Index of Sheets
(SEE SHEET 1A)

TENN.	YEAR	SHEET NO
	1984	1
FED AID PROJ NO	ID IR 440-4(59)206	
STATE PROJ NO	19014-3115-44	

19014-3116-44

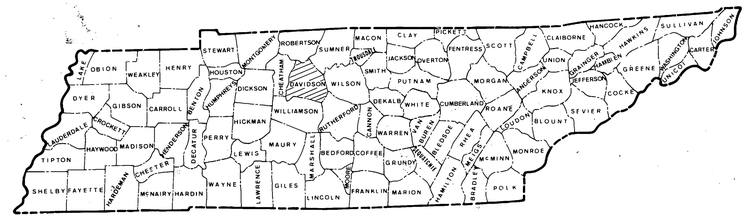
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING AND DEVELOPMENT

DAVIDSON COUNTY

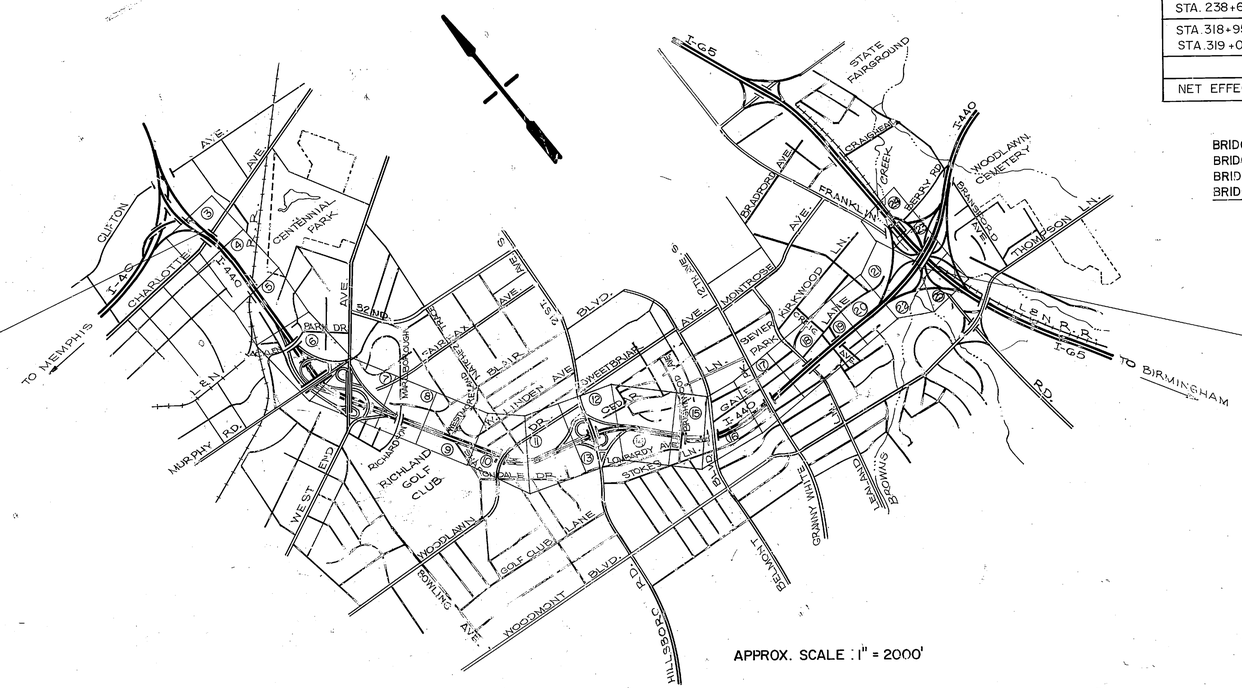
I-440 FROM CHARLOTTE AVE TO THE I-65 DIRECTIONAL INTERCHANGE

PAVING, LIGHTING, SIGNING, NOISE WALLS, LANDSCAPING, AND SIGNALIZATION

INTER-STATE HIGHWAY NO. I-440 FAHS NO. I-440



TRAFFIC DATA
(SEE SHEET NO 2DD)



APPROX. SCALE : 1" = 2000'

EQUATIONS

STATION	+	—
I-40 'N-E' STA. 337+82.34 = PAPER LOC. I-40 'N-E' STA. 337+78.46 = I-440 STA. 113+16.30	——	——
I-40 'W-S' STA. 337+04.35 = PAPER LOC. I-40 'E-S' STA. 367+09.49 = I-440 STA. 113+16.30	——	——
STA. 238+59.208 BACK = STA. 238+66.226 AHEAD		7018
STA. 318+95.96 BACK = STA. 319+06.18 AHEAD		10.22
NET EFFECT ON ENUMERATION =	- 17.238	

EXCLUSIONS

BRIDGE OVER CHARLOTTE AVE.		0.047 MILES
BRIDGE OVER L & N R.R.		0.056 MILES
BRIDGE OVER LEALAND LANE		0.030 MILES
BRIDGE OVER CRAIG AVE.		0.030 MILES
TOTAL EXCLUSION	=	0.163 MILES

19014-3115-44
19014-3116-44
BEGIN PROJ. NO. ID-IR-440-4(59)206
STA. 'N-E' 344+00
'E-S' 361+00

19014-3115-44
19014-3116-44
END PROJ. NO. ID-IR-440-4(59)206
STA. 344+92.19

ROADWAY LENGTH	4.340	MILES
BRIDGE LENGTH	0.000	MILES
PROJECT LENGTH	4.340	MILES

APPROVED Louis Evans
STATE TRANSPORTATION ENGINEER

DATE

APPROVED
COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

SPECIAL NOTES

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 STEVE JOBE CHECKED

P.E. NO. 19014-1101-44

IDYNE POST N26632

INDEX OF SHEETS

SHEET NO.	SHEET NAME
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2A	ESTIMATED ROADWAY QUANTITIES
2B	ESTIMATED SIGNING QUANTITIES
2C	ESTIMATED LANDSCAPING QUANTITIES
2D	ESTIMATED LIGHTING QUANTITIES
2E-2J	TABULATED QUANTITIES
2K, 2L	GENERAL NOTES
2M-2V	TYPICAL SECTIONS
2W-2CC	MISC. DETAILS
2DD	TRAFFIC DIAGRAM
3-25	PROPOSED LAYOUTS
26-64	PROFILES
65-95	LANDSCAPING PLANS
96	LIGHTING GENERAL NOTES
97-103	LIGHTING DETAILS
104-105	CIRCUIT DIAGRAMS
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169-179	GENERAL LAYOUT OF OVERHEAD SIGN STRUCTURES DWG. NOS M-141-12 THRU M-141-11
180-187	GENERAL LAYOUT OF CONTILEVER SIGN STRUCTURE DWG. NOS. M-141-12 THRU M-141-19
188	MODIFICATIONS TO EXISTING OVERHEAD, CANTILEVER AND BRIDGE MOUNT SIGNS, DWG NO M-141-20
189-199	SIGNS MOUNTED ON BRIDGES, DWG.NOS. M-141-21 THRU M-141-31 (INCLUDES REFERENCE DWG. NOS. H-3-56, M-94-1, M-94-19, M-94-49, M-110-41, M-110-130, M-110-148 & M-119-37)
200-211	X-SECTIONS FOR BERMS & RETENTION BASINS @ HILLSBORO ROAD INTERCHANGE
** 138A	SIGN SCHEDULE

SHEET NO. 14A FILED IN FILE NO. IN 194
SHEET NOS. 26-31 AND 54-61 FILED IN FILE NO. IN 334
SHEET NOS 32-37 AND 62-64 FILED IN FILE NO. IN 194
SHEET NOS. 38-53 FILED IN FILE NO IN 44

* INCLUDES SHEET NO 28B, DWG. NO. M-28-23 (DETAIL OF ENERGY ATTENUATOR)

** INCLUDES SHEET NO. 14A

TO BE PRINTED WITH PLANS

M-42-149 7-17-81 STANDARD GUARDRAIL ATTACHMENT TO BRIDGES

STANDARD ROADWAY DRAWINGS

DWG NO	REV DATE	TITLE
		ROADWAY DESIGN STANDARDS
RD-A-1	9-18-79	STANDARD ABBREVIATIONS
RD-L-1	3-15-76	STANDARD LEGEND
RD-L-2	1-11-82	STANDARD LEGEND
RD-S-11A	1-11-82	ROADSIDE DITCH DETAILS FOR SIGN AND CONSTRUCTION
RD-S-15	1-11-82	DESIGN STANDARDS 4- LANE HIGHWAYS IN RURAL & URBAN AREAS (ON FAI & FAP SYSTEMS)
RD-S-15B	1-11-82	DESIGN STANDARD 4-6 LANE INDEPENDENT ROADWAYS ON F.A.I. AND F.A.P. SYSTEMS.
RD-S-15C	1-11-82	DESIGN STANDARD 1&2 LANE RAMPS
RD-SE-1	11-09-76	STANDARD SUPERELEVATION DETAILS
RD-UD-1	7-17-81	UNDERDRAIN DETAILS
RD-UD-2	7-21-82	UNDERDRAIN DETAILS
		DRAINAGE - CULVERTS AND ENDWALLS
D-CE-1	1-1-76	CONSTRUCTION DETAILS
D-CE-3		SAFETY ADJUSTMENT FOR ENDWALLS
D-PB-1	2-25-77	CLASS "B" BEDDING AND CULVERT EXCAVATION
D-PE-4	9-28-83	CONCRETE ENDWALLS, STRAIGHT "U" AND "L" TYPE
		DRAINAGE - CATCH BASINS AND MANHOLES
D-CB-3	7-17-81	NOS. 36 AND 37 CATCH BASIN AND GRATE
D-CB-12-32	3-15-76	STANDARD NO. 12-32 CATCH BASIN & CASTINGS
D-CB-24	7-17-81	STANDARD NOS. 24 & 48 CATCH BASIN WITH WELDED STEEL GRATES
D-CBB-12	6-15-82	TYPE "B" FRAME & GRATE FOR NOS. 10, 12, 14, & 15 CATCH BASIN
D-CBC-12	3-15-76	CASTINGS FOR NOS. 10, 12, 14 & 15 CATCH BASIN W/TYPE "C" GRATE
D-MH-4	7-17-81	NO. 3 MANHOLE CASTINGS
		ROADWAY AND PAVEMENT APPURTENANCES
RP-J-1	1-31-83	PORTLAND CEMENT CONCRETE PAVEMENT JOINT TYPES AND SPACING FOR DESIGN SPEED OVER 40 MPH
RP-J-3		PORTLAND CEMENT CONCRETE PAVEMENT JOINT TYPES AND SPACING FOR DESIGN SPEEDS 40 MPH AND LESS
RP-J-5	1-31-83	TYPICAL ACCELERATION & DECELERATION LANE JOINT TYPES & SPACING FOR CONCRETE RAMPS
RP-J-7	1-31-83	CONCRETE RAMP JOINT TYPES AND SPACING
RP-J-9	1-31-83	CONTRACTION AND CONSTRUCTION JOINTS FOR CONCRETE PAVEMENT
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 JOINTS
RP-J-17		DOWEL ASSEMBLIES
RP-J-19		DOWEL ASSEMBLIES
RP-J-21		DOWEL ASSEMBLIES
		SAFETY APPURTENANCES AND FENCE
S-F-10	7-17-81	STANDARD RIGHT-OF-WAY STOCK FENCE
S-F-10B	7-17-81	STANDARD RIGHT-OF-WAY CHAIN LINK FENCE
S-FG-20	1-1-76	EXAMPLES OF WATER GATES & CROSSINGS
S-GR-11	9-15-82	W-BEAM BARRIER RAIL AND RUB RAIL
S-GR-12	9-15-82	BARRIER RAIL MOUNTING, POST BLOCK-OUTS, POST BASE DETAILS
S-GR-13	9-15-82	W-BEAM BARRIER POST DETAILS & SPECIFICATIONS
S-GR-14	9-15-82	W-BEAM BARRIER FASTENING HARDWARE AND REFLECTORS
S-GR-15	9-15-82	W-BEAM BARRIER TERMINAL ELEMENT DETAILS
S-GR-16	9-15-82	GUARDRAIL BARRIER TREATMENT FOR PIERS IN MEDIAN
S-GR-17	9-15-82	BRIDGE END PROTECTION IN MEDIAN FOR DUAL BRIDGES
S-GR-18	3-09-83	GUARDRAIL TERMINAL ANCHOR, TYPE 11
S-GR-19	3-09-83	TERMINAL ANCHORS, TYPE 12, TYPE 13
S-GR-20	9-15-82	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
		TRAFFIC CONTROL APPURTENANCES
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T-M-3		MARKING DETAILS FOR EXPRESSWAYS AND FREEWAYS
T-M-4		MARKING DETAILS FOR EXPRESSWAYS AND FREEWAYS
T-M-5		MARKING DETAILS FOR EXPRESSWAYS AND FREEWAYS
T-M-6		MARKING DETAILS OF RAMP INTERSECTIONS
T-M-7		SPACING DETAILS OF RAISED REFLECTIVE PAVEMENT MARKERS
T-M-8		SPACING DETAILS OF RAISED REFLECTIVE PAVEMENT MARKERS
T-M-9		DETAILS OF RAISED REFLECTIVE PAVEMENT MARKERS
T-M-10	6-20-83	MARKING STANDARDS FOR TRAFFIC ISLANDS AND PAVED SHOULDERS
T-S-6	1-01-76	MOUNTING DETAILS, BOLTED EXTRUDED PANELS
T-S-7	8-10-83	HIGHWAY SHIELDS-FEDERAL ROUTES
T-S-8	8-10-83	HIGHWAY SHIELDS AND ARROWS-STATE ROUTES
T-S-9	1-01-76	STANDARD LAYOUT, GROUND MOUNTED SIGNS
T-S-11	12-12-83	DELINEATOR, MILEPOST, AND PAVEMENT ARROW DETAILS
T-S-12	12-12-83	STANDARD MOUNTING DETAILS, FLAT SHEET SIGNS, ALUMINUM-STEEL DESIGN
T-S-13	4-12-77	STANDARD STEEL GROUND MOUNTED SIGNS, BREAKAWAY TYPE POST, FOOTING DETAILS I-BEAM AND SQUARE TUBE
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T-S-15	1-01-76	STANDARD CONDUIT & GROUNDING DETAILS FOR OVERHEAD & BUTTERFLY SIGN STRUCTURE
T-SG-1	5-07-79	WOODEN POLE, CONDUIT AND SPAN WIRE CONNECTORS
T-SG-2	1-01-76	LOOP LEAD-INS & PULL BOXES
T-SG-3	9-27-77	STANDARD NOTES & DETAILS OF DETECTION LOOPS
T-SG-4	4-04-77	TYPICAL LAYOUT & DETAILS OF DETECTION LOOPS
T-SG-5	1-01-76	CONTROLLER CABINET DETAILS
T-SG-6	1-01-76	CONTROLLER CABINET MOUNTING DETAILS
T-SG-7		SIGNAL HEAD ASSEMBLY DETAILS
		EROSION CONTROL AND LANDSCAPING
EL-P-1	1-11-82	TEMPORARY POLLUTION CONTROL STRUCTURES
EL-P-2	1-11-82	TYPICAL TEMPORARY POLLUTION CONTROL STRUCTURE LOCATIONS
EL-P-10	1-01-76	TYPICAL ROADWAY LANDSCAPE PLANTING DETAILS
EL-P-11	1-01-76	TYPICAL MATURE PLANT SPREAD & CRITERIA FOR PROXIMITY TO ROADWAY
		BRIDGE APPURTENANCES
M-28-1	7-17-81	BRIDGERAILING-CONCRETE PARAPET

TYPE	YEAR	PROJECT NO	SHEET NO.
PAVING	1984	I-440-4(59)206	1A

REV. 4-4-84; ADDED DWG. NO. M-42-149 (TO BE PRINTED WITH PLANS) TO INDEX.

REV. 4-24-84; ADDED STD. DWG. NO. T-S-8 CHANGED REVISION DATES FOR STD. DWG. NOS. T-S-11 AND T-S-12. ADDED FOOTNOTE TO INCLUDE SHEET NO. 14A.

REVISED: 1-14-85; SHEET NO. 14I ADDED TO INDEX.

REV. 2-6-85; ADDED SHEET 127A

REV. 12-31-86; ADDED SHEET NOS 200-211 TO INDEX.

REV. 3-20-87; SHEET NO. 138A ADDED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

INDEX

LIST OF DRAWINGS

Const. No. 19014-3115-44

REV. No.1, BY: R.L.H., 3-30-84, ADDED DWG. & ITEM.

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Const	84	IDIR-440-4(69) 206	2

	DWG. NO.	LATEST REV. DATE
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1 GENERAL DETAILS AND NOTES FOR METAL NOISE BARRIER	M-82-7	6-8-82

ESTIMATED BARRIER QUANTITIES		NOISE BARRIER 701 INTERSTATE 440 STA. 303+00., 12' RT. TO STA. 351+09. RT. TOTAL LENGTH = 4,386'-0" LAYOUT DWG. NO. M-119-104.	NOISE BARRIER 702 INTERSTATE 440 STA. 303+54.5, 109' LT. TO N-W RDWY. STA. 655+33.5 TOTAL LENGTH = 3,723'-0" LAYOUT DWG. NO. M-119-110.	NOISE BARRIER 703 INTERSTATE 440 STA. 276+02.5, 120' RT. TO STA. 294+80, 100' RT. TOTAL LENGTH = 1,912'-6" LAYOUT DWG. NO. M-119-116.	NOISE BARRIER 704 INTERSTATE 440 STA. 276+49, 105' LT. TO STA. 291+58.5, 225 LT. TOTAL LENGTH = 1,479'-0" LAYOUT DWG. NO. M-119-116.	NOISE BARRIER 705 INTERSTATE 440 STA. 266+58, 120' RT. TO STA. 275+38, 118' RT. TOTAL LENGTH = 943'-6" LAYOUT DWG. NO. M-119-121.	NOISE BARRIER 706 INTERSTATE 440 STA. 266+35, 118' LT. TO STA. 275+93.3, 123' LT. TOTAL LENGTH = 892'-6" LAYOUT DWG. NO. M-119-121.	
ITEM NO	DESCRIPTION	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	UNIT
1 718-01.03	NOISE BARRIER (METAL)	2,177	1,861					S.F.
204-02.11	DRILLED CAISSON (EARTH) (2'-6"ϕ)	1,494	1,765	478	510	345	339	L.F.
204-02.16	DRILLED CAISSON (ROCK) (2'-6"ϕ)			324	119	117	111	L.F.
718-01.01	NOISE BARRIER	15,368	15,844	23,834	11,679	8,738	10,523	S.F.
718-01.02	NOISE BARRIER (ACOUSTICALLY ABSORPTIVE)	20,246	22,423					L.F.
718-02	NOISE BARRIER SAFETY SHAPE	4,411	3,552					L.F.

ESTIMATED BARRIER QUANTITIES		NOISE BARRIER 707 INTERSTATE 440 STA. 244+17.6, 492' RT. TO STA. 265+11, 110' RT. TOTAL LENGTH = 2,116'-6" LAYOUT DWG. NO. M-119-124.	NOISE BARRIER 708 INTERSTATE 440 STA. 244+03.3, 368' LT. TO STA. 265+06.9, 117' LT. TOTAL LENGTH = 2,218'-6" LAYOUT DWG. NO. M-119-124.	NOISE BARRIER 709 INTERSTATE 440 STA. 217+76, 105' RT TO HILLSBORO PIKE STA. 14+40, 42' LT. TOTAL LENGTH = 2,295'-0" LAYOUT DWG. NO. M-119-131.	NOISE BARRIER 710 INTERSTATE 440 STA. 214+78, 102' LT. TO STA. 239+01.6, 608' LT. TOTAL LENGTH = 2,499'-0" LAYOUT DWG. NO. M-119-131.	NOISE BARRIER 711 INTERSTATE 440 STA. 201+82.5, 107' RT. TO STA. 213+91, 113' RT. TOTAL LENGTH = 1,198'-6" LAYOUT DWG. NO. M-119-138.	NOISE BARRIER 712 INTERSTATE 440 STA. 198+68, 108' LT. TO STA. 213+47.9, 120' LT. TOTAL LENGTH = 1,555'-6" LAYOUT DWG. NO. M-119-138.	
ITEM NO.	DESCRIPTION	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	UNIT
1 718-01.03	NOISE BARRIER (METAL)							S.F.
204-02.11	DRILLED CAISSON (EARTH) (2'-6"ϕ)	656	1,085	572	823	307	411	L.F.
204-02.16	DRILLED CAISSON (ROCK) (2'-6"ϕ)	317	225	415	409	202	249	L.F.
718-01.01	NOISE BARRIER	29,495	29,376	31,943	31,790	12,767	18,581	S.F.
718-01.02	NOISE BARRIER (ACOUSTICALLY ABSORPTIVE)							L.F.
718-02	NOISE BARRIER SAFETY SHAPE							L.F.

ESTIMATED BARRIER QUANTITIES		NOISE BARRIER 801A INTERSTATE 440 STA. 183+21.9, 116' LT. TO STA. 197+26, 125' LT. TOTAL LENGTH = 1,428'-0" LAYOUT DWG. NO. M-119-142.	NOISE BARRIER 801B INTERSTATE 440 STA. 169+00, 370' LT. TO STA. 182+07.9, 146' LT. TOTAL LENGTH = 1,326'-0" LAYOUT DWG. NO. M-119-142.	NOISE BARRIER 802 INTERSTATE 440 STA. 172+44, 613' RT. TO STA. 183+22, 118' RT. TOTAL LENGTH = 1,233'-6" LAYOUT DWG. NO. M-119-146.	NOISE BARRIER 803 INTERSTATE 440 STA. 160+12, 112' LT. TO STA. 162+82, 160' LT. TOTAL LENGTH = 408'-0" LAYOUT DWG. NO. M-119-148.	NOISE BARRIER 804A INTERSTATE 440 STA. 158+57, 117' RT. TO STA. 160+00. 149' RT. TOTAL LENGTH = 153'-0" LAYOUT DWG. NO. M-119-149.	NOISE BARRIER 804C INTERSTATE 440 STA. 166+50, 237' RT. TO STA. 169+72., 317' RT. TOTAL LENGTH = 331'-6" LAYOUT DWG. NO. M-119-149.	
ITEM NO.	DESCRIPTION	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	UNIT
1 718-01.03	NOISE BARRIER (METAL)							S.F.
204-02.11	DRILLED CAISSON (EARTH) (2'-6"ϕ)	526	524	293	196	58	114	L.F.
204-02.16	DRILLED CAISSON (ROCK) (2'-6"ϕ)	179	172	250		16	47	L.F.
718-01.01	NOISE BARRIER	14,076	13,923	13,242	5,168	1,564	3,723	S.F.
718-01.02	NOISE BARRIER (ACOUSTICALLY ABSORPTIVE)							L.F.
718-02	NOISE BARRIER SAFETY SHAPE							L.F.

ESTIMATED BARRIER QUANTITIES		NOISE BARRIER 805A INTERSTATE 440 STA. 146+78., 134' LT. TO STA. 151+50., 293' LT. TOTAL LENGTH = 510'-0" LAYOUT DWG. NO. M-119-150.	NOISE BARRIER 805C INTERSTATE 440 STA. 156+18, 392' LT. TO STA. 158+00, 385' LT. TOTAL LENGTH = 153'-0" LAYOUT DWG. NO. M-119-150.	NOISE BARRIER 807 INTERSTATE 440 STA. 134+00, 112' LT. TO STA. 145+64', 132' LT. TOTAL LENGTH = 1,173'-0" LAYOUT DWG. NO. M-119-152.	NOISE BARRIER 808A INTERSTATE 440 STA. 130+98.5, RT. TO STA. 134+00, 116' RT. TOTAL LENGTH = 306'-0" LAYOUT DWG. NO. M-119-152.	NOISE BARRIER 808C INTERSTATE 440 STA. 140+00, 114' RT. TO STA. 145+50, 100' RT. TOTAL LENGTH = 561'-0" LAYOUT DWG. NO. M-119-2.	NOISE BARRIER 810 INTERSTATE 440 E-S RDWY. STA. 365+88, RT. TO I-440 STA. 127+37., 71' RT. TOTAL LENGTH = 1,555'-6" LAYOUT DWG. NO. M-119-156.		
ITEM NO.	DESCRIPTION	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	QUANTITY	TOTAL QUANTITIES	UNIT
1 718-01.03	NOISE BARRIER (METAL)							4,038	S.F.
204-02.11	DRILLED CAISSON (EARTH) (2'-6"ϕ)	118	16	220	104	48	321	11,323	L.F.
204-02.16	DRILLED CAISSON (ROCK) (2'-6"ϕ)	101	35	235	20	115	260	3,918	L.F.
718-01.01	NOISE BARRIER	5,593	1,887	13,226	3,145	5,559	21,947	342,991	S.F.
718-01.02	NOISE BARRIER (ACOUSTICALLY ABSORPTIVE)							42,669	S.F.
718-02	NOISE BARRIER SAFETY SHAPE							7,963	L.F.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

ESTIMATED NOISE BARRIER QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2A

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
109-10.01	TRAINEE	HOUR	12,000
(1) 202-01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L S	1
203-01	ROAD AND DRAINAGE EXCAVATION	C Y	4,760
203-04.01	PLACING AND SPREADING SOIL FOR LANDSCAPING	C Y	85,714
(2) 203-06	WATER	M G	2,567
203-07	FURNISHING AND SPREADING TOPSOIL	C Y	4,846
(20) 203-03	BORROW EXCAVATION (UNCLASSIFIED)	C Y	2,638
204-07	BEDDING MATERIAL (PIPE) CLASS (B)	C Y	454
207-01	SUBGRADE CONSTRUCTION AND PREPARATION	PER STA	238
209-01	TEMPORARY BERM	L F	13,935
209-05	SEDIMENT REMOVAL	C Y	2,700
209-06	BALED HAY OR STRAW EROSION CHECKS	BALE	10,935
209-07	DUMPED ROCK	C Y	1,350
(3) 303-01	MINERAL AGGREGATE, TYPE 'A' BASE, GRADING 'D'	TON	46,424
303-10.01	MINERAL AGGREGATE (SIZE NO. 4)	TON	5,001
305-02	LEAN CONCRETE BASE (5 INCHES)	S Y	411,638
312-01	MINERAL AGGREGATE(ALFSB)	TON	93,047
312-02	LIME	TON	3,809
312-03	FLY ASH	TON	11,971
312-04	BITUMINOUS MATERIAL(ALFSB)	TON	356
501-01.02	PORTLAND CEMENT CONCRETE PAVEMENT (PLAIN) 9"	S Y	47,253
501-01.03	PORTLAND CEMENT CONCRETE PAVEMENT (PLAIN) 10"	S Y	190,150
501-03.01	COLORED CONCRETE SHOULDERS	S Y	146,134
(4) 604-01.01	CLASS 'A' CONCRETE (ROADWAY)	C Y	52
(5) 604-01.02	STEEL BAR REINFORCING (ROADWAY)	LB	1,569
607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L F	4,984
607-06.02	30" CONCRETE PIPE CULVERT (CLASS III)	L F	170
607-07.02	36" CONCRETE PIPE CULVERT (CLASS III)	L F	27
607-37.02	18" CORRUGATED METAL PIPE CULVERT	L F	1,331
607-08.02	42" CONCRETE PIPE CULVERT (CLASS III)	L F	424
(21) 608-36.02	6" POLYVINYL CHLORIDE WATER PIPES	L F	425
611-03.01	CLASS A CONCRETE (CATCHBASIN)	C Y	87
611-03.02	STEEL BAR REINFORCING (CATCHBASIN)	L B	58
611-03.03	BRICK MASONRY (CATCHBASIN)	M BRICK	61.917
611-03.04	GRAY IRON CASTINGS (CATCHBASIN)	LB	18,348
611-04.52	ADJUSTMENT OF EXISTING CATCH BASIN	EACH	26
611-07.01	CLASS 'A' CONCRETE (PIPE ENDWALLS)	C Y	7
611-07.02	STEEL BAR REINFORCING (PIPE ENDWALLS)	LB	100
611-07.04	STRUCTURAL STEEL (CATCH BASIN)	LB	27,214
703-01	CEMENT CONCRETE DITCH PAVING	C Y	310
705-01.41	PROTECTIVE GUARDRAIL AT BRIDGE ENDS (POWDER COATED)	L F	567
705-01.42	PROTECTIVE GUARDRAIL AT BRIDGE PIERS (POWDER COATED)	L F	2,342
705-02.42	METAL DEEP BEAM SINGLE GUARDRAIL (POST SP 6 FT 3 IN) (POWDER COATED)	L F	5,089
705-03.43	METAL MEDIAN DIVIDER GUARDRAIL (POST SP. 6 FT 3 IN)(POWDER COATED)(27 INCH MT. HT.)	L F	1,416
705-04.41	GUARDRAIL TERMINAL ANCHOR (TYPE 11) (POWDER COATED)	EACH	50
705-04.42	GUARDRAIL TERMINAL ANCHOR (TYPE 12) (POWDER COATED)	EACH	4
705-04.43	GUARDRAIL TERMINAL ANCHOR (TYPE 13) (POWDER COATED)	EACH	36
705-08.60	GUARDRAIL ENERGY ABSORBING TERMINAL	EACH	2
(13) 707-02.06	GATE CHAIN LINK FENCE-12 FT.) (VINYL COATED)	EACH	5
707-02.15	END AND CORNER POST ASSEMBLIES (CHAIN LINK) FENCE-6 FT (VINYL COATED)	EACH	145
(19) 707-02.20	CHAIN LINK FENCE (6 FT) (VINYL COATED)	L F	23,310
707-04	WATER CROSSING	L F	130
707-05	WATER GATE	S F	140
709-04	REINFORCED CONCRETE SLOPE PAVEMENT	C Y	646
710-04	FILTER CLOTH UNDERDRAIN (WITH PIPE)	L F	31,269
710-10.02	6" PERFORATED C.M. PIPE UNDERDRAINS	L F	15,872
710-13.03	FILTER CLOTH	S Y	24,036

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
(18) 711-01	CONCRETE MEDIAN BARRIER	L F	3,989
711-02	CONCRETE MEDIAN BARRIER (BRIDGE PIER PROTECTION)	L F	60
712-01	TRAFFIC CONTROL	L S	1
712-06	SIGNS(CONSTRUCTION)	S F	120
712-08.03	ARROW BOARDS(TYPE C)	EACH	2
(7) 713-15.07	SUSPENDED FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	EACH	2
716-01.02	RAISED PAVEMENT MARKERS (TYPE 2)	EACH	2,530
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L F	220
716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	10
716-03.01	PLASTIC WORD PAVEMENT MARKING (ONLY)	EACH	2
716-12.01	EPOXY PAVEMENT MARKING (LINE)	LIN. MI.	36
716-12.02	EPOXY PAVEMENT MARKING (8 IN BARRIER LINE)	L.F.	7300
716-12.04	EPOXY PAVEMENT MARKING (CHANNELIZATION STRIPING)	S Y	1,998
717-01	MOBILIZATION	L S	1
730-02.04	SIGNAL HEAD ASSEMBLY (130)	EACH	18
(8) 730-02.07	SIGNAL HEAD ASSEMBLY (130 A2)	EACH	2
730-02.13	SIGNAL HEAD ASSEMBLY (150 A2H)	EACH	1
730-03.01	INSTALL PULL BOX	EACH	3
(9) 730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	1
730-08.05	SIGNAL CABLE 12 CONDUCTOR	L F	300
(10) 730-08.08	SIGNAL CABLE (INTERCONNECT)	L F	1900
730-09.01	SPAN WIRE ASSEMBLY (12,500 LBS. MIN BREAKING STR.)	L F	800
730-12.01	CONDUIT 1"	L F	260
730-12.02	CONDUIT 2"	L F	1419
730-13.01	VEHICLE LOOP DETECTOR	EACH	8
(11) 730-13.03	VEHICLE LOOP DETECTOR (DELAY)	EACH	1
730-14.01	SHIELDED DETECTOR CABLE	L F	1510
(12) 730-14.02	FURNISHING INSTALLING LOOP WIRING AND SEALING	L F	1345
730-16.01	TWO PHASE ACTUATED CONTROLLER	EACH	2
(17) 730-16.04	EIGHT PHASE ACTUATED CONTROLLER	EACH	1
730-19.01	ELECTRIC TIME SWITCH	EACH	2
(14) 730-20.01	LOCAL SYNCHRONOUS CONTROLLER	EACH	2
(15) 730-20.02	MASTER SYNCHRONOUS CONTROLLER	EACH	1
730-23.01	STEEL STRAIN POLE (SIGNAL SUPPORT)	EACH	8
730-08.02	SIGNAL CABLE-5 CONDUCTOR	LF	250
730-11.01	STEEL CONDUIT RISER	EACH	1
730-16.03	FOUR PHASE ACTUATED CONTROLLER	EACH	1
801-03	WATER (SEEDING AND SODDING)	M G	158
803-01	SODDING (NEW SOD)	S Y	15,758

NON-PARTICIPATING ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
(16) 705-08.99	SPARE PARTS (HI-DRI CARTRIDGE)	L S	1

FOOTNOTES

1. ITEM INCLUDES THE REMOVAL OF ALL EXISTING STOCK FENCE AND END AND CORNER POST ASSEMBLIES (APPROX. 56,330 LIN. FT. OF FENCE AND 526 END AND CORNER POST ASSEMBLIES).
2. INCLUDES 1,299 M GAL FOR EMBANKMENT (BERMS) AND 1268 M GAL FOR SUBGRADE CONSTRUCTION AND PREPARATION.
3. TO BE USED, AS DIRECTED BY THE ENGINEER, FOR LEVELING THE SUBGRADE.
4. INCLUDES 46 CU YDS FOR JUNCTION BOXES, AND 6 CU YDS FOR GUARDRAIL ENERGY ABSORBING TERMINAL. THE CONCRETE USED FOR THE ENERGY ABSORBING TERMINAL SHALL BE TINTED. SEE NOTE ON DWG. NO. M-28-23 (SHT. NO. 2BB).
5. INCLUDES 1,287 LBS. FOR JUNCTION BOXES, AND 282 LBS. FOR GUARDRAIL ENERGY ABSORBING TERMINAL.
6. TO BE BLACK VINYL COATED. SEE GEN. NOTE NO. 33.
7. LEFT TURN SIGNAL SIGNS.

REV. 2-6-84. CHANGED QUANTITY ON ITEM 730-02.04, 730-03.01, 730-08.08, 730-12.01, 730-12.02, 730-13.01, 730-14.01, 730-14.02, 730-20.01. ADDED ITEMS 730-08.02, 730-11.01, 730-16.03.

REV. 5-24-85: ADDED ITEM NOS. 607-06.02, 607-07.02 & 607-08.02 AND REVISED ITEM NOS. 204-07, 604-01.01, 604-01.02, 607-03.02, 611-03.01, 611-04.52 & 611-07.04. REVISED FOOTNOTE NOS. 4 & 5. ADDED ITEM NO. 611-03.02.

REV. 9-5-85: CHANGED QUANTITIES FOR ITEM NOS. 604-01.01, 604-01.02, 607-03.02, 611-03.01, 611-03.03, 611-04.52, & 611-07.04. CHANGED FOOTNOTE NOS. 4 & 5.

REV. 3-17-86: CHANGED QUANTITY FOR ITEM NO. 611-07.04 AND ADDED ITEM NO. 611-03.04.

REV. 12-31-86: CHANGED QUANTITY FOR ITEM NOS. 801-03 & 803-01. ADDED ADDED ITEM NOS. 203-01 & 608-36.02 AND FOOTNOTES 20 & 21, AND ALSO CHANGED QUANTITIES ON ITEM NOS. 607-03.02, 611-03.01, 611-04.52, 611-07.01, 611-07.02 & 611-07.04, AND ADDED ITEM NO. 203-03.

FOOT NOTES (CONT)

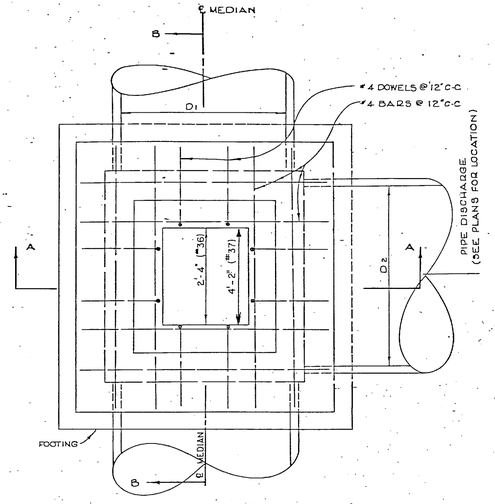
8. RED LENS SHALL HAVE LOUVER.
9. THE ELECTRICAL SERVICE CONNECTION SHALL INCLUDE THE NECESSARY MATERIALS AND LABOR FOR CONNECTION TO ELECTRICAL SERVICE, WIRING OF CONTROLLERS AND DETECTORS, AND ALL INCIDENTALS NECESSARY TO RENDER A COMPLETE AND OPERABLE SYSTEM.
10. INTERCONNECT CABLE SHALL BE 12 CONDUCTOR (6 TWISTED PAIR) 19 AWG SHIELDED CABLE, REA STANDARD PE39.
11. MAXIMUM OF 60 SEC. DELAY TIME TO BE PROVIDED. (LOCATION—LEFT TURN LANE AT EASTBOUND I-440 RAMP, HILLSBORO RD.)
12. QUANTITY IS BASED ON 810 LIN FT. OF SAW SLOT. ENTER BID ITEM 730-14.02 TO INCLUDE 1650 LIN FT. OF LOOP WIRE IN SAW SLOT AND SEALING 1600 LOOP WIRE TYPE RHW-XLP SHALL BE SUPPLIED.
13. INCLUDES LOCKS AND KEYS.
14. AN ACCEPTABLE ALTERNATE TO THE LOCAL SYNCHRONOUS COORDNATOR IS A COORDINATION MODULE INCLUDED IN THE CONTROLLER UNIT.
15. THE MASTER CONTROLLER SHALL BE AT INTERSECTION OF SHARONDALE DR. AND LOMBARDY AVE. WITH HILLSBORO RD.
16. THE CONTRACTOR SHALL FURNISH AND DELIVER THIS MATERIAL TO THE REGIONAL MAINTENANCE ENGINEER.
17. TO OPERATE INITIALLY AS A TWO PHASE CONTROLLER, THE CABINET SHALL BE WIRED TO PROVIDE FOR FIVE VEHICLE MOVEMENTS AND FOUR PEDESTRIAN MOVEMENTS. TWELVE LOAD SWITCH BASES AND A TWELVE CHANNEL CONFLICT MONITOR SHALL BE PROVIDED.
18. CONCRETE TO BE TINTED. SEE GEN. NOTE NO. 48.
19. TO INCLUDE TOP RAIL
20. TO BE USED, AS DIRECTED BY THE ENGINEER FOR THE BERMS IN AND AROUND THE HILLSBORO RD. INTERCHANGE.
21. TO BE USED, AS DIRECTED BY THE ENGINEER, FOR DRAINING THE RETENTION AREAS IN AND AROUND THE HILLSBORO RD. INTERCHANGE.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

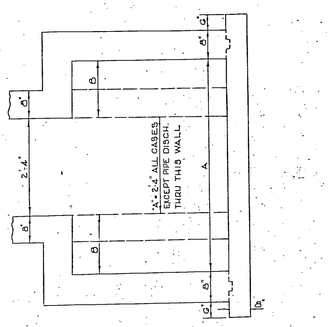
ESTIMATED ROADWAY QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2AA

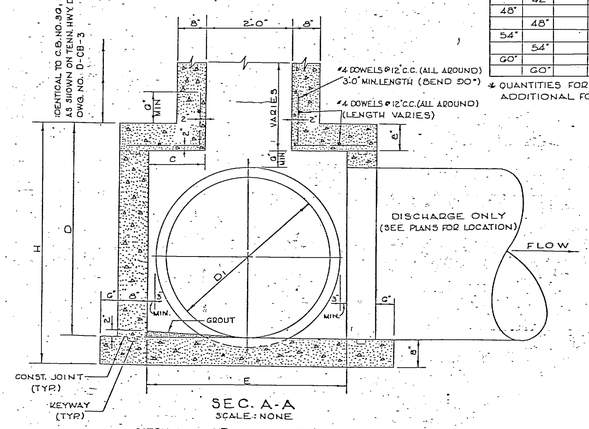
REV. 5-24-85: ADDED DETAIL FOR MODIFIED TYPE 36 & 37 CATCHBASINS.



PLAN



SEC. B-B



SEC. A-A
SCALE: NONE

CATCH BASINS(#36,37) MODIFIED TO ACCOMMODATE CONCRETE PIPES 2'-6" DIAMETER OR LARGER

TABLE OF DIMENSIONS

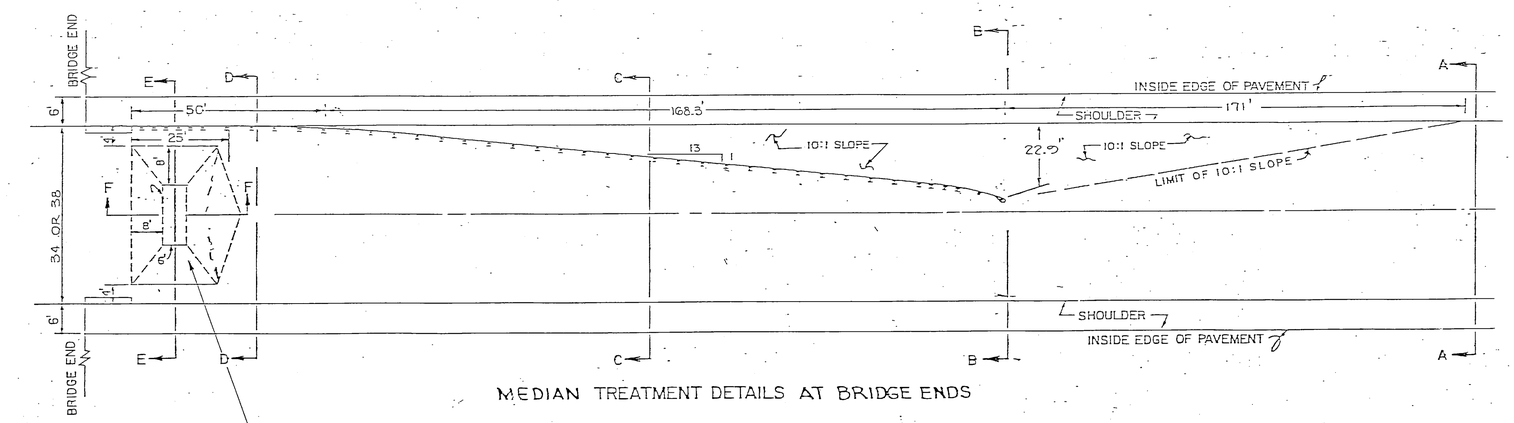
PIPE DIA. D1	PIPE DIA. D2	B	C	D	CL. "A" CONC. C.Y.	* C.Y. OF CONC. DEDUCTION FOR ONE PIPE
30"		0'	9½"	47½"	2.72	0.19
	30"	8"				
36"		0'	13"	54"	3.50	0.26
	36"	11"				
42"		0'	16½"	60½"	4.37	0.35
	42"	14½"				
48"		0'	20"	67"	5.34	0.46
	48"	18"				
54"		0'	23½"	73½"	6.41	0.58
	54"	21½"				
60"		0'	27"	80"	7.57	0.70
	60"	25"				

* QUANTITIES FOR THE DEPTH "H" ONLY. ADD 0.28 C.Y. FOR EACH ADDITIONAL FOOT OF DEPTH ABOVE "H" TO GRATE ELEV.

NOTES

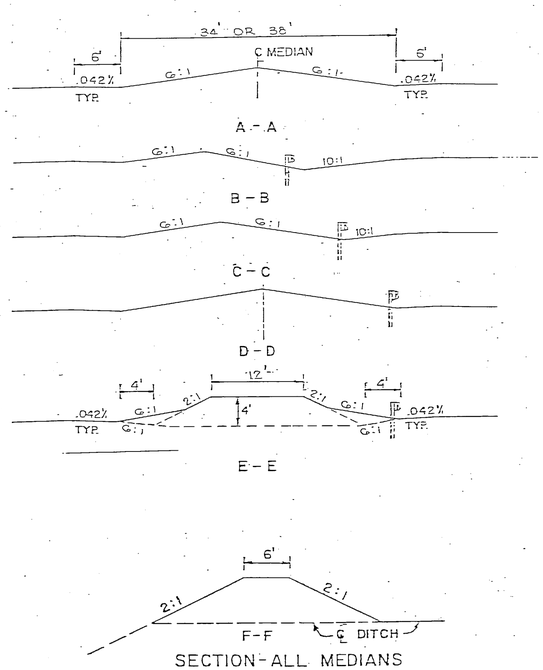
1. "A" IS OUTSIDE PIPE DIAMETER G'±.
2. "E" IS OUTSIDE PIPE DIAMETER G'±.

DETAILS NO. 36 AND 37 MODIFIED CATCHBASINS



MEDIAN TREATMENT DETAILS AT BRIDGE ENDS

ALL COSTS OF CONSTRUCTING BERM ARE TO BE INCLUDED IN ITEM NO. 203-04.01



SECTION - ALL MEDIANS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

DETAILS NO. 36 & 37 MODIFIED CATCHBASINS & DETAIL OF MEDIAN TREATMENT AT BRIDGE ENDS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(53)206	2B

ESTIMATED SIGNING QUANTITIES

	ITEM NO.	DESCRIPTION		UNIT	QUANTITY	
	713-01.01	CLASS A CONCRETE (FOUNDATIONS FOR SIGN SUPPORTS)	27	CY	~~20~~ ~~21~~ ~~19~~	3-20-87 ~~10-28-86~~ DEV. ~~10-21-86~~
	713-01.02	STEEL BAR REINFORCEMENT (FOUNDATIONS FOR SIGN SUPPORTS)	G880 ~~6753~~	LB	~~6174~~ ~~5483~~ 4901	DEV. ~~10-21-86~~ ~~10-28-86~~ ~~12-29-86~~ 3-20-87
	713-02.01	DELINEATOR (SINGLE WHITE REFLECTOR) AND STEEL POST		EACH	10	
	713-02.04	DELINEATOR (MILE MARKER) AND STEEL POST		EACH	2	
	713-02.12	DELINEATOR (DOUBLE WHITE) REFLECTOR AND STEEL POST		EACH	33	
	713-02.30	DELINEATOR (SINGLE WHITE) REFLECTOR AND STEEL POST(PAINTED)		EACH	155	
	713-02.31	DELINEATOR (DOUBLE WHITE) REFLECTOR AND STEEL POST(PAINTED)		EACH	117	
	713-02.32	DELINEATOR (SINGLE AMBER) REFLECTOR AND STEEL POST(PAINTED)		EACH	148	
(8)	713-02.33	DELINEATOR (MILE MARKER ANODIZED) AND STEEL POST(PAINTED)		EACH	10	
	713-05	STRUC. STL. HOLLOW SQ. POSTS(BRK-AWAY) FOR SIGN SUPPORT	1378	LB	~~1327~~ ~~1396~~ ~~1089~~	3-20-87 REV. ~~10-28-86~~ ~~12-29-86~~
	713-05.01	STRUC. STL. HOLLOW SQ. POSTS(BRK-AWAY) FOR SIGN SUPPORT(PAINTED)		LB	~~812~~ ~~570~~ ~~289~~	REV. ~~10-21-86~~ 12-29-86
	713-06	STRUC. STL. I-BEAMS & WF BEAMS(BRK-AWAY) FOR SIGN SUPPORT	1231	LB	~~1066~~ ~~869~~	REV. ~~10-28-86~~ 3-20-87
	713-06.01	STRUC. STL. I-BEAMS & WF BEAMS(BRK-AWAY) FOR SIGN SUPPORT (PAINTED)	7995	LB	~~8133~~ ~~6010~~ 5300	REV. ~~10-21-86~~ ~~12-29-86~~ 12-29-86
(1)	713-09.01	STRUC. STEEL OVERHEAD SIGN STRUCTURE (SPAN 66'-0")		EACH	1	
(1)	713-09.02	STRUC. STEEL OVERHEAD SIGN STRUCTURE (SPAN 67'-0")		EACH	1	
	713-09.03	STRUC. STEEL OVERHEAD SIGN STRUCTURE (SPAN 69'-0")		EACH	1	
(1)	713-09.04	STRUC. STEEL OVERHEAD SIGN STRUCTURE (SPAN 72'-0")		EACH	1	
	713-09.05	STRUC. STEEL OVERHEAD SIGN STRUCTURE (SPAN 75'-0")		EACH	1	
(1)	713-09.06	STRUC. STEEL OVERHEAD SIGN STRUCTURE (SPAN 82'-0")		EACH	1	
(1)	713-09.07	STRUC. STEEL OVERHEAD SIGN STRUCTURE (SPAN 84'-0")		EACH	1	
	713-09.08	STRUC. STEEL OVERHEAD SIGN STRUCTURE (SPAN 85'-0")		EACH	1	
	713-09.09	STRUC. STEEL OVERHEAD SIGN STRUCTURE (SPAN 86'-0")		EACH	1	
(1)	713-09.10	STRUC. STEEL OVERHEAD SIGN STRUCTURE (SPAN 94'-0")		EACH	1	
(1)	713-09.11	STRUC. STEEL OVERHEAD SIGN STRUCTURE (SPAN 104'-0")		EACH	1	
(1)	713-10.01	STRUC. STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 22)		EACH	1	
(1)	713-10.02	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 25)		EACH	1	
	713-10.03	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 44)		EACH	1	
(1)	713-10.04	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 59)		EACH	1	
(1)	713-10.05	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 75)		EACH	1	
(1)	713-10.06	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 78)		EACH	1	
(1)	713-10.07	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 97)		EACH	1	
(1)	713-10.08	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 102)		EACH	1	
(1)	713-10.09	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 110)		EACH	1	
(1)	713-10.10	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 120)		EACH	1	
(1)	713-10.11	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 132)		EACH	1	
(1)	713-10.12	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 140)		EACH	1	
	713-10.13	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 194)		EACH	1	
	713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	266	SF	~~261~~ ~~271~~ ~~216~~	3-20-87 REV. ~~10-28-86~~ ~~12-29-86~~
	713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	131	SF	~~88~~ ~~88~~ ~~80~~	REV. ~~10-28-86~~ 3-20-87
	713-13.20	FLAT SHEET ALUMINUM SIGNS (0.080" THICK) (ANODIZED)		SF	168 ~~172~~ ~~113~~	REV. ~~10-21-86~~ 12-29-86
	713-13.21	FLAT SHEET ALUMINUM SIGNS (0.100" THICK) (ANODIZED)	888 ~~872~~	SF	~~834~~ ~~622~~ 554	REV. ~~10-21-86~~ ~~12-29-86~~ ~~10-28-86~~ 3-20-87
	713-13.22	FLAT SHEET ALUMINUM SIGNS (0.125" THICK) (ANODIZED)		SF	48	
	713-14	EXTRUDED ALUMINUM PANEL SIGNS		SF	~~4373~~ ~~1605~~	REV. ~~2-20-86~~ ~~1265~~, REV. ~~4/15/86~~ 3925 REV. 8-1-86
	713-14.01	EXTRUDED ALUMINUM PANEL SIGNS (ANODIZED)		SF	~~8502~~	8610 REV. 4/15/86
(2)	713-15	REMOVAL OF SIGNS, POST, AND FOOTINGS		LS	1	
(3)	713-15.04	INSTALLATION OF LETTERS AND ARROWS		LS	1	
(1)	713-15.11	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 27 & 27A)		LS	1	
(1)	713-15.12	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 29)		LS	1	
(1)	713-15.13	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 34)		LS	1	
(1)	713-15.14	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 85)		LS	1	
(1)	713-15.15	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 87)		LS	1	
(1)	713-15.16	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 89)		LS	1	
(1)	713-15.17	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 95)		LS	1	
(1)	713-15.18	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 96)		LS	1	
(1)	713-15.19	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 142)		LS	1	
(1)	713-15.20	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 143)		LS	1	
(1)	713-15.21	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 146)		LS	1	
(1)	713-15.22	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 147)		LS	1	
	713-15.23	SIGN SUPPORT ASSEMBLY ON BRIDGES (SIGN NO. 185)		LS	1	
~~(4)~~	~~713-17.03~~	~~INSTALLATION OF AUXILIARY SUPPORTS ON EXISTING SIGN~~		~~EACH~~	~~1~~	REV. 8-1-86
(5)	713-17.07	SIGN MOUNTED ON CONCRETE MEDIAN BARRIER		EACH	2	
(6)	713-17.08	MODIFICATION TO EXISTING OVERHEAD STRUCTURE		LS	1	
(9)	713-17.11	RELOCATE EXISTING BRIDGE MOUNTED SIGN		L.S.	1	REV. 3.20.87
(1)	713-10.14	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 14)		EACH	1	
(1)	713-10.15	STRUCTURAL STEEL CANTILEVER SIGN STRUCTURE (SIGN NO. 152A)		EACH	1	
(7)	716-04.05	PLASTIC PAVEMENT MARKING (STRAIGHT-ARROW		EACH	2	

(1) STRUCTURE TO BE PAINTED. FOR DETAIL SEE GENERAL NOTES REGARDING PAINTING.

(2) SIGN FACES ONLY ON SIGN NOS. 162, 164, 168, ~~170~~, 172, ~~174~~, 178, 180, 181, 184, 186, 187 & 190. SIGN FACE, SUPPORTS & FOOTINGS ON SIGN NOS. 6, 8, 18, 43A, 44A, 45A, 50A & 51A.

(3) SIGN NOS. 165, 166, 167, 192, 193, 198 & 199 & 174

(4) ~~SIGN NO. 175.~~

(5) SIGN NOS. 98 & 139.

(6) SIGN NOS. 169, ~~171~~, 173 & 176.

(7) SEE STD. DWG. NO. T-S-11.

(8) SIGN FACE TO BE 0.080" SHEET ALUMINUM (ANODIZED) & POSTS TO BE PAINTED.

(9) SIGN NO. 85.

REV. 2-20-86; QUANTITY CHANGED ON ITEM NO. 713-14 AND SIGN NO. 170 DELETED FROM FOOTNOTE NO. 2

REV. 4/15/86; FOOTNOTE NO. 1 ELIMINATED ON ITEM NO. 713-10.03 AND ADDED ITEM NO. 713-10.04. QUANTITIES CHANGED ON ITEM NOS 713-14 AND 713-14.01.

REV. 8-1-86; FOOTNOTE NOS. 2, 3 & 6 CORRECTED. FOOTNOTE NO. 4 AND ITEM NO. 713-17.03 DELETED. QUANTITY CHANGED ON ITEM NO. 713-14.

REV. 10-21-86; QUANTITIES CHANGED ON ITEM NOS. 713-01.01, 713-01.02, 713-05.01, 713-06.01, 713-13.20 & 713-13.21.

REV. 10-28-86; QUANTITIES CHANGED ON ITEM NOS. 713-01.01, 713-01.02, 713-05, 713-06, 713-06.01, 713-13.02, 713-13.03 & 713-13.21.

REV. 12-29-86; QUANTITIES CHANGED ON ITEM NOS. 713-01.02, 713-05, 713-05.01, 713-06.01, 713-13.02, 713-13.20 & 713-13.21.

REV. 3-20-87; QUANTITIES CHANGED ON ITEM NOS. 713-01.01, 713-01.02, 713-05, 713-06, 713-13.02, 713-13.03 & 713-13.21. ITEM NO. 713-17.11 ADDED. FOOTNOTE NO. 9 ADDED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

ESTIMATED SIGNING QUANTITIES

REVISED: 4-4-84

- REVISION TO NOTES (ADD #20 - REMOVE #17)
- REVISION TO CROWN VETCH, AND GRASS QUANTITIES & PAY ITEM NO. ADDED.

REV. 4-24-84; REVISED GENERAL NOTES NO.4 & NO. 10, ALSO SPECIAL PROVISION 802.15(C), DELETED GENERAL NOTE NO. 16 AND REVISED NO. 8.

PLANT SCHEDULE (IR-440-4(59)206)

⚠ REVISED INTERCHANGE 5-30-85

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	IR-440-4(59)206	2C

PAY ITEM NO.	KEY	BOTANICAL NAME	COMMON NAME	QTY	NO.	HGT	SPRD	TRUNK	ROOTS	SPCNG	REMARKS
		TREES									
802-01.01	AR	ACER SACCHARUM	SUGAR MAPLE	EACH	529	12'-14'	6'-7'	2"-2½"CAL	24" BALL MIN.	AS SHOWN	MATCHED
802-01.02	CC	CERCIS CANADENSIS	EASTERN REDBUD CLUMPS	EACH	1563	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	EACH	1074	6'-8'	3'-4'	1" CAL.	18" BALL MIN.	AS SHOWN	MATCHED
802-01.04	CP	CRATAEGUS CORDATA	WASHINGTON HAWTHORN	EACH	1262 ⚠	6'-8'	3'-4'	1" CAL.	18" BALL MIN.	AS SHOWN	TREE FORM
802-01.05	FP	FRAXINUS PENNSYLVANICA	GREEN ASH	EACH	170	12'-14'	6'-7'	2"-2½" CAL	24" BALL MIN.	AS SHOWN	MATCHED
802-01.06	IO	ILEX OPACA	AMERICAN HOLLY	EACH	202 ⚠	8'-10'	4'-5'	1-1½" CAL	20" BALL MIN.	AS SHOWN	MATCHED
802-01.07	KP	KOELREUTERIA PANICULATA	GOLDEN RAINTREE	EACH	149	8'-10'	4'-5'	1½" CAL	20" BALL MIN.	AS SHOWN	MATCHED
802-01.08	LI	LIQUIDAMBAR STYRACIFLUA	SWEET GUM	EACH	120 ⚠	12'-14'	6'-7'	2"-2½" CAL	24" BALL MIN.	AS SHOWN	MATCHED
802-01.09	LT	LIRIODENDRON TULIPIFERA	TULIPTREE	EACH	402	12'-14'	6'-7'	2"-2½" CAL	24" BALL MIN.	AS SHOWN	MATCHED
802-01.10	MH	MALUS HOPA	CRABAPPLE	EACH	991	6'-8'	3'-4'	1" CAL	18" BALL MIN.	AS SHOWN	MATCHED
802-01.11	PO	PLATANUS OCCIDENTALIS	PLANE TREE	EACH	150 ⚠	12'-14'	6'-7'	2"-2½" CAL	24" BALL MIN.	AS SHOWN	MATCHED
802-01.12	PT	PINUS TAEDA	LOBLOLLY PINE	EACH	571	8'-10"	3'-4'	1½" CAL	20" BALL MIN.	15' MAX.	MATCHED
802-01.13	QC	QUERCUS BOREALIS	RED OAK	EACH	223	12'-14'	6'-7'	2"-2½" CAL	24" BALL MIN.	AS SHOWN	MATCHED
802-01.14	QS	QUERCUS COCCINEA	SCARLET OAK	EACH	56	12'-14'	6'-7'	2"-2½" CAL	24" BALL MIN.	AS SHOWN	MATCHED
802-01.15	QP	QUERCUS PALUSTRIS	PIN OAK	EACH	317 ⚠	12'-14'	6'-7'	2"-2½" CAL	24" BALL MIN.	AS SHOWN	MATCHED
802-01.16	TC	TILIA CORDATA	LITTLELEAF LINDEN	EACH	10						MATCHED
802-01.17	PW	PINUS STROBUS	WHITE PINE	EACH	2,045	8'-10'	3'-4'	1½" CAL	20" BALL MIN.	15' MAX.	MATCHED
802-01.18	PN	PINUS NIGRA	AUSTRIAN PINE	EACH	461 ⚠	8'-10'	3'-4'	1½" CAL	20" BALL MIN.	15' MAX.	MATCHED
		SHRUBS									
802-03.01	CS	CHAENOMELES LAGENARIA	FLOWERING QUINCE	EACH	17,037 ⚠	2'-3'	3'	FULL TO BASE	BARE ROOT	4' O.C.	MATCHED
802-03.02	EA	EUONYMUS ALATUS	WINGED EUONYMUS	EACH	4,451	2'-3'	3'	FULL TO BASE	BARE ROOT	3' O.C.	MATCHED
802-03.03	EP	ELEAGNUS PUNGENS	AUTUMN ELEAGNUS	EACH	28,105	2'-3'	3'	FULL TO BASE	BARE ROOT	4' O.C.	MATCHED
802-03.04	FI	FORSYTHIA SUSPENSA	FORSYTHIA	EACH	20,008 ⚠	2'-3'	3'	FULL TO BASE	BARE ROOT	4' O.C.	MATCHED
802-03.05	IC	ILEX CORNUTA	CHINESE HOLLY	EACH	300	12"	24"	FULL TO BASE	BARE ROOT	4' O.C.	MATCHED
802-03.06	JH	JUNIPERUS HORIZONTALIS	CREEPING JUNIPER	EACH	484	12"	18"		BARE ROOT	3' O.C.	
		VINES									
802-04.01	GS	GELSEIUM SEMPERVIRENS	CAROLINA JESSAMINE	EACH	8340				3"POT	12" O.C.	MATCHED
802-04.02	PI	PARTHENOCISSUS TRICUSPLIDATA	BOSTON IVY	EACH	63,589				3" POT	12" O.C.	MATCHED
802-04.03	PQ	PARTHENOCISSUS QUINQUEFOLIA	VIRGINIA CREEPER	EACH	23,758 ⚠				3" POT	12" O.C.	MATCHED
802-04.04	WS	WISTERIA SINENSIS	WISTERIA	EACH	4485				3" POT	12" O.C.	MATCHED
		GROUNDCOVER									
802-04.05	WF	WILD FLOWER MIXTURE (SEE SPECS FOR MIX)		*UNIT	540.07						
802-04.09	CV	CROWN VETCH (SEE SPECS FOR MIX)		*UNIT	742.96 ⚠						
		SEEDLINGS									
802-02.01	PS	PINUS TAEDA	PINE SEEDLINGS	EACH	4408					5'	1 YR SEEDLINGS
802-02.02	SS	RHUS GLABRA	SUMMAC SEEDLINGS	EACH	19,710					5'	1 YR SEEDLINGS
802-04.10		GRASS (SEE NOTE # 2)	GRASS	UNIT	1913.89 ⚠						
(1) 802-05		WATER (PLANT ESTABLISHMENT)		*	* M.G. 5,055						
720-10.01		REST SHELTER		1	L.S.						

GENERAL NOTES:

1. 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.
2. ALL AREAS DESIGNATED AS "SEED WITH GRASS" SHALL BE 80% KENTUCKY FESCUE AND 20% ANNUAL RYE. SEED AT A RATE OF 4 LBS. PER 1000 SQ. FT.
3. 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.
4. PRIOR TO SEEDING THE WILDFLOWER AND PLANTING THE SHRUB MASSES IN THE SPECIFIED LOCATIONS THOSE AREAS SHOULD BE TILLED AND SCARIFIED INCLUDING THOSE AREAS PREVIOUSLY SEEDED. SEED WILDFLOWER AREAS AS DIRECTED IN THE SPECIFICATIONS.
5. PROTECT ALL SEEDED OR ESTABLISHED SLOPES DURING THE LANDSCAPE INSTALLATION.
6. CONTRACTOR TO STAKE ALL PLANT MATERIAL LOCATIONS AND SHRUB MASSES AND RECEIVE APPROVAL FROM RESIDENT ENGINEER PRIOR TO INSTALLATION.
7. 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.
8. ALL MOWING LIMITS THAT ARE SHOWN ON THE PLANS WILL BE DETERMINED BY THE RESIDENT ENGINEER AND STAKED
9. ALL PLANTING SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE EXISTING DRAINAGE AS DETERMINED BY THE RESIDENT ENGINEER
10. AFTER ALL TREES AND SHRUBS ARE PLANTED, THE CONTRACTOR WILL BE REQUIRED TO WATER SAME IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS REGARDING SECTION 802.14 BETWEEN APRIL 15 AND SEPTEMBER 15. COST OF THIS WORK TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 802.05 WATER (PLANT ESTABLISHMENT).
11. 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.
12. 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).

GENERAL NOTES CONT.

20. ALL AREAS FROM CHARLOTTE AVENUE TO SHARONDALE WERE TO HAVE BEEN SEEDED BY A PREVIOUS CONTRACT. THERE MAY BE SOME AREAS IN THE ABOVE LIMITS THAT WILL REQUIRE SEEDING (CROWN VETCH MIXTURE), DUE TO PAVING OPERATIONS AND/OR UNDERDRAIN INSTALLATION WORK. COST OF SEEDING THESE AREAS TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO. 802-04.09. IN THE AREA FROM SHARONDALE AVENUE TO I-65 THE BERMS IN THE MEDIAN AND BERMS AT THE PRE-SPLIT AREAS ARE TO BE CONSTRUCTED UNDER THIS CONTRACT AND ARE TO BE SEEDED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

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

FERTILIZER, AT A RATE OF NOT LESS THAN 20 LBS. OF GRADE 10-10-10 OR EQUIVALENT FOR AREAS DESIGNATED AS LAWNS AND 15 LBS. 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.

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, AS DESCRIBED IN SECTION 802.15(A).

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, 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 RESIDENT ENGINEER FOR APPROVAL.

13. ALL PLANTINGS ALONG ROAD BED TO EXTEND TO SHOULDER EDGE.
14. IN NO CASE SHALL A SINGLE ROW OF SHRUBS BE PLANTED. ALL SHRUB PLANTING SHALL BE A MINIMUM OF 2 SHRUBS DEEP.
15. SEEDLINGS SHALL BE PLANTED IN RANDOM SPACING NOT TO EXCEED 5'-0.C. - TO GIVE NATURAL APPEARANCE.
16.

*18. ONE UNIT EQUALS 1,000 S.F.

**19. M.G. = 1000 GAL.

FOOTNOTE:

(1) QUANTITY BASED ON 12 WATERINGS.

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

29411

BRUNING

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	I-440-4(59)206	2CC

THE SIGNING FOR DETOURING AND MAINTAINING TRAFFIC IS THE MINIMUM AMOUNT THAT WILL BE REQUIRED. THE CONTRACTOR MAY NEED TO PROVIDE ADDITIONAL SIGNS AS DEEMED NECESSARY.

THE CONTRACTOR WILL BE REQUIRED TO REMOVE THE CONES AT THE END OF EACH DAYS WORK & REPLACE THEM BEFORE THE START OF EACH DAYS WORK.

ALL SIGNS SHALL AGREE WITH "MANUAL UNIFORM TRAFFIC CONTROL DEVICES FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS. FOR DETAILS OF FLASHING ARROW BOARD SEE STD. DWG. NO. 5-FA-5.

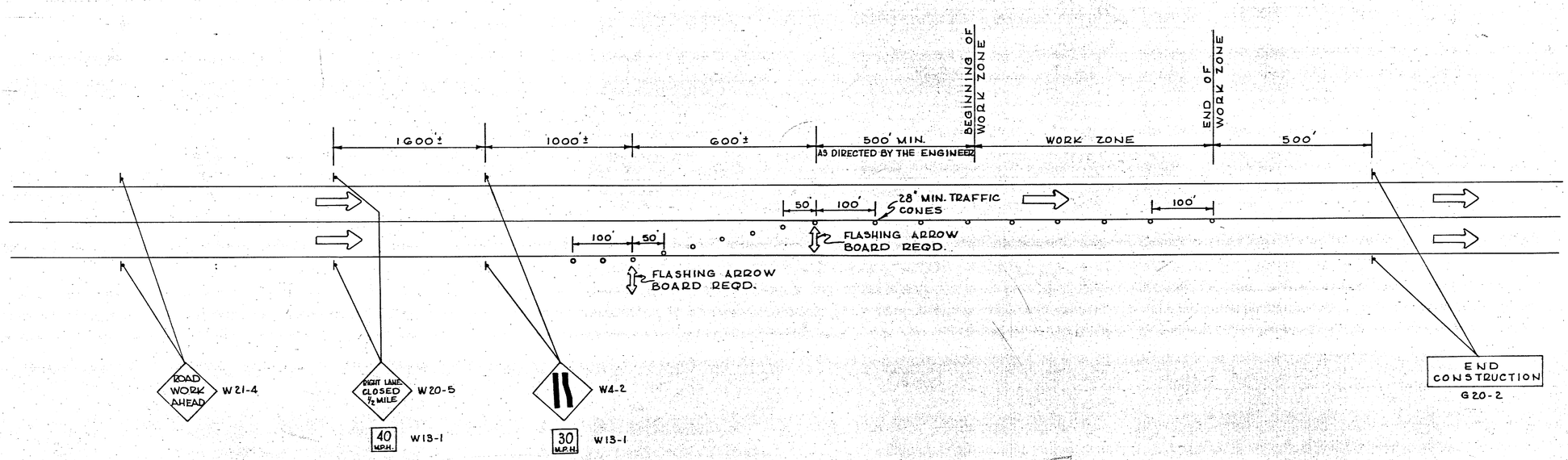
WHERE CONES ARE USED ADJACENT TO LANES OF MOVING TRAFFIC WHERE THERE WILL BE A WIND CREATED BY PASSING VEHICLES, WEIGHTED CONES WILL BE NECESSARY AS OUTLINED IN SECTION 6C-9 M.U.T.C.D. , CURRENT EDITION.

THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC AS FOLLOWS:

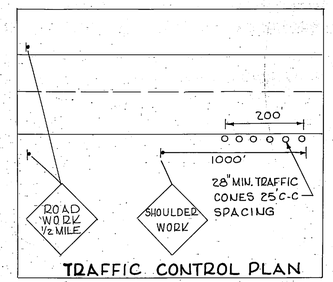
1. THE CONTRACTOR WILL BE PERMITTED TO CLOSE ONE-LANE OF TRAFFIC FROM 9 A.M. TO 3 P.M. TYPICAL DETAILS OF CLOSURE SHOWN ON THIS SHEET. THE CONTRACTOR WILL BE REQUIRED TO HAVE ALL TRAFFIC CONTROL DEVICES REMOVED FROM ROADWAY BEFORE 3 P.M.
2. THE CONTRACTOR WILL BE PERMITTED TO CLOSE INTERSTATE TRAFFIC WHILE INSTALLING OVERHEAD SIGN TRUSS OR DIAGRAMMATIC SIGN FACES. HE WILL NOT BE ABLE TO STOP TRAFFIC MORE THAN 10 MINUTES AT ANY ONE TIME. IN THE EVENT THAT AN EMERGENCY VEHICLE HAS TO GET THROUGH, THE CONTRACTOR WILL STOP ALL WORK AND ALLOW THEM TO PASS. DURING THE PERIOD OF CLOSURE POLICE OFFICERS SHALL BE IN THE EMPLOY OF THE CONTRACTOR TO ASSIST IN THE CONTROL OF TRAFFIC. TRAFFIC WILL ONLY BE CLOSED ON A SUNDAY FROM 6 A.M. TO 10 A.M.
3. THE REGIONAL TRAFFIC ENGINEER SHALL REVIEW AND APPROVE THE LAYOUT OF THESE LANE CLOSURES PRIOR TO THEIR PLACEMENT.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO CLOSE ANY INTERSTATE LANES DURING A HOLIDAY WEEKEND.

THESE DETAILS SHALL ALSO APPLY TO LANE CLOSING ON CROSS-STREETS.

IF OTHER CLOSING ARE REQUIRED THEY SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.



TYPICAL SHOWING CLOSING OF 1-LANE OF INTERSTATE



TRAFFIC CONTROL PLAN

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

DETAILS OF MAINTAINING TRAFFIC

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2D

REV. 3-5-85: CHANGED QUANTITIES ON ITEM NOS. 714-02.01, 714-03.01, 714-05.01, 714-06.04 & 714-08.01.

ESTIMATED LIGHTING QUANTITIES

	ITEM NO.	DESCRIPTION	QUANTITY	UNIT
	714-02.01	ENCASED CONDUIT (RIGID, 2")	3,445	LIN. FT.
⑦	714-03.01	DIRECT BURIAL CONDUIT (P.V.C., 2")	60,060	LIN. FT.
	714-05.01	PULL BOXES (EARTH INSTALLED)	77	EACH
	714-06.01	CABLE (1 CONDUCTOR, #10, THW-MTW, 600 V) (STRANDED COPPER)	9,372	LIN. FT.
	714-06.02	CABLE (1 CONDUCTOR, #8, THW-MTW, 600 V) (STRANDED COPPER)	12,280	LIN. FT.
	714-06.03	CABLE (1 CONDUCTOR, #6, THW-MTW, 600 V) (STRANDED COPPER)	44,776	LIN. FT.
	714-06.04	CABLE (1 CONDUCTOR, #4, THW-MTW, 600 V) (STRANDED COPPER)	99,125	LIN. FT.
	714-06.05	CABLE (1 CONDUCTOR, #2, THW-MTW, 600 V) (STRANDED COPPER)	19,230	LIN. FT.
	714-08.01	LIGHT STANDARDS (SQ. TAPERED STEEL, 40' M.H., WITH FRANGIBLE BASE, ONE 15' SQUARE ARM SHOULDER MOUNTING (S)	137	EACH
	714-08.02	LIGHT STANDARDS (SQ. TAPERED STEEL, 35' M.H., WITH FRANGIBLE BASE, ONE 15' SQUARE ARM SHOULDER MOUNTING (RS)	72	EACH
	714-08.03	LIGHT STANDARDS (SQ. TAPERED STEEL, 40' M.H., WITH FRANGIBLE BASE, SHOULDER MOUNTING BEHIND GUARDRAIL WITH ONE 11' SQUARE ARM (G)	4	EACH
	714-08.04	LIGHT STANDARDS (SQ. TAPERED STEEL, 35' M.H., WITH FRANGIBLE BASE, SHOULDER MOUNTING BEHIND GUARDRAIL WITH ONE 11' SQUARE ARM (RG)	3	EACH
	714-08.05	LIGHT STANDARDS (SQ. TAPERED STEEL, 40' M.H., WITH FRANGIBLE BASE, TWO 15' SQUARE ARM MEDIAN MOUNTING (M)	17	EACH
	714-08.06	LIGHT STANDARDS (SQ. TAPERED STEEL, 35' M.H., BRIDGE, PARAPET, OR RETAINING WALL MOUNTING WITH ONE 7' SQUARE ARM (RP) (F)	32	EACH
	714-08.07	LIGHT STANDARDS (SQ. TAPERED STEEL, 40' M.H., TWO LUMINAIRES BARRIER MOUNTING WITH TWO 6' SQUARE ARMS (W)	13	EACH
	714-08.08	LIGHT STANDARDS (SQ. TAPERED STEEL, 35' M.H., BARRIER MOUNTING WITH ONE 6' SQUARE ARMS (RW)	5	EACH
	714-08.09	LIGHT STANDARDS (SQ. TAPERED STEEL, 35' M.H., WITH FRANGIBLE BASE, CURB AND GUTTER MOUNTING WITH ONE 4' SQUARE ARM (RC)	60	EACH
	714-09.01	LUMINAIRES (250 W H.P.S., RECTILINEAR TYPE)	372	EACH
④	714-09.02	LUMINAIRES (150 W H.P.S., UNDERPASS)	67	EACH
⑤	714-11	CABLE MARKERS	78	EACH
⑥	714-12.01	CONTROL CENTER NO. 1	1	L.S.
	714-12.02	CONTROL CENTER NO. 2	1	L.S.
	714-12.03	CONTROL CENTER NO. 3	1	L.S.
	714-12.04	CONTROL CENTER NO. 4	1	L.S.
	714-12.05	CONTROL CENTER NO. 5	1	L.S.
	714-12.06	CONTROL CENTER NO. 6	1	L.S.
	714-30	AS BUILT PLANS	2	SET

① ② ③

NOTE: ITEMS 714-04.01, 714-04.02, 714-05.02 ARE NOT IN THIS CONTRACT.

⑤ CABLE MARKERS ARE TO BE INSTALLED AT ROADWAY CROSSINGS OR AS DIRECTED BY THE ENGINEER.

⑦ 3,050 L.F. IS TO BE CAST-IN-PLACE IN MEDIAN BARRIERS.

STRUCTURE NO. AND LOCATION	① P.V.C., 2" LIN. FT.	② GALV STL. 1" LIN. FT.	③ PULL BOXES STRUCTURES	④ 150W H.P.S. UNDERPASS
NO. 1 I-440 N.E. OVER CHARLOTTE AVE.	155	68	4	2
NO. 2 I-440 E.S. OVER CHARLOTTE AVE.	181	62	4	2
NO. 3 I-440 OVER L&N.R.R. "W. B."	300	—	—	—
NO. 3 I-440 OVER L&N.R.R. "E. B."	309	—	—	—
NO. 4 ACKLEN PARK DR. OVER I-440	65	220	5	4
NO. 5 MURPHY RD. OVER I-440	252	164	7	4
NO. 6 WEST END AVE. OVER I-440 & RAMP "F-H"	160	650	17	10
NO. 7 RAMP "F" OVER RAMP "D" & I-440	325	135	4	3
NO. 8 RICHARDSON / MARLBOROUGH AVE. OVER I-440	85	260	5	4
NO. 9 SHARONDALE DR. OVER I-440	435	405	9	4
NO. WOODLAWN DR. OVER I-440	65	190	3	2
NO. HILLSBORO PIKE OVER I-440	395	585	8	8
NO. BRIGHTWOOD AVE. OVER I-440	—	560	13	8
NO. BELMONT BLVD. OVER I-440	55	258	9	8
NO. GRANNY WHITE PIKE OVER I-440	120	330	10	8
NO. I-440 OVER LEALAND LANE "W.B."	175	—	—	—
NO. I-440 OVER LEALAND LANE "E.B."	175	—	—	—
NO. I-440 OVER CRAIG AVE. "W.B."	180	—	—	—
NO. I-440 OVER CRAIG AVE. "E.B."	180	—	—	—
RETAINING WALL MOUNTING	2,035	—	5	—
TOTALS	5,647	3,887	103	67

⑥

ITEM NO.	INCLUDES		
	CABINETS	2 POLE 60A LIGHTING CONTACTORS	TRIPLE FUSE DISCONNECTS
714-12.01	1	1	2
714-12.02	1	1	2
714-12.03	2	2	3
714-12.04	2	2	3
714-12.05	3	3	5
714-12.06	1	1	2

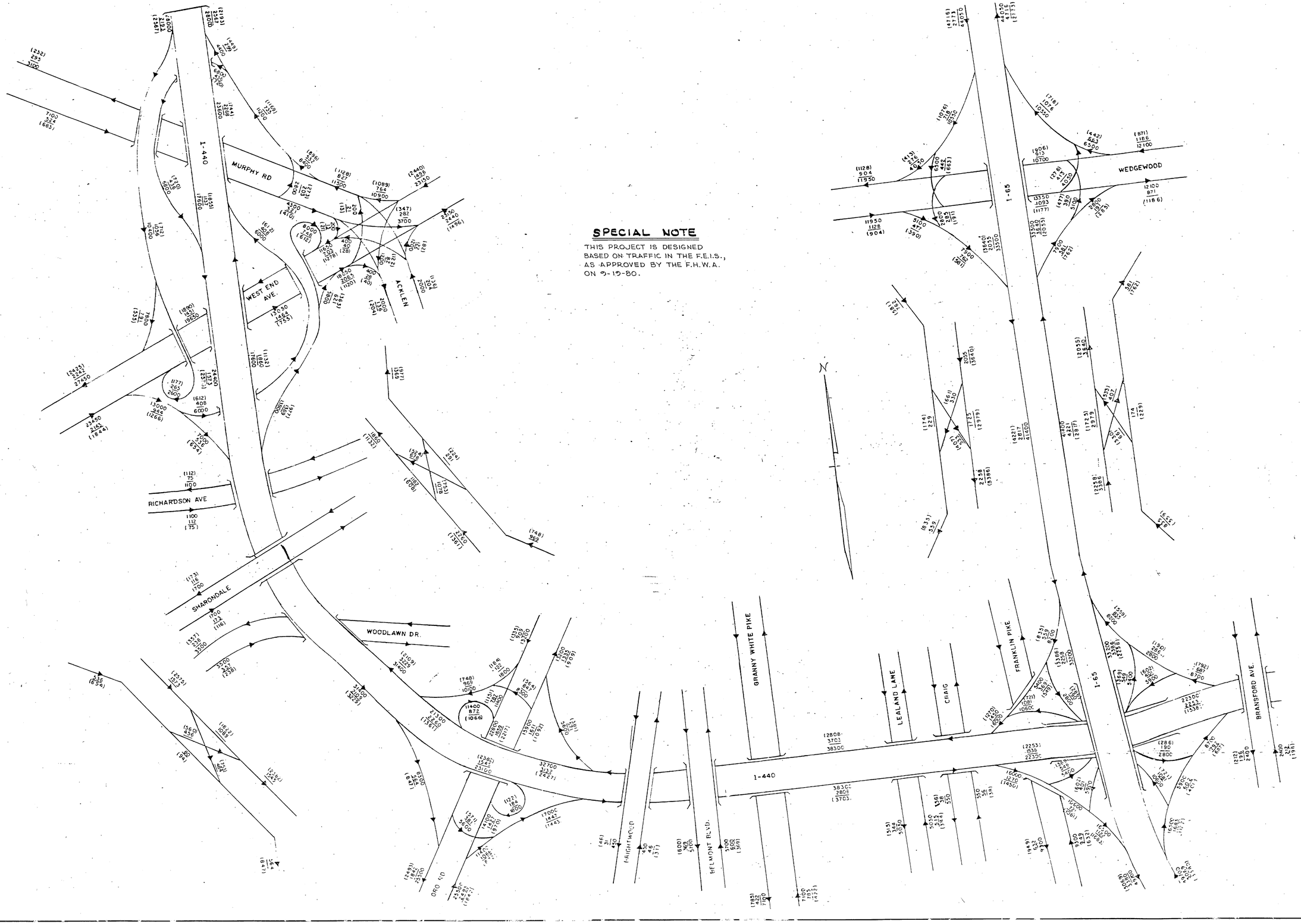
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

ESTIMATED
LIGHTING
QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 DD

SPECIAL NOTE

THIS PROJECT IS DESIGNED BASED ON TRAFFIC IN THE F.E.I.S., AS APPROVED BY THE F.H.W.A. ON 9-19-80.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TRAFFIC DIAGRAM

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 E

ESTIMATED STORM SEWER DRAINAGE QUANTITIES

CODE NO.	STATION	LOC.	TYPE	DRAWING NUMBER	DEPTH	OUTLET FLOW ELEV.	CATCH BASINS 611-03.01 CLASS "A" CONC. (C.Y.)	CATCH BASINS 611-03.05 BRICK MASONRY "M" BRICK	CATCH BASINS 611-03.04 GRAY IRON CASTINGS (LB.)	CATCH BASINS 611-07.04 STRUCT. STEEL (LB.)	ENDWALLS 611-07.01 CLASS "A" CONC. (C.Y.)	ENDWALLS 611-07.02 STEEL BAR REINF. (LB.)	JUNCTION BOXES 604-01.01 CLASS "A" CONC. (C.Y.)	JUNCTION BOXES 604-01.02 STEEL BAR REINF. (LB)	611-04.52 ADJUSTMENT OF EXISTING C.B.S
1	201+50 I-440	LT	24 C.B.	D-CB-24	4.00	544.23	0.32	0.580		310.53					
2	201+50 I-440	RT	24 CB.	D-CB-24	4.00	544.23	0.32	0.580		310.53					
3	201+50 I-440	RT	J.B.	SHEET NO. 2Y	——	539.89							2.4	73	
4	203+50 I-440	LT	24 CB.	D-CB-24	4.00	542.99	0.32	0.580		310.53					
5	203+50 I-440	RT	24 CB.	D-CB-24	4.00	542.99	0.32	0.580		310.53					
6	203+50 I-440	RT	JB.	SHEET NO. 2 Y	——	538.29							2.4	73	
7	204+50 I-440	LT	24 C.B.	D-CB-24	3.75	543.43	0.32	0.542		310.53					
8	204+50 I-440	RT.	24 C.B.	D-CB-24	3.75	543.43	0.32	0.542		310.53					
9	204+50 I-440	℄	J.B.	SHEET NO. 2 Y	——	537.86							2.4	73	
10	211+75 I-440	LT.	24 C.B.	D-CB-24	3.75	538.94	0.32	0.542		310.53					
11	211+75 I-440	RT	24 CB.	D-CB-24	4.07	538.62	0.32	0.556		310.53					
12	213+50 I-440	RT	24 C.B.	D-CB-24	3.75	539.06	0.32	0.542		310.53					
13	212+51.72 I-440	LT	48 C.B.	D-CB-24	3.75	538.76	0.48	0.758		529.17					
14	212+51.72 I-440	RT	48 C.B.	D-CB-24	4.44	538.07	0.48	0.799		529.17					
15	212+51.72 I-440	RT	ADJ.			536.70									1
16	217+00 I-440	LT	24 C.B.	D-CB-24	3.75	542.50	0.32	0.542		310.53					
17	217+00 I-440	LT.	24 C.B.	D-CB-24	6.70	542.19	0.32	0.961		310.53					
18	218+00 I-440	RT	24 C.B.	D-CB-24	9.70	541.79	0.32	1.423		310.53					
19	218+00 I-440	RT	ADJ.			540.47									1
20	219+50 I-440	LT	24 C.B.	D-CB-24	4.00	552.41	0.32	0.580 ①		310.53					
21	219+50 I-440	℄	ADJ.			541.37									1
22	221+50 I-440	LT	24 C.B.	D-CB-24	4.00	557.85	0.32	0.580		310.53					
23	221+50 I-440	RT	24 C.B.	D-CB-24	3.75	557.72	0.32	0.542		310.53					
24	221+50 I-440	℄	J.B.	SHEET NO. 2Y	——	542.04							5.3	132	
25	225+00 I-440	LT	24 C.B.	D-CB-24	4.00	564.29	0.32	0.580		310.53					
26	225+00 I-440	℄	ADJ.			543.47									1
27	731+50 RAMP 'A'	RT	24 C.B.	D-CB-24	3.75	564.92	0.32	0.542		310.53					
28	230+00 I-440	RT	ADJ.			558.22									1
30	236+50 I-440	RT	24 CB.	D-CB-24	3.75	558.39	0.32	0.542		310.53					
31	237+60 I-440	℄	ADJ.			551.76									1
32	239+00 I-440	LT	24 CB.	D-CB-24	3.75	555.51	0.32	0.542		310.53					
33	239+00 I-440	RT	24 C.B.	D-CB-24	4.31	555.19	0.32	0.593		310.53					
34	240+75 I-440	LT	24 C.B.	D-CB-24	3.75	555.54	0.32	0.542		310.53					
35	240+75 I-440	RT	24 CB.	D-CB-24	4.31	555.22	0.32	0.593		310.53					
36	239+83.86 I-440	LT	48 C.B.	D-CB-24	3.75	555.31	0.48	0.758		529.17					
37	239+83.86 I-440	RT	48 C.B.	D-CB-24	4.63	554.67	0.48	0.840		529.17					
38	239+83.86 I-440	RT	ADJ.			550.90									1
39	243+00 I-440	LT	24 CB.	D-CB-24	3.95	557.93	0.32	0.572		310.53					
40	243+00 I-440	RT	24 CB.	D-CB-24	3.75	558.37	0.32	0.542		310.53					
41	243+00 I-440	℄	JB.	SHEET NO. 2Y		556.96							1.9	60	
42	839+63.48 RAMP 'C'	LT	36 C.B.	D-CB-3	2.25	593.70	1.53			71.82					
43	843+00 RAMP 'C'	LT	48 C.B.	D-CB-24	3.75	577.16	0.48	0.758		529.17					
44	243+55 I-440	LT	36 C.B.	D-CB-3	2.25	572.50	1.53			71.82					
45	243+80 I-440	LT	J.B.	SHEET NO. 2Y		572.18							1.2	37	
46	244+00 I-440	LT	ADJ.			562.94									1
47	245+50 I-440	LT	24 C.B.	D-CB-24	3.75	562.93	0.32	0.542		310.53					
48	245+75 I-440	RT	24 C.B.	D-CB-24	3.75	563.65	0.32	0.542		310.53					
49	245+50 I-440	℄	ADJ.			561.68									1
50	248+50 I-440	RT	24 C.B.	D-CB-24	3.75	568.96	0.32	0.542		310.53					
51	248+50 I-440	℄	JB.	SHEET NO. 2Y		565.50							3.8	104	
52	262+50 I-440	LT	37 CB.	D-CB-3	2.17	587.83	2.10			133.45					
53	262+50 I-440	LT	ADJ	——	——	573.11									1
54	267+00 I-440	LT	JB	SHEET NO. 2Y	——	564.82							1.3	37	
55	268+50 I-440	LT	48 C.B.	D-CB-24	3.75	558.54	0.48	0.723		529.17					
56	266+64.71 I-440	RT	48 C.B.	D-CB-24	3.75	565.82	0.48	0.758		529.17					
57	267+50 I-440	R T	J.B.	SHEET NO. 2Y	——	564.30							1.3	37	
58	268+50 I-440	R T	24 C.B.	D-CB-24	3.75	560.64	0.32	0.507		310.53					
59	268+50 I-440	LT	24 C.B.	D-CB-24	3.75	559.76	0.32	0.507		310.53					
60	268+50 I-440	LT	J.B.	SHEET NO. 2Y	——	550.81							1.4	48	
61	271+00 I-440	LT	24 C.B.	D-CB-24	3.75	550.16	0.32	0.542		310.53					
62	271+00 I-440	RT	24 C.B.	D-CB-24	3.75	552.24	0.32	0.542		310.53					
63	271+00 I-440	℄	ADJ			~~542.20~~ 542.20									1
64	271+50 I-440	LT	48 C.B.	D-CB-24	3.75	542.42	0.48	0.758		529.17					
65	272+00 I-440	RT	48 C.B.	D-CB-24	3.75	545.78	0.48	0.758		529.17					
66	272+00 I-440	LT	J.B.	SHEET NO. 2Y	——	539.47							1.9	60	
67	273+50 I-440	LT	37 C.B.	D-CB-3	2.17	~~562.83~~ 562.83	2.10			133.45					
68	273+50 I-440	LT	ADJ			535.81									1
69	273+50 I-440	LT	24 C.B.	D-CB-24	9.24	~~534.98~~ 534.98	0.32	1.302		310.53					
TOTALS (SHEET 2 E)							21.82	26.669		15,110.03			25.3	734	12

① JUNCTION BOX TO BE ADJUSTED
② CATCH BASIN TO BE ADJUSTED

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

ESTIMATED STORM SEWER DRAINAGE QUANTITIES

	STATION	LOC.	TYPE	DRAWING NUMBER	DEPTH	OUTLET FLOW ELEV.	CATCHBASIN 611-03.01 CLASS A CONC. (C.Y.)	CATCHBASIN 611-03.05 BRICK MASONRY (M. BRICK)	CATCHBASIN 611-03.04 GRAY IRON CASTINGS (LB.)	CATCHBASIN 611-07.04 STRUCTURAL STEEL (LB.)	ENDWALLS 611-07.01 CLASS A CONC (C.Y.)	ENDWALLS 611-07.02 STEEL BAR REINF. (LB.)	ENDWALLS 611-07.04 STRUCTURAL STEEL (LB.)	611-03.02 STEEL BAR REINF. (LB.)	JUNCTION BOXES 604-01.01 CLASS 'A' CONC. (C.Y.)	JUNCTION BOXES 604-01.02 STEEL BAR REINF (LB.)	611-04.52 ADJUSTMENT OF EXIST. CATCH BASINS
141	654+00 'N-W' RDY.	RT.	1 C.B.	D-CB-12-32	3.50	497.64	0.85	0.626	834								
142	654+00 'N-W' RDY.	LT.	BEVEL	SHEET NO. 2X		496.00											
143	335+25 'W-S' RDY.	RT.	1 C.B.	D-CB-12-32	3.50	501.45	0.85	0.626	834								
144	335+25 'W-S' RDY.	RT.	BEVEL	SHEET NO. 2X		499.30											
145	342+50 'W-S' RDY.	RT	1 C.B.	D-CB-12-32	3.50	506.94	0.85	0.626	834								
146	342+50 'W-S' RDY.	RT.	BEVEL	SHEET NO. 2X		494.40											
200	257+14 I-440	LT.	#37C.B.	D-CB-3	3.75	574.75	4.33			266				14			
201	257+14 I-440	LT.	J.B.	SHEET NO. 2Y	—	574.69									3.3	88	
202	255+13 I-440	LT.	#36C.B.	D-CB-3	2.17	577.55	1.51			72							
203	254+95 I-440	LT.	#36C.B.	D-CB-3	4.68	574.02	4.75			72				14			
204	253+52 I-440	MED	ADJ.														1
205	253+52 I-440	LT.	#36C.B.	D-CB-3	3.67	578.33	3.98			72				10			
206	253+52 I-440	LT.	ADJ.														1
207	249+50 I-440	LT.	#37C.B.	D-CB-3	3.75	581.17	4.42			266				10			
208	251+03 I-440	LT.	#36 C.B.	D-CB-3	5.98	578.62	4.90			72				10			
209	251+03 I-440	LT.	ADJ.														1
30A	641+00 RAMP 'BB'	RT	#24 C.B.	D-CB-24	3.75	559.63	0.32	0.541		310.53							
31A	640+00 RAMP 'BB'	RT	#24 C.B.	D-CB-24	2.83	557.99	0.32	0.400		310.53							
32A	640+00 RAMP 'BB'	RT	J.B			557.15									1.2	37	
33A	639+41.49 RAMP 'BB'	RT	ADJ														1
34A	639+41.49 RAMP 'BB'	RT	#48 C.B.	D-CB-24	6.62	553.79	0.48	1.281		929.17							
35A	241+00 I-440	LT	#24 C.B.	D-CB-24	3.75	557.44	0.32	0.541		310.53							
36A	241+00 I-440	LT	ADJ														1
51A	246+75 I-440	LT	#24 C.B.	D-CB-24	4.99	565.83	0.32	0.585		310.53							
50A	243+40 I-440	RT.	#36 C.B.	D-CB-3	2.17	557.35	1.51			71.82							
64A	18+68 HILLSBORO RD.	RT.	ADJ														1
65A	910+18 RAMP 'D-D'	RT.	ADJ														1
64B	18+41 HILLSBORO RD.	RT.	'U' E.W.	D-PE-4		572.00					1.39	20					
65B	909+80 RAMP 'D-D'	RT.	'U' E.W.	D-PE-4		566.00					1.39	20					
40A	21+55 HILLSBORO RD.	LT.	ADJ														1
40B	21+55 HILLSBORO RD.	LT.	'ST' E.W.	D-PE-4	—	573.00					1.04						
45A	21+53 HILLSBORO RD.	RT.	ADJ														1
45B	21+71 HILLSBORO RD.	RT.	'U' E.W.	D-PE-4	—	589.60					1.39	20					
	TOTAL (SHEET 2E)						21.82	26.669	——	15,110.03					25.3	734	12
	TOTAL (SHEET 2F)						34.51	30.022	15,846	9,440.89	1.38	40			16	428	5
	TOTAL (SHEET 2G)						29.71	5.226	2,502	2,663.11	5.21	60		58	4.5	125	9
	TOTALS						86.04	61.917	18,348	27,214.03	6.59	100		58	45.8	1287	26

(5) DOUBLE NO. 37 CATCHBASIN.
(6) SEE DETAIL SHEET 2AA

TYPE	YEAR	PROJECT NO.	SHEET NO
PAVING	1984	I-440-4(59)206	2G

REV. 5-24-85: ADDED DRAINAGE ITEM NOS. 200 THRU 209. ADDED FOOTNOTE NO. 5 & 6, AND ADDED ITEM NO. 611-03.02 .

REV. 9-5-85: ADDED DRAINAGE STRUCTURE NOS. 30A THRU 36A AND 51A. CHANGED QUANTITIES FOR ITEM NOS. 611-03.01, 611-03.03, 611-07.04 604-01.01, 604-01.02, & 611-04.52.

REV. 3-17-86: CHANGED STRUCTURAL STEEL TO GRAY IRON CASTINGS FOR ALL #1 CATCH BASINS AND REVISED TOTALS ACCORDINGLY.

REV. 12-31-86: ADDED DRAINAGE ITEM NOS. 50A, 64A, 65A, 64B & 65B, AND CHANGED QUANTITIES FOR ITEM NOS. 611-03.01, 602-06.01, 611-04.52, 611-07-01 & 611-07.02. ADDED DRAINAGE ITEM NOS. 40A, 45A, 40B & 45B.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
P/V/NG	1984	I-440-4(59)206	2F

REV. 3-17-86: CHANGED STRUCTURAL STEEL TO GRAY IRON CASTINGS FOR ALL #1 CATCH BASINS AND REVISED TOTALS ACCORDINGLY.

ESTIMATED STORM SEWER DRAINAGE QUANTITIES

CODE NO.	STATION	LOC.	TYPE	DRAWING NUMBER	DEPTH	OUTLET FLOW ELEV.	CATCH BASINS 611-03.01 CLASS "A" CONC. (C.Y.)	CATCH BASINS 611-03.03 BRICK MASONRY "M" BRICK	CATCH BASINS 611-03.04 GRAY IRON CASTINGS (LB.)	CATCH BASINS 602-06.01 STRUCT. STEEL (LB.)	ENDWALLS 611-07.01 CLASS "A" CONC. (C.Y.)	ENDWALLS 611-07.02 STEEL BAR REINF. (LB.)	ENDWALLS 602-01.01 STRUCT. STEEL (LB.)	JUNCTION BOXES 604-01.01 CLASS 'A' CONC. (C.Y.)	JUNCTION BOXES 604-01.02 STEEL BAR REINF. (LB.)	611-04.52 ADJUSTMENT OF EXISTING CATCH BASINS
70	273+50	I-440	RT.	#37 C.B.	D-CB-3	2.17	568.83	2.10			133.45					
71	273+50	I-440	RT.	ADJ	———	———	541.13									1
72	277+00	I-440	RT.	#24 CB.	D-CB-24	3.75	532.04	0.32	0.542		310.53					
73	277+00	I-440	LT.	#24 CB.	D-CB-24	3.75	532.42	0.32	0.542		310.53					
74	277+00	I-440	LT.	J.B.	SHEET NO.2Y	———	527.06							3.1	88	
75	277+00	I-440	RT.	#24 CB.	D-CB-24	3.75	532.98	0.32	0.542		310.53					
76	278+75	I-440	RT.	#24 CB.	D-CB-24	3.75	530.67	0.32	0.507		310.53					
78	278+75	I-440	LT.	J.B.	SHEET NO.2Y	———	523.93							3.8	104	
79	280+00	I-440	RT.	#24 CB.	D-CB-24	3.75	532.01	0.32	0.542		310.53					
80	280+25	I-440	℄	ADJ	———	———	522.20									1
81	280+25	I-440	LT.	#24 CB.	D-CB-24	11.20	522.69	0.32	1.542		310.53					
82	281+25	I-440	RT.	#24 CB.	D-CB-24	3.75	530.81	0.32	0.542		310.53					
83	281+25	I-440	LT.	STUB	———	———	521.19									
84	282+75	I-440	RT.	#24 CB.	D-CB-24	4.00	528.13	0.32	0.580		310.53					
85	282+75	I-440	LT.	J.B.	SHEET NO.2Y	———	520.23							5.4	132	
86	288+25	I-440	LT.	#24 CB.	D-CB-24	3.75	524.27	0.32	0.542		310.53					
87	288+25	I-440	RT.	#24 CB.	D-CB-24	3.75	524.27	0.32	0.542		310.53					
88	288+25	I-440	RT.	#24 CB.	D-CB-24	5.00	523.83	0.32	0.699		310.53					
89	288+00	I-440	℄	ADJ	———	———	516.56									1
90	291+25	I-440	LT.	#48 C.B.	D-CB-24	3.75	523.04	0.48	0.758		310.53					
91	292+00	I-440	LT.	ADJ	———	———	521.91									1
92	291+25	I-440	RT.	#24 CB.	D-CB-24	3.75	522.46	0.32	0.542		310.53					
93	292+00	I-440	℄	ADJ	———	———	514.57									1
94	294+50	I-440	LT.	#24 C.B.	D-CB-24	3.75	521.47	0.32	0.542		310.53					
95	293+75	I-440	RT.	#24 C.B.	D-CB-24	3.75	520.27	0.32	0.542		310.53					
96	294+50	I-440	RT.	#24 C.B.	D-CB-24	6.00	519.22	0.32	0.818		310.53					
97	297+75	I-440	LT.	#24 C.B.	D-CB-24	3.75	521.39	0.32	0.542		310.53					
98	297+75	I-440	RT.	#24 C.B.	D-CB-24	4.10	521.04	0.32	0.560		310.53					
99	296+25.54	I-440	RT.	#48 C.B.	D-CB-24	8.81	516.10	0.48	1.726		529.17					
100	296+25.54	I-440	LT.	#48 C.B.	D-CB-24	4.96	519.95		1.050		529.17					
101	302+00	I-440	RT.	#1 C.B.	D-CB-12-32	3.50	523.25	0.85	0.626	834						
102	302+00	I-440	RT.	BEVEL	SHEET NO.2X	———	521.00									
103	306+23	I-440	℄	#36 C.B.	D-CB-3	2.17	525.61	1.51			71.82					
104	306+23	I-440	RT.	BEVEL	SHEET NO.2X	———	522.50									
105	312+75	I-440	℄	#36 C.B.	D-CB-3	2.17	528.62	1.51			71.82					
106	312+75	I-440	LT.	BEVEL	SHEET NO.2X	———	518.88									
107	316+83	I-440	℄	#36 C.B.	D-CB-3	2.17	526.38	1.51			71.82					
08	316+83	I-440	LT.	BEVEL	SHEET NO.2X	———	511.30									
109	318+95.62	I-440	RT.	#1 C.B.	D-CB-12-32	3.50	522.37	0.85	0.626	834						
110	318+95.62	I-440	LT.	#1 C.B.	D-CB-12-32	4.00	521.87	0.86	0.693	834						
111	318+95.62	I-440	LT.	BEVEL	SHEET NO.2X	———	513.25									
112	323+00	I-440	℄	#36 C.B.	D-CB-3	2.17	515.07	1.51			71.82					
113	325+00	I-440	LT.	#1 C.B.	D-CB-12-32	3.50	510.03	0.85	0.591	834						
114	325+00	I-440	LT.	BEVEL	SHEET NO.2X	———	498.30									
115	327+25	'W-S' RDY	RT.	#1 C.B.	D-CB-12-32	3.50	505.63	0.85	0.626	834						
116	327+25	'W-S' RDY	RT.	BEVEL	SHEET NO.2X	———	503.75									
117	672+00	'N-W' RDY	RT.	#1 C.B.	D-CB-12-32	3.50	505.00	0.85	0.626	834						
118	672+00	'N-W' RDY	RT.	BEVEL	SHEET NO.2X	———	499.00									
119	328+75	I-440	LT.	#24 C.B.	D-CB-24	3.75	505.09	0.32	0.542		310.53					
120	328+75	I-440	RT.	#24 C.B.	D-CB-24	4.25	504.59	0.32	0.584		310.53					
121	330+50	I-440	LT.	#24 C.B.	D-CB-24	3.75	505.09	0.32	0.542		310.53					
122	330+50	I-440	RT.	#24 C.B.	D-CB-24	4.25	504.59	0.32	0.584		310.53					
123	329+62.05	I-440	LT.	#48 C.B.	D-CB-24	3.75	504.86	0.48	0.758		529.17					
124	329+62.05	I-440	RT.	#48 C.B.	D-CB-24	4.25	504.36	0.48	0.794		529.17					
125	329+00	I-440	RT.	J.B.	SHEET NO.2Y	———	487.36							3.7	104	
126	667+50	'N-W' RDY	RT.	#1 C.B.	D-CB-12-32	3.50	502.65	0.85	0.626	834						
127	667+50	'N-W' RDY	RT.	BEVEL	SHEET NO.2X	———	496.00									
128	331+75	'W-S' RDY	RT.	#1 C.B.	D-CB-12-32	3.50	501.00	0.85	0.626	834						
129	332+50	'W-S' RDY	RT.	#1 C.B.	D-CB-12-32	3.50	500.36	0.85	0.591	834						
130	333+80	'W-S' RDY	RT.	#1 C.B.	D-CB-12-32	3.50	500.37	0.85	0.626	834						
131	333+14.03	'W-S' RDY	RT.	TRIPLE #1 C.B.	D-CB-12-32	3.67	500.00	2.58	1.767	2502						
132	333+14.03	'W-S' RDY	RT.	"U" E.W.	D-PE-4	———	499.50					0.69	20			
133	662+25	'N-W' RDY	RT.	#1 C.B.	D-C.B.-12-32	3.50	497.38	0.85	0.626	834						
134	660+75	'N-W' RDY	RT.	#1 C.B.	D-C.B.-12-32	3.50	495.48	0.85	0.591	834						
135	657+75	'N-W' RDY	RT.	#1 C.B.	D-C.B.-12-32	3.50	494.08	0.85	0.626	834						
136	658+68.04	'N-W' RDY	RT.	DOUBLE #1 C.B.	D-C.B.-12-32	4.00	493.38	1.72	1.386	1668						
137	659+25	'N-W' RDY	RT.	#1 C.B.	D-C.B.-12-32	4.50	493.08	0.86	0.763	834						
138	659+25	'N-W' RDY	RT.	"U" E.W.	D-PE-4	———	489.75					0.69	20			
139	342+60	I-440	℄	#36 C.B.	D-CB-3	2.17	543.95	1.51			71.82					
140	342+60	I-440	LT.	BEVEL	SHEET NO.2X	———	495.00									
TOTALS (SHEET 2F)								34.51	30.022	15,846	9,440.89	1.38	40	16	428	5

(1) JUNCTION BOX TO BE ADJUSTED
(2) CATCH BASIN TO BE ADJUSTED
(3) SEE SPECIAL NOTE, SHEET NO. 17
(4) FOR ADDITIONAL DETAILS, SEE SHEET NO. 2W

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TABULATED QUANTITIES

PIPE CULVERTS

SHEET NO.	FROM CODE	FROM ELEV.	TO CODE	TO ELEV.	GRADE %	CONCRETE PIPE CULVERTS 18"	24"	30"	36"	48"	30"x19"	C.M. PIPE CULVERTS 18"	30"	36"	73" X 45" CONC. ARCH	ITEM 204-07 BED. MAT'L. CU. YD.	REMARKS
9	1	544.23	3	540.09	5.18	80'										12.72	
9	2	544.23	3	540.09	6.68	62'										12.72	
9	4	542.99	6	538.49	6.00	75'										12.72	
9	5	542.99	6	538.49	6.72	67'										12.72	
9	7	543.43	9	538.06	35.80							15'				0	
10	8	543.43	9	538.06	35.80							15'				0	
10	10	538.94	11	538.82	0.40	30'										0	
10	11	538.62	14	538.27	0.47	75'										0	
10	12	539.06	14	538.27	0.79	100'										0	
10	13	538.76	14	538.27	1.63	30'										0	
10	14	538.07	15	536.70	34.25							4'				0	
10	16	542.50	17	542.39	0.20	56'										11.87	
10	17	542.19	18	541.99	0.20	100'										0	
10	18	541.79	19	540.47	1.78	74'										15.69	
11	20	552.41	21	541.37	73.60							15'				0	
11	22	557.85	24	542.24	195.13							8'				0	
11	23	557.72	24	542.24	77.40							20'				0	
11	25	564.29	26	543.47	138.80							15'				0	
11	27	564.92	28	558.22	5.68	118'										25.02	
12	30	558.39	31	551.76	5.72	116'										0	
12	32	555.51	33	555.39	0.80	15'										0	
12	33	555.19	37	554.87	0.39	83'										0	
12	34	555.54	35	555.42	0.80	15'										0	
12	35	555.22	37	554.87	0.38	91'										0	
12	36	555.31	37	554.87	2.93	15'										0	
12	37	554.67	38	550.90	8.38	45'										9.54	
12	39	557.93	41	557.16	4.53	17'										0	
12	40	558.37	41	557.16	15.13	8'										0	
12	42	593.70	43	577.36	5.00	327'										0	
12	43	577.16	45	572.38	7.74	61'										5.51	
12	44	572.50	45	572.38	0.44	27'										0	
12	45	572.18	46	562.94	11.55	80'										3.82	
12	47	562.93	49	561.68	10.42	12'										0	
12	48	563.65	49	561.68	8.21	24'										0	
14	50	568.96	51	565.70	32.60							10'				0	
15	52	587.83	53	573.11	66.91							22'				0	
15	54	564.82	55	558.54	4.27	147'										0	
15	55	558.54	60	551.01	15.06	50'										10.60	
15	56	565.82	57	564.30	1.79	85'										0	
15	57	564.30	58	560.84	3.30	105'										0	
15	58	560.64	59	559.96	1.21	56'										11.87	
15	59	559.76	60	551.01	218.75							4'				0	
15	61	550.16	63	542.20	79.60							10'				0	
15	62	552.24	63	542.20	14.14	71'										11.87	
15	64	547.42	66	539.67	9.94	78'										14.20	
15	65	545.78	66	539.67	35.94							17'				0	
16	67	562.83	68	535.81	84.44							32'				0	
16	70	568.83	71	541.13	138.50							20'				0	
16	72	532.04	74	527.26	19.12							25'				0	
16	73	532.42	74	527.26	129.00							4				0	
16	75	532.98	76	530.87	3.52	60'										12.72	
16	76	530.67	78	524.13	29.73							22'				0	
16	79	532.01	80	522.20	12.58	78'										12.30	
16	82	530.81	83	521.19	12.33	78'										12.30	
16	84	528.13	85	520.43	38.50							20'				0	
17	86	524.27	89	516.56	10.56	73'										12.30	
17	87	524.27	88	524.03	0.43	56'										11.87	
17	88	523.83	89	516.56	29.08							25				0	
17	90	523.04	91	521.91	1.61	70'										0	
17	92	522.46	93	514.57	7.89	100'										16.96	
17	94	521.47	96	519.42	6.83	30'										0	
17	95	520.27	96	519.42	0.94	90'										19.08	
17	96	519.22	99	516.20	1.73	175'										0	
17	97	521.39	98	521.24	1.17	30'										0	
17	98	521.04	99	516.30	3.16	150'										0	
18	101	523.25	102	521.00	8.04							28'				0	
18	103	525.61	104	522.50	3.21							97'				10.25	
18	105	528.62	106	518.88	9.74							100'				10.25	
18	107	526.38	108	511.30	13.83							109'				10.25	
19	109	522.37	110	522.07	0.22	139'										22.15	
19	110	521.87	111	513.25	29.72							29'				0	
19	112	515.07	113	510.23	2.25	215'										35.40	
19	113	510.03	114	498.30	26.07							45'				0	
12	30A	559.63	32A	557.15	2.48	100'											
12	31A	557.99	32A	557.15	4.20	20'											
12	32A	557.15	33A	554.08	5.58	55'											
TOTAL (SHEET 2H)						3,914'						711'				356.70	

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2H

REV. 9-5-85: ADDED 18" CONC. PIPE FROM 30A TO 32A, 31A TO 32A, AND 32A TO 33A. ADJUSTED TOTAL.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TABULATED QUANTITIES

PIPE CULVERTS

SHEET NO.	FROM CODE	FROM ELEV.	TO CODE	TO ELEV.	GRADE %	CONCRETE PIPE CULVERTS 18"	24"	30"	36"	48"	30"X19"	42"	C.M. PIPE CULVERTS 18"	30"	36"	73"X45" CONC. ARCH	ITEM 204-07 BED. MAT'L. CU. YD.	REMARKS
20	115	505.63	116	503.75	4.82								39'				—0—	
20	117	505.00	118	499.00	20.69								29'				—0—	
20	119	505.09	120	504.79	1.00	30'											—0—	
20	120	504.59	125	487.36	68.92								25'				—0—	
20	121	505.09	122	504.79	1.00	30'											—0—	
20	122	504.59	124	504.36	0.26	90'											—0—	
20	123	504.86	124	504.56	1.00	30'											—0—	
20	124	504.36	125	487.56	27.10								62'				—0—	
20	126	502.65	127	496.00	23.75								28'				—0—	
20	128	501.00	129	500.56	0.59	75'											—0—	
20	129	500.36	131	500.20	0.27	60'											—0—	
20	130	500.37	131	500.20	0.28	60'											—0—	
20	131	500.00	132	499.50	2.94	17'											—0—	
21	133	497.38	134	495.68	1.13	150'											—0—	
21	134	495.48	137	493.28	1.47	150'											—0—	
21	135	494.08	136	493.58	0.60	83'											—0—	
21	136	493.38	137	493.28	0.18	55'											—0—	
21	137	493.08	138	489.75	7.57								44'				8.05	
21	139	543.95	140	495.00	23.09								212'				7.69	
21	141	497.64	142	496.00	2.10								78'				—0—	
22	143	501.45	144	499.30	5.38								40'				—0—	
22	145	506.94	146	494.40	33.00								38'					
14	200	574.75	201	574.69	0.33							18'					—0—	
14	201	574.69	203	574.02	0.30							222'					—0—	
14	202	577.55	203	574.02	13.07	27'											—0—	
14	203	574.02	204	573.44	0.32							184'					81.33	
14	205	578.33	206	578.15	1.20				15'								—0—	
14	207	581.17	208	578.62	1.50			170'									—0—	
14	208	578.62	209	578.42	1.50				12'								—0—	
13	50A	557.35	50B	555.26	2.38	88'											—0—	
13	64A	574.90	64B	572.00	8.79	33'											—0—	
13	65A	566.55	65B	566.00	1.31	42'											—0—	
12	40A	579.28	40B	573.0	25.12								25'				—0—	
12	45A	589.87	45B	589.60	0.54	50'											—0—	
(TOTAL SHEET 2I)						1070'		170'	27'			424'	620'				97.48	
(TOTAL SHEET 2H)						3914'							711'				356.70	
TOTAL						4984'		170'	27'			424'	1331'				454.18	

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	21

REV. 5-24-85: REVISED PIPE CULVERT TABLE TO MATCH REVISION TO STORM SEWER DRAINAGE IN PRIMROSE CIRCLE VICINITY. CODE NO. 200 TO 209 ADDED TO TABLE.

