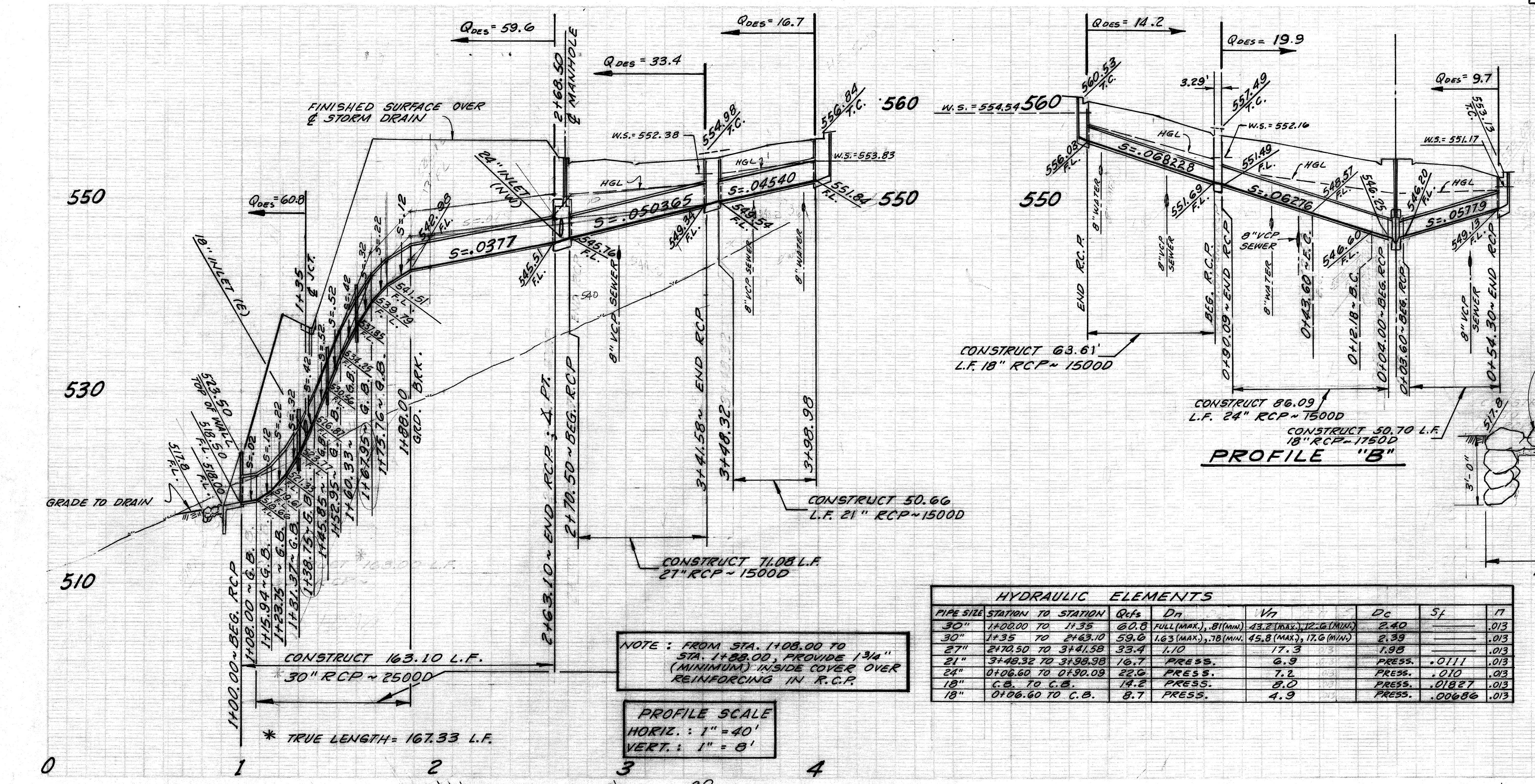
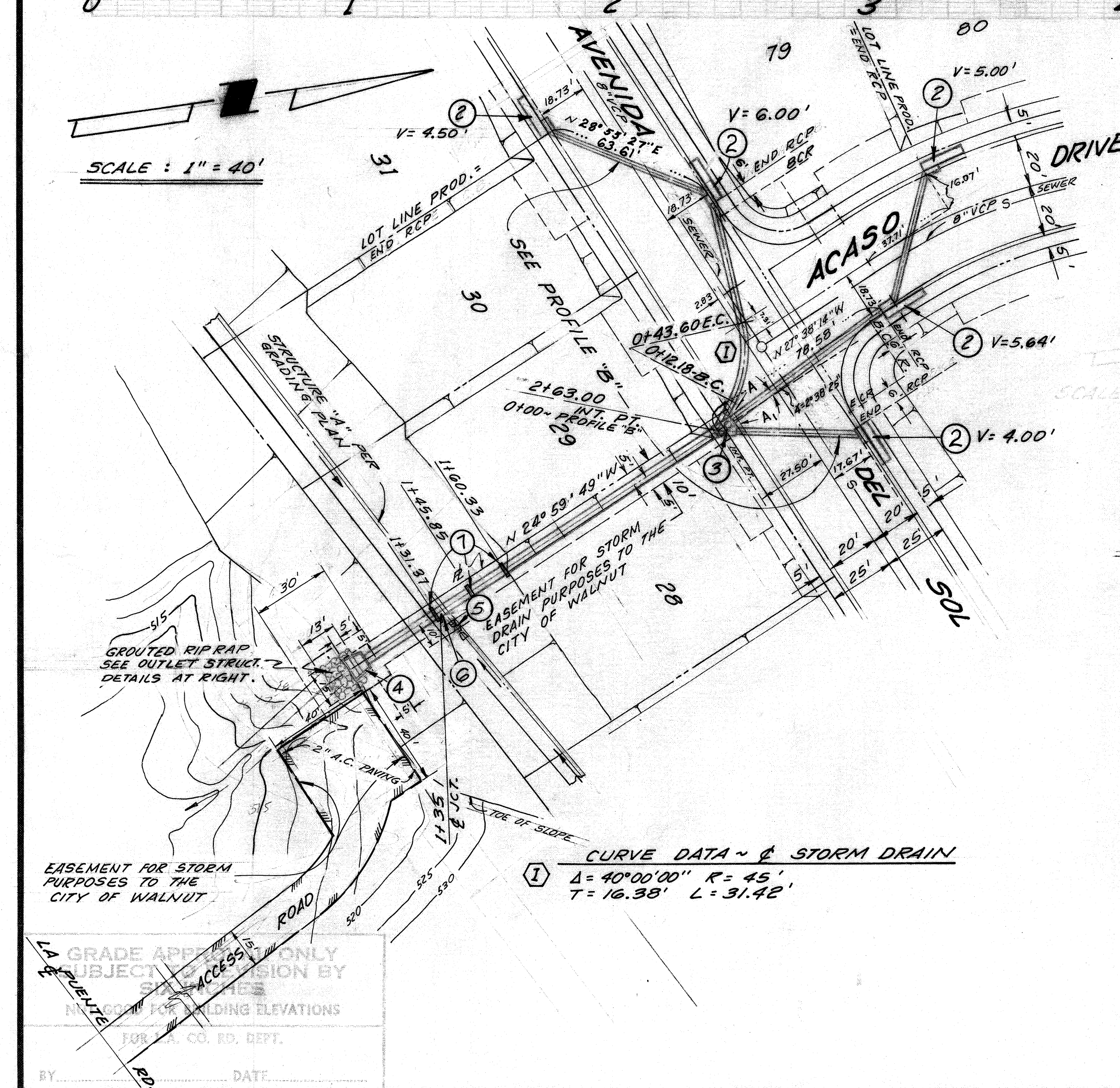
REVIEWED	SUBMITTED	APPROVED
DATE	DIVISION ENGINEER — HIGHWAY DIVISION — DATE	ROAD COMMISSIONER — DATE



