

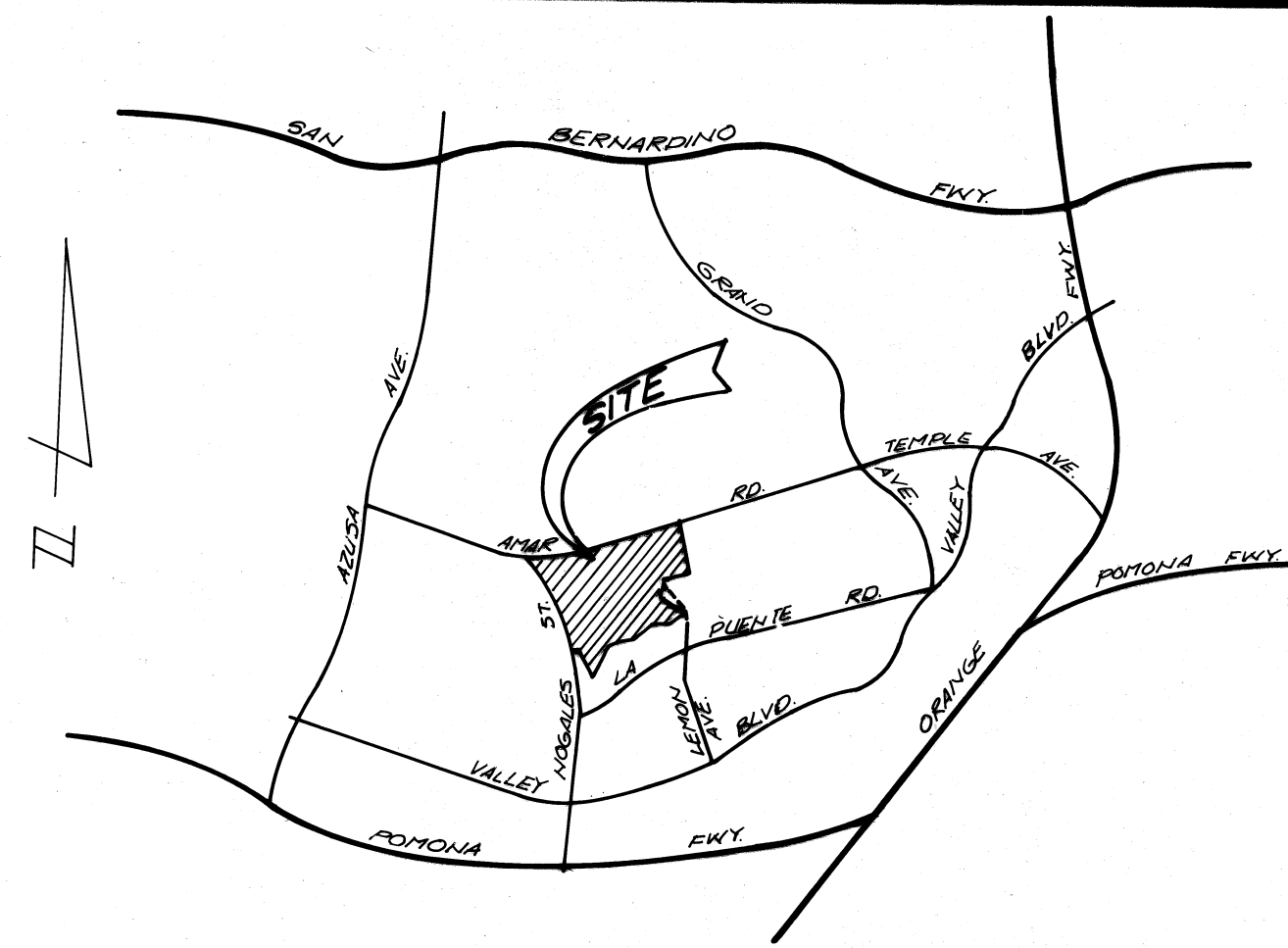
KEY MAP
NO SCALE

GENERAL NOTES FOR STORM DRAIN CONSTRUCTION

- ALL PIPE LAID IN OPEN TRENCH SHALL BE BEDDED IN ACCORDANCE WITH LOS ANGELES COUNTY ENGINEER CASE AND BEDDING PER STANDARD NO. D-54
- 24 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT INSPECTOR AT (213) 226-4206, AND WALNUT CITY ENGINEER AT (714) 595-2279.
- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1979 EDITION) AND TO THE SATISFACTION OF THE CITY ENGINEER.
- BEFORE WORK COMMENCES, THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE CITY ENGINEER TO EXCAVATE WITHIN CITY STREETS. THE PERMIT WILL BE ISSUED WITHOUT FEE.
- ALL BACKFILL SHALL BE COMPACTED TO A RELATIVE DENSITY OF 90%.
- ALL STATE AND LOCAL TRENCH SAFETY RULES WILL BE RIGIDLY ENFORCED.
- THE CONTRACTOR MUST MAINTAIN ALL TRAFFIC SIGNS IN AN ERECT, READILY DISCERNIBLE POSITION, FREE FROM OBSTRUCTIONS TO MOTORIST'S VISION, AND SHALL RESET SAME IN THE PROPER POSITION UPON COMPLETION OF CONSTRUCTION.
- EXISTING UTILITIES CROSSING STORM DRAIN SHALL BE SUPPORTED PER L.A.C.F.C.D. STD. 2-D 173.1-3, AS DIRECTED BY THE CITY ENGINEER.
- THE CONTRACTOR SHALL FURNISH A LETTER OF CERTIFICATION FROM THE PIPE MANUFACTURER AS TO TEST RESULTS OF THE PIPE INSTALLED.
- R.C.P. SHALL BE MANUFACTURED AND INSPECTED IN ACCORDANCE WITH SECTION 207-2.7, 2.8 AND 2.9 OF STANDARD SPECIFICATIONS.
- ALL PIPE LENGTHS SHOWN ARE HORIZONTAL PROJECTIONS, UNLESS OTHERWISE NOTED.
- THIS STORM DRAIN WILL NOT BE ACCEPTED FOR MAINTENANCE UNTILL THE STREETS HAVE BEEN PAVED, MANHOLES BROUGHT UP TO GRADE AND THE SYSTEM CLEANED TO THE SATISFACTION OF THE CITY ENGINEER.
- 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.
