Appendix L
Public Services

ESA

SEWER AREA STUDY REPORT FOR VESTING TENTATIVE TRACT NO. 83534

PC9051, PC6594, PC6788, PC10811, PC785, IPC 142, IPC 239, IPC 257, AND IPC 257R

HYDRAULIC CALCULATIONS AND EXISTING SYSTEM ANALYSIS

ESTU#: 2021000470

PC No. 12594AS

PREPARED FOR:

PROJECT DIMENSIONS, INC.
4 PARK PLAZA, SUITE 700
IRVINE, CA 92614
TEL. (949) 476-2246

PREPARED BY

FUSCOE ENGINEERING
600 WILSHIRE BLVD., SUITE 1470
LOS ANGELES, CALIFORNIA 90017
TEL. (213) 988-8802

DATE: JULY 24, 2023

SEWER AREA STUDY
APPROVED

REVIEWED BY ______ DATE 08/14/2023

APPROVED BY ______ DATE ______

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION

THIS APPROVAL EXPIRES TWO YEARS FROM THE DATE OF APPROVAL

REGISTERED PROFESSIONAL ENGINEER
ANDREW JEFFERSON WILLROOT
No. C49881
CIVIL
STATE OF CALIFORNIA

07/24/2023

CITY OF INDUSTRY
SEWER AREA STUDY
OUTLET APPROVAL

APPROVED BY: ______ RCE NO. [illegible] DATE 7/31/23

CHECKED BY: Wes Correll DATE 7/28/2023

WE HAVE REVIEWED THE APPROVED Q FROM THE COUNTY OF LOS ANGELES AND DID NOT IDENTIFY
ANY REQUIRED MITIGATION FOR THIS PROJECT.
THIS APPROVAL EXPIRES TWO YEARS FROM THE DATE OF APPROVAL

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1.0 INTRODUCTION

The following Sewer Area Study has been prepared by Fuscoe Engineering Inc. to:

a.) Determine and demonstrate the capacity of the existing Los Angeles County sewer facilities (PC 9054, PC 6594, PC 6788, PC10811, PC12178, PC 7851, IPC 219, IPC 142, IPC 239, IPC 257, and IPC 257R) servicing the proposed project site continuing through City of Industry, and out falling to LACSD trunk line #21.

b.) Determine the proposed sewer pipe sizes necessary for this project.

This analysis includes all tributary flow to the sewer system. This includes the proposed development upstream of the trunk line and the existing developments upstream of the trunk line.

2.0 SITE DESCRIPTION

The proposed project is located within the Rowland Heights neighborhood of unincorporated Los Angeles County. Per the entitlement project documents, the project will be broken into six (6) "planning areas" totaling 75.6 acres and designated as PA-1, PA-2, PA-3, PA-4, PA-5, and PA-6. See **Figure 1** for the project vicinity map.

PA-1 and PA-2 are bordered by East Walnut Drive to the north; single family homes on Tierra Luna and Tierra Siesta to the east; Colima Drive to the south; and a portion of the existing Royal Vista golf course to remain to the west. The assessor's parcel numbers (APN) for PA-1 and PA-2 are 8762-023-001 and 8762-023-002. Note, PA-1 and PA-2 will contain a mix of single-family homes, duplexes, and triplexes.

PA-3 is also bordered by East Walnut Drive to the north; single family homes and open space to the east; single family homes on Iluso Avenue to the south; and PA-2 to the west. PA-3 currently shares the same APN number as PA-1: 8762-023-001. Note, PA-3 will consist entirely of dense townhomes.

PA-4 will be an open space lot with no bathroom facilities. PA-4 is bordered by single family homes on Tierra Luna to the south; single family homes on Padrino Avenue to the northwest; and single-family homes on Athena Drive to the northeast. The APN for PA-4 is 8762-027-039.

PA-5 sits south of PA-1 across Colima Drive. Thus, Colima Drive forms PA-5's northerly border with the City of Diamond Bar boundary to the east; single family homes on Morning Sun Avenue, Shepherd Hills Drive, Chapel Hill Drive, and Tam O'Shanter Drive to the south; and single-family homes on Leanne Terrace/Walnut Leaf Drive to the west. PA-5's APN is 8764-002-006 and will contain a mix of single-family homes, duplexes, and triplexes.

Last, PA-6 sits to the west of PA-5 and will also be open space lot with no bathroom facilities. PA-6 is bordered by single family homes on Walnut Leaf Drive to the northeast; single family homes on Tam O'Shanter Drive to the south; and a portion of the existing Royal Vista golf course to remain to the west. PA-6's APN is 8764-002-005.

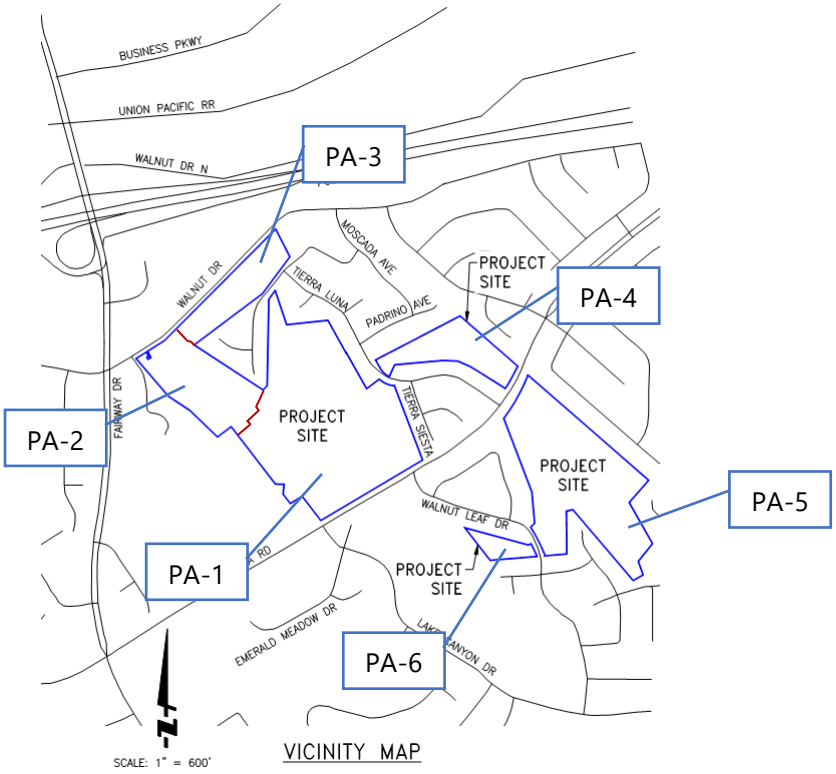


Figure 1 – Project Vicinity Map

3.0 PROJECT DESCRIPTION

As aforementioned, this project will redevelop portions of the existing Royal Vista golf course into two-hundred thirty-five (235) residential lots across four "planning areas," and thirteen (13) open space lots across all six planning areas.

PA-1, PA-2, and PA-5 will be subdivided into two hundred (200) detached single-family lots, twenty-nine (29) duplex lots, and five (5) triplex lots. **Each triplex lot contains two (2) triplex structures resulting in six (6) dwelling units per lot. In total there are ten (10) triplex structures equaling thirty (30) dwelling units.**

Generally, single-family home lots average 5000 square feet (SF) and are either 60-foot by 84-foot lots or 47-foot by 107-foot lots. Single-family homes on the 60-foot by 84-foot lots will range between 2,800 SF to 3,200 SF and contain five (5) or six (6) bedrooms and 3.5 or 4.5 bathrooms. Single-family homes on the 47'x107' lots will range between 2,600 SF to 3,000 SF and contain four (4) to five (5) bedrooms, a bonus room, and 3 or 4.5 bathrooms.

PA-3 will include seventy-two (72) townhouses within a single lot.

PA-4 and PA-6 will be open space lots.

See **Table 1** and **Table 2** for a breakdown of sewer generation by lot type, and lot types per planning area.

	SFH	Duplex	Triplex	Townhome
Units Per Lot	1	2	6	72
CFS/Lot	0.001	0.002	0.006	0.072

Table 1 – Generated Flow Breakdown by Lot Type per County of Los Angeles Sewer Estimated Average Daily Sewage Flows, Appendix A

	SFH Lots (0.001CFS/Lot)	Duplex Lots (0.002CFS/Lot)	Triplex Lots (0.006CFS/Lot)	Townhome Lot (0.072CFS/Lot)	Open Space Lot (0CFS/Lot)	Total Lots	Total CFS
PA-1	116	17	3	-	5	141	0.168
PA-2	32	-	-	-	3	35	0.032
PA-3	-	-	-	1	1	2	0.072
PA-4	-	-	-	-	1	1	-
PA-5	52	12	2	-	2	68	0.088
PA-6	-	-	-	-	1	1	-
					Grand Total:	248	0.360

Table 2 – Planning Area Breakdown

This project will protect-in-place Manhole 44 (MH 44) and Manhole 50 (MH 50). This project will remove all other existing public sewer facilities onsite and quit-claim all existing sewer easements. This includes MH 45, MH 46, MH 47, MH 48, MH 49, and MH 51. See the SMD Maps in Appendix B for existing manhole locations.

Connections to the existing sewer lines will be made at Tierra Luna, Walnut Drive, Walnut Leaf Drive, and within the project site (see Appendix C for connection locations and proposed sewer facilities). All new onsite sewer mains will be located within new public sewer easements and publicly maintained by the Los Angeles County Sanitation District (LACSD). The proposed public vitrified clay pipe (VCP) gravity sewer system has pipe diameters of 8-inches and 10-inches with a minimum slope of 0.4% and a maximum slope of 11.4%.

4.0 SEWAGE SYSTEM DESCRIPTION

All existing sewer lines onsite between Colima Road and Walnut Drive shall be abandoned and relocated within the proposed private streets. Rerouting will start downstream of MH 50 (PA-1) on the east side of the project, downstream of existing MH 52 on the south side of the project, and upstream of existing MH 634 on the north side of the project. The rerouted sewer lines will connect to the existing sewer line between existing MH 17 and existing MH 634 at Walnut Drive. Note, existing MH 44 and MH 50 shall be protected onsite.

The eastern part of the project (PA-1 & PA-5) will flow to an 8-inch VCP sewer that lies within Tierra Luna. Two (2) sewer connections will be made along Tierra Luna: one at MH 184 and another at the MH 50 . These combined proposed and existing flows are conveyed through C-Street in PA-1 to A-Street to Walnut Drive. This 8-inch VCP sewer routes west.

The existing sewer system located to the south of Colima Road currently outfalls north into a series of 10-inch and 12-inch VCP lines existing in an onsite easement between Colima Road and East Walnut Drive joining the proposed 8" VCP line at MH P34.

Existing flow from MH 44 connects to MH P42.

The most northerly portion of the project in PA-3 will connect to the existing 8" VCP line in East Walnut Drive between existing MH 18 and MH 19.

The servicing sewer main downstream of MH 16 lies within City of Industry. Existing plans were used to determine sizing and slopes for the existing sewer main from MH 16 to MH 7 (PC 10811, PC6594, IPC 142, and IPC 166). A new 21" sewer main replacing the existing 18" sewer main downstream of MH 7 to the 30" LACSD trunk line (IPC 257R) is currently under construction. Per the request of the City of Industry, the sewer analysis studied the capacity of this new 21" sewer line.

Due to previous reports showing lines over 151% flow test were conducted. To see the results of these please see **Conclusion,** and **Appendix K.**

5.0 METHODOLOGIES

All sewer pipes were analyzed per the Los Angeles County sewer capacity policies, **Appendix F**, broken down as follows:

For pipes <15 inches: ½ full is 100% capacity (d/D)

For pipes >15 inches: ¾ full is 100% capacity (d/D)

Per currently County policy, any calculated sewer pipe flows between 101% and 150% "capacity" will require the County to check maintenance records. If maintenance records warrant, the County may require a sewer flow test. Note, if field verified sewer flows are less than 151% capacity, no mitigation measures will be required.

If calculated flows are between 151% and 200% of capacity, flow measurements are automatically required. Like before, if field verified sewer flows are less than 151% of capacity, no mitigation measured will be required. However, if actual flow is above 151%, the case shall be referred to Sewer Advisory Committee (SAC) to evaluate the options and make recommendations to the County Administration for approval. These options may include but are not limited to: requiring full mitigation from the development, assessing pro-rata shares, creation of a reimbursement district, or establishing a County Improvement (CI) district.

Existing sewer flows were determined using average sewage flows per acre for specific zoning—i.e., R-1, R-2, etc. These "zoning coefficients" are shown on the County of Los Angeles Estimated Average Daily Sewer Flow for Various Occupancies table shown in **Appendix A**. With zoning coefficients and sewage tributary areas defined, the following formula is used to determine existing sewer flows:

$Q = (Z)(A)$

A = Tributary area (acres)

Z= Zoning Coefficients (cfs per acre)

Proposed sewer flows, however, were determined at the unit and bedroom level using the County of Los Angeles Sewer Estimated Average Daily Sewage Flows as shown in **Appendix A**. For single family homes and

condominium units, 0.001CFS/unit was used to estimate proposed flow. For the duplex and triplex lots, the sewer flows were estimated using bedrooms per dwelling unit per the table in **Appendix A.** For a breakdown of proposed dwelling units see Tables 1, 2, and 3 in **Section 3.0**.

Per County policies, Kutter's formula, as defined in **Appendix D**, was used to determine sewer capacities. **Appendix D** contains a tabulated calculation of all existing, proposed, and cumulative sewer flows as well as the design capacity.

Please note, PA-4 and PA-6 have no additional facilities that would generate additional sewer flow. Therefore, methodologies for existing land use will be used for those areas.

6.0 CONCLUSIONS

Appendix C, Sewer Area Study Exhibit with Land Use Zoning, and **Appendix D**, Project Sewer Generation Factor Analysis table, accounted for all pipe segments from the various existing upstream manholes to MH 16. Per **Appendix C** and **Appendix D**, only one segment of the existing sewer pipe is above the 100% capacity threshold.

Below are the pertinent sewer pipe segments with proposed sewer outfall connections or existing tie-ins, including the existing sewer pipe above the 100% capacity threshold.

MH 184 - MH 183: The existing 8-inch sloped VCP at 0.5% sewer (PC 9054) on Tierra Luna between MH 184 and MH 183 will flow at 25% capacity with the proposed flow.

MH 180 - MH P20: The existing 8-inch VCP sloped at 0.4% sewer (PC6954) on Tierra Luna Between MH 180 and MH P20 will flow at 49% capacity with the proposed flow.

MH P34 - MH P32: The proposed 8-inch pipe sloped at 2.9% between MH P34 and MH P32 (PC6594) in Planning area 1 will flow at 77% capacity with the proposed flow.

MH 634 – MH 16: The existing 12-inch VCP sloped at 1.4% sewer (PC10811) between MH 634 and MH 16 will flow at 94% capacity with the proposed flow.

MH P47 – MH 17: The existing 8-inch VCP sloped at 0.6% (PC6788) on Walnut Drive between MH P47 and MH17 is flowing at 125% capacity without additional flow. Given calculated proposed flow resulted in 155% capacity, a flow test was conducted by US3 (results in **Appendix J**). Per the sewer capacity table in **Appendix D**, the sewer flow through the existing 8-inch dropped from a calculated value of 0.663 cfs to 0.607 cfs resulting in 142% post-development capacity. Therefore, no mitigation measures will be required.

The 12" sewer outfall to the City of Industry sewer infrastructure at MH 16 is 1.892 CFS flowing at 94% capacity.

The 18" sewer outfall to the LACSD 30" trunk line #21 is 2.438 CFS flowing at 35% capacity within the connection pipe.

APPENDICES

APPENDIX A

LA COUNTY AVERAGE DAILY FLOW AND ZONING COEFFICIENT TABLE

Estimated Average Daily Sewage Flows for Various Occupancies

Occupancy	Abbreviation	*Average daily flow	
Apartment Buildings:			
Bachelor or Single dwelling units	Apt	150	gal/D.U.
1 bedroom dwelling units	Apt	200	gal/D.U.
2 bedroom dwelling units	Apt	250	gal/D.U.
3 bedroom or more dwelling units	Apt	300	gal/D.U.
Auditoriums, churches, etc.	Aud	5	gal/seat
Automobile parking	P	25	gal/1000 sq ft gross floor area
Bars, cocktails lounges, etc.	Bar	20	gal/seat
Commercial Shops & Stores	CS	100	gal/1000 sq ft gross floor area
Hospitals (surgical)	HS	500	gal/bed
Hospitals (convalescent)	HC	85	gal/bed
Hotels	H	150	gal/room
Medical Buildings	MB	300	gal/1000 sq ft gross floor area
Motels	MB	150	gal/unit
Office Buildings	Off	200	gal/1000 sq ft gross floor area
Restaurants, cafeterias, etc.	R	50	gal/seat
Schools:			
Elementary or Jr. High	S	10	gal/student
High Schools	HS	15	gal/student
Universities or Colleges	U	20	gal/student
College Dormitories	CD	85	gal/student

*Multiply the average daily flow by 2.5 to obtain the peak flow

Zoning Coefficients

Zone	Coefficient (cfs/Acre)
Agriculture ----------	0.001
Residential*:	
R-1 ----------	0.004
R-2 ----------	0.008
R-3 ----------	0.012
R-4 ----------	0.016*
Commercial:	
C-1 through C-4 ----------	0.015*
Heavy Industrial:	
M-1 through M-4 ----------	0.021*

* Individual building, commercial or industrial plant capacities shall be the determining factor when they exceed the coefficients shown

* Use 0.001 (cfs/unit) for condominiums only

RPD-1-5000	0.0087 cfs/acre = (43,560 SF / 5000 SF) X 0.001
R-1-8500	0.005 cfs/acre = (43,560 SF / 8500 SF) X 0.001

APPENDIX B

SMD MAPS

SEE SHT. NO. E-2304

U-129
U-130
U-131
U-136
U-137
U-138

OUTFALL TO 30" LACSD TRUNK SEWER

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. E-2262

SEE SHT. NO. E-2348

SEE SHT. NO. E-2306

E 4,317,000

N 4,106,500

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
- SEWERS NOT MAINTAINED BY SMD
- TRUNK SEWERS
- CITY BOUNDARY
- STANDARD MANHOLE
- COMPOSITE MANHOLE COVER
- DROP MANHOLE
- SHALLOW MANHOLE
- TRAP MANHOLE
- WEIR MANHOLE
- C.O. CLEANOUT
- L.H. LAMP HOLE

TOTAL MH'S THIS MAP: 731

MAP REV.
07-16-14

E-2305

MAP REV
07-16-14

DATA BASE REV
08-17-89

SEWER MAIN TO REMAIN
SEWER MAIN TO BE REMOVED

MANHOLES TO BE REMOVED:
45, 46, 47, 48, 49, 51

MANHOLES TO BE PROTECTED ONSITE:
17, 44, 50, 51, 52, 57, 179, 180

CONSOLIDATED S.M.D.

E-2305

T:679:C-4

0831-0931-2305

SEE SHT. NO. E-2347

U-136
U-137
U-138
U-141
U-142
U-143

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.

CITY OF INDUSTRY
CITY OF POMONA
CITY OF LOS ANGELES
CITY OF DIAMOND BAR
UNINCORPORATED LA COUNTY

SAN JOSE CREEK
WALNUT ELEM
GOLDEN SPRINGS
WALNUT VALLEY WATER DIST.
SEC 17 T2S R9W
SEC 20 T2S R9W

I.P.C. 283
I.P.C. 209
I.P.C. 256
I.P.C. 170
I.P.C. 173
I.P.C. 257
I.P.C. 239
I.P.C. 142
I.P.C. 219
I.P.C. 151
I.P.C. 286

P.C. 8888
P.C. 8996
P.C. 9509
P.C. 9294
P.C. 9576
P.C. 9670
P.C. 9273
P.C. 6836
P.C. 9525
P.C. 6867
P.C. 6340
P.C. 8992
P.C. 9620
P.C. 9772
P.C. 9699
P.C. 9898A
P.C. 9512
P.C. 9703
P.C. 9591
P.C. 10514
P.C. 6982
P.C. 7894
P.C. 8359
P.C. 6788
P.C. 9366
P.C. 6788
P.C. 9511
P.C. 9054
P.C. 6594
P.C. 9238
P.C. 7851
P.C. 9527
P.C. 9526
P.C. 9643
P.C. 9640
P.C. 9646
P.C. 96-01
P.C. 96-04
P.C. 96-02
P.C. 96-03
P.C. 7860
P.C. 9091
P.C. 5310-B
P.C. 9227
P.C. 9608
P.C. 5310-C
P.C. 9186
P.C. 6099
P.C. 8556
P.C. 10009
P.C. 10560
P.C. 11057
P.C. 9189
P.C. 10903
P.C. 9225
P.C. 9314
P.C. 9007
P.C. 11432
P.C. 9653

PROJECT SITE

ACOP 104

E 4,327,000
N 4,106,500

SEE SHT. NO. E-2305
SEE SHT. NO. E-2391
SEE SHT. NO. E-2349

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: 678

CITY OF INDUSTRY SEWER MAIN
SEWER MAIN TO REMAIN
SEWER MAIN TO BE REMOVED
UNINCORPORATED LA COUNTY BORDER

MANHOLES TO BE REMOVED:
45, 46, 47, 48, 49, 51

MANHOLES TO BE PROTECTED:
17, 44, 50, 51, 52, 57, 179, 180

MAP REV. 04-27-11
MAP REV 03-02-11
DATA BASE REV 11-13-89

E-2348

CONSOLIDATED S.M.D.

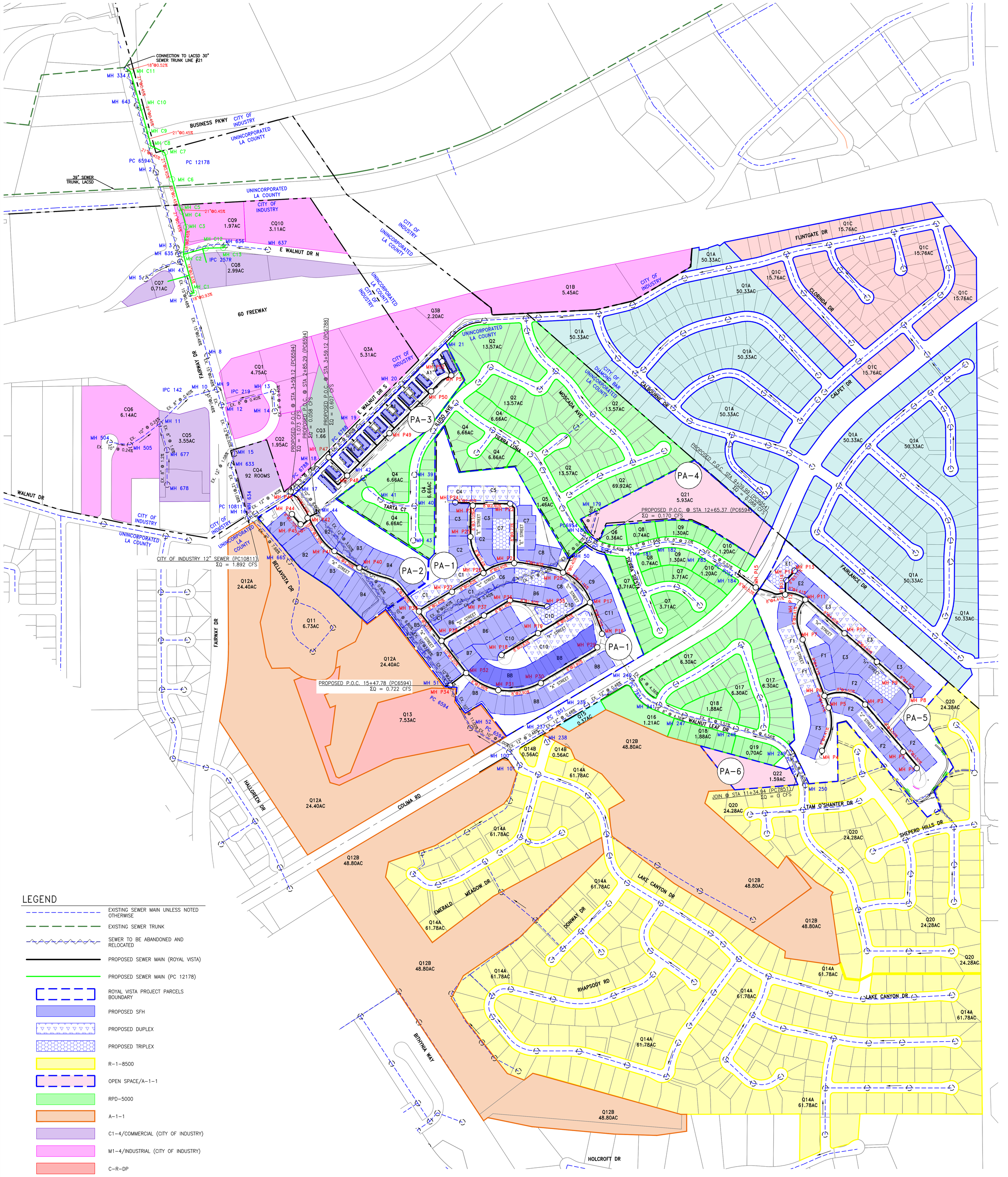
E-2348

T:679:F4

0831-0931-2348

APPENDIX C

SEWER AREA STUDY EXHIBIT WITH LAND USE ZONING



LEGEND

- EXISTING SEWER MAIN UNLESS NOTED OTHERWISE
- EXISTING SEWER TRUNK
- SEWER TO BE ABANDONED AND RELOCATED
- PROPOSED SEWER MAIN (ROYAL VISTA)
- PROPOSED SEWER MAIN (PC 12178)
- ROYAL VISTA PROJECT PARCELS BOUNDARY
- PROPOSED SFH
- PROPOSED DUPLEX
- PROPOSED TRIPLEX
- R-1-8500
- OPEN SPACE/A-1-1
- RPD-5000
- A-1-1
- C1-4/COMMERCIAL (CITY OF INDUSTRY)
- M1-4/INDUSTRIAL (CITY OF INDUSTRY)
- C-R-DP
- LOW DENSITY RESIDENTIAL (DIAMOND BAR: R1 EQUIVALENT)
- LOW MEDIUM DENSITY RESIDENTIAL (DIAMOND BAR: R2 EQUIVALENT)
- INSTITUTIONAL (CITY OF INDUSTRY: M1 EQUIVALENT)
- MH XX — EXISTING SEWER MANHOLE
- MH XX — PROPOSED SEWER MANHOLE (ROYAL VISTA)
- MH XX — PROPOSED SEWER MANHOLE (PC 12178)
- EX. 8" @ 2.00% — EXISTING SEWER PIPE SIZE AND SLOPE
- 8" @ 2.00% — PROPOSED SEWER PIPE SIZE AND SLOPE
- LA COUNTY/CITY BORDER

200' 0' 100' 200'
SCALE: 1" = 200'

SEWER AREA STUDY

ROYAL VISTA

MAJOR LAND DIVISION
VESTING TENTATIVE TRACT MAP NO 83534
LOCATED IN THE UNINCORPORATED TERRITORY
OF THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

PREPARED FOR:
PROJECT DIMENSIONS, INC.
4 PARK PLAZA, SUITE 700
IRVINE, CA 92614
CONTACT: JON CONK
PHONE: 949.476.2246

FUSCOE ENGINEERING
600 Wilshire Blvd., Suite 1470
Los Angeles, California 90017
tel 213.988.8802 ◦ fax 213.988.8803
www.fuscoe.com

JOB NO. 662-004
DRAWN BY: EC
SHEET 1 of 1

APPENDIX D

PROJECT SEWER GENERATION FACTOR ANALYSIS TABLE

LA COUNTY SEWER ANALYSIS TABLE

STREET NAME	Sewer Area-In Designation	Segment		Pipe		Design Capacity (CFS)	Acres	Zone (Existing)	Zoning Coefficient (cfs/acre)	Average Daily Flow (CFS)	Cumulative Calculated Flow	Cumulative Flow/Design Capacity	PC OR CI CONSTRUCTION PLAN #	Comment	Jurisdiction
		U/S M.H #	D/S M.H. #	Size (in)	Slope (%)										
H STREET (PLANNING AREA 5)															
	E1			N/A	N/A		N/A			0.006	0.006			(1) Triplex Lot, (1) Lots Total	
	E2			N/A	N/A		N/A			0.002	0.008			(2) SFH, (2) Lots Total	
	E3			N/A	N/A		N/A			0.035	0.043			(17) SFH, (6) Duplex Lot, (1) Triplex Lot, (24) Lots Total	
	F1			N/A	N/A		N/A			0.018	0.061			(6) SFH, (6) Duplex Lot, (12) Lots Total	
	F2			N/A	N/A		N/A			0.022	0.083			(22) SFH, (22) Lots Total	
	F3			N/A	N/A		N/A			0.005	0.088			(5) SFH, (5) Lots Total	
H STREET		P12	P15	8	4.41%	1.163				0.000	**0.088**	8%		Flows into Tierra Luna - See H Street in Tierra Luna Table ***All flows in this planning area are upstream of terminus manhole 184, no existing flows through area. All upstream pipes are designed as part of proposed improvements.**	LA COUNTY
TIERRA LUNA		P12	P15												
	H STREET									**0.088**	0.088			Flow from H Street (Planning Area 5) - See H Street Table	
TIERRA LUNA		P15	184	8	0.53%	0.402				0.000	0.088	22%	9054		LA COUNTY
	Q10						1.199	RPD-5000	0.0087	0.010	0.098				
TIERRA LUNA		184	183	8	0.53%	0.402				0.000	0.098	25%	9054		LA COUNTY
	Q9						1.297	RPD-5000	0.0087	0.011	0.110				
TIERRA LUNA		183	182	8	2.00%	0.783				0.000	0.110	14%	9054		LA COUNTY
	Q8						0.744	RPD-5000	0.0087	0.006	0.116				
TIERRA LUNA		182	181	8	11.64%	1.891				0.000	0.116	6%	9054		LA COUNTY
	Q7						3.708	RPD-5000	0.0087	0.032	0.149				
	Q6						0.363	RPD-5000	0.0087	0.003	0.152				
TIERRA LUNA		181	180	8	6.40%	1.402				0.000	0.152	11%	9054,6594		LA COUNTY
	Q21						5.934	A-1	0.001	0.006	0.158				
	Q5						1.462	RPD-5000	0.0087	0.013	0.170				
TIERRA LUNA		180	P20	8	0.40%	0.349				0.000	**0.170**	49%	6594	Flows into C Street (Planning Area 1) - See C Street Table	LA COUNTY
C STREET (PLANNING AREA 1)		180	P20												
	TIERRA LUNA									**0.170**	0.170			Flow from Tierra Luna - See Tierra Luna Table	
	C11						N/A			0.005	0.175			(5) SFH, (5) Lots Total	
	C10						N/A			0.024	0.199			(8) SFH, (5) Duplex Lot, (1) Triplex Lot, (14) Lots Total	
	C9						N/A			0.004	0.203			(4) SFH, (4) Lots Total	
	C8						N/A			0.012	0.215			(6) SFH, (1) Triplex Lot, (7) Lots Total	
C STREET		P20	P21	8	0.40%	0.349				0.000	0.215	62%			LA COUNTY
	C6						N/A			0.002	0.217			(2) SFH, (2) Lots Total	
	C5						N/A			0.008	0.225			(4) Duplex Lot, (4) Lots Total	
	C4						N/A			0.004	0.229			(2) Duplex Lot, (2) Lots Total	
	C3						N/A			0.006	0.235			(6) SFH, (6) Lots Total	
	C2						N/A			0.006	0.241			(6) SFH, (6) Lots Total	
C STREET		P21	P26	8	0.40%	0.349				0.000	0.241	69%			LA COUNTY
	C7						N/A			0.013	0.254			(7) SFH, (1) Triplex Lot, (8) Lots Total	
	C1						N/A			0.019	0.273			(7) SFH, (6) Duplex Lot, (13) Lots Total	
C STREET		P26	P39	8	0.40%	0.349				0.000	**0.273**	78%		Flows into A Street (Planning Area 1 & 2) - See A Street Table	
A STREET (PLANNING AREA 1 & 2)															
	Q22						1.593	A-1	0.001	0.002	0.002				
	Q20						24.282	R-1-8500	0.005	0.124	0.126				
	Q19						0.705	RPD-5000	0.0087	0.006	0.132				
	Q18						1.884	RPD-5000	0.0087	0.016	0.149				
	Q17						6.302	RPD-5000	0.0087	0.055	0.203				
	Q16						1.214	RPD-5000	0.0087	0.011	0.214				
	Q15						0.367	R-1-8500	0.005	0.002	0.216				
	Q14B						0.564	R-1-8500	0.005	0.003	0.219				
	Q14A						61.776	R-1-8500	0.005	0.317	0.535				
	Q13						7.534	C-R-DP	0.015	0.113	0.648				
	Q12A						24.400	A-1	0.001	0.024	0.673				
	Q12B						48.798	A-1	0.001	0.049	0.722				
A STREET		P34	P32	8	2.90%	0.943				0.000	0.722	77%			LA COUNTY
	B8						N/A			0.033	0.755			(33) SFH, (33) Lots Total	
	B7						N/A			0.007	0.762			(7) SFH, (7) Lots Total	
A STREET		P32	P38	10	5.20%	2.348				0.000	0.762	32%			LA COUNTY
	B6						N/A			0.019	0.781			(19) SFH, (19) Lots Total	
	B5						N/A			0.004	0.785			(4) SFH, (4) Lots Total	
A STREET		P38	P39	10	4.20%	2.110				0.000	0.785	37%			LA COUNTY
	C STREET									**0.273**	1.058			Flow from C Street (Planning Area 1) - See C Street Table	
	B4						N/A			0.016	1.074			(16) SFH, (16) Lots Total	
A STREET		P39	P40	10	4.20%	2.110				0.000	1.074	51%			LA COUNTY
	B3						N/A			0.008	1.082			(8) SFH, (8) Lots Total	
A STREET		P40	P41	10	4.20%	2.110				0.000	1.082	51%			LA COUNTY
	B2						N/A			0.007	1.089			(7) SFH, (7) Lots Total	
A STREET		P41	P42	10	3.30%	1.870				0.000	1.089	58%			LA COUNTY
	B1						N/A			0.003	1.092			(3) SFH, (3) Lots Total	
	Q4						6.664	RPD-5000	0.0087	0.058	1.150				
A STREET		P42	P46	10	3.30%	1.870				0.000	**1.150**	61%		Flows into Walnut Leaf Drive (Planning Area 2 & 3) - See Walnut Drive Table	LA COUNTY
WALNUT DRIVE (PLANNING AREA 2 & 3)															
	MH18 FLOW TEST									0.535	0.535			Flow value taken from flow test for MH 18.	
	A1			8	0.60%	0.428	N/A			0.072	0.607			72 Condo Units, 1 Lots Total	
WALNUT DRIVE S		P47	18	8	0.60%	0.428				0.000	0.607	142%			LA COUNTY
		18	17	8	0.60%	0.428				0.000	0.607	142%			LA COUNTY
		17	P46	12	1.40%	2.016				0.000	0.607	30%			LA COUNTY
	MH17 FLOW TEST + ALL PROPOSED FLOW									**1.066**	1.066			1.066 cfs represents the data taken from the MH 17 flow test, and all proposed flow (summation of average daily flow from rows with sewer areas designations beginning with A, B, C, E, F).	
WALNUT DRIVE S		P46	MH 634	12	1.40%	2.016				0.000	1.066	53%	10811/6788		LA COUNTY
	MH634 FLOW TEST + ALL PROPOSED FLOW									**1.892**	1.892			1.892 cfs represents the data taken from the MH 634 flow test, and all proposed flow (summation of average daily flow from rows with sewer areas designations beginning with A, B, C, E, F).	
WALNUT DRIVE S		MH 634	16	12	1.40%	2.016				0.000	1.892	94%	10811/6788		LA COUNTY

Green indicates outflow at Manhole 16

TOTAL RESIDENTIAL LOTS: 235

Kutter's Formula: $Q = a * c * [R * S]^{1/2}$ n=0.013

$$c = \frac{41.65 + 0.00281/S + 1.811/n}{1 + [41.65 + 0.00281/S] * n/R^{1/2}}$$

	SFH	Duplex	Triplex	Townhome Lot
Units Per Lot	1	2	6	72
CFS/Lot	0.001	0.002	0.006	0.072

Table 1 – Generated Flow Breakdown by Lot Type per County of Los Angeles Sewer Estimated Average Daily Sewage Flows, Appendix A

	SFH Lots (0.001CFS/Lot)	Duplex Lots (0.002CFS/Lot)	Triplex (0.006CFS/Lot)	Townhome (0.072CFS/Lot)	Open Space Lot (0CFS/Lot)	Total Lots	Total CFS
PA-1	116	17	3	-	5	141	0.168
PA-2	32	-	-	-	3	35	0.032
PA-3	-	-	-	1	1	2	0.072
PA-4	-	-	-	-	1	1	-
PA-5	52	12	2	-	2	68	0.088
PA-6	-	-	-	-	1	1	-
					Grand Total:	**248**	**0.360**

Table 2 – Planning Area Breakdown

STREET NAME	Sewer Area-In Designation	Segment		Pipe		Design Capacity (CFS)	Acres	Zone (Existing)	Zoning Coefficient (cfs/acre)	Average Daily Flow (CFS)	Cumulative Calculated Flow	Cumulative Flow/Design Capacity	PC OR CI CONSTRUCTION PLAN #	Comment	Jurisdiction
		U/S M.H #	D/S M.H. #	Size (in)	Slope (%)										
Walnut Drive S	**LAC**	MH 634	16				**SEE PREVIOUS TABLE**			1.892	1.892			**SEE PREVIOUS TABLE FOR FLOW VALUE**	
Fairway Drive	Q11						6.73	A-1	0.001	0.007	1.899				
Fairway Drive		16	633	12	1.08%	1.770				0.000	1.899	107%	PC 10811		Industry
	CQ4						**94**	**C(HOTEL)**	**0.00058**	**0.055**	**1.953**			**Please note that acres is showing room count and zoning coefficient is showing cfs/room in this row**	
Fairway Drive		633	15	12	1.08%	1.770				0.000	1.953	110%	PC 10811		Industry
Fairway Drive		15	12	12	2.00%	2.410				0.000	1.953	81%	PC 6594		Industry
	CQ1						4.75	M	0.021	0.100	2.053				
	CQ2						1.95	M	0.021	0.041	2.094				
Fairway Drive		12	9	15	0.48%	4.017				0.000	2.094	52%	PC 6594		Industry
	CQ6						6.14	M	0.021	0.129	2.223				
	CQ5						3.55	C	0.015	0.053	2.276				
Fairway Drive		9	8	15	0.48%	4.017				0.000	2.276	57%	PC 6594		Industry
Fairway Drive		8	7	15	0.48%	4.017				0.000	2.276	57%	PC 6594		Industry
Fairway Drive		7	C1	18	0.93%	9.213				0.000	2.276	25%	PC 12178		Industry
	CQ7						0.71	C	0.015	0.011	2.287				
Fairway Drive		C1	C2	18	0.93%	9.213				0.000	2.287	25%	PC 12178		Industry
	CQ8						2.99	C	0.015	0.045	2.332				
	CQ9						1.97	M	0.021	0.041	2.373				
	CQ10						3.11	M	0.021	0.065	2.438				
Fairway Drive		C2	C3	18	0.45%	6.398				0.000	2.438	38%	PC 12178		Industry
Fairway Drive		C3	C4	21	0.45%	9.730				0.000	2.438	25%	PC 12178		Industry
Fairway Drive		C4	C5	21	0.45%	9.730				0.000	2.438	25%	PC 12178		Industry
Fairway Drive		C5	C6	20	0.45%	8.522				0.000	2.438	29%	PC 12178		LAC
Fairway Drive		C6	C7	21	0.45%	9.730				0.000	2.438	25%	PC 12178		LAC
Fairway Drive		C7	C8	21	0.45%	9.730				0.000	2.438	25%	PC 12178		Industry
Fairway Drive		C8	C9	21	0.45%	9.730				0.000	2.438	25%	PC 12178		LAC
Fairway Drive		C9	C10	21	0.45%	9.730				0.000	2.438	25%	PC 12178		LAC
Fairway Drive		C10	C11	21	0.45%	9.730				0.000	2.438	25%	PC 12178		LAC
Fairway Drive		C11	334	21	0.45%	9.730				0.000	2.438	25%	PC 12178		LAC
Fairway Drive		**334**	**LACSD #21**	**18**	**0.52%**	**6.880**				**0.000**	**2.438**	**35%**	**PC 6594**	**Outfall to LACSD Trunk Line #21**	**LAC**

APPENDIX E

SEWER WILL SERVE

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager

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

April 1, 2021

Ref. DOC 6130498

Mr. Alex Flores, Engineer
Fuscoe Engineering
600 Wilshire Boulevard
Suite 1470
Los Angeles, CA 90017

Dear Mr. Flores:

Will Serve Letter for Royal Vista

The Los Angeles County Sanitation Districts (Districts) received your will serve letter request for the subject project on March 16, 2021. We offer the following comments regarding sewerage service:

1. A portion of the project area is outside the jurisdictional boundaries of the Districts and will require annexation into District No. 21 before sewerage service can be provided to the proposed development. For a copy of the Districts' Annexation Information and Processing Fee sheets, go to www.lacsd.org, under Services, then Wastewater Program and Permits and select Annexation Program. For more specific information regarding the annexation procedure and fees, please contact Ms. Donna Curry at (562) 908-4288, extension 2708.

2. 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' District No. 21 Outfall Trunk Sewer, located in Fairway Drive south of San Jose Avenue. The Districts' 30-inch diameter trunk sewer has a capacity of 22.2 million gallons per day (mgd) and conveyed a peak flow of 6.5 mgd when last measured in 2014.

3. The wastewater generated by the proposed project will be treated at the San Jose Creek Water Reclamation Plant (WRP) located adjacent to the City of Industry, which has a capacity of 100 mgd and currently processes an average flow of 58.5 mgd. All biosolids and wastewater flows that exceed the capacity of the San Jose Creek WRP are diverted to and treated at the Joint Water Pollution Control Plant in the City of Carson.

4. The expected increase in average wastewater flow from the project site, described in the plan as 240 single family homes and 72 affordable homes, is 80,155 gallons per day, after the structures on the project site are demolished. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, under Services, then Wastewater Program and Permits, select Will Serve Program, and scroll down to click on the Table 1, Loadings for Each Class of Land Use link.

5. The Districts are empowered by the California Health and Safety Code to charge a fee to connect facilities (directly or indirectly) to the Districts' Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is used by the Districts to upgrade or expand the Sewerage System. Payment of a connection fee may be required before this project is permitted to discharge to the Districts' Sewerage System. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, under Services, then Wastewater (Sewage) and

select Rates & Fees. In determining the impact to the Sewerage System and applicable connection fees, the Districts will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel(s) or facilities on the parcel(s) in the development. For more specific information regarding the connection fee application procedure and fees, the developer should contact the Districts' Wastewater Fee Public Counter at (562) 908-4288, extension 2727.

6. 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 the developer that the Districts intend to provide this service up to the levels that are legally permitted and to inform the developer 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 or at araza@lacsd.org.

Very truly yours,

Adriana Raza

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

cc: D. Curry
A. Schmidt
A. Howard

APPENDIX F

SEWER POLICIES PER LA COUNTY "APPENDIX D"

October 12, 2005

Approved

TO: Dean Efstathiou

FROM: Dennis Hunter
Land Development Division

POLICIES FOR MANAGING AVAILABLE SEWER CAPACITY AND SEWAGE DISCHARGE IN EXCESS OF DESIGN CAPACITY

The following will set forth Public Works' policies related to managing sewer infrastructure capacity. Design capacity of the sewer mainline is defined as follows:

< 15" diameter	½ full = 100% capacity (d/D)
≥ 15" diameter	¾ full = 100% capacity (d/D)

When Public Works determines there is available capacity in a mainline sewer for infill and redevelopment projects, the remaining available capacity shall be allocated on a first come – first serve basis.

Sewer Advisory Committee

A Sewer Advisory Committee (SAC) will be formed for the purpose of recommending courses of action to address proposed development connecting to existing sewers that will cause them to be operating beyond their design capacity. The SAC will make their recommendations to Dean Efstathiou, Assistant Director. The SAC will be chaired by Waterworks and Sewer Maintenance Division and will have representatives from Design and Land Development Divisions. Each Division will appoint a Principal Engineer or Senior Civil Engineer as a representative to the SAC and will convene whenever sewer decisions are required to address developmental impacts. Sewer Maintenance will maintain records of SAC meetings and will prepare recommendations to Administration for approval. The SAC may require other Division representatives to participate on a case-by-case basis when necessary, such as Building and Safety and Programs Development.

Divisional Responsibilities

Design Division

1. Support activities of the SAC.
2. Prepare sewer area studies when required.

3. Maintain records/archive of all approved sewer area studies and flow measurements.

Land Development Division

1. Support activities of the SAC.

2. Impose sewer area study requirements for private developments if necessary and review/approve all submittals.

3. Refer cases to SAC when both sewer area studies and flow measurements indicate that a potential overload situation exists or will exist based on criteria described below.

4. Provide copies of all approved sewer area studies and flow measurements to Design Division for archiving.

Waterworks and Sewer Maintenance Division

1. Chair the SAC, maintain meeting records and prepare position papers to Administration.

2. Advise the SAC when an overload condition is observed during maintenance activities.

3. Initiate effort to track and map all overload areas within the Consolidated Maintenance District.

4. Keep database of all flow measurement results.

Design Criteria

1. Capacity of sewer mainlines less than 15" in diameter are considered full (100 percent) when the ratio of the depth of flow (d) over the pipe diameter (D) is equal to 0.5, expressed as d/D = 0.5.

2. Capacity of sewer mainlines equal to or greater than 15" in diameter are considered full (100 percent) when the ratio of the depth of flow (d) over the pipe diameter (D) is equal to 0.75, expressed as d/D = 0.75.

3. When an area study indicates that flow conditions based on calculated discharges is between 101 percent to 150 percent of capacity, no flow measurements and no mitigation will be required. If maintenance records warrant, a flow test may be required.

4. When an area study for a development that proposes to increase the density or change the zoning indicates that flow conditions are between 151 to 200 percent of capacity, flow measurements shall be required. If the flow test indicates that the actual flow condition is below 151 percent, no mitigation will be required. If the flow test results indicate the actual flow is above 151 percent, the case shall be referred to the SAC to evaluate options and make recommendations to Administration for approval. These options may include, but are not limited to: requiring full mitigation from the development, assessing pro-rata shares, creation of a reimbursement district, or establishing a County Improvement (CI) district.

AHN:ca
P:\LDPUB\SUBPCHECK\SEWER\MISCELLANEOUS\SEWER INFRASTRUCTURE MANAGEMENT

cc: Administration (Kelly)
Building and Safety (Patel)
Design (Kumar)
Land Development (D'Antonio, Burger, Ruiz, Chong, Witter, Narag)
Programs Development (Afshari)
Waterworks and Sewer Maintenance (Del Real, Lehto)

APPENDIX G

SAMPLE CALCULATION

STREET NAME	Segment		Pipe												
	U/S M.H #	D/S M.H. #	Size (in)	Slope (%)	Diameter ft	Radius ft	Total X-Sectional Area ft2	What Percent? (50 or 75)	X sectional area of flow ft2 (A)	Coefficient of Roughness (n)	Wetted Permimeter ft (P)	Hydraulic Radius ft (A/P)	Kutters C	Empty	Design Capacity (CFS)
	P46	16	12	1.40%	1.000	0.500	0.785	0.500	0.393	0.013	1.571	0.250	86.757		2.016

$$Q = a * c * [R * S]^{1/2}$$

$$c = \frac{41.65 + 0.00281/S + 1.811/n}{1 + [41.65 + 0.00281/S] * n/R^{1/2}}$$

a = cross sectional area
c = Kutters coefficient
R = hydraulic radius
S = friction slope
n = Mannings coefficent

APPENDIX H

RELEVANT ZONING MAPS: LA COUNTY, CITY OF INDUSTRY, AND CITY OF DIAMOND BAR

CONTRIBUTING AREAS

PROJECT AREA

PROJECT AREA

CONTRIBUTING AREAS

CONTRIBUTING AREAS

NOTE: ONLY SHOWING CONTRIBUTING AREAS FOR LA COUNTY, SEE OTHER MAPS FOR OTHER CITY CONTRIBUTIONS

NOTE: NEXT SHEET SHOWS AREA NORTH OF CURRENT MAP

376 752 Feet

Printed: 10/24/22

Created in GIS-NET Public

Disclaimer: This map represents a quick representation of spatial imagery or vector layers using GIS-NET. The map should be interpreted in accordance with the GIS-NET Public disclaimer statement. Printed with permission from the Los Angeles County Dept. of Regional Planning. All rights reserved.

LA COUNTY PLANNING

CONTRIBUTING AREAS

PROJECT AREA

NOTE: ONLY SHOWING CONTRIBUTING AREAS FOR CITY OF INDUSTRY, FOR LA COUNTY AND DIAMOND BAR SEE OTHER MAPS

Date: 6/19/15

PLACEWORKS

0 2,500 5,000 10,000 Feet

0 0.5 1 2 Miles

City of Industry

Sphere of Influence Boundary

Zoning

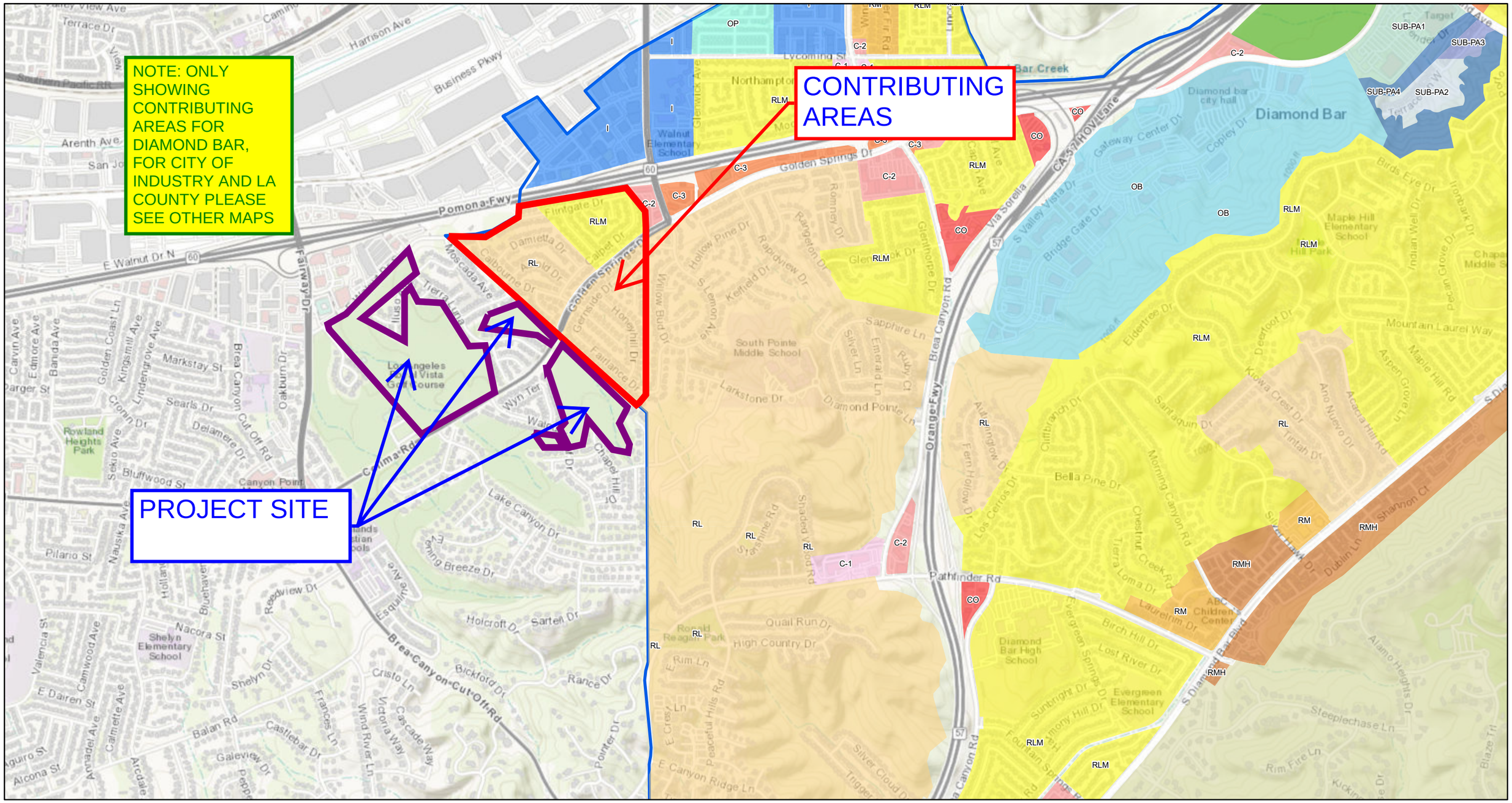
- Industrial (M)
- Industrial - Commercial Overlay (M-C Overlay)
- Commercial (C)
- Commercial - Adult Business Overlay (A-B)
- Institutional (INST)
- Automobile Zone (A-Z)
- Recreation and Open Space Zone (ROS)

Printed: 9/29/2015

ZONING

CITY OF INDUSTRY

Diamond Bar GIS



10/24/2022, 5:33:14 PM

Zoning

- C-1: Neighborhood Commercial
- C-2: Community Commercial
- C-3: Regional Commercial
- C-3-PD: Regional Commercial Planned Development
- CO: Commercial Office
- I: Light Industry
- OB: Office, Business Park
- OP: Office, Professional
- OS: Open Space/ Conservation
- RL: Low Density Residential
- RLM: Low Medium Density Residential
- RM: Medium Density Residential
- RMH: Medium High Density Residential
- RR: Rural Residential
- SUB-PA1: Planning Area 1
- SUB-PA2: Planning Area 2
- SUB-PA3: Planning Area 3
- SUB-PA4: Planning Area 4
- Diamond Bar Boundary

1:18,056

0 0.17 0.35 0.7 mi

0 0.3 0.6 1.2 km

County of Los Angeles, Bureau of Land Management, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, METI/NASA, EPA, USDA

City of Diamond Bar

APPENDIX I

RECORD PLANS FOR LA COUNTY SEWERS: PC9051, PC6594, PC6788, PC10811, PC785, IPC 142, IPC 239, IPC 257, AND IPC 257R

B.M. CG 1309 ELEV. 508.723

LEAD AND NAIL WEST END OF CONCRETE HEADWALL, 18'SOUTH OF CENTERLINE WALNUT DRIVE AND 20' EAST OF CENTERLINE PROD. OF FAIRWAY DRIVE.

OTTRBEIN QUAD. 1980

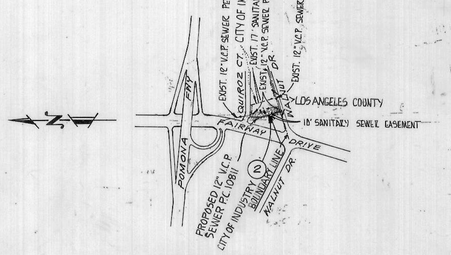
PRIVATE ENGINER'S NOTICE TO CONTRACTORS:

THE EXISTENCE AND APPROXIMATE LOCATION OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES OR STRUCTURES EXCEPT AS SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO LIABILITY AS TO THE EXACT LOCATION OF SAID LINES NOR FOR UTILITY OR IRRIGATION LINES WHOSE LOCATIONS ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY AND IRRIGATION COMPANIES PRIOR TO WORK OR EXCAVATION TO DETERMINE EXACT LOCATIONS OF ALL LINES AFFECTING THIS WORK, WHETHER OR NOT SHOWN HEREON, AND FOR ANY DAMAGE OR PROTECTION TO THESE LINES.

MARK L. RAAB RCE 29616 EXP. 3/31/91 — 5/4/88 DATE

NOTICE TO CONTRACTOR:

1. SEWER SERVICE TO BE MAINTAINED AT ALL TIMES.
2. SALVAGEABLE FRAMES AND COVERS TO BE DELIVERED TO SEWER MAINTENANCE YARD AT 2849 S. MYRTLE AVE., IRWINDALE, CALIF.



INDEX MAP
SCALE: 1" = 600'

P.C. 10811, PARCEL MAP No. 18564

NOTE: NUMBER IN CIRCLE INDICATES PAGE NUMBER.

NO CONNECTION FOR THE DISPOSAL OF INDUSTRIAL WASTES SHALL BE MADE TO SEWERS SHOWN ON THESE DRAWINGS UNTIL A PERMIT FOR INDUSTRIAL WASTEWATER DISCHARGE HAS BEEN ISSUED BY THE SANITATION DISTRICTS FOR SAID CONNECTION.

BEFORE BREAKING INTO OR CONSTRUCTION ON A COUNTY SANITATION DISTRICT SEWER AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, SANITATION DISTRICT INSPECTOR SHALL BE NOTIFIED BY PHONE (818) 962-8605 SO THAT REQUIRED INSPECTION CAN BE MADE.

REVISION No 1 — DATE
REVISED LOCATION OF M.H. FROM 23+99.35 TO 24+18.35.
REVISED BY: Mark L. Raab R.E. No 29616
APPROVED: Sanjiv G. Bali 3/16/89 DEPT. OF PUBLIC WORKS

CITY OF INDUSTRY
APPROVED
John J. Radecki Jr. 5/24/88
JOHN J. RADECKI JR. RCE 20330 CITY ENGINEER — DATE

GENERAL NOTES:

1. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. SEA LEVEL DATUM OF 1929.
2. NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS.
3. NO REPRESENTATIVE OF THE DEPARTMENT OF PUBLIC WORKS WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
4. GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURBS, CENTER LINE OF STREETS, OR CENTER LINE OF ALLEYS 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.
5. THE PRIVATE ENGINEER SHALL FURNISH THE DEPARTMENT OF PUBLIC WORKS WITH GRADE SHEETS AND STATIONING FOR ALL HOUSE LATERALS AND "Y" OR "T" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED. 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° WITH THE MAIN LINE SEWER. ANY CHANGE IN ALIGNMENT SHALL BE REQUESTED IN WRITING BY THE PRIVATE ENGINEER.
6. THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL DEPTH AT THE PROPERTY LINE BELOW THE TOP OF CURB ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
7. BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE CONSTRUCTION DIVISION OF LOS ANGELES COUNTY DEPT. OF PUBLIC WORKS PERMIT OFFICE NO. 6, AND PAY A FEE TO THE DEPARTMENT OF PUBLIC WORKS, 900 S. FREMONT AVE., ALHAMBRA, CA. 91803 8TH FLOOR TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
8. IF WORK IS TO BE DONE IN A STATE HIGHWAY, A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA, DIVISION OF HIGHWAYS, 120 SOUTH SPRING STREET, LOS ANGELES, CALIFORNIA.
9. APPROVAL OF THIS PLAN BY THE COUNTY OF LOS ANGELES DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.
10. REFER TO SECTION 7.10.4.1 OF THE STANDARD SPECIFICATIONS, REGARDING SAFETY ORDERS.
11. PRIOR TO THE ISSUANCE OF THE REQUIRED SEWER CONSTRUCTION PERMIT, THE CONTRACTOR SHALL OBTAIN AND FILE WITH THE DEPARTMENT OF PUBLIC WORKS COPIES OF A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE ROAD ELEMENT, AT THE DEPARTMENT OF PUBLIC WORKS 900 S. FREMONT AVE., ALHAMBRA, CA. 91803 - 8TH FLOOR. A PERMIT FOR EXCAVATIONS AND TRENCHES FROM THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY AND A CERTIFICATE OF WORKER'S COMPENSATION INSURANCE WITH THE DEPARTMENT OF PUBLIC WORKS, NAMED AS THE CERTIFICATE HOLDER TO BE NOTIFIED 30 DAYS PRIOR TO CANCELLATION OF POLICY.

CONSTRUCTION NOTES:

1. WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1988 EDITION WITH 1988 SUPPLEMENTS) AND DEPT. OF PUBLIC WORKS SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED SEPT. 21, 1976 AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE DEPARTMENT OF PUBLIC WORKS.
2. THE CONTRACTOR SHALL NOTIFY THE ENVIRONMENTAL SERVICES BY TELEPHONE (818) 458-5129 AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
3. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE 8 FEET BELOW CURB GRADE EXCEPT AS NOTED.
4. WYE OR TEE BRANCHES MAY BE USED FOR CONNECTIONS TO MAINLINE SEWERS EXCEPT AS NOTED.
5. ALL STRUCTURES SHALL BE EITHER BRICK MANHOLES PER S-3 OR PRECAST CONCRETE MANHOLES PER S-36, EXCEPT AS NOTED.
6. PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
7. MANHOLE TOPS IN UNIMPROVED RIGHTS OF WAY TO BE SIX INCHES ABOVE FINISHED GRADE.
8. VITRIFIED CLAY PIPE JOINTS SHALL BE TYPE "D" OR "G" PER STANDARD SPECIFICATIONS SECTION 208-2.
9. IF A POWER POLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED, PER S-23, CASE II. TWO FEET ON EACH SIDE FROM THE POINT OF INTERFERENCE.
10. IF DURING THE COURSE OF CONSTRUCTION IT IS DETERMINED THAT THERE IS LESS THAN FOUR FEET OF COVER OVER THE TOP OF A MAIN LINE OR HOUSE LATERAL SEWER WHICH IS NOT INDICATED ON THE PLANS, THE PIPE SHALL BE ENCASED PER S-23, CASE II UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS.
11. ALL JOINTS BETWEEN CAST IRON PIPE AND VITRIFIED CLAY PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT, TYPE "C" OR "D", (WITH BUSHING IF NECESSARY) PER STANDARD SPECIFICATIONS, SECTION 208-2.
12. SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 306-1.4 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
13. RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET L.A. COUNTY ROAD DEPT. OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
14. FULL COMPLIANCE WITH SECTION 306-1.3.4 OF THE STANDARD SPECIFICATION WILL BE REQUIRED FOR BACKFILL IN STREETS. CERTIFICATION OF BACKFILL COMPACTION AND SAND EQUIVALENTS BY A QUALIFIED, REGISTERED TESTING LABORATORY SHALL BE PROVIDED BY THE PERMITTEE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF PARTIAL ACCEPTANCE.
15. SPECIAL BACKFILL IN EASEMENT CONSTRUCTION: (A) BACKFILL TRENCH AND REPLACE OTHER EARTH SO AS TO ACHIEVE THE NATURAL OR FINISHED GRADES AND SLOPES SHOWN ON THE GRADING PLAN APPROVED FOR THIS DEVELOPMENT BY THE LAND DEVELOPMENT DIVISION, (B) ALL BACKFILL AND EARTH REPLACED SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY PER A.S.T.M. STD. METHOD OF TEST D698.57 AS MODIFIED. ACCEPTABLE CERTIFICATION OF SUCH COMPACION SHALL BE SUBMITTED TO THE CONSTRUCTION DIVISION, DEPARTMENT OF PUBLIC WORKS.

PROFILE, ALIGNMENT AND GRADE OF

SANITARY SEWERS

TO BE CONSTRUCTED IN

PARCEL MAP NO. 18564

PRIVATE CONTRACT NO. 10811

INDEX: U-137 - D&E-4

1 SHEET ; 2 PAGES

53340

SCALE: VERT. 1" = 8' HORIZ. 1" = 40'

MARCH, 1988

REGISTERED PROFESSIONAL ENGINEER — MARK L. RAAB — No. 29616 — Exp. 3-31-91 — CIVIL — STATE OF CALIFORNIA

PREPARED IN THE OFFICES OF
raab engineering inc.
1700 E. LINCOLN AVE. SUITE 201 ANAHEIM, CA. 92805 (714)533-0840
BY: Mark L. Raab
MARK L. RAAB REG. C.E. No. 29616

THE FOLLOWING LATEST REVISED STANDARD PLANS ON FILE IN THE OFFICE OF THE DEPARTMENT OF PUBLIC WORKS SHALL APPLY IN THE CONSTRUCTION OF THIS PROJECT:

LEGEND	S-1
MINIMUM PUBLIC SAFETY REQUIREMENTS	S-2
BRICK MANHOLE	S-3
STANDARD MANHOLE STEP	S-17
BEDDING FOR SEWER PIPE	S-21
CRADLING AND ENCASEMENT	S-23
WYE OR TEE SUPPORT	S-26
ALLOWABLE TRENCH WIDTHS	S-33
LOCKING MANHOLE FRAME AND COVER	S-35
NON-REINFORCED PRECAST CONCRETE MANHOLE	S-36
SPECIAL HOUSE LATERALS	S-25

COUNTY OF LOS ANGELES, CALIFORNIA

THOMAS A. TIDEMANSON
DIRECTOR OF PUBLIC WORKS

APPROVED Carl A. Blum 8/9/88 (DATE)

CHECKED Bernard Ohuma 8-3-88 (DATE)

REG. C.E. NO. 18,116

CHARLES W. CARRY
CHIEF ENGINEER

CO. SAN. DIST. NO. 21

APPROVED for James A. Noyes OFFICE ENGINEER 8/12/88

LA PUENTE BLDG. DIST. 2.02

PS007572

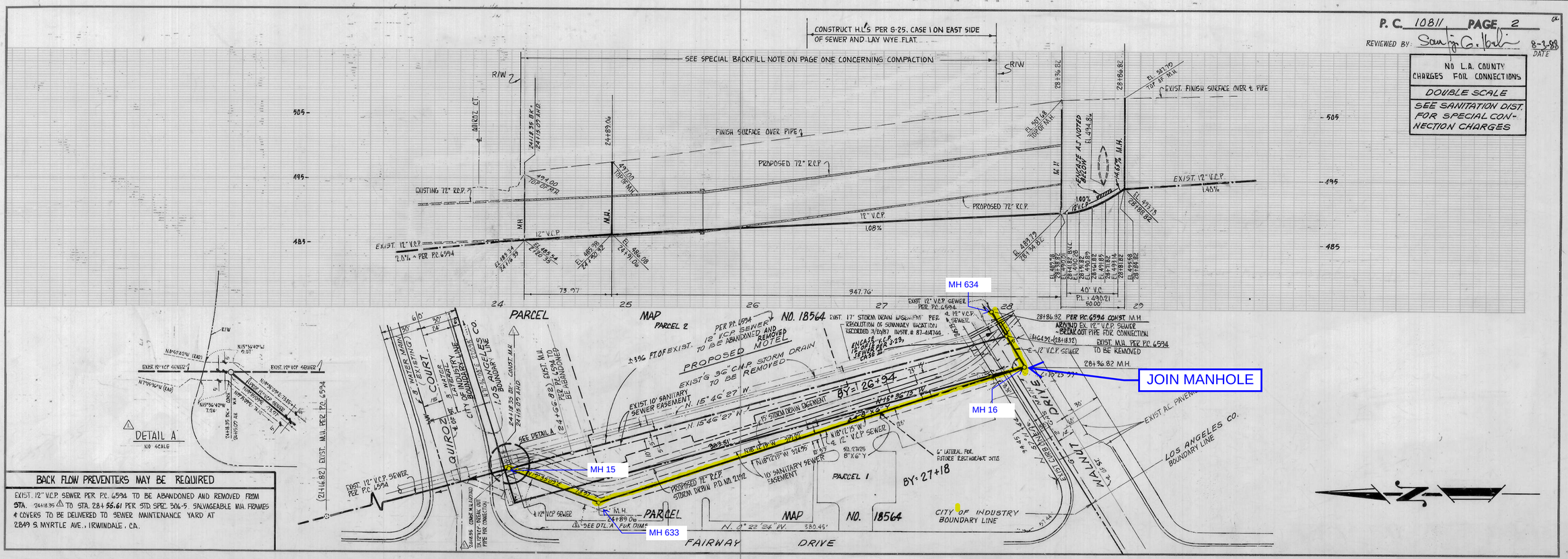
P. C. 10811 PAGE 2

REVIEWED BY: Sanjiv G. Bali 8-2-88 DATE

NO L.A. COUNTY CHARGES FOR CONNECTIONS

DOUBLE SCALE

SEE SANITATION DIST. FOR SPECIAL CONNECTION CHARGES



PARCEL MAP 18564
P.C. 10811

Bench Mark: S.G. 1930 Elev. 583.121
Fifth Ave. 0.25 mile East of Brea Canyon Cut-Off Road near Culvert at mile post 3.75' 110 ft North of center of pavement, 1 Oft. Westerly from Southeastern prolongation of a barbed wire fence and 624 feet from fence corner. A station C.S. Mon. in handhole stamped B.M. 44.7 1955 RE 63"

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.

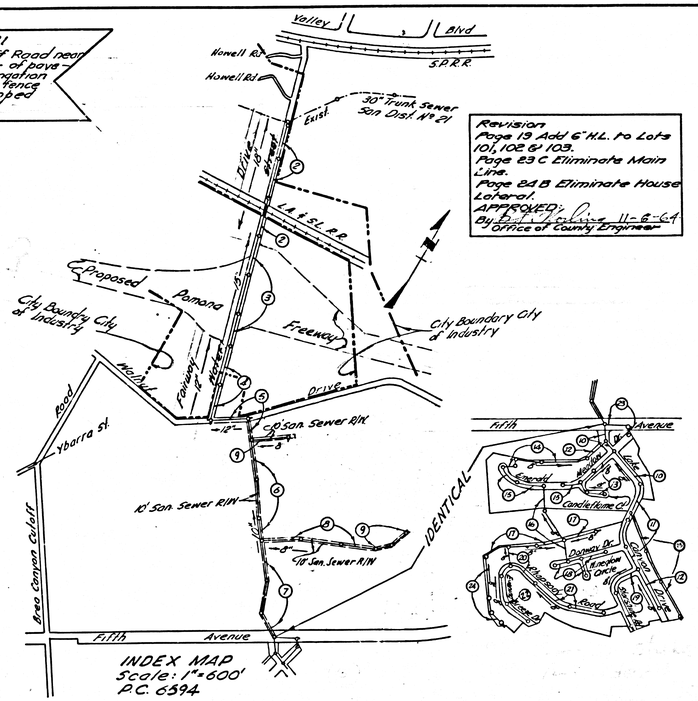
BEFORE BREAKING INTO ANY EXISTING STRUCTURE AND BEFORE FINAL ACCEPTANCE OF THIS WORK, COUNTY SANITATION DISTRICT (DU 4-1281) SHALL BE NOTIFIED IN ORDER THAT REQUIRED INSPECTION CAN BE MADE.

Fairway Drive

Note: 30" Gas Line in ~~Water Street~~ is high pressure gas line (655 psi). Contractor to notify So. Counties Gas Co. 24 hrs. prior to excavation. Phone Brea, Jasper 9-2889

Approved Robt S. Rope
10-2-63 CITY MANAGER CITY OF INDUSTRY

COLLECT CHARGES AS INDICATED
D. R. Olson 9/23/63



INDEX MAP
Scale: 1"=600'
P.C. 6594

Note: Numbers in circles indicate page numbers

Revision
Page 19 Add 6" W.L. to Lots 101, 102 & 103.
Page 23 C Eliminate Main Line.
Page 24 B Eliminate House Laterals.
APPROVED:
By [signature] 11-6-64
Office of County Engineer

DOUBLE SCALE

PUENTE *BLDG. DIST. NO. 2*

NOTES:

1. PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
2. NO REPRESENTATIVE OF THE COUNTY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
3. IF DURING THE COURSE OF CONSTRUCTION IT IS DETERMINED THAT THERE IS LESS THAN FOUR FEET OF COVER OVER THE TOP OF A MAIN LINE OR HOUSE LATERAL VCP SEWER WHICH IS NOT INDICATED ON THE PLANS, THE PIPE SHALL BE ENCASED PER S.A. 172 CASE III UNLESS OTHERWISE APPROVED BY THE COUNTY ENGINEER.
4. THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL DEPTH AT THE PROPERTY LINE BELOW THE TOP OF CURB ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
5. NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE COUNTY ENGINEER.
6. USE STANDARD MANHOLE FRAMES AND COVERS, S-a-117.
7. USE EXTRA STRENGTH PIPE, ALL PIPE STANDARD DEPTH, EXCEPT AS NOTED.
8. USE MECHANICAL COMPRESSION JOINTS FOR ALL V.C.P. JOINTS PER SPEC'S., SECS. 14, A8 & A9
9. RESURFACE ALL TRENCH WITHIN PAVED AREA TO MEET L.A. COUNTY ROAD DEPT. OR CALIF. STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
10. IF A POWER POLE IS WITHIN THREE FEET OF SEWER, THE SEWER SHALL BE ENCASED PER S.A. 172 OF TWO FEET ON EITHER SIDE FROM THE POLE.
11. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE 6 FEET BELOW CURB GRADE
12. MANHOLES SHALL BE BRICK SEWER STRUCTURES PER S-a-8, PRECAST CONCRETE MANHOLES PER S-A 136 OR S-A 173 MAY BE USED AS AN ALTERNATE IN LOCATIONS APPROVED BY THE COUNTY ENGINEER.
13. FOR ALLOWABLE LEAKAGE TEST USE FORMULA NO. 2 SPEC'S., SEC. 64.
14. MANHOLE TOPS IN UNIMPROVED RIGHTS-OF-WAY TO BE SIX INCHES ABOVE FINISHED GRADE.
15. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION BY TELEPHONE, MADISON 9-4747, EXT. 81581 AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
16. STANDARD SPECIFICATIONS DATED MAY 28, 1962, SHALL APPLY IN THE CONSTRUCTION OF THIS PROJECT.
17. ALL STATE AND LOCAL TRENCH SAFETY ORDERS WILL BE RIGIDLY ENFORCED.
18. THE PRIVATE ENGINEER SHALL FURNISH THE COUNTY ENGINEER WITH GRADE SHEETS AND STATIONING FOR ALL HOUSE LATERALS AND "Y" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED. 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° WITH THE MAIN LINE SEWER. ANY CHANGE IN ALIGNMENT SHALL BE REQUESTED IN WRITING BY THE PRIVATE ENGINEER.
19. Sewers in filled ground:
   (A) No construction will be permitted in fill areas unless acceptable certification is submitted to the Construction Div. of the County Engineers Dept. that relative compaction is greater than 80%.
   (B) If compaction is less than 90%, the sewer must be cradled as shown on plans per S-a-166, or have a special base course per S-a-179, Case III. Special Manhole bases must be installed per S-a-123 as indicated on plans.
   (C) If compaction is greater than 90% neither cradling nor special manhole bases will be required. However, mechanical compression joints must be used in fill areas.

PROFILE ALIGNMENT AND GRADE OF P.C. 6594

SANITARY SEWERS PAGE 1

TO BE CONSTRUCTED IN J.N. 0360.49

TRACT NO. 28140

PRIVATE CONTRACT NO. 6594

W.S. 39

19 SHEETS; 25 PAGES

SCALE: VERT. 1"=6' HORIZ. 1"=40' JULY, 1963

PREPARED IN THE OFFICES OF

WEACO INC.

By: John H. Cesar REG. C. E. NO. 9915

36288

FOR LEGEND SEE PLAN NO. S-A-61

NOTE:
GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURBS, CENTER LINE OF STREETS, OR CENTER LINE OF ALLEYS 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.
THIS DRAWING AND THE DATA HEREON ARE HEREBY MADE A PART OF THE SPECIFICATIONS.
WORK SHALL BE CONSTRUCTED ACCORDING TO SPECIFICATIONS ON FILE IN THE OFFICE OF THE COUNTY ENGINEER AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE COUNTY ENGINEER.
BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE L. A. COUNTY ROAD DEPT., DISTRICT OFFICE NO. 1 AND PAY A FEE TO THE COUNTY ENGINEER, ROOM 310 C.O. ENG. BLDG. 108 W. 2ND ST., L. A. SUFFICIENT TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
APPROVAL OF THIS PLAN BY THE COUNTY OF LOS ANGELES DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OR OF THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.
IF WORK IS TO BE DONE IN A STATE HIGHWAY, A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA, DIVISION OF HIGHWAYS, 120 SOUTH SPRING STREET.

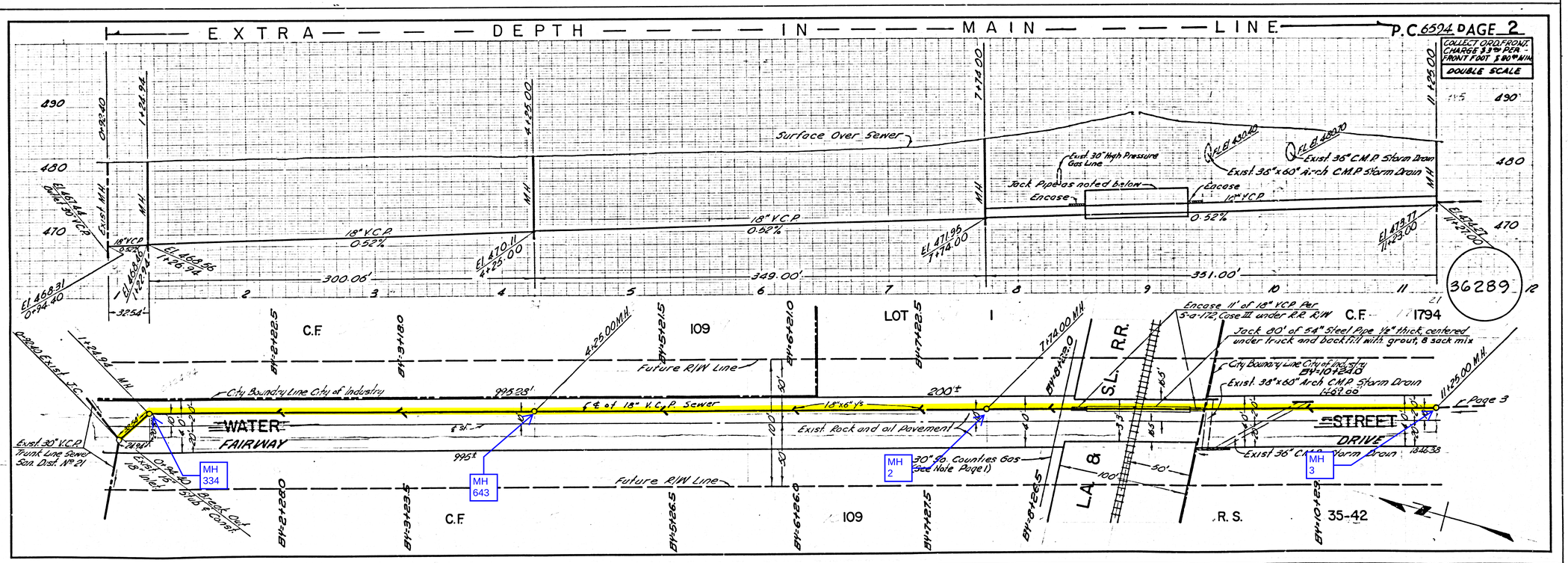
COUNTY OF LOS ANGELES, CALIFORNIA

APPROVED, JOHN A. LAMBIE, COUNTY ENGINEER — APPROVED, D. PARKHURST, CHIEF ENGINEER

BY [signature] ASS'T SANITATION ENGINEER — BY [signature] CO. SAN. DIST. NO. 21 OFFICE ENGINEER

CHECKED BY [signature] 9-27-63
OFFICE OF COUNTY ENGINEER, REG. C. E. NO. 9406

SUBMITTED Gordon W. Knigge SAN DIMAS REGIONAL ENGINEER

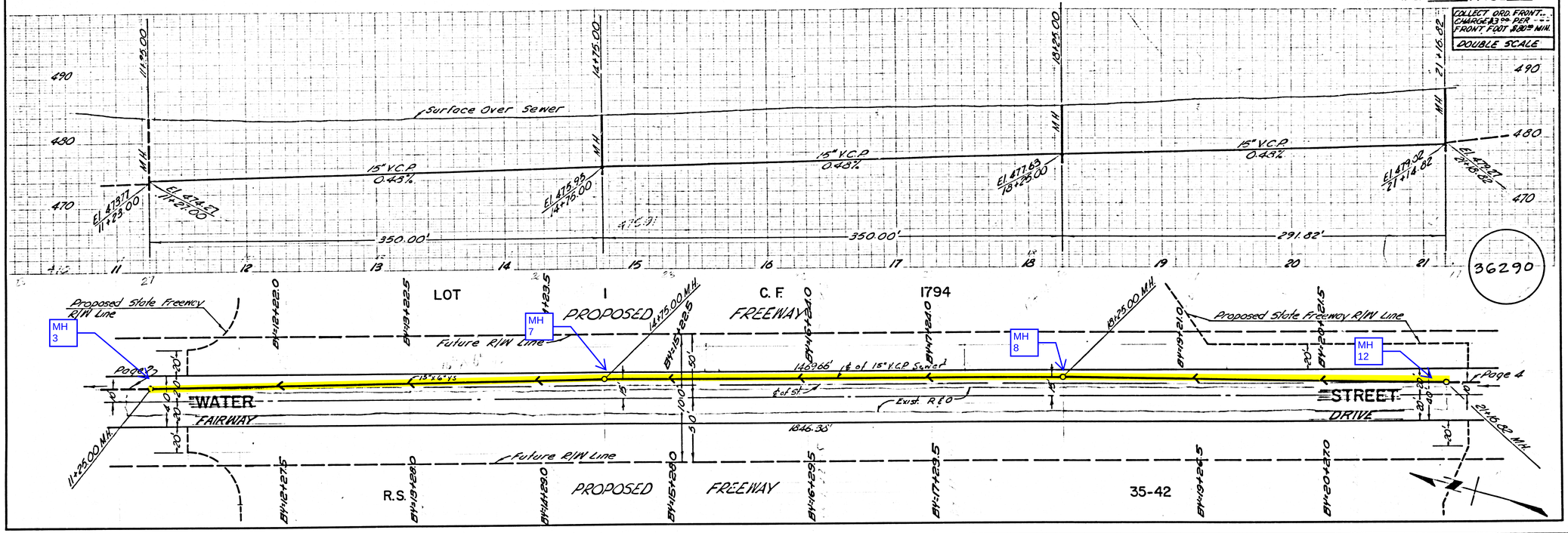


L.A. COUNTY SEWER SHEET NO. 1 SO. CAL. BLUEPRINT CO.