REV. 12-31-86: ADDED CODE NOS. 50A, 50B, 64A, 64B, 65A, 65B, 40A, 40B, 45A & 45B. REVISED QUANTITIES.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TABULATED QUANTITIES

BRUNING 29411

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2K

GRADING

(1) GRADES SHOWN ARE SAME AS FINISHED GRADES SHOWN ON TYPICAL CROSS-SECTIONS AND SAME AS FINISHED GRADE ELEVATIONS SHOWN ON CROSS-SECTIONS.

(2) ON ALL SUPERELEVATED CURVES, THE FINISHED GRADE IS CARRIED ON THE INSIDE EDGE OF PAVEMENT. SEE PLAN AND PROFILE SHEETS, TYPICAL SECTIONS, AND STANDARD DRAWING NO. RD-SE-1 FOR SUPERELEVATION DETAILS.

(3) THE CONTRACTOR WILL BE REQUIRED TO USE MATERIAL WHICH HAS BEEN STOCKPILED UNDER PREVIOUS PROJECTS TO CONSTRUCT EARTH BERMS IN THE MEDIAN AND IN ROCK CUTS AS SHOWN ON THE TYPICAL SECTIONS. THIS WORK SHALL BE PAID FOR UNDER ITEM NO. 203-04.01. IN THE EVENT THAT THE AMOUNT OF STOCKPILED MATERIAL SHOULD PROVE TO BE INSUFFICIENT FOR THE CONSTRUCTION OF THESE BERMS AS SHOWN, THE TYPICAL SECTION SHALL BE MODIFIED TO UTILIZE THE MATERIAL THAT IS AVAILABLE.

(4) AFTER THE SPREADING OF THE MATERIAL FOR THE EARTH BERMS, IT SHALL BE SHAPED AND LIGHTLY COMPACTED. A 3" LAYER OF TOPSOIL SHALL THEN BE SPREAD ON THE BERMS.

(5) THE CONTRACTOR WILL BE REQUIRED TO INSTALL STRIPS OF FILTER CLOTH (ITEM NO. 710-13.03) OVER THE MINERAL AGGREGATE TO BE PLACED IN THE EXISTING ROCK CUT DITCHES PRIOR TO THE CONSTRUCTION OF THE BERMS FROM SHARONDALE DR. TO I-65. IT IS PREFERRED THAT THE FILTER CLOTH BE OBTAINED IN STRIPS AS WIDE AS POSSIBLE IN ORDER TO MINIMIZE THE NUMBER OF SEAMS REQUIRED. AT ANY PLACE WHERE THE FILTER CLOTH MUST BE OVERLAPPED, EITHER TRANSVERSE OR LONGITUDINAL, THE OVERLAP SHALL BE A MINIMUM OF 12 INCHES. ANY FILTER CLOTH THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

(6) THE COST OF ANY AND ALL EXCAVATION REQUIRED TO INSTALL THE FILTER CLOTH UNDERDRAINS IN THE MEDIAN SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO. 710-04, FILTER CLOTH UNDERDRAINS (WITH PIPE).

SEEDING AND SODDING

(7) 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, SECTION 801.(CROWN VETCH)

(8) SODDING WILL BE PLACED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DRAINAGE

(9) THE CONTRACTOR WILL BE REQUIRED TO SHAPE DITCHES TO THE SPECIFIED DESIGN. ALL COSTS TO BE INCLUDED IN THE UNIT PRICE BID FOR THE PAY ITEM FOR PAVED DITCHES.

(10) THE COST OF EXCAVATION FOR PIPE CULVERTS AND ENDWALLS IS TO BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT OF PIPE.

(11) THE COST OF EXCAVATION FOR CATCH BASINS, MANHOLES, AND JUNCTION BOXES IS TO BE INCLUDED IN THE RESPECTIVE PAY ITEMS FOR THE STRUCTURE.

SIGNALIZATION

(12) EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE TDOT, BUREAU OF HIGHWAYS "SPECIAL PROVISIONS REGARDING SECTIONS 730N TRAFFIC SIGNALS, 730E-MASTER COORDINATOR, AND 730F-MODULAR SOLID STATE DIGITAL COORDINATION UNIT."

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

(14) WHEN THE INSTALLATION OF THE PROPOSED TRAFFIC SIGNAL EQUIPMENT REQUIRES THE REMOVAL OF EXISTING PAVEMENTS, CURB AND GUTTER AND SIDEWALKS OR WHERE SUCH EXISTING IMPROVEMENTS ARE DAMAGED IN THE COURSE OF INSTALLATION, THE CONTRACTOR SHALL MAKE REPLACEMENTS AND REPAIRS IN KIND OR OF EQUAL AS DIRECTED BY THE ENGINEER. ALL COST OF SUCH REPLACEMENTS AND REPAIR SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION, AND NO ADDITIONAL COMPENSATION WILL BE MADE.

(15) ALL CONTROLLERS FURNISHED BY THE CONTRACTOR SHALL BE COMPLETE WITH ALL NECESSARY AUXILIARY EQUIPMENT, HARDWARE AND CABINET NECESSARY FOR INSTALLATION.

(16) THE COSTS OF ALL SIGNAL HANGERS, CLAMPS AND MISCELLANEOUS HARDWARE ARE TO BE INCLUDED IN THE PRICE BID FOR RELATED ITEMS.

(17) THE REGIONAL TRAFFIC ENGINEER SHALL BE CONTACTED REGARDING SIGNAL TIMING A MINIMUM OF 30 DAYS PRIOR TO THE ACTIVATION OF THE TRAFFIC SIGNAL.

(18) ALL LOOPS SHALL BE 6' X 45' WITH A DOUBLE RUN OF WIRE UNLESS INDICATED OTHERWISE ON THE PLANS, AND LOOPS IN THE SAME LANE SHALL BE WIRED IN PARALLEL.

(19) SIGNAL LAMPS SHALL COMPLY TO SPECIAL PROVISION 730.202.

(20) ALL LOOPS AND LEADS TO THE PULLBOX ARE TO BE ONE CONTINUOUS LENGTH OF #14 AWG (CROSS LINK POLYETHYLENE) SINGLE CONDUCTOR STRANDED CABLE WHICH MEETS THE REQUIREMENTS OF I.M.S.A. SPECIFICATION 19.2. ALL LEADS FROM THE PULLBOX TO THE CONTROLLER ARE TO BE ONE CONTINUOUS LENGTH OF #14 AWG (CROSS LINK POLYETHYLENE) 2 CONDUCTOR STRANDED CABLE WHICH MEETS THE REQUIREMENTS OF I.M.S.A. SPECIFICATION 19.2. ALL LEADS ARE TO BE TWISTED AT LEAST THREE TIMES PER FOOT.

(21) ALL CONDUIT SHALL BE GALVANIZED STEEL (SHERARDIZED CONDUIT NOT ACCEPTABLE) AND SHALL BE LAID NO LESS THAN 24" BELOW THE PAVEMENT.

(22) A LIGHTNING ARRESTOR SHALL BE PROVIDED ACROSS THE LEAD-IN EXTERNAL TO EACH DETECTOR LOOP AMPLIFIER.

(23) A LIGHTNING ARRESTOR SHALL BE PROVIDED ACROSS THE ELECTRICAL SERVICE INPUT TO THE CONTROLLER.

(24) CONTROLLER AND STRAIN POLES SHALL BE PAINTED USING SYSTEM "B" INORGANIC ZINC WITH VINYL TOPCOAT OUTLINED IN SECTION-603- PAINTING, IN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION-1981 EDITION. THE COLOR OF THE TOPCOAT SHALL BE DARK BRONZE NO.595A FEDERAL STANDARD COLOR NO. 20059. IF DURING THE SHIPMENT OR ERECTION OF THESE STRUCTURES, THE PAINTED SURFACE IS DAMAGED IN ANY MANNER, THEN IT SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT ENGINEER.

(25) AN INSPECTION SHALL BE MADE PRIOR TO THE CLOSING OF THIS CONTRACT BY REPRESENTATIVES OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION, INCLUDING THE REGIONAL TRAFFIC ENGINEER AND THE AGENCY ASSUMING MAINTENANCE RESPONSIBILITY, ACCOMPANIED BY A REPRESENTATIVE OF THE CONTRACTOR.

UTILITIES

(26) THE LOCATIONS OF UTILITIES, PUBLIC OR PRIVATE, ARE APPROXIMATE ONLY. THEIR EXACT LOCATION SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR.

(27) UTILITY OWNERS ARE TO RESET, RELAY, OR MAKE ADJUSTMENTS OF POWER AND TELEPHONE LINES AND POLES, WATER AND SEWER LINES AND ALL OTHER PUBLIC UTILITIES CONFLICTING WITH THE PROPOSED IMPROVEMENTS.

(28) THE CONTRACTOR WILL BE REQUIRED TO COOPERATE WITH THE OWNERS OF LOCAL UTILITIES IN THE ADJUSTMENT OF THEIR FACILITIES WHERE THEY INTERFERE WITH CONSTRUCTION.

(29) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTION MEASURES TO SAFEGUARD EXISTING UNDERGROUND UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EWUIPMENT IS REQUIRED TO WORK AROUND AND OVER THE UNDERGROUND UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UNDERGROUND PIPE LINES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID ON OTHER ITEMS. THE CONTRACTOR WILL NOT BE ALLOWED TO PLACE BASE AND PAVEMENT UNTIL ALL UNDERGROUND UTILITIES ARE ADJUSTED AND/OR INSTALLED.

(30) NO CLAIMS OR DAMAGES DUE TO DELAYS CAUSED BY UTILITY ADJUSTMENTS OR INSTALLATIONS WILL BE MADE.

(31) THE CONTRACTOR SHALL ACCOMPLISH ALL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRIC SAFETY CODE (NESC) AND SHALL PROVIDE THE PROPER CLEARANCE BETWEEN SIGNAL SPAN WIRES/TETHER WIRE AND ADJACENT ELECTRICAL DISTRIBUTION FACILITIES IN ACCORDANCE WITH THE NESC.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

GENERAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2J

PROPOSED GUARDRAIL (STD. DWG. S-GR-11-21)

LOCATION	SHEET NO.	SIDE	STATIONS FROM	STATIONS TO	TERMINAL ANCHOR TYPE 11 705-04.41	TERMINAL ANCHOR TYPE 12 705-04.42	TERMINAL ANCHOR TYPE 13 705-04.43	GUARDRAIL 705-01.41	705-01.42	705-02.42	705-03.42	705-03.43	
RAMP 'E-S'	3	RT.	361+88	362+59	1			27'		19'			
RAMP 'N-E'	3	RT.	342+53	343+30			1			77'			
RAMP 'N-E'	3	LT.	339+00	340+09	1			27'		56'			
RAMP 'N-E'	3	RT.	114+84(I-440)	340+23		1		27'		378'			
RAMP 'E-S'	3	RT.	366+40	113+27(I-440)		1				79'			
I-440	4	RT.	124+96	127+15	1			27'		169'			
I-440	4	LT.	124+70	126+45			1			175'			
I-440	4	RT.	126+72	127+59	1			27'		34'			
I-440	4	LT.	129+40	130+27	1			27'		35'			
I-440	4	LT.	129+82	132+03	1			27'		169'			
I-440	5	RT.	144+88	146+41	1		1		65'			59'	
I-440	6	LT.	145+85	147+33	1		1		65'			59'	
RAMP 'A'	6	LT.	6+73	10+00	1		1			300'			
I-440	6	RT.	157+00	158+75	1		1		95'			59'	
I-440	6	LT.	157+90	159+65	1		1		95'			59'	
RAMP 'C'	7	LT.	5+00	10+50	1		1			525'			
I-440	7	RT.	167+71	169+54	1		1		101'			59'	
I-440	7	LT.	168+66	170+47	1		1		101'			59'	
I-440	7	LT.	168+28	170+14	1		1		105'			59'	
RAMP 'F-H'	7	RT.	6+46	8+35	1		1		105'			59'	
RAMP 'F'	7	LT.	2+38	3+27	1		1	27'		35'			
RAMP 'F'	7	RT.	2+42	3+27	1		1	27'		35'			
RAMP 'F'	7	LT.	6+72	6+56('H')	1		1			332'			
RAMP 'G'	7	LT.	10+59	15+02	1		1			418'			
RAMP 'H'	7	LT.	1+57	4+47	1		1	27'		238'			
I-440	7	RT	173+45	174+80	1		1		51'			59'	
I-440	7	LT	174+35	175+76	1		1		51'			59'	
I-440	7	LT	173+64	175+01	1		1		53'	59'			
I-440	7	RT	173+77	175+12	1		1		50	59'			
RAMP 'D'	7	LT	3+75	5+12	1		1		53'	59'			
I-440	8	RT	181+84	183+47	1		1		80'			59'	
I-440	8	LT	182+77	184+37	1		1		80'			59'	
I-440	9	RT	198+55	200+07	1		1		67'			59'	
I-440	9	LT	199+47	200+99	1		1		67'			59'	
I-440	10	RT	212+85	214+50	1		1		80'			59'	
I-440	10	LT	213+78	215+40	1		1		80'			59'	
I-440	12	RT	238+50	240+78	1		1		144'			59'	
I-440	12	LT	239+22	241+50	1		1		144'			59'	
I-440	15	LT	264+20	266+52	1		1		148'			59'	
I-440	15	LT	265+20	267+52	1		1		148'			59'	
I-440	16	RT	274+78	276+19	1		1		58'			59'	
I-440	16	LT	275+62	277+03	1		1		58'			59'	
I-440	17	RT	294+07	295+74	1		1		82'			59'	
I-440	17	LT	294+98	296+64	1		1		82'			59'	
I-440	18	RT	306+72	308+93	1			27'		169'			
I-440	18	LT	310+48	312+70	1			27'		169'			
I-440	18	RT	316+88	319+07	1			27'		169'			
I-440	19	LT	320+80	325+00	1			27'		368'			
I-440	21	RT	342+71	344+91	1			27'		169'			
I-440	21	RT.	344+26	344+91	1			27'		12.5			
I-440	19	RT.	322+94	324+12	1		1		34'	59'			
'W-N' RDWY	22	RT.	446+85	447+50	1			27'		12.5'			
'W-N' RDWY	22	LT.	446+85	447+50	1			27'		12.5'			
S-W 'RDWY'	21	RT.	151+71	155+00			1			329'			
RAMP 'A'	13	LT	735+50	738+00	1		1			225'			
I-440	18	RT.	302+35	303+00	1			27'		12.5'			
LOOP 'BB'	12	LT	643+63	644+52		1		27'		62'			
LOOP 'DD'	13	LT	906+41	907+10		1		27'		69'			
TOTALS					50	4	36	567'	2342'	5089'		1416'	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TABULATED QUANTITIES

TELSTYNE POST N1856

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2L

REV. 4-4-84: GEN. NOTE 54 REVISED, GEN. NOTES 55,56 ADDED. PRIORITY OF CONST. ADDED.

REV. 8-31-84: CHANGED SPECIAL PROVISION NUMBER IN NOTE NO. 54.

REV. 4-15-86: SIGN NO.S 14 & 152A, ADDED AND SIGN NO. 92 ELIMINATED FROM GENERAL NOTES NO. 42.

F E N C I N G

(32) THE CONTRACTOR WILL BE REQUIRED TO REMOVE EXISTING STOCK FENCE AND END AND CORNER POST ASSEMBLIES, AND REPLACE IT WITH BLACK VINYL COATED CHAIN LINK FENCE AND END AND CORNER POST ASSEMBLIES (6 FT)(SEE NOTE NO. 33). ALL FENCE AND END AND CORNER POST ASSEMBLIES WHICH ARE REMOVED SHALL BE STOCKPILED, AS DIRECTED BY THE ENGINEER, TO BE PICKED UP BY STATE MAINTENANCE FORCES. ALL COSTS OF REMOVAL AND STOCKPLING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO. 202-01.

(33) PROPOSED FENCE SHALL COMPLY WITH STANDARD DRAWING S-F-10B EXCEPT AS NOTED HERE: VINYL COATED FABRIC IN ACCORDANCE WITH AASHTO M-181-77, TYPE 4 VINYL COATED FABRIC. SIZE OF COATED WIRE SHALL BE 9 GAGE. COLOR OF FABRIC SHALL BE BLACK AND A COLOR SAMPLE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. POSTS, BRACES, RAIL, AND ALL OTHER FRAMEWORK FOR FENCES SHALL COMPLY WITH STANDARD DRAWING S-F-10B, AND SHALL BE COATED WITH BLACK VINYL.

(34) THE PROPOSED FENCE SHALL BE TURNED IN AT DRAINAGE STRUCTURES AND BRIDGES SO AS TO ABUT WINGWALLS AND/OR ABUTMENTS. AT APPROXIMATE LOCATIONS SHOWN ON PLANS, THE FENCE SHALL BE ABUTTED TO THE NOISE WALLS IN THE SAME MANNER IN WHICH IT IS ABUTTED TO WINGWALLS AND BRIDGE ABUTMENTS. IN AREAS WHERE THE EXISTING FENCE IS BEING REPLACED BY NOISE WALLS, THE FENCE SHALL REMAIN IN PLACE UNTIL ENOUGH OF THE NOISE WALL IS BUILT TO SERVE AS ACCESS CONTROL.

(35) THE CONTRACTOR WILL NOT CUT ANY FENCE UNTIL THE AFFECTED PROPERTY OWNERS HAVE BEEN NOTIFIED OF THE INTENTION TO CUT FENCES.

(36) GATE LOCATIONS, AS SHOWN ON THE PLANS, ARE APPROXIMATE. FINAL LOCATIONS ARE TO BE DETERMINED BY THE ENGINEER IN CONSULTATION WITH THE REGIONAL MAINTENANCE ENGINEER.

S I G N I N G N O T E S

(37) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUT-OUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACK-GROUND. THE LETTERS, DIGITS, ARROWS, BORDERS AND ALPHABET ACCESSORIES ON ALL EXTRUDED PANEL SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE, AS OUTLINED IN THE STANDARD SPECIFICATIONS. ALL SHIELDS AND GUIDE SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE AS OUTLINED IN THE STANDARD SPECIFICATIONS.

(38) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE LENGTHS WERE COMPUTED FROM THE CROSS-SECTIONS CONTAINED IN THE CONSTRUCTION PLANS. IN THE EVENT THE SUPPORT LENGTHS ARE 2' SHORTER OR LONGER THAN SHOWN ON THE PLANS, THE ENGINEER SHOULD VERIFY THE SUPPORT TYPE WITH MR. RONALD HAMLIN, SPECIAL DESIGNS, TELEPHONE NO. 615-741-0982. THE CONTRACTOR SHALL VERIFY ALL SUPPORTS LENGTHS AT THE SITE PRIOR TO ERECTION.

(39) THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.

(40) AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.

(41) THE CONTRACTOR WILL BE REQUIRED TO FURNISH LAYOUT DRAWINGS(3 SETS) OF ALL EXTRUDED PANEL SIGNS WITH SPACING OF ALL LETTERS, NUMERALS, SHIELDS, AND ARROWS. THE LAYOUT DRAWINGS SHOULD BE SENT TO MR. RONALD HAMLIN, SPECIAL DESIGN OFFICE SUITE 1100, J. K. POLK BUILDING, NASHVILLE, TN. 37219.

(42) THE OVERHEAD AND CANTILEVER SIGN STRUCTURES THAT ARE TO BE ERECTED ALONG I-440 PARKWAY(SIGN NOS. 14,152A, 21,22,24,25,59,75,78,83,97,101,102,110,120,132,138,140,151,152) ARE TO BE OF THE TWO TUBE TRUSS SIGN SUPPORT TYPE FOR THE OVERHEADS AND AND SINGLE SIGN POST-CANTILEVER TYPE DOUBLE MASTARM FOR THE CANTILEVER STRUCTURES. THE STRUCTURES SHALL BE PAINTED USING SYSTEM "B"—INORGANIC ZINC WITH VINYL TOPCOAT OUTLINED IN SECTION 603 PAINTING-IN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION-1981 EDITION. THE COLOR OF THE TOP COAT SHALL BE DARK BRONZE, FEDERAL COLOR STANDARD 595A, COLOR NO. 20059. IF DURING SHIPMENT OR ERECTION OF THESE STRUCTURES THE PAINTED SURFACE IS DAMAGED IN ANY MANNER THEN IT SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT ENGINEER. THE SIGN STRUCTURES NUMBERED ABOVE SHALL NOT BE GALVANIZED BEFORE PAINTING. SEE DRAWING M-66-11 FOR FURTHER NOTES PERTAINING TO THESE STRUCTURES. BRIDGE MOUNT SIGN STRUCTURE NOS. 27,27A,29,34,85,87,89, ,95,96,142,143,146,147 ARE TO BE PAINTING USING SYSTEM "B" AS OUTLINED ABOVE. AFTER STRUCTURES ARE ERECTED THE CONTRACTOR WILL BE REQUIRED TO PAINT THE BOLTED CONNECTIONS WITH DARK BRONZE VINYL PAINT.

(43) THE EXTRUDED PANELS AND FLATT SHEET ALUMINUM SIGN FACES SHOWN ON SIGN SCHEDULE AS ANODIZED SHALL BE ANODIZED DARK BRONZE, FEDERAL COLOR STANDARD 595 A COLOR NO. 20059 THIS INCLUDES THE POST CLIPS FOR EXTRUDED PANES CONNECTION. THE NUT END OF THE BOLT CONNECTION ON FLAT SHEET SIGNS SHALL BE PAINTED (DARK BRONZE VINYL) AFTER SIGN IS INSTALLED ON SUPPORT. THE ABOVE ALSO APPLIES TO MILEPOST MARKER AND DELINEATOR POST.

M I S C E L L A N E O U S

(47) NOISE WALL LOCATIONS SHOWN ON PROPOSED LAYOUTS AND LANDSCAPING PLANS ARE FOR REFERENCE ONLY. FOR EXACT LOCATIONS, SEE NOISE BARRIER LAYOUTS.

(48) THE CONCRETE USED TO CONSTRUCT CONCRETE SHOULDERS, CONCRETE DITCHES ADJACENT TO SHOULDERS, SLOPE PAVEMENT IN THE MEDIAN, AND THE SAFETY SHAPE WALLS BUILT IN CONJUNCTION WITH NOISE WALLS SHALL BE TINTED TO MATCH FEDERAL COLOR STANDARD 595A COLOR NO. 23619. THIS TINT SHALL BE ACHIEVED BY THE ADDITION OF APPROVED PIGMENTS TO THE CONCRETE MIXTURE TO OBTAIN A UNIFORM TINT THROUGHOUT.

(49) THE LANDSCAPING SHALL NOT BEGIN UNTIL ALL OTHER WORK IS COMPLETED. IT SHALL BE ADJUSTED, AS DIRECTED BY THE ENGINEER, SO AS NOT TO BLOCK THE VIEW OF SIGNS AND NOT INTERFERE WITH LIGHTING OR SIGHT DISTANCES AT RAMP INTERSECTIONS. THIS NOTE IS NOT MEANT TO EXCLUDE ANY SEEDING OR SODDING NECESSARY FOR EROSION CONTROL.

(50) THE ABATEMENT OF CONSTRUCTION NOISE IS A HIGH PRIORITY ON THIS PROJECT. THEREFORE, THE CONTRACTOR WILL BE REQUIRED TO PERFORM HIS NORMAL CONSTRUCTION OPERATIONS BETWEEN THE HOURS OF 6:00 AM AND 7:00 PM, OR AS DIRECTED BY THE ENGINEER.

(51) THE CONTRACTOR WILL BE REQUIRED TO COORDINATE HIS WORK WITH CONTRACTORS WORKING ON ADJACENT PROJECTS. NO EXTRA COMPENSATION WILL BE GRANTED FOR DELAYS.

(52) THE CONTRACTOR IS TO USE CAUTION WHILE APPLYING EPOXY PAVEMENT MARKINGS, ESPECIALLY WHEN PREPARING THE CONCRETE SURFACE FOR THE PAINT. IN THE EVENT THAT ANY CONCRETE PAVEMENT OR JOINTS ARE DAMAGED DURING THIS OPERATION, THEY SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

(53) NO PAVEMENT MARKING (EDGE LINES, ETC.) SHALL BE APPLIED TO SHOULDERS, BUT SHALL BE APPLIED TO THE PAVEMENT ONLY. 905A

(54) ALL JOINTS ON THE CONCRETE PAVEMENT, AND CONCRETE SHOULDERS SHALL BE SEALED WITH SILICONE MATERIAL, SEE DETAIL ON SHEET NO. 2X, AND SPECIAL PROVISION 501E. // THE JOINTS IN THE CONCRETE SHOULDERS (EXPANSION, TRANSVERSE, AND LONGITUDINAL) SHALL MATCH THE JOINTS ON THE MAINLINE PAVEMENT BOTH FROM A TYPE AND LOCATION STANDPOINT. SEE RP-J SERIES STANDARD DRAWINGS FOR DETAILS.

(55) EXCAVATION FOR SEDIMENT TRAPS, AND/OR SEDIMENT PONDS WILL BE INCLUDED IN THEIR RESPECTIVE PAY ITEMS AND NOT PAID UNDER ITEM NO. 203-01 AS INDICATED ON THE STANDARD DRAWING.

SIGNING NOTES (CONT.)

(44) THE STEEL SIGN SUPPORTS SQUARE TUBE, I-BEAMS AND WF—BEAMS) SHOWN ON SIGN SCHEDULE AS PAINTED, SHALL BE PAINTING USING SYSTEM "B"-INORGANIC ZINC WITH VINYL TOPCOAT OUTLINED IN SECTION 603 PAINTING IN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION-1981 EDITION. THE COLOR OF THE TOPCOAT SHALL BE DARK BRONZE, FEDERAL COLOR STANDARD 595A, COLOR NO. 20059 THIS INCLUDES STUBS, FUSE PLATES, BOLT KEEPER PLATES AND SHIMS. ALL BOLTS AND NUTS SHALL BE PAINTED (DARK BRONZE VINYL) AFTER SIGN SUPPORTS ARE INSTALLED.

(45) ALL SIGNS MARKED TO BE REMOVED ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM 713-15. THE CONTRACTOR WILL BE REQUIRED TO STOCKPILE EXISTING SIGNS, SUPPORTS AND BUTTERFLY STRUCTURES AT LOCATION DESIGNATED BY THE ENGINEER AND TO BE PICKED UP BY STATE MAINTENANCE FORCES.

(46) THE EXISTING FOOTINGS TO BE REMOVED 6" BELOW GROUND LINE.

(56) THERE ARE SOME TEMPORARY PAVEMENT MARKINGS, AND TRAFFIC CONTROL DEVICES IN THE I-65 DIRECTIONAL INTERCHANGE THAT WERE INSTALLED UNDER THE PREVIOUS PAVING PROJECT (I-ID-IR-440-4 (53) 211). THESE MARKINGS AND DEVICES ARE TO REMAIN IN PLACE UNTIL THE WESTERN SECTION OF I-440 IS READY TO OPEN TO TRAFFIC. AT SUCH TIME THESE DEVICES AND MARKINGS ARE TO BE REMOVED, DEVICES ARE TO BECOME PROPERTY OF THE CONTRACTOR. COST OF REMOVING THESE ITEMS TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO. 712-01 TRAFFIC CONTROL.

S C O P E - O F - W O R K

1. THE PREPARATION OF THE SUBGRADE, CONSTRUCTION OF LEAN CONCRETE BASE OR AGGREGATE-LIME-FLY ASH BASE, AND THE CONSTRUCTION OF CEMENT CONCRETE PAVEMENT AND SHOULDERS ALONG I-440 AND INTERCHANGE RAMPS WITHIN THE LIMITS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
2. THE CONSTRUCTION OF NOISE WALLS AS SHOWN ON PLANS OR DIRECTED BY THE ENGINEER.
3. THE CONSTRUCTION OF HIGHWAY LIGHTING.
4. LANDSCAPING AS SHOWN IN THE PLANS OR DIRECTED BY THE ENGINEER.
5. SIGNALIZATION IN THE HILLSBORO RD. INTERCHANGE AS SHOWN IN PLANS OR AS DIRECTED BY THE ENGINEER.
6. THE CONSTRUCTION OF EARTH BERMS IN THE MEDIAN AND ROCK CUTS, AS SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
7. THE INSTALLATION OF GUARDRAIL AND TERMINAL ANCHORS AT LOCATIONS SHOWN IN PLANS OR AS DIRECTED BY THE ENGINEER.
8. THE MARKING OF PAVEMENT WITH EPOXY PAVEMENT MARKINGS AS INDICATED IN THE PLANS, STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER.
9. THE CONSTRUCTION OF A STORM DRAINAGE SYSTEM AS SHOWN IN PLANS OR DIRECTED BY THE ENGINEER.
10. THE REMOVAL OF EXISTING STOCK FENCE AND END AND CORNER POST ASSEMBLIES, AND THE ERECTION OF NEW BLACK VINYL COATED CHAIN LINK FENCE AND END AND CORNER POST ASSEMBLIES.
11. INSTALLATION OF ROADWAY SIGNING ALONG I-440 INCLUDING I-40 APPROACH ON THE WESTERN AND EASTERN END OF I-440, I-24 APPROACH ON THE EASTERN END OF I-440 AND ON I-65 APPROACH TO I-440.
12. THE CONSTRUCTION OF CONCRETE DITCHES, CONCRETE MEDIAN BARRIER AND OTHER ITEMS NECESSARY FOR THE COMPLETION OF THIS PROJECT.
13. THE INSTALLATION OF TWO (2) ENERGY ATTENUATION DEVICES AT THE HILLSBORO ROAD INTERCHANGE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

PRIORITY OF CONSRUCTION

FOLLOWING IS A SUGGESTED PRIORITY OF CONSTRUCTION, IF THE CONTRACTOR ELECTS TO SET A DIFFERENT PRIORITY THEN HE MUST SUBMIT IT TO THE ENGINEER FOR APPROVAL.

(1) THE INSTALLATION AND/OR ADJUSTMENT OF THE DRAINAGE SYSTEM, THE INSTALLATION OF THE EARTH BERMS.

(2) THE INSTALLATION OF LEAN CONCRETE BASE, CONCRETE PAVING, COLORED CONCRETE SHOULDERS, SAFETY SHAPE BARRIERS, CONCRETE BARRIERS, NOISE WALLS.

(3) THE INSTALLATION OF GUARDRAIL, SIGNING, SIGNALS, PAVEMENT MARKINGS, LIGHTING.

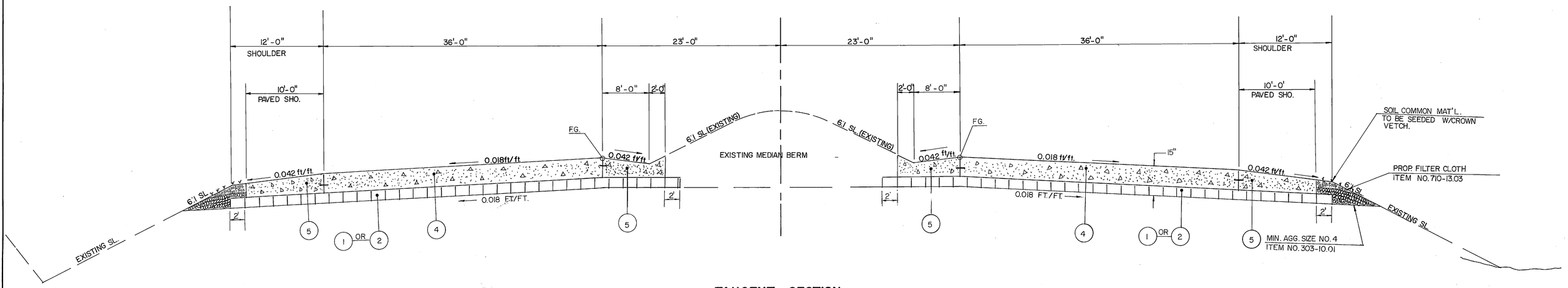
(4) THE REMOVAL OF EXISTING CHAIN LINK FENCE AND THE INSTALLATION OF PROPOSED CHAIN LINK FENCE.

(5) THE LANDSCAPING WORK AS SHOWN ON THE PLANS SHALL BE THE LAST ORDER OF WORK DONE ON THIS PROJECT.

STATE OF TENNESSEE
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BUREAU OF HIGHWAYS

GEN. NOTES AND SCOPE-OF-WORK

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 M



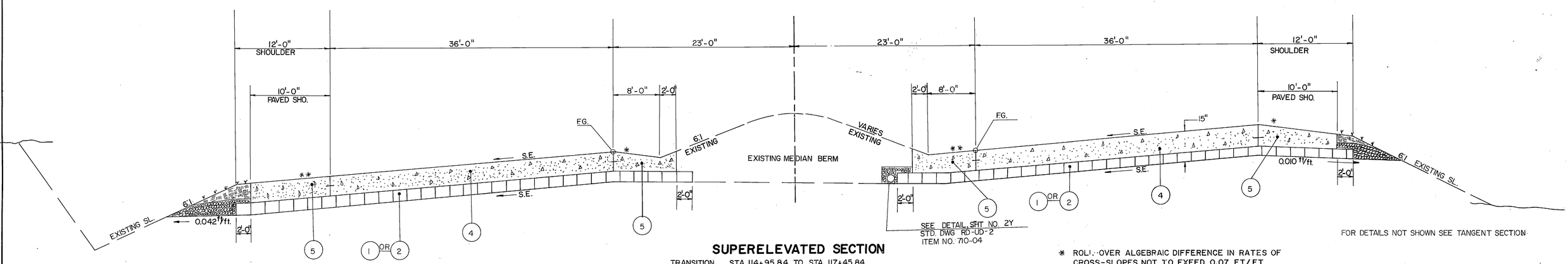
NOTE

UNDERDRAINS ARE TO BE TIED TO EXISTING OR PROPOSED DRAINAGE STRUCTURES, OR TURNED OUT TO ROADWAY DITCHES.

TANGENT SECTION

STA. 113+16.30 TO STA. 114+95.84
STA. 124+86.95 TO STA. 130+26.72

SEE SHEET NO. 2V FOR PROPOSED PAVEMENT SCHEDULE



SUPERELEVATED SECTION

TRANSITION	STA. 114+95.84	TO STA. 117+45.84
	STA. 117+45.84	TO STA. 122+36.95
TRANSITION	STA. 122+36.95	TO STA. 124+86.95
TRANSITION	STA. 130+26.72	TO STA. 133+26.72

* ROLL-OVER ALGEBRAIC DIFFERENCE IN RATES OF CROSS-SLOPES NOT TO EXEED 0.07 FT./FT.

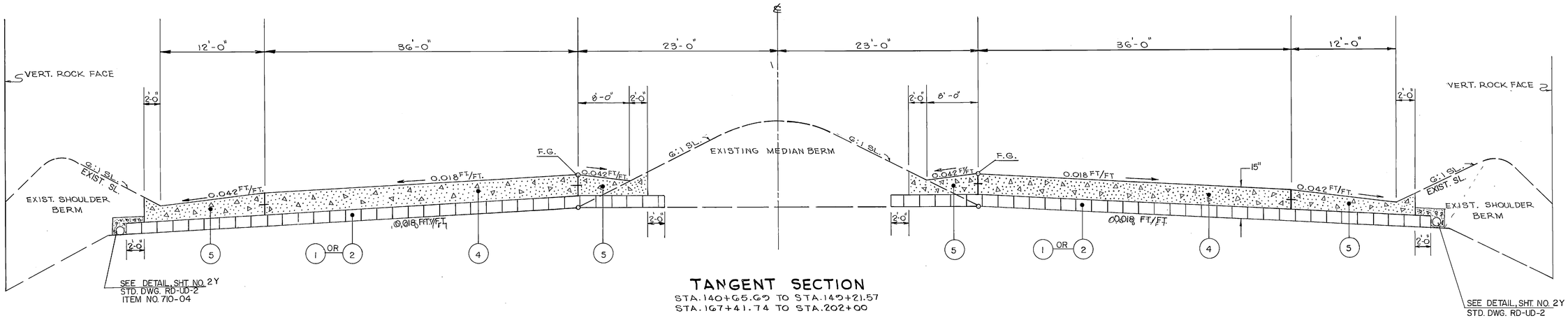
** SHOULDER SLOPE ON LOW SIDE EQUALS S.E. WHEN S.E. IS GREATER THAN NORMAL SHOULDER SLOPE.

FOR DETAILS NOT SHOWN SEE TANGENT SECTION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 N



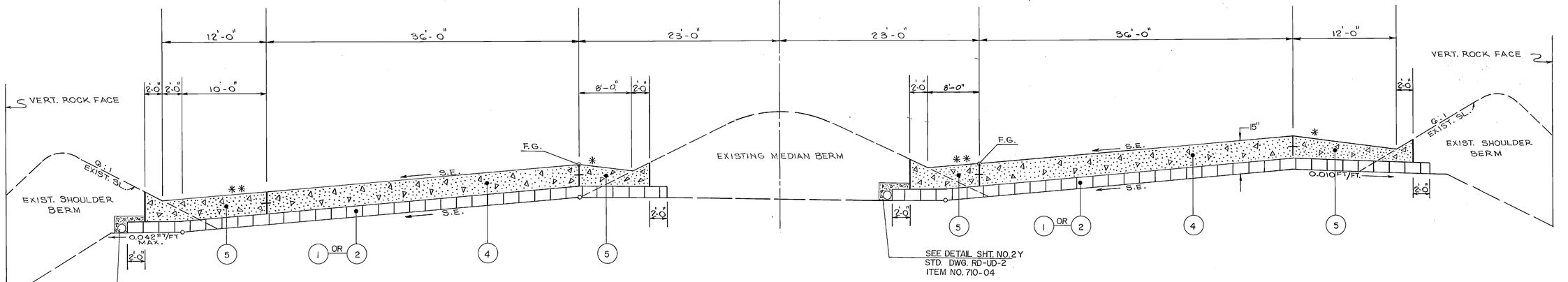
TANGENT SECTION

STA. 140+65.69 TO STA. 145+21.57
STA. 167+41.74 TO STA. 202+00

NOTE

UNDERDRAINS ARE TO BE TIED TO EXISTING OR PROPOSED DRAINAGE STRUCTURES, OR TURNED OUT TO ROADWAY DITCHES.

SEE SHEET NO. 2V FOR PROPOSED PAVEMENT SCHEDULE



SUPERELEVATED SECTION

	STA. 133+26.72	TO STA. 137+65.69
TRANS.	STA. 137+65.69	TO STA. 140+65.69
TRANS.	STA. 149+21.57	TO STA. 152+71.57
	STA. 152+71.57	TO STA. 163+91.74
TRANS.	STA. 163+91.74	TO STA. 167+41.74

* ROLL-OVER ALGEBRAIC DIFFERENCE IN RATES OF CROSS-SLOPES NOT TO EXCEED 0.07 FT./FT.

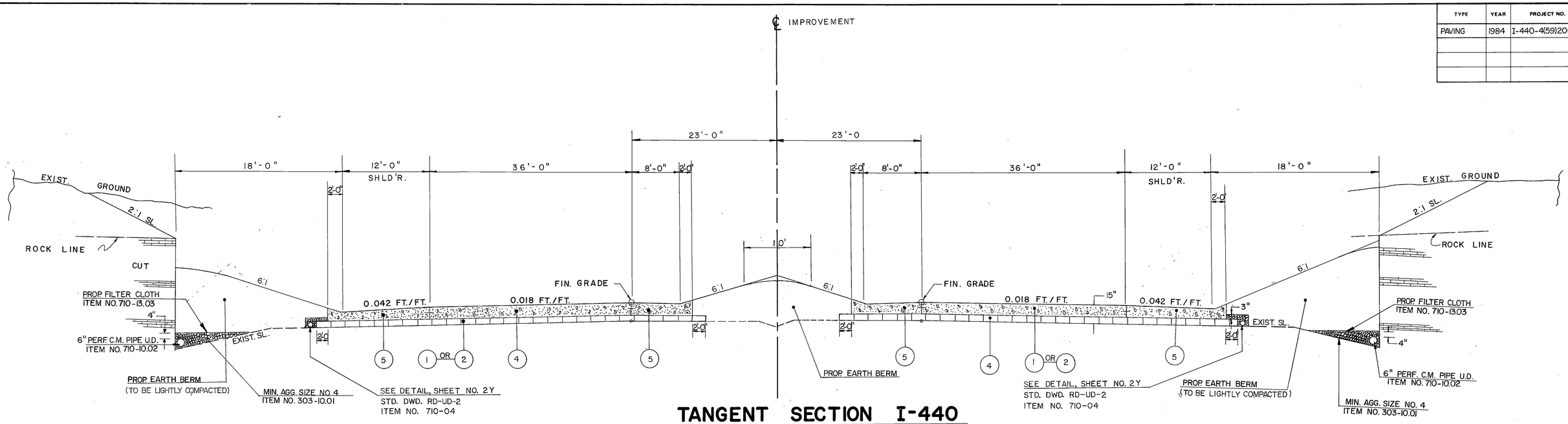
** SHOULDER SLOPE ON LOW SIDE EQUALS S.E. WHEN S.E. IS GREATER THAN NORMAL SHOULDER SLOPE.

FOR DETAILS NOT SHOWN SEE TANGENT SECTION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2ϕ

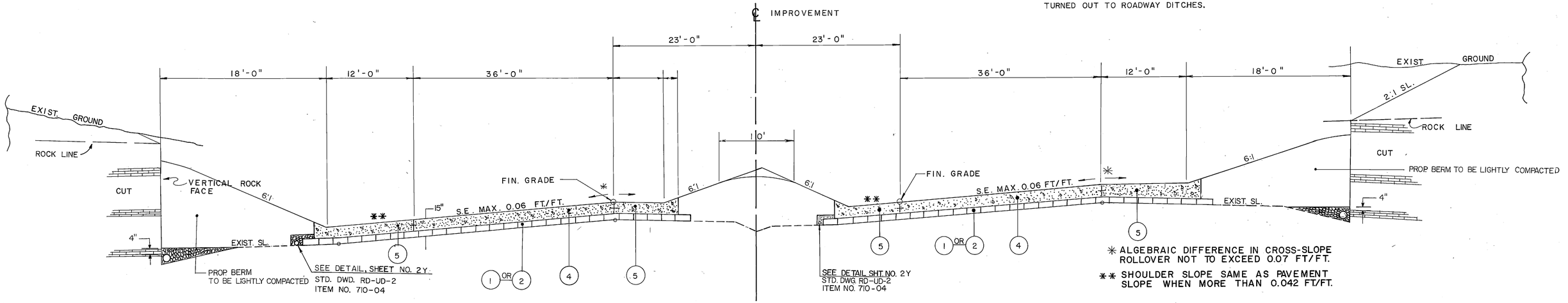


TANGENT SECTION I-440

STA. 202+00 TO 212+42.08
STA. 262+50 TO 265+50
STA. 285+12.38 TO 290+42.36

NOTE
UNDERDRAINS ARE TO BE TIED TO EXISTING OR PROPOSED DRAINAGE STRUCTURES, OR TURNED OUT TO ROADWAY DITCHES.

SEE SHEET NO 2V FOR PROPOSED PAVEMENT SCHEDULE



SUPERELEVATED SECTION I-440

STA. 212+42.08 TO 218+50
STA. 265+50 TO 285+12.38
STA. 290+42.36 TO 300+34.32

* ALGEBRAIC DIFFERENCE IN CROSS-SLOPE ROLLOVER NOT TO EXCEED 0.07 FT/FT.

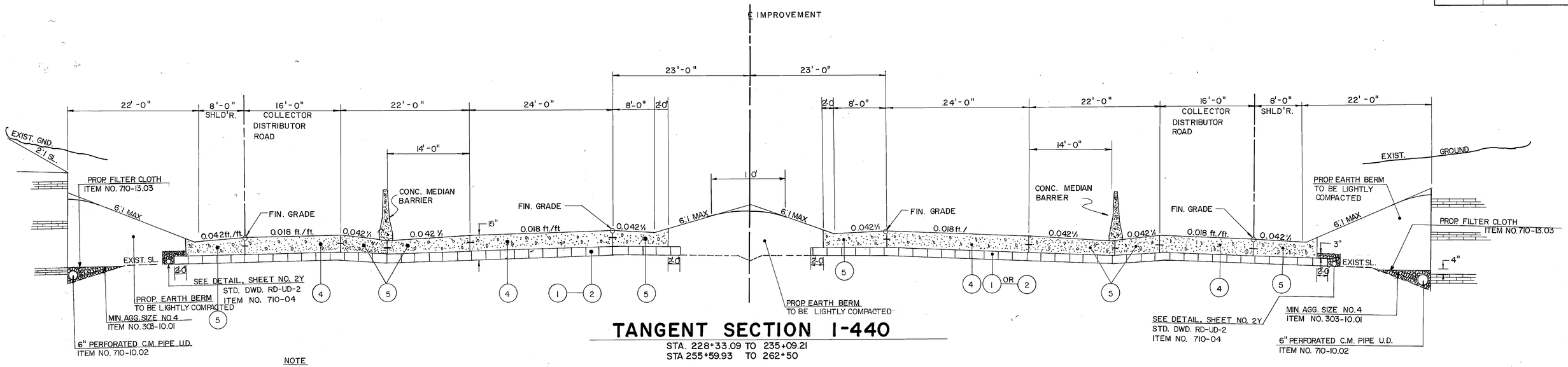
** SHOULDER SLOPE SAME AS PAVEMENT SLOPE WHEN MORE THAN 0.042 FT/FT.

FOR DETAILS NOT SHOWN SEE TANGENT SECTION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 P



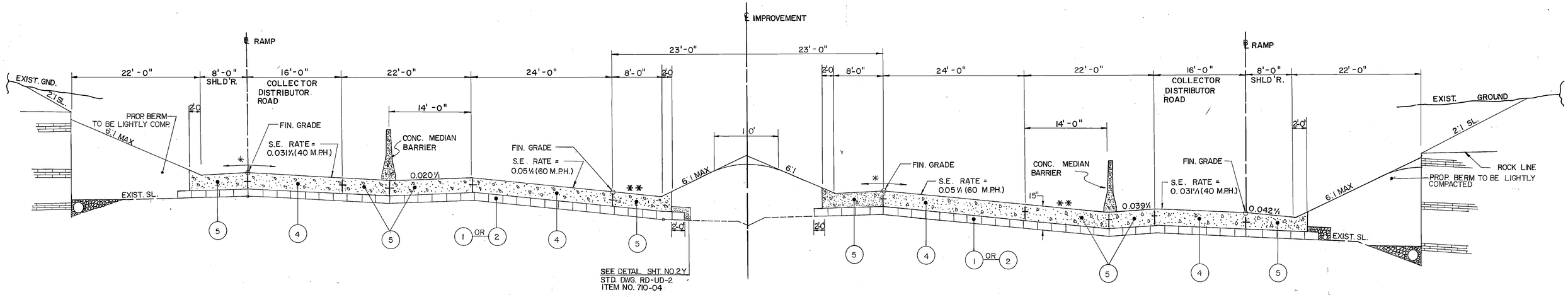
TANGENT SECTION I-440

STA. 228+33.09 TO 235+09.21
STA 255+59.93 TO 262+50

NOTE

UNDERDRAINS ARE TO BE TIED TO EXISTING OR PROPOSED DRAINAGE STRUCTURES, OR TURNED OUT TO ROADWAY DITCHES.

SEE SHEET NO. 2V FOR PROPOSED PAVEMENT SCHEDULE



SUPERELEVATED SECTION I-440

STA. 235+09.21 TO 255+59.93

FOR DETAILS NOT SHOWN SEE TANGENT SECTION

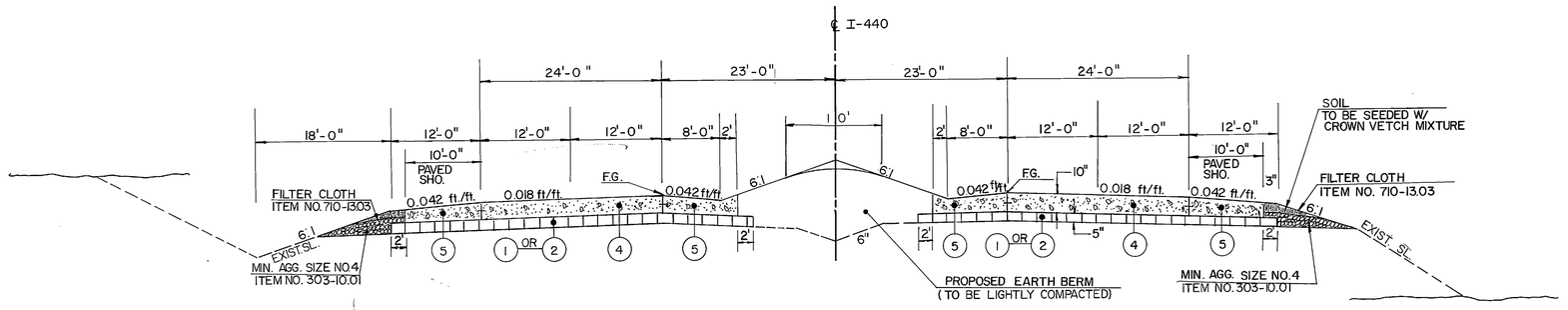
* ALGEBRAIC DIFFERENCE IN CROSS-SLOPE ROLLOVER NOT TO EXCEED 0.07 ft./ft.

** SHOULDER SLOPE SAME AS PAVEMENT SLOPE WHEN MORE THAN 0.042 ft./ft.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 Q

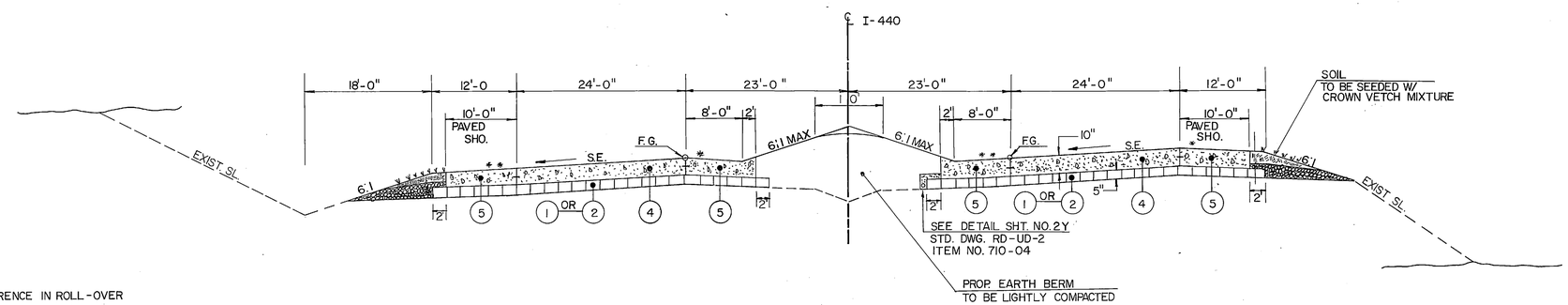


TANGENT SECTION
(I-440)

STA. 300+34.32 TO STA. 303+00
STA. 303+00 TO STA. 333+95.47

NOTE
UNERDRAINS ARE TO BE TIED TO EXISTING OR PROPOSED DRAINAGE STRUCTURES, OR TURNED OUT TO ROADWAY DITCHES.

SEE SHEET NO. 2 V FOR PROPOSED PAVEMENT SCHEDULE



SUPERELEVATED SECTION
(I-440)

STA. 333+45.97 TO END OF PROJECT

* ALGEBRIC DIFFERENCE IN ROLL-OVER SHALL NOT EXCEED 0.07 ft./ft.

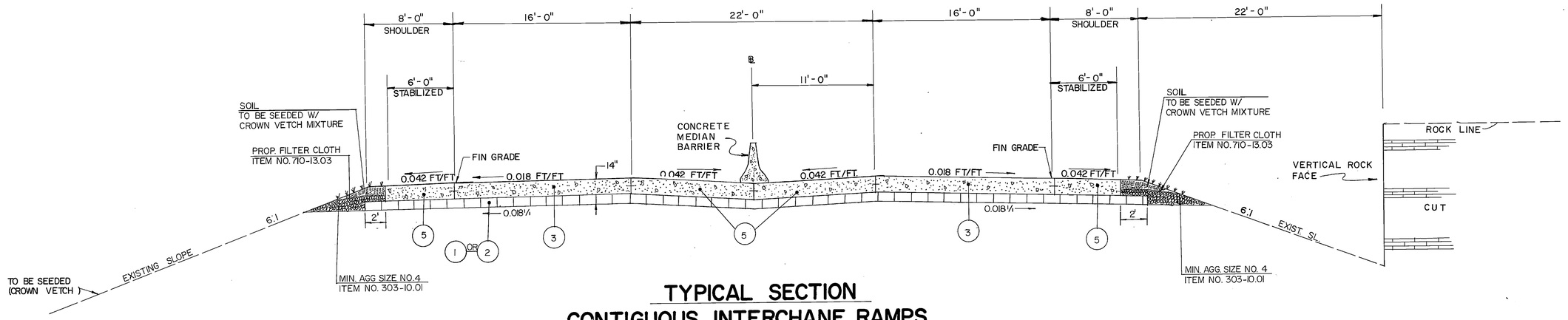
** SHOULDER SLOPE ON LOW SIDE EQUALS S.E. WHEN S.E. EXCEEDS 0.042 ft./ft.

FOR DETAILS NOT SHOWN SEE TANGENT SECTION.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TYPICAL SECTIONS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 R



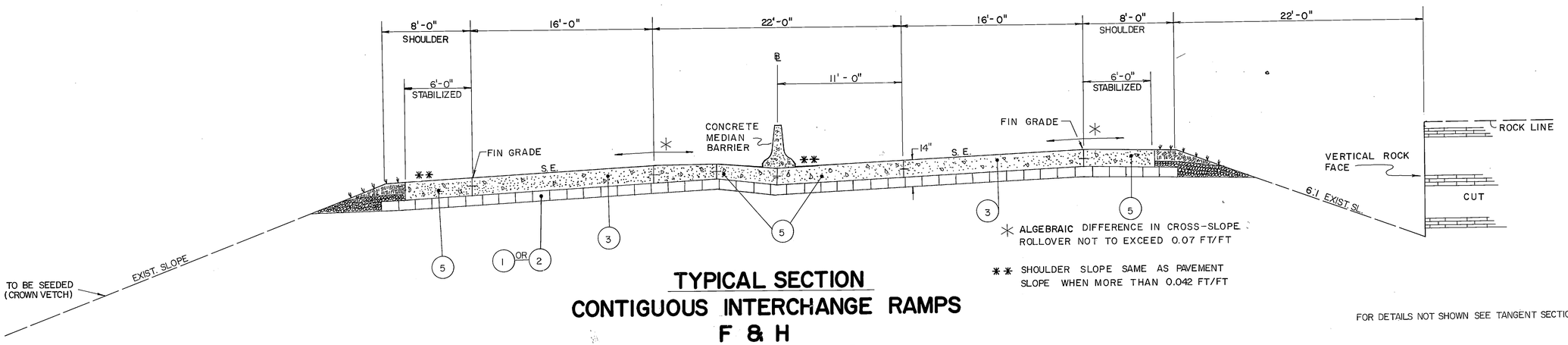
TYPICAL SECTION
CONTIGUOUS INTERCHANE RAMPS "F" & "H" TANGENT

(LOOKING IN DIRECTION OF TRAFFIC FLOW)

NOTE

UNDERDRAINS ARE TO BE TIED TO EXISTING OR PROPOSED DRAINAGE STRUCTURE, OR TURNED OUT TO ROADWAY DITCHES.

SEE SHEET NO. 2V FOR PROPOSED PAVEMENT SCHEDULE



TYPICAL SECTION
CONTIGUOUS INTERCHANGE RAMPS F & H SUPERELEVATED

✳ ALGEBRAIC DIFFERENCE IN CROSS-SLOPE ROLLOVER NOT TO EXCEED 0.07 FT/FT

✳✳ SHOULDER SLOPE SAME AS PAVEMENT SLOPE WHEN MORE THAN 0.042 FT/FT

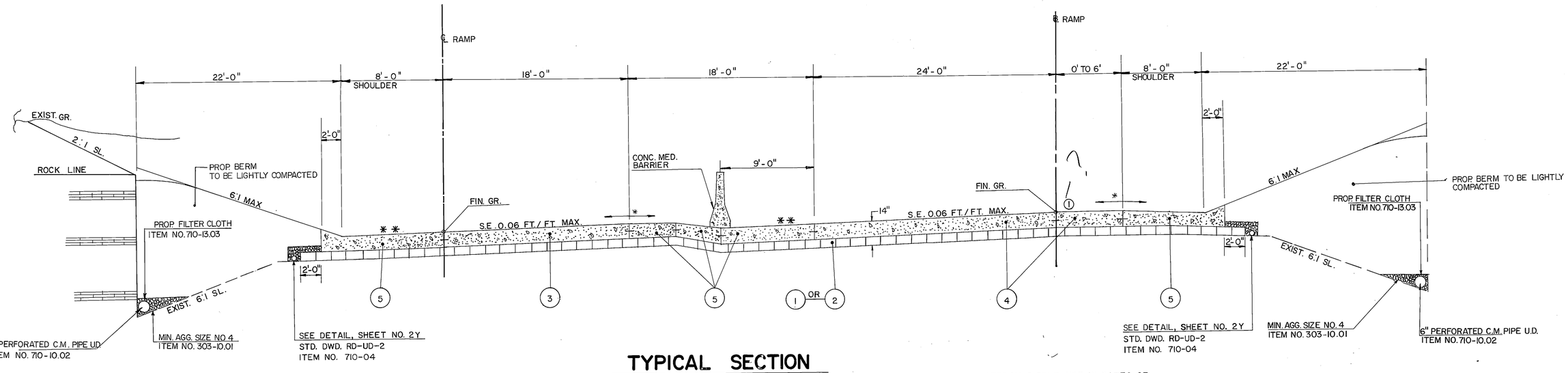
FOR DETAILS NOT SHOWN SEE TANGENT SECTION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TYPICAL SECTIONS

USE MICROFILM

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 S



TYPICAL SECTION

CONTIGUOUS INTERCHANGE RAMPS
RAMP - "B" & "BB"
RAMP - "D" & "DD"
(HILLSBORO R.D. INTERCHANGE)

* ROLL-OVER ALGEBRAIC DIFFERENCE IN RATES OF CROSS-SLOPES NOT TO EXCEED 0.07 FT./FT.

** SHOULDER SLOPE ON LOW SIDE EQUALS S.E. WHEN S.E. IS GREATER THAN NORMAL SHOULDER SLOPE.

SEE SHEE NO. 2V FOR PROPOSED PAVEMENT SCHEDULE

FOR DETAILS NOT SHOWN SEE TANGENT SECTION

NOTE

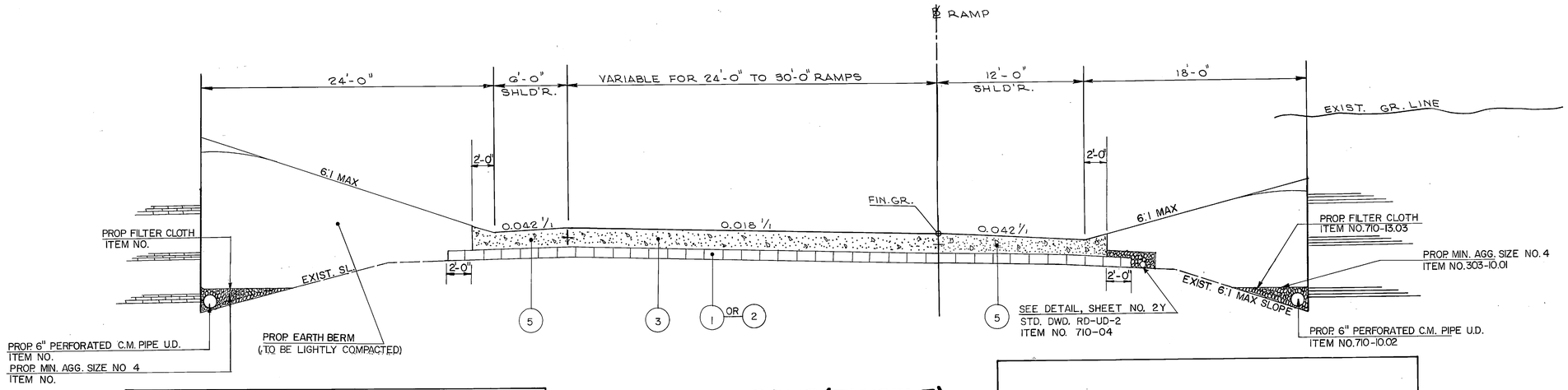
UNDERDRAINS ARE TO BE TIED TO EXISTING OR PROPOSED DRAINAGE STRUCTURES, OR TURNED OUT TO ROADWAY DITCHES.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

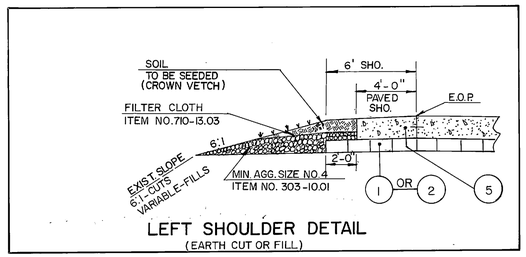
TYPICAL SECTIONS

TELEDYNE POST N2937

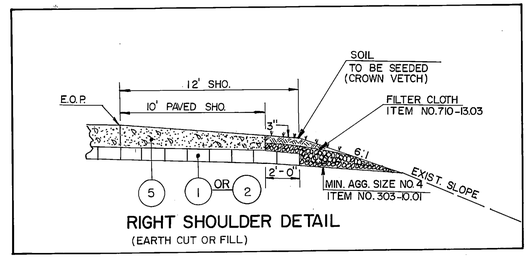
TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 U



MULTI-LANE RAMP (TANGENT)



LEFT SHOULDER DETAIL
(EARTH CUT OR FILL)

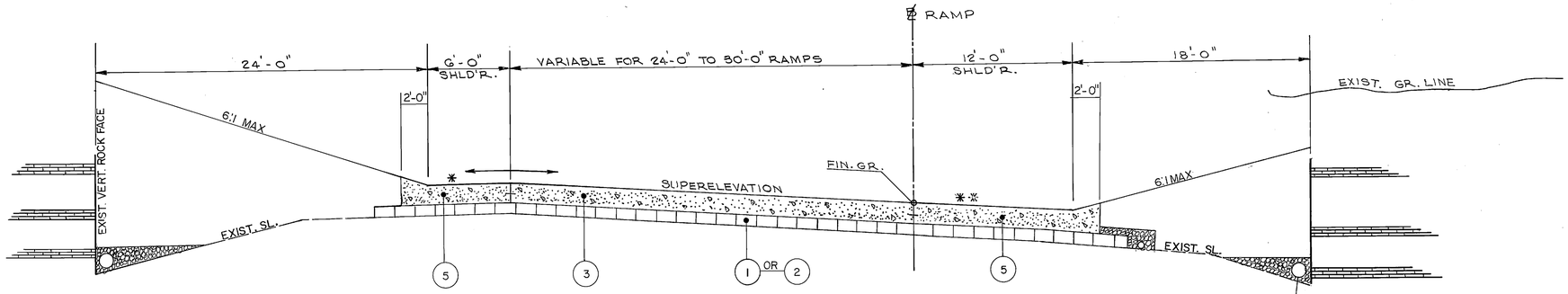


RIGHT SHOULDER DETAIL
(EARTH CUT OR FILL)

SEE SHEET NO. 2V FOR PROPOSED PAVEMENT SCHEDULE.

NOTE

UNDERDRAINS ARE TO BE TIED TO EXISTING OR PROPOSED DRAINAGE STRUCTURES, OR TURNED OUT TO ROADWAY DITCHES.



* ROLL-OVER ALGEBRAIC DIFFERENCE IN RATES OF CROSS-SLOPES NOT TO EXCEED 0.07 FT./FT.

** SHOULDER SLOPE ON LOW SIDE EQUALS S.E. WHEN S.E. IS GREATER THAN NORMAL SHOULDER SLOPE.

MULTI-LANE RAMP (S.E. RIGHT)

(LOOKING IN DIRECTION OF TRAFFIC FLOW)

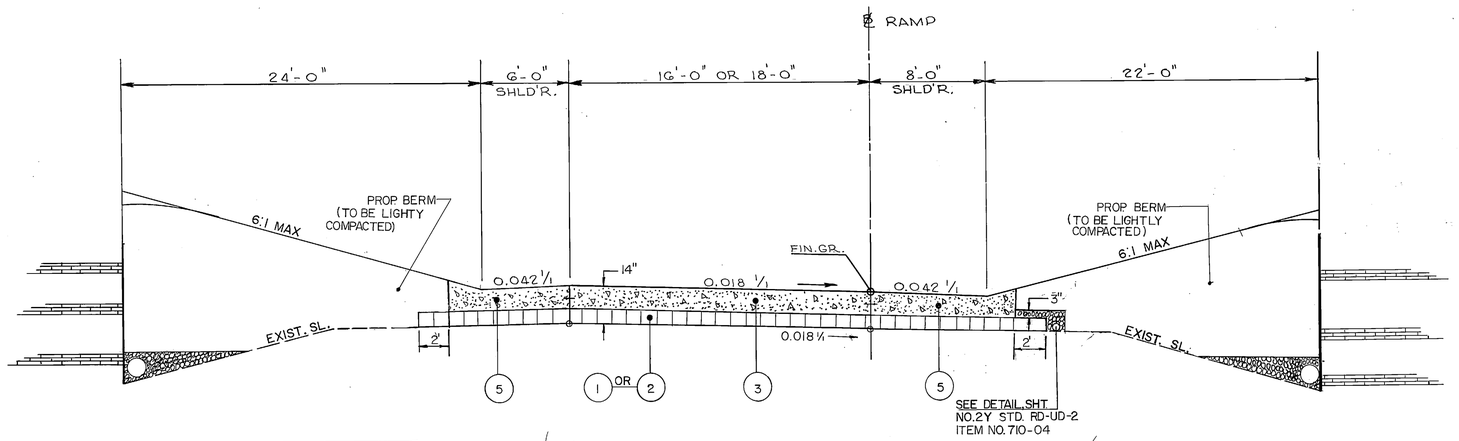
FOR DETAILS NOT SHOWN SEE TANGENT SECTION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

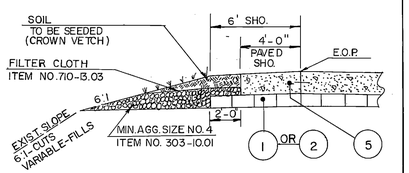
TYPICAL SECTIONS
I-440
RAMPS

TELEDYNE POST N2522

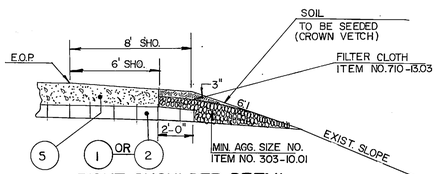
TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 T



SINGLE LANE RAMP (TANGENT)



LEFT SHOULDER DETAIL
(EARTH CUT OR FILL)

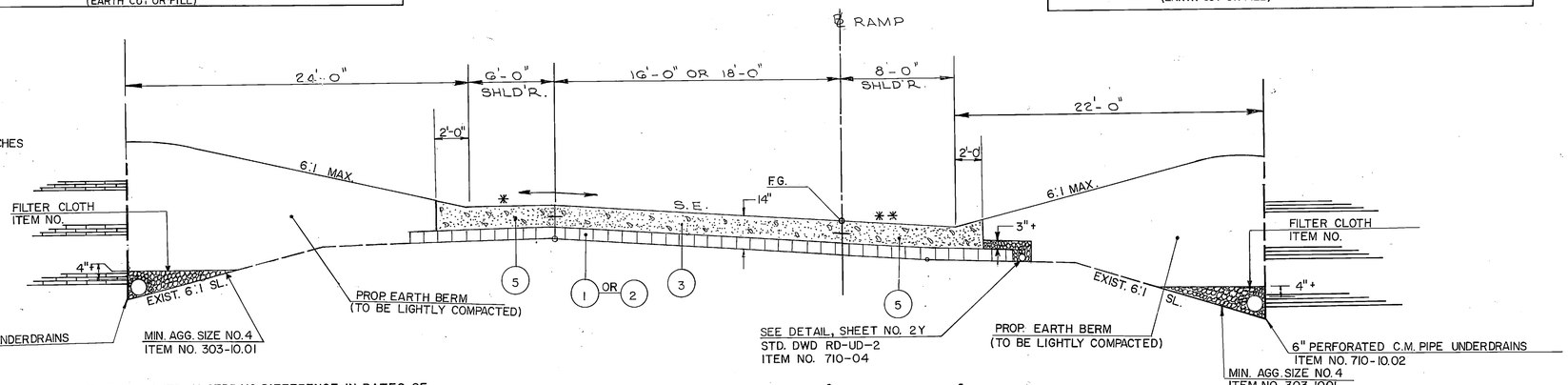


RIGHT SHOULDER DETAIL
(EARTH CUT OR FILL)

SEE SHEET NO. 2V FOR PROPOSED PAVEMENT SCHEDULE.

NOTE

UNDERDRAINS ARE TO BE TIED TO EXISTING OR PROPOSED DRAINAGE STRUCTURES, OR TURNED OUT TO ROADWAY DITCHES



* ROLL-OVER ALGEBRAIC DIFFERENCE IN RATES OF CROSS-SLOPES NOT TO EXCEED 0.07 FT./FT.

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SINGLE LANE RAMP (S.E. RIGHT)

(LOOKING IN DIRECTION OF TRAFFIC FLOW)

FOR DETAILS NOT SHOWN SEE TANGENT SECTION

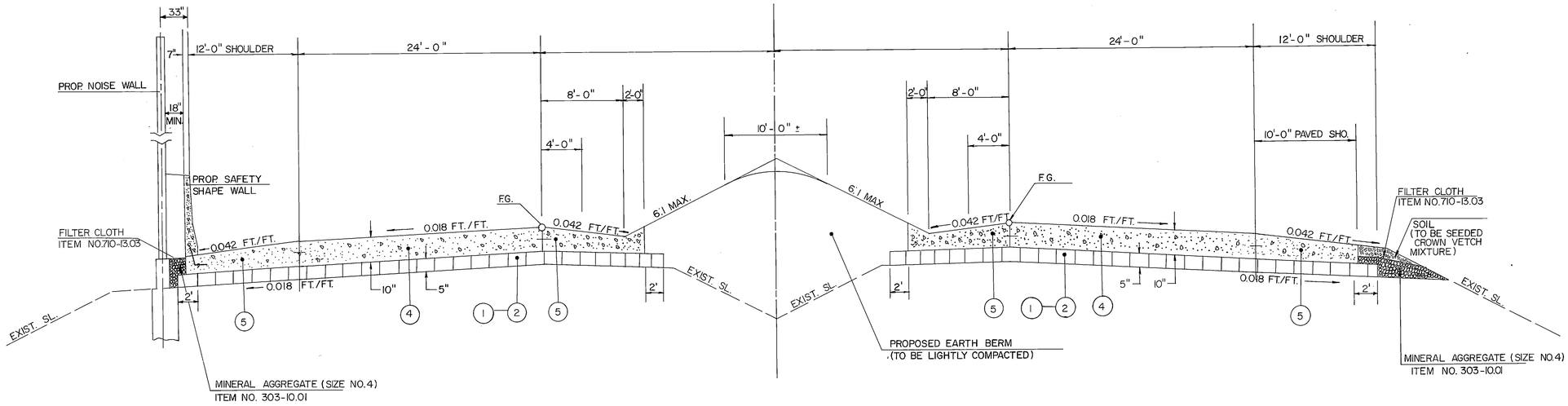
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TYPICAL SECTIONS
I-440
RAMPS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 V

SEE SHEET NO. 2W AND DWG. NO. M-119-163 FOR DETAILS OF SAFETY SHAPE WALL.

— NOTE —
THIS SIDE OF TYPICAL APPLIES TO ALL FILL SECTIONS WHERE NOISE WALLS ARE LOCATED AT EDGE OF SHOULDER. SEE LAYOUT SHEETS FOR EXACT LOCATIONS.



MAIN LINE (TANGENT)

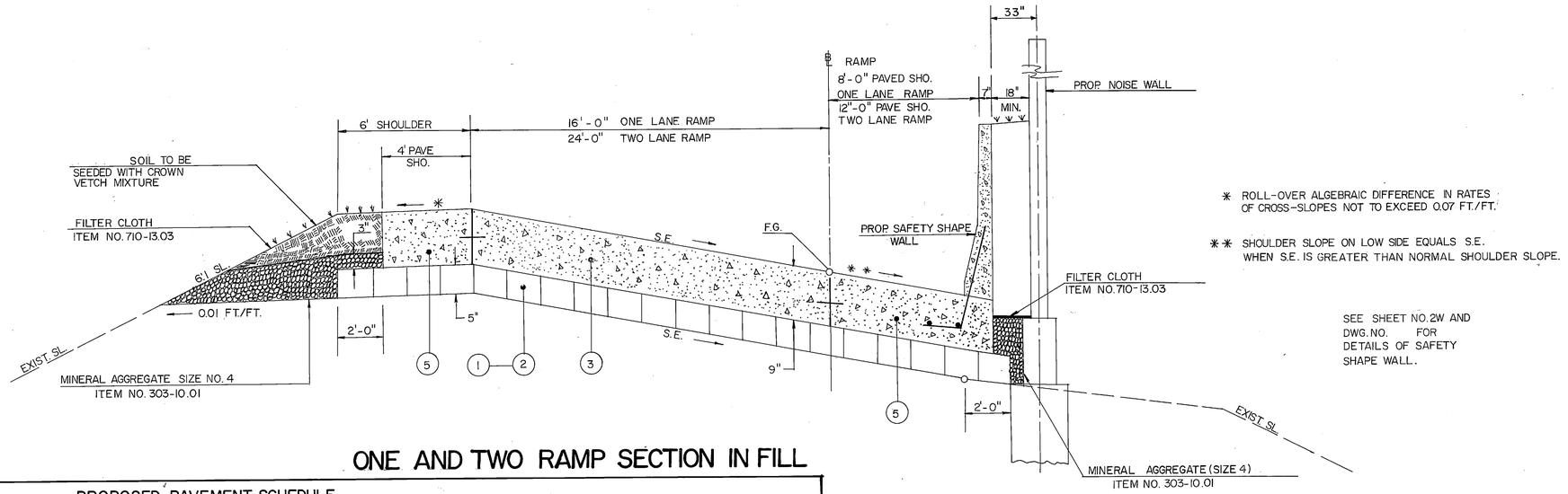
LIMITS ?

PIPE UNDERDRAINS SHALL BE TIED TO CATCH BASINS OR TURNED OUT TO ROADWAY DITCHES.

AFTER MATERIAL FOR BERMS IS PLACED, IT SHALL BE SHAPED AND ROLLED UNTIL IT IS UNYIELDING.

— NOTE —
SEE LANDSCAPING PLANS FOR FINAL SEEDING, PLANTINGS, ETC. FOR MEDIAN, AREAS AND SIDE SLOPES.

SEE SHEET NO. 2V FOR PROPOSED PAVEMENT SCHEDULE.



* ROLL-OVER ALGEBRAIC DIFFERENCE IN RATES OF CROSS-SLOPES NOT TO EXCEED 0.07 FT./FT.

** SHOULDER SLOPE ON LOW SIDE EQUALS S.E. WHEN S.E. IS GREATER THAN NORMAL SHOULDER SLOPE.

SEE SHEET NO. 2W AND DWG. NO. FOR DETAILS OF SAFETY SHAPE WALL.

ONE AND TWO RAMP SECTION IN FILL

PROPOSED PAVEMENT SCHEDULE

(1) AGGREGATE-LIME-FLY ASH STABILIZED BASE (5" ±) (ALT. 'A') 312-01 MINERAL AGGREGATE (ALFSB) 312-02 LIME (3½ %) 312-03 FLY ASH (11%) 312-04 BITUMINOUS MATERAL (ALFSB)	(4) CONCRETE SURFACE 501-01.03 PORTLAND CEMENT CONCRETE PAVEMENT (PLAIN) 10" THICK
(2) BASE (ALT. 'B') 305-02 LEAN CONCRETE BASE (L.C.B.) 5" THICK	(5) CONCRETE SHOULDER 501-03.01 COLORED CONCRETE SHOULDERS
(3) CONCRETE SURFACE 501-01.02 PORTLAND CEMENT CONCRETE PAVEMENT (PLAIN) 9" THICK	

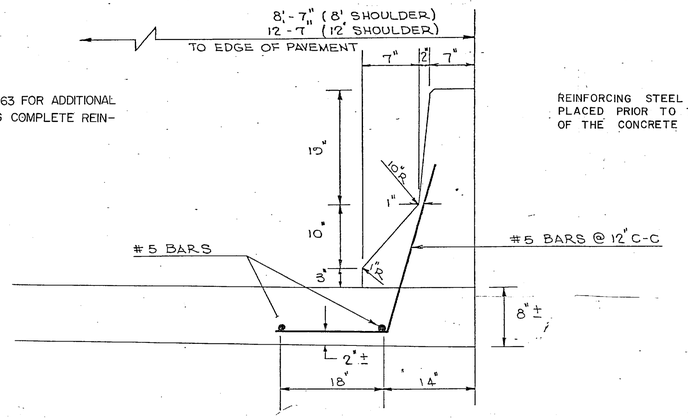
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

TYPICAL SECTIONS

TELEFILM 1051 N2037

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 W

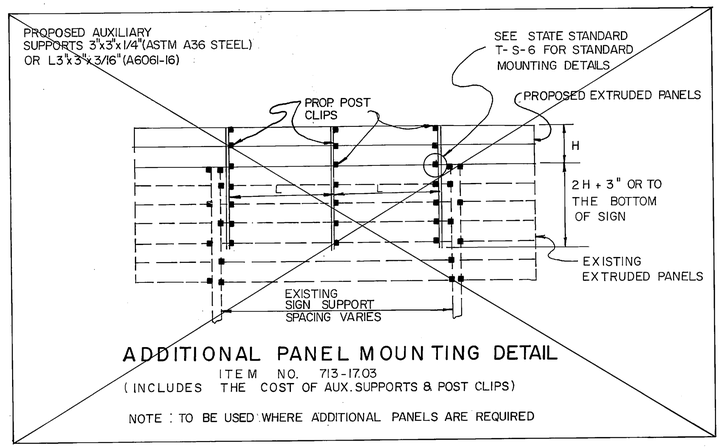
REV. 8-1-86; ADDITIONAL PANEL MOUNTING DETAIL DELETED.



SEE DWG. M-119-163 FOR ADDITIONAL DETAILS, INCLUDING COMPLETE REINFORCING DETAILS

REINFORCING STEEL SHALL BE PLACED PRIOR TO THE PLACING OF THE CONCRETE FOR SHOULDERS.

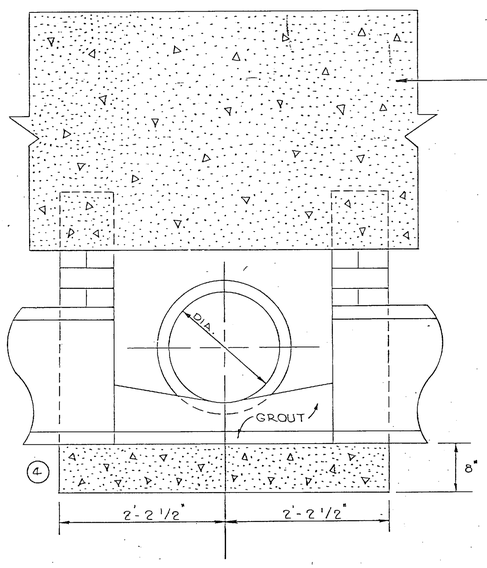
DETAIL OF SAFETY SHAPE WALL TO BE BUILT IN CONJUNCTION WITH NOISE WALLS



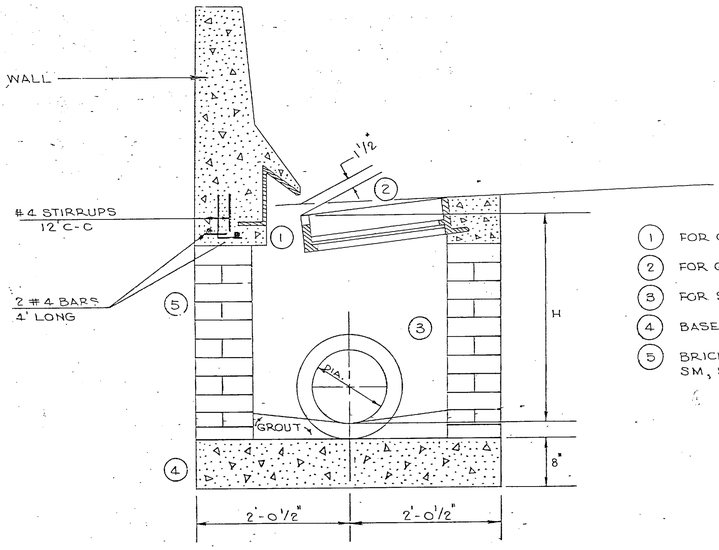
ADDITIONAL PANEL MOUNTING DETAIL

ITEM NO. 713-17.03
(INCLUDES THE COST OF AUX. SUPPORTS & POST CLIPS)

NOTE : TO BE USED WHERE ADDITIONAL PANELS ARE REQUIRED



FRONT VIEW



SIDE VIEW

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

DETAIL OF TYPE 1 CATCH BASIN

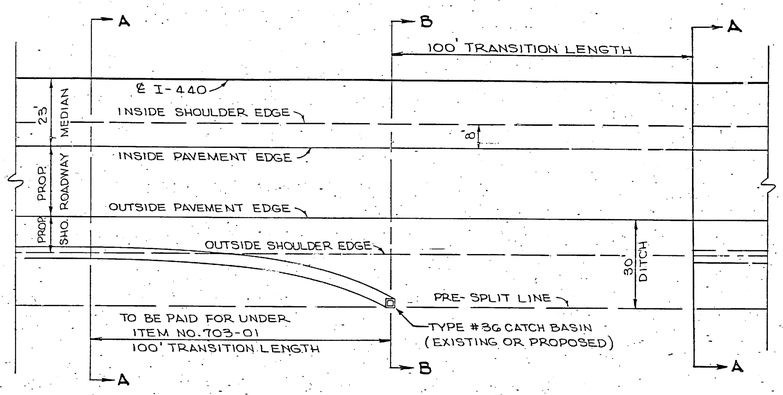
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

MISC. DETAILS

T...	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2X

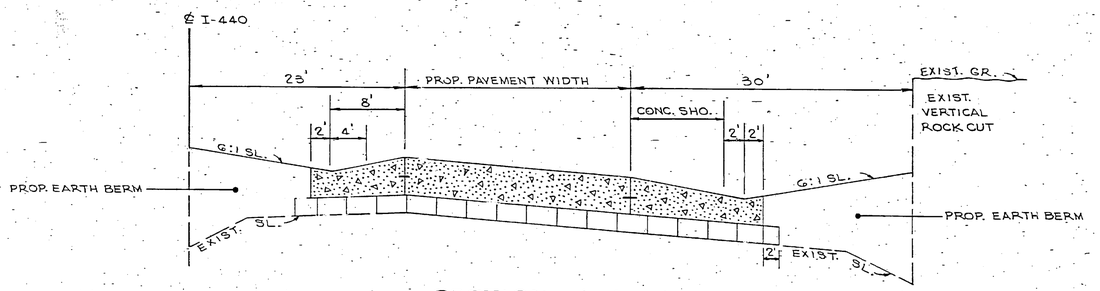
REV. 4-4-84: DETAIL FOR SEALING JOINTS ADDED.

REV. 8-31-84: CHANGED SPECIAL PROVISION NUMBER AND TITLE IN JOINT DETAIL.

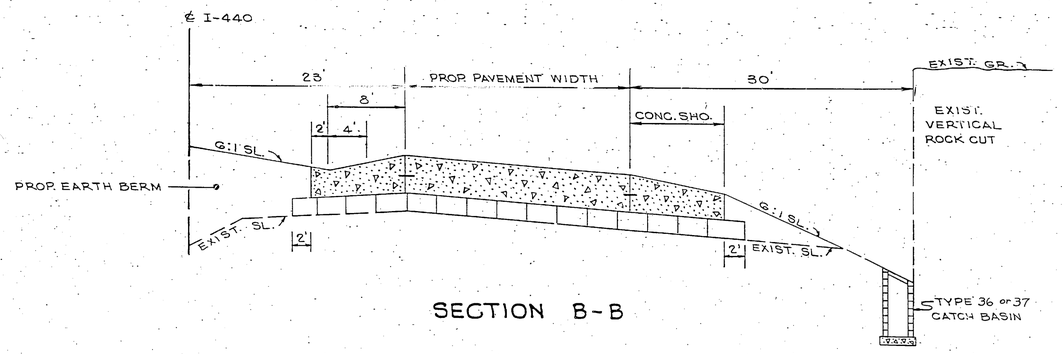


PLAN VIEW

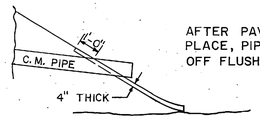
CONCRETE DITCH TRANSITION



SECTION A-A

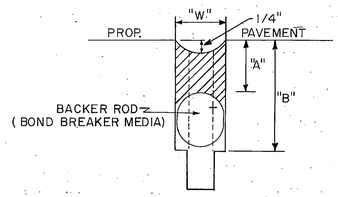


SECTION B-B



AFTER PAVED DITCH IS IN PLACE, PIPE IS TO BE CUT OFF FLUSH WITH DRAIN.

SKETCH SHOWING HOW PAVED DITCH IS USED IN LIEU OF ENDWALLS



LONGITUDINAL AND TRANSVERSE CONSTRUCTION AND CONTRACTION JOINT DETAIL

LONGITUDINAL & TRANSVERSE JOINT DIMENSIONS				
SILICONE SEALANT				
JOINT SPACING	JOINT WIDTH	BACKER ROD DIAMETER	BACKER ROD PLACEMENT DEPTH	MINIMUM JOINT DEPTH
FT.	"W"	"W"+1/8"	"A"	"B"
20 OR LESS	3/8"	1/2"	1/2"	1 1/4"
21-30	1/2"	5/8"	1/2"	1 1/4"

(1) SECOND CUT SHALL BE TO DEPTH AND WIDTH GIVEN IN TABLE

(2) BOTH CUTS MAY BE MADE AT SAME TIME AT CONTRACTOR'S OPTION.

CONCRETE SLAB JOINT DETAILS
(SILICONE)

(APPLIES TO CONCRETE PAVEMENT AND CONCRETE SHOULDERS)

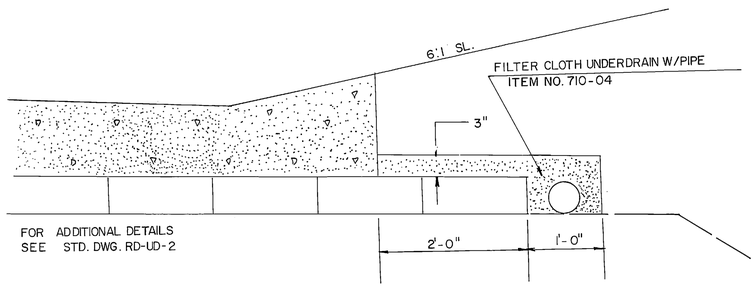
SEE SPECIAL PROVISION 501E

905A

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

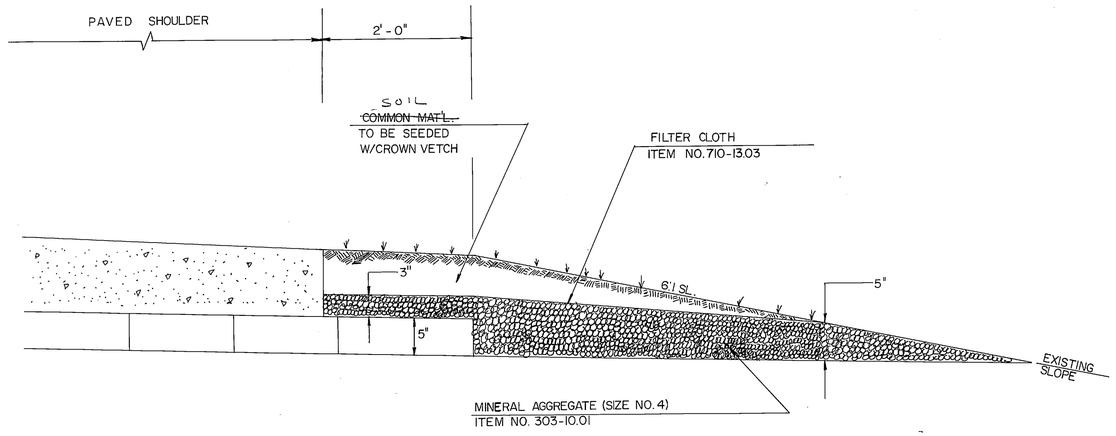
MISC. DETAILS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 Y



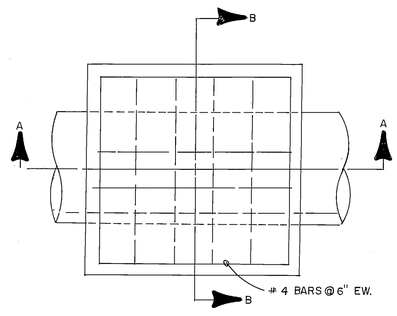
DETAIL OF UNDERDRAIN

(SEE TYPICAL SECTIONS FOR LOCATIONS)



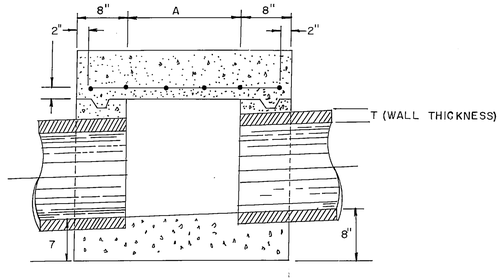
DETAIL OF UNDERDRAIN IN FILL OR EARTH CUT

(SEE TYPICAL SECTIONS FOR LOCATIONS)

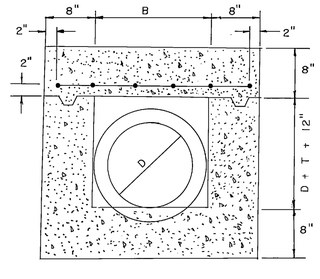


PIPE SIZE	DIMENSION	CLASS A CONCRETE		STEEL REINFORCEMENT
		ENTIRE STRUCTURE	DEDUCT FOR EACH PIPE OPENING	
	A OR B	CUBIC	YARD	POUND
18"	2'-6"	1.5	0.1	37
24"	3'-0"	2.0	0.2	48
30"	3'-6"	2.5	0.2	60
36"	4'-0"	3.2	0.3	73
42	4'-6"	3.9	0.3	88
48"	5'-0"	4.7	0.4	104
54"	5'-6"	6.3	0.4	132
60"	6'-6"	7.9	0.5	160

THE STRUCTURES SHALL BE CONSTRUCTED TO ACCOMMODATE THE LARGEST SIZE PIPE INSTALLED WITHIN THE A OR B DIMENSIONS TO BE PAID FOR UNDER ITEM. 604-01.01 & 604-01.02



SECTION 'A-A'



SECTION 'B-B'

JUNCTION BOX DETAIL

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

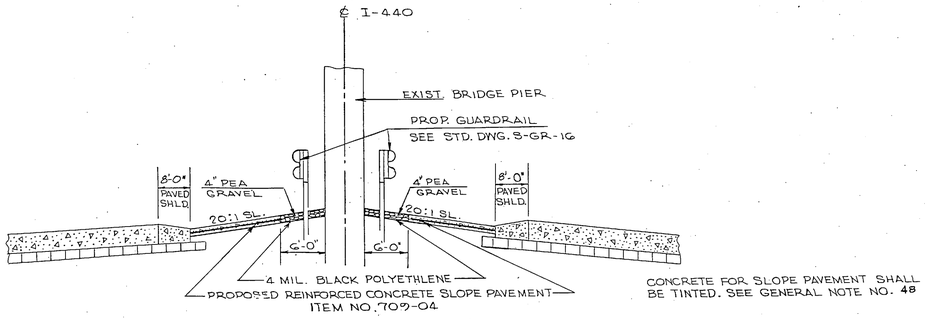
MISC. DETAILS

TELEPOST N29527

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	2 Z

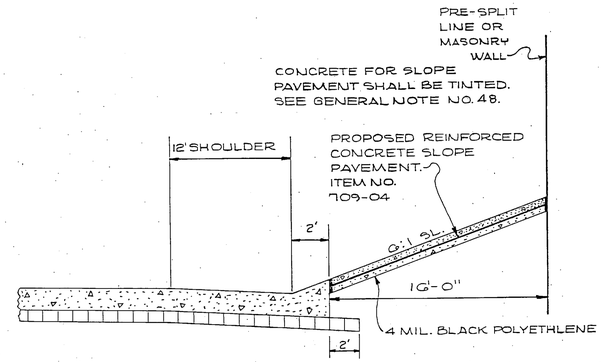
NOTE : COSTS OF PEA GRAVEL AND BLACK POLYETHYLENE ARE TO BE INCLUDED IN ITEM NO. 709-04.

PAVE SLOPES UNDER BRIDGES WITH 4" THICK CEMENT CONCRETE SLAB REINFORCED WITH NO. 4 GAGE WIRE FABRIC @ 6' CENTER AND 58 LBS. PER 100 S.F. THE SLAB SHALL EXTEND THE WIDTH OF THE STRUCTURE. THE WIRE FABRIC REINFORCEMENT SHALL BE PLACED ONE-HALF THE DEPTH OF THE SLAB AND EXTEND TO WITHIN 3" OF ITS EDGE WITH A 12" OVERLAP REQUIRED ON ALL SHEETS. THE COST OF THE WIRE FABRIC REINFORCEMENT TO BE INCLUDED IN THE UNIT PRICE DID FOR ITEM 709-04, REINFORCED CONCRETE SLOPE PAVEMENT. ONE-HALF INCH PREMOULDED EXPANSION JOINTS WITHOUT LOAD TRANSFERS SHALL BE FORMED ABOUT ALL STRUCTURES AND FEATURES PROJECTING THRU, IN OR AGAINST THE SLAB. THE SLAB SHALL BE GROOVED *PARALLEL* WITH AND AT RIGHT ANGLES TO THE UNDER ROADWAY CENTER LINE AT 6' CENTER TO CENTER. DEPTH OF GROOVE TO BE NOT LESS THAN 1".

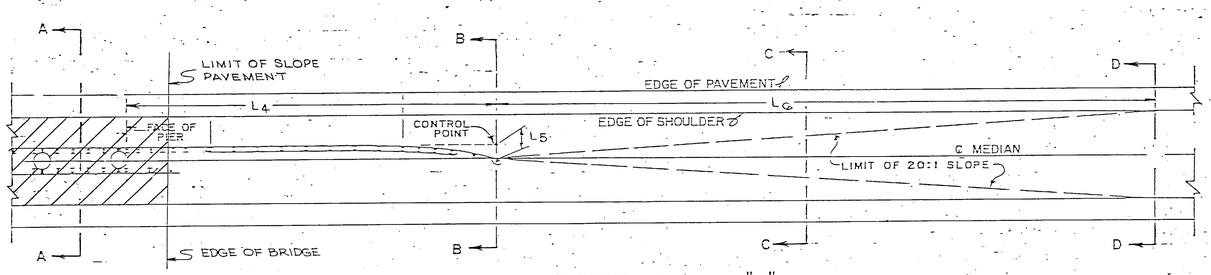


SECTION "A-A"

DETAIL OF MEDIAN TREATMENT AT BRIDGE PIERS



DETAIL OF TREATMENT BELOW BRIDGE ABUTMENTS

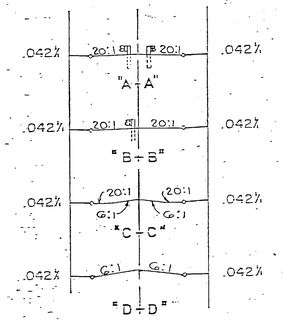


MEDIAN TREATMENT TYPE "B"

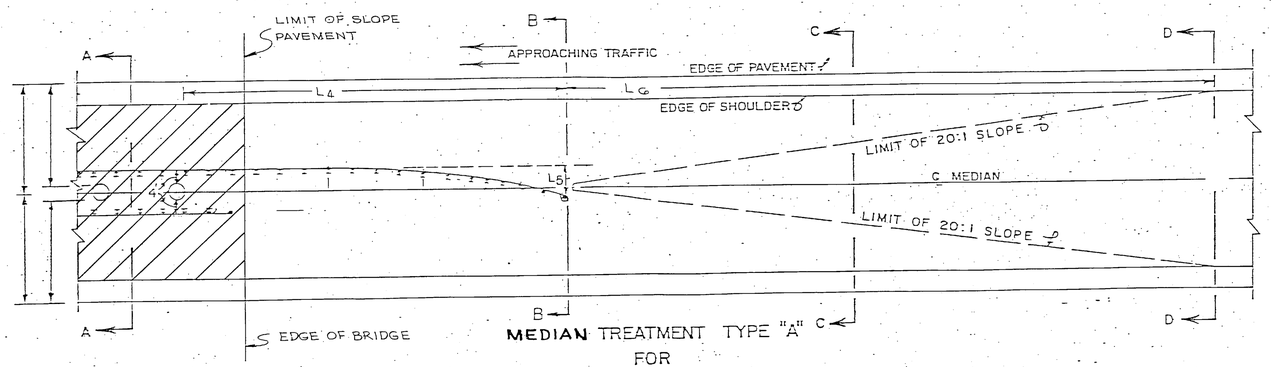
(FOR MEDIAN WIDTH > 30' < 48')

HALF TYPICAL - TREATMENT IS SAME FOR APPROACHING TRAFFIC IN OTHER DIRECTION BUT ON OPPOSITE SIDE FROM THAT AS SHOWN.

