

Sewer Area Study
ESTU2016000099
PC 12338AS
SAS17-00001

Tract Map No. 74650

Prepared by:

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SEWER AREA STUDY
CONCEPTUAL APPROVAL OF Q ONLY

APPROVED BY: *Imad Aboujawdah* RCE NO. _____ DATE 03/12/2018

CHECKED BY: *Imad Aboujawdah* DATE 03/12/2018

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION

THIS CONCEPTUAL APPROVAL IS CONTINGENT UPON OUTLET APPROVAL FROM
CITY OF SANTA CLARITA

PLEASE NOTE THAT THE COUNTY OF LOS ANGELES ONLY REVIEWED AND
APPROVED DISCHARGES AND CAPACITIES FROM FACILITIES WITHIN
UNINCORPORATED AREAS. SEWER CAPACITIES FOR EXISTING SEWER LINES
LYING WITHIN CITY JURISDICTION SHALL BE CHECKED BY SAID CITY.



Imad Aboujawdah
Imad Aboujawdah, P.E.

3/8/18
Date

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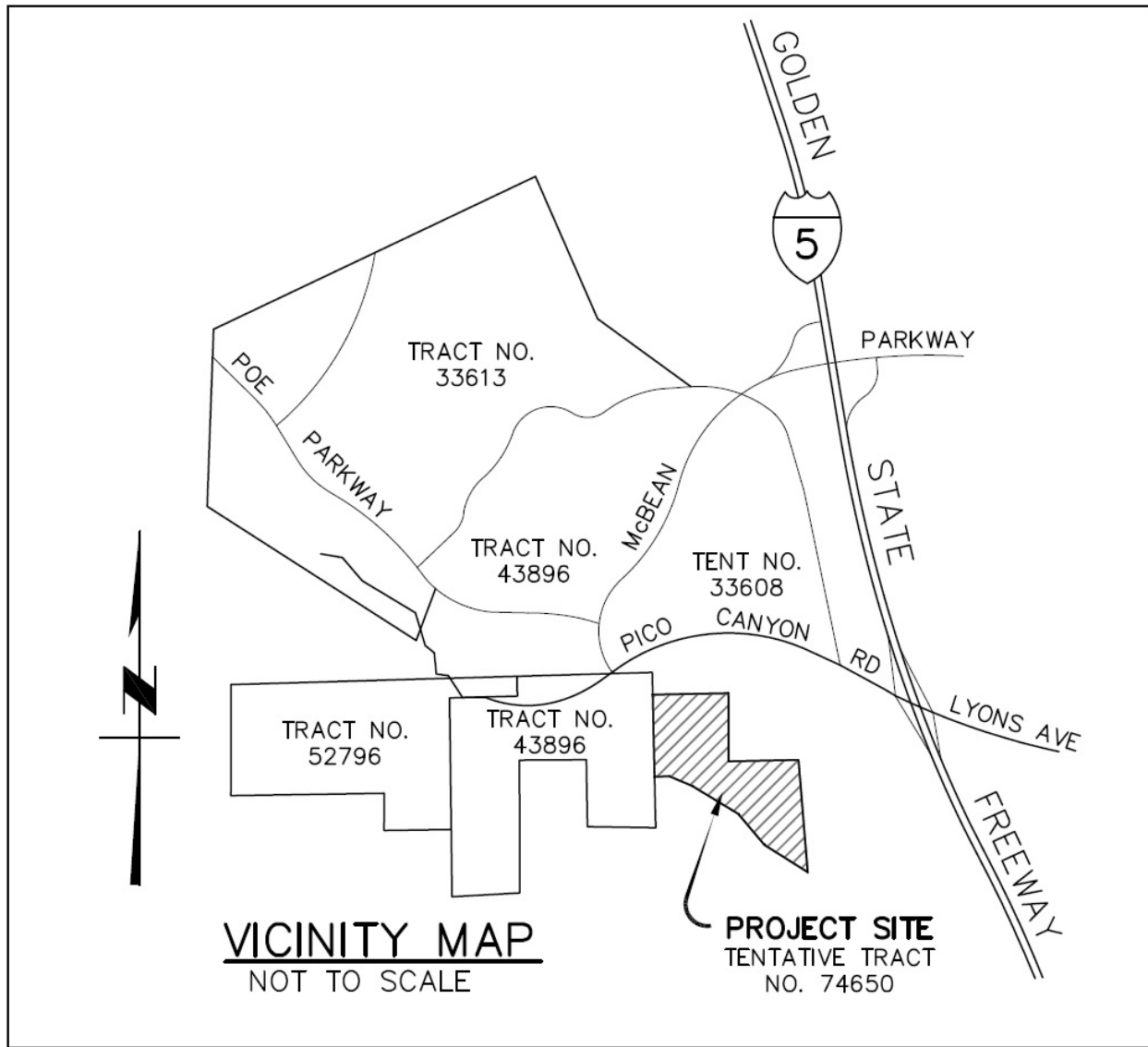
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REFERENCES:

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INTRODUCTION

Civil Design and Drafting Inc., has performed a sewer area study for the proposed development (Tract No. 74650) located in the unincorporated area of Los Angeles County, east of Magnolia Lane and Autumn Place. The site is zoned A-2-2 per Los Angeles County GIS-NET3 – Planning and Zoning. The purpose of this study is to provide capacity analysis for the proposed sewer line that will convey the flow from the proposed project through the existing county sewer line at Magnolia Lane. The existing county sewer line capacity from the connection will join the existing sewer line of Santa Clarita at the city boundary. The city of Santa Clarita will continue the direction of the flow to the sanitation district trunk sewer located in Orchard Village Road and Mill Valley Street. This study will also determine the pipe size necessary for sewer line extension and any upgrade of existing sewer lines.

SITE DESCRIPTION

The proposed site is located in the unincorporated area of Los Angeles County, at the east corner of Magnolia Lane and Autumn Place. The project consists of 37 single family dwellings under Vesting Tentative Tract Map No. 74650.

PROJECT DESCRIPTION

The proposed development consists of single family residential lots and encompasses a total of 37 units. The site also includes open spaces, hardscape, and landscape areas.

SEWER PIPE CAPACITY ANALYSIS

The proposed sewer pipes in Magnolia Lane, “A” Street, “B” Street, and “C” Street were designed using S-C4 standard per County of Los Angeles. The project consists of 37 units and generates a 0.037 cfs. This flow was used to calculate the existing site sewer discharge.

The future development – Sub Area 2B-2O, 2R-2Y, & 4A-4B as seen on Sewer Area Study Map, consists of 680.20 acres and generates a 0.399 cfs.

The existing flow beginning at Magnolia Lane in Los Angeles County and ending at the City of Santa Clarita Boundary have been calculated using Kutter’s Formula per County of Los Angeles. Tributary areas shown on the map have been determined by using as built data from the County of Los Angeles. The capacity of the entire sewer line within the project tributary area was analyzed per County of Los Angeles standard S-C4 for a maximum design depth of half full. The zoning map for each of the tributary

areas was found in GIS-NET3 from the Department of Regional Planning-County of Los Angeles. See Table 1 below for the summary of the total flow of the existing, proposed, and future development.

Table 1: Total flow of the existing, proposed, and future development

SUMMARY		Sub Area	Area	Calculated Flow (cfs)	Approved Q (cfs)
LA County	Proposed	1A	37 DU	0.037	6.238 from LA County
	Future	2B - 2O, 2R-2Y, & 4A- 4B	680.20 Acres	0.399	
	Existing	1B, 2P, 2Q, 3A - 3C, 4C, 5A, 7A -7C, 8A - 8E, 9A, & 10A – 10Z	212.19 Acres	5.801	
			2766 DU		
		1784 Students			
City of Santa Clarita	Existing	11A-11B, 12A, 13A-13B, 14A, 15A-15E, 16A-16B, & 17A-17E	138.39 Acres	1.823	1.823 from City of Santa Clarita
			1558 DU		
			2097 Students		

METHODOLOGY

Kutter’s formula was used in the analysis of the pipe segments with the corresponding proposed slopes. A value of n=0.013 was used in the analysis and a spreadsheet program was used to run the flow depth for circular pipes. This program was obtained from the County program library.

CONCLUSION

Based on the sewer area study prepared for the project, the existing sewer line was analyzed to determine the minimum line capacity of the proposed development. The existing line was divided into 17 junctions, and the flow rate of each was calculated based on the tributary areas coming into each reach. This sewer area study shows the mitigation in Summary Table 2 and the Sewer Area Study Map (Please see Section and Map). Based on the results in Summary Table 2, the mitigation will require the downstream sewer lines to be upgraded from manhole # 17-16-14-13-12-11-10-9-7-2-1 and 171-169.

SECTION

**SUMMARY TABLE 2: CAPACITY OF EXISTING PIPES FOR FULL TRIBUTARY DEVELOPMENT AREA
(INCLUDING EXISTING, PROPOSED, AND FUTURE DEVELOPMENT)**

Street Name	Segment		Pipe		*Capacity (cfs)		Area No.	Area (Acres, DU, Student)	Zoning Coeff.	Calculated Flow (cfs)	** Cumulative Calculated Flow (cfs)	PC or CI Construction Plan #	RESULTS	% Full	
	M.H. #	M.H. #	Size (in)	Slope (%)	1/2 Full (<15")	3/4 Full (≥15")								Comulative Flow/ Capacity	
LA COUNTY	6	5	8	2.00											
	5	4	8	2.00											
	4	3	8	2.00											
	3	2	8	0.40											
	2	1	8	0.40											
	1	597	8	0.40	0.35		1A	37	0.0010	0.037	0.037		OK	10.6%	
	597	596	8	1.88	0.76						0.037	P.C. 11544	OK	4.9%	
	596	595	8	0.40	0.35						0.037	P.C. 11544	OK	10.6%	
	595	594	8	0.56	0.41		1B	50	0.0010	0.050	0.087	P.C. 11544	OK	21.1%	
	594	593	8	36.0	3.32						0.087	P.C. 11544	OK	2.6%	
	593	592	8	5.40	1.29						0.087	P.C. 11545	OK	6.8%	
	592	575	8	7.00	1.47						0.087	P.C. 11544	OK	5.9%	
							2A	117.50	0.0000	0.000	0.087				
							2B	12.45	0.0005	0.006	0.093				
							2C	11.74	0.0005	0.006	0.099				
							2D	57.00	0.0005	0.029	0.128				
							2E	95.41	0.0005	0.048	0.175				
							2F	10.01	0.0005	0.005	0.180				
							2G	10.00	0.0005	0.005	0.185				
							2H	40.00	0.0005	0.020	0.205				
							2I	20.00	0.0005	0.010	0.215				
							2J	15.00	0.0005	0.008	0.223				
							2K	5.00	0.0005	0.003	0.225				
							2L	14.86	0.0005	0.007	0.233				
							2M	33.00	0.0005	0.017	0.249				
							2N	40.00	0.0005	0.020	0.269				
							2O	39.53	0.0005	0.020	0.289				
							2P	19	0.0010	0.019	0.308				
						2R	9.27	0.0005	0.005	0.313					
						2S	38.00	0.0005	0.019	0.332					
						2T	18.92	0.0005	0.009	0.341					
						2U	18.92	0.0005	0.009	0.351					
						2V	11.30	0.0005	0.006	0.356					

**SUMMARY TABLE 2: CAPACITY OF EXISTING PIPES FOR FULL TRIBUTARY DEVELOPMENT AREA
(INCLUDING EXISTING, PROPOSED, AND FUTURE DEVELOPMENT)**

Street Name	Segment		Pipe		*Capacity (cfs)		Area No.	Area (Acres, DU, Student)	Zoning Coeff.	Calculated Flow (cfs)	** Cumulative Calculated Flow (cfs)	PC or CI Construction Plan #	RESULTS	% Full
	M.H. #	M.H. #	Size (in)	Slope (%)	1/2 Full (<15")	3/4 Full (≥15")								Comulative Flow/ Capacity
LA COUNTY							2X	9.49	0.0005	0.005	0.361			
							2Y	10.66	0.0005	0.005	0.366			
	575	574	15	7.00		8.24	2Q	231.00	0.0010	0.231	0.597	P.C. 11544	OK	7.2%
	574	157	15	0.52		4.19					0.597	P.C. 11464	OK	14.3%
							3A	243	0.0010	0.243	0.840			
							3B	173	0.0010	0.173	1.013			
	157	158	18	0.40		6.04	3C	195	0.0010	0.195	1.208	P.C. 10462-A	OK	20.0%
	158	160	18	0.52		6.90					1.208	P.C. 10462-A	OK	17.5%
	160	163	15	1.20		6.38					1.208	P.C. 10462-A	OK	18.9%
	163	650	15	1.80		7.82					1.208	P.C. 10462-A	OK	15.5%
							4A	9.40	0.0005	0.005	1.213			
							4B	22.40	0.0060	0.134	1.347			
	650	165	15	2.40		9.03	4C	10.34	0.0030	0.031	1.378	P.C. 10462-A	OK	15.3%
	165	166	15	1.40		6.89	5A	969	0.000039	0.037	1.416	P.C. 10462-A	OK	20.5%
	166	167	15	1.30		6.64					1.416	P.C. 10462-A	OK	21.3%
	167	168	12	4.36		6.60					1.416	P.C. 10462-A	OK	39.8%
	168	169	15	1.00		5.82					1.416	P.C. 10462-A	OK	24.3%
	169	170	15	1.60		7.37					1.416	P.C. 10462-A	OK	19.2%
							7A	5.67	0.010	0.057	1.473			
							7B	11.00	0.032	0.352	1.825			
	170	171	15	1.60		7.37	7C	14.32	0.015	0.215	2.039	P.C. 10462-A	OK	27.7%
	171	35	15	2.92		9.96					2.039	P.C. 10462-A	OK	20.5%
							8A	27.33	0.012	0.328	2.367			
							8B	11.08	0.015	0.166	2.534			
							8C	3.17	0.015	0.048	2.581			
							8D	2.60	0.015	0.039	2.620			
	35	26	18	0.40		6.04	8E	4.67	0.015	0.070	2.690	P.C. 10462-A	OK	44.5%
	26	365	21	0.81		13.10	9A	9.20	0.032	0.294	2.985	P.C. 10445	OK	22.8%
						10A	138	0.001	0.138	3.123				
						10B	815	0.000039	0.032	3.154				
						10C	4.07	0.016	0.065	3.219				
						10D	4.60	0.016	0.074	3.293				
						10E	267	0.001	0.267	3.560				

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Street Name	Segment		Pipe		*Capacity (cfs)		Area No.	Area (Acres, DU, Student)	Zoning Coeff.	Calculated Flow (cfs)	** Cumulative Calculated Flow (cfs)	PC or CI Construction Plan #	RESULTS	% Full	
	M.H. #	M.H. #	Size (in)	Slope (%)	1/2 Full (<15")	3/4 Full (≥15")								Comulative Flow/ Capacity	
LA COUNTY							10F	80	0.001	0.080	3.640				
							10G	75	0.001	0.075	3.715				
							10H	140	0.001	0.140	3.855				
							10J	184	0.001	0.184	4.039				
							10K	81	0.001	0.081	4.120				
							10L	17.14	0.006	0.103	4.223				
							10M	16.16	0.016	0.259	4.481				
							10N	23.36	0.006	0.140	4.621				
							10P	14.27	0.016	0.228	4.850				
							10R	5.07	0.015	0.076	4.926				
							10S	28.14	0.015	0.422	5.348				
							10T	298	0.001	0.298	5.646				
							10V	178	0.001	0.178	5.824				
							10X	116	0.001	0.116	5.940				
							10Y	171	0.001	0.171	6.111				
	365	367	21	0.81		13.10	10Z	127	0.001	0.127	6.238	P.C. 10445	OK	47.6%	
	367	79	18	1.00		9.57					6.238	P.C. 10445	OK	65.1%	
CITY OF SANTA CLARITA	79	78	18	1.40		11.33					6.238	P.C. 10445	OK	55.0%	
	78	76	18	1.00		9.57					6.238	P.C. 10445	OK	65.1%	
	76	17	18	1.12		10.13					6.238	P.C. 10445	OK	61.6%	
	17	12	18	0.20		4.26					6.238	P.C. 885401	UPGRADE	146.5%	
							11A	73	0.001	0.073	6.311				
	12	7	18	0.20		4.26	11B	126	0.0002	0.025	6.336	P.C. 8769, 8855	UPGRADE	148.8%	
	7	2	18	0.32		5.40					6.336	P.C. 876091	UPGRADE	117.3%	
	2	1	18	0.24		4.67					6.336	P.C. 876091	UPGRADE	135.7%	
	1	171	18	1.36		11.17					6.336	P.C. 876091	OK	56.7%	
	171	169	18	0.32		5.40					6.336	P.C. 876091	UPGRADE	117.3%	
	169	168	12	8.00	4.82						6.336	P.C. 876091	OK	131.4%	
	168	165	15	1.40		6.89	12A	95	0.001	0.095	6.431	P.C. 8583	OK	93.3%	
							13A	269	0.001	0.269	6.700				
	165	150	15	1.52		7.18	13B	142	0.001	0.142	6.842	P.C. 8146R01	OK	95.3%	
150	149	18	1.48		11.65					6.842	P.C. 8146R01	OK	58.7%		
149	148	18	1.52		11.81	14A	82	0.001	0.082	6.924	P.C. 8146R01	OK	58.6%		

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(INCLUDING EXISTING, PROPOSED, AND FUTURE DEVELOPMENT)**

Street Name	Segment		Pipe		*Capacity (cfs)		Area No.	Area (Acres, DU, Student)	Zoning Coeff.	Calculated Flow (cfs)	** Cumulative Calculated Flow (cfs)	PC or CI Construction Plan #	RESULTS	% Full	
	M.H. #	M.H. #	Size (in)	Slope (%)	1/2 Full (<15")	3/4 Full (≥15")								Comulative Flow/ Capacity	
CITY OF SANTA CLARITA	148	145	18	1.48		11.65					6.924	P.C. 8146R01	OK	59.4%	
	145	144	18	1.52		11.81					6.924	P.C. 8146R01	OK	58.6%	
							15A	1471	0.000077	0.114	7.038				
							15B	307	0.001	0.307	7.345				
							15C	6.65	0.015	0.100	7.444				
							15D	2.22	0.001	0.024	7.469				
	144	129	18	1.00		9.57	15E	126	0.001	0.126	7.595	P.C. 8146R01	OK	79.3%	
	129	43	18	1.00		9.57	16A	76	0.001	0.076	7.671	P.C. 8146R01	OK	80.1%	
	43	32	18	1.00		9.57	16B	626	0.000039	0.024	7.695	P.C. 8146R01	OK	80.4%	
	32	31	18	2.12		13.95					7.695	P.C. 8146R01	OK	55.2%	
							17A	62	0.001	0.062	7.757				
							17B	70	0.001	0.070	7.827				
							17C	6	0.001	0.006	7.833				
							17D	115	0.001	0.115	7.948				
								6.12	0.0002	0.001	7.949				
31	TRUNK	18	1.24			17E	111	0.001	0.111	8.060	P.C. 10445	OK	75.6%		

* Calculated using Kutter's Formula with n=0.013 (as in S-C4 graph in PC Procedural Manual)

** Based on current land use and coefficients per LA County, (Attach supporting calculations)

TRACT NO. 74650 - SEWER AREA STUDY
 JUNCTION CALCULATION - EXISTING - PROPOSED - FUTURE

	Tract #	Sub Area	Zoning	AREA			Zoning Coefficient (cfs/acre)	Commulative Flow (cfs)
				Acres	DU	Students		
	74650	1A	A-2-2		37		0.0010	0.037
	43896-06	1B	R-A-10000		40		0.0010	0.040
	43896-02		R-A-10000		10		0.0010	0.010
REACH 1								0.087
		2A	O-S	117.50			0.0000	0.000
	2826-70	2B	A-2-2	12.45			0.0005	0.006
	2826-9	2C	A-2-2	11.74			0.0005	0.006
	2826-9	2D	A-2-2	57.00			0.0005	0.029
	2826-9	2E	A-2-2	95.41			0.0005	0.048
	2826-20	2F	A-2-2	10.01			0.0005	0.005
	2826-20	2G	A-2-2	10.00			0.0005	0.005
	2826-20	2H	A-2-2	40.00			0.0005	0.020
	2826-20	2I	A-2-2	20.00			0.0005	0.010
	2826-20	2J	A-2-2	15.00			0.0005	0.008
	2826-20	2K	A-2-2	5.00			0.0005	0.003
	2826-20	2L	A-2-2	14.86			0.0005	0.007
	2826-20	2M	A-2-2	33.00			0.0005	0.017
	2826-20	2N	A-2-2	40.00			0.0005	0.020
	2826-20	2O	A-2-2	39.53			0.0005	0.020
	52908	2P	A-2-2		19		0.0010	0.019
	2826-20	2R	A-2-2	9.27			0.0005	0.005
	2826-20	2S	A-2-2	38.00			0.0005	0.019
	2826-20	2T	A-2-2	18.92			0.0005	0.009
	2826-20	2U	A-2-2	18.92			0.0005	0.009
	2826-20	2V	A-2-2	11.30			0.0005	0.006
	2826-97	2X	A-2-2	9.49			0.0005	0.005
	43896-01	2Y	A-2-2	10.66			0.0005	0.005
	43896-02	2Q	R-A-10000		45		0.0010	0.045
	43896-03		R-A-10000		13		0.0010	0.013
	43896-04		R-A-10000		32		0.0010	0.032
	43896-05		R-A-10000		22		0.0010	0.022
	43896-07		R-A-10000		66		0.0010	0.066
	43896		R-A-10000		53		0.0010	0.053
REACH 2								0.597
	49761	3A	R-1-5000		243		0.0010	0.243
	49760	3B	R-1-5000		173		0.0010	0.173
	33698	3C	RPD-5000-6U		195		0.0010	0.195
REACH 3								1.208
	2826-20	4A	A-2-2	9.40			0.0005	0.005
	2826-20	4B	RPD-5000-6U	22.40			0.006	0.134
	48208	4C	RPD-1-3.3U	10.34			0.003	0.031

TRACT NO. 74650 - SEWER AREA STUDY
 JUNCTION CALCULATION - EXISTING - PROPOSED - FUTURE

	Tract #	Sub Area	Zoning	AREA			Zoning Coefficient (cfs/acre)	Commulative Flow (cfs)
				Acres	DU	Students		
REACH 4								1.378
		5A	S			969	0.000039	0.037
REACH 5								1.416
REACH 6	NOT IN USE							
	33608-04	7A	RPD-5000-10U	5.67			0.0100	0.057
	33608-03	7B	RPD-5000-32U	11.00			0.0320	0.352
	44806	7C	C-3-DP	14.32			0.0150	0.215
REACH 7								2.039
	45638	8A	R-3-DP	27.33			0.0120	0.328
	2826-63	8B	C-3	11.08			0.0150	0.166
	2826-10	8C	C-3	3.17			0.0150	0.048
	2826-63	8D	C-3	2.60			0.0150	0.039
	44806	8E	C-3-DP	4.67			0.0150	0.070
REACH 8								2.690
	33608-01	9A	RPD-5000-32U	9.20			0.0320	0.294
REACH 9								2.985
	49100	10A	R-1-5000		138		0.0010	0.138
		10B	S			815	0.000039	0.032
	44337	10C	RPD-1-16U	4.07			0.0160	0.065
	44336	10D	RPD-1-16U	4.60			0.0160	0.074
	33698	10E	RPD-5000-6U		267		0.0010	0.267
	44353	10F	RPD-1-16U		80		0.0010	0.080
	44340	10G	RPD-1-28U		75		0.0010	0.075
	33608-02	10H	RPD-5000-26U		140		0.0010	0.140
	49762	10Y	RPD-5000-6U		171		0.0010	0.171
	49099	10J	RPD-1-11U		184		0.0010	0.184
	33698	10K	RPD-5000-6U		81		0.0010	0.081
	33698	10L	RPD-5000-6U	17.14			0.0060	0.103
	44338	10M	RPD-1-16U	16.16			0.0160	0.259
	33698	10N	RPD-5000-6U	23.36			0.0060	0.140
	44339	10P	RPD-1-16U	14.27			0.0160	0.228
	33698	10R	C-3	5.07			0.0150	0.076
	2826-95	10S	C-3-DP	9.04			0.0150	0.136
	2826-96		C-3-DP	19.10			0.0150	0.287
	33613	10T	R-1-5000		298		0.0010	0.298
	49761	10V	R-1-5000		178		0.0010	0.178
	49760	10X	R-1-5000		116		0.0010	0.116
	49099	10Z	RPD-5000-6U		127		0.0010	0.127
REACH 10								6.238
	27567	11A	UR3		44		0.0010	0.044
	27288		UR3		29		0.0010	0.029

TRACT NO. 74650 - SEWER AREA STUDY
 JUNCTION CALCULATION - EXISTING - PROPOSED - FUTURE

Sample Calculation					Zoning Coefficient (cfs/acre)	Commulative Flow (cfs)
Sub Area	Zoning	AREA				
		Acres	DU	Students		
2O	A-2-2	39.53			x 0.001/2 =	0.020
2P	A-2-2		19		x 0.001 =	0.019
2Q	R-A-10000		231		x 0.001 =	0.231
3B	R-1-5000		173		x 0.001 =	0.173
3C	RPD-5000-6U		195		x 0.001 =	0.195
4B	RPD-5000-6U	22.40			x 0.006 =	0.134
4C	RPD-1-3.3U	10.34			x 0.003 =	0.031
7A	RPD-5000-10U	5.67			x 0.010 =	0.057
7B	RPD-5000-32U	11.00			x 0.032 =	0.352
7C	C-3-DP	14.32			x 0.015 =	0.215
8B	C-3	11.08			x 0.015 =	0.166
10C	RPD-1-16U	4.07			x 0.016 =	0.065
11A	UR3		73		x 0.001 =	0.073
13A	UR3 (11DU/AC)		269		x 0.001 =	0.269
15B	UR5 (18DU/AC)		307		x 0.001 =	0.307
15C	CN	6.65			x 0.015 =	0.100
15D	UR2		24		x 0.001 =	0.024
17B	S			626	x S =	0.024

$$S = \frac{10 \text{ gal/student}}{\text{Day}} \times 2.5 \times \frac{1 \text{ cf}}{7.48 \text{ gal}} \times \frac{1 \text{ day}}{24 \text{ h} \times 60 \text{ min} \times 60 \text{ s}}$$

S = Elementary or Jr. High

DU = Dwelling Units

SUMMARY		Sub Area	Area	Calculated Flow (cfs)	Approved Q (cfs)
LA County	Proposed	1A	37 DU	0.037	6.238 from LA County
	Future	2B - 2O, 2R-2Y, & 4A- 4B	680.20 Acres	0.399	
	Existing	1B, 2P, 2Q, 3A - 3C, 4C, 5A, 7A -7C, 8A - 8E, 9A, & 10A - 10Z	212.19 Acres 2766 DU 1784 Students	5.801	
City of Santa Clarita	Existing	11A-11B, 12A, 13A-13B,	138.39 Acres	1.823	1.823 from City of Santa Clarita
		14A, 15A-15E, 16A-16B,	1558 DU		
		& 17A-17E	2097 Students		

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	0.037	cfs	<= Discharge
n=	0.013		<= Roughness coefficient
S=	0.0040		<= Slope V:H
r=	0.333	ft	<= Radius

TRIAL DEPTH:

h=	1.335	in	<= Vary this depth to get $Q_{assume} = Q_{given}$
		0.111 ft	

CACULATIONS:

beta= 48.25 degree

R= 0.068 ft

C= 58.465

V= 0.966 ft/sec

A= 0.038 sq. ft.

Q_{assume}= 0.037 cfs

Q_{halfull} = 0.35 cfs Q_{3/4full} = 0.65 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 1.335

Capacity d/r = 33.41%

Q_{capacity} = 0.348 cfs

Capacity Q_{given}/Q_{capacity} = 10.62%

(Q_{halfull} = 0.35 cfs	(Q_{3/4full} = 0.65 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.167 ft	R _{3/4full} = 0.201 ft
C _{halfull} = 77.391 ft	C _{3/4full} = 81.524 ft
A _{halfull} = 0.174 sq. ft.	A _{3/4full} = 0.280 sq. ft.
V _{halfull} = 2.000 ft/sec)	V _{3/4full} = 2.311 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	0.037	cfs	<= Discharge
n=	0.013		<= Roughness coefficient
S=	0.0188		<= Slope V:H
r=	0.333	ft	<= Radius

TRIAL DEPTH:

h=	0.943	in	<= Vary this depth to get Q _{assume} = Q _{given}
		0.079 ft	

CACULATIONS:

beta= 40.18 degree

R= 0.049 ft

C= 52.598

V= 1.604 ft/sec

A= 0.023 sq. ft.

Q_{assume}= 0.037 cfs

Q_{halfull} = 0.76 cfs Q_{3/4full} = 1.41 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 0.943

Capacity d/r = 23.60%

Q_{capacity} = 0.759 cfs

Capacity Q_{given}/Q_{capacity} = 4.88%

(Q_{halfull} = 0.76 cfs	(Q_{3/4full} = 1.41 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.167 ft	R _{3/4full} = 0.201 ft
C _{halfull} = 77.738 ft	C _{3/4full} = 81.865 ft
A _{halfull} = 0.174 sq. ft.	A _{3/4full} = 0.280 sq. ft.
V _{halfull} = 4.356 ft/sec)	V _{3/4full} = 5.031 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	0.037 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0040	<= Slope V:H
r=	0.333 ft	<= Radius

TRIAL DEPTH:

h= **1.337** in <= Vary this depth to get Q_{assume} = Q_{given}
0.111 ft

CACULATIONS:

beta= 48.29 degree

R= 0.068 ft

C= 58.492

V= 0.967 ft/sec

A= 0.038 sq. ft.

Q_{assume}= 0.037 cfs

Q_{half full} = **0.35 cfs** Q_{3/4 full} = **0.65 cfs**

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 1.337

Capacity d/r = 33.46%

Q_{capacity} = 0.348 cfs

Capacity Q_{given}/Q_{capacity} = 10.62%

(Q_{half full} = 0.35 cfs	(Q_{3/4 full} = 0.65 cfs
beta _{half full} = 90.000 degree	beta _{3/4 full} = 120.00 degree
R _{half full} = 0.167 ft	R _{3/4 full} = 0.201 ft
C _{half full} = 77.391 ft	C _{3/4 full} = 81.524 ft
A _{half full} = 0.174 sq. ft.	A _{3/4 full} = 0.280 sq. ft.
V _{half full} = 2.000 ft/sec)	V _{3/4 full} = 2.311 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	0.087 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0056	<= Slope V:H
r=	0.333 ft	<= Radius

TRIAL DEPTH:

h=	1.830 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.153 ft	

CACULATIONS:

beta= 57.18 degree

R= 0.091 ft

C= 64.313

V= 1.448 ft/sec

A= 0.060 sq. ft.

Q_{assume}= 0.087 cfs

Q_{halfull} = 0.41 cfs Q_{3/4full} = 0.77 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 1.830

Capacity d/r = 45.80%

Q_{capacity} = 0.413 cfs

Capacity Q_{given}/Q_{capacity} = 21.07%

(Q_{halfull} = 0.41 cfs	(Q_{3/4full} = 0.77 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.167 ft	R _{3/4full} = 0.201 ft
C _{halfull} = 77.516 ft	C _{3/4full} = 81.647 ft
A _{halfull} = 0.174 sq. ft.	A _{3/4full} = 0.280 sq. ft.
V _{halfull} = 2.371 ft/sec)	V _{3/4full} = 2.739 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	0.087	cfs	<= Discharge
n=	0.013		<= Roughness coefficient
S=	0.3600		<= Slope V:H
r=	0.333	ft	<= Radius

TRIAL DEPTH:

h=	0.718	in	<= Vary this depth to get $Q_{assume} = Q_{given}$
		0.060 ft	

CACULATIONS:

beta= 34.88 degree

R= 0.038 ft

C= 47.991

V= 5.628 ft/sec

A= 0.015 sq. ft.

Q_{assume}= 0.087 cfs

Q_{halfull} = 3.32 cfs Q_{3/4full} = 6.18 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 0.718

Capacity d/r = 17.97%

Q_{capacity} = 3.324 cfs

Capacity Q_{given}/Q_{capacity} = 2.62%

(Q_{halfull} = 3.32 cfs	(Q_{3/4full} = 6.18 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.167 ft	R _{3/4full} = 0.201 ft
C _{halfull} = 77.828 ft	C _{3/4full} = 81.953 ft
A _{halfull} = 0.174 sq. ft.	A _{3/4full} = 0.280 sq. ft.
V _{halfull} = 19.083 ft/sec)	V _{3/4full} = 22.041 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	0.087 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0540	<= Slope V:H
r=	0.333 ft	<= Radius

TRIAL DEPTH:

h= **1.090** in <= Vary this depth to get Q_{assume} = Q_{given}
0.091 ft

CACULATIONS:

beta= 43.35 degree

R= 0.057 ft

C= 55.221

V= 3.054 ft/sec

A= 0.029 sq. ft.

Q_{assume}= 0.087 cfs

Q_{halfull} = 1.29 cfs Q_{3/4full} = 2.39 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 1.090

Capacity d/r = 27.28%

Q_{capacity} = 1.287 cfs

Capacity Q_{given}/Q_{capacity} = 6.76%

(Q_{halfull} = 1.29 cfs	(Q_{3/4full} = 2.39 cfs
beta_{halfull} = 90.000 degree	beta_{3/4full} = 120.00 degree
R_{halfull} = 0.167 ft	R_{3/4full} = 0.201 ft
C_{halfull} = 77.800 ft	C_{3/4full} = 81.926 ft
A_{halfull} = 0.174 sq. ft.	A_{3/4full} = 0.280 sq. ft.
V_{halfull} = 7.388 ft/sec)	V_{3/4full} = 8.534 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	0.087	cfs	<= Discharge
n=	0.013		<= Roughness coefficient
S=	0.0700		<= Slope V:H
r=	0.333	ft	<= Radius

TRIAL DEPTH:

h=	1.030	in	<= Vary this depth to get Q _{assume} = Q _{given}
		0.086 ft	

CACULATIONS:

beta= 42.08 degree

R= 0.054 ft

C= 54.221

V= 3.325 ft/sec

A= 0.026 sq. ft.

Q_{assume}= 0.087 cfs

Q_{halfull} = 1.47 cfs

Q_{3/4full} = 2.72 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 1.030

Capacity d/r = 25.78%

Q_{capacity} = 1.465 cfs

Capacity Q_{given}/Q_{capacity} = 5.94%

(Q_{halfull} = 1.47 cfs
beta_{halfull} = 90.000 degree
R_{halfull} = 0.167 ft
C_{halfull} = 77.807 ft
A_{halfull} = 0.174 sq. ft.
V_{halfull} = 8.413 ft/sec)

(Q_{3/4full} = 2.72 cfs
beta_{3/4full} = 120.00 degree
R_{3/4full} = 0.201 ft
C_{3/4full} = 81.933 ft
A_{3/4full} = 0.280 sq. ft.
V_{3/4full} = 9.717 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	0.597	cfs	<= Discharge
n=	0.013		<= Roughness coefficient
S=	0.0200		<= Slope V:H
r=	0.625	ft	<= Radius

TRIAL DEPTH:

h=	2.740	in	<= Vary this depth to get Q _{assume} = Q _{given}
		0.228 ft	

CACULATIONS:

beta= 50.60 degree

R= 0.139 ft

C= 73.696

V= 3.885 ft/sec

A= 0.153 sq. ft.

Q_{assume}= 0.596 cfs

Q_{half full} = 4.46 cfs Q_{3/4 full} = 8.24 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 2.740

Capacity d/r = 36.53%

Q_{capacity} = 8.239 cfs

Capacity Q_{given}/Q_{capacity} = 7.25%

(Q_{half full} = 4.46 cfs	(Q_{3/4 full} = 8.24 cfs
beta_{half full} = 90.000 degree	beta_{3/4 full} = 120.00 degree
R_{half full} = 0.313 ft	R_{3/4 full} = 0.377 ft
C_{half full} = 91.878 ft	C_{3/4 full} = 96.089 ft
A_{half full} = 0.614 sq. ft.	A_{3/4 full} = 0.987 sq. ft.
V_{half full} = 7.269 ft/sec)	V_{3/4 full} = 8.345 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	0.597 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0052	<= Slope V:H
r=	0.625 ft	<= Radius

TRIAL DEPTH:

h=	3.770 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.314 ft	

CACULATIONS:

beta= 60.18 degree

R= 0.184 ft

C= 79.667

V= 2.465 ft/sec

A= 0.242 sq. ft.

Q_{assume}= 0.596 cfs

Q_{halffull} = 2.27 cfs Q_{3/4full} = 4.19 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 3.770

Capacity d/r = 50.27%

Q_{capacity} = 4.191 cfs

Capacity Q_{given}/Q_{capacity} = 14.25%

(Q_{halffull} = 2.27 cfs	(Q_{3/4full} = 4.19 cfs
beta _{halffull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halffull} = 0.313 ft	R _{3/4full} = 0.377 ft
C _{halffull} = 91.649 ft	C _{3/4full} = 95.871 ft
A _{halffull} = 0.614 sq. ft.	A _{3/4full} = 0.987 sq. ft.
V _{halffull} = 3.697 ft/sec)	V _{3/4full} = 4.245 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	1.208	cfs	<= Discharge
n=	0.013		<= Roughness coefficient
S=	0.0040		<= Slope V:H
r=	0.750	ft	<= Radius

TRIAL DEPTH:

h=	5.320	in	<= Vary this depth to get Q _{assume} = Q _{given}
		0.443 ft	

CACULATIONS:

beta=	65.86	degree
R=	0.253	ft
C=	86.752	
V=	2.761	ft/sec
A=	0.437	sq. ft.
Q _{assume} =	1.206	cfs

Q_{halfull} =	3.27 cfs	Q_{3/4full} =	6.04 cfs
------------------------------	-----------------	------------------------------	-----------------

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 5.320

Capacity d/r = 59.11%

Q_{capacity} = 6.042 cfs

Capacity Q_{given}/Q_{capacity} = 20.00%

(Q_{halfull} =	3.27 cfs	(Q_{3/4full} =	6.04 cfs
beta_{halfull} =	90.000 degree	beta_{3/4full} =	120.00 degree
R_{halfull} =	0.375 ft	R_{3/4full} =	0.453 ft
C_{halfull} =	95.656 ft	C_{3/4full} =	99.898 ft
A_{halfull} =	0.884 sq. ft.	A_{3/4full} =	1.422 sq. ft.
V_{halfull} =	3.705 ft/sec)	V_{3/4full} =	4.250 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	1.208 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0052	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h= **4.980** in <= Vary this depth to get Q_{assume} = Q_{given}
 0.415 ft

CACULATIONS:

beta= 63.47 degree

 R= 0.240 ft

 C= 85.603

 V= 3.022 ft/sec

 A= 0.398 sq. ft.
 Q_{assume}= 1.204 cfs

Q_{halfull} = 3.74 cfs Q_{3/4full} = 6.90 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 4.980

Capacity d/r = 55.33%

Q_{capacity} = 6.895 cfs

Capacity Q_{given}/Q_{capacity} = 17.52%

(Q_{halfull} = 3.74 cfs	(Q_{3/4full} = 6.90 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.744 ft	C _{3/4full} = 99.981 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 4.228 ft/sec)	V _{3/4full} = 4.850 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	1.208 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0120	<= Slope V:H
r=	0.625 ft	<= Radius

TRIAL DEPTH:

h= **4.330** in <= Vary this depth to get Q_{assume} = Q_{given}
 0.361 ft

CACULATIONS:

beta= 65.00 degree
 R= 0.207 ft
 C= 82.479
 V= 4.111 ft/sec
 A= 0.293 sq. ft.
 Q_{assume}= 1.206 cfs

Q_{halfull} = 3.45 cfs Q_{3/4full} = 6.38 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 4.330

Capacity d/r = 57.73%

Q_{capacity} = 6.378 cfs

Capacity Q_{given}/Q_{capacity} = 18.94%

(Q_{halfull} = 3.45 cfs	(Q_{3/4full} = 6.38 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.313 ft	R _{3/4full} = 0.377 ft
C _{halfull} = 91.824 ft	C _{3/4full} = 96.038 ft
A _{halfull} = 0.614 sq. ft.	A _{3/4full} = 0.987 sq. ft.
V _{halfull} = 5.628 ft/sec)	V _{3/4full} = 6.461 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	1.208 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0180	<= Slope V:H
r=	0.625 ft	<= Radius

TRIAL DEPTH:

h= **3.920** in <= Vary this depth to get Q_{assume} = Q_{given}
0.327 ft

CACULATIONS:

beta= 61.49 degree

R= 0.190 ft

C= 80.651

V= 4.721 ft/sec

A= 0.255 sq. ft.

Q_{assume}= 1.206 cfs

Q_{halfull} = 4.23 cfs Q_{3/4full} = 7.82 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 3.920

Capacity d/r = 52.27%

Q_{capacity} = 7.815 cfs

Capacity Q_{given}/Q_{capacity} = 15.46%

(Q_{halfull} = 4.23 cfs	(Q_{3/4full} = 7.82 cfs
beta_{halfull} = 90.000 degree	beta_{3/4full} = 120.00 degree
R_{halfull} = 0.313 ft	R_{3/4full} = 0.377 ft
C_{halfull} = 91.869 ft	C_{3/4full} = 96.081 ft
A_{halfull} = 0.614 sq. ft.	A_{3/4full} = 0.987 sq. ft.
V_{halfull} = 6.896 ft/sec)	V_{3/4full} = 7.916 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	1.378 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0240	<= Slope V:H
r=	0.625 ft	<= Radius

TRIAL DEPTH:

h=	3.900 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.325 ft	

CACULATIONS:

beta= 61.31 degree

R= 0.190 ft

C= 80.578

V= 5.435 ft/sec

A= 0.254 sq. ft.

Q_{assume}= 1.378 cfs

Q_{halfull} = 4.89 cfs Q_{3/4full} = 9.03 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 3.900

Capacity d/r = 52.00%

Q_{capacity} = 9.026 cfs

Capacity Q_{given}/Q_{capacity} = 15.27%

(Q_{halfull} = 4.89 cfs	(Q_{3/4full} = 9.03 cfs
beta_{halfull} = 90.000 degree	beta_{3/4full} = 120.00 degree
R_{halfull} = 0.313 ft	R_{3/4full} = 0.377 ft
C_{halfull} = 91.892 ft	C_{3/4full} = 96.102 ft
A_{halfull} = 0.614 sq. ft.	A_{3/4full} = 0.987 sq. ft.
V_{halfull} = 7.964 ft/sec)	V_{3/4full} = 9.143 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	1.416 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0140	<= Slope V:H
r=	0.625 ft	<= Radius

TRIAL DEPTH:

h=	4.500 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.375 ft	

CACULATIONS:

beta= 66.42 degree

R= 0.214 ft

C= 83.216

V= 4.551 ft/sec

A= 0.310 sq. ft.