HYDRAULIC ELEMENTS

PIPE SIZE	STATION TO STATION	Qcfs	Dn	Vn	Dc	Sf	n
30"	1+00.00 TO 1+35	60.8	FULL (MAX.), .81 (MIN.)	43.2 (MAX.), 12.6 (MIN.)	2.40	—	.013
30"	1+35 TO 2+63.10	59.6	1.63 (MAX.), .78 (MIN.	45.8 (MAX.), 17.6 (MIN.)	2.39	—	.013
27"	2+70.50 TO 3+41.58	33.4	1.10	17.3	1.98	—	.013
21"	3+48.32 TO 3+98.98	16.7	PRESS.	6.9	PRESS.	.0111	.013
24"	0+06.60 TO 0+90.09	22.6	PRESS.	7.2	PRESS.	.010	.013
18"	C.B. TO C.B.	14.2	PRESS.	8.0	PRESS.	.01827	.013
18"	0+06.60 TO C.B.	8.7	PRESS.	4.9	PRESS.	.00686	.013

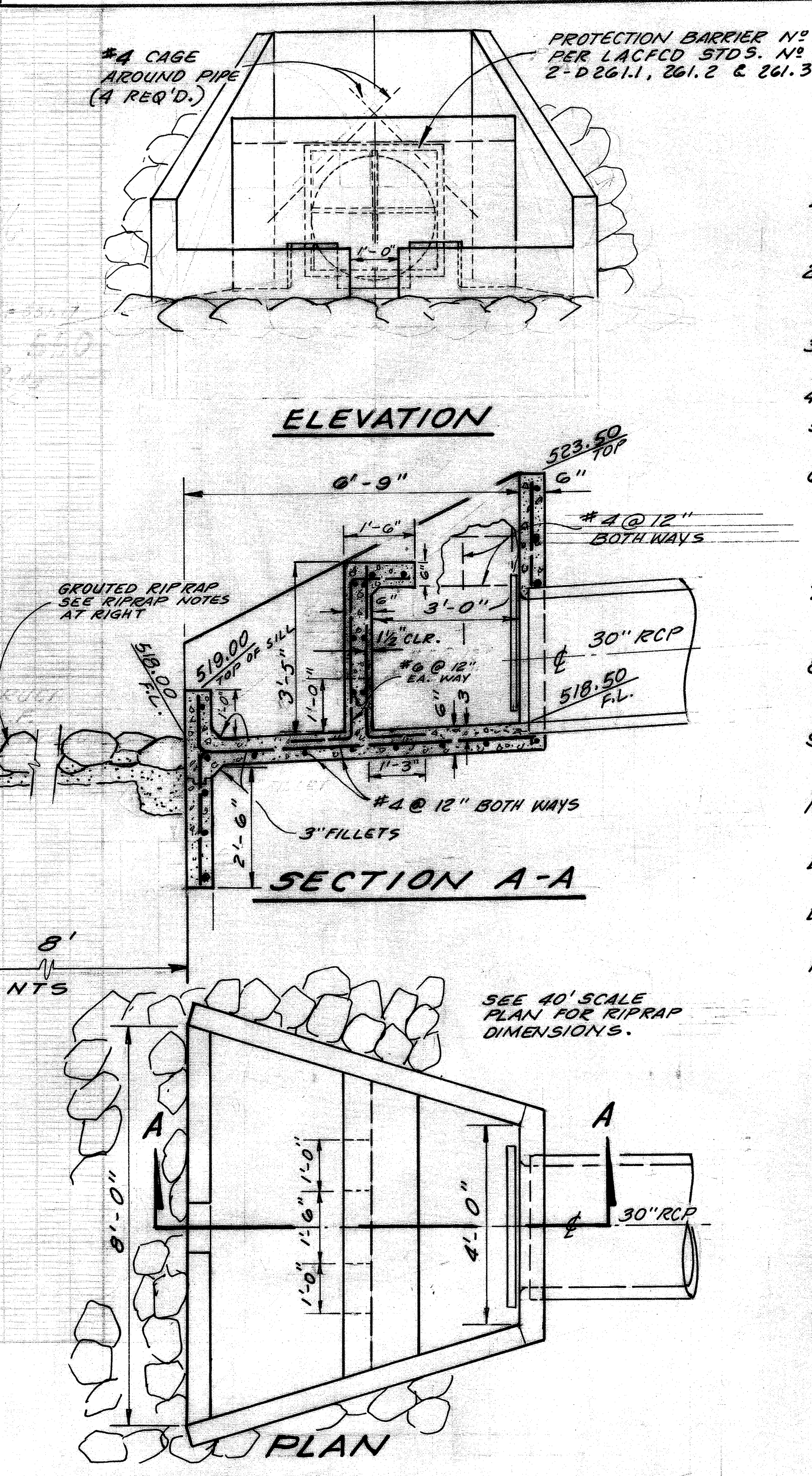


CONSTRUCTION NOTES

1. ~~CONSTRUCT CATCH BASIN Nº 6 PER L.A.C.F.C.D. STD. 2-D109; CASE A~1 GRATE; W = 6'-11 3/8"; "V" DIMENSION PER PLAN. LOCAL DEPRESSION Nº 4 PER 2D415.~~
2. CONSTRUCT CATCH BASIN Nº 6 PER L.A.C.F.C.D. STD. 2-D109; CASE B ~ 2 GRATES; W = 17'-4 3/4"; "V" DIMENSION PER PLAN. LOCAL DEPRESSION Nº 4
3. CONSTRUCT MANHOLE Nº 1 PER L.A.C.F.C.D. STD. 2-D102. ∠A = 30°, ∠A₁ = 33°42'17"
4. CONSTRUCT OUTLET STRUCTURE PER DETAIL AT RIGHT.
5. CONSTRUCT INLET Nº 1 PER L.A.C.F.C.D. STD. 2-D265 (SEE DETAIL AT RIGHT)
6. CONSTRUCT JUNCTION STRUCTURE Nº 2 PER L.A.C.F.C.D. STD. 2-D112; A = 90°, B = 18", C = 1.50' D = 30"
7. CONSTRUCT CONCRETE PIPE ANCHOR PER L.A. COUNTY ENGINEER'S STD. D-72.

