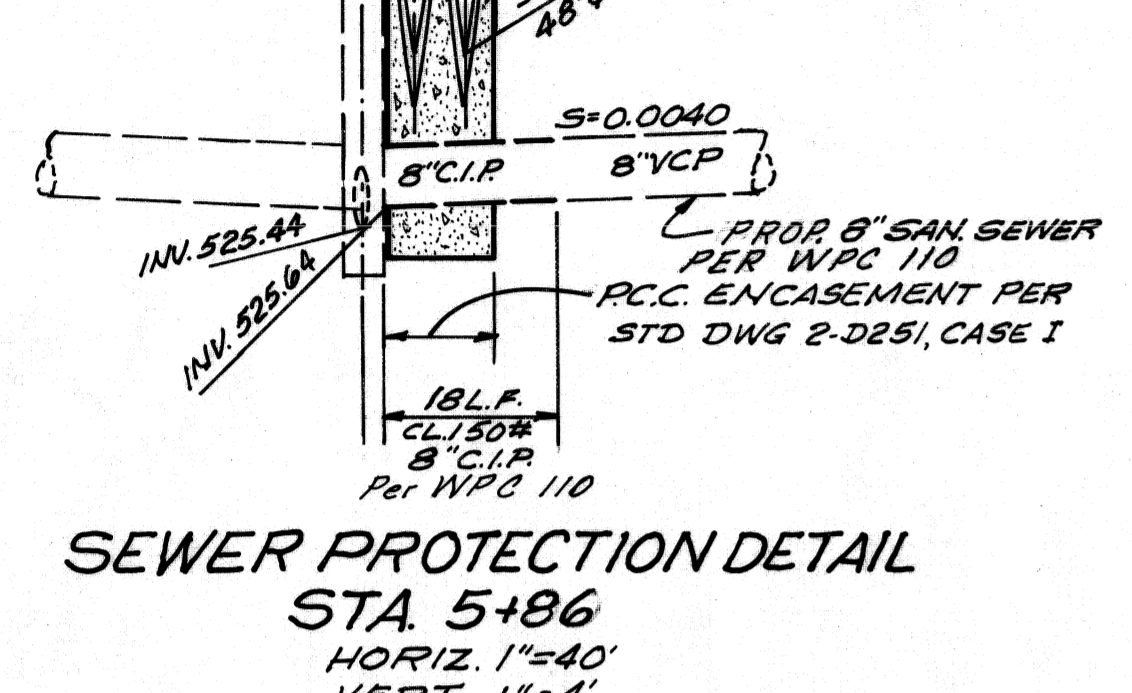


CROSS SECTION OF DUAL 48" C.I.P.
FROM STA. 1+31.23 TO STA. 1+21.0
SCALE 1"=40'