Q_{assume}= 1.409 cfs

Q_{halfull} = 3.73 cfs

Q_{3/4full} = 6.89 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 4.500

Capacity d/r = 60.00%

Q_{capacity} = 6.891 cfs

Capacity Q_{given}/Q_{capacity} = 20.55%

(Q_{halfull} = 3.73 cfs
beta_{halfull} = 90.000 degree
R_{halfull} = 0.313 ft
C_{halfull} = 91.844 ft
A_{halfull} = 0.614 sq. ft.
V_{halfull} = 6.080 ft/sec)

(Q_{3/4full} = 6.89 cfs
beta_{3/4full} = 120.00 degree
R_{3/4full} = 0.377 ft
C_{3/4full} = 96.056 ft
A_{3/4full} = 0.987 sq. ft.
V_{3/4full} = 6.979 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	1.416 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0130	<= Slope V:H
r=	0.625 ft	<= Radius

TRIAL DEPTH:

h=	4.600 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.383 ft	

CACULATIONS:

beta= 67.25 degree

R= 0.218 ft

C= 83.612

V= 4.447 ft/sec

A= 0.319 sq. ft.

Q_{assume}= 1.419 cfs

Q_{halfull} = 3.59 cfs Q_{3/4full} = 6.64 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 4.600

Capacity d/r = 61.33%

Q_{capacity} = 6.639 cfs

Capacity Q_{given}/Q_{capacity} = 21.33%

(Q_{halfull} = 3.59 cfs	(Q_{3/4full} = 6.64 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.313 ft	R _{3/4full} = 0.377 ft
C _{halfull} = 91.835 ft	C _{3/4full} = 96.048 ft
A _{halfull} = 0.614 sq. ft.	A _{3/4full} = 0.987 sq. ft.
V _{halfull} = 5.858 ft/sec)	V _{3/4full} = 6.725 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	1.416 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0436	<= Slope V:H
r=	0.500 ft	<= Radius

TRIAL DEPTH:

h=	3.700 in	<= Vary this depth to get $Q_{assume} = Q_{given}$
	0.308 ft	

CACULATIONS:

beta= 67.46 degree

R= 0.175 ft

C= 78.809

V= 6.880 ft/sec

A= 0.206 sq. ft.

Q_{assume}= 1.416 cfs

Q_{halfull} = 3.56 cfs Q_{3/4full} = 6.60 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 3.700

Capacity d/r = 61.67%

Q_{capacity} = 3.560 cfs

Capacity Q_{given}/Q_{capacity} = 39.77%

(Q_{halfull} = 3.56 cfs	(Q_{3/4full} = 6.60 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.250 ft	R _{3/4full} = 0.302 ft
C _{halfull} = 86.839 ft	C _{3/4full} = 91.089 ft
A _{halfull} = 0.393 sq. ft.	A _{3/4full} = 0.632 sq. ft.
V _{halfull} = 9.066 ft/sec)	V _{3/4full} = 10.447 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	1.416 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0100	<= Slope V:H
r=	0.625 ft	<= Radius

TRIAL DEPTH:

h=	4.900 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.408 ft	

CACULATIONS:

beta=	69.72 degree
R=	0.229 ft
C=	84.726
V=	4.054 ft/sec
A=	0.348 sq. ft.
Q _{assume} =	1.412 cfs

Q_{halfull} =	3.15 cfs	Q_{3/4full} =	5.82 cfs
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RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 4.900

Capacity d/r = 65.33%

Q_{capacity} = 5.821 cfs

Capacity Q_{given}/Q_{capacity} = 24.32%

(Q_{halfull} =	3.15 cfs	(Q_{3/4full} =	5.82 cfs
beta_{halfull} =	90.000 degree	beta_{3/4full} =	120.00 degree
R_{halfull} =	0.313 ft	R_{3/4full} =	0.377 ft
C_{halfull} =	91.798 ft	C_{3/4full} =	96.013 ft
A_{halfull} =	0.614 sq. ft.	A_{3/4full} =	0.987 sq. ft.
V_{halfull} =	5.136 ft/sec)	V_{3/4full} =	5.896 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	1.416 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0160	<= Slope V:H
r=	0.625 ft	<= Radius

TRIAL DEPTH:

h=	4.360 in	<= Vary this depth to get $Q_{assume} = Q_{given}$
	0.363 ft	

CACULATIONS:

beta= 65.25 degree

R= 0.208 ft

C= 82.644

V= 4.770 ft/sec

A= 0.296 sq. ft.

Q_{assume}= 1.413 cfs

Q_{halfull} = 3.99 cfs Q_{3/4full} = 7.37 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 4.360

Capacity d/r = 58.13%

Q_{capacity} = 7.367 cfs

Capacity Q_{given}/Q_{capacity} = 19.22%

(Q_{halfull} = 3.99 cfs	(Q_{3/4full} = 7.37 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.313 ft	R _{3/4full} = 0.377 ft
C _{halfull} = 91.858 ft	C _{3/4full} = 96.070 ft
A _{halfull} = 0.614 sq. ft.	A _{3/4full} = 0.987 sq. ft.
V _{halfull} = 6.501 ft/sec)	V _{3/4full} = 7.462 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	2.039	cfs	<= Discharge
n=	0.013		<= Roughness coefficient
S=	0.0160		<= Slope V:H
r=	0.625	ft	<= Radius

TRIAL DEPTH:

h=	5.250	in	<= Vary this depth to get Q _{assume} = Q _{given}
		0.438 ft	

CACULATIONS:

beta=	72.54	degree
R=	0.242	ft
C=	86.024	
V=	5.351	ft/sec
A=	0.383	sq. ft.
Q _{assume} =	2.048	cfs

Q_{halfull} =	3.99 cfs	Q_{3/4full} =	7.37 cfs
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RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 5.250

Capacity d/r = 70.00%

Q_{capacity} = 7.367 cfs

Capacity Q_{given}/Q_{capacity} = 27.68%

(Q_{halfull} =	3.99 cfs	(Q_{3/4full} =	7.37 cfs
beta_{halfull} =	90.000 degree	beta_{3/4full} =	120.00 degree
R_{halfull} =	0.313 ft	R_{3/4full} =	0.377 ft
C_{halfull} =	91.858 ft	C_{3/4full} =	96.070 ft
A_{halfull} =	0.614 sq. ft.	A_{3/4full} =	0.987 sq. ft.
V_{halfull} =	6.501 ft/sec)	V_{3/4full} =	7.462 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	2.039 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0292	<= Slope V:H
r=	0.625 ft	<= Radius

TRIAL DEPTH:

h=	4.500 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.375 ft	

CALCULATIONS:

beta= 66.42 degree

R= 0.214 ft

C= 83.280

V= 6.578 ft/sec

A= 0.310 sq. ft.

Q_{assume}= 2.037 cfs

Q_{half full} = 5.39 cfs Q_{3/4 full} = 9.96 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 4.500

Capacity d/r = 60.00%

Q_{capacity} = 9.957 cfs

Capacity Q_{given}/Q_{capacity} = 20.48%

(Q_{half full} = 5.39 cfs	(Q_{3/4 full} = 9.96 cfs
beta _{half full} = 90.000 degree	beta _{3/4 full} = 120.00 degree
R _{half full} = 0.313 ft	R _{3/4 full} = 0.377 ft
C _{half full} = 91.904 ft	C _{3/4 full} = 96.114 ft
A _{half full} = 0.614 sq. ft.	A _{3/4 full} = 0.987 sq. ft.
V _{half full} = 8.786 ft/sec)	V _{3/4 full} = 10.086 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	2.690 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0040	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	8.050 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.671 ft	

CACULATIONS:

beta= 83.94 degree

R= 0.348 ft

C= 93.971

V= 3.507 ft/sec

A= 0.765 sq. ft.

Q_{assume}= 2.683 cfs

Q_{halffull} = 3.27 cfs Q_{3/4full} = 6.04 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 8.050

Capacity d/r = 89.44%

Q_{capacity} = 6.042 cfs

Capacity Q_{given}/Q_{capacity} = 44.52%

(Q_{halffull} = 3.27 cfs	(Q_{3/4full} = 6.04 cfs
beta _{halffull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halffull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halffull} = 95.656 ft	C _{3/4full} = 99.898 ft
A _{halffull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halffull} = 3.705 ft/sec)	V _{3/4full} = 4.250 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	2.985	cfs	<= Discharge
n=	0.013		<= Roughness coefficient
S=	0.0081		<= Slope V:H
r=	0.875	ft	<= Radius

TRIAL DEPTH:

h=	6.600	in	<= Vary this depth to get $Q_{assume} = Q_{given}$
		0.550 ft	

CACULATIONS:

beta= 68.20 degree

R= 0.311 ft

C= 91.596

V= 4.595 ft/sec

A= 0.647 sq. ft.

Q_{assume}= 2.974 cfs

Q_{halfull} = 7.12 cfs Q_{3/4full} = 13.10 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 6.600

Capacity d/r = 62.86%

Q_{capacity} = 13.100 cfs

Capacity Q_{given}/Q_{capacity} = 22.78%

(Q_{halfull} = 7.12 cfs	(Q_{3/4full} = 13.10 cfs
beta_{halfull} = 90.000 degree	beta_{3/4full} = 120.00 degree
R_{halfull} = 0.438 ft	R_{3/4full} = 0.528 ft
C_{halfull} = 99.348 ft	C_{3/4full} = 103.521 ft
A_{halfull} = 1.203 sq. ft.	A_{3/4full} = 1.935 sq. ft.
V_{halfull} = 5.918 ft/sec)	V_{3/4full} = 6.770 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.238 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0081	<= Slope V:H
r=	0.875 ft	<= Radius

TRIAL DEPTH:

h=	9.750 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.813 ft	

CACULATIONS:

beta= 85.90 degree

R= 0.417 ft

C= 98.228

V= 5.707 ft/sec

A= 1.093 sq. ft.

Q_{assume}= 6.240 cfs

Q_{halffull} = 7.12 cfs Q_{3/4full} = 13.10 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 9.750

Capacity d/r = 92.86%

Q_{capacity} = 13.100 cfs

Capacity Q_{given}/Q_{capacity} = 47.62%

(Q_{halffull} = 7.12 cfs	(Q_{3/4full} = 13.10 cfs
beta_{halffull} = 90.000 degree	beta_{3/4full} = 120.00 degree
R_{halffull} = 0.438 ft	R_{3/4full} = 0.528 ft
C_{halffull} = 99.348 ft	C_{3/4full} = 103.521 ft
A_{halffull} = 1.203 sq. ft.	A_{3/4full} = 1.935 sq. ft.
V_{halffull} = 5.918 ft/sec)	V_{3/4full} = 6.770 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.238 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0100	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	10.050 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.838 ft	

CACULATIONS:

beta=	96.70 degree
R=	0.401 ft
C=	97.384
V=	6.165 ft/sec
A=	1.015 sq. ft.
Q _{assume} =	6.254 cfs

Q_{halfull} =	5.19 cfs	Q_{3/4full} =	9.57 cfs
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RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 10.050

Capacity d/r = 111.67%

Q_{capacity} = 9.575 cfs

Capacity Q_{given}/Q_{capacity} = 65.15%

(Q_{halfull} =	5.19 cfs	(Q_{3/4full} =	9.57 cfs
beta_{halfull} =	90.000 degree	beta_{3/4full} =	120.00 degree
R_{halfull} =	0.375 ft	R_{3/4full} =	0.453 ft
C_{halfull} =	95.886 ft	C_{3/4full} =	100.114 ft
A_{halfull} =	0.884 sq. ft.	A_{3/4full} =	1.422 sq. ft.
V_{halfull} =	5.872 ft/sec)	V_{3/4full} =	6.735 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.238 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0140	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	9.100 in	<= Vary this depth to get $Q_{assume} = Q_{given}$
	0.758 ft	

CACULATIONS:

beta= 90.64 degree

R= 0.378 ft

C= 96.088

V= 6.987 ft/sec

A= 0.896 sq. ft.

Q_{assume}= 6.261 cfs

Q_{halffull} = 6.14 cfs Q_{3/4full} = 11.33 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 9.100

Capacity d/r = 101.11%

Q_{capacity} = 11.333 cfs

Capacity Q_{given}/Q_{capacity} = 55.04%

(Q_{halffull} = 6.14 cfs	(Q_{3/4full} = 11.33 cfs
beta_{halffull} = 90.000 degree	beta_{3/4full} = 120.00 degree
R_{halffull} = 0.375 ft	R_{3/4full} = 0.453 ft
C_{halffull} = 95.930 ft	C_{3/4full} = 100.156 ft
A_{halffull} = 0.884 sq. ft.	A_{3/4full} = 1.422 sq. ft.
V_{halffull} = 6.951 ft/sec)	V_{3/4full} = 7.972 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.238 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0100	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	10.050 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.838 ft	

CACULATIONS:

beta= 96.70 degree

R= 0.401 ft

C= 97.384

V= 6.165 ft/sec

A= 1.015 sq. ft.

Q_{assume}= 6.254 cfs

Q_{halfull} = 5.19 cfs Q_{3/4full} = 9.57 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 10.050

Capacity d/r = 111.67%

Q_{capacity} = 9.575 cfs

Capacity Q_{given}/Q_{capacity} = 65.15%

(Q_{halfull} = 5.19 cfs	(Q_{3/4full} = 9.57 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.886 ft	C _{3/4full} = 100.114 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 5.872 ft/sec)	V _{3/4full} = 6.735 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.238 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0112	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	9.700 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.808 ft	

CACULATIONS:

beta= 94.46 degree

R= 0.393 ft

C= 96.939

V= 6.428 ft/sec

A= 0.971 sq. ft.

Q_{assume}= 6.242 cfs

Q_{halfull} = 5.49 cfs Q_{3/4full} = 10.13 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 9.700

Capacity d/r = 107.78%

Q_{capacity} = 10.134 cfs

Capacity Q_{given}/Q_{capacity} = 61.55%

(Q_{halfull} = 5.49 cfs	(Q_{3/4full} = 10.13 cfs
beta_{halfull} = 90.000 degree	beta_{3/4full} = 120.00 degree
R_{halfull} = 0.375 ft	R_{3/4full} = 0.453 ft
C_{halfull} = 95.902 ft	C_{3/4full} = 100.130 ft
A_{halfull} = 0.884 sq. ft.	A_{3/4full} = 1.422 sq. ft.
V_{halfull} = 6.215 ft/sec)	V_{3/4full} = 7.128 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.238 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0020	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h= **17.200** in <= Vary this depth to get Q_{assume} = Q_{given}
1.433 ft

CACULATIONS:

beta= 155.66 degree

R= 0.427 ft

C= 98.218

V= 2.870 ft/sec

A= 1.739 sq. ft.

Q_{assume}= 4.992 cfs

Q_{halffull} = 2.31 cfs Q_{3/4full} = 4.26 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 20% <===== **Not Good**
(Increase h)

Flow Depth (in) = Try another h

Capacity d/r = No Result

Q_{capacity} = 4.257 cfs

Capacity Q_{given}/Q_{capacity} = 146.52%

(Q_{halffull} = 2.31 cfs	(Q_{3/4full} = 4.26 cfs
beta_{halffull} = 90.000 degree	beta_{3/4full} = 120.00 degree
R_{halffull} = 0.375 ft	R_{3/4full} = 0.453 ft
C_{halffull} = 95.278 ft	C_{3/4full} = 99.541 ft
A_{halffull} = 0.884 sq. ft.	A_{3/4full} = 1.422 sq. ft.
V_{halffull} = 2.609 ft/sec)	V_{3/4full} = 2.995 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.336 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0020	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h= **16.900** in <= Vary this depth to get Q_{assume} = Q_{given}
 1.408 ft

CACULATIONS:

beta= 151.38 degree

R= 0.435 ft

C= 98.631

V= 2.908 ft/sec

A= 1.723 sq. ft.

Q_{assume}= 5.010 cfs

Q_{half full} = **2.31 cfs** Q_{3/4 full} = **4.26 cfs**

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} % = 21% <===== **Not Good**
 (Increase h)

Flow Depth (in) = Try another h

Capacity d/r = No Result

Q_{capacity} = **4.257 cfs**

Capacity Q_{given}/Q_{capacity} = **148.82%**

(Q _{half full} =	2.31 cfs	(Q _{3/4 full} =	4.26 cfs
beta _{half full} =	90.000 degree	beta _{3/4 full} =	120.00 degree
R _{half full} =	0.375 ft	R _{3/4 full} =	0.453 ft
C _{half full} =	95.278 ft	C _{3/4 full} =	99.541 ft
A _{half full} =	0.884 sq. ft.	A _{3/4 full} =	1.422 sq. ft.
V _{half full} =	2.609 ft/sec)	V _{3/4 full} =	2.995 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.336 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0032	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	17.100 in	<= Vary this depth to get $Q_{assume} = Q_{given}$
	1.425 ft	

CACULATIONS:

beta= 154.16 degree

R= 0.430 ft

C= 98.640

V= 3.658 ft/sec

A= 1.734 sq. ft.

Q_{assume}= 6.343 cfs

Q_{halfull} = 2.92 cfs Q_{3/4full} = 5.40 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 17.100

Capacity d/r = 190.00%

Q_{capacity} = 5.400 cfs

Capacity Q_{given}/Q_{capacity} = 117.34%

(Q_{halfull} = 2.92 cfs	(Q_{3/4full} = 5.40 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.561 ft	C _{3/4full} = 99.808 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 3.310 ft/sec)	V _{3/4full} = 3.798 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.336 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0024	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	16.900 in	<= Vary this depth to get Q _{assume} = Q _{given}
	1.408 ft	

CACULATIONS:

beta= 151.38 degree

R= 0.435 ft

C= 98.751

V= 3.190 ft/sec

A= 1.723 sq. ft.

Q_{assume}= 5.495 cfs

Q_{halffull} = 2.53 cfs Q_{3/4full} = 4.67 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 13% **<===== Not Good**
(Increase h)

Flow Depth (in) = Try another h

Capacity d/r = No Result

Q_{capacity} = 4.669 cfs

Capacity Q_{given}/Q_{capacity} = 135.70%

(Q_{halffull} = 2.53 cfs	(Q_{3/4full} = 4.67 cfs
beta_{halffull} = 90.000 degree	beta_{3/4full} = 120.00 degree
R_{halffull} = 0.375 ft	R_{3/4full} = 0.453 ft
C_{halffull} = 95.403 ft	C_{3/4full} = 99.659 ft
A_{halffull} = 0.884 sq. ft.	A_{3/4full} = 1.422 sq. ft.
V_{halffull} = 2.862 ft/sec)	V_{3/4full} = 3.284 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.336 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0136	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	9.250 in	<= Vary this depth to get $Q_{assume} = Q_{given}$
	0.771 ft	

CACULATIONS:

beta= 91.59 degree

R= 0.382 ft

C= 96.315

V= 6.938 ft/sec

A= 0.915 sq. ft.

Q_{assume}= 6.347 cfs

Q_{halfull} = 6.05 cfs Q_{3/4full} = 11.17 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 9.250

Capacity d/r = 102.78%

Q_{capacity} = 11.170 cfs

Capacity Q_{given}/Q_{capacity} = 56.72%

(Q_{halfull} = 6.05 cfs	(Q_{3/4full} = 11.17 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.927 ft	C _{3/4full} = 100.153 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 6.851 ft/sec)	V _{3/4full} = 7.857 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.336 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0032	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	17.000 in	<= Vary this depth to get $Q_{assume} = Q_{given}$
	1.417 ft	

CACULATIONS:

beta= 152.73 degree

R= 0.432 ft

C= 98.777

V= 3.674 ft/sec

A= 1.729 sq. ft.

Q_{assume}= 6.350 cfs

Q_{halffull} = 2.92 cfs Q_{3/4full} = 5.40 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 17.000

Capacity d/r = 188.89%

Q_{capacity} = 5.400 cfs

Capacity Q_{given}/Q_{capacity} = 117.34%

(Q_{halffull} = 2.92 cfs	(Q_{3/4full} = 5.40 cfs
beta _{halffull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halffull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halffull} = 95.561 ft	C _{3/4full} = 99.808 ft
A _{halffull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halffull} = 3.310 ft/sec)	V _{3/4full} = 3.798 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.336 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0800	<= Slope V:H
r=	0.500 ft	<= Radius

TRIAL DEPTH:

h= **7.050** in <= Vary this depth to get Q_{assume} = Q_{given}
0.588 ft

CACULATIONS:

beta= 100.08 degree

R= 0.275 ft

C= 88.983

V= 13.190 ft/sec

A= 0.480 sq. ft.

Q_{assume}= 6.328 cfs

Q_{halfull} = 4.82 cfs Q_{3/4full} = 8.94 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 7.050

Capacity d/r = 117.50%

Q_{capacity} = 4.824 cfs

Capacity Q_{given}/Q_{capacity} = 131.35%

(Q_{halfull} = 4.82 cfs	(Q_{3/4full} = 8.94 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.250 ft	R _{3/4full} = 0.302 ft
C _{halfull} = 86.857 ft	C _{3/4full} = 91.106 ft
A _{halfull} = 0.393 sq. ft.	A _{3/4full} = 0.632 sq. ft.
V _{halfull} = 12.283 ft/sec)	V _{3/4full} = 14.154 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.431 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0140	<= Slope V:H
r=	0.625 ft	<= Radius

TRIAL DEPTH:

h= **10.650** in <= Vary this depth to get Q_{assume} = Q_{given}
0.888 ft

CACULATIONS:

beta= 114.83 degree

R= 0.372 ft

C= 95.744

V= 6.909 ft/sec

A= 0.932 sq. ft.

Q_{assume}= 6.438 cfs

Q_{halfull} = 3.73 cfs Q_{3/4full} = 6.89 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 10.650

Capacity d/r = 142.00%

Q_{capacity} = 6.891 cfs

Capacity Q_{given}/Q_{capacity} = 93.33%

(Q_{halfull} = 3.73 cfs	(Q_{3/4full} = 6.89 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.313 ft	R _{3/4full} = 0.377 ft
C _{halfull} = 91.844 ft	C _{3/4full} = 96.056 ft
A _{halfull} = 0.614 sq. ft.	A _{3/4full} = 0.987 sq. ft.
V _{halfull} = 6.080 ft/sec)	V _{3/4full} = 6.979 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.842	cfs	<= Discharge
n=	0.013		<= Roughness coefficient
S=	0.0152		<= Slope V:H
r=	0.625	ft	<= Radius

TRIAL DEPTH:

h=	10.800	in	<= Vary this depth to get Q _{assume} = Q _{given}
		0.900 ft	

CACULATIONS:

beta=	116.10	degree
R=	0.373	ft
C=	95.844	
V=	7.221	ft/sec
A=	0.946	sq. ft.
Q _{assume} =	6.830	cfs

Q_{halfull} =	3.89 cfs	Q_{3/4full} =	7.18 cfs
------------------------------	-----------------	------------------------------	-----------------

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 10.800

Capacity d/r = 144.00%

Q_{capacity} = 7.181 cfs

Capacity Q_{given}/Q_{capacity} = 95.28%

(Q_{halfull} =	3.89 cfs	(Q_{3/4full} =	7.18 cfs
beta_{halfull} =	90.000 degree	beta_{3/4full} =	120.00 degree
R_{halfull} =	0.313 ft	R_{3/4full} =	0.377 ft
C_{halfull} =	91.853 ft	C_{3/4full} =	96.065 ft
A_{halfull} =	0.614 sq. ft.	A_{3/4full} =	0.987 sq. ft.
V_{halfull} =	6.336 ft/sec)	V_{3/4full} =	7.273 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.842 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0148	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h= **9.450** in <= Vary this depth to get Q_{assume} = Q_{given}
0.788 ft

CACULATIONS:

beta= 92.87 degree

R= 0.387 ft

C= 96.620

V= 7.308 ft/sec

A= 0.940 sq. ft.

Q_{assume}= 6.868 cfs

Q_{halfull} = 6.31 cfs Q_{3/4full} = 11.65 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 9.450

Capacity d/r = 105.00%

Q_{capacity} = 11.653 cfs

Capacity Q_{given}/Q_{capacity} = 58.71%

(Q_{halfull} = 6.31 cfs	(Q_{3/4full} = 11.65 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.936 ft	C _{3/4full} = 100.161 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 7.147 ft/sec)	V _{3/4full} = 8.197 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.924 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0152	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h= **9.400** in <= Vary this depth to get Q_{assume} = Q_{given}
0.783 ft

CACULATIONS:

beta= 92.55 degree

R= 0.385 ft

C= 96.550

V= 7.389 ft/sec

A= 0.934 sq. ft.

Q_{assume}= 6.898 cfs

Q_{halfull} = **6.40 cfs** Q_{3/4full} = **11.81 cfs**

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 9.400

Capacity d/r = 104.44%

Q_{capacity} = 11.810 cfs

Capacity Q_{given}/Q_{capacity} = 58.63%

(Q_{halfull} = 6.40 cfs	(Q_{3/4full} = 11.81 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.939 ft	C _{3/4full} = 100.164 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 7.243 ft/sec)	V _{3/4full} = 8.307 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.924 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0148	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h= **9.520** in <= Vary this depth to get Q_{assume} = Q_{given}
0.793 ft

CALCULATIONS:

beta= 93.31 degree

R= 0.388 ft

C= 96.721

V= 7.332 ft/sec

A= 0.949 sq. ft.

Q_{assume}= 6.955 cfs

Q_{halffull} = **6.31 cfs** Q_{3/4full} = **11.65 cfs**

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 9.520

Capacity d/r = 105.78%

Q_{capacity} = 11.653 cfs

Capacity Q_{given}/Q_{capacity} = 59.42%

(Q_{halffull} = 6.31 cfs	(Q_{3/4full} = 11.65 cfs
beta _{halffull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halffull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halffull} = 95.936 ft	C _{3/4full} = 100.161 ft
A _{halffull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halffull} = 7.147 ft/sec)	V _{3/4full} = 8.197 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	6.924 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0152	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h= **9.400** in <= Vary this depth to get Q_{assume} = Q_{given}
0.783 ft

CACULATIONS:

beta= 92.55 degree

R= 0.385 ft

C= 96.550

V= 7.389 ft/sec

A= 0.934 sq. ft.

Q_{assume}= 6.898 cfs

Q_{halfull} = 6.40 cfs Q_{3/4full} = 11.81 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 9.400

Capacity d/r = 104.44%

Q_{capacity} = 11.810 cfs

Capacity Q_{given}/Q_{capacity} = 58.63%

(Q_{halfull} = 6.40 cfs	(Q_{3/4full} = 11.81 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.939 ft	C _{3/4full} = 100.164 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 7.243 ft/sec)	V _{3/4full} = 8.307 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	7.595 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0100	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	11.400 in	<= Vary this depth to get $Q_{assume} = Q_{given}$
	0.950 ft	

CACULATIONS:

beta= 105.47 degree

R= 0.427 ft

C= 98.830

V= 6.461 ft/sec

A= 1.180 sq. ft.

Q_{assume}= 7.624 cfs

Q_{halfull} = 5.19 cfs Q_{3/4full} = 9.57 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 11.400

Capacity d/r = 126.67%

Q_{capacity} = 9.575 cfs

Capacity Q_{given}/Q_{capacity} = 79.32%

(Q_{halfull} = 5.19 cfs	(Q_{3/4full} = 9.57 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.886 ft	C _{3/4full} = 100.114 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 5.872 ft/sec)	V _{3/4full} = 6.735 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	7.671 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0100	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	11.420 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.952 ft	

CACULATIONS:

beta= 105.60 degree

R= 0.428 ft

C= 98.848

V= 6.464 ft/sec

A= 1.182 sq. ft.

Q_{assume}= 7.644 cfs

Q_{halfull} = 5.19 cfs Q_{3/4full} = 9.57 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 11.420

Capacity d/r = 126.89%

Q_{capacity} = 9.575 cfs

Capacity Q_{given}/Q_{capacity} = 80.12%

(Q_{halfull} = 5.19 cfs	(Q_{3/4full} = 9.57 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.886 ft	C _{3/4full} = 100.114 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 5.872 ft/sec)	V _{3/4full} = 6.735 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	7.695 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0100	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	11.500 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.958 ft	

CACULATIONS:

beta= 106.13 degree

R= 0.429 ft

C= 98.918

V= 6.479 ft/sec

A= 1.192 sq. ft.

Q_{assume}= 7.723 cfs

Q_{halfull} = 5.19 cfs Q_{3/4full} = 9.57 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 11.500

Capacity d/r = 127.78%

Q_{capacity} = 9.575 cfs

Capacity Q_{given}/Q_{capacity} = 80.37%

(Q_{halfull} = 5.19 cfs	(Q_{3/4full} = 9.57 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.886 ft	C _{3/4full} = 100.114 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 5.872 ft/sec)	V _{3/4full} = 6.735 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	7.695 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0212	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	9.100 in	<= Vary this depth to get Q _{assume} = Q _{given}
	0.758 ft	

CACULATIONS:

beta= 90.64 degree

R= 0.378 ft

C= 96.125

V= 8.601 ft/sec

A= 0.896 sq. ft.

Q_{assume}= 7.707 cfs

Q_{halfull} = 7.56 cfs Q_{3/4full} = 13.95 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 9.100

Capacity d/r = 101.11%

Q_{capacity} = 13.951 cfs

Capacity Q_{given}/Q_{capacity} = 55.16%

(Q_{halfull} = 7.56 cfs	(Q_{3/4full} = 13.95 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.967 ft	C _{3/4full} = 100.191 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 8.557 ft/sec)	V _{3/4full} = 9.813 ft/sec)

***Cells that are highlighted can be changed**

GIVEN:

Q _{given} =	8.060 cfs	<= Discharge
n=	0.013	<= Roughness coefficient
S=	0.0124	<= Slope V:H
r=	0.750 ft	<= Radius

TRIAL DEPTH:

h=	11.000 in	<= Vary this depth to get $Q_{assume} = Q_{given}$
	0.917 ft	

CACULATIONS:

beta= 102.84 degree

R= 0.420 ft

C= 98.483

V= 7.109 ft/sec

A= 1.131 sq. ft.

Q_{assume}= 8.044 cfs

Q_{halfull} = 5.78 cfs Q_{3/4full} = 10.66 cfs

RESULT:

(Q_{given}-Q_{assume}) / Q_{given} %= 0% <===== **OK**

Flow Depth (in) = 11.000

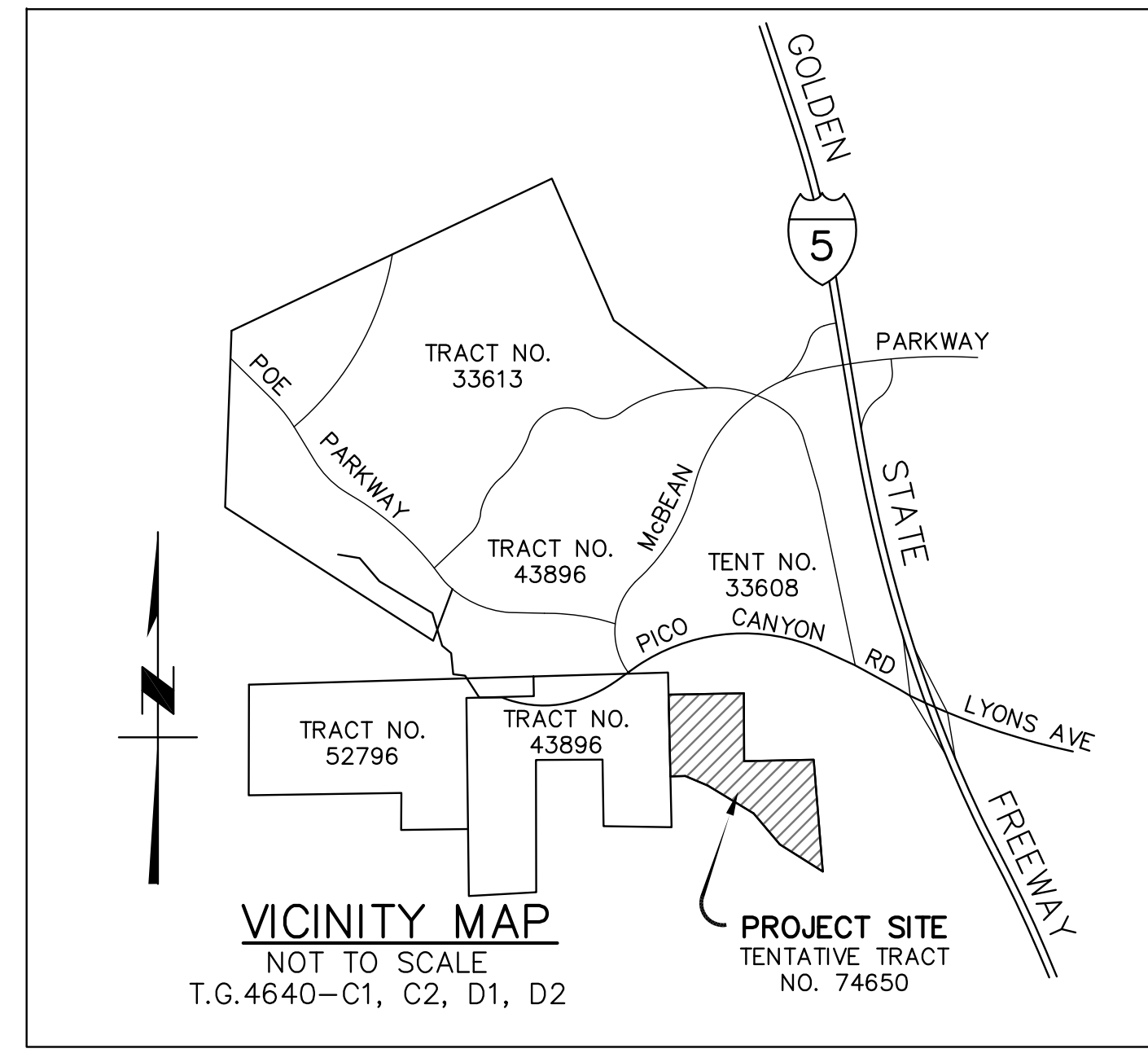
Capacity d/r = 122.22%

Q_{capacity} = 10.665 cfs

Capacity Q_{given}/Q_{capacity} = 75.58%

(Q_{halfull} = 5.78 cfs	(Q_{3/4full} = 10.66 cfs
beta _{halfull} = 90.000 degree	beta _{3/4full} = 120.00 degree
R _{halfull} = 0.375 ft	R _{3/4full} = 0.453 ft
C _{halfull} = 95.916 ft	C _{3/4full} = 100.142 ft
A _{halfull} = 0.884 sq. ft.	A _{3/4full} = 1.422 sq. ft.
V _{halfull} = 6.541 ft/sec)	V _{3/4full} = 7.502 ft/sec)

MAP



EASEMENT PLOT
 ORDER NO. 416240446
 PROPERTY IN QUESTION

ITEM NO. 2 - INGRESS AND EGRESS
 NOVEMBER 13, 1963 AS INSTRUMENT NO. 3337 O.R. TO BE ABANDONED

ITEM NO. 3 - ROAD
 MARCH 13, 1963 AS INSTRUMENT NO. 2385 O.R. TO BE ABANDONED

ITEM NO. 4 - INGRESS, EGRESS AND PUBLIC UTILITY - AFFECTS PARCEL 4 ONLY
 AUGUST 5, 1969 AS INSTRUMENT NO. 2831 O.R. TO BE ABANDONED

ITEM NO. 5 - DITCHES AND CANALS - UNLOCATABLE
 BOOK 2896 PAGE 85 O.R.

ITEM NO. 7 - ROADWAYS - UNLOCATABLE
 BOOK 03630 PAGE 468 O.R.

ITEM NO. 8 - INGRESS, EGRESS AND UTILITIES - UNLOCATABLE
 APRIL 4, 1978 AS INSTRUMENT NO. 78-352178 AND
 FEBRUARY 27, 1979 AS INSTRUMENT NO. 79-227247, BOTH OF O.R.

ITEM NO. 11 - INGRESS AND EGRESS - AFFECTS PARCEL 4 ONLY
 OCTOBER 1, 1985 AS INSTRUMENT NO. 85-1147318 O.R. TO BE ABANDONED

ITEM NO. 12 - WATER PIPE LINE
 JULY 30, 1997 AS INSTRUMENT NO. 97-1153697 O.R. TO BE REMAIN

ITEM NO. 14 - INGRESS, EGRESS, UTILITIES AND COMMUNICATION FACILITIES - UNLOCATABLE
 APRIL 8, 2008 AS INSTRUMENT NO. 2008-605413 O.R.

BENCHMARK L3026

RDBM TAG IN S CB 26' W/O BCR @ SW COR
 LYONS AVE & WILEY CYN RD 100' W & 40' S/O
 C/L INT (NR W END CB)

NEWHALL 2009 ELEV.=1265.354 (FEET)
 ELEV.= 385.681 (M)

LEGAL DESCRIPTION:
 SEE SHEET 2 OF 2 FOR FULL LEGAL DESCRIPTION

RECORD OWNER: PICO CANYON, LLC
 CIVIL DESIGN AND DRAFTING, INC.
 IMAD ABOUJAWDAH
 885 PATRIOT DR., UNIT C
 MOORPARK, CA 93021
 805-522-2622

SUBDIVIDER: PICO CANYON, LLC
 1435 REYNOLDS CT.
 THOUSAND OAKS, CA 91362
 805-373-2860

ENGINEER: CIVIL DESIGN AND DRAFTING, INC.
 IMAD ABOUJAWDAH
 885 PATRIOT DR., UNIT C
 MOORPARK, CA 93021
 805-522-2622

PROJECT LOCATION:
 MAGNOLIA LN & AUTUMN PL
 SANTA CLARITA, CA 91381
 THOMAS GUIDE PAGE NO. 4640-C-2
 APN: 2826-020-012, 013 & 061

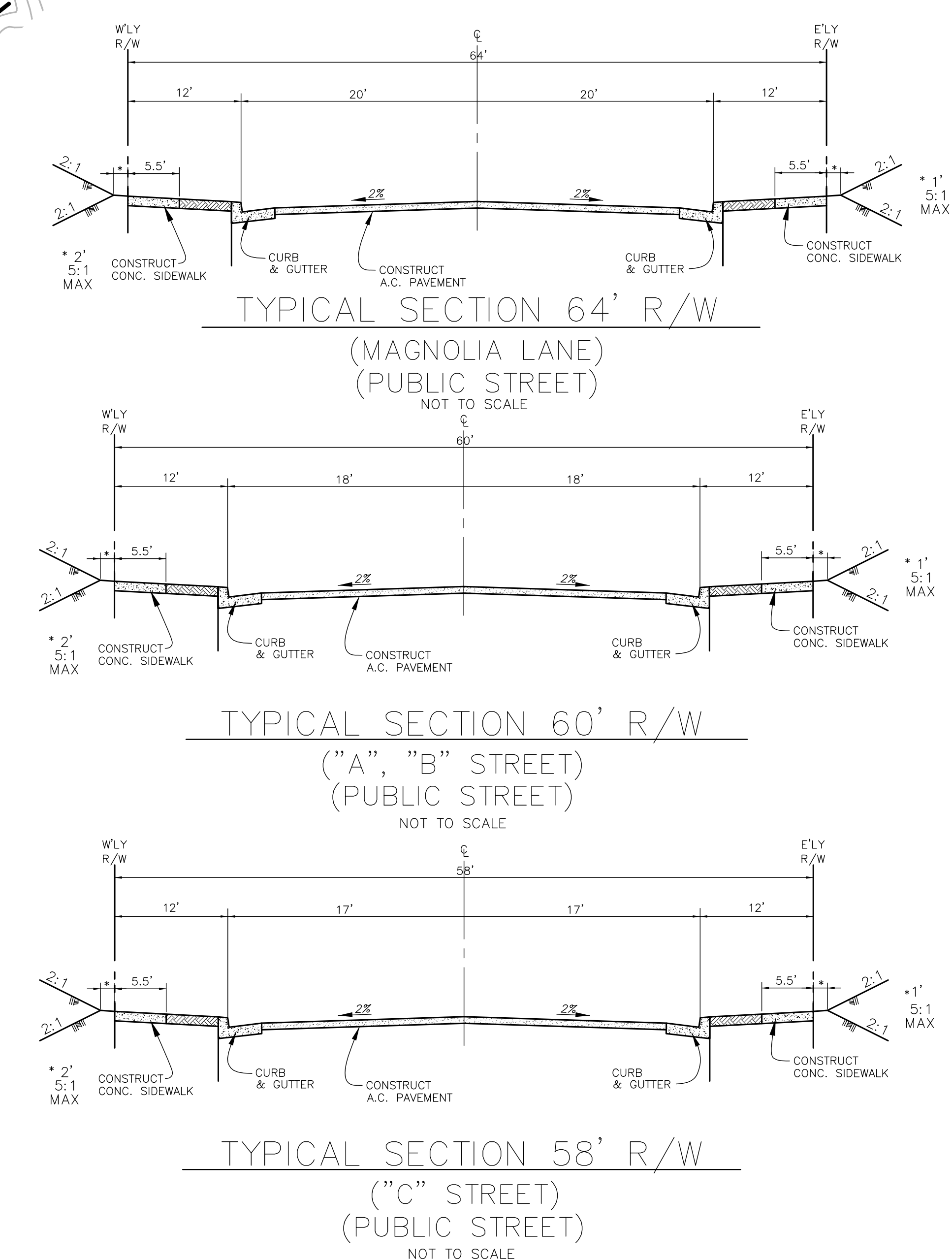
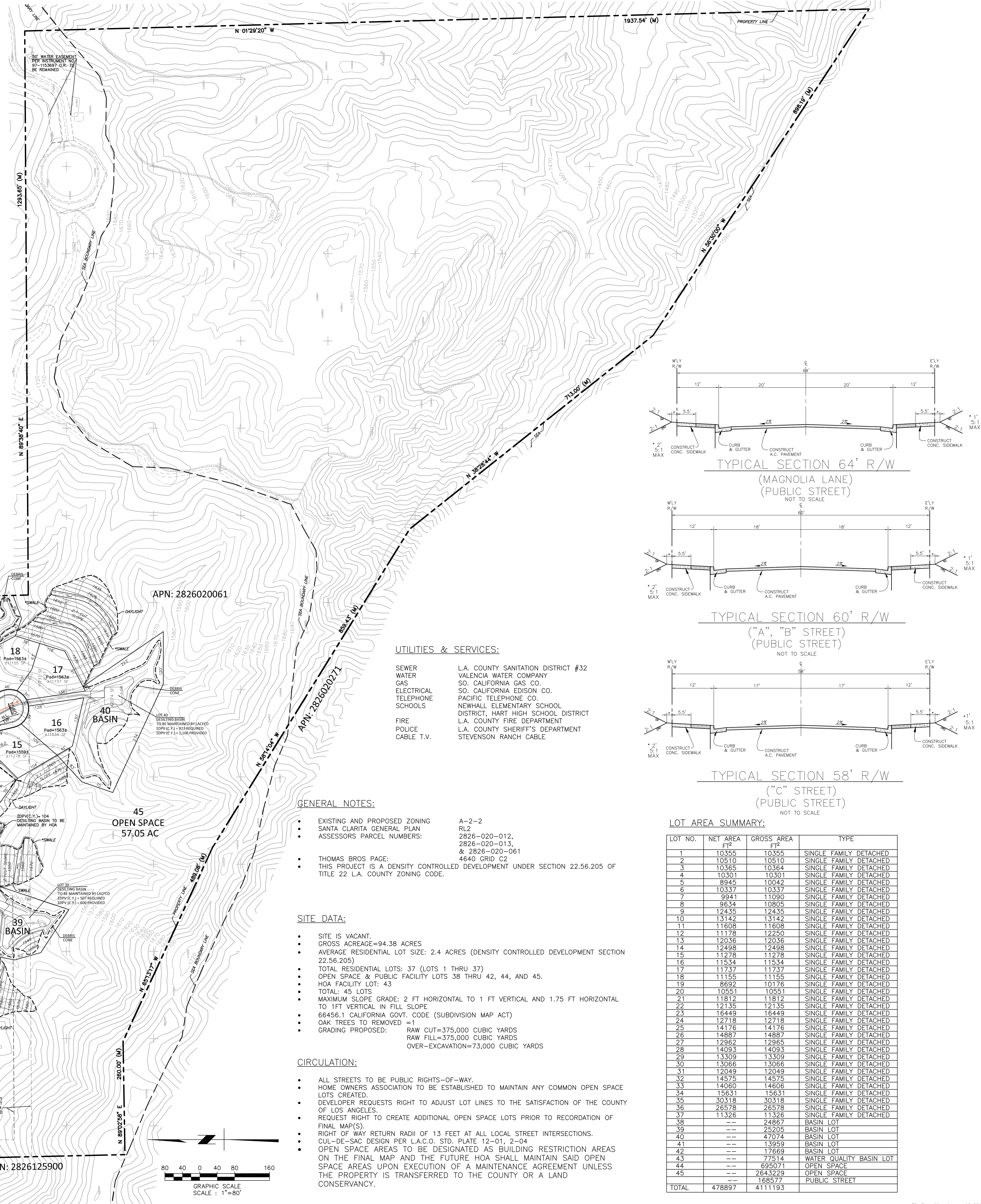
NOTE:
 OPEN SPACE AREAS TO BE DESIGNATED AS
 RESTRICTED USE AREAS ON THE FINAL MAP.
 ALL EASEMENTS MARKED TO BE ABANDONED
 WILL TAKE EFFECT AT MAP RECORDATION.

