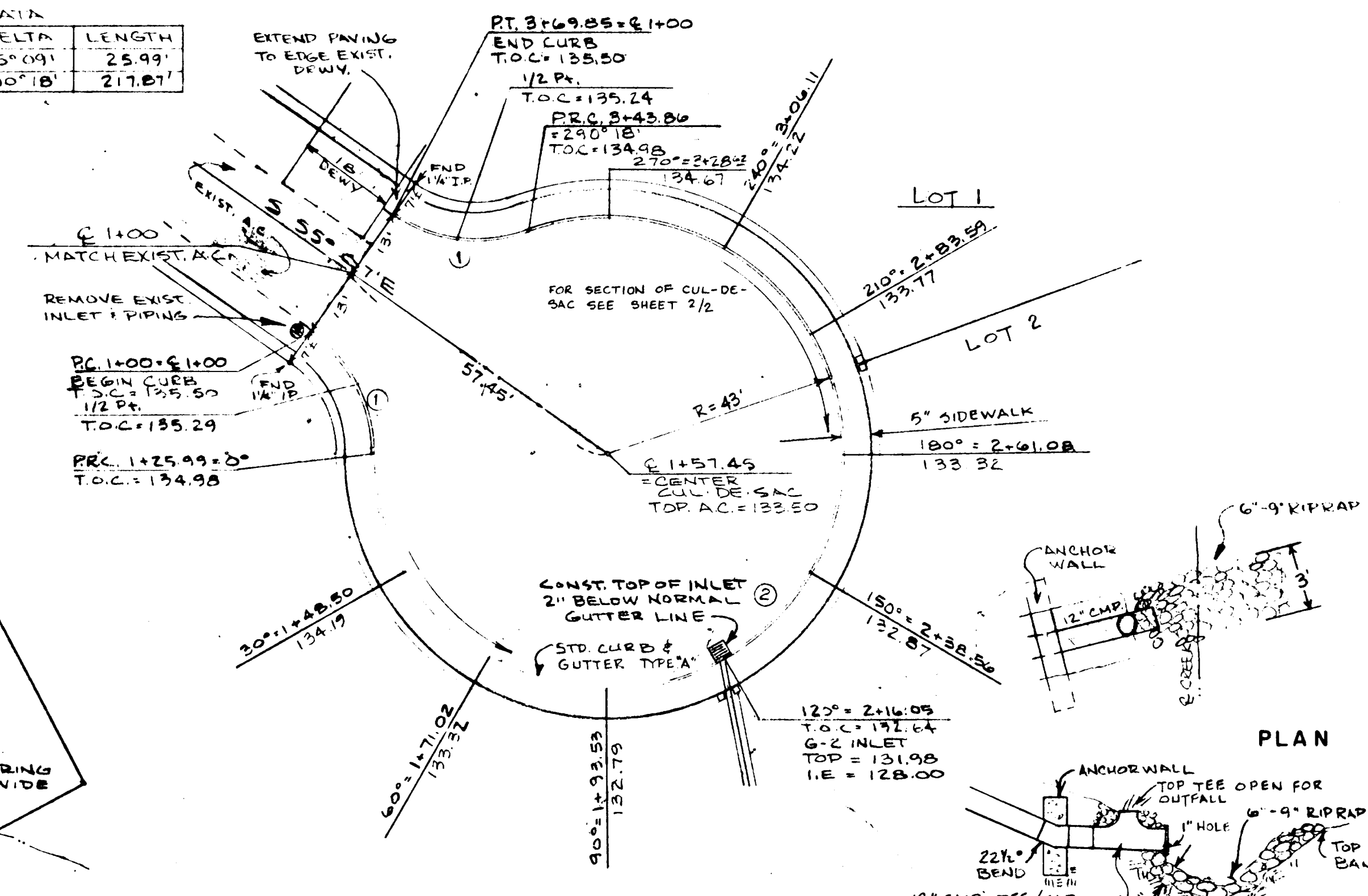
