

INDEX OF SHEETS
SEE SHEET NO. 1A

TRAFFIC DATA
SEE SHEET <u>25</u>

THIS PROJECT WAS NOT DESIGNED BASED ON TRAFFIC SHOWN, BUT AS DESCRIBED IN THE F.E.I.S. AS APPROVED BY THE F.H.W.A. ON SEPTEMBER 19, 1980.

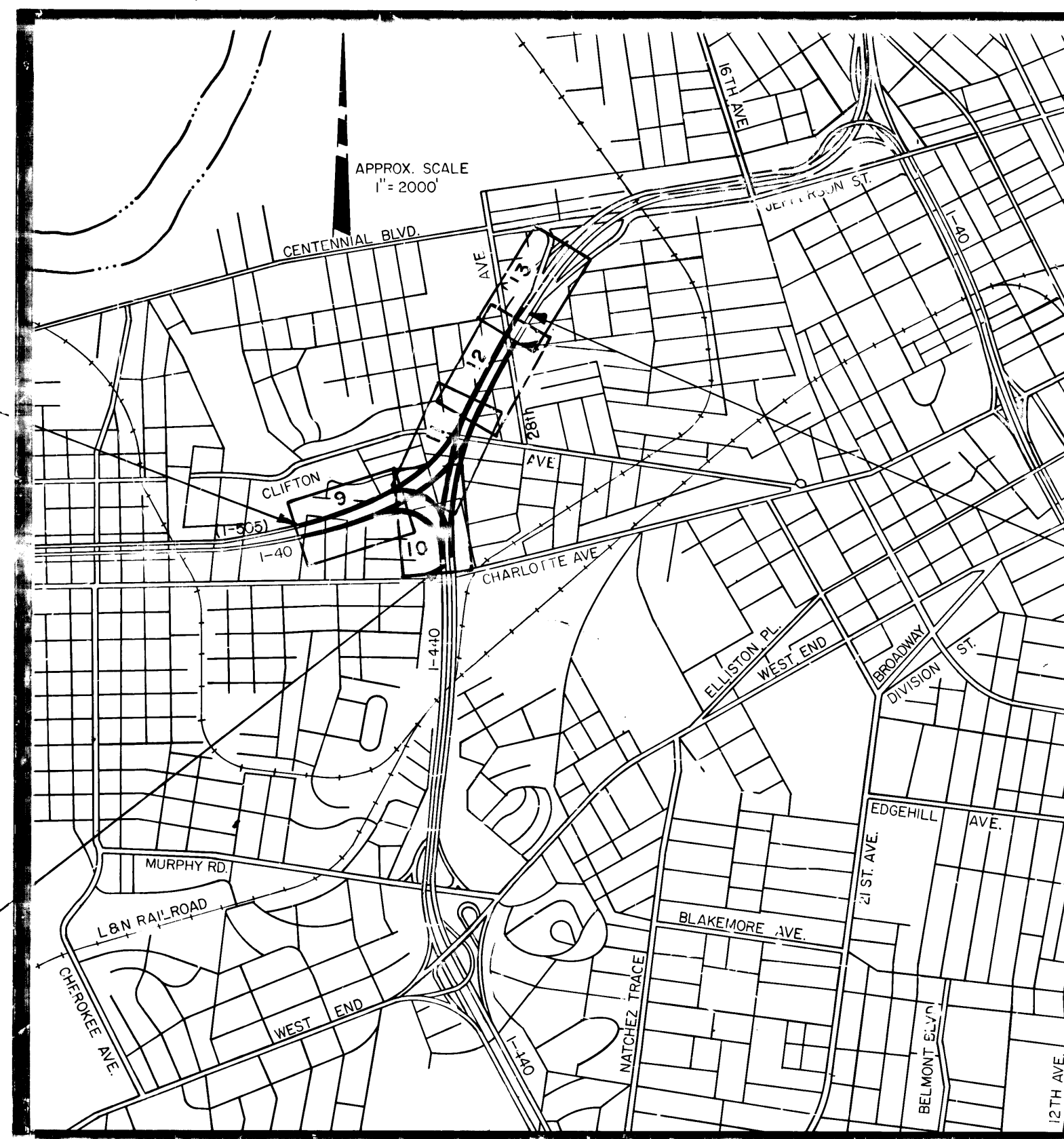
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

DAVIDSON COUNTY

I-40/I-440 INTERCHANGE

GRADE, DRAIN, PAVE AND BRIDGES

INTERSTATE HIGHWAY NO. I-40-440 F.A.H.S. NO. I-40-440



19014-3113-44
19014-3114-44
BEGIN PROJ. ID-IR-440-4(50)206 CONST.
STA. 340+00 @ I-40

LIMITS OF CONSTRUCTION
STA. "E.S." 361+00
STA. "N.E." 344+00

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.

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

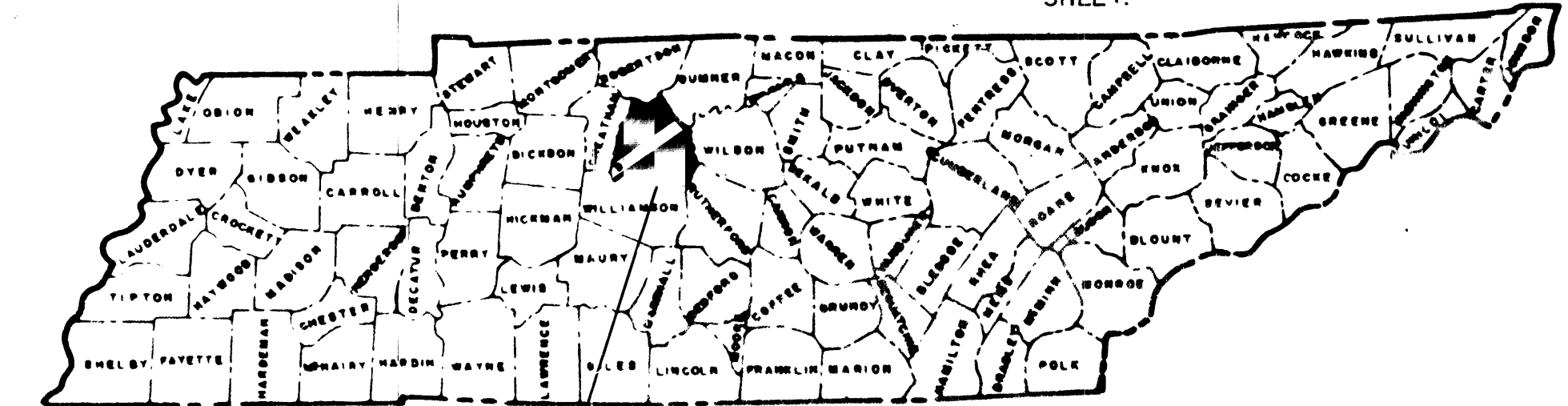
DESIGNER BARGE, WAGGONER, SUMNER & CANNON CHECKED BY RAY N. EVANS

① ROADWAY LENGTH	0.905 MILES
② BRIDGE LENGTH	0.098 MILES
BOX BRIDGE LENGTH	0.000 MILES
PROJECT LENGTH	1.003 MILES

- ① BASED ON LENGTH OF I-40 EAST BOUND LANE ROADWAY AND DOES NOT INCLUDE RAMPS.
- ② BRIDGE RENOVATIONS ONLY THIS CONTRACT, DOES NOT INCLUDE BRIDGES ON RAMPS.

FED. ROAD DIST. NO.	TENN.	YEAR	SHEET NO.
3		1983	1
FED. AID PROJ. NO.	ID-IR-440-4(50)206		
STATE PROJ. NO.	19014-3113-44 19014-3114-44		

NOTE: ALL SHEETS WILL HAVE PROJ. NO'S CORRECTED TO AGREE WITH THE ABOVE NO. AT LATER DATE.
REV. 5-13-83: CORRECTED PROJECT NO. THIS SHEET.



ID-IR-440-4(50)206

EQUATIONS			
BACK	AHEAD	+	-
		—	—
		—	—
		—	—
NET EFFECT		NO EFFECT	

NO EXCLUSIONS

19014-3113-44
19014-3114-44
END PROJ. ID-IR-440-4(50)206 CONST.
STA. 393+00 @ I-40

APPROVED Louis Evans
STATE TRANSPORTATION ENGINEER

DATE

APPROVED Paul E. F...
COMMISSIONER

PLANS PRINTED		
DATE	PURPOSE	INFO. REQ'D.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED _____
DIVISION ADMINISTRATOR DATE

INDEX

SHEET NO.

1
 1A
 2-2A
 2B-2C
 2D-2E
 2F
 2G-2H
 2I
 2J-2L
 2M-2N
 2-O
 2-P
 2-Q

3
 3A-3B
 3C-3E
 * 4-8 (NOT USED IN PLANS)
 9-13
 9A-13A
 9B-13B
 14-24
 25
 26-30
 31
 32-37
 38 & 38A
 39-43
 44-46
 47-48
 49
 50
 51-138
 RP-J-1
 RP-J-5
 RP-J-9
 EL-P-3
 K-38-155

SHEET NAME

TITLE SHEET
 INDEX AND STANDARD DRAWINGS
 ESTIMATED BRIDGE QUANTITIES AND NOTES
 ESTIMATED ROADWAY QUANTITIES
 TABULATED QUANTITIES
 GRADING PLAN & ESTIMATED QUANTITIES
 GENERAL NOTES
 SCOPE OF WORK AND PRIORITY OF CONSTRUCTION
 TYPICAL SECTIONS
 MISCELLANEOUS DETAILS
 MEDIAN BARRIER GUARDRAIL ENERGY ABSORBING TERMINAL
 OVERHEAD SIGN STRUCTURE MOUNTED ON CONCRETE MEDIAN BARRIER
 OVERHEAD SIGN STRUCTURE MOUNTED ON CONCRETE MEDIAN BARRIER AND GUARDRAIL ATTACHMENT
 GENERAL TRAFFIC CONTROL PLAN
 DETOUR PLAN WB 1-40
 TRAFFIC CONTROL PLAN - BRIDGE WIDENINGS
 RIGHT-OF-WAY SHEETS
 PRESENT LAYOUT
 PROPOSED LAYOUT
 DRAINAGE & GRADING LAYOUT
 PROFILES
 GEOMETRIC DESIGN PLAN
 PAVEMENT MARKING PLAN
 LIGHTING GENERAL NOTES
 LIGHTING DETAILS
 CIRCUIT DIAGRAM & MAINTENANCE OF LIGHTING
 PROPOSED LIGHTING LAYOUT
 LANDSCAPE DEVELOPMENT PLAN
 PLANTING DETAILS
 PLANT SCHEDULE & NOTES
 TEMPORARY POLLUTION CONTROL PLAN
 CROSS-SECTIONS
 PORTLAND CEMENT CONCRETE PAVEMENT JOINT TYPE AND SPACING (PRINT WITH PLANS)
 TYPICAL ACCELERATION & DECELERATION LANE JOINT TYPES & SPACING FOR CONCRETE RAMPS (PRINT WITH PLANS)
 CONTRACTION AND CONSTRUCTION JOINTS FOR CONCRETE PAVEMENT (PRINT WITH PLANS)
 TYPICAL TEMPORARY POLLUTION CONTROL STRUCTURES LOCATIONS (PRINT WITH PLANS)
 STANDARD SPLICE AND BEARING DETAILS (PRINT WITH PLANS)

STANDARD ROADWAY DRAWINGS

DWG NO.

RD-A-1
 RD-L-1
 RD-L-2
 RD-S-11
 RD-S-11A
 RD-S-13
 RD-S-15
 RD-S-15B
 RD-S-15C
 RD-S-17
 RD-SA-1
 RD-SE-1
 RD-UD-1
 RD-UD-2
 D-CE-1
 D-CE-3
 D-PB-1
 D-PE-4
 D-PE-4U
 D-PE-6U
 D-PG-3
 * 3F-3I

TITLE

ROADWAY DESIGN STANDARDS
 STANDARD ABBREVIATIONS
 STANDARD LEGEND
 STANDARD LEGEND
 ROADSIDE SLOPE DEVELOPMENT
 ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
 DESIGN STANDARDS-4-LANE HIGHWAYS, URBAN AREAS
 DESIGN STANDARDS-4-LANE, DEPRESSED MEDIAN (ON F.A.I. AND F.A.P. SYSTEMS)
 DESIGN STANDARDS-4 & 6 LANE INDEPENDENT ROADWAYS (ON F.A.I. AND F.A.P. SYSTEMS)
 DESIGN STANDARDS-1 & 2 LANE RAMPS
 MEDIAN SECTIONS AND MEDIAN BARRIER WARRANT CRITERIA
 SAFETY APPROACH TO UNDERPASSES, GRADING DESIGN & SLOPE PROTECTION
 STANDARD SUPERELEVATION DETAILS
 UNDERDRAIN DETAILS
 UNDERDRAIN DETAILS

DRAINAGE-CULVERTS AND ENDWALLS
 REVISED CONSTRUCTION DETAILS
 SAFETY ADJUSTMENTS FOR ENDWALLS
 STANDARD DETAILS CLASS "B" BEDDING AND CULVERT EXCAVATION
 STRAIGHT, "U" & "L" TYPE CONCRETE ENDWALL
 ENDWALL WITH STEEL GRATE FOR 15" THRU 48" PIPE (4:1 SLOPE)
 ENDWALL WITH STEEL GRATE FOR 15" THRU 48" PIPE (8:1 SLOPE)
 FERROUS AND ALUMINUM CORRUGATED METAL PIPE

TRAFFIC CONTROL PLAN - ALTERNATE DETOUR PHASING

STANDARD ROADWAY DRAWINGS (CON'T)

DWG NO.	CURRENT REV. DATE	TITLE
DRAINAGE-CATCH BASINS AND MANHOLES		
D-CB-3	7-17-81	NO. 36 AND NO. 37 CATCH BASINS AND GRATE
D-CB-9	1-11-82	STANDARD APRON SPILLWAY AT BRIDGE ENDS
D-CB-12-32	3-15-78	STANDARD NO. 12-32 CATCH BASIN AND CASTINGS
D-CB-32	3-15-78	DETAILS OF STANDARD NO. 32 CATCH BASIN
D-MH-3	1-1-78	MASONRY & PRECAST NO. 3 MANHOLE
D-MH-4	7-17-81	NO. 3 MANHOLE CASTINGS
ROADWAY AND PAVEMENT APPURTENANCES		
RP-J-11	7-17-81	3/4" AND 1-3/4" EXPANSION & EDGE PAVEMENT JOINTS
RP-J-13		3/8", 3/4", & 1-3/4" ELASTIC JOINT SEALS
RP-J-15		METAL LONGITUDINAL JOINT
RP-J-17		DOWEL ASSEMBLIES
RP-J-19		DOWEL ASSEMBLIES
RP-J-21		DOWEL ASSEMBLIES
SAFETY APPURTENANCES AND FENCE		
S-F-10b	7-17-81	STANDARD RIGHT-OF-WAY CHAIN LINK FENCE
S-RP-2	1-1-78	CONCRETE RIGHT OF WAY POST
S-GR-11	8-15-82	W-BEAM BARRIER RAIL AND RUB RAIL
S-GR-12	8-15-82	BARRIER RAIL MOUNTING, POST BLOCK-OUTS, POST "BASE" DETAILS
S-GR-13	8-15-82	W-BEAM BARRIER POST DETAILS AND SPECIFICATIONS
S-GR-14	8-15-82	W-BEAM BARRIER FASTENING HARDWARE AND REFLECTORS
S-GR-15	8-15-82	W-BEAM BARRIER TERMINAL ELEMENT DETAILS
S-GR-16	8-15-82	GUARDRAIL BARRIER TREATMENT FOR PIERS IN MEDIAN
S-GR-17	8-15-82	BRIDGE END PROTECTION IN MEDIAN FOR DUEL BRIDGES
S-GR-18	8-15-82	GUARDRAIL TERMINAL ANCHOR TYPE II
S-GR-19	8-15-82	TERMINAL ANCHORS TYPE 12 AND TYPE 13
S-GR-20	8-15-82	PROTECTIVE GUARDRAIL FOR BRIDGE ENDS AND MEDIAN DIVIDER GUARDRAIL
S-GR-21	9-15-82	LENGTH OF NEED AND TERMINAL REQUIREMENTS IN FILLS
S-MB-1		STANDARD CONCRETE MEDIAN BARRIER
S-MB-2		STANDARD CONCRETE MEDIAN BARRIER (BRIDGE PIER PROTECTION)
M-23-16		MEDIAN BARRIER GUARDRAIL ENERGY ABSORBING TERMINAL
TRAFFIC CONTROL APPURTENANCES		
T-M-2		MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-M-3		MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-M-4		MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-M-5		MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-S-6	1-1-78	STANDARD MOUNTING DETAILS-BOLTED EXTRUDED PANELS
T-S-7	2-18-78	HIGHWAY SHIELDS & ARROWS
T-S-9	1-1-78	STANDARD LAYOUT GROUND MOUNTED SIGNS
T-S-11	7-17-81	DELINEATORS, MILE POST & PAVEMENT ARROWS DETAILS
T-S-12	10-24-79	STANDARD MOUNTING DETAILS, FLAT SHEET SIGNS, ALUMINUM-STEEL DESIGN
T-S-14	4-12-77	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST, FOOTING DETAILS, WF-BEAMS
T-S-15	1-1-78	STANDARD CONDUIT AND GROUNDING DETAILS FOR OVERHEAD AND BUTTERFLY SIGN STRUCTURES
T-S-16	10-24-79	GROUND MOUNTED SIGNS & DETAILS
T-S-17	7-17-81	GROUND MOUNTED SIGNS & PERFORATED SQUARE TUBE
T-S-19	7-1-78	STANDARD MEMBERS BENDAWAY SIGN SUPPORTS, ALUMINUM-STEEL DESIGN
EROSION CONTROL AND LANDSCAPING		
EL-P-1	1-11-82	TYPICAL TEMPORARY POLLUTION CONTROL STRUCTURES
EL-P-2	1-11-82	TYPICAL TEMPORARY POLLUTION CONTROL STRUCTURES LOCATIONS
BRIDGE APPURTENANCES		
K-80-14	8-27-78	STANDARD REINFORCING BAR SUPPORT DETAIL FOR CONCRETE SLABS
K-85-150	1-9-75	MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS
K-86-144	7-17-81	REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS
H-5-111	11-12-82	STANDARD PIPE DETAILS
M-8-149	11-20-75	LIGHT STANDARD SUPPORT DETAILS
M-103-149	7-7-82	PRECAST PRESTRESSED BRIDGE DECK PANELS, DESIGN CRITERIA, 1982
M-103-150	7-7-82	PRECAST PRESTRESSED BRIDGE DECK PANELS, GENERAL DETAILS, 1982

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	ID-IR-440-4(50)206	1A

REV. 5-13-83: ADDED SHEET 38A AND STANDARD DRAWING NO. K-38-155 TO PLANS.
 REV. 1-18-84: ADDED SHEETS 3F THRU 3I TO INDEX.

STATE HIGHWAYS
IN-
/N
330

LIST OF SPECIAL PROVISIONS

NO.	TITLE	LATEST REVISED DATE
105A	REGARDING APPROVAL OF SHOP DRAWINGS	9-8-81
907A	REGARDING EPOXY COATED REINFORCING STEEL	9-8-81
604A	REGARDING CLASS "A" CONCRETE FOR BRIDGE DECKS	12-20-82
602	REGARDING SECTION 602 STEEL STRUCTURES	9-8-81

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	1D-IR-440-4(5)206	2

REV 5-13-83 CORRECTED PROJECT NO.

BRIDGE No. 4	BRIDGE No. 5	BRIDGE No. 6	BRIDGE No. 7-7A	BRIDGE No. 32	BRIDGE No. 8
STRUCTURE No. 4 STA. 350+01.16 I-440 RAMP NW OVER I-40. 4 SPAN CONTINUOUS CURVED STEEL BOX GIRDERS WITH CAST-IN-PLACE COMPOSITE CONCRETE DECK. LENGTH = 440'-6" 42'-0" ROADWAY WITH CONCRETE PARAPETS.	STRUCTURE No. 5 STA. 350+44.24 I-440 RAMP WS OVER RAMP NW. 3 SPAN CONTINUOUS CURVED STEEL BOX GIRDERS WITH CAST- IN-PLACE COMPOSITE CONCRETE DECK. LENGTH = 372'-0" 42'-0" ROADWAY WITH CONCRETE PARAPETS.	STRUCTURE No. 6 STA. 356+66.50 I-440 RAMP WS OVER RAMP EB. 3 SPAN CONTINUOUS CURVED STEEL BOX GIRDERS WITH CAST- IN-PLACE COMPOSITE CONCRETE DECK. LENGTH = 347'-3" 42'-0" ROADWAY WITH CONCRETE PARAPETS.	STRUCTURE No. 7-7A STA. 363+19.22 (W.S) STA. 363+35.62 (EB) WIDENING OF I-40 OVER CLIFTON AVE. 3 SPAN CONTINUOUS PRECAST CONCRETE TYPE II I-BEAMS WITH CAST-IN-PLACE CONCRETE DECK. LENGTH = 141'-2 1/2" (WS) 141'-1 1/2" (EB) VARIABLE ROADWAY WITH CONCRETE PARAPETS. SKEW = 71°-00'-45" (WS) 74°-34'-24" (EB)	STRUCTURE No. 32 STA. 370+94.08 WIDENING OF I-40 OVER BATAVIA AVE. 3 SPAN CONTINUOUS PRECAST TYPE II I-BEAMS WITH CAST- IN-PLACE CONCRETE DECK. LENGTH = 165'-1 1/2" (WS) 163'-5 1/2" (EB) VARIABLE ROADWAY WITH CONCRETE PARAPETS. SKEW = 59°-23'-01"	STRUCTURE No. 8 STA. 380+33.33 WIDENING OF I-40 OVER 28th AVENUE. STRUCTURAL STEEL SLOPE-LEG FRAME WITH COMPOSITE CAST-IN-PLACE CONCRETE DECK. LENGTH = 213'-5" ± VARIABLE ROADWAY WITH CONCRETE PARAPETS. SKEW = 37°-31'-05" TO LOCAL TANGENT.

BRIDGE NO. 4
LAYOUT DWG. NO. M-125-1 THRU M-125-20

BRIDGE NO. 5
LAYOUT DWG. NO. M-125-21 THRU M-125-37

BRIDGE NO. 6
LAYOUT DWG. NO. M-125-38 THRU M-125-56

BRIDGE NO. 7-7A
LAYOUT DWG. NO. M-125-57 THRU M-125-70

BRIDGE NO. 32
LAYOUT DWG. NO. M-125-71 THRU M-125-82
PLUS M-125-82A

BRIDGE NO. 8
LAYOUT DWG. NO. M-125-83 THRU M-125-93
PLUS M-125-93A

ESTIMATED BRIDGE QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TOTAL QUANTITIES	UNIT
202-04.01	REMOVAL OF STRUCTURES	1						1	LUMP SUM
202-04.02	REMOVAL OF STRUCTURES		1					1	LUMP SUM
202-04.03	REMOVAL OF STRUCTURES			1				1	LUMP SUM
202-04.04	REMOVAL OF STRUCTURES				1			1	LUMP SUM
202-04.05	REMOVAL OF STRUCTURES					1		1	LUMP SUM
202-04.06	REMOVAL OF STRUCTURES						1	1	LUMP SUM
204-02.01	DRY EXCAVATION (BRIDGES)	414.2	264	1,085	205.8	229.2	417.1	2615.3	C.Y.
204-02.11	DRILLED CAISSON (EARTH) (2'-6" Ø)	15		254				269	L.F.
204-02.16	DRILLED CAISSON (ROCK) (2'-6" Ø)	112		20				132	L.F.
204-04.01	ROCK EXCAVATION (BRIDGES)	611.3	515	525.2	17.4	9.0	4.9	1682.8	C.Y.
204-05	ROCK DRILLING (BRIDGES)	78	24	60	36.0	24.0	12.0	234	L.F.
602-04.01	STEEL STRUCTURES	1						1	LUMP SUM
602-04.02	STEEL STRUCTURES		1					1	LUMP SUM
602-04.03	STEEL STRUCTURES			1				1	LUMP SUM
602-04.04	STEEL STRUCTURES		1					1	LUMP SUM
602-05.08	STANDARD ELASTOMERIC EXPANSION DEVICE	88	44	88				220	L.F.
603-02.01	REPAINTING EXISTING STEEL STRUCTURES (LUMP SUM)							1	LUMP SUM
604-01.12	CLASS "A" CONCRETE (BRIDGE DECK)	565.5	467.0	456.5	419.0	416.0	580.4	2904.4	C.Y.
604-02.03	EPOXY COATED REINFORCING STEEL	167,384	141,310.0	137,270	97,410.0	78,400.0	108,138.0	729,912	L.B.
604-03.01	CLASS "A" CONCRETE (BRIDGES)	796.5	472.6	743.2	324.4	326.7	290.0	2953.4	C.Y.
604-03.02	STEEL BAR REINFORCEMENT (BRIDGES)	117,845	91,185.0	88,852	51,294.0	45,042.0	39,129.0	433,347	L.B.
604-03.03	LINSEED OIL TREATMENT	2,254	1,895.0	1,860				6,009	S.Y.
604-04.01	APPLIED TEXTURE FINISH (NEW STRUCTURES)	2158		1381	1,511.0	1,149.0	730.0	6,929	S.Y.
604-04.02	APPLIED TEXTURE FINISH (EXISTING STRUCTURES)				2,715.0	2,879.0	365.0	5,959	S.Y.
604-36	SCARIFYING				2,357.0	2,432.0	3126.0	7,915	S.Y.
606-02.03	STEEL PILES (10 INCH)	100	590.0	100	470.0	388.0	337.0	1,985	L.F.
615-01.02	PRESTRESSED CONCRETE I-BEAM (TYPE II) 36" DEEP				5570	638.0		1,195	L.F.
620-03	CONCRETE PARAPET (M-28-1)	901	807.0	749.0	633.0	340.0	480.0	3,910	L.F.
705-08.03	REINFORCED CONCRETE MEDIAN BARRIER (BRIDGES)					213.0	263.0	478	L.F.
709-04	REINFORCED CONCRETE SLOPE PAVEMENT				40.3	40.0	29.3	109.6	C.Y.
709-05.01	MACHINED RIP-RAP	228.4	102.0	185.0				515.4	C.Y.
710-10	6" Ø PERFORATED C.M. PIPE (18 GA.) w/ POROUS BACKFILL	120.0	144.0	120.0	82.0	56.0	73.0	595	L.F.
710-11	6" C.M. PIPE UNDERDRAINS (18 GA.)	110.0	42.0	70.0	80.0	27.0	20.0	349	L.F.
714-01.01	STRUCTURE LIGHTING	1						1	LUMP SUM
714-01.02	STRUCTURE LIGHTING		1					1	LUMP SUM
714-01.03	STRUCTURE LIGHTING			1				1	LUMP SUM
714-01.04	STRUCTURE LIGHTING				1			1	LUMP SUM
714-01.05	STRUCTURE LIGHTING					1		1	LUMP SUM
714-01.06	STRUCTURE LIGHTING						1	1	LUMP SUM
718-01.02	NOISE BARRIER (METAL)				970.0			970.0	S.F.

STANDARD DRAWINGS	DRAWING NO.	LATEST REVISED DATE
STANDARD PILE DETAILS	H-5-111	11-12-82
REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLAB	K-80-14	8-27-76
MISCELLANEOUS ABUTMENT & DRAINAGE DETAILS	K-85-150	7-9-75
REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS	K-86-144	7-17-81
PRECAST PRESTRESSED BRIDGE DECK PANELS	M-103-149 & 150	7-7-82
BRIDGE RAILING - CONCRETE PARAPET	M-28-1	7-17-81
STANDARD PORTABLE BARRIER RAIL	K-38-158	7-17-81
LIGHT STANDARD SUPPORT DETAILS	M-8-149	11-20-75
SLOPE PROTECTION	RO-SA-1	1-11-82
SPLICE & BEARING DETAILS	K-38-155	
STANDARD ELASTOMERIC EXPANSION JOINT	K-86-142	12-2-71

FOR FOOTNOTES SEE DRAWINGS

M-125-2 M-125-22 M-125-39 M-125-58 M-125-72 M-125-84

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGE INDEX
AND
QUANTITIES

STATE HIGHWAYS
 Plans File
 by No. 330

STANDARD DWG.	DWG. NO.	REV. DATE
MISCELLANEOUS ABUTMENT & DRAINAGE DETAILS	K-85-150	1-9-75
LIGHT STD SUPPORT DETAILS	M-8-140	11-20-75
BRIDGE RAILING CONCRETE PARAPET	M-28-1	7-17-81
RETAINING WALL STANDARD CANTILEVER 6'-30" GENERAL NOTES	M-103-132	11-1-82
RETAINING WALL STANDARD CANTILEVER 6'-30" CASE II, SURCHARGE	M-103-134	
RETAINING WALL STANDARD CANTILEVER 6'-30" MISCELLANEOUS DETAILS	M-103-137	

BARRIER RAIL	CONCRETE BARRIER WALL No.1	CONCRETE BARRIER WALL No.2	CONCRETE BARRIER WALL No.3	CONCRETE BARRIER WALL No.4	CONCRETE BARRIER WALL No.5	CONCRETE BARRIER WALL No.6	CONCRETE BARRIER WALL No.7	CONCRETE BARRIER WALL No.8	CONCRETE BARRIER WALL No.9	NOISE BARRIER 901-A	NOISE BARRIER 901-B
GRADE BEAM WITH CONCRETE PARAPET. WB RAMP RIGHT STA. 355+50 TO STA. 352+33.69 WS RAMP LEFT STA. 352+33.69 TO STA. 352+33.69 WS RAMP RIGHT STA. 352+33.69 TO STA. 352+33.69 E IAD RIGHT STA. 372+13.09 WS RAMP MEDIAN STA. 364+02.00 EB RAMP MEDIAN STA. 364+10.00	RETAINING WALL WITH CONCRETE PARAPET. STA. 357+25 WB TO STA. 361+02.00 WS LENGTH= 375'-5"	RETAINING WALL WITH CONCRETE PARAPET. STA. 358+08.17 WS TO STA. 359+55.00 WS LENGTH= 146'-11 1/4"	RETAINING WALL WITH CONCRETE PARAPET. STA. 358+08.17 WS TO STA. 362+45.31 WS LENGTH= 406'-10 3/4"	RETAINING WALL WITH CONCRETE PARAPET. STA. 362+02.30 WB TO STA. 369+56.72 WS LENGTH= 508'-4 1/2"	RETAINING WALL WITH CONCRETE PARAPET. STA. 365+66.10 EB TO STA. 370+42.20 EB LENGTH= 476'-11 1/4"	RETAINING WALL WITH CONCRETE PARAPET. STA. 371+33.42 WS TO STA. 380+04.96 WS LENGTH= 809'-6 3/8"	RETAINING WALL WITH CONCRETE PARAPET. STA. 371+33.42 WS TO STA. 377+04.00 NW LENGTH= 140'-7 3/8"	RETAINING WALL WITH CONCRETE PARAPET. STA. 377+04.00 NW TO STA. 387+13.00 WS LENGTH= 117'-0"	RETAINING WALL WITH CONCRETE PARAPET. STA. 387+13.00 WS TO STA. 388+29.50 WS LENGTH= 514'-2 3/4"	COMBINED NOISE BARRIER AND SAFETY SHAPE, "NE", STA. 355+41 I TO STA. 362+80.5 I BEGIN LAYOUT AT STA. 360+00.	COMBINED NOISE BARRIER AND SAFETY SHAPE, "EB", STA. 364+34 I TO STA. 367+40. I BEGIN LAYOUT AT STA. 367+40.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	ID-IR-440-4(50)206	2A

REV. 5-12-83: ADDED SHEET M-125-111 TO PLANS.
 REV. 5-13-83: CORRECTED PROJECT NO.
 Rev. 5-16-83: Added Note

ITEM No.	DESCRIPTION	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TOTAL QUANTITIES	UNIT	
204-02.01	Dry Excavation (Bridges)	508.4 ⑥	430.7 ②	243.1 ②	599.5 ②	746.2 ②	593.0 ①	1,132.0 ②	280.4 ②	202.0 ②	1,210.0 ②		5945.3	C.Y.	
204-02.11	Drilled Caisson (Earth) (2'-6" φ)											285	429	FT.	
204-02.16	Drilled Caisson (Rock) (2'-6" φ)											25	25	FT.	
204-04.01	Rock Excavation (Bridges)			42.0						18.0	95.0		155.0	C.Y.	
604-03.01	Class "A" Concrete (Bridges)	508.4 ④	185.5	152.0	275.0	305.0	265.0	475.5	150.0	114.0 ⑦	752.0 ⑦		3182.4	C.Y.	
604-03.02	Steel Bar Reinforcement (Bridges)	32,710	8,500	10,803	16,089	14,945	13,083	23,450	8,576	5,932	58,866		192,954	LBS.	
604-04.01	Applied Textured Finish (New Structures)	1,479	410	260	400	581	741	875	255				5,001	S.Y.	
620-03	Concrete Parapet (M-28-1)	1,961	373	149	407	580	476	870	141	117	514		5,588	L.F.	
710-10	6" φ Perforated C.M. Pipe (18ga.) w/ Porous Backfill ⑥		373	149	407	580	476	870	141	117	514		3,627	L.F.	
710-11	6" φ C.M. Pipe Underdrains (18ga.)		24	12	28	40	32	60	12	8	36		252	L.F.	
718-01.01	Noise Barrier (Concrete)											7,633	2,924	10,557	30 FT.
718-02	Noise Barrier Safety Wall											740	306	1,046	L.F.
719-01.07	Structure Lighting												1 ①	Lump Sum	

- LUMP SUM FOR STRUCTURE LIGHTING TO INCLUDE THE INSTALLATION OF 6,300 LINEAR FEET OF CONDUIT P.V.C. 2", 2 PULL BOXES STRUCTURES, AND 17 LIGHT STANDARD SUPPORTS WITH 60 ANCHOR BOLTS AND ALL MISCELLANEOUS HARDWARE NECESSARY FOR INSTALLATION.
- EXCAVATION BASED ON EXISTING GROUND.
- EXCAVATION BASED ON NEW ROAD PROFILE.
- COST OF DRAINS TO BE INCLUDED IN THE UNIT PRICE BID FOR CLASS "A" CONCRETE.
- THE COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.
- THE COST OF 4 THREADED STEEL INSERTS AND 4 7/8" φ x 4" HEX HEAD BOLTS (A-307) TO BE INCLUDED IN CONCRETE BARRIER WALL ITEMS BID ON.
- THE COST OF ALL CONCRETE FINISHES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CLASS "A" CONCRETE.
- THE COST OF 8-1/2" φ ANCHOR BOLTS AND HEAVY HEX. NUTS EACH FOR OVERHEAD SIGN NO.1 AND OVERHEAD SIGN NO.2 TO BE INCLUDED IN CONCRETE BARRIER WALL ITEMS BID ON.

- BARRIER RAILS:**
 ROADWAY DRAWINGS SHEET NO. 10A, 11A, & 12A FOR LOCATION AND GEOMETRY FOR DETAILS SEE SHEET M-125-111.
- BARRIER WALL No. 1: LAYOUT DRAWINGS NO. M-125-94 THRU M-125-95
 - BARRIER WALL No. 2: LAYOUT DRAWINGS NO. M-125-96
 - BARRIER WALL No. 3: LAYOUT DRAWINGS NO. M-125-97 THRU M-125-98
 - BARRIER WALL No. 4: LAYOUT DRAWINGS NO. M-125-99 THRU M-125-100
 - BARRIER WALL No. 5: LAYOUT DRAWINGS NO. M-125-101 THRU M-125-102
 - BARRIER WALL No. 6: LAYOUT DRAWINGS NO. M-125-103 THRU M-125-105
 - BARRIER WALL No. 7: LAYOUT DRAWINGS NO. M-125-106
 - BARRIER WALL No. 8: LAYOUT DRAWINGS NO. M-125-107
 - BARRIER WALL No. 9: LAYOUT DRAWINGS NO. M-125-108 THRU M-125-110
 - NOISE BARRIER 901A & 901B: LAYOUT DRAWINGS NO. M-125-112 THRU M-125-113

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

BARRIER INDEX
 AND
 QUANTITIES

REV. 1-18-84: REVISED GUARDRAIL TO REMAIN BLOCK.

STORM SEWER TABULATION						
SHEET NUMBER	CONCRETE PIPE		C.M.P. - L		BEDDING MATERIAL CLASS B-C.Y.	
	CLASS III - L.F.		15"	24"		
	18"	24"	607-370	607-3703		204-07
9B					8	1.8
10B	126	680				181.0
11B	166	754			60	249.4
12B	38		72			19.6
13B			22			3.5
TOTALS	330	1334			94	455.3

APRON SPILLWAY TABULATION						
SHEET NUMBER	NUMBER OF SPILLWAYS			CLASS "A" CONCRETE 604-01.01	RUBBLE STONE RIP-RAP (GROUTED) 709-02	CORR. METAL PIPE DRAINS (12") 610-05.04
	10'	15'	20'			
9B	1			4.2 C.Y.	2.6 C.Y.	46 L.F.
10B		1		5.2 C.Y.	2.6 C.Y.	36 L.F.
11B						
12B	2			8.4 C.Y.	5.2 C.Y.	50 L.F.
13B						
TOTALS	3	1		17.8 C.Y.	10.4 C.Y.	132 L.F.

GUARDRAIL TO REMAIN		
STATION TO STATION	LOCATION	LENGTH
"E-B" 340+90 TO "E-B" 345+75	RT.	585'
"E" 380+67 TO "E" 382+78	RT.	216'
"E" 380+52 TO "E" 391+22	RT.	1,061'
"J-B" 390+00 TO "J-B" 392+72	LT.	272'
"J-B" 390+95 TO "J-B" 392+72	RT.	177'
TOTAL		2,311'

* BEGINS RIGHT OF RAMP "A"

CATCH BASIN AND MANHOLE TABULATION																	
SHEET NUMBER	CATCH BASINS												MANHOLES TYPE 3, 5' DIA.				
	TYPE 1		TYPE 2		TYPE 3			TYPE 21	TYPE 36		TYPE 37						
	0'-4'	0'-4'	4'-6'	6'-8'	4'-6'	6'-8'	8'-12'	4'-6'	0'-4'	4'-6'	0'-4'	4'-6'	6'-8'	4'-6'	6'-8'	8'-12'	12'-16'
	611-04-01	611-04-03	611-04-04	611-04-05	611-04-07	611-04-08	611-04-09	611-04-11	611-04-13	611-04-16	611-04-17	611-04-18	611-02-02	611-02-03	611-02-04	611-02-05	
9B			1														
10B																	
11B					2	1		1		2	1		1			1	
12B	1	1		1	1		5										
13B	2	2															
TOTALS	3	3		1	3	1	5	1	1	4	1	1	1	1	1	1	

PIPE ENDWALL TABULATION				
SHEET NUMBER	NUMBER OF ENDWALLS	CLASS "A" CONCRETE 611-07.01 C.Y.	STEEL BAR REINF. 611-07.02 LB.	STRUCT. STEEL 611-07.03 LB.
9B	1	2.10	243	
10B	1	1.63	78.4	
11B	6	9.47	219.5	632
12B	5	4.87	100	
13B	1	0.83	20	
TOTALS	14	18.90	660.9	632

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	ID-IR-440-4(50)208	2E

REV. 5-13-83: ADDED LIME-FLY ASH
BASE ALTERNATE. CORRECTED PROJECT
NO.

ITEM NO.	DESCRIPTION	PAVING QUANTITIES										TOTAL	UNIT
		LOCATION											
		CL [*] I-40	EB RAMP	WB RAMP	NW RAMP	ES RAMP	WS RAMP	NE RAMP	DETOUR ON WB RAMP				
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING "D"	6202.0	1,673.7	1,598.9	1,057.2	860.3	1,690	770.6	1,486.7			13,818.4	TON
307-0105	AGGREGATE FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) "A-CRL"	7,327.7	1,435.8	1,310.8	82.1	1,625	72.9	54.7				10,446.5	TON
307-0106	ASPHALT CEMENT FOR BITUMINOUS PLANT MIX (HOT MIX)(BPMB-HM) "A-CRL"	3,053	59.8	54.6	3.4	6.8	3.1	2.3				4,353	TON
307-0201	AGGREGATE FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRADING "B"	6,233.7	1,546.9	1,469.5	99.6	1,870	1,698	82.1	662.0			10,450.6	TON
307-0202	ASPHALT CEMENT FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRADING "B"	2,937	72.9	69.2	4.7	8.8	8.0	3.9	29.4			4,906	TON
411-0101	MINERAL AGGREGATE FOR ASPHALTIC CONCRETE SURFACE (ACS) GRADING "D"	2,246.6	436.6	398.6	32.6	57.1	29.9	24.3	212.0			3,437.7	TON
411-0102	ASPHALT CEMENT FOR ASPHALTIC CONCRETE SURFACE (ACS) GRADING "D"	143.4	27.9	25.4	2.0	3.6	1.8	1.5	13.5			219.1	TON
411-0201	MINERAL AGGREGATE FOR ASPHALTIC CONCRETE SURFACE (ACS) GRADING "E"	6,667	282.3	2,860	153	32.7	54.2	17.2				1,354.4	TON
411-0202	ASPHALT CEMENT FOR ASPHALTIC CONCRETE SURFACE (ACS) GRADING "E"	42.6	18.0	18.3	1.0	2.1	3.5	1.1				86.6	TON
501-0103	PORTLAND CEMENT CONCRETE PAVEMENT (PLAIN) 10"	4,107.6	2,345.8	4,379.6	5,123.9	2,984.2	2,598.4	4,309.9				25,849.4	SQ YD
501-0302	PORTLAND CEMENT CONCRETE SHOULDER (DEPTH VARIES, 10" MAXIMUM)	0.0	0.0	0.0	2,807.5	1,946.8	1,303.4	2,657.6				8,715.3	SQ YD
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	167	6.6	6.7	0.4	0.8	1.3	0.4	5.5			38.4	TON
402-02	AGGREGATE FOR COVER MATERIAL (PC)	661	26.2	26.6	1.4	3.0	5.0	1.6	21.7			151.6	TON
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	140	2.3	2.2	0.1	0.1	0.1	0.1	0.8			19.7	TON
307-0103	AGGREGATE (BPMB-HM) GRADING "A-S" MIXTURE								478.9			478.9	TON
307-0104	ASPHALT CEMENT (BPMB-HM) GRADING "A-S" MIXTURE								16.1			16.1	TON
307-0301	AGGREGATE FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRADING "C"								246.3			246.3	TON
307-0302	ASPHALT CEMENT FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRADING "C"								13.0			13.0	TON
305-02	LEAN CONCRETE BASE (LCB) 5 INCHES	5,066.5	2,995.1	5,103.4	5,966.3	3,525.3	2,974.2	5,025.9				30,656.7	SQ YD
312-01	MINERAL AGGREGATE (ALFSB)	1,145	67.7	1,154	1,349	79.7	67.2	1,136				6,930	TON
312-02	LIME	47	2.8	4.7	5.5	3.3	2.8	4.6				284	TON
312-03	FLY ASH	147	8.7	14.8	17.4	10.3	8.6	14.7				892	TON
312-04	BITUMINOUS MATERIAL (ALFSB)	4	3	4	5	3	3	5				27	TON

* INCLUDES JB RAMP QUANTITIES

STATION TO STATION	LOCATION	GUARDRAIL QUANTITIES						
		TERMINAL ANCHORS - EA.			GUARDRAIL LENGTH - LIN. FT.			
		TYPE II 705-04.01	TYPE I3 705-04.03	MEDIAN (BREAKAWAY) 705-04.04	at BRIDGE ENDS 705-01.01	CONCRETE BARRIER 705-01.03	RESET 706-02	POSTS 706-03
CL I-40								
339+41-339+67	CL							
339+67-339+94	CL				26'-10 3/4"			
340+65-340+90	RT							
343+78-344+16	RT				37'-6"	7		
"EB" RAMP								
349+25-349+52	LT				26'-10 3/4"			
349+52-351+40	LT				187'-6"	31		
361+34-361+59	LT							
361+59-361+28	LT				68'-9"	12		
362+28-362+55	LT				26'-10 3/4"			
"WB" RAMP								
349+47-350+90	RT				150'-0"	25		
350+90-351+15	RT							
CL I-40								
382+38-382+65	LT				26'-10 3/4"			
382+65-388+63J3	LT				606'-3"	98		
382+78-382+97	RT				18'-9"	4		
391+22-391+47	RT				25'-0"	5		
393+20-393+47	CL				26'-10 3/4"			
"ES" RAMP								
355+60-355+84	LT							
355+84-356+96	LT				112'-6"	19		
"NW" RAMP								
339+00-348+20	LT				925'-0"	149		
348+20-348+47	LT				26'-10 3/4"			
341+98-346+76	RT				475'-0"	77		
346+76-347+04	RT				26'-10 3/4"			
353+11-353+39	RT				26'-10 3/4"			
353+39-353+52	RT				12'-6"	3		
353+52-353+78	RT							
353+11-353+37	LT				26'-10 3/4"			
353+37-357+00	LT				368'-9"	60		
357+00-357+24	LT							
"NE" RAMP								
347+57-347+82	RT							
347+82-352+51	RT				468'-9"	76		
354+75-355+00	RT							
355+00-355+13	RT				12'-6"	3		
355+13-355+40	RT				26'-10 3/4"			
"JB" RAMP								
388+63B-390+00	LT				131'-3"	22		
390+71-391+83	RT				112'-6" *			
390+71-390+96	RT				25'-0"	5		
TOTALS		8	9	1	188'-3 1/4"	80'-8 1/4"	3,737'-6"	596

* TO BE INSTALLED AS A "BACK RAIL"
ON EXISTING GUARDRAIL.

3/17/83

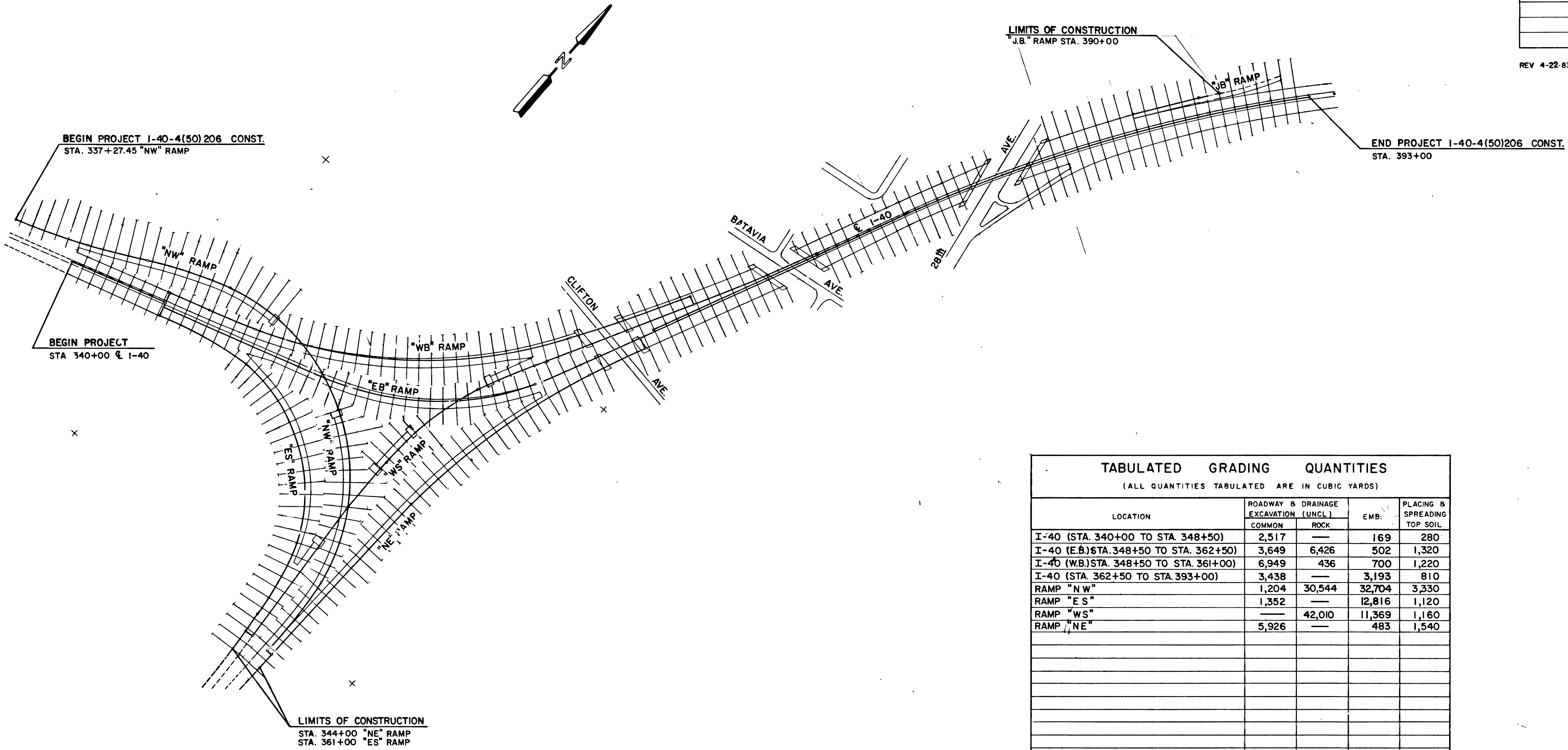
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TABULATION
OF
QUANTITIES

FILE NO. 330

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	2F

REV 4-22-83 GRADING QUANTITIES REVISED.



TABULATED GRADING QUANTITIES				
(ALL QUANTITIES TABULATED ARE IN CUBIC YARDS)				
LOCATION	ROADWAY & DRAINAGE EXCAVATION (UNCL)		EMB.	PLACING & SPREADING TOP SOIL
	COMMON	ROCK		
I-40 (STA. 340+00 TO STA. 348+50)	2,517	—	169	280
I-40 (E.B.) (STA. 348+50 TO STA. 362+50)	3,649	6,426	502	1,320
I-40 (W.B.) (STA. 348+50 TO STA. 361+00)	6,949	436	700	1,220
I-40 (STA. 362+50 TO STA. 393+00)	3,438	—	3,193	810
RAMP "NW"	1,204	30,544	32,704	3,330
RAMP "ES"	1,352	—	12,816	1,120
RAMP "WS"	—	42,010	11,369	1,160
RAMP "NE"	5,926	—	483	1,540
TOTAL	25,035	79,416	61,936	10,780

BALANCE COMPUTATION

ROAD AND DRAINAGE EXCAVATION	25,035 CU. YD.	79,416 CU. YD.
LESS TOPSOIL REQUIRED	10,780 CU. YD.	—
ROAD AND DRAINAGE EXCAVATION AVAILABLE FOR EMBANKMENT	14,255 CU. YD.	79,416 CU. YD.
EMBANKMENT REQUIRED	28,122 CU. YD.	29,403 CU. YD.
LESS EXCAVATION AVAILABLE	14,255 CU. YD.	79,416 CU. YD.
BORROW REQUIRED	18,085 CU. YD.	—
ESTIMATED EXCESS MATERIAL	—	50,013 CU. YD.

**COMMON EXCAVATION & BORROW USED FOR COVER OVER SOLID ROCK CUT SLOPES AND ROCK EMBANKMENT.

SHRINKAGE 15%
SWELL 15%

317123

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

GRADING PLAN
AND ESTIMATED
QUANTITIES

SCALE: 1"=200'

TENN. STATE HIGHWAYS
 Plans File No. 330
 Dwn

GENERAL NOTES

GRADING:

GRADES SHOWN ON PROFILES ARE SAME AS FINISHED GRADES SHOWN ON TYPICAL CROSS-SECTIONS AND SAME AS FINISHED GRADE ELEVATIONS SHOWN ON ROADWAY CROSS-SECTION, EXCEPT AS PROVIDED BELOW

GRADING FOR MAINLINE ROADWAYS WILL MATCH EXISTING PAVEMENT GRADES, CROSS-SLOPES AND SUPERELEVATION RATES, EXCEPT FOR A PORTION OF THE WEST BOUND LANES DESIGNATED FOR PAVEMENT REMOVAL AND LOWERING OF GRADES FROM STATION 344+25 TO STATION 352+25.

NO SINKHOLES HAVE BEEN OBSERVED ON THIS PROJECT. THE POSSIBILITY DOES EXIST THAT THERE MAY BE SOME ENCOUNTERED DURING CONSTRUCTION. IF THIS SITUATION OCCURS, THE DIVISION OF SOILS AND GEOLOGY WILL BE NOTIFIED FOR INVESTIGATION AND REMEDIAL RECOMMENDATIONS IF NEEDED. IF ANY OTHER SOILS OR GEOLOGICAL PROBLEMS ARE ENCOUNTERED DURING CONSTRUCTION, THE DIVISION OF SOILS AND GEOLOGY WILL BE NOTIFIED.

WHERE PRACTICAL, THE CONTRACTOR SHALL UTILIZE ROCK EXCAVATION PRIOR TO USING EARTHEN EXCAVATION TO CONSTRUCT ROADWAY EMBANKMENTS IN ACCORDANCE WITH SECTION 205 OF THE SPECIFICATIONS.

GRADING WITHIN THE INTERCHANGE SHALL BE ACCORDING TO THE DRAINAGE AND GRADING LAYOUT SHEETS.

DRAINAGE:

THE COST OF CUTTING INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE PAID FOR AS ITEM NO. 203-01, ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).

ENDWALLS ARE SHOWN ON THE PLANS, HOWEVER, THE TYPE MAY BE CHANGED BY THE ENGINEER AS NECESSARY TO IMPROVE SAFETY FEATURES.

EXISTING MANHOLES, CATCH BASINS, INLETS, CONNECTIONS AND CULVERTS TO BE REMOVED OR ABANDONED SHALL BE REMOVED, SEALED OR BULKHEADED AS DIRECTED BY THE ENGINEER. COST OF THIS WORK IS TO BE INCLUDED IN OTHER ITEMS OF CONSTRUCTION.

WHEN A PROPOSED CULVERT IS MOVED TO A LOCATION OTHER THAN THAT SHOWN ON THE PLANS, THEREBY INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE OR DEDUCTION IN PAYMENT WILL BE MADE DUE TO SUCH CHANGES.

THE COST OF REMOVING AND/OR CONNECTING EXISTING UNDERDRAINS TO DRAINAGE STRUCTURES CONSTRUCTED UNDER THIS PROJECT, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS OF WORK.

ALL COSTS OF CONNECTING NEW UNDERDRAINS TO EXISTING OR PROPOSED DRAINAGE STRUCTURES WITHIN THIS CONTRACT SHALL BE INCLUDED WITH THE UNIT PRICE BID FOR ITEM 710-04 FILTER CLOTH UNDERDRAINS (WITH PIPE).

THE COST OF PIPE BENDS SHALL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE.

PAVING:

MAINLINE ROADWAYS - EXISTING CONCRETE PAVEMENTS SHALL BE WIDENED IN ACCORDANCE WITH THE TYPICAL SECTIONS AND SHALL MATCH THE GRADES, CROSS-SLOPES AND SUPERELEVATION RATES OF THE EXISTING PAVEMENTS. MAINLINE ROADWAYS SHALL RECEIVE AN ASPHALTIC CONCRETE OVERLAY (0.80 FEET THICK) THROUGHOUT THE PROJECT FROM STATION 340+00 TO STATION 393+00. FROM STA. 332+75 TO STA. 340+00 AND FROM STA. 393+00 TO STA. 400+25, THE EXISTING MAINLINE SHALL RECEIVE AN ASPHALTIC CONCRETE OVERLAY TRANSITION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER

DIRECTIONAL RAMPS - PAVING ON ALL RAMPS SHALL CONFORM TO DESIGN PROFILE GRADES, CROSS-SLOPES, SUPERELEVATIONS, ROADWAY CROSS-SECTIONS AND TYPICAL SECTIONS. AN ASPHALTIC CONCRETE OVERLAY TRANSITION, SHALL BE REQUIRED TO TRANSITION FROM AN EXISTING CONCRETE PAVEMENT WITH ASPHALTIC OVERLAY TO THE PROPOSED CONCRETE RAMP PAVEMENT, AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

PAVEMENT MARKINGS:

THE CONTRACTOR SHALL REMOVE ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH PROPOSED MARKINGS AS SPECIFIED IN SECTION 712-05 OF THE STANDARD SPECIFICATIONS. COMPENSATION SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

THE CONTRACTOR SHALL PLACE TEMPORARY CENTERLINE PAVEMENT MARKINGS, EDGE LINES AND LANE LINES ON ALL NEWLY PLACED PAVEMENT AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS ARE NOT PERMITTED.

TEMPORARY MARKINGS ON THE INTERMEDIATE LAYERS OF PAVEMENT SHALL BE INSTALLED TO PERMANENT STANDARDS WITH REFLECTIVE TAPE OR REFLECTORIZED PAINT.

THE PAVEMENT MARKINGS ON THE DETOUR AND LANE SHIFTS FOR CENTERLINES, EDGELINES AND LANELINES WILL BE INSTALLED AND MAINTAINED TO THE SAME STANDARDS AS FOR PERMANENT MARKINGS ON THE MAIN ROADWAY. THE MARKINGS SHALL BE IN PLACE PRIOR TO ALLOWING TRAFFIC ONTO THE PAVEMENT.

ON THE FINAL SURFACE, THE STRIPING SHALL BE REFLECTORIZED EPOXY PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK.

THE COST OF PAVEMENT MARKINGS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 716-05.01 PAINTED PAVEMENT MARKING (LINE), LIN. MI.

GENERAL NOTES (CONTINUED)

CONSTRUCTION SIGNING:

THE LETTERS, DIGITS, ARROWS, BORDERS AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS.

ALL DETOURS AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

GUARDRAIL:

IT IS INTENDED THAT THE EXISTING GUARDRAIL WILL BE SET ON THIS PROJECT. ALL GUARDRAIL IN EXCESS OF THAT REQUIRED TO COMPLETE THIS PROJECT SHALL BECOME THE PROPERTY OF THE STATE MAINTENANCE DIVISION-ALL GUARDRAIL POSTS THAT ARE REMOVED SHALL BECOME THE PROPERTY OF THE STATE MAINTENANCE DIVISION. SEE SECTION 708 OF THE STANDARD SPECIFICATIONS FOR PROPER HANDLING AND STORAGE. PAYMENT FOR REMOVAL HANDLING AND STORAGE.

FENCING:

LOCATION OF FENCE WILL BE ONE FOOT INSIDE THE RIGHT-OF-WAY LINE EXCEPT WHERE OTHERWISE SHOWN ON THE PLANS. FENCES SHALL BE TURNED IN AT DRAINAGE STRUCTURES AND BRIDGES WHERE DIRECTED BY THE ENGINEER SO AS TO ABUT WINGWALLS, ENDWALLS, AND/OR ABUTMENTS. THE CONTRACTOR SHALL BE REQUIRED TO ERECT CERTAIN SECTIONS OF FENCING AT ANY TIME AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR WILL BE REQUIRED TO NOTIFY PROPERTY OWNERS AT LEAST 14 DAYS PRIOR TO CUTTING FENCES.

THE CONTRACTOR WILL MAKE ALL NECESSARY ADJUSTMENTS TO EXISTING CONTROL ACCESS FENCE AS REQUIRED BY OTHER ITEMS OF WORK, SUCH AS THE CONSTRUCTION OF DRAINAGE STRUCTURES, WALLS AND BRIDGE SLOPE PAVEMENT.

ALL PERMANENT FENCE ADJUSTMENTS IS TO BE STANDARD CHAIN LINK GALVANIZED METAL FENCE.

SEEDING & SODDING:

ITEM NO. 801-01.02 - CROWN VETCH MIXTURE (WITH MULCH) SHALL BE USED ON SLOPES 3:1 OR STEEPER AND OTHER AREAS AS INDICATED IN THE PLANS THAT ARE INACCESSABLE FOR MOWING.

ALL NEWLY GRADED EARTHEN AREAS ON THIS PROJECT THAT ARE NOT TO BE PAVED, SODDED OR STABILIZED SHALL BE SEEDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS REGARDING SECTION 801.

ALL EXISTING ROADWAYS, TO BE ABANDONED, SHALL BE SCARIFIED, OBLITERATED, TOPSOILED & SEEDED IN ACCORDANCE WITH SECTION 801 OF THE STANDARD SPECIFICATIONS. PAYMENT WILL BE MADE UNDER ITEM NOS. 801-01, 801-01.02, 801-03, AND 203-04.

WHERE SEEDING IS TO BE PLACED ON ROCK CUTS, THE ROCK SHALL BE REMOVED 1'-0" BELOW THE FINISHED GRADING LINE AND BACKFILLED WITH 9" OF EARTHEN MATERIAL AND 3" OF TOPSOIL PRIOR TO SEEDING. PAYMENT FOR THIS WORK WILL BE MADE UNDER ITEM NOS. 203-01, 203-04, 801-01, AND 803-01

UTILITIES:

LOCATION OF UTILITIES, PUBLIC AND/OR PRIVATE, ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXISTENCE AND EXACT LOCATION OF THESE AND OTHER UTILITIES WHICH MAY EXIST IN THE FIELD BY COORDINATING WITH THE OWNERS OF SAID UTILITIES.

THE OWNERS OF PUBLIC UTILITIES ARE TO RESET, RELAY OR ADJUST ALL PUBLIC UTILITIES CONFLICTING WITH THE PROPOSED IMPROVEMENT.

THE CONTRACTOR WILL COOPERATE WITH THE OWNERS OF LOCAL UTILITIES IN THE ADJUSTMENT OF THEIR FACILITIES WHERE THEY INTERFERE WITH CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAY OR INCONVENIENCE CAUSED BY UTILITY ADJUSTMENTS OR RELOCATIONS.

THE CONTRACTOR WILL USE EXTREME CAUTION IN WORKING UNDER AND AROUND EXISTING UTILITIES. IN THE EVENT SPECIAL EQUIPMENT IS REQUIRED TO EXCAVATE OR TUNNEL UNDER OR AROUND THESE EXISTING UTILITIES, IT WILL BE FURNISHED BY THE CONTRACTOR AT NO EXTRA COST.

EXISTING STORM AND SANITARY SEWERS NOT REQUIRED IN THE PROPOSED IMPROVEMENT SHALL BE REMOVED OR PLUGGED IF WITHIN 3'0" OF FINISHED GRADE, OR IF, IN THE OPINION OF THE ENGINEER, THEY WOULD BE DETRIMENTAL TO THE SUBGRADE. GENERALLY, PIPES LEFT IN PLACE ARE TO BE PLUGGED AT BOTH ENDS WITH MASONRY. ALL COST ARE TO BE INCLUDED IN OTHER BID ITEMS.

AS WORK PROGRESSES, NASHVILLE ELECTRIC SERVICE (N.E.S.) WILL DISCONNECT POWER TO EXISTING LIGHT STANDARDS TO BE REMOVED. THE CONTRACTOR SHALL NOTIFY N.E.S. SEVEN DAYS IN ADVANCE OF THE REMOVAL OF LIGHT STANDARDS. THE CONTRACTOR SHALL REMOVE AND STORE LIGHT STANDARDS AT DIRECTION OF THE ENGINEER. LIGHT STANDARDS SHALL BECOME THE PROPERTY OF N.E.S. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS OF CONSTRUCTION. GENERAL NOTES FOR STREET LIGHTING ARE FOUND ON SHEET 31.

THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	D-28-400-1(SO)206	2G

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

GENERAL NOTES

GENERAL NOTES (CONTINUED)

UTILITIES (CONTINUED):

THE FOLLOWING IS A LISTING OF UTILITIES PRESENTLY INVOLVED IN THIS CONTRACT WITH NAMES AND ADDRESSES:

MR. C.H. BATES
SOUTH CENTRAL BELL
2002 RICHARD JONES RD.
NASHVILLE, TN. 37215

MR. PETE GRIMES
NASHVILLE GAS COMPANY
800 2ND AVENUE, NORTH
NASHVILLE, TN. 37201

MR. BOB GILBERT
VIACOM CABLEVISION
800 MAIN STREAM DRIVE
NASHVILLE, TN 37208

MR. JOE MCKENZIE
NASHVILLE ELECTRIC SERVICE
1214 CHURCH STREET
NASHVILLE, TN 37248

MR. LARRY TURNER
METRO. DEPT. OF WATER AND SEWERAGE SERVICES
8TH FLOOR, STAHLMAN BLDG.
211 UNION STREET
NASHVILLE, TN 37201

MISCELLANEOUS:

THE ENGINEER SHALL IDENTIFY CERTAIN TREES THAT FALL OUTSIDE THE SLOPE LIMITS OF THE I-40 AND I-440 MAINLINES AND THE DIRECTIONAL INTERCHANGE RAMP. OAK, MAPLE, AND OTHER TREES THAT ARE LOCATED IN THESE AREAS ARE TO BE PROTECTED FROM DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT

THE FOLLOWING STIPULATIONS APPLY TO THE TREES MARKED FOR PROTECTION. CONSTRUCTION EQUIPMENT WILL NOT BE PERMITTED TO BE PARKED BENEATH THE TREES. PLACING CONSTRUCTION MATERIALS BENEATH THE TREES WILL NOT BE PERMITTED; STORING FUELS WILL NOT BE PERMITTED. TOPSOIL WILL NOT BE PERMITTED TO BE REMOVED BENEATH ANY OF THE TREES IDENTIFIED TO BE PRESERVED.

CERTAIN TREES WILL BE PROTECTED BY CONSTRUCTING BARRICADES AROUND THEM. (SEE DETAIL ON SHEET NO. 2N). THE ENGINEER SHALL INDICATE WHICH TREES ARE TO BE PROTECTED WITH BARRICADES AFTER CONSULTATION WITH THE STATE LANDSCAPE ARCHITECT AT 741-2808.

THE CONTRACTOR AND/OR UTILITY COMPANIES ARE TO AVOID REMOVING TREES, WHEREVER POSSIBLE, THROUGHOUT THE PROJECT SITE. TRIMMING SHOULD BE MINIMIZED TO PRESERVE EXISTING NEIGHBORHOOD CHARACTERISTICS. COST TO BE INCLUDED IN OTHER ITEMS OF CONSTRUCTION.

NO BURNING WILL BE ALLOWED ON THIS PROJECT.

ENTRANCE AND EXIT FROM LOCAL STREETS TO PRIVATE PROPERTY MUST BE PROVIDED AT ALL TIMES. ALL COST FOR MAINTENANCE AND PROTECTION OF TRAFFIC ARE TO BE INCLUDED IN OTHER ITEMS OF CONSTRUCTION.

THE ABATEMENT OF CONSTRUCTION NOISE IS A HIGH PRIORITY ON THIS PROJECT. THE CONTRACTOR WILL PERFORM HIS NORMAL CONSTRUCTION OPERATIONS BETWEEN THE HOURS OF 8:00 a.m. AND 7:00 p.m. OR AS DIRECTED BY THE ENGINEER. THIS INCLUDES BLASTING, DRILLING, OPERATING HEAVY EQUIPMENT, ETC. AS FAR AS BLASTING IS CONCERNED THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH THE 1975 BLASTING LAW WHICH IS ADMINISTERED BY THE TENNESSEE DEPARTMENT OF INSURANCE AND BANKING. THIS LAW REQUIRES CERTIFICATION OF THE PERSONNEL IN THE FIELD AND ESTABLISHES CRITERIA AS TO THE SIZE, TIMING, AND MAGNITUDE OF THE BLAST AND THE DISTANCE FROM ANY NEARBY BUILDINGS OR IMPROVEMENTS. SHOULD ANY DAMAGE OCCUR DUE TO BLASTING, THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE.

THE CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE TO ALLOW THE ENGINEER TO NOTIFY THE APPROPRIATE METROPOLITAN OFFICIALS (PUBLIC WORKS DIRECTOR AND CITY TRAFFIC ENGINEER) AT LEAST ONE WEEK (7 DAYS) PRIOR TO DETOURING TRAFFIC ON CLIFTON STREET, BATAVIA STREET AND 28TH AVENUE

IF THE CONTRACTOR ON THIS PROJECT IS TO DO ANY HAULING THROUGH THE ADJACENT I-440, PARKWAY PROJECT WHICH IS PRESENTLY UNDER CONTRACT. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHERS SO AS TO AVOID DELAY. NO EXTRA COMPENSATION WILL BE AWARDED FOR DELAYS.

THE CONTRACTOR SHALL MAINTAIN TWO LANES OF TRAFFIC IN EACH DIRECTION AT ALL TIMES, EXCEPT UNDER SPECIFIC CONDITION PROVIDED FOR IN THE PLANS, OR OTHER TIMES AS APPROVED BY THE ENGINEER.

THE TEMPORARY SURFACING TRANSITION AT THE BEGINNING AND END OF THE PROJECT, AT INTERCHANGE RAMP, AND AT THE BRIDGES SHALL BE CONSTRUCTED AT SUFFICIENT LENGTH AND IN A MANNER TO PROVIDE A SMOOTH AND EASE OF RIDE CONDITION AS DIRECTED BY THE ENGINEER.

ALL EXISTING SIGN BLANKS AND STRUCTURES REMOVED DURING THE CONSTRUCTION OF THIS PROJECT, ARE TO BECOME THE PROPERTY OF THE STATE MAINTENANCE DIVISION. SEE STANDARD SPECIFICATIONS FOR PROPER HANDLING AND STORAGE. THE COSTS OF REMOVING, STOCKPILING, ETC. SHALL BE INCLUDED IN THE COSTS OF OTHER ITEMS OF CONSTRUCTION.

ALL SALVAGEABLE MATERIALS FROM REMOVAL OF EXISTING BRIDGES SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

ALL CONCRETE BOX AND SLAB TYPE CULVERTS AND BRIDGES ARE DESIGNED FOR HS 20 AND ALTERNATE MILITARY LOADING.

GUARDRAIL:

THE CONTRACTOR IS ALLOWED TO USE A 1" STANDARD SWAGE FITTING AND STUD ON BREAKAWAY CABLE TERMINAL GUARDRAIL ANCHORS IN LIEU OF THE 1 1/4" SIZE SHOWN ON S-GR-18 AND S-GR-19.

MISCELLANEOUS:

COST OF EXCAVATION FOR PIPE CULVERTS & ENDWALLS TO BE INCLUDED IN COST OF UNIT PRICE BID FOR PIPE.

COST OF EXCAVATION FOR CATCH BASIN, MANHOLE & JUNCTION BOX WILL BE INCLUDED IN RESPECTIVE PAY ITEM & WILL NOT BE PAID FOR DIRECTLY

JOINT SEALING:

CASE*1: NEW CONCRETE PAVEMENT (NOT TO BE OVERLAID WITH BITUMINOUS MATERIAL.)

LONGITUDINAL JOINTS THAT ARE NOT FORMED WITH POLYETHYLENE STRIPS SHALL BE INITIALLY SAWED 1/8" WIDE AND TO A DEPTH OF 3" FOR PAVEMENTS THAT ARE TO BE PLACED 24' WIDE OR LESS AND TO A DEPTH OF 4" FOR PAVEMENTS THAT ARE PLACED MORE THAN 24' WIDE. THE JOINTS SHALL THEN BE SAWED 3/8" WIDE FOR A DEPTH OF 1 1/4". IMMEDIATELY AFTER SAWING, THE JOINTS SHALL BE THOROUGHLY CLEANED OF ALL RESIDUE BY METHODS DETAILED IN SPECIAL PROVISION 501C UNDER CONSTRUCTION REQUIREMENTS. AFTER CLEANING, A 1/2" DIAMETER BACKER ROD SHALL BE PLACED TO A DEPTH OF 1/2" BELOW THE PAVEMENT SURFACE. SEALANT WILL THEN BE TOOLED INTO THE JOINT TO A DEPTH OF 1/4" BELOW THE PAVEMENT SURFACE. SEALANT IS TO MEET THE REQUIREMENTS OF SPECIAL PROVISION*905A.

TRANSVERSE CONTRACTION JOINTS SHALL BE SIMILARLY CONSTRUCTED EXCEPT THE INITIAL SAWING SHALL BE TO A MINIMUM DEPTH OF 3".

EXPANSION JOINTS SHALL BE AS INDICATED ON THE PLANS.

PAYMENT FOR JOINT CONSTRUCTION AND MATERIALS SHALL BE AS INDICATED IN SECTION 501.26 OF THE STANDARD SPECIFICATIONS FOR PORTLAND CEMENT CONCRETE PAVEMENT.

ITEM 501-03.02 CONCRETE SHOULDERS WILL BE REQUIRED TO MEET ALL JOINT REQUIREMENTS FOR PORTLAND CEMENT CONCRETE PAVEMENT.

CASE*2: NEW CONCRETE PAVEMENT (TO BE OVERLAID WITH BITUMINOUS MATERIAL).

SAME AS CASE*1 EXCEPT: JOINT MATERIAL IS TO MEET REQUIREMENTS OF SPECIAL PROVISION NO. 501C FOR HOT POURED ELASTIC TYPE II JOINT SEALER.

CASE*3: CLEAN & RESEAL EXISTING TRANSVERSE AND LONGITUDINAL JOINTS AND RANDOM CRACKED (TO BE OVERLAID WITH BITUMINOUS MATERIAL).

JOINTS TO BE SEALED ACCORDING TO SPECIAL PROVISION NO. 501C TO THE DIMENSIONS SHOWN ON THE PLANS. (SEE DETAIL SHEET NO 2N). JOINT MATERIAL TO BE HOT POURED ELASTIC TYPE II JOINT SEALER. PAYMENT TO BE MADE UNDER ITEMS 501-08 01 AND 501-08 04.

CASE*4: JOINTS BETWEEN CONCRETE AND ASPHALT.

CONSTRUCTION TO BE AS INDICATED ON STANDARD DRAWING RP-J-11. JOINT TO MEET THE REQUIREMENTS OF SPECIAL PROVISION NO 501C FOR ASPHALT-VULCANIZED RUBBER SEALANT. PAYMENT WILL BE INCLUDED IN COST OF OTHER ITEMS.

TIE-BARS WILL BE REQUIRED ON ALL LONGITUDINAL CONSTRUCTION & CONTRACTION JOINTS AS PER STANDARD DRAWINGS RP-J-9&RP-J-15. COST OF MATERIALS AND LABOR TO BE INCLUDED IN OTHER ITEMS.

TYPE	YEAR	PROJECT NO	SHEET NO
CONST.	1983	ID-IR-440(50)206	2H

Rev 4-22-83: GUARDRAIL NOTE ADDED.
REV 5-13-83: MISCELLANEOUS NOTES ADDED AND JOINT SEALING.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

GENERAL NOTES

TENN. STATE DEPT. OF TRANSPORTATION
 Plans Div.
 No. 21

SCOPE-OF-WORK

WORK ON THIS PROJECT INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:

GRADE, DRAIN, PAVE AND RESURFACE I-40 FROM A POINT WEST OF THE I-40/I-440 DIRECTIONAL INTERCHANGE TO A POINT EAST OF THE I-40 BRIDGE OVER 28TH AVENUE, TO THE LINES AND GRADES INDICATED ON THE TYPICAL CROSS-SECTIONS, PLANS, AND PROFILES OR AS DIRECTED BY THE ENGINEER.

GRADE, DRAIN AND PAVE FOUR (4) DIRECTIONAL INTERCHANGE RAMPS FROM A POINT ON I-440, NORTH OF THE PROPOSED I-440 PARKWAY BRIDGE OVER CHARLOTTE AVENUE, TO THE TERMINUS OF EACH OF THE FOUR (4) RAMPS AT I-40, AS INDICATED IN THE PLANS AND ON THE TYPICAL CROSS-SECTIONS OR AS DIRECTED BY THE ENGINEER.

TWO BRIDGE WIDENINGS OF I-40 OVER CLIFTON STREET, ONE BRIDGE WIDENING OF I-40 OVER BATAVIA STREET AND ONE BRIDGE WIDENING OF I-40 OVER 28TH AVENUE.

THE REMOVAL OF THREE EXISTING BRIDGES WITHIN THE I-40/I-440 INTERCHANGE AS INDICATED IN THE PLANS AND THE SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

- (1) RAMP "NW" OVER I-40 MAINLINES, STRUCTURE NO. 4;
- (2) RAMP "WS", OVER RAMP "NW" STRUCTURE NO. 5;
- (3) RAMP "WS" OVER I-40 EASTBOUND LANES, STRUCTURE NO. 6.

THE CONSTRUCTION OF THREE NEW BRIDGES WITHIN THE I-40/I-440 INTERCHANGE RAMPS AS INDICATED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

- (1) RAMP "NW" OVER I-40 MAINLINES, STRUCTURE NO. 4;
- (2) RAMP "WS" OVER RAMP "NW", STRUCTURE NO. 5;
- (3) RAMP "WS" OVER I-40 EASTBOUND LANES, STRUCTURE NO. 6.

THE REVISIONS TO EXISTING STORM SEWER SYSTEMS AND/OR THE CONSTRUCTION OF NEW STORM SYSTEMS AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE CONSTRUCTION OF CONCRETE BARRIER WALLS AND RAILS AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE INSTALLATION OF FENCE, NOISE WALLS, LIGHT STANDARDS, GUARDRAILS AND ALL OTHER MISCELLANEOUS ITEMS OF CONSTRUCTION NECESSARY FOR THE COMPLETION OF THE PROJECT AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE IMPLEMENTATION OF A DETAILED TEMPORARY TRAFFIC CONTROL PLAN AS SUGGESTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE CONSTRUCTION OF TEMPORARY POLLUTION CONTROL STRUCTURES AS SUGGESTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

ALL DITCH PAVING, SODDING, SEEDING, AND ALL OTHER INCIDENTAL ITEMS NECESSARY FOR THE COMPLETION OF THE PROJECT.

**SUGGESTED
 PRIORITY OF CONSTRUCTION**

THE CONSTRUCTION OF THIS PROJECT MAY BE DIVIDED INTO TWO (2) SEPARATE SECTIONS.

SECTION I THE WIDENING OF I-40, INCLUDING THE WIDENING OF BRIDGES OVER CLIFTON STREET, BATAVIA STREET, AND 28TH AVENUE NORTH, INCLUDING STREET LIGHTING.

SECTION II THE GRADING, DRAINAGE, PAVING, STRUCTURAL, LANDSCAPING, NOISEWALL AND STREET LIGHTING NECESSARY TO CONSTRUCT THE I-440 DIRECTIONAL INTERCHANGE RAMPS & BRIDGES.

THE CONTRACTOR MAY ELECT TO WORK ON SECTION I AND SECTION II SIMULTANEOUSLY. FOLLOWING IS A SUGGESTED 'SEQUENCE OF CONSTRUCTION'. THE CONTRACTOR MAY ELECT TO SET A DIFFERENT 'SEQUENCE OF CONSTRUCTION', IF HE DOES, THEN HE IS TO SUBMIT HIS 'SEQUENCE OF CONSTRUCTION' TO THE ENGINEER FOR APPROVAL.