LAND USE SUMMARY:

SINGLE FAMILY	ACRES	%	LOTS
9.35	9.91	37	
OPEN SPACE LOTS	76.64	81.20	2
PUBLIC FACILITY	2.74	2.90	5
HOA FACILITY	1.78	1.89	1
PUBLIC STREETS	3.87	4.10	
TOTAL	94.38	100%	

CURVE DATA

CURVE	DELTA	RADIUS	LENGTH	TANGENT
C1	94°05'14"	350.00'	574.75'	375.91'
C2	135°09'08"	480.00'	199.72'	95.48'
C3	26°13'25"	400.00'	183.08'	93.17'
C4	32°09'11"	620.00'	347.93'	178.68'
C5	165°40'18"	281.00'	322.08'	181.34'
C6	28°40'19"	378.72'	189.52'	96.79'



UTILITIES & SERVICES:

SEWER: L.A. COUNTY SANITATION DISTRICT #32
 WATER: VALENCIA WATER COMPANY
 GAS: SO. CALIFORNIA GAS CO.
 ELECTRICAL: SO. CALIFORNIA EDISON CO.
 TELEPHONE: PACIFIC TELEPHONE CO.
 SCHOOLS: NEWHALL ELEMENTARY SCHOOL
 DISTRICT: HART HIGH SCHOOL DISTRICT
 FIRE: L.A. COUNTY FIRE DEPARTMENT
 POLICE: L.A. COUNTY SHERIFF'S DEPARTMENT
 CABLE T.V.: STEVENSON RANCH CABLE

GENERAL NOTES:

- EXISTING AND PROPOSED ZONING: A-2-2
- SANTA CLARITA GENERAL PLAN: RL2
- ASSESSORS' PARCEL NUMBERS: 2826-020-012, 2826-020-013, & 2826-020-061
- THOMAS BROS PAGE: 4640 GRID C2
- THIS PROJECT IS A DENSITY CONTROLLED DEVELOPMENT UNDER SECTION 22.56.205 OF TITLE 22 L.A. COUNTY ZONING CODE.

SITE DATA:

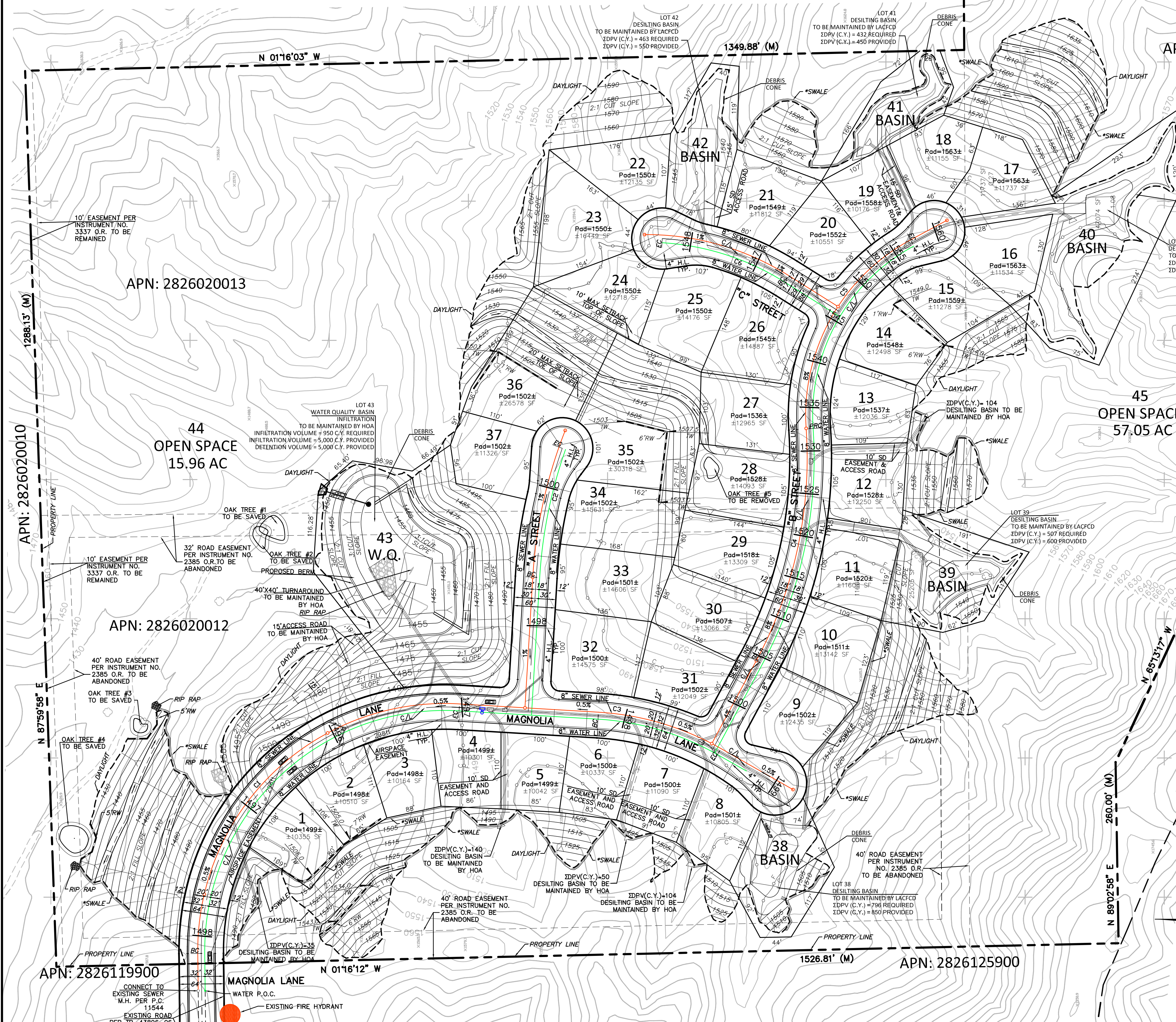
- SITE IS VACANT.
- GROSS ACREAGE=94.38 ACRES
- AVERAGE RESIDENTIAL LOT SIZE: 2.4 ACRES (DENSITY CONTROLLED DEVELOPMENT SECTION 22.56.205)
- TOTAL RESIDENTIAL LOTS: 37 (LOTS 1 THRU 37)
- OPEN SPACE & PUBLIC FACILITY LOTS 38 THRU 42, 44, AND 45.
- HOA FACILITY LOT: 43
- TOTAL: 45 LOTS
- MAXIMUM SLOPE GRADE: 2 FT HORIZONTAL TO 1 FT VERTICAL AND 1.75 FT HORIZONTAL TO 1 FT VERTICAL IN FILL SLOPE
- 66456.1 CALIFORNIA GOVT. CODE (SUBDIVISION MAP ACT)
- OAK TREES TO REMOVED = 1
- GRADING PROPOSED: RAW CUT=375,000 CUBIC YARDS
 RAW FILL=375,000 CUBIC YARDS
 OVER-EXCAVATION=73,000 CUBIC YARDS

CIRCULATION:

- ALL STREETS TO BE PUBLIC RIGHTS-OF-WAY.
- HOME OWNERS ASSOCIATION TO BE ESTABLISHED TO MAINTAIN ANY COMMON OPEN SPACE LOTS CREATED.
- DEVELOPER REQUESTS RIGHT TO ADJUST LOT LINES TO THE SATISFACTION OF THE COUNTY OF LOS ANGELES.
- REQUEST RIGHT TO CREATE ADDITIONAL OPEN SPACE LOTS PRIOR TO RECORDATION OF FINAL MAP(S).
- RIGHT OF WAY RETURN RADIUS OF 13 FEET AT ALL LOCAL STREET INTERSECTIONS.
- CUL-DE-SAC DESIGN PER L.A.C.O. STD. PLATE 12-01, 2-04
- OPEN SPACE AREAS TO BE DESIGNATED AS BUILDING RESTRICTION AREAS ON THE FINAL MAP AND THE FUTURE HOA SHALL MAINTAIN SAID OPEN SPACE AREAS UPON EXECUTION OF A MAINTENANCE AGREEMENT UNLESS THE PROPERTY IS TRANSFERRED TO THE COUNTY OR A LAND CONSERVANCY.

LOT AREA SUMMARY:

LOT NO.	NET AREA	GROSS AREA	TYPE
1	10355	10355	SINGLE FAMILY DETACHED
2	10510	10510	SINGLE FAMILY DETACHED
3	10365	10364	SINGLE FAMILY DETACHED
4	10301	10301	SINGLE FAMILY DETACHED
5	8945	10042	SINGLE FAMILY DETACHED
6	10337	10337	SINGLE FAMILY DETACHED
7	9941	11090	SINGLE FAMILY DETACHED
8	9634	10805	SINGLE FAMILY DETACHED
9	12435	12435	SINGLE FAMILY DETACHED
10	13142	13142	SINGLE FAMILY DETACHED
11	11608	11608	SINGLE FAMILY DETACHED
12	11178	12250	SINGLE FAMILY DETACHED
13	12036	12036	SINGLE FAMILY DETACHED
14	12498	12498	SINGLE FAMILY DETACHED
15	11278	11278	SINGLE FAMILY DETACHED
16	11534	11534	SINGLE FAMILY DETACHED
17	11737	11737	SINGLE FAMILY DETACHED
18	11155	11155	SINGLE FAMILY DETACHED
19	8692	10176	SINGLE FAMILY DETACHED
20	10551	10551	SINGLE FAMILY DETACHED
21	11812	11812	SINGLE FAMILY DETACHED
22	12135	12135	SINGLE FAMILY DETACHED
23	18449	18449	SINGLE FAMILY DETACHED
24	12718	12718	SINGLE FAMILY DETACHED
25	14176	14176	SINGLE FAMILY DETACHED
26	14887	14887	SINGLE FAMILY DETACHED
27	12962	12962	SINGLE FAMILY DETACHED
28	14093	14093	SINGLE FAMILY DETACHED
29	13309	13309	SINGLE FAMILY DETACHED
30	13066	13066	SINGLE FAMILY DETACHED
31	12049	12049	SINGLE FAMILY DETACHED
32	14575	14575	SINGLE FAMILY DETACHED
33	14060	14060	SINGLE FAMILY DETACHED
34	15631	15631	SINGLE FAMILY DETACHED
35	30318	30318	SINGLE FAMILY DETACHED
36	26578	26578	SINGLE FAMILY DETACHED
37	11326	11326	SINGLE FAMILY DETACHED
38	---	24867	BASEIN LOT
39	---	25205	BASEIN LOT
40	---	47074	BASEIN LOT
41	---	13959	BASEIN LOT
42	---	17669	BASEIN LOT
43	---	77514	WATER QUALITY BASIN LOT
44	---	695071	OPEN SPACE
45	---	2643229	OPEN SPACE
	---	168577	PUBLIC STREET
TOTAL	478897	411193	



UNDERGROUND SERVICE ALERT
 Call 811 TOLL FREE
 1-800-422-4733

REVISION BLOCK

REV#	DATE	DESCRIPTION

DESIGNER: CIVIL DESIGN AND DRAFTING, INC.
 885 PATRIOT DR., UNIT C
 MOORPARK, CA 93021
 805-522-2622

PROJECT: CANYON VIEW ESTATES
 MAJOR LAND DIVISION
 VESTING TENTATIVE TRACT NO. 74650
 LOCATED IN THE UNINCORPORATED TERRITORY OF
 THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

SCALE: AS NOTED

SHEET 1 **OF** 2

Plot Date: Mon, January 08, 2018

CURVE	DELTA	RADIUS	LENGTH	TANGENT
C1	94°05'16"	350.00'	574.76'	375.91'
C2	15°59'08"	680.00'	189.72'	95.48'
C3	26°13'25"	400.00'	183.08'	93.17'
C4	32°09'11"	620.00'	347.93'	178.68'
C5	65°40'18"	281.00'	322.08'	181.34'
C6	28°40'19"	378.72'	189.52'	96.79'

NOTE

* ALL SWALES SHOULD HAVE A MINIMUM OF 5% SLOPE FOR SELF CLEANING VELOCITY

LEGAL DESCRIPTION:

File No: 416240446

EXHIBIT "A"

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL 1:
THE WEST HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF FRACTIONAL SECTION 5, TOWNSHIP 3 NORTH, RANGE 16 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

EXCEPT THEREFROM ALL OIL, GAS, MINERALS AND HYDROCARBON SUBSTANCES BELOW A DEPTH OF 500 FEET BUT WITHOUT THE RIGHT OF SURFACE ENTRY TO REMOVE OR RECOVER SAME, AS RESERVED BY HESTER L. WILSON A WIDOW, AND ELSIE WILSON CASAD, A MARRIED WOMAN IN DEED RECORDED JUNE 17, 1966 AS INSTRUMENT NO. 1315

PARCEL 2:
THE EAST ONE HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF FRACTIONAL SECTION 5, TOWNSHIP 3 NORTH, RANGE 16 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA

PARCEL 3:
THAT PORTION F THE SOUTHWEST QUARTER OF SECTION 5, TOWNSHIP 3 NORTH, RANGE 16 WEST, SAN BERNARDINO MERIDIAN IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA,

BEGINNING AT THE NORTHWESTLY CORNER OF SAID SOUTHWEST QUARTER; THENCE ALONG THE WESTERLY LINE OF SAID SOUTHWEST QUARTER SOUTH 00° 57' 02" EAST 215.00 FEET; THENCE AT RIGHT ANGLES TO SAID WESTERLY LINE NORTH 89° 02' 58" EAST 260.00 FEET; THENCE SOUTH 69° 13' 17" EAST 489.08 FEET; THENCE SOUTH 89° 14' 04" EAST 854.43 FEET; THENCE SOUTH 38° 28' 44" EAST 713.00 FEET; THENCE SOUTH 56° 48' 53" EAST 905.37 FEET TO A POINT IN THE EASTERLY LINE OF SAID SOUTHWEST QUARTER DISTANT SOUTH 01° 29' 47" EAST 1938.44 FEET FROM THE SOUTHERLY BOUNDARY OF TRACT NO. 45308 AS PER MAP FILED IN BOOK 1222 PAGES 36 TO 45 INCLUSIVE OF MAPS, RECORDS OF SAID COUNTY; THENCE ALONG SAID EASTERLY LINE NORTH 01° 29' 47" WEST 1938.44 FEET TO THE SOUTHERLY BOUNDARY SAID SOUTHERLY BOUNDARY ALSO BEING THE NORTHERLY LINE OF SAID SOUTHWEST QUARTER; THENCE ALONG THE NORTHERLY LINE OF SAID SOUTHWEST QUARTER SOUTH 89° 38' 47" WEST 2389.06 TO THE POINT OF BEGINNING, SAID LAND IS SHOWN AS PARCEL 1 OF THAT CERTAIN CERTIFICATE OF COMPLIANCE RECORDED NOVEMBER 15, 2002 AS INSTRUMENT NO. 02-2765315 OF OFFICIAL RECORDS

EXCEPT THEREFROM AN UNDIVIDED TWO PERCENT OF ALL OIL, GAS, SILVER, AND OTHER PRECIOUS METALS, MINERALS AND MINERAL SUBSTANCES IN AND UNDER AND THAT MAY BE PRODUCED FROM SAID LAND, TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS AT ALL TIMES FOR THE PURPOSES OF MINING, DRILLING AND EXPLORING SAID LANDS FOR ANY AND ALL OIL, GAS, MINERAL AND MINERALS SUBSTANCES AND REMOVING THE SAME THEREFROM; TOGETHER WITH ALL THE DIPS, SPURS AND ANGLES AND ALSO ALL THE METALS, ORES, GOLD AND SILVER-BEARING QUARTZ, ROCK AND GEM, MINERAL AND MINERAL SUBSTANCES THEREIN AND ALL RIGHTS, PRIVILEGES AND ADVANTAGES THERETO INCIDENT, APPENDANT AND APPURTENANT OR THEREON USUALLY HAD AND ENJOYED AS GRANTED TO R. A. GAMMEL, A SINGLE MAN IN DEED RECORDED JUNE 14, 1937 IN BOOK 15945 PAGE 173 OF OFFICIAL RECORDS

CLTA Preliminary Report Form - Modified (11-17-06) Page 3

File No: 416240446

ALSO EXCEPT THEREFROM AN UNDIVIDED ONE PERCENT OF ALL OIL, GAS AND OTHER HYDROCARBON SUBSTANCES AND MINERAL WHICH MAY LIE, IN, ON, UNDER OR BE HEREAFTER PRODUCED, SAVED OR SOLD FROM SAID LAND WITH THE RIGHT OF INGRESS AND EGRESS THERETO AS GRANTED TO JOSEPH W. AIDLIN, IN DEED RECORDED JANUARY 15, 1940 IN BOOK 17241 PAGE 29 OF OFFICIAL RECORDS

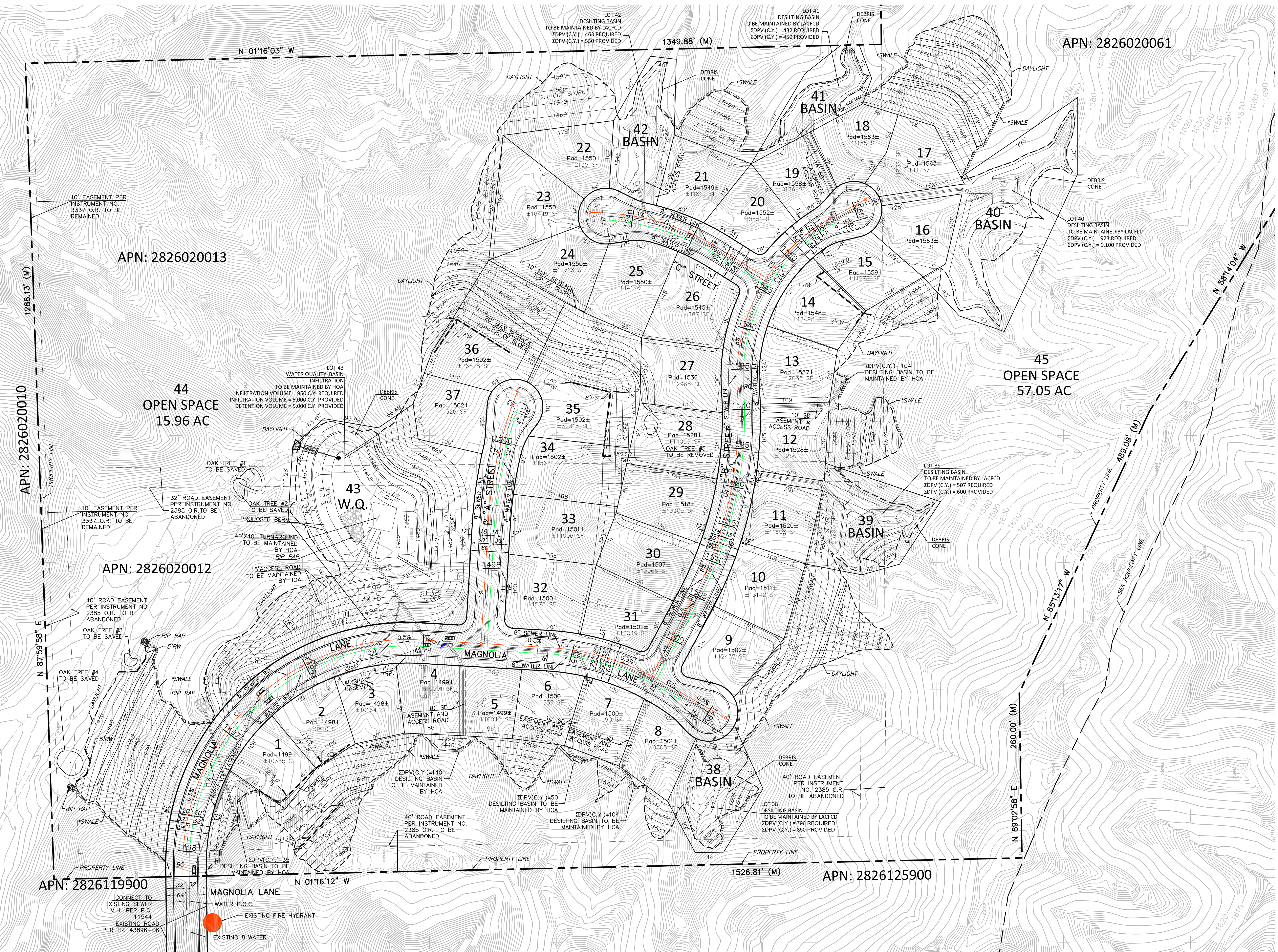
ALSO EXCEPT THEREFROM 1/4% OF AN UNDIVIDED PERCENT OF ALL OIL, GAS, AND OTHER HYDROCARBON SUBSTANCES AND MINERALS WHICH MAY LIE, IN, ON, UNDER OR BE HEREAFTER PRODUCED, SAVED OR SOLD FROM SAID LAND WITH THE RIGHT OF INGRESS AND EGRESS THERETO AS GRANTED TO JOSEPH W. AIDLIN AND MARY AIDLIN, HUSBAND AND WIFE AS JOINT TENANTS IN DEED RECORDED APRIL 6, 1948 IN BOOK 20665 PAGE 77 OF OFFICIAL RECORDS

BY AN AGREEMENT DATED OCTOBER 1, 1959 AND RECORDED DECEMBER 31, 1959 AS INSTRUMENT NO. 467 IN BOOK 4420 PAGE 171 OF OFFICIAL RECORDS, THE HOLDERS OF THE ABOVE INTEREST WAIVED AND RELINQUISHED ANY RIGHT TO ENTER UPON THE SURFACE OR SUBSURFACE TO A DEPTH OF 500 FEET MEASURED VERTICALLY FROM THE SURFACE OF SAID LAND FOR ANY PART THEREOF, FOR THE PURPOSE OF EXERCISING ANY OF THEIR SAID RESPECTIVE RIGHTS

PARCEL 4:
ANY AND ALL EASEMENTS, RIGHTS AND RIGHTS OF WAY, FOR ACCESS, INSTALLATION AND MAINTENANCE OF UTILITIES OR COMMUNICATION SERVICES OF RECORD, APPURTENANT OR ATTACHED TO OR UTILIZED BY ANY OF THE AFORESAID PARCELS

APNs: 2826-020-012, 2826-020-013 AND 2826-020-061

CLTA Preliminary Report Form - Modified (11-17-06)



UNDERGROUND SERVICE ALERT
Call TOLL FREE
1-800-422-4753

REV	APPR	DATE

REVISION BLOCK

REVISION DESCRIPTION

Professional Engineer Seal: Michael J. Moran, No. 11299, State of California

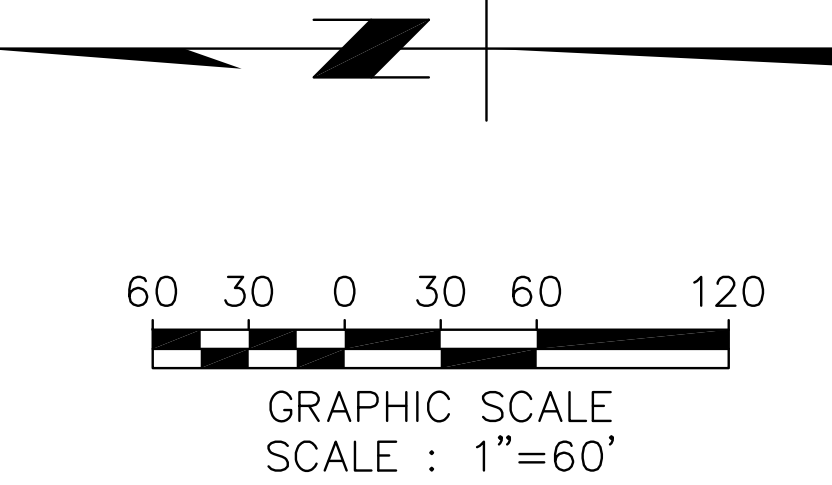
Design Drafting Inc. logo and contact information.

CANYON VIEW ESTATES
MAJOR LAND DIVISION
VESTING TENTATIVE TRACT NO. 74650
LOCATED IN THE UNINCORPORATED TERRITORY OF
THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA
SCALE: AS NOTED

PREPARED BY: [Signature]

SHEET 2 OF 2

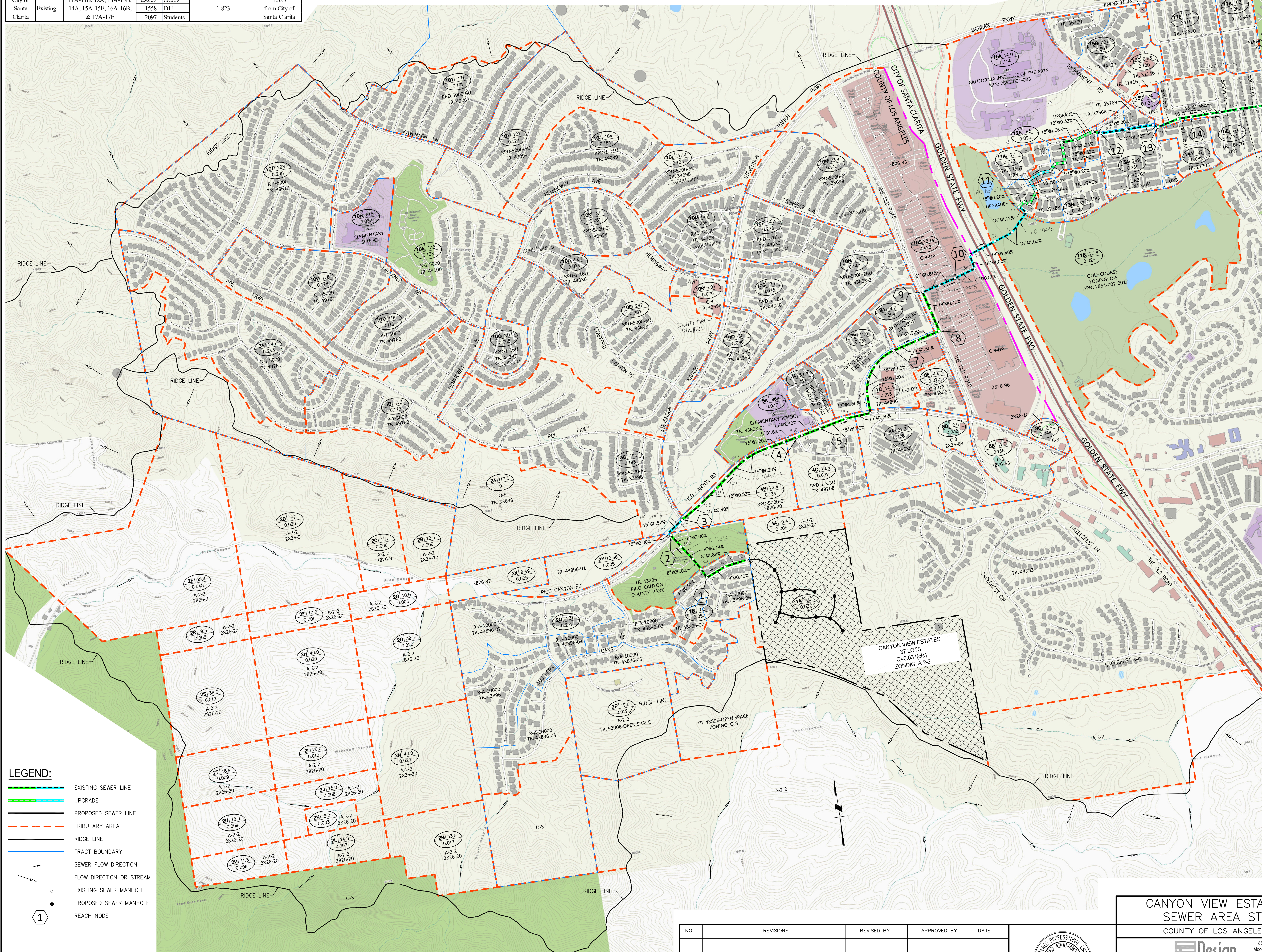
Plot Date: Mon, January 08, 2018



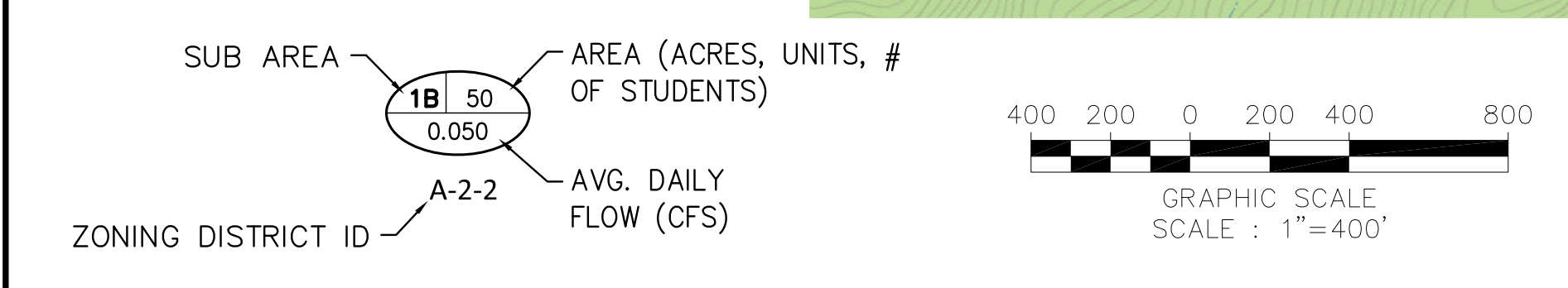
SUMMARY		Sub Area	Area	Calculated Flow (cfs)	Approved Q (cfs)
LA County	Proposed	1A	37 DU	0.037	6.238
	Future	2B-20, 2R-2Y, & 4A-4B	680.20 Acres	0.399	
City of Santa Clarita	Existing	1B, 2P, 2Q, 3A-3C, 4C, 5A, 7A-7C, 8A-8E, 9A, & 10A-10Z	212.19 Acres 1784 Students	5.801	1.823
	Existing	11A-11B, 12A, 13A-13B, 14A, 15A-15E, 16A-16B, & 17A-17E	138.39 Acres 1558 DU 2097 Students	1.823	from City of Santa Clarita

SEWER AREA STUDY-TRACT 74650

AREA SERVED FULL TRIBUTARY DEVELOPMENT AREA (INCLUDING EXISTING, PROPOSED, AND FUTURE DEVELOPMENT)



TRACT NO. 74650 - SEWER AREA STUDY									
JUNCTION CALCULATION - EXISTING - PROPOSED - FUTURE		ZONING		AREA		FLOW		EXISTING	
TRACT	SUB AREA	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
REACH 1	1A	0.000	0.037	0.000	0.037	0.000	0.037	0.000	0.037
REACH 2	2B-20	0.000	0.399	0.000	0.399	0.000	0.399	0.000	0.399
REACH 3	3A-3C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 4	4A-4B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 5	5A-5E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 6	6A-6B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 7	7A-7C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 8	8A-8E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 9	9A-9Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 10	10A-10Z	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 11	11A-11B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 12	12A-12B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 13	13A-13B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 14	14A-14B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 15	15A-15E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 16	16A-16B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REACH 17	17A-17E	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



PREPARE FOR:
JON FRIEDMAN
1435 REYNOLDS COURT
THOUSAND OAKS, CA 91362
PHONE: 805-373-2860

REVIEWED LAND DEVELOPMENT DIVISION
BY _____ ROAD AND GRADING SECTION DATE _____

NO.	REVISIONS	REVISED BY	APPROVED BY	DATE



CANYON VIEW ESTATES-TRACT NO. 74650
SEWER AREA STUDY - PC 12338AS
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

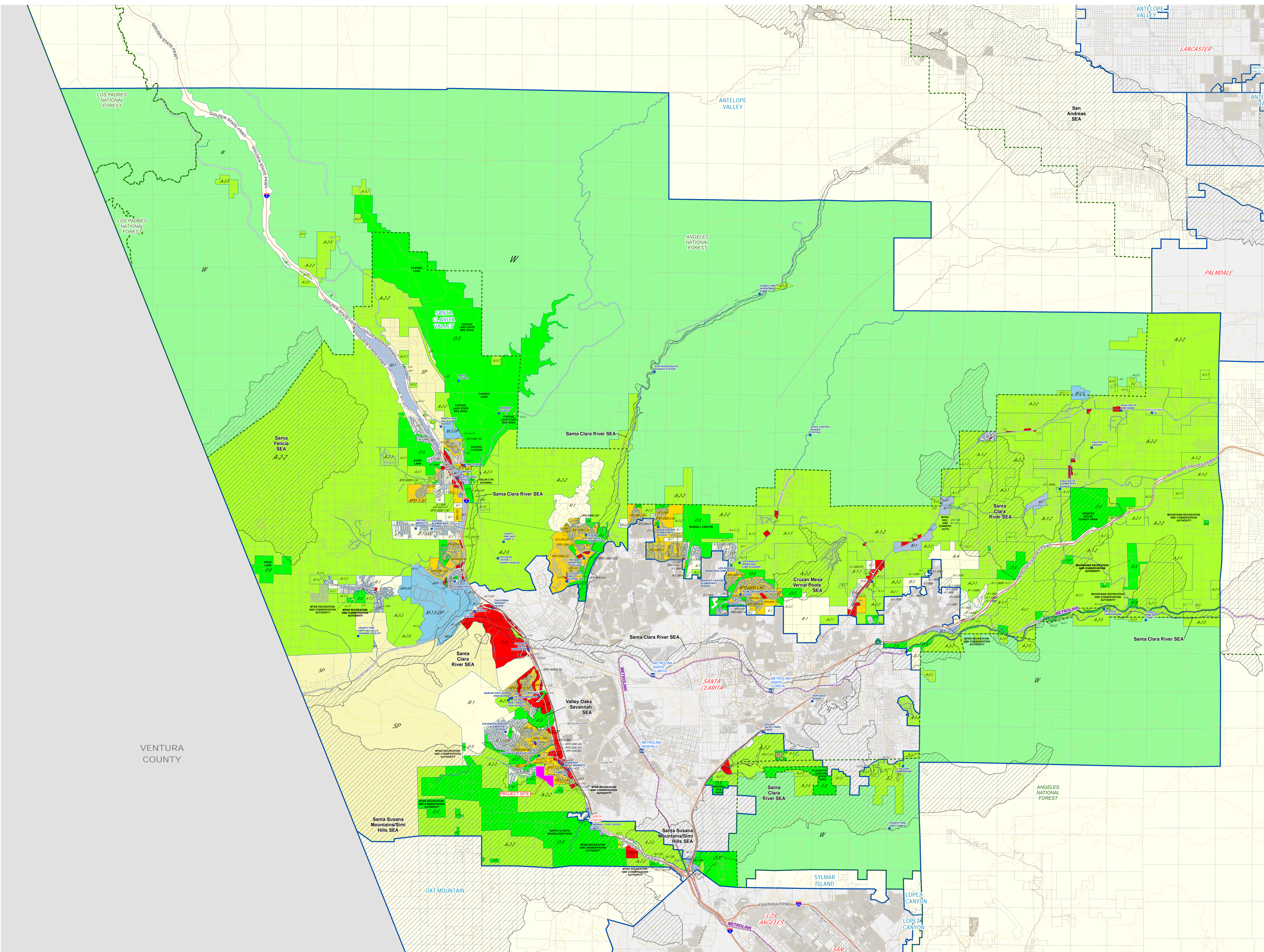
885 Patriot Drive, Unit C
Moorpark, California 93021
Phone: 805-522-2622
Fax: 805-426-8016

PROJECT ENGINEER _____ DATE _____

SHEET 1 OF 1

10-20-16 10:00 AM C:\Users\jfrank\Documents\74650\Drawings\74650-01-01-01.dwg (11/21/2016)

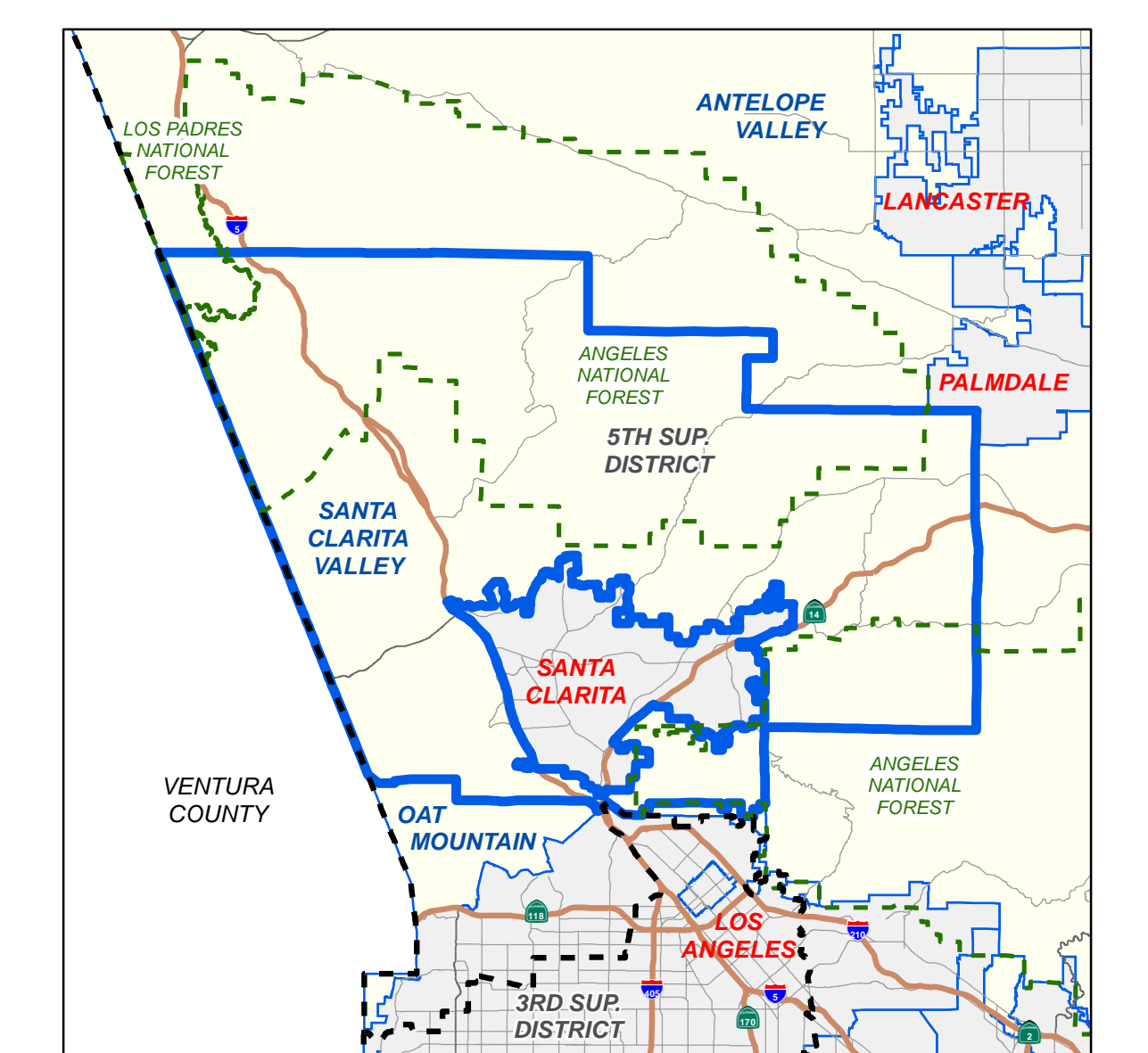
Los Angeles County General Plan
SANTA CLARITA VALLEY
AREA PLAN
Zoning Map



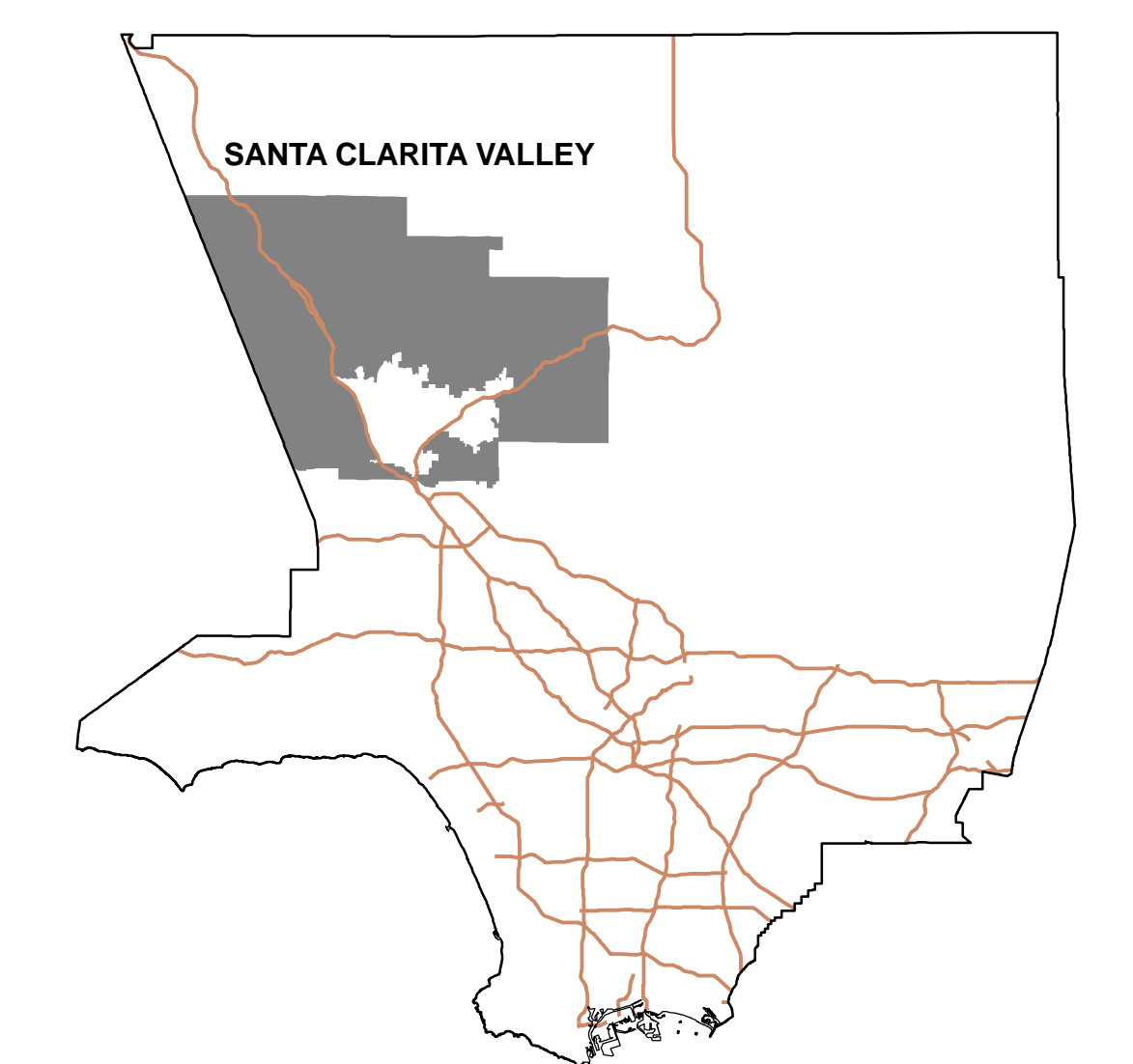
LEGEND

- | | |
|---|--|
| <ul style="list-style-type: none"> R-1 - Single-family residence R-2 - Two-family residence R-3(U) - Limited multiple residence R-4(U) - Unlimited multiple residence R-A - Residential agriculture RPD - Residential planned development A-1 - Light agriculture A-2 - Heavy agriculture C-H - Commercial highway C-1 - Restricted business C-2 - Neighborhood commercial C-3 - Unlimited commercial C-M - Commercial manufacturing CPD - Commercial planned development C-R - Commercial recreation M-1 - Light manufacturing M-2 - Heavy manufacturing M-3 - Unclassified M-4 - Unlimited manufacturing M-2.5 - Aircraft, heavy industrial MPD - Manufacturing industrial planned development D-2 - Desert-Mountain IT - Institutional SP - Specific Plan B-1 - Buffer strip B-2 - Corner buffer R-R - Resort and recreation W - Watershed P-R - Restricted parking SR-D - Scientific research and development O-S - Open space A-C - Arts and crafts MXD - Mixed use development | <p>Base Features</p> <ul style="list-style-type: none"> Parcels City / Unincorporated Community Boundary Surrounding City Surrounding Unincorporated Community Water Feature National Forest <p>Overlays</p> <ul style="list-style-type: none"> Significant Ecological Areas <p>Transit Lines</p> <ul style="list-style-type: none"> Metrolink Stations Metro Rail Stations Metrolink Transitways Light Rail - Existing Light Rail - Proposed Light Rail - Under Construction |
|---|--|
- NOTES:**
 The location of zoning boundaries is as accurate as can be portrayed at this scale. For more precise boundary locations, please contact the Land Development Coordinating Center (LDDC) at (818) 974-6411.
 Parcel boundaries are from the parcel database maintained by the Department of Public Works and the Assessor's Office. Parcels shown on the map reflect the most recent update from the Assessor's Office as of February 2012.