- THE CONTRACTOR SHALL CONFORM TO THE "MINIMUM PUBLIC SAFETY REQUIREMENTS" AS SHOWN ON LOS ANGELES COUNTY ENGINEER STANDARD S-2.
- ALL CONCRETE SHALL BE 3,000 POUNDS PER SQUARE INCH PORTLAND CEMENT CONCRETE, UNLESS OTHERWISE SHOWN.
- REINFORCEMENT SHALL BE REFORMED BARS OF INTERMEDIATE GRADE STEEL AS PER ASTM A-615, GRADE 60.
- THE INSPECTOR MAY HAVE THE OPTION TO REQUIRE CONCRETE BACKFILL DURING CONSTRUCTION WHEN THE PIPE HAS LESS THAN ONE FOOT OF COVER AND IS SUBJECT TO HEAVY EQUIPMENT TRAFFIC. THE CONCRETE BACKFILL SHALL CONSIST OF 1:3:5 MIX CONCRETE, POURED FROM WALL TO WALL OF TRENCH AND FROM BOTTOM OF TRENCH TO A MINIMUM DEPTH OF 4 INCHES OVER TOP OF PIPE.
- ALL PIPE SHALL BE PLACED IN A TRENCH IN NATURAL GROUND AND/OR COMPACTED FILL. THE GROUND LEVEL BEFORE THE TRENCHING SHALL BE AT LEAST 3 FEET ABOVE TOP OF PIPE ELEVATION, OR AT FINISH SURFACE ELEVATION, WHICHEVER IS LESS. ALL BACKFILL IN EASEMENTS SHALL BE COMPACTED TO THE DENSITY REQUIRED BY THE GRADING PLAN.
- A PERMIT SHALL BE OBTAINED FROM THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT PRIOR TO COMMENCING ANY CONSTRUCTION WORK UNDER THIS CONTRACT. CONTACT THE DISTRICT BY TELEPHONE AT 226-4208 TO OBTAIN AN INSPECTION PERMIT AND TO MAKE DEPOSIT FOR CONSTRUCTION INSPECTION BY THE DISTRICT.
- ELEVATIONS ARE IN FEET ABOVE USC AND G.S. MEAN SEA LEVEL DATUM OF 1929.
- GALVANIZE ALL METAL PARTS AFTER FABRICATION.
- THE CONTRACTOR SHALL NOTIFY L.A.C.F.C.D. CONTRACT ADMINISTRATION DIVISION 24 HRS. BEFORE THE START OF ANY WORK AT (213) 226-4206.
- THIS STORM DRAIN, MTD 918, WILL BE ACCEPTED FOR TRANSFER TO THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT FOR OPERATION AND MAINTENANCE AT SUCH TIME AS ITS OUTLET, MTD 404, HAS BEEN ACCEPTED BY L.A.C.F.C.D. FOR TRANSFER.