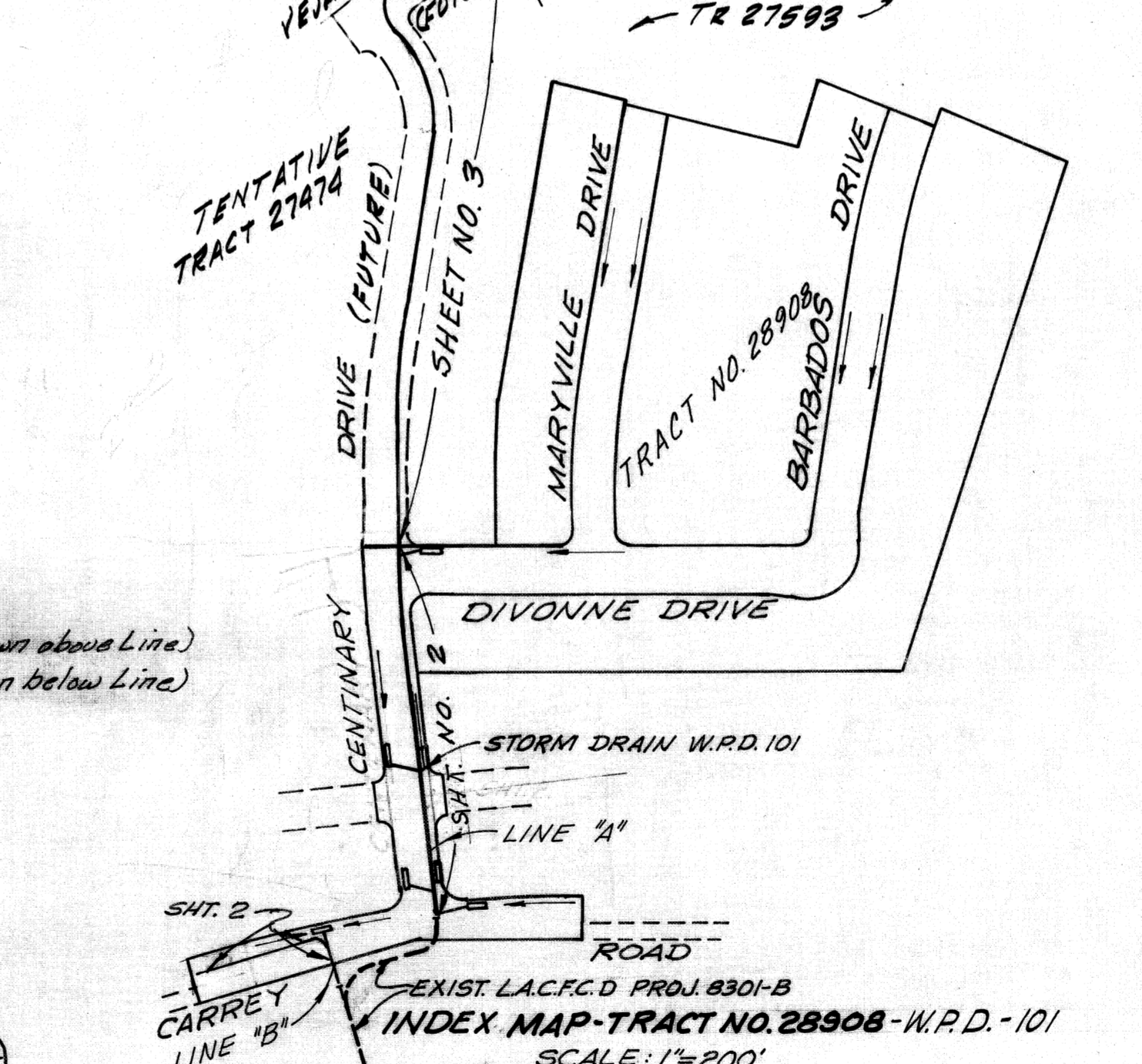
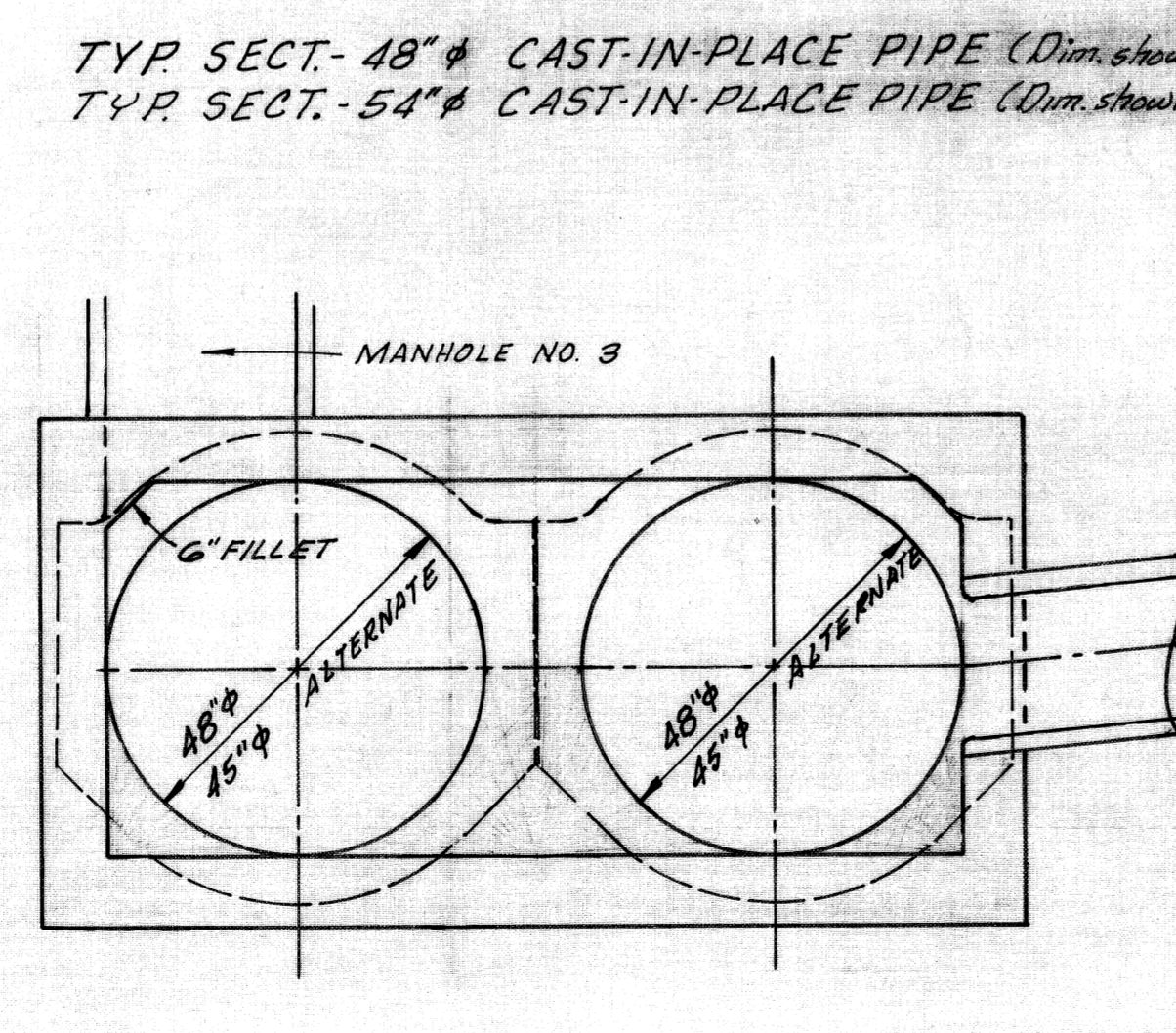
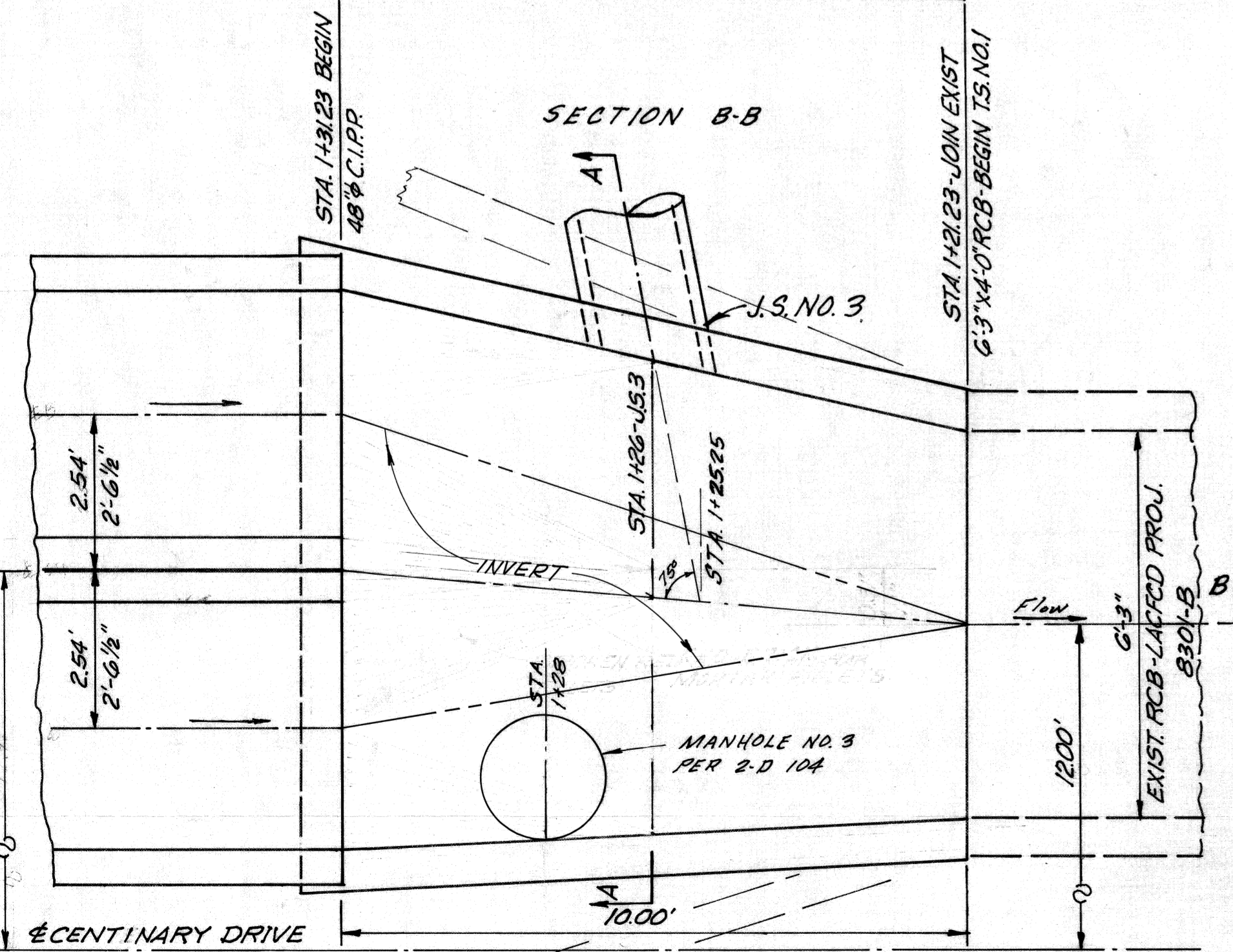
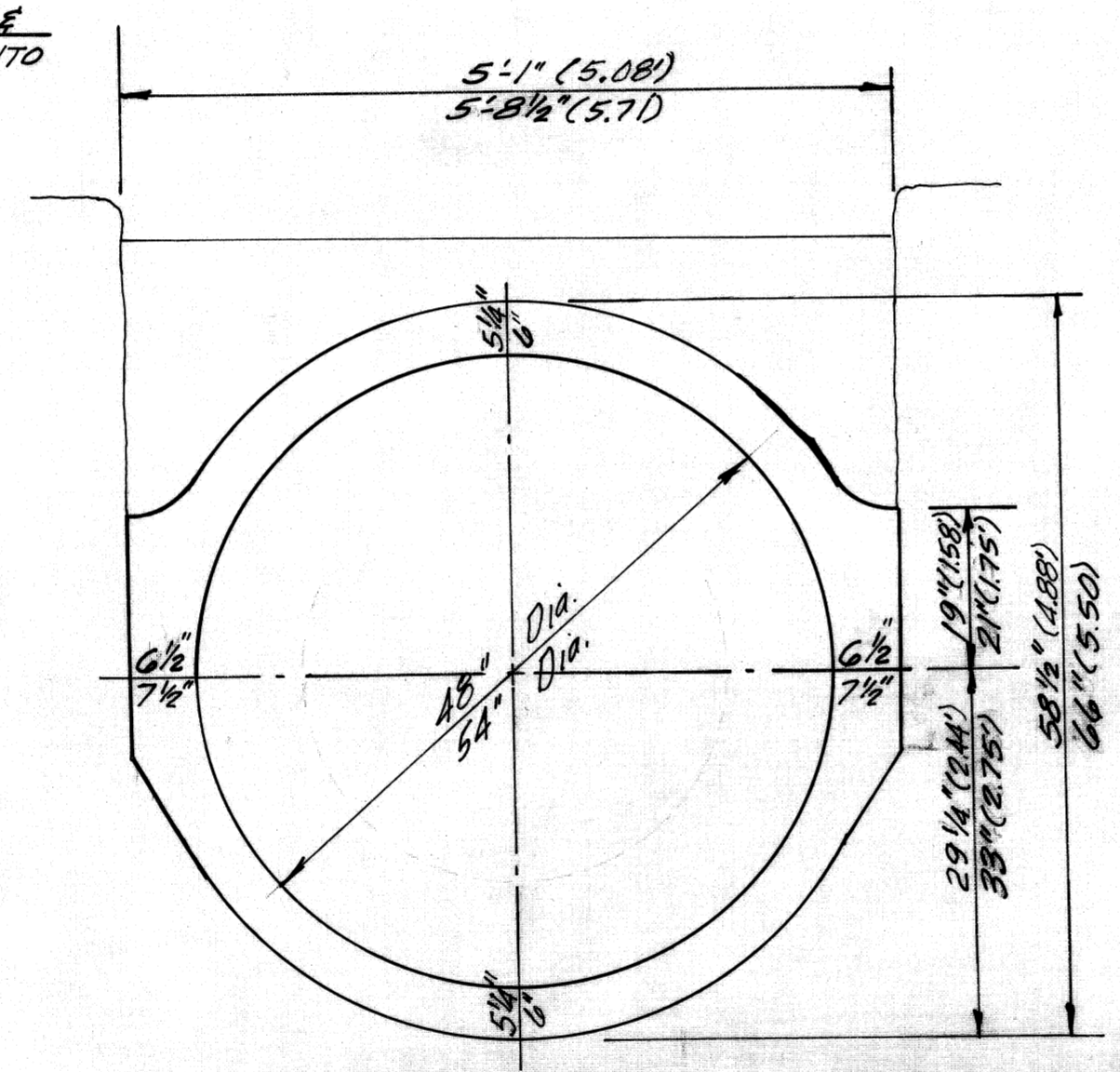
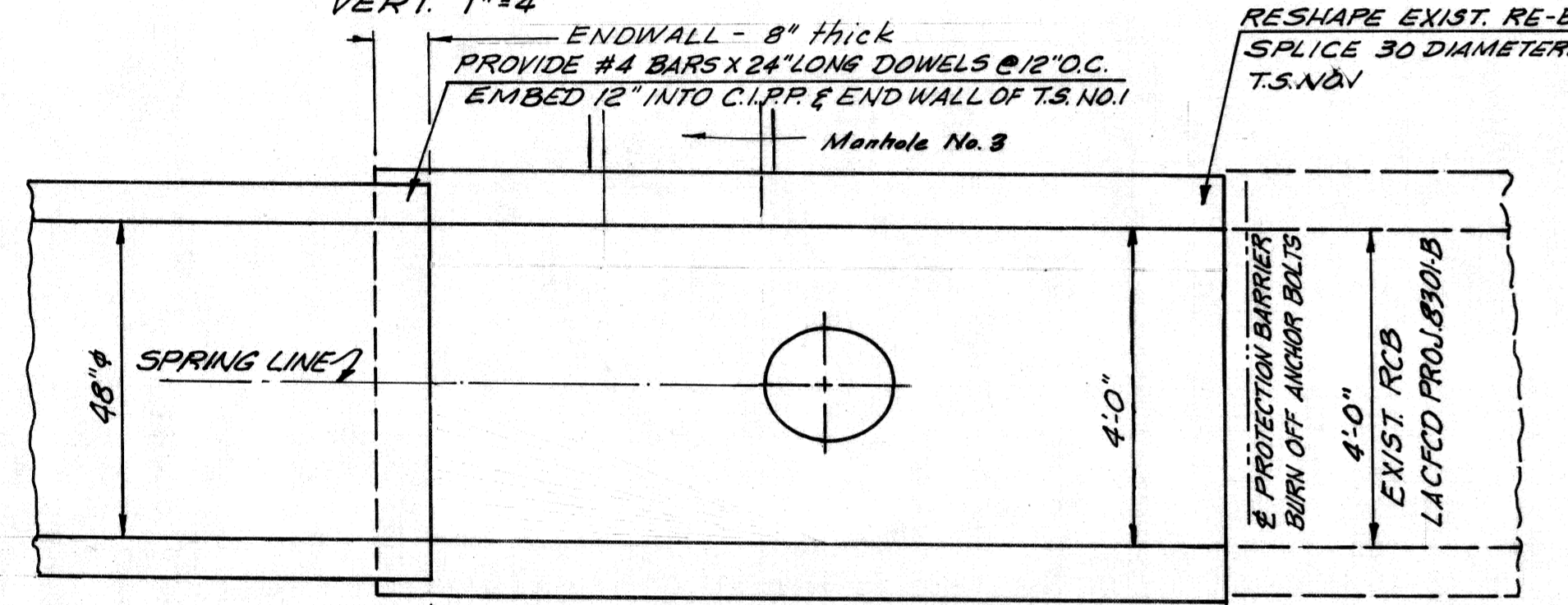
SEWER PROTECTION DETAIL
STA 5+86
HORIZ. 1"=40'
VERT. 1"=4'