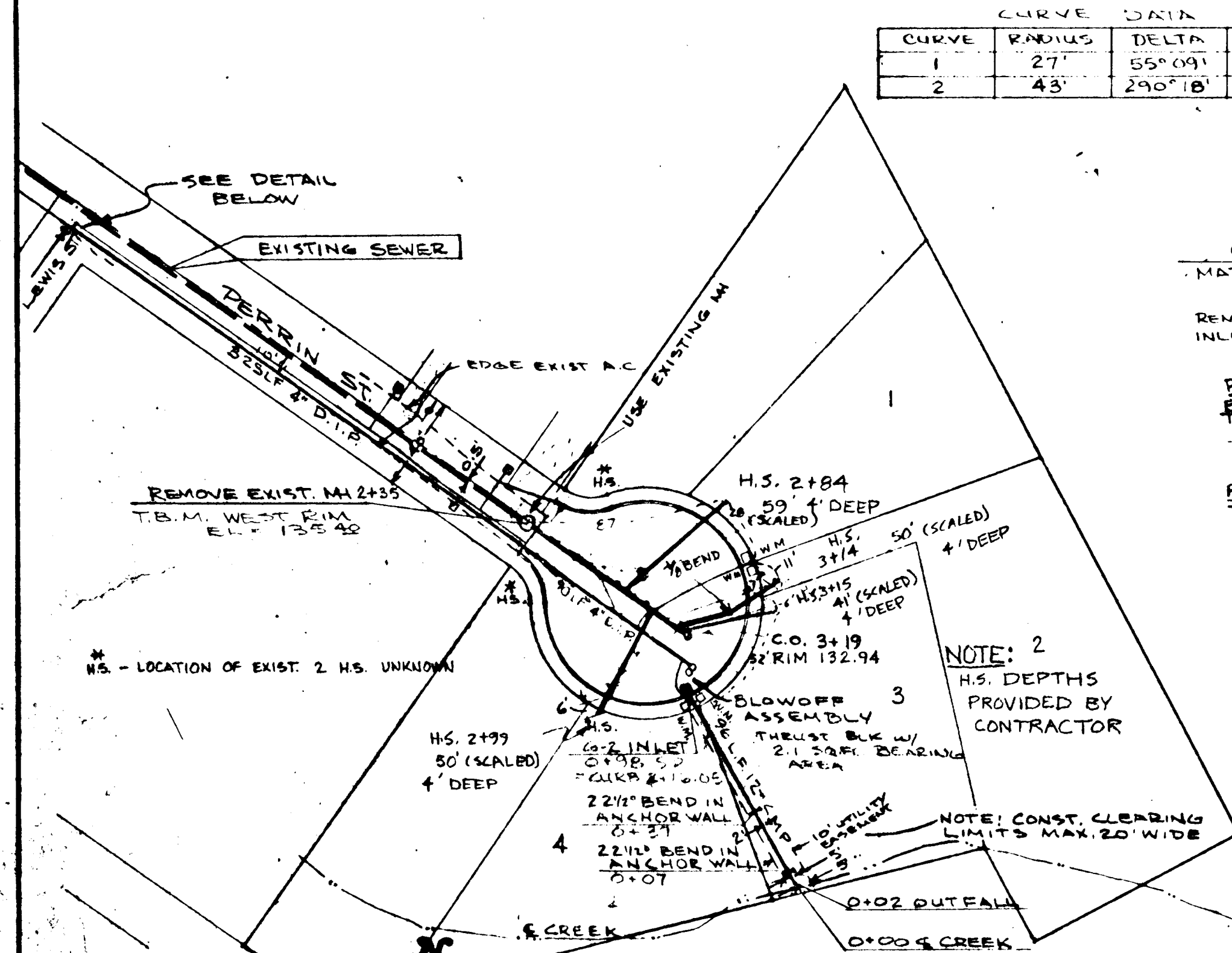