P.C. 6594 PAGE 3

COLLECT ORD. FRONT CHARGE $3.00 PER FRONT FOOT $30.00 MIN.

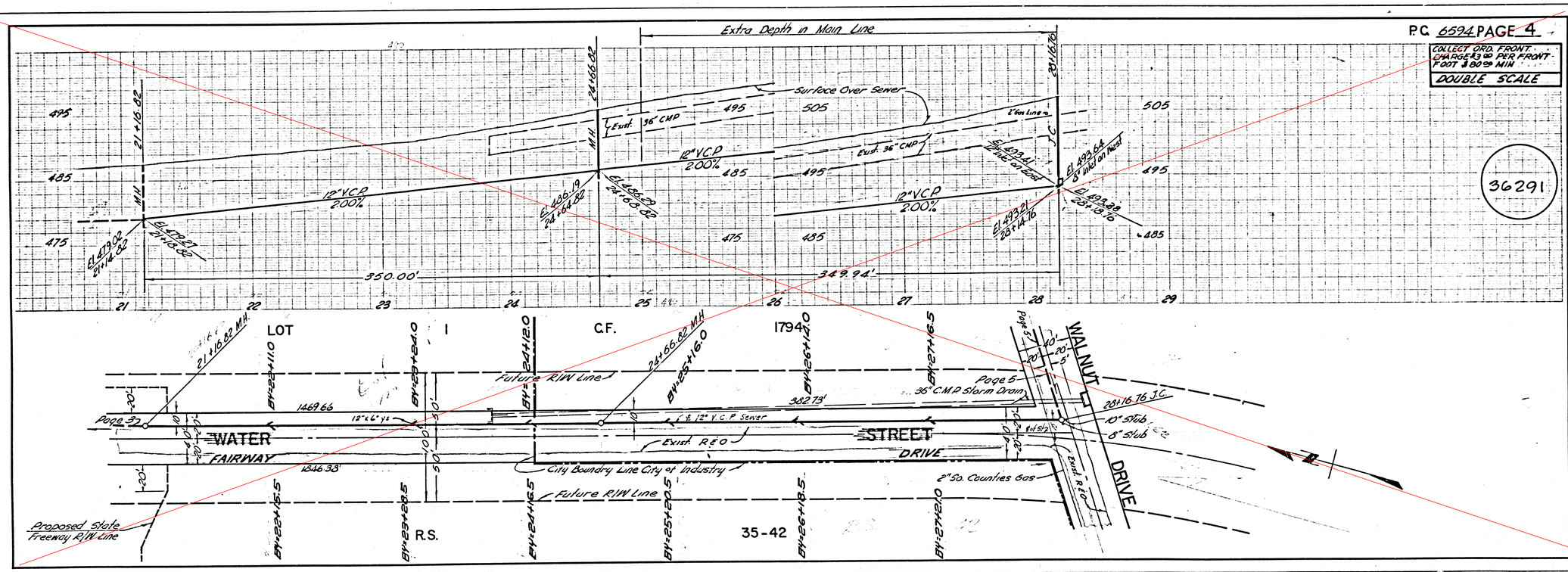
DOUBLE SCALE



P.C. 6594 PAGE 4

COLLECT ORD. FRONT CHARGE $3.00 PER FRONT FOOT $30.00 MIN.

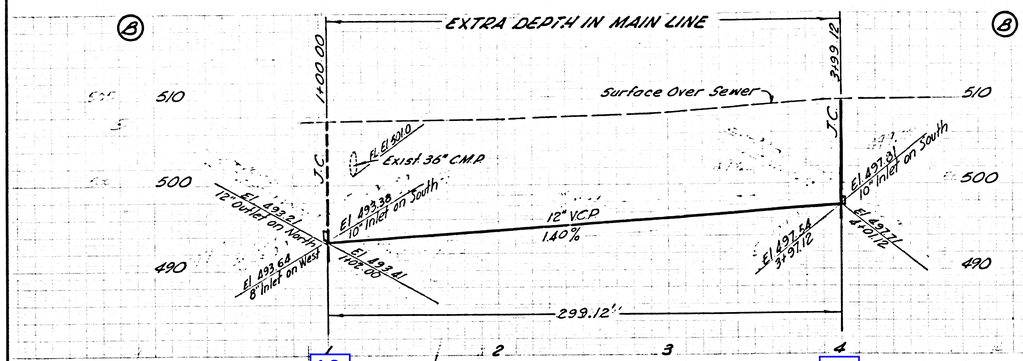
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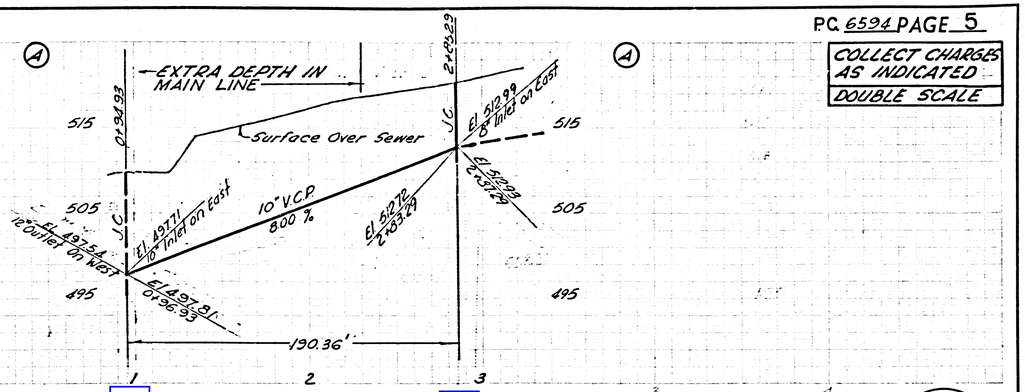


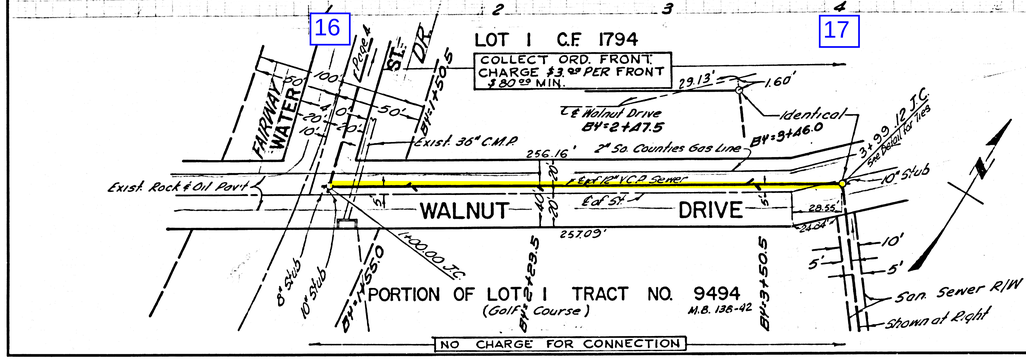
E. & E. 199 SO. CAL. BLUE PRINT SHEET NO. 2

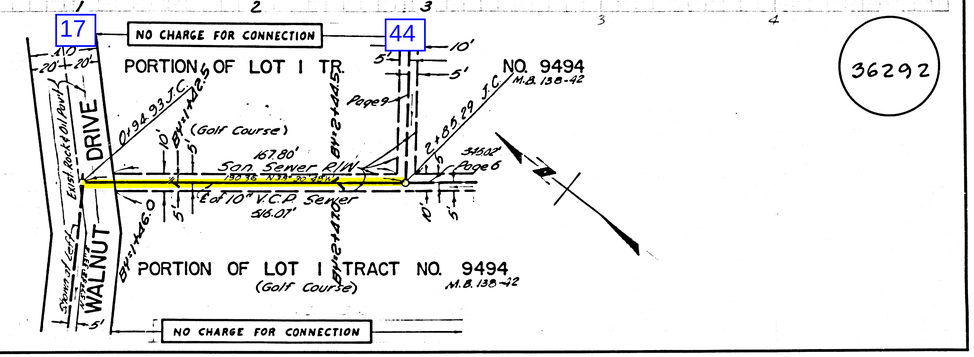
P.C. 6594 PAGE 5

COLLECT CHARGES AS INDICATED
DOUBLE SCALE





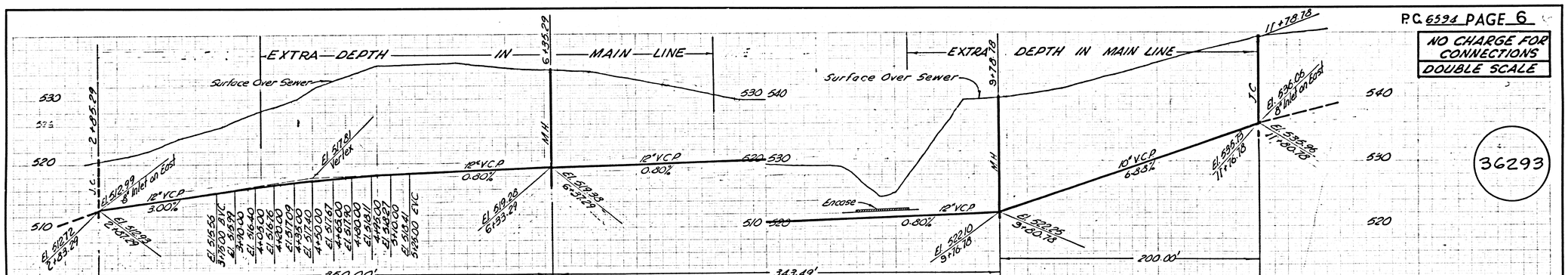




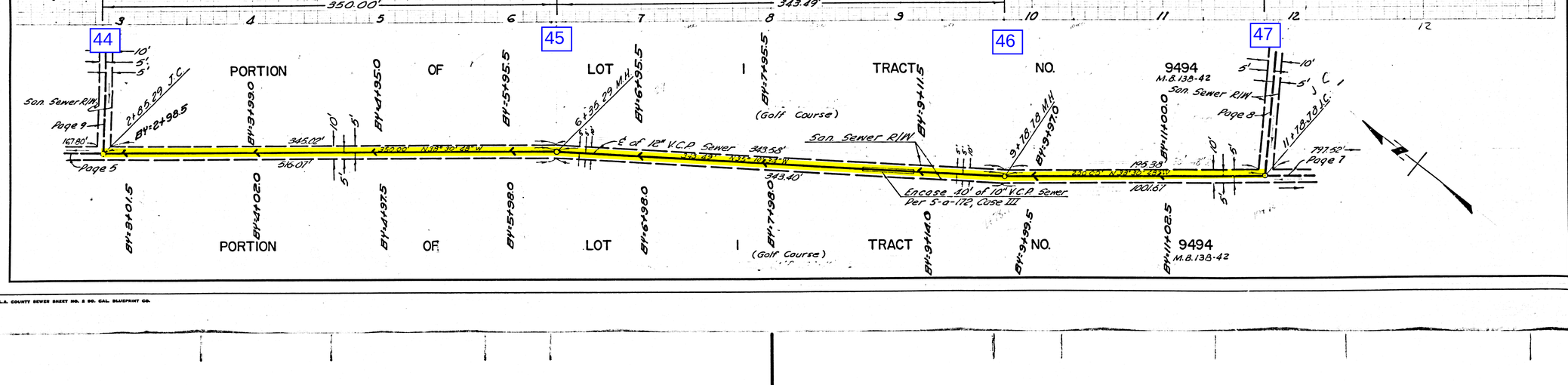
36292

P.C. 6534 PAGE 6

NO CHARGE FOR CONNECTIONS
DOUBLE SCALE



36293



K. & E. 186 L.A. COUNTY SEWER SHEET NO. 2 00. CAL. BLUEPRINT CO.

P.C. 6594 PAGE 7

NO CHARGE FOR CONNECTIONS
DOUBLE SCALE

EXTRA DEPTH — EXTRA DEPTH — EXTRA DEPTH — EXTRA DEPTH

Surface Over Sewer — Surface Over Sewer

Jack Pipe as Noted Below

10"VCP 3.88% — 10"VCP 11.00% — 10"VCP 14.44% — 10"VCP 3.88% — 10"VCP 11.00% — 10"VCP 200%

El 539.73 11+16.78 — El 539.06 8" Inlet on East — El 535.98 11+30.78 — El 544.28 15+28.78 — El 543.92 15+30.78 — El 563.90 15+20.78 — El 575.43 16+36.78 — El 580.07 8" Inlet on South — El 580.60 20+44.13

JC — MH — JC

350.00' — 300.00' — 267.35'

36294

47 — 51 — 52 — 100

PORTION OF LOT I TRACT NO. 9494 M.B. 138-42 (Golf Course)

San. Sewer R/W — 345.05' — 549.63' — 299.08' — 300.92'

Page 8 — Page 6 — 195.38' — 6" V.C.P. Sewer

Jack 35' of 36" Steel Pipe 5/16" thick, centered under exist. pvmt and backfill with grout

Building — 81.20 M.H. — 18+47.0 — 169.94' — 167.48'

LAKE CANYON — Page 10 — DRIVE — FIFTH — Walnut Valley Water District

P.C. 6594 PAGE 8

NO CHARGE FOR CONNECTIONS
DOUBLE SCALE

EXTRA DEPTH — EXTRA DEPTH IN MAIN LINE — Surface Over Sewer

8"V.C.P 0.40% — 8"V.C.P 0.40% — Const 6' Chimney Base Per S-a-9 — Encase as noted below — Wall of M.H. to be 12" thick when depth exceeds 22' deep — Const 6" Chimney Base Per S-a-9

El 539.73 10" Inlet on North — El 536.06 10" Inlet on South — El 537.44 3+48.00 — El 537.14 3+32.00 — El 539.30 6+98.00 — El 539.02 7+02.00 — El 540.31 10+38.86

350.00' — 350.00' — 340.86'

36295

47 — 48 — 49 — 50

PORTION OF LOT I TRACT NO. 9494 M.B. 138-42 (Golf Course)

Const Chimney Base as Noted Above — San Sewer R/W — 690.41' — 691.07' — 625' of Encasement Per S-a-172 Case III — Const Chimney Base as Noted Above

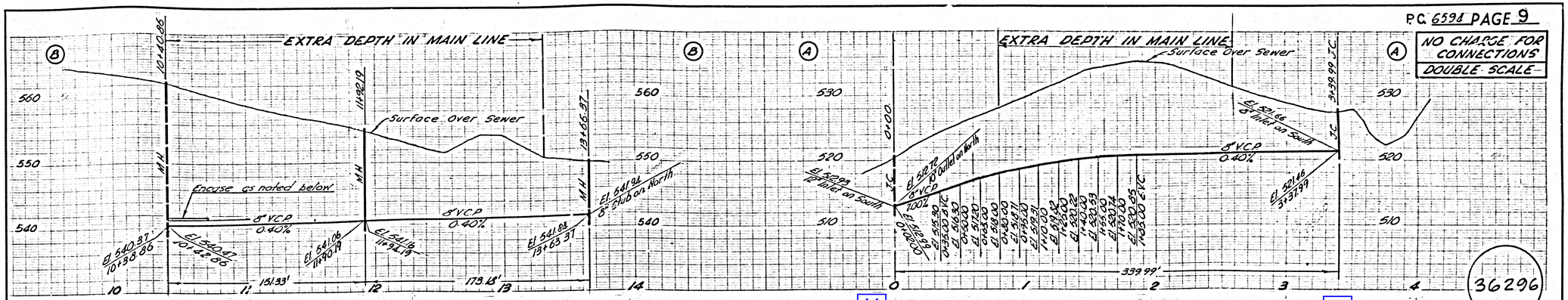
Page 7 — Page 9 — 345.94 — 344.00' — 146.27'

PORTION OF LOT 1 TR. 9058 M.B. 144-98

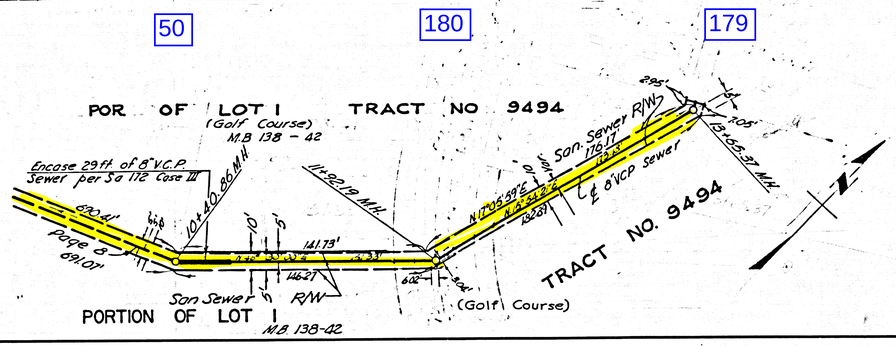
L.A. COUNTY SEWER SHEET NO. 2 SO. CAL. BLUEPRINT CO.

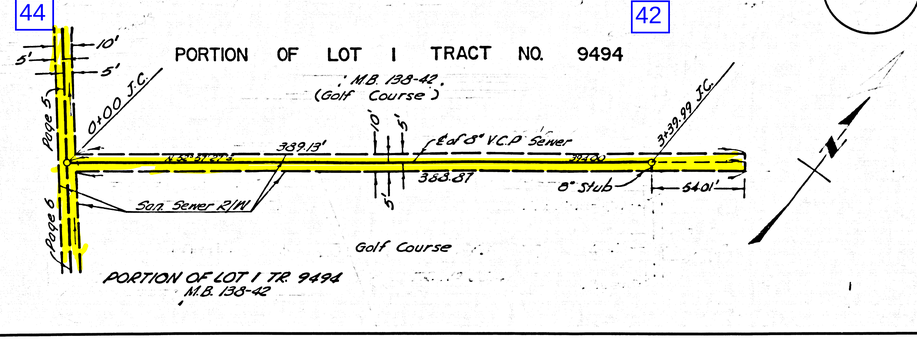
P.C. 6594 PAGE 9

NO CHARGE FOR CONNECTIONS
DOUBLE SCALE



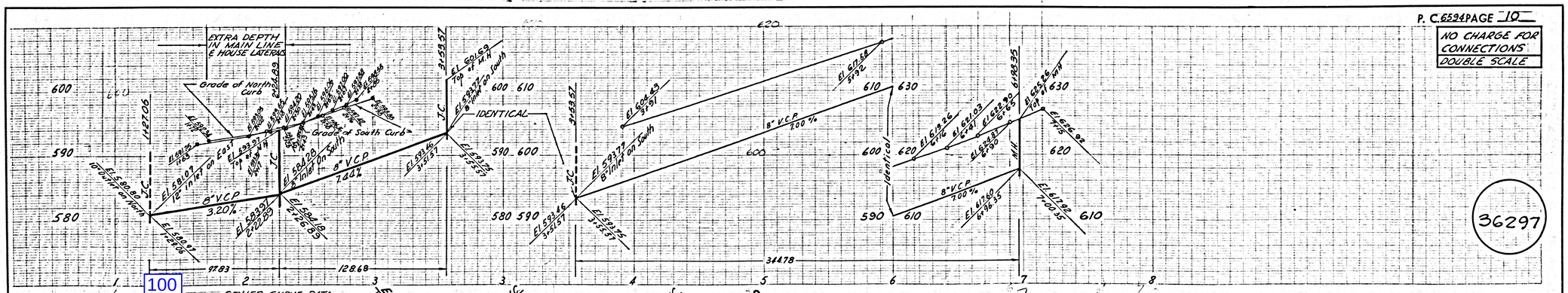
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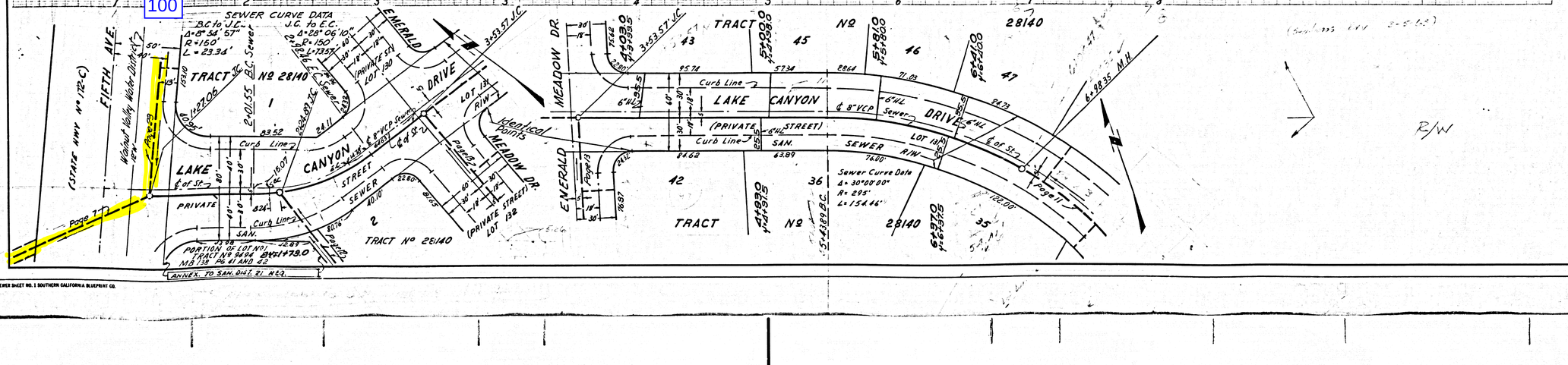


P.C. 6524 PAGE 10

NO CHARGE FOR CONNECTIONS
DOUBLE SCALE



100



L.A. COUNTY SEWER SHEET NO. 1 SOUTHERN CALIFORNIA BLUEPRINT CO.

DOUBLE SCALE

LA PUENTE BLDG. DIST. NO. 2

PROFILE ALIGNMENT AND GRADE OF P.C.6788

SANITARY SEWERS PAGE 1

TO BE CONSTRUCTED IN

TRACT Nº 29185

PRIVATE CONTRACT NO.6788

W.S. 39

6 SHEETS; 5 PAGES

SCALE: VERT. 1"=5' HORIZ. 1"=40' November , 1963

36220

PREPARED IN THE OFFICES OF

DUTCH HOLZHAUER ENGINEERING INC.

T.W. Hallman Ave Alhambra, California CU-3-3251

By: W.C. Holzhauer REG. C. E. NO.10219

FOR LEGEND SEE PLAN NO. S-A-64

NOTE:

GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURBS, CENTER LINE OF STREETS, OR CENTER LINE OF ALLEYS 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.

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

WORK SHALL BE CONSTRUCTED ACCORDING TO SPECIFICATIONS DATED May 29,1964 FILED IN THE OFFICE OF THE COUNTY ENGINEER AND SHALL BE PERFORMED ONLY IN THE PRESENCE OF THE CO. ENGR. BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE L. A. COUNTY ROAD DEPT., DISTRICT OFFICE NO. 1 AND PAY FEE TO THE COUNTY ENGINEER FOR BUILDING CONSTRUCTION FOR INSPECTION AT 370 SAN DIMAS (REGIONAL OFFICE BUILDING) SUFFICIENT TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.

APPROVAL OF THIS PLAN BY THE COUNTY OF LOS ANGELES DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.

IF WORK IS TO BE DONE IN A STATE HIGHWAY, A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA, DIVISION OF HIGHWAYS, 120 SOUTH SPRING STREET.

COUNTY OF LOS ANGELES, CALIFORNIA

APPROVED, JOHN A. LAMBIE, COUNTY ENGINEER — APPROVED, J.D. PARKHURST CHIEF ENGINEER

CO. SAN. DIST. NO. 21

BY Richard E. Kuhn ASST. SANITATION ENGINEER — BY G. Parkhurst OFFICE ENGINEER

SUBMITTED BY: Loden W. Keirl SAN DIMAS REGIONAL OFFICE

CHECKED BY: B.F. Perkins 1-30-64 REG. C.E. NO. 11636

J.N. 036192

BENCH MARK: Sa.1790

FOUND LEAD & TACK NEAR CENTER OF CURVED CONCRETE HEADWALL ± 2.4' NORTHERLY OF THE CENTERLINE OF LYCOMING STREET AND 20' EASTERLY OF LEMON.

OTTERBEIN 1959 ELEV. 529.111

UNDERGROUND STRUCTURES

ALL UNDERGROUND UTILITIES OR STRUCTURES REPORTED BY THE OWNER OR OTHERS AND THOSE SHOWN ON THE RECORDS EXAMINED ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT.

THE OWNER BY EXCEPTING THESE PLANS OR PROCEEDING WITH IMPROVEMENTS PURSUANT THERE TO AGREES TO ASSUME LIABILITY AND TO HOLD UNDERSIGNED HARMLESS FOR ANY DAMAGES RESULTING TO THE EXISTANCE OF THE UNDERGROUND UTILITIES OR STRUCTURES NOT REPORTED TO THE UNDERSIGNED, NOT INDICATED ON THE PUBLIC RECORDS EXAMINED; LOCATED AT VARIANCE WITH THAT REPORTED OR SHOWN ON RECORDS EXAMINED.

THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES SHOWN AND ANY OTHER UTILITIES OR STRUCTURES FOUND AT THE SITE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK.

W.C. HOLZHAUER RCE No 13054

1. PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
2. NO REPRESENTATIVE OF THE COUNTY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
3. THE PRIVATE ENGINEER SHALL FURNISH THE COUNTY ENGINEER WITH OFFSET SHEETS AND STATIONING FOR HOUSE LATERALS AND "Y" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AND THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED. ALL HOUSE LATERALS SHALL BE CONSTRUCTED IN A STRAIGHT ALIGNMENT AT RIGHT ANGLES FROM THE MAIN LINE SEWER EXCEPT AS SHOWN ON THE PLAN. HOUSE LATERALS FROM CHIMNEYS SHALL NOT HAVE AN ANGLE OF LESS THAN 45° WITH THE MAIN LINE SEWER. ANY CHANGE IN ALIGNMENT SHALL BE REQUESTED IN WRITING
4. THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL DEPTH AT THE PROPERTY LINE BELOW THE TOP OF CURB BY POINTS AND ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
5. NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE COUNTY ENGINEER.
6. USE STANDARD MANHOLE FRAMES AND COVERS, S-a-117.
7. USE SAND-STRENGTH PIPE ALL PIPE IS STANDARD DEPTH EXCEPT AS NOTED.
8. USE MECHANICAL COMPRESSION FOR ALL V.C.P. JOINTS PER SPEC'S. SECS. 36 , 48, & 49, EXCEPT AS NOTED.
9. RESURFACE ALL TRENCH WITHIN PAVED AREA TO MEET L.A. COUNTY ROAD DEPT. OR CALIF. STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
10. I.P.& POWER POLE IS WITHIN 5' FROM POINT OF THIS SEWER SHALL BE ENCASED PER S-a-172 CASE II. TWO POINTS WITHIN 5' OR FROM THE POINT OR INTERSECTION.
11. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE Co FEET BELOW CURB GRADE EXCEPT AS NOTED.
12. MANHOLES SHALL BE BRICK SEWER STRUCTURES PER S-106 PRECAST CONCRETE MANHOLES PER S-a-133 OR S-a-178 MAY BE USED IN UNPAVED AREAS EXCEPT IN LOCATIONS APPROVED BY THE CO ENGINEER.
13. FOR ALLOWABLE LEAKAGE TEST USE FORMULA WD 2 SPEC'S. SEC. 84.
14. MANHOLE TOPS IN UNIMPROVED RIGHTS-OF-WAY TO BE SIX INCHES ABOVE FINISHED GRADE.
15. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION BY TELEPHONE, MADISON 9-4747, EXT. 61/91 AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.

16. IF DURING THE COURSE OF CONSTRUCTION IT IS DETERMINED THAT THERE IS LESS THAN FOUR FEET OF COVER OVER THE TOP OF A MAIN LINE OR HOUSE LATERALS VCP SEWER WHICH IS NOT INDICATED ON THE PLANS, THE PIPE SHALL BE ENCASED PER SEC. A-172 CASE III UNLESS OTHERWISE APPROVED BY THE CO ENGINEER.

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

COLLECT CHARGES AS INDICATED

Harold E. Anderson

Note: 30" Gas Line in Walnut Street is high pressure gas Line Co. 99 psi). Contractor to notify Ga Counties Gas Co. 24 hrs. prior to excavation. Phone Brea, Jasper 9-2889

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.

REVISION: PAGES 3 and 4
1. Revised sewer alignment between Sta. 12+75.00 to 14+50.00.
2. Changed 8" V.C.P. to 8" C.I.P. from Sta. 10+90.5 to Sta. 13+78.5. Use centrifugally cast, cast iron pipe, class 150, ±1/45 fittings with "TYTON JOINTS" or equal. Mechanical joints on fittings.
3. Relocated chimneys from Sta. 13+00 to 12+75 and 10+95 to 11+00.
4. Install 8" C.I.P. per S.C.D. design manual A21.1.
Approved: B.F. Perkins Date: 9-11-64
Office of the County Engineer R.C.E. No. 11636

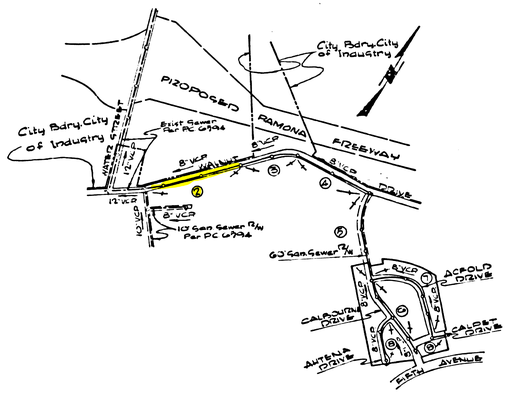
REVISION:
1. Added a H.L. on Page 2 @ Sta 5+99.00
2. Added 36' of 8" Main, 4 Wye, 1 M.H. on Page 8-B @ Sta 5+16.22.
APPROVED: B.F. Perkins 4-3-64
OFFICE OF THE COUNTY ENGINEER R.C.E. No. 11636

INDEX MAP

Scale: 1"=600'

TRACT Nº 29185

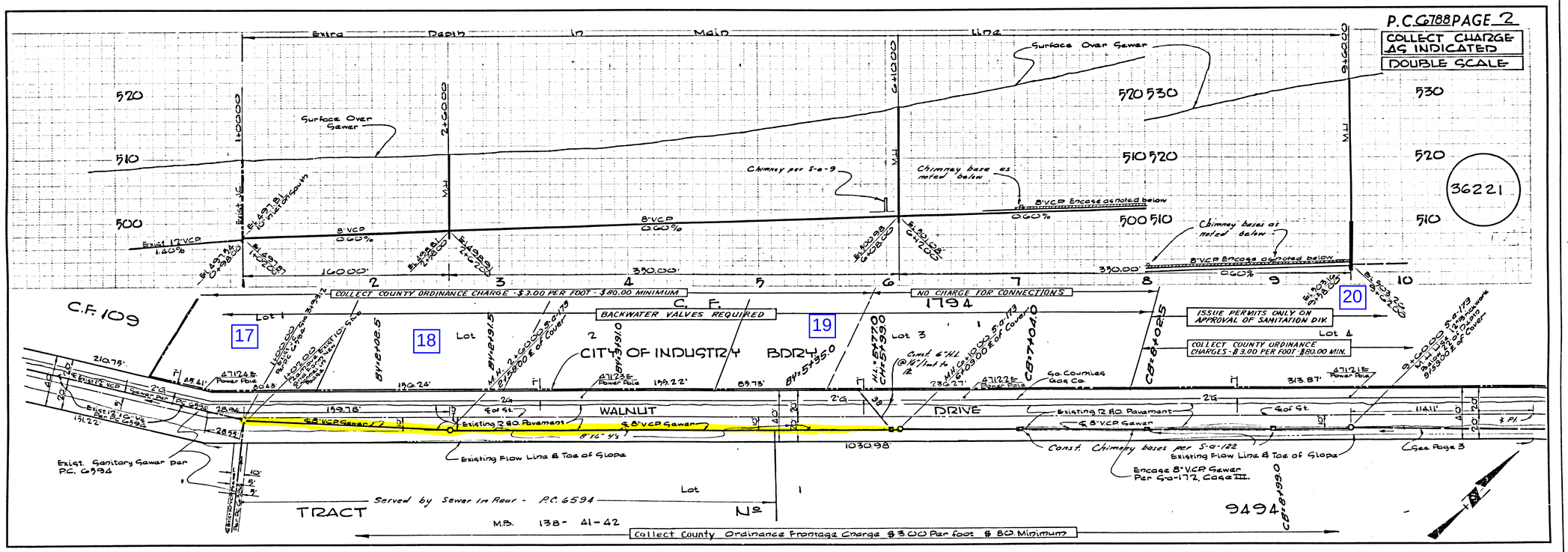
P.C. 6788



P.C.6788 PAGE 2

COLLECT CHARGE AS INDICATED

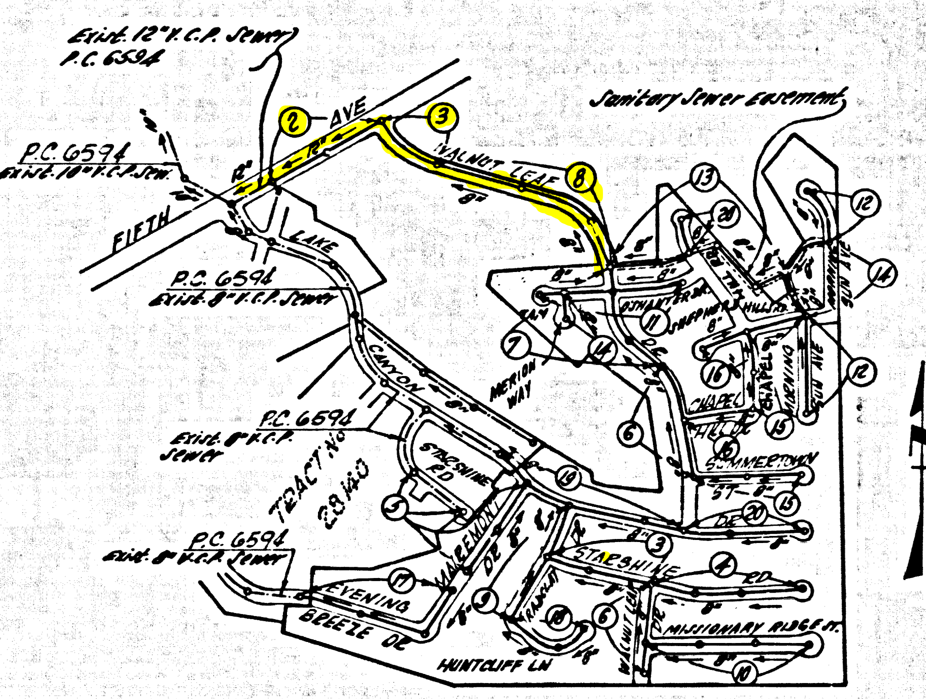
DOUBLE SCALE



36221

K & E 199 SO. CAL. BLUE PRINT SHEET NO. 2

B.M. BG 3107 ELEV. 591.619
P.D.B.M. Tag S CB Near B.C.R.@
S.E Cor. 5th Ave. + Lake Cyn. Rd. 40 Ft.
S + 98 Ft. E. Approx. C/L lot.
OTTERBEIN QUAD. 19 65



Any connection to the sewage system of County Sanitation District, provided directly or indirectly by the sewers shown on these plans, shall be considered a temporary connection until all area sewered is annexed to said district, at which time the connection shall become permanent. If for any reason the annexation to the district of any area sewered hereunder is not completed, the property not in the district will be required to disconnect unless a contract is entered into with the district providing for the disposal of sewage from the area.

INDEX MAP
SCALE: 1" = 600'
P.C. 7851

FILLS MUST BE IN PLACE 5 FEET ABOVE SEWER FLOW LINE PRIOR TO SEWER CONSTRUCTION

PRIVATE ENGINEER'S NOTE TO CONTRACTOR

The existence and location of any underground utilities or structures shown on this plan were obtained by a thorough search of available records.

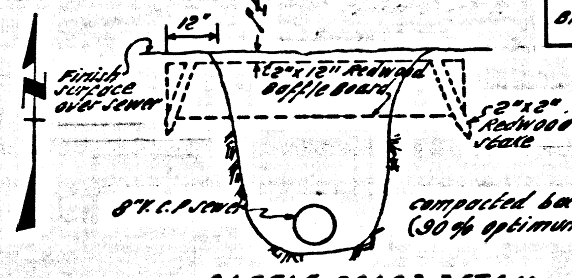
To the extent of our knowledge there are no existing utilities or structures except as shown on this plan.

The contractor is required to take precautionary measures to protect the utilities shown and other lines not of record or shown on this plan.

John H. Arian
Reg. C.E. 9915

REVISION NO. 2
Show changes due to revised storm drain location on pages 12 & 18. Change sewer alignment on pages 2 & 3.
APPROVED: County of Los Angeles
BY [illegible] R.C.E. 10443 DATE 12-18-67

REVISION
Change location of House Laterals on Lots 74 & 75 from chimney to main sewer page 9
Eliminate westerly H.L. for lot 56 page 4.
Approved: County of Los Angeles
BY [illegible] R.C.E. 10443 DATE 11-28-67



BAFFLE BOARD DETAIL
NO SCALE

NOTES:
1. Each end of baffle board will extend one foot into undisturbed ground.
2. Baffle boards shall be spaced so that the top of the lower board shall be level with the bottom of the next higher board.
3. The upper layer of backfill to be one foot minimum of top soil. Top soil shall be tamped in place and planted with perennials of same type as those on adjacent slopes or required in accordance with grading plan. Soil shall be adequately watered until growth is restored.

ALL JOINTS BETWEEN CAST IRON PIPE AND VITRIFIED CLAY PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT (WITH HOOP IF NECESSARY) PER STAND. SPEC. SEC. 36 OR APPROVED EQUAL

DOUBLE SCALE
LA PUENTE BLDG. DIST. NO. 2

NOTES:
1. PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
2. NO REPRESENTATIVE OF THE COUNTY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
3. THE PRIVATE ENGINEER SHALL FURNISH THE COUNTY ENGINEER WITH GRADE SHEETS AND STATIONING FOR ALL HOUSE LATERALS AND "Y" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED. 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° WITH THE MAIN LINE SEWER. ANY CHANGE IN ALIGNMENT SHALL BE REQUESTED IN WRITING BY THE PRIVATE ENGINEER.
4. THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL DEPTH AT THE PROPERTY LINE BELOW THE TOP OF CURB ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
5. NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE COUNTY ENGINEER.
6. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION BY TELEPHONE, MADISON 9-4747, EXT. 81551, AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
7. ALL STRUCTURES SHALL BE EITHER BRICK MANHOLES PER S.3 OR PRECAST CONCRETE MANHOLES PER S.5 OR S.6 EXCEPT AS NOTED.
8. USE STANDARD MANHOLE FRAMES AND COVERS, S-15, EXCEPT AS NOTED.
9. MANHOLE TOPS IN UNIMPROVED RIGHTS-OF-WAY TO BE SIX INCHES ABOVE FINISHED GRADE.
10. USE EXTRA STRENGTH PIPE. ALL PIPE IS STANDARD DEPTH EXCEPT AS NOTED.
11. USE MECHANICAL COMPRESSION JOINTS FOR ALL V.C.P. JOINTS PER SPEC'S., SECS. 36, 48 & 49.
12. IF A POWER POLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED, PER S-23, TWO FEET ON EACH SIDE FROM THE POINT OF INTERFERENCE.
13. IF DURING THE COURSE OF CONSTRUCTION IT IS DETERMINED THAT THERE IS LESS THAN FOUR FEET OF COVER OVER THE TOP OF A MAIN LINE OR HOUSE LATERAL V.C.P. SEWER WHICH IS NOT INDICATED ON THE PLANS, THE PIPE SHALL BE ENCASED PER S-23, UNLESS OTHERWISE APPROVED BY THE COUNTY ENGINEER.
14. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE 6 FEET BELOW CURB GRADE EXCEPT AS NOTED.
15. RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET L.A. COUNTY ROAD DEPT. OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
16. FOR ALLOWABLE LEAKAGE TEST USE FORMULA NO. 2, SPEC'S., SEC. 54.
17. ALL STATE AND LOCAL TRENCH SAFETY ORDERS WILL BE STRICTLY ENFORCED.
18. SPECIAL BACKFILL IN DESIGNATED AREAS
(a) Backfill Trench and replace other earth removed so as to achieve the natural or finish grades and slopes shown on the grading plan approved for this tract by the Building and Safety Division.
(b) All backfill and earth replaced shall be compacted to a minimum of 90% of maximum density per A.S.T.M. standard method of test 3698-57T as modified. acceptable certification of such compaction shall be submitted to the construction division.
19. IF BRICK MANHOLES PER S.3 are used, WALL THICKNESS OF 12 INCHES IS REQUIRED BELOW 22 FT. OF DEPTH.
(7+70) 20. STATION IN CIRCLES INDICATES HOUSE LATERALS OR WYES MUST NOT BE CONSTRUCTED UPSTREAM OF THAT STATION.
21. TEE BRANCHES MAY BE USED IN PLACE OF WYE BRANCHES FOR HOUSE LATERAL CONNECTIONS TO THE MAIN LINE SEWER UNLESS OTHERWISE INDICATED.

COLLECT CHARGES AS INDICATED
D. R. Olson 7-11-67

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.

PROFILE, ALIGNMENT AND GRADE OF
P.C. 7851
PAGE 1

SANITARY SEWERS

CONSTRUCTED IN

TRACT NO. 27141

PRIVATE CONTRACT NO. 7851

W.S. .. 39
10 SHEETS, 20 PAGES
SCALE: VERT. 1"=8' HORIZ. 1"=40' MAY, 1967
(39616)
PREPARED IN THE OFFICES OF
WEACCO INC.
By: John H. Arian
REG. C. E. NO. 9915

FOR LEGEND SEE PLAN NO. S-1

NOTE:
GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURBS, CENTER LINE OF STREETS, OR CENTER LINE OF ALLEYS 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.
THIS DRAWING AND THE DATA HEREON ARE HEREBY MADE A PART OF THE SPECIFICATIONS.
WORK SHALL BE CONSTRUCTED ACCORDING TO STANDARD SPECIFICATIONS DATED 5-25-62 as revised ON FILE IN THE OFFICE OF THE COUNTY ENGINEER AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE COUNTY ENGINEER.
BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE L.A. COUNTY ROAD DEPT., DISTRICT OFFICE NO. 1, AND PAY A FEE TO THE COUNTY ENGINEER, ROOM 320, COUNTY ENGINEERING BUILDING, 108 WEST SECOND STREET OR SAN DIMAS REGIONAL OFFICE, SUFFICIENT TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
APPROVAL OF THIS PLAN BY THE COUNTY OF LOS ANGELES DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.
IF WORK IS TO BE DONE IN A STATE HIGHWAY, A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA, DIVISION OF HIGHWAYS, 120 SOUTH SPRING STREET, LOS ANGELES, CALIFORNIA.

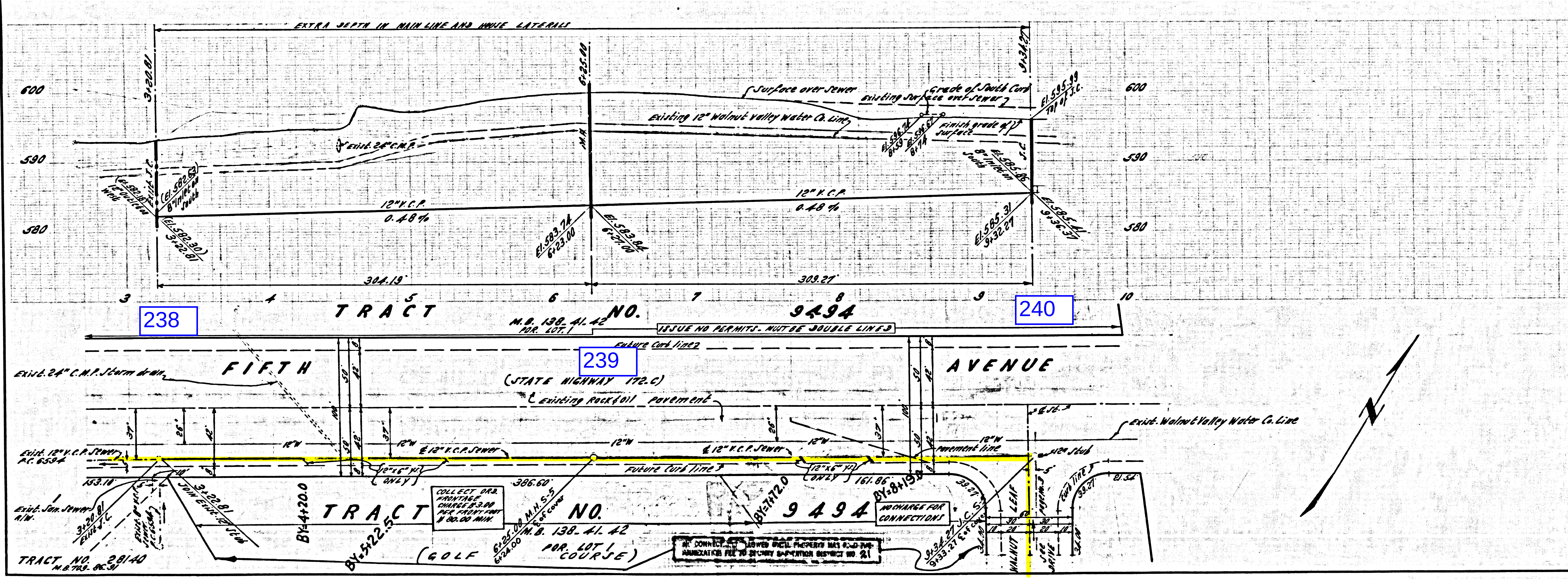
COUNTY OF LOS ANGELES, CALIFORNIA
JOHN A. LAMBIE, COUNTY ENGINEER
J. D. PARKHURST, CHIEF ENGINEER
CO. SAN. DIST. NO. 21
APPROVED BY, Richard M. Cross
ASSISTANT SANITATION ENGINEER
APPROVED BY, [illegible]
OFFICE ENGINEER
SUBMITTED BY, B. F. Norling
SAN DIMAS REGIONAL ENGINEER
CHECKED BY, [illegible] 7-24-67
REG. C.E. NO. 10443

J.N. 0250.02

P. C. 7851 PAGE 2

COLLECT CHARGES AS INDICATED
DOUBLE SCALE

(39617)



L.A. COUNTY SEWER SHEET NO. 1 SOUTHERN CALIFORNIA BLUEPRINT CO.

P.C. 7851/PAGE 3

NO CHARGE FOR CONNECTIONS DOUBLE SCALE

39618

240

247

TRACT NO. 9494

TRACT NO. 9058

FIFTH AVENUE

WALNUT

LEAF DRIVE

STARSHINE ROAD

LANDLEY DRIVE

P.C. 7851/PAGE 4

NO CHARGE FOR CONNECTIONS DOUBLE SCALE

39619

10' Storm Drain Easement

TRACT No. 27141

L.A. COUNTY SEWER SHEET NO. 2 SOUTHERN CALIFORNIA BLUEPRINT CO.

P.C. 7851 PAGE 7

NO CHARGE FOR CONNECTIONS
DOUBLE SCALE

39622

TRACT NO. 9058
M.B. 144-38, 100
P.O.R. LOT 1
10' Sanitary Sewer Easement

TRACT NO. 27141

WALNUT LEAF DRIVE

IDENTICAL POINTS

P.C. 7851 PAGE 8

COLLECT CHARGES AS INDICATED
DOUBLE SCALE

39623

247

248

249

250

TRACT NO. 27141

TRACT NO. 9058

NO CONNECTIONS ALLOWED UNTIL PROPERTY HAS PAID THE ANNEXATION FEE TO COUNTY SANITATION DISTRICT NO. 21

NO CHARGE FOR CONNECTIONS

M.B. 144-38, 100
P.O.R. LOT 1

WALNUT LEAF DRIVE

COLLECT GRD. FRONTAGE CHARGE $3.00 PER FRONT FOOT $30.00 MIN.

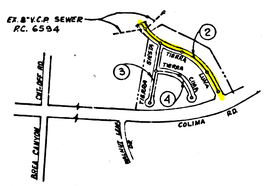
(GOLF COURSE)

L.A. COUNTY SEWER SHEET NO. 2 SOUTHERN CALIFORNIA BLUEPRINT CO.

B.M. B G 3108 ELEV. 583.105

ROAD DEPT B.M.TAG IN WEST CURB 1 FT NORTH OF B.C.R.AT NORTHWEST CORNER COLIMA ROAD (5th AVE.) AND CALBOURNE DRIVE 80 FT. NORTH AND 18 FT. WEST C INTERSECTION.

QT. R.BEIN QUAD. 1970



VICINITY MAP
SCALE 1"=600'
TRACT NO. 31845
P.C. 9054

DOUBLE SCALE

GENERAL NOTES:

1. ELEVATION: ARE IN FEET ABOVE U.S.C. & G.S. SEA LEVEL DATUM OF 1929.
2. NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE COUNTY ENGINEER.
3. NO REPRESENTATIVE OF THE COUNTY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
4. GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURBS, CENTER LINE OF STREETS, OR CENTER LINE OF ALLEYS 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.
5. THE PRIVATE ENGINEER SHALL FURNISH THE COUNTY ENGINEER WITH GRADE SHEETS AND STATIONING FOR ALL HOUSE LATERALS AND "T" OR "Y" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED. 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° WITH THE MAIN LINE SEWER. ANY CHANGE IN ALIGNMENT SHALL BE REQUESTED IN WRITING BY THE PRIVATE ENGINEER.
6. THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL DEPTH AT THE PROPERTY LINE BELOW THE TOP OF CURB ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
7. BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE L.A. COUNTY ROAD DEPT., DISTRICT OFFICE NO. 1, AND PAY A FEE TO THE COUNTY ENGINEER, 201 E. BONITA AVE., SAN DIMAS, REGIONAL OFFICE, TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
8. IF WORK IS TO BE DONE IN A STATE HIGHWAY, A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA, DIVISION OF HIGHWAYS, 120 SOUTH SPRING STREET, LOS ANGELES, CALIFORNIA.
9. APPROVAL OF THIS PLAN BY THE COUNTY OF LOS ANGELES DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.
10. REFER TO SECTION 7-10.4.1 OF THE STANDARD SPECIFICATIONS, REGARDING SAFETY ORDERS.
11. PRIOR TO ISSUANCE OF THE REQUIRED SEWER CONSTRUCTION PERMIT BY THE COUNTY ENGINEER, THE CONTRACTOR SHALL OBTAIN A PERMIT TO EXCAVATE FROM THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY.
12. (3140) INDICATES HOUSE LATERAL MUST NOT BE CONSTRUCTED UPSTREAM OF THIS STATION.

BEFORE BREAKING INTO OR CONSTRUCTION ON A COUNTY SANITATION DISTRICT SEWER AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SANITATION DISTRICT INSPECTOR SHALL BE NOTIFIED BY PHONE 961-8855 SO THAT REQUIRED INSPECTION CAN BE MADE.

CONSTRUCTION NOTES:

1. WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 197 6 EDITION AND COUNTY ENGINEER SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED 3-1-74 AS AMENDED AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE COUNTY ENGINEER.
2. THE CONTRACTOR SHALL NOTIFY THE DESIGN DIVISION BY TELEPHONE, (213) 974-7285, AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
3. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE 6 FEET BELOW CURB GRADE EXCEPT AS NOTED.
4. WYE OR TEE BRANCHES MAY BE USED FOR CONNECTIONS TO MAINLINE SEWERS EXCEPT AS NOTED.
5. ALL STRUCTURES SHALL BE EITHER BRICK MANHOLES PER S-3 OR PRECAST CONCRETE MANHOLES PER S-36, EXCEPT AS NOTED.
6. PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
7. MANHOLE TOPS IN UNIMPROVED RIGHTS OF WAY TO BE SIX INCHES ABOVE FINISHED GRADE.
8. VITRIFIED CLAY PIPE JOINTS SHALL BE TYPE "B", "F", OR "G" PER STANDARD SPECIFICATIONS SECTION 208-2.
9. IF A POWER POLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED, PER S-23, CASE II, TWO FEET ON EACH SIDE FROM THE POINT OF INTERSECTION.
10. IF DURING THE COURSE OF CONSTRUCTION IT IS DETERMINED THAT THERE IS LESS THAN FOUR FEET OF COVER OVER THE TOP OF A MAIN LINE OR HOUSE LATERAL V.C.P. SEWER WHICH IS NOT INDICATED ON THE PLANS, THE PIPE SHALL BE ENCASED PER S-23, CASE II, UNLESS OTHERWISE APPROVED BY THE COUNTY ENGINEER.
11. ALL JOINTS BETWEEN CAST IRON PIPE AND VITRIFIED CLAY PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT, TYPE "C" OR "D", WITH BUSHING IF NECESSARY PER STANDARD SPECIFICATIONS, SECTION 208-2.
12. SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 306-1.6 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
13. RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET L.A. COUNTY ROAD DEPT. OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
14. FULL COMPLIANCE WITH SECTION 306-1.2.5 OF THE SPECIAL PROVISIONS WILL BE REQUIRED FOR BACKFILL IN STREETS. CERTIFICATION OF BACKFILL COMPACTION AND SAND EQUIVALENTS BY A QUALIFIED, REGISTERED TESTING LABORATORY SHALL BE PROVIDED BY THE PERMITTEE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF PARTIAL ACCEPTANCE.

NO CONNECTION FOR THE DISPOSAL OF INDUSTRIAL WASTES SHALL BE MADE TO SEWERS SHOWN ON THESE DRAWINGS UNTIL A PERMIT FOR INDUSTRIAL WASTE WATER DISCHARGE HAS BEEN ISSUED BY THE SANITATION DISTRICTS FOR SAID CONNECTION.

PROFILE, ALIGNMENT AND GRADE OF

SANITARY SEWERS

PAGE 1

CONSTRUCTED IN

TRACT NO. 31845
PRIVATE CONTRACT NO. 9054

W.S. 39-A4

2 SHEETS; 4 PAGES

45,918

SCALE: VERT. 1"=8' HORIZ. 1"=40' JULY, 1976

PREPARED IN THE OFFICES OF

RAAB & BOYER ENGINEERING CO.

14482 BEACH BLVD. SUITE R WESTMINSTER, CA. 92683

BY: Richard A. Boyer 7/7/76

REG. C. E. No. 13542

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

LEGEND	S-1
MINIMUM PUBLIC SAFETY REQUIREMENTS	S-2
BRICK MANHOLE	S-2
STANDARD MANHOLE STEP	S-17
BEDDING FOR SEWER PIPE	S-21
GRADING AND ENCASEMENT	S-23
WYE OR TEE SUPPORT	S-26
ALLOWABLE TRENCH WIDTHS	S-33
LOCKING MANHOLE FRAME AND COVER	S-35
NON-REINFORCED PRECAST CONCRETE MANHOLE	S-36
CHIMNEY PIPE AND BASE	S-27

COUNTY OF LOS ANGELES, CALIFORNIA

DEPT. OF COUNTY ENGINEER — JOHN D. PARKHURST, CHIEF ENGINEER

CO. SAN DIST. NO. 21

APPROVED SAN DIMAS B.F. Worling REGIONAL ENGINEER — APPROVED L. Faschmann OFFICE ENGINEER

CHECKED Thomas E. Howard 26 Nov 76 (DATED)

REG. C.E. NO. 19156

LA PUENTE BLDG. DIST. 20

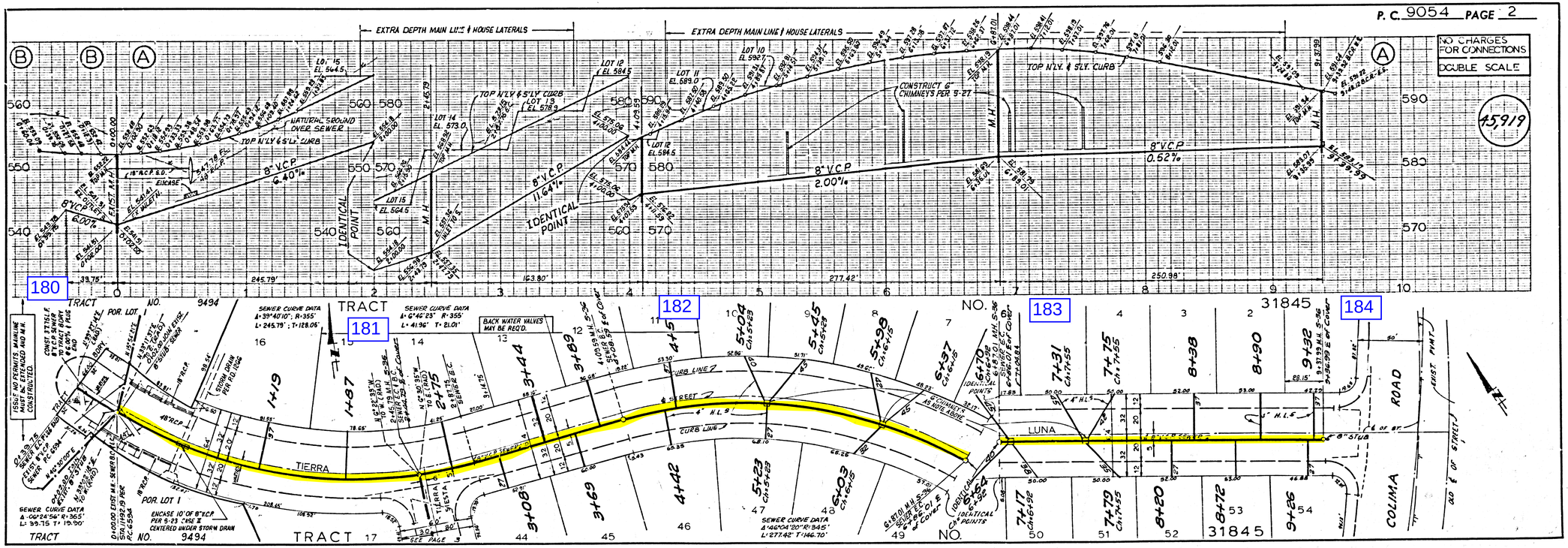
J.N. 025002

P.C. 9054 PAGE 2

NO CHARGES FOR CONNECTIONS

DOUBLE SCALE

45,919



L.A. COUNTY SEWER SHEET NO. 1 SOUTHERN CALIFORNIA BLUEPRINT CO. 7-73

BENCH MARKS

CITY OF INDUSTRY BENCHMARK F-6R.
ELEVATION:484.178
R.D. BM. & TAG ON N.E. COR. OF WALNUT & FAIRWAY DR.
± 25' E/O BCR ON N. CB. BM IS IN S.W. COR. OF C.B.

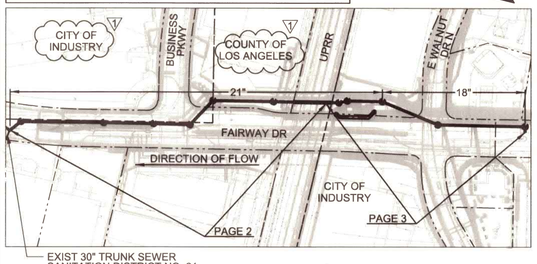
THE BASIS OF VERTICAL CONTROL IS THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

BASIS OF BEARING:

THE BEARING N15°35'55"W OF THE CENTERLINE OF FAIRWAY DRIVE BETWEEN THE 1ST CURVE NORTH OF THE LOS ANGELES & SALT LAKE RAILROAD RIGHT OF WAY AND THE 1ST CURVE SOUTH OF STATE ROUTE 60, BEING DERIVED FROM COORDINATES BASED ON SPC CA 5 NAD 83 (EPOCH 2007) IS THE BASIS BEARINGS OF THIS MAP.

CONTRACTOR TO PROTECT AND PRESERVE IN PLACE ALL EXISTING SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE RESET BY A LICENSED LAND SURVEYOR AND THE APPROPRIATE CORNER RECORDED MUST BE WITH THE COUNTY OF LOS ANGELES

Per Title 20.24.140 of LA County Code, obstructing access to sewer facilities is prohibited. No object difficult to remove shall be located over the sewer easement(s) as to interfere with ready access to sewer facilities.



INDEX MAP

BUILDING AND SAFETY DISTRICT OFFICE: LA PUENTE
SCALE: 1"=200' CSMD INDEX 2305 & 2348
NOTES: NUMBER IN CIRCLE INDICATES PAGE NUMBER. ALL MAINLINE SANITARY SEWERS ARE WITHIN THE SANITARY SEWER EASEMENT
P.C. 12178 FAIRWAY DRIVE, BUSINESS PKWY TO SR-60
THOMAS GUIDE PAGE: 679 GRIDS D3 AND E3

NO.	REVISION	REVISED BY	APPROVED BY	DATE
V	REVISED PER LACDPW/LACSD COMMENTS	AT		10/21/15
0	ISSUED FOR CONSTRUCTION			10/27/14
2	ADDENDUM 3	AT (9-5-14)		
1	ADDENDUM 2	AT (8-14-14)		
A	ISSUED FOR BID			7/29/14

STORMWATER POLLUTION PLAN NOTES

A. NOTES:

1. Eroded sediments and other pollutants must be retained on site and may not be transported from the site via sheetflow, swales, area drains, natural drainage courses or wind.
2. Stockpiles of earth and other construction related materials must be protected from being transported from the site by the forces of wind or water.
3. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.
4. Excess or waste concrete may not be washed into the Public way or any other drainage system. Provisions shall be made to retain concrete wastes on site until they can be disposed of as solid waste.
5. Trash and construction related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
6. Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.
7. Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.
8. The following BMPs as outlined in, but not limited to, the "Best Management Practice Handbook, California Stormwater quality task force, Sacramento, California, 2003", or the latest revised edition, may apply during the construction of this project (Additional measures may be required if deemed appropriate by county inspectors):

EROSION CONTROL
EC-1 Scheduling
EC-2 Preservation of Existing Vegetation
EC-3 Hydraulic Mulch
EC-4 Hydroseeding
EC-5 Soil Binders
EC-6 Straw Mulch
EC-7 Geotextiles and Mats
EC-8 Wood Mulching
EC-9 Earth Dikes and Drainage Swales
EC-10 Velocity Dissipation Swales
EC-11 Slope Drains
EC-12 Streambank Stabilization
EC-13 Polyacrylamide

TEMPORARY SEDIMENT CONTROL
SE-1 Silt Fence
SE-2 Sediment Basin
SE-3 Sediment Trap
SE-4 Check Dams
SE-5 Fiber Rolls
SE-6 Gravel Bag Berm
SE-7 Street Sweeping and Vacuuming
SE-8 Sandbag Barrier
SE-9 Straw Bale Barrier
SE-10 Storm Drain Inlet Protection
SE-11 Chemical Treatment

WIND EROSION CONTROL
WE-1 Wind Erosion Control

NON-STORM WATER MANAGEMENT
NS-1 Water Conservation Practices
NS-2 Dewatering Operations
NS-3 Paving and Grinding Operations
NS-4 Temporary Stream Crossing
NS-5 Clear Water Diversion
NS-6 Illicit Connection/Discharge
NS-7 Potable Water/Irrigation
NS-8 Vehicle and Equipment Cleaning
NS-9 Vehicle and Equipment Fueling
NS-10 Vehicle and Equipment Maintenance
NS-11 Pile Driving Operations
NS-12 Concrete Curing
NS-13 Concrete Finishing
NS-14 Material Over Water
NS-15 Demolition Adjacent to Water
NS-16 Temporary Batch Plants

EQUIPMENT TRACKING CONTROL
TR-1 Stabilized Construction Entrance/Exit
TR-2 Stabilized Construction Roadway
TR-3 Entrance/Outlet Tire Wash

WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL
WM-1 Material Delivery and Storage
WM-2 Material Use
WM-3 Stockpile Management
WM-4 Spill Prevention and Control
WM-5 Solid Waste Management
WM-6 Hazardous Waste Management
WM-7 Contaminated Soil Management
WM-8 Concrete Waste Management
WM-9 Sanitary/Septic Waste Management
WM-10 Liquid Waste Management

B. STANDARD PLANS:

The following latest revised standard plans on file in the office of the following department shall apply in the construction of this project.

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS:

2000-0 Legend for sanitary sewer plans and profiles and district maps.
2002-1 Precast concrete shallow manhole.
2003-2 Reinforced precast concrete manhole.
2004-1 Rectangular shallow manhole.
2007-2 Trap manhole base.
2014-1 Rectangular manhole frame and cover.
2015-1 Standard manhole step.
2021-1 Bedding for sewer pipe.
2023-2 Cradling and encasement.
2024-1 WYE or TEE support.
2026-1 Erosion protection in steep slopes.
2027-1 Allowable trench widths.
6008-1 Minimum public safety requirements.
2100-1 Requirement's for sanitary sewers near water mains

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC)

133-3 Asphalt concrete pavement repair
204-2 Terminal cleanout structure
207-2 Precast reinforced concrete manhole base
208-2 Breaking into existing manholes
210-3 Manhole frame and cover locking type
220-3 Chimneys
221-2 Pipe anchors and backfill stabilizers
222-2 House connection sewer
223-2 House connection remodeling
225-2 Blanket protection for pipes

COUNTY SANITATION DISTRICTS (CSD) NOTES:

1. No connection for the disposal of industrial wastes shall be made to sewers shown on these drawings until a permit for industrial wastewater discharge has been issued by CSD for said connections.
2. See CSD manhole detail on these drawings.
3. All work involving CSD sewers or manholes shall be in accordance with the latest edition of the Standard Specifications for Public Works Construction, and CSD's latest Amendments to the Standard Specifications for Public Works Construction and Standard Drawings for Construction. A copy of the specifications and standard drawings may be obtained from the CSD engineering counter (Room 110) at 1955 Workman Mill Road, Whittier, CA 90601 or from the CSD website "www.lacsd.org".

Any damage to the sewer line shall be the responsibility of the contractor/owner. All grading and construction occurring over and the vicinity of the existing sewer shall be performed in the presence of a County inspector. Where applicable, the sewers shall be protected per Std. Plan 2023-2 at all significant crossings.

The Contractor shall preserve all survey monuments and will be responsible for replacing all monuments that are damaged or affected by construction.

PRIVATE CONTRACT SEWER GENERAL NOTES

*1. A sewer construction permit shall be obtained and a fee paid for construction inspection and record plans to the County of Los Angeles Department of Public Works, at the Permit Counter, 900 South Fremont Avenue, 8th Floor, Alhambra, at least 72 hours prior to starting work under this permit. Copies of all other required permits, such as Road Excavation, Caltrans, etc., must be filed with the permit application.
*2. Prior to issuance of any permit, the contractor shall file a permit for excavations and trenches from the State of California Division of Industrial Safety, and a Certificate of Worker's Compensation Insurance with the Department of Public Works, City of Industry and Alameda Corridor-East named as the Certificate Holders. All agencies shall be notified 30 days prior to cancellation of the insurance policy.
3. If work is done in a State Highway, a permit must be obtained from the State of California Division of Highways, 120 South Spring Street, Los Angeles, California.
4. When work is within a contract city, the contractor must contact the Director of Public Works of that city, to determine the location to pay the inspection fee.
5. The contractor shall contact the district office listed on the "Application for Construction Permit" to arrange for an acceptable construction start date.
*6. Approval of this plan by the County of Los Angeles Department of Public Works does not constitute a representation as to accuracy of the location of or the existence or non-existence of any underground utility pipe or structure within the limits of this project. This note applies to all pages.
7. All work shall be in accordance with the latest approved edition of the "Standard Specifications for Public Works Construction", including supplements (if there is any), the latest "Additions and Amendments to the Standard Specifications for Public Works Construction" and the latest "Special Provisions for the Construction of Sanitary Sewer" and shall be prosecuted only in the presence of the County of Los Angeles Department of Public Works.
8. The contractor's attention is directed to Section 7-10.4.1 of the "Standard Specifications for Public Works Construction" in regard to safety orders and shall conform to the "Minimum Public Safety Requirement" as shown on Los Angeles Department of Public Works' standard plan 6008-1.
9. Elevations are in feet above U.S.C. & G.S. sea level datum of 1929 (NGVD 29).
10. No revisions shall be made in these plans without the approval of the County of Los Angeles Department of Public Works, City Engineer for the City of Industry or ACE.
*11. No representation of the County of Los Angeles Department of Public Works, City Engineer for the City of Industry, or ACE will survey or lay out any portion of the work.
*12. Grades to which this improvement is to be constructed are shown on plans and profiles. Grade points for top of curbs, centerline of streets, or centerline of alleys, are shown by circles on profiles at all points between said designed points. The grade shall be established so as to conform to a straight line drawn between said design points.
13. An approved backwater valve is required when the pad is lower in elevation than the top of the next upstream manhole.
14. Contact Environmental Programs Division for industrial waste discharge permit @ (626) 458-3517

CONSTRUCTION NOTES

1. Provide survey stakes on the property line or property lines produced at right angles to the sewer line at the centerline of each manhole.
2. Vitrified clay pipe joints shall be type "D" or "G" per "Standard Specifications for Public Works Construction" Section 208-2.
3. If a powerpole is within three feet of the sewer, the sewer shall be encased per LACDPW standard plan 2023-2, Case II, two feet on each side from the point of interference.
4. All joints between cast iron pipe and vitrified clay shall be made with a rubber sleeve joint, type "D" (with bushing if necessary) per "Standard Specifications for Public Works Construction" Section 208-2.
5. House laterals to be constructed with inverts at the property line 6 feet below curb grade except as noted.
6. Wye or tee branches may be used for connections to the mainline sewers except as noted.
7. If during the course of construction, it is determined that there is less than four feet of cover over the top of a mainline or house lateral V.C.P. sewer which is not indicated on the plans, the pipes shall be encased per LACDPW standard plan 2023-2, Case II, unless otherwise approved by the County of Los Angeles Department of Public Works.
*8. All structures shall be either precast concrete sewer manholes per LACDPW standard plan 2002-2 (SPPWC 200-2), or reinforced precast concrete manhole per LACDPW standard plan 2003-2, except as noted.
9. Resurface all trenches within paved areas to meet the Department of Public Works or California State Highway requirements in accordance with the permits.
10. Full compliance with Section 306-1.3 of the "Standard Specifications for Public Works Construction" will be required for backfill in street. Certification of backfill, compaction, and sand equivalents by a qualified civil engineer shall be provided by the permitee prior to the issuance of a certificate of partial acceptance.
11. All backfill and fills outside of the street right of way shall be compacted to 90% of the maximum density as determined by ASTM soil compaction test D 1557-78 method "D" unless otherwise specified. This shall be certified by a qualified civil engineer. This certification shall be submitted to the Construction Division of the Department of Public Works prior to the acceptance of the work by the county.
12. Manhole tops in unimproved rights of way to be six inches above finished grade.
13. Sewers to be tested for leakage per section 306-1.4 of the "Standard Specifications for Public Works Construction" and "Special Provisions for the Construction of Sanitary Sewer" if applicable.
14. Manhole tops in improved rights of way to be level with finished grade.
15. All wyes and/or house laterals are to be located at least 5' apart and when possible not closer than 5' to any manhole.
16. All pipe materials shall be vitrified clay pipe or ductile iron pipe or other approved materials by the County of Los Angeles Department of Public Work.
17. Contractor to coat outside of all sanitary sewer manholes with waterproof membranes.
*18. All sanitary sewer manhole frames and covers shall be watertight.
19. All joints are to be mechanical compression joints.
20. Prior to acceptance of any sanitary sewer line by the City of Industry or the County of Los Angeles, an inspection of said line by video shall be required at no cost to the City or County. All new mainline sewers shall be video inspected per the provisions of 500-1.1.5 of the Standard Specifications. The result of the video inspection shall be recorded in DVD format and a copy shall be provided to the City and the Los Angeles County Department of Public Works Sewer Maintenance Division Attention Fernando Villaluna at no cost. The developer of the project shall notify the City in writing at least 24 hours in advance of the scheduled date of the video inspection.
21 Abandonment and/or removal of conduits and structure shall be per section 306-5 of the Standard Specifications for Public Works Construction. Surplus manholes and covers shall be delivered by the contractor to the Sewer Maintenance East Yard at 2849 South Myrtle Avenue, Irwindale, CA 91701. Contact Mr. James Pryor at (626) 446-5227.

NOTICE TO CONTRACTOR:

MAINTAIN SEWER FLOW AT ALL TIMES DURING CONSTRUCTION.

EXISTING SEWER SYSTEM SHALL BE OPERATIONAL AT ALL TIMES DURING RECONSTRUCTION. NOTIFY AFFECTED BUSINESS OWNERS AT LEAST 72 HRS IN ADVANCE.

OBTAIN LACSD APPROVAL TO BREAK INTO EXISTING TRUNK SEWER.

ALL SANITARY SEWER MANHOLE SHAFTS AND FRAMES SHALL BE WATERTIGHT.

SEWER VIDEO OF ALL SEGMENTS SHALL BE SUBMITED PRIOR TO PARTIAL FIELD ACCEPTANCE (95%) AND COMPLETED FIELD ACCEPTANCE (98%). FINAL MAP AND AS-BUILT SEWER PLANS SHALL BE SUBMITTED PRIOR TO PARTIAL FIELD ACCEPTANCE.

SEWER LATERALS SHOWN ON PLANS ARE FOR REFERENCE ONLY.

ISSUE NO HOUSE LATERAL CONNECTION PERMITS UNTIL OUTLET SEWER PC 12178 ARE ACCEPTED FOR PUBLIC USE BY THE COUNTY OF LOS ANGELES.

PIPELINE CROSSING AGREEMENT BETWEEN UNION PACIFIC RAILROAD COMPANY AND COUNTY OF LOS ANGELES PER AUDIT NUMBER 277634 AND FOLDER NUMBER 0292233, DATED 4/4/2015.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUED MAINTENANCE OF PC 12178 SANITARY SEWER UNTIL THE COUNTY FORMALLY ACCEPTS IT FOR MAINTENANCE. ALL MANLINE, MANHOLES AND LATERALS SHALL BE PROTECTED FROM DAMAGE AND INFILTRATION.

CONTRACTOR TO PROTECT AND PRESERVE IN PLACE ALL EXISTING SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE RESET BY A LICENSED LAND SURVEYOR AND THE APPROPRIATE CORNER RECORD MUST BE FILED WITH THE COUNTY OF LOS ANGELES.

PROFILE, ALIGNMENT, AND GRADE OF
SANITARY SEWERS
TO BE CONSTRUCTED IN CITY OF INDUSTRY
FAIRWAY DRIVE
BETWEEN BUSINESS PKWY & SR-60
PC NO. 12178 ⚠
2 SHEETS: 4 PAGES
COUNTY OF LOS ANGELES CALIFORNIA
SMD INDEX 2305 & 2348

PAGE 01 ⚠

CITY OF INDUSTRY
OF LOS ANGELES COUNTY, CALIFORNIA
JOHN BALLAS - CITY ENGINEER
APPROVED BY John Ballas CITY ENGINEER DATE: 1-5-16

GAIL FARBER DIRECTOR OF PUBLIC WORKS
RECOMMENDED BY, LAND DEVELOPMENT DIVISION
BY ASSISTANT DIVISION ENGINEER DATE 1/6/16
SUBMITTED BY Fabrizio D. Patanor SEWER AND WATER/LANDSCAPING SUBDIVISION PLAN CHECKING SECTION DATE 1/11/16

COUNTY SANITATION DISTRICT NO. 21
OF LOS ANGELES COUNTY, CALIFORNIA
⚠ GRACE ROBINSON HYDE, CHIEF ENGINEER AND GENERAL MANAGER
APPROVED BY Jimmy Liu for OFFICE ENGINEER DATE: 1/14/2016

PRIVATE ENGINEERS NOTICE TO CONTRACTORS:

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS IS REQUIRED BY A SEARCH OF AVAILABLE RECORDS TO THE BEST OF OUR KNOWLEDGE. THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THIS MAP. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THIS DRAWING. PRIOR TO EXCAVATION THE CONTRACTOR SHALL CALL TOLL FREE 1-800-422-4133 TO VERIFY THE UNDERGROUND LOCATION OF GAS AND TELEPHONE LINES. THE CONTRACTOR SHALL ALSO CALL MR. RAY CUMMINGS OF GENERAL TELEPHONE COMPANY AT 1-805-948-4871 SO THAT THEY CAN MARK THE LOCATION OF UNDERGROUND TELEPHONE LINES.