- 1. CLEARING AND GRUBBING OF THE ENTIRE PROJECT.
- 2. REMOVAL OF EXISTING INTERCHANGE BRIDGES (STRUCTURES 4, 5 & 6).
- 3. WIDENING OF I-40 BETWEEN STATION 340+00 AND 360+00.
- 4. CONSTRUCTION OF BRIDGES AND APPROACHES OVER I-40 (STRUCTURES 4 & 6).
- 5. WIDENING OF I-40 BETWEEN STATION 360+00 AND 393+00 INCLUDING BRIDGE WIDENING, RETAINING WALL AND BARRIER WALL CONSTRUCTION, AND INSTALLATION OF STREET LIGHTING
- 6. CONSTRUCTION OF BRIDGE OVER "WS" RAMP (STRUCTURE 5).
- 7. GRADING, DRAINAGE, PAVING & LANDSCAPING REMAINING PROJECT.

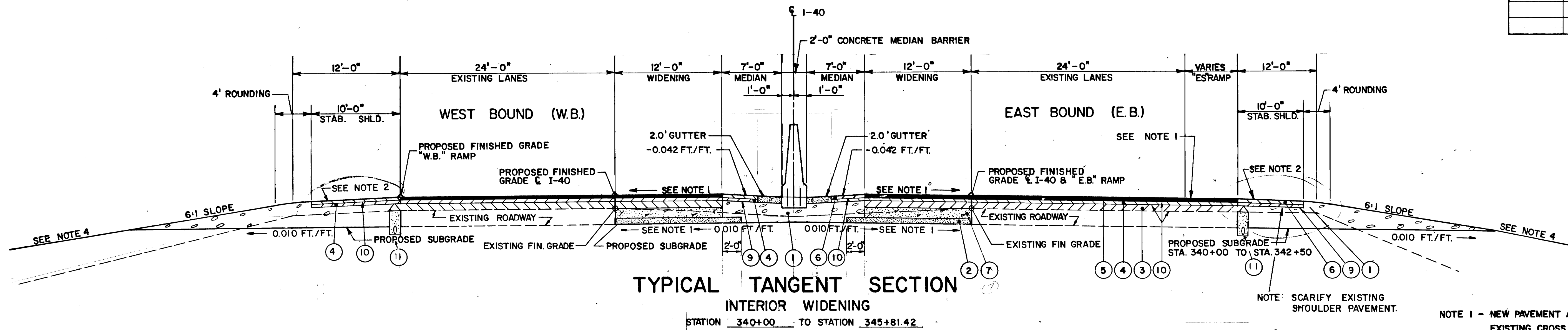
REMOVAL AND REPLACEMENT OF RAMP BRIDGES OVER MAIN LINES TO BE COMPLETED IN STAGES IN ORDER TO MINIMIZE DISRUPTIONS OF MAIN LINE TRAFFIC. CROSSOVERS WILL BE REQUIRED ON EACH SIDE OF THE INTERCHANGE, BETWEEN CLIFTON AVE. AND BATAVIA AVE. ON THE EAST, AND WEST OF STRUCTURE NO. 4. DETOURS OF TRAFFIC ON THE MAIN LINES FOR THE REMOVAL OF EXIST. BRIDGES AND THE ERECTION OF STRUCTURAL STEEL FOR PROP BRIDGES SHALL BE LIMITED TO NON-HOLIDAY SUNDAYS TO BE APPROVED BY T.D.O.T. TRAFFIC ENGINEER.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	ID-IR-440-4(50)206	21

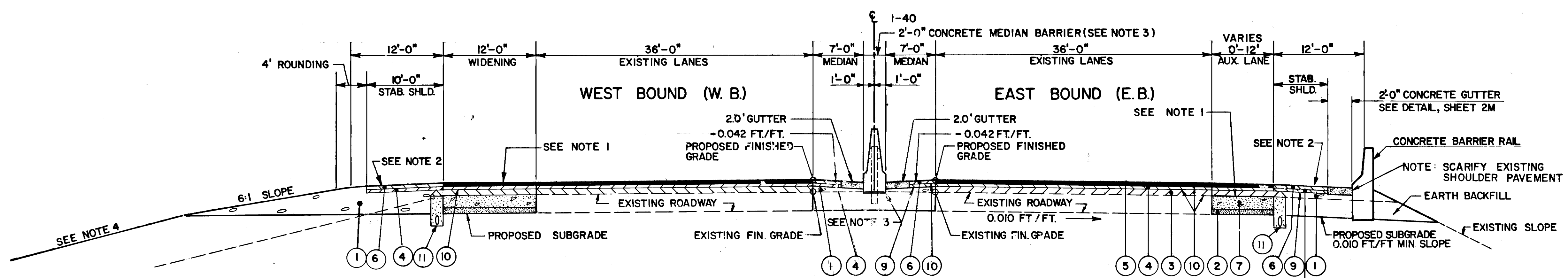
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

SCOPE OF WORK
 AND
 PRIORITY OF
 CONSTRUCTION

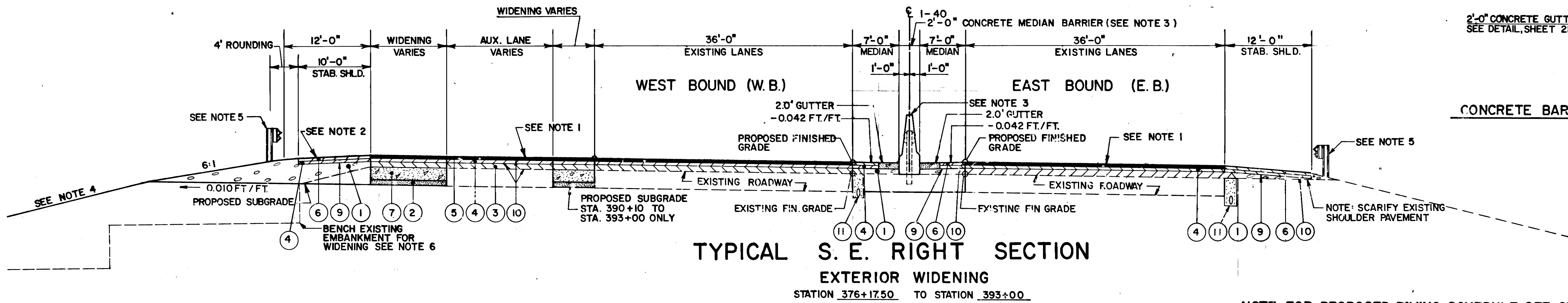
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	ID-IR-440-4(50)20	21



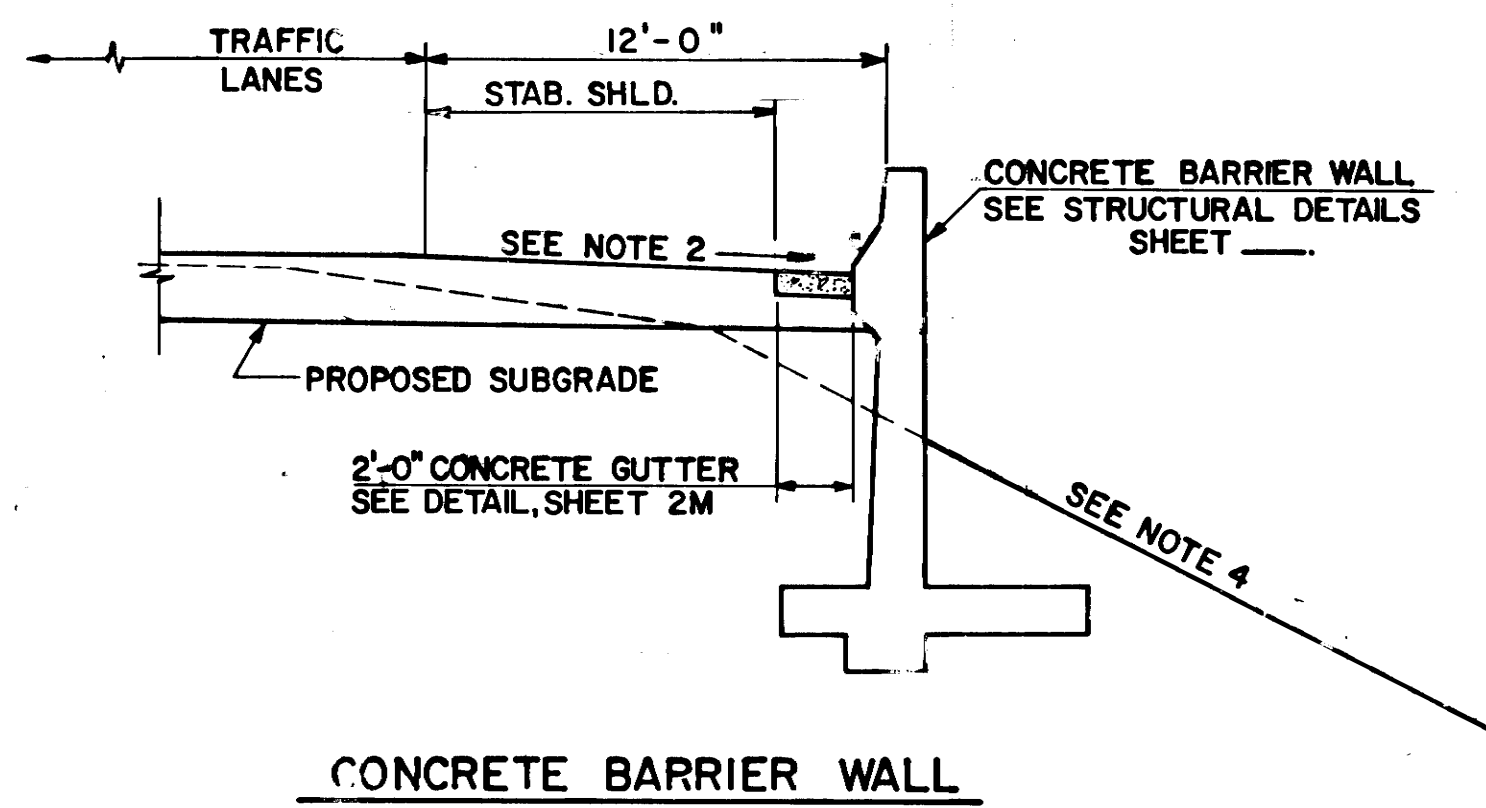
TYPICAL TANGENT SECTION
INTERIOR WIDENING
 STATION 340+00 TO STATION 345+81.42



TYPICAL TANGENT SECTION
EXTERIOR WIDENING
 STATION 372+24.08 TO STATION 376+17.50



TYPICAL S. E. RIGHT SECTION
EXTERIOR WIDENING
 STATION 376+17.50 TO STATION 393+0.0



CONCRETE BARRIER WALL

- NOTE 1 - NEW PAVEMENT AND SUBGRADE TO MATCH EXISTING CROSS SLOPE AND FINISHED GRADE.
- NOTE 2 - SHOULDER SLOPE TO BE MIN. 0.042 FT./FT. IN S.E. SECTION, SHOULDER SLOPE ON LOW SIDE TO BE SAME AS PAVEMENT S.E. WHEN GREATER THAN 0.042 FT./FT.
- NOTE 3 - REMOVE EXISTING MEDIAN DIVIDER GUARDRAIL AND CONSTRUCT CONCRETE MEDIAN BARRIER. SEE T.D.O.T. STD. DWG. S-MB-1.
- NOTE 4 - SEE DRAINAGE & GRAD. LAYOUT SHEETS.
- NOTE 5 - TYPICAL GUARDRAIL PLACEMENT TO CONFORM TO STD. DWG. RD-S-11.
- NOTE 6 - FOR WIDENING ON EXISTING EMBANKMENTS, CUT BENCHES ACCORDING TO DETAIL ON SHEET 2N.
- NOTE 7 - SEE SHEET 2K FOR PROPOSED PAVING SECTION.

NOTE: FOR PROPOSED PAVING SCHEDULE SEE SHEET 2-K

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

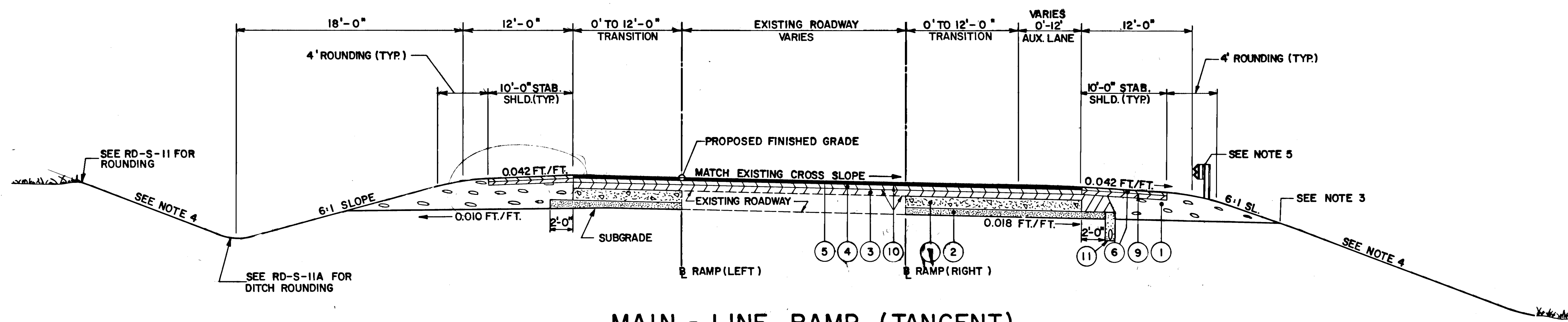
TYPICAL SECTIONS
W/MEDIAN BARRIER
I-40

NOT TO SCALE

NEW STATE HIGHWAYS
 Plans
 File No. 330
 Date

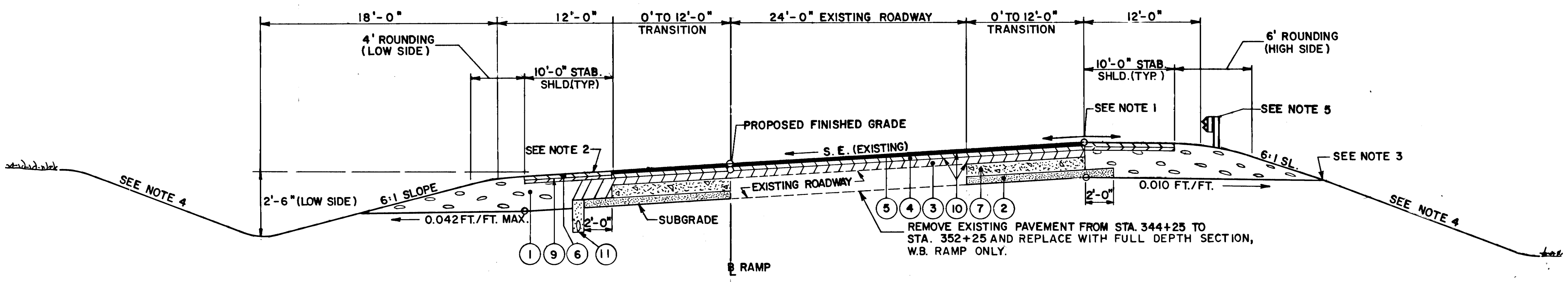
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	ID-IR-440-4(50208)	2K

REV. 5-13-83; ADDED LIME-FLY ASH BASE ALTERNATE



MAIN - LINE RAMP (TANGENT)

LOOKING IN DIRECTION OF TRAVEL
 "EB" RAMP STATION 345+81.42 TO STATION 350+03.26 &
 STATION 362+00 TO STATION 372+24.08



MAIN - LINE RAMP (S.E.)

LOOKING IN DIRECTION OF TRAVEL (E.B.)
 "EB" RAMP STATION 350+03.26 TO STATION 362+00
 "WB" RAMP STATION 348+00 TO STATION 360+68.40

- NOTE 1 - ALGEBRAIC DIFFERENCE IN CROSS-SLOPE ROLLOVER NOT TO EXCEED 0.07 FT./FT.
- NOTE 2 - SHOULDER SLOPE AT LOW SIDE OF RAMP TO BE SAME AS S.E. WHEN GREATER THAN 0.042 FT./FT.
- NOTE 3 - SEE T.D.O.T. STD. DWG. RD-S-15C, DETAIL A, B, C OR D ROUNDING OF SLOPES ON FILL SLOPES.
- NOTE 4 - SEE DRAINAGE & GRADING LAYOUT SHEETS.
- NOTE 5 - TYPICAL GUARDRAIL PLACEMENT TO CONFORM TO STD. DWG. RD-S-15B.

PROPOSED PAVING SCHEDULE

<p>1. MINERAL AGGREGATE BASE AT FULL DEPTH THROUGH SHOULDERS 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D</p> <p>2. SEE NEXT COLUMN.</p> <p>3. BITUMINOUS COATED AGGREGATE BASE AT 3 1/2" THICK (315 lbs. PER Sq. Yd.) 307-01.05 AGGREGATE FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) "A-CRL" 307-01.06 ASPHALT CEMENT FOR BITUMINOUS PLANT MIX (HOT MIX)(BPMB-HM) "A-CRL"</p> <p>3A. BITUMINOUS COATED AGGREGATE BASE AT 3 1/2" ± THICK (315 lbs. PER Sq. Yd.) 307-01.03 AGGREGATE FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRAD. "A-S" MIXTURE 307-01.04 ASPHALT CEMENT FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRAD. "A-S" MIXT.</p> <p>4. BITUMINOUS BINDER AT 2 1/2" THICK (275 lbs. PER Sq. Yd.) 307-02.01 AGGREGATE FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRADING "B" 307-02.02 ASPHALT CEMENT FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRADING "B"</p> <p>4A. BITUMINOUS BINDER AT 4" ± THICK (440 lbs. PER Sq. Yd.) 307-02.01 AGGREGATE FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRADING "B" 307-02.02 ASPHALT CEMENT FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRADING "B"</p>	<p>5. BITUMINOUS SURFACING (ROADWAY) AT 1 1/4" ± THICK (125 lbs. PER Sq. Yd.) 411-01.01 MINERAL AGGREGATE FOR ASPHALTIC CONCRETE SURFACE (ACS) GRADING "D" 411-01.02 ASPHALT CEMENT FOR ASPHALTIC CONCRETE SURFACE (ACS) GRADING "D"</p> <p>6. STABILIZED SHOULDER AT 1 1/4" ± THICK (165 lbs. PER Sq. Yd.) 411-02.01 MINERAL AGGREGATE FOR ASPHALTIC CONCRETE SURFACE (ACS) GRADING "E" 411-02.02 ASPHALT CEMENT FOR ASPHALTIC CONCRETE SURFACE (ACS) GRADING "E"</p> <p>7. CONCRETE PAVEMENT 501-01.03 PORTLAND CEMENT PAVEMENT (PLAIN) 10" 2. BASE COURSE (UNDER CONC. PAVEMENT) ALTERNATES 305-02 LEAN CONCRETE BASE (LCB) ALTS. 312-01 MINERAL AGGREGATE (ALFSB) 312-02 LIME (3-1/2%) 312-03 FLY ASH (11%) 312-04 BITUMINOUS MATERIAL (ALFSB)</p> <p>8. CONCRETE SHOULDER 501-03.02 CONCRETE SHOULDER (DEPTH VARIES 10" MAX.)</p>	<p>9. PRIME COAT 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) AT 0.35 Gal. PER Sq. Yd. 402-02 AGGREGATE FOR COVER MATERIAL (PC) AT 12 lbs. PER Sq. Yd.</p> <p>10. TACK COAT 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) AT 0.02 Gal PER Sq. Yd.</p> <p>11. FILTER CLOTH UNDERDRAIN 710-04 FILTER CLOTH UNDERDRAIN (WITH PIPE). (SEE STD. DWG. RD-UD-2).</p> <p>12. BITUMINOUS LEVELING AT 1 1/2" ± THICK (165 lbs. PER Sq. Yd.) 307-03.01 AGGREGATE FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRADING "C" 307-03.02 ASPHALT CEMENT FOR BITUMINOUS PLANT MIX BASE (HOT MIX)(BPMB-HM) GRADING "C"</p>
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STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

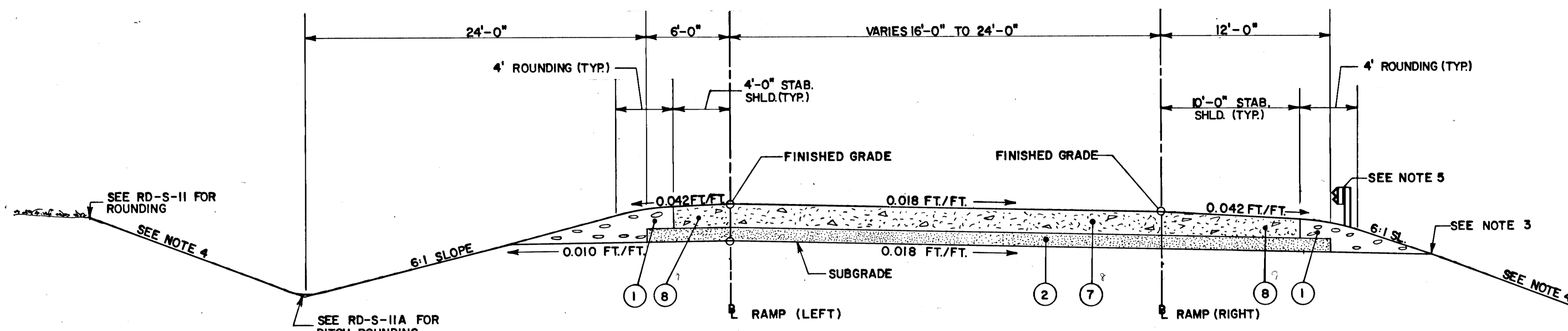
**TYPICAL SECTIONS
 I-40
 MAIN LINE RAMPS**

(NOT TO SCALE)

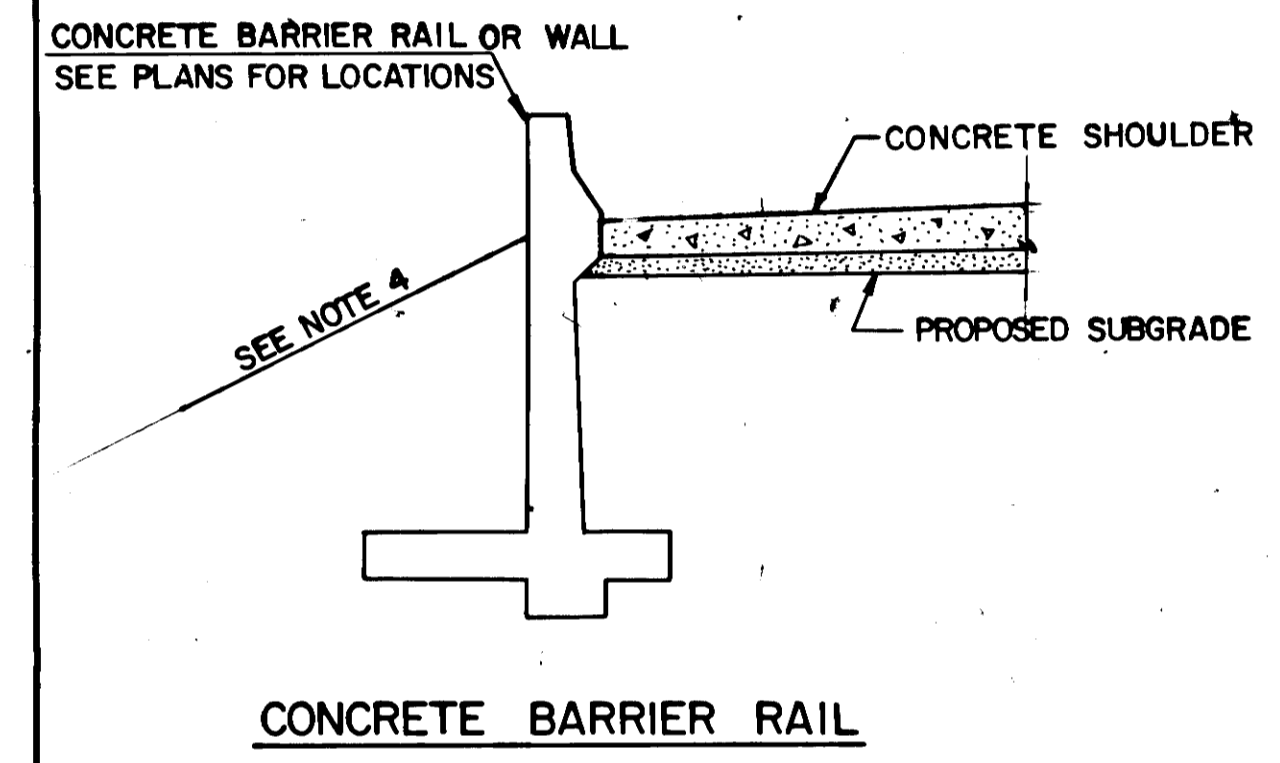
BRUNING 29411

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	TD-IR-440-4(50)206	2L

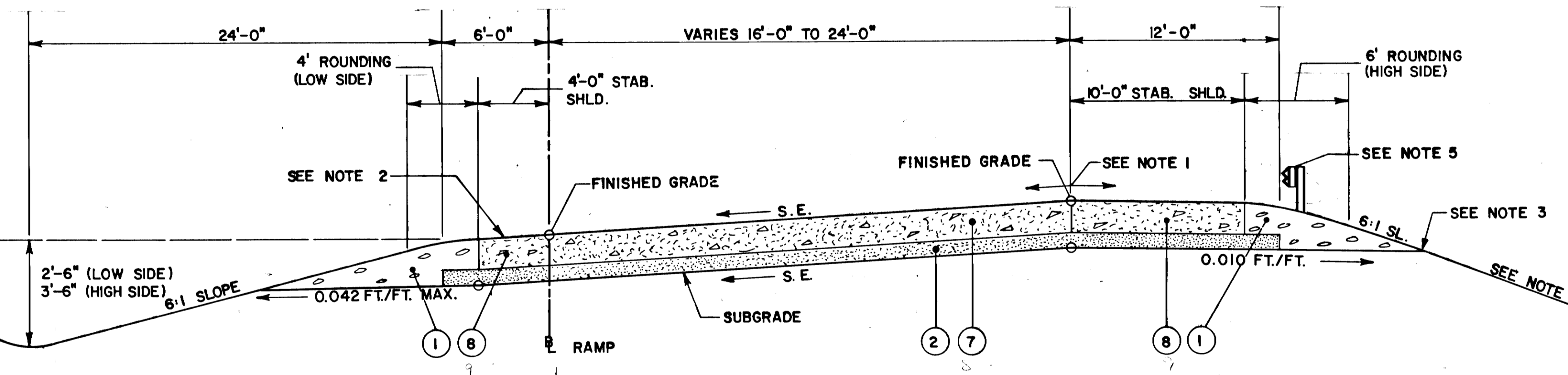
TENN. STATE DEPT. OF TRANSPORTATION
 File No. 330
 Plans Div.



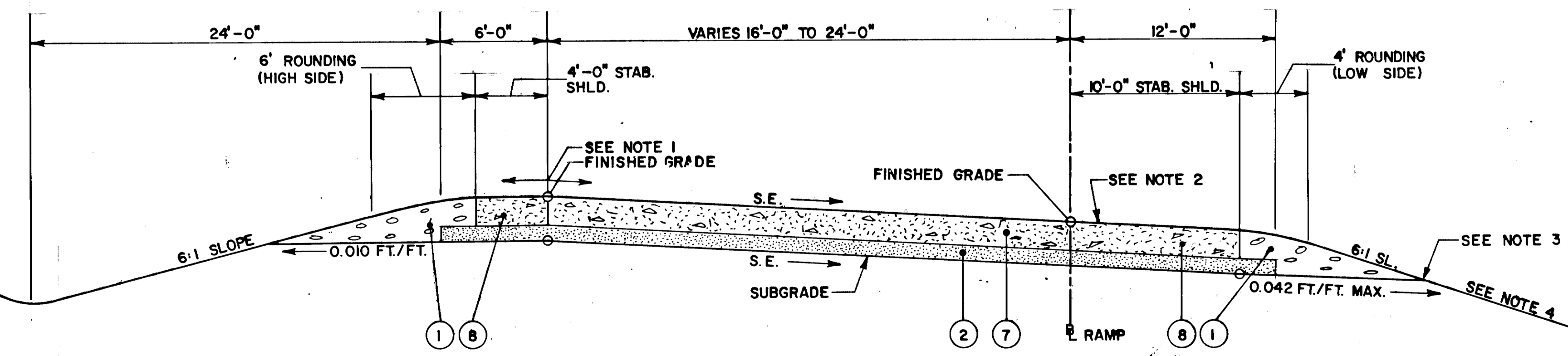
MULTI-LANE RAMP (TANGENT)
 LOOKING IN DIRECTION OF TRAVEL
 "WS" RAMP
 "NE" RAMP



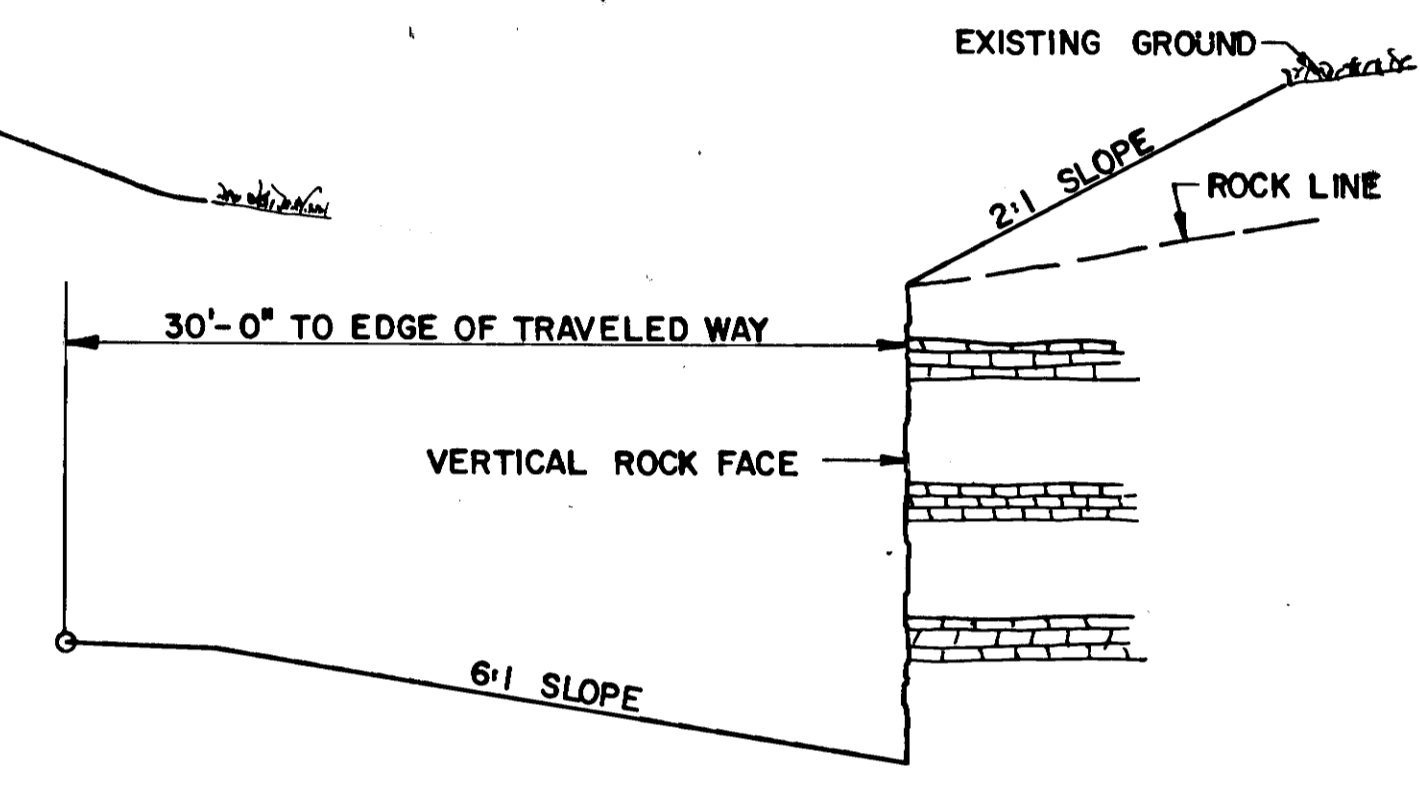
CONCRETE BARRIER RAIL



MULTI-LANE RAMP (S.E. LEFT)
 LOOKING IN DIRECTION OF TRAVEL
 "NW" RAMP
 "WS" RAMP



MULTI-LANE RAMP (S.E. RIGHT)
 LOOKING IN DIRECTION OF TRAVEL
 "NW" RAMP
 "ES" RAMP
 "NE" RAMP



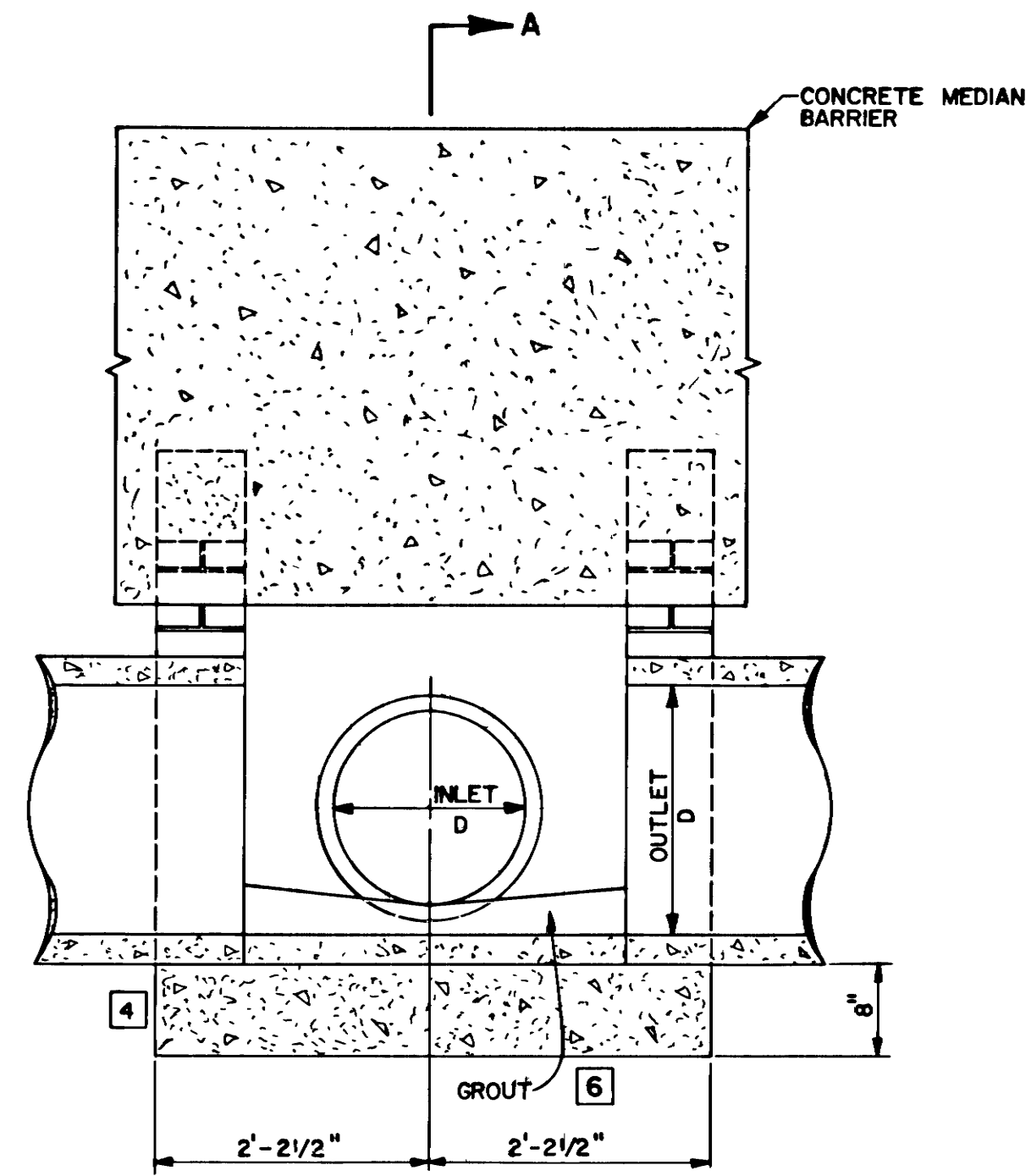
ROCK CUT DETAIL
 "E.B." RAMP
 "WB" RAMP
 "NW" RAMP
 "NE" RAMP

- NOTE 1 - ALGEBRAIC DIFFERENCE IN CROSS-SLOPE ROLLOVER NOT TO EXCEED 0.07 FT./FT.
- NOTE 2 - SHOULDER SLOPE AT LOW SIDE OF RAMP TO BE SAME AS S.E. WHEN GREATER THAN 0.042 FT./FT.
- NOTE 3 - SEE T.D.O.T. STD. DWG. RD-S-15C, DETAIL A, B, C OR D ROUNDING OF SLOPES ON FILL SLOPES.
- NOTE 4 - SEE DRAINAGE & GRADING LAYOUT SHEETS.
- NOTE 5 - TYPICAL GUARDRAIL PLACEMENT TO CONFORM TO STD. DWG. RD-S-15C.

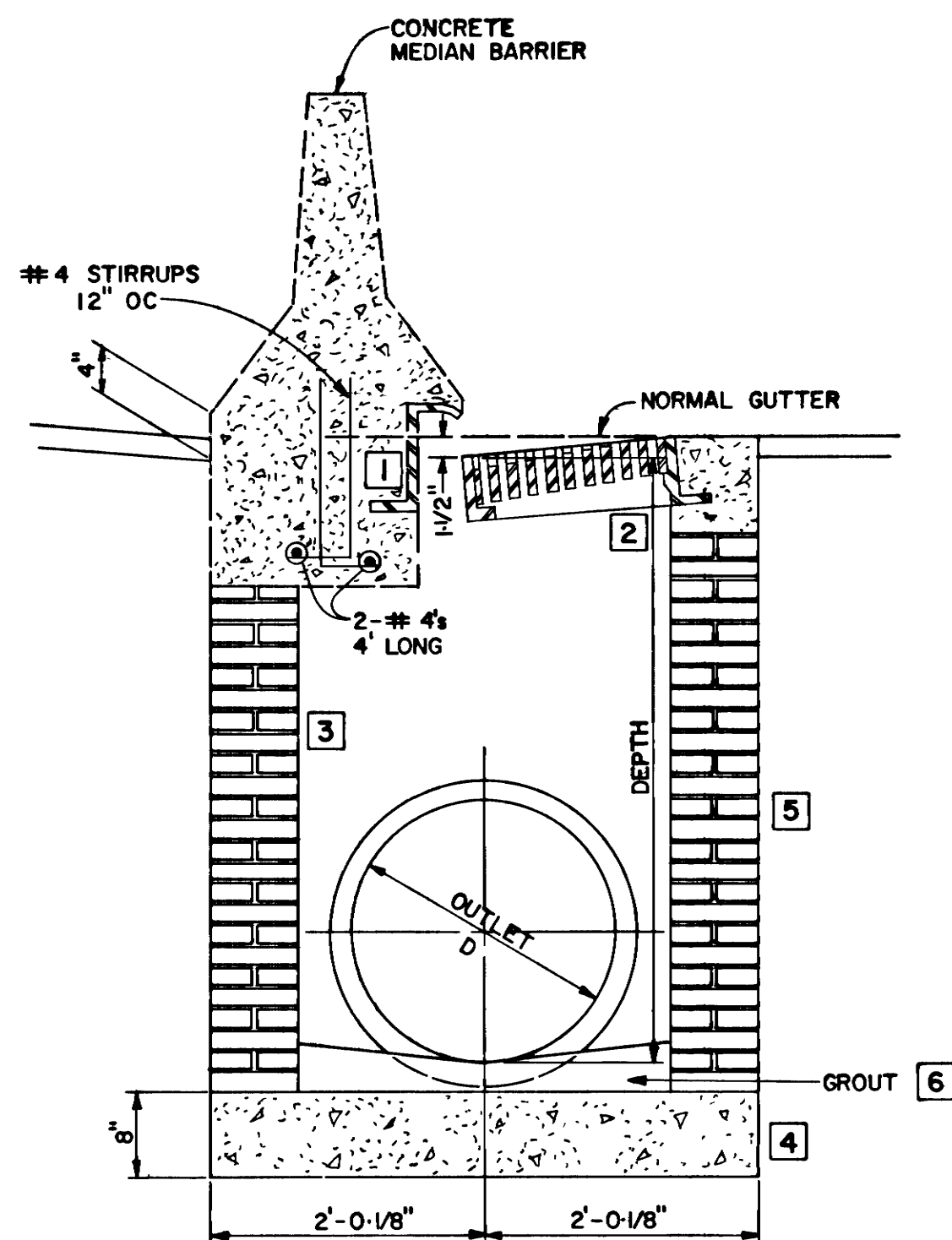
NOTE: FOR PROPOSED PAVING SCHEDULE SEE SHEET 2-K

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
TYPICAL SECTIONS
I-40/I-440
RAMPS
 (NOT TO SCALE)

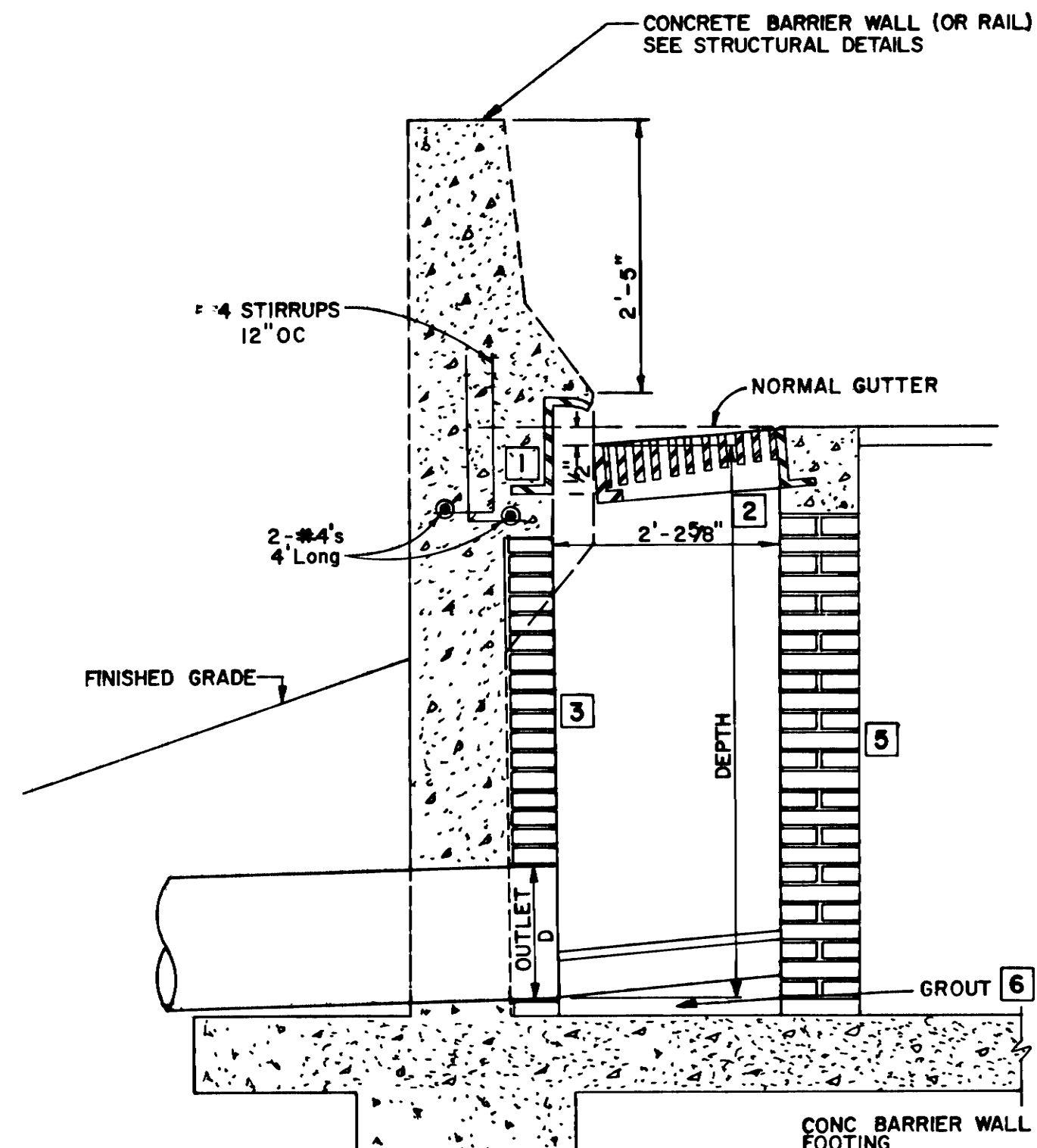
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IR-440-4(50)206	2M



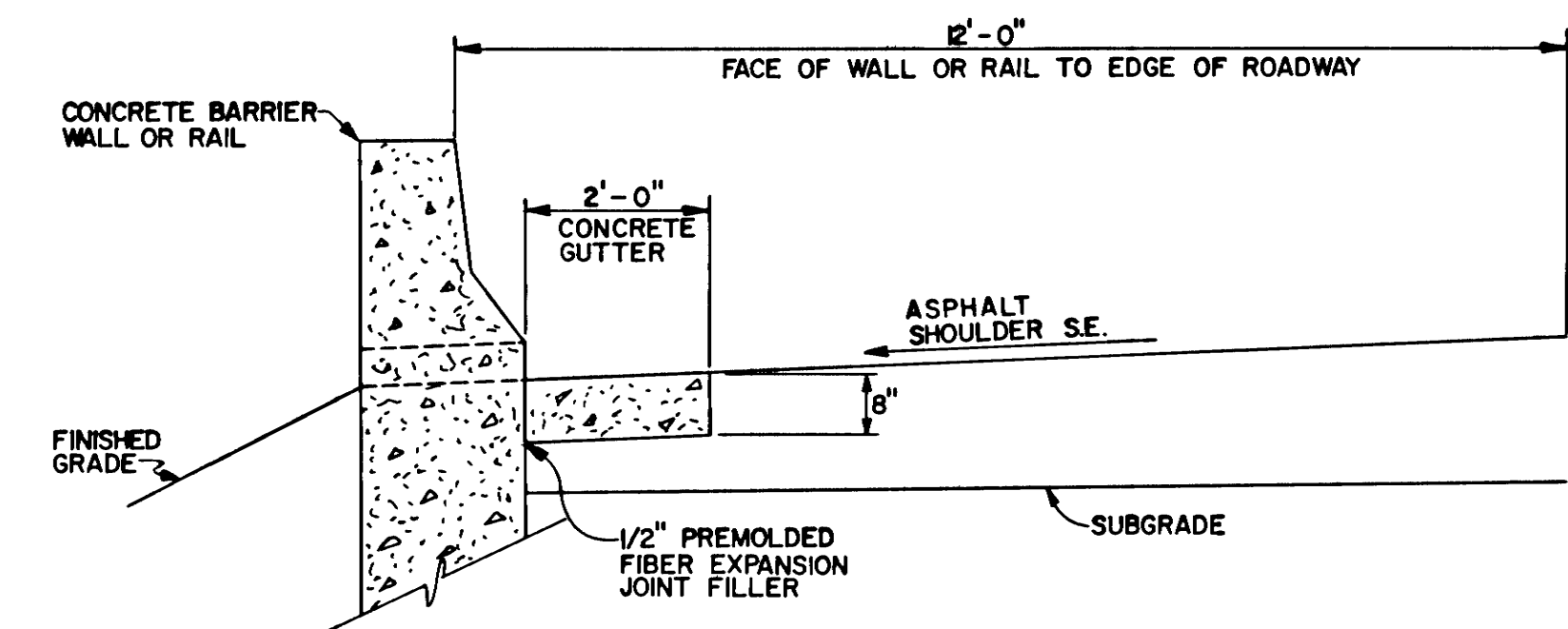
CATCH BASIN NO. 2
SECTION B-B
N.T.S.



CATCH BASIN NO. 1
N.T.S.

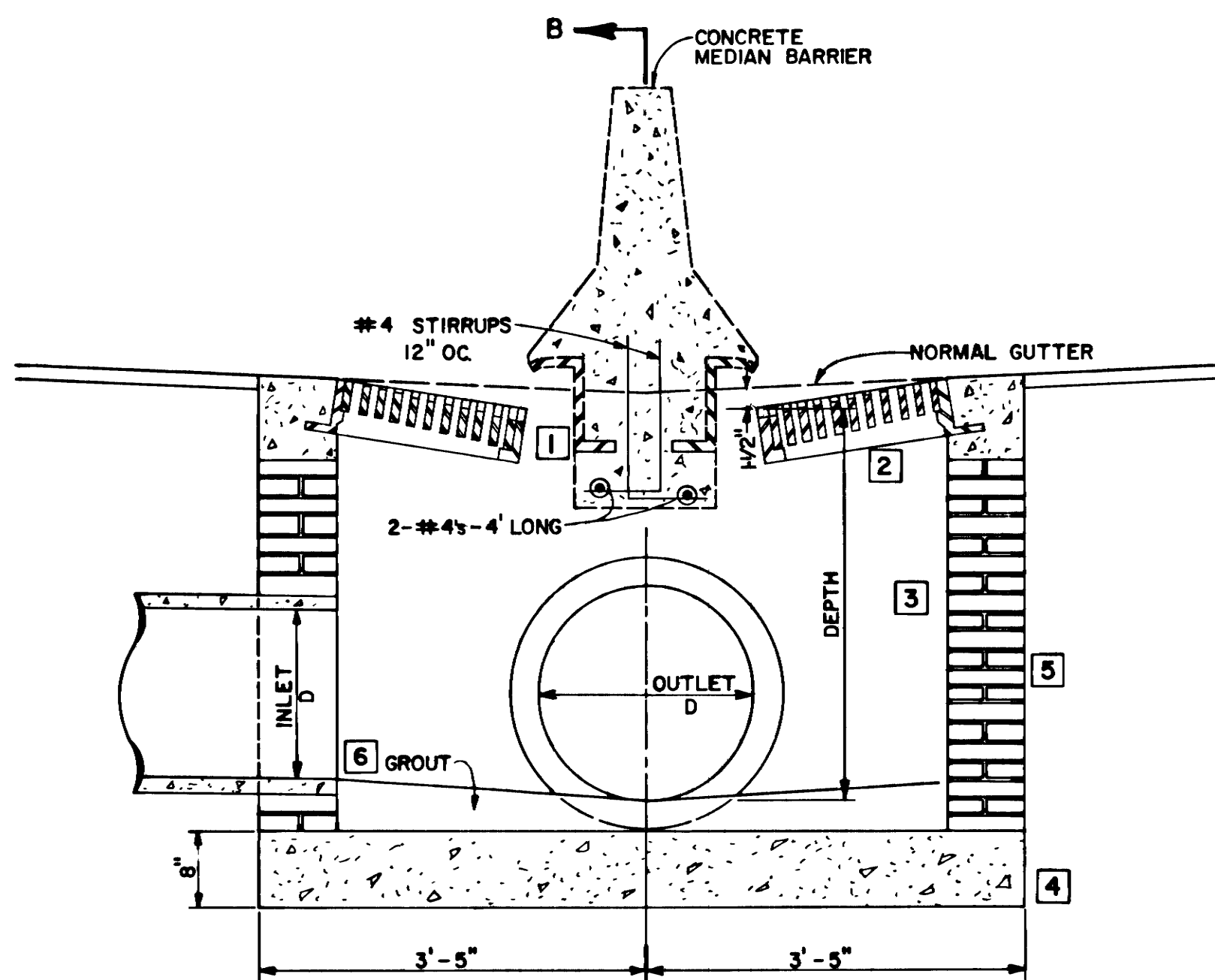


CATCH BASIN NO. 3
N.T.S.

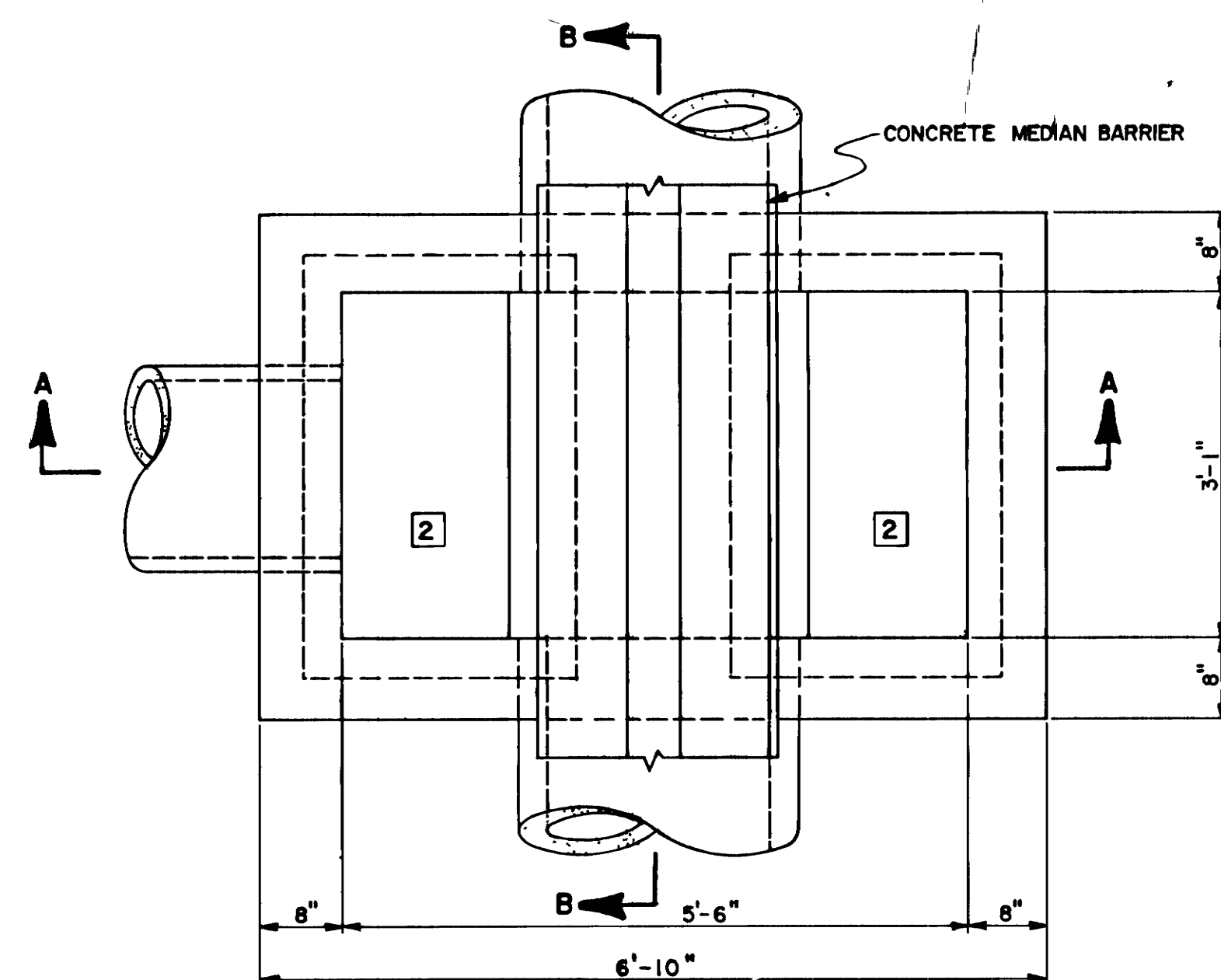


DETAIL OF CONCRETE GUTTER ALONG CONCRETE BARRIER WALL OR RAIL
N.T.S.

NOTE: CONCRETE GUTTER TO BE INSTALLED ALONG ALL CONCRETE BARRIERS AND RAILS ADJACENT TO ASPHALT SHOULDERS. CONCRETE GUTTER TO BE INSTALLED ALONG CONCRETE MEDIAN DIVIDER WHERE SHOWN ON PROPOSED LAYOUT SHEETS.



CATCH BASIN NO. 2
SECTION A-A
N.T.S.



CATCH BASIN NO. 2
PLAN
N.T.S.

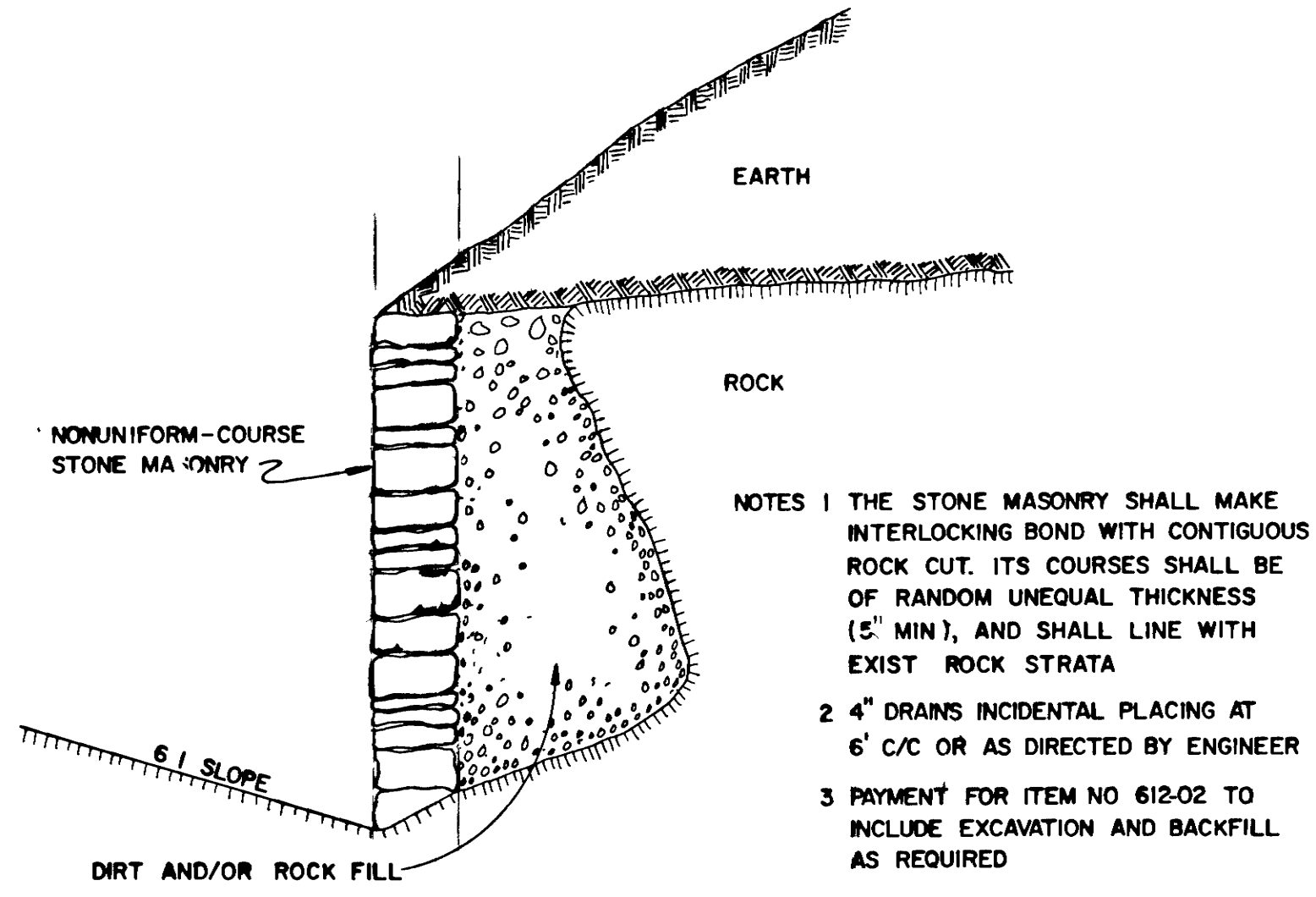
- 1 FOR CURB IRON DETAIL, SEE DWG. D-CB-32.
- 2 FOR GRATE AND FRAME DETAIL, SEE DWG. D-CB-12-32.
- 3 FOR STEP DETAIL, SEE DWG. D-CB-12-32 AND DWG. D-MH-4.
- 4 BASE SHALL BE CLASS "A" CONCRETE (CATCH BASIN).
- 5 BRICK SHALL CONFORM TO AASHTO DESIGNATION M91, GRADE SM, SIZE NO. 1.
- 6 SHAPE INVERT WITH GROUT, SEE DWG. D-CB-12

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

MISCELLANEOUS
DETAILS

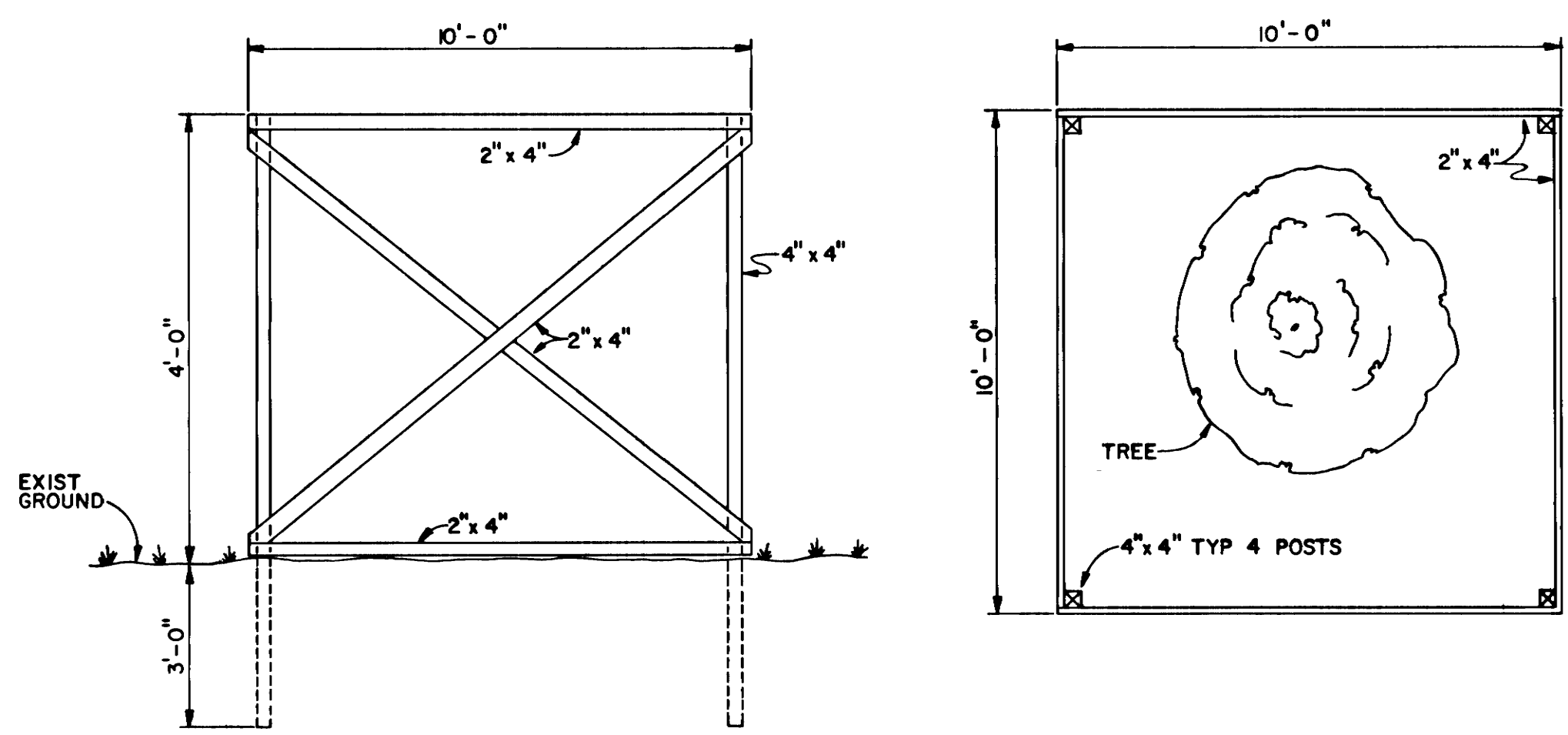
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IR-440-4(50)204	2N

REV 5/13/83: ADDED DETAIL OF HOT POURED SEALANT FOR EX. TRANSVERSE, LONGITUDINAL & RANDOM CRACKS

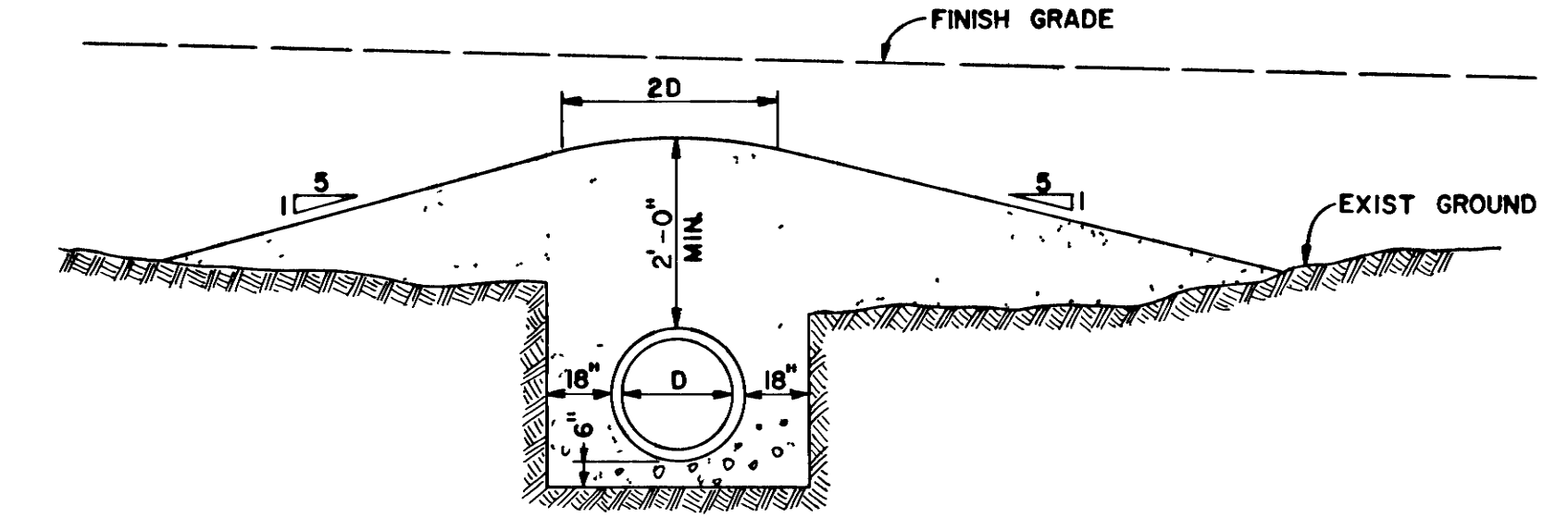


- NOTES
- 1 THE STONE MASONRY SHALL MAKE INTERLOCKING BOND WITH CONTIGUOUS ROCK CUT. ITS COURSES SHALL BE OF RANDOM UNEQUAL THICKNESS (5" MIN), AND SHALL LINE WITH EXIST ROCK STRATA
 - 2 4" DRAINS INCIDENTAL PLACING AT 6' C/C OR AS DIRECTED BY ENGINEER
 - 3 PAYMENT FOR ITEM NO 612-02 TO INCLUDE EXCAVATION AND BACKFILL AS REQUIRED

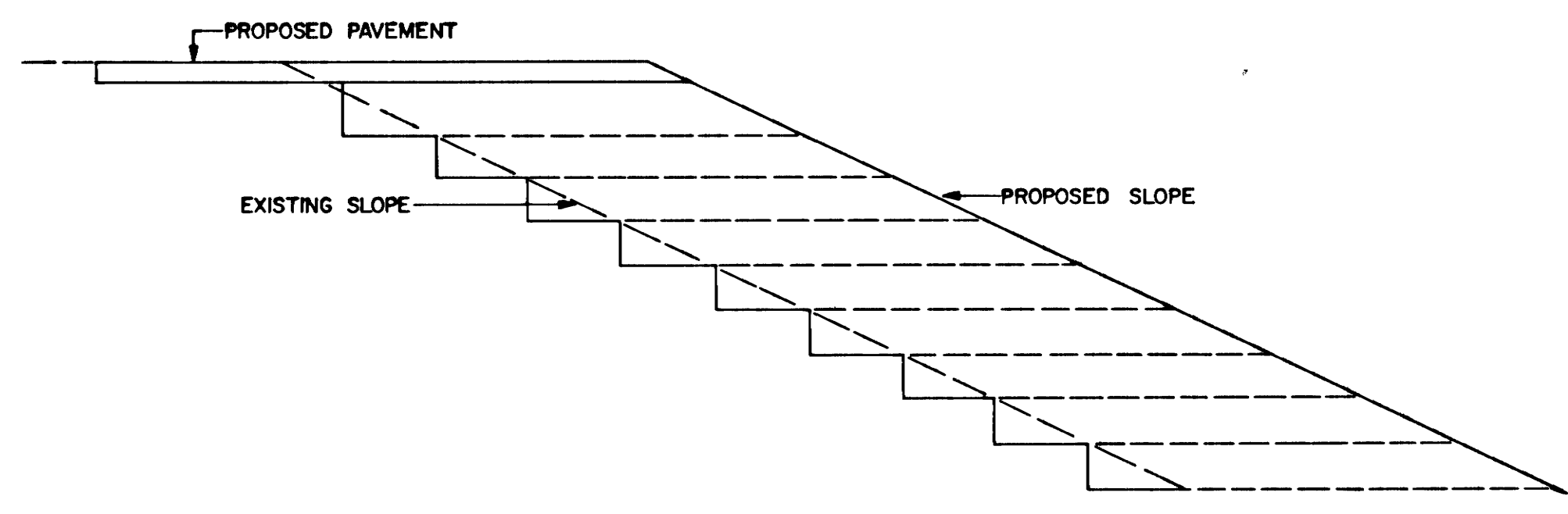
NONUNIFORM-COURSE STONE MASONRY
 ITEM NO. 612-02



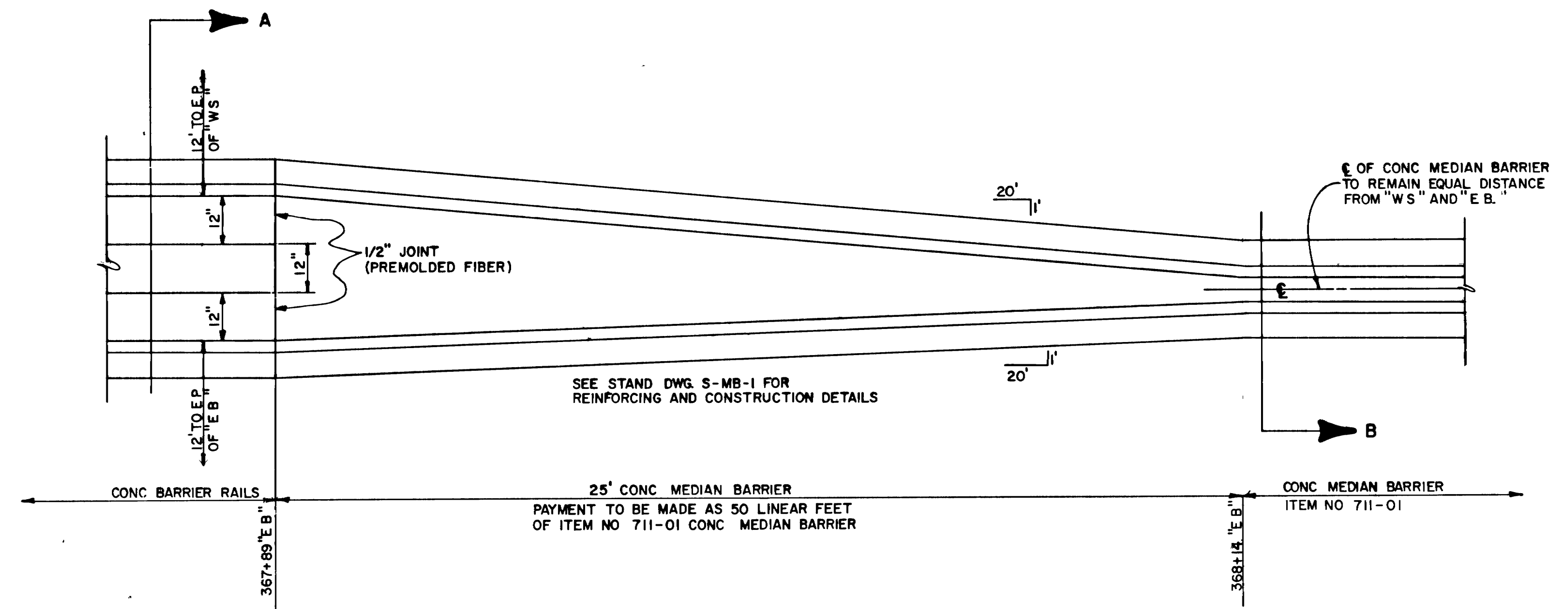
TEMPORARY WOOD TREE PROTECTION BARRICADE
 ITEM NO. 802-05.01



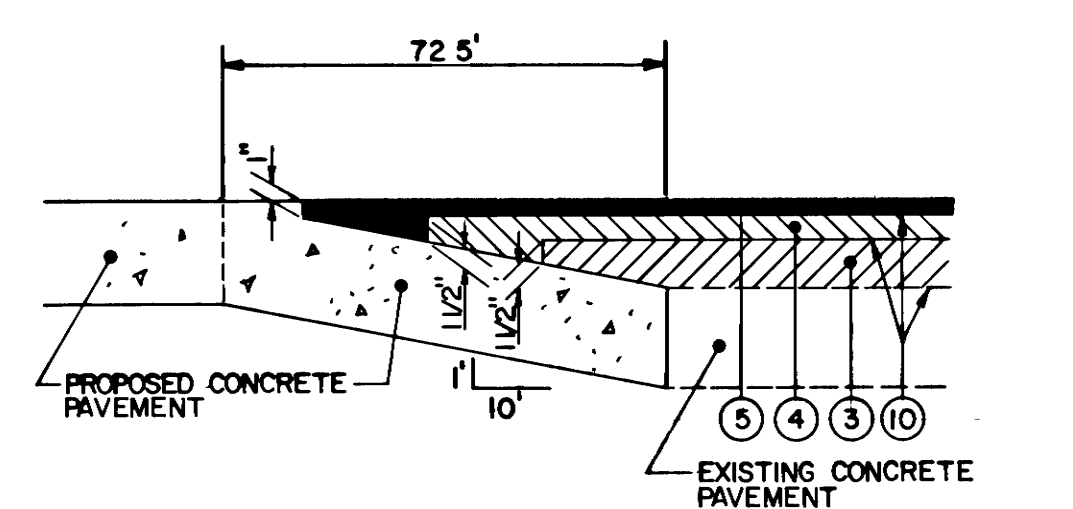
TEMPORARY RAMP OVER PIPE INSTALLATION



SEE STD SPEC 205 03
DETAIL FOR WIDENING EXISTING EMBANKMENTS

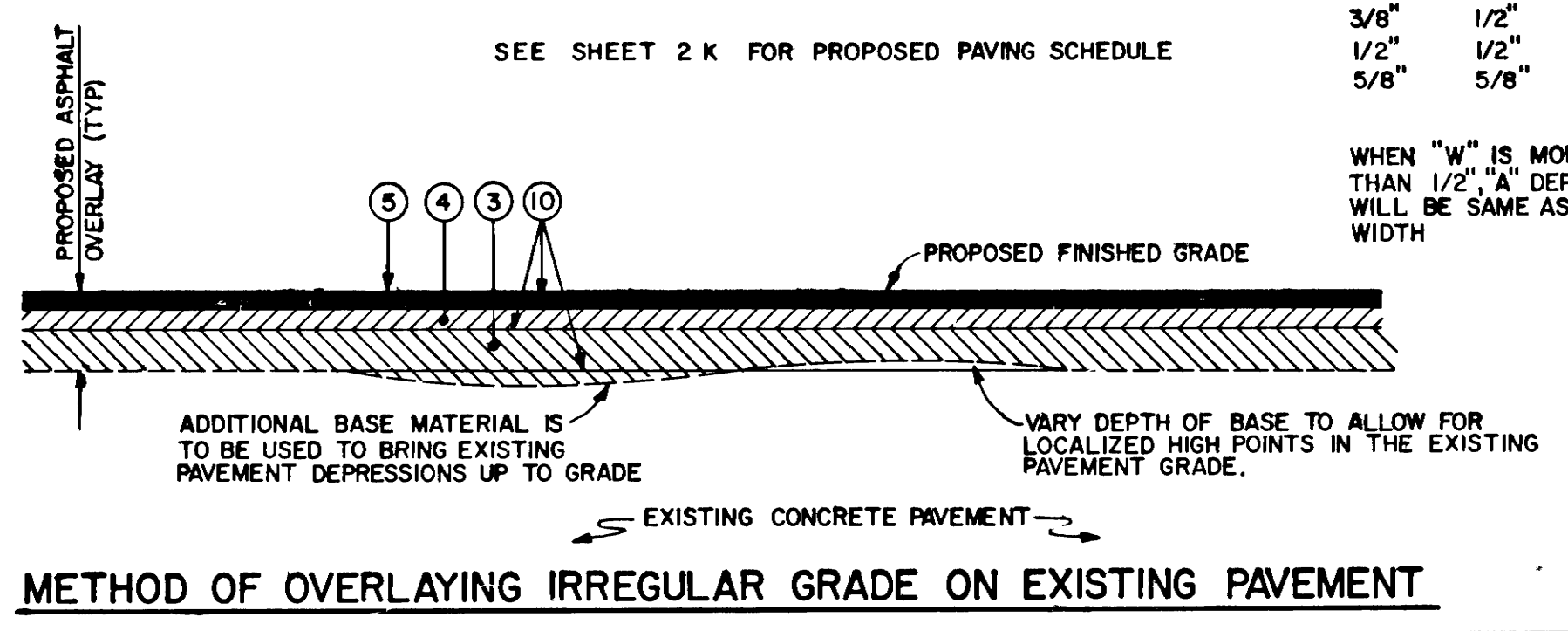
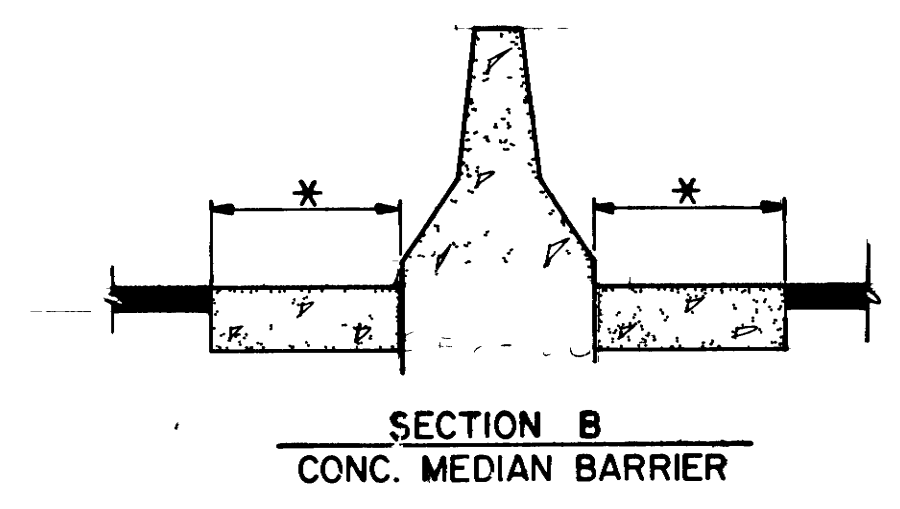
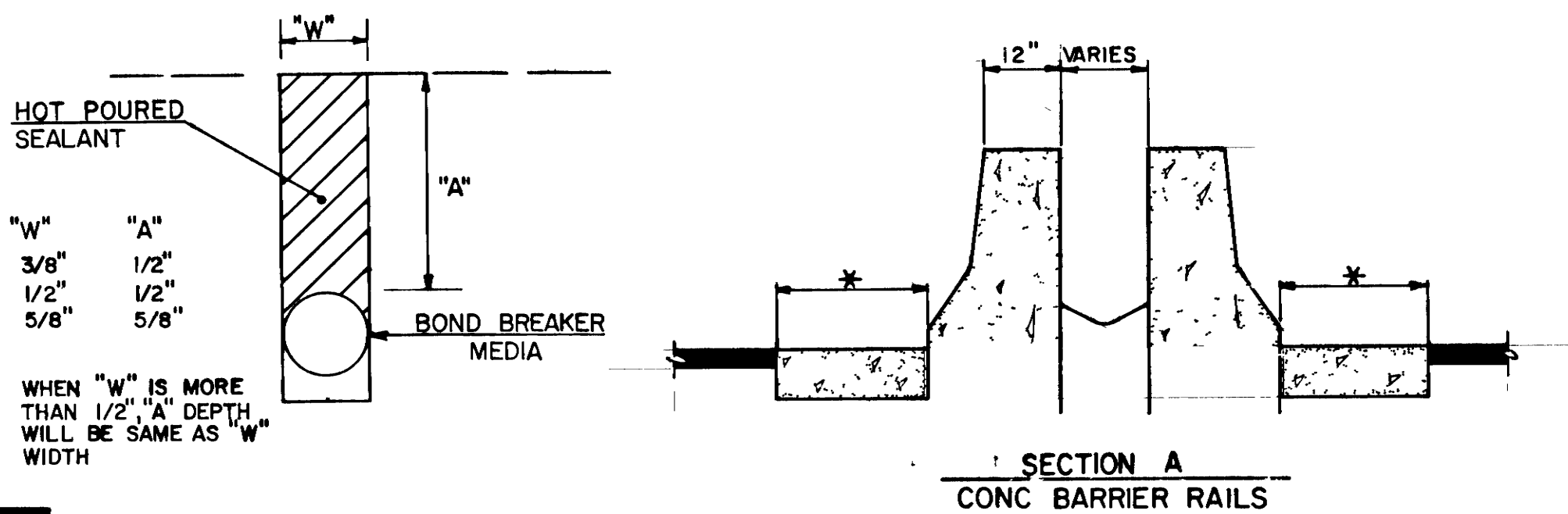


TRANSITION FROM CONC. BARRIER RAILS TO CONC. MEDIAN BARRIER
 SEE SHEET 12 A FOR LOCATION



ASPHALT OVERLAY TRANSITION (RAMPS)

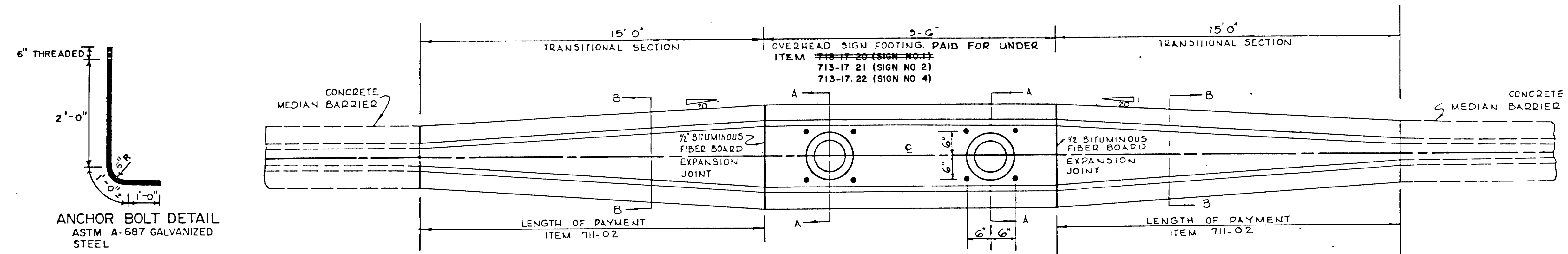
DETAIL OF HOT POURED SEALANT FOR EXISTING TRANSVERSE AND LONGITUDINAL JOINTS & RANDOM CRACKS



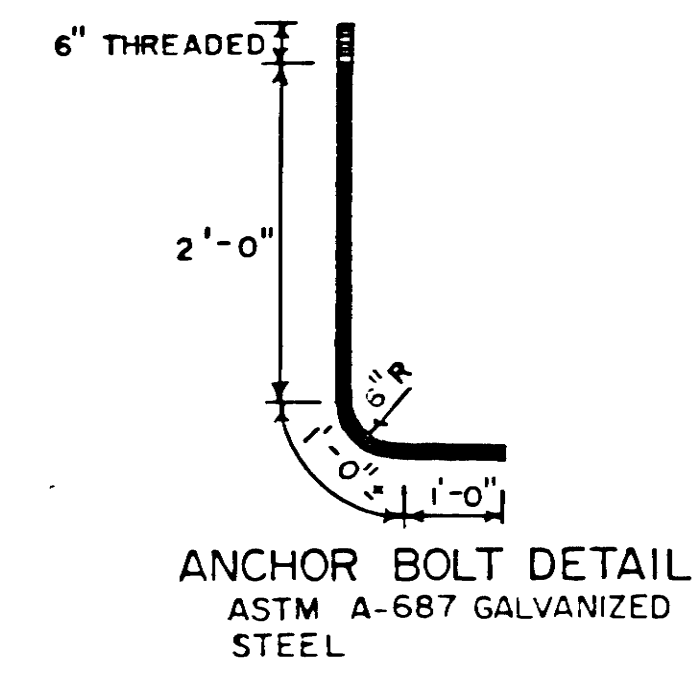
METHOD OF OVERLAYING IRREGULAR GRADE ON EXISTING PAVEMENT

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	TD-38-440-4(8)204	2 P

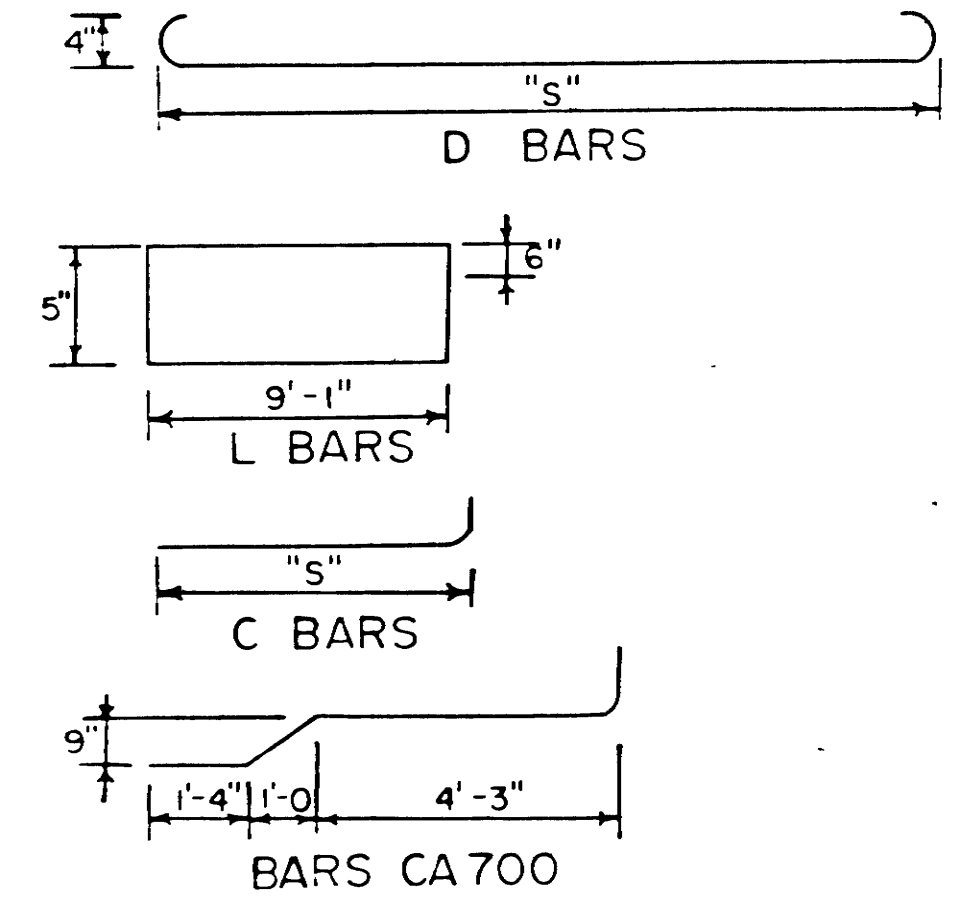
REV 2-8-84: OVERHEAD SIGN FOOTING NO. 1 ELIMINATED LOCATION OF OVERHEAD SIGN FOOTING NO. 4 CHANGED.
 REV 3/6/85: ANCHOR BOLT DETAILS CORRECTED.