FOR DIMENSIONS SEE STD. DWG. S-GR-16



SECTIONS TYPE "B"



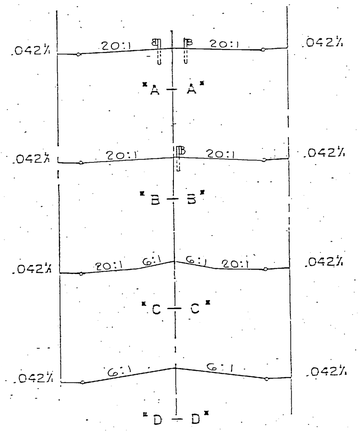
MEDIAN TREATMENT TYPE "A"

FOR

PIERS IN MEDIAN

(FOR MEDIAN WIDTH 48' TO 60' INCLUSIVE)

HALF TYPICAL - TREATMENT IS SAME FOR APPROACHING TRAFFIC IN OTHER DIRECTION BUT ON OPPOSITE SIDE FROM THAT AS SHOWN.



SECTIONS TYPE "A"

NOTE

THESE DETAILS SHALL ALSO BE USED WHERE THE VERTICAL MEMBERS OF OVERHEAD SIGN STRUCTURES ARE IN THE MEDIAN, EXCEPT THAT NO SLOPE PAVEMENT WILL BE REQUIRED. SEE PROPOSED LAYOUTS FOR LOCATIONS.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

DETAIL OF MEDIAN TREATMENT AT BRIDGE PIERS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	4

I-440

P.I. = STA.113+91.69
Δc = 5°33'30" LT.
Dc = 0°45'
T = 370.85'
Lc = 741.11'
R = 7,639.44'
E = 9.00'
SE = 0.026 FT./FT.
TRANS. LENGTH = 250'
N = 641,000.00
E = 1,757,124.66

120

125

STA. 115+00

P.C. 116+20.84

P.T. 128+61.95

STA. 130+00

SEABOARD SYSTEM R.R.

PROP A.C. FENCE

PRESPLIT LINE

V PAVE

℄ I-440

S 5°33'30" E

24" ST.

18" ST.

TYPE 13 TERMINAL ANCHOR

TYPE II ~~TERMINAL~~ ANCHOR

PRIOR G.R.

TYPE II TERMINAL ANCHOR

PRESPLIT LINE

PROP NOISE WALL 810

MATCH LINE

PROP.(6'x12') ACCESS GATE

PROP A.C. FENCE

S 0°48'25" W

ACCESS R.D. TO BOYLES GALVANIZING CO.

S 34°18'22" W

1-440 STA. 118+27.51 = ACCESS RD. TO BOYLES GALVANIZING CO. STA. 0+00 (146.50' RT. OF 1-440 ℄)

CONC. DR.

ELKINS AVE.

GOR

P.C. 6+06.19

P.T. 7+08.51

MATCH LINE

ACCESS R.D. TO BOYLES GALVANIZING CO.

P.I. = STA. 6+58.88
Δ = 33°30' RT.
D = 32°30'26"
T = 52.67'
L = 102.32'
R = 175.00'
E = 7.75'
N = 640,501.45
E = 1,756,271.73

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440
STA. 115+00 TO STA. 130+00

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	6

I-440

P.I. = STA. 158+58.67
Δ = 36° 45' 15.5"
Δc = 28° 00' 15.5"
Dc = 2° 30'
R = 2,291.83'
Ts = 937.10'
Ls = 350.00'
Lc = 1,120.17'
Θs = 4.375°
P = 2.22'
K = 174.97'
Xc = 349.80'
Yc = 8.91'
Es = 125.50'
S.E. = 0.057 FT/FT.
N = 697,165.21
E = 1,756,904.58

RAMP "B"

① P.I. STA. 0+07.83 (LT. E.P.)
Δ = 76° 08' 40"
R = 10.00'
D = 572.958°
T = 7.83'
L = 13.29'
E = 2.70'

② P.I. STA. 0+22.40 (LT. E.P.)
Δ = 13° 51' 20"
R = 75.00'
D = 76.3944°
T = 9.11'
L = 18.14'
E = 0.55'

③ P.C. STA. 0+75.16 (LT. E.P.)
Δ = 24° 40' 04"
R = 200.00'
D = 28.6479°
T = 43.73'
L = 86.11'
E = 4.73'

④ P.I. STA. 1+41.06
Δ = 62° 02' 30"
R = 230.00'
D = 24.9112°
T = 141.06'
L = 253.07'
E = 38.38'

⑤ P.I. STA. 3+10.47
Δ = 27° 51' 15"
Ac = 16° 51' 15"
Rc = 1,041.74'
Dc = 5° 30'
Ts = 358.69'
Ls = 200.00'
Lc = 306.44'
Θs = 5° 30'
P = 1.60'
K = 99.97'
Xc = 199.82'
Yc = 6.40'
Es = 33.20'
S.E. = 0.057 FT./FT.

RAMP "A"

P.I. STA. 158+58.67
Δ = 36° 45' 15.5"
Δc = 28° 00' 15.5"
Dc = 2° 30'
R = 2,291.83'
Ts = 937.10'
Ls = 350.00'
Lc = 1,120.17'
Θs = 4.375°
P = 2.22'
K = 174.97'
Xc = 349.80'
Yc = 8.91'
Es = 125.50'
S.E. = 0.057 FT./FT.
N = 697,165.23
E = 1,756,904.58

① P.I. STA. 1+17.51 (LT. E.R.)
Δ = 7° 02' 30"
R = 1909.86'
D = 3° 00'
T = 117.51'
L = 234.72'
E = 3.61'

② P.I. STA. 4+38.37 (LT. E.P.)
Δ = 3° 44' 55"
R = 1145.92'
D = 5° 00'
T = 37.50'
L = 74.97'
E = 0.61'

③ P.T. STA. 8+11.65
Δ = 7° 02' 30"
Δc = 2° 32' 30"
Dc = 3° 00'
Rc = 1909.86'
Ts = 192.58'
Ls = 150.00'
Lc = 84.72'
Θs = 2° 15'
P = 0.42'
K = 75.00'
Xc = 149.98'
Yc = 1.96'
Es = 4.10'
S.E. = 0.044 FT/FT.

④ P.I. STA. 11+40.84
Δ = 87° 08' 15"
R = 100.00'
D = 57.2958°
T = 95.13'
L = 152.08'
E = 38.21'

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440
STA. 145+00 TO STA. 160+00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	7

TENN. STANDARD Plans Appvd. TYPE IN No. 3

STANDARD

I-440
P.I. STA. 158+58.67
Δ = 36°45' 15.5"
Δc = 28°00' 15.5"
Dc = 2° 30'
R = 2,291.83'
Ts = 937.10'
Ls = 350.00'
Lc = 1,120.17'
θs = 4.375°
P = 2.22'
K = 174.27'
Xc = 342.80'
Es = 125.50'
S.E. = 0.057 FT./FT.

RAMP "H"

① P.I. STA. 4+42.18
Δ = 17°32'54"
Δc = 14°32'54"
Dc = 5°00'
Rc = 1,909.86'
Ts = 344.81'
Ls = 100.00'
Lc = 484.94'
θs = 1°30'
P = 0.22'
K = 50.00'
Xc = 99.99'
Yc = 0.87'
Es = 22.84'
L.T. = 66.67'
S.T. = 33.34'
S.E. = 0.044 FT/FT.

② P.I. STA. 11+04.66
Δ = 38°58'26"
R = 300.00'
D = 19.0986°
L = 204.07'
T = 106.16'
E = 18.23'
S.E. = 0.06 FT./FT.
TRAN. LENGTH = 110 FT.

③ Δ = 180°00'00"
R = 150.00'
D = 38.1972°
L = 471.24'
S.E. = 0.06 FT./FT.

④ P.I. STA. 17+66.77
Δ = 34°29'08"
R = 300.00
D = 19.0986°
L = 180.57'
T = 93.11'
E = 14.12'
S.E. 0.06 FT./FT.
TRANS. LENGTH = 110 FT.

RAMP "G"

② P.I. STA. 12+62.05
Δ = 10°30'
Δc = 7°30'
Dc = 5°00'
Rc = 1,909.86'
Ts = 225.51'
Ls = 100.00'
Lc = 250.00'
θs = 1°30'
P = 0.22'
K = 50.00'
Xc = 99.99'
Yc = 0.87'
Es = 8.26'
L.T. = 66.67'
S.T. = 33.34'
S.E. = 0.044 FT/FT.

③ P.I. STA. 15+61.03
Δ = 60°35'27"
R = 100.00'
D = 57.2958°
T = 58.42'
L = 105.75'
E = 15.82'

RAMP "C"

① P.I. STA. 3+89.28
Δ = 10°13'09"
D = 1°30'
R = 3,819.72'
T = 341.55'
L = 681.26'
E = 15.24'
S.E. = 0.028 FT./FT.
TRANS. LENGTH = 150 FT.

② P.I. STA. 12+02.38
Δ = 54°50.40'
D = 57.2958°
R = 100.00'
T = 52.95'
L = 95.75'
E = 12.77'

③ P.I. STA. 11+74.66
Δ = 15°16'48"
D = 44.0737°
R = 130.00'
T = 17.44'
L = 34.67'
E = 1.16'

RAMP "F"

① P.I. STA. 7+57.7'
Δ = 48°28'8"
R = 300.71'
D = 18°30'
T = 1097.23'
L = 802.57'
E = 830.40'
S.E. = 0.06 FT./FT
TRANS. LENGTH = 140 FT.

RAMP "D"

① P.I. STA. 0+33.60
Δ = 37°03.33'
D = 57.2953°
R = 100'
T = 33.60'
L = 64.88'
E = 5.45'

② P.I. STA. 4+64.18
Δ = 11°19'17"
D = 2°00'
R = 2864.79'
T = 283.04'
L = 566.06'
E = 14.04
S.E. 0.035 FT./FT.
TRANS. LENGTH = 150'

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440
STA. 160+00 TO STA. 176+00

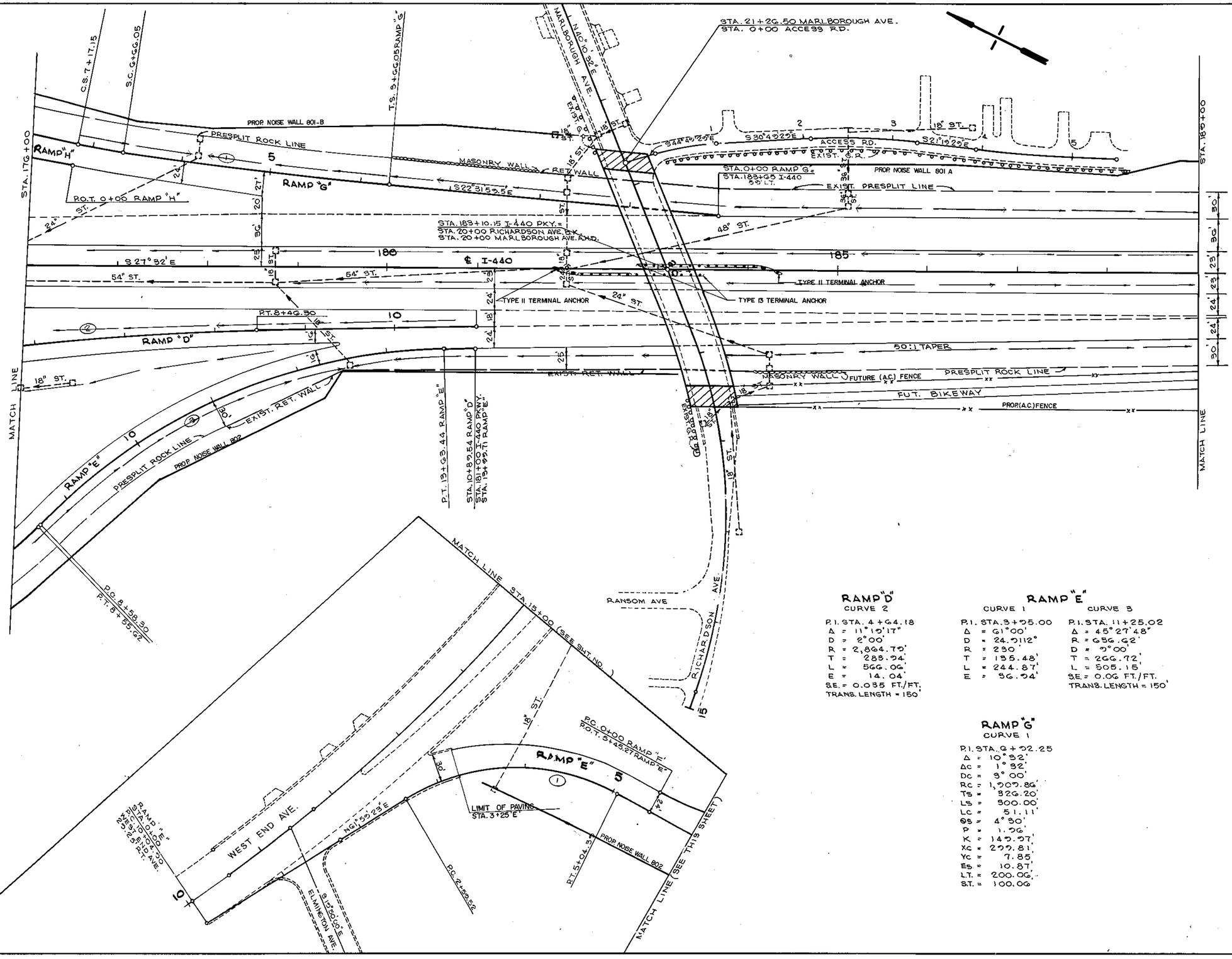
SCALE: 1" = 50

MATCH LINE STA. 15+00 (SEE SHEET NO.)

TELEVOX POST MISSA

TENN-STATE HIGHWAYS
Plans File No. IN-31
Divn.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	8



RAMP "D"
CURVE 2

P.I. STA. 4+64.18
Δ = 11° 15' 17"
D = 2° 00'
R = 2,864.79'
T = 283.94'
L = 566.06'
E = 14.04'
S.E. = 0.035 FT./FT.
TRANS. LENGTH = 150'

RAMP "E"
CURVE 1

P.I. STA. 3+25.00
Δ = 61° 00'
D = 24.9112°
R = 230'
T = 135.48'
L = 244.87'
E = 36.94'

CURVE 3

P.I. STA. 11+25.02
Δ = 45° 27' 48"
R = 636.62'
D = 9° 00'
T = 266.72'
L = 505.15'
S.E. = 0.06 FT./FT.
TRANS. LENGTH = 150'

RAMP "G"
CURVE 1

P.I. STA. 0+02.25
Δ = 10° 32'
Δc = 1° 32'
Dc = 3° 00'
Rc = 1,909.86'
Ts = 329.20'
Ls = 300.00'
Lc = 51.11'
θs = 4° 30'
P = 1.96'
K = 149.97'
Xc = 299.81'
Yc = 7.85'
Es = 10.87'
L.T. = 200.06'
S.T. = 100.06'

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440
STA. 176+00 TO STA. 187+00
SCALE: 1" = 50'

TELEPHONE POST

TENNESSEE STATE HIGHWAYS
Plans File No. IN-37
Divn.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	9

190

195

200

STA. 189+00

EXIST. PRESPLIT LINE

FENCE TO BE REMOVED

EXIST. RET. WALL W/ FENCE ON TOP

PROP NOISE WALL 801A

EXIST. PRESPLIT ROCK LINE

MAS. WALL

SHARONDALE DR.

WESTMORELAND AVE.

PERM. BARRICADES & ROAD CLOSURE SIGNS (EXISTING)

PROP NOISE WALL 712

STA. 204+00

18" ST. N 27°32'W

℄ I-440

30" ST.

TYPE 13 TERMINAL ANCHOR

TYPE II TERMINAL ANCHOR

TYPE II TERMINAL ANCHOR

GT. 548.23 IN. 544.23

INV. 538.29

GT. 546.99 INV. 542.99

INV. 539.89

GT. 546.99 INV. 542.99

EXIST. PRESPLIT LINE

FUTURE (A.C.) FENCE

FUT. BIKEWAY

PROP (A.C.) FENCE

EXIST. PRESPLIT ROCK LINE

PROP NOISE WALL 711

FUT. BIKEWAY

GT. 548.23 IN. 544.23

FUTURE (A.C.) FENCE

S 06°21'38" W

STA. 199+75.72 ℄ I-440 = STA. 30+00 SHARONDALE DR.

MATCH LINE

MATCH LINE

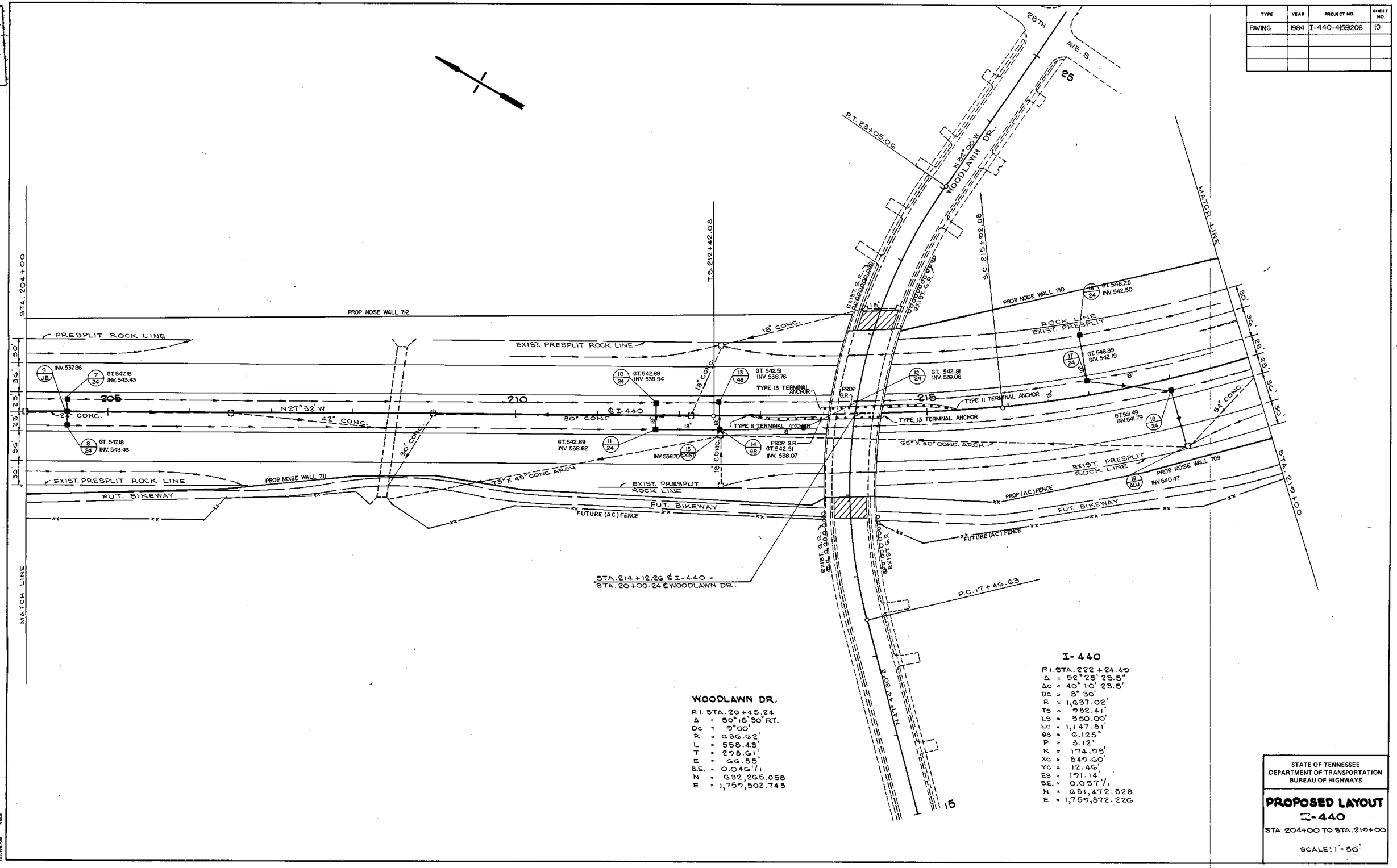
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440
STA. 189+00 TO STA. 204+00

SCALE: 1" = 50'

TENNESSEE STATE PLANS
Plans File No. IN-37
Divis

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	10



WOODLAWN DR.

P.I. STA. 20+45.24
Δ = 50°15'30" RT.
Dc = 9°00'
R = 636.62'
L = 558.43'
T = 298.61'
E = 66.55'
S.E. = 0.04G'/'
N = 632,265.058
E = 1,757,502.743

I-440

P.I. STA. 222+24.45
Δ = 52°25'23.5"
Δc = 40°10'23.5"
Dc = 3°30'
R = 1,637.02'
Ts = 782.41'
Ls = 850.00'
Lc = 1,147.81'
θs = 6.125°
P = 3.12'
K = 174.93'
Xc = 849.60'
Yc = 12.46'
Es = 191.14'
S.E. = 0.057'/'
N = 631,472.528
E = 1,759,872.226

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440

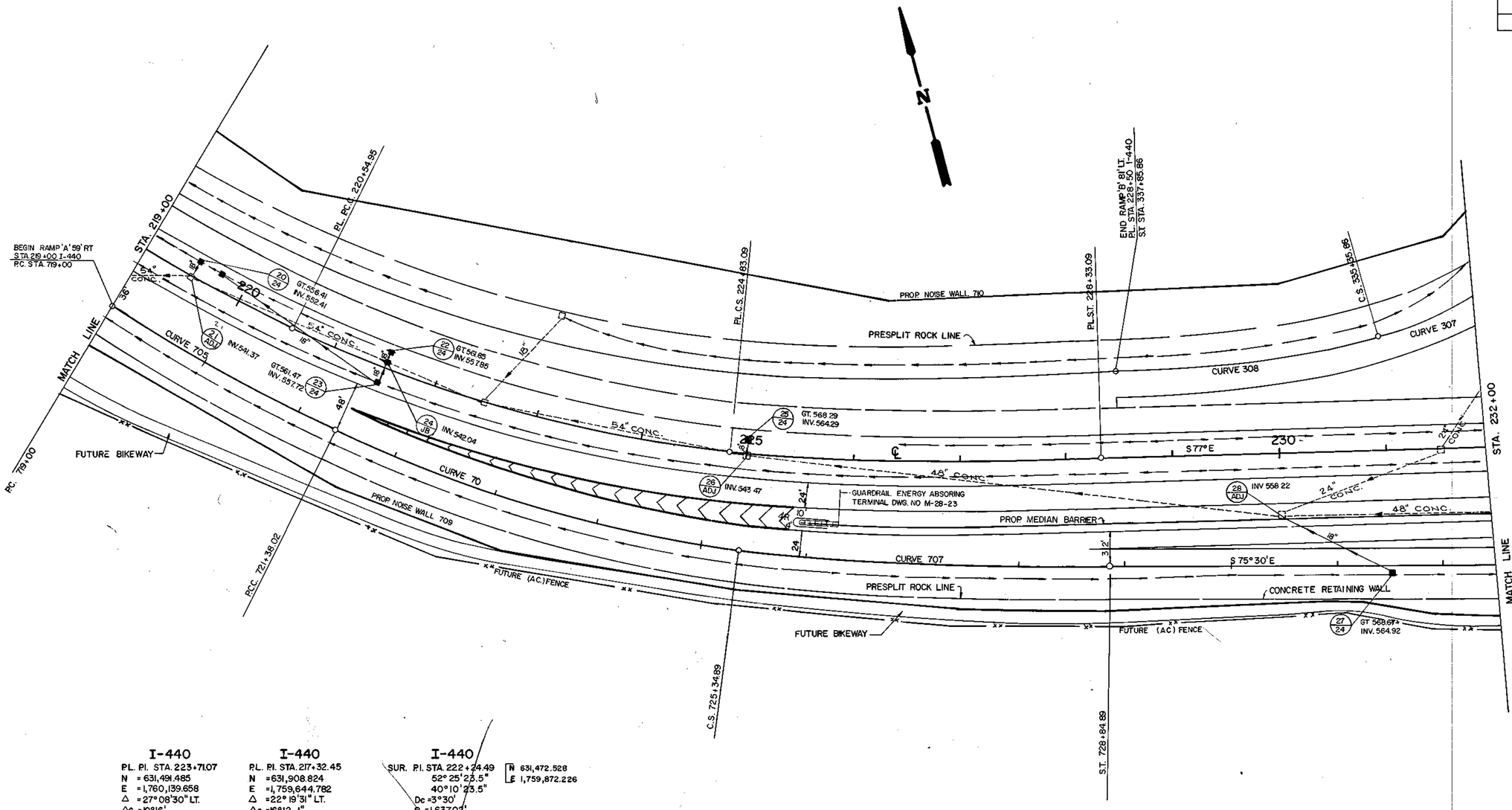
STA 204+00 TO STA. 219+00

SCALE: 1"=50'

TELEFILM FORT HARRISON

TENN. STATE HIGHWAYS
Plans Divn.
File No. IN-1-3

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	11



I-440

P.L. PI. STA. 223+71.07
N = 631,491.485
E = 1,760,139.658
Δ = 27° 08'30" LT.
Δc = 19°16'
Dc = 4° 30'
R = 1273.240'
TsA = 316.125'
TsB = 474.418'
Ls = 350'
Lc = 428.148'
Os = 7°52'30"
P = 4.006'
K = 174.89'
Xc = 349.339'
Yc = 16.014'
Es = 40.690'
S.E. =

I-440

P.L. PI. STA. 217+32.45
N = 631,908.824
E = 1,759,644.782
Δ = 22° 19'31" LT.
Δc = 16°12 1"
Dc = 3° 30'
R = 1637.022'
Ts = 490.374'
Ts = 331.235'
Ls = 350'
Lc = 462.865'
Os = 6°07'30"
P = 3.117'
K = 174.933'
Xc = 349.600'
Yc = 12.462'
Es = 34.744'
S.E. =

I-440

SUR. PI. STA. 222+24.49
52° 25'23.5"
40° 10'23.5"
Dc = 3°30'
R = 1,637.02'
Ts = 982.4'
Ls = 350.00'
Lc = 1,147.81'
Os = 6°07'30"
P = 3.12'
K = 174.93'
Xc = 349.60
Yc = 12.46'
Es = 191.14'
S.E = 0.057 ft
T.S. = 212+42.08
S.C. = 215+92.08
C.S. = 227+39.89
S.T. = 230+89.89

N 631,472.528
E 1,759,872.226

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I - 440
STA 219+00
TO
STA. 232+00

TENN. STATE HIGHWAYS
Plans File No. IN-37
Div.

SCANNED

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	12

REV. 9-5-85: DELETED NOTE OMITTING BERMS ALONG RAMP 'C' & ON MAINLINE EAST OF BRIDGE. DELETED PAVED DITCHES IN SAME AREAS. ADDED DRAINAGE STRUCTURE NOS. 30A THRU 36A, AND NECESSARY PIPE.

REV. 12-31-86: ADDED BERMS ON THE LT. & RT. OF RAMP 'C' AND ON THE RT. OF RAMP 'B-B'. ADDED NOTES. EXCAVATED AREA ADDED LT. OF RAMP 'B' STA. 331+50 TO STA. 333+50. ADDED CODE NOS. 40A, 40B, 45A & 45B. ADDED 1-18" C.M.P. AND 1-24" CONC. PIPE.

NOTE: THE EXISTING OUTLETS FOR CODE NOS. 40A & 45A TO BE ADJUSTED. THE NEW OUTLETS 40A SHOULD DRAIN INTO LOOP 'B-B' AND 45A SHOULD DRAIN INTO THE AREA AROUND BERM B. THE COST OF ADJUSTING THE CATCH BASINS WILL BE INCLUDED IN ITEM NO. 611-04.52.

I-440
P.I. = STA. 245+30.21 {N 631,090.016 E 1,762,257.790
Δ = 45°17'56"
Δc = 36°32'36"
Dc = 8°50'
R = 2,291.83'
Ts = 1,132.24'
Ls = 350.0
Lc = 1,401.96'
Θs = 4.375°
P = 2.22'
K = 174.97'
Xc = 349.80'
Yc = 8.91'
Es = 193.92'
S.E. = 0.05⅛
T.S. = 233+97.97
S.C. = 237+47.97
C.S. = 252+09.93
S.T. = 255+59.93

MIN. BERM ELEV. VARIES FROM 577.0 TO 595.0

GRADE TO DRAIN
5'
2:1
2:1
VARIES
EXIST. GROUND LINE
BERM 'B-B'
BEG. BERM 'B-B' @ STA. 639+00

NOTE: SEE ROADWAY CROSS-SECTIONS FOR SPECIFIC DETAILS.

—NOTE—
THE CONTRACTOR WILL BE REQUIRED TO GRADE THIS AREA TO ELEVATIONS INDICATED. COST OF EXCAVATING TO BE INCLUDED IN ITEM NO 203-01, COST OF ANY DRILLING AND SHOOTING, WILL ALSO BE INCLUDED IN ITEM 203-01.

(SEE CROSS-SECTION SHEET 200.)

MATCH LINE STA. 20+00
P.C. 20+75.588
PROP. A.C. FENCE
LIMIT OF PAVING
CURVE 305
PROP. CONC. MEDIAN BARRIER
CURVE 607
CURVE 608
CURVE 609
CURVE 606
CURVE 306
CURVE 307
CURVE 605
CURVE 805
CURVE 806
P.C. 325+07.46
N 88°51'21" W
P.T. 330+71.21
T.S. 331+17.40
S 65°17'20" W
SC 333+17.40
PROP. NOSE WALL 710
PRESPLIT ROCK LINE
RAMP 'B'
NO BERMS REQD.
PRESPLIT ROCK LINE
580.0
579.0
578.0
579.0
580.0
PAVED DITCH
TYPE 12 TERMINAL ANCHOR
PROP. G.R.
NO BERM REQD.
PRESPLIT ROCK LINE
SC 644+15.92
PC 643+68.58
PC 647+47.50
CS 648+48.86
LIMIT OF PAVING 324+85
LIMIT OF PAVING 649+59
PORTABLE CONCRETE PLANT
4@6" PERFORATED PVC PIPES PIPES INLET EL. 576.0 OUTLET EL. 575.0
650
BERM 'B-B'
PRESPLIT ROCK LINE
INV 573.0
408 STEW
PROP. RAMP 'BB' 36' LT. STA. 21+51.481 HILLSBORO RD. P.O.T. STA. 639+00 88.85' LT.
POT 324+25.0 (RAMP 'B') 24+25 (HILLSBORO PIKE)
END RAMP 'BB' 36' LT. STA. 21+51.481 HILLSBORO RD. P.O.T. STA. 651+48.84
TO BE PLUGGED
24" CONC.
4@6" PVC PIPES INLET EL. 589.5 OUTLET EL. 589.0
45B INV 589.60
45A INV 589.87
INV 579.28
30A ADJ
30A 24 GT 563.38 INV 559.63
INV-557.15
32A JB
34A 48 GT 560.41 INV 553.79
TO BE PLUGGED
31A 24 GT 560.82 INV 557.99
PRESPLIT ROCK LINE
NO BERMS REQD.
SOD DITCH
PAVED DITCH
N 71°46'50" W
PL T.S. 235+09.21
MATCH LINE STA. 232+00
CURVE 307
235
S 77°E
TYPE 13 TERMINAL ANCHOR
℄ I-440
TYPE II TERMINAL ANCHOR
PROP. G.R.
31 ADJ INV. 551.76
30 24 GT. 562.14 INV. 558.39
32 24
33 24 GT. 559.50 INV. 555.19
36 48 GT. 559.06 INV. 555.31
37 8 GT. 559.30 INV. 554.67
38 ADJ INV. 550.90
260
GT. 559.26 INV. 556.51
35 24 GT. 559.53 INV. 555.22
34 24 GT. 559.29 INV. 555.54
35A 24 GT. 561.19 INV. 557.44
INV. 565.36
PRESPLIT ROCK LINE
PROP. CONC. MEDIAN BARRIER
TYPE II TERMINAL ANCHOR
TYPE 13 TERMINAL ANCHOR
41 JB INV. 556.96
39 24 GT. 561.88 INV. 557.93
40 24 GT. 562.12 INV. 558.57
INV. 561.68
46 ADJ
42 24 GT. 566.68 INV. 562.93
GT. 567.90 INV. 563.65
38 24
30" CONC.
245
MATCH LINE STA. 246+00
RAMP
4" CONC.
6.5" CONC.
5" CONC.
24" CONC.
18" CONC.
8" CONC.
30" CONC.
16' 22' 24' 23' 24' 23' 24' 22' 16'

P.I. = STA. 25+12.46 {N 631,599.550 E 1,761,852.336
D = 3°00'00"
R = 1909.86'
L = 735.52'
T = 372.37'
E = 35.96'
S.E. = 0.035⅛

—SPECIAL NOTE—
IN THE AREA LT. OF RAMP 'C', THERE ARE SEVERAL EXISTING TREES. THESE EXISTING TREES ARE NOT TO BE DISTURBED WHILE CONSTRUCTING THE PROPOSED BERM. THE PROPOSED BERM IS TO BE CONSTRUCTED IN, AND AROUND THE EXISTING TREES.

MIN. BERM EL. VARIES FROM 591.0 TO 598.0
GRADE TO DRAIN
5'
2:1
2:1
MIN. BERM HT. 3'-0"
EXIST. GROUND LINE
BEG BERM 'B' 0'TO5' FROM PRE-SPLIT LINE
BERM 'B'
(LT. STA. 240+50 ± TO LT. STA. 243+00)
BEGIN RAMP 'C' 58' RT. STA. 25+60 HILLSBORO RD. P.C. STA. 837+38.34

NOTE: SEE ROADWAY CROSS-SECTIONS (200 TO 211) FOR SPECIFIC DETAILS.

LIMIT OF PAVING 838+14
PROP. A.C. FENCE
'C-1'
CS 839+46.48
GT. 595.95 INV. 593.70
BERM 'C-1'
GRADE TO DRAIN
5'
MIN. BERM EL. 616.0
3:1
3:1
EXIST. GROUND LINE
BEG. BERM EL. 610.0 @ APPROX. 5' BACK OF PRE-SPLIT LINE
BERM 'C-1'
GRADE TO DRAIN
5'
MIN. BERM EL. 612.0
3:1
3:1
BEG BERM EL. 606.0 @ APPROX. 5' BACK OF PRE-SPLIT LINE
BERM 'C-2'
4@6" PVC PIPES INLET EL 606.0 OUTLET EL. 605.0
PROP. NOSE WALL 708
BERM 'C-2'
ST. 842+43.48
43 48 GT. 580.91 INV. 577.16
'C-2'
'C-2'
PRESPLIT ROCK LINE
RAMP "C"
S 45°E
845
18" CONC.
45 JB INV. 572.18
44 36 GT. 574.75 INV. 572.50
46 ADJ INV. 562.94

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440

STA. 232+00 TO STA. 246+00
SCALE 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	13

REV.12-31-86: ADDED TRAPEZOIDIAL BASINS AND BERM FOR LOOP 'D-D', ADDED CODE NOS. 50A, 50B, 64A, 64B, 65A & 65B AND 3-18" PIPES.

T.S. 235+09.21
N 631,232.672
E 1,761,260.704

S.C. 237+47.57

EQ. 238+57.208 (S.C.) BACK =
238+66.226 ℄ SURV. AHEAD

℄ I-440

STA. 232+87.33 I-440 =
STA. 20+00 HILLSBORO RD.

MATCH LINE STA. 232+00

RAMP 'A'

RAMP 'C'

RAMP 'D'

LOOP 'D-D'

CURVE 708

CURVE 709

CURVE 905

CURVE 906

CURVE 907

CURVE 908

CURVE 909

CURVE 910

CURVE 405

CURVE 406

BEG. RAMP DD
C.S. 902+48.81
85' RT. STA. 241+24.62 I-440

END RAMP DD
S.T. 912+02.56
64' RT. STA. 18+27.90
HILLSBORO RD.

TIE INTO EXISTING GROUND LINE @ EL. 574.0

S.C. 905+48.81

C.S. 909+52.56

GRADE TO DRAIN

OUTLET 565.0

OUTLET 562.0

SEMI-TRAPEZOIDIAL BASIN
MIN. BOTTOM DIM. 100' x 25'
BOTTOM EL. 562.0

TRAPEZOIDIAL BASIN
MIN. BOTTOM DIM. 100' x 25'
BOTTOM EL. 562.0

6" DIA. PVC PIPE
INLET EL. 563.0
OUTLET EL. 562.0

3:1 CUT SLOPES

NO BERMS REQD.

PRESPLIT ROCK LINE

TYPE I2 TERMINAL ANCHOR

PROP. CONC. BARRIER WALL

PROP. CONC. MED. BARRIER

TYPE II TERMINAL ANCHOR

TYPE I3 TERMINAL ANCHOR

EXIST. RET. WALL 2

EXIST. PRESPLIT LINE

EXIST. RET. WALL

FUT. BIKEWAY

FUTURE (A.C.) FENCE

PROP NOISE WALL 709

PROP NOISE WALL 707

LIMIT OF PAVING STA. 739+63

LIMIT OF PAVING STA. 415+95

LIMIT OF PAVING STA. 390+14

P.C. 417+44.26

P.T. 419+66.07

T.S. 420+26.71

4-6" DIA. PVC PIPES
INLET EL. 565.5
OUTLET EL. 565.0

END RAMP 'A' PT. 738+47.12
44' LT. HILLSBORO RD
STA. 16+00

BEG. RAMP 'D'
STA. 416+00 =
HILLSBORO RD.
STA. 6+00

S43°08'50"E

S75°30'E

S77°E

N76°33'22"E

PROP GR

SHARON HILL CIRCLE

SHARONDALE DR.

LOMBARDY AVE.

HILLSBORO RD.

PROP AC FENCE

MATCH LINE

235

240

245

420

735

738+78.17

T.S. 735+78.12

① THE CONTRACTOR IS TO USE CAUTION WHILE EXCAVATING IN THESE AREAS. LIGHTING CONDUIT MAY BE IN PLACE AT THESE LOCATIONS. IF THE LIGHTING CONDUIT IS IN PLACE, THEN SHIFT THE LOCATION OF THE CONDUIT. COST OF RELOCATING ANY CONDUIT THAT IS IN CONFLICT WILL BE PAID FOR AT THE UNIT PRICE BID FOR THE APPROPRIATE LIGHTING ITEMS.

NOTE: THE EXISTING OUTLETS FOR CODE NOS. 64A & 65A TO BE ADJUSTED. THE NEW OUTLETS SHOULD DRAIN INTO LOOP 'D-D'. THE COST OF ADJUSTING THE CATCH BASINS WILL BE INCLUDED IN ITEM NO. 611-04.52.

I-440

P.I. STA. 245+30.21
Δ = 45°17'56" RT.
Δc = 36°32'56"
Dc = 2°30'
R = 2,291.83'
Ts = 1,132.24'
Ls = 350.0'
Lc = 1,461.96'
Gs = 4.375°
P = 2.22'
K = 174.57'
Xc = 349.80'
Yc = 8.51'
Es = 198.92'
S.E. = 0.05'/'
TS. = 233+57.57
S.C. = 237+47.57
C.S. = 252+09.53
S.T. = 255+59.53
N = 631,050.016
E = 1,762,257.790

CUT TO EL. 562.0
MIN. DEPTH 2'-0"
EXIST. GROUND LINE
TO BE SODDED
3:1
20' MIN.

TYPICAL SECTION
OF RETENTION BASIN
RT. I-440 STA. 245+00.

* BERM "D" ELEV. VARIED FROM 573.0 TO 577.0, MIN. HEIGHT 3'-0"

GRADE TO DRAIN
5'
3:1
TO BE SODDED
BEG. BERM 0'-5" FROM PRE-SPLIT LINE

BERM 'D'

MIN. DEPTH 4'-0"
CUT TO EL. 562.0
EXIST. GROUND LINE
3:1
25' MIN.
3:1
TO BE SODDED

RETENTION BASIN
RT. STA. 908+50

NOTE:
FOR EXACT LOCATION OF BERM 'D', RETENTION BASINS SEE CROSS-SECTIONS, SHT. NOS. 200-211.

TYPICAL SECTION
LOOP 'D-D'

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440
STA. 232+00 TO STA. 246+00

SCALE: 1" = 50'

SHEET 13

DESIGN FILE NO. 147027

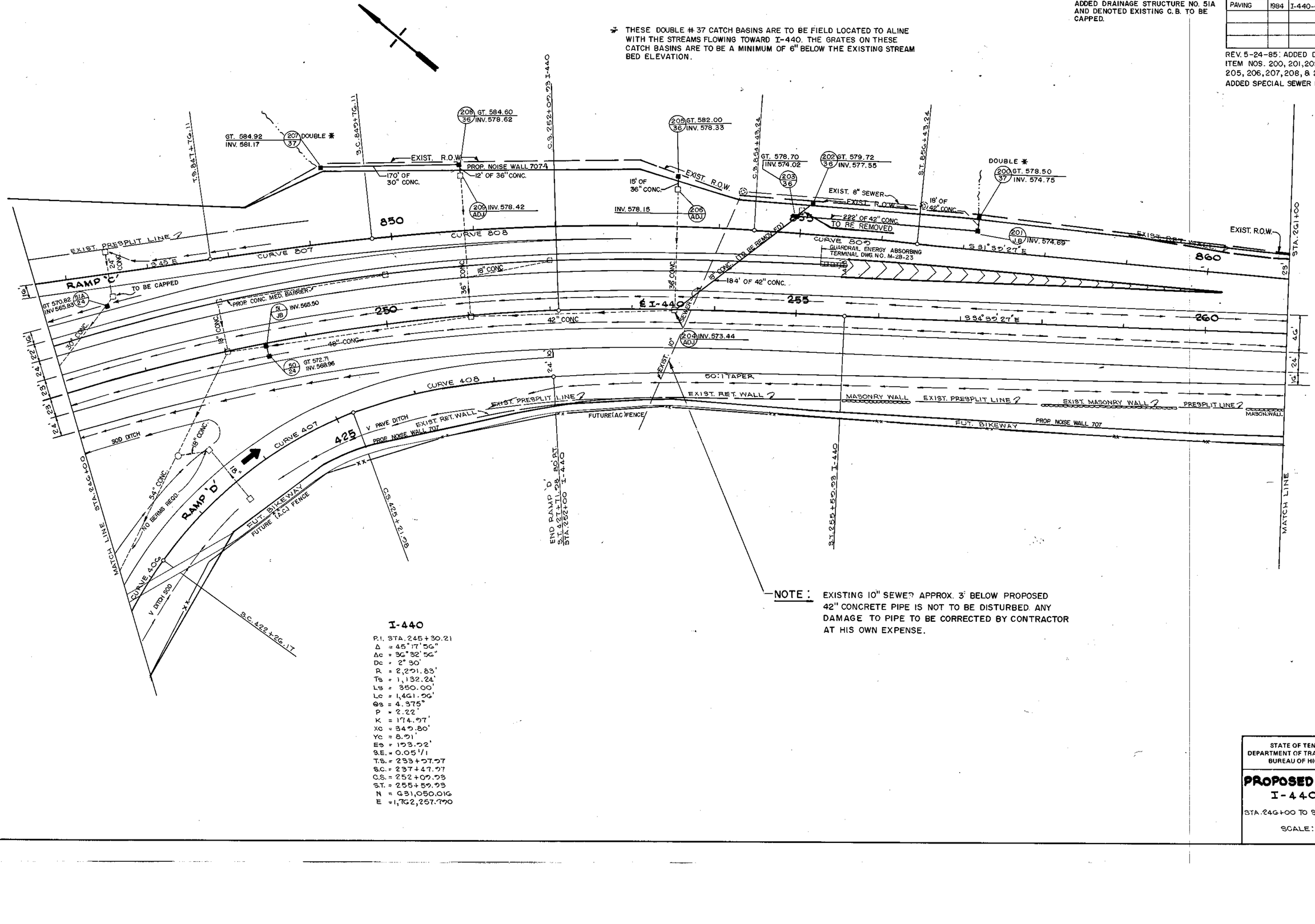
TENN. STATE HIGHWAYS | Plans | Proj. No. IN-37 | Divn.

REV. 9-5-85: ADDED BERMS ON RIGHT OF RAMP 'C' FROM 851+50 TO 853+50. ADDED DRAINAGE STRUCTURE NO. 51A AND DENOTED EXISTING C.B. TO BE CAPPED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	14

REV. 5-24-85: ADDED DRAINAGE ITEM NOS. 200, 201, 202, 203, 204, 205, 206, 207, 208, & 209., AND ADDED SPECIAL SEWER NOTE.

* THESE DOUBLE # 37 CATCH BASINS ARE TO BE FIELD LOCATED TO ALINE WITH THE STREAMS FLOWING TOWARD I-440. THE GRATES ON THESE CATCH BASINS ARE TO BE A MINIMUM OF 6" BELOW THE EXISTING STREAM BED ELEVATION.



NOTE: EXISTING 10" SEWER APPROX. 3' BELOW PROPOSED 42" CONCRETE PIPE IS NOT TO BE DISTURBED. ANY DAMAGE TO PIPE TO BE CORRECTED BY CONTRACTOR AT HIS OWN EXPENSE.

I-440

P.I. STA. 245+30.21
Δ = 45° 17' 56"
Δc = 36° 32' 56"
Dc = 2° 30'
R = 2,291.83'
Ts = 1,132.24'
Ls = 350.00'
Lc = 1,461.26'
Θs = 4.375°
P = 2.22'
K = 174.97'
Xc = 349.80'
Yc = 8.91'
Es = 193.52'
S.E. = 0.05 1/1
T.S. = 233+97.97
S.C. = 237+47.97
C.S. = 252+09.93
S.T. = 255+59.93
N = 631,050.016
E = 1,762,257.790

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440

STA. 246+00 TO STA. 261+00

SCALE: 1" = 50'

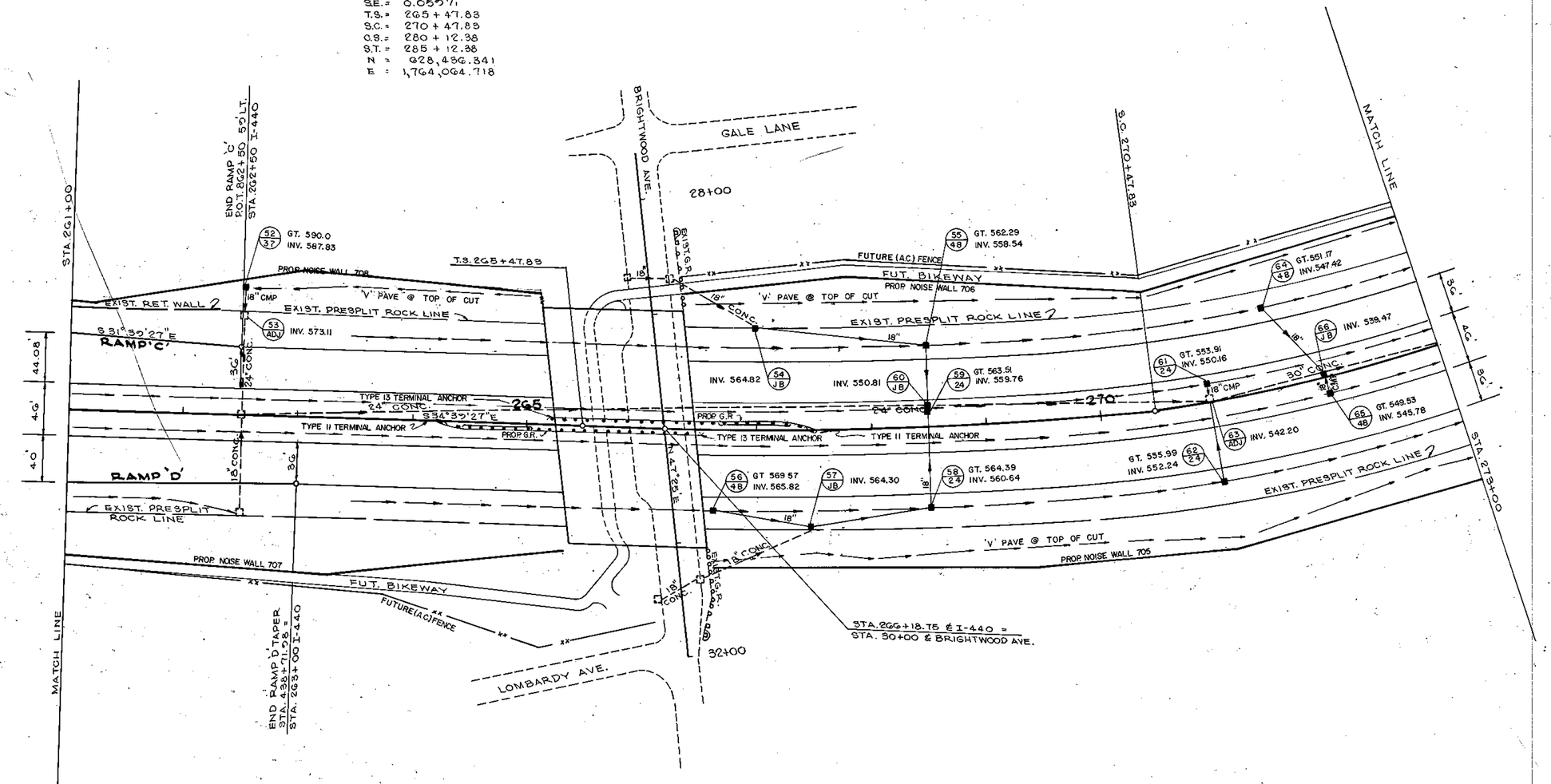
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TENN. STATE HIGHWAYS
Plans File No. 1-N
Rem. No. 37

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	15

I-440

P.I. STA. 276+05.20
Δ = 58°34'55"
Dc = 4°00'
Ls = 500.00'
Ts = 1057.37'
Es = 218.31'
R = 1,432.40'
Yc = 25.11'
P = 7.26'
K = 249.74'
Xc = 499.48'
Lc = 584.55'
θs = 10°
Δc = 38°34'55"
S.E. = 0.059 ft/ft
T.S. = 265 + 47.83
S.C. = 270 + 47.83
C.S. = 280 + 12.38
S.T. = 285 + 12.38
N = 928,436.341
E = 1,764,064.718



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

I-440

STA. 261+00 TO STA. 273+00

SCALE: 1" = 50'

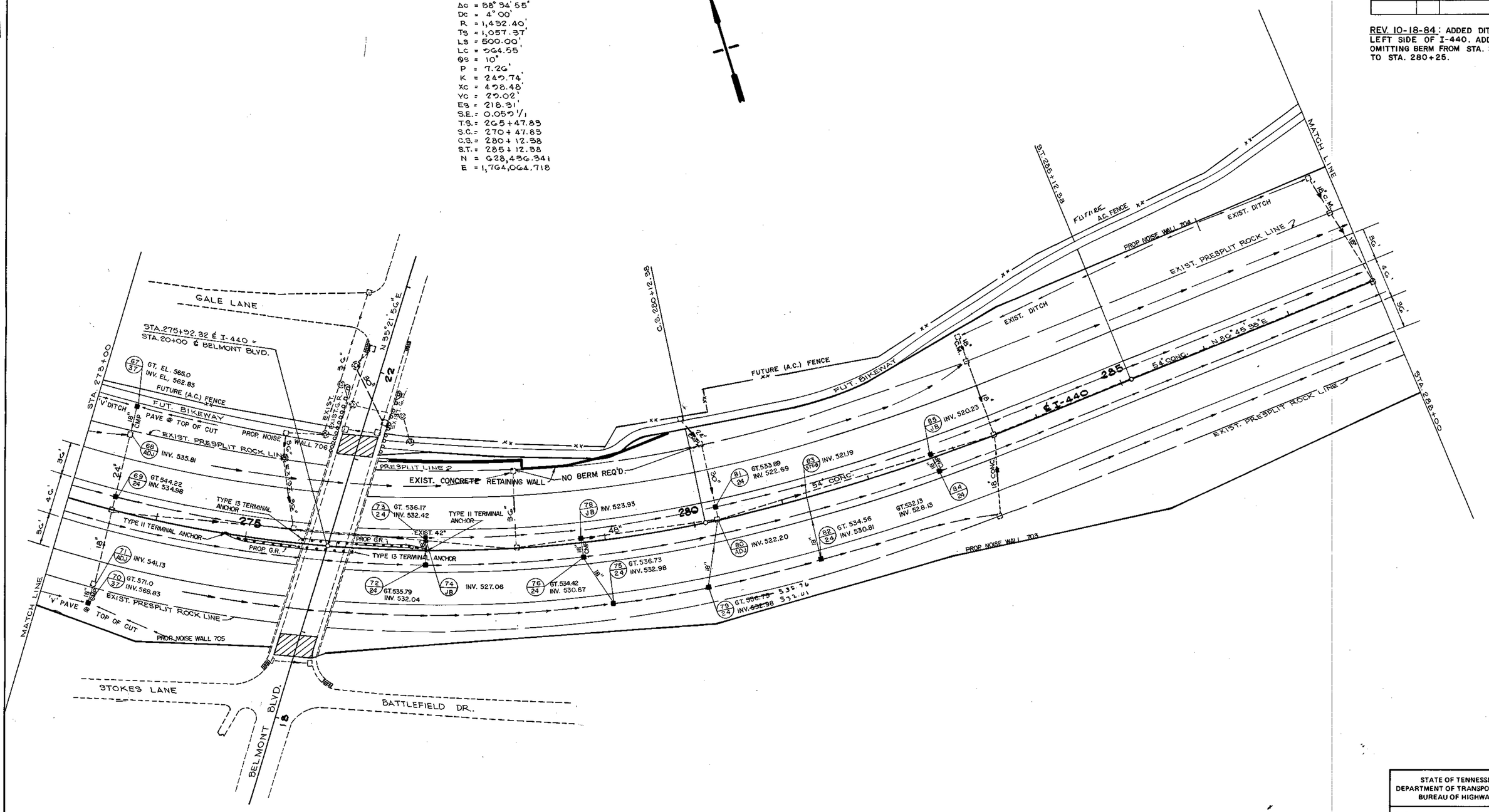
TENN. STATE HIGHWAYS
Plans File No. IN-31
Divn.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	16

REV. 10-18-84 : ADDED DITCHES LEFT SIDE OF I-440. ADDED NOTE OMITTING BERM FROM STA. 278+00 TO STA. 280+25.

I-440

P.I. STA. 276+05.20
Δ = 58° 34' 55"
Δc = 58° 34' 55"
Dc = 4° 00'
R = 1,432.40'
Ts = 1,057.37'
Ls = 500.00'
Lc = 564.55'
Θs = 10°
P = 7.26'
K = 249.74'
Xc = 478.48'
Yc = 29.02'
Es = 218.31'
S.E. = 0.050 ft/ft
T.S. = 265+47.83
S.C. = 270+47.83
C.S. = 280+12.38
S.T. = 285+12.38
N = 628,436.341
E = 1,764,064.718



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440

STA. 273+00 TO STA. 288+00

SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	884	I-440-4(59)206	17

TENNESSEE DEPARTMENT OF HIGHWAYS
Plans Archive Unit
Date 3/1
Div 1

N

S 85°42'55"E
GALE LANE
S 84°40'55"E

FUT. BIKEWAY
FUT. FENCE
PROP AC FENCE
PROP NOISE WALL 704
℄ GRANNY WHITE PIKE STA. 20+00 =
℄ I-440 STA. 205+57

EXIST. ROCK WALL
GRANNY WHITE
EXIST. ROCK WALL
N 17°04'01"E
EXIST. PAVED DITCH
EXIST. ROCK WALL
EXIST. ROCK WALL

EXIST. PAVED DITCH
EXIST. PAVED DITCH
EXIST. ROCK CUT DITCH
EXIST. ROCK CUT DITCH

STA. 288+00
STA. 302+00

86/24 GT. 528.02 INV. 524.27
89/ADJ INV. 516.56
88/24 GT. 528.83 INV. 523.83
87/24 GT. 528.02 INV. 524.27
90/48 GT. 526.79 INV. 523.34
91/ADJ INV. 521.91
93/ADJ INV. 514.57
92/24 GT. 526.21 INV. 522.46
85/24 GT. 524.02 INV. 520.27
94/24 GT. 525.22 INV. 521.47
96/24 GT. 525.22 INV. 519.22
100/48 GT. 524.91 INV. 519.95
97/24 GT. 525.14 INV. 521.39
99/48 GT. 524.91 INV. 516.10
98/24 GT. 525.14 INV. 521.04

TYPE II TERMINAL ANCHOR
TYPE II TERMINAL ANCHOR
TYPE II TERMINAL ANCHOR
PROF G.R.
PROF G.R.

290
205
300
I-440
N 86°45'38"E
S 87°11'52"E
EXIST. 6'x5' CONC. BOX CULV.

SPECIAL NOTE
EXISTING NO. 3 MANHOLE IS TO BE REMOVED FROM EXISTING NO. 6 JUNCTION BOX, AND NO. 48 CATCH BASIN IS TO BE CONSTRUCTED ON TOP OF JUNCTION BOX. COSTS OF REMOVAL TO BE INCLUDED IN OTHER ITEMS OF CONSTRUCTION.

PROP NOISE WALL 703
P.C. 291+42.30
P.T. 299+34.32
MATCH LINE
MATCH LINE

EXIST. ROCK WALL
GRANNY WHITE PIKE
EXIST. ROCK WALL
N 8°E
S 86°E
EXIST. G.F.B. DITCH
N 86°17'45"E
PROP. A.C. FENCE

N 85°29'01"E
BATTLEFIELD DR.
N 17°01'01"E
S 83°10'55"E
EXIST. 8'x4' BOX CULV.
S 83°10'55"E
BATTLEFIELD DR.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

I-440

STA. 288+00 TO STA. 302+00

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	18

TENN. STATE HIGHWAYS
Plans File No. 17
Divd.

GALE LANE
PROP (A.C.) FENCE
STA. 302+00
ROCK CUT PITCH
PROP. NOISE WALL W/SAFETY SHAPE WALL
12" CMP
PROP AC FENCE
LEALAND LANE
18" CMP
V PAVE
106 BEV INV. 518.88
PROP. NOISE WALL
INV. 511.30 108 BEV
STA. 317+00
EXIST. 10' F.B. DITCH
S8°17'55"E
S8°13'30"E
305
EXIST. 6'x5' CONC. BOX CULV.
TYPE II TERMINAL ANCHOR
PROP G.R.
310
315
I-440
GT. 527.78 103 36
GT. 525.61
GT. 530.79 105 36
INV. 528.62
GT. 528.55 107 36
INV. 526.38
TYPE II TERMINAL ANCHOR 101 1 GT. 526.75 INV. 523.25
102 BEV INV. 521.00
INV. 522.50 104 BEV
PROP. NOISE WALL
EXIST. 6'x5' CONC. BOX CULV.
EXIST. 7'@ 10'x5' CONC. BOX BRIDGE
STA. 309+70 I-440 = STA. 20+00 LEALAND LANE
N 8G°17'49"E
G.F.B. DITCH
S 85°E
EXIST 10'x4' BOX CULV.
N 06°20'40"W
MATCH LINE
BATTLEFIELD DR.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

I-440

STA. 302+00 TO STA. 317+00

SCALE: 1"=50

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(49)206	5A
PAVING	1984	I-440-4(59)206	14A

RAMP 'A'

CURVE 705

P.I. = 720+19.219
N = 631,669.941
E = 1,759,821.217
Δ = 8° 19' 50" LT.
DC = 3° 30' 00"
T = 119.219'
L = 238.017'
R = 1,637.022
P.C. = 719+00
N = 631,759.320
E = 1,759,742.321
S.E. =

CURVE 706

P.I. = 723+38.073
N = 631,463.719
E = 1,760,064.956
Δ = 17° 51' 32" LT.
DC = 4° 30' 00"
T = 200.056'
L = 396.867'
R = 1,273.240'
C.C. = 721+38.017
N = 631,592.937
E = 1,759,912.231
TRAN. LGTH.
S.E. =

CURVE 707

P.I. = 726+51.761
N = 631,343.073
E = 1,760,358.027
LS = 350'
θs = 7° 52' 30" LT.
LT = 233.565'
ST = 116.877'
LC = 349.706'
Xc = 349.339'
Yc = 16.014'
DS = 4° 30' 00"
C.S. = 725+34.884
N = 631,387.564
E = 1,760,249.950
S.T. = 728+84.884
N = 631,284.593
E = 1,760,584.152
MAX. S.E.

CURVE 708

P.I. = 737+82.490
N = 631,059.850
E = 1,761,453.168
LS = 300'
θs = 36° 00' RT.
LT = 204.299'
ST = 103.919'
LC = 294.769'
Xc = 288.371'
Yc = 61.082'
DS = 24° 00'
T.S. = 735+78.191
N = 631,111.003
E = 1,761,255.376
S.C. = 738+78.191
N = 630,979.664
E = 1,761,519.268

CURVE 709

P.I. = 739+52.437
N = 630,922.374
E = 1,761,566.494
Δ = 34° 33' 04" RT.
DC = 24° 00'
T = 74.245'
L = 143.963'
R = 238.732'
C.C. = 740+22.154
N = 630,848.405
E = 1,761,572.899
TRAN. LGTH.

CURVE 710

P.I. = 740+80.203
N = 630,790.573
E = 1,761,577.906
Δ = 19° 32' 41" RT.
DC = 17° 00'
T = 58.048'
L = 114.969'
R = 337.034'
P.T. = 741+37.123
N = 630,734.398
E = 1,761,563.278
S.E. =

RAMP 'B'

CURVE 305

P.I. = 328+70.836
N = 631,855.776
E = 1,761,569.173
Δ = 90° 17' 13" LT.
DC = 15° 50' 49"
T = 363.372'
L = 569.742'
R = 361.557'
P.C. = 325+07.464
N = 631,572.816
E = 1,761,797.147
P.T. = 330+77.206
N = 631,626.387
E = 1,761,287.357
TRAN. LGTH.
S.E. =

CURVE 306

P.I. = 332+51.013
N = 631,516.667
E = 1,761,152.561
LS = 200'
θs = 11° 30' RT
LT = 133.616'
ST = 66.924'
LC = 199.642'
Xc = 199.196'
Yc = 13.342'
DS = 11° 30' 00"
T.S. = 331+17.397
N = 631,601.016
E = 1,761,256.187
S.C. = 333+17.397
N = 631,485.616
E = 1,761,093.277
MAX. S.E. =

CURVE 307

P.I. = 334+28.415
N = 631,434.105
E = 1,760,994.932
Δ = 25° 7' 25" RT.
Dc = 11° 30' 00"
T = 111.018'
L = 218.467'
R = 498.224'
S.E. =

CURVE 308

P.I. = 336+19.700
N = 631,425.535
E = 1,760,800.267
LS = 250'
θs = 14° 22' 30" RT.
LT = 167.22'
ST = 83.836'
LC = 249.301'
Xc = 248.431'
Yc = 20.814'
DS = 11°30'
C.S. = 335+35.864
N = 631,429.222
E = 1,760,884.022
S.T. = 337+85.864
N = 631,459.886
E = 1,760,636.613
MAX. S.E. =

LOOP 'BB'

CURVE 605

P.I. = 643+14.718
N = 631,345.390
E = 1,761,264.337
LS = 500'
θs = 95° RT
LT = 398.793'
ST = 227.470'
LC = 441.549'
Xc = 378.967'
Yc = 226.604'
DS = 38° 00'
T.S. = 639+15.925
N = 631,220.705
E = 1,761,643.137
S.C. = 644+15.925
N = 631,554.436
E = 1,761,354.018
TRAN. LGTH.
MAX. S.E.

CURVE 606

P.I. = 644+99.503
N = 631,631.244
E = 1,761,386.969
Δ = 58° 00' RT
DC = 38° 00"
T = 83.578'
L = 152.632'
R = 150.779'
S.E. =

CURVE 607

P.I. = 646+60.752
N = 631,658.076
E = 1,761,560.682
Δ = 34° RT.
DC = 19° 00'
T = 92.195'
L = 178.947'
R = 301.556'
C.C. = 645+68.557
N = 631,644.002
E = 1,761,469.567
S.E. =

CURVE 608

P.I. = 647+99.578
N = 631,596.605
E = 1,761,691.199
Δ = 32° 25' 57" RT.
DC = 32° 00'
T = 52.074'
L = 101.352'
R = 179.049'
C.C. = 647+47.504
N = 631,618.793
E = 1,761,644.089
S.E. =

CURVE 609

P.I. = 649+56.061
N = 631,462.044
E = 1,761,776.423
LS = 300'
θs = 48° 00' RT
LT = 207.884'
ST = 107.205'
LC = 290.746'
Xc = 279.618'
Yc = 79.669'
DS = 32° 00'
C.S. = 648+48.856
N = 631,552.613
E = 1,761,719.062
S.T = 651+48.856
N = 631,261.869
E = 1,761,720.337
MAX. S.E. =

RAMP 'C'

CURVE 805

P.I. = 838+55.851
N = 631,493.683
E = 1,761,914.603
Δ = 40° 31' 29" LT
DC = 18° 00'
T = 117.509'
L = 225.137'
R = 318.310'
PC = 837+38.342
N = 631,602.228
E = 1,761,959.618
SE =
TRAN. LGTH.

CURVE 806

P.I. = 840+65.643
N = 631,284.762
E = 1,761,982.485
LS = 300'
θs = 27° 00' LT.
LT = 202.377'
ST = 102.164'
LC = 297.050'
Xc = 293.406'
Yc = 46.382'
DS = 18° 00'
ST = 842+63.479
N = 631,141.660
E = 1,762,125.588
CS = 839+63.479
N = 631,381.925
E = 1,761,950.915

CURVE 807

P.I. = 849+09.454
N = 630,684.886
E = 1,762,582.361
LS = 200'
θs = 2° 00' RT.
LT = 133.342
ST = 66.674'
LC = 199.989'
Xc = 199.976'
Yc = 2.327'
DS = 2° 00'
TS = 847+76.112
N = 630,779.173
E = 1,762,488.074
SC = 849+76.112
N = 630,636.124
E = 1,762,627.833

CURVE 808

P.I. = 852+10.193
N = 630,464.928
E = 1,762,787.476
Δ = 9° 20' 33" RT.
DC = 2° 00'
T = 234.081'
L = 467.125
R = 2,864.789'
S.E. =

CURVE 809

P.I. = 855+09.911
N = 630,214.589
E = 1,762,954.163
LS = 200'
θs = 2° 00' RT
LT = 133.342'
ST = 66.674'
LC = 199.989'
Xc = 199.976'
Yc = 2.327'
DS = 2° 00'
CS = 854+43.237
N = 630,270.086
E = 1,762,917.210
ST = 856+43.237
N = 630,101.088
E = 1,763,024.146

RAMP 'D'

CURVE 405

P.I. = 418+66.677
N = 630,526.631
E = 1,761,787.626
Δ = 60° 17' 48" LT.
DC = 27° 10' 59"
T = 122.422'
L = 221.818'
R = 210.778'
PC = 417+44.256
N = 630,615.950
E = 1,761,703.905
PT = 419+66.074
N = 630,555.094
E = 1,761,906.693
SE =
TRAN. LGTH.

CURVE 406

P.I. = 421+59.787
N = 630,600.131
E = 1,762,095.099
LS = 200'
θs = 11° 30' 00" RT.
LT = 133.616'
ST = 66.924'
LC = 199.642'
Xc = 199.196'
Yc = 13.342'
DS = 11° 30' 00"
TS = 420+26.172
N = 630,569.066
E = 1,761,965.144
SC = 422+26.172
N = 630,602.401
E = 1,762,161.984

CURVE 407

P.I. = 423+78.578
N = 630,607.571
E = 1,762,314.302
Δ = 34° 01' 03" RT.
Dc = 11° 30' 00"
T = 152.406'
L = 295.805'
R = 498.224'
SE. =

CURVE 408

P.I. = 426+21.056
N = 630,474.030
E = 1,762,527.402
LS = 250'
θs = 17° 30' 00" RT.
LT = 152.720'
ST = 99.080'
LC = 249.003'
Xc = 247.214'
Yc = 29.794'
DS(1) = 11° 30'
DS(2) = 2° 30'
CS = 425+21.977
N = 630,526.642
E = 1,762,443.445
SC = 427+71.977
N = 630,357.774
E = 1,762,626.437

LOOP 'DD'

CURVE 905

P.I. = 904+56.472
N = 630,892.757
E = 1,761,996.868
LS = 300'
θs = 60° 53' 40" RT.
LT = 207.660'
ST = 119.315'
LC = 285.416'
Xc = 265.697'
Yc = 104.248'
DS(1) = 2° 35' 46"
DS(2) = 38° 00'
CS = 902+48.812
N = 630,976.673
E = 1,761,806.919
SC = 905+48.812
N = 630,773.947
E = 1,762,007.829

CURVE 906

CENTER CURVE
N = 630,760.096
E = 1,761,857.688
Δ = 153° 25' 22" RT
DC = 38° 00'
L = 403.744'
R = 150.778
SE = 0.06 FT/FT.

CURVE 907

P.I. = 910+41.759
N = 630,756.309
E = 1,761,682.540
LS = 250'
θs = 47° 30' R.T.
LT = 173.091'
ST = 89.203'
LC = 242.447'
Xc = 233.356'
Yc = 65.768
D.S. = 38° 00'
CS = 909+52.556
N = 630,680.536
E = 1,761,729.609
ST = 912+02.556
N = 630,922.982
E = 1,761,729.238

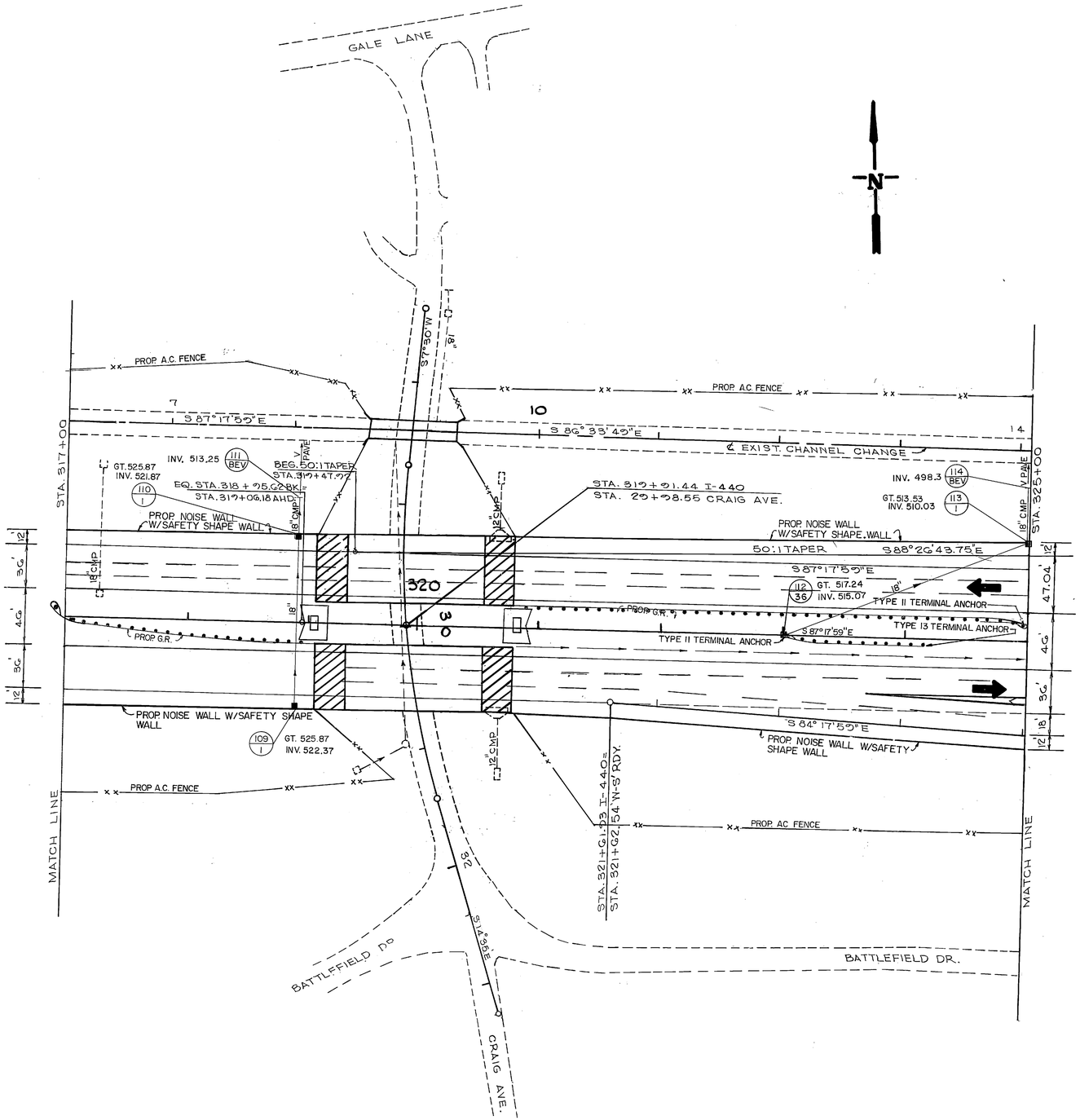
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

CURVE DATA
&
COORDINATES

I-440 & HILLSBORO RD.
INTERCHANGE

BRUNING 23411

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59) 206	19



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440

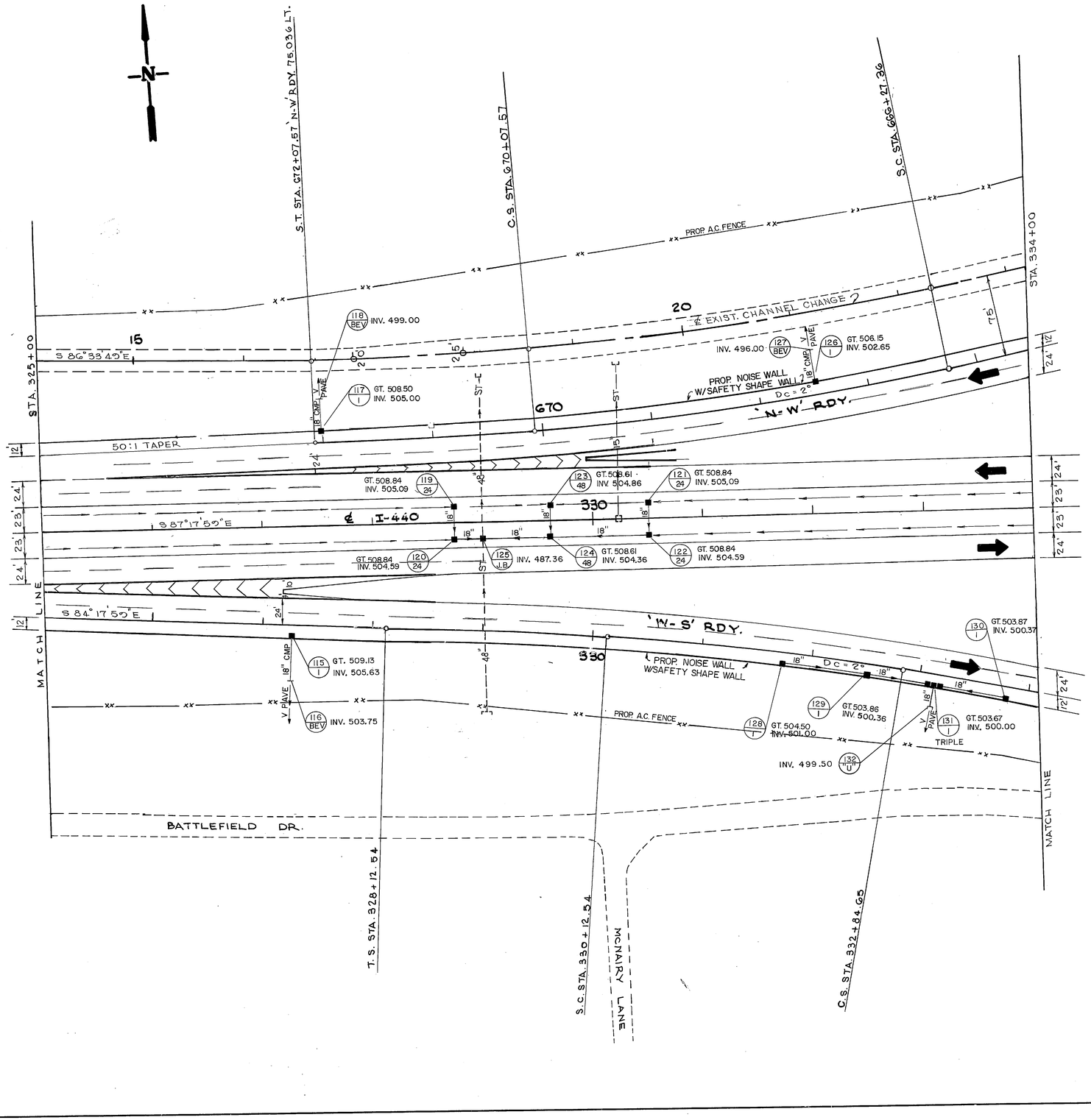
STA. 317+00 TO STA. 325+00

SCALE : 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	20

'N-W' R.D.Y. CURVE DATA
P.I. = STA. 668+18.52
ΔT = 11° 36' 15.25" RT.
Dc = 2° 00'
LS = 200.0'
TS = 391.16'
ES = 15.20'
XC = 199.98'
YC = 2.33'
ΘS = 2° 00'
RC = 2864.79'
LC = 380.21'
P.I.N = 628,467.60
E = 1,769,737.15
C.C.N = 631,339.81
E = 1,769,523.83
S.E. = +0.035 ft/ft
V = 50 MPH

'W-S' R.D.Y. CURVE DATA
P.I. = STA. 331+49.18
ΔT = 5° 26' 32" RT.
DC = 2° 00'
LS = 200.0'
TS = 336.64'
ES = 10.32'
XC = 199.98'
YC = 2.33'
ΘS = 2° 00'
RC = 2,864.79'
LC = 272.11'
P.I. N = 628,274.02
E = 1,769,734.44
C.C.N. = 625,446.32
E = 1,769,214.37
S.E. = +0.035 ft/ft
V = 50 MPH



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

I-440
STA. 325+00 TO STA. 334+00
SCALE: 1" = 50'

TELEDYNE POST N2707

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	21

VAULX LANE

GALE LANE

'N-W' RDY. CURVE DATA

P.I. STA. 658+07.10
Ø$ = 12°00' RT.
L.T. = 200.46'
S.T. = 100.42'
L.S. = 300'
N = 628,628.55
E = 1,770,645.30

P.I. STA. 656+02.93
Δ = 38°30'56" RT.
D = 8°00'
T = 250.22'
L = 481.44'
E = 42.45'
R = 716.20'
P.I.N. = 628,696.12
E = 1,771,026.58
C.C.N = 627,330.06
E = 1,770,469.50
S.E. = 0.06 1/1
V = 50 M.P.H.

MATCH LINE STA. 658+15.24

12' 24'

STA. 653+00 BEG. TAPER
STA. 653+15.24

PROP. AC FENCE

P.I. STA. 656+96.68

PROP. NOISE WALL 7 W/SAFETY SHAPE WALL 7

655

DC 8°

50 FT. TAPER

141 / 1 GT. 501.14
INV. 497.64

18" CMP

142 / BEV INV. 496.00

V PAVE

'N-W' RDY.

END TAPER STA. 651+15.24

24"

T.S. 654+27.36

PROP. AC FENCE

S.T. 660+96.68

N 67°57'01"E

15

14

℄ CHANNEL CHANGE

N 75°57'01"E

CUR. 7

138 / 0 INV. 489.75

GT. 497.58
INV. 493.08

137 / 1

136 / 1 DOUBLE

GT. 497.38
INV. 493.38

135 / 1 GT. 497.58
INV. 494.08

134 / 1 GT. 498.98
INV. 495.48

133 / 1 GT. 500.88
INV. 497.38

75'

660

24"

89

PROP. NOISE WALL ℄ W/SAFETY SHAPE WALL 7

S 79°57'01" W

665

'N-W' RDY.

38:1 TAPER

S 81°27'01" W

S 81°26'59" W

660

'S-W' RDY.

DC=6°

24"

TYPE 13 TERMINAL ANCHOR

155

140 / BEV INV. 495.00

STA. 154+00

MATCH LINE

24'

12'

END 'S-W' RDY. 16' LT.
S.T. STA. 660 + 96.68 'S-W' RDY.
P.O.T. STA. 160+96 'S-W' RDY.

BEG. TAPER
S.T. STA. 660 + 96.68 'N-W' RDY.
40' LT.

S.T. 159+96.14

ENT. ST. 3 @ 14'x8' SLAB BRIDGE

C.S. 156+96.14

18" C.M.P.

R.C.C. 154+40.33

MATCH LINE

24' 23' 23' 24'

335

S 87°17'59" E

340

DC = 1°30'

345

I-440

TYPE II TERMINAL ANCHOR

PROP. G.R.

139 / 36 GT. 546.12
INV. 543.95

PROP. G.R.

TYPE II TERMINAL ANCHOR

STA. 346+00

MATCH LINE STA. 334+00

T.S. 338+25.47

S.C. 340+45.47

I-440 CURVE DATA

P.I. STA. 339+25.47
Ø$ = 1°07'30" LT.
L.T. = 100.00'
S.T. = 50.00'
L.S. = 150'
N = 628,344.57
E = 1,770,586.97

P.I. STA. 343+22.53
Δ = 27°04'44" LT.
D = 1°30'
T = 513.81'
L = 1,805.25'
E = 109.13'
R = 3813.72'
P.I.N = 628,300.56
E = 1,771,520.05
C.C.N = 632,161.47
E = 1,770,741.96
S.E. = 0.036 1/1
V = 60 MPH

'S-W' RDY. CURVE DATA

P.I. STA. 156+96.16
Δ = 15°18'45" LT.
D = 6°00'
T = 128.37'
L = 255.21'
E = 8.59'
R = 954.93'
P.I.N = 628,644.21
E = 1,770,892.48
C.C.N = 627,666.72
E = 1,770,840.21
S.E. = 0.059 1/1
V = 50 M.P.H.

P.I. STA. 157+96.38
Ø$ = 9°00' LT.
L.T. = 200.26'
S.T. = 100.24'
L.S. = 300'
N = 628,622.41
E = 1,770,747.47

19015-3115-44
19015-3116-44
END PROJ. NO. I-IR-440-4(59)206
STA 344+92.19

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

I-440

STA. 334+00 TO STA. 346+00

SCALE: 1" = 50'

TELEVOISE JOINT N2527

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	22

19015-3115-44
19015-3116-44
END PROJ. NO. I-IR-440-4(59)206
STA. 344+92.19

N

MATCH LINE STA. 334+00 (SEE SHT. NO. 20)

MATCH LINE STA. 346+00 (SEE SHT. NO. 23)

MATCH LINE STA. 348+50 (SEE SHT. NO. 25)

335 — S 87°17'59" E — 340 — 345

℄ I-440

T.S. 338+95.47
N 628,349.28
E 1,770,487.08

S.C. 340+45.47
N 628,343.19
E 1,770,636.95

18" — DC = 1°30'

TYPE II TERMINAL ANCHOR — PROP. G.R.

TYPE II TERMINAL ANCHOR — PROP. G.R.

24' 2.8' 24' — 24' 23' 23' 24'

BEG. W-N RDY. 8' L.T.
STA. 336+62.71 W-S' RDY.
P.O.T. STA. 4.35+75.85 W-N' RDY.
N 628,47.29
E 1,770,233.35

S 74° 51'27" E — S 77°51'27" E

335 — 16.5m

℄ PROP. NOISE WALLS W/SAFETY SHAPE WALL
143 / 1 — GT. 504.95 INV. 501.45
144 / BEV — INV. 499.30

BATTLEFIELD DRIVE

EXIST. 3@ 14'x 18' SLAB BRIDGE

T.S. 439+84.37
N 628,661.36
E 1,770,632.73

S.C. 441+84.37
N 628,029.62
E 1,770,829.97

P.C.C. 445+66.71
N 628,121.13
E 1,771,195.31

STA. 447+50

TYPE II TERMINAL ANCHOR — PROP. G.R. — DC 8° — PROP. G.R.

LIMIT OF PAVING 'W-N' RDWY. STA. 447+36.35

440 — 445

'W-N' ROADWAY — DC = 5°

16' — 22' — 28'

W-N RDY. CURVE DATA
P-I. = STA. 441+17.87
Os = 9°00' LT.
L.T. = 133.51'
S.T. = 66.82'
Ls = 200'
N = 628,033.28
E = 1,770,763.25

'W-N' RDY. CURVE DATA
P.I. = STA. 443+34.93
△ = 34°24'39" LT.
D = 9°00'
T = 197.13'
L = 382.34'
E = 29.82'
R = 636.62'

P.I.N. = 627,987.62
E = 1,770,975.45
C.C.N. = 628,665.28
E = 1,770,864.87
S.E. = 0.06%
V = 50 M.P.H.

S.T. 334+84.65
N 628,186.08
E 1,770,059.39

T.S. 337+96.77
N 628,104.55
E 1,770,360.67

S.C. 339+46.77
N 628,063.48
E 1,770,504.93

SUTTON HILL RD.

BROWNS CREEK

BROOKSIDE DR. SO.

PROP. A.C. FENCE

GT. 510.44
INV. 506.94

145 / 1

18" C.M.P.

PAVE

℄ PROP. NOISE WALL W/SAFETY SHAPE WALL

146 / BEV — INV. 494.40

W-S' RDY.

W-S RDY. CURVE DATA
P.I. = STA. 338+96.78
Os = 2°15' RT.
L.T. = 100.01'
S.T. = 50.01'
Ls = 150'
P.I.N. = 628,078.43
E = 1,770,457.21

'W-S' RDY. CURVE DATA
P.I. = STA. 342+31.90
△ = 19°10'46" RT.
D = 3°00'
T = 322.68'
L = 639.32'
E = 27.07'
R = 1909.86'
P.I.N. = 627,990.89
E = 1,770,780.69
C.C.N. = 626,240.94
E = 1,769,939.04
S.E. = +0.044%
V = 50 M.P.H.

W-S' ROADWAY — DC = 3°

24'

P.C.C. 345+88.08
N 627,774.71
E 1,771,071.99

PARK TERRACE

SUTTON HILL RD.

WEST FORK OF BROWNS CR.

12' 2.4'

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440

STA. 334+00 TO STA. 346+00

SCALE 1" = 50'

TELEDYNE 1051 N27027

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	23

MATCH LINE STA. 154+00 (SEE SHT. NO. 21)

MATCH LINE STA. 346+00 (SEE SHT. NO. 22)

P.C.C. STA. 447+66.71

MATCH LINE STA. 447+50 SEE SHT. NO. 23

'S-W' RDWY.

PROP. GR.

LIMIT OF PAVING "S-W" RDY. STA. 151+83.07

P.C.C. STA. 47+14.41

'N-E' RDWY.

EXIST. PARAPET WALL

MATCH LINE STA. 653+00 (SEE SHT. NO. 21)

LIMIT OF PAVING 'N-W' RDY. STA. 652+50

PROP NOISE WALL W/SAFETY SHAPE WALL

'N-W' RDWY.

S.C. 641+56.01

T.S. 650+15.24

END PROP CHAIN LINK FENCE

STA. 648+82.73 N-W RDY. = STA. 40+57.20 FRANKLIN PIKE

N-E RDY.
P.I. = STA. 52+59.03
Δc = 74° 36' 4.32"
Dc = 8°
T = 545.61
Lc = 932.52
E = 184.15
R = 716.20

N-E RDY.
P.I. = STA. 44+48.68
Δc = 41° 48' 21.61"
Dc = 7° 30'
T = 291.77'
Lc = 557.41'
E = 53.82'
R = 763.94'

EXIST. CONC. MED. BARRIER

FRANKLIN PIKE

P.T. 393+63.35

N-E RDY. CURVE DATA
P.I. = STA. 41+25.03
OS = 12° 00'
L.T. = 200.46'
S.T. = 100.42'
L.S. = 300.00'

N-E RDY.
P.I. = 40+73.81
OS = 9° 22' 30"
L.T. = 166.90
S.T. = 83.55
L.S. = 250.00

EXIST. G.R.

I-65

EXIST. MED. G.R.

EXIST. MED. BARRIER

STA. 533+00

MATCH LINE

EXIST. G.R.

W-N RDY. CURVE DATA
P.I. = STA. 459+31.45
OS = 3° 00'
L.T. = 100.01'
S.T. 50.01'
L.S. = 150.00'
P.I. N = 629,315.7
E = 1,771,727.51

W-N RDY.
P.I. = STA. 453+54.02
Δc = 44° 55' 20"
Dc = 4°
T = 587.31'
Lc = 1114.72
E = 115.73'
R = 1432.39'
P.I. N = 628,678.711
E = 1,771,748.17

C.S. STA. 458+81.43

W-N RDWY.

EXIST. G.R.

S.T. STA. 460+31.43

S.C. 245+19.27

'N-E' RDWY.

EXIST. PARAPET

EXIST. PARAPET

I-440

S RDWY.

T.S. 243+19.27

L & N R.R.

E-N RDY. CURVE DATA
P.I. = STA. 530+20.15
Δc = 97° 42' 17" RT.
Dc = 8° 00'
T = 819.62'
Lc = 1221.31'
E = 372.242'
R = 716.2
P.I. N = 628,747.76
E = 1,772,026.62

MATCH LINE STA. 355+25 I-440

MATCH LINE STA. 355+25 I-440

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
I-440
STA. 346+00 TO STA. 355+25

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	24

N-W RDY. CURVE DATA)
P.I. STA. 643+06.89
T = 5°57'05" RT.
Dc = 2°00'
Ls = 200'
Ts = 248.95'
Xc = 199.98'
Yc = 2.33'
Os = 2°
Rc = 2,864.79'
Tc = 48.79'
Lc = 97.57'
PI = N 629,932.92
E 1,771,414.99
S.E. = 0.035% V = 50 M.P.H.

STA. 41+73 FRANK PK. =
P.L. ℄ STA. 0+02.12 BERRY RD.

FRANKLIN PIKE
N 14°46.53" E

C.S. STA. 643+55.51

S.T. STA. 645+55.51

EXIST. RET. WALL

S 17°26'05" W

"N-W" ROADWAY

T.S. STA. 640+57.95

S.C. STA. 642+57.95

DC = 2°

24"

18" C.M.

13" C.M.

EXIST. G.R.

6.0"

30"

18"

24"

EXIST. G.R.

6'X6' SLAB CULVERT

STA. 543+21.00 I-65

EXIST. G.R.

S 11°23' W

(SEE SHEET NO.)

535

540

545

(SEE SHEET NO.)

EXIST. G.R.

N 78°28'13" E

BERRY RD

W-N ROADWAY

"E-N" ROADWAY

EXIST. G.R.

E-N ROADWAY

EXIST. G.R.

MATCH LINE

END W-N RDY 12' LT.

P.C.C. 542+32.26

EXIST. G.R.

EXIST. CONC. PARAPET

P.C.C. 534+21.84

N 73°28'13" E

P.C.C. 536+23.01

℄ N R.R.

N 00°57'02" W

MATCH LINE

N 02°30'00" E

E-N RDY. CURVE DATA
P.I. = STA. 535+22.59
Ac = 8° 02' 48" RT.
Dc = 4° 00'
T = 100.75'
Ec = 201.17'
E = 3.53'
R = 14.32.39'
PI. N = 629,621.16
E = 1,771,736.38
S.E. = 059% V = 50 M.P.H.

E-N RDY. CURVE DATA
P.I. = STA. 539+28.79
△c = 12°11'06" RT.
Dc = 2°00'
T = 305.78'
Lc = 609.25'
E = 16.27"
R = 2864.79'
P.I. = N 630,021.09
E 1,771,663.45
S.E. = 0.035% V = 50 M.P.H.

E-N RDY. CURVE DATA
P.I. = STA. 544+60.46
△c = 6°38'00" RT.
Dc = 1°27'18"
T = 228.21
Lc = 455.90
E = 6.61'
R = 3,937.85'
P.I. = N 630,554.8
E 1,771,680.68
S.E. 0.028% V = 50 M.P.H.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 533+00 TO STA. 546+00
(I-65)
SCALE = 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59) 206	25

"W-S" PL. RDY CURVE DATA
PI. STA. 357+15.06
Δc = 10°24' 57"
Dc = 10°45'
T = 298.42'
R = 3274.05
Lc = 594.37
E = 13.52'
PI.N. = 626,986.23
E = 1,771,875.85

"W-S" RDY CURVE DATA
PI. STA. 350+03.01
Δc = 12°27'30"
Dc = 1°30'
T = 416.92
R = 3819.72
Lc = 828.92
E = 22.69
L = 830.56
PI.N. = 627,526.35
E = 1,771,406.83

FRANKLIN PIKE CURVE DATA
PI. STA. 28+06.53
Δc = 15°-31'-16" LT.
Dc = 0°40'
T = 1171.26'
E = 79.44'
L = 2328.17
R = 8594.37'
PI.N. 628,158,129
E = 1,771,565.602

"E-S" RDY. CURVE DATA
PI. STA. 251+10.96
Δc = 63°-30'-18" LT.
Dc = 6° 00'
T = 590.99
E = 168.08
Lc = 1058.42
R = 954.93
PI. N = 628,454,32
E = 1,771,352,45

"E-S" RDY. CURVE DATA
PI. STA. 260+38.95
θs = 12°00' LT.
L.T. = 200.46'
S.T. = 100.42'
Ls = 300.00'

T-65 CURVE DATA
PI. = STA. 522+98.25
c = 37°17'14" RT.
Dc = 1° 00'
T = 1,933.07
Lc = 3,728.72
E = 317.31
R = 5,729.58'
PI. = N 628,290.39
E 1,771, 274.19

E-S PL. RDY. CURVE DATA
PI. STA. 257+62.35
Δc = 28°-48'-41" LT.
Dc = 8° 00
T = 183.96
E = 23.25'
Lc = 360.14
R = 716.20'
PI.N = 627,679.64
E = 1,771,370.08

"S-E" RDY. CURVE DATA
PI. STA. 510+99.11
Δc = 20°+6'00" RT.
Dc = 3°00'
T = 341.34
E = 30.26
Lc = 675.56
R = 1,909.86'
PI.N. 627,319.69
E = 1,772,009.6
S.E. = +0.044 ft
V = 50 M.P.H.

"S-E" RDY. CURVE DATA
PI. STA. 518+22.16
Δc = 44°18'38.75 RT.
Dc = 6° 00
T = 388.83
Lc = 738.51'
E = 76.13
R = 954.93'
PI.N = 628,049.68
E = 1,771,993.2
S.E. = +0.059 ft
V = 50 M.P.H.

"S-W" RDY. CURVE DATA
PI. = STA. 142+79.16
θs. = 12°00' LT.
L.T. = 200.46
S.T. = 100.42'
L.S = 300'

"S-W" RDY. CURVE DATA
PI. STA. 145+16.00
Δc = 21°-42'-15" LT.
Dc = 8° 00'
T = 137.30'
E = 13.04'
L = 271.30'
R = 716.20'
N = 628.075.71
E = 1,771,857.81

"S-W" RDY. CURVE DATA
PI. STA. 150+55
Δc = 31°-31'-14" LT.
Dc = 4° 00'
T = 405.83
E = 56.38'
Lc = 790.93
R = 1432.39
PI.N = 628,475.5
E = 1,771,490.18

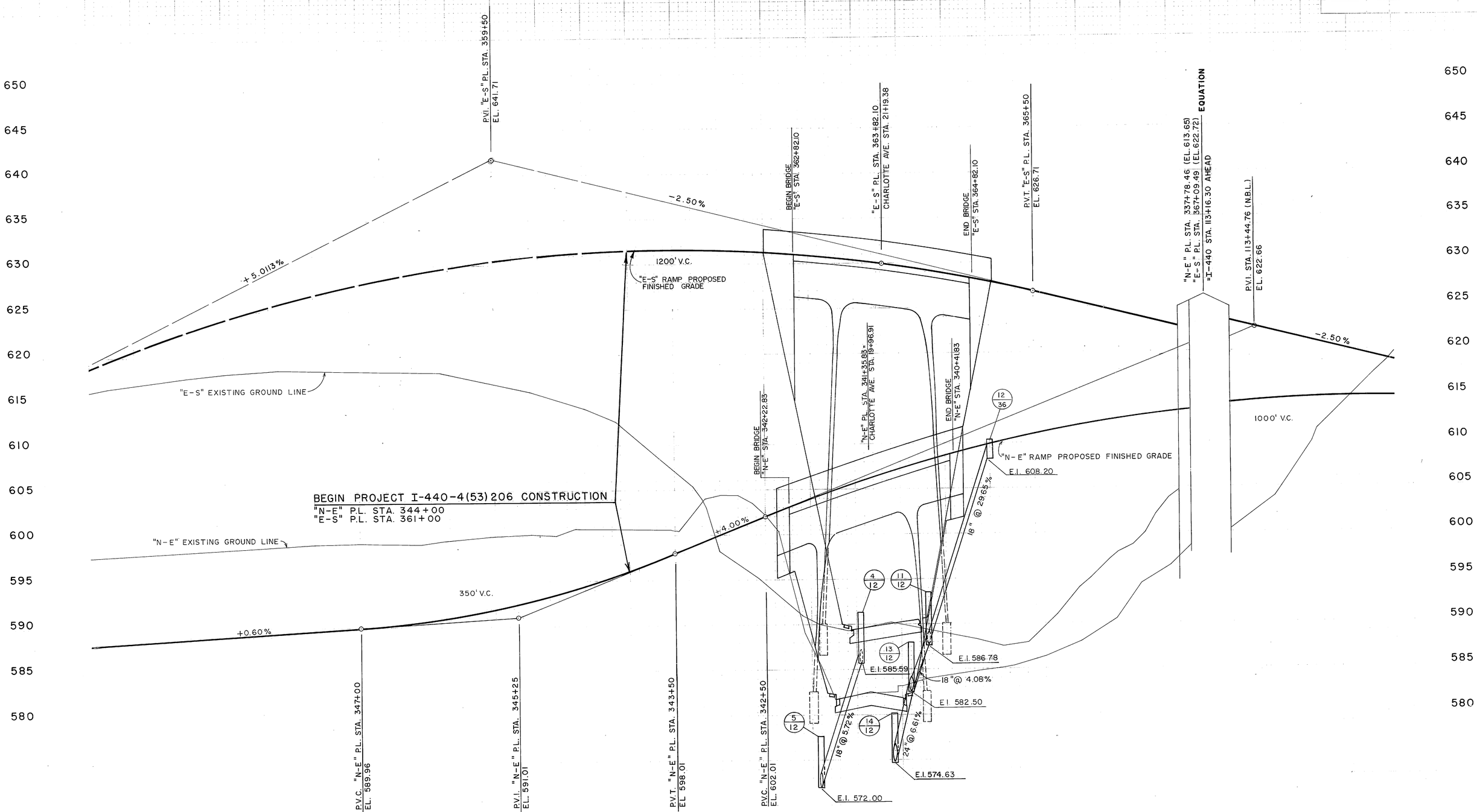
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

348+50 TO 35:+06.69
'W-S' RDWY

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	28
PAVING	1984	I-440-4(59)206	26



PROFILE

I-440 PARKWAY
"N-E" P.L. STA 344+00 &
"E-S" P.L. STA 361+00
TO STA 115+00
HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	29
PAVING	1984	I-440-4(59)206	27

REV. 1-31-86: GENERAL REVISIONS TO DRAINAGE

P.V.T. STA. 118+44.76
EL. 610.16 (NBL.)

P.V.C. STA. 121+20.55
EL. 605.27

P.V.I. STA. 122+20.55
EL. 600.77

P.V.T. STA. 123+20.55
EL. 595.58

BEGIN BRIDGE LT. LANE STA. 127+06.00
BEGIN BRIDGE RT. LANE STA. 127+42.59

END BRIDGE LT. LANE STA. 129+54.00
END BRIDGE RT. LANE STA. 129+95.22

P.V.C. STA. 130+00
EL. 591.47

STA. 128+19.10 = ℄ NORTH BOUND TRACK

STA. 128+58.18 = ℄ MID TRACK

STA. 128+78.31 = ℄ SOUTH BOUND TRACK

S.B.L. (RIGHT LANE)

NBL. (LEFT LANE)

PROPOSED FINISHED GRADE

12.50%

200' V.C.

1.792 54%

18" @ 2.43%

24" @ 1.62%

24" @ 1.99%

18" @ 8.11%

18" @ 0.50%

18" @ 0.50%

24" @ 17.79%

18" @ 0.79%

18" @ 0.50%

18" @ 0.50%

23'-0" MIN. CL.

EXISTING GROUND LINE

E.I. 609.22
E.I. 607.34
E.I. 607.24
E.I. 605.36
E.I. 605.07
E.I. 600.69
E.I. 599.84
E.I. 600.10
E.I. 597.86
E.I. 599.54
E.I. 597.57
E.I. 604.50
E.I. 595.27
E.I. 593.76
E.I. 593.29
E.I. 593.19
E.I. 592.90
E.I. 592.85
E.I. 592.65
E.I. 592.30
E.I. 588.92
E.I. 587.20
E.I. 563.00
E.I. 559.60
E.I. 557.97
E.I. 554.20
E.I. 553.50
E.I. 553.20

B.M.
MON. NO. 40
CONC. MON. WITH BRASS CAP
1074.86' LT. STA. 117+00.96
ELEV. 552.24

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE
I-440 PARKWAY

STA. 115+00 TO STA. 130+00

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

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

SURVEY NOTE BOOK NO. PLOTTED TEMPLATE AREAS AREAS CHECKED

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	30
PAVING	1984	I-440-4(59)206	28

REV. 11-31-84 GENERAL REVISIONS TO DRAINAGE.

SURVEY PLOTTED
NOTE BOOK TEMPLATE
NO. AREAS
AREAS CHECKED

NOTE BOOK TEMPLATE
NO. AREAS
AREAS CHECKED

PVC. STA. 130+00
EL. 591.47

PVI. STA. 131+00
EL. 586.70

PVT. STA. 138+00
EL. 574.38

45 / 15

45A / 36

50 / 3

47 / 24

46 / 24

49 / 24

48 / 24

E.I. 588.00

18" @ 20.83

-1.19254%

800' V.C

E.I. 578.29

E.I. 577.75

E.I. 577.25

E.I. 576.30

E.I. 574.32

E.I. 574.03

18" @ 2.55%

51 / 36

EXISTING GROUND LINE

52 / 24

55 / 24

E.I. 571.50

53 / 24

54 / 24

56 / I.B.

E.I. 566.80

PROPOSED FINISHED GRADE

E.I. 567.42

E.I. 566.20

E.I. 565.44

E.I. 564.92

18" @ 3.55%

57 / E.W.

E.I. 571.00

30" @ 68.18%

3.082%

59 / 24

62 / 3

61 / 24

58A / 24

58 / 36

60 / 24

E.I. 557.16

E.I. 555.18

E.I. 553.47

E.I. 552.15

E.I. 551.86

E.I. 553.09

24" @ 2.95%

B.M.
MON. NO. 37
CONC. MON. WITH BRASS CAP
149.87' RT. STA. 139+23.52 ON TANGENT
ELEV. 581.29

600 595 590 585 580 575 570 565 560 555 550 545 540

130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE
I-440 PARKWAY
STA. 130+00 TO STA. 145+00

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	31
PAVING	1984	I-440-4(59)206	29

REV: 2-2-83: GRADING QUANTITIES REVISED TO REFLECT ADDITION OF EARTH BERM NOISE BARRIER.

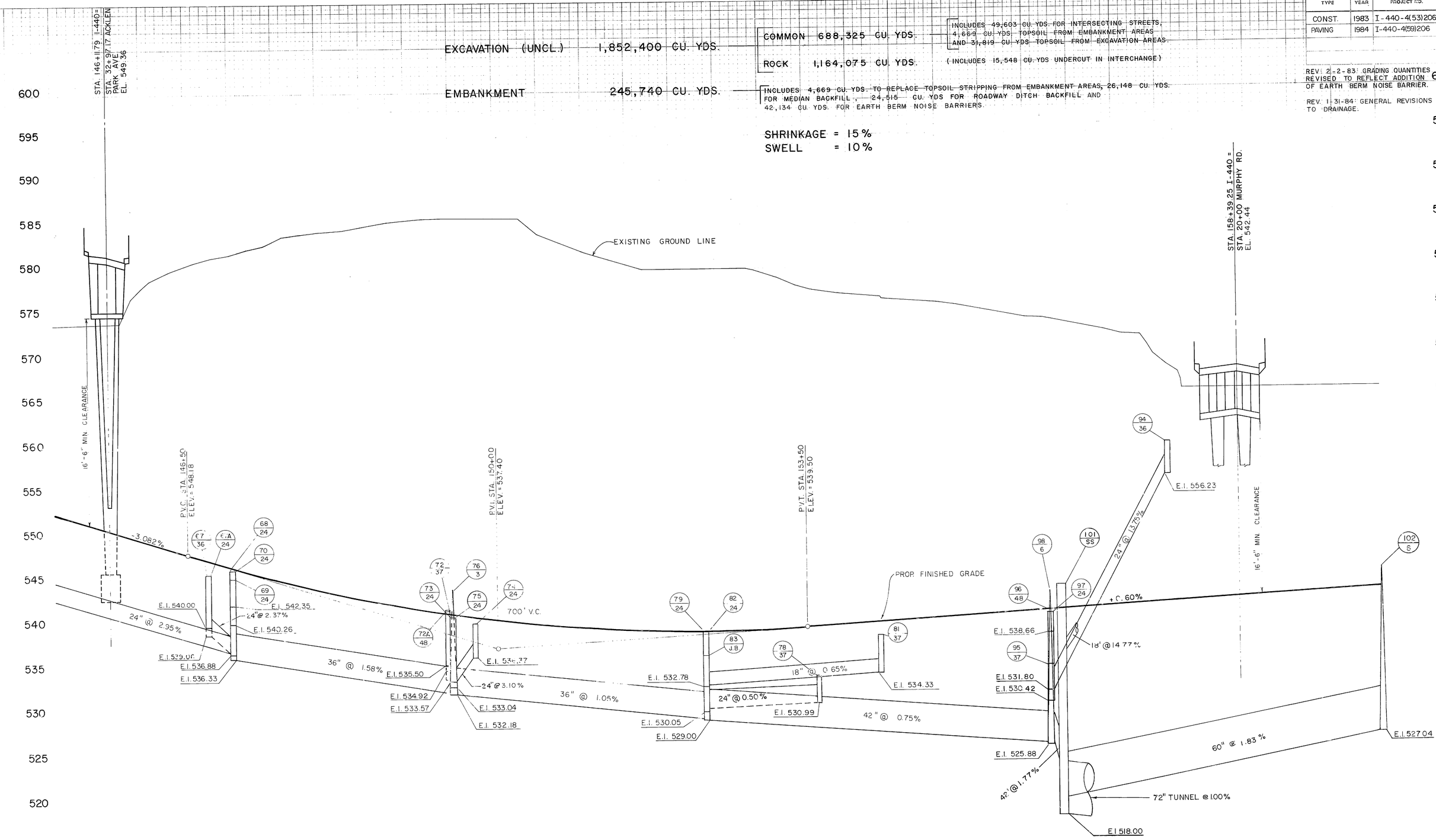
REV. 1-31-84: GENERAL REVISIONS TO DRAINAGE.