INDEX TO STANDARD DRAWINGS

- 2-D 88 LOCAL DEPRESSION NO. 2
- 2-D 96 STANDARD DROP STEP
- 2-D 102 MANHOLE NO. 1
- 2-D 107 CONCRETE RINGS, REDUCER AND PIPE FOR MANHOLE SHAFT
- 2-D 112 JUNCTION STRUCTURE NO. 2
- 2-D 113 MANHOLE NO. 4
- 2-D 156 MANHOLE FRAME AND COVER FOR CATCH BASINS
- 2-D 157 CATCH BASIN REINFORCEMENT FOR ROUND MANHOLES.
- 2-D 160 CATCH BASIN NO. 1
- 2-D 162 CATCH BASIN NO. 2
- 2-D 163 CATCH BASIN NO. 3
- 2-D 172 CATCH BASIN REINFORCEMENT
- 2-D 173 PIPE SUPPORT ACROSS TRENCHES
- 2-D 175 REMOVABLE PROTECTION FOR CATCH BASINS
- 2-D 184 MANHOLE NO. 2
- 2-D 188 TRANSITION STRUCTURE NO. 3
- 2-D 190 PIPE CONNECTIONS TO EXISTING STORM DRAINS
- 2-D 193 JUNCTION STRUCTURE NO. 4
- 2-D 224 CONNECTION TO CATCH BASIN FOR PIPES 12 INCHES THRU 72 INCHES
- 2-D 232 DETAIL OF CATCH BASIN OPENING
- 2-D 264 ADJUSTABLE PROTECTION BAR STIRRUP
- 2-D 265 INLET NO. 1
- 2-D 393 CONCRETE COLLAR FOR PIPE 12 INCHES THROUGH 66 INCHES
- 2-D 472 STANDARD 24-INCH MANHOLE FRAME AND COVER
D-54 PIPE BEDDING IN OPEN TRENCH.



VICINITY MAP
NO SCALE

BENCH MARK N° CG 4430
R.O.B.M. TAG IN WEST WALL OF CATCH BASIN, 6 FT. EAST OF B.C.R., 32 FT. NORTH OF R. OF LA PUENTE RD. AND 82 FT. EAST OF R. OF NOGALES ST. ELEV. 460.860
1975 DATUM WEST COVINA QUAD

QUANTITY ESTIMATE		
ITEM	QUANTITY	UNIT
MANHOLE NO 1	4	EA.
JUNCTION STRUCTURE NO 2	3	EA.
CATCH BASIN NO 3	5	EA.
CONCRETE COLLAR	3	EA.
18" RCP 2400 D	147	L.F.
24" RCP 2400 D	628	L.F.
27" RCP 2400 D	93	L.F.

Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this Project including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineer harmless from any and all liability, real or alleged, in connection with the performance of work on the Project, excepting for liability arising from the sole negligence of the Owner or the Engineer.

NOTICE TO CONTRACTOR
The existence and location of any underground utility pipe or structures shown on these Plans are obtained by a search of available records. Approval of this Plan by the City of Walnut does not constitute a representation as to the accuracy or completeness of the location or the existence or non-existence of any underground utility pipe or structure within the limits of this Project. The Contractor is required to take all due precautionary means to protect the utility lines not of record or not shown on this Plan.

NOTE:
QUANTITIES SHOWN ARE APPROXIMATE ONLY IT IS THE CONTRACTORS RESPONSIBILITY TO SUPPLY PIPE SIZE, LENGTH & D-LOADS SHOWN IN PLANS.