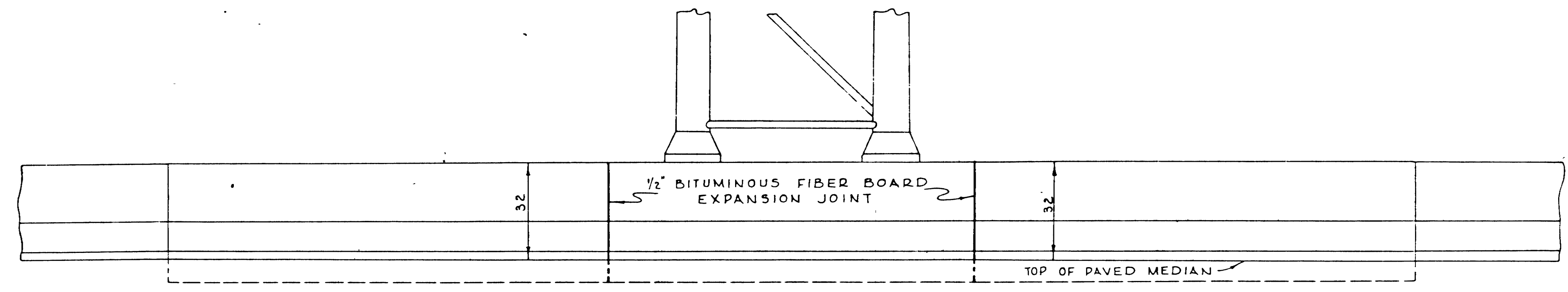
PLAN



ANCHOR BOLT DETAIL
 ASTM A-687 GALVANIZED STEEL



BAR DETAILS

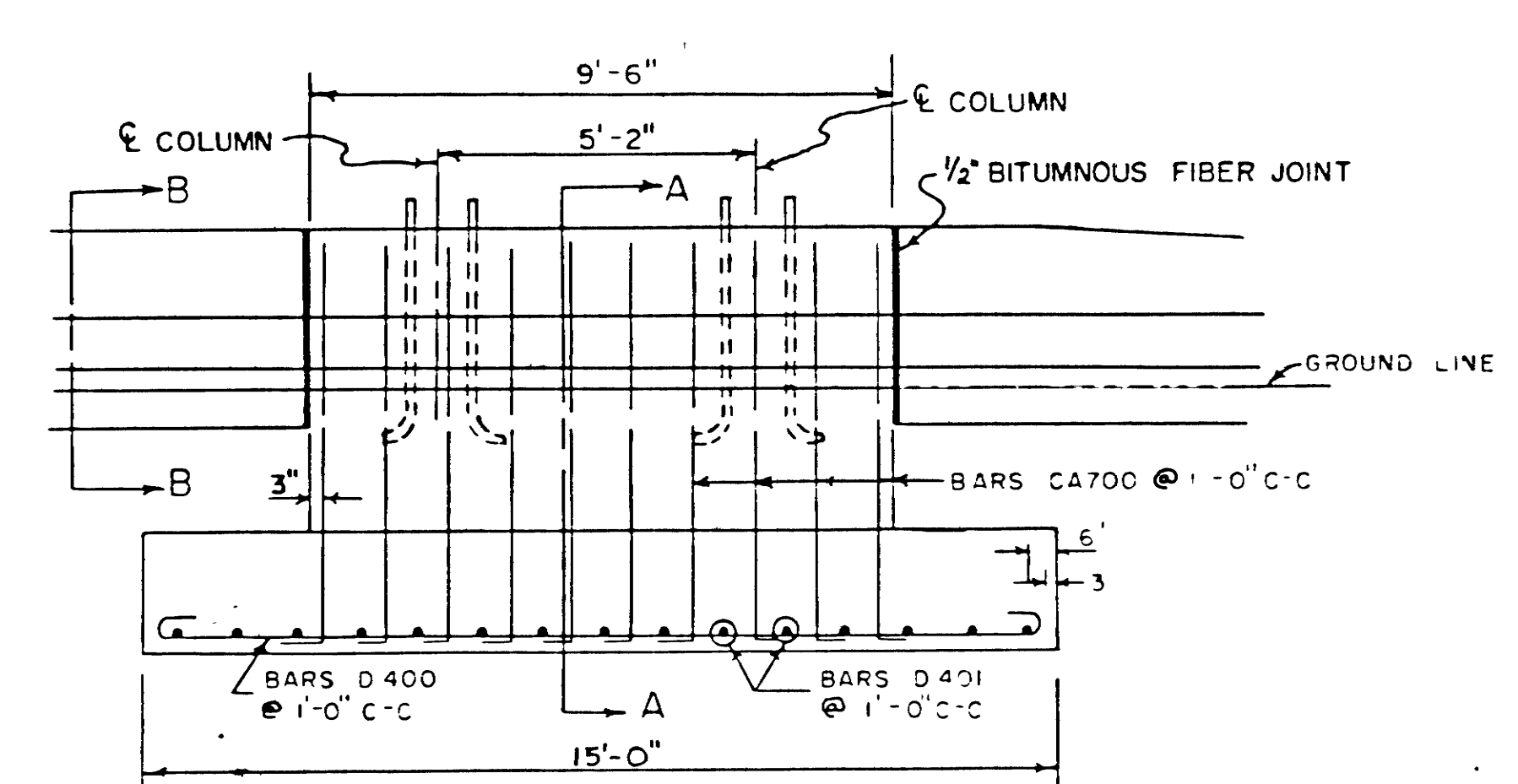


ELEVATION

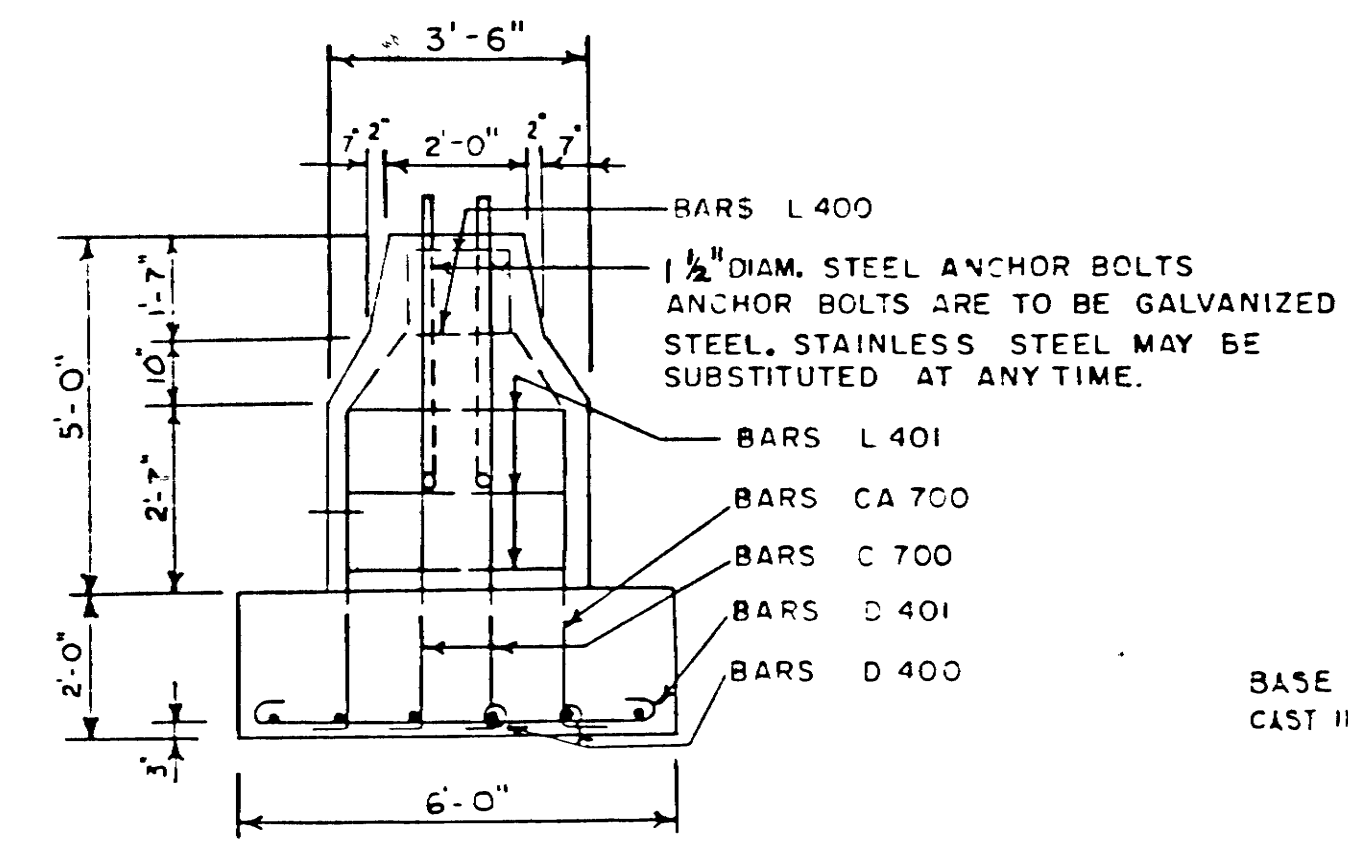
FINISHING CONCRETE SURFACES: CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION GO4 22 OF THE TENNESSEE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED BY THE SPECIAL PROVISION NO 130 REGARDING SECTION GO4 - CONCRETE STRUCTURES. A TEXTURED COATED FINISH SHALL BE USED IN LIEU OF A CLASS 2 FINISH THE COLOR OF THE FINISH SHALL BE SIMILAR TO WHITE FEDERAL SPECIFICATION NO 37778, A COLOR SAMPLE SHALL BE SUBMITTED TO THE MATERIALS AND TEST ENGINEER FOR APPROVAL ALL COST OF FINISHING TO BE INCLUDED IN ITEM NO. 711-02.

PLASTIC COATED DOWEL BARS WILL BE PERMITTED AS AN ALTERNATE TO PAINTED AND GREASED DOWEL BARS. THE PLASTIC COATING SHALL BE AN APPROVED HIGH DENSITY POLYETHYLENE 17 MILS (±2 MILS) BONDED TO THE BAR WITH AN APPROVED ADHESIVE 1 TO 8 MILS THICK (4 MILS NOMINAL).

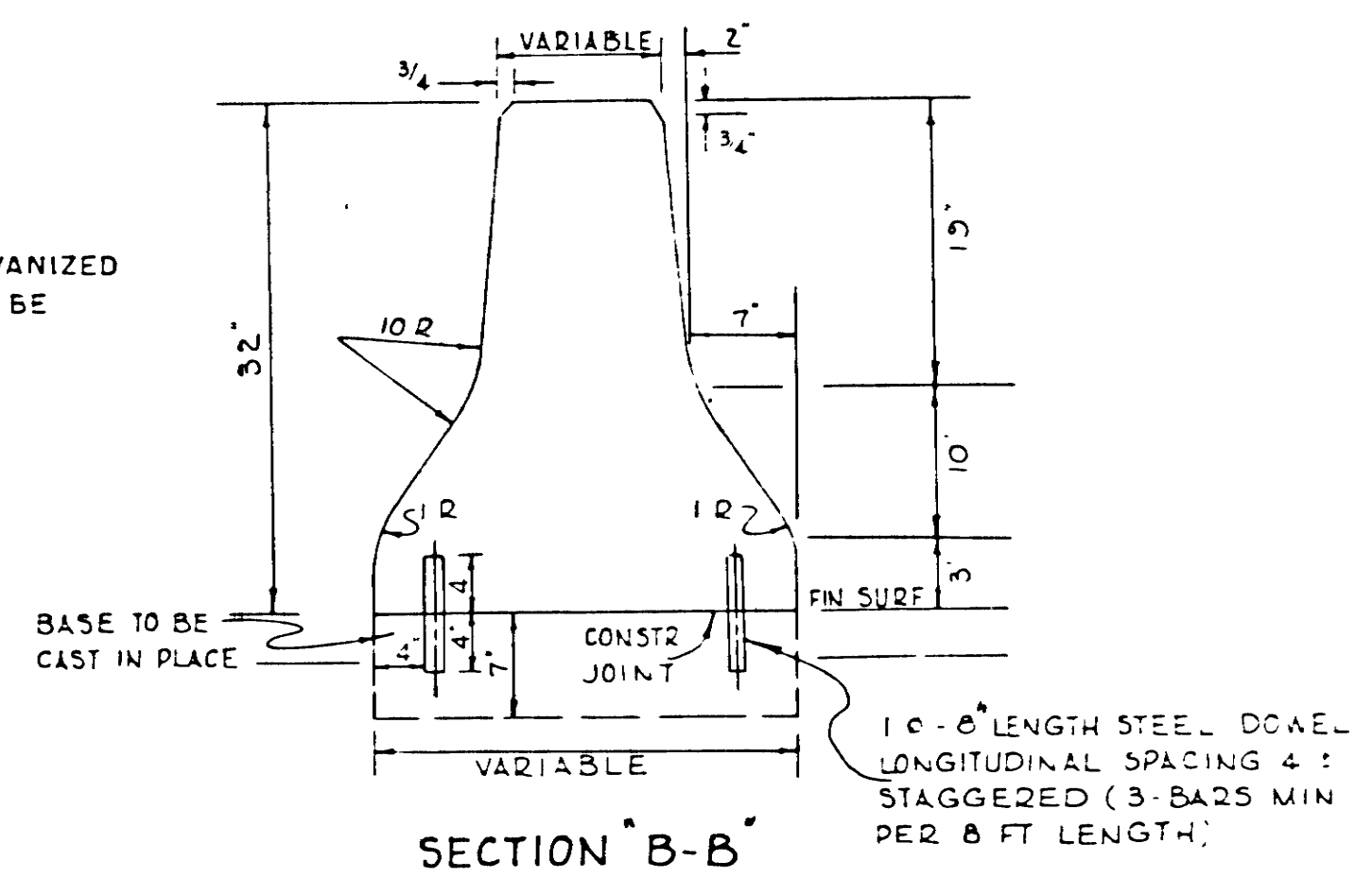
PRICE OF BARRIER INCLUDES COST OF ALL REINFORCEMENT, DOWELS, DRILLING, JOINTS, JOINT MATERIAL AND ANY OTHER INCIDENTAL ITEMS NECESSARY FOR COMPLETE INSTALLATION OF THE BARRIER



FOOTING F-1



SECTION A-A



SECTION B-B

ESTIMATED QUANTITIES

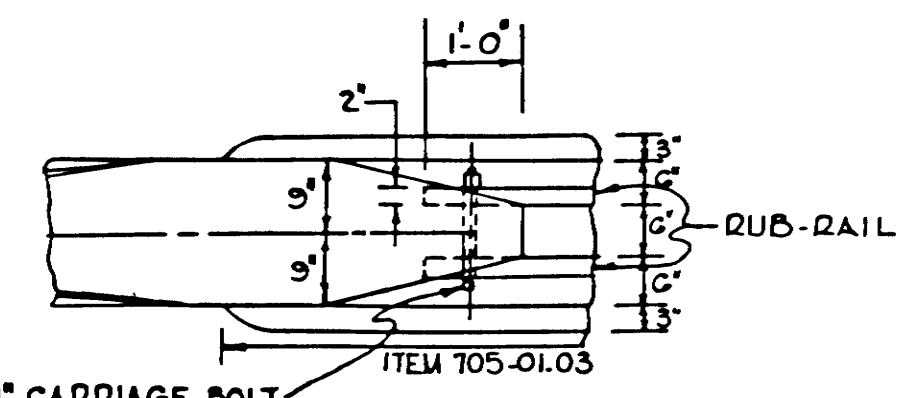
CLASS "A" CONCRETE	11.9 C Y
REINFORCING STEEL	588 LB

SIGN NO. 1 (STA 385+78.71)
 SIGN NO. 2 (STA 377+00)
 SIGN NO. 4 (STA 34C+G5)

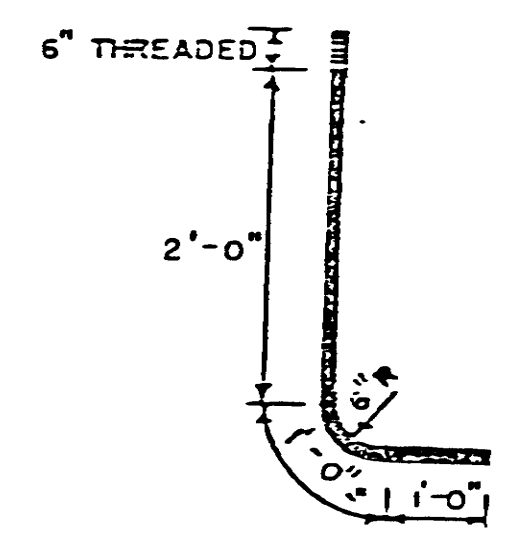
BILL OF STEEL - PER FOOTING

BAR	SIZE	NO REQD	DIM "S"	LENGTH
C 700	7	4	6'-6"	7'-6"
CA 700	7	20		7'-10"
D 400	4	6	14'-6"	15'-6"
D 401	4	15	5'-6"	6'-6"
L 400	4	2	1'-7"	21'-10"
L 401	4	3	3'-1"	24'-10"

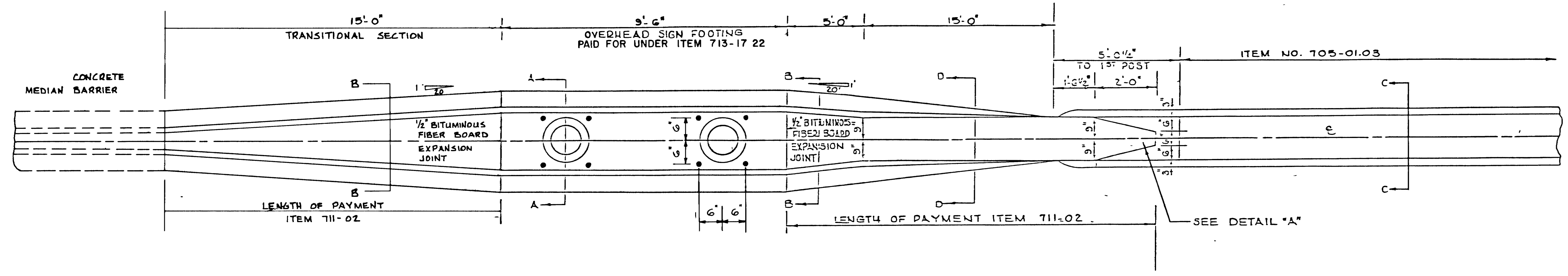
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 DETAILS
 OVERHEAD SIGN STRUCTURE
 MOUNTED ON CONCRETE
 MEDIAN BARRIER



DETAIL "A"
 ALL COSTS OF FORMING AND BOLT TO BE INCLUDED IN PRICES BID FOR OTHER ITEMS



ANCHOR BOLT DETAIL
 ASTM A-687 GALVANIZED STEEL



PLAN

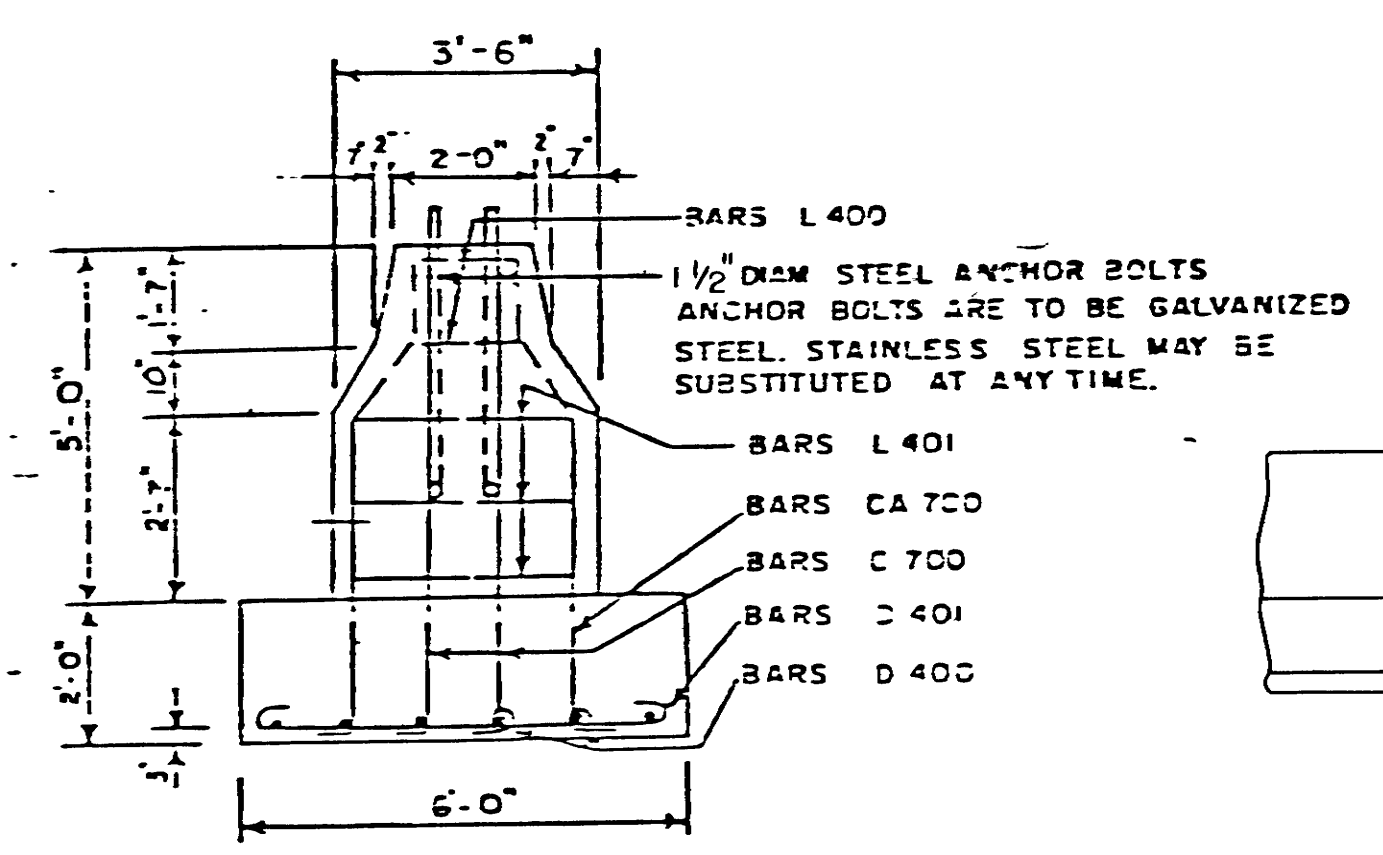
ESTIMATED QUANTITIES

CLASS "A" CONCRETE	11.9 C.Y.
REINFORCING STEEL	588 LB

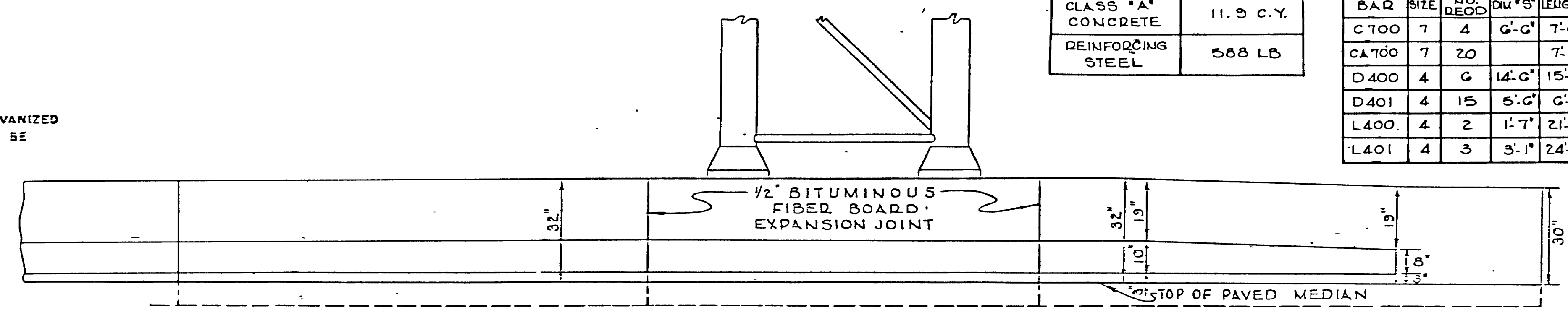
BILL OF STEEL-PER FOOTING

BAR	SIZE	NO. DEOD.	DM *S	LENGTH
C 700	7	4	6'-6"	7'-6"
CA 700	7	20		7'-10"
D 400	4	6	14'-6"	15'-6"
D 401	4	15	5'-6"	6'-6"
L 400	4	2	1'-7"	2'-10"
L 401	4	3	3'-1"	24'-10"

NOTE: FOR DETAILS NOT SHOWN SEE STANDARD DWG. S-GR-15, S-MB-1, & S-MB-2



SECTION "A-A"

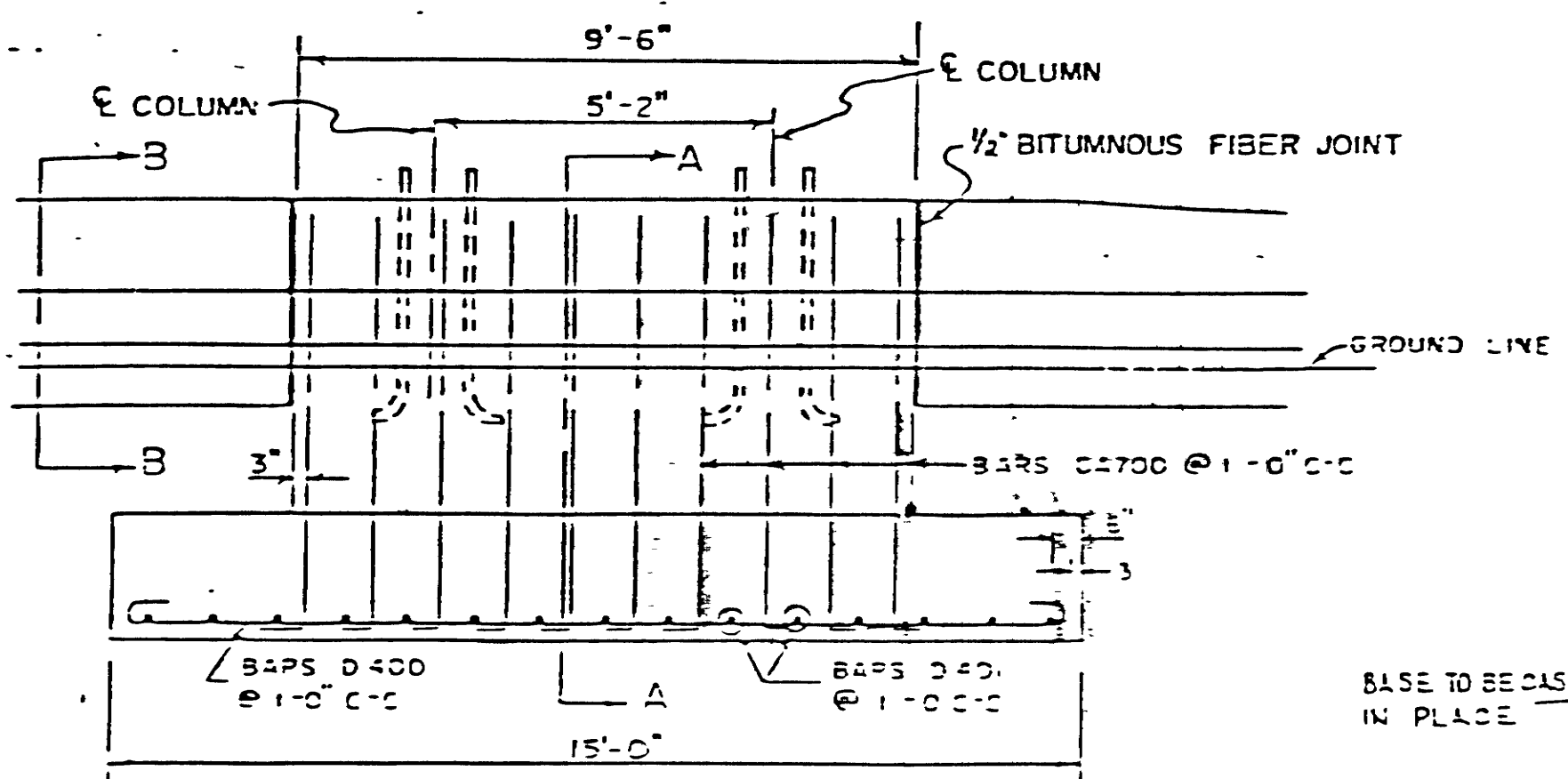


ELEVATION

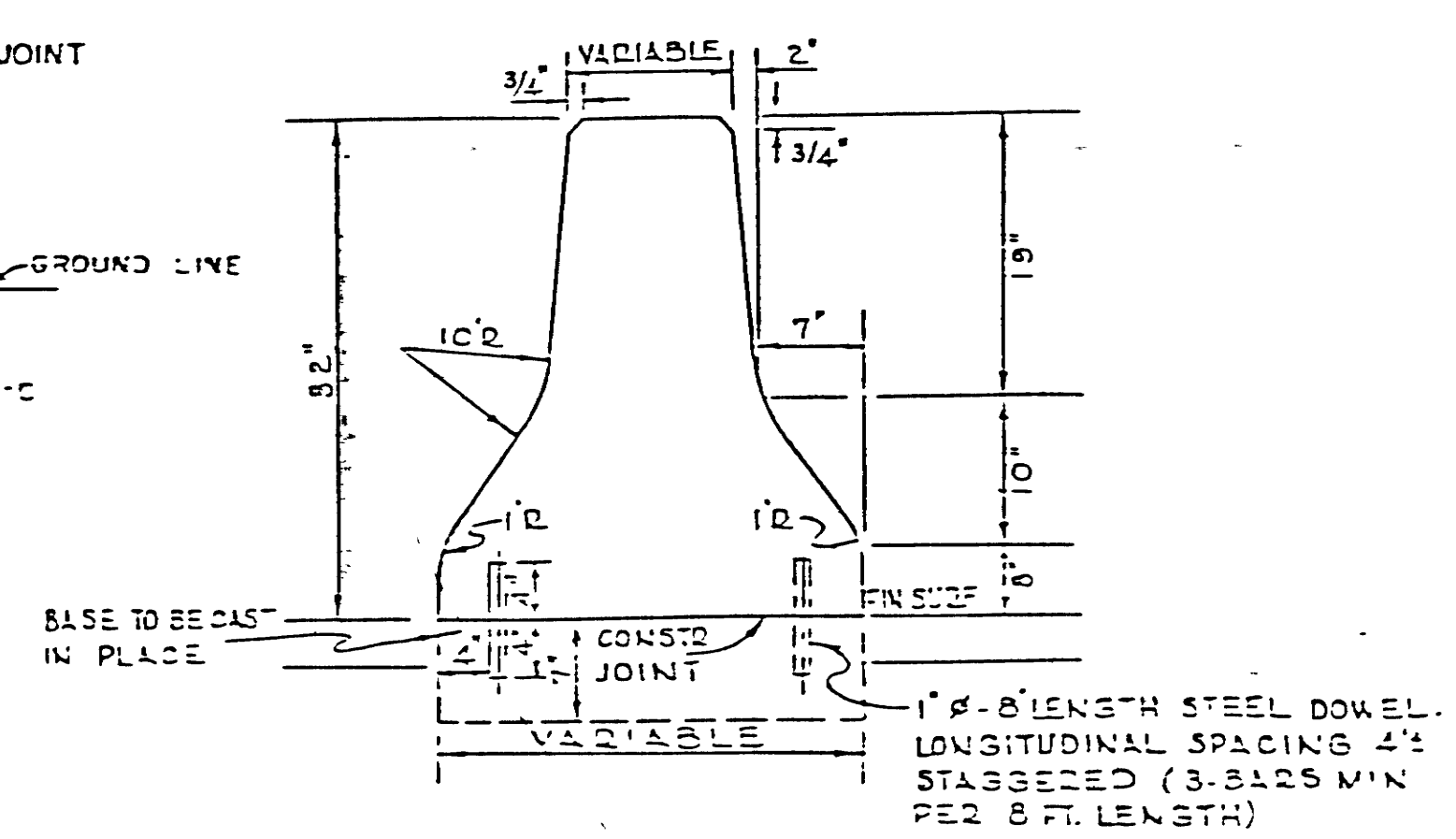
FINISHING CONCRETE SURFACES: CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.22 OF THE TENNESSEE STANDARD SPECIFICATION EXCEPT AS MODIFIED BY THE SPECIAL PROVISION REGARDING SECTION 604-CONCRETE STRUCTURES. A TEXTURED COATED FINISH SHALL BE USED IN LIEU OF A CLASS 2 FINISH. THE COLOR OF THE FINISH SHALL BE SIMILAR TO WHITE, FEDERAL SPECIFICATION NO. 3788G, FEDERAL COLOR STANDARD NO. 595a, AND A COLOR SAMPLE SHALL BE SUBMITTED TO THE ENGINEER OF STRUCTURES FOR APPROVAL.

PLASTIC COATED DOWEL BARS WILL BE PERMITTED AS AN ALTERNATE TO PAINTED AND GREASED DOWEL BARS. THE PLASTIC COATING SHALL BE AN APPROVED HIGH DENSITY POLYETHYLENE 17 MILS (±2 MILS) BONDED TO THE BAR WITH AN APPROVED ADHESIVE 1 TO 8 MILS THICK (4 MILS NOMINAL).

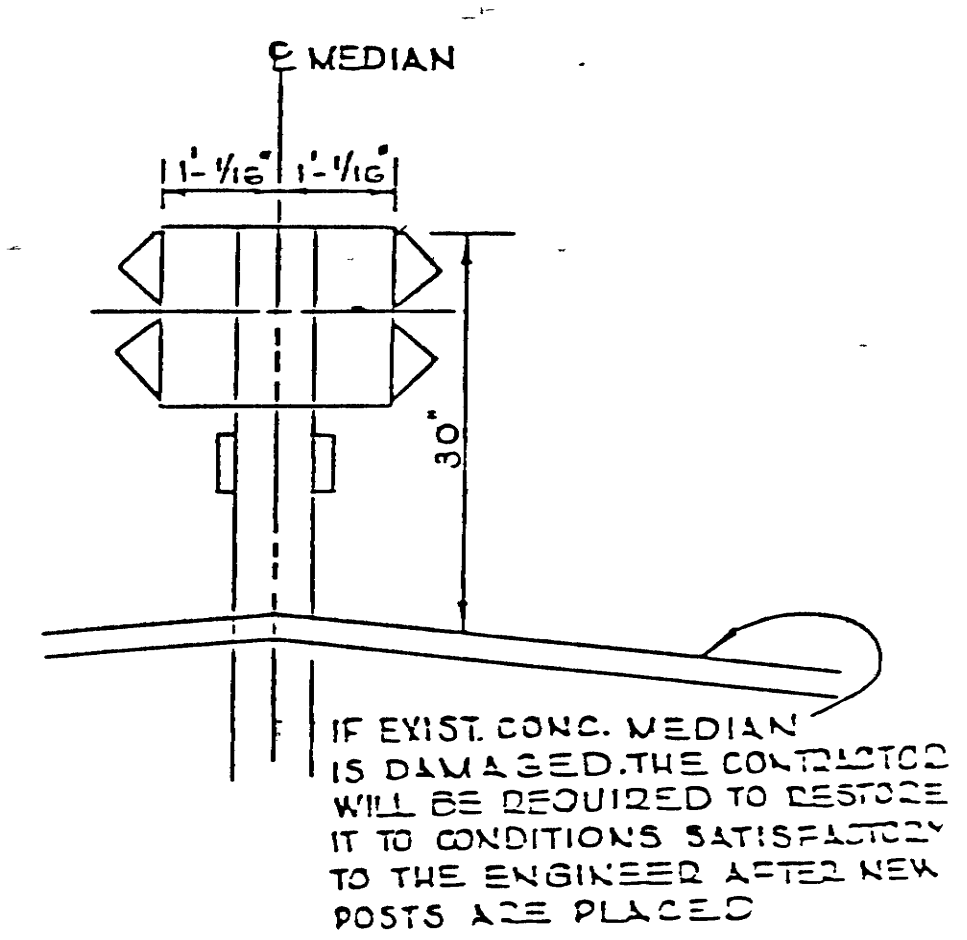
PRICE OF BARRIER INCLUDES COST OF ALL REINFORCEMENT, DOWELS, DRILLING, JOINTS, JOINT MATERIAL AND ANY OTHER INCIDENTAL ITEMS NECESSARY FOR COMPLETE INSTALLATION OF THE BARRIER.



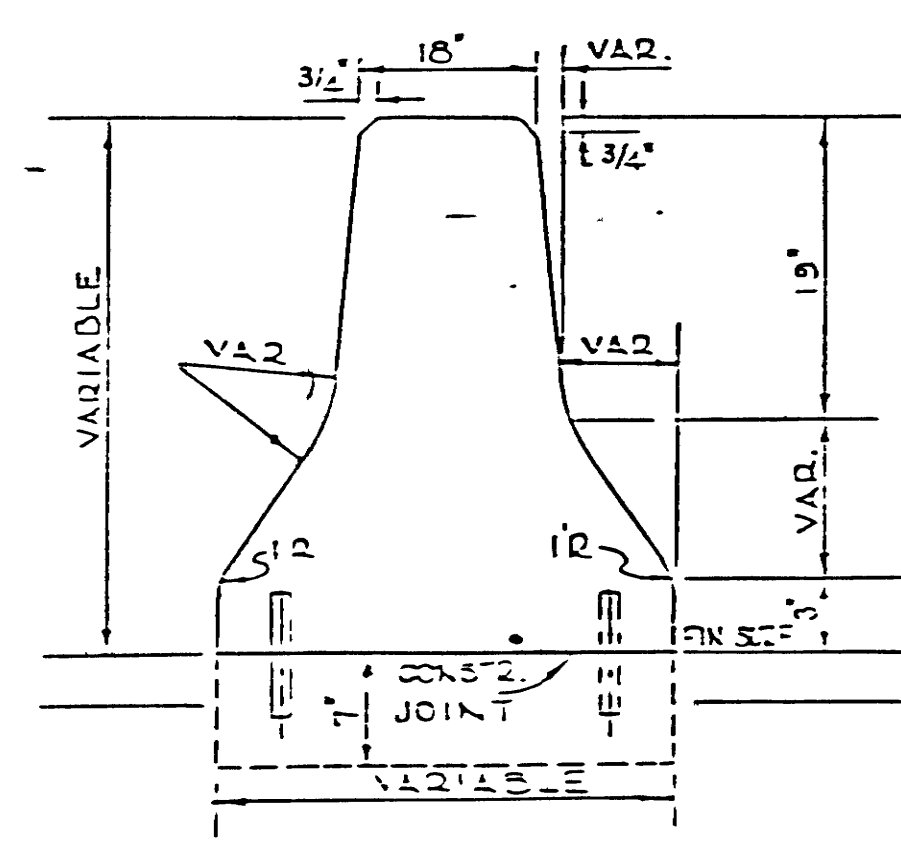
FOOTING F-1



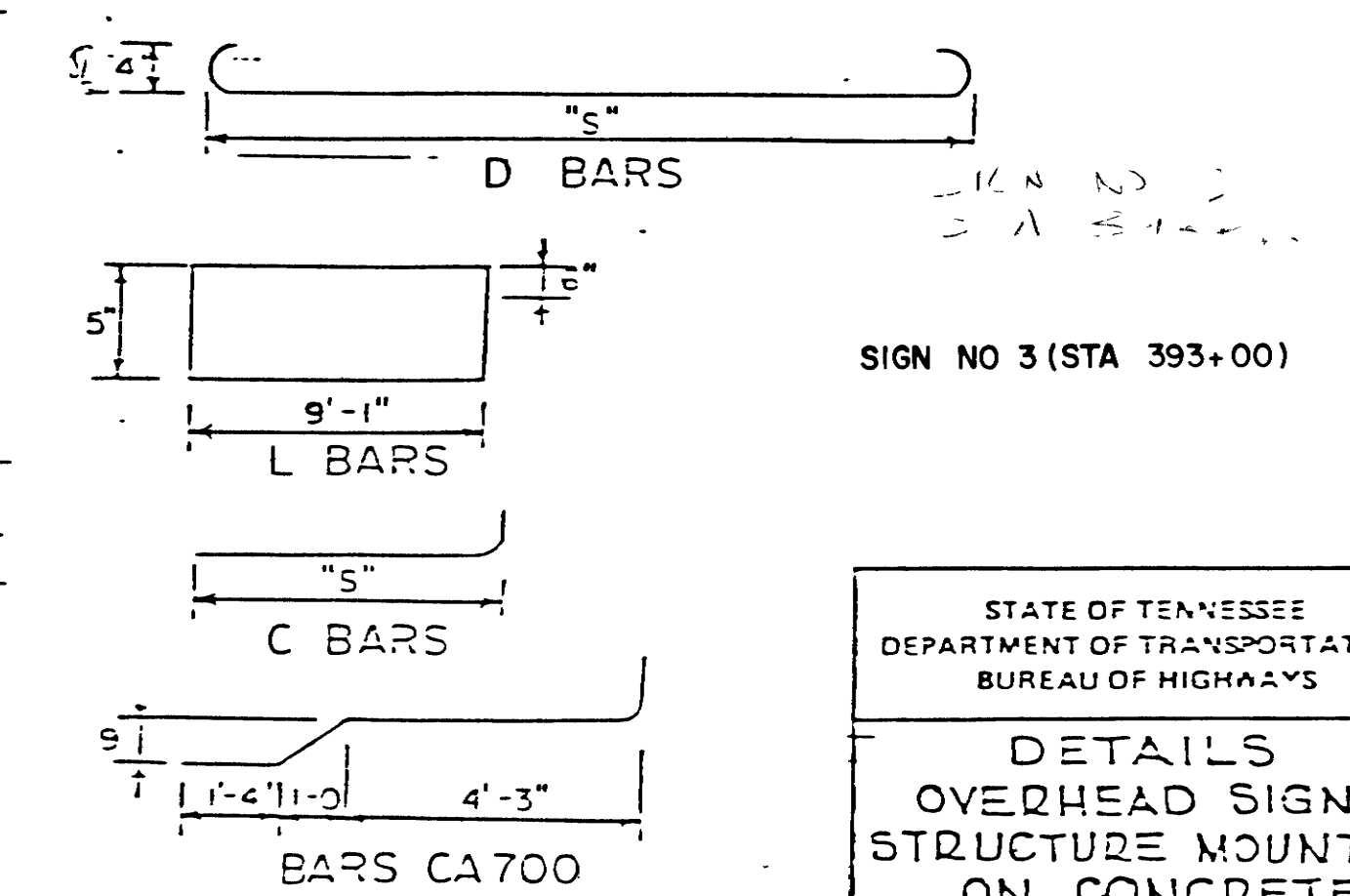
SECTION "B-B"



SECTION "C-C"



SECTION "D-D"
 FOR DETAILS NOT SHOWN SEE SECTION "B-B"



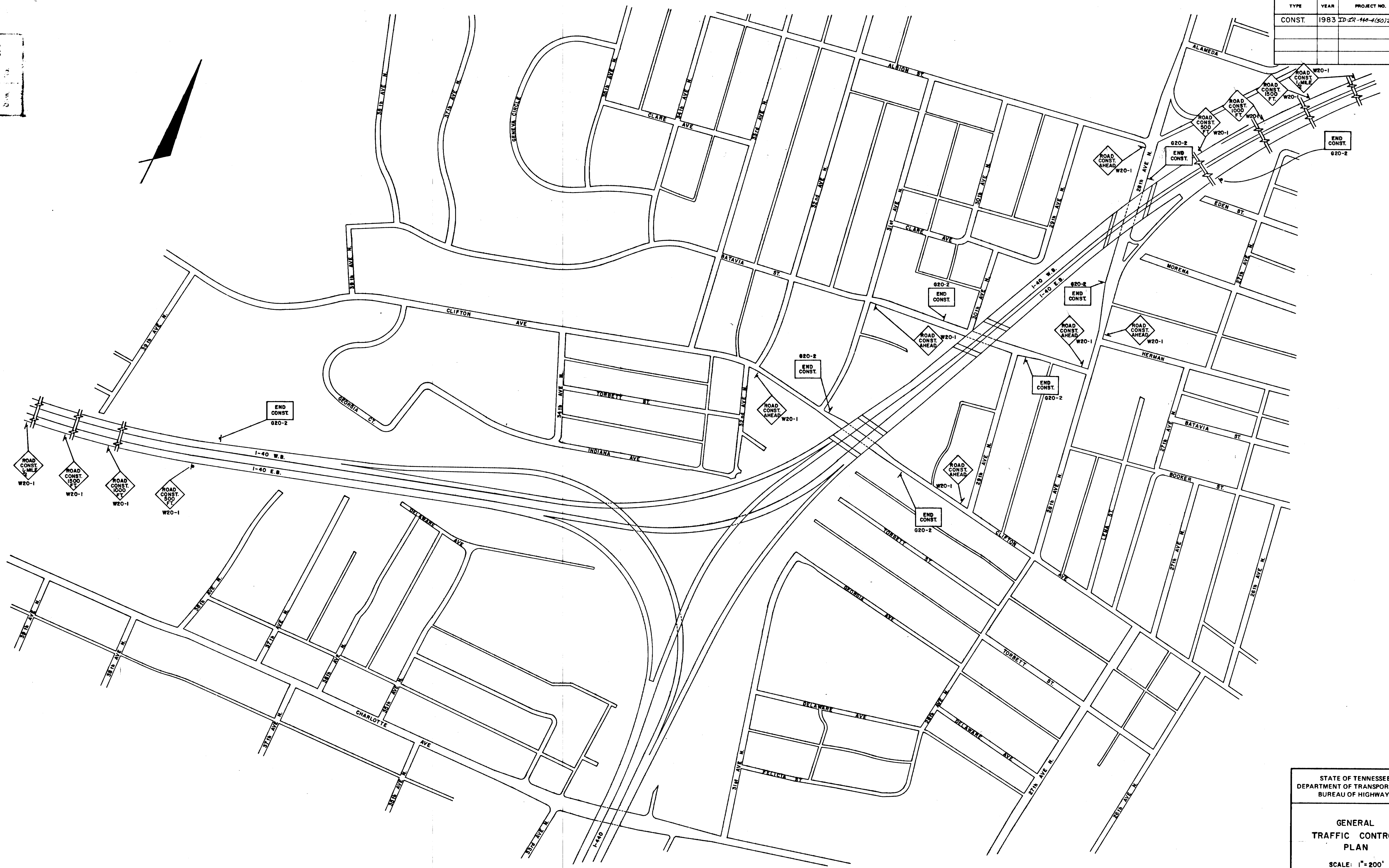
BAR DETAILS

SIGN NO 3 (STA 393+00)

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 DETAILS
 OVERHEAD SIGN
 STRUCTURE MOUNTED
 ON CONCRETE
 MEDIAN BARRIER
 &
 GUARDRAIL ATTACHMENT

TENN. STATE HIGHWAYS
 Plan No. **JN-330**
 Div. No. **330**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	TD-2R-149-4(50)204	3



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**GENERAL
 TRAFFIC CONTROL
 PLAN**

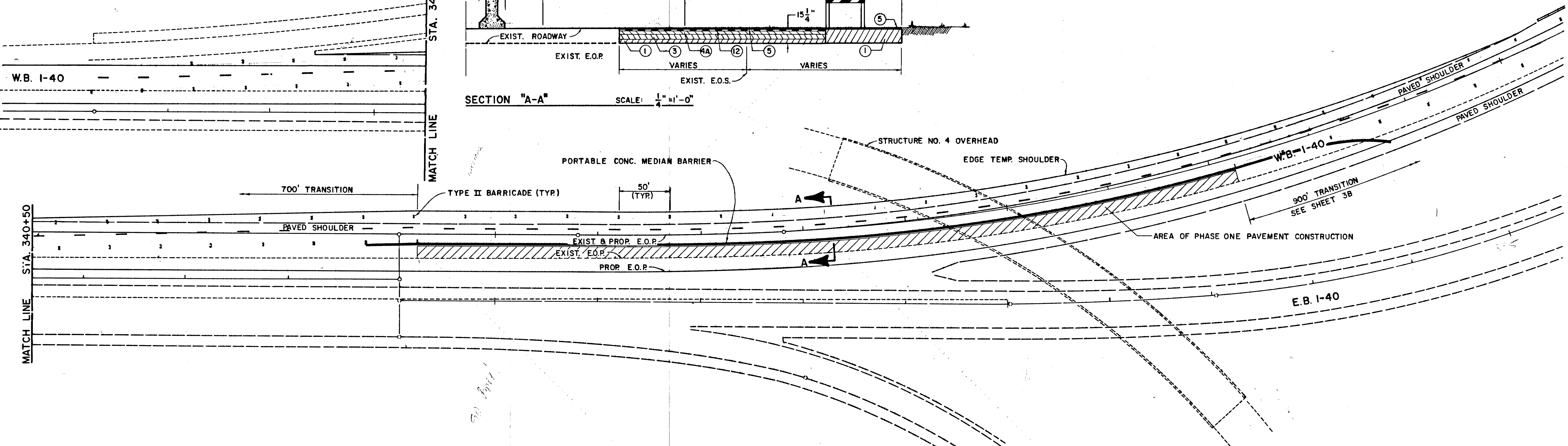
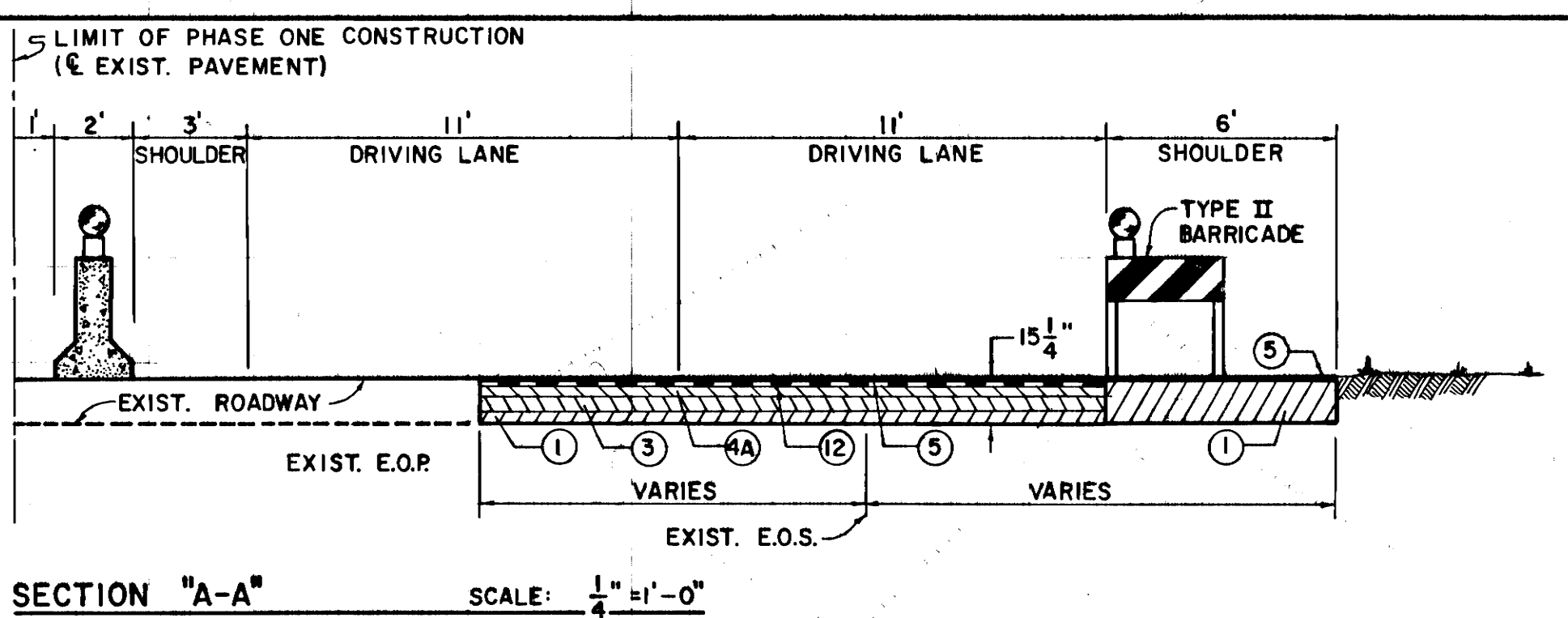
SCALE: 1" = 200'

TENN. STATE HIGHWAYS
Plans IN-330
Div.

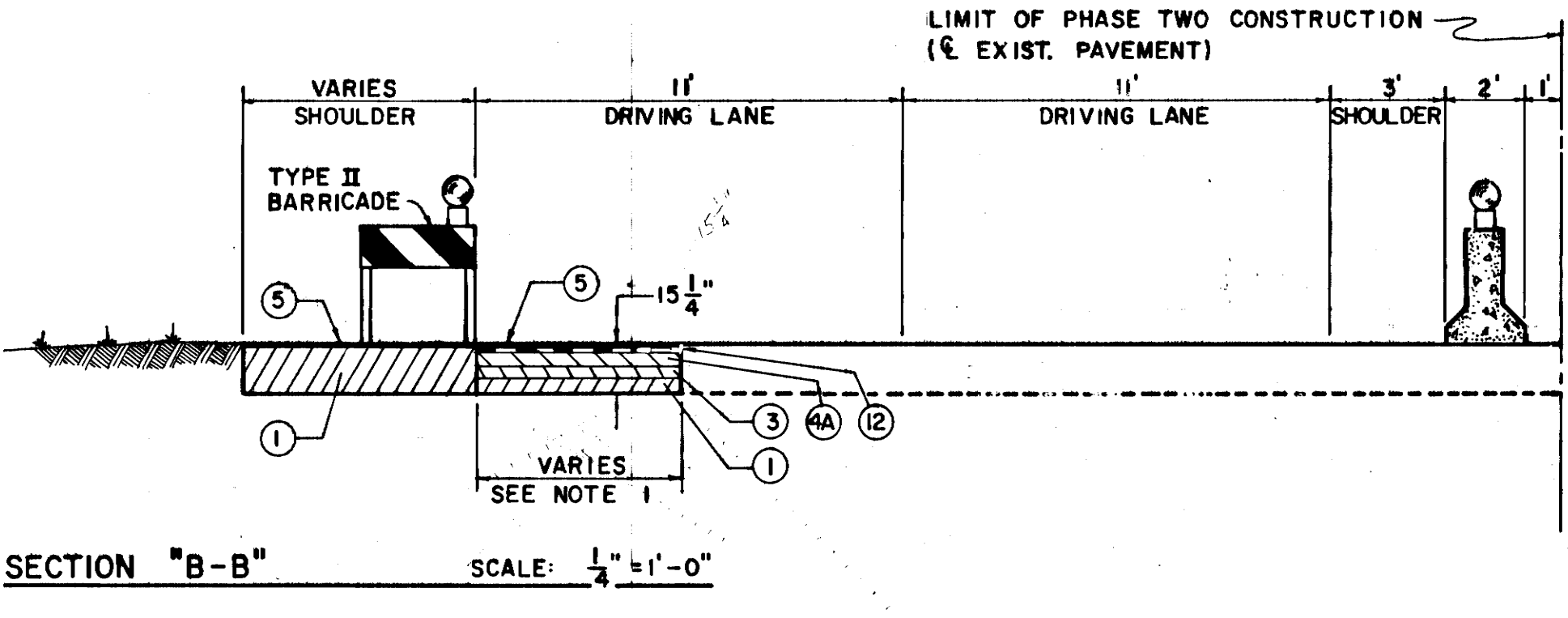
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	IP-7A-1-40-1(50)204	3A

NOTE: 1. SEE SHEET 2K FOR PROPOSED PAVING SCHEDULE.
2. PAYMENT FOR TEMPORARY ROADWAY AND SHOULDER SHALL BE MADE UNDER THE APPROPRIATE PAY ITEMS.

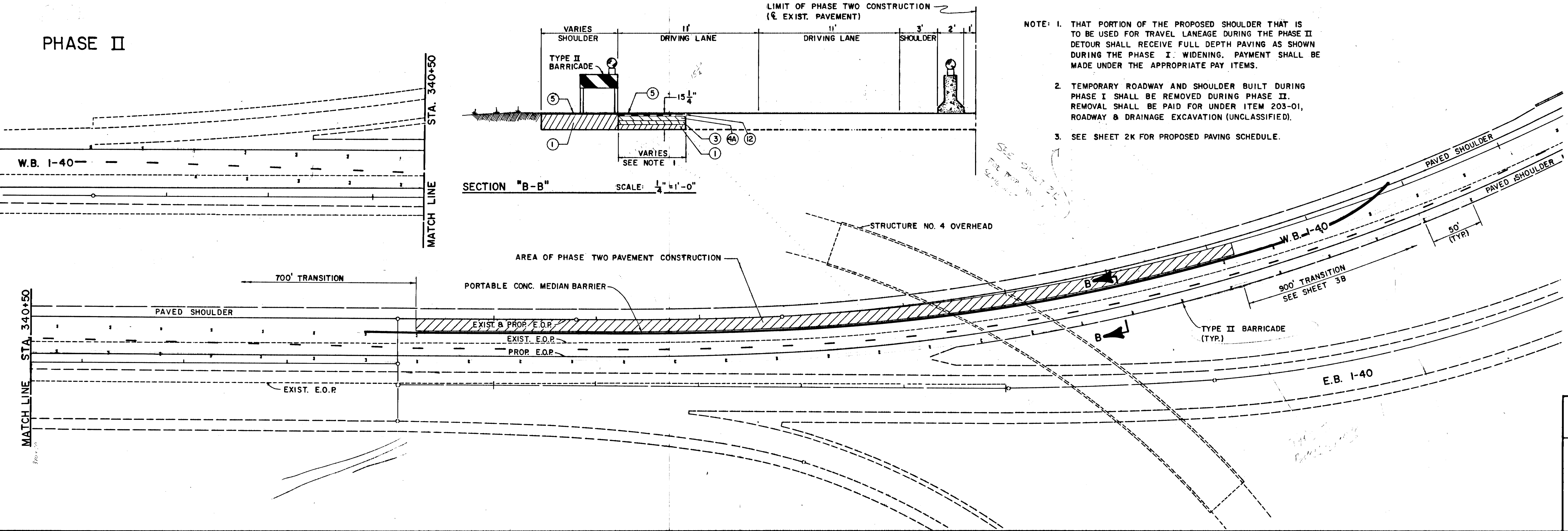
PHASE I



PHASE II



NOTE: 1. THAT PORTION OF THE PROPOSED SHOULDER THAT IS TO BE USED FOR TRAVEL LANEAGE DURING THE PHASE II DETOUR SHALL RECEIVE FULL DEPTH PAVING AS SHOWN DURING THE PHASE I WIDENING. PAYMENT SHALL BE MADE UNDER THE APPROPRIATE PAY ITEMS.
2. TEMPORARY ROADWAY AND SHOULDER BUILT DURING PHASE I SHALL BE REMOVED DURING PHASE II. REMOVAL SHALL BE PAID FOR UNDER ITEM 203-01, ROADWAY & DRAINAGE EXCAVATION (UNCLASSIFIED).
3. SEE SHEET 2K FOR PROPOSED PAVING SCHEDULE.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

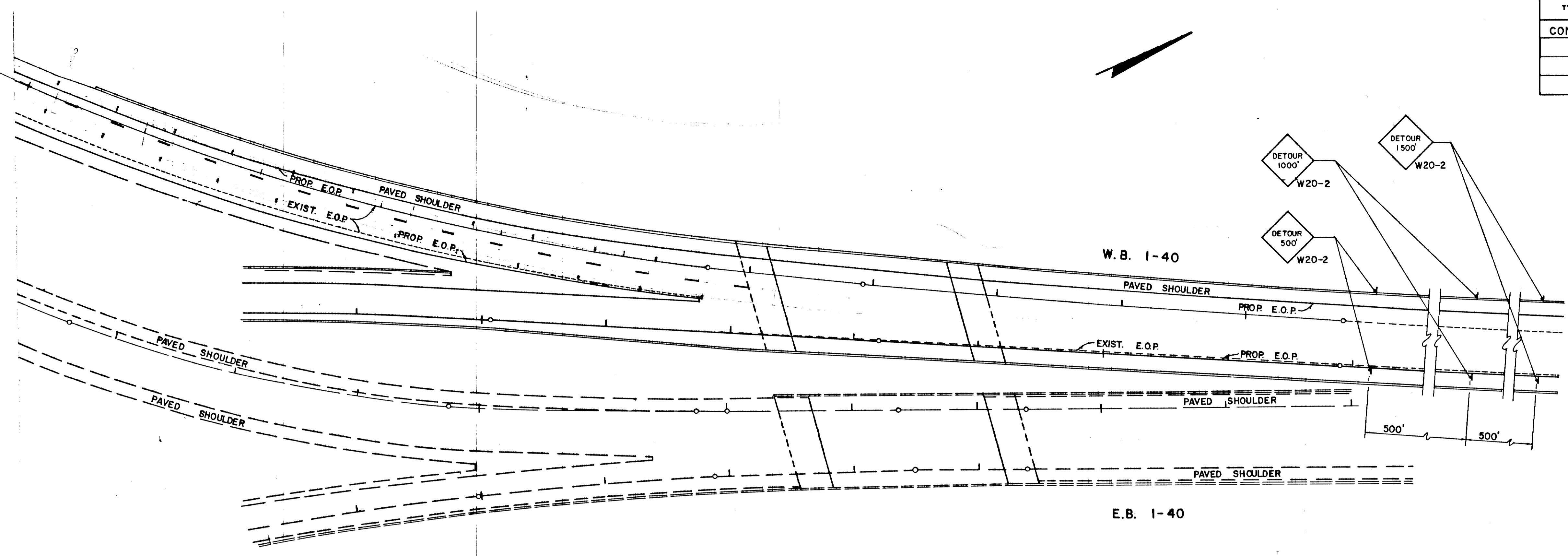
DETOUR PLAN
W.B. I-40

SCALE: 1"=50'

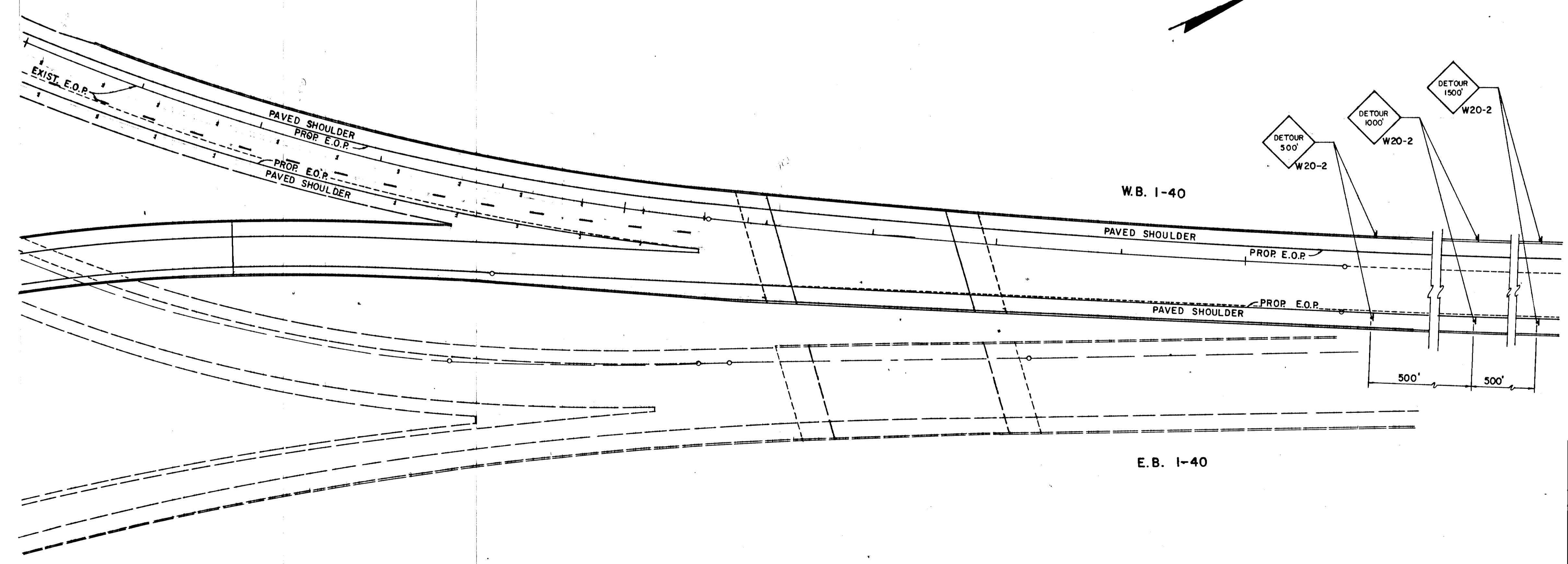
TENN. STATE HIGHWAYS
 Plans File No. 330
 Divn.

PHASE I

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	TD-TR-40-4(50)204	3 B



PHASE II



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

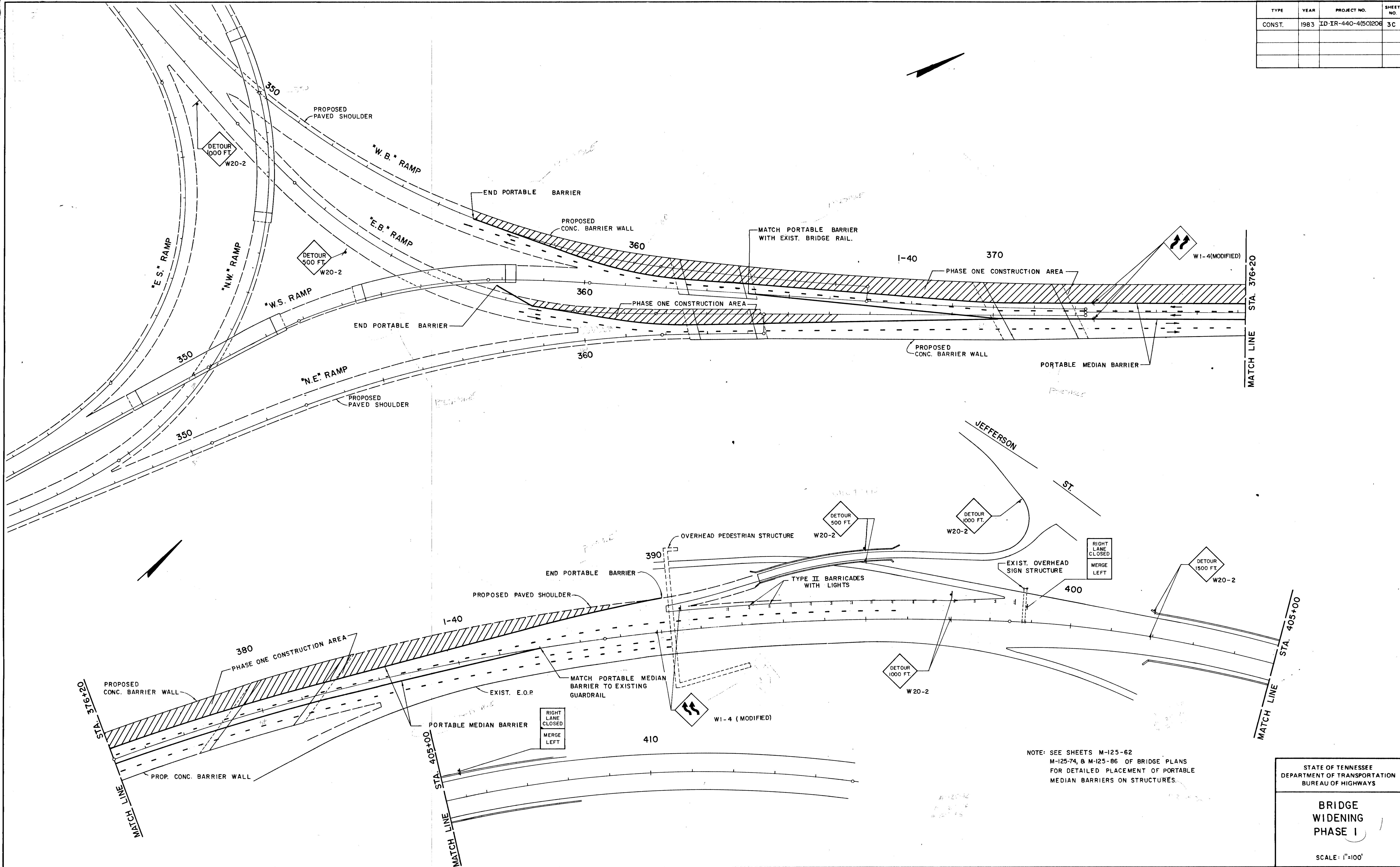
DETOUR PLAN
 W.B. I-40

WE 140
 SCALE: 1" = 50'

3-25-83

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	ID-IR-440-4(50)206	3C

MINN. STATE HIGHWAYS
 File No. 330
 Divn.



