

SCANNED

FILE NO. 49

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATED STRUCTURE INDEX AND QUANTITIES
2A	ESTIMATED ROADWAY QUANTITIES (SANITARY SEWER AND WATER MAIN ITEMS), SCOPE-OF-WORK.
2B	TABULATED QUANTITIES (SANITARY SEWER PIPES), AND GENERAL NOTES
2C-26	SANITARY SEWER AND WATER LINE DETAILS
3-7	PRESENT LAYOUTS (UTILITY ADJUSTMENTS)
8-12	PROPOSED LAYOUTS (UTILITY ADJUSTMENTS)
13, 14	PROFILES WATER LINES
15	PLAN AND PROFILE GRANNY WHITE PIKE
16	CULVERT CROSS-SECTION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

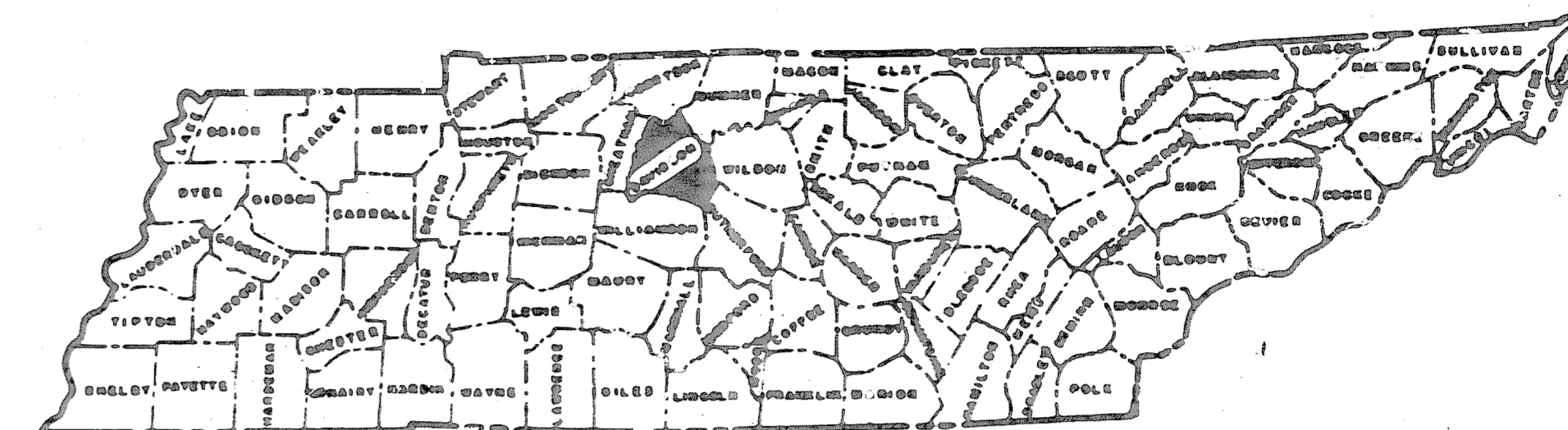
FED. ROAD DIST. NO.	TENN.	YEAR	SHEET NO.
3	N	1982	1
FED. AID PROJ. NO.		I-440-4(54)209	
STATE PROJ. NO.		19014-3112-44	

DAVIDSON COUNTY

- 4 BRIDGES ALONG I-440
 1) GRANNY WHITE PIKE OVER I-440
 2) I-440 OVER LEALAND LANE
 3) I-440 OVER CRAIG AVENUE
 4) BOX BRIDGE @ STA. 315+50

BRIDGES AND UTILITIES

STATE HIGHWAY NO. I-440 F.A.S. NO. I-440 PARKWAY



NO EXCEPTIONS

TABLE OF EQUATIONS		LOC.	+	-
STA. 318 + 75.96 BK - STA. 319 + 06.18 A.H.	I-440			10.72
NET EFFECT ON ENUMERATION =				0.00

TABLE OF EXCLUSIONS		LOC.	LENGTH
STA. 295 + 75.25 TO STA. 309 + 15.23	I-440		- 1339.98
STA. 310 + 26.26 TO STA. 315 + 40.19	I-440		- 513.93
STA. 315 + 59.82 TO STA. 319 + 36.68	I-440		- 376.86
NET EFFECT ON ENUMERATION =			- 2,230.77

THE EXCLUDED PORTIONS OF THIS PROJECT ARE TO BE CONSTRUCTED UNDER PROJECT NO. I-65-2(58)80, AND THAT PROJECT IS TO BE INCLUDED IN THIS CONTRACT.

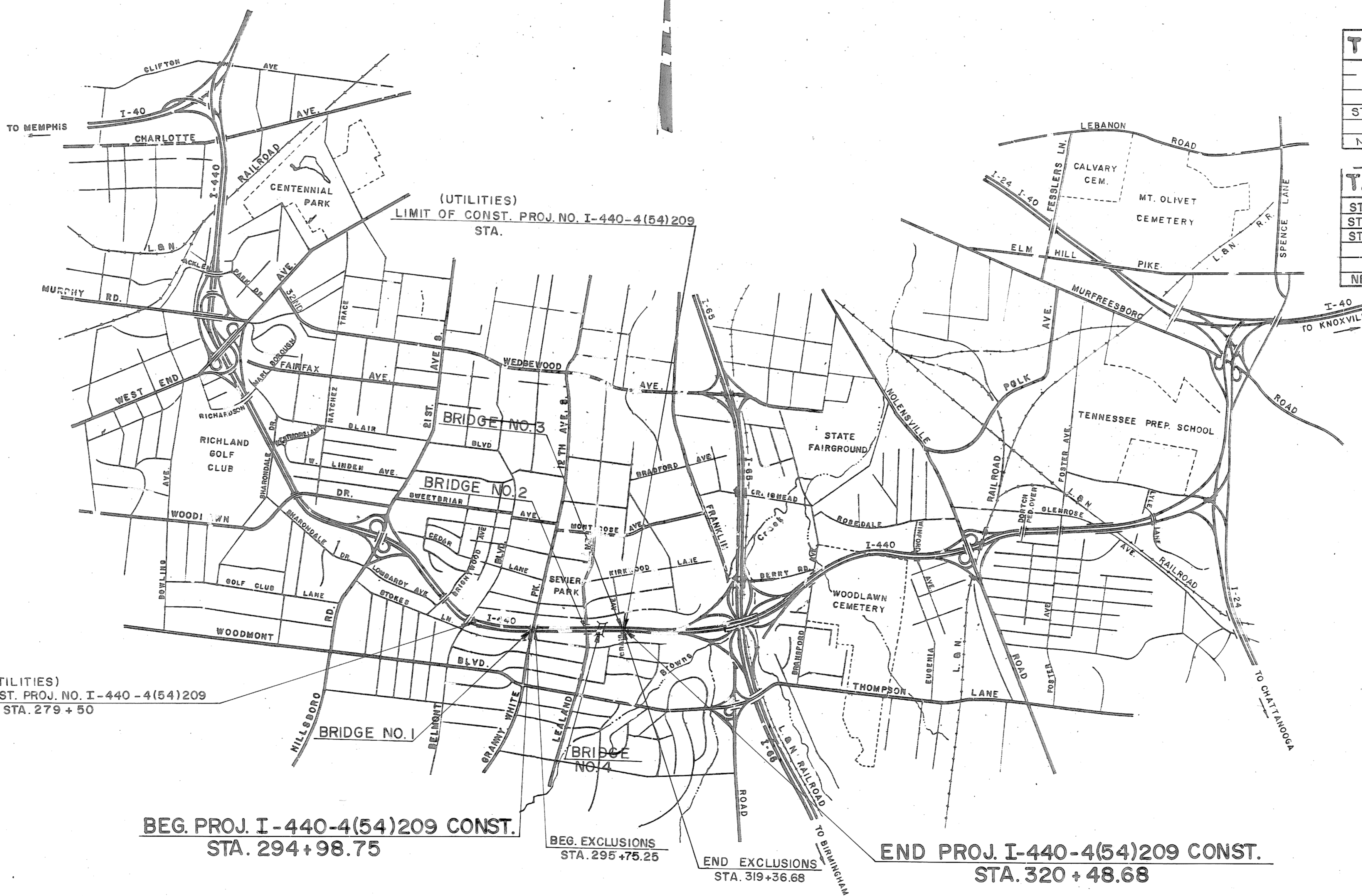
STANDARD BRIDGE DRAWINGS

- K-15-III CONC. BOX BRIDGE 2 AT 10' X 5' SKEW 60°
- K-15-118 WINGWALLS - MULTIPLE 10' SPANS SKEW 60°
- K-15-29 CONC. BOX BRIDGES, FILL SECTIONS ALL SKEWS
- M-103-149 & 150 PRESTRESSED CONCRETE BRIDGE DECK PANELS (TO BE PRINTED WITH PLANS)

SPECIAL NOTE

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

(UTILITIES)
LIMIT OF CONST. PROJ. NO. I-440-4(54)209
STA. 279 + 50



BEG. PROJ. I-440-4(54)209 CONST.
STA. 294 + 98.75

BEG. EXCLUSIONS
STA. 295 + 75.25

END EXCLUSIONS
STA. 319 + 36.68

END PROJ. I-440-4(54)209 CONST.
STA. 320 + 48.68

ROADWAY LENGTH.....0.000 MILES

- ① BRIDGE LENGTH.....0.056 MILES
- ② BOX BRIDGE LENGTH.....0.004 MILES
- ③ PROJECT LENGTH.....0.056 MILES

- ① INCLUDES 0.014 MI. ON GRANNY WHITE PIKE BRIDGE ALONG I-440 & 0.021 MI. FOR LEALAND AVENUE BRIDGE, 0.021 MI. FOR CRAIG AVENUE BRIDGE.
- ② NOT INCLUDED IN THE PROJECT LENGTH.
- ③ DOES NOT INCLUDE 0.039 MILES FOR GRANNY WHITE PIKE OVER I-440

APPROVED *Louis Evans*
STATE TRANSPORTATION ENGINEER

DATE _____
APPROVED *[Signature]*
COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED _____
DIVISION ADMINISTRATOR DATE _____

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION FORMERLY DEPARTMENT OF HIGHWAYS DATED MARCH 1, 1981 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT

DESIGNER REAVIS PENDERGRASS CHECK BY _____
P.E. #19009-5134-44

TYPE	YEAR	PROJECT NO.	SHEET NO.
	1982	I-440-4(54)209	2

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-19-82	HMP	RIP-RAP QUANTITY

I-440

ESTIMATED BRIDGE QUANTITIES								TOTAL	UNIT
ITEM NO.	DESCRIPTION	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY		
204-02.01	DRY EXCAVATION (BRIDGES)	609		122	522	319	650	2,222	C.Y.
204-04.01	ROCK EXCAVATION (BRIDGES)	1,705						1,705	C.Y.
204-05	ROCK DRILLING (BRIDGES)	36						36	L.F.
604-01.12	CLASS "A" CONCRETE (BRIDGE DECK)	481.0	177.0	362.0				1040.0	C.Y.
604-02.03	EPOXY COATED REINFORCING STEEL	236,493	69,506	141,180				447,179	LBS.
604-03.01	CLASS "A" CONCRETE (BRIDGES)	1,739.4	697.0	505.0	250.0	187.4	305.9	3,687.7	C.Y.
604-03.02	STEEL BAR REINFORCEMENT (BRIDGES)	334,155	120,830	97,460	13,331	11,475	18,800	596,051	LBS.
604-03.03	LINSEED OIL TREATMENT	860	1,902	1,896				4,658	S.Y.
606-22.03	STEEL PILES (10 INCH) (DRIVING)	150	1,435	2,074				3,659	L.F.
606-32.03	STEEL PILES (10 INCH) (FURNISH DOMESTIC)	150	1,435	2,074				3,659	L.F.
606-42.03	STEEL PILES (10 INCH) (FURNISH FOREIGN)	150	1,435	2,074				3,659	L.F.
615-02.13	PRESTRESSED CONCRETE BOX BEAM (45" X 48")		2,398					2,398	L.F.
615-02.36	PRESTRESSED CONCRETE BOX BEAM (66" X 48")			1,320				1,320	L.F.
615-02.49	PRESTRESSED CONCRETE TRAPEZOIDAL BOX BEAM		436					436	L.F.
620.03	CONCRETE PARAPET		604					604	L.F.
709-05.04	MACHINED RIP-RAP (3IN. TO 6IN.)	66	368	142				576	C.Y.
710-10	6" Ø PERFORATED C.M. PIPE (18 GA.) W/POROUS BACKFILL	1,967	192	214	231	183	340	3,127	L.F.
710-11	6" Ø C.M. PIPE UNDERDRAINS (18 GA.)	84	52	60	20	20	20	256	L.F.
908-21.01	BEARINGS (DWG. NO. M-110-50)	8						8	EACH
920-01.11	ROADWAY EXPANSION DEVICE	83.0						83.0	L.F.

OPTIONAL

LIST of STANDARD DRAWINGS

DRAWING TITLE	DWG. NO.	LATEST REVISION DATE
STANDARD REINFORCING BAR SUPPORT DETAILS	M-80-14	8-27-76
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	M-85-150	1-9-75
REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS	M-86-144	7-17-81
STANDARD PILE DETAILS	M-5-111	11-27-73
BRIDGE RAILING-CONCRETE PARAPET	M-28-1	7-17-81
TENNESSEE STANDARD PRECAST PRESTRESSED BRIDGE DECK PANELS	M-103-149	7-7-82
TENNESSEE STANDARD PRECAST PRESTRESSED BRIDGE DECK PANELS	M-103-150	7-7-82

LIST of SPECIAL PROVISIONS

NO.	DESCRIPTION	LATEST REVISION DATE
107A	REGARDING APPROVAL OF SHOP DRAWINGS	7-8-81
907A	REGARDING EPOXY COATED REINFORCING STEEL	9-8-81

LIST of DRAWINGS

DRAWING TITLE	DWG. NO.
LAYOUT OF BRIDGE NO. 1	M-110-41 THROUGH M-110-54
LAYOUT OF BRIDGE NO. 2	M-110-55 THROUGH M-110-64
LAYOUT OF BRIDGE NO. 3	M-110-65 THROUGH M-110-74
RETAINING WALL @ STA. 17+50	M-110-80
RETAINING WALL @ STA. 22+50	M-110-81
RETAINING WALL @ STA. 24+50	M-110-82

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

ESTIMATED
BRIDGE
QUANTITIES

SCANNED

FILE NO. 49

TELEPHONE 408-1100

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)209	2A

SANITARY SEWER AND WATER MAIN ITEMS

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
755-45.06	10" CL. 53 D.I.P. SEWER	30	LIN. FT.
755-45.08	8" CL. 53 D.I.P. SEWER	364	LIN. FT.
755-45.12	8" CL. 52 D.I.P. WATER MAIN	1470	LIN. FT.
755-45.13	6" CL. 52 D.I.P. WATER MAIN	1380	LIN. FT.
755-45.17	MANHOLE BASE - 4' DIAMETER	30	EACH
755-45.18	MANHOLE SIDEWALL - 4' INSIDE DIAMETER	330	VERT. FT.
755-45.19	STANDARD MANHOLE FRAME AND COVER	28	EACH
755-45.22	DUCTILE IRON AND CAST IRON PIPE FITTINGS	3500	POUNDS
755-45.23	CONCRETE FOR BLOCKING, ENCASEMENT, ETC.	32.5	CU. YDS.
755-45.27	6" X 6" TAPPING SLEEVE AND VALVE WITH VALVE BOX	7	EACH
755-45.32	8" GATE VALVE WITH VALVE BOX	5	EACH
755-45.33	6" GATE VALVE WITH VALVE BOX	6	EACH
755-45.35	1" BLOW-OFF VALVE WITH VALVE BOX	1	EACH
755-45.36	CUTTING AND CAPPING EXISTING 6" WATER MAIN	4	EACH
755-45.39	3/4" COPPER WATER SERVICE LINE	30	LIN. FT.
755-45.40	RELOCATING EXISTING WATER METER	1	EACH
755-45.41	RELOCATING EXISTING FIRE HYDRANT	3	EACH
755-45.44	WATER FOR DUST CONTROL	60	M. GALS.
755-45.45	CALCIUM CHLORIDE FOR DUST CONTROL	30	BAGS
755-45.46	TYPE "A" PAVEMENT REPAIR	1200	LIN. FT.
755-45.47	CRUSHED STONE PAVEMENT REPAIR	20	LIN. FT.
755-45.49	TOPSOILING AND SEEDING OF TRENCHES	3430	LIN. FT.
755-45.50	CRUSHED STONE BACKFILL (NO. 67)	2050	CU. YDS.
755-45.57	ADJUSTMENT OF EXISTING MANHOLES	5	EACH
755-45.58	MANHOLE VENT	1	EACH
755-45.59	DROP MANHOLE CONNECTIONS	3	EACH
755-45.60	WATERTIGHT MANHOLE FRAMES & COVERS	2	EACH
755-45.61	10" SEWER	1450	LIN. FT.
755-45.62	10" CLASS 55 D.I.P. SEWER	334	LIN. FT.
755-45.64	SANITARY SEWER HOUSE SERVICE CONNECTIONS (6")	405	LIN. FT.
755-45.65	6" TEE CONNECTION FOR SANITARY SEWER HOUSE SERVICE	24	EACH
755-45.66	PLUG EXISTING SANITARY SEWER LINES	22	EACH
755-45.67	UNCLASSIFIED EXCAVATION	6870	CU. YD.
755-45.68	8" X 8" TAPPING SLEEVE AND VALVE WITH VALVE BOX	2	EACH
755-45.70	CUTTING AND CAPPING EXISTING 8" WATER MAIN	2	EACH
755-45.71	TEMPORARY PAVEMENT REPAIR	1200	LIN. FT.
755-45.72	3/4" AND 1" WATER METERS WITH METER BOX	1	EACH
755-45.73	CUT AND CAP EXISTING 3" WATER MAIN	1	EACH
755-45.74	15" CLASS 53 D.I.P. SEWER	10	LIN. FT.
755-45.75	18" SEWER	3005	LIN. FT.
755-45.76	14" STEEL ENCASEMENT PIPE	225	LIN. FT.
755-45.78	8" WATER MAIN IN 16" CASING PIPE (GRANNY WHITE PIKE BRIDGE)	285	LIN. FT.
755-45.79	18" CLASS 53 D.I.P. SEWER	256	LIN. FT.
755-45.80	REPAIR OF HOUSE SERVICE CONNECTIONS (WATER)	12	EACH
612-02	NONUNIFORM-COURSE STONE MASONRY	98	CU. YD.
204-01	CULVERT EXCAVATION (UNCLASSIFIED)	534	CU. YD.
604-02.01	CLASS A CONCRETE (BOX BRIDGES)	725	CU. YD.
604-02.02	STEEL BAR REINFORCEMENT (BOX BRIDGES)	120,954	POUNDS

SCOPE OF WORK

- * THE CONSTRUCTION OF FOUR (4) BRIDGES.
- ① BRIDGE AND APPROACHES ON GRANNY WHITE PIKE OVER I-440.
- ② BRIDGE AND APPROACHES ON I-440 OVER LEALAND LANE.
- ③ BRIDGE AND APPROACHES ON I-440 OVER CRAIG AVENUE.
- ④ BOX BRIDGE AT STA. 315+50 ON I-440.

THE RELOCATION OF EXISTING SANITARY SEWERS, AND WATER LINES ON I-440 FROM JUST EAST OF BELMONT AVENUE TO CRAIG AVENUE, TO LINES AND GRADES AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

THE CONSTRUCTION OF A RETAINING WALL (W / ROCK FACE) ALONG GRANNY WHITE PIKE (LT. & RT.) AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

SEQUENCE OF CONSTRUCTION

- A. THE FIRST BRIDGE TO BE CONSTRUCTED IS THE CRAIG AVENUE BRIDGE.
- B. THE SECOND BRIDGE TO BE CONSTRUCTED IS THE LEALAND LANE BRIDGE.
- C. THE THIRD BRIDGE TO BE CONSTRUCTED IS THE GRANNY WHITE BRIDGE.
- D. THE BOX BRIDGE MAY BE CONSTRUCTED AT THE CONTRACTOR'S DISCRETION.

* NOTE *

FOR PROPOSED LAYOUT SHEETS ON THESE BRIDGES SEE SHEET NOS. 33,34 & 35 ON PROJECT NO. I-65-2(58)80.

- ① INCLUDES 265 L.F. OF 6" CL. 52 D.I.P. WATER MAIN WITH MECHANICAL JOINT FITTINGS
- ② INCLUDES REQUIRED MECHANICAL JOINT FITTINGS
- ③ TO BE USED ON RETAINING WALL ALONG GRANNY WHITE PIKE

BRIDGE ITEMS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

**ESTIMATED
ROADWAY
QUANTITIES
&
SCOPE OF WORK**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)209	28

SANITARY SEWER PIPES																
FROM						TO						TYPE AND LINEAR FEET REQUIRED				
CODE	STATION	LOCATION		INVERT ELEVATION	CODE	STATION	LOCATION		INVERT ELEVATION	10"	16"	CLASS 53 D.I.P.	CLASS 53 D.I.P.	CLASS 53 D.I.P.	CLASS 53 D.I.P.	
		L.T.	R.T.				L.T.	R.T.								
475	16+25		10	518.72	476	293+55		360	519.12							
476	293+55		360	519.37	476A	293+37		330	519.49	30'						
476A	293+37		330	519.74	477	291+07		326	520.66	230'						
477	291+07		326	520.91	478	290+01		343	521.35	110						
478	290+01		343	521.60	479	286+26		322	523.12	380						
479	286+26		322	523.22	480	284+22		296	524.02	200						
480	284+22		296	524.12	481	282+40		260	524.92	200						
481	282+40		260	525.02	482	279+86		210	526.22	300						
482	279+86		210	526.72	483	280+14		120	529.06						334	
483	280+14	120		540.40	484	279+56		110	541.00			60'				
485	320+28		167	489.65	486	319+86		148	491.61		40					
486	319+86		148	491.86	487	316+86		153	493.66		300					
487	316+86		153	493.76	488	314+60		200	495.14		230					
488	314+60		200	495.24	489	312+28		405	496.62		230					
489	312+28		405	496.72	490	17+85	LEALAND LN.	5	498.10		230					
490	17+85	LEALAND LN.	5	498.47	491	18+95	LEALAND LN.	2	499.57				110			
491	17+85	LEALAND LN.	5	498.60	492	307+85		197	506.15		220					
492	307+85		197	506.40	493	304+87		225	508.20		300					
493	304+87		225	508.30	494	301+97		263	510.04		290					
494	301+97		263	510.29	495	301+90		391	511.07		130					
495	301+90		391	511.32	496	298+66		356	513.27		325					
497	319+87		199	495.15	498	319+66		212	495.33		6					
498	319+66		212	495.58	499	316+52		209	496.84		314					
499	316+52		209	496.94	500	317+36		187	498.34		350					
500	317+36		187	498.44	501	311+55		158	499.22				156			
502	24+58	GRANNY WHITE PK	10	555.67	503	23+14	GRANNY WHITE PK	10	557.51			184				
503	23+14	GRANNY WHITE PK		558.01	504	294+76		323	561.61			120				
505	294+76		322	559.21												
TOTALS										1,450	3,005	364	110	256	334	

* NOTE: STATIONS SHOWN ARE WITH RESPECT TO
 I-440 PARKWAY UNLESS NOTED OTHERWISE.

SANITARY SEWER AND WATER MAIN NOTES

ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT EXISTING SEWER LINES ARE OWNED AND MAINTAINED BY METROPOLITAN NASHVILLE AND DAVIDSON COUNTY, DEPARTMENT OF WATER AND SEWERAGE SERVICES, AND THAT ALL WORK ON THE SANITARY SEWER SYSTEM MUST BE PERFORMED TO MEET STANDARD METRO SPECIFICATIONS AND APPROVAL OF THE ENGINEER. THESE SPECIFICATIONS SHALL BE INCLUDED AS PART OF THE UTILITY PLANS.

CAUTION SHALL BE TAKEN WHEN WORKING AROUND HES POWER POLES TO ASSURE NO DAMAGE OCCURS TO FOOTING.

SANITARY SEWER LINES OF 8" TO 10" DIAMETER ARE TO BE CONCRETE SEWER PIPE, A.S.T.M. DESIGNATION C14, EXTRA STRENGTH PIPE UNLESS OTHERWISE SPECIFIED ON PLANS, SEWER PIPES OF 12" DIAMETER AND LARGER ARE TO BE THE EQUIVALENT OF REINFORCED CONCRETE PIPE, A.S.T.M. DESIGNATION C-76 CLASS III UNLESS OTHERWISE SPECIFIED ON THE PLANS.

EXISTING SEWER LINES TO BE ABANDONED ARE TO REMAIN IN SERVICE UNTIL SUCH TIME AS A NEW LINE IS IN PLACE READY TO CONNECT TO THE SEWER SYSTEM UNLESS OTHERWISE ORDERED BY THE ENGINEER. THE CONTRACTOR SHALL RECONNECT ALL CONNECTIONS THAT ARE DISRUPTED BY SANITARY SEWER RELOCATIONS. PAYMENT FOR SUCH RECONNECTIONS WILL BE INCLUDED IN APPROPRIATE PAY ITEMS.

THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT EXISTING WATER LINES ARE OWNED AND MAINTAINED BY METROPOLITAN NASHVILLE, DAVIDSON COUNTY, DEPARTMENT OF WATER AND SEWERAGE SERVICES, AND THAT ALL WORK ON THE WATER SYSTEM MUST BE PERFORMED TO MEET THE STANDARD SPECIFICATIONS AND APPROVAL OF THE ENGINEER.

POINTS WHERE ABANDONED MAIN ORIGINATE AND TERMINATE ARE USUALLY AT A TEE OR FITTING IN EXISTING MAIN OF WATER WORK SYSTEM. THE METROPOLITAN NASHVILLE AND DAVIDSON COUNTY, DEPARTMENT OF WATER AND SEWERAGE SERVICES WILL SPECIFY EXACT POINTS TO "CUT" AND "CAP" PIPES.

EXISTING MAINS TO BE ABANDONED ARE TO REMAIN IN SERVICE UNTIL SUCH TIME AS A NEW PIPE IS IN PLACE READY TO CONNECT TO THE WATER SYSTEM PRIOR TO REMOVING OLD PIPE, UNLESS OTHERWISE ORDERED BY THE ENGINEER.

WHEN LAYING WATER PIPE TO CONFORM TO THE ROAD CURVATURE THE BREAKING OF JOINTS WILL BE PERMITTED. THE CONTRACTOR IS TO USE 12 FOOT LENGTHS IN PLACE OF 16 FOOT LENGTH PIPES TO CONFORM TO THE MAXIMUM DEFLECTIONS.

WHENEVER POSSIBLE, GATE VALVES ON MAINS IN SIDEWALK AREAS ARE TO BE LOCATED AT RADIUS POINTS (END OF CURVES) AND WHEN MAINS ARE IN STREET, VALVES ARE TO BE LOCATED IN LINE WITH STREET PROPERTY LINE OR RIGHT-OF-WAY.

ALL PROPOSED WATER LINES ARE TO BE DUCTILE IRON PIPE, UNLESS OTHERWISE SPECIFIED ON PLANS.

ALL ABANDONED FIRE HYDRANTS NOT USED IN THE NEW WORK TO REMAIN THE PROPERTY OF METROPOLITAN DEPARTMENT OF WATER AND SEWERAGE SERVICES AND ARE TO BE STORED IN A SUITABLE PLACE DESIGNATED BY THE ENGINEER FOR PICK-UP BY THE METROPOLITAN DEPARTMENT OF WATER AND SEWERAGE SERVICES. THE COST FOR REMOVAL AND STORAGE WILL BE INCLUDED IN ITEM NO. 755-45.41.

THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTAINING OF HOUSE WATER SERVICES DURING THE CONSTRUCTION. FOR THE PROPOSED UTILITIES RELOCATION, PAYMENT WILL BE COVERED UNDER ITEM NO. 755-45.80.

THE CONTRACTOR SHALL GIVE ADVANCE NOTICE TO THE VARIOUS UTILITY COMPANIES BEFORE DOING ANY WORK WHICH MAY INTERFERE WITH THE OPERATIONS OF THEIR FACILITIES.

CONTRACTOR SHALL COOPERATE WITH THE VARIOUS UTILITY COMPANIES CARRYING OUT WORK WHICH IS RELATED TO THE WORK OF THIS CONTRACT.

ALL ABANDONED VALVES, VALVE BOXES, FRAMES AND OTHER APPURTENANCES, EXCEPT AS NOTED ON THE PLANS, WILL BE SALVAGED BY THE METROPOLITAN DEPARTMENT OF WATER AND SEWERAGE SERVICES. THE ENGINEER IS TO INFORM THE METROPOLITAN DEPARTMENT OF WATER AND SEWERAGE SERVICES WHEN EXISTING MAINS ARE TO BE ABANDONED. THE METROPOLITAN DEPARTMENT OF WATER AND SEWERAGE SERVICES DOES NOT INTEND TO SALVAGE ABANDONED MAINS.

THE CONTRACTOR IS TO USE EXTREME CAUTION IN WORKING CLOSE TO THE EXISTING N.E.S. STEEL POWER POLES LOCATED AT VARIOUS POINTS ALONG THIS PROJECT. IN THE EVENT ANY OF THESE POLES OR FOOTINGS ARE DAMAGED DUE TO EXCAVATING, BLASTING OR OTHER WORK DONE IN CONJUNCTION WITH THIS PROJECT, THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR REPLACING / OR REPAIRING POLES OR FOOTINGS AT HIS OWN EXPENSE.