EXCAVATION (UNCL.) 1,852,400 CU. YDS.

- COMMON 688,325 CU. YDS. — INCLUDES 49,603 CU. YDS. FOR INTERSECTING STREETS, 4,669 CU. YDS. TOPSOIL FROM EMBANKMENT AREAS AND 31,819 CU. YDS. TOPSOIL FROM EXCAVATION AREAS.
- ROCK 1,164,075 CU. YDS. (INCLUDES 15,548 CU. YDS UNDERCUT IN INTERCHANGE)

EMBANKMENT 245,740 CU. YDS. — INCLUDES 4,669 CU. YDS. TO REPLACE TOPSOIL STRIPPING FROM EMBANKMENT AREAS, 26,148 CU. YDS. FOR MEDIAN BACKFILL, 24,515 CU. YDS FOR ROADWAY DITCH BACKFILL AND 42,134 CU. YDS. FOR EARTH BERM NOISE BARRIERS.

SHRINKAGE = 15%
SWELL = 10%



B.M.
MON. NO. 36
CONC MON. WITH BRASS DISK
S.E. CORNER ACKLEN PARK DR. AT PARK CIR.
24.51' LT. OF STA. 34+97.55 ACKLEN PARK DR.
ELEV. 561.97

B.M.
MON. NO. 34
CONC. MON. WITH BRASS CAP
32.45' LT. STA. 16+15.46 MURPHY RD.
ELEV. 562.75

B.M.
MON. NO. 33
CONC. MON. WITH BRASS CAP
130.15' RT. STA. 18+16.61 MURPHY RD.
ELEV. 568.70

PROFILE
I-440 PARKWAY
STA. 145+00 TO STA. 160+00

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	32
PAVING	1984	I-440-4(59)206	30

REV.-1-31-84-GENERAL REVISIONS TO DRAINAGE

NOTE BOOK TEMPLATE
NO. AREAS
AREAS CHECKED

STA. 169+01.23 I-440 =
STA. 20+00 WEST END AVE.
EL. 548.81

STA. 174+48.63 I-440
=STA. 5+13.14 RAMP "F"

EXISTING GROUND LINE

RAMP "F"

MIN. CLEARANCE 16'-6"

PROPOSED FINISHED GRADE

+0.60%

105 / 18 — E.I. 564.50

18" @ 60.61%

102 / 6 — 103 / 24 — 104 / 37 — 104A / 48 — 106 / 24 — 107A / 24 — 107 / 36

E.I. 539.77

18" @ 2.40%

E.I. 542.75

18" @ 0.85%

E.I. 544.00

E.I. 535.39

E.I. 534.24

E.I. 534.72

66" @ 1.00%

E.I. 527.04

128 / 24 — 129 / 37 — 109 / 24 — 110 / 36 — 108 / 18

E.I. 541.40

18" @ 0.50%

18" @ 31.27%

E.I. 543.50

18" @ 30.42%

E.I. 540.89

E.I. 534.90

E.I. 531.24

60" @ 0.65%

132 / 24 — 130 / 24 — 137 / 37 — 135 / 37

E.I. 541.71

18" @ 1.00%

E.I. 540.35

E.I. 538.75

E.I. 533.39

60" @ 0.60%

141 / 24 — 142 / 24 — 148 / 37 — 143 / 36 — 144 / 36

E.I. 543.19

E.I. 543.90

E.I. 551.45

18" @ 3.15%

E.I. 543.39

60" @ 0.50%

E.I. 535.89

590 585 580 575 570 565 560 555 550 545 540 535 530 525

160 161 162 163 164 165 166 168 169 170 171 172 173 174 175

B.M.
MON. NO. 30
BRASS CAP IN CURB
S.E. CORNER LANCASTER AVE. AT WEST END AVE.
73.9' LT. STA. 169+16.48
EL. EV. 568.26

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE
I-440 PARKWAY

STA. 160+00 TO STA. 175+00

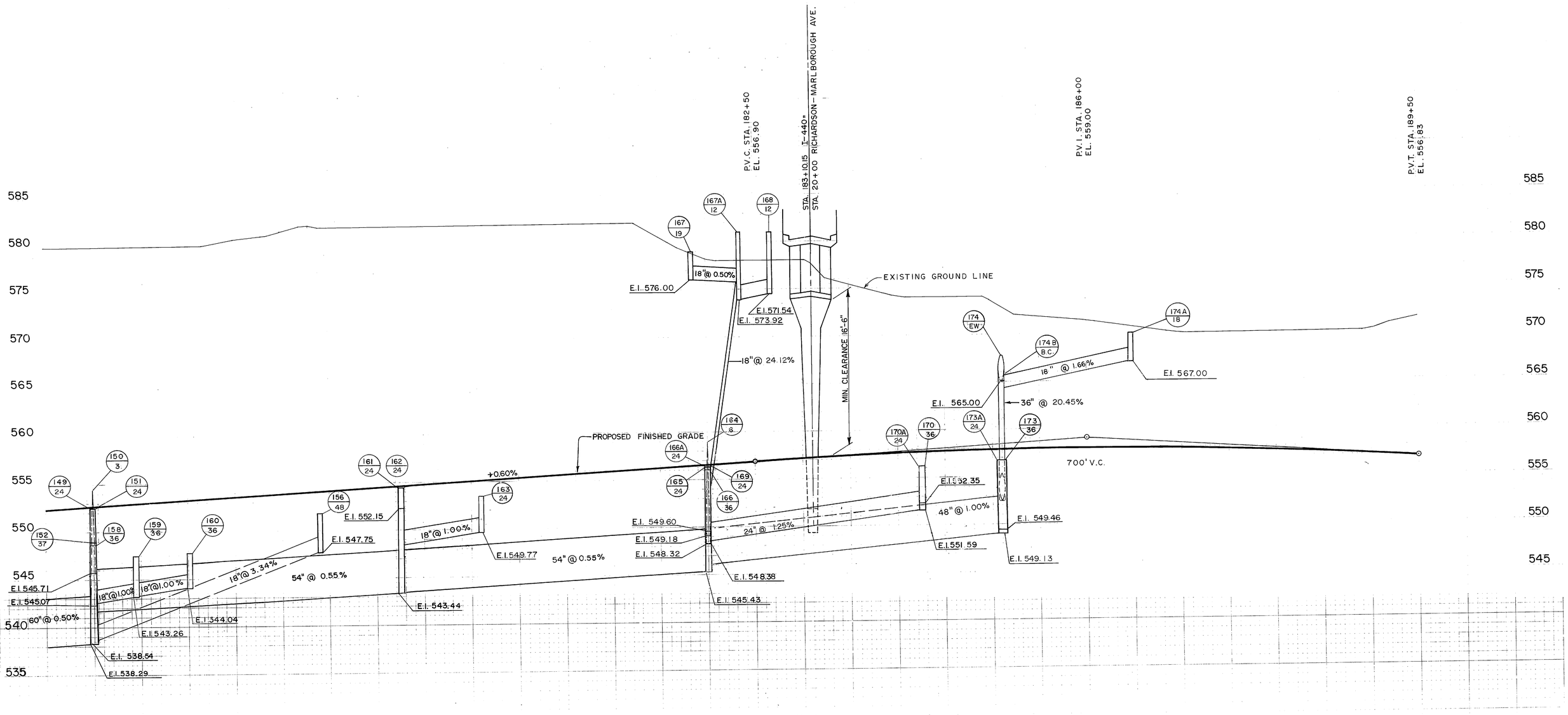
HORIZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LIN
TRUBLOOD
PRINTED IN U.S.A.

334

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	33
PAVING	1984	I-440-4(59)206	31

REV. 1-31-84: GENERAL REVISIONS TO DRAINAGE



B.M.
MON. NO. 27
S.W. CORNER MARLBOROUGH AVE.
AT CHESTERFIELD AVE.
428.29' LT. STA. 181+43.21
ELEV. 592.82

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

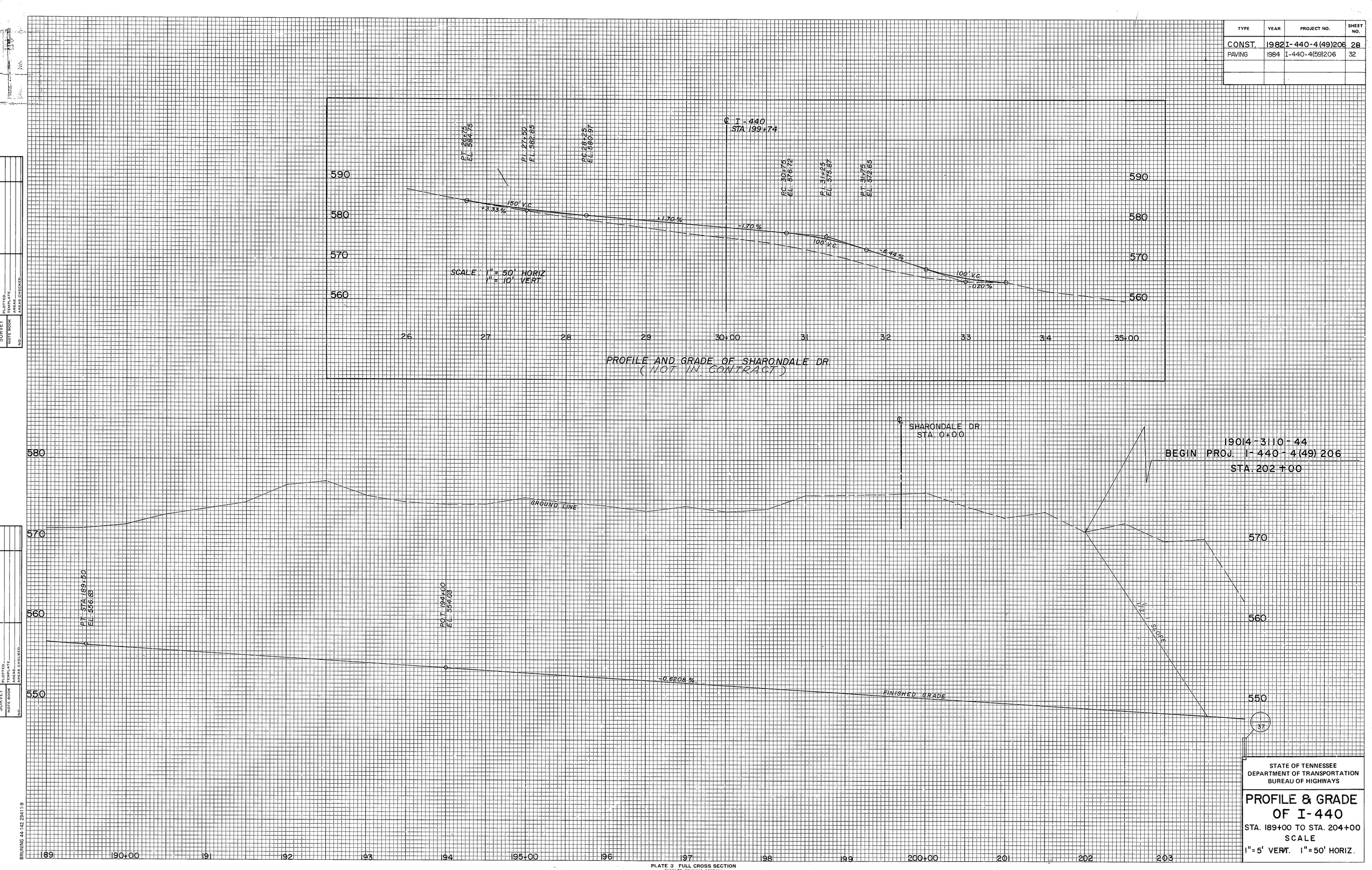
PROFILE
I-440 PARKWAY

STA. 175+00 TO STA. 189+00

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(49)206	28
PAVING	1984	I-440-4(59)206	32

PROFILE AND GRADE OF SHARONDALE DR.
(NOT IN CONTRACT)



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE & GRADE OF I-440

STA. 189+00 TO STA. 204+00
SCALE
1" = 5' VERT. 1" = 50' HORIZ.

PLATE 3 FULL CROSS SECTION
CHARLES BRUNING COMPANY
MADE IN U.S.A.

BRUNING 44-142 29411-9

SURVEY NO. NOTE BOOK PLOTTED TEMPLATE AREAS AREAS CHECKED

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(49)206	29
PAVING	1984	I-440-4(59)206	33

REV. 9-12-85: DELETED DRAINAGE ITEMS 2,3,14,5 & 16, CHANGED DRAINAGE ITEMS 1,4,7 & 10 TO JUNCTION BOXES.

REV. 10-4-84: ADDED PROFILE FOR LINMAR AVE., ADDED DRAINAGE STRUCTURE NOS. IIF, IIG, IIH, III, AND IIJ. CHANGED INVERT ELEVATION FOR DRAINAGE STRUCTURE NO. II. CHANGED GRATE AND INVERT ELEVATIONS FOR STRUCTURE NO. 9. CHANGED SIZE OF PIPE FROM STRUCTURE NO. 9 TO NO. 10. ADDED A LINE OF PIPE FROM STRUCTURE NO. 10 TO NO. 7. ADDED ALL PIPE NECESSARY FOR NEW STRUCTURES.

WOODLAWN DRIVE ℄
STA. 17+71
E.P. STA. 0+20, EL. 565.21
P.C. STA. 0+50, EL. 563.66
P.I. STA. 0+75, EL. 562.63, V.C. 50
P.C. STA. 1+10, EL. 557.94
P.C. STA. 1+10, EL. 557.94
P.I. STA. 1+55, EL. 554.59, V.C. 50
LIMIT OF WORK, P.T. STA. 1+60, EL. 553.15
-5.760%, -3.340%, 0.410%
565, 560, 555, 550
2+00, 1+00, 0+00

PROFILE — LINMAR AVE.

℄ I-440
STA. 214+12.32

LIMIT OF NEW WORK
STA. 13+75
P.C. 13+90, EL. 551.00
P.I. 14+40, EL. 552.20
P.T. 14+90, EL. 554.23
+4.05%
18"
100' V.C.
+2.46%
GROUND LINE
IIC 12
IID SAFE
IIB 14
P.C. 16+75, EL. 561.72
P.I. 17+50, EL. 564.76
P.T. 18+25, EL. 566.97
+1.61%
150' V.C.
IIH 12
FIN. GRADE
IIA 12
III 14
P.C. 22+50, EL. 572.81
P.I. 23+50, EL. 574.72
200' V.C.
+4.59%
III 12
P.T. 24+50, EL. 579.01
IIF LEW
II G & B
LIMIT OF NEW WORK, STA. 25+25
18"
580, 570, 560, 550, 540
13, 14, 15+00, 16, 17, 18, 19, 20+00, 21, 22, 23, 24, 25+00

PROFILE AND GRADE OF WOODLAWN DRIVE

℄ WOODLAWN DR.
20+00
TRANSITION FOR SUPERELEVATION
P.C. 211+50, EL. 543.17
212+42.08
P.I. 214+50, EL. 541.31
215+92.08
P.T. 217+50, EL. 550.43
I-440
-0.6208%
FIN. GRADE
600' V.C.
+3.041%
JB 1
JB 4
5 STUB
JB 7
6 STUB
8 STUB
JB 10
U.D. 11
9 37CB
12 36CB
17 36CB
24"
42"
30"
2 LINE OF 30" CONC. PIPE
45"
18"
54"
40'
560, 550, 540
STA. 208+50 (I-440)
12' x 5' x 186' CONC. BOX CULV.
SKEW 82° 26' LT. OA
DWG. NOS. K-80-50, D-CE-1, & K-15-49
.018 FT./FT. NORMAL
SUPERELEVATED
3° 30' LT.
.057 FT./FT. SUPERELEVATED
P.T.S. 212+42.08, .018 FT./FT. NORMAL
S.C. 215+92.08, .057 FT./FT. SUPERELEVATED
580, 570, 560, 550, 540
204, 205+00, 206, 207, 208, 209, 210+00, 211, 212, 213, 214, 215+00, 216, 217, 218

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE & GRADE I-440 & WOODLAWN DR.

STA. 204+00 TO STA. 219+00
SCALE
1" = 5' VERT. 1" = 50' HORIZ.

NOTE BOOK NO. | TEMPLATE | AREAS | AREAS CHECKED

BRUNING 44-142 29411-9

PLATE 3 FULL CROSS SECTION
CHARLES BRUNING COMPANY
MADE IN U.S.A.

EXCAVATION

1,463,221 C.Y.

COMMON

ROCK

EMBANKMENT

69,780 C.Y.

INCLUDES 21,561 CU. YDS. TOPSOIL FROM EXC. AREAS; 630 CU. YDS. WOODLAWN DR., 9,635 CU. YDS. HILLSBORO RD.; 659 CU. YDS. BELMONT BLVD., 2,365 CU. YDS. HAZELWOOD, AND 1,432 CU. YDS. FOR HILLSBORO GARDEN DRIVE.

INCLUDES 6,201 CU. YDS. UNDERCUT IN MEDIAN AND DITCHES.

COMMON SHR 20%

ROCK SWL 10%

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(49)206	30
PAVING	1984	I-440-4(59)206	34

REV. 5-24-82

REV. 9-12-85: CHANGED DRAINAGE ITEMS 18, 21, 22 & 25. CHANGED GRADING QUANTITIES.

NOTE BOOK | TEMPLATE | AREAS | AREAS CHECKED | NO.

600 590 580 570 560 550

GROUND LINE

P.I. 227+47.20 EL. 590.76

-2.0278%

+3.041%

FIN. GRADE

1600' V.C.

P.C. 219+47.20 EL. 536.43

18 JB

19 #37

21 JB

22 JB

24 #1

25 JB

2.4%

54"

54"

54"

48"

18"

222+29.95 +.060 FT./FT. SUPERELEVATED

C.S. 224+83.09 +.060 FT./FT. SUPERELEVATED

ST. 228+33.09 -.018 FT./FT.

TRANSITION FOR SUPERELEVATION

4°30' LT. +.060 FT./FT. SUPERELEVATED

TRANSITION FOR SUPERELEVATION

219 220+00 221 222 223 224 225+00 226 227 228 228 230+00 231 232

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE & GRADE OF I-440

STA. 219+00 TO STA. 232+00

SCALE

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

PLATE 3 FULL CROSS SECTION
CHARLES BRUNING COMPANY
MADE IN U.S.A.

BRUNING 44-142 29411-9

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(49)206	31
PAVING	1984	I-440-4(59)206	35

REV. 9-12-85: CHANGED DRAINAGE ITEMS 54, 49 & 51 TO JUNCTION BOXES, AND DELETED DRAINAGE ITEM 28.

NOTE BOOK NO.

TEMPLATE AREAS CHECKED BY

600
590
580
570
560
550

GROUND LINE

I-440

FIN. GRADE

1600' V.C.

-2.027 8 %

PT. 235+47.203
EL. 564.533

PC. 236+17.982
EL. 563.097

18"

12"

48"

24"

42"

30"

+700' V.C.

PI. 239+75
EL. 556.00

+1.927 1 %

PT. 243+25
EL. 562.75

℄ HILLSBORO ROAD
STA. 239+87.33

EQ. STA. 238+59.209 BK.
STA. 238+66.226 AHD.

S.C. 238+59.209
.050'/' S.E.
EL. 559.85

S.C. 238+66.226
.050'/' S.E.
EL. 559.85

T.S. 235.09

P.C. 236+17.98

0.8 %

TRANSITION FOR SUPERELEVATION

2° - 30' RT.

.050 '/' SUPERELEVATION

232 233 234 235+00 236 237 238 239 240+00 241 242 243 244 245+00 246

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE & GRADE OF I-440

STA. 232+00 TO STA. 246+00

SCALE

1" = 5' VERT. TO 1" = 50' HORIZ.

PLATE 3 FULL CROSS SECTION

BRUNING 44-142 23411-9
CHARLES BRUNING COMPANY
MADE IN U.S.A.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(49)206	32
PAVING	1984	I-440-4(59)206	36

REV. 9-12-85: DELETED DRAINAGE ITEM 85, AND CHANGED DRAINAGE ITEMS 75, 82 & 86 TO JUNCTION BOXES.

NOTE BOOK NO. | TEMPLATE | AREAS | AREAS CHECKED

610

600

590

580

570

560

246 47 48 49 250 51 52 53 54 255 56 57 58 59 60

P.C. 251+50 EL. 578.65

P.I. 260+50 EL. 596.00

-3.0 %

+1.927 %

-1.800' V.C.

GROUND LINE

FIN. GRADE I-440

FIN. GRADE I-440

77 #1

78 #1

79 JB

80 #37

81 #1

82 JB

97 STUB

84 #37

85 JB

83 #36

18"

18"

42"

48"

18"

C.S. 252+09.93 .050% S.E.

S.T. 255+59.93 .018% NORMAL

.050% SUPERELEVATION

TRANSITION FOR SUPERELEVATION

.018% NORMAL

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE & GRADE OF I-440

STA. 246+00 TO STA. 261+00

SCALE

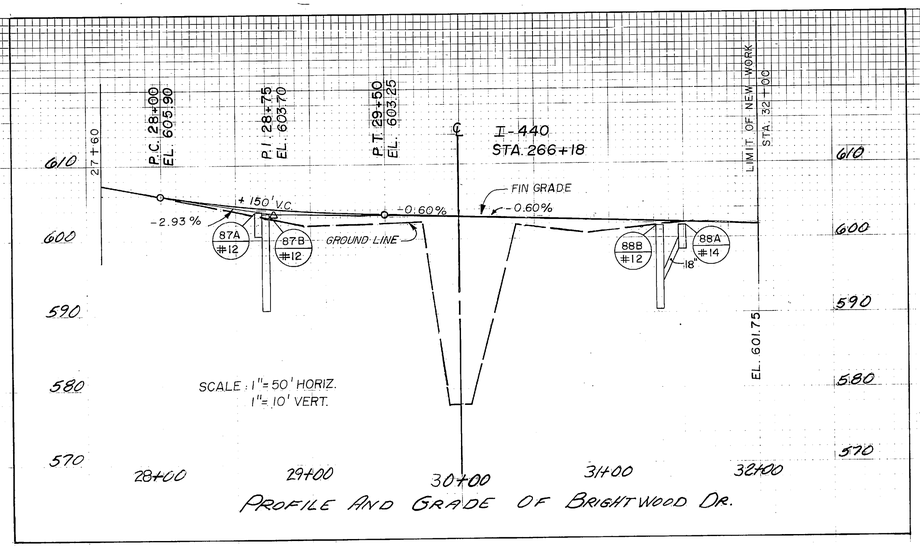
1"= 5' VERT. 1"= 50' HORIZ.

PLATE 3 FULL CROSS SECTION
CHARLES BRUNING COMPANY
MADE IN U.S.A.

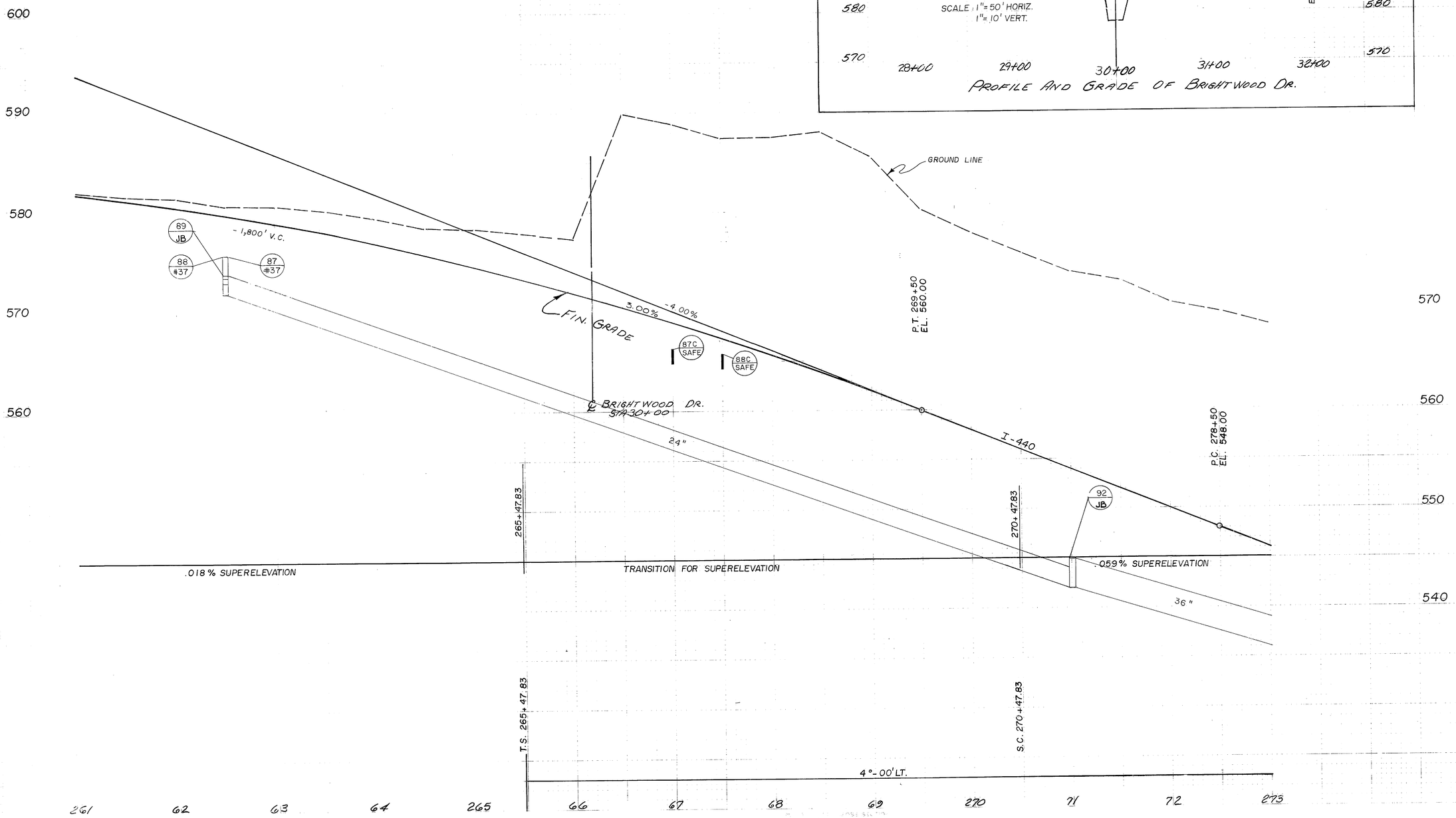
BRUNING 44-142 25411-9

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-440-4(49)206	33
PAVING	1984	I-440-4(59)206	37

REV. 5-24-82: GENERAL REVISION.
REV. 9-12-85: DELETED DRAINAGE ITEMS 90 & 91, AND CHANGED DRAINAGE ITEMS 89 & 92 TO JUNCTION BOXES.



PROFILE AND GRADE OF BRIGHTWOOD DR.



CHARLES BRUNING COMPANY
MADE IN U.S.A.

PROFILE & GRADE OF I-440

STA. 261+00 TO STA. 273+00
SCALE
1"=5' VERT. 1"=50' HORIZ.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	46
PAVING	1984	I-440-4(59)206.	38

REV 2-14-83: PROFILE OF SPECIAL DITCH REVISED FROM STA. 278+00 TO STA. 280+25 LT. I-440.

REV. 5/12/83: REVISED DRAINAGE STRUCTURE ON I-440 AND BELMONT BLVD.

REV. 8-31-83: DELETED DRAINAGE ITEMS 101 & 110 CHANGED DRAINAGE ITEMS 105, 106 & 112 TO REGULAR JUNCTION BOXES AND DRAINAGE ITEM 113 TO NO. 7 JUNCTION BOX.

AREAS CHECKED

NO.

570

560

550

540

535

530

525

0.59% SUPERELEVATION

TRANSITION FOR I SUPERELEVATION

1.18% SUPERELEVATION

P.I. 275+25
EL. 532.30

4.00%

36"

0.50%

42"

BELMONT BLVD.
STA. 20+00

CONST. LIMIT PROJ. NO.
STA. 278+00

P.I. 278+00
EL. 535.34

EXISTING 8" SEWER LINE

FLOW LINE EL. 540.00 @ MANHOLE
EL. 535.5 @ TIE IN
TO 15"SA BATTLEFIELD DR.

+24 C.M.

FIN. GRADE

SPECIAL DITCH ON LEFT

-11.67%

10' S.A.

EL. 528.25

4.0%

SPECIAL DITCH ON LEFT
(DEEPEN SIDE DITCH)

-20.285%

54"

I-440

0.60%

EL. 527.56

18" C.M.

54"

C.S. 280+12.35

P.I. 280+12.35

GROUND LINE

18" C.M.

0.60%

54"

C.S. 285+12.35

273 74 275 76 77 78 79 280 81 82 83 84 285 86 87

PLATE 3 FULL CROSS SECTION
CHARLES BRUNING COMPANY
MADE IN U.S.A.

BRUNING A4-1482

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE & GRADE I-440 AND BELMONT BLVD.

STA. 273+00 TO STA. 288+00
SCALE
1"=5' VERT. 1"=50' HORIZ.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	47
PAVING	1984	I-440-4(59)206	39

REV. 8-31-83: DELETED DRAINAGE ITEMS 114, 119, 120, 127, 128, 130 AND 131. CHANGE DRAINAGE ITEMS 117 AND 132 TO NO.6 JUNCTION BOXES AND DRAINAGE ITEM 116 TO REGULAR JUNCTION BOX. DELETED MEDIAN DITCH BACKFILL AND ADJUSTED GRADING QUANTITIES ACCORDINGLY.

-.018 1/1 | 200' TRANSITION | STA. 290+42.36 | P.C. STA. 291+42.36 | STA. 292+42.36 | -.021 1/1 | S.E. = .02 1/1 | D = 0°45'0" | STA. 298+34.32 | -.021 1/1 | P.T. STA. 299+34.32 | 200' TRANSITION | STA. 300+34.32 | -.018 1/1 | EXC. | EMB.

544,137 C.Y. EXCAVATION (UNCLASS.)

COMMON	277,561 C.Y.	INCLUDES 8,345 C.Y. TOPSOIL FROM EXC. AREAS; 5,965 C.Y. FROM EMB. AREAS, 6028 C.Y. FOR I-65/I-440 INTERCHANGE RAMPS ('W-S', 'W-N', 'S-W' & 'N-W', ALL WEST OF FRANKLIN ROAD); 5,398 C.Y. FOR GRANNY WHITE PIKE, 411 C.Y. FOR BATTLEFIELD DR., 9060 C.Y. FOR GALE LANE, 3435 C.Y. FOR LEALAND LANE, 528 C.Y. FOR CRAIG AVENUE; 12,200 C.Y. TO BE RESERVED FOR I-65 EMB., 50,000 C.Y. TO BE RESERVED FOR FUTURE LANDSCAPING, AND TO BE STOCKPILED AT LOCATIONS ALONG I-440, AS DIRECTED BY THE ENGINEER.
ROCK	237,955 C.Y.	INCLUDES 88,679 C.Y. TO BE USED ON I-440 & 239,276 C.Y. TO BE EXCESS MATERIAL.
CHANNEL	69,058 C.Y.	THIS MATERIAL AVAILABLE FOR EMBANKMENTS, INCLUDES 1466 C.Y. TO BE USED FOR TOPSOIL.

EXC. / EMB.

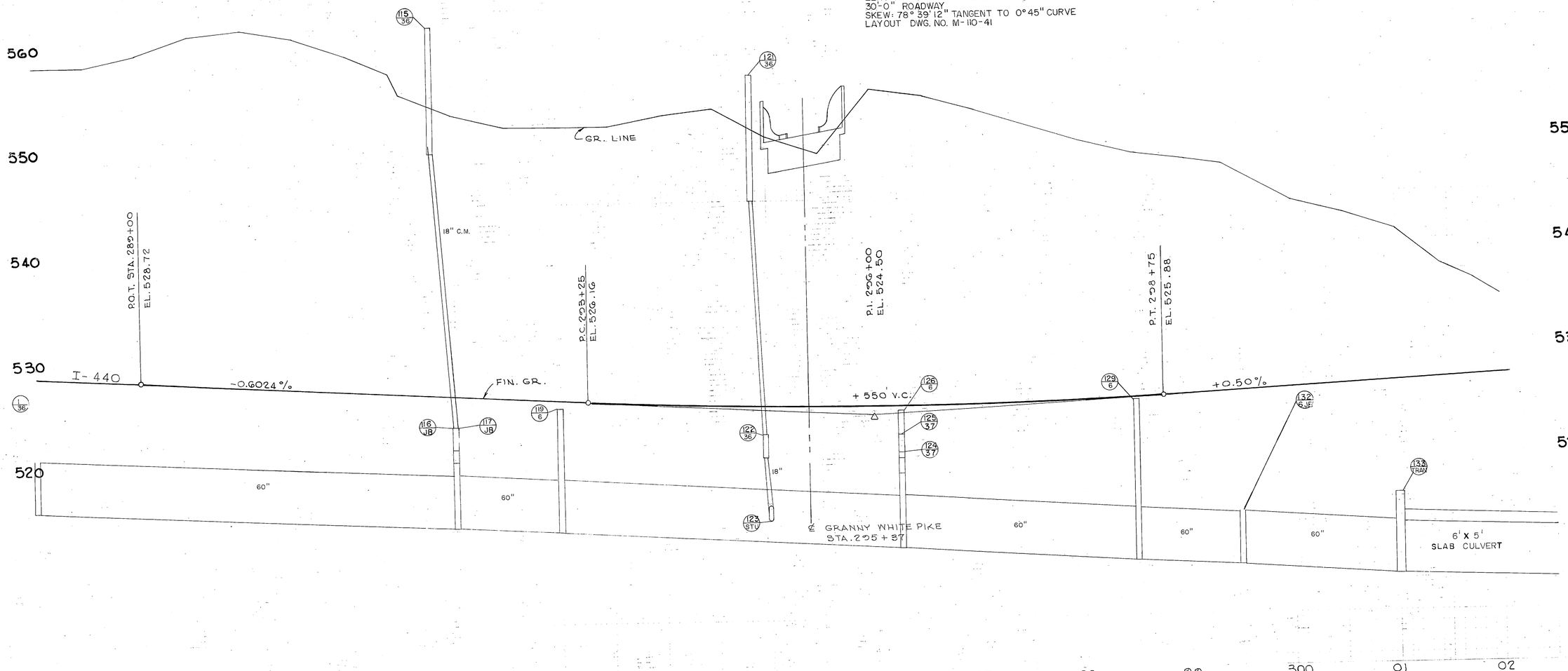
EMBANKMENT 271,709 C.Y. — INCLUDES 5,965 C.Y. TO REPLACE STRIPPED TOPSOIL, 5034 C.Y. FOR GRANNY WHITE PIKE, 6,419 C.Y. FOR BATTLEFIELD DRIVE, 44 C.Y. FOR GALE LN., 525 C.Y. FOR LEALAND LN., 365 C.Y. FOR CRAIG AVENUE. 1924 C.Y. FOR I-65/I-440 INTERCHANGE RAMPS ('W-S','W-N','S-W','N-W'; ALL WEST OF FRANKLIN ROAD.)

SHRINK 10%
SWELL 10%

TOPSOIL NOTE: 15,485 C.Y. NEEDED FOR I-440 GRADING WORK, 7,425 C.Y. AVAILABLE FROM ROADWAY CUTS, 5,965 C.Y. AVAILABLE FROM UNDER EMBANKMENTS, 850 C.Y. AVAILABLE FROM FLAT BOTTOM DITCHES, 1466 C.Y. AVAILABLE FROM CHANNEL CH. GRADING, (1175 C.Y. FROM CH. CH. TO BE USED ON I-440, 291 C.Y. FROM CH. CH. TO BE USED ON I-65 WIDENING)

BRIDGE NO. 1 PROJ. NO. I-440-4(54)209

STA. 297+37, GRANNY WHITE PIKE OVER I-440
CONTINUOUS CAST-IN-PLACE CONCRETE BOX GIRDER
LENGTH: 209'-1 3/4" 2 SPANS @ 104'-6 7/8"
30'-0" ROADWAY
SKEW: 78°39'12" TANGENT TO 0°45" CURVE
LAYOUT DWG. NO. M-110-41



PROFILE & GRADE
I-440 & GRANNY WHITE

STA. 288+00 TO STA. 302+00

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	48
PAVING	1984	I-440-4(59)206	40

SURVEY: SURVEYED, PLOTTED, NOTE BOOK, NO. — TEMPLATE, AREAS, AREAS CHECKED

PROFILE AND GRADE OF LEALAND LANE

I-440
STA. 20+00.00

LIMIT OF CONST
STA. 15+25

P.C. 18+15
EL. 511.79

P.I. 19+15
EL. 508.90

P.T. 20+15
EL. 509.38

LIMIT OF CONST
STA. 22+75

EL. 510.92

FIN. GRADE

GROUND LINE

+0.479%

300' V.C.

STA. 8+47
7'-0" D.I. X 4 PRECAST BOX CULVERT WITH CAST-IN-PLACE WINGWALLS REQ'D.
SKEW 78° RT. ID A 256 AC (C=0.5)
DWG. NOS. M-78-106, M-78-107, M-78-108, K-15-113, K-85-150, D-CE-3.

Q50 368 C.F.S. W.S. ELEV. 508.96
Q100 420 C.F.S. W.S. ELEV. 509.88

168 12
169 14
166 14
165 14
164 18
163 24
162 12
161 24
167 SUB
169 SUB

2.5
EL. 520.17

Q100
Q50

8'-0"

3'-6"

30"

24"

24"

7.5

15" SA

500 15 16 17 18 19 20 21 22 23 500

520 520

510 510

540

530 530

520 520

510 510

I-440

FIN. GRADE

+0.50%

GROUND LINE

6' X 5' CONC. SLAB CULV.

38 WING

BEG. BRIDGE (N.B.L.)
STA. 305+11.36

BEG. BRIDGE (E.B.L.)
STA. 305+19.14

END BRIDGE (N.B.L.)
STA. 310+22.33

END BRIDGE (E.B.L.)
STA. 310+30.14

PI. STA. 311+50
EL. 532.26

-2.052%

-800' V.C.

PT. STA. 313+50
EL. 534.72

BRIDGE NO.2 PROJ. NO. I-440-4(54)209

STA. 308+70, I-440 OVER LEALAND LANE
SIDE BY SIDE PRECAST PRESTRESSED CONCRETE BOX BEAM WITH COMPOSITE CONCRETE DECK SLAB
LENGTH = SPAN @ 111'-0 3/8"
2 @ 54'-0" ROADWAYS
SKEW = 80°-25'-15"
LAYOUT DWG. NO. M-110-55

BRIDGE NO.4 PROJ. NO. I-440-4(54)209

STA. 315+50
3 @ 25'-0" @ 10'X5' CONCRETE BOX BRIDGE WITH WINGWALLS REQ'D.
SKEW 80°-11'-15" RT. ID A 2.77 AC (C=0.5)
DWG. NOS. K-15-111, K-15-118, K-15-29, K-80-14, K-85-150, M-103-149, M-103-150, D-CE-3.

Q50 4001 C.F.S. W.S. ELEV. 501.20
Q100 442 C.F.S. W.S. ELEV. 501.45

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE & GRADE I-440 AND LEALAND LANE

STA. 302+00 TO STA. 317+00
SCALE
1"=5' VERT. 1"=50' HORIZ.

302 03 04 305 06 07 08 09 310 11 12 13 14 15 16

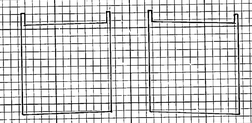
PLATE 3 FULL CROSS SECTION
CHARLES BRUNING COMPANY

BRUNING 44-142 29411-9

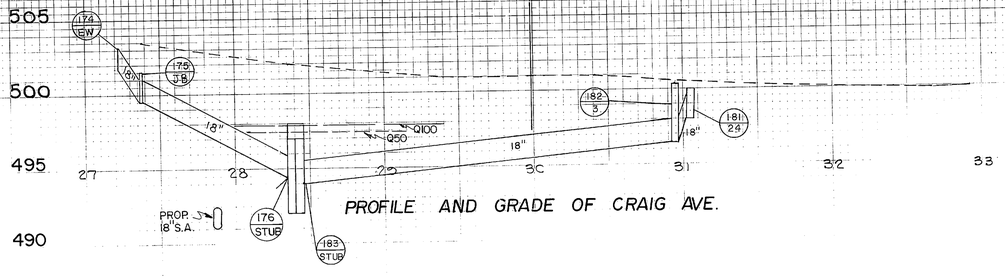
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-GS-2(58)80	49
PAVING	1984	I-440-4(59)206	41

41

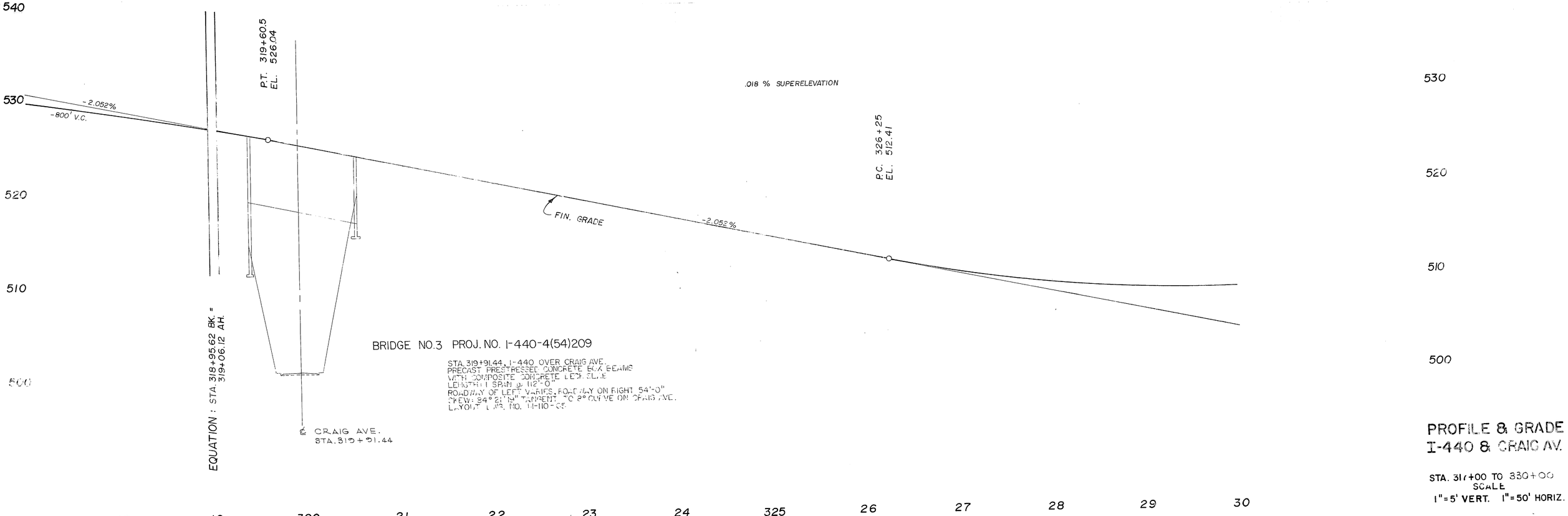
STA. 28+39
142 OF 10' X 5' PRECAST BOX CULVERT TO BE JOINED TO MAKE
71' OF 2 @ 10' X 5' BOX CULVERT WITH CAST IN PLACE WINGWALLS.
SKEW: 86° DIA. 590 Ac. (C=0.5)
DWG. NOS. M-78-106, M-78-107, M-78-108,
K-15-109; K-85-150; D-CE-3; K-15-113.
Q50 802 C.F.S. W.S. ELEV. 497.5
Q100 875 C.F.S. W.S. ELEV. 497.95



@ I-440
CRAIG AVE. STA. 23+58.55



PROFILE AND GRADE OF CRAIG AVE.



PROFILE & GRADE
I-440 & CRAIG AV.

STA. 317+00 TO 330+00
SCALE
1"=5' VERT. 1"=50' HORIZ.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	50
PAVING	1984	I-440-4(59)206	42

42

565
560
555
550
545
540
535
530
525
520
515
510
505
500
495
490
485
480

P.I. STA. 331+25
EL. 502.15
(100'D V.C.)

P.I. STA. 336+25
EL. 522.33

+2.08% G2

N. 05° 19' E.

BEG. BR. STA. 339+79.42

END BR. STA. 340+23.58

℄ BR. STA. 6+28
I-440 STA. 340+00

(EXISTING)
3 @ 14'X8'X 140'-0"
RCONC SLAB BRIDGE OVER BROWNS CREEK
℄ STA. 6+28 BRIDGE = STA. 340+00 I-440
LENGTH ALONG ℄ I-440 = 47'-2"
SKEW 90°

330 331 332 333 334 335 336 337 338 339 340 341 342 343 344

PLATE 3 FULL CROSS SECTION
CHARLES BRUNING COMPANY
MADE IN U.S.A.

BRUNING 44142 29411-9

SURVEY	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED PROFILE
I-440

STA. 330+00 TO STA. 344+00

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	51
PAVING	1984	I-440-4(59)206	43

P.C. STA. 344+10
ELI. 562.012

BEGIN BRIDGE
STA. 345+16.69

A = 0.392 %

P.I. STA. 349+50
ELI. 575.807
(1080' V.C.)

A = 0.00 %

1080' V.C.

P.T. STA. 353+90
ELI. 574.207

END BRIDGE
STA. 355+45.31

E.P.G.

END PROJ. NO. I-IR-440-4(59)206 PAVING
STA 344+92.9

℄ E-S RDY

℄ W-N RDY

℄ N-E RDY

℄ S-W RDY

℄ N.B. TRACK - E.P.G.

℄ I-65

℄ FRANKLIN PIKE

575
570
565
560
555
550
545
540
535
530
525
520
515
510
505
500
495
490
485

344 345 346 347 348 349 350 351 352 353 354 355 356 357 358

SURVEY	SURVEYED	
	COMPUTED	
NOTE BOOK	TEMPLATE	
	AREAS	
NO.	AREAS CHECKED	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED PROFILE
I-440

STA. 344+00 TO STA. 358+00

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

PLATE 3 FULL CROSS SECTION

CHARLES BRUNING COMPANY
MADE IN U.S.A.
BRUNING 44 142 29411-9

	YR.	PROJECT NO.	SHT. NO.
CONST.	1982	I-65-2(58)80	54
PAVING	1984	I-440-4(59)206	44

TRANSITION FOR SUPERELEVATION

TRANSITION FOR SUPERELEVATION

SUPERELEVATION −0.06 1/ft 8° HORIZONTAL CURVE

100' TRANSITION

SUPERELEVATION −0.05 1/ft 4° HORIZONTAL CURVE

BEGIN "S-W" RDY. STA. 138+26.14 (S.E. = +0.044) EL. 516.42

+46 EL. 516.07

+36 EL. 518.41

+48 EL. 519.38

+98 EL. 521.51

P.C. STA. 140+08.07 EL. 521.99

T.S. STA. 140+76.70 (S.E. = -0.018 1/ft)

P.I. STA. 143+38.02 EL. 532.29 WC = 350.00'

S.C. STA. 143+78.70

STA. 145+00

STA. 146+00

BEG. BRIDGE STA. 146+41.51

P.C. STA. 146+58.02 EL. 522.34

+3.17 %

GRAPHICAL GRADE

EMB. WORK DONE UNDER PROJ. NO. I-440-4(46)211

FROM STA. 140+50 TO STA. 143+00

GRADING "S-W" RDWY. PROJ. NO. I-65-2(58)80

GRADING TO BE DONE FROM STA. 143+00 TO STRUCTURE NO. 162

-3.06 %

EXIST. STRUCTURE NO. 162

℄ "S-E" RDWY.

℄ I-440

℄ "W-N" RDY.

℄ I-65

LIMIT OF PAVING STA. 151+83.07 PROJ. NO. I-IR-440-4(59)206

END BRIDGE STA. 151+58.57

P.C. STA. 151+93.44 EL. 505.96

℄ RELOC. FRANKLIN PIKE

535 530 525 520 515 510 505 500 495 490 485 480 475

138 139 140 141 142 143 144 145 146 147 148 149 150 151 152

NOTE BOOK AREAS NO. ____ AREAS CHECKED

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

RAMP PROFILE

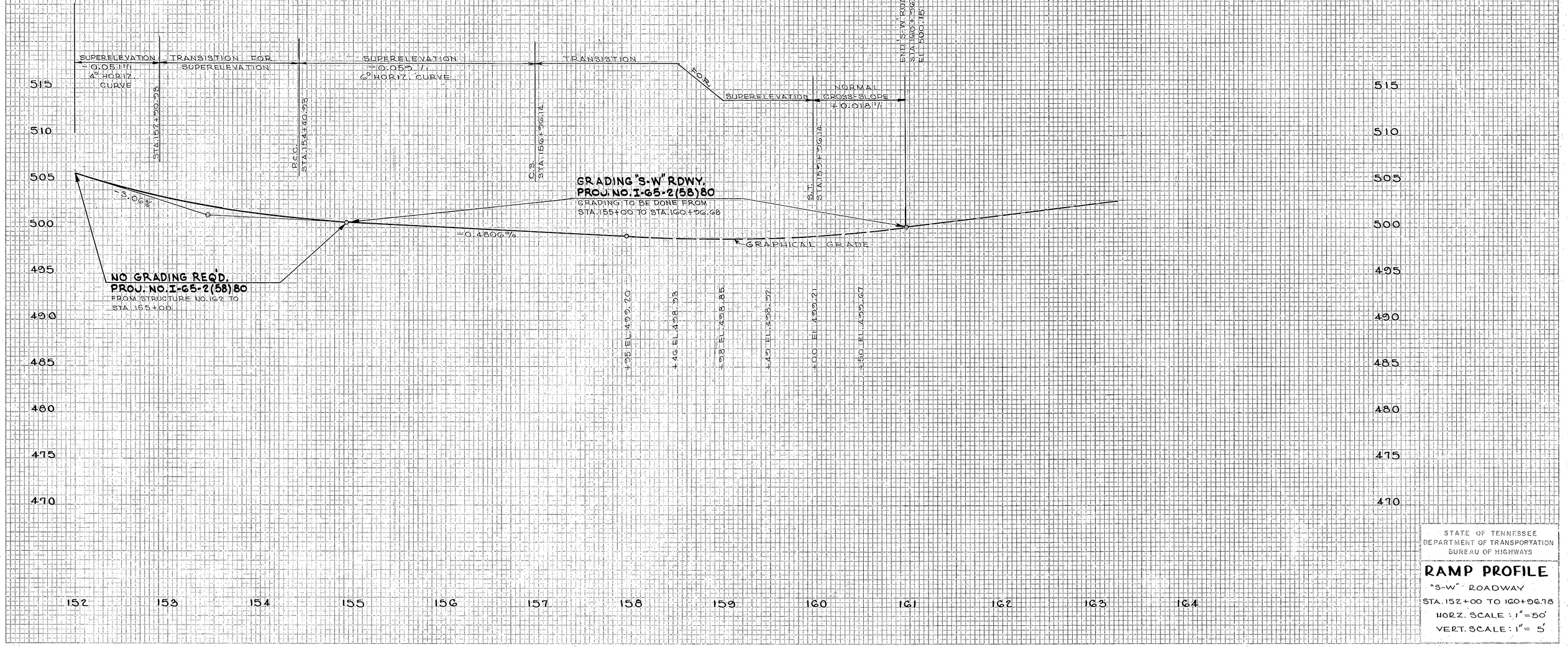
"S-W" ROADWAY

STA. 138+26.14 TO 152+00

HORZ. SCALE: 1" = 50'

VERT. SCALE: 1" = 5'

		PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	55
PAVING	1984	I-440-4-(59)206	45



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

RAMP PROFILE

"S-W" ROADWAY
STA. 152+00 TO 160+96.18
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 5'

AREAS
AREAS CHECKED

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	56
PAVING	1984	I-440-4(59)206	46

BEG. GRADING "W-S" RDWY.
PROJ. NO. I-65-2(58)80
GRADING TO BE DONE FROM
STA. 321+62.54 TO STA. 342+00

BEG. "W-S" ROADWAY
STA. 321+62.54
EL. 521.76

-2.42%

525
520
515
510
505

322

STA. 321+62.54 TO STA. 322+00

TANGENT
+0.10%
(APPLIES ON BACK
TO BEG. OF W-J
RDY. @ STA. 321+62.54)

T.S. STA. 328+12.54

TRANSITION FOR
SUPERELEVATION

S.C. STA. 330+12.54

SUPERELEVATION
+0.030'/'
2° HORIZONTAL CURVE

TRANSITION FOR
SUPERELEVATION

C.S. STA. 332+84.65

TANGENT
+0.018'/'

S.T. STA. 334+84.65

P.C. STA. 332+00
EL. 504.85

P.T. STA. 333+00
EL. 503.84
VC = 200'

P.T. STA. 334+00
EL. 504.60

520
515
510
505

324+50
EL. 510.82

326+75
EL. 510.40

327+00
EL. 510.05

327+25
EL. 509.73

327+50
EL. 509.41

327+75
EL. 509.15

328+00
EL. 508.88

-2.42%

GRAPHICAL GRADE

+1.00%

+0.72%

322 323 324 325 326 327 328 329 330 331 332 333 334 335 336

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

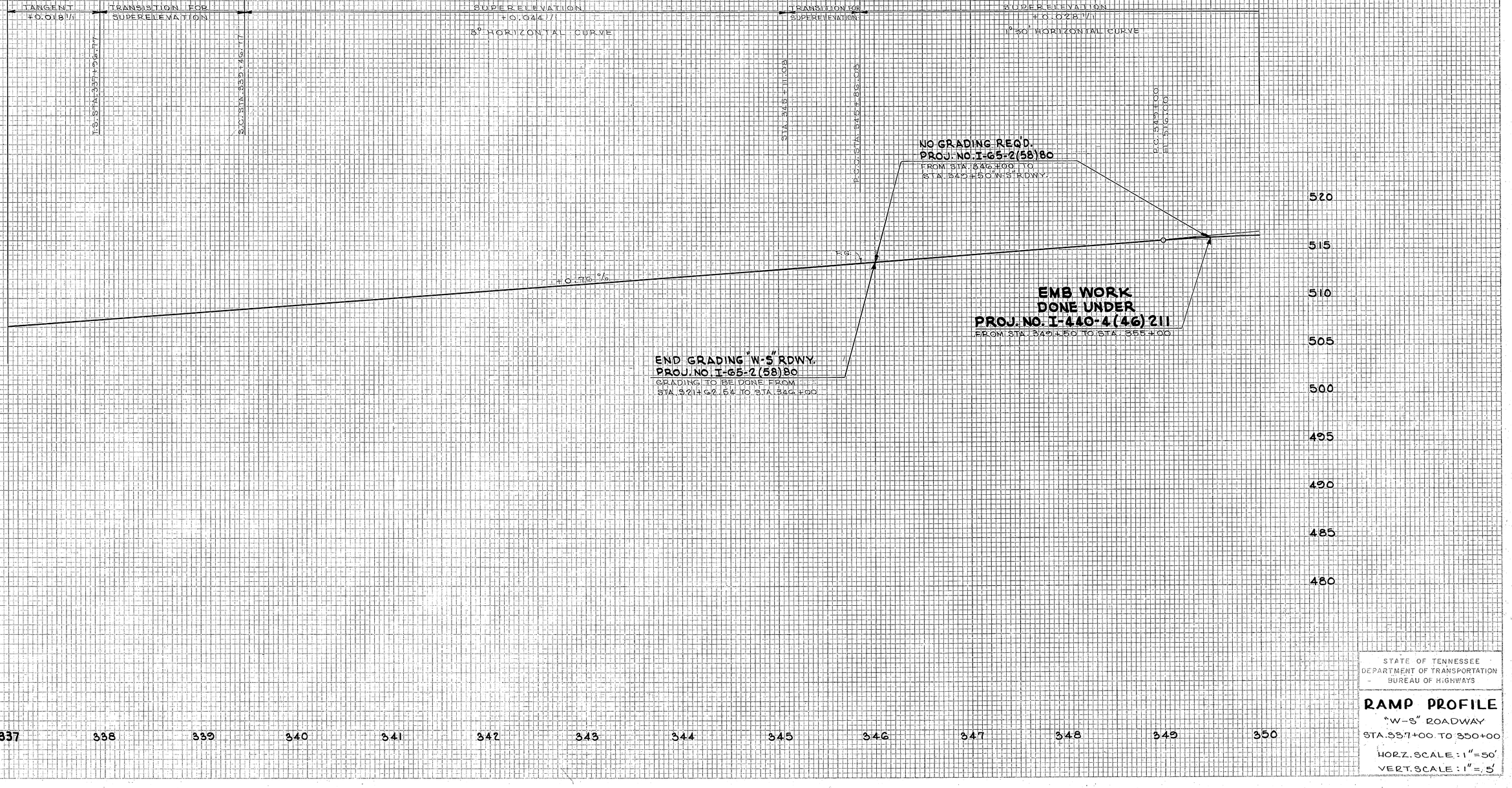
RAMP PROFILE
"N-S" ROADWAY
STA. 321+00 TO STA. 337+00
SCALE: HORZ. 1" = 50'

NOTE BOOK NO.
TEMPLATE
AREAS
AREAS CHECKED

BRUNING 46-142-2941-9

PLATE 3 FULL CROSS SECTION
CHARLES BRUNING COMPANY
MADE IN U.S.A.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	57
PAVING	1984	I-440-4(59)206	47



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
- BUREAU OF HIGHWAYS

RAMP PROFILE

"W-S" ROADWAY
STA. 337+00 TO 350+00
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'

TRIPLICATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.

	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	58
PAVING	1984	I-440-4(59)206	48

SUPERELEVATION +0.029 1/1 1° 30' HORIZONTAL CURVE

TRANSITION FOR SUPERELEVATION

SUPERELEVATION +0.032 1/1 1° 45' HORIZONTAL CURVE

TRANSITION FOR SUPERELEVATION

SUPERELEVATION +0.018 1/1

TANGENT SECTION +0.018 1/1

P.C.C. STA. 354+19.64

STA. 355+66.64

STA. 358+60.85

C.S. STA. 360+11.83

S.T.S. STA. 362+11.83

P.I. 350+55
EL. 517.14
V.C. = 800'

P.T. 352+00
EL. 515.90

℄ RELOC. FRANKLIN PIKE

P.C. 356+50
EL. 512.19

P.I. 358+00
EL. 510.95
V.C. = 300'

P.T. 359+50
EL. 513.85

+ 27 EL. 515.54

+ 75 EL. 516.20

+ 25 EL. 517.06

+ 81.48 EL. 517.48

+ 30 EL. 517.79

+ 75 EL. 518.12

END "W-S" RDWY.
STA. 362+70.83 "W-S" RDWY.
STA. 1502+70.83 "W-S" RDWY.
EL. 518.28

LIMIT OF PAVING
STA. 354+00

+0.76%

F.G.

-0.82%

+1.33%

GRAPHIC GRADE

EXIST. STRUCTURE NO. 160

LIMIT OF PAVING STA. 351+06.69
PROJ. NO. I-IR-440-4(59)206

EMB WORK DONE UNDER PROJ. NO. I-440-4(46)211
FROM STA. 343+50 TO STA. 355+00

BEGIN GRADING "W-S" RDWY.
PROJECT NO. I-65-2(58)80
GRADING TO BE DONE FROM STA. 355+00 TO STA. 363+01.83

540 535 530 525 520 515 510 505 500 495 490

350 351 352 353 354 355 356 357 358 359 360 361 362

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

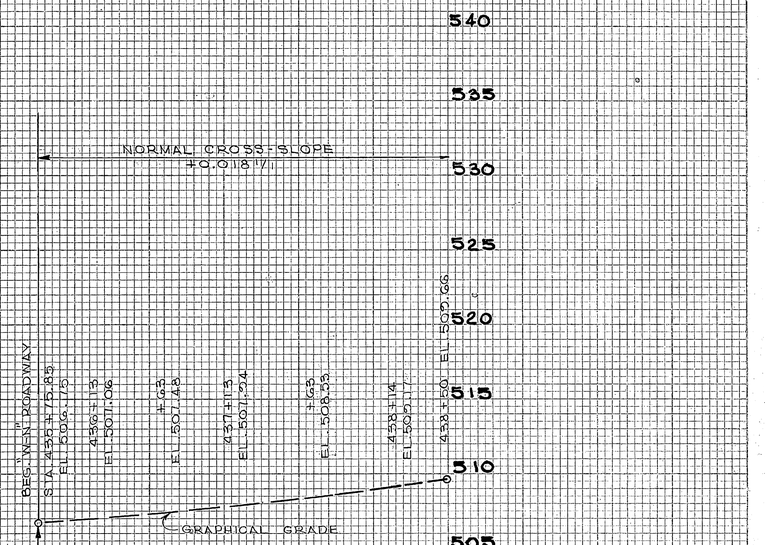
RAMP PROFILE
"W-S" ROADWAY
STA. 350+00 TO 362+00
HORZ. SCALE: 1"=50'

WHITE BOOK AREAS ____ AREAS CHECKED ____
HOR. ____

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	01
PAVING	1984	I-440-4(59)206	49

NOTE BOOK ____ AREAS
NO. ____ AREAS CHECKED

NOTE BOOK ____ AREAS
NO. ____ AREAS CHECKED



BEGIN GRADING "W-N" R.DWY.
PROJ. NO. I-65-2(58)80

GRADING TO BE DONE FROM
STA. 435+75.85 TO STA. 442+50

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

RAMP PROFILE
"W-N" ROADWAY
STA. 435+00 TO 438+50

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	G2
PAVING	1984	I-440-4(59)206	50

LIMIT OF PAVING STA. 447+36.35
PROJ. NO. I-IR-440-4(59)206)

GRADING "W-N" RDWY.
PROJ. NO. I-65-2(58)80
GRADING TO BE DONE FROM
STA. 435+75.85 TO STRUCTURE NO. 65

EXIST. STRUCTURE NO. I-65

℄ I-440

P.I. 450+50
EL. 529.04
1200' V.C.

+4.00%

-3.20%

℄ N-E RDY.

℄ S-W RDY.

℄ I-65

℄ RELOC. FRANKLIN PK.

+1.58.7%

438+50
EL. 503.66

P.C. 440+50
EL. 512.74

P.I. 442+00
EL. 515.04
300' V.C.

P.C. 443+50
EL. 521.04

P.C. 444+50
EL. 525.04

530
525
520
515
510
505
500
495
490
485
480

T.S. STA. 439+84.37

S.C. STA. 441+84.37

P.C.C. STA. 445+66.71

446+25

447+25

P.C.C. 447+66.71

NORMAL CROSS-SECTION
+0.018'/'

TRANSITION FOR SUPERELEVATION

-1.06'/' SUPERELEVATION
3° HORIZONTAL CURVE

100' TRANSITION

-1.051'/' SUPERELEVATION
4° HORIZONTAL CURVE

3° HORIZ. CURVE

6° HORIZ. CURVE

438 439 440 441 442 443 444 445 446 447 448 449 450 451 452

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

RAMP PROFILE

"W-N" ROADWAY
STA. 438+50 TO 452+00
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"= 5'

NOTE BOOK
NO.
AREAS
AREAS CHECKED

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	66
PAVING	1984	I-440-4(59)206	51

TRANS. FOR S.E.

S.E.=0.035 ft/ft
2° HORZ. CURVE

TRANSITION FOR SUPERELEVATION

TANGENT SECTION
-0.018 ft/ft

TRANSITION FOR SUPERELEVATION

SUPERELEVATION
-0.06 ft/ft
8° HORZ. CURVE

S.C. STA. 642+57.35

C.S. STA. 643+55.51

S.T. STA. 645+55.51

P.V.C. 645+50
ELEV. 503.16

P.V.T. 642+50
ELEV. 498.35

P.V.I. STA. 648+00
ELEV. 507.17
V.C. = 500

BEGIN BRIDGE
STA. 646+96.25

END BRIDGE
STA. 651+03.75

P.V.T. 650+50
ELEV. 504.91

S.T. STA. 650+15.24

S.C. STA. 653+15.24

LIMIT OF PAVING
STA. 644+00

+1.605 ft/ft

EXIST. STRUCTURE NO. 176 (N.I.C.)

-0.906 ft/ft

NO GRADING REQ'D.
PROJ. NO. I-65-2(58)80
FROM STA. 652+50 TO STA. 656+50

LIMIT OF PAVING STA. 652+50
PROJ. I-IR-440-4(5%) 206

GRADING "N-W" RDWY.
PROJ. NO. I-65-2(58)80
GRADING TO BE DONE FROM
STA. 634+07.51 TO STA. 645+00

BERRY RD.

RELOC. FRANKLIN PK.

EMB WORK
DONE UNDER
PROJ. NO. I-440-4(46)211
STA. 645+00 TO STA. 652+50

505
500
495
490
485
480
475
470

642 643 644 645 646 647 648 649 650 651 652 653 654

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

RAMP PROFILE

"N-W" ROADWAY
STA. 642+00 TO 654+00

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

STATE BOOK NO. ____ PG. ____ AREAS AREAS CHECKED

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	67
PAVING	1984	I-440-4(59)206	52

SUPERELEVATION +0.06 "/'

TRANSITION FOR SUPERELEVATION

NORMAL CROSS SLOPE +0.018 "/'

TRANS. FOR S.E.

P.V.C. STA. 651+42.5
ELEV. 458.93

C.S. STA. 651+36.68

P.V.I. 658+92.5
ELEV. 457.27
V.C. = 300

S.T. STA. 660+36.68

P.V.T. 660+42.5
ELEV. 459.11

T.S. STA. 664+27.36

515

510

505

500

495

490

485

480

475

470

-0.306 %

+1.266 %

NO GRADING REQ'D.
PROJ. NO. I-65-2(58)80
FROM STA. 652+50 TO STA. 656+50

GRADING "N-W" RDWY.
PROJ. NO. I-65-2(58)80
GRADING TO BE DONE FROM
STA. 656+50 TO STA. 672+07.57

G54 G55 G56 G57 G58 G59 G60 G61 G62 G63 G64 G65

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

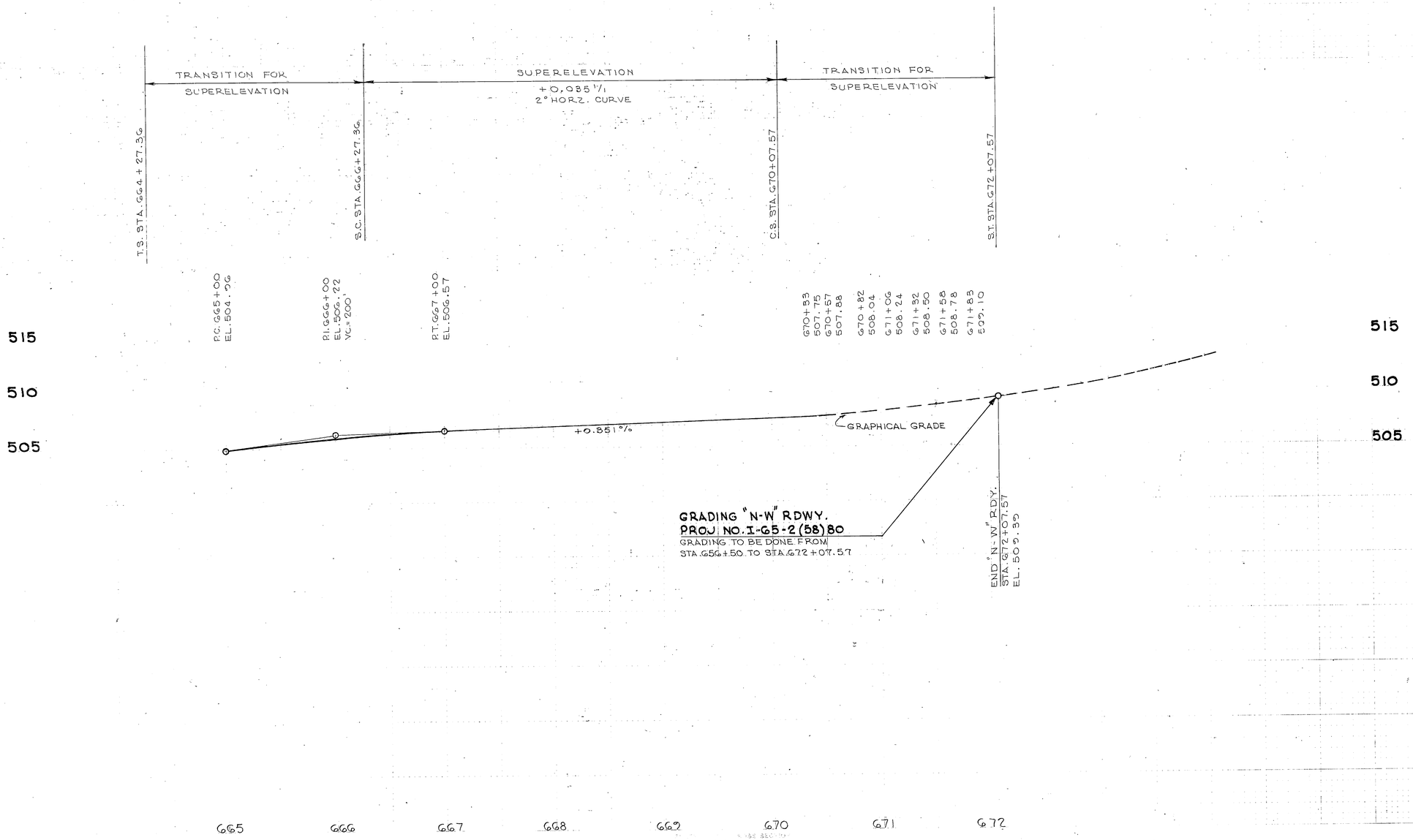
RAMP PROFILE

"N-W" ROADWAY
STA. 654+00 TO 665+00

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

ROAD BOOK AREAS
NO. AREAS CHECKED

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1982	I-65-2(58)80	68
PAVING	1984	I-440-(59)206	53



CHARLES BRUNNER COMPANY
MADE IN U.S.A.

DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

RAMP PROFILE

"N-W" ROADWAY

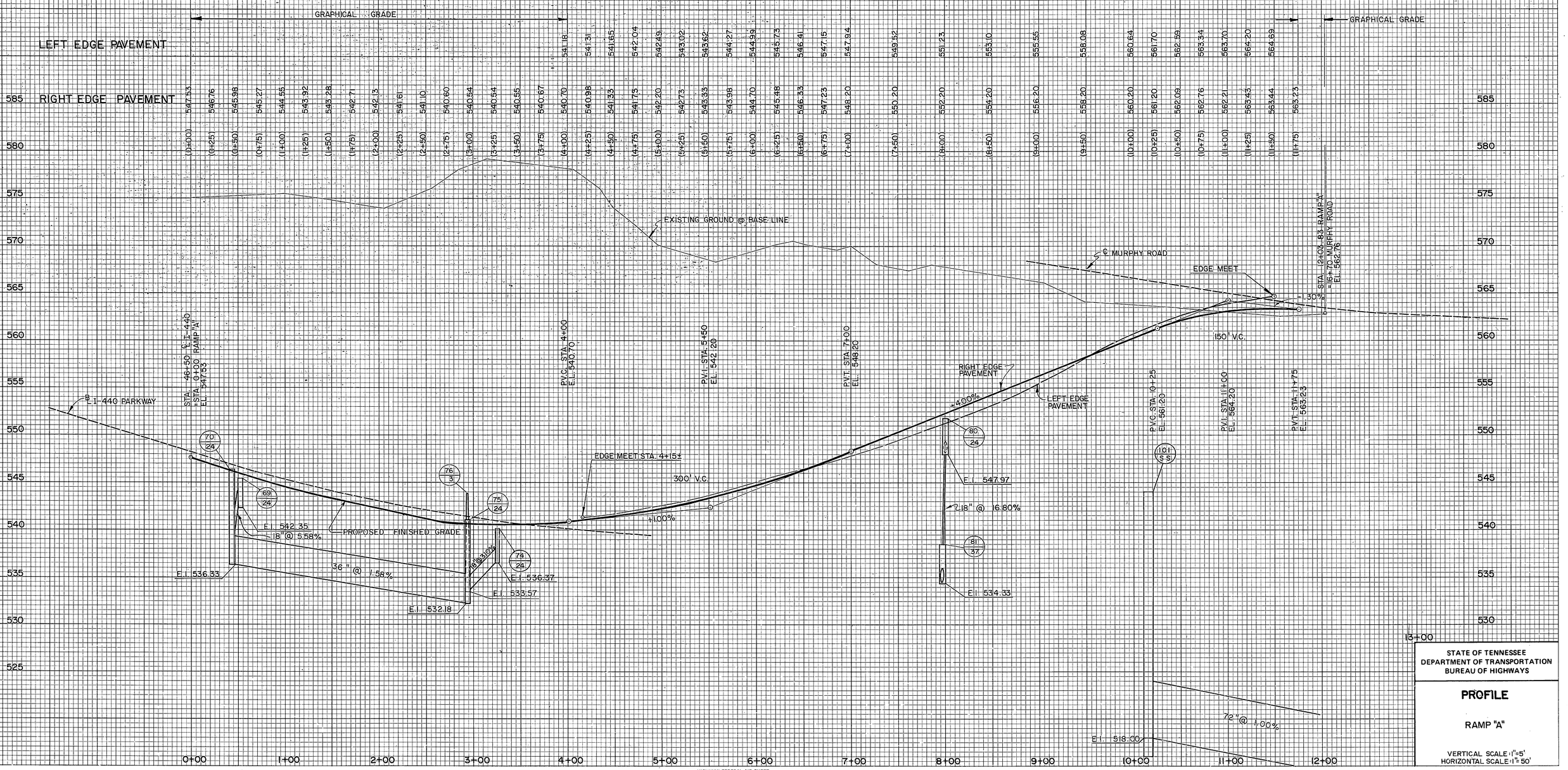
STA. 664+27.36 TO STA. 672+07.57

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	36
PAVING	1984	I-440-4(59)206	54

REV. -31-84 GENERAL REVISIONS TO DRAINAGE

NOTE BOOK TEMPLATE
NO. AREAS
AREAS CHECKED



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE

RAMP "A"

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

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53) 206	37
PAVING	1984	I-440-4(59)206	55

REV. 1-31-84 GENERAL REVISIONS TO DRAINAGE.
REV. 8-2-85 REVISED GRAPHIC GRADE AT BEGINNING OF RAMP.

NOTE BOOK TEMPLATE
NO. AREAS
AREAS CHECKED

| | | |

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	38
PAVING	1984	I-440-4(59)206	56

REV. 1-31-84 GENERAL REVISIONS TO DRAINAGE.

NOTE BOOK | TEMPLATE | AREAS | AREAS CHECKED | NO.

| | | |

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53) 206	39
PAVING	1984	I-440-4(59)206	57

REV. 1-3-84 GENERAL REVISIONS TO DRAINAGE

	(0+00)	(0+25)	(0+50)	(0+75)	(1+00)	(1+25)	(1+50)	(1+75)	(2+00)	(2+50)	(3+00)	(3+25)	(3+50)	(3+75)	(4+00)	(4+25)	(4+50)	(4+75)	(5+00)	(5+25)	(5+50)	(5+75)	(6+00)	(6+50)	(7+00)	(7+50)	(8+00)	(8+50)	(9+00)	(9+25)	(9+50)	(9+75)	(10+00)	(10+25)	(10+50)	(10+75)
GRAPHICAL GRADE																																				
RIGHT EDGE PAVEMENT			567.48	566.78	565.76	564.80	563.83	562.84	561.84	559.72	557.82	556.57	555.56	554.75	554.02	553.39	552.84	552.39	552.06	551.79	551.63	551.57	551.57	551.90	552.24	552.65	553.05	553.46	553.78	553.94						
LEFT EDGE PAVEMENT	569.33	568.71	567.93	567.09	566.19	565.23	564.26	563.27	562.27	560.29	558.31	557.31	556.37	555.52	554.77	554.12	553.56	553.09	552.73	552.45	552.28	552.20	552.21	552.48	552.80	553.12	553.43	553.75	554.07	554.23	554.39	554.55	554.71	554.86	555.02	555.18

STA. 17+98.07 PAPER LOC. ℄ WEST END AVENUE
STA. 0+00 RAMP "D"
EL. 569.32

PAPER LOC. ℄ WEST END AVENUE

145/12

3.00%

EDGE MEET STA. 0+30±

E.I. 561.76

18" @ 16.40%

144/36

18" @ 3.15%

E.I. 543.19

PROPOSED FINISHED GRADE

3.96%

148/37

E.I. 551.45

300' V.C.

MIN. CLEARANCE 16'-6"

STA. 4+75.49 RAMP "D"
STA. 4+02.60 RAMP "F"

RAMP "F"

EXISTING GROUND @ BASE LINE

P.V.T. STA. 6+25
E.I. 552.33

188/36 — 18" @ 1.00%

159/36

160/36 — 18" @ 1.00%

E.I. 544.04

E.I. 542.26

E.I. 543.26

LEFT E.P.

+0.64%

RIGHT E.P.

161/24

163/24

E.I-440 PARKWAY

RAMP "E"

EDGE MEET STA. 9+40±

18" @ 1.00%

E.I. 549.77

E.I. 543.44

STA. 10+83.38 RAMP "D" =
STA. 181+00 I-440 PARKWAY
EL. 555.24

P.V.C. STA. 0+25
EL. 568.7

P.V.I. STA. 0+75
EL. 567.2

P.V.T. STA. 1+25
EL. 565.23

P.V.C. STA. 3+25
EL. 557.31

P.V.T. STA. 4+75
EL. 551.37

595 590 585 580 575 570 565 560 555 550 545 540

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00

NOTE BOOK TEMPLATE
NO. AREAS
AREAS CHECKED

PROFILE
HORIZONTAL
VERTICAL
NOTE BOOK
AREAS
AREAS CHECKED

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE

RAMP "D"

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	40
PAVING	1984	I-440-4(59)206	58

REV. 3-1-84 GENERAL REVISIONS TO DRAINAGE

NOTE BOOK TEMPLATE
NO. AREAS CHECKED

| | | |

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	41
PAVING	1984	I-440-4(59)206	59

REV. 1-31-84 GENERAL REVISIONS TO DRAINAGE

RIGHT EDGE PAVEMENT — GRAPHICAL GRADE

LEFT EDGE PAVEMENT

| | | |

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	42
PAVING	1984	I-440-4(59)206	60

REV. 1-31-84 GENERAL REVISIONS TO DRAINAGE.

NOTE BOOK TEMPLATE
NO. AREAS
AREAS CHECKED

STA. 23+62.01 P.I. ℄ WEST END AVE.=
STA. 16+08.36 RAMP "G" (46.86 RT)
ELEV. 575.15

GRAPHICAL GRADE

| | | |

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1983	I-440-4(53)206	43
PAVING	1984	I-440-4(59)206	61

REV. 13-84: GENERAL REVISIONS TO DRAINAGE

	(14+00)	(13+50)	(13+00)	(12+50)	(12+00)	(11+50)	(11+25)	(11+00)	(10+75)	(10+50)	(10+25)	(10+00)	(9+75)	(9+50)	(9+25)	(9+00)	(8+75)	(8+50)	(8+25)	(8+00)	(7+75)	(7+50)	(7+25)	(7+00)	(6+75)	(6+50)	(6+25)	(6+00)	(5+75)	(5+50)	(5+25)	(5+00)	(4+75)	(4+50)	(4+25)	(4+00)	(3+75)	(3+50)	(3+25)	(3+00)	(2+75)	(2+50)	(2+25)	(2+00)	(1+75)	(1+50)	(1+25)	(1+00)	(0+75)	(0+50)	(0+25)	(0+00)
LEFT EDGE PAV'T	566.56	564.12	561.67	559.23	556.78	554.34	553.12	552.00	551.04	550.117	549.34	548.67	548.14	547.77	547.68	547.76	547.96	548.28	548.72	549.26	549.85	550.38	551.01	551.76	552.70	553.93	555.15	556.27	557.28	558.18	558.97	559.66	560.23	560.70	561.05	561.30	561.44	561.47	561.39	561.21	560.91	560.51	559.99	559.37	558.64	557.90	556.97	556.35	555.79	555.32	554.91	554.56
RIGHT EDGE PAV'T	565.60	563.16	560.71	558.27	555.82	553.38	552.16	551.04	550.08	549.26	548.58	548.06	547.69	547.47	547.39	547.47	547.67	547.99	548.43	548.97	549.63	550.41	551.29	552.29	553.40	554.63	555.85	556.97	557.98	558.88	559.67	560.36	560.93	561.40	561.75	562.00	562.14	562.20	562.16	562.02												

GRAPHICAL GRADE

RAMP "H" STATION 14+00 MATCH LINE

EXISTING GROUND @ ℄

EQUATION: STA. 4+46.88 RT. E.P. EL. 561.45 = STA. 4+46.88 LT. E.P. EL. 560.75

P.V.I. STA. 4+10 EL. 566.24

P.V.C. STA. 1+70 EL. 558.48

STA. 0+00 RAMP "H" = STA. 17+15 RAMP "G" 24" LT., EL. 554.56

P.V.T. STA. 11+30 EL. 552.40

P.V.I. STA. 10+15 EL. 548.78

P.V.I. STA. 7+75 EL. 546.22

P.V.C. STA. 6+50 EL. 554.63

P.V.C. STA. 9+00 EL. 547.47

P.V.T. STA. 17+50 EL. 576.33

P.V.I. STA. 16+50 EL. 577.63

P.V.C. STA. 15+25 EL. 571.72

18" @ 16.86%

24" @ 4.80%

24" @ 4.61%

36" @ 2.30%

36" @ 5.74%

18" @ 0.60%

18" @ 2.51%

18" @ 2.59%

18" @ 11.76%

24" @ 34.89%

24" @ 2.62%

5.15%

4.23%

0.20%

0.60%

230' V.C.

250' V.C.

480' V.C.

EL. 563.78

EL. 564.10

EL. 563.27

EL. 556.00

EL. 548.30

EL. 542.90

EL. 534.90

EL. 538.75

EL. 541.22

EL. 540.74

EL. 544.09

EL. 540.33

EL. 549.85

EL. 548.22

EL. 545.71

EL. 570.37

EL. 567.25

EL. 573.33

PROPOSED FINISHED GRADE

PROP GRADE RAMP "G"

PROP GRADE PL ℄ WEST END AVE.

EDGE MEET STA. 17+70 ±

18+54.36 RAMP "H" = 23+50.42 WEST END AVE.

RT. E.P.

LT. E.P.

MATCH LINE STA. 14+00 RAMP "H"

	(18+50)	(18+25)	(18+00)	(17+75)	(17+50)	(17+25)	(17+00)	(16+75)	(16+50)	(16+25)	(16+00)	(15+75)	(15+50)	(15+25)	(15+00)	(14+50)
LEFT EDGE PAV'T	576.99	577.22	577.29	577.21	576.99	576.35	575.66	574.93	573.92	572.68	571.45	569.01				
RIGHT EDGE PAV'T	575.35	575.59	575.92	576.33	576.55	576.63	576.54	576.31	575.93	575.39	574.70	573.87	572.86	571.72	570.49	568.05

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROFILE

RAMP "H"

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

NOTE BOOK TEMPLATE
NO AREAS
NO AREAS CHECKED

HIGHWAY FEDERAL AID SHEET NO.
PLATE 3-FULL CROSS SECTION-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	82	I-4404(49)206	36
PAVING	1984	I-440-4(59)206	62

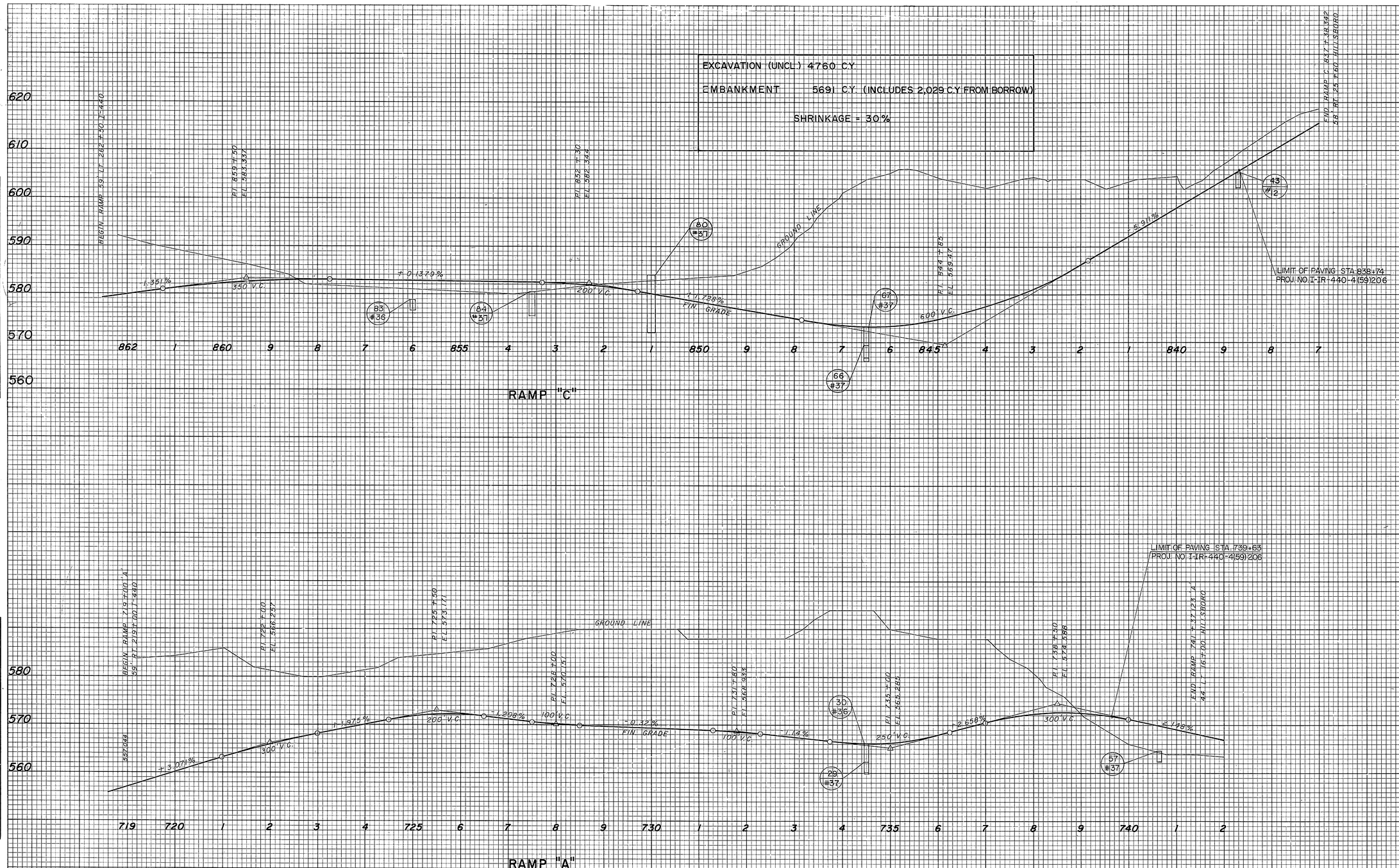
REV. 5-12-85: DELETED DRAINAGE ITEMS 1, 20 & 23, AND ADDED DRAINAGE ITEMS 80 & 84 TO PROFILE SHEET.

REV. 12-3-86: ADDED GRADING QUANTITIES.

EXCAVATION (UNCL) 4760 C.Y.

EMBANKMENT 5691 C.Y. (INCLUDES 2,029 C.Y. FROM BORROW)

SHRINKAGE = 30%



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

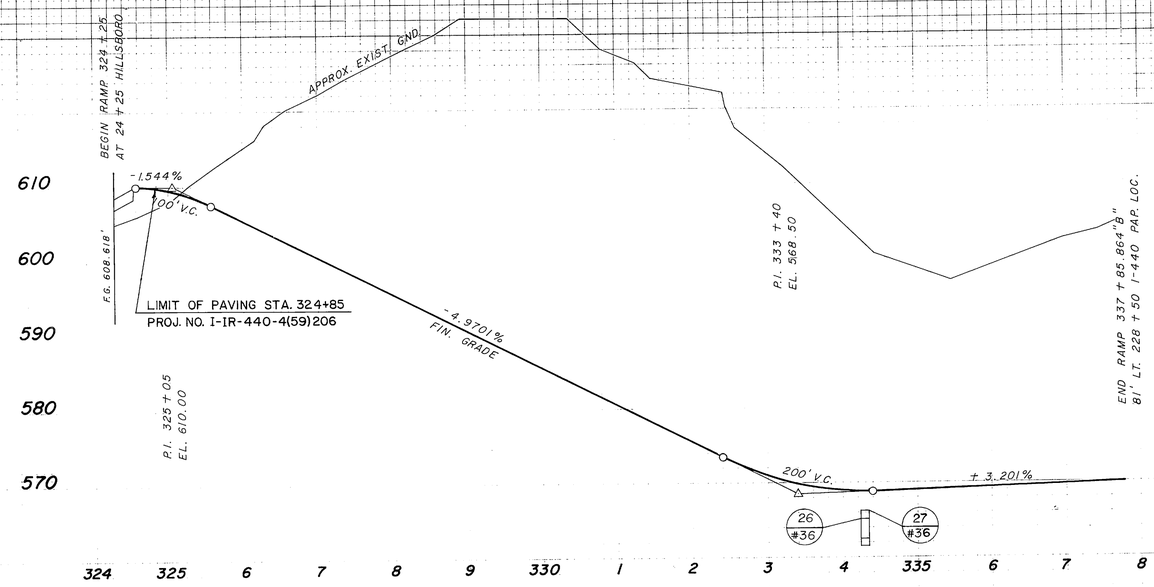
HILLSBORO PK.
INTERCHANGE
RAMPS

SCALE 1" = 10' VERT.
1" = 100' HORZ.

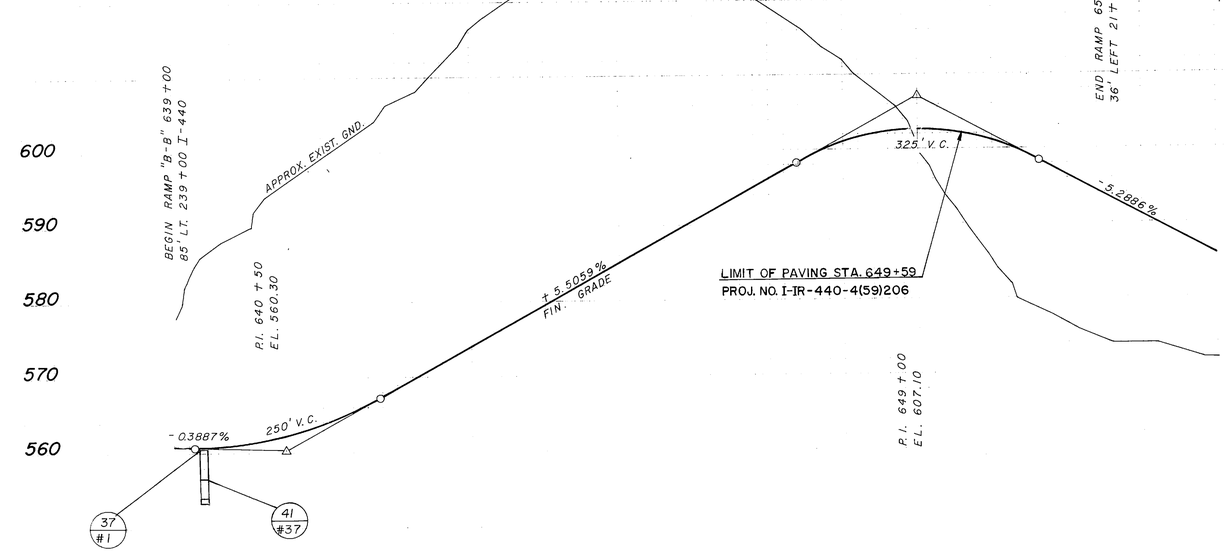
NOTE BOOK NO.
TEMPLATE
AREAS
AREAS CHECKED

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
TELEDYNE
PRINTED IN U.S.A.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	82	I-440 4(49)206	37
PAVING	1984	I-440-4(59)206	63



RAMP "B"



LOOP "B-B"

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

HILLSBORO PK.
INTERCHANGE
RAMPS

SCALE: 1" = 10' VERT.
1" = 100' HORZ.

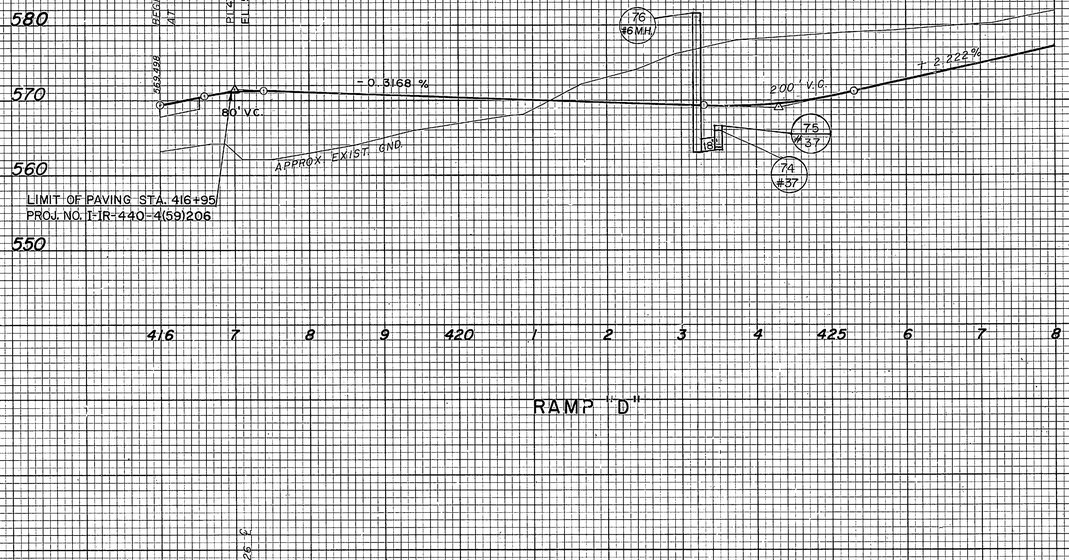
CROSS SECTION
TELEDYNE

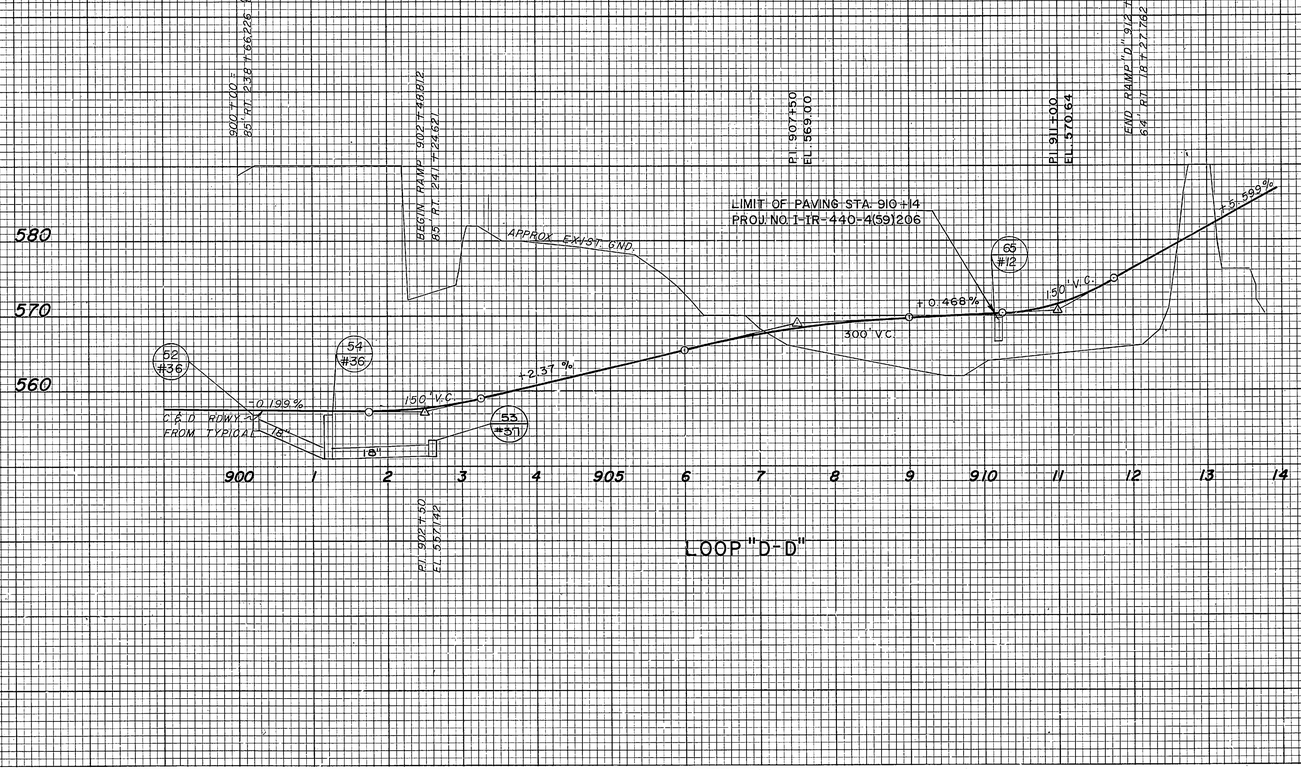
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	82	I-4404(49)206	38
PAVING	1984	I-440-4(59)206	64

64

REV. 5-12-83: CORRECTED DRAINAGE ITEM 53.

NOTE BOOK
TEMPLATE
NO.
AREAS
AREAS CHECKED





STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

HILLSBORO PK.
INTERCHANGE
RAMPS

SCALE: 1"= 10' VERT.
1"= 100' HORZ.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	1984	IR-440-4(59)206	65

REV. 4-4-84
REMOVE CROWN VETCH QUANTITES

KEY	COMMON NAME	QTY
PT	LOBLOLLY PINE	26
CS	FLOWERING QUINCE	639
EP	ELEAGNUS	1111
FI	FORSYTHIA	92
GS	CAROLINA JESSAMINE	290
PI	BOSTON IVY	605
SS	SUMMAC SEEDLINGS	130
PN	AUSTRIAN PINE	67
	GRASS (SQ.YD)	911

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

BEGIN PROJECT I-440
STA. "N-E" 345+00
STA. "W-S" 344+00

EQUATION: I-440 POT STA 113+30.30 = "N-E" POT STA 337+82.34 = P.I. "N-E" 337+83.27
"W-S" POT STA 337+14.35 = P.I. "W-S" 337+04.42

EXISTING MATERIAL TO REMAIN. SELECTIVE CLEARING AT DIRECTION OF RESIDENT ENGINEER

8-PT

TO BE SEEDED WITH GRASS (911 SQ.YD)

9-PT

92-FI

STA. 115+00

130-SS

433-CS

9-PT

85-PI

NOISE WALL

23-PN

320-EP

290-GS

12-PN

154-EP

190-EP

320-PI

76-CS

200-PI

11-PN

130-CS

190-EP

21-PN

257-EP

LIMIT OF LANDSCAPE PLANTINGS IN THIS CONTRACT. EXTEND PLANTING TO MATCH ADJACENT CONTRACT.

32nd AVE. N.

33rd AVE. N.

CHARLOTTE AVE.

CHARLOTTE

ALLEY

RAMP "N-E"

RAMP "N-W"

RAMP "W-S"

RAMP "E-S"

P.C. STA. 20+84.67

EXIST. PAVM'T WIDTH

LIMIT OF CONSTRUCTION STA 16+00

PROP. R.O.W. (A.C.) & FENCE

R.O.W. (A.C.) & FENCE

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
STATION "N-E" 345+00
&
STATION "W-S" 344+00
TO
STATION 115+00

SCALE: 1"=50'

KEY	COMMONNAME	QTY
CP	WASHINGTON HAWTHORN	45
LT	TULIP TREE	20
MH	CRABAPPLE	85
PT	LOBLOLLY PINE	26
QC	RED OAK	17
CS	FLOWERING QUINCE	430
EP	ELEAGNUS	655
FI	FORSYTHIA	1347
GS	CAROLINA JESSAMINE	950
PI	BOSTON IVY	2871

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMONNAME	QTY
SS	SUMMAC SEEDLINGS	93
PN	AUSTRIAN PINE	38
PW	WHITE PINE	22
CF	DOGWOOD	51
	GRASS (SQ YD)	4582

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	66

REVISED 4-4-84
CROWN VETCH & GRASS QUANTITIES CHANGED.

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

EXISTING MATERIAL TO REMAIN. SELECTIVE CLEARING AT DIRECTION OF RESIDENT ENGINEER

5 - PN
33 - PN
683 - FI
PROPOSED R.O.W. (C.A) & FENCE
17 - QC
P.T. STA 123+61.05
8 - LT
11 - PW
372 - EP
PROP R.O.W. (A.C.)
PROP FENCE
STA. 130+00
13 - FI
TO BE SEEDED WITH GRASS (3027 SQ.YD)
PRESPLIT LINE
283 - EP
PROP FENCE
STA. 115+00
825 - PI
20 - CF
20 - MH
26 - MH
430 - CS
L=440
147 - FI
28 - MH
DUE SOUTH
996 - PI
14 - CF
26 - PT
45 - CP
PRESPLIT LINE
S 84° 28' 38" W 200.00'
PROP R.O.W.
1050 - PI
11 - PW
MATCH LINE
PROP A.C. & FENCE
S 61° 21' 22" E
S 0° 46' 22" W
R=60'
93 - SS
12 - LT
CONC. DR.
ELKINS AVE.
252 - FI
7 - CF
11 - MH
950 - GS
PROP R.O.W.
252 - FI
SLOPE LINE
10 - CF
TO BE SEEDED WITH GRASS (1550 SQ.YDS. GRASS)
N 39° 18' 22" W
LIMIT OF CONSTRUCTION STA 8+00
LOUISVILLE & NASHVILLE RAILROAD
MATCH LINE

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS
2240 West End Avenue, Post Office Box 1625,
Nashville, Tennessee 37202-1625

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 115+00 TO STA. 130+00

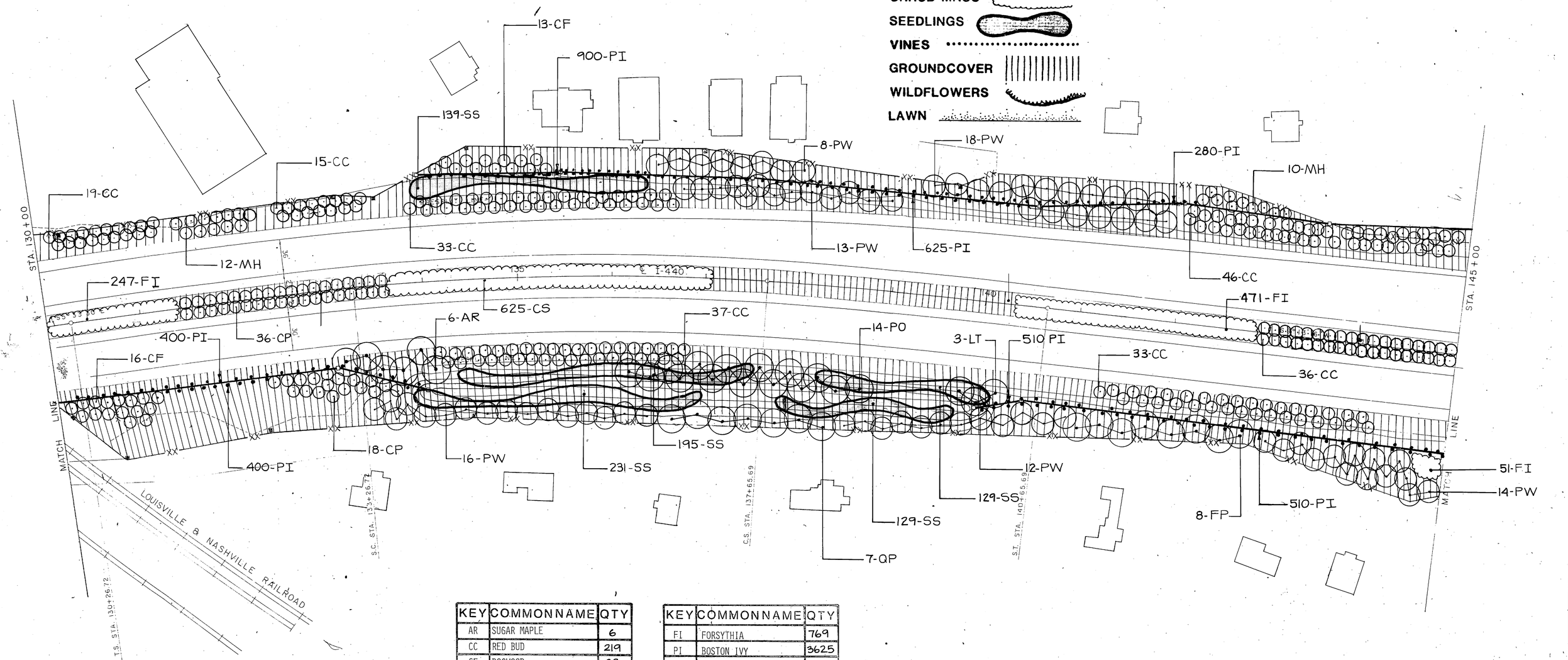
SCALE 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(53)206	67

REVISED 4-4-84
REVISE CROWN VETCH & GRASS QUANITIES.