CHRIS H. BRETALL 41824 June 26, 2015
PROJECT ENGINEER RCE NO DATE

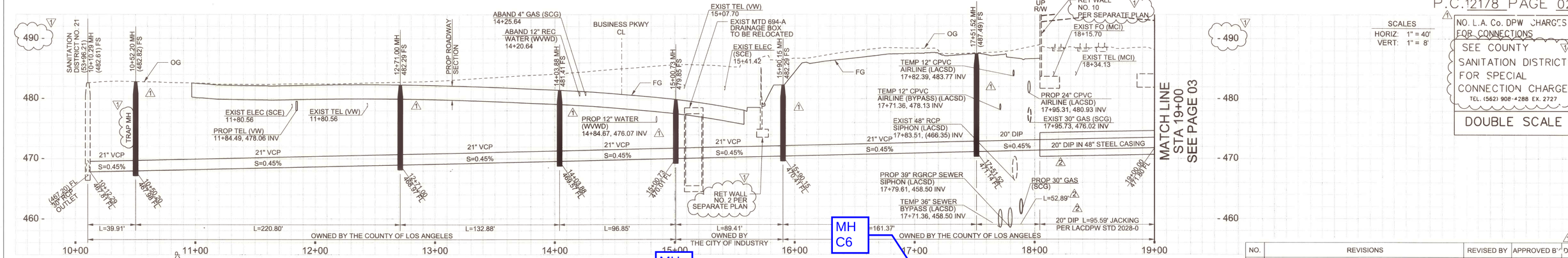
COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
CONSOLIDATED SEWER MAINTENANCE DISTRICT
REVIEWED FOR MAINTENANCE
REVIEWED BY: Kari Eldridge DATE: 1/11/16

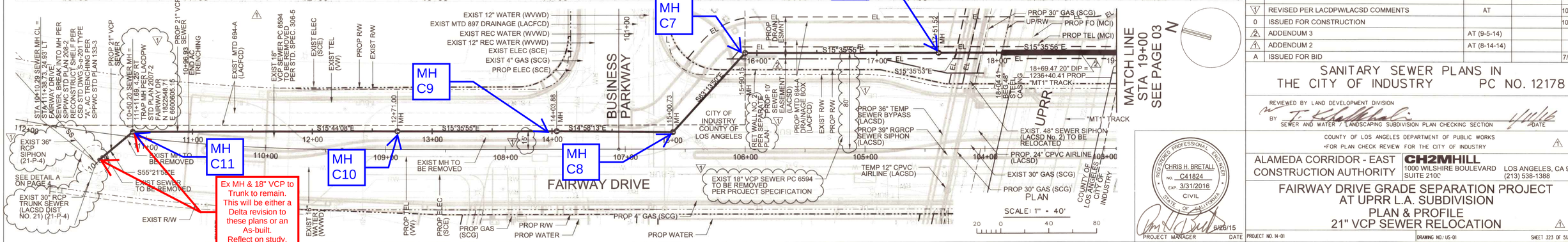
P.C. 12178 PAGE 02 ⚠

NO. L.A. Co. DPW CHARGES FOR CONNECTIONS
SEE COUNTY SANITATION DISTRICTS FOR SPECIAL CONNECTION CHARGES
TEL. (562) 908-4288 EX. 2727

DOUBLE SCALE

SCALES
HORIZ: 1" = 40'
VERT: 1" = 8'





NO.	REVISIONS	REVISED BY	APPROVED BY	DATE
V	REVISED PER LACDPW/LACSD COMMENTS	AT		10/21/15
0	ISSUED FOR CONSTRUCTION			10/27/14
2	ADDENDUM 3	AT (9-5-14)		
1	ADDENDUM 2	AT (8-14-14)		
A	ISSUED FOR BID			7/29/14

SANITARY SEWER PLANS IN THE CITY OF INDUSTRY PC NO. 12178 ⚠

REVIEWED BY LAND DEVELOPMENT DIVISION
BY SEWER AND WATER / LANDSCAPING SUBDIVISION PLAN CHECKING SECTION DATE

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
•FOR PLAN CHECK REVIEW FOR THE CITY OF INDUSTRY ⚠

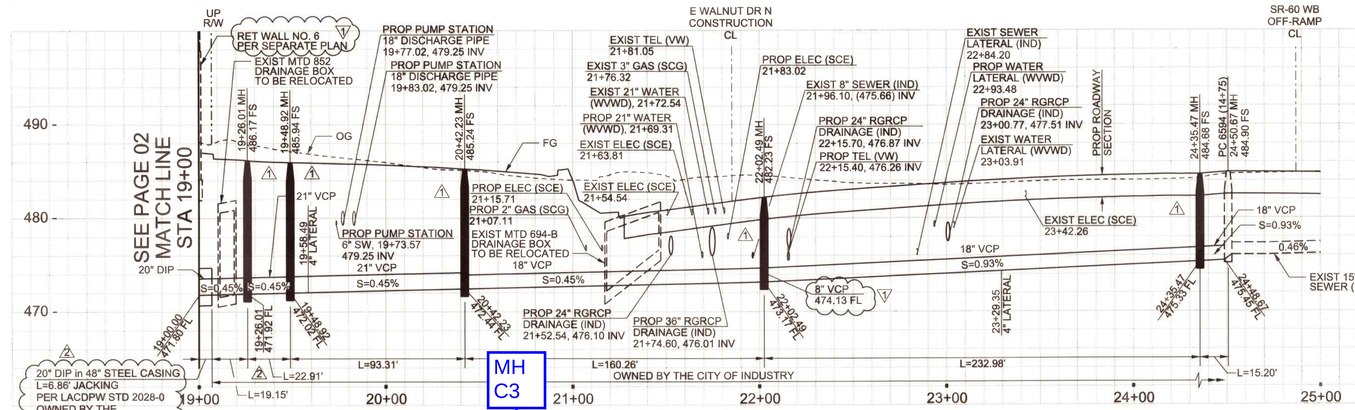
REGISTERED PROFESSIONAL ENGINEER
CHRIS H. BRETALL
No. C41824
EXP. 3/31/2016
CIVIL
STATE OF CALIFORNIA
PROJECT MANAGER 6/26/15 DATE

ALAMEDA CORRIDOR - EAST CONSTRUCTION AUTHORITY
CH2MHILL
1000 WILSHIRE BOULEVARD SUITE 2100 LOS ANGELES, CA 90017 (213) 538-1388

FAIRWAY DRIVE GRADE SEPARATION PROJECT AT UPRR L.A. SUBDIVISION PLAN & PROFILE 21" VCP SEWER RELOCATION ⚠

PROJECT NO. 14-01 DRAWING NO.: US-01 SHEET 323 OF 513

421561PS-US-V1.dgn 2015X10X28 11:06:51 AM
DPW: ACCOUNTY.COV ts-ac-dl.dgn 12/2008



SCALES
HORIZ: 1" = 40'
VERT: 1" = 8'

NO. L.A. Co. CHARGES FOR CONNECTIONS

SEE COUNTY SANITATION DISTRICTS FOR SPECIAL CONNECTION CHARGES
TEL. (562) 908-4288 EX. 2727

DOUBLE SCALE

NO.	REVISIONS	REVISED BY	APPROVED BY	DATE
V	REVISED PER LACDPW/LACSD COMMENTS	AT		10/21/15
0	ISSUED FOR CONSTRUCTION			10/27/14
2	ADDENDUM 3	AT (9-5-14)		
1	ADDENDUM 2	AT (8-14-14)		
A	ISSUED FOR BID			7/29/14

N

PLAN
SCALE: 1" = 40'
20 0 40 80

REGISTERED PROFESSIONAL ENGINEER
CHRIS H. BRETALL
NO. C41824
EXP. 3/31/2016
CIVIL
STATE OF CALIFORNIA

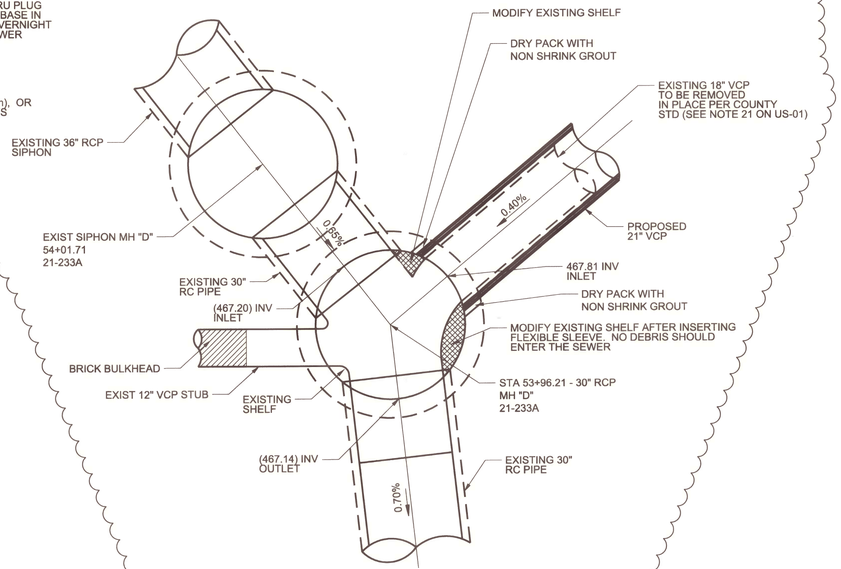
REVIEWED BY CITY OF INDUSTRY
APPROVED BY John Bollas 1-5-16
CITY ENGINEER DATE

FAIRWAY DRIVE BETWEEN BUSINESS PKWY & 26-00 PC NO 12178

NO. L.A. Co. CHARGES FOR CONNECTIONS

NOTES:

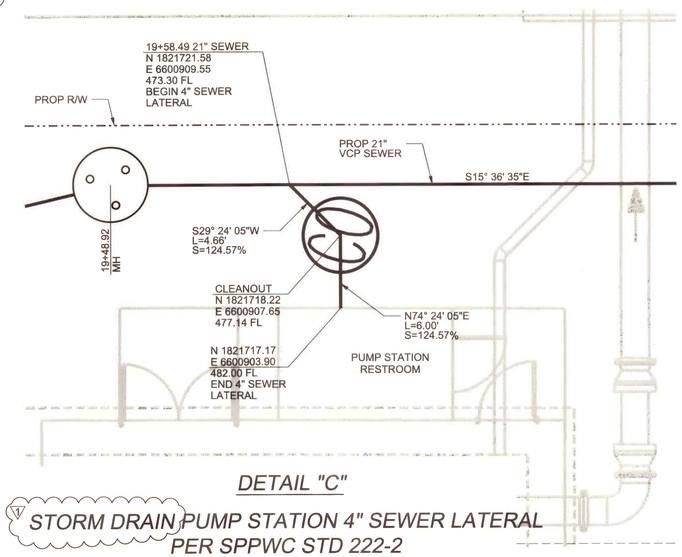
1. WHEN ALLOWED BY THE COUNTY SANITATION DISTRICTS (CSD) INSPECTOR, THE CONTRACTOR SHALL BREAK INTO THE MANHOLE BASE, INSTALL THE PROPOSED PIPE, INSERT A FLEXIBLE FLOW-THRU PLUG IN THE MANHOLE TO CONTAIN THE FLOW, AND COMPLETE CHANNELIZATION OF THE MANHOLE BASE IN THE DRY. THE CONTRACTOR IS ADVISED THIS WORK MAY HAVE TO BE PERFORMED DURING OVERNIGHT HOURS WHEN FLOWS ARE LOWER. AS OF 4/21/2010 THE PEAK FLOW IN THE 30-INCH TRUNK SEWER WAS 17 CFS.
2. VERIFY EXISTING INVERTS PRIOR TO CONSTRUCTION.
3. PROTECT EXISTING BRICK OR CONRETE MANHOLE SHAFT.
4. NOTIFY THE CSD SUPERINTENDENT OF MAINENANCE AT (310) 638-1161 (for projects in the LA Basin), OR (661) 257-4806 (for projects in the Santa Clarita or Antelope Valleys), AT LEAST TWO (2) WORKING DAYS PRIOR TO THE START OF ANY WORK ON THE CSD MANHOLE TO ARRANGE FOR INSPECTION.



DETAIL "A"

EXIST MH
CSD STA 53+96.21

SCALE: 1/2"=1'



DETAIL "C"

STORM DRAIN PUMP STATION 4" SEWER LATERAL
PER SPPWC STD 222-2

SCALE: 1/4"=1'

REGISTERED PROFESSIONAL ENGINEER
CHRIS H. BRETALL
NO. C41824
EXP. 3/31/2016
CIVIL
STATE OF CALIFORNIA

REVIEWED BY CITY OF INDUSTRY
APPROVED BY John Bollas 1-5-16
CITY ENGINEER DATE

DRAWING NO. US-02 SHEET 324 OF 513

BENCH MARKS

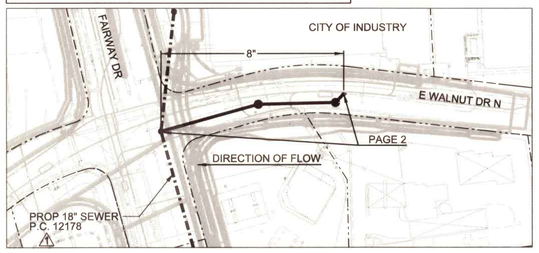
CITY OF INDUSTRY BENCHMARK F-6R.
ELEVATION:484.178
R.D. BM. & TAG ON N.E. COR. OF WALNUT & FAIRWAY DR.
± 25' E/O BCR ON N. CB. BM IS IN S.W. COR. OF C.B.

THE BASIS OF VERTICAL CONTROL IS THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

BASIS OF BEARING:

THE BEARING N15°35'55"W OF THE CENTERLINE OF FAIRWAY DRIVE BETWEEN THE 1ST CURVE NORTH OF THE LOS ANGELES & SALT LAKE RAILROAD RIGHT OF WAY AND THE 1ST CURVE SOUTH OF STATE ROUTE 60, BEING DERIVED FROM COORDINATES BASED ON SPC CA 5 NAD 83 (EPOCH 2007) IS THE BASIS BEARINGS OF THIS MAP.

CONTRACTOR TO PROTECT AND PRESERVE IN PLACE ALL EXISTING SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE RESET BY A LICENSED LAND SURVEYOR AND THE APPROPRIATE CORNER RECORDED MUST BE WITH THE COUNTY OF LOS ANGELES



INDEX MAP

SCALE: 1"=100' CSMD INDEX 2305 & 2348
P.C. 12178 E WALNUT DRIVE N, EAST OF FAIRWAY DRIVE
I.P.C. 257R
THOMAS GUIDE PAGE: 679 GRIDS D3 AND E3

BUILDING AND SAFETY DISTRICT OFFICE: LA PUENTE
NOTES: NUMBER IN CIRCLE INDICATES PAGE NUMBER. ALL MAINLINE SANITARY SEWERS ARE WITHIN THE SANITARY SEWER EASEMENT

NO.	REVISION	REVISED BY	APPROVED BY	DATE
V	REVISED PER LACDPW/LACSD COMMENTS	AT		10/21/15
0	ISSUED FOR CONSTRUCTION			10/27/14
1	ADDENDUM 2	AT (8-14-14)		
A	ISSUED FOR BID			7/29/14

Per Title 20.24.140 of LA County Code, obstructing access to sewer facilities is prohibited. No object difficult to remove shall be located over the sewer easement(s) as to interfere with ready access to sewer facilities.

STORMWATER POLLUTION PLAN NOTES

A. NOTES:

1. Eroded sediments and other pollutants must be retained on site and may not be transported from the site via sheetflow, swales, area drains, natural drainage courses or wind.
2. Stockpiles of earth and other construction related materials must be protected from being transported from the site by the forces of wind or water.
3. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.
4. Excess or waste concrete may not be washed into the Public way or any other drainage system. Provisions shall be made to retain concrete wastes on site until they can be disposed of as solid waste.
5. Trash and construction related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
6. Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.
7. Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.
8. The following BMPs as outlined in, but not limited to, the "Best Management Practice Handbook, California Stormwater quality task force, Sacramento, California, 2003", or the latest revised edition, may apply during the construction of this project (Additional measures may be required if deemed appropriate by county inspectors):

EROSION CONTROL
EC-1 Scheduling
EC-2 Preservation of Existing Vegetation
EC-3 Hydraulic Mulch
EC-4 Hydroseeding
EC-5 Soil Binders
EC-6 Straw Mulch
EC-7 Geotextiles and Mats
EC-8 Wood Mulching
EC-9 Earth Dikes and Drainage Swales
EC-10 Velocity Dissipation Swales
EC-11 Slope Drains
EC-12 Streambank Stabilization
EC-13 Polyacrylamide

TEMPORARY SEDIMENT CONTROL
SE-1 Silt Fence
SE-2 Sediment Basin
SE-3 Sediment Trap
SE-4 Check Dams
SE-5 Fiber Rolls
SE-6 GravelBag Berm
SE-7 Street Sweeping and Vacuuming
SE-8 Sandbag Barrier
SE-9 Straw Bale Barrier
SE-10 Storm Drain Inlet Protection
SE-11 Chemical Treatment

WIND EROSION CONTROL
WE-1 Wind Erosion Control

NON-STORM WATER MANAGEMENT
NS-1 Water Conservation Practices
NS-2 Dewatering Operations
NS-3 Paving and Grinding Operations
NS-4 Temporary Stream Crossing
NS-5 Clear Water Diversion
NS-6 Illicit Connection/Discharge
NS-7 Potable Water/Irrigation
NS-8 Vehicle and Equipment Cleaning
NS-9 Vehicle and Equipment Fueling
NS-10 Vehicle and Equipment Maintenance
NS-11 Pile Driving Operations
NS-12 Concrete Curing
NS-13 Concrete Finishing
NS-14 Material Over Water
NS-15 Demolition Adjacent to Water
NS-16 Temporary Batch Plants

EQUIPMENT TRACKING CONTROL
TR-1 Stabilized Construction Entrance/Exit
TR-2 Stabilized Construction Roadway
TR-3 Entrance/Outlet Tire Wash

WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL
WM-1 Material Delivery and Storage
WM-2 Material Use
WM-3 Stockpile Management
WM-4 Spill Prevention and Control
WM-5 Solid Waste Management
WM-6 Hazardous Waste Management
WM-7 Contaminated Soil Management
WM-8 Concrete Waste Management
WM-9 Sanitary/Septic Waste Management
WM-10 Liquid Waste Management

B. STANDARD PLANS:

The following latest revised standard plans on file in the office of the following department shall apply in the construction of this project.
LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

2000-0 Legend for sanitary sewer plans and profiles and district maps.
2002-1 Precast concrete shallow manhole.
2003-2 Reinforced precast concrete manhole.
2004-1 Rectangular shallow manhole.
2007-2 Trap manhole base.
2014-1 Rectangular manhole frame and cover.
2015-1 Standard manhole step.
V
2021-1 Bedding for sewer pipe.
2023-2 Cradling and encasement.
2024-1 WYE or TEE support.
2026-1 Erosion protection in steep slopes.
2027-1 Allowable trench widths.
6008-1 Minimum public safety requirements.
2100-1 Requirement's for sanitary sewers near water mains

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC)

133-3 Asphalt concrete pavement repair
204-2 Terminal cleanout structure
207-2 Precast reinforced concrete manhole base
208-2 Breaking into existing manholes
210-3 Manhole frame and cover locking type
220-3 Chimneys
221-2 Pipe anchors and backfill stabilizers
222-2 House connection sewer
223-2 House connection remodeling
225-2 Blanket protection for pipes

COUNTY SANITATION DISTRICTS (CSD) NOTES:

1. No connection for the disposal of industrial wastes shall be made to sewers shown on these drawings until a permit for industrial wastewater discharge has been issued by CSD for said connections.
2. See CSD manhole detail on these drawings.
3. All work involving CSD sewers or manholes shall be in accordance with the latest edition of the Standard Specifications for Public Works Construction, and CSD's latest Amendments to the Standard Specifications for Public Works Construction and Standard Drawings for Construction. A copy of the amendments and standard drawings may be obtained from the CSD engineering counter (Room 110) at 1955 Workman Mill Road, Whittier, CA 90601 or from the CSD website "www.lacsd.org".

Any damage to the sewer line shall be the responsibility of the contractor/owner. All grading and construction occurring over and the vicinity of the existing sewer shall be performed in the presence of a County inspector. Where applicable, the sewers shall be protected per Std. Plan 2023-2 at all significant crossings.

The Contractor shall preserve all survey monuments and will be responsible for replacing all monuments that are damaged or affected by construction.

V

NOTICE TO CONTRACTOR:

- MAINTAIN SEWER FLOW AT ALL TIMES DURING CONSTRUCTION.
- EXISTING SEWER SYSTEM SHALL BE OPERATIONAL AT ALL TIMES DURING RECONSTRUCTION. NOTIFY AFFECTED BUSINESS OWNERS AT LEAST 72 HRS IN ADVANCE.
- OBTAIN LACSD APPROVAL TO BREAK INTO EXISTING TRUNK SEWER.
- ALL SANITARY SEWER MANHOLE SHAFTS AND FRAMES SHALL BE WATERTIGHT.
- SEWER VIDEO OF ALL SEGMENTS SHALL BE SUBMITED PRIOR TO PARTIAL FIELD ACCEPTANCE (9/01) AND COMPLETED FIELD ACCEPTANCE (9/87). FINAL MAP AND AS-BUILT SEWER PLANS SHALL BE SUBMITTED PRIOR TO PARTIAL FIELD ACCEPTANCE.
- SEWER LATERALS SHOWN ON PLANS ARE FOR REFERENCE ONLY.
- ISSUE NO HOUSE LATERAL CONNECTION PERMITS UNTIL OUTLET SEWER PC 12178 ARE ACCEPTED FOR PUBLIC USE BY THE COUNTY OF LOS ANGELES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUED MAINTENANCE OF PC 12178 SANITARY SEWER UNTIL THE COUNTY FORMALLY ACCEPTS IT FOR MAINTENANCE. ALL MAINLINE, MANHOLES AND LATERALS SHALL BE PROTECTED FROM DAMAGE AND INFILTRATION.
- CONTRACTOR TO PROTECT AND PRESERVE IN PLACE ALL EXISTING SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE RESET BY A LICENSED LAND SURVEYOR AND THE APPROPRIATE CORNER RECORD MUST BE FILED WITH THE COUNTY OF LOS ANGELES.

PRIVATE CONTRACT SEWER GENERAL NOTES

The following general notes are to be included on Page 1 of all Private Contract Sewer Plans:

*1. A sewer construction permit shall be obtained and a fee paid for construction inspection and record plans to the County of Los Angeles Department of Public Works, at the Permit Counter, 900 South Fremont Avenue, 8th Floor, Alhambra, at least 72 hours prior to starting work under this permit. Copies of all other required permits, such as Road Excavation, Caltrans, etc., must be filed with the permit application.
*2. Prior to issuance of any permit, the contractor shall file a permit for excavations and trenches from the State of California Division of Industrial Safety, and a Certificate of Worker's Compensation Insurance with the Department of Public Works, City of Industry and Alameda Corridor-East named as the Certificate Holders. All agencies shall be notified 30 days prior to cancellation of the insurance policy.
3. If work is done in a State Highway, a permit must be obtained from the State of California Division of Highways, 120 South Spring Street, Los Angeles, California.
4. When work is within a contract city, the contractor must contact the Director of Public Works of that city, to determine the location to pay the inspection fee.
5. The contractor shall contact the district office listed on the "Application for Construction Permit" to arrange for an acceptable construction start date.
*6. Approval of this plan by the County of Los Angeles Department of Public Works does not constitute a representation as to accuracy of the location of or the existence or non-existence of any underground utility pipe or structure within the limits of this project. This note applies to all pages.
7. All work shall be in accordance with the latest approved edition of the "Standard Specifications for Public Works Construction", including supplements (if there is any), the latest "Additions and Amendments to the Standard Specifications for Public Works Construction" and the latest "Special Provisions for the Construction of Sanitary Sewer" and shall be prosecuted only in the presence of the County of Los Angeles Department of Public Works.
8. The contractor's attention is directed to Section 7-10.4.1 of the "Standard Specifications for Public Works Construction" in regard to safety orders and shall conform to the "Minimum Public Safety Requirement" as shown on Los Angeles Department of Public Works' standard plan 6008-1.
9. Elevations are in feet above U.S.C. & G.S. sea level datum of 1929 (NGVD 29).
10. No revisions shall be made in these plans without the approval of the County of Los Angeles Department of Public Works, City Engineer for the City of Industry or ACE.
*11. No representative of the County of Los Angeles Department of Public Works, City Engineer for the City of Industry, or ACE will survey or lay out any portion of the work.
*12. Grades to which this improvement is to be constructed are shown on plans and profiles. Grade points for top of curbs, centerline of streets, or centerline of alleys, are shown by circles on profiles at all points between said designed points. The grade shall be established so as to conform to a straight line drawn between said design points.
13. An approved backwater valve is required when the pad is lower in elevation than the top of the next upstream manhole.
14. Contact Environmental Programs Division for industrial waste discharge permit @ (626) 458-3517

CONSTRUCTION NOTES

1. Provide survey stakes on the property line or property lines produced at right angles to the sewer line at the centerline of each manhole.
2. Vitrified clay pipe joints shall be type "D" or "G" per "Standard Specifications for Public Works Construction" Section 208-2.
3. If a powerpole is within three feet of the sewer, the sewer shall be encased per LACDPW standard plan 2023-2, Case II, two feet on each side from the point of interference.
4. All joints between cast iron pipe and vitrified clay shall be made with a rubber sleeve joint, type "D" (with bushing if necessary) per "Standard Specifications for Public Works Construction" Section 208-2.
5. House laterals to be constructed with inverts at the property line 6 feet below curb grade except as noted.
6. Wye or tee branches may be used for connections to the mainline sewers except as noted.
7. If during the course of construction, it is determined that there is less than four feet of cover over the top of a mainline or house lateral V.C.P. sewer which is not indicated on the plans, the pipes shall be encased per LACDPW standard plan 2023-2, Case II, unless otherwise approved by the County of Los Angeles Department of Public Works.
*8. All structures shall be either precast concrete sewer manholes per LACDPW standard plan 2002-2 (SPPWC 200-2), or reinforced precast concrete manhole per LACDPW standard plan 2003-2, except as noted.
9. Resurface all trenches within paved areas to meet the Department of Public Works or California State Highway requirements in accordance with the permits.
10. Full compliance with Section 306-1.3 of the "Standard Specifications for Public Works Construction" will be required for backfill in street. Certification of backfill, compaction, and sand equivalents by a qualified civil engineer shall be provided by the permitee prior to the issuance of a certificate of partial acceptance.
11. All backfill and fills outside of the street right of way shall be compacted to 90% of the maximum density as determined by ASTM soil compaction test D 1557-78 method "D" unless otherwise specified. This shall be certified by a qualified civil engineer. This certification shall be submitted to the Construction Division of the Department of Public Works prior to the acceptance of the work by the County.
12. Manhole tops in unimproved rights of way to be six inches above finished grade.
13. Sewers to be tested for leakage per section 306-1.4 of the "Standard Specifications for Public Works Construction" and "Special Provisions for the Construction of Sanitary Sewer" if applicable.
14. Manhole tops in improved rights of way to be level with finished grade.
15. All wyes and/or house laterals are to be located at least 5' apart and when possible not closer than 5' to any manhole.
16. All pipe materials shall be vitrified clay pipe or ductile iron pipe or other approved materials by the County of Los Angeles Department of Public Work.
17. Contractor to coat outside of all sanitary sewer manholes with waterproof membranes.
*18. All sanitary sewer manhole frames and covers shall be watertight.
19. All joints are to be mechanical compression joints.
20. Prior to acceptance of any sanitary sewer line by the City of Industry or the County of Los Angeles, an inspection of said line by video shall be required at no cost to the City or County. All new mainline sewers shall be video inspected per the provisions of 500-1.1.5 of the Standard Specifications. The result of the video inspection shall be recorded in DVD format and a copy shall be provided to the City and the Los Angeles County Department of Public Works Sewer Maintenance Division Attention Fernando Villaluna at no cost. The developer of the project shall notify the City in writing at least 24 hours in advance of the scheduled date of the video inspection.
21 Abandonment and/or removal of conduits and structure shall be per section 306-5 of the Standard Specifications for Public Works Construction. Surplus manholes and covers shall be delivered by the contractor to the Sewer Maintenance East Yard at 2849 South Myrtle Avenue, Irwindale, CA 91701. Contact Mr. James Pryor at (626) 446-5227.

PROFILE, ALIGNMENT, AND GRADE OF
SANITARY SEWERS
TO BE CONSTRUCTED IN
CITY OF INDUSTRY
E WALNUT DRIVE N
EAST OF FAIRWAY DRIVE
P.C. NO. 12178 I.P.C. NO. 257R
1 SHEETS: 2 PAGES
COUNTY OF LOS ANGELES CALIFORNIA
SMD INDEX 2305 & 2348

PAGE 05

CITY OF INDUSTRY
OF LOS ANGELES COUNTY, CALIFORNIA
JOHN BALLAS - CITY ENGINEER
APPROVED BY John Ballas CITY ENGINEER DATE: 1-5-16

V

PRIVATE ENGINEERS NOTICE TO CONTRACTORS:

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS IS REQUIRED BY A SEARCH OF AVAILABLE RECORDS TO THE BEST OF OUR KNOWLEDGE. THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THIS MAP. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THIS DRAWING. PRIOR TO EXCAVATION THE CONTRACTOR SHALL CALL TOLL FREE 1-800-422-4133 TO VERIFY THE UNDERGROUND LOCATION OF GAS AND TELEPHONE LINES. THE CONTRACTOR SHALL ALSO CALL MR. RAY CUMMINGS OF GENERAL TELEPHONE COMPANY AT 1-805-948-4871 SO THAT THEY CAN MARK THE LOCATION OF UNDERGROUND TELEPHONE LINES.

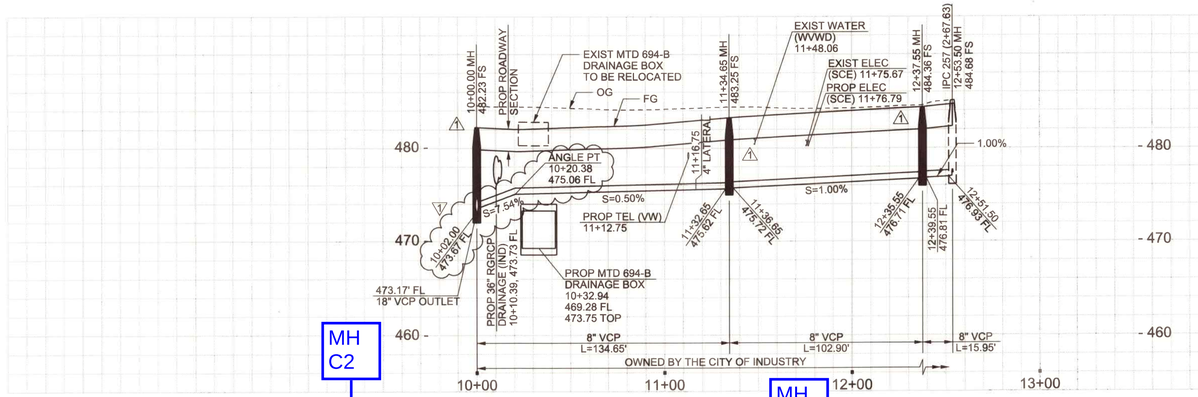
CHRIS H. BRETALL | 41824 | V | June 26, 2015
PROJECT ENGINEER | RCE NO | DATE

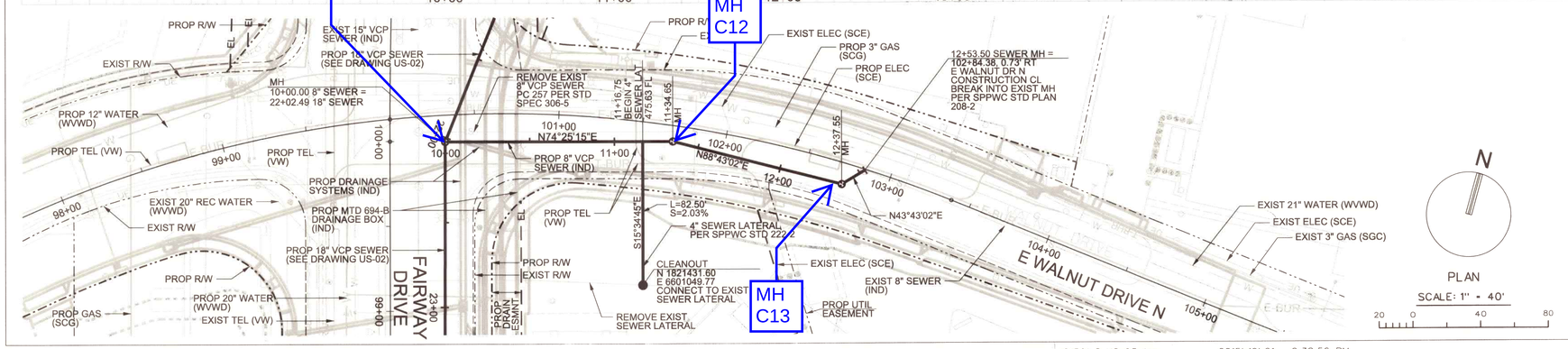
COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
CONSOLIDATED SEWER MAINTENANCE DISTRICT
REVIEWED FOR MAINTENANCE
REVIEWED BY: [signature] DATE: 7/11/16

I.P.C. 257R P.C. 12178 PAGE 06

SCALES
HORIZ: 1" = 40'
VERT: 1" = 8'

NO. L.A. Co. DPW CHARGES FOR CONNECTIONS
SEE COUNTY SANITATION DISTRICTS FOR SPECIAL CONNECTION CHARGES
TEL. (562) 908-4288 EX. 2727
DOUBLE SCALE





N

PLAN
SCALE: 1" = 40'
20 0 40 80

NO.	REVISIONS	REVISED BY	APPROVED BY	DATE
V	REVISED PER LACDPW/LACSD COMMENTS	AT		10/21/15
0	ISSUED FOR CONSTRUCTION			10/27/14
1	ADDENDUM 2	AT (8-14-14)		
A	ISSUED FOR BID			7/29/14

SANITARY SEWER PLANS IN THE CITY OF INDUSTRY
P.C. NO. 12178
I.P.C. NO. 257R

V

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
•FOR PLAN CHECK REVIEW FOR THE CITY OF INDUSTRY

REGISTERED PROFESSIONAL ENGINEER — CHRIS H. BRETALL — NO. C41824 — EXP. 3/31/2016 — CIVIL — STATE OF CALIFORNIA
PROJECT MANAGER 6/26/15 DATE

ALAMEDA CORRIDOR - EAST CONSTRUCTION AUTHORITY
CH2MHILL
1000 WILSHIRE BOULEVARD SUITE 2100 LOS ANGELES, CA 90017 (213) 538-1388

FAIRWAY DRIVE GRADE SEPARATION PROJECT
AT UPRR L.A. SUBDIVISION
PLAN & PROFILE 8" VCP SEWER RELOCATION
E WALNUT DRIVE N

PROJECT NO. 14-01 | DRAWING NO.: US-03 | SHEET 325 OF 513

421561-S-US-03.dgn 2015\10\21 2:38:56 PM

DPW-ENGINEERING.DGN Version.dgn 2.2015

© 2015 ON.C.P. BRISK YAMAHA TO TEAS IN FAIRD TUMAW E

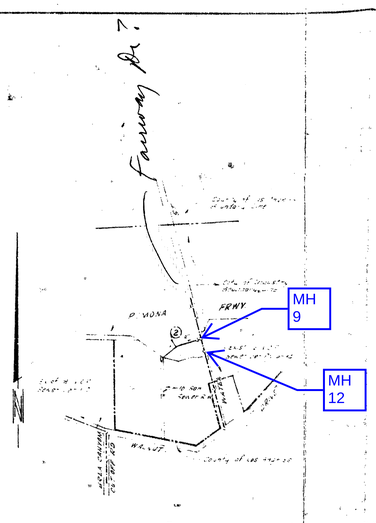
B.M. BG 1310 ELEV. 492.781

ELEV. AT A POINT ON THE NORTH SIDE OF THE EAST BOUND OFF RAMP OF THE POMONA FREEWAY AT THE INTERSECTION OF THE OFF RAMP AND THE CENTER LINE OF WATER ST.

OTTERBEIN QUAD. 1965

THE FOLLOWING LATEST ISSUED STANDARD PLANS OF THE CITY ENGINEER SHALL APPLY TO THE CONSTRUCTION OF THE SEWER

SEWER	S-1
TYPICAL EXCAVATION SHEETS REQUIREMENTS	S-2
MH'S MANHOLE	S-3
M.H. MODIFIED PRECAST CONCRETE SECTION	S-4
MODIFIED PRECAST CONCRETE MANHOLE	S-5
MANHOLE FRAME AND COVER	S-6
STANDARD MANHOLE STEP	S-7
BEDDING FOR SEWER PIPE	S-8
LATERAL SUPPORT AND PROTECTION	S-9
STORM DRAIN	S-10
TRENCHABLE TRENCH WIDTHS	S-11



IPC 142

Pcl 21574

BLDG. DIST. NO. 2.0

NOTES

1. PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER OF EACH MANHOLE
2. NO REPRESENTATIVE OF THE CITY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK
3. THE PRIVATE ENGINEER SHALL FURNISH THE CITY ENGINEER WITH GRADE SHEETS AND STATIONING FOR ALL HOUSE LATERALS AND "Y" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED. 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° WITH THE MAIN LINE SEWER. ANY CHANGE IN ALIGNMENT SHALL BE REQUESTED IN WRITING BY THE PRIVATE ENGINEER.
4. THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL DEPTH AT THE PROPERTY LINE BELOW THE TOP OF CURB ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET
5. NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE CITY ENGINEER
6. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER BY TELEPHONE, ED 9-1098 AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT
7. ALL STRUCTURES SHALL EITHER BRICK MANHOLES PER S-3 OR PRECAST MANHOLES PER S-5 OR S-6, EXCEPT AS NOTED.
8. "Y" OR "T" BRANCHES MAY BE USED FOR CONNECTIONS TO MAIN LINE SEWERS, EXCEPT AS NOTED.
9. MANHOLE TOPS IN UNIMPROVED RIGHTS-OF-WAY TO BE SIX INCHES ABOVE FINISHED GRADE
10. USE EXTRA STRENGTH PIPE ALL PIPE IS STANDARD DEPTH EXCEPT AS NOTED
11. V.C.P. JOINTS SHALL BE TYPE "C", "F" OR "O" PER STD. SPECS SEC. 208-2.
12. IF A POWER POLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED, PER S-23, TWO FEET ON EACH SIDE OF THE POINT OF INTERFERENCE
13. IF DURING THE COURSE OF CONSTRUCTION IT IS DETERMINED THAT THERE IS LESS THAN FOUR FEET OF COVER OVER THE TOP OF MAIN LINE OR HOUSE LATERAL V.C.P. SEWER WHICH IS NOT INDICATED ON THE PLANS, THE PIPE SHALL BE ENCASED PER S-23, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER
14. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AS NOTED
15. RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET CITY OF INDUSTRY OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS
16. SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 220-2.3.1 OF THE STD. SPECS.
17. REFER TO SECTION 7-10 & 7 OF THE STD SPECS REGARDING SAFETY CODES

SPECIAL NOTES:

1. THE CONTRACTOR SHALL SECURE A PERMIT FOR STREET EXCAVATION FROM THE CITY ENGINEER'S OFFICE AND COMPLY WITH ALL CONDITIONS THEREOF. THE CONTRACTOR MAY CONTACT THE CITY ENGINEER'S OFFICE REGARDING THESE CONDITIONS.
2. SAND BACKFILL IS REQUIRED THROUGHOUT.

[illegible] shall be as follows to [illegible] can be used.

SEE SHEET 2

NOTICE TO CONTRACTOR

The existence and location of any underground utility pipes or structures shown on the plans are obtained by a search of the available records. The City has no knowledge therein as to the existence or non-existence of any underground utility pipes or structures not shown on these plans. The contractor is required to take due precautions to locate the underground utility pipes and any other utility pipes or structures not shown on these plans.

George F. Jenkins REG. C.E. 11994

NO CHARGE FOR CONNECTION

PROFILE ALIGNMENT AND GRADE OF I. P.C. 142

SANITARY SEWERS PAGE 1

TO BE CONSTRUCTED IN

R/W WEST OF WATER ST.

PRIVATE CONTRACT NO. 142

I.W.S. -8

1 SHEET ; 2 PAGES

SCALE: VERT 1"=4 HORIZ 1"=40

MARCH , 1969

U-137-03

PREPARED IN THE OFFICES OF

H. M. SCOTT & ASSOCIATES

9135 E. VALLEY BLVD. ROSEMEAD, CALIF. PH 287-1960

By: George F. Jenkins

George F. Jenkins REG. C. E. NO. 11994

FOR LEGEND SEE PLAN NO S 1

ALL IMPROVEMENT IS TO BE CONSTRUCTED AS SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR THE INVERTS OF SEWER LINES ARE THE CENTER LINE OF ALLEYS ARE SHOWN BY CIRCLES ON PROFILES. ALL POINTS REPRESENTING ELEVATIONS ON THE GRADE SHALL BE ESTABLISHED SO AS TO CONFORM TO A STRAIGHT LINE DRAWN BETWEEN AND DESIGNATED POINTS AS SHOWN ON THE PLANS AND PROFILES. ALL ELEVATIONS ARE BASED ON MEAN SEA LEVEL DATUM OF 1929.

ALL WORK SHALL BE DONE ACCORDING TO THE DATA HEREON ARE HEREBY MADE A PART OF THE SPECIFICATIONS ACCORDING TO PUBLIC WORKS SPECS DATED 1960 ON FILE IN THE OFFICE OF THE CITY ENGINEER AND SHALL BE PERFORMED ONLY IN THE PRESENCE OF THE CITY ENGINEER OR HIS DULY AUTHORIZED REPRESENTATIVE. NO WORK SHALL BE DONE ON CITY STREETS IN THE OFFICES OF THE CITY ENGINEER UNTIL THE CONTRACTOR HAS OBTAINED A PERMIT TO EXCAVATE IN CITY STREETS AT THE OFFICE OF THE CITY ENGINEER AND PAY A FEE TO THE CITY OF INDUSTRY, 14722 ARBEL STREET, INDUSTRY, CALIFORNIA SUFFICIENT TO COVER THE COST OF INSPECTION AND RELATED PLANS

APPROVAL OF THESE PLANS BY THE CITY MANAGER DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OR THE CORRECTNESS OF THE PLANS AS TO THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PLANS.

NOTE: IF WORK IS TO BE DONE IN A STATE HIGHWAY A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA DIVISION OF HIGHWAYS, SOUTH SPRING STREET, LOS ANGELES, CALIFORNIA

CITY OF INDUSTRY, CALIFORNIA

J. D. PARKHURST, CHIEF ENGINEER

CO. SAN DIST. NO. 21

APPROVED BY: J. D. Parkhurst

J. D. PARKHURST

E. J. EPPERSON CITY ENGINEER

DATE 4-9-69

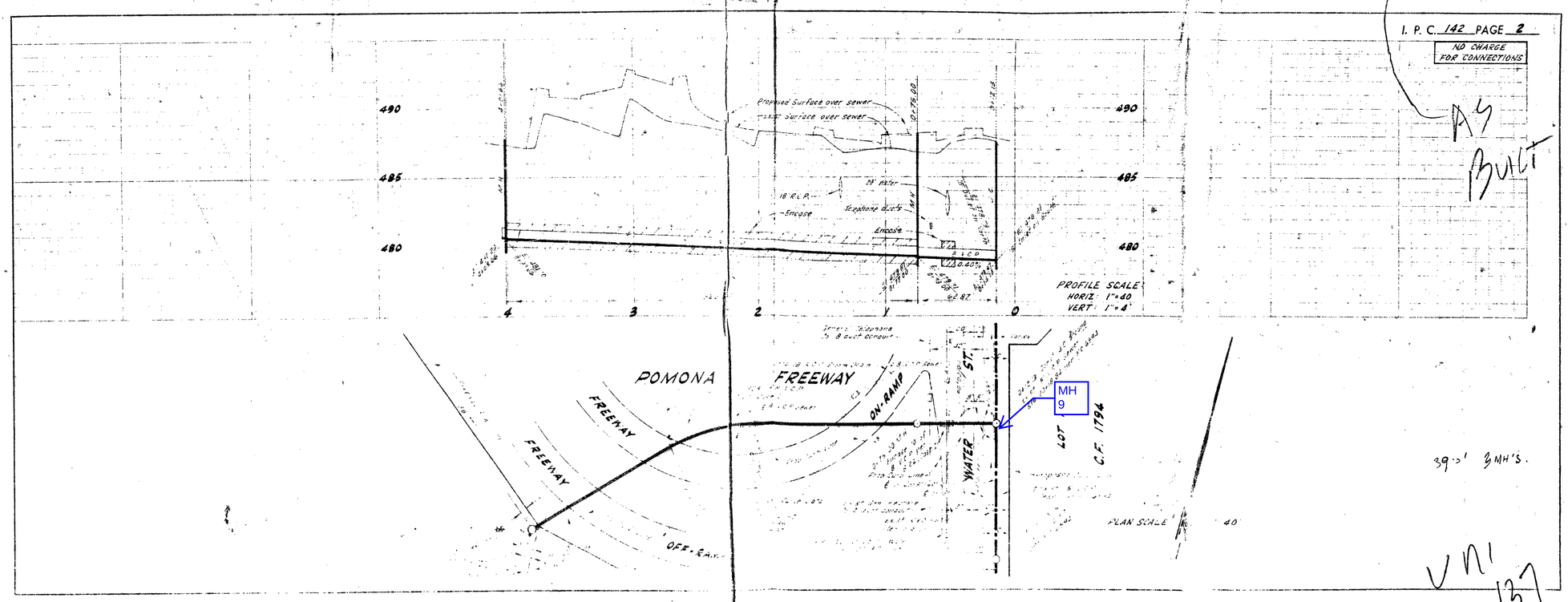
ROBERT S. HARE CITY MANAGER

J.N. 69-25

I. P. C. 142 PAGE 2

NO CHARGE FOR CONNECTIONS

AS BUILT



39-1' & MH'S.

VN 137

IPC 142

JUL 20 1969

B.M. W-6 ELEV. 509.620

BRASS CAP ON E. END OF HEADWALL 20'± S OF THE ℄ OF WALNUT DRIVE 25'± E OF THE ℄ OF FAIRWAY DRIVE (WINTER STREET).

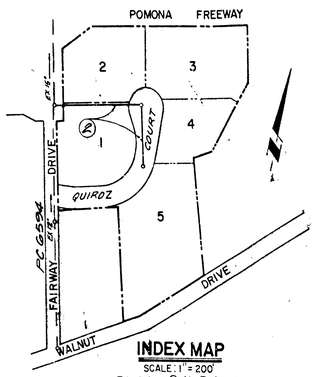
QUAD. 19

PRIVATE ENGINEER'S NOTICE TO CONTRACTOR

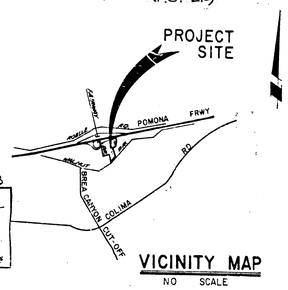
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF MY KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

NO CONNECTION FOR THE DISPOSAL OF INDUSTRIAL WASTES SHALL BE MADE TO SEWERS SHOWN ON THESE DRAWINGS UNTIL A PERMIT FOR INDUSTRIAL WASTEWATER DISCHARGE HAS BEEN ISSUED BY THE SANITATION DISTRICTS FOR SAID CONNECTION.

BEFORE BREAKING INTO OR CONSTRUCTION ON A COUNTY SANITATION DISTRICT SEWER AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, SANITATION DISTRICT INSPECTOR SHALL BE NOTIFIED BY PHONE - 562-8605, ~~5671167~~ SO THAT REQUIRED INSPECTION CAN BE MADE.



INDEX MAP
SCALE: 1" = 200'
CITY OF INDUSTRY
I.P.C. 219



VICINITY MAP
NO SCALE

U-137
T:97-B3

RECEIVED
AS-BUILT
APR 07 1983
Sewer Maintenance

GENERAL NOTES:

1. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. SEA LEVEL DATUM OF 1929.
2. NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE CITY ENGINEER.
3. NO REPRESENTATIVE OF THE CITY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
4. GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURBS, CENTER LINE OF STREETS, OR CENTER LINE OF ALLEYS 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.
5. THE PRIVATE ENGINEER SHALL FURNISH THE CITY ENGINEER WITH GRADE SHEETS AND STATIONING FOR ALL HOUSE LATERALS AND "T" OR "Y" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED. 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 CHAMBERS SHALL NOT HAVE AN ANGLE OF LESS THAN 45° WITH THE MAIN LINE SEWER. ANY CHANGE IN ALIGNMENT SHALL BE REQUESTED IN WRITING BY THE PRIVATE ENGINEER.
6. THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL DEPTH AT THE PROPERTY LINE BELOW THE TOP OF CURB ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
7. BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN CITY STREETS FROM THE CITY OF INDUSTRY , AND PAY A FEE TO THE CITY ENGINEER'S OFFICE TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
8. IF WORK IS TO BE DONE IN A STATE HIGHWAY, A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA, DIVISION OF HIGHWAYS, 120 SOUTH SPRING STREET, LOS ANGELES, CALIFORNIA.
9. APPROVAL OF THIS PLAN BY THE CITY OF INDUSTRY DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.
10. REFER TO SECTION 7-10.4.1 OF THE STANDARD SPECIFICATIONS, REGARDING SAFETY ORDERS.
11. SEWER TRENCH BACKFILL WITHIN EASEMENT:
    a. BACKFILL TRENCH AND REPLACE OTHER EARTH REMOVED, SO AS TO ACHIEVE THE NATURAL OR FINISHED GRADES AND SLOPES SHOWN ON THE GRADING PLAN APPROVED FOR THIS TRACT BY THE CITY OF INDUSTRY.
    b. ALL BACKFILL AND EARTH REPLACED SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY PER A.S.T.M. D698-57T AS MODIFIED. ACCEPTABLE CERTIFICATION OF SUCH COMPACTION SHALL BE SUBMITTED TO THE CITY ENGINEER, CITY OF INDUSTRY.

CONSTRUCTION NOTES:

1. WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1970 EDITION WITH LATEST SUPPLEMENTS) AND CITY ENGINEER SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE CITY ENGINEER.
2. THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION BY TELEPHONE, 333-1291 , AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
3. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE 6 FEET BELOW CURB GRADE EXCEPT AS NOTED.
4. WYE OR TEE BRANCHES MAY BE USED FOR CONNECTIONS TO MAINLINE SEWERS EXCEPT AS NOTED.
5. ALL STRUCTURES SHALL BE EITHER BRICK MANHOLES PER S-3 OR PRECAST CONCRETE MANHOLES PER S-36, EXCEPT AS NOTED.
6. PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
7. MANHOLE TOPS IN UNIMPROVED RIGHTS OF WAY TO BE SIX INCHES ABOVE FINISHED GRADE
8. VITRIFIED CLAY PIPE JOINTS SHALL BE TYPE "D", "F", OR "O" PER STANDARD SPECIFICATIONS SECTION 208-2.
9. IF A POWER POLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED, PER S-23, CASE II, TWO FEET ON EACH SIDE FROM THE POINT OF INTERFERENCE.
10. IF DURING THE COURSE OF CONSTRUCTION IT IS DETERMINED THAT THERE IS LESS THAN FOUR FEET OF COVER OVER THE TOP OF A MAIN LINE OR HOUSE LATERAL V.C.P. SEWER WHICH IS NOT INDICATED ON THE PLANS, THE PIPE SHALL BE ENCASED PER S-23, CASE II UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
11. ALL JOINTS BETWEEN CAST IRON PIPE AND VITRIFIED CLAY PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT, TYPE "C" OR "D", (WITH BUSHING IF NECESSARY) PER STANDARD SPECIFICATIONS, SECTION 208-2.
12. SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 306-2.3.7 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
13. RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET CITY OF INDUSTRY OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
14. FULL COMPLIANCE WITH SECTION 306-1.9.3 OF THE SPECIAL PROVISIONS WILL BE REQUIRED FOR BACKFILL IN STREETS. CERTIFICATION OF BACKFILL COMPACTION AND SAND EQUIVALENTS BY A QUALIFIED, REGISTERED TESTING LABORATORY SHALL BE PROVIDED BY THE PERMITTEE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF PARTIAL ACCEPTANCE.

PROFILE, ALIGNMENT AND GRADE OF

SANITARY SEWERS

TO BE CONSTRUCTED IN

PARCEL MAP 166

CITY OF INDUSTRY

PRIVATE CONTRACT NO. 219

W.S.

1 SHEETS; 2 PAGES

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

OCTOBER, 1980

PREPARED IN THE OFFICES OF:

BAINE ENGINEERING, INC.
501 N GOLDEN CIRCLE DR, SUITE 200, SANTA ANA, CA. 92705

BY: J. Thomas Baine
REC. C. E. No. 15795

Sewer Maintenance File

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

LEGEND	S-1
MINIMUM PUBLIC SAFETY REQUIREMENTS	S-2
BRICK MANHOLE	S-3
STANDARD MANHOLE STEPS	S-17
BEDDING FOR SEWER PIPE	S-21
CRADLING AND ENCASEMENT	S-25
WYE OR TEE SUPPORT	S-26
ALLOWABLE TRENCH WIDTHS	S-33
LOCKING MANHOLE FRAME AND COVER	S-35
NON-REINFORCED PRECAST CONCRETE MANHOLE	S-36

CITY OF INDUSTRY, CALIFORNIA

JOHN J. RADECKI JR. CITY ENGINEER WALTER E. GARRISON

APPROVED John J. Radecki Jr. 1/9/81 R.C.E. NO. 20350 DATED

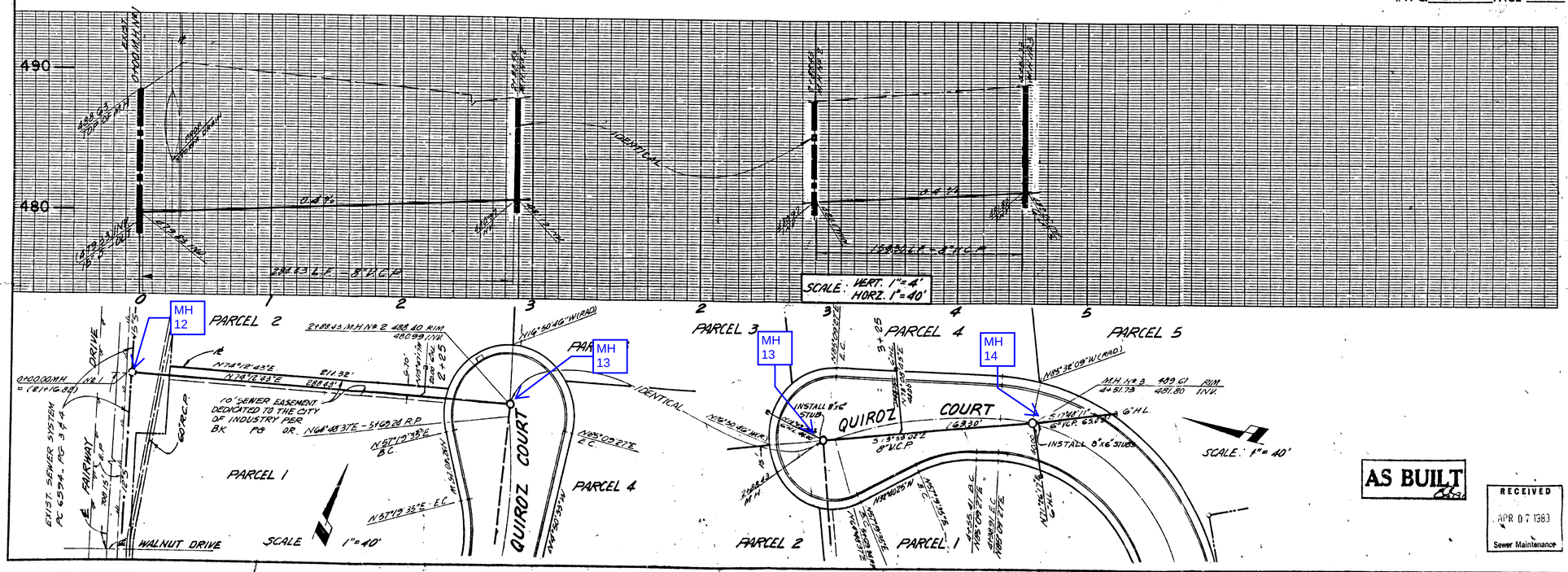
APPROVED Walter E. Garrison 1/16/81 OFFICE ENGINEER

CO SAN DIST. NO. 21

LOS ANGELES COUNTY ENGINEER-FACILITIES
CONSOLIDATED SEWER MAINTENANCE DISTRICT

REVIEWED BY: H. M. Hickey DATE 1/14/81

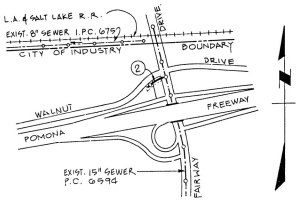
INDUSTRY BLDG. DIST. 8 J.N. 6647



AS BUILT

RECEIVED
APR 07 1983
Sewer Maintenance

B.M. NO. F-7 ELEV. 498.871
BRASS CAP STAMPED F-1, POMONA FWY.
CENTERLINE STA. 977+10± 3' EAST OF
WEST END OF CONC. BOX CULVERT
HEADWALL N/S FRONTAGE ROAD.
QUAD. 19



INDEX MAP
SCALE: 1" = 600'
I.P.C. NO. 239
P.M. NO. 227

U-1237
T3 S27-R9.3
RECEIVED
AS-BUILT
JUN 01 1985
H&K
Sewer Maintenance

GENERAL NOTES:

1. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. SEA LEVEL DATUM OF 1929
2. NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE CITY ENGINEER.
3. NO REPRESENTATIVE OF THE CITY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK
4. GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURBS, CENTERLINE OF STREETS, OR CENTERLINE OF ALLEYS 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
5. THE PRIVATE ENGINEER SHALL FURNISH THE CITY ENGINEER, WITH GRADE SHEETS AND STATIONING FOR ALL HOUSE LATERALS AND "Y" OR "T" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED. 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° WITH THE MAIN LINE SEWER. ANY CHANGE IN ALIGNMENT SHALL BE REQUESTED IN WRITING BY THE PRIVATE ENGINEER.
6. THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL DEPTH AT THE PROPERTY LINE BELOW THE TOP OF CURB ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
7. BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN CITY STREETS FROM THE CITY OF INDUSTRY AND PAY A FEE TO THE CITY ENGINEER, 15651 E. STAFFORD STREET, INDUSTRY, CA., TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
8. IF WORK IS TO DONE IN A STATE HIGHWAY, A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA, DIVISION OF HIGHWAYS, 120 SOUTH SPRING STREET, LOS ANGELES, CALIFORNIA
9. APPROVAL OF THIS PLAN BY THE CITY OF INDUSTRY DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.
10. REFER TO SECTION 7-1.04 OF THE STANDARD SPECIFICATIONS, REGARDING SAFETY ORDERS
11. PRIOR TO THE ISSUANCE OF THE REQUIRED SEWER CONSTRUCTION PERMIT, THE CONTRACTOR SHALL OBTAIN AND FILE WITH THE CITY ENGINEER, COPIES OF A PERMIT TO EXCAVATE IN CITY STREETS FROM THE CITY OF INDUSTRY A PERMIT FOR EXCAVATIONS AND TRENCHES FROM THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY AND A CERTIFICATE OF WORKER'S COMPENSATION INSURANCE WITH THE DEPARTMENT OF PUBLIC WORKS, 500 SOUTH VERMONT, RM 408, LOS ANGELES, CALIFORNIA 90005, NAMED AS THE CERTIFICATE HOLDER TO BE NOTIFIED 30 DAYS PRIOR TO CANCELLATION OF POLICY

CONSTRUCTION NOTES:

1. WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1982 EDITION WITH 1983 SUPPLEMENT AND CITY ENGINEER'S SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED _____ AND SHALL BE PRE-STUTTED DOWN IN THE PRESENCE OF THE CITY ENGINEER.
2. THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION BY TELEPHONE 333-2211 AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
3. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE 6 FEET BELOW CURB GRADE EXCEPT AS NOTED.
4. WYE OR TEE BRANCHES MAY BE USED FOR CONNECTIONS TO MAINLINE SEWERS EXCEPT AS NOTED
5. ALL STRUCTURES SHALL BE CLASS A BRICK MANHOLES PER S-3 OR PRECAST CONCRETE MANHOLES PER S-24, EXCEPT AS NOTED.
6. PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE
7. MANHOLE TOPS IN UNIMPROVED RIGHTS OF WAY TO BE SIX INCHES ABOVE FINISHED GRADE.
8. VITRIFIED CLAY PIPE JOINTS SHALL BE TYPE "D" OR "O" PER STANDARD SPECIFICATIONS SECTION 208-2.
9. IF A POWER POLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED, PER S-23, CASE II, TWO FEET ON EACH SIDE FROM THE POINT OF INTERFERENCE.
10. DURING THE COURSE OF CONSTRUCTION IT IS DETERMINED THAT THERE IS LESS THAN FOUR FEET OF COVER OVER THE TOP OF A MAIN LINE OR HOUSE LATERAL SEWER WHICH IS NOT INDICATED ON THE PLANS, THE PIPE SHALL BE ENCASED PER S-23, CASE II UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
11. ALL JOINTS BETWEEN CAST IRON PIPE AND VITRIFIED CLAY PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT, TYPE "C" OR "D", WITH BUSHING IF NECESSARY PER STANDARD SPECIFICATIONS, SECTION 208-2
12. SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 306-1.1 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
13. RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET CITY OF INDUSTRY OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
14. FULL COMPLIANCE WITH SECTION 306-1.3 OF THE SPECIAL PROVISIONS WILL BE REQUIRED FOR BACKFILL IN STREETS. CERTIFICATION OF BACKFILL COMPACTION AND SAND EQUIVALENTS BY A QUALIFIED, REGISTERED TESTING LABORATORY SHALL BE PROVIDED BY THE PERMITTEE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF PARTIAL ACCEPTANCE.
15. SPECIAL BACKFILL IN EASEMENT CONSTRUCTION (IN BACKFILL TRENCH AND REPLACE OTHER EARTH SO AS TO ACHIEVE THE NATURAL OR FINISHED GRADES AND SLOPES SHOWN ON THE GRADING PLAN APPROVED FOR THIS DEVELOPMENT BY THE BUILDING AND SAFETY DIVISION. IN ALL BACKFILL AND EARTH REPLACED SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY PER A.S.T.M. STD. METHOD OF TEST D698-57T AS MODIFIED. ACCEPTABLE CERTIFICATION OF SUCH COMPACTION SHALL BE SUBMITTED TO THE CITY OF INDUSTRY.

NO CONNECTION FOR THE DISPOSAL OF INDUSTRIAL WASTES SHALL BE MADE TO SEWERS SHOWN ON THESE DRAWINGS UNTIL A PERMIT FOR INDUSTRIAL WASTEWATER DISCHARGE HAS BEEN ISSUED BY THE SANITATION DISTRICTS FOR SAID CONNECTION.

BEFORE BREAKING INTO OR CONSTRUCTION ON A COUNTY SANITATION DISTRICT SEWER AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, SANITATION DISTRICT INSPECTOR SHALL BE NOTIFIED BY PHONE 818 - 962-8605 SO THAT REQUIRED INSPECTION CAN BE MADE.

PROFILE ALIGNMENT AND GRADE OF

SANITARY SEWERS

TO BE CONSTRUCTED IN

PARCEL MAP NO. 227
CITY OF INDUSTRY

PRIVATE CONTRACT NO. 239

I W.S. #8

1 SHEETS; 2 PAGES

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

JUNE, 1985

PREPARED IN THE OFFICES OF
R.S. ANGVIRE
2940 WESTWOOD BLVD. LOS ANGELES, CA. 90064
BY: R.S. Angvire
REG. C.E. No. 9264

THE FOLLOWING LATEST REVISED STANDARD PLANS ON FILE IN THE OFFICE OF THE DEPARTMENT OF PUBLIC WORKS SHALL APPLY IN THE CONSTRUCTION OF THIS PROJECT.

LEGEND	
MINIMUM PUBLIC SAFETY REQUIREMENTS	S-1
BRICK MANHOLE	S-2
STANDARD MANHOLE STEP	S-3
CRADLING AND ENCASEMENT	S-17
WYE OR TEE SUPPORT	S-21
ALLOWABLE TRENCH WIDTHS	S-22
LOCKING MANHOLE FRAME AND COVER	S-26
NON-REINFORCED PRECAST CONCRETE MANHOLE	S-35
DESIGN REQUIREMENTS FOR SANITARY SEWERS IN THE VICINITY OF PRESSURE WATER MAINS	S-36
	S-1 CI

CITY OF INDUSTRY
COUNTY OF LOS ANGELES, CALIFORNIA

JOHN J. RADECKI, JR. CITY ENGINEER
APPROVED John J. Radecki Jr. 10/16/85 DATE
R.C.E. NO. 20590

CHARLES W. CARRY
CHIEF ENGINEER
CO SAN DIST. NO. 21
APPROVED Jim Ten Eyck 10/16/85 DATE
OFFICE ENGINEER

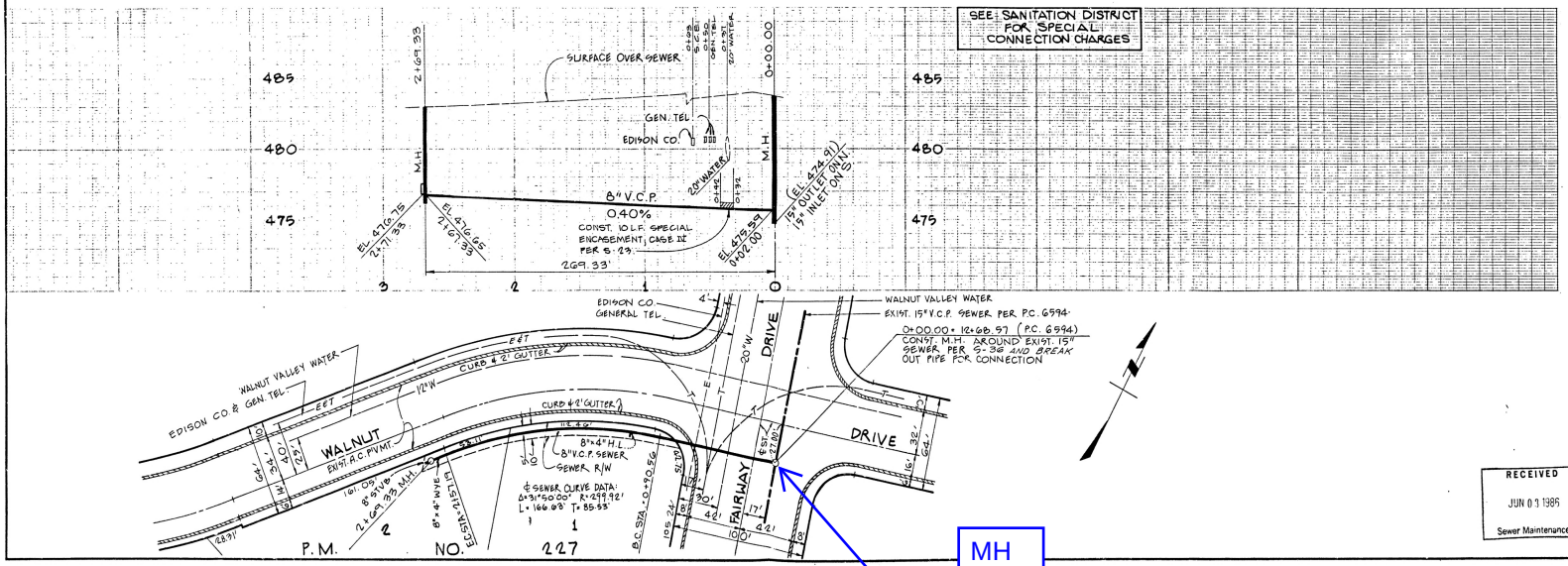
CONSOLIDATED SEWER MAINTENANCE DISTRICT
DEPARTMENT OF PUBLIC WORKS
REVIEWED FOR MAINTENANCE.

REVIEWED BY: J Onedera 10-9-85 DATE

J.N. 7005

I.P.C. 239 PAGE 2

SEE SANITATION DISTRICT FOR SPECIAL CONNECTION CHARGES



MH 4

RECEIVED
JUN 01 1985
Sewer Maintenance

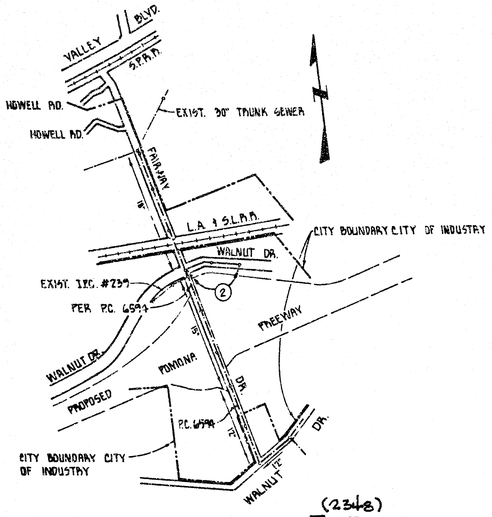
B.M. F-5R ELEV. 483.77'

R.D.B.M. 4 TAC ON S.E. CORNER OF WALNUT & FAIRWAY DR. I-45 E/O S.C.R. ON C.O. N.W. CORNER OF CATCH BASIN.

QUAD. 19

NO CONNECTION FOR THE DISPOSAL OF INDUSTRIAL WASTES SHALL BE MADE TO SEWERS SHOWN ON THESE DRAWINGS UNTIL A PERMIT FOR INDUSTRIAL WASTEWATER DISCHARGE HAS BEEN ISSUED BY THE SANITATION DISTRICTS FOR SAID CONNECTION.

BEFORE BREAKING INTO OR CONSTRUCTION ON A COUNTY SANITATION DISTRICT SEWER AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, SANITATION DISTRICT INSPECTOR SHALL BE NOTIFIED BY PHONE (818) 962-8605 SO THAT REQUIRED INSPECTION CAN BE MADE.



INDEX MAP
SCALE: 1"=600'
I.P.C. No. 257
CITY OF INDUSTRY

(2348)
T29T-B03

RECEIVED
AS-BUILT
JUL 23 1991
CITY
Sewer Maintenance

Δ	REVISIONS	APPROV.	DATE
Δ	ADDED 18 L.F. D.I.P. CO. SAN. DIST. # 21	JB	4/17/90
Δ	ADDED 18 L.F. D.I.P. CONSOL. SEWER MAINT. DIST.	JB	5/9/90

GENERAL NOTES:

1. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. SEA LEVEL DATUM OF 1929
2. NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE CITY ENGINEER.
3. NO REPRESENTATIVE OF THE CITY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
4. GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURBS, CENTER LINE OF STREETS, OR CENTER LINE OF ALLEYS 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.
5. THE PRIVATE ENGINEER SHALL FURNISH THE CITY ENGINEER WITH GRADE SHEETS AND STATIONING FOR ALL HOUSE LATERALS AND "Y" OR "T" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED. 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° WITH THE MAIN LINE SEWER. ANY CHANGE IN ALIGNMENT SHALL BE REQUESTED IN WRITING BY THE PRIVATE ENGINEER.
6. THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL DEPTH AT THE PROPERTY LINE BELOW THE TOP OF CURB ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
7. BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN CITY STREETS FROM THE CITY OF INDUSTRY AND PAY A FEE TO THE CITY ENGINEER, 16651 E. STAFFORD ST., INDUSTRY, CALIFORNIA TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
8. IF WORK IS TO BE DONE IN A STATE HIGHWAY, A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA DIVISION OF HIGHWAYS, 120 SOUTH SPRING STREET, LOS ANGELES, CALIFORNIA.
9. APPROVAL OF THIS PLAN BY THE CITY OF INDUSTRY DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OF OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.
10. REFER TO SECTION 7-10.1 OF THE STANDARD SPECIFICATIONS, REGARDING SAFETY ORDERS.
11. PRIOR TO THE ISSUANCE OF THE REQUIRED SEWER CONSTRUCTION PERMIT, THE CONTRACTOR SHALL OBTAIN AND FILE WITH THE CITY OF INDUSTRY A PERMIT FOR EXCAVATIONS AND TRENCHES FROM THE STATE OF CALIFORNIA, A DIVISION OF INDUSTRIAL SAFETY AND A CERTIFICATE OF WORKER'S COMPENSATION INSURANCE WITH THE CITY OF INDUSTRY 16651 E. STAFFORD STR. CITY OF INDUSTRY, CA. 91744 NAMED AS THE CERTIFICATE HOLDER TO BE NOTIFIED 30 DAYS PRIOR TO CANCELLATION OF POLICY.

CONSTRUCTION NOTES:

1. WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1985 EDITION WITH 1986 SUPPLEMENTS AND DEPARTMENT OF PUBLIC WORKS SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED SEPTEMBER 21, 1978 AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE CITY ENGINEER.
2. THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION BY TELEPHONE (818) 333-2211 AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
3. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE 6 FEET BELOW CURB GRADE EXCEPT AS NOTED.
4. WYE OR TEE BRANCHES MAY BE USED FOR CONNECTIONS TO MAINLINE SEWERS EXCEPTED AS NOTED.
5. ALL STRUCTURES SHALL BE EITHER BRICK SEWER MANHOLES PER S-3 OR PRECAST CONCRETE SEWER MANHOLES PER S-36, EXCEPT AS NOTED.
6. PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
7. MANHOLE TOPS IN UNIMPROVED RIGHTS OF WAY TO BE SIX INCHES ABOVE FINISHED GRADE.
8. VITRIFIED CLAY PIPE JOINTS SHALL BE TYPE "D" OR "G" PER STANDARD SPECIFICATIONS SECTION 208-2.
9. IF A POWER POLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED, PER S-23, CASE II TWO FEET ON EACH SIDE FROM THE POINT OF INTERFERENCE.
10. IF DURING THE COURSE OF CONSTRUCTION IT IS DETERMINED THAT THERE IS LESS THAN FOUR FEET OF COVER OVER THE TOP OF A MAIN LINE OR HOUSE LATERAL V.C.P. SEWER WHICH IS NOT INDICATED ON THE PLANS, THE PIPE SHALL BE ENCASED PER S-23, CASE II UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
11. ALL JOINTS BETWEEN CAST IRON PIPE AND VITRIFIED CLAY PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT TYPE "C" OR "D" WITH BUSHING IF NECESSARY, PER STANDARD SPECIFICATIONS, SECTION 208-2.
12. SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 306-1.4 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
13. RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET CITY OF INDUSTRY OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
14. IF FULL COMPLIANCE WITH SECTION 306-1.3.4 OF THE STANDARD SPECIFICATIONS WILL BE REQUIRED FOR BACKFILL IN STREETS CERTIFICATION OF BACKFILL COMPACTION AND SAND EQUIVALENTS BY A QUALIFIED REGISTERED TESTING LABORATORY SHALL BE PROVIDED BY THE PERMITTEE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF PARTIAL ACCEPTANCE.
15. SPECIAL BACKFILL IN EASEMENT CONSTRUCTION: (A) BACKFILL TRENCH AND REPLACE OTHER EARTH SO AS TO ACHIEVE THE NATURAL OR FINISHED GRADES AND SLOPES SHOWN ON THE GRADING PLAN APPROVED FOR THIS DEVELOPMENT BY THE LAND DEVELOPMENT DIVISION. (B) ALL BACKFILL AND EARTH REPLACED SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY PER A.S.T.M. STD. METHOD OF TEST D698-78 AS MODIFIED ACCEPTABLE CERTIFICATION OF SUCH COMPACTION SHALL BE SUBMITTED TO THE CITY OF INDUSTRY.

PROFILE ALIGNMENT AND GRADE OF

PAGE 1

SANITARY SEWERS

TO BE CONSTRUCTED IN

WALNUT DR. (NORTH)
E. OF FAIRWAY DR.
CITY OF INDUSTRY
PRIVATE CONTRACT NO. 257

IWS # 8

1 SHEETS; 2 PAGES

SCALE: VERT. 1"=4'
HORZ. 1"=40'

, 19

PREPARED IN THE OFFICES OF
HAYES & ASSOCIATES, INC.
17220 NEWHOPE ST., STE. 108/109
FOUNTAIN VALLEY, CA. 92708

BY: _____
REG. C.E. No. 20920

REGISTERED PROFESSIONAL ENGINEER
P. H. DURAND, JR.
No. 20920
CIVIL
State of California

THE FOLLOWING LATEST REVISED STANDARD PLANS ON FILE IN THE OFFICE OF THE DEPARTMENT OF PUBLIC WORKS SHALL APPLY IN THE CONSTRUCTION OF THIS PROJECT:

LEGEND	S-1
MINIMUM PUBLIC SAFETY REQUIREMENTS	S-2
BRICK MANHOLE	S-3
STANDARD MANHOLE STEP	S-17
BEDDING FOR SEWER PIPE	S-21
CRADLING AND ENCASEMENT	S-23
WYE OR TEE SUPPORT	S-26
ALLOWABLE TRENCH WIDTHS	S-33
LOCKING MANHOLE FRAME AND COVER	S-35
NON-REINFORCED PRECAST CONCRETE MANHOLE	S-36

CITY OF INDUSTRY — CALIFORNIA

JOHN D. BALLAS
CITY ENGINEER
APPROVED John Ballas 4/17/90 DATE

CHARLES W. CARRY
CHIEF ENGINEER
CO. SAN. DIST. NO. 21
APPROVED _____ 4/24/90
OFFICE ENGINEER

CONSOLIDATED SEWER MAINTENANCE DISTRICT
DEPARTMENT OF PUBLIC WORKS
REVIEWED FOR MAINTENANCE:

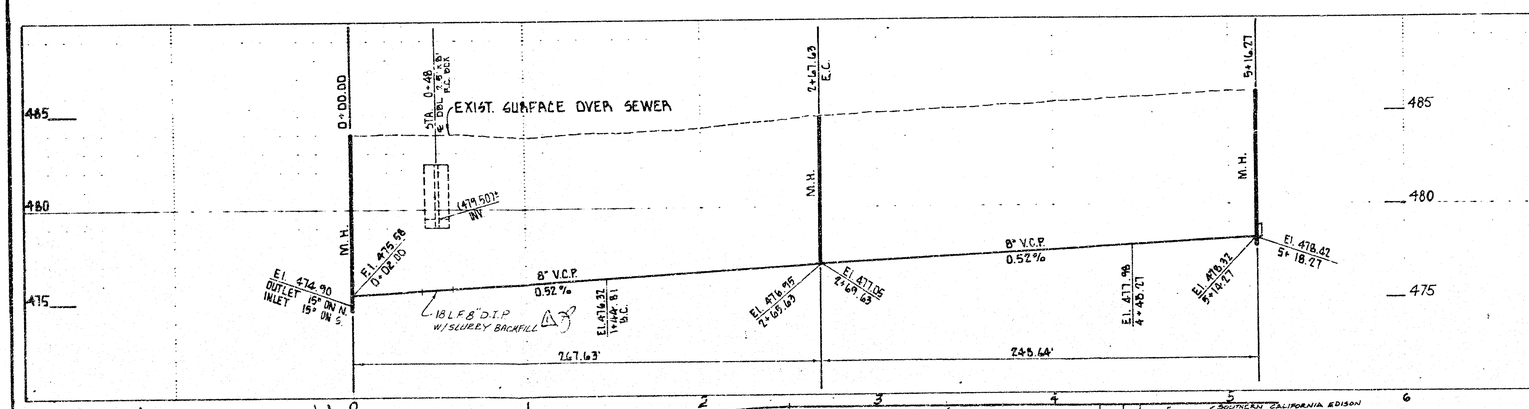
REVIEWED BY _____ 4-23-90
DATE

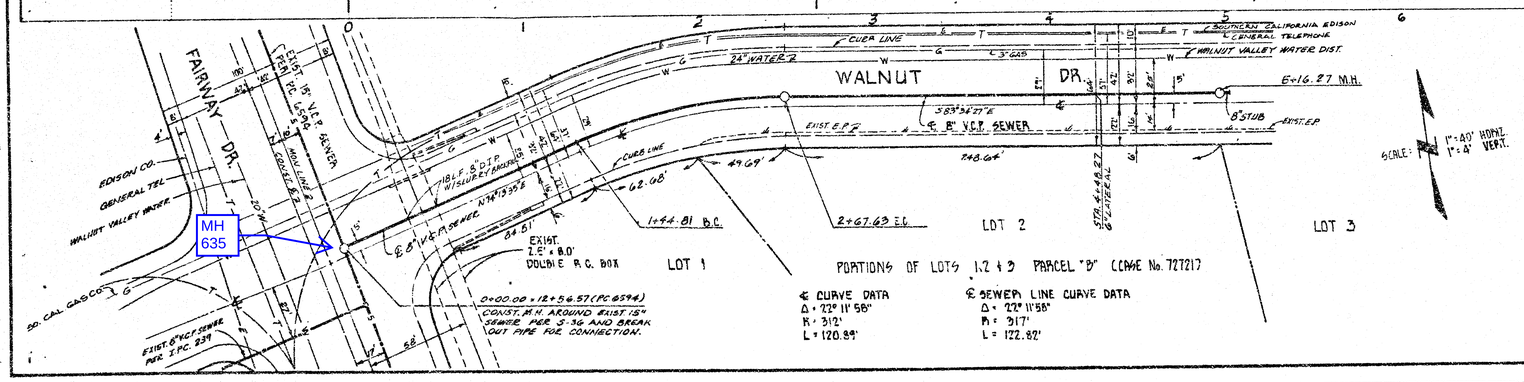
AS BUILT

J.N. 7354

I.P.C. 257 PAGE 2

NO CHARGE FOR CONNECTIONS





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

SEE SANITATION DISTRICT FOR SPECIAL CONNECTION CHARGES (213) 699-7411 X2715

NO CONNECTION FOR THE DISPOSAL OF INDUSTRIAL WASTES SHALL BE MADE TO SEWERS SHOWN ON THESE DRAWINGS UNTIL A PERMIT FOR INDUSTRIAL WASTEWATER DISCHARGE HAS BEEN ISSUED BY THE SANITATION DISTRICTS FOR SAID CONNECTION.

