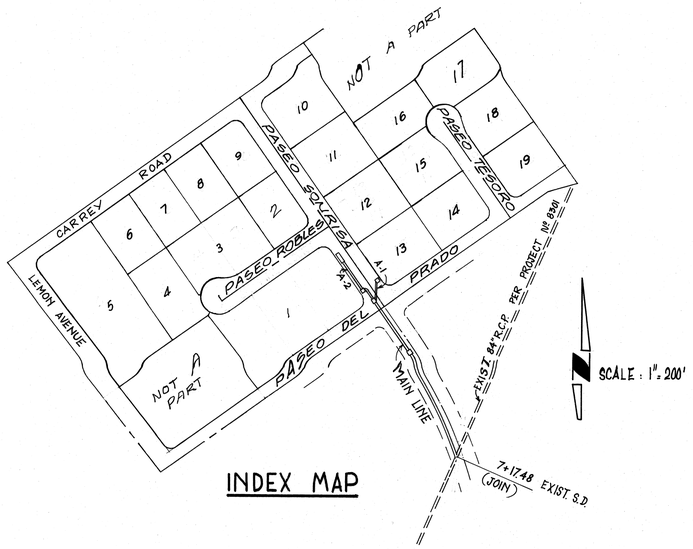

INDEX MAP

HYDRAULIC ELEMENTS

LINE	FROM	TO	Q_{50}	V
A-2	℄ 28'C.B	6+22.50	8.50 C.F.S	4.81 F.P.S.
MAIN	6+22.50	5+83.00	15.07	4.80
	5+83.00	4+06.00	24.00	12.37 FLOWING PART FULL
				6.04 FULL
	4+06.00	1+14.80	24.00	6.04
A-1	℄ 7'C.B.	6+22.50	8.93	2.84

NO.	REVISION	REVISED BY	APPROVED BY	DATE
1	27" R.C.P. TO 33" FROM STA. 1+14 TO 5+80, RAISE GRADE 0.1'			

BENCH MARK: S.G. 1785
L. & T. CONCRETE WALK TO HOUSE NO. 221 LEMON AVE. ± 92' W'LY. & 250± S'LY. ℄ CARREY ROAD. MK'D. "B.M".
ELEV. 534.722' (COVINA 1960)

STORM DRAIN PLANS IN TRACT No. 33488 M.T.D. No. 795

GENERAL NOTES (Cont'd)

23. A SOILS ENGINEER SHALL CERTIFY THAT ALL FILLS AND BACKFILLS OVER UNDERGROUND STORM DRAINS OUTSIDE OF ST. R/W HAVE BEEN COMPACTED OR CONSOLIDATED TO A 90% DENSITY. THIS CERTIFICATION SHALL BE SUBMITTED TO THE COUNTY ENGINEER PRIOR TO ACCEPTANCE OF THE WORK BY THE COUNTY.
24. 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.
25. THE CONTRACTOR SHALL CONFORM TO THE "MINIMUM PUBLIC SAFETY REQUIREMENTS" AS SHOWN ON LOS ANGELES COUNTY ENGINEER STANDARD S-2.
26. 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.
27. THE INSPECTOR MAY HAVE THE OPTION TO REQUIRE CONCRETE BACKFILL DURING CONSTRUCTION WHEN THE PIPE HAS LESS THAN ONE FOOT OF COVER AND IS SUBJECTED TO HEAVY EQUIPMENT TRAFFIC. THE CONCRETE BACKFILL SHALL CONSIST OF 1:3:5 MIX CEMENT CONCRETE POURED FROM WALL TO WALL OF TRENCH AND FROM BOTTOM OF TRENCH TO A MINIMUM DEPTH OF 4 INCHES OVER TOP OF PIPE.