LEGEND

R.O.W.
NOISE WALL
FENCE x-x
PRESPLIT LINE
TREE
SHRUB MASS
SEEDLINGS
VINES
GROUNDCOVER
WILDFLOWERS
LAWN



KEY	COMMONNAME	QTY
AR	SUGAR MAPLE	6
CC	RED BUD	219
CF	DOGWOOD	29
CP	WASHINGTON HAWTHORN	54
FP	GREEN ASH	8
LT	TULIP TREE	3
MH	CRABAPPLE	22
PO	PLANE TREE	14
QP	PIN OAK	7
CS	FLOWERING QUINCE	625

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMONNAME	QTY
FI	FORSYTHIA	769
PI	BOSTON IVY	3625
SS	SUMMAC SEEDLINGS	823
PW	WHITE PINE	81

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 130+00 TO STA. 145+00

SCALE 1"=50'

KEY	COMMONNAME	QTY
AR	SUGAR MAPLE	11
CC	RED BUD	23
CF	DOGWOOD	28
MH	CRABAPPLE	52
PO	PLANE TREE	5
QC	RED OAK	29
CS	FLOWERING QUINCE	1396
EA	WINGED EUONYMUS	60
EP	ELEAGNUS	245
FI	FORSYTHIA	887

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMONNAME	QTY
PI	BOSTON IVY	2460
PS	PINE SEEDLINGS	113
SS	SUMMAC SEEDLINGS	726
PW	WHITE PINE	71
	GRASS (SQ.YD)	5688

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	68

REVISED: 4-4-84
REVISED GRASS QUANTITY.

MATCH LINE "A"

NOTE: SEED ALL AREAS OF CONSTRUCTION WITH GRASS.

TO BE SEEDED WITH GRASS (916 SQ.YD.)

P.C. STA. 0+00 RAMP "B" = STA. 25+02.75 MURPHY RD.

18-MH
91-SS
47-SS
12-QC
55-SS
113-PS
73-SS
49-PW
23-CC
11-AR
11-MH
23-MH
480-PI
1500-PI
480-PI
8-PW
803-CS
28-CF
165-EP
165-FI
17-QC
SEEDED WITH GRASS (471 SQ.YD)
460-SS
444-CS
60-EA
5-PO
80-EP
195-FI
149-CS
297-FI
14-PW
230-FI

S 82°49' E
S 19°48' 45" E
S 9°13'16" W

MURPHY ROAD
MATCH LINE STA. 160+00
MATCH LINE STA. 145+00
ACKLEN PARK DRIVE
150 ℄ I-440
155

STA. 146+11.79 ℄ I-440
= STA. 32+97.17 ACKLEN PARK DRIVE

SEE SHEET 69 FOR PLANTING IN THIS AREA

30 WEST END AVE.
30
℄
MATCH LINE "A"

NORTH
50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS
2016 West End Avenue, Post Office Box 1820
Nashville, Tennessee 37202-1820

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 145+00 TO STA. 160+00

SCALE 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	69

REVISED 4-4-84
REVISED CROWN VETCH & GRASS QUANTITIES

STA. 15 +39.25 I-440
= STA. 20 +00 MURPHY ROAD

E. B. L.

RAMP "A"

P.C. STA. 0+00
= STA. 16+42.47 P.T.

S14°13'16"W

S57°10'46"W

S82°49'E

208-FI
181-FI
36-MH
324-FI
778YD²-CV
306-CS
36-MH
199-CS
163-CS
10-MH
155-PI
5-PW
8-PW
340-PI
65-PI
60-PI
7-AR
379-SS
5-PO
935-PI
PLANT VINES ALONG
PRE-SPLIT (TYPICAL)
9-LT
5-LT
8-QC
16-CC
167-PS
12-PT
626-SS
9-LT
238-SS
17-CC
77-SS
15-CF
134-SS
16-CF
172-SS
21-CC
440-FI
268-SS
8-CC
10-PW
6-CC
6-AR
12-CF
602-EP
12-CC
5-AR
SEEDED WITH GRASS (1882 SQ.YD)
60-PI
239-FI
475-FI
17-QC
3-PW
760-WF
EXISTING VEGETATION TO
REMAIN AND IS TO BE
SELECTIVELY CLEARED
UNDER DIRECTION OF
RESIDENT ENGINEER
SEEDED WITH GRASS (6080 SQ.YD.)
TRENCH BED EDGE
3" DEEP
10-AR
10-CF
14-QC

STA. 145+00
DRIVE
PARK
MATCH LINE
ACKLEN
STA. 160+00
MATCH LINE
MURPHY ROAD
GREENWAY
S 05°30'51"E
AVE.

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

KEY	COMMONNAME	QTY
AR	SUGAR MAPLE	28
CF	DOGWOOD	53
CC	RED BUD	80
MH	CRABAPPLE	82
LT	TULIP TREE	23
PO	PLANE TREE	5
PT	LOBLOLLY PINE	12
QC	RED OAK	39
CS	FLOWERING QUINCE	668
EP	ELEAGNUS	602

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMONNAME	QTY
FI	FORSYTHIA	1867
PI	BOSTON IVY	1615
WF	WILD FLOWER	760YD²
	GRASS (SQ.YD)	7962
PS	PINE SEEDLINGS	167
SS	SUMMAC SEEDLINGS	2137
PW	WHITE PINE	31

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 145+00 TO STA. 160+00

SCALE 1"=50'

REVISED 4-4-84
REVISION TO CROWN VETCH AND GRASS QUANTITY.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	70

KEY	COMMON NAME	QTY
AR	SUGAR MAPLE	17
CC	RED BUD	15
CF	DOGWOOD	39
CP	WASHINGTON HAWTHORN	62
IO	AMERICAN HOLLY	28
KP	GOLDEN RAINTREE	19
LT	TULIP TREE	22
MH	CRABAPPLE	164
PT	LOBLOLLY PINE	20
QC	RED OAK	18

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMON NAME	QTY
CS	FLOWERING QUINCE	1858
EA	WINGED EUONYMUS	968
EP	ELEAGNUS	1541
FI	FORSYTHIA	1950
GS	CAROLINA JESSAMINE	720
PI	BOSTON IVY	2085
WF	WILD FLOWERS	3071YD²
	GRASS (SQ.YD.)	10,417
PW	WHITE PINE	23
IC	CHINESE HOLLY	300

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

EXISTING VEGETATION TO BE SELECTIVELY CLEARED UNDER DIRECTION OF RESIDENT ENGINEER

SEEDED WITH GRASS (4936 SQ.YD.)

8-QC TO BE LOCATED BY RESIDENT ENGINEER

SEEDED LAWN

STA. 27+25

N 33°56'19" E

WEST

25

N38°34'23"E

END

N39°24'40"E

AVENUE

N 34°02'54" W

RAMP "G"

RAMP "H"

RAMP "F"

PERMANENT UTILITY EASMT.

PROPERTY LINE

MATCH LINE STA 160+00

MATCH LINE STA 175+00

℄ L=440

S 27° 31' 59" E

484-FI
50-MH
222-FI
196-CS
28-CP
145-EA
219-EA
8-PW
15-PW
7-LT
8-IO
8-LT
13-CS
720-GS
2-AR
18-CS
49-EP
300-IC
325-EA
5-IO
19-KP
15-AR
109-FI
201-FI
12-IO
54-FI
544-EP
SEEDED WITH GRASS (5480 SQ.YD.)
6-PT
14-PT
17-MH
158-CS
240-PI
948-EP
7-CP
26-MH
281-CS
7-LT
508-FI
24-MH
19-CP
462-CS
279-EA
3-IO
24-CF
615-PI
15-CC
1510YD²-WF
325-PI
15-CF
11-MH
219-CS
2"-3" GRAVEL
14-MH
10-QC
511-CS
8-CP
22-MH
372-FI
1561YD²-WF
290-PI
STREAM WASHED ROUND STONE

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS
3312 Miller End Avenue, Post Office Box 1625
Nashville, Tennessee 37202-1625

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

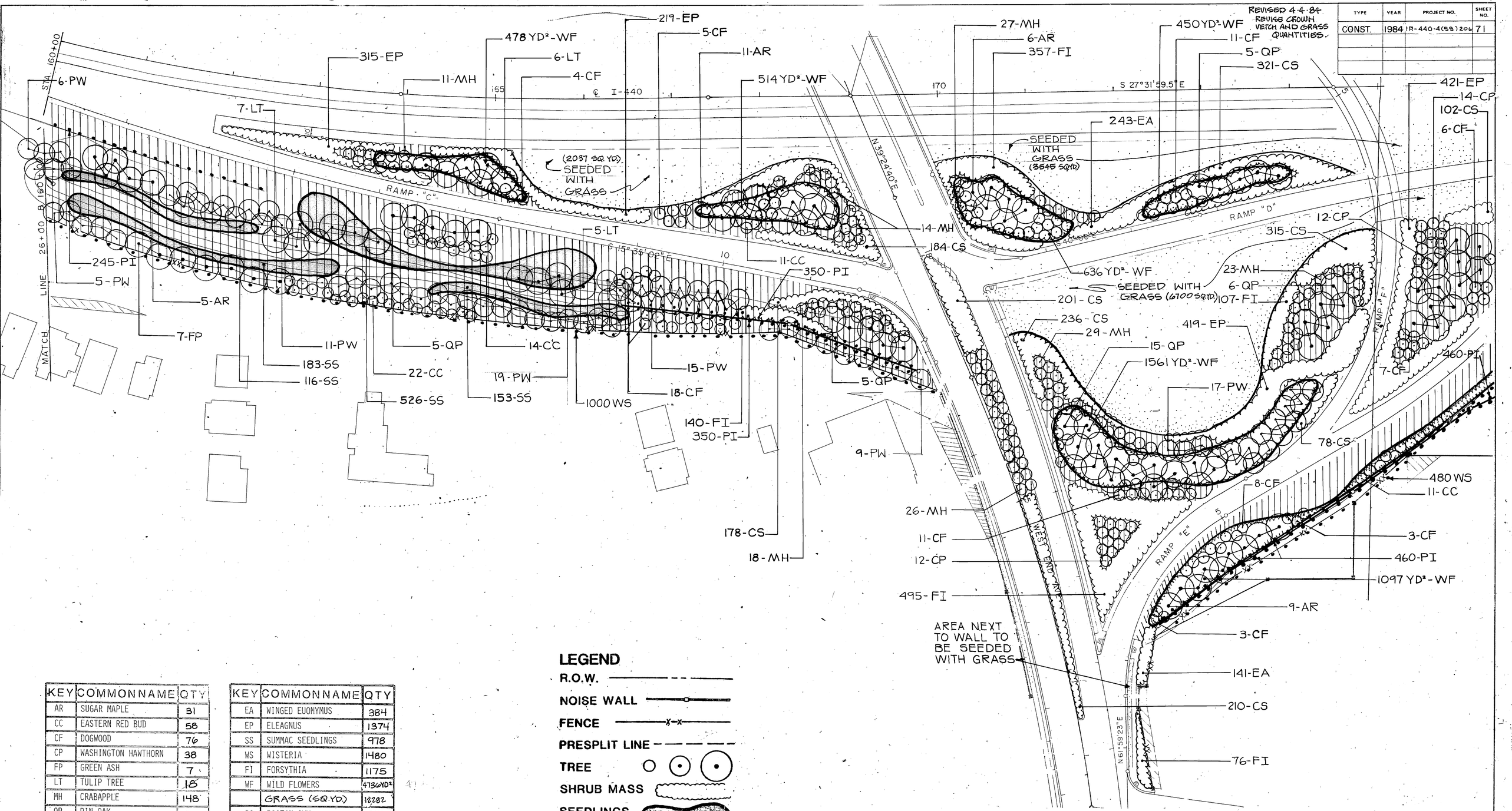
PROPOSED LAYOUT

STA. 160+00 TO STA. 175+00

SCALE 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(58)206	71

REVISED 4-4-84
REVISE CROWN VETCH AND GRASS QUANTITIES.



KEY	COMMONNAME	QTY
AR	SUGAR MAPLE	31
CC	EASTERN RED BUD	58
CF	DOGWOOD	76
CP	WASHINGTON HAWTHORN	38
FP	GREEN ASH	7
LT	TULIP TREE	18
MH	CRABAPPLE	148
QP	PIN OAK	36
PW	WHITE PINE	82
CS	FLOWERING QUINCE	1825

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMONNAME	QTY
EA	WINGED EUONYMUS	384
EP	ELEAGNUS	1374
SS	SUMMAC SEEDLINGS	978
WS	WISTERIA	1480
FI	FORSYTHIA	1175
WF	WILD FLOWERS	4736YD²
	GRASS (SQ.YD)	12282
PI	BOSTON IVY	1865

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 160+00 TO STA. 175+00

SCALE 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	72

REVISED 4-4-84
REVISED QUANTITIES OF CROWN VETCH AND GRASS.

KEY	COMMONNAME	QTY
AR	SUGAR MAPLE	33
CC	RED BUD	9
CP	WASHINGTON HAWTHORN	71
LT	TULIP TREE	13
MH	CRABAPPLE	14
PO	PLANE TREE	7
QP	PIN OAK	8
CS	FLOWERING QUINCE	537
EP	ELEAGNUS	497
FI	FORSYTHIA	690

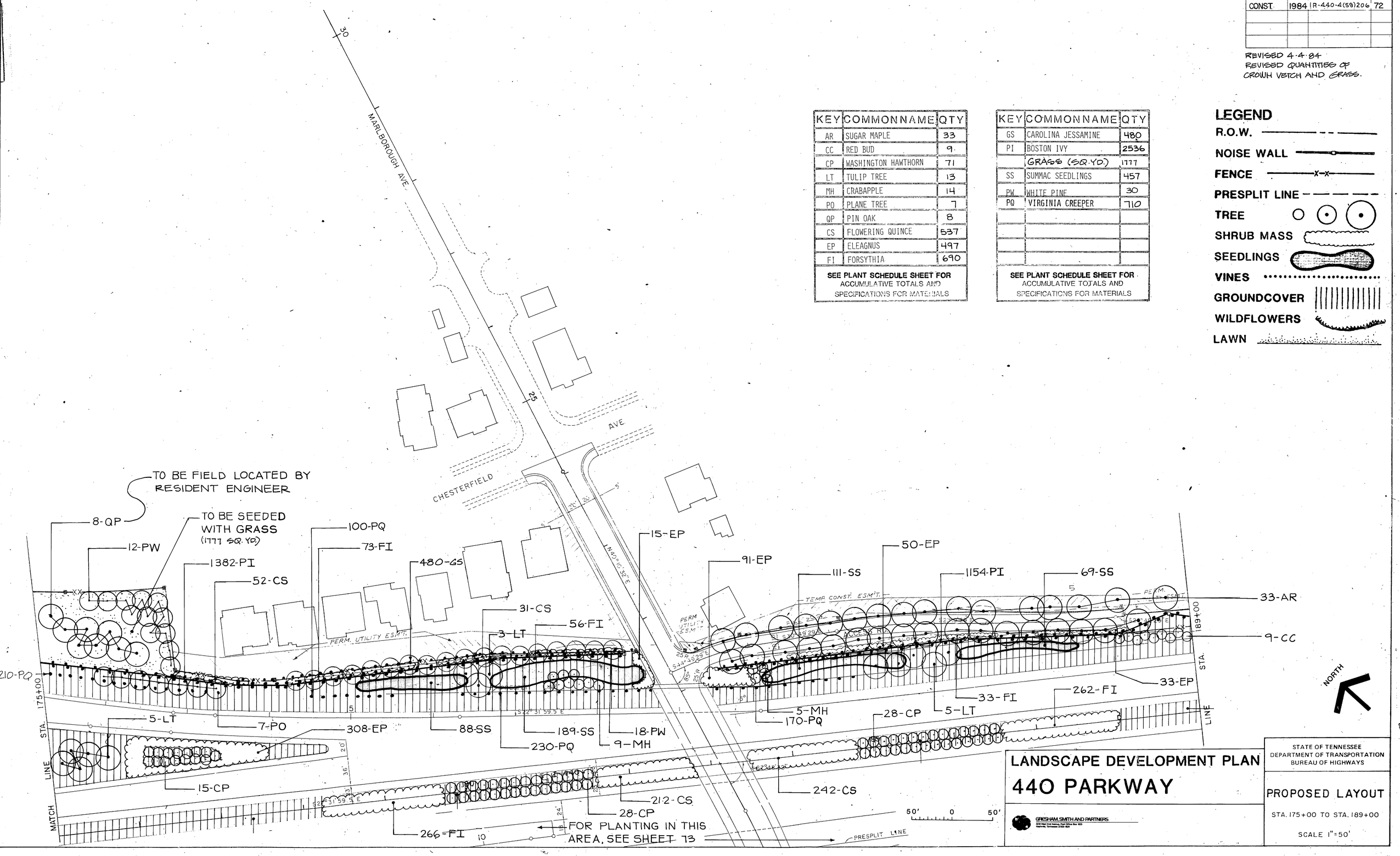
SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMONNAME	QTY
GS	CAROLINA JESSAMINE	480
PI	BOSTON IVY	2536
	GRASS (SQ.YD)	1777
SS	SUMMAC SEEDLINGS	457
PW	WHITE PINE	30
PQ	VIRGINIA CREEPER	710

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

LEGEND

R.O.W.
NOISE WALL
FENCE
PRESPLIT LINE
TREE
SHRUB MASS
SEEDLINGS
VINES
GROUNDCOVER
WILDFLOWERS
LAWN



LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS
222 West End Avenue, Post Office Box 1625
Nashville, Tennessee 37202-1625

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

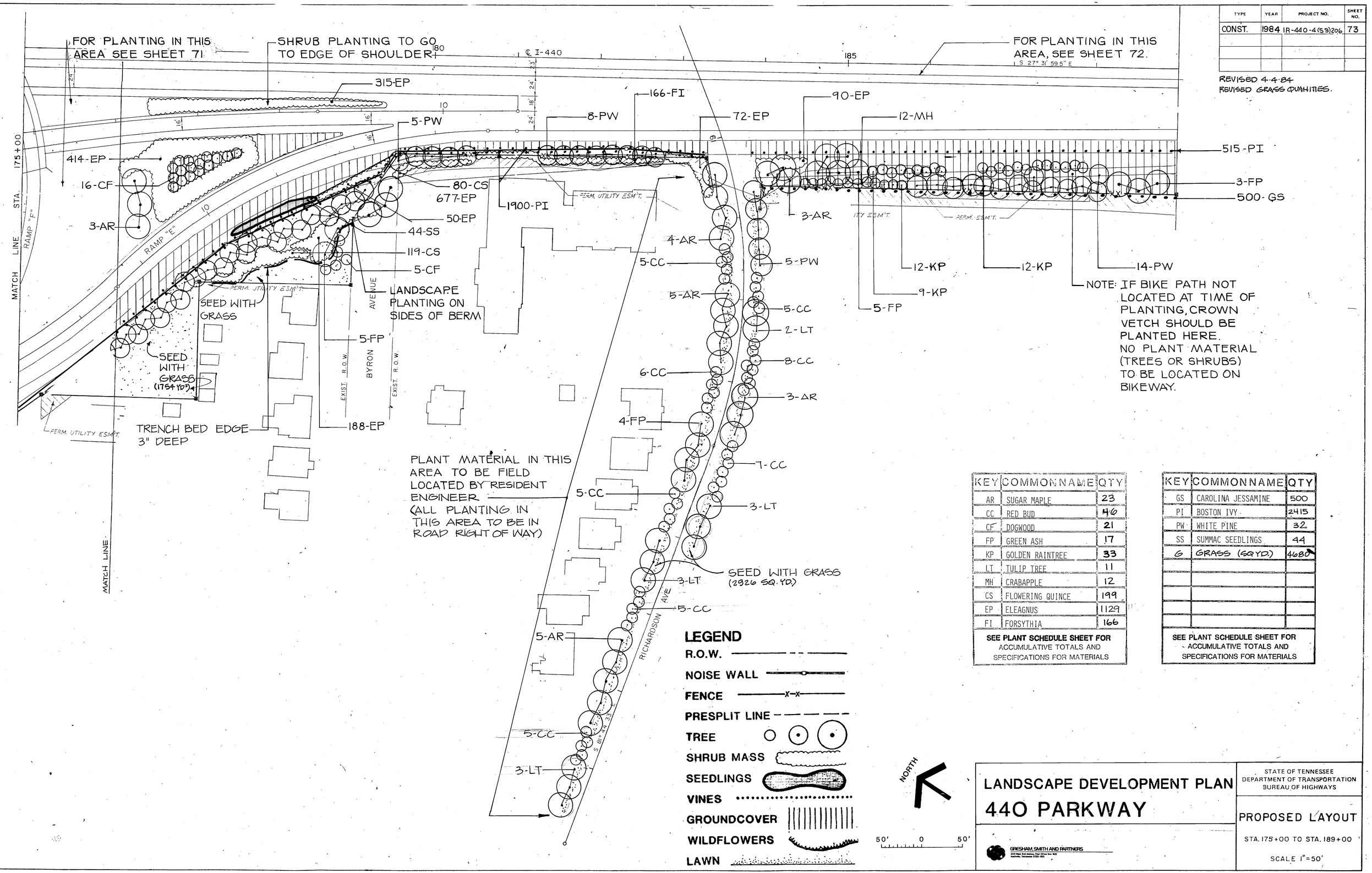
PROPOSED LAYOUT

STA. 175+00 TO STA. 189+00

SCALE 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(6S)206	73

REVISED 4-4-84
REVISED GRASS QUANTITIES.



KEY	COMMON NAME	QTY
AR	SUGAR MAPLE	23
CC	RED BUD	46
CF	DOGWOOD	21
FP	GREEN ASH	17
KP	GOLDEN RAINTREE	33
LT	TULIP TREE	11
MH	CRABAPPLE	12
CS	FLOWERING QUINCE	199
EP	ELEAGNUS	1129
FI	FORSYTHIA	166

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMON NAME	QTY
GS	CAROLINA JESSAMINE	500
PI	BOSTON IVY	2415
PW	WHITE PINE	32
SS	SUMMAC SEEDLINGS	44
G	GRASS (SQ YD)	4680

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS
3340 West End Avenue, Post Office Box 1625
Nashville, Tennessee 37202-1625

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 175+00 TO STA. 189+00

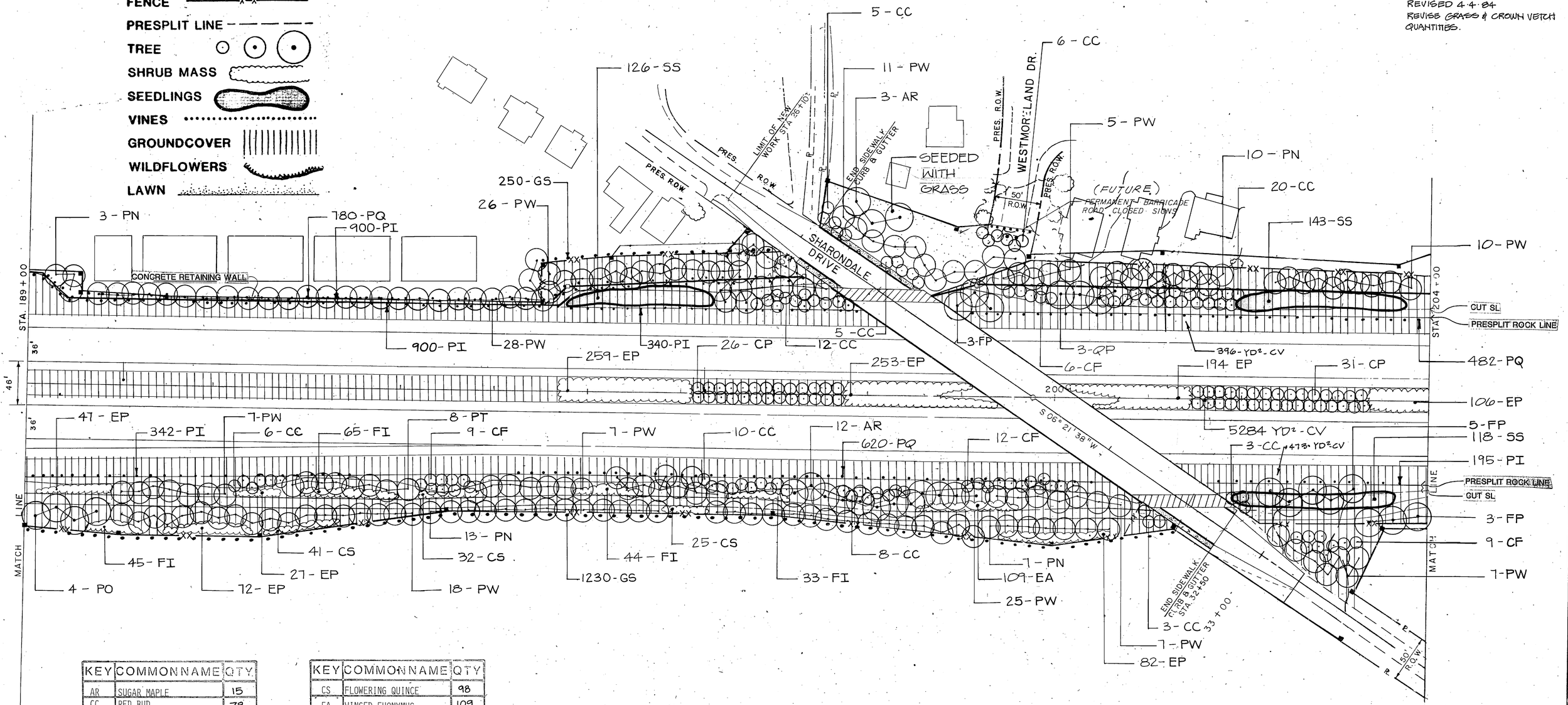
SCALE 1"=50'

CONST.	1984	IR-440-4(59)206	74

REVISED 4-4-84
REVISE GRASS & CROWN VETCH QUANTITIES.

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN



KEY	COMMON NAME	QTY.
AR	SUGAR MAPLE	15
CC	RED BUD	78
CF	DOGWOOD	36
CP	WASHINGTON HAWTHORN	57
FP	GREEN ASH	11
PT	LOBLOLLY PINE	8
QP	PIN OAK	3
PO	PLANE TREE	4
PN	AUSTRIAN PINE	33
PW	WHITE PINE	151

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMON NAME	QTY.
CS	FLOWERING QUINCE	98
EA	WINGED EUONYMUS	109
EP	ELEAGNUS	1040
FI	FORSYTHIA	187
GS	CAROLINA JESSAMINE	1480
PI	BOSTON IVY	2677
PQ	VIRGINIA CREEPER	1882
CV	CROWN VETCH	838470
SS	SUMMAC SEEDLINGS	387

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS
3310 West End Avenue, Post Office Box 1625
Nashville, TN 37202
(615) 385-3310

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I - 440
STA. 18+00
TO
STA. 204+00

SCALE : 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	75

REVISED 4-4-84
REVISION IN GRASS & CROWN VETCH QUANTITIES

LEGEND

R.O.W.
NOISE WALL
FENCE
PRESPLIT LINE
TREE

SHRUB MASS
SEEDLINGS
VINES
GROUNDCOVER
WILDFLOWERS
LAWN

STA. 204+00

13-PW
129-EA
4-AR
103-CS
7-CC
7-CC
4-PN
6-PW
10-CF
WESTWOOD
PLANT CROWN VETCH TO EDGE OF CREEK RIP-RAP
VEGETATION TO BE SELECTIVELY CLEARED IN THIS AREA
7-PO
50-EA
9-PO
20-PW
178-EP
78-PS
215-FI
DRIVE
8-FP
18-CP
3-PW
5-PO
SEEDED WITH GRASS (900 SQ.YD)
15-PN
25-FI
145-FI
CUT SL
PRESPLIT ROCK LINE
410-PI
141-FI
540 YD²-CV
26-CC
47-PI
PRESPLIT ROCK LINE
CUT SL
300-PI (INCLUDES BOTH SIDES)
5-LI
5-PW
TO BE SEEDED WITH GRASS. (1776 SQ.YD)
FUTURE BIKEWAY
6-PN
9-PN
80-EP
10-KP
139-CS
6-CF
9-PW
400-GS
110-FI
125-EP
101-PS
14-PW
250-PI
720-YD²CV
486 YD²CV
108-PS
190-EP
386-EP
1005-PI
5-FP
11-CF
1430YD²-CV
5-FP
108-EP
2000-PI (INCLUDES BOTH SIDES OF WALL)
31-CC
1829 YD²-CV
53-EP
60-CS
138-EP
364-EP
279-EP
1787 YD²-CV
22-CP
412YD²-CV
8-CF
122-EP
72-PS
FUTURE BIKEWAY
10-PW
6-PW
101-CS
10-PW
918-PI
14-PW
5-PN
918-PI
167-EA
70-EA
9-PW
5-QS
8-PW
56-EP
PLANT CROWN VETCH TO EDGE OF CREEK RIP-RAP
10-PW
STA. 219+00
MATCH LINE
MATCH LINE
STA 22+12 PVT. DR.
STA 21+84 PVT. DR.
STA 23+66 PVT. DR.
PT. 23 E 1,632,227.3 N 1,739,798.78
N 82°00' W
WOODLAWN
N 47°44'50"E
16
18
MATCH LINE "A" THIS SHEET
MATCH LINE "A" THIS SHEET
STA 14+82 PVT. DR.
SHARONDALE
DRIVE
LIMIT NEW WORK STA. 13+75
NORTH
50' 0 50'

KEY	COMMONNAME	QTY
AR	SUGAR MAPLE	4
CC	RED BUD	71
CF	DOGWOOD	35
CP	WASHINGTON HAWTHORN	40
FP	GREEN ASH	18
KP	GOLDEN RAINTREE	10
LI	SWEET GUM	5
—	GRASS (SQ.YD)	2696
PO	PLANE TREE	21
PW	WHITE PINE	137

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMONNAME	QTY
PN	AUSTRIAN PINE	39
QS	SCARLET OAK	5
CS	FLOWERING QUINCE	403
EA	WINGED EUONYMUS	416
EP	AUTUMN ELEAGNUS	2079
FI	FORSYTHIA	636
GS	CAROLINA JESSAMINE	400
PI	BOSTON IVY	5848
PS	PINE SEEDLING	359
CV	CROWN VETCH	7204 YD²

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS

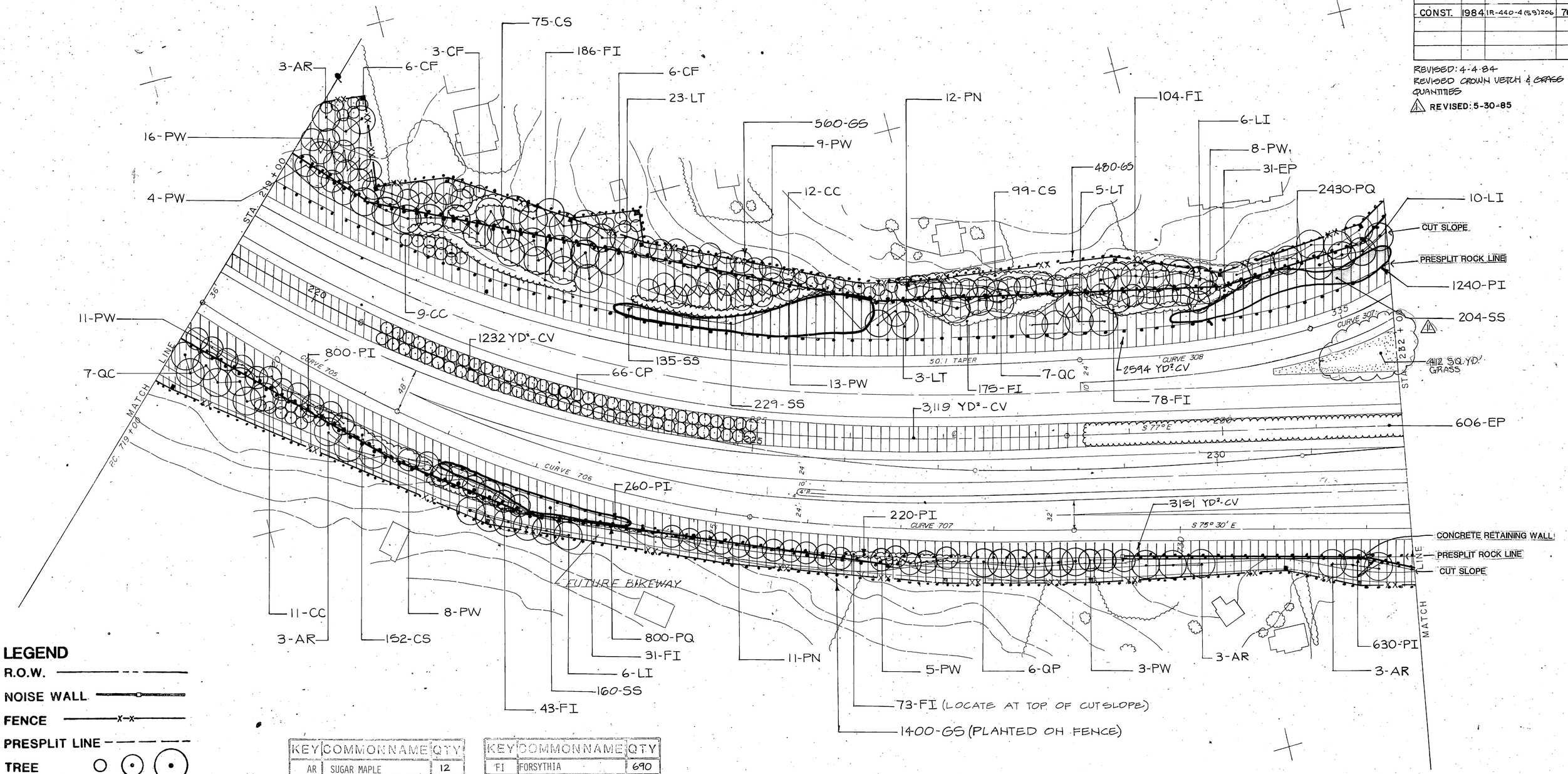
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I-440
STA. 204+00
TO
STA. 219+00

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	76

REVISED: 4-4-84
REVISED CROWN VETCH & GRASS QUANTITIES
⚠1 REVISED: 5-30-85



LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

KEY	COMMON NAME	QTY
AR	SUGAR MAPLE	12
CC	RED BUD	32
CF	DOGWOOD	15
CP	WASHINGTON HAWTHORN	66
LI	SWEET GUM	22
LT	TULIP TREE	31
QC	RED OAK	14
QP	PIN OAK	6
⚠1 CS	FLOWERING QUINCE	326
EP	ELEAGNUS	637

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMON NAME	QTY
FI	FORSYTHIA	690
GS	CAROLINA JESSAMINE	2440
PI	BOSTON IVY	3150
PQ	VIRGINIA CREEPER	3230
CV	CROWN VETCH	10,096 YD²
SS	SUMMAC SEEDLINGS	728
PN	AUSTRIAN PINE	23
PW	WHITE PINE	77
⚠1	GRASS (SQ YD)	412

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS
2100 West End Avenue, Post Office Box 198
Nashville, Tennessee 37202-405

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I - 440
STA. 219+00
TO
STA. 232+00

LANDSCAPE DEVELOPMENT PLAN

440 PARKWAY

GRESHAM, SMITH AND PARTNERS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	77

REVISED 4-4-84
REVISED CROWN VETCH AND GRASS QUANTITIES
△1 REVISED INTERSECTION 6-30-85

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

EXISTING VEGETATION TO REMAIN AND SHOULD BE CLEARED UNDER DIRECTION OF RESIDENT ENGINEER

WOODLAWN DR. — N-82°-15'-W

LIMIT OF PAVING

CUT SLOPE
PRESPLIT ROCK LINE

MATCH LINE STA. 39+00
PT. 24,75,598
N 631,894.111
E 1,702,080.142

END FENCE EXISTING TO BE OBLITERATED, TOPSOILED AND SEEDED

SEED LAWN ALONG SIDEWALK

NOTE: SEED ALL AREAS DISTURED BY CONSTRUCTION

NORTH

50' 0 50'

KEY	COMMON NAME	QTY
AR	SUGAR MAPLE	13
CC	RED BUD	83
CF	DOGWOOD	66
CP	WASHINGTON HAWTHORN	246
IO	AMERICAN HOLLY	83
KP	GOLDEN RAINTREE	7
LI	SWEET GUM	44
PO	PLANE TREE	37
QC	RED OAK	11
PN	AUSTRIAN PINE	49
PW	WHITE PINE	63
	FLOWERING QUINCE	1593
		438
		3.40
		15,388
	GRASS SQ. YD.	26.76

SEE PLANT SCHEDULE SHEET FOR

41-FI
287 GB
7-IO
744-PI
1,151-PI
202-EA
7-AR
9-AR
4-PN
236-EA
101-PI
320-FI
19-PW
7-KP
145
39-EP
7-AR
11-CC
54-CS
5-IO
52-CS
6-IO
37-PH
23
PC 325+10.746
N 38°-51'-27"-W
CURVE 305
CURVE 607
CURVE 608
CURVE 609
CURVE 805
CURVE 806
CURVE 304
CURVE 605
300-CS
720-EP
HILLSBORO PIKE
52-CP
12-PO
4-AR
5355 SY GRASS
386 SY-CV
840-CS
29-CF
33-CP
611-CS
11-QC
℄ I-440
371-EP
423-EP
36-CP
624YD²-CV
340-FI
302 YD²-CV
RAMP
MATCH LINE STA. 232+00
MATCH LINE STA. 246+00
748YD²-CV
40-CP
79-CS
59-CP
T640-FI
6-PO
73-CS
600-PI
6-PN
3-PW
585-PI
CUT SLOPE
PRESPLIT ROCK LINE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I-440
STA. 232+00 LT.
TO
STA. 246+00 LT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	78

REVISED 4-4-84
REVISED PLANT QUANTITIES
⚠1 REVISED 5-30-85

FOR PLANTING IN THESE AREAS SEE SHEET 77

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

PRESPLIT ROCK L
CUT SLOP
CONCRETE RETAINING WALL

KEY	COMMONNAME	QTY
AR	SUGAR MAPLE	22
CC	RED BUD	40
CF	DOGWOOD	58
CP	WASHINGTON HAWTHORN	72 ⚠1
IO	AMERICAN HOLLY	31
LI	SWEET GUM	3
LT	TULIP TREE	11
MH	CRABAPPLE	8
QP	PIN OAK	22 ⚠1
PW	WHITE PINE	67
PN	AUSTRIAN PINE	88
CS	FLOWERING QUINCE	2121 ⚠1
EA	WINGED EUONYMUS	387
EP	AUTUMN ELEAGNUS	1649
FI	FORSYTHIA	1842 ⚠1
SS	SUMMAC SEEDLINGS	95
PQ	VIRGINIA CREEPER	2285
PI	BOSTON IVY	734
WF	WILD FLOWERS	462 YD²
	GRASS (SQ.YD)	7172 ⚠1

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

CV	CROWN VETCH	1720 YD²

℄ I-440
54-FI
680-PI
428-FI
30-CP
61-CS
1720 YD²-CV
94-FI
990-PQ
RAMP "A"
CURVE 708
CURVE 709
CURVE 710
41-FI
64-FI
7-PW
49-CS
5-AR
64-CS
10-PW
66-CS
21-FI
990-PQ
7-PW
11-CF
SEEDED WITH GRASS (2869 SQ.YD)
4-PW.
217-FI
7-PN
SEED WITH GRASS (155 SQ.YD)
END TAPER 14 I-40
SHARON HILL CIRCLE 14+00
℄ RELOCATED HILLSBORO PIKE
3-PW
24-EP
203-FI
8-PW
68-EP
SHARONDALE DRIVE
LIMITS OF CONST & PAVING STA 10+50 ±
LOMBARDY AVE
84-FI
14-PW
3-AR
S 45°08'50" E
89-EA
145-EA
CURVE 405
CURVE 406
CURVE 407
27-IO
300-PQ
522-CS
207-EP
170-FI
350-EP
245
LOOP "DD"
11-CF
3-AR
4-CC
6-LT
12-CC
SEEDED WITH GRASS (2933 SQ.YD)
13-CC
5-LT
2044 YD²-WF
153-EA.
17-CF
5-AR
81-PN
43-CS
96-FI
3-LI
4-IO
116-FI
95-SS
7-PW
11-CC
456-CS
3-AR
SEED WITH GRASS (1215 SQ.YD)
8-MH
190-FI
3-AR
STA 232+00
STA 246+00
MATCH LINE
17-CP
10-QP
13-CP
283-CS
12-QP
2577-YD² WF
577-CS
12-CP
19-CF
50:1 TAPER
N 630,500
4+40
LIMIT OF PAVING
25'R
15'R
10'R
PROP R.O.W.
PT STA 3+08.79
PC STA 1+90.11
PT STA 1+67.01
HILLSBORO GARDEN RD.

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I - 440
STA. 232+00 RT.
TO
STA. 246+00 RT.

REVISED 4-4-84
REVISED CROWN VETCH QUANTITY.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	80

KEY	COMMON NAME	QTY
AR	SUGAR MAPLE	8
MH	CRABAPPLE	66
PN	AUSTRIAN PINE	10
SS	SUMMAC SEEDLINGS	107
EP	ELEAGNUS	1275
IO	AMERICAN HOLLY	45
PI	BOSTON IVY	3830
CV	CROWN VETCH	6403 YD²
WS	WISTERIA	1040

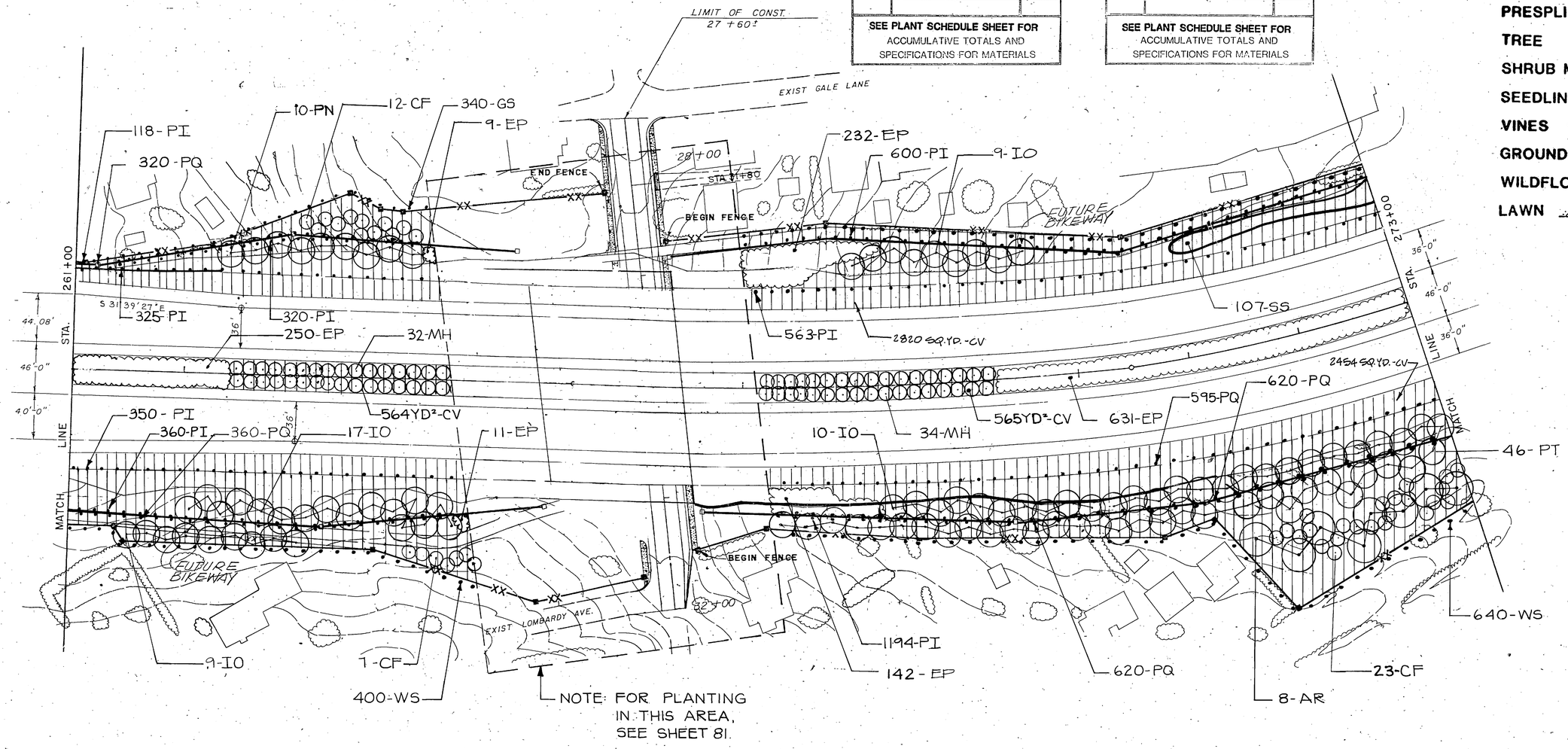
SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMON NAME	QTY
GS	JESSAMINE	340
PT	LOBLOLLY PINE	46
CF	DOGWOOD	42
PQ	VIRGINIA CREEPER	2515

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN



NOTE: FOR PLANTING IN THIS AREA, SEE SHEET 81.

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS
2210 West End Avenue, Post Office Box 1625
Nashville, Tennessee 37202

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I - 440
STA. 261+00
TO
STA. 273+00

SCALE : 1"= 50'

LEGEND

R.O.W.

NOISE WALL

FENCE

PRESPLIT LINE

TREE

SHRUB MASS

SEEDLINGS

VINES

GROUNDCOVER

WILDFLOWERS

LAWN

KEY	COMMON NAME	QTY
AR	SUGAR MAPLE	14
MH	CRABAPPLE	72
LT	TULIP TREE	34
QC	RED OAK	15
CF	DOGWOOD	41
CC	RED BUD	73
PW	WHITE PINE	131
KP	GOLDEN RAINTREE	46
PS	PINE SEEDLINGS	253
SS	SUMMAC SEEDLINGS	584

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMON NAME	QTY
CS	FLOWERING QUINCE	812
EP	ELEAGNUS	237
FI	FORSYTHIA	717
PI	BOSTON IVY	3360
CV	CROWN VETCH	9019 YD²
PQ	VIRGINIA CREEPER	4876
WF	WILD FLOWERS	808 YD²
	GRASS (SQ. YD.)	2680

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

REVISED 4-4-84
REVISED CROWN VETCH QUANTITY & GRASS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(55)206	82

VEGETATION IN THIS AREA TO BE SELECTIVELY CLEARED UNDER DIRECTION OF RESIDENT ENGINEER

120-SS
GALE LANE
516-PI (INCLUDES BOTH SIDES OF NOISE WALL)
162-CS
9-KP
6-KP
114-CS
1114-PQ
5-CC
5-PW
8-CF
30-PW
8-CF
6-AR
8-CF
15-CC
9-CC
CUT SLOPE
PRESPLIT ROCK LINE
5-QC
1944 YD²-CV
1117-PI
11-CC
3-QC
1239-PI
PRESPLIT ROCK LINE
CUT SLOPE
464-SS
19-PW
26-PW
7-QC
152-PS
101-PS
1114-PQ
2397 SQ. YD.-CV
CONCRETE RETAINING WALL
6-PW
BUILDING
LIMIT OF CONST. & PAVING STA. 22+42±
FUTURE BIKEWAY
N 35° 21' 56" E
22
23
STA. 273+00
STA. 288+00
621-SQ.YD.-CV
254-PI
36-MH
3-AR
550YD²-CV
112 EP
125-EP
36-MH
602YD²-CV
354-FI
258-PI
5-AR
179-CS
480-SQ.YD.CV
6-KP
180-CS
177-CS
15-PW
2425 SQ. YD. CV
1324-PQ
10-CF
19-PW
46'
36'
MATCH LINE
BELMONT BLVD.
STOKES LANE
BATTLEFIELD DR.
7-LT
11-PW
EXISTING MATERIAL TO REMAIN, SELECTIVE CLEARING AT DIRECTION OF RESIDENT ENGINEER
492-PI (BOTH SIDES OF NOISE WALL)
17
16-KP
9-KP
6-LT
7-CF
16-CC
307YD²-WF
5-LT
125-FI
1324-PQ
SEEDED WITH GRASS (2680 SQ. YD)
501YD²-WF
10-LT
238-FI
8-CC
6-LT
NORTH
50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I - 440
STA. 273+00
TO
STA. 288+00

SCALE: 1"= 50'

REVISED: 4-4-84
REVISED CROWN VETCH AND GRASS QUANTITIES.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	83

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

NOTE: VEGETATION IN WOODED AREAS TO BE SELECTIVELY CLEARED UNDER DIRECTION OF RESIDENT ENGINEER

KEY	COMMONNAME	QTY
AR	SUGAR MAPLE	126
CC	RED BUD	106
CF	DOGWOOD	167
CP	WASHINGTON HAWTHORN	111
FP	GREEN ASH	5
LI	SWEET GUM	11
LT	TULIP TREE	10
IO	AMERICAN HOLLY	15
QP	PIN OAK	13
PW	WHITE PINE	166

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMONNAME	QTY
QS	SCARLET OAK	8
CS	FLOWERING QUINCE	270
EP	AUTUMN ELEAGNUS	3363
PI	BOSTON IVY	3678
SS	SUMMAC SEEDLINGS	125
CV	CROWN VETCH	7926 SQ.YD
FI	FORSYTHIA	200
	GRASS (SQ.YD)	76,922

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

NORTH

50' 0 50'

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS

PROPOSED LAYOUT

STA. 288+00 TO STA. 302+00

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	84

REVISED 4/4/84
REVISE CROWN VETCH & GRASS QUANTITIES.

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

TRENCH BED EDGE 3" DEEP
3-LT
5-AR
7- AR
161-SS
3-QP
800-WS
TO BE SEEDED WITH GRASS. (10,315 SQ.YD.)
5-FP
8-PW
31-PW
740-GS
5-AR
71-SS
7-FP
LEALAND LANE
46-PW
589-PQ
589-PQ
5-QP
5-QP
150-EP
614 YD³-CV
161-EP
150-EP
2005S
663-PQ
663-PQ
5-QP
6-QP
110-SS
302+00 STA.
317+00 STA.
650-CV
40-PN
600-PQ
263-EP
612-PQ
4-QC
17-QP
16-CC
150-EP
6-FP
176-EP
4-QP
150-EP
36-CP
716YD³-CV
397-EP
329YD³-CV
18-CP
6-QP
640-PQ
640-PQ
4-QP
MATCH LINE
MATCH LINE
33-CF
19-AR
TRENCH BED EDGE 3" DEEP
PERM. UTILITY ESM'T. (RELOC. SAN. SEWER & N.E.S. POWER LINES)
PERM. UTILITY ESM'T. (RELOC. SAN. SEWER & N.E.S. POWER LINES)
8-QP
91-EP
7-PW
37-PW
275-SS
114-SS
12-CC
(11,400 SQ.YD.) ALL DISTURBED AREA TO BE SEEDED WITH GRASS.
14-PW
3-PW
26-PW
LEALAND LANE
NORTH
50' 0 50'

KEY	COMMONNAME	QTY
AR	SUGAR MAPLE	36
CC	RED BUD	28
CF	DOGWOOD	33
CP	WASHINGTON HAWTHORN	54
EP	GREEN ASH	18
QP	PIN OAK	03
QC	RED OAK	4
EP	ELEAGNUS	1688
GS	CAROLINA JESSAMINE	740
PQ	VIRGINIA CREEPER	4996

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMONNAME	QTY
WS	WISTERIA	800
CV	CROWN VETCH	2309YD
SS	SUMMAC SEEDLINGS	931
PN	AUSTRIAN PINE	40
PW	WHITE PINE	172
LT	TULIP TREE	3
	GRASS (SQ.YD)	21,715

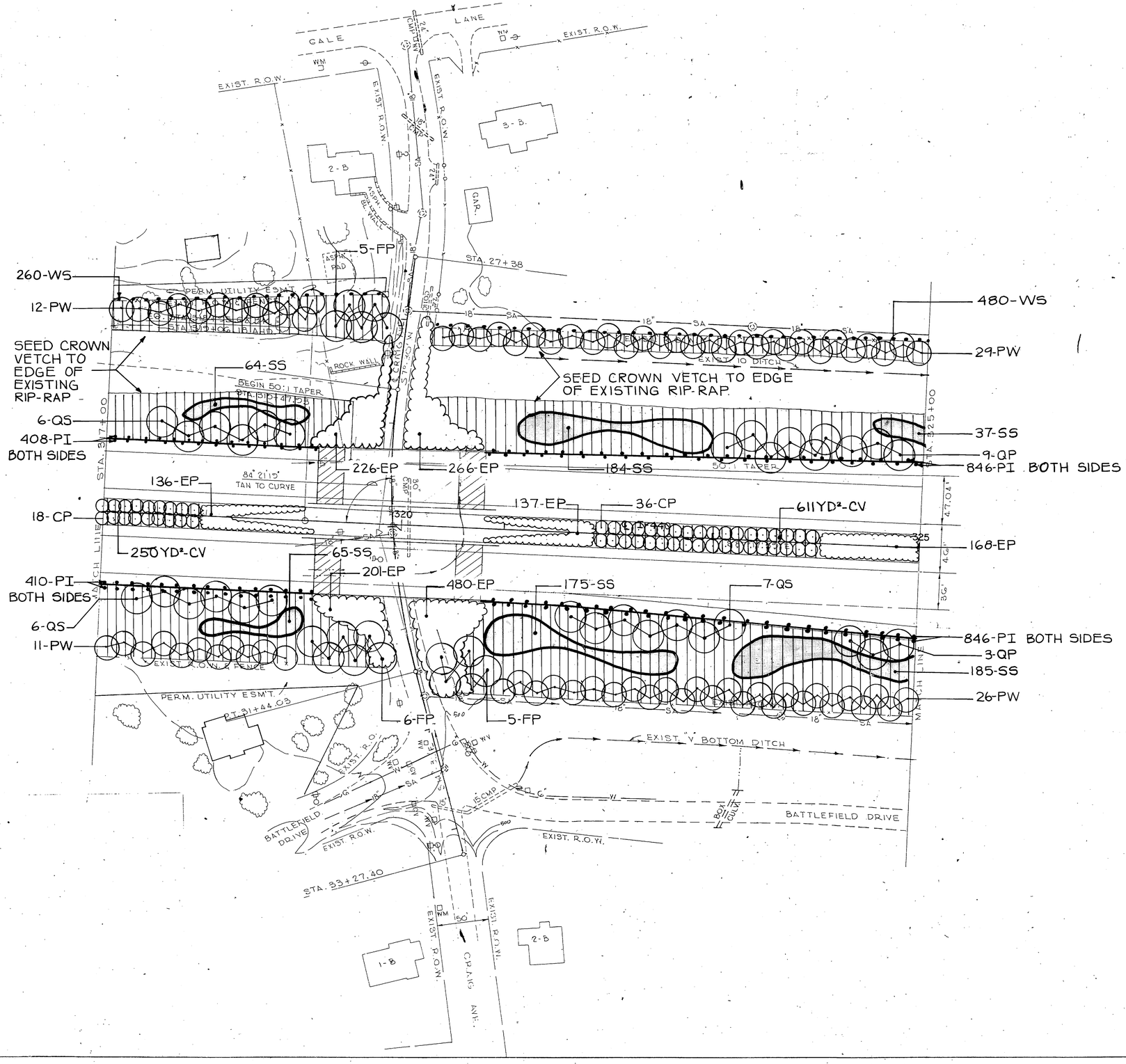
SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

GRESHAM, SMITH AND PARTNERS
Nashville, Tennessee 37202

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	85



KEY	COMMON NAME	QTY
CP	WASHINGTON HAWTHORN	54
EP	GREEN ASH	16
QP	PIN OAK	12
EP	ELEAGNUS	1614
PI	BOSTON IVY	2510
WS	WISTERIA	740
CV	CROWN VETCH	861YD²
SS	SUMMAC SEEDLINGS	710
PW	WHITE PINE	78
QS	SCARLET OAK	19

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

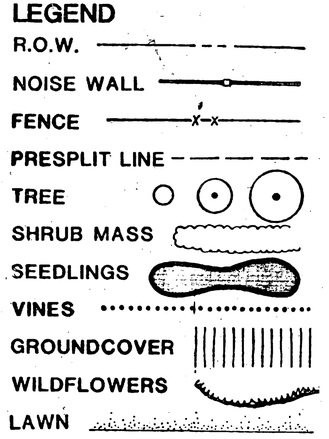
GRESHAM, SMITH AND PARTNERS

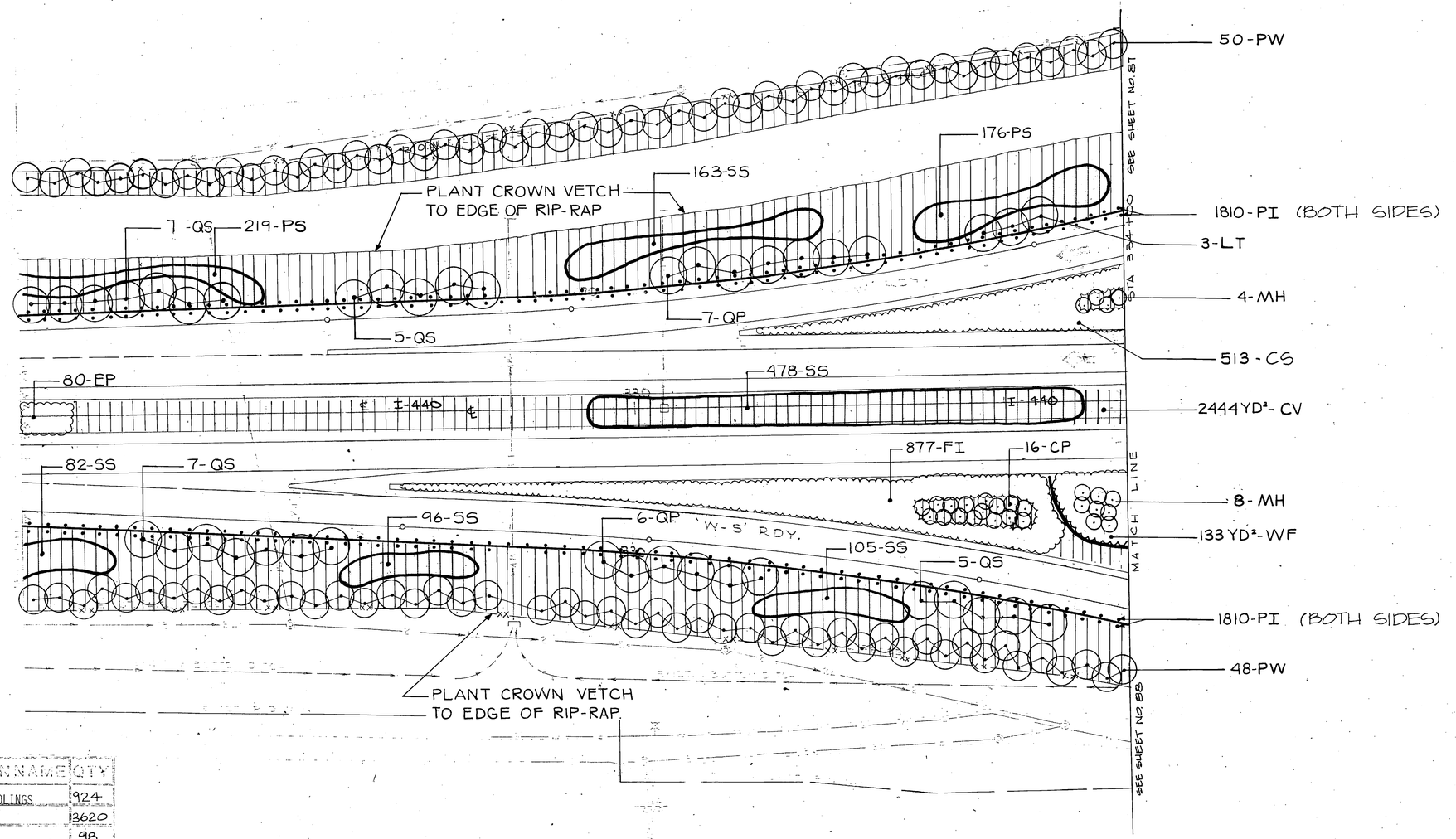
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 27+00 to 325+00

TYPE	YEAR	PROJECT NO	SHEET NO
CONST.	1984	IR-440-4(59)206	86





KEY	COMMON NAME	QTY
CP	WASHINGTON HAWTHORN	16
LT	TULIP TREE	3
MH	CRABAPPLE	12
QP	PIN OAK	13
CS	FLOWERING QUINCE	513
EP	ELEAGNUS	80
FI	FORSYTHIA	877
WF	WILD FLOWERS	133 YD²
CV	CROWN VETCH	2,444 YD²
PS	PINE SEEDLINGS	395

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMON NAME	QTY
SS	SUMMAC SEEDLINGS	924
PI	BOSTON IVY	3620
PW	WHITE PINE	98
QS	SCARLET OAK	24

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
STA 325+00 TO STA 334+00

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	87

KEY	COMMONNAME	QTY
AR	SUGAR MAPLE	13
CC	RED BUD	92
CF	DOGWOOD	44
FP	GREEN ASH	7
LT	TULIP TREE	43
MH	CRABAPPLE	80
PT	LOBLOLLY TREE	47
QP	PIN OAK	61
CS	FLOWERING QUINCE	248
PI	BOSTON IVY	2056
WF	WILD FLOWERS	7090YD²
PS	PINE SEEDLINGS	979
SS	SUMMAC SEEDLINGS	797
PW	WHITE PINE	108
	GRASS (SQ.YD)	45830

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

REVISED: 4-4-84
REVISED GRASS QUANTITY.

GALE LANE

VAULX LANE

EXIST. R.O.W.

EXIST. FENCE

6-AR
7-QP
108-PS
244-PS
16-CC
22-LT
32-PW
171-PS
13-CF
59-PW
11-QP
31-MH
93-PS
2056-PI
40-CS
11-MH
8-QP
363-PS
15-CF
7-QP
208-CS
5-PW
22-CC
12-PW
10-QP
586 YD²-WF
17-CC
15-MH
25-CC
21-PT
11-LT
323-SS
23-MH
1369YD²-WF
5-QP
10-LT
314-SS
19-PT
7-AR
12-CC
5135 YD²-WF
16-CF
7-PT
13-QP
160-SS
7-FP
TRENCHED 3" DEEP DITCH

S.C. 653+15.24
N = 628,978.10
E = 1,771,093.26

BEG. TAPER STA. 653+15.24

(SEE SHT. NO 90)

MATCH LINE

50:1 TAPER

N 78° 25' E

N 67° 57' 01" E

N 79° 57' 01" E

S 79° 57' 01" W

S 81° 27' 01" W

88:1 TAPER

N-W ROADWAY

S-W ROADWAY

12' SHOULDER

GR. SHOULDER

DITCH

DC = 6°

DC = 1° 30'

DC = 9°

I-440 ℄

STA. 334+00

STA. 345+00

STA. 346+00

(SEE SHEET NO 86)

(SEE SHEET NO 90)

335

340

345

155

T.S. 338+25.47
N = 628,345.28
E = 1,770,487.08

S.C. 340+45.47
N = 628,343.12
E = 1,770,636.65

TO BE SEEDED WITH GRASS (45830 SQ.YD)

FOR MEDIAN PLANTING AND PLANTING IN THIS AREA SEE SHEET 88

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS
310 West End Avenue, Post Office Box 1625
Nashville, Tennessee 37202

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 334+00 TO STA. 346+00

SCALE: 1"=50'

29411

BRUNING

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS
2240 West End Avenue, Post Office Box 1625
Nashville, Tennessee 37202

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	88

REVISED: 4-4-84
REVISED GRASS QUANTITIES

908-EP
T.S. 338+25.47
N 628,349.28
E 1,770,487.08
S.C. 340+45.47
N 628,348.19
E 1,770,636.25
3530 YD²-WF
1649 YD²-CV
SEE SHEET 87
597 YD²-CV
335
S87°17'59"E
12' SHOULDER
TOP 528.57
INV. 524.82
340
18"
DC = 1°30'
GT. 537.16
INV. 524.57
℄ I-440
U.S. 70 TO BE REMOVED AND PIPE PLUGGED
TOP 550.57
INV. 540.57
345
STA. 346+00
146-SS
10-LI
1980 YD²-WF
376-PS
8-PO
10-CC
6-PT
5-CF
(SEE SHT. NO. 86)
21-CC
11-LT
297-SS
5-CC
12-PO
TRENCH BED EDGE 3" DEEP
12-QP
MATCH LINE
SEE SHEET NO. 90
STA. 347+50
1389-PI
1389-PI
STA. 334+00
8-QP
335
19-CF
6-PN
23-CC
41-PN
SEED WITH GRASS (4475 SQ.YD)
10-AR
56-SS
MATCHLINE
SEE SHEET NO. 89
13-CC
445
12-LT
162-SS
440
185-SS
7-PO
15-PO
21-PT
BATTLEFIELD DRIVE
EXIST. R.O.W.
S70°25'E
S75°10'E
100' TAPER
330-SS
148-SS
8' SHOULDER
DC=5°
6-QP
313-EP
SEED WITH GRASS (2889 SQ.YD)
32-PW
28-PW
T.S. 337+26.77
N 628,104.55
E 1,770,360.67
EXIST. R.O.W.
S70°10'E
S.C. 339+46.77
N 628,068.48
E 1,770,504.53
SUTTON HILL RD.
BROWNS CREEK
N28°41'E
EXIST. R.O.W.
23-MH
5-LT
FUTURE R.O.W.
9-CC
353-SS
228-SS
SEED WITH GRASS (4163 YD²)
33-PT
380-PS
18-CC
12-PQ
5778 YD²-WF
10-AR
30-LT
MATCHLINE SEE SHEET NO. 89
(SEE SHT. NO. 89)
BROOKSIDE DR. 30'
30' PARK TERRACE 30'
S4
S57°13'E
EXIST. R.O.W.
273-PS
264-PS
15-CC
44-PW
EXIST. R.O.W.
S80°05'E
N60°55'E
MIDDLE FK. OF BROWNS CR.
MATCH LINE
(3)

KEY	COMMON NAME	QTY
PI	BOSTON IVY	2778
WF	WILD FLOWERS	11,288 YD²
CV	CROWN VETCH	2246 YD²
PS	PINE SEEDLINGS	[illegible]
SS	SUMMAC SEEDLINGS	[illegible]
PN	AUSTRIAN PINE	47
PW	WHITE PINE	104
	GRASS (SQ.YD)	11527

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMON NAME	QTY
AR	SUGAR MAPLE	20
CC	RED BUD	124
CF	DOGWOOD	24
LI	SWEET GUM	10
LT	TULIP TREE	58
MH	CRABAPPLE	23
PO	PLANE TREE	54
PT	LOBLOLLY PINE	60
QP	PIN OAK	226
EP	ELEAGNUS	1221

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

LEGEND
- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

NORTH

50' 0 50'

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 334+00 TO STA. 346+00

SCALE: 1" = 50'

LANDSCAPE DEVELOPMENT PLAN

440 PARKWAY

GRESHAM, SMITH AND PARTNERS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CON ST.	1982	IR-440-4(59)206	89

REVISED: 4-4-84
REVISED GRASS QUANTITIES

KEY	COMMON NAME	QTY
AR	SUGAR MAPLE	28
CC	RED BUD	125
CF	DOGWOOD	14
CP	WASHINGTON HAWTHORN	136
LT	TULIP TREE	52
FP	GREEN ASH	24
MH	CRABAPPLE	39
PT	LOBLOLLY PINE	170
QC	RED OAK	20
QP	PIN OAK	11

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

GRASS (SQ. YD)	6288

AREA TO BE CLEARED OF UNDESIRABLE VEGETATION AT DIRECTION OF RESIDENT ENGINEER

TO BE SEEDED WITH GRASS (1844 SQ. YD)

TO BE SEEDED WITH GRASS (4444 SQ. YD)

KEY	COMMON NAME	QTY
CS	FLOWERING QUINCE	1268
EP	ELEAGNUS	225
FI	FORSYTHIA	1003
SS	SUMMAC SEEDLINGS	2372
PW	WHITE PINE	51
PS	PINE SEEDLINGS	609
PI	BOSTON IVY	580
WF	WILD FLOWER	8147 YD²
CV	CROWN VETCH	7045 YD²
	GRASS (SQ. YD)	

SEE LAST SHEET OF DRAWINGS FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

LEGEND

R.O.W. — PRESPLIT LINE — VINES

NOISE WALL — TREE — GROUNDCOVER

FENCE — SHRUB MASS — WILDFLOWERS

SEEDLINGS — LAWN

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 507+00 TO STA. 521+00

SCALE: 1" = 50'

REVISED: 4-4-84
REVISED GRASS QUANTITY.

KEY	COMMON NAME	QTY
CC	RED BUD	115
CF	DOGWOOD	114
CP	WASHINGTON-HAWTHORN	57
MH	CRABAPPLE	53
LT	TULIP TREE	31
KP	GOLDEN RAINTREE	19
QC	RED OAK	51
FP	GREEN ASH	31
LI	SWEET GUM	17
PW	WHITE PINE	72

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMON NAME	QTY
QP	PIN OAK	13
EP	ELEAGNUS	1080
PT	LOBLOLLY PINE	116
SS	SUMMAC SEEDLINGS	2260
WF	WILD FLOWERS	6312 YD²
PS	PINE SEEDLINGS	240
	GRASS (SQ. YD.)	1900

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

FOR PLANTING IN THIS AREA SEE SHEET NO. 87 (1900 SQ.YD) SEEDED WITH GRASS

108-SS, 10-LI, 11-PW, 316-SS, SEE SHEET NO. 90 MATCHLINE, 7-LI, 16-PW, 13-QP, 15-MH, 333-EP, 13-MH, 11-PW, SEE SHEET NO. 90 MATCHLINE, 268-SS, I-440 ℄, 195-SS, SEE SHEET NO. 90 MATCHLINE, 32-CC, 30-CC, 5-QC, 111-SS, 200-EP, 22-PT, 82-SS, 23-CP, 1652 YD²-WF, 129-SS, 100-SS, 25-MH, 13-CF, ℄ RELOCATED FRANKLIN PIKE, CONCRETE MEDIAN BARRIER, 283-EP, 2830 YD²-WF, 181-EP, EXIST. PVMT. EDGE, 122-SS, 15-PT, 34-PW, 240-PS, I-65 ℄, 18-QC, 38-CF, 10-QC, 13-FP, 34-CP, 224-SS, SHEET 92, 2"-3" GRAVEL, 8-CF, 649 YD²-WF, 8-QC, 14-CF, 13-CF, 3378 YD²-WF, 11-CF, 165-SS, 12-CC, 15-CC, 11-PT, 11-CC, 15-CC, 440-SS, 21-LT, 16-PT, 49-EP, 19-KP, 10-LT, 34-EP, S. BROADWAY, I-440 ℄, 17-CF, L&N RAILROAD, MATCHLINE STA 521+00, MATCHLINE STA 553+20, 7-PT, 15-QC, 11-PT, 4741 YD²-WF, 18-FP, 34-PT, 3122 YD²-WF, MATCH LINE STA 555+25 I-440

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

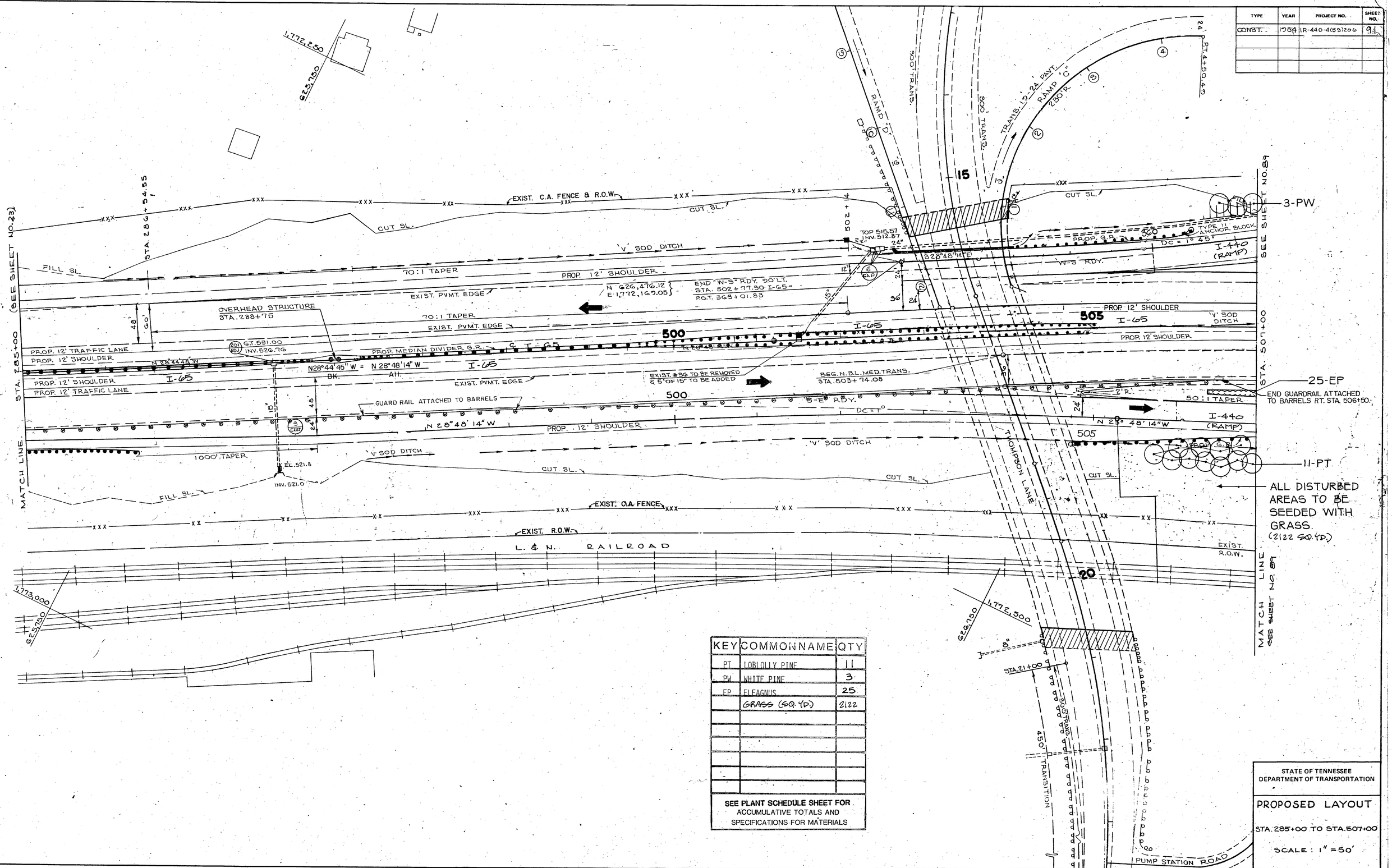
GRESHAM, SMITH AND PARTNERS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 521+00 TO STA. 553+00

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	9



KEY	COMMON NAME	QTY
PT	LOBLOLLY PINE	11
PW	WHITE PINE	3
EP	ELEAGNUS	25
	GRASS (SQ. YD)	2122

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 285+00 TO STA. 507+00

SCALE: 1" = 50'

KEY	COMMON NAME	QTY
AR	SUGAR MAPLE	8
CC	RED BUD	62
CP	WASHINGTON HAWTHORN	45
FP	GREEN ASH	8
MH	CRABAPPLE	53
LT	TULIP TREE	16
PO	PLANE TREE	3
PT	LOBLOLLY PINE	29
QC	RED OAK	5
PW	WHITE PINE	53

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

KEY	COMMON NAME	QTY
EA	WINGED EUONYMUS	610
EP	ELEAGNUS	409
FI	FORSYTHIA	866
PI	BOSTON IVY	268
WF	WILD FLOWERS	1760YD²
CV	CROWN VETCH	895YD²
SS	SUMMAC SEEDLINGS	1305

SEE PLANT SCHEDULE SHEET FOR ACCUMULATIVE TOTALS AND SPECIFICATIONS FOR MATERIALS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1984	IR-440-4(59)206	92

SEED ALL DISTURBED AREAS WITH GRASS

LEGEND

- R.O.W.
- NOISE WALL
- FENCE
- PRESPLIT LINE
- TREE
- SHRUB MASS
- SEEDLINGS
- VINES
- GROUNDCOVER
- WILDFLOWERS
- LAWN

NORTH

50' 0 50'

LANDSCAPE DEVELOPMENT PLAN
440 PARKWAY

GRESHAM, SMITH AND PARTNERS

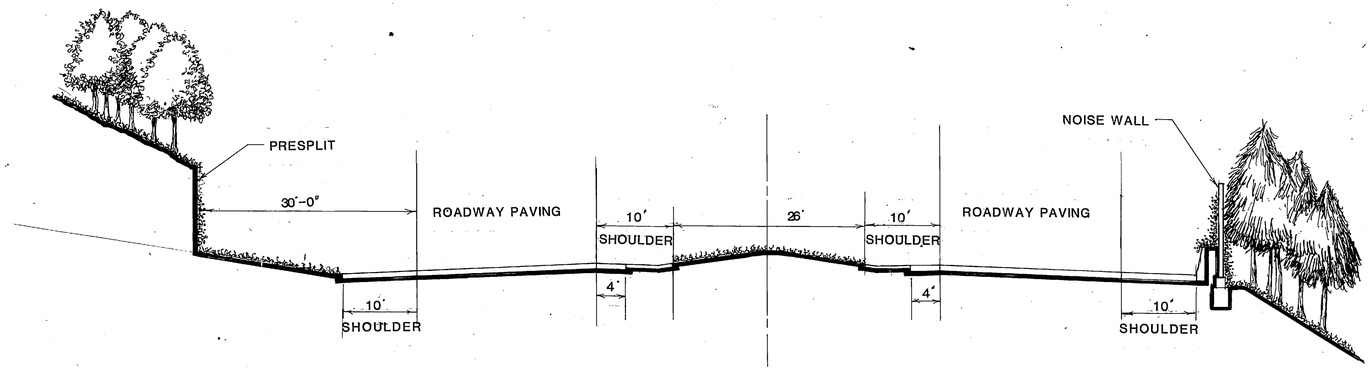
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

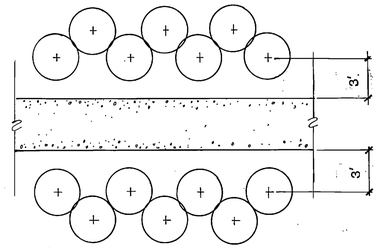
PROPOSED LAYOUT

STA. 533+00 TO STA. 546+00

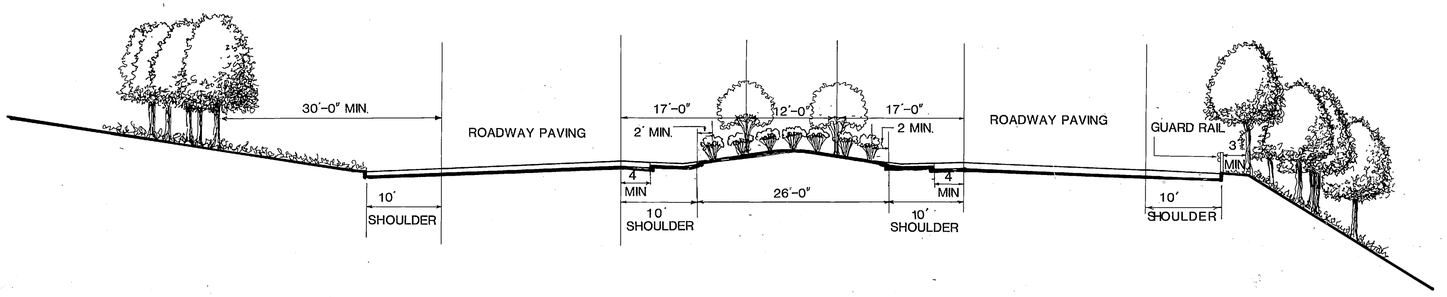
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	IR-440-4(55)206	93





SHRUB PLANTING AT PAVED DITCH



LANDSCAPE DEVELOPMENT PLAN

440 PARKWAY

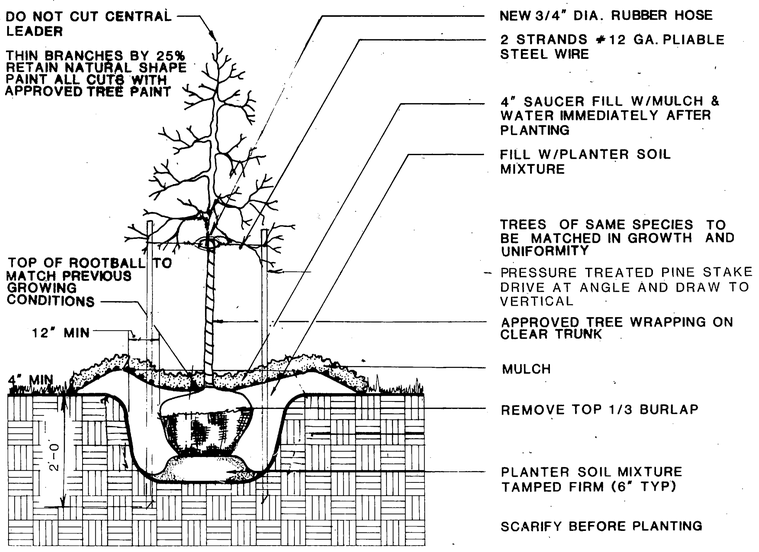
GRESHAM, SMITH AND PARTNERS
3310 West End Avenue
Nashville, Tennessee 37203

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

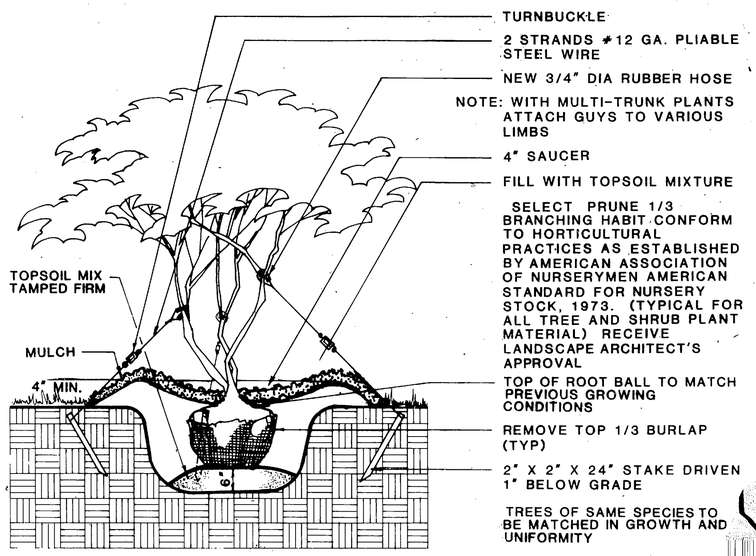
PLANTING DETAILS

TYPICAL ROAD SECTIONS

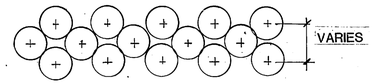
TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	IR-440-4(59)206	94



DETAIL: TYPICAL TREE GUYING
NO SCALE



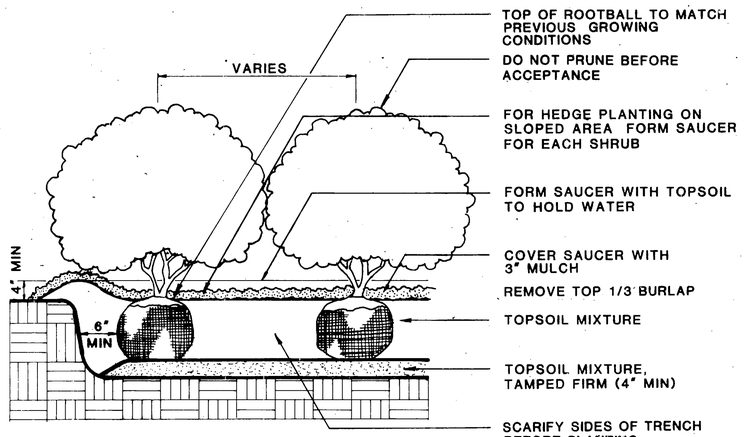
DETAIL: MULTI-TRUNKED TREE PLANTING
NO SCALE



PLAN: SHRUB STAGGERING
NO SCALE

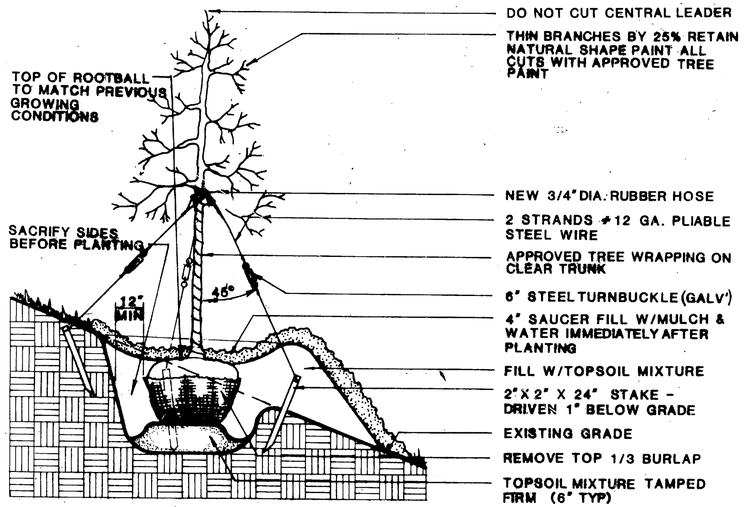
SHRUBS OF SAME SPECIES TO BE MATCHED IN GROWTH AND UNIFORMITY

STAGGER ALL MASS PLANTING



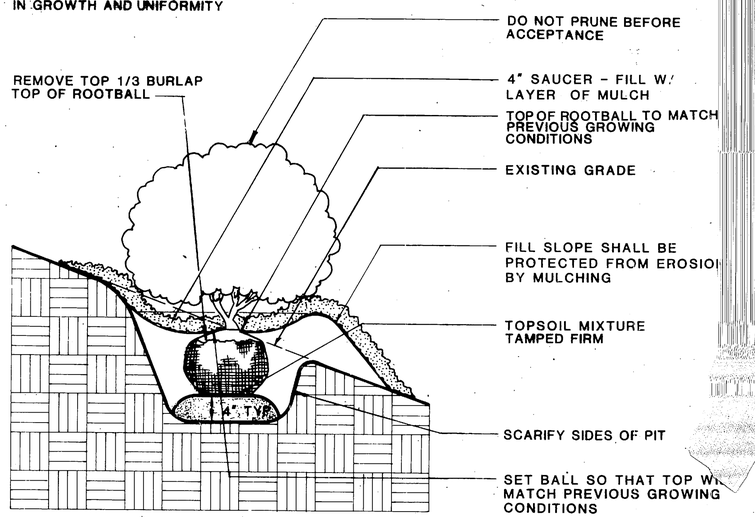
DETAIL: TYPICAL TRENCH PLANTING
NO SCALE

TREES OF SAME SPECIES TO BE MATCHED IN GROWTH AND UNIFORMITY

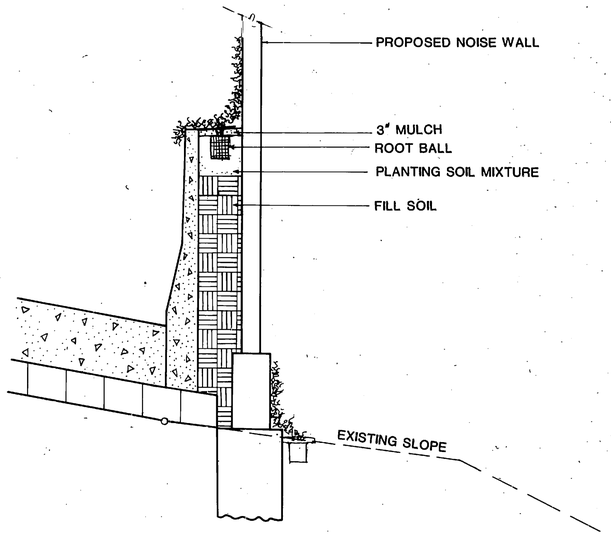


DETAIL: TYPICAL SLOPE PLANTING FOR TREES OVER 2" CALIPER
NO SCALE

SHRUBS OF SAME SPECIES TO BE MATCHED IN GROWTH AND UNIFORMITY



DETAIL: TYPICAL SHRUB PLANTING ON SLOPE
NO SCALE



DETAIL: NOISE WALL VINE PLANTING
NO SCALE

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

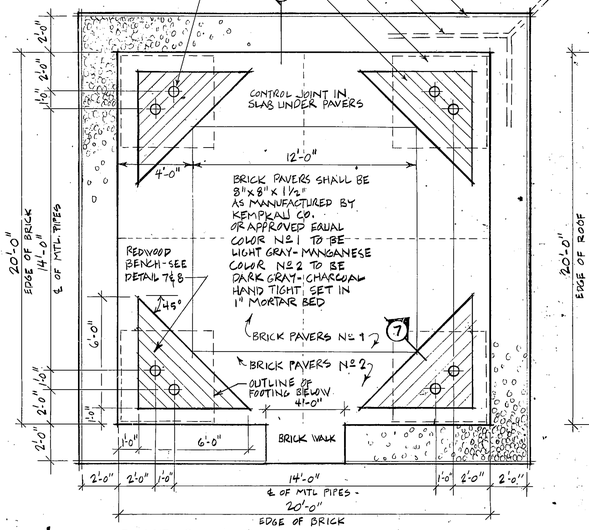
TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	IR-440-4(59)206	95

CONCRETE SHALL BE 3000 PSI

ALL EXPOSED METAL SHALL BE PAINTED DARK GRAY "CAMEO BLACK" PITTSBURG DX751 ENAMEL

ALL EXPOSED WD SHALL BE STAINED WITH OLYMPIC SEMI TRANSPARENT STAIN # 913

1"x6" REDWOOD EDGE
GRAVEL DRAIN AREA
BRICK PAVING
REDWOOD BENCH
6" PIPE
DRAIN TO GRADE AT LOW POINT W 4" PIPE

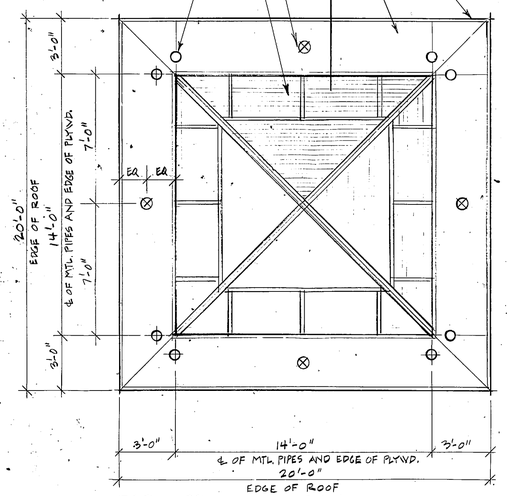


1 FLOOR PLAN

NOTE: ALL PLANS, ELEVATIONS, & SECTIONS AT SCALE ¼"=1'-0"

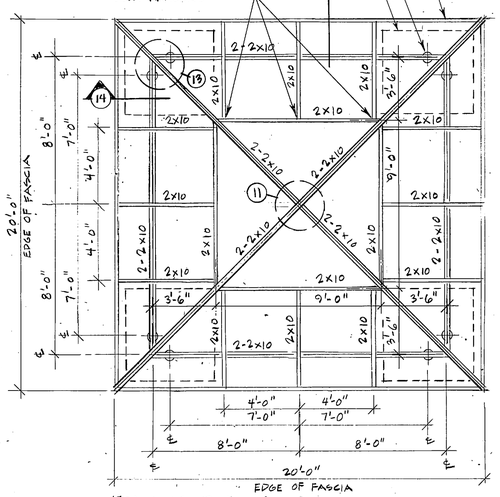
LIGHT FIXTURE SHALL BE WEATHERPROOF WIDE SPREAD RECESSED DOWN-LIGHT WITH SINGLE PHOTOCELL LIGHT SWITCH. CONTRACTOR SHALL MAKE ALL CONNECTIONS W/ UNDERGROUND WIRING TO MEET 1981 NEC REQUIREMENTS.

EDGE OF FASCIA/MTL ROOF
EXTERIOR GRADE PLYWOOD SOFFIT
LIGHT FIXTURE (4)
3"x1" T&G PECK
6" PIPE



2 REFLECTED CEILING PLAN

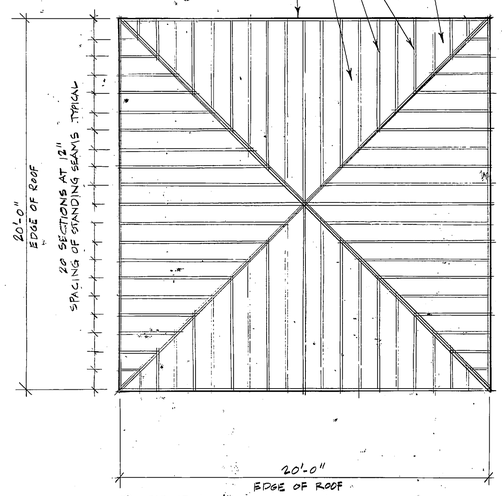
EDGE OF FASCIA REDWD TRIM 2"x6"
COLUMN CONNECTION SEE DETAIL
OUTLINE OF 5'x5'x1' FOOTING
NOTE ALL STRUCTURAL WOOD TO BE DOUGLAS FIR. 3"x1" T&G DECK TO BE DOUGLAS FIR.
MAKE CONNECTIONS W JOIST HANGERS



3 FRAMING PLAN

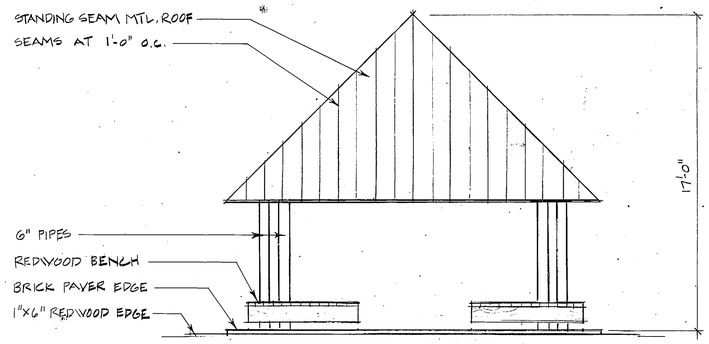
STANDING SEAM ROOFING SHALL BE BERRIDGE TEE-PANEL SYSTEM AS MANUFACTURED BY BERRIDGE CO, HOUSTON, TX, OR APPROVED EQUAL. PANELS AND SEAMS ROLL FORMED IN CONTINUOUS LENGTHS. SEAM SPACING SHALL BE 12" O.C. ATTACHMENTS TO BE CONCEALED. MATERIAL SHALL BE HOT-DIPPED GALVANIZED 24 GAUGE STEEL WITH KYNAR 500 FINISH COLOR SHALL BE COLONIAL (DARK) RED.

SEAM SPACING 12" O.C.
STANDING SEAM MTL ROOF
REDWOOD TRIM AT EDGE (UNDER MTL. ROOF)



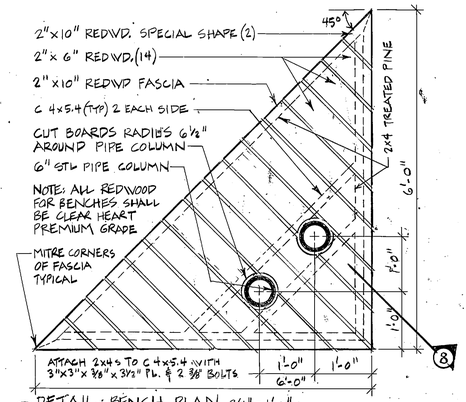
4 ROOF PLAN

STANDING SEAM MTL. ROOF
SEAMS AT 1'-0" O.C.



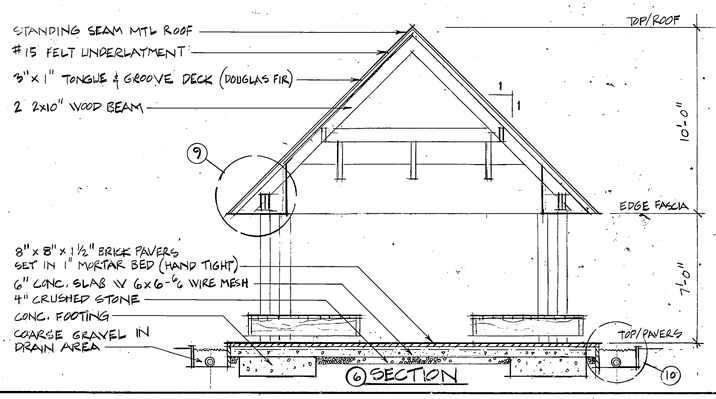
5 ELEVATION
TYPICAL FOR 4 SIDES

2"x10" REDWD. SPECIAL SHAPE (2)
2"x 6" REDWD. (14)
2"x10" REDWD FASCIA
C 4x5.4 (TYP) 2 EACH SIDE
CUT BOARDS RADIUS 6½" AROUND PIPE COLUMN
6" STL PIPE COLUMN
NOTE: ALL REDWOOD FOR BENCHES SHALL BE CLEAR HEART PREMIUM GRADE
MITRE CORNERS OF FASCIA TYPICAL



7 DETAIL: BENCH PLAN ¾"=1'-0"

STANDING SEAM MTL. ROOF
#15 FELT UNDERLAYMENT
3"x 1" TONGUE & GROOVE DECK (DOUGLAS FIR)
2 2x10" WOOD BEAM



6 SECTION

2"x6" REDWD. CLR. HEART PREM. GRADE BOARDS
1½" ANGLE BRACE 2 PER BOARD
2"x6" TREATED PINE
6" STL. PIPE
C 4x5.4 (TYP) EACH SIPE OF COLUMN ATTACH W ⅜" WELD
2"x10" REDWD FASCIA
8"x8"x1½" BRICK PAVERS SET IN 1" MORTAR BED
ELEC. POWER IN CONDUIT
1'-6"
BASE PL 1'-0"x1'-0" x¾" W 4 ¾" ϕ A.B. SEE DETAIL 15
1" GROUT
6" CONC. SLAB
4" CRUSHED STONE
PL 3"x13"x 3/16 W 4 ¾" ϕ A.B.
5'-0"x5'-0"x1'-0" FTG W 4 #5 EA. WAY

8 DETAIL: BENCH SECTION ¾"=1'-0"

2'x1' DRAINAGE DITCH FILLED WITH COURSE RIVER WASHED GRAVEL
4" PERFORATED PLASTIC UNDERDRAIN PIPE LAID OVER 2x4
8"x8"x1½" BRICK PAVERS
2"x4" REDWOOD BOARDER WITH STAKES 4'-0" O.C.
12" MIN

10 DETAIL: GRAVEL DRAIN ¾"=1'-0"

STANDING SEAM MTL ROOF
STANDING SEAM, BEYOND
3"x1" TONGUE & GROOVE DECK
2"x10" ROOF RAFTER
2"x4" STUD
¾" EXT. GRADE PLYWD.
2-2x10" BEAM
2x2 STUD
2x6 REDWD TRIM
1
1
LIGHT FIXTURE
1'-1"
7'-0" AFF
2"x6" ANGLE BY ROOFING MFR
1"x4 REDWD TRIM
45°
1'-0" 2'-0"
3'-0"

9 DETAIL: EDGE OF ROOF 1½"=1'-0"

2-2x10 ROOF BEAM
4"x4"x ⅜"x9" BENT PLATE
2-¾" BOLTS EACH SIDE

11 DETAIL BEAM CONNECTION NTS

4"x4"x ⅜"x9" BENT PLATE
2-¾" BOLTS EACH SIDE
2-2x10 ROOF BEAM

12 DETAIL BEAM CONNECTION NTS

2-2x10 ROOF BEAM
6"x6"x ⅜"x9" BENT PLATE
2-¾" BOLTS EACH SIDE
6"PIPE & BENT PLATE
9"x9"x ⅜"x9" BENT PLATE
1'-0" TYP.
1'-0" TYP.

13 DETAIL BEAM CONNECTION NTS

2-2x10 ROOF BEAM
UPPER LEG OF BENT PLATE TO WITHSTAND UPLIFT OF 1500 LBS. W 2 ¾" BOLTS
2-2x10 BEAM
6"x 6"x⅜"x9" BENT PL. W 2 ¾" BOLTS EACH SIDE W 6" UPPER LEG
BENT PLATE 9"x9"x⅜" (INSIDE) x ⅜" W 2 ⅜" BOLTS WELD PLATE TO TOP OF PIPE
1'-0"
6"ϕ STL. PIPE

14 DETAIL BEAM CONNECTION NTS

℄ FTG.
BASE PLATE 1'-0"x1'-0"x ¾" W 4 - ¾"ϕ A.B.
6"
6"
℄ FTG.
1'-0"
4½" 4½"
6" PIPE COL. W ⅜" V
5'-0"x5'-0"x 1'-0" CONC. FOOTING W 4-#5 EACH WAY TOP & BOTTOM
1'-0"

15 DETAIL BASE PLATE NTS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIGHTWOOD PLAZA
REST SHELTER

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	84	I-440-4(59)206	96

REV. 4-24-84: REVISED LIGHTING GENERAL NOTE A.

GENERAL NOTES

LIGHTING GENERAL

A. THIS PROJECT SHALL BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF HIGHWAYS DATED MARCH 1, 1984 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 GALVINIZED 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. 250 W LUMINAIRES SHALL BE EQUIPPED WITH 240 VOLT AUTO REGULATOR BALLAST AND A.N.S.I. CODE S50 LAMPS. FUSE EACH LUMINAIRE WITH A 15A, SLOW BLOWING 600V FUSE WITH A WEATHER PROOF FUSE HOLDER IN THE BASE OF EACH POLE.

E. LUMINAIRES SHALL BE BOLTED TO EXTENSION ARMS AND EXTENSION ARMS SHALL BE BOLTED TO POLE TOPS. USE OF SLIP FIT TENNON CONNECTIONS WILL NOT BE PERMITTED.

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.F.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. OMITTED

K. CONTROL POINT CIRCUIT FUSES SHALL BE DUAL-ELEMENT SLOW BLOWING TYPE 600 V, 100,000 AMP INTERUPTING CAPACITY.

L. 150 W LUMINAIRES SHALL BE EQUIPPED WITH 240 VOLT AUTO REGULATOR BALLAST AND A.N.S.I CODE S54 LAMPS. FUSE EACH LUMINARE WITH A 15A, SLOW BLOWING 600V FUSE WITH A WEATHER PROOF FUSE HOLDER.

M. THE POLES SHALL BE SQUARE TAPERED STEEL 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 LUMINAIRES CHANGED OUT ARE TO BE STOCKPILED AT A LOCATION APPROVED BY THE ENGINEER AND ARE TO REMAIN THE PROPERTY OF THE STATE.

P. CONTROL POINTS SHALL BE PROVIDED WITH A SPARE 30 AMP CIRCUIT AND CONDUIT FOR FUTURE USE.

Q. ALL 1" GALVANIZED CONDUIT AND JUNCTION BOXES IN STRUCTURES ARE TO BE INSTALLED BY OTHERS.

PERFORMANCE SPECIFICATIONS: (ROADWAY LUMINAIRES)

A. 250 WATT HIGH PRESSURE SODIUM LUMINAIRE SHALL CONFORM TO I.E.S. CLASSIFICATIONS: TYPE II MEDIUM DISTRIBUTION SEMI-CUTOFF.

B. 150 WATT HIGH PRESSURE SODIUM UNDER BRIDGE LUMINAIRES SHALL BE SET FOR MAX. C.P. AT $\theta = 70°$ AND TO PROVIDE I.E.S. "LONG" DISTRIBUTION.

C. DESIGN ILLUMINATION BASIS:

I-440	0.6 fc MAINTAINED
CROSSROADS AND RAMPS	0.8 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. MAXIUM CANDLE POWER SHALL OCCUR BETWEEN $\theta = 60°$ AND $\theta = 70°$

F. 150 W H.P.S. LAMPS SHALL BE RATED TO PROVIDE AN AVERAGE LIFE NOT LESS THAN 24,000 HOURS.

CONSTRUCTION SPECIFICATIONS (ROADWAY LUMINAIRES)

A. 250 W. LUMINAIRES SHALL BE "RECTILINEAR" TYPE IN 400 W HOUSING WITH.
1. HINGED AND GASKETED ACCESS DOOR, POSITIVE LOCKING WITH SAFETY CHAIN.
2. BALLAST AND CAPACITOR MOUNTED ON A SINGLE PLATE WITH TEMPERATURE DISCONNECT OR SCREW PLUG TERMINALS.
3. ALUMINUM HOUSING, ANODIZED DARK BRONZE "313" COLOR OR PRIMED AND PAINTED DARK BRONZE U.C. 20059.

B. 150 WATT LUMINAIRES SHALL BE "UNDERPASS" TYPE WITH:
1. CAST ALUMINUM HOUSING
2. POLYCARBONATE REFRACTOR
3. REFRACTOR GUARD

C. POLES SHALL BE SQUARE TAPERED STEEL AND LENGTH AS REQUIRED BY MOUNTING HEIGHT. BOLT CIRCLE FOR PARAPET MOUNTED POLES SHALL BE 11¾" FOR FOUR 1"x40" ANCHOR BOLTS.

D. BRACKET ARMS SHALL BE SQUARE STRAIGHT STEEL AND LENGTH AS REQUIRED BY MOUNTING OFFSET.

E. FRANGIBLE BASES, POLES AND BRACKET ARMS SHALL BE PRIMED AND PAINTED USING "SYSTEM B-INORGANIC ZINC/VINYL" CONFORMING TO SECTION 603 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. FINISH COAT COLOR SHALL BE DARK BRONZE COLOR U.S. 20059.

F. FRANGIBLE BASES SHALL BE AASHTO APPROVED WITH ACCESS DOOR.

G. THE CONTRACTOR SHALL PROVIDE THE STATE ONE FINISHED LUMINAIRE AND A REPRESENTATIVE POLE SECTION (PRIMED AND PAINTED) FOR APPROVAL OF LUMINAIRE CONSTRUCTION, COLOR, AND PAINTING METHODS.