BEFORE BREAKING INTO OR CONSTRUCTION ON A COUNTY SANITATION DISTRICT SEWER AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, SANITATION DISTRICT INSPECTOR SHALL BE NOTIFIED BY PHONE (818) 962-8605 SO THAT REQUIRED INSPECTION CAN BE MADE.

RECEIVED
JUL 23 1991
Sewer Maintenance

AS BUILT

J.N. 7441

IPC 257

COUNTY SEWER SHEET NO. 1 GM Jr. (213) 699-8440 DATE 12-87

APPENDIX J

US3 CERTIFICATION, FLOW TEST, AND GRAPHS FOR MH 17, 18, AND 634

CERTIFICATION PAGE

Sewer Flow Monitoring Study from 3/13/23 to 3/16/23

For Tract No. 83534 in Walnut, CA 91789

"I certify that this project's data reports were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the data submitted. Based on my inquiry of the person or persons who installed the flow monitoring equipment and those persons directly responsible for gathering the data, the information submitted in these data reports are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that as a Registered Professional Engineer in the State of California, I am ethically bound to provide services honestly and to protect the public health, safety, and welfare."



Signed on: 5/18/2023

Constance Darlene Szczublewski, RCE 78908
Registration Expires March 31, 2024

Methods & Procedures & Equipment

Methods and Procedures

Utility Systems Science & Software provided Fuscoe Engineering with an off the shelf, non-proprietary flow monitoring solution that included three state of the art Hach Flo-Dar® AV Sensor systems. The project course of action is listed below. The US^3 team:

- Assessed permitting and traffic control at the sites in Walnut, CA.
- Coordinated with the Los Angeles County Department of Public Works and the East Maintenance Yard Supervisor for installation and removal of equipment.
- Installed and removed traffic control in accord with site-specific California Temporary Traffic Control Handbook (CATTCH) requirements for both the installation and removal of equipment.
- Validated the sites for suitability for sewer flow monitoring.
    - Fairway Dr manhole (MH) 634 had no laterals with moderate open channel hydraulics. The upstream line was monitored as it provided the best hydraulics during the inspection.
    - Quiroz Ct MH 17 had pipes entering from northeast and southeast with moderate to rapid open channel hydraulics and turbulence in the mainline due to inflow from the lateral. The upstream southeast lateral was monitored because of the poor hydraulics in the downstream line and because the total flow was being monitored in the manholes upstream and downstream of this site.
    - Quiroz Ct MH 18 had no laterals with moderate open channel hydraulics. The downstream line was monitored as it provided the best hydraulics during the inspection.
- Installed and calibrated the flow monitoring equipment at the sites per manufacturer recommendations on 03/08/2023.
    - Follow-up on the installations confirmed equipment was reading properly.
    - Collected 15-minute interval depth and velocity data points over the entire monitoring period.
- Removed the equipment on 03/16/2023 and validated the data.
    - All of the equipment went through diagnostic testing before and after the study with less than a 1% deviation between manual and meter level readings and less than a 5% deviation between manual and meter velocity readings.
    - Equipment calibration was verified in accordance with manufacturer specifications.
- Prepared the data reports.
    - The following table contains a summary of the average (Avg) and maximum (Max) velocities (Vel) and levels (Lev) collected during this study as well as the calculated flow rates (Flow) and depth versus diameter ratios (d/D).

MH #	Pipe Size (in)	Avg Vel (fps)	Max Vel (fps)	Avg Lev (in)	Max Lev (in)	Avg Flow (gpm)	Max Flow (gpm)	Avg d/D	Max d/D
634	12	5.14	6.61	2.98	4.03	360.97	687.46	0.25	0.34
17	10	6.11	7.53	1.94	2.28	205.71	316.46	0.19	0.23
18	8	3.78	5.16	2.07	2.71	122.75	240.53	0.26	0.34

Equipment



Figure above: Web-Enabled Flo-Dar® AV Sensor, Radar-Based Velocity/Area Flow Meter

FloDar® AV Sensor Specifications:

- **Enclosure**
  - IP68 Waterproof rating, Polystyrene
- **Dimensions**
  - 160.5 W x 432.2 L x 297 D mm (6.32 x 16.66 x 11.7 in.),
  - With SVS, D = 387 mm (15.2 in.)
- **Weight**
  - 4.8 kg (10.5 lbs.)
- **Operating Temperature**
  - -10 to 50°C (14 to 122°F)
- **Storage Temperature**
  - -40 to 60°C (-40 to 140°F)
- **Power Requirements**
  - Supplied by FL900 Flow Logger, Flo-Logger, or Flo-Station
- **Interconnecting Cable**
  - Disconnect available at both sensor and logger or Flo-Station
  - Polyurethane, 0.400 (±0.015) in. diameter; IP68
  - Standard length 9 m (30 ft), maximum 305 m (1000 ft)
- **Cables – available in two styles:**
  - connectors at both ends
  - connector from sensor with open leads to desiccant hub, desiccant hub with connector to logger. A potting/sealant kit will be included. This can be used to run the cable through conduit.
- **Certification**
  - Certified to: FCC Part 15.245: FCC ID: VIC-FLODAR24
  - Industry Canada Spec. RSS210. v7: IC No.: 6149A-FLODAR24

SURCHARGE DEPTH MEASUREMENT

  - Auto zero function maintains zero error below 0.5 cm (0.2 in.)
- **Method**
  - Piezo-resistive pressure transducer with stainless steel diaphragm
- **Range**
  - 3.5 m (138 in.), overpressure rating 2.5 x full scale

VELOCITY MEASUREMENT

- **Method**
  - Radar
- **Range**
  - 0.23 to 6.10 m/s (0.75 to 20 ft/s)

- **Frequency Range**
  - 24.075 to 24.175 GHz, 15.2 mW (max.)
- **Accuracy**
  - ±0.5%; ±0.03 m/s (±0.1 ft/s)

DEPTH MEASUREMENT

- **Method**
  - Ultrasonic
- **Standard Operating Range from Flo-Dar® Housing to Liquid**
  - 0 to 152.4 cm (0 to 60 in.)
- **Optional Extended Level Operating Range from Transducer Face to Liquid**
  - 0 to 6.1 m (0 to 20 ft.) with 43.18 cm (17 in.) dead band, temperature compensated.
- **Accuracy**
  - ±1%; ±0.25 cm (±0.1 in.)

FLOW MEASUREMENT

- **Method**
  - Based on Continuity Equation
- **Accuracy**
  - ±5% of reading typical where flow is in a channel with uniform flow conditions and is not surcharged, ±1% full scale max.

SURCHARGE CONDITIONS DEPTH/VELOCITY DEPTH (Std with Flo-Dar® Sensor)

- **Surcharge depth supplied by Flo-Dar® sensor.**

VELOCITY (Optional Surcharge Velocity Sensor)

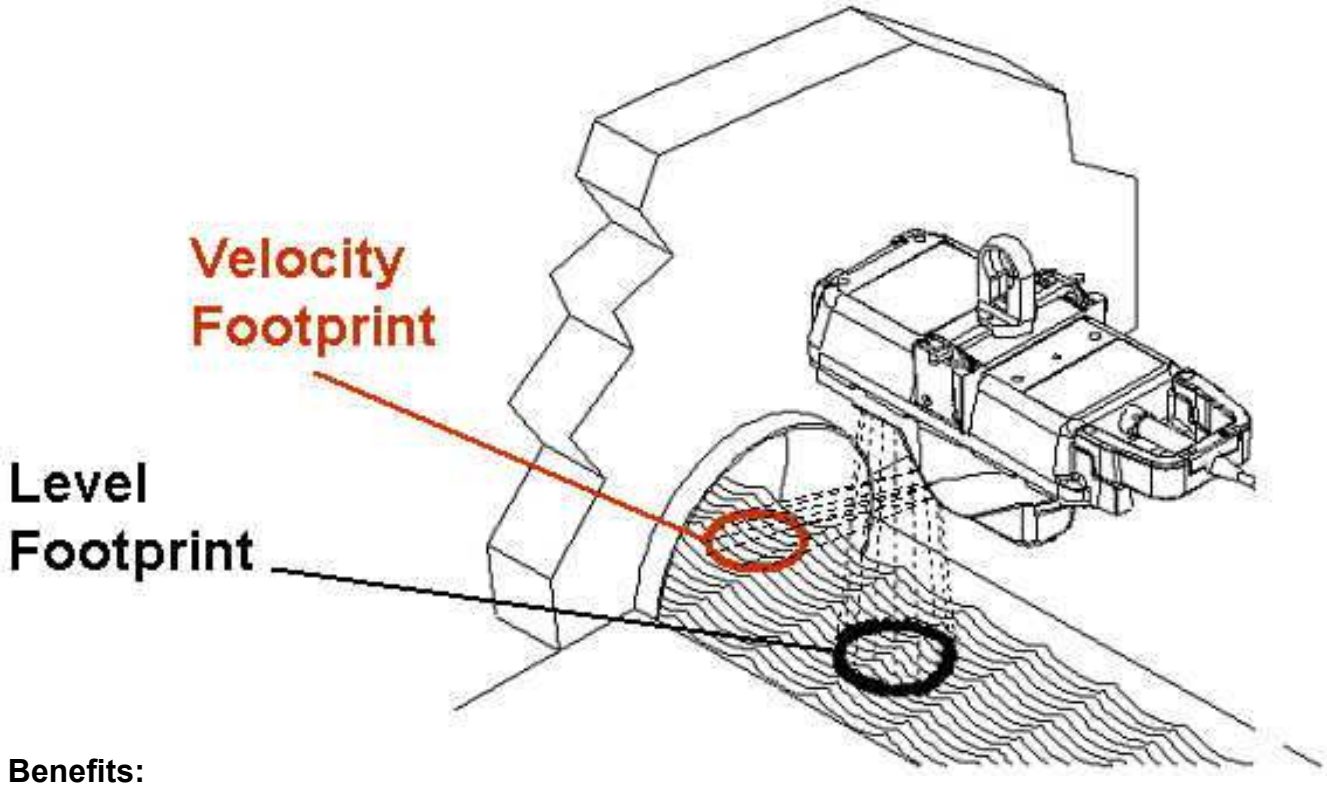
- **Method**
  - Electromagnetic
- **Range**
  - ±4.8 m/s (±16 ft/s)
- **Accuracy**
  - ±0.15 ft/s or 4% of reading, whichever is greater.
- **Zero Stability**
  - ±0.05 ft/s

The Flo-Dar® Open Channel Flow Meters provide an innovative approach to open channel flow monitoring. Combining digital Doppler radar velocity sensing with ultrasonic pulse echo level sensing Flo-Dar® provides accurate open channel flow monitoring without the fouling problems associated with submerged sensors.

Perfect Solution for Difficult Flow Conditions:

- Flows with High Solids Content
- High Temperature Flows
- Caustic Flows
- Large Man-Made Channel
- High Velocities
- Shallow Flows





Benefits:

1. Personnel have no contact with the flow during installation.
2. Maintenance caused by sensor fouling is eliminated
3. Field Replaceable/Interchangeable Sensors and Monitors

How It Works

Flo-Dar® transmits a digital Doppler radar beam that interacts with the fluid and reflects back signals at a different frequency than that which was transmitted. These reflected signals are compared with the transmitted frequency. The resulting frequency shift provides an accurate measure of the velocity and the direction of the flow. Level is detected by ultrasonic pulse echo. Flow is then calculated based on the Continuity Equation:

$$Q = V \times A, \text{ Where } Q = \text{Flow, } V = \text{Average Velocity and } A = \text{Area}$$

Accurate Flow Measurements

Flo-Dar® provides the user with highly accurate flow measurements under a wide range of flows and site conditions. By measuring the velocity of the fluid from above, Flo-Dar® eliminates accuracy problems inherent with submerged sensors including sensor disturbances, high solids content and distribution of reflectors.

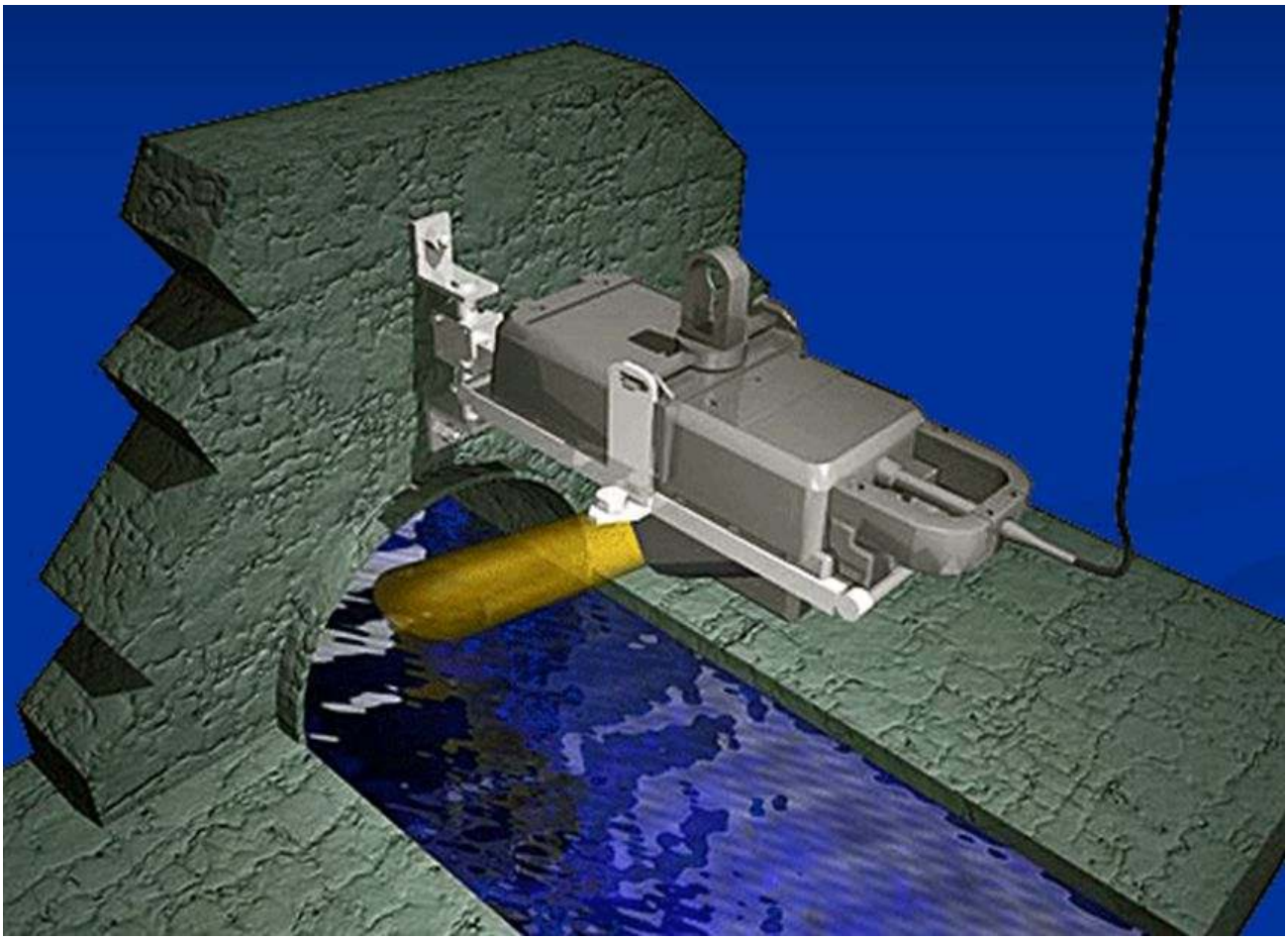


Figure above: US^3 utilizes exclusively Hach March-McBirney Flo-Dar® Meters

US³ Company Information

US³ is a California Corporation **Federal ID No. 33-0729605** and qualifies as a Minority Business Enterprise. US³ has certified as an MBE with the California Public Utility Commission's authorized clearinghouse, **Verification Number: 97ES0008.**

US³ is a specialty service company for the Water & Waste Water industry, providing monitoring and control for Utilities since 1996. US³ is in the forefront of this industry by taking the proven technological approaches developed in other high-tech industries and applying them to protect one of our most precious natural resources - our water.

US³ engineers and technical personnel have applied advanced instrumentation system technology to water/wastewater open channel flow monitoring, pipeline evaluation, engineering, and data analysis, all coupled to the power of the Internet. This unique integrated systems approach allows the company to bring greater insight and intelligence to gathering information about water/wastewater system performance of our clients, and in turn, to support the fulfillment of their commitments to manage and cost effectively design, operate, and maintain these systems.

Moreover, ***US³*** supports Municipalities, Consulting Engineering firms and other water/waste water systems integrators by providing temporary technical services for engineering, software programming and technical site maintenance and calibration site support work, primarily in the Water and Waste Water industries.



Figure at right: All US³ technicians are certified for Confined Space Entry.

Key Personnel Assigned

US³ provided the necessary resources to fully implement this project. Primary in support of this effort were the following personnel:

Mr. Mark Serres: Mr. Serres is a degreed electrical engineer with over 25 years of experience with fresh/wastewater systems, project management, and systems integration in relation to complex industrial systems. This includes experience in industrial automation and water/wastewater industries. Mr. Serres is responsible for assuring client satisfaction and marshalling the required resources to meet the project requirements.

Mr. Thomas Williams: Mr. Williams is an Engineering Manager with over 20 years of experience in complex systems development for wastewater monitoring. This experience includes hydraulic compatibility, instrumentation, communications and analysis. Mr. Williams is responsible for assuring that the required equipment is designed and calibrated to meet the project requirements.

Darlene Szczublewski, PE: Mrs. Szczublewski is a licensed Civil Engineer in multiple states. She has over 15 years of engineering experience with stormwater/wastewater related projects. She assisted in the completion of several Sanitary Sewer Evaluation Surveys and Capacity Analysis projects to meet Consent Decrees as well as completing numerous Infiltration and Inflow (I&I) studies for other clients. Mrs. Szczublewski has developed numerous flow data analysis techniques to present a clear informative picture of flow in a monitored system. Her work also includes the development of training programs for clients describing I&I and capacity analysis methodologies. Mrs. Szczublewski is responsible for analyzing the data as well as the data collection process and assuring that the reports meet the project requirements.

Name, title, address and telephone number of persons to contact regarding this US³ project.

Darlene Szczublewski, PE
Senior Civil Engineer
darlene.szczublewski@uscubed.com

1300 Hill Street
El Cajon, CA 92020
619-546-4281 (work)
619-246-5304 (cell)

Tom Williams
Engineering Manager
tom.williams@uscubed.com

1300 Hill Street
El Cajon, CA 92020
619-546-4281 (work)
619-398-7799 (cell)

Site Report 3/22/2023

Confidential Proprietary Information

Fuscoe

2023.03 Walnut MH 17

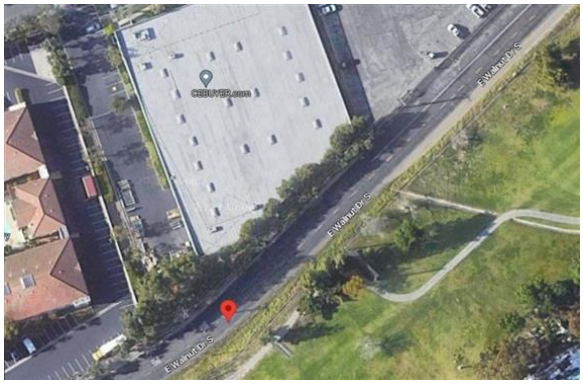
MH at ~19844 Quiroz Ct
Walnut, CA 91789
MH # 17

Access:
MH in EB lane on E. Walnut Dr S, south of address

System Type:
Sanitary [X] Storm [ ]

Install Date: 3/08/2023

Map



Flow Meter		
Meter Depth: 134.6"		
MH Coordinates: 33.993717, -117.868360		
Moderate to rapid open channel hydraulics with turbulence in mainline due to inflow from lateral		
Avg Velocity	Avg Measured Level	Multiplier
6.1 fps	1.9"	0.93

Gas			
O2	H2S	CO	LEL
20.9	0	0	0

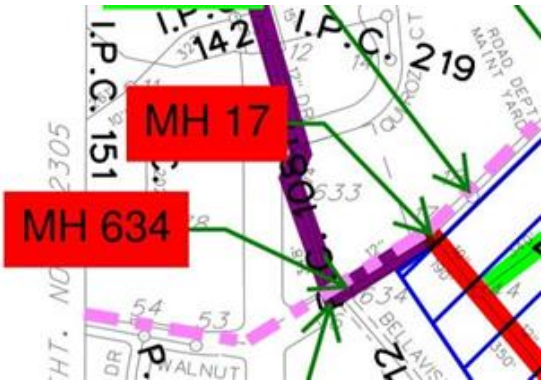
Notes
Pipes entering from NE & SE; monitored the US SE line because of poor hydraulics in DS line & total flow being monitored in US & DS MHs.

Traffic Safety
Used arrow board, cones & signs in accord w/site-specific CATTCH requirements.

Land Use			
Residential	Commercial	Industrial	Trunk
	X		

Manhole Depth	152.5"
Monitored Pipe Size	10"
Inner Pipe Size (In/Out)	10"/10"
Pipe Shape	Round
Pipe Condition	Good
Manhole Material	Brick
Silt	None observed
Velocity Profile Data	Passed
Velocity Profile Taken	0.4 2-D
Sensor Offset	17.9"
Sensor Dist. to Crown	7.9"
Sensor Direction	Upstream
Flow Heading	Southwest

Sewer Plan



Meter Site Document

2023.03 Walnut MH 17

MH at ~19844 Quiroz Ct

Walnut, CA 91789

Site



Manhole Before Install



Installation Process



Installed



Upstream S□ □□ter□□



□pstream □□ter□□Pipe Size



Temporary Flow Study

Fuscoe

2023.03 Walnut MH 17

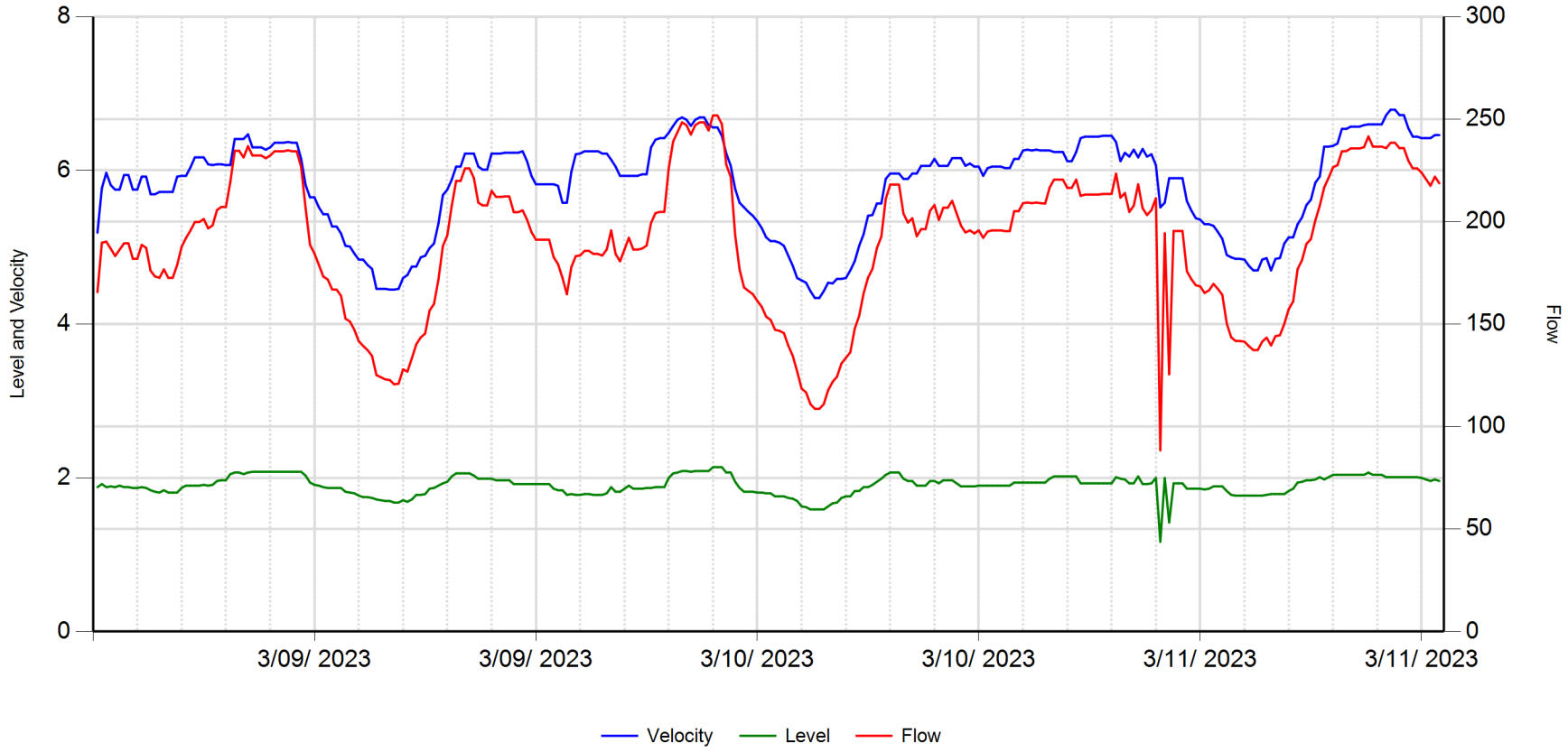
Meter Start Date		From	3/8/2023
Meter Stop Date		To	3/16/2023
Velocity (fps)		Level (in)	Flow (mgd)
Average	6.064	1.945	0.296
Maximum	7.530	2.280	0.456
Minimum	4.340	1.170	0.127
Pipe Size		10.000	
Estimated Capacity (mgd)		Not Calculated	
Capacity Used		Not Calculated	
Sensor Type		Hach - Flodar	

Utility Systems, Science and Software

1300 Hill St
El Cajon, CA 92020

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

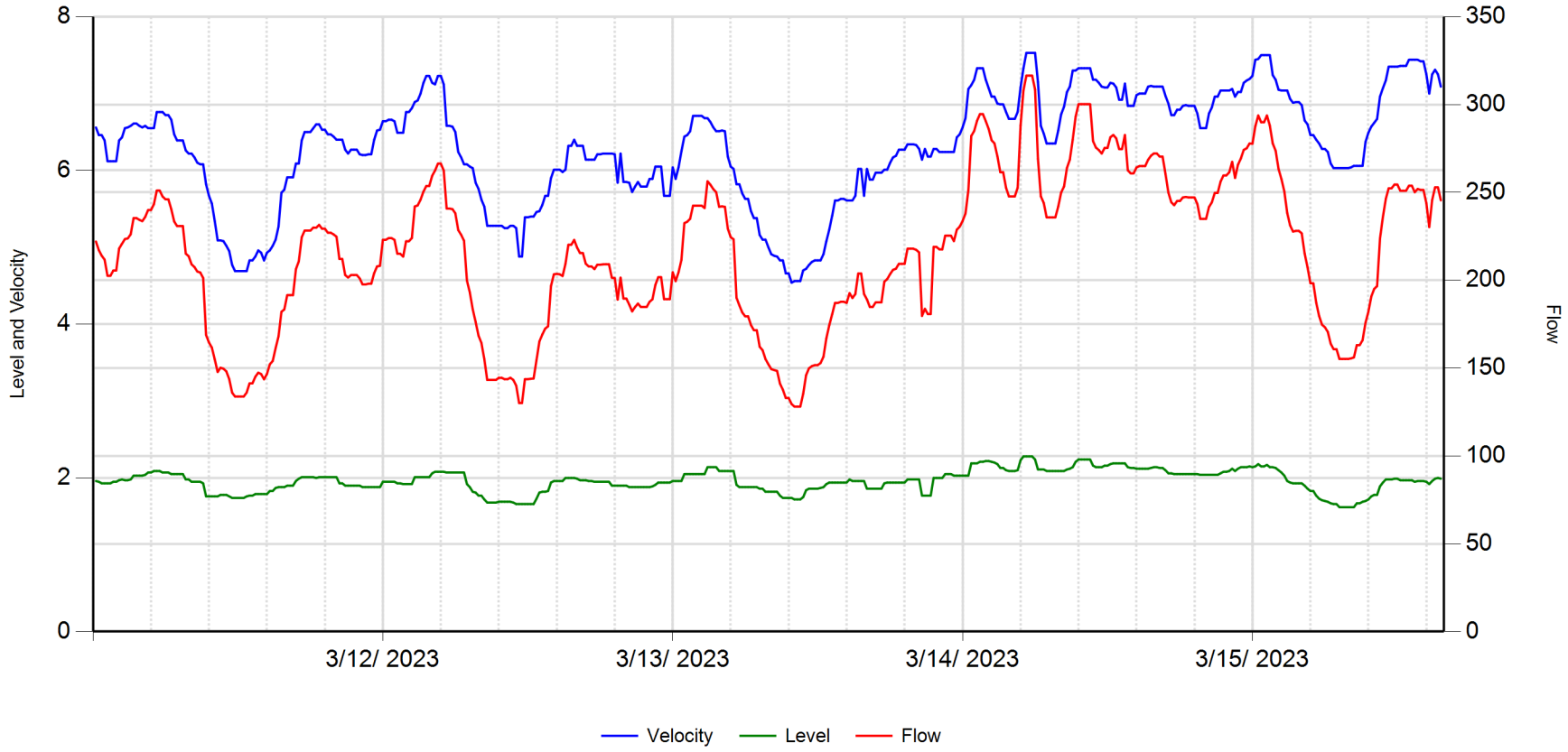
2023.03 Walnut MH 17



	Velocity (fps)	Level (in)	Flow (gpm)		
Average	5.812	1.905	190.510	**RainFall**	Inches
Maximum	6.790	2.140	251.820		
Minimum	4.340	1.170	88.480		

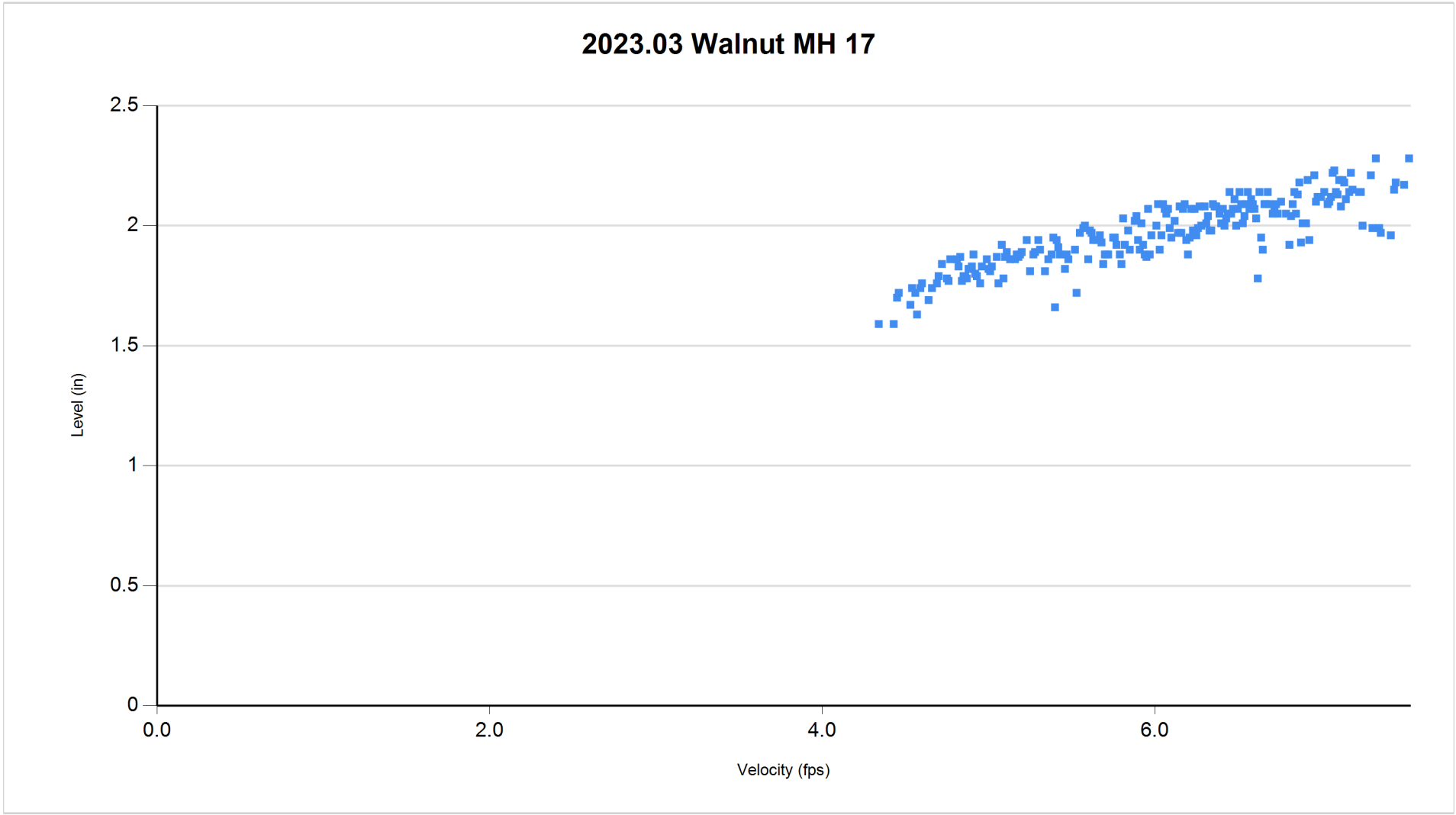
3/21/2023

2023.03 Walnut MH 17



	Velocity (fps)	Level (in)	Flow (gpm)		
Average	6.305	1.959	215.647	**RainFall**	Inches
Maximum	7.530	2.280	316.460		
Minimum	4.540	1.620	128.080		

3/21/2023



3/8/2023 thru 3/16/2023

3/21/2023 1:36:43 PM

Site Report 3/22/2023

Confidential Proprietary Information

Fuscoe

2023.03 Walnut MH 18

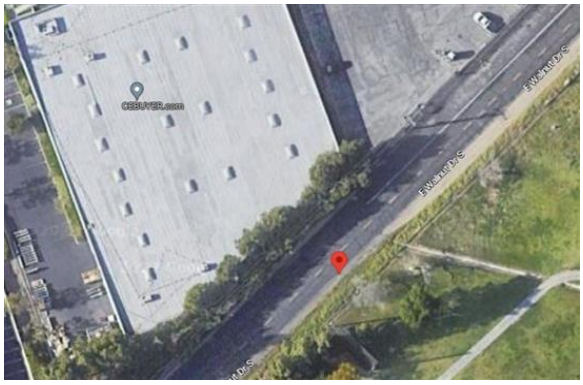
MH at ~19844 Quiroz Ct
Walnut, CA 91789
MH # 18

Access:
MH in EB gutter of E. Walnut Dr S, south of address

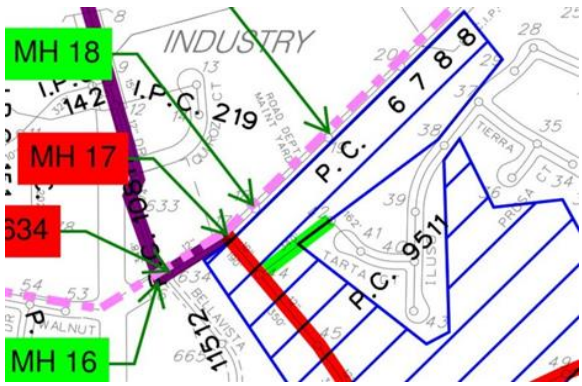
System Type:
Sanitary [X] Storm [ ]

Install Date: 3/08/2023

Map



Sewer Plan



Flow Meter			
Meter Depth: 133.7"			
MH Coordinates: 33.994014, -117.867968			
Moderate open channel hydraulics			
Avg Velocity	Avg Measured Level		Multiplier
3.8 fps	2.1"		1.0
Gas			
O2	H2S	CO	LEL
20.9	0	0	0
Notes			
No laterals; monitored the downstream line as it provided the best hydraulics during inspection.			
Traffic Safety			
Used cones & signs in accord w/site-specific CATTCH requirements.			
Land Use			
Residential	Commercial	Industrial	Trunk
	X		

Manhole Depth	149"
Monitored Pipe Size	8"
Inner Pipe Size (In/Out)	8"/8"
Pipe Shape	Round
Pipe Condition	Good
Manhole Material	Concrete
Silt	None observed
Velocity Profile Data	Passed
Velocity Profile Taken	0.4 2-D
Sensor Offset	15.3"
Sensor Dist. to Crown	7.3"
Sensor Direction	Downstream
Flow Heading	Southwest

Meter Site Document

2023.03 Walnut MH 18

MH at ~19844 Quiroz Ct

Walnut, CA 91789

Site



Manhole Before Install



Installation Process



Installed



Downstream



Downstream Pipe Size



Temporary Flow Study

Fuscoe

2023.03 Walnut MH 18

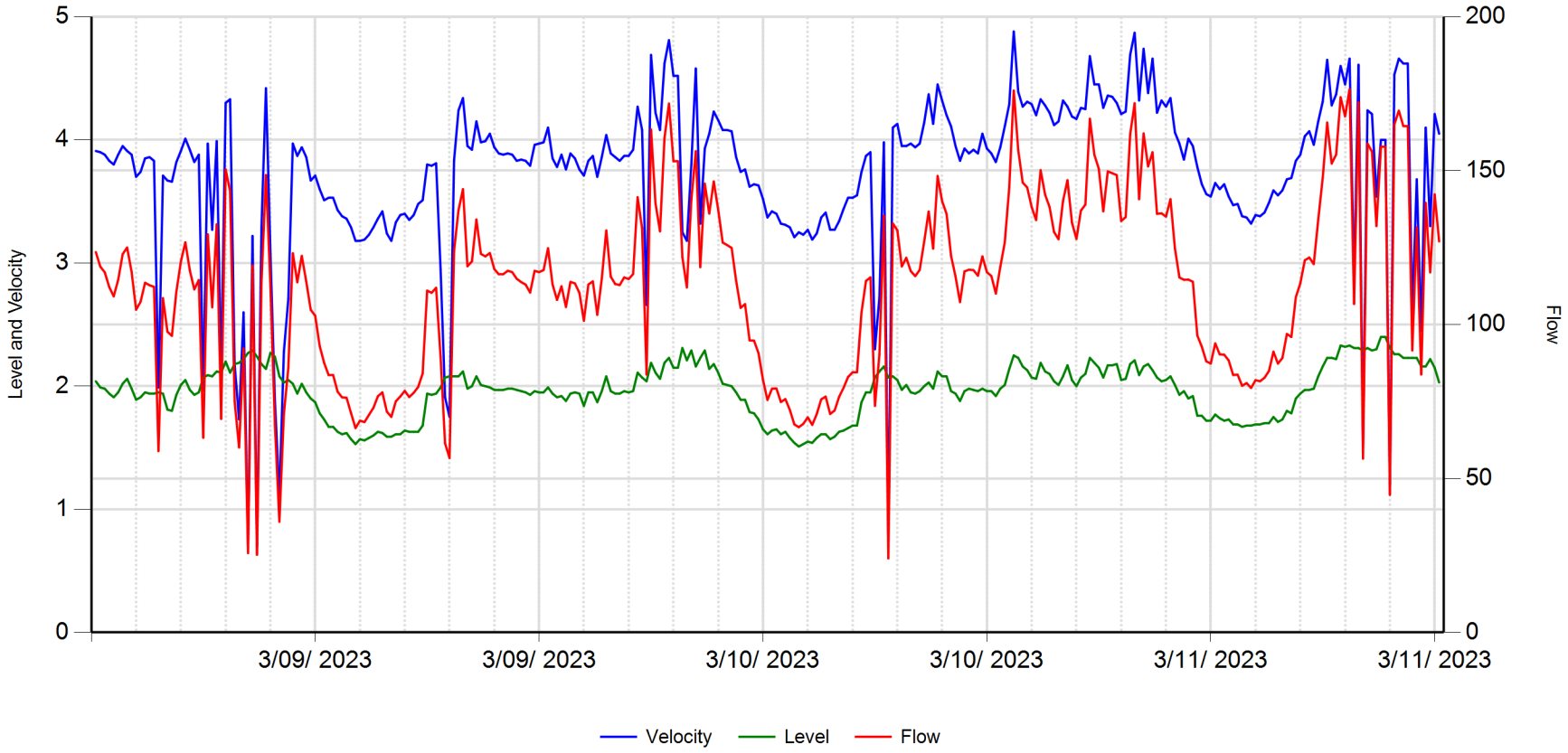
Meter Start Date		From	3/8/2023
Meter Stop Date		To	3/16/2023
Velocity (fps)		Level (in)	Flow (mgd)
Average	3.791	2.064	0.177
Maximum	5.160	2.710	0.346
Minimum	0.250	1.510	0.013
Pipe Size		8.000	
Estimated Capacity (mgd)		Not Calculated	
Capacity Used		Not Calculated	
Sensor Type		Hach - Flodar	

Utility Systems, Science and Software

1300 Hill St
El Cajon, CA 92020

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

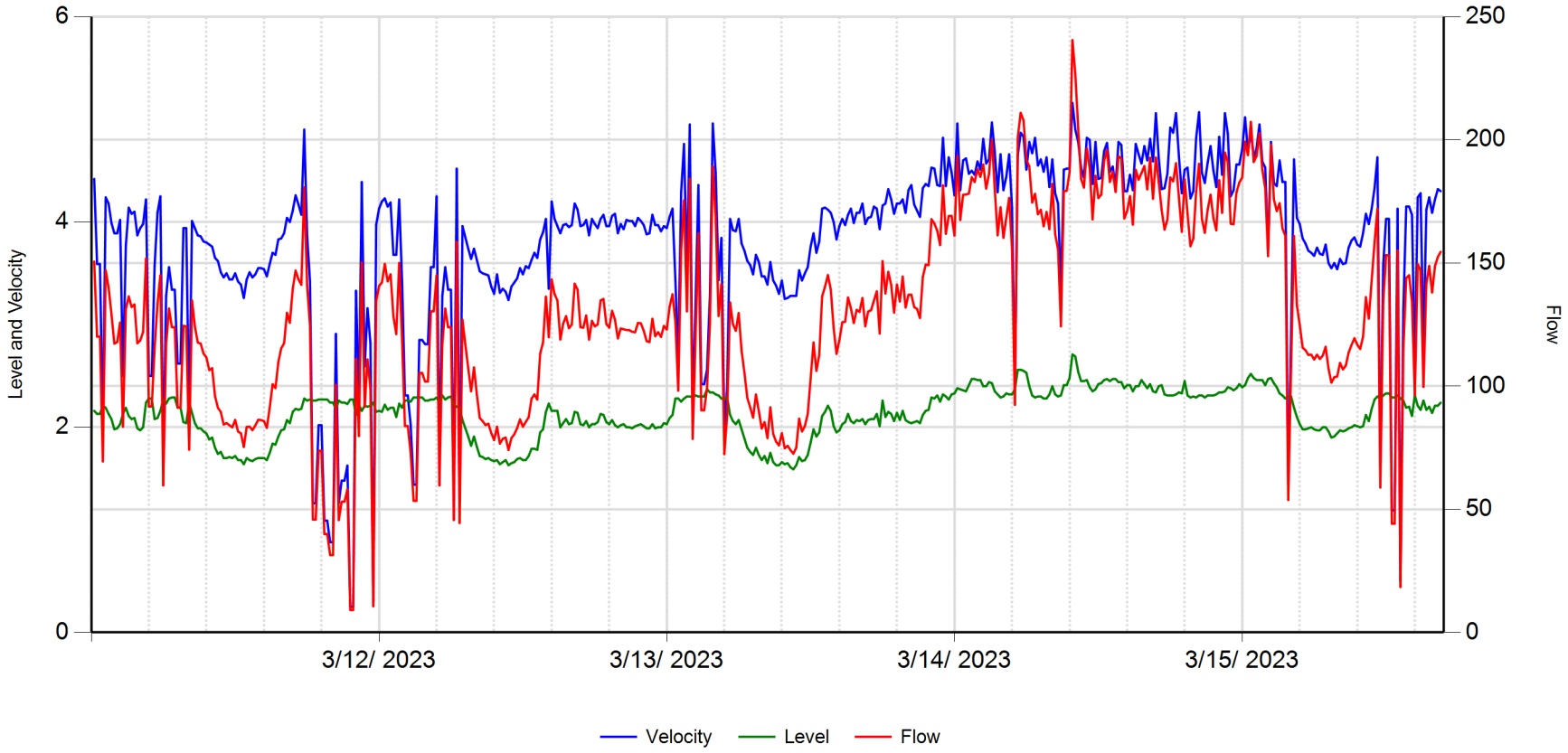
2023.03 Walnut MH 18



	Velocity (fps)	Level (in)	Flow (gpm)		
Average	3.736	1.965	112.545	**RainFall**	Inches
Maximum	4.880	2.400	176.470		
Minimum	0.700	1.510	24.090		

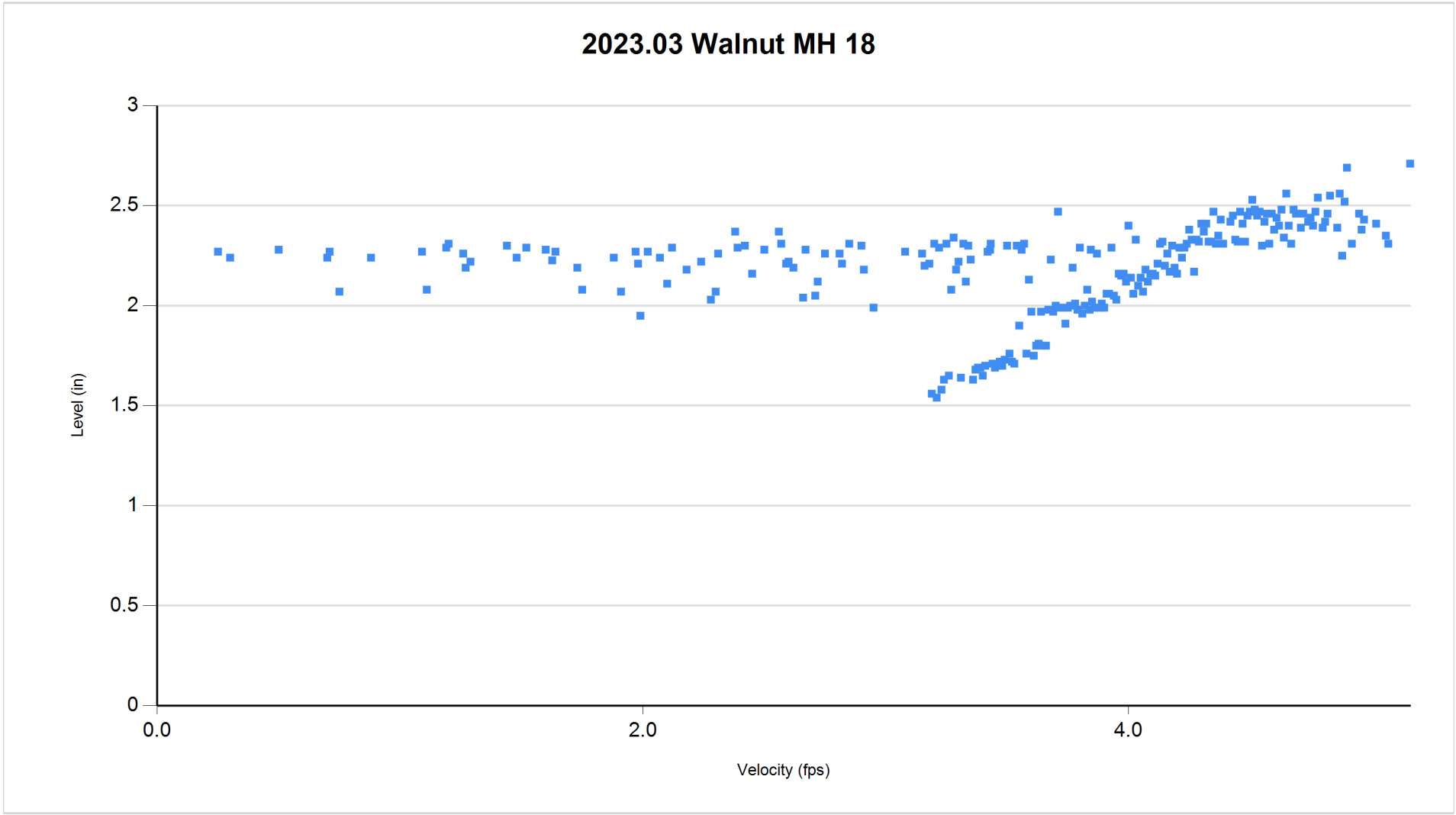
3/21/2023

2023.03 Walnut MH 18



	Velocity (fps)	Level (in)	Flow (gpm)		
Average	3.809	2.136	129.294	**RainFall**	Inches
Maximum	5.160	2.710	240.530		
Minimum	0.250	1.590	9.130		

3/21/2023



3/8/2023 thru 3/16/2023

3/21/2023 1:37:17 PM

Site Report 3/22/2023

Confidential Proprietary Information

Fuscoe

2023.03 Walnut MH 634

MH at ~1170 Fairway Dr
Walnut, CA 91789
MH # 634

Access:
MH in EB lane of E. Walnut Dr S, south of address

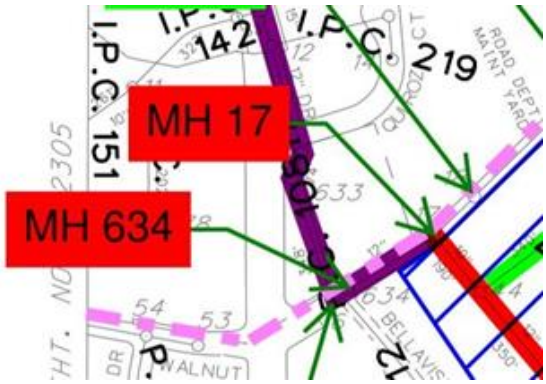
System Type:
Sanitary [X] Storm [ ]

Install Date: 3/08/2023

Map



Sewer Plan



Flow Meter
Meter Depth: 149"
MH Coordinates: 33.993320, -117.869097
Moderate open channel hydraulics

Avg Velocity	Avg Measured Level	Multiplier
5.1 fps	3.0"	1.4

Gas			
O2	H2S	CO	LEL
20.9	0	0	0

Notes
No laterals; monitored the upstream line as it provided the best hydraulics during inspection.

Traffic Safety
Used arrow board, cones & signs in accord w/site-specific CATTCH requirements.

Land Use			
Residential	Commercial	Industrial	Trunk
	X		

Manhole Depth	168"
Monitored Pipe Size	12"
Inner Pipe Size (In/Out)	12"/12"
Pipe Shape	Round
Pipe Condition	Good
Manhole Material	Brick
Silt	None observed
Velocity Profile Data	Passed
Velocity Profile Taken	0.4 2-D
Sensor Offset	19.0"
Sensor Dist. to Crown	7.0"
Sensor Direction	Upstream
Flow Heading	So□t□west

Meter Site Document

2023.03 Walnut MH 634

MH at ~1170 Fairway Dr

Walnut, CA 91789

Site



Manhole Before Install



Installation Process



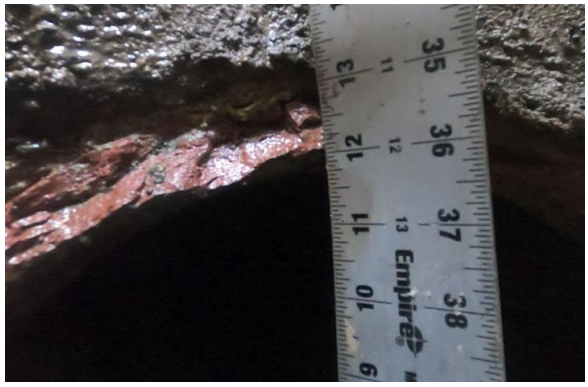
Installed



Upstream



□pstream Pipe Size



Temporary Flow Study

Fuscoe

2023.03 Walnut MH 634

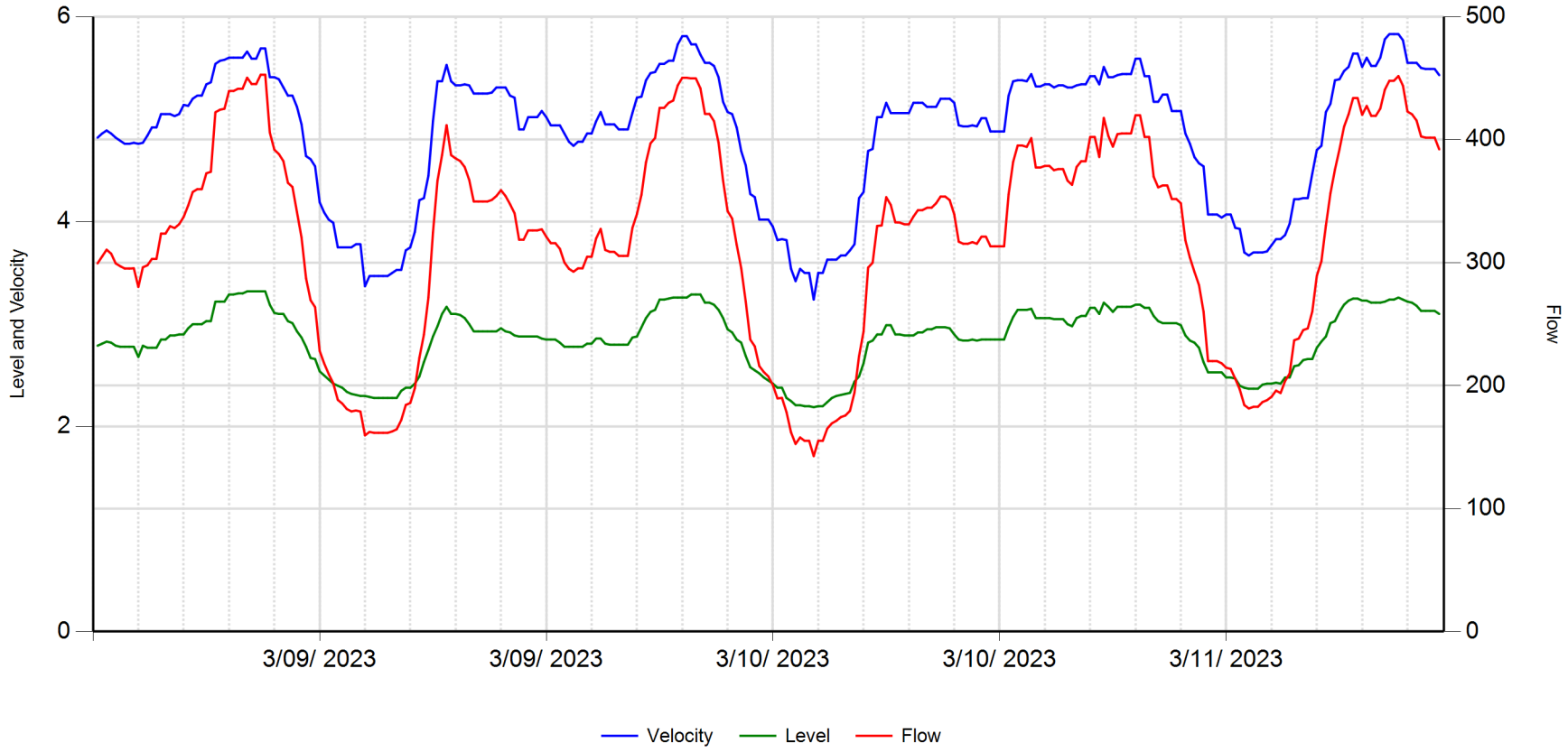
Meter Start Date		From	3/8/2023
Meter Stop Date		To	3/16/2023
Velocity (fps)		Level (in)	Flow (mgd)
Average	5.126	2.984	0.519
Maximum	6.610	4.030	0.990
Minimum	3.240	2.190	0.206
Pipe Size		12.000	
Estimated Capacity (mgd)		Not Calculated	
Capacity Used		Not Calculated	
Sensor Type		Hach - Flodar	

Utility Systems, Science and Software

1300 Hill St
El Cajon, CA 92020

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

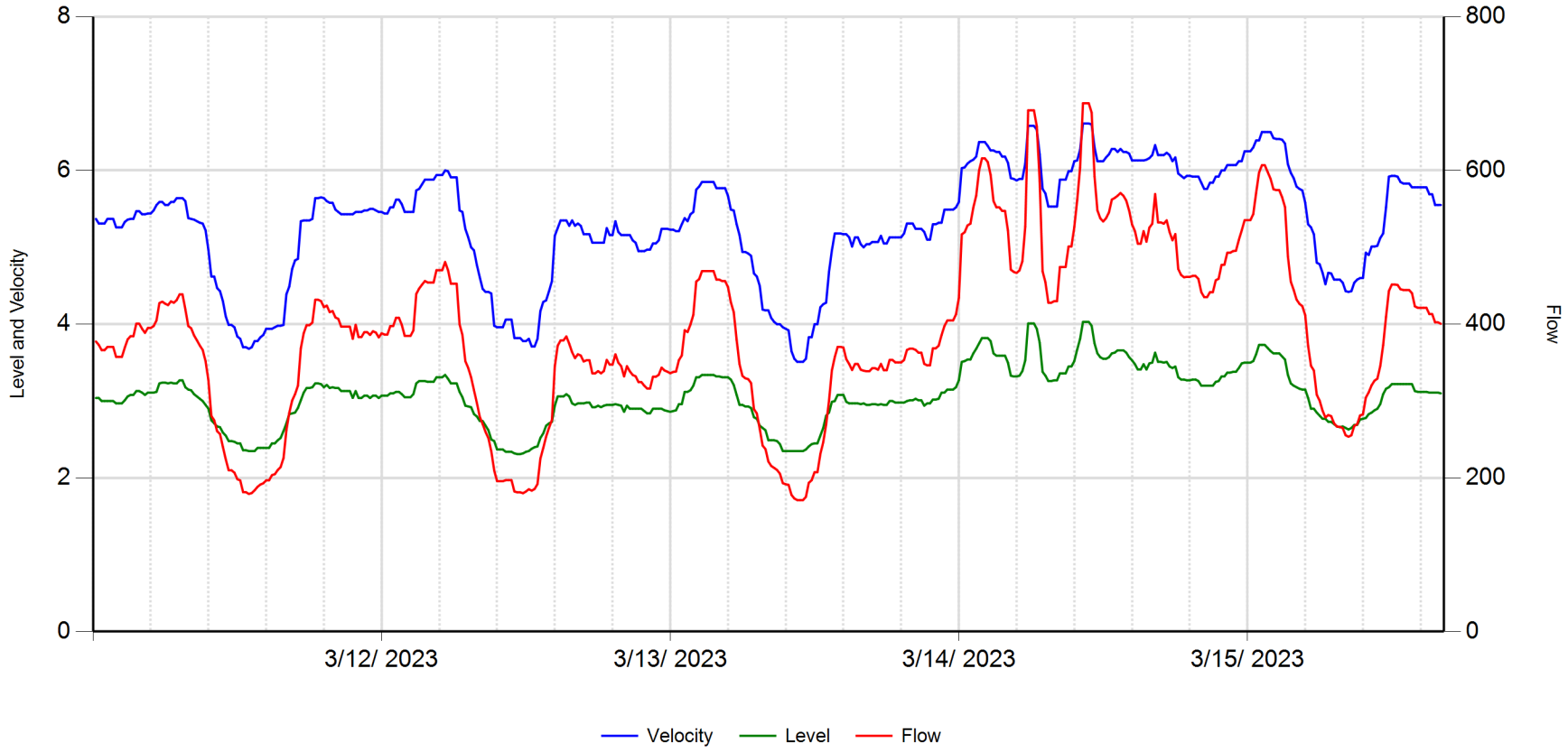
2023.03 Walnut MH 634



	Velocity (fps)	Level (in)	Flow (gpm)		
Average	4.864	2.852	319.345	**RainFall**	Inches
Maximum	5.830	3.320	452.850		
Minimum	3.240	2.190	142.730		

3/21/2023

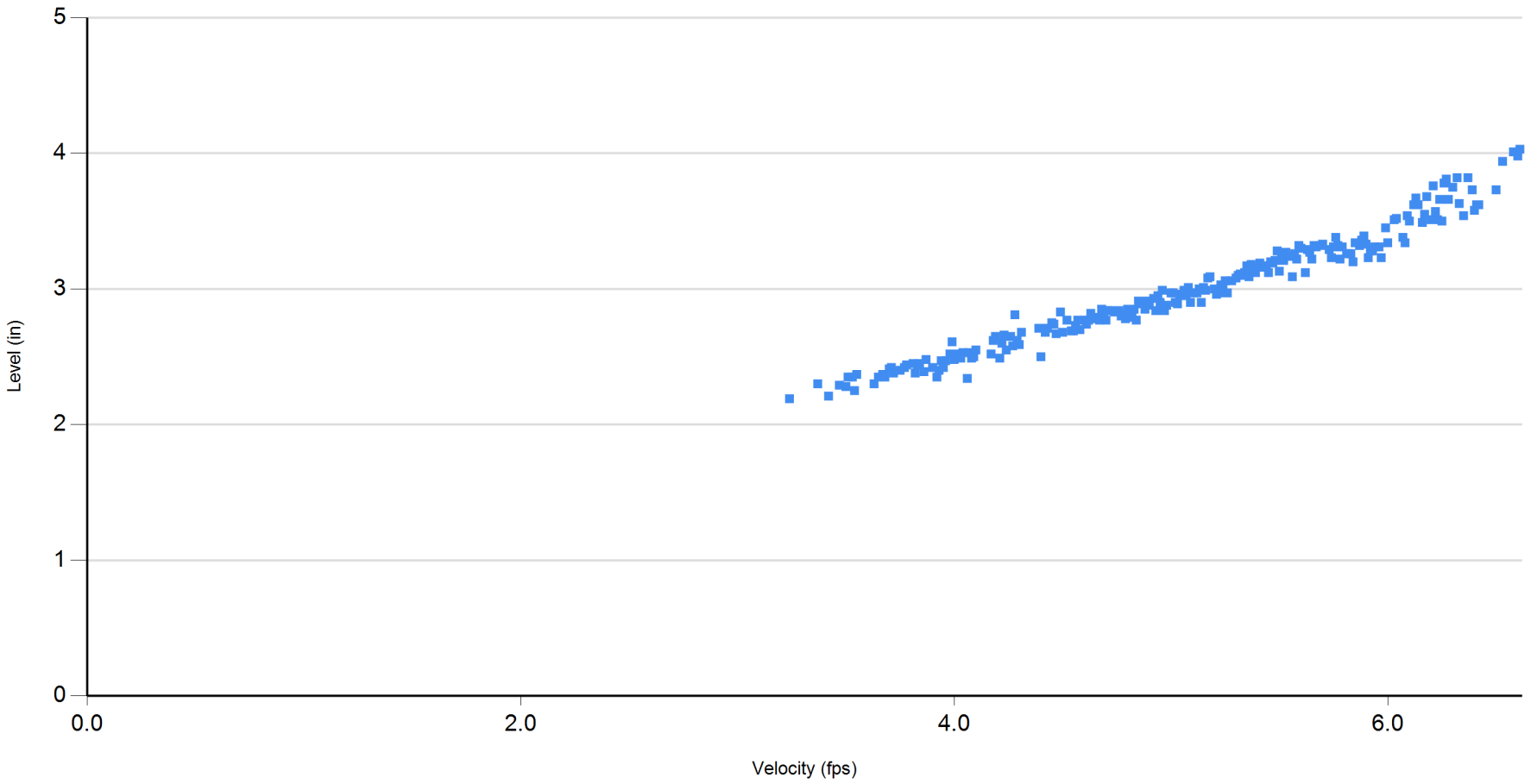
2023.03 Walnut MH 634



	Velocity (fps)	Level (in)	Flow (gpm)		
Average	5.311	3.067	387.445	**RainFall**	Inches
Maximum	6.610	4.030	687.460		
Minimum	3.510	2.310	171.190		

3/21/2023

2023.03 Walnut MH 634



3/8/2023 thru 3/16/2023

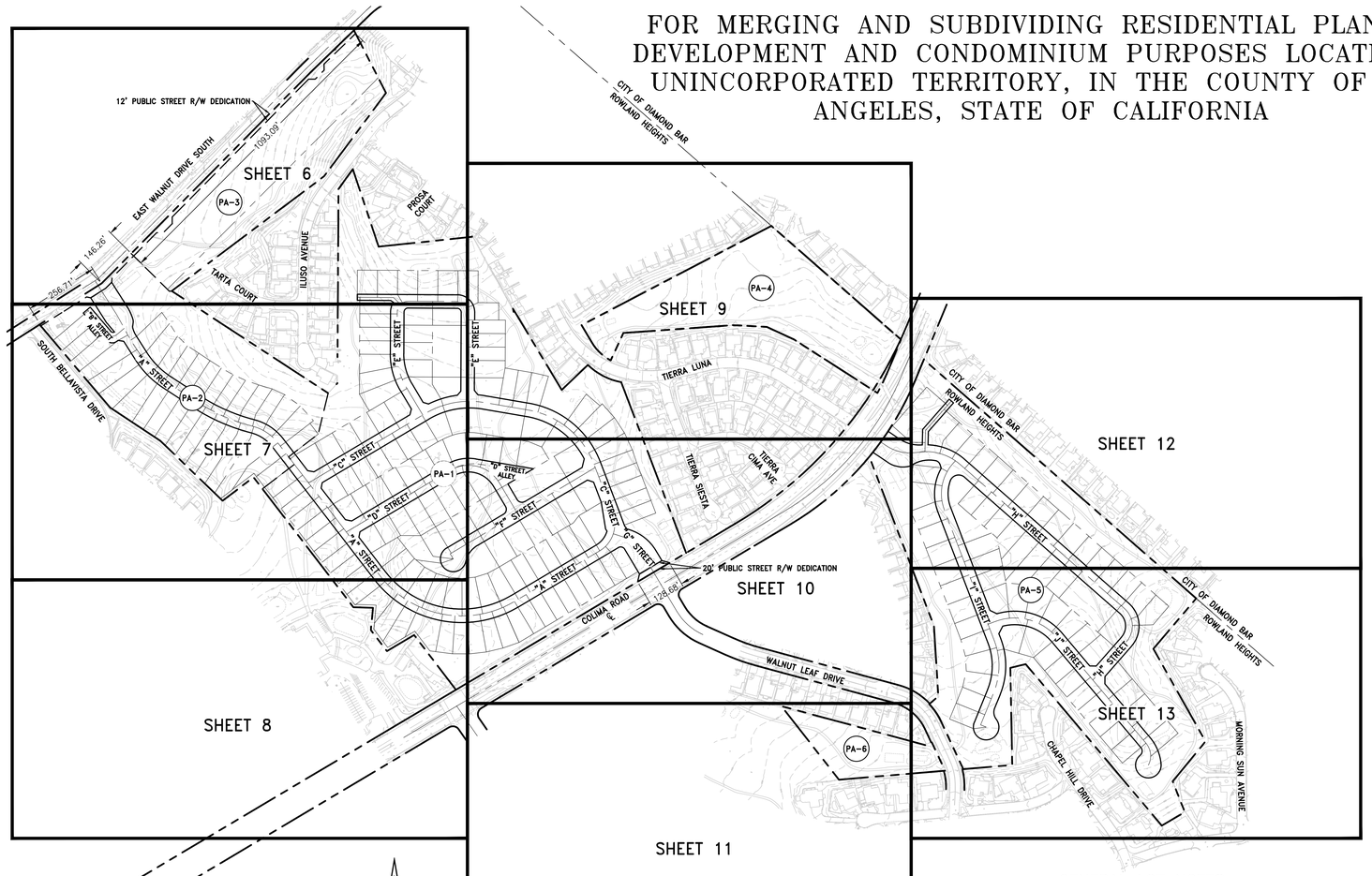
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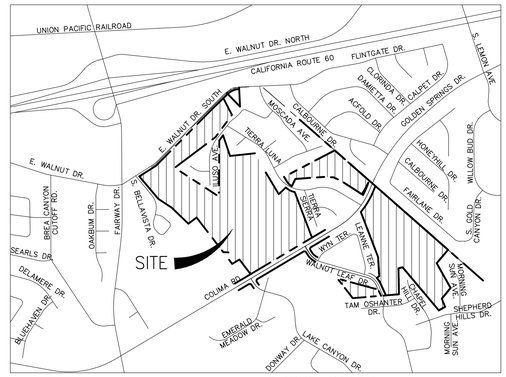
APPENDIX K

PROPOSED VTTM

MAJOR LAND DIVISION VESTING TENTATIVE TRACT NO. 83534

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA





N

VICINITY MAP

THOMAS GUIDE PG. 679–E4
679–E5, 679–F4, 679–F5
SCALE: 1" = 800'

200' 0' 100' 200'
SCALE: 1" = 200'

KEY MAP

PROJECT DATA

PROJECT SITE AREA: 3,295,105 SF (75.65 AC) GROSS
3,262,567 SF (74.90 AC) NET

NET = GROSS LESS EXISTING EASEMENTS TO REMAIN AND PUBLIC STREET R/W DEDICATIONS

DEDICATION ACREAGE = 0.53 AC

SINGLE FAMILY RESIDENTIAL LOTS: 200
CONDOMINIUM LOTS: 35
PRIVATE COMMON OPEN SPACE LOTS: 13
TOTAL LOTS: 248

PROJECT INFORMATION

THIS PROPOSED SINGLE FAMILY HOME, DUPLEX, TRIPLEX, AND TOWNHOMES PROJECT WILL SUBDIVIDE PORTIONS OF THE EXISTING LOS ANGELES ROYAL VISTA GOLF COURSE PER THE TENTATIVE TRACT MAP HEREON. THE PROPOSED SUBDIVISION WILL CONTAIN THE FOLLOWING LOT BREAKDOWN:

TWO HUNDRED (200) LOTS CONTAINING SINGLE FAMILY HOMES.

THIRTY–FIVE (35) CONDOMINIUM LOTS CONTAINING ONE–HUNDRED SIXTY (160) UNITS.

THIRTEEN (13) PRIVATE COMMON OPEN SPACE LOTS.

PARKING INFORMATION

ALL PROPOSED RESIDENTIAL LOTS INCLUDE 2 COVERED PARKING STALLS PER UNIT

SETBACK REQUIREMENTS

ZONE RPD–5000–6U MINIMUM SETBACKS:
FRONT YARD: 20 FEET
SIDE YARDS: 5 FEET
BACK YARDS: 15 FEET

ZONE RPD–5000–11U MINIMUM SETBACKS:
FRONT YARD: 20 FEET
SIDE YARDS: 5 FEET
BACK YARDS: 15 FEET

ZONE RPD–5000–12U MINIMUM SETBACKS (PA–1):
FRONT YARD: 10 FEET
SIDE YARDS: 25 FEET
BACK YARDS: 8 FEET

ZONE RPD–5000–12U MINIMUM SETBACKS (PA–5):
FRONT YARD: 20 FEET
SIDE YARDS: 5 FEET
BACK YARDS: 15 FEET

ZONE RPD–5000–14U MINIMUM SETBACKS:
FRONT YARD: 10 FEET
SIDE YARDS: 25 FEET
BACK YARDS: 8 FEET

ZONE RPD–5000–18U MINIMUM SETBACKS:
FRONT YARD: 12 FEET
SIDE YARDS: 5 FEET
BACK YARDS: 15 FEET

SHEET INDEX

SHEET TITLE	SHEET NUMBER
TITLE SHEET	1
LEGAL DESCRIPTION	2
LOT AND PLANNING AREA SUMMARY	3
EXISTING CONDITIONS AND EASEMENTS	4
EXISTING CONDITIONS AND EASEMENTS	5
LOTS 75–80, 235–236, 239	6
LOTS 1–28, 48–74, 99–115, 119–126, 131–141, 152–154, 242, 237–8	7
LOTS 29–34, 155–157	8
LOTS 81–92, 116–117, OPEN SPACE LOT 247	9
LOTS 35–47, 93–98, 127–130, 118, 142–151, 158–168	10
OPEN SPACE LOT 248	11
LOTS 169–191, 211–215, 196–197, 246	12
LOTS 192–195, 199–210, 216–234, 245	13
TYPICAL SECTIONS AND DETAILS	14
SLOPE CROSS SECTIONS	15
SLOPE CROSS SECTIONS	16
SLOPE CROSS SECTIONS	17
SLOPE CROSS SECTIONS	18
SLOPE CROSS SECTIONS	19
SLOPE CROSS SECTIONS	20
RETAINING WALL SITE PLAN	21
RETAINING WALL SITE PLAN	22
RETAINING WALL TYPICAL DETAILS AND HEIGHT SCHEDULE	23

SUBDIVIDER

ATTN: JON CONK
PROJECT DIMENSIONS, INC.
4 PARK PLAZA, SUITE 700
IRVINE, CA 92614

PROJECT ADDRESS

19816 WALNUT DRIVE
WALNUT, CA 91789

CIVIL ENGINEER

ATTN; ANDREW WILLRODT
FUSCOE ENGINEERING, INC.
600 WILSHIRE BLVD, SUITE 1470
LOS ANGELES, CA 90017

RECORD OWNER

TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS VESTED IN:

RVGC PARTNERS, INC., A CALIFORNIA CORPORATION.

(PARCELS: 8762–022–002, 8762–023–002, 8762–027–039, 8764–002–006, AND 8764–002–005)

AND

TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS VESTED IN:

RV DEV LLC.

(PARCEL: 8762–023–001)

ASSESSOR PARCEL NUMBERS

8762–022–002, 8762–023–001, 8762–023–002, 8762–027–039,
8764–002–005, 8764–002–006

GENERAL PLAN DESIGNATION

ROWLAND HEIGHTS COMMUNITY GENERAL PLAN

RECORD BOUNDARY NOTE

THE BOUNDARY AND EASEMENT INFORMATION SHOWN HEREON HAS BEEN CONSTRUCTED FROM RECORD SOURCE DOCUMENTS (TRACT MAPS AND DEEDS) AS EVIDENCED IN THE PRELIMINARY TITLE REPORTS AS PREPARED BY FIRST AMERICAN TITLE COMPANY, ORDER NO. OSA–6233679 (29), DATED 4/7/2020 AND THE CHICAGO TITLE COMPANY, ORDER NO. 00130182–994–X49–DB, DATED 4/9/2020.

PURSUANT TO THE CONTRACT SCOPE OF WORK, THE BOUNDARY IS NOT THE RESULT OF A FIELD SURVEY, BUT COMPILED FROM RECORD MAPS AND SURVEYS AVAILABLE IN THE PUBLIC RECORD. THE FOUNDATION FOR THE PROJECT BOUNDARY WAS ASSEMBLED FROM SAID TRACT MAPS AND DEEDS.

THERE ARE ANOMALIES IN THE MATHEMATICAL DATA BETWEEN SAID RECORDS IN THE MAGNITUDE OF 1 TO 2 FEET. A BOUNDARY DETERMINATION SURVEY FOR THE SUBJECT PROPERTY IS ADVISABLE FOR FINAL DETERMINATION OF THE PROPERTY BOUNDARIES SUBJECT TO PROPOSED BUILDING SETBACKS AND IMPROVEMENTS THAT MAY BE CRITICAL TO DEVELOPMENT.

BASIS OF BEARINGS

THE BEARINGS SHOWN HEREON ARE BASED ON THE CALIFORNIA STATE PLANE COORDINATE SYSTEM NAD–83 (2017.50) ZONE V, AS DERIVED BY STATION POSITIONS PUBLISHED BY CSRC. THE STATIONS USED IN THE HORIZONTAL CONTROL FOR THIS SURVEY ARE: LPHS, PSDM, SNHS, SPMS, AND WCHS.

HAZARD NOTES

1. FLOOD NOTE: PER FEMA FLOOD MAP NUMBER 06037C1880F, THE SITE IS IN MINIMAL FLOOD HAZARD AREA X.
2. WILDFIRE HAZARD NOTE: PROJECT IS NOT IN A WILDFIRE HAZARD AREA AS OBTAINED FROM THE CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE) MAPS OF SIGNIFICANT FIRE HAZARDS.
3. EARTHQUAKE FAULT ZONE HAZARD NOTE: THIS PROJECT IS NOT WITHIN AN EARTHQUAKE FAULT ZONE.
4. LIQUEFACTION HAZARD: A PORTION OF THIS PROJECT SITE ADJACENT TO THE INTERSECTION OF EAST WALNUT DRIVE AND BELLAVISTA DRIVE IS LOCATED IN A ZONE SUSCEPTIBLE TO LIQUEFACTION. THE MAJORITY OF THE PROJECT SITE POSSESSES LOW POTENTIAL FOR LIQUEFACTION FOLLOWING EXPECTED REMEDIAL GRADING. REFER TO GEOTECHNICAL SOILS REPORT FOR FURTHER DETAILS.
5. METHANE HAZARD NOTE: NOT WITHIN 300 FEET OF AN OIL OR GAS WELL OR 1,000 FEET OF A METHANE PRODUCING SITE.

PERMIT NUMBERS

VTM: RPPL2021007149
CUP: RPPL2021007151
ZC: RPPL2021007152
ENV: RPPL2021007150
PLAN AMENDMENT: RPPL2021004680
HOUSING PERMIT: RPPL2021007161

EARTHWORK QUANTITIES

EARTHWORK CUT AND FILL QUANTITIES FOR ENTIRE PROJECT SITE:

TOTAL VOLUME HANDLED:	2,184,773	CY
CUT:	387,010	CY
FILL:	253,341	CY (FILL ACCOUNTS FOR 10% SHRINKAGE)
NET:	133,669	CY (EXPORT)
OVER–EXCAVATION:	1,544,422	CY

1. HAUL ROUTE DESTINATION: OLINDA LANDFILL, 1942 VALENCIA AVENUE, BREA, CALIFORNIA, 92823.
2. OVEREXCAVATION EXTENDS A VARIABLE DEPTH UP TO A MAXIMUM OF 25 FEET BELOW EXISTING GRADE. BACKFILL TO PROPOSED ROUGH GRADE ELEVATIONS. OVEREXCAVATION ONLY REQUIRED FOR PA–1, PA–2, PA–3, AND PA–5.
3. FILL VALUES ACCOUNT FOR 10% SHRINKAGE FACTOR.