UTILITY OWNER

MR. RAY HARRINGTON
 METRO WATER AND SEWER DEPT.
 8TH FLOOR STAHLMAN BLDG.
 211 CHURCH STREET
 NASHVILLE, TN 37201

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

TABULATED
 QUANTITIES
 &
 SANITARY SEWER
 AND
 WATER MAIN NOTES

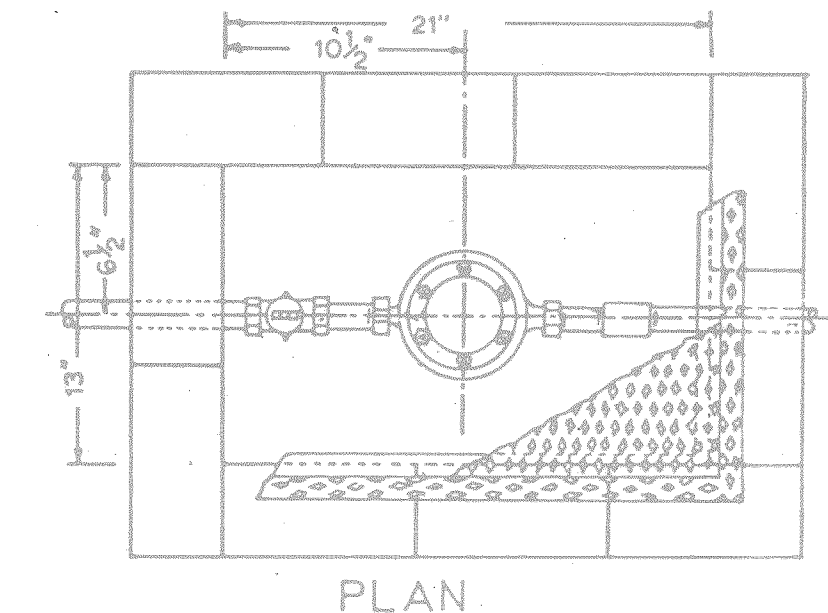
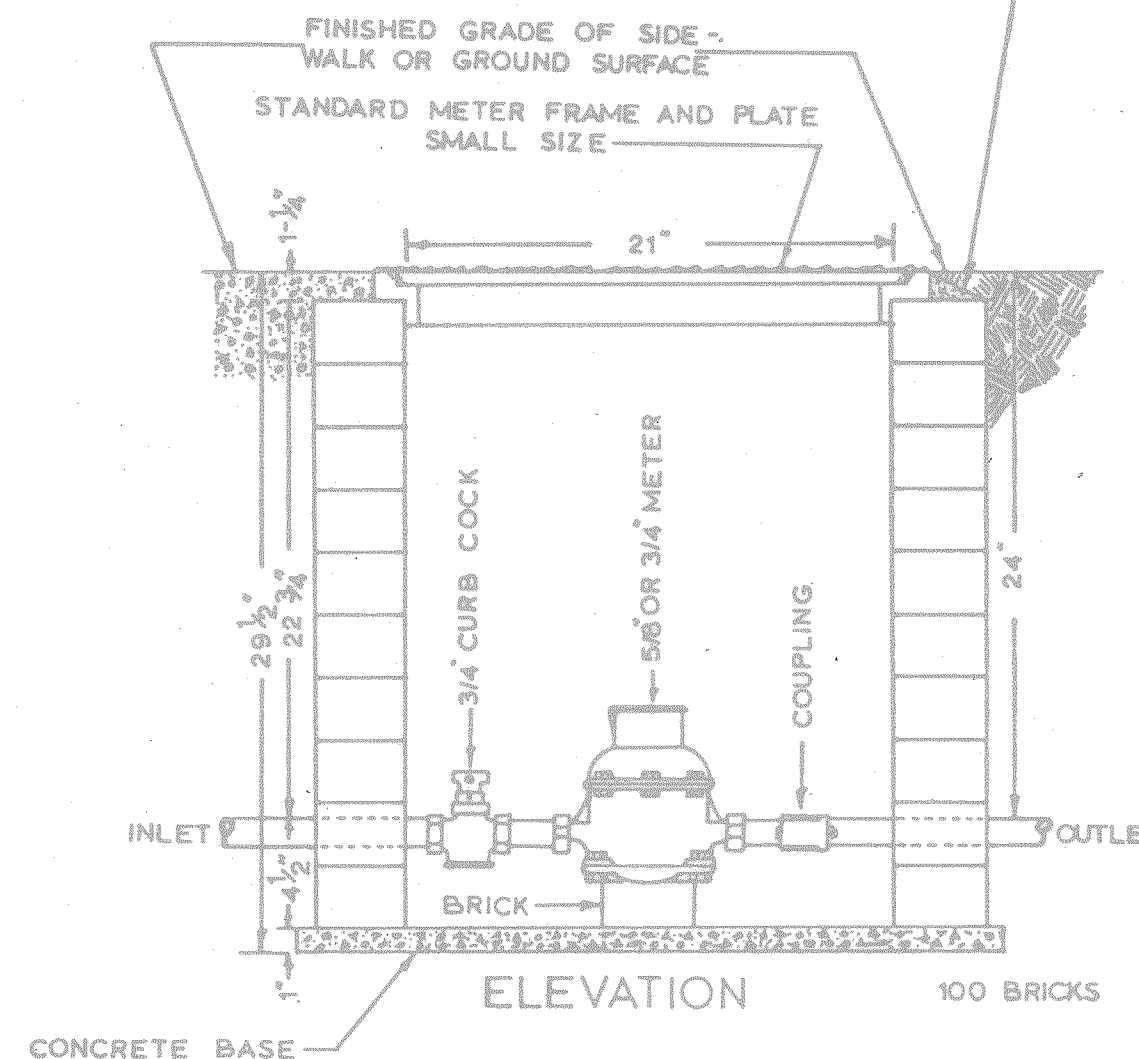
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FEB 22 2002 BY TRC

RETURN TO: H2000

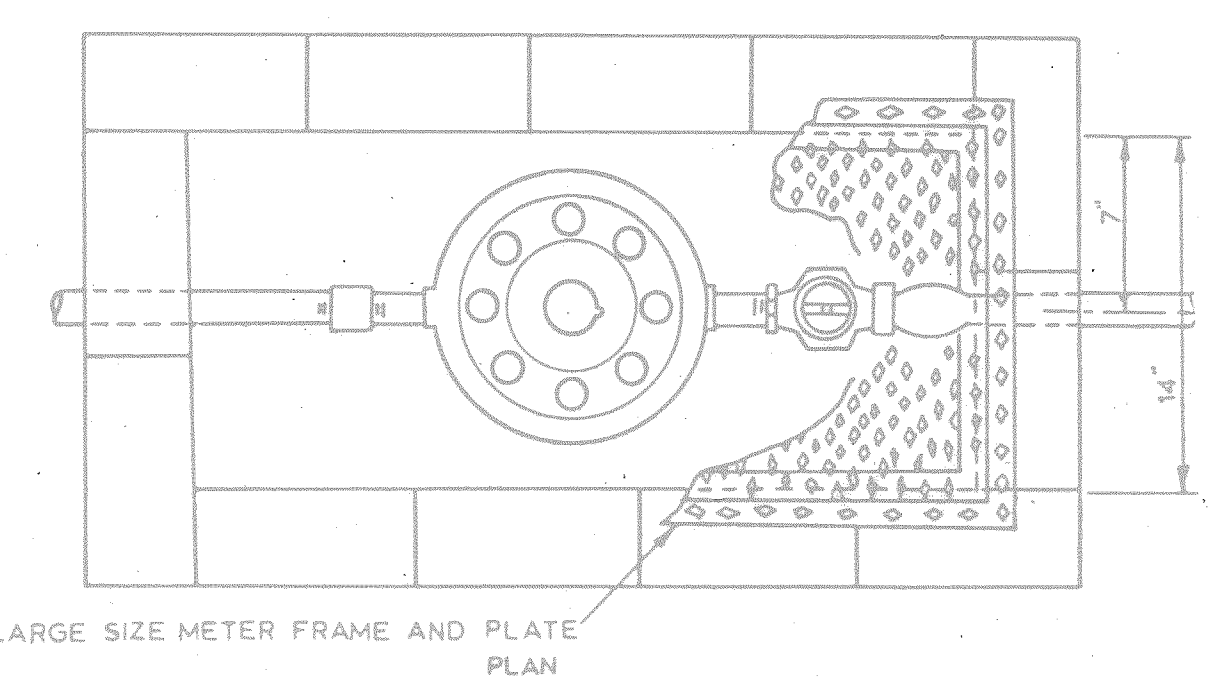
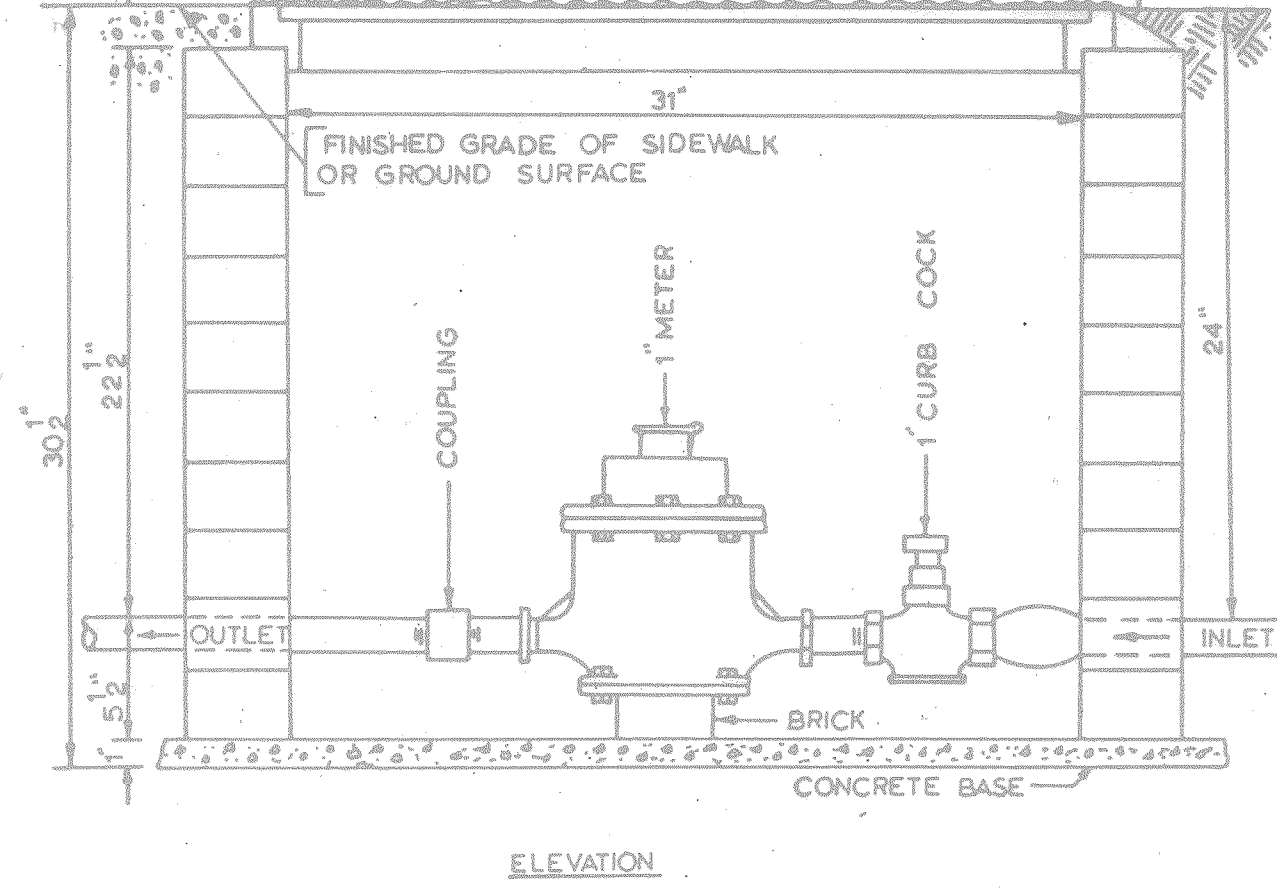
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1981	I-440-4(54)209	2 C

TOP OF METER FRAME TO OUTER EDGE OF BRICK TO BE ROUNDED OFF WITH CONCRETE WHERE THERE IS NO SIDEWALK

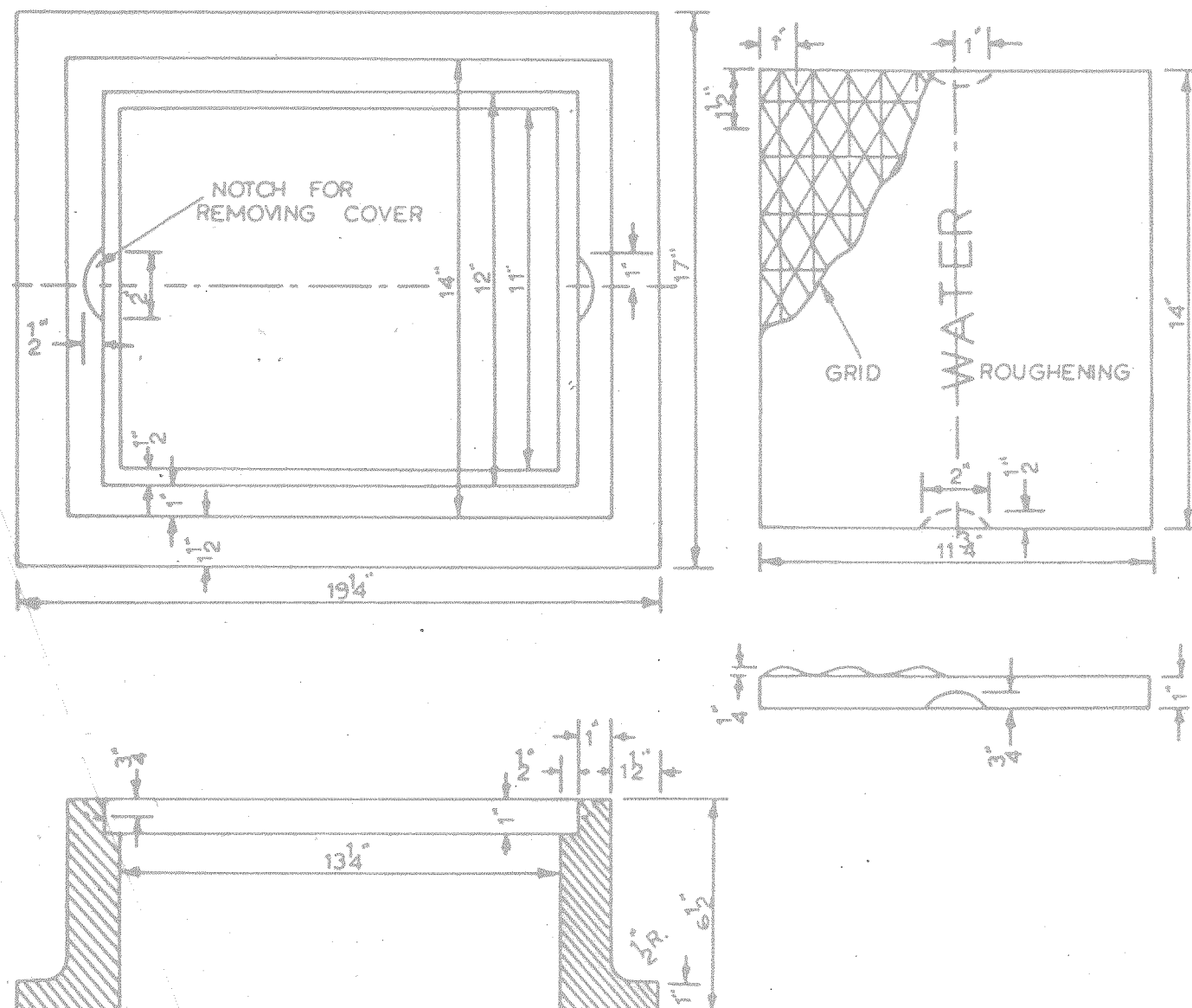


5/8" OR 3/4" METER DETAIL
(METRO DWG. NO. W-14)

TOP OF METER FRAME TO OUTER EDGE OF BRICK TO BE ROUNDED OFF WITH CONCRETE WHERE THERE IS NO SIDEWALK

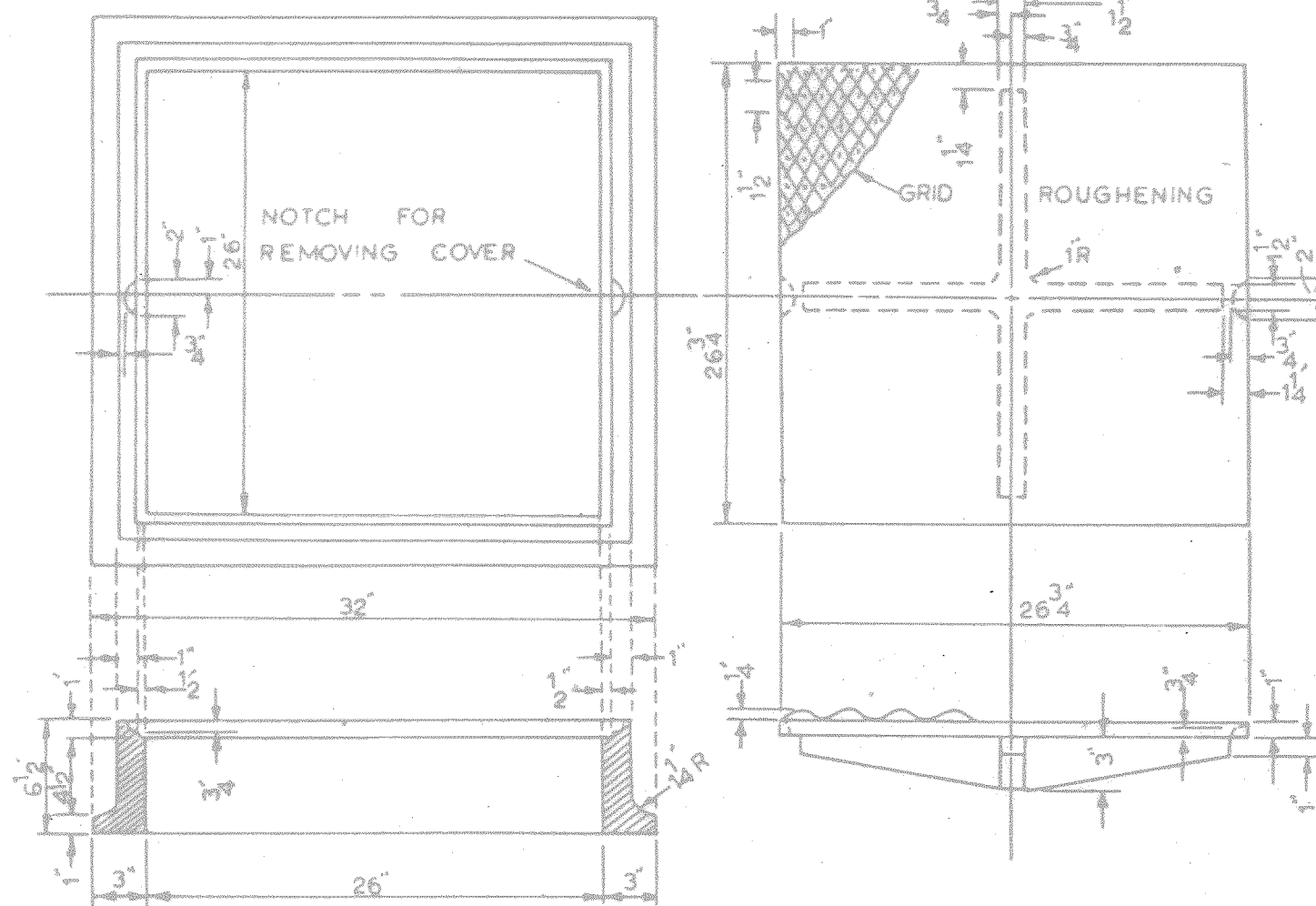


1" METER DETAIL
(METRO DWG. NO. W-15)



NO OPEN SAND CASTINGS TO BE MADE OF GOOD TOUGH QUALITY OF CAST IRON COVER MUST FIT EVENLY ON RABBIT OF FRAME IN ORDER TO EQUALLY DISTRIBUTE WEIGHT OF COVER OVER FRAME
MINIMUM WEIGHT OF FRAME 150 LBS
MINIMUM WEIGHT OF COVER 45 LBS

DETAIL OF CAST IRON VALVE BOX FRAME AND COVER
(SMALL SIZE)
(METRO DWG. NO. W-11)



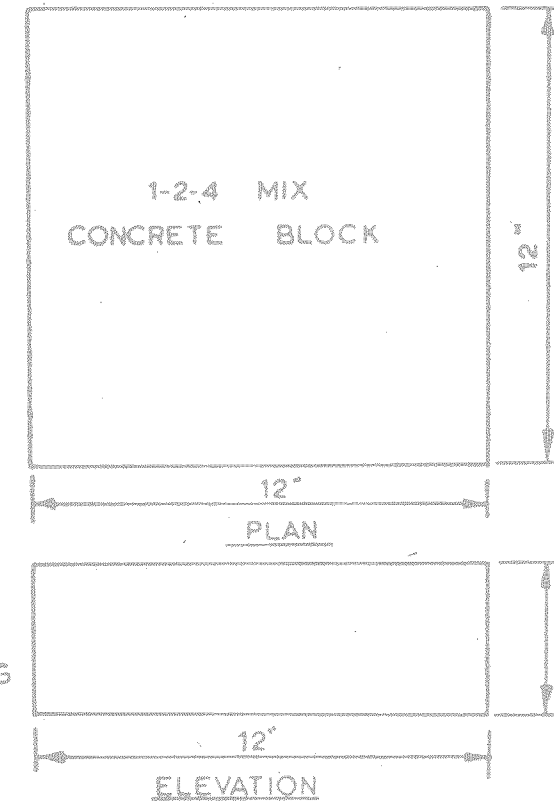
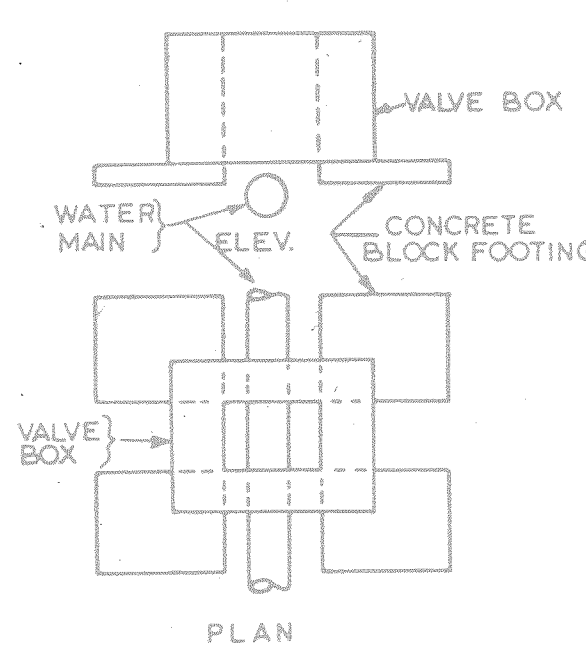
NO OPEN SAND CASTINGS TO BE MADE OF GOOD TOUGH QUALITY OF CAST IRON COVER MUST FIT EVENLY ON RABBIT OF FRAME IN ORDER TO EQUALLY DISTRIBUTE WEIGHT OF COVER OVER FRAME

MINIMUM WEIGHT OF FRAME 296 LBS
MINIMUM WEIGHT OF COVER 234 LBS

DETAIL OF CAST IRON VALVE BOX FRAME AND COVER
(LARGE SIZE)
(METRO DWG. NO. W-12)

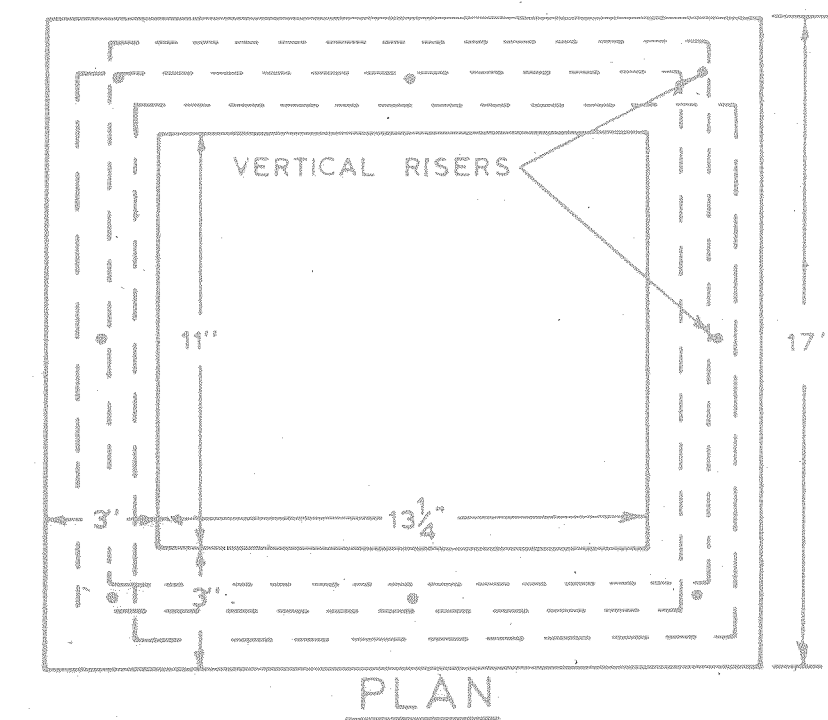
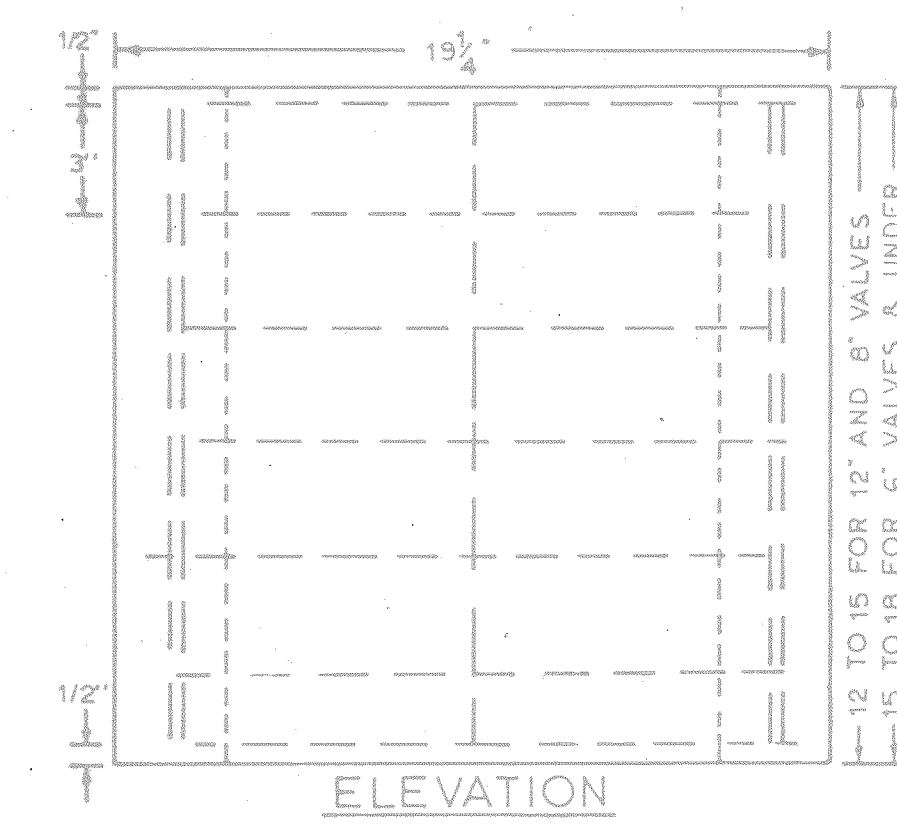
NOTE BEFORE INSTALLATION OF VALVE BOXES AND FOOTINGS, THE EARTH ON WHICH THE FOOTINGS AND THE VALVE BOXES ARE TO BE SET SHALL BE BACK-FILLED AND THOROUGHLY TAMPED AND COMPACTED.

FOUR (4) CONCRETE BLOCKS OF THE SIZE AND SHAPE SHOWN ARE TO BE PLACED UNDER EACH VALVE BOX, ONE UNDER EACH CORNER OF BOX.



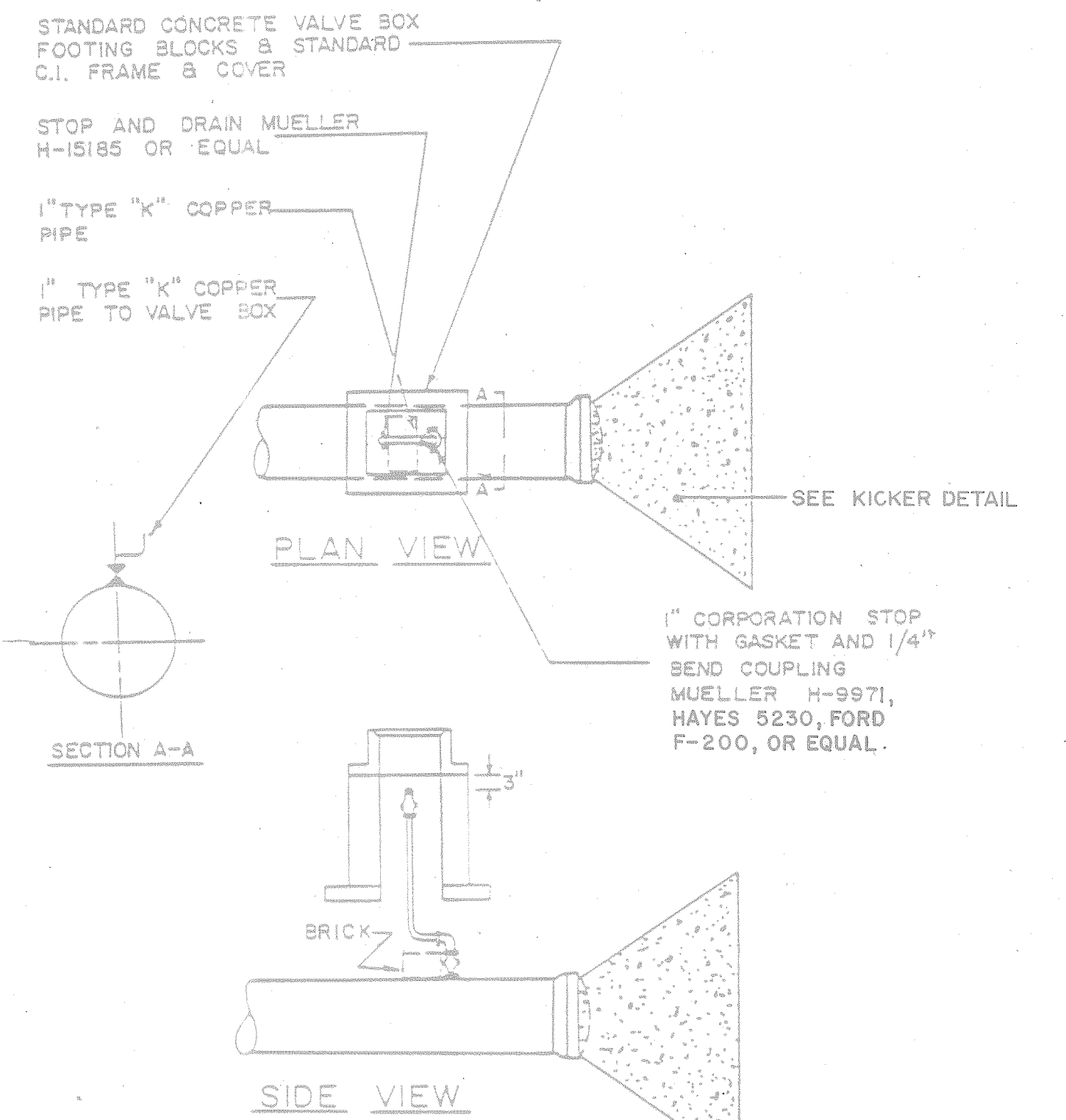
NO REINFORCING STEEL IN FOOTING CONCRETE MIX TO BE 1 PART CEMENT 2 PARTS SAND AND 4 PARTS NO. 2 CRUSHED STONE OR GRAVEL. VOLUME FOR ONE BLOCK=0.333 CU. FT. FOR ALL BLOCKS. VOLUME=1.332 CU. FT. WEIGHT OF ONE BLOCK= APPROX. 50 LBS. FOR ALL FOUR BLOCKS, WEIGHT= 200 LBS. BEARING AREA ON SOIL= 576 SQ. IN.

DETAIL OF STANDARD CONCRETE VALVE BOX FOOTINGS
(METRO DWG. NO. W-9)



NOTE: REINFORCING TO BE 1/4" STEEL REINFORCING RODS PLACED HORIZONTALLY IN SQUARES 16 1/4" X 14" AND TO BE STAGGERED APPROXIMATELY AS SHOWN ON PLAN VIEW, ONE FOR EVERY 3" OF HEIGHT OF BOX. VERTICAL RISERS ARE TO BE SHORTER THAN THE HEIGHT OF THE BOX AND SHALL BE PLACED IN EACH CORNER OF THE BOX AND AT THE HALF WAY POINT OF EACH SIDE OF THE BOX USING 8 RISERS TO THE BOX.
TOTAL LENGTH OF REINFORCING RODS FOR BOX APPROX. 47 FEET.
CONCRETE MIXTURE TO BE 1 PART CEMENT PARTS SAND & 4 PARTS NO. 2 CRUSHED STONE OR GRAVEL.
TOTAL VOLUME OF MIXTURE FOR BOX - APPROX. 2 CU. FT.