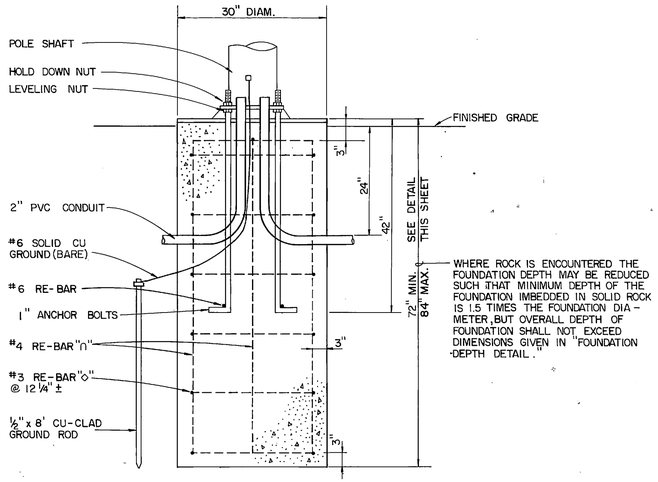
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LIGHTING

GENERAL NOTES

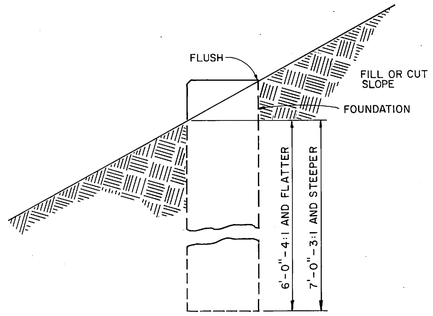
TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	97

Divn. No. 3



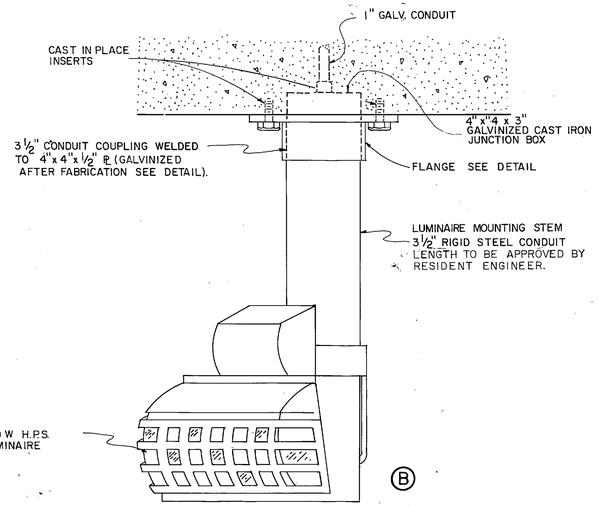
FOUNDATION DETAILS FOR ROADWAY LIGHT STANDARDS

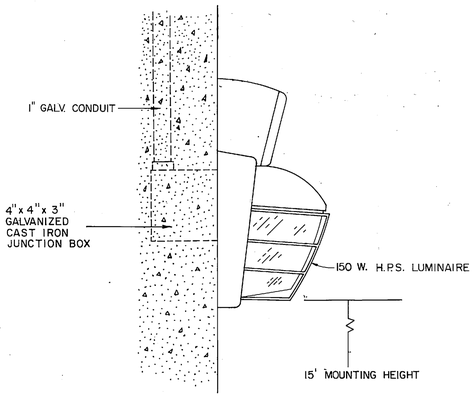
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FOUNDATION DEPTH DETAIL

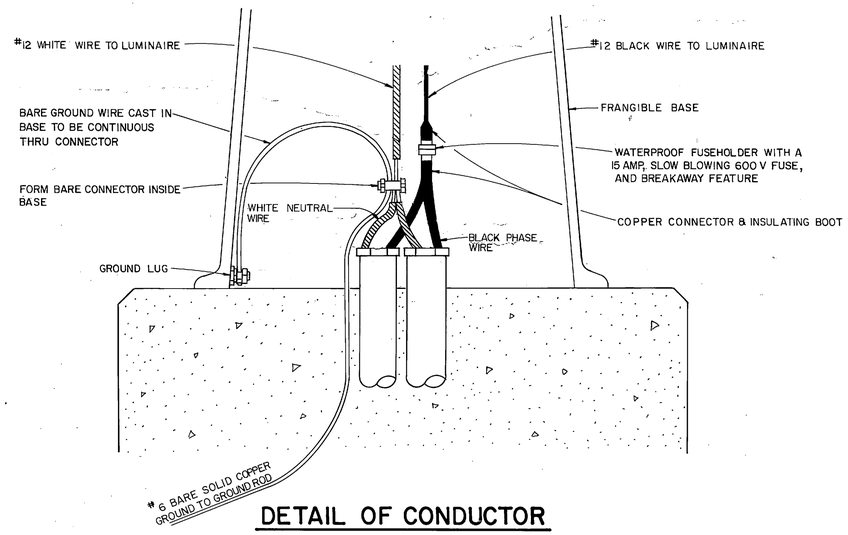
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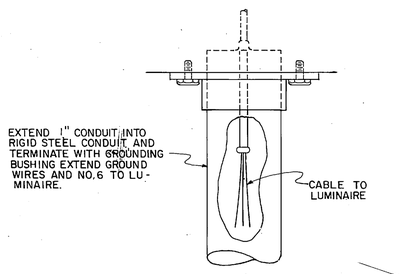
LUMINAIRE MOUNTED ON PIER Ⓑ

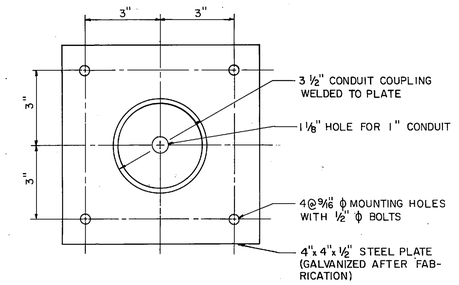
NO SCALE



DETAIL OF CONDUCTOR CONNECTIONS INSIDE STANDARD

NO SCALE





LUMINAIRE MOUNTED ON BRIDGE SLAB

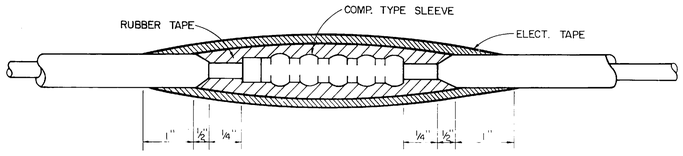
NO SCALE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LIGHTING DETAIL

TELEDYNE POST N1835

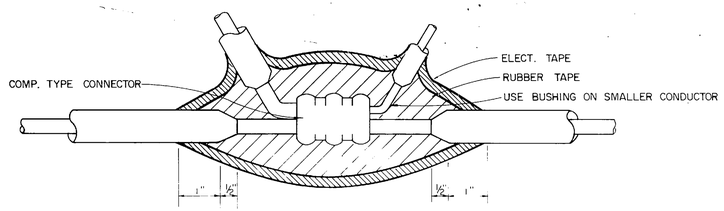
TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	98



1. REMOVE INSULATION FROM CONDUCTORS SO THAT WHEN SLEEVE IS INSTALLED APPROXIMATELY 1/8" BARE CONDUCTOR WILL REMAIN. TAPER INSULATION.
2. INSTALL COMPRESSION TYPE SLEEVE IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
3. APPLY COATING OF RUBBER CEMENT OVERALL, THEN WRAP WITH RUBBER TAPE SO THAT MINIMUM RUBBER TAPE THICKNESS EQUALS CONDUCTOR INSULATION THICKNESS. FINISH WRAPPING SPLICE WITH SOUTH #34 ELECTRICAL TAPE, MINIMUM OF FOUR WRAPS EACH HALF SPLICE. ALTERNATE WRAPS REVERSED LAY.

STRAIGHT SPLICE DETAIL

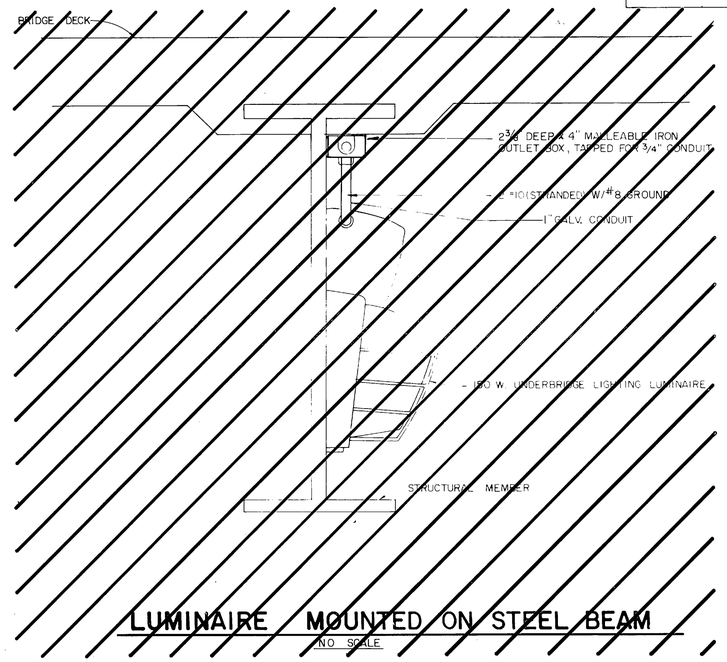
NO SCALE



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.
4. SAME AS NOTES 3 & 4 FOR STRAIGHT SPLICE.

SPLICE DETAIL FOR 3 OR MORE CONDUCTORS

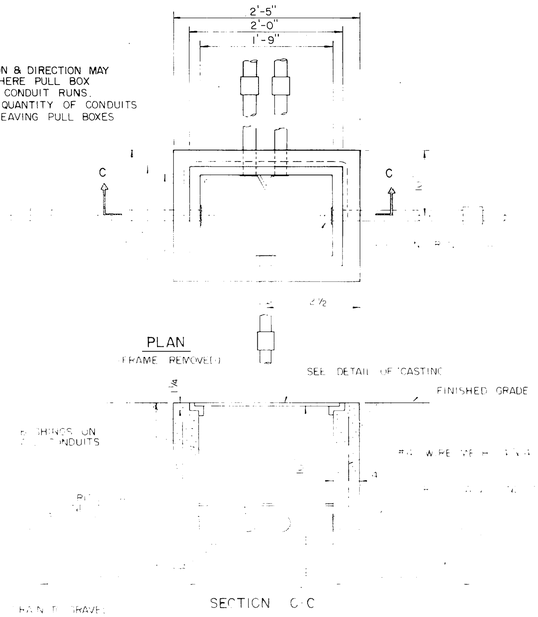
NO SCALE



LUMINAIRE MOUNTED ON STEEL BEAM

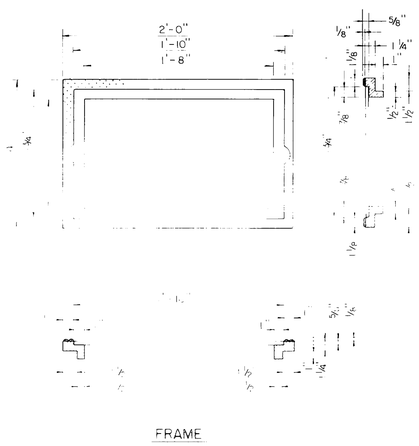
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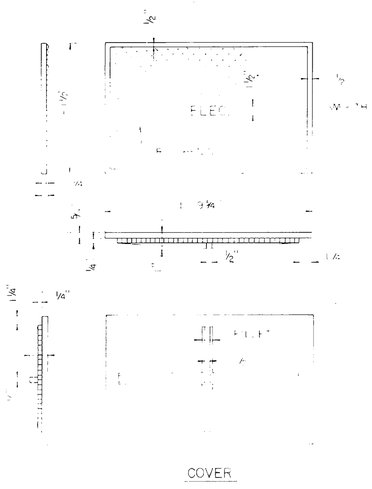
CONDUIT LOCATION & DIRECTION MAY BE ADJUSTED WHERE PULL BOX IS OFFSET FROM CONDUIT RUNS. SEE PLAN FOR QUANTITY OF CONDUITS ENTERING AND LEAVING PULL BOXES



DETAIL OF PULL BOX

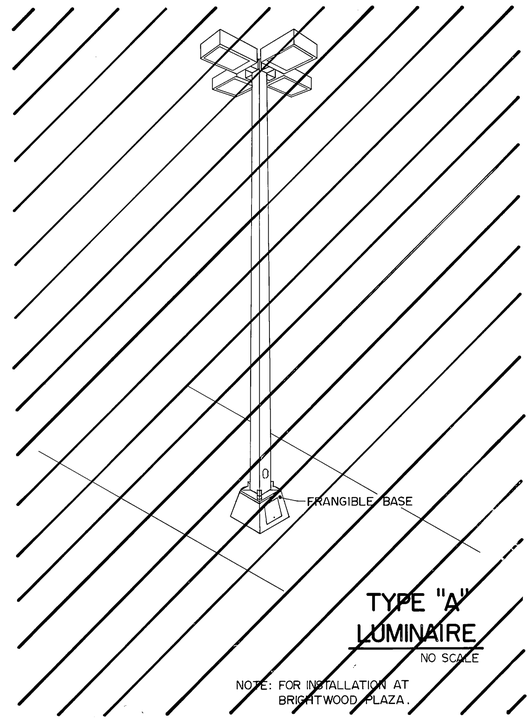
NO SCALE





DETAIL OF PULL BOX CASTING

NO SCALE



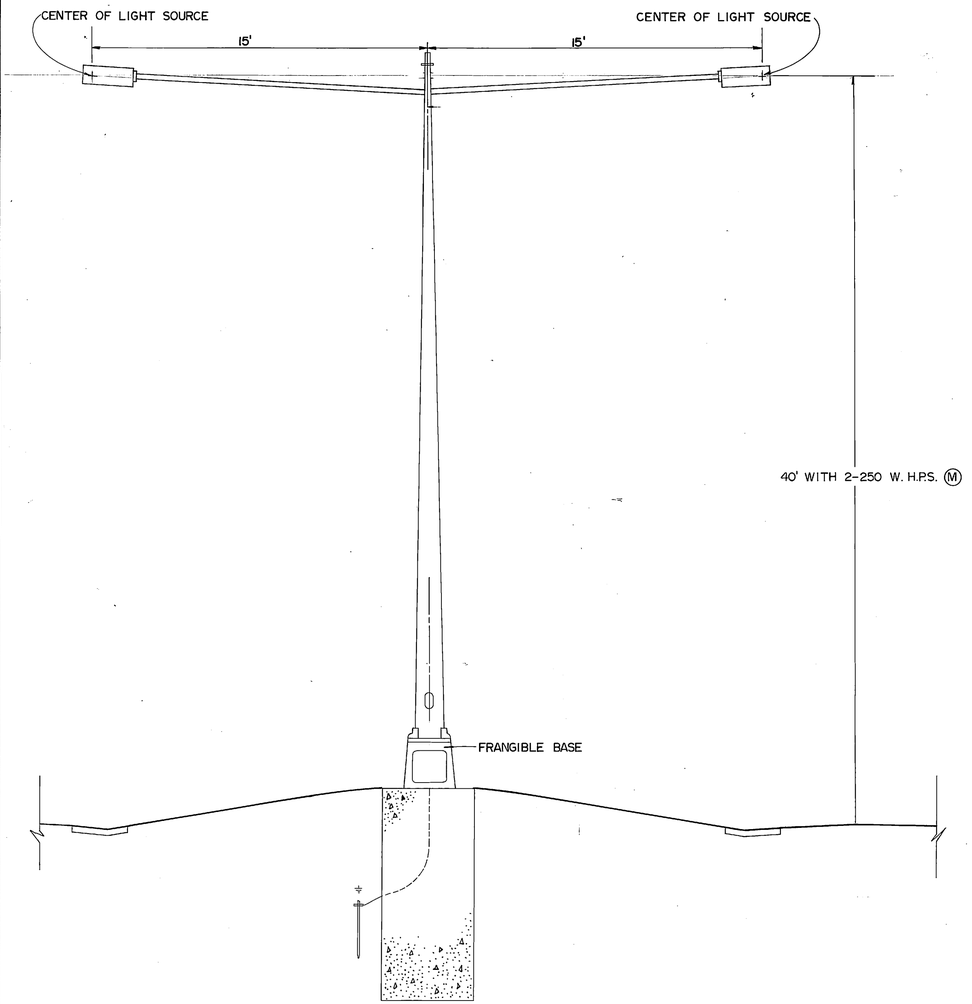
TYPE "A" LUMINAIRE

NO SCALE

NOTE: FOR INSTALLATION AT BRIGHTWOOD PLAZA.

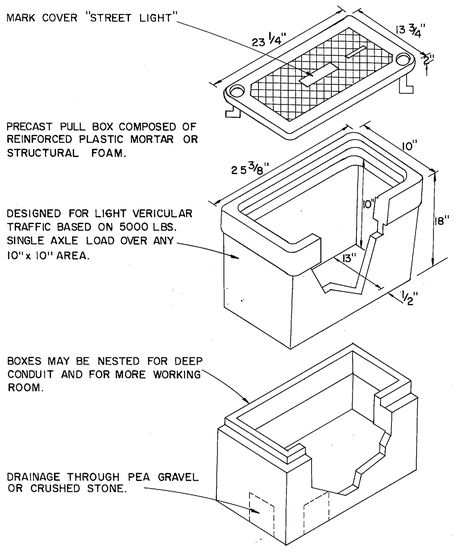
LIGHTING - DETAILS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206)	99



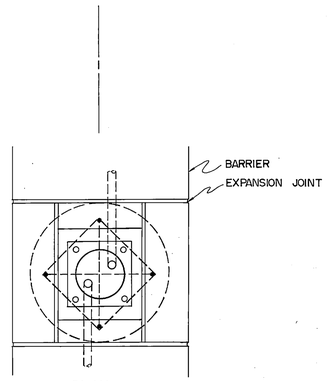
TWIN MEDIAN MOUNTED LUMINAIRES Ⓜ

NO SCALE

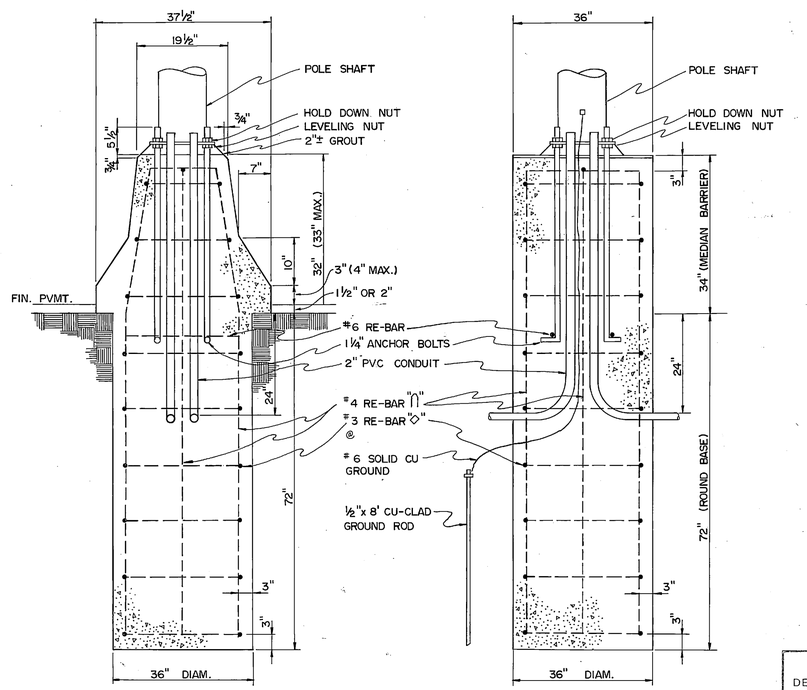


ALTERNATE UNDERGROUND PULL BOX DETAIL

N.T.S.



PLAN



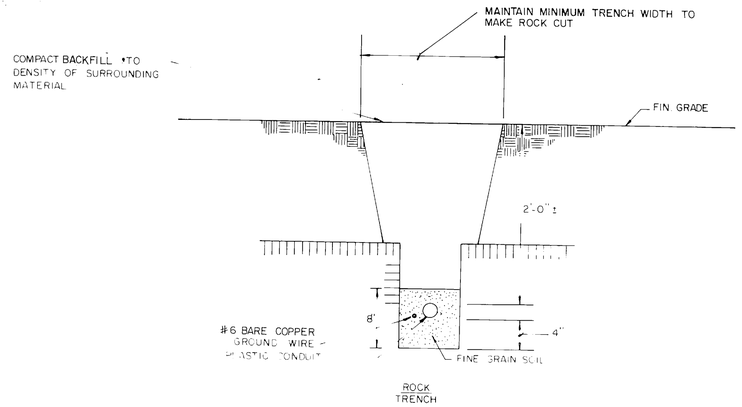
LIGHTING STANDARD FOUNDATION DETAILS

SEE STD. DWG. M-103-148

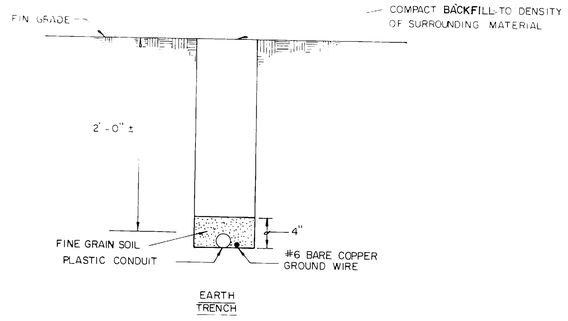
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LIGHTING DETAIL

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	100

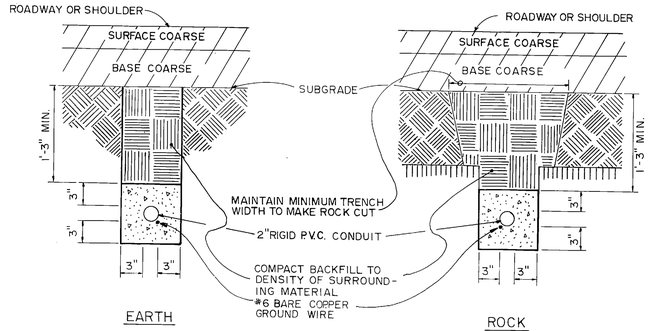


ROCK TRENCH



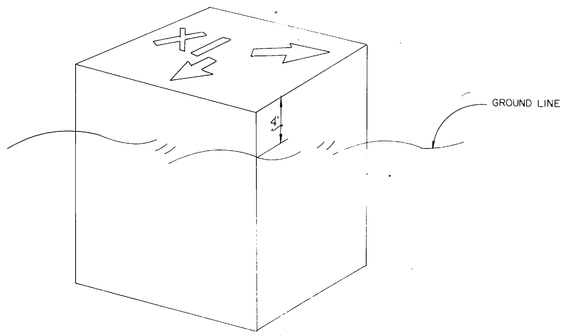
EARTH TRENCH

DIRECT BURIAL CONDUIT DETAILS



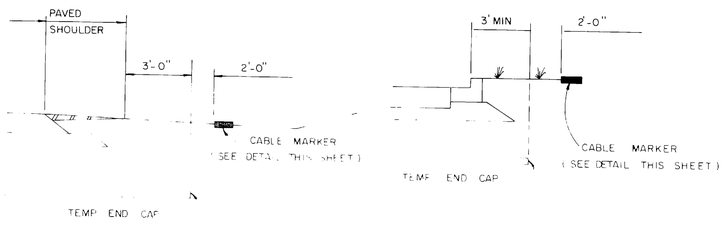
CONCRETE ENCASED CONDUIT DETAILS

NO SCALE



CABLE MARKER

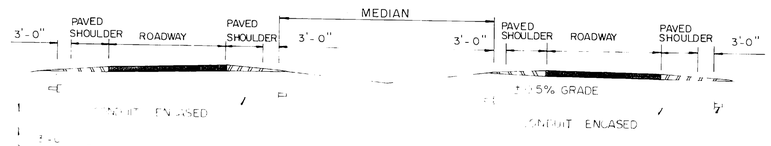
NO SCALE



CONDUIT CROSSING

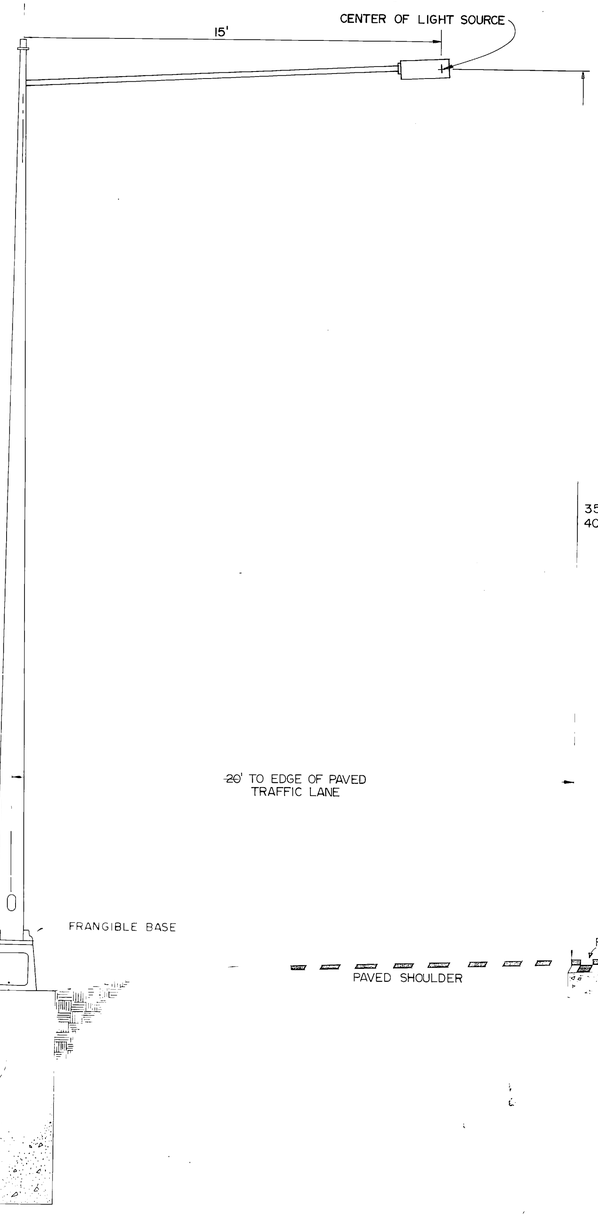
CABLE MARKER LOCATIONS

NO SCALE



ELEVATION SHOWING CONDUIT PLACEMENT

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



SHOULDER MOUNTED LUMINAIRE (S)(RS)

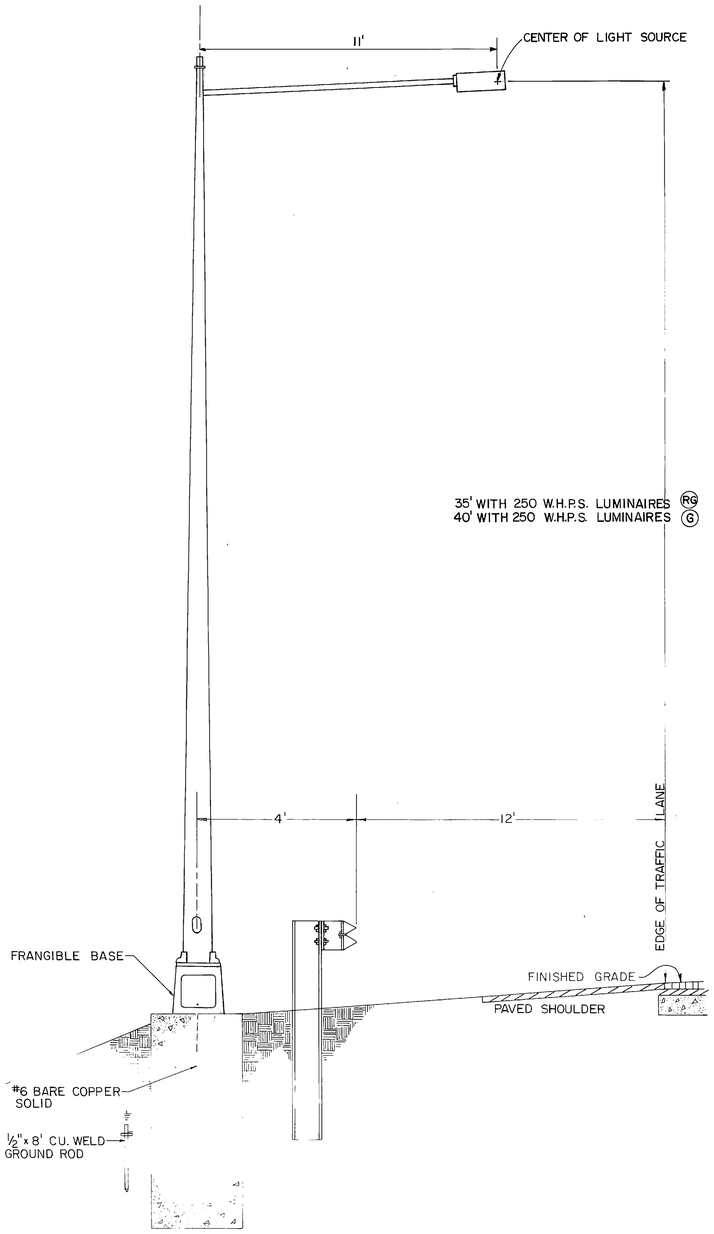
(WITHOUT GUARDRAIL)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LIGHTING DETAIL

NO SCALE

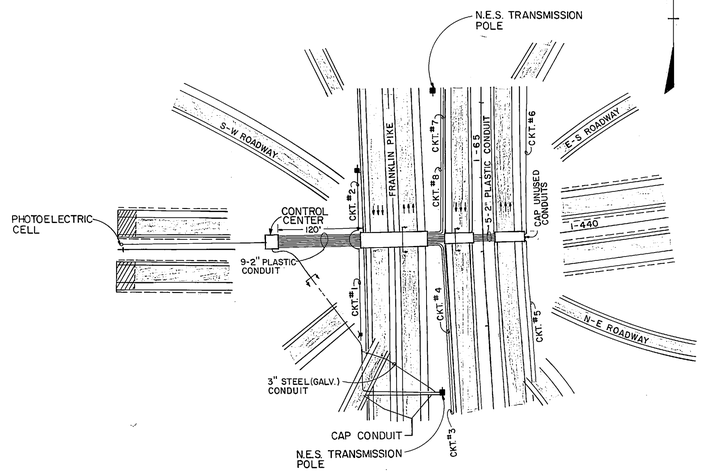
TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	101



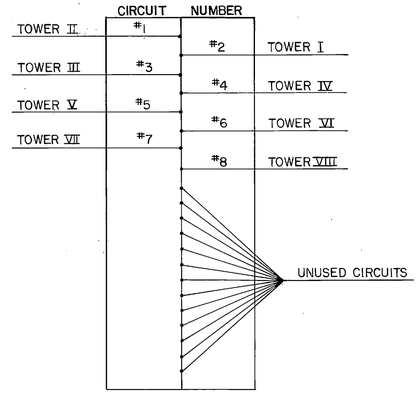
SHOULDER MOUNTED LUMINAIRE G RG

WITH GUARDRAIL

EXISTING CONTROL POINT @ I-440 / I-65

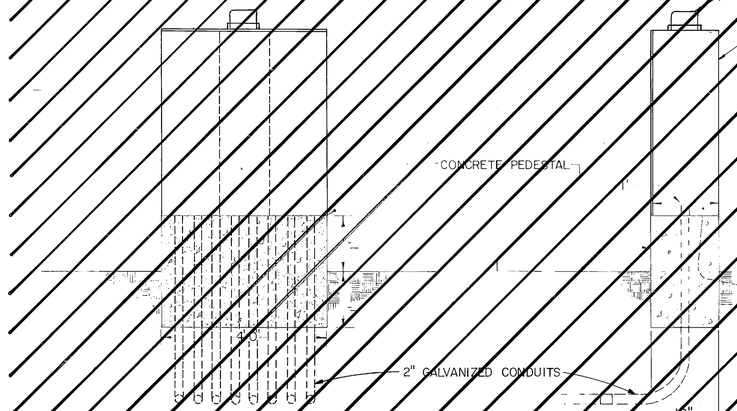


CONDUIT AND CONTROL CENTER

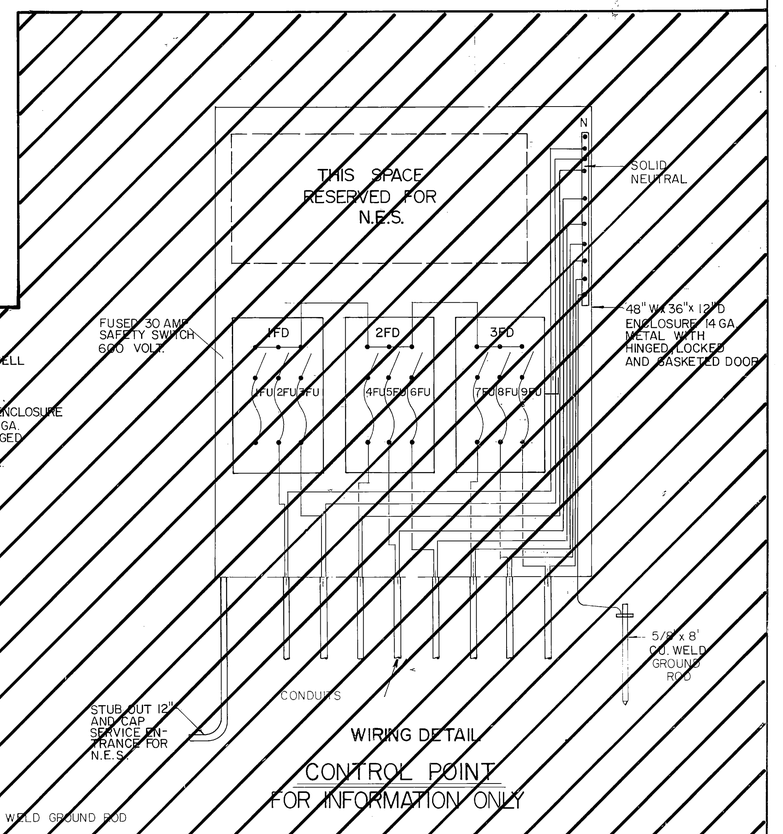


PANEL DIAGRAM

NOT IN THIS CONTRACT
FOR INFORMATION ONLY



CONSTRUCTION DETAIL
CONTROL POINT
NO SCALE



WIRING DETAIL

CONTROL POINT

FOR INFORMATION ONLY

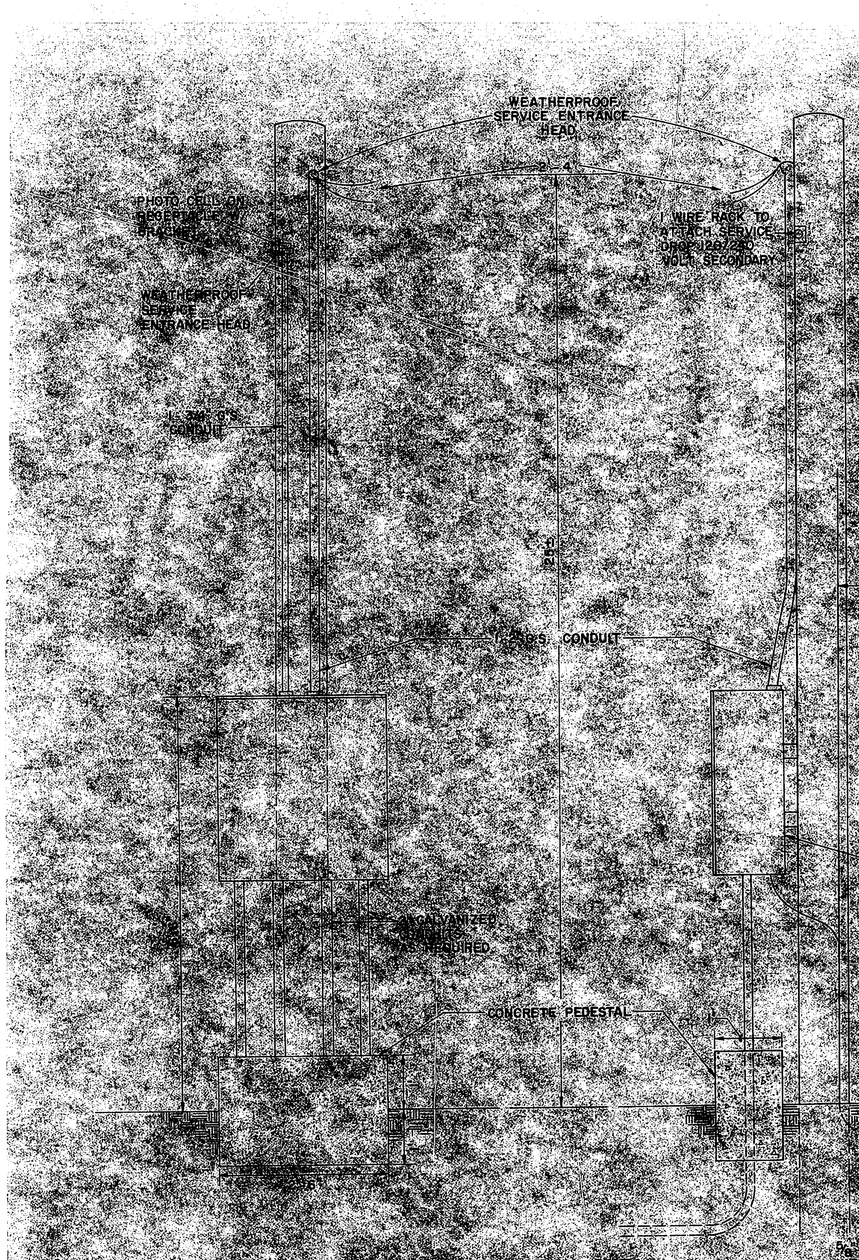
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

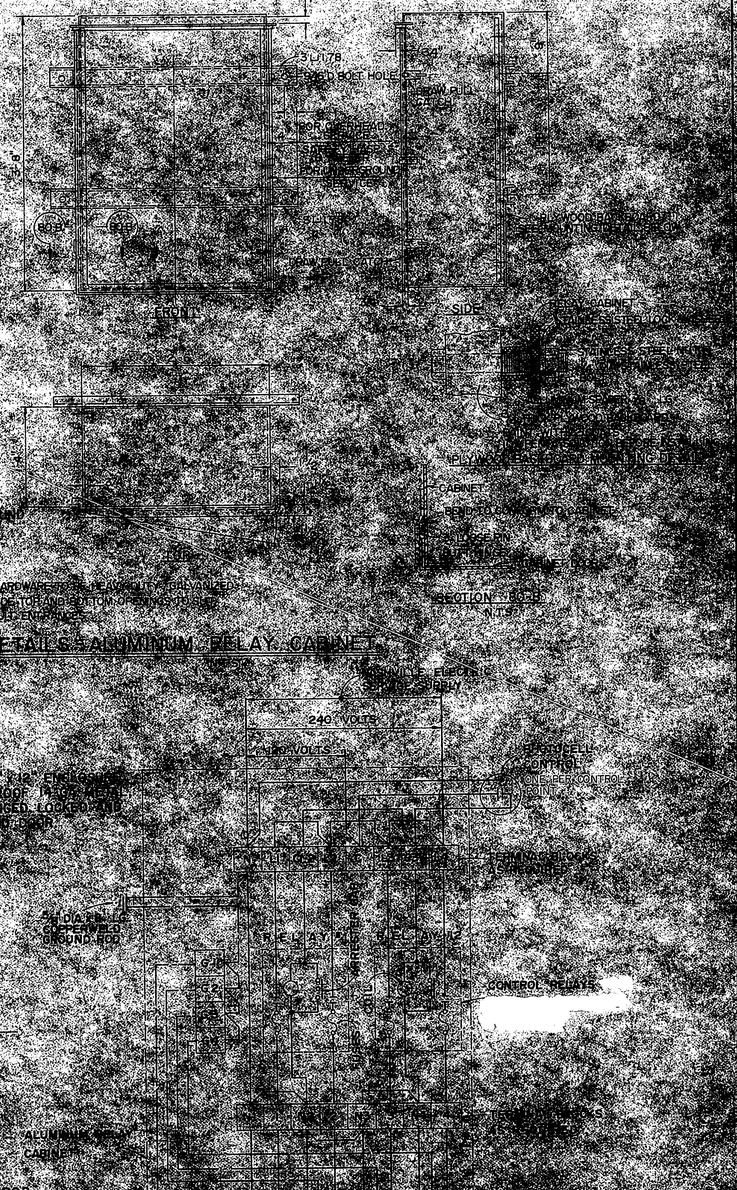
LIGHTING DETAIL

NO SCALE

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	102

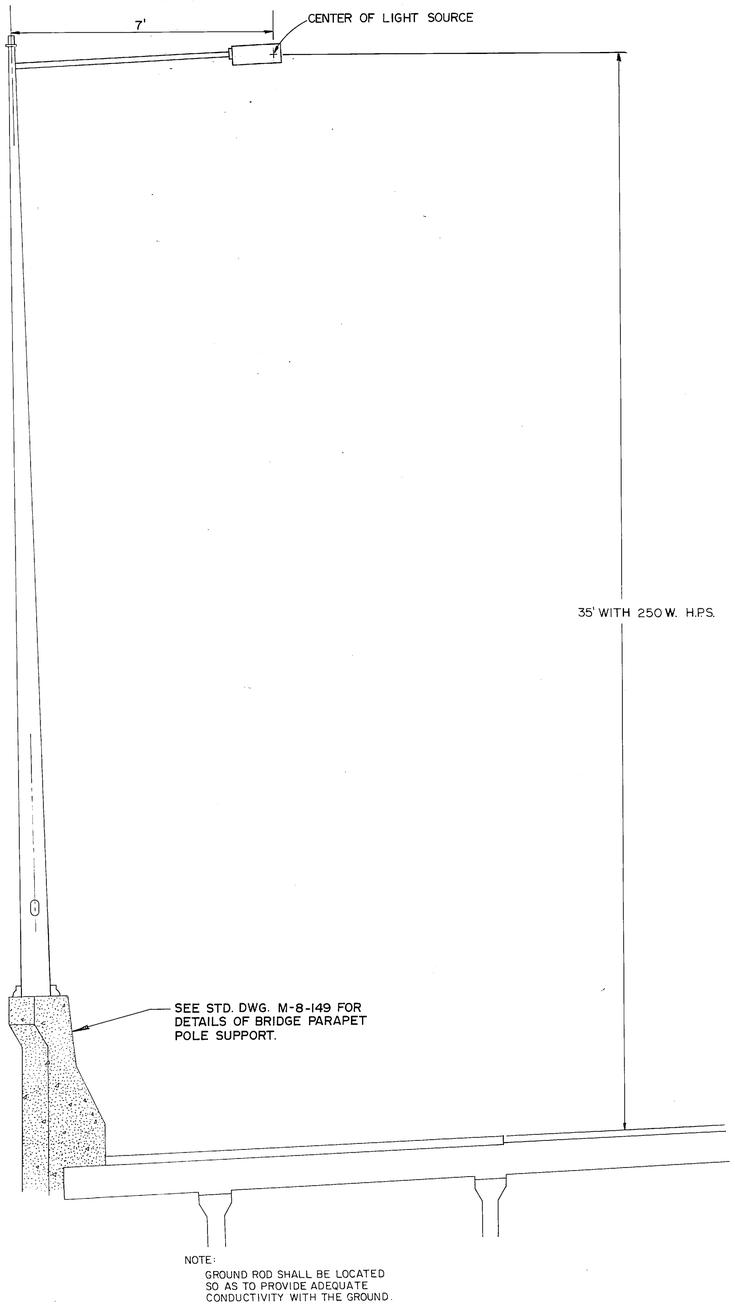
UNDERPASS LUMINAIRE
MOUNTING HEIGHT DETAIL





NOTES
1. CONTRACTOR IS RESPONSIBLE FOR ALL MATERIAL AND INSTALLATION OF CONDUIT INCLUDING WEATHERHEAD.

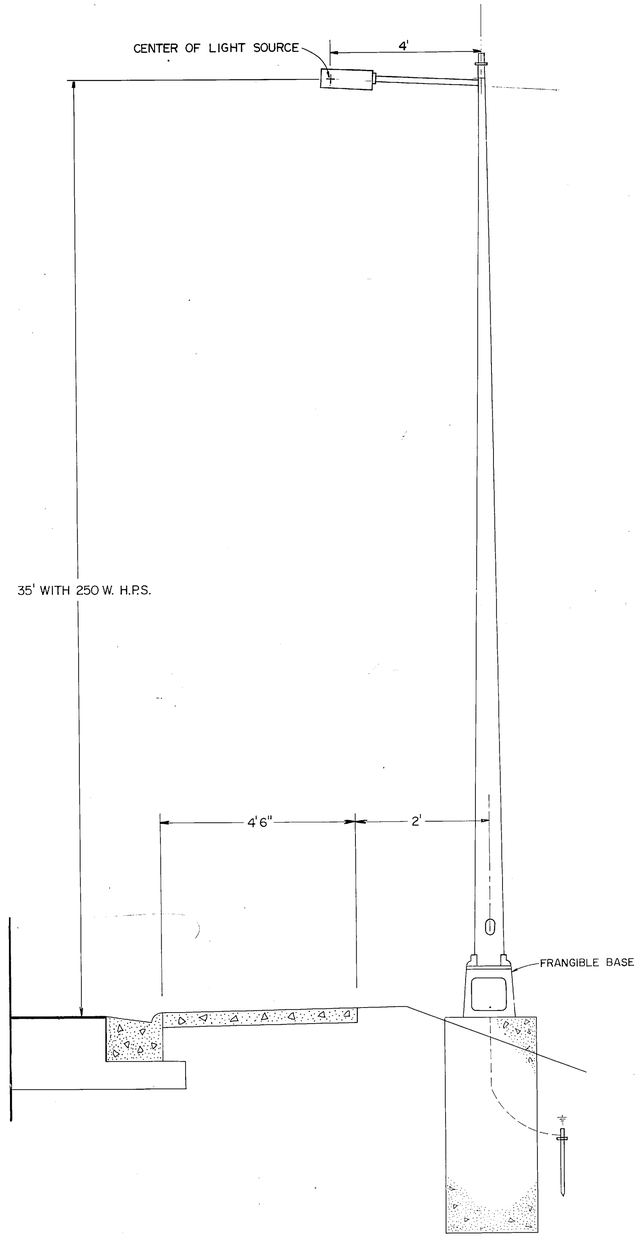
TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	103



NOTE:
GROUND ROD SHALL BE LOCATED SO AS TO PROVIDE ADEQUATE CONDUCTIVITY WITH THE GROUND.

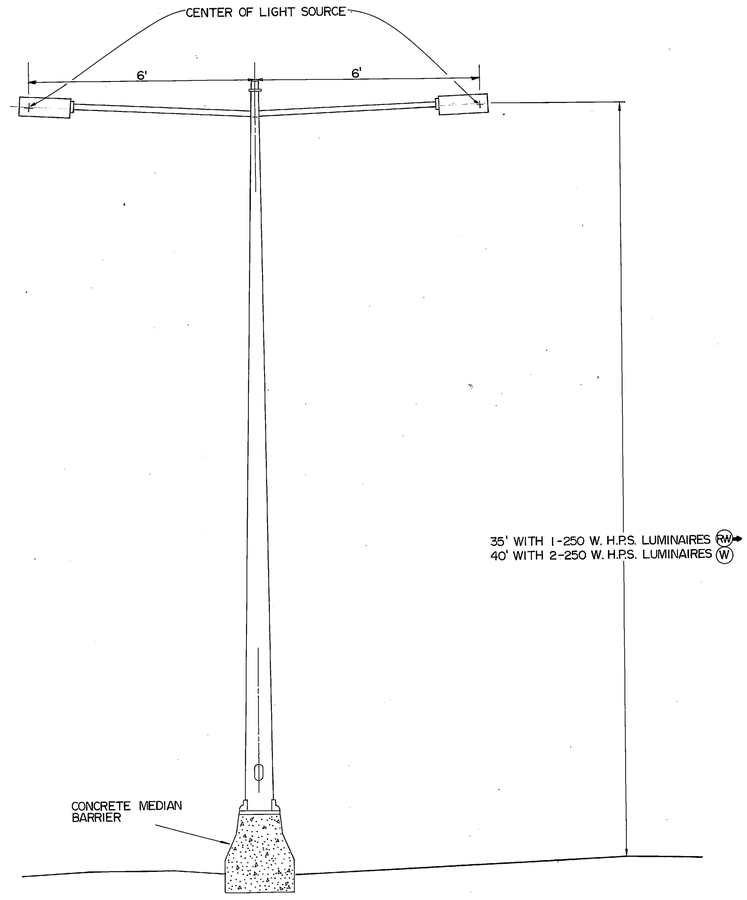
BRIDGE PARAPET MOUNTED LUMINAIRE Ⓟ

NO SCALE



CURB & GUTTER MOUNTED LUMINAIRE Ⓒ

NO SCALE



TWIN BARRIER MOUNTED LUMINAIRES Ⓦ

NO SCALE

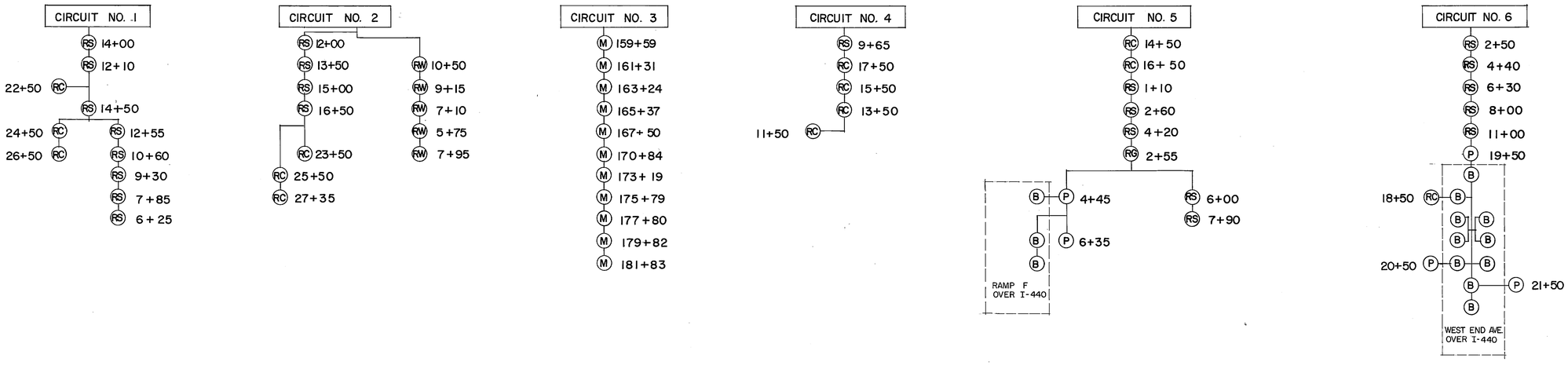
NOTE: (RW) LUMINAIRES HAVE ONLY ONE 250 W. H.P.S. LUMINAIRE AND THE STREET SIDE IS TO BE IN THE DIRECTION OF THE ARROW.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

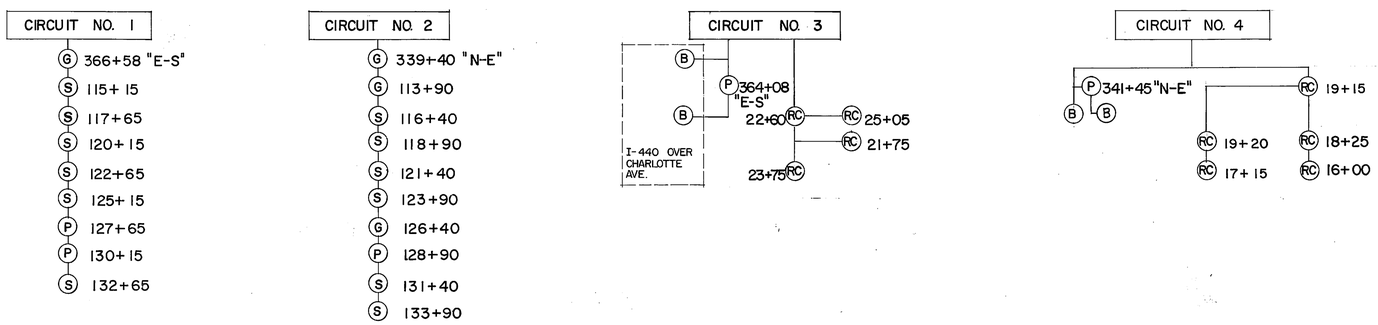
LIGHTING DETAIL

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	104

CIRCUIT DIAGRAM CONTROL POINT NO. 5 (@ MURPHY ROAD)



CIRCUIT DIAGRAM CONTROL POINT NO. 6 (@ CHARLOTTE AVE.)

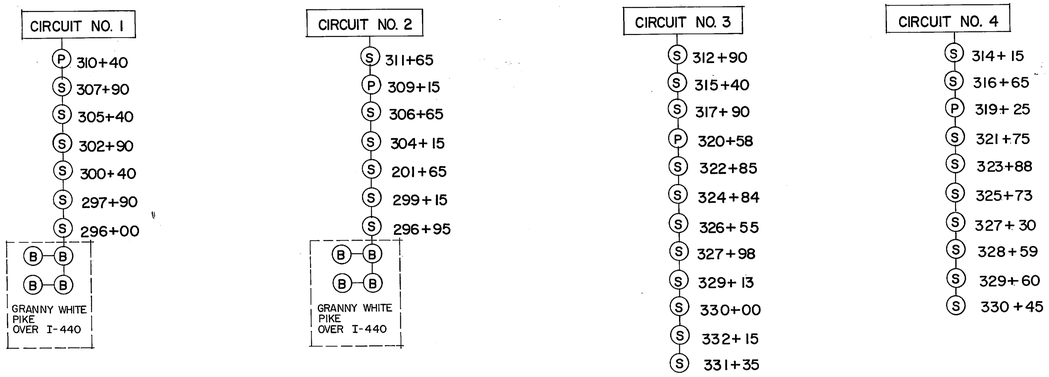


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

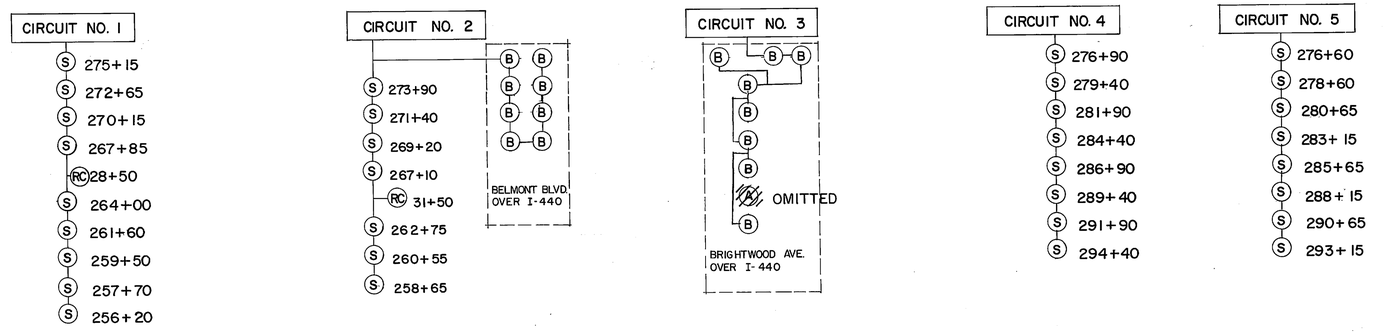
CIRCUIT DIAGRAMS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	105

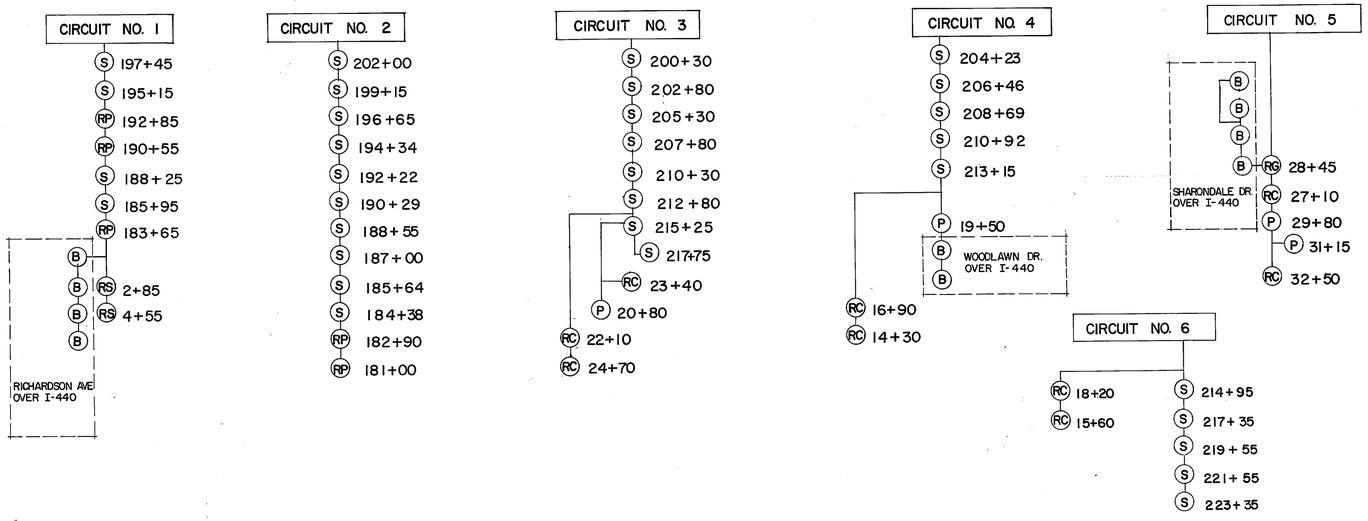
CIRCUIT DIAGRAM CONTROL POINT NO. 1 (@ LEALAND LANE)



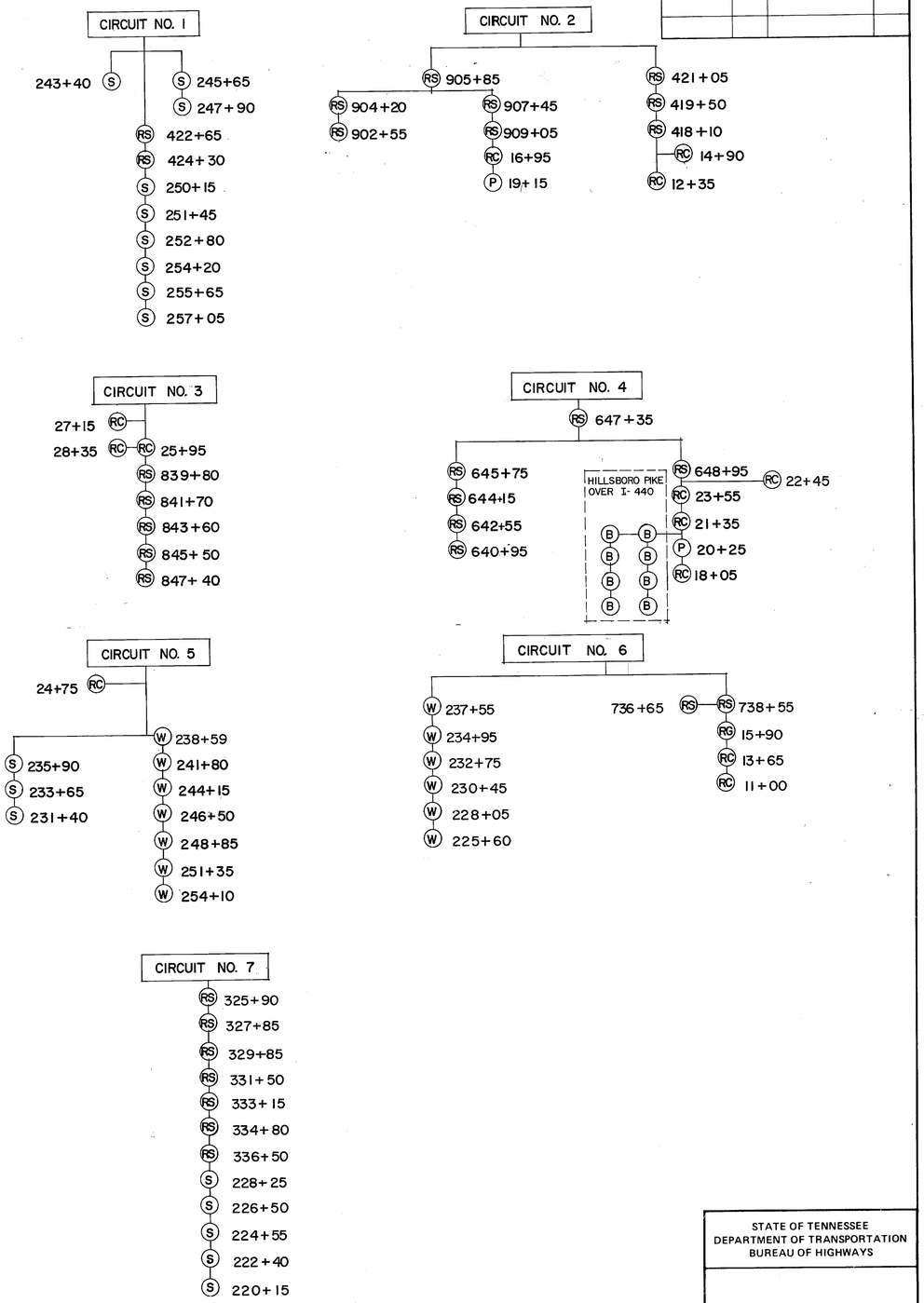
CIRCUIT DIAGRAM CONTROL POINT NO. 2 (@ BELMONT BLVD.)



CIRCUIT DIAGRAM CONTROL POINT NO. 4 (@ SHARONDALE DRIVE)



CIRCUIT DIAGRAM CONTROL POINT NO. 3 (@ HILLSBORO PIKE)



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

CIRCUIT DIAGRAMS

TELEDYNE POST N18556

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	106

LEGEND

- (B) UNDERPASS LUMINAIRE
- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (M) TWIN MEDIAN MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (RW) BARRIER MOUNTED LUMINAIRES (35' MT. HT.)
- [C] PULL BOX (STRUCTURES) EXISTING
- [·] PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

NOTE: SEE SHEET NO. 47 FOR PLAN & PROFILE OF CHARLOTTE AVE.

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

19014-3111-44

BEGIN PROJECT I-440-4(53)206 CONST.
STA. "N-E" 344+00
STA. "E-S" 361+00

EQUATION: I-440 POT STA. 113+16.30 = P.L. "N-E" 337+78.46
"N-E" POT STA. 337+82.34 = P.L. "E-S" 367+09.49
"W-S" POT STA. 337+04.35 = P.L.

(SEE SHEET NO. 107)

STA. 115+00

MATCH LINE

P.L. "N-E" POT. STA. 344+70.80
=P.L. "N-W" S.T. STA. 363+79.56

P.L. "N-E" STA. 341+35.83
=STA. 19+96.91 CHARLOTTE AVE.
N642,032.77
E1,757,183.66

P.C. STA. 20+84.67
N642,011.02
E1,757,098.64

P.L. "E-S" P.O.S. STA. 363+82.10
=STA. 21+19.38 CHARLOTTE AVE.

P.C. STA. 339+59.13
N 641,852.89
E 1,757,065.66

P.L. "E-S" ST. STA. 365+31

P.L. "E-S" P.O.C. STA. 360+16.99
=P.L. "W-S" P.O.C. STA. 343+93.13

P.L. "E-S" S.C. STA. 359+31.99

P.L. "E-S" C.S. STA. 356+02.57

P.L. "N-W" C.S. STA. 360+29.56

P.T. STA. 24+56.57

N641,960.39
E1,756,731.00

N641,675.39
E1,757,183.66

N641,675.39
E1,757,065.66

PAPER LOC. BASE LINE

PAPER LOC. P

ORIGINAL BASELINE

DUE NORTH

DUE SOUTH

N0°57'17"W

S75°39'10"W

N6°13'30"W

S88°40'01"W

60:1 TAPER TO I-40 W.B.

300' TRANSITION

TRANSITION

RAMP "N-E"

RAMP "N-W"

RAMP "W-S"

RAMP "E-S"

CHARLOTTE AVE.

32nd AVE. N.

33rd AVE. N.

ALLEY

STRUCTURE NO. 1

STRUCTURE NO. 2

BEGIN BRIDGE STA. 342+22.83 "N-E"

END BRIDGE STA. 340+41.83 "N-E"

BEGIN BRIDGE STA. 362+82.10 "E-S"

END BRIDGE STA. 364+82.10 "E-S"

END FENCE STA. 342+36 "N-E"

BEGIN FENCE STA. 340+28± "N-E"

BEGIN FENCE STA. 365+07 "E-S"

BEGIN RETAINING WALL STA. 340+84± "N-E"

BEGIN RETAINING WALL STA. 361+00 "E-S"

END RETAINING WALL STA. 117+16±

END RETAINING WALL

END FENCE STA. 362+48 "E-S"

END TAPER STA. 113+43.96

BEGIN TAPER STA 344+70.80 "N-E"

PROPOSED CONCRETE RETAINING WALL NO.1

PROPOSED CONCRETE RETAINING WALL NO.2 W/ FENCE ON TOP

PROPOSED CONC. RETAINING WALL NO.3

PROPOSED CONCRETE RETAINING WALL NO.4 WITH FENCE ON TOP

FUTURE CONCRETE RETAINING WALL

FUTURE GUARDRAIL

BEGIN RETAINING WALL TYPE 11

BEGIN RETAINING WALL TYPE 12

BEGIN RETAINING WALL TYPE 13

BEGIN PRESPLIT ROCK LINE

PRESPLIT ROCK LINE

REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS (TYPICAL) SEE STD. DWG. K-86-144

END RETAINING WALL & CHAIN-LINK FENCE

EXIST. R.O.W. (C.A.) & FENCE

EXIST. R.O.W. & PROP. (C.A.) & FENCE

PROP. R.O.W. (C.A.) & FENCE

EXIST. R.O.W.

LIMIT OF CONSTRUCTION STA. 16+00

LIMIT OF CONSTRUCTION

FILL SL.

CUT SL.

EXIST. PAVM'T. WIDTH

CP-6

(N.B.L.)

(S.B.L.)

N641,675.39
E1,757,124.66

N641,678.39
E1,757,085.66

PAPER LOCATED CURVE DATA
I-440 RAMP "E-S"

CURVE (1)
- P.I. = P.L. STA. 361+32.17
- N = 642,052.87
- E = 1,757,063.53
- Δ = 6°00'00"
- D = 1°30'
- T = 200.18'
- L = 400.00'
- R = 3819.72'
- E = 5.24'
- S.E. = 0.044 FT./FT.

CURVE (2)
- P.I. = P.L. STA. 363+98.66
- N = 641,986.23
- E = 1,757,065.66
- θ_S = 1°30'00"
- L.S. = 200.00'
- L.T. = 133.34'
- S.T. = 66.67'
- X_C = 199.99'
- Y_C = 1.75'
- S.E. = 0.044 FT./FT.

ORIGINAL BASELINE CURVE DATA
RAMP "W-S"
- P.I. STA. 342+66.83
- N = 642,237.87
- E = 1,757,104.66
- Δ_C = 7°40'52"
- D_C = 1°15'
- T = 307.70'
- L = 614.49'
- R = 4583.66'
- E = 10.31'

NOTE: EXISTING WESTBOUND ON RAMP TO I-40 IS TO BE CLOSED WHEN BRIDGE CONSTRUCTION AT CHARLOTTE AVE. IS BEGUN.

CHARLOTTE AVE.
- P.I. STA. 22+71.42
- N 641,964.73
- E 1,756,917.71
- Δ = 13°01'00"
- D = 3°30'00"
- L = 371.90'
- T = 186.76'
- R = 1,637.02'
- E = 10.62'
- S.E. = REVERSE CROWN
- TRANS. LENGTH = 100'

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STATION "N-E" 344+00
&
STATION "E-S" 361+00
TO
STATION 115+00

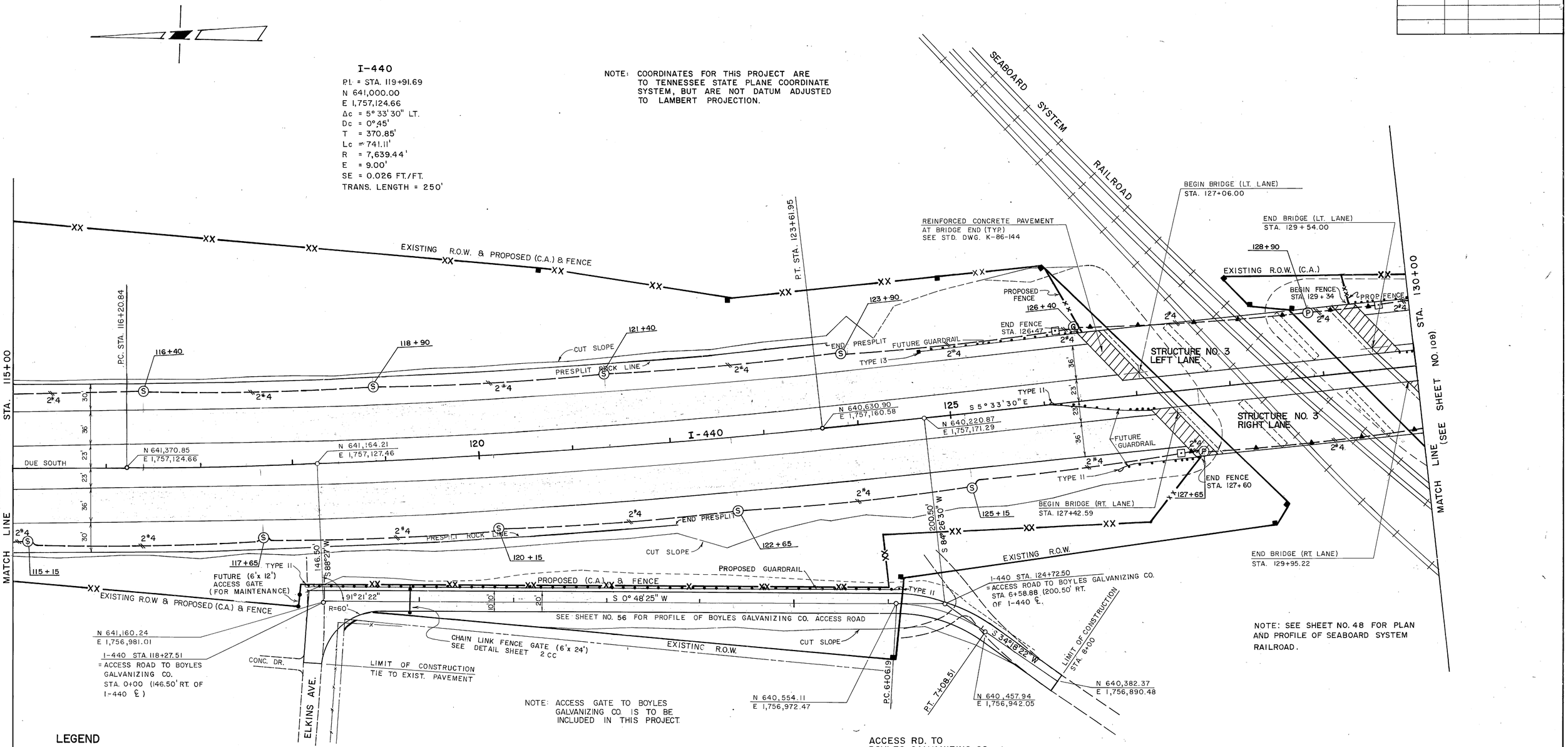
SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	10.7

I-440

P.I. = STA. 119+91.69
N 641,000.00
E 1,757,124.66
Δc = 5° 33' 30" LT.
Dc = 0°45'
T = 370.85'
Lc = 741.11'
R = 7,639.44'
E = 9.00'
SE = 0.026 FT./FT.
TRANS. LENGTH = 250'

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



NOTE: ACCESS GATE TO BOYLES GALVANIZING CO. IS TO BE INCLUDED IN THIS PROJECT.

ACCESS RD. TO BOYLES GALVANIZING CO.
P.I. = STA. 6+58.88
N 640,501.45
E 1,756,971.73
Δ = 33°30' RT.
D = 32°44'26"
T = 52.67'
L = 102.32'
R = 175.00'
E = 7.75'

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (M) TWIN MEDIAN MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RF) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (RW) BARRIER MOUNTED LUMINAIRES (35' MT. HT.)

- PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

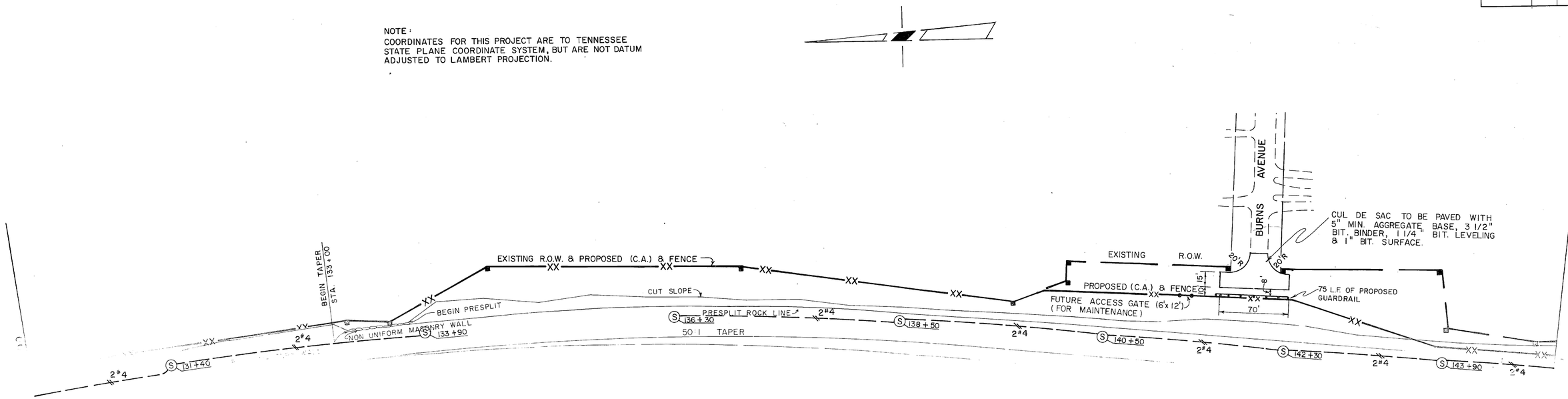
PROPOSED LAYOUT

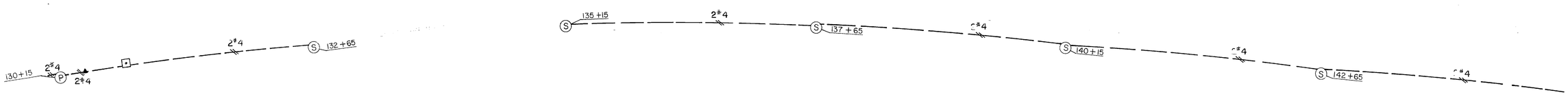
STA. 115+00 TO STA. 130+00

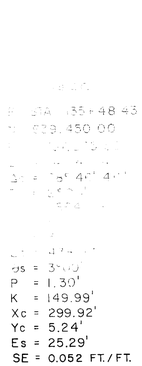
SCALE 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	108

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









LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (M) TWIN MEDIAN MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (RW) BARRIER MOUNTED LUMINAIRES (35' MT. HT.)

- PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 130+00 TO STA. 145+00

SCALE 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	109

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

NOTE: SEE SHEET NOS. 50 & 51 FOR PLAN & PROFILE OF MURPHY RD.

I-440

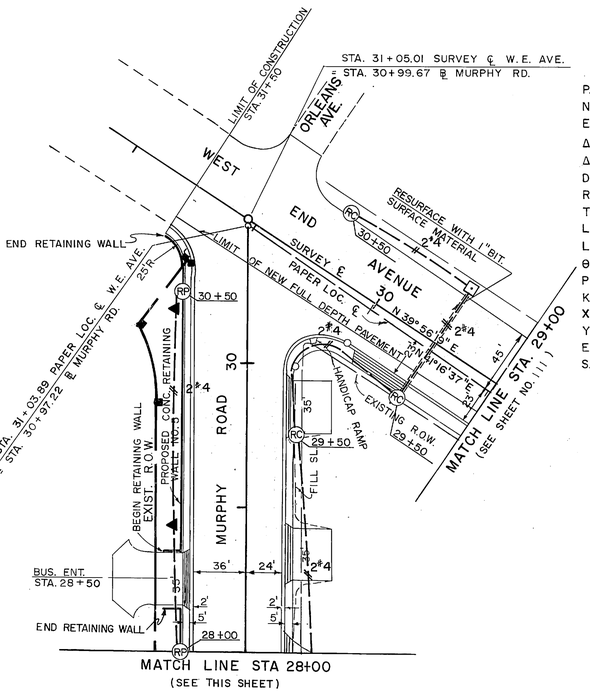
P.I. = STA. 158+58.67
N 637,165.21
E 1,756,904.58
Δ = 36°45'15.5"
Δc = 28°00'15.5"
Dc = 2°30'
R = 2,291.83'
Ts = 937.10'
Ls = 350.00'
Lc = 1,120.17'
θs = 4.375°
P = 2.22'
K = 174.97'
Xc = 349.80
Yc = 8.91'
Es = 125.50'
S.E. = 0.057 FT./FT.

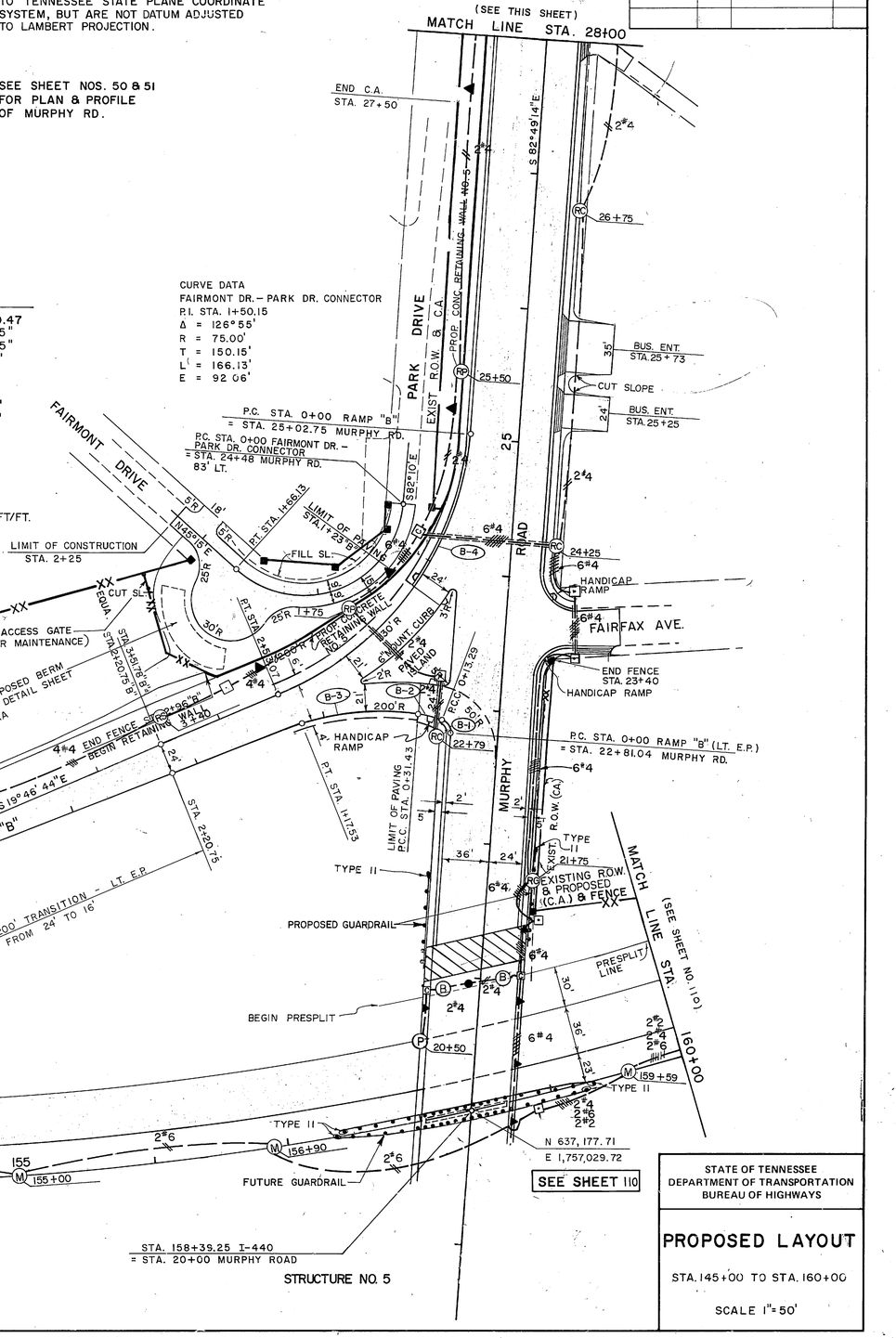
RAMP "B" CURVE DATA

B-1	B-2	B-3	B-4	B-5
P.I. STA. 0+07.83 (LT. E.P)	P.I. STA. 0+22.40 (LT. E.P.)	P.I. STA. 0+75.16 (LT. E.P.)	P.I. STA. 1+41.06	P.I. STA. 9+10.47
Δ = 76°08'40"	Δ = 13°51'20"	Δ = 24°40'04"	Δ = 62°02'30"	Δ = 27°51'15"
R = 10.00'	R = 75.00'	R = 200.00'	R = 230.00'	Δc = 16°51'15"
D = 572.958°	D = 76.3944°	D = 28.6479°	D = 24.9112°	Rc = 1,041.74'
T = 7.83'	T = 9.11'	T = 43.73'	T = 141.06'	Dc = 5°30'
L = 13.29'	L = 18.14'	L = 86.11'	L = 253.07'	Ts = 358.69'
E = 2.70'	E = 0.55'	E = 4.73'	E = 38.38'	Ls = 200.00'
				Lc = 306.44'
				θs = 5°30'
				P = 1.60'
				K = 99.97'
				Xc = 199.82'
				Yc = 6.40'
				Es = 33.20'
				SE = 0.057 FT/FT.

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (M) TWIN MEDIAN MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (RW) BARRIER MOUNTED LUMINAIRES (35' MT. HT.)
- (B) UNDERPASS LUMINAIRE
- PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS
- (C) PULL BOX CAST INTO BRIDGE OR RETAINING WALL





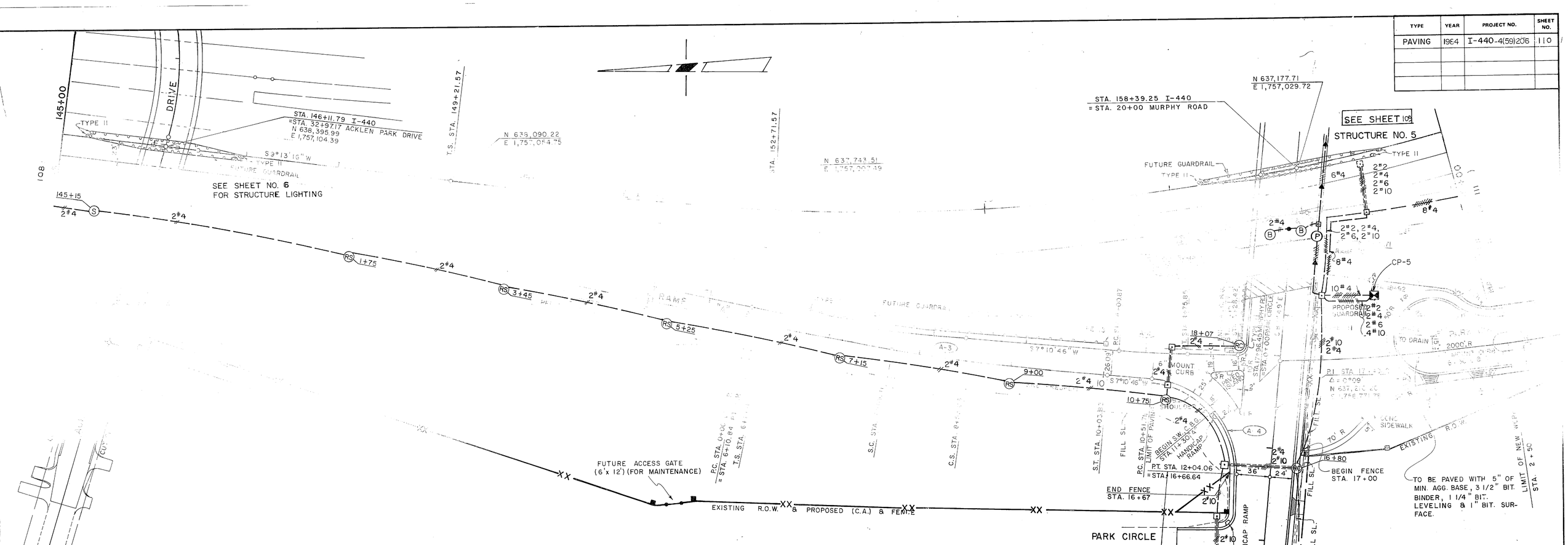
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 145+00 TO STA. 160+00

SCALE 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1964	I-440-4(59)206	110



NOTE: SEE SHEET NO. 49A FOR PLAN & PROFILE OF ACKLEN PARK DR. AND PARK CIRCLE.

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

NOTE: CAUTION MUST BE USED IN BLASTING NEAR ALL STEEL POLE FOUNDATIONS.

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (M) TWIN MEDIAN MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (RM) BARRIER MOUNTED LUMINAIRES (35' MT. HT.)
- (B) UNDERPASS LUMINAIRE
- PULL BOX
- CONTROL POINT
- (C) PULL BOX CAST INTO BRIDGE OR RETAINING WALL
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

RAMP "A" CURVE DATA

I-440
- P.I. = STA. 158+58.67
- N 637,165 23
- E 1,756,904.58
- Δ = 36°45'15.5"
- Δc = 28°00' 15.5"
- Dc = 2° 30'
- R = 2,291.83'
- Ts = 937.10'
- Ls = 350.00'
- Lc = 1,120.17'
- Θs = 4.375°
- P = 2.22'
- K = 174.97'
- Xc = 349.80'
- Yc = 8.91'
- Es = 125.50'
- S.E. = 0.057 FT./FT.

A-1
- P.I. = STA. 1+17.51 (LT. E.P)
- Δ = 7°02'30"
- R = 1909.86
- D = 3°00'
- T = 117.51'
- L = 234 72'
- E = 3.61'

A-2
- P.I. = STA. 4+38.37 (LT. E.P.)
- Δ = 3°44'55"
- R = 1145.92'
- D = 5°00'
- T = 37.50'
- L = 74.97'
- E = 0 61'

A-3
- P.I. = STA. 8+11.65
- Δ = 7°02'30"
- Δc = 2°32'30"
- Dc = 3°00'
- Rc = 1909.86'
- Ts = 192.54'
- Ls = 150.00'
- Lc = 84.72'
- Θs = 2°15'
- P = 0.49'
- K = 75.00'
- Xc = 149.98'
- Yc = 1.96'
- Es = 4.10'
- S.E. = 0 044 FT./ FT.

A-4
- P.I. STA. 11+46.84
- Δ = 87°08'15"
- R = 100.00'
- D = 57.2958°
- T = 95.13'
- L = 152.08'
- E = 38.21'

NOTE: SEE SHEET NOS. 50 & 51 FOR PLAN & PROFILE OF MURPHY ROAD.

EXISTING SIDEWALK TO BE REMOVED; AREA TO BE TOPSOILED & SEEDED.

PROPOSED LAYOUT

STA. 145+00 TO STA. 160+00

SCALE 1"=30'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	111

CURVE DATA
RAMP "H"

H-1
P.I. = STA. 4+42.18
Δ = 17°32' 54"
Δc = 14°32'54"
Dc = 3° 00'
Rc = 1909.86'
Ts = 344.81'
Ls = 100.00'
Lc = 484.94'
θs = 1° 30'
P = 0.22'
K = 50.00'
Xc = 99.99'
Yc = 0.87'
Es = 22.84'
L.T. = 66.67'
S.T. = 33.34'
S.E. = 0.044 FT./FT.

H-2
P.I. = STA. 11+04.66
Δ = 38°58' 26"
R = 300.00'
D = 19.0986°
L = 204.07'
T = 106.16
E = 18.23'
S.E. = 0.06 FT./FT.
TRANS. LENGTH = 110 FT.

H-3
Δ = 180°00' 00"
R = 150.00'
D = 38.1972°
L = 471.24'
S.E. = 0.06 FT./FT.

H-4
P.I. = STA. 17+66.77
Δ = 34° 29' 08"
R = 300.00'
D = 190986°
L = 180.57'
T = 93.11
E = 14.12'
S.E. = 0.06 FT./FT.
TRANS. LENGTH = 110 FT.

I-440
P.I. = STA. 158+58.67
N 637, 165.21
E 1,756,904.58
Δ = 36° 45' 15.5"
Δc = 28°00'15.5"
Dc = 2°30'
R = 2,291.83'
Ts = 937.10'
Ls = 350.00'
Lc = 1,120.17'
θs = 4.375°
P = 2.22'
K = 174.97'
Xc = 349.80'
Es = 125.50'
S.E. = 0.057 FT./FT.

NOTE: SEE SHEET NO'S 52 & 53 FOR PLAN & PROFILE OF WEST END AVENUE.

NOTE: SEE SHEET NO. 23 FOR F-1 CURVE DATA & SHEET NO. 26 FOR G-1 CURVE DATA.

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

CURVE DATA
RAMP "G"

G-2
P.I. = STA. 12+62.05
Δ = 10° 30'
Δc = 7° 30'
Dc = 3° 00'
Rc = 1,909.86'
Ts = 225.51'
Ls = 100.00'
Lc = 250.00'
θs = 1° 30'
P = 0.22'
K = 50.00'
Xc = 99.99'
Yc = 0.87'
Es = 8.26'
L.T. = 66.67'
S.T. = 33.34'
S.E. = 0.044 FT./FT.

G-3
P.I. = STA. 15+61.03
Δ = 60° 35' 27"
R = 100.00'
D = 57.2958°
T = 58.42'
L = 105.75'
E = 15.82'

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (M) TWIN MEDIAN MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (RW) BARRIER MOUNTED LUMINAIRES (35' MT. HT.)
- (B) UNDERPASS LUMINAIRE
- PULL BOX
- CONTROL POINT
- PULL BOX CAST INTO BRIDGE OR RETAINING WALL
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB "G" OR BEAM

MATCH LINE (SEE SHEET NO. 109) STA. 29+00

WEST END AVENUE

N 39° 56' 19" E

N 38° 34' 23" E

N 39° 24' 40" E

P.O.T. STA. 17+42.82 RT. E.P. = P.O.T. STA. 27+35.58 P.L. & W.E. AVE. 45' RT. E.P.

P.T. STA. 7+91.36 RT. E.P.

P.C. STA. 7+07.95 RT. E.P.

LIMIT OF CONST. STA. 0+76

BUS. ENT. STA. 26+90

26+50

24+50

LIMIT OF CONST. STA. 0+77

BUS. ENT. STA. 24+80

BUS. ENT. STA. 28+78

BUS. ENT. STA. 28+20

BUS. ENT. STA. 27+60

BUS. ENT. STA. 26+90

BUS. ENT. STA. 26+20

25+50

27+35

P.T. STA. 0+73.67 LT. E.P. = P.T. STA. 27+49.56 P.L. & W.E. AVE.

P.T. STA. 27+28.85 P.L. & W.E. AVE.

P.C. STA. 0+21.76 LT. E.P.

STA. 0+00 LT. E.P.

P.C. STA. 26+76.94 P.L. & W.E. AVE. 22' LT.

END FENCE STA. 16+55 "H"

PROPOSED CONCRETE RETAINING WALL NO. 6 WITH FENCE ON TOP

RAMP "H"

16+50

15+00

P.C.C. STA. 16+73.66

LIMIT OF PAVING 23+50

BEGIN, RETAINING WALL

13+50

12+00

P.C.C. STA. 12+02.41

P.T. STA. 23+78.35 P.L. & W.E. AVE. 33' LT.

P.T. STA. 18+54.38 RAMP "H" = STA. 23+50.42 P.L. & W.E. AVE. 33' RT.

P.C. STA. 23+22.48 P.L. & W.E. AVE.

PROPOSED GUARDRAIL

STRUCTURE NO. 6

P.C. STA. 9+98.50 RAMP "H"

END RETAINING WALL STA. 9+00 "F-H"

9+15

BEGIN RETAINING WALL STA. 10+75 "H"

PROP. MEDIAN BARRIER

S.C. STA. 12+63.24

T.S. STA. 10+88.24

12+10

10+50

21+50

PROP MEDIAN BARRIER

P.O.T. STA. 9+98.50 ℄ =P.O.T. STA. 9+98.50 RAMP "F" =P.C. STA. 9+98.50 RAMP "H"

PROPOSED CONCRETE RETAINING WALL NO. 7

14+00 CUT SL.

PRESPLIT ROCK LINE

END PRESPLIT

TO BE PAVED WITH 5" MIN. AGG. BASE, 3 1/2" BIT. BINDER, 1 1/4" BIT. LEVELING & 1" BIT. SURFACE.

50 LF OF PROPOSED GUARDRAIL

FAIRFAX AVE.

6-30 CB & G

PRVT. DR. STA. 13+30 RAMP "H"

P.C.C. STA. 15+35.32 RAMP "F" =P.O.C. STA. 161+08.17 I-440

59' LT.

40'

24'

EXISTING R.O.W.

MATCH LINE STA. 160+00

(SEE SHEET NO. 109)

RAMP "F" CURVE DATA
F-2
Δ = 17° 58' 46"
Δ = 13° 36' 16"
Dc = 5°
R = 1,145.92'
Ls = 175.00'
Lc = 272.09'
θs = 4° 22' 30"
P = 1.11'
K = 87.48
Xc = 174.90'
Yc = 4.45'
Es = 15.36'

161+31

163+24

165

165+37

167+50

170

170+84

173+19

℄ I-440

N 636,648.59
E 1,757,183.97

N 636,334.28
E 1,757,337.77

N 635,311.60
E 1,757,509.07

C.S. STA. 163+91.74

S.T. STA. 167+41.74

STA. 21+53.71 P.L. ℄ W.E. AVE. =STA. 8+11.96 RAMP "F-H"

STA. 20+00 SURVEY ℄ WEST END AVE. =STA. 169+01.01 I-440 PKWY.

STA. 20+00 PAPER LOC. ℄ WEST END AVE. =STA. 169+01.23 I-440 PKWY.

N 636,192.84
E 1,757,411.49

CURVE DATA
RAMP "F"-"H"
F-H-1
Δ = 8° 33' 46"
Δc = 7° 03' 46"
Dc = 3° 01' 03"
Rc = 1,898.86'
Ls = 100.00'
Lc = 234.07'
θs = 1° 30'
P = 0.218'
K = 49.99'
Xc = 99.99'
Yc = 0.87'
S.E. = 0.044 FT/FT

P.O.C. STA. 5+13.14 RAMP "F" =P.O.T. STA. 174+48.63 I-440

N 635,707.45
E 1,757,664.53

RAMP "G"

PVT. DR. STA. 12+47 RAMP "G"

PVT. DR. STA. 11+33 RAMP "G"

PVT. DR. STA. 11+98 RAMP "G"

PVT. DR. STA. 13+10 RAMP "G"

RESURFACE WITH 1" OF ASPHALTIC CONCRETE SURFACE, ITEM 411-01

REMOVE EXISTING CURB (INCLUDED IN ITEM 203-01)

EXISTING SIDEWALK TO BE REBUILT.

FAIRFAX AVENUE

LIMIT OF NEW WORK

REMOVE EXISTING ISLAND (INCLUDE IN ITEM 203-01)

MAINTAIN EXISTING GRADE

REMOVE EXISTING CURB (INCLUDE IN ITEM 203-01)

EXISTING R.O.W. & PROPOSED (C.A.) & FENCE

PROPOSED 6' SIDEWALK

EXISTING R.O.W.

GRADE AREA TO DRAIN

P.T. STA. 16+08.36 RAMP "G" = P.O.T. STA. 13+71.16 ℄ RT. E.P. = STA. 23+62.01 P.L. ℄ W.E. AVE. 46.86' RT.

LIMIT OF PAVING

BEGIN FENCE STA. 24+14

FUTURE BIKEWAY

PROPOSED C.A. & FENCE

50 L.F. PROPOSED GUARDRAIL

PRESPLIT ROCK LINE

STABILIZED SHOULDER

RAMP "G"

FUTURE GUARDRAIL

N22°30'00"W

N39°24'40"E

N12°00'00"W

EXISTING CURB & GUTTER TO BE REBUILT WITH TYPE 6-30 CURB & GUTTER (RT. & LT.)

EXISTING SIDEWALK TO BE REBUILT

P.C.C. STA. 15+02.61

S.T. STA. 14+86.54

P.C.C. STA. 14+36.54

S.T. STA. 10+17.15

P.C.C. STA. 13+86.54

C.S. STA. 13+86.54

RAMP "H"

PROPOSED CONCRETE RETAINING WALL NO. 8

RAMP "F"

90° TRANSITION

FUTURE GUARDRAIL

END RETAINING WALL STA. 6+72.69 "F"

REINFORCED CONCRETE PAVEMENT AT BRIDGE END DWG K 86-144

STA. 172+60 BEGIN TAPER

50:1 TAPER

END BRIDGE STA. 6+59.19

STRUCTURE NO. 7

P.T. STA. 8+02.57 RAMP "F" =P.O.C. STA. 4+46.88 RAMP "H"

P.O.T. STA. 10+70.41 RT. E.P.

S.C. STA. 1+97.37

MATCH LINE STA. 175+00

(SEE SHEET NO. 113)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 160+00 TO STA. 175+00

SCALE 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	112

112

(SEE SHEET NO 110) MATCH LINE STA. 160+00

STA. 20+00 SURVEY ℄ WEST END AVE.
=STA. 169+01.01 I-440 PKWY.

N 636,184.10
E 1,757,192.62

N 636,473.08
E 1,757,112.02

165

℄ I-440

170

S 27°31'59.5"E

STA. 20+00 PAPER LOC. ℄ WEST END AVE.
=STA. 169+01.23 I-440 PARKWAY.
N 636,192.84
E 1,757,411.49

P.O.C. STA. 5+13.14 RAMP "F"
=P.O.T. STA. 174+48.63 I-440
N 635,707.45
E 1,757,664.53

TYPE 11

FUTURE GUARDRAIL

TYPE 11

23'

24'

19' 20'

10'

STAB. SHOULDER

16'

TYPE II

END PRESPLIT

90' TRANS.

8#4

C-1

RAMP "C"

300' TRANSITION 16' TO 30'

7+50

FUTURE GUARDRAIL

TYPE 13

30'

P.T. STA. 7+22.99

8#4

11+00

10+50

PROPOSED GUARDRAIL

TYPE II

2#4

STRUCTURE NO. 6

N 39°21'30" E

P.C. STA. 8+88.38 RT. E.P. =
STA. 18+79.64 P.L. ℄ WEST END AVE
48' RT.

P.O.C. STA. 11+92.00 RAMP "C"
= STA. 17+93.87 WEST END AVE.
33' LT. P.L. ℄ W. E. AVE.

P.O.C. STA. 0+00 RAMP "D"
= STA. 17+89.12 P.L. ℄ WEST END AVE 48' RT.
N 635,999.44
E 1,757,314.69

N 635,621.135
E 1,757,596.401

P.O.C. STA. 4+02.60 RAMP "F"
=P.O.T. STA. 4+75.49 RAMP "D"

TYPE II

D-2

MATCH LINE STA. 175+00 (SEE SHEET NO. 114)

19+50

18+50

TYPE II

A-30R

HANDICAP RAMP

150' R

S 40° 00' E

RAMP "D"

24'

2#4

4+20

400' TAPER FROM 24' TO 16'

STABILIZED SHOULDER

2#4

2+60

P.C. STA. 2+74.08

FUTURE GUARDRAIL

TYPE II

P.T. STA. 1+64.83

1+10

RAMP "D" CURVE DATA
D-1
2#4
P.I. STA. 0+33.60
Δ=37°08'33"
D=57.2958°
R=100'
T=33.60'
L=64.83'
E=5.49'

RAMP "F" CURVE DATA
F-1
P.I. STA. 7+57.71
Δ=148° 28' 31"
R = 3097.1'
D = 18° 30'
T = 1097.23'
L = 802.57'
E = 830.40'
S.E. 0.06 FT./FT.
TRANS. LENGTH = 140'

RAMP "D" CURVE DATA
D-2
P.I. STA. 4+64.18
Δ=11° 19' 17"
D = 2° 00'
R = 2864.79'
T = 283.94'
L = 566.06'
E = 14.04'
S.E. 0.035 FT./FT.
TRANS. LENGTH = 150'

XX

PROPOSED (C.A.) & FENCE

FUTURE ACCESS GATE (6' x 12')(FOR MAINTENANCE)

PARK

CIRCLE

CENTRAL AVE.

6+30

8+00

9+65

P.T. STA. 11+57.33

STABILIZED SHOULDER

6'4

C-3

C-2

NOTE: EXISTING PAVEMENT TO BE OBLITERATED & SCARIFIED; AREA TO BE TOPSOILED & SEEDED.

EXIST. R.O.W. & PROP. (C.A.) & FENCE

I-440 STA. 160+10

SEE TYPICAL SECTION OF ALLEY, SHEET 27

SEE PROFILE SHEET 62

50'

10'

40'R

75° 20' 20"

EXISTING CURB TO BE REMOVED

EXIST SIDEWALK TO REMAIN

REPAIR PAVEMENT WITH 5" MIN. AGG. BASE, 3½ BIT. BINDER, 1¼ BIT. LEVELING & 1" BIT. SURFACE

STA. 4+00 ℄ PROP ALLEY =
STA. 0+00 ℄ RICHLAND AVE.

RICHLAND AVE.

P.T. STA. 12+53.32 RAMP "C"
=STA. 17+10.81 P.L. ℄ W.E. AVE. 33' LT.
N 635,990.39
E 1,757,202.39

P.T. STA. 6+14.20 L.T. E.P.
=STA. 16+62.37 P.L. ℄ W.E. AVE. 33' LT.

P.T. STA. 16+76.95 P.L. ℄ W.E. AVE.

P.T. STA. 16+51 SURVEY ℄ W.E. AVE.

LIMIT OF CONST. STA. 1+10

END FENCE STA. 16+50

LIMIT OF PAVING STA. 0+40

P.C. STA. 11+57.33

P.T. STA. 17+31.29 P.L. ℄ W.E. AVE.

P.T. STA. 7+40.03 RT. E.P.

48' RT.

33'

2'

5'

16#4

17+50

16+50

15+50

14+50

SURVEY ℄
WEST END AVE.
P.I. = STA. 12+97.73
Δ = 21° 27' 00"
Dc = 3°00'
R = 1,909.86'
Lc = 715.00'
T = 361.73'
E = 33.95'
S.E. = R.C.
TRANS LENGTH = 100 FT.
SE. TRANS = 100 FT.

WEST END AVE.

6#4

4#4

2#4

15

MASONRY WALL, SEE DETAIL SHEET 2 CC

13+50

BEGIN MASONRY WALL. STA. 12+78

BRASS CAP DESIGNATING THE LIMIT OF ACCESS CONTROL IS TO BE INSTALLED IN MASONRY WALL.

12+50

11+50

10+50

SURVEY CENTERLINE
STA. 11+45.23 WEST END AVE.
=STA. 17+93.14 ELMINGTON AVE.
N 635,584.89
E 1,756,815.41

P.C. STA. 0+00 LT. E.P. =
STA. 10+57.37 P.L. ℄
WEST END AVE 33.02' LT.
BEGIN CURB & GUTTER & SIDEWALK LT.

N 61°59'23" E

P.C. STA. 0+00 RAMP "F"
= P.O.T. STA. 5+45.27 RAMP "E"

RAMP "F"

R=3'

75' TRANSITION

16'

STA. 7+05 RAMP "E"

7+00

2#4

XX

73'

40' R

60'

6'6'

C-2

RAMP "E"

5'

P.T. STA. 3+04.59

E-1

4+10

5+75

TO DRAIN

20'

25' R

40'

6-30 C&G

150 LF. PROPOSED GUARDRAIL

EXISTING R.O.W.

LIMIT OF CONSTRUCTION

RESURFACE WITH 1" BIT. SURFACE.

GILLESPIE AVE.

24'

16'

PROPOSED CA. & FENCE

RAMP "E" CURVE DATA
E-1
P.T. STA. 3+95.00
Δ = 61°00'
D = 24.9112°
R = 230'
T = 135.48'
L = 244.87'
E = 36 94'

HANDICAP RAMP

LIMIT OF PAVING STA. 3+25 E

75' TRANSITION

CUL-DE-SAC TO BE PAVED WITH 5" MIN. AGG. BASE, 3 1/2" BIT. BINDER, 1 1/4" BIT. LEVELING & 1" BIT. SURFACE.

STA. 1+73.97 RAMP "E"
=STA. 11+75 P.L. ℄ W.E. AVE. 44.33' RT.
N. 635,565.45
E. 1,756,866.46

NOTE: SEE SHEET NO 25 FOR CURVE DATA FOR CURVE E-2.

FILL SLOPE

BEGIN FENCE STA. 1+50

STA. 1+00 6 STEPS REQ'D

PVT DR. STA. 1+63

S 19°50'00"E

ELMINGTON AVE.

6-30 C&G

3'

45' R

HANDICAP RAMP

LIMIT OF CONST. STA. 1+75

STA. 0+00 RAMP "E" N 635,483.74
=P.C. STA. 10+04.90 P.L. ℄ W.E. AVE. 29.25' RT. E 1,756,712.86
BEGIN C.&G. & SIDEWALK RT.

