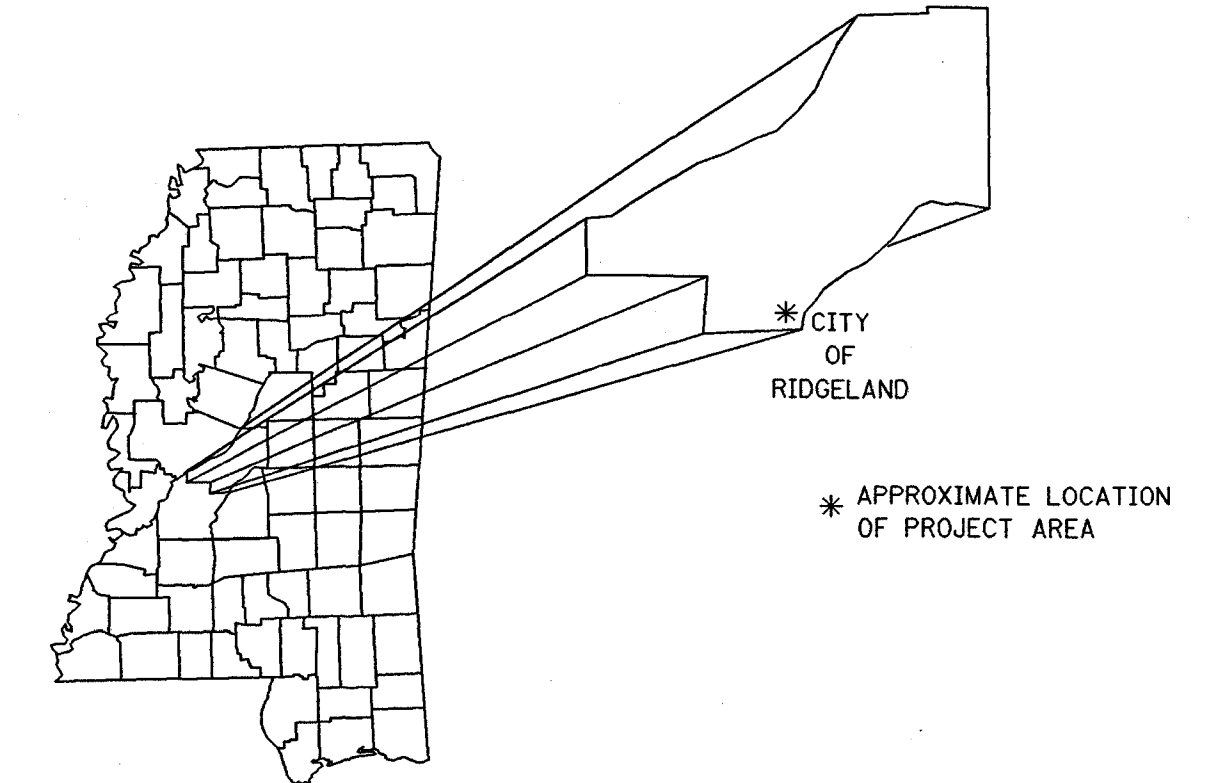


MISSISSIPPI DEPARTMENT OF TRANSPORTATION ENHANCEMENT PROGRAMS CITY OF RIDGELAND MULTI-USE PATH PROJECT NO. STP-0213-00(025)

GENERAL INDEX

DESCRIPTION	NUMBER OF SHEETS
TITLE SHEET	1
DETAILED INDEX	1
GENERAL NOTES	1
TYPICAL SECTIONS	2
SCHEDULE SHEETS	3
PLAN & PROFILE SHEETS	21
TRAFFIC CONTROL PLANS	2
PERMANENT MARKING AND SIGNING PLANS	12
DETAIL SHEETS	4
SPECIAL DESIGN DRAWINGS	6
STANDARD DRAWINGS	13
CROSS SECTIONS	X
TOTAL	X

LOCATION MAP



BRIDGE STRUCTURES REQ'D.

Bridge over CN/IC Railroad
Sta. 61+93.02 to Sta. 63+93.02
Spans (2 @ 100')

Bridge over Purple Creek
Sta. 14+83.44 to Sta. 15+31.44
Spans (1 @ 48')

LENGTH DATA

MULTI-USE PATH	
Length of Path	1.975 MI.
Length of Bridges	0.046 MI.
Length of Exceptions	0.138 MI.
Length of Project (Gross)	2.159 MI.

EQUATIONS

None

EXCEPTIONS

26+87.42 - 32+04.87

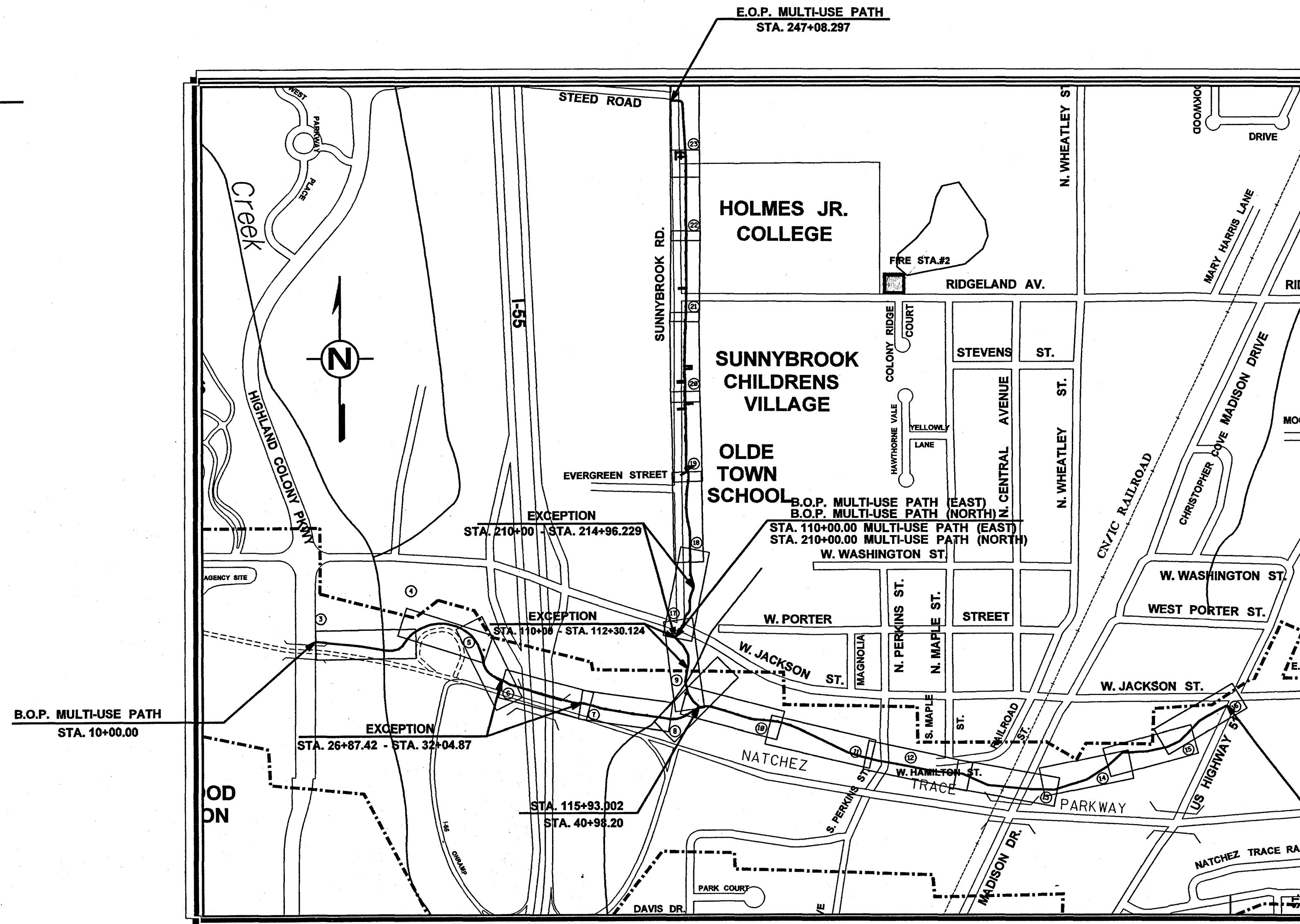
110+00.00 - 112+30.124

210+00.00 - 214+96.229

DESIGN DATA

DESIGN SPEED = 20 MPH

FOR REVIEW
NOT FOR CONSTRUCTION



VICINITY MAP

PROJECT LOCATION

RATIOS/SCALES (UNLESS OTHERWISE NOTED)

PLAN	1" = 20'
PROFILE	HOR. 1" = 20'
	VERT. 1" = 5'

Mayor:
Gene F. McGee

Aldermen:
Linda Davis Trunzler
Gerald Steen
Ken Heard
Chuck Gautier
Carole A. Davis
Larry Roberts
Scott Jones

Public Works Director:
John M. McCollum, P.E.

Asst. Public Works Director:
Sid Hawthorne

Asst. City Engineer:
David Williams, P.E.

City Clerk:
David W. Overby

Fire Chief:
Matthew Bailey

Police Chief:
Jimmy R. Houston, Sr.

Madison County

Prepared by: _____
Project Engineer _____ Date _____

Approved: _____
Mayor _____ Date _____
City of Ridgeland

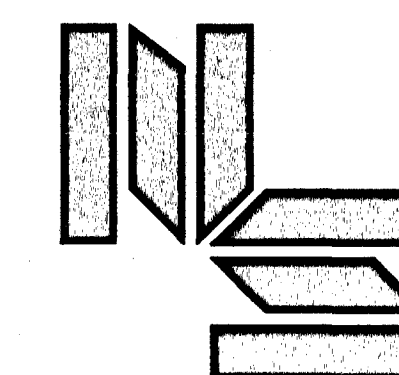
Approved: _____
Executive Director _____ Date _____
Mississippi Department of Transportation

Approved: _____
Division Administrator _____ Date _____
Federal Highway Administration

ENVIRONMENTAL PERMITS

TYPE	REQUIRED		BY
	YES	NO	
N.W. (WATERS OF U.S.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
N.W. (WETLANDS)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
G.P.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
404	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
STORMWATER	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

PREPARED BY:



NEEL-SCHAFFER, INC.
ENGINEERS PLANNERS
Jackson, Mississippi

Filename: TITLESHT.dgn



















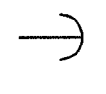




PWP-01310

MARCH 18th 2003

GENERAL NOTES

- Existing trees within the clearing limits designated "to remain" shall not be removed except by permission of the Engineer. Trees outside the clearing limits shall not be damaged or removed without the permission of the Engineer unless otherwise indicated. Trees indicated on plans are for reference and do not include all trees that may be present within or without the project limits. Trees not shown on plans shall not be counted separately for payment except as specifically noted or specified.
- Within the boundaries of the Natchez Trace Parkway, the Contractor shall stake the baselines, earthwork limits and clearing limits prior to the start of construction. See Special Provisions 907-699 for staking requirements. Costs of this staking shall be absorbed in pay item 907-699. When staking of the baselines, earthwork limits and clearing limits is complete, the Contractor shall notify the Engineer. The Owner, Engineer and representatives of the National Park Service will review the project within ten days of being notified that the staking is complete. During this review, desirable trees which fall outside the earthwork limits but within the clearing limits will be marked to remain. After this review, the Engineer will notify the Contractor in writing that the review has been completed and will indicate the markings used to identify trees which are to remain. At the same time the clearing limits may be adjusted to include or exclude specific features. In no case will the clearing limit be adjusted to be more than 25 feet farther from the baseline than the location shown on the plans. Adjustment of the clearing limits will not result in any change in the contract amount regardless of the extent of the changes in the clearing limits.
- Areas between the earthwork limits and clearing limits shall be cleared of all brush, trees, weeds and debris except for trees marked during the Owner's review. The ground shall be scarified and the area shall be seeded and mulched. The Contractor shall maintain areas thus treated to include mowing, removal of debris, maintenance of erosion control measures and repair of erosion damage until the project is accepted by the Owner.
- Selected dead, dying or unsightly pine trees outside the clearing limits and within the boundaries of the Natchez Trace Parkway shall be removed by the contractor. Trees outside limits of construction, which are to be removed, will be marked by the National Park Service. Removal of trees beyond the clearing limits shall be paid under pay item 202-B.
- All existing landscaping within the project limits shall be protected unless otherwise indicated. Landscaping which is damaged as a result of work under this contract shall be replaced with material of the same quantity, quality and dimensions as that which was damaged. In the case of plant material all plants shall be live and in good condition at the time of installation.
- The 1990 Mississippi Standard Specifications for Road and Bridge Construction are made a part of fully and completely as if attached hereto, except where superseded by the special provisions, or amended by revisions.
- All signs, signals, pavement markings and temporary traffic control devices shall conform to the Manual of Uniform Traffic Control Devices (Millennium Edition and all subsequent revisions).
- Underground utilities shown on plans are plotted in their approximate locations from the best information available to the Engineer. The Engineer does not guarantee their accuracy or guarantee that all utilities are shown. The Contractor shall be responsible for making for himself independent investigations, including subsurface investigation, as may be necessary.
- For list of public utilities, see WK. No. 3.
- All permanent signs installed within the boundaries of the Natchez Trace Parkway shall be mounted on 2"x 2" weathering steel posts. All permanent sign within the boundaries of the Natchez Trace Parkway shall be painted brown on the reverse side. Submit color sample for approval prior to purchasing paint.