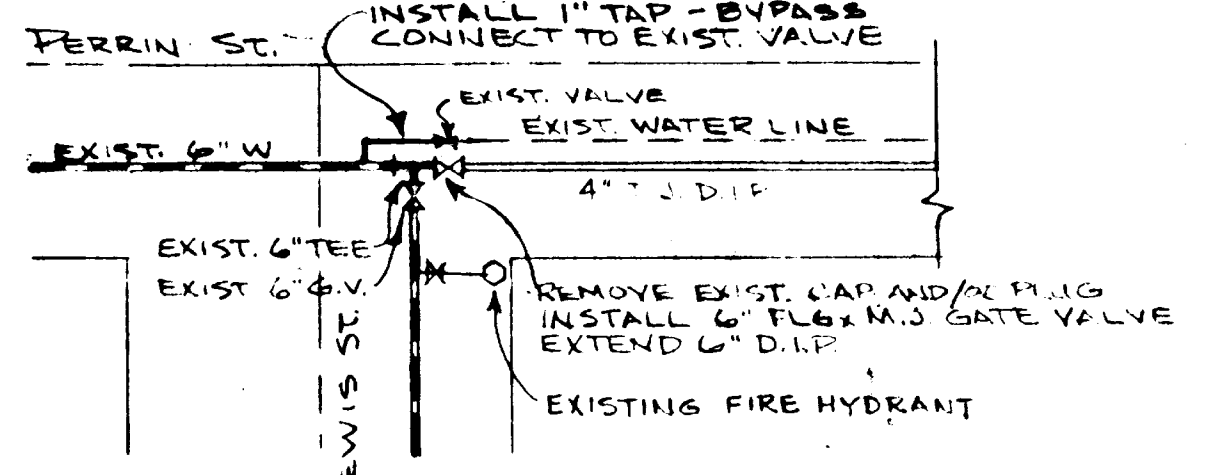
PERRIN ST.