REVISIONS			CITY OF WALNUT APPROVED	PLANS PREPARED BY:	CITY OF WALNUT
				Hunsaker Associates Inc.	
REVISOR	DATE	REVISOR	DATE		

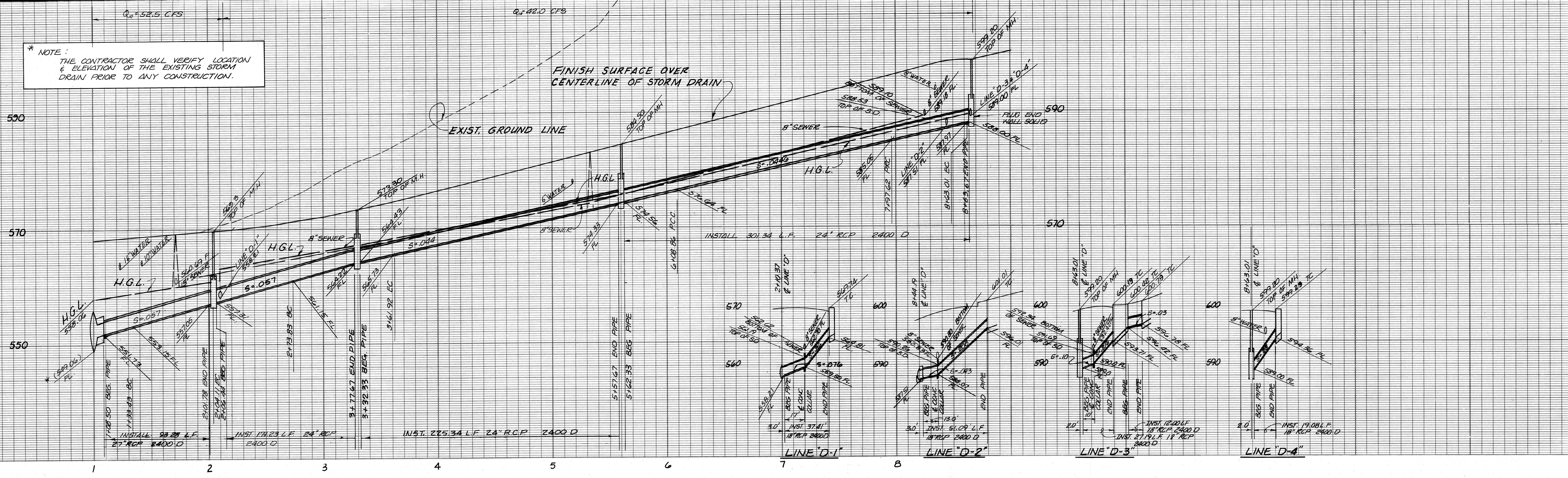
CITY OF WALNUT

STORM DRAIN IMPROVEMENTS
MISCELLANEOUS TRANSFER DRAIN N° 918
LINE "D"
STA. 1+00.00 TO 8+63.67

128A

TR. 36673 STORM DRAIN IMPROVEMENTS SHEET 1 OF 2

* NOTE:
THE CONTRACTOR SHALL VERIFY LOCATION & ELEVATION OF THE EXISTING STORM DRAIN PRIOR TO ANY CONSTRUCTION.