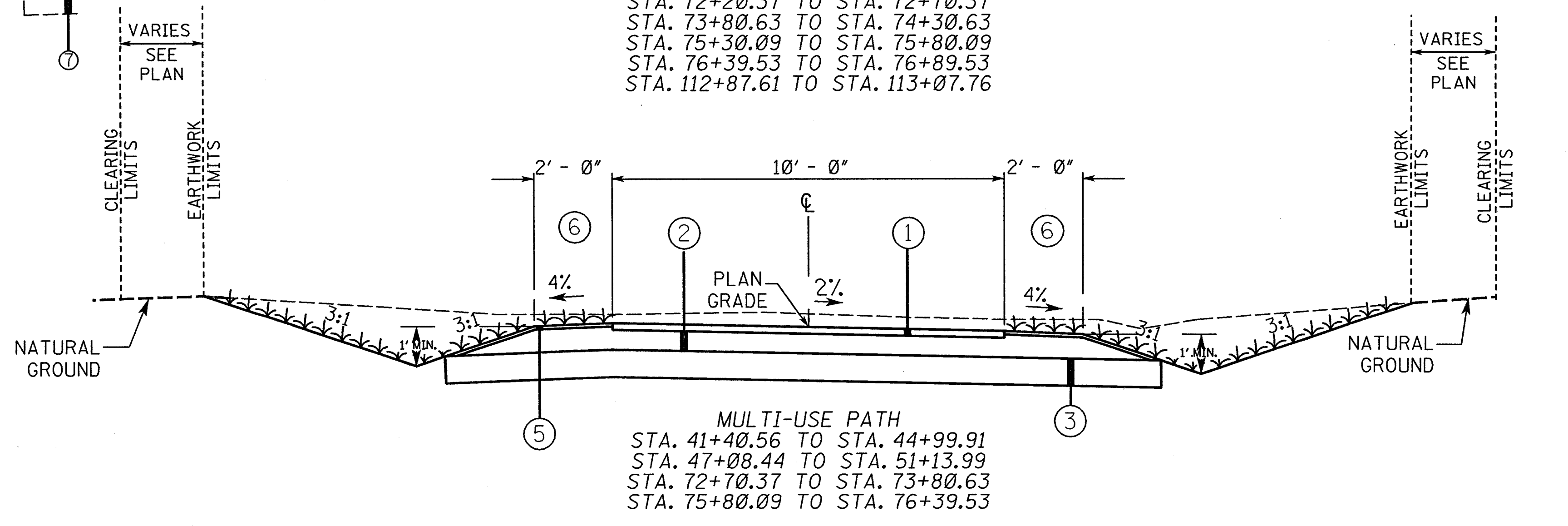
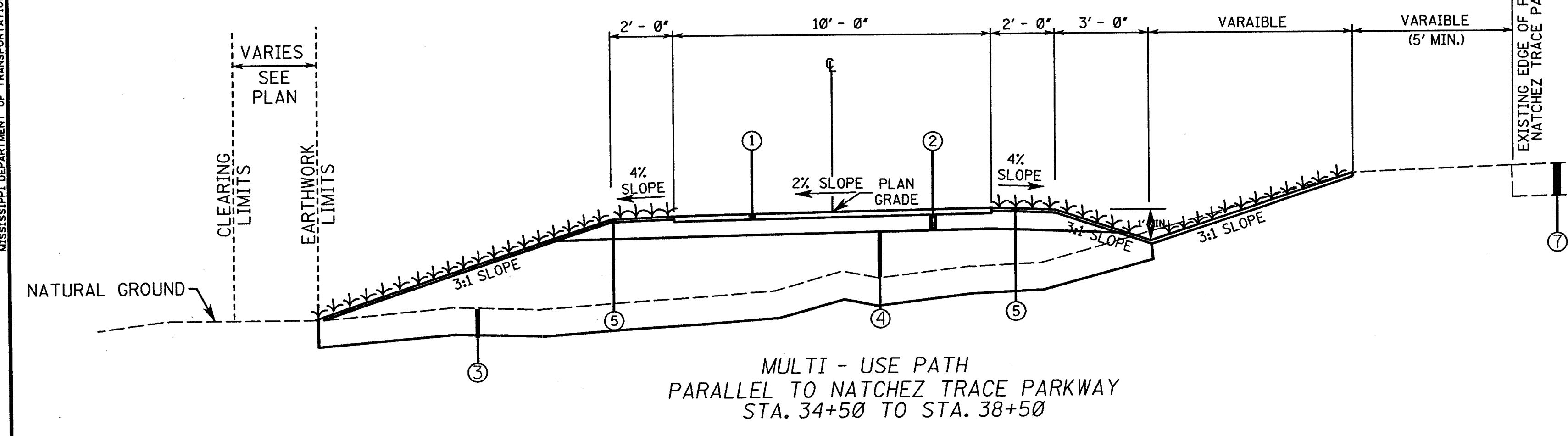
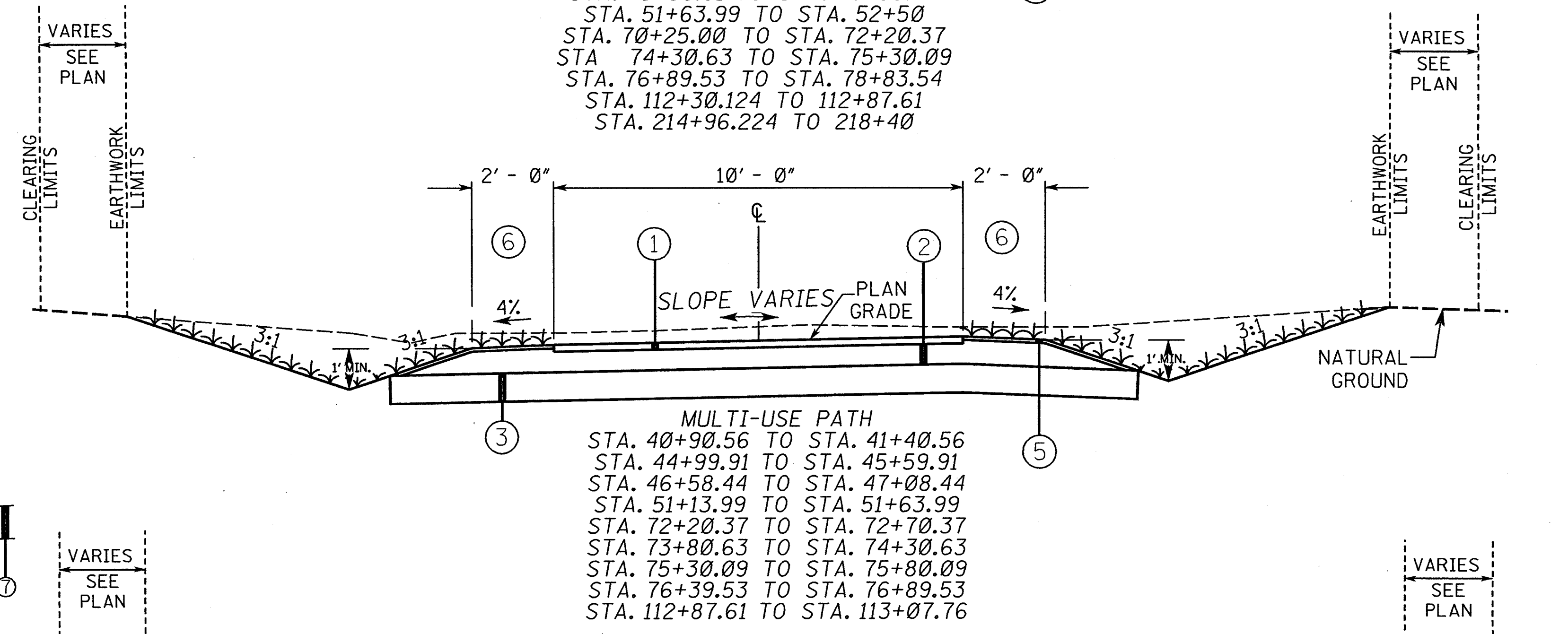
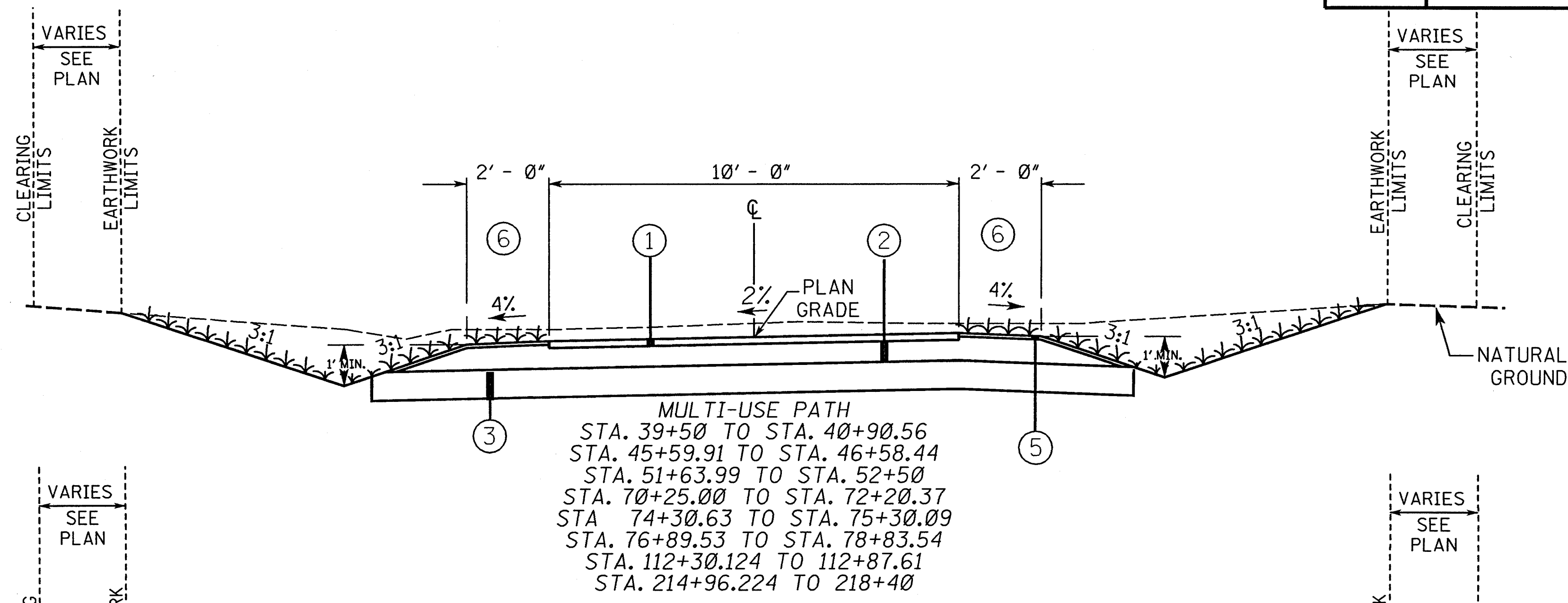
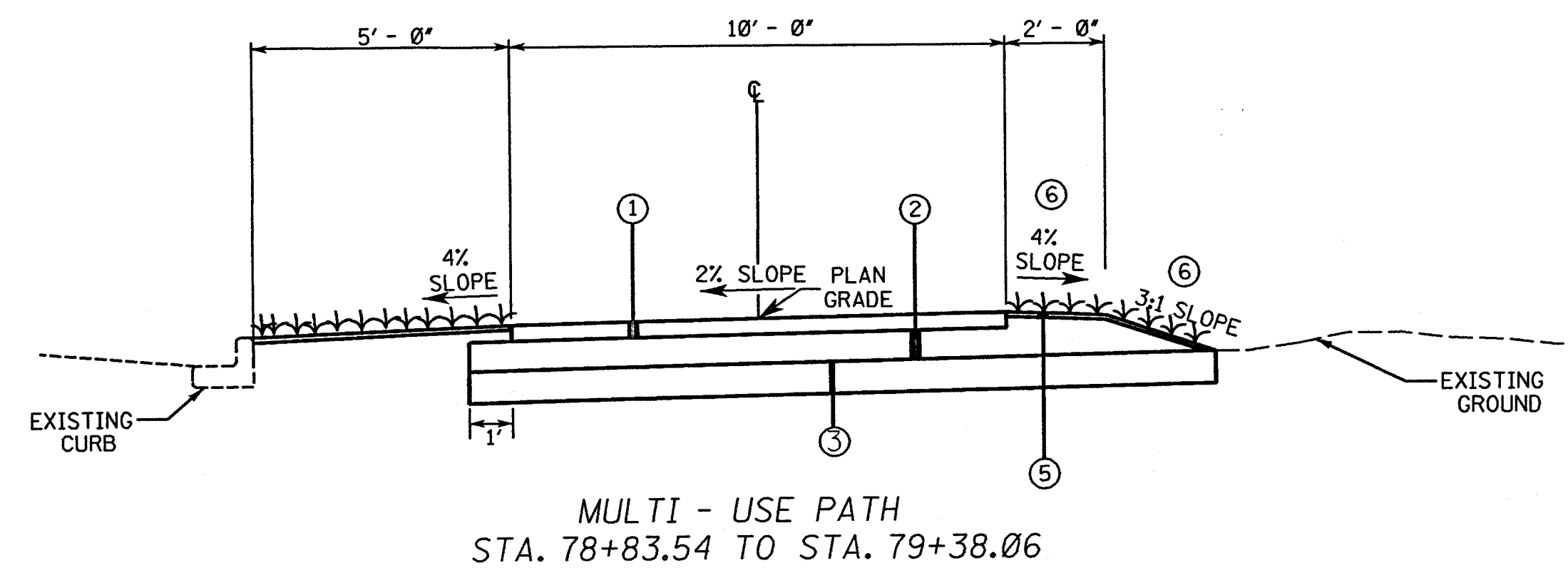
LEGEND

TBM		COMMUNICATION BOX	
IRON ROD		PAY PHONE	
SET IRON ROD		TRAFFIC POLE	
FOUND IRON ROD		ANTENNA POLE	
NAIL		FLOOD LIGHT	
STOP SIGN		SPRINKLER	
GUARD POST		SPRINKLER VALVE	
CURB INLET		VENT PIPE	
FLOWER BED		LIFT STATION	
GUY WIRE		LINE CONTINUES	
GUY POLE		YAUPON HOLLY	
		INDIAN HAWTHORNE	

**FOR REVIEW
NOT FOR CONSTRUCTION**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
GENERAL NOTES	
WORKING NUMBER	GN-1
FILENAME:	GNOTES.dgn
DESIGN TEAM	N-S
CHECKED	DATE
SHEET NUMBER	