PROPOSED & QUIT–CLAIM EASEMENTS

(A) PROPOSED EASEMENT FOR PRIVATE DRIVES AND FIRE LANE PURPOSES.

(B) PROPOSED 10' SUBSURFACE EASEMENT TO WALNUT VALLEY WATER DISTRICT FOR WATER PIPELINES.

(C) PROPOSED 10' WIDE SUBSURFACE EASEMENT DEDICATED TO THE COUNTY OF LOS ANGELES FOR SANITARY SEWER PURPOSES.

(D) PROPOSED 10' WIDE SUBSURFACE EASEMENT DEDICATED TO THE COUNTY OF LOS ANGELES FOR STORM DRAIN PURPOSES.

(E) PROPOSED VARYING WIDTH NON–EXCLUSIVE SURFACE ACCESS EASEMENT FOR PUBLIC UTILITY MAINTENANCE PURPOSES. APPLICABLE ON ALL PRIVATE DRIVEWAYS AND FIRE LANES WITHIN THE SUBDIVISION.

(F) PROPOSED 10' WIDE SUBSURFACE EASEMENT FOR PRIVATE STORM DRAIN PURPOSES.

(G) QUIT–CLAIM EXISTING EASEMENT PER PLAN. REFER TO SHEET 4 & 5 FOR EXISTING EASEMENT DETAILS.

GENERAL LOT NOTES

1. SINGLE FAMILY LOTS 1–61, 68–74, 81–104, 106–115, 117–143, 145, 151–168, 170–173, 180–193, 195–212, AND 219–234 SHALL BE INDIVIDUAL FEE LOTS.
2. DUPLEX LOTS 62–67, 75–80, 146–150, 174–179, AND 213–218 SHALL BE CONDOMINIUM LOTS.
3. TRIPLEX LOTS 105, 116, 144, 169, AND 194 SHALL BE CODNO LOTS.
4. LOT 235 SHALL BE DESIGNATED FOR RESIDENTIAL TOWNHOMES AS A CONDOMINIUM LOT.
5. LOTS 239–248 SHALL BE PRIVATE COMMON OPEN SPACE LOTS MAINTAINED BY THE HOA.
6. ALL LOT BOUNDARIES SHALL EXTEND TO THE CENTERLINE OF ALL PRIVATE DRIVES & FIRE LANES. A RECIPROCAL ACCESS EASEMENT WILL BE RECORDED OVER ALL PRIVATE DRIVEWAYS AND FIRE LANES.
7. ALL PRIVATE STREETS SHALL BE OWNED AND MAINTAINED BY THE PRIVATE HOMEOWNER'S ASSOCIATION.
8. ALL PRIVATE OPEN AREAS SHALL BE OWNED AND MAINTAINED BY THE PRIVATE HOMEOWNER'S ASSOCIATION.
9. RECIPROCAL ACCESS RIGHTS SHALL BE GRANTED THROUGH THE PROPOSED PRIVATE DRIVE WAYS AND FIRE LANES FOR ALL PROPERTIES WITHIN THE SUBDIVISION.
10. PROPOSED PRIVATE STREETS "A" THROUGH "J" ARE TO BE PRIVATE DRIVEWAYS AND FIRE LANES. SEE DEPARTMENT OF REGIONAL PLANNING WAIVER AGAINST STREET FRONTAGE REQUIREMENTS.
11. ALL SLOPE SETBACK AREAS ARE TO BE MAINTAINED BY HOA WITHIN SINGLE–FAMILY LOTS.
12. NO STRUCTURES ARE TO BE ESTABLISHED WITHIN SLOPED AREAS.
13. ALL BOUNDARIES SHALL EXTEND TO THE CENTERLINE OF PRIVATE DRIVEWAYS AND FIRELANES.

SLOPE AREA NOTE

TOTAL SLOPED AREA OF 4:1 (OR STEEPER): ±14.1 AC

LAND USE DESIGNATION

OS (OPEN SPACE)

SITE ZONING

EXISTING: A–1–1, A–1–10000 (LIGHT AGRICULTURAL)
PROPOSED: RPD–5000–6U, RPD–5000–11U, RPD–5000–12U, RPD–5000–14U, RPD–5000–18U

FIRE HYDRANT NOTE

1. ALL FIRE HYDRANTS SHALL MEASURE 6" X 4"X 2–1/2" BRASS OR BRONZE, CONFORMING TO CURRENT AWWA STANDARD C503 OR APPROVED EQUAL, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE COUNTY OF LOS ANGELES FIRE DEPARTMENT C105.1 CFC.

GENERAL NOTES

1. ALL BOUNDARY MONUMENTS SHALL BE SET PRIOR TO FILING FINAL MAP.
2. STRUCTURE DEMOLITION NOTE: ALL EXISTING STRUCTURES WITHIN PROJECT LIMIT WILL BE DEMOLISHED.
3. VEGETATION DEMOLITION NOTE: ALL EXISTING VEGETATION WITHIN GRADING LIMITS WILL BE CLEARED. PROTECTED TREES ARE OUTSIDE OF GRADING LIMITS. SEE OAK TREE PROTECTION ZONE LIMITS DELINEATED ON PLAN.
4. FIRE SPRINKLER NOTE: ALL RESIDENTIAL CONSTRUCTION WILL BE SPRINKLERED.
5. SLOPE NOTE: WHERE ROADWAYS DAYLIGHT TO EXISTING GROUND, UPSLOPES AND DOWNSLOPES WILL MATCH EXISTING SLOPE GRADIENTS AND MAY BE STEEPER THAN 2:1. ALL OTHER PROPOSED SLOPES SHALL BE 2:1.
6. EXISTING DRIVEWAY ON EAST WALNUT DRIVE TO REMAIN.
7. EXISTING CART DRIVEWAYS ON COLIMA ROAD TO BE REMOVED.
8. ALL BROKEN AND DAMAGED SIDEWALK ON COLIMA ROAD SHALL BE REPLACED AS NEEDED TO THE SATISFACTION OF THE LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS.
9. PLANT STREET TREES (24–INCH BOX MINIMUM) ALONG COLIMA ROAD AND EAST WALNUT DRIVE AND PROVIDE IRRIGATION.
10. TENTATIVE MAP REQUESTING TO WAIVE STREET FRONTAGE ON APPLICABLE LOTS.
11. GATED ENTRANCES ARE PROHIBITED.
12. NO PHASING TO OCCUR DURING PROJECT DEVELOPMENT.
13. ALL ON–SITE EXISTING FENCES, WALLS, AND OCCUPIED BUILDINGS TO BE REMOVED.

PROTECTED TREE NOTES

1. THERE ARE FIVE (5) PROTECTED LIVE OAK TREES OFFSITE WITH DRIP LINE LIMITS ON OR NEAR THE PROJECT PERIMETER BOUNDARY (PA–5) AS NOTED ON SHEET 13. TREE PROTECTION ZONES SHOWN ON PLANS. PROJECT WILL PROTECT EXISTING LIVE OAK TREES IN PLACE AND HAVE NO GRADING WITHIN THE TREE–PROTECTION ZONE.

BENCHMARK

BM NO.: FG4741 ELEV.: 508.392' (LOS ANGELES COUNTY BENCHMARK)
DATUM: NAVD 88, YEAR OF ADJUSTMENT 2013
DESCRIPTION: L&T IN W CB 1 FT S/O BCR @ SW COR FAIRWAY DR & WALNUT DR (SOUTH)

NO.	REVISIONS	DATE	BY

FUSCOE ENGINEERING
600 Wilshire, Suite 1470 Los Angeles, California 90017
tel 213.988.8802 • fax 213.988.8803 • www.fuscoe.com

Name 04/10/2023 Date

REGISTERED PROFESSIONAL ENGINEER ANDREW JEFFERSON WILLRODT No.C49881 CIVIL STATE OF CALIFORNIA

MAJOR LAND DIVISION
TITLE SHEET

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

DATE	JOB NUMBER
4/10/2023	0662–004

SCALE:	DRAFTED BY: EC	SHT. 1 OF 23 SHTS.
PER PLAN	CHECKED BY: AW	

F:\PROJECTS\662\004\PLANS\SHTELEMENTS\TENTATIVE TRACT MAP\0662004–TTM00.DWG (04–10–23 1:38:23PM) Plotted by: EDochron

LEGAL DESCRIPTION

PARCEL 1: (APN: A PORTION OF 8762-022-002)

THAT PORTION OF LOT 1 OF TRACT NO. 9494, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS SHOWN ON MAP IN BOOK 138, PAGES 41 AND 42 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF WALNUT DRIVE AND THE SOUTHERLY PROLONGATION OF THE CENTERLINE OF WATER STREET, AS SAD INTERSECTION IS SHOWN ON SAO MAP; THENCE NORTH 57 DEGREES 41 MINUTES 30 SECONDS EAST ALONG SAID CENTERLINE OF WALNUT DRIVE, A DISTANCE OF 25.00 FEET;

THENCE SOUTH 32 DEGREES 18 MINUTES 30 SECONDS EAST 20.00 FEET TO THE TRUE POINT OF BEGINNING, SAID TRUE POINT OF BEGINNING BEING A POINT IN THE SOUTHEASTERLY LINE OF SAID WALNUT DRIVE;

THENCE SOUTH 40 DEGREES 22 MINUTES 19 SECONDS EAST 385.02 FEET;

THENCE SOUTH 56 DEGREES 32 MINUTES 25 SECONDS EAST 209.39 FEET;

THENCE SOUTH 46 DEGREES 06 MINUTES 13 SECONDS EAST 259.08 FEET;

THENCE NORTH 03 DEGREES 17 MINUTES 44 SECONDS EAST 30.9 1 FEET;

THENCE NORTH 51 DEGREES 25 MINUTES 06 SECONDS EAST 122.97 FEET;

THENCE NORTH 37 DEGREES 34 MINUTES 26 SECONDS WEST 790.70 FEET TO A POINT IN SAID SOUTHEASTERLY LINE OF WALNUT DRIVE;

THENCE SOUTH 44 DEGREES 36 MINUTES 30 SECONDS WEST 9.69 FEET;

THENCE SOUTH 57 DEGREES 41 MINUTES 30 SECONDS WEST 259.95 FEET ALONG SAID SOUTHEASTERLY LINE TO THE TRUE POINT OF BEGINNING.

EXCEPT THAT PORTION OF THE ABOVE DESCRIBED PARCEL, DESCRIBED AS FOLLOWS:

COMMENCING AT SAID INTERSECTION OF THE CENTERLINE OF SAID WALNUT DRIVE AND THE SOUTHERLY PROLONGATION OF SAID CENTERLINE OF WATER STREET;

THENCE NORTH 57 DEGREES 41 MINUTES 30 SECONDS EAST, ALONG SAD CENTERLINE OF WALNUT DRIVE, 101.70 FEET;

THENCE SOUTH 26 DEGREES 01 MINUTES 15 SECONDS EAST 20.12 FEET TO A POINT IN THE NORTHWESTERLY LINE OF SAID LOT NO. 1, SAID LAST MENTIONED POINT BEING THE TRUE POINT OF BEGINNING;

THENCE SOUTH 26 DEGREES 01 MINUTES 1 S SECONDS EAST 57.73 FEET;

THENCE SOUTH 64 DEGREES 18 MINUTES 45 SECONDS WEST 26.30 FEET;

THENCE NORTH 26 DEGREES 01 MINUTES 15 SECONDS WEST 18.20 FEET;

THENCE NORTH 64 DEGREES 18 MINUTES 45 SECONDS EAST 16.30 FEET;

THENCE NORTH 26 DEGREES 01 MINUTES 15 SECONDS WEST 38.43 FEET, MORE OR LESS, TO SAID NORTHWESTERLY LINE OF SAID LOT NO. 1;

THENCE NORTH 57 DEGREES 41 MINUTES 30 SECONDS EAST 10.06 FEET TO THE TRUE POINT OF BEGINNING.

ALSO EXCEPT THAT PORTION DESCRIBED AS FOLLOWS:

THAT PORTION OF SAID LOT 1, TRACT 9494, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF WALNUT DRIVE, 40 FEET WIDE, AND THE SOUTHERLY PROLONGATION OF THE CENTERLINE OF WATER STREET, AS SAID INTERSECTION IS SHOWN ON SAID MAP;

THENCE NORTH 57 DEGREES 41 MINUTES 30 SECONDS EAST ALONG SAID CENTERLINE OF WALNUT DRIVE, 25 FEET;

THENCE SOUTH 32 DEGREES 18 MINUTES 30 SECONDS EAST 20 FEET TO THE SOUTHEASTERLY LINE OF WALNUT DRIVE;

THENCE SOUTH 40 DEGREES 22 MINUTES 19 SECONDS EAST 385.02 FEET;

THENCE SOUTH 56 DEGREES 32 MINUTES 25 SECONDS EAST 209.39 FEET;

THENCE SOUTH 46 DEGREES 06 MINUTES 13 SECONDS EAST 20.59 FEET TO THE TRUE POINT OF BEGINNING;

THENCE NORTH 53 DEGREES 36 MINUTES 06 SECONDS EAST 75.29 FEET;

THENCE SOUTH 79 DEGREES 50 MINUTES 53 SECONDS EAST 51.46 FEET;

THENCE NORTH 60 DEGREES 59 MINUTES 22 SECONDS EAST 69.43 FEET;

THENCE SOUTH 37 DEGREES 34 MINUTES 26 SECONDS EAST 160.36 FEET;

THENCE SOUTH 51 DEGREES 25 MINUTES 06 SECONDS WEST 122.97 FEET;

THENCE SOUTH 03 DEGREES 17 MINUTES 44 SECONDS WEST 30.91 FEET;

THENCE NORTH 46 DEGREES 06 MINUTES 13 SECONDS WEST 238.49 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT THEREFROM ALL OIL, GAS, AND OTHER HYDROCARBON SUBSTANCES AND ALL PRECIOUS MINERALS AND METALS BELOW THE DEPTH OF 500 FEET BELOW THE SURFACE OF THE DEMISED PREMISES, PROVIDED FURTHER, HOWEVER, THAT THERE SHALL BE NO RIGHT TO SURFACE ENTRY FOR THE PURPOSE OF TAKING ANY OF SAID RESERVED SUBSTANCES, AS RESERVED IN DEED RECORDED DECEMBER 23, 1976 AS INSTRUMENT NO. 1973 OF OFFICIAL RECORDS.

PARCEL 2: (APN: A PORTION OF 8762-022-002)

THAT PORTION OF LOT 1, TRACT 9494, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 138, PAGES 41 AND 42 OF MAPS, RECORDS OF LOS ANGELES COUNTY, CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF WALNUT DRIVE, 40 FEET WIDE, AND THE SOUTHERLY PROLONGATION OF THE CENTERLINE OF WATER STREET, AS SAID INTERSECTION IS SHOWN ON SAID MAP;

THENCE NORTH 57 DEGREES 41 MINUTES 30 SECONDS EAST ALONG SAID CENTERLINE OF WALNUT DRIVE, 25 FEET;

THENCE SOUTH 32 DEGREES 18 MINUTES 30 SECONDS EAST, 20 FEET TO THE SOUTHEASTERLY LINE OF WALNUT DRIVE;

THENCE SOUTH 40 DEGREES 22 MINUTES 19 SECONDS EAST, 385.02 FEET;

THENCE SOUTH 56 DEGREES 32 MINUTES 25 SECONDS EAST, 209.39 FEET;

THENCE SOUTH 46 DEGREES 06 MINUTES 13 SECONDS EAST, 20.59 FEET TO THE TRUE POINT OF BEGINNING;

THENCE NORTH 53 DEGREES 36 MINUTES 06 SECONDS EAST, 75.29 FEET;

THENCE SOUTH 79 DEGREES 50 MINUTES 53 SECONDS EAST, 51.46 FEET;

THENCE NORTH 60 DEGREES 59 MINUTES 22 SECONDS EAST, 69.43 FEET;

THENCE SOUTH 37 DEGREES 34 MINUTES 26 SECONDS EAST, 160.36 FEET;

THENCE SOUTH 51 DEGREES 25 MINUTES 06 SECONDS WEST, 122.97 FEET;

THENCE SOUTH 03 DEGREES 17 MINUTES 44 SECONDS WEST, 30.91 FEET;

THENCE NORTH 46 DEGREES 06 MINUTES 13 SECONDS WEST 238.49 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT THEREFROM ALL OIL, GAS AND OTHER HYDROCARBON SUBSTANCES AND ALL PRECIOUS MINERALS AND METALS BELOW THE DEPTH OF 500 FEET BELOW THE SURFACE OF THE DEMISED PREMISES, PROVIDED FURTHER, HOWEVER, THAT THERE SHALL BE NO RIGHT OF SURFACE ENTRY FOR THE PURPOSE OF TAKING ANY OF SAID RESERVED SUBSTANCES, AS RESERVED IN DEED RECORDED DECEMBER 23, 1976 AS INSTRUMENT NO. 1973, OFFICIAL RECORDS.

PARCEL 6: (8764-002-005)

THAT PORTION OF LOT 1 OF TRACT 9058, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 144 PAGES 98, 99 AND 100, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

LEGAL DESCRIPTION, CONTINUED

BEGNNNG AT THE INTERSECTION OF THE SOUTHWESTERLY LINE OF SAID LOT 1 WITH THE NORTHERLY LINE OF LOT 201 OF TRACT 27141, AS PER MAP RECORDED IN BOOK 765 PAGES 72, INCLUSIVE OF MAPS, RECORDS OF SAID COUNTY;

THENCE ALONG THE BOUNDARY LINES OF SAID TRACT 27141, NORTH 85° 15' 09" EAST, 370.64 FEET TO THE WESTERLY LINE OF WALNUT LEAF DRIVE, AS SHOWN ON THE MAP OF SAID TRACT 27141;

THENCE ALONG SAID WESTERLY LINE, NORTH 24° 49' 59" WEST, 110.00 FEET;

THENCE SOUTH 65° 10' 01" WEST, 25.00 FEET;

THENCE NORTH 74° 44' 59" WEST, 518.57 FEET TO SAID SOUTHWESTERLY LINE OF LOT 1;

THENCE ALONG SAID SOUTHWESTERLY LINE, SOUTH 37° 54' 50" EAST, 325.00 FEET TO THE POINT OF SAID BEGINNING.

PARCEL 7: (APN: 8764-002-006)

THOSE PORTIONS OF LOTS 1 AND 2 OF TRACT 9058, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 144 PAGES 98, 99 AND 100 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST NORTHERLY CORNER OF LOT 226 OF TRACT 27141, AS PER MAP RECORDED IN BOOK 765 PAGES 72 TO 86 INCLUSIVE OF MAPS, RECORDS OF SAID COUNTY;

THENCE ALONG THE BOUNDARY LINES OF SAID TRACT 27141, THE FOLLOWING COURSES AND DISTANCES:

SOUTH 40° 30' 00" WEST, 230.00 FEET;
SOUTH 29° 15' 00" EAST, 370.00 FEET;
SOUTH 39° 30' 00" WEST, 180.00 FEET;
SOUTH 21° 30' 00" EAST, 115.00 FEET;
SOUTH 59° 45' 00" WEST, 93.00 FEET;
NORTH 40° 00' 00" WEST, 735.00 FEET;
SOUTH 76° 15' 00" WEST, 55.00 FEET;
SOUTH 1° 00' 00" EAST, 338.00 FEET;
SOUTH 85° 13' 28" WEST, 170.71 FEET;

NORTH 24° 49' 59" WEST, 182.22 FEET TO A TANGENT CURVE, CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 230.00 FEET AND NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 18° 30' 00", AN ARC DISTANCE OF 74.26 FEET;

THENCE NORTH 49° 36' 00" EAST, 41.28 FEET;

THENCE NORTH 3° 30' 13" WEST, 245.45 FEET;

THENCE NORTH 20° 48' 07" WEST, 630.43 FEET TO A POINT IN THE SOUTHEASTERLY LINE OF FIFTH AVENUE, 100 FEET WIDE, SAID POINT BEING A CURVE, CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 1050.00 FEET, THE RADIAL LINE TO SAID POINT BEARS SOUTH 50° 24' 51" EAST;

THENCE NORTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 16° 54' 54", AN ARC DISTANCE OF 309.98 FEET;

THENCE TANGENT TO SAID CURVE AND CONTINUING ALONG SAID SOUTHEASTERLY LINE, NORTH 22° 40' 15" EAST, 79.41 FEET, MORE OR LESS, TO THE NORTHEASTERLY LINE OF LOT 1 OF SAID TRACT 9058;

THENCE ALONG SAID NORTHEASTERLY LINE, SOUTH 48° 38' 15" EAST, 1260.00 FEET TO THE POINT OF BEGINNING, TOGETHER WITH THAT PORTION OF FIFTH AVENUE THAT WOULD PASS BY A CONVEYANCE OF THE ABOVE DESCRIBED LAND.

PARCEL 8: (APN: 8762-027-039)

THAT PORTION OF LOT 1 OF TRACT 9058, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 144 PAGES 98, 99 AND 100 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTHWESTERLY LINE OF FIFTH AVENUE, 100 FEET WIDE, AS DESCRIBED IN THE DEED RECORDED IN BOOK 11537 PAGE 397, OFFICIAL RECORDS OF SAID COUNTY WITH THE NORTHEASTERLY LINE OF SAID LOT 1;

THENCE ALONG SAID NORTHWESTERLY LINE, SOUTH 22° 40' 15" WEST, 113.23 FEET TO THE BEGINNING OF A TANGENT CURVE IN SAID NORTHWESTERLY LINE, CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 950.00 FEET;

THENCE SOUTHWESTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 5° 25' 41", AN ARC DISTANCE OF 90.00 FEET;

THENCE NON-TANGENT TO SAID CURVE, NORTH 57° 12' 38" WEST, 344.21 FEET;

THENCE NORTH 65° 00' 00" WEST, 105.00 FEET;

THENCE NORTH 87° 00' 00" WEST, 120.00 FEET;

THENCE SOUTH 86° 00' 00" WEST, 380.00 FEET;

THENCE SOUTH 25° 00' 00" WEST, 105.04 FEET TO A POINT IN A NON-TANGENT CURVE, CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 170.00 FEET, THE RADIAL LINE TO SAID POINT BEARS SOUTH 28° 14' 03" WEST;

THENCE NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 31° 15' 57", AN ARC DISTANCE OF 92.77 FEET;

THENCE TANGENT TO SAID CURVE, NORTH 30° 30' 00" WEST, 69.00 FEET;

THENCE NORTH 62° 30' 06" EAST, 744.86 FEET TO THE NORTHEASTERLY LINE OF LOT 1 OF SAID TRACT 9058;

THENCE ALONG SAID NORTHEASTERLY LINE, SOUTH 48° 38' 52" EAST, 454.80 FEET AND SOUTH 48° 38' 02" EAST, 145.22 FEET TO THE POINT OF BEGINNING, TOGETHER WITH THAT PORTION OF SAID FIFTH AVENUE, THAT WOULD PASS BY A CONVEYANCE OF THE ABOVE DESCRIBED LAND.

PARCEL 9: (APN: 8762-023-002)

THAT PORTION OF LOT 1 OF TRACT 9058, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 144 PAGES 98, 99 AND 100 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTHWESTERLY LINE OF FIFTH AVENUE, 100 FEET WIDE, AS DESCRIBED IN THE DEED RECORDED IN BOOK 11537 PAGE 397, OFFICIAL RECORDS OF SAID COUNTY, WITH THE SOUTHWESTERLY LINE OF SAID LOT 1;

THENCE ALONG SAID SOUTHWESTERLY LINE, NORTH 37° 54' 25" WEST, 788.56 FEET AND NORTH 12° 26' 32" WEST, 270.00 FEET;

THENCE SOUTH 30° 49' 45" EAST, 329.79 FEET;

THENCE NORTH 46° 30' 00" EAST, 126.00 FEET TO A POINT IN A NON-TANGENT CURVE, CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 230.00 FEET, THE RADIAL LINE TO SAID POINT BEARS SOUTH 44° 00' 00" WEST;

THENCE SOUTHEASTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 33° 00' 00", AN ARC DISTANCE OF 132.47 FEET;

THENCE NON-TANGENT TO SAID CURVE, SOUTH 20° 43' 14" EAST, 635.50 FEET TO SAID NORTHWESTERLY LINE OF FIFTH AVENUE;

THENCE ALONG SAID NORTHWESTERLY LINE, SOUTH 59° 21' 45" WEST, 68.00 FEET TO THE POINT OF BEGINNING, TOGETHER WITH THAT PORTION OF SAID FIFTH AVENUE, THAT WOULD PASS BY A CONVEYANCE OF THE ABOVE DESCRIBED LAND.

LEGAL DESCRIPTION, CONTINUED

APN: 8762-023-001

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF WALNUT, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 138 PAGES 41 AND 42 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST NORTHERLY CORNER OF SAID TRACT 9494, BEING A POINT IN THE SOUTHERLY LINE OF WALNUT DRIVE, AS SHOWN ON SAID MAP; THENCE ALONG SAID SOUTHERLY LINE, SOUTH 87° 15' 13" WEST, 103.02 FEET TO THE BEGINNING OF A CURVE IN SAID SOUTHERLY LINE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 230.00 FEET; THENCE SOUTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 41° 12' 40", AN ARC LENGTH OF 165.43 FEET; THENCE TANGENT TO SAID CURVE AND ALONG THE SOUTHEASTERLY LINE OF SAID WALNUT DRIVE SOUTH 46° 02' 33" WEST, 80.00 FEET TO THE TRUE POINT OF BEGINNING, THENCE LEAVING SAID SOUTHERLY LINE; SOUTH 26° 58' 11" EAST, 246.30 FEET;
THENCE SOUTH 36° 33' 09" WEST, 361.01 FEET;
THENCE SOUTH 52° 57' 27" WEST, 664.00 FEET;
THENCE SOUTH 56° 55' 15" EAST, 650.42 FEET;
THENCE NORTH 42° 26' 09" EAST, 47.42 FEET;
THENCE NORTH 0° 15' 17" EAST, 675.01 FEET;
THENCE NORTH 35° 32' 16" EAST, 86.02 FEET;
THENCE SOUTH 18° 26' 06" EAST, 284.60 FEET;
THENCE NORTH 83° 51' 13" EAST, 326.88 FEET;
THENCE SOUTH 29° 03' 48" EAST, 285.66 TO THE EASTERLY LINE OF SAID TRACT 9494, THENCE ALONG SAID EASTERLY LINE, SOUTH 12° 26' 32" EAST, 270.00 FEET TO AN ANGLE POINT IN SAID EASTERLY LINE; THENCE CONTINUING ALONG THE BOUNDARY LINE OF SAID TRACT, SOUTH 37° 54' 25" EAST, 788.56 FEET TO THE NORTHWESTERLY LINE OF FIFTH AVENUE, 100 FEET WIDE, AS DESCRIBED IN THE DEED TO THE COUNTY OF LOS ANGELES, RECORDED IN BOOK 11599 PAGE 391, OFFICIAL RECORDS OF SAID COUNTY; THENCE ALONG SAID NORTHWESTERLY LINE
SOUTH 59° 21' 45" WEST, 864.14 FEET TO THE MOST EASTERLY CORNER OF THE LAND DESCRIBED AS PARCEL 2 IN THE DEED TO THE HUNTINGTON PARK FIRST SAVINGS AND LOAN ASSOCIATION, RECORDED JANUARY 2, 1962 AS INSTRUMENT NO. 830, IN BOOK D1465 PAGE 636, OFFICIAL RECORDS OF SAID COUNTY; THENCE ALONG THE BOUNDARY LINES OF THE LAND DESCRIBED IN PARCEL 2 OF SAID DEED, NORTH 37° 14' 13" WEST, 92.26 FEET, NORTH 5° 42' 38" EAST, 77.64 FEET AND NORTH 87° 57' 17" WEST, 68.34 FEET TO A POINT IN THE SOUTHWESTERLY LINE OF THE LAND DESCRIBED AS EXHIBIT "A" IN THE LEASE RECORDED DECEMBER 18, 1963 AS INSTRUMENT NO. 4660, IN BOOK M1413 PAGE 200, OFFICIAL RECORDS OF SAID COUNTY; THENCE ALONG SAID SOUTHWESTERLY LINE, NORTH 37° 14' 13" WEST, TO AN ANGLE POINT IN SAID LINE; THENCE CONTINUING ALONG THE BOUNDARIES, DESCRIBED IN SAID LEASE, SOUTH 52° 45' 47" WEST, 135.22 FEET; NORTH 46° 06' 13" WEST 41.74 FEET, NORTH 3° 17' 44" EAST, 30.91 FEET, NORTH 51° 25' 06" EAST, 122.97 FEET AND NORTH 37° 34' 26" WEST, 790.70 FEET, MORE OR LESS TO THE SOUTHEASTERLY LINE OF SAID WALNUT DRIVE, NORTH 44° 47' 33" EAST, 1022.98 FEET TO AN ANGLE POINT IN SAID SOUTHWESTERLY LINE; THENCE CONTINUING ALONG SAID SOUTHEASTERLY LINE, NORTH 46° 02' 33" EAST, 211.59 FEET TO THE TRUE POINT OF BEGINNING, TOGETHER WITH THAT PORTION OF FIFTH AVENUE, THE TITLE WHICH WOULD PASS BY A CONVEYANCE OF THE ABOVE DESCRIBED LAND.

NO.	REVISIONS	DATE	BY

FUSCOE ENGINEERING
600 Wilshire, Suite 1470 Los Angeles, California 90017
tel 213.988.8802 fax 213.988.8803 www.fuscoe.com

Name 04/10/2023 Date

REGISTERED PROFESSIONAL ENGINEER — ANDREW JEFFERSON WILLIAMS — No.C49881 — CIVIL — STATE OF CALIFORNIA

MAJOR LAND DIVISION

LEGAL DESCRIPTION

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

DATE 4/10/2023	JOB NUMBER 0662-004
SCALE: PER PLAN	DRAFTED BY: EC CHECKED BY: AW

SHT. 2 OF 23 SHTS.

F:\PROJECTS\662\004\PLANS\ENTITLEMENTS\TENTATIVE TRACT MAP\0662-004-TTM00.DWG (04-10-23 11:38:23PM) Plotted by: Edelman

LOT SUMMARY

LOT NO.	GROSS AREA (SQFT)	GROSS AREA (AC)	NET AREA (SQFT)	NET AREA (AC)	PLANNING AREA	LOT FRONTAGE WIDTH (FT)	EASEMENT AREA (SF)	EASEMENT AREA (AC)	ZONING	LAND USE	UNITS
1	7,545	0.17	6,676	0.15	2	47	870	0.02	RPD-5000-6U	SFH	1
2	7,600	0.17	6,731	0.15	2	47	869	0.02	RPD-5000-6U	SFH	1
3	9,101	0.21	7,071	0.16	2	66	2,030	0.05	RPD-5000-6U	SFH	1
4	11,306	0.26	9,796	0.22	2	49	1,510	0.03	RPD-5000-6U	SFH	1
5	10,503	0.24	9,395	0.22	2	48	1,108	0.03	RPD-5000-6U	SFH	1
6	11,042	0.25	10,003	0.23	2	46	1,040	0.02	RPD-5000-6U	SFH	1
7	11,546	0.27	10,506	0.24	2	46	1,041	0.02	RPD-5000-6U	SFH	1
8	8,571	0.20	7,488	0.17	2	47	1,083	0.02	RPD-5000-6U	SFH	1
9	8,596	0.20	7,492	0.17	2	47	1,105	0.03	RPD-5000-6U	SFH	1
10	8,658	0.20	7,553	0.17	2	47	1,105	0.03	RPD-5000-6U	SFH	1
11	9,024	0.21	7,935	0.18	2	47	1,089	0.03	RPD-5000-6U	SFH	1
12	9,572	0.22	8,482	0.19	2	47	1,090	0.03	RPD-5000-6U	SFH	1
13	10,161	0.23	9,148	0.21	2	44	1,012	0.02	RPD-5000-6U	SFH	1
14	11,119	0.26	10,036	0.23	2	47	1,083	0.02	RPD-5000-6U	SFH	1
15	12,195	0.28	11,072	0.25	2	45	1,123	0.03	RPD-5000-6U	SFH	1
16	15,358	0.35	13,104	0.30	2	88	2,254	0.05	RPD-5000-6U	SFH	1
17	7,725	0.18	5,666	0.13	2	47	2,058	0.05	RPD-5000-6U	SFH	1
18	6,134	0.14	4,884	0.11	2	47	1,250	0.03	RPD-5000-6U	SFH	1
19	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
20	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
21	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
22	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
23	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
24	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
25	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
26	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
27	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
28	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
29	6,124	0.14	5,040	0.12	1	47	1,084	0.02	RPD-5000-6U	SFH	1
30	8,055	0.18	7,006	0.16	1	46	1,049	0.02	RPD-5000-6U	SFH	1
31	8,142	0.19	7,093	0.16	1	46	1,049	0.02	RPD-5000-6U	SFH	1
32	11,142	0.26	7,183	0.16	1	93	3,959	0.09	RPD-5000-6U	SFH	1
33	6,778	0.16	5,729	0.13	1	46	1,049	0.02	RPD-5000-6U	SFH	1
34	6,778	0.16	5,729	0.13	1	46	1,049	0.02	RPD-5000-6U	SFH	1
35	6,778	0.16	5,729	0.13	1	46	1,049	0.02	RPD-5000-6U	SFH	1
36	6,778	0.16	5,729	0.13	1	46	1,049	0.02	RPD-5000-6U	SFH	1
37	6,819	0.16	5,769	0.13	1	46	1,050	0.02	RPD-5000-6U	SFH	1
38	6,741	0.15	5,694	0.13	1	46	1,048	0.02	RPD-5000-6U	SFH	1
39	6,134	0.14	5,029	0.12	1	46	1,105	0.03	RPD-5000-6U	SFH	1
40	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
41	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
42	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
43	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
44	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
45	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
46	6,093	0.14	5,029	0.12	1	47	1,064	0.02	RPD-5000-6U	SFH	1
47	12,779	0.29	4,917	0.11	1	43	7,861	0.18	RPD-5000-6U	SFH	1
48	8,120	0.19	6,634	0.15	2	63	1,486	0.03	RPD-5000-6U	SFH	1
49	8,645	0.20	7,065	0.16	2	61	1,580	0.04	RPD-5000-6U	SFH	1
50	6,996	0.16	5,835	0.13	2	47	1,161	0.03	RPD-5000-6U	SFH	1
51	6,833	0.16	5,719	0.13	2	47	1,114	0.03	RPD-5000-6U	SFH	1
52	6,818	0.16	5,714	0.13	2	47	1,105	0.03	RPD-5000-6U	SFH	1
53	6,820	0.16	5,712	0.13	2	47	1,108	0.03	RPD-5000-6U	SFH	1
54	6,863	0.16	5,736	0.13	2	47	1,127	0.03	RPD-5000-6U	SFH	1
55	6,911	0.16	5,777	0.13	2	47	1,134	0.03	RPD-5000-6U	SFH	1
56	7,170	0.16	5,904	0.14	2	53	1,267	0.03	RPD-5000-6U	SFH	1
57	7,149	0.16	5,938	0.14	2	51	1,212	0.03	RPD-5000-6U	SFH	1
58	6,739	0.15	5,740	0.13	2	44	999	0.02	RPD-5000-6U	SFH	1
59	7,787	0.18	6,838	0.16	2	44	950	0.02	RPD-5000-6U	SFH	1
60	8,164	0.19	7,068	0.16	2	49	1,096	0.03	RPD-5000-6U	SFH	1
61	6,110	0.14	5,006	0.11	2	47	1,105	0.03	RPD-5000-6U	SFH	1
62	10,243	0.24	6,053	0.14	1	54	4,189	0.10	RPD-5000-11U	Duplex	2
63	7,525	0.17	5,880	0.13	1	70	1,645	0.04	RPD-5000-11U	Duplex	2
64	7,525	0.17	5,880	0.13	1	70	1,645	0.04	RPD-5000-11U	Duplex	2
65	7,525	0.17	5,880	0.13	1	70	1,645	0.04	RPD-5000-11U	Duplex	2
66	7,525	0.17	5,880	0.13	1	70	1,645	0.04	RPD-5000-11U	Duplex	2
67	9,998	0.23	5,730	0.13	1	55	4,268	0.10	RPD-5000-11U	Duplex	2
68	8,447	0.19	7,409	0.17	1	46	1,038	0.02	RPD-5000-6U	SFH	1
69	8,009	0.18	6,988	0.16	1	46	1,021	0.02	RPD-5000-6U	SFH	1
70	7,237	0.17	6,207	0.14	1	46	1,031	0.02	RPD-5000-6U	SFH	1
71	6,131	0.14	5,029	0.12	1	44	1,102	0.03	RPD-5000-6U	SFH	1
72	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
73	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
74	7,509	0.17	5,121	0.12	1	42	2,388	0.05	RPD-5000-6U	SFH	1
75	6,615	0.15	5,880	0.13	1	70	735	0.02	RPD-5000-11U	Duplex	2
76	6,985	0.16	5,880	0.13	1	70	1,105	0.03	RPD-5000-11U	Duplex	2
77	7,402	0.17	5,880	0.13	1	70	1,522	0.03	RPD-5000-11U	Duplex	2
78	7,525	0.17	5,880	0.13	1	70	1,645	0.04	RPD-5000-11U	Duplex	2
79	7,514	0.17	5,880	0.13	1	67	1,634	0.04	RPD-5000-11U	Duplex	2
80	8,232	0.19	6,961	0.16	1	67	1,270	0.03	RPD-5000-11U	Duplex	2
81	6,160	0.14	5,040	0.12	1	53	1,120	0.03	RPD-5000-6U	SFH	1
82	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
83	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
84	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
85	7,719	0.18	6,309	0.14	1	60	1,410	0.03	RPD-5000-6U	SFH	1
86	10,177	0.23	6,072	0.14	1	44	4,105	0.09	RPD-5000-6U	SFH	1
87	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
88	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
89	6,767	0.16	5,694	0.13	1	47	1,073	0.02	RPD-5000-6U	SFH	1
90	7,013	0.16	5,947	0.14	1	47	1,066	0.02	RPD-5000-6U	SFH	1
91	7,648	0.18	6,582	0.15	1	47	1,066	0.02	RPD-5000-6U	SFH	1
92	7,648	0.18	6,582	0.15	1	47	1,066	0.02	RPD-5000-6U	SFH	1
93	7,643	0.18	6,577	0.15	1	47	1,066	0.02	RPD-5000-6U	SFH	1
94	6,651	0.15	5,546	0.13	1	47	1,105	0.03	RPD-5000-6U	SFH	1
95	6,604	0.15	5,499	0.13	1	47	1,105	0.03	RPD-5000-6U	SFH	1
96	6,604	0.15	5,499	0.13	1	47	1,105	0.03	RPD-5000-6U	SFH	1
97	6,593	0.15	5,499	0.13	1	47	1,094	0.03	RPD-5000-6U	SFH	1
98	14,324	0.33	5,499	0.13	1	47	8,825	0.20	RPD-5000-6U	SFH	1
99	9,899	0.23	5,875	0.13	1	45	4,024	0.09	RPD-5000-6U	SFH	1
100	7,380	0.17	5,970	0.14	1	60	1,410	0.03	RPD-5000-6U	SFH	1
101	7,401	0.17	5,963	0.14	1	60	1,438	0.03	RPD-5000-6U	SFH	1
102	7,078	0.16	5,533	0.13	1	62	1,545	0.04	RPD-5000-6U	SFH	1
103	10,932	0.25	6,167	0.14	1	47	4,765	0.11	RPD-5000-6U	SFH	1
104	9,899	0.23	5,875	0.13	1	45	4,024	0.09	RPD-5000-6U	SFH	1
105	22,140	0.51	17,910	0.41	1	180	4,230	0.10	RPD-5000-12U	Triplex	6
106	9,782	0.22	6,148	0.14	1	49	3,634	0.08	RPD-5000-6U	SFH	1
107	9,613	0.22	5,275	0.12	1	55	4,338	0.10	RPD-5000-6U	SFH	1
108	6,474	0.15	5,052	0.12	1	60	1,422	0.03	RPD-5000-6U	SFH	1
109	6,474	0.15	5,052	0.12	1	61	1,422	0.03	RPD-5000-6U	SFH	1
110	6,474	0.15	5,052	0.12	1	61	1,422	0.03	RPD-5000-6U	SFH	1
111	6,474	0.15	5,052	0.12	1	60	1,422	0.03	RPD-5000-6U	SFH	1
112	6,474	0.15	5,052	0.12	1	60	1,422	0.03	RPD-5000-6U	SFH	1
113	6,580	0.15	5,135	0.12	1	61	1,445	0.03	RPD-5000-6U	SFH	1
114	7,333	0.17	5,521	0.13	1	74	1,812	0.04	RPD-5000-6U	SFH	1
115	8,289	0.19	6,183	0.14	1	86	2,106	0.05	RPD-5000-6U	SFH	1
116	20,513	0.47	15,899	0.36	1	195	4,615	0.11	RPD-5000-12U	Triplex	6
117	10,580	0.24	7,916	0.18	1	101	2,665	0.06	RPD-5000-6U	SFH	1
118	9,083	0.21	6,743	0.15	1	96	2,341	0.05	RPD-5000-6U	SFH	1
119	9,254	0.21	5,279	0.12	1	45	3,976	0.09	RPD-5000-6U	SFH	1
120	6,474	0.15	5,052	0.12	1	61	1,422	0.03	RPD-5000-6U	SFH	1
121	6,474	0.15	5,052	0.12	1	60	1,422	0.03	RPD-5000-6U	SFH	1
122	6,474	0.15	5,052	0.12	1	61	1,422	0.03	RPD-5000-6U	SFH	1
123	6,474	0.15	5,052	0.12	1	61	1,422	0.03	RPD-5000-6U	SFH	1
124	6,474	0.15	5,052	0.12	1	60	1,422	0.03	RPD-5000-6U	SFH	1
125	6,685	0.15	5,352	0.12	1	48	1,332	0.03	RPD-5000-6U	SFH	1
126	7,143	0.16	5,958	0.14	1	54	1,185	0.03	RPD-5000-6U	SFH	1
127	7,048	0.16	5,848	0.13	1	53	1,200	0.03	RPD-5000-6U	SFH	1
128	7,395	0.17	5,403	0.12	1	60	1,993	0.05	RPD-5000-6U	SFH	1
129	8,190	0.19	5,400	0.12	1	60	2,790	0.06	RPD-5000-6U	SFH	1
130	10,647	0.24	7,510	0.17	1	60	3,138	0.07	RPD-5000-6U	SFH	1
131	9,620	0.22	5,280	0.12	1	55	4,340	0.10	RPD-5000-6U	SFH	1
132	6,420	0.15	5,010	0.12	1	60	1,410	0.03	RPD-5000-6U	SFH	1
133	7,500	0.17	6,090	0.14	1	60	1,410	0.03	RPD-5000-6U	SFH	1
134	8,580	0.20	7,170	0.16	1	60	1,410	0.03	RPD-5000-6U	SFH	1
135	8,580	0.20	7,170	0.16	1	60	1,410	0.03	RPD-5000-6U	SFH	1
136	8,580	0.20	7,170	0.16	1	60	1,410	0.03	RPD-5000-6U	SFH	1
137	8,621	0.20	7,092	0.16	1	61	1,529	0.04	RPD-5000-6U	SFH	1
138	7,678	0.18	7,217	0.17	1	21	462	0.01	RPD-5000-6U	SFH	1
139	6,364	0.15	5,370	0.12	1	44	994	0.02	RPD-5000-6U	SFH	1
140	6,420	0.15	5,010	0.12	1	60	1,410	0.03	RPD-5000-6U	SFH	1
141	6,420	0.15	5,010	0.12	1	60	1,410	0.03	RPD-5000-6U	SFH	1
142	6,420	0.15	5,010	0.12	1	60	1,410	0.03	RPD-5000-6U	SFH	1
143	9,523	0.22	5,388	0.12	1	46	4,135	0.09	RPD-5000-6U	SFH	1
144	22,472	0.52	15,481	0.36	1	168	6,991	0.16	RPD-5000-12U	Triplex	6
145	11,536	0.26	6,849	0.16	1	61	4,687	0.11	RPD-5000-6U	SFH	1
146	9,108	0.21	7,416	0.17	1	72	1,692	0.04	RPD-5000-11U	Duplex	2
147	9,108	0.21	7,416	0.17	1	72	1,692	0.04	RPD-5000-11U	Duplex	2
148	9,108	0.21	7,416	0.17	1	72	1,692	0.04	RPD-5000-11U	Duplex	2
149	9,108	0.21	7,416	0.17	1	72	1,692	0.04	RPD-5000-11U	Duplex	2
150	8,572	0.20	6,880	0.16	1	72	1,692	0.04	RPD-5000-11U	Duplex	2
151	10,827	0.25	6,053	0.14	1	58	4,774	0.11	RPD-5000-6U	SFH	1
152	7,328	0.17	5,882	0.14	1	62	1,447	0.03	RPD-5000-6U	SFH	1
153	7,002	0.16	5,592	0.13	1	59	1,410	0.03	RPD-5000-6U	SFH	1
154	7,705	0.18	6,068	0.14	1	67	1,637	0.04	RPD-5000-6U	SFH	1
155	7,705	0.18	4,999	0.11	1	67	2,706	0.06	RPD-5000-6U	SFH	1
156	7,705	0.18	6,068	0.14	1	67	1,637	0.04	RPD-5000-6U	SFH	1
157	7,705	0.18	6,068	0.14	1	67	1,637	0.04	RPD-5000-6U	SFH	1
158	7,705	0.18	6,068	0.14	1	67	1,637	0.04	RPD-5000-6U	SFH	1
159	7,705	0.18	6,068	0.14	1	67	1,637	0.04	RPD-5000-6U	SFH	1
160	7,150	0.16	5,696	0.13	1	60	1,453	0.03	RPD-5000-6U	SFH	1
161	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
162	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
163	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
164	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
165	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
166	6,134	0.14	5,029	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
167	6,305	0.14	5,200	0.12	1	47	1,105	0.03	RPD-5000-6U	SFH	1
168	12,867	0.30	7,810	0.18	1	62	5,057	0.12	RPD-5000-6U	SFH	1
169	18,065	0.41	16,441	0.38	5	166	1,624	0.04	RPD-5000-14U	Triplex	6
170	9,799	0.22	7,065	0.16	5	48	2,734	0.06	RPD-5000-6U	SFH	1
171	6,862	0.16	5,687	0.13	5	53	1,175	0.03	RPD-5000-6U	SFH	1
172	6,450	0.15	5,087	0.12	5	60	1,363	0.03	RPD-5000-6U	SFH	1
173	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
174	7,525	0.17	5,880	0.13	5	70	1,645	0.04	RPD-5000-12U	Duplex	2
175	7,525	0.17	5,880	0.13	5	70	1,645	0.04	RPD-5000-12U	Duplex	2
176	7,525	0.17	5,880	0.13	5	70	1,645	0.04	RPD-5000-12U	Duplex	2
177	7,525	0.17	5,880	0.13	5	70	1,645	0.04	RPD-5000-12U	Duplex	2
178	7,525	0.17	5,880	0.13	5	70	1,645	0.04	RPD-5000-12U	Duplex	2
179	7,525	0.17	5,880	0.13	5	70	1,645	0.04	RPD-5000-12U	Duplex	2
180	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
181	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
182	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
183	6,988	0.16	5,460	0.13	5	65	1,528	0.04	RPD-5000-6U	SFH	1
184	7,231	0.17	5,755	0.13	5	69	1,476	0.03	RPD-5000-6U	SFH	1
185	6,855	0.16	6,204	0.14	5	31	650	0.01	RPD-5000-6U	SFH	1
186	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
187	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
188	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
189	7,827	0.18	6,417	0.15	5	60	1,410	0.03	RPD-5000-6U	SFH	1
190	10,580	0.24	9,170	0.21	5	60	1,410	0.03	RPD-5000-6U	SFH	1
191	11,231	0.26	9,821	0.23	5	60	1,410	0.03	RPD-5000-6U	SFH	1
192	8,675	0.20	7,265	0.17	5	60	1,410	0.03	RPD-5000-6U	SFH	1
193	7,380	0.17	5,970	0.14	5	60	1,410	0.03	RPD-5000-6U	SFH	1
194	22,140	0.51	17,910	0.41	5	180	4,230	0.10	RPD-5000-14U	Triplex	6
195	10,488	0.24	6,579	0.15	5	41	3,909	0.09	RPD-5000-6U	SFH	1
196	7,936	0.18	6,526	0.15	5	60	1,410	0.03	RPD-5000-6U	SFH	1
197	7,508	0.17	6,098	0.14	5	60	1,410	0.03	RPD-5000-6U	SFH	1
198	6,902	0.16	5,492	0.13	5	60	1,410	0.03	RPD-5000-6U	SFH	1
199	10,729	0.25	6,572	0.15	5	70	4,157	0.10	RPD-5000-6U	SFH	1
200	8,423	0.19	7,079	0.16	5	61	1,345	0.03	RPD-5000-6U	SFH	1
201	8,412	0.19	7,110	0.16	5	59	1,302	0.03	RPD-5000-6U	SFH	1
202	7,402	0.17	6,082	0.14	5	59	1,320	0.03	RPD-5000-6U	SFH	1
203	7,023	0.16	5,645	0.13	5	61	1,378	0.03	RPD-5000-6U	SFH	1
204	7,083	0.16	5,673	0.13	5	60	1,410	0.03	RPD-5000-6U	SFH	1
205	12,054	0.28	6,911	0.16	5	59	5,143	0.12	RPD-5000-6U	SFH	1
206	9,991	0.23	5,851	0.13	5	48	4,140	0.10	RPD-5000-6U	SFH	1
207	7,256	0.17	5,670	0.13	5	68	1,586	0.04	RPD-5000-6U	SFH	1
208	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
209	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
210	6,695	0.15	5,172	0.12	5	60	1,523	0.03	RPD-5000-6U	SFH	1
211	6,802	0.16	5,470	0.13	5	61	1,332	0.03	RPD-5000-6U	SFH	1
212	8,235	0.19	6,916	0.16	5	60	1,319	0.03	RPD-5000-6U	SFH	1
213	7,644	0.18	6,051	0.14	5	71	1,594	0.04	RPD-5000-12U	Duplex	2
214	7,525	0.17	5,880	0.13	5	70	1,645	0.04	RPD-5000-12U	Duplex	2
215	7,525	0.17	5,880	0.13	5	70	1,645	0.04	RPD-5000-12U	Duplex	2
216	7,525	0.17	5,880	0.13	5	70	1,645	0.04	RPD-5000-12U	Duplex	2
217	7,525	0.17	5,880	0.13	5	70	1,645	0.04	RPD-5000-12U	Duplex	2
218	7,525	0.17	5,880	0.13	5	70	1,645	0.04	RPD-5000-12U	Duplex	2
219	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
220	7,177	0.16	5,545	0.13	5	68	1,632	0.04	RPD-5000-6U	SFH	1
221	8,570	0.20	6,377	0.15	5	89	2,193	0.05	RPD-5000-6U	SFH	1
222	7,861	0.18	5,947	0.14	5	79	1,914	0.04	RPD-5000-6U	SFH	1
223	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
224	6,485	0.15	5,080	0.12	5	61	1,405	0.03	RPD-5000-6U	SFH	1
225	11,936	0.27	6,736	0.15	5	83	5,199	0.12	RPD-5000-6U	SFH	1
226	10,088	0.23	7,413	0.17	5	106	2,675	0.06	RPD-5000-6U	SFH	1
227	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
228	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
229	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
230	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
231	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
232	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
233	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
234	6,450	0.15	5,040	0.12	5	60	1,410	0.03	RPD-5000-6U	SFH	1
235	191,088	4.39	172,628	3.96	3		18,460	0.42	RPD-5000-18U	Townhomes	72
236	70,303	1.61	67,629	1.55	3		2,675	0.06	A-1-1	Open Space	-
237	22,409	0.51	10,590	0.24	2		11,819	0.27	A-1-1	Open Space	-
238	114,475	2.63	102,197	2.35	2		12,279	0.28	A-1-1	Open Space	-
239	227,175	5.22	210,822	4.84	1		16,353	0.38	A-1-1	Open Space	-
240	46,799	1.07	38,192	0.88	1		8,607	0.20	A-1-1	Open Space	-
241	7,471	0.17	4,106	0.09	1		3,365	0.08	A-1-1	Open Space	-
242	1,939	0.05	1,844	0.04	2		94	0.00	A-1-1	Open Space	-
243	20,413	0.47	13,508	0.31	1		6,905	0.16	A-1-1	Open Space	-
244	9,333	0.21	5,694	0.13	1		3,639	0.08	A-1-1	Open Space	-
245	366,030	8.41	317,360	7.29	5		48,670	1.12	A-1-1	Open Space	-
246	24,552	0.56	15,020	0.34	5		9,532	0.22	A-1-1	Open Space	-
247	253,195	5.81	246,647	5.66	4		6,548	0.15	A-1-1	Open Space	-
248	69,381	1.59	69,381	1.59	6		-	-	A-1-1	Open Space	-

*NET ACREAGE = GROSS AREA LESS EXISTING EASEMENTS TO REMAIN, PROPOSED EASEMENTS, AND PROPOSED PUBLIC/PRIVATE STREET R/W DEDICATIONS

PLANNING AREA SUMMARY

Planning Area	Total Lots	Lot Numbers	Lot Description	Number of Units	Description of Units	Gross Area (AC)	Net Area (AC)	Developed Space (AC)	Open Space (AC)
PA-1	**141**					**31.61**	**31.52**	**24.47**	**7.14**
	116	19-47, 68-74, 81-104, 106-115, 117-143, 145, 151-168	SFH	116		19.76	19.76		
	17	62-67, 75-80, 146-150,	Residential Condominium	34	Duplex Units	3.21	3.21		
	3	105, 116, 144	Residential Condominium	18	Triplex Units	1.50	1.50		
	5	239-244	Open Space			7.14	7.05		
PA-2	**35**					**9.55**	**9.37**	**6.36**	**3.19**
	32	1-18, 48-61	SFH	32		6.36	6.36		
	3	237, 238, 242	Open Space			3.19	3.01		
PA-3	**2**					**6.00**	**5.62**	**4.39**	**1.61**
	1	235	Residential Condominium	72	Townhomes	4.39	4.04		
	1	236	Open Space			1.61	1.58		
PA-4	**1**					**5.81**	**5.74**		**5.81**
	1	247	Open Space			5.81	5.74		
PA-5	**68**					**21.09**	**21.06**	**12.12**	**8.97**
	52	170-173, 180-193, 195-212, 219-234	SFH	52		9.12	9.12		
	12	174-179, 213-218	Residential Condominium	24	Duplex Units	2.08	2.08		
	2	169, 194	Residential Condominium	12	Triplex Units	0.92	0.92		
	2	245, 246	Open Space			8.97	8.94		
PA-6	**1**					**1.59**	**1.59**		**1.59**
	1	248	Open Space			1.59	1.59		
Total	**248**			**360**		**75.65**	**74.90**	**47.34**	**28.31**

*NET ACREAGE = GROSS AREA LESS EXISTING EASEMENTS TO REMAIN AND PROPOSED PUBLIC STREET R/W DEDICATIONS

LEGEND

- ▨ PA–1
- ▨ PA–2
- ▨ PA–3
- ▨ PA–4
- ▨ PA–5
- ▨ PA–6

NO.	REVISIONS	DATE	BY

FUSCOE
ENGINEERING
600 Wilshire, Suite 1470, Los Angeles, California 90017
tel 213.988.8802 ∘ fax 213.988.8803 ∘ www.fuscoe.com

04/10/2023
Name Date

REGISTERED PROFESSIONAL ENGINEER
ANDREW JEFFERSON WILLROOT
No.C49881
CIVIL
STATE OF CALIFORNIA

MAJOR LAND DIVISION

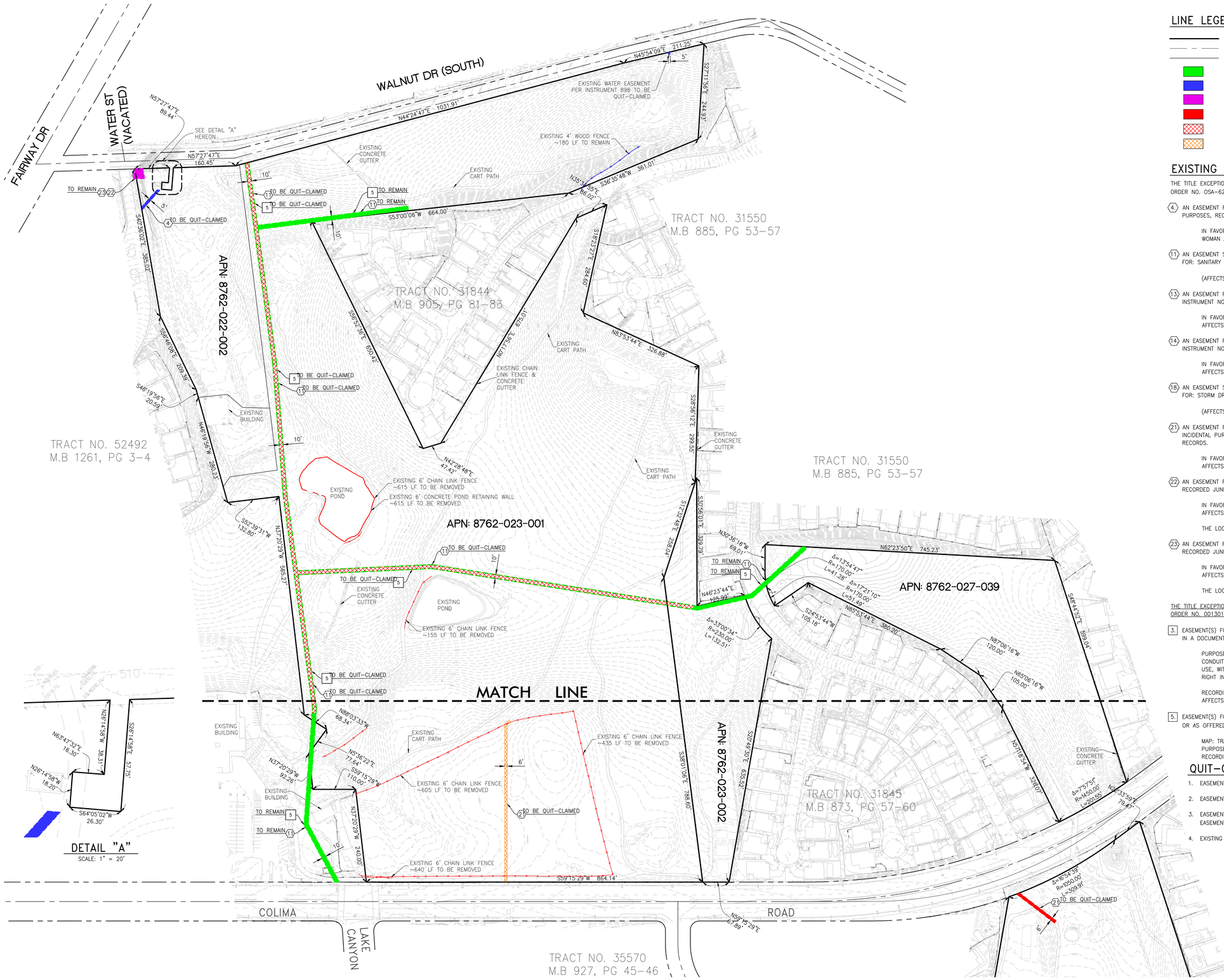
LOT AND PLANNING AREA SUMMARY

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

DATE	JOB NUMBER
4/10/2023	0662–004

SCALE: PER PLAN
DRAFTED BY: EC
CHECKED BY: AW
SHT. 3 OF 23 SHTS.

F:\PROJECTS\662\004\PLANS\ENTITLEMENTS\TENTATIVE TRACT MAP\0662.004–TTM00.DWG (04–10–23 1:38:24PM) Plotted by: ECochran



LINE LEGEND

- PROJECT PROPERTY LINES
- CENTERLINE
- ADJACENT LOTS
- EXISTING SEWER EASEMENT PER TITLE EXCEPTIONS (TO REMAIN)
- EXISTING WATER EASEMENT PER TITLE EXCEPTIONS (TO BE ABANDONED)
- EXISTING STORM DRAIN EASEMENT PER TITLE EXCEPTIONS (TO REMAIN)
- EXISTING DRY UTILITY EASEMENT PER TITLE EXCEPTIONS (TO BE REMOVED)
- EXISTING SEWER EASEMENT PER TITLE EXCEPTIONS (TO BE ABANDONED)
- EXISTING DRY UTILITY EASEMENT PER TITLE EXCEPTIONS (TO BE ABANDONED)

EXISTING EASEMENTS

THE TITLE EXCEPTIONS SHOWN ON THE PRELIMINARY TITLE REPORT BY FIRST AMERICAN TITLE COMPANY, ORDER NO. OSA-6233679 (29) ARE SHOWN AS (X) ON THIS TENTATIVE TRACT MAP.

(4.) AN EASEMENT FOR PIPES AND POLES FOR WATER IRRIGATION AND DOMESTIC USES AND INCIDENTAL PURPOSES, RECORDED JANUARY 27, 1949 AS INSTRUMENT NO. 897 OF OFFICIAL RECORDS.

IN FAVOR OF: HELEN M. AIREY, A MARRIED WOMAN
AFFECTS: PARCELS 1 AND 2

(11) AN EASEMENT SHOWN AND DEDICATED TO THE COUNTY OF LOS ANGELES ON TRACT MAP NO. 28140 FOR: SANITARY SEWER AND INCIDENTAL PURPOSES.

(AFFECTS PARCELS 8 AND 9)

(13) AN EASEMENT FOR SANITARY SEWER AND INCIDENTAL PURPOSES, RECORDED DECEMBER 30, 1966 AS INSTRUMENT NO. 2922 OF OFFICIAL RECORDS.

IN FAVOR OF: HUNTINGTON PARK FIRST SAVINGS AND LOAN ASSOCIATION
AFFECTS: PARCEL 7

(14) AN EASEMENT FOR SANITARY SEWER AND INCIDENTAL PURPOSES, RECORDED MARCH 17, 1967 AS INSTRUMENT NO. 3393 OF OFFICIAL RECORDS.

IN FAVOR OF: HUNTINGTON PARK FIRST SAVINGS AND LOAN ASSOCIATION
AFFECTS: PARCEL 7

(18) AN EASEMENT SHOWN AND DEDICATED TO THE COUNTY OF LOS ANGELES ON TRACT MAP NO. 27141 FOR: STORM DRAIN AND INCIDENTAL PURPOSES.

(AFFECTS PARCEL 7)

(21) AN EASEMENT FOR UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS AND INCIDENTAL PURPOSES, RECORDED OCTOBER 6, 1988 AS INSTRUMENT NO. 88-1613675 OF OFFICIAL RECORDS.

IN FAVOR OF: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION
AFFECTS: PARCEL 9

(22) AN EASEMENT FOR COVERED STORM DRAIN, INGRESS AND EGRESS AND INCIDENTAL PURPOSES, RECORDED JUNE 18, 2003 AS INSTRUMENT NO. 03-1744069 OF OFFICIAL RECORDS.

IN FAVOR OF: LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
AFFECTS: PARCEL 1

THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION.

(23) AN EASEMENT FOR COVERED STORM DRAIN, INGRESS AND EGRESS AND INCIDENTAL PURPOSES, RECORDED JUNE 18, 2003 AS INSTRUMENT NO. 03-1744070 OF OFFICIAL RECORDS.

IN FAVOR OF: LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
AFFECTS: PARCEL 1

THE LOCATION OF THE EASEMENT CANNOT BE DETERMINED FROM RECORD INFORMATION.

THE TITLE EXCEPTIONS SHOWN ON THE PRELIMINARY TITLE REPORT BY THE CHICAGO TITLE COMPANY, ORDER NO. 00130182-994-X49-DB ARE SHOWN AS X ON THIS TENTATIVE TRACT MAP.

3. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS SET FORTH IN A DOCUMENT:

PURPOSES: MAINTAINING, CONSTRUCTING, CLEANING, RENEWING, AND REPAIRING PIPE LINES, CONDUITS, AND SIMILAR APPLIANCES, FOR CONVEYING WATER FOR IRRIGATION AND DOMESTIC USE, WITH THE NECESSARY MATERIALS AND OTHER DEVICES FOR MEASURING WATER, ALSO THE RIGHT INGRESS AND EGRESS, FOR THE FORGOING PURPOSES.

RECORDING DATE: JANUARY 27, 1949 RECORDING NO. 897 OF OFFICIAL RECORDS
AFFECTS: A PORTION OF SAID LAND AS MORE PARTICULARLY DESCRIBED IN SAID DOCUMENT

5. EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO AS DELINEATED OR AS OFFERED FOR DEDICATION, ON THE MAP OF SAID TRACT/PLAT;

MAP: TRACT NO. 28140
PURPOSE: SANITARY SEWER
RECORDING NO.: THAT PORTION OF SAID LAND AS SHOWN ON THE MAP OF SAID TRACT.

QUIT-CLAIM NOTES

1. EASEMENTS TO REMAIN AND PROPOSED EASEMENTS LISTED ON SHEET 1 SHOWN ON SHEETS 5 TO 12.
2. EASEMENT (5) AND (11) WILL BE QUITCLAIMED DURING THE FINAL MAP RECORDING PROCESS.
3. EASEMENT (4) AND (21) WILL BE QUITCLAIMED BEFORE THE FINAL MAP RECORDING PROCESS WITH EASEMENT HOLDER'S AGREEMENTS.
4. EXISTING WATER EASEMENT PER INSTRUMENT 898 TO BE QUIT-CLAIMED.

N

100' 0' 50' 100'
SCALE: 1" = 100'

NO.	REVISIONS	DATE	BY

FUSCOE ENGINEERING
600 Wilshire, Suite 1470 Los Angeles, California 90017
tel 213.988.8802 fax 213.988.8803 www.fuscoe.com
Name 04/10/2023 Date

REGISTERED PROFESSIONAL ENGINEER — ANDREW JEFFERSON WELCH — No.C49881 — CIVIL — STATE OF CALIFORNIA

MAJOR LAND DIVISION

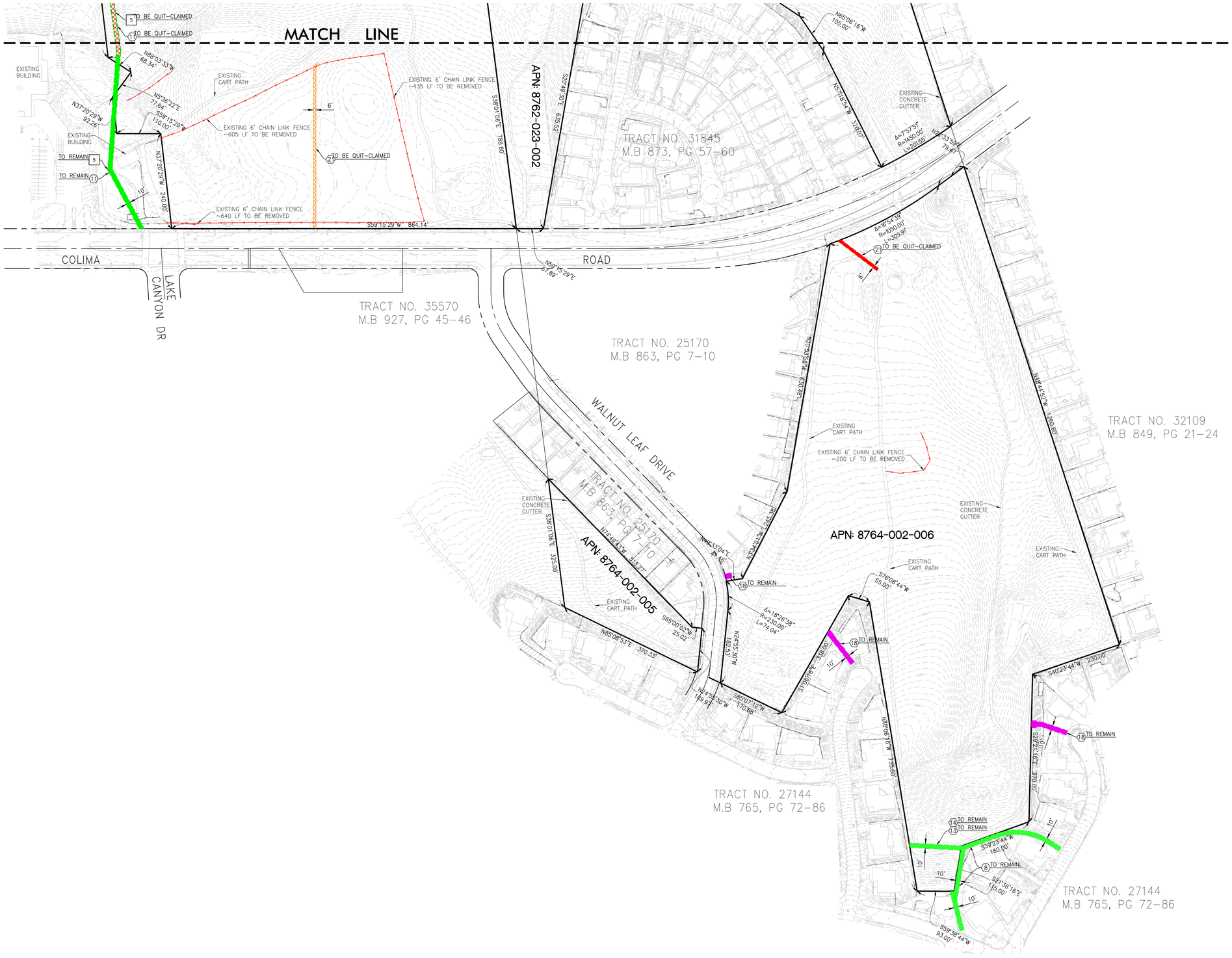
EXISTING CONDITIONS AND EASEMENTS

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

DATE	JOB NUMBER
4/10/2023	0662-004

SCALE:	DRAFTED BY: EC	SHT. 4 OF 23 SHTS.
PER PLAN	CHECKED BY: AW	

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100' 0' 50' 100'

SCALE: 1" = 100'

NO.	REVISIONS	DATE	BY

FUSCOE ENGINEERING
600 Wilshire, Suite 1470 Los Angeles, California 90017
tel 213.988.8872 fax 213.988.8803 ©www.fuscoe.com

Name

04/10/2023
Date

REGISTERED PROFESSIONAL ENGINEER
ANDREW JEFFERSON WILLIAMS
No.C49881
CIVIL
STATE OF CALIFORNIA

MAJOR LAND DIVISION

EXISTING CONDITIONS AND EASEMENTS

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

DATE	JOB NUMBER
4/10/2023	0662-004

SCALE:	DRAFTED BY: EC CHECKED BY: AW	SHT. 5 OF 23 SHTS.
PER PLAN		

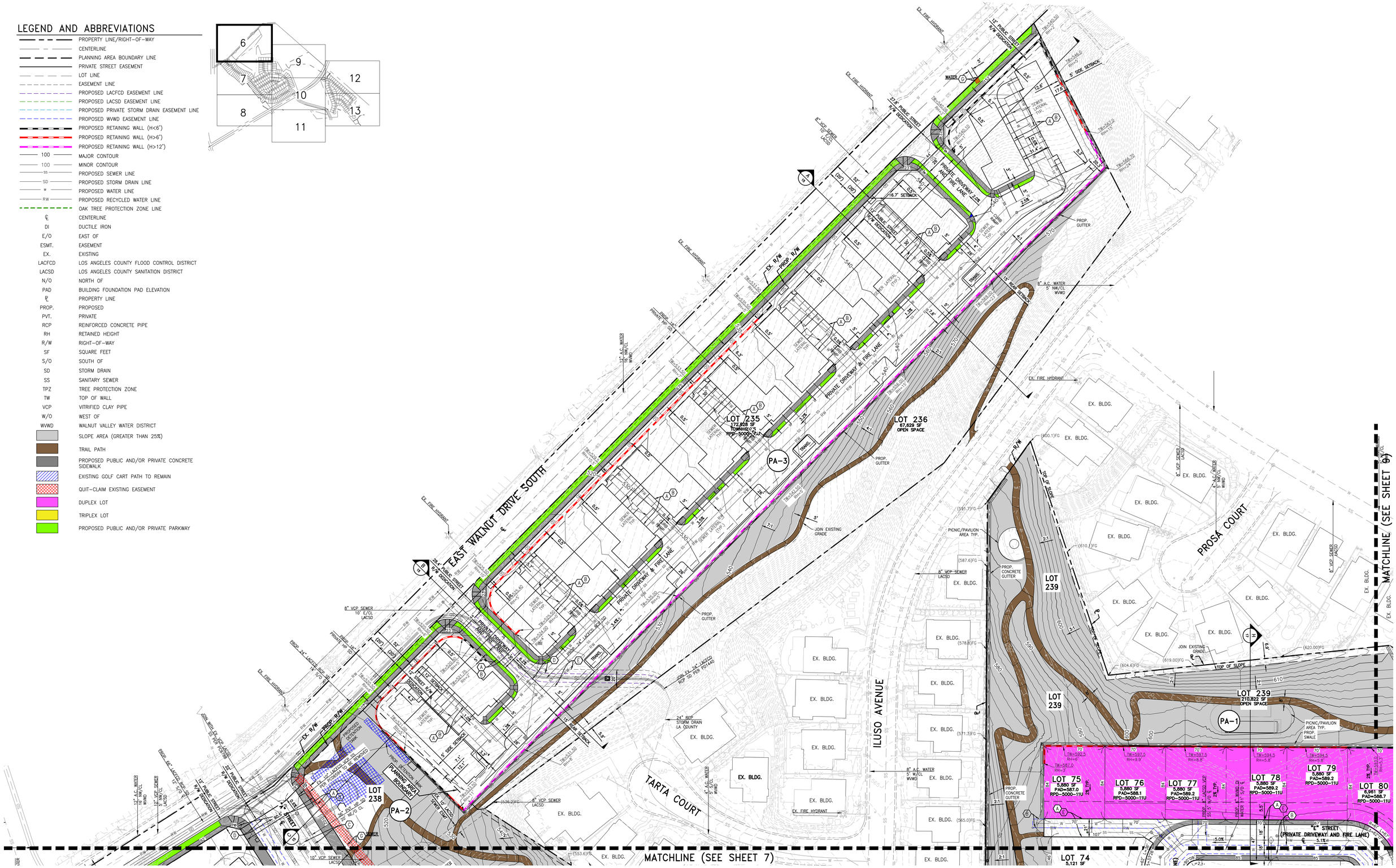
F:\PROJECTS\662\004\PLANS\ENTITLEMENTS\TENTATIVE TRACT MAP\0662004-TTM01.DWG (04-10-23 11:38:58PM) Plotted by: EChohron

LEGEND AND ABBREVIATIONS

- PROPERTY LINE/RIGHT-OF-WAY
- CENTERLINE
- PLANNING AREA BOUNDARY LINE
- PRIVATE STREET EASEMENT
- LOT LINE
- EASEMENT LINE
- PROPOSED LACFCD EASEMENT LINE
- PROPOSED LACSD EASEMENT LINE
- PROPOSED PRIVATE STORM DRAIN EASEMENT LINE
- PROPOSED WVWD EASEMENT LINE
- PROPOSED RETAINING WALL (H<6')
- PROPOSED RETAINING WALL (H>6')
- PROPOSED RETAINING WALL (H>12')
- 100 MAJOR CONTOUR
- 100 MINOR CONTOUR
- SS PROPOSED SEWER LINE
- SD PROPOSED STORM DRAIN LINE
- W PROPOSED WATER LINE
- RW PROPOSED RECYCLED WATER LINE
- OAK TREE PROTECTION ZONE LINE

℄	CENTERLINE
DI	DUCTILE IRON
E/O	EAST OF
ESMT.	EASEMENT
EX.	EXISTING
LACFCD	LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
LACSD	LOS ANGELES COUNTY SANITATION DISTRICT
N/O	NORTH OF
PAD	BUILDING FOUNDATION PAD ELEVATION
℄	PROPERTY LINE
PROP.	PROPOSED
PVT.	PRIVATE
RCP	REINFORCED CONCRETE PIPE
RH	RETAINED HEIGHT
R/W	RIGHT-OF-WAY
SF	SQUARE FEET
S/O	SOUTH OF
SD	STORM DRAIN
SS	SANITARY SEWER
TPZ	TREE PROTECTION ZONE
TW	TOP OF WALL
VCP	VITRIFIED CLAY PIPE
W/O	WEST OF
WVWD	WALNUT VALLEY WATER DISTRICT

- SLOPE AREA (GREATER THAN 25%)
- TRAIL PATH
- PROPOSED PUBLIC AND/OR PRIVATE CONCRETE SIDEWALK
- EXISTING GOLF CART PATH TO REMAIN
- QUIT-CLAIM EXISTING EASEMENT
- DUPLEX LOT
- TRIPLEX LOT
- PROPOSED PUBLIC AND/OR PRIVATE PARKWAY



N

40' 0' 20' 40'

SCALE: 1" = 40'

NO.	REVISIONS	DATE	BY

FUSCOE ENGINEERING
600 Wilshire, Suite 1470 Los Angeles, California 90017
tel 213.988.8802 fax 213.988.8803 www.fuscoe.com

Name 04/10/2023 Date

REGISTERED PROFESSIONAL ENGINEER — ANDREW JEFFERSON WILLIAMS — No.C49881 — CIVIL — STATE OF CALIFORNIA

MAJOR LAND DIVISION

LOTS 75-80, 235-236, 239

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

DATE	JOB NUMBER
4/10/2023	0662-004

SCALE:	DRAFTED BY: EC	SHT. 6 OF 23 SHTS.
PER PLAN	CHECKED BY: AW	

F:\PROJECTS\662\DWG\PLANS\ENTITLEMENTS\TENTATIVE TRACT MAP\0662-004-TTM02.DWG (04-10-23 1:39:25PM) Plotted by: Ecochran

MATCHLINE (SEE SHEET 6)

MATCHLINE (SEE SHEET 8)

MATCHLINE (SEE SHEET 9)

MATCHLINE (SEE SHEET 10)

(PRIVATE DRIVEWAY AND FIRE LANE)

ILUSO AVENUE

SOUTH BELLAVISTA DRIVE

"A" STREET (PRIVATE DRIVEWAY AND FIRE LANE)

"B" STREET

"C" STREET (PRIVATE DRIVEWAY AND FIRE LANE)

"D" STREET

"E" STREET (PRIVATE DRIVEWAY AND FIRE LANE)

"F" STREET

LOT 237 10,590 SF OPEN SPACE

LOT 238 102,197 SF OPEN SPACE

LOT 239

LOT 240

LOT 242 1,844 SF OPEN SPACE

PA-1

PA-2

PLANNING AREA BOUNDARY

PROP. CONCRETE GUTTER

SLOPE SETBACK (TYP.)

20' SFD FRONT SETBACK (TYP.)

TOE OF SLOPE

EX. BLDG.