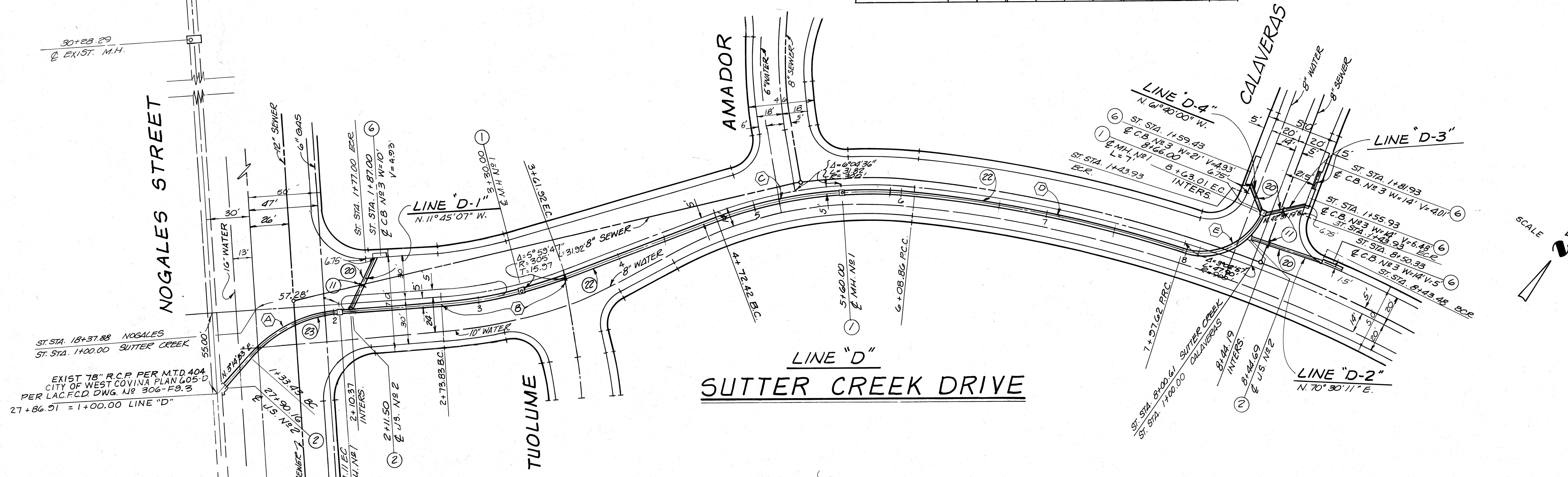
CURVE DATA

Δ	R	L	T
45°00'00"	90'	70.68'	37.28'
16°32'53"	305'	88.09'	44.35'
26°30'00"	295'	136.44'	69.46'
72°05'03"	895'	188.76'	94.73'
83°15'37"	45'	65.39'	40.00'

- CONSTRUCTION NOTES
- CONST. M.H. N#1 PER LACFCD STD 2-D 102.
 - CONST. J.S. N#2 PER LACFCD STD 2-D 112.
 - CONST. C.B. N#3 PER LACFCD STD PLAN 6802.
 - CONST. CONC. COLLAR PER LACFCD STD 2-D 393.
 - INSTALL 18" RCP (SEE PROFILE FOR D-LOAD.)
 - INSTALL 24" RCP (SEE PROFILE FOR D-LOAD.)
 - INSTALL 27" RCP (SEE PROFILE FOR D-LOAD.)

HYDRAULIC DATA

STA. TO STA.	Q ₀	S ₀	DIA.	n	D _n	V _n	D _n	V ₀	S _f	V _f
1100 - 2+10	52.5	.057	27"	.013	1.40	20.18	FULL	13.20	.02874	13.20
2+10 - 2+12	52.5	.057	24"	.013	1.59	19.63	FULL	16.71	.03387	16.71
2+12 - 3+30	42.0	.057	24"	.013	1.33	18.98	FULL	13.37	.03448	13.37
3+30 - 5+40	42.0	.044	24"	.013	1.46	17.05	FULL	13.37	—	13.37
5+40 - 8+65	42.0	.044	24"	.013	1.46	17.13	FULL	13.37	—	13.37



REVISIONS

REVISIONS	REVISIONS	REVISIONS	REVISIONS
REVISED TO EL., V-DEPTHS & TOP OF M.H. EL. TO AGREE WITH STREET PLANS	REVISED BY: <i>Frank Salinger</i>	RE. N°: 9/12/80	REVISIONS: 1
REVISED BY: <i>Frank Salinger</i>	RE. N°: 12/1/80	REVISIONS: 2	DATE: 12/1/80
APPROVED: <i>Frank Salinger</i>	DATE: 12/1/80	RE. N°: 12/1/80	REVISIONS: 3
APPROVED: <i>Frank Salinger</i>	DATE: 12/1/80	RE. N°: 12/1/80	REVISIONS: 4

CITY OF WALNUT APPROVED

PLANS PREPARED BY:
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(714) 754-1011

CITY OF WALNUT

STORM DRAIN IMPROVEMENTS

MISCELLANEOUS TRANSFER DRAIN N° 918

LINE "D"

STA. 1+00.00 TO 8+63.67

128 B

TR. 36673

STORM DRAIN IMPROVEMENTS

SHEET 2 OF 2

WPC 182