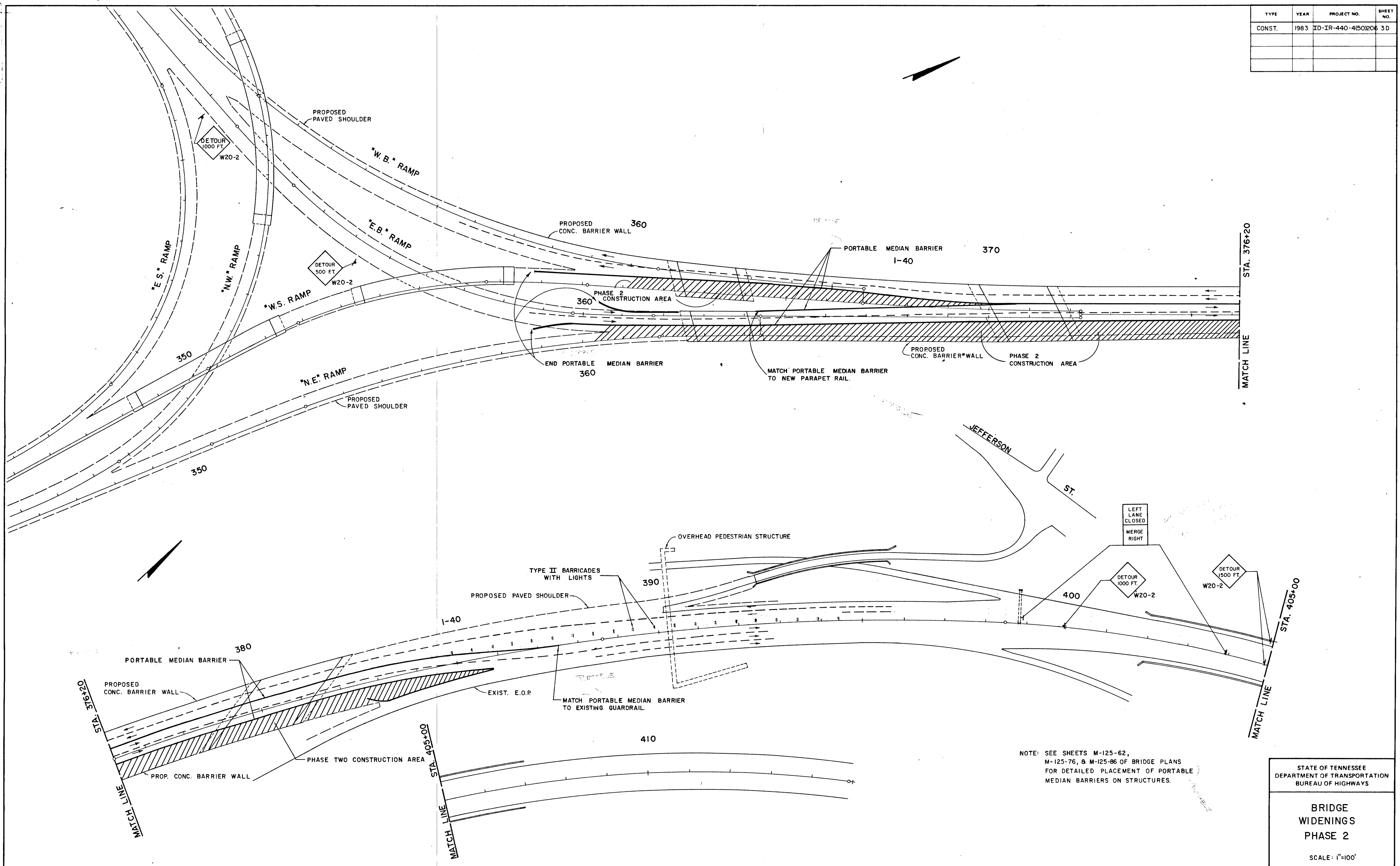
NOTE: SEE SHEETS M-125-62
 M-125-74, & M-125-86 OF BRIDGE PLANS
 FOR DETAILED PLACEMENT OF PORTABLE
 MEDIAN BARRIERS ON STRUCTURES.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**BRIDGE
 WIDENING
 PHASE I**

SCALE: 1"=100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	ID-IR-440-4(50)206 3D	



NOTE: SEE SHEETS M-125-62, M-125-76, & M-125-86 OF BRIDGE PLANS FOR DETAILED PLACEMENT OF PORTABLE MEDIAN BARRIERS ON STRUCTURES.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

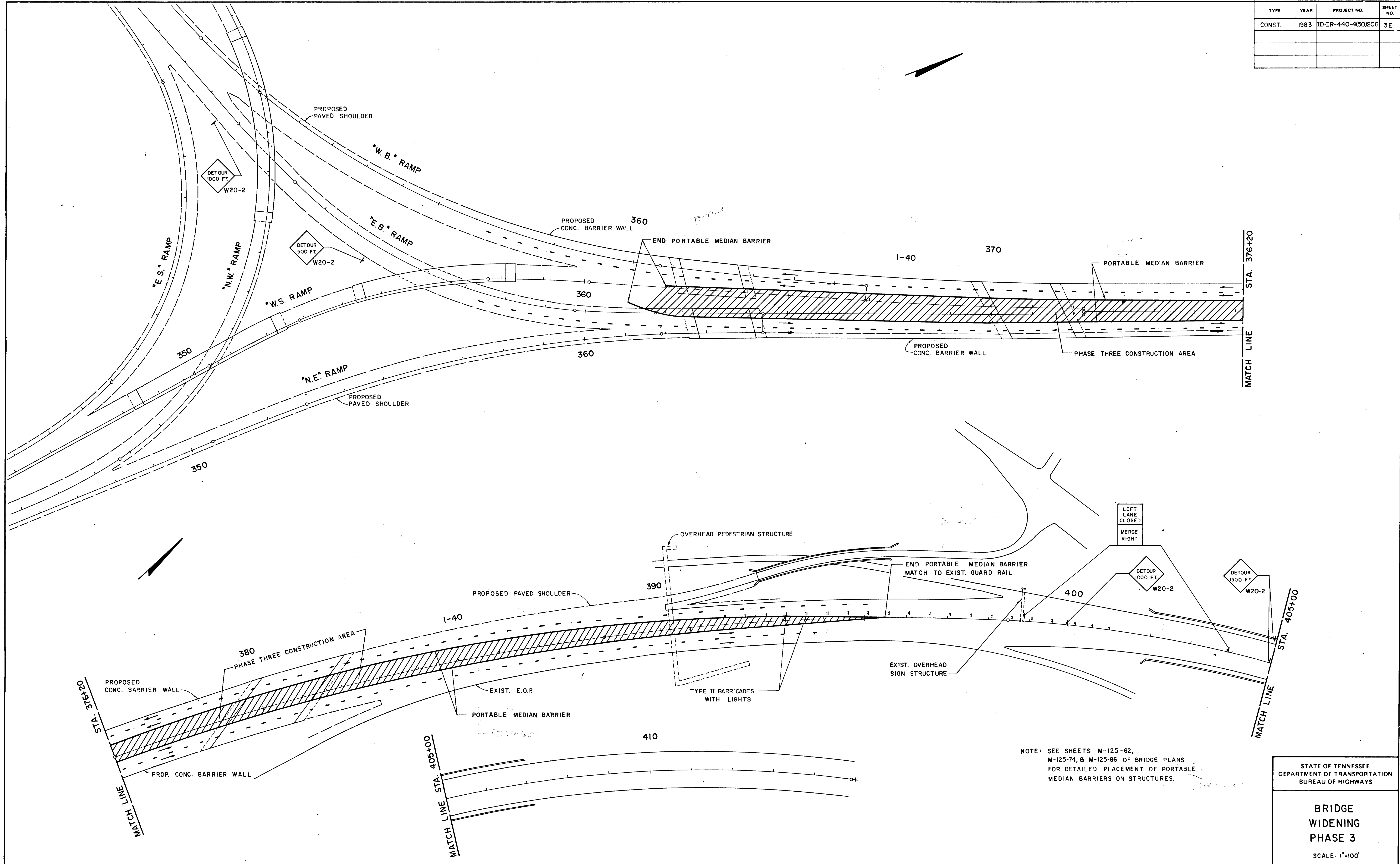
**BRIDGE
 WIDENINGS
 PHASE 2**

SCALE: 1"=100'

TEL: 615-542-2000 FAX: 615-542-2001
 330
 11/83

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	ID-IR-440-4(50)206	3E

TENSILE STRENGTH
 PL. DIV. NO. 330



NOTE: SEE SHEETS M-125-62,
 M-125-74, B M-125-86 OF BRIDGE PLANS
 FOR DETAILED PLACEMENT OF PORTABLE
 MEDIAN BARRIERS ON STRUCTURES.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**BRIDGE
 WIDENING
 PHASE 3**

SCALE: 1"=100'

TELEPHONE BOOK
 NUMBER

3 25 83

1N-330

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IP-140-1(50)200	3 F

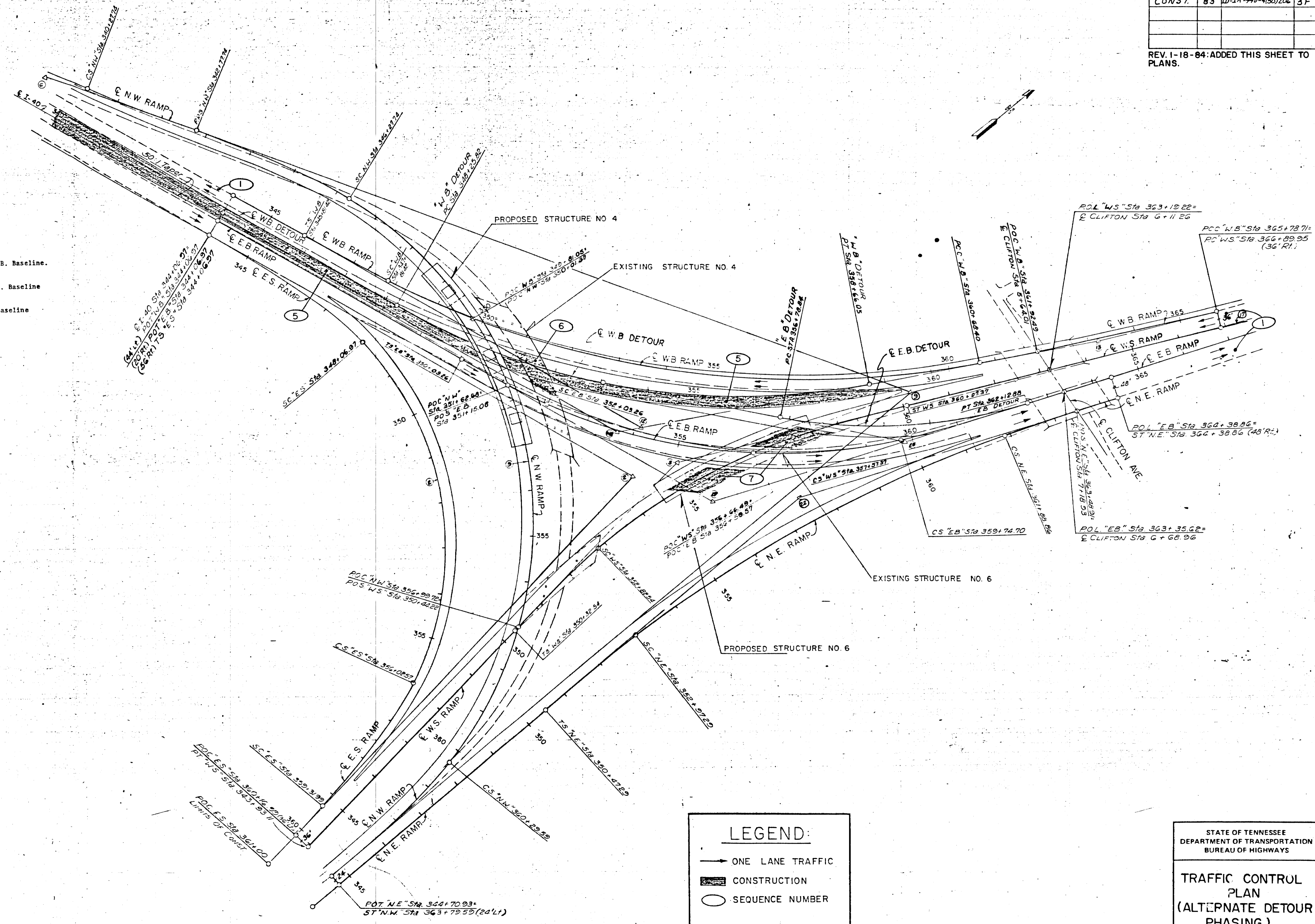
REV. 1-18-84: ADDED THIS SHEET TO PLANS.

PHASE I

1. Maintain traffic on existing pavement.
2. Construct 600 L.F. temporary double face guardrail 28' Rt. W.B. Baseline. Station 344 + 00 to 350 + 00 (tie to existing).
3. Construct 600 L.F. temporary double face guardrail 4' Lt. E.B. Baseline. Station 344 + 00 to 350 + 00 (tie to existing).
4. Construct 200 L.F. temporary single face guardrail Rt. W.B. Baseline. Station 356 + 00 to 358 + 00.
5. Construct W. B. Detour.
6. Remove span #3 of structure #4.
7. Remove span #1 and #3 of structure #6.

PI. STA.'S FOR RAMPS

- ⑥ "N.W." P.I. Sta. 339+46.58
- ⑨ "N.W." P.I. Sta. 358+82.22
- ⑫ "W.B." P.I. Sta. 354+06.10
- ⑬ "E.B." P.I. Sta. 356+20.95
- ⑭ "E.S." P.I. Sta. 354+45.34
- ⑮ "W.S." P.I. Sta. 355+30.63
- ⑰ "N.E." P.I. Sta. 357+50.93
- ⑱ "W.B." P.I. Sta. 363+23.63
- ⑲ DETOUR P.I. Sta. 353+70.07
- ⑳ DETOUR P.I. Sta. 359+51.87



LEGEND:

- ONE LANE TRAFFIC
- ▨ CONSTRUCTION
- SEQUENCE NUMBER

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TRAFFIC CONTROL PLAN
(ALTERNATE DETOUR PHASING)

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-10-440-4 (50)206	3G

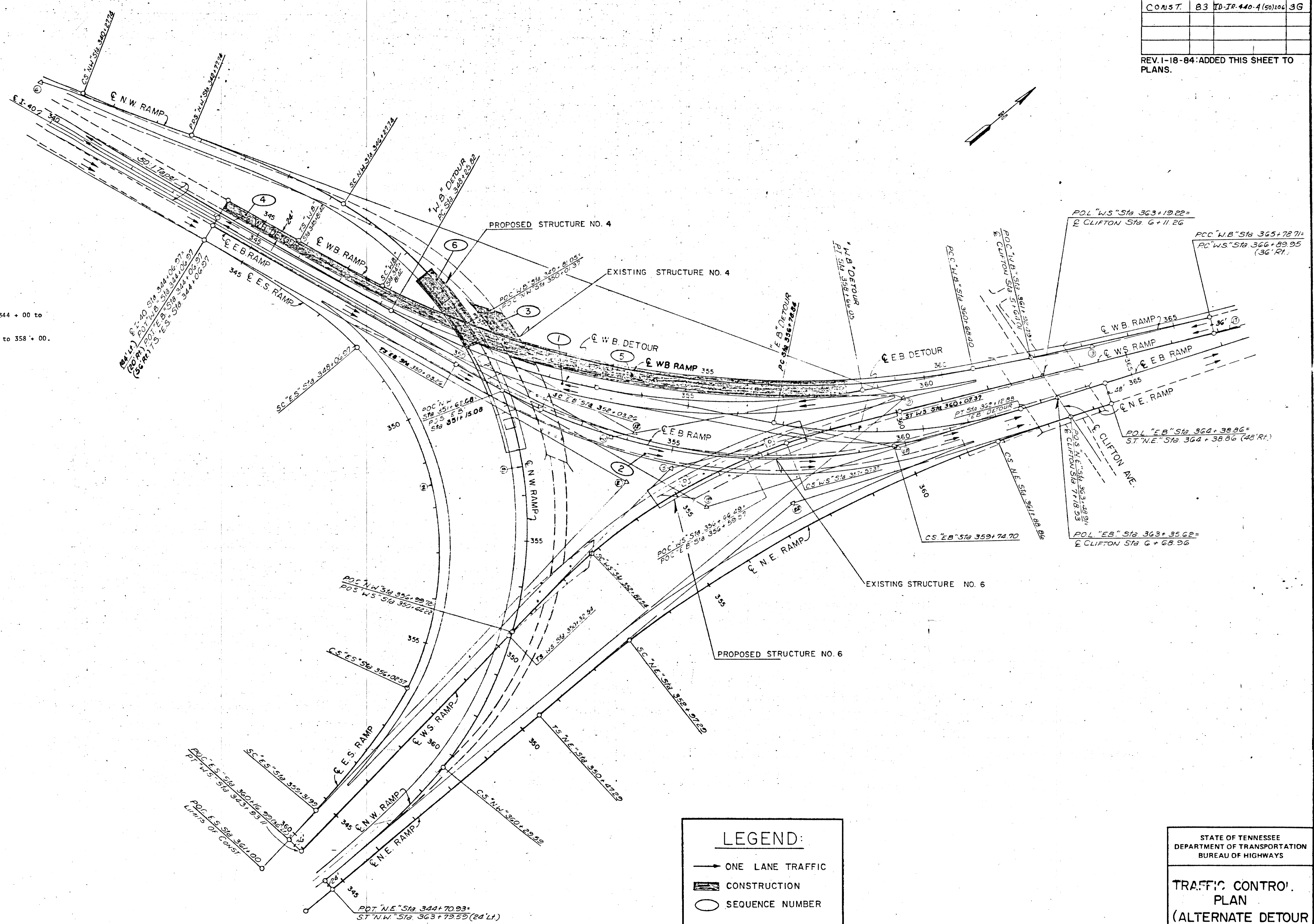
REV. 1-18-84: ADDED THIS SHEET TO PLANS.

110-330

- PHASE II
- Shift W.B. traffic to W. B. detour.
 - Maintain E.B. traffic on existing E.B. lanes.
 - Remove span #1 and #2 of structure #4.
 - Construct two northerly lanes of proposed W.B. ramp station 344 + 00 to 347 + 00.
 - Construct three lanes of proposed W.B. ramp Station 347 + 00 to 358 + 00.
 - Construct structure #4 to field splice #2.

PI. STA.'s FOR RAMPS

- ① "N.W." P.I. Sta. 339+46.58
- ② "N.W." P.I. Sta. 358+82.22
- ③ "W.B." P.I. Sta. 354+06.10
- ④ "E.B." P.I. Sta. 356+20.95
- ⑤ "E.S." P.I. Sta. 354+45.34
- ⑥ "W.S." P.I. Sta. 355+30.63
- ⑦ "N.E." P.I. Sta. 357+50.93
- ⑧ "W.B." P.I. Sta. 363+23.63
- ⑨ DETOUR P.I. Sta. 353+70.07
- ⑩ DETOUR P.I. Sta. 359+51.87



LEGEND:

- ONE LANE TRAFFIC
- ▨ CONSTRUCTION
- SEQUENCE NUMBER

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

**TRAFFIC CONTROL PLAN
(ALTERNATE DETOUR PHASING)**

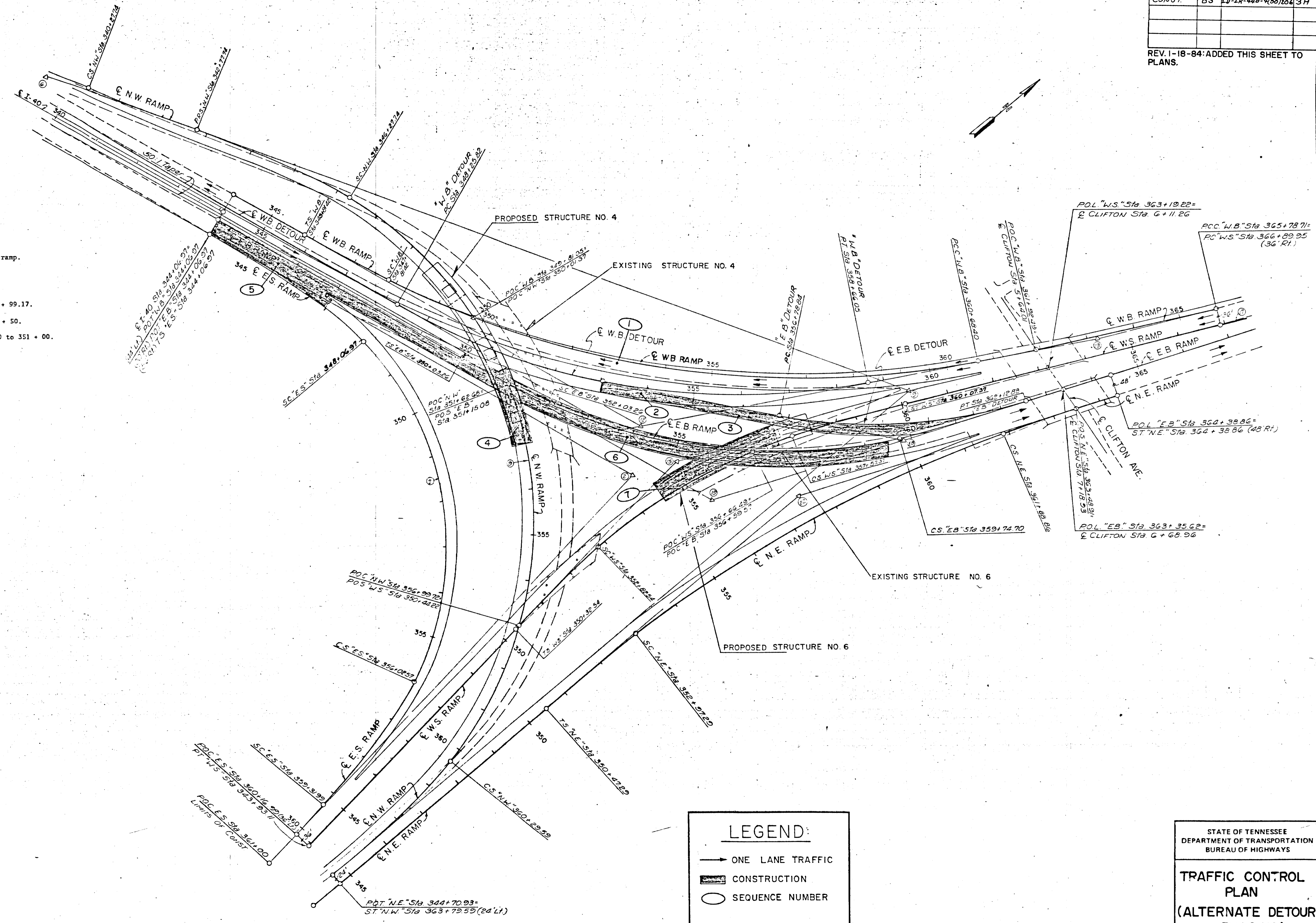
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	B3	LD-IR-440-4(50)204	3H

REV. 1-18-84: ADDED THIS SHEET TO PLANS.

1N-330

- PHASE III
- Shift W.B. traffic to two northerly lanes of proposed W.B. ramp.
 - Construct E.B. detour.
 - Shift E.B. traffic to detour.
 - Construct structure #4 from field splice #3 to station 352 + 99.17.
 - Construct three lanes of E.B. ramp station 351 + 00 to 359 + 50.
 - Construct two southerly lanes of E.B. ramp station 344 + 00 to 351 + 00.
 - Remove structure #6 and construct structure #6 to pier #2.

- PI STA.'s FOR RAMPS
- ⑥ "N.W." P.I. Sta. 339 + 46.58
 - ⑨ "N.W." P.I. Sta. 358 + 82.22
 - ⑫ "W.B." P.I. Sta. 354 + 06.10
 - ⑭ "E.B." P.I. Sta. 356 + 20.95
 - ⑮ "E.S." P.I. Sta. 354 + 45.34
 - ⑯ "W.S." P.I. Sta. 355 + 30.63
 - ⑰ "N.E." P.I. Sta. 357 + 50.93
 - ⑱ "W.B." P.I. Sta. 363 + 23.63
 - ⑳ DETOUR P.I. Sta. 353 + 70.07
 - ㉑ DETOUR P.I. Sta. 359 + 51.87



LEGEND:

- ONE LANE TRAFFIC
- ▨ CONSTRUCTION
- SEQUENCE NUMBER

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TRAFFIC CONTROL PLAN
(ALTERNATE DETOUR PHASING)

1111-330

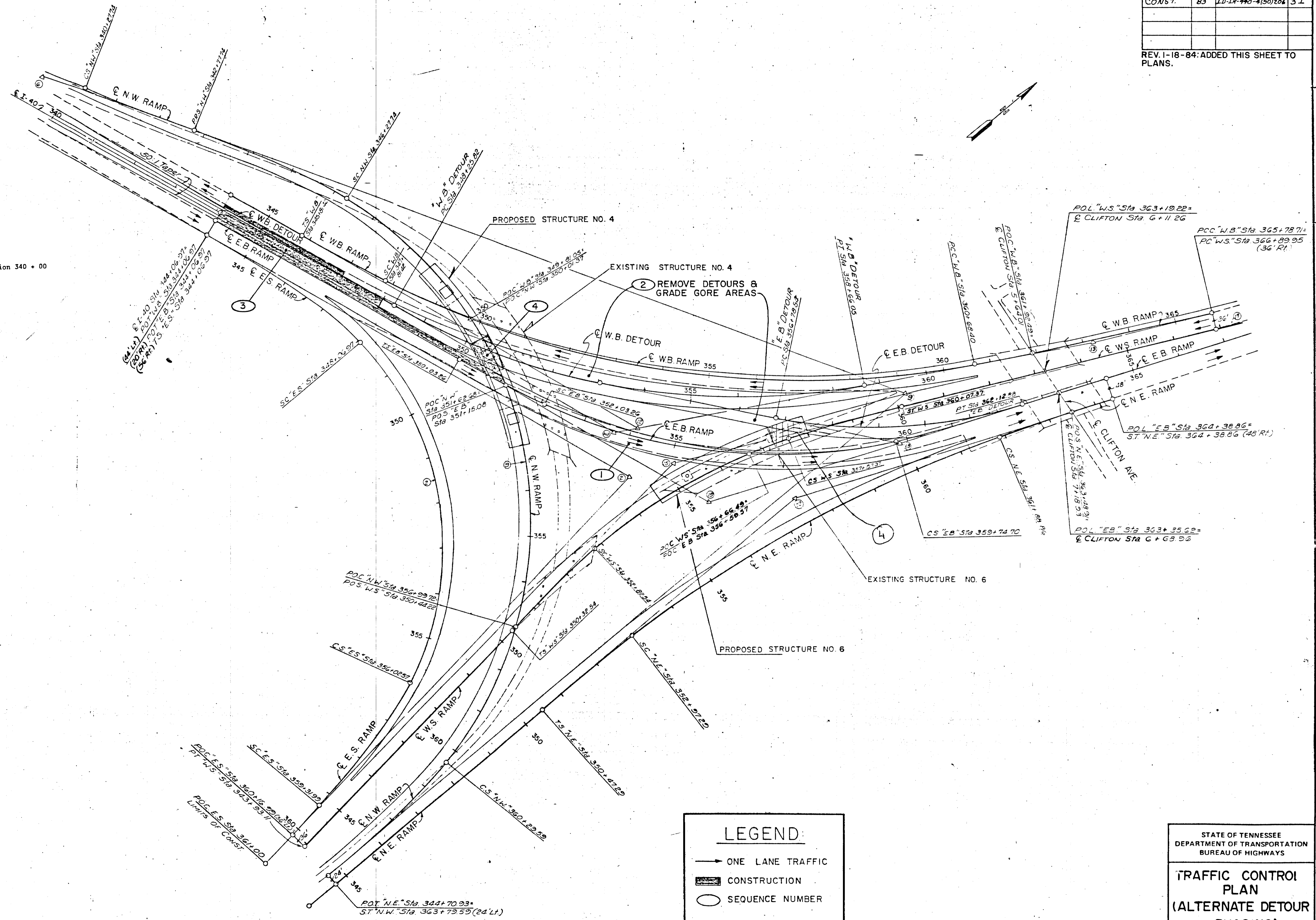
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-1A-140-4(50)206	31

REV. 1-18-84: ADDED THIS SHEET TO PLANS.

- PHASE IV
- Shift E.B. traffic to two southerly proposed lanes.
 - Remove detour.
 - Construct median and inside lane and E.B. & W.B. ramps station 340 + 00 to 351 + 00.
 - Complete structure #6. 4-4
 - Open new structures and roadway to traffic.

PI STA'S FOR RAMPS

- ⑥ "NW" PI Sta. 339+46.58
- ⑨ "NW" PI Sta. 358+82.22
- ⑫ "WB" PI Sta. 354+06.10
- ⑭ "EB" PI Sta. 356+20.95
- ⑰ "ES" PI Sta. 354+45.34
- ⑲ "WS" PI Sta. 355+30.63
- ⑳ "NE" PI Sta. 357+50.93
- ㉑ "WB" PI Sta. 363+23.63
- ㉒ DETOUR PI Sta. 353+70.07
- ㉓ DETOUR PI Sta. 359+51.87



LEGEND:

- ONE LANE TRAFFIC
- ▨ CONSTRUCTION
- SEQUENCE NUMBER

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

**TRAFFIC CONTROL PLAN
(ALTERNATE DETOUR PHASING)**

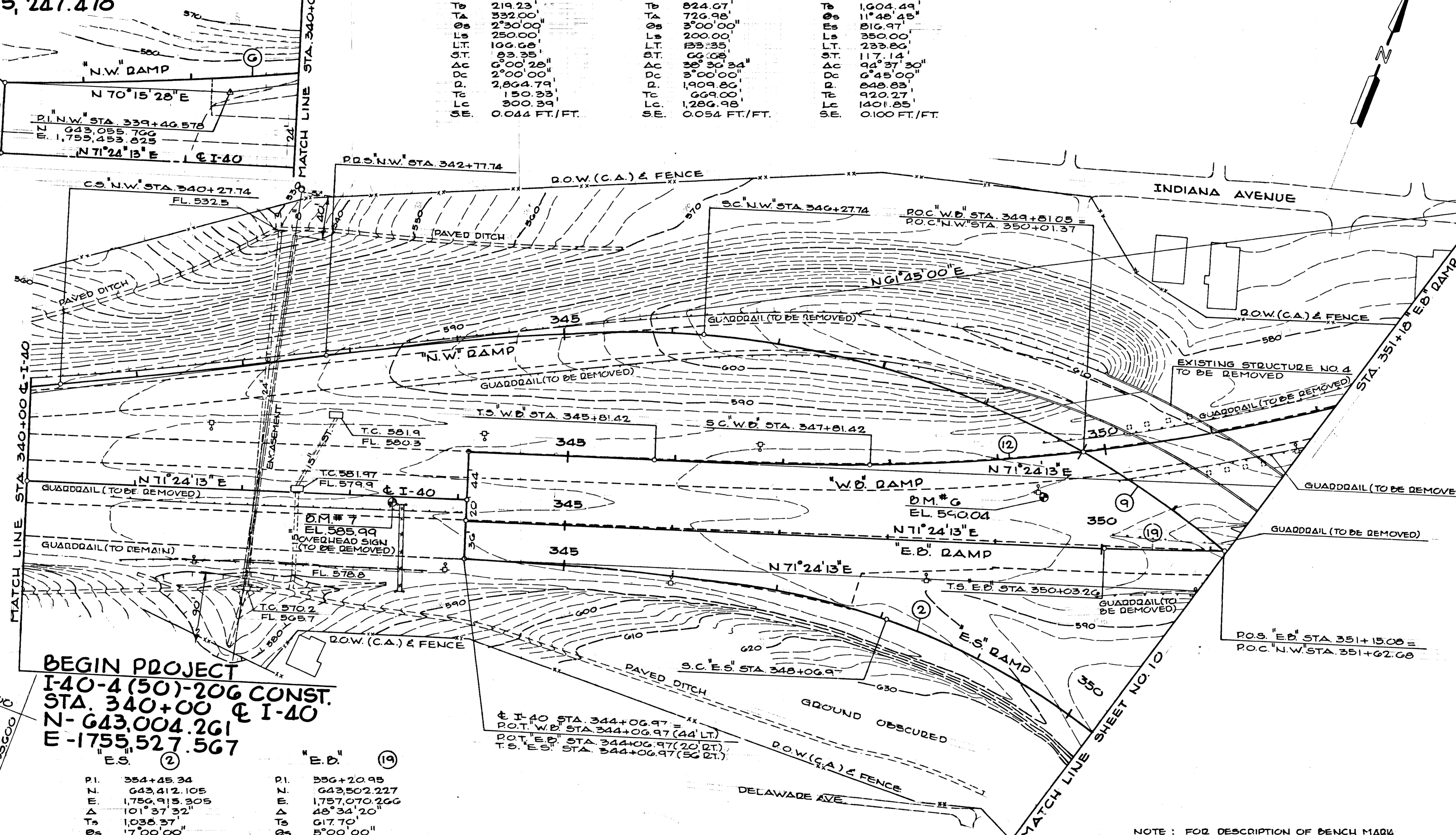
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 Date
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NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	9

LIMITS OF CONSTRUCTION
 "N.W." RAMP STA. 337+27.35
 N- 642,981.712
 E- 1,755,247.478

"N.W." (6)		"W.D." (12)		"N.W." (9)	
P.I.	339+46.50	P.I.	354+06.10	P.I.	358+82.22
N.	643,085.766	N.	643,494.367	N.	643,972.345
E.	1,755,453.825	E.	1,756,846.218	E.	1,757,159.660
Δ	8°30'28"	Δ	41°36'34"	Δ	118°15'00"
Ts	219.23'	Ts	824.67'	Ts	1,004.49'
Ta	332.00'	Ta	726.98'	Ta	1,148'48"
Es	2°30'00"	Es	3°00'00"	Es	816.97'
Ls	250.00'	Ls	200.00'	Ls	350.00'
Lt	106.68'	Lt	133.35'	Lt	233.86'
St	83.35'	St	66.08'	St	117.14'
Ac	0°00'28"	Ac	38°36'34"	Ac	94°37'30"
Dc	2°00'00"	Dc	3°00'00"	Dc	6°45'00"
D.	2,864.79'	D.	1,909.80'	D.	648.83'
Tc	150.33'	Tc	669.00'	Tc	920.27'
Lc	300.39'	Lc	1,286.98'	Lc	1401.85'
Se	0.044 FT./FT.	Se	0.054 FT./FT.	Se	0.100 FT./FT.



BEGIN PROJECT
 I-40-4(50)-206 CONST.
 STA. 340+00 & I-40
 N- 643,004.261
 E- 1,755,527.567

"E.S." (2)		"E.D." (19)	
P.I.	354+45.34	P.I.	356+20.95
N.	643,412.105	N.	643,502.227
E.	1,756,915.305	E.	1,757,070.266
Δ	101°37'32"	Δ	48°34'20"
Ts	1,038.37'	Ts	617.70'
Es	17°00'00"	Es	5°00'00"
Ls	408.34'	Ls	112.85'
Lt	400.00'	Lt	200.00'
Lt	267.91'	Lt	133.39'
St	134.40'	St	66.72'
Ac	07°37'32"	Ac	38°34'20"
Dc	8°30'00"	Dc	5°00'00"
D.	674.07'	D.	1,145.92'
Tc	451.47'	Tc	400.98'
Lc	795.60'	Lc	771.44'
Se	0.100 FT./FT.	Se	0.083 FT./FT.

NOTE: FOR DESCRIPTION OF BENCH MARK NO'S 6 & 7, SEE PROFILE SHEET NO. 14.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

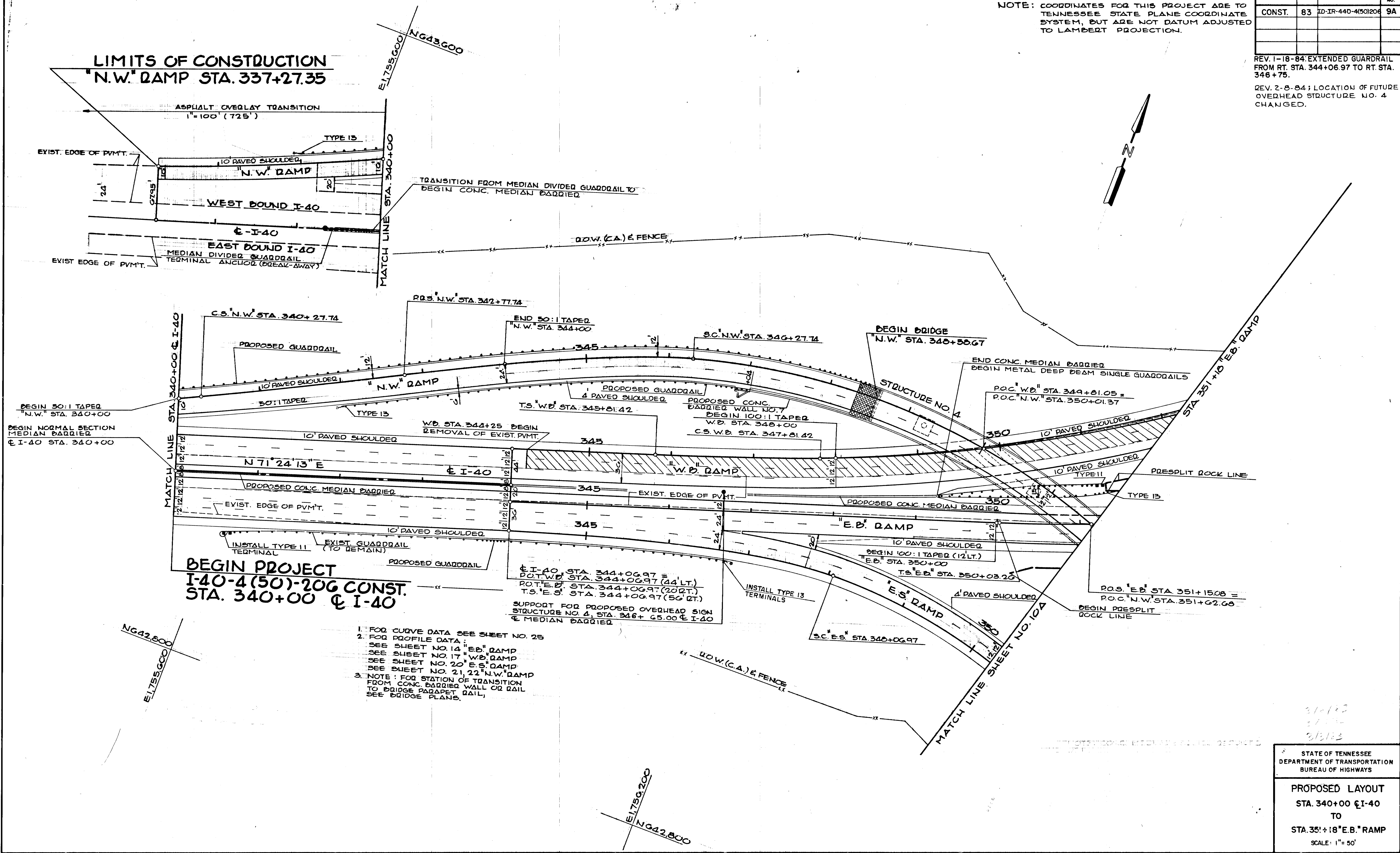
PRESENT LAYOUT
 STA 340+00 & I-40
 TO
 STA. 351+18 "E.B" RAMP
 SCALE: 1" = 50'

BRUNING 29411

NOTE: COORDINATES FOR THIS PROJECT ARE TO
 TENNESSEE STATE PLANE COORDINATE
 SYSTEM, BUT ARE NOT DATUM ADJUSTED
 TO LAMBERT PROJECTION.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IR-440-4(50)206	9A

REV. 1-18-84: EXTENDED GUARDRAIL
 FROM RT. STA. 344+06.97 TO RT. STA.
 346+75.
 REV. 2-8-84: LOCATION OF FUTURE
 OVERHEAD STRUCTURE NO. 4
 CHANGED.



BEGIN PROJECT
I-40-4(50)-206 CONST.
STA. 340+00 & I-40

- FOR CURVE DATA SEE SHEET NO. 25
- FOR PROFILE DATA:
 SEE SHEET NO. 14 "E.B." DAMP
 SEE SHEET NO. 17 "W.B." DAMP
 SEE SHEET NO. 20 "E.S." DAMP
 SEE SHEET NO. 21, 22 "N.W." DAMP
- NOTE: FOR STATION OF TRANSITION
 FROM CONC. BARRIER WALL OR RAIL
 TO BRIDGE PARAPET RAIL,
 SEE BRIDGE PLANS.

SUPPORT FOR PROPOSED OVERHEAD SIGN
 STRUCTURE NO. 4, STA. 346+65.00 & I-40
 & MEDIAN BARRIER
 & I-40 STA. 344+06.97 =
 P.O.T. W.D. STA. 344+06.97 (44' LT.)
 P.O.T. E.B. STA. 344+06.97 (20' T.)
 T.S. E.S. STA. 344+06.97 (56' RT.)

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
PROPOSED LAYOUT
STA. 340+00 & I-40
TO
STA. 351+10 "E.B." RAMP
 SCALE: 1" = 50'

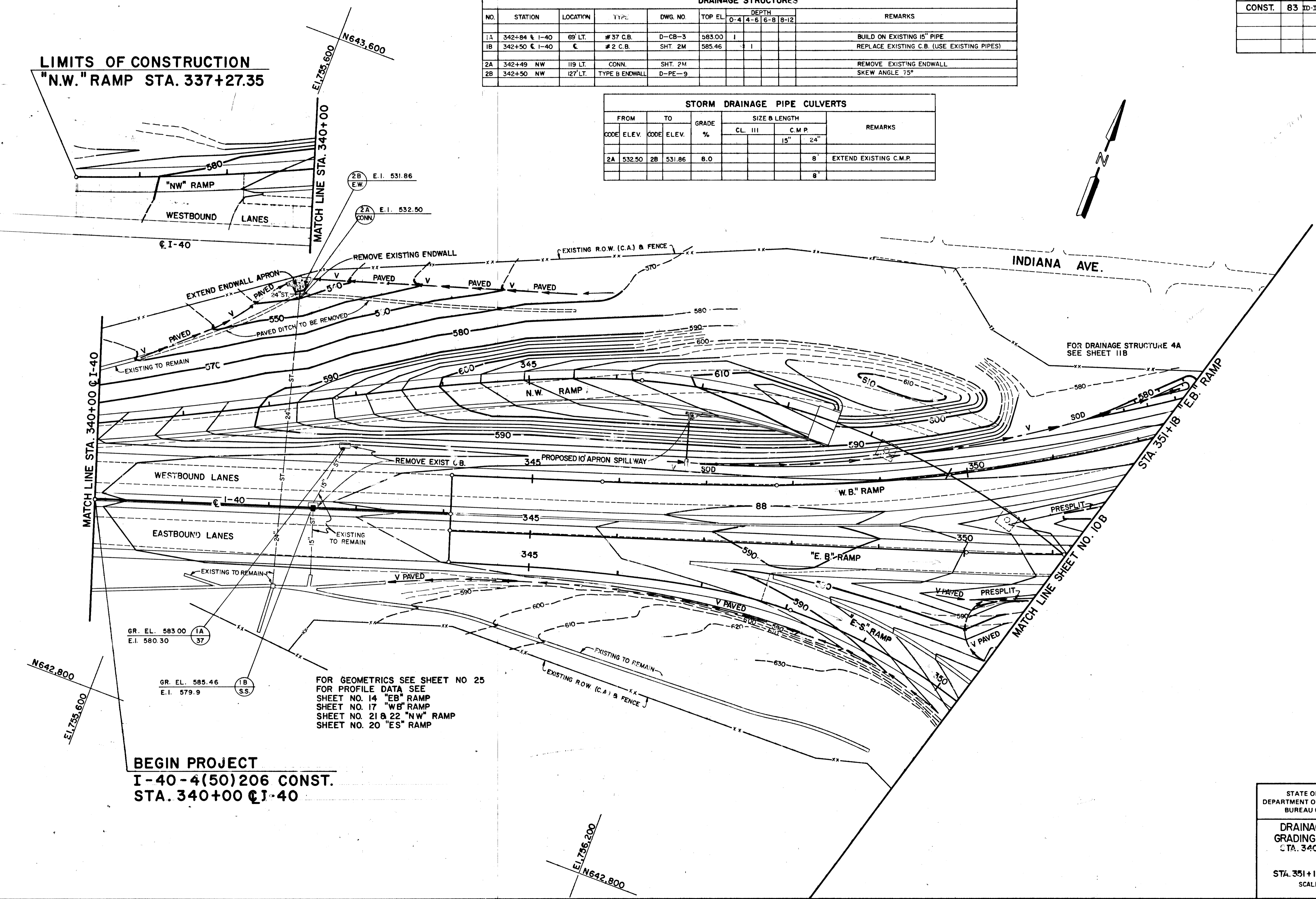
TENN. STATE HIGHWAY
 Plans
 Div.
 No. 330

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	9B

DRAINAGE STRUCTURES											
NO.	STATION	LOCATION	TYPE	DWG. NO.	TOP EL.	DEPTH				REMARKS	
						0-4	4-6	6-8	8-12		
1A	342+84	I-40	69' LT.	# 37 C.B.	D-CB-3	583.00	1				BUILD ON EXISTING 15" PIPE
1B	342+50	I-40	CL	# 2 C.B.	SHT 2M	585.46	1				REPLACE EXISTING C.B. (USE EXISTING PIPES)
2A	342+49	NW	119 LT.	CONN.	SHT. 2M						REMOVE EXISTING ENDWALL
2B	342+50	NW	127 LT.	TYPE B ENDWALL	D-PE-9						SKEW ANGLE 75°

STORM DRAINAGE PIPE CULVERTS									
FROM	TO	GRADE %	SIZE & LENGTH		REMARKS				
			CL. III	C.M.P.					
CODE	ELEV.	CODE	ELEV.	15"	24"				
2A	532.50	2B	531.86	8'		EXTEND EXISTING C.M.P.			
				8'					

LIMITS OF CONSTRUCTION
"N.W." RAMP STA. 337+27.35



GR. EL. 583.00 (1A)
 E.I. 580.30 (37)

GR. EL. 585.46 (1B)
 E.I. 579.9 (S.S.)

FOR GEOMETRICS SEE SHEET NO 25
 FOR PROFILE DATA SEE
 SHEET NO. 14 "EB" RAMP
 SHEET NO. 17 "WB" RAMP
 SHEET NO. 21 & 22 "NW" RAMP
 SHEET NO. 20 "ES" RAMP

BEGIN PROJECT
I-40-4(50)206 CONST.
STA. 340+00 CL I-40

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**DRAINAGE AND
 GRADING LAYOUT**
STA. 340+00 CL I-40
TO
STA. 351+18 "E.B." RAMP
 SCALE: 1" = 50'

NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IR-440-4(50)206	10

* EXIT SPIRAL FOR "E.S." RAMP IS A TRANSITION SPIRAL BETWEEN ② AN ③°30' CURVE, AND ④ A 1°30' CURVE. CURVE DATA FOR ② GIVEN TO THEORETICAL ST. STA. 360+02.57 FOR SIMPLICITY OF LAYOUT.

"E.S." ④	"E.S."* ②	"N.W." ⑨
P.I. 361+85.69	P.I. 354+45.34	P.I. 358+82.22
N. 642,199.903	N. 643,412.105	N. 643,972.345
E. 1,757,065.600	E. 1,756,915.305	E. 1,757,159.600
Δ 7°30'00"	Δ 10°31'32"	Δ 118°15'00"
Ts 253.70	Ts 1038.37	Ts 1,004.49
Ta 347.04	Es 408.34	Es 816.97
Os 1°30'00"	Os 17°00'00"	Os 11°48'45"
Ls 200.00	Ls 400.00	Ls 350.00
Lt 133.34	Lt 267.91	Lt 233.86
St 66.67	St 134.40	St 117.14
Dc 0°00'00"	Dc 0°00'00"	Dc 94°37'30"
Ds 1°30'00"	Ds 8°30'00"	Ds 6°45'00"
Dt 3819.72'	Dt 074.07'	Dt 848.83'
Lc 200.18'	Lc 451.47'	Lc 920.27'
Ls 400.00'	Ls 795.60'	Ls 1,401.85'
SE. 0.044 FT./FT.	SE. 0.100 FT./FT.	SE. 0.100 FT./FT.

LIMITS OF CONSTRUCTION
P.O.C. "E.S." STA. 361+00
N. 642,284.433
E. 1,757,050.805

P.I. "E.S." STA. 361+85.69
N. 642,199.903
E. 1,757,065.600

500°00'00"E
S.D. I-440 PARKWAY (N.I.C.)

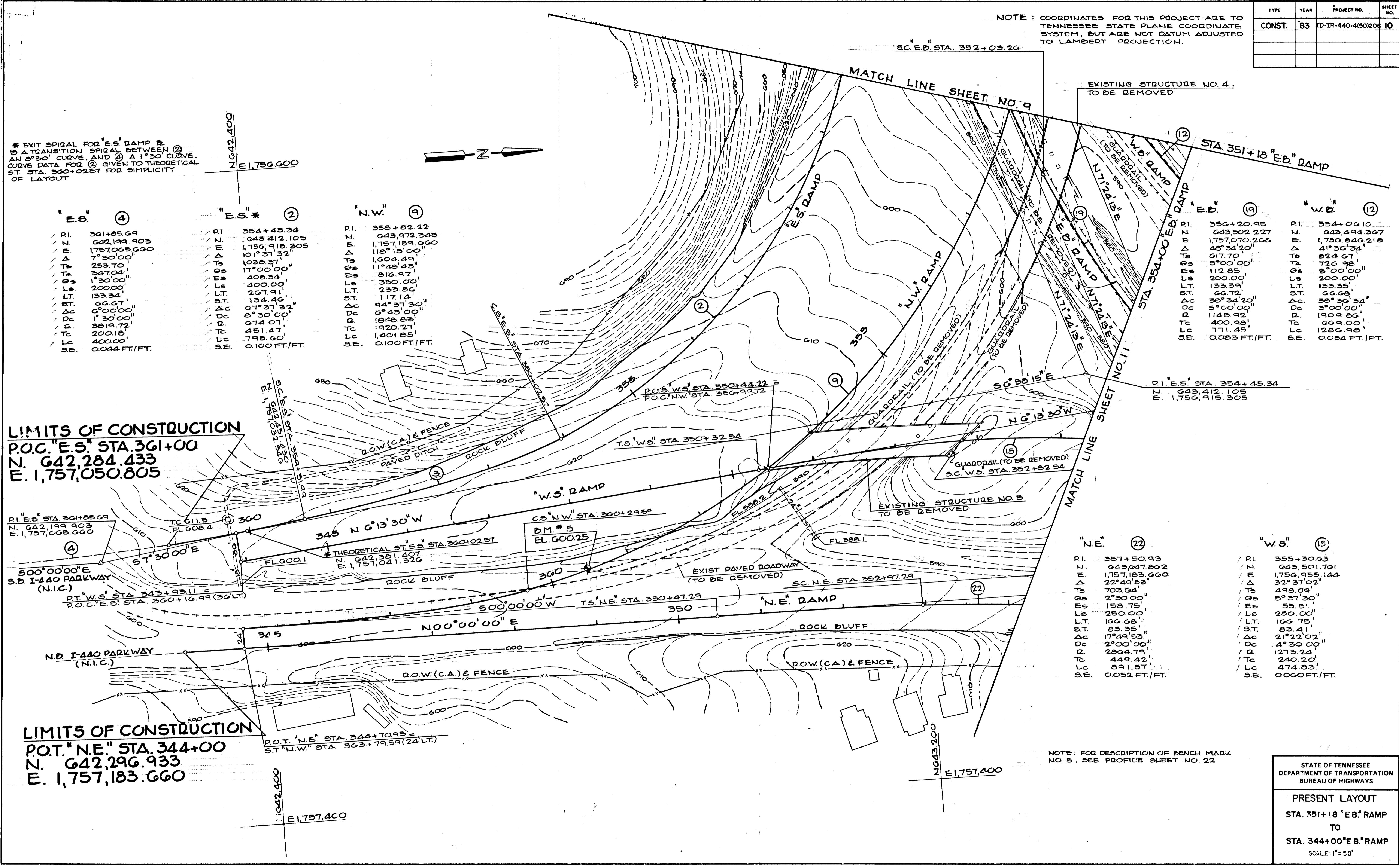
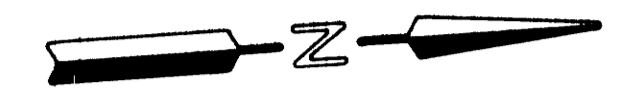
P.T. "W.S." STA. 343+93.11 =
P.O.C. "E.S." STA. 360+16.99 (30'LT.)

N.D. I-440 PARKWAY (N.I.C.)

LIMITS OF CONSTRUCTION
P.O.T. "N.E." STA. 344+00
N. 642,296.933
E. 1,757,183.660

P.O.T. "N.E." STA. 344+70.93 =
S.T. "N.W." STA. 363+79.59 (24'LT.)

N 642,400
E 1,757,400



NOTE: FOR DESCRIPTION OF BENCH MARK NO. 5, SEE PROFILE SHEET NO. 22

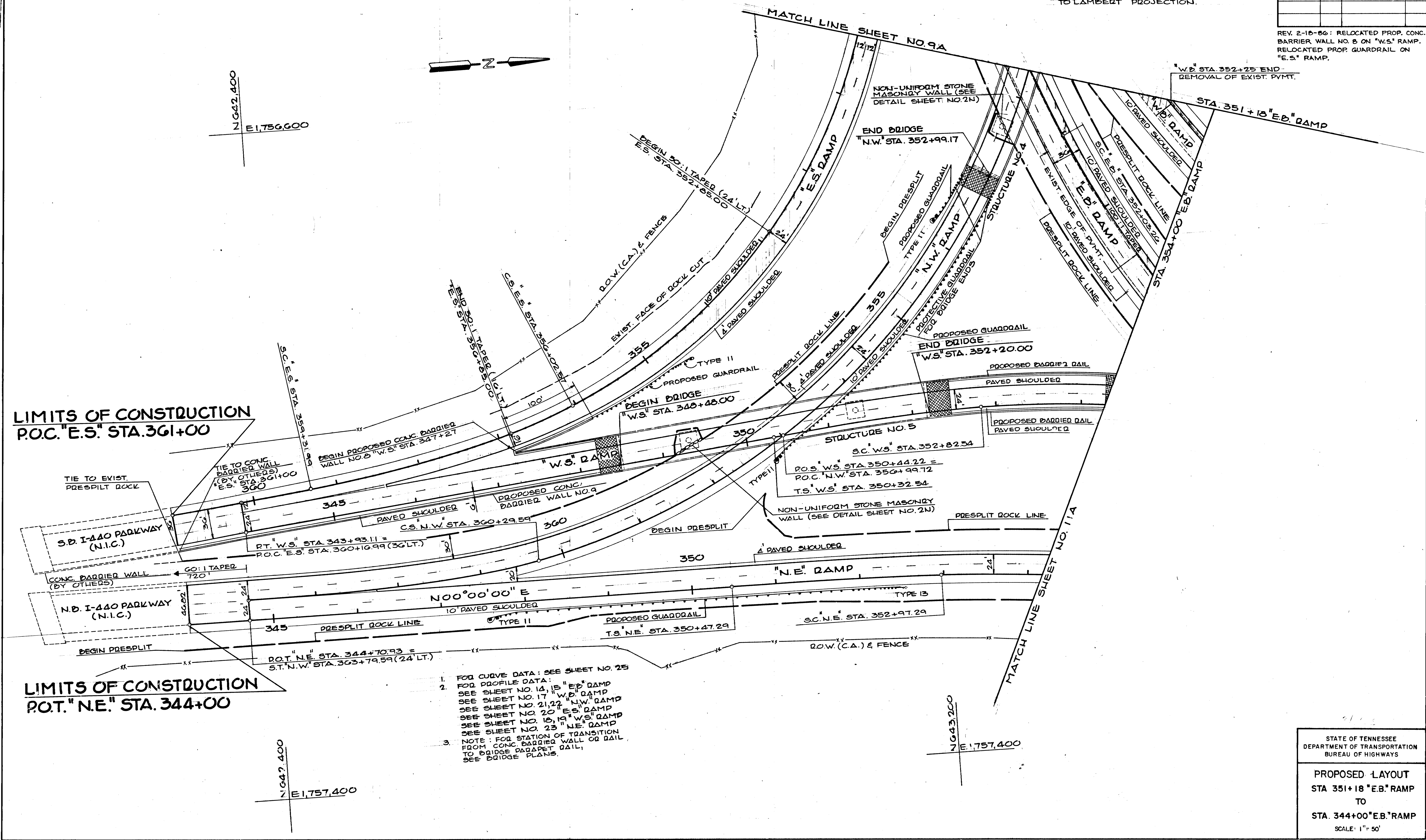
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PRESENT LAYOUT
STA. 351+18 "E.B." RAMP
TO
STA. 344+00 "E.B." RAMP
SCALE: 1" = 50'

NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	10A

REV. 2-18-86: RELOCATED PROP. CONC. BARRIER WALL NO. B ON "W.S." RAMP. RELOCATED PROP. GUARDRAIL ON "E.S." RAMP.



LIMITS OF CONSTRUCTION
 P.O.C. "E.S." STA. 361+00

LIMITS OF CONSTRUCTION
 P.O.T. "N.E." STA. 344+00

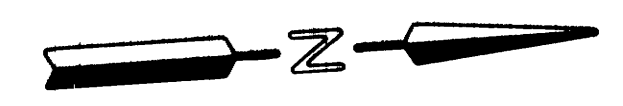
- FOR CURVE DATA: SEE SHEET NO. 25
- FOR PROFILE DATA:
 SEE SHEET NO. 14, 15 "E.S." RAMP
 SEE SHEET NO. 17 "W.S." RAMP
 SEE SHEET NO. 21, 22 "N.W." RAMP
 SEE SHEET NO. 20 "E.S." RAMP
 SEE SHEET NO. 18, 19 "W.S." RAMP
 SEE SHEET NO. 23 "N.E." RAMP
- NOTE: FOR STATION OF TRANSITION FROM CONC. BARRIER WALL OR RAIL TO BRIDGE BARRIER WALL, SEE BRIDGE PLANS.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PROPOSED LAYOUT
 STA 351+18 "E.B." RAMP
 TO
 STA. 344+00 "E.B." RAMP
 SCALE: 1" = 50'

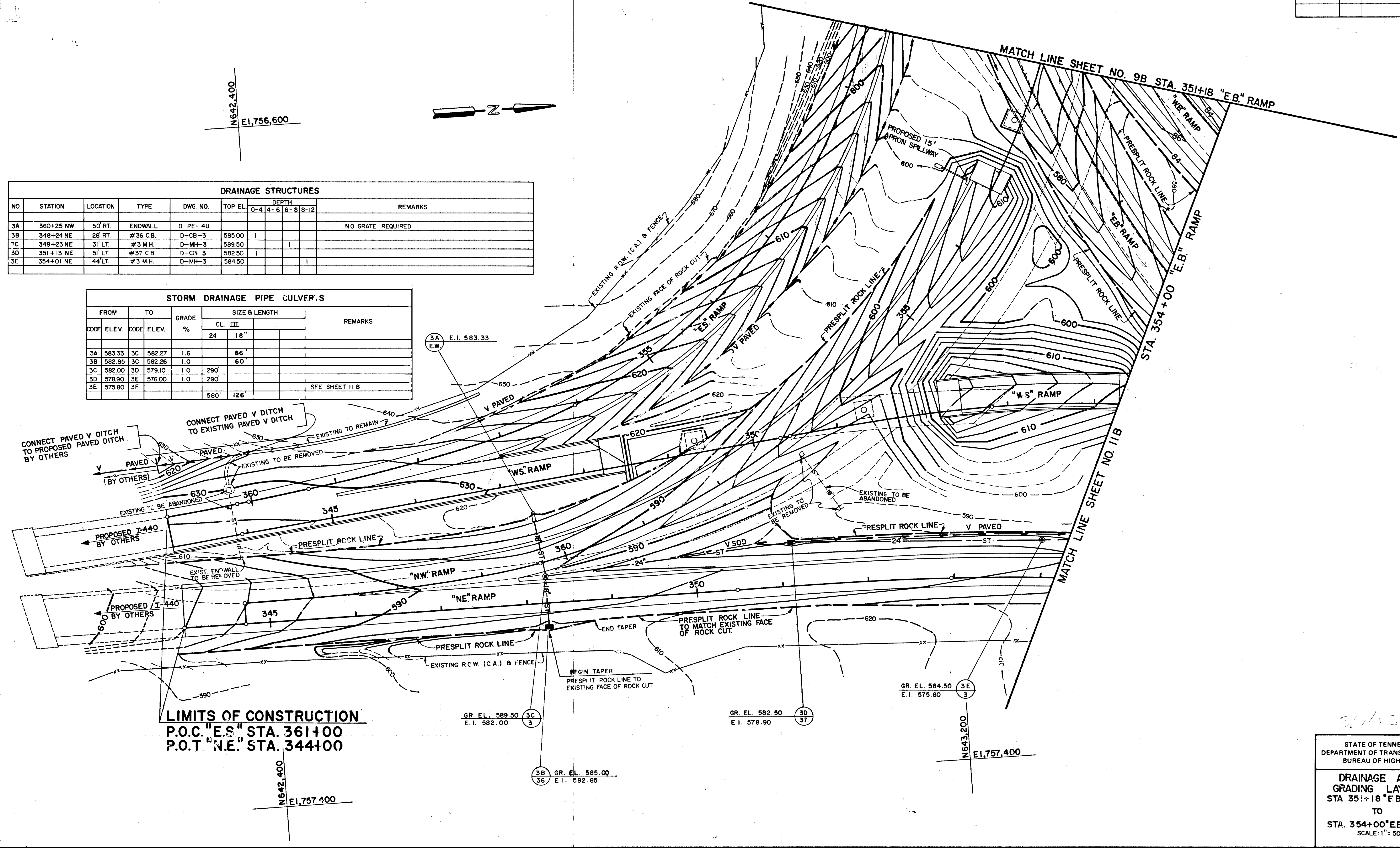
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	10B

N642.400
E1,756,600



DRAINAGE STRUCTURES											
NO.	STATION	LOCATION	TYPE	DWG. NO.	TOP EL.	DEPTH					REMARKS
						0-4	4-6	6-8	8-12		
3A	360+25 NW	50' RT.	ENDWALL	D-PE-4U	585.00						NO GRATE REQUIRED
3B	348+24 NE	28' RT.	#36 C.B.	D-CB-3	589.50						
3C	348+23 NE	31' LT.	#3 M.H.	D-MH-3	582.50						
3D	351+13 NE	51' LT.	#37 C.B.	D-CB-3	582.50						
3E	354+01 NE	44' LT.	#3 M.H.	D-MH-3	584.50						

STORM DRAINAGE PIPE CULVERTS									
FROM CODE	TO CODE	GRADE %	SIZE & LENGTH		REMARKS				
			CL. III						
ELEV.	ELEV.		24"	18"					
3A 583.33	3C 582.27	1.6	66'	60'					
3B 582.85	3C 582.26	1.0	290'						
3C 582.00	3D 579.10	1.0	290'						
3D 578.90	3E 576.00	1.0							
3E 575.80	3F		580'	126'	SEE SHEET 11B				



LIMITS OF CONSTRUCTION
P.O.C. "E.S." STA. 361+00
P.O.T. "N.E." STA. 344+00

N642.400
E1,757.400

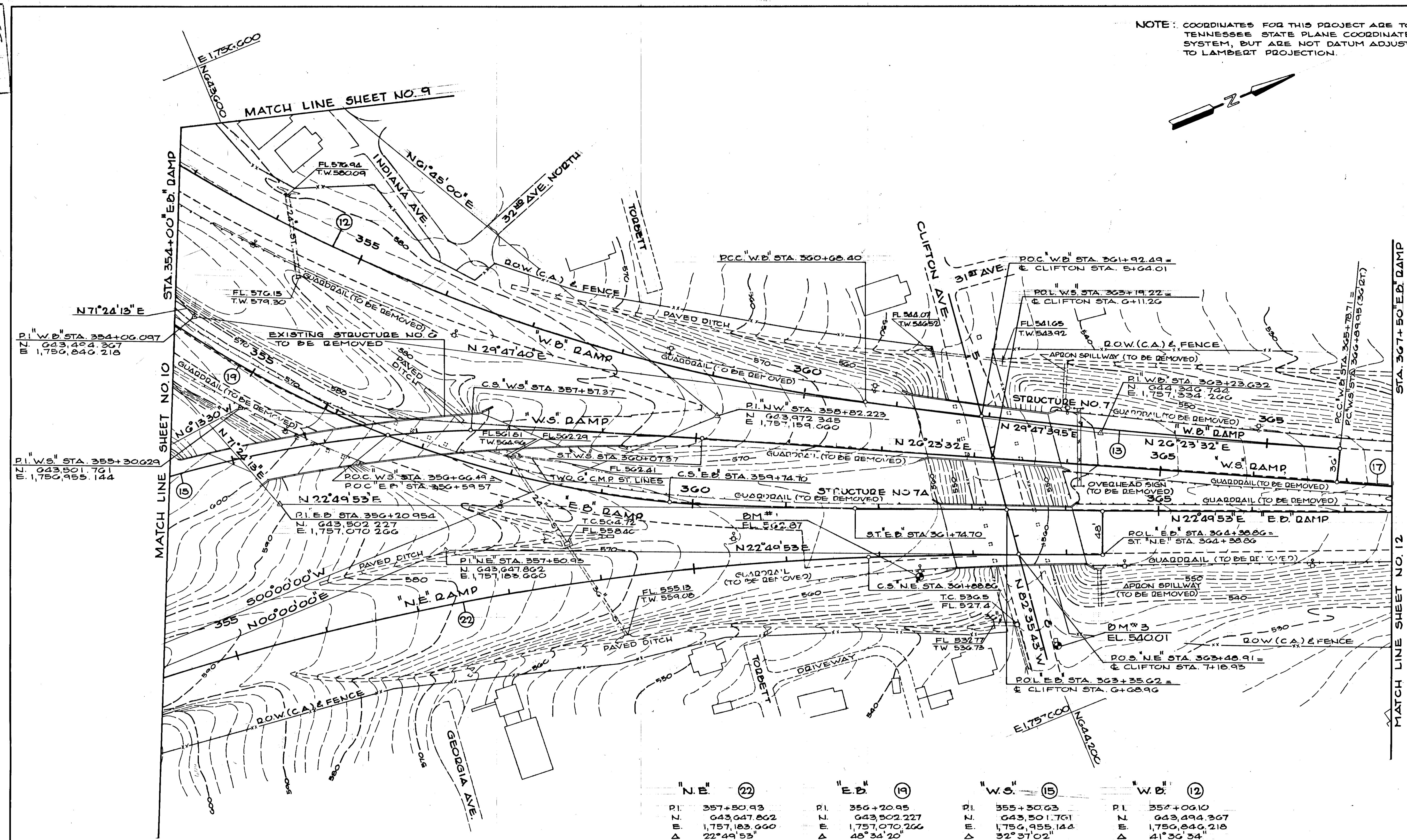
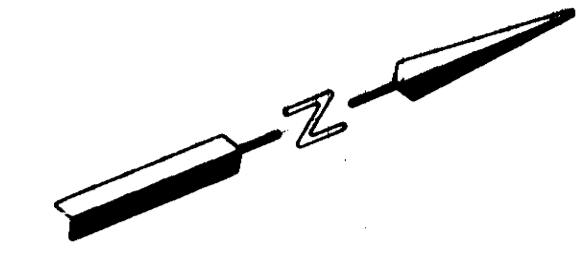
N643.200
E1,757.400

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

DRAINAGE AND GRADING LAYOUT
STA 351+18 "E.B." RAMP
TO
STA. 354+00 "E.B." RAMP
SCALE: 1" = 50'

NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	83	TD-IR-440-4(50)206	11



"W.B." (13)

P.I.	363+23.63
N.	644,346.744
E.	1,757,334.266
Δ	3°24'08"
Δc	0°40'00"
D.	8,594.37'
Tc	255.23'
Lc	510.31'
S.E.	0.0104 FT./FT.

"W.S." (17)

P.I.	369+57.10
N.	644,798.675
E.	1,757,598.719
Δ	3°33'39"
Δc	0°40'00"
D.	8,594.37'
Tc	267.15'
Lc	534.13'
S.E.	0.0104 FT./FT.

"N.E." (22)

P.I.	357+50.93
N.	643,647.862
E.	1,757,183.660
Δ	22°49'53"
Ts	703.64'
Os	2°30'00"
Es	158.75'
Ls	250.00'
LT.	166.68'
ST.	83.35'
Δc	17°49'53"
Dc	2°00'00"
D.	2,864.79'
Tc	449.42'
Lc	891.57'
S.E.	0.052 FT./FT.

"E.B." (19)

P.I.	356+20.95
N.	643,502.227
E.	1,757,070.266
Δ	48°34'20"
Ts	617.70'
Os	5°00'00"
Es	112.85'
Ls	200.00'
LT.	133.39'
ST.	66.72'
Δc	38°34'20"
Dc	5°00'00"
D.	1,145.92'
Tc	400.98'
Lc	771.44'
S.E.	0.083 FT./FT.

"W.S." (15)

P.I.	355+30.63
N.	643,501.761
E.	1,756,955.144
Δ	32°37'02"
Ts	498.09'
Os	5°37'30"
Es	55.51'
Ls	250.00'
LT.	166.75'
ST.	83.41'
Δc	21°22'02"
Dc	4°30'00"
D.	1,273.24'
Tc	240.20'
Lc	474.83'
S.E.	0.060 FT./FT.

"W.B." (12)

P.I.	354+06.10
N.	643,494.367
E.	1,756,846.218
Δ	41°36'34"
Ts	824.67'
TA	726.98'
Os	3°00'00"
Ls	200.00'
LT.	133.35'
ST.	66.68'
Δc	38°36'34"
Dc	3°00'00"
D.	1,909.86'
Tc	669.00'
Lc	1,286.98'
S.E.	0.054 FT./FT.

NOTE: FOR DESCRIPTION OF BENCH MARK NO. 1, SEE PROFILE SHEET NO. 14

P.M.#3 EL. 540.01
 NAIL IN POWER POLE 20'
 LEFT OF STA. 8+25 CLIFTON AVE.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PRESENT LAYOUT

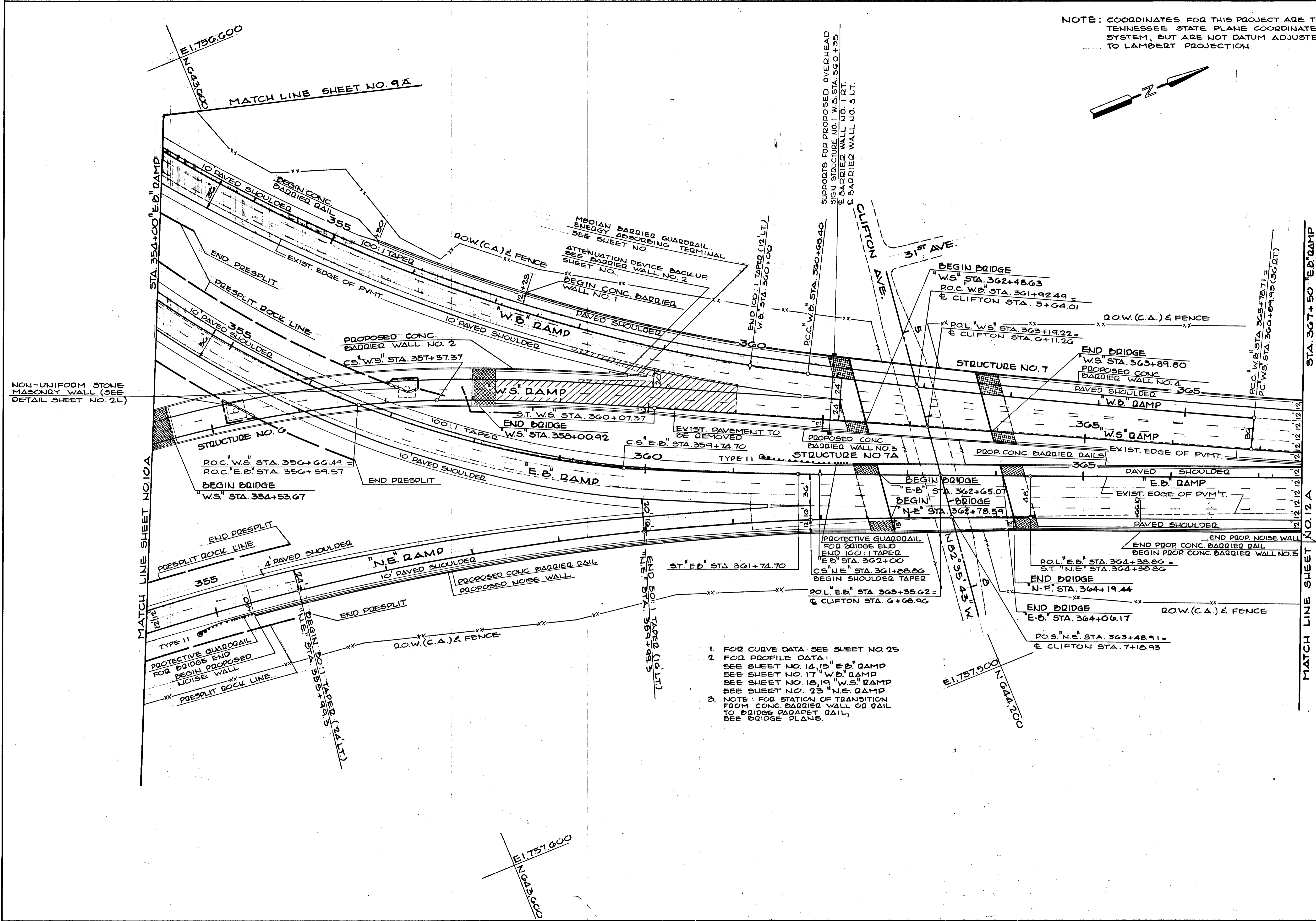
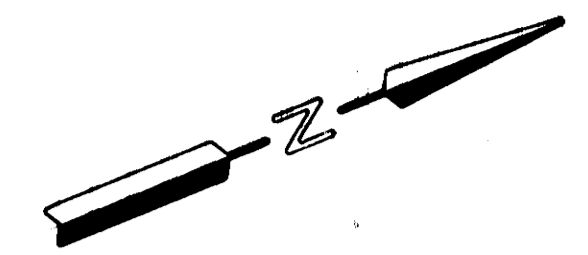
STA. 354+00 "E.B." RAMP
 TO
 STA. 367+50 "E.B." RAMP

SCALE: 1" = 50'

NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IR-440-4(50)20611A	

REV. 2-8-84; LOCATION OF FUTURE OVERHEAD SIGN STRUCTURE NO. 1 CHANGED.



NON-UNIFORM STONE MASONRY WALL (SEE DETAIL SHEET NO. 2L)

1. FOR CURVE DATA: SEE SHEET NO. 25
2. FOR PROFILE DATA: SEE SHEET NO. 14, 15 "E.B." RAMP; SEE SHEET NO. 17 "W.D." RAMP; SEE SHEET NO. 18, 19 "W.S." RAMP; SEE SHEET NO. 23 "N.E." RAMP
3. NOTE: FOR STATION OF TRANSITION FROM CONC. BARRIED WALL OR RAIL TO BRIDGE PARAPET RAIL, SEE BRIDGE PLANS.