LIST OF STANDARD PLANS

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

MANHOLE #1	2-D102
JUNCTION STRUCTURE # 2	2-D112
CATCH BASIN # 2	2-D162
FRAME AND COVER	2-D472
REINFORCING STEEL	2-D171
DROP STEP	2-D96
FACE PLATE	2-D232
MANHOLE LOCATION	2-D157
CATCH BASIN REINFORCEMENT	2-D172
PIPE BEDDING PER L.A. COUNTY ENGINEER	D-54 Ad
CATCH BASIN #3	2-D163
MANHOLE FRAME & COVER (CATCH BASIN)	2-D156
REMOVABLE PROTECTION BARS	2-D175
CONNECTION TO CATCH BASIN	2-D 224

LOS ANGELES COUNTY ENGINEERS STD. DWG.

PIPE BEDDING, CASE A.D.	D-54

GENERAL NOTES:

1. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. MEAN SEA LEVEL DATUM OF 1929. ALL WORK SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1976 EDITION," AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE COUNTY ENGINEER.
2. APPROVAL OF THIS PLAN BY THE COUNTY OF LOS ANGELES DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION, OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY, PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THIS NOTE APPLIES TO ALL SHEETS.
3. THE CONTRATOR SHALL NOTIFY THE CONSTRUCTION SECTION OF THE DESIGN DIV. BY TELEPHONE, 974-7283 AT LEAST 24 HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT. THE CONTRACTOR SHALL SUBMIT A DEPOSIT FOR CONSTRUCTION INSPECTION TO THE COUNTY ENGINEER, 108 WEST 2ND STREET, LOS ANGELES, AT LEAST 24 HOURS BEFORE STARTING ANY WORK UNDER THIS CONTRACT.
4. ALL CONSTRUCTION JOINTS IN THE FOOTING OF SLABS AND WALLS SHALL BE IN THE SAME PLANE. NO STAGGERING OF JOINTS WILL BE PERMITTED.
5. NO CONCRETE SHALL BE PLACED UNTIL THE FORMS AND REINFORCING STEEL HAS BEEN PLACED, INSPECTED AND APPROVED.
6. TRANSVERSE REINFORCEMENT AND TRANSVERSE JOINTS SHALL BE PLACED AT RIGHT ANGLES (OR RADIAL) TO CONDUIT CENTERLINE EXCEPT AS OTHERWISE SHOWN ON THE DRAWINGS.
7. ALL CONCRETE SHALL BE PORTLAND CEMENT CONCRETE WITH AN ULTIMATE 28 DAYS COMPRESSIVE STRENGTH OF 3000 p.s.i.
8. ALL EXPOSED EDGES SHALL BE FINISHED WITH A 3/4" CHAMFER.
9. ALL STEEL ADJACENT TO FACE OF CONCRETE SHALL HAVE 2½" CLEARANCE UNLESS OTHERWISE SPECIFIED.
10. REINFORCEMENT SHALL BE DEFORMED BARS OF INTERMEDIATE GRADE STEEL AS PER A.S.T.M. A-615-
11. ALL BAR BENDS AND HOOKS SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE "MANUAL OF STANDARD PRACTICE".
12. DIMENSIONS FROM FACE OF CONCRETE TO STEEL ARE TO CENTERLINE OF STEEL UNLESS OTHERWISE NOTED.
13. ALL BACKFILLS AND FILLS TO BE USED AS SUBGRADE SHALL BE COMPACTED TO A RELATIVE DENSITY OF 90% UNLESS OTHERWISE SPECIFIED.
14. ALL STEEL THAT IS TO BE CONTINUOUS SHALL HAVE A MINIMUM LAP OF 30 BAR DIAMETERS OR 18", WHICHEVER IS GREATER.
15. ALL CATCH BASINS AND CONNECTOR PIPES BETWEEN CATCH BASINS TO BE INSPECTED BY THE COUNTY ROAD DEPARTMENT.
16. PIPE SHALL BE EMBEDDED 5 INCHES INTO ALL STRUCTURES INCLUDING INLET & HEADWALLS, UNLESS OTHERWISE SPECIFIED.
17. WHERE PIPE IS TO BE PLACED IN FILL, THE FILL SHALL BE COMPACTED TO A MINIMUM DEPTH OF 3 FEET ABOVE THE TOP OF PIPE PRIOR TO TRENCHING.
18. ALL BACKFILL AND FILL AROUND CLOSED CONDUIT IN STREET RIGHTS OF WAY SHALL BE BROUGHT UP TO SUBGRADE OF THE ROAD OR TO 2 FEET ABOVE THE TOP OF THE CONDUIT, WHICHEVER IS LESS. THE ROAD DEPARTMENT SHALL INSPECT ALL BACKFILL AND FILL ABOVE AFOREMENTIONED LIMITS. APPLICATION FOR AN ENGINEER OR INSPECTOR IN CONNECTION WITH THE WORK, SHALL BE MADE BY THE CONTRACTOR AT LEAST 24 HOURS BEFORE HIS SERVICE IS REQUIRED. CALL 226-8188.
19. A PERMIT SHALL BE OBTAINED FROM THE ROAD DEPARTMENT AND THE L.A.C.F.C.D., AND SHALL BE SUBMITTED TO THE INSPECTOR PRIOR TO COMMENCING CONSTRUCTION WITHIN THEIR RIGHTS OF WAY.
20. ALL REINFORCED CONCRETE PIPE SHALL BE BEDDED IN ACCORDANCE WITH LOS ANGELES COUNTY ENGINEER CASE Ad BEDDING PER STANDARD DRAWING D-54 UNLESS OTHERWISE NOTED.
21. UNLESS OTHERWISE SHOWN, CONCRETE DIMENSIONS SHALL BE MEASURED VERTICALLY OR HORIZONTALLY AND PARALLEL OR AT RIGHT ANGLES (OR RADIAL) TO THE CENTER LINE OF CONSTRUCTION.
22. THIS STORM DRAIN WILL NOT BE ACCEPTED FOR MAINTENANCE UNTIL THE STREETS HAVE BEEN PAVED, MANHOLES BROUGHT TO GRADE, AND THE SYSTEM IS CLEANED TO THE SATISFACTION OF THE COUNTY ENGINEER.