PLAN DESIGN BY: MISSISSIPPI DEPARTMENT OF TRANSPORTATION

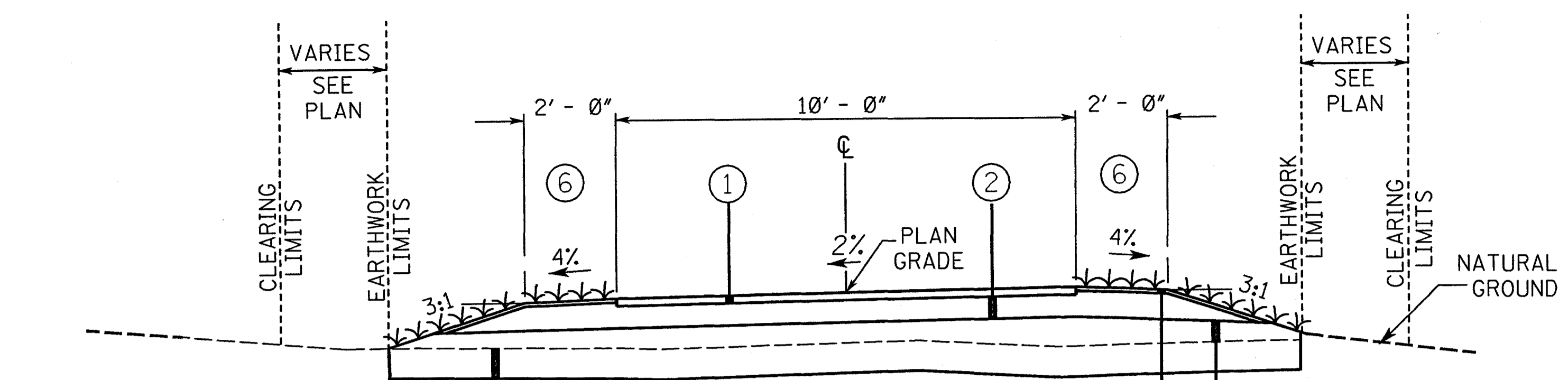


- ① 2" HOT-MIX ASPHALT SURFACE COURSE (HMA MT 9.5mm)
- ② 6" AND VARIABLE GRANULAR MATERIAL (CLASS 5) (GROUP C)
- ③ 6" AND VARIABLE EXISTING SUBGRADE, SCARIFIED AND COMPACTED IN PLACE
- ④ BORROW MATERIAL (B15)
- ⑤ 2" AND VARIABLE TOP SOIL REQ'D.
- ⑥ EROSION CONTROL TREATMENT PER PLANS AND VEGETATION SCHEDULE
- ⑦ EXISTING PAVEMENT STRUCTURE

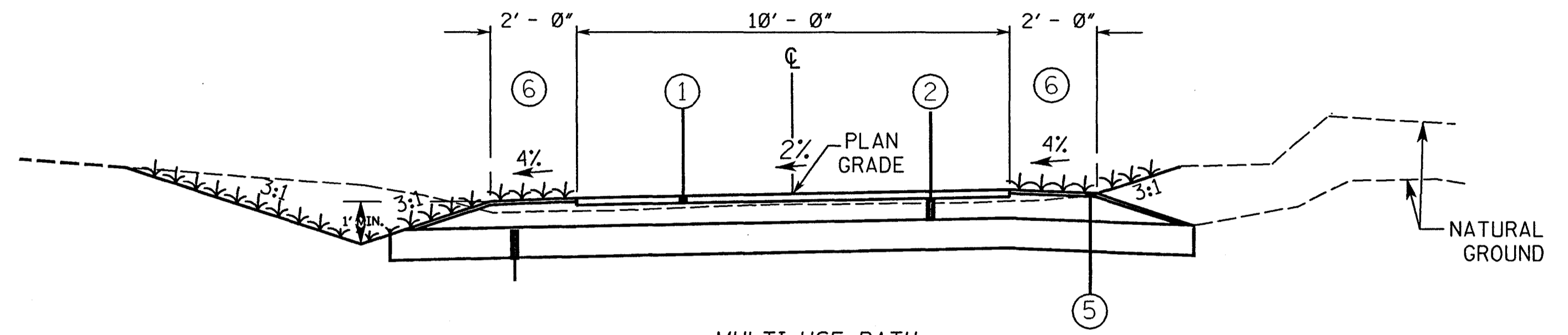
**FOR REVIEW
NOT FOR CONSTRUCTION**

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		CITY OF RIDGELAND, MISSISSIPPI	
		MULTI-USE PATH	
		TYPICAL SECTIONS	
DATE	FILENAME: tynps.dgn	WORKING NUMBER	TS-1
DESIGN TEAM	N-S	CHECKED	SHEET NUMBER
		DATE	

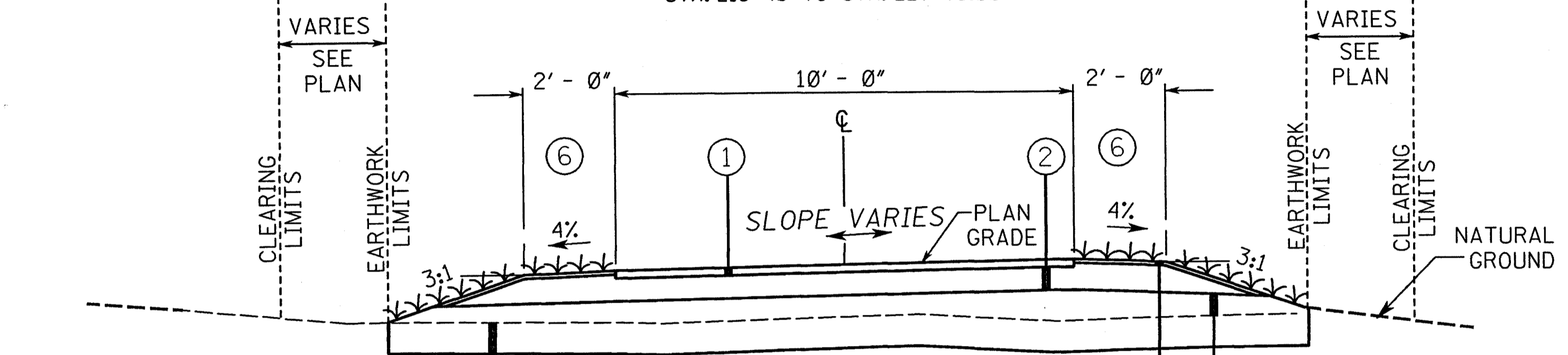
PLAN DESIGN DIVISION OF TRANSPORTATION



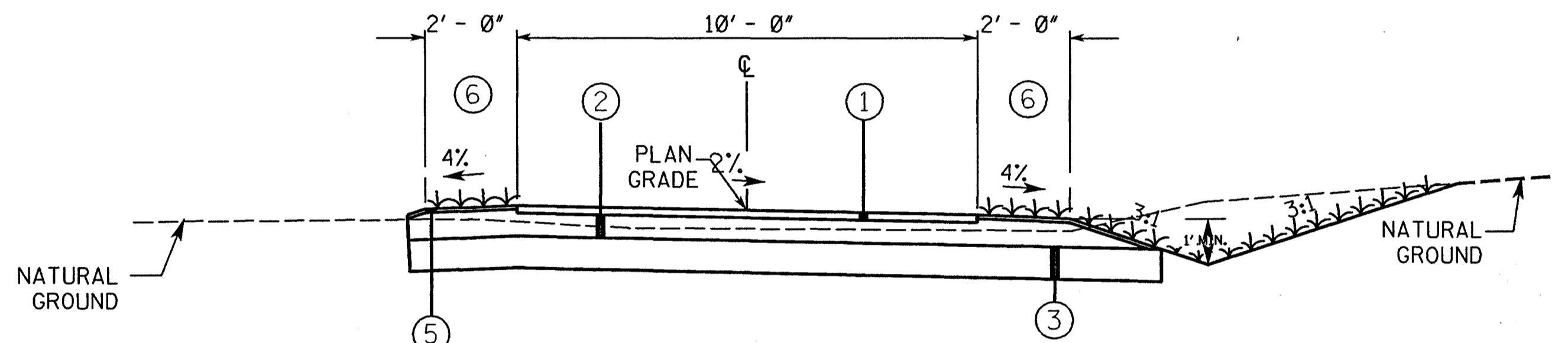
MULTI-USE PATH
 STA. 13+05.62 TO STA. 16+14.45
 STA. 24+14.40 TO STA. 34+50
 STA. 38+50 TO STA. 39+50
 STA. 52+50 TO STA. 54+07.96
 STA. 56+98.88 TO STA. 60+35.07
 STA. 64+14.24 TO STA. 66+73.83
 STA. 69+93.29 TO STA. 70+25.00
 STA. 114+10.26 TO STA. 115+93.00
 STA. 218+40 TO STA. 227+75.00



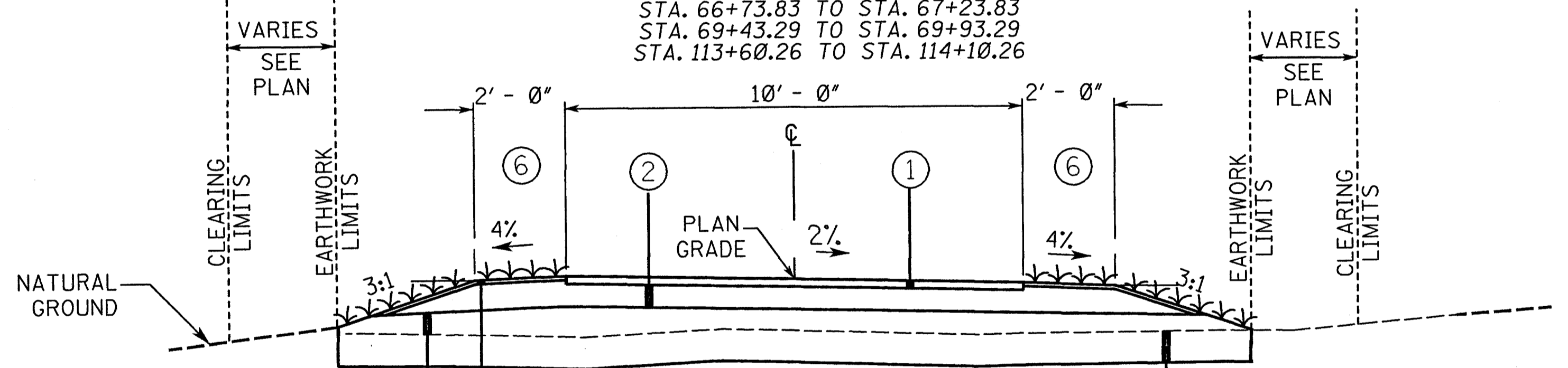
MULTI-USE PATH
 STA. 227+75.00 TO STA. 247+08.297



MULTI-USE PATH
 STA. 12+55.62 TO STA. 13+05.62
 STA. 16+14.45 TO STA. 16+64.45
 STA. 23+64.40 TO STA. 24+14.40
 STA. 54+87.96 TO STA. 55+37.96
 STA. 56+48.88 TO STA. 56+98.88
 STA. 60+35.07 TO STA. 60+85.07
 STA. 66+73.83 TO STA. 67+23.83
 STA. 69+43.29 TO STA. 69+93.29
 STA. 113+60.26 TO STA. 114+10.26



MULTI-USE PATH
 STA. 10+00 TO STA. 10+50



MULTI-USE PATH
 STA. 10+50 TO STA. 12+55.62
 STA. 16+64.45 TO STA. 23+64.40
 STA. 55+37.96 TO STA. 56+48.88
 STA. 60+85.07 TO STA. 61+44.78
 STA. 67+23.83 TO STA. 69+43.29
 STA. 113+07.76 TO STA. 113+60.26

- ① 2" HOT-MIX ASPHALT SURFACE COURSE (HMA MT 9.5mm)
- ② 6" AND VARIABLE GRANULAR MATERIAL (CLASS 5) (GROUP C)
- ③ 6" AND VARIABLE EXISTING SUBGRADE, SCARIFIED AND COMPACTED IN PLACE
- ④ BORROW MATERIAL (B15)
- ⑤ 2" AND VARIABLE TOP SOIL REQ'D.
- ⑥ EROSION CONTROL TREATMENT PER PLANS AND VEGETATION SCHEDULE
- ⑦ EXISTING PAVEMENT STRUCTURE

**FOR REVIEW
 NOT FOR CONSTRUCTION**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
TYPICAL SECTIONS	
WORKING NUMBER	TS-2
FILENAME:	typnps2.dgn
DESIGN TEAM	N-S
CHECKED	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 PLANNING AND DESIGN DIVISION
 1000 BAYVIEW BLVD., SUITE 100
 BILOXI BEACH, MISSISSIPPI 39266-4000
 PHONE: 601/833-2200
 FAX: 601/833-2201
 WWW.MISSISSIPPIDEPARTMENTOFTRANSPORTATION.COM

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM	UNIT	PRELIMINARY	FINAL
***** EARTHWORK ITEMS *****				
201-A	CLEARING AND GRUBBING	LUMP SUM		
202-A	REMOVAL OF OBSTRUCTIONS	LUMP SUM		
202-B	REMOVAL OF SELECTED TREES OUTSIDE THE LIMITS OF CONSTRUCTION	EACH		
202-B	REMOVAL OF HEADWALLS	LUMP SUM		
202-B	REMOVAL OF CURB (ALL TYPES)	LIN.FT.		
202-B	REMOVAL OF CONCRETE PAVED DITCH	LIN.FT.		
202-B	REMOVAL OF PIPE (ALL SIZES)	LIN.FT.		
202-B	REMOVAL OF TRAFFIC STRIPE	LIN.FT.		
202-B	REMOVAL OF TRAFFIC STRIPE	SQ.YD.		
202-B	REMOVAL OF ASPHALT PAVEMENT (ALL DEPTHS)	SQ.YD.		
203-A	UNCLASSIFIED EXCAVATION (FM)	CU.YD.		
203-EX	BORROW EXCAVATION (FME) (AH) (CLASS B15) (CONTRACTOR FURNISHED)	CU.YD.		
203-G	EXCESS EXCAVATION (FM) (AH)	CU.YD.		
206-A	STRUCTURE EXCAVATION	CU.YD.		
***** ROADSIDE DEVELOPMENT ITEMS *****				
211-B	TOPSOIL FOR SLOPE TREATMENT (CONTRACTOR FURNISHED)(LVM)	CU.YD.		
212-B	STANDARD GROUND PREPARATION	SQ.YD.		
213-A	AGRICULTURAL LIMESTONE	TON		
213-B	COMBINATION FERTILIZER (13-13-13)	TON		
213-C	SUPERPHOSPHATE	TON		
214-A	SEEDING (BERMUDAGRASS)	LB.		
214-A	SEEDING (TALL FESCUE)	LB.		
214-A	SEEDING (CRIMSON CLOVER)	LB.		
215-A	VEGETATIVE MATERIALS FOR MULCH	TON		
216-A	SOLID SODDING	SQ.YD.		
217-A	DITCH LINER	SQ.YD.		
907-218-C	BITUMINOUS TREATED ROVING	SQ.YD.		
219-A	WATERING	M/GALLON		
220-A	INSECT PEST CONTROL	ACRE		
907-221-A	PORTLAND CEMENT CONCRETE PAVED DITCH	CU.YD.		
230-A	SHRUB PLANTING (YAUPON HOLLY) (3 GAL.)	EACH		
230-A	SHRUB PLANTING (INDIAN HAWTHORNE) (3 GAL.)	EACH		
232-A	FERTILIZER FOR WOODY PLANT MATERIAL TABLE (21 GRAM)	M		
233-A	TREE BARK MULCH (TYPE II)	CU YD.		
234-A	TEMPORARY SILT FENCE	LIN.FT.		
235-A	TEMPORARY EROSION CHECKS	BALE		
***** SUBBASES & BASE ITEMS *****				
304-C	GRANULAR MATERIAL (LVM) (CLASS 5 , GROUP C)	CU.YD.		
***** BITUMINOUS PAVING ITEMS *****				
907-403-A	HOT MIX ASPHALT,HT(9.5 mm MIXTURE)	TON		
***** CONCRETE PAVING ITEMS *****				
907-503-C	SAW CUT, FULL DEPTH	LIN. FT.		