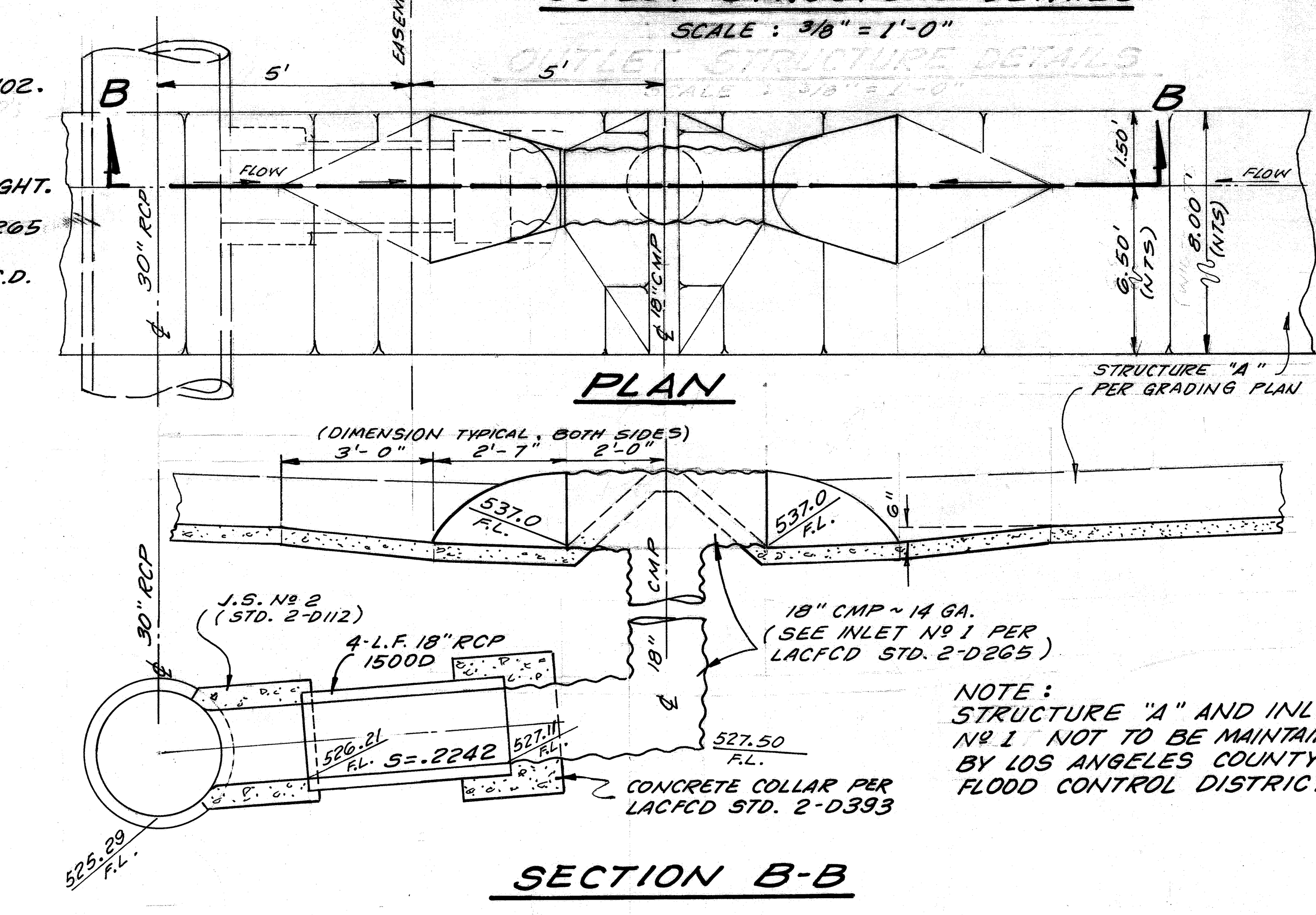
LIST OF STANDARD DRAWINGS

~~CATCH BASIN Nº 6~~	~~2-D109~~
MANHOLE Nº 1	2-D102
JUNCTION STR. Nº 2	2-D112
INLET Nº 1	2-D265
LOCAL DEPRESSION Nº 4	2-D415
CATCH BASIN OPENING	2-D232
STD. DROP STEP	2-D96
M.H. FRAME & COVER	2-D472
C.B. REINF.	2-D172
C.B. REINF. FOR ROUND M.H.	2-D157
C.B. PIPE CONNECTION	2-D224
MANHOLE SHAFT	2-D107
M.H. FRAME & COVER (FOR C.B.)	2-D156
C.B. FRAME & GRATING	2-D227
C.B. PROTECTION BAR	2-D175
CONCRETE COLLAR	2D393
CONC. PIPE ANCHORS	L.A. CO. ENG'R. STD. D-72



OUTLET STRUCTURE DETAILS

SCALE : 3/8" = 1'-0"



DETAILS ~ STRUCT. "A" TO INLET Nº 1

SCALE : 3/8" = 1'-0"