VICINITY MAP:



KEY MAP:



VENTURA COUNTY



City of SANTA CLARITA
Zoning Map
Last Update: September 2015

- Urban Residential**
 - UR1 = 2.0 du/a
 - UR2 = 5.0 du/a
 - UR3 = 11.0 du/a
 - UR4 = 18.0 du/a
 - UR5 = min. 18 du/a - max. 30.0 du/a
- Non-Urban Residential**
 - NU1 = 0.05 du/a
 - NU2 = 0.1 du/a
 - NU3 = 0.2 du/a
 - NU4 = 0.5 du/a
 - NU5 = 1.0 du/a
- Commercial**
 - CC - Community Commercial
 - CN - Neighborhood Commercial
 - CR - Regional Commercial
- Open Space**
 - OS-NF - Open Space—National Forest
 - OS-A - Open Space—Agriculture
 - OS - Open Space
 - OS-BLM - Open Space—Bureau of Land Management
- Mixed Use**
 - CP - Corridor Plan
 - MX-C - Mixed Use - Corridor
 - MX-N - Mixed Use - Neighborhood
- Industrial**
 - BP - Business Park
 - I - Industrial
- Other**
 - PI - Public/Institutional
- Specific Plan**
 - SP
- Boundaries**
 - City Boundary
 - Zoning Boundary

REFERENCES



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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

GRACE ROBINSON HYDE
Chief Engineer and General Manager

November 17, 2017

Ref. Doc. No.: 4354110

Mr. Imad Aboujawdah, President
Civil Design and Drafting, Inc.
885 Patriot Drive, Unit C
Moorpark, CA 91302

Dear Mr. Aboujawdah:

Will Serve Letter Update for Tract Map No. 74650

The Santa Clarita Valley Sanitation District (District) received your will serve letter request for the subject project on October 30, 2017. The proposed project is located within the jurisdictional boundaries of the District. Previous comments submitted by the Districts in correspondence dated December 7, 2016 (copy enclosed) still apply the subject project with the following updated information:

1. The Santa Clarita Valley Joint Sewerage System currently produces an average recycled water flow of 17.9 million gallons per day.
2. All other information concerning Districts' facilities and sewerage service stated in the enclosed copy is current.

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

Very truly yours,


Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

cc: M. Sullivan
M. Tatalovich



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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

GRACE ROBINSON HYDE
Chief Engineer and General Manager

December 7, 2016

Ref File No.: 3967008

Ms. Samantha Kenewell
Civil Design and Drafting, Inc.
885 Patriot Drive, Unit C
Moorpark, CA 93021

Dear Ms. Kenewell:

Will Serve Letter for Tract Map No. 74650

This is in response to your request for a will serve letter for the subject project, which was received by the Santa Clarita Valley Sanitation District (District) on November 10, 2016. We offer the following comments regarding sewerage service:

1. The project area is outside the jurisdictional boundaries of the District and will require annexation into the District before sewerage service can be provided to the proposed development. For a copy of the District's Annexation Information and Processing Fee sheets, go to www.lacsd.org, Wastewater & Sewer Systems, Will Serve Program, and click on the appropriate link. 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 District, for conveyance to either or both the District's Valencia Trunk Sewer, located in Orcharge Village Road east of Wiley Canyon Road, or the District No. 32 Main Trunk Sewer, located in a private right of way northeast of the intersection of Wiley Canyon Road and Orchard Village Road. The District's 24-inch diameter Valencia Trunk Sewer has a capacity of 5.5 million gallons per day (mgd) and conveyed a peak flow of 4.3 mgd when last measured in 2016. The District's 18-inch diameter District No. 32 Main Trunk Sewer has a capacity of 3.3 mgd and conveyed a peak flow of 2 mgd when last measured in 2013.
3. The District operates two water reclamation plants (WRPs), the Saugus WRP and the Valencia WRP, which provide wastewater treatment in the Santa Clarita Valley. These facilities have a combined capacity of 28.1 mgd and currently process an average flow of 18.2 mgd.
4. The expected average wastewater flow from the proposed project, described in the application as 37 proposed single family homes, is 9,620 gallons per day. For a copy of the District's average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

5. The District is empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the District's Sewerage System or for increasing the strength or quantity of wastewater discharged from connected facilities. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is issued. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and search for the appropriate link. In determining the impact to the Sewerage System and applicable connection fees, the District's Chief Engineer will determine the user category (e.g. Condominium, Single Family home, etc.) that best represents the actual or anticipated use of the parcel or facilities on the parcel. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at (562) 908-4288, extension 2727.

6. In order for the District to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of District 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 District 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 District treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the District intends to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of District facilities.

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

Very truly yours,



Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:dc

cc: D. Curry



Schools ▾ City, zip, address or school

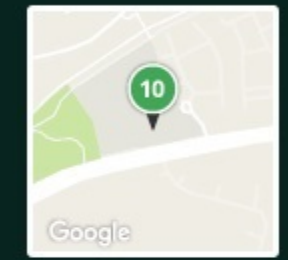
PARENTING ▾ DONATE EN ESPAÑOL SIGN IN

FEATURED [Building character](#) [Road to college](#) [Parenting Cue Cards](#) [Emotional smarts](#) [Worksheets](#)

California / Stevenson Ranch / Schools / School Profile

Pico Canyon Elementary School

Follow



K-6 | [Public district](#) | [Newhall](#) | 969 students
25255 Pico Canyon Road Stevenson Ranch, CA 91381-1658 | [Contact info](#)

[Overview](#) [Reviews](#) [Report card](#) [Details](#)

10 out of 10 GreatSchools Rating [?]

Schools serving similar student populations most often got a: **9** [?]

SCORES ARE FROM 1 TO 10

9 Test scores for low-income students [?]

English Proficiency (state avg 44%) 83%	Math Proficiency (state avg 33%) 68%
--	---

ADVERTISEMENT

- Report Card Quicklinks:** [Test scores](#), [College readiness](#), [Scores by student groups](#)
- School Details Quicklinks:** [Student demographics](#), [Programs](#), [Classes](#), [Extracurriculars](#), [Teachers](#)
- Reviews Quicklinks:** [Parent reviews](#), [Student reviews](#), [Write a review](#)

Resources: Understand your child's [SBAC score report](#)

Contact this school

School leader: Laura Banda
25255 Pico Canyon Road

[See this school's attendance zone](#)



California Institute of the Arts

CalArts Fact Sheet

Established in 1961 by Walt and Roy Disney, California Institute of the Arts (CalArts) is the nation's first higher education institute to offer undergraduate and graduate degrees in both the visual and performing arts. CalArts is dedicated to training and nurturing the next generation of professional artists, fostering brilliance and innovation within the broadest context possible. Admission to CalArts is competitive and considered mainly on the basis of demonstrated talent, creativity and commitment. Other important considerations include educational records, recommendations and artist's statement.

Current Students

Total headcount enrollment: 1,471 students

- ▶ Undergraduate students (BFA, Certificate): 946 (64.3%)
- ▶ Graduate students (MFA, MA, DMA, Advanced Certificate): 501 (34.1%)
- ▶ Special non-degree students: 24 (1.6%)

Areas of Study (Métiers)

- ▶ 21.3% School of Art
- ▶ 3.3% School of Critical Studies
- ▶ 6.3% The Sharon Disney Lund School of Dance
- ▶ 27.1% School of Film/Video
- ▶ 19.1% The Herb Alpert School of Music
- ▶ 22.9% School of Theater

Gender

- ▶ 55.7% Female
- ▶ 44.3% Male

Geographic and National Representation

- ▶ United States: 1,168 students (79.4%) from 45 states and the District of Columbia, Puerto Rico, Guam, and the Virgin Islands
- ▶ International: 303 students (20.6%) from 47 countries



Schools [City, zip, address or school] [Search]

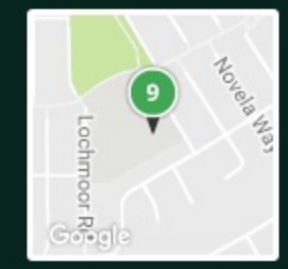
PARENTING ▾ DONATE EN ESPAÑOL SIGN IN

FEATURED Building character Road to college Parenting Cue Cards Emotional smarts Worksheets

California / Valencia / Schools / School Profile

Meadows Elementary School

Follow



K-6 | Public district | Newhall | 626 students
25577 North Fedala Road Valencia, CA 91355-2536 | Contact info

Overview Reviews Report card Details

9 out of 10 GreatSchools Rating [?]

Schools serving similar student populations most often got a: **9** [?]

SCORES ARE FROM 1 TO 10

5 Test scores for low-income students [?]

English Proficiency (state avg 44%) 64%	Math Proficiency (state avg 33%) 51%
--	---

Tax-deferred saving opportunity.
Compound interest potential.
Low minimum contribution to start.

ADVERTISEMENT

Report Card Quicklinks: Test scores, College readiness, Scores by student groups

School Details Quicklinks: Student demographics, Programs, Classes, Extracurriculars, Teachers

Reviews Quicklinks: Parent reviews, Student reviews, Write a review

Resources: Understand your child's **SBAC score report**

Contact this school



Schools City, zip, address or school

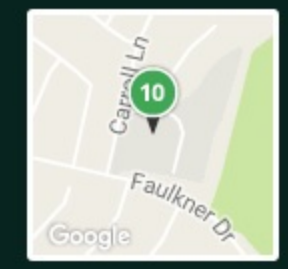
PARENTING DONATE EN ESPAÑOL SIGN IN

FEATURED Building character Road to college Parenting Cue Cards Emotional smarts Worksheets

California / Stevenson Ranch / Schools / School Profile

Stevenson Ranch Elementary School

Follow



K-6 | Public district | Newhall | 815 students
25820 North Carroll Lane Stevenson Ranch, CA 91381-1100 | Contact info

Overview Reviews Report card Details

10 out of 10 GreatSchools Rating

Schools serving similar student populations most often got a: 10

SCORES ARE FROM 1 TO 10

10 Test scores for low-income students

English Proficiency (state avg 44%)	Math Proficiency (state avg 33%)
86%	71%

- Report Card Quicklinks:** [Test scores](#), [College readiness](#), [Scores by student groups](#)
- School Details Quicklinks:** [Student demographics](#), [Programs](#), [Classes](#), [Extracurriculars](#), [Teachers](#)
- Reviews Quicklinks:** [Parent reviews](#), [Student reviews](#), [Write a review](#)

Resources: Understand your child's **SBAC score report**

IXL Math Practice Try 10 FREE practice problems!

- Kindergarten
- 1st Grade
- 2nd Grade
- 3rd Grade
- 4th Grade
- 5th Grade
- 6th Grade
- 7th Grade
- 8th Grade
- Algebra 1 & 2
- Geometry
- Precalculus

ADVERTISEMENT

Contact this school

School leader: Staci Block
25820 North Carroll Lane

See this school's attendance zone



Estimated Average Daily Sewage Flows for Various Occupancies

Occupancy	Abbreviation	*Average daily flow	
Apartment Buildings:			
Bachelor or Single dwelling units	Apt	100	gal/D.U. → 150
1 bedroom dwelling units	Apt	150	gal/D.U. → 200
2 bedroom dwelling units	Apt	200	gal/D.U. → 250
3 bedroom or more dwelling units	Apt	250	gal/D.U. → use 300 GPD per SMD
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	M	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

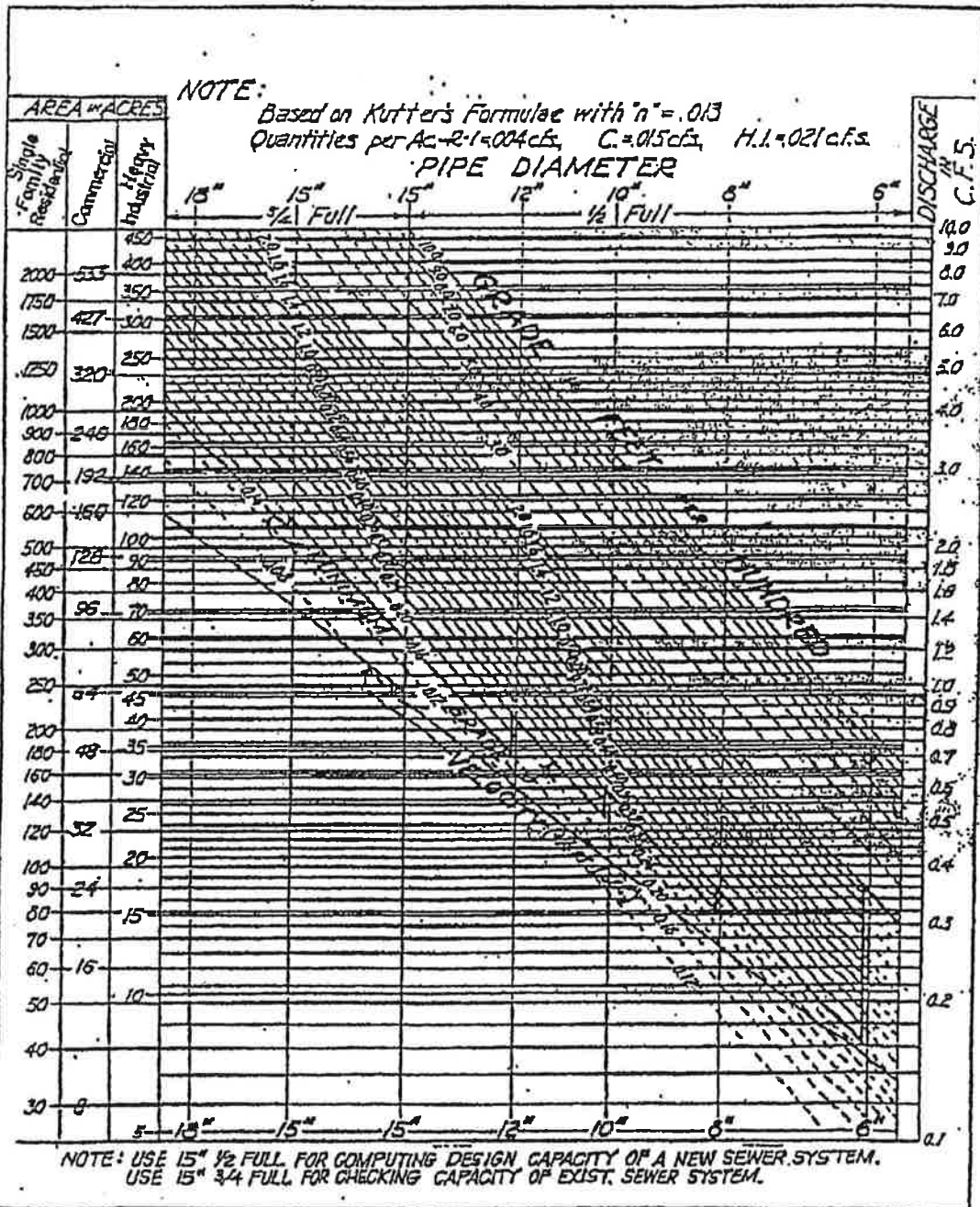
*Multiply the average daily flow by 2.5 to obtain the peak flow

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:	
M1 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



FLOW DIAGRAM FOR THE DESIGN OF CIRCULAR SANITARY SEWERS

COUNTY OF LOS ANGELES
 DEPARTMENT OF PUBLIC WORKS

COUNTY ENGINEER
 STANDARD

DATE: 3/80

S-C4

DESIGN

[Signature]
 ASSISTANT DEPUTY

[Signature]
 COUNTY ENGINEER

[Signature]
 10010443



City of Santa Clarita
Development Services Division

SEWAGE FLOW COEFFICIENTS

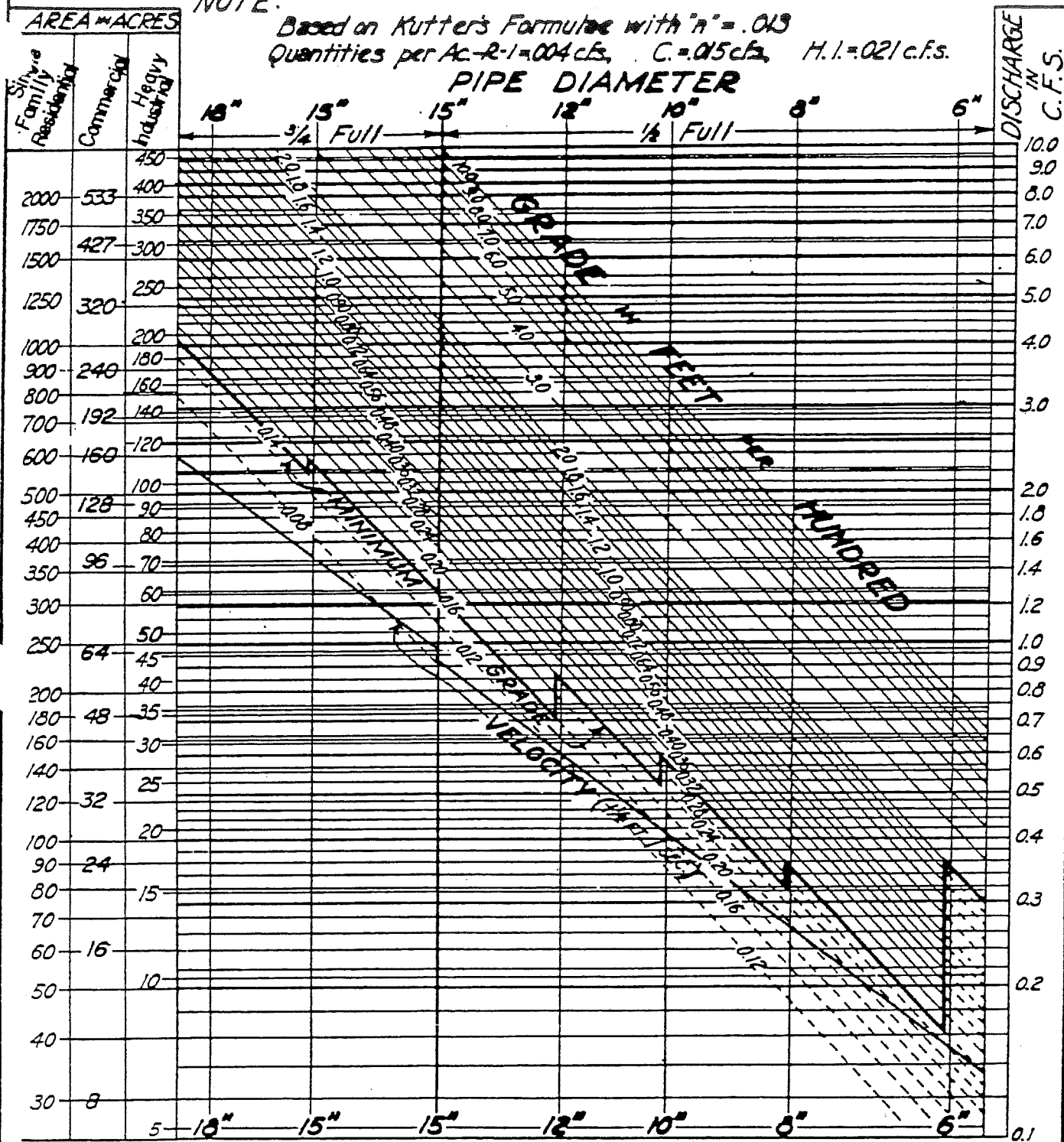
ZONING	DESCRIPTION	COEFFICIENT (cfs/gross acreage)	COEFFICIENT (cfs/dwelling unit)
OS	Open Space	0.0002	-----
A	Agricultural - 1 single family home/ legal lot	0.0002	-----
RE	Residential Estate – large custom single family homes on uniquely configured lots	0.00075	-----
RVL	Residential Very Low Density - 1 DU/AC	0.001	0.001
RL	Residential Low Density – 2.2 DU/AC	0.0015	0.00068
RS	Residential Suburban - 5 DU/AC	0.005	0.001
→ RM	Residential Moderate – 11 DU/AC	0.012	0.00109
RMH	Residential Medium High – 20 DU/AC	0.015	0.00075
RH	Residential High – 28 DU/AC	0.023	0.00082
CTC	Commercial Town Center	0.015	-----
CC	Community Commercial	0.015	-----
CN	Commercial Neighborhood	0.015	-----
CO	Commercial Office	0.015	-----
VSR	Visitor Serving/Resort	0.021	-----
BP	Business Park	0.021	-----
IC	Industrial Commercial	0.021	-----
I	Industrial	0.021	-----

Notes:

- The coefficient to be used for any zoned area not listed in this table will be determined by the City Engineer based upon the intended development and use.
- Open space coefficient: this coefficient is to account for water infiltration into sewer pipe.
- Coefficients in cfs/gross acreage shall be used for areas that are not yet developed and not yet entitled.
- Coefficients in cfs/dwelling unit shall be used for developed areas and areas that are entitled.

NOTE:

Based on Kutter's Formulae with $n = .013$
 Quantities per Ac - R-1 = 004 cfs, C = .015 cfs, H.I. = .021 c.f.s.



NOTE: USE 15" - 1/2 FULL FOR COMPUTING DESIGN CAPACITY OF A NEW SEWER SYSTEM. USE 15" - 3/4" FULL FOR CHECKING CAPACITY OF EXIST. SEWER SYSTEM.

FLOW DIAGRAM FOR THE DESIGN OF CIRCULAR SANITARY SEWERS

COUNTY OF LOS ANGELES
 DEPARTMENT OF PUBLIC WORKS

COUNTY ENGINEER
 STANDARD

S-C4

DATE: 3 / 80

DESIGN

[Signature] P.R.C.E.
 2010443

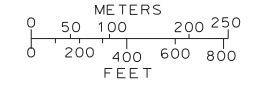
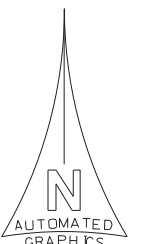
[Signature]
 ASSISTANT DEPUTY

[Signature]
 COUNTY ENGINEER

SEE SHT. NO. 1218



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.



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
- △ DROP MANHOLE
- SHALLOW MANHOLE
- ◇ TRAP MANHOLE
- ⊞ WEIR MANHOLE
- C.D. → CLEANOUT
- L.H. → LAMP HOLE

TOTAL MH'S THIS MAP: 84

1180

1220

1

2

3

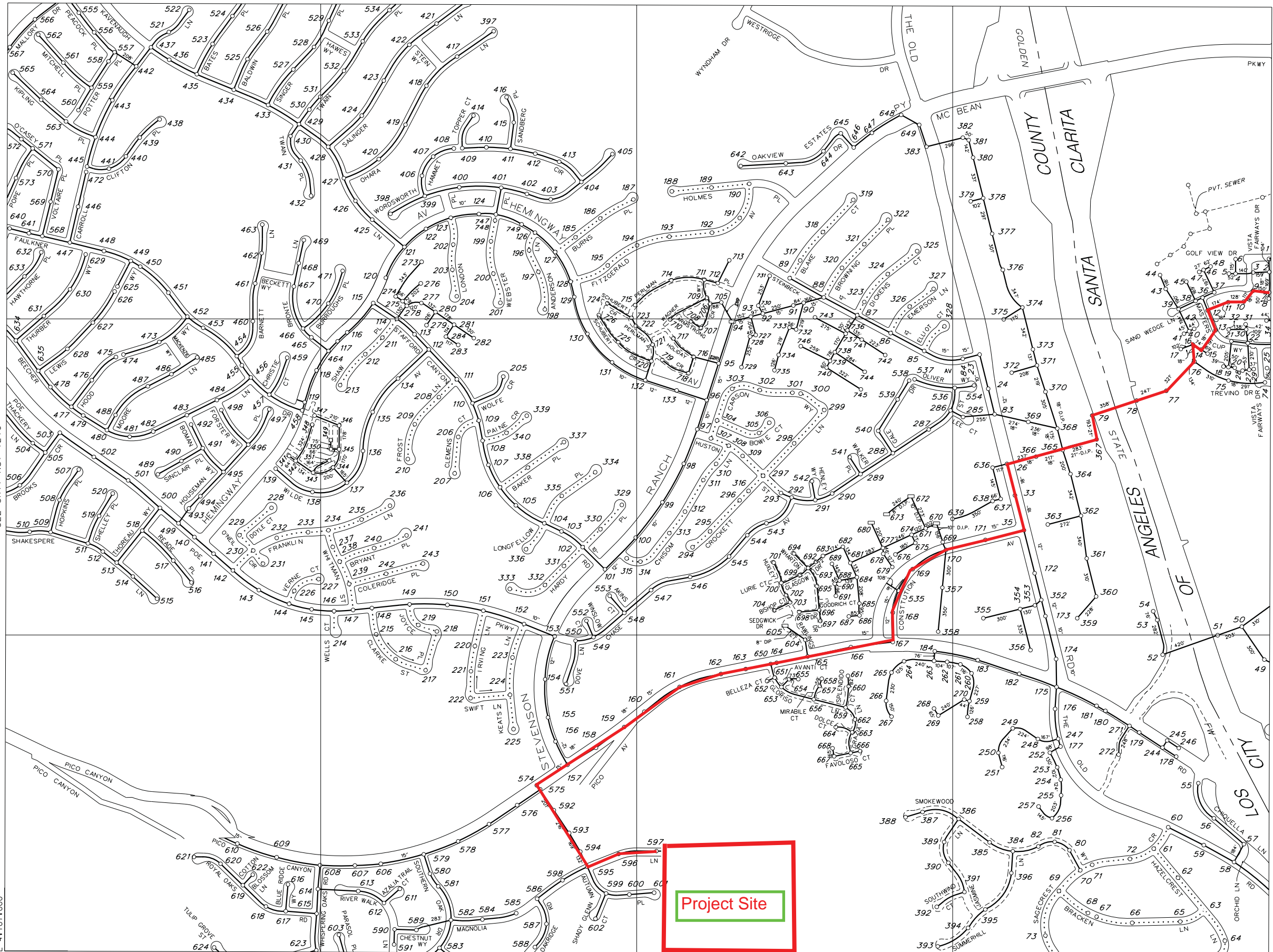
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2

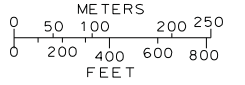
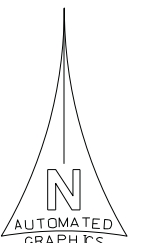
3

SEE SHT. NO. N-1257

A-42
A-47



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LEGEND

- CLAY SEWERS MAINTAINED BY S.M.D. 8" UNLESS OTHERWISE NOTED
- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- FORCE MANS
- - - 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

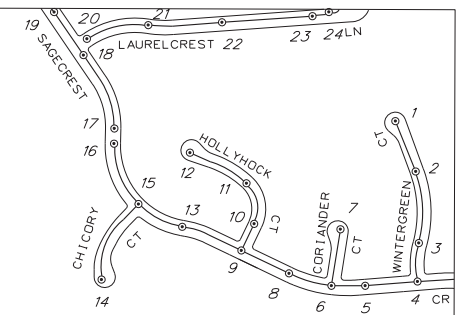
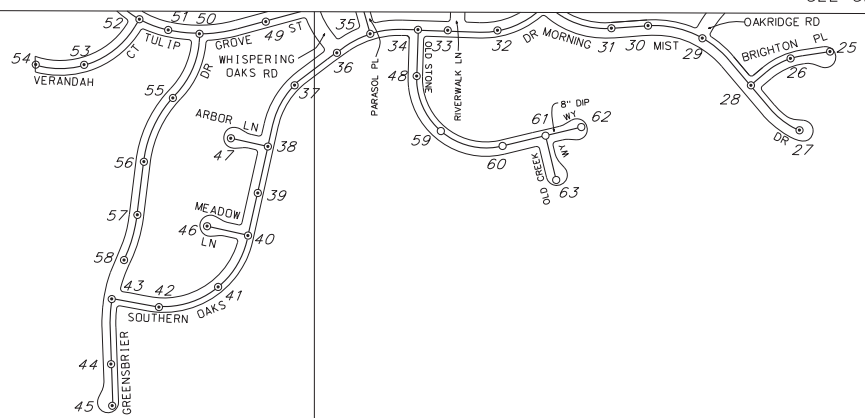
TOTAL MH'S THIS MAP: 748

SEE SHT. NO. 1219

SEE SHT. NO. N-1259

MAP REV
05-05-14
DATA BASE REV
05-16-88

SEE SHT. NO. N-1258

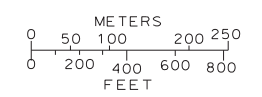
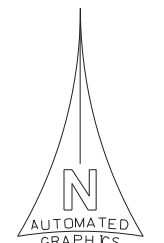


Project Site

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

LOS ANGELES COUNTY

SEE SHT. NO. N-1298



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.D. → CLEANOUT
- L.H. → LAMP HOLE
- PUMP STATION

TOTAL MH'S THIS MAP: 63

1

2

3

1220

E 4,107,000

N 4,241,500

1220

MAP REV 10-26-09

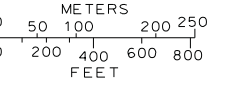
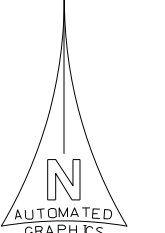
DATA BASE REV 08-01-88

SEE SHT. NO. N-1296

- A-41
- A-42
- A-47
- A-48
- X-48

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. N-1336



LEGEND

- CLAY SEWERS MAINTAINED BY S.M.D. 8" UNLESS OTHERWISE NOTED
- PLASTIC SEWERS
- CONCRETE SEWERS
- CLAY SEWERS, LINED
- CEMENT SEWERS, LINED
- FORCE MANS
- - - 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: 919



SEE SHT. NO. N-1258

SEE SHT. NO. N-1298

MAP REV
03-19-14
DATA BASE REV
06-02-88

BENCH MARK: L 3026
 RDBM TAG IN 5 CB 8.2 M W/O BCR @
 SH COR LYONS AVE & HILEY CYN RD
 30.5M W/O & 12.2M S/O CAL INT (NR W END CB)
 NE-HALL, 1945 ELEV. = 1265.216

STORMWATER POLLUTION CONTROL REQUIREMENTS FOR SEWER CONSTRUCTION

- Eroded sediments and other pollutants must be retained on site and may not be transported from the site via sheet flow, swales, area drains, natural drainage courses, or silt.
- Stockpiles of earth and other construction related materials must be protected from being transported from the site by the forces of wind or water.
- Fuels, oils, solvents, and other toxic materials must be stored in accordance with their labeling 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.
- 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 safe waste.
- Trash and construction-related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
- 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.
- Any slopes with disturbed soil or denuded vegetation must be stabilized so as to inhibit erosion by wind and water.

THIS SEWER PERMIT CONTRACT
 ACCEPTED FOR PUBLIC USE
 06/14/2005
 COUNTY OF LOS ANGELES
 DEPARTMENT OF PUBLIC WORKS
 LAND DEVELOPMENT DIVISION

- CA001 - Dewatering Operations
 CA002 - Paving Operations
 CA003 - Structure Construction and Painting
 CA010 - Material Delivery and Storage
 CA020 - Solid Waste Management
 CA021 - Hazardous Waste Management
 CA023 - Concrete Waste Management
 CA024 - Sanitary/Septic Waste Management
 CA030 - Vehicle and Equipment Cleaning
 CA031 - Vehicle and Equipment Fueling
 CA032 - Vehicle and Equipment Maintenance
 ES010 - Scheduling
 ES050 - Preservation of Existing Vegetation
- ES010 - Seeding and Planting
 ES021 - Mulching
 ES020 - Geotextiles and Mats
 ES021 - Dust Controls
 ES023 - Temporary Stream Crossing
 ES023 - Construction Road Stabilization
 ES024 - Stabilized Construction Entrance
 ES034 - Storm Drain Inlet Protection

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
- APWA 208-0 BREAKING INTO EXISTING MANHOLES
 APWA 221-1 PIPE ANCHORS AND BACKFILL STABILIZERS
 APWA 222-0 HOUSE CONNECTION SEWER
 APWA 223-0 HOUSE CONNECTION REMODELING
 APWA 220-1 CHIMNEYS
 2000-0 BEDDING FOR SEWER PIPE
 2021-0 WYE OR TEE SUPPORT
 2024-0 ALLOWABLE TROUGH WIDTHS
 2027-0 CRADLING & ENCASMENT

NOTE:
 ISSUE NO HOUSE LATERAL CONNECTION PERMITS UNTIL
 OUTLET P.C. 11464 IS ACCEPTED FOR PUBLIC USE BY
 THE COUNTY OF LOS ANGELES.

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 (661) 266-4683 SO THAT REQUIRED
 INSPECTION CAN BE MADE.

PRIVATE CONTRACT SEWER GENERAL NOTES

- The following general notes are to be included on Page 1 of all Private Contract Sewer Plans:
- A sewer construction permit shall be obtained and a fee paid for construction inspection and record plans to the 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, Citrus, etc. must be filed with the permit application.
 - 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 named as the Certificate Holder to be notified 30 days prior to commencement of work.
 - 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.
 - 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.
 - The contractor shall contact the District Office listed on the "Application for Construction Permit" to arrange for an acceptable construction start date.
 - Approval of this plan by the County of Los Angeles 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.
 - All work shall be in accordance with the latest approved edition of the "Standard Specifications for Public Works Construction, including supplements and the latest Special Provisions for the Construction of Sanitary Sewers and shall be promulgated only in the presence of the Department of Public Works.
 - 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 Requirements" as shown on Los Angeles Department of Public Works Standard S-2.
 - Elevations are in feet above U.S.C. & G.S. sea level datum of 1929.
 - No revisions shall be made in these plans without the approval of the Director of Public Works.
 - No representative of the Department of Public Works will survey or lay out any portion of the work.
 - 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 ditches, are shown by circles or triangles of all points between designated points. The grade shall be established so as to conform to a straight line down between said designated points.
 - 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 of right angles from the main sewer except as shown on the plans. House laterals from chimneys shall not have an angle of less than 45 degrees with the M.L. sewer. Any change in alignment shall be requested in writing by the private engineer.
 - 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.

CONSTRUCTION NOTES

- Provide survey stakes on the property line or property lines produced at right angles to the sewer line at the centerline of each manhole.
- Vitrified clay pipe joints shall be type "D" or "D" per standard specifications section 208-2.
- If a powerpole is within three feet of the sewer, the sewer shall be encased per standard plan S-23, case II, two feet on each side from the point of interference.
- All joints between cast iron pipe and vitrified clay pipe shall be made with a rubber sleeve joint, type "D" (with bushing if necessary) per standard specifications section 208-2.
- House laterals shall be constructed with inverts at the property line 6 feet below curb grade except as noted.
- Wye or tee branches may be used for connections to the main sewer except as noted.
- If during the course of construction, it is determined that there is less than four feet of cover over the top of a manhole or house lateral V.C.P. sewer which is not indicated on the plans, the pipes shall be encased per standard plan S-23, case II, unless otherwise approved by the Director of Public Works.
- All structures shall be either brick sewer manholes per standard plan S-3 or precast concrete sewer manholes per standard plan S-26, or reinforced precast concrete manholes per standard plan S-6, except as noted.
- Reinforce all branches within paved areas to meet Los Angeles County Public Works or California State Highway requirements in accordance with the permits.
- Full compliance with section 306-1.3.4, if the standard specification will be required for backfill in street certification of backfill composition and sand equivalent by a qualified civil engineer shall be provided by the permittee prior to the issuance of a certificate of partial acceptance.
- All backfill and fills outside of the street right of way that 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.
- Mainline taps in unimproved rights of way to be six inches above finished grade.
- Sewers to be tested for leakage per section 306-1.4 of the standard specifications and special provisions.



RECORD PLANS

PROFILE, ALIGNMENT AND GRADE OF
SANITARY SEWERS
 TO BE CONSTRUCTED IN
 TRACT NO. 43896-06 PC NO. 11544
 3 SHEETS 5 PAGES
 COUNTY OF LOS ANGELES CALIFORNIA

INDEX 1259
 JAMES A. NOYES DIRECTOR OF PUBLIC WORKS
 APPROVED BY LAND DEVELOPMENT DIVISION
 BY *Thomas W. Hernandez* 4/12/01
 SUBMITTED BY *[Signature]* 4/11/01

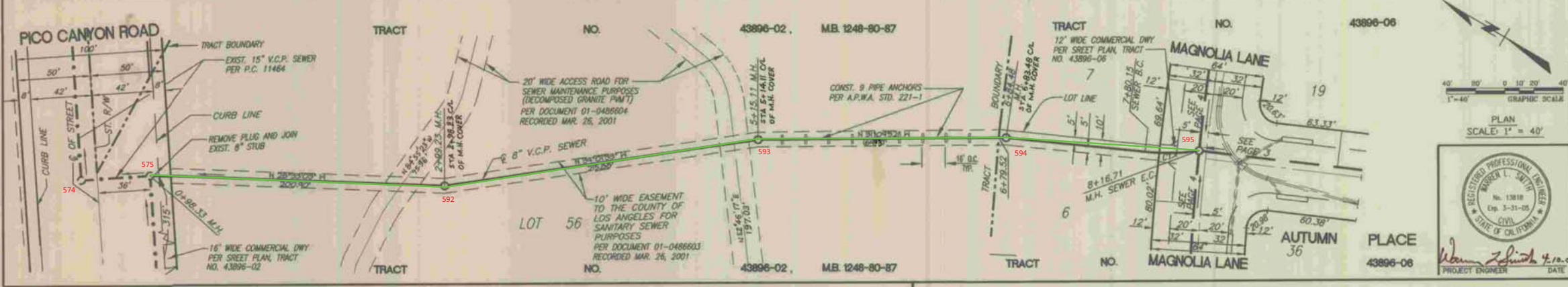
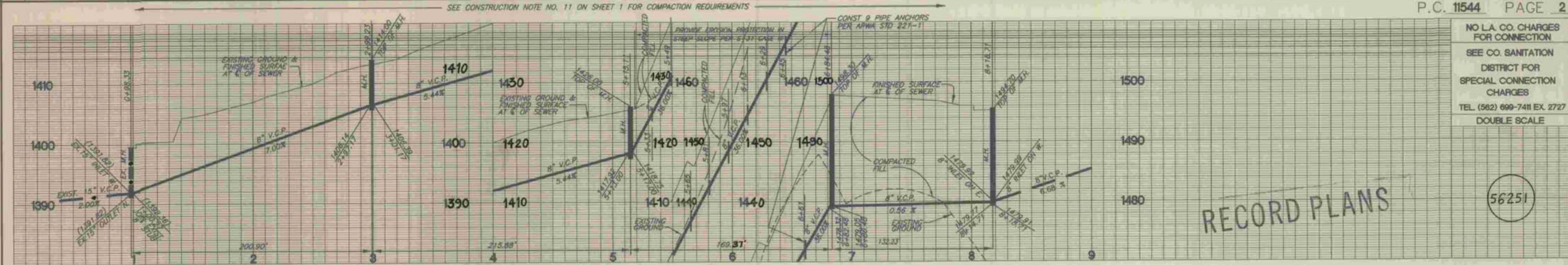
APPROVED: COUNTY SANITATION DISTRICT 56250
 OF LOS ANGELES CALIF.
 JAMES F. STAHL - CHIEF ENGINEER AND GENERAL MANAGER
 COUNTY SANITATION DISTRICT NO. 32
 BY *[Signature]* DATE: 4/13/01

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 1-800-422-4153 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.