CURVE	RADIUS	DELTA	LENGTH
1	27'	55°09'	25.99'
2	43'	290°18'	217.81'



CUL-DE-SAC CURB DETAIL

OUTFALL SECTION



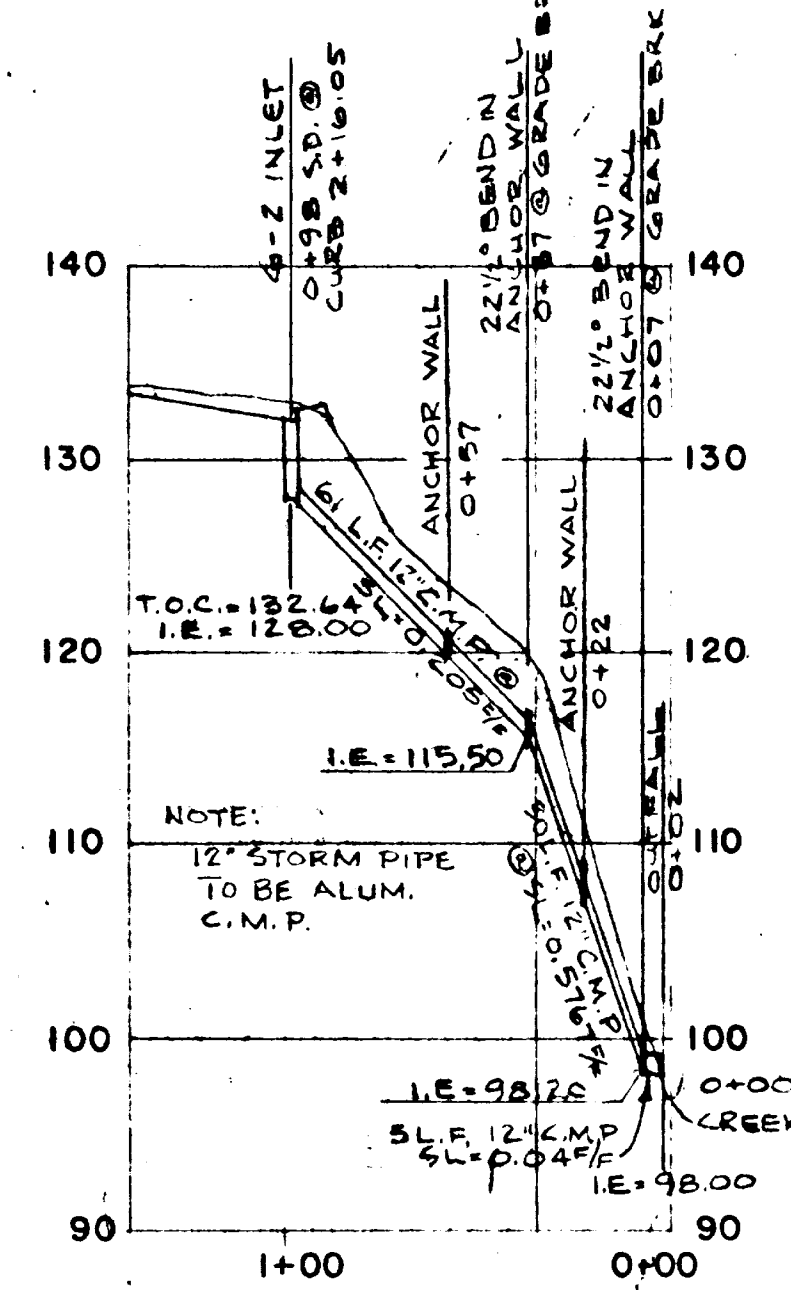
WATERLINE CONNECTION



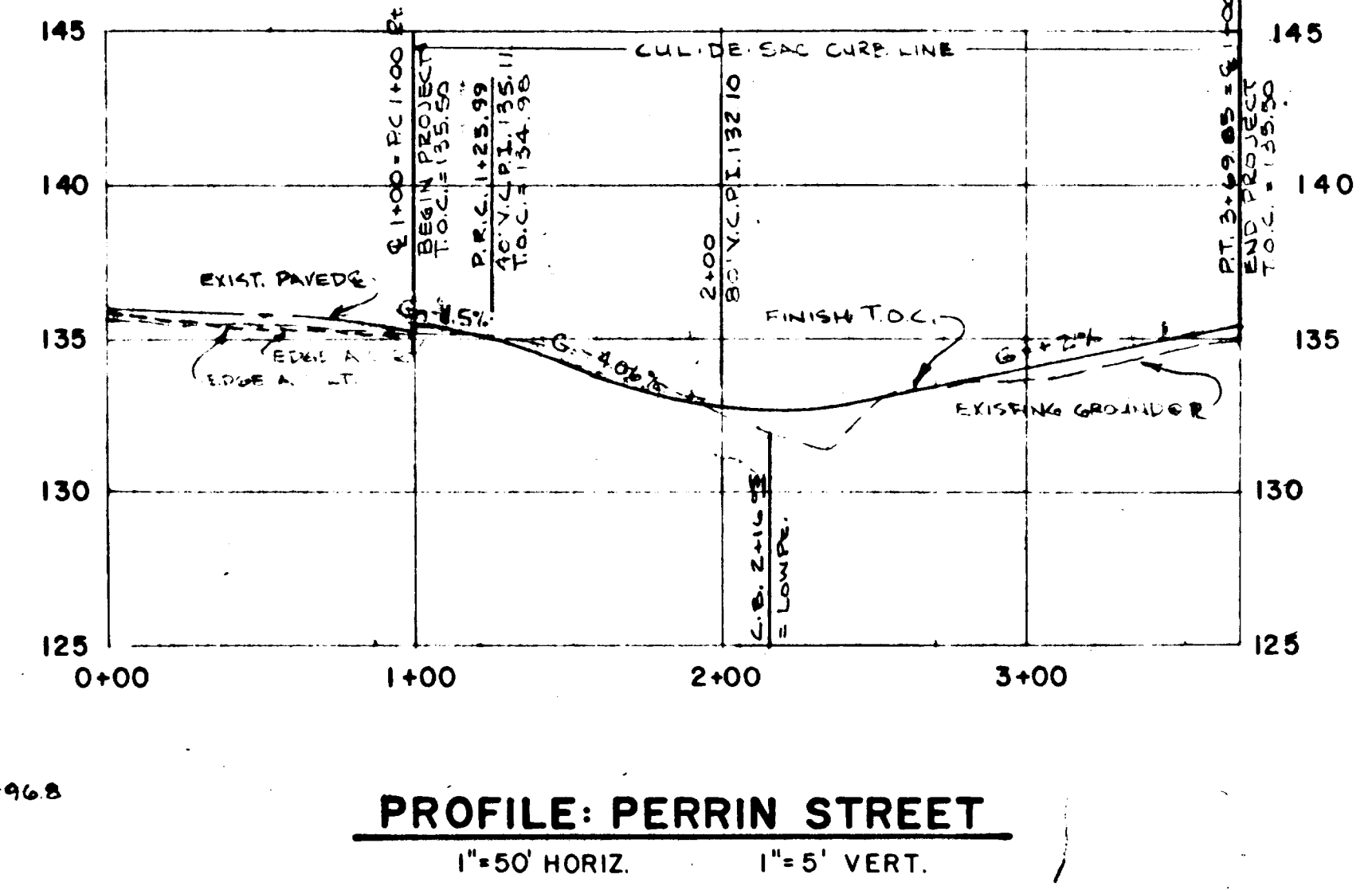