- CONCRETE & REINFORCEMENT NOTES:**
1. ALL CONCRETE SHALL BE 3000 POUNDS PER SQUARE INCH PORTLAND CEMENT CONCRETE, EXCEPT CONCRETE USED FOR CAST-IN-PLACE PIPE SHALL BE 4000 POUNDS PER SQUARE INCH PORTLAND CEMENT CONCRETE, 28 DAY COMP. STRENGTH.
 2. ALL REINFORCEMENT SHALL BE INTERMEDIATE GRADE AND SHALL CONFORM WITH A.S.T.M. A-1502T.
 3. DIMENSIONS FROM FACE OF CONCRETE TO STEEL ARE TO CENTER OF BAR UNLESS OTHERWISE SHOWN.
 4. LONGITUDINAL STEEL SHALL BE CONTINUOUS AND EXTEND THRU ALL CONSTRUCTION JOINTS AND AROUND CORNERS.
 5. ALL STEEL THAT IS TO BE CONTINUOUS SHALL HAVE A MINIMUM LAP AT SPLICES OF 30 BAR DIAMETERS.
 6. UNLESS OTHERWISE SHOWN CONCRETE DIMENSIONS SHALL BE MEASURED VERTICALLY OR HORIZONTALLY & PARALLEL OR AT RIGHT ANGLES (OR RADIAL) TO THE CENTERLINE OF CONSTRUCTION.
 7. ALL R.C.P. SHALL BE EMBEDDED A MINIMUM OF 5 INCHES INTO HEADWALLS OR OTHER STRUCTURES.
 8. TRANSVERSE CONSTRUCTION JOINTS IN WALLS & SLABS SHALL BE IN THE SAME PLANE. NO STAGGERING OF JOINTS WILL BE PERMITTED.
 9. THE TRANSVERSE REINFORCING STEEL SHALL TERMINATE 2 INCHES FROM THE CONCRETE SURFACES UNLESS OTHERWISE SHOWN.
 10. FINISH ALL EXPOSED SURFACES WITH 3/4" CHAMFER.
 11. ALL STEEL SHOWN ADJACENT TO A FACE OF CONCRETE SHALL BE PLACED 2 1/2 INCHES FROM THE CONCRETE FACE UNLESS OTHERWISE SHOWN.