EX. FIRE HYDRANT

LOT 1 8,676 SF PAD=512.6 RPD-5000-6U

LOT 2 6,731 SF PAD=513.3 RPD-5000-6U

LOT 3 7,071 SF PAD=514.0 RPD-5000-6U

LOT 4 9,796 SF PAD=516.5 RPD-5000-6U

LOT 5 9,395 SF PAD=518.7 RPD-5000-6U

LOT 6 10,003 SF PAD=519.8 RPD-5000-6U

LOT 7 10,506 SF PAD=522.7 RPD-5000-6U

LOT 8 7,488 SF PAD=524.8 RPD-5000-6U

LOT 9 7,492 SF PAD=527.0 RPD-5000-6U

LOT 10 7,553 SF PAD=529.1 RPD-5000-6U

LOT 11 7,935 SF PAD=531.2 RPD-5000-6U

LOT 12 8,482 SF PAD=533.2 RPD-5000-6U

LOT 13 9,148 SF PAD=535.2 RPD-5000-6U

LOT 14 10,036 SF PAD=537.2 RPD-5000-6U

LOT 15 11,072 SF PAD=539.4 RPD-5000-6U

LOT 16 13,104 SF PAD=543.5 RPD-5000-6U

LOT 17 5,666 SF PAD=545.6 RPD-5000-6U

LOT 18 4,884 SF PAD=547.7 RPD-5000-6U

LOT 19 5,029 SF PAD=548.5 RPD-5000-6U

LOT 20 5,029 SF PAD=549.3 RPD-5000-6U

LOT 21 5,029 SF PAD=550.2 RPD-5000-6U

LOT 22 5,029 SF PAD=551.1 RPD-5000-6U

LOT 23 5,029 SF PAD=552.0 RPD-5000-6U

LOT 24 5,029 SF PAD=552.8 RPD-5000-6U

LOT 25 5,029 SF PAD=553.6 RPD-5000-6U

LOT 26 5,029 SF PAD=554.5 RPD-5000-6U

LOT 27 5,029 SF PAD=556.8 RPD-5000-6U

LOT 28 5,029 SF PAD=559.0 RPD-5000-6U

LOT 48 6,834 SF PAD=517.8 RPD-5000-6U

LOT 49 7,065 SF PAD=520.8 RPD-5000-6U

LOT 50 5,835 SF PAD=522.9 RPD-5000-6U

LOT 51 5,719 SF PAD=525.0 RPD-5000-6U

LOT 52 5,714 SF PAD=527.1 RPD-5000-6U

LOT 53 5,712 SF PAD=529.2 RPD-5000-6U

LOT 54 5,736 SF PAD=531.3 RPD-5000-6U

LOT 55 5,777 SF PAD=533.4 RPD-5000-6U

LOT 56 5,904 SF PAD=535.7 RPD-5000-6U

LOT 57 5,938 SF PAD=538.0 RPD-5000-6U

LOT 58 5,740 SF PAD=540.1 RPD-5000-6U

LOT 59 6,838 SF PAD=542.0 RPD-5000-6U

LOT 60 7,068 SF PAD=544.1 RPD-5000-6U

LOT 61 5,005 SF PAD=546.2 RPD-5000-6U

LOT 62 6,053 SF PAD=551.2 RPD-5000-11U

LOT 63 5,880 SF PAD=554.2 RPD-5000-11U

LOT 64 5,880 SF PAD=557.2 RPD-5000-11U

LOT 65 5,880 SF PAD=561.2 RPD-5000-11U

LOT 66 5,880 SF PAD=566.2 RPD-5000-11U

LOT 67 5,730 SF PAD=568.8 RPD-5000-11U

LOT 68 7,409 SF PAD=574.3 RPD-5000-6U

LOT 69 6,988 SF PAD=576.4 RPD-5000-6U

LOT 70 6,207 SF PAD=578.6 RPD-5000-6U

LOT 71 5,029 SF PAD=580.9 RPD-5000-6U

LOT 72 5,029 SF PAD=583.1 RPD-5000-6U

LOT 73 5,029 SF PAD=585.4 RPD-5000-6U

LOT 74 5,121 SF PAD=587.0 RPD-5000-6U

LOT 99 5,875 SF PAD=587.0 RPD-5000-6U

LOT 100 5,970 SF PAD=583.6 RPD-5000-6U

LOT 101 5,963 SF PAD=580.8 RPD-5000-6U

LOT 102 5,533 SF PAD=577.8 RPD-5000-6U

LOT 103 6,167 SF PAD=573.8 RPD-5000-6U

LOT 104 9,875 SF PAD=586.8 RPD-5000-6U

LOT 105 17,910 SF PAD=583.6 RPD-5000-12U

LOT 106 6,148 SF PAD=574.9 RPD-5000-6U

LOT 107 5,275 SF PAD=552.0 RPD-5000-6U

LOT 108 5,052 SF PAD=558.0 RPD-5000-6U

LOT 109 5,052 SF PAD=558.0 RPD-5000-6U

LOT 110 5,052 SF PAD=561.0 RPD-5000-6U

LOT 111 5,052 SF PAD=564.0 RPD-5000-6U

LOT 112 5,052 SF PAD=567.0 RPD-5000-6U

LOT 113 5,135 SF PAD=569.0 RPD-5000-6U

LOT 114 5,521 SF PAD=570.6 RPD-5000-6U

LOT 115 6,183 SF PAD=572.6 RPD-5000-6U

LOT 119 5,279 SF PAD=555.2 RPD-5000-6U

LOT 120 5,052 SF PAD=558.0 RPD-5000-6U

LOT 121 5,052 SF PAD=560.8 RPD-5000-6U

LOT 122 5,052 SF PAD=563.6 RPD-5000-6U

LOT 123 5,052 SF PAD=566.4 RPD-5000-6U

LOT 124 5,052 SF PAD=569.2 RPD-5000-6U

LOT 125 5,352 SF PAD=572.0 RPD-5000-6U

LOT 126 5,957 SF PAD=574.0 RPD-5000-6U

LOT 131 5,280 SF PAD=556.2 RPD-5000-6U

LOT 132 5,010 SF PAD=558.9 RPD-5000-6U

LOT 133 6,090 SF PAD=561.6 RPD-5000-6U

LOT 134 5,170 SF PAD=564.3 RPD-5000-6U

LOT 135 7,170 SF PAD=567.0 RPD-5000-6U

LOT 136 7,170 SF PAD=569.7 RPD-5000-6U

LOT 137 7,092 SF PAD=572.4 RPD-5000-6U

LOT 138 7,217 SF PAD=568.1 RPD-5000-6U

LOT 139 5,370 SF PAD=568.1 RPD-5000-6U

LOT 140 5,010 SF PAD=570.1 RPD-5000-6U

LOT 141 5,010 SF PAD=573.1 RPD-5000-6U

LOT 152 5,882 SF PAD=559.1 RPD-5000-6U

LOT 153 5,592 SF PAD=562.1 RPD-5000-6U

LOT 154 5,063 SF PAD=565.2 RPD-5000-6U

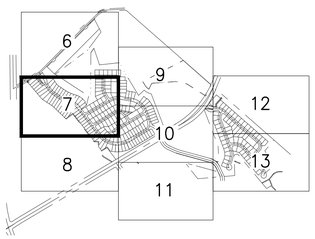
LOT 155 4,999 SF

LEGEND AND ABBREVIATIONS

- PROPERTY LINE/RIGHT-OF-WAY
- CENTERLINE
- PLANNING AREA BOUNDARY LINE
- PRIVATE STREET EASEMENT
- LOT LINE
- EASEMENT LINE
- PROPOSED LACFCD EASEMENT LINE
- PROPOSED LACSD EASEMENT LINE
- PROPOSED PRIVATE STORM DRAIN EASEMENT LINE
- PROPOSED WVWD EASEMENT LINE
- PROPOSED RETAINING WALL (H<6')
- PROPOSED RETAINING WALL (H>6')
- PROPOSED RETAINING WALL (H>12')
- 100 MAJOR CONTOUR
- 100 MINOR CONTOUR
- SS PROPOSED SEWER LINE
- SD PROPOSED STORM DRAIN LINE
- W PROPOSED WATER LINE
- RW PROPOSED RECYCLED WATER LINE
- OAK TREE PROTECTION ZONE LINE

℄	CENTERLINE
DI	DUCTILE IRON
E/O	EAST OF
ESMT.	EASEMENT
EX.	EXISTING
LACFCD	LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
LACSD	LOS ANGELES COUNTY SANITATION DISTRICT
N/O	NORTH OF
PAD	BUILDING FOUNDATION PAD ELEVATION
ℙ	PROPERTY LINE
PROP.	PROPOSED
PVT.	PRIVATE
RCP	REINFORCED CONCRETE PIPE
RH	RETAINED HEIGHT
R/W	RIGHT-OF-WAY
SF	SQUARE FEET
S/O	SOUTH OF
SD	STORM DRAIN
SS	SANITARY SEWER
TPZ	TREE PROTECTION ZONE
TW	TOP OF WALL
VCP	VITRIFIED CLAY PIPE
W/O	WEST OF
WVWD	WALNUT VALLEY WATER DISTRICT

- SLOPE AREA (GREATER THAN 25%)
- TRAIL PATH
- PROPOSED PUBLIC AND/OR PRIVATE CONCRETE SIDEWALK
- EXISTING GOLF CART PATH TO REMAIN
- QUIT-CLAIM EXISTING EASEMENT
- DUPLEX LOT
- TRIPLEX LOT
- PROPOSED PUBLIC AND/OR PRIVATE PARKWAY



N

40' 0' 20' 40'

SCALE: 1" = 40'

NO.	REVISIONS	DATE	BY

FUSCOE ENGINEERING

600 Wilshire, Suite 1470 Los Angeles, California 90017
tel 213.988.8802 fax 213.988.8803 www.fuscoe.com

Name 04/10/2023 Date

REGISTERED PROFESSIONAL ENGINEER ANDREW JEFFERSON WILLOUGHBY No.C49881 CIVIL STATE OF CALIFORNIA

MAJOR LAND DIVISION

LOTS 1-28, 48-74, 99-115, 119-126, 131-141, 152-154, 242, 237-8

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

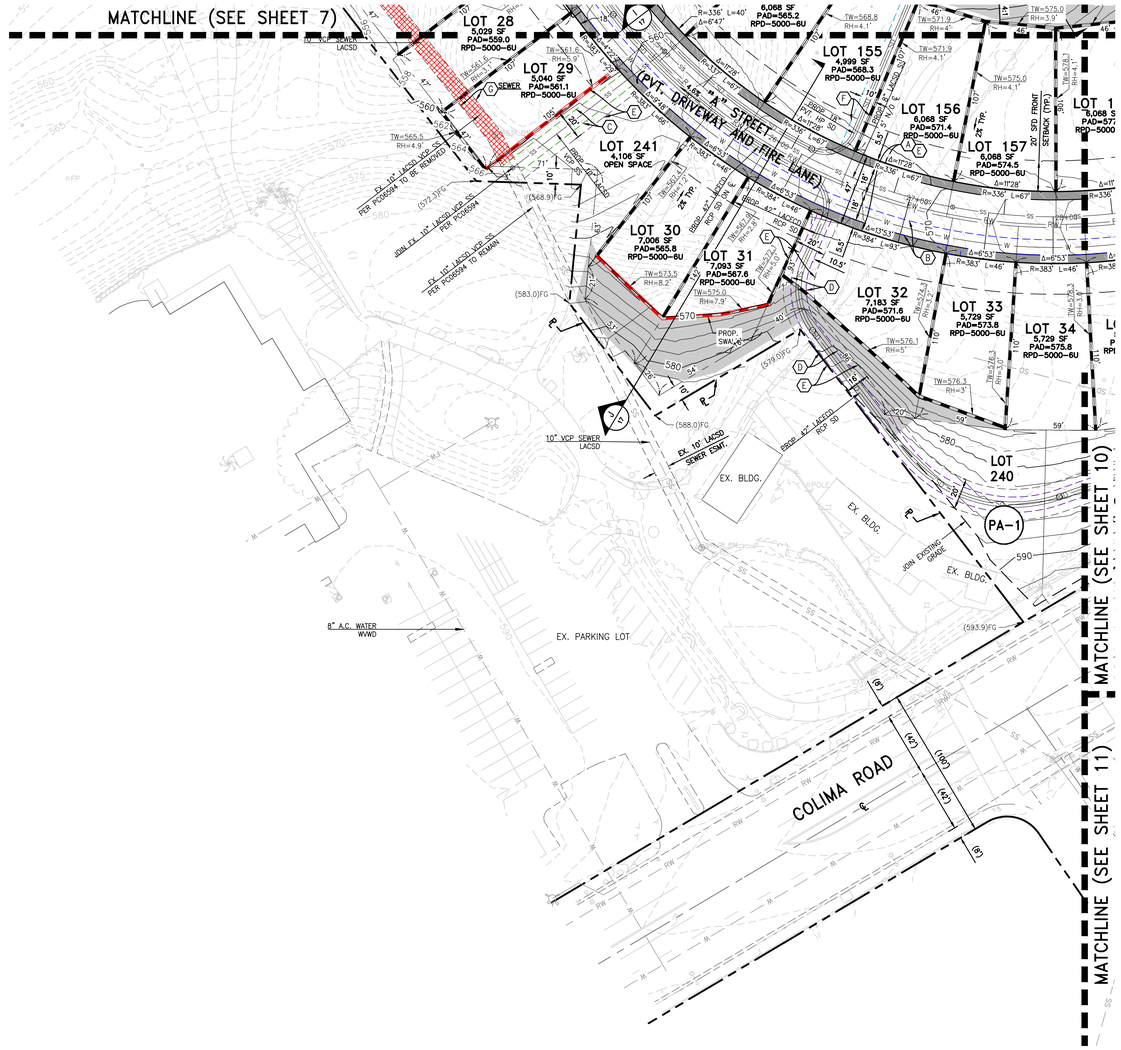
DATE	JOB NUMBER
4/10/2023	0662-004

SCALE: PER PLAN

DRAFTED BY: EC
CHECKED BY: AW

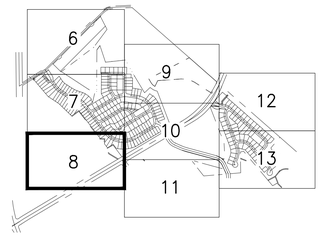
SHT. 7 OF 23 SHTS.

F:\PROJECTS\662\104\PLANS\ENTITLEMENTS\TENTATIVE TRACT MAP\0662-004-TTM02.DWG (04-10-23 1:39:51 PM) Plotted by: EScohren



LEGEND AND ABBREVIATIONS

	PROPERTY LINE/RIGHT-OF-WAY
	CENTERLINE
	PLANNING AREA BOUNDARY LINE
	PRIVATE STREET EASEMENT
	LOT LINE
	EASEMENT LINE
	PROPOSED LACFCD EASEMENT LINE
	PROPOSED LACSD EASEMENT LINE
	PROPOSED PRIVATE STORM DRAIN EASEMENT LINE
	PROPOSED WVWD EASEMENT LINE
	PROPOSED RETAINING WALL (H<6')
	PROPOSED RETAINING WALL (H>6')
	PROPOSED RETAINING WALL (H>12')
100	MAJOR CONTOUR
100	MINOR CONTOUR
SS	PROPOSED SEWER LINE
SD	PROPOSED STORM DRAIN LINE
W	PROPOSED WATER LINE
RW	PROPOSED RECYCLED WATER LINE
	OAK TREE PROTECTION ZONE LINE
℄	CENTERLINE
DI	DUCTILE IRON
E/O	EAST OF
ESMT.	EASEMENT
EX.	EXISTING
LACFCD	LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
LACSD	LOS ANGELES COUNTY SANITATION DISTRICT
N/O	NORTH OF
PAD	BUILDING FOUNDATION PAD ELEVATION
℄	PROPERTY LINE
PROP.	PROPOSED
PVT.	PRIVATE
RCP	REINFORCED CONCRETE PIPE
RH	RETAINED HEIGHT
R/W	RIGHT-OF-WAY
SF	SQUARE FEET
S/O	SOUTH OF
SD	STORM DRAIN
SS	SANITARY SEWER
TPZ	TREE PROTECTION ZONE
TW	TOP OF WALL
VCP	VITRIFIED CLAY PIPE
W/O	WEST OF
WVWD	WALNUT VALLEY WATER DISTRICT
	SLOPE AREA (GREATER THAN 25%)
	TRAIL PATH
	PROPOSED PUBLIC AND/OR PRIVATE CONCRETE SIDEWALK
	EXISTING GOLF CART PATH TO REMAIN
	QUIT-CLAIM EXISTING EASEMENT
	DUPLEX LOT
	TRIPLEX LOT
	PROPOSED PUBLIC AND/OR PRIVATE PARKWAY





40' 0' 20' 40'

SCALE: 1" = 40'

NO.	REVISIONS	DATE	BY

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Name 04/10/2023 Date

REGISTERED PROFESSIONAL ENGINEER ANDREW JEFFERSON WILLIAMS No.C49881 CIVIL STATE OF CALIFORNIA

MAJOR LAND DIVISION

LOTS 29-34, 155-157

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

DATE	JOB NUMBER	
4/10/2023	0662-004	
SCALE: PER PLAN	DRAFTED BY: EC CHECKED BY: AW	SHT. 8 OF 23 SHTS.

F:\PROJECTS\662\004\PLANS\ENTITLEMENTS\TENTATIVE TRACT MAP\0662004-TTM02.DWG (04-10-23 1:40:16PM) Plotted by: EChochron

MATCHLINE (SEE SHEET 6)

MATCHLINE (SEE SHEET 12)

MATCHLINE (SEE SHEET 10)

DIAMOND BAR ROWLAND HEIGHTS

TIERRA LUNA

TIERRA SIESTA

"C" STREET (PRIVATE DRIVEWAY AND FIRE LANE)

LOT 80 6,981 SF PAD=588.7 RPD-5000-11U

LOT 81 5,040 SF PAD=586.6 RPD-5000-6U

LOT 82 5,029 SF PAD=584.6 RPD-5000-6U

LOT 83 5,029 SF PAD=582.3 RPD-5000-6U

LOT 84 5,029 SF PAD=580.0 RPD-5000-6U

LOT 85 6,309 SF PAD=577.7 RPD-5000-6U

LOT 86 6,072 SF PAD=574.5 RPD-5000-6U

LOT 87 5,029 SF PAD=575.8 RPD-5000-6U

LOT 88 5,029 SF PAD=576.8 RPD-5000-6U

LOT 89 5,694 SF PAD=577.7 RPD-5000-6U

LOT 90 5,947 SF PAD=580.7 RPD-5000-6U

LOT 91 6,582 SF PAD=581.6 RPD-5000-6U

LOT 92 6,582 SF PAD=582.6 RPD-5000-6U

LOT 116 15,899 SF PAD=575.5 RPD-5000-12U

LOT 117 7,916 SF PAD=578.8 RPD-5000-6U

LOT 118

LOT 239

LOT 247 246,647 SF OPEN SPACE

PA-1

PA-4

PA-5

EX. BLDG.

PROP. CONCRETE GUTTER

PROP. SWALE

PROP. DETENTION TANK

36" RCP STORM DRAIN LA COUNTY

JOIN 36" RCP SD PER PD0506

48" RCP STORM DRAIN LA COUNTY

12" A.C. WATER 5' E/CL WWD

EX. 48" LACFCD RCP SD

EX. 8" LACSD VCP SS TO REMAIN

8" VCP SEWER LACSD

EX. 10' LACSD SEWER ESMT.

PROP. 8" LACSD VCP SS

PROP. 8" LACSD VCP SS TO BE REMOVED

EX. FIRE HYDRANT

8" A.C. WATER 5' E/CL WWD

12" PVC WATER 37' W/CL WWD

12" STEEL WATER 22' E/CL WWD

8" VCP SEWER LACSD

SEWER MH 593.9RIM 585.8INV

PROP. VARIABLE WIDTH PUBLIC STREET S/W DEDICATION

EX. R/W PER APN MAP NO. 8702-027-039

EX. R/W PER HWY DEDICATION HM5-05

EX. R/W PER TRACT NO. 51945

DENSE TREES ONLY

POOL

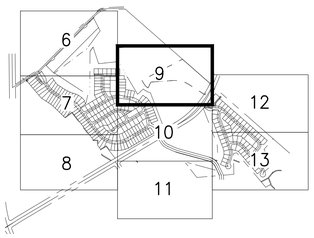
LEGEND AND ABBREVIATIONS

PROPERTY LINE/RIGHT-OF-WAY	
CENTERLINE	
PLANNING AREA BOUNDARY LINE	
PRIVATE STREET EASEMENT	
LOT LINE	
EASEMENT LINE	
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PROPOSED PRIVATE STORM DRAIN EASEMENT LINE	
PROPOSED WWD EASEMENT LINE	
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SS PROPOSED SEWER LINE	
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W PROPOSED WATER LINE	
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OAK TREE PROTECTION ZONE LINE	
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LACFCD	LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
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W/O	WEST OF
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	SLOPE AREA (GREATER THAN 25%)
	TRAIL PATH
	PROPOSED PUBLIC AND/OR PRIVATE CONCRETE SIDEWALK
	EXISTING GOLF CART PATH TO REMAIN

	QUIT-CLAIM EXISTING EASEMENT
	DUPLEX LOT
	TRIPLEX LOT
	PROPOSED PUBLIC AND/OR PRIVATE PARKWAY



N

40' 0' 20' 40'

SCALE: 1" = 40'

MAJOR LAND DIVISION

LOTS 81-92, 116-117, OPEN SPACE LOT 247

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

NO.	REVISIONS	DATE	BY

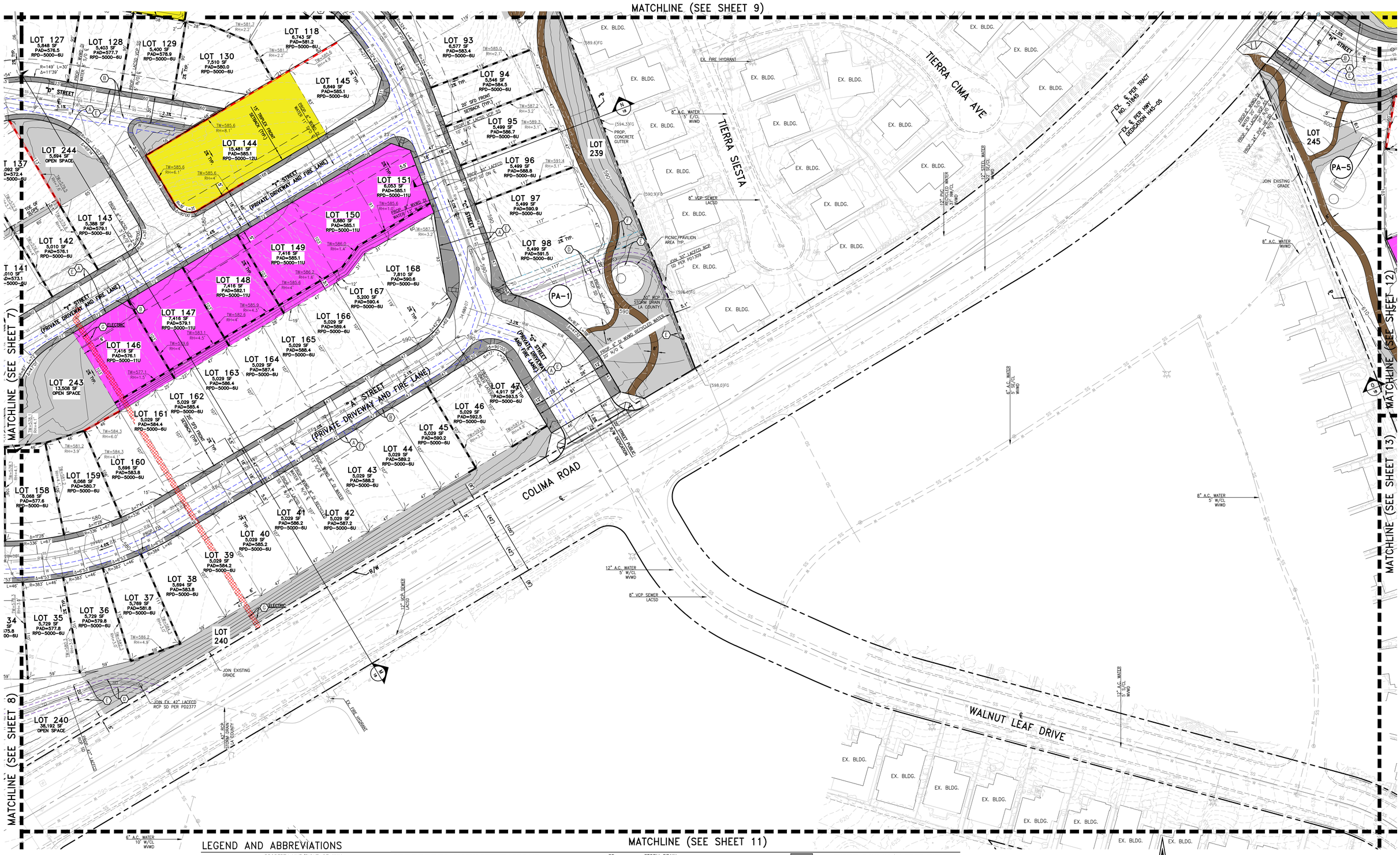
FUSCOE ENGINEERING
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tel 213.988.8802 fax 213.988.8803 www.fuscoe.com

Name 04/10/2023 Date

REGISTERED PROFESSIONAL ENGINEER ANDREW JEFFERSON WILLIAMS No.C49881 CIVIL STATE OF CALIFORNIA

DATE 4/10/2023		JOB NUMBER 0662-004
SCALE: PER PLAN	DRAFTED BY: EC CHECKED BY: AW	SHT. 9 OF 23 SHTS.

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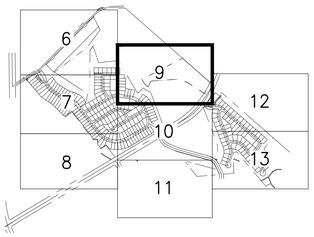


LEGEND AND ABBREVIATIONS

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- PROPOSED LACSD EASEMENT LINE
- PROPOSED PRIVATE STORM DRAIN EASEMENT LINE
- PROPOSED WWVD EASEMENT LINE
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- W PROPOSED WATER LINE
- RW PROPOSED RECYCLED WATER LINE
- OAK TREE PROTECTION ZONE LINE

℄	CENTERLINE	SD	STORM DRAIN
DI	DUCTILE IRON	SS	SANITARY SEWER
E/O	EAST OF	TPZ	TREE PROTECTION ZONE
ESMT.	EASEMENT	TW	TOP OF WALL
EX.	EXISTING	VCP	VITRIFIED CLAY PIPE
LACFCD	LOS ANGELES COUNTY FLOOD CONTROL DISTRICT	W/O	WEST OF
LACSD	LOS ANGELES COUNTY SANITATION DISTRICT	WVWD	WALNUT VALLEY WATER DISTRICT
N/O	NORTH OF		SLOPE AREA (GREATER THAN 25%)
PAD	BUILDING FOUNDATION PAD ELEVATION		TRAIL PATH
ℙ	PROPERTY LINE		
PROP.	PROPOSED		
PVT.	PRIVATE		
RCP	REINFORCED CONCRETE PIPE		
RH	RETAINED HEIGHT		
R/W	RIGHT-OF-WAY		
SF	SQUARE FEET		
S/O	SOUTH OF		

- PROPOSED PUBLIC AND/OR PRIVATE CONCRETE SIDEWALK
- EXISTING GOLF CART PATH TO REMAIN
- QUIT-CLAIM EXISTING EASEMENT
- DUPLEX LOT
- TRIPLEX LOT
- PROPOSED PUBLIC AND/OR PRIVATE PARKWAY



N

40' 0' 20' 40'

SCALE: 1" = 40'

NO.	REVISIONS	DATE	BY

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Name 04/10/2023 Date

REGISTERED PROFESSIONAL ENGINEER ANDREW JEFFERSON WILLIAMS No.C49881 CIVIL STATE OF CALIFORNIA

MAJOR LAND DIVISION

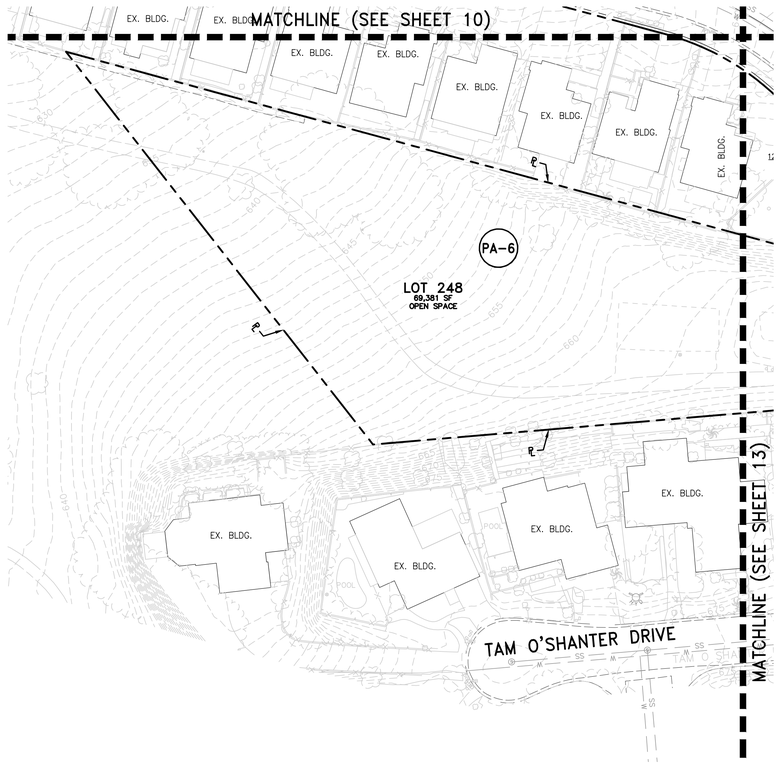
LOTS 35-47, 93-98, 127-130, 118, 142-151, 158-168

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

DATE	JOB NUMBER
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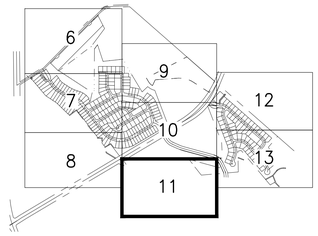
SCALE:	DRAFTED BY: EC	SHT. 10 OF 23 SHTS.
PER PLAN	CHECKED BY: AW	

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LEGEND AND ABBREVIATIONS

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℄	CENTERLINE
DI	DUCTILE IRON
E/O	EAST OF
ESMT.	EASEMENT
EX.	EXISTING
LACFCD	LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
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N/O	NORTH OF
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	SLOPE AREA (GREATER THAN 25%)
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	QUIT-CLAIM EXISTING EASEMENT
	DUPLEX LOT
	TRIPLEX LOT
	PROPOSED PUBLIC AND/OR PRIVATE PARKWAY





40' 0' 20' 40'

SCALE: 1" = 40'

NO.	REVISIONS	DATE	BY

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Name 04/10/2023 Date

REGISTERED PROFESSIONAL ENGINEER
ANDREW JEFFERSON WILLIAMS
No.C49881
CIVIL
STATE OF CALIFORNIA

MAJOR LAND DIVISION

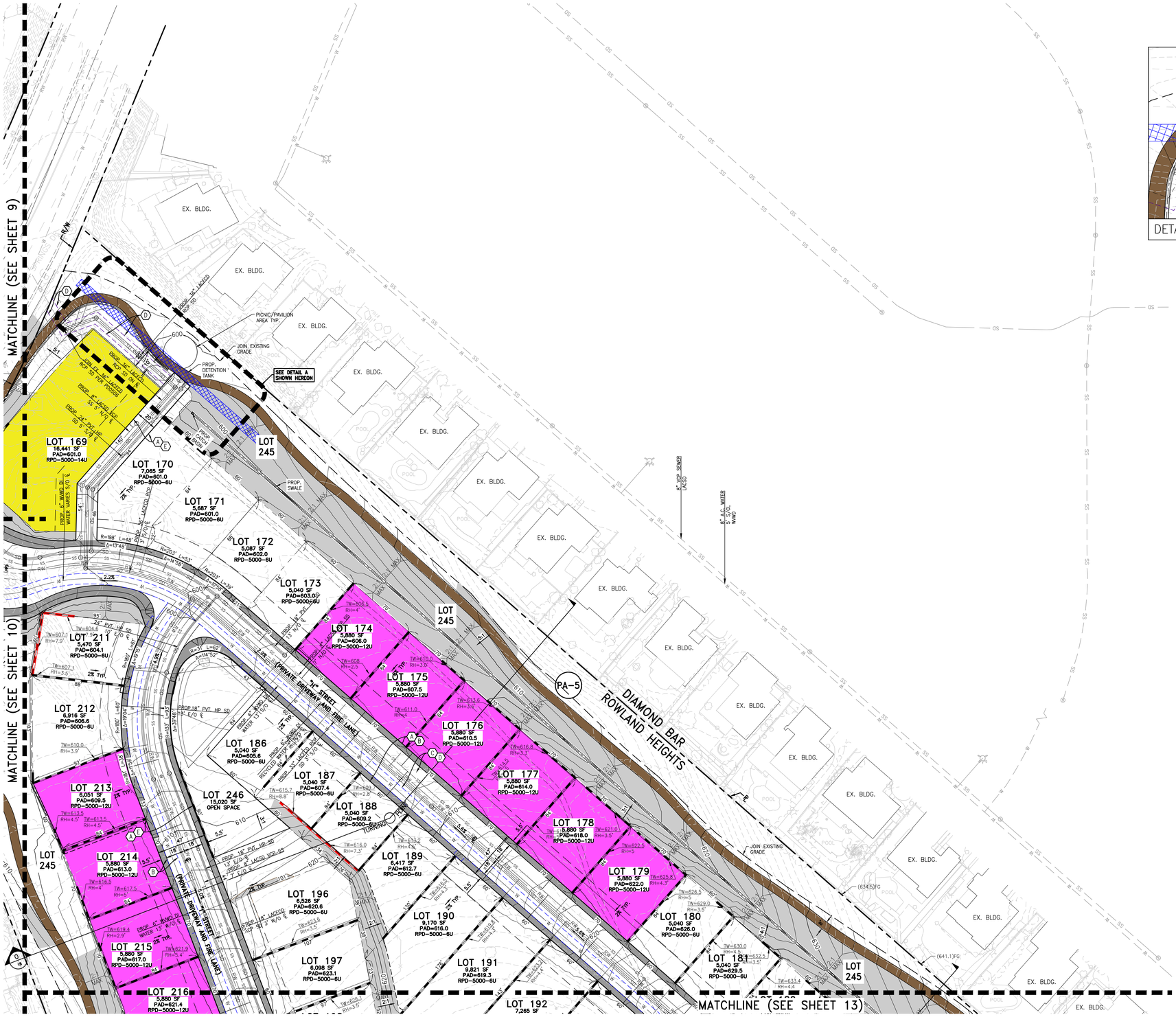
OPEN SPACE LOT 248

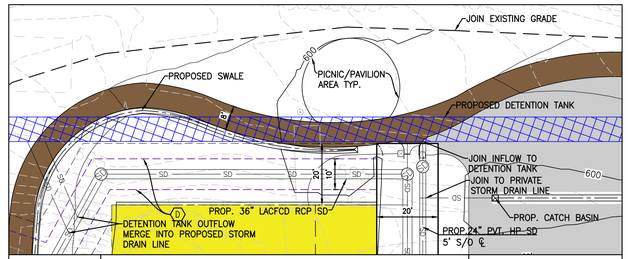
FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

DATE	JOB NUMBER
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SCALE:	DRAFTED BY: EC CHECKED BY: AW	SHT. 11 OF 23 SHTS.
PER PLAN		

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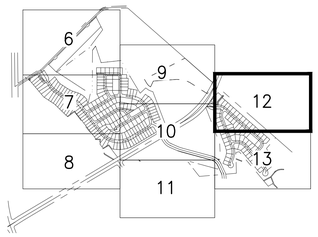
DETAIL A | DETENTION TANK CONNECTION DETAIL | SCALE: 1" = 20'

N

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

LEGEND AND ABBREVIATIONS

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- ℄ CENTERLINE
- DI DUCTILE IRON
- E/O EAST OF
- ESMT. EASEMENT
- EX. EXISTING
- LACFCD LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
- LACSD LOS ANGELES COUNTY SANITATION DISTRICT
- N/O NORTH OF
- PAD BUILDING FOUNDATION PAD ELEVATION
- P/L PROPERTY LINE
- PROP. PROPOSED
- PVT. PRIVATE
- RCP REINFORCED CONCRETE PIPE
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- W/O WEST OF
- WVWD WALNUT VALLEY WATER DISTRICT
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N

40' 0' 20' 40'
SCALE: 1" = 40'

NO.	REVISIONS	DATE	BY

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MAJOR LAND DIVISION

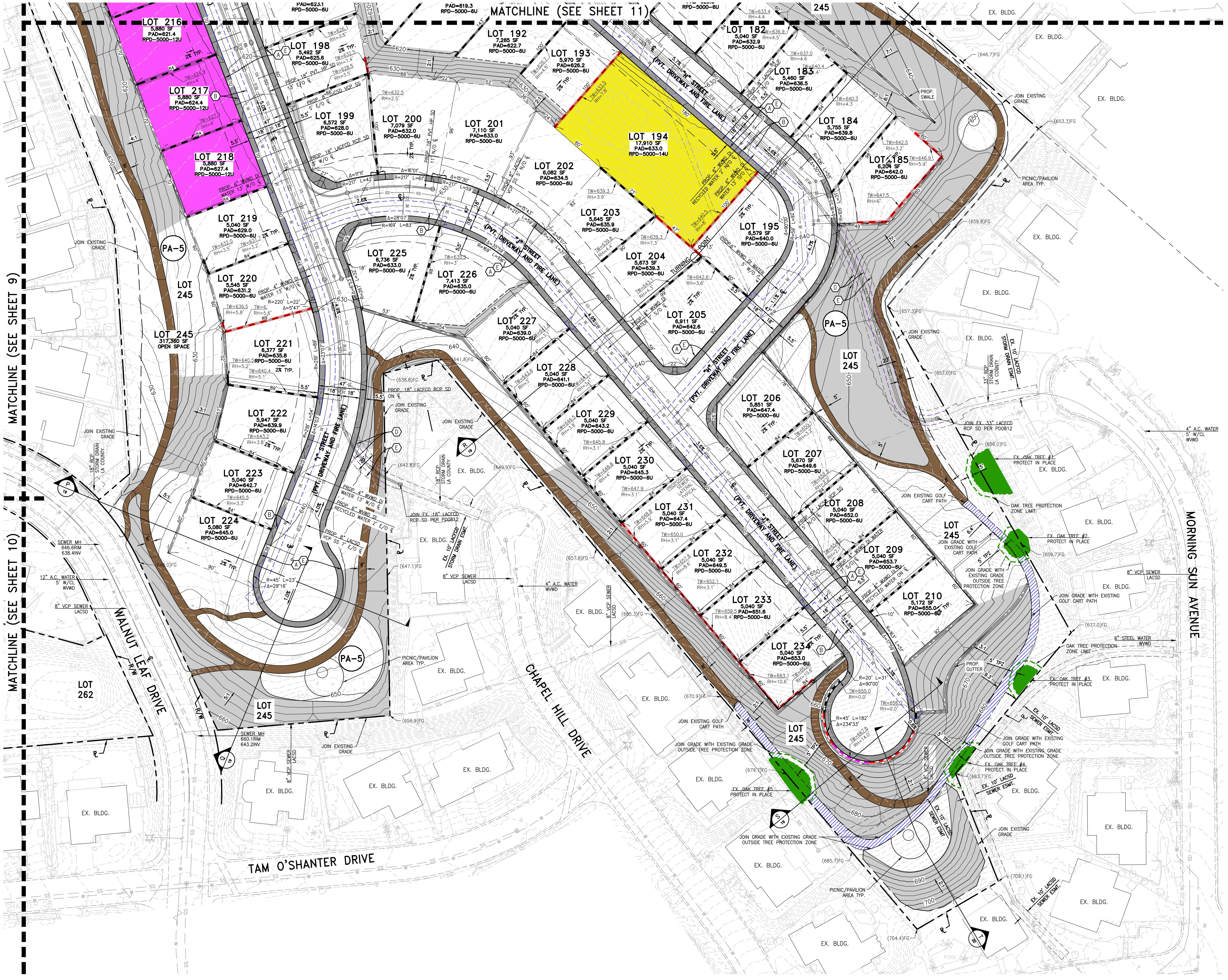
LOTS 169-191, 211-215, 196-197, 246

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

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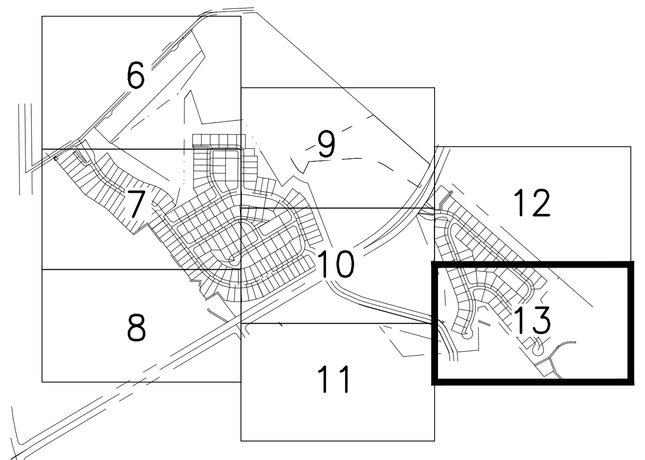
SCALE:	DRAFTED BY: EC CHECKED BY: AW	SHT. 12 OF 23 SHTS.
PER PLAN		

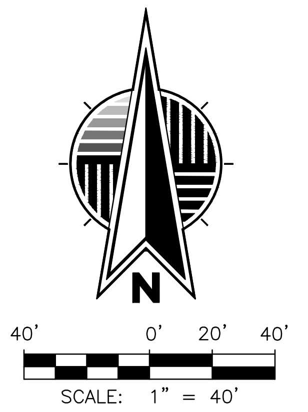
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LEGEND AND ABBREVIATIONS

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■	DUPLEX LOT
■	TRIPLEX LOT
🟩	PROPOSED PUBLIC AND/OR PRIVATE PARKWAY





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ENGINEERING
600 Wilshire, Suite 1470, Los Angeles, California 90017
tel 213.988.8802 ∘ fax 213.988.8803 ∘ www.fuscoe.com
Name 04/10/2023 Date

ANDREW JEFFERSON WILLRODT
No. C49881
CIVIL

MAJOR LAND DIVISION

LOTS 192-195, 199-210, 216-234, 245

FOR MERGING AND SUBDIVIDING RESIDENTIAL PLANNED DEVELOPMENT AND CONDOMINIUM PURPOSES LOCATED IN UNINCORPORATED TERRITORY, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

DATE 4/10/2023	JOB NUMBER 0662-004
SCALE: PER PLAN	DRAFTED BY: EC CHECKED BY: AW
	SHT. 13 OF 23 SHTS.

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Royal Vista Residential & Parks Project

Water Demand Memorandum

PREPARED FOR: Project Dimensions, Inc.

PREPARED BY: Fuscoe Engineering, Inc.

DATE: March 27, 2023

1. Purpose

The purpose of this memorandum is to provide an estimate of proposed water demands for the Royal Vista Residential & Parks Project ("Project") and to determine if there is adequate water supply to support the Project. As required by Senate Bill 610 (SB 610) and Section 10912(a) of the Water Code, a Water Supply Assessment (WSA) must be furnished to local governments for inclusion in environmental documentation for certain projects subject to the California Environmental Quality Act (CEQA). Projects that must include WSAs must have at least one of the following features:

1. A proposed residential development of more than 500 dwelling units.
2. A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
3. A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
4. A proposed hotel or motel, or both, having more than 500 rooms.
5. A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
6. A mixed-use project that includes one or more of the projects specified in this subdivision.
7. A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.
8. If a public water system has fewer than 5,000 service connections, then ''project'' means any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections, or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

Although the Project does not include more than 500 dwelling units (as described in more detail below), this memorandum is developed to demonstrate there are adequate water supplies to support the Project as part of the CEQA impact assessment.

2. Project Description and Water Provider

The Project includes proposed residential, park, and common open spaces that encompass approximately 75.6 acres (Project Site) within Rowland Heights, an unincorporated portion of Los Angeles County. The Project is adjacent to the northeast corner of Rowland Heights limits and is located to the southwest of the interchange of State Route Highway 57 South and State Route Highway 60 West. The Project is within the Walnut Valley Water District (WVWD) service area and currently receives water from WVWD for a portion of the existing golf course irrigation within the Project footprint.

The primary components of the Project land plan include: (i) single family homes, (ii) residential duplex, triplex, townhomes, and (iii) common open space and parks. Water demands will be calculated for the entirety of the Project. A summary of the project land uses is shown in Table 1.

Table 1 Project Land Uses

Residential Area		
Proposed Project Land Use	**Proposed Project Land Use Description**	**Unit Count**
Single Family Detached	Single family detached residential homes with residential streets, walkways, and landscaping	200 DU
Duplex, Triplex and Townhome Units	Multi-family residential units with garages, surface parking, private driveways, walkways, and landscaping	160 DU
Landscaped Areas		
Open Space, Parks and Residential Landscaped Areas	Landscaped open space with graded trails and slopes and common area landscaped areas surrounding residential units	36 acres
Notes: DU: dwelling unit		

The existing land use is currently the Royal Vista Golf Club, and a portion of the golf course will be replaced with the Royal Vista Residential & Parks Project. Therefore, the development of this area will contribute to an increase in water demands within Rowland Heights. The methodology and results for quantifying the proposed Project water demands are summarized below.

3. Existing Water Demands

The existing Project site receives water supply from a local groundwater pumping well for irrigation purposes for all 6 planning areas (Lots 1-6).

Existing water use data was obtained from the groundwater well serving the Project Site and is summarized below and in Appendix A. The golf course restaurant and clubhouse are not within the Project limits and will remain in use under the proposed conditions, therefore are not included in the following existing water demand calculations. A summary of the estimated existing water demand for the Project Site is shown in Table 2.

Table 2 Estimated Existing Water Demand

Land Use	Land Acreage	Water Source[1]	Total Average Daily Consumption (GPD)[2]	Total Average Annual Consumption (AFY)[3]
Golf Course (Lots 1-6)	76 acres	Groundwater Well	176,340	197.5
		Total Existing Water Demand	176,340	197.5

Notes:
[1] See Appendix A for water use data.
[2] GPD: Gallons Per Day
[3] AFY: Acre Feet Per Year

4. Proposed Project Water Demands

The proposed Project will increase the usage of WVWD's potable water supply. As the primary supplier of water to the community, WVWD must comply with all applicable regulations at the State and Federal level. The Project site will also utilize recycled water for irrigation, which is treated at and obtained from the LACSD Pomona Water Reclamation Plant. Under existing conditions, the Project Site does not irrigate with recycled water. Therefore, the proposed Project will also increase the usage of WVWD's recycled water supply.

There are no published WVWD water demand unit factors for residential land uses available. Therefore, water demand was estimated using City of Los Angeles Sewerage Facilities Charge Sewage Generation Factor for Residential and Commercial Categories (April 6, 2012) with a conversion factor (110% increase) for estimating indoor water usage. The Estimated Total Water use (ETWU) methodology is used for landscaping demand estimates (see Appendix A) for both potable water used for on-lot irrigation as well as estimating recycled water demand for common area landscaping. Summaries of the water demand calculations for each land use are described in more detail below.

The groundwater well that currently serves the existing golf course area will no longer be used as a water source for the Project Site. It will continue to be used for the remaining golf course area, as needed. Therefore, there will be a net reduction on the groundwater source of -176,340 GPD.

Table 3 Project Water Demand Calculation Summary – Method 1 (City of Los Angeles)

Residential Areas Potable Water Demands						
Proposed Project Land Use	**Unit Water Demand[1]**		**Land Use Units**		**Water Usage (GPD)**	**Water Usage (AFY)**
Single Family	253	GPD/DU	200	DUs	50,600	57
Duplex	209	GPD/DU	58	DUs	12,122	14
Triplex	209	GPD/DU	30	DUs	6,270	7
Townhome	209	GPD/DU	72	DUs	15,048	17
Single Family On-lot Irrigation	ETWU Method[2]				38,504	43
Combined Total Potable Water Demand					**122,544**	**137**
Landscaped Areas Recycled Water Demands						
Proposed Project Land Use	**Unit Water Demand**				**Water Usage (GPD)**	**Water Usage (AFY)**
Common Open Space and Parks	ETWU Method[2]				+68,449	+77
Total Net Potable Water Demands					+122,544	+137
Total Net Recycled Water Demand					+68,449	+77

Notes:

1. City of Los Angeles Sewage Generation Factor for Residential and Commercial Categories (4/6/2012). Water demands estimated by multiplying sewer unit demand factor by 110% for conservative purposes to account for consumption.
2. The Estimated Total Water Use equation for landscape irrigation with planting factors is based on Summers/Murphy & Partner, inc. Irrigation Master Plan. The Irrigation Master Plan provides calculations for landscaping using potable water (private lots) and recycled water (common areas, parks, etc). See Appendix B for the Irrigation Master Plan.

As shown above in Method 1, water demands are estimated to increase by approximately 137 AFY for potable water and 77 AFY for recycled water by employing the City of Los Angeles sewer flow factors as well as the ETWU equation. This approach is considered conservative in estimating indoor water demands. Actual water demands will likely be less due to advances in water efficiency and water conservation laws. Two different water demand methodologies (Methods 2 and 3) are also included in Appendix A to estimate a more realistic water demand for the Project.

Method 2 implements a methodology of estimating water demands based on fixture counts and assumptions on water use per fixture associated with the Project. Method 3 estimates water demands by applying Assembly Bill No. 1668/Senate Bill 606, which requires a water use limit of 55 gallons per person per day, to the anticipated population growth from the Project. The results are summarized below:

- Method 2 Indoor Water Use Estimate: 72.1 AFY
- Method 3 Indoor Water Use Estimate: 75.4 AFY

Indoor water use implemented in Table 3 above (Method 1) includes an estimated indoor water use of 94 AFY (adding the AFY of single-family, duplex, triplex, and townhomes) which is approximately 19 to 22 AFY more than either Method 2 or Method 3 indoor water use estimates. Therefore, water demands will likely be 20% lower on average than the 137 AFY due to more efficient water fixtures and lower per capital water usage. See Appendix A for detailed water demand calculations.

5. 2020 Walnut Valley Water District (WVWD) Urban Water Management Plan Summary

WVWD's 2020 Urban Water Management Plan (UWMP) projects total water demands to increase from 21,173 AFY in 2025 to 22,193 AFY in 2045 for normal years, representing an increase in demand of 1,020 AFY over the 20-year time period. For dry years, WVWD projects total water demand to increase from 17,896 AFY in 2025 to 18,760 AFY in 2045 for 5 consecutive dry years, representing an increase in demand of 864 AFY. In addition, each 5-year increment identifies an anticipated increase in demand of over 200 AFY per 5-year period.

For normal years, the proposed increase in potable water demand from the Project of about 137 AFY represents approximately 13% of the total increase in demand (1,020 AFY) from 2025 to 2045 in the UWMP for normal years. For dry years, 137 AFY would represent approximately 15% of the projected demand (864 AFY) from 2025 to 2045. The proposed Project demand also fits well under the anticipated increase of 200+AFY per 5-year period indicating the Project could be built in its entirety and not increase water demands beyond the projected demand for that same period.

The UWMP projects recycled water demands to increase from 3,489 AFY in 2025 to 3,664 AFY in 2045 representing an increase in demand of 1,973 AFY. The proposed increase in recycled water demand from the Project of ~77 AFY represents approximately 4% of the projected demand from 2025 to 2045 in the UWMP.

The increase of 137 AFY for potable water and 77 AFY for recycled water fit within UWMP projections. As noted above, the increase in indoor water demands will likely be much lower due to advances in water efficiency and water conservation laws. These results have been shared with WVWD and WVWD staff had confirmed that the anticipated water demand increase throughout their service area from 2025-2045 has not already been accounted for and is available to serve the Project.

6. CEQA Impact Assessment

California Environmental Quality Act (CEQA) significance criteria are used to evaluate the degree of impact caused by a development project on environmental resources such as hydrology and water quality. According to Appendix G, Section XIX of the CEQA Guidelines, a project would normally have a significant effect on water supplies if the project would impact the threshold listed below:

Impact B. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The 2020 UWMP prepared by WVWD, accounts for existing development within their service area, as well as projected growth through the year 2045. The increase in potable water demands of 137 AFY from the proposed Project is well within the planned increases in water demands within the WVWD service area (1,020 AFY anticipated from 2025 to 2045 for normal and 864 AFY for dry year scenarios) and falls within the assumed growth between the first segment of the UWMP covering between 2025 and 2030. In addition, as the recycled water projections are anticipated to increase by 1,973 AFY between 2025 to 2045, the proposed Project increase on recycled water of 77 AFY can also be accommodated. Therefore, it is anticipated that WVWD would be able to supply the demands of the Project as well as additional future growth.

7. Conclusion

As noted in Section 5, the Project is anticipated to increase potable water demands. However, this increase fits within the anticipated increase in water demand as planned within WVWD's service area as described within the WVWD 2020 UWMP. In addition, WVWD staff have confirmed that the increase in water demand from 2025-2045 has not already been accounted for to support other new development projects. Therefore, it can be concluded that there are adequate water supplies to support this Project in normal dry, single dry and multiple dry year climate scenarios.

Appendix A – Water Demand Calculations and Resources

Project Irrigation Demand from Private Lots, Common Open Space, and Parks

Royal Vista Golf Club - Existing Groundwater Usage			
Actual data provided by current owner			
Usage (8/31/2020-7/31/2021)	132,116,400.0	Gallons	Notes
	361,962.7	gpd	
	2,320.3	gpd /acre	156 total acres
	176,340.8	**gpd**	**Project (76 acres)**
	185,621.9	gpd	Non-Project (80 acres)

Single Family Home On-lot Potable Irrigation Calculation			
Proposed Demand Conversions from Irrigation Master Plan			
	gal/yr	GPD	Acre-feet per Year
Potable Water	14,053,945	38,504	43.1

Common Area Landscaping Reclaimed Water Irrigation Calculation				
Proposed Demand Conversions from Irrigation Master Plan				
POC (location TBD)	Water Source	gal/yr	GPD	Acre-feet per Year
# 1	Recycled	5,163,276	14,146	15.8
# 2	Recycled	1,761,550	4,826	5.4
# 3	Recycled	2,093,519	5,736	6.4
# 4	Recycled	7,950,212	21,781	24.4
# 5	Recycled	5,839,607	15,999	17.9
# 6	Recycled	2,175,687	5,691	6.7
	Total	**39,037,796**	**106,953**	**119.8**

Project Potable Water Demand Calculation Summary – Method 1 (City of Los Angeles)

Residential Areas Potable Water Demands						
Proposed Project Land Use	Unit Water Demand[1]		Land Use Units		Water Usage (GPD)	Water Usage (AFY)
Single Family	253	GPD/DU	200	DUs	50,600	57
Duplex	209	GPD/DU	58	DUs	12,122	14
Triplex	209	GPD/DU	30	DUs	6,270	7
Townhome	209	GPD/DU	72	DUs	15,048	17
Single Family On-lot Irrigation	ETWU Method[2]				38,504	43
Combined Total Potable Water Demand					122,544	137
Landscaped Areas Recycled Water Demands						
Proposed Project Land Use	Unit Water Demand				Water Usage (GPD)	Water Usage (AFY)
Common Open Space and Parks	ETWU Method[2]				+68,449	+77
Total Net Potable Water Demands					+122,544	+137
Total Net Recycled Water Demand					+68,449	+77

Notes:

1. City of Los Angeles Sewage Generation Factor for Residential and Commercial Categories (4/6/2012). Water demands estimated by multiplying sewer unit demand factor by 110% for conservative purposes to account for consumption.
2. The Estimated Total Water Use equation for landscape irrigation with planting factors is based on Summers/Murphy & Partner, inc. Irrigation Master Plan. The Irrigation Master Plan provides calculations for landscaping using potable water (private lots) and recycled water (common areas, parks, etc). See Appendix B for the Irrigation Master Plan.

Project Potable Water Demand Calculation Summary – Method 2 (Fixture Frequency)

Residential Areas									
Residential Unit Water Demands	Water Demand[1]		Frequency Water Usage[2]		Assumed People Per DU[3]		Unit Water Usage (GPD)	Water Usage for 360 DUs (GPD)	Water Usage for 360 DUs (AFY)
Toilets[1, 2, 4]	1.28	Gal/flush	5.2	Fpd/person	3.4	People/unit	22.63	8,146.94	9.13
Showers[2, 4]	17.8	Gal/shower	0.75	Shower/person/d	3.4	People/unit	45.39	16,340.40	18.30
Bathtubs[4]	27.5	Gal/bath	0.1	Bath/person/d	3.4	People/unit	9.35	3,366.00	3.77
Washing Machine[4]	21	Gal/load	0.36	Loads/person/d	3.4	People/unit	25.70	9,253.44	10.37
Dishwasher[4]	4.5	Gal/load	0.13	Loads/person/d	3.4	People/unit	1.99	716.04	0.80
Faucets[1, 2]	1.8	Gal/minute	10.4	Min/person/d	3.4	People/unit	63.65	22,913.28	25.67
Leakage[2]	10	Gal/DU/day	-	-	-	-	10	3,600	4.03
							Proposed Potable Water Demand from fixture counts	64,336	72.1

Notes:

1. *2019 CALGreen Residential Mandatory Code Requirements for new developments*
2. *Aquacraft Analysis of Water Use in New Single-Family Homes (2011)*
3. *Royal Vista Project Description (EIR/CEQA)*
4. *Aquacraft Analysis - Water and Energy Savings from High Efficiency Fixtures and Appliances in Single Family Homes - Volume 1 (2005)*

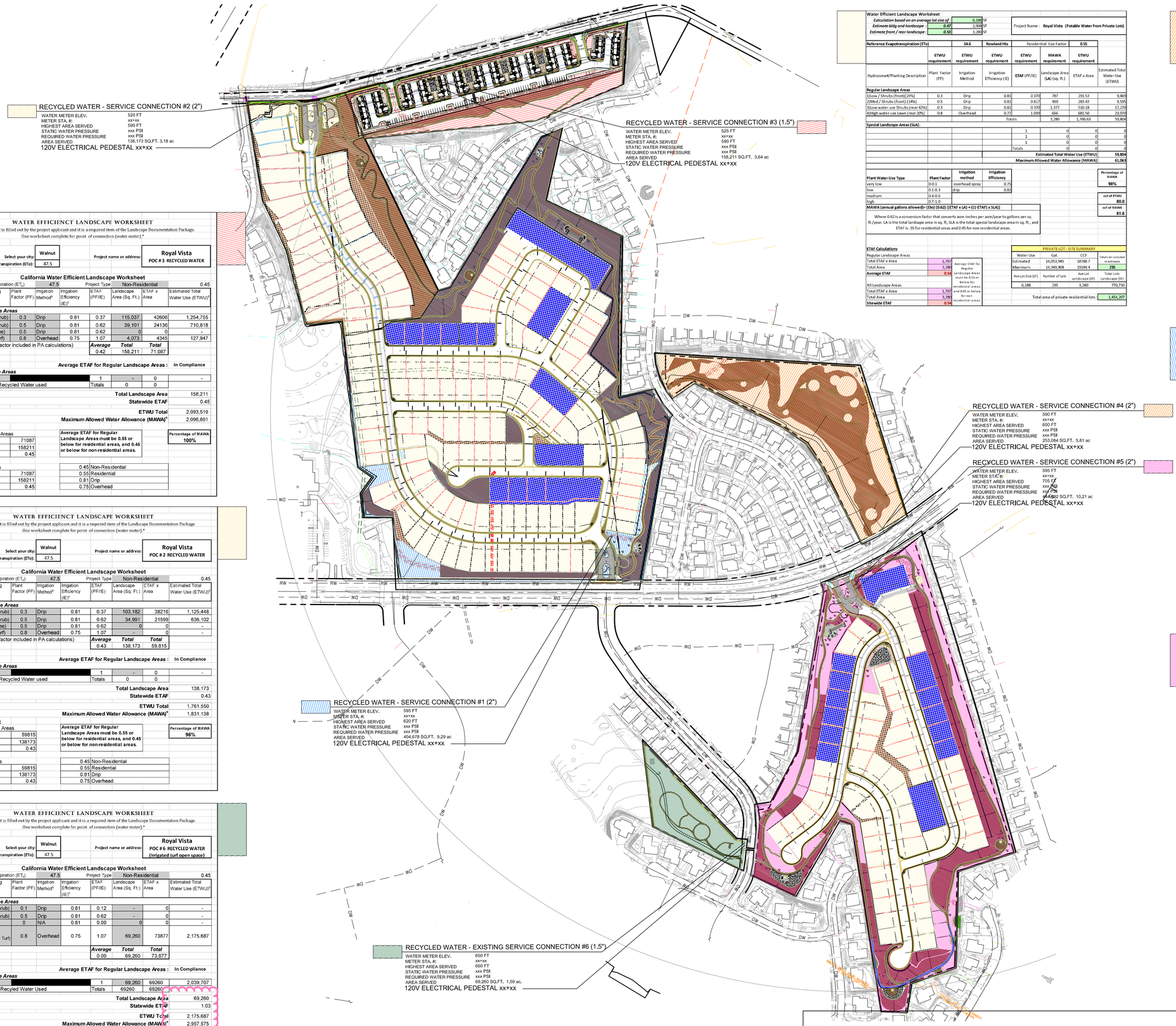
Project Demand Estimated from AB 1668 SB 606[1] For Residential Development - Method 3 (55 GPCD)

Residential Areas				
AB 1668 SB 606 Goal[1]		Project Population Increase	Water Usage (GPD)	Water Usage (AFY)
55	GPCD	+1,224	67,320	75.4

Notes:

1. *Excerpt from Assembly Bill No. 1668 (2/17/2017): "Existing law requires the state to achieve a 20% reduction in urban per capita water use in California by December 1, 2020. Existing law requires each urban retail water supplier to develop urban water targets and an interim urban water use target, as specified. This bill would require the State Water Resources Control Board, in coordination with the Department of Water Resources, to adopt long-term standards for the efficient use of water, as provided, and performance measures for commercial, industrial, and institutional water use on or before June 30, 2022. The bill would require the department, in coordination with the board, to conduct necessary studies and investigations and make recommendations, no later than October 1, 2021, for purposes of these standards and performance measures. The bill would require the department, in coordination with the board, to conduct necessary studies and investigations and would authorize the department and the board to jointly recommend to the Legislature a standard for indoor residential water use. The bill, until January 1, 2025, would establish 55 gallons per capita daily as the standard for indoor residential water use.*

Appendix B – Irrigation Master Plan (March 2023)



WATER EFFICIENCT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC # 3 RECYCLED WATER**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.3	Drip	0.81	0.37	115,037	42606	1,254,755
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	39,101	24136	710,818
Med Water Use (Tree)	0.5	Drip	0.81	0.62	0	0	-
High Water Use (Turf)	0.8	Overhead	0.75	1.07	4,073	4345	127,947
(1.12 Slope factor included in PA calculations)				*Average*	*Total*	*Total*	
				0.42	158,211	71,087	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
SLA-1	1	-	0	-
Recycled Water used	Totals	0	0	

Total Landscape Area 158,211
Statewide ETAF 0.45
ETWU Total 2,093,519
Maximum Allowed Water Allowance (MAWA)[e] 2,096,691

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	71087
Total Area	158211
Average ETAF	0.45

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 100%

All Landscape Areas		
Total ETAF x Area	71087	0.45 Non-Residential
Total Area	158211	0.81 Drip
Average ETAF	0.45	0.75 Overhead

WATER EFFICIENCT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC # 2 RECYCLED WATER**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.3	Drip	0.81	0.37	103,182	38216	1,125,448
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	34,991	21599	636,102
Med Water Use (Tree)	0.5	Drip	0.81	0.62	0	0	-
High Water Use (Turf)	0.8	Overhead	0.75	1.07	-	0	-
(1.12 Slope factor included in PA calculations)				*Average*	*Total*	*Total*	
				0.43	138,173	59,815	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
SLA-1	1	-	0	-
Recycled Water used	Totals	0	0	

Total Landscape Area 138,173
Statewide ETAF 0.43
ETWU Total 1,761,550
Maximum Allowed Water Allowance (MAWA)[e] 1,831,138

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	59815
Total Area	138173
Average ETAF	0.43

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 96%

All Landscape Areas		
Total ETAF x Area	59815	0.45 Non-Residential
Total Area	138173	0.55 Residential
Average ETAF	0.43	0.81 Drip
		0.75 Overhead

WATER EFFICIENCT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC #6 RECYCLED WATER (irrigated turf open space)**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.1	Drip	0.81	0.12	-	0	-
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	-	0	-
Fallow	0	N/A	0.81	0.00	0	0	-
High Water Use (Existing Open Space Turf)	0.8	Overhead	0.75	1.07	69,260	73877	2,175,687
				Average	*Total*	*Total*	
				0.00	69,260	73,877	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
Open Space Turf	1	69,260	69260	2,039,707
Recycled Water Used	Totals	69260	69260	

Total Landscape Area 69,260
Statewide ETAF 1.03
ETWU Total 2,175,687
Maximum Allowed Water Allowance (MAWA)[e] 2,957,575

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	73877
Total Area	69260
Average ETAF	1.07

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 74%

All Landscape Areas		
Total ETAF x Area	143137	0.45 Non-Residential
Total Area	138520	0.55 Residential
Average ETAF	1.03	0.81 Drip
		0.75 Overhead

Water Efficient Landscape Worksheet

Calculation based on an overage lot size of 6,188 SF
Estimate bldg and hardscape 0.47 2,909 SF
Estimate front / rear landscape 0.53 3,280 SF

Project Name : **Royal Vista (Potable Water from Private Lots)**

Reference Evapotranspiration (ETo) 54.6 Rowland Hts Residential Use Factor 0.55

Hydrozone#/Planting Description	Plant Factor (PF)	ETWU requirement Irrigation Method	ETWU requirement Irrigation Efficiency (IE)	ETWU requirement ETAF (PF/IE)	MAWA requirement Landscape Area (LA) (sq. ft.)	ETWU requirement ETAF x Area	Estimated Total Water Use (ETWU)
Regular Landscape Areas							
1)Low / Shrubs (front)(24%)	0.3	Drip	0.81	0.370	787	291.53	9,869
2)Med / Shrubs (front) (14%)	0.5	Drip	0.81	0.617	459	283.43	9,595
3)Low water use Shrubs (rear 42%)	0.3	Drip	0.81	0.370	1,377	510.18	17,270
4)High water use lawn (rear 20%)	0.8	Overhead	0.77	1.039	656	681.50	23,070
				Totals	3,280	1,766.63	59,804
Special Landscape Areas (SLA):							
				1	0	0	0
				1	0	0	0
				1	0	0	0
				Totals	0	0	0
					Estimated Total Water Use (ETWU)		**59,804**
					Maximum Allowed Water Allowance (MAWA)		**61,063**

Plant Water Use Type	Plant Factor	Irrigation method	Irrigation Efficiency
very low	0-0.1	overhead spray	0.75
low	0.1-0.3	drip	0.81
medium	0.4-0.6		
high	0.7-1.0		

Percentage of MAWA 98%

MAWA (annual gallons allowed)= (Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]

ccf of ETWU 80.6

ccf of MAWA 81.6

Where 0.62 is a conversion factor that converts acre-inches per acre/year to gallons per sq. ft./year. LA is the total landscape area in sq. ft, SLA is the total special landscape area in sq. ft., and ETAF is .55 for residential areas and 0.45 for non residential areas.

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	1,767
Total Area	3,280
Average ETAF	**0.54**

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas	
Total ETAF x Area	1,767
Total Area	3,280
Sitewide ETAF	**0.54**

PRIVATE LOT - SITE SUMMARY

	Water Use	Gal.	CCF	Total Lots included in estimate
	Estimated	14,053,945	18788.7	
	Maximum	14,349,908	19184.4	235
	Ave Lot Size (SF)	Number of Lots	Ave Lot Landscape (SF)	Total Lots Landscape (SF)
	6,188	235	3,280	770,730

Total area of private residential lots 1,454,307

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC # 4 RECYCLED WATER (irrigated turf open space)**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.1	Drip	0.81	0.12	-	0	-
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	-	0	-
Fallow	0	N/A	0.81	0.00	-	0	-
High Water Use (Existing Open Space Turf)	0.8	Overhead	0.75	1.07	253,084	269956	7,950,212
				Average	*Total*	*Total*	
				0.00	253,084	269,956	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
Open Space Turf	1	253,084	253084	7,453,324
Recycled Water used	Totals	253084	253084	

Total Landscape Area 253,084
Statewide ETAF 1.03
ETWU Total 7,950,212
Maximum Allowed Water Allowance (MAWA)[e] 10,807,320

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	269956
Total Area	253084
Average ETAF	1.07

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 74%

All Landscape Areas		
Total ETAF x Area	523040	0.45 Non-Residential
Total Area	506168	0.55 Residential
Average ETAF	1.03	0.81 Drip
		0.75 Overhead

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC # 1 RECYCED WATER**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.3	Drip	0.81	0.37	301,635	111717	3,290,056
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	103,043	63907	1,873,220
Med Water Use (Tree)	0.5	Drip	0.81	0.62	0	0	-
High Water Use (Turf)	0.8	Overhead	0.75	1.07	-	0	-
(1.12 Slope factor included in PA calculations)				*Average*	*Total*	*Total*	
				0.43	404,678	175,323	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
SLA-1	1	-	0	-
Recycled Water used	Totals	0	0	

Total Landscape Area 404,678
Statewide ETAF 0.43
ETWU Total 5,163,276
Maximum Allowed Water Allowance (MAWA)[e] 5,362,995

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	175323
Total Area	404678
Average ETAF	0.43

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 96%

All Landscape Areas		
Total ETAF x Area	175323	0.45 Non-Residential
Total Area	404678	0.55 Residential
Average ETAF	0.43	0.81 Drip
		0.75 Overhead

WATER EFFICIENCT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC # 5 RECYCED WATER**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.3	Drip	0.81	0.37	327,084	121142	3,567,638
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	107,485	66349	1,953,971
Med Water Use (Tree)	0.5	Drip	0.81	0.62	0	0	-
High Water Use (Turf)	0.8	Overhead	0.75	1.07	10,123	10798	317,997
(1.12 Slope factor included in PA calculations)				*Average*	*Total*	*Total*	
				0.42	444,692	198,289	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
SLA-1 High Water Turf	1	10,123	10123	298,122
Recycled Water used	Totals	10123	10123	

Total Landscape Area 444,692
Statewide ETAF 0.46
ETWU Total 5,839,607
Maximum Allowed Water Allowance (MAWA)[e] 6,191,403

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	198289
Total Area	444692
Average ETAF	0.45

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 94%

All Landscape Areas		
Total ETAF x Area	208412	0.45 Non-Residential
Total Area	454815	0.55 Residential
Average ETAF	0.46	0.81 Drip
		0.75 Overhead

NORTH

SCALE: 1" =200' - 0"
0 200 400 600 800

SMP ENVIRONMENTAL DESIGN
SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446

PROJECT DIMENSIONS INC

ROYAL VISTA RESIDENTIAL & PARKS PROJECT

MAJOR LAND DIVISION

Preliminary Landscape Plan
Irrigation Master Plan
FOR LOT MERGING, SUBDIVIDING, AND CONDOMINIUM PURPOSES
LOCATED IN UNINCORPORATED TERRITORY
OF THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

NO.	REVISIONS	DATE	BY
	IMP rev, base and calculations	10/18/22	
	IMP rev, base and calculations to poc #4 and poc #6	3/13/23	MRM

FUSCOE ENGINEERING
600 Wilshire, Suite 1470, Los Angeles, California 90017
tel 213.988.8800 fax 213.988.8803 www.fuscoe.com

Name Date

DATE: MARCH 06, 2023
JOB NUMBER: 0662-004 ENVIRONMENTAL DESIGN
SCALE: PER PLAN
DRAFTED BY: EC
CHECKED BY: AW

L.7.0 OF L.7.0

SKYE PATRICK
Library Director

LA COUNTY LIBRARY

October 27, 2022

Marie Pavlovic
LA County Planning
Subdivisions Section
320 West Temple Street
Los Angeles, CA 90012

COMMENTS FOR ROYAL VISTA RESIDENTIAL AND PARKS PROJECT - PROJECT NO. PRJ2021-002011-(1)

Dear Marie Pavlovic:

This is to provide comments regarding the Royal Vista Residential and Parks Project which proposes to redevelop six parcels of the existing golf course into four residential planning areas and two recreational/open space planning areas, for a total of 360 dwelling units and a trails and park system. Attached is a report of LA County Library's analysis of the development and the projected impact to services.

If you have any questions or need additional information, please contact Elsa Muñoz at (562) 940-8450 or EMunoz@library.lacounty.gov.

Very best,

Skye Patrick
County Librarian

SP:YDR:GR:EM

c: Grace Reyes, Administrative Deputy, LA County Library
Jesse Walker-Lanz, Assistant Director, Public Services, LA County Library
Ting Fanti, Departmental Finance Manager, Budget and Fiscal Services, LA County Library

https://lacounty.sharepoint.com/sites/publiclibrary/docs/staffservices/Documents/EIR/Royal Vista Residential Project/DRP/Royal Vista Residential Project NOP response.doc

LA COUNTY LIBRARY
COMMENTS FOR ROYAL VISTA RESIDENTIAL AND PARKS PROJECT

LA County Library evaluated the Royal Vista Residential and Parks Project located in Los Angeles County within the unincorporated community of Rowland Heights.

The project area is being serviced by the Rowland Heights Library, located at 1850 Nogales St., Rowland Heights, CA 91748, a facility with 14,863 sq. ft. of space, a collection of 67,754 books, magazines, and media, and 21 public access computers (as of June 30, 2022). LA County Library service level guidelines require a minimum of 0.50 gross square foot of library facility space per capita, 3.0 items (books and other library materials) per capita for regional libraries and 2.75 items per capita for community libraries, and 1.0 public access computer per 1,000 people served.

Rowland Heights Library is a community library and based on these guidelines does not currently meet the minimum requirements for the population of this service area. The current deficiency is 8,968 sq. ft. of facility space, 75,229 collection items, and 27 public access computers.

The proposed project involves the construction of a total of 360 dwelling units, with an estimated population increase of 1,127. This project will have a significant impact on library services since it will create a demand for additional materials and facility space and will affect the library's capacity to serve the residents of the area.

We estimate the total increased service cost related to the proposed project to be approximately $697K which is illustrated by the following chart:

Royal Vista Residential and Parks Project	Impact Per Capita (population of 1,127)	Estimated Costs	Total Costs
a. Building	564	$1,000 sq. ft.	$564,000
b. Land (4:1 land to building ratio)	2,256	$20 (Library Planning Area 4)	$45,120
c. Collections	3,099	$28	$86,772
d. Public Access Computers	1	$1,800	$1,800
Total			$697,692

In efforts to minimize the impact of residential projects on library services LA County Library collects a one-time Library Facilities Mitigation Fee (Developer Fee) at the time building permits are requested for all new residential dwellings located within the unincorporated areas of the County served by the LA County Library. The current Developer Fees are as follows, by Library Planning Area, these fees are subject to a CPI increase effective July 1:

FY 2022-23 Library Facilities Mitigation Fee Schedule

Planning Area	Fee per Dwelling Unit
Area 1 - Santa Clarita Valley	$1,096
Area 2 - Antelope Valley	$1,061
Area 3 - West San Gabriel Valley	$1,108
Area 4 - East San Gabriel Valley	$1,094
Area 5 – Southeast	$1,097
Area 6 – Southwest	$1,105
Area 7 - Santa Monica Mountains	$1,099

The Royal Vista Residential and Parks Project is within the LA County Library's Planning Area 4 – East San Gabriel Valley, current Developer Fee is $1,094 per dwelling unit for a total of $393,840 ($1,094 x 360 dwelling units).

LA County Library also collects an annual special tax which is levied on parcels within 10 cities (Cudahy, Culver City, Duarte, El Monte, La Cañada Flintridge, Lakewood, Lomita, Lynwood, Maywood, and West Hollywood) and unincorporated areas serviced by LA County Library. The Special Tax Rate for FY 2022-23 is $33.20 per parcel.

The LA County Library is open to discuss options regarding mitigation efforts and supporting the continued enhancement and delivery of library services to the residents of Rowland Heights.



FUSCOE ENGINEERING

Royal Vista Residential Project

INFRASTRUCTURE ASSESSMENT FOR WATER AND SEWER

Prepared For:
Project Dimensions

Prepared By:
FUSCOE ENGINEERING, INC.
600 Wilshire Boulevard
Los Angeles, CA 90017
213.988,8802
www.fuscoe.com

PROJECT MANAGER
ANDREW WILLRODT, PE

DATE PREPARED: November 2022

PROJECT NUMBER: 662-004

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1. INTRODUCTION

1.1 PROJECT DESCRIPTION

The 75.64-acre Royal Vista Residential Project ("Project Site", "Royal Vista Project") is located in the Unincorporated County of Los Angeles ("County"), in the northeastern most part of the Rowland Heights Community, California. The Project Site encompasses six non-contiguous parcels located both north and south of Colima Road, including Assessor Parcel Numbers (APNs) 8762-022-002, 8762-023-001, 8762-023-002, 8762-027-039, 8764-002-005, and 8764-002-006 (Los Angeles County Office of the Assessor, 2021), and located in the 20100 block of Colima Road, Rowland Heights, California 91789. The Project Site parcels generally constitute 13 holes and the driving range of the existing 27-hole Royal Vista Golf Club on Colima Road. The Project Site is bisected by Colima Road, comprised of four parcels north of Colima Road, and two parcels south of Colima Road.

The proposed Project would develop 360 residential units, a neighborhood park, and pocket park on the six existing parcels, redeveloping four of the existing golf course parcels into residential planning areas (Lots 1, 2, 3, and 5) and two into recreational/open space planning areas (Lot 4 and 6). Three of the four proposed residential planning areas (Lots 1, 2, and 5) will be subdivided into 200 detached single-family units, 58 duplexes, 30 triplexes, and the fourth residential planning area (Lot 3) will include 72 townhouse units within 14 structures.

1.2 SCOPE OF WORK

As part of the environmental impact report (EIR) for the Project, the purpose of this report is to analyze the potential impacts of the Project on the existing water and wastewater infrastructure systems. Therefore this technical report discusses the current location of existing water and wastewater infrastructure, analysis of potential Project impacts related to this infrastructure, and any applicable mitigation measures. For further implications regarding the water supply, refer to the Project's Water Demand Memorandum.

2. REGULATORY FRAMEWORK

2.1 WATER

The Project Site receives water supply from a local groundwater pumping well for irrigation purposes for 4 out of the 6 planning areas (Lots 1-3 and 6). The remaining portions of the Project Site (Lots 4 and 6) are assumed to receive water from the Walnut Valley Water District (WVWD) within Division IV since these lots currently have a domestic water meter. The proposed project will increase the usage of WVWD's water supply. As the primary water supplier to the community, WVWD must comply with all applicable regulations at the State and Federal level.

Applicable regulations affecting WVWD as a supplier of water include efficiency requirements, such as California Code of Regulations (CCR) Title 20, Chapter 4, Article 4, Section 1605, which requires all new plumbing fixtures to adhere to efficiency requirements, and CCR Title 24, Part 11, which requires a water use reduction of 20% above baseline for all homes, commercial, and state buildings. Refer to the Project's Water Demand Memorandum for more regulations and reporting on WVWD's supply capabilities.

The community of Rowland Heights is located in unincorporated Los Angeles County and has adopted the Los Angeles County Fire Code, including its associated fire flow requirements. Pursuant to County of Los Angeles Code Chapter 20.16.060, minimum fire flow requirements shall be determined by the Fire Chief or Fire Marshall based on land use, assuming a minimum operating pressure of 20 pounds per square inch (psi). Site-specific fire flow requirements of 1,000 gpm are required for this project since it is not in a fire hazard zone and consists of proposed single-family homes, condominium duplex, triplex, and townhouse units..

2.2 WASTEWATER

The Project is located within the Community of Rowland Heights in unincorporated Los Angeles County and is subject to Los Angeles County Code Chapter 20.32. The County does provide will-serve letters for new sewer connections and requires a sewer study/flow capacity analysis. New connections are subject to sewer connection fees.