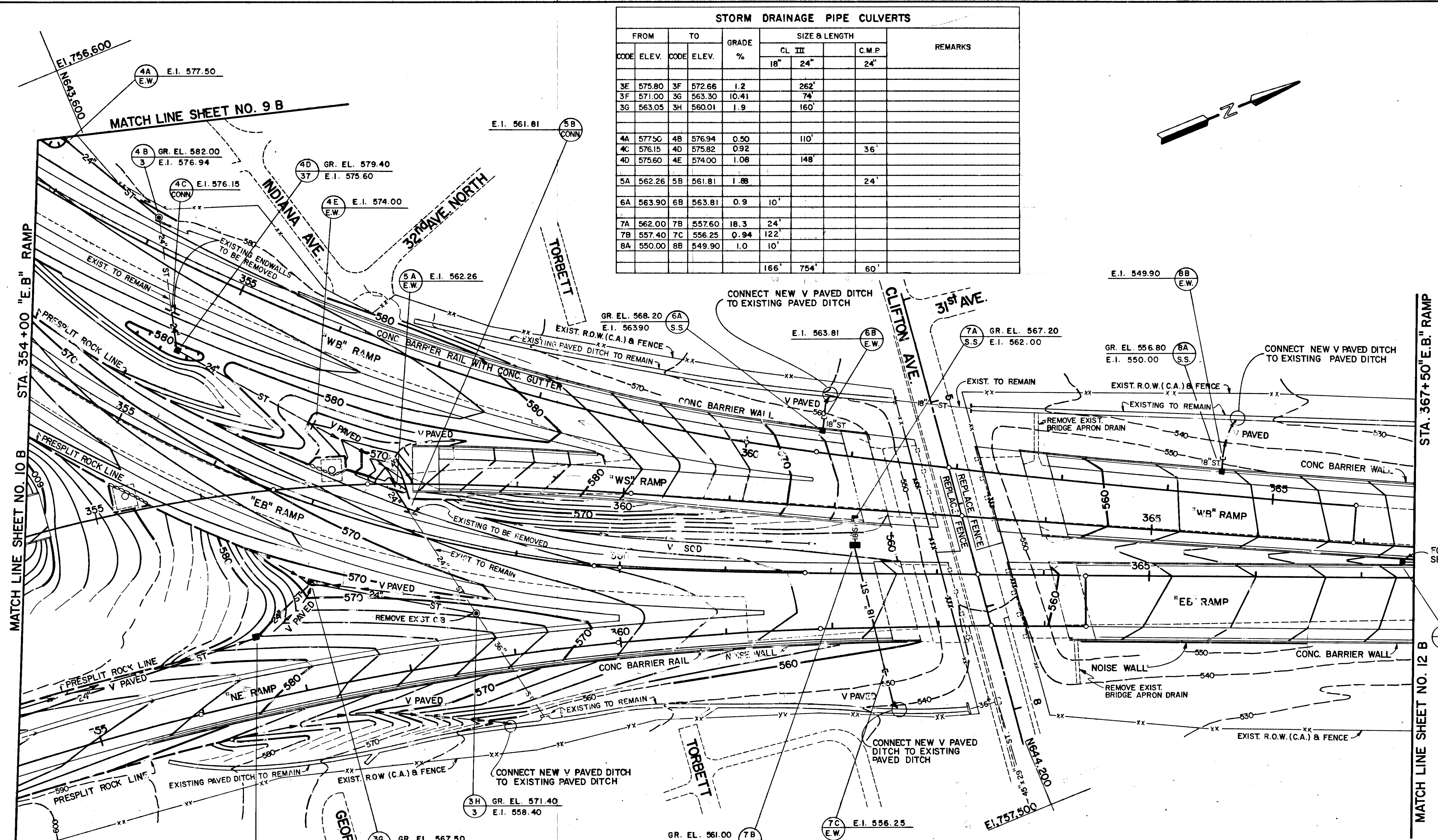
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PROPOSED LAYOUT
 STA 354+00 "E.B." RAMP
 TO
 STA. 367+50 "E.B." RAMP
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IR-440-450/206	11B

STORM DRAINAGE PIPE CULVERTS

FROM CODE	TO CODE	GRADE %	SIZE & LENGTH			REMARKS
			CL. III	18"	24"	
3E	575.80	3F	572.66	1.2	262'	
3F	571.00	3G	563.30	10.41	74'	
3G	563.05	3H	560.01	1.9	160'	
4A	577.50	4B	576.94	0.50	110'	
4C	576.15	4D	575.82	0.92		36'
4D	575.60	4E	574.00	1.08	148'	
5A	562.26	5B	561.81	1.88		24'
6A	563.90	6B	563.81	0.9	10'	
7A	562.00	7B	557.60	18.3	24'	
7B	557.40	7C	556.25	0.94	122'	
8A	550.00	8B	549.90	1.0	10'	
			166'	754'	60'	



DRAINAGE STRUCTURES

NO.	STATION	LOCATION	TYPE	DWG. NO	TOP EL.	DEPTH					REMARKS
						0-4	4-6	6-8	8-12	12-16	
3F	356+63 NE	59' LT.	#21 C.B.	D-CB-21	575.50						
3G	357+22 EB	71' RT.	#37 C.B.	D-CB-3	567.50						
3H	358+73 EB	59' RT.	#3 M.H.	D-MH-3	571.40						REPLACE EXISTING C.B. W/MANHOLE
4A	352+88 WB	49' LT.	GRATED E.W.	D-PE-6U							
4B	354+00 WB	28' LT.	#3 M.H.	D-MH-3	582.00						REMOVE EXISTING STR. ENDWALL
4C	354+49 WB	46' RT.	CONN.	D-PT-1							REMOVE EXISTING STR. ENDWALL
4D	354+70 WB	75' RT.	#37 C.B.	D-CB-3	579.40						
4E	356+10 WB	90' RT.	STP E.W.	D-PE-4							
5A	357+72 EB	37' LT.	STR. E.W.	D-PE-4							SKREW ANGLE 45°
5B	357+95 EB	18' LT.	CONN.								REMOVE EXISTING STR. ENDWALL
6A	360+70 WB	21' LT.	#3 C.B.	SHT. 2M	568.20						
6B	360+70 WB	31' LT.	TYPE U.E.W.	D-PE-4							
7A	362+20 WS	11' LT.	#3 C.B.	SHT. 2M	567.20						
7B	362+23 EB	27' LT.	#37 C.B.	D-CB-3	561.00						
7C	362+51 NE	40' RT.	TYPE U.E.W.	D-PE-4							
8A	364+50 WB	23' LT.	#3 C.B.	SHT. 2M	556.80						
8B	364+50 WB	33' LT.	TYPE U.E.W.	D-PE-4							

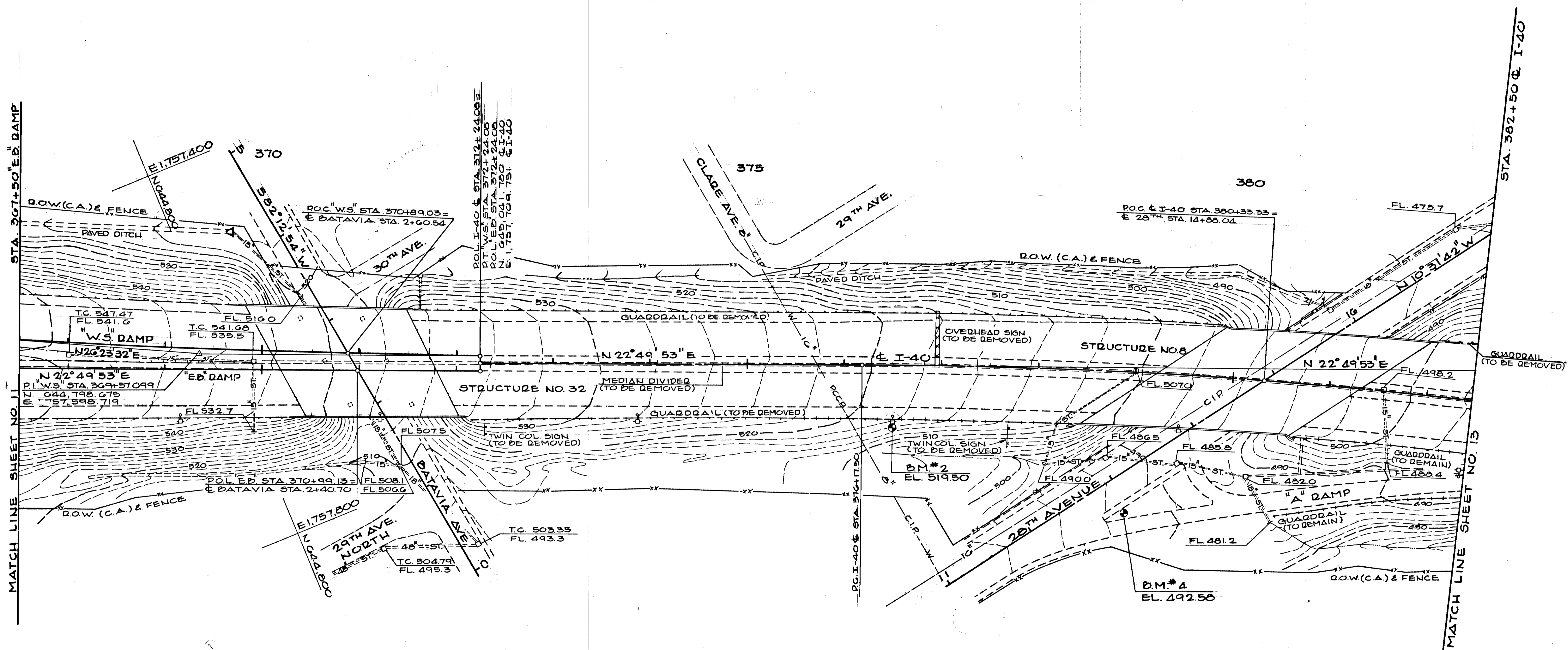
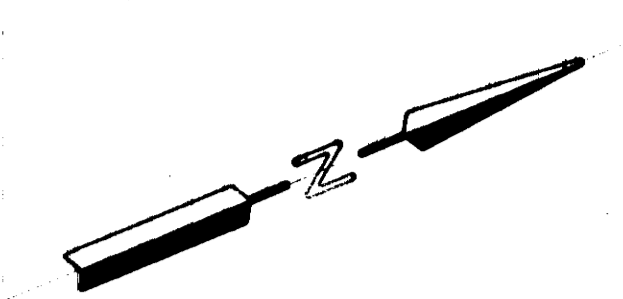
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

**DRAINAGE AND
GRADING LAYOUT**
STA. 354+00 "E.B." RAMP
TO
STA. 367+50 "E.B." RAMP
SCALE: 1" = 50'

Plans
Dwn. No. 350

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	83	TD-IR-440-450205	12

NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.



"W.S." (17)	I-40
P.I. 369+57.099	P.I. 387+40.63
N. 644,798.675	N. 644,920.856
E. 1,757,598.719	E. 1,757,648.999
ΔC 3° 33' 39"	ΔC 22° 17' 49"
ΔD 0° 40' 00"	ΔD 1° 00'
D. 8,594.37	D. 5,729.58
TE 207.15	TE 1,129.13
LC 534.13	LC 2,229.69
S.E. 0.0104 FT/FT.	S.E. 0.018 FT/FT.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PRESENT LAYOUT
STA 367+50 "E.B." RAMP
TO
STA 382+50 "I-40"
SCALE: 1" = 50'

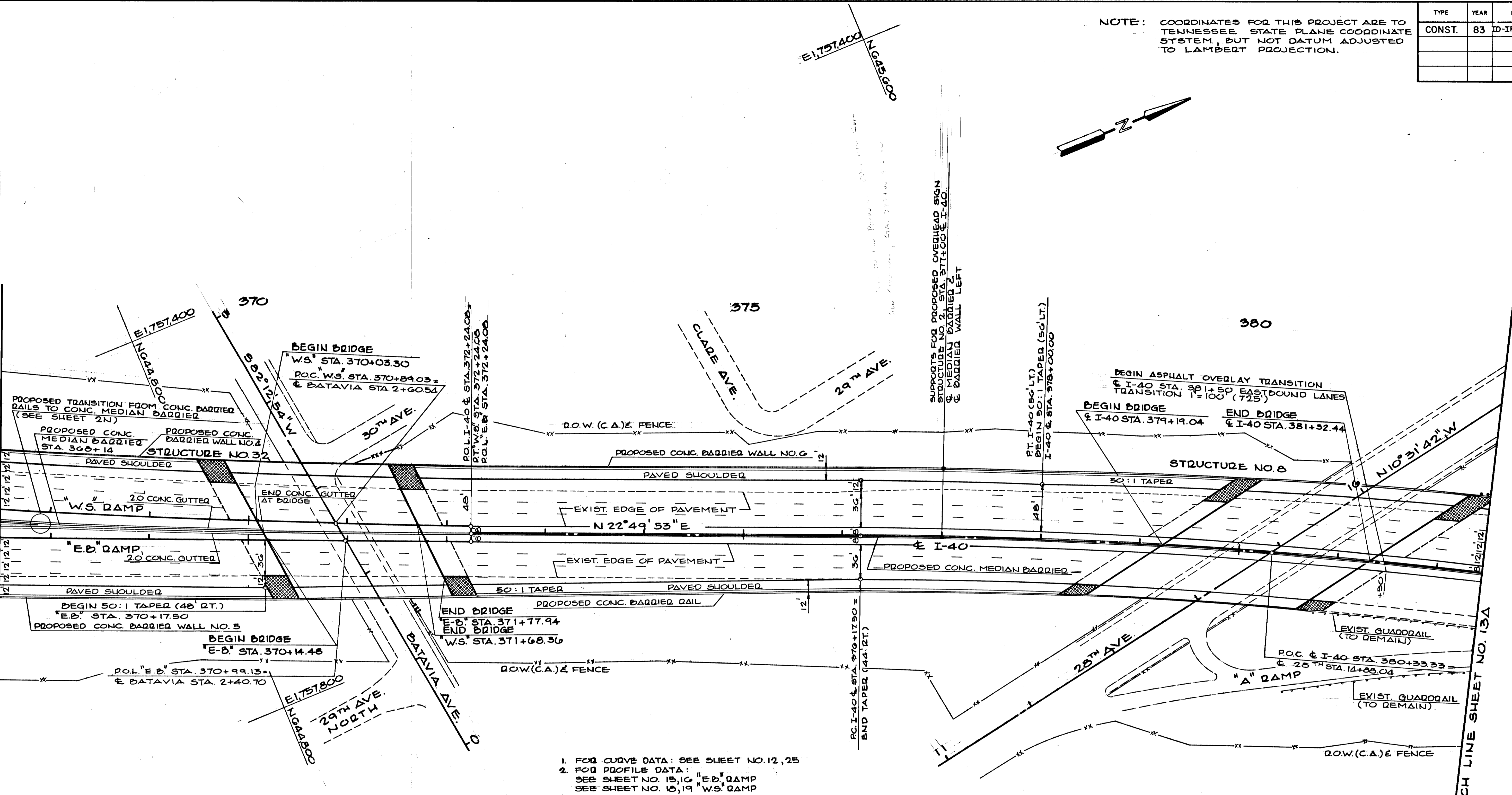
Plans
No. 330
Dwn.

NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT NOT DATUM ADJUSTED TO LAMBERT PROJECTION.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-450(206)	12A

MATCH LINE SHEET NO. 11A STA. 367+50 "E.B." RAMP

MATCH LINE SHEET NO. 13A STA. 382+50 & I-40

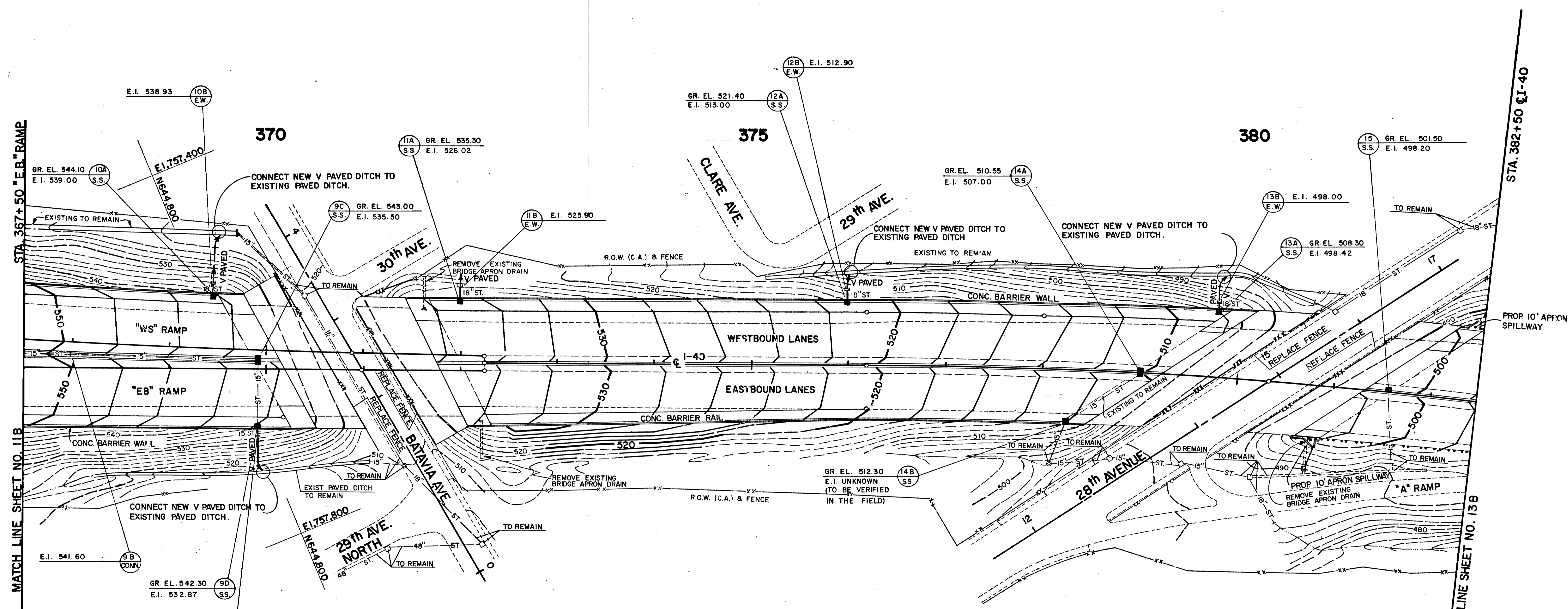


- FOR CURVE DATA: SEE SHEET NO. 12, 25
- FOR PROFILE DATA: SEE SHEET NO. 15, 16 "E.B." RAMP; SEE SHEET NO. 15, 19 "W.S." RAMP
- NOTE: FOR STATION OF TRANSITION FROM CONC. BARRIER WALL OR RAIL TO BRIDGE PARAPET RAIL, SEE BRIDGE PLANS.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
STA. 367+50 "E.B." RAMP
TO
STA. 382+50 & I-40

SCALE: 1" = 50'



CODE	FROM ELEV.	TO ELEV.	GRADE %	SIZE & LENGTH			REMARKS
				C.M.P.	CL. III		
9A	543.52	9B 541.60	3.2	60'	18"	18"	REPLACE EXISTING PIPE
9D	532.87	9E 532.75	1.0	12'			
10A	539.00	10B 538.93	1.0			8'	
11A	526.02	11B 525.90	1.0			12'	
12A	513.00	12B 512.90	1.0			10'	
13A	498.42	13B 498.00	5.25			8'	
TOTALS				72'		38'	

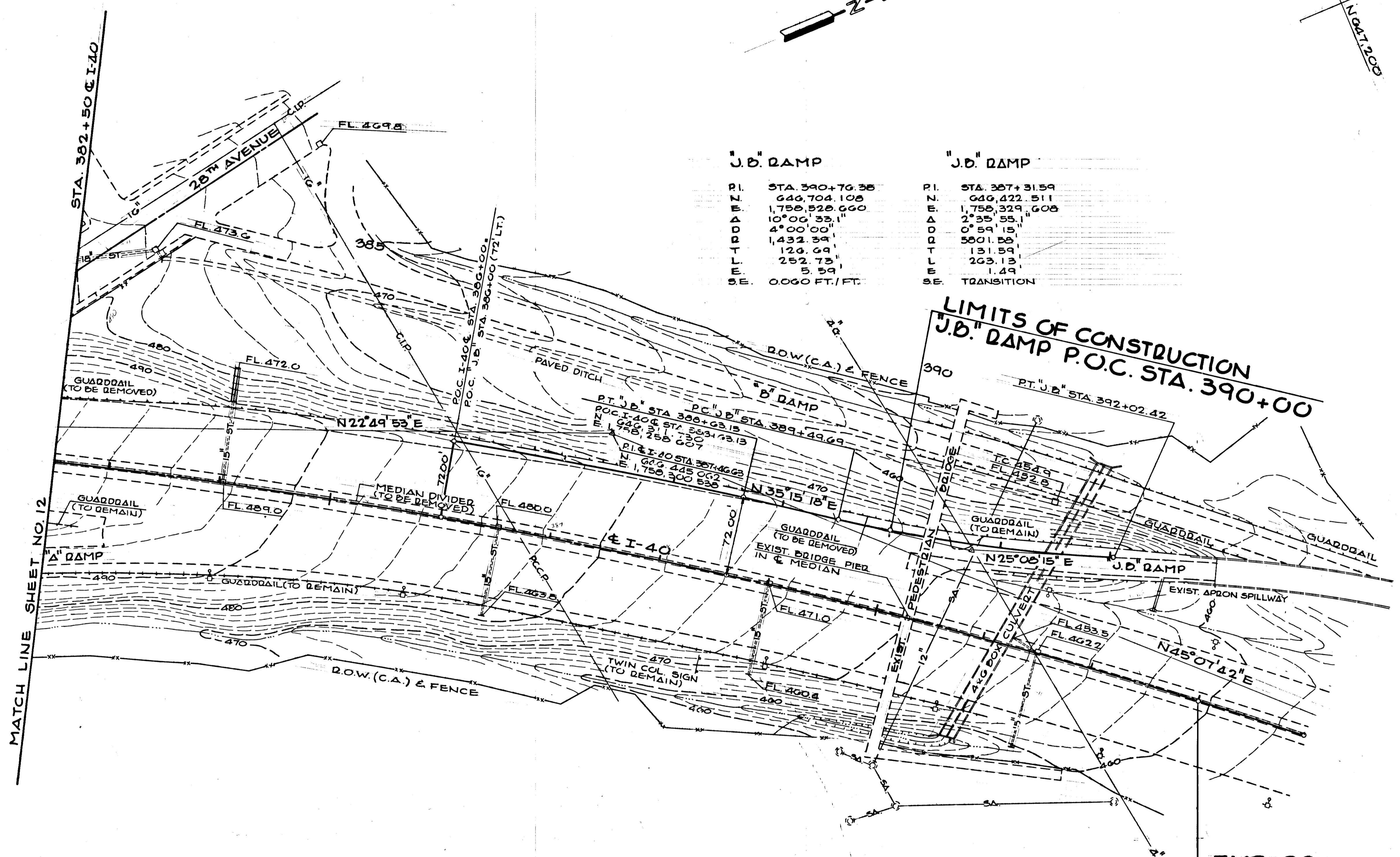
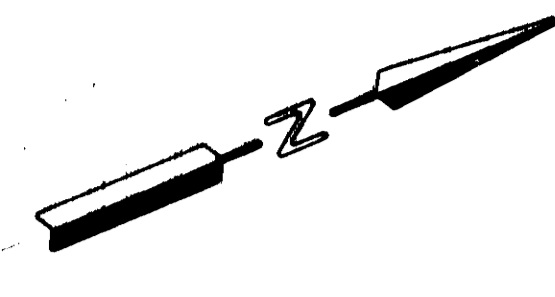
NO.	STATION	LOCATION	TYPE	DWG. NO.	TOP EL.	DEPTH				REMARKS
						0-4	4-6	6-8	8-12	
9A	367+40 EB	15' LT.	#37 C.B.	D-C.B.-3	550.50					BUILD BETWEEN CONC. BARRIER RAILS - SEE SHT. 11B
9B	368+00 EB	14' LT.	CONN.							REMOVE EXISTING C.B.
9C	369+92 EB	8' LT.	#2 C.B.	SHT. 2M	543.00					REMOVE EXISTING C.B.
9D	369+92 EB	60' RT.	#3 C.B.	SHT. 2M	542.30					BUILD ON EXISTING 15" PIPE
9E	369+92 EB	72' RT.	TYPE U E.W.	D-PE-4						
10A	369+44 WS	59' LT.	#3 C.B.	SHT. 2M	544.10					
10B	369+44 WS	66' LT.	TYPE U E.W.	D-PE-4						
11A	372+00 WS	59' LT.	#3 C.B.	SHT. 2M	535.30					
11B	372+00 WS	71' LT.	TYPE U E.W.	D-PE-4						
12A	376+00 I-40	67' LT.	#3 C.B.	SHT. 2M	521.40					
12B	376+00 I-40	77' LT.	TYPE U E.W.	D-PE-4						
13A	379+75 I-40	69' LT.	#3 C.B.	SHT. 2M	508.30					
13B	379+75 I-40	77' LT.	TYPE U E.W.	D-PE-4						
14A	379+00 I-40	6	#2 C.B.	SHT. 2M	510.55					REMOVE EXISTING C.B. - CLEAN EXISTING PIPE
14B	378+20 I-40	55' RT.	#3 C.B.	SHT. 2M	512.30					BUILD ON EXISTING 15" PIPE - CLEAN EXISTING PIPE
15	381+55 I-40	6	#1 C.B.	SHT. 2M	501.50					REMOVE EXISTING C.B.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

DRAINAGE AND GRADING LAYOUT
 STA. 367+50 "E.B." RAMP
 TO
 STA. 382+50 I-40
 SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IR-440-4(50)206	13

NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.



"J.B." RAMP

PI.	STA. 390+76.36
N.	646,704.108
E.	1,758,528.660
Δ	10°06'33.1"
DO	4°00'00"
DR	1,432.34'
TL	120.64'
LE	252.73'
SE.	5.59'
SE.	0.060 FT./FT.

"J.B." RAMP

PI.	STA. 397+31.59
N.	646,422.511
E.	1,758,329.608
Δ	2°35'55.1"
DO	0°59'15"
DR	5801.58'
TL	131.59'
LE	263.13'
SE.	1.49'
SE.	TRANSITION

LIMITS OF CONSTRUCTION
J.B. RAMP P.O.C. STA. 390+00

MATCH LINE SHEET NO 12

☉ I-40

PI.	387+46.63
N.	644,920.856
E.	1,757,648.999
Δ	22°17'49"
DO	1°00'
DR	5,729.58'
TL	1,129.13'
LE	2,229.69'
SE.	0018 FT./FT.

END PROJECT
I-40-4(50)-206 CONST.
P.O.C. I-40 STA. 393+00
N. 646,837.714
E. 1,758,731.963

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

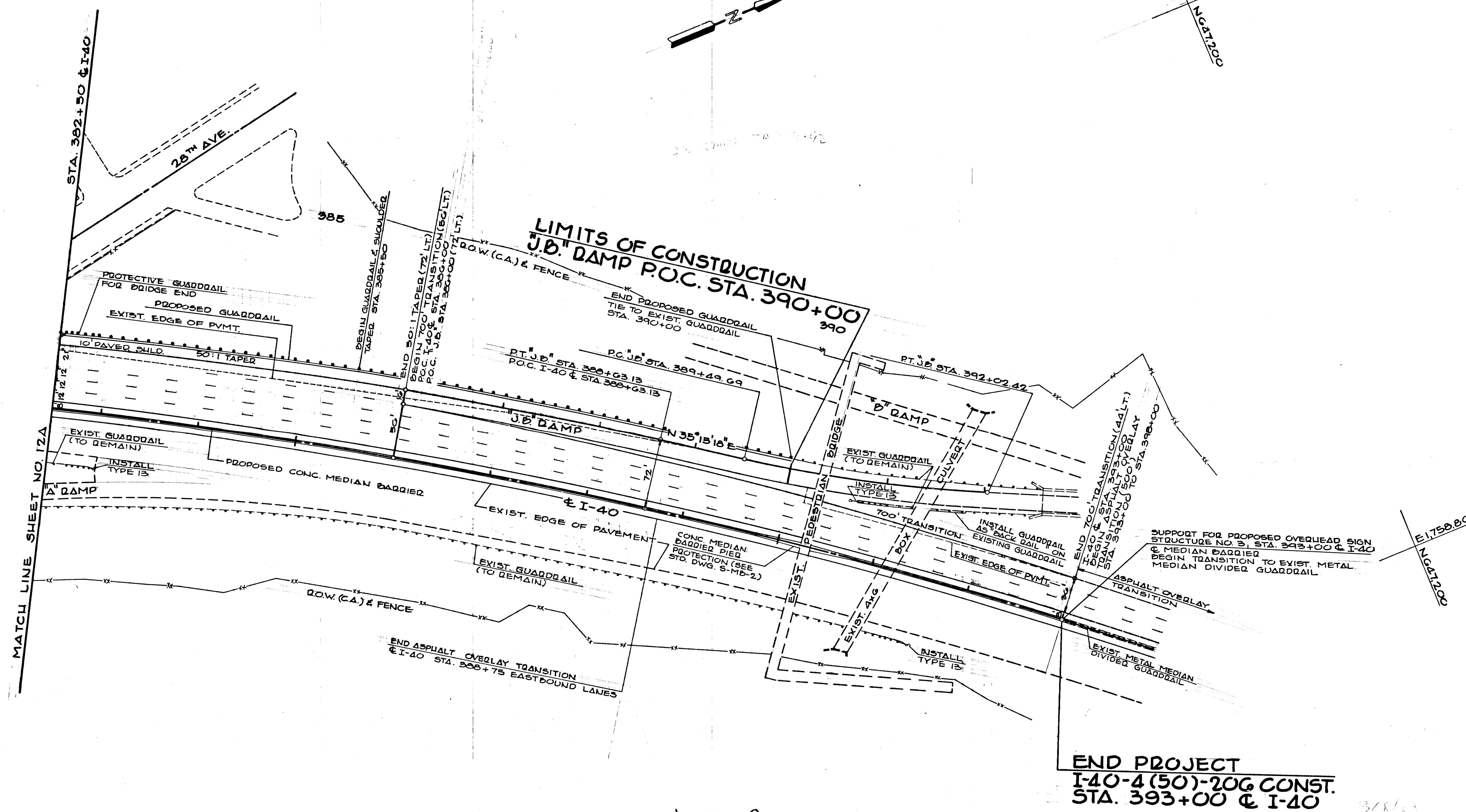
PRESENT LAYOUT

STA. 382+50 ☉ I-40
 TO
 STA. 393+00 ☉ I-40

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IR-440-4(50)206	13A

NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.



MATCH LINE SHEET NO. 12A

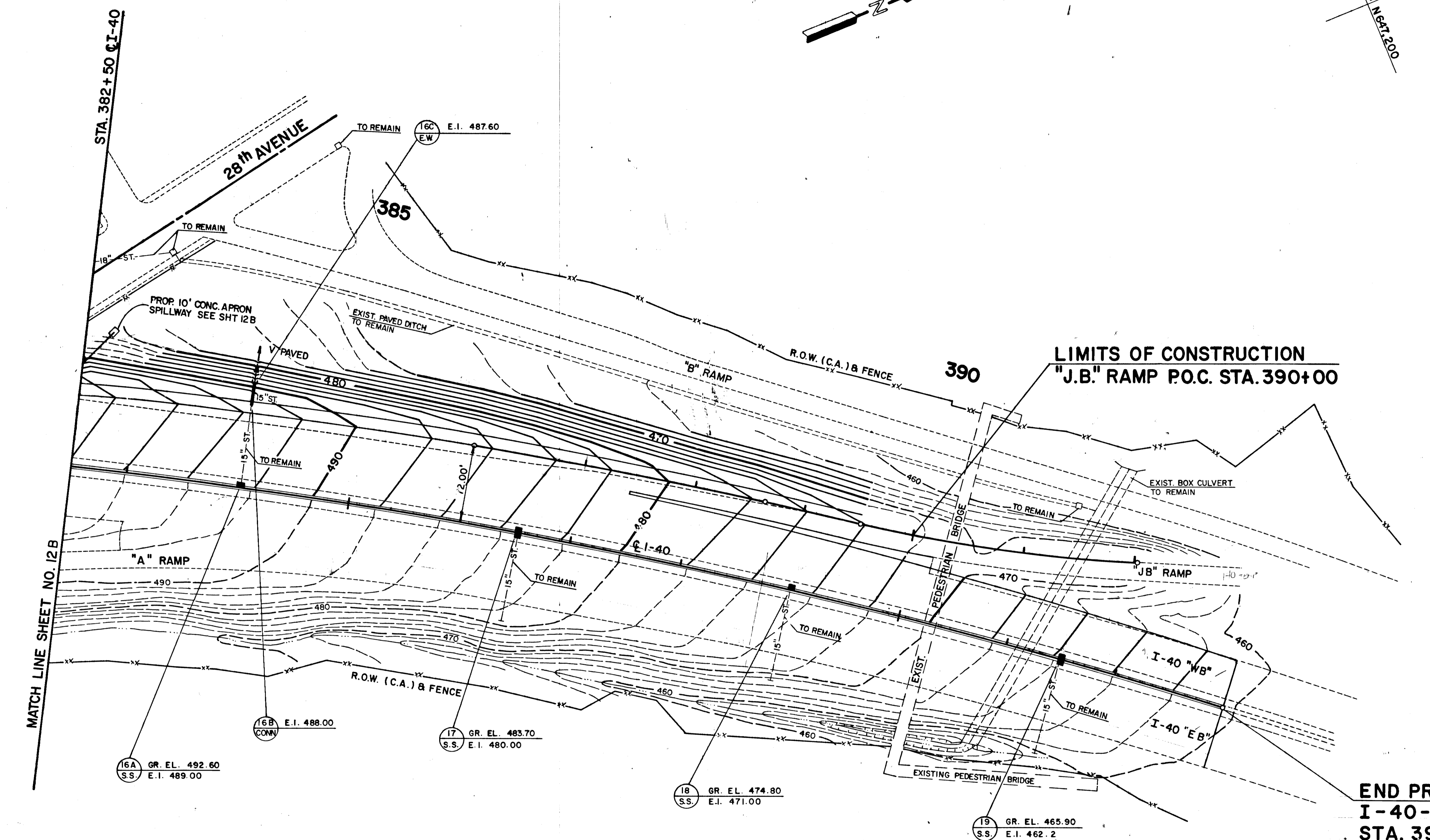
END PROJECT
 I-40-4(50)-206 CONST.
 STA. 393+00 @ I-40

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PROPOSED LAYOUT
 STA. 382+50 @ I-40
 TO
 STA. 393+00 @ I-40
 SCALE: 1" = 50'

3/8/83

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	138



NO.	STATION	LOCATION	TYPE	DWG. NO.	TOP EL.	DEPTH					REMARKS
						0'-4"	4'-6"	6'-8"	8'-12"		
16A	384+03	€ I-40	# 1 C.B.	SHT. 2M	492.60	1					REPLACE EXISTING C.B.
16B	384+03	€ I-40	74' LT. CONN.	D-PT-1							REMOVE EXISTING BEVELED END
16C	384+03	€ I-40	95' LT. TYPE U E.W.	D-PE-4							
17	386+52	€ I-40	# 2 C.B.	SHT. 2M	483.70	1					REPLACE EXISTING C.B.
18	389+00	€ I-40	# 1 C.B.	SHT. 2M	474.80	1					REPLACE EXISTING C.B.
19	391+50	€ I-40	# 2 C.B.	SHT. 2M	465.90	1					REPLACE EXISTING C.B.

STORM DRAINAGE PIPE CULVERTS								
FROM CODE	TO CODE	ELEV.	ELEV.	GRADE %	SIZE & LENGTH			REMARKS
					C.M.P.	CL. III		
					15"	15"	18"	
16B	488.00	16C	487.60	1.82	22'			
					22'			

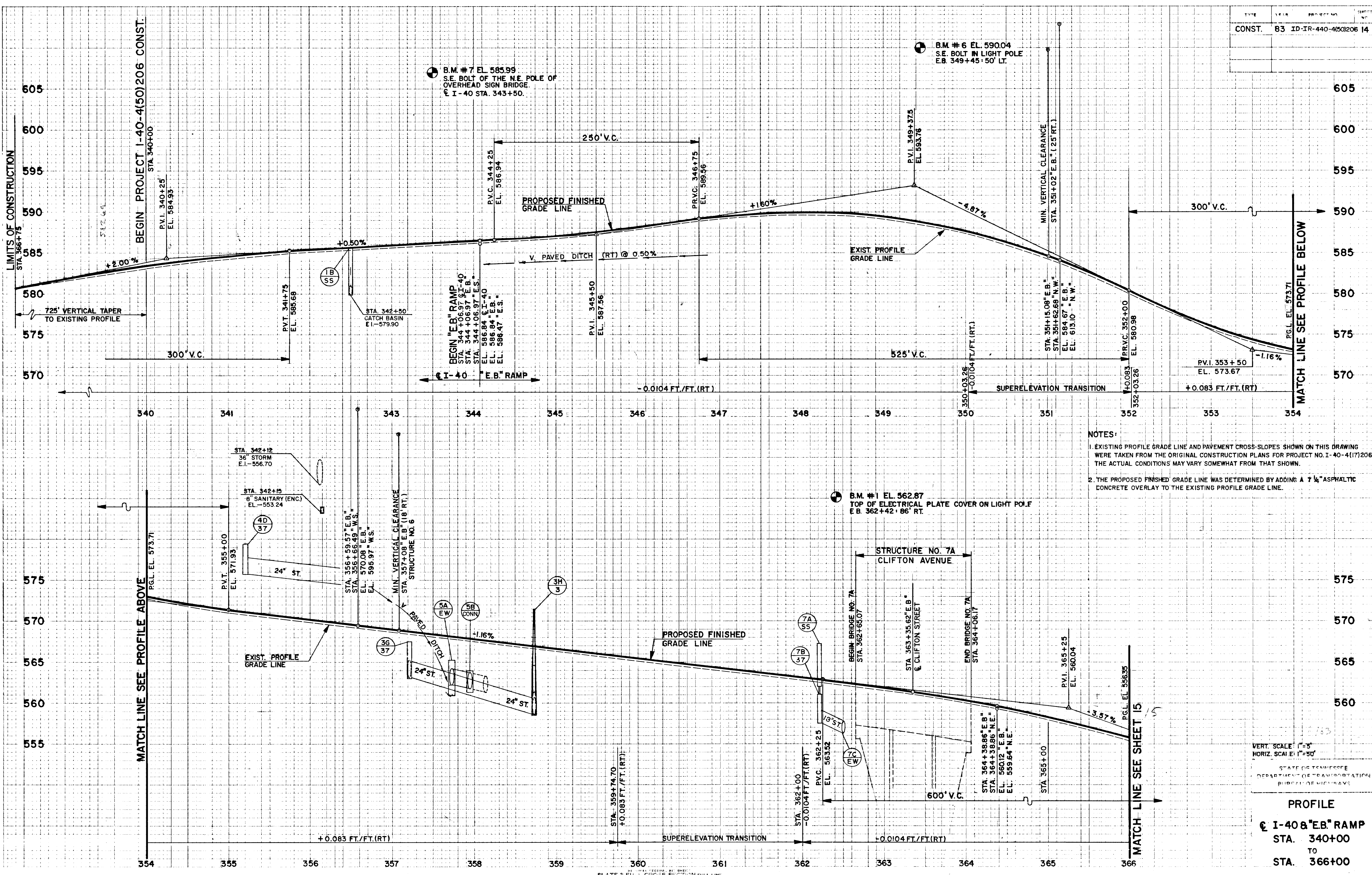
END PROJECT
I-40-4(50)206 CONST.
STA. 393+00 € I-40

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

DRAINAGE AND GRADING LAYOUT
STA. 382+50 € I-40
TO
STA. 390+00 € I-40
 SCALE: 1" = 50'

DATE	
BY	
CHECKED	
APPROVED	
NO. OF SHEETS	
NO. OF SHEETS USED	

DATE	
BY	
CHECKED	
APPROVED	
NO. OF SHEETS	
NO. OF SHEETS USED	



- NOTES:
- EXISTING PROFILE GRADE LINE AND PAVEMENT CROSS-SLOPES SHOWN ON THIS DRAWING WERE TAKEN FROM THE ORIGINAL CONSTRUCTION PLANS FOR PROJECT NO. I-40-4(17)206. THE ACTUAL CONDITIONS MAY VARY SOMEWHAT FROM THAT SHOWN.
 - THE PROPOSED FINISHED GRADE LINE WAS DETERMINED BY ADDING A 7/8" ASPHALTIC CONCRETE OVERLAY TO THE EXISTING PROFILE GRADE LINE.

VERT. SCALE: 1"=5'
 HORIZ. SCALE: 1"=50'

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

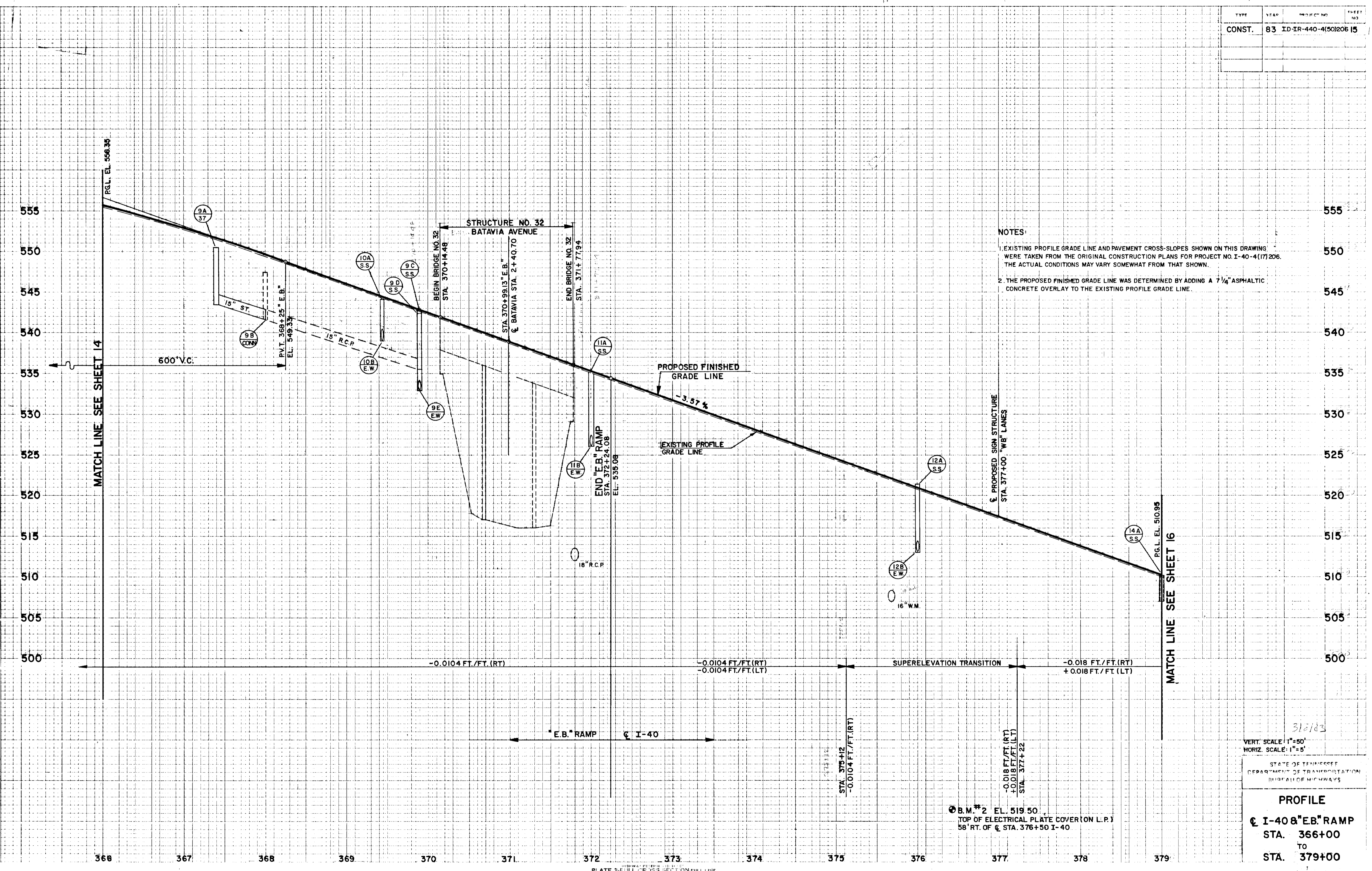
PROFILE
 I-40 "EB" RAMP
 STA. 340+00
 TO
 STA. 366+00

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	15

TENN. STATE HIGHWAYS
 Plans File No. 330
 Drawn

FINAL SURVEY PLOTTED
 NOTE BOOK

ORIGINAL SURVEY PLOTTED
 NOTE BOOK



NOTES:
 1. EXISTING PROFILE GRADE LINE AND PAVEMENT CROSS-SLOPES SHOWN ON THIS DRAWING WERE TAKEN FROM THE ORIGINAL CONSTRUCTION PLANS FOR PROJECT NO. I-40-4(17)206. THE ACTUAL CONDITIONS MAY VARY SOMEWHAT FROM THAT SHOWN.
 2. THE PROPOSED FINISHED GRADE LINE WAS DETERMINED BY ADDING A 7/4" ASPHALTIC CONCRETE OVERLAY TO THE EXISTING PROFILE GRADE LINE.

312183
 VERT. SCALE: 1"=50'
 HORIZ. SCALE: 1"=5'
 STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

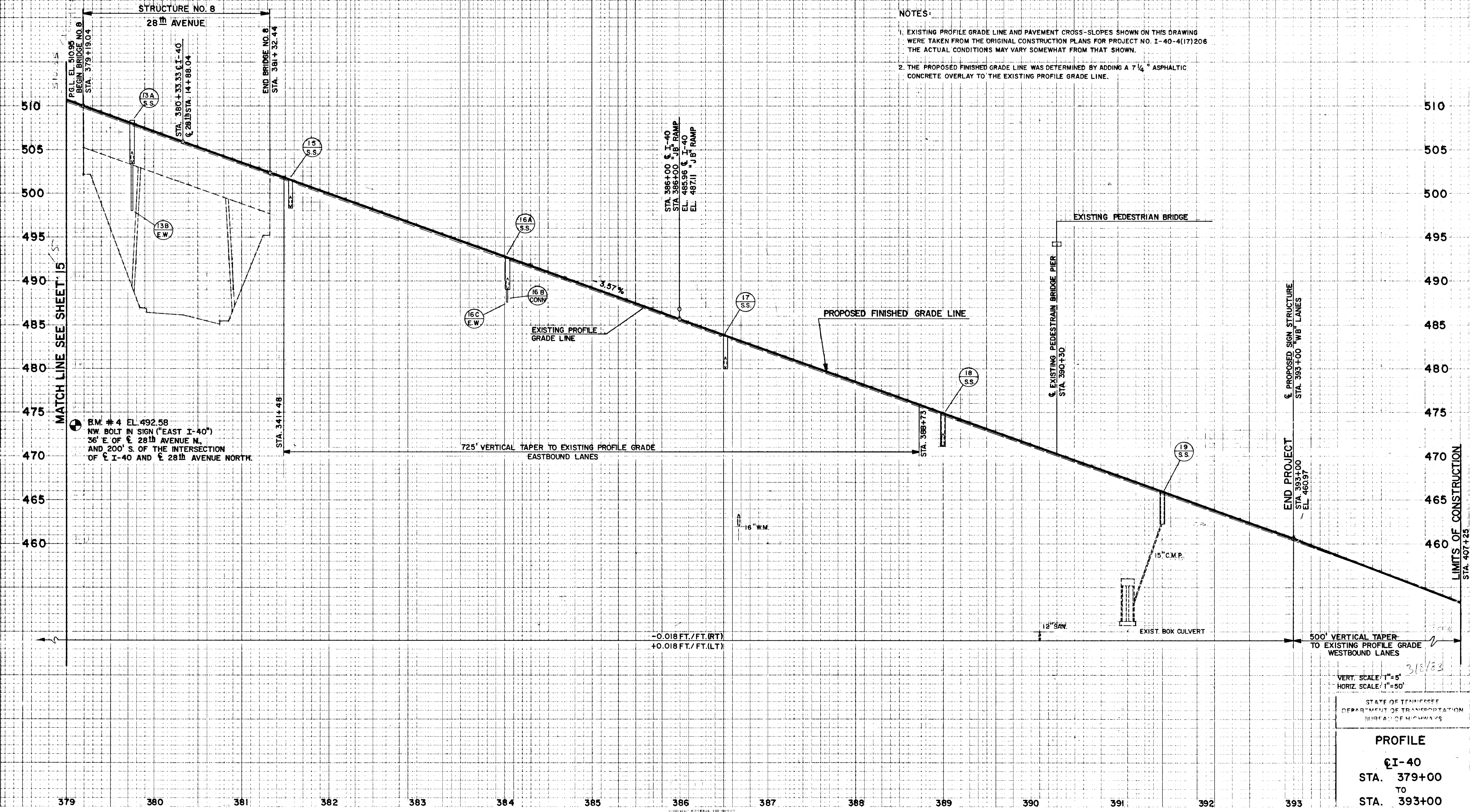
PROFILE
 I-40 8" E.B. RAMP
 STA. 366+00
 TO
 STA. 379+00

TECHNICAL SERVICES
 Plans
 Div. No. 330

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)20616	16

ORIGINAL SURVEYED BY DATE
 SURVEY PLOTTED BY
 NOTE BOOK NO. AREA CHECKED

ORIGINAL SURVEYED BY DATE
 SURVEY PLOTTED BY
 NOTE BOOK NO. AREA CHECKED



- NOTES:
- EXISTING PROFILE GRADE LINE AND PAVEMENT CROSS-SLOPES SHOWN ON THIS DRAWING WERE TAKEN FROM THE ORIGINAL CONSTRUCTION PLANS FOR PROJECT NO. I-40-4(17)206. THE ACTUAL CONDITIONS MAY VARY SOMEWHAT FROM THAT SHOWN.
 - THE PROPOSED FINISHED GRADE LINE WAS DETERMINED BY ADDING A 7 1/4" ASPHALTIC CONCRETE OVERLAY TO THE EXISTING PROFILE GRADE LINE.

VERT. SCALE: 1"=5'
 HORIZ. SCALE: 1"=50'

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PROFILE
 I-40
 STA. 379+00
 TO
 STA. 393+00

379 380 381 382 383 384 385 386 387 388 389 390 391 392 393

TELEPHONE NO. 330
 Plans
 Divn. No. 330

FINAL SURVEY
 SURVEY PLOTTED
 NOTE BOOK NO. 330
 NO. 330

ORIGINAL SURVEY
 SURVEY PLOTTED
 NOTE BOOK NO. 330
 NO. 330

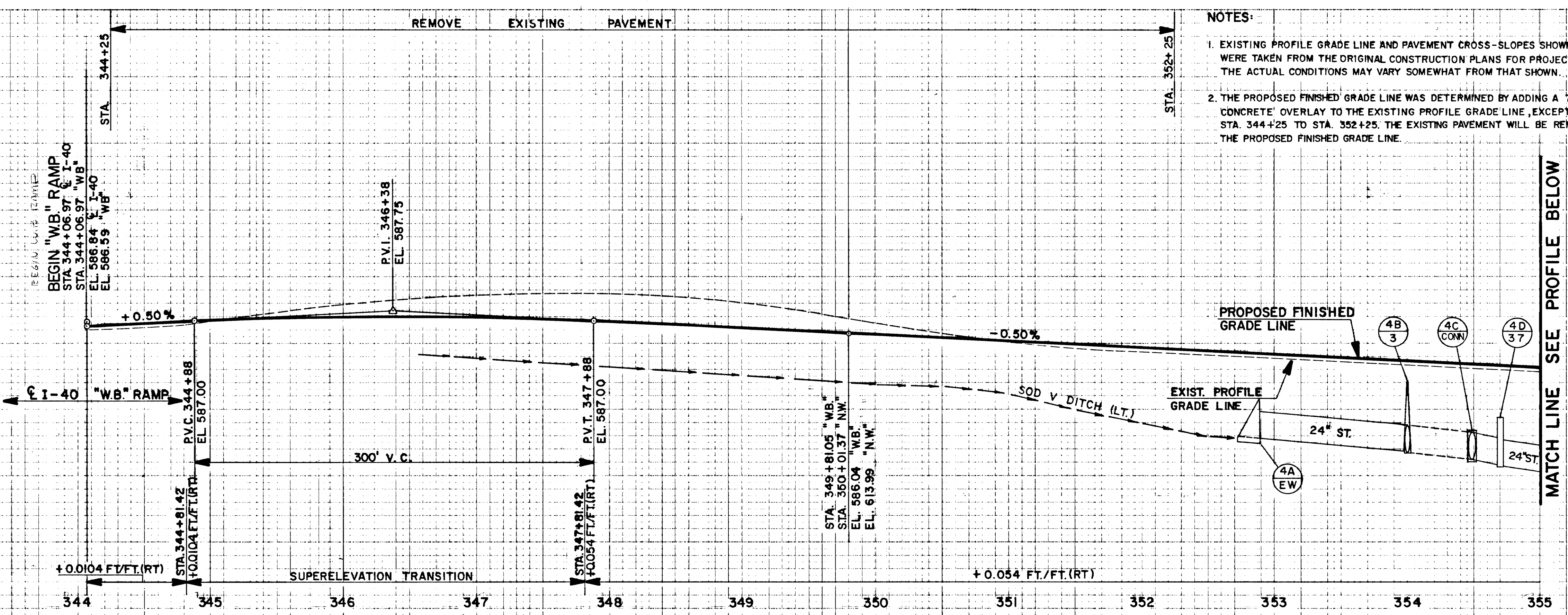
REMOVE EXISTING PAVEMENT

NOTES:

- EXISTING PROFILE GRADE LINE AND PAVEMENT CROSS-SLOPES SHOWN ON THIS DRAWING WERE TAKEN FROM THE ORIGINAL CONSTRUCTION PLANS FOR PROJECT NO. I-40-4(17)206. THE ACTUAL CONDITIONS MAY VARY SOMEWHAT FROM THAT SHOWN.
- THE PROPOSED FINISHED GRADE LINE WAS DETERMINED BY ADDING A 7/4" ASPHALTIC CONCRETE OVERLAY TO THE EXISTING PROFILE GRADE LINE, EXCEPT THAT FROM STA. 344+25 TO STA. 352+25, THE EXISTING PAVEMENT WILL BE REMOVED TO LOWER THE PROPOSED FINISHED GRADE LINE.

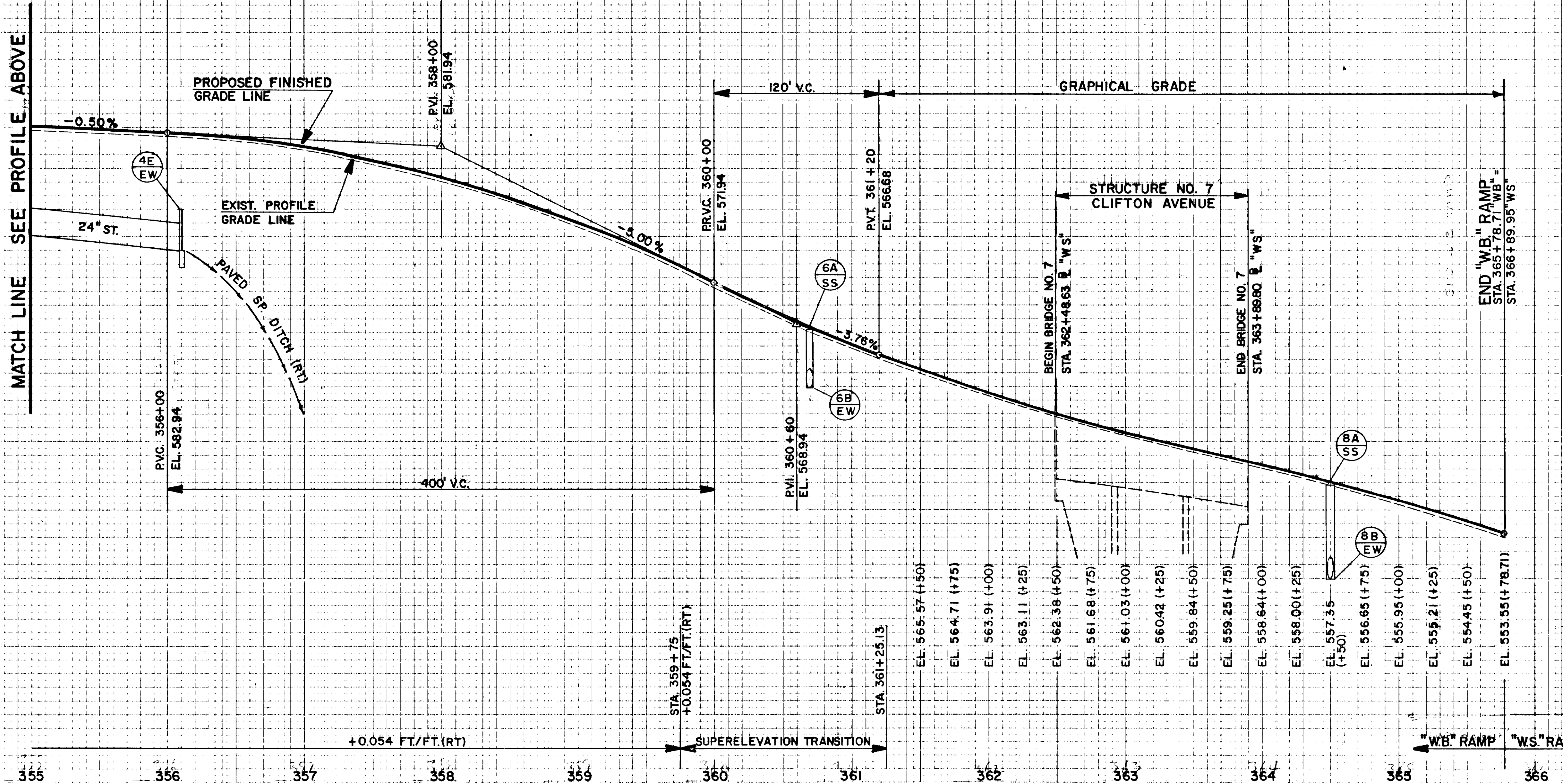
CONST. 83 ID-IR-440-4(50)206 17

595
590
585
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575
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565
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555
550



MATCH LINE SEE PROFILE BELOW

MATCH LINE SEE PROFILE ABOVE



595
590
585
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565
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555
550

STA. 359+75	EL. 565.57 (+50)
STA. 360+00	EL. 564.71 (+75)
STA. 360+60	EL. 563.91 (+00)
STA. 361+25.13	EL. 563.11 (+25)
STA. 362+48.63	EL. 562.38 (+50)
STA. 363+68.80	EL. 561.68 (+75)
STA. 364+88.97	EL. 561.03 (+00)
STA. 365+09.16	EL. 560.42 (+25)
STA. 366+29.35	EL. 559.84 (+50)
STA. 367+49.54	EL. 559.25 (+75)
STA. 368+69.73	EL. 558.64 (+00)
STA. 369+89.92	EL. 558.00 (+25)
STA. 370+10.11	EL. 557.35 (+50)
STA. 371+30.30	EL. 556.65 (+75)
STA. 372+50.49	EL. 555.95 (+00)
STA. 373+70.68	EL. 555.21 (+25)
STA. 374+90.87	EL. 554.45 (+50)
STA. 375+11.06	EL. 553.55 (+75)

VERT. SCALE: 1"=5'
 HORIZ. SCALE: 1"=50'

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

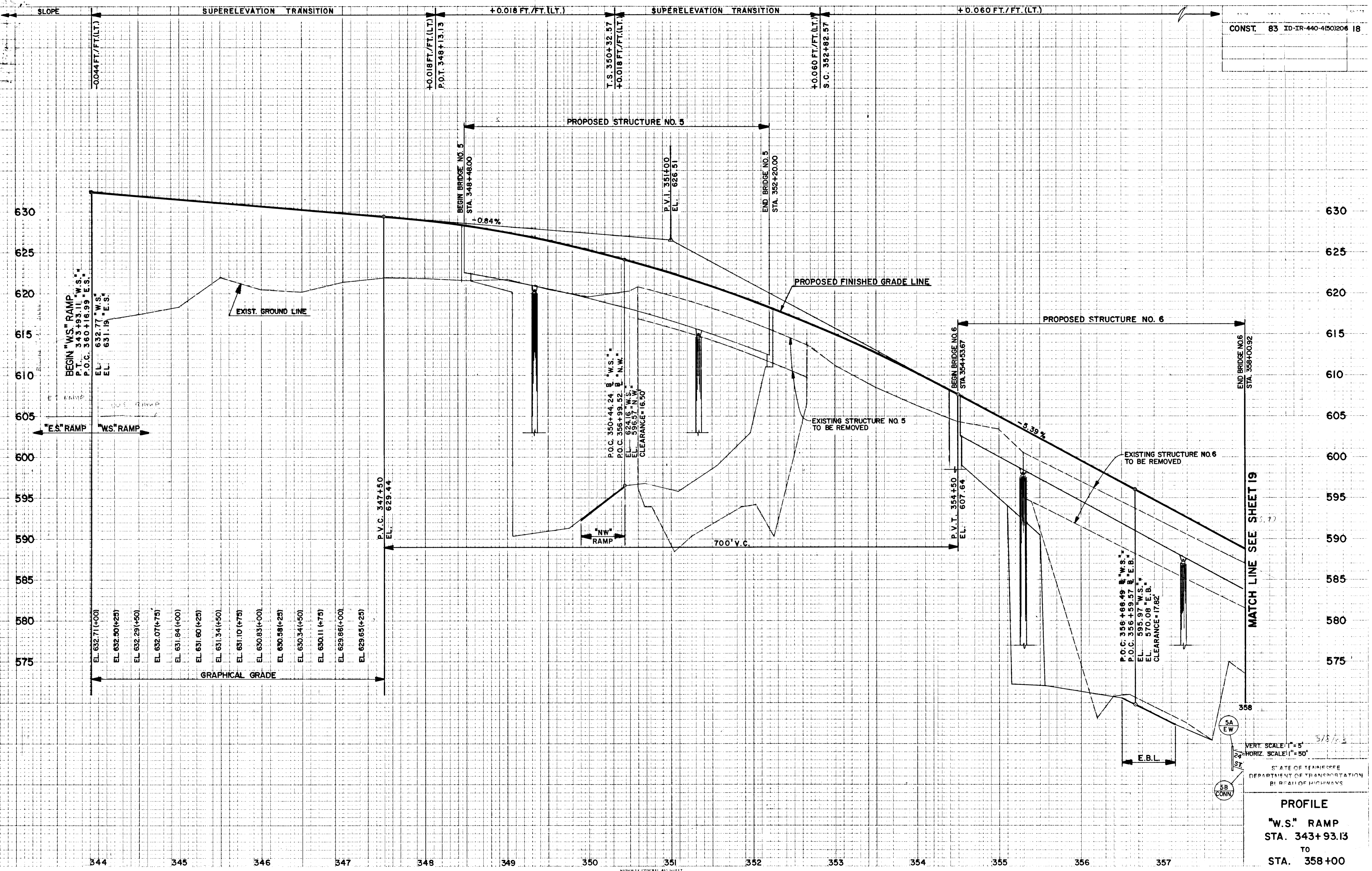
PROFILE
 "WB" RAMP
 STA. 344+06.99
 TO
 STA. 365+78.71

STATE HIGHWAYS
 File No. 330
 Div. No. 330

CONST. 83 ID-IR-440-4(50)206 18

ORIGINAL SURVEY PLANNED
 SURVEY PLOTTED
 NOTE BOOK TEMPLATE
 AREAS CHECKED

ORIGINAL SURVEY PLANNED
 SURVEY PLOTTED
 NOTE BOOK TEMPLATE
 AREAS CHECKED



VERT. SCALE: 1" = 5'
 HORIZ. SCALE: 1" = 50'

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

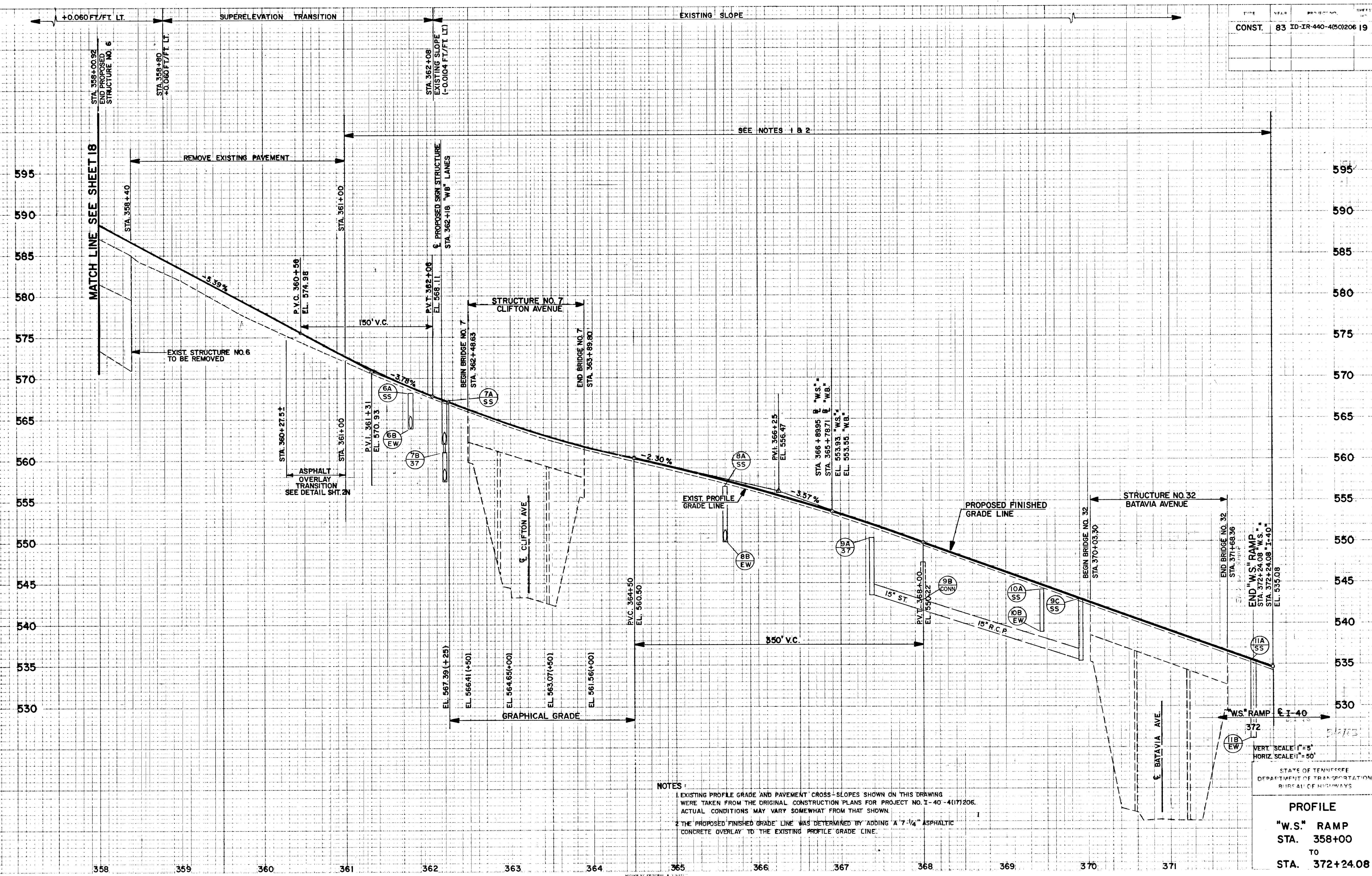
PROFILE
"W.S." RAMP
STA. 343+93.11
TO
STA. 358+00

TENNESSEE HIGHWAYS
 Plans File IN
 Div. No. 330

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IR-440-4(50)206	19

FINAL SURVEY
 BY DATE
 CHECKED
 NO.

ORIGINAL SURVEY
 BY DATE
 CHECKED
 NO.



NOTES:
 1. EXISTING PROFILE GRADE AND PAVEMENT CROSS-SLOPES SHOWN ON THIS DRAWING WERE TAKEN FROM THE ORIGINAL CONSTRUCTION PLANS FOR PROJECT NO. I-40-4(17)206. ACTUAL CONDITIONS MAY VARY SOMEWHAT FROM THAT SHOWN.
 2. THE PROPOSED FINISHED GRADE LINE WAS DETERMINED BY ADDING A 7-1/4" ASPHALTIC CONCRETE OVERLAY TO THE EXISTING PROFILE GRADE LINE.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

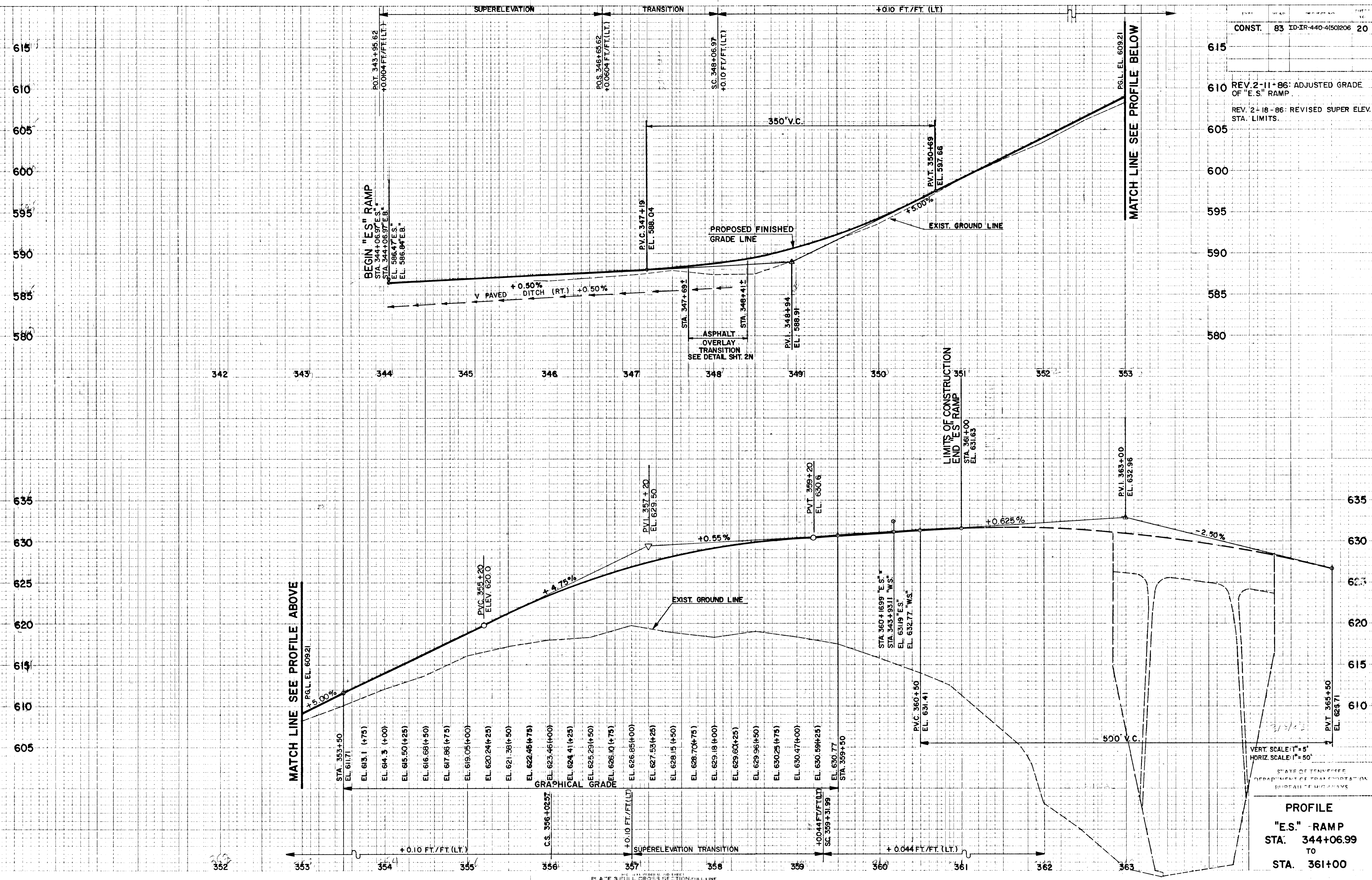
PROFILE
 "W.S." RAMP
 STA. 358+00
 TO
 STA. 372+24.08

VERT. SCALE: 1"=5'
 HORIZ. SCALE: 1"=50'

TENN. STATE HIGHWAYS
 Plans File IN-330
 Divn. No. 330

FINAL SURVEY
 SURVEYED BY DATE
 PLOTTED BY DATE
 NOTE BOOK NO. DATE
 NO. ASSES CHECKED

ORIGINAL SURVEY
 SURVEYED BY DATE
 PLOTTED BY DATE
 NOTE BOOK NO. DATE
 NO. ASSES CHECKED



CONST.	83	ID-IR-440-4(50)206	20
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REV. 2-11-86: ADJUSTED GRADE OF "E.S." RAMP.
 REV. 2-18-86: REVISED SUPER ELEV. STA. LIMITS.

VERT. SCALE: 1" = 5'
 HORIZ. SCALE: 1" = 50'

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

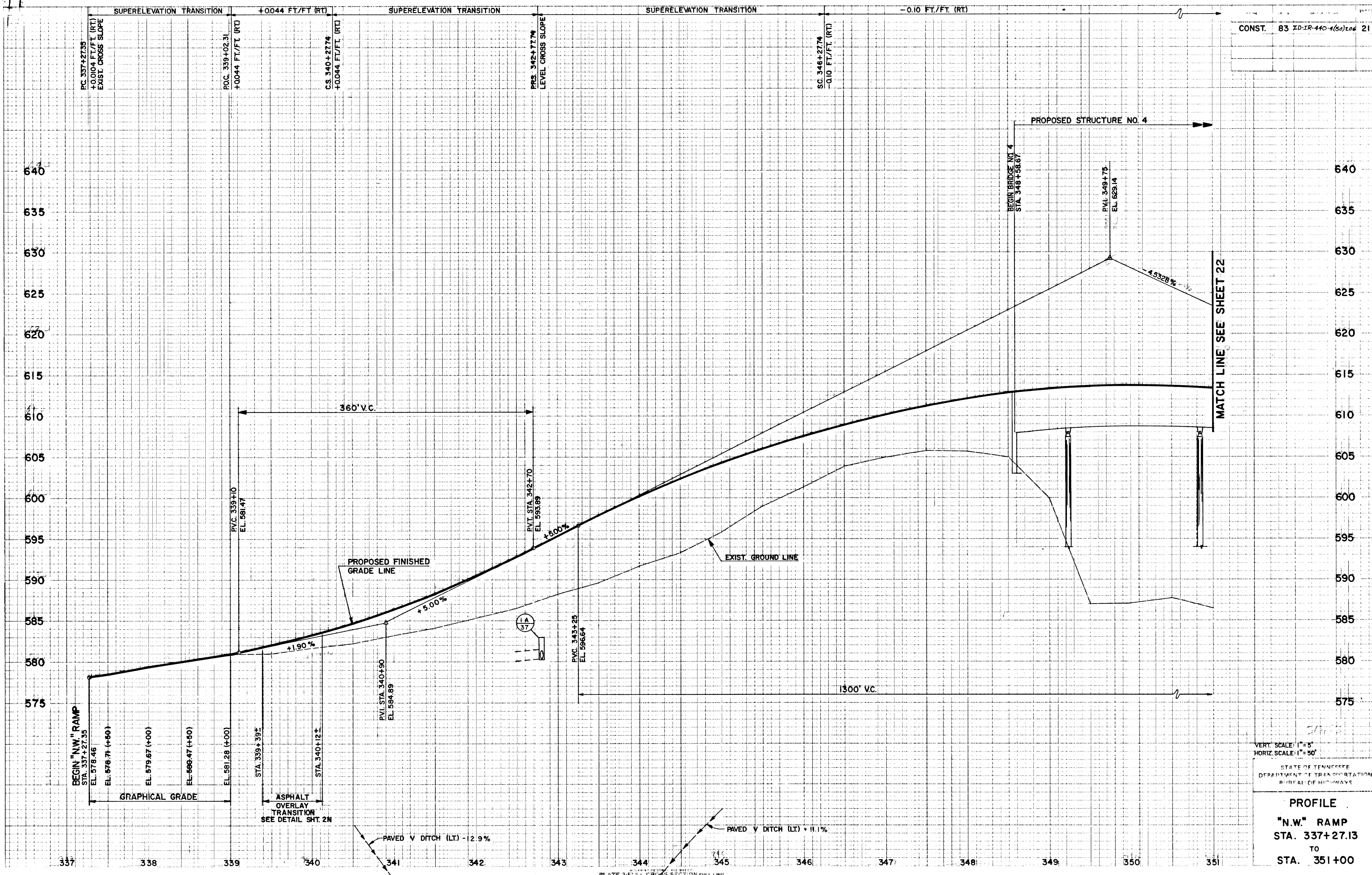
PROFILE
"E.S." - RAMP
 STA. 344+06.99
 TO
 STA. 361+00

TENN. STATE HIGHWAYS
 File No. **IN-380**
 Plans Book No. **380**

DATE: _____
 BY: _____
 ORIGINAL SURVEY: _____
 SURVEY: _____
 PLOTTED: _____
 NOTE BOOK: _____
 AREAS: _____
 NO. _____

DATE: _____
 BY: _____
 ORIGINAL SURVEY: _____
 SURVEY: _____
 PLOTTED: _____
 NOTE BOOK: _____
 AREAS: _____
 NO. _____

CONST. 83 ID-IR-440-4(50)206 21



VERT. SCALE: 1"=5'
 HORIZ. SCALE: 1"=50'

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PROFILE
 "N.W." RAMP
 STA. 337+27.13
 TO
 STA. 351+00

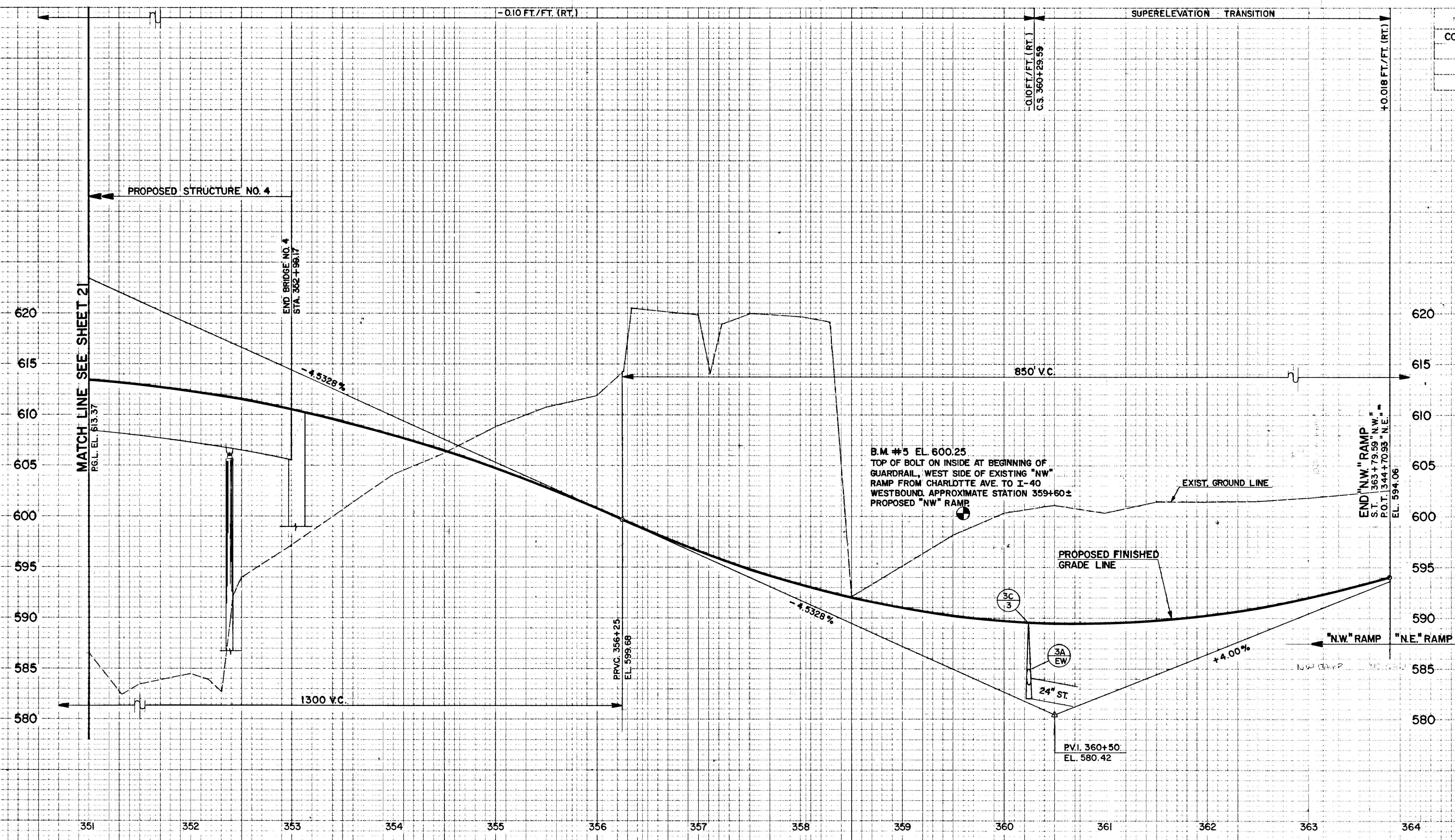
PLATE 3-FULL CROSS SECTION-FULL LINE

TENN. STATE HIGHWAYS
 Plans File No. 330
 Div. No. 330

FINAL SURVEY
 SURVEYED, PLOTTED, CHECKED, AND APPROVED
 BY: _____ DATE: _____
 NO. _____

ORIGINAL SURVEY
 SURVEYED, PLOTTED, CHECKED, AND APPROVED
 BY: _____ DATE: _____
 NO. _____

CONST.	83	ID-TR-440-4(50)206	22
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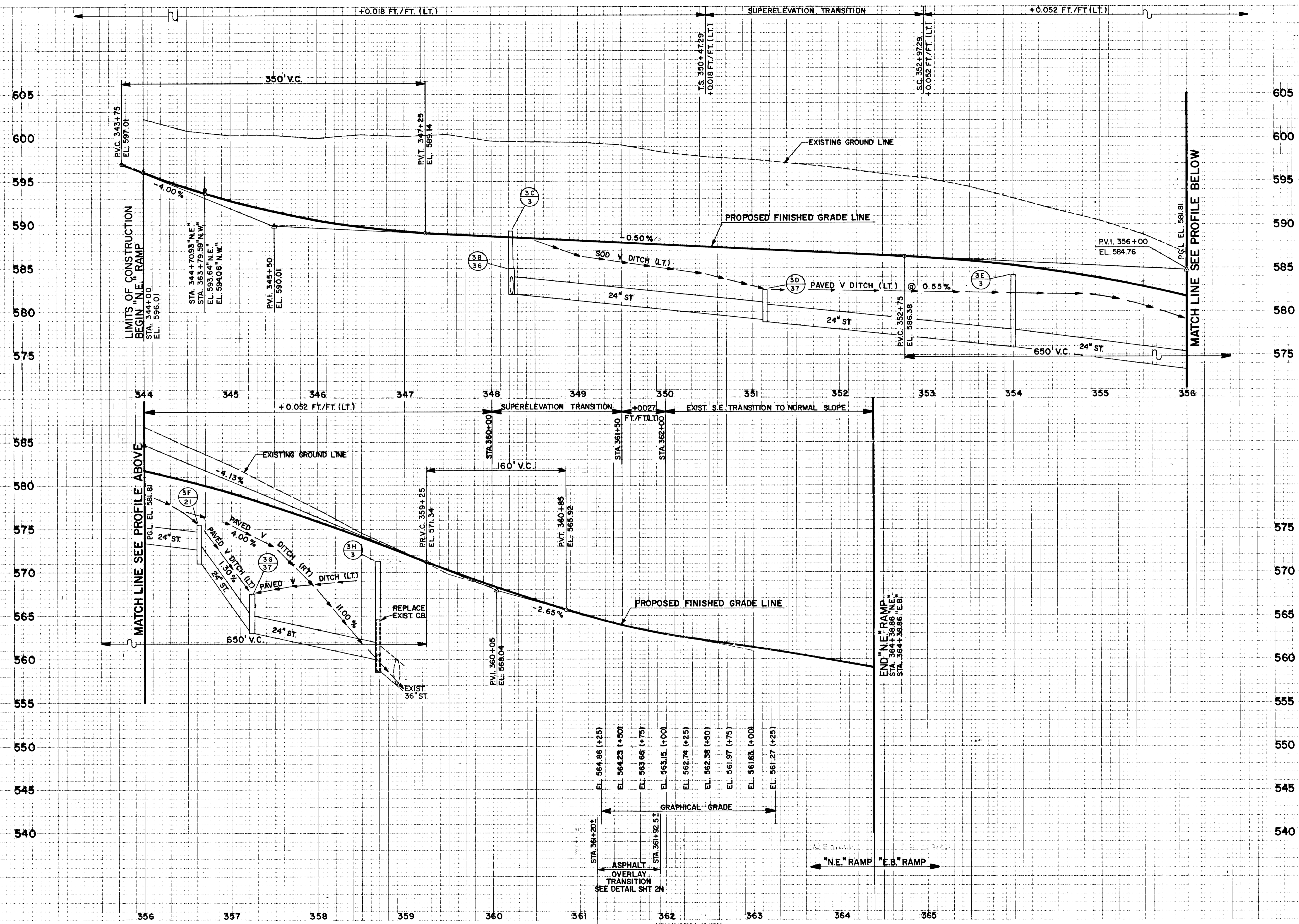
3/8/83
 VERT. SCALE: 1"=5'
 HORIZ. SCALE: 1"=50'
 STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PROFILE
"N.W." RAMP
STA. 351+00
TO
STA. 363+79.56

File No. 330
 Plans Dwn.