- GENERAL NOTES:**
1. ALL ELEVATIONS ARE IN FEET ABOVE U.S.G.S. MEAN SEA LEVEL DATUM OF 1929
 2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1970 EDITION, AND SHALL BE PROSECUTED ONLY IN THE PRESENCE OF THE CITY ENGINEER & L.A.C.F.C.D. INSPECTOR UNLESS OTHERWISE NOTED.
 3. APPROVAL OF THIS PLAN BY THE CITY ENGINEER DOES NOT CONSTITUTE A REPRESENTATION TO THE ACCURACY OF THE LOCATION, EXISTENCE, OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY, PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT.
 4. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER BY TELEPHONE AT (213) 333-1291 EXT. AT LEAST 24 HOURS PRIOR TO STARTING ANY WORK UNDER THIS CONTRACT.
 5. ALL R.C.P. SHALL BE BEDDED IN ACCORDANCE WITH CASE A-4 PER L.A. CO. ENGR STD DWG NO. D-54, UNLESS OTHERWISE SPECIFIED.
 6. PERMITS SHALL BE OBTAINED FROM THE CITY OF WALNUT & L.A.C.F.C.D. AND WILL BE SUBMITTED TO THE INSPECTOR PRIOR TO STARTING CONSTRUCTION WITHIN THEIR R/W.
 7. 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 2 FEET ABOVE THE TOP OF PIPE ELEV. OR FINISH SURFACE ELEV. WHICHEVER IS LESS.
 8. ALL FILL AND BACKFILL AROUND CLOSED CONDUITS IN STREET RIGHTS OF WAY SHALL BE BROUGHT UP TO TO THE SUBGRADE OF THE ROAD OR 2 FEET ABOVE THE TOP OF CONDUIT, WHICHEVER IS LESS. THE CITY SHALL INSPECT ALL BACKFILL & FILL ABOVE THE AFORESAID LIMITS.
 9. 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 (333-1291)
 10. THE STORM DRAIN WILL NOT BE ACCEPTED FOR MAINTENANCE UNTIL THE STREETS HAVE BEEN PAVED, MANHOLE COVERS SET TO FINISHED GRADE, AND THE SYSTEM IS CLEANED TO THE SATISFACTION OF THE CITY ENGINEER.
 11. ALL CATCH BASINS AND CONNECTOR PIPES BETWEEN BASINS IN SERIES TO BE INSPECTED BY THE CITY ENGINEER.
 12. ALL MANHOLES NOT IN PAVED STREETS SHALL BE PROVIDED WITH LOCKING DEVICES. SEE NOTE G OF L.A.C.F.C.D. STD. DWG. 2-D181.
 13. CONTRACTORS ATTENTION IS DIRECTED TO SECTION 7-10.4.1 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION IN REGARD TO CALIFORNIA STATE SAFETY ORDERS.
 14. THE CONTRACTOR SHALL CONFORM TO THE "MINIMUM PUBLIC SAFETY REQUIREMENTS" AS SHOWN IN L.A. CO. ENGR. STD. DWG. NO. S-2.
 15. DISTRICT AREA INSPECTOR IS TO BE NOTIFIED BY TELEPHONE BEFORE CONSTRUCTION IS STARTED (223-2111 EXT. 7421) R.C.P. SHALL BE MANUFACTURED AND INSPECTED IN ACCORDANCE WITH SPEC. G ANNEX "D" OF THE L.A.C.F.C.D. STANDARD SPECIFICATIONS.
 16. ALL STATIONS SHOWN ARE ON & OF STORM DRAIN UNLESS OTHERWISE SHOWN ON PLAN.
 17. ALL EXISTING UTILITIES SHALL BE MAINTAINED IN PLACE BY CONTRACTOR UNLESS OTHERWISE NOTED.
 18. ALL WORK WITHIN L.A.C.F.C.D. RIGHT-OF-WAY SHALL CONFORM TO PERMIT.
 19. ALL CONNECTING PIPE STUBS FOR FUTURE CATCH BASINS SHALL HAVE ENDS PLUGGED WITH 8" OF CONCRETE OR BRICK AND MORTAR.

- CAST IN PLACE PIPE NOTES:**
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH L.A.C.F.C.D. SPECIFICATIONS FOR CAST IN PLACE NON-REINFORCED CONCRETE PIPE AND GENERAL NOTES, AT ABOVE RIGHT. CAST IN PLACE PIPE SPECIFICATIONS SHALL HAVE PRECEDENCE OVER THE STANDARD STORM DRAIN SPECIFICATIONS.
 2. BACKFILL, OTHER THAN A THIN MEMBRANE FOR CURING, SHALL NOT BE PLACED OVER CAST IN PLACE PIPE UNTIL 28 DAYS AFTER THE CONCRETE THEREIN HAS BEEN POURED, OR UNTIL TEST SAMPLES INDICATE THAT THE CONCRETE THEREIN HAS DEVELOPED A STRENGTH OF 4000 PSI IN COMPRESSION.

- ALTERNATE RCP MAINLINE NOTES:**
1. PRECAST 45" RCP, 1200-D, MAY BE USED AS AN ALTERNATE TO THE 48" C.I.P. PIPE AS SHOWN HEREON & 54" RCP, 1200-D, FOR 54" C.I.P.
 2. DUAL 45" RCP'S SHALL BE LAID WITH A MINIMUM CLEARANCE OF 8" AND AND BACKFILLED TO SPRING LINE WITH SAND.