As the Project site is located in the unincorporated County of Los Angeles, a portion of it falls under the jurisdiction of the Los Angeles County Sanitation Districts (LACSD), while another portion is outside the jurisdictional boundaries of the Districts and will require annexation into District No. 21. LACSD consists of 24 independent special districts and serves 5.6 million people in Los Angeles County. The service areas cover approximately 850 square miles and encompass 78 cities and unincorporated areas in the county. The sewer system is comprised of 1,400 miles of sewer lines, 49 pumping plants, and 11 wastewater treatment plants. The Project Site lies within the San Jose Water Reclamation Plant area. All biosolids and wastewater flows that exceed the capacity of the San Jose Creek WRP are diverted to the Joint Water Pollution Control Plant Sanitary Sewer System (JWPCP).

3. ENVIRONMENTAL SETTING

3.1 WATER

3.1.1 REGIONAL

WVWD maintains water infrastructure serving a portion of the Project area. WVWD is a sub-agency of Three Valleys Municipal Water District (TVMWD), and WVWD maintains 510 miles of distribution mains, 31 reservoirs and 17 pump stations throughout southern California regulated by the California Public Utilities Commission (CPUC). Located in Los Angeles County, the WVWD serves the City of Diamond Bar, portions of the cities of Walnut, Industry, West Covina, and Pomona, as well as the easterly unincorporated parts of Rowland Heights in Los Angeles County.

Water is purchased from the Metropolitan Water District of Southern California (MWD) through TVMWD. Water delivered to TVMWD's sub-agencies can be treated at MWD's Weymouth Treatment Plant located in the City of La Verne. Water can also be treated by TVMWD at its Miramar Water Treatment Plant located in the City of Claremont. WVWD obtains water from these districts for all of its system. The recycled water that is used by WVWD is obtained from the LACSD Pomona Water Reclamation Plant.

3.1.2 LOCAL

The northern portion of the Project Site along Walnut Dr is currently adjacent to a WVWD 12" domestic water line that runs underneath Walnut Dr. The middle portions and southern portions of the site along Colima Rd are currently adjacent to a WVWD 12" domestic water line and a 12" recycled water line. See Attachment A for an excerpt from the Water Atlas Map showing the Project location.

3.1.3 ON-SITE

As described above, the Project Site is currently occupied by an existing golf course. The existing golf course clubhouses and associated structures are all on offsite parcels that are completely separate from the Project Site and will remain in use under the proposed condition. The estimated existing water demand for the Project Site, which was calculated using the Estimated Total Water Use Equation (ETWU), is approximately 198 AFY. See Attachment F for the Irrigation Master Plan.

There are seven (7) fire hydrants located within the public Right-of-Way along portions of the Project Site on Colima Rd, Walnut Drive, Iluso Ave. Each fire hydrant is approximately 40-50 feet away from the project boundary. These fire hydrants connect to WVWD water lines.

3.2 WASTEWATER

3.2.1 REGIONAL

Regional wastewater service is provided by LACSD. Flows from the Project Site drain to the San Jose Creek Water Reclamation Plant (WRP) in the City of Industry. The WRP currently treats an

average of 58.5 million gallons of wastewater per day and has a total permitted capacity of 100 million gallons per day (MGD).

3.2.2 LOCAL

Wastewater at the Project Site is conveyed via existing 8", 10" and 12" public sewer lines owned and maintained by LA County. The 8" sewer lines currently exist underneath Tierra Luna and the current Project Site, between Colima Rd and Walnut Dr. As the existing sewer lines reach Walnut Dr, they outfall into 10" sewer line within the project boundary and a 12" line underneath Walnut Dr. Wastewater flow then travels north through Fairway drive, enters into a 15" and 18" sewer line and ultimately outfalls into a LACSD 30" trunk line near the intersection of San Jose Ave and Fairway Dr. A portion of the sewer lines within Fairway Dr are maintained by the City of Industry. These trunk line flows then drain to the San Jose Creek Water Reclamation Plant.

3.2.3 ON-SITE

There are currently no existing sewer lateral connections to the County's public sewer system from the Project Site per the existing site conditions. As previously mentioned in section 3.2.2., there are 8", 10" and 12" sewer lines running through the site between Colima Rd and Walnut Dr. These sewer lines connect to a 12" sewer line underneath Walnut Dr.

As noted above, there are currently no structures within the Project Site, thus creating zero sewer generation. The existing golf course clubhouses and associated structures are all on offsite parcels that are separate from the Project Site and will remain in use under the proposed conditions.

4. SIGNIFICANCE THRESHOLDS

California Environmental Quality Act (CEQA) significance criteria are used to evaluate the degree of impact caused by a development project on environmental resources such as hydrology and water quality. According to Appendix G, Section XIX of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would impact the thresholds listed for each utility below:

4.1 WATER

Would the project:

A. Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects?

4.2 WASTEWATER

Would the project:

A. Require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects?

C. 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?

5. METHODOLOGY

5.1 WATER

This report analyzes the potential impacts of the Project on the existing public water infrastructure by comparing the estimated Project water demand with the available capacity of the existing facilities. As sewer flows and water demands are correlated and similar for indoor water usage, the existing and proposed water demands are based on LACSD sewer generation factors for estimating indoor water usage. Additional water demands for the proposed landscaping features were calculated using the Estimated Total Water Use Equation (ETWU). The ETWU utilizes planting and irrigation efficiency estimates to calculate total annual water use for landscaping. WVWD will also provide confirmation of water supplies available for the proposed Project and adequate capacity to deliver water to the Project. Fire flows were tested on 4/2/2021 at Hydrant #283211, #283216, #283220, #283412, and #270117 for 1-hour durations through WVWD's Hydraulic Model in order to determine adequate flow at the minimum requirement of 20 psi.

5.2 WASTEWATER

This report analyzes the potential impacts of the Project on the existing private and public sewer infrastructure by comparing the estimated Project sewer flows with the available capacity of the existing facilities. LACSD sewer generation factors will be utilized to estimate existing and proposed sewer flows. A detailed sewer capacity study is included in Attachment B.

6. PROJECT IMPACTS

6.1 CONSTRUCTION

6.1.1 WATER

During construction, water will be required intermittently for dust control, equipment cleaning, soil grading and preparation during the early phases of the Project. The latter phases of construction normally require less water usage. Construction water demands are typically less than the long-term operational water demand of a project and are temporary. It is anticipated that existing water infrastructure would be sufficient to meet the limited, temporary water demand associated with construction of the Project. Therefore, impacts to water infrastructure due to construction activity are considered less than significant.

The Project will require construction of new, on-site water distribution lines to serve new buildings, as well as the potential relocation and extension of existing lines. Construction impacts associated with the installation of water distribution lines would primarily involve trenching in order to place the lines below surface. When considering impacts resulting from the installation of any required water infrastructure, all impacts are of a relatively short-term duration (i.e., months) and would cease to occur once the installation is complete. Installation of new water infrastructure will be limited to on-site water distribution, and minor off-site work associated with connections and possible extensions to the public main. Prior to ground disturbance, Project contractors would coordinate with WVWD to identify the locations and depth of all lines. Further, WVWD and the County of Los Angeles would be notified in advance of proposed ground disturbance activities to avoid water lines and disruption of water service. A site-specific Storm Water Pollution Prevention Plan (SWPPP) would also be prepared for the proposed construction activities and appropriate measures would be implemented to reduce or eliminate pollutants from entering the local drainage system. Therefore, Project impacts on water associated with construction activities would be temporary and less than significant.

6.1.2 WASTEWATER

Construction activities for the Project could result in temporary wastewater generation on-site. However, such use would be temporary and nominal when compared with the wastewater generated by the Project. In addition, construction workers would typically utilize portable restrooms and hand wash areas, which would not contribute to direct wastewater flows to the County's wastewater system. Thus, wastewater generation from Project construction activities is not anticipated to cause any measurable increase in wastewater flows.

Construction impacts associated with wastewater infrastructure would primarily be confined to trenching for miscellaneous utility lines and connections to public infrastructure. Installation of wastewater infrastructure will be limited to relocating and adding on-site wastewater distribution and minor off-site work associated with connections to the public main. No upgrades to the public main are anticipated. Any work that affects services to the existing sewer lines will be coordinated with the County of Los Angeles. Furthermore, construction management and access plans would ensure safe pedestrian access as well as emergency vehicle access and safe vehicle travel. Moreover, when considering impacts resulting from the installation of any required wastewater infrastructure, all impacts are of a relatively short-term duration and would cease to

occur once the installation is complete. In addition, A site-specific Storm Water Pollution Prevention Plan (SWPPP) would also be prepared for the proposed construction activities and appropriate measures would be implemented to reduce or eliminate pollutants from entering the local drainage system. Therefore, Project impacts on wastewater associated with construction activities would be less than significant.

6.2 OPERATION

6.2.1 WATER

6.2.1.1 WATER DEMAND AND INFRASTRUCTURE ASSESSMENT

As noted above, as indoor water and sewer flows are similar, it is assumed that the sewer flow calculations within Attachment B are also representative of water flow increases. Therefore, it is estimated that indoor potable water flows will be approximately 0.174 cfs (112,263 GPD) as noted in Attachment B and the Sewer Area Study. Outdoor potable water flows are anticipated to be approximately 38,500 GPD and a recycled water demand of 56,500 GPD for recycled water flows. Potable water will be utilized for on-site private lots whereas recycled water infrastructure will be utilized for common area landscaping. See Appendix F for the Irrigation Master Plan that quantifies water flow increases for landscaped areas.

Water infrastructure is assessed for normal flow conditions as well as fire flow capacity. Los Angeles County Fire Code requirements (Chapter 20.16.060) allow the fire chief or fire marshal to determine the minimum fire flow for proposed projects. The site-specific conditions of approval require a demonstration of 1,000 GPM at 20 psi residual pressure for a duration of 1 hour.

A fire flow test for the Project site was conducted on 4/2/2021, using the 5 hydrants located near the Project Site (Hydrants #283221, #283216, #283220, #283412. #270117, See Attachments A and D) to determine if adequate capacity exists within the 12" and 8" water mains. With the size and addition of private streets for the proposed Project Site, new hydrants will need to be included in the water infrastructure design to meet fire department requirements. At the required residual pressure of 20 psi, a fire flow of 3,283 gpm was provided for the duration of the test (1 hour). Out of the 5 test that were requested, 3,283 gpm was the lowest from an 8" main. The available flow of 3,283 gpm satisfies and exceeds the site-specific requirements of 1,000 gpm (as well as the anticipated flows referenced above). Under proposed conditions, and additional fire hydrants will be installed within proposed private streets for the residential parcels. The fire flow results indicate adequate fire flow availability and infrastructure capacity within the 8" and 12" water main for the proposed Project. See Attachment D for fire flow test results.

Based on WVWD's will serve letter and the satisfactory results of the fire flow test, impacts on water infrastructure would be less than significant.

6.2.2 WASTEWATER

6.2.2.1 SEWER GENERATION

As shown in Attachment C, the Project's estimated wastewater generation is 0.174 cfs, representing a net increase in wastewater generation at the Project Site. See sections below for a sewer infrastructure assessment.

6.2.2.2 INFRASTRUCTURE CAPACITY

The Project will be served primarily by an existing 8" sewer line located in Tierra Luna and relocated 8" and 10" sewer lines going through the northwestern portion of the Project Site that outfalls into a 12" sewer line in Walnut Dr. Each residential planning area will include private streets that will contain proposed sewer lines or relocated sewer lines. The County of Los Angeles will require a sewer connection permit with LACSD and associated connection fees. These fees will be utilized to cover any infrastructure improvements required as a result of Project implementation. The proposed Project allows for up to 360 units, as presented in this report. Lot 3 that includes 72 residential units, will outfall into a sewer line segment in Walnut Dr which results in an allowable d/D ratio of 1.4. Lots 1, 2, and 4-6, which include 288 Residential units, outfall into a separate sewer line segment, downstream of Lot 3, in Walnut Dr, which results in an allowable d/D ratio of 0.65 with all proposed and existing accumulated wastewater flow per Attachment B. With a measured d/D at one existing sewer line point of connection being between 1.00-1.50 reference range for analysis, one segment of sewer main in Walnut Dr will need to have a sewer flow test if maintenance records warrant per LA County Policy. Per Attachment B, one sewer line segment downstream of the proposed project is also between the allowable ratio of 1.00-1.50, thus needing a maintenance record check. The sewer mains in and around the Project Site are anticipated to have adequate capacity, and additional sewer main improvements will not be required to be upsized outside of the project Site. A site-specific Sewer Study was submitted to the County (Sewer Area Study dated 7/6/2021, see Attachment B).

Community and County flows drain to LACSD wastewater infrastructure and are ultimately conveyed to the San Jose Creek Water Reclamation Plant (WRP). The WRP has a capacity of 100 MGD and currently treats approximately 58.5 MGD. The Project's estimated wastewater generation increase of 0.174 cfs (0.1 MGD) comprises less than 0.3 percent of the remaining available capacity of the WRP. In addition, a Will-Serve Letter dated 4/1/2021 was provided by LACSD for the proposed project (Attachment E). Therefore, based on LACSD's will serve letter and the available wastewater treatment capacity, impacts on wastewater infrastructure would be less than significant.

7. IMPACT ASSESSMENT

7.1 WATER

Impact A. Require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects?

The proposed Project will increase the potable water flows for the site by 0.174 cfs. A will serve letter was provided for the Project by WVWD on 3/18/2021, and it is not anticipated that the 12" lines located in Walnut Dr and Colima Rd will need to be upsized as a result of Project buildout. As noted in Section 6.2.1.3, a fire flow tests were performed for the site and returned a minimum fire flow of 3,283 gpm at 20 psi for the 1-hour test duration, exceeding the site-specific requirement of 1,000 gpm. This also indicates adequate infrastructure capacity in the 12" water main serving the site. In the case of any modifications to water transmission lines or laterals, all applicable local, regional, and state-level construction management ordinances shall be followed, minimizing environmental impact. Impacts to water infrastructure will be less than significant.

7.2 WASTEWATER

Impact A. Require or result in the relocation or construction of new or expanded wastewater facilities, the construction or relocation of which could cause significant environmental effects?

Under proposed conditions, the Project site will be served by the same County of LA infrastructure as under existing conditions. Flows are anticipated to increase under Project buildout by 0.174 cfs. A site-specific Sewer Study dated 7/6/2021 was submitted to the County and LACSD has provided a will-serve letter for the Project site. The County allowable d/D of the sewer mains throughout the site are all below 1.00, with one occurrence between 1.00-1.50. Since the measured d/D ratios are below 1.50 for on-site analysis, it is not anticipated that any County sewer lines will need to be upsized as a result of the Project. In the case where infrastructure needs to be upsized, the County of LA utilizes sewer impact fees to fund construction of new lines. For any new connections, laterals, or trenching that is required as a part of Project construction, all pertinent local, regional, and state-level regulations will be followed, minimizing environmental impact. Impacts to wastewater facilities will be less than significant.

Impact C. 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?

Wastewater generated by the Project would be conveyed via the existing wastewater conveyance systems for treatment at the San Jose Creek Water Reclamation Plant. As noted in Section 3.2.1, existing design capacity of the plant is approximately 100 million gallons per day (MGD) and the existing average daily flow for the system is approximately 58.5 MGD. The Project's total estimated wastewater generation increase of 0.1 MGD summarized above comprises less than 0.3 percent of the available 41.5 MGD capacity in the system. Through appropriate planning

such as Sewer Master Plans and long-term flow projections, LACSD will be able to effectively serve the Project and update sewer infrastructure as needed. Impacts to services provided by the wastewater treatment provider will be less than significant.

8. CUMULATIVE IMPACTS ASSESSMENT

8.1 WATER

The Project has a will serve letter from WVWD for the 12-inch water lines along Walnut Dr and Colima Rd that are adjacent to the Project Site. Analysis of more detailed development plans will require that the Project construct additional facilities for the residential planning areas prior to the provision of water service. The additional facilities will consist of a local water system within the residential planning areas that connect to the existing 12-inch water lines in Walnut Dr and Colima Rd. At this time, WVWD has not indicated that any upgrades to the existing 12-inch water lines are needed at this time.

Additionally, WVWD keeps records of proposed capital improvements within their System area[1] to account for various infrastructure upgrades to support existing service and new developments. This highlights the WVWD's ability to successfully track and manage infrastructure needs of its service area. Four projects relating to water distribution, and ongoing improvements, are currently in development and three projects are in planning. Of those listed, none are within proximity to the Project Site. WVWD regularly updates this list of projects and can request additional upgrades to infrastructure if necessary. WVWD is able to account for changes in development around the Project Site and can mitigate for deficiencies as needed. Therefore, cumulative impacts on water supply would be less than significant.

8.2 WASTEWATER

The Project will result in the additional generation of sewer flow. However, as discussed above, a sewer area study completed by Fuscoe Engineering (Attachment B) is currently under review by the County with approval anticipated, and a will-serve letter has been provided by LACSD for the Project site. The sewer area study concluded that adequate capacity within the sewer infrastructure exists to serve the Project.

Additionally, the County keeps records of all proposed developments in the County and the immediately adjacent area. Of the 21 projects currently in development or planning within the County or immediately adjacent areas, none are within a mile of the Project Site.

The County regularly updates this spreadsheet to keep track of various developments that may impact infrastructure. The County has the ability to charge impact fees and can request additional upgrades to infrastructure if necessary. The County is also able to account for changes in development around the Project Site and can mitigate for deficiencies as they arise.

The County also corresponds periodically with regional wastewater LACSD to confirm regional infrastructure capacity exists. Wastewater generated by the Project would be conveyed via the existing LACSD and City of Industry wastewater conveyance systems for ultimate treatment at the San Jose Creek Water Reclamation Plant (WRP) owned and maintained by LACSD. The Project's total estimated wastewater generation increase of 0.1 mGD comprises less than 0.3 percent of the available capacity in the WRP system (41.5 MGD). Based on these forecasts, the

[1] 2021 WVWD Project List. 2019. https://www.wvwd.com/projects

Project's increase in wastewater generation would be adequately accommodated by the San Jose Creek Water Reclamation Plant. Related projects must go through the same analysis to determine if any facilities will need to be upgraded to accommodate for the increase in capacity. It is not anticipated that increases in sewer flows from Project buildout, or redevelopment of the area surrounding the Project Site, including the 21 projects currently under construction for LACSD, will adversely impact the capacity of local or regional wastewater infrastructure or the wastewater treatment plant. Therefore, cumulative impacts would be less than significant.

ATTACHMENT A

WATER ATLAS EXCERPT

LEGEND

Points:

- Abandoned Valve
- Access Manhole
- AirVac
- Backflow Device
- BlowOff
- Closed Valve
- Corporation Stop
- Coupling
- Dead End
- Electrolysis TestStation
- Emergency Intertie
- FireService Connection
- Hops
- Hydrant
- Hydro Electric Generator
- Hydro Pneumatic Tank
- Inspection Manhole
- Manhole
- Meter
- New Point
- Open Valve
- Pump
- Reducer
- Removed Valve
- Repair
- Reservoir
- Sampling Point
- Surge Tank
- Well

Lines:

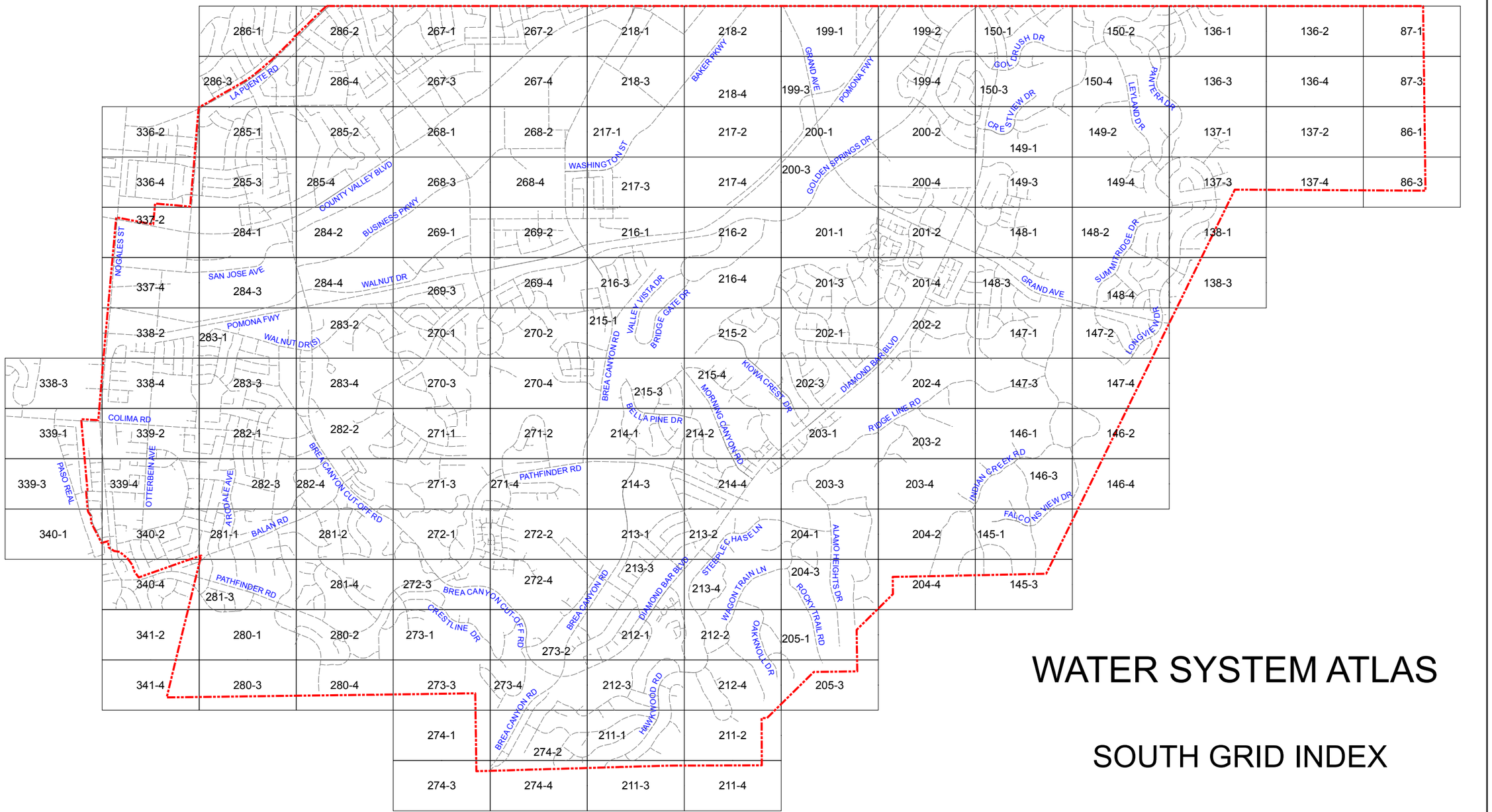
- 1000H
- 1000R
- 1043
- 1050
- 1070
- 1175R
- 1200D
- 1200W
- 1275H
- 1350
- 1350H
- 770
- 875
- 930
- 970R
- Drain
- Other
- OCF
- Offline
- New Arc
- Joint Water Line
- Badillo Grand
- Recycled Water System
- AirVac Lateral
- BlowOff Lateral
- Fire Service Lateral
- Hydrant Lateral
- Intertie Lateral
- Master Meter Lateral
- Service Lateral

Polygons:

- Access
- Concrete Encasement
- Facility Parcel
- New Poly
- Other
- Pressure Reducing Station
- Public Utility
- Pump Station
- Reservoir
- Steel Casing
- Vault
- Water

Landbase Lines:

- Parcels
- City Boundary
- CenterLines



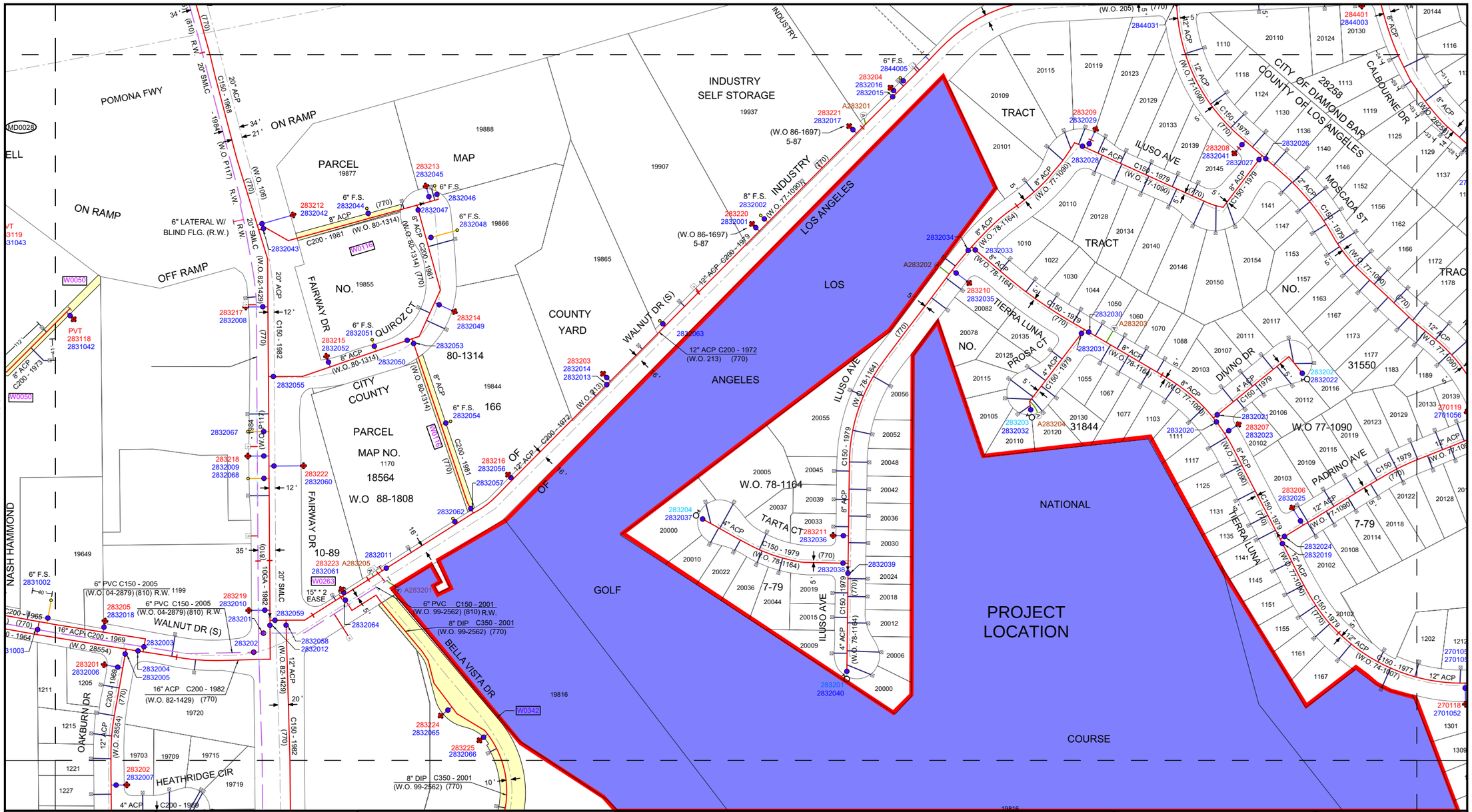
WATER SYSTEM ATLAS

SOUTH GRID INDEX

284-4

283-1

270-1

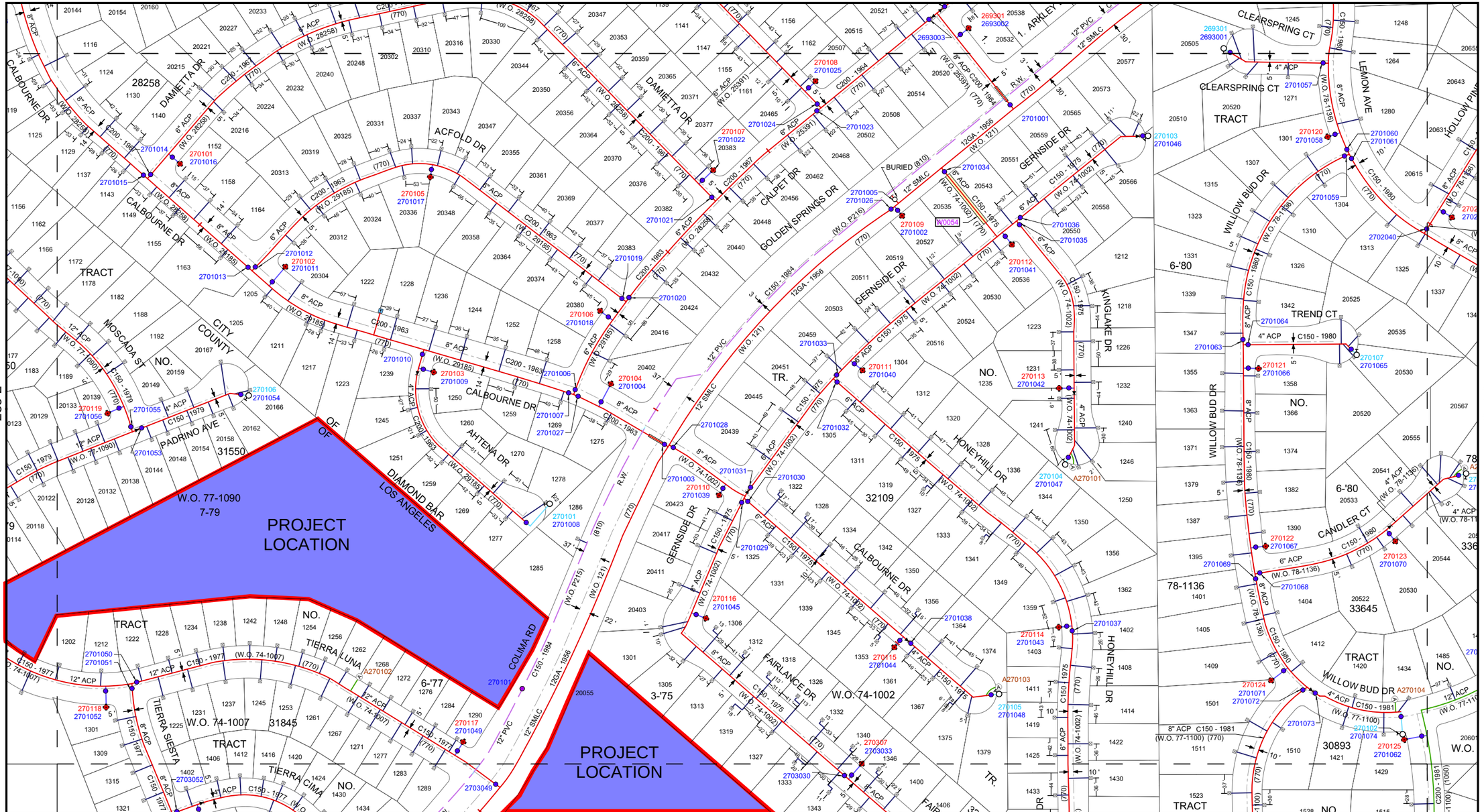


	F.H.	Valves	A.V.	B.O.	Meters	Distribution	Transmission
Domestic	25	69	5	4	142	9306.31	1471.38
Recycled	-	2	1	-	6	1014.76	1608.06
BGTM	-	-	-	-	-	-	-
PWR	-	-	-	-	-	-	-
NSL-Recycled	-	-	-	-	-	-	-

283-4

NOTICE TO USERS OF THIS ATLAS

The locations of District underground facilities, as provided, are believed to be accurate. If more detailed information is required, the District's Engineering Department should be contacted. Any excavator shall take all the steps necessary to avoid contact with underground facilities, which may result in injury to personnel or damage to facilities. The final determination of exact location, and the cost of repair to damaged facilities, is the responsibility of the excavator.



270-1	Scale: 1" = 200' NOT FOR CONSTRUCTION	**WALNUT VALLEY WATER DISTRICT**	N	NOVEMBER-2008	270-1

	F.H.	Valves	A.V.	B.O.	Meters	Distribution	Transmission
Domestic	26	75	4	7	270	14772.59	-
Recycled	-	1	-	-	1	2254.84	-
BGTM	-	-	-	-	-	-	-
PWR	-	-	-	-	-	-	-
NSL-Recycled	-	-	-	-	-	-	-

270-3

NOTICE TO USERS OF THIS ATLAS

The locations of District underground facilities, as provided, are believed to be accurate. If more detailed information is required, the District's Engineering Department should be contacted. Any excavator shall take all the steps necessary to avoid contact with underground facilities, which may result in injury to personnel or damage to facilities. The final determination of exact location, and the cost of repair to damaged facilities, is the responsibility of the excavator.

283-2

283-3

270-3

PROJECT LOCATION

PARCEL MAP NO. 20814 W.O. 91-2026 10-92

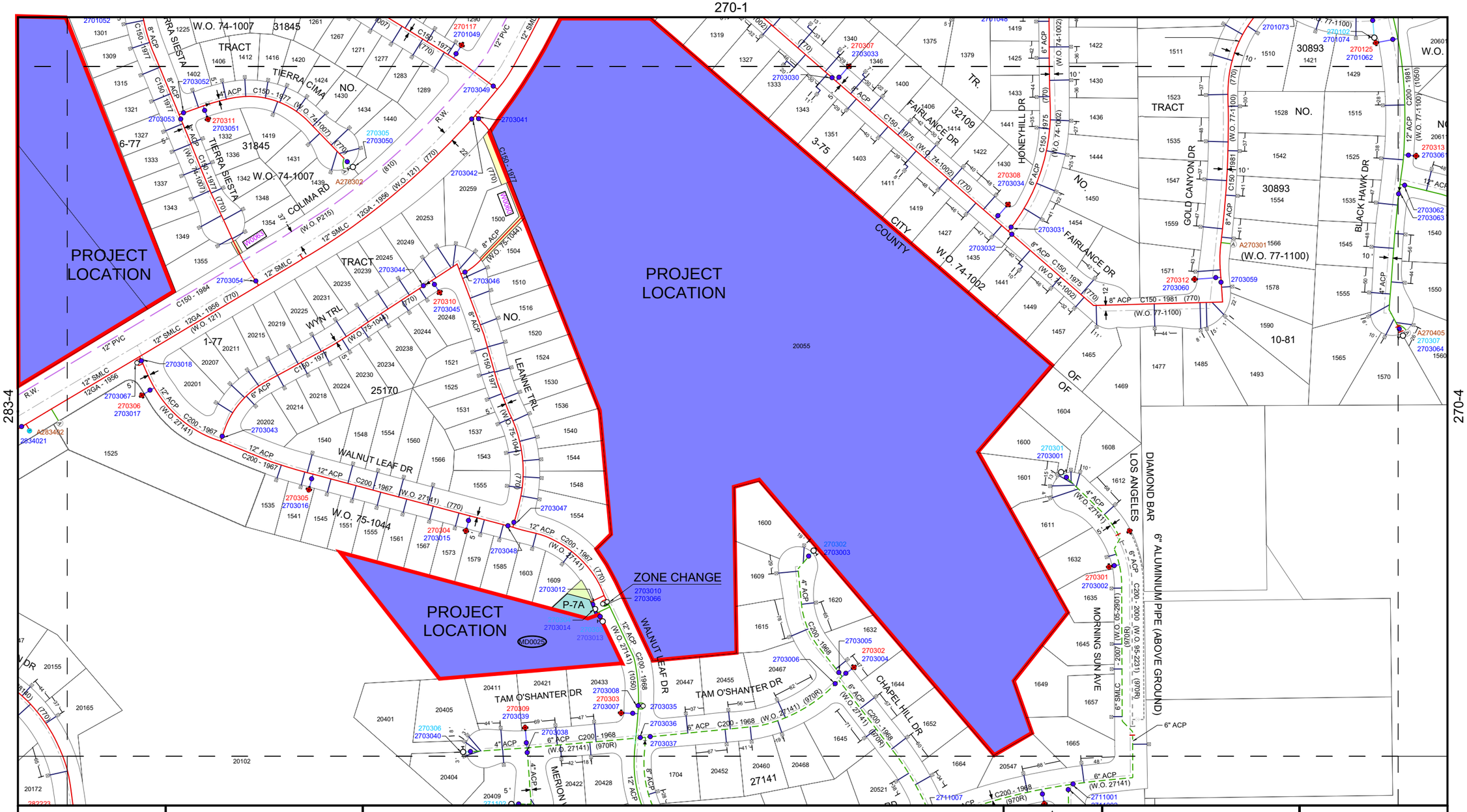
283-4	Scale: 1" = 200' NOT FOR CONSTRUCTION	WALNUT VALLEY WATER DISTRICT	JULY-2008	283-4

	F.H.	Valves	A.V.	B.O.	Meters	Distribution	Transmission
Domestic	12	37	2	3	93	7822.99	-
Recycled	-	3	1	-	2	1577.84	1710.5
BGTM	-	-	-	-	-	-	-
PWR	-	-	-	-	-	-	-
NSL-Recycled	-	-	-	-	-	-	-

282-2

NOTICE TO USERS OF THIS ATLAS

The locations of District underground facilities, as provided, are believed to be accurate. If more detailed information is required, the District's Engineering Department should be contacted. Any excavator shall take all the steps necessary to avoid contact with underground facilities, which may result in injury to personnel or damage to facilities. The final determination of exact location, and the cost of repair to damaged facilities, is the responsibility of the excavator.



270-3	Scale: 1" = 200' NOT FOR CONSTRUCTION	**WALNUT VALLEY WATER DISTRICT**	N	NOVEMBER-2008	270-3

	F.H.	Valves	A.V.	B.O.	Meters	Distribution	Transmission
Domestic	12	63	2	6	175	10319.54	-
Recycled	-	-	-	-	-	1357.01	-
BGTM	-	-	-	-	-	-	-
PWR	-	-	-	-	-	-	-
NSL-Recycled	-	-	-	-	-	-	-

271-1

NOTICE TO USERS OF THIS ATLAS

The locations of District underground facilities, as provided, are believed to be accurate. If more detailed information is required, the District's Engineering Department should be contacted. Any excavator shall take all the steps necessary to avoid contact with underground facilities, which may result in injury to personnel or damage to facilities. The final determination of exact location, and the cost of repair to damaged facilities, is the responsibility of the excavator.

ATTACHMENT B

SEWER AREA STUDY

ATTACHMENT C

WALNUT VALLEY WATER DISTRICT WILL SERVE LETTER

WALNUT VALLEY WATER DISTRICT

271 South Brea Canyon Road Walnut, California 91789-3002
(909) 595-7554 • (626) 964-6551
www.wvwd.com • Fax: (909) 444-5521

BOARD OF DIRECTORS

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President
Election Division V

Jerry Tang
First Vice President
Election Division I

Edwin M. Hilden
Second Vice President
Election Division II

Kevin Hayakawa
Assistant Treasurer
Election Division IV

Theresa Lee
Director
Election Division III

STAFF

Erik Hitchman, P.E.
General Manager
Chief Engineer
Secretary

Brian Teuber
Assistant General Manager
Second Assistant Treasurer

Sheryl L. Shaw, P.E.
Director of Engineering

Lily Lopez
Director of External Affairs

Alanna Diaz
Director of HR and
Risk Management

Thomas M. Monk
Director of Operations

Gabriela Sanchez
Executive Secretary

LEGAL COUNSEL

James D. Ciampa

M□r□□ □□□□□□□□

WILL SERVE LETTER

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The referenced development ("Development"), located in the City of Rowland Heights, Los □n□e□es □o□nt□□□ □□i□orni□□□ies wit□in t□e ser□i□e □re□ o□t□e W□n□t □□□e□W□ter Distri□t ("District"). The District is prepared to provide water service for the Developer ("Developer") to the Development subject to the following conditions and reservations:

□□ De□e□oper s□□□s□□□ it to Distri□t □□p□ns□desi□ns□□nd □re dep□rt□ent re□□ire□ents □or t□e De□e□op□ent in order □or t□e Distri□t to desi□n t□e ne□ess□r□w□ter distri□□tion s□ste□ □nd ot□er □□i□ities re□□ired □or t□e De□e□op□ent in □□□ord□n□e wit□ Distri□t R□□es □nd Re□□□tions□

□□ De□e□oper s□□□□r□nt Distri□t □n□ □nd □□e□se□ents re□□ired □or w□ter ser□i□e□ together with a policy of title insurance guaranteeing District's title to such easements.

□□ In □□□ord□n□e wit□ t□e R□□es □nd Re□□□tions□De□e□oper s□□□p□□ □□re□□ired □ees □nd □□□r□es□in□□din□ □n□ re□□ired deposit □□o□nts□in order to pro□ess p□□ns□ desi□n□□nd □o□p□ete □onstr□□tion o□t□e re□□ired on□site □nd o□□site i□pro□e□ents□

□□ T□e De□e□oper s□□□□o□p□□wit□ t□e R□□es □nd Re□□□tions in □or□e □nd e□e□t □t t□e ti□e w□ter ser□i□e is re□□ested □nd □s t□ose R□□es □nd Re□□□tions □ □□□e □□ended □ro□ ti□e to ti□e in□□□din□□□□t not li□ited to□t□e p□□□ent o□□n□ □nd □□□District □□□r□es□ees□□nd e□penses ne□ess□r□to pro□ide ser□i□e to t□e De□e□op□ent□

□□ T□e De□e□oper □□□now□d□es t□□t w□ter ser□i□e to t□e De□e□op□ent s□□□□□e s□□□e□t to □□□i□□□i□it□ o□w□ter□ In re□□n□ □pon t□is represent□tion to pro□ide w□ter ser□i□e□ De□e□oper is □w□re o□t□e restri□tions □ont□ined □erein □nd t□e re□i□n□e □□t□e Distri□t □pon t□e Metropo□it□n W□ter Distri□t o□So□t□ern □□li□orni□□s its so□e s□pp□ier o□w□ter □or do□esti□ p□rposes□ W□i□e t□ere is □□rrent□□ no pro□i□ition □□□inst □ddition□□ □onne□tions□t□e Distri□t □□s t□e □□t□ori□□to red□□e □nd restri□t ser□i□e □onne□tions□ T□e De□e□oper □rt□er □□□now□d□es t□□t t□is □etter does not □onsti□te □n□ □□□r□nt□ t□□t w□ter ser□i□e wi□□□e □□□i□□□□e □or t□e De□e□op□ent □t t□e ti□e o□□onne□tion□

□□ De□e□oper □□rees t□□t t□is w□ter ser□i□e □etter is e□□□□si□e to t□e De□e□op□ent des□ri□ed □□o□e □□nd n□□ □er o□□nits□i□indi□□ted□□nd □ □□ not □e tr□ns□erred or

assigned to any other person or for any other purpose without the District's written consent.

6. Provision of water service to the Development is contingent upon the Developer meeting the requirements of the rules and regulations of the District and such other governmental entities having jurisdiction over such Development.

7. This letter and any representations made herein shall become null and void twelve months from the date hereof if the water distribution system has not been installed. The Developer shall not be entitled to any water connections not made at the time of the expiration of this letter.

8. At any time prior to connection and upon binding the Board of Directors that the District is unable to serve the property for reasons beyond its control, this letter shall be revoked by the District.

9. The Developer for itself and on behalf of its successors agrees to defend at Developer's expense, any action brought against the District, its agents, officers or employees because of the issuance of any approvals or authorizations obtained herein or in the alternative to reimburse such approvals. The Developer agrees to reimburse the District for any costs, fees or expenses the District may incur as a result of any such determination. Developer further agrees that in defending the District, such attorneys shall be employed by the District's choice and the expense of which shall be paid by Developer.

10. Service pursuant to this letter shall be in accordance with the Rules and Regulations as they may be amended from time to time. By issuing this letter the District does not guarantee any specific quantities, pressures or flows with respect to service provided by the District.

If you concur with the above please sign and return a copy of this letter to the undersigned. If you have any questions please contact me at the Rose at at.

Very truly yours,

WATER DISTRICT

Sheryl L Shaw

Sheryl Shaw
Director of Engineering

Accepted this day of

DEVELOPER

Signature

Print Name

Title

ATTACHMENT D

FIRE FLOW TEST RESULTS

WALNUT VALLEY WATER DISTRICT

271 South Brea Canyon Road Walnut, California 91789-3002
(909) 595-7554 • (626) 964-6551
www.wvwd.com • Fax: (909) 444-5521

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Election Division IV

Theresa Lee
Director
Election Division III

STAFF

Erik Hitchman, P.E.
General Manager
Chief Engineer
Secretary

Brian Teuber
Assistant General Manager
Second Assistant Treasurer

Sheryl L. Shaw, P.E.
Director of Engineering

Lily Lopez
Director of External Affairs

Alanna Diaz
Director of HR and
Risk Management

Thomas M. Monk
Director of Operations

Gabriela Sanchez
Executive Secretary

LEGAL COUNSEL

James D. Ciampa

March 31, 2021

Mr. Jon Conk
Project Dimensions
600 Wilshire Boulevard, Suite 1470
Los Angeles, CA 90017

RE: Fire Flow Test – Hydraulic Model for 19816 Walnut Drive (S), Walnut
APN 8762-023-001, FH No. 283-2-11

Dear Mr. Conk:

Due to current imported water supply conditions and as part of the District's ongoing water conservation measures, the requested fire flow was simulated using the District's hydraulic model. There have not been any significant changes to the system conditions. The model is accurate within 8-10 psi. Actual system conditions can vary depending on the time of day and actual tank levels.

If you have any questions, please contact Vince De La Rosa at Ext. 297.

Very truly yours,

WALNUT VALLEY WATER DISTRICT

Ginger S. Han, P.E.
Senior Civil Engineer

GH:vd

Enclosures

FORM 195
Rev. 11/06/2019

COUNTY OF LOS ANGELES FIRE DEPARTMENT
FIRE PREVENTION DIVISION

Fire Prevention Engineering
5823 Rickenbacker Road
Commerce, CA 90040
Telephone (323) 890-4125 Fax (323) 890-4129

Information on Fire Flow Availability for Building Permit

For One and Two Family Dwellings, Townhomes, and Accessory Dwelling Units

INSTRUCTIONS:

Complete parts I, II (A), and II (B)

Verifying fire flow, fire hydrant location and fire hydrant size.

PROJECT INFORMATION
(To be Completed by Applicant) Fire Hydrant 283211

PART I

Building Address: 19816 Walnut Dr

City or Area: Walnut CA 91789 APN 8762-023-001

Nearest Cross Street: Tarta Ct and Iluso Ave

Distance of Nearest Cross Street: 40'

Property Owner: Jon Conk from Project Dimensions (Owner Rep.) Telephone: (949) 4476-2246

Address: 600 Wilshire Blvd, Suite 1470 (Applicant address) Telephone: 213-542-5632

City: Los Angeles Zip Code 90017

Occupancy (Use of Building): Single Family Residential Sprinklered: Yes ☐ No ☐

Type of Construction N/A

Square Footage: N/A Number of Stories: N/A

Alex Flores

Applicant's Signature

03/25/2021
Date

PART II (A) **INFORMATION ON FIRE FLOW AVAILABILITY**
(Part II A and II B to be completed by Water Purveyor)

The distance from the fire hydrant to the property line is approximately 281 feet

feet via vehicular access. The fire flow services will be rendered from a 8-inch

inch diameter water main. The hydrant is located on west side of Iluso Avenue
(Direction/side) (Street)

45' +/- (Feet) north (Direction) of Tarta Court (Nearest Cross - Street)

Static PSI 99 Residual PSI 84 Orifice size n/a Pitot n/a

Fire Flow at 20 PSI 3,283 gpm for one hour duration ☐ Flow Test Date / Time _____
☒ Hydraulic model

Domestic Meter Size n/a

PART II (B)

WALNUT VALLEY WATER DISTRICT — Water Purveyor

V. De La Rosa — Signature

(909) 595-1268 — Phone Number

APRIL 2, 2021 — Date

CIVIL ENGINEERING ASSISTANT — Title

PART III **Conditions for Approval by the Building Department**
(To be Completed by Building Department)

The building permit may be issued for new or additions to detached one and two family dwellings, townhomes, and accessory dwelling units when the above information is completed and shows that the following minimum requirements are met and the property is not located in a Fire Hazard Severity Zone.

- The water system is capable of delivering at least 1000 GPM at 20 PSI for one-hour if non-sprinklered.
- The water system is capable of delivering at least 500 GPM at 20 PSI for one-half hour if sprinklered.
- The total area of the entire structure is less than 3,600 square feet.
- No portion of the lot frontage to the public fire hydrant shall exceed 450 feet via vehicular access.
- All portions of the proposed construction must be within 150 feet of a vehicular access roadway that is a minimum of 20 feet wide, paved with concrete or asphalt and does not exceed 15% grade.

APPROVED BY _____ DATE _____ OFFICE _____

This Information is Considered Valid for Twenty Four Months

When the project does not meet all of the above requirements for approval by the **Building Department,** the project must be sent to the **Fire Prevention Division** for approval before a Building Permit can be issued by the **Building Department**.

Walnut Valley Water District
271 S Brea Canyon Rd,
Walnut, CA
(909) 595-1268
https://www.wvwd.com

flow report

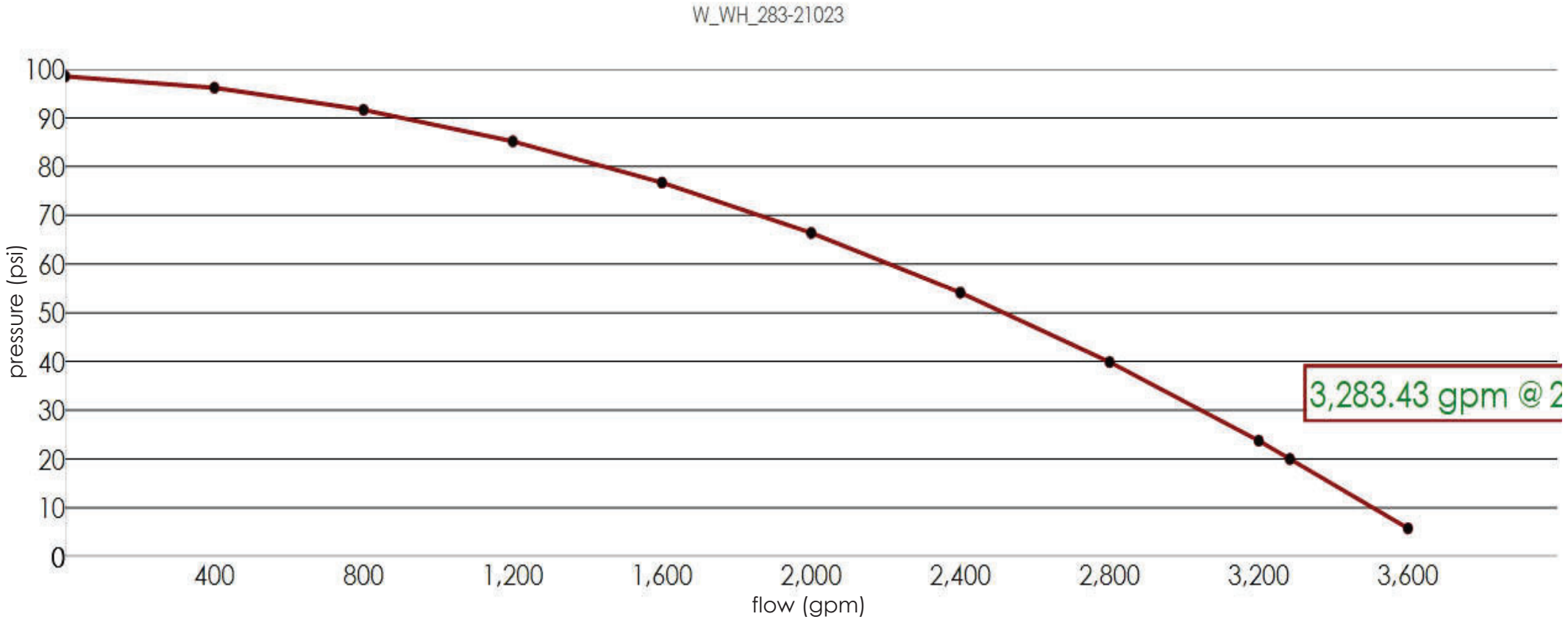
19816 Walnut Drive (S), Walnut (Ex. F.H. No. 283-2-11)

SEDARU

hydrant curve

static pressure (psi)	99	required fire flow (gpm)	1,250
residual pressure (psi)	84	required minimum pressure (psi)	20

hydrant flow @ 20 psi
3,283 gpm



hydrant data

flow (gpm)	0	400	800	1,200	1,600	2,000	2,400	2,800	3,200	3,283	3,600
pressure (psi)	98.51	96.17	91.64	85.18	76.71	66.39	54.14	39.90	23.75	20.00	5.77

Walnut Valley Water District
271 S Brea Canyon Rd,
Walnut, CA
(909) 595-1268
https://www.wvwd.com

flow report

19816 Walnut Drive (S), Walnut (Ex. F.H. No. 283-2-11)

SEDARU

location

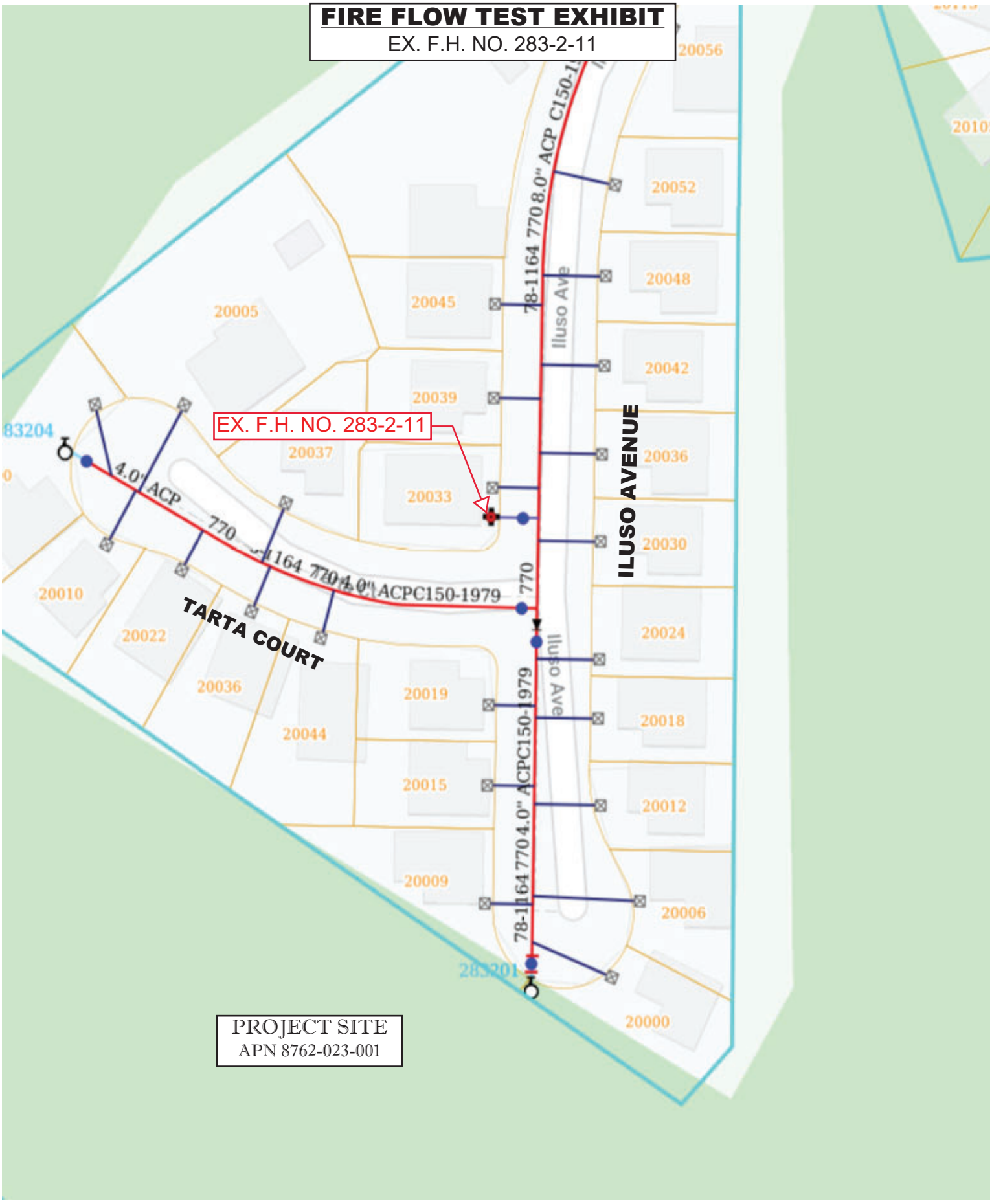
static pressure (psi)	99	required fire flow (gpm)	1,250
residual pressure (psi)	84	required minimum pressure (psi)	20

hydrant flow @ 20 psi
3,283 gpm



FIRE FLOW TEST EXHIBIT

EX. F.H. NO. 283-2-11



1" = 94 ft	19816 Walnut Drive (S) City of Walnut	03/31/2021	

This map may represents a visual display of related geographic information. Data provided here on is not guarantee of acutual field conditions. To be sure of complete accuracy, please contact the responsible staff for most up to date information.

WALNUT VALLEY WATER DISTRICT

271 South Brea Canyon Road Walnut, California 91789-3002
(909) 595-7554 • (626) 964-6551
www.wvwd.com • Fax: (909) 444-5521

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First Vice President
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Alanna Diaz
Director of HR and
Risk Management

Thomas M. Monk
Director of Operations

Gabriela Sanchez
Executive Secretary

LEGAL COUNSEL

James D. Ciampa

March 31, 2021

Mr. Jon Conk
Project Dimensions
600 Wilshire Boulevard, Suite 1470
Los Angeles, CA 90017

RE: Fire Flow Test – Hydraulic Model for 19816 Walnut Drive (S), Walnut
APN 8762-023-001, FH No. 283-2-16

Dear Mr. Conk:

Due to current imported water supply conditions and as part of the District's ongoing water conservation measures, the requested fire flow was simulated using the District's hydraulic model. There have not been any significant changes to the system conditions. The model is accurate within 8-10 psi. Actual system conditions can vary depending on the time of day and actual tank levels.

If you have any questions, please contact Vince De La Rosa at Ext. 297.

Very truly yours,

WALNUT VALLEY WATER DISTRICT

Ginger S. Han, P.E.
Senior Civil Engineer

GH:vd

Enclosures

FORM 195
Rev. 11/06/2019

COUNTY OF LOS ANGELES FIRE DEPARTMENT
FIRE PREVENTION DIVISION

Fire Prevention Engineering
5823 Rickenbacker Road
Commerce, CA 90040
Telephone (323) 890-4125 Fax (323) 890-4129

Information on Fire Flow Availability for Building Permit

For One and Two Family Dwellings, Townhomes, and Accessory Dwelling Units

INSTRUCTIONS:

Complete parts I, II (A), and II (B)

Verifying fire flow, fire hydrant location and fire hydrant size.

PROJECT INFORMATION
(To be Completed by Applicant)

Fire Hydrant 283216

PART I

Building Address: 19816 Walnut Dr

City or Area: Walnut CA 91789 APN 8762-023-001

Nearest Cross Street: Bellavista Dr and Walnut Dr

Distance of Nearest Cross Street: 350'

Property Owner: Jon Conk from Project Dimensions (Owner Rep.) Telephone: (949) 4476-2246

Address: 600 Wilshire Blvd, Suite 1470 (Applicant address) Telephone: 213-542-5632

City: Los Angeles Zip Code 90017

Occupancy (Use of Building): Single Family Residential Sprinklered: Yes ☐ No ☐

Type of Construction N/A

Square Footage: N/A Number of Stories: N/A

Alex Flores

Applicant's Signature

03/25/2021
Date

PART II (A) **INFORMATION ON FIRE FLOW AVAILABILITY**
(Part II A and II B to be completed by Water Purveyor)

The distance from the fire hydrant to the property line is approximately 50 feet feet via vehicular access. The fire flow services will be rendered from a 12-inch inch diameter water main. The hydrant is located on north side of Walnut Drive (S) (Direction/side) (Street)

370' +/- (Feet) northeast (Direction) of Fairway Drive (Nearest Cross - Street)

Static PSI 122 Residual PSI 104 Orifice size n/a Pitot n/a

Fire Flow at 20 PSI 13,509 gpm for one hour duration ☐ Flow Test Date / Time ☒ Hydraulic model

Domestic Meter Size n/a

PART II (B)

WALNUT VALLEY WATER DISTRICT — Water Purveyor

V. De La Rosa — Signature

(909) 595-1268 — Phone Number

APRIL 2, 2021 — Date

CIVIL ENGINEERING ASSISTANT — Title

PART III **Conditions for Approval by the Building Department**
(To be Completed by Building Department)

The building permit may be issued for new or additions to detached one and two family dwellings, townhomes, and accessory dwelling units when the above information is completed and shows that the following minimum requirements are met and the property is not located in a Fire Hazard Severity Zone.

- The water system is capable of delivering at least 1000 GPM at 20 PSI for one-hour if non-sprinklered.
- The water system is capable of delivering at least 500 GPM at 20 PSI for one-half hour if sprinklered.
- The total area of the entire structure is less than 3,600 square feet.
- No portion of the lot frontage to the public fire hydrant shall exceed 450 feet via vehicular access.
- All portions of the proposed construction must be within 150 feet of a vehicular access roadway that is a minimum of 20 feet wide, paved with concrete or asphalt and does not exceed 15% grade.

APPROVED BY _____ DATE _____ OFFICE _____

This Information is Considered Valid for Twenty Four Months

When the project does not meet all of the above requirements for approval by the **Building Department,** the project must be sent to the **Fire Prevention Division** for approval before a Building Permit can be issued by the **Building Department**.

Walnut Valley Water District

271 S Brea Canyon Rd,
Walnut, CA
(909) 595-1268
https://www.wvwd.com

flow report

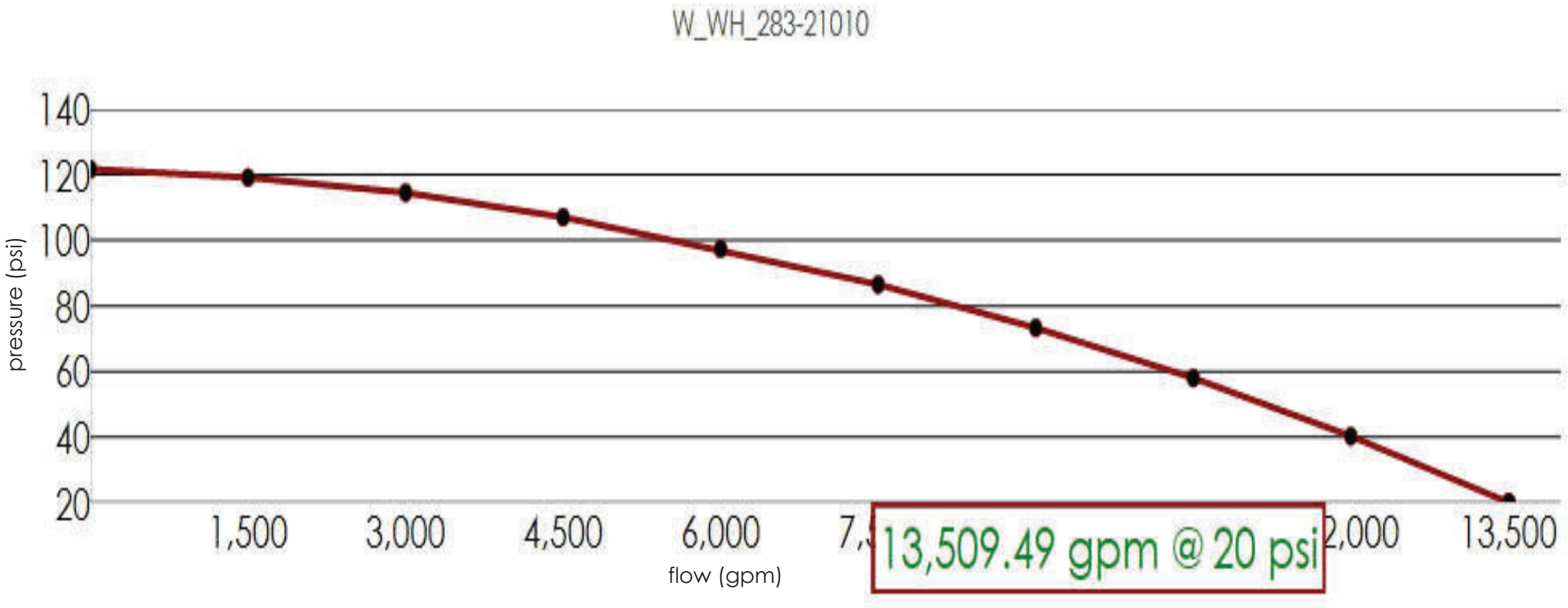
19816 Walnut Dr (S), Walnut (Ex. F.H. No. 283-2-16)

SEDARU

hydrant curve

static pressure (psi)	122	required fire flow (gpm)	5,000
residual pressure (psi)	104	required minimum pressure (psi)	20

hydrant flow @ 20 psi
13,509 gpm



hydrant data

flow (gpm)	0	1,500	3,000	4,500	6,000	7,500	9,000	10,500	12,000	13,500	13,509
pressure (psi)	121.69	119.15	114.54	107.07	97.40	86.54	73.33	58.04	40.33	20.14	20.00

Walnut Valley Water District
271 S Brea Canyon Rd,
Walnut, CA
(909) 595-1268
https://www.wvwd.com

flow report

19816 Walnut Dr (S), Walnut (Ex. F.H. No. 283-2-16)

SEDARU

location

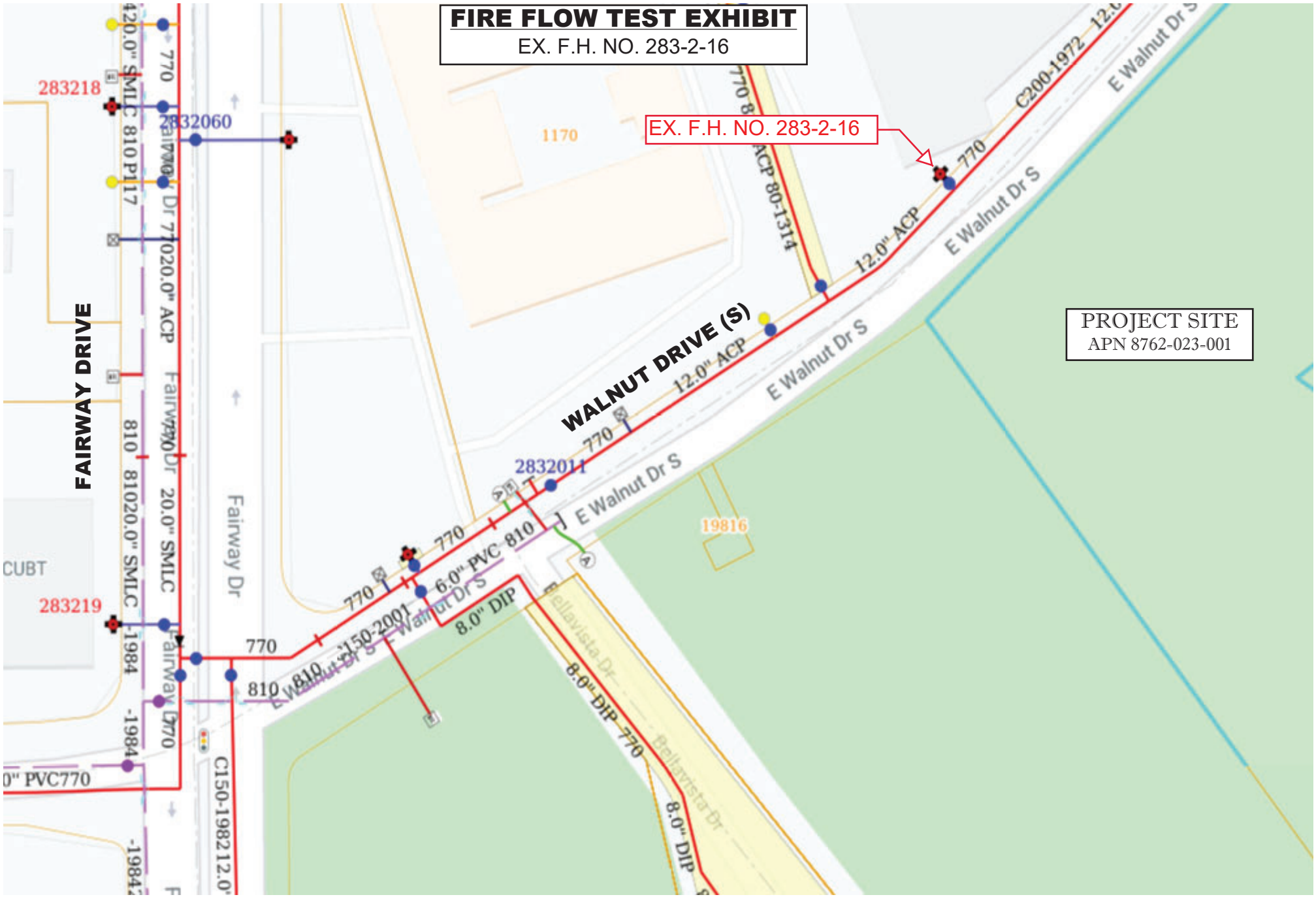
static pressure (psi)	122	required fire flow (gpm)	5,000
residual pressure (psi)	104	required minimum pressure (psi)	20

hydrant flow @ 20 psi
13,509 gpm



FIRE FLOW TEST EXHIBIT

EX. F.H. NO. 283-2-16



1" = 94 ft	19816 Walnut Drive (S) City of Walnut	04/02/2021	

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WALNUT VALLEY WATER DISTRICT

271 South Brea Canyon Road Walnut, California 91789-3002
(909) 595-7554 • (626) 964-6551
www.wvwd.com • Fax: (909) 444-5521

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Thomas M. Monk
Director of Operations

Gabriela Sanchez
Executive Secretary

LEGAL COUNSEL

James D. Ciampa

March 31, 2021

Mr. Jon Conk
Project Dimensions
600 Wilshire Boulevard, Suite 1470
Los Angeles, CA 90017

RE: Fire Flow Test – Hydraulic Model for 19816 Walnut Drive (S), Walnut
APN 8762-023-001, FH No. 283-2-20

Dear Mr. Conk:

Due to current imported water supply conditions and as part of the District's ongoing water conservation measures, the requested fire flow was simulated using the District's hydraulic model. There have not been any significant changes to the system conditions. The model is accurate within 8-10 psi. Actual system conditions can vary depending on the time of day and actual tank levels.

If you have any questions, please contact Vince De La Rosa at Ext. 297.

Very truly yours,

WALNUT VALLEY WATER DISTRICT

Ginger S. Han, P.E.
Senior Civil Engineer

GH:vd

Enclosures

FORM 195
Rev. 11/06/2019

COUNTY OF LOS ANGELES FIRE DEPARTMENT
FIRE PREVENTION DIVISION

Fire Prevention Engineering
5823 Rickenbacker Road
Commerce, CA 90040
Telephone (323) 890-4125 Fax (323) 890-4129

Information on Fire Flow Availability for Building Permit

For One and Two Family Dwellings, Townhomes, and Accessory Dwelling Units

INSTRUCTIONS:

Complete parts I, II (A), and II (B)

Verifying fire flow, fire hydrant location and fire hydrant size.

PROJECT INFORMATION
(To be Completed by Applicant) Fire Hydrant 283220

PART I

Building Address: 19816 Walnut Dr

City or Area: Walnut CA 91789 APN 8762-023-001

Nearest Cross Street: Bellavista Dr and Walnut Dr

Distance of Nearest Cross Street: 630'

Property Owner: Jon Conk from Project Dimensions (Owner Rep.) Telephone: (949) 4476-2246

Address: 600 Wilshire Blvd, Suite 1470 (Applicant address) Telephone: 213-542-5632

City: Los Angeles Zip Code 90017

Occupancy (Use of Building): Single Family Residential Sprinklered: Yes ☐ No ☐

Type of Construction N/A

Square Footage: N/A Number of Stories: N/A

Alex Flores

Applicant's Signature

03/25/2021
Date

PART II (A) **INFORMATION ON FIRE FLOW AVAILABILITY**
(Part II A and II B to be completed by Water Purveyor)

The distance from the fire hydrant to the property line is approximately 62 feet feet via vehicular access. The fire flow services will be rendered from a 12-inch inch diameter water main. The hydrant is located on north side of Walnut Drive (S)
(Direction/side) (Street)

1270' +/- (Feet) northeast (Direction) of Fairway Drive (Nearest Cross - Street)

Static PSI 114 Residual PSI 106 Orifice size n/a Pitot n/a

Fire Flow at 20 PSI 10,315 gpm for one hour duration ☐ Flow Test Date / Time ☒ Hydraulic model

Domestic Meter Size n/a

PART II (B)

WALNUT VALLEY WATER DISTRICT
Water Purveyor

V. De La Rosa
Signature

(909) 595-1268 Phone Number

APRIL 2, 2021 Date

CIVIL ENGINEERING ASSISTANT
Title

PART III **Conditions for Approval by the Building Department**
(To be Completed by Building Department)

The building permit may be issued for new or additions to detached one and two family dwellings, townhomes, and accessory dwelling units when the above information is completed and shows that the following minimum requirements are met and the property is not located in a Fire Hazard Severity Zone.

- The water system is capable of delivering at least 1000 GPM at 20 PSI for one-hour if non-sprinklered.
- The water system is capable of delivering at least 500 GPM at 20 PSI for one-half hour if sprinklered.
- The total area of the entire structure is less than 3,600 square feet.
- No portion of the lot frontage to the public fire hydrant shall exceed 450 feet via vehicular access.
- All portions of the proposed construction must be within 150 feet of a vehicular access roadway that is a minimum of 20 feet wide, paved with concrete or asphalt and does not exceed 15% grade.

APPROVED BY _____ DATE _____ OFFICE _____

This Information is Considered Valid for Twenty Four Months

When the project does not meet all of the above requirements for approval by the **Building Department,** the project must be sent to the **Fire Prevention Division** for approval before a Building Permit can be issued by the **Building Department**.

Walnut Valley Water District
271 S Brea Canyon Rd,
Walnut, CA
(909) 595-1268
https://www.wvwd.com

flow report

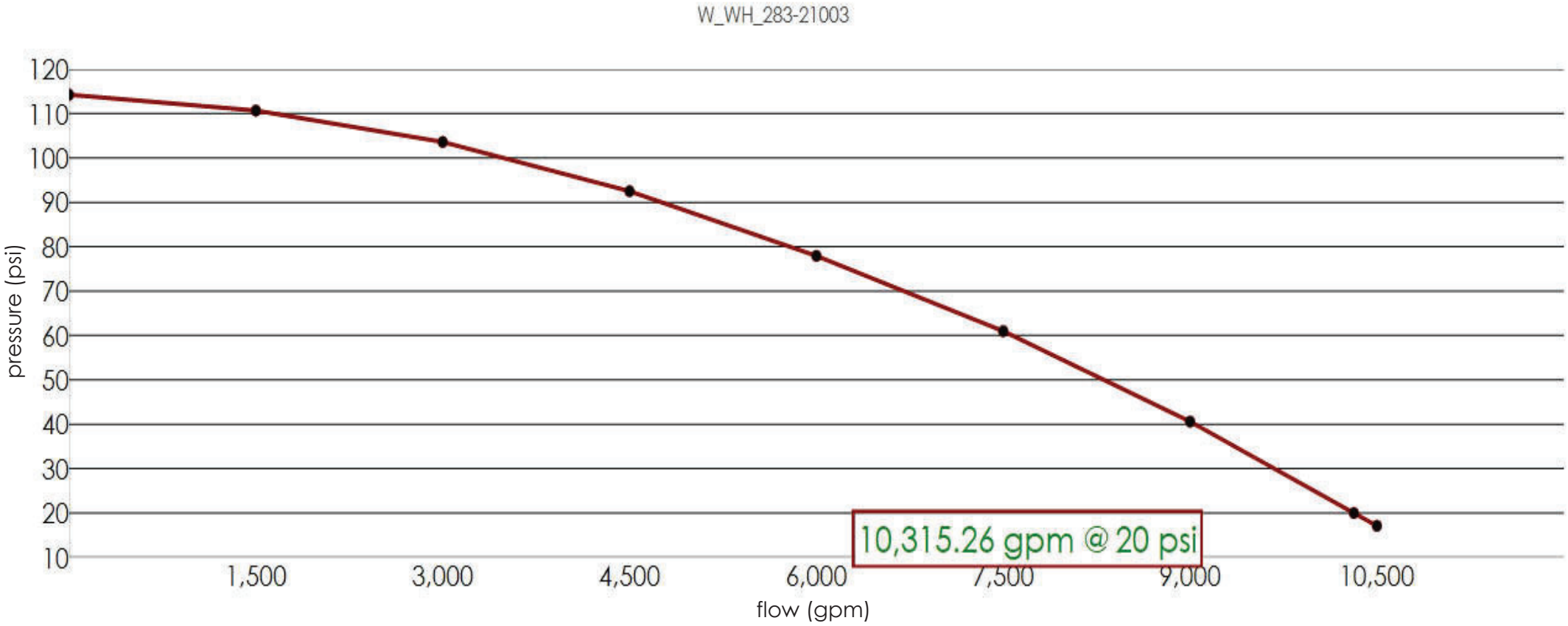
19816 Walnut Drive (S), Walnut (Ex. F.H. No. 283-2-20)

SEDARU

hydrant curve

static pressure (psi)	114	required fire flow (gpm)	2,500
residual pressure (psi)	106	required minimum pressure (psi)	20

hydrant flow @ 20 psi
10,315 gpm



hydrant data

flow (gpm)	0	1,500	3,000	4,500	6,000	7,500	9,000	10,315	10,500
pressure (psi)	114.26	110.69	103.61	92.52	77.94	60.98	40.61	20.00	17.10

Walnut Valley Water District
271 S Brea Canyon Rd,
Walnut, CA
(909) 595-1268
https://www.wvwd.com

flow report

19816 Walnut Drive (S), Walnut (Ex. F.H. No. 283-2-20)

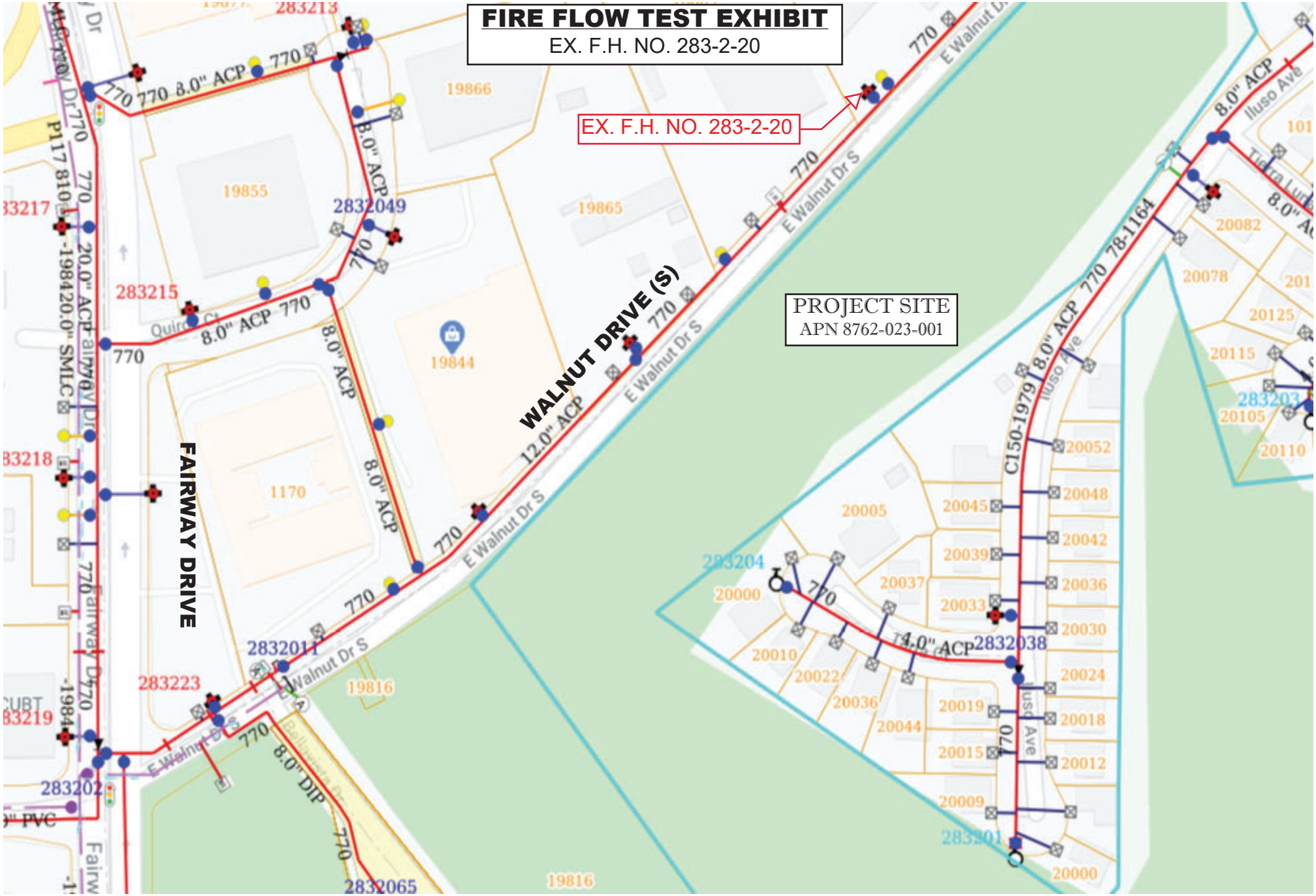
SEDARU

location

static pressure (psi)	114	required fire flow (gpm)	2,500
residual pressure (psi)	106	required minimum pressure (psi)	20

hydrant flow @ 20 psi
10,315 gpm





1" = 188 ft	19816 Walnut Drive (S) City of Walnut	03/31/2021	

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WALNUT VALLEY WATER DISTRICT

271 South Brea Canyon Road Walnut, California 91789-3002
(909) 595-7554 • (626) 964-6551
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Director of Operations

Gabriela Sanchez
Executive Secretary

LEGAL COUNSEL

James D. Ciampa

March 31, 2021

Mr. Jon Conk
Project Dimensions
600 Wilshire Boulevard, Suite 1470
Los Angeles, CA 90017

RE: Fire Flow Test – Hydraulic Model for 19816 Walnut Drive (S), Walnut
APN 8762-023-001, FH No. 283-4-12

Dear Mr. Conk:

Due to current imported water supply conditions and as part of the District's ongoing water conservation measures, the requested fire flow was simulated using the District's hydraulic model. There have not been any significant changes to the system conditions. The model is accurate within 8-10 psi. Actual system conditions can vary depending on the time of day and actual tank levels.