Wynn Z. Smith 4.10.01
 RCE NO. 13818 DATE

NO.	REVISION	REVISED BY	APPROVED BY	DATE



CURVE DATA:

CURVE	DELTA	RADIUS	LENGTH	TANGENT
C1	13°57'56"	150.00'	38.56'	18.37'

SANITARY SEWER PLANS IN
 TRACT NO. 43896-06 PC NO. 11544
 REVIEWED BY LAND DEVELOPMENT DIVISION
 BY *M.D. Est* 4-11-01
 COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

SR CONSULTANTS, INC.
 ENGINEERING LAND PLANNING LAND SURVEYING
 2898 MATARO STREET
 PASADENA - CALIFORNIA 91107-3112
 Phone: (626) 683-0430
 PROJECT ENGINEER DATE TRACT NO. 43896-06

NO L.A. CO. CHARGES FOR CONNECTION
SEE CO. SANITATION DISTRICT FOR SPECIAL CONNECTION CHARGES
TEL. (562) 699-7411 EX. 2727
DOUBLE SCALE

RECORD PLANS

CURVE DATA:

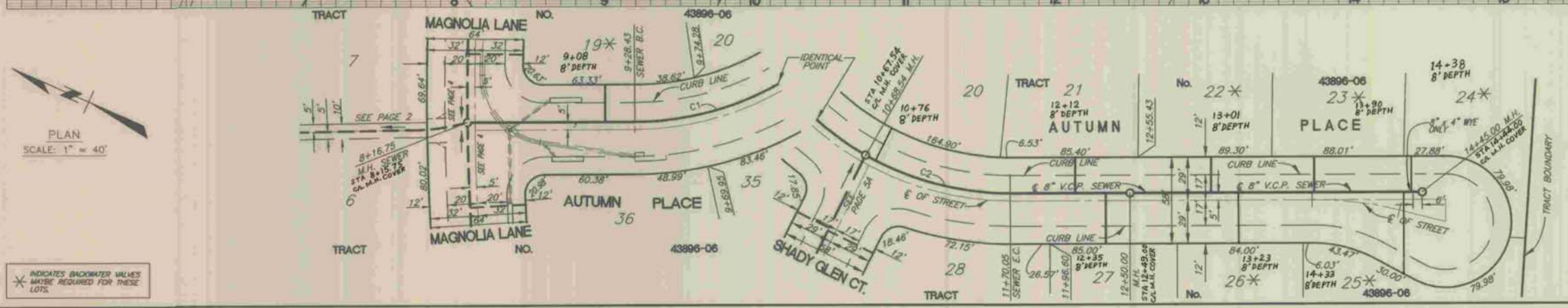
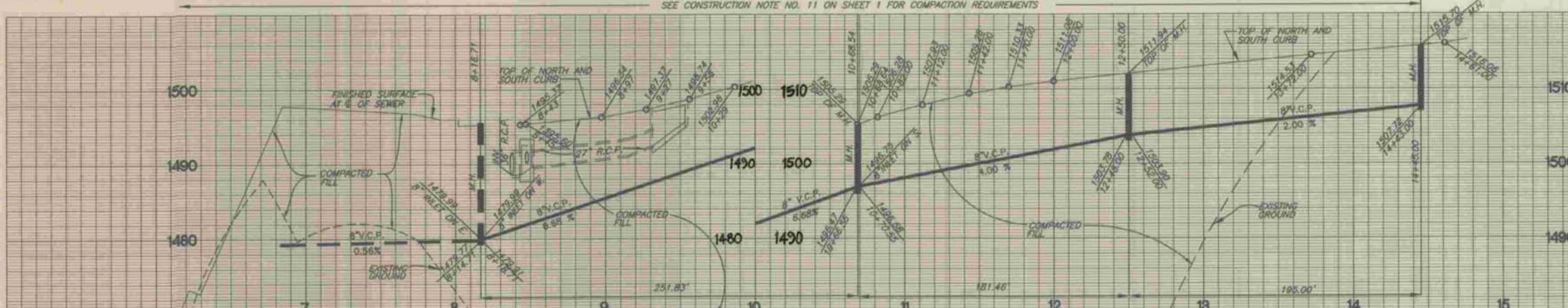
CURVE	DELTA	RADIUS	LENGTH	TANGENT
C1	41°10'18"	195.00'	140.11'	73.24'
C2	29°49'15"	195.00'	101.50'	51.92'

56252



REVIEWED BY LAND DEVELOPMENT DIVISION
SUBDIVISION PLAN CHECKING SECTION
M.D. Exp. 4-11-01 DATE

SEE CONSTRUCTION NOTE NO. 11 ON SHEET 1 FOR COMPACTION REQUIREMENTS



INDICATES BACKWATER VALVES MAYBE REQUIRED FOR THESE LOTS.

PLAN SCALE: 1" = 40'

PLAN SCALE: 1" = 40'

NO L.A. CO. CHARGES FOR CONNECTION
SEE CO. SANITATION DISTRICT FOR SPECIAL CONNECTION CHARGES
TEL. (562) 699-7411 EX. 2727
DOUBLE SCALE

RECORD PLANS

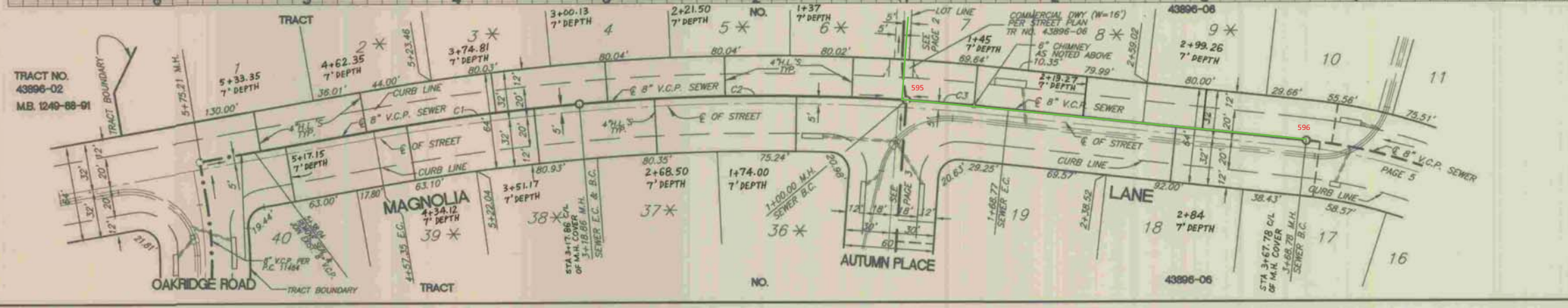
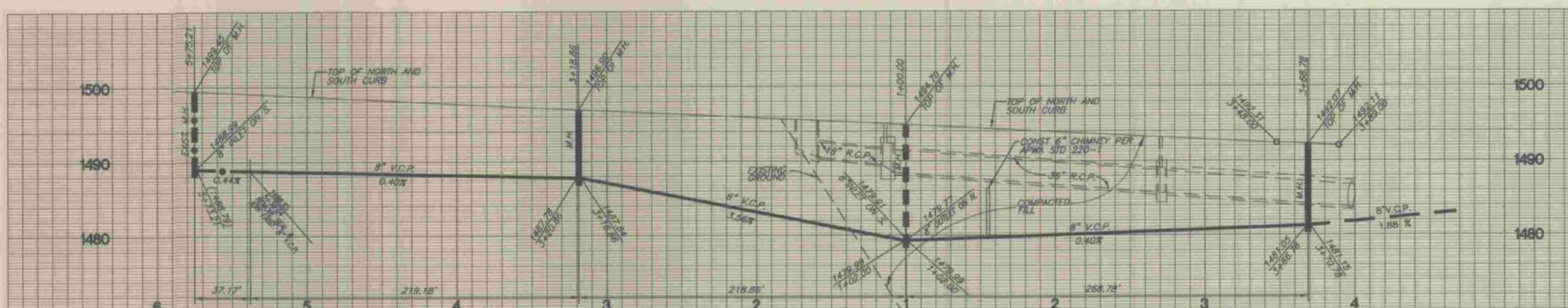
CURVE DATA:

CURVE	DELTA	RADIUS	LENGTH	TANGENT
C1	05°16'20"	1505.00'	138.49'	69.29'
C2	08°20'02"	1505.00'	218.86'	109.85'
C3	02°37'01"	1505.00'	68.77'	34.37'

56253



REVIEWED BY LAND DEVELOPMENT DIVISION
SUBDIVISION PLAN CHECKING SECTION
M.D. Exp. 4-11-01 DATE



TRACT NO. 43896-02
M.B. 1249-88-91

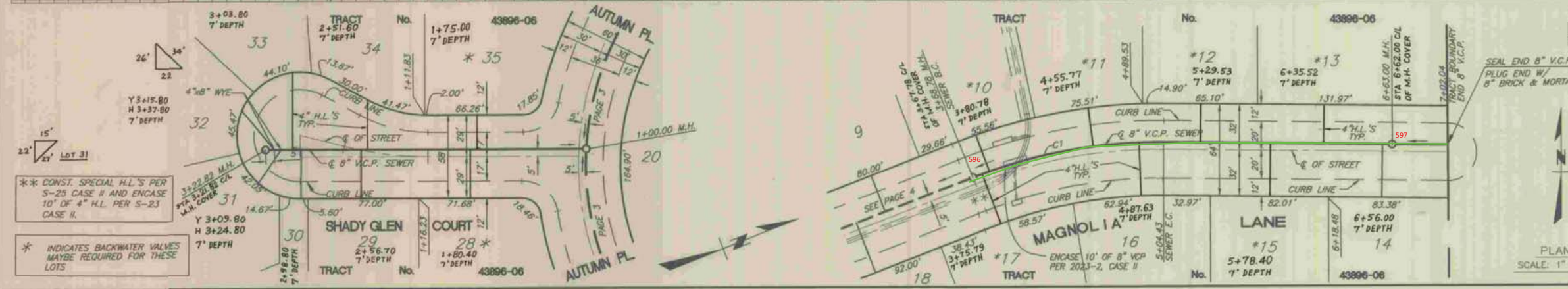
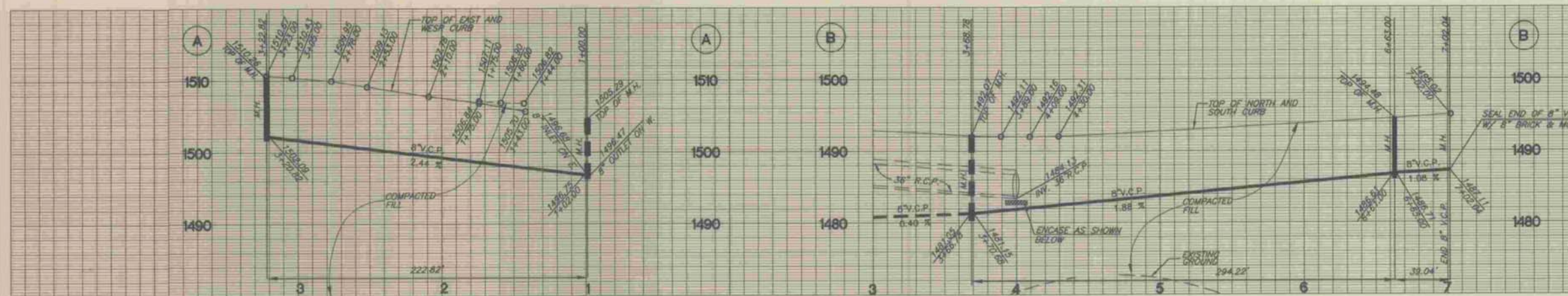
PLAN SCALE: 1" = 40'

PLAN SCALE: 1" = 40'

PART C.P. 80-88834 ON TRACT

NO L.A. CO. CHARGES FOR CONNECTION
 SEE CO. SANITATION DISTRICT FOR SPECIAL CONNECTION CHARGES
 TEL. (562) 899-7411 EX. 2727
 DOUBLE SCALE

RECORD PLANS



CURVE DATA:

CURVE	DELTA	RADIUS	LENGTH	TANGENT
C1	21°53'38"	355.00'	135.65'	68.66'

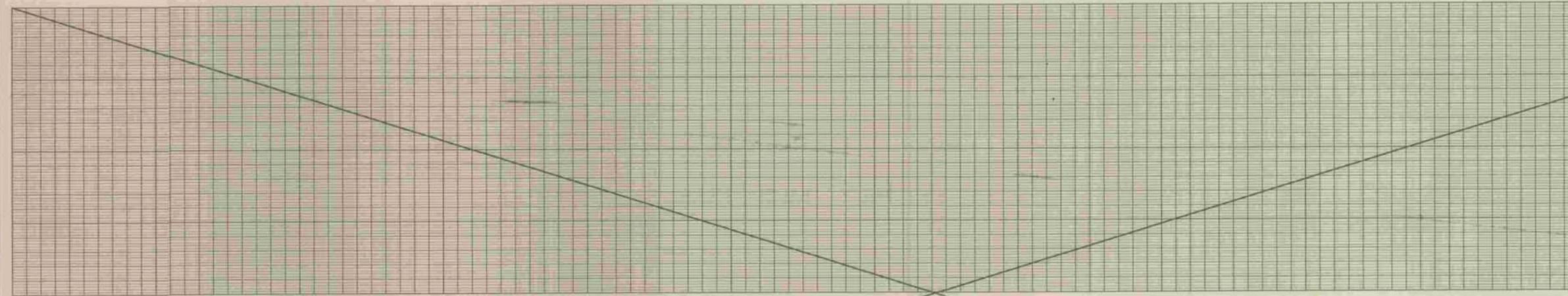
56254



REVIEWED BY LAND DEVELOPMENT DIVISION
 BY *M.D. [Signature]*
 DIVISION PLAN CHECKING SECTION

** CONST. SPECIAL H.L.'S PER S-25 CASE II AND ENCASE 10' OF 4" H.L. PER S-23 CASE II.
 * INDICATES BACKWATER VALVES MAYBE REQUIRED FOR THESE LOTS

NO L.A. CO. CHARGES FOR CONNECTION
 SEE CO. SANITATION DISTRICT FOR SPECIAL CONNECTION CHARGES
 TEL. (562) 899-7411 EX. 2727
 DOUBLE SCALE



VOID

REVIEWED BY LAND DEVELOPMENT DIVISION
 BY
 SUBDIVISION PLAN CHECKING SECTION

14311 P.C. 9 00-00834 ON TRACT

BENCH MARK: L 3026
 RDBM TA6 IN 5 CB 6.2 M W/O BCR @
 SH COR LYONS AVE & WILEY CYN RD
 30.5M W/O & 12.2M S/O C/L INT (NR W END CB)
 NEHALL MMS ELEV. = 1265.246

STORMWATER POLLUTION CONTROL REQUIREMENTS FOR SEWER CONSTRUCTION

- Graded sediments and other pollutants must be retained on site and may not be transported from the site by sheet flow, rills, ditches, natural drainage courses, or wind.
- Stockpiles of earth and other construction related materials must be protected from being transported from the site by the forces of wind or water.
- 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.
- 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.
- Trash and construction-related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and ground by wind.
- Sediments and other materials may not be trucked 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 rains or other means.
- Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.

THIS SEWER PRIVATE CONTRACT ACCEPTED FOR PUBLIC USE
 06/14/2005
 COUNTY OF LOS ANGELES
 DEPARTMENT OF PUBLIC WORKS
 LAND DEVELOPMENT DIVISION

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
 APWA 208-0 BREAKING INTO EXISTING MANHOLES
 APWA 220-1 CHIMNEYS
 APWA 221-1 PIPE ANCHORS
 APWA 222-0 HOUSE CONNECTION SEWER
 APWA 223-0 HOUSE CONNECTION REMODELING
 2000-0 LEGEND FOR SANITARY SEWER PLANS AND PROFILES AND DISTRICT MAPS
 2002-0 BEDDING FOR SEWER PIPE
 2024-0 WYE OR TEE SUPPORT
 2027-0 ALLOWABLE TRENCH WIDTHS
 2023-1 CRAILING AND ENCASMENT

BEFORE BREAKING INTO OR CONSTRUCTION ON A COUNTY SANITATION DISTRICT SEWER AND PRIOR ACCEPTANCE OF THE PROJECT, A SANITATION DISTRICT INSPECTOR SHALL BE NOTIFIED BY PHONE (805) 947-5027 SO THAT REQUIRED INSPECTION CAN BE MADE.

LOT 56 IS RESTRICTED TO NO CONSTRUCTION OF RESIDENTIAL BUILDINGS AND WILL NOT BE SERVED BY THIS SEWER.

NOTE: ISSUE NO ALL CONNECTION PERMITS FOR LOTS FROM 14 TO 19 & FROM 32 TO 35 UNLESS OUTLET P.C. 11544 IS ACCEPTED FOR PUBLIC USE BY 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:

- A sewer construction permit shall be obtained and a fee paid for construction inspection and record plans to the 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 Connection, Caltrans, etc., must be filed with the permit application.
- Prior to issuance of any permit, the contractor shall file a permit for associations and franchises 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 start of work on a State Highway, a permit must be obtained from the State of California Division of Highways, 120 South Spring Street, Los Angeles, California.
- 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.
- The contractor shall contact the district office listed on the "Application for Construction Permit" to arrange for an acceptable construction start date.
- Approval of this plan by the County of Los Angeles 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.
- All work shall be in accordance with the latest approved edition of the "Standard Specifications for Public Works Construction, including supplements and the latest Special Provisions for the Construction of Sanitary Sewers and shall be prosecuted only in the presence of the Department of Public Works.
- 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 Requirements" as shown on Los Angeles Department of Public Works Standard 5-2.
- Elevations are in feet above U.S.C. & G.S. sea level datum of 1928.
- No revisions shall be made in these plans without the approval of the Director of Public Works.
- No representative of the Department of Public Works will survey or lay out any portion of the work.
- Grades to which this improvement is to be constructed are shown on plans and profiles. Grade points for top of curb, centerline of streets, or centerline of alleys, are shown by circles on profiles of all points between designated points. The grade shall be established so as to conform to a straight line drawn between said designated points.
- The private engineer shall furnish the Department of Public Works with grade sheets and staking 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 change shall not have an angle of less than 45 degrees with the M.L. sewer. Any change in alignment shall be requested in writing by the private engineer.
- 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.

CONSTRUCTION NOTES

- Provide survey stakes on the property line or property lines produced at right angles to the sewer line at the centerline of each manhole.
- Verified city pipe joints shall be type "D" or "Q" per standard specifications section 208-2.
- If a powerline is within three feet of the sewer, the sewer shall be encased per standard plan 5-23, case 8, two feet on each side from the point of interference.
- All joints between cast iron pipe and verified city shall be made with a rubber sleeve joint, type "D" (with bushing if necessary) per standard specifications section 208-2.
- House laterals to be constructed with inverts at the property line 6 feet below curb grade except as noted.
- Wye or tee branches may be used for connections to the mainline sewers except as noted.
- If during the course of construction, it is determined that there is less than four feet of cover over the top of a manhole or house lateral V.C.P. sewer which is not indicated on the plans, the pipes shall be encased per standard plan 5-23, case 8, or reinforced precast concrete manhole per standard plan 5-6, except as noted.
- All structures shall be either brick sewer manholes per standard plan 5-3 or precast concrete sewer manholes per standard plan 5-36, or reinforced precast concrete manhole per standard plan 5-6, except as noted.
- resurface all branches within paved areas to meet Los Angeles County Public Works or California State Highway requirements in accordance with the permit.
- All backfill and fill outside of the street right of way shall be compacted to 90% of the maximum density as determined by ASTM and compaction test 0 1007-TB 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.
- Manhole tops in unimproved rights of way to be six inches above finished grade.
- Sewers to be tested for leakage per section 306-1/4 of the standard specifications and special provisions.

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

54946

TRACT NO. 43896-02 PC NO. 11464
 6 SHEETS: 12 PAGES
 COUNTY OF LOS ANGELES CALIFORNIA
 INDEX 1258 AND 1259

HARRY W. STONE DIRECTOR OF PUBLIC WORKS
 APPROVED BY LAND DEVELOPMENT DIVISION
 BY: [Signature] ASSISTANT DIVISION ENGINEER
 SUBMITTED BY: [Signature] SUPERVISOR PLAN CHECKING SECTION

APPROVED: COUNTY SANITATION DISTRICT
 OF LOS ANGELES CALIF.
 CHARLES W. CARRY - CHIEF ENGINEER and GENERAL MANAGER
 COUNTY SANITATION DISTRICT NO. 32

BY: [Signature] DATE: 6/1/00

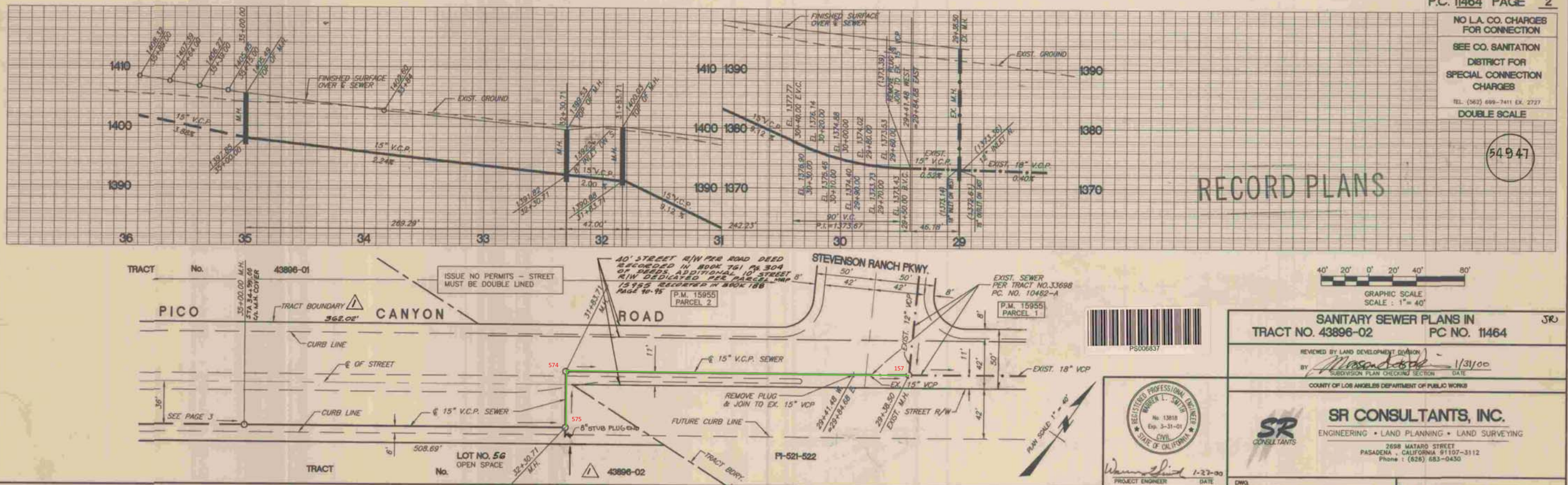
PRIVATE ENGINEERS NOTICE TO CONTRACTORS

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 CLAMMING OF GENERAL TELEPHONE COMPANY AT 1-800-548-4871 SO THAT THEY CAN MARK THE LOCATION OF UNDERGROUND TELEPHONE LINES.

W. W. [Signature] 1-27-00
 REC NO. C13818 DATE

NO.	REVISION	REVISED BY	APPROVED BY	DATE
1	REVISED INDEX MAP; MOVE LOT LINES C/L ON PAGE 11.5.1.8.10.12. VOID PAGE 8.1.1.10.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63.64.65.66.67.68.69.70.71.72.73.74.75.76.77.78.79.80.81.82.83.84.85.86.87.88.89.90.91.92.93.94.95.96.97.98.99.100. ADD PLANS PROFILE LINE 8 ON PAGE 8.	[Signature]	[Signature]	6/14/00

NO.	REVISION	REVISED BY	APPROVED BY	DATE
1	ADD H.L. ON PAGE 3 AND 7 FOR RESERVATION LOT 56 TO 35 (FORMER TRACT NO. 43896-05)	[Signature]	[Signature]	8/17/00



RECORD PLANS

P.C. 11464 PAGE 2

NO L.A. CO. CHARGES FOR CONNECTION
 SEE CO. SANITATION DISTRICT FOR SPECIAL CONNECTION CHARGES
 TEL. (802) 609-7411 EX. 2727
 DOUBLE SCALE

54947

GRAPHIC SCALE
 SCALE: 1" = 40'

SANITARY SEWER PLANS IN
 TRACT NO. 43896-02 PC NO. 11464

REVIEWED BY LAND DEVELOPMENT DIVISION
 BY: [Signature] 1/31/00
 SUBDIVISION PLAN CHECKING SECTION DATE

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

SR CONSULTANTS, INC.
 ENGINEERING • LAND PLANNING • LAND SURVEYING
 2698 MATARO STREET
 PASADENA, CALIFORNIA 91107-3112
 Phone: (626) 653-0430

REGISTERED PROFESSIONAL ENGINEER
 No. 13618
 Exp. 3-31-01
 CIVIL
 STATE OF CALIFORNIA
 W. W. [Signature] 1-27-00
 PROJECT ENGINEER DATE DWG

SANITARY SEWERS

TO BE CONSTRUCTED IN

TRACT NO 33698 PRIVATE CONTRACT NO. 10462-A INDEX A-42

17 SHEETS, 33 PAGES

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

DATE: DECEMBER 1935



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 DIRECTOR OF PUBLIC WORKS.
3. NO REPRESENTATIVE OF THE DEPT. 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 DEPT. 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 THE L.A. CO. DEPT. OF PUBLIC WORKS, DISTRICT OFFICE #18, AND PAY A FEE TO THE DIRECTOR OF PUBLIC WORKS, 300 S. FRENCH AVENUE, ALHAMBRA, CA. 31823, 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 116.41 OF THE STANDARD SPECIFICATIONS, REGARDING SAFETY ORGERS.
11. PRIOR TO THE ISSUANCE OF THE REQUIRED SEWER CONSTRUCTION PERMIT, THE CONTRACTOR SHALL OBTAIN AND FILE WITH THE DEPT. OF PUBLIC WORKS COPIES OF A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE ROAD ELEMENT AT THE DEPT. OF PUBLIC WORKS A PERMIT FOR EXCAVATIONS AND TRENCHES IN THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY AND CERTIFICATE OF WORKER'S COMPENSATION INSURANCE WITH THE DEPT. OF PUBLIC WORKS, 300 S. FRENCH AVENUE, ALHAMBRA, CA. 31823, 8th FLOOR. THESE 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 (1935 EDITION WITH 1938 SUPPLEMENT) & DEPT. OF PUBLIC WORKS SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED SEP. 21, 1938 AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE DIRECTOR OF PUBLIC WORKS.
2. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION BY TELEPHONE, 818-18-325 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. "Y" OR "T" BRANCHES MAY BE USED FOR CONNECTIONS TO MAINLINE SEWERS EXCEPT AS NOTED.
5. ALL STRUCTURES SHALL BE EITHER BRICK, SEWER MANHOLES PER S-3 OR PRE-CAST CONCRETE MANHOLES PER S-3B 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 "D" PER STANDARD SPECIFICATIONS SECTION 262.2.
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 DIRECTOR 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 262.2.
12. SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 262.1.1 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
13. RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET L.A. COUNTY PUBLIC WORKS OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
14. FULL COMPLIANCE WITH SECTION 262.1.2.5 OF THE STD 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 EMBANKMENT 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 690.57 AS MODIFIED. ACCEPTABLE CERTIFICATION OF SUCH COMPACTION SHALL BE SUBMITTED TO THE CONSTRUCTION DIVISION - P.W.C. WORKS, DEPT.

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

Table with 2 columns: Description and Reference Number. Includes items like 'MINIMUM PUBLIC SAFETY REQUIREMENTS', 'BRICK SEWER MANHOLE', 'STANDARD SANDHOLE SIF', 'HOODING FOR SEWER PIPE', 'CRACKING AND ENCASEMENT', 'TYPE OR THE SUPPORT', 'ALLOWABLE TRENCH WIDTHS', 'LOCKING MANHOLE FRAME AND COVER', 'IRON REINFORCED PRECAST CONCRETE SEWER MANHOLE', 'CHIMNEY PIPE & BASE', 'RECTANGULAR SHALLOW MANHOLE', 'RECTANGULAR MANHOLE FRAME & COVERS', 'PRECAST CONCRETE SHALLOW MANHOLE', 'SPECIAL HOUSE LATERALS', 'SEWER PROTECTION IN STREET SLOPES'.

COUNTY OF LOS ANGELES, CALIFORNIA THOMAS A. TIDEMANSON, DIRECTOR OF PUBLIC WORKS CHARLES W. CARRY, CHIEF ENGINEER CO. SAN DIST. NO. 32

APPROVED: Dean Hjeltson 11/11/35 DATE: APPROVED: J. G. Baer 11/12/35 DATE: OFFICE ENGINEER

CHECKED: Sauf G. Ibal 1-11-35 DATE: M.D. NO. 33134 SANTA CLARITA VALLEY BLOC. DIST. 32

DOUBLE SCALE

CONSTRUCTION NOTES (cont.)

- 16. VEE BRANCHES ONLY MAY BE USED FOR CONNECTIONS TO MAIN LINE SEWER IF A.S.C.P. IS USED.
17. ALL JOINT BETWEEN CAST IRON PIPE AND A.S.C.P. SHALL BE MADE WITH APPROVED FITTINGS.
18. FULL COMPLIANCE WITH PART IX OF THE SPECIAL PROVISIONS IS REQUIRED FOR THE INSTALLATION OF A.S.C. COMPOSITE PIPE AND A.S.C. SOLID WALL HOUSE LATERALS.
19. MANHOLE SURVEY STAKES AND CLAMPS ARE REQUIRED FOR THE CONNECTION OF A.S.C. COMPOSITE PIPE TO MANHOLE STRUCTURES.
20. A.S.C. SOLID WALL PIPE MUST BE USED FOR VEE AND HOUSE LATERAL CONNECTIONS TO A.S.C. COMPOSITE MAINLINE SEWER PIPE.
21. 3 DEGREE DEFLECTION COMPLEYS SHALL BE USED TO ACCOMPLISH RADII OF CURVATURE LESS THAN 300' WHEN USING 8" A.S.C. COMPOSITE PIPE.
22. A.S.C. COMPOSITE PIPE SHALL BE ORDERED IN CONFORMANCE WITH THE TABLE IN SECTION 2-21 OF PART IX OF SPECIAL PROVISIONS.

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. 3 DATE: 2-2-39 REMOVED SEWER PAGES 5, 6, 7, 8 AND POWER POLES APPROVED: Sauf G. Ibal DEPT. OF PUBLIC WORKS

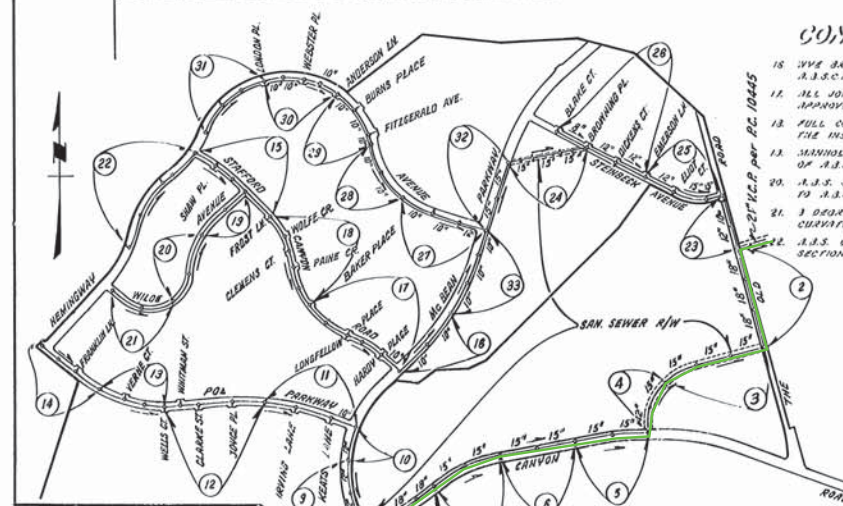
REVISION NO. 4 DATE: 1/24/39 REALIGNED SEWER PAGE 9 TO AVOID POWER POLE. ADDED AND RELOCATED M.H. PAGE 6 TO AVOID GAS LINE APPROVED: Sauf G. Ibal DEPT. OF PUBLIC WORKS

ISSUE NO HL PERMITS UNTIL OUTLET SEWER RC 10445 IS ACCEPTED FOR PUBLIC USE BY THE COUNTY OF LOS ANGELES.

LOTS 555, 556, 557, 559 THRU 572, 574 THRU 579, 581, 582, 583, 585, 586, 587 AND 591 ARE OPEN SPACE LOTS RESTRICTED TO NO CONSTRUCTION AND WILL NOT BE SERVED BY THIS SEWER.

3111 CL 3960 ELEV. 262.866 ROOM TAG IN CONC BASE OF EDISON PP #187400E 60 FT S & 67 FT E C/L INT LYONS AVE & WILEY CV RD VEWHALL QUAD. 19 83

CONTRACTOR MUST MAINTAIN FLOW AT ALL TIMES.



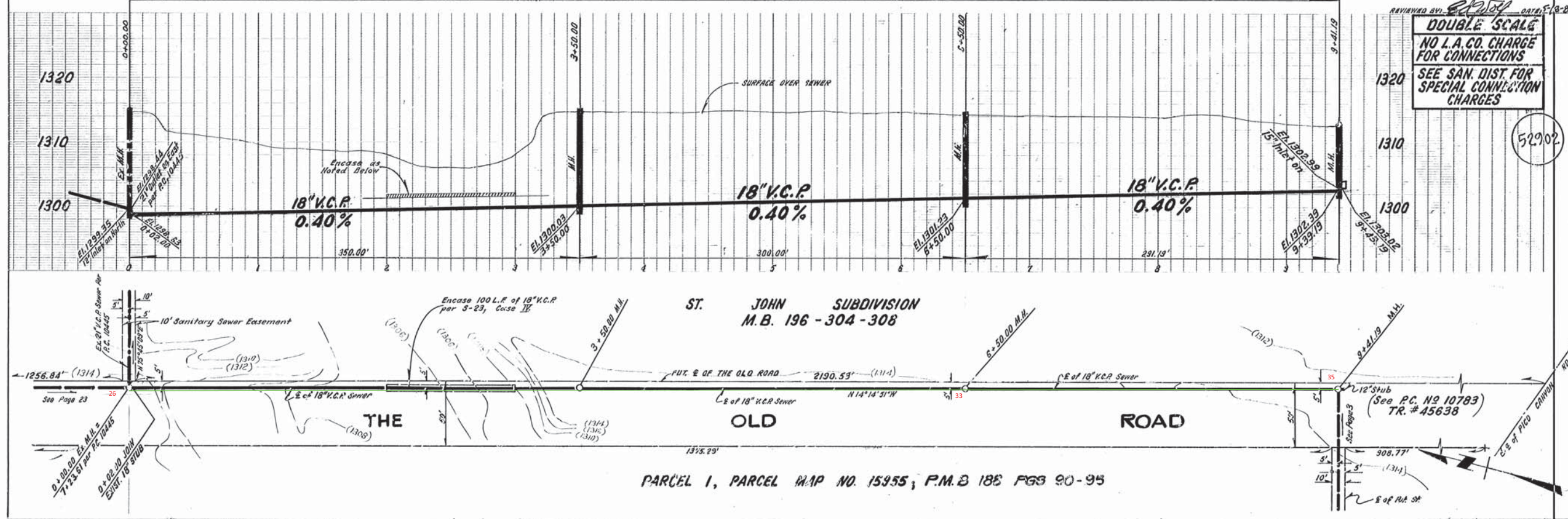
REVISION NO. 5 DATE: 9-10-31 PAGE 20 - ADDED M.H. AT STA. 23+00 REMOVE EX. M.H. AT STA. 24+60.52 & CONSTRUCTED NEW M.H. - LOWERED SEWER M.L. STA. 23+02.00 TO STA. 23+00.52 APPROVED: Sauf G. Ibal DEPT. OF PUBLIC WORKS

INDEX MAP TRACT NO 33698 P.C. NO 10462-A Scale: 1"=800'

REVISION NO. 6 DATE: 1-22-31 PAGE 30, ADDED 64 FT. OF 8" VCP SEWER FROM M.H. @ STA. 24+68.52 ACROSS HEMINGWAY AVE. APPROVED: Sauf G. Ibal DEPT. OF PUBLIC WORKS

REVISION NO. 2 DATE: 7/21/31 Added 8" Inter. Pp. 26 @ Manhole Sta. 11+68.85, Added Manhole 8" IN L.A.S. Pp. 24 Sta. 6+91.20 & Sta. 2+68.52; Added Angle on Stub Pp. 24 Sta. 6+00.00 APPROVED: Sauf G. Ibal DEPT. OF PUBLIC WORKS

SEE NOTE 15 ON PAGE 1 REGARDING COMPACTION

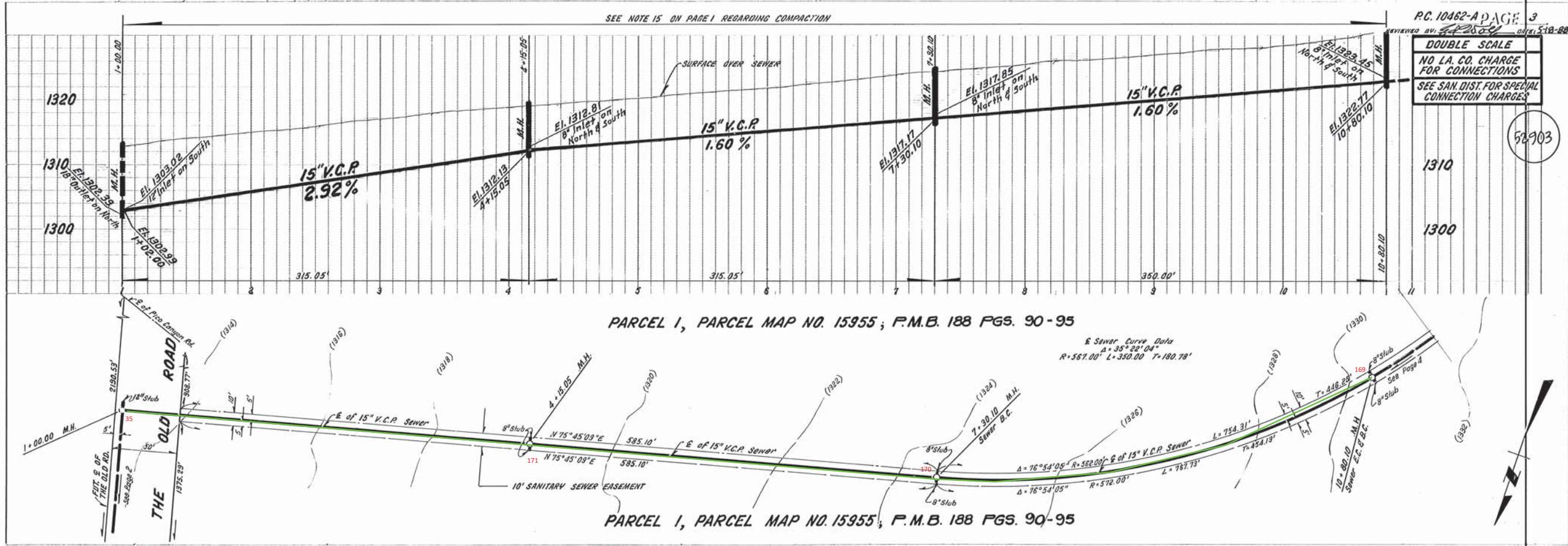


P.C. 10462-A PAGE 2

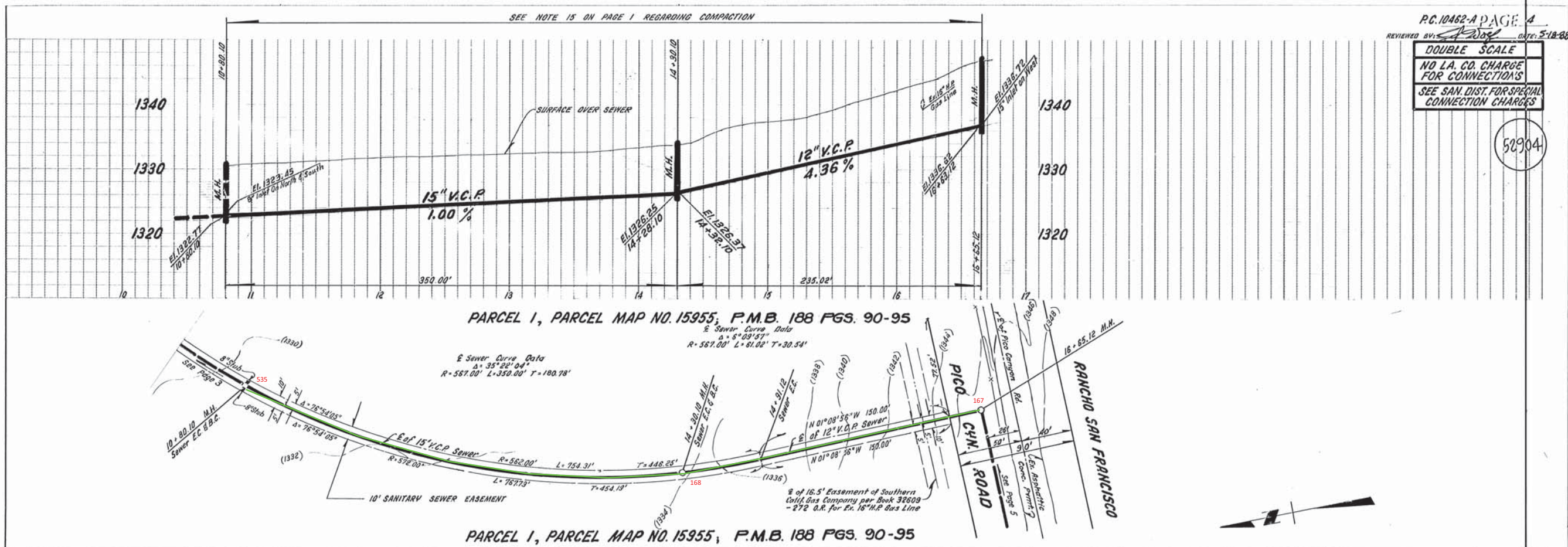
REVISION BY: [Signature] DATE: 5-13-38 DOUBLE SCALE NO L.A. CO. CHARGE FOR CONNECTIONS SEE SAN. DIST. FOR SPECIAL CONNECTION CHARGES