I-440

P.I. = STA. 158+58.67
N 637,165.21
E 1,756,904.58
Δ = 36°45' 15.5"
Δc = 28°00' 15.5"
Dc = 2° 30'
R = 2,291.83'
Ts = 937.08'
Ls = 350.00'
Lc = 1,120.18'
θs = 4.375°
P = 2.22'
K = 174.97'
Xc = 349.80'
Yc = 8.91'
Es = 125.50'
S.E. = 0.057 FT./FT.

RAMP "C" CURVE DATA

C-1
P.I. = STA. 3+83.28
Δ = 10° 13' 09"
D = 1° 30'
R = 3,819.72'
T = 341.55'
L = 681.26'
E = 15.24'
S.E. = 0.028 FT./FT.
TRANS. LENGTH = 150 FT.

C-2
P.I. = STA. 12+09.38
Δ = 54° 59' 40"
D = 57.2958°
R = 100.00'
T = 52.05'
L = 95.98'
E = 12.74'

C-3
P.I. = STA. 11+74.66
Δ = 15° 16' 48"
D = 44.0737°
R = 130.00'
T = 17.44'
L = 34.67'
E = 1.16'

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

NOTE: CAUTION MUST BE USED IN BLASTING NEAR ALL STEEL POLE FOUNDATION.

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (M) TWIN MEDIAN MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL – PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (RW) BARRIER MOUNTED LUMINAIRES (35' MT. HT.)
- (B) UNDERPASS LUMINAIRE
- PULL BOX
- CONTROL POINT
- [C] PULL BOX CAST INTO BRIDGE OR RETAINING WALL
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 160+00 TO STA. 175+00

SCALE 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	113

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (M) TWIN MEDIAN MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (RW) BARRIER MOUNTED LUMINAIRES (35' MT. HT.)
- (B) UNDERPASS LUMINAIRE
- PULL BOX
- CONTROL POINT
- [C] PULL BOX CAST INTO BRIDGE OR RETAINING WALL
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

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

~~NOTE: SEE SHEET NO. 54 FOR PLAN & PROFILE OF RICHARDSON-MARLBOROUGH AVE.~~

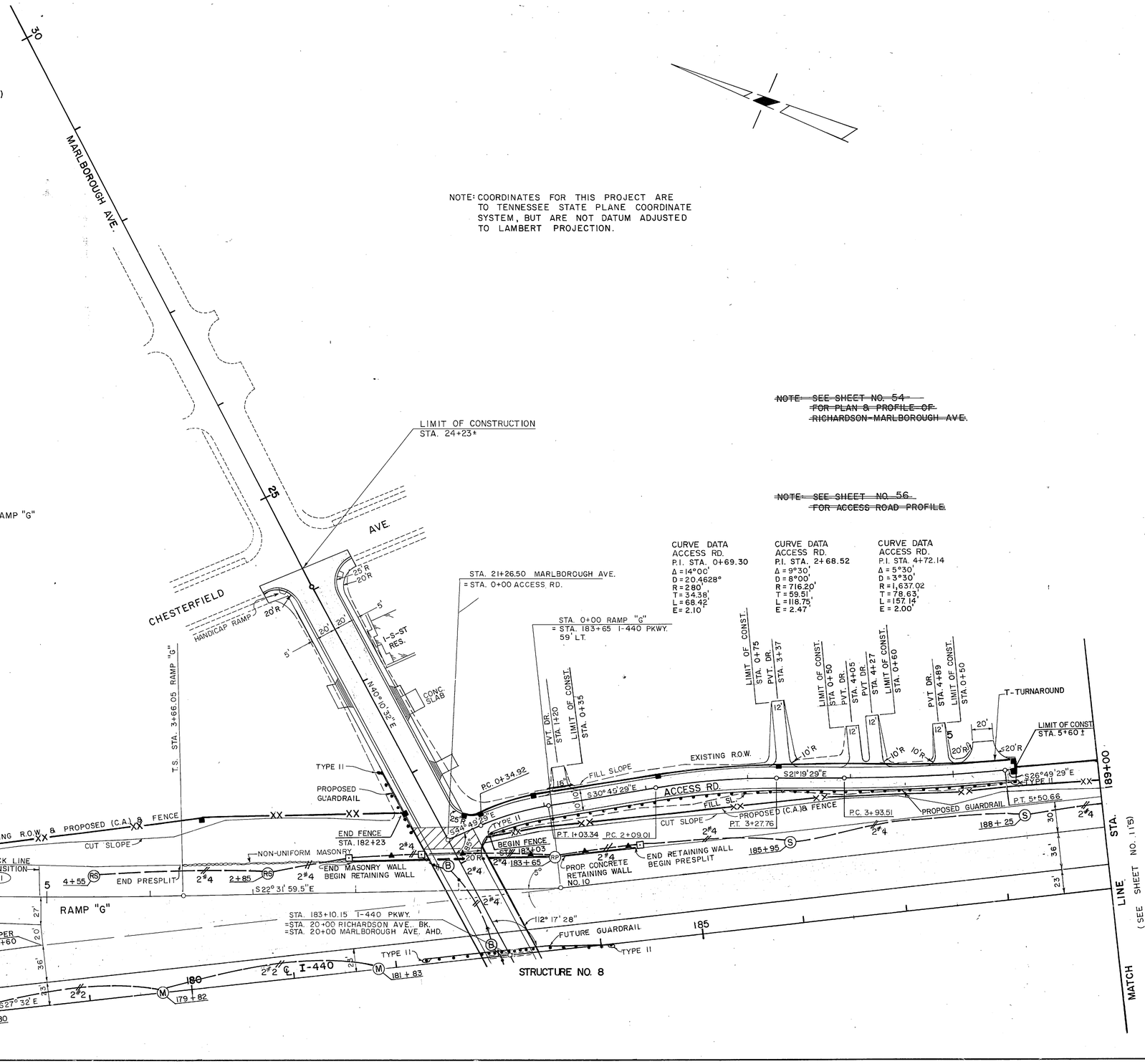
~~NOTE: SEE SHEET NO. 56 FOR ACCESS ROAD PROFILE.~~

CURVE DATA RAMP "G"
G-1
P.I. = STA. 6+92.25
Δ = 10° 32'
Δc = 1° 32'
Dc = 3° 00'
Rc = 1,909.86'
Ts = 326.20'
Ls = 300.00'
Lc = 51.11'
θs = 4° 30'
P = 1.96'
K = 149.97'
Xc = 299.81'
Yc = 7.85'
Es = 10.07'
L.T. = 200.06'
S.T. = 100.06'

CURVE DATA ACCESS RD.
P.I. STA. 0+69.30
Δ = 14° 00'
D = 20.4628°
R = 280'
T = 34.38'
L = 68.42'
E = 2.10'

CURVE DATA ACCESS RD.
P.I. STA. 2+68.52
Δ = 9° 30'
D = 8° 00'
R = 716.20'
T = 59.51'
L = 118.75'
E = 2.47'

CURVE DATA ACCESS RD.
P.I. STA. 4+72.14
Δ = 5° 30'
D = 3° 30'
R = 1,637.02'
T = 78.63'
L = 157.14'
E = 2.00'

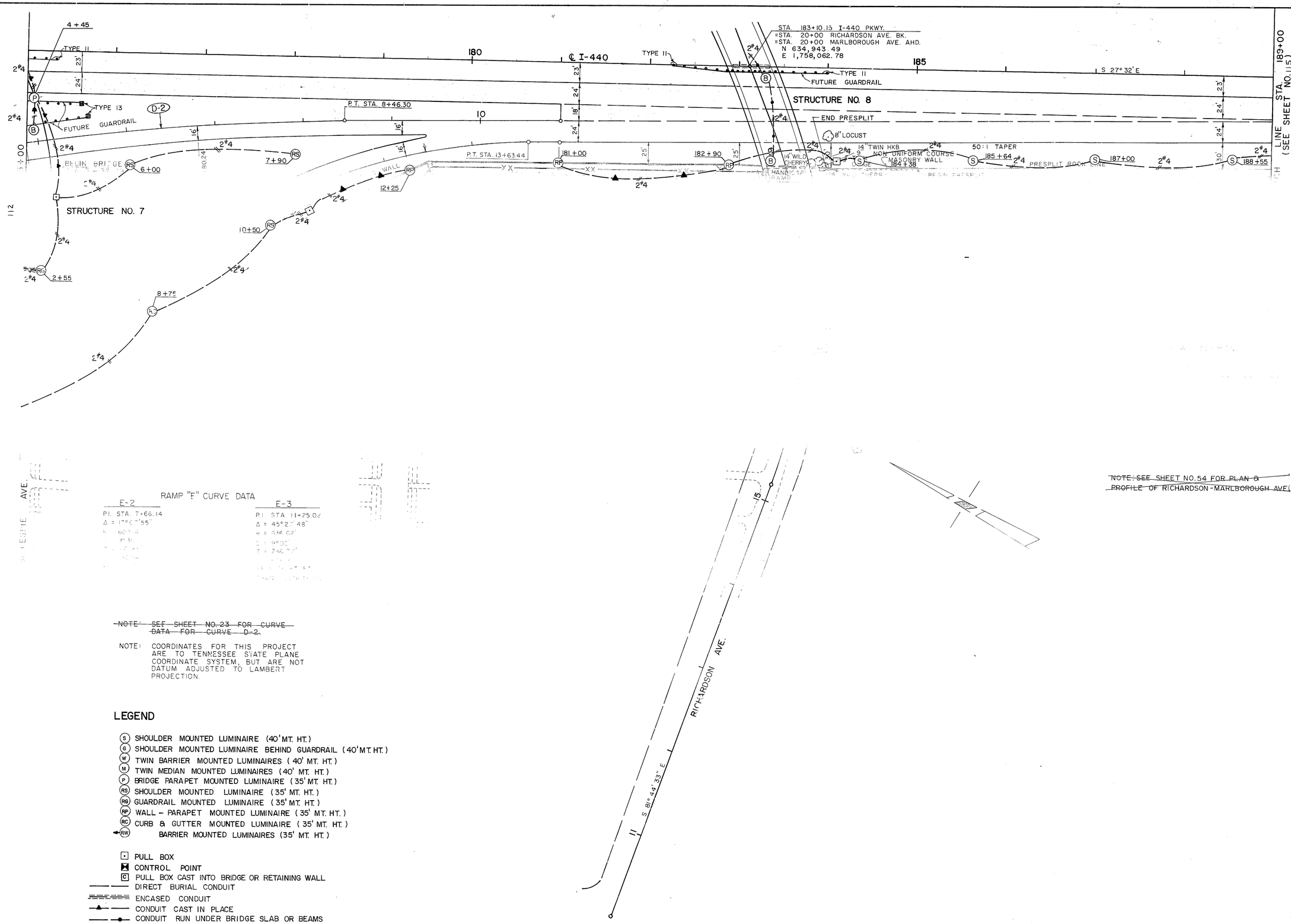


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 175+00 TO STA. 189+00

SCALE 1"=50'



TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	114

RAMP "E" CURVE DATA

E-2	E-3
P.I. STA. 7+66.14	P.I. STA. 11+25.02
Δ = 17°06'55"	Δ = 45°27'48"
R = 668.41'	R = 346.02'
D = 8°35'	D = 16°32'
T = 100.50'	T = 143.72'
L = 199.77'	L = 274.56'

~~NOTE: SEE SHEET NO. 23 FOR CURVE DATA FOR CURVE D-2.~~

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

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (M) TWIN MEDIAN MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (RW) BARRIER MOUNTED LUMINAIRES (35' MT. HT.)

- PULL BOX
- CONTROL POINT
- [C] PULL BOX CAST INTO BRIDGE OR RETAINING WALL
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

~~NOTE: SEE SHEET NO. 54 FOR PLAN & PROFILE OF RICHARDSON-MARLBOROUGH AVE.~~

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 175+00 TO STA. 189+00

SCALE 1"=50'

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 181+00 TO STA. 505+00

SCALE 1" = 50'

NOTE:
CONTRACTOR TO REMOVE TREES AS DESIGNATED BY N.E.S. ON N.E.S. EASEMENT FROM STA. 185+00 TO STA. 501+20.

CAUTION MUST BE USED IN BLASTING NEAR STEEL TOWER FOUNDATIONS.

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

NOTE: SEE SHEET NO. 22 FOR PLAN & PROFILE OF SHARONDALE DR.

STA. 184+00
LIMIT OF CONSTRUCTION

STA 185+72.57 ℄ I-440
=STA 30+00 ℄ SHARONDALE DR.
N. 653,198.630
E 1,728,858.980

EXISTING ROW & PROPOSED (C.A.) & FENCE

FUTURE BIKEWAY

CUT SLOPE

PRESPLIT ROCK LINE

STA. 188+00
END TAPER

STA. 189+00
BEGIN TAPER

STA. 505+88
END FENCE

HANDICAP RAMP

DRIVE

FILL SLOPE

CUT SLOPE

EXISTING ROW

C.A. & FENCE

STA. 505+88
BEGIN FENCE

TO BE REMOVED
TEMPORARY FENCE

STA. 505+88
PRESPLIT ROCK LINE

505+00

FUTURE GUARDRAIL

TYPE II

STRUCTURE NO. 9

N 25°25'15.38" W

NON-UNIFORM COURSE ASPHALT MAT

STA. 191+15
END FENCE

STA. 189+80
BEGIN FENCE

CONC. RETAINING WALL NO. 11

FENCE ALONG TOP OF WALL

EXISTING R.O.W. (C.A.)

EXISTING R.O.W. & PROPOSED (C.A.) & FENCE

STA 502+10 ±
LIMIT OF CONSTRUCTION

SHARONDALE DR.

PROPOSED GUARDRAIL

Cb-4

EXIST. R.O.W.

EXIST. R.O.W.

EXISTING R.O.W.

END FENCE THIS PROJECT

ROAD CLOSURE SIGNS
PERMANENT BARRICADES AND

EXIST. ROW

WOOD FENCE

MEADOWLAND LANE

S2

℄ I-440

N 25°25'15.38" W

181

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	116

REV: 4-30-85 RELOCATED CURB & GUTTER MOUNTED LUMINAIRE FROM STA. 14+30 TO STA. 13+85.

I-440

P.I. STA. 222 + 24.49 (N 631,472.528
Δ = 52° 25' 23.5" (E 1,759,872.226
Δc = 40° 10' 23.5"
Dc = 3° 30'
R = 1,637.02'
Ts = 982.41'
Ls = 350.00'
Lc = 1,147.81'
θs = 6.125°
P = 3.12'
K = 174.93'
Xc = 349.60'
Yc = 12.46'
Es = 191.14'
S.E. = 0.057 ft/ft
T.S. = 212 + 42.08
S.C. = 215 + 92.08
C.S. = 227 + 39.89
S.T. = 230 + 89.89

T.S. 212 + 42.08
N 632,343.660
E 1,759,418.102

S.C. 215 + 92.08
N 632,039.315
E 1,759,590.759

PROP. BERM SEE. DETAIL SHT. #

WESTWOOD

205 + 30 CUT SL 207 + 80 210 + 30 212 + 80

PRESPLIT ROCK LINE

205 N 27° 32' W 210 ℄ I-440

204 + 23 206 + 46 208 + 69 210 + 92

FUTURE BIKEWAY

STA. 214 + 12.26 (℄ I-440) =
STA. 20 + 00.24 (℄ WOODLAWN DR.)
N 632,193.426
E 1,759,498.036

24 + 70 28TH AVE. S. LIMIT OF NEW WORK STA. 25 + 25

24145 PVT. DR. STA. 22+53 PVT. DR. 2#4 P.I. 23 + 05.06 N 632,223.499 E 1,759,798.446 22410 PVT. DR. N 82° 00' W 24150 PVT. DR. 24157 PVT. DR. 22 + 10 21184 PVT. DR. DRIVE 23 + 40 20 + 00 217 + 75 END TAPER 218 + 50 STA. 219 + 00

215 + 25 CUT SL 20 + 80 215

MATCH LINE

19 + 50 213 + 15 214 + 95 217 + 35 CUT SL FUTURE BIKEWAY

18 + 20 17156 PVT. DR. 6'-30 CURB & GUTTER 2.5 GRASS PLOT 5'-0" SIDEWALK

P.C. 17 + 46.63
N 632,064.250
E 1,759,281.735

16188 PVT. DR. 16 + 90 WOODLAWN N 47° 44' 30" E 15 + 60 15480 PRIVATE DR.

WOODLAWN DRIVE
P.I. STA. 20 + 45.24 (N 632,265.058
Δ = 50° 15' 30" RT. (E 1,759,502.743
Dc = 9° 00'
R = 636.62'
L = 558.43'
T = 298.61'
E = 66.55'
S.E. = 0.046 ft/ft

MATCH LINE "A" THIS SHEET

STA 14182 PVT. DR. 15 150' TAPER 36' TO 44' 13 + 85 DRIVE LIMIT NEW WORK STA. 13 + 75 SHARONDALE

MATCH LINE "A" THIS SHEET

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (B) UNDERPASS LUMINAIRE
- PULL BOX
- CONTROL POINT
- (C) PULL BOX CAST INTO BRIDGE OR RETAINING WALL
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I - 440
STA. 204 + 00
TO
STA. 219 + 00

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	117

STA. 219+00

MATCH LINE

PC. 719+00

PCC. 721+38.02

PI. PCC. 220+54.95
N 631,695,284
E 1,759,897.997

220+15

36'

BEGIN RAMP 'A' 59' RT.
P.I. STA. 219+00 -140
N 631,759,900
E 1,759,743.321

2#6

S

CURVE 705

730

219+55

2#6

48'

221+55

2#6

CURVE 706

223+35

CUT SLOPE

FUTURE BIKEWAY

220

222+40

CUT SLOPE

2#4

224+55

2#4

P.I. C.S. 224+83.09
N 631,478.953
E 1,760,265.134

226+50

2#4

50:1 TAPER

228+25

2#4

P.I. ST. 228+33.09 N 631,384.765 E 1,760,601.918

END RAMP 'B' 81' LT.
P.I. STA. 228+50.1-440
ST. STA. 337+85.86
N 631,459.886
E 1,760,636.613

336+50

2#4

C.S. 335+35.86

334+80

RS

2#4

335

CURVE 307

2#4

CURVE 308

231+40

S

2#2

STA. 232+00

24'

10'

225

225

PAP. LOCATED ℄

S 77°E

230

230

W

2#2

2#2

CONCRETE BARRIER WALL (FUTURE)

2#2

24'

225+60

CURVE 707

228+05

32'

S 75°30' E

230+45

730

PRESPLIT ROCK LINE

CONCRETE RETAINING WALL

725

C.S. 725+34.89

C.S. 227+39.89
N 631,374.440
E 1,760,497.496

ST. 728+84.89

ST. 230+39.89
N 631,301.280
E 1,760,839.865

MATCH LINE

I-440

P.I. STA. 223+71.07
N = 631,491.485
E = 1,760,139.658
Δ = 27°08'30" LT.
Δ_c = 19°16'
Dc = 4°30'
R = 1273.240'
T_{SA} = 316.125'
T_{SB} = 474.418'
Ls = 350'
Lc = 428.148'
θs = 7°52'30"
P = 4.006'
K = 174.89'
Xc = 349.339'
Yc = 16.014'
Es = 40.690'
S.E. =

I-440

P.I. STA. 217+32.45
N = 631,908.824
E = 1,759,644.782
Δ = 22°19'31" LT.
Δ_c = 16°12'1"
Dc = 3°30'
R = 1637.022'
Ts = 490.374'
Ts = 331.235'
Ls = 350'
Lc = 462.865'
θs = 6°07'30"
P = 3.117'
K = 174.933'
Xc = 349.600'
Yc = 12.462'
Es = 34.744'
S.E. =

I-440

SUR. P.I. STA. 222+24.49 N 631,472.528 E 1,759,872.226
Δ = 52°25'23.5"
Δ_c = 40°10'23.5"
Dc = 3°30'
R = 1,637.02'
Ts = 982.41'
Ls = 350.00'
Lc = 1,147.81'
θs = 6°07'30"
P = 3.12'
K = 174.93'
Xc = 349.60'
Yc = 12.46'
Es = 191.14'
S.E. = 0.057'/'
T.S. = 212+42.08
S.C. = 215+92.08
C.S. = 227+39.89
S.T. = 230+89.89

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL – PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)

- PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I – 440
STA. 219+00 TO STA. 232+00

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	11B

I-440

P.I. = STA. 245+30.21 {N 631,050.016 E 1,762,257.790
Δ = 45°17'56"
Δc = 36°32'56"
Dc = 2°30'
R = 2,291.83'
Ts = 1,132.24'
Ls = 350.0'
Lc = 1,461.96'
θs = 4.375°
P = 2.22'
K = 174.97'
Xc = 349.80'
Yc = 8.91'
Es = 193.92'
S.E. = 0.05 %
T.S. = 233+97.97
S.C. = 237+47.97
C.S. = 252+09.93
S.T. = 255+59.93

HILLSBORO RD.

P.I. = STA. 25+12.46 {N 631,599.550 E 1,761,852.336
D = 3°00'00"
R = 1909.86'
L = 735.52'
T = 372.37'
E = 35.96'
S.E. = 0.035%

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (B) UNDERPASS LUMINAIRE
- PULL BOX
- CONTROL POINT
- [C] PULL BOX CAST INTO BRIDGE OR RETAINING WALL
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

MATCH LINE STA. 239+00 (SEE SHEET NO. 40)

WOODLAWN DR.

N-82°-15'W

LIMIT OF PAVING

EXISTING TO BE OBLITERATED, TOPSOILED AND SEEDED

BEGIN RAMP 'C' 58' R.T. STA. 25+60 HILLSBORO RD.
P.C. STA. 837+38.34
N 631,602.228
E 1,761,959.618

CUT SLOPE

CURVE 305

CURVE 607

CURVE 608

CURVE 609

CURVE 606

CURVE 605

CURVE 307

CURVE 306

CURVE 805

CURVE 806

RAMP "B"

RAMP "C"

HILLSBORO PIKE

PRESPLIT ROCK LINE

CONC. BARRIER WALL

P.T. 330+77.21

T.S. 331+17.40

S.C. 333+17.40

S 40°11'20" W

S 77° E

PAP. LOC. ℄

N-79°-57'-23" W

℄ I-440

N 71°46'50" W

N 38°51'27" W

T.S. 235+97.97
N 631,247,170
E 1,761,142,928

P.I. T.S. 235+09.21
N 631,232,672
E 1,761,260,704

S.C. 237+47.97
N 631,177,698
E 1,761,485,810

C.S. 238+59.208 (PAP. LOC. S.C. BK.=238+46.226 AHD. (℄ SURVEY)
N 631,145,309
E 1,761,599,532
T.S. 6397+19.92

BEGIN RAMP "B" STA. 239+00 I-440
N 631,215,726
E 1,761,458,262

END RAMP "DB" 30' LT. STA. 21+51.68 HILLSBORO RD.
P.O.T. 324+25.0 (RAMP "B") 22'-T-25' (HILLSBORO PIKE)
STA. 651+48.86
N 631,508.604
E 1,761,848.884

S.T. STA. 651+48.86
N 631,261.339
E 1,761,260.337

P.C. 21+40.08
N 631,240.985
E 1,761,751.873

C.S. 839+63.48

S.T. 842+63.48

LIMIT OF PAVING 649+59

LIMIT OF PAVING 838+74

SEE SHEET 16

MATCH LINE STA. 232+00

MATCH LINE STA. 246+00

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I-440
STA. 232+00 LT.
TO
STA. 246+00 LT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	11.9

SEE SHEET 15
FOR UNDERPASS LIGHTING

SEE SHEET 15

P.L.T.S 235 + 09.21
N 631,232.672
E 1,761,260.704

S.C. 237 + 47.97

E.O. 238 + 59.208 (PAP. LOC. S.C.) BACK =
238 + 66.226 (℄ SURV.) AHEAD
N 631,145.309
E 1,761,599.532

℄ I-440

S 77° E
PAP. LOC. ℄
S-79° 57' 23" E
℄ SURVEY
T.S. 233 + 97.97

N 631,106.100
E 1,761,714.080
239 + 87.33 (℄ I-440) =
20 + 00 (HILLSBORO RD.)

STA. 232+00
MATCH LINE
MATCH LINE STA. 246+00

RETAINING WALL
S 75° 30' E
RAMP "A"
PRESPLIT ROCK LINE
CONC. RETAINING WALL

CURVE 708
CURVE 709
CURVE 907
CURVE 905
CURVE 906
CURVE 405
CURVE 10
LOOP "DD"
RAMP "D"

12' SHLD'R
50:1 TAPER
LIMIT OF PAVING
FUTURE BIKEWAY OVERPASS

END RAMP 'DD' 64' RT.
STA. 18+27.76 HILLSBORO RD.
S.T. STA. 912 + 02.56
N 630, 922.982
E 1,761, 729.238

END RAMP 'A' 44' LT.
STA. 16+00 HILLSBORO RD.
P.T. STA. 741+37.12
N 630, 734.398
E 1,761,563.278

BEGIN RAMP 'D'
STA. 416+00
N 630,778.913
E 1,761,622.408

P.I. STA. 16+60.21
N 630,770.752
E 1,761,605.252

S 43° 08' 50" E

END TAPER 14+40

SHARON HILL CIRCLE 14400

℄ RELOCATED HILLSBORO PIKE

HILLSBORO RD.
P.I. = STA. 14+00.35 { N 630,525.515 / E 1,761,551.410
Δ = 15° 41' 26" LT.
Dc = 3° 00' 00"
R = 1909.86'
Lc = 523.00'
T = 263.17'
E = 18.05'
S.E. = 035 %

I-440
{ N 631,050.016 / E 1,762,257.790
P.I. = STA. 245+30.21
Δ = 45° 17' 56" RT.
Δc = 36° 32' 56"
Dc = 2° 30'
R = 2,291.83'
Ts = 1,132.24'
Ls = 350.0'
Lc = 1,461.96'
θs = 4.375°
P = 2.22'
K = 174.97'
Xc = 349.80'
Yc = 8.91'
Es = 193.92'
S.E. = 0.05 %
T.S. = 233+97.97
S.C. = 237+47.97
C.S. = 252+09.93
S.T. = 255+59.93

PROPOSED ACCESS ROAD CURVE DATA

① P.I. STA. 1+11.33
Δ = 45° 00'
D = 38.1972°
T = 62.13'
L = 117.81'
R = 150'
E = 12.36'

② P.I. STA. 2+51.25
Δ = 34° 00'
D = 28.6479°
T = 61.15'
L = 118.68'
R = 200'
E = 9.14'

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)

- PULL BOX
- CONTROL POINT
- [C] PULL BOX CAST INTO BRIDGE OR RETAINING WALL
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

SHARONDALE DRIVE
LIMITS OF CONST. & PAVING STA. 10+50 ±
P.C. 11+37.194
N 630,300.761
E 1,761,414.529
END CONTROL ACCESS & FENCE
LOMBARDY AVE.

HILLSBORO GARDEN DR.
PROP. R.O.W.
PROP. I.R.O.W.
4+40
LIMIT OF PAVING
PT STA. 3+08.79
P.C. STA. 1+90.11
PT STA. 1+67.01
P.C. STA. 0+49.20
LOMBARDY AVE.
LIMIT OF PAVING
0+00

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I - 440
STA. 232+00 RT.
TO
STA. 246+00 RT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	120

120

T.S. 847+76.11
S.C. 849+76.11
C.S. 854+43.24
S.T. 856+43.24
END PRESPLIT
CUT SLOPE
CURVE 807
CURVE 808
CURVE 809
RAMP "C"
S 45° E
S 31° 39' 27" E
S 34° 39' 27" E
CONCRETE RETAINING WALL
FLATTENED SLOPES
FUTURE CONCRETE BARRIER WALL
℄ I-440
STA. 261+00
12' SHLDR
CURVE 408
CURVE 407
RAMP "D"
50:1 TAPER
PRESPL.
ROCK LINE
NON-UNIFORM MASONRY WALL
FUTURE BIKEWAY
MATCH LINE
CURVE 406
C.S. 425+21.88
S.C. 422+26.17
END RAMP "D" 80' RT. STA. 252+00 I-440
ST. STA. 427+71.98
N 630,357.774
E 1,762,626.437
C.S. 252+09.93
N 630,401.358
E 1,762,695.402
ST. 255+59.93
N 630,118.691
E 1,762,901.644
MATCH LINE

I-440
P.I. STA. 245+30.21 { N 631,050.016 / E 1,762,257.790
Δ = 45° 17' 56"
Δc = 36° 32' 56"
Dc = 2° 30'
R = 2,291.83'
Ts = 1,132.24'
Ls = 350.00'
Lc = 1,461.96'
θs = 4.375°
P = 2.22'
K = 174.97'
Xc = 349.80'
Yc = 8.91'
Es = 193.92'
S.E. = 0.05 ft
T.S. = 233+97.97
S.C. = 237+47.97
C.S. = 252+09.93
S.T. = 255+59.93

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)

- PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

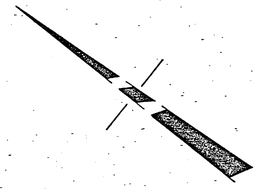
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

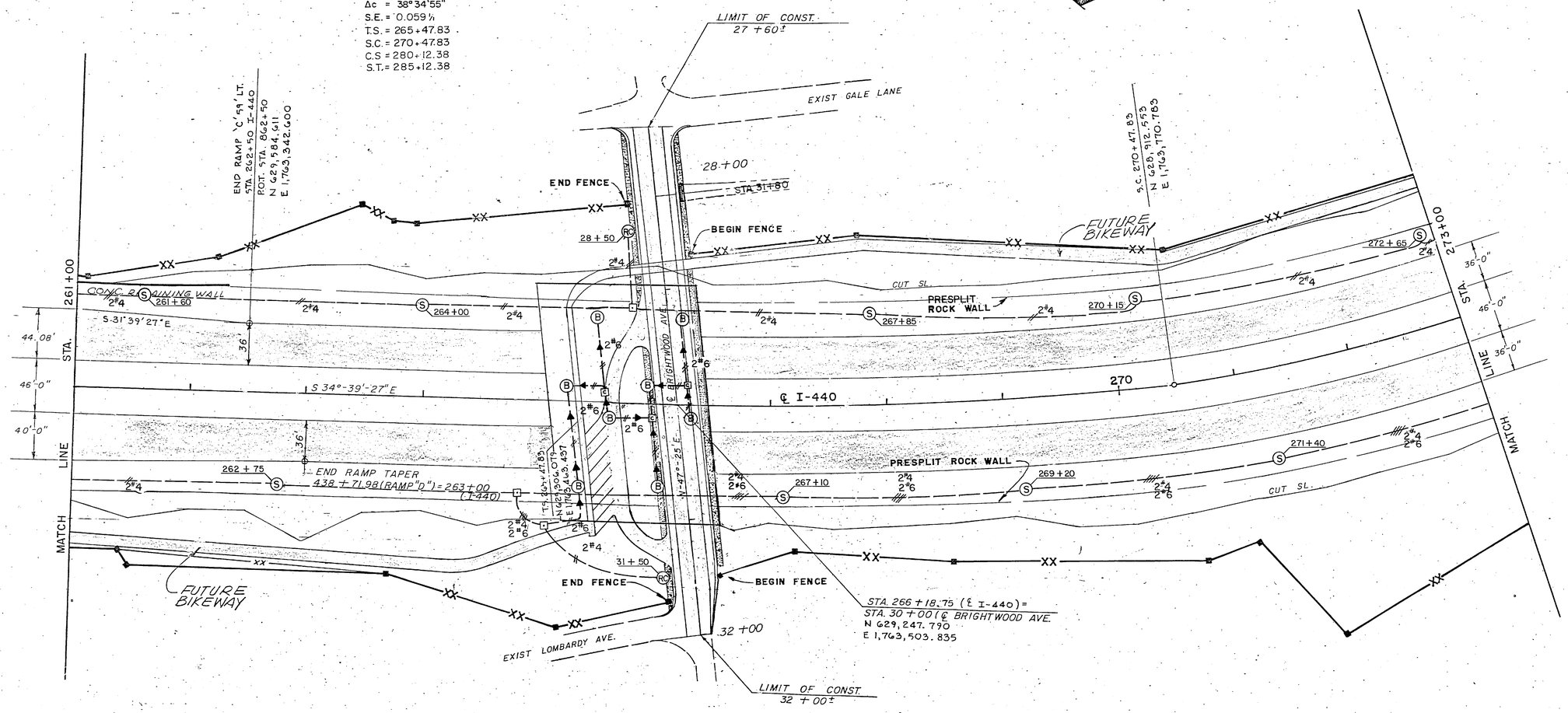
LAYOUT SHEET
I-440
STA. 246+00 TO STA. 261+00

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	I-2L

I-440

P.I. = STA. 276+05.20 { N 628,436.341 / E 1,764,064.718
Δ = 58°34'55"
Dc = 4°00'
Ls = 500.00'
Ts = 1057.37'
Es = 218.31'
R = 1,432.40'
Yc = 29.11
P = 7.26'
K = 249.74'
Xc = 499.48'
Lc = 964.55'
θs = 10°
Δc = 38°34'55"
S.E. = 0.059 ft
T.S. = 265+47.83
S.C. = 270+47.83
C.S. = 280+12.38
S.T. = 285+12.38





LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL -- PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (B) UNDERPASS LUMINAIRE
- PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS
- [C] PULL BOX IN STRUCTURE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

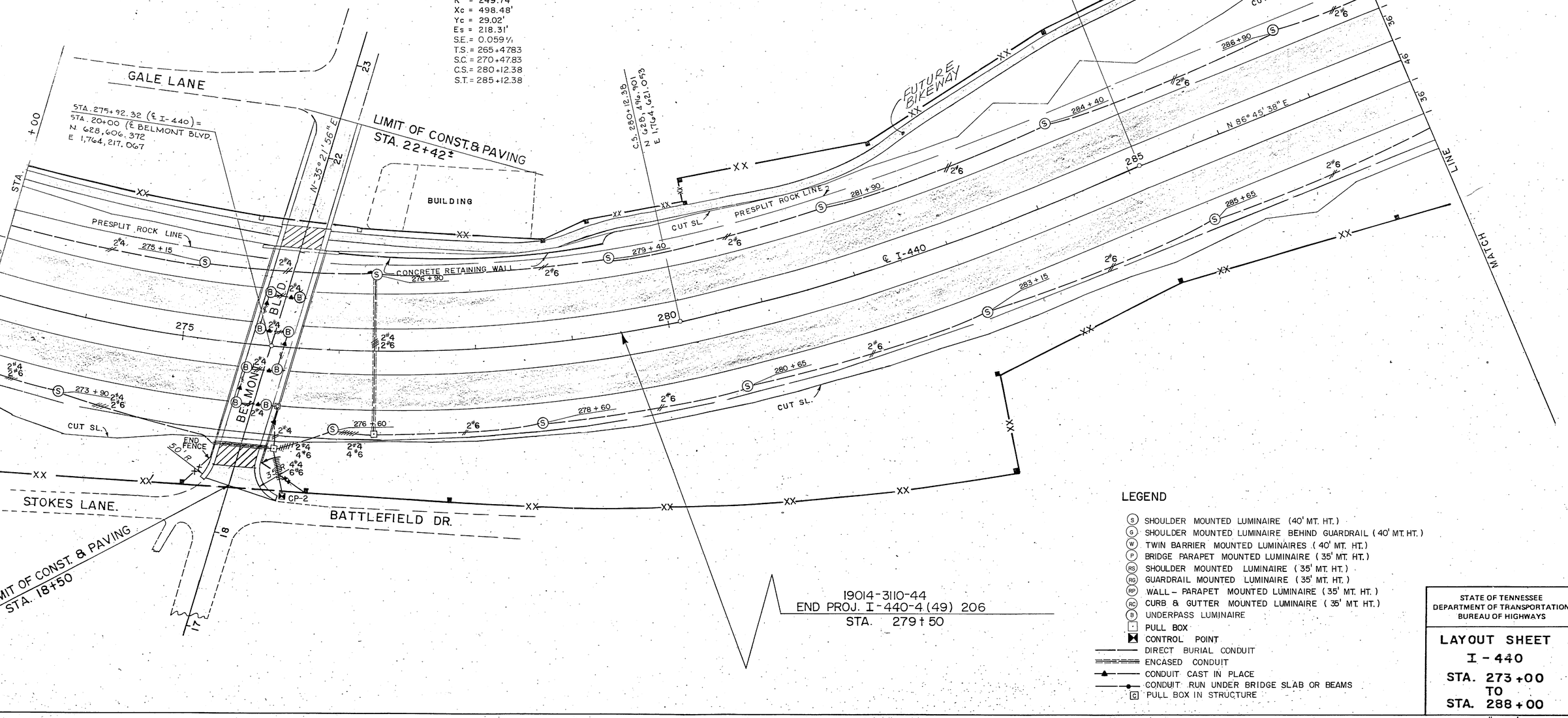
LAYOUT SHEET
I - 440
STA. 261+00 TO STA. 273+00

SCALE : 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	L22

I-440

P.I. STA. 276 + 05.20 { N 628,436.341 / E 1,764,064.718
Δ = 58°34'55"
Δc = 38°34'55"
Dc = 4°00'
R = 1,432.40'
Ts = 1,057.37'
Ls = 500.00'
Lc = 964.55'
θs = 10°
P = 7.26'
K = 249.74'
Xc = 498.48'
Yc = 29.02'
Es = 218.31'
S.E. = 0.059 ft/ft
T.S. = 265+47.83
S.C. = 270+47.83
C.S. = 280+12.38
S.T. = 285+12.38



19014-3110-44
END PROJ. I-440-4(49) 206
STA. 279+50

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (B) UNDERPASS LUMINAIRE
- PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS
- (C) PULL BOX IN STRUCTURE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT SHEET
I - 440
STA. 273+00
TO
STA. 288+00

SCALE : 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	123

123

I-440

P.I. STA. 295+38.70
Δ = 5° 56' 23"
D = 0° 45' 00"
R = 7639.437'
T = 396.336'
L = 791.963'
Lc = 791.608'
E = 10.274'
P.C. STA. 291+42.36
P.T. STA. 299+34.32
P.I. = N 628,554.09
E. 766,143.05

LIMIT OF PROJECT
STA. 291+50

℄ GRANNY WHITE PIKE STA. 20+00=
STA. 295+37 ℄ I-440

MATCH LINE STA. 25+00

℄ GALE LANE

℄ GALE LANE

1' ROCK WALL

5' SIDEWALK

G-30 C&G

1' ROCK WALL

50' R.

50' R.

50' R.

50' R.

288+00

STA.

MATCH LINE

N 86° 45 38" E

290

PRESENT ROCK LINE

288+15

289+40

290+65

291+90

293+15

294+40

P.C. 291+42.36

20

295

℄ I-440

296+95

296+00

297+90

299+15

300

300+40

201+65

302+00

STA.

MATCH LINE

S 87° 17' 55" E

P.T. 299+34.32

1' ROCK WALL

5' SIDEWALK

G-30 C&G

G-30 C&G

1' ROCK WALL

50' R.

50' R.

℄ BATTLEFIELD DR.

℄ BATTLEFIELD DR.

LIMIT OF CONST.
STA. 15+70

15

2*6

2*4

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)
- (B) UNDERPASS LUMINAIRE
- PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS
- [C] PULL BOX IN STRUCTURE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

STA. 288+00 TO STA. 302+00

SCALE: 1" = 50'

288+00 to 302+00

29411

BRUNING

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	124

GALE LANE

LEALAND LANE

PERM. UTILITY & DRAINAGE ESM'T. (RELOC. SAN. SEWER & ELEC. DITCH)

PERM. UTILITY ESM'T. (RELOC SAN SEWER)

PERM. UTILITY ESM'T. (RELOCATE SAN. SEWER & N.E.S. POWER LINES)

PERM. UTILITY ESM'T. (RELOC. SAN. SEWER & N.E.S. POWER LINES)

BATTLEFIELD DRIVE

BATTLEFIELD DRIVE

STA. 302+00

STA. 317+00

MATCH LINE

MATCH LINE

305

310

315

℄ I-440

STA. 309+70 I-440 = STA. 20+00 LEALAND LANE

2#4 — 304+15 — 306+65 — 309+15 — 311+65 — 314+15 — 316+65

2#6 — 302+90 — 305+40 — 307+90 — 310+40 — 312+90 — 315+40

6#4

2#6 6#4

CP-1

PC 25°15'

18

16

LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL – PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)

- PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

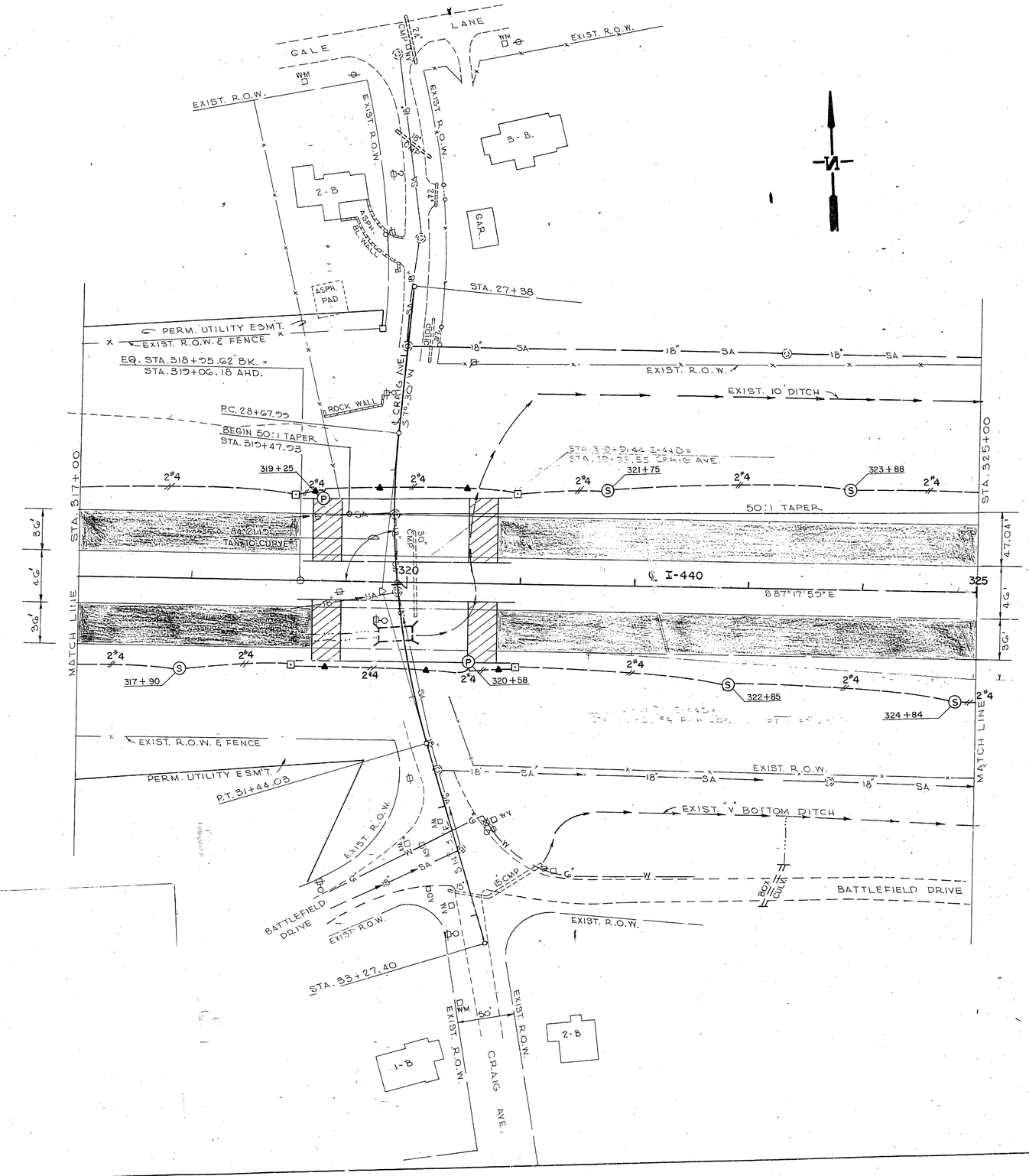
STA. 302+00 TO STA. 317+00

SCALE: 1"=50'

STA. 302+00 TO STA. 317+00

BRUNING 29411

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)205	125



LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL – PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)

- PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT

I-440

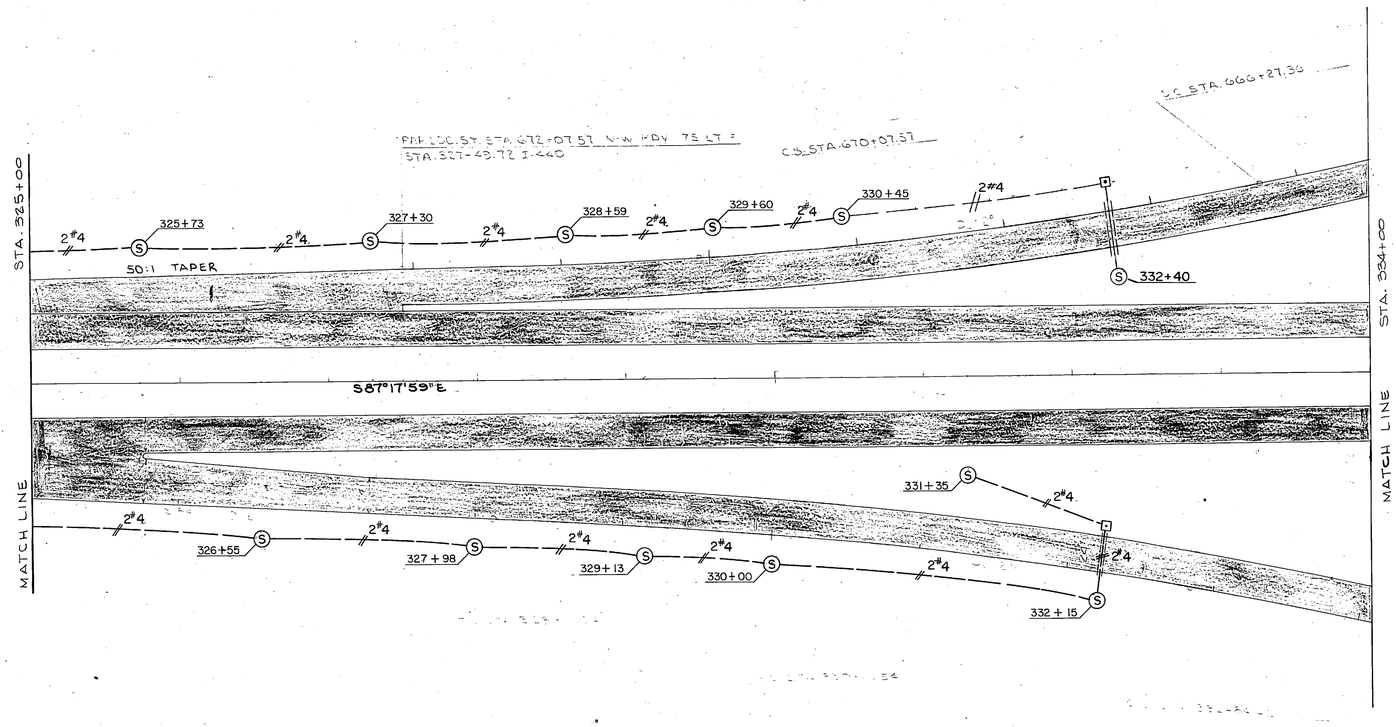
STA. 319+00 TO STA. 325+00

SCALE 1" = 50'

29411

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	126

REV. 3-5-85: ADDED PULL BOX AND LIGHT STANDARD, STA. 332+40. ADDED ENCASED CONDUIT & DIRECT BURIAL CONDUIT.



LEGEND

- (S) SHOULDER MOUNTED LUMINAIRE (40' MT. HT.)
- (G) SHOULDER MOUNTED LUMINAIRE BEHIND GUARDRAIL (40' MT. HT.)
- (W) TWIN BARRIER MOUNTED LUMINAIRES (40' MT. HT.)
- (P) BRIDGE PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RS) SHOULDER MOUNTED LUMINAIRE (35' MT. HT.)
- (RG) GUARDRAIL MOUNTED LUMINAIRE (35' MT. HT.)
- (RP) WALL - PARAPET MOUNTED LUMINAIRE (35' MT. HT.)
- (RC) CURB & GUTTER MOUNTED LUMINAIRE (35' MT. HT.)

- PULL BOX
- CONTROL POINT
- DIRECT BURIAL CONDUIT
- ENCASED CONDUIT
- CONDUIT CAST IN PLACE
- CONDUIT RUN UNDER BRIDGE SLAB OR BEAMS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED LAYOUT
STA. 325+00
TO
STA. 334+00

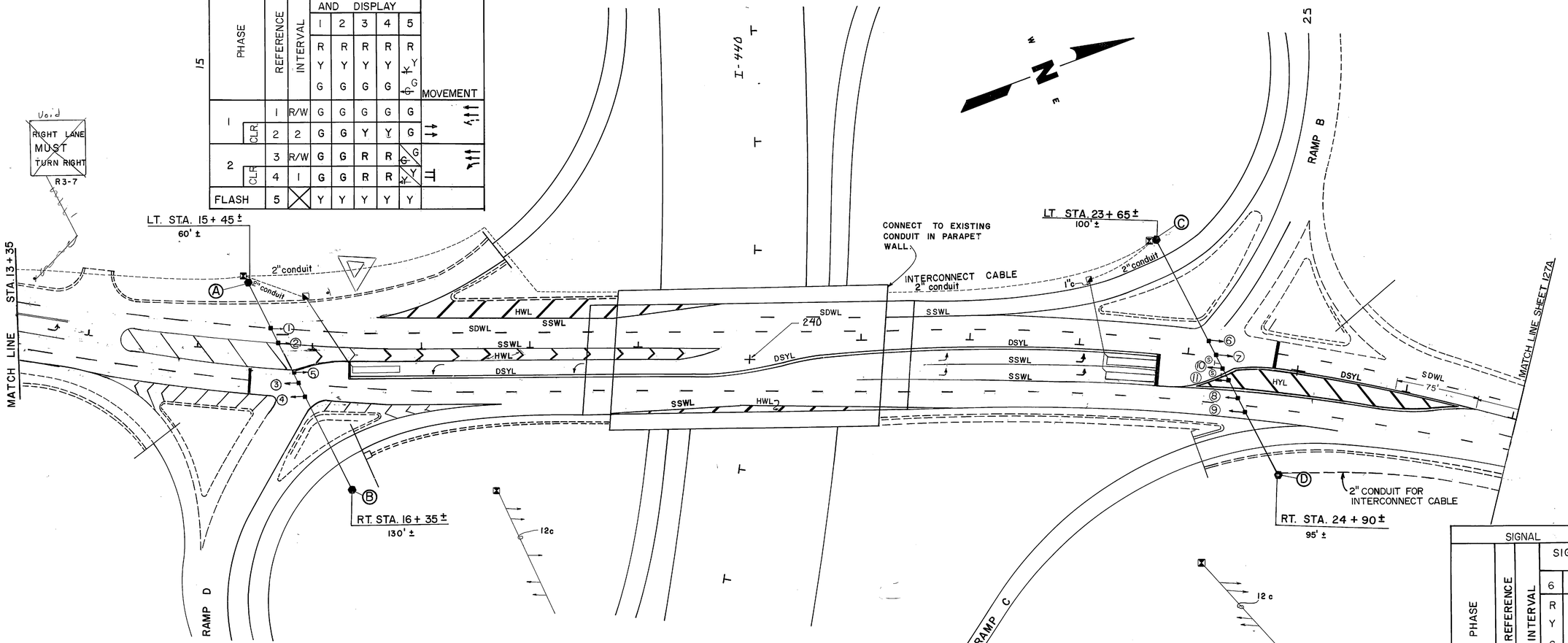
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	127

REV. 2-6-85: ADD INTERCONNECT CABLE FROM POLE "D" TO NEW CONTROLLER AT WOODLAWN.

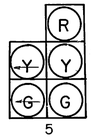
SIGNAL SEQUENCE CHART

PHASE		REFERENCE	INTERVAL	SIGNAL HEAD NO. AND DISPLAY 1	2	3	4	5	MOVEMENT
				R	R	R	R	R	
				Y	Y	Y	Y	Y	
				G	G	G	G	G	
1		1	R/W	G	G	G	G	G	
	CLR	2	2	G	G	Y	Y	G	
2		3	R/W	G	G	R	R	G	
	CLR	4	1	G	G	R	R	Y	
FLASH		5	X	Y	Y	Y	Y	Y	

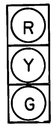


SIGNAL SEQUENCE CHART

PHASE		REFERENCE	INTERVAL	SIGNAL HEAD NO. AND DISPLAY 6	7	8	9	10	11	MOVEMENT
				R	R	R	R	R	R	
				Y	Y	Y	Y	Y	Y	
				G	G	G	G	G	G	
1		1	R/W	G	G	G	G	R	R	
	CLR	2	2	Y	Y	G	G	R	R	
2		3	R/W	R	R	G	G	G	G	
	CLR	4	1	R	R	G	G	Y	Y	
FLASH		5	X	Y	Y	Y	Y	Y	Y	


5


10, 11


1, 2, 3, 4, 6, 7, 8, 9, 12, 13, 14, 15, 16, 17, 18, 19

LEFT TURN SIGNAL
R 10-10 S

SIGNAL SEQUENCE CHART

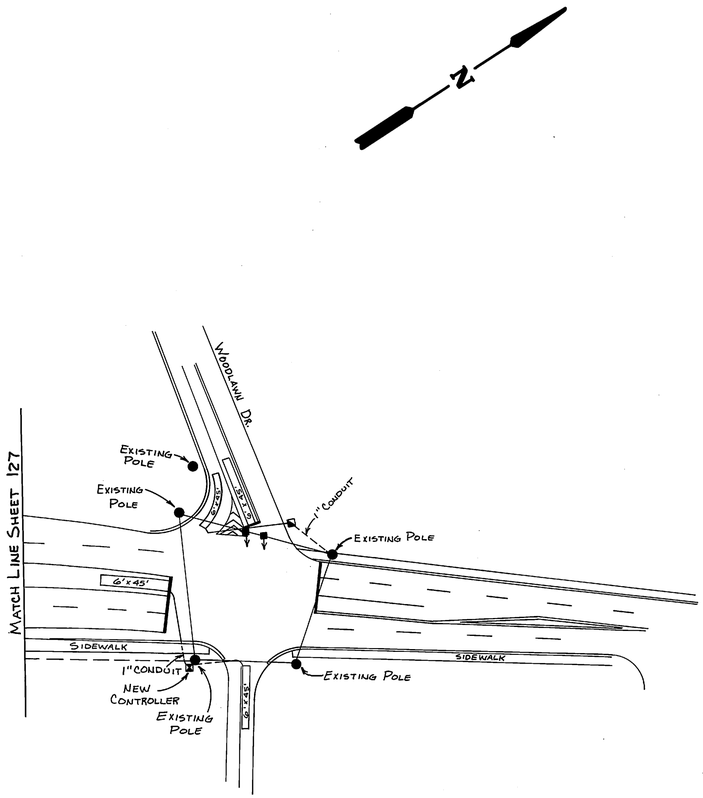
PHASE		REFERENCE	INTERVAL	SIGNAL HEAD NO. AND DISPLAY 12	13	14	15	16	17	18	19	MOVEMENT
				R	R	R	R	R	R	R	R	
				Y	Y	Y	Y	Y	Y	Y	Y	
				G	G	G	G	G	G	G	G	
1		1	R/W	G	G	G	G	R	R	R	R	
	CLR	2	2	Y	Y	Y	Y	R	R	R	R	
2		3	R/W	R	R	R	R	G	G	G	G	
	CLR	4	1	R	R	R	R	Y	Y	Y	Y	
FLASH		5	X	Y	Y	Y	Y	R	R	R	R	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNAL
PROPOSED LAYOUT
I-440 / HILLSBORO RD.

SCALE 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1985	I-440-4(59)206	127A



INSTALL 2" CONDUIT FROM POLE "D" TO NEW CONTROLLER AT WOODLAWN.

INSTALL INTERCONNECT CABLE FROM CONTROLLER ON POLE "C" TO NEW CONTROLLER AT WOODLAWN.

ADD TWO (2) SIGNAL-HEADS ON EXISTING POLES, AND SPAN AT WOODLAWN.

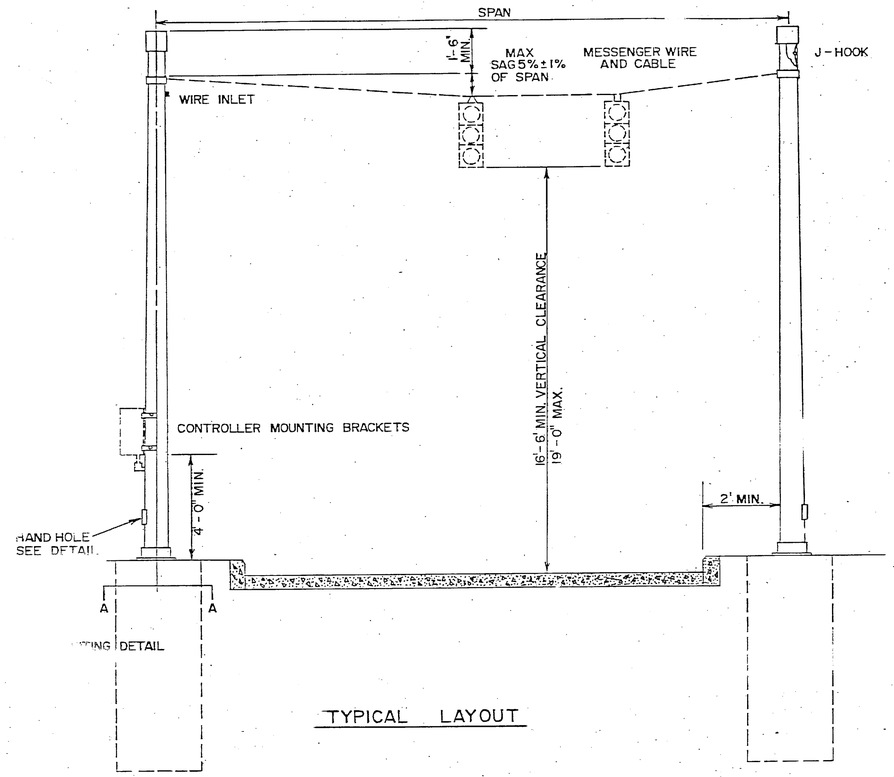
FURNISHING, INSTALLING LOOP WIRING ON WOODLAWN AND THE LEFT TURN LANE ON HILLSBORO ROAD; ALSO LOOPS TO BE INSTALLED IN PRIVATE DRIVE.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED
HILLSBORO RD.
AT
WOODLAWN DR.

BRUNING 44-142 80/42

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	128



TYPICAL LAYOUT

NOTES:

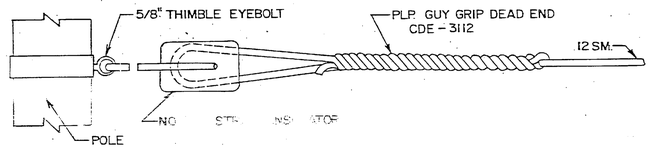
1. ALL STEEL STRAIN POLES SHALL CONFORM TO THE SPECIAL PROVISION REGARDING TRAFFIC SIGNALS.
2. STRAIN POLES SHALL BE DESIGNED ACCORDING TO ASSHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (LATEST EDITION).
3. THE CONTRACTOR SHALL FURNISH POLES DESIGNED FOR A WIND VELOCITY AS FOLLOWS:
   REGIONS 1,2 AND 3 - 80 M.P.H.
   REGION 4 - 70 M.P.H.
4. ANCHOR BOLTS— ANCHOR BOLTS SHALL BE DESIGNED BY THE POLE FABRICATOR. THEY SHALL BE CAPABLE OF RESISTING THE FULL BENDING MOMENT OF THE SHAFT AT ITS YIELD STRENGTH STRESS.
5. THE COST OF ALL FOOTING MATERIALS AND INSTALLATION SHALL BE INCLUDED IN THE PRICE BID FOR STEEL STRAIN POLES.
6. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND NOTES TO THE ENGINEER OF STRUCTURES FOR APPROVAL PRIOR TO FABRICATION.
7. ELECTRICAL SERVICE SHALL BE RUN INSIDE STEEL POLE.
8.

POLE	FOOTING DEPTH	MOMENT CAPACITY
A	10'-6"	130 000
B	10'-6"	130 000
C	11'-6"	173 000
D	11'-6"	173 000
E	8'-6"	65 000
F	8'-6"	65 000
G	8'-6"	65 000
H	8'-6"	65 000

ESTIMATED FOOTING QUANTITIES

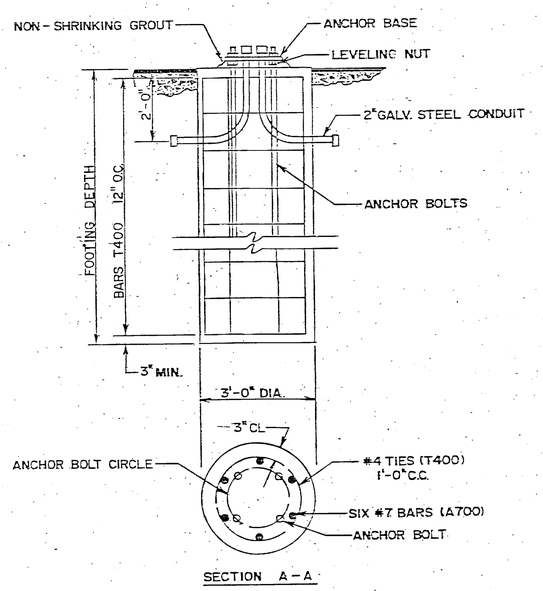
PER FOOTING

POLE	FOOTING DEPTH	T-400 BARS			A-700 BARS			CONCRETE (C.Y.)
		NO. BARS	LENGTH EACH BAR (FT.)	TOTAL WGT. (LBS.)	NO. BARS	LENGTH EACH BAR (FT.)	TOTAL WGT. (LBS.)	
E,F,G,H	8'-6"	9	8'-10"	54	6	8'-0"	99	2.3
C,D	10'-6"	11	8'-10"	65	6	10'-0"	123	3.0
A,B	11'-6"	12	8'-10"	71	6	11'-0"	135	3.2

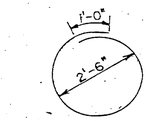


NOTE: ALL MESSENGER CABLE TO BE SEPARATED BY SIZE 502 STRAIN INSULATORS AT A MINIMUM OF 6' FROM POLES ON ALL SPANS.

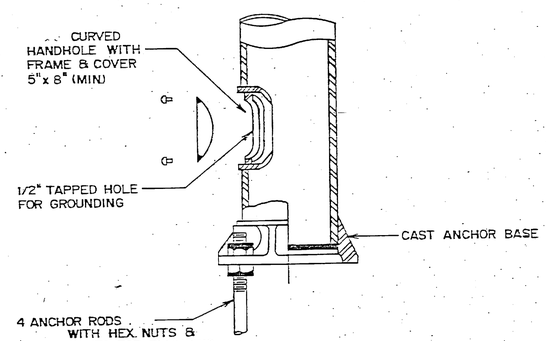
DETAIL OF SPAN ATTACHMENT TO POLES AND CONNECTION OF STRAIN INSULATORS TO MESSENGER CABLE.



FOOTING DETAIL



NOTE: T400 BARS SHALL LAP 1'-0"



HANDHOLE DETAIL

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

STRAIN POLE DETAILS FOR SPAN MOUNTED SIGNALS

NO SCALE

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)20G	129

SIGN NO.	LEGEND	SHEET NO.	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU.YD.	REIN. STEEL LBS.		
28	SEE REMARKS MILE D10-4	14G	12"	24"									WHITE (REF)	GREEN (REF)	0.080" SHEET ALUMINUM (ANODIZED)							SIGN NOS. 28 & 32 ARE NUMERAL NO. 1
32		14G																				
90		14B																				SIGN NOS. 90 & 91 ARE NUMERAL NO. 2
91		14B																				
136		149																				SIGN NOS. 136 & 137 ARE NUMERAL NO. 3
137		149																				
149		151																				SIGN NOS. 149 & 150 ARE NUMERAL NO. 4
150		151																				
156		153																				SIGN NOS. 156 & 157 ARE NUMERAL NO. 5
157		153																				
7	MILE 2 0 6 D10-6	143	12"	48"									WHITE (REF)	GREEN (REF)	0.080" SHEET ALUMINUM							
9		143																				
16	EAST M3-2 INTER 40	144	30"	15"							36"X36"		WHITE (REF)	BLUE (REF.)	0.080" SHEET ALUMINUM	2" ϕ @ 3.12#/FT. (GALVANIZED)	h=13'-0"	TYPE 4 D=1'-0"	0.12	26.4	6'-0"	
50	EAST M3-2 70S	14G	24" 30"	12" 24"									BLACK	WHITE (REF)	0.080" SHEET ALUMINUM	2" ϕ @ 3.12#/FT. (GALVANIZED)	h=11'-9"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
70	WEST M3-4 70S	147	24" 30"	12" 24"									BLACK	WHITE (REF)	0.080" SHEET ALUMINUM	2" ϕ @ 3.12#/FT. (GALVANIZED)	h=11'-9"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
117	NORTH M3-1 431	149	24" 30"	12" 24"									BLACK	WHITE (REF)	0.080" SHEET ALUMINUM	2" ϕ @ 3.12#/FT. (GALVANIZED)	h=11'-9"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
131	SOUTH M3-3 431	149	24" 30"	12" 24"									BLACK	WHITE (REF)	0.080" SHEET ALUMINUM	2" ϕ @ 3.12#/FT. (GALVANIZED)	h=11'-3"	TYPE 4 D=1'-0"	0.12	26.4	5'-0"	
23	EAST M3-2 INTER 440	145	30"	15"							45"X36"		WHITE (REF)	BLUE (REF)	0.100" SHEET ALUMINUM (ANODIZED)	2½" ϕ @ 3.98#/FT. (PAINTED)	h=12'-0"	TYPE 4 D=1'-0"	0.12	26.4	6'-0"	
88		148															h=12'-0"					
141		150															h=12'-0"					
93	WEST M3-4 INTER 440	148	30"	15"							45"X36"		WHITE (REF)	BLUE (REF)	0.100" SHEET ALUMINUM (ANODIZED)	2½" ϕ @ 3.98#/FT. (PAINTED)	h=12'-0"	TYPE 4 D=1'-0"	0.12	26.4	6'-0"	
148		151															h=12'-0"					
43	JCT M2-1 INTER 440	14G	21"	15"							30"X24"		WHITE (REF)	BLUE (REF)	0.080" SHEET ALUMINUM	2" ϕ @ 3.12#/FT. (GALVANIZED)	h=12'-0"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
79		147															h=12'-0"					
107		149															h=12'-0"					
130		149															h=13'-0"					
80	INTER 440 M5-1	147	21"	15"							30"X24"		WHITE (REF)	BLUE (REF)	0.080" SHEET ALUMINUM	2" ϕ @ 3.12#/FT. (GALVANIZED)	h=13'-0"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
35		14G										MG-1L					h=13'-3"				5'-0"	
51	EAST M3-2 70S	14G	24"	12"								MG-1L	BLACK	WHITE (REF)	0.080" SHEET ALUMINUM	2" ϕ @ 3.12#/FT. (GALVANIZED)	h=13'-3"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
52	AS REQD.	14G	30"	24"								M5-1L					h=13'-3"					
			21"	15"																		

DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SIGN SCHEDULE

N21176

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SIGN NO.	LEGEND	SHEET NO.	SIZE LENGTH	SIZE HEIGHT	SIZE RADIUS	SIZE BORDER WIDTH	COPY CAPITAL	COPY LOWER CASE	COPY NUMERAL	COPY SERIES	SHIELD	ARROW	SIGN FACE COPY	SIGN FACE BACKGROUND	SIGN FACE MATERIAL	STEEL DESIGN (BREAK-AWAY) SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU.YD.	REIN. STEEL LBS.	MINIMUM VERTICAL CLEARANCE	REMARKS
35	EAST M3-2 / INTER 440 / AS REQD.	146	24"	12"							30"X24"	MG-1L	WHITE (REF)	BLUE (REF)	0.080" SHEET ALUMINUM	2"ϕ @ 3.12# /FT. (GALVANIZED)	h=13'-3"	TYPE 4 D=1'-0"	0.12	26.4	5'-0"	
56		147										M5-1L					h=12'-9"					
69		147	21"	15"								MG-1L					h=12'-9"				7'-0"	
128A		149										MG-1L					h=12'-9"					
46	WEST M3-4 / INTER 440 / AS REQD.	146	24"	12"							30"X24"	M5-2R	WHITE (REF)	BLUE (REF)	0.080" SHEET ALUMINUM	2"ϕ @ 3.12#/FT. (GALVANIZED)	h=12'-9"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
47		146										MG-2R					h=12'-9"					
53		146										MG-1R					h=12'-9"					
53A		146	21"	15"								MG-1L					h=12'-9"					
117A		149										MG-1L					h=12'-9"					
45	M3-2 EAST INTER 440 / WEST M3-4 INTER 440 / MG-3 / MG-2	146	24" / 21"	12" / 15"							30"X24"		WHITE (REF)	BLUE (REF)	0.080" SHEET ALUMINUM	2"ϕ @ 3.12#/FT. (GALVANIZED)	h1=12'-9" h2=12'-9"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
54	M3-4 WEST INTER 440 / EAST M3-2 709 / M5-1 / MG-3	146	24" / 30" / 21"	12" / 24" / 15"							30"X24"		(INTERSTATE) WHITE (REF.) / (U. S. BLACK	ASSEMBLY) BLUE (REF) / ASSEMBLY) WHITE (REF)	0.080" SHEET ALUMINUM	2"ϕ@ 3.12#/FT. (GALVANIZED)	h1=12'-0" h2=13'-0"	TYPE 4 D=1'-0"	0.12	26.4	5'-0"	
108	M3-2 EAST INTER 440 / WEST M3-4 INTER 440 / MG-3 / M5-2	149	24" / 21"	12" / 15"							30"X24"		WHITE (REF)	BLUE (REF)	0.080" SHEET ALUMINUM	2"ϕ @ 3.12#/FT. (GALVANIZED)	h1=12'-9" h2=12'-9"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
129	M3-4 WEST INTER 440 / EAST M3-2 INTER 440 / MG-3 / M5-2	149	24" / 21"	12" / 15"							30"X24"		WHITE (REF)	BLUE (REF)	0.080" SHEET ALUMINUM	2"ϕ @ 3.12#/FT. (GALVANIZED)	h1=12'-9" h2=12'-9"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
4	W4-1	143	48"	48"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM	53 X 5.7 (GALVANIZED)	h1=15'-9" h2=15'-9"	TYPE 5 D=1'-3"	0.18	50.1	G'-0"	
31		146															h1=13'-9" h2=14'-3"					
81		147													0.100" SHEET ALUMINUM (ANODIZED)	53 X 5.7 (PAINTED)	h1=13'-9" h2=14'-3"					
~~153~~		~~152~~															h1=13'-9" h2=14'-3"					REMOVE SIGN FACE ONLY. SUPPORTS & FOOTINGS TO REMAIN IN PLACE.
10	W4-3	143	48"	48"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM	53 X 5.7 (GALVANIZED)	h1=15'-9" h2=15'-9"	TYPE 5 D=1'-3"	0.18	50.1	G'-0"	
19		144															h1=15'-9" h2=15'-9"					
13		143													0.100" SHEET ALUMINUM (ANODIZED)	53 X 5.7 (PAINTED)	h1=15'-9" h2=15'-9"					
64		147															h1=14'-9" h2=14'-9"					
82		147															h1=15'-9" h2=15'-9"					
100		149															h1=15'-3" h2=15'-3"					
135		149															h1=15'-9" h2=15'-9"					
151A		152															h1=15'-9" h2=15'-9"					
153		153															h1=15'-9" h2=15'-9"					
11	W4-2	143	48"	48"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM (ANODIZED)	53 X 5.7 (PAINTED)	h1=12'-3" h2=12'-3"	TYPE 5 D=1'-3"	0.18	50.1	G'-0"	
~~12~~		~~143~~															h1=14'-3" h2=14'-9"					
12A		143															h1=14'-3" h2=14'-9"					
151B		152															h1=14'-6" h2=14'-6"					

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)20G	130

REV. 10-28-86; SIGN NOS. 155, 155A & 155B DELETED. SIGN NOS. 53A, 100A, 117A & 128A ADDED.

REV. 12/29/86: DELETED SIGN NO. 100A FROM THIS SHEET AND ADDED TO SHEET NO. 138.

REV. 3-20-87; SIGN NO. 12 REMOVED & SIGN FACE REMOVED ON SIGN NO. 153.

DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SIGN SCHEDULE

N31176

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SIGN NO.	LEGEND	SHEET NO.	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU.YD.	REIN. STEEL LBS.		
48	PEDESTRIANS NON-MOTORIZED TRAFFIC MOTOR DRIVEN CYCLES PROHIBITED TN-21	146	36"	30"									BLACK	WHITE (REF)	0.100" SHEET ALUMINUM (ANODIZED)	2" ϕ @ 3.12#/FT. (PAINTED)	h=9'-0"	TYPE 4 D=1'-0"	0.12	26.4	5'-0"	
76		147															h=11'-0"					
77		147															h=11'-0"					
111		149															h=9'-0"					
133		149															h=11'-0"					
41	WRONG WAY R1-1a	146	36"	24"									WHITE (REF)	RED (REF)	0.100" SHEET ALUMINUM (ANODIZED)	2" ϕ @ 3.12#/FT. (PAINTED)	h=10'-0"	TYPE 4 D=1'-0"	0.12	26.4	5'-0"	
42		146															h=10'-0"					
57		147															h=10'-0"					
58		147															h=10'-0"					
65		147															h=10'-0"					
66		147															h=10'-0"					
73		147															h=10'-0"					
74		147															h=10'-0"					
103		149															h=10'-0"					
104		149															h=10'-0"					
113		149															h=10'-0"					
121		149															h=10'-0"					
122		149															h=10'-0"					
125		149															h=10'-0"					
38A	DO NOT ENTER R5-1	146	30"	30"									WHITE (REF)	WHITE (REF) RED (REF)	0.080" SHEET ALUMINUM (ANODIZED)	2" ϕ @ 3.12#/FT. (PAINTED)	h=11'-0"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
37		146																				SIGN #37 MOUNTED ON BACK OF SIGN #36
61		147																				SIGN #61 MOUNTED ON BACK OF SIGN #60
71		147																				SIGN #71 MOUNTED ON BACK OF SIGN #72
106		149																				SIGN #106 MOUNTED ON BACK OF SIGN #105A
118		149																				SIGN #118 MOUNTED ON BACK OF SIGN #119
123		149														2" ϕ @ 3.12#/FT. (PAINTED)	h=9'-6"	TYPE 4 D=1'-0"	0.12	26.4	5'-0"	
116		149															h=9'-6"					
38		146															h=11'-0"				7'-0"	
67		147															h=11'-0"					
68		147															h=11'-0"					
36	VIELD R1-2	146	36" X 36" X 36"										RED (REF)	WHITE (REF)	0.080" SHEET ALUMINUM (ANODIZED)	2" ϕ @ 3.12#/FT. (PAINTED)	h=11'-0"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
49		146															h=11'-0"					
60		147															h=11'-0"					
72		147															h=11'-0"					
109		149															h=9'-0"				5'-0"	
~~105A~~		~~149~~															h=11'-0"				7'-0"	SIGN FACE ONLY TO BE REMOVED SUPPORT TO STAY IN PLACE
119		149															h=10'-0"					
39	ONE WAY R6-1(L)	146	36"	12"									BLACK	WHITE (REF) BLACK	0.080" SHEET ALUMINUM (ANODIZED)							SIGN #39 MOUNTED UNDER SIGN #38
39A		146																				SIGN #39A MOUNTED UNDER SIGN #38A
40	ONE WAY R6-1(R)	146	36"	12"									BLACK	WHITE (REF) BLACK	0.080" SHEET ALUMINUM (ANODIZED)							SIGN #40 MOUNTED UNDER SIGN #38
40A		146																				SIGN #40A MOUNTED UNDER SIGN #38A
26	SPEED LIMIT 55 TN-7a	145	48"	60"									BLACK	WHITE (REF)	0.100" SHEET ALUMINUM (ANODIZED)	S 3 X 5.7 (PAINTED)	h1=12'-9" h2=13'-0"	TYPE 5 D=1'-3"	0.18	50.1	6'-0"	
94		148															h1=12'-3" h2=15'-0"					
144		150															h1=12'-9" h2=13'-0"					
145		150															h1=12'-9" h2=13'-0"					
62	RAMP 25 M.P.H. W13-3	147	36"	48"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM (ANODIZED)	S 3 X 5.7 (PAINTED)	h1=13'-3" h2=13'-6"	TYPE 5 D=1'-3"	0.18	50.1	6'-0"	
114		149															h1=12'-3" h2=12'-6"					
127		149															h1=11'-9" h2=12'-0"					
33	EXIT SEE REMARKS 2	146	6'-0"	5'-0"	6"	2"	12"		18"	"E" "E"		TYPE "F" @ 45°	WHITE (REF)	GREEN (REF)	5-12" ALUM. EXTRUSIONS (ANODIZED)	S 5 X 10 (PAINTED)	h1=14'-3" h2=13'-9"	TYPE 5 D=1'-3"	0.18	50.1	7'-0"	SIGN NOS. 33 & 80 ARE NUMERAL NO. 1
80		147															h1=15'-3" h2=15'-3"					
55		146															h1=14'-3" h2=13'-9"					SIGN NO. 55 IS NUMERAL NO. 1A

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(53)20G	131

REV. 12/29/86: DELETED SIGNS NO. 124 AND 128. ADDED SIGN NO. 105A. ADJUSTED POST ACCORDINGLY FOR SIGN NO'S 106 & 123.

REV. 3-20-87; SIGN FACE REMOVED ON SIGN NO. 105A.

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ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SIGN NO.	LEGEND	SHEET NO.	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU.YD.	REIN. STEEL LBS.		
98	EXIT 3 ↗	148	4'-0"	6'-0"	9"	2"	10"		15"	"E"		TYPE "F" @ 45°	WHITE (REF)	GREEN (REF)	0.125" SHEET ALUMINUM (ANODIZED)							FOR SUPPORT DETAIL SEE SH. NO. 141
139		149								"E"												
30	Entering Four-Forty Pkwy	146	10'-0"	3'-0"	3"	1"	8"	6"		"E"			WHITE (REF)	BROWN (REF)	3-12" ALUM. EXTRUSIONS (ANODIZED)	S3X5.7 (PAINTED)	h1 = 10'-6" h2 = 9'-6"	TYPE 5 D = 1'-3"	0.18	50.1	7'-0"	
63		147					8"	6"		"E"							h1 = 13'-8" h2 = 13'-3"					
84		147					8"	6"		"E"							h1 = 10'-6" h2 = 9'-6"					
99		149															h1 = 10'-6" h2 = 9'-6"					
134		149														S4X7.7 (PAINTED)	h1 = 15'-3" h2 = 12'-3"					
5	EAST 40 Nashville ↓↓↓	143	28'-0"	9'-0"	12"	2"	12"			"E"	36"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS							OVERHEAD STRUCTURE
	EXIT 206 EAST 40 Knoxville ↓		11'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	45"X36"				2-12" ALUM. EXTRUSIONS							
			12'-0"	9'-0"	12"	2"	16"	12"		"E"		TYPE "H" @ 45°	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS							
15	EXIT 206 EAST 40 Knoxville ↓↓	144	11'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS							OVERHEAD STRUCTURE
			12'-0"	9'-0"	12"	2"	12"			"E"					9-12" ALUM. EXTRUSIONS							
	WEST 40 Memphis ↓↓↓		28'-0"	9'-0"	12"	2"	16"	12"		"E"	36"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS							
158	WEST 40 Memphis ↓	153	12'-0"	9'-0"	12"	2"	12" 16"	12"		"E" "E"	36"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							EXISTING OVERHEAD STRUCTURE SEE DWG. NO. M-9G-107
21	WEST 40 Memphis ↓↓	145	16'-0"	9'-0"	12"	2"	12" 16"	12"		"E" "E"	36"X36"	TYPE "H" @ 45°	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							OVERHEAD STRUCTURE
	EAST 40 Nashville ↓↓		16'-0"	9'-0"	12"	2"	12" 16"	12"		"E" "E"	36"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							
22	BOTTOM 3 PANELS TO BE YELLOW (REF) W/BLACK COPY — EXITS 1-1A; 109 West End Ave Murphy Rd 3/4 MILE; EXIT ↓ ONLY — NO BORDER REQD.	145	11'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED) 14-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE
			17'-0"	14'-0"	12"	2"	16" 16" 10" 12"	12" 12"	10"/10"	"E" "E" "E" "E"												
96	BOTTOM 3 PANELS TO BE YELLOW (REF) W/BLACK COPY — EXIT 1; 109 West End Ave 1/2 MILE; EXIT ↓ ONLY — NO BORDER REQD.	148	8'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED) 12-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
			17'-0"	12'-0"	12"	2"	16" 10" 12"	12"	10"/10"	"E" "E" "E"												

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)206	132

REV. 10-21-86; DOWN ARROWS SKEWED @ 45° ON SIGN NOS. 5 AND 21.

REV. 3-20-87; ONE DOWN ARROW REMOVED AND ONE DOWN ARROW RESPACED ON SIGN NO. 5.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)20G	133

REV. 4-15-86: ANODIZED PANELS ADDED TO SIGN NO. 59.

REV. 12/29/86: CHANGED ARROW ON SIGN NO. 83 AND CHANGED DIRECTION ON SIGN NO. 75.

SIGN NO.	LEGEND	SHEET NO.	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU.YD.	REIN. STEEL LBS.		
25	BOTTOM 3 PANELS TO BE YELLOW (REF) W/BLACK COPY EXIT 1 105 EAST West End Ave Murphy Rd EXIT ONLY NO BORDER REQD.	145	8'-0"	2'-0"	6" TOP ONLY	2"	10" 12"		15"	"E" "E"	45"X36"		WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE
27A		146	17'-0"	12'-0"	12"	2"	16" 16" 12"	12" 12"		"E" "E" "E"		TYPE "H"			12-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
87	BOTTOM 3 PANELS TO BE YELLOW (REF) W/BLACK COPY EXIT 1 105 West End Ave EXIT ONLY NO BORDER REQD.	147	8'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	45"X36"		WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
89		148	17'-0"	10'-0"	12"	2"	16" 12"	12"		"E" "E"					10-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
27	EXIT 1A 105 WEST West End Ave NEXT RIGHT	146	10'-0" 17'-0"	2'-0" 9'-0"	6" TOP ONLY 12"	2" 2"	10" 12" 16" 12"	 12" 	15"	"E" "E" "E" "E"	45"X36"		WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED) 9-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
34	EXIT 1A 105 WEST West End Ave	146	10'-0" 20'-0"	2'-0" 7'-0"	6" TOP ONLY 9"	2" 2"	10" 12" 16"	 12"	15"	"E" "E" "E"	45"X36"	TYPE "G" @ 45°	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED) 7-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
44	EAST 40 Knoxville LEFT LANE WEST 40 Memphis NEXT-RIGHT	146	12'-0" 12'-0"	9'-0" 9'-0"	12" 12"	2" 2"	12" 16" 12" 12" 16" 12"	 12" 12" 		"E" "E" "E" "E" "E" "E"	45"X36" 45"X36"		WHITE (REF) WHITE (REF)	GREEN (REF) GREEN (REF)	9-12" ALUM. EXTRUSIONS 9-12" ALUM. EXTRUSIONS							CANTILEVER STRUCTURE
59	EAST 40 Knox-ville NEXT-LEFT	147	12'-0"	9'-0"	12"	2"	12" 16" 12"	 12" 		"E" "E" "E"	45"X36"		WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE
75	WEST EAST	147	12'-0" 12'-0"	7'-0" 7'-0"	9" 9"	2" 2"	12" 12"			"E" "E"	45"X36" 45"X36"	TYPE "H" TYPE "H"	WHITE (REF) WHITE (REF)	GREEN (REF) GREEN (REF)	7-12" ALUM. EXTRUSIONS (ANODIZED) 7-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE
78	40 Memphis Knoxville	147	15'-0"	9'-0"	12"	2"	16" 16"	12" 12"		"E" "E"	45"X36"	TYPE "G" @ 45°	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE
83	WEST 40 Memphis EAST 40 Knoxville	147	12'-0" 12'-0"	9'-0" 9'-0"	12" 12"	2" 2"	12" 16" 12" 16"	 12" 12"		"E" "E" "E" "E"	45"X36" 45"X36"	TYPE "H" TYPE "H"	WHITE (REF) WHITE (REF)	GREEN (REF) GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED) 9-12" ALUM. EXTRUSIONS (ANODIZED)							OVERHEAD STRUCTURE
102	EAST 40 Knoxville	149	15'-0"	7'-0"	9"	2"	12" 16"	 12"		"E" "E"	45"X36"	TYPE "G" @ 45°	WHITE (REF)	GREEN (REF)	7-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE

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TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)206	134

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SIGN NO.	LEGEND	SHEET NO.	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU.YD.	REIN. STEEL LBS.		
110	I-440 EAST Knoxville LEFT LANE	149	1° 12'-0"	3'-0"	12"	2"	12" 10"	12"		"E" "E" "E"	45"X36"		WHITE (REF)	GREEN(REF)	3-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE
	I-440 WEST Memphis		14'-0"	7'-0"	9"	2"	12" 10"	12"		"E" "E"	45"X36"	TYPE "G" @ 45°	WHITE (REF)	GREEN (REF)	7-12" ALUM. EXTRUSIONS (ANODIZED)							
120	I-440 WEST Memphis	149	14'-0"	7'-0"	9"	2"	12" 10"	12"		"E" "E"	45"X36"	TYPE "G" @ 45°	WHITE (REF)	GREEN (REF)	7-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE
132	I-440 WEST Memphis LEFT LANE	149	18'-0"	9'-0"	12"	2"	12" 10"	12"		"E" "E" "E"	45"X36"		WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE
	I-440 EAST Knoxville		15'-0"	7'-0"	9"	2"	12" 10"	12"		"E" "E"	45"X36"	TYPE "G" @45°	WHITE (REF)	GREEN (REF)	7-12" ALUM. EXTRUSIONS (ANODIZED)							
138	431 SOUTH Hillsboro Pike	149	17'-0"	9'-0"	12"	2"	12" 10"	12"		"E" "E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							OVERHEAD STRUCTURE
	431 NORTH 21st Ave		12'-0"	9'-0"	12"	2"	12" 10"	12"	10"	"E" "E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							
101	431 NORTH 21st Ave	149	12'-0"	9'-0"	12"	2"	12" 10"	12"	10"	"E" "E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							OVERHEAD STRUCTURE
	431 SOUTH Hillsboro Pike		17'-0"	9'-0"	12"	2"	12" 10"	12"		"E" "E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							
85	BOTTOM 3 PANELS TO BE YELLOW (REF) W/ BLACK COPY EXIT 3 431 21st Ave Hillsboro Pike 3/4 MILE EXIT ONLY NO BORDER REQD.	147	9'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
147		151	17'-0"	14'-0"	12"	2"	16" 16" 10" 12"	12" 12"	16" 10"/10"	"E" "E" "E" "E"					14-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
97	BOTTOM 3 PANELS TO BE YELLOW (REF) W/ BLACK COPY EXIT 3 431 21st Ave Hillsboro Pike EXIT ONLY NO BORDER REQD.	148	9'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	45"X36"	TYPE "G" @ 45°	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE
140		150	20'-0"	12'-0"	12"	2"	16" 16" 12"	12" 12"	16"	"E" "E" "E"					12-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE
95	BOTTOM 3 PANELS TO BE YELLOW (REF) W/ BLACK COPY EXIT 3 431 21st Ave Hillsboro Pike EXIT ONLY NO BORDER REQD.	148	9'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
143		150	17'-0"	12'-0"	12"	2"	16" 16" 12"	12" 12"	16"	"E" "E" "E"					12-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT

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SIGN NO.	LEGEND	SHEET NO.	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU.YD.	REIN. STEEL LBS.		
152	INTER 65 NORTH Nashville	152	12'-0"	9'-0"	12"	2"	12"			"E"	36"X36"	TYPE "H" @ 45°	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							OVERHEAD STRUCTURE
							10"	12"		"E"												
	INTER 65 SOUTH Birmingham		15'-0"	9'-0"	12"	2"	12"			"E"	36"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							
							10"	12"		"E"												
151	INTER 440 EAST Knoxville	152	10'-0"	9'-0"	12"	2"	12"			"E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							OVERHEAD STRUCTURE
							10"	12"		"E"												
	EXIT 5 INTER 65 NORTH Nashville		8'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	36"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED)							
			12'-0"	9'-0"	12"	2"	12"			"E"					9-12" ALUM. EXTRUSIONS (ANODIZED)							
							10"	12"		"E"												
	EXIT 5 INTER 65 SOUTH Birmingham		8'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	36"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED)							
			15'-0"	9'-0"	12"	2"	12"			"E"					9-12" ALUM. EXTRUSIONS (ANODIZED)							
							10"	12"		"E"												
154	INTER 440 WEST Memphis	153	10'-0"	9'-0"	12"	2"	12"			"E"	45"X36"	TYPE "H" @ 45°	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS							EXISTING OVERHEAD STRUCTURE SEE DWG. NO. M-9G-106
							10"	12"		"E"												
175	EXITS 213A-B INTER 24 INTER 440 Nashville Chattanooga Memphis 1 MILE	157	10'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	INTER 24 36"X36"		WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS	USE EXISTING SUPPORTS						USE AUXILIARY SUPPORTS. SEE DETAIL SHEET NO. 2W
			10'-0"	13'-0"	12"	2"	10"	12"		"E"					13-12" ALUM. EXTRUSIONS							
							10"	12"		"E"	INTER 440 45"X36"											
							10"	12"	15"	"E"												
169	EXIT 213A EAST INTER 24 WEST INTER 440 Chattanooga	157	12'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	INTER 24 36"X36"		WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS							EXISTING OVERHEAD STRUCTURE SEE SH. NO. 188
							12"			"E"												
			10'-0"	11'-0"	12"	2"	10"	12"		"E"	INTER 440 45"X36"	TYPE "H"			11-12" ALUM. EXTRUSIONS							
171	EXIT 213A EAST INTER 24 WEST INTER 440 Chattanooga Memphis	157	12'-0"	2'-0"	6" TOP ONLY	2"	10"		15"	"E"	INTER 24 36"X36"		WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS							EXISTING OVERHEAD STRUCTURE SEE SHT. NO. 188
							12"			"E"												
			10'-0"	13'-0"	12"	2"	10"	12"		"E"	INTER 440 45"X36"	TYPE "H"			13-12" ALUM. EXTRUSIONS							
							10"	12"		"E"												
176	INTER 440 Memphis PROP. US 41 SOUTH EXIST. Murfreesboro Rd NEXT RIGHT	158	10'-0"	5'-0"	12" TOP ONLY	2"	10"	12"		"E"	45"X36"		WHITE (REF)	GREEN (REF)	5-12" ALUM. EXTRUSIONS							EXISTING CANTILEVER STRUCTURE SEE SHT. NO. 188
			10'-0"	8'-0"																		
182	INTER 440 WEST Memphis	159	12'-0"	9'-0"	12"	2"	12"			"E"	45"X36"	TYPE "H" @ 45°	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS							EXISTING OVERHEAD STRUCTURE SEE DWG. NO. M-9G-G9
							10"	12"		"E"												

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)20G	135

REV. 2-20-86: SIGN NO. 171 DELETED.

REV. 8-1-86; MESSAGE & SIGN SIZE CHANGED ON SIGN NO. 169 AND SIGN NO. 175 DELETED.

REV. 10-28-86; DOWN ARROW SKEWED @ 45° ON SIGN NOS. 152 AND 154.

REV. 3-20-87; ONE DOWN ARROW REMOVED AND ONE DOWN ARROW RESPACED ON SIGN NO. 154.

DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SIGN SCHEDULE

N31176

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)206	13G

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SIGN NO.	LEGEND	SHEET NO.	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU.YD.	REIN. STEEL LBS.		
165	INTER 440 WEST Memphis	15G	14'-0"	7'-0"			16"	12"		"E"			WHITE (REF)									EXISTING CANTILEVER STRUCTURE THE MESSAGE "Memphis" TO BE ADDED
166		15G																				EXISTING CANTILEVER STRUCTURE THE MESSAGE "Memphis" TO BE ADDED
167	INTER 440 WEST Memphis NEXT RIGHT	15G	12'-0"	9'-0"			16"	12"		"E"			WHITE (REF)									EXISTING CANTILEVER STRUCTURE THE MESSAGE "Memphis" TO BE ADDED
191	EXIT 53 INTER 440 WEST Memphis 1½ MILES	16I	9'-0" 12'-0"	2'-0" 3'-0"	6" TOP ONLY 12"	2" 2"	10" 12" 16" 10"	12"	15" 10"/10" 15"	"E" "E" "E" "E" "E"	45"X36"		WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS 9-12" ALUM. EXTRUSIONS							EXISTING OVERHEAD STRUCTURE SEE DWG. NO. M-9G-75
177	EXIT 53 INTER 440 WEST Memphis ½ MILE	15B	9'-0" 12'-0"	2'-0" 3'-0"	6" TOP ONLY 12"	2" 2"	10" 12" 16" 10"	12"	15" 10"/10"	"E" "E" "E" "E"	45"X36"		WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS 9-12" ALUM. EXTRUSIONS							EXISTING OVERHEAD STRUCTURE SEE DWG. NO. M-9G-G5
189		16I																				BRIDGE MOUNT
179	EXIT 53 INTER 440 WEST Memphis NEXT RIGHT	15B	9'-0" 12'-0"	2'-0" 3'-0"	6" TOP ONLY 12"	2" 2"	10" 12" 16" 12"	12"	15"	"E" "E" "E" "E"	45"X36"		WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS 9-12" ALUM. EXTRUSIONS							EXISTING CANTILEVER STRUCTURE SEE DWG. NO. M-9G-7G
188		16O																				EXISTING OVERHEAD STRUCTURE SEE DWG. NO. M-9G-73
183	EXIT 53 INTER 440 WEST Memphis	15B	9'-0" 14'-0"	2'-0" 7'-0"	6" TOP ONLY 9"	2" 2"	10" 12" 16"	12"	15"	"E" "E" "E"	45"X36"	TYPE "G" @ 45°	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS 7-12" ALUM. EXTRUSIONS							EXISTING OVERHEAD STRUCTURE SEE DWG. NO. M-9G-112
185		16O																				EXISTING OVERHEAD STRUCTURE SEE DWG. NO. M-9G-71
195	EXIT 80 INTER 440 WEST Memphis	16H	9'-0"	2'-0"	6" TOP ONLY	2"	10" 12"		15"	"E" "E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS 5-12" ALUM. EXTRUSIONS							EXISTING OVERHEAD STRUCTURE SEE DWGS. NOS M-9G-114 & M-9G-11G
196		16H	12'-0"	3'-0"	12"	2"	16"	12"		"E"												EXISTING OVERHEAD STRUCTURE SEE DWGS. NO. M-9G-89 & M-9G-11G
197		16G																				EXISTING OVERHEAD STRUCTURE SEE DWG. NO. M-9G-11G
194	LANE ENDS 1000 FT	16H	12'-0"	7'-0"	9"	2"	12" 12"		12"	"E" "E"		TYPE "H"	BLACK	YELLOW (REF)	7-12" ALUM. EXTRUSIONS							CANTILEVER STRUCTURE
14	Entering Four-Forty Pkwy	14J	17'-0"	5'-0"	9"	2"	13.33" 13.33"	10" 10"		"E" "E"			WHITE (REF)	BROWN (REF)	5-12" ALUM. EXTRUSIONS (ANODIZED)							CANTILEVER STRUCTURE
152A		15Z																				CANTILEVER STRUCTURE
160	INTER 440 WEST Memphis	15A	16'-0"	9'-0"	12"	2"	12" 16"	12"		"E" "E"	45"X36"	TYPE "H"	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							EXISTING OVERHEAD STRUCTURE SEE DWG. NO. M-9G-109
20	EXIT 206 EAST INTER 440 Knoxville 3/4 MILE WEST INTER 40 Memphis 3/4 MILE	14A	11'-0" 29'-0"	2'-0" 10'-0"	6" TOP ONLY 12"	2" 2"	10" 12" 16" 10"	12"	15" 10" / 10"	"E" "E" "E" "E"	INTER 40 36"X36" INTER 440 45"X36"	SEE SH. NO. 13J FOR ARROW DETAIL	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS 10-12" ALUM. EXTRUSIONS							OVERHEAD STRUCTURE
17	EXIT 206 EAST INTER 440 Knoxville WEST INTER 40 Memphis	14A	11'-0" 29'-0"	2'-0" 9'-0"	6" TOP ONLY 12"	2" 2"	10" 12" 16"	12"	15"	"E" "E" "E"	INTER 40 36"X36" INTER 440 45"X36"	SEE SH. NO. 13J FOR ARROW DETAIL	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS 9-12" ALUM. EXTRUSIONS							OVERHEAD STRUCTURE

DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SIGN SCHEDULE

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)206	137

REV. 8-1-86; MESSAGE AND SIGN SIZE CHANGED ON SIGN NO. 173.

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SIGN NO.	LEGEND	SHEET NO.	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU.YD.	REIN. STEEL LBS.		
29	WEST I-40 EAST I-40 Memphis 3/4 MILE Nashville 3/4 MILE	146	30'-0"	10'-0"	12"	2"	12" 16" 10"	12"	10"/10"	"E" "E" "E"	36"X36"	SEE SH. NO. 139 FOR ARROW DETAIL	WHITE (REF.)	GREEN (REF)	10-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
24	WEST I-40 EAST I-40 Memphis Nashville	145	30'-0"	9'-0"	12"	2"	12" 16"	12"		"E" "E"	36"X36"	SEE SH. NO. 139 FOR ARROW DETAIL	WHITE (REF)	GREEN (REF)	9-12" ALUM. EXTRUSIONS (ANODIZED)							OVERHEAD STRUCTURE
142	EXIT 5 EAST I-40 I-440 I-65 Knoxville 1 MILE Nashville Birmingham 1 MILE	150	8'-0" 34'-0"	2'-0" 12'-0"	6" TOP ONLY 12"	2" 2"	10" 12" 16" 16" 16" 16" 16" 10"	12" 12" 12" 12"	15" 15"	"E" "E" "E" "E" "E" "E" "E"	I-65 36"X36" I-440 45"X36"	SEE SH. NO. 139 FOR ARROW DETAIL	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED) 12-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
146	EXIT 5 EAST I-440 I-65 Knoxville Nashville Birmingham	151	8'-0" 34'-0"	2'-0" 10'-0"	6" TOP ONLY 12"	2" 2"	10" 12" 16" 16" 16"	12" 12" 12" 12"	15"	"E" "E" "E" "E" "E"	I-65 36"X36" I-440 45"X36"	SEE SH. NO. 139 FOR ARROW DETAIL	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED) 10-12" ALUM. EXTRUSIONS (ANODIZED)							BRIDGE MOUNT
143	EXIT 5 WEST I-440 I-65 Memphis 3/4 MILE Nashville Birmingham 3/4 MILE	155	8'-0" 34'-0"	2'-0" 12'-0"	6" TOP ONLY 12"	2" 2"	10" 12" 16" 16" 16"	12" 12" 12" 12"	15" 15"/10"	"E" "E" "E" "E" "E"	I-65 36"X36" I-440 45"X36"	SEE SH. NO. 139 FOR ARROW DETAIL	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED) 12-12" ALUM. EXTRUSIONS (ANODIZED)							EXISTING BRIDGE MOUNT SEE DWG. NO. M-9G-121
141	EXIT 5 WEST I-440 I-65 Memphis Nashville Birmingham	155	8'-0" 34'-0"	2'-0" 10'-0"	6" TOP ONLY 12"	2" 2"	10" 12" 16" 16" 16"	12" 12" 12" 12"	15" 15"/10"	"E" "E" "E" "E" "E"	I-65 36"X36" I-440 45"X36"	SEE SH. NO. 139 FOR ARROW DETAIL	WHITE (REF)	GREEN (REF)	2-12" ALUM. EXTRUSIONS (ANODIZED) 10-12" ALUM. EXTRUSIONS (ANODIZED)							EXISTING OVERHEAD STRUCTURE SEE DWG. NO. M-9G-110
173	EXIT 213A EXIT 213B EAST I-24 I-440 WEST I-24 WEST I-40 Chattanooga 3/4 MILE Nashville 3/4 MILE	157	(BOTH PANELS) 12'-0" 34'-0"	EXIT 2'-0" 11'-0"	6" TOP ONLY 12"	2" 2"	10" 12" 16" 10"	12"	15" 10"/10"	"E" "E" "E" "E"	I-24 I-40 36"X36" I-440 45"X36"	SEE SH. NO. 139 FOR ARROW DETAIL	WHITE (REF)	GREEN (REF)	4-12" ALUM. EXTRUSIONS 11-12" ALUM. EXTRUSIONS							EXISTING BRIDGE MOUNT SEE SHT. NO. 188
192	EXIT 80 NORTH I-65 Nashville 1½ MILES Memphis Knoxville 1½ MILES	163	30'-0"	12'-0"			16"	12"		"E"			WHITE (REF)									EXISTING OVERHEAD STRUCTURE THE MESSAGE "Memphis" TO BE ADDED.
193	EXIT 80 NORTH I-65 Nashville Memphis Knoxville	163	30'-0"	10'-0"			16"	12"		"E"			WHITE (REF)									EXISTING OVERHEAD STRUCTURE THE MESSAGE "Memphis" TO BE ADDED.
199	EXIT 80 SOUTH I-65 Birmingham 1¼ MILES Memphis Knoxville 1¼ MILES	166	33'-0"	12'-0"			16"	12"		"E"			WHITE (REF)									EXISTING BRIDGE MOUNT THE MESSAGE "Memphis" TO BE ADDED.

DEPARTMENT OF TRANSPORTATION
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SIGN SCHEDULE

DST N31176

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SIGN NO.	LEGEND	SHEET NO.	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
			LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU.YD.	REIN. STEEL LBS.		
19B	EXIT 80 / SOUTH I-65 Birmingham / I-40 Memphis Knoxville	166	33'-0"	10'-0"			16"	12"		"E"			WHITE (REF)									EXISTING OVERHEAD STRUCTURE THE MESSAGE "Memphis" TO BE ADDED
153A	W9-1 RIGHT LANE ENDS	152	48"	48"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM (ANODIZED)	S 3 X 5.7 (PAINTED)	h1 = 14'-9" h2 = 15'-0"	TYPE 5 D = 1'-3"	0.18	50.1	6'-0"	
76A	W4-2	147	36"	36"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM (ANODIZED)	2½"ϕ @ 3.98#/FT. (PAINTED)	h = 12'-9"	TYPE 4 D = 1'-0"	0.12	26.4	5'-0"	
76B		147															h = 12'-9"					
100A		149															h = 12'-9"					
100B		149															h = 12'-9"					
133A		149															h = 12'-9"					
133B		149															h = 12'-9"					
151C	RIGHT LANE ENDS	152	18"	30"	3"	1"	5" 5"			"C" "C"			BLACK	YELLOW (REF)	0.080" SHEET ALUMINUM (ANODIZED)	2"ϕ @ 3.12#/FT. (PAINTED)	h = 8'-0"	TYPE 4 D = 1'-0"	0.12	26.4	6'-0"	TO BE MOUNTED BETWEEN CONC. BARRIER WALL AND NOISE WALL
153B		152					5"			"C"							h = 8'-0"					TO BE MOUNTED BETWEEN CONC. BARRIER WALL AND NOISE WALL
11A	W4-2	143	48"	48"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM (ANODIZED)	S 3 X 5.7 (PAINTED)	h1 = 14'-3" h2 = 13'-9"	TYPE 5 D = 1'-3"	0.18	50.1	6'-0"	
12B		143															h1 = 14'-3" h2 = 13'-9"					
~~12C~~		~~143~~															~~h1 = 14'-3"~~ ~~h2 = 13'-9"~~					
5A	W1-8(R)	143	30"	36"									BLACK	YELLOW (REF)	0.080" SHEET ALUMINUM (ANODIZED)	2"ϕ @ 3.12#/FT. (PAINTED)	h = 11'-6"	TYPE 4 D = 1'-0"	0.12	26.4	5'-0"	TO BE INSTALLED 5' FROM OUTSIDE EDGE OF SHOULDER
5B		143															h = 11'-6"					
5C		143															h = 11'-6"					
13A	W1-8(L)	143	30"	36"									BLACK	YELLOW (REF)	0.080" SHEET ALUMINUM (ANODIZED)	2"ϕ @ 3.12#/FT. (PAINTED)	h = 11'-6"	TYPE 4 D = 1'-0"	0.12	26.4	5'-0"	TO BE INSTALLED 5' FROM OUTSIDE EDGE OF SHOULDER
13B		143															h = 11'-6"					
13C		143															h = 11'-6"					
13D		143															h = 11'-6"					
4A	EXIT 45 MPH W13-2	143	48"	60"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM (ANODIZED)	S 4 X 7.7 (PAINTED)	h1 = 14'-9" h2 = 15'-3"	TYPE 5 D = 1'-3"	0.18	50.1	6'-0"	
51B	TO M4-5 EAST M3-2 I-40 440	146	24" 24"	12" 12"							30"X24"	MG-1R M5-1R	WHITE (REF)	BLUE (REF)	0.080" SHEET ALUMINUM	2½"ϕ @ 3.98#/FT. (GALVANIZED)	h = 15'-0"	TYPE 4 D = 1'-0"	0.12	26.4	7'-0"	
52A	2 ARS REQD.	146	21"	15"													h = 15'-0"					
70A	R4-7	147	24"	30"									BLACK	WHITE (REF)	0.080" SHEET ALUMINUM	2"ϕ @ 3.12#/FT. (GALVANIZED)	h = 11'-0"	TYPE 4 D = 1'-0"	0.12	26.4	7'-0"	
71A		147															h = 11'-0"					
154B	W4-3	153	48"	48"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM (ANODIZED)	S 3 X 5.7 (PAINTED)	h1 = 13'-3" h2 = 13'-9"	TYPE 5 D = 1'-3"	0.18	50.1	6'-0"	
154A	W4-3	153	48"	48"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM (ANODIZED)	S 3 X 5.7 (PAINTED)	h1 = 13'-3" h2 = 13'-9"	TYPE 5 D = 1'-3"	0.18	50.1	6'-0"	
154C	RAMP 45 MPH W13-3	153	48"	60"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM	S 4 X 7.7 (GALVANIZED)	h1 = 16'-6" h2 = 17'-9"	TYPE 5 D = 1'-3"	0.18	50.1	6'-0"	
154D		153															h1 = 16'-6" h2 = 17'-9"					
21A	RAMP 45 MPH W13-3	145	48"	60"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM (ANODIZED)	S 4 X 7.7 (PAINTED)	h1 = 16'-3" h2 = 16'-9"	TYPE 5 D = 1'-3"	0.18	50.1	6'-0"	
152A		152															h1 = 18'-9" h2 = 19'-6"					
158A		153															h1 = 16'-3" h2 = 16'-9"					
158B		153															h1 = 16'-3" h2 = 16'-9"					
160A		154														S 3 X 5.7 (PAINTED)	h1 = 13'-3" h2 = 13'-3"					
157A	W1-2L	153	48"	48"									BLACK	YELLOW (REF)	0.100" SHEET ALUMINUM (ANODIZED)	S 3 X 5.7 (PAINTED)	h1 = 13'-6" h2 = 14'-0"	TYPE 5 D = 1'-3"	0.18	50.1	4'-0"	
157B		153															h1 = 13'-6" h2 = 14'-0"					
183A	45 MPH W13-1	159	24"	24"													h1 = 13'-6" h2 = 14'-0"					
183B		159															h1 = 13'-6" h2 = 14'-0"					

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)20G	138

REV. 10-21-86; SIGN NOS. 4A, 5A, 5B, 5C, 11A, 12B, 12C, 13A, 13B, 13C AND 13D ADDED.