- ① REMOVAL OF OBSTRUCTIONS SHALL INCLUDE ALL OBSTRUCTIONS SHOWN ON THE PLANS INCLUDING CONCRETE HEADWALLS, CISTERNS AND ANY OTHER ITEMS WHICH NEED TO BE REMOVED.
- ② QUANTITY INCLUDED XXXX CUBIC YARDS E.S.F.E.
EROSION CONTROL ITEMS REQUIRED:
- ③

ITEM	RATE	SEASONAL
STANDARD GROUND PREPARATION	PER SQ. YD.	MAR 1 TO SEPT 1
AGRICULTURAL LIMESTONE	3 TONS/ACRES	MAR 1 TO SEPT 1
COMBINATION FERTILIZER (13-13-13)	.5 TON/ACRE	MAR 1 TO SEPT 1
SEEDING (BERMUDA GRASS)	21 LBS/ACRE	MAR 1 TO SEPT 1
VEGATATIVE MATERIAL FOR MULCH	2 TONS/ACRE	MAR 1 TO SEPT 1
- ④ INCLUDES CONCRETE FOR CONCRETE COLLARS AND JUNCTION BOXES.
- ⑤ MAINTENANCE OF TRAFFIC SHALL INCLUDE ALL ITEMS NECESSARY TO PROVIDE ADEQUATE AND SAFE TRAFFIC CONTROL DURING CONSTRUCTION ACTIVITIES.

③
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③

**FOR REVIEW
NOT FOR CONSTRUCTION**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
SUMMARY OF QUANTITIES	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
PROJECT NO. STP-0213-00(025)	WORKING NUMBER
COUNTY : MADISON	SQ-1
FILENAME: SQ.dgn	SHEET NUMBER
DESIGN TEAM N-S	CHECKED DATE

ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM	UNIT	PRELIMINARY	FINAL
***** DRAINAGE ITEMS *****				
601-B	CLASS "B" STRUCTURAL CONCRETE, MINOR STRUCTURES	CU.YD.		
602-A	REINFORCING STEEL	LB.		
603-C-A	15" REINFORCED CONCRETE PIPE, CLASS III	LIN.FT.		
603-C-A	18" REINFORCED CONCRETE PIPE, CLASS III	LIN.FT.		
603-C-A	24" REINFORCED CONCRETE PIPE, CLASS III	LIN.FT.		
603-C-A	36" REINFORCED CONCRETE PIPE, CLASS III	LIN.FT.		
603-C-B	15" REINFORCED CONCRETE END SECTION	EACH		
603-C-B	18" REINFORCED CONCRETE END SECTION	EACH		
603-C-B	24" REINFORCED CONCRETE END SECTION	EACH		
603-C-B	36" REINFORCED CONCRETE END SECTION	EACH		
603-C-E	22"x13" REINFORCED CONCRETE ARCH PIPE, CLASS IIIA	LIN. FT.		
603-C-E	29"x18" REINFORCED CONCRETE ARCH PIPE, CLASS IIIA	LIN. FT.		
603-C-E	36"x23" REINFORCED CONCRETE ARCH PIPE, CLASS IIIA	LIN. FT.		
603-C-E	58"x36" REINFORCED CONCRETE ARCH PIPE, CLASS IIIA	LIN.FT.		
603-C-F	22"x13" CONCRETE ARCH PIPE END SECTION	EACH		
603-C-F	29"x18" CONCRETE ARCH PIPE END SECTION	EACH		
603-C-F	36"x23" CONCRETE ARCH PIPE END SECTION	EACH		
603-C-F	58"x36" CONCRETE ARCH PIPE END SECTION	EACH		
603-M-A	18" ZINC COATED CORRUGATED METAL PIPE, 16 GAUGE, 2 2/3" x 1/2" CORRUGATIONS	LIN.FT.		
603-M-A	24" ZINC COATED CORRUGATED METAL PIPE, 16 GAUGE, 2 2/3" x 1/2" CORRUGATIONS	LIN.FT.		
604-A	CASTINGS	LB		
604-B	GRATINGS	LB		
***** INCIDENTAL CONSTRUCTION ITEMS *****				
606-B-PP	HAND RAIL (PER PLANS)	LIN. FT.		
907-606-N-PP	BOLLARD GUARD POST ASSEMBLY (EARTH TYPE)(PER PLANS)	EACH		
907-606-P-PP	BOLLARD GUARD POST ASSEMBLY (HINGED TYPE)(PER PLAN)	EACH		
613-A	ADJUSTMENT OF CASTINGS, GRATINGS AND UTILITY APPURTENANCES	LUMP SUM		
614-B	CONCRETE DRIVEWAY (WITH REINFORCEMENT)	SQ. YD.		
907-614-C-PP	DETECTABLE WARNINGS (PER PLAN)	SQ. YD.		
617-A	RIGHT-OF-WAY MARKERS (TYPE II)	EACH		
618-A	MAINTENANCE OF TRAFFIC	LUMP SUM		
***** TRAFFIC CONTROL ITEMS *****				
619-D1	STANDARD ROADSIDE CONSTRUCTION SIGNS (LESS THAN 10 SQ.FT.)	SQ.FT.		
619-D2	STANDARD ROADSIDE CONSTRUCTION SIGNS (10 SQ.FT. OR MORE)	SQ.FT.		
620-A	MOBILIZATION	LUMP SUM		
***** PAVEMENT MARKING ITEMS *****				
907-626-AA OR	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE) (90 MIL.MIN.) OR 6" COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	MILE		
907-626-BB OR	6" THERMOPLASTIC TRAFFIC STRIPE (CONTINUOUS WHITE) (90 MIL. MIN.) OR 6" COLD PLASTIC TRAFFIC STRIPE (CONTINUOUS WHITE)	MILE		
907-626-CC OR	6" THERMOPLASTIC EDGE STRIPE (CONTINUOUS WHITE) (60 MIL. MIN.) OR 6" COLD PLASTIC EDGE STRIPE (CONTINUOUS WHITE)	MILE		
907-626-EE OR	6" THERMOPLASTIC TRAFFIC STRIPE (CONTINUOUS YELLOW) (90 MIL. MIN.) OR 6" COLD PLASTIC TRAFFIC STRIPE (CONTINUOUS YELLOW)	MILE		
907-626-FF OR	6" THERMOPLASTIC EDGE STRIPE (CONTINUOUS YELLOW) (60 MIL. MIN.) OR 6" COLD PLASTIC EDGE STRIPE (CONTINUOUS YELLOW)	MILE		
907-626-GG OR	THERMOPLASTIC DETAIL STRIPE (6" EQUIVALENT LENGTH)(WHITE) (90 MIL. MIN.) OR COLD PLASTIC DETAIL STRIPE (6" EQUIVALENT LENGTH) (WHITE)	LIN.FT.		
907-626-GG OR	THERMOPLASTIC DETAIL STRIPE (6" EQUIVALENT LENGTH)(YELLOW) (90 MIL. MIN.) OR COLD PLASTIC DETAIL STRIPE (6" EQUIVALENT LENGTH) (YELLOW)	LIN.FT.		
907-626-HH OR	THERMOPLASTIC LEGEND (WHITE) (120 MIL. MIN.) OR COLD PLASTIC LEGEND (WHITE)	SQ.FT.		
907-626-HH OR	THERMOPLASTIC LEGEND (WHITE) (120 MIL. MIN.) OR COLD PLASTIC LEGEND (WHITE)	LIN.FT.		

④

- ① REMOVAL OF OBSTRUCTIONS SHALL INCLUDE ALL OBSTRUCTIONS SHOWN ON THE PLANS INCLUDING CONCRETE HEADWALLS, CISTERNS AND ANY OTHER ITEMS WHICH NEED TO BE REMOVED.
- ② QUANTITY INCLUDED XXXX CUBIC YARDS E.S.F.E.
EROSION CONTROL ITEMS REQUIRED:
- ③

ITEM	RATE	SEASONAL
STANDARD GROUND PREPARATION	PER SQ. YD.	MAR 1 TO SEPT 1
AGRICULTURAL LIMESTONE	3 TONS/ACRES	MAR 1 TO SEPT 1
COMBINATION FERTILIZER (13-13-13)	.5 TON/ACRE	MAR 1 TO SEPT 1
SEEDING (BERMUDA GRASS)	21 LBS/ACRE	MAR 1 TO SEPT 1
VEGATATIVE MATERIAL FOR MULCH	2 TONS/ACRE	MAR 1 TO SEPT 1
- ④ INCLUDES CONCRETE FOR CONCRETE COLLARS AND JUNCTION BOXES.
- ⑤ MAINTENANCE OF TRAFFIC SHALL INCLUDE ALL ITEMS NECESSARY TO PROVIDE ADEQUATE AND SAFE TRAFFIC CONTROL DURING CONSTRUCTION ACTIVITIES.

⑤

**FOR REVIEW
NOT FOR CONSTRUCTION**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
SUMMARY OF QUANTITIES	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
PROJECT NO. STP-0213-00(025)	
COUNTY : MADISON	
DATE	WORKING NUMBER
FILENAME: SQ.dgn	SQ-2
DESIGN TEAM N-S	CHECKED DATE
	SHEET NUMBER

PLAN C.A.S. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

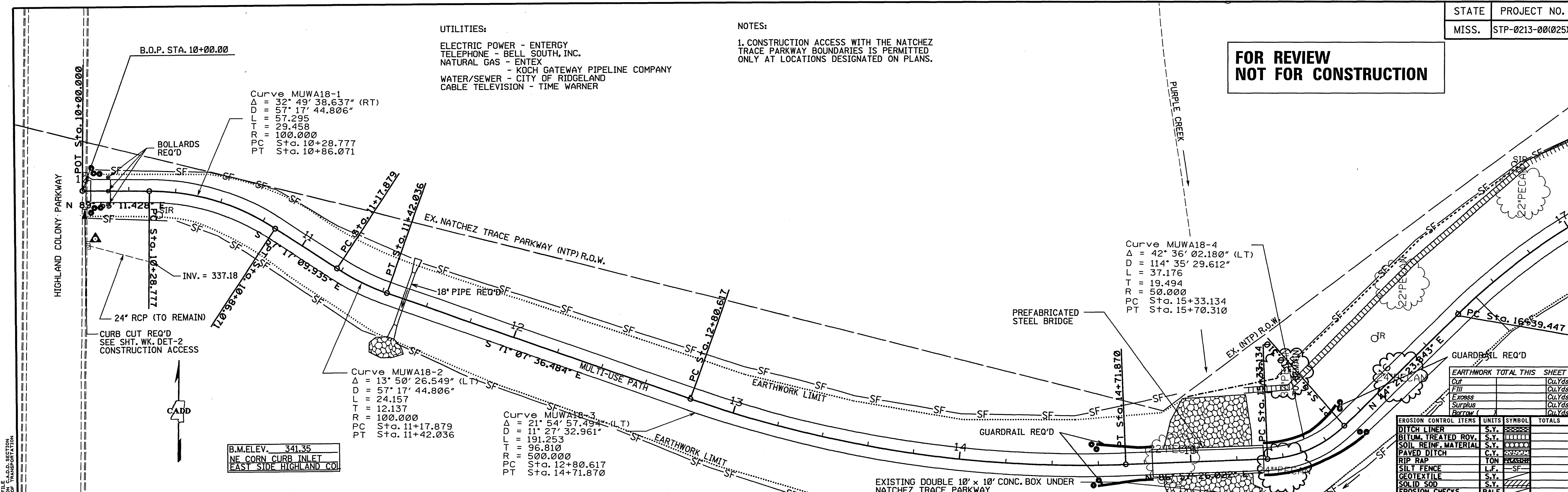
**FOR REVIEW
NOT FOR CONSTRUCTION**

UTILITIES:

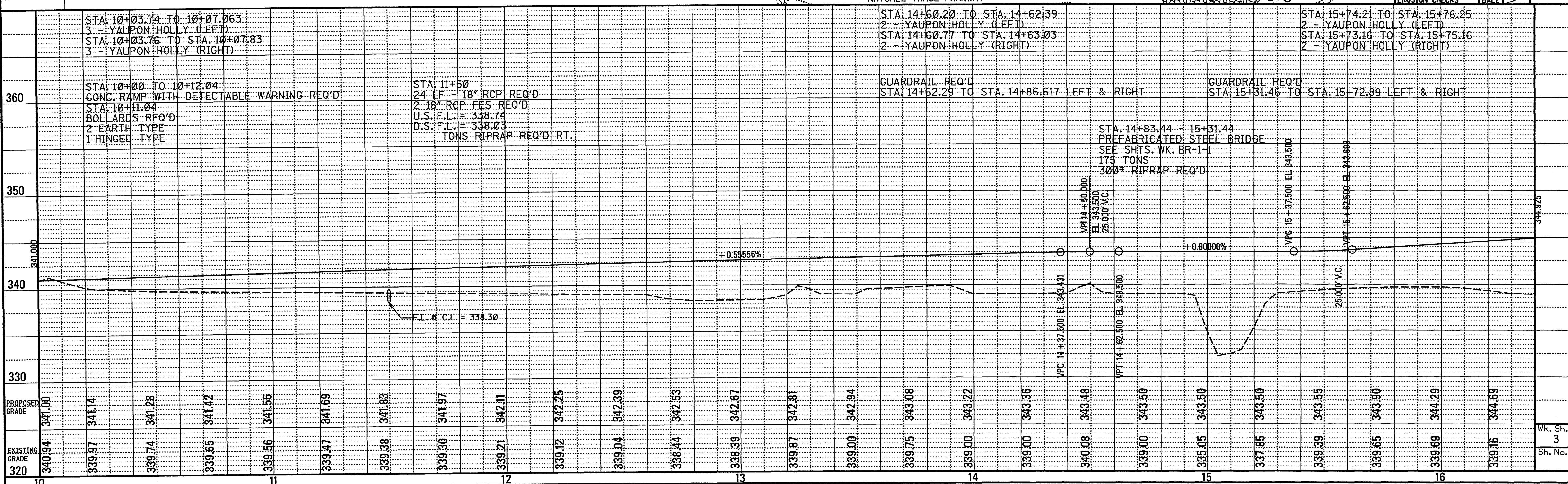
ELECTRIC POWER - ENERGY
 TELEPHONE - BELL SOUTH, INC.
 NATURAL GAS - ENTEX
 - KOCH GATEWAY PIPELINE COMPANY
 WATER/SEWER - CITY OF RIDGELAND
 CABLE TELEVISION - TIME WARNER