GENERAL NOTES FOR STORM DRAIN CONSTRUCTION

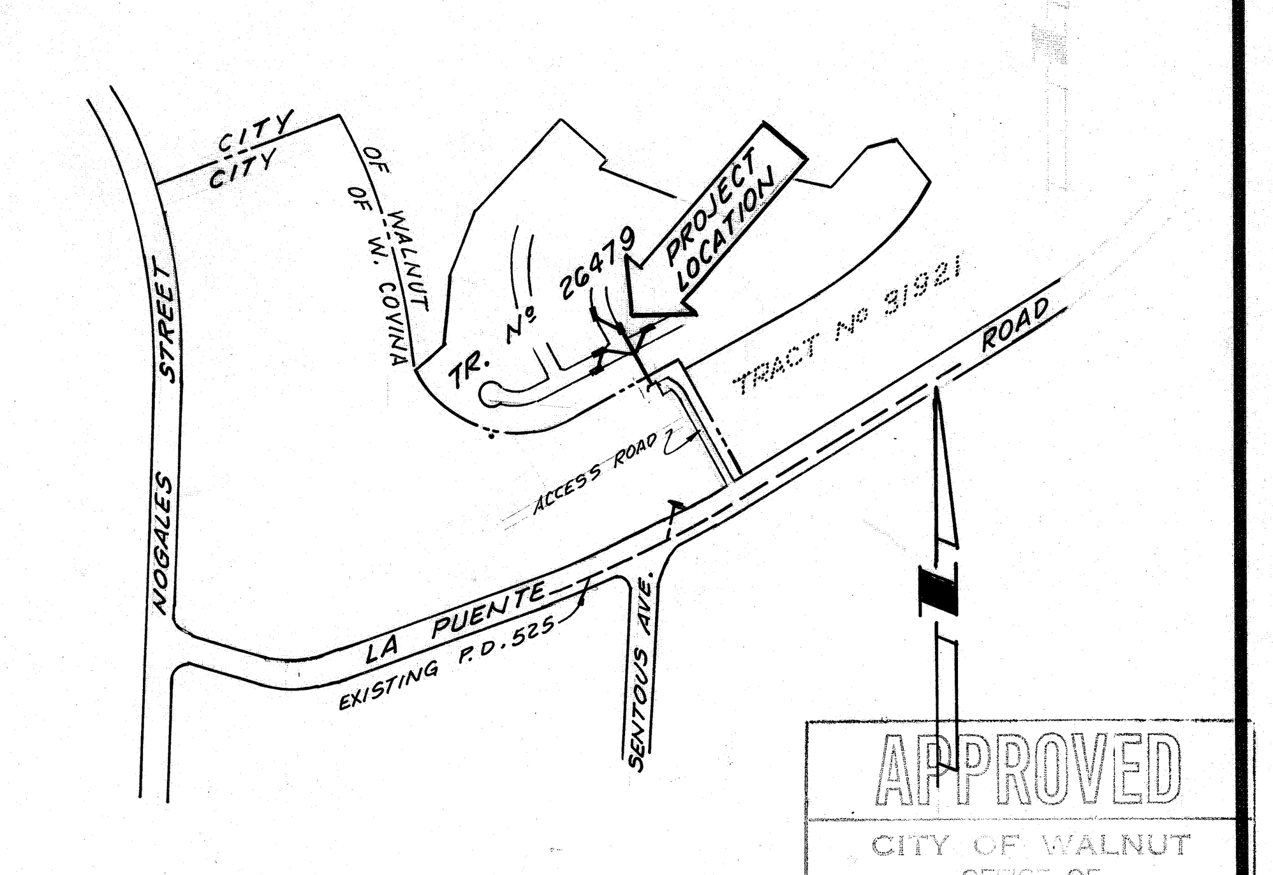
1. ALL PIPE LAID IN OPEN TRENCH SHALL BE BEDDED IN ACCORDANCE WITH L.A. COUNTY ENGINEER CASE Ad BEDDING PER STANDARD D-54.
2. 24 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT INSPECTOR AT 213-223-2111; EXT. 74211, AND CITY ENG'R., 714-595-2279.
3. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECS FOR PUBLIC WORKS CONSTRUCTION & SUPPLEMENT, 1973 EDITION.
4. ALL BACKFILL SHALL BE COMPACTED TO RELATIVE DENSITY OF 90%.
5. ALL STATE AND LOCAL TRENCH SAFETY RULES WILL BE RIGIDLY ENFORCED.
6. THE CONTRACTOR MUST MAINTAIN ALL TRAFFIC SIGNS IN AN ERECT, READILY DISCERNIBLE POSITION AND FREE FROM OBSTRUCTIONS TO MOTORIST'S VISION, AND SHALL RESET SAME IN THE PROPER POSITION UPON COMPLETION OF CONSTRUCTION.
7. EXISTING UTILITIES CROSSING THE STORM DRAIN SHALL BE SUPPORTED PER LACFCD STD. 2-D173 AS DIRECTED BY THE CITY ENGINEER.
8. R.C.P. SHALL BE MANUFACTURED AND INSPECTED IN ACCORDANCE WITH SECTION 207 ~ 2.7, 2.8 AND 2.9 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1973 EDITION).