PARCEL 1, PARCEL MAP NO. 15955, P.M.B 185 PGS 90-95

S
A-SAND 9M 29
BRACE 9M 7397



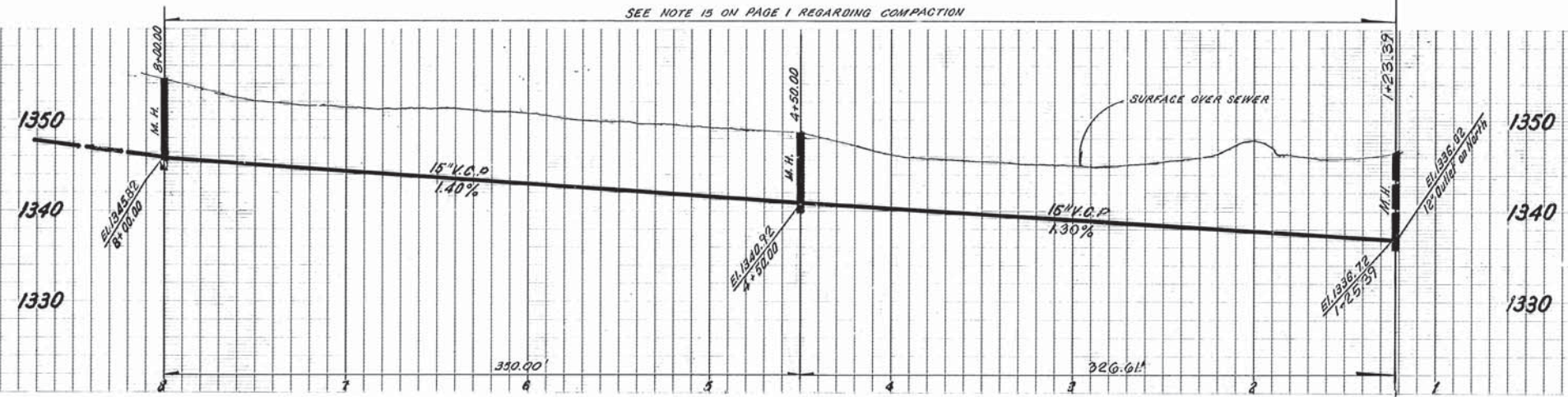
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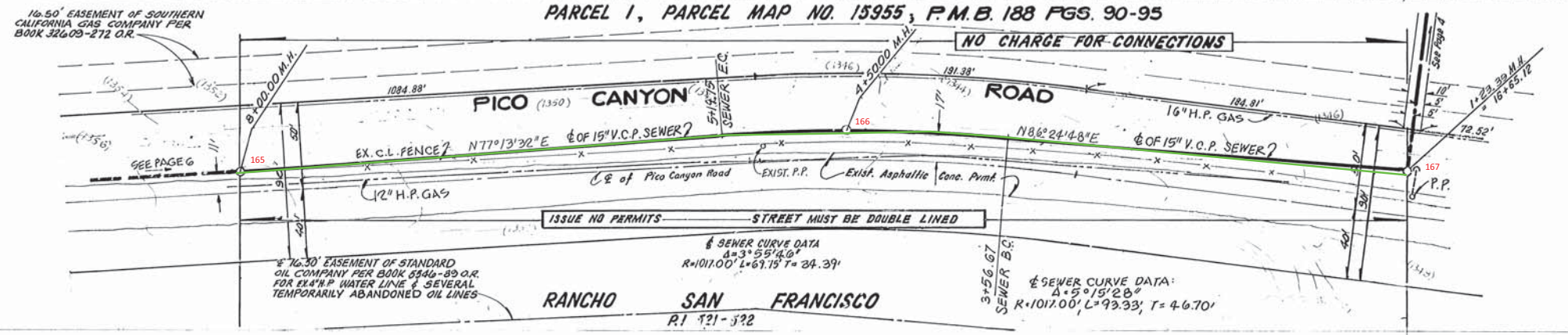
52904

DOUBLE SCALE
 NO L.A.CO. CHARGE
 FOR CONNECTIONS
 SEE SAN. DIST. FOR
 SPECIAL CONNECTION
 CHARGES

52905

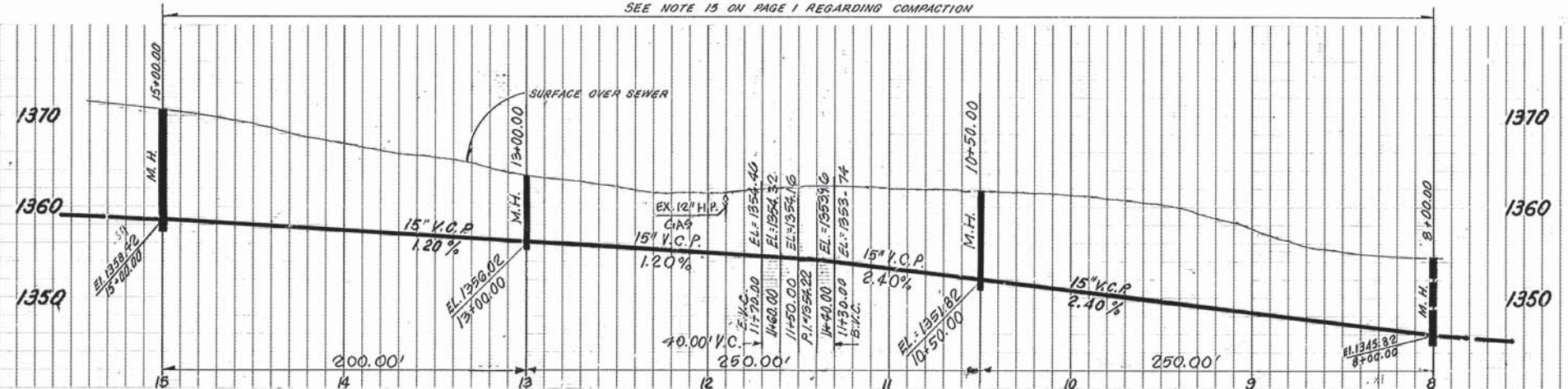


PARCEL 1, PARCEL MAP NO. 15955, P.M.B. 188 PGS. 90-95

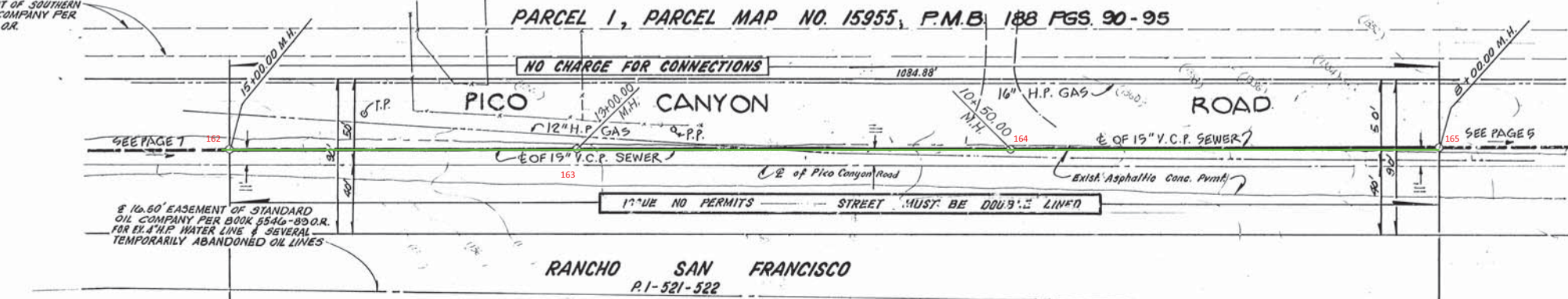


DOUBLE SCALE
 NO L.A.CO. CHARGE
 FOR CONNECTIONS
 SEE SAN. DIST. FOR
 SPECIAL CONNECTION
 CHARGES

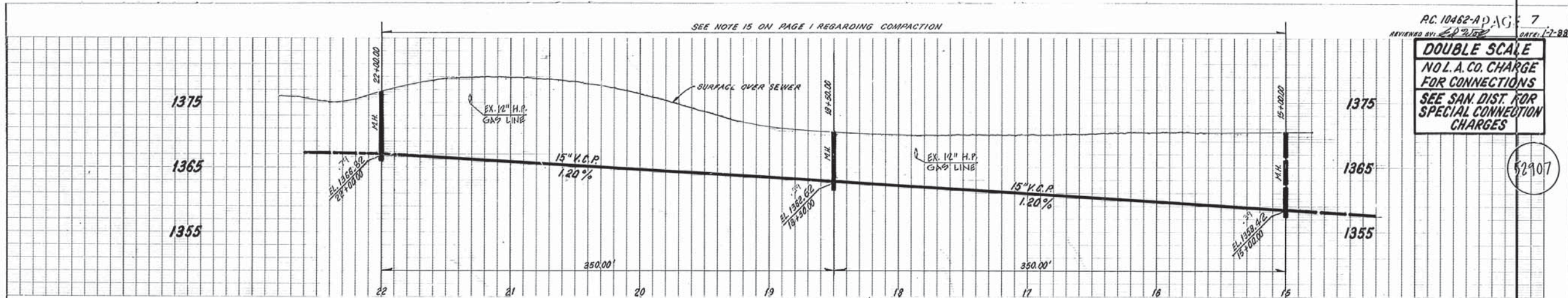
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PARCEL 1, PARCEL MAP NO. 15955, P.M.B. 188 PGS. 90-95

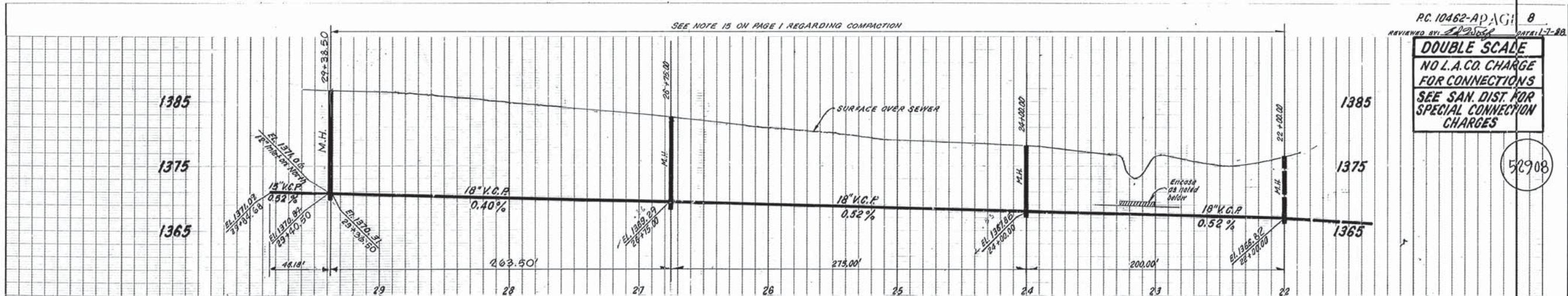
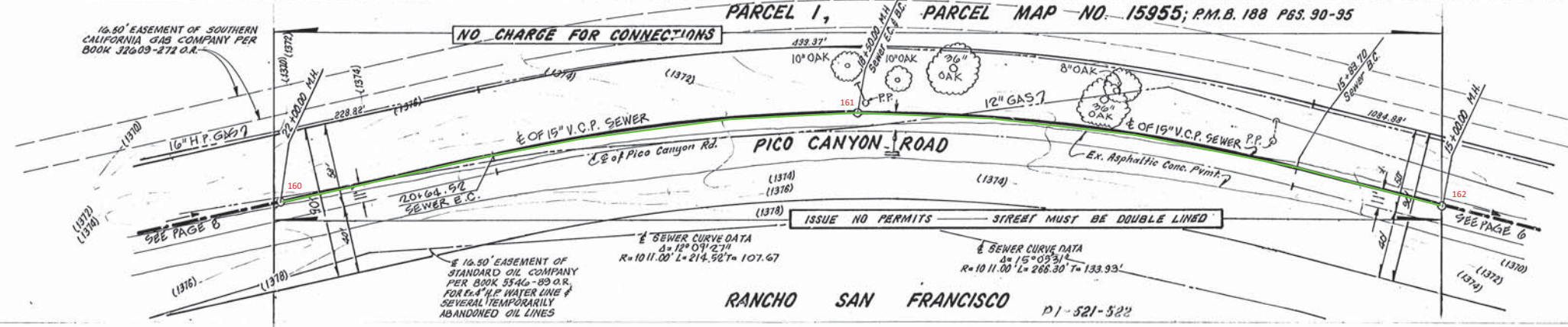


E-A-SAN 01 M 39
 BESEE 01 M 39



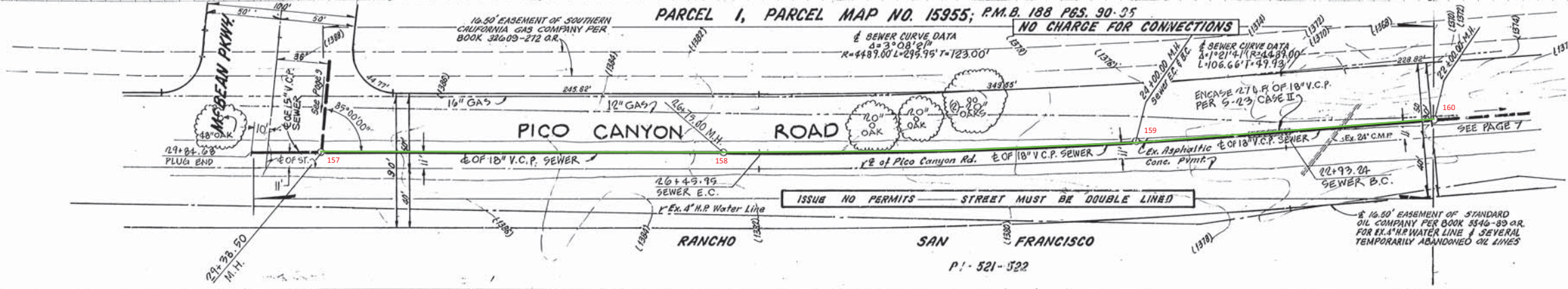
RC. 10462-APAGE 7
 REVIEWED BY: [Signature] DATE: 1-7-88
DOUBLE SCALE
 NO L.A. CO. CHARGE FOR CONNECTIONS
 SEE SAN. DIST. FOR SPECIAL CONNECTION CHARGES

52907



RC. 10462-APAGE 8
 REVIEWED BY: [Signature] DATE: 1-7-88
DOUBLE SCALE
 NO L.A. CO. CHARGE FOR CONNECTIONS
 SEE SAN. DIST. FOR SPECIAL CONNECTION CHARGES

52908



3.11. CL 5087 ELEV. 1259.970
 ROB M TAG IN E CURB 3 FT. S/O BCR AT
 S.E. LY COR TOURNAMENT RD & GOLF COURSE
 RD. 48 FT. S. & 20 FT. E/O & INT.
 NEWHALL QUA. D. 19 78

DOUBLE SCALE

MILL VALLEY ROAD AND OTHER R/W
PRIVATE CONTRACT NO. 10445

INDEX A-42
 3 SHEETS; 8 PAGES

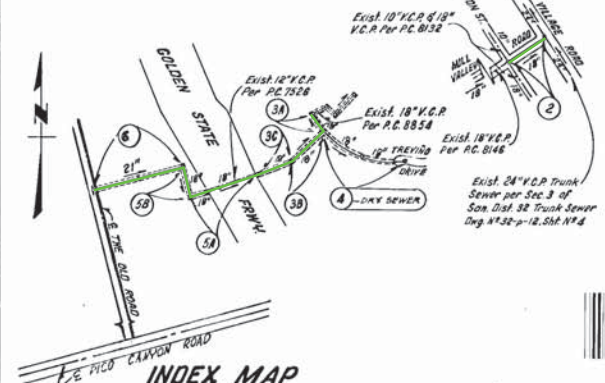
53415

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



DATE: JUNE, 1986
 PREPARED IN THE OFFICES OF
ENGINEERING SERVICE CORPORATION
 8017 BRISTOL PARKWAY, LOS ANGELES, CALIF. 90044
 TELEPHONE: (213) 417-1559
 BY: J. Kenney
 REG. C. E. No. 13035

NOTE:
 NUMBERS IN CIRCLE
 INDICATE PAGE NUMBERS



INDEX MAP
MILL VALLEY ROAD AND OTHER R/W
P.C. NO. 10445
 Scale: 1" = 600'



THE CONTRACTOR MUST MAINTAIN SERVICE AT ALL TIME DURING THE CONSTRUCTION PERIOD.

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: 9/14/87 REVISED STA. & EL. @ STA. 4+75.00 ON PAGE 3C REVISED STA. EL. & SLOPE FROM STA. 4+75.00 TO STA. 3+09.47 ON PAGE 5A. APPROVED: <i>Sandy G. Galati</i> 9/18/87 DEPARTMENT OF PUBLIC WORKS	REVISION NO. 2 DATE: 5/14/88 REVISED STA. & EL. @ STA. 7+23.61 AND REVISED PIPE SIZE & SLOPE FROM STA. 0+70.00 TO STA. 7+23.61 ON PAGE 6. APPROVED: <i>Sandy G. Galati</i> 5/14/88 DEPARTMENT OF PUBLIC WORKS
---	---

- GENERAL NOTES:**
1. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. SEA LEVEL DATUM OF 1929.
 2. NO PERMITS SHALL BE MADE IN THESE PLANS WITHOUT THE AFFIDAVIT OF THE DIRECTOR OF PUBLIC WORKS.
 3. NO ALTERNATIVE OF THE DEPT. OF PUBLIC WORKS WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
 4. DEWATERING TO IMPROVE THIS IMPROVEMENT IS TO BE CONSTRUCTED AND SHOWN IN PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURBS, CENTER LINE OF STREETS, OR CENTER LINE OF ALLEYS ARE SHOWN BY DOTTED OR PROFILES AT ALL POINTS. ELEVATIONS ASSOCIATED POINTS OF GRADE SHALL BE ESTABLISHED TO BE COMPARED TO A STRAIGHT LINE DRAWN BETWEEN SAID DESIGNATED POINTS.
 5. THE PRIVATE ENGINEER SHALL FURNISH THE DEPT. OF PUBLIC WORKS WITH GRADE SHEETS AND STATIONING FOR ALL HOUSE LATERALS AND 1/4" OR 1/2" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THE PROPER LOCATIONS WITH STATIONING PLAIN AND MARKED. ALL HOUSE LATERALS SHALL BE CONSTRUCTED IN AS RIGHT ANGLE TO THE CENTER LINE OF THE SEWER EXCEPT AS SHOWN ON THE PLANS. HOUSE LATERALS FROM HOUSES SHALL NOT BE 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 COST DIV. OF THE L.A. DEPT. OF PUBLIC WORKS, PLANT OFFICE NO. 8, AND PAY A FEE TO THE DIRECTOR OF PUBLIC WORKS, 2224 ALGATE ST., LOS ANGELES, CA 90012 TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
 8. IF WORK IS TO BE DONE ON A STATE HIGHWAY A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA, A DIVISION OF HIGHWAYS, 700 SOUTH SHAW ST., 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 OR THE EXISTENCE OR THE EXACT POSITION OF ANY UNDERGROUND UTILITY OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTICE APPLIES TO ALL TRENCHES.
 10. REFER TO SECTION 10407 OF THE STANDARD SPECIFICATIONS REGARDING SAFETY PROCEDURES.
 11. PRIOR TO THE ISSUANCE OF THE REQUIRED SEWER CONSTRUCTION PERMIT THE CONTRACTOR SHALL OBTAIN AND FILE WITH THE COUNTY ENGINEER COPIES OF A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE COST DIV. OF THE DEPT. OF PUBLIC WORKS, ALTERNATE ENGINEERING AND TRENCHING FROM THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY AND ACCIDENT INVESTIGATION AND INSURANCE WITH THE DEPARTMENT OF PUBLIC WORKS, 2224 ALGATE STREET, LOS ANGELES, CALIFORNIA 90012 NAMED AS THE CERTIFICATE HOLDER TO BE NOTIFIED IN WRITING TO CANCELLED A PERMIT.

- CONSTRUCTION NOTES:**
1. WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1988 EDITION WITH 1988 SUPPLEMENT & DEPT. OF PUBLIC WORKS SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED SEPTEMBER 21, 1988 AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE COUNTY DEPT. OF PUBLIC WORKS.
 2. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION OF PUBLIC WORKS BY TELEPHONE 913-318-1841 AT LEAST 24 HOURS BEFORE STARTING ANY WORK UNDER THE CONTRACT.
 3. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE STREET BELOW CURB GRADE EXCEPT AS NOTED.
 4. WYE OR TEE BRANCHES MAY BE USED FOR CONNECTIONS TO MAIN LINE SEWERS EXCEPT AS NOTED.
 5. ALL STRUCTURES SHALL BE THE BRICK MANHOLES PER 3 OR PRECAST CONCRETE MANHOLES PER 4, EXCEPT AS NOTED.
 6. PROPERTY STAKES ON THE PROPERTY LINE OR PROPERTY LINES SHOULD BE PLACED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
 7. MANHOLE TOPS IN UNIMPROVED AREAS TO BE 6" MINUS ABOVE FINISHED GRADE.
 8. WITHIN 24" OF JOINTS SHALL BE 3" MINUS OR 1/2" OVER STANDARD SPECIFICATIONS SECTION 2-6.2.
 9. IF A MANHOLE IS A THIN THREE FEET OR THEREABOUTS SHALL BE ENLARGED PER 23 CASE 12 TWO FEET WIDE AND 30" HIGH AT 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 ENLARGED PER 23 CASE 12 UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF PUBLIC WORKS.
 11. ALL JOINTS BETWEEN CAST IRON PIPE AND A THIRD OR LARGER PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT, TYPE D OR D WITH BUSHING IF NECESSARY PER STANDARD SPECIFICATIONS SECTION 2-6.2.
 12. SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 2-6.2 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
 13. RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET LA COUNTY ROAD DEPT. OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH THE PLANS.
 14. FULL COMPLIANCE WITH SECTION 2-6.2 OF THE STANDARD SPECIFICATIONS WILL BE REQUIRED FOR BACKFILL IN STREETS. CERTIFICATION OF EACH FULL COMPLIANCE AND SAND EQUIVALENCY BY A QUALIFIED TESTING LABORATORY SHALL BE PROVIDED BY THE CONTRACTOR PRIOR TO THE ISSUANCE OF A CERTIFICATE OF PARTIAL ACCEPTANCE.
 15. SPECIAL BRACKLE IN PAVEMENT CONSTRUCTION, BRACKLE TRENCH AND SPECIAL OTHER PAVEMENT SO AS TO ACHIEVE THE NATURAL DRAINAGE GRADIENTS AND BRACKLES SHALL BE SHOWN ON THE SINKING PLAN APPROVED BY THE DEVELOPER BY THE LAND DEVELOPMENT DIVISION. IN ALL BRACKLES AND EARTH RETAINED SHALL BE CONSTRUCTED TO A MINIMUM OF AN 8% GRADE DENSITY PER 5-2-14. 8% DENSITY METHOD OF TEST. LIGHTLY AS MODIFIED ACCEPTABLE CERTIFICATION OF SUCH COMPLIANCE SHALL BE SUBMITTED TO THE CONSTRUCTION DIVISION, DEPT. OF PUBLIC WORKS.

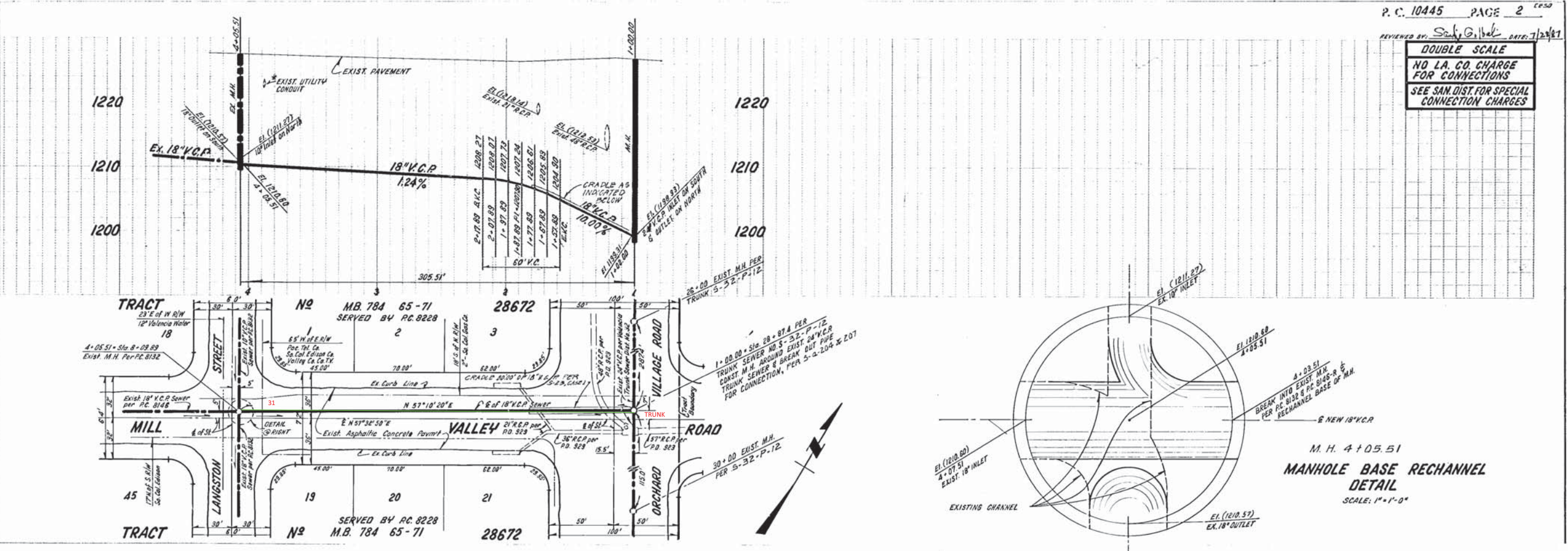
THE FOLLOWING LATEST REVISED STANDARD PLANS ON FILE IN THE OFFICE OF THE DEPT. OF PUBLIC WORKS SHALL APPLY IN THE CONSTRUCTION OF THIS PROJECT:

LEGEND	1-1
MINIMUM PUBLIC SAFETY REQUIREMENTS	1-2
BRICK MANHOLE	1-3
STANDARD MANHOLE 30" DIA.	1-4
STANDARD 18" MANHOLE	1-5
CASTING AND ENCASEMENT	1-6
ATE OR TEE SPLICING	1-7
ALLOWABLE TRENCH WIDTHS	1-8
LOCKING MANHOLE FRAMES AND COVERS	1-9
NON-FRANCOISED PRECAST LOWWATER MANHOLE	1-10
STANDARD MANHOLE FRAMES	1-11
STANDARD 24" MANHOLE FRAMES COVERS	1-12

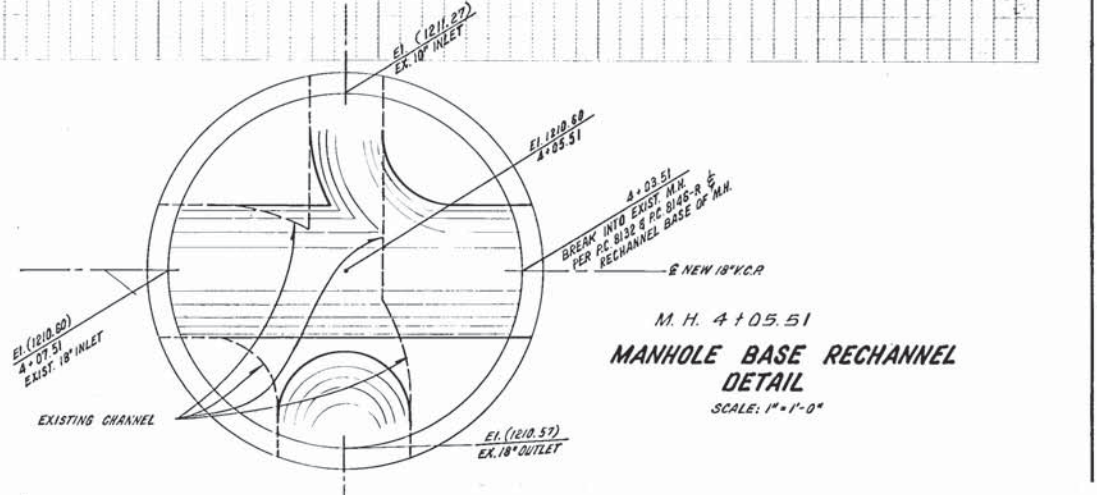
IN ADDITION TO THE FOLLOWING COUNTY SANITATION DISTRICT STANDARDS SHALL APPLY TO THE CONSTRUCTION OF THIS PROJECT:

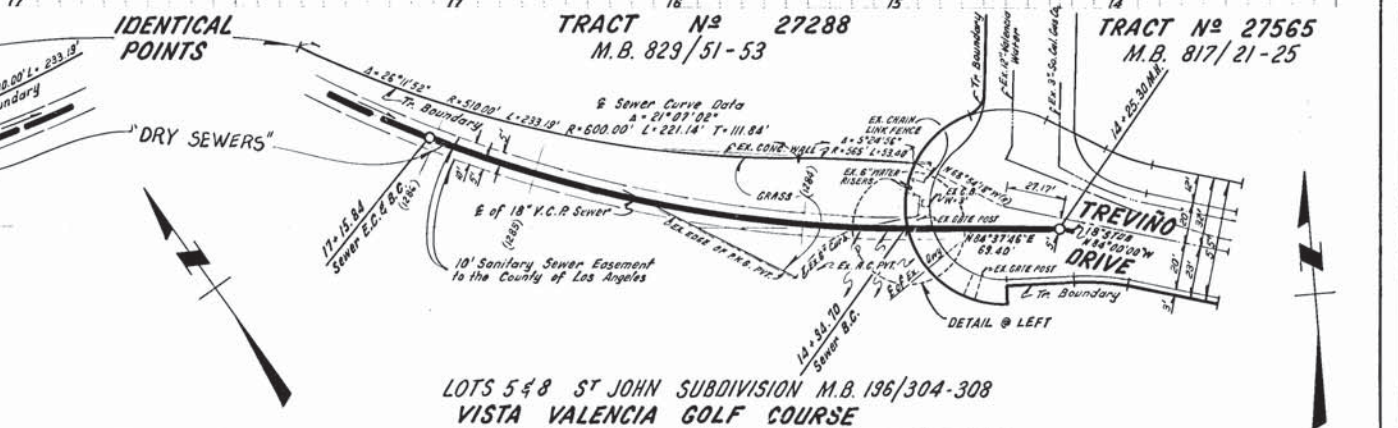
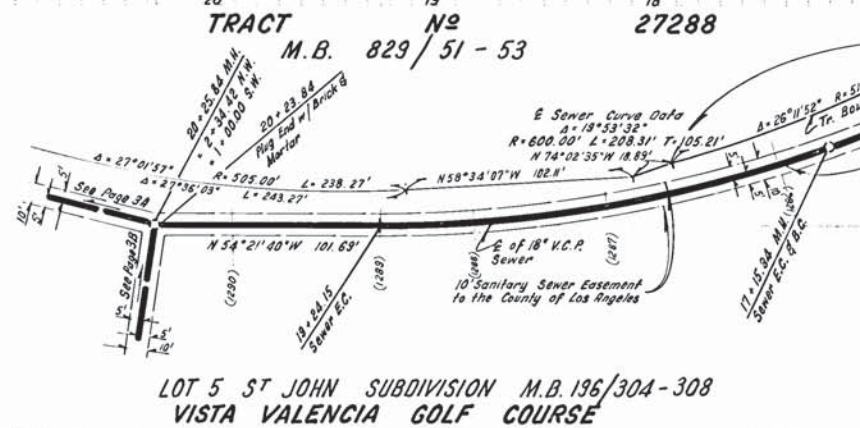
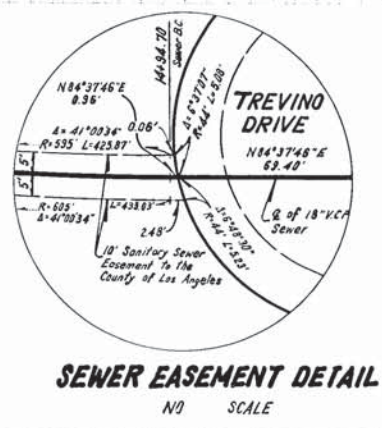
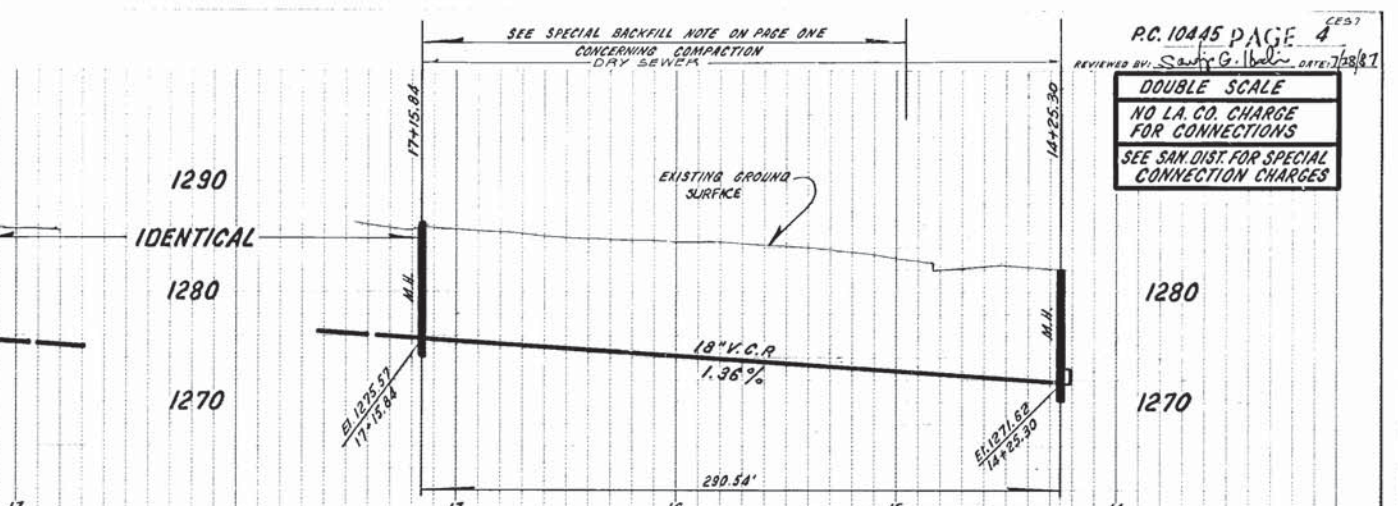
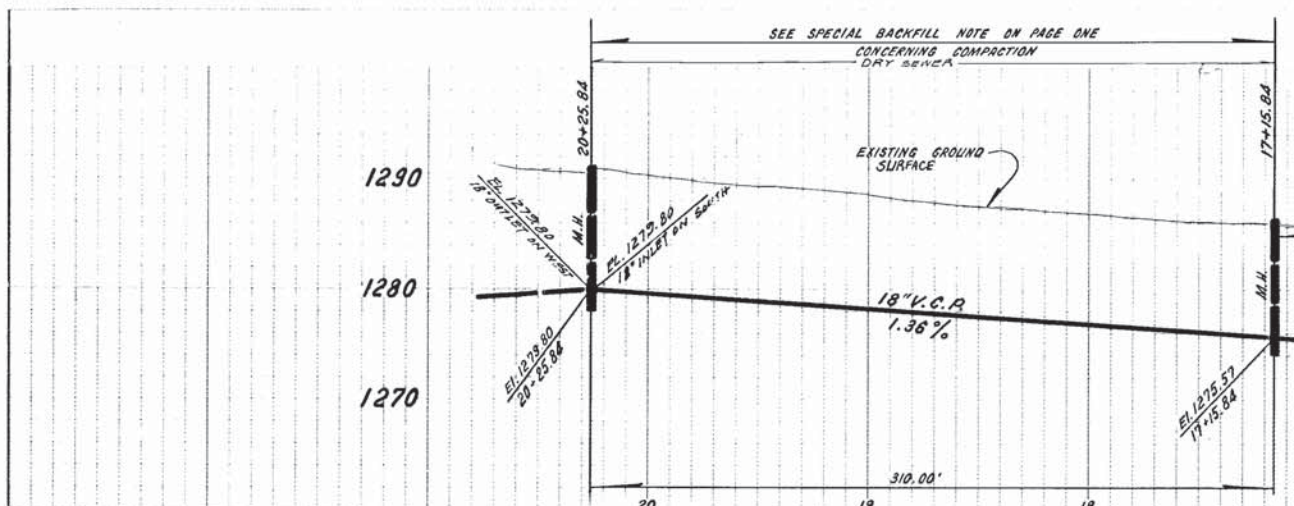
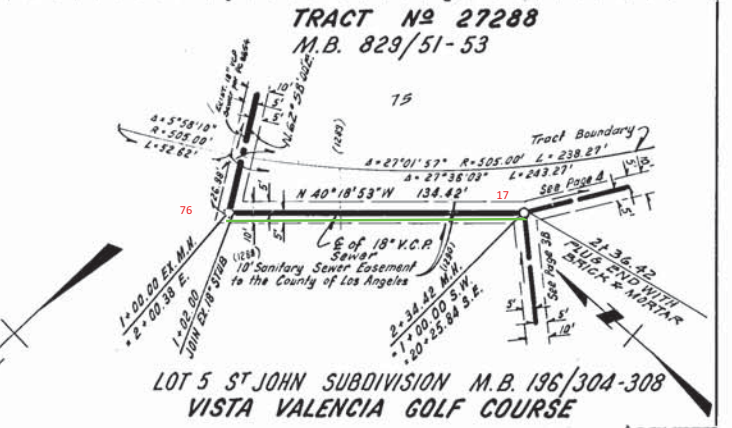
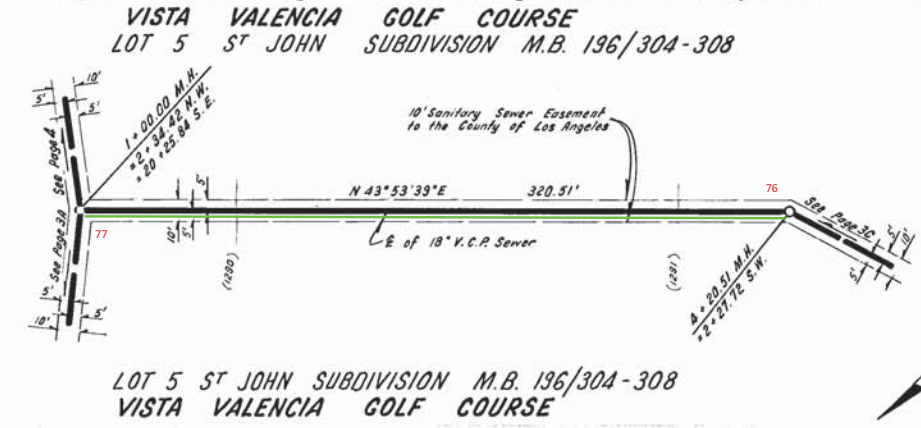
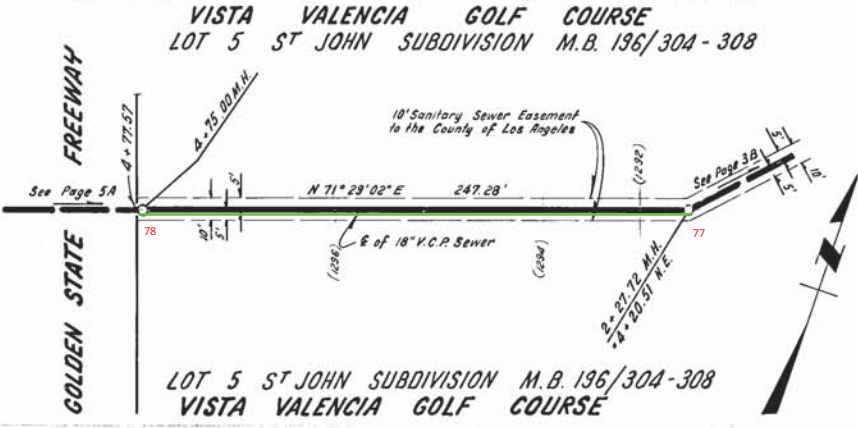
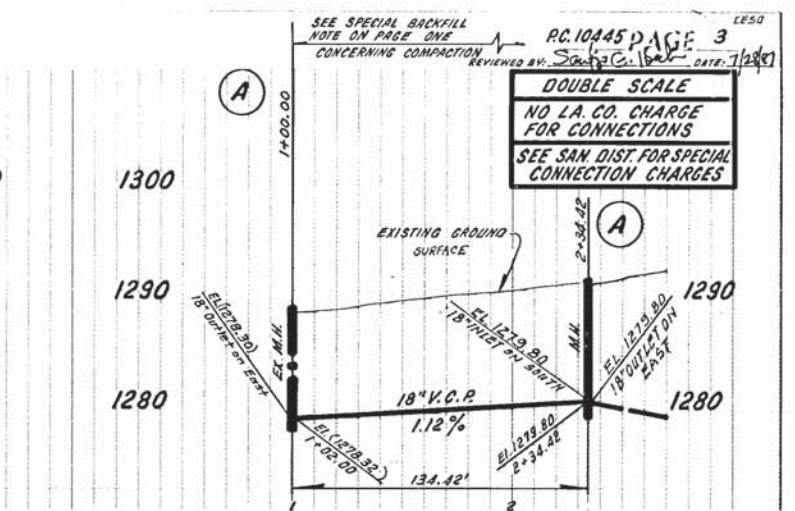
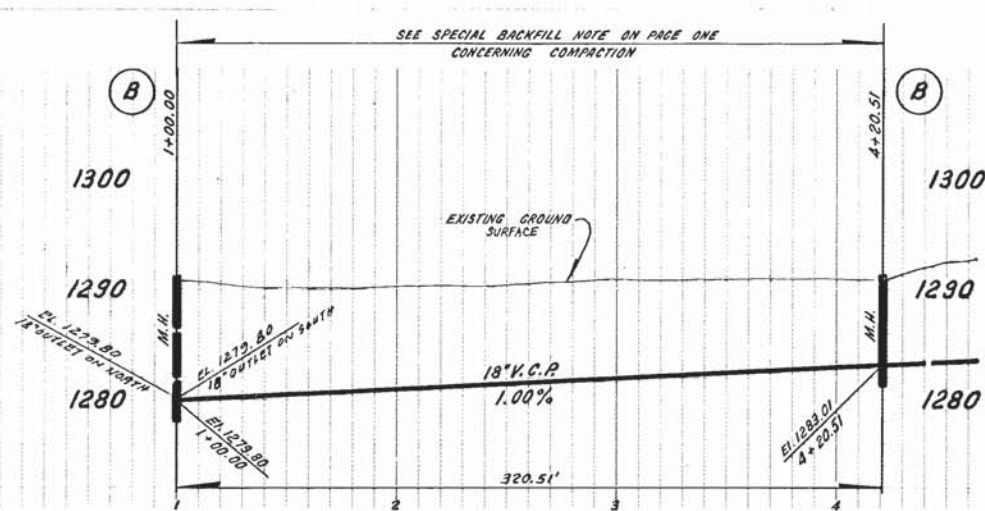
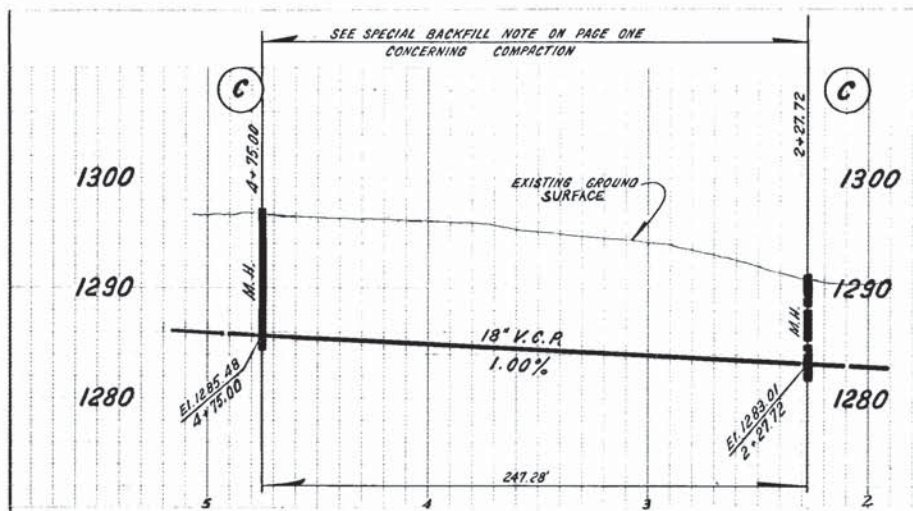
COUNTY OF LOS ANGELES, CALIFORNIA
 THOMAS A. THOMASMAN, DIRECTOR OF PUBLIC WORKS CHARLES W. CARRY, CHIEF ENGINEER