NOTES:

1. CONSTRUCTION ACCESS WITH THE NATCHEZ TRACE PARKWAY BOUNDARIES IS PERMITTED ONLY AT LOCATIONS DESIGNATED ON PLANS.



EARTHWORK TOTAL THIS SHEET		EROSION CONTROL ITEMS	
Item	Quantity	Units	Symbol
Cut		CuYds	
Fill		CuYds	
Excess		CuYds	
Surplus		CuYds	
Borrow		CuYds	
DITCH LINER	S.Y.		
BITUM. TREATED ROV.	S.Y.		
SOIL REINF. MATERIAL	S.Y.		
PAVED DITCH	C.Y.		
RIP RAP	TON		
SILT FENCE	L.F.		
GEOTEXTILE	S.Y.		
SOLID SOD	S.Y.		
EROSION CHECKS	BALE		



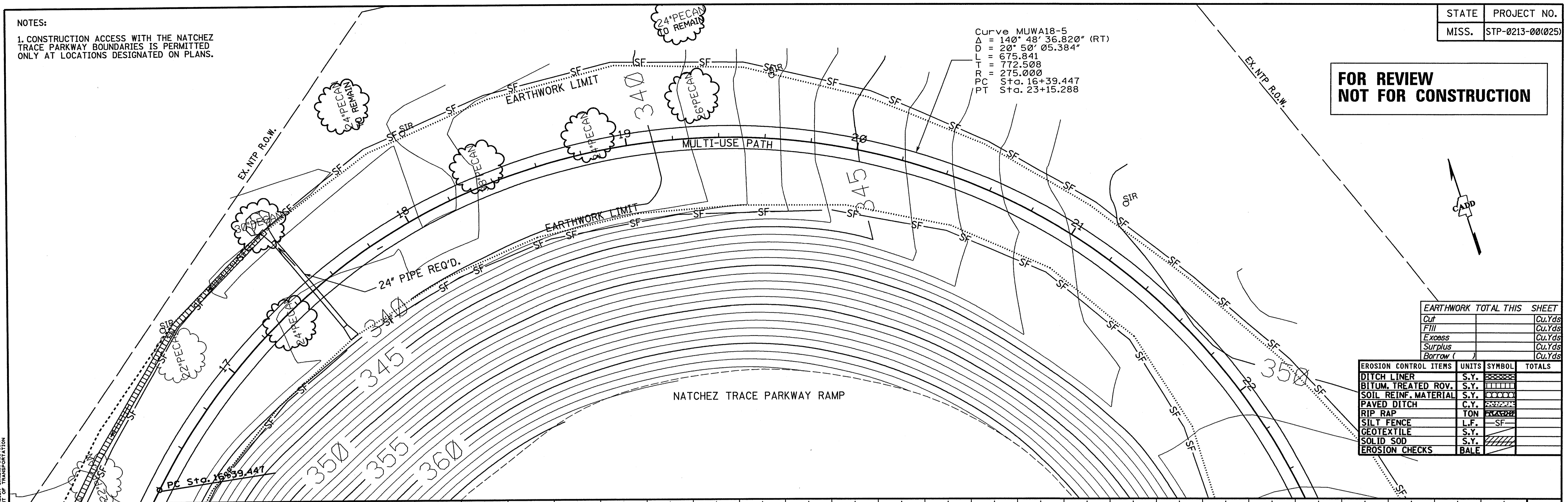
NOTES:
 1. CONSTRUCTION ACCESS WITH THE NATCHEZ TRACE PARKWAY BOUNDARIES IS PERMITTED ONLY AT LOCATIONS DESIGNATED ON PLANS.

STATE PROJECT NO.
 MISS. STP-0213-00(025)

**FOR REVIEW
 NOT FOR CONSTRUCTION**

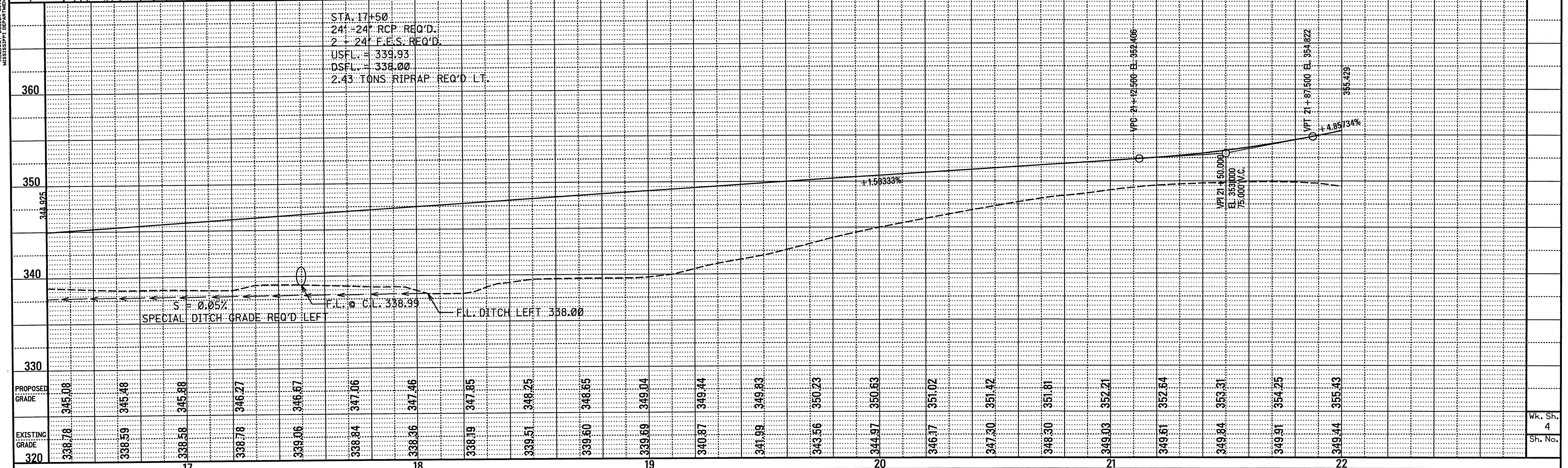
Curve MUWA18-5
 $\Delta = 140^\circ 48' 36.820''$ (RT)
 $D = 20^\circ 50' 05.384''$
 $L = 675.841$
 $T = 772.508$
 $PT = 275.000$
 $PC = Sta. 16+39.447$
 $PT = Sta. 23+15.288$

PLAN/PROFILE ROADWAY DESIGN DIVISION CADD SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION



EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow ()	Cu.Yds

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	



STA. 17+50
 24" RCP REQ'D.
 2 + 24" F.E.S. REQ'D.
 USFL = 339.93
 DSFL = 338.00
 2.43 TONS RIPRAP REQ'D. LT.

S = 0.05%
 SPECIAL DITCH GRADE REQ'D LEFT
 F.L. @ C.L. 338.99
 F.L. DITCH LEFT 338.00

PROPOSED GRADE	EXISTING GRADE	17	18	19	20	21	22
345.08	338.78	345.48	338.58	346.27	338.78	340.57	338.84
347.06	339.06	347.06	347.46	347.85	338.19	348.25	339.51
349.04	339.50	348.55	339.89	349.04	340.87	349.83	341.99
351.02	343.36	350.23	344.37	350.53	346.17	351.42	347.30
352.21	348.30	351.81	349.03	352.21	349.61	352.64	349.84
353.31	349.31	353.31	349.31	354.25	349.44	355.43	349.31
354.29	349.44	355.43					

Wk. Sh.
 4
 Sh. No.

Curve MUWA18-7
 $\Delta = 11^\circ 04' 32.333''$ (RT)
 $D = 57^\circ 17' 44.806''$
 $L = 19.331$
 $R = 100.000$
 $PC = \text{Sta. } 26+54.180$
 $PT = \text{Sta. } 26+73.511$

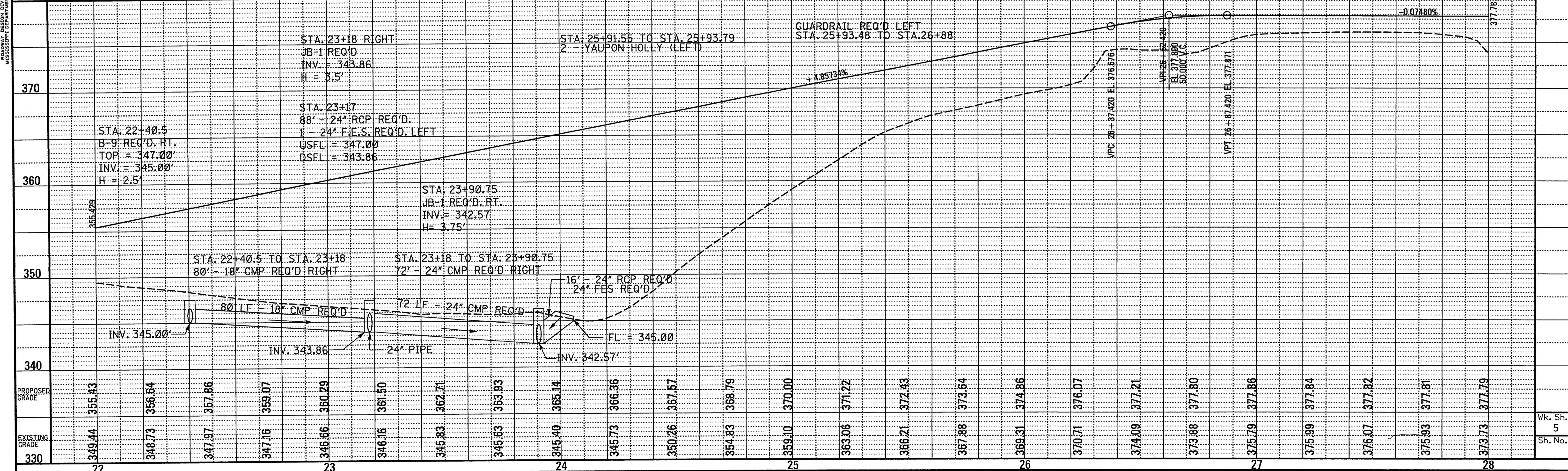
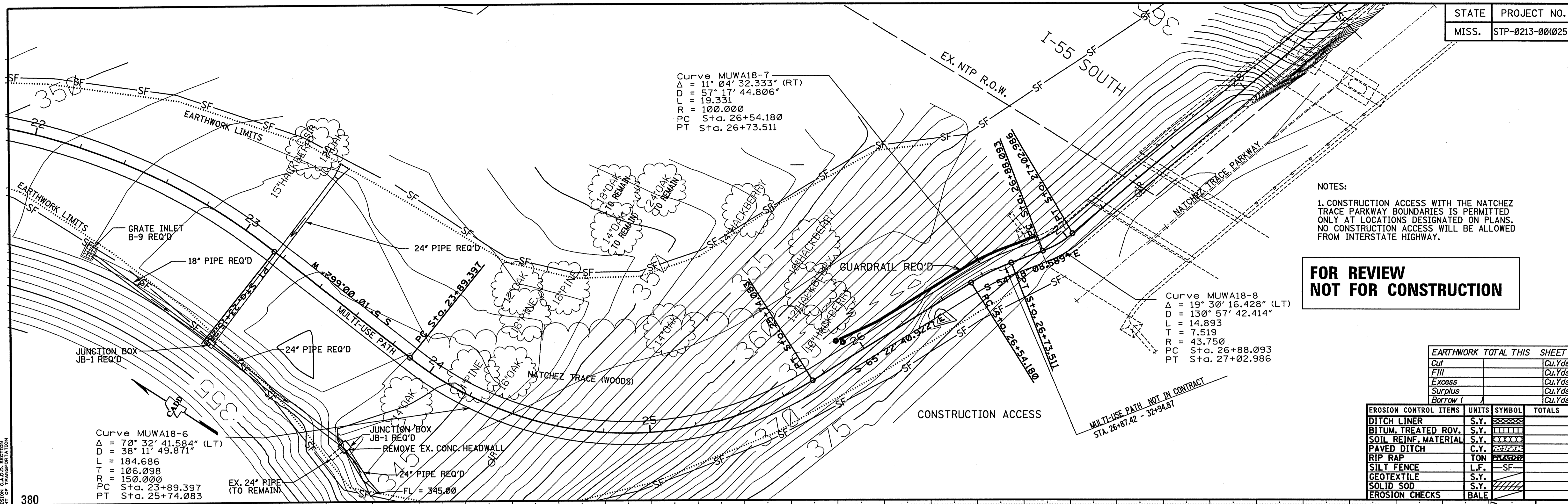
Curve MUWA18-8
 $\Delta = 19^\circ 30' 16.428''$ (LT)
 $D = 130^\circ 57' 42.414''$
 $L = 14.893$
 $T = 7.519$
 $R = 43.750$
 $PC = \text{Sta. } 26+88.093$
 $PT = \text{Sta. } 27+02.986$

NOTES:
 1. CONSTRUCTION ACCESS WITH THE NATCHEZ TRACE PARKWAY BOUNDARIES IS PERMITTED ONLY AT LOCATIONS DESIGNATED ON PLANS. NO CONSTRUCTION ACCESS WILL BE ALLOWED FROM INTERSTATE HIGHWAY.