DETAIL OF STANDARD CONCRETE VALVE BOX
(METRO DWG. NO. W-10)

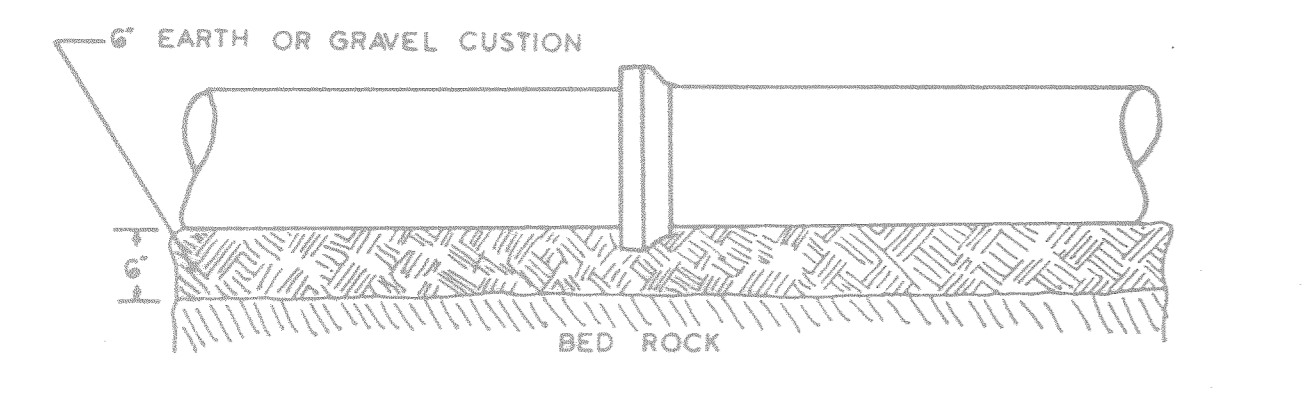
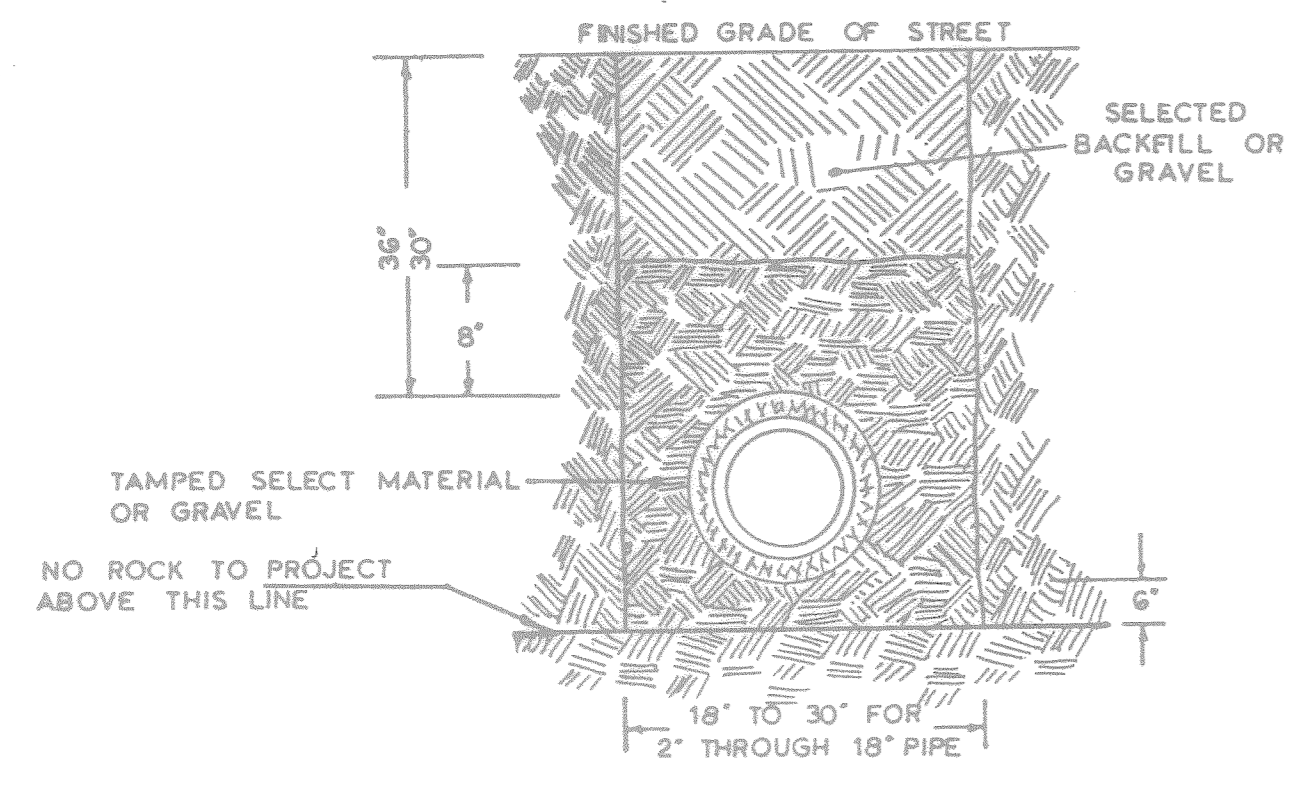


STANDARD 1" BLOW-OFF DETAIL
(METRO DWG. NO. W-7)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

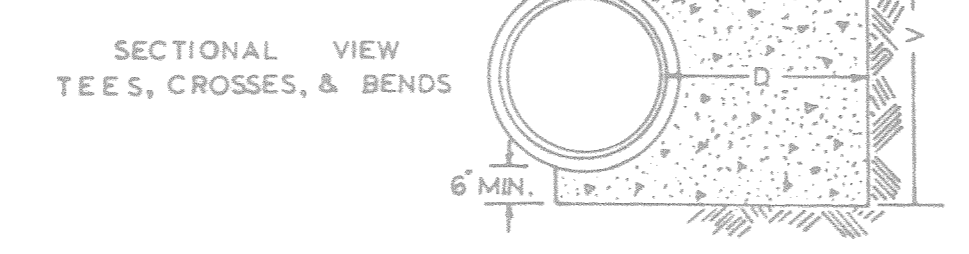
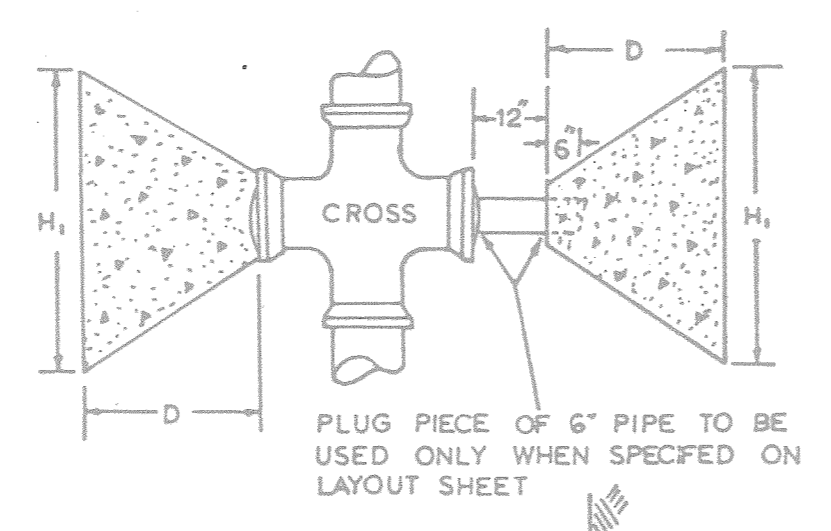
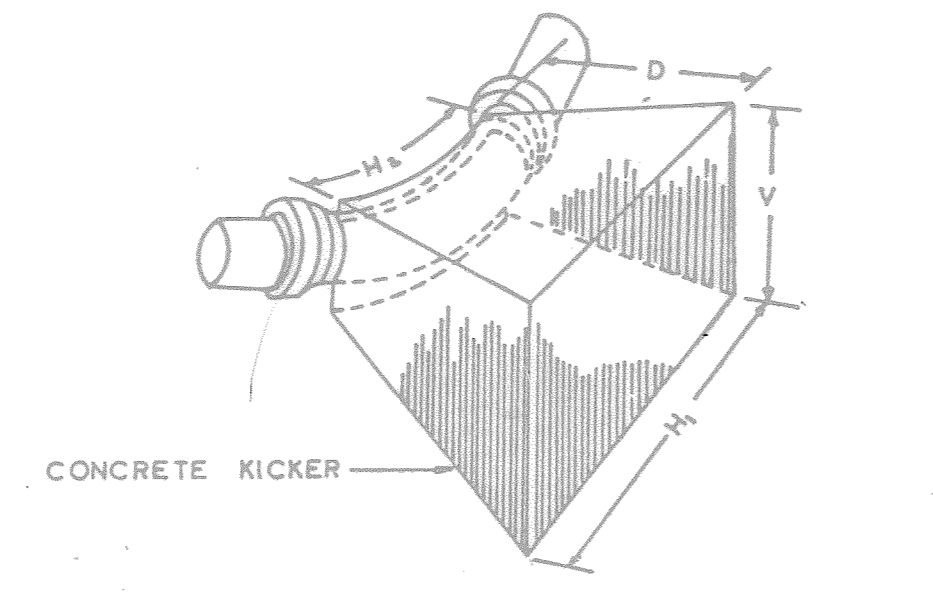
DETAILS
WATER LINE

TYPE	YEAR	PROJECT NO	SHEET NO
CONST	1981	I-440-4(54)209	2 D



NOTE: WHERE TRENCH HAS ROCK BOTTOM, DEPTH OF TRENCH MUST BE ENOUGH TO ALLOW FOR 6" EARTH CUSHION BELOW BOTTOM OF PIPE

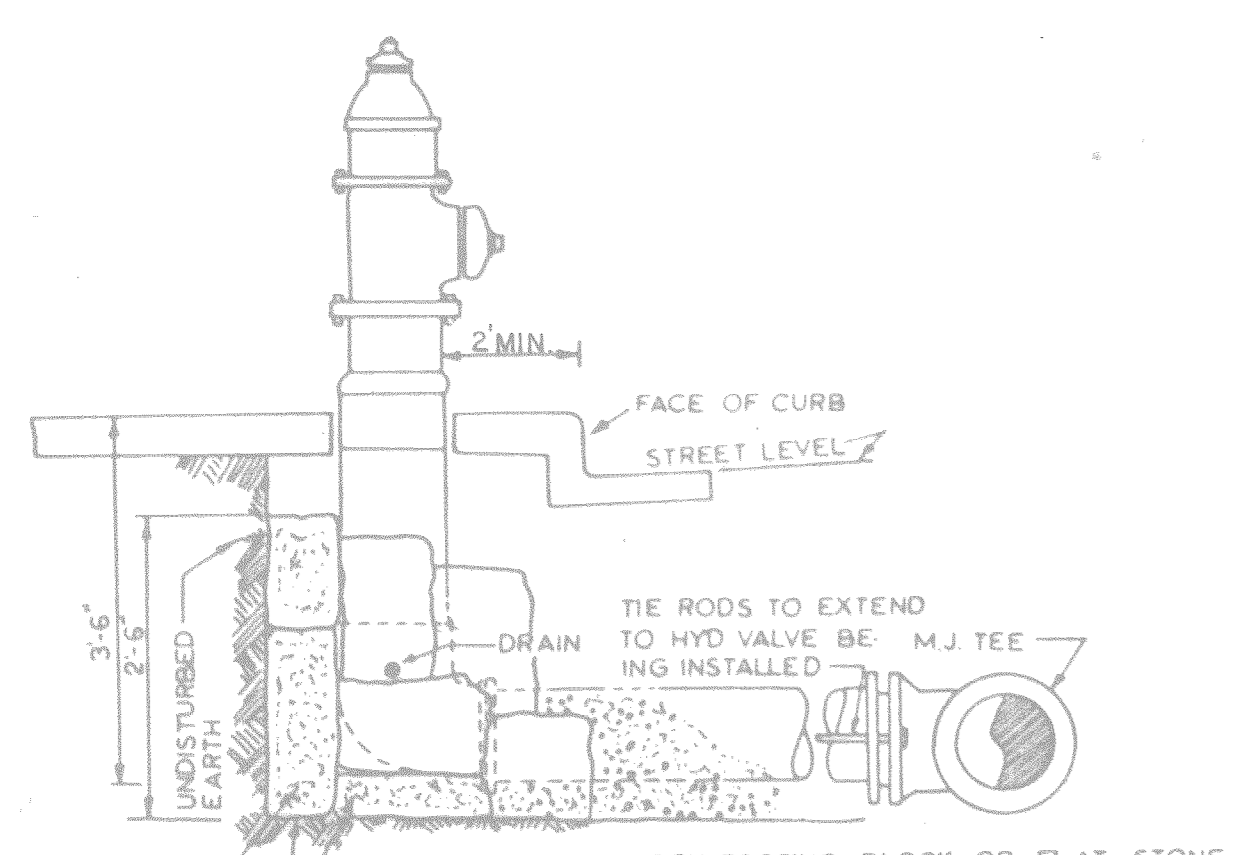
DETAIL FOR METHOD OF SUPPORTING PIPE AND BACKFILLING TRENCH (METRO DWG. NO. W-6)



NOTE: SEE THIS SHEET FOR TABLE OF DIMENSIONS FOR CONCRETE KICKER

BLOCKING DETAIL (METRO DWG. NO. W-4)

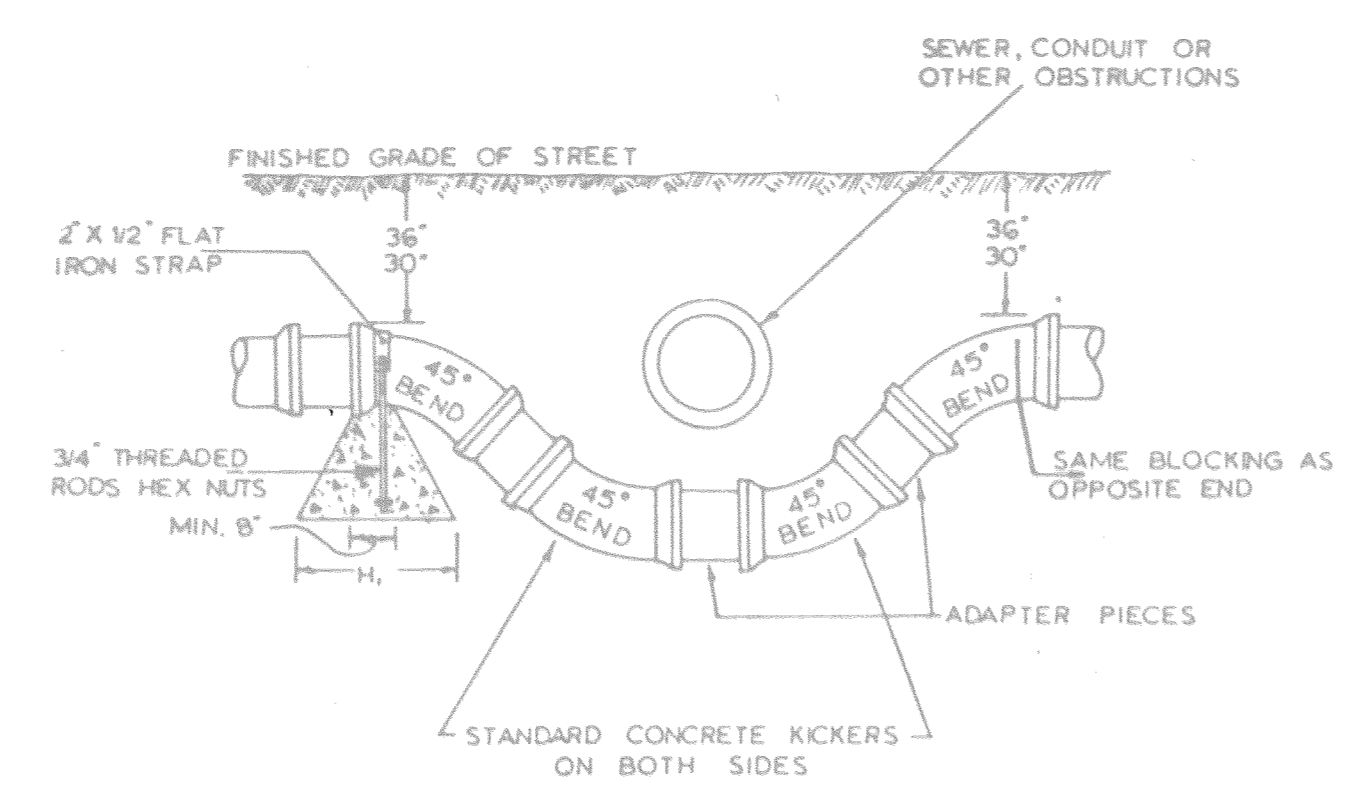
HYDRANT SHALL BE SET ON FLAT STONE OR CONC. VALVE BOX FOOTING BLOCK. LARGE FLAT STONES SHALL BE WEDGED FIRMLY BEHIND AND EXTENDING AROUND HYDRANT TO UNDISTURBED EARTH. CARE SHALL BE USED TO SET HYDRANT PLUMB. THE FIRE HYDRANT SHALL BE LOCATED NOT LESS THAN 2 FEET FROM FACE OF CURB TO FRONT OF HYDRANT PROTECTION CASE. A MINIMUM OF 2 CU. FT. OF CRUSHED STONE SHALL BE PLACED AROUND LEAD ADJOINING BLOCKING FOR DRAINAGE FROM WASTE OPENING.



20"x20" SQ. STONE WEDGED BETWEEN HYD. BASE AND BACK OF TRENCH - 4" MIN. THICKNESS OR CLASS "A" CONCRETE CAN BE USE IN PLACE OF STONE

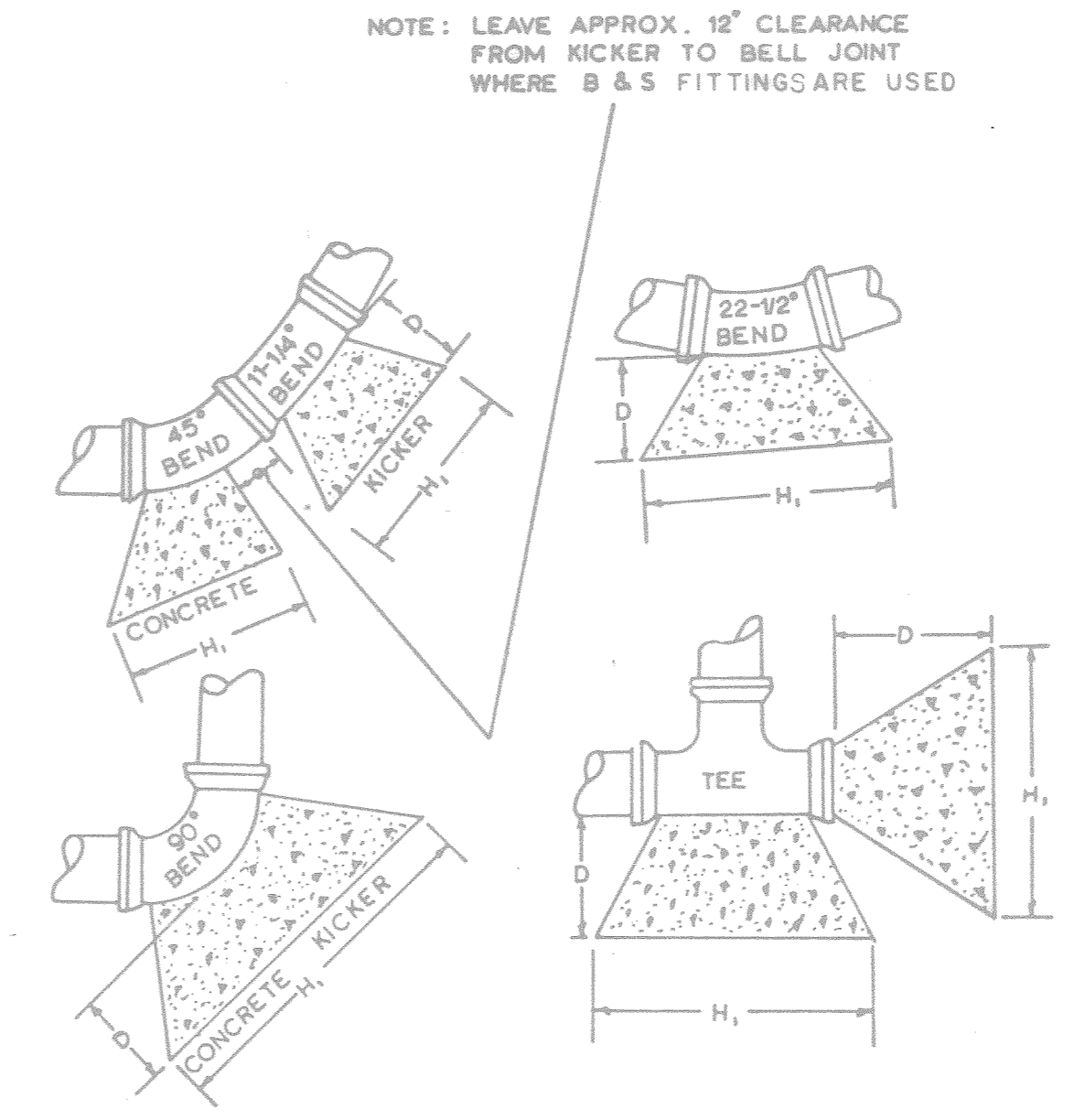
FIRE HYDRANT INSTALLATION

NOTE: SEE THIS SHEET FOR TABLE OF DIMENSIONS FOR CONCRETE KICKERS



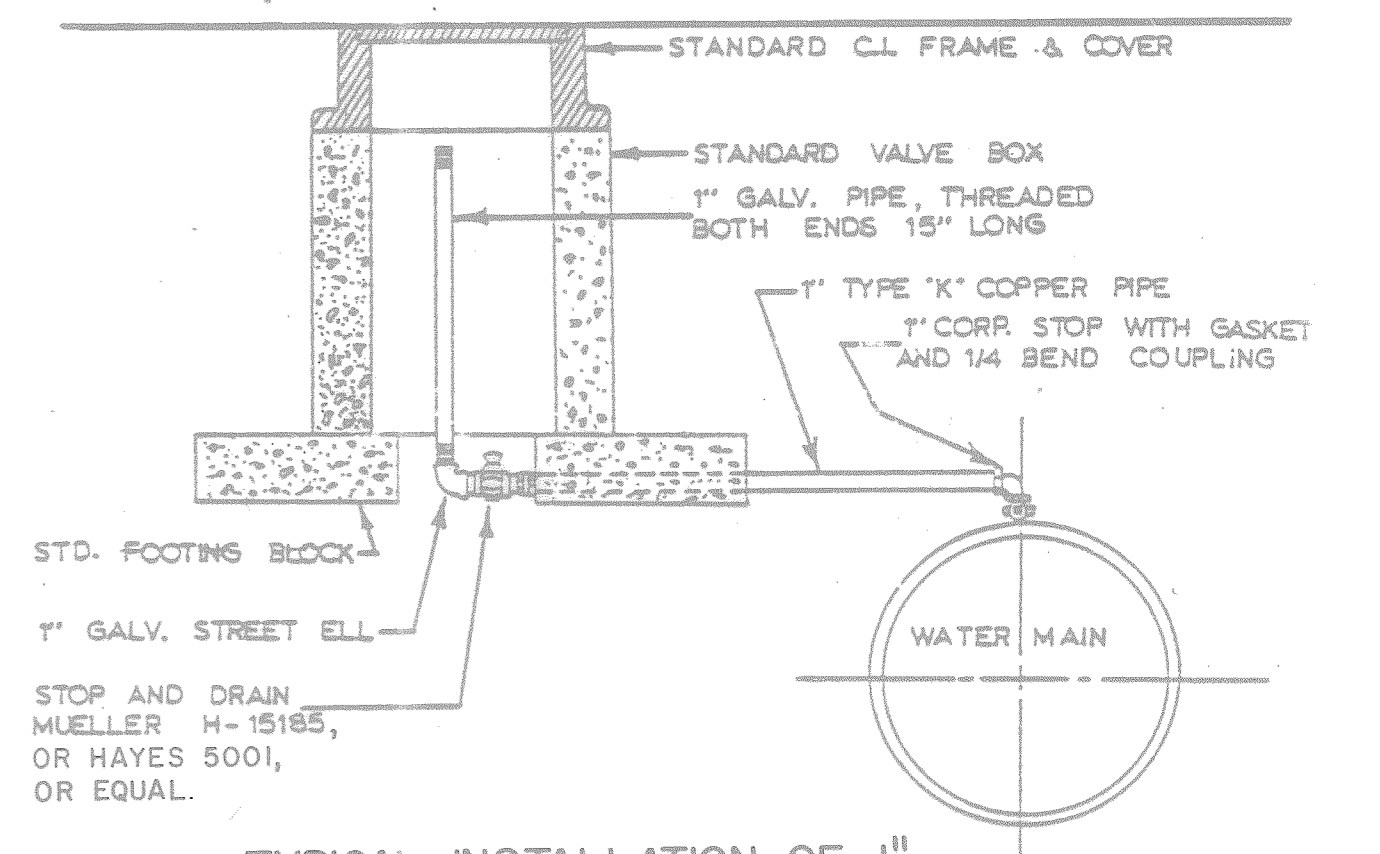
NOTE: SIZE OF KICKER, CLAMP, & RODS SHALL BE INCREASED IF SPECIFIED ON LAYOUT SHEETS OR BY THE ENGINEER.

DETAIL FOR METHOD OF CROSSING UNDER OBSTRUCTIONS

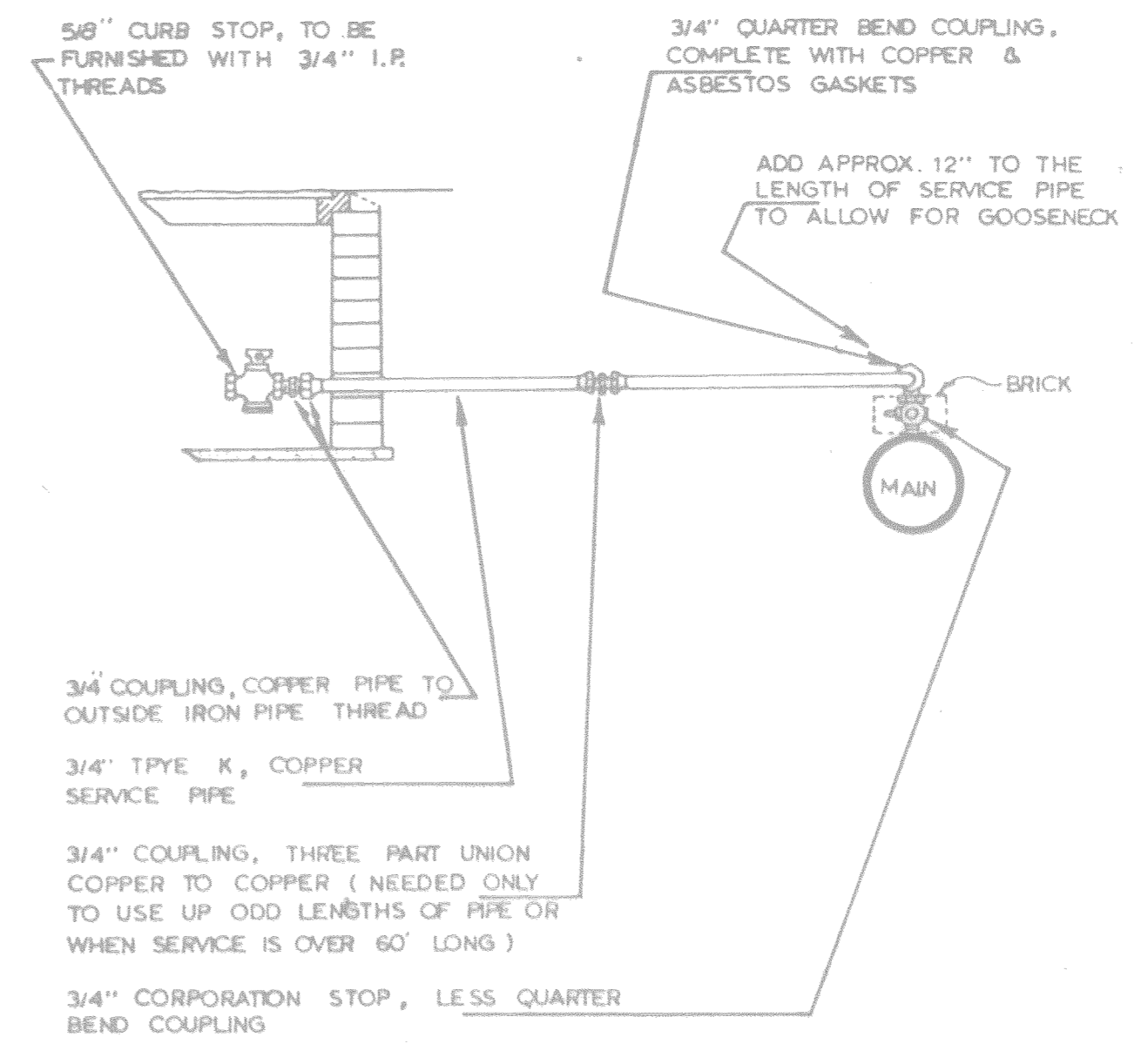


NOTE: SEE THIS SHEET FOR TABLE OF DIMENSIONS FOR CONCRETE KICKER

BLOCKING DETAIL



TYPICAL INSTALLATION OF 1" CONNECTION FOR AIR RELIEF (METRO DWG. NO. W-8)



NOTE: 3/4" COUPLING, THREE PART UNION, COPPER TO COPPER SHALL BE INSTALLED OUTSIDE STREET PAVING ONLY.

SERVICE LINE DETAIL (METRO DWG. NO. W-13)

SIZE OF PIPE	TABLE OF DIMENSIONS FOR CONCRETE KICKER																													
	TAPPING SLEEVES TEES & PLUGS					90° BENDS					45° BENDS					22 1/2° BENDS					11 1/4° BENDS.									
	H1	H2	V	D	CU. FT.	H1	H2	V	D	CU. FT.	H1	H2	V	D	CU. FT.	H1	H2	V	D	CU. FT.	H1	H2	V	D	CU. FT.					
2" & 2 1/4"	18"	10"	12"	18"	190	18"	10"	12"	18"	190	18"	6"	12"	18"	150	18"	6"	12"	18"	150	18"	6"	12"	18"	150	18"	6"	12"	18"	150
3" & 4"	24"	12"	12"	18"	225	24"	12"	12"	18"	225	18"	8"	12"	18"	160	18"	8"	12"	18"	160	18"	8"	12"	18"	160	18"	8"	12"	18"	160
6"	24"	16"	18"	18"	350	30"	16"	18"	18"	405	24"	10"	16"	18"	300	24"	10"	16"	18"	320	24"	10"	16"	18"	320	24"	10"	16"	18"	320
8"	36"	18"	18"	18"	505	39"	18"	24"	18"	730	30"	11"	18"	18"	395	24"	11"	18"	18"	340	24"	11"	16"	18"	340	24"	11"	16"	18"	340
10"	48"	24"	18"	24"	715	54"	32"	24"	18"	1025	24"	18"	21"	18"	460	24"	18"	21"	18"	460	24"	18"	21"	18"	460	24"	18"	21"	18"	460
12"	54"	30"	24"	24"	134	54"	32"	36"	24"	1815	42"	18"	24"	24"	960	24"	18"	24"	24"	960	24"	18"	21"	24"	610	24"	18"	21"	24"	610
16"	66"	34"	36"	24"	225	69"	48"	48"	24"	290	48"	30"	36"	24"	170	36"	30"	27"	24"	118	27"	24"	27"	24"	910	27"	24"	27"	24"	910
18"	36"	24"				48"	24"				30"	24"				30"	24"				30"					30"				
20"	38"	24"				48"	24"				40"	24"				36"	24"				40"					40"				
24"	42"	24"				60"	24"				48"	24"				42"	24"				42"					42"				
30"	52"	24"				72"	24"				48"	24"				48"	24"				48"					48"				
36"	58"	24"				96"	24"				72"	24"				72"	24"				48"					48"				

TABLE IS BASED ON 225 PSI OR 150 PSI WORKING PRESSURE PLUS 50% WATER HAMMER

NOTE: CONCRETE USED FOR BLOCKING SHALL BE CLASS "A" EARTH PRESSURES ARE FIGURED AT 4000* PER SQ. FT. BEARING AREA OF KICKERS SHALL BE INCREASED WHEN POURED AGAINST SAND, LOOSE FILL, WET EARTH, CINDERS, ECT.