REV. 10-28-86; SIGN NOS. 21A, 51B, 52A, 70A, 71A, 152A, 154A, 154B, 154C, 154D, 157A, 157B, 158A, 158B, 160A, 183A AND 183B ADDED.

REV. 12/29/86: DELETED SIGNS NO. 105 AND 106A. ADDED SIGNS NO. 76A, 76B, 100A, 100B, 133A AND 133B.

REV. 3-20-87; SIGN NO. 12C REMOVED.

DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SIGN SCHEDULE

N31176

ALL SIGNS SHOWN WITH DESIGNATIONS ARE TO BE FABRICATED AS DETAILED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION)

SIGN NO.	LEGEND		SHEET NO.	SIZE				COPY				SHIELD	ARROW	SIGN FACE			STEEL DESIGN (BREAK-AWAY)					MINIMUM VERTICAL CLEARANCE	REMARKS
				LENGTH	HEIGHT	RADIUS	BORDER WIDTH	CAPITAL	LOWER CASE	NUMERAL	SERIES			COPY	BACKGROUND	MATERIAL	SUPPORT TYPE	SUPPORT LENGTH	FOOTING	CONC. CU.YD.	REIN. STEEL LBS.		
103A		W3-1a	147	36"	36"									(ARROW) BLACK (STOP) RED (REF)	YELLOW(REF)	0.100" SHEET ALUMINUM							MOUNTED ON BACK OF SIGN # 103
104A			147																				MOUNTED ON BACK OF SIGN #104
106A		R1-1	147	30"	30"									WHITE (REF)	RED (REF)	0.080" SHEET ALUMINUM							MOUNTED ON BACK OF SIGN #106
99A		W4-2	147	36"	36"									BLACK	YELLOW(REF)	0.100" SHEET ALUMINUM	2½"ϕ @ 3.58#/FT.	h= 12'-9"	TYPE 4 D=1'-0"	0.12	26.4	7'-0"	
99A		W4-2	164	48"	48"									BLACK	YELLOW(REF)	0.100" SHEET ALUMINUM	S3X5.7	h1= 14'-3" h2= 14'-9"	TYPE 5 D= 1'-3"	0.18	50.1	6'-0"	
153C		W4-3	152	48"	48"									BLACK	YELLOW(REF)	0.100" SHEET ALUMINUM (ANODIZED)		USE EXISTING SUPPORTS					

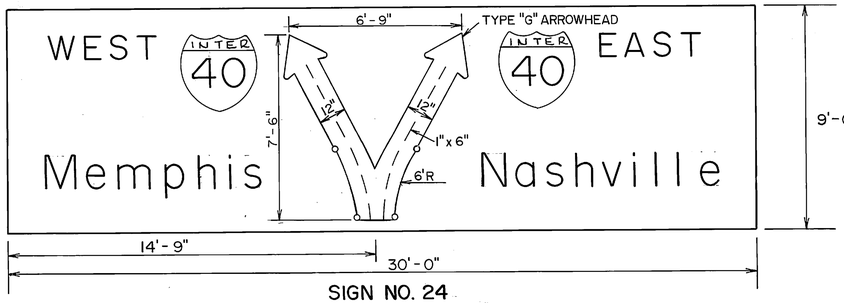
TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)206	138A

REV. 3-20-87; THIS SHEET ADDED TO PLANS.

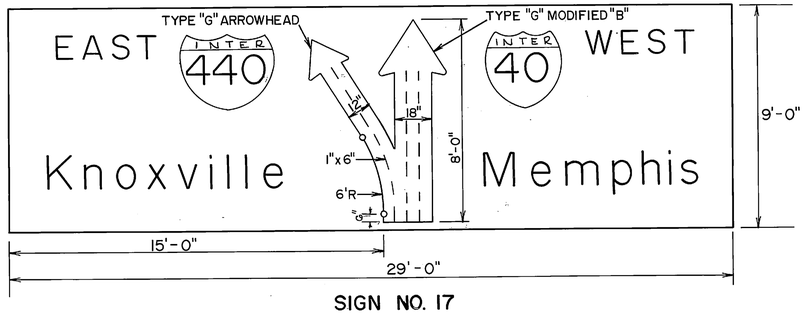
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SIGN SCHEDULE

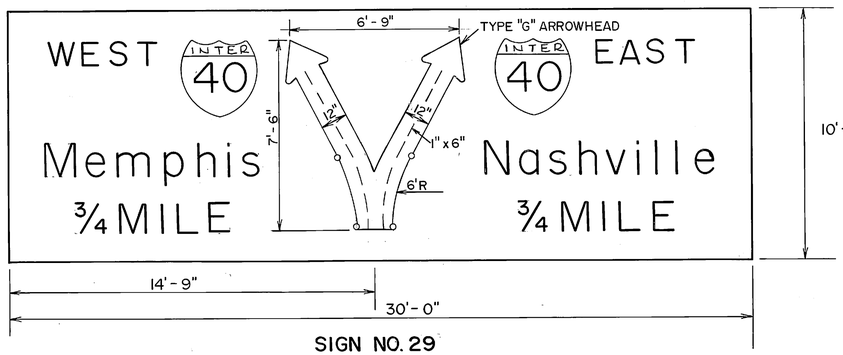
TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	139



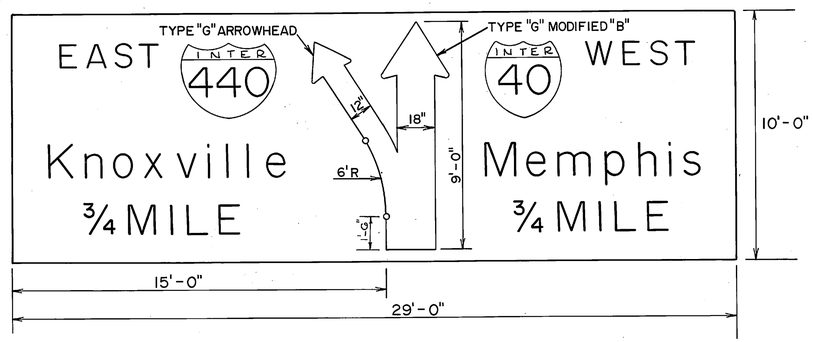
SIGN NO. 24



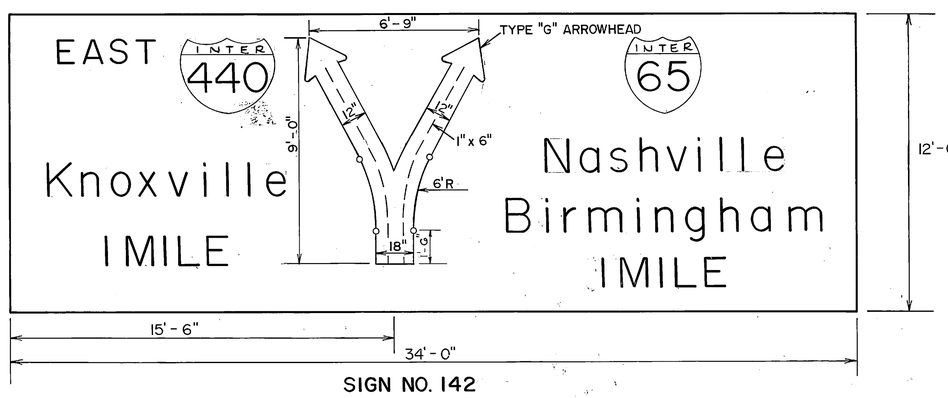
SIGN NO. 17



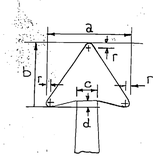
SIGN NO. 29



SIGN NO. 20



SIGN NO. 142



"G" ARROW

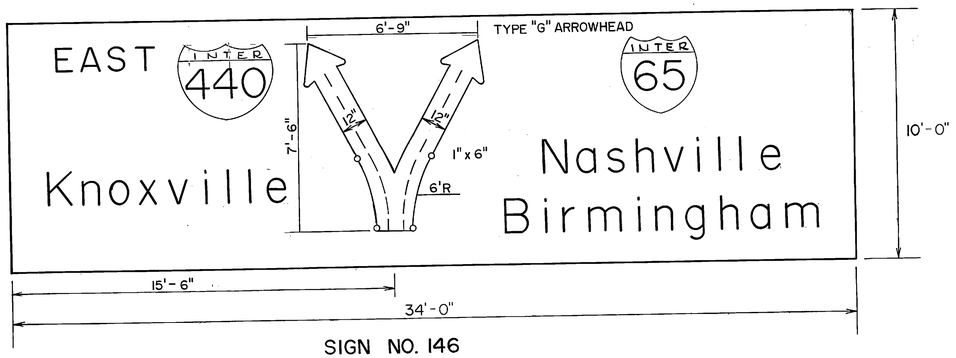
ARROWHEAD	ARROW DIMENSIONS IN INCHES				
	a	b	c	d	r
"G"	22-1/4	17	5-3/8	1-3/4	1
"G" MODIFIED "B"	33-3/8	25-1/2	8-1/16	2-5/8	1-1/2

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

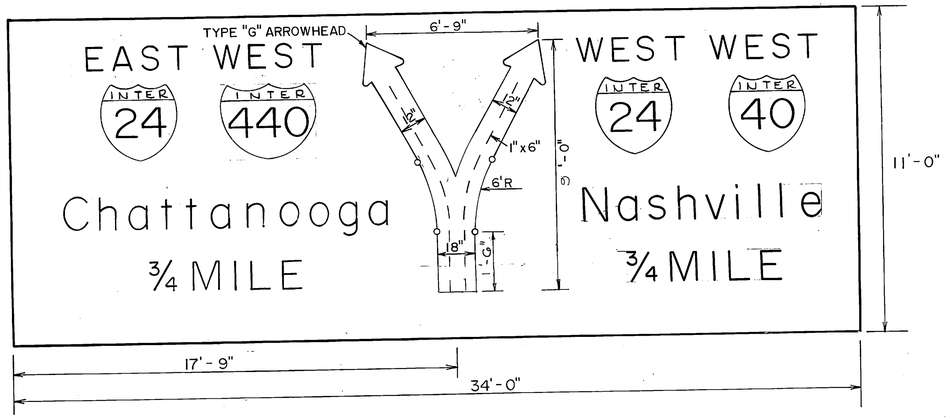
DIAGRAMMATIC DETAILS

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	140

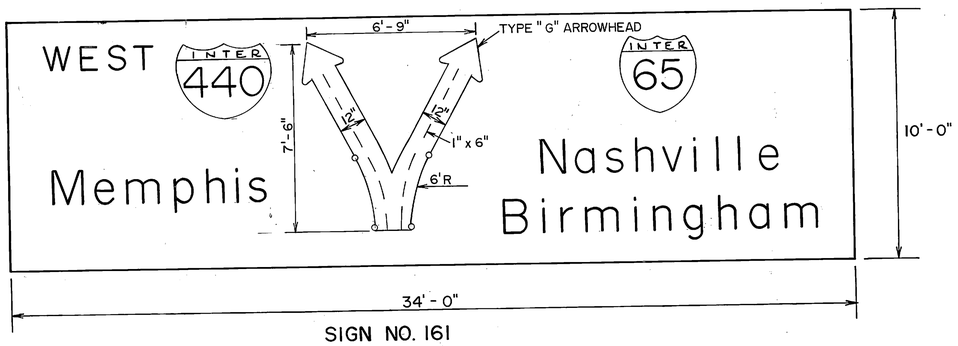
DEV. 8-1-8G; MESSAGE AND SIGN SIZE CHANGED ON SIGN NO. 173.



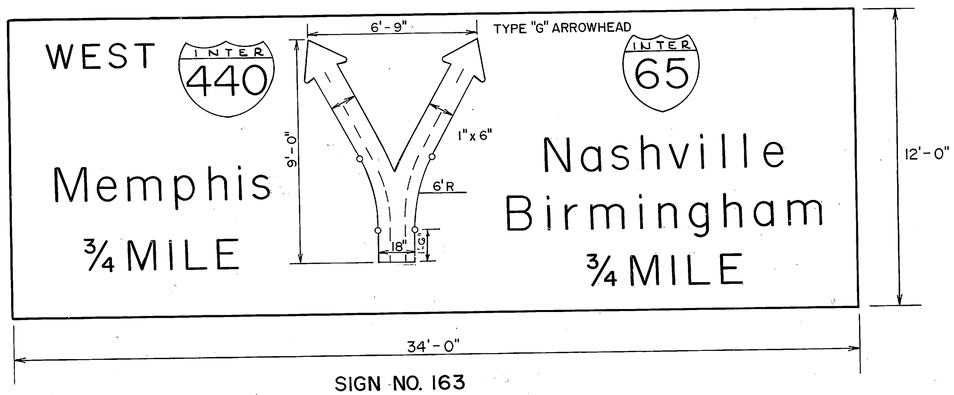
SIGN NO. 146



SIGN NO. 173



SIGN NO. 161



SIGN NO. 163

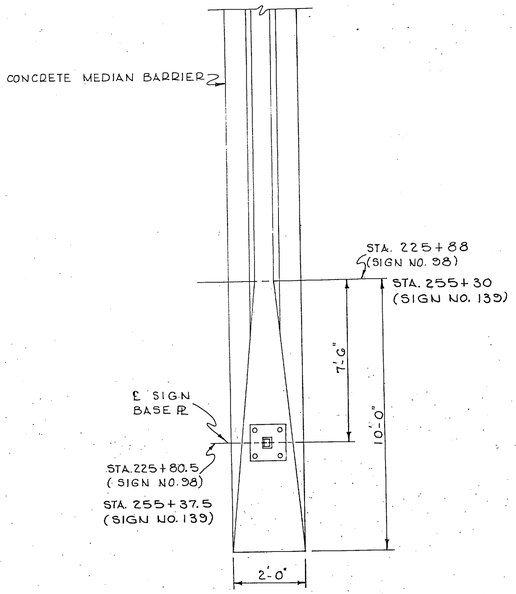
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

DIAGRAMMATIC DETAILS

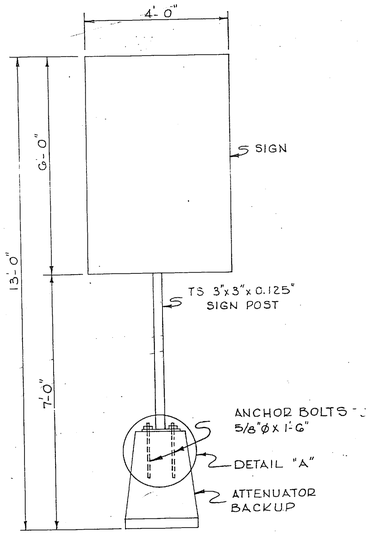
TELEDYNE POST N29257

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)206	141

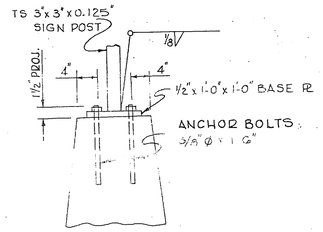
REVISED: 1-14-85; THIS SHEET ADDED TO PLANS.



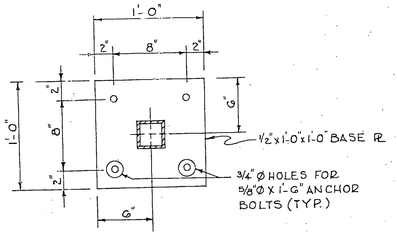
PLAN



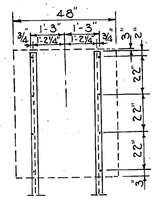
ELEVATION



DETAIL "A"



BASE ℞ DETAILS



BOLT SPACING DETAIL

MATERIAL SPECIFICATIONS

(1) WELDING SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.

(2) SIGN SUPPORT ASSEMBLY INCLUDING HARDWARE TO BE PAINTED. FOR DETAILS SEE GENERAL NOTES REGARDING PAINTING.

(3) MATERIAL FOR STEEL STRUCTURAL SHAPES AND PLATES SHALL BE ASTM-A36 STEEL.

(4) ALL BOLTS SHALL BE 5/8" ϕ A325 STEEL.

ESTIMATED QUANTITIES

ITEM NO. 713-17.07
SIGN SUPPORT MOUNTED ON MEDIAN BARRIER, RAIL
2*

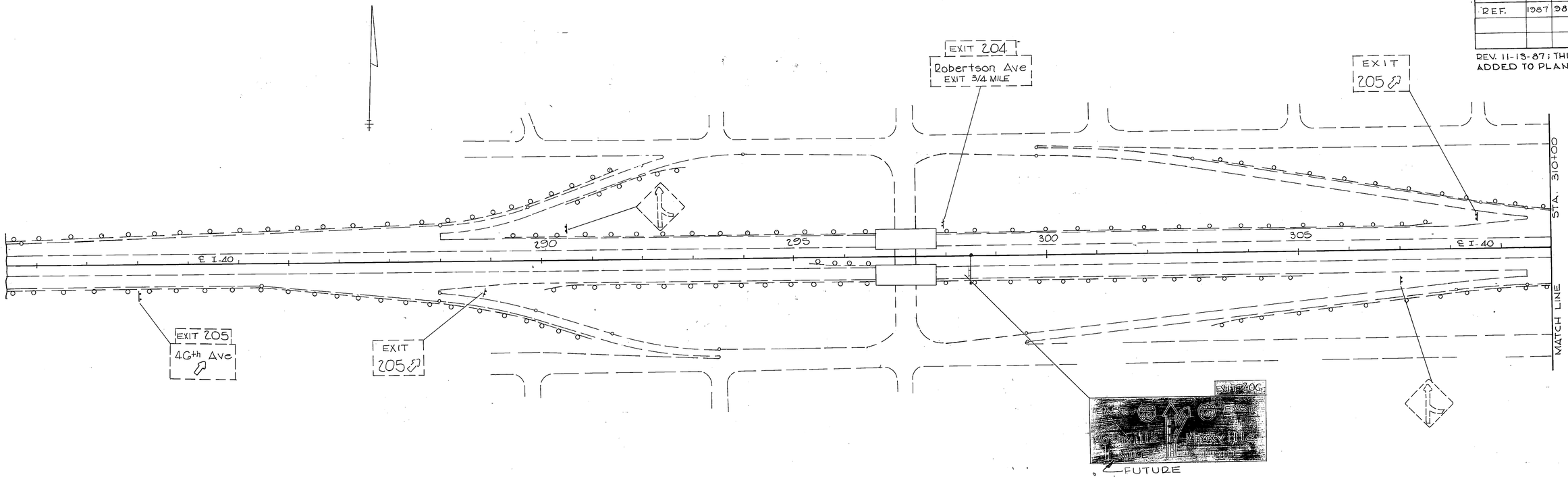
* NOTE: COST OF SIGN SUPPORT ASSEMBLY IN PLACE SHALL BE PER EACH. COST OF SIGN FACE SHALL BE PAID AS ITEM NO. 713-13.22.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGN SUPPORT DETAIL SIGN NO. 98 & 139 DAVIDSON COUNTY

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	142
REF.	1987	98030-4193-04	76

REV. 11-13-87; THIS SHEET ADDED TO PLANS.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

FROM STA. 280+00 TO STA. 339+00

SCALE: 1" = 100'

SECTION 11

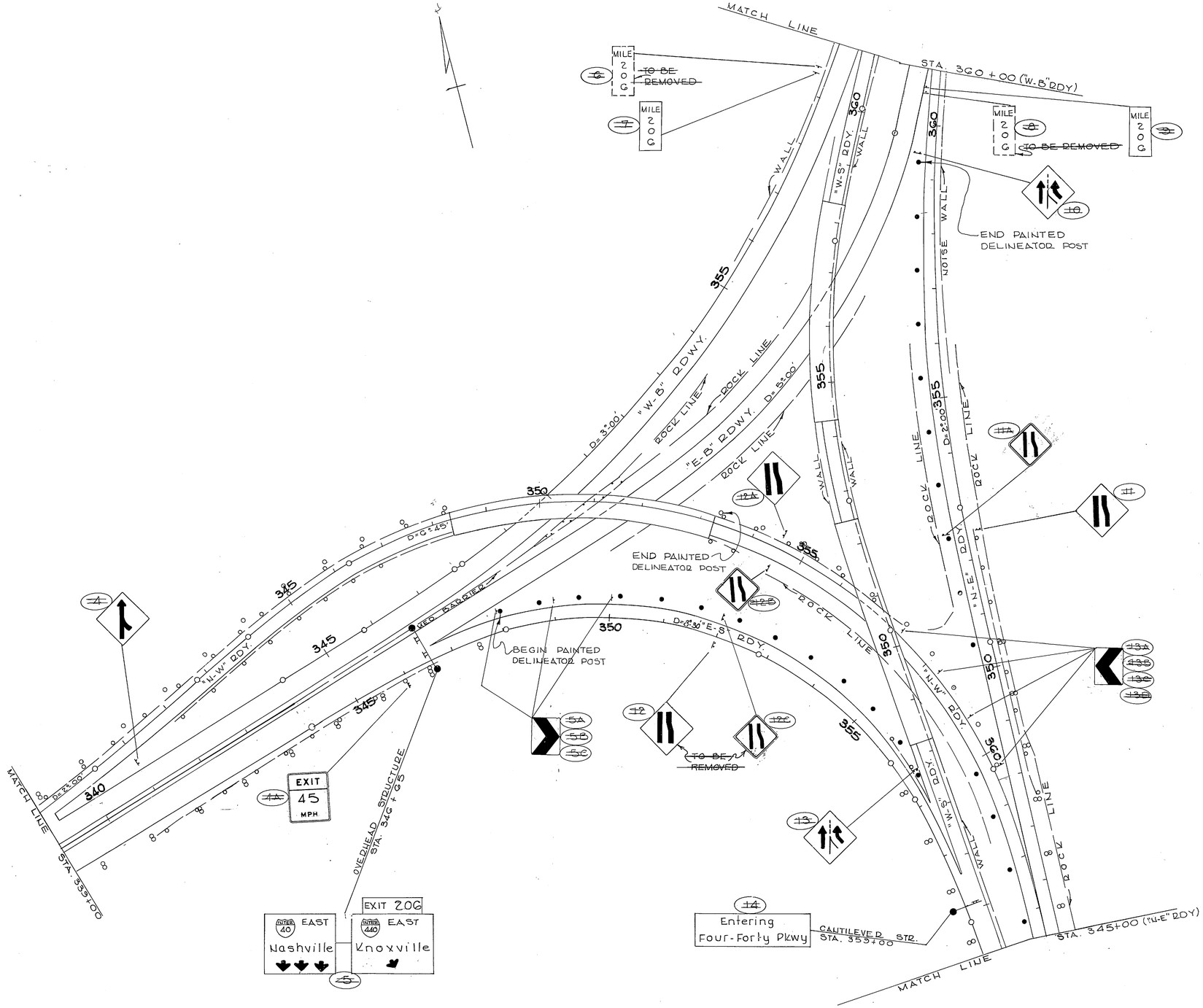
TELEDYNE POST N1B56

(1)

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(33)206	143
SIGNING	1987	19014-4117-04	G

REV. 10-21-86; DOWN ARROWS SKEWED @ 45° ON SIGN NO. 5. SIGN NOS. 4A, 5A, 5B, 5C, 11A, 12B, 12C, 13A, 13B, 13C AND 13D ADDED.

REV. 3-20-87; ONE DOWN ARROW REMOVED AND ONE DOWN ARROW RESPACED ON SIGN NO. 5. SIGN NO'S. 12 & 12C TO BE REMOVED.



~~LEGEND~~

~~SEE SHEET NO. 142~~

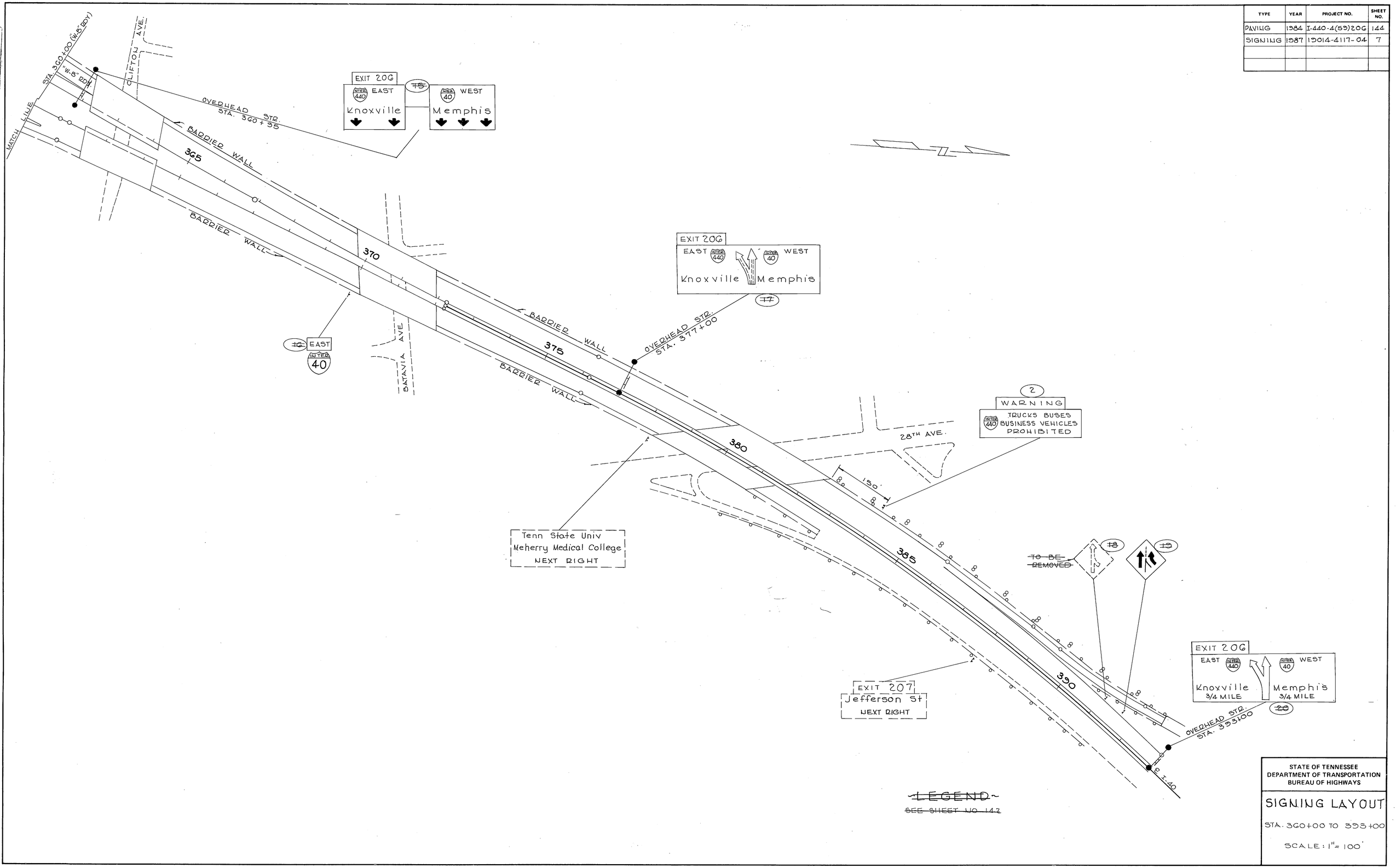
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

STA. 339+00 TO 360+00

SCALE: 1"=100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)20G	144
SIGNING	1987	15014-4117-04	7



~~LEGEND~~

~~SEE SHEET NO 142~~

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

STA. 360+00 TO 393+00

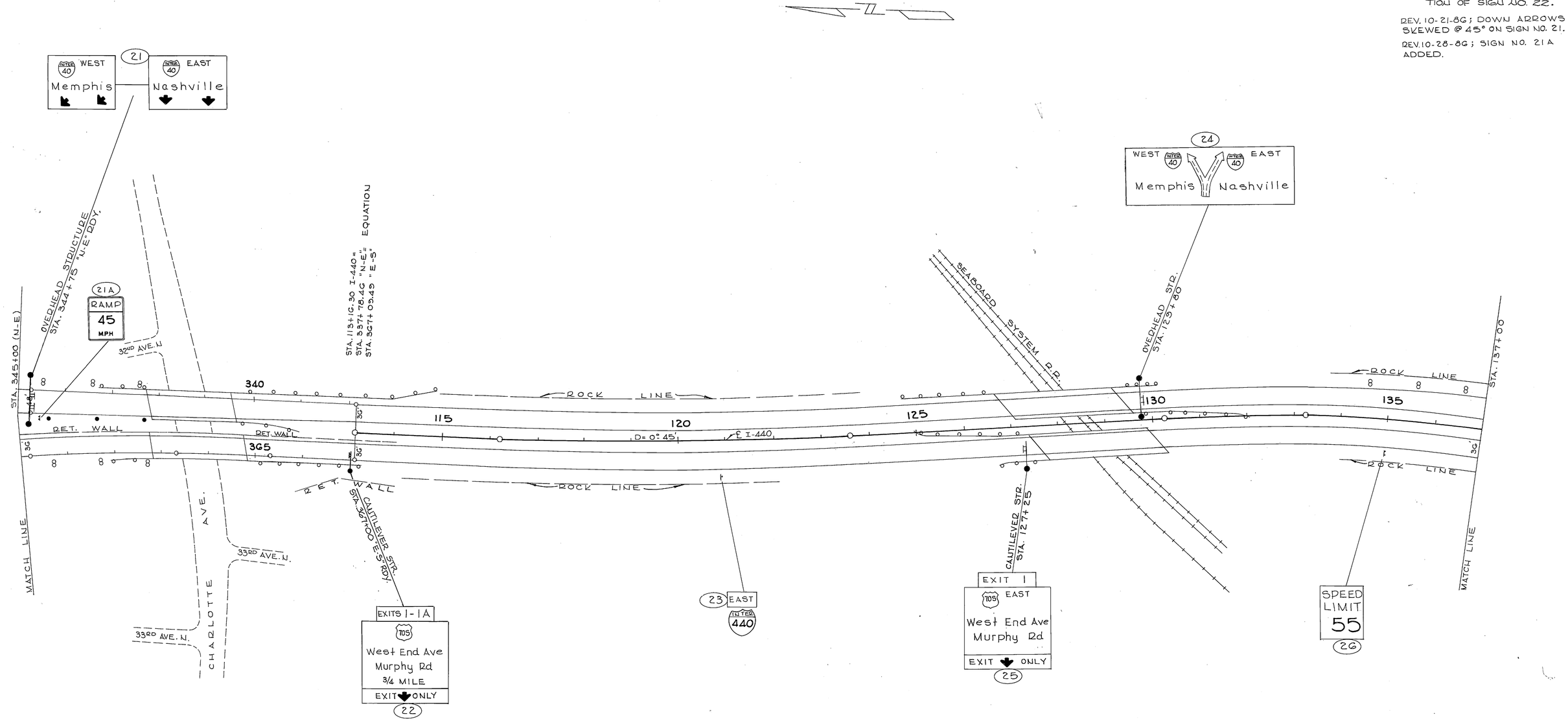
SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)20G	145

REV. 1/29/86: CORRECTED LOCATION OF SIGN NO. 22.

REV. 10-21-86; DOWN ARROWS SKEWED @ 45° ON SIGN NO. 21.

REV. 10-28-86; SIGN NO. 21A ADDED.



~LEGEND~
SEE SHEET NO. 142

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

STA. 345+00 (N-E) TO
STA. 137+00

SCALE: 1" = 100'

TELEDYNE POST 142927

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)206	146
REF.	1987	98030-4193-04	77

REV. 11-13-87; THIS SHEET ADDED TO PLANS.

REV.: 10-28-86; SIGN NOS. 51B, 52A & 53A ADDED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

STA. 137+00 TO STA. 163+00

SCALE: 1" = 100'

SECTION II

LEGEND

SEE SHT. NO. 142

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)20G	147
REF.	1987	98030-4193-04	78

REV. 1/29/86: CORRECTED LOCATION SIGN NO. 75.

REV. 10-28-86; SIGN NOS. 70A AND 71A ADDED.

REV. CHANGED ARROW ON SIGN NO 83. MOVED SIGN NO 76. ADDED SIGN NO. 76A AND 76B. CHANGED DIRECTION ON SIGN NO. 75.

REV. 3-20-87; SIGN NO. 69A ADDED. SIGN NO. 85 TO BE RELOCATED.

REV. 11-13-87; THIS SHEET ADDED TO PLANS.

MATCH LINE STA 22+00

56 EAST INTER 440

57 WRONG WAY

58 WRONG WAY

8 TRUCKS BUSES BUSINESS VEHICLES PROHIBITED FUTURE

INTER 440 EAST Knoxville NEXT LEFT 59

CANTILEVER STR. STA. 23+00

62 RAMP 25 M.P.H.

63 Entering Four-Forty Pkwy

STA. 163+00

RET. WALL

RAMP "H" D=15°

60 YIELD

61 DO NOT ENTER

71A

71 DO NOT ENTER

72 YIELD

73 WRONG WAY

74 WRONG WAY

RAMP "G" D=3°00'

ROCK LINE

DETAINING WALL

RAMP "H"

RAMP "F"

CANTILEVER STR. STA. 3+00

75 705 WEST

75 705 EAST

5 AQUINAS JR COLLEGE FREE WILL BAPTIST BIBLE COLLEGE

Aquinas Jr College Free Will Baptist Coll TO BE REMOVED

6 EXIT 1

87 EXIT 1 705 West End Ave EXIT ONLY

7 EXIT 1 Aquinas Jr College Free Will Baptist Coll TO BE REMOVED

MALBOROUGH AVE

ACCESS RD.

BRIDGE MOUNT

ROCK LINE

50:1 TAPER

℄ I-440

MATCH LINE

STA. 194+00

D=1°30'

RAMP "C"

64

65 WRONG WAY

66 WRONG WAY

67 DO NOT ENTER

68 DO NOT ENTER

69 EAST INTER 440

69A

WEST END AVE.

RAMP "D"

RAMP "E" D=2°00'

76 PEDESTRIANS NON-MOTORIZED TRAFFIC MOTOR DRIVEN CYCLES PROHIBITED

76A

76B

81

82

BRIDGE MOUNT AVE

85 EXIT 3 431 21st Ave Hillsboro Pike 3/4 MILE EXIT ONLY

~~EXISTING SIGN TO BE RELOCATED SEE DWG. NO. M-119-37 FOR LOCATION~~

77 PEDESTRIANS NON-MOTORIZED TRAFFIC MOTOR DRIVEN CYCLES PROHIBITED

OVERHEAD STR. STA. 6+25±

83 INTER 440 WEST Memphis INTER 440 EAST Knoxville

84 Entering Four-Forty Pkwy

70 WEST 705

FUTURE 9 TRUCKS BUSES BUSINESS VEHICLES PROHIBITED

CANTILEVER STR. STA. 12+00

INTER 440 Memphis Knoxville 78

ELMINGTON AVE.

70A

79 JCT INTER 440

INTER 440 80

~~LEGEND~~

~~SEE SHEET NO. 142~~

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

STA. 163+00 TO 194+00
(WEST END INTERCHANGE)

SCALE: 1" = 100'

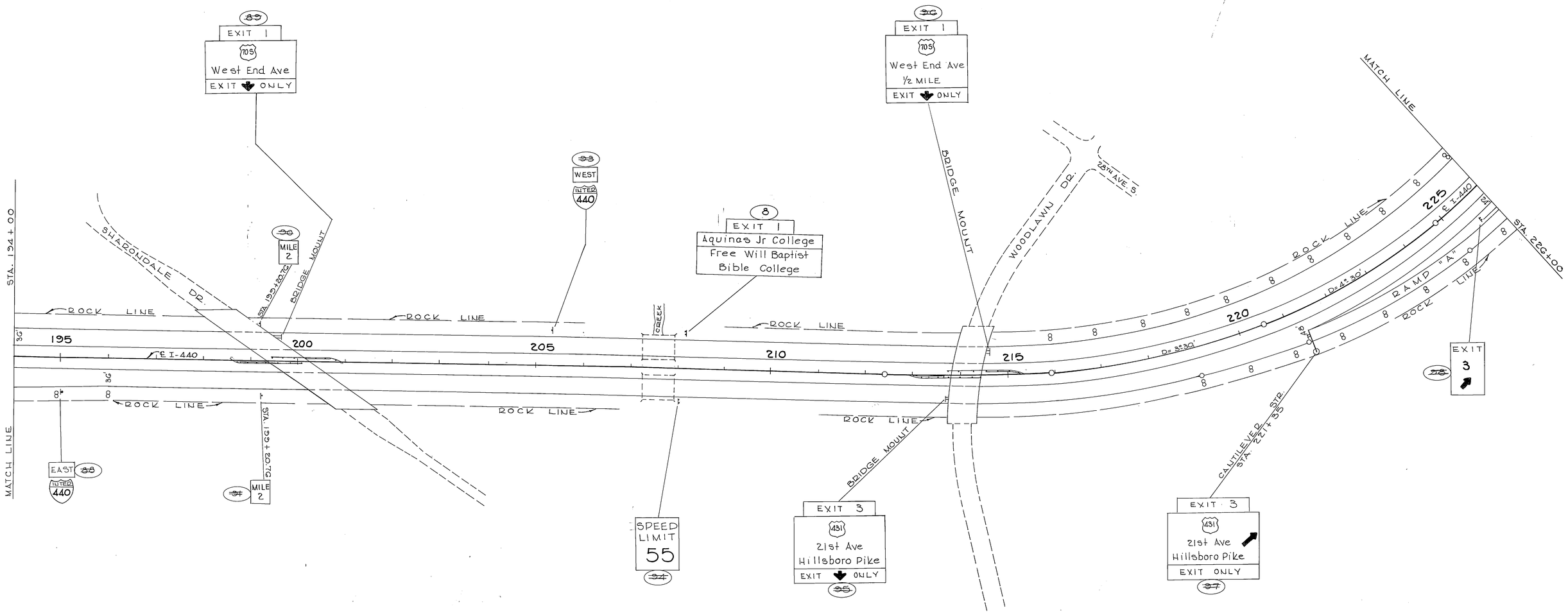
SECTION 11

6

TELEDYNE POST N29257

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	148
REF.	1987	98030-4193-04	79

REV. 11-13-87; THIS SHEET ADDED TO PLANS.



~~LEGEND~~

~~SEE SHEET NO. 142~~

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

STA. 194+00 TO STA. 226+00

SCALE: 1" = 100'

SECTION 11

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(53)206	149
SIGNING	1987	19014-4117-04	11

REV. 10-28-86; SIGN NOS. 100A, 117A AND 128A ADDED.

REV. 12/29/86: DELETED SIGNS NO. 105, 106A, 124 AND 128. ADDED SIGNS NO 105A, 100B, 133A AND 133B.

REV. 3-20-87; SIGN NO'S. 103A, 104A & 106A ADDED. SIGN NO. 105A REMOVED.

~~107~~ JCT INTER 440

~~108~~ EAST INTER 440 | WEST INTER 440

15 TRUCKS BUSES BUSINESS VEHICLES PROHIBITED EAST INTER 440 Knoxville LEFT LANE ~~110~~

16 TRUCKS BUSES BUSINESS VEHICLES PROHIBITED WEST INTER 440 Memphis

CAUTILEVER STR. STA. 226+00

~~109~~ YIELD

~~111~~ PEDESTRIANS NON-MOTORIZED TRAFFIC MOTOR DRIVEN CYCLES PROHIBITED

~~111~~ NORTH 431

~~118~~ DO NOT ENTER

~~117~~ YIELD

~~117A~~ WEST INTER 440

TRUCKS BUSES BUSINESS VEHICLES PROHIBITED 17 WEST INTER 440 Memphis ~~120~~

CAUTILEVER STR. STA. 231+25

~~121~~ WRONG WAY

~~122~~ WRONG WAY

~~100A~~ ~~100B~~

~~100~~

~~99~~ Entering Four-Forty Pkwy

RAMP "B" D=15°50'44" D=19° D=32° 350 360 G45 G50 G40 WRONG WAY ~~113~~ ~~114~~ RAMP 25 M.P.H. DO NOT ENTER ~~116~~ E HILLSBORO PIKE 25

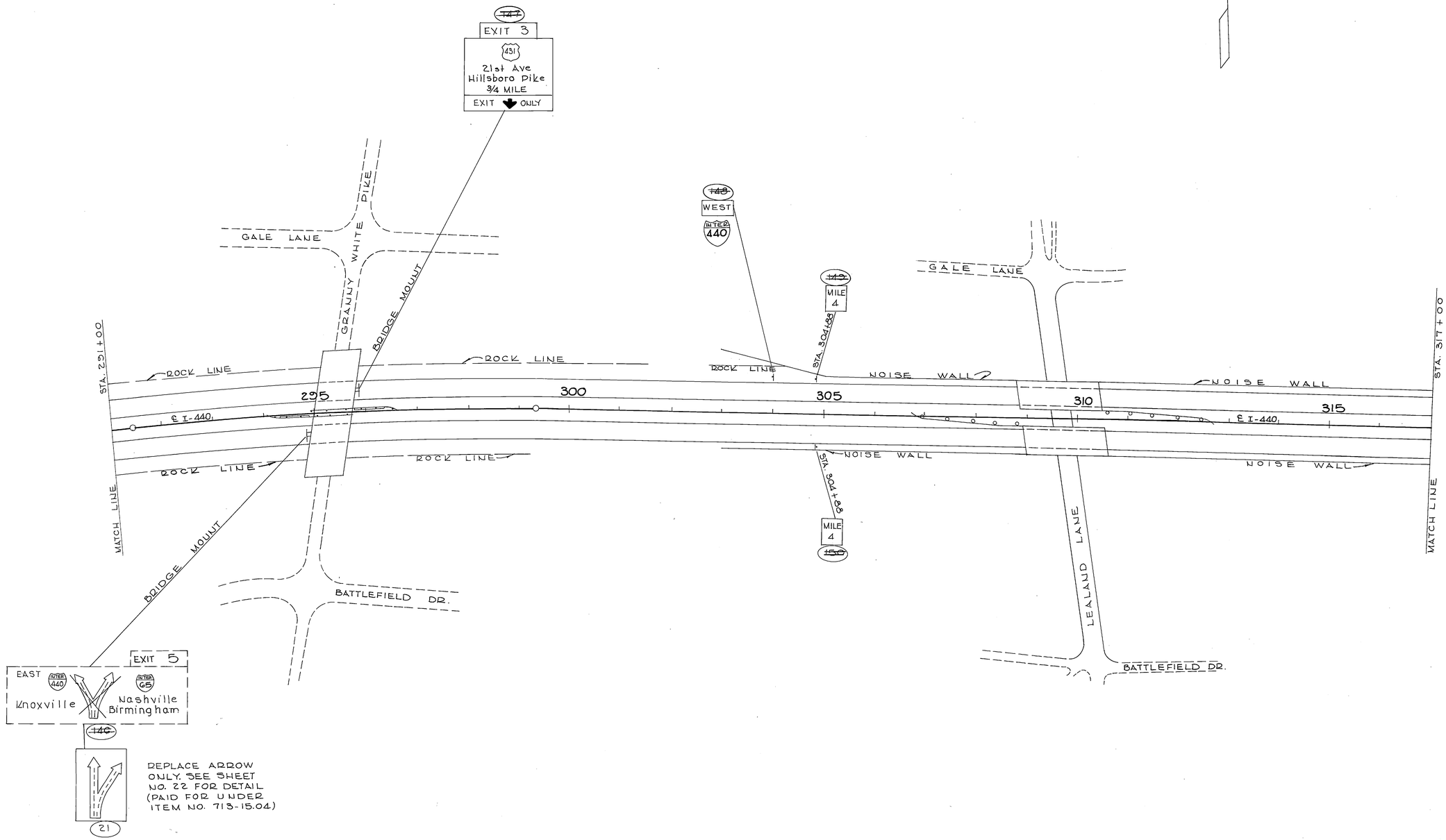
ROCK LINE RAMP "C" D=11°30' 840 845 850 905 910 915 920 925 930 935 940 945 950 955 960 965 970 975 980 985 990 995 1000 1005 1010 1015 1020 1025 1030 1035 1040 1045 1050 1055 1060 1065 1070 1075 1080 1085 1090 1095 1100

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)206	150
SIGNING	1987	19014-4117-04	12

~~140~~
EXIT 3
431
21st Ave
Hillsboro Pike
EXIT ONLY

STA. 258+00
MATCH LINE
8
24
RAMP "C"
8
8
ROCK
8
CANTILEVER SIGN
STA. 262+50
260
8
8
8
8
ROCK LINE
8
8
8
8
℄ I-440
265
8
8
8
8

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(53)206	151
SIGNING	1987	19014-4117-04	13



REPLACE ARROW ONLY. SEE SHEET NO. 22 FOR DETAIL (PAID FOR UNDER ITEM NO. 713-15.04)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

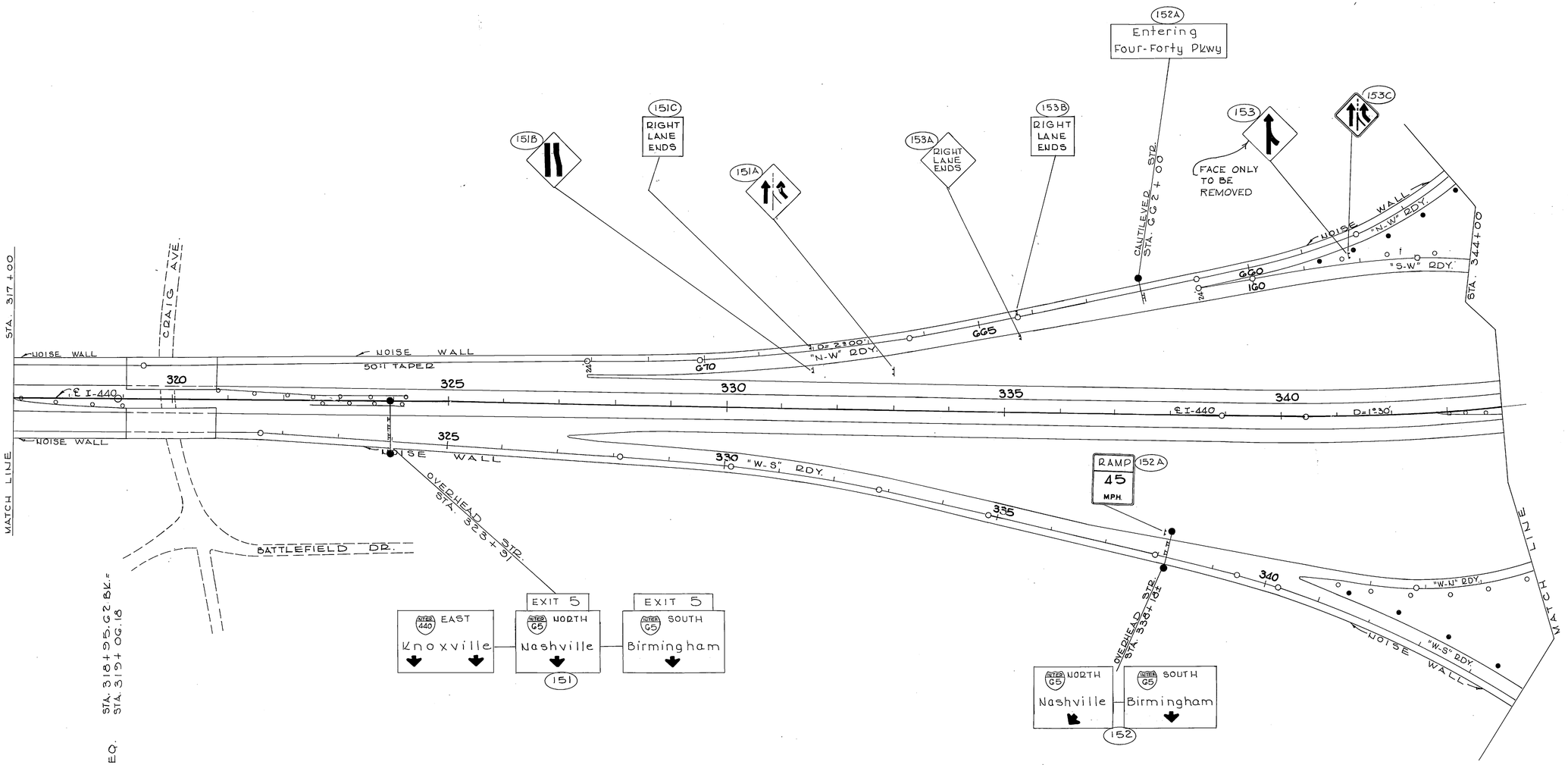
STA. 291+00 TO 317+00

SCALE: 1"= 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(53)206	152

REV. 10-28-86; DOWN ARROW SKEWED @ 45° ON SIGN NO. 152. SIGN NO. 152A ADDED.

REV. 3-20-87; SIGN NO. 153C ADDED. SIGN NO. 153 REMOVED.



~LEGEND~

SEE SHEET NO. 142.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

STA. 317+00 TO 344+00

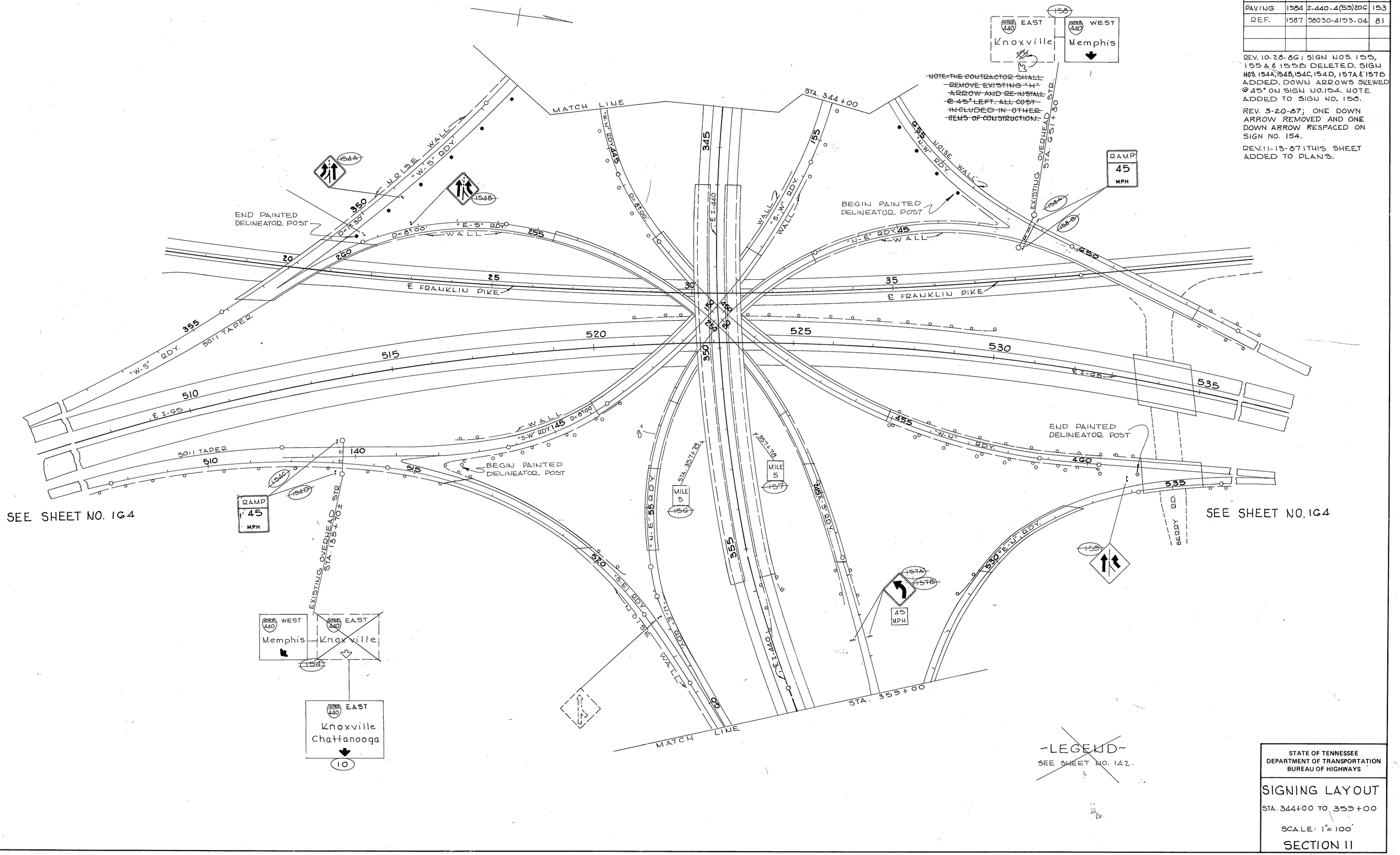
SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)206	153
REF.	1987	98030-4193-04	81

REV. 10-28-86; SIGN NOS. 155, 155A & 155B DELETED. SIGN NOS. 154A, 154B, 154C, 154D, 157A & 157B ADDED. DOWN ARROWS SKEWED @ 45° ON SIGN NO. 154. NOTE ADDED TO SIGN NO. 153.

REV. 3-20-87; ONE DOWN ARROW REMOVED AND ONE DOWN ARROW RESPACED ON SIGN NO. 154.

REV. 11-13-87; THIS SHEET ADDED TO PLANS.



~LEGEND~

SEE SHEET NO. 142.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

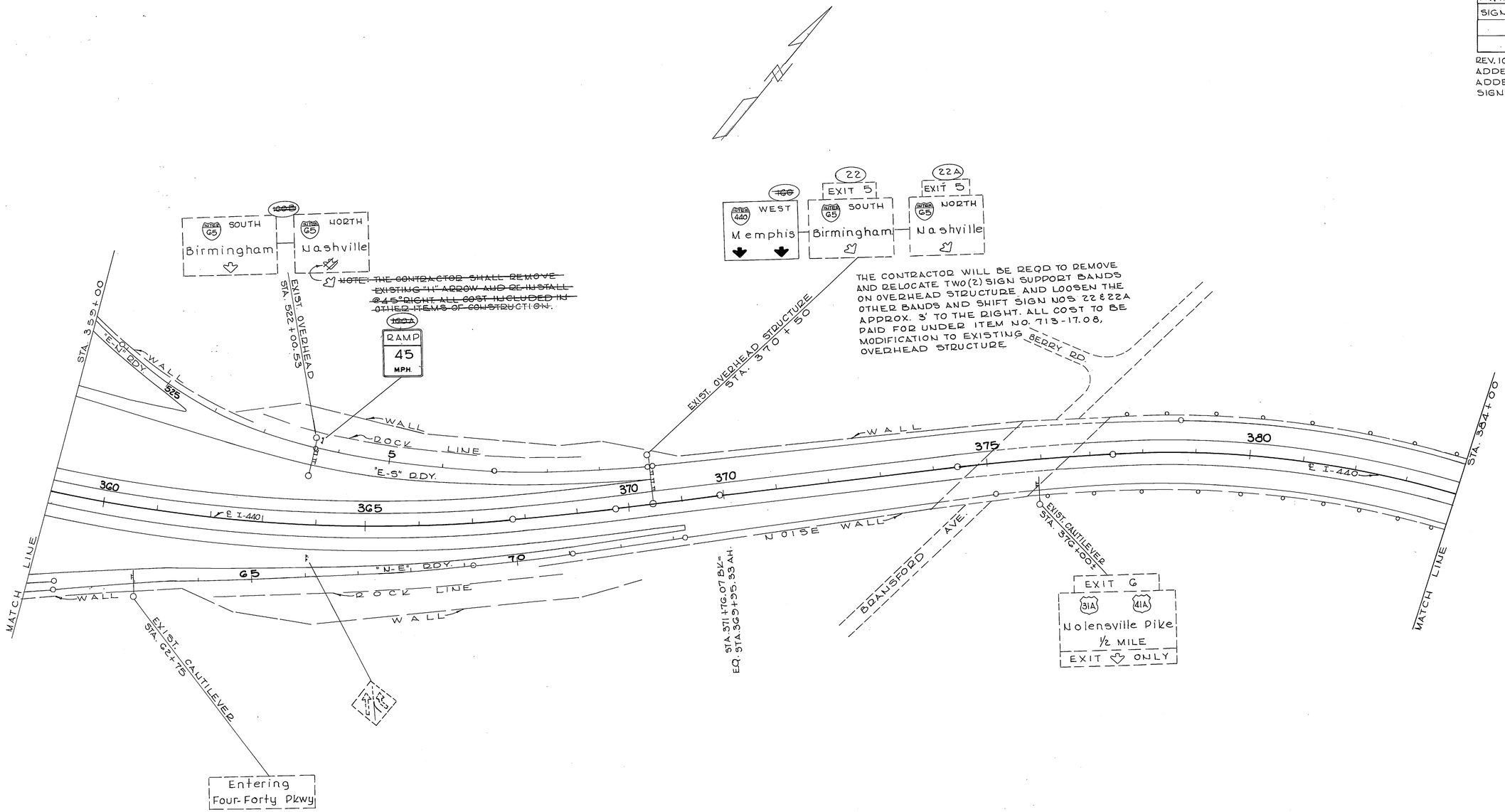
STA. 344+00 TO 359+00

SCALE: 1" = 100'

SECTION 11

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-1(55)206	154
SIGNING	1987	19014-4117-04	14

REV. 10-28-86; SIGN NO. 1G0A ADDED. NO. 1G0B AND NOTE ADDED TO EXIST. OVERHEAD SIGN STRUCTURE @ STA. 522+00.53.



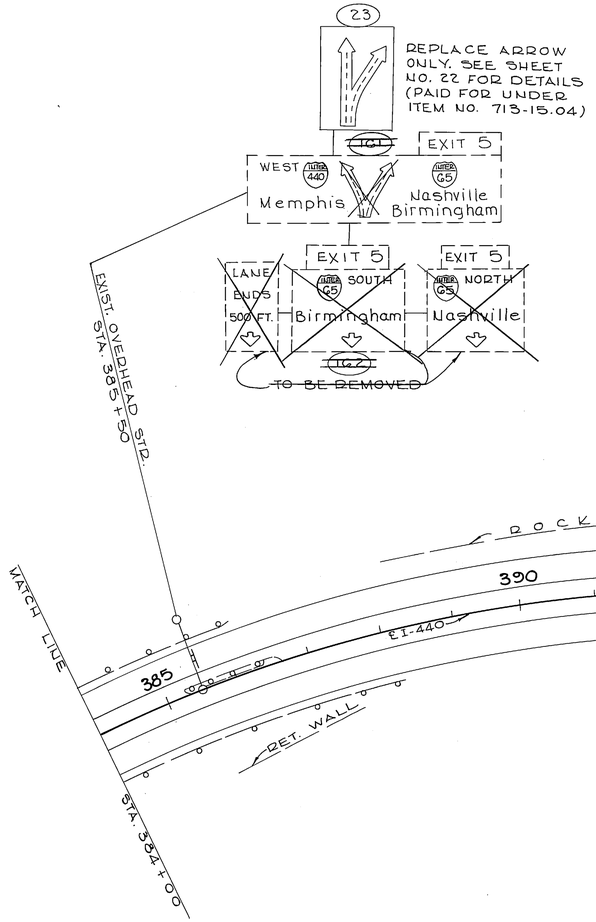
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

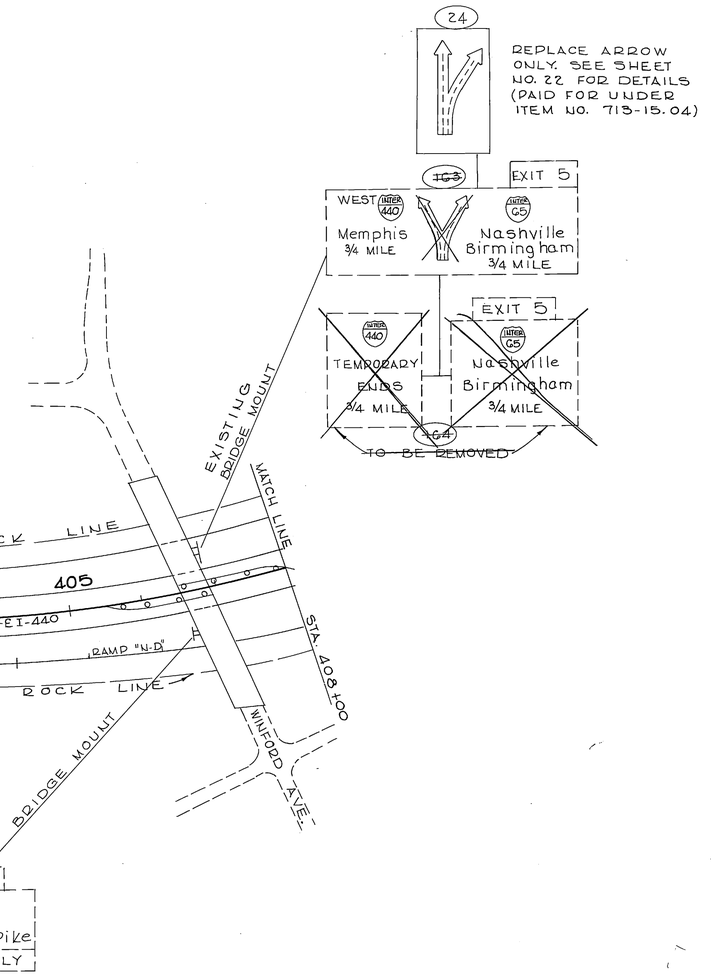
SIGNING LAYOUT

STA. 359+00 TO 384+00

SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	155
SIGNING	1987	19014-4117-04	15





STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

STA. 384+00 TO 408+00

SCALE: 1"= 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	15G
SIGNING	1987	19014-4117-04	1G

26
TRUCKS BUSES BUSINESS VEHICLES PROHIBITED
EAST
Knoxville
NEXT RIGHT

27
TRUCKS BUSES BUSINESS VEHICLES PROHIBITED
WEST
~~IGG~~ Memphis
~~(SIGN IS EXISTING. MESSAGE "Memphis" IS PROPOSED)~~

28
TRUCKS BUSES BUSINESS VEHICLES PROHIBITED
WEST
~~IGG~~ Memphis
~~(SIGN IS EXISTING. MESSAGE "Memphis" IS PROPOSED)~~

25
TRUCKS BUSES BUSINESS VEHICLES PROHIBITED
EAST
Knoxville

29
TRUCKS BUSES BUSINESS VEHICLES PROHIBITED
WEST
Memphis
NEXT RIGHT
~~(SIGN IS EXISTING. MESSAGE "Memphis" IS PROPOSED)~~

30
TRUCKS BUSES BUSINESS VEHICLES PROHIBITED
EAST
Knoxville
~~IGG~~

WEST 24 Nashville
EAST 40 Knoxville
1¼ MILES
EAST 24 Chattanooga
1¼ MILES

EXIT 6

EXIT G
31A 41A
Nolensville Pike

EXIT G

Entering Four-Forty Pkwy

RAMP

EXISTING CANTILEVER STR. STA. 0+75±

EXIST. CANTILEVER STR. STA. 0+50±

EXISTING CANTILEVER STR. STA. 1+40±

EXIST. BRIDGE MOUNT

ROCK LINE

NOISE WALL

RAMP "N-E"

RAMP "N-A"

RAMP "N-F"

RAMP "N-D"

RAMP "N-C"

EXIST. CANTILEVER

L.E.U.P.2

MATCH LINE STA. 408+00

410 415 420 425 430

EI-440

NOLENSVILLE PIKE

5 10 15 20

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT

STA. 408+00 TO 435+00

SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)206	157
SIGNING	1987	19014-4117-04	17

REV. 2-20-86; SIGN NO. 171 DELETED AND SIGN NO. 170 TO REMAIN IN PLACE.

REV. 8-1-86; MESSAGE CHANGED ON SIGN NOS. 169 & 173. SIGN NO. 175 DELETED AND SIGN NO. 174 TO REMAIN IN PLACE WITH I-440 SHIELD TO BE ADDED.

~~168~~
EXIT 213A
EAST
Chattanooga
~~TO BE REMOVED~~

EXIT 213B
WEST
Nashville

EAST
EXIT 213A
EAST WEST
Chattanooga
169

EXIST. OVERHEAD STR.

SPENCE LANE

RAMP "U"

EXIT 213C

170
EXIT 213A
EAST
Chattanooga
~~TO BE REMOVED~~

EXIT 213B
WEST
Nashville

EXIT 213C
41
Spence Lane

EXIT 213A
EAST WEST
Chattanooga
Memphis
~~171~~

EXIST. OVERHEAD STR.

465 470 475 480 ℄ I-40

CREEK

STA. 482+00

MATCH LINE

MILL

EXITS 215A-B
Briley Pky
Metro Airport
Opryland
1 MILE

EXIT 213A
~~172~~
EXIT 213B
EAST WEST
Chattanooga
3/4 MILE
Nashville
3/4 MILE
~~TO BE REMOVED~~

EXIT 213A
~~173~~
EXIT 213B
EAST WEST WEST WEST
Chattanooga
3/4 MILE
Nashville
3/4 MILE

EXIST BRIDGE MOUNT

EXIT 213C
41
Spence Lane
1/2 MILE

31
WARNING
TRUCKS BUSES
BUSINESS VEHICLES
PROHIBITED

~~45"X36" TO BE ADDED~~

~~174~~
EXITS 213 A-B
36"
~~TO BE REMOVED~~
Nashville
Chattanooga
1 MILE

~~175~~
EXITS 213 A-B
Nashville
Chattanooga
Memphis
1 MILE

MILE 2-1-4

DRIVE

MASSMAN

485 490 495 500 505 510 ℄ I-40

STA. 482+00

MATCH LINE

MILE 2-1-4

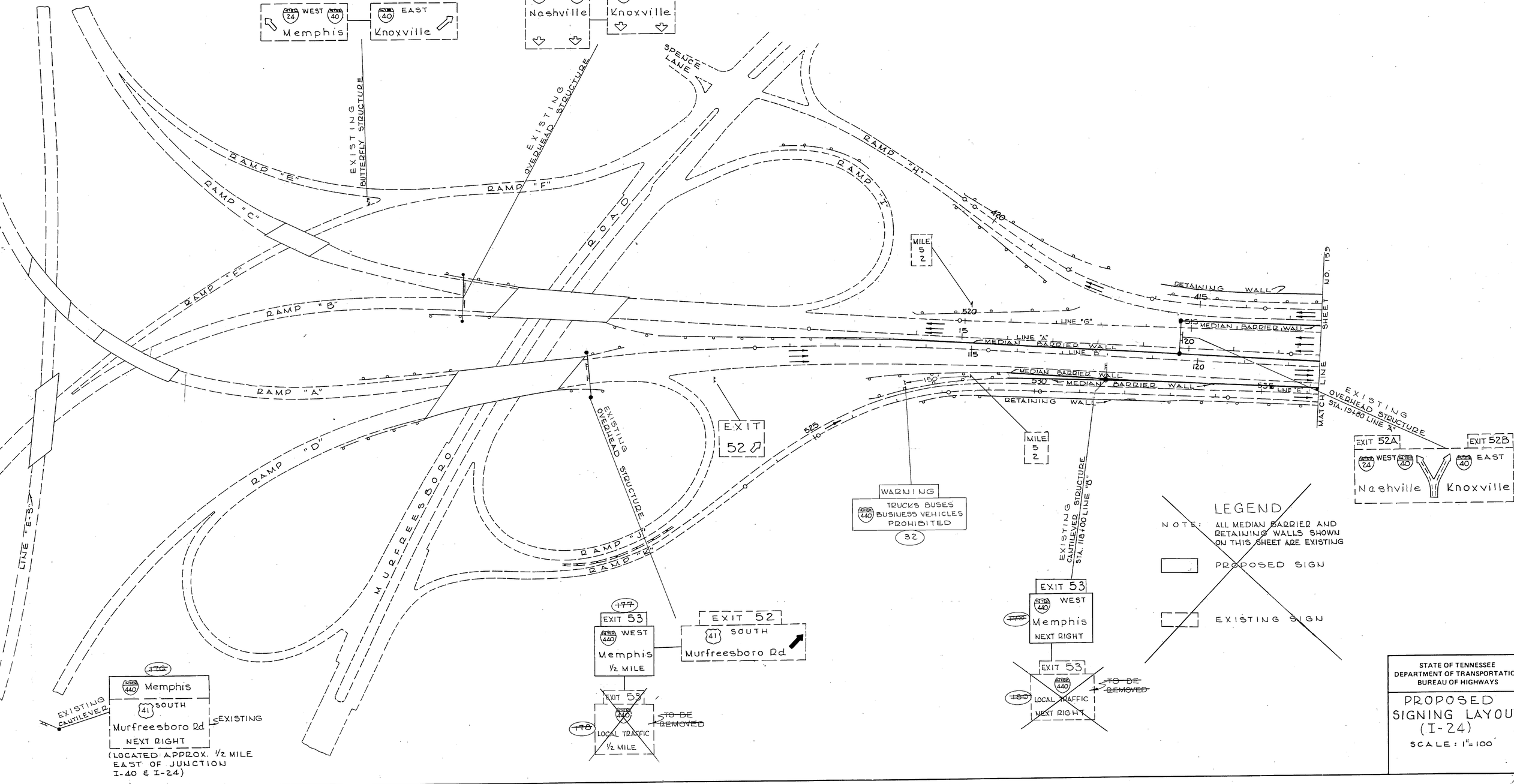
EXIT 215A
SOUTH
Briley Pky
Metro Airport
NEXT RIGHT

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT (I-40)

SCALE: 1"= 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	158
SIGNING	1987	19014-4117-04	18



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED SIGNING LAYOUT (I-24)

SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
DRVING	1984	I-440-4(59)20G	159

REV. 10-28-86; SIGN NOS. 183A & 183B ADDED.

SH. NO 158

MATCH LINE

RET. WALL

LINE "I"

LINE "G"

MED. BARRIER WALL

MED. BARRIER WALL

MED. BARRIER WALL

LINE "E"

LINE "J"

LINE "B"

LINE "A"

LINE "C"

LINE "D"

LINE "F"

LINE "H"

LINE "G"

ENERGY ATT.

ENERGY ATT.

MED. BARRIER WALL

EXIST. CANTILEVER

EXIST. OVERHEAD

ROCK LINE

ROCK LINE

ROCK LINE

RET. WALL

WALL

EXISTING OVERHEAD STRUCTURE STA. 544+90 LINE "E"

EXISTING OVERHEAD STRUCTURE STA. 132+55

STA. 55+00

MATCH LINE

EXIT 52B
WEST 24 EAST 40
Nashville
Knoxville

41
Murfreesboro Rd

EXIT 52A
WEST 24 40
Nashville

EXIT 52B
EAST 40
Knoxville

EXIT
52

EXIT 53

EXIT
53

EAST 24
Chattanooga
182

WEST 440
Memphis

TO BE REMOVED
LOCAL TRAFFIC
181

EAST 24
Chattanooga
183

EXIT 53
WEST 440
Memphis

TO BE REMOVED
LOCAL TRAFFIC
184

41
Murfreesboro Rd
NEXT RIGHT

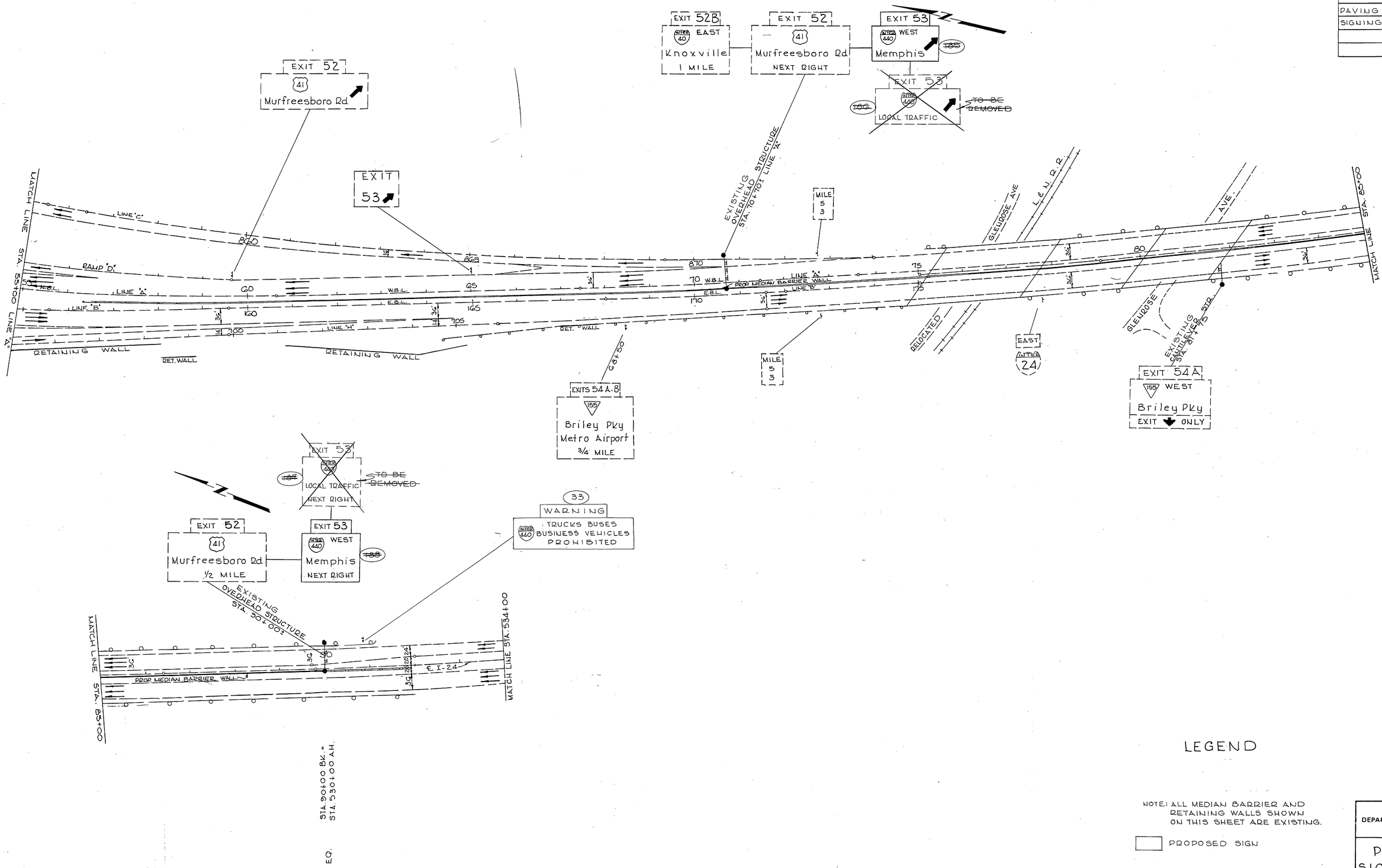
183A
183B
45 MPH

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SIGNING LAYOUT (I-24)

SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(55)206	160
SIGNING	1987	19014-4117-04	19



LEGEND

NOTE: ALL MEDIAN BARRIER AND RETAINING WALLS SHOWN ON THIS SHEET ARE EXISTING.

PROPOSED SIGN

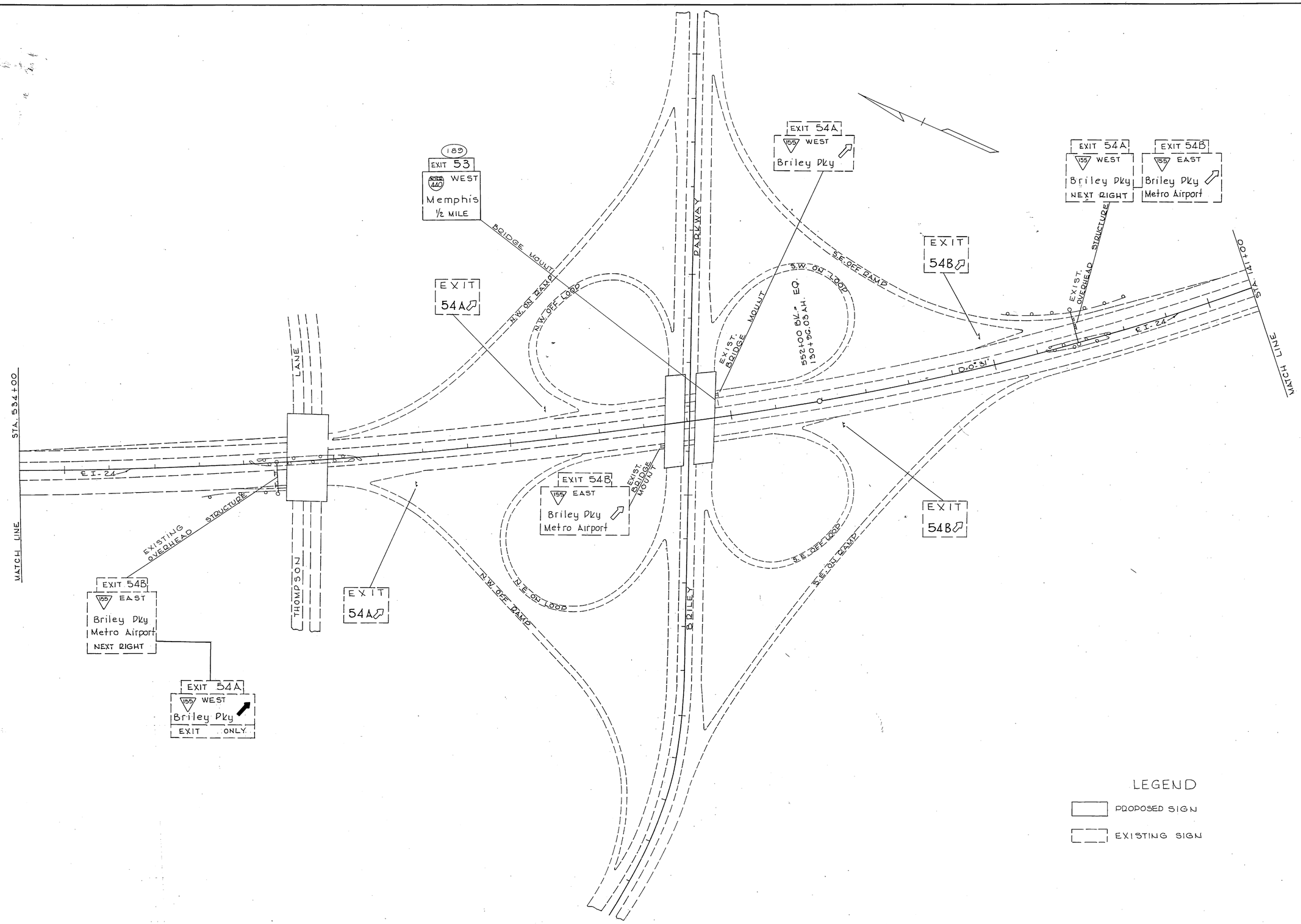
EXISTING SIGN

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED SIGNING LAYOUT (I-24)

SCALE 1"= 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVILIG	1984	I-440-4(55)20G	1G1



LEGEND

PROPOSED SIGN

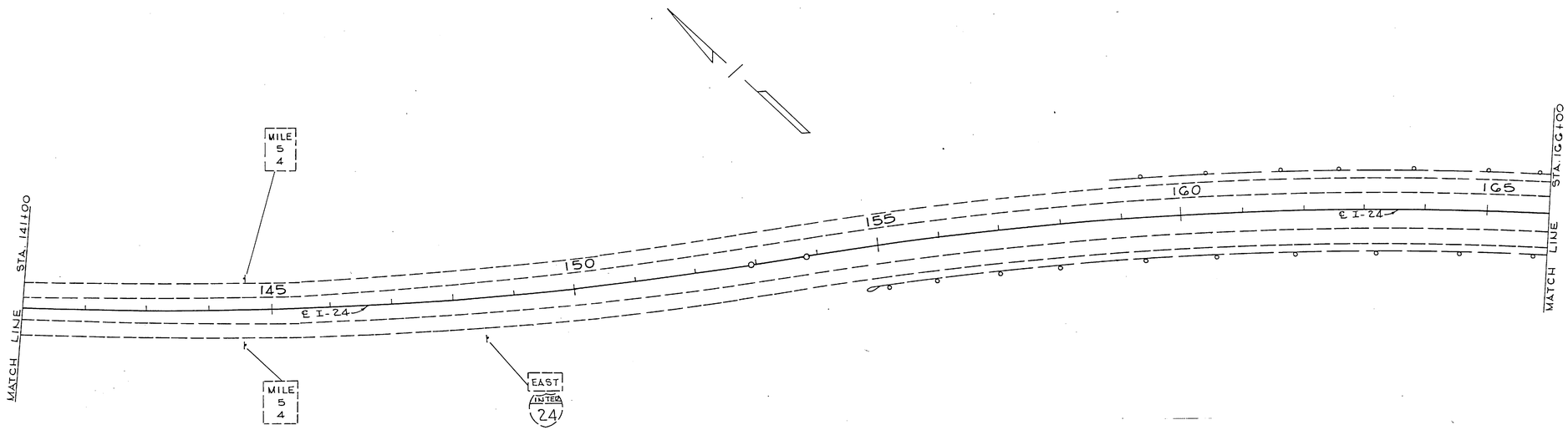
EXISTING SIGN

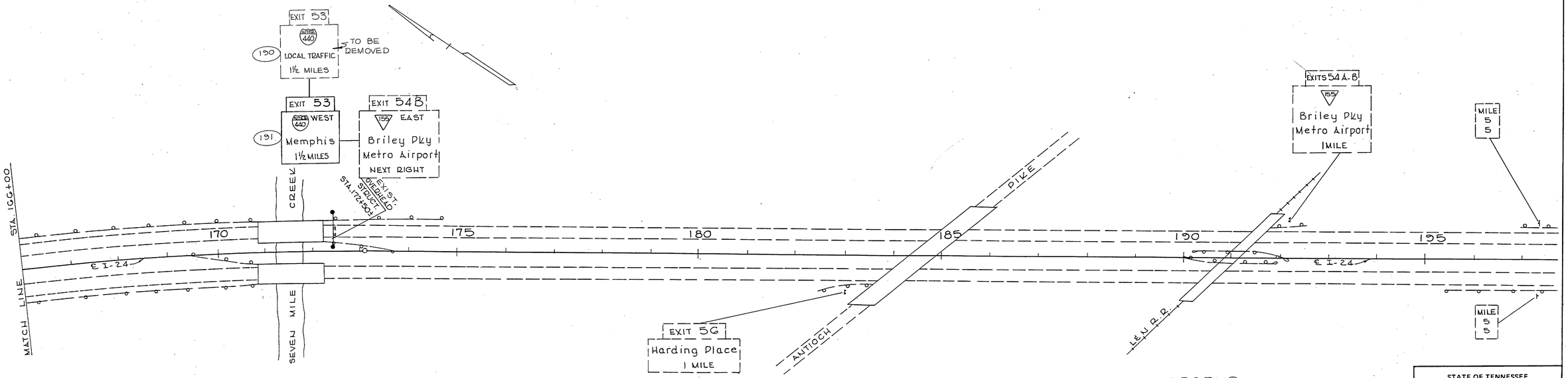
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED SIGNING LAYOUT (I-24)

SCALE : 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(53)206	162





LEGEND

PROPOSED SIGN

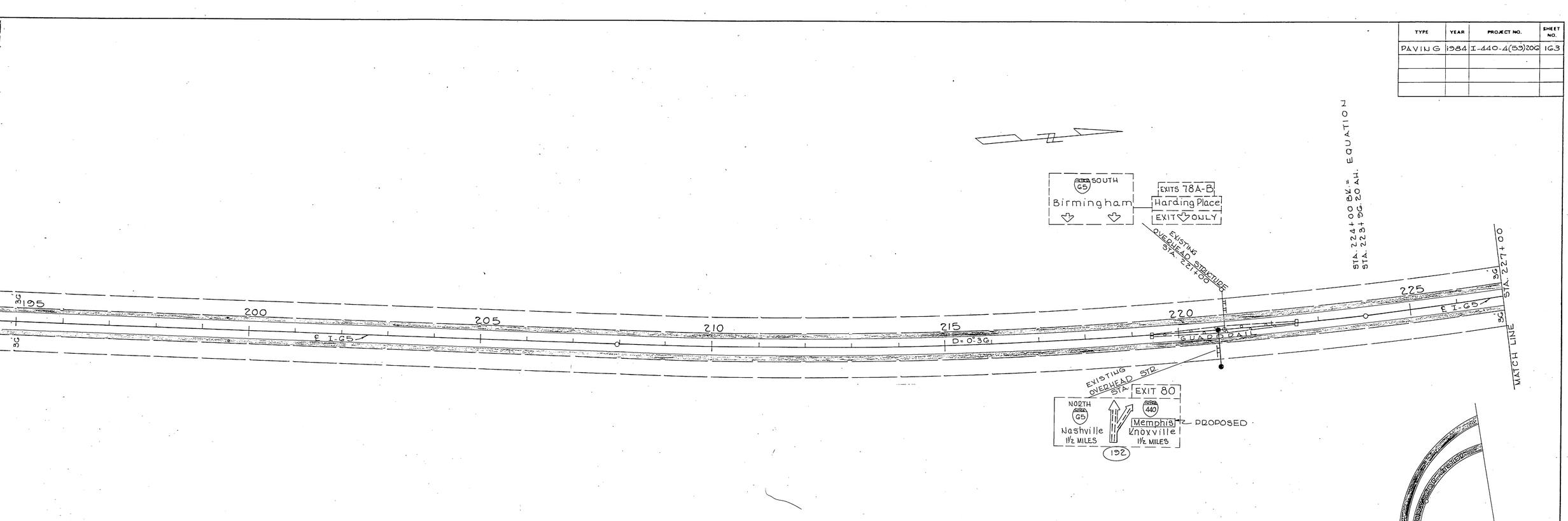
EXISTING SIGN

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED SIGNING LAYOUT (I-24)

SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(53)206	IG3



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED SIGNING LAYOUT (I-65)

BEG. PROJ. TO STA. 259+00

SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)206	164
REF.	1987	98030-4193-04	80

REV. 3-20-87; SIGN NO. 196A ADDED.

REV. 11-13-87; THIS SHEET ADDED TO PLANS.

STA. 289+00 B.L. = STA. 429+19.45 A.H. EQUA.

SPEED LIMIT 55 MINIMUM 45

ARMORY DRIVE INTERCHANGE

SOUTH INTER 65

STA. 255+00

BEGIN LINE

260

265

I-65

D=0°-36'

270

275

280

285

70:1 TAPER

EXIST. GUARDRAIL

LANE ENDS 1000 FT

196

CANTILEVER SIGN STA. 280+54.55

LANE ENDS MERGE LEFT

STA. 289+00 B.L. = STA. 429+19.45 A.H. EQUA.

MATCH LINE STA. 429+00

300 TAPER

1000' TAPER

LIGHT STANDARD

EXIST. GUARDRAIL

EXIST. OVERHEAD SIGN STA. 286+75

SPEED LIMIT 55 MINIMUM 45

EXIT 80 INTER 440 EAST Chattanooga NEXT RIGHT 9

WARNING TRUCKS BUSES BUSINESS VEHICLES PROHIBITED 34

FUTURE

INTER 65 NORTH Nashville

EXIT 80 INTER 440 WEST Memphis 195

EXIT 80 INTER 440 EAST Knoxville

~~EXIST. SIGN IS MOUNTED IN THE POSITION OF THE PROP. SIGN. THE CONTRACTOR WILL BE REQD. TO MOVE EXISTING SIGN AS SHOWN ON DWG. NO. M-SG-114. COST OF MOVING EXISTING SIGN INCLUDED IN OTHER ITEMS OF CONSTRUCTION.~~

MILE 80

RAMP "C"

RAMP "A"

"W-S" ROADWAY D=1°-45' STA. 507+70

G.R.

505

510

515

520

525

530

500

EXISTING GUARDRAIL

I-65

D=1°-00'

"S-E" ROADWAY D=3°-00'

STA. 507+70

MILE 80

EXISTING OVERHEAD STRUCTURE STA. 501+20

THOMPSON LANE

MATCH LINE STA. 453+00

RETAINING WALL

GUARDRAIL

SEE SHEET NO. 153

INTER 65 NORTH Nashville

EXIT 80 INTER 440 WEST Memphis 196

EXIT 80 INTER 440 EAST Knoxville

~~EXIST. SIGN IS MOUNTED IN THE POSITION OF THE PROP. SIGN. THE CONTRACTOR WILL BE REQD. TO MOVE EXISTING SIGN AS SHOWN ON DWG. NO. M-SG-114. COST OF MOVING EXISTING SIGN INCLUDED IN OTHER ITEMS OF CONSTRUCTION.~~

PROPOSED SIGN

EXISTING SIGN

FUTURE PAVEMENT WIDENING & ARMORY DRIVE INTERCHANGE

EXISTING PAVEMENT STRIPING BUILT UNDER PROJ. I-65-2(58)80

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

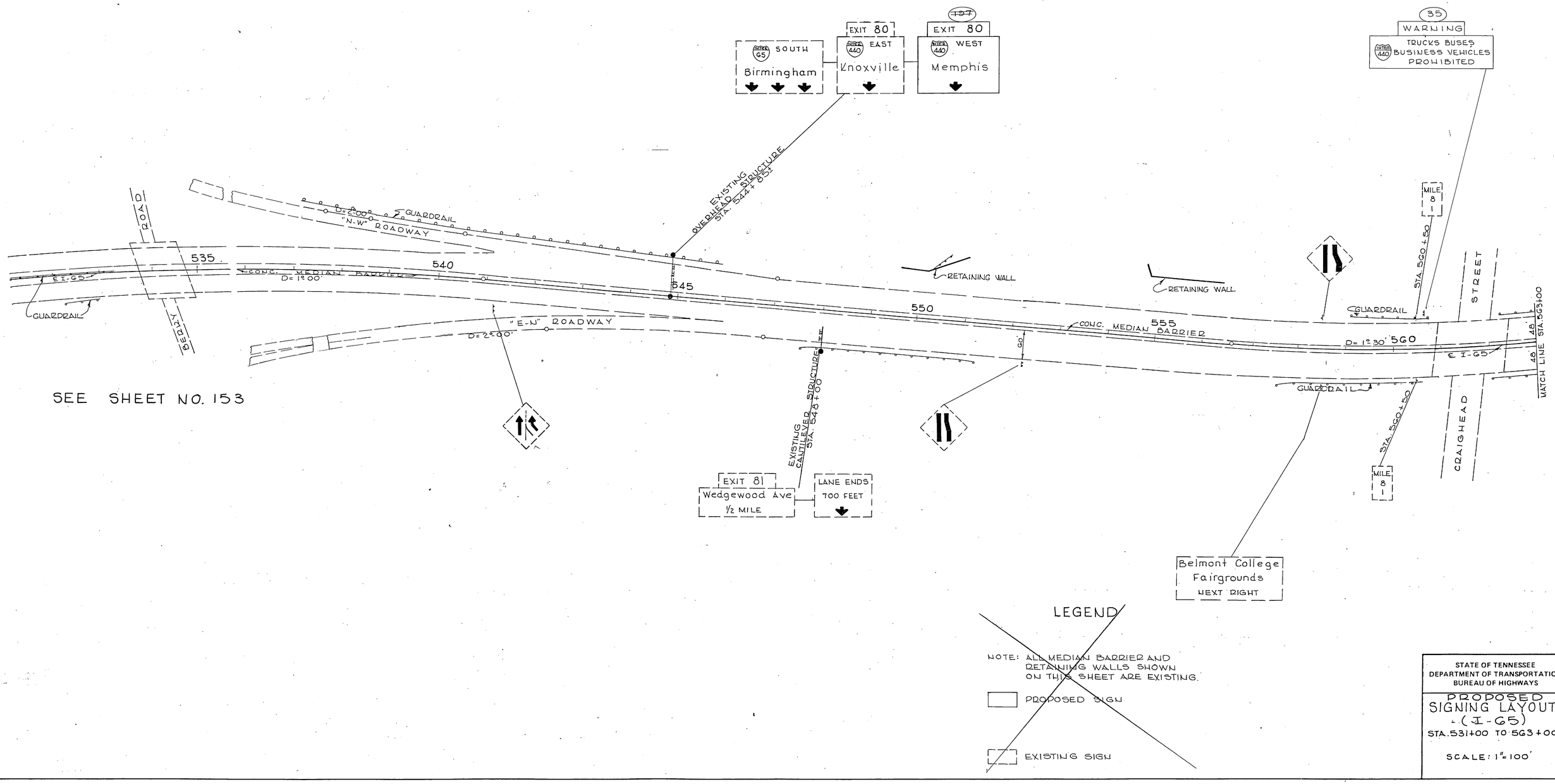
PROPOSED SIGNING LAYOUT (I-65)

STA. 255+00 TO 531+00

SCALE: 1"=100'

SECTION 11

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(53)206	125
SIGNING	1987	19014-4117-04	21



LEGEND

NOTE: ALL MEDIAN BARRIER AND RETAINING WALLS SHOWN ON THIS SHEET ARE EXISTING.

PROPOSED SIGN

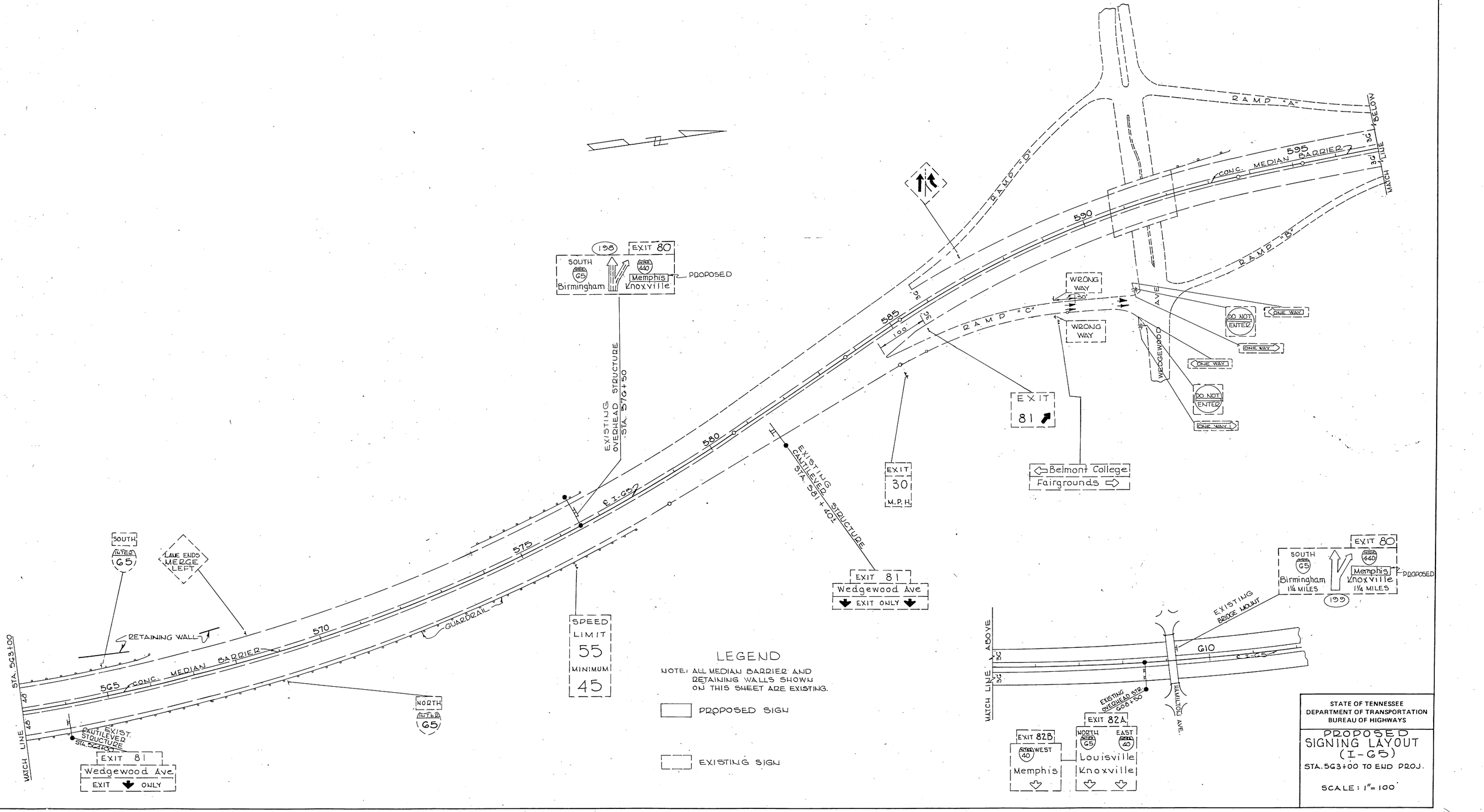
EXISTING SIGN

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

PROPOSED
SIGNING LAYOUT
(I-65)
STA. 531+00 TO 563+00

SCALE: 1"=100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
PAVING	1984	I-440-4(59)20G	166



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

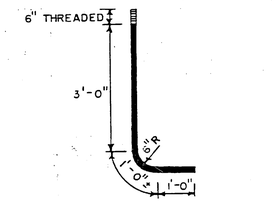
PROPOSED SIGNING LAYOUT (I-65)

STA. 563+00 TO END PROJ.

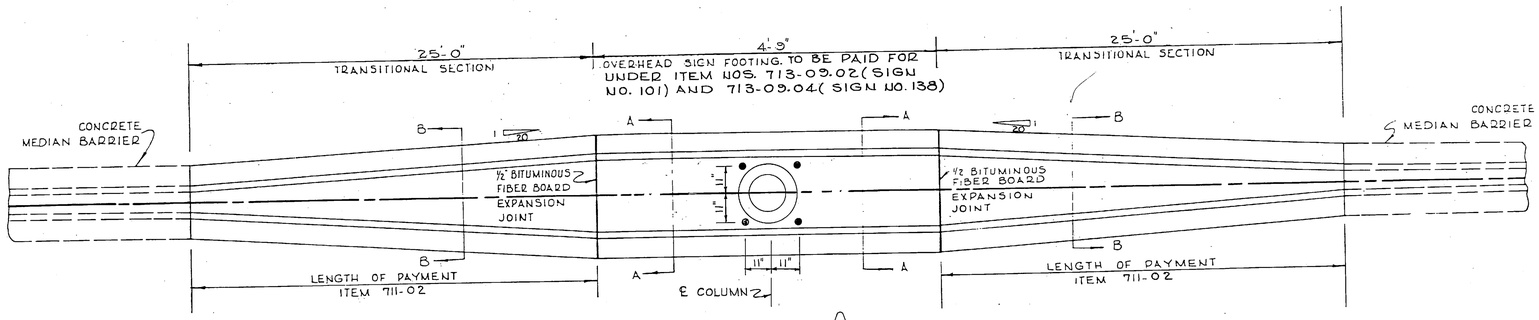
SCALE: 1" = 100'

TYPE	YEAR	PROJECT NO	SHEET NO.
PAVING	1984	I-440-4(55)206	168

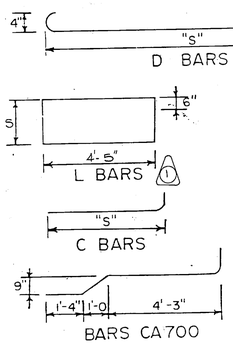
(1) REV. 5-20-86; FOOTING SIZE AND QUANTITIES.



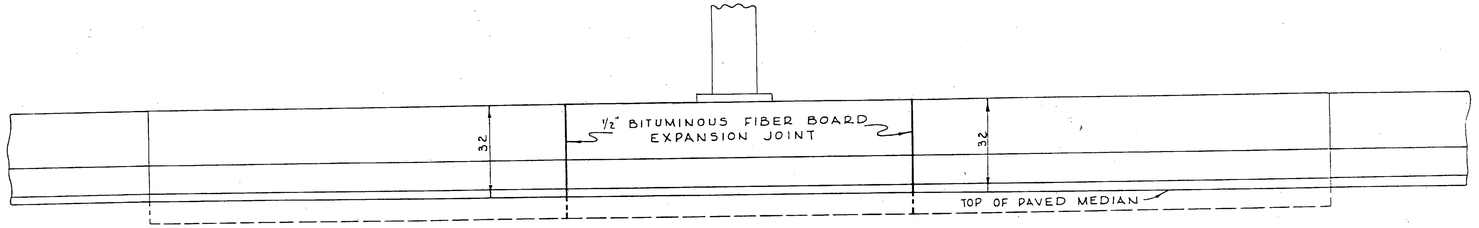
ANCHOR BOLT DETAIL
ASTM A-687 GALVANIZED STEEL



PLAN (1)



BAR DETAILS

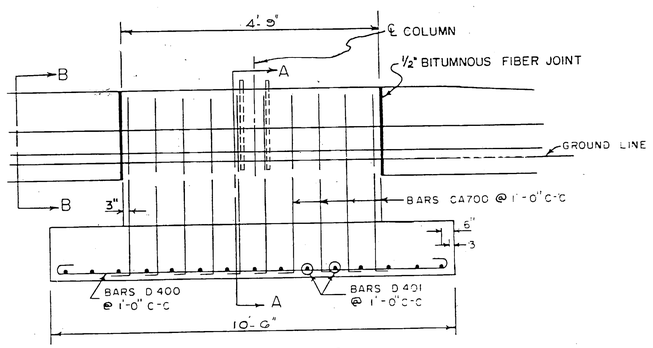


ELEVATION (1)

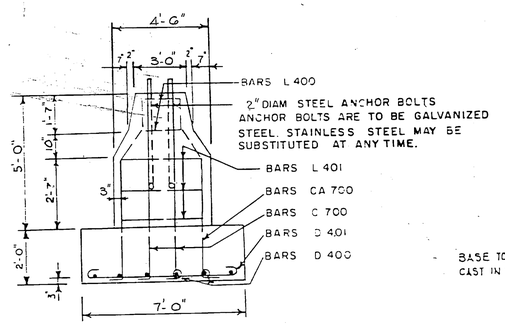
FINISHING CONCRETE SURFACES: CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.22 OF THE TENNESSEE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED BY THE SPECIAL PROVISION NO 130 REGARDING SECTION 604 - CONCRETE STRUCTURES. A TEXTURED COATED FINISH SHALL BE USED IN LIEU OF A CLASS 2 FINISH. THE COLOR OF THE FINISH SHALL BE SIMILAR TO WHITE. FEDERAL SPECIFICATION NO 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 POLYETHELENE 17 MILS (±2 MILS) BONDED TO THE BAR WITH AN APPROVED ADHESIVE 1 TO 8 MILS THICK (4 MILS NOMINAL).

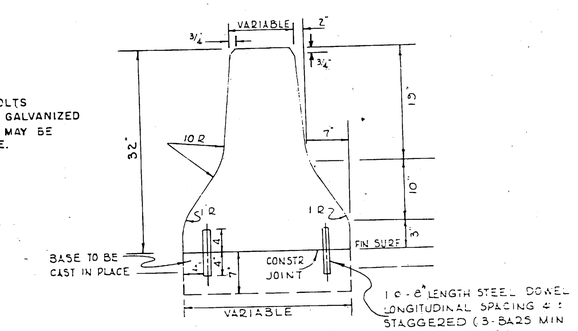
PRICE OF BARRIER INCLUDES COST OF ALL REINFORCEMENT, DOWELS, DRILLING, JOINTS, JOINT MATERIAL AND ANY OTHER INCIDENTAL ITEMS NECESSARY FOR COMPLETE INSTALLATION OF THE BARRIER.



FOOTING F-1 (1)



SECTION "A-A" (1)



SECTION "B-B" (1)

ESTIMATED QUANTITIES (1)

CLASS "A" CONCRETE	8.9 C Y
REINFORCING STEEL	374 LB.

SIGN NO. 101
STA. 228 + 27±

SIGN NO. 138
STA. 253 + 00±

BILL OF STEEL - PER FOOTING (1)

BAR	SIZE	NO. REQD.	DIM. "S"	LENGTH
C 700	7	4	6'-6"	7'-6"
CA700	7	10		7'-10"
D 400	4	6	10'-0"	10'-6"
D 401	4	11	6'-6"	7'-6"
L 400	4	2	2'-7"	14'-6"
L 401	4	3	4'-1"	17'-6"

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

DETAILS
OVERHEAD SIGN STRUCTURE MOUNTED ON CONCRETE MEDIAN BARRIER