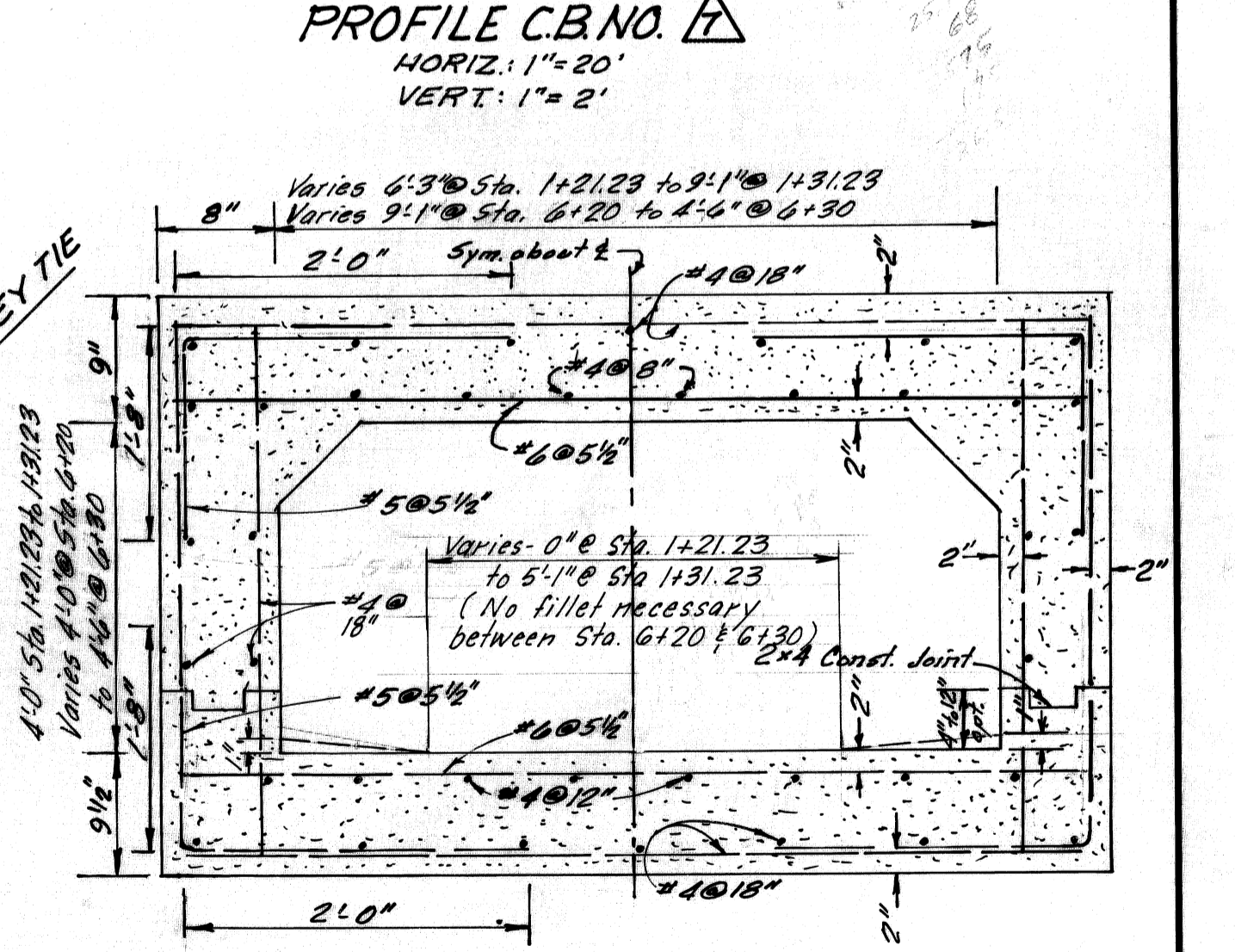
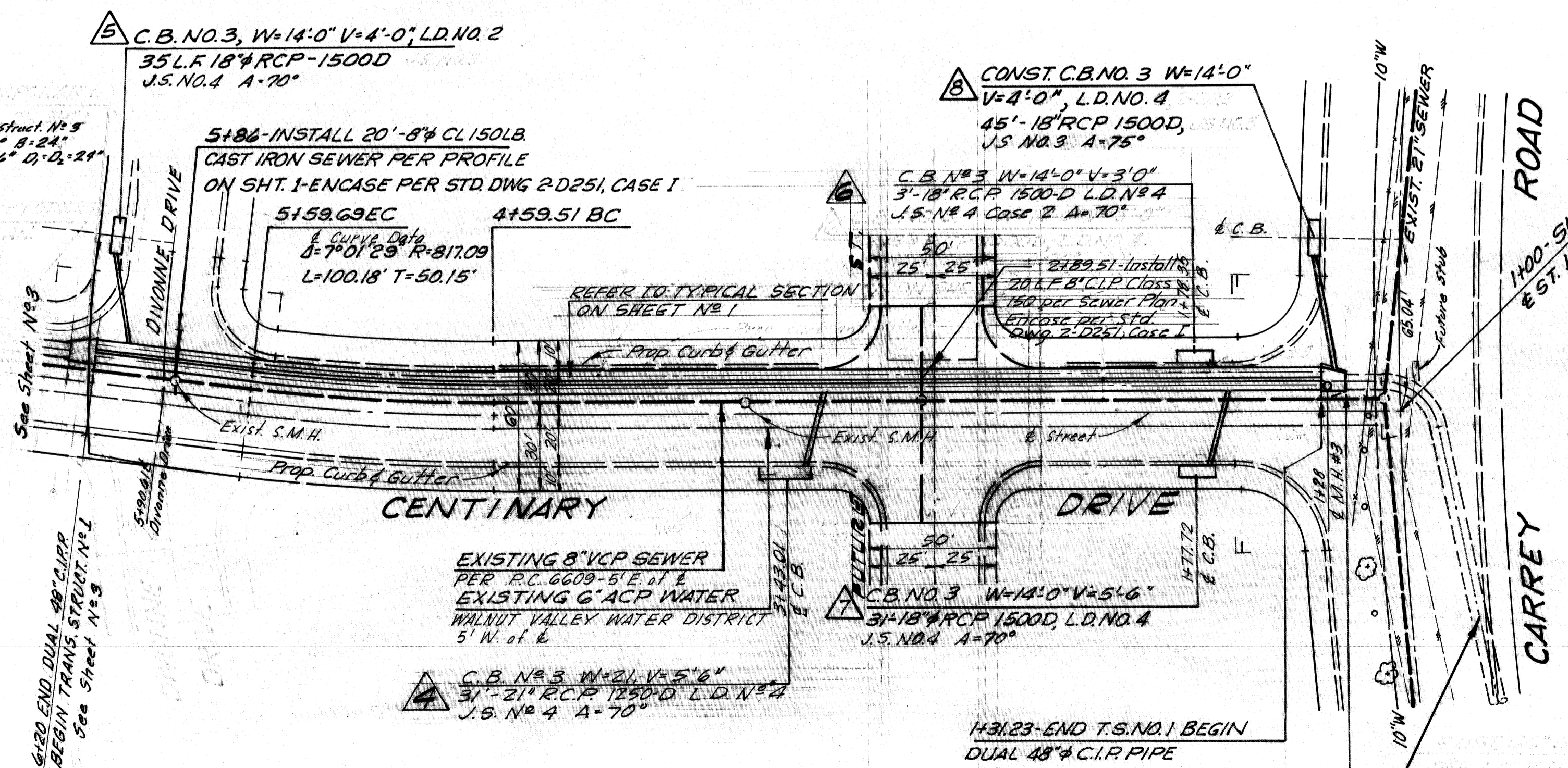
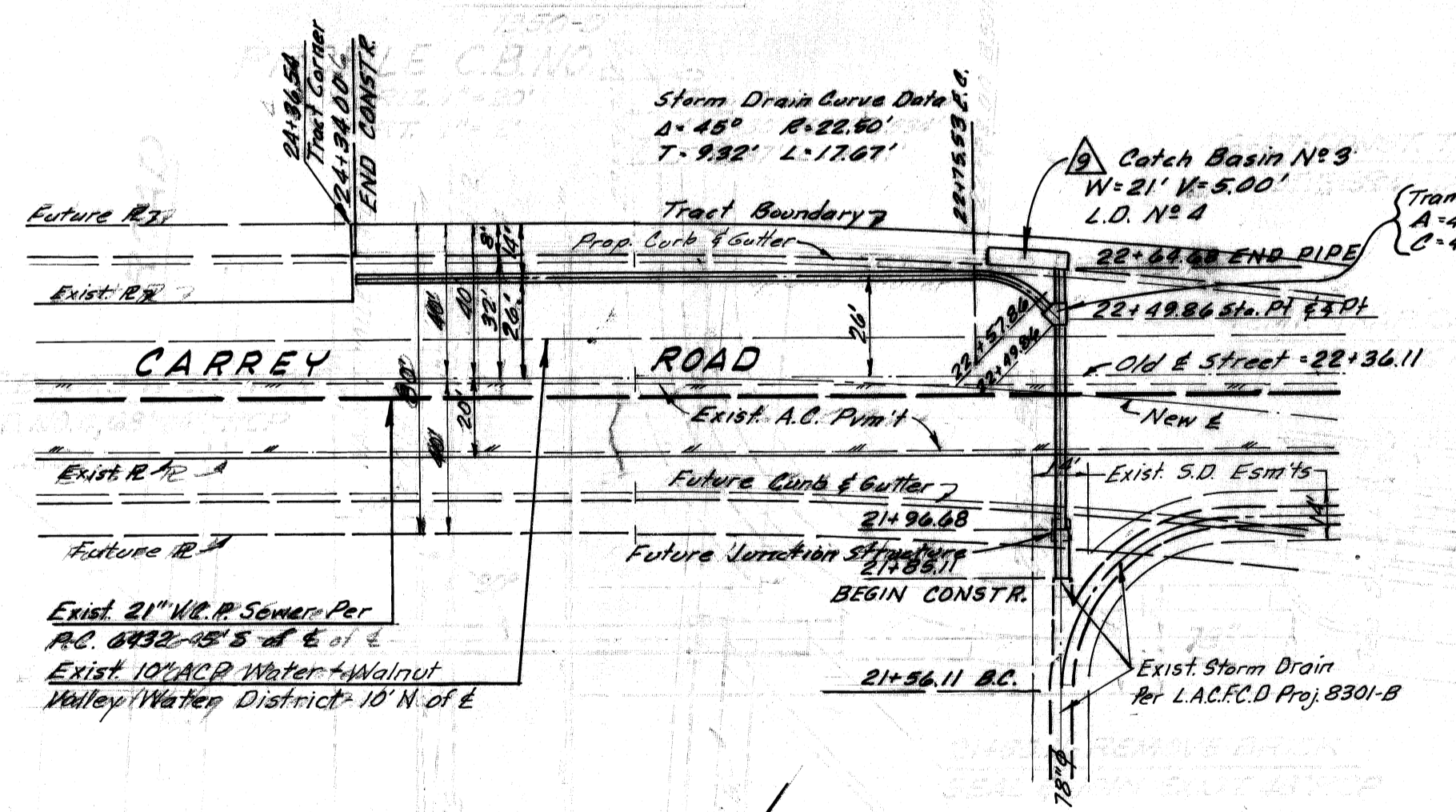
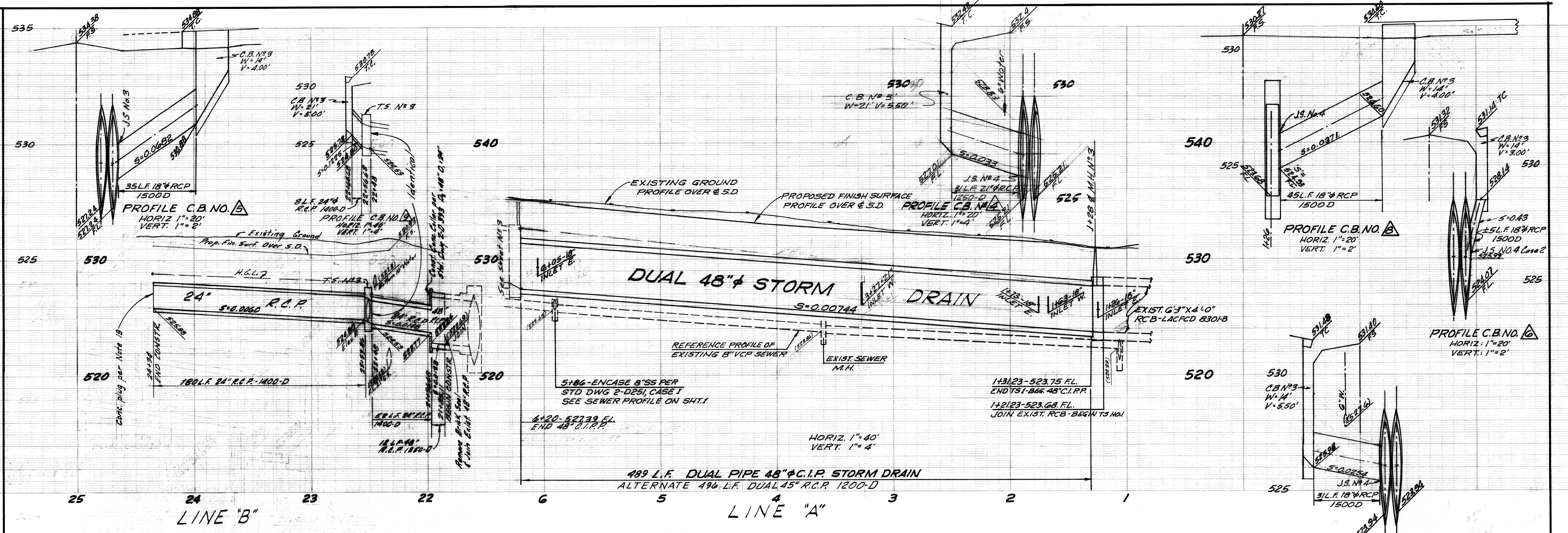
HYDRAULIC DATA		
STA.	TO STA.	10 YEAR Q-CFS
2156.11-8301-B	2156.11-8301-B	308
1+21.33	23+60=1421.33	276
1+63	1+73	247
1+73	3+27	235
3+27	6+105	233
6+05	6+40	207
6+40	14+56	191
14+56	16+87	161
21+85	22+48	81
22+58	24+34	16