RIPRAP NOTES

1. ROCKS FOR GROUTED RIPRAP SHALL BE GOOD QUALITY BROKEN CONCRETE AND/OR RIVER RUN ROCK. THE SMALLEST DIMENSION SHALL EXCEED 3 INCHES AND THE LARGEST DIMENSION SHALL NOT EXCEED 18 INCHES. THE LARGEST DIMENSION SHALL NOT EXCEED 4 TIMES THE SMALLEST DIMENSION.
2. THERE SHALL BE A GROUT BED OF AT LEAST 2 INCHES BENEATH THE FIRST LAYER OF ROCK. ALL THE VOIDS BETWEEN THE ROCKS SHALL BE FILLED WITH GROUT. MAXIMUM SPACING BETWEEN ROCKS SHALL BE 2 INCHES.
3. SURFACE ROCKS SHALL BE IMBEDDED FROM 1/2 TO 2/3 OF THEIR MAXIMUM DIMENSION.

NOTE: CONCRETE MAY BE SUBSTITUTED FOR THE GROUT.

PRIVATE ENGINEERS NOTICE TO CONTRACTORS

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 OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THIS MAP.
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 THIS DRAWING.

Lawrence R. Wlezien — REGISTERED CIVIL ENGINEER No. 19355 — 3/27/78 DATE

APPROVED
CITY OF WALNUT
OFFICE OF
CITY ENGINEER
4/10/78 DATE

REVIEWED BY THE LOS ANGELES COUNTY ROAD DEPT.
BY: _____ DATE: _____

JENNINGS-HALDERMAN-HOOD
540 NORTH GOLDEN CIRCLE SUITE 111
SANTA ANA, CALIFORNIA 92705
SIGNATURE: Lawrence R. Wlezien 1/13/78 R.C.E. NO. 19355
LAWRENCE R. WLEZIEN

CITY OF WALNUT, CALIFORNIA
COUNTY ENGINEER

DESIGN DIVISION
APPROVED BY: _____ R.C.E. 12225 DATE: 4/10/78
CITY ENGINEER
CHECKED BY: _____ R. C. E. NO. _____ DATE: _____