**FOR REVIEW
 NOT FOR CONSTRUCTION**

EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow ()	Cu.Yds

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	XXXX	
BITUM. TREATED ROV.	S.Y.		
SOIL REINF. MATERIAL	S.Y.	XXXX	
PAVED DITCH	C.Y.	XXXX	
RIP RAP	TON	XXXX	
SILT FENCE	L.F.	-SF-	
GEOTEXTILE	S.Y.	XXXX	
SOLID SOD	S.Y.	XXXX	
EROSION CHECKS	BALE	XXXX	



Curve MUWA18-10
 $\Delta = 16^\circ 52' 20.623''$ (RT)
 $D = 57' 17' 44.806''$
 $L = 29.448$
 $T = 14.831$
 $R = 100.000$
 $PC Sta. 32+35.074$
 $PT Sta. 32+64.522$

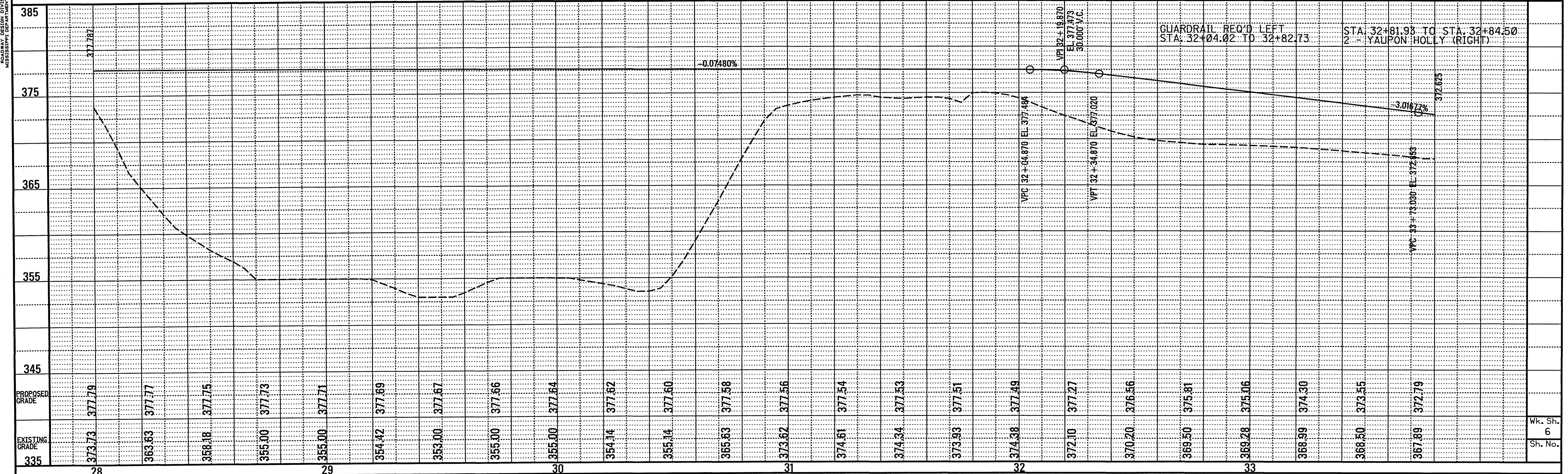
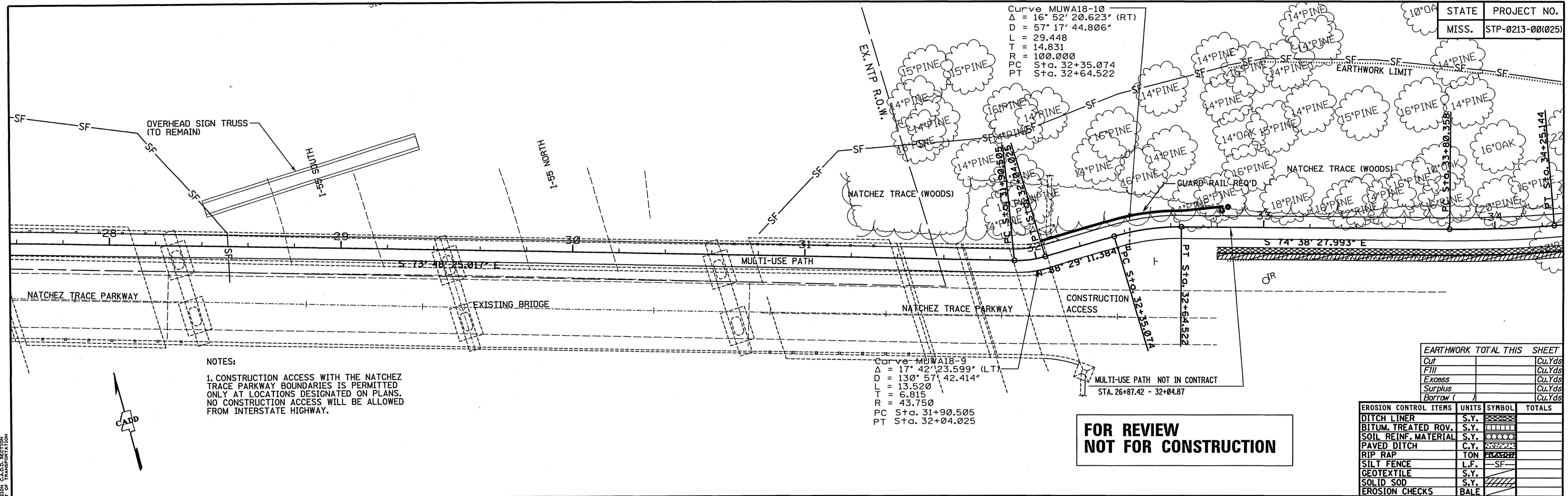
Curve MUWA18-9
 $\Delta = 17^\circ 42' 23.599''$ (LT)
 $D = 130^\circ 57' 42.414''$
 $L = 13.520$
 $T = 6.815$
 $R = 43.750$
 $PC Sta. 31+90.505$
 $PT Sta. 32+04.025$

NOTES:
 1. CONSTRUCTION ACCESS WITH THE NATCHEZ TRACE PARKWAY BOUNDARIES IS PERMITTED ONLY AT LOCATIONS DESIGNATED ON PLANS. NO CONSTRUCTION ACCESS WILL BE ALLOWED FROM INTERSTATE HIGHWAY.

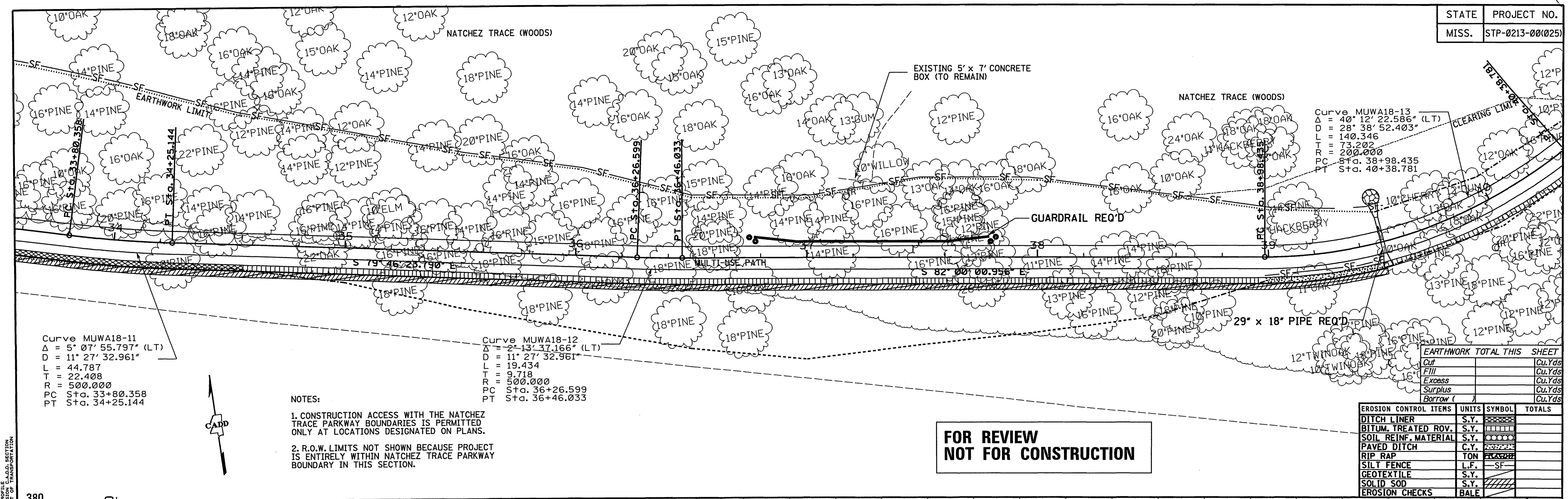
EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow	Cu.Yds

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	

**FOR REVIEW
NOT FOR CONSTRUCTION**



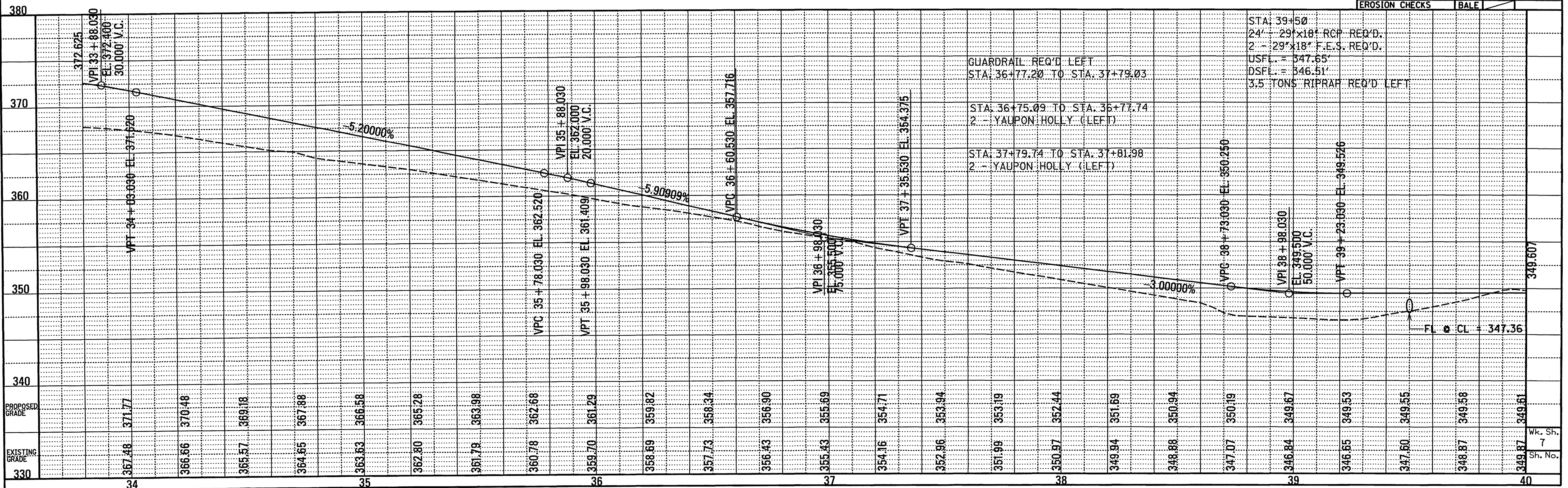
ROADWAY DESIGN DIVISION (L.A.O.D.) SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION



**FOR REVIEW
NOT FOR CONSTRUCTION**

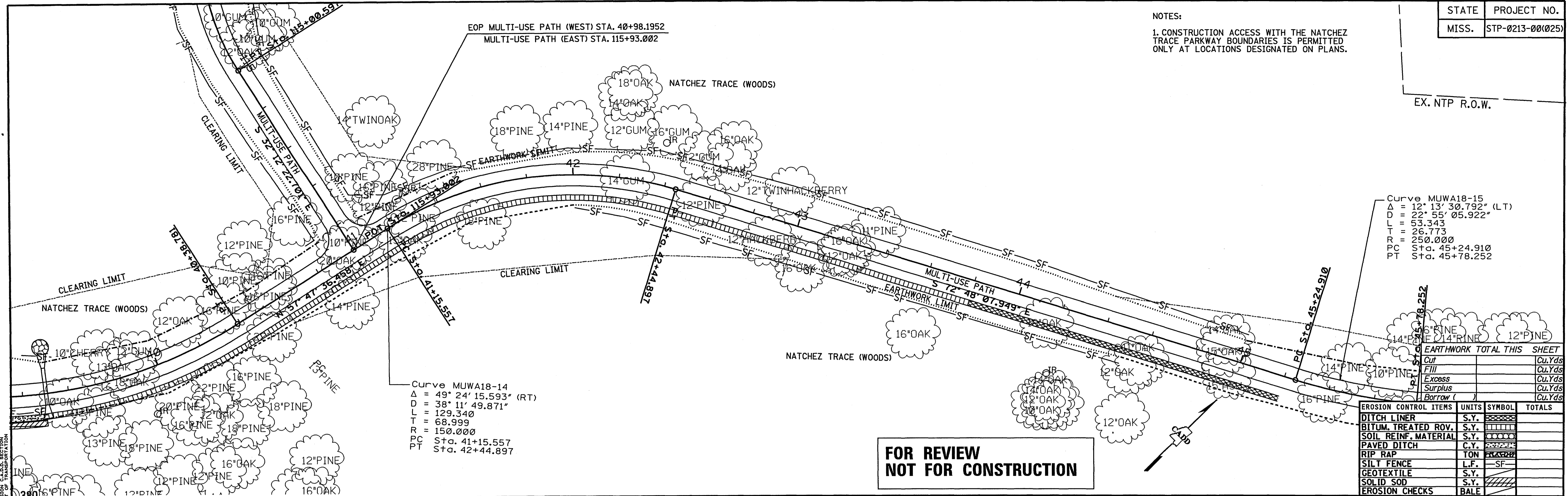
EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Barrow ()	Cu.Yds

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	



NOTES:
 1. CONSTRUCTION ACCESS WITH THE NATCHEZ TRACE PARKWAY BOUNDARIES IS PERMITTED ONLY AT LOCATIONS DESIGNATED ON PLANS.