If you have any questions, please contact Vince De La Rosa at Ext. 297.

Very truly yours,

WALNUT VALLEY WATER DISTRICT

Ginger S. Han, P.E.
Senior Civil Engineer

GH:vd

Enclosures

FORM 195
Rev. 11/06/2019

COUNTY OF LOS ANGELES FIRE DEPARTMENT
FIRE PREVENTION DIVISION

Fire Prevention Engineering
5823 Rickenbacker Road
Commerce, CA 90040
Telephone (323) 890-4125 Fax (323) 890-4129

Information on Fire Flow Availability for Building Permit

For One and Two Family Dwellings, Townhomes, and Accessory Dwelling Units

INSTRUCTIONS:

Complete parts I, II (A), and II (B)

Verifying fire flow, fire hydrant location and fire hydrant size.

PROJECT INFORMATION
(To be Completed by Applicant) Fire Hydrant 283412

PART I

Building Address: 19816 Walnut Dr

City or Area: Walnut CA 91789 APN 8762-023-001

Nearest Cross Street: Colima Rd and Lake Canyon Dr

Distance of Nearest Cross Street: 380'

Property Owner: Jon Conk from Project Dimensions (Owner Rep.) Telephone: (949) 4476-2246

Address: 600 Wilshire Blvd, Suite 1470 (Applicant address) Telephone: 213-542-5632

City: Los Angeles Zip Code 90017

Occupancy (Use of Building): Single Family Residential Sprinklered: Yes ☐ No ☐

Type of Construction N/A

Square Footage: N/A Number of Stories: N/A

Alex Flores - Fuscoe Engineering

Applicant's Signature 03/25/2021 Date

PART II (A) **INFORMATION ON FIRE FLOW AVAILABILITY**
(Part II A and II B to be completed by Water Purveyor)

The distance from the fire hydrant to the property line is approximately 90 feet

feet via vehicular access. The fire flow services will be rendered from a 12-inch

inch diameter water main. The hydrant is located on south/southeast side of Colima Road
(Direction/side) (Street)

421' +/- (Feet) southwest (Direction) of Walnut Leaf Drive (Nearest Cross - Street)

Static PSI 83 Residual PSI 78 Orifice size n/a Pitot n/a

Fire Flow at 20 PSI 6,371 gpm for one hour duration ☐ Flow Test Date / Time _____
☒ Hydraulic model

Domestic Meter Size n/a

PART II (B)

WALNUT VALLEY WATER DISTRICT
Water Purveyor

V. De La Rosa
Signature

(909) 595-1268 Phone Number

APRIL 2, 2021 Date

CIVIL ENGINEERING ASSISTANT
Title

WALNUT VALLEY WATER DISTRICT Quality Since 1952

PART III **Conditions for Approval by the Building Department**
(To be Completed by Building Department)

The building permit may be issued for new or additions to detached one and two family dwellings, townhomes, and accessory dwelling units when the above information is completed and shows that the following minimum requirements are met and the property is not located in a Fire Hazard Severity Zone.

- The water system is capable of delivering at least 1000 GPM at 20 PSI for one-hour if non-sprinklered.
- The water system is capable of delivering at least 500 GPM at 20 PSI for one-half hour if sprinklered.
- The total area of the entire structure is less than 3,600 square feet.
- No portion of the lot frontage to the public fire hydrant shall exceed 450 feet via vehicular access.
- All portions of the proposed construction must be within 150 feet of a vehicular access roadway that is a minimum of 20 feet wide, paved with concrete or asphalt and does not exceed 15% grade.

APPROVED BY _____ DATE _____ OFFICE _____

This Information is Considered Valid for Twenty Four Months

When the project does not meet all of the above requirements for approval by the **Building Department,** the project must be sent to the **Fire Prevention Division** for approval before a Building Permit can be issued by the **Building Department**.

Walnut Valley Water District
271 S Brea Canyon Rd,
Walnut, CA
(909) 595-1268
https://www.wvwd.com

flow report

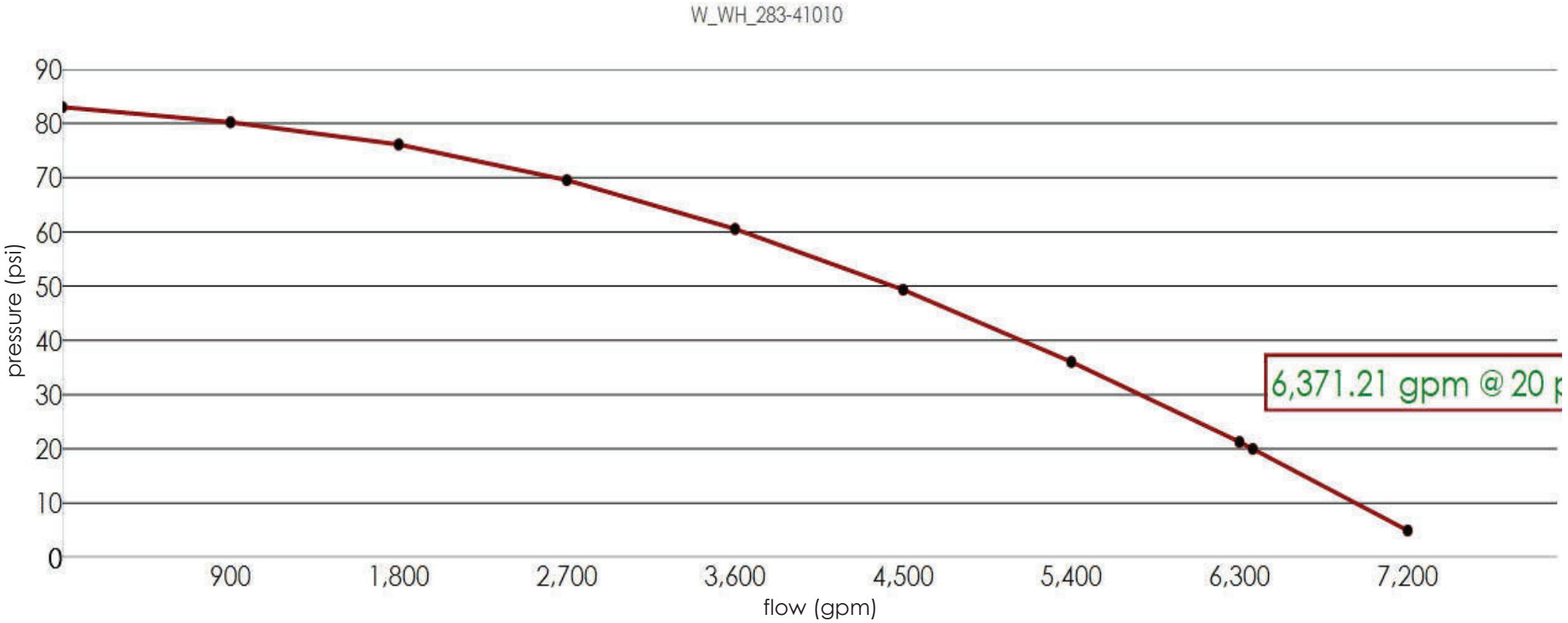
19816 Walnut Drive (S), Walnut (Ex. F.H. No. 283-4-12)

SEDARU

hydrant curve

static pressure (psi)	83	required fire flow (gpm)	1,500
residual pressure (psi)	78	required minimum pressure (psi)	20

hydrant flow @ 20 psi
6,371 gpm



hydrant data

flow (gpm)	0	900	1,800	2,700	3,600	4,500	5,400	6,300	6,371	7,200
pressure (psi)	83.01	80.23	76.12	69.55	60.55	49.34	36.04	21.29	20.00	4.95

Walnut Valley Water District
271 S Brea Canyon Rd,
Walnut, CA
(909) 595-1268
https://www.wvwd.com

flow report

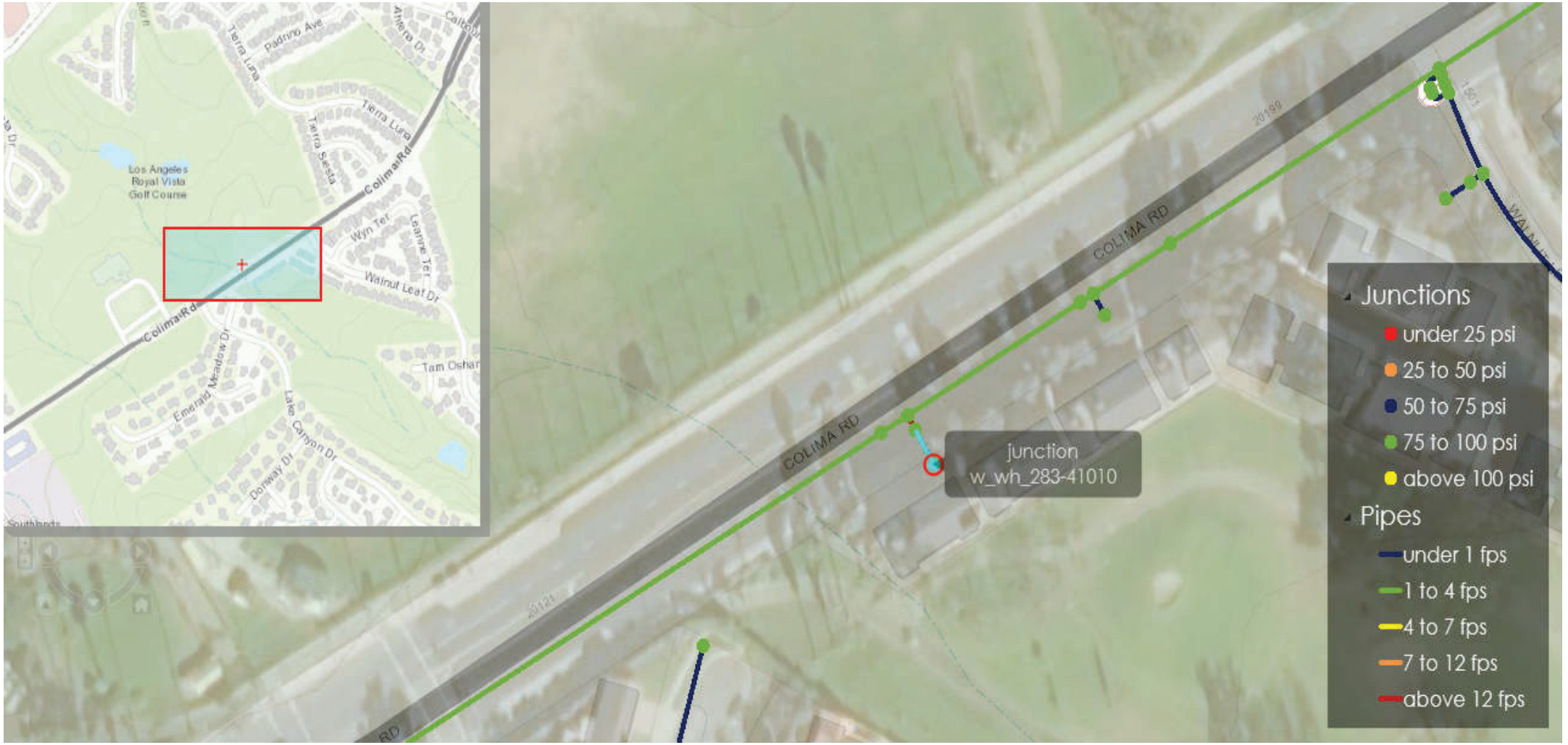
19816 Walnut Drive (S), Walnut (Ex. F.H. No. 283-4-12)

SEDARU

location

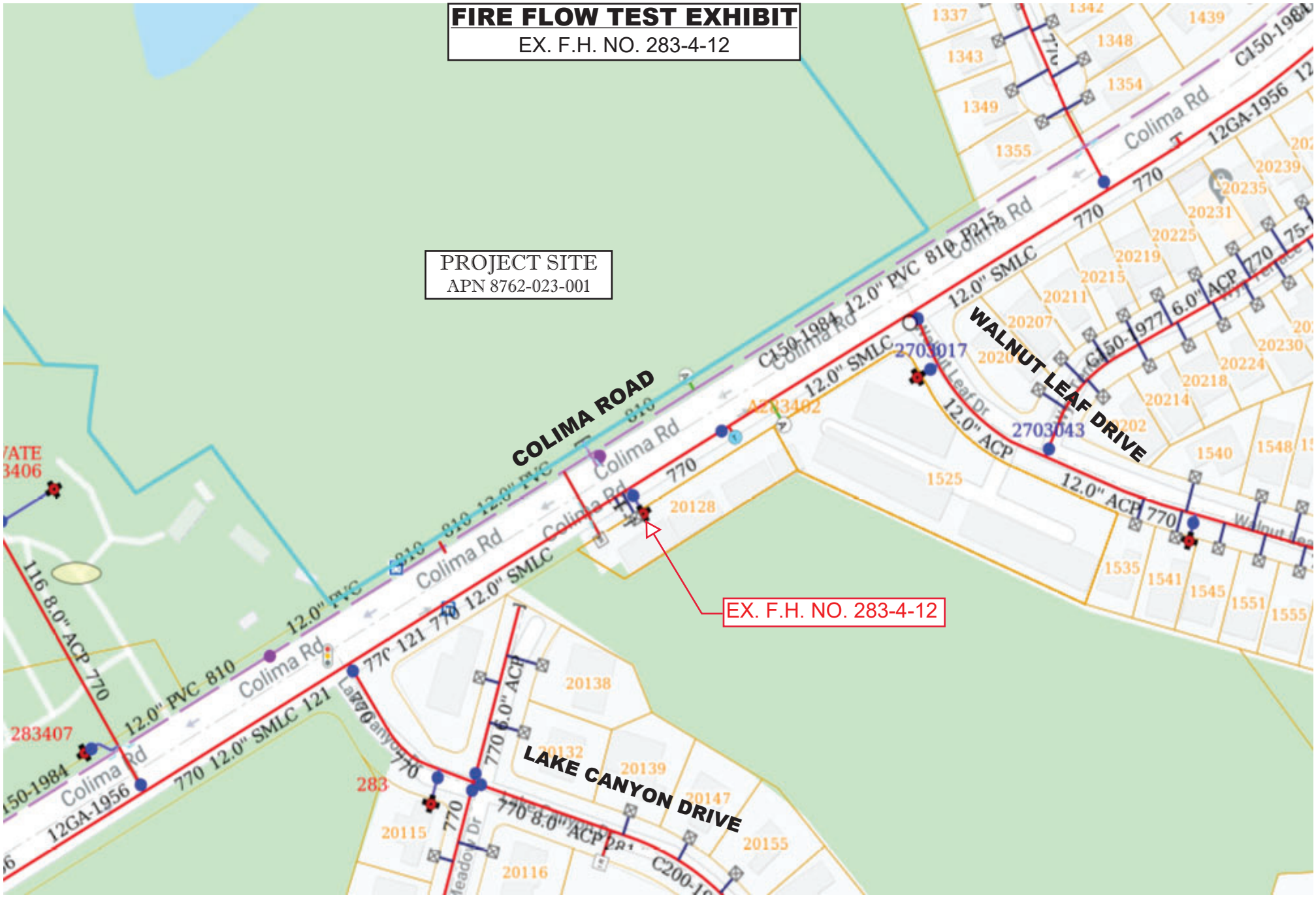
static pressure (psi)	83	required fire flow (gpm)	1,500
residual pressure (psi)	78	required minimum pressure (psi)	20

hydrant flow @ 20 psi
6,371 gpm



FIRE FLOW TEST EXHIBIT

EX. F.H. NO. 283-4-12



1" = 188 ft	19816 Walnut Drive (S) City of Walnut	03/31/2021	

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WALNUT VALLEY WATER DISTRICT

271 South Brea Canyon Road Walnut, California 91789-3002
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Alanna Diaz
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Thomas M. Monk
Director of Operations

Gabriela Sanchez
Executive Secretary

LEGAL COUNSEL

James D. Ciampa

March 31, 2021

Mr. Jon Conk
Project Dimensions
600 Wilshire Boulevard, Suite 1470
Los Angeles, CA 90017

RE: Fire Flow Test – Hydraulic Model for 20055 Colima Road, Walnut
APN 8764-002-006, FH No. 270-1-17

Dear Mr. Conk:

Due to current imported water supply conditions and as part of the District's ongoing water conservation measures, the requested fire flow was simulated using the District's hydraulic model. There have not been any significant changes to the system conditions. The model is accurate within 8-10 psi. Actual system conditions can vary depending on the time of day and actual tank levels.

If you have any questions, please contact Vince De La Rosa at Ext. 297.

Very truly yours,

WALNUT VALLEY WATER DISTRICT

Ginger S. Han, P.E.
Senior Civil Engineer

GH:vd

Enclosures

FORM 195
Rev. 11/06/2019

COUNTY OF LOS ANGELES FIRE DEPARTMENT
FIRE PREVENTION DIVISION

Fire Prevention Engineering
5823 Rickenbacker Road
Commerce, CA 90040
Telephone (323) 890-4125 Fax (323) 890-4129

Information on Fire Flow Availability for Building Permit

For One and Two Family Dwellings, Townhomes, and Accessory Dwelling Units

INSTRUCTIONS:

Complete parts I, II (A), and II (B)

Verifying fire flow, fire hydrant location and fire hydrant size.

PROJECT INFORMATION
(To be Completed by Applicant) Fire Hydrant 270117

PART I

Building Address: 20055 Colima Rd

City or Area: Walnut CA 91789 APN 8764-002-006

Nearest Cross Street: Colima Rd and Tierra Luna

Distance of Nearest Cross Street: 40'

Property Owner: Jon Conk from Project Dimensions (Owner Rep.) Telephone: (949) 4476-2246

Address: 600 Wilshire Blvd, Suite 1470 (Applicant address) Telephone: 213-542-5632

City: Los Angeles Zip Code 90017

Occupancy (Use of Building): Single Family Residential Sprinklered: Yes ☐ No ☐

Type of Construction N/A

Square Footage: N/A Number of Stories: N/A

Alex Flores - Fuscoe Engineering

Applicant's Signature

03/25/2021
Date

PART II (A) **INFORMATION ON FIRE FLOW AVAILABILITY**
(Part II A and II B to be completed by Water Purveyor)

The distance from the fire hydrant to the property line is approximately 150 feet

feet via vehicular access. The fire flow services will be rendered from a 12-inch

inch diameter water main. The hydrant is located on northeast side Tierra Luna
(Direction/side) (Street)

82' +/- (Feet) northwest (Direction) of Colima Road (Nearest Cross - Street)

Static PSI 87 Residual PSI 83 Orifice size n/a Pitot n/a

Fire Flow at 20 PSI 7,364 gpm for one hour duration ☐ Flow Test Date / Time ____
☒ Hydraulic model

Domestic Meter Size n/a

PART II (B)

WALNUT VALLEY WATER DISTRICT
Water Purveyor

V. De La Rosa
Signature

(909) 595-1268 Phone Number

APRIL 2, 2021 Date

CIVIL ENGINEERING ASSISTANT
Title

PART III **Conditions for Approval by the Building Department**
(To be Completed by Building Department)

The building permit may be issued for new or additions to detached one and two family dwellings, townhomes, and accessory dwelling units when the above information is completed and shows that the following minimum requirements are met and the property is not located in a Fire Hazard Severity Zone.

- The water system is capable of delivering at least 1000 GPM at 20 PSI for one-hour if non-sprinklered.
- The water system is capable of delivering at least 500 GPM at 20 PSI for one-half hour if sprinklered.
- The total area of the entire structure is less than 3,600 square feet.
- No portion of the lot frontage to the public fire hydrant shall exceed 450 feet via vehicular access.
- All portions of the proposed construction must be within 150 feet of a vehicular access roadway that is a minimum of 20 feet wide, paved with concrete or asphalt and does not exceed 15% grade.

APPROVED BY _____ DATE _____ OFFICE _____

This Information is Considered Valid for Twenty Four Months

When the project does not meet all of the above requirements for approval by the **Building Department,** the project must be sent to the **Fire Prevention Division** for approval before a Building Permit can be issued by the **Building Department**.

Walnut Valley Water District
271 S Brea Canyon Rd,
Walnut, CA
(909) 595-1268
https://www.wvwd.com

flow report

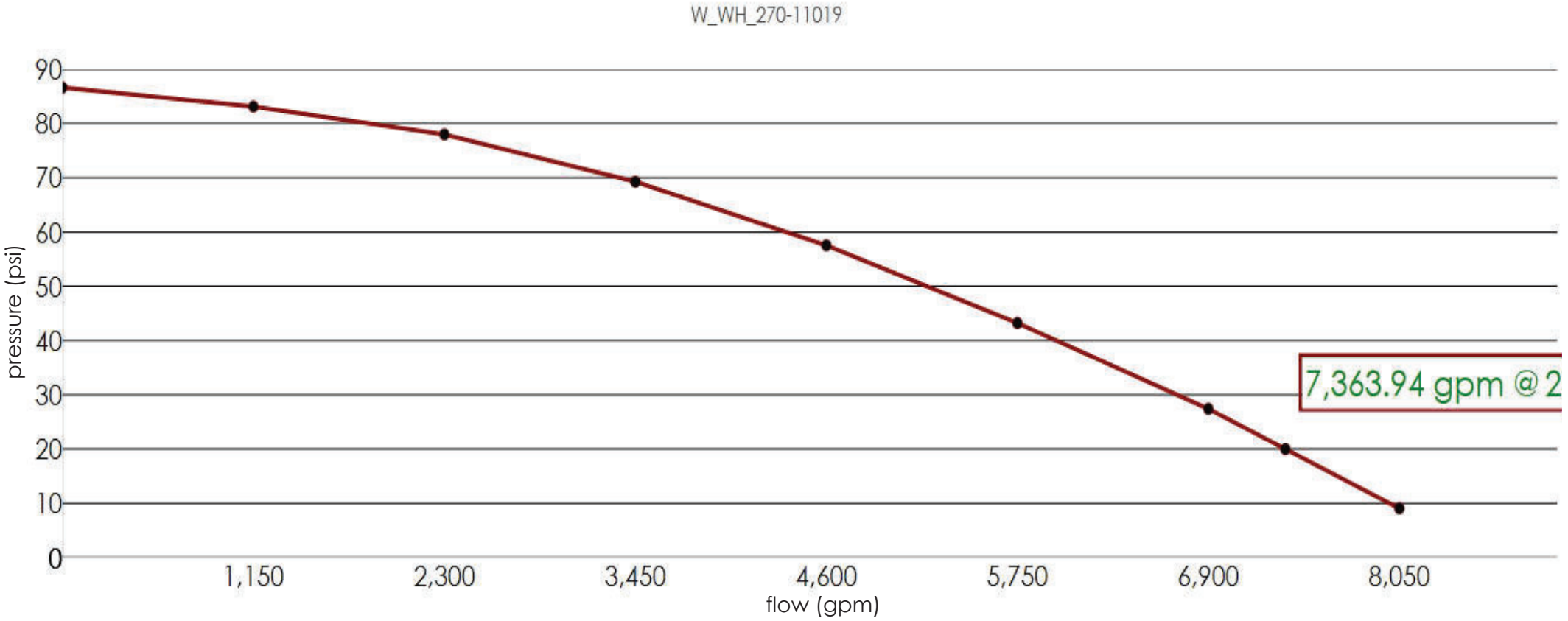
20055 Colima Road, Walnut (Ex. F.H. No. 270-1-17)

SEDARU

hydrant curve

static pressure (psi)	87	required fire flow (gpm)	1,250
residual pressure (psi)	83	required minimum pressure (psi)	20

hydrant flow @ 20 psi
7,364 gpm



hydrant data

flow (gpm)	0	1,150	2,300	3,450	4,600	5,750	6,900	7,364	8,050
pressure (psi)	86.64	83.12	77.98	69.27	57.54	43.22	27.40	20.00	9.06

Walnut Valley Water District
271 S Brea Canyon Rd,
Walnut, CA
(909) 595-1268
https://www.wvwd.com

flow report

20055 Colima Road, Walnut (Ex. F.H. No. 270-1-17)

SEDARU

location

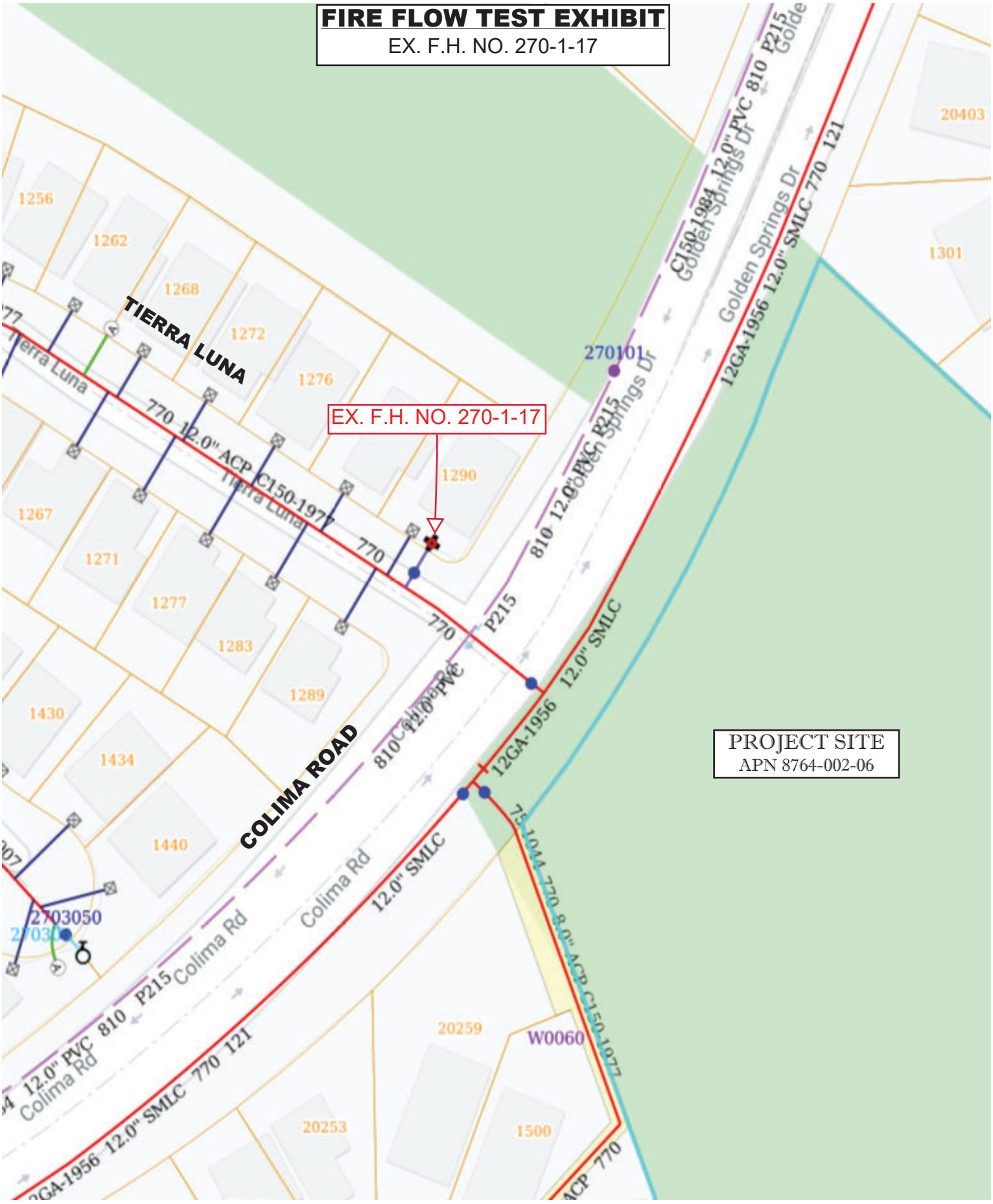
static pressure (psi)	87	required fire flow (gpm)	1,250
residual pressure (psi)	83	required minimum pressure (psi)	20

hydrant flow @ 20 psi
7,364 gpm



FIRE FLOW TEST EXHIBIT

EX. F.H. NO. 270-1-17



1" = 94 ft	20055 Colima Road City of Walnut	03/31/2021	

This map may represents a visual display of related geographic information. Data provided here on is not guarantee of acutual field conditions. To be sure of complete accuracy, please contact the responsible staff for most up to date information.

ATTACHMENT E

LACSD WILL SERVE LETTER

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager

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

April 1, 2021

Ref. DOC 6130498

Mr. Alex Flores, Engineer
Fuscoe Engineering
600 Wilshire Boulevard
Suite 1470
Los Angeles, CA 90017

Dear Mr. Flores:

Will Serve Letter for Royal Vista

The Los Angeles County Sanitation Districts (Districts) received your will serve letter request for the subject project on March 16, 2021. We offer the following comments regarding sewerage service:

1. A portion of the project area is outside the jurisdictional boundaries of the Districts and will require annexation into District No. 21 before sewerage service can be provided to the proposed development. For a copy of the Districts' Annexation Information and Processing Fee sheets, go to www.lacsd.org, under Services, then Wastewater Program and Permits and select Annexation Program. For more specific information regarding the annexation procedure and fees, please contact Ms. Donna Curry at (562) 908-4288, extension 2708.

2. 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' District No. 21 Outfall Trunk Sewer, located in Fairway Drive south of San Jose Avenue. The Districts' 30-inch diameter trunk sewer has a capacity of 22.2 million gallons per day (mgd) and conveyed a peak flow of 6.5 mgd when last measured in 2014.

3. The wastewater generated by the proposed project will be treated at the San Jose Creek Water Reclamation Plant (WRP) located adjacent to the City of Industry, which has a capacity of 100 mgd and currently processes an average flow of 58.5 mgd. All biosolids and wastewater flows that exceed the capacity of the San Jose Creek WRP are diverted to and treated at the Joint Water Pollution Control Plant in the City of Carson.

4. The expected increase in average wastewater flow from the project site, described in the plan as 240 single family homes and 72 affordable homes, is 80,155 gallons per day, after the structures on the project site are demolished. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, under Services, then Wastewater Program and Permits, select Will Serve Program, and scroll down to click on the Table 1, Loadings for Each Class of Land Use link.

5. The Districts are empowered by the California Health and Safety Code to charge a fee to connect facilities (directly or indirectly) to the Districts' Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is used by the Districts to upgrade or expand the Sewerage System. Payment of a connection fee may be required before this project is permitted to discharge to the Districts' Sewerage System. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, under Services, then Wastewater (Sewage) and

select Rates & Fees. In determining the impact to the Sewerage System and applicable connection fees, the Districts will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel(s) or facilities on the parcel(s) in the development. For more specific information regarding the connection fee application procedure and fees, the developer should contact the Districts' Wastewater Fee Public Counter at (562) 908-4288, extension 2727.

6. 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 the developer that the Districts intend to provide this service up to the levels that are legally permitted and to inform the developer 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 or at araza@lacsd.org.

Very truly yours,

Adriana Raza

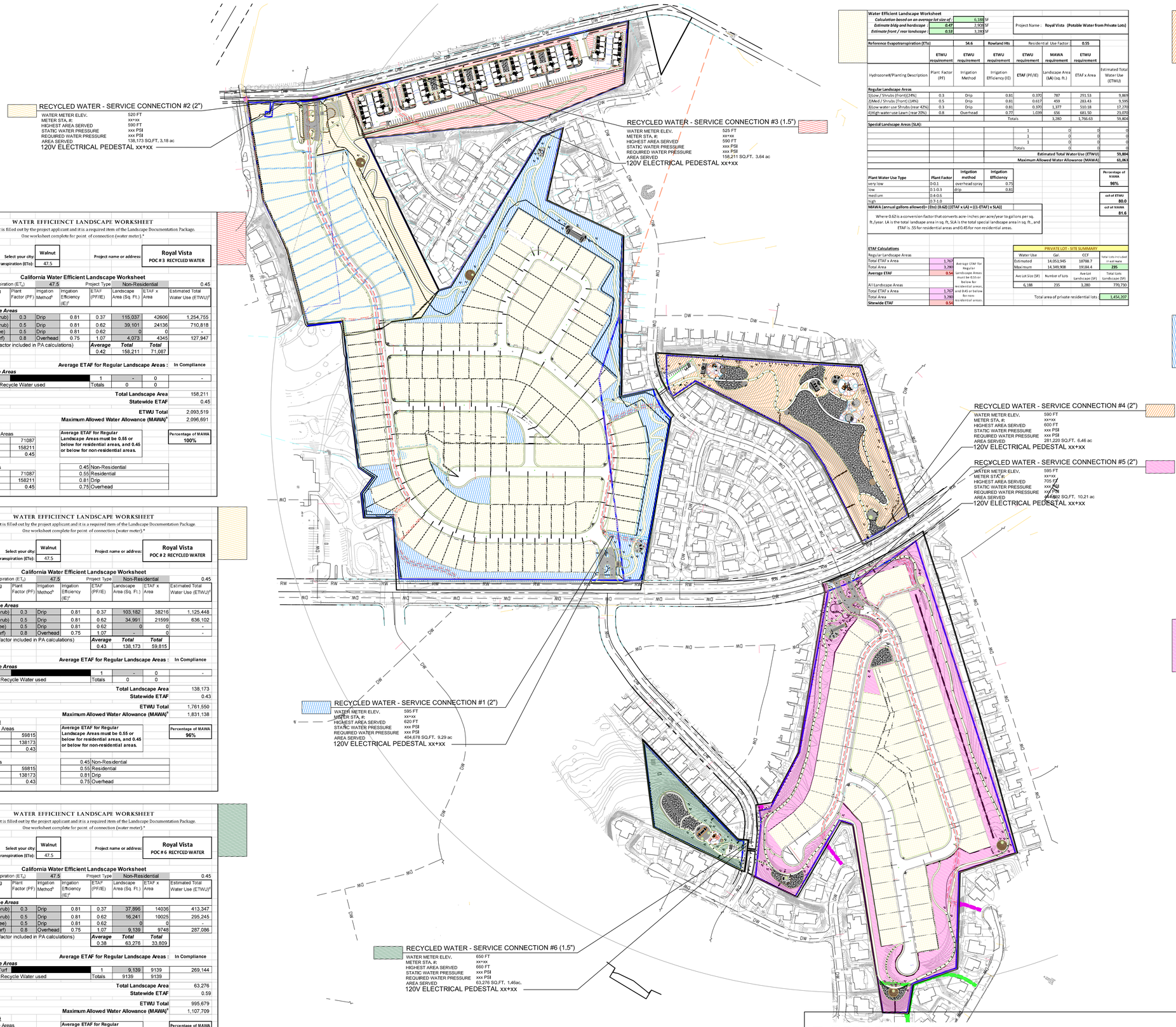
Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

cc: D. Curry
A. Schmidt
A. Howard

ATTACHMENT F

PRELIMINARY IRRIGATION MASTER PLAN



WATER EFFICIENCY LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC # 3 RECYCLED WATER**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.3	Drip	0.81	0.37	115,037	42606	1,254,755
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	39,101	24136	710,818
Med Water Use (Tree)	0.5	Drip	0.81	0.62	0	0	-
High Water Use (Turf)	0.8	Overhead	0.75	1.07	4,073	4345	127,947
(1.12 Slope factor included in PA calculations)				***Average*** 0.42	***Total*** 158,211	***Total*** 71,087	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
SLA-1	1	-	0	-
Recycle Water used	Totals	0	0	

Total Landscape Area 158,211
Statewide ETAF 0.45
ETWU Total 2,093,519
Maximum Allowed Water Allowance (MAWA)[e] 2,096,691

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	71087
Total Area	158211
Average ETAF	0.45

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 100%

All Landscape Areas		
Total ETAF x Area	71087	0.45 Non-Residential
Total Area	158211	0.55 Residential
Average ETAF	0.45	0.81 Drip
		0.75 Overhead

WATER EFFICIENCY LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC # 2 RECYCLED WATER**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.3	Drip	0.81	0.37	103,182	38216	1,125,448
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	34,991	21599	636,102
Med Water Use (Tree)	0.5	Drip	0.81	0.62	0	0	-
High Water Use (Turf)	0.8	Overhead	0.75	1.07	-	0	-
(1.12 Slope factor included in PA calculations)				***Average*** 0.43	***Total*** 138,173	***Total*** 59,815	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
SLA-1	1	-	0	-
Recycle Water used	Totals	0	0	

Total Landscape Area 138,173
Statewide ETAF 0.43
ETWU Total 1,761,550
Maximum Allowed Water Allowance (MAWA)[e] 1,831,138

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	59815
Total Area	138173
Average ETAF	0.43

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 96%

All Landscape Areas		
Total ETAF x Area	59815	0.45 Non-Residential
Total Area	138173	0.55 Residential
Average ETAF	0.43	0.81 Drip
		0.75 Overhead

WATER EFFICIENCY LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC # 6 RECYCED WATER**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.3	Drip	0.81	0.37	37,896	14036	413,347
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	16,241	10025	295,245
Med Water Use (Tree)	0.5	Drip	0.81	0.62	0	0	-
High Water Use (Turf)	0.8	Overhead	0.75	1.07	9,139	9748	287,086
(1.12 Slope factor included in PA calculations)				***Average*** 0.38	***Total*** 63,276	***Total*** 33,809	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
SLA-1 High Water Turf	1	9,139	9139	269,144
Recycle Water used	Totals	9139	9139	

Total Landscape Area 63,276
Statewide ETAF 0.59
ETWU Total 995,679
Maximum Allowed Water Allowance (MAWA)[e] 1,107,709

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	33809
Total Area	63276
Average ETAF	0.53

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 90%

All Landscape Areas		
Total ETAF x Area	42948	0.45 Non-Residential
Total Area	72415	0.55 Residential
Average ETAF	0.59	0.81 Drip
		0.75 Overhead

Water Efficient Landscape Worksheet

Calculation based on an average for size of 6.188 AF
Estimate bldg and hardscape 0.47 2.908 AF
Estimate front / rear landscape 0.53 3.280 AF

Project Name : **Royal Vista (Potable Water from Private Lots)**

Reference Evapotranspiration (ETo) 54.6 Rowland Hts Residential Use Factor: 0.55

Hydrozone#/Planting Description	ETWU requirement Plant Factor (PF)	ETWU requirement Irrigation Method	ETWU requirement Irrigation Efficiency (IE)	ETWU requirement ETAF (PF/IE)	MAWA requirement Landscape Area (LA) (sq. ft.)	ETWU requirement ETAF x Area	Estimated Total Water Use (ETWU)
Regular Landscape Areas							
1)Low / Shrubs (front)(24%)	0.3	Drip	0.81	0.370	787	291.53	9,869
2)Med / Shrubs (front) (14%)	0.5	Drip	0.81	0.617	459	283.43	9,595
3)Low water use Shrubs (rear 42%)	0.3	Drip	0.81	0.370	1,377	510.18	17,270
4)High water use lawn (rear 20%)	0.8	Overhead	0.77	1.039	656	681.50	23,070
			Totals		3,280	1,766.63	59,804
Special Landscape Areas (SLA):							
				1	0	0	0
				1	0	0	0
				1	0	0	0
			Totals		0	0	0
						Estimated Total Water Use (ETWU)	59,804
						Maximum Allowed Water Allowance (MAWA)	61,063

Plant Water Use Type	Plant Factor	Irrigation method	Irrigation Efficiency
very low	0-0.1	overhead spray	0.75
low	0.1-0.3	drip	0.81
medium	0.4-0.6		
high	0.7-1.0		

Percentage of MAWA **98%**

MAWA (annual gallons allowed)= (Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]

Where 0.62 is a conversion factor that converts acre-inches per acre/year to gallons per sq. ft./year. LA is the total landscape area in sq. ft, SLA is the total special landscape area in sq. ft., and ETAF is .55 for residential areas and 0.45 for non residential areas.

col of ETWU **80.0**
col of MAWA **81.6**

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	1,767
Total Area	3,280
Average ETAF	0.54
All Landscape Areas	
Total ETAF x Area	1,767
Total Area	3,280
Sitewide ETAF	0.54

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

PRIVATE LOT - SITE SUMMARY

Water Use	Gal.	CCF	Total Lots Included in est Water
Estimated	14,053,945	18788.7	
Maximum	14,389,908	19184.4	235

Ave Lot Size (SF)	Number of Lots	Ave Lot Landscape (SF)	Total Lots Landscape (SF)
6,188	235	3,280	770,730

Total area of private residential lots 1,454,707

WATER EFFICIENCY LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC # 4 RECYCED WATER**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.3	Drip	0.81	0.37	165,213	61190	1,802,046
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	52,347	32313	951,617
Med Water Use (Tree)	0.5	Drip	0.81	0.62	0	0	-
High Water Use (Turf)	0.8	Overhead	0.75	1.07	63,660	67904	1,999,773
(1.12 Slope factor included in PA calculations)				***Average*** 0.33	***Total*** 281,220	***Total*** 161,407	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
SLA-1 High Water Turf	1	63,660	63660	1,874,787
Recycle Water used	Totals	63660	63660	

Total Landscape Area 281,220
Statewide ETAF 0.65
ETWU Total 4,753,435
Maximum Allowed Water Allowance (MAWA)[e] 5,601,655

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	161407
Total Area	281220
Average ETAF	0.57

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 85%

All Landscape Areas		
Total ETAF x Area	225067	0.45 Non-Residential
Total Area	344680	0.55 Residential
Average ETAF	0.65	0.81 Drip
		0.75 Overhead

WATER EFFICIENCY LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC # 1 RECYCED WATER**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.3	Drip	0.81	0.37	301,635	111717	3,290,056
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	103,043	63907	1,873,220
Med Water Use (Tree)	0.5	Drip	0.81	0.62	0	0	-
High Water Use (Turf)	0.8	Overhead	0.75	1.07	-	-	-
(1.12 Slope factor included in PA calculations)				***Average*** 0.43	***Total*** 404,678	***Total*** 175,323	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
SLA-1	1	-	0	-
Recycle Water used	Totals	0	0	

Total Landscape Area 404,678
Statewide ETAF 0.43
ETWU Total 5,163,276
Maximum Allowed Water Allowance (MAWA)[e] 5,362,995

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	175323
Total Area	404678
Average ETAF	0.43

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 96%

All Landscape Areas		
Total ETAF x Area	175323	0.45 Non-Residential
Total Area	404678	0.55 Residential
Average ETAF	0.43	0.81 Drip
		0.75 Overhead

WATER EFFICIENCY LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required item of the Landscape Documentation Package.
One worksheet complete for point of connection (water meter).*

Select your city: Walnut
Reference Evapotranspiration (ETo): 47.5
Project name or address: **Royal Vista POC # 5 RECYCED WATER**

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 47.5 Project Type Non-Residential 0.45

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
Low Water Use (Shrub)	0.3	Drip	0.81	0.37	327,084	121142	3,567,638
Med Water Use (Shrub)	0.5	Drip	0.81	0.62	107,485	66349	1,953,971
Med Water Use (Tree)	0.5	Drip	0.81	0.62	0	0	-
High Water Use (Turf)	0.8	Overhead	0.75	1.07	10,123	10798	317,997
(1.12 Slope factor included in PA calculations)				***Average*** 0.42	***Total*** 444,692	***Total*** 198,289	

Average ETAF for Regular Landscape Areas : In Compliance

Special Landscape Areas				
SLA-1 High Water Turf	1	10,123	10123	298,122
Recycle Water used	Totals	10123	10123	

Total Landscape Area 444,692
Statewide ETAF 0.46
ETWU Total 5,839,607
Maximum Allowed Water Allowance (MAWA)[e] 6,191,403

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	198289
Total Area	444692
Average ETAF	0.45

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Percentage of MAWA 94%

All Landscape Areas		
Total ETAF x Area	208412	0.45 Non-Residential
Total Area	454815	0.55 Residential
Average ETAF	0.46	0.81 Drip
		0.75 Overhead

NORTH

SCALE: 1" =200' - 0"
0 200 400 600 800

SUMMERS/MURPHY & PARTNERS, INC.
34197 COAST HWY SUITE 200
DANA POINT CA 92629
(949) 443-1446

EXHIBIT "A"

MAJOR LAND DIVISION

ROYAL VISTA RESIDENTIAL & PARKS PROJECT

Preliminary Landscape Plan
Irrigation Master Plan

FOR LOT MERGING, SUBDIVIDING, AND CONDOMINIUM PURPOSES
LOCATED IN UNINCORPORATED TERRITORY
OF THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

NO.	REVISIONS	DATE	BY
0/16/22	IMP rev, base and calculations		

FUSCOE ENGINEERING
600 Wilshire, Suite 1470,Los Angeles, California 90017
tel 213.988.8800 fax 213.988.8803 www.fuscoe.com

Name Date

DATE October 14, 2022
JOB NUMBER 0662-004
ENVIRONMENTAL DESIGN
SCALE: PER PLAN
DRAFTED BY: EC
CHECKED BY: AW
L.7.0 OF L.7.0

WALNUT VALLEY WATER DISTRICT

271 South Brea Canyon Road • Walnut, California 91789-3002
(909) 595-7554 • (626) 964-6551
walnutvalleywater.gov • Fax: (909) 444-5521

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LEGAL COUNSEL

James D. Ciampa

May 25, 2023

WILL SERVE LETTER

Mr. Andrew Willrodt
Fuscoe Engineering, Inc.
600 Wilshire Boulevard, Suite 1470
Los Angeles, CA 90017

RE: Water Service Availability – Royal Vista Residential Project
City of Rowland Heights (VTTM 83534)

Dear Mr. Willrodt:

The entirety of the referenced development ("Development"), located in the City of Rowland Heights, Los Angeles County, California, lies within the service area of the Walnut Valley Water District ("District"). The District is prepared to provide water service including both potable and recycled water for the Developer ("Developer") to the Development subject to the following conditions and reservations:

1. Developer shall submit to District all plans, designs, and fire department requirements for the Development in order for the District to design the necessary water distribution systems (potable and reclaimed water) and other facilities required for the Development in accordance with District Rules and Regulations.

2. Developer shall grant District any and all easements required for water service, together with a policy of title insurance guaranteeing District's title to such easements.

3. In accordance with the Rules and Regulations, Developer shall pay all required fees and charges, including any required deposit amounts, in order to process plans, design, and complete construction of the required on-site and off-site improvements.

4. The Developer shall comply with the Rules and Regulations in force and effect at the time water service is requested and as those Rules and Regulations may be amended from time to time including, but not limited to, the payment of any and all District charges, fees, and expenses necessary to provide service to the Development.

5. The Developer acknowledges that water service to the Development shall be subject to availability of water. In relying upon this representation to provide water service, Developer is aware of the restrictions contained herein and the reliance by the District upon the Metropolitan Water District of Southern California as its sole supplier of water for domestic purposes. While there is currently no prohibition against additional connections, the District has the authority to reduce and restrict service connections. The Developer further acknowledges that this letter does not constitute any guaranty that water service will be available for the Development at the time of connection.

6. Developer agrees that this water service letter is exclusive to the Development described above (and number of units, if indicated) and may not be transferred or assigned to any other person or for any other purpose without the District's written consent.

7. Provision of water service to the Development is contingent upon the Development meeting the requirements of any other governmental entity having jurisdiction over such Development.

8. This letter and any representations made herein shall be null and void twelve (12) months from the date hereof if the water distribution system has not been installed. The Developer shall not be entitled to any water connections not made at the time of the expiration of this letter.

9. At any time prior to connection and upon a finding by the Board of Directors that the District is unable to serve the property for reasons beyond its control, this letter may be revoked by the District.

10. The Developer for itself and on behalf of its successors agrees to defend, at Developer's expense, any action brought against the District, its agents, officers or employees because of the issuance of any approvals or authorizations obtained herein, or in the alternative, to relinquish such approvals. The Developer agrees to reimburse the District for any costs, fees, or expenses the District may incur as a result of any such legal action. Developer further agrees that in conducting the defense of such action, District shall be entitled to engage its own attorneys, the expense of which shall be paid by Developer.

11. All Service pursuant to this letter shall be in accordance with the Rules and Regulations as they may be amended from time to time. By issuing this letter, the District does not guarantee any specific quantities, pressures, or flows with respect to service provided by the District.

If you concur with the above, please sign and return a copy of this letter to the undersigned. If you have any questions, please contact the Vince De La Rosa at Ext. 297.

Very truly yours,

WALNUT VALLEY WATER DISTRICT

Type text here

for Sheryl L. Shaw, P.E.
Director of Engineering

Accepted this 30 day of MAY, 2023

DEVELOPER

By _____
Signature

GEORGE E. PETERSON
Print Name

MANAGER, RVDEV, LLC
Title

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager

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

November 21, 2022

Ref. DOC 6756125

Mr. Evan Cochran, Senior Engineer
Fuscoe Engineering, Inc.
600 Wilshire Boulevard, Suite 1470
Los Angeles, CA 90017

Dear Mr. Cochran:

Will Serve Letter for Vesting Tentative Tract Map No. 83534 – Royal Vista

The Los Angeles County Sanitation Districts (Districts) received your will serve letter request for the subject project on November 11, 2022. We offer the following comments regarding sewerage service:

1. A portion of the project area is outside the jurisdictional boundaries of the Districts and will require annexation into District No. 21 before sewerage service can be provided to the proposed development. For a copy of the Districts' Annexation Information and Processing Fee sheets, go to www.lacsd.org, under Services, then Wastewater Program and Permits and select Annexation Program. For more specific information regarding the annexation procedure and fees, please contact the undersigned.

2. 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' District 21 Outfall Trunk Sewer, located in Fairway Drive south of San Jose Avenue. The Districts' 30-inch diameter trunk sewer has a capacity of 22.2 million gallons per day (mgd) and conveyed a peak flow of 6.5 mgd when last measured in 2014.

3. The expected increase in average wastewater flow from the project, described in the application as 200 single-family homes, 29 duplexes, 10 triplexes and 72 condominiums, is 78,801 gallons per day, after all structures on the project site are demolished. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, under Services, then Wastewater Program and Permits and select 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 to connect facilities (directly or indirectly) to the Districts' Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities. This connection fee is used by the Districts for its capital facilities. Payment of a connection fee may be required before this project is permitted to discharge to the Districts' Sewerage System. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, under Services, then Wastewater (Sewage) and select Rates & Fees. In determining the impact to the Sewerage System and applicable connection fees, the Districts will determine the user category (e.g. Condominium, Single Family Home, etc.) that best represents the actual or anticipated use of the parcel(s) or facilities on the parcel(s) in the development. For more specific information regarding the connection fee application procedure and fees, the developer should contact the Districts' Wastewater Fee Public 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 CAA. 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 the developer that the Districts intend to provide this service up to the levels that are legally permitted and to inform the developer 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 2708 or at dcurry@lacsd.org.

Very truly yours,

Donna J. Curry

Donna J. Curry
Customer Service Specialist
Facilities Planning Department

DC:dc

cc: A. Schmidt
A. Howard

OFFICE OF THE SHERIFF

COUNTY OF LOS ANGELES

HALL OF JUSTICE

ALEX VILLANUEVA, SHERIFF

June 29, 2021

Daryl Koutnik, Project Manager
ESA
626 Wilshire Boulevard, Suite 1100
Los Angeles, California 90017

Dear Mr. Koutnik:

REQUEST FOR SHERIFF'S DEPARTMENT SERVICE INFORMATION IN PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT ROYAL VISTA RESIDENTIAL PROJECT

Thank you for inviting the Los Angeles County Sheriff's Department (Department) to provide information and responses to specific questions to be addressed under the California Environmental Quality Act (CEQA) in preparing an Environmental Impact Report (EIR), for the Royal Vista Residential Project (Project). The proposed Project is located on the existing Royal Vista golf course in the City of Rowland Heights. The proposed Project involves the development of the six parcels of the existing golf course into four residential lots and two recreational/open space lots, including one neighborhood park and one pocket park. Three of the residential lots would include 249 detached single-family units. The fourth residential lot would include 72 townhouse units within 14 townhouse buildings. The Project would also include 21.65 acres of onsite retained open space.

The proposed Project is located within the service area of the Department's Walnut-Diamond Bar Sheriff's Station (Station). Accordingly, the Station reviewed your request and provided the attached responses (see correspondence dated June 29, 2021 from Captain Steven H. Tousey).

For future reference, our Department provides the following updated address and contact information for all requests for review comments regarding law documents, the California Environmental Quality Act and/or other related

correspondence that may potentially impact our Department services and facilities:

Tracey Jue, Director
Facilities Planning Bureau
Los Angeles County Sheriff's Department
211 West Temple Street
Los Angeles, California 90012

Attention: Planning Section

Should you have any questions regarding this matter, please contact me, at (323) 526-5657, or your staff may contact Ms. Rochelle Campomanes, at (323) 526-5614.

Sincerely,

ALEX VILLANUEVA, SHERIFF

Tracey Jue, Director
Facilities Planning Bureau

SH-AD-32A (8/17)-

COUNTY OF LOS ANGELES

SHERIFF'S DEPARTMENT

"A Tradition of Service Since 1850"

DATE: June 29, 2021
FILE NO:

OFFICE CORRESPONDENCE

FROM: STEVEN H. TOUSEY, CAPTAIN
WALNUT/DIAMOND BAR STATION

TO: TRACEY JUE, DIRECTOR
FACILITIES PLANNING BUREAU

SUBJECT: **SUBJECT: RESPONSE TO REQUEST FOR SHERIFF'S DEPARTMENT SERVICE INFORMATION FOR THE PROPOSED ROYAL VISTA RESIDENTIAL PROJECT**

The Walnut-Diamond Bar Sheriff Station (Station) is providing the following information as a response to a request received from ESA, a company who is currently preparing an Environmental Impact Report (EIR) for the proposed Royal Vista Residential Project (Project). The approximate 60.97-acre Project would redevelop portions of the existing Royal Vista golf course site located in the community of Rowland Heights. The Project site is within the Station's service area. Upon release of the EIR for public review, the Department reserves the right to make modifications to the following information should more specific Project details become available and/or circumstances change.

The proposed Project involves the development of the six parcels of the existing golf course into four residential lots and two recreational/open space lots, including one neighborhood park and one pocket park. Three of the residential lots would include 249 detached single-family units. The fourth residential lot would include 72 townhouse units within 14 townhouse buildings. The Project would also include 21.65 acres of onsite retained open space.

The questionnaire below is formatted to correspond with the format of the request:

1. ***Which LASD station(s) would provide primary service to the Rowland Heights Project Site? Would any other LASD stations serve the site (i.e., back-up responders)?***

   The Project site is within the Station's service area. The proposed Project is approximately 3.9 miles from the Station, located at 21695 East Valley Boulevard in Walnut.

If the need for back-up is required, Industry Sheriff Station located at 150 North Hudson Avenue in City of Industry or San Dimas Sheriff Station located at 270 South Walnut Avenue in San Dimas can also respond, respectively.

2. ***Please provide information regarding the LASD station(s) serving the Project Site, including:***

   a. ***Staffing and equipment for each LASD facility serving the Project Site (i.e., patrol cars, total full-time and part-time staff, number of officers on 24-hour duty):***

      The Station is currently staffed by 109 sworn personnel and 36 civilian employees. The Station's personnel has 145 full-time staff, 0 part-time staff, and 0 sworn personnel on a 24-hour duty. The Station currently has 38 black and white (patrol) cars and 20 pool cars.

   b. ***Population served and boundaries of LASD facilities:***

      The Station's service area encompasses approximately 40 square miles with an estimated resident population of 155,000 persons. The Station currently serves the Cities of Walnut, Diamond Bar, and Rowland Heights, and the unincorporated areas of Covina Hill and West Covina.

   c. ***A general overview of the emergency response system (i.e., dispatch system, standard procedures and protocols, etc.):***

      Calls for service are received from the public by desk personnel. Desk personnel determine if the call received is Emergent, Priority or Routine. Desk personnel determine the response team required to address the call. The Watch Commander monitors the response. The call for service and how it was responded to by the Department is documented. A report number can also be obtained if the responding deputy is required to write an incident report. If additional resources are needed, desk personnel may request additional assistance via neighboring Sheriff Stations such as San Dimas and Industry Station. If more resources are required to address the event, the Station's Watch Commander can request additional resources via our Sheriff's Emergency Operations Center.

d. ***Most recent data on associated response times for the station(s) serving the Project area and the overall LASD, if known; and***

The Station's average and/or anticipated response times for emergent, priority, and routine calls for service received from the proposed Project are 4.5, 6.9, and 31 minutes, respectively. (Please note these are approximate response times, which could be affected by traffic conditions and will vary depending upon the location of the responding unit at the time of the call.)

e. ***Crime statistics for LASD facilities serving the Project Site.***

Preliminary Data for the Station for the current calendar year 2021 is the following:

- Criminal Homicide (5)
- Forcible Rape (6)
- Robbery (32)
- Aggravated Assault (91)
- Burglary (217)
- Larceny Theft (694)
- Grand Theft Auto (137)
- Arson (3)

3. ***What is the response time goal(s), if any?***

The Department generally adheres to the following, widely-accepted industry standard among law enforcement agency for responses categorized as emergent, priority, and routine calls for service: 10 minutes, 20 minutes, and 60 minutes, respectively.

4. ***What would be the anticipated response time for crime incidents to the Project Site for this Project?***

The Station's average and/ or anticipated response times for emergent, priority, and routine calls for service received from the proposed Project are 4.5, 6.9, and 31 minutes, respectively. (Please note these are approximate response times, which could be affected by traffic conditions and will vary depending upon the location of the responding unit at the time of the call.)

5. ***Does the County have any planned or recent improvements to the LASD facilities in the service area of the Project Site (e.g., expansion, new facilities)? If so, please describe.***

   No expansion or new facilities are proposed at this time.

6. ***Would Project implementation require the physical expansion of an existing LASD station(s), a new LASD station, or additional staffing to the LASD protection facilities servicing the Project Site?***

   The Station is currently understaffed. However, assigning additional personnel to the Station to meet an acceptable service ratio will exacerbate the current shortage of space and supporting equipment. Any expansion of the Station, or construction of new facilities, should not only account for the current shortage, but should also accommodate additional personnel and equipment that will become necessary as our service area continues to experience growth and intensification of land uses.

   The proposed Project will increase employees and daytime population of the Station's service area, which will generate an increased demand for law enforcement services. The Station expects the EIR to quantify the population increases, describe potential impacts to our resources and operations, and identify measures that will mitigate these impacts to a level of insignificance.

   Additional resources to address the needs of the development will need to be reviewed by the City of Rowland Heights and our Contract Law Enforcement Bureau in coordination with our Station.

   a. ***If any new staff required, how many and what position?*** Once further detailed information and analysis is provided regarding the development, additional resources to address the needs of the development will can be reviewed by the City of Rowland Heights and our Contract Law Enforcement Bureau in coordination with our Station.

   b. ***If any new staff required, could the new staff be accommodated within existing LASD station(s) without the need for physical expansion of the existing station(s)***

Once further detailed information and analysis is provided regarding the development, the need for additional space at the Station can be determined.

7. ***Would there be any special design requirements due to the specific attributes of the proposed Project***

The Department recommends that the general principles of Crime Prevention Thru Environmental Design (CPTED) be implemented during the Project design phase. The goal of CPTED is to reduce opportunities for criminal activities by employing physical design features that discourage anti-social behavior, while encouraging the legitimate use of the site. The overall tenets of CPTED include defensible space, territoriality, surveillance, lighting, landscaping, and physical security. With advanced notice, Station personnel can be available to discuss CPTED with the Project developer.

The Station recommends that an analysis and impacts of the proposed Project to the local transportation and circulation system also be included in the EIR. Traffic levels at intersections must be identified, studied and analyzed. Preparation of a Construction Mitigation Plan would also help in reducing impacts to traffic levels. A Construction Traffic Management Plan should also be implemented as part of the proposed Project to address construction-related traffic congestion and emergency access issues. If temporary lane closures are necessary for the installation of utilities, emergency access should be maintained at all times. Flag persons and/or detours should also be provided as needed to ensure safe traffic operations, and construction signs should be posted to advise motorists of reduced construction zone speed limits.

The Project Applicant will be required to pay all applicable required law enforcement mitigation fees associated with the Project.

Thank you for including the Station in the environmental documents review process for the Project. Should you have any questions regarding this matter, please contact Rochelle Campomanes, with Facilities Planning Bureau at (323) 526-5614.

SHT:MA:ma

COUNTY OF LOS ANGELES
FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294
(323) 881-2401
www.fire.lacounty.gov

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KATHRYN BARGER
FIFTH DISTRICT

July 7, 2021

Daryl Koutnik, Project Manager
ESA
Planning Department
626 Wilshire Boulevard
Los Angeles, CA 90017

Dear Mr. Koutnik:

REQUEST FOR FIRE PROTECTION SERVICES INFORMATION, "ROYAL VISTA RESIDENTIAL PROJECT," WOULD REDEVELOP THE SIX PARCELS OF THE EXISTING ROYAL VISTA GOLF COURSE INTO FOUR RESIDENTIAL LOTS AND TWO RECREATIONAL/OPEN SPACE LOTS, INCLUDING ONE NEIGHBORHOOD PARK AND ONE POCKET PARK, THREE OF THE RESIDENTIAL LOTS WOULD INCLUDE 249 DETACHED SINGLE-FAMILY UNITS, THE FOURTH RESIDENTIAL LOT WOULD INCLUDE 72 TOWNHOUSE UNITS WITHIN 14 TOWNHOUSE BUILDINGS, ROWLAND HEIGHTS, FFER 2021006641

The Request for Fire Protection Services Information has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department.

The following are their comments:

PLANNING DIVISION:

For the analysis, please confirm or provide the following information regarding the LACFD and issues relating to provision of fire protection and emergency medical services for the Project area, as appropriate:

1. Which fire station(s) would provide primary service to the Project Site? Which stations would provide back-up services?

Fire Station 119 is the jurisdictional station (1st-due) for this Project Site. It is located at 20480 Pathfinder Road, Walnut, CA 91789, approximately 1.9 miles southeast of the project site with an estimated response time of 5 minutes. It is staffed during a 24-hour shift with a 3-person engine company (1-Captain, 1-Fire Fighter Specialist, and 1-Fire Fighter) and a 2-person paramedic squad (2-Fire Fighter/Paramedics).

Fire Station 145 is the 2nd-due station providing back-up services. It is located at 1525 S. Nogales Avenue, Rowland Heights, CA 91748, approximately 2 miles west of the project site with an estimated response time of 6 minutes. It is staffed during a 24-hour shift with a 3-person engine company (1-Captain, 1-Fire Fighter Specialist, and 1-Fire Fighter).

2. Information for each serving fire station including the following:

   a. Equipment and staffing (e.g., engines, trucks, squads, total full-time and part-time staff, number of firefighters on 24-hour duty, paramedic staff and services, etc.).

   b. Distances from each fire station to the Project Site.

   c. Number of personnel available at each fire station.

   d. Which resources (e.g., engine company, truck company) available at each station.

   See response above.

3. A general overview of the emergency response system (e.g., emergency response plans, standard operation protocols and procedures, new technology or programs underway to improve response times, etc.).

   LACFD operates under a regional concept in its approach to providing fire protection and emergency medical services, wherein emergency response units are dispatched as needed to an incident anywhere in the LACFD's service territory based on distance and availability, without regard to jurisdictional or municipal boundaries. So, while the stations mentioned above are the two closest stations to the project site, resources may be responded from other adjacent fire stations if needed.

4. What is the response time goal(s) for fire incidents?

   The LACFD uses national guidelines of a 5-minute response time for the 1st-arriving unit for fire and EMS responses and 8 minutes for the advanced life support (paramedic) unit in urban areas, and 8-minute response time for the 1st-arriving unit and 12 minutes for advanced life support (paramedic) unit in suburban areas.

5. What would be the anticipated response time for fire incidents to the Project Site for this Project? What would be the response time goal to the site with the project?

   The Project Site is located in a mix of urban/suburban area. The anticipated response time for fire incidents with or without the Project is near our response time goal of a 5-minute response time for the 1st- arriving unit, and 8 minutes for a paramedic unit in urban areas.

6. Does the County have any planned or recently completed improvements to the fire protection facilities in the service area of the Project Site (e.g., expansion, new facilities, additional staffing, etc.)? If so, please describe.

   LACFD currently does not have any planned or recently completed improvements to the fire protection facilities near the Project Site (e.g., expansion, new facilities, additional staffing, etc.).

7. Would Project implementation require the physical expansion of an existing fire station(s), a new fire station, or additional staffing to the fire protection facilities servicing the project site? If so, please describe.

   a. If any new staff required, how many and what position?

   b. If any new staff required, could the new staff be accommodated within existing fire station(s) without the need for physical expansion of the existing station(s)?

   No. Currently, staffing levels and facilities are adequate near the Project Site.

8. Would there be any other design features special fire protection equipment required due to the height, location, uses or other attributes of the Project?

   None.

For any questions regarding this response, please contact Kien Chin, Planning Analyst, at (323) 881-2404 or Kien.Chin@fire.lacounty.gov.

LAND DEVELOPMENT UNIT:

1. Fire Apparatus Access Roads must be installed and maintained in a serviceable manner prior to and during the time of construction. Fire Code 501.4.

2. All fire lanes shall be clear of all encroachments and shall be maintained in accordance with the Title 32, County of Los Angeles Fire Code.

3. The required 20-foot wide driving surface shall be increased to 26 feet when fire hydrants are required. The 26-foot width shall be maintained for a minimum of 25 linear feet on each side of the hydrant location.

4. Provide a minimum unobstructed width of 28 feet, exclusive of shoulders and an unobstructed vertical clearance "clear to sky" Fire Department vehicular access to within 150 feet of all portions of the exterior walls of the first story of the building, as measured by an approved route around the exterior of the building when the height of the building above the lowest level of the Fire Apparatus Access Road is more than 30 feet high, or the building is more than three stories. The access roadway shall be located a minimum of 15 feet and a maximum of 30 feet from the building and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial Fire Apparatus Access Road is positioned shall be approved by the fire code official. Fire Code 503.1.1 and 503.2.2.

5. Provide approved signs or other approved notices or markings that include the words "NO PARKING - FIRE LANE." Signs shall have a minimum dimension of 12 inches wide by 18 inches high and have red letters on a white reflective background. Signs shall be provided for Fire Apparatus Access Roads, to clearly indicate the entrance to such road, or prohibit the obstruction thereof and at intervals, as required by the Fire Inspector. Fire Code 503.3.

6. The dimensions of the approved Fire Apparatus Access Roads shall be maintained as originally approved by the fire code official. Fire Code 503.2.2.1.

7. Fire Apparatus Access Roads shall be provided with a 32-foot centerline turning radius. (Fire Code 503.2.4) Indicate the centerline, inside and outside turning radii for each change in direction on the site plan.

8. Dead-end Fire Apparatus Access Roads in excess of 150 feet in-length shall be provided with an approved Fire Department turnaround. Fire Code 503.2.5.

9. Fire Apparatus Access Roads shall not be obstructed in any manner, including by the parking of vehicles, or the use of traffic calming devices, including but not limited to, speed bumps or speed humps. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times. Fire Code 503.4.

10. Traffic Calming Devices, including but not limited to, speed bumps and speed humps, shall be prohibited unless approved by the fire code official. Fire Code 503.4.1.

11. All required PUBLIC fire hydrants shall be installed, tested, and accepted prior to beginning construction. Fire Code 501.4.

12. All private on-site fire hydrants shall be installed, tested, and approved prior to building occupancy. Fire Code 901.5.1.

13. Provide a Form 195/196 signed and completed by the local water purveyor.

14. Show all existing public fire hydrants to within 300' of all property lines.

For any questions regarding the report, please contact Joseph Youman at (323) 890-4243 or Joseph.Youman@fire.lacounty.gov.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed.

Under the Los Angeles County Oak tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage or encroach into the protected zone of any tree of the Oak genus which is 25 inches or more in circumference (eight inches in diameter), as measured 4 1/2 feet above mean natural grade.

If Oak trees are known to exist in the proposed project area further field studies should be conducted to determine the presence of this species on the project site.

The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project.

For any questions regarding this response, please contact Forestry Assistant, Nicholas Alegria at (818) 890-5719.

HEALTH HAZARDOUS MATERIALS DIVISION:

The Health Hazardous Materials Division of the Los Angeles County Fire Department has no comments regarding the letter entitled, "Request for Information Regarding Fire Protection Services and Facilities for the Royal Vista Residential Project," dated June 11, 2021, prepared by Environmental Science Associates, pertaining to the project site.

Please contact HHMD senior typist-clerk, Perla Garcia at (323) 890-4035 or Perla.garcia@fire.lacounty.gov if you have any questions.

If you have any additional questions, please contact this office at (323) 890-4330

Very truly yours,

RONALD M. DURBIN, CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

RMD:ac

LOS ANGELES COUNTY
DEPARTMENT OF PARKS AND RECREATION

PARK OBLIGATION REPORT

Tentative Map # **83534** DRP Map Date: **12/13/2022** SCM Date: **01/19/2023** Report Date: **03/01/2023**
Park Planning Area # **10** CSD: **ROWLAND HEIGHTS CSD** Map Type: **Tentative Map - Tract**

Total Units	= Proposed Units	+ Exempt Units
360	**360**	**0**

Park land obligation in acres or in-lieu fees:

ACRES:	**3.52**
IN-LIEU FEES:	**$986,332**

Sections 21.24.340, 21.24.350, 21.28.120, 21.28.130, and 21.28.140, the County of Los Angeles Code, Title 21, Subdivision Ordinance provide that the County will determine whether the development's park obligation is to be met by:

1) the dedication of land for public or private park purpose or,
2) the payment of in-lieu fees or,
3) the provision of amenities or any combination of the above.

The specific determination of how the park obligation will be satisfied will be based on the conditions of approval by the advisory agency as recommended by the Department of Parks and Recreation.

The Representative Land Value (RLVs) in Los Angeles County Code (LACC) Section 21.28.140 are used to calculate park fees and are adjusted annually, based on changes in the Consumer Price Index. The new RLVs become effective July 1st of each year and may apply to this subdivision map if first advertised for hearing before either a hearing officer or the Regional Planning Commission on or after July 1st pursuant to LACC Section 21.28.140, subsection 3. Accordingly, the park fee in this report is subject to change depending upon when the subdivision is first advertised for public hearing.

The park obligation for this development will be met by:

The payment of $986,332 in lieu fees.

Trails:

No Trails

Comments:

For further information or to schedule an appointment to make an in-lieu fee payment:
Please contact Clement Lau at (626) 588-5301 or Loretta Quach at (626) 588-5305
Department of Parks and Recreation, 1000 S. Fremont Avenue, Unit #40. Building A-9 West, 3rd Floor. Alhambra, California 91803.

By: _____

Clement Lau, Departmental Facilites Planner II

LOS ANGELES COUNTY
DEPARTMENT OF PARKS AND RECREATION

PARK OBLIGATION WORKSHEET

Tentative Map # **83534** DRP Map Date: **12/13/2022** SCM Date: **01/19/2023** Report Date: **03/01/2023**
Park Planning Area # **10** CSD: **ROWLAND HEIGHTS CSD** Map Type: **Tentative Map - Tract**

The formula for calculating the acreage obligation and or in-lieu fee is as follows:

(P)eople x (0.0030) Ratio x (U)nits = (X) acres obligation
(X) acres obligation x RLV/Acre = In-Lieu Base Fee

Where: P = Estimate of number of People per dwelling unit according to the type of dwelling unit as determined by the U.S. Census
Ratio = The subdivision ordinance provides a ratio of 3.0 acres of park land for each 1,000 people generated by the development. This ratio is calculated as "0.0030" in the formula.
U = Total approved number of Dwelling Units.
X = Local park space obligation expressed in terms of acres.
RLV/Acre = Representative Land Value per Acre by Park Planning Area.

Total Units **360** = Proposed Units **360** + Exempt Units **0**

Park Planning Area = **10**

Type of dwelling unit	People *	Ratio 3.0 Acres/ 1000 People	Number of Units	Acre Obligation
Detached S.F. Units	**3.49**	**0.0030**	**200**	**2.09**
M.F. < 5 Units	**2.95**	**0.0030**	**0**	**0.00**
M.F. >= 5 Units	**2.98**	**0.0030**	**160**	**1.43**
Mobile Units	**3.18**	**0.0030**	**0**	**0.00**
Exempt Units			**0**	**0.00**
TOTAL			**360**	**3.52**

Ratio	Acre Obligation	RLV / Acre	In-Lieu Base Fee
@ (0.0030)	3.52	$279,858	**$986,332**

Lot #	Provided Space	Provided Acres	Credit (%)	Acre Credit
0		0.00	100.00%	0.00
			Total Provided Acre Credit:	**0.00**

Acre Obligation		Net Obligation	RLV / Acre	**In-Lieu Fee Due**
3.52	0.00	3.52	$279,858	**$986,332**

SKYE PATRICK
Library Director

LA COUNTY LIBRARY

October 27, 2022

Marie Pavlovic
LA County Planning
Subdivisions Section
320 West Temple Street
Los Angeles, CA 90012

COMMENTS FOR ROYAL VISTA RESIDENTIAL AND PARKS PROJECT - PROJECT NO. PRJ2021-002011-(1)

Dear Marie Pavlovic:

This is to provide comments regarding the Royal Vista Residential and Parks Project which proposes to redevelop six parcels of the existing golf course into four residential planning areas and two recreational/open space planning areas, for a total of 360 dwelling units and a trails and park system. Attached is a report of LA County Library's analysis of the development and the projected impact to services.

If you have any questions or need additional information, please contact Elsa Muñoz at (562) 940-8450 or EMunoz@library.lacounty.gov.

Very best,

Skye Patrick
County Librarian

SP:YDR:GR:EM

c: Grace Reyes, Administrative Deputy, LA County Library
Jesse Walker-Lanz, Assistant Director, Public Services, LA County Library
Ting Fanti, Departmental Finance Manager, Budget and Fiscal Services, LA County Library

https://lacounty.sharepoint.com/sites/publiclibrary/docs/staffservices/Documents/EIR/Royal Vista Residential Project/DRP/Royal Vista Residential Project NOP response.doc

LA COUNTY LIBRARY
COMMENTS FOR ROYAL VISTA RESIDENTIAL AND PARKS PROJECT

LA County Library evaluated the Royal Vista Residential and Parks Project located in Los Angeles County within the unincorporated community of Rowland Heights.

The project area is being serviced by the Rowland Heights Library, located at 1850 Nogales St., Rowland Heights, CA 91748, a facility with 14,863 sq. ft. of space, a collection of 67,754 books, magazines, and media, and 21 public access computers (as of June 30, 2022). LA County Library service level guidelines require a minimum of 0.50 gross square foot of library facility space per capita, 3.0 items (books and other library materials) per capita for regional libraries and 2.75 items per capita for community libraries, and 1.0 public access computer per 1,000 people served.

Rowland Heights Library is a community library and based on these guidelines does not currently meet the minimum requirements for the population of this service area. The current deficiency is 8,968 sq. ft. of facility space, 75,229 collection items, and 27 public access computers.

The proposed project involves the construction of a total of 360 dwelling units, with an estimated population increase of 1,127. This project will have a significant impact on library services since it will create a demand for additional materials and facility space and will affect the library's capacity to serve the residents of the area.

We estimate the total increased service cost related to the proposed project to be approximately $697K which is illustrated by the following chart:

Royal Vista Residential and Parks Project	Impact Per Capita (population of 1,127)	Estimated Costs	Total Costs
a. Building	564	$1,000 sq. ft.	$564,000
b. Land (4:1 land to building ratio)	2,256	$20 (Library Planning Area 4)	$45,120
c. Collections	3,099	$28	$86,772
d. Public Access Computers	1	$1,800	$1,800
Total			$697,692

In efforts to minimize the impact of residential projects on library services LA County Library collects a one-time Library Facilities Mitigation Fee (Developer Fee) at the time building permits are requested for all new residential dwellings located within the unincorporated areas of the County served by the LA County Library. The current Developer Fees are as follows, by Library Planning Area, these fees are subject to a CPI increase effective July 1:

FY 2022-23 Library Facilities Mitigation Fee Schedule

Planning Area	Fee per Dwelling Unit
Area 1 - Santa Clarita Valley	$1,096
Area 2 - Antelope Valley	$1,061
Area 3 - West San Gabriel Valley	$1,108
Area 4 - East San Gabriel Valley	$1,094
Area 5 – Southeast	$1,097
Area 6 – Southwest	$1,105
Area 7 - Santa Monica Mountains	$1,099

The Royal Vista Residential and Parks Project is within the LA County Library's Planning Area 4 – East San Gabriel Valley, current Developer Fee is $1,094 per dwelling unit for a total of $393,840 ($1,094 x 360 dwelling units).

LA County Library also collects an annual special tax which is levied on parcels within 10 cities (Cudahy, Culver City, Duarte, El Monte, La Cañada Flintridge, Lakewood, Lomita, Lynwood, Maywood, and West Hollywood) and unincorporated areas serviced by LA County Library. The Special Tax Rate for FY 2022-23 is $33.20 per parcel.

The LA County Library is open to discuss options regarding mitigation efforts and supporting the continued enhancement and delivery of library services to the residents of Rowland Heights.