FINAL SURVEY PLOTTED
 DATE: _____
 BY: _____
 CHECKED: _____

ORIGINAL SURVEY PLOTTED
 DATE: _____
 BY: _____
 CHECKED: _____



Station	Elevation
STA. 361+20.1	EL. 564.86 (+25)
STA. 361+50.1	EL. 564.23 (+50)
STA. 361+75.1	EL. 563.66 (+75)
STA. 361+100.1	EL. 563.15 (+100)
STA. 361+25.1	EL. 562.74 (+25)
STA. 361+50.1	EL. 562.38 (+50)
STA. 361+75.1	EL. 561.97 (+75)
STA. 361+100.1	EL. 561.63 (+100)
STA. 361+25.1	EL. 561.27 (+25)

VERT. SCALE: 1"=5'
 HORIZ. SCALE: 1"=50'

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PROFILE
 "N.E." RAMP
 STA. 344+00
 TO
 STA. 364+38.86

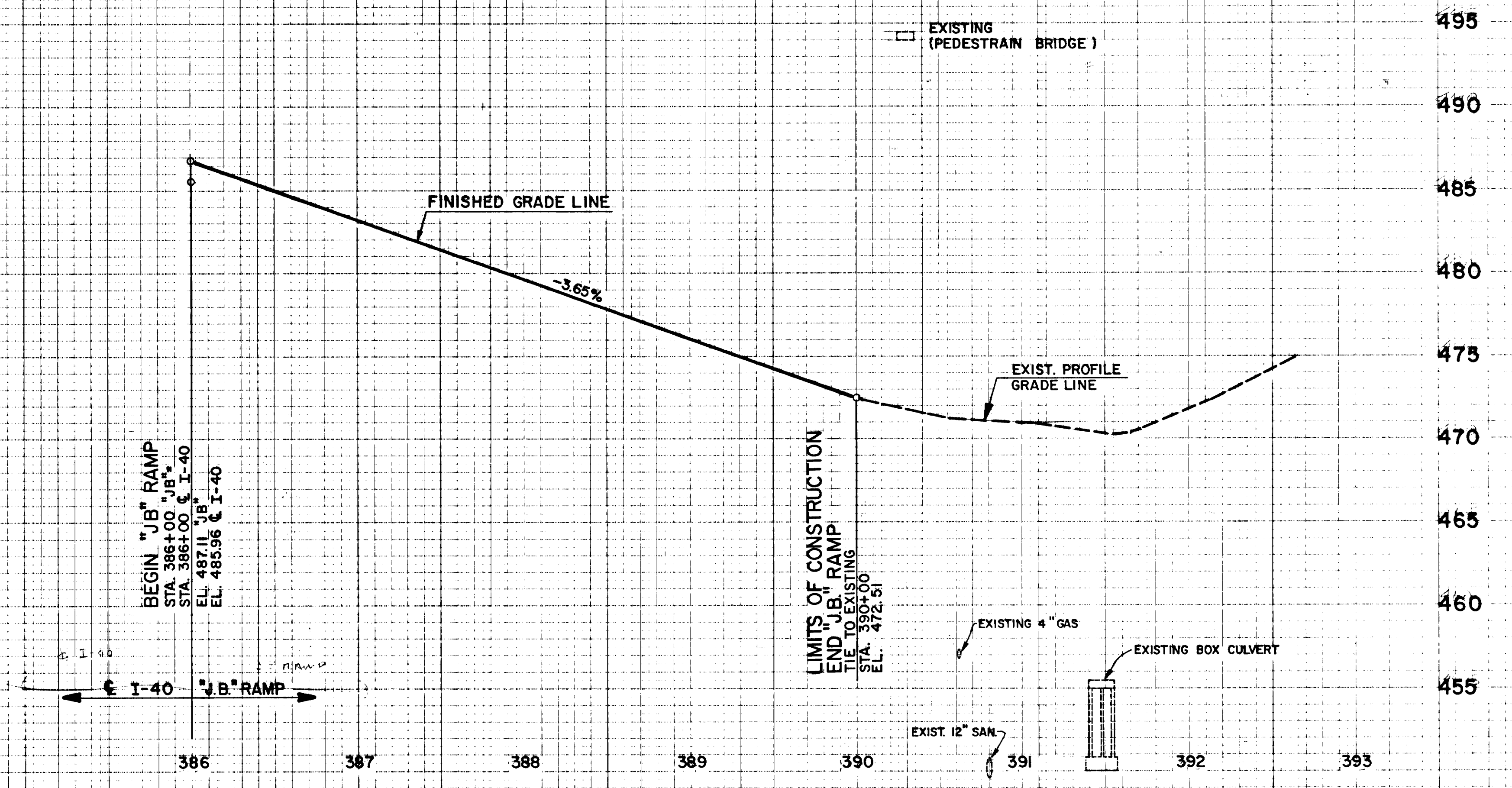
3/8/83

TEHR. STATE HIGHWAYS
 PLAN Title IN-
 Dwn. No. 330

TYPE	YEAR	PROJECT NO.	SHEET
CONST.	83	TD-TR-440-4(50)206	24 24

FINAL SURVEY DATE
 PROJECTED DATE
 NO. OF HOURS
 AREA

ORIGINAL SURVEY DATE
 PROJECTED DATE
 NO. OF HOURS
 AREA



VERT. SCALE: 1"=5'
 HORIZ. SCALE: 1"=50'

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PROFILE
 "J.B." RAMP
 STA. 386+00
 TO
 STA. 389+50

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	IR-440-4(60)204	25

FILE IN
 7/14/83
 7/15/83
 7/16/83
 7/17/83
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 12/31/83

BEGIN PROJECT E I-40
 STA. 340+00
 N-643,004.261
 E-1,755,527.567
 BEGIN CONSTRUCTION "NW" RAMP
 STA. 337+27.35
 N-642,981.712
 E-1,755,247.478

LEGEND
 DESIGN YEAR A.D.T. 000
 DESIGN YEAR D.H.V. AM.
 (P.M.)
 DATE: NOVEMBER 24, 1980

LIMITS OF CONSTRUCTION
 I-440
 STA. 361+00 "E.S." RAMP
 N 642,284.433
 E 1,757,050.805
 STA. 344+00 "N.E." RAMP
 N 642,296.933
 E 1,757,183.660

CURVE NO.	PI. STA.	PI. COORDINATES	Δ_T	Δ_C	D_C	R_C	T_C	L_C	E_C	SPIRAL NO.	L_s	θ_s	LT.	ST.	T.BK. T.AHD.	E.S.	S.E. ft./ft.
2"ES"	354+45.34	643,412.105 1,756,915.305	101° 37' 32"	67° 37' 32"	8° 30'	674.068'	451.47'	795.60'	137.22'	1	400'	17° 00' 00"	267.91'	134.46'	1038.37'	408.34'	0.10
4"ES"	361+85.69	642,199.903 1,757,065.660	7° 30' 00"	6° 00' 00"	1° 30'	3819.719'	200.18'	400.00'	5.24'	5	200'	1° 30' 00"	133.34'	66.67'	253.70'	347.04'	0.044
6"NW"	339+46.58	643,055.766 1,755,453.825	8° 30' 28.5"	6° 00' 28.3"	2° 00'	2864.789'	150.33'	300.39'	3.94'	7	250'	2° 30' 00"	166.68'	83.35'	219.23'	332.00'	0.044
9"NW"	358+82.22	643,972.345 1,757,159.660	118° 15' 00"	94° 37' 30"	6° 45'	848.826'	920.27'	1401.85'	403.13'	10	350'	11° 48' 45"	233.86'	117.14'	1604.49'	816.97'	0.100
12"WB"	354+06.10	643,494.367 1,756,846.218	41° 36' 33.5"	38° 36' 33.5"	3° 00'	1909.859'	669.00'	1286.98'	113.78'	11	200'	3° 00' 00"	133.35'	66.68'	824.67'	726.98'	0.054
13"WB"	363+23.63	644,346.744 1,757,334.266		3° 24' 07.5"	0° 40'	8594.367'	255.23'	510.31'	3.79'								0.0104
15"WS"	355+30.63	643,501.761 1,756,955.144	32° 37' 02"	21° 22' 02"	4° 30'	1273.240'	240.20'	474.83'	22.46'	14	250'	5° 37' 30"	166.75'	83.41'	498.09'	55.51'	0.060
17"WS"	369+57.10	644,798.675 1,757,598.719		3° 33' 39"	0° 40'	8594.367'	267.15'	534.13'	4.15'	16							0.0104
19"EB"	356+20.95	643,502.227 1,757,070.266	48° 34' 20"	38° 34' 20"	5° 00'	1145.916'	400.98'	771.44'	68.13'	18	200'	5° 00' 00"	133.39'	66.72'	617.70'	112.85'	0.083
22"NE"	357+50.93	643,647.862 1,757,183.660	22° 49' 53"	17° 49' 53"	2° 00'	2864.789'	449.42'	891.57'	35.04'	21	250'	2° 30' 00"	166.68'	83.35'	703.64'	158.75'	0.052

* IS TRANSITION SPIRAL FROM CURVE NO. 2 TO CURVE NO. 4. THEORETICAL $L_s = 400.00'$, POINT OF CURVE NO. 4 IS STATION 359+31.99, RESULTING IN AN EFFECTIVE LENGTH OF 329.43' FOR SPIRAL.

NOTE: COORDINATES FOR THIS PROJECT ARE ON TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION. MULTIPLY BY FACTOR 1.00006 TO DATUM ADJUST THESE COORDINATES.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 I-40/I-440 DIRECTIONAL
 INTERCHANGE
 GEOMETRIC DESIGN
 PLAN
 STA. 340+00 E I-40
 TO
 STA. 372+24.08 E I-40
 SCALE: 1"=100'

TENN. STATE DEPARTMENT OF TRANSPORTATION
 Plans
 No. 330

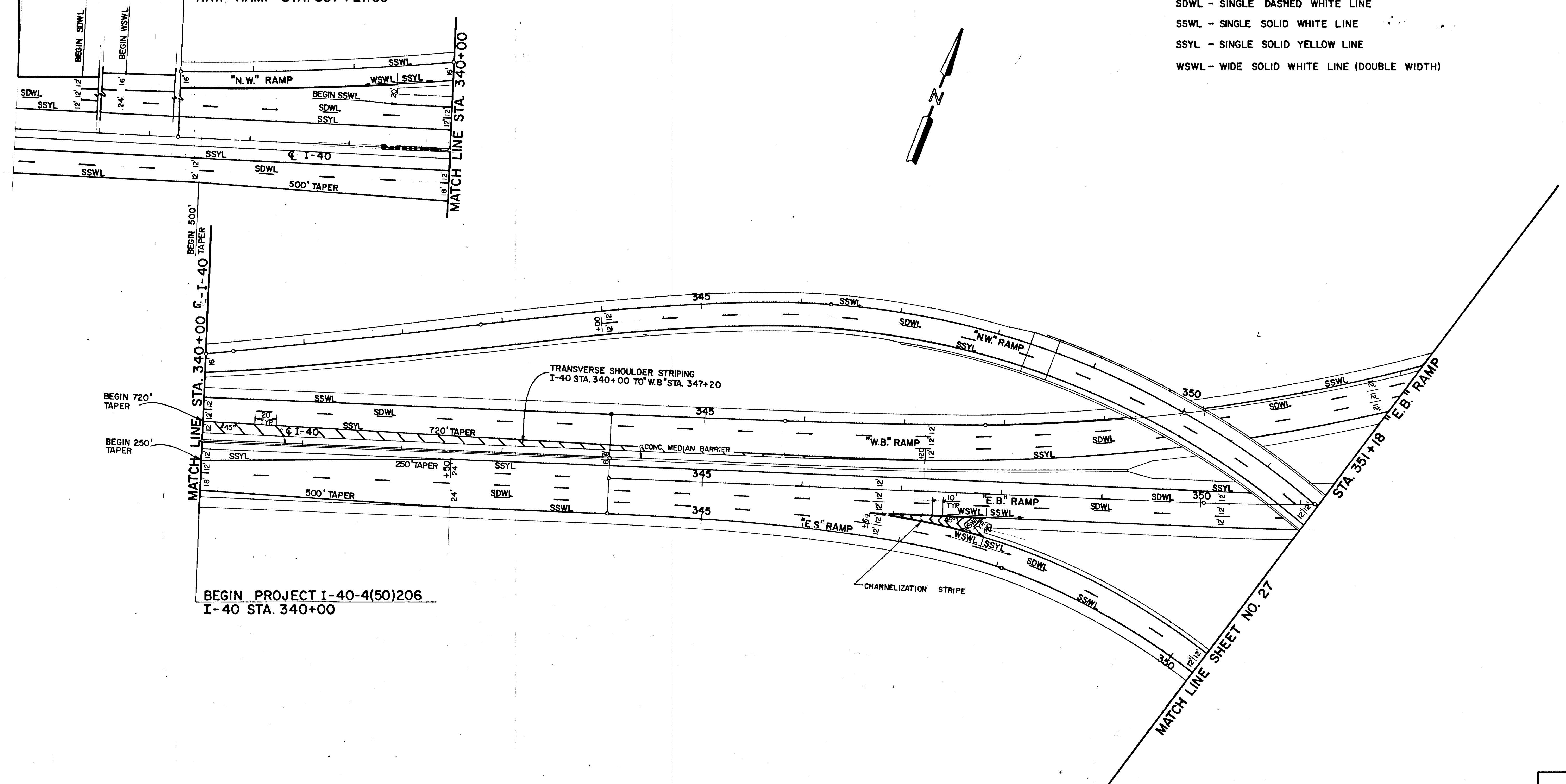
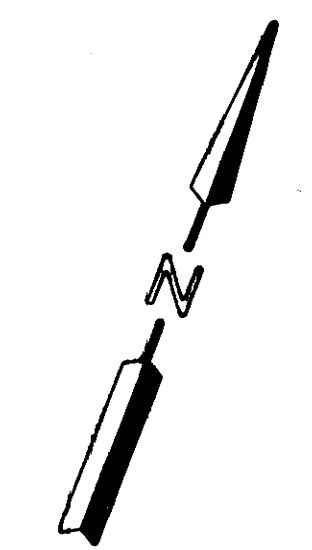
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	26

MATCH EXISTING STRIPING
 I-40 STA. 332+75

BEGIN CONSTRUCTION
 "N.W." RAMP STA. 337+27.35

KEY

- SDWL - SINGLE DASHED WHITE LINE
- SSWL - SINGLE SOLID WHITE LINE
- SSYL - SINGLE SOLID YELLOW LINE
- WSWL - WIDE SOLID WHITE LINE (DOUBLE WIDTH)

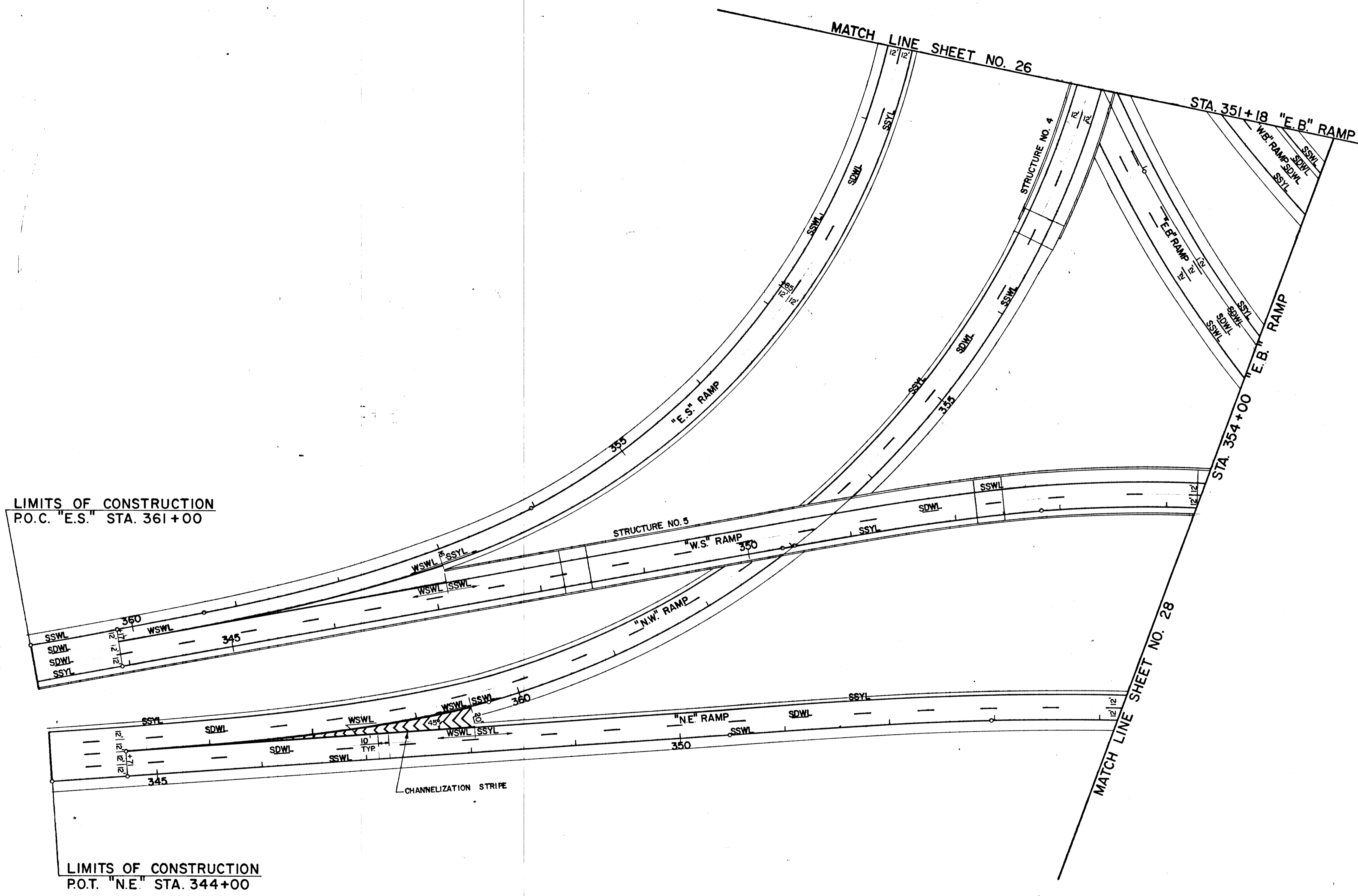


BEGIN PROJECT I-40-4(50)206
 I-40 STA. 340+00

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**PAVEMENT MARKING
 PLAN**
 STA. 340+00 I-40
 TO
 STA. 351+18 "E.B." RAMP
 SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	27

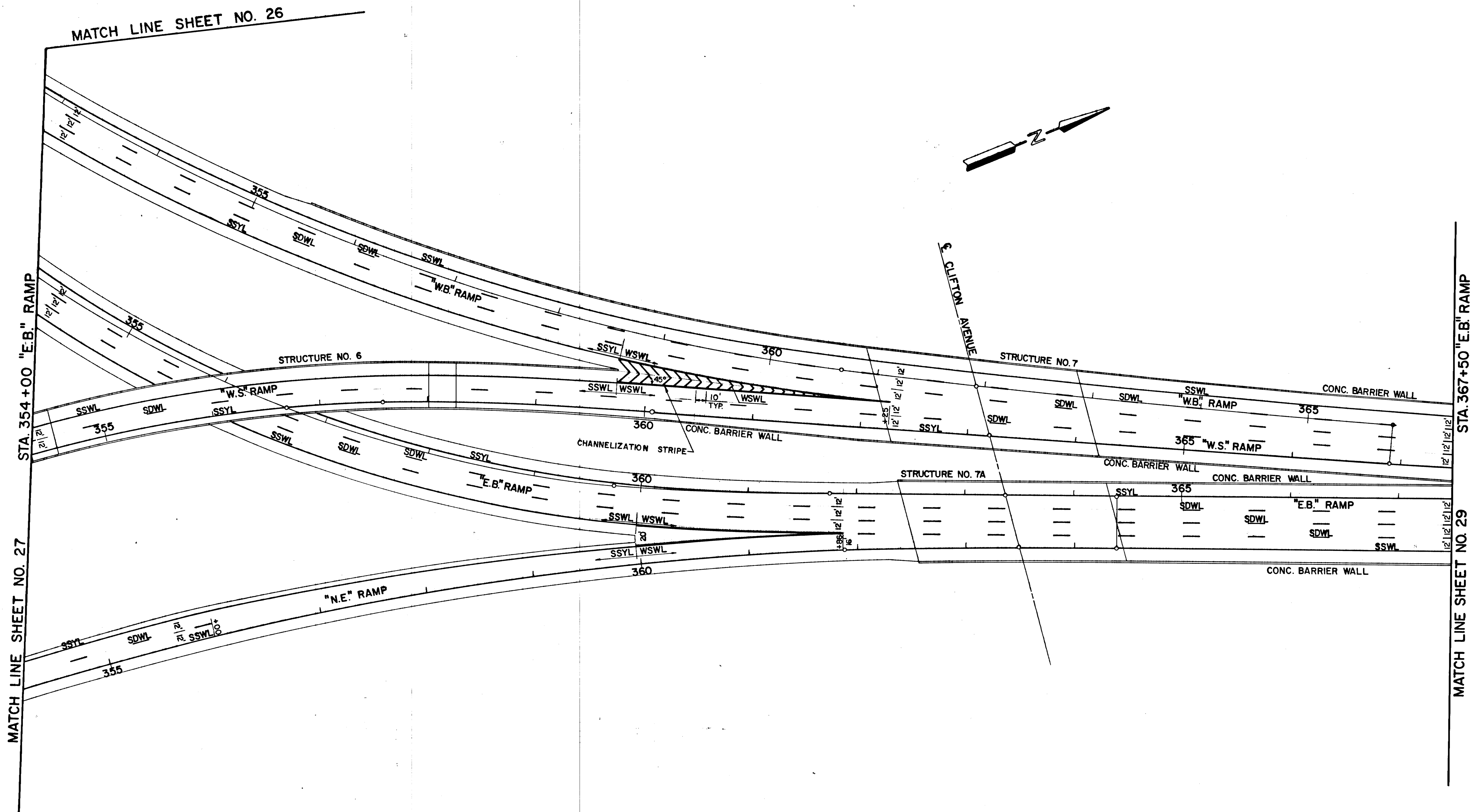


STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**PAVEMENT MARKING
 PLAN**

STA. 351+18 "E.B." RAMP
 TO
 STA. 344+00 "E.B." RAMP
 SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	28

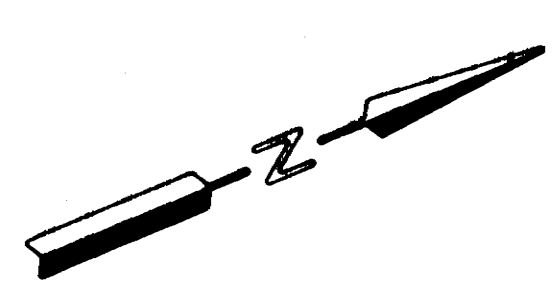
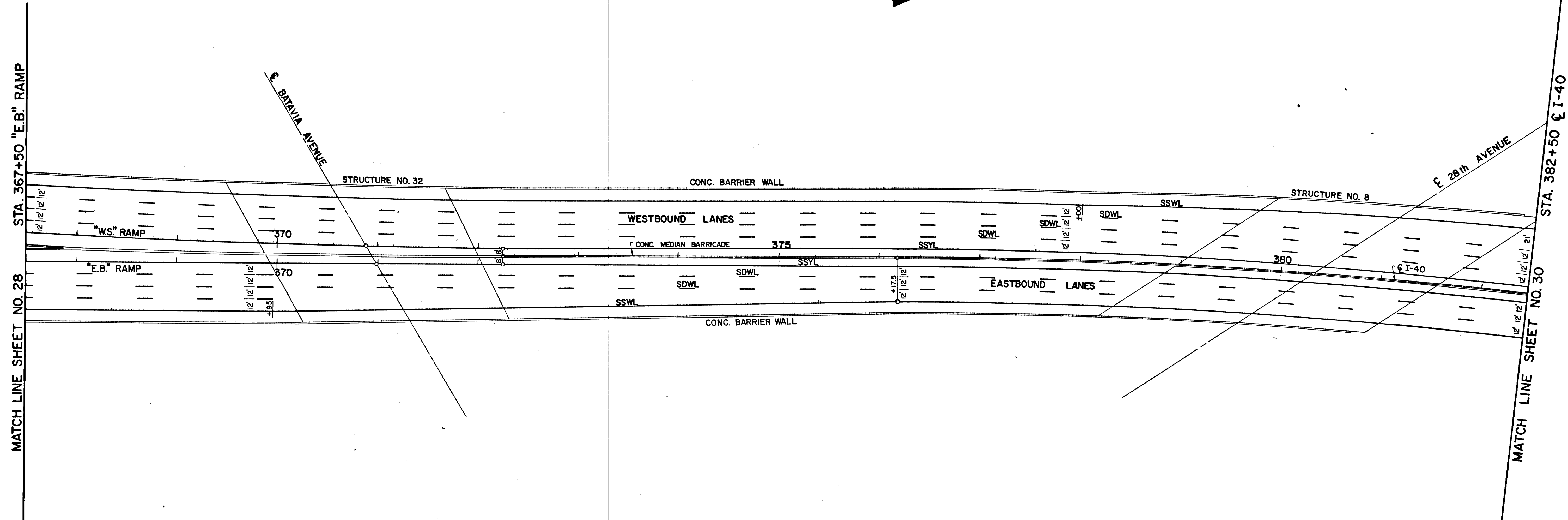


STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**PAVEMENT MARKING
 PLAN**
 STA. 354+00 "E.B." RAMP
 TO
 STA. 367+50 "E.B." RAMP
 SCALE: 1" = 50'

TENN. STATE HIGHWAYS
 Plans, Specifications, and Reports
 No. 330

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	29



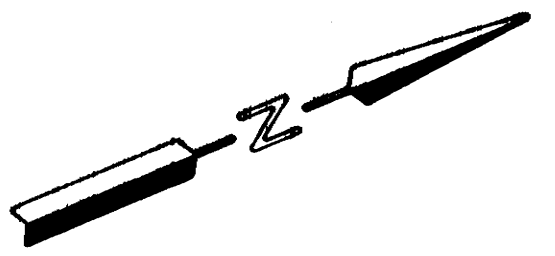
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**PAVEMENT MARKING
 PLAN**
 STA. 367+50 "E.B." RAMP
 TO
 STA. 382+50 I-40
 SCALE: 1"=50'

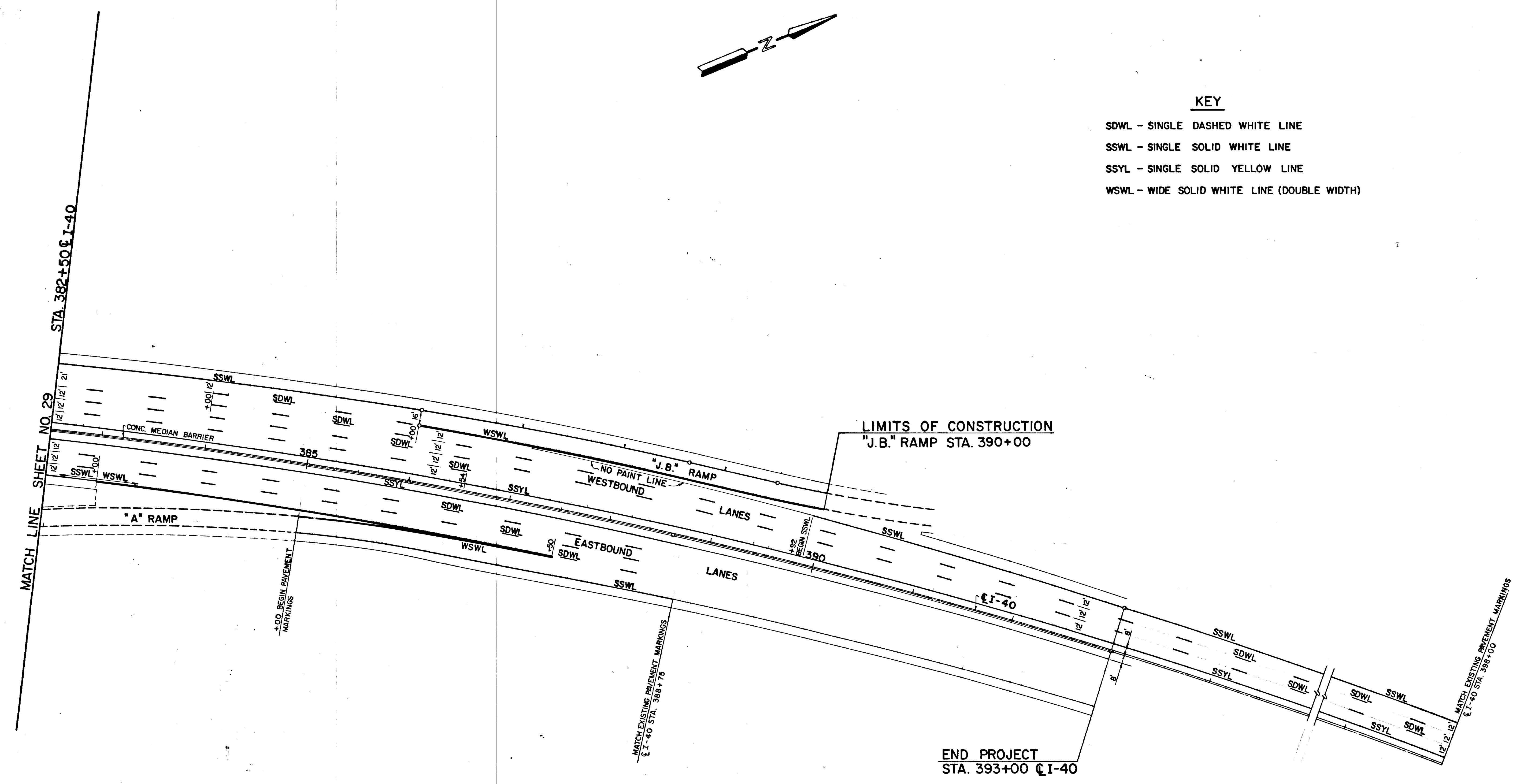
TELEPHONE PORT 11818

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IR-440-4(50)206	30

T&E
 Plans
 DWG
 No. 330
 1/8" = 1'



- KEY**
- SDWL - SINGLE DASHED WHITE LINE
 - SSWL - SINGLE SOLID WHITE LINE
 - SSYL - SINGLE SOLID YELLOW LINE
 - WSWL - WIDE SOLID WHITE LINE (DOUBLE WIDTH)



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 PAVEMENT MARKING
 PLAN
 STA. 382+50 @ I-40
 TO
 STA. 393+00 @ I-40
 SCALE: 1" = 50'

TELETYPE UNIT

TECHNICAL STAFF
 Plans
 Div.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	31

GENERAL NOTES

REV. 4-22-83: SHEET REDRAWN

LIGHTING GENERAL

- A. THIS PROJECT SHALL BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF HIGHWAYS DATED JANUARY 1968, AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSED CONTRACT.
- B. CONDUITS TO BE INSTALLED UNDER EXIST. PAVEMENT SHALL BE RIGID GALVANIZED STEEL CONDUIT SHALL BE JACKED OR BORED UNDER EXISTING PAVEMENT, UNLESS ROCK IS ENCOUNTERED. WHERE ROCK IS ENCOUNTERED, OBTAIN APPROVAL FROM THE ENGINEER TO SAW CUT EXISTING PAVEMENT. BURIAL DEPTH OF CONDUIT UNDER PAVEMENT SHALL BE 36". CONDUIT SHALL BE EXTENDED 3'-0" BEYOND EDGE OF PAVED SHOULDER.
- C. CONDUITS IN UNPAVED AREAS SHALL BE SCHEDULE 40 POLYVINYL CHLORIDE (RIGID)
- D. 250W LUMINAIRES SHALL BE EQUIPPED WITH 240 VOLT AUTO REGULATOR BALLAST AND A.N.S.I. CODE S50 LAMPS. FUSE EACH LUMINAIRE WITH A15A, SLOW BLOWING 600V FUSE WITH A WEATHER PROOF FUSE HOLDER IN THE BASE OF EACH POLE.
- E. ALL CONDUIT FITTINGS, HANGERS, EXPANSION FITTING, OUTLET BOXES AND ACCESSORIES REQUIRED FOR INSTALLATION OF CONDUIT IN OR ON BRIDGES SHALL BE INCIDENTAL TO THE UNIT PRICE OF STRUCTURE CONDUIT.
- F. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE LIGHTING ENGINEER FOR APPROVAL PRIOR TO PURCHASING MATERIAL.
- G. THE RESIDENT ENGINEER SHALL INSPECT EACH LUMINAIRE TO VERIFY THAT THE LAMP POSITION MATCHES THAT WHICH IS CALLED FOR IN THE APPROVED SHOP DRAWINGS.
- H. THIS CONSTRUCTION SHALL COMPLY WITH THE LATEST REVISIONS TO THE NATIONAL ELECTRICAL CODE, N.E.P.A. NO. 70, AND THE NATIONAL ELECTRICAL SAFETY CODE.
- I. ALL INCIDENTAL EQUIPMENT AND MATERIAL REQUIRED FOR THE SUCCESSFUL EXECUTION OF THIS WORK SHALL BE FURNISHED WHETHER SPECIFICALLY NOTED OR NOT.
- J. OMT
- K. CONTROL POINT CIRCUIT FUSES SHALL BE DUAL-ELEMENT SLOW BLOWING TYPE 600 V, 100,000 AMP INTERRUPTING CAPACITY.
- L. 150 W LUMINAIRES SHALL BE EQUIPPED WITH 240 VOLT AUTO REGULATOR BALLAST AND A.N.S.I CODE S55 LAMPS. FUSE EACH LUMINARE WITH A15A, SLOW BLOWING 600V FUSE WITH A WEATHER PROOF FUSE HOLDER.
- M. THE POLES SHALL BE ROUND TAPERED POLES DESIGNED IN ACCORDANCE WITH THE REQUIRMENTS OF THE 1981 EDITION OF THE STANDARD SPECIFICATION FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS PUBLISHED BY THE AMERICAN ASSOCIATION OF THE STATE HIGHWAY AND TRANSPORTATION OFFICALS. EXCEPT AS FURTHER PROVIDED HEREIN.
- N. POLES SHALL BE DESIGNED FOR 80 M.P.H. WIND PRESSURE. THE DESIGN SHALL SUPPORT THE NUMBER AND TYPE LUMINAIRES AND MOUNTING HEAD SPECIFIED ON THE PLANS.
- O. EXISTING EQUIPMENT REMOVED IS TO BE STOCKPILED AT A LOCATION APPROVED BY THE ENGINEER AND IS TO REMAIN THE PROPERTY OF THE STATE.
- P. ALL ANCHOR BOLTS, LUMINAIRE MOUNTING STEMS AND ACCESSORIES REQUIRED FOR INSTALLATION OF UNDERPASS LUMINAIRES SHALL BE INCIDENTAL TO THE UNIT PRICE OF UNDERPASS LUMINAIRES.
- Q. CONTROL POINT SHALL BE PROVIDED WITH A SPARE 60 AMP CIRCUIT FOR FUTURE USE.
- R. NO PULL BOXES SHALL BE LOCATED WITHIN THE SHOULDER OR PAVEMENT AREAS.

PERFORMANCE SPECIFICATIONS (ROADWAY LUMINAIRES)

- A. 250 WATT HIGH PRESSURE SODIUM LUMINAIRE SHALL CONFORM TO I.E.S. CLASSIFICATIONS: TYPE III MEDIUM DISTRIBUTION SEMI-CUTOFF.
- B. 150 WATT HIGH PRESSURE SODIUM UNDER BRIDGE LUMINAIRES SHALL BE SET FOR MAX. C.P. AT $\theta = 67.5^\circ$ AND TO PROVIDE I.E.S. "LONG" DISTRIBUTION.
- C. DESIGN ILLUMINATION BASIS:
 - I-440, I-40, AND RAMPS 0.8 fc MAINTAINED
 - CLIFTON AVE. AND BATAVIA AVE. 0.9 fc MAINTAINED
 - LAMP LUMEN DEPRECIATION FACTOR 0.73
 - LUMINAIRE DIRT DEPRECIATION FACTOR 0.90
- D. 250 W H.P.S. LAMPS PROVIDED SHALL BE RATED TO PROVIDE AN AVERAGE LIFE NOT LESS THAN 24,000 HOURS.
- E. MAXIMUM CANDLE POWER OF 250 W H.P.S. LUMINAIRES SHALL OCCUR BETWEEN $\theta = 60^\circ$ AND $\theta = 70^\circ$
- F. 150 W H.P.S. LAMPS SHALL BE RATED TO PROVIDE AN AVERAGE LIFE NOT LESS THAN 24,000 HOURS.

CONSTRUCTION SEQUENCING:

- A. THE CONTRACTOR SHALL SEQUENCE THE WORK SO THAT THE EXISTING ROADWAYS ON WHICH TRAFFIC IS TO BE MAINTAINED WILL ALWAYS BE ILLUMINATED DURING NON-DAYLIGHT HOURS.

CONSTRUCTION SPECIFICATIONS (ROADWAY LUMINAIRES)

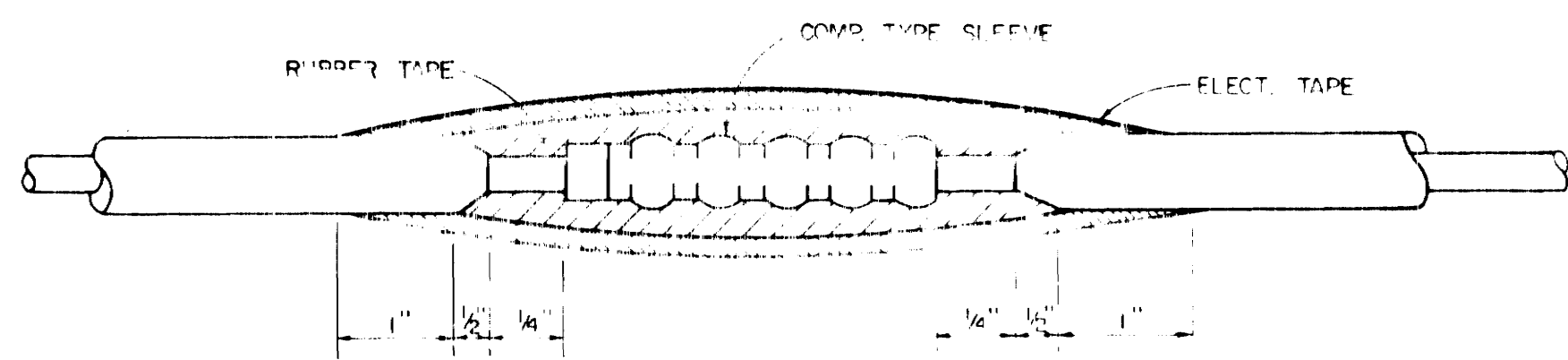
- A. 250W LUMINAIRES SHALL BE COBRAHEAD TYPE IN 400 W HOUSING WITH:
 1. HINGED AND GASKETED ACCESS DOOR, POSITIVE LOCKING.
 2. BALLAST AND CAPACITOR MOUNTED ON A SINGLE PLATE WITH TEMPERATURE DISCONNECT OR SCREW PLUG TERMINALS.
 3. ALUMINUM HOUSING.
- B. 150 WATT LUMINAIRES SHALL BE "UNDERPASS" TYPE WITH:
 1. CAST ALUMINUM HOUSING
 2. POLYCARBONATE REFRACTOR
 3. REFRACTOR GUARD
- C. POLES SHALL BE ROUND TAPERED AND LENGTH AS REQUIRED BY MOUNTING HEIGHT POLE BASES SHALL ACCOMMODATE A BOLT CIRCLE FOR PARAPET MOUNTED POLES OF 11 TO 12 INCHES FOR FOUR 1" X 40" ANCHOR BOLTS.
- D. BRACKET ARMS SHALL BE ROUND TAPERED TRUSS TYPE WITH STRAP MOUNTING AND LENGTH AS REQUIRED BY MOUNTING OFFSET, SEE SHEETS 35 THRU 38.
- E. FRANGIBLE BASES SHALL BE AASHTO APPROVED WITH ACCESS DOOR.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

LIGHTING
 GENERAL NOTES

DRAWING POST

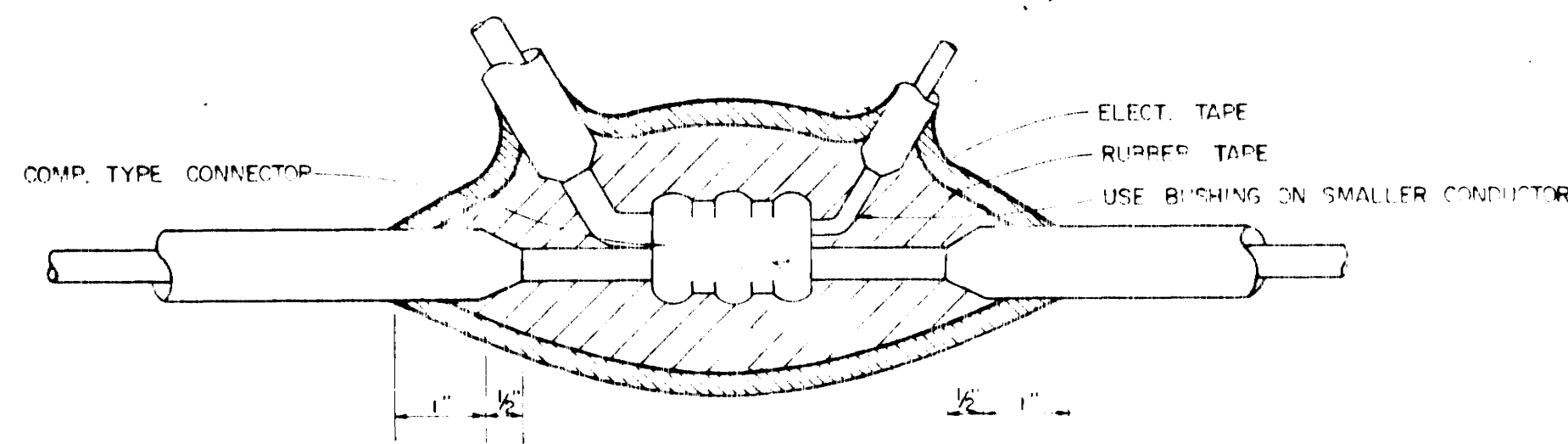
REV. 4-22-83: REMOVED LUMINAIRE MOUNTED ON STEEL BEAM DETAIL. ADDED UNDERPASS LUMINAIRE MOUNTING HEIGHT DETAIL.



1. REMOVE INSULATION FROM CONDUCTORS SO THAT WHEN SLEEVE IS INSTALLED APPROXIMATELY 1/8" BARE CONDUCTOR WILL REMAIN. TAPE INSULATION.
2. INSTALL COMPRESSION TYPE SLEEVE IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
3. APPLY STRIP OF RUBBER CEMENT OVERALL THEN WRAP WITH RUBBER TAPE SO THAT MINIMUM RUBBER TAPE THICKNESS EQUALS CONDUCTOR INSULATION THICKNESS.
4. FINISH WEAVING SPLICE WITH SCOTCH #33 ELECTRICAL TAPE. MINIMUM OF FOUR WRAPS, EACH HALF LAPPED WITH ALTERNATE WRAPS REVERSED LAY.

STRAIGHT SPLICE DETAIL

NO SCALE

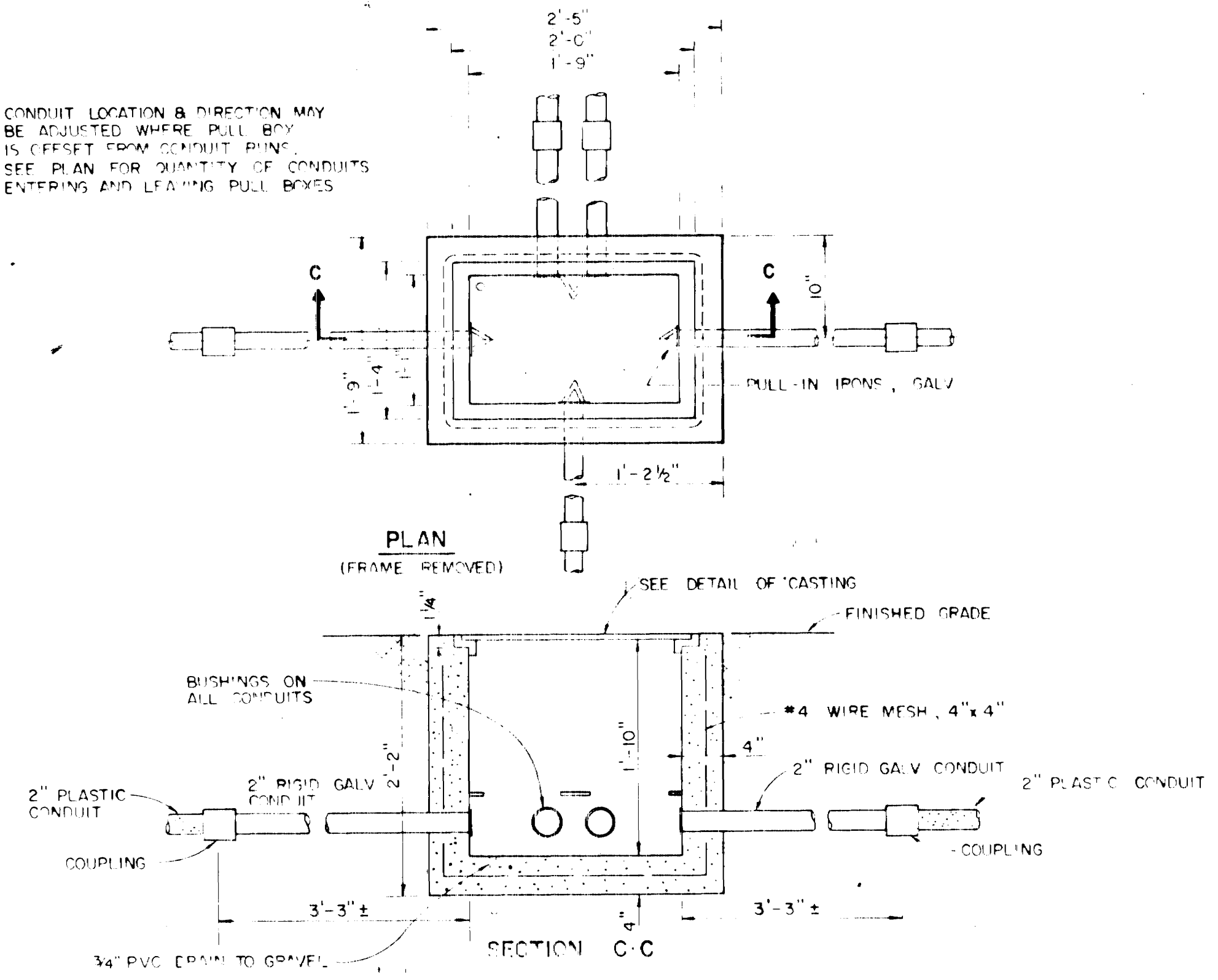


1. REMOVE INSULATION FROM CONDUCTORS TAPERING INSULATION AS SHOWN.
2. INSTALL COMPRESSION TYPE CONNECTOR IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
 - A. WHERE ONLY 3 CONDUCTORS ARE REQUIRED INSERT SHORT LENGTH OF WIRE IN UNUSED OPENING.
 - B. WHERE CONDUCTORS ARE OF DIFFERENT SIZE USE COMPRESSION SLEEVE TO FIT LARGER SIZE WITH BUSHING FOR SMALLER CONDUCTOR.
3. SAME AS NOTES 3 & 4 FOR STRAIGHT SPLICE.

SPLICE DETAIL FOR 3 OR MORE CONDUCTORS

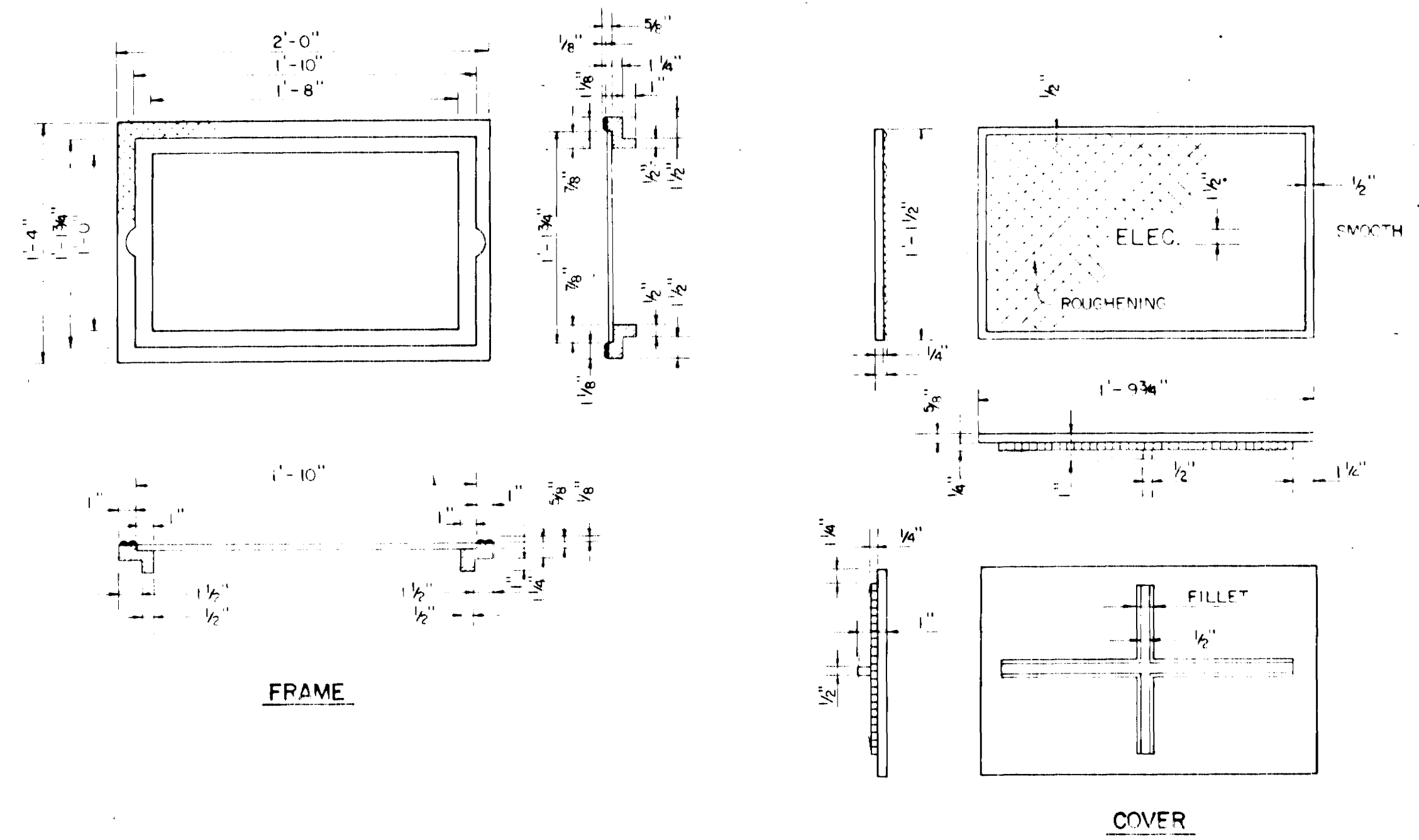
NO SCALE

CONDUIT LOCATION & DIRECTION MAY BE ADJUSTED WHERE PULL BOX IS OFFSET FROM CURB POINT. SEE PLAN FOR QUANTITY OF CONDUITS ENTERING AND LEAVING PULL BOXES.



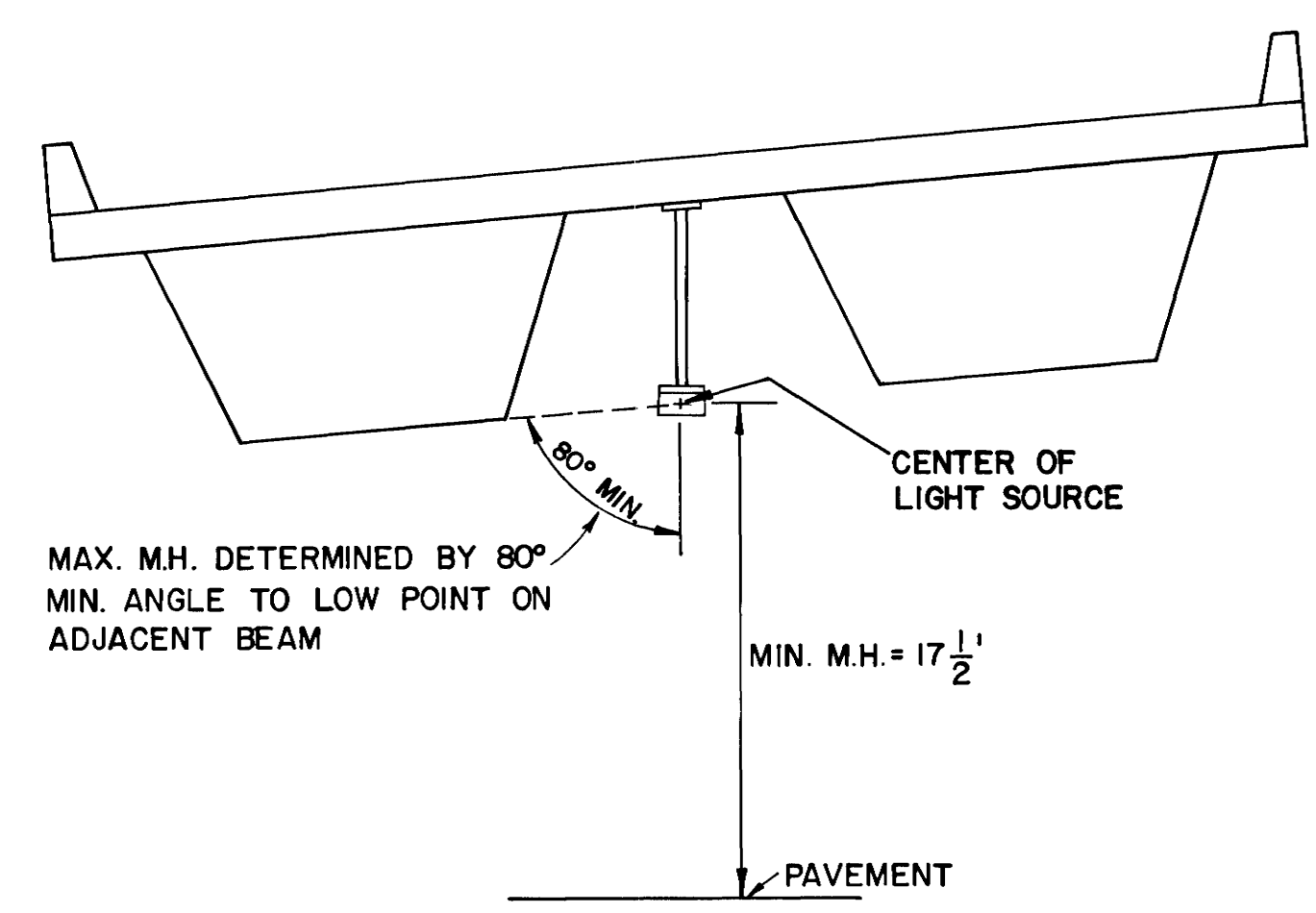
DETAIL OF PULL BOX

NO SCALE



DETAIL OF PULL BOX CASTING

NO SCALE

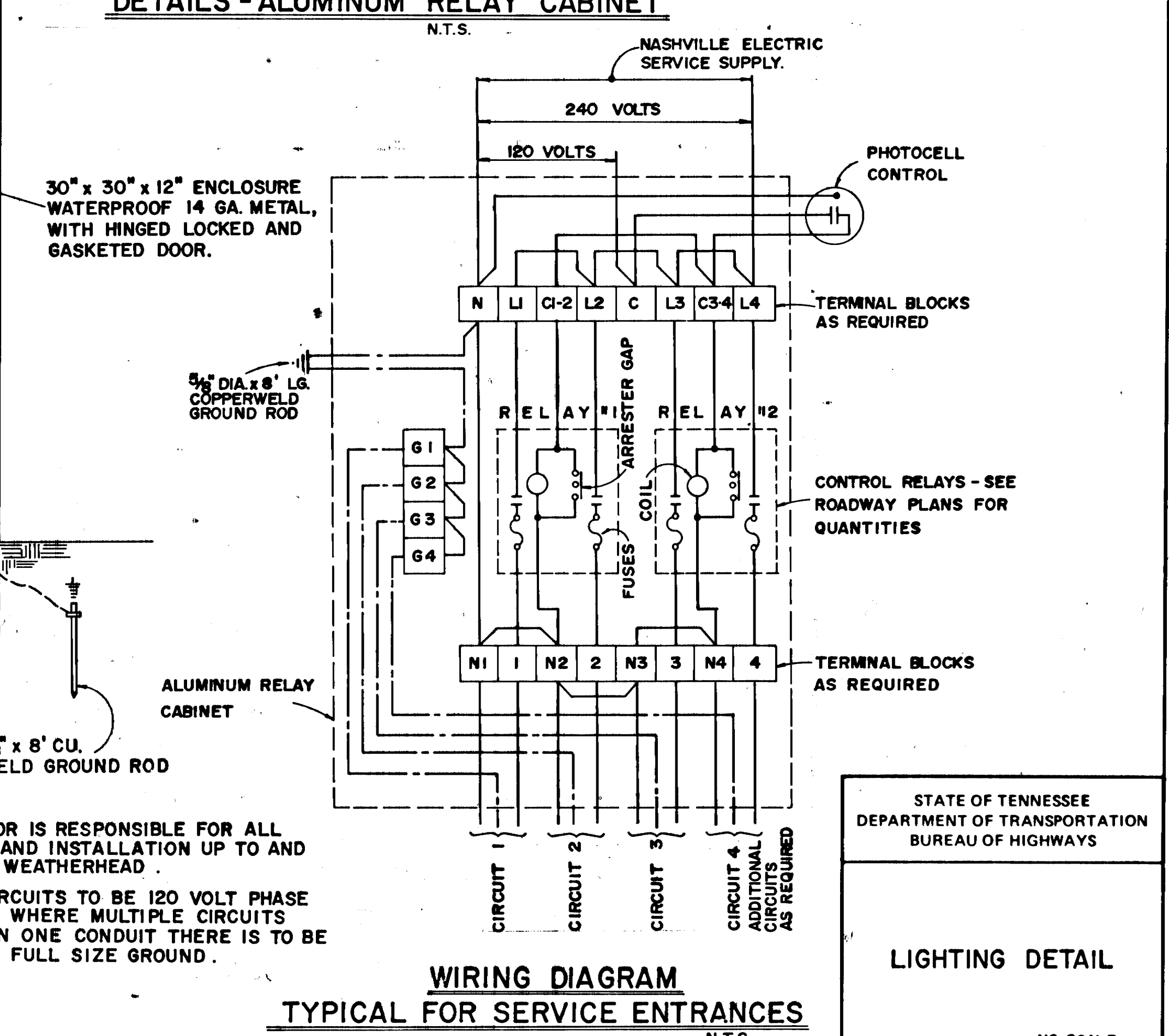
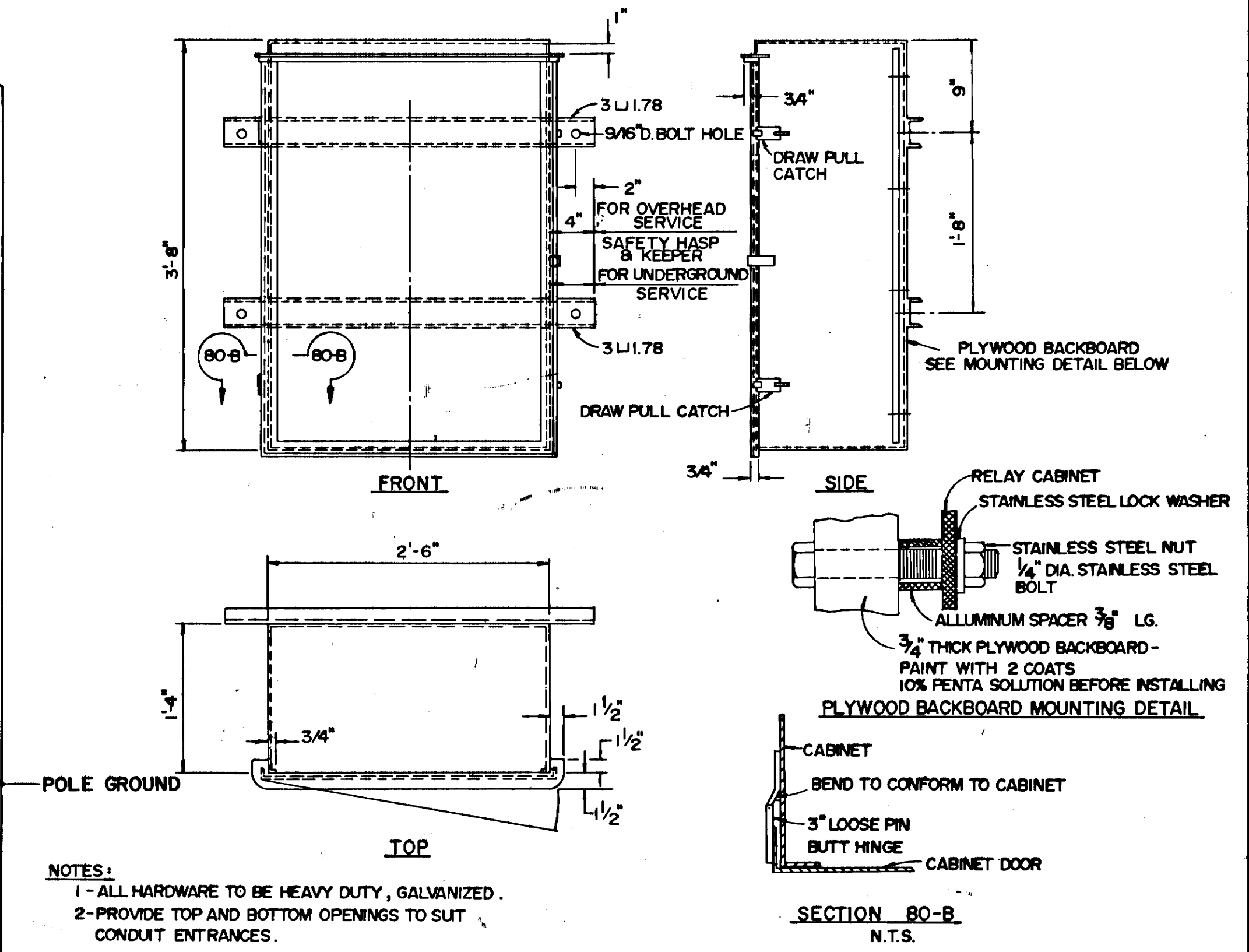
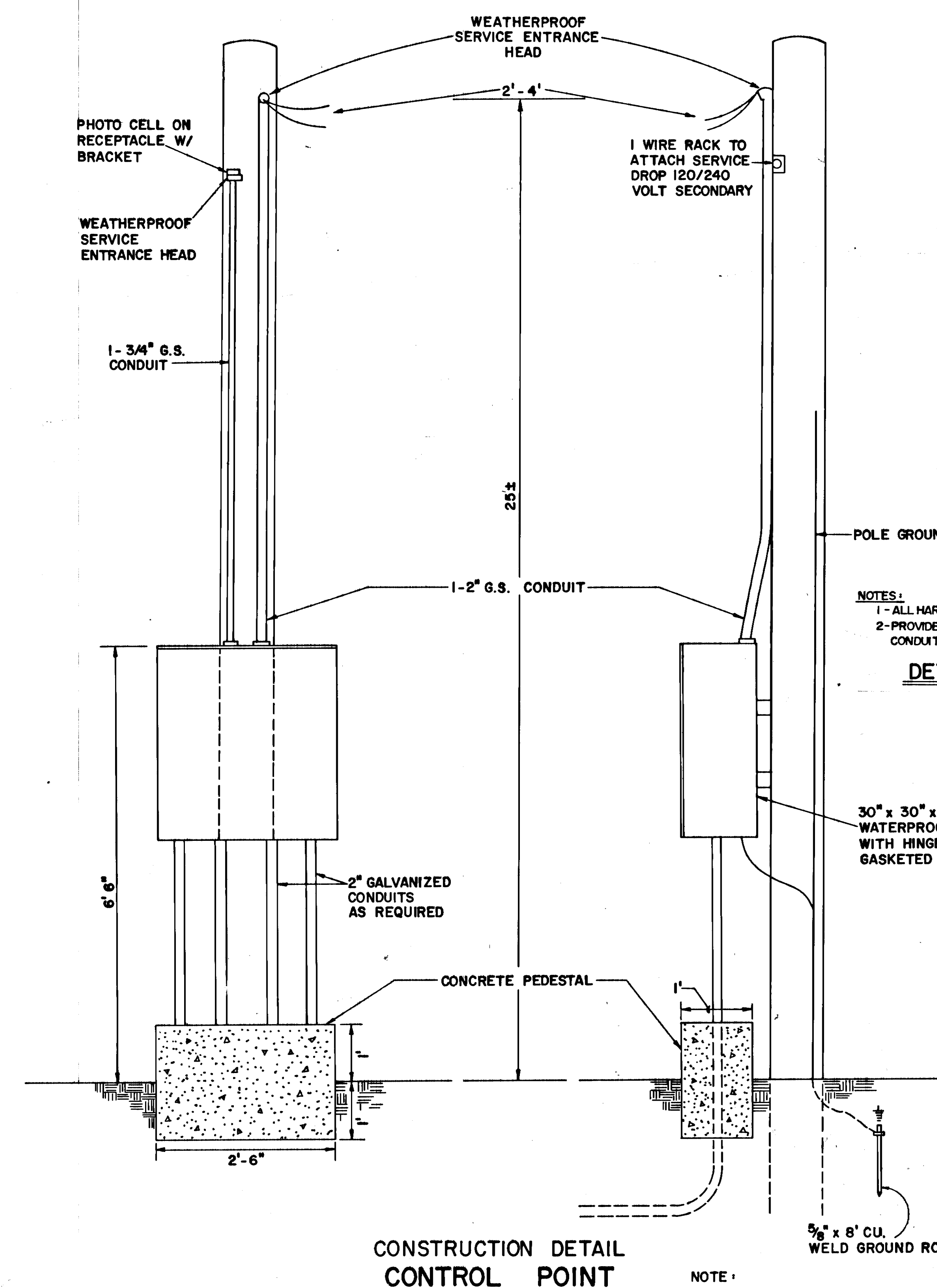
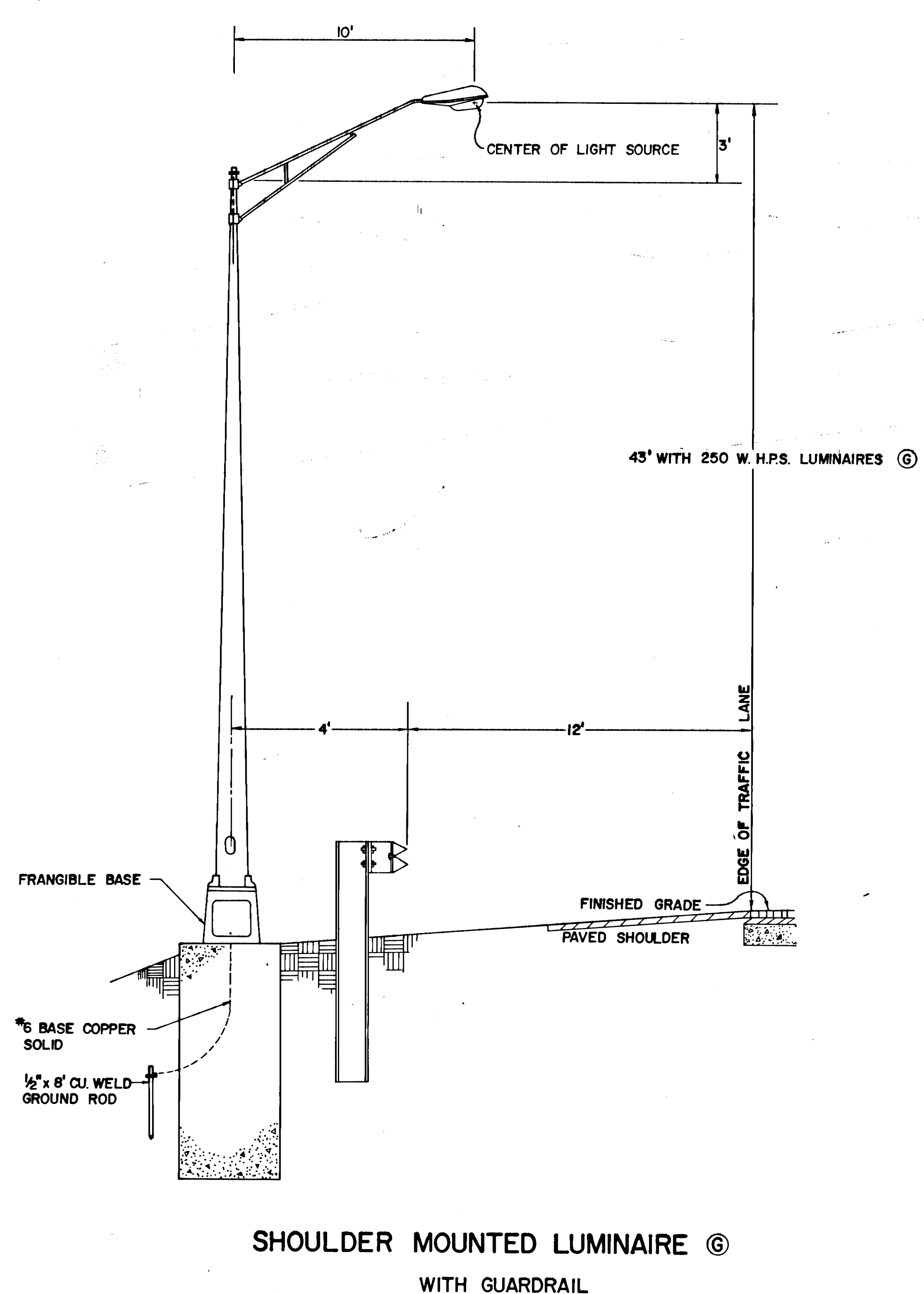


UNDERPASS LUMINAIRE MOUNTING HEIGHT DETAIL

NO SCALE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	33

REV. 4 22 83; ADDED DETAILS OF CONTROL POINT



- NOTE:
- CONTRACTOR IS RESPONSIBLE FOR ALL MATERIAL AND INSTALLATION UP TO AND INCLUDING WEATHERHEAD.
 - BRANCH CIRCUITS TO BE 120 VOLT PHASE TO GROUND WHERE MULTIPLE CIRCUITS ARE RUN IN ONE CONDUIT THERE IS TO BE A COMMON FULL SIZE GROUND.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

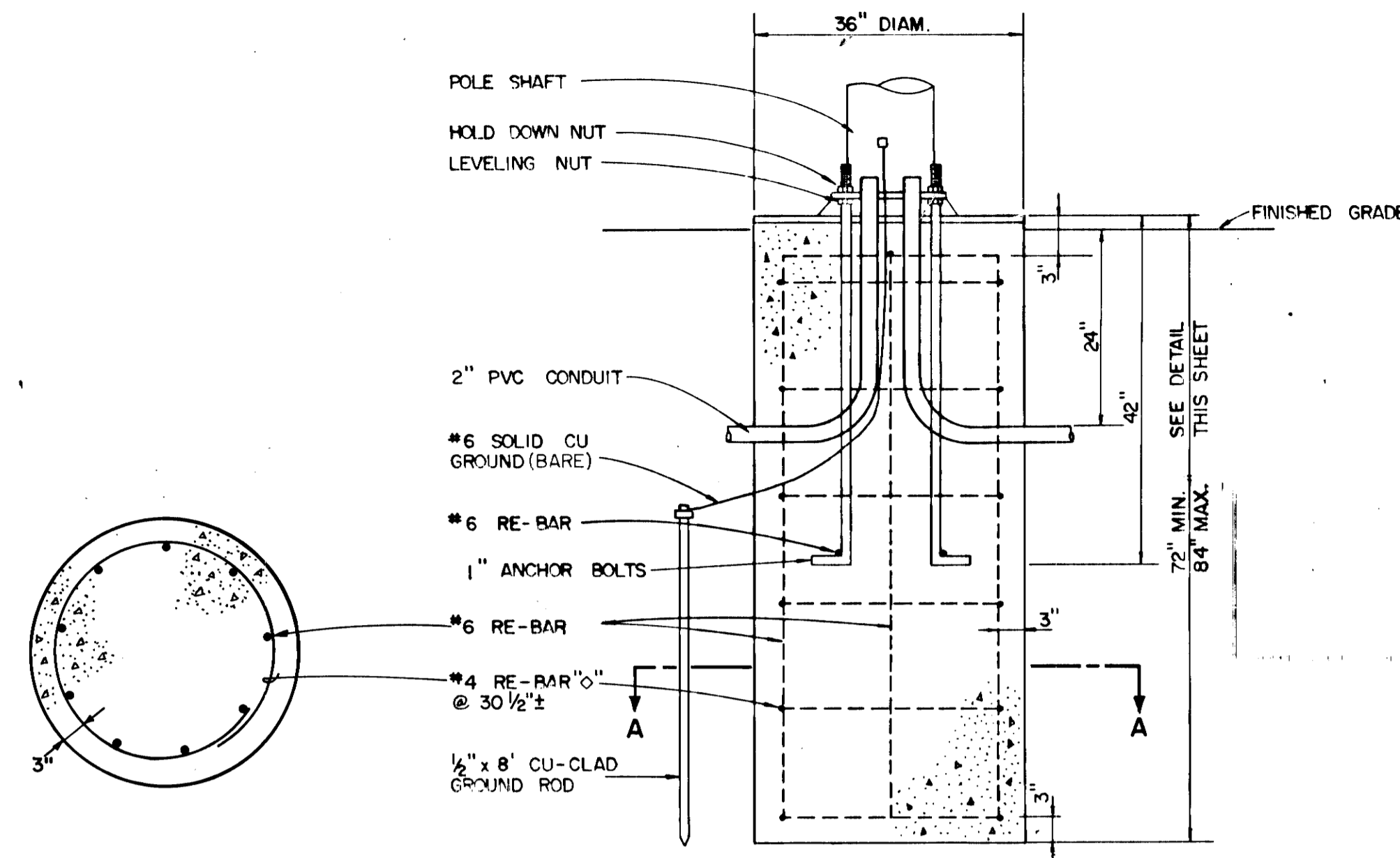
LIGHTING DETAIL

NO SCALE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	83	ID-IR-440-4(50)206	34

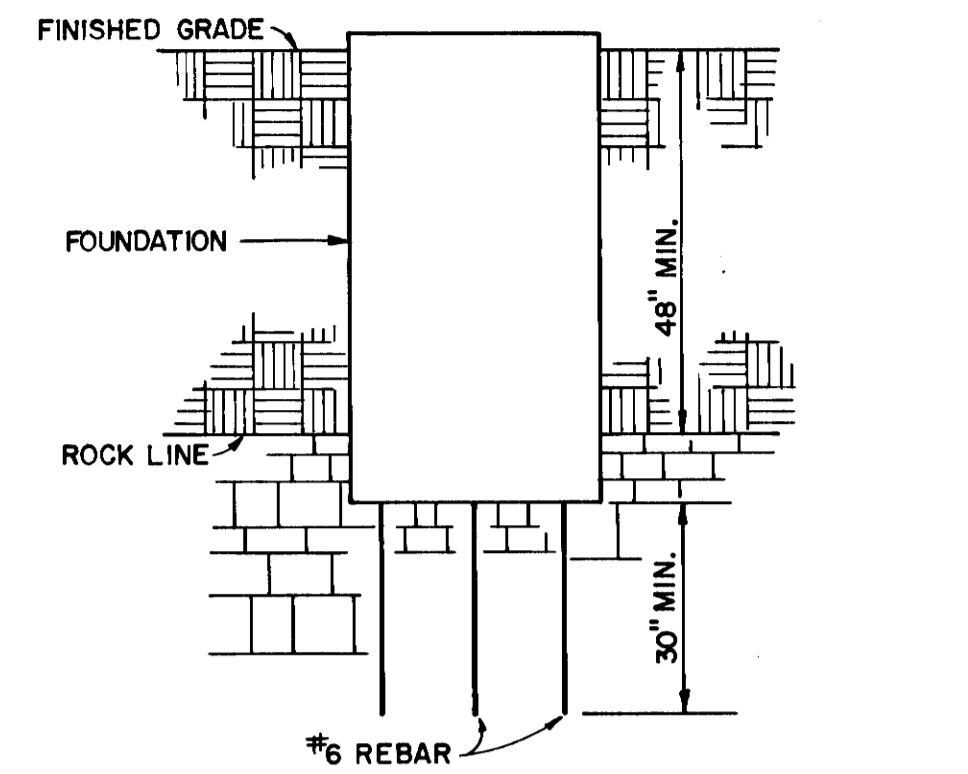
REV. 4-22-83: ADDED REBAR & EMBEDMENT DETAILS FOR FOUNDATION. REVISED DETAIL OF CONDUCTOR CONNECTIONS & DETAIL OF LUMINAIRE MOUNTED ON PIER.