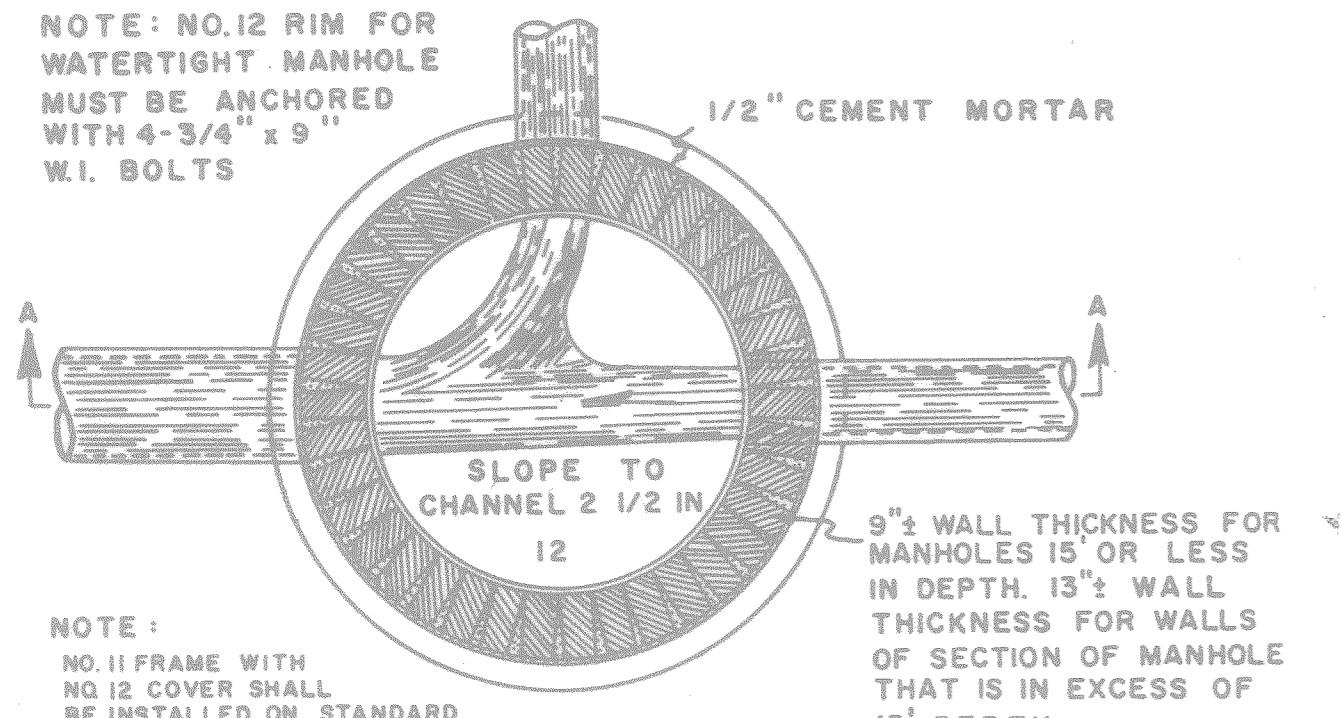
TABLE OF DIMENSIONS

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAYS

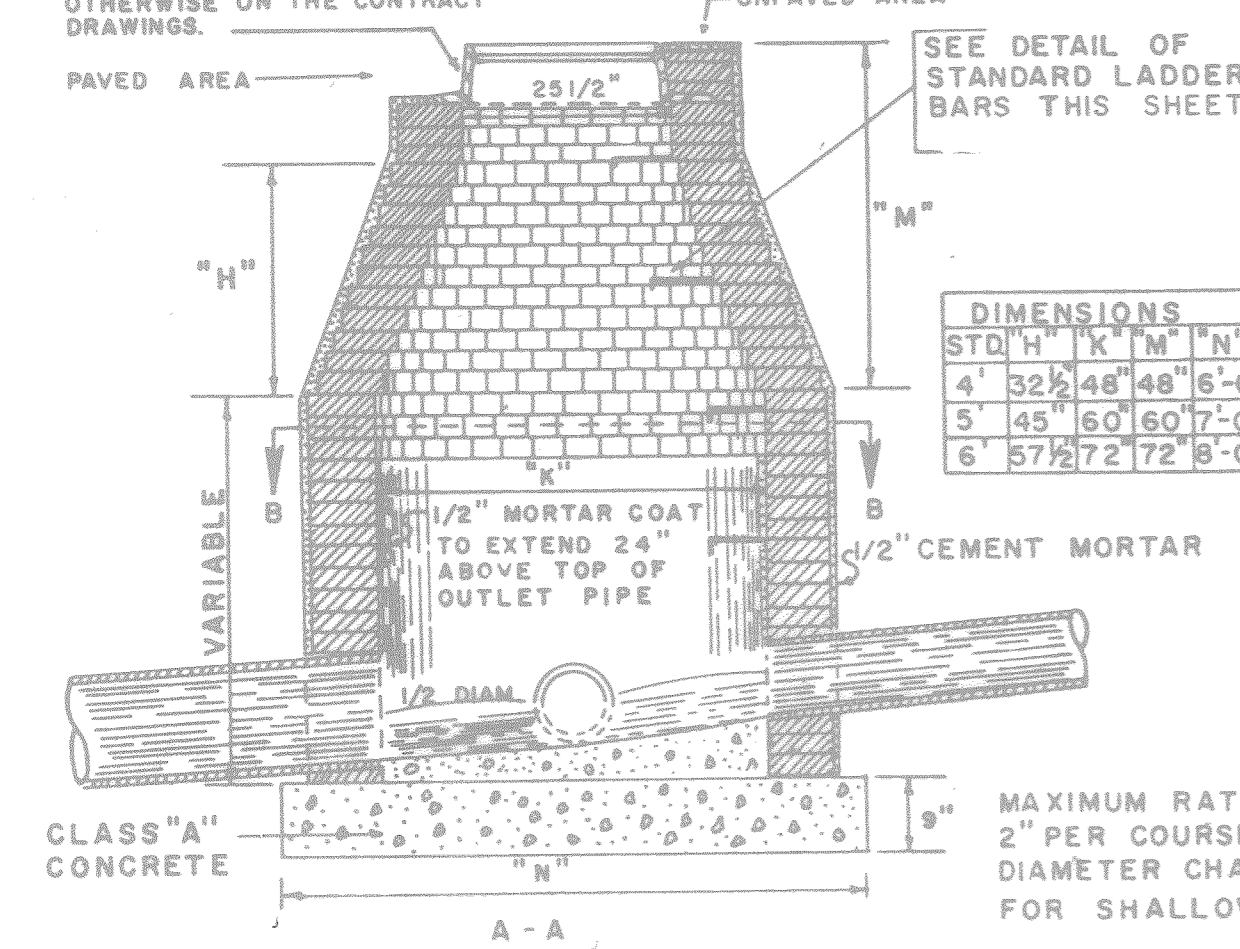
DETAILS WATER LINE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)209	2E

NOTE: NO. 12 RIM FOR WATERTIGHT MANHOLE MUST BE ANCHORED WITH 4-3/4" x 9" W.I. BOLTS

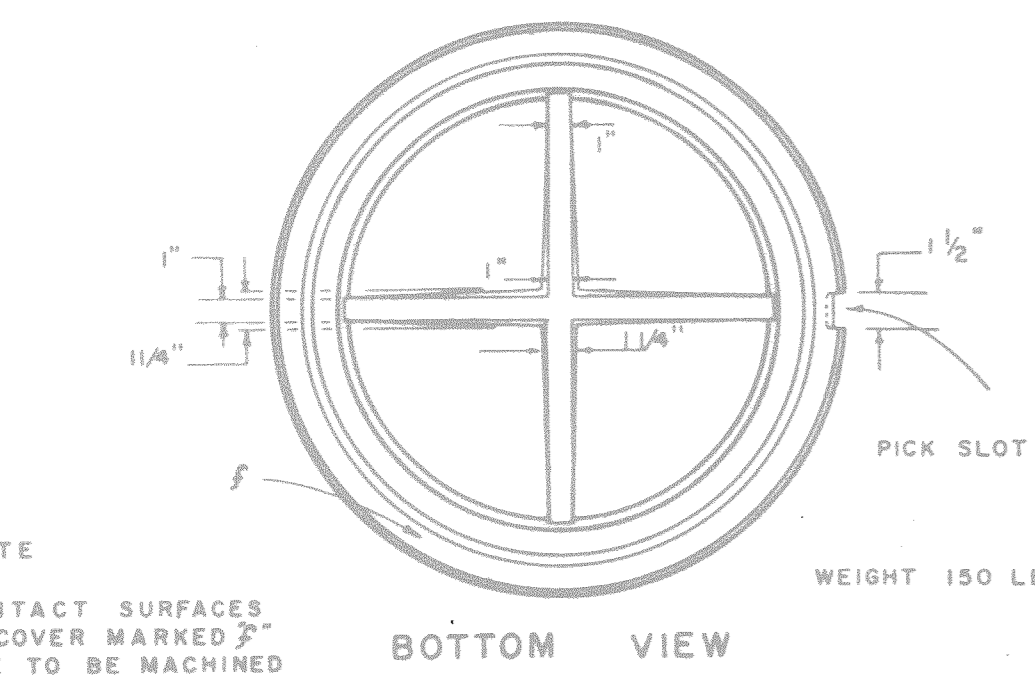
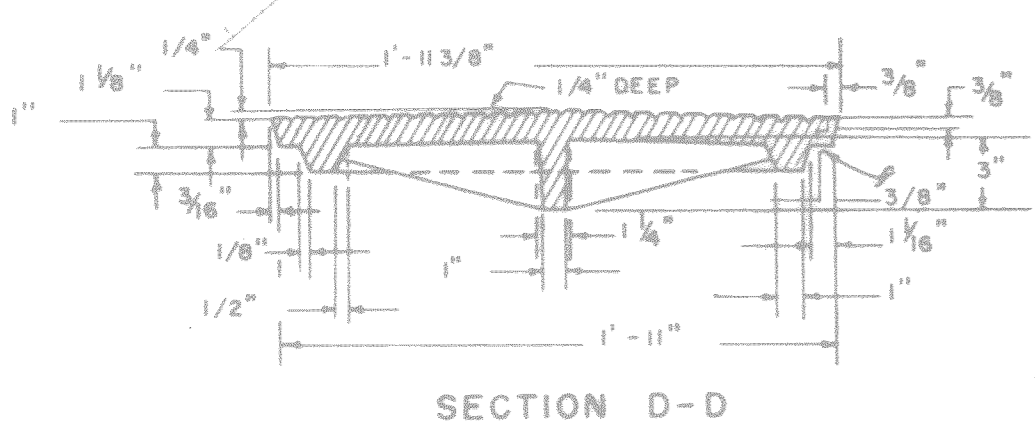
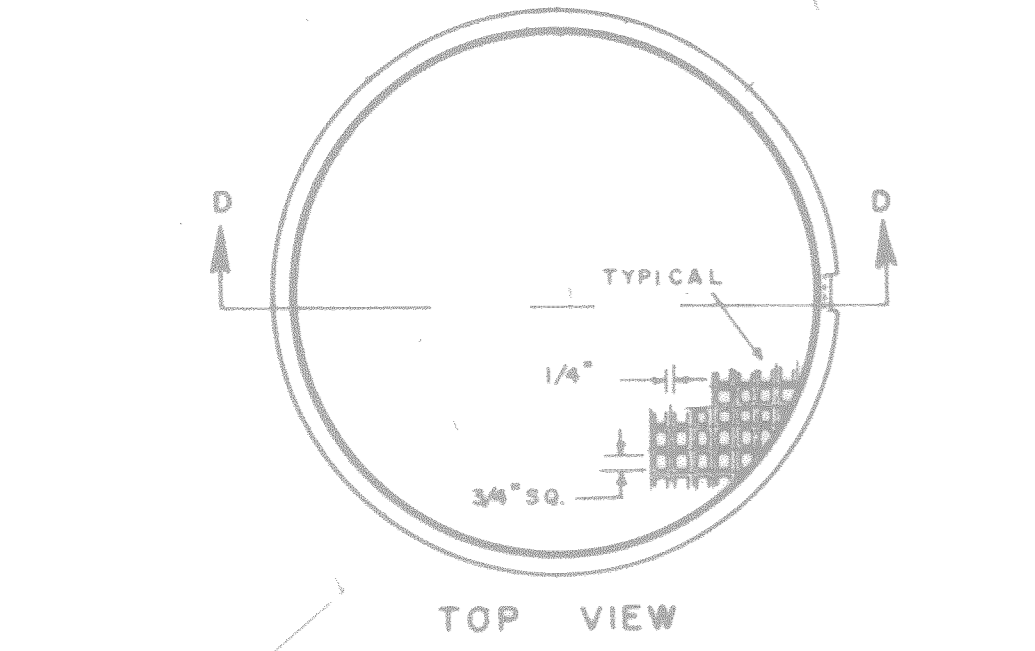


NOTE: NO. 11 FRAME WITH NO. 12 COVER SHALL BE INSTALLED ON STANDARD MANHOLES UNLESS NOTED OTHERWISE ON THE CONTRACT DRAWINGS.

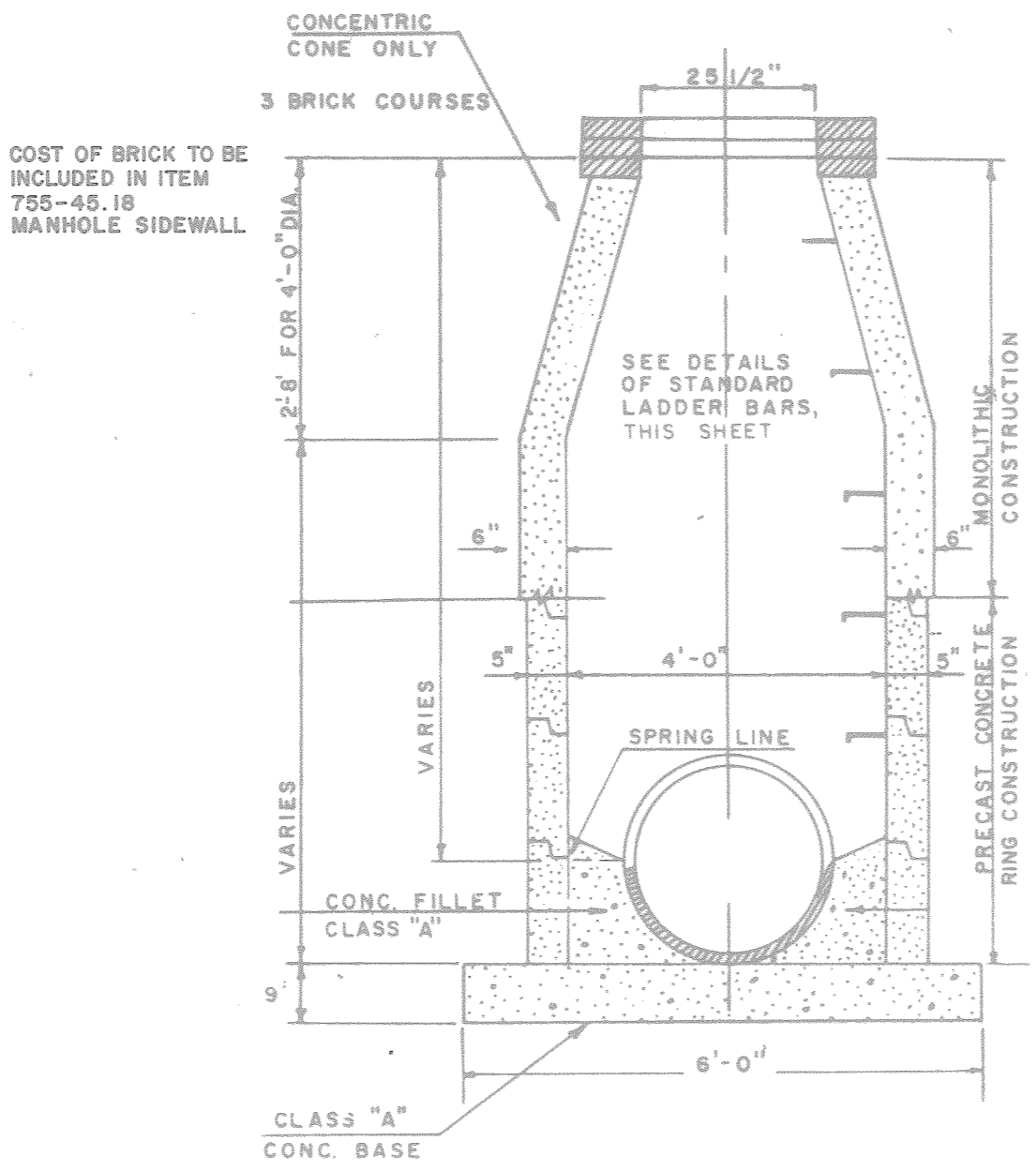
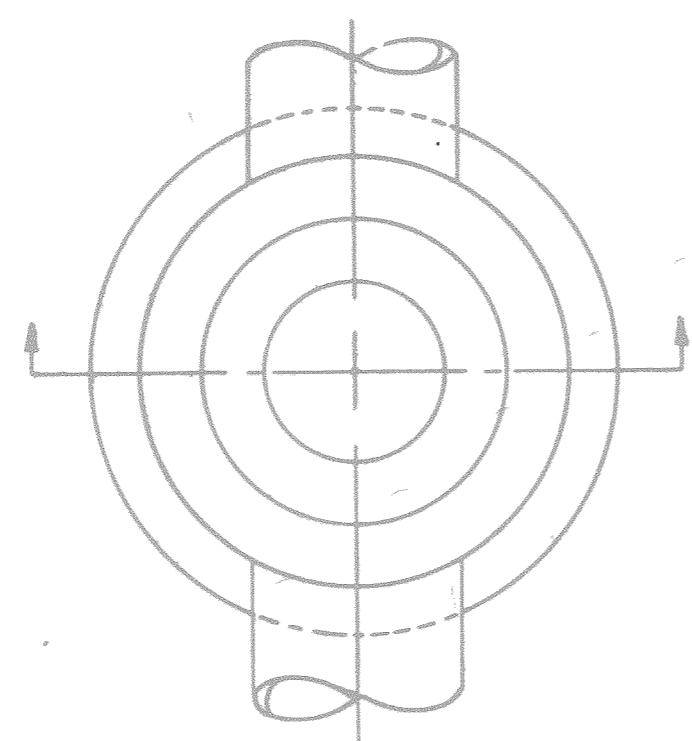


STQ	H	K	M	N
4'	32 1/2"	48"	48"	6'-0"
5'	45"	60"	60"	7'-0"
6'	57 1/2"	72"	72"	8'-0"

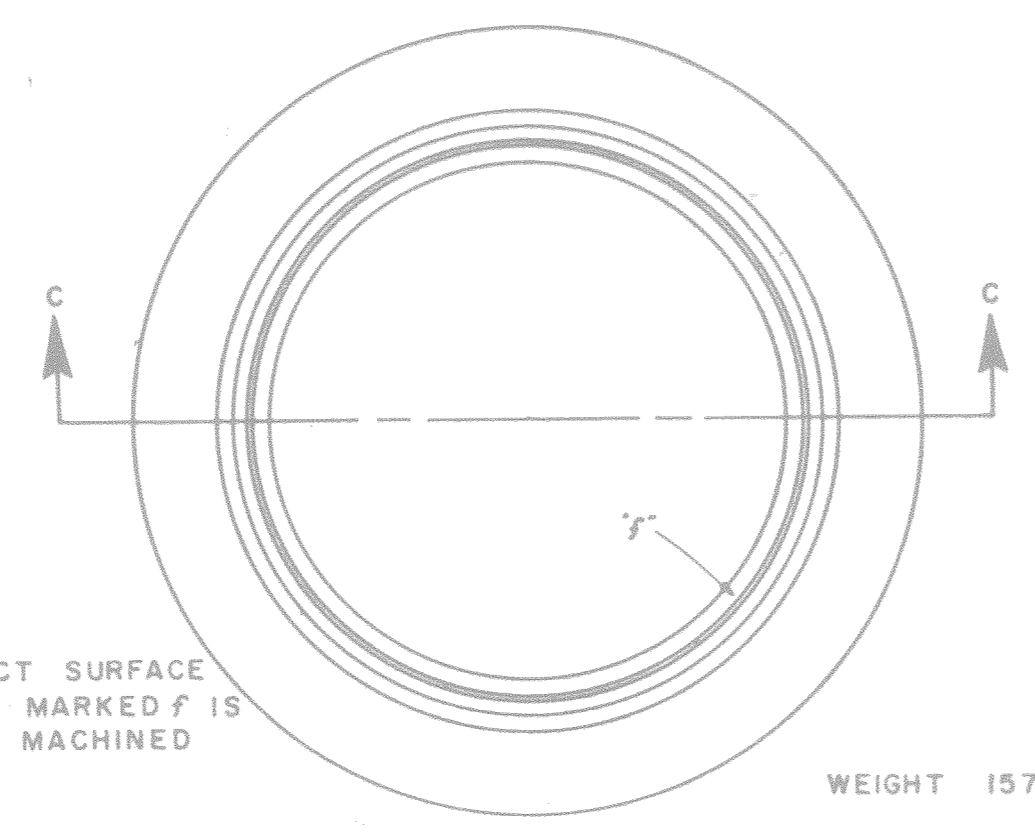
STANDARD MANHOLE DETAILS (METRO DWG. NO. SS-1)



MANHOLE COVER NO. 12 (METRO DWG. NO. SS-8)

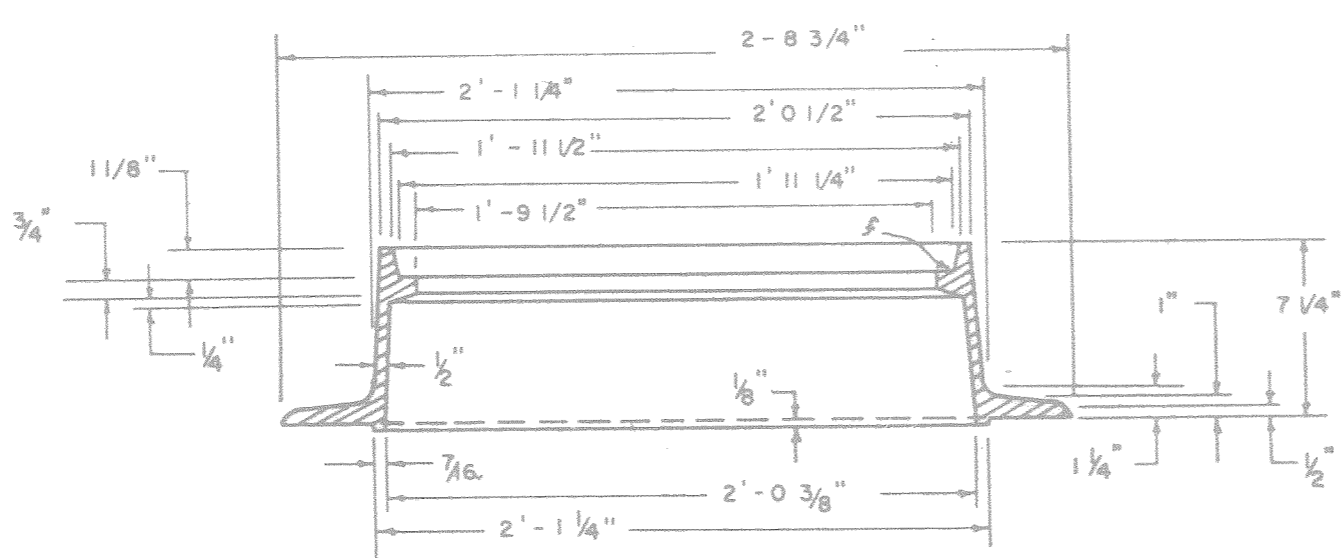


SECTION STANDARD PRECAST CONCRETE MANHOLE DETAIL (METRO DWG. NO. SS-2)

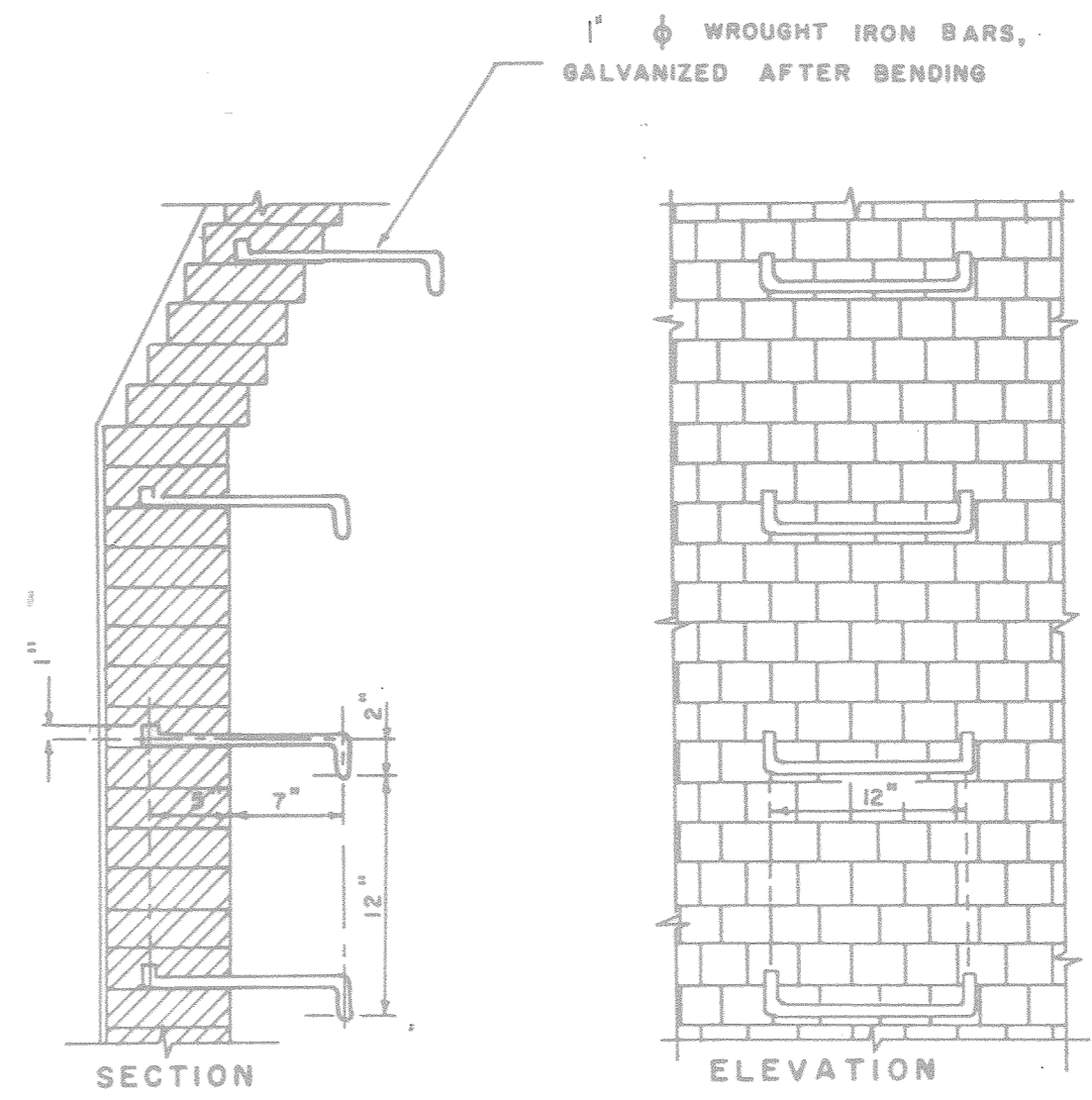


NOTE CONTACT SURFACE FRAME MARKED 'f' IS TO BE MACHINED

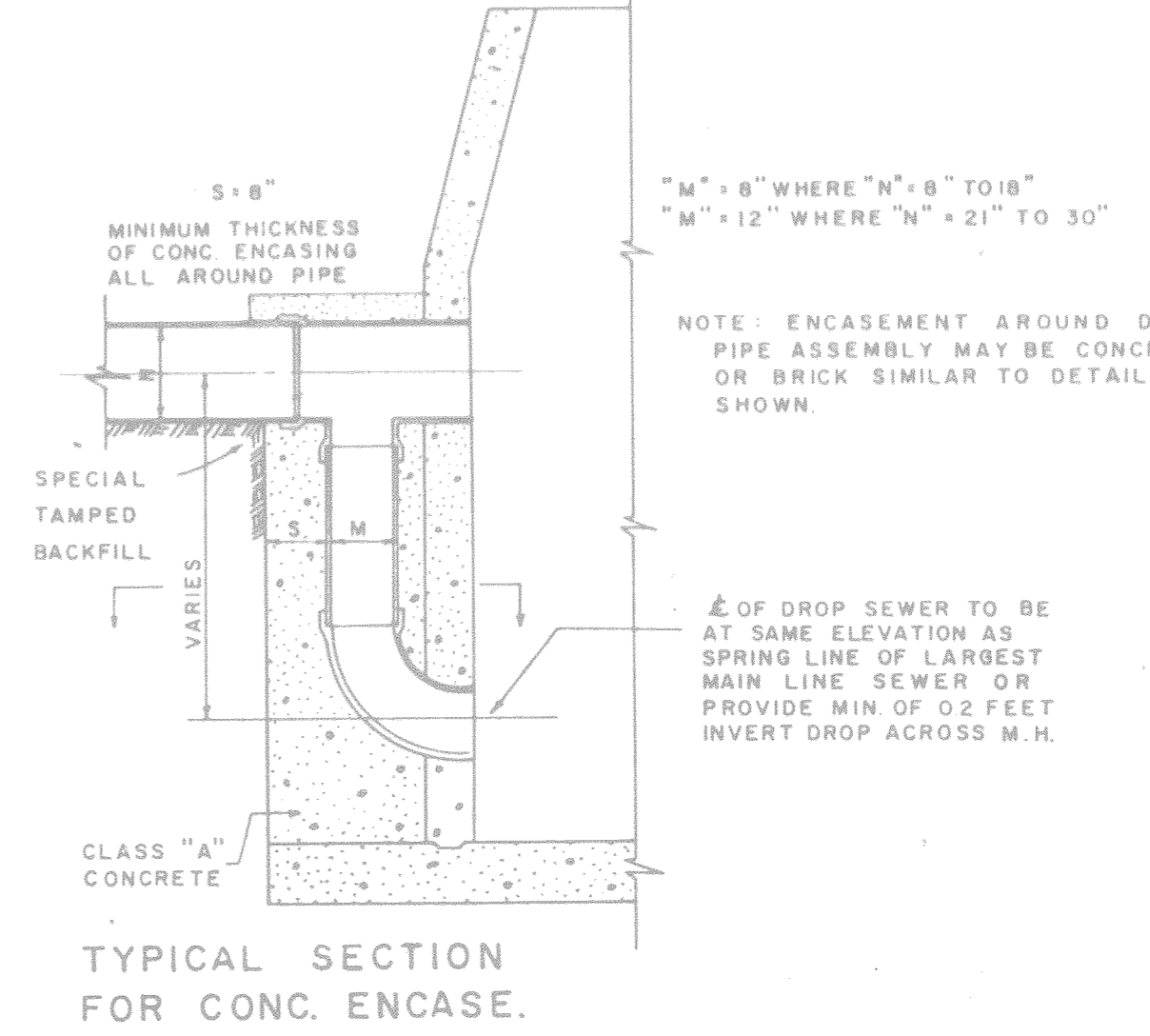
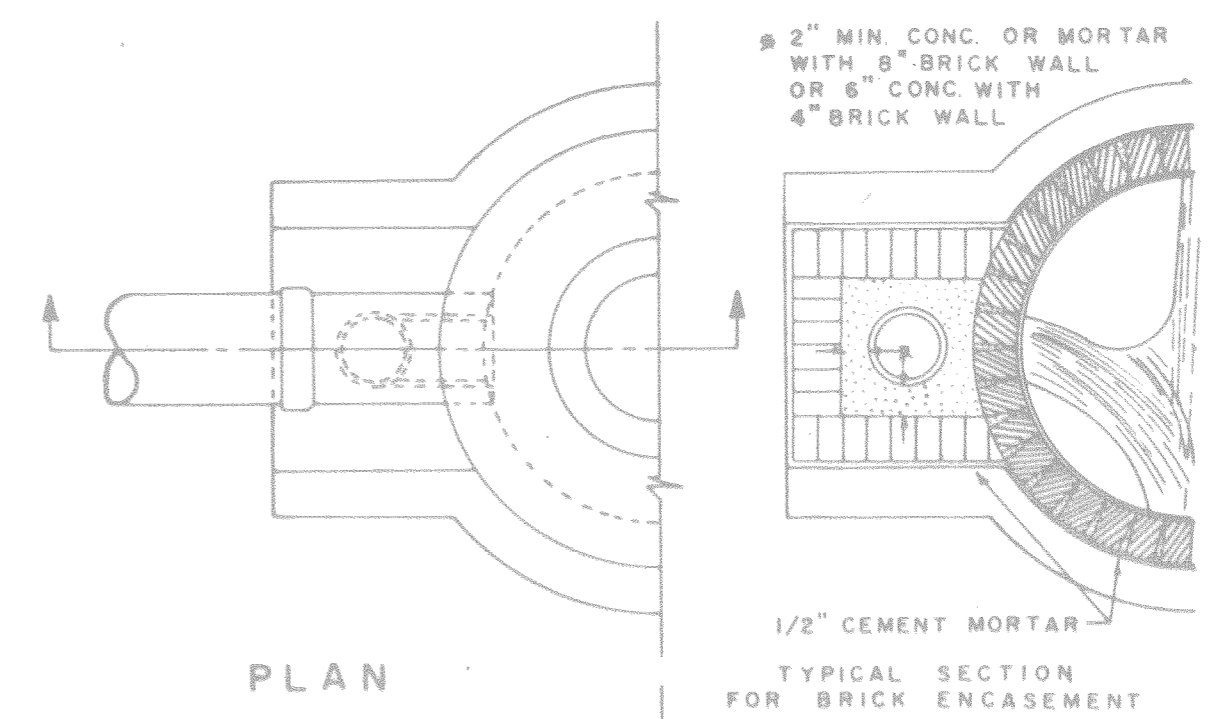
WEIGHT 157 LBS.