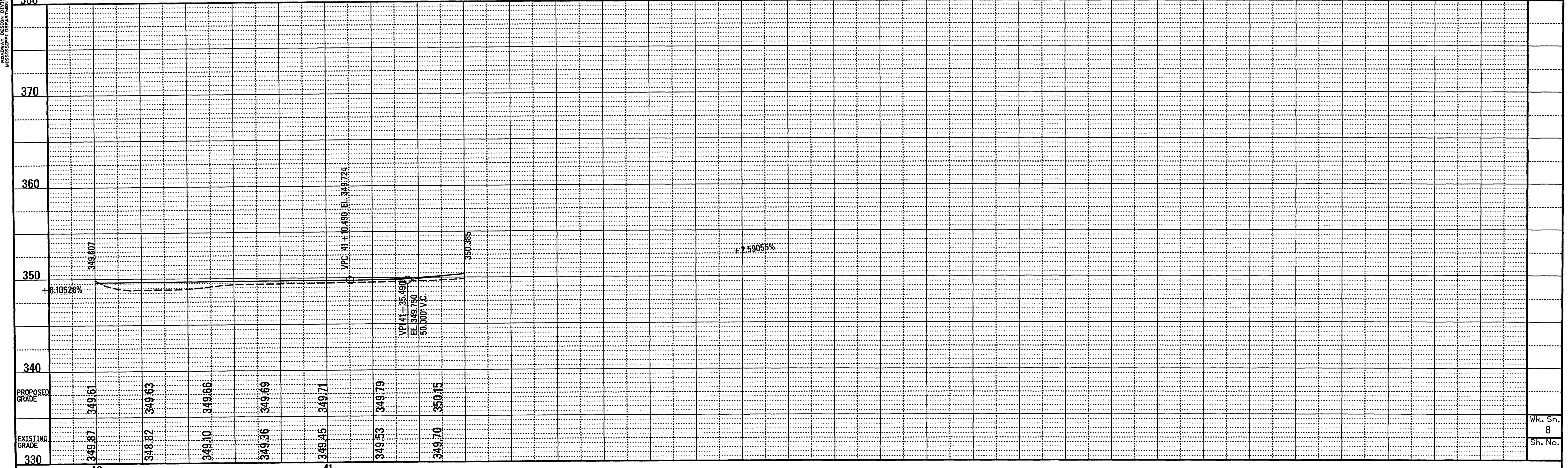
EX. NTP R.O.W.



**FOR REVIEW
 NOT FOR CONSTRUCTION**

EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow (Cu.Yds

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	



ROADWAY DESIGN DIVISION, C.A.D.D. SECTION, MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MULTI-USE PATH STA. 110+00.00 - STA. 112+30.124 NOT IN CONTRACT.
THIS SECTION TO BE CONSTRUCTED UNDER SEPERATE CONTRACT
FOR IMPROVEMENT OF INTERSECTION OF JACKSON ST. AND SUNNYBROOK RD.

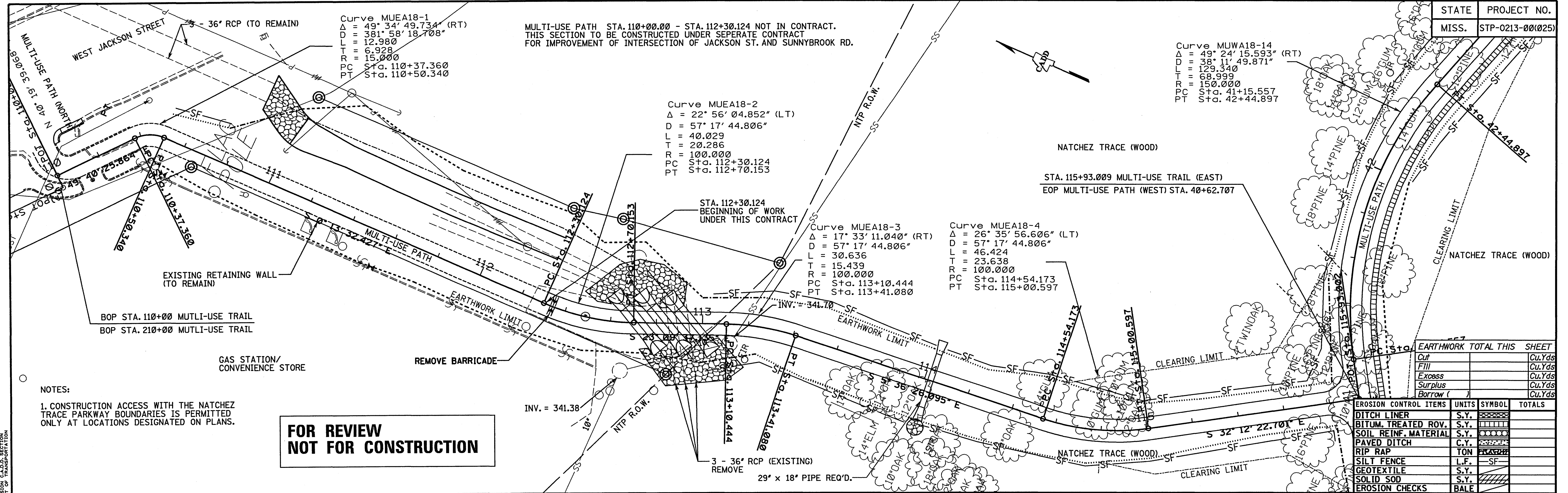
Curve MUEA18-1
Δ = 49° 34' 49.734" (RT)
D = 381' 58" 18.708"
L = 12.980
T = 6.928
R = 15.000
PC Sta. 110+37.360
PT Sta. 110+50.340

Curve MUEA18-2
Δ = 22° 56' 04.852" (LT)
D = 57' 17" 44.806"
L = 40.029
T = 20.286
R = 100.000
PC Sta. 112+30.124
PT Sta. 112+70.153

Curve MUWA18-14
Δ = 49° 24' 15.593" (RT)
D = 38' 11' 49.871"
L = 129.340
T = 68.999
R = 150.000
PC Sta. 41+15.557
PT Sta. 42+44.897

Curve MUEA18-3
Δ = 17° 33' 11.040" (RT)
D = 57' 17" 44.806"
L = 30.636
T = 15.439
R = 100.000
PC Sta. 113+10.444
PT Sta. 113+41.080

Curve MUEA18-4
Δ = 26° 35' 56.606" (LT)
D = 57' 17" 44.806"
L = 46.424
T = 23.638
R = 100.000
PC Sta. 114+54.173
PT Sta. 115+00.597

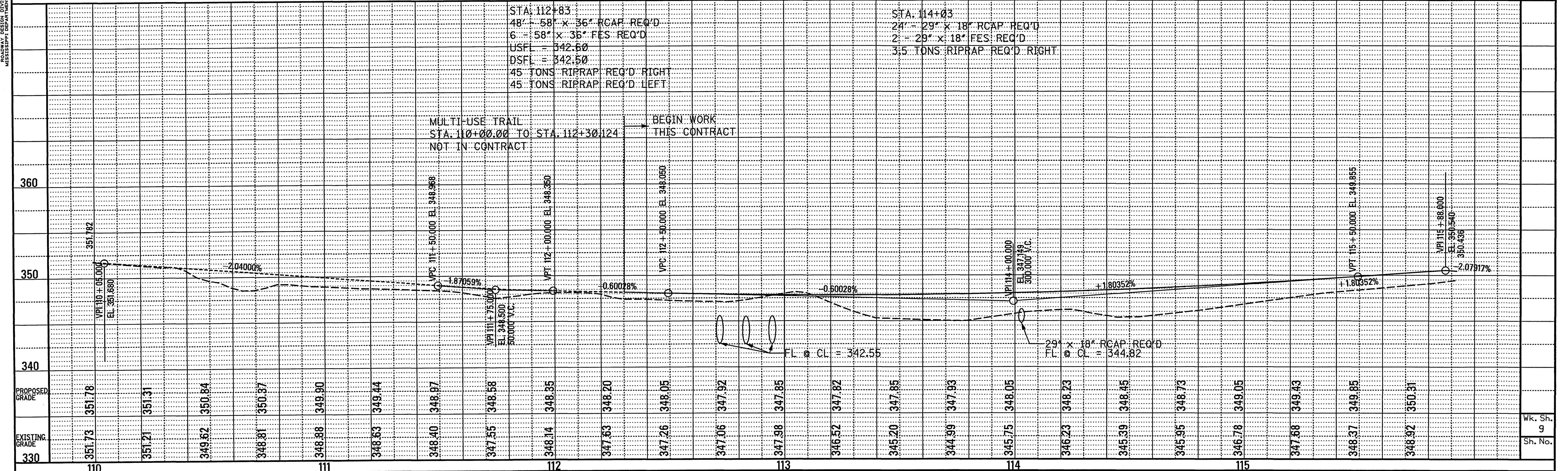


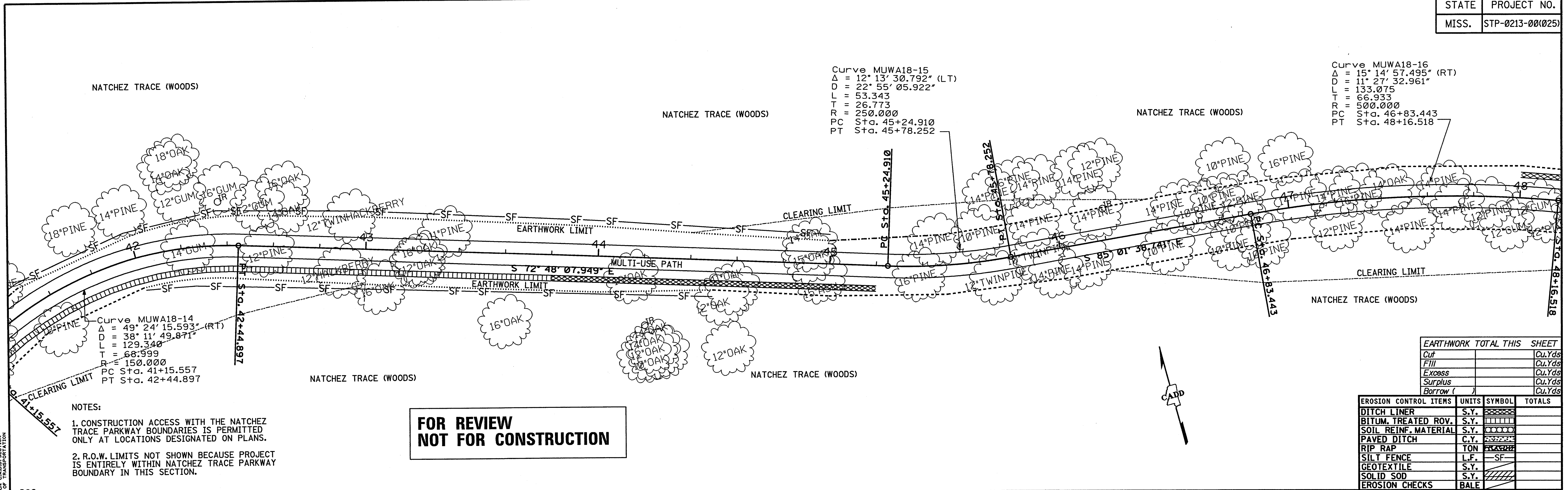
NOTES:
1. CONSTRUCTION ACCESS WITH THE NATCHEZ TRACE PARKWAY BOUNDARIES IS PERMITTED ONLY AT LOCATIONS DESIGNATED ON PLANS.

**FOR REVIEW
NOT FOR CONSTRUCTION**

EARTHWORK TOTAL THIS SHEET		UNITS	SYMBOL	TOTALS
Cut		Cu.Yds		
Fill		Cu.Yds		
Excess		Cu.Yds		
Surplus		Cu.Yds		
Borrow		Cu.Yds		

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		
BITUM. TREATED ROV.	S.Y.		
SOIL REINF. MATERIAL	S.Y.		
PAVED DITCH	C.Y.		
RIP RAP	TON		
SILT FENCE	L.F.		
GEOTEXTILE	S.Y.		
SOLID SOD	S.Y.		
EROSION CHECKS	BALE		



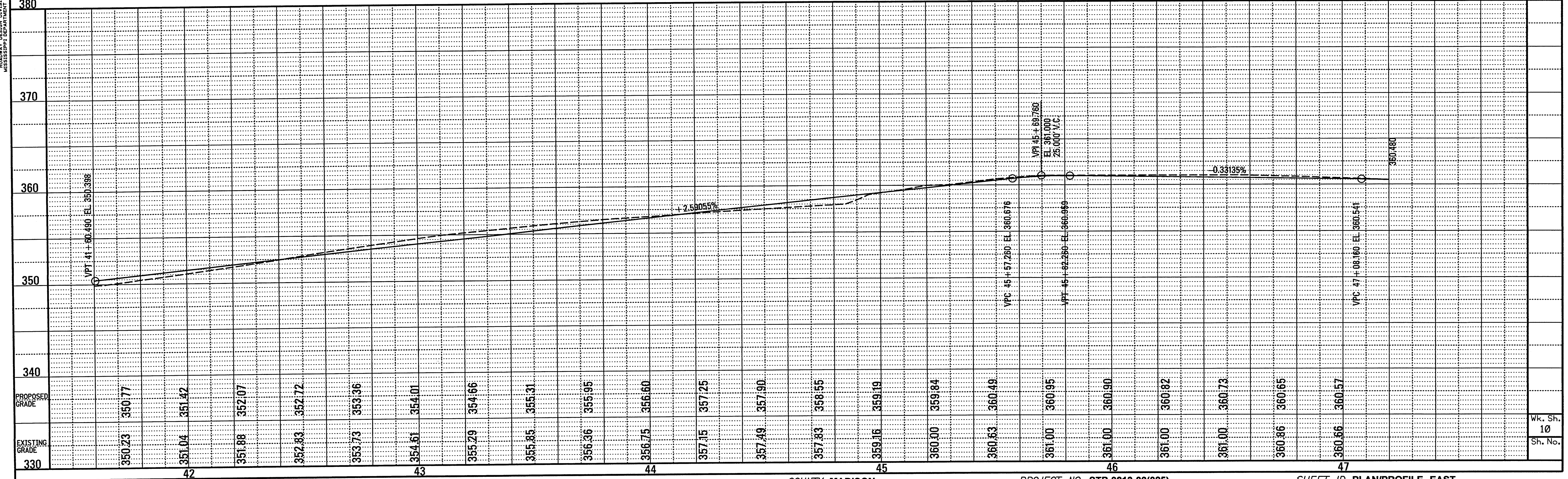


NOTES:
 1. CONSTRUCTION ACCESS WITH THE NATCHEZ TRACE PARKWAY BOUNDARIES IS PERMITTED ONLY AT LOCATIONS DESIGNATED ON PLANS.
 2. R.O.W. LIMITS NOT SHOWN BECAUSE PROJECT IS ENTIRELY WITHIN NATCHEZ TRACE PARKWAY BOUNDARY IN THIS SECTION.