NOTE: EPOXY GROUT SHALL BE NON-SHRINK TYPE IN ACCORDANCE WITH ASTM C-827, ASTM C-307, ASTM C-580 AND ASTM C-531.

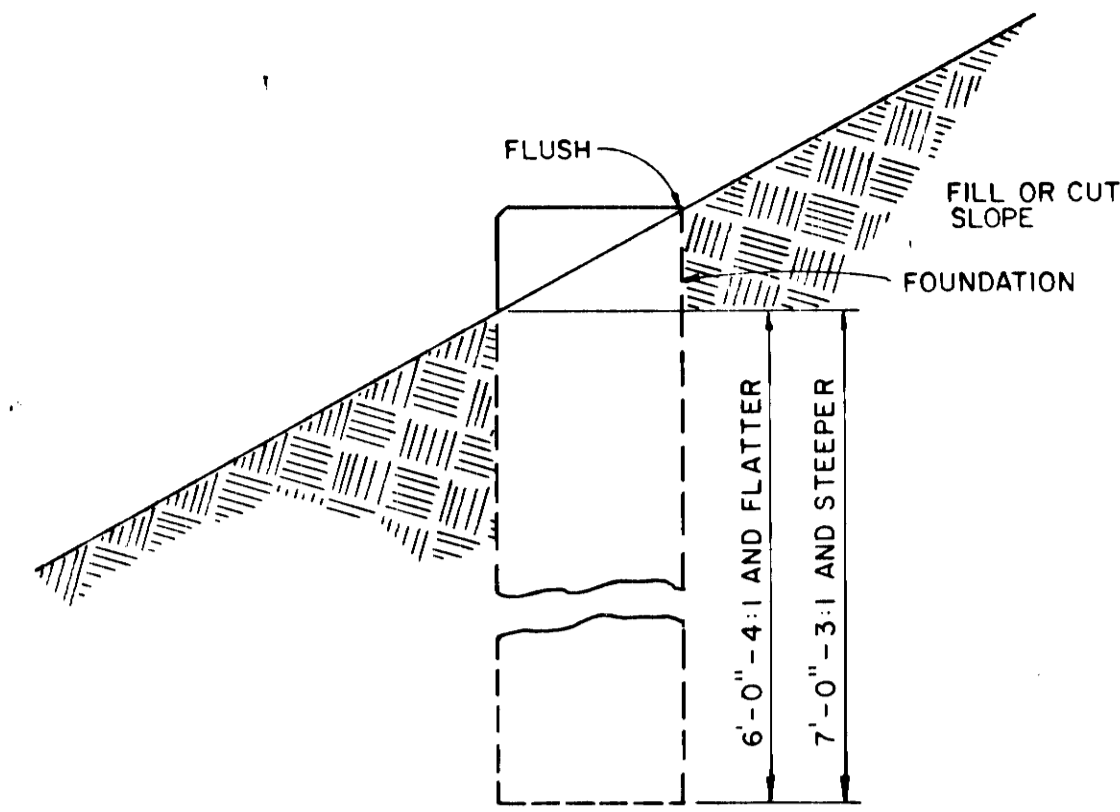


**SECTION A-A
REBAR DETAIL**
NO SCALE

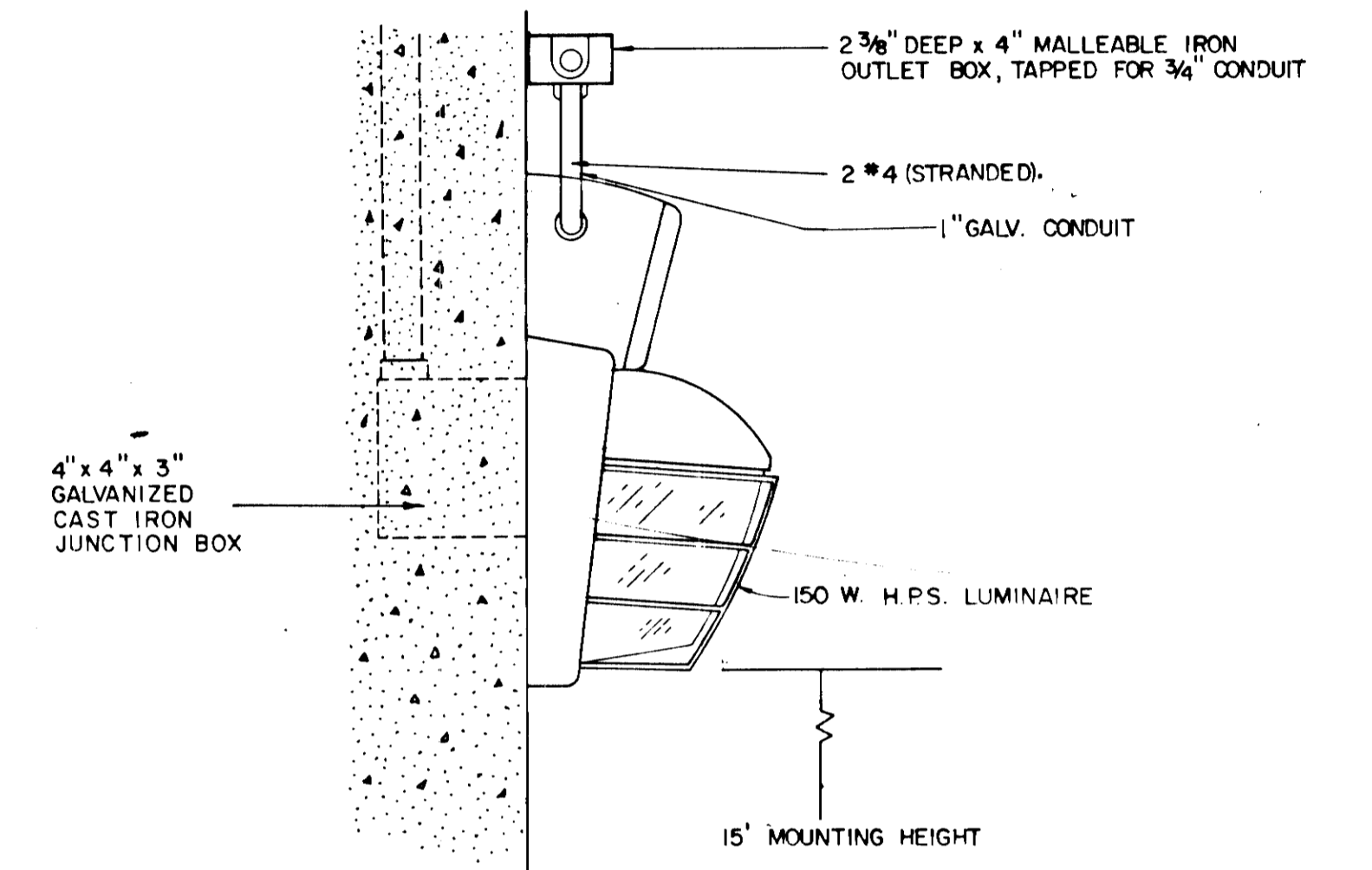
**FOUNDATION DETAILS
FOR
ROADWAY LIGHT STANDARDS**
NO SCALE



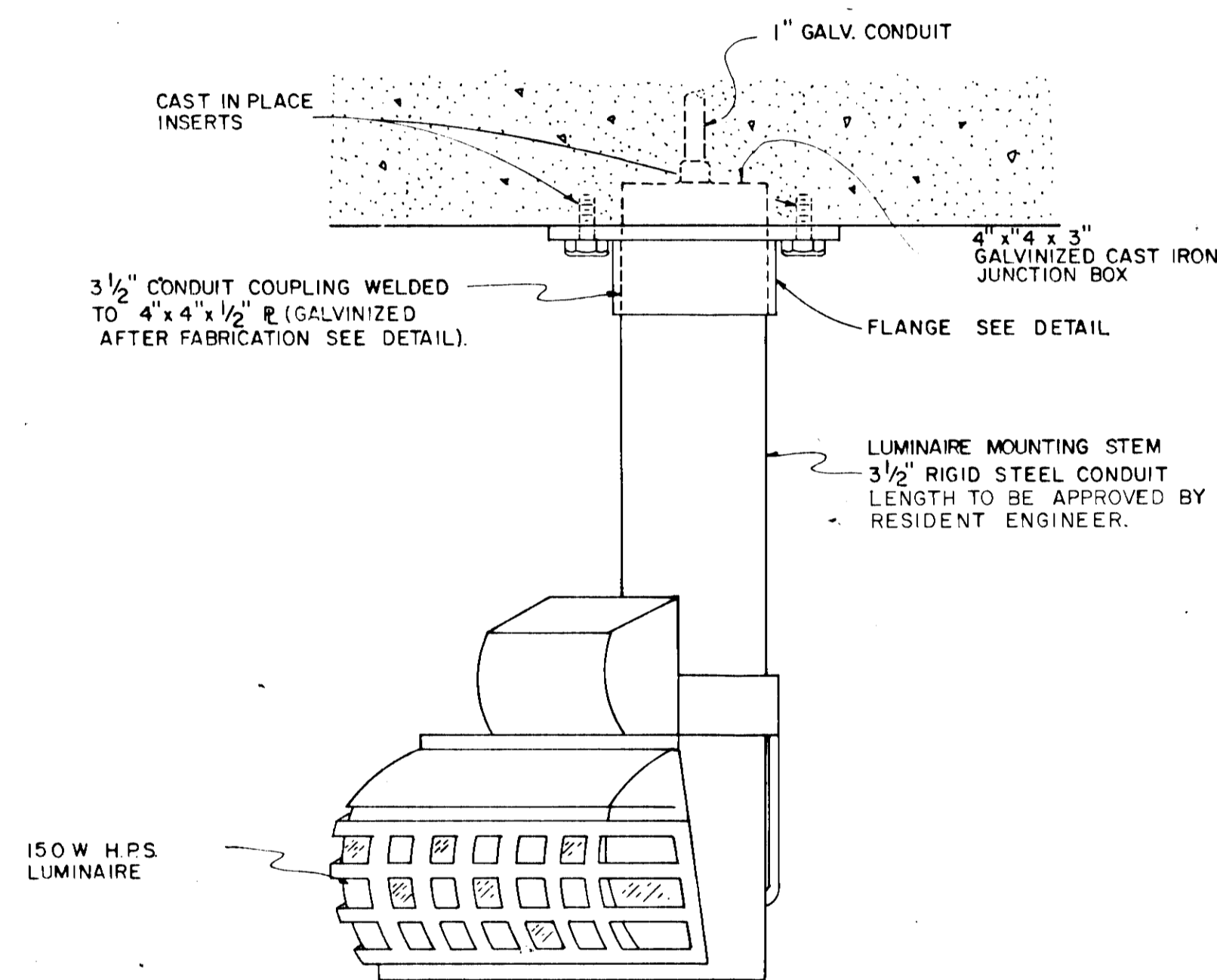
**ROCK EMBEDMENT DETAIL
FOR
ROADWAY LIGHT STANDARDS FOUNDATION**
NO SCALE



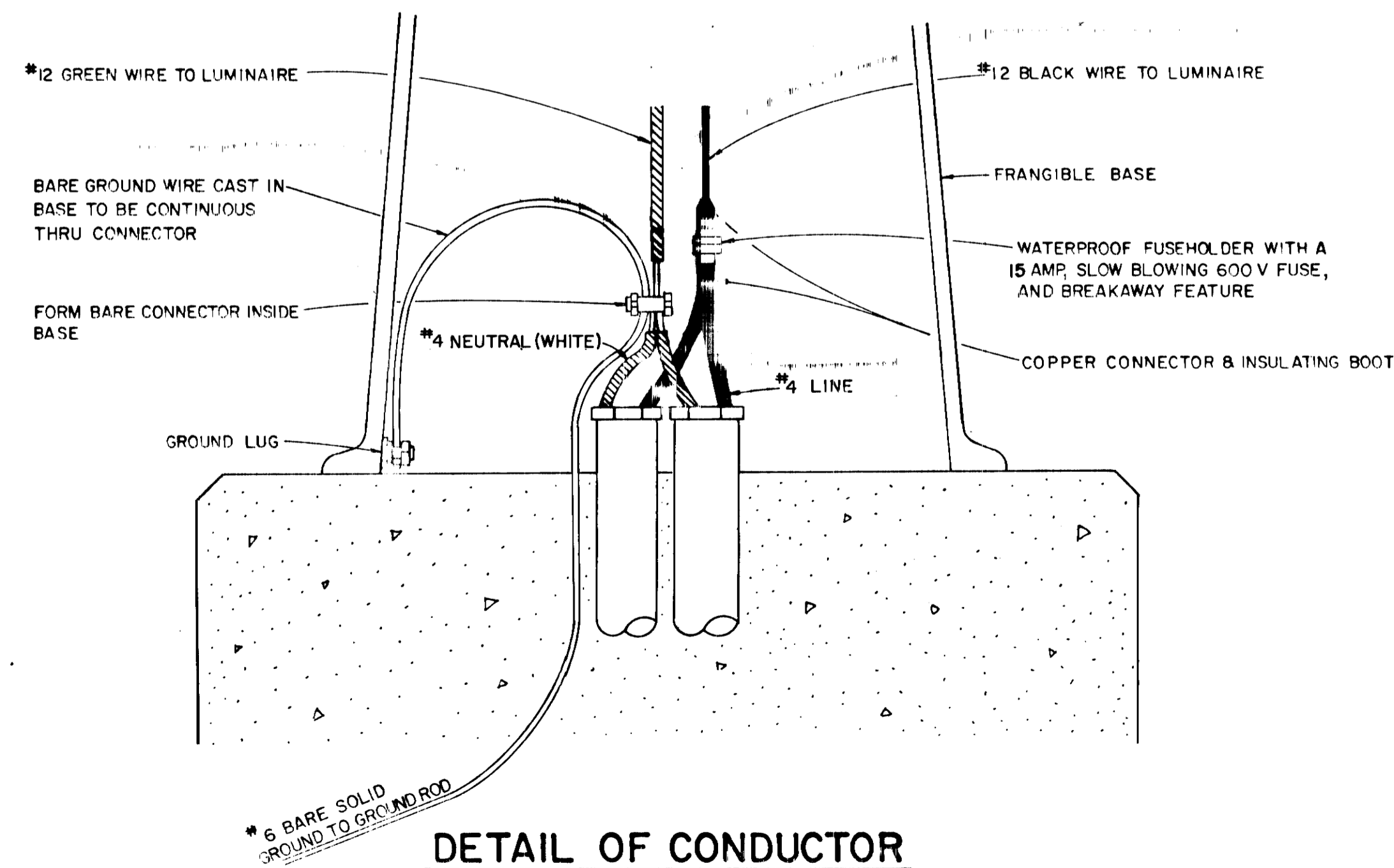
FOUNDATION DEPTH DETAIL
NO SCALE



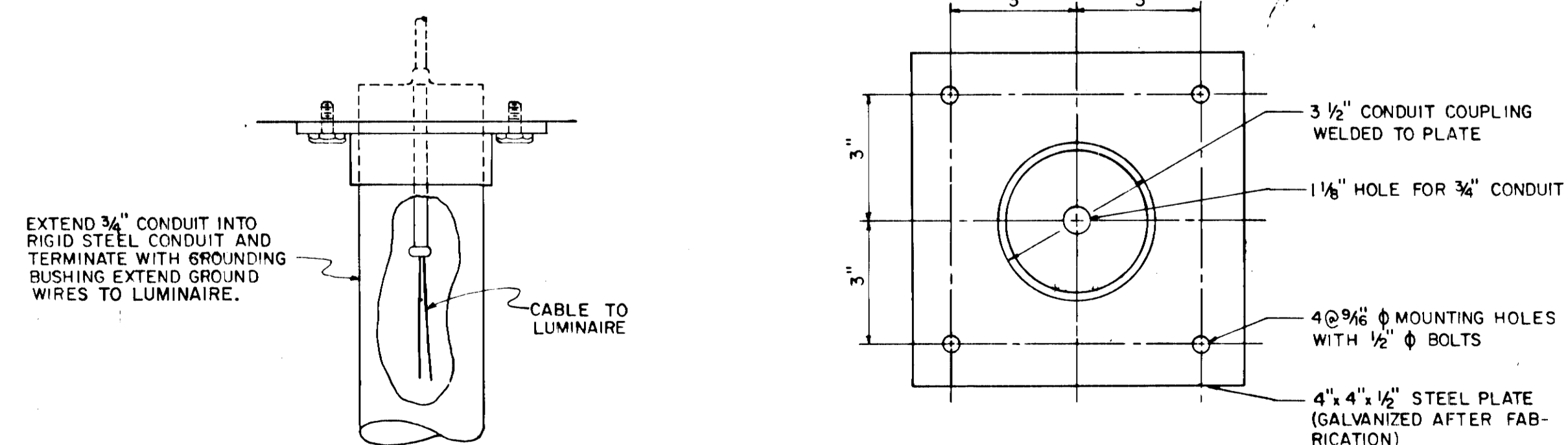
LUMINAIRE MOUNTED ON PIER (B)
NO SCALE



LUMINAIRE MOUNTED ON BRIDGE SLAB (B)
NO SCALE



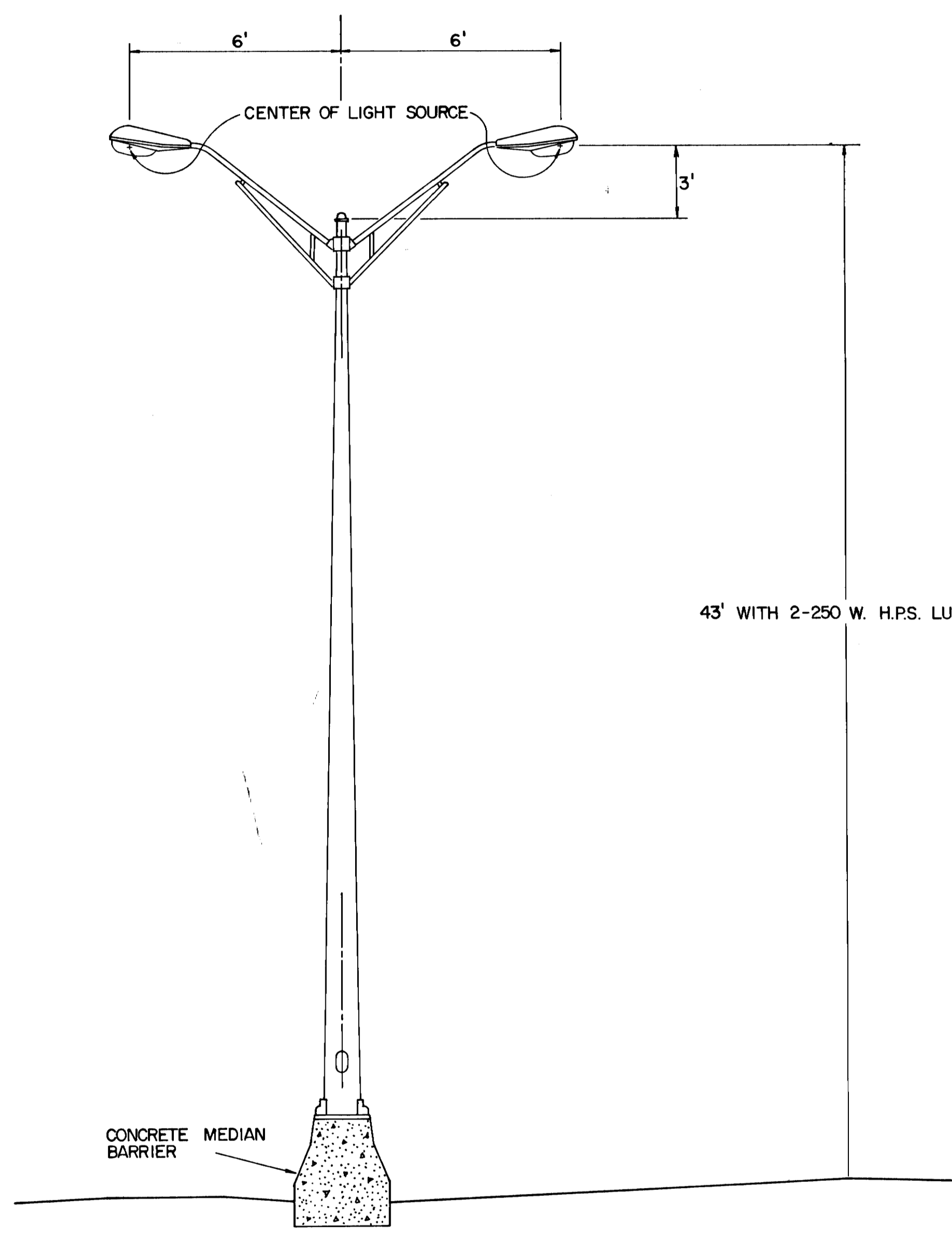
**DETAIL OF CONDUCTOR
CONNECTIONS INSIDE STANDARD**
NO SCALE



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

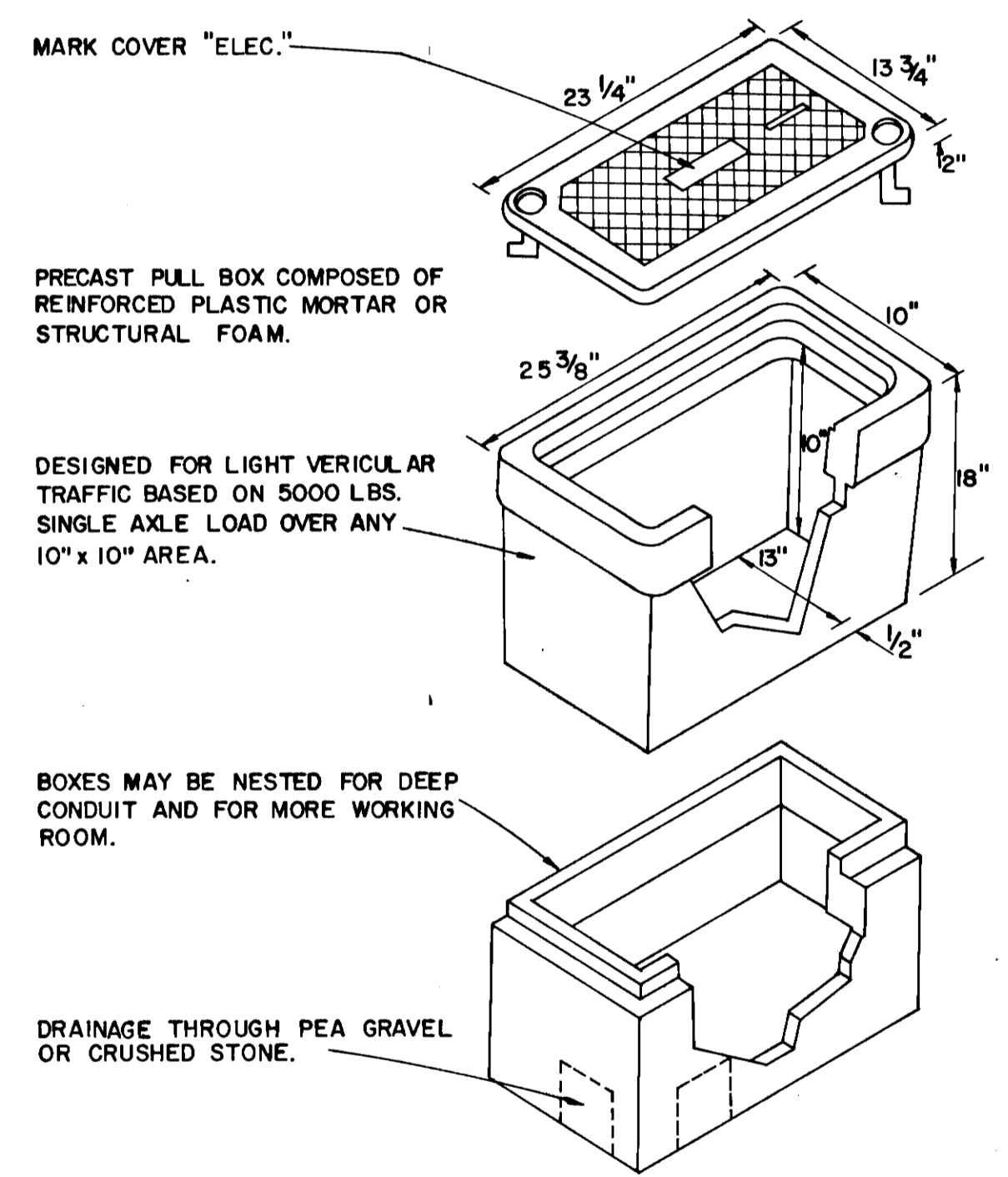
LIGHTING DETAIL

REV. 4-22-83: REVISED M.H. ON TWIN LUMINAIRE DETAIL. CHANGED RE-BAR SIZES ON FOUNDATION DETAILS.

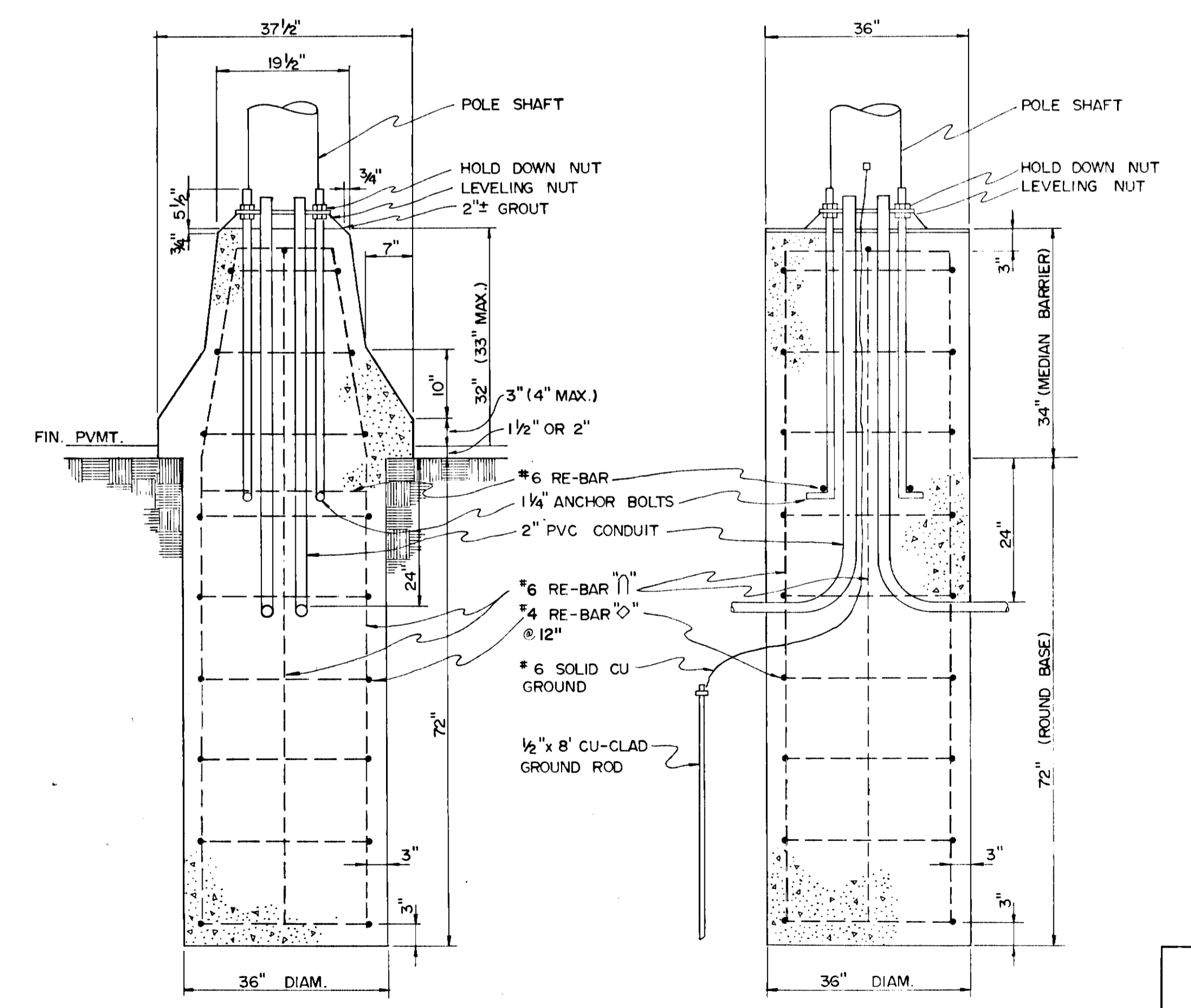
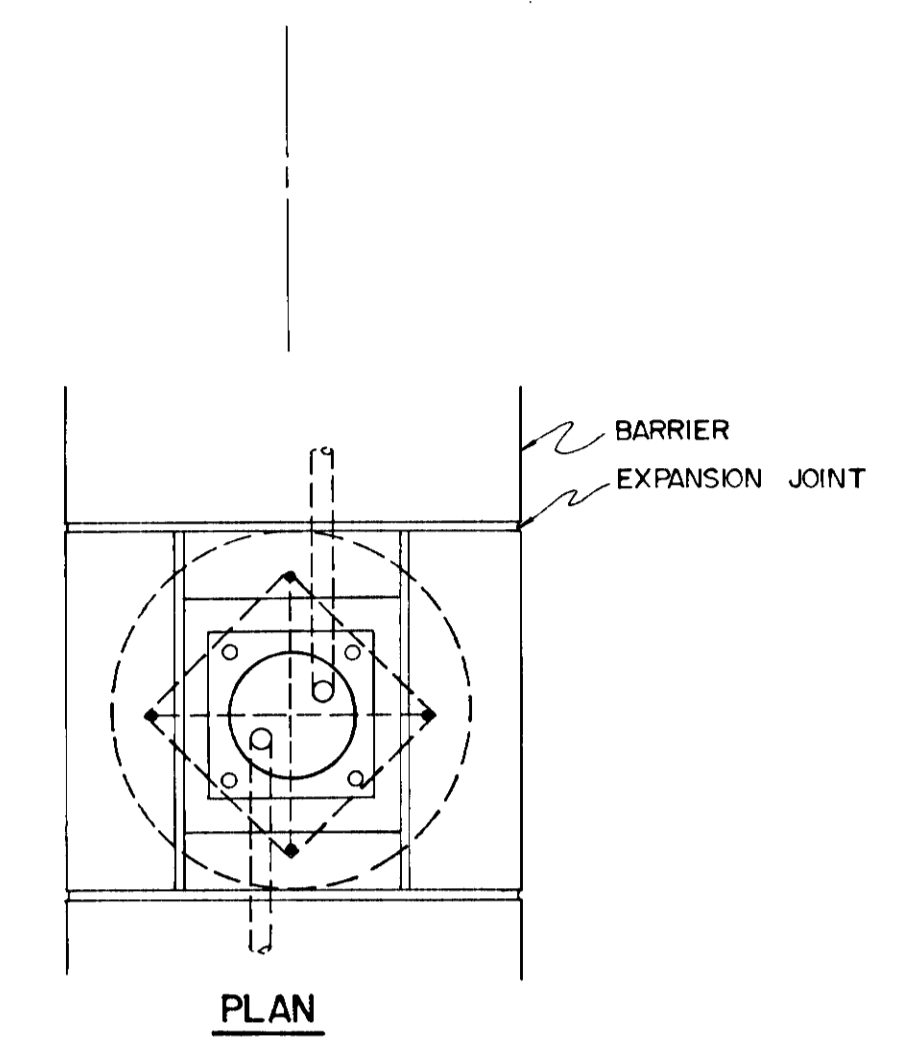


NOTE: SEE STANDARD DRAWING M-103-148

TWIN BARRIER MOUNTED LUMINAIRES (M)
 N.T.S.



ALTERNATE UNDERGROUND PULL BOX DETAIL
 N.T.S.



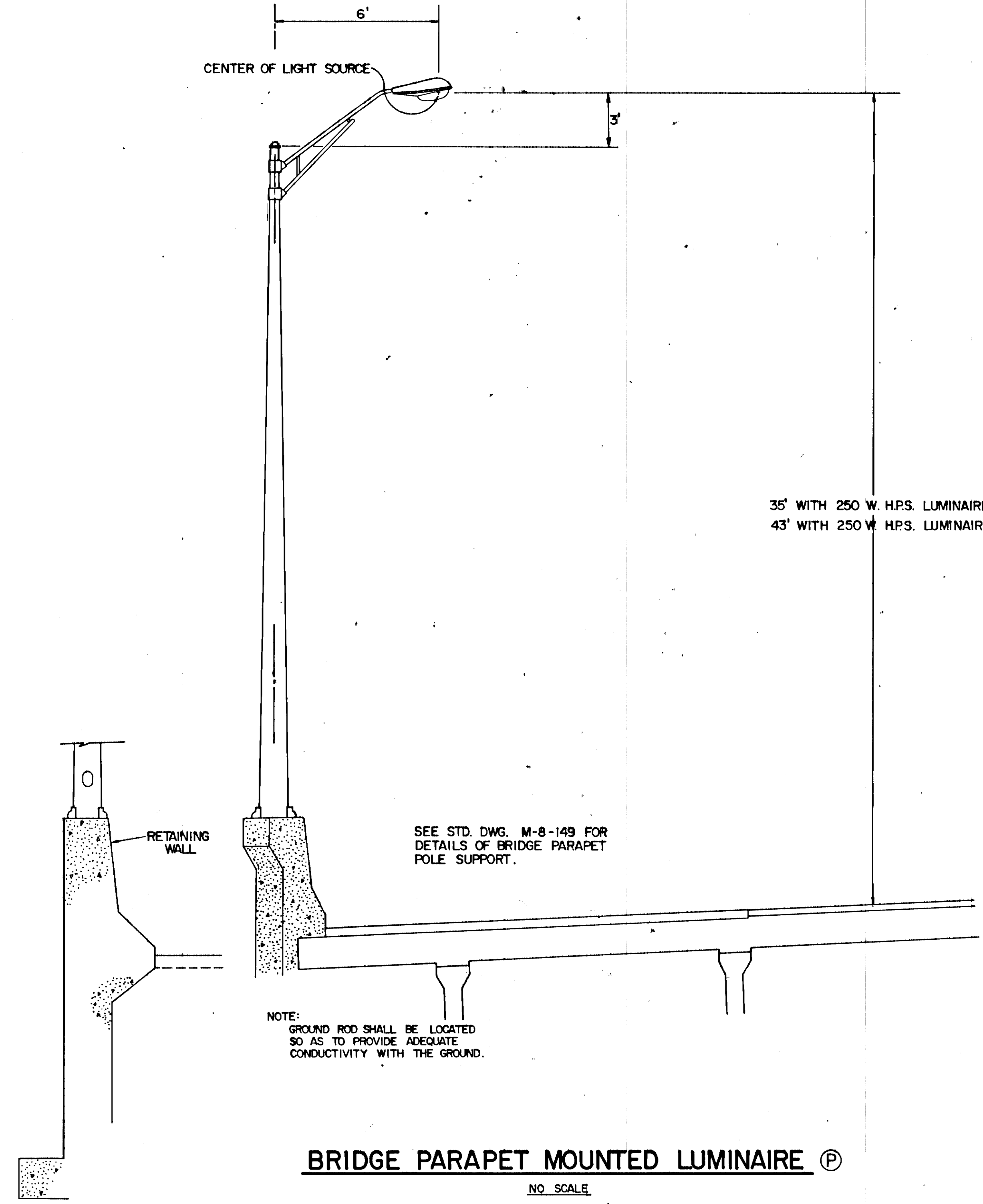
LIGHTING STANDARD FOUNDATION DETAILS
 SEE ALSO STD. DWG. M-103-148

LIGHTING DETAIL

STATE HIGHWAY
 FILE No. 330
 DRAWING No. 330

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	83	TD-TR-440-4(50)206	36

REV. 4-22-83: REVISED M.H. FOR RETAINING WALL LUMINAIRE.



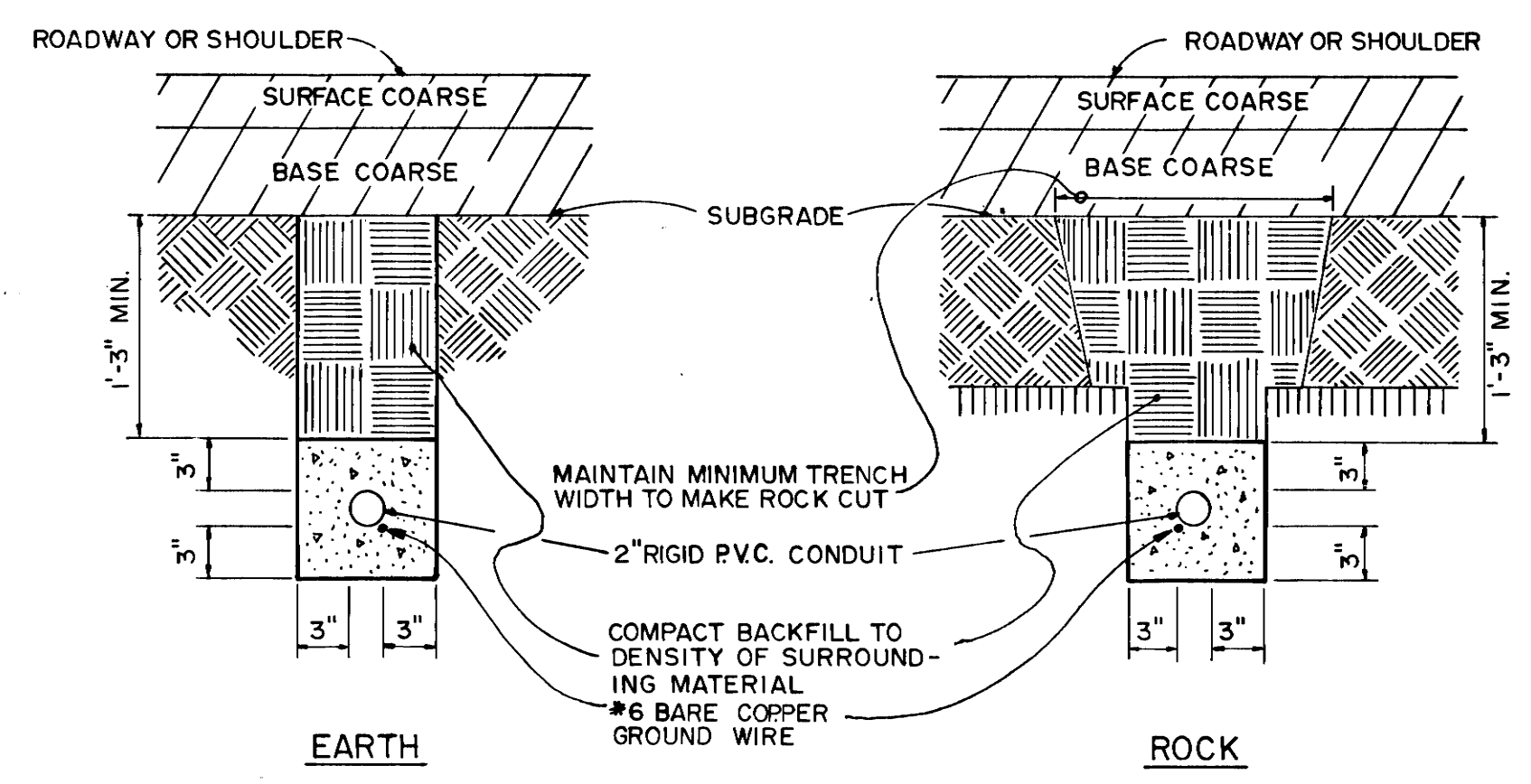
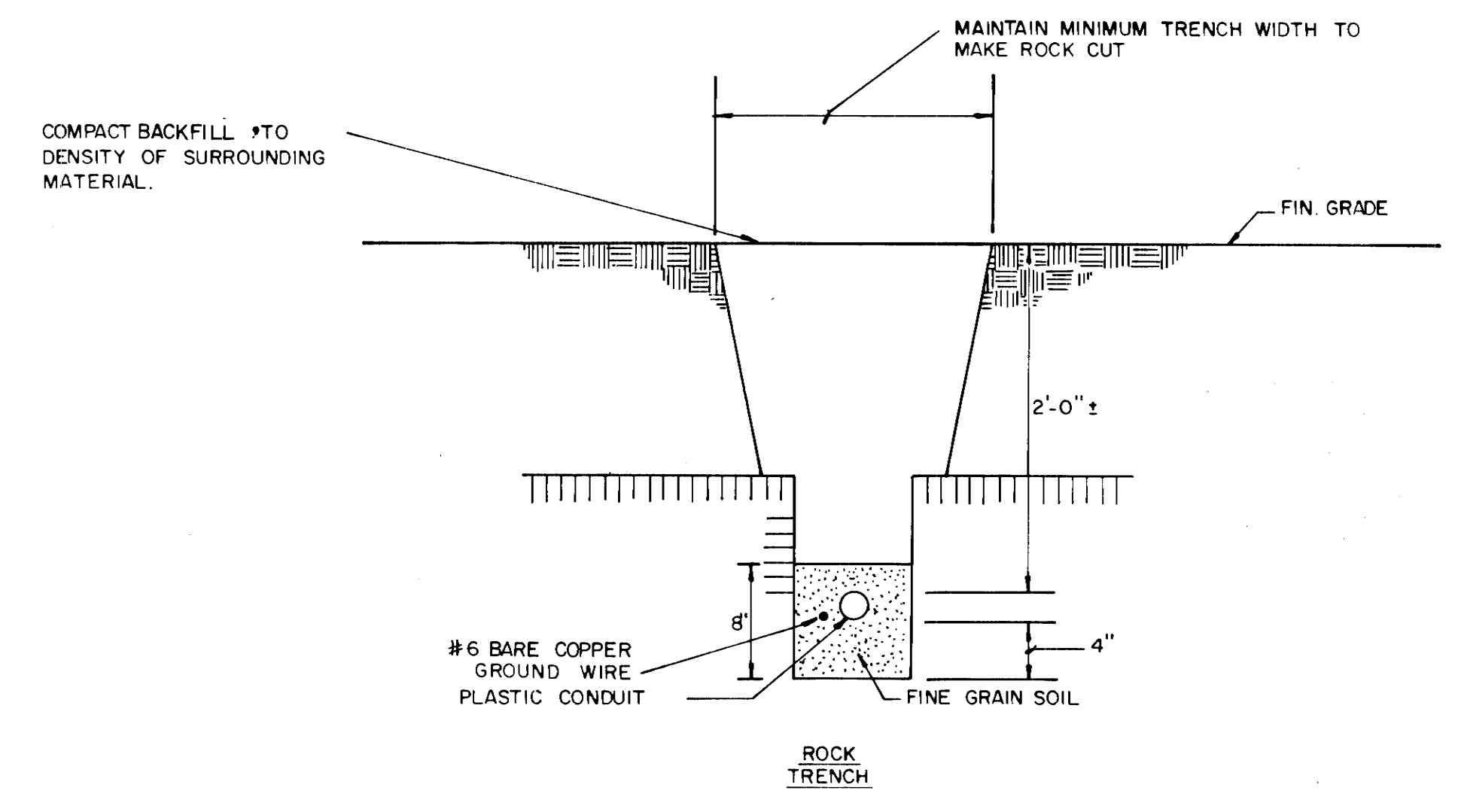
BRIDGE PARAPET MOUNTED LUMINAIRE ®
 NO SCALE

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

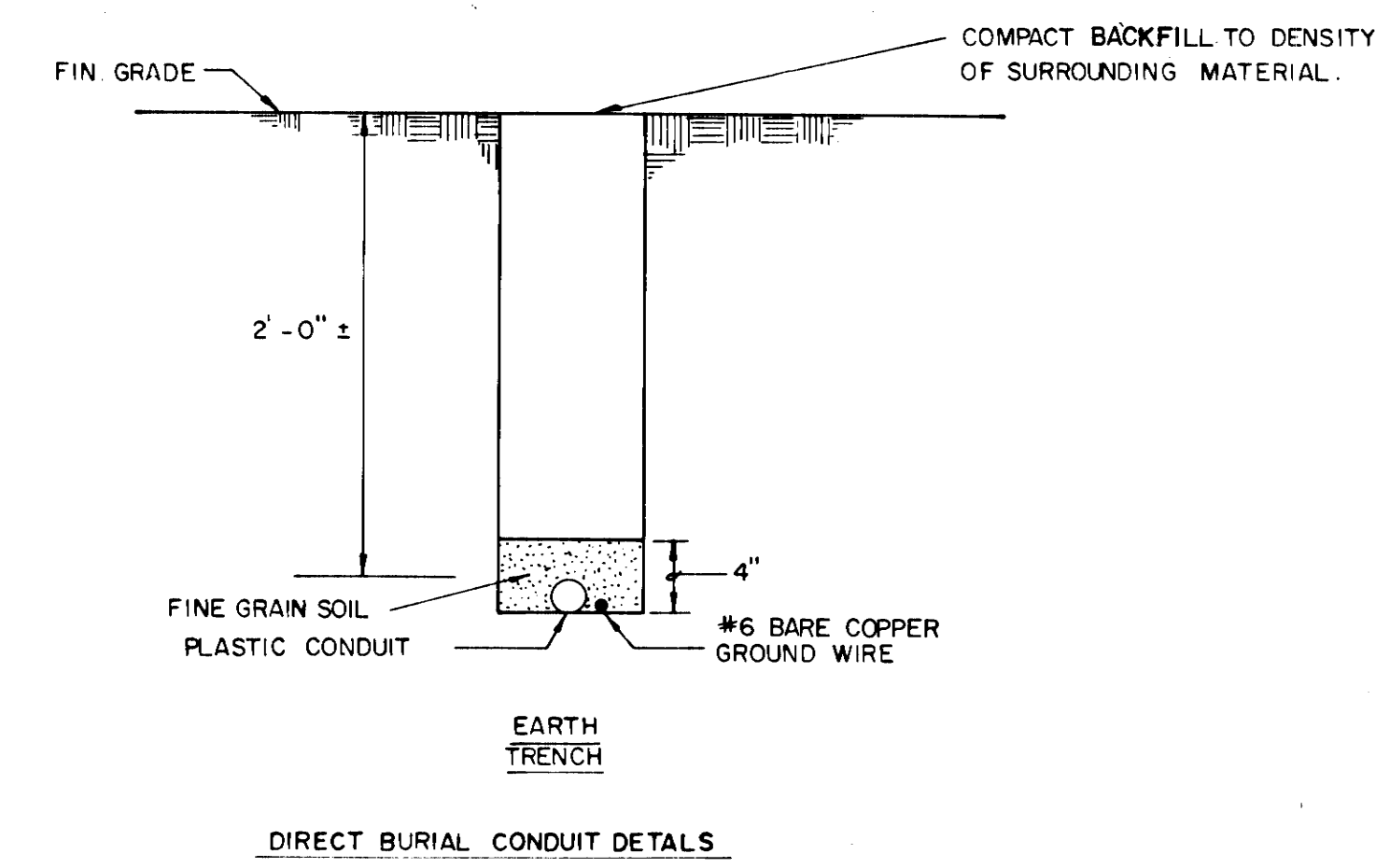
LIGHTING DETAIL

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	83	ID-IR-440-4(50)206	37

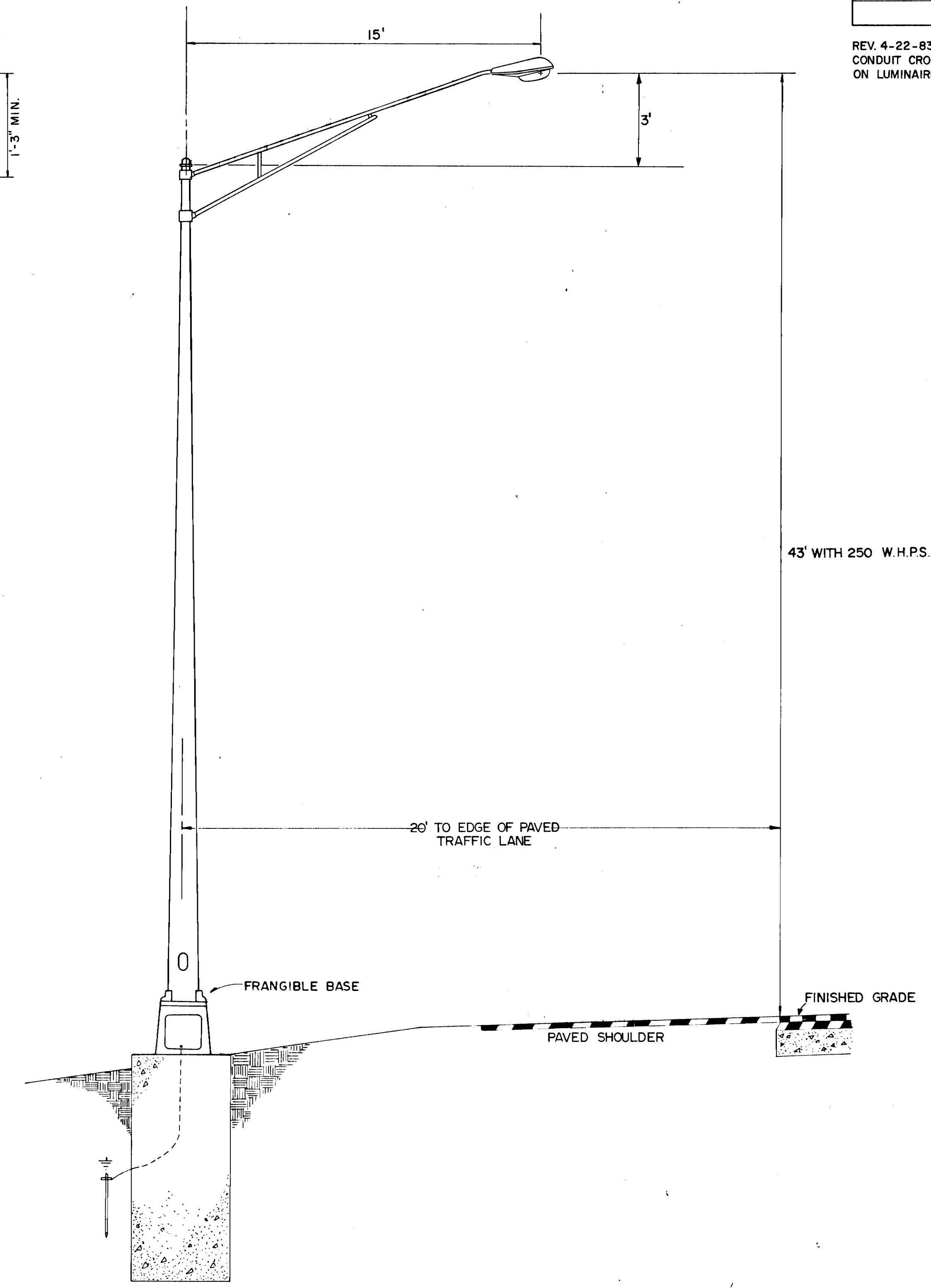
REV. 4-22-83: REMOVED CABLE MARKER & CONDUIT CROSSING DETAILS. REVISED M.H. ON LUMINAIRE DETAIL.



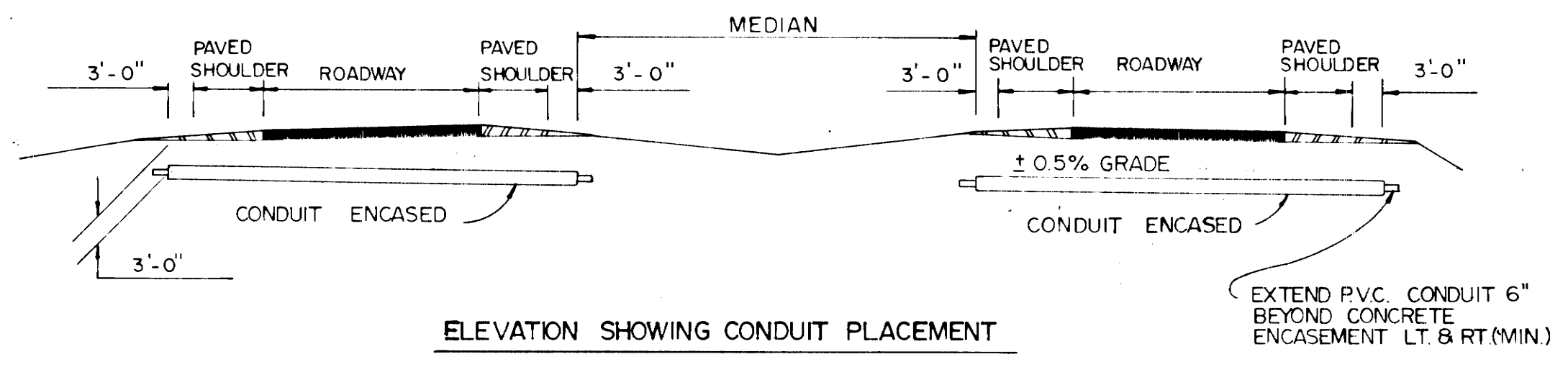
CONCRETE ENCASED CONDUIT DETAILS
 NO SCALE



DIRECT BURIAL CONDUIT DETAILS



SHOULDER MOUNTED LUMINAIRE (WITHOUT GUARDRAIL)



EXTEND P.V.C. CONDUIT 6" BEYOND CONCRETE ENCASEMENT LT. & RT. (MIN.)

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

LIGHTING DETAIL

NO SCALE

TENN. STATE HIGHWAYS
 PIERS FOR
 No. 330
 IN

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	83	TD-IR-440-4(50)206	38

CIRCUIT NO. 1

- 340+50 "N.W." (G)
- 341+25 "I-40" (S)
- 342+70 "N.W." (G)
- 344+90 "N.W." (G)
- 345+40 "W.B." (S)
- 350+30 "W.B." (S)
- 352+30 "W.B." (S)
- 354+30 "W.B." (S)
- 356+30 "W.B." (P)
- 358+30 "W.B." (P)
- 360+30 "W.B." (P)

☒ CONTROL POINT

CIRCUIT NO. 2

- 343+20 "I-40" (M)
- 347+60 "E.B." (M)
- 349+60 "E.B." (S)
- 351+60 "E.B." (S)
- 353+60 "E.B." (S)
- 355+60 "E.B." (S)
- 358+35 "E.B." (S)
- 360+20 "E.B." (S)

CIRCUIT NO. 3

- 350+00 "E.S." (S)
- 352+55 "E.S." (S)
- 355+30 "E.S." (S)
- 358+20 "E.S." (S)
- 361+40 "I-440" (S)
- 344+90 "W.S." (P)
- 347+00 "W.S." (P)
- 349+20 "W.S." (P)
- 351+40 "W.S." (P)
- 353+60 "W.S." (G)
- 355+80 "W.S." (P)
- 358+00 "W.S." (P)
- 360+20 "W.S." (P)
- 362+40 "W.S." (P)

CIRCUIT NO. 4

- 342+80 "N.E." (G)
- 345+90 "N.E." (S)
- 348+10 "N.E." (G)
- 350+30 "N.E." (G)
- 352+50 "N.E." (G)
- 354+70 "N.E." (G)
- 356+90 "N.E." (G)
- 359+10 "N.E." (G)
- 361+30 "N.E." (G)
- 344+35 "N.E." (S)
- 361+50 "N.W." (S)
- 359+80 "N.W." (S)
- 355+90 "N.W." (S)
- 353+70 "N.W." (S)

CIRCUIT NO. 5

- 6+55 "CLIFTON" (B)
- 6+95 "CLIFTON" (B)
- 364+15 "N.E." (P)
- 367+65 "W.S." (P)
- 371+15 "W.S." (P)
- 375+30 "W.S." (P)
- 379+70 "I-40" (P)
- 383+95 "I-40" (G)
- 388+00 "I-40" (G)
- 392+65 "J.B." (S)
- 392+00 "I-40" (S)
- 364+15 "N.E." (P)
- 367+65 "E.B." (P)
- 371+15 "E.B." (P)
- 375+30 "I-40" (P)
- 379+70 "I-40" (P)

CIRCUIT NO. 6

- 365+90 "W.S." (P)
- 365+90 "E.B." (P)
- 369+40 "E.B." (M)
- 1+90 "BATAVIA" (B)
- 2+45 "BATAVIA" (B)
- 3+00 "BATAVIA" (B)
- 373+15 "I-40" (M)
- 377+50 "I-40" (M)
- 381+85 "I-40" (M)
- 386+00 "I-40" (M)
- 390+00 "I-40" (M)

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

CIRCUIT DIAGRAMS

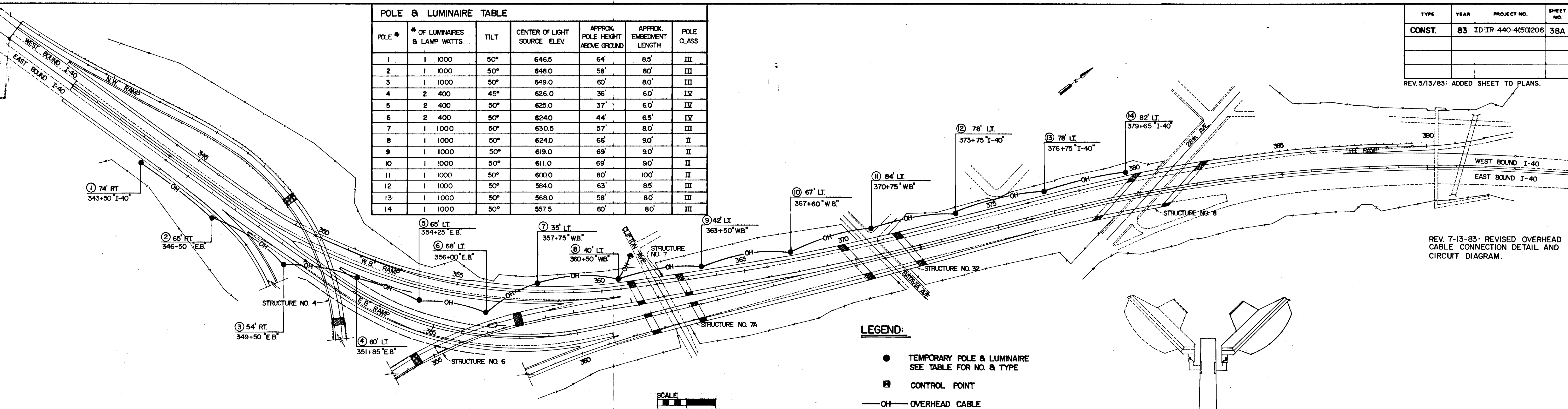
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
PROJECT NO. 440-4(5)Q206
SHEET NO. 38A

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(5)Q206	38A

POLE #	* OF LUMINAIRES & LAMP WATTS	TILT	CENTER OF LIGHT SOURCE ELEV	APPROX. POLE HEIGHT ABOVE GROUND	APPROX. EMBEDMENT LENGTH	POLE CLASS
1	1 1000	50°	646.5	64'	8.5'	III
2	1 1000	50°	648.0	58'	8.0'	III
3	1 1000	50°	649.0	60'	8.0'	III
4	2 400	45°	626.0	36'	6.0'	IV
5	2 400	50°	625.0	37'	6.0'	IV
6	2 400	50°	624.0	44'	6.5'	IV
7	1 1000	50°	630.5	57'	8.0'	III
8	1 1000	50°	624.0	66'	9.0'	II
9	1 1000	50°	619.0	69'	9.0'	II
10	1 1000	50°	611.0	69'	9.0'	II
11	1 1000	50°	600.0	80'	10.0'	II
12	1 1000	50°	584.0	63'	8.5'	III
13	1 1000	50°	568.0	58'	8.0'	III
14	1 1000	50°	557.5	60'	8.0'	III

REV. 5/13/83: ADDED SHEET TO PLANS.

REV. 7-13-83: REVISED OVERHEAD CABLE CONNECTION DETAIL AND CIRCUIT DIAGRAM.



MAINTENANCE OF LIGHTING

GENERAL NOTES

- THIS CONSTRUCTION SHALL COMPLY WITH THE LATEST REVISIONS TO THE NATIONAL ELECTRICAL CODE, N.E.P.A. NO. 70, AND THE NATIONAL ELECTRICAL SAFETY CODE.
- ALL INCIDENTAL EQUIPMENT AND MATERIAL REQUIRED FOR THE SUCCESSFUL EXECUTION OF THIS WORK SHALL BE FURNISHED, WHETHER SPECIFICALLY NOTED OR NOT.
- THE CONTRACTOR SHALL SUBMIT EQUIPMENT SHOP DRAWINGS TO THE LIGHTING ENGINEER FOR APPROVAL PRIOR TO THE PURCHASING OF MATERIAL.
- WHEN THIS TEMPORARY LIGHTING SYSTEM IS DISCONNECTED, ALL POLES, LUMINAIRES AND WIRES SHALL BE DISMANTLED AND STOCKPILED AT A LOCATION APPROVED BY THE ENGINEER. LUMINAIRES SHALL REMAIN THE PROPERTY OF THE STATE.

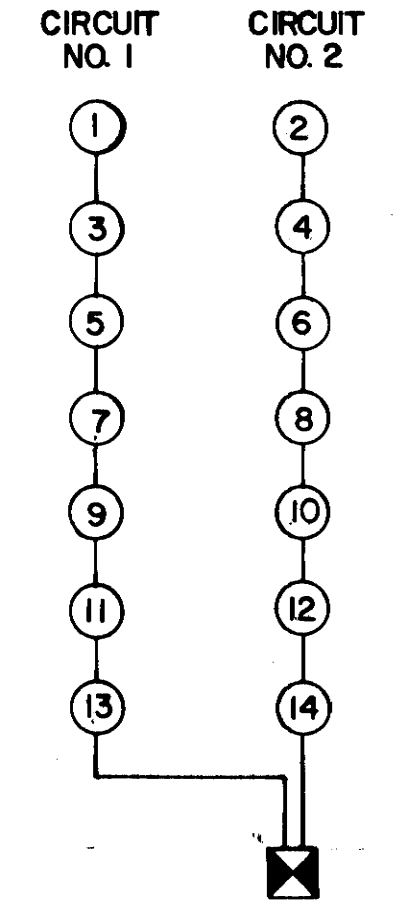
LUMINAIRE PERFORMANCE SPECIFICATIONS

- LAMPS SHALL BE CLEAR METAL HALIDE.
- LUMINAIRES SHALL PROVIDE I.E.S. TYPE II MEDIUM DISTRIBUTION WHEN OFFSET 0.75 MOUNTING HEIGHTS FROM THE EDGE OF PAVEMENT.
- 1000 WATT LAMP SHALL BE RATED TO PROVIDE AN AVERAGE LIFE OF NOT LESS THAN 85,000 HOURS, FOR USE WITH A.N.S.I. SPECIFICATION M47 BALLASTS.
- 400 WATT LAMPS SHALL BE RATED TO PROVIDE AN AVERAGE LIFE OF NOT LESS THAN 24,000 HOURS, FOR USE WITH A.N.S.I. M-59 BALLASTS.
- DESIGN ILLUMINATION BASIS:
1.0 fc MAINTAINED
COMBINED LLD & LDD = 0.657

LUMINAIRE CONSTRUCTION SPECIFICATIONS

- CAST ALUMINUM HOUSING.
- PRISMATIC GLASS REFRACTOR.
- BALLAST AND CAPACITOR MOUNTED ON A SINGLE PLATE WITH QUICK DISCONNECT TERMINALS.
- LOCKING VERTICAL ADJUSTMENT PERMITTING FIELD ADJUSTMENTS.
- LUMINAIRES SHALL BE EQUIPPED WITH A 240 VOLT AUTOREGULATOR BALLAST. FUSE EACH LUMINAIRE WITH A 15 AMP SLOW BLOWING 600 VOLT FUSE WITH A WEATHER PROOF FUSEHOLDER.

CIRCUIT DIAGRAM

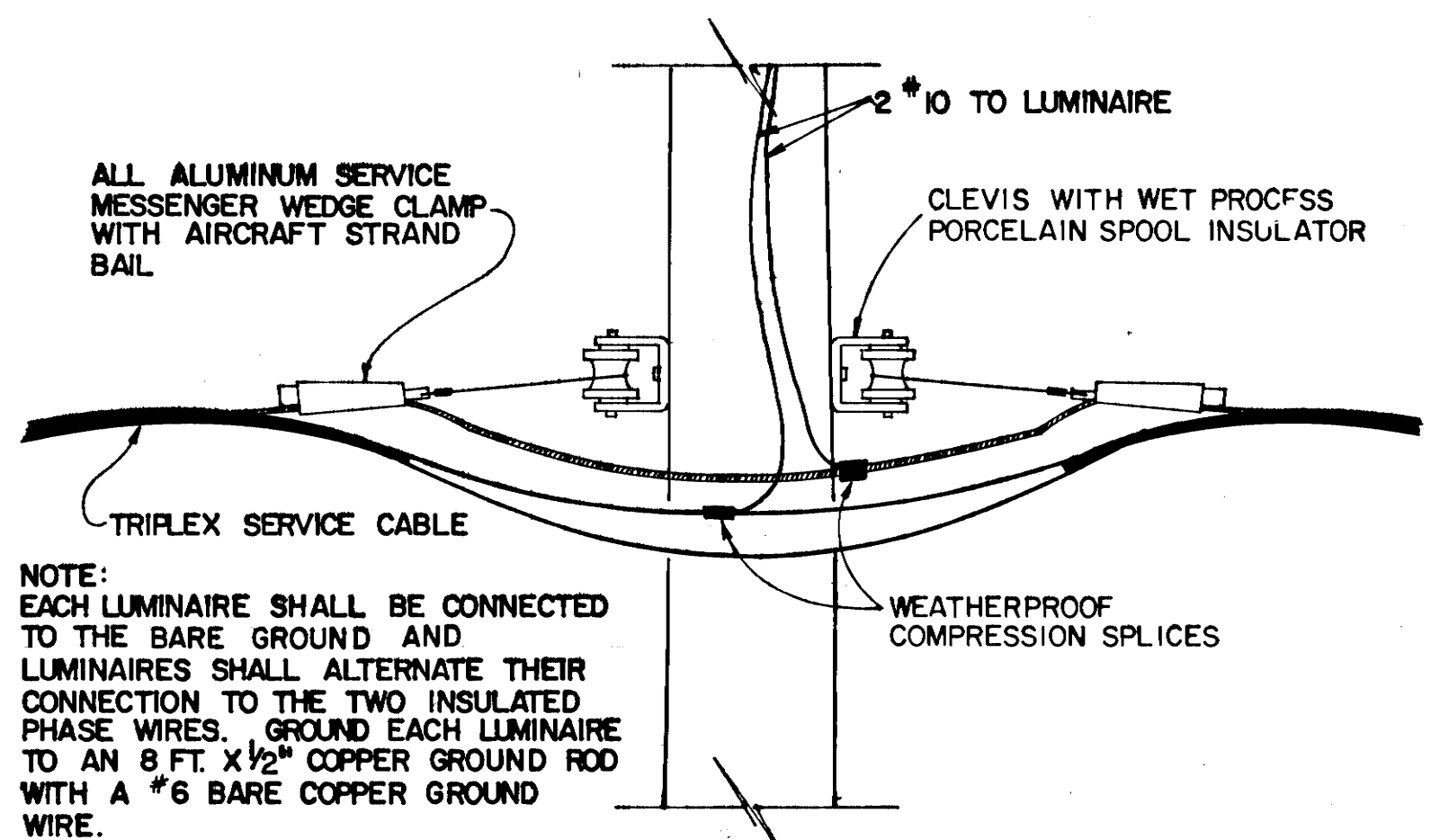


CABLE SPECIFICATIONS

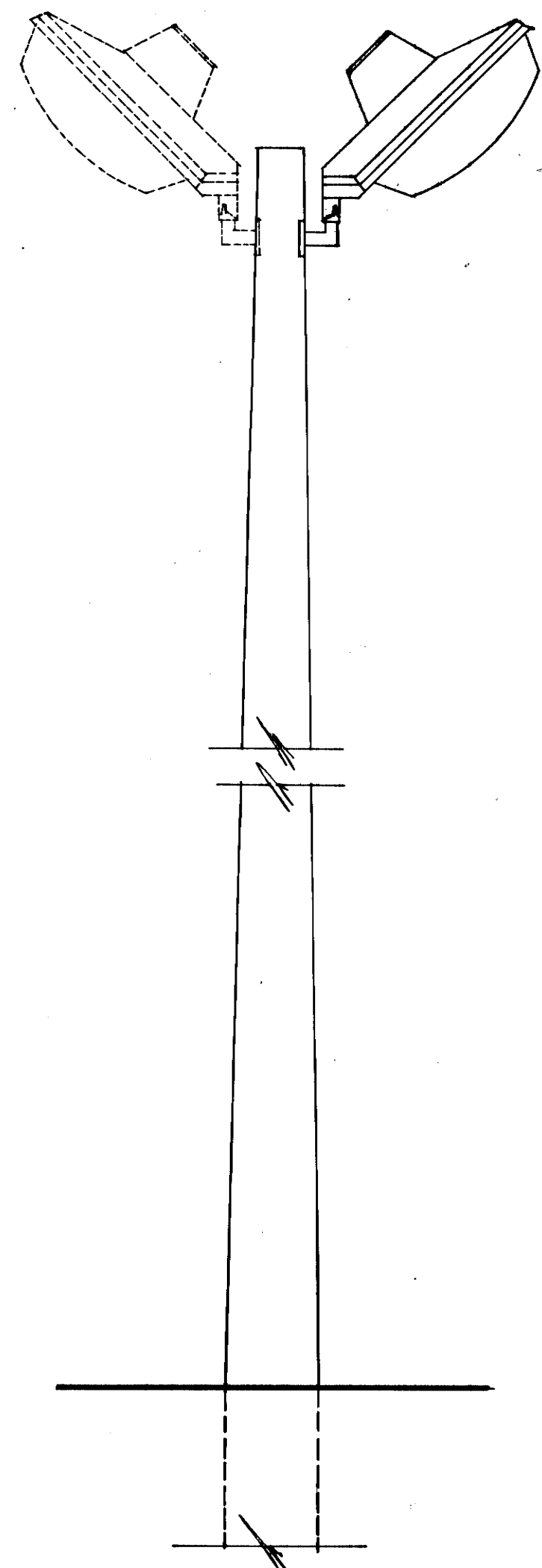
- ELECTRICAL SERVICE CABLE SHALL BE #4 AWG POLYETHYLENE COVERED TRIPLEX SELF SUPPORTING CABLE.
- THE INSULATED CONDUCTORS SHALL BE 7 STRAND EC-H19 ALUMINUM AND MEET THE REQUIREMENTS OF ASTM SPECIFICATION B-231. THE BARE MESSENGER SHALL BE STEEL REINFORCED STRANDED ALUMINUM ACSR (4-6/1) AND MEET THE REQUIREMENTS OF ASTM SPECIFICATIONS B-232. INSULATION SHALL BE CROSS-LINKED POLYETHYLENE OR EXTRUDED POLYETHYLENE AND SHALL MEET THE REQUIREMENTS OF IPCEA SPECIFICATIONS S-19-81 OR S-61-402.

SEQUENCING

- PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES THAT WILL DAMAGE OR DESTROY THE EXISTING LIGHTING SYSTEM WITHIN THE CONSTRUCTION AREA, THE CONTRACTOR SHALL CONSTRUCT AND PLACE INTO SERVICE THIS TEMPORARY LIGHTING SYSTEM.
- THE PROPOSED ELECTRICAL CONTROL POINT AT CLIFTON AVENUE IS TO BE CONSTRUCTED AND USED AS THE ELECTRICAL SERVICE CONNECTION FOR THIS TEMPORARY LIGHTING SYSTEM.
- FOLLOWING COMPLETION OF CONSTRUCTION OF THE PROPOSED ROADWAY LENGTH SYSTEM, SHOWN ON SHEETS 31 THRU 43, THE CONTRACTOR SHALL DISCONNECT THIS TEMPORARY LIGHTING SYSTEM AND EFFECT THE PROPOSED SYSTEM DURING THE DAY LIGHT HOURS OF ONE DAY.



OVERHEAD CABLE CONNECTION DETAIL
N.T.S.



LUMINAIRE MOUNTING DETAIL
N.T.S.

SUMMARY OF QUANTITIES		
ITEM DESCRIPTION	QTY.	UNIT
1000 W. METAL HALIDE LUMINAIRES	11	EA.
400 W. METAL HALIDE LUMINAIRES	6	EA.
CLASS II WOOD POLES	4	EA.
CLASS III WOOD POLES	7	EA.
CLASS IV WOOD POLES	3	EA.
#4 AWG TRIPLEX CABLE	4150	L.F.

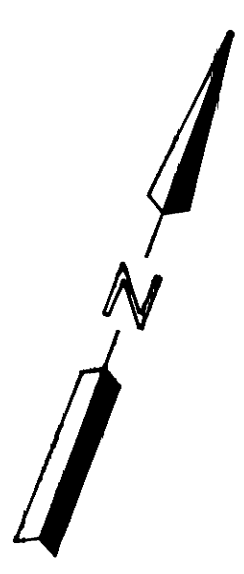
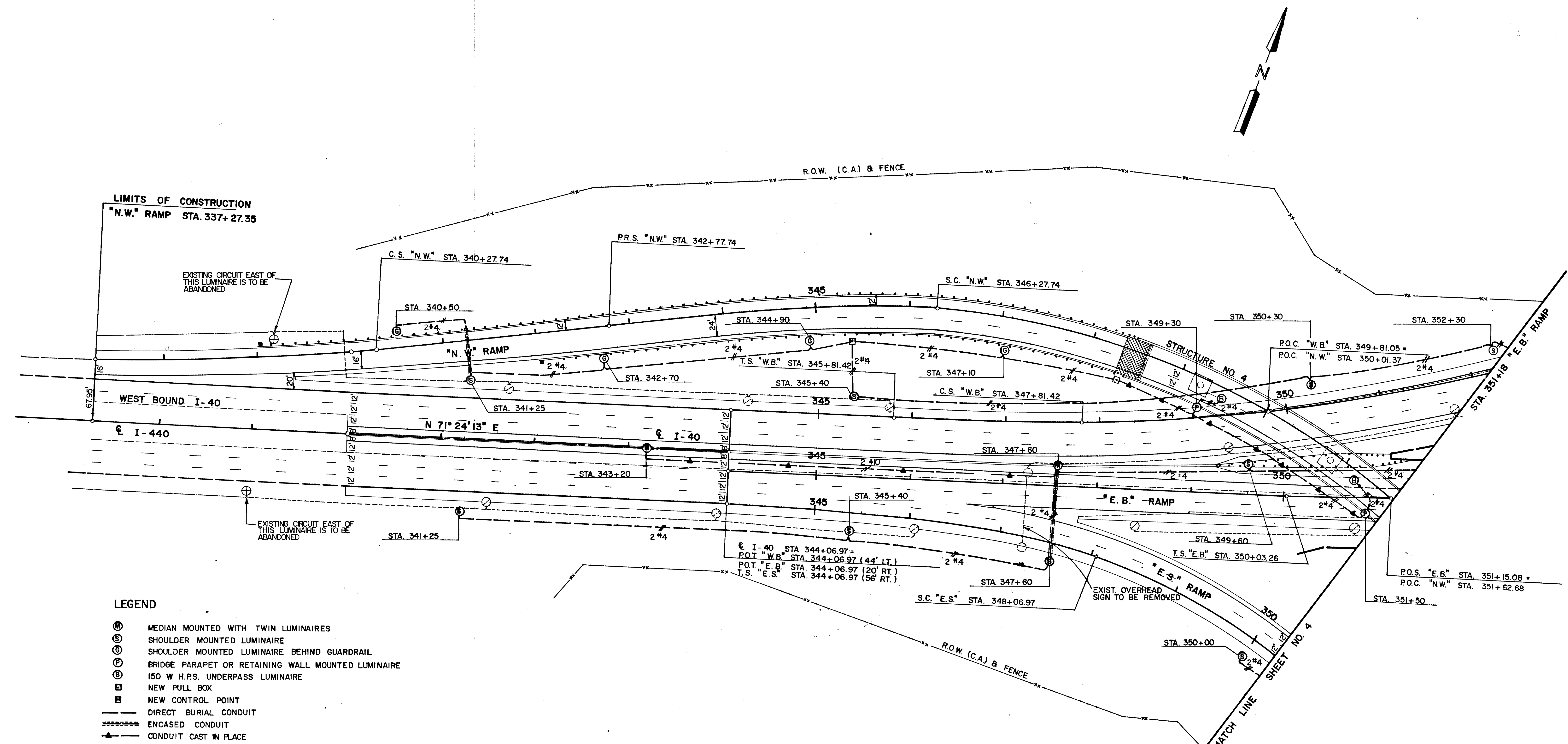
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

MAINTENANCE OF LIGHTING

File No. 330
 Plans
 Date

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	ID-IR-440-4(50)206	39

REV. 4-22-83 REVISED WIRE SIZES.