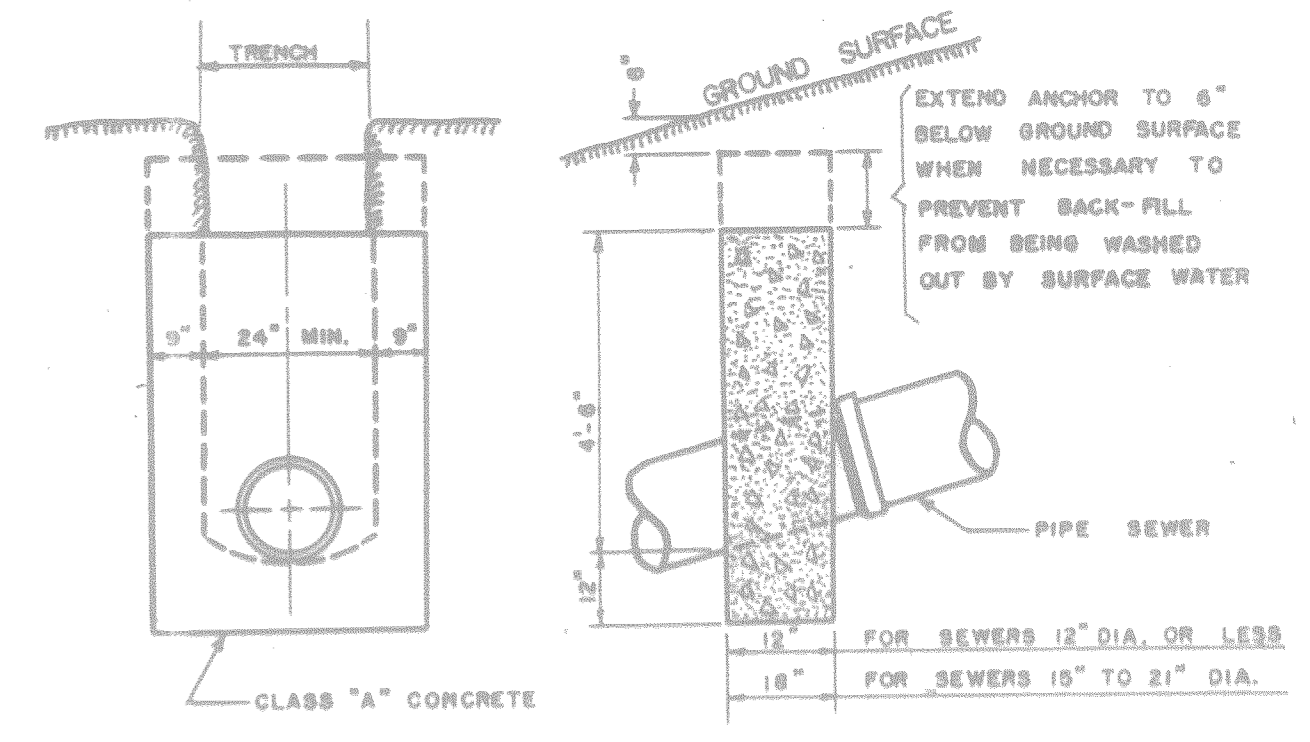
MANHOLE FRAME NO. 11 (METRO DWG. NO. SS-7)



DETAIL OF STANDARD LADDER BARS (METRO DWG. NO. SS-5)



DROP PIPE ASSEMBLY FOR STANDARD MANHOLES (METRO DWG. NO. SS-6)



CONCRETE ANCHORS FOR SEWERS ON STEEP GRADES
 PROVIDE NO ANCHOR ON GRADES LESS THAN 20% UNLESS NOTED.
 PROVIDE ANCHOR 38 C. TO C. ON GRADES BETWEEN 20% AND 34%.
 " " 24" C. TO C. " " 34% " 50%.
 " " 18" C. TO C. " " 50% " 70%.
 FOR CONDITIONS OTHER THAN SHOWN HEREON ANCHORS SHALL BE PROVIDED AS REQUIRED BY THE CONTRACT PLANS OR ORDERED IN THE FIELD BY THE ENGINEER.

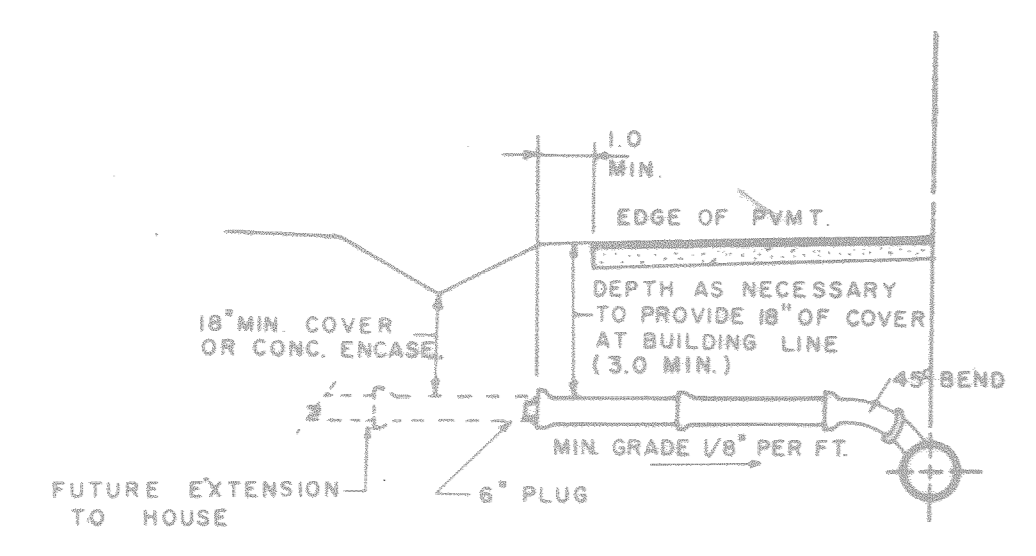
STANDARD CONCRETE SEWER ANCHORS

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

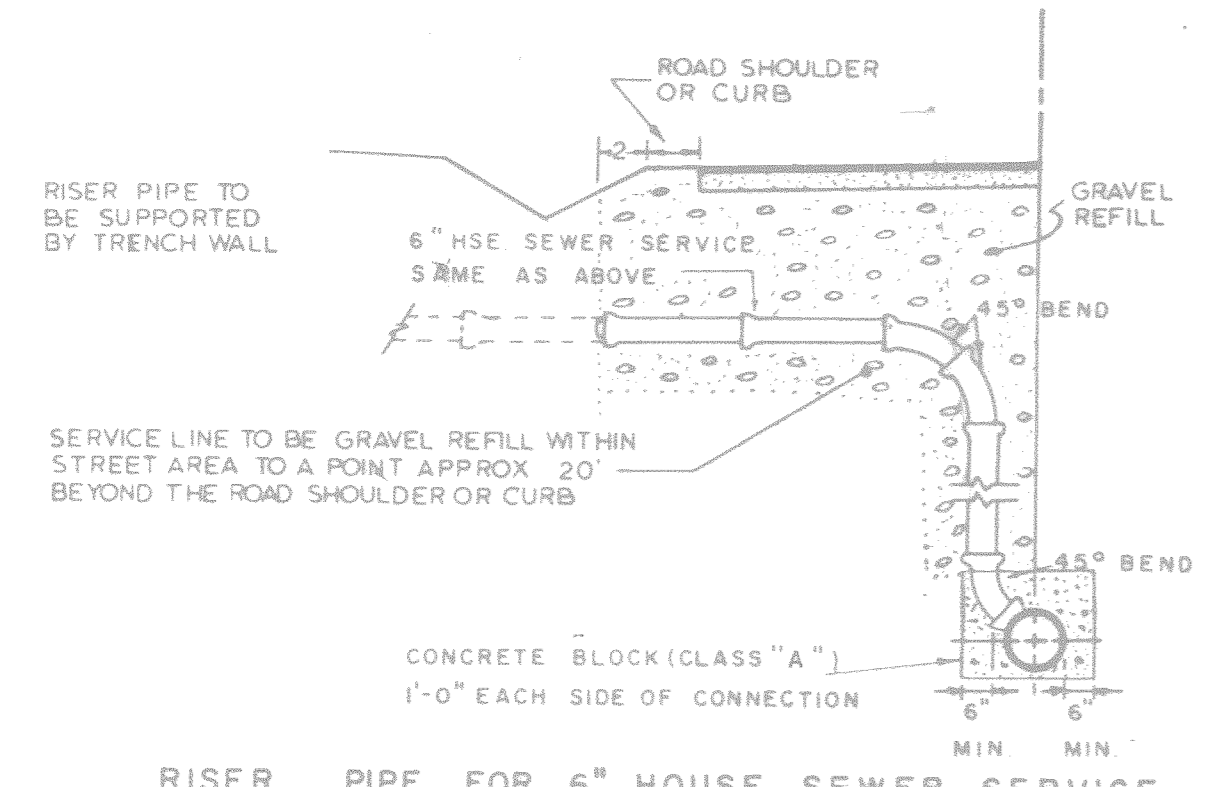
DETAILS
 SANITARY SEWER

TENN. STATE HIGHWAYS
 Plans
 No. 49
 Div.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	1982	I-440-4(54)203	2 F

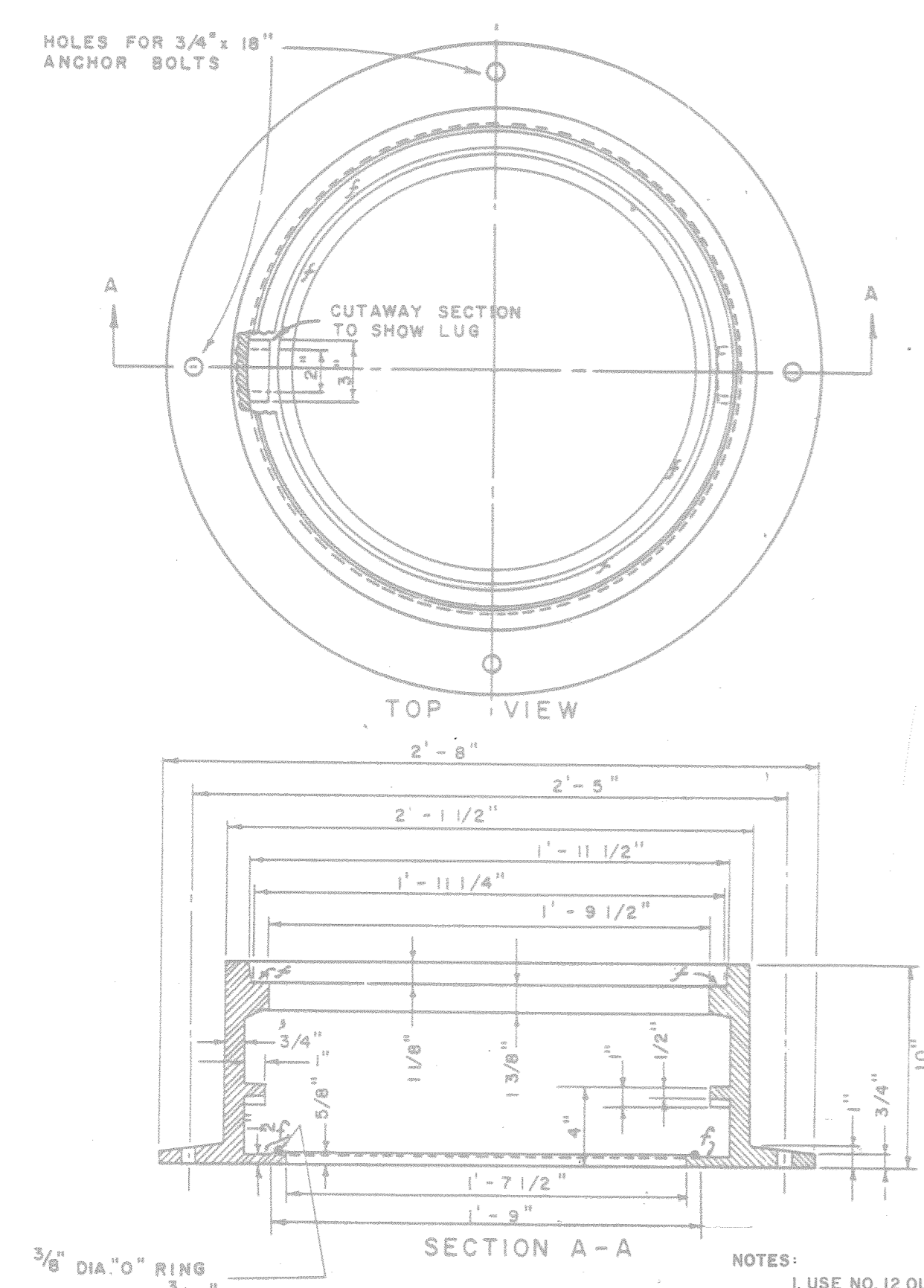


6" HOUSE SEWER SERVICE



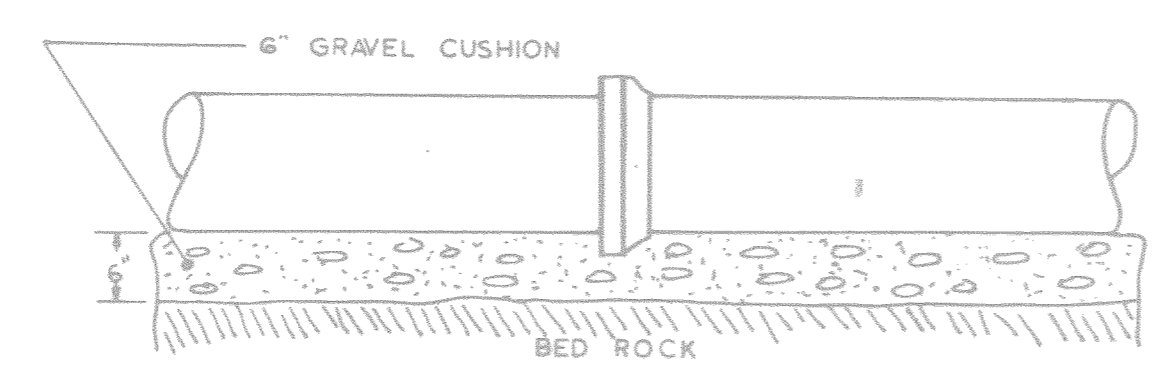
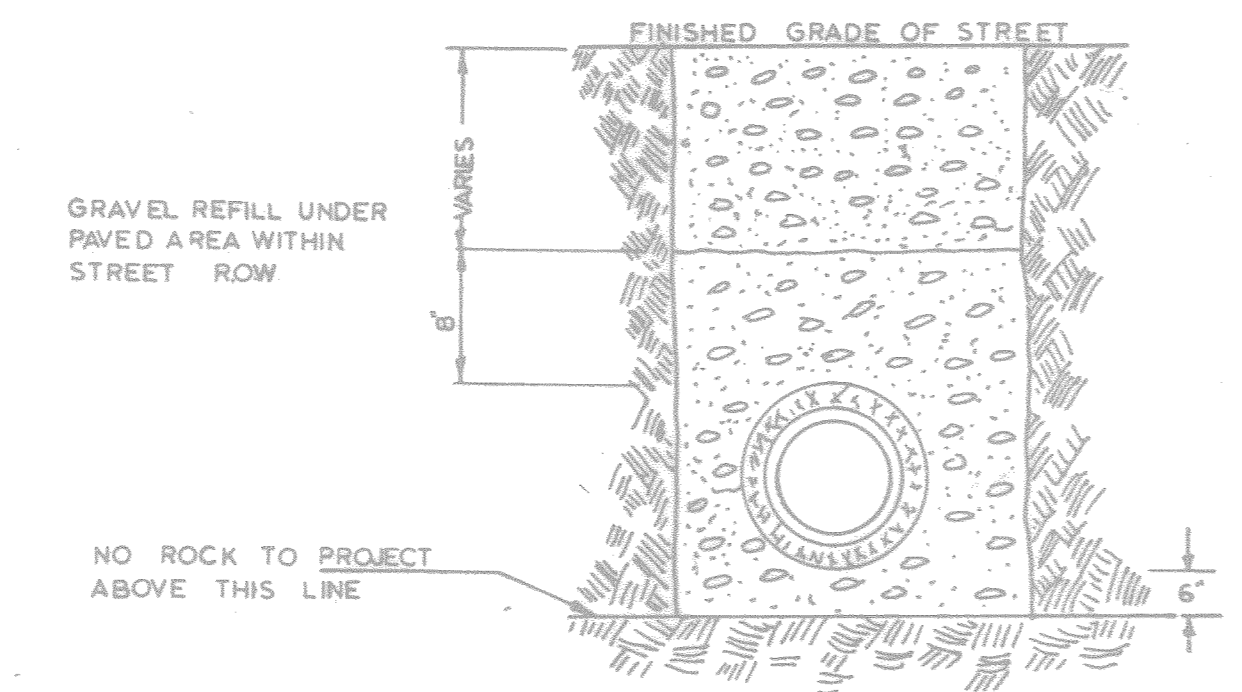
RISER PIPE FOR 6" HOUSE SEWER SERVICE

6" HOUSE SEWER SERVICE
 (METRO DWG. NO. SS-15)



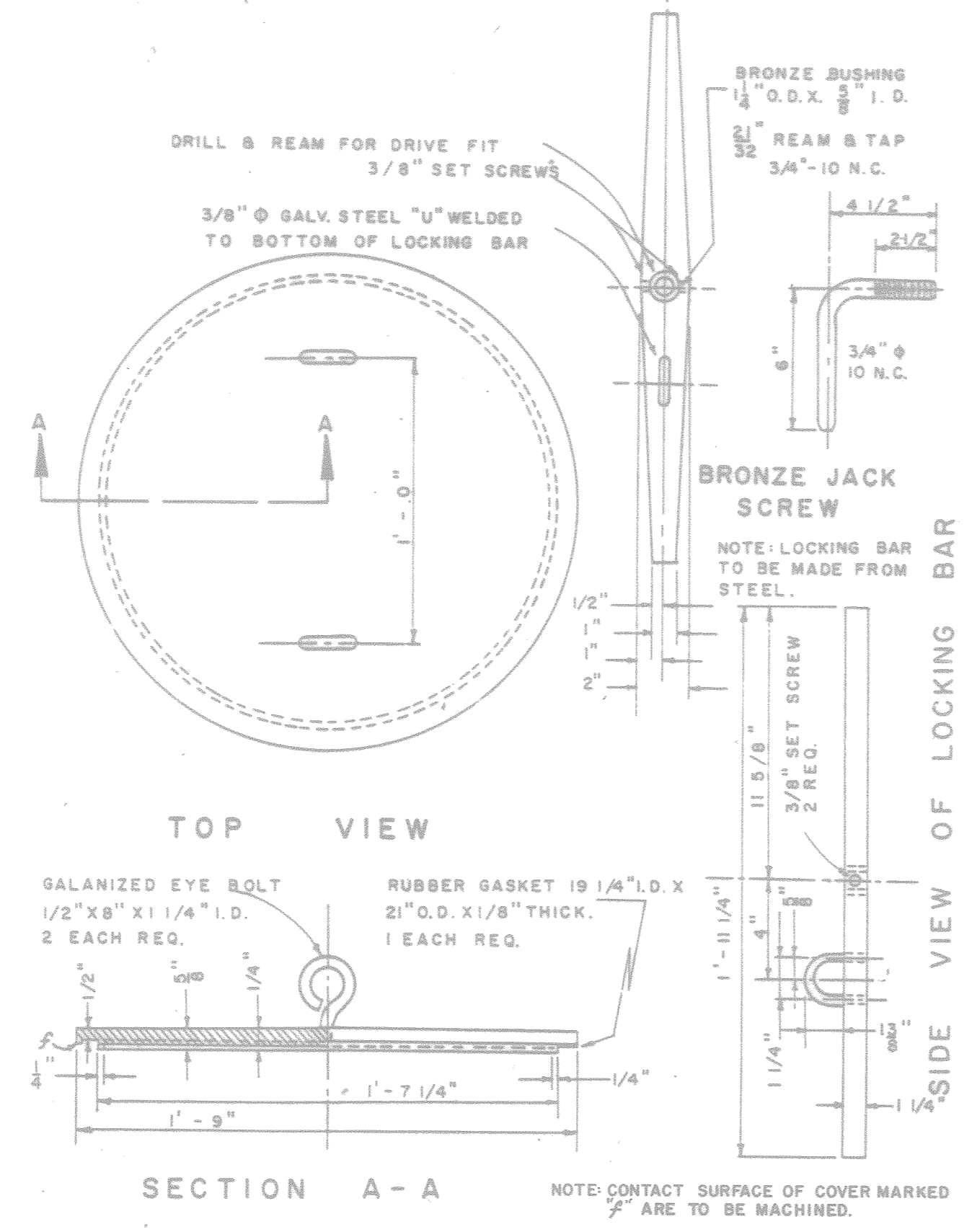
(METRO DWG. NO. SS-9)
 WATER TIGHT MANHOLE
 FRAME NO. 12
 APPROX. WEIGHT = 375 LBS.

- NOTES:
 1. USE NO. 12 OUTSIDE COVER.
 2. PROVIDE ANCHOR RING FOR FRAMES SET IN CONCRETE.
 3. CONTACT SURFACES OF FRAME AND COVER MARKED "Z" ARE TO BE MACHINED.



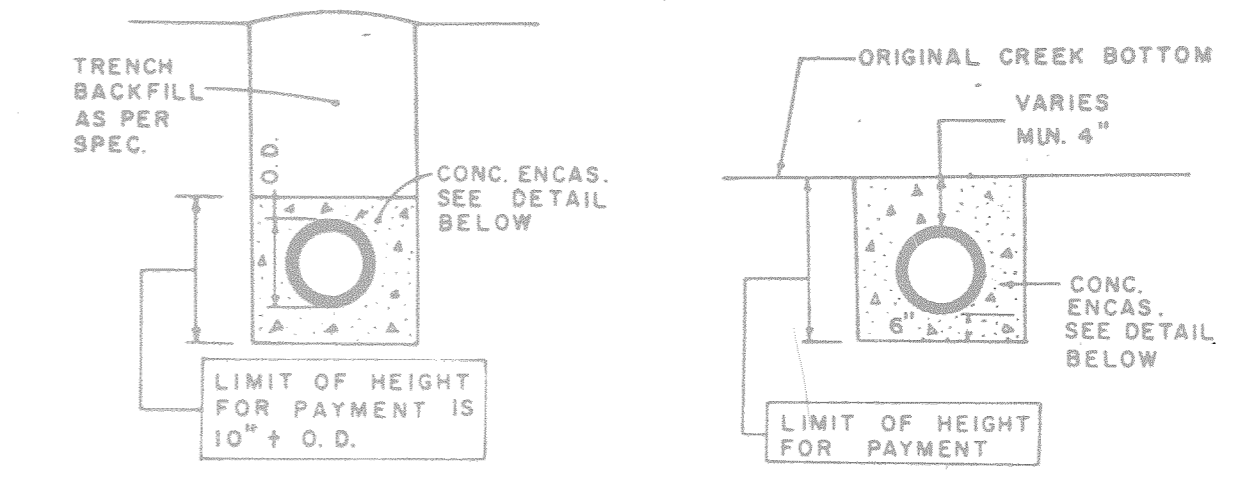
NOTE WHERE TRENCH HAS ROCK BOTTOM DEPTH OF TRENCH MUST BE ENOUGH TO ALLOW FOR 6" CRUSHED STONE BELOW BOTTOM OF PIPE

METHOD OF SUPPORTING PIPE AND BACKFILLING TRENCH
 (METRO DWG. NO. SS-16)
 TOP VIEW OF LOCKING BAR

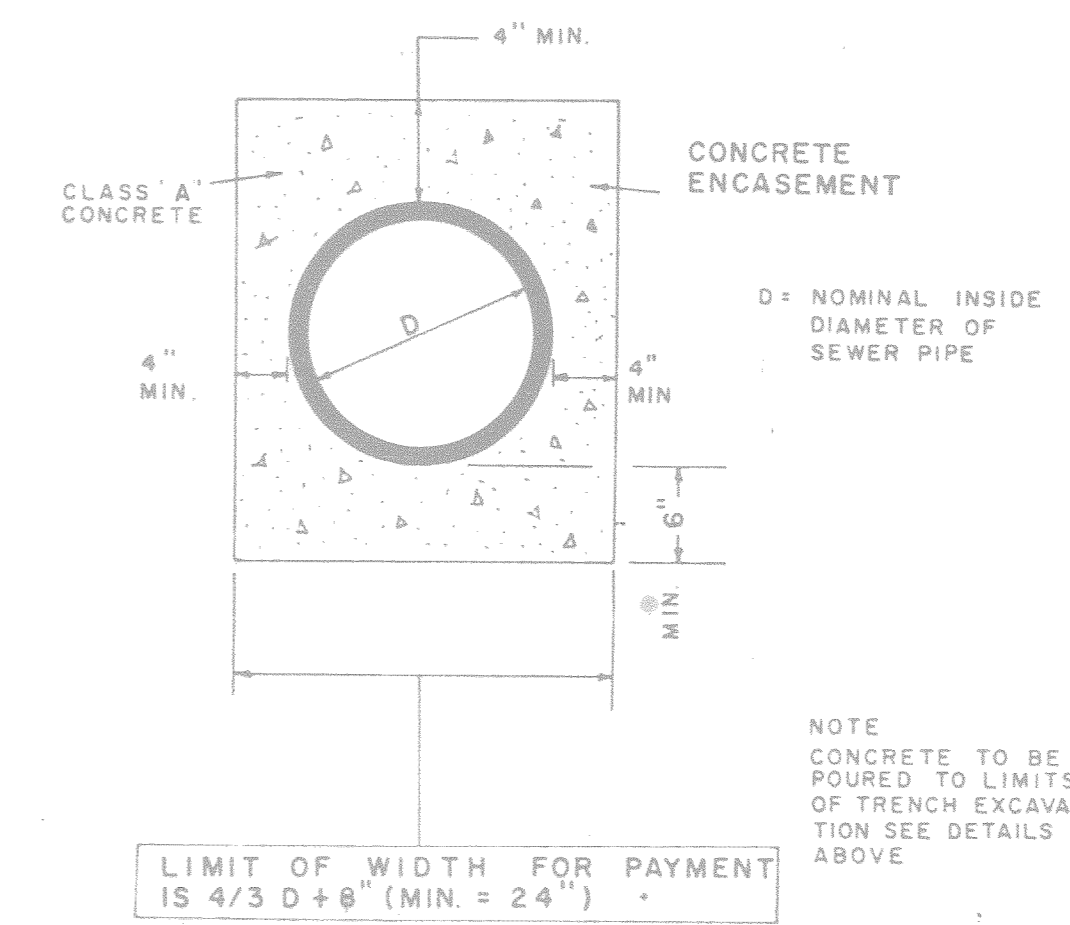


WATER SEALING COVER & LOCKING BAR FOR NO. 12
 (METRO DWG. NO. SS-10)

NOTE: CONTACT SURFACE OF COVER MARKED "Z" ARE TO BE MACHINED.



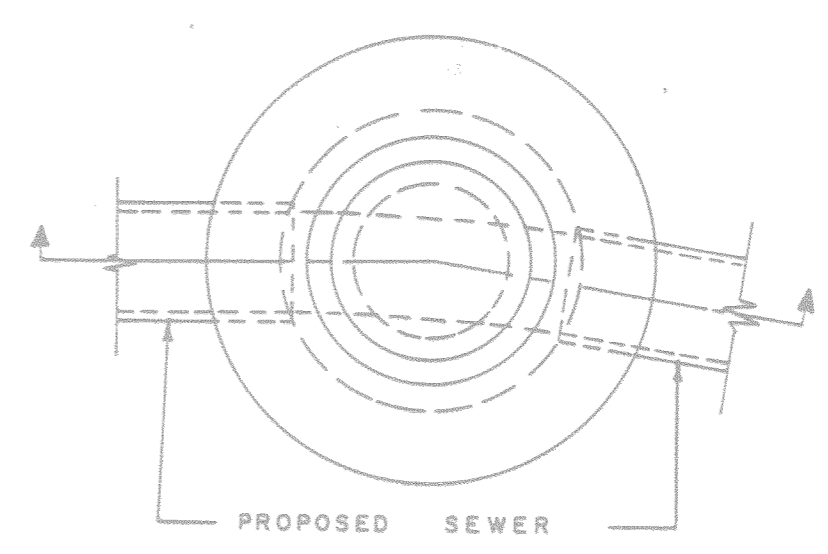
STANDARD CONCRETE ENCASEMENT CREEK BOTTOM CONC. ENCASEMENT



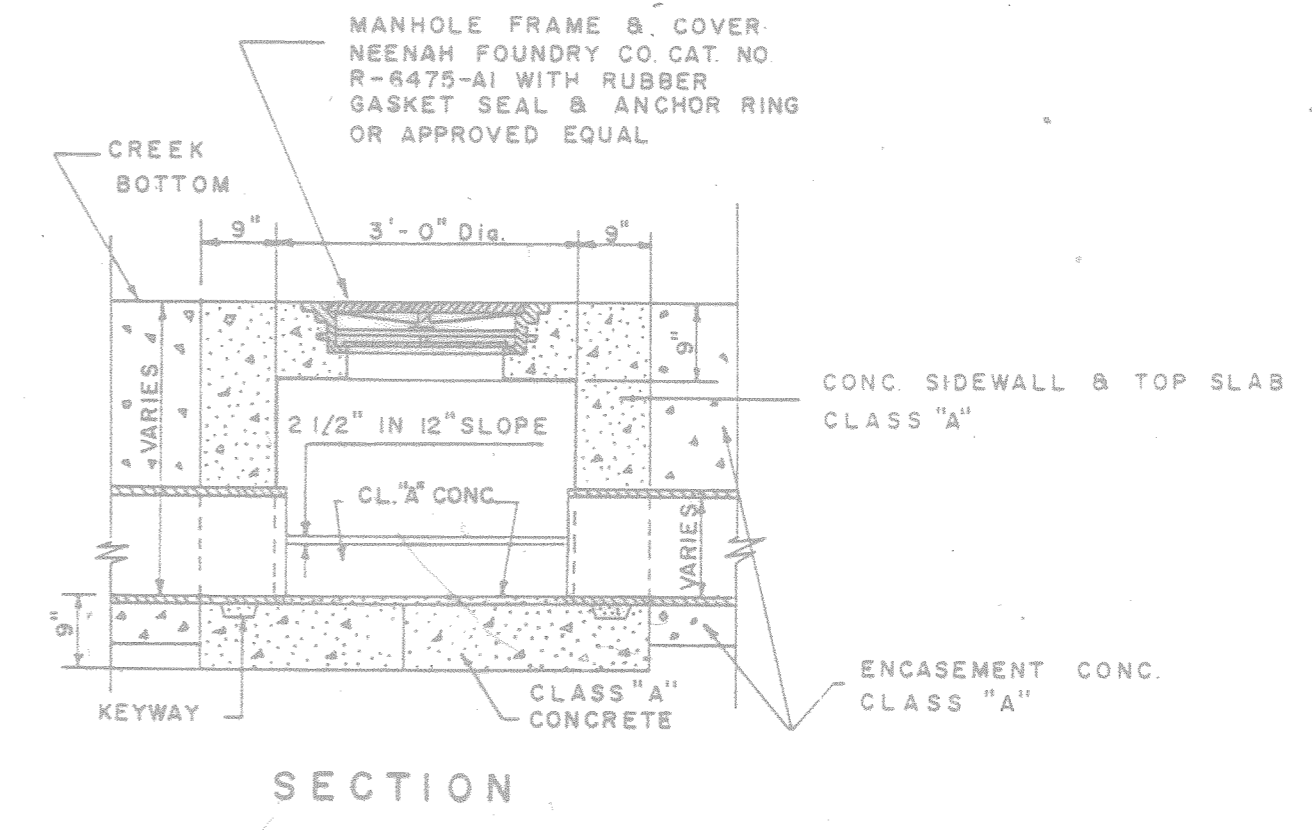
LIMIT OF WIDTH FOR PAYMENT IS 4/3 D + 8" (MIN. = 24")