VICINITY MAP



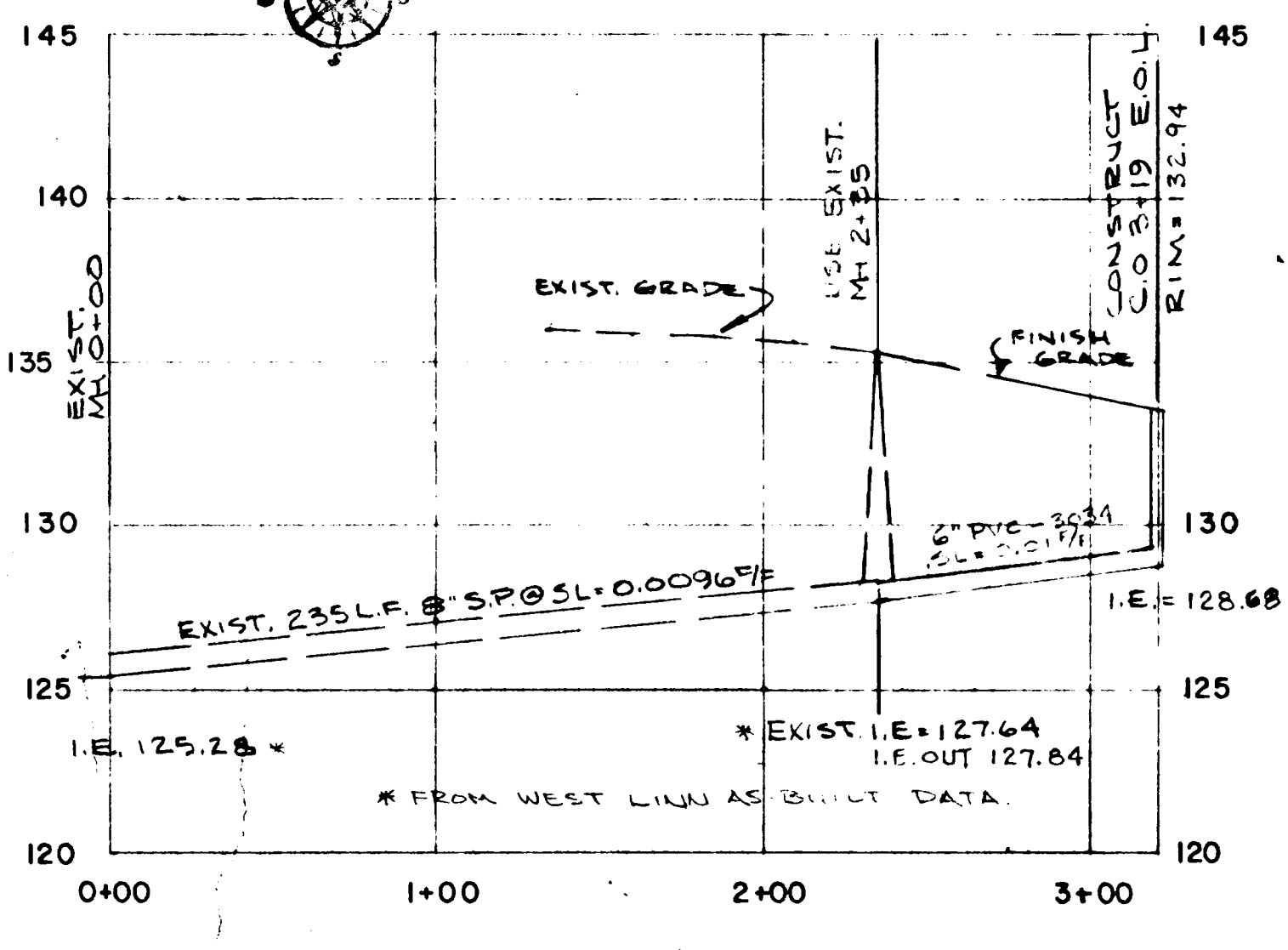
PLAN 1"=50'



PROFILE: STORM DRAIN 1"=50' HORIZ. 1"=10' VERT.



PROFILE: PERRIN STREET 1"=50' HORIZ. 1"=5' VERT.



PROFILE: SANITARY SEWER 1"=50' HORIZ. 1"=5' VERT.