APPROVED: *Dean Efstathios* 8-3-87 (DATE)
 APPROVED: *John Shaver* 8/6/87 (DATE)
 CHECKED: *F. J. ...* 7/30/87 (DATE)
 100 C.E. 100 16841
 SANTA CLARITA VALLEY BLDG. DIST. 82

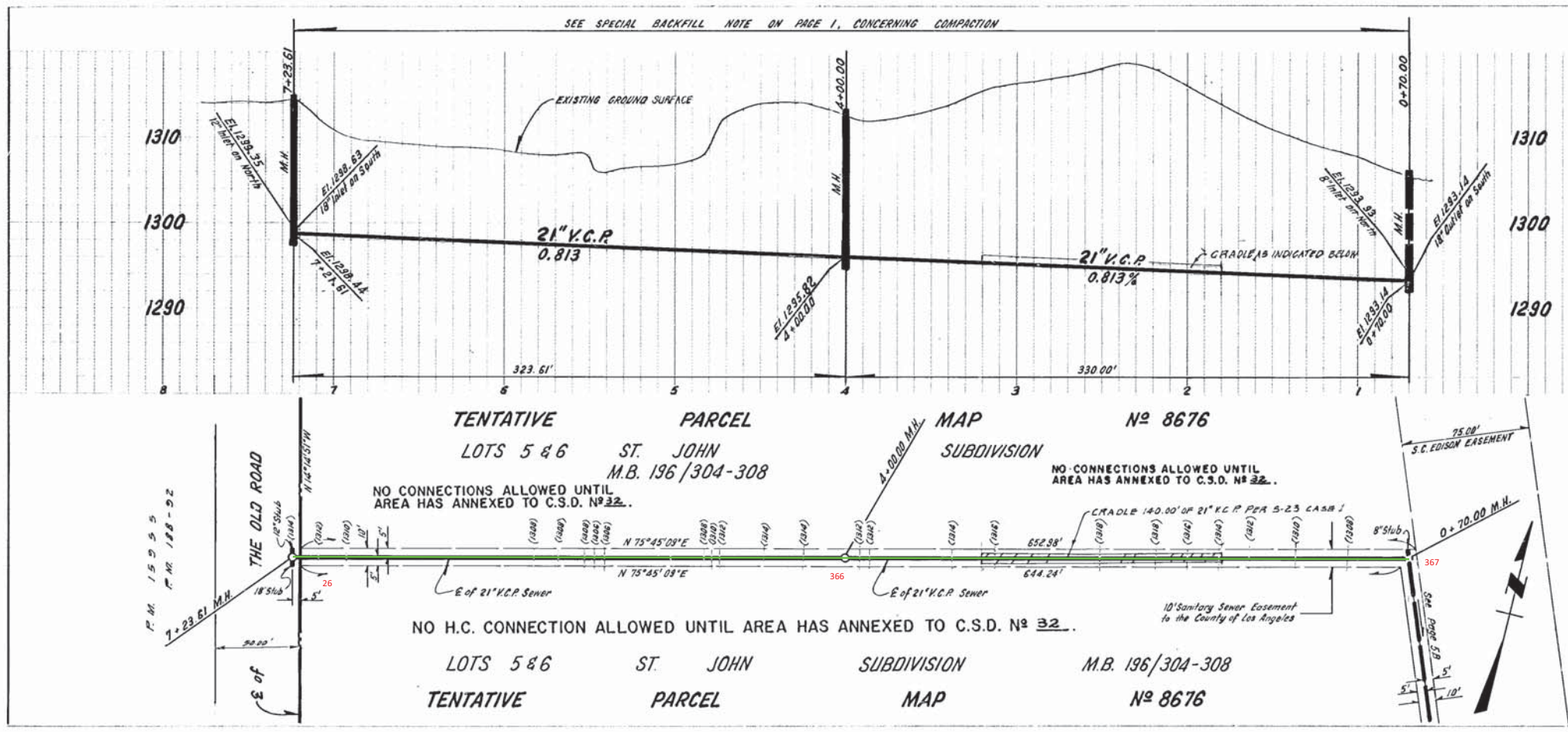
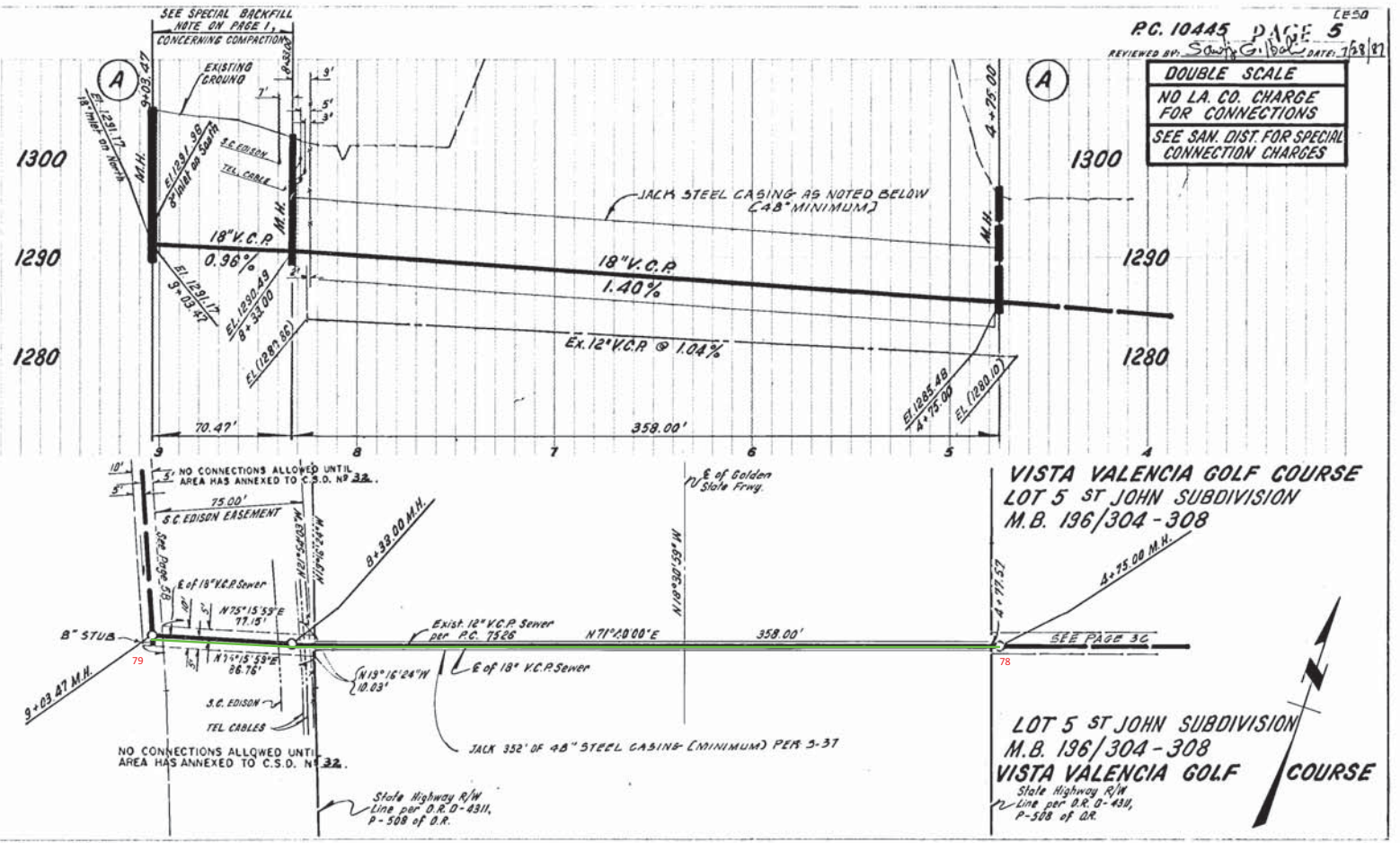
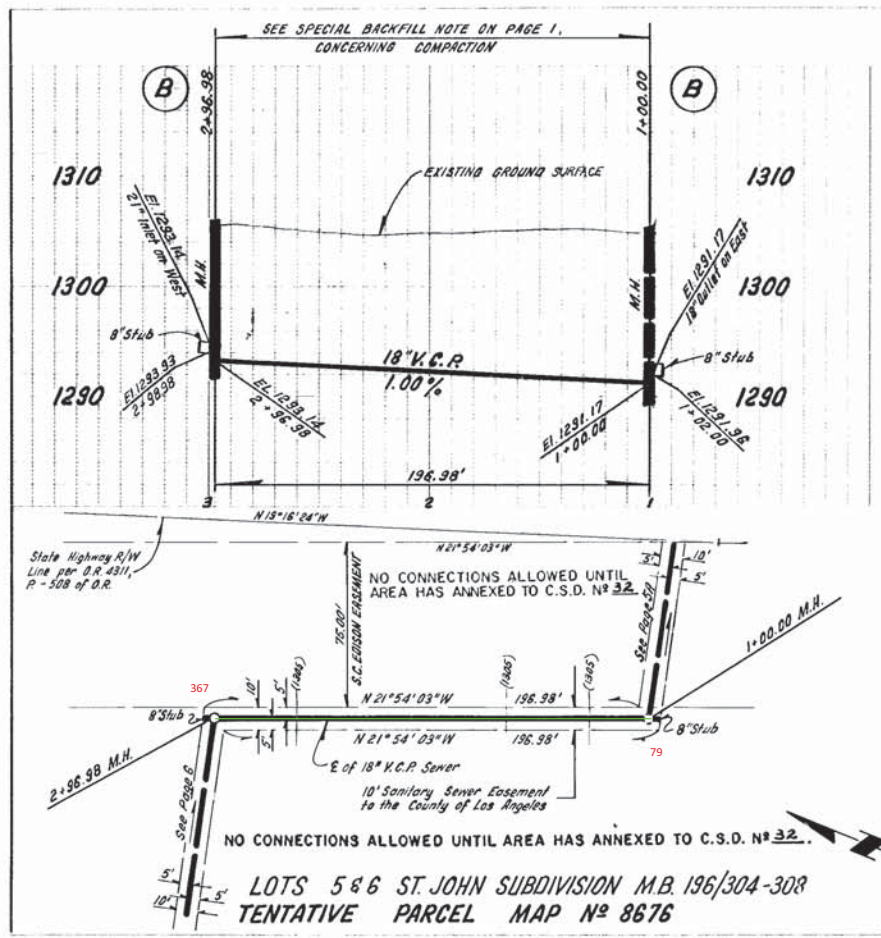


DOUBLE SCALE
 NO L.A. CO. CHARGE FOR CONNECTIONS
 SEE SAN. DIST. FOR SPECIAL CONNECTION CHARGES





10445



PC. 10445 PAGE 5
 REVIEWED BY: Sandy Gillette DATE: 7/23/11
 DOUBLE SCALE
 NO L.A. CO. CHARGE FOR CONNECTIONS
 SEE SAN. DIST. FOR SPECIAL CONNECTION CHARGES

PC. 10445 PAGE 6
 REVIEWED BY: Sandy Gillette DATE: 7/23/11
 DOUBLE SCALE
 NO L.A. CO. CHARGE FOR CONNECTIONS
 SEE SAN. DIST. FOR SPECIAL CONNECTION CHARGES

10/10/11

PROFILE, ALIGNMENT AND GRADE OF
SANITARY SEWERS PAGE 1

CONSTRUCTED IN
TRACT NO. 27288
PRIVATE CONTRACT NO. 8854

INDEX 2525115
W.S. 69
3 SHEETS, 5 PAGES

44070

SCALE: HORIZ. 1" = 40'
VERT. 1" = 4'
OCTOBER, 1972
PREPARED IN THE OFFICES OF
SISK AND ENGINEERING ASSOCIATES
15205 DORBANK BLVD., VAN NUYS, CALIF. 91411
BY: *Ronald K. Horn*
REG. C. E. No. 16713

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

LEGEND	5-1
MINIMUM PUBLIC SAFETY IMPROVEMENTS	5-2
BRICK MANHOLES	5-3
STANDARD MANHOLE STEP	5-4
BEDDING FOR SEWER PIPE	5-5
CRADLING AND ENCASMENT	5-6
WYE OR THE SUPPORT	5-7
ALLOWABLE TRINCH WIDTHS	5-8
LOCKING MANHOLE FRAME AND COVER	5-9
NON-REINFORCED PRECAST CONCRETE MANHOLES	5-10

COUNTY OF LOS ANGELES, CALIFORNIA
 HARVEY T. BRANDT, COUNTY ENGINEER JOHN D. PARKHURST, CHIEF ENGINEER
 APPROVED *Amador C. ...* APPROVED *J. ...*
 REGIONAL ENGINEER OFFICE ENGINEER
 CHECKED *Ralph ...* DATE 10-15-72
 REG. C. E. No. 16338 DATE
 NEWHALL, BLDG. DIST. B.2. J. N. 0150.02

GENERAL NOTES:

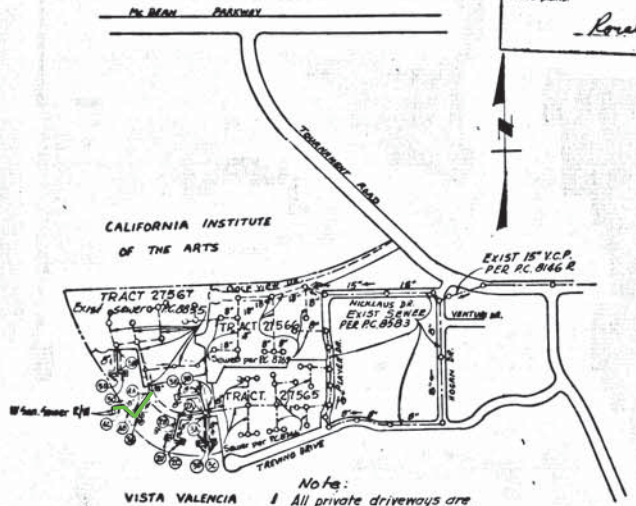
1. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. MEAN SEVER DATUM OF 1929.
 2. NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE COUNTY ENGINEER.
 3. NO REPRESENTATIVE OF THE COUNTY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
 4. GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURB, 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 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 STAGES 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 WITH AT THE PROPERTY LINE SHOW THE TOP OF CONVECTATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
 7. BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST:
 - PAY A FEE TO THE COUNTY ENGINEER, SANITARIUM DISTRICT, BOX 19, NEWHALL, CALIFORNIA, TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
 - 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.
 8. 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 NOTICE APPLIES TO ALL PAGES.
 9. REFER TO SECTION 7-184.3 OF THE STANDARD SPECIFICATIONS, REGARDING SAFETY ORDNANCE.
- County Sanitation Districts shall be notified prior to the following so that included inspections can be made (Phone: 337-1025 & 688-4101)
- Acceptance of the project: *Ronald K. Horn*
- Provisions for the disposal of industrial wastes shall be made without written permission from the City Engineer and General Manager of the County Sanitation Districts.

CONSTRUCTION NOTES:

1. WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1972 EDITION) WITH THE SUPPLEMENTS AND COUNTY ENGINEER SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED APRIL 12, 1972 AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE COUNTY ENGINEER.
2. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION BY TELEPHONE, IN UNION 9-400, EXT. 8188, AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
3. HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE & FEET BELOW CURB GRADE, ONE (1) OF ALLEY.
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 5-3 OR PRECAST CONCRETE MANHOLES PER 5-10.
6. PROVIDE STAGES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCE AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
7. MANHOLE TOPS IN IMPROVED RIGHTS OF WAY TO BE LEVEL, WITH FINISHED GRADE.
8. VITRIFIED CLAY PIPE JOINTS SHALL BE TYPE "B", "T", OR "C" PER STANDARD SPECIFICATIONS SECTION 300-2.
9. IF A POWER POLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED, PER 5-25, 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 5-32, 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 GASKET JOINT, TYPE "C" OR "D", WITH RUBBERING IF NECESSARY PER STANDARD SPECIFICATIONS, SECTION 300-2.
12. SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 300-2.2.7 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
13. SEWER PIPE BEDDING SHALL CONFORM TO 5-81.
14. SPECIAL BACKFILL IN DESIGNATED AREAS:
 - (a) Backfill trench and replace other earth removed so as to achieve the natural or finished grade of slope shown on the grading plan approved for this tract by the Building & Safety Division.
 - (b) All backfill & earth replacement shall be compacted to a minimum of 90% of the max. density per ASTM Standard method of test D-1557-57T as modified. Acceptable certification of such compaction shall be submitted to the Construction Div.

B.M. 81.042 ELEV. 1262.066
 Ref. Dept. B.M. log in N. side of conc. base
 @ R.E. Corp. Edison Tower 175-37343-3
 35' E. of E. of Lyons Ave. & 20' E. of
 Wilkey Cyn. Rd.
 Newhall QUAD. 1965

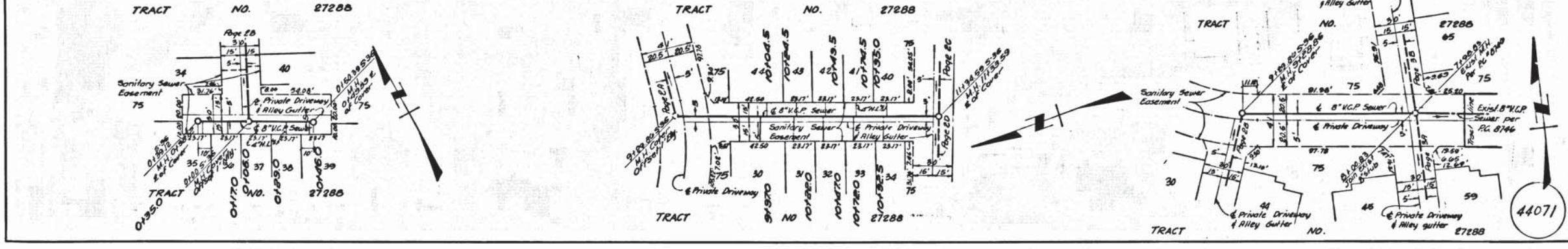
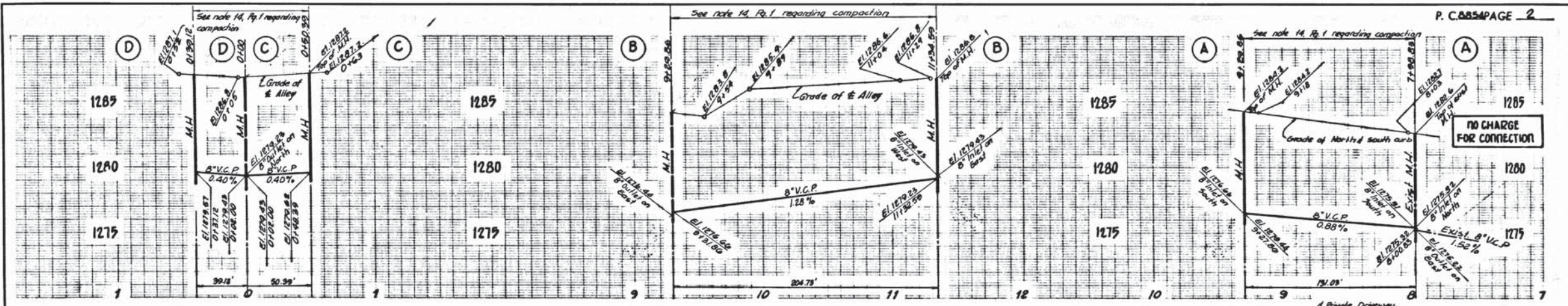
NOTICE TO CONTRACTOR
 The existence and location of any underground utility pipes or structures shown on these plans are obtained by a search of the available records. To the best of my knowledge there are no existing utilities except as shown on these plans. The contractor is required to take the precautionary measures to protect the utility lines shown and any other lines not in record or not shown on these plans.
Ronald K. Horn 10/13
 R.E.L.

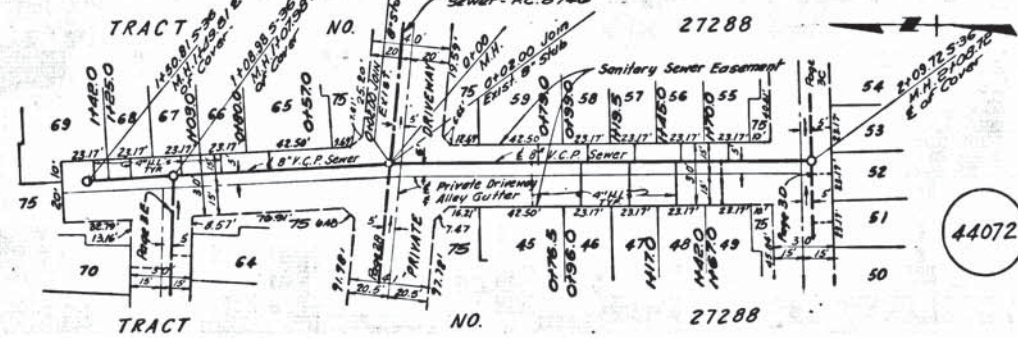
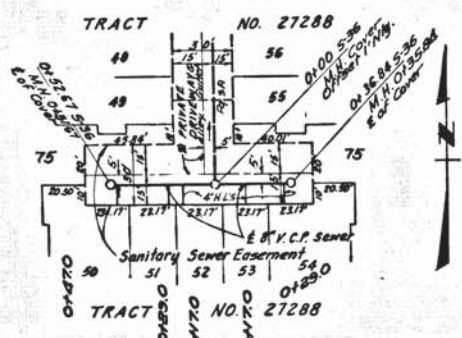
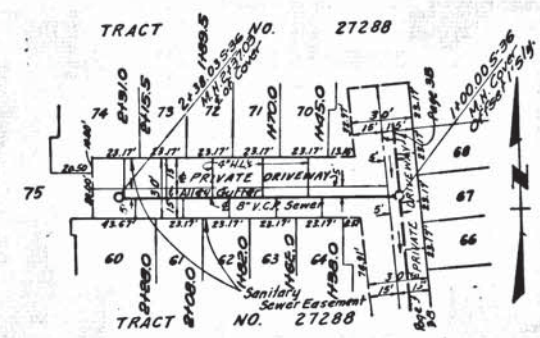
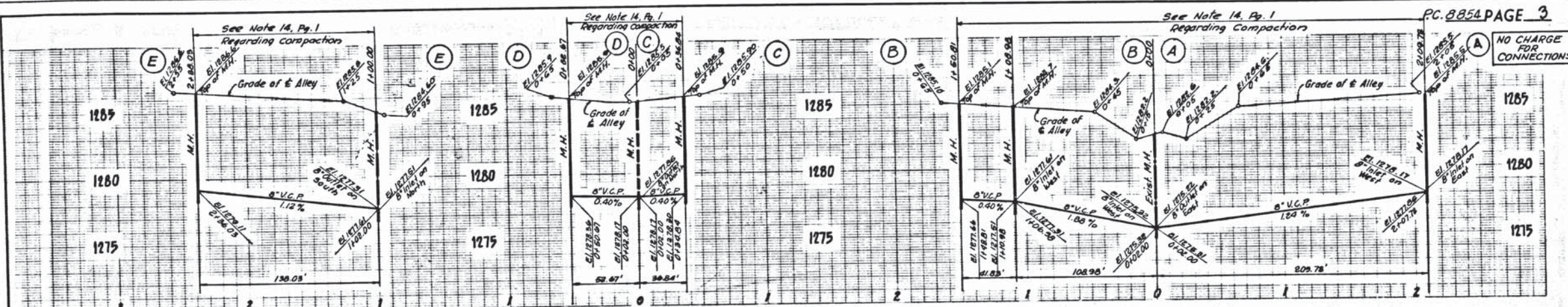


No fee:
 1. All private driveways are Sanitary Sewer Easement.
 2. Numbers in circle indicate page number

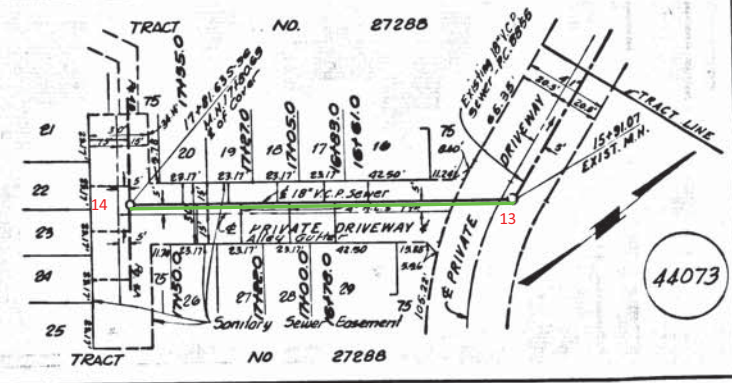
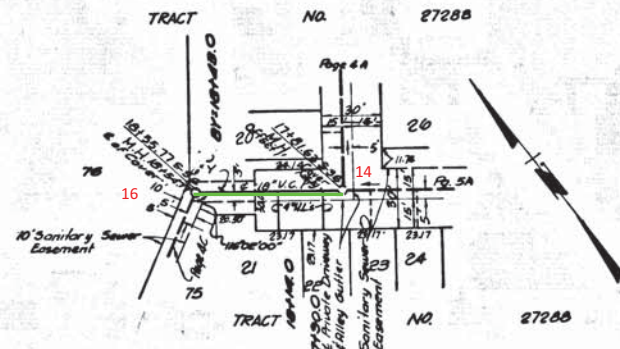
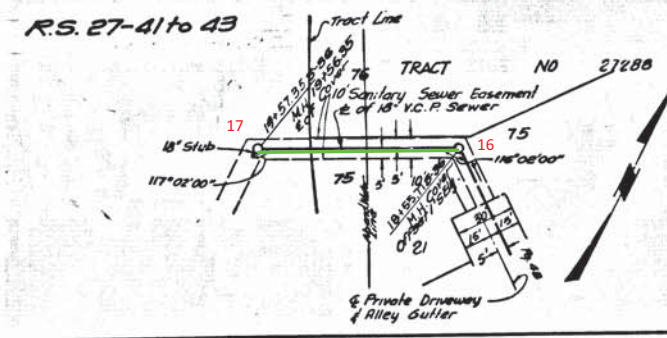
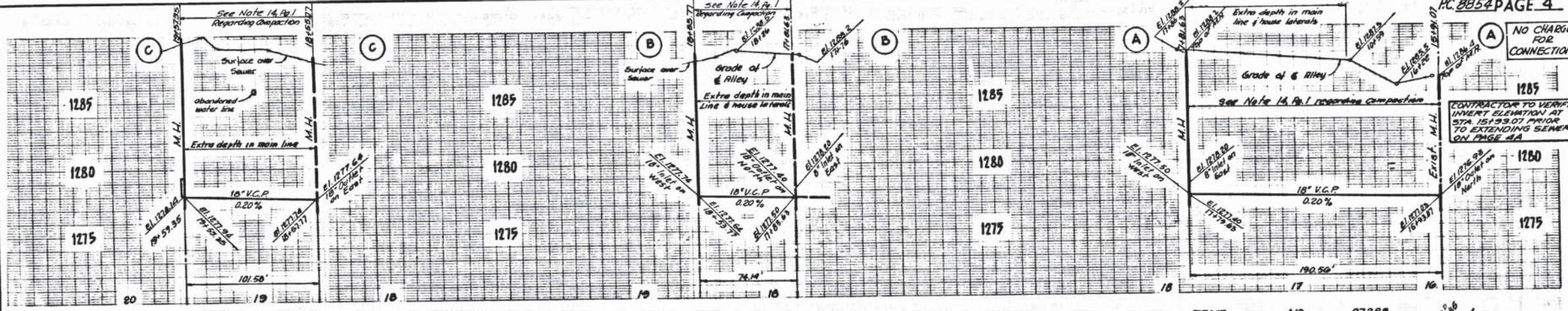
INDEX MAP
 PG. 8854
 TR. NO. 27288
 SCALE: 1" = 500'

LOT 75 NOT SERVED, COMMON LOT FOR SLOPE ONLY
 LOT 76 IS SERVED BY P.C. 8855
 (PAGES 4 & 5)
 ISSUE NO PERMITS UNTIL P.C. 8855 AND P.C. 8146 ARE ACCEPTED





44072



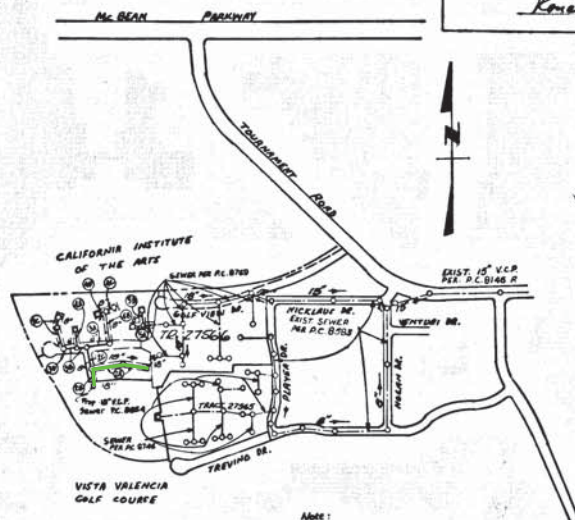
44073

B.M. B.L. 642 ELEV. 1262.066
 RD. Dept. B.M. 109 in N. side of conc. base @
 N.E. cor. Edison tower 177 11-373413-3, 85'
 S. of E. of Lyons Ave & 30' E. of W. of Wiley
 Canyon Rd.
 Newhall QUAD. 1965

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.

Ronald R. Horn 16913
 S.C.E.



Note:
 1. All private driveways are secondary sewer mainlines.
 2. Figures in circles indicate page numbers.

INDEX MAP
 P.C. 8855
 TRACT NO. 27567
 SCALE: 1"=50'

LOTS 78 & 79 NOT SERVED, COMMON
 LOTS FOR SLOPE ONLY

GENERAL NOTES:

- ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. SEA LEVEL DATUM OF 1929.
 - NO ADJUSTMENTS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE COUNTY ENGINEER.
 - NO REPRESENTATIVE OF THE COUNTY ENGINEER WILL VERIFY OR LAY OUT ANY PORTION OF THE WORK.
 - 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.
 - THE PRIVATE ENGINEER SHALL FURNISH THE COUNTY 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.
 - THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL BIRTH AT THE PROPERTY LINE BELOW THE TOP OF CURB ELEVATION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
 - BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST:
 - PAY A FEE TO THE COUNTY ENGINEER, SANITATION DIVISION, ROOM 16, 8420 E. IMPERIAL AVENUE, SUNNYVALE, CALIFORNIA 94088, REGIONAL OFFICE, TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
 - 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.
 - 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.
 - REFER TO SECTION 7-104.1 OF THE STANDARD SPECIFICATIONS, REGARDING SAFETY SIGNS.
- County Sanitation Districts shall be notified prior to the following no later than 10 days before starting any work under this contract: (Phone 337-1025 - 658-1181)
- Accompanys of the project.
- No connections for the disposal of industrial wastes shall be made without written permission from the Chief Engineer and General Manager of the County Sanitation Districts.

CONSTRUCTION NOTES:

- WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1970 EDITION) WITH THE SUPPLEMENTS AND COUNTY ENGINEER SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED APRIL 10, 1975, AND SHALL BE PROTECTED ONLY IN THE PRESENCE OF THE COUNTY ENGINEER.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION BY TELEPHONE, IN LONDON 9-042, EXT. 81381, AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
- HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE AND FIVE FEET BELOW CURB GRADE AND 6" OF ALLEY.
- WYE OR T BRANCHES MAY BE USED FOR CONNECTIONS TO MAINLINE SEWERS EXCEPT AS NOTED.
- ALL STRUCTURES SHALL BE EITHER BRICK MANHOLES PER S-3 OR PRECAST CONCRETE MANHOLES PER S-26.
- PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINE PRODUCE AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
- MANHOLE TOPS IN IMPROVED GRADES OF WAY TO BE LEVEL WITH FINISHED GRADE.
- VERTIFIED CLAY PIPE JOINTS SHALL BE TYPE "B", "F", OR "G" PER STANDARD SPECIFICATIONS SECTION 306-2.
- 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.
- 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.
- ALL JOINTS BETWEEN CAST IRON PIPE AND VERTIFIED CLAY PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT, TYPE "C" OR "D", FIFTH EDITION IF NECESSARY PER STANDARD SPECIFICATIONS, SECTION 306-2.
- SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 306.1.2.7 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- SMALLER PIPE (DRAINAGE) SHALL CONFORM TO S-22.
- SPECIAL BACKFILL IN DESIGNATED AREAS:
 - (a) Backfill trench and replace earth removed up to achieve the natural or finished grade & slope shown on the grading plan approved for this tract by the Building & Society Division.
 - (b) All backfill & earth replaced shall be compacted to a minimum of 90% of the maximum density per ASTM Standard Method of Test D698-57T as modified.
 - Acceptable certification of such compaction shall be submitted to the Construction Division.

CONSTRUCTED IN
TRACT NO. 27567

PRIVATE CONTRACT NO. 8855

INDEX 252 & 115
 W.S. 63

5 SHEETS, 8 PAGES

AA011

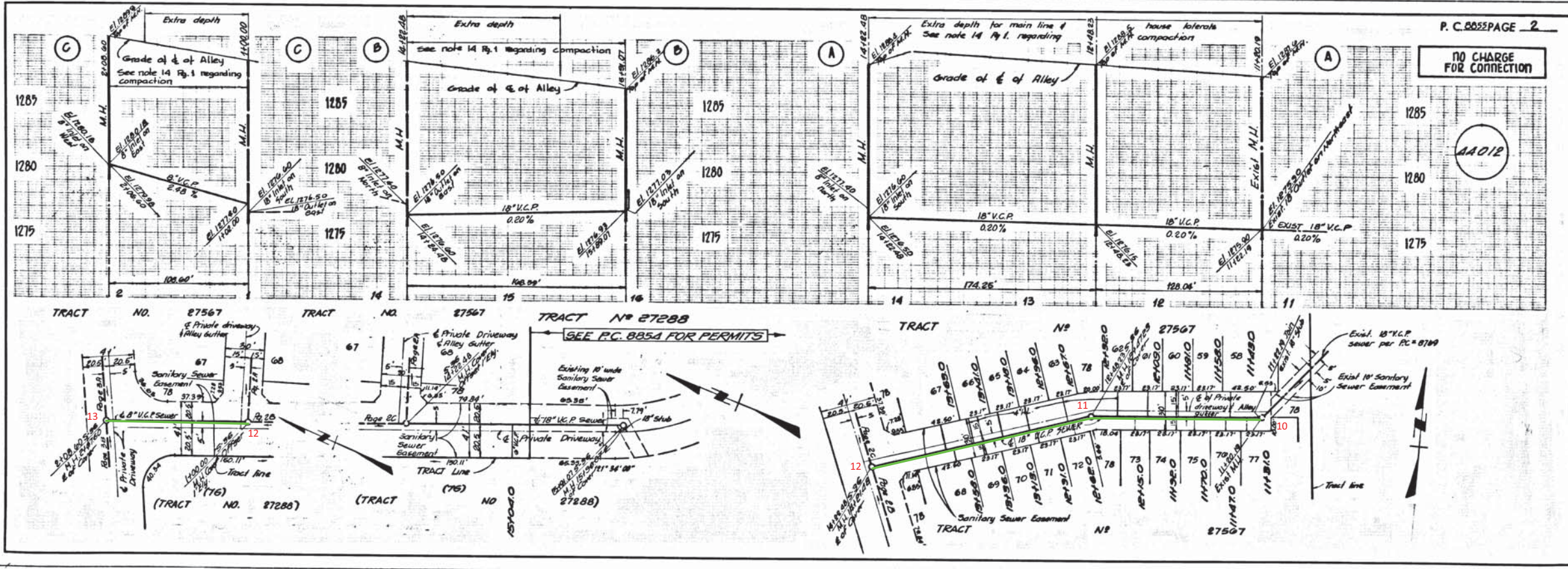
SCALE: HORIZ. 1"=40' VERT. 1"=4'
 OCTOBER, 1972
 PREPARED IN THE OFFICES OF

Siland Engineering Associates, Inc.
 18208 BURBANK BOULEVARD
 VAN NUYS, CALIFORNIA 91401
 BY Ronald R. Horn RCE # 10012

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

LEADERS	0-1
MINIMUM PUBLIC SAFETY BOUNDARIES	0-2
BRICK MANHOLE	0-3
STANDARD MANHOLE STOP	0-4
REMOVING FOR SEWER PIPE	0-5
CRADLING AND ENCASING	0-6
WYE OR TEE SUPPORT	0-7
ALLOWABLE TRENCH WIDTHS	0-8
LOCKING MANHOLE FRAME AND COVER	0-9
NON-REINFORCED PRECAST CONCRETE MANHOLES	0-10

COUNTY OF LOS ANGELES, CALIFORNIA
 HARVEY T. BRANDT, COUNTY ENGINEER JOHN D. PARKHURST, CHIEF ENGINEER
 APPROVED Amad C. D. 12-15-72 APPROVED R. Parkhurst
 REGIONAL ENGINEER OFFICE ENGINEER
 CHECKED R. Parkhurst 12-15-72
 DATE
 REG. C.E. NO. 4390
 Newhall BLDG. DIST. 82 J.N. 0150.01



NO CHARGE FOR CONNECTION

AA012

B.M. B.L. 642 ELEV. 1262.066
 ROAD DEPT. B.M. TAG IN N. SIDE OF
 CONCRETE BASE AT N.E. COR. EDISON
 TOWER NO. M-373W3, 35' S. OF E. OF
 LYONS AVE. 690' E. OF WILEY CYN. ROAD
 NEWHALL QUAD. 1962.

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.

Ronald R. Horn 16913
 R.C.L.

Full compliance with section 906-19.5 of the special provisions will be required for backfill in streets. Certification of backfill compaction & sand equivalents by a qualified, registered testing laboratory shall be provided by the permittee prior to the issuance of a certificate of partial acceptance.

GENERAL NOTES:

- ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. SEA LEVEL DATUM OF 1929.
- NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE COUNTY ENGINEER.
- NO REPRESENTATIVE OF THE COUNTY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
- GRADES TO WHICH THE CONTRACTOR 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.
- 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 TO 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.
- THE PRIVATE ENGINEER SHALL FURNISH THE HOUSE LATERAL BENEATH AT THE PROPERTY LINE BELOW THE TOP OF CURB REVISION FOR EACH HOUSE LATERAL ON THE GRADE SHEET.
- BEFORE WORK CAN BE STARTED, THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN COUNTY STREETS FROM THE A. COUNTY ROAD DEPT., DISTRICT OFFICE NO. _____, AND PAY A FEE TO THE COUNTY ENGINEER, ROOM 18, COUNTY ENGINEERING BLDG., 2ND FLOOR, 1100 N. GARDEN ST., LOS ANGELES, CALIFORNIA 90012. REGIONAL OFFICE, TO COVER THE COST OF CONSTRUCTION INSPECTION AND RECORD PLANS.
- 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.
- 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 PIPES, OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL PAGES.
- REFER TO SECTION 7-10.6.2 OF THE STANDARD SPECIFICATIONS, REGARDING SAFETY ORDNANCE.

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. County Sanitation Districts shall be contacted prior to the following so that required inspections can be made (Phone 337-1255 - 4800-4464)

CONSTRUCTION NOTES:

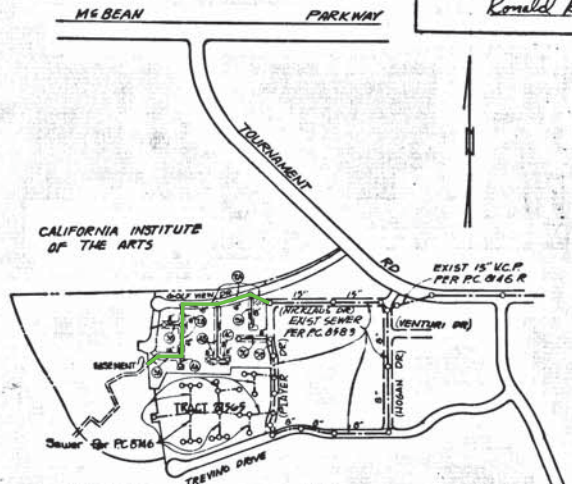
- WORK SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1979 EDITION) WITH RELEVANT SUPPLEMENTS AND COUNTY ENGINEER SPECIAL PROVISIONS FOR THE CONSTRUCTION OF SANITARY SEWERS DATED 3/25/12 - 13/12.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION BY TELEPHONE, AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
- HOUSE LATERALS TO BE CONSTRUCTED WITH INVERTS AT PROPERTY LINE & MUST BELOW CURB GRADE EXCEPT AS NOTED.
- PIPE OR THE BRANCHES MAY BE USED FOR CONNECTIONS TO MAINLINE SEWERS EXCEPT AS NOTED.
- ALL STRUCTURES SHALL BE EITHER BRICK MANHOLES PER S-3 OR PRECAST CONCRETE MANHOLES PER S-24.
- PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCE AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
- MANHOLE PIPS IN IMPROVED RIGHTS OF WAY TO BE 18" MIN. WITH FINISHED GRADE.
- VERTIFIED CLAY PIPE JOINTS SHALL BE TYPE "B", "T", OR "C" PER STANDARD SPECIFICATIONS SECTION 306-2.
- 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.
- 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 PROTECTED ON THE PLANS, THE PIPE SHALL BE ENCASED PER S-23, CASE III UNLESS OTHERWISE APPROVED BY THE COUNTY ENGINEER.
- ALL JOINTS BETWEEN CAST IRON PIPE AND VERTIFIED CLAY PIPE SHALL BE MADE WITH A RUBBER SLIPY JOINT, TYPE "C" OR "B", WITH GASKETING IF NECESSARY PER STANDARD SPECIFICATIONS SECTION 306-2.
- SEWERS TO BE TESTED FOR LEAKAGE PER SECTION 306-2.3.2 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET LA. COUNTY ROAD DEPT. OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
- SPECIAL BACKFILL IN DESIGNATED AREAS:
 - Backfill trench and replace other earth removed so as to achieve the natural or finished grade & slopes shown on the grading plan approved for this tract by the Building and Safety Division.
 - All backfill and earth replaced shall be compacted to a minimum of 90% of the max. density per ASTM Standard Method of Test D698-07T as modified. Acceptable Certification of such compaction shall be submitted to the Construction Division.