BENCH MARK: S.G. 1785
L. ET. IN CONC. WALK TO HOUSE #221 LEMON AVE. 192' WLY & 250' SLY & CARRY ROAD MARKED "B.M."
ELEV. 534.722 (COVINA 1960)

LIST OF STANDARD DRAWINGS

AGENCY	ITEM	DWG. NO.
L.A.C.F.C.D.	CATCH BASIN NO.3	2-D163
"	DETAIL CATCH BASIN OPENINGS	2-D232
"	CATCH BASIN PIPE CONNECTION	2-D224
"	LOCAL DEPRESSION NO.2	2-D88
"	" NO.4	2-D415
"	TRANSITION STRUCTURE NO.4	2-D198
"	JUNCTION STRUCTURE NO.3	2-D191
"	" NO.4	2-D193
"	PIPE COLLAR	2-D393
"	SEWER PROTECTION	2-D251
"	PIPE BEDDING	D-54
"	TRENCH SAFETY	S-2
"	SEWER SADDLE CONNECTION	S-28
L.A.C.F.C.D.	TRANSITION STRUCTURE NO.1	2-D235
"	MANHOLE NO. 3	2-D104

CITY OF WALNUT			
MISCELLANEOUS TRANSFER DRAIN NO. 298 W.P.D. - 101 IN TRACT NO. 28908			
EVANS ASSOCIATES INC. 1543 WEST GARVEY AVE WEST COVINA, CALIF. Ronald P. [Signature] Jan. 72 R.C.E. No. 12425	Submitted By: Date: Approved: Date: By: Ronald P. [Signature] App. Date: [Signature] 10/24/72	SCALE: 1"=40' DESIGN: R.N. DRAWN: E.F. CHECKED: R.N.	SHEET NO. 1 OF 3 PROJECT NO.