NOTE CONCRETE TO BE POURED TO LIMITS OF TRENCH EXCAVATION SEE DETAILS ABOVE

(METRO DWG. NO. SS-14)
 CONCRETE ENCASEMENT



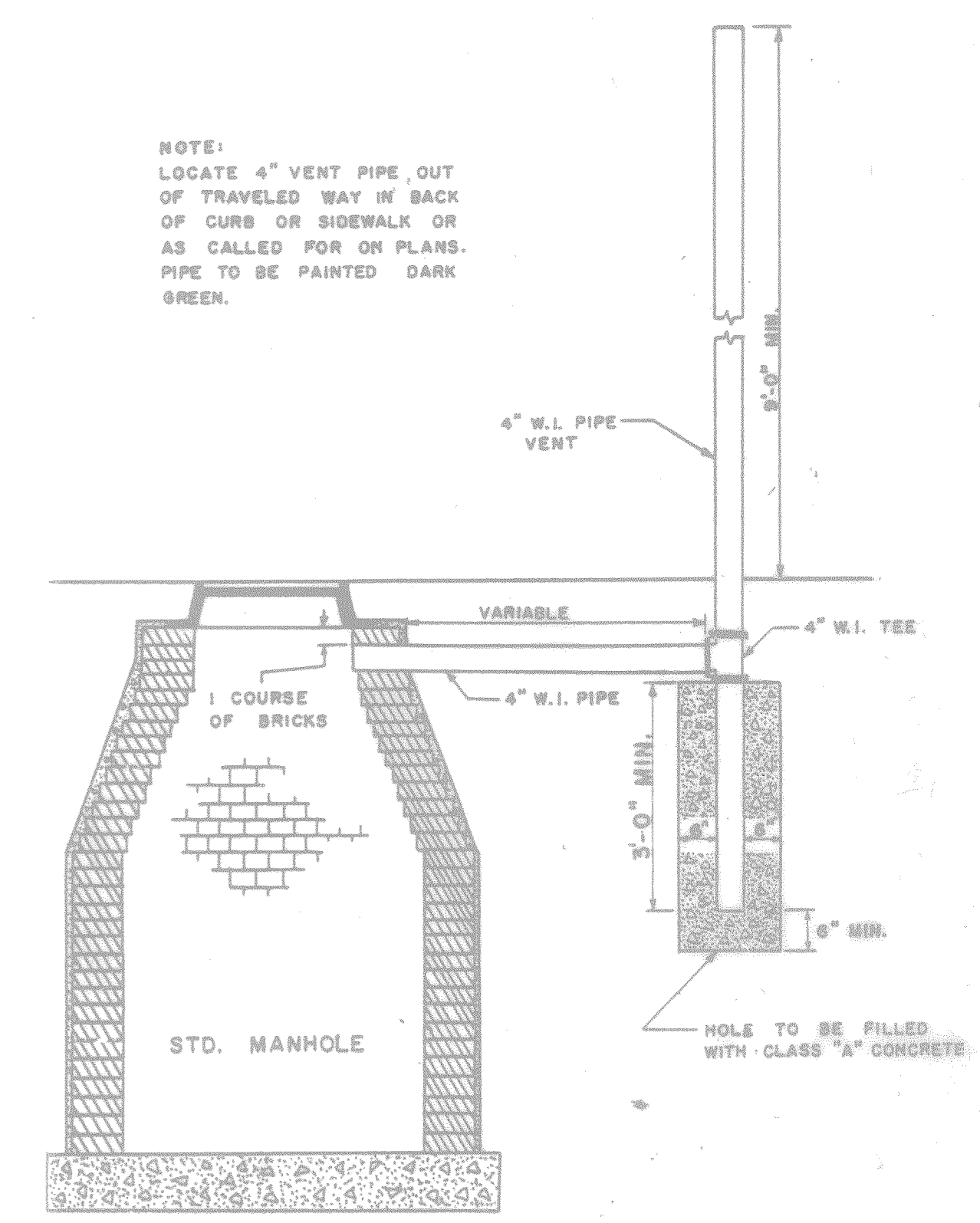
PLAN



SECTION

NOTE: SIDEWALL AND TOP SLAP SHALL BE MONOLITHIC

CREEK BOTTOM MANHOLE
 (METRO DWG. NO. SS-4)



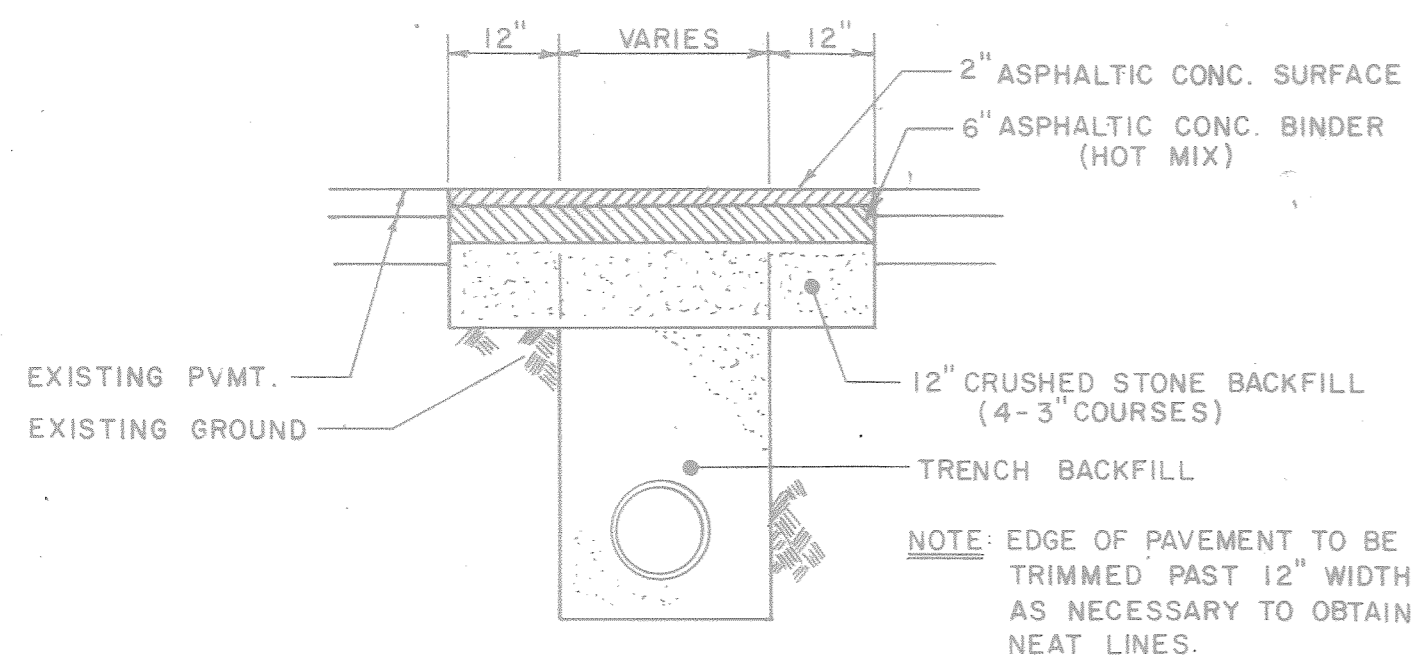
STANDARD MANHOLE VENT
 ITEM NO. 755.45.58

NOTE: LOCATE 4" VENT PIPE OUT OF TRAVELED WAY IN BACK OF CURB OR SIDEWALK OR AS CALLED FOR ON PLANS. PIPE TO BE PAINTED DARK GREEN.

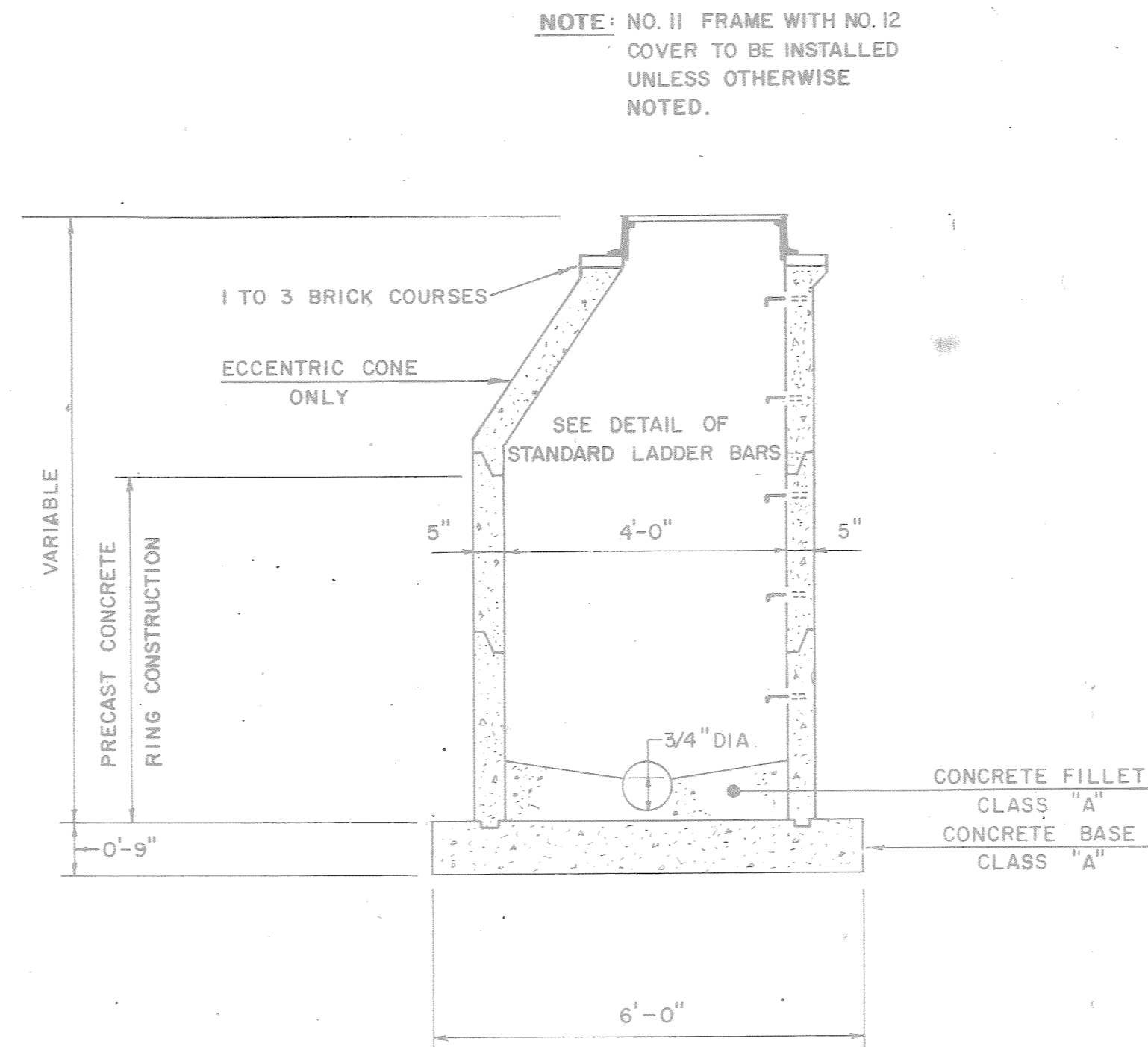
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

DETAILS
 SANITARY SEWER

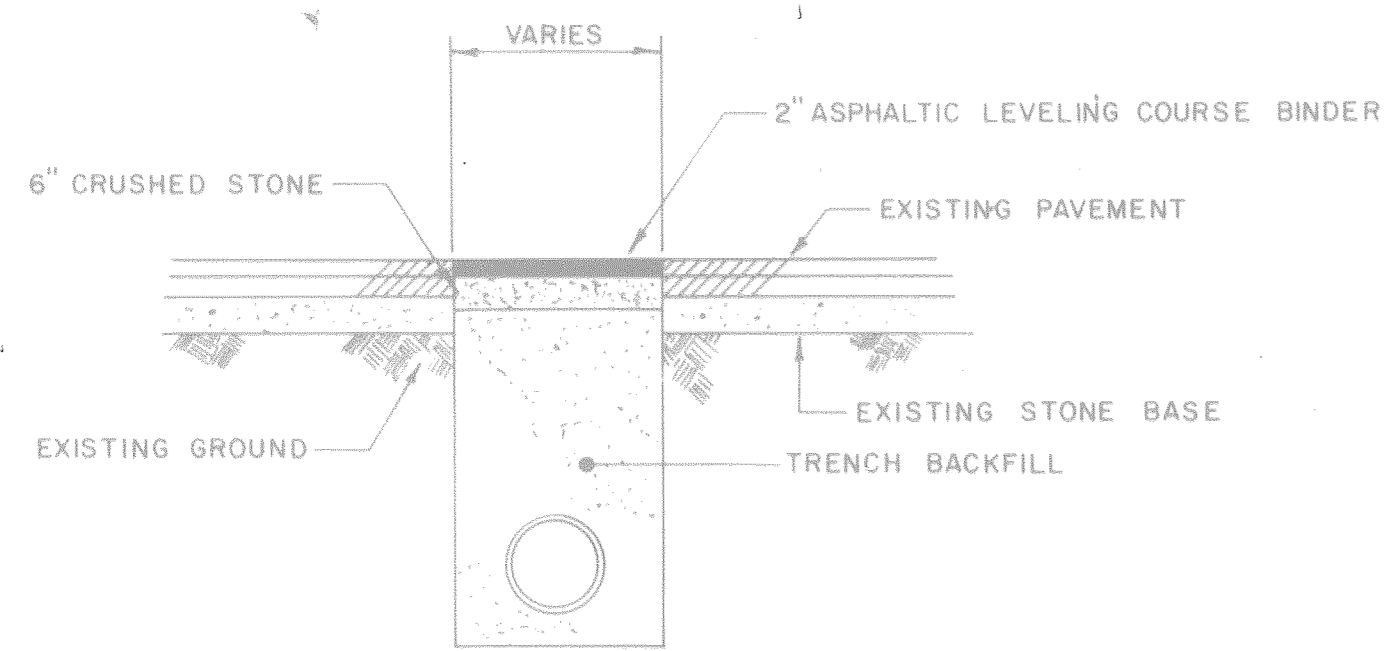
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-410-4(54)209	26



TYPE 'A' PAVEMENT REPLACEMENT DETAIL



SECTION
PRECAST CONCRETE MANHOLE DETAIL
(WITH ECCENTRIC CONE)
USE ONLY AS DIRECTED BY THE ENGINEER



TEMPORARY PAVEMENT REPLACEMENT DETAIL

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

**PAVEMENT
REPLACEMENT
AND
SEWER CONSTRUCTION
DETAILS**

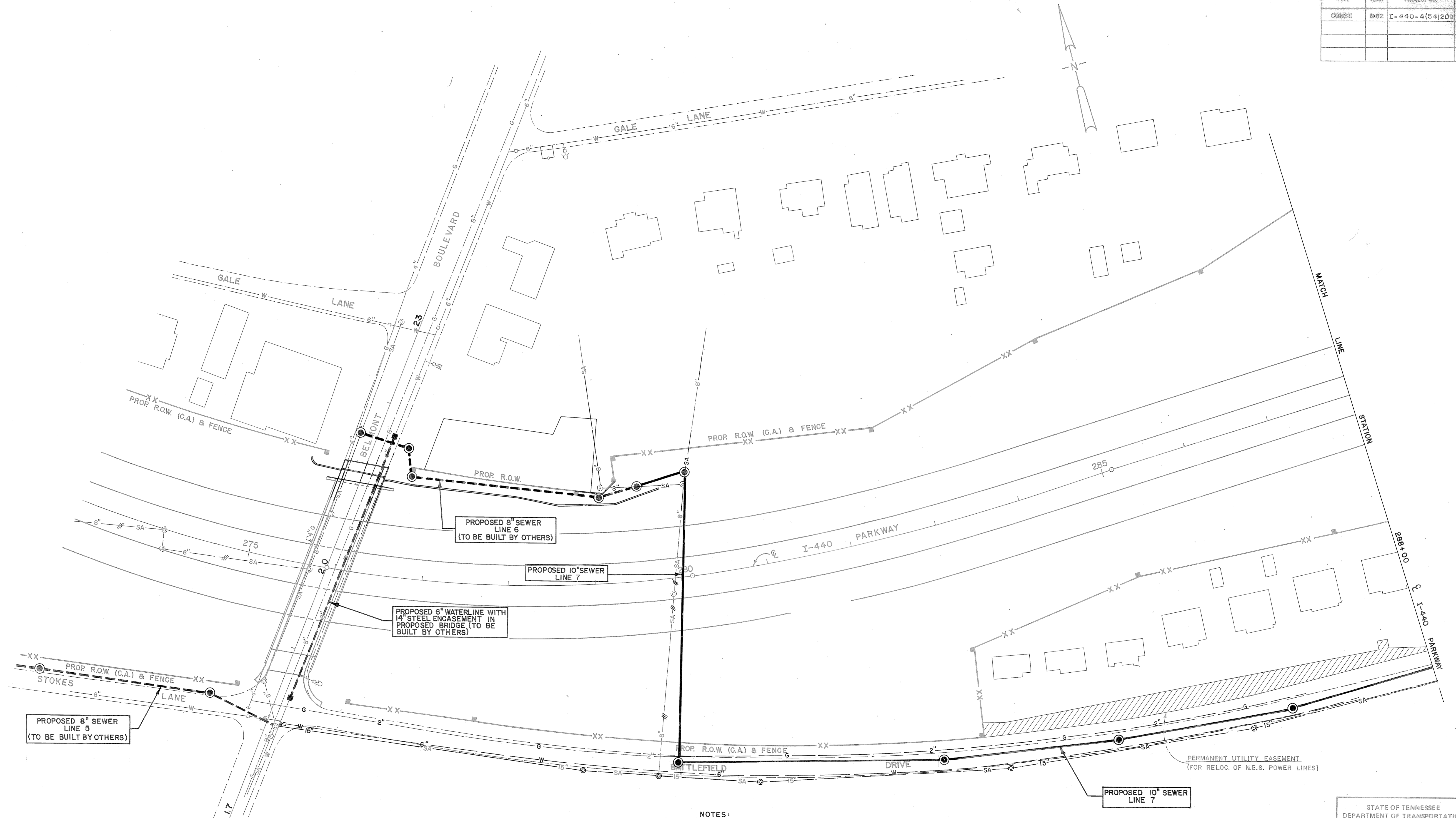
SCANNED

FILE NO. 49

REVISIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(34)203	3

STATE HIGHWAYS
 File No. 44
 Plans
 Drawn



NOTES

1. EXISTING GAS, WATER, TELEPHONE & POWER LINES HAVE NOT BEEN FIELD VERIFIED.
2. GAS, TELEPHONE & POWER LINES TO BE RELOCATED BY OTHERS.
3. SEE "PROPOSED SANITARY SEWER RELOCATION" SHEETS FOR DETAILED INFORMATION ON PROPOSED SEWER.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**I-440 PARKWAY
 PRESENT LAYOUT
 UTILITIES ADJUSTMENTS**

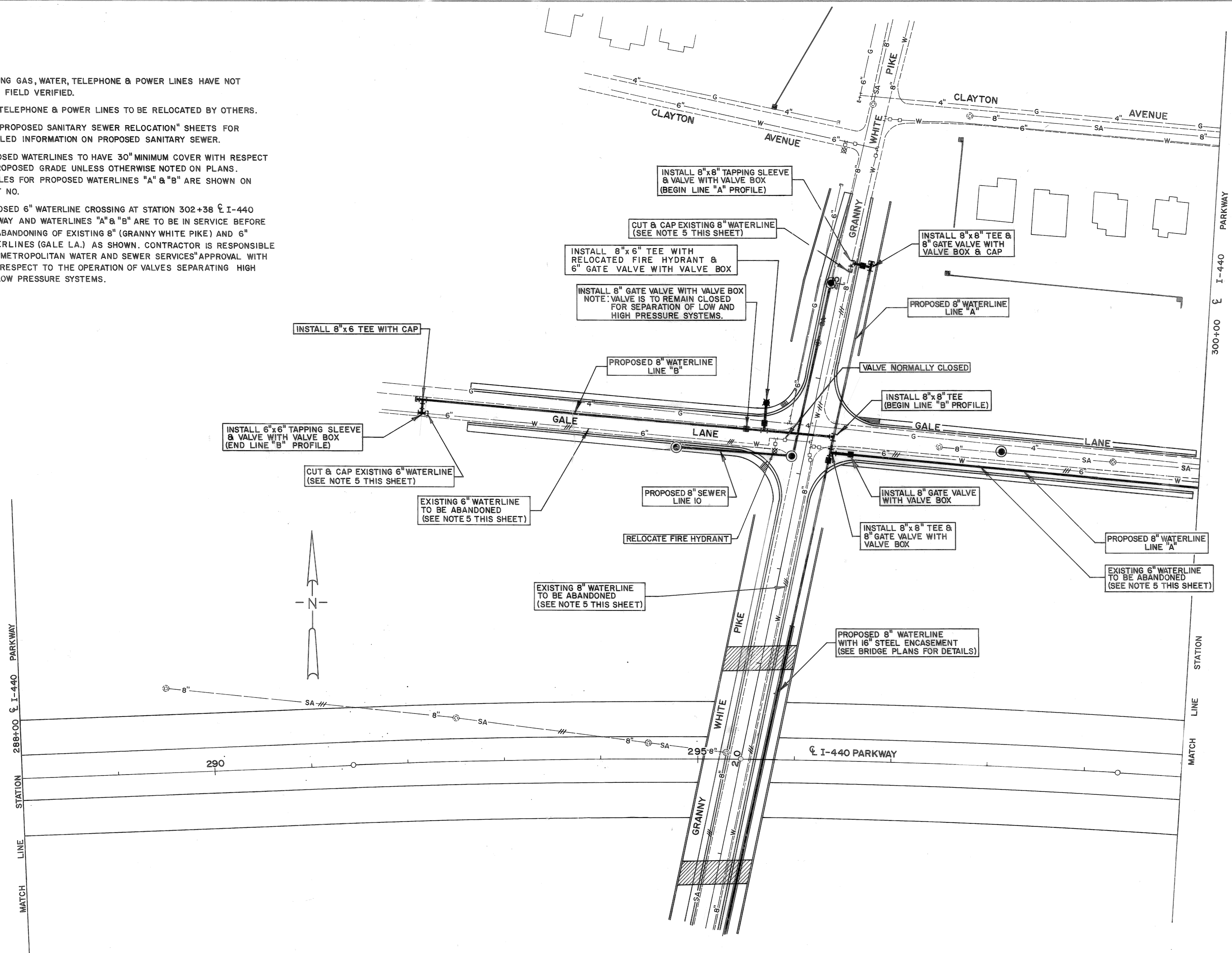
STA. 273+00 TO STA. 279+00
 BELMONT BOULEVARD

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)203	4

NOTES:

- EXISTING GAS, WATER, TELEPHONE & POWER LINES HAVE NOT BEEN FIELD VERIFIED.
- GAS, TELEPHONE & POWER LINES TO BE RELOCATED BY OTHERS.
- SEE "PROPOSED SANITARY SEWER RELOCATION" SHEETS FOR DETAILED INFORMATION ON PROPOSED SANITARY SEWER.
- PROPOSED WATERLINES TO HAVE 30" MINIMUM COVER WITH RESPECT TO PROPOSED GRADE UNLESS OTHERWISE NOTED ON PLANS. PROFILES FOR PROPOSED WATERLINES "A" & "B" ARE SHOWN ON SHEET NO.
- PROPOSED 6" WATERLINE CROSSING AT STATION 302+38 \pm I-440 PARKWAY AND WATERLINES "A" & "B" ARE TO BE IN SERVICE BEFORE THE ABANDONING OF EXISTING 8" (GRANNY WHITE PIKE) AND 6" WATERLINES (GALE LA.) AS SHOWN. CONTRACTOR IS RESPONSIBLE FOR "METROPOLITAN WATER AND SEWER SERVICES" APPROVAL WITH RESPECT TO THE OPERATION OF VALVES SEPARATING HIGH AND LOW PRESSURE SYSTEMS.

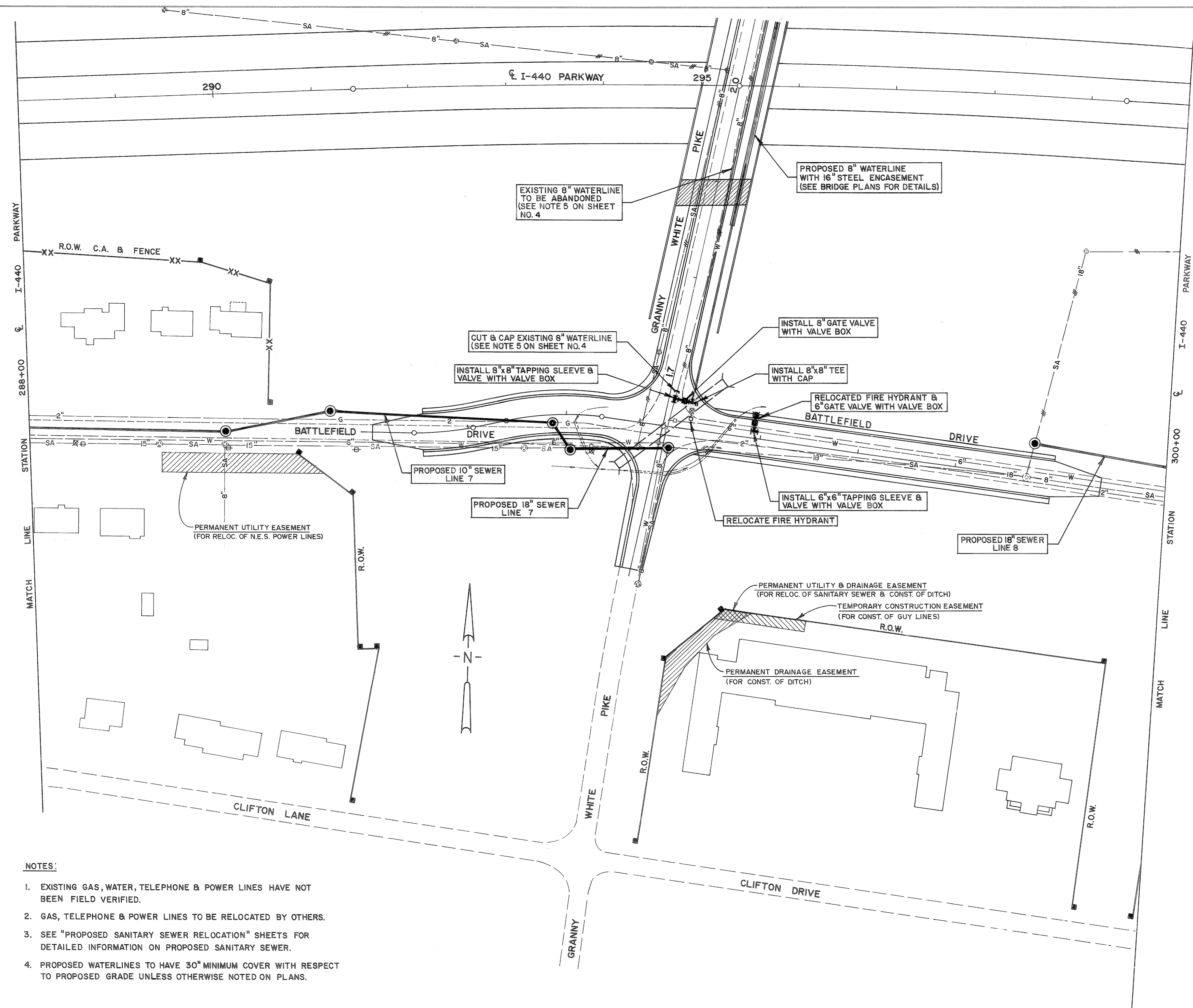


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

**I-440 PARKWAY
PRESENT LAYOUT
UTILITIES ADJUSTMENTS
GRANNY WHITE PIKE
&
GALE LANE**

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)209	5



NOTES:

- EXISTING GAS, WATER, TELEPHONE & POWER LINES HAVE NOT BEEN FIELD VERIFIED.
- GAS, TELEPHONE & POWER LINES TO BE RELOCATED BY OTHERS.
- SEE "PROPOSED SANITARY SEWER RELOCATION" SHEETS FOR DETAILED INFORMATION ON PROPOSED SANITARY SEWER.
- PROPOSED WATERLINES TO HAVE 30" MINIMUM COVER WITH RESPECT TO PROPOSED GRADE UNLESS OTHERWISE NOTED ON PLANS.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

**I-440 PARKWAY
PRESENT LAYOUT
UTILITIES ADJUSTMENTS
GRANNY WHITE PIKE
&
BATTLEFIELD DRIVE**

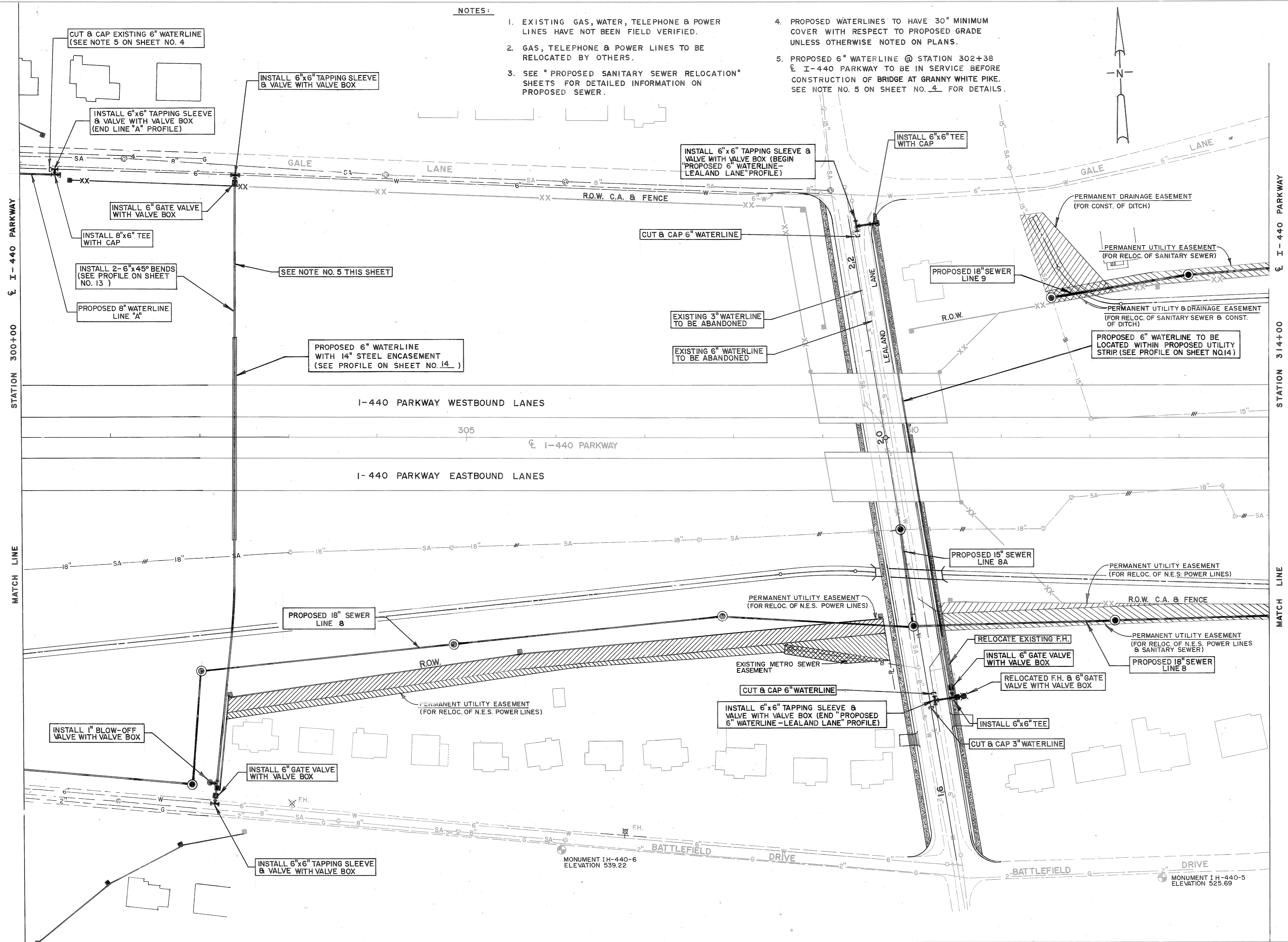
SCALE: 1" = 50'

FILE NO. 44
DATE
DRAWN
CHECKED
APPROVED
TELETYPE UNIT R10200

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)209	6

NOTES:

- EXISTING GAS, WATER, TELEPHONE & POWER LINES HAVE NOT BEEN FIELD VERIFIED.
- GAS, TELEPHONE & POWER LINES TO BE RELOCATED BY OTHERS.
- SEE "PROPOSED SANITARY SEWER RELOCATION" SHEETS FOR DETAILED INFORMATION ON PROPOSED SEWER.
- PROPOSED WATERLINES TO HAVE 30" MINIMUM COVER WITH RESPECT TO PROPOSED GRADE UNLESS OTHERWISE NOTED ON PLANS.
- PROPOSED 6" WATERLINE @ STATION 302+38 @ I-440 PARKWAY TO BE IN SERVICE BEFORE CONSTRUCTION OF BRIDGE AT GRANNY WHITE PIKE. SEE NOTE NO. 5 ON SHEET NO. 4 FOR DETAILS.