TRACT NO 27566
 PRIVATE CONTRACT NO. 8769

Index 292-5-119
 W.S. 68
 3 SHEETS, 9 PAGES
 SCALE: HORIZ. 1"=40' VERT. 1"=4'
 JUNE, 1972
 PREPARED IN THE OFFICES OF
 Sisk Engineering Associates, Inc.
 18208 BURBANK BOULEVARD
 VAN NUYS, CALIFORNIA 91411
 767-0890
 BY: Ronald R. Horn
 REG. C.E. No. 16913

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

SEWER	.....	S-2
MINIMUM PUBLIC SAFETY REQUIREMENTS	.....	S-3
BRICK MANHOLE	.....	S-4
STANDARD MANHOLE STEP	.....	S-5
MODIFY FOR SEWER PIPE	.....	S-6
GRADING AND ENCASING	.....	S-7
PIPE OR THE SURFACE	.....	S-8
ALLOWABLE TRENCH WIDTHS	.....	S-9
LOCKING MANHOLE FRAME AND COVER	.....	S-10
NON-REINFORCED PRECAST CONCRETE MANHOLE	.....	S-11
SPECIAL HOUSE LATERALS	.....	S-12

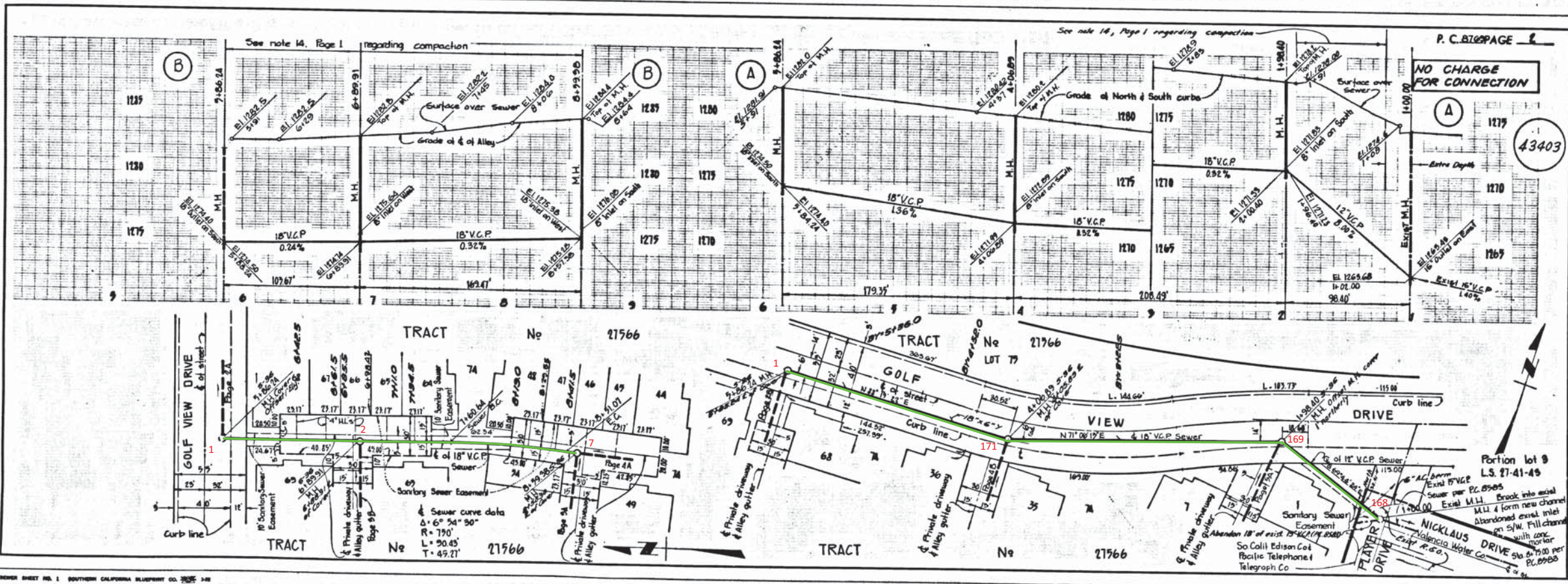


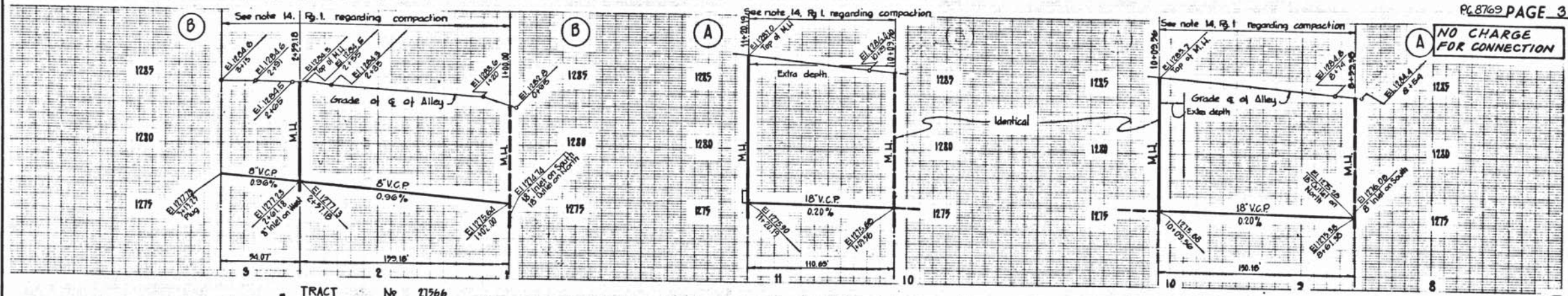
INDEX MAP
 SCALE: 1"=500'
 P.C. 8769

Issue no house conn. permits until P.C. 8585 is accepted.

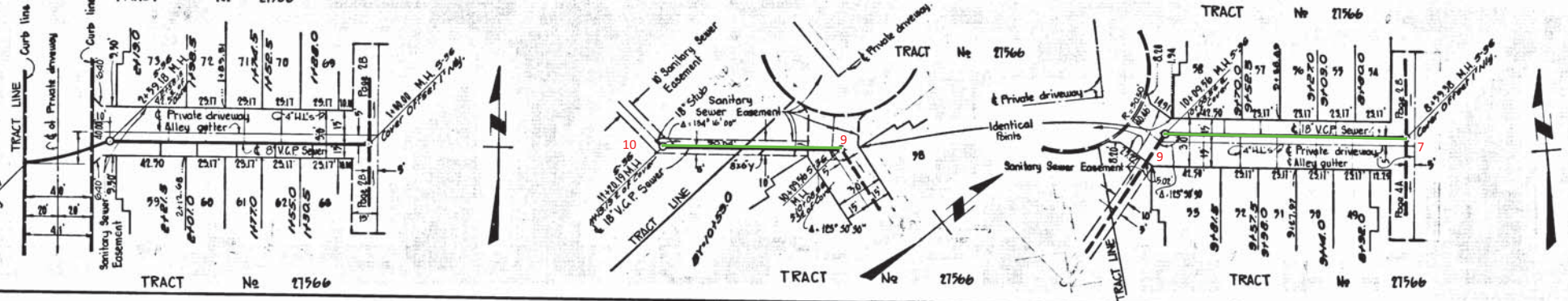
Lot 75 not served
 Common lot for slope only

COUNTY OF LOS ANGELES, CALIFORNIA
 HARVEY T. BRADY, COUNTY ENGINEER JOHN D. PARKHURST, CHIEF ENGINEER
 APPROVED: [Signature] 5/24/72 REGIONAL ENGINEER (DATE) APPROVED: [Signature] OFFICE ENGINEER
 CHECKED: [Signature] 5-3-72 DATE
 REG. C.E. NO. 15390
 NEWHALL BLDG. DIST. B2 J.N. 0250.02

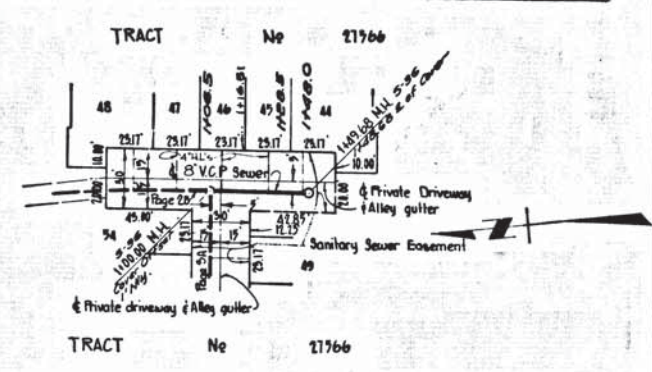
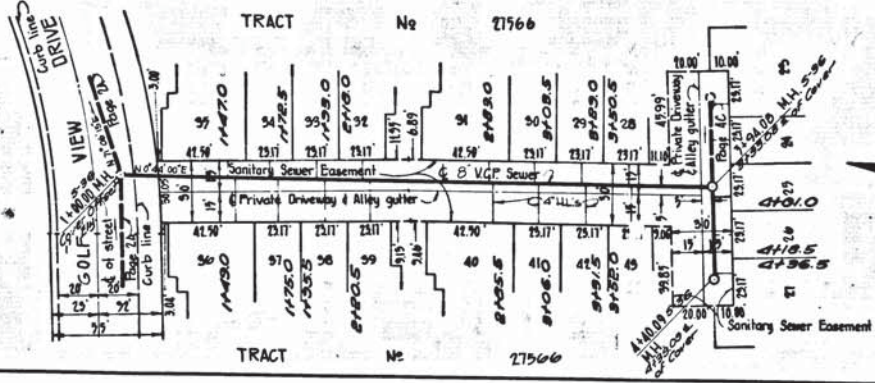
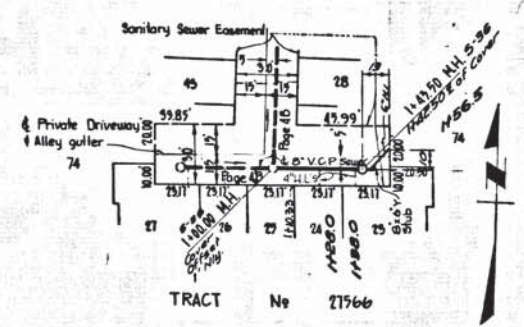
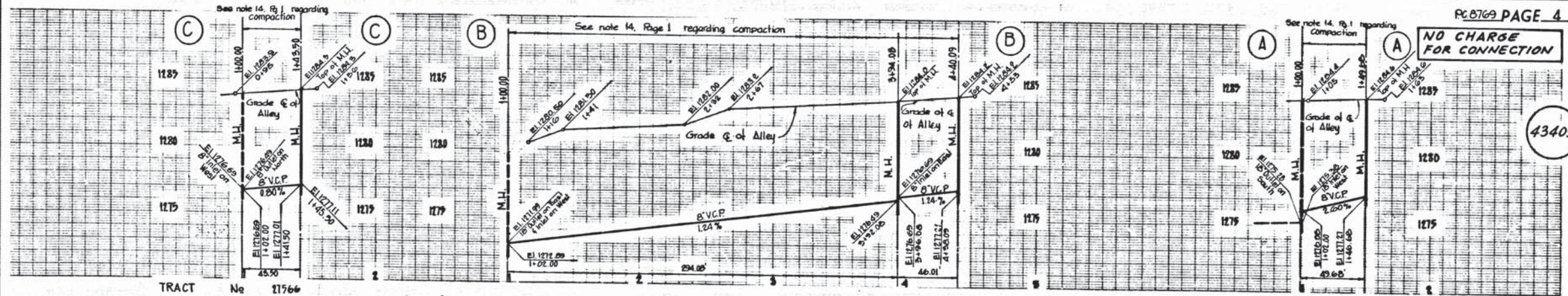




LS 27-41-45
Portion Lot 5
Sewer Curve data
A - 28' 20" 10"
R - 190'
L - 54.07'

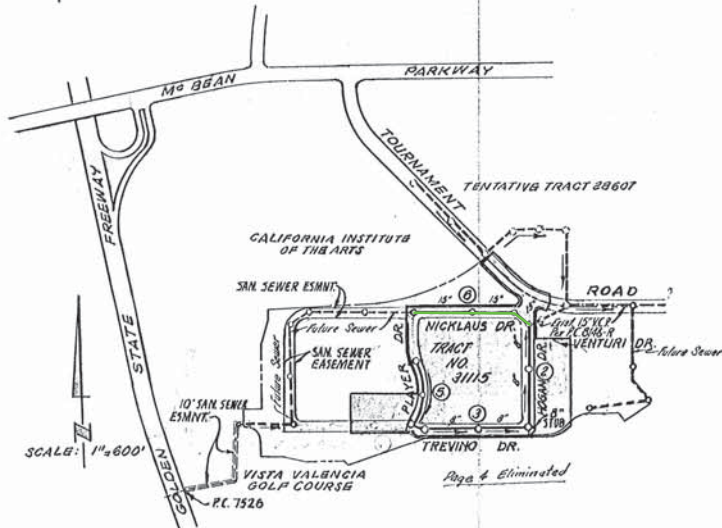


43404



43405

B.M. BL 642 ELEV. 1262.066
 Road Department Bench Mark Tag in North side of concrete
 base of Northwest corner of house on N. 313th St. 35' S. of E.
 of 1900 Ave. and 30' E. of E. of Wiley Clayton Road.
NEWHALL QUAD. 19 65.



INDEX MAP
 SCALE: 1" = 600'
P.C. 8583

NOTE: NUMBERS IN CIRCLES INDICATE PAGE NUMBERS

NEWHALL BLDG. DIST. NO. 8.2

TO BE CONSTRUCTED IN
TRACT No 31115
PRIVATE CONTRACT NO. 8583

INDEX 255313 V.S. 03-D-3
 3 SHEETS, 25 PAGES
 SCALE: YEAR 1" = 4' JANUARY, 1971
 MOBL. 1" = 40'
 PREPARED IN THE OFFICES OF
VALCON INC.
 1429 THOUSAND OAKS BLVD.
 THOUSAND OAKS, CALIFORNIA
 BY: *[Signature]*
 ALVIN J. NOVA JR. REG. C. E. NO. 13979

42501

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.
 WORK SHALL BE CONSTRUCTED ACCORDING TO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION) AND COUNTY ENGINEER SPECIAL ORDINANCES FOR THE CONSTRUCTION OF SANITARY SEWERS DATED APRIL 1, 1970.
 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. 3, AND PAY A FEE TO THE COUNTY ENGINEER, SAME AS IN S.D. 3150 E. IMPERIAL HWY. COUNTY ENGINEER'S OFFICE, 120 SOUTH SPRING STREET, LOS ANGELES, CALIFORNIA.
 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 ON A STATE HIGHWAY, A PERMIT MUST BE OBTAINED FROM THE STATE OF CALIFORNIA, DIVISION OF HIGHWAYS, 120 SOUTH SPRING STREET, LOS ANGELES, CALIFORNIA.

THE FOLLOWING COUNTY ENGINEER STANDARD PLANS APPLY TO THIS PROJECT

LEGEND	S-1
MIN. PUBLIC SAFETY REQUIREMENTS	S-2
BRICK MANHOLE	S-3
NON REINFORCED PRECAST CONCRETE MANHOLE	S-36
LOCKING MANHOLE FRAME AND COVER	S-35
MANHOLE STEP	S-17
BEDDING FOR SEWER PIPE	S-21
CRADLING AND ENCASUREMENT	S-23
WYE OR TEE SUPPORT	S-28
CHIMNEY PIPE AND BASE	S-27
ALLOWABLE TRENCH WIDTHS	S-33

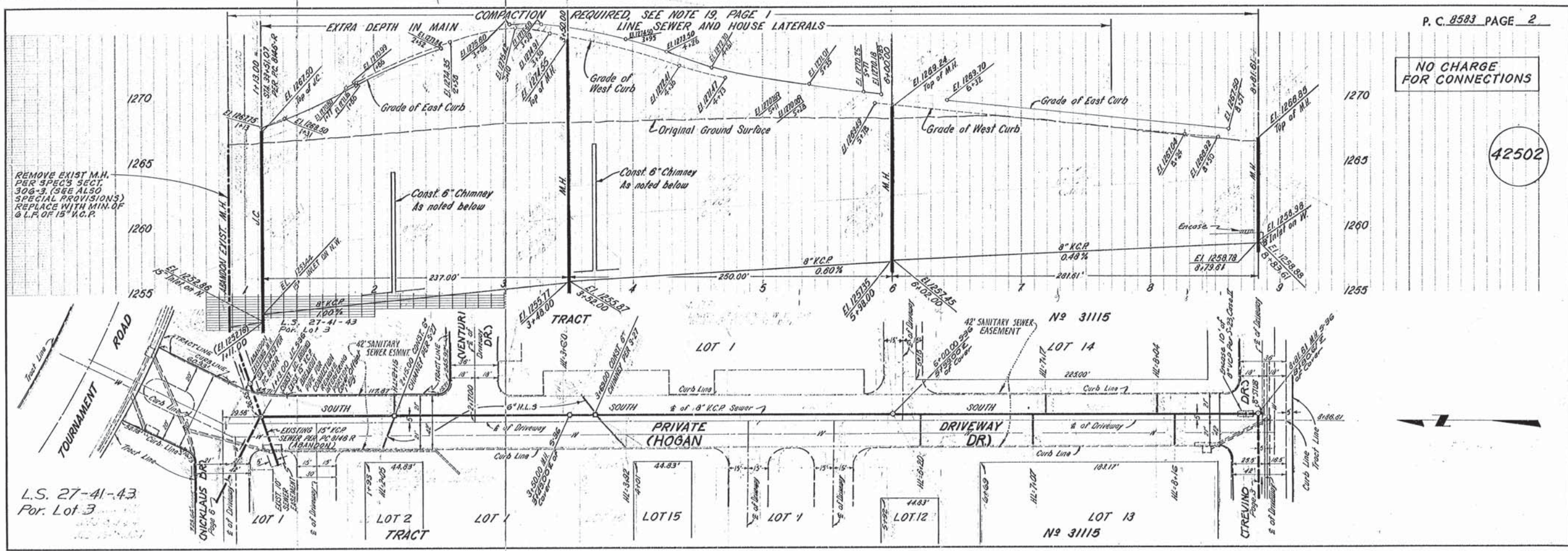
REVISION:
 1. LOWERED GRADES ON PAGE 3 (6+36.69 TO 6+17.43) & 4 DUE TO WATER MAIN INTERFERENCE. ADDED EAST-BOUND PIPE ON PAGE 4.
APPROVED: HARVEY T. BRANDT COUNTY ENGINEER
 BY: *[Signature]* DATE: 1-23-71
 R.C.E. NO. 11372
 OFFICE OF THE COUNTY ENGINEER
REVISION: 1. Sanitary Sewer On Page 4 deleted.
 2. Added 6" H.L. For Lot 8 On Page 5.
APPROVED: HARVEY T. BRANDT COUNTY ENGINEER
 BY: *[Signature]* DATE: 1-23-71
 R.C.E. NO. 11372
 OFFICE OF THE COUNTY ENGINEER

County Sanitation District No. 1 shall be notified prior to the start of work that required inspection can be made (Phone 397-1925 or 393-1191)
 Acceptance of this project,
 No connections for the disposal of industrial wastes shall be made to sewers shown on these plans without written permission from the Chief Engineer and General Manager of the County Sanitation Districts.

COLLECT CHARGES AS INDICATED

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.
[Signature]
 ALVIN J. NOVA JR. REG. C. E. NO. 13979

COUNTY OF LOS ANGELES, CALIFORNIA
 HARVEY T. BRANDT, COUNTY ENGINEER
 J. D. PARKHURST, CHIEF ENGINEER
 APPROVED BY: *[Signature]* REGIONAL ENGINEER
 APPROVED BY: *[Signature]* OFFICE ENGINEER
 CHECKED BY: *[Signature]* S.S. 11
 REG. C. E. NO. 43390
 J. N. 0250.02

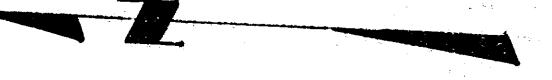
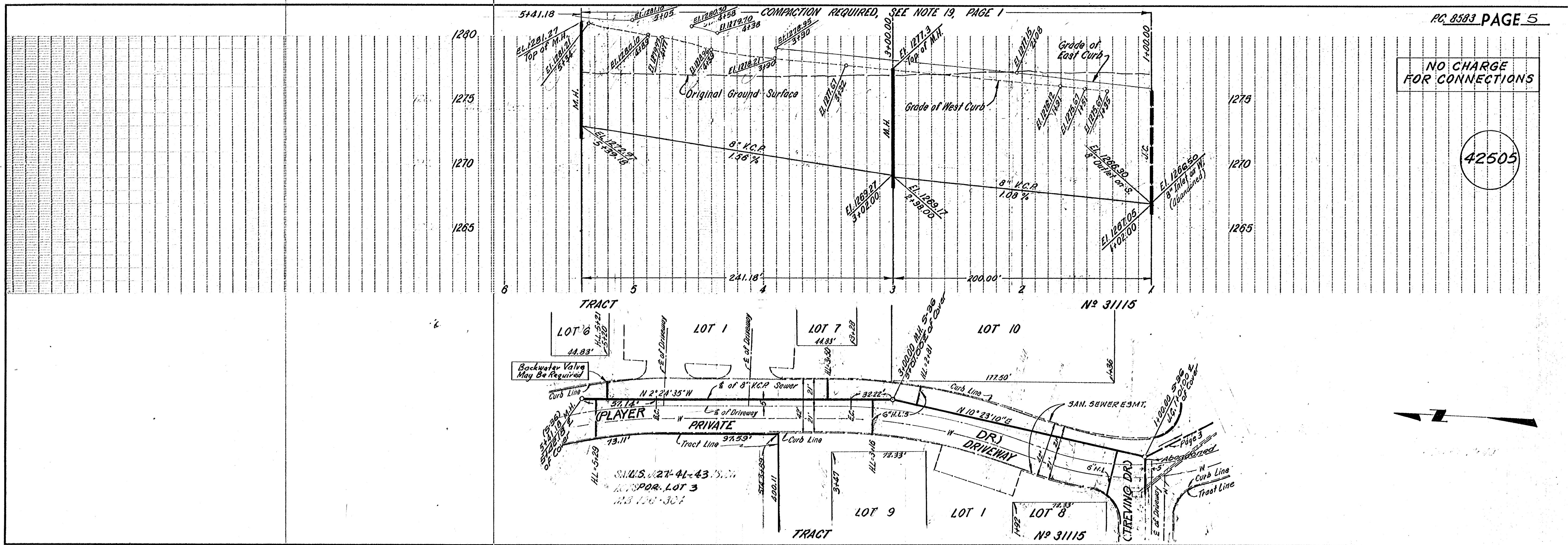


NO CHARGE FOR CONNECTIONS

42502

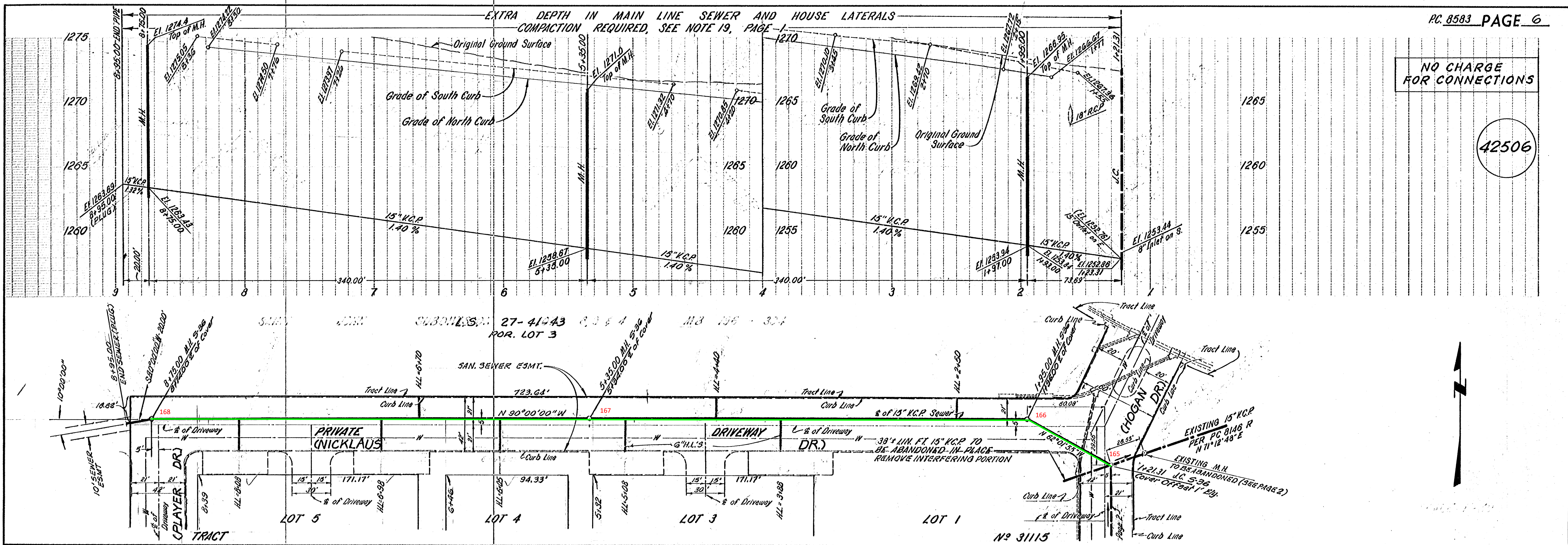
NO CHARGE FOR CONNECTIONS

42505



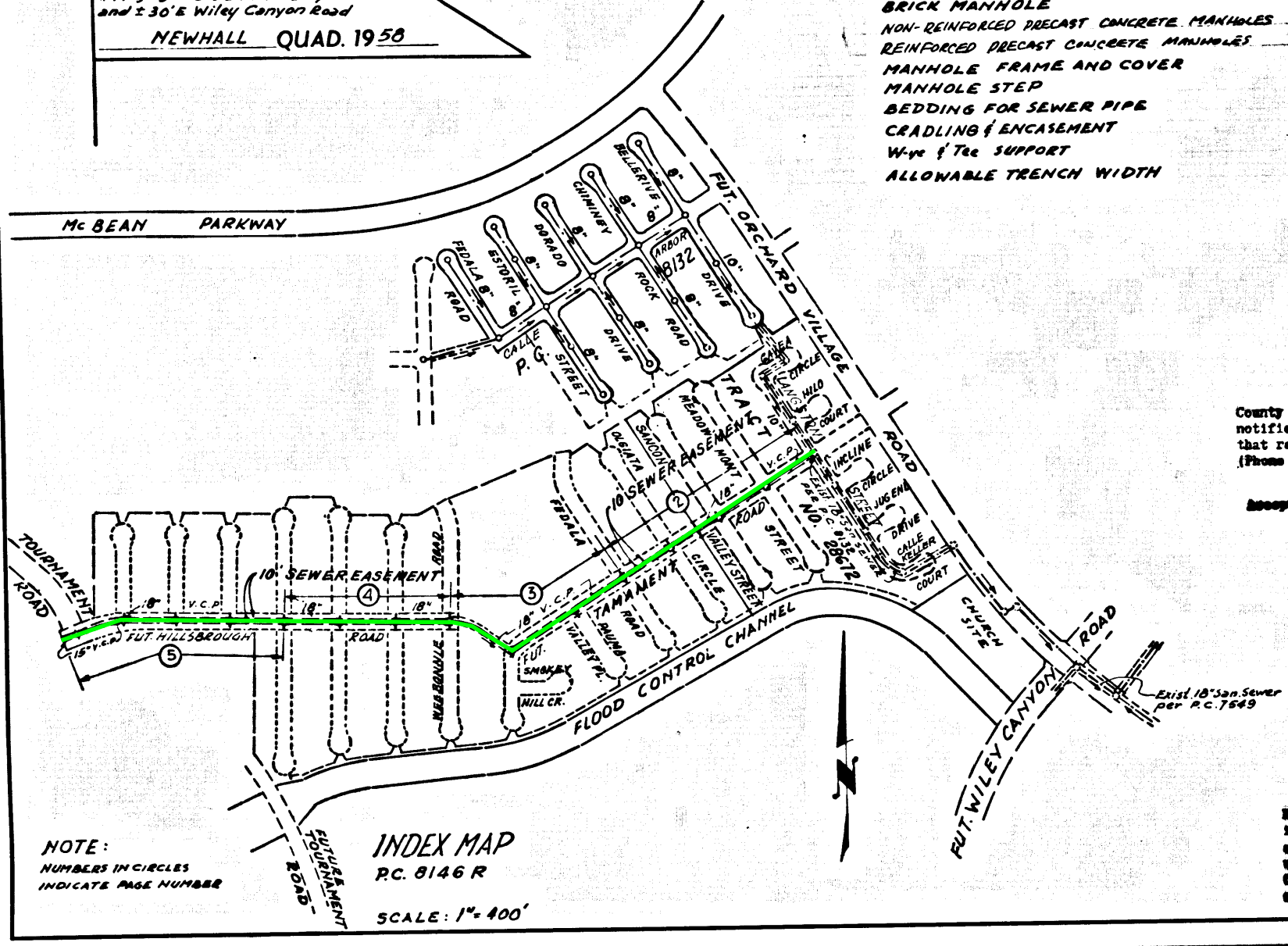
NO CHARGE FOR CONNECTIONS

42506



3 828 JA

B.M. 51 642 ELEV. 1262.07
 Road Point 8 M Top No. Side Conc. Base
 of Mc Bean Parkway
 W 3 3/4 W 3 3/4 S 35 So. E Lyons Avenue
 and 2 30' E Wiley Canyon Road
 NEWHALL QUAD. 1958



THE FOLLOWING COUNTY ENGINEER STANDARD PLANS
 APPLY TO THIS PROJECT:

LEGEND	S-1
MINIMUM PUBLIC SAFETY REQUIREMENTS	S-2
BRICK MANHOLE	S-3
NON-REINFORCED PRECAST CONCRETE MANHOLES	S-4
REINFORCED PRECAST CONCRETE MANHOLES	S-5
MANHOLE FRAME AND COVER	S-16
MANHOLE STEP	S-17
BEDDING FOR SEWER PIPE	S-21
CRADLING ENCASUREMENT	S-23
Ways of the SUPPORT	S-26
ALLOWABLE TRENCH WIDTH	S-33

County Sanitation Districts shall be notified prior to the following so that required inspection can be made (Phone 381-1025 - 400-0887)

Acceptance of the project.

In connection with the stoppage of industrial wastes shall be made to owners shown on these drawings without written permission from the Chief Engineer and General Manager of the County Sanitation Districts.

DOUBLE SCALE
 NEWHALL BLDG. DIST. NO. 8.2

- NOTES:
- PROVIDE STAKES ON THE PROPERTY LINE OR PROPERTY LINES PRODUCED AT RIGHT ANGLES TO THE SEWER LINE AT THE CENTER LINE OF EACH MANHOLE.
 - NO REPRESENTATIVE OF THE COUNTY ENGINEER WILL SURVEY OR LAY OUT ANY PORTION OF THE WORK.
 - THE PRIVATE ENGINEER SHALL FURNISH THE COUNTY ENGINEER WITH GRADE SHEETS AND STATIONING FOR ALL "Y" OR "T" BRANCHES AND SHALL PROVIDE STAKES FOR THEM AT THEIR PROPER LOCATIONS WITH STATIONING PLAINLY MARKED.
 - NO REVISIONS SHALL BE MADE IN THESE PLANS WITHOUT THE APPROVAL OF THE COUNTY ENGINEER.
 - THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION DIVISION BY TELEPHONE, MADISON 4-07, EXT. 8188, AT LEAST TWENTY-FOUR HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
 - MANHOLES SHALL BE BRICK SEWER STRUCTURES PER S-3 OR PRECAST CONCRETE MANHOLES PER S-5 OR S-4, EXCEPT AS NOTED.
 - USE STANDARD MANHOLE FRAMES AND COVERS, S-8.
 - MANHOLE TOPS IN UNIMPROVED RIGHTS-OF-WAY TO BE SIX INCHES ABOVE FINISHED GRADE.
 - USE EXTRA STRENGTH PIPE. ALL PIPE IS STANDARD DEPTH EXCEPT AS NOTED.
 - VITRIFIED CLAY PIPE JOINTS SHALL BE TYPE "B" OR "C" OR "D" PER S.P.A. SEC. 2-00-2.
 - 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.
 - 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.
 - RESURFACE ALL TRENCHES WITHIN PAVED AREAS TO MEET L.A. COUNTY ROAD DEPT. OR CALIFORNIA STATE HIGHWAY REQUIREMENTS IN ACCORDANCE WITH PERMITS.
 - SEWERS TO BE TESTED FOR LEAKAGE PER SEC. 306-2.5-7 OF S.P.A. S.P.A.S.
 - REFER TO SEC. 7-10-8.1 OF THE STANDARD SPECIFICATIONS REGARDING SAFETY ORDERS.
 - TRENCH BRANCHES MAY BE USED FOR CONNECTION TO MAIN LINE SEWERS, EXCEPT AS NOTED.
 - SPECIAL BACKFILL ON DESIGNATED AREAS: A. BACKFILL TRENCH AND REPLACE OTHER EARTH REMOVED SO AS TO ACHIEVE THE NATURAL OR FINISHED GRADE AND SLOPE SHOWN ON GRADING PLANS, TR-8076-873-2871, APP. IN THE BUILDING AND SAFETY DIVISION; B. SIX BAGGERS AND EARTH REPLACED SHALL BE COMPACTED TO THE MIN. OF 90% OF MAXIMUM DENSITY PER ASTM. ITS METHOD OF TEST D-698-57 AS MODIFIED; ACCEPTABLE CERTIFICATION OF SUCH COMPACTION SHALL BE SUBMITTED TO THE COUNTY ENGINEER.
 - SEWER PIPE BEDDING SHALL CONFORM TO S-21.

THE SEWER EASEMENT FOR THIS PROJECT HAS BEEN DEDICATED PER TRACT NO. 28671, M.B. 781-78-84

DO NOT ISSUE HOUSE CONNECTION PERMITS UNTIL P.C. 8132 IS ACCEPTED

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.
 Michael F. Madden
 C.E. 16744

CONSTRUCTED IN
 RIGHT OF WAY SOUTH OF McBEAN PARKWAY
 BETWEEN LANGSTON STREET AND TOURNAMENT ROAD

PRIVATE CONTRACT NO. 8146 R

W.S. 62
 3 SHEETS, 5 PAGES
 DATE: AUGUST, 1968
 SCALE: 1" = 40'
 PREPARED IN THE OFFICES OF
 VOORHEIS-TRINDLE CO.
 5913 Van Nuys Blvd., Van Nuys, California.
 Michael F. Madden
 REG. C. E. NO. 16744

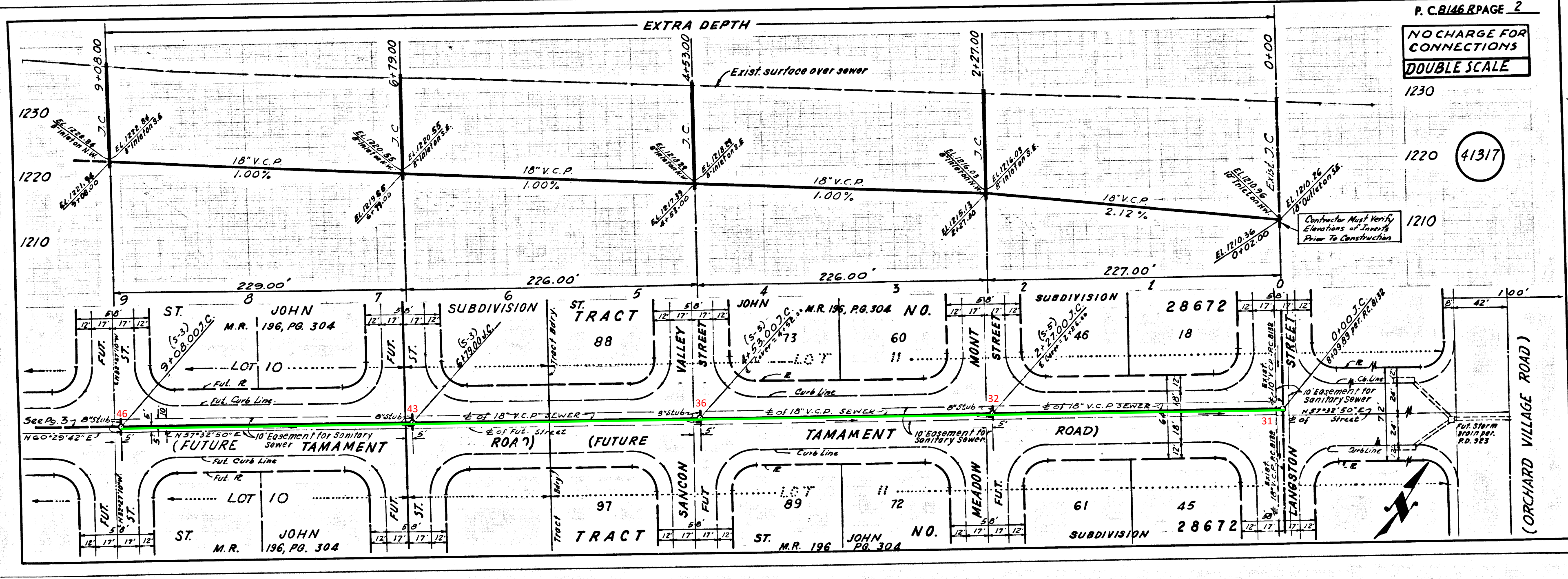
FOR LEGEND SEE PLAN NO. S-1

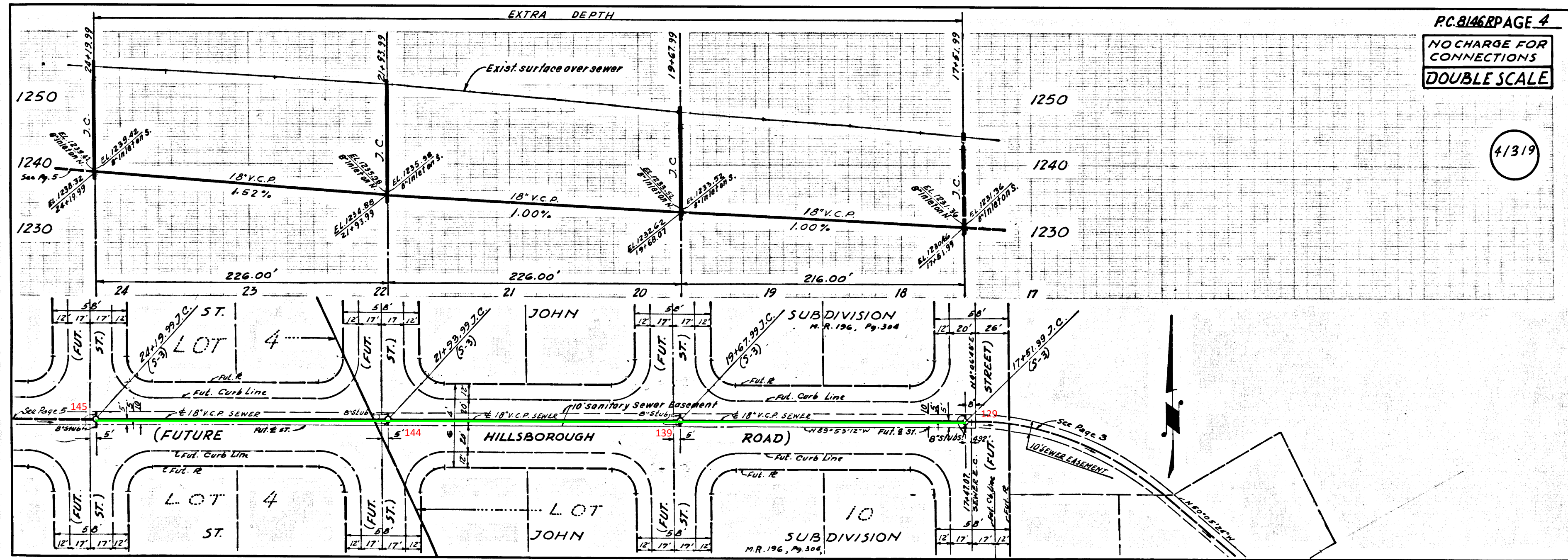
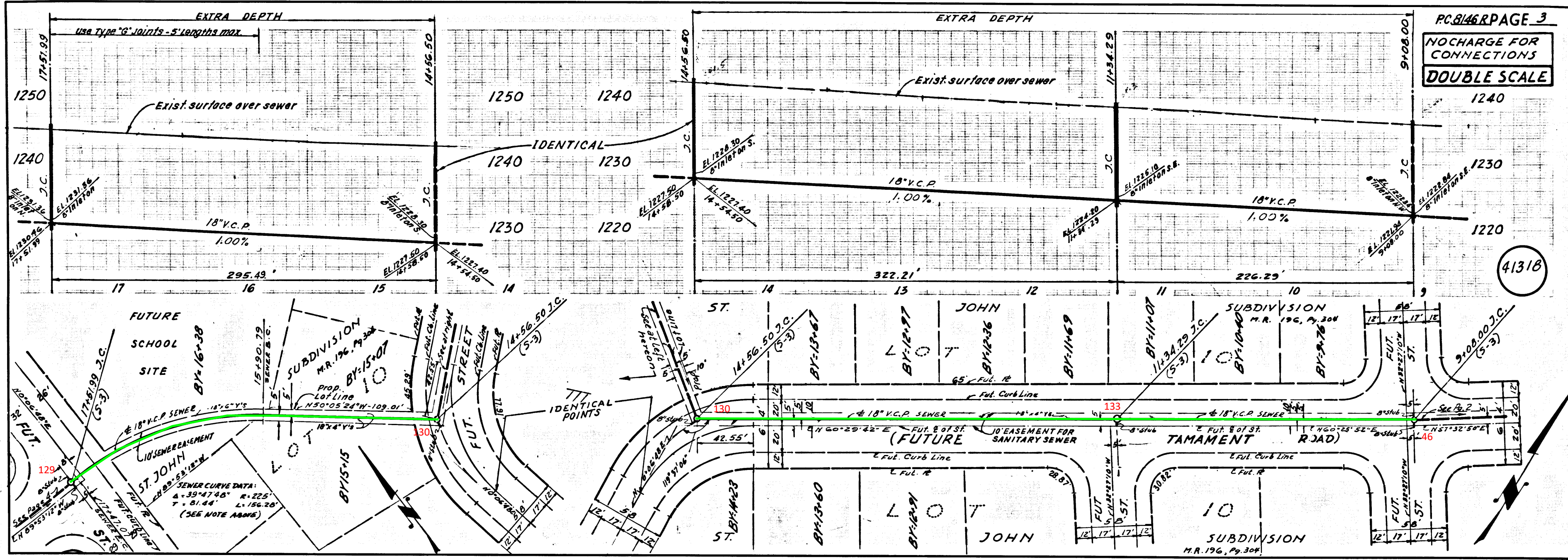
NOTES:
 GRADES TO WHICH THIS IMPROVEMENT IS TO BE CONSTRUCTED ARE SHOWN ON PLANS AND PROFILES. GRADE POINTS FOR TOP OF CURBS, CENTER LINE OF STREETS, OF CENTER LINE OF ALLEYS ARE SHOWN BY CIRCLES ON PROFILES. AT ALL POINTS BETWEEN DESIGNATED POINTS THE GRADE SHALL BE ESTABLISHED SO AS TO CONFORM TO A STRAIGHT LINE DRAWN BETWEEN SAID DESIGNATED POINTS. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. MEAN 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 OF PUBLIC WORKS CONSTRUCTION COUNTY ENGINEER'S SPECIAL PROVISIONS DATED JAN. 2, 1967 AS REVISED AND SHALL BE PROSECUTED IN THE PRESENCE OF 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. 5, AND PAY A FEE TO THE COUNTY ENGINEER, ROOM 300, COUNTY ENGINEERING BUILDING, 100 WEST SECOND STREET OF CONSTRUCTION INSPECTION AND SECOND 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, 130 SOUTH BRINK STREET, LOS ANGELES, CALIFORNIA.

COUNTY OF LOS ANGELES, CALIFORNIA
 JOHN A. LAMBIE, COUNTY ENGINEER
 J. D. PARKHURST, CHIEF ENGINEER
 CO. S. 197 32
 APPROVED BY: [Signature]
 OFFICE ENGINEER

APPROVED BY: [Signature]
 CHECKED BY: Ralph Schick 2/2/69
 REG. C. E. NO. 13908

J. N. 0369.34





NO CHARGE FOR CONNECTIONS
DOUBLE SCALE