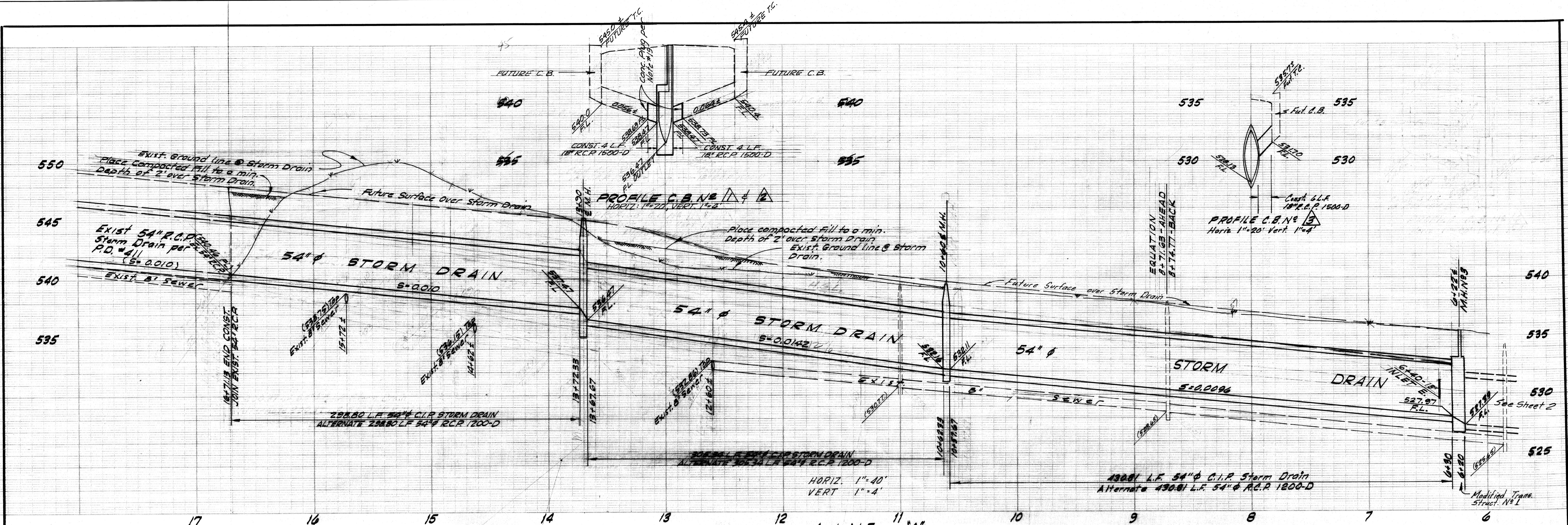
APPROVED BY:
E. J. Johnson 3-24-72
 CITY ENGINEER

142123-BEGIN MOD. T.S. NO. 1 - SEE DET. ON SHT. 1 - REMOVE EXIST. INLET STR. JOIN EXIST. 6'-3" X 4'-0" RCB SECTION = STA. 23+60 OF L.A.C.F.C.D. PROJECT NO. 8301-LINE B

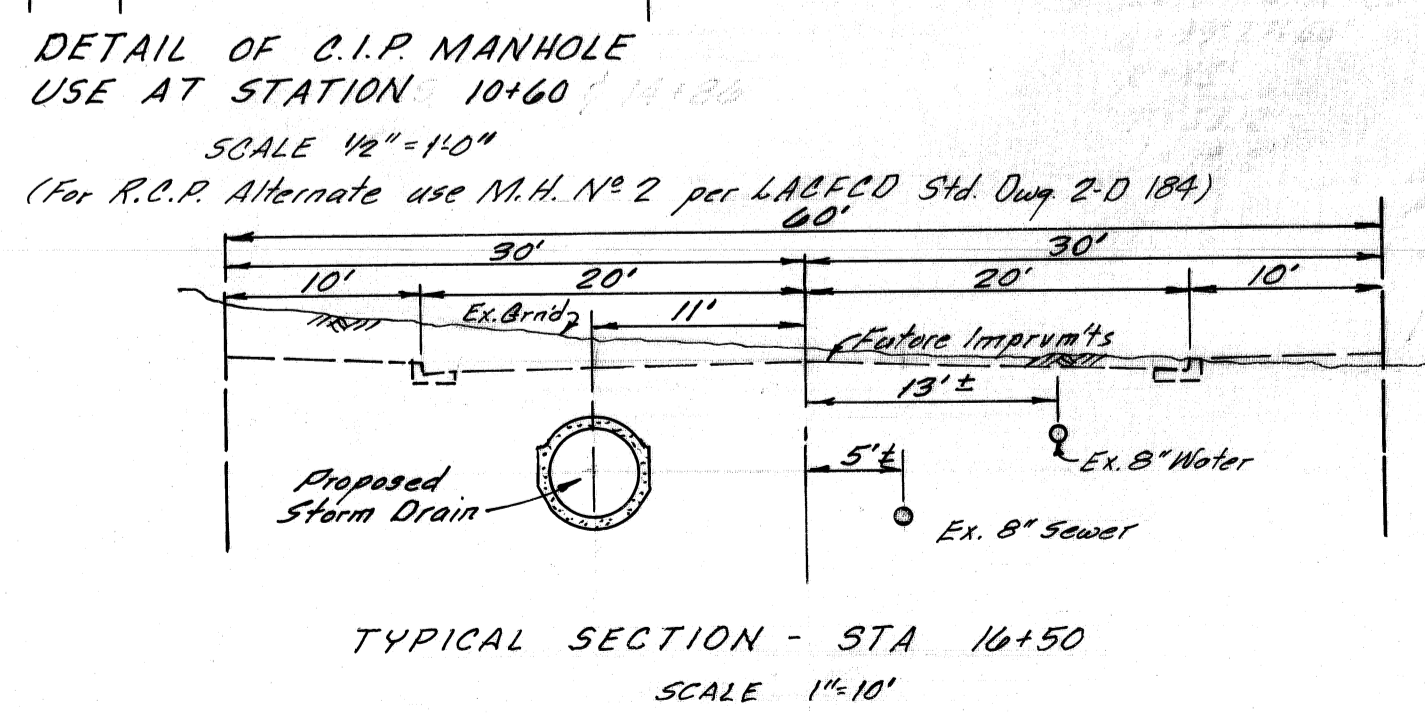
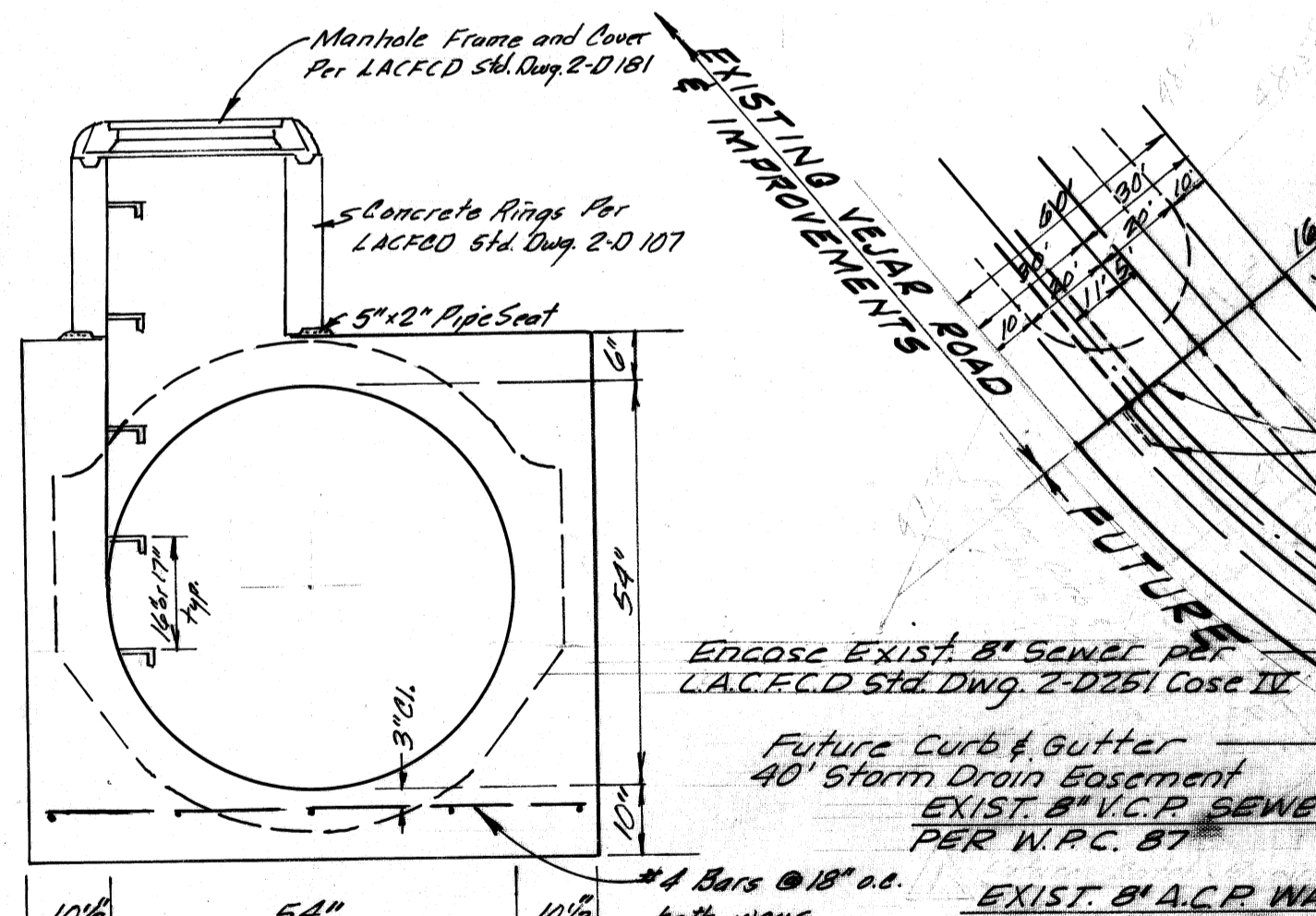
CITY OF WALNUT
 MISCELLANEOUS TRANSFER DRAIN
 NO. 298 W.P.D. - 101
 IN
 TRACT NO. 28908
EVANS & ASSOCIATES, INC.
 1543 W. GARVEY AVE. WEST COVINA, CAL.
Ronald Wittinghouse
 DATE: Jan., 1972 R.C.E. NO. 12425