GENERAL NOTES:

ALL WORK AND MATERIAL TO BE IN ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORKS DEPARTMENT, O.S.H.D. AND A.P.W.A. OREGON CHAPTER SPECIFICATION. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL RELOCATE ANY IN CONFLICT WITH THE PROPOSED CONSTRUCTION. CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND MUST BE VERIFIED BY THE CONTRACTOR. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST. THE ENGINEER HAS NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND CONSTRUCTION REVIEW SERVICES RELATING TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED FOR THE CONTRACTOR TO PERFORM HIS WORK. CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, AND OTHER MATERIAL IN THE ROADWAY AND WHERE INDICATED ON THE PLAN. MATERIAL SHALL BE DISPOSED OF IN SUCH A MANNER AS TO MEET LOCAL REGULATIONS.

STREET AND STORM DRAINAGE NOTES:

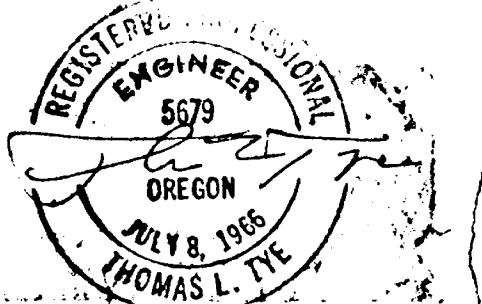
CONCRETE CULVERT PIPE SHALL BE ASTM C 14 CLASS 3 NONREINFORCED CONCRETE PIPE UNLESS SHOWN OTHERWISE ON PROFILE. PIPE BEDDING SHALL CONFORM WITH GRANULAR BEDDING AND BACKFILL REQUIREMENTS OF A.P.W.A. DIV. III SECTION 61-3.03 B2 AND 61-3.05. CORRUGATED METAL PIPE SHALL BE ASPHALT-COATED 16 GAGE GALVANIZED STEEL PIPE AND COUPLING BANDS CONFORMING TO O.S.H.D. SECTION 605. TRENCHES WITHIN THE RIGHTS-OF-WAY SHALL BE BACKFILLED WITH SELECT GRANULAR MATERIAL. BEDDING TO BE CLASS B. COMPACTION SHALL BE SUFFICIENT TO PREVENT FUTURE SETTLEMENT. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD TO USE TO ACHIEVE REQUIRED COMPACTION. TRENCH BACKFILL OUTSIDE OF PAVED AREAS MAY BE EXCAVATED TRENCH MATERIAL. BEDDING TO BE CLASS "B". MATERIAL IN SOFT SPOTS WITHIN THE ROADWAY SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH PIT RUN CRUSHED ROCK. THE ENTIRE SUBGRADE SHALL BE THOROUGHLY COMPACTED AT THE LOWEST MOISTURE CONTENT AT WHICH A HANDFUL OF THE SOIL CAN BE MOLDED BY A FIRM CLOSING OF THE HAND. (95% COMPACTION AASHTO T180) ASPHALT CONCRETE PAVEMENT MIX TO BE DESIGNED FROM A MIX FORMULA APPROVED BY O.S.H.D. FOR MATERIAL USED. CONTRACTOR TO PROVIDE ENGINEER WITH CERTIFICATE OF COMPLIANCE FROM ASPHALT PAVEMENT PLANT UNLESS OTHERWISE INDICATED. EXCESS EXCAVATION TO BE SPREAD AND COMPACTED EVENLY ON LOTS AS DIRECTED BY OWNER. VEGETATION AND TOP SOIL TO BE STRIPPED OFF FILL AREAS PRIOR TO FILLING.

WATER SYSTEM NOTES:

ALL PIPE TO BE MINIMUM COVER OF 36 INCHES BELOW FUTURE STREET GRADES, CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT PIPE INTERIORS, FITTINGS, AND VALVES AGAINST CONTAMINATION. FIRE HYDRANTS TO BE DRY-BARREL WATEROUS TYPE AND COMPLY WITH A.W.W.A. CS02. SERVICES TO HAVE FORD TYPE COMPRESSION TYPE FITTINGS. HOUSE SERVICES TO BE COPPER TYPE "K" SEAMLESS SOFT ANNEALED. SINGLE SERVICES TO BE 3/4-INCH. DOUBLE SERVICES TO BE 1-INCH. COPPER TUBE BENDS TO BE SMOOTH RADIUS. METER BOXES TO BE NO. 1 METER BOX AS MANUFACTURED BY METER BOX EQUIPMENT COMPANY, TIGARD, OREGON. METER LOCATIONS TO BE 12-INCHES BELOW TOP OF CURB & 9"-6 INCHES BEHIND CURB. SERVICE TAPS TO BE AT LEAST 18-INCHES APART. SADDLES REQUIRED. GATE VALVES TO BE A.W.W.A. C 500. VALVES TO HAVE 2-INCH OPERATING NUT WITH COUNTER CLOCKWISE OPENING AND NONRISING STEM. DUCTILE IRON PIPE TO BE TYTON JOINT CEMENT MORTAR LINED CLASS 52 AND SHALL CONFORM TO ASTM C110, C150 AND C151. FITTINGS AND PIPE SECTIONS THAT WILL NOT BE DISINFECTED BY CHLORINE LINE 24 HOURS SHALL HAVE THE INTERIORS SWABBED WITH A 5 PERCENT HYPOCHLORITE SOLUTION BEFORE THEY ARE INSTALLED. CONCRETE THRUST BLOCKS TO BE CONSTRUCTED AT ALL TEES, BENDS, FIRE HYDRANTS, BLOWOFFS AND WHERE INDICATED ON PLANS. THE MINIMUM BEARING SURFACE AGAINST UNDISTURBED SOIL TO BE AS SHOWN ON PLANS. CONCRETE SHALL BE ALLOWED TO CURE BEFORE PIPELINE PRESSURE TESTING. PIPELINE TO BE TESTED AT 150 P.S.I. AND HELD AT THE PRESSURE FOR 2 HOURS. TEST TO BE WITNESSED BY CITY WATER DEPARTMENT PERSONNEL. PIPE LINE TO BE THOROUGHLY DISINFECTED AND FLUSHED IN ACCORDANCE WITH A.W.W.A. STANDARD C 601.

SANITARY SEWER NOTES:

CONCRETE SANITARY SEWER PIPE SHALL BE ASTM 9034 PLASTIC PIPE WITH RUBBER GASKETS UNLESS SHOWN OTHERWISE ON PROFILE. ENGINEER RESERVES THE RIGHT TO ADJUST GRADES OR ALIGNMENT TO ACCOMMODATE UTILITIES OR EXISTING SEWER LINES AS REQUIRED. BUILDING SERVICE CONNECTIONS TO SLOPE 1/2 MINIMUM UP TO FUTURE HOUSE LOCATION FROM SEWER LATERAL OR MAIN. SERVICE SHALL BE 4-INCH SEWER PIPE AND SHALL EXTEND TO DISTANCE SHOWN ON PLANS AND END AT ELEVATION SHOWN. WYES AND 1/8TH BENDS REQUIRED FOR SERVICE CONNECTION. STATIONING AND DISTANCE SHOWN ON PLAN AND PROFILE ARE HORIZONTAL AND NOT SLOPE DISTANCE. CONTRACTOR SHALL PREPARE A PRINT FOR THE ENGINEER SHOWING AS-CONSTRUCTED DATA: STATION OF WYE ALONG SEWER, LENGTH OF CONNECTION AND DEPTH OF SERVICE CONNECTION AT PROPERTY LINE OF END OF SERVICE AND ANY CHANGES MADE DURING CONSTRUCTION. INSPECTION WILL BE ON PROJECT AS DEEMED NECESSARY BY ENGINEER. IF INSPECTOR IS NOT PRESENT, CONTRACTOR SHALL CALL FOR INSPECTION PRIOR TO BACKFILLING TRENCH AND TO WITNESS PIPELINE TESTING.



COMPASS CORPORATION

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CARL COFFMAN  
16615 S. Wachtman  
Oregon City, Oregon 97045  
Phone: 631-2903

SUBDIVISION IMPROVEMENTS

Perrin Street cul-de-sac

ASBUILT

DATE	NO.	REVISION
9/18/86	1	ASBUILT
7/30/86	3	REV'D. CITY REG'S.
7/24/86	2	REV'D. PERRIN ST. CUL-DE-SAC
10-15-81	1	PER CITY APPROVAL

SCALE	DATE
AS SHOWN	AUG. '81

BY	CHECKED
B.M.C.	T

FILE 81-1854-1229