LEGEND

- ⊕ MEDIAN MOUNTED WITH TWIN LUMINAIRES
- ⊙ SHOULDER MOUNTED LUMINAIRE
- ⊙ SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL
- ⊙ BRIDGE PARAPET OR RETAINING WALL MOUNTED LUMINAIRE
- ⊙ 150 W H.P.S. UNDERPASS LUMINAIRE
- ⊠ NEW PULL BOX
- ⊠ NEW CONTROL POINT
- DIRECT BURIAL CONDUIT
- ==== ENCASED CONDUIT
- ▲— CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS
- EXISTING CONDUIT TO REMAIN
- EXISTING CONDUIT AND CIRCUIT TO BE ABANDONED
- ⊕ EXISTING LIGHT STANDARD TO REMAIN
- ⊙ EXISTING LIGHT STANDARD TO BE REMOVED
- ⊠ EXISTING PULL BOX
- ⊠ EXISTING CONTROL POINT TO REMAIN
- BORED OR JACKED CONDUIT
- ⊠ PULL BOX CAST INTO BRIDGE OR RETAINING WALL

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
PROPOSED LIGHTING LAYOUT
 STA. 337+27.35
 TO
 STA. 351+18 "E.B."
 SCALE: 1" = 50'

TYPE	DATE	PROJECT NO.
CONSTR.	PT	TD-IR-440-4150206
		43

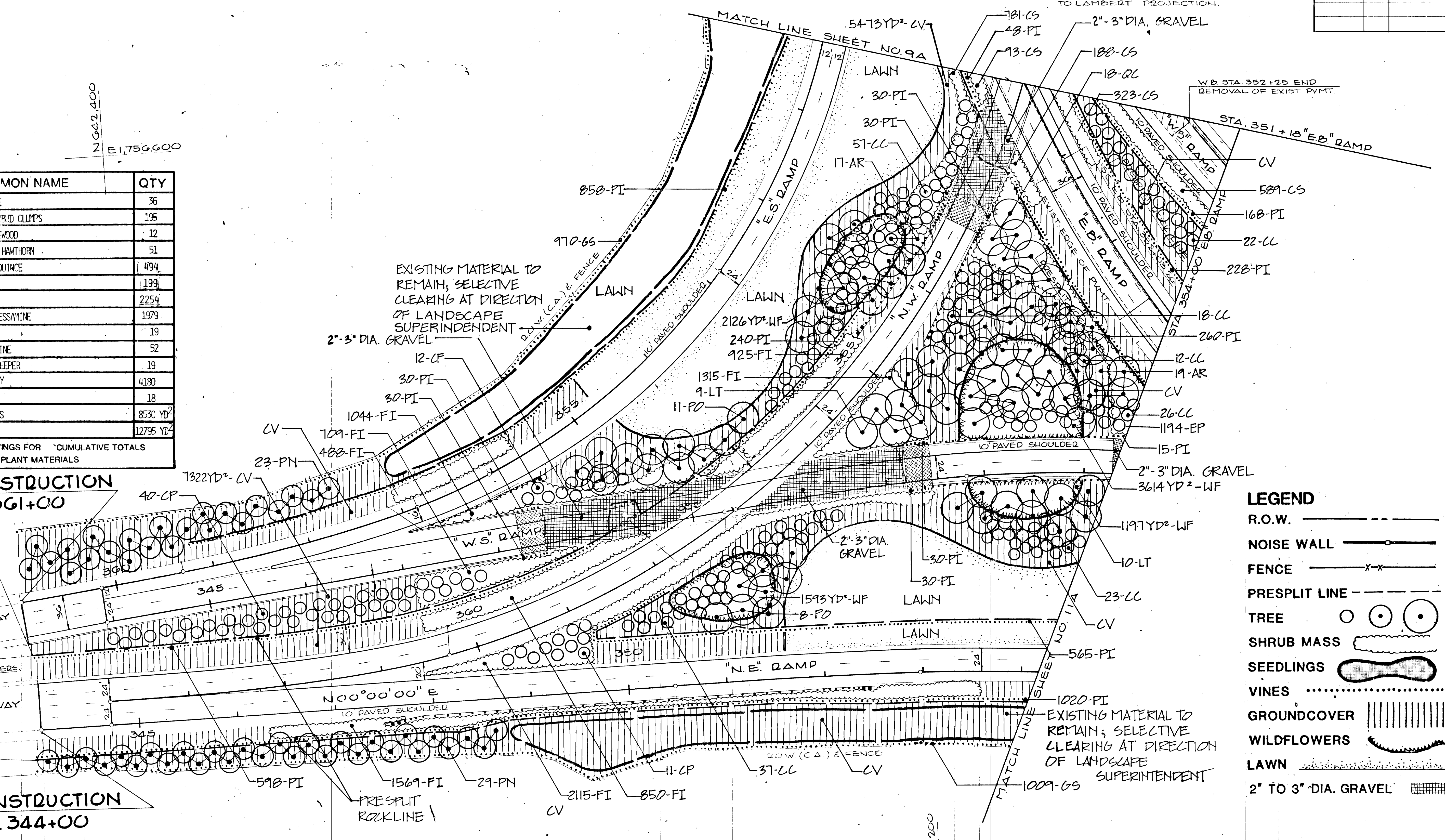
NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.

KEY	COMMON NAME	QTY
AR	SUGAR MAPLE	36
CC	EASTERN REDBUD CLUMPS	195
CF	CLOUD 9 DOGWOOD	12
CP	WASHINGTON HAWTHORN	51
CS	FLOWERING GUINCE	494
EP	ELEAGNUS	199
FI	FORSYTHIA	2254
GS	CAROLINA JESSAMINE	1979
LT	TULIPTREE	19
PN	AUSTRIAN PINE	52
PO	VIRGINIA CREEPER	19
PI	BOSTON IVY	4180
QC	RED OAK	18
WF	WILD FLOWERS	8530 YD ²
CV	CROWN VETCH	12795 YD ²

SEE LAST SHEET OF DRAWINGS FOR CUMULATIVE TOTALS AND SPECIFICATIONS FOR PLANT MATERIALS

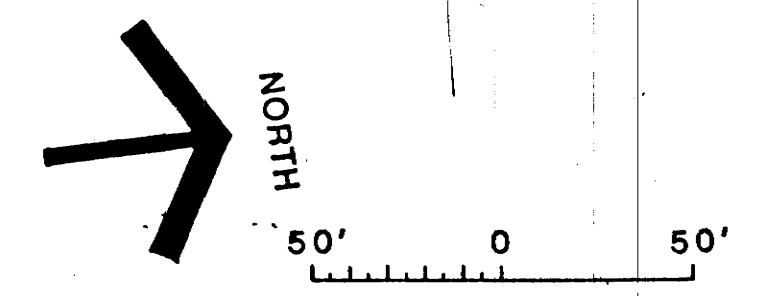
LIMITS OF CONSTRUCTION
P.O.C. "E.S." STA. 361+00

LIMITS OF CONSTRUCTION
P.O.T. "N.E." STA. 344+00



LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN
- 2" TO 3" DIA. GRAVEL

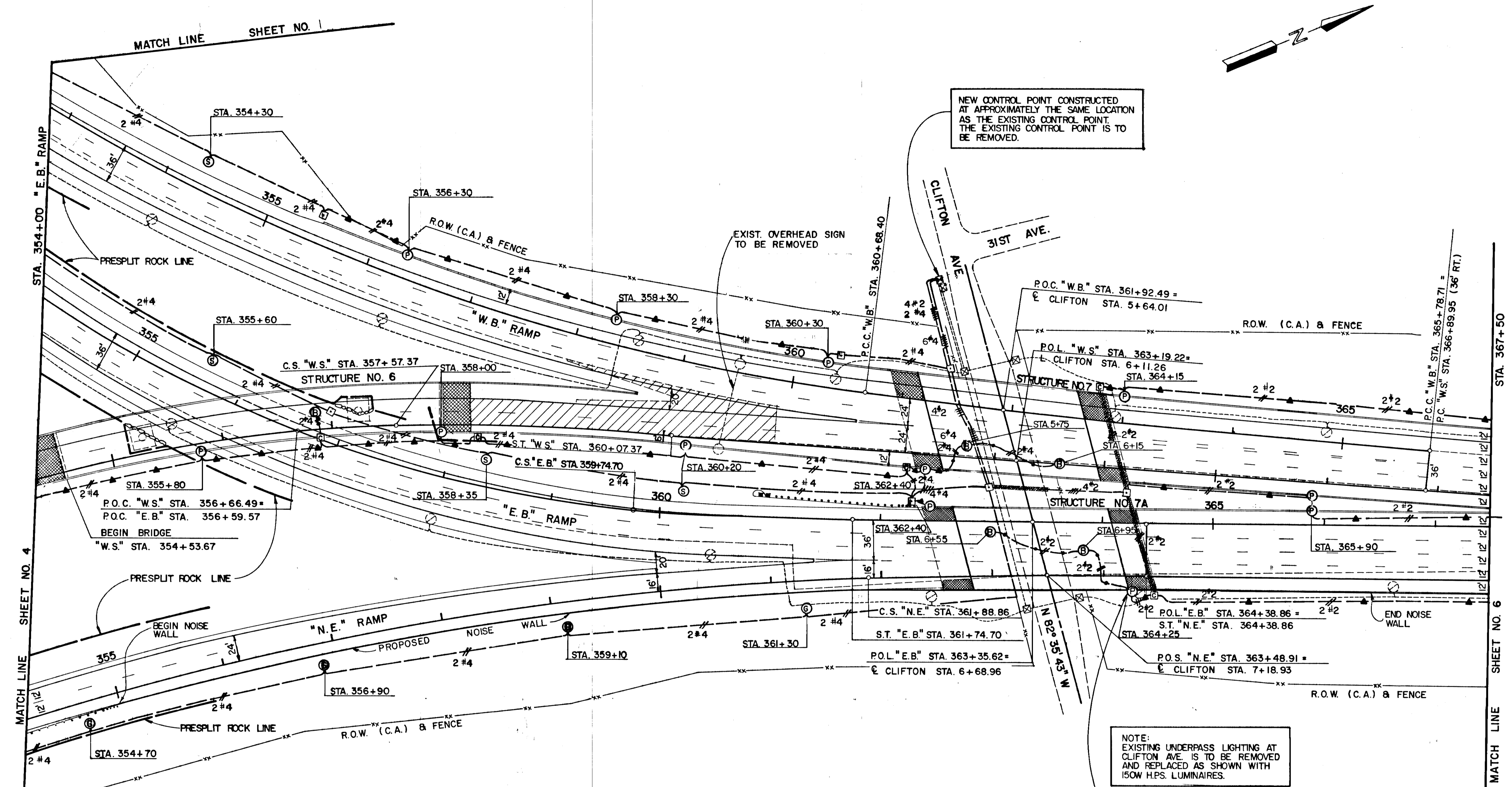


**LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY**

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
STA. 351+18"E.B."
TO
STA. 354+00"E.B."
SCALE: 1" = 50'

GRESHAM SMITH AND PARTNERS
3310 West End Avenue
Nashville, Tennessee 37203



NEW CONTROL POINT CONSTRUCTED AT APPROXIMATELY THE SAME LOCATION AS THE EXISTING CONTROL POINT. THE EXISTING CONTROL POINT IS TO BE REMOVED.

EXIST. OVERHEAD SIGN TO BE REMOVED

NOTE: EXISTING UNDERPASS LIGHTING AT CLIFTON AVE. IS TO BE REMOVED AND REPLACED AS SHOWN WITH 150W H.P.S. LUMINAIRES.

NOTE: THIS LUMINAIRE IS TO BE CONSTRUCTED BEHIND THE NOISE WALL, AND ADJACENT TO THE BRIDGE ABUTMENT.

LEGEND

- ⊕ MEDIAN MOUNTED WITH TWIN LUMINAIRES
- ⊙ SHOULDER MOUNTED LUMINAIRE
- ⊙ SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL
- ⊙ BRIDGE PARAPET OR RETAINING WALL MOUNTED LUMINAIRE
- ⊙ 150 W.H.P.S. UNDERPASS LUMINAIRE
- ⊙ NEW PULL BOX
- ⊙ NEW CONTROL POINT
- DIRECT BURIAL CONDUIT
- ==== ENCASED CONDUIT
- ▲— CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS
- EXISTING CONDUIT TO REMAIN
- EXISTING CONDUIT AND CIRCUIT TO BE ABANDONED
- ⊕ EXISTING LIGHT STANDARD TO REMAIN
- ⊙ EXISTING LIGHT STANDARD TO BE REMOVED
- ⊙ EXISTING PULL BOX
- ⊙ EXISTING CONTROL POINT TO REMAIN
- BORED OR JACKED CONDUIT
- ⊙ PULL BOX CAST INTO BRIDGE OR RETAINING WALL

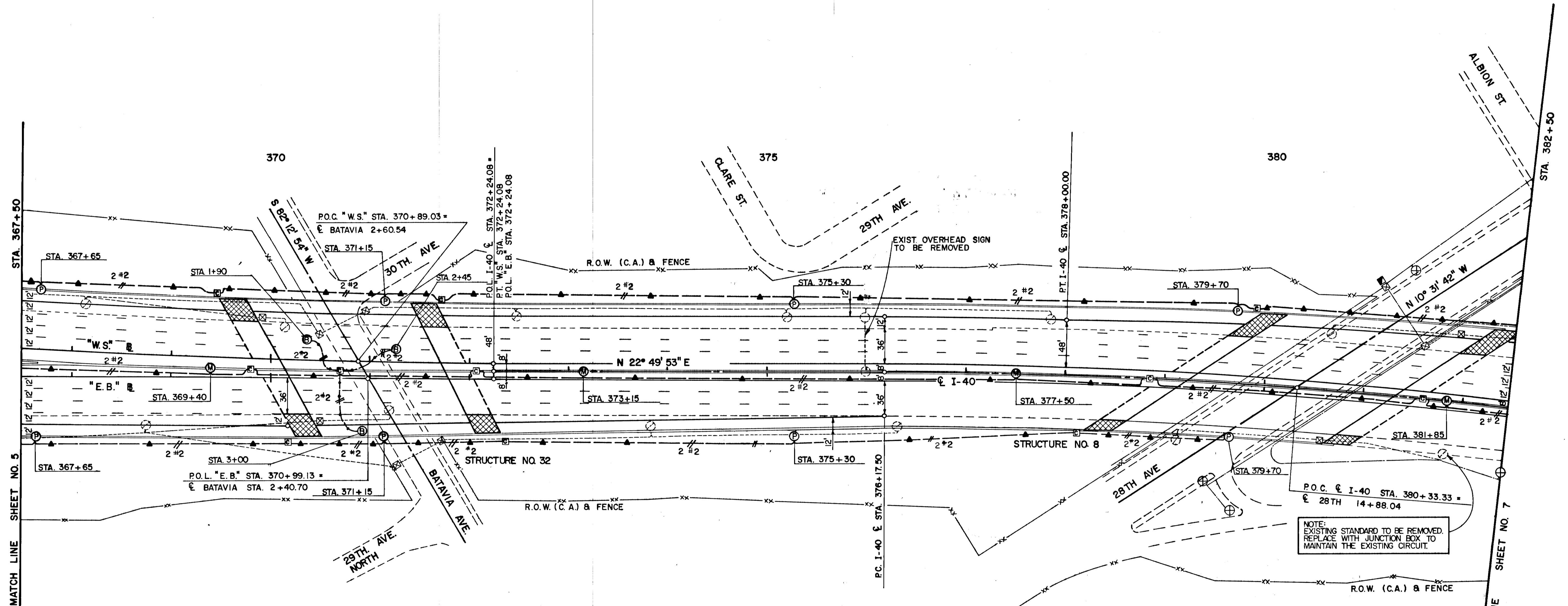
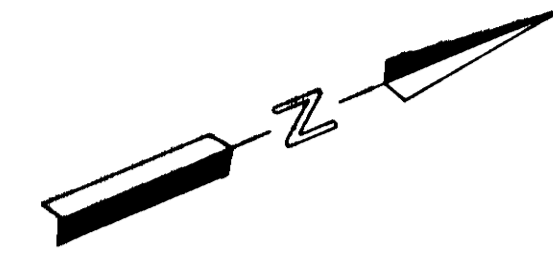
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PROPOSED LIGHTING LAYOUT
 STA. 354+00 "E.B."
 TO
 STA. 367+50
 SCALE: 1" = 50'

TECHNICAL DRAWING
 No. 550
 DATE: 11/1/83
 BY: [Signature]

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	83	TD-IR-440-4(50)206	42

REV. 4-22-83 REVISED WIRE SIZES.



NOTE:
 EXISTING UNDERPASS LIGHTING
 AT BATAVIA AVE IS TO BE REMOVED
 OR REPLACED WITH 150W HPS
 LUMINAIRES.

LEGEND

- ⊙ MEDIAN MOUNTED WITH TWIN LUMINAIRES
- ⊙ SHOULDER MOUNTED LUMINAIRE
- ⊙ SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL
- ⊙ BRIDGE PARAPET OR RETAINING WALL MOUNTED LUMINAIRE
- ⊙ 150 W H.P.S. UNDERPASS LUMINAIRE
- NEW PULL BOX
- NEW CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS
- EXISTING CONDUIT TO REMAIN
- EXISTING CONDUIT AND CIRCUIT TO BE ABANDONED
- ⊕ EXISTING LIGHT STANDARD TO REMAIN
- ⊖ EXISTING LIGHT STANDARD TO BE REMOVED
- ⊗ EXISTING PULL BOX
- EXISTING CONTROL POINT TO REMAIN
- BORED OR JACKED CONDUIT
- PULL BOX CAST INTO BRIDGE OR RETAINING WALL

NOTE:
 EXISTING UNDERPASS LUMINAIRES
 AT 28th AVE ARE TO REMAIN
 IN THE EXISTING CIRCUIT.

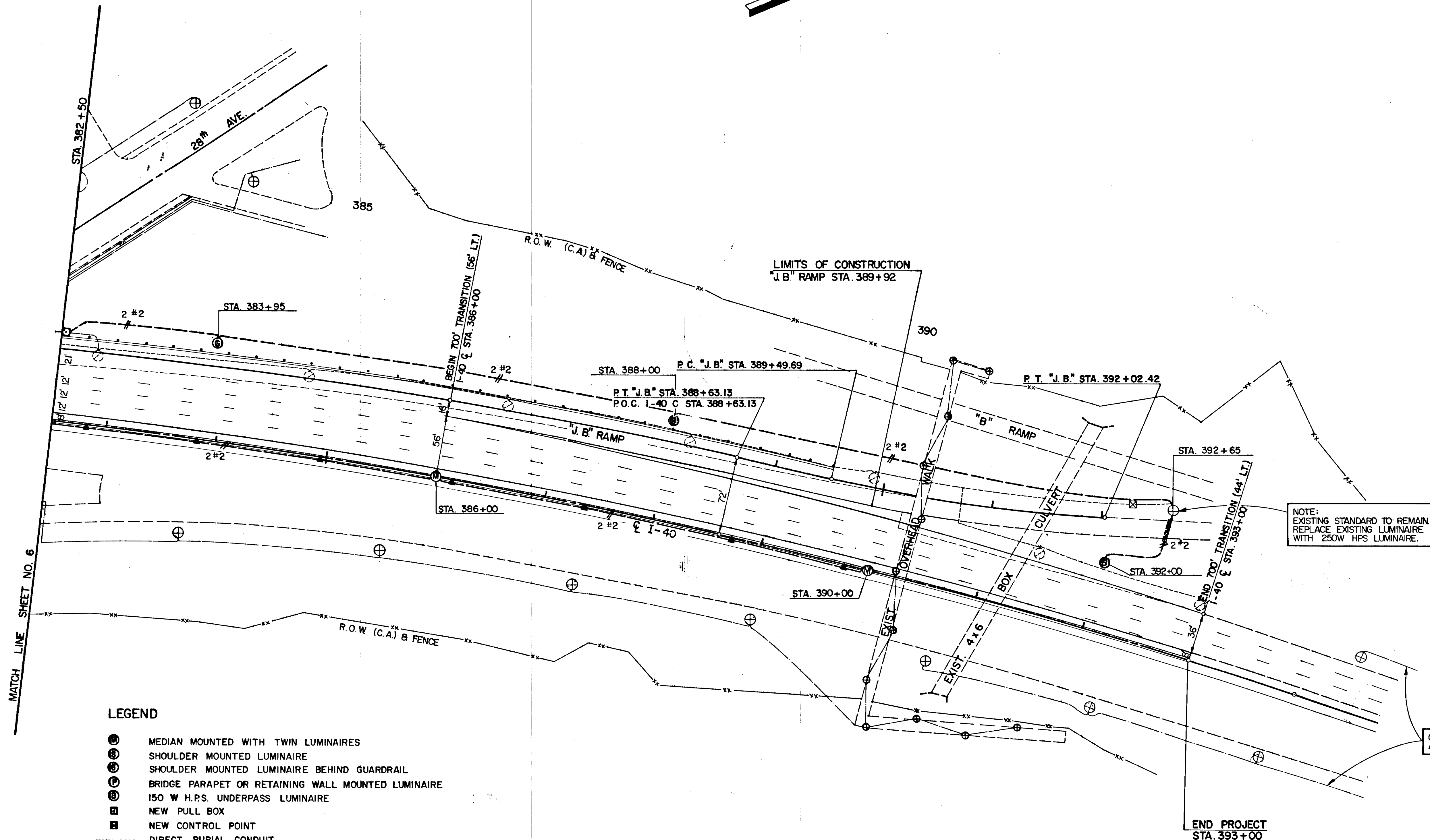
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PROPOSED LIGHTING LAYOUT
 STA. 367+50
 TO
 STA. 382+50

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	83	ID-IR-440-4(50)206	43

REV. 4-22-83 REVISED WIRE SIZES



NOTE:
 EXISTING STANDARD TO REMAIN
 REPLACE EXISTING LUMINAIRE
 WITH 250W HPS LUMINAIRE.

CIRCUIT TO CONTROL POINT
 AT JEFFERSON STREET.

LEGEND

- ⊙ MEDIAN MOUNTED WITH TWIN LUMINAIRES
- ⊙ SHOULDER MOUNTED LUMINAIRE
- ⊙ SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL
- ⊙ BRIDGE PARAPET OR RETAINING WALL MOUNTED LUMINAIRE
- ⊙ 150 W H.P.S. UNDERPASS LUMINAIRE
- NEW PULL BOX
- NEW CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS
- EXISTING CONDUIT TO REMAIN
- EXISTING CONDUIT AND CONDUIT TO BE ABANDONED
- ⊕ EXISTING LIGHT STANDARD TO REMAIN
- ⊖ EXISTING LIGHT STANDARD TO BE REMOVED
- ⊗ EXISTING PULL BOX
- ⊗ EXISTING CONTROL POINT TO REMAIN
- BORED OR JACKED CONDUIT
- ⊗ PULL BOX CAST INTO BRIDGE OR RETAINING WALL

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

PROPOSED LIGHTING LAYOUT
 STA. 382+50
 TO
 STA. 393+00

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONGT.	83	ID-IR-440-41501206	44

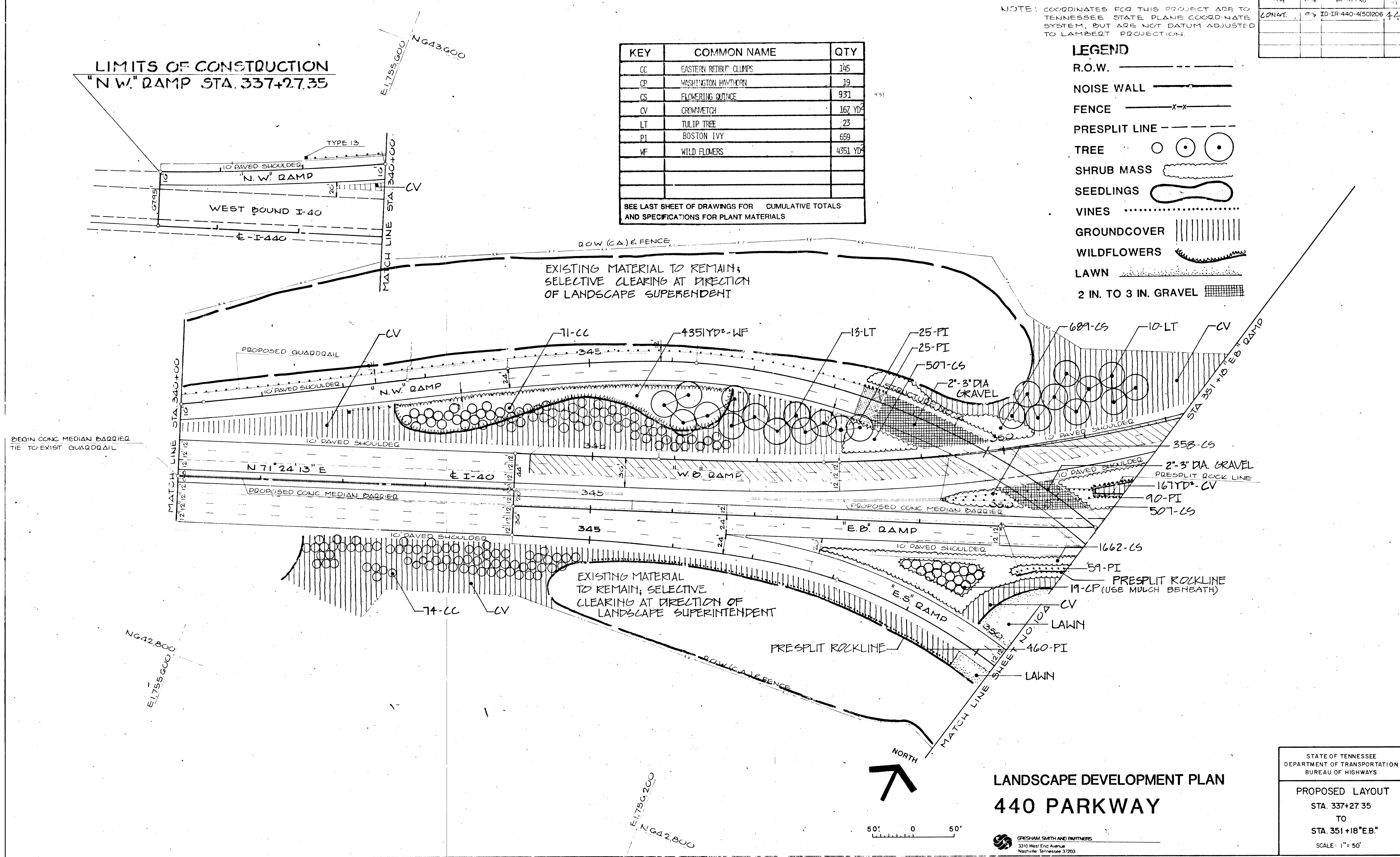
NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.

KEY	COMMON NAME	QTY
CC	EASTERN REDBUD CLUMPS	145
CP	WASHINGTON HAMTHORN	19
CS	FLOWERING QUINCE	931
CV	CROWMETCH	167 YD ²
LT	TULIP TREE	23
PI	BOSTON IVY	659
WF	WILD FLOWERS	4351 YD ²

SEE LAST SHEET OF DRAWINGS FOR CUMULATIVE TOTALS AND SPECIFICATIONS FOR PLANT MATERIALS

- LEGEND**
- R.O.W. -----
 - NOISE WALL -----
 - FENCE ----- X-X -----
 - PRESPLIT LINE -----
 - TREE ○ ○ ○ ○ ○
 - SHRUB MASS [wavy line symbol]
 - SEEDLINGS [oval symbol]
 - VINES [dotted line symbol]
 - GROUNDCOVER [stippled symbol]
 - WILDFLOWERS [grass-like symbol]
 - LAWN [dotted symbol]
 - 2 IN. TO 3 IN. GRAVEL [grid symbol]

LIMITS OF CONSTRUCTION
"N.W." RAMP STA. 337+27.35



**LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY**

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
STA. 337+27.35
TO
STA. 351+18 "E.B."
SCALE: 1" = 50'

GRESHAM SMITH AND PARTNERS
3310 West End Avenue
Nashville, Tennessee 37203

NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.

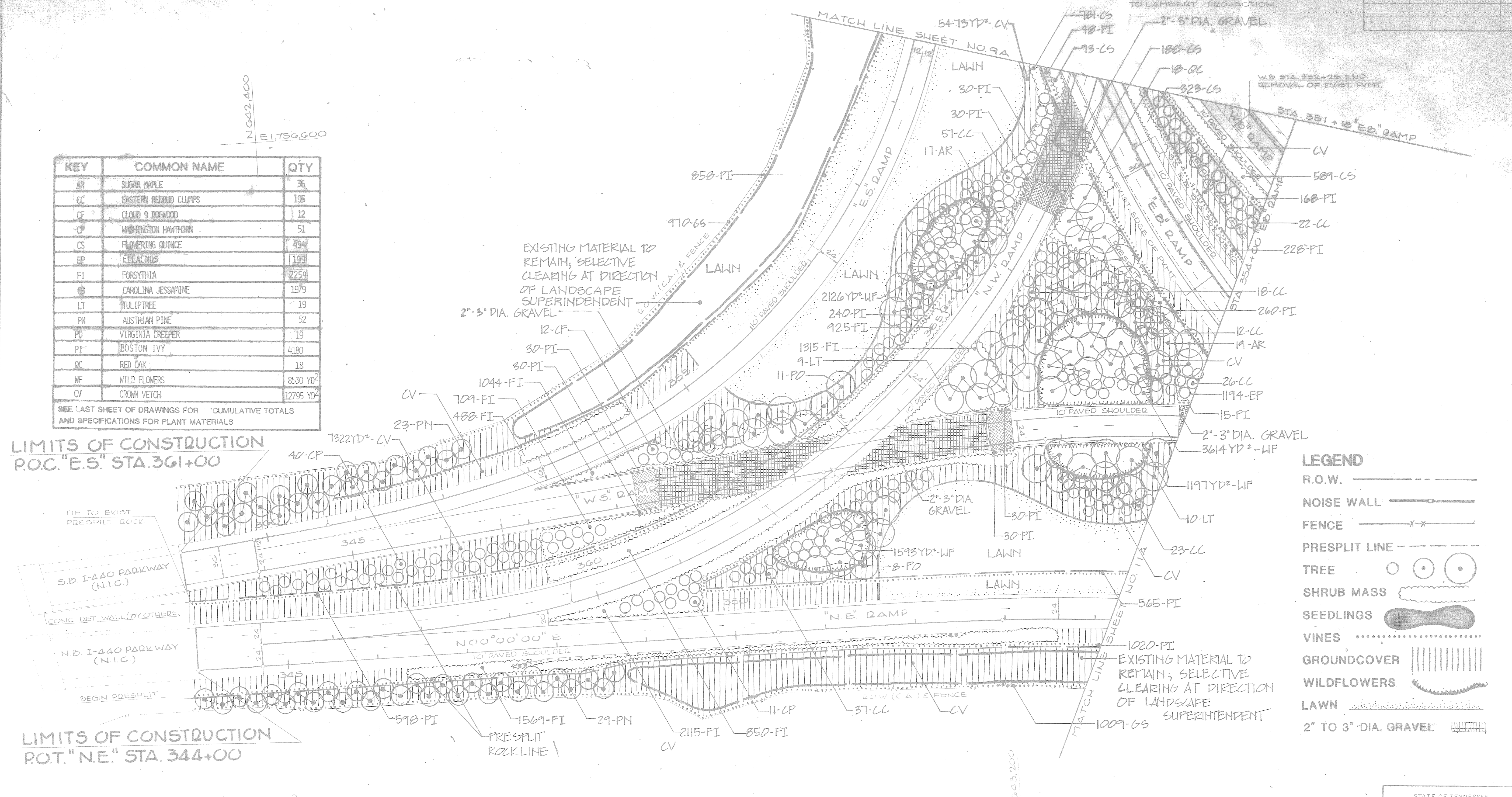
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-TR-440-4(5)206	45

KEY	COMMON NAME	QTY
AR	SUGAR MAPLE	36
CC	EASTERN REDBUD CLIMPS	195
CF	CLOUD 9 DOGWOOD	12
CP	WASHINGTON HAWTHORN	51
CS	FLOWERING QUINCE	494
EP	ELAEAGNUS	199
FI	FORSYTHIA	2254
GS	CAROLINA JESSAMINE	1979
LT	TULIPTREE	19
PN	AUSTRIAN PINE	52
PD	VIRGINIA CREEPER	19
PI	BOSTON IVY	4180
QC	RED OAK	18
WF	WILD FLOWERS	8530 YD ²
CV	CROWN VETCH	12795 YD ²

SEE LAST SHEET OF DRAWINGS FOR CUMULATIVE TOTALS AND SPECIFICATIONS FOR PLANT MATERIALS

LIMITS OF CONSTRUCTION
P.O.C. "E.S." STA. 361+00

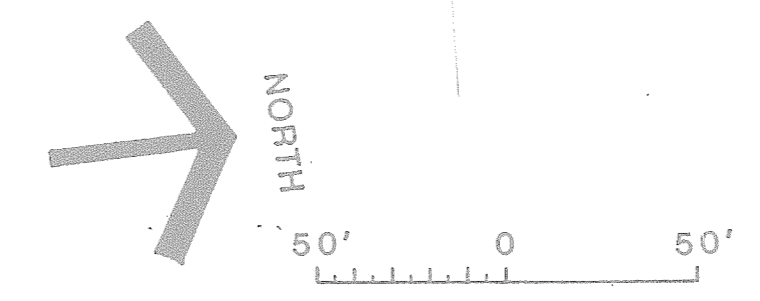
LIMITS OF CONSTRUCTION
P.O.T. "N.E." STA. 344+00



LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN
- 2" TO 3" DIA. GRAVEL

**LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY**



GRESHAM SMITH AND PARTNERS
3310 West End Avenue
Nashville, Tennessee 37203

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

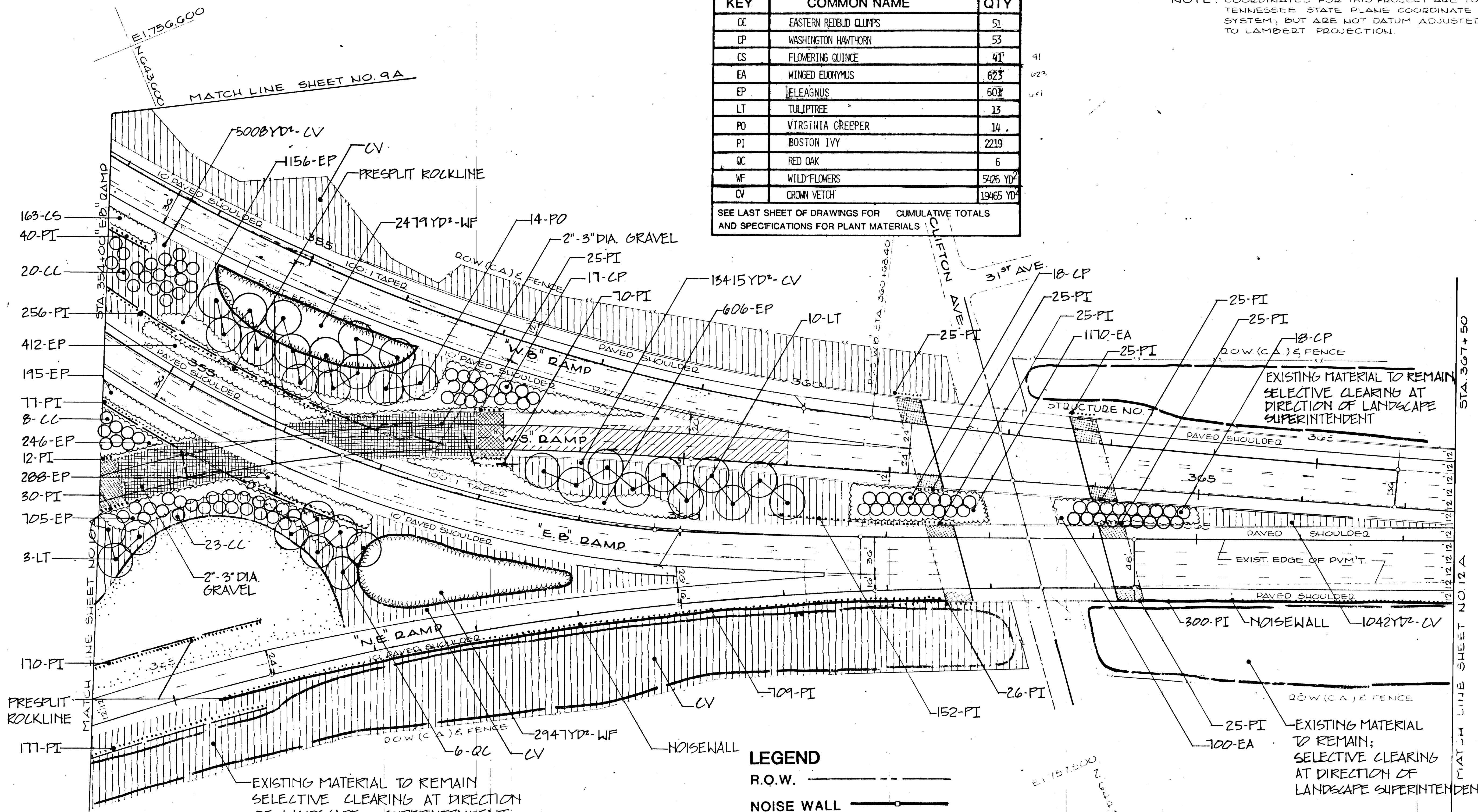
PROPOSED LAYOUT
STA. 351+18 "E.B."
TO
STA. 354+00 "E.B."
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	83	TD-IR-440-4(50)206	46

NOTE: COORDINATES FOR THIS PROJECT ARE TO TENNESSEE STATE PLANE COORDINATE SYSTEM, BUT ARE NOT DATUM ADJUSTED TO LAMBERT PROJECTION.

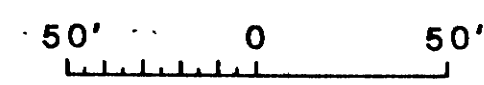
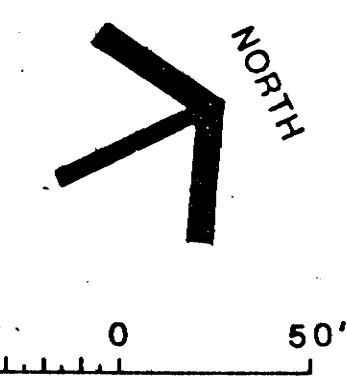
KEY	COMMON NAME	QTY
CE	EASTERN REDBUD CLUMPS	51
CP	WASHINGTON HAWTHORN	53
CS	FLOWERING QUINCE	41
EA	WINGED EUONYMUS	623
EP	LELEAGNUS	601
LT	TULIPTREE	13
PO	VIRGINIA CREEPER	14
PI	BOSTON IVY	2219
QC	RED OAK	6
WF	WILD FLOWERS	5426 YD ²
CV	CROWN VETCH	19465 YD ²

SEE LAST SHEET OF DRAWINGS FOR CUMULATIVE TOTALS AND SPECIFICATIONS FOR PLANT MATERIALS



LEGEND

- R.O.W. ————
- NOISE WALL ————
- FENCE — x — x —
- PRESPLIT LINE - - - -
- TREE ○ ○ ○
- SHRUB MASS [wavy line]
- SEEDLINGS [dotted area]
- VINES (dotted line)
- GROUNDCOVER [vertical lines]
- WILDFLOWERS [jagged line]
- LAWN [stippled area]
- 2" TO 3" DIA GRAVEL [grid pattern]

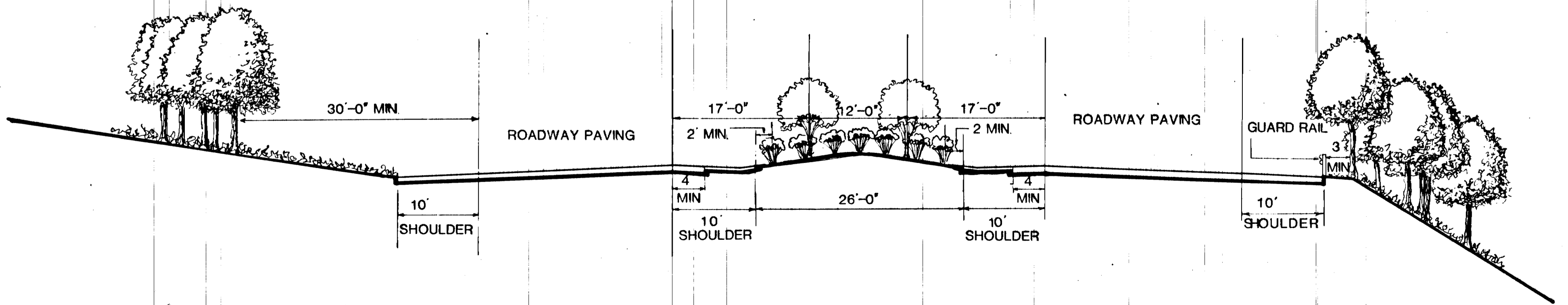
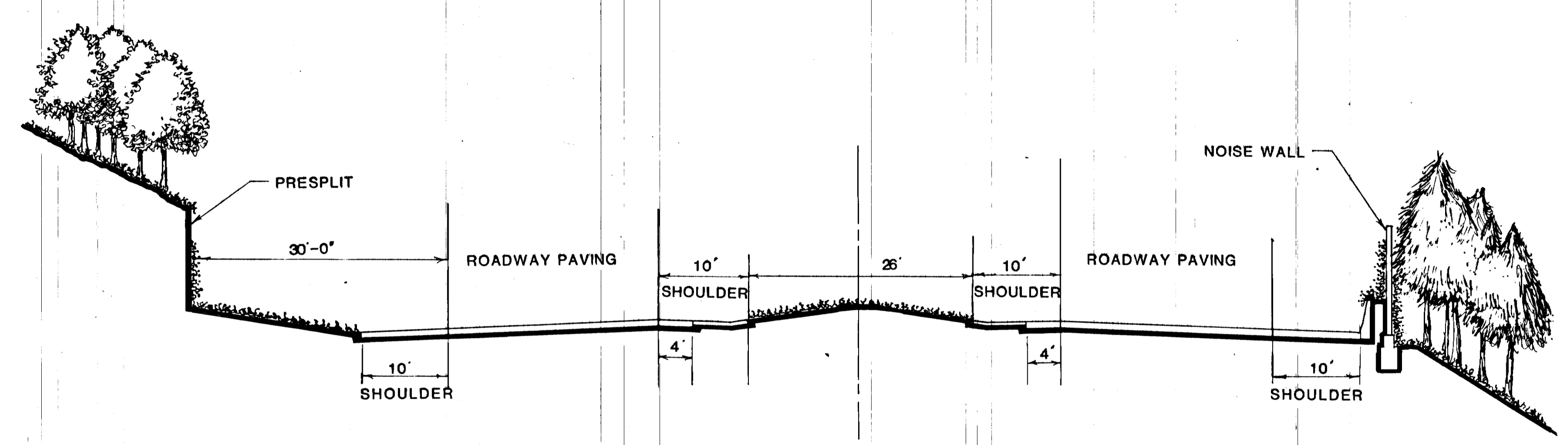


**LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY**

GRESHAM SMITH AND PARTNERS
3310 West End Avenue
Nashville, Tennessee 37203

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
STA. 354+00"E B"
TO
STA. 367+50
SCALE: 1" = 50'

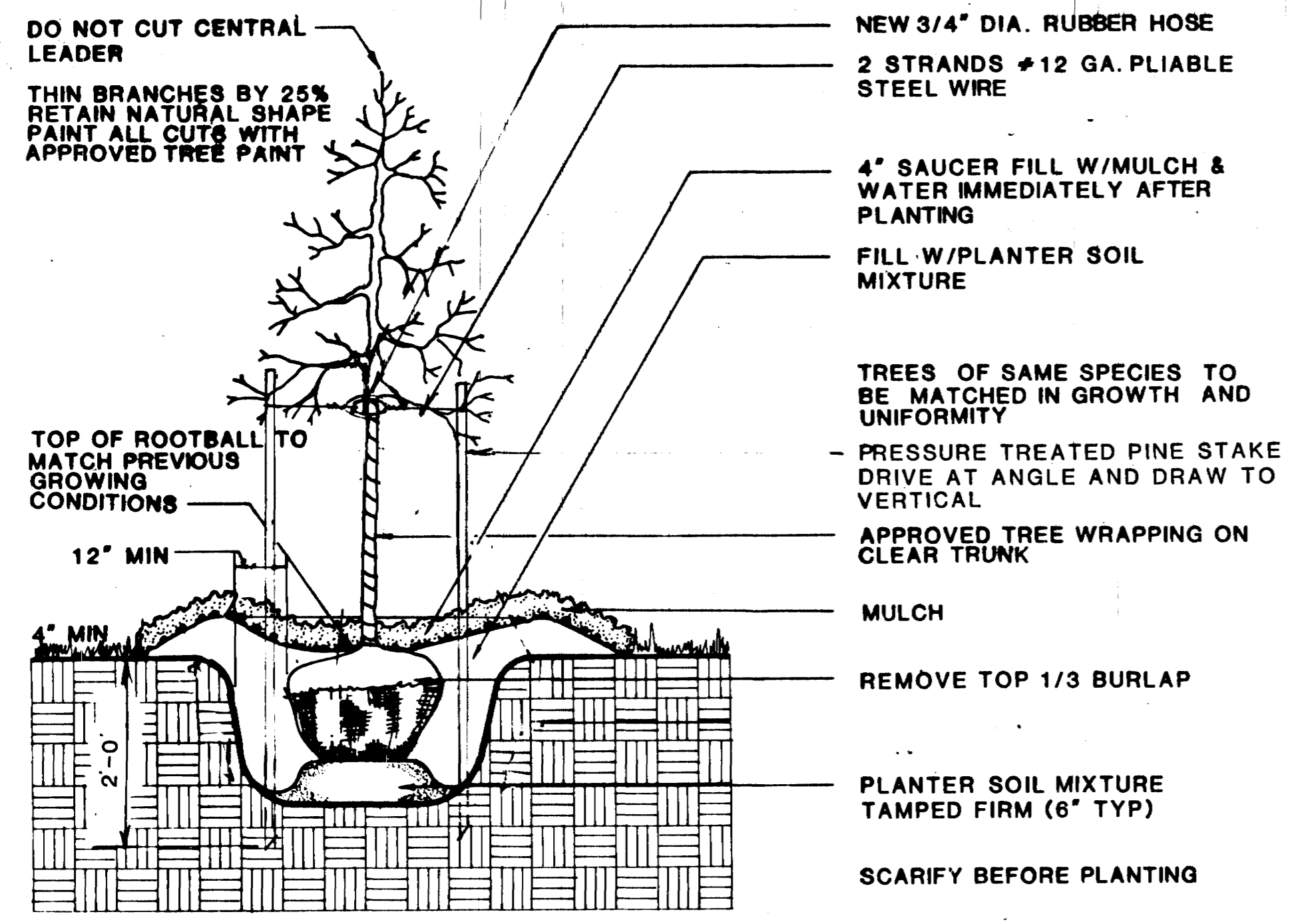


LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

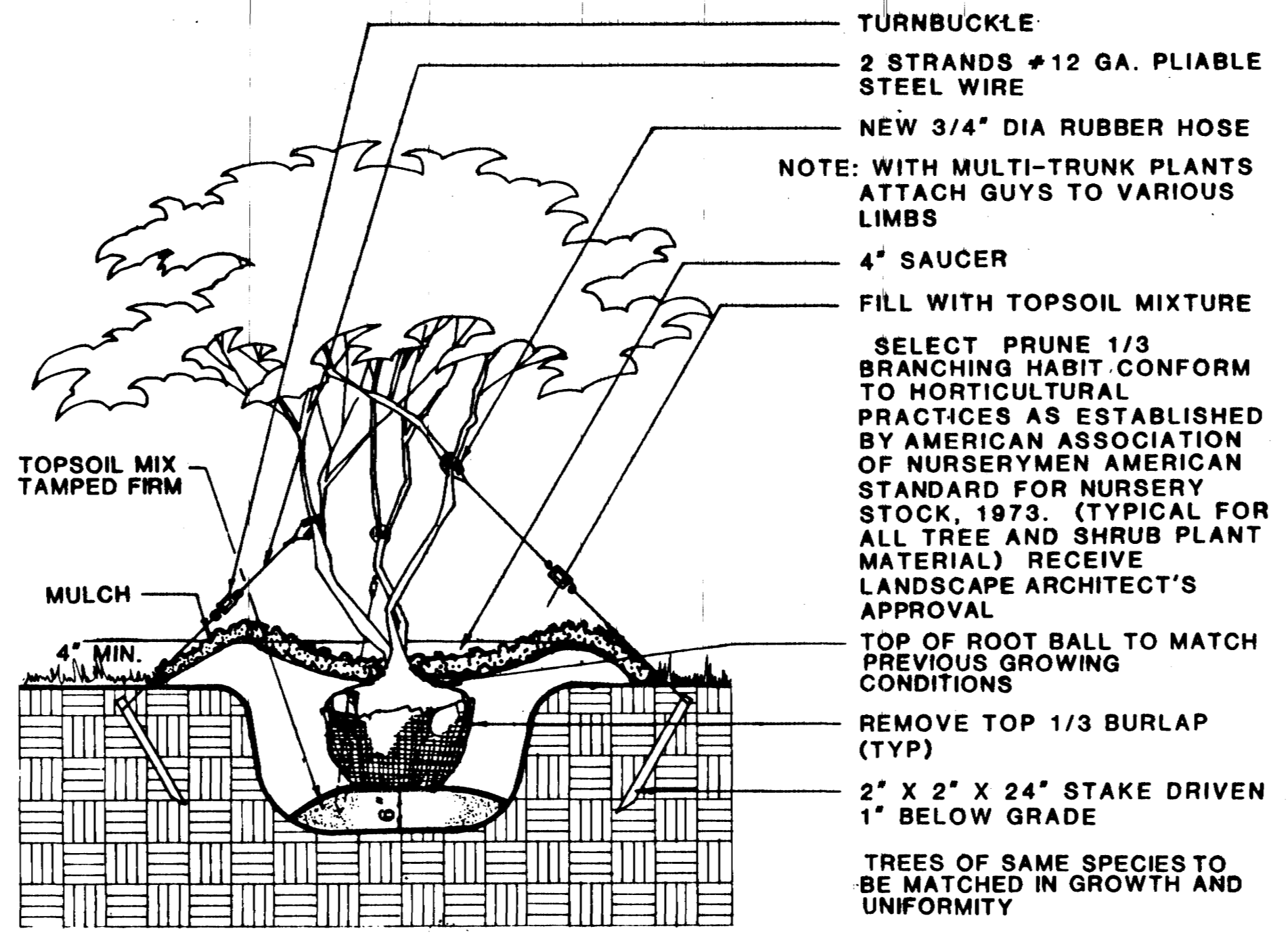
GRESHAM SMITH AND PARTNERS
 3310 West End Avenue
 Nashville, Tennessee 37203

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
PLANTING DETAILS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	TD-IR-440-4(50)206	40

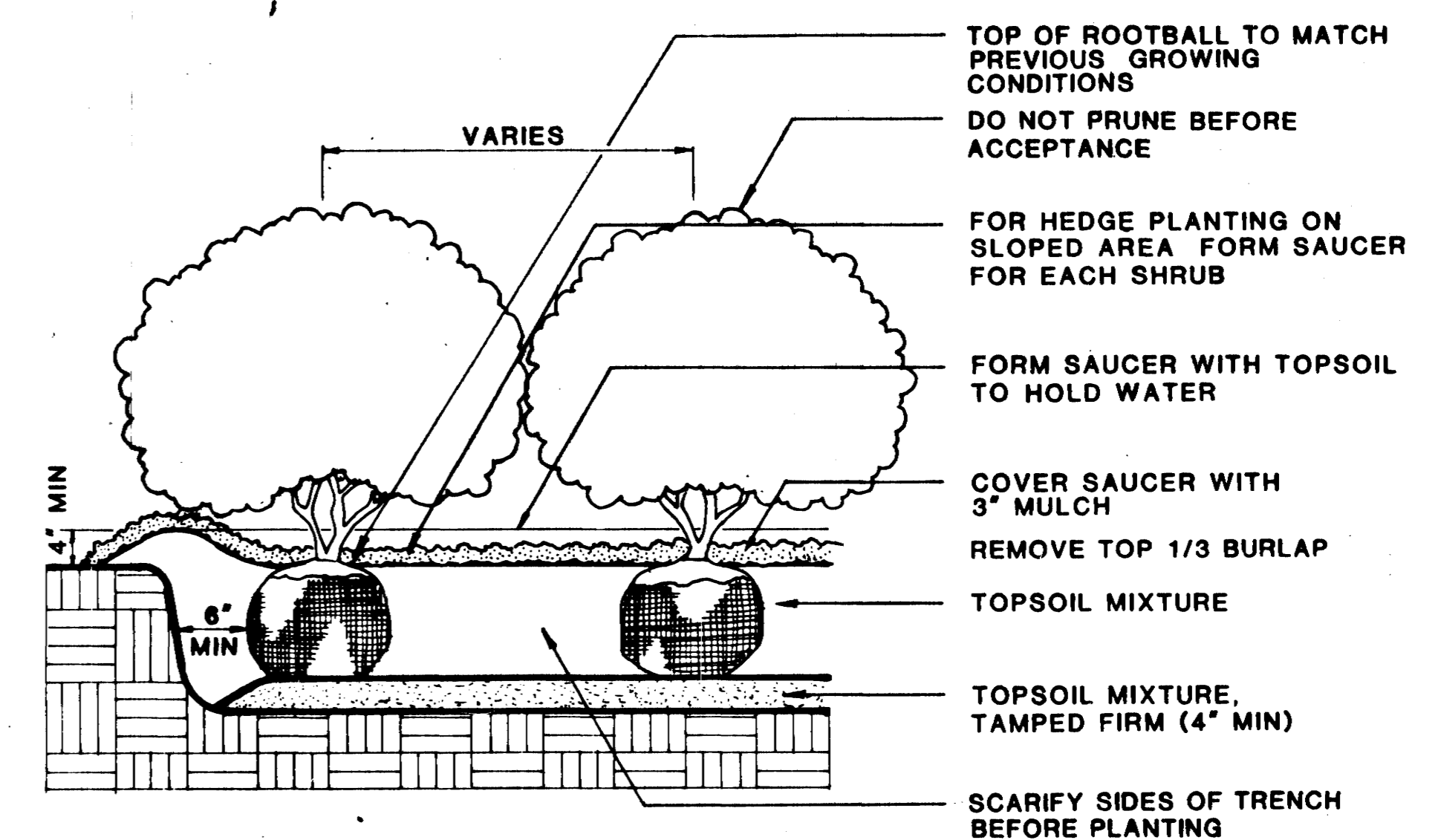


DETAIL: TYPICAL TREE GUYING
 NO SCALE

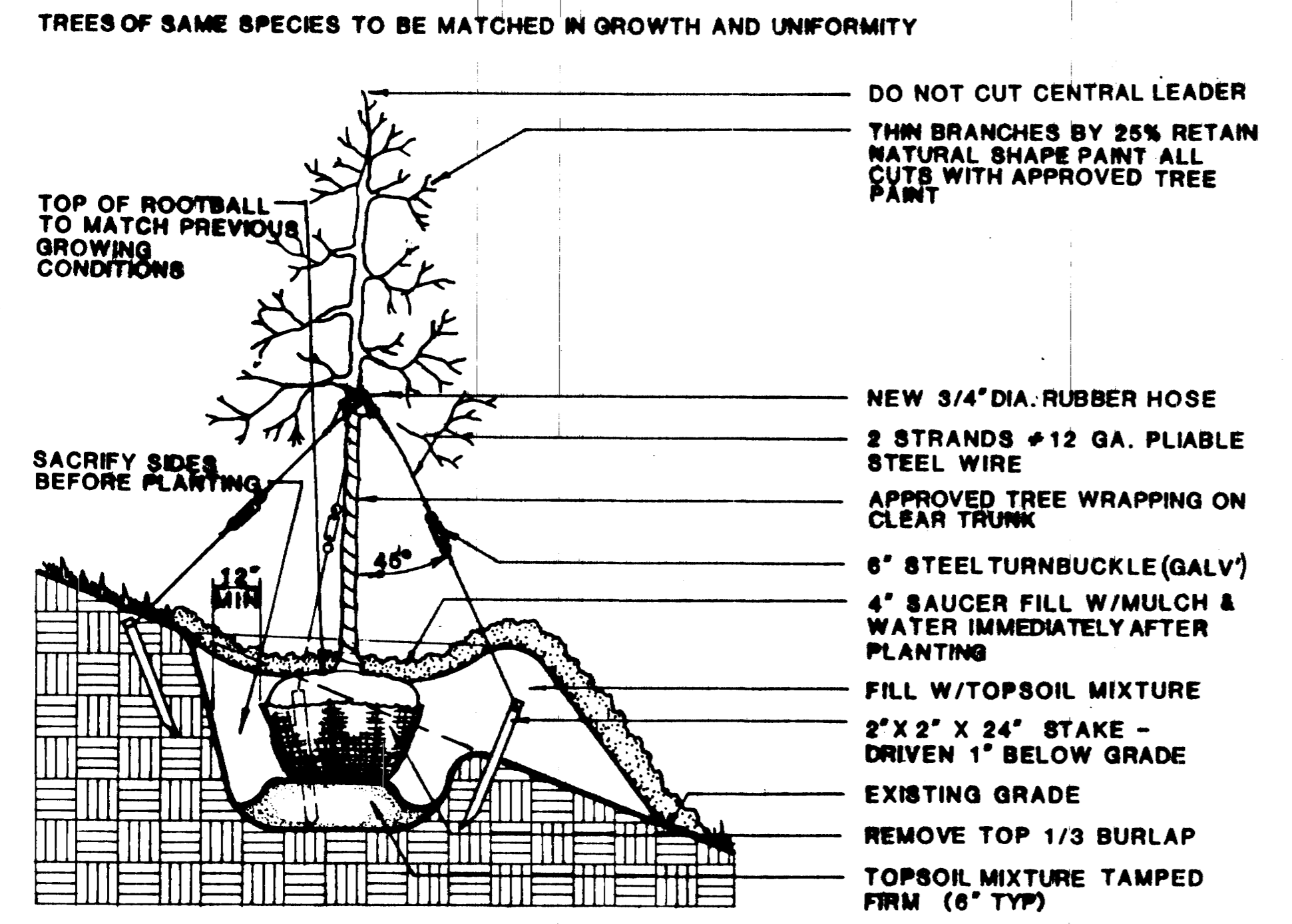


DETAIL: MULTI-TRUNKED TREE PLANTING
 NO SCALE

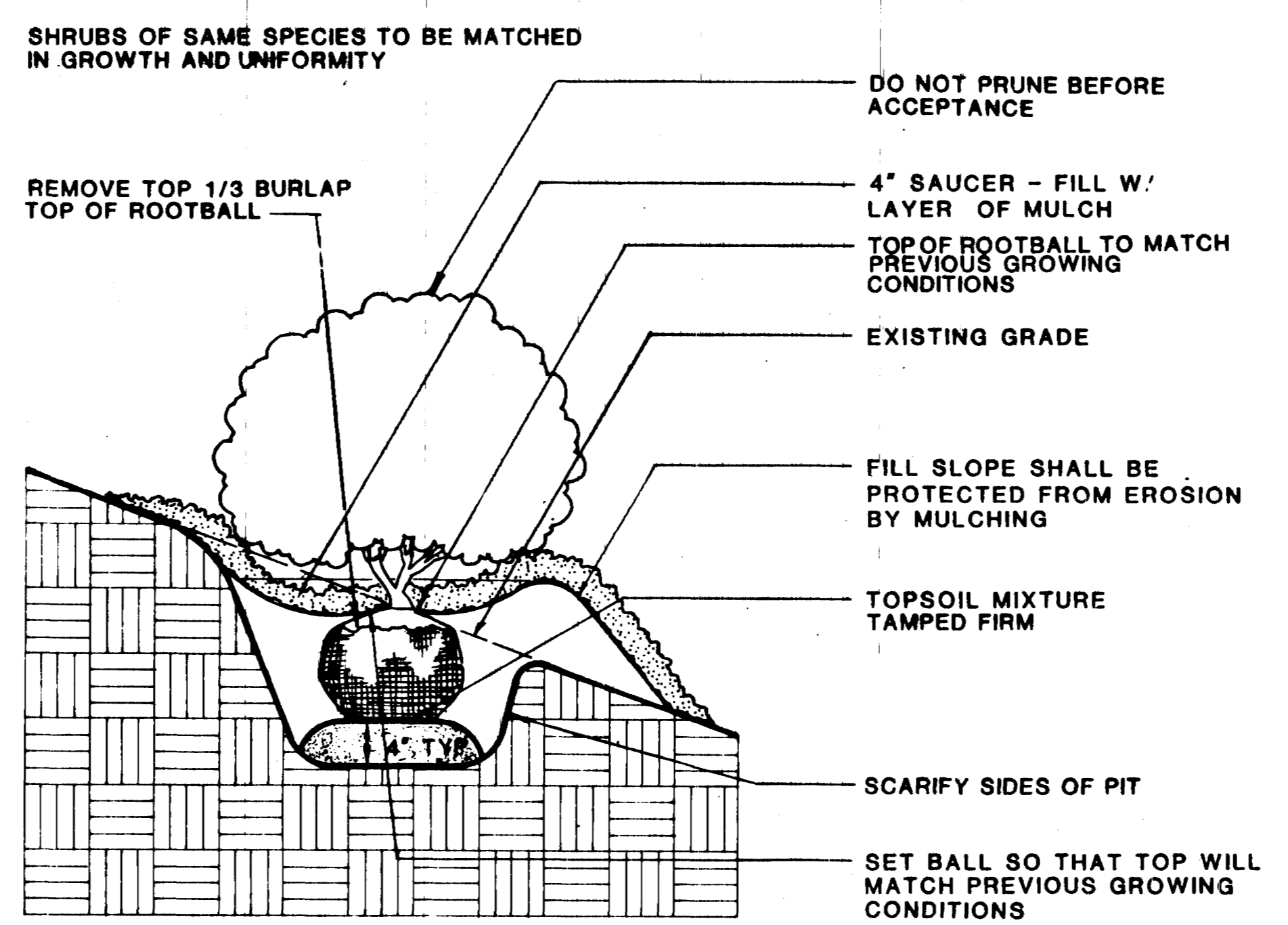
SEE SECTION 2480 OF PROJECT MANUAL FOR ADDITIONAL SPECIFICATIONS



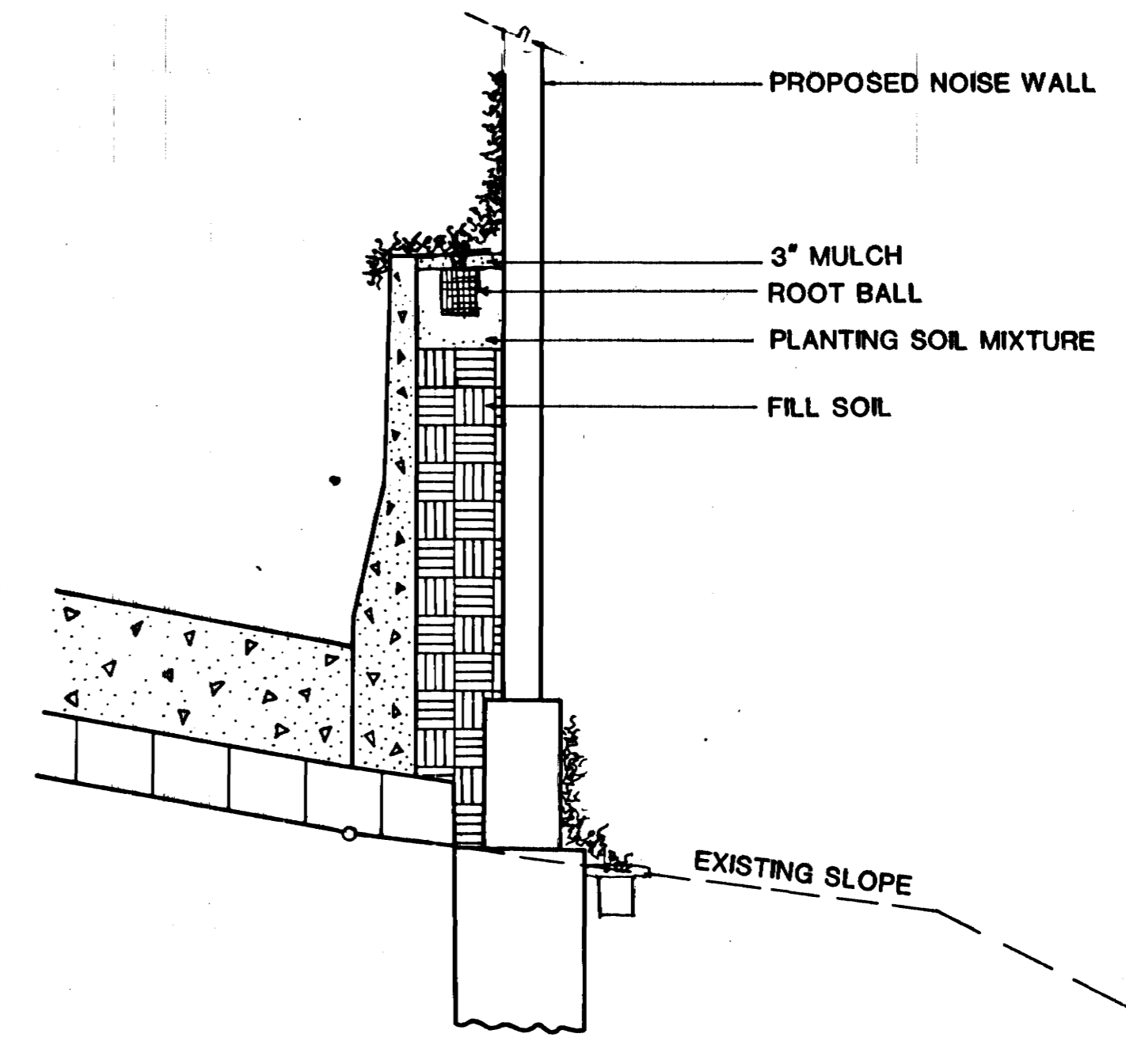
DETAIL: TYPICAL TRENCH PLANTING
 NO SCALE



DETAIL: TYPICAL SLOPE PLANTING FOR TREES OVER 2" CALIPER
 NO SCALE



DETAIL: TYPICAL SHRUB PLANTING ON SLOPE
 NO SCALE



DETAIL: NOISE WALL VINE PLANTING
 NO SCALE

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
PLANTING DETAILS

BRUNING
29411

PLANT SCHEDULE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	TD-IR-440-4(50)206	49

PAY ITEM NO.	KEY	BOTANICAL NAME	COMMON NAME	QTY	HGT	SPRD	TRUNK	ROOTS	SPCNG	REMARKS
		TREES								
802-01.01	AR	ACER SACCHARUM	SUGAR MAPLE	36	12'-14'	6'-7'	2-2 1/2" CAL.	24" BALL MIN.	AS SHOWN	MATCHED
802-01.02	CC	CERCIS CANADENSIS	EASTERN REDBUD CLUMPS	391	6'-8'	3'-4'	MULTIPLE	18" BALL MIN.	AS SHOWN	TRUNKS MATCHED IN DIA.
802-01.03	CF	CORNUS FLORIDA 'CLOUD NINE'	CLOUD 9 DOGWOOD	12	6'-8'	3'-4'	1" CAL.	18" BALL MIN.	AS SHOWN	MATCHED
802-01.04	CP	CRATAEGUS CORDATA	WASHINGTON HAWTHORN	123	6'-8'	3'-4'	1" CAL.	18" BALL MIN.	AS SHOWN	TREE FORM
802-01.05	LT	LIRIODENDRON TULIPIFERA	TULIPTREE	55	12'-14'	6'-7'	2-2 1/2" CAL.	24" BALL MIN.	AS SHOWN	MATCHED
802-01.06	QC	QUERCUS BOREALIS	RED OAK	24	12'-14'	6'-7'	2-2 1/2" CAL.	24" BALL MIN.	AS SHOWN	MATCHED
802-01.07	PN	PINUS NIGRA	AUSTRIAN PINE	52	8'-10'	3'-4'	1 1/2" CAL.	20" BALL MIN.	AS SHOWN	MATCHED
		SHRUBS								
802-03.01	CS	CHAENOMELES LAGENARIA	FLOWERING QUINCE	1466	3'-4'	3'	F.T.B.	12" BALL MIN.	4' O.C.	MATCHED
802-03.02	EA	EUONYMUS ALATUS	WINGED EUONYMUS	623	3'-4'	3'	F.T.B.	12" BALL MIN.	3' O.C.	MATCHED
802-03.03	EP	ELEAGNUS PUNGENS	ELEAGNUS	800	3'-4'	3'	F.T.B.	12" BALL MIN.	6' O.C.	MATCHED
802-03.04	FI	FORSYTHIA SUSPensa	FORSYTHIA	2254	3'-4'	3'	F.T.B.	12" BALL MIN.	4' O.C.	MATCHED
		VINES								
802-04.01	GS	GELSEIUM SEMPERVIRENS	CAROLINA JESSAMINE	1979				QUART POT	12" O.C.	MATCHED
802-04.03	PI	PARTHENOISSUS TRICUSPIDATA	BOSTON IVY	7058				QUART POT	12" O.C.	MATCHED
802-04.04	PO	PARTHENOISSUS QUINTQUEFOLIA	VIRGINIA CREEPER	33				QUART POT	12" O.C.	MATCHED

- GENERAL NOTES:
- ALL AREAS DESIGNATED AS CROWNVETCH SHALL BE 85% CROWNVETCH AND 15% KENTUCKY FESCUE. SEED AT A RATE OF 1 LB. PER 1,000 SQ. FT.
 - ALL AREAS DESIGNATED AS "LAWNS" SHALL BE 80% KENTUCKY FESCUE AND 20% ANNUAL RYE. SEED AT A RATE OF 4 LBS. PER 1,000 SQ. FT.
 - IF THE CONTRACTOR ENCOUNTERS CONDITIONS DIFFERENT FROM THOSE INDICATED ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO BEGINNING WORK IN THE AREA.
 - ALL AREAS OTHER THAN THE CENTER MEDIAN ARE TO BE SEED BY STATE FORCES. PRIOR TO THE INSTALLATION, WILD FLOWER AND SHRUB MASS AREAS TO BE SPRAYED WITH HERBICIDE AND RECEIVE REGIONAL LANDSCAPE SUPERINTENDENT'S APPROVAL PRIOR TO ENGAGING IN ANY FURTHER WORK IN THESE AREAS. TILL AND SCARIFY ALL WILD FLOWER AND SHRUB MASS AREAS PRIOR TO PLANTING. SEED WILD FLOWER AREAS AS DIRECTED IN THE SPECIFICATIONS.
 - PROTECT ALL SEEDED OR ESTABLISHED SLOPES DURING THE LANDSCAPE INSTALLATION.
 - STAKE ALL PLANT MATERIAL LOCATIONS AND SHRUB MASSES AND RECEIVE APPROVAL FROM REGIONAL LANDSCAPE SUPERINTENDENT PRIOR TO INSTALLATION.
 - NO PLANT MATERIALS SHALL BE PLACED THAT WOULD PROHIBIT PROPER SIGHT LINES ALONG THE TRAVEL WAY AS WELL AS ON AND OFF RAMP MERGING AREAS.
 - ALL MOWING LIMITS THAT ARE SHOWN ON THE PLANS WILL BE DETERMINED BY THE REGIONAL LANDSCAPE SUPERINTENDENT AND STAKED PRIOR TO MOWING SEASON.
 - ALL PLANTING SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE EXISTING DRAINAGE AS DETERMINED BY THE REGIONAL LANDSCAPE SUPERINTENDENT.
 - AFTER ALL TREES AND SHRUBS ARE PLANTED, THE CONTRACTOR WILL BE REQUIRED TO WATER AS DIRECTED BY THE LANDSCAPE SUPERINTENDENT IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS REGARDING SECTION 802.14 BETWEEN APRIL 15 AND SEPT. 15. COST OF THIS WORK TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 802.05 WATER (LANDSCAPING).
 - TREES WHICH WILL ULTIMATELY HAVE TRUNKS WITH DIAMETERS LARGER THAN 4 INCHES NOT TO BE PLANTED WITHIN 30' OF TRAVEL WAY UNLESS PROTECTED BY GUARDRAIL.
 - WILD FLOWER MIXTURE SHALL BE COMPOSED OF:
 INDIAN BLANKET - GAILLARDIA PULCHELLA
 SULPHUR COSMOS - COSMOS SULPHUREUS
 LANCE-LEAVED COREOPSIS - COREOPSIS LANCEOLATA
 DAMES ROCKET - HESPERIS MATRONALIS
 POOR MANS WEATHER GLASS - ANAGALLIS ARVENSIS VAR. COERULA
 CONEFLOWER - ECHINACEA PURPUREA
 TICKSEED - COREOPSIS TINCTORIA
 BLACKEYED SUSAN - RUDBECKIA HIRTA
 UPRIGHT PRAIRIE CONEFLOWER - RATIBIDA COLUMNARIS
 RATE OF SEEDING SHALL BE 8 LBS. OF MIXED SEED PER ACRE (44 UNITS).

SPECIAL PROVISIONS

FOLLOWING ARE AMENDMENTS TO THE GENERAL SPECIFICATIONS:

TOPSOIL: SECTION 203.06

4TH PARAGRAPH: ... THREE TO FOUR INCHES OF TOPSOIL SHALL BE ADDED AFTER LIGHT COMPACTION.

PREPARING THE SEEDBED: SECTION 801.05

FERTILIZE , AT A RATE OF NOT LESS THAN 20 LBS./1000 S.F. OF GRADE 10-10-10 OR EQUIVALENT FOR AREAS DESIGNATED AS LAWNS AND 15 LBS./1000 S.F. OF GRADE 5-10-15 OR EQUIVALENT FOR AREAS DESIGNATED AS CROWNVETCH, SHALL BE UNIFORMLY INCORPORATED INTO THE SOIL FOR A DEPTH OF APPROXIMATELY 1/2 INCH.

SEEDING: SECTION 801.06

SEED OF THE SPECIFIED GROUP SHALL BE SOWN UNIFORMLY BY MEANS OF A ROTARY SEEDER, HYDRAULIC EQUIPMENT, OR OTHER SATISFACTORY MEANS, APPROVED BY LANDSCAPE SUPERINTENDENT AT A RATE SPECIFIED ON THE PLANS.

MATERIALS: SECTION 802.02

MULCH SHALL BE AGED 2 YEARS SHREDDED HARDWOOD BARK FREE OF WEEDS, SEEDS, LARGE STICKS, OR OTHER DEBRIS. SUBMIT SAMPLE OF BARK TO REGIONAL LANDSCAPE SUPERINTENDENT FOR APPROVAL.

GUARANTEE: SECTION 802.15(C)

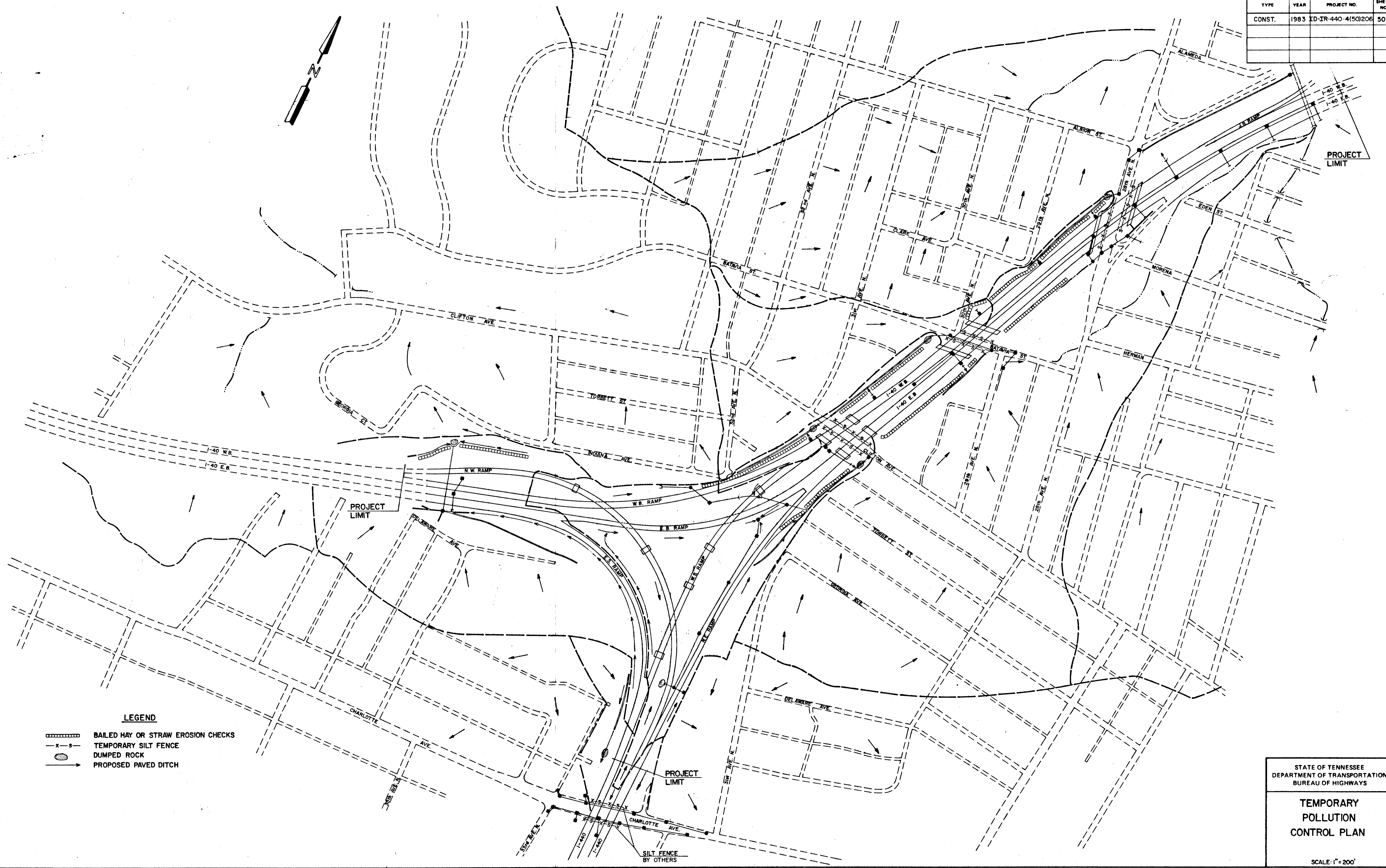
THE CONTRACTOR SHALL REPLACE AT NO ADDITIONAL COST TO THE STATE PLANT MATERIALS WHICH DIE OR ARE NOT IN A HEALTHY GROWING CONDITION AT THE END OF 2 GROWING SEASONS.

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY


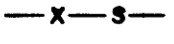


GRESHAM SMITH AND PARTNERS
3310 West End Avenue
Nashville, Tennessee 37203

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
PLANT SCHEDULE
AND NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	ID-IR-440-4(50)206	50



LEGEND

-  BAILED HAY OR STRAW EROSION CHECKS
-  TEMPORARY SILT FENCE
-  DUMPED ROCK
-  PROPOSED PAVED DITCH

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

**TEMPORARY
 POLLUTION
 CONTROL PLAN**

SCALE: 1" = 200'