APPROVED BY:

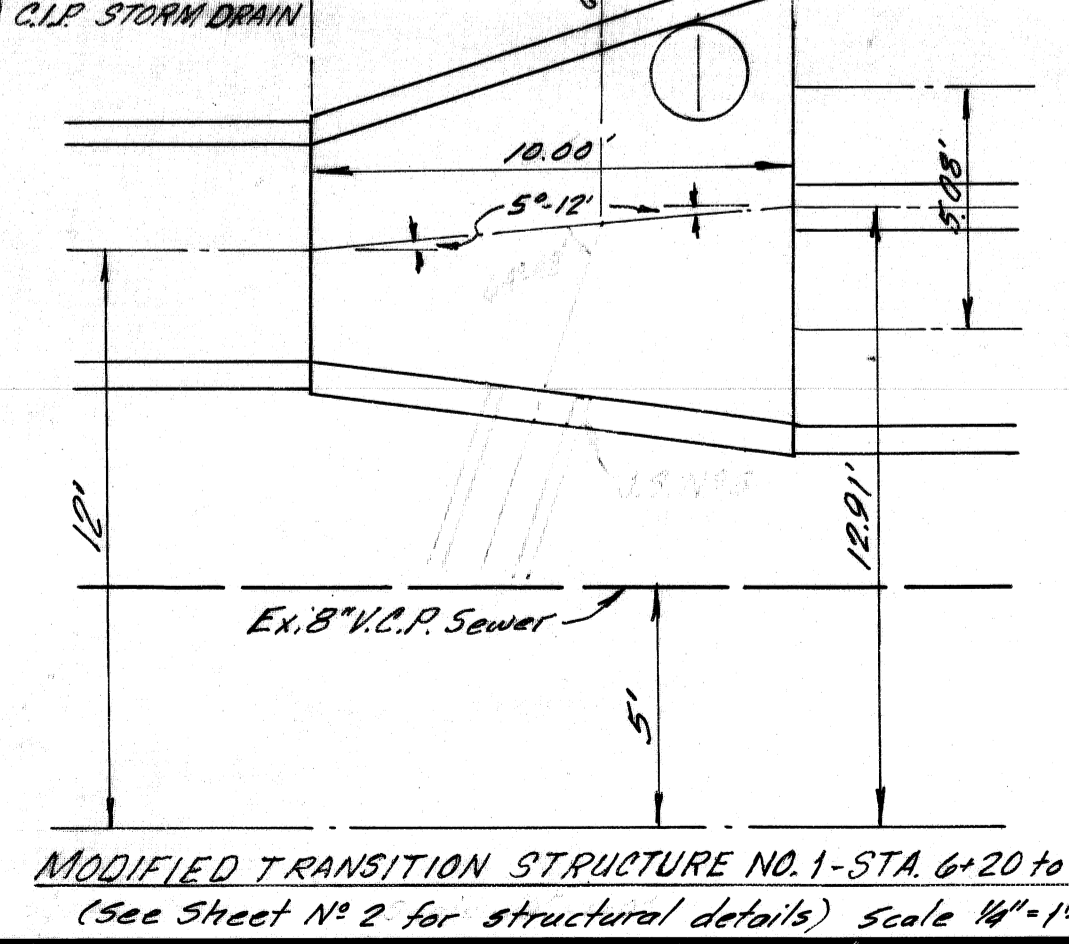
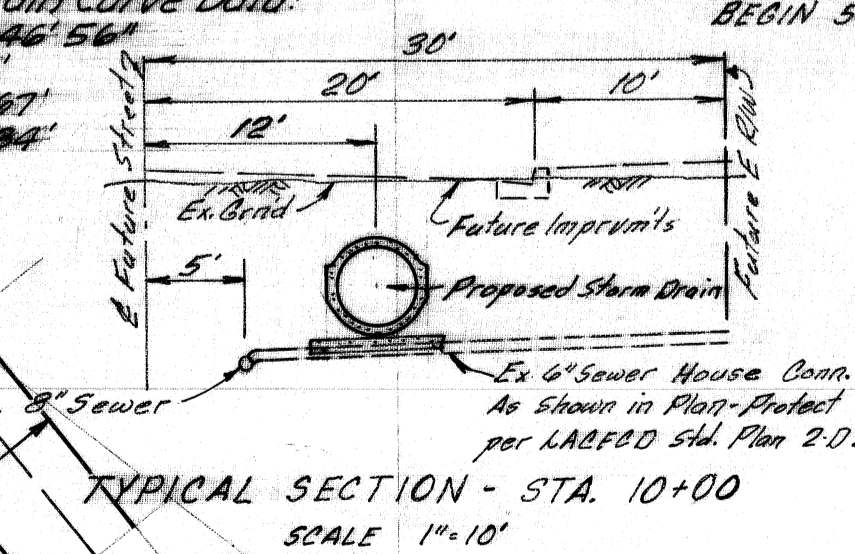
 CITY ENGINEER
 DATE: _____ SHEET 2 OF 3



LINE 11 "A"
 Note: Existing Sewer House Connections (67) at Sta. 6+50, 7+20, 7+80, 8+40, 9+20, 9+80, 10+50, 11+12 shall be protected per L.A.C.F.C.D. Std. Dwg. 2-D 251



- * NOTE:
- (1) STORM DRAIN FLOW LINE ELEV. MAY BE RAISED 6" MAX TO ELIMINATE CONFLICT WITH HOUSE CONNECTIONS IF NECESSARY
 - (2) EXIST. WATER LINE TO BE ABANDONED IN PLACE
 - (3) SANITARY SEWER AND WATER LINE TO BE RECONSTRUCTED AS PART OF TR. NO 27474.



APPROVED BY:		REVISIONS	
E. J. [Signature] 3-20-72 CITY ENGINEER		1. CHANGE MH STA. FROM 13+70 TO 13+30. 1-8-73	
CITY OF WALNUT			
MISCELLANEOUS TRANSFER DRAIN NO. 298 W.P.D - 101 FOR TRACT NO 28908			
DATE:	Submitted By:	SHEET NO.	
SCALE: 1"=40'	Date:	3 OF 3	
DESIGN: R.N.	Approved:	PROJECT NO.	
DRAWN: R.N.	Date:		
CHECKED: R.N.	District Dwg. No.		
	Transferred:		