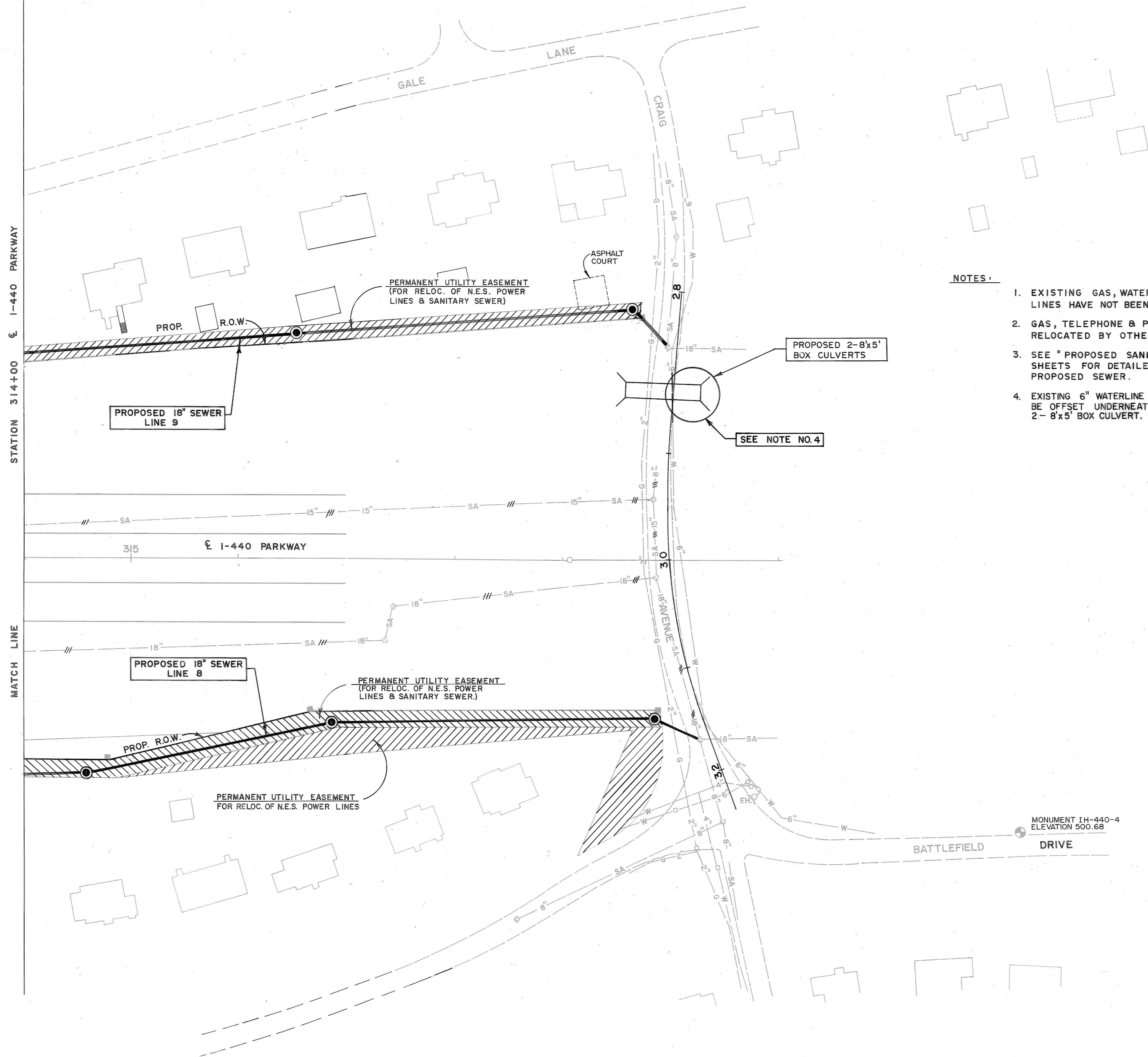
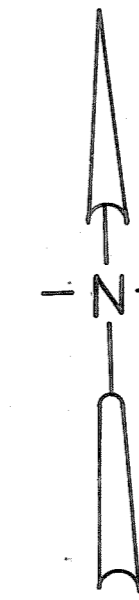


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

**I-440 PARKWAY
PRESENT LAYOUT
UTILITIES ADJUSTMENTS
STA. 300+00 TO STA. 314+00
LEALAND LANE**

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)209	7



NOTES:

1. EXISTING GAS, WATER, TELEPHONE & POWER LINES HAVE NOT BEEN FIELD VERIFIED.
2. GAS, TELEPHONE & POWER LINES TO BE RELOCATED BY OTHERS.
3. SEE "PROPOSED SANITARY SEWER RELOCATION" SHEETS FOR DETAILED INFORMATION ON PROPOSED SEWER.
4. EXISTING 6" WATERLINE IN CRAIG AVENUE TO BE OFFSET UNDERNEATH PROPOSED 2- 8'x5' BOX CULVERT.

SEE NOTE NO.4

PROPOSED 18" SEWER LINE 9

PROPOSED 18" SEWER LINE 8

PROPOSED 2-8'x5' BOX CULVERTS

PERMANENT UTILITY EASEMENT (FOR RELOC. OF N.E.S. POWER LINES & SANITARY SEWER)

PERMANENT UTILITY EASEMENT (FOR RELOC. OF N.E.S. POWER LINES & SANITARY SEWER.)

PERMANENT UTILITY EASEMENT FOR RELOC. OF N.E.S. POWER LINES

MONUMENT I-440-4 ELEVATION 500.68

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

**I-440 PARKWAY
PRESENT LAYOUT
UTILITIES ADJUSTMENTS**

STA. 314+00 TO STA.
CRAIG AVENUE

SCALE: 1" = 50'

FILED
 No. 49
 DIVISION

STATION 314+00 & I-440 PARKWAY
 MATCH LINE

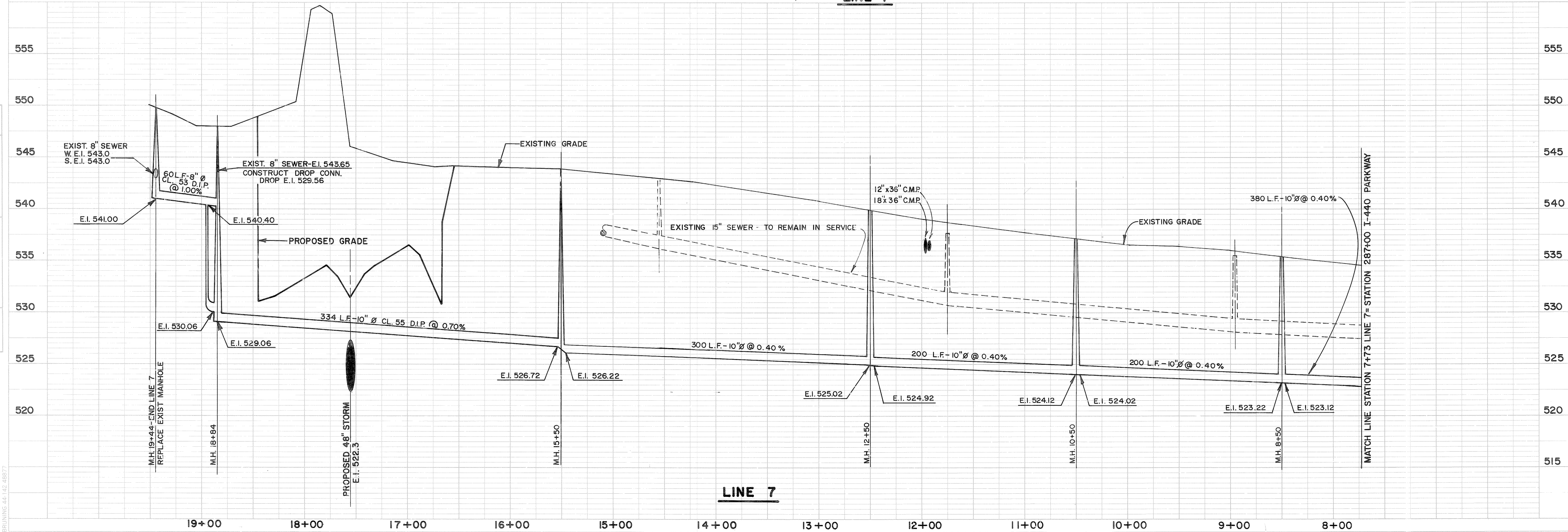
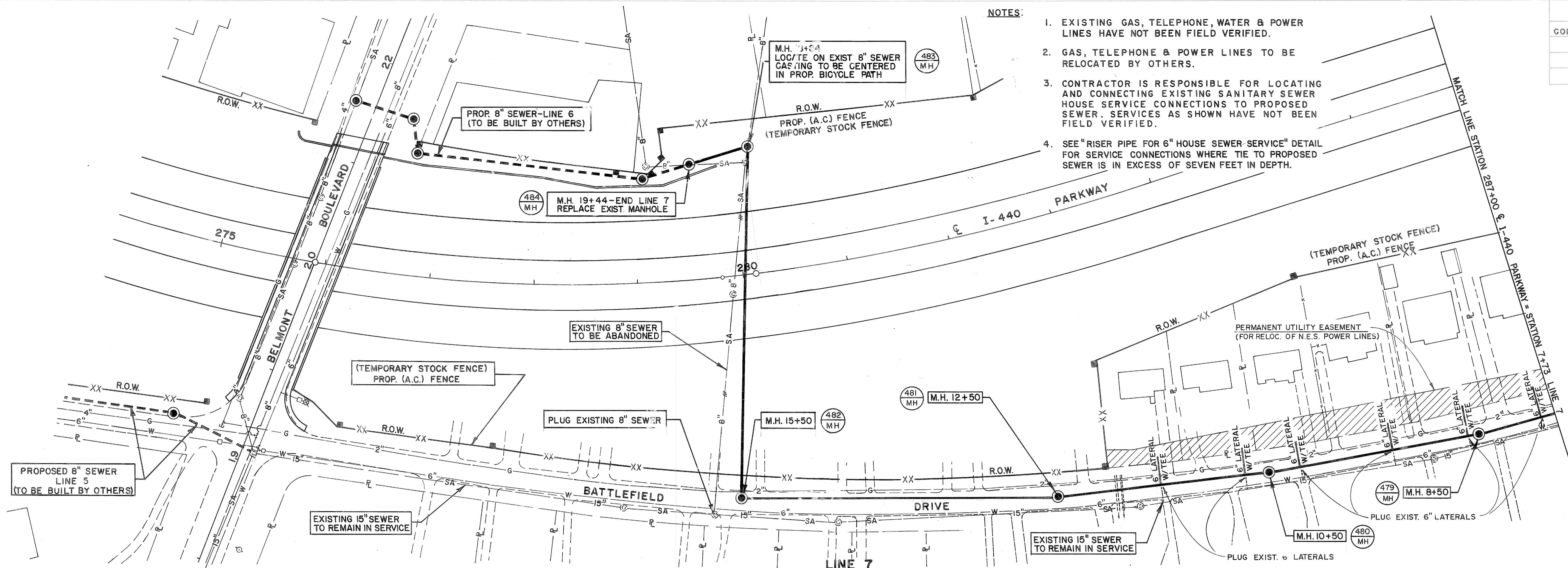
PLAN	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)209	8

NOTES:

- EXISTING GAS, TELEPHONE, WATER & POWER LINES HAVE NOT BEEN FIELD VERIFIED.
- GAS, TELEPHONE & POWER LINES TO BE RELOCATED BY OTHERS.
- CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONNECTING EXISTING SANITARY SEWER HOUSE SERVICE CONNECTIONS TO PROPOSED SEWER. SERVICES AS SHOWN HAVE NOT BEEN FIELD VERIFIED.
- SEE "RISER PIPE FOR 6" HOUSE SEWER SERVICE" DETAIL FOR SERVICE CONNECTIONS WHERE TIE TO PROPOSED SEWER IS IN EXCESS OF SEVEN FEET IN DEPTH.



BRUNING 44142 48577

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

**I-440 PARKWAY
PROPOSED SANITARY
SEWER LAYOUT**

STA. 274+00 TO STA. 279+18
BELMONT BOULEVARD

HORIZONTAL SCALE 1" = 50'
VERTICAL SCALE 1" = 5'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)209	9

PLAN

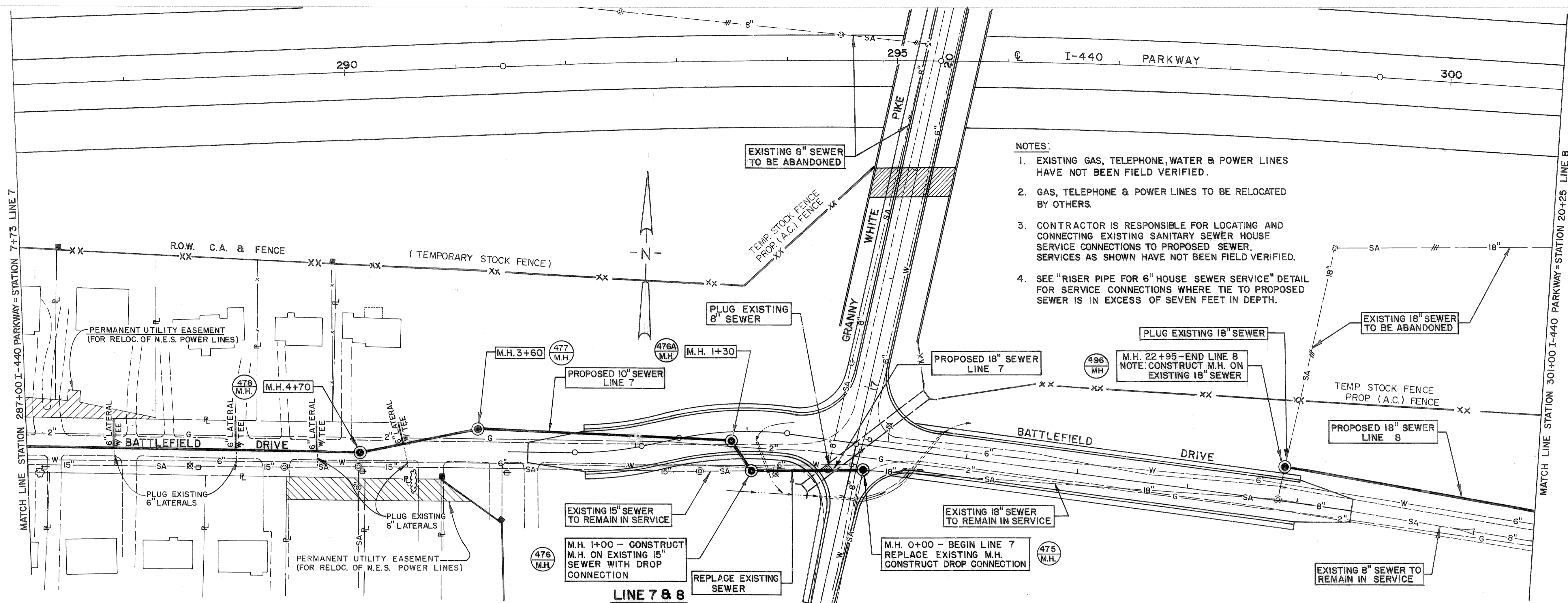
SURVEYED
 PLOTTED
 ALIGNMENT CHECKED
 RT. OF WAY CHECKED

NOTE BOOK NO.

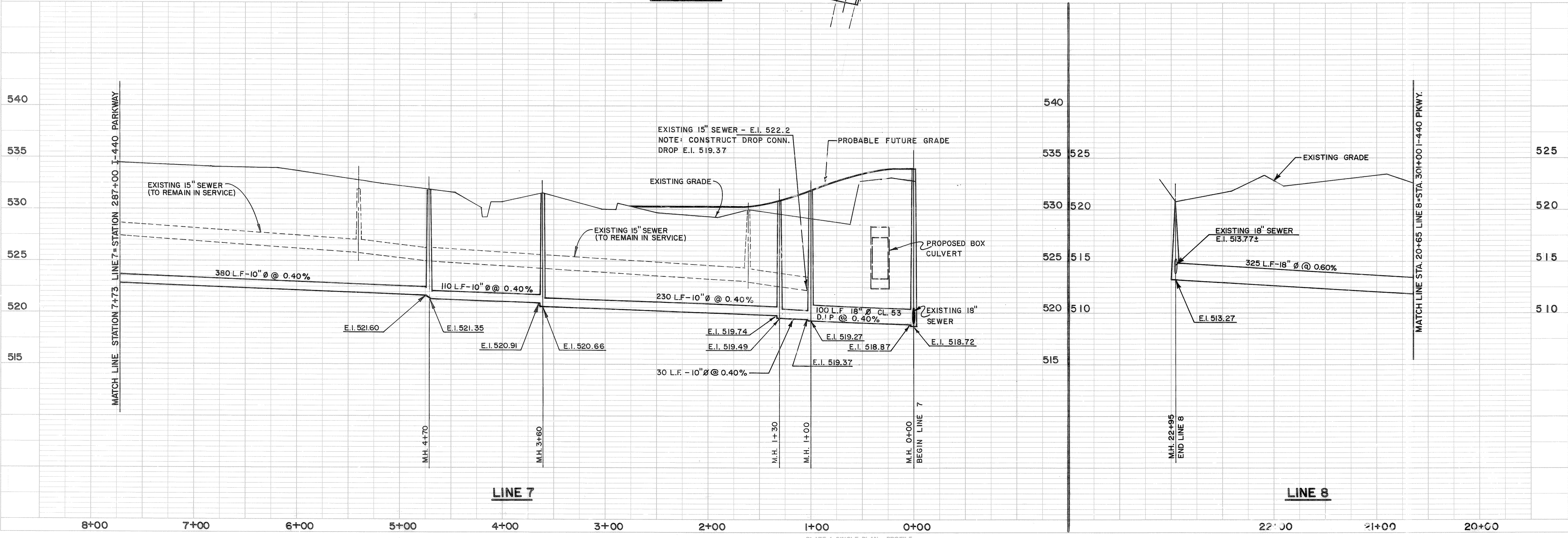
PROFILE

GRADES CHECKED
 STRUCTURE NOTATIONS CHK'D

NOTE BOOK NO.



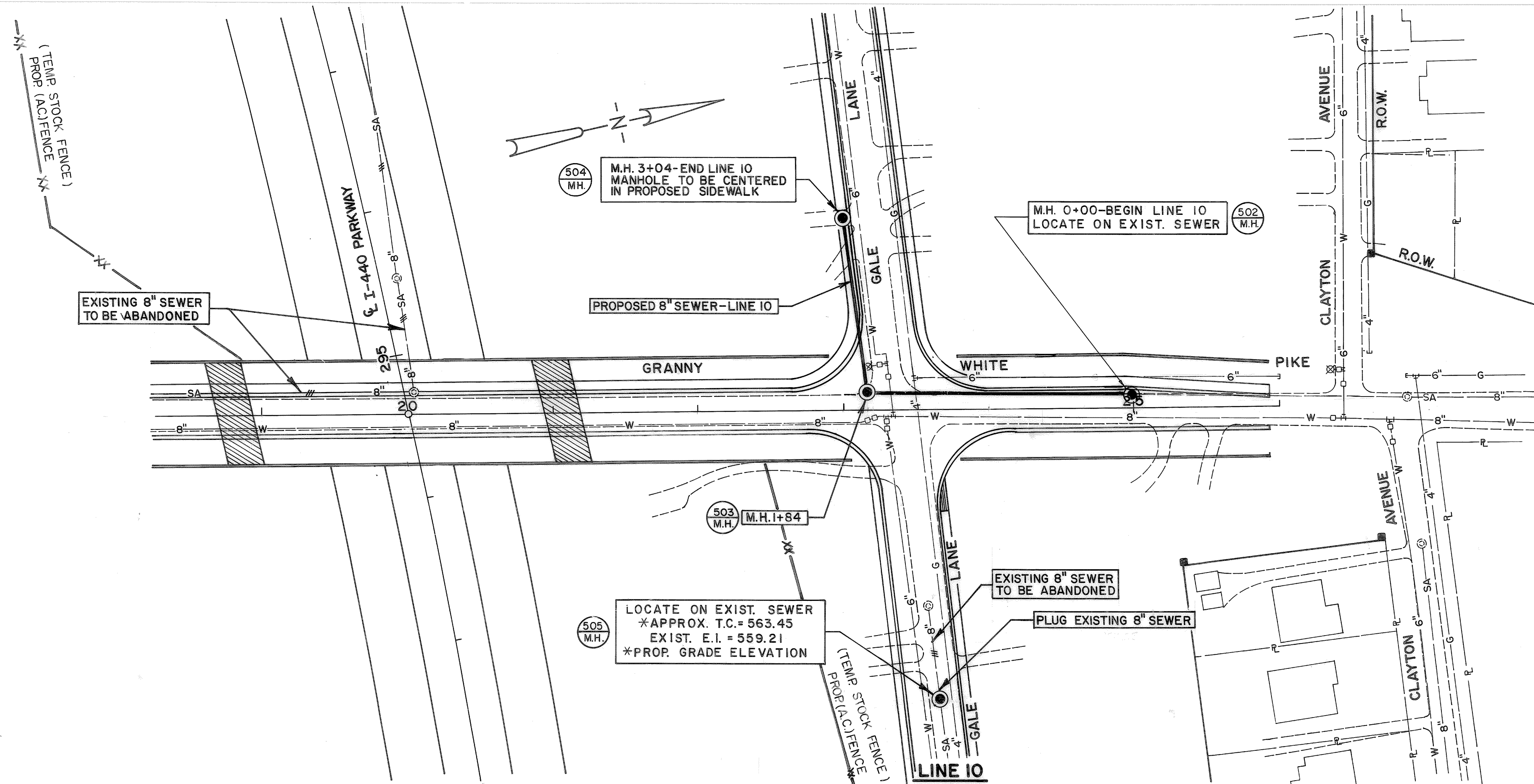
- NOTES:
- EXISTING GAS, TELEPHONE, WATER & POWER LINES HAVE NOT BEEN FIELD VERIFIED.
 - GAS, TELEPHONE & POWER LINES TO BE RELOCATED BY OTHERS.
 - CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONNECTING EXISTING SANITARY SEWER HOUSE SERVICE CONNECTIONS TO PROPOSED SEWER. SERVICES AS SHOWN HAVE NOT BEEN FIELD VERIFIED.
 - SEE "RISER PIPE FOR 6" HOUSE SEWER SERVICE" DETAIL FOR SERVICE CONNECTIONS WHERE TIE TO PROPOSED SEWER IS IN EXCESS OF SEVEN FEET IN DEPTH.



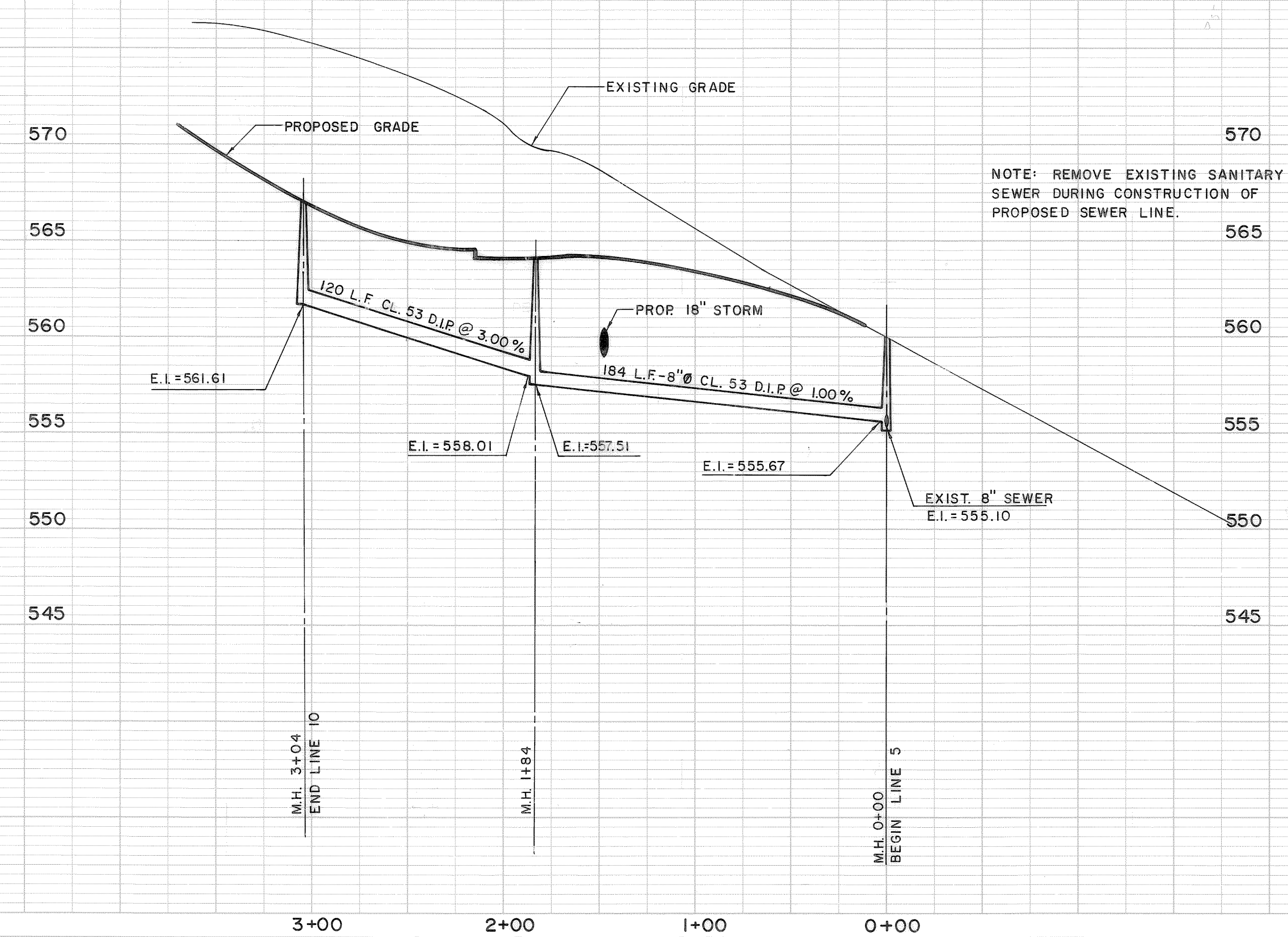
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**I-440 PARKWAY
 PROPOSED SANITARY
 SEWER LAYOUT
 GRANNY WHITE PIKE
 &
 BATTLEFIELD DRIVE**
 HORIZONTAL SCALE 1"=50'
 VERTICAL SCALE 1"=5'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)209	10



- NOTES:**
- EXISTING GAS, TELEPHONE, WATER & POWER LINES HAVE NOT BEEN FIELD VERIFIED.
 - GAS, TELEPHONE & POWER LINES TO BE RELOCATED BY OTHERS.



NOTE: REMOVE EXISTING SANITARY SEWER DURING CONSTRUCTION OF PROPOSED SEWER LINE.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**I-440 PARKWAY
 PROPOSED SANITARY
 SEWER LAYOUT
 GRANNY WHITE PIKE
 &
 GALE LANE**
 HORIZONTAL SCALE 1"=50'
 VERTICAL SCALE 1"=5'

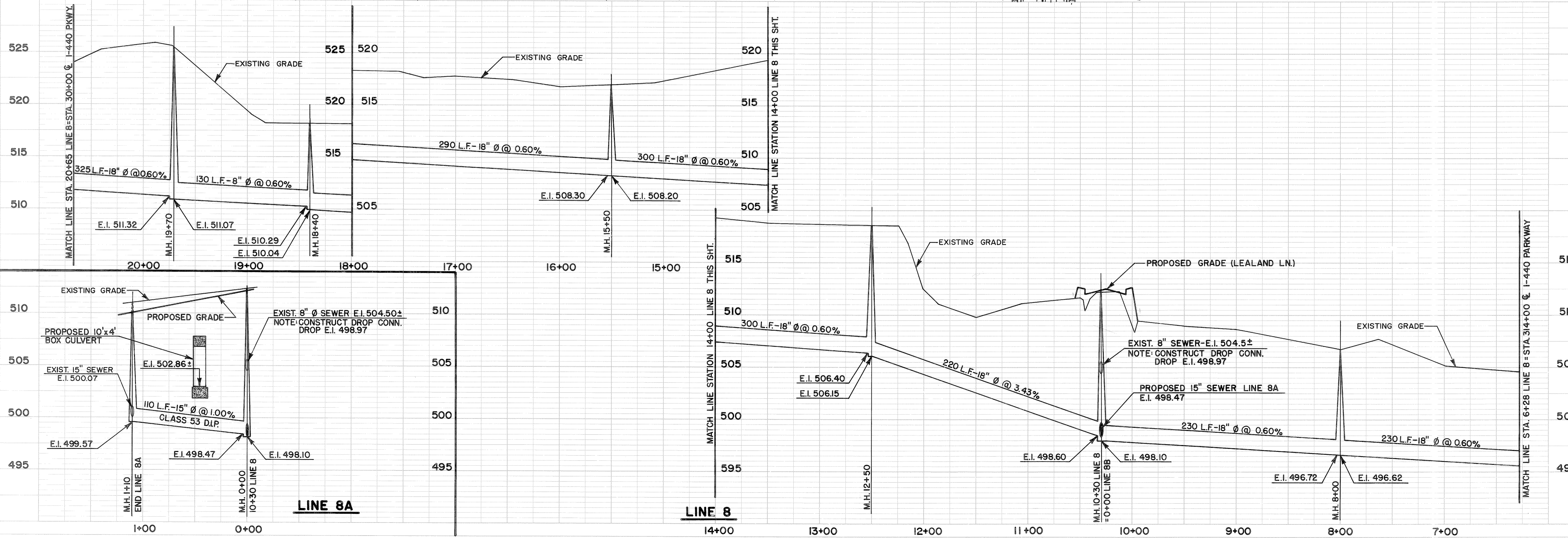
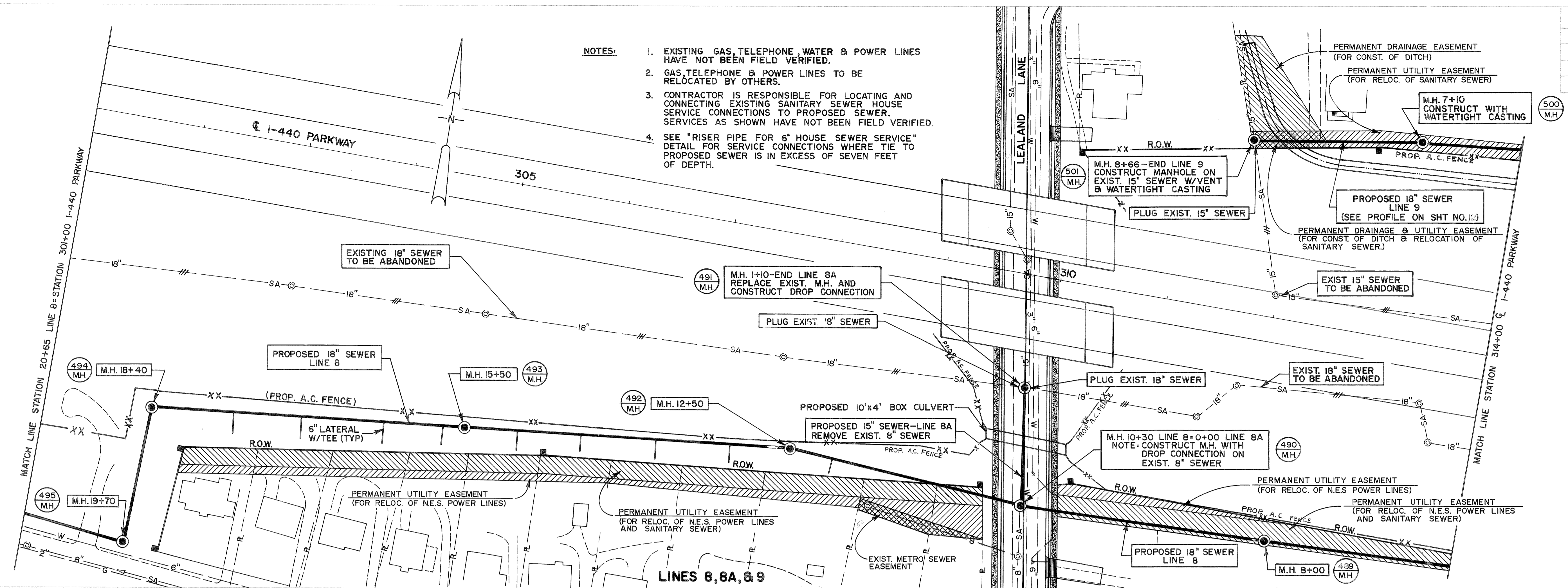
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	1-440-4(54)209	11

IN-49

PLAN
 SURVEYED
 PLOTTED
 ALIGNED
 CHECKED
 NO. 101
 DATE

PROFILE
 SURVEYED
 PLOTTED
 GRADES CHECKED
 STRUCTURE NOTATING CHKD
 NO. 101
 DATE

- NOTES:
- EXISTING GAS TELEPHONE, WATER & POWER LINES HAVE NOT BEEN FIELD VERIFIED.
 - GAS TELEPHONE & POWER LINES TO BE RELOCATED BY OTHERS.
 - CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONNECTING EXISTING SANITARY SEWER HOUSE SERVICE CONNECTIONS TO PROPOSED SEWER. SERVICES AS SHOWN HAVE NOT BEEN FIELD VERIFIED.
 - SEE "RISER PIPE FOR 6" HOUSE SEWER SERVICE" DETAIL FOR SERVICE CONNECTIONS WHERE TIE TO PROPOSED SEWER IS IN EXCESS OF SEVEN FEET OF DEPTH.