SHT 1 OF 2 SHTS
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J.H.H. Job No. 1681

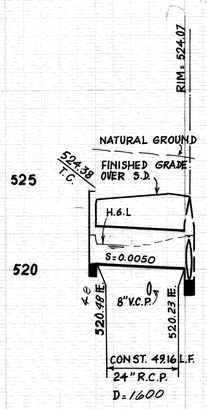
SOUTHERN CALIFORNIA BLUEPRINT CO. P.D. SHEET NO. 1 DATE 10/76

WPC 163

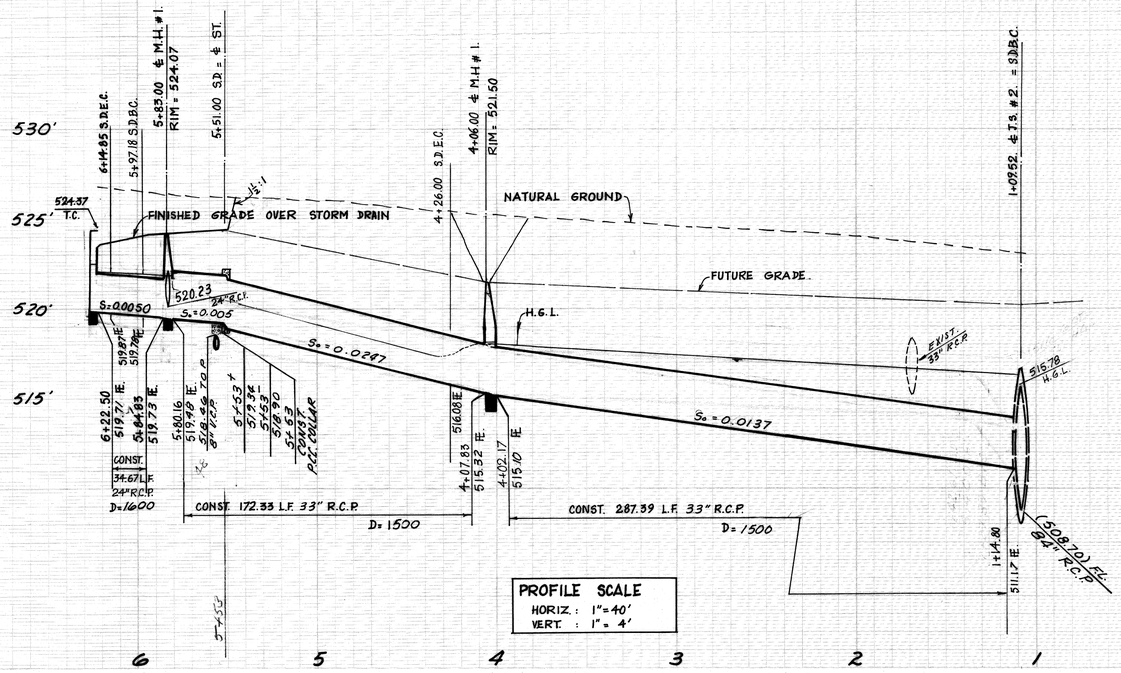
116A

STORM DRAIN PLANS IN TRACT No. 33488

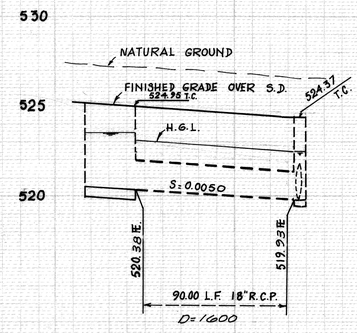
P.D. No. 8507



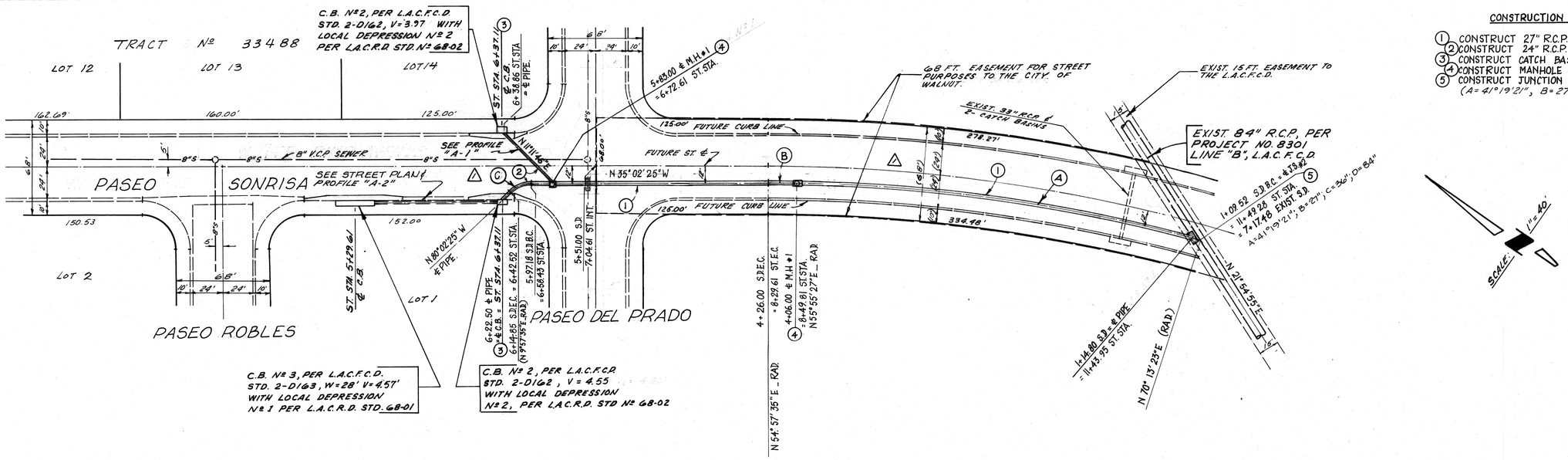
PROFILE "A-1"



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



PROFILE "A-2"



C.B. Nº 2, PER L.A.C.F.C.D. STD. 2-D162, V=3.97 WITH LOCAL DEPRESSION Nº 2 PER L.A.C.R.D. STD. Nº 68-02

C.B. Nº 3, PER L.A.C.F.C.D. STD. 2-D163, W=28' V=4.57' WITH LOCAL DEPRESSION Nº 1 PER L.A.C.R.D. STD. 68-01

C.B. Nº 2, PER L.A.C.F.C.D STD. 2-D162, V = 4.55 WITH LOCAL DEPRESSION Nº 2, PER L.A.C.R.D. STD Nº 68-02

CONSTRUCTION NOTES:

1. CONSTRUCT 27" R.C.P.
2. CONSTRUCT 24" R.C.P.
3. CONSTRUCT CATCH BASIN # 2 PER L.A.C.F.C.D STD. 2-D162.
4. CONSTRUCT MANHOLE # 1 PER L.A.C.F.C.D. STD. 2-D102
5. CONSTRUCT JUNCTION STRUCTURE # 2 PER L.A.C.F.C.D. STD 2-D112 (A=41°19'21", B=27", C=36", D=84")

STORM DRAIN CURVE DATA:

	Δ	R	L	T
A	14°17'56"	1188.00'	296.48'	149.01'
B	0°57'52"	1188.00'	20.00'	10.00'
C	45°00'00"	22.50'	17.67'	9.32'

APPROVED
CITY OF WALNUT
OFFICE OF
CITY ENGINEER
[signature] 4/10/78
BY DATE

JENNINGS HALDERMAN HOOD
540 NORTH GOLDEN CIRCLE SUITE 111
SANTA ANA, CALIFORNIA 92705

SIGNATURE: [signature] 11/13/78
LAWRENCE R. WIERSEN R.C.E. NO. 12355

CITY OF WALNUT, CALIFORNIA

COUNTY ENGINEER

CHECKED BY: _____ R.C.E. NO. _____ DATE: _____

OFFICE OF COUNTY ENGINEER

SHT 2 OF 2 SHTS
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