**FOR REVIEW
 NOT FOR CONSTRUCTION**

EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow ()	Cu.Yds

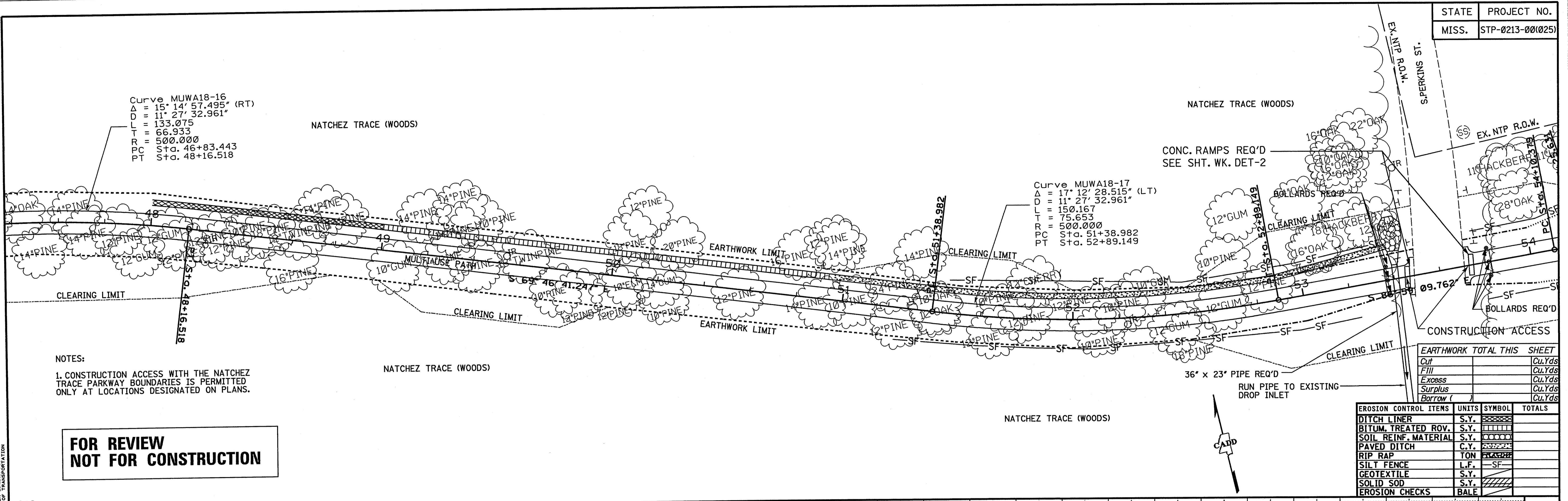
EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	



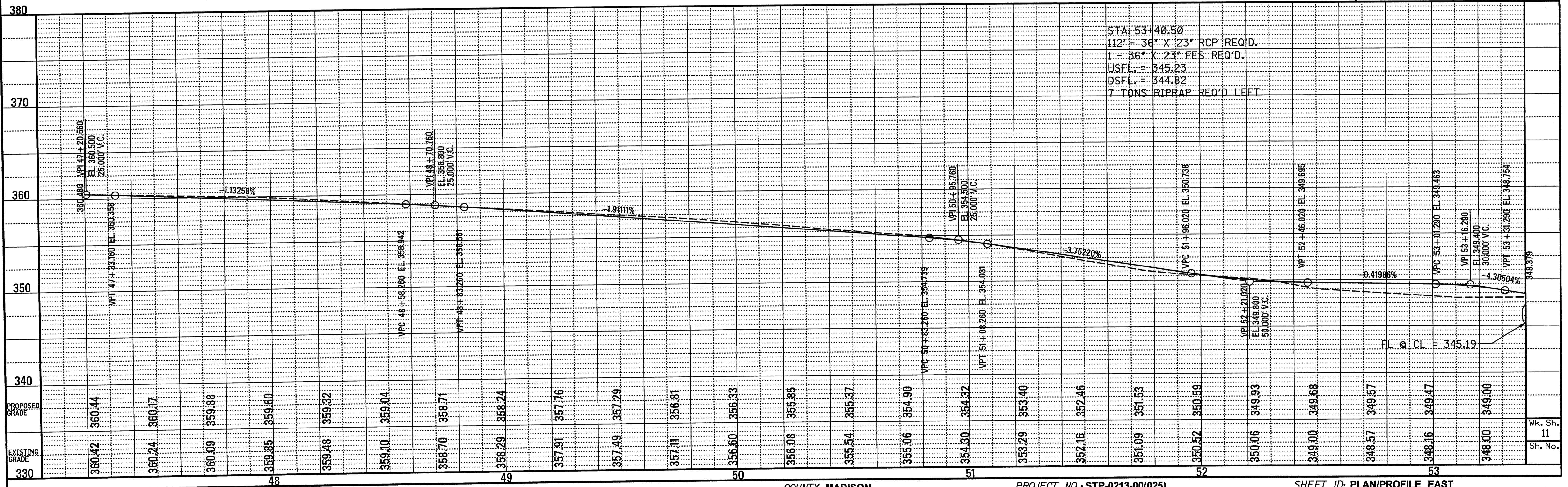
PLAN PROFILE ROAD SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Curve MUWA18-16
 Δ = 15° 14' 57.495" (RT)
 D = 11° 27' 32.961"
 L = 133.075
 E = 66.933
 R = 500.000
 PC = Sta. 46+83.443
 PT = Sta. 48+16.518

Curve MUWA18-17
 Δ = 17° 12' 28.515" (LT)
 D = 11° 27' 32.961"
 L = 150.167
 E = 75.653
 R = 500.000
 PC = Sta. 51+38.982
 PT = Sta. 52+89.149



**FOR REVIEW
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NOTES:
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Curve MUWA18-19
 $\Delta = 26^\circ 47' 30.489''$ (RT)
 $D = 28' 38' 52.403''$
 $L = 93.521$
 $PT = 47.632$
 $PC = 200.000$
 $S + a. 55 + 12.956$
 $S + a. 56 + 06.477$

FUTURE CONNECTION NOT IN CONTRACT

CONC. RAMP REQ'D SEE DETAIL SHT. WK DET-2

EX. NTP R.O.W.

11 HACKBERRY

12 HACKBERRY

13 HACKBERRY

14 HACKBERRY

15 HACKBERRY

16 HACKBERRY

17 HACKBERRY

18 HACKBERRY

19 HACKBERRY

20 HACKBERRY

21 HACKBERRY

22 HACKBERRY

23 HACKBERRY

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40 HACKBERRY

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45 HACKBERRY

46 HACKBERRY

47 HACKBERRY

48 HACKBERRY

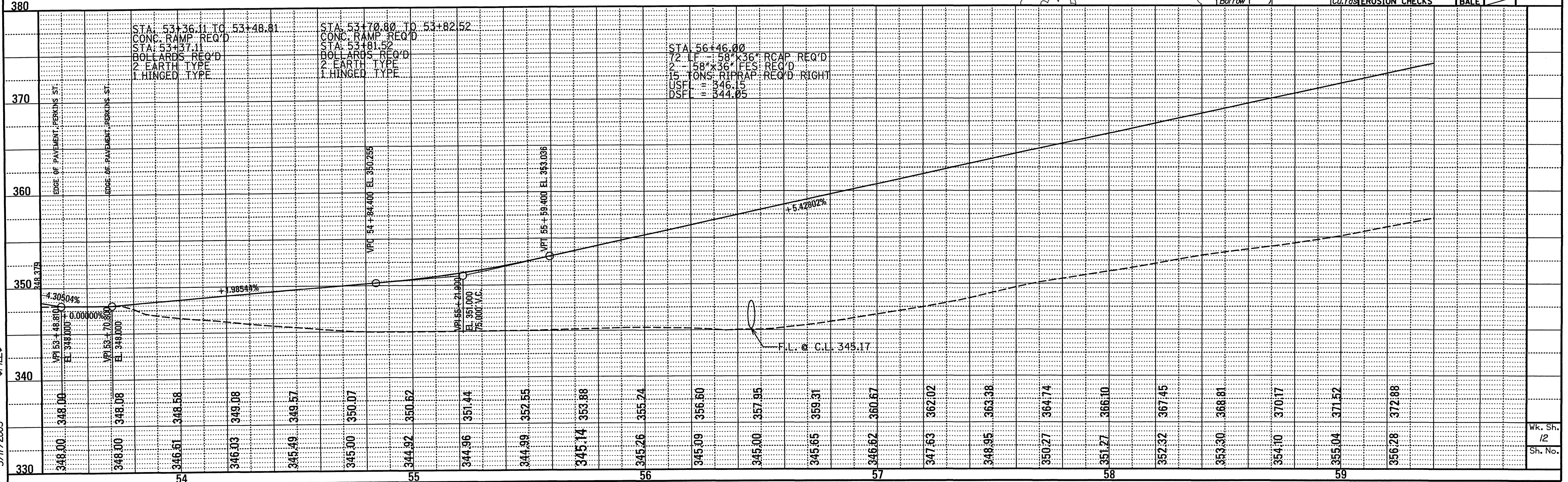
49 HACKBERRY

Curve MUWA18-18
 $\Delta = 8^\circ 44' 18.902''$ (LT)
 $D = 57' 17' 44.806''$
 $L = 15.252$
 $PT = 7.641$
 $PC = 100.000$
 $S + a. 54 + 10.379$
 $S + a. 54 + 25.631$

**FOR REVIEW
 NOT FOR CONSTRUCTION**

Curve MUWA18-20
 $\Delta = 28^\circ 09' 29.080''$ (LT)
 $D = 19' 05' 54.935''$
 $L = 147.435$
 $PT = 75.238$
 $PC = 300.000$
 $S + a. 56 + 73.882$
 $S + a. 58 + 21.318$

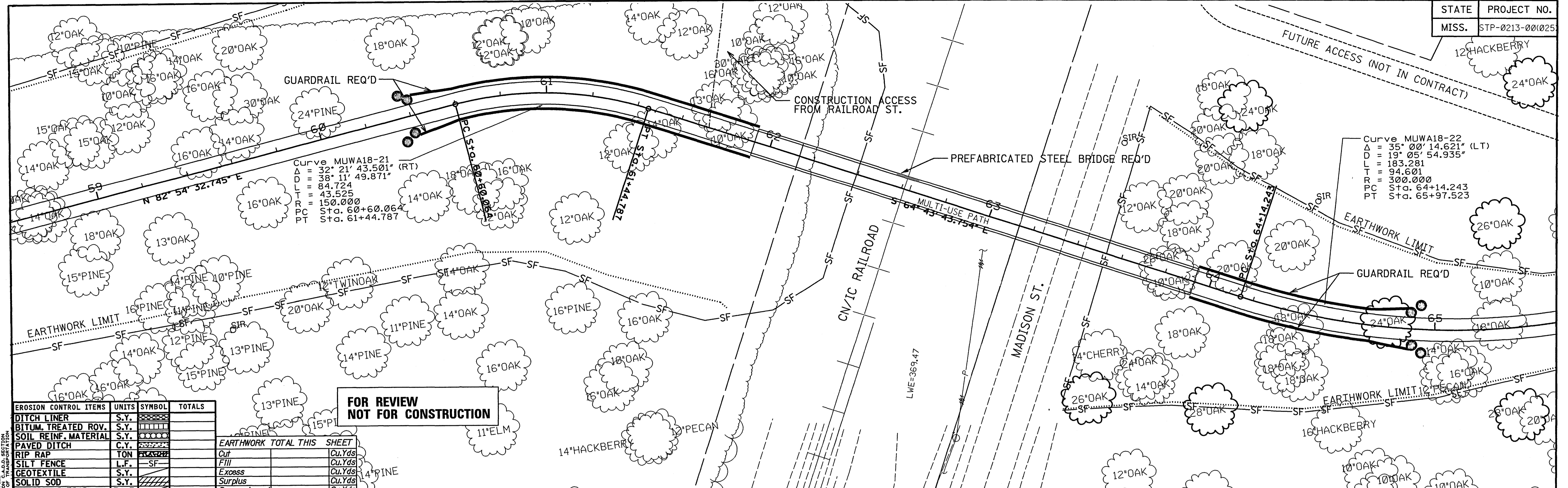
EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	S.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	



ROADWAY DESIGN DIVISION C.A.D.D. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

3/17/2003

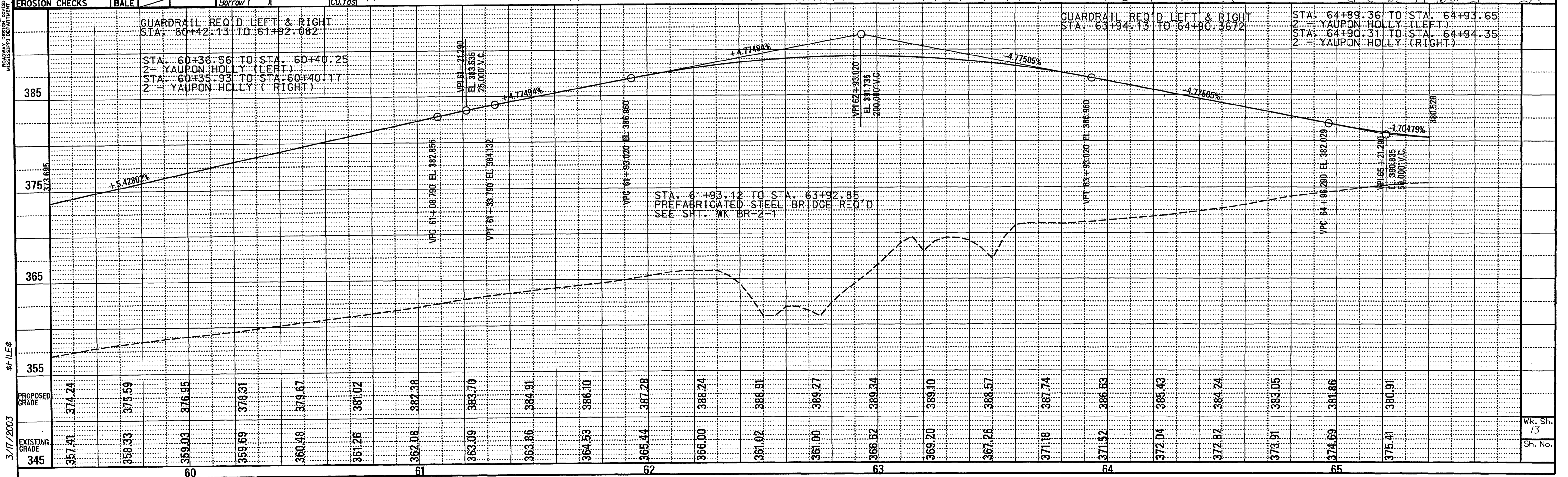
Wk. Sh.
12
Sh. No.



EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	