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**1-440 PARKWAY
 PROPOSED SANITARY
 SEWER LAYOUT**

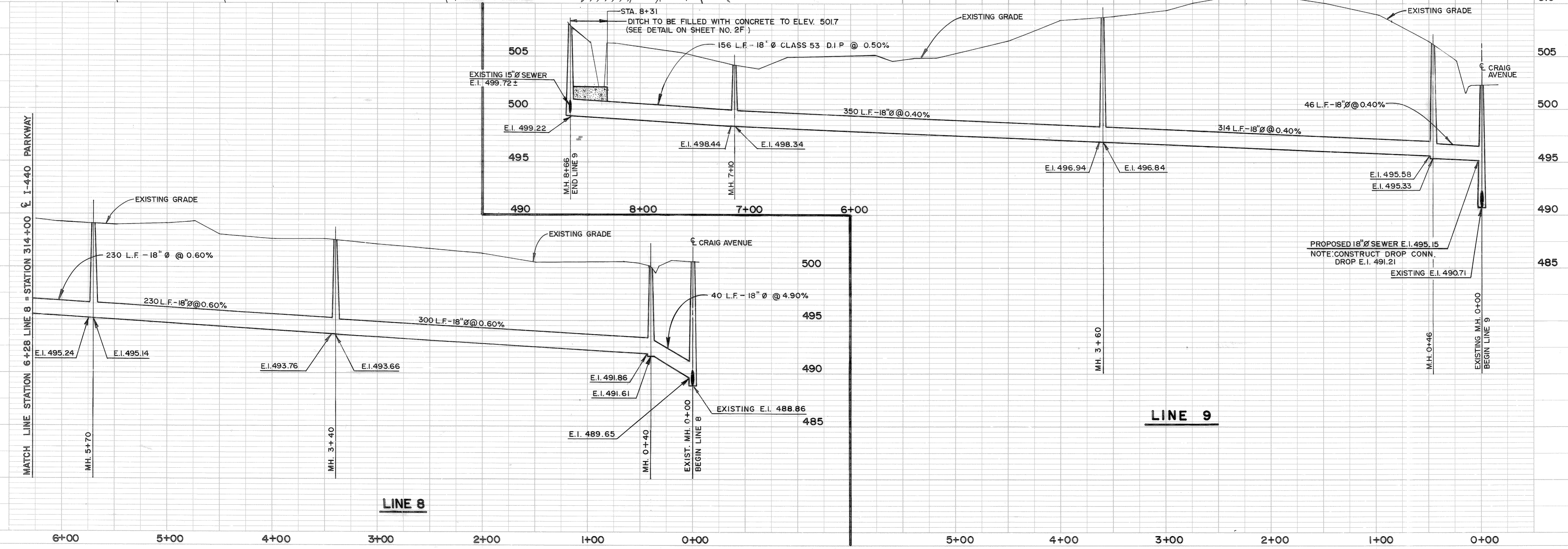
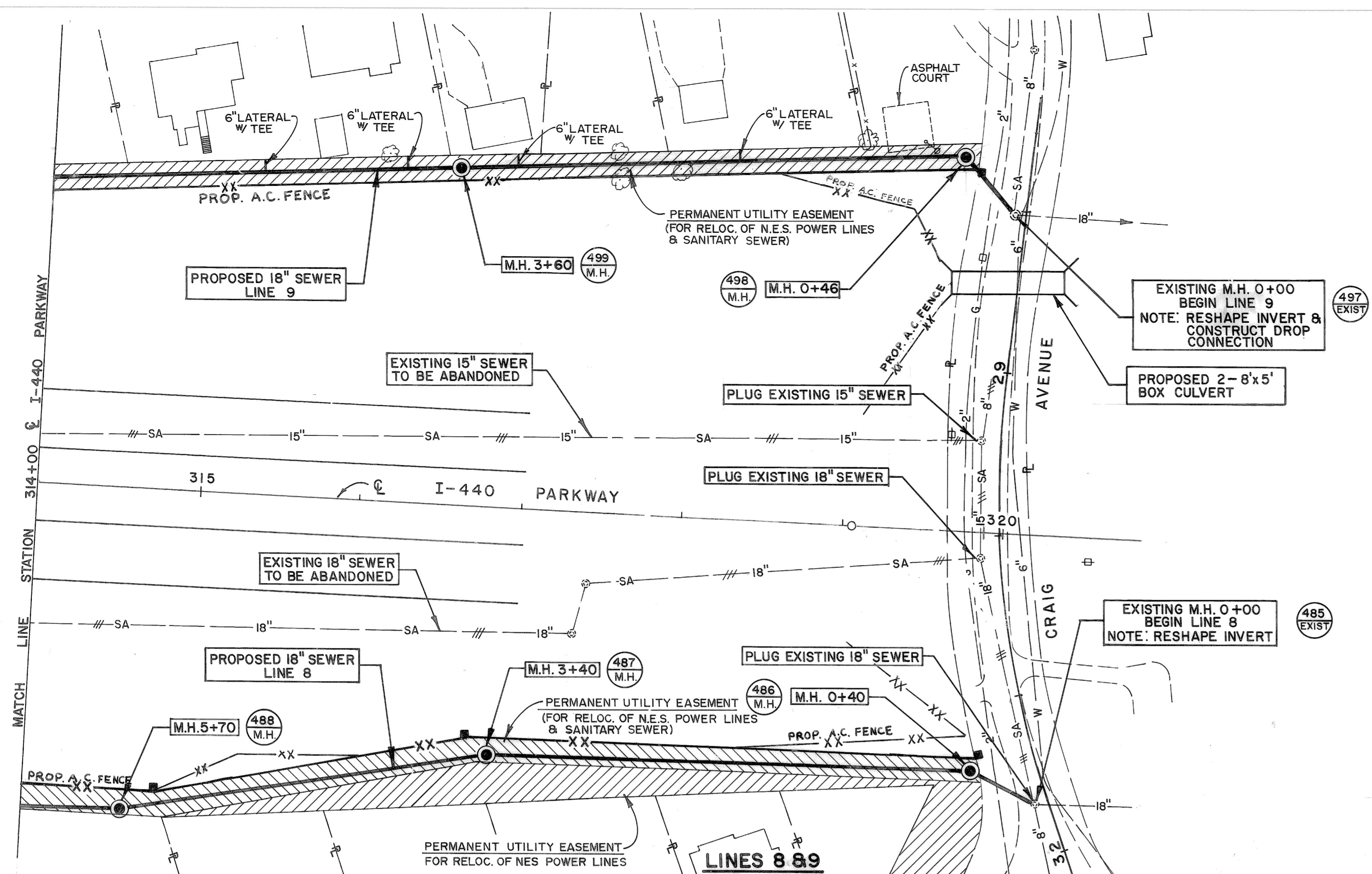
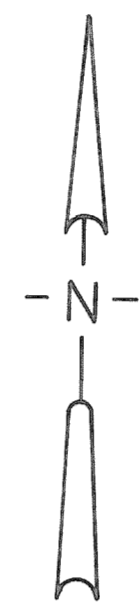
STA. 301+00 TO STA. 314+00
 LEALAND LANE

HORIZONTAL SCALE 1"=50'
 VERTICAL SCALE 1"=5'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)209	12

NOTES:

- EXISTING GAS, TELEPHONE, WATER & POWER LINES HAVE NOT BEEN FIELD VERIFIED.
- GAS, TELEPHONE & POWER LINES TO BE RELOCATED BY OTHERS.
- CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONNECTING EXISTING SANITARY SEWER HOUSE SERVICE CONNECTIONS TO PROPOSED SEWER. SERVICES AS SHOWN HAVE NOT BEEN FIELD VERIFIED.
- SEE "RISER PIPE FOR 6" HOUSE SEWER SERVICE" DETAIL FOR SERVICE CONNECTIONS WHERE TIE TO PROPOSED SEWER IS IN EXCESS OF SEVEN FEET IN DEPTH.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

**I-440 PARKWAY
PROPOSED SANITARY
SEWER LAYOUT**

STA. 314+00 TO STA. 320+28
CRAIG AVENUE
HORIZONTAL SCALE 1"=50'
VERTICAL SCALE 1"=5'

PLAN
SURVEYED, PLOTTED, CHECKED, RT. OF WAY CHECKED.
NOTE BOOK NO.

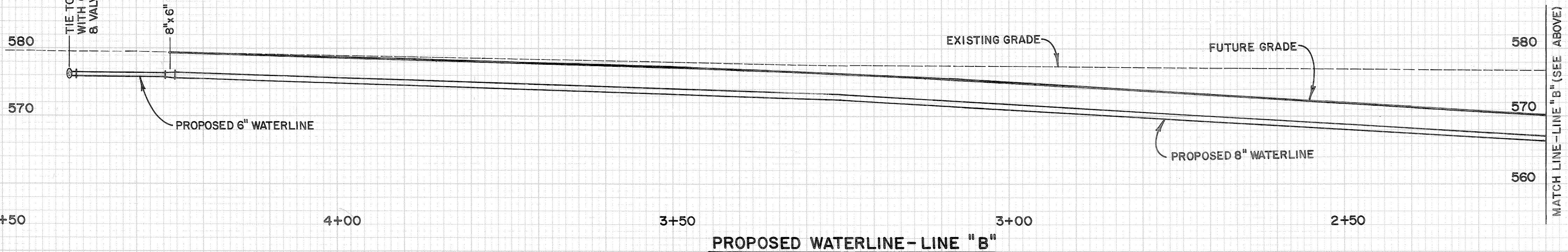
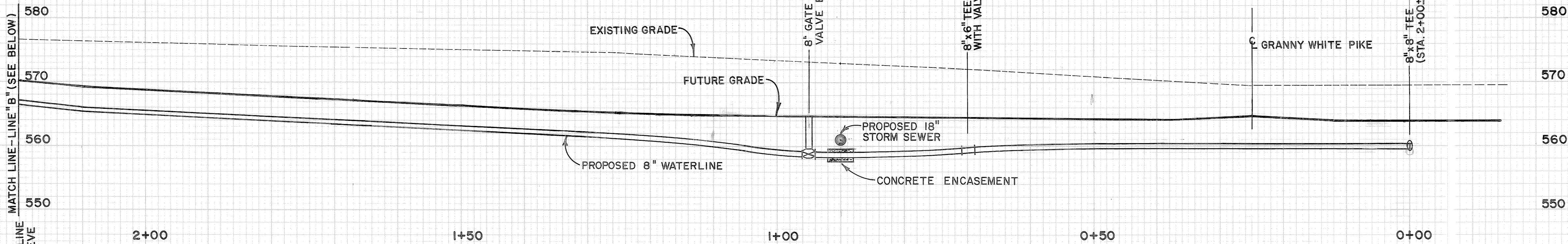
PROFILE
SURVEYED, PLOTTED, CHECKED, STRUCTURE NOTATIONS CHECKED.
NOTE BOOK NO.

BRUNING 48 142 28877

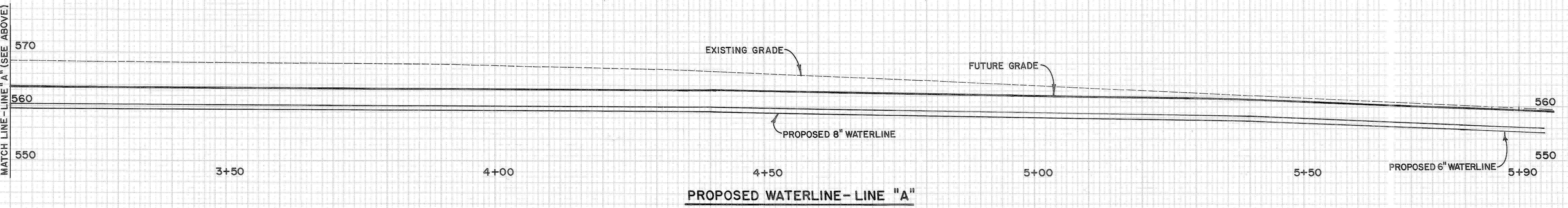
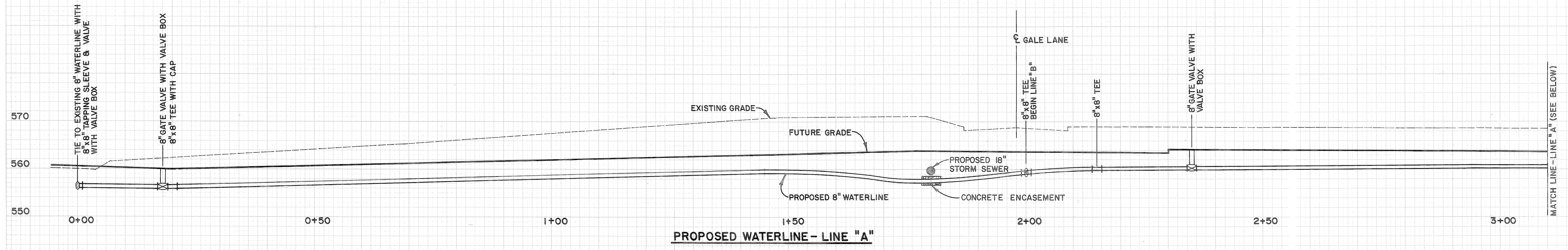
49

FINAL SURVEY DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 NOTE BOOK NO. _____
 AREA CHECKED _____

ORIGINAL SURVEY DATE: _____
 BY: _____
 CHECKED: _____
 DATE: _____
 NOTE BOOK NO. _____
 AREA CHECKED _____



NOTE: PROPOSED WATERLINES "A" & "B" ARE TO HAVE 30" MINIMUM COVER WITH RESPECT TO FUTURE GRADES UNLESS OTHERWISE NOTED.



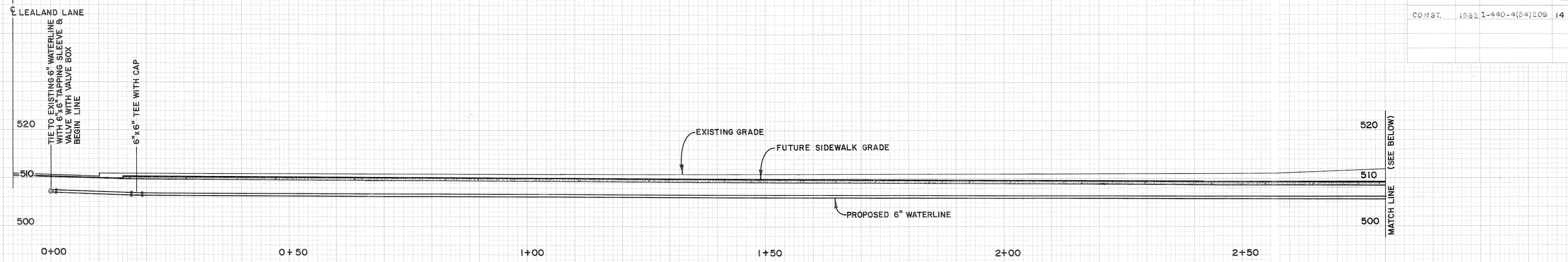
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
I-440 PARKWAY
 PROPOSED WATER PROFILES
 LINES A & B
 HORIZONTAL SCALE 1" = 10'
 VERTICAL SCALE 1" = 10'

49

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1992	I-440-4(54)209	14

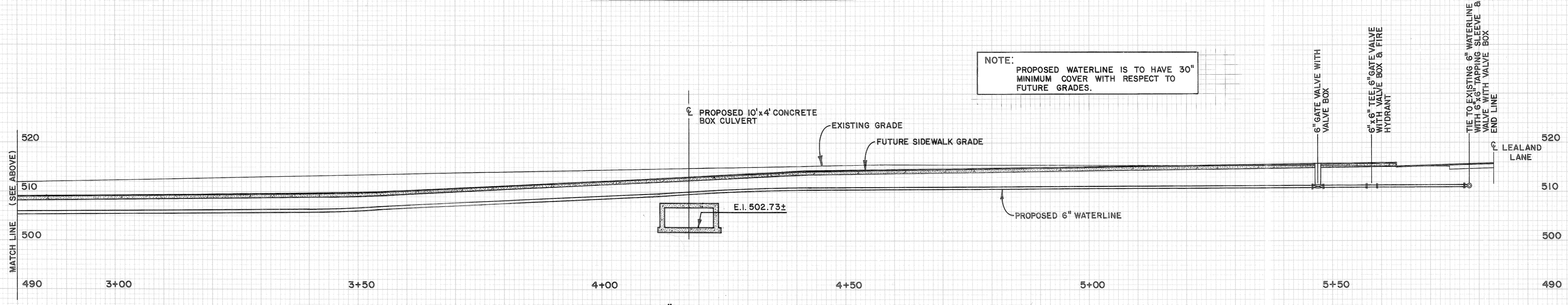
FINAL SURVEY	DATE
BY	
NO.	

ORIGINAL SURVEY	DATE
BY	
NO.	



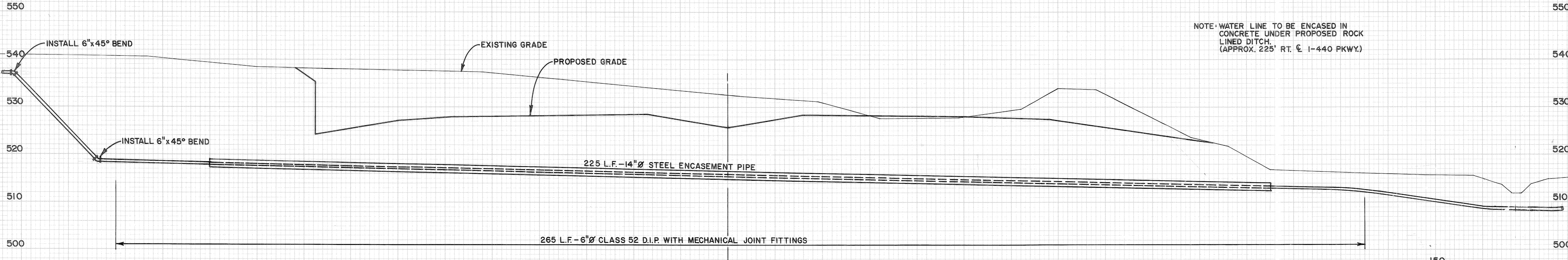
PROPOSED 6" WATERLINE - LEALAND LANE

NOTE:
 PROPOSED WATERLINE IS TO HAVE 30" MINIMUM COVER WITH RESPECT TO FUTURE GRADES.



PROPOSED 6" WATERLINE - LEALAND LANE

NOTE: WATER LINE TO BE ENCASED IN CONCRETE UNDER PROPOSED ROCK LINED DITCH. (APPROX. 225' RT. CL I-440 PKWY.)



PROPOSED 6" WATERLINE CROSSING - STATION 302+38 CL I-440 PARKWAY

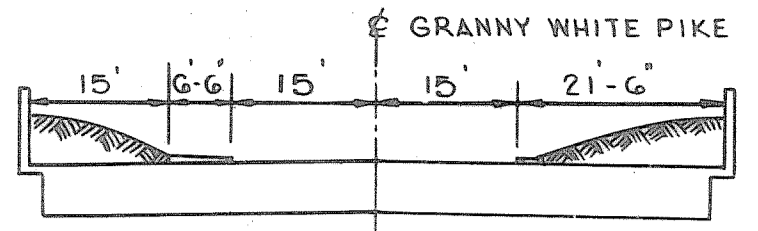
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

I-440 PARKWAY

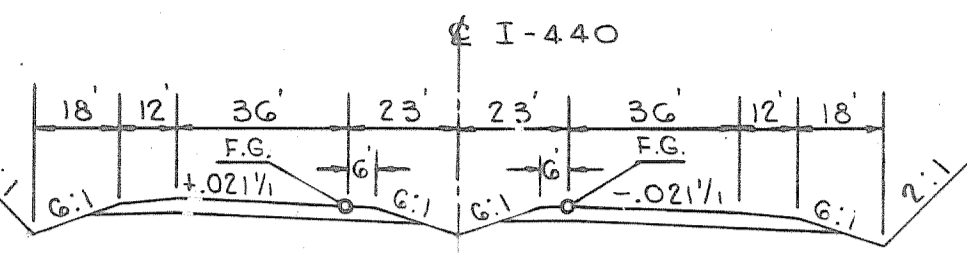
PROPOSED WATER PROFILES FOR INTERSTATE CROSSING

HORIZONTAL SCALE 1" = 10'
 VERTICAL SCALE 1" = 10'

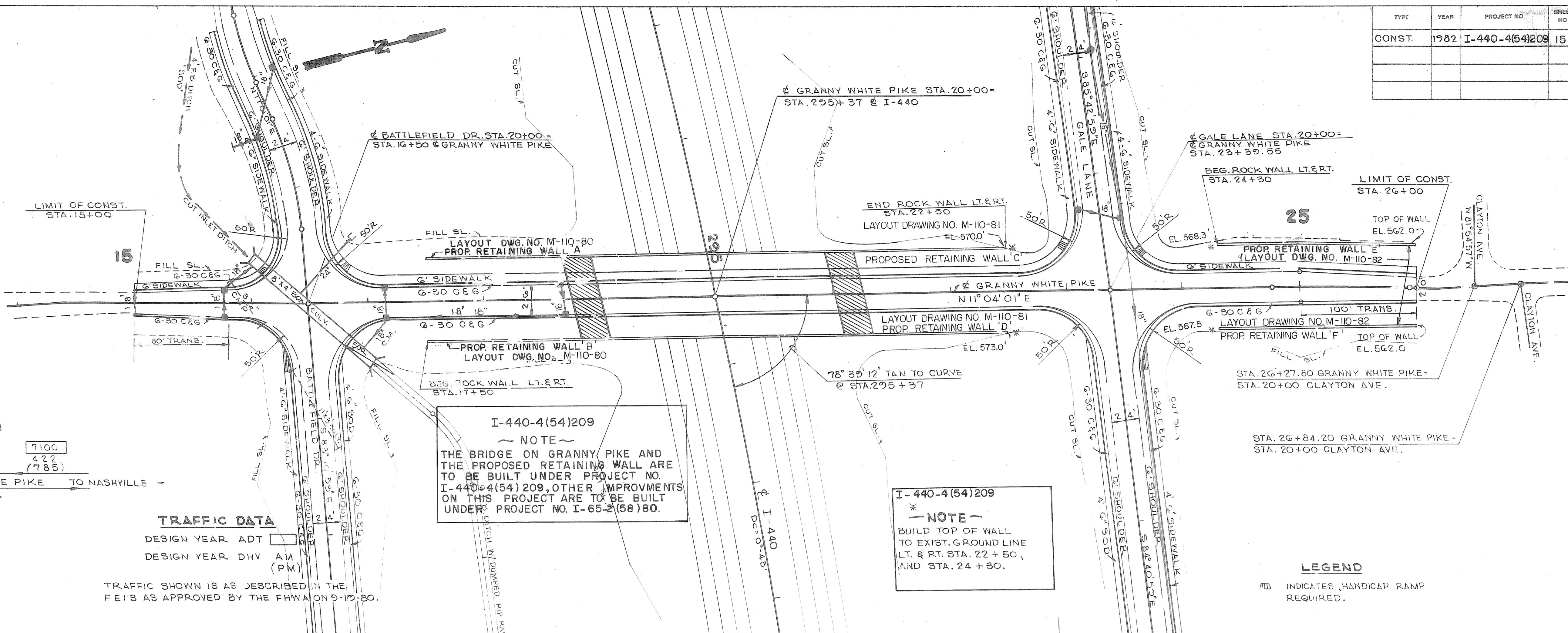
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(54)209	15



BRIDGE SECTION
 SHOWING CLEARANCE ON GRANNY WHITE PIKE
 OVER I-440 AT RIGHT ANGLES TO STA. 20+00±
 GRANNY WHITE PIKE.



BRIDGE SECTION
 SHOWING CLEARANCE ON GRANNY WHITE PIKE
 OVER I-440 AT RIGHT ANGLES TO STA. 295+37±
 ON I-440.



I-440-4(54)209
 ~ NOTE ~
 THE BRIDGE ON GRANNY PIKE AND
 THE PROPOSED RETAINING WALL ARE
 TO BE BUILT UNDER PROJECT NO.
 I-440-4(54)209, OTHER IMPROVEMENTS
 ON THIS PROJECT ARE TO BE BUILT
 UNDER PROJECT NO. I-65-2(58)80.

I-440-4(54)209
 ~ NOTE ~
 BUILD TOP OF WALL
 TO EXIST. GROUND LINE
 LT. & RT. STA. 22+50,
 AND STA. 24+30.

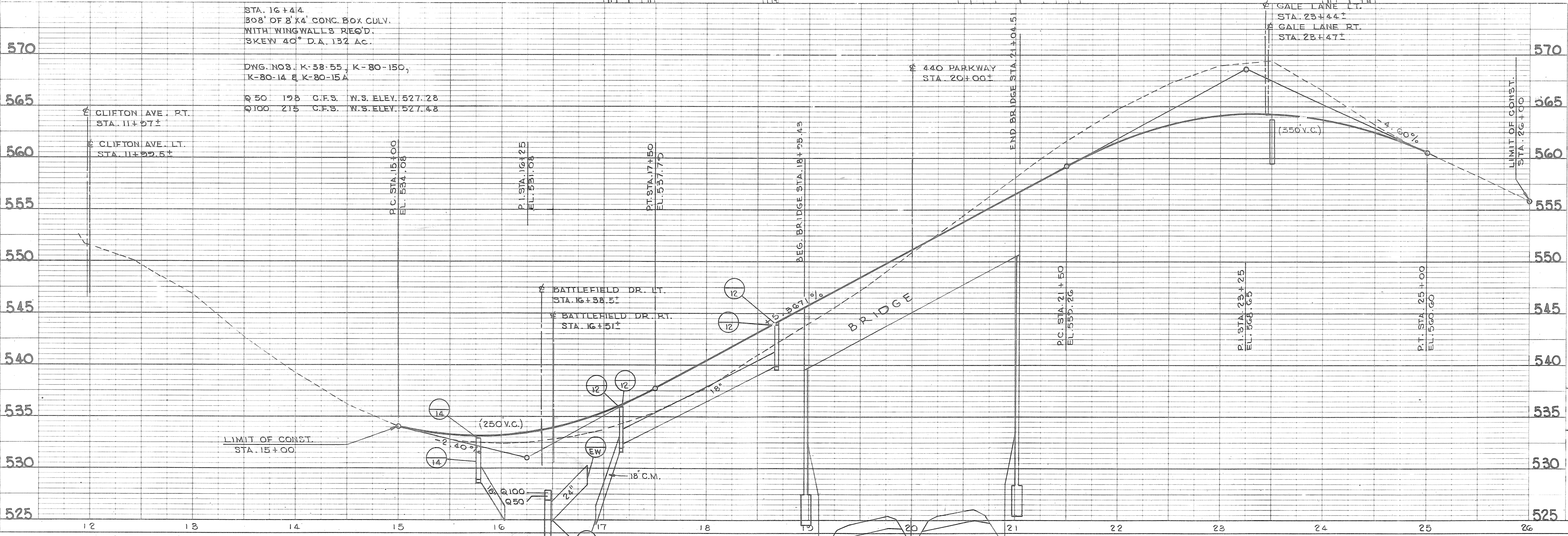
TRAFFIC DATA

DESIGN YEAR ADT
 DESIGN YEAR DHV AM (PM)
 TRAFFIC SHOWN IS AS DESCRIBED IN THE
 FEIS AS APPROVED BY THE FHWA ON 9-19-80.

LEGEND
 ■ INDICATES HANDICAP RAMP
 REQUIRED.

DATE	BY

DATE	BY



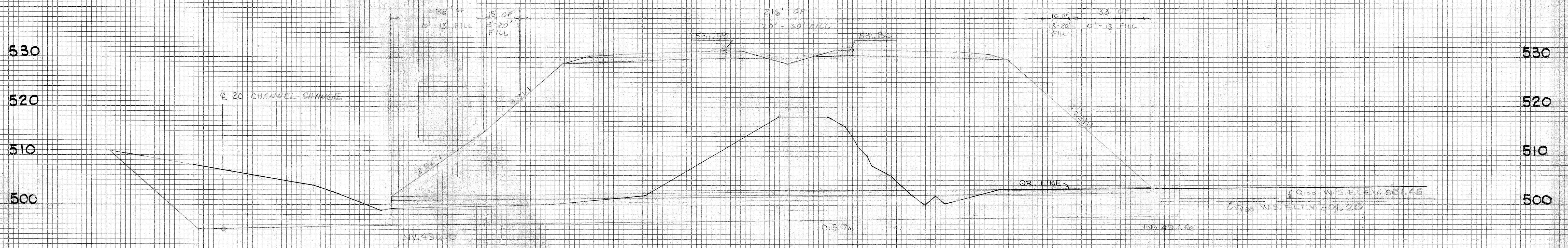
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT
GRANNY WHITE PIKE
 STA. 12+00 TO STA. 27+00

TENN. STATE HIGHWAYS
Plans
Div. No. 49

SCANNED
FINAL SURVEY
NOTE BOOK NO.
SURVEYED BY
DATE
TEMP. AREAS CHECKED

ORIGINAL SURVEY NOTE BOOK NO.
BY
DATE
TEMP. AREAS CHECKED



BRIDGE NO. 4 PROJECT NO. 1-440-4(5A)209
STA. 315+50 1-440
3.12' OF 2 @ 10" CONC. BOX BRIDGE W/WINGWALL REQ'D.
SKEW 60° LT. D.A. 277 AC. (C=0.5)
- CLASS 'A' CONC. 722.87 CU YD
- STEEL BAR REIN. 20,354.19 LB
FOUNDATION FILL MATL. 153.17 CU YD
MINERAL AGGREGATE (BACKFILL) 685.44 TONS
- CULVERT EXCAVATION 533.53 CU YDS
CHANNEL EXCAVATION 2205.83 CU YDS
DWG NOS. K-15-11, K-15-12, K-15-28, K-80-14
K-83-150, M-103-189, M-103-150, D-CE-3

NOTE
THE CONTRACTOR MAY SUBSTITUTE
PRECAST BOX SECTIONS IN LIEU OF
CAST IN PLACE CONCRETE. SEE SPECIAL
PROVISION REGARDING CONCRETE STRUCTURES.

SCALE: 1" = 20' HORIZ.
1" = 10' VERT.