9. THE CONTRACTOR SHALL FURNISH A LETTER OF CERTIFICATION FROM THE PIPE MANUFACTURER AS TO TEST RESULTS OF PIPE INSTALLED.
10. ALL PIPE LENGTHS SHOWN ARE HORIZONTAL PROJECTIONS, UNLESS OTHERWISE NOTED.
11. ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
12. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615-GRADE 60.
13. THE ENGINEER, VTN, HAS INVESTIGATED ALL AVAILABLE RECORDS OF THE CITY AND OF THE UTILITY COMPANIES INVOLVED, AND ALL KNOWN SUBSTRUCTURES ARE SHOWN HEREON. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL SUBSRUCTURES, WHETHER OR NOT SHOWN HEREON, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR OR REPLACEMENT OF SAID SUBSTRUCTURES DAMAGED BY HIS OPERATIONS IN CONNECTION WITH THE PROSECUTION OF SAID WORK.
14. THIS STORM DRAIN WILL NOT BE ACCEPTED FOR MAINTENANCE UNTIL THE STREETS HAVE BEEN PAVED, MANHOLES BROUGHT UP TO GRADE, AND THE SYSTEM IS CLEANED TO THE SATISFACTION OF THE CITY ENGINEER.
15. ELEVATIONS ARE IN FEET ABOVE U.S.C. & G.S. MEAN SEA LEVEL DATUM OF 1929.

RIP RAP NOTES

ROCK FOR GROUTED RIPRAP SHALL BE GOOD QUALITY BROKEN CONCRETE AND/OR RIVER RUN ROCK. THE SMALLEST DIMENSION SHALL NOT EXCEED 3-INCHES, AND THE LARGEST DIMENSION SHALL NOT EXCEED 18-INCHES. THE LARGEST DIMENSION SHALL NOT EXCEED 4 TIMES THE SMALLEST DIMENSION.

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.

SURFACE ROCKS SHALL BE EMBEDDED FROM 1/2 TO 2/3 THEIR MAXIMUM DIMENSION.



VICINITY MAP
NO SCALE

APPROVED
CITY OF WALNUT
OFFICE OF CITY ENGINEER
2/21/75

GRADE APPROVED ONLY SUBJECT TO REVISION BY ... NOT GOOD FOR BUILDING ELEVATIONS
L.A. CO. RD. DEPT.

PLANS PREPARED BY:
VTN consolidated, inc.
ENGINEERS ARCHITECTS PLANNERS 2301 CAMPUS DRIVE, IRVINE, CALIFORNIA
SIGNATURE — CIVIL ENGINEER — R.E. No. 17348

REVISIONS

Revised By	RE. No.	Revised By	RE. No.	Revised By	RE. No.
Approved	Date	Approved	Date	Approved	Date

~~LOS ANGELES COUNTY ROAD DEPARTMENT~~
CITY OF WALNUT

STORM DRAIN

MISCELLANEOUS TRANSFER DRAIN Nº 582

TR. 26479

SHT 1 of 1 SHTS

77-286

L.A. Co. Road Dept. Sheet #2 7-72
Southern Calif. Blueprint Co.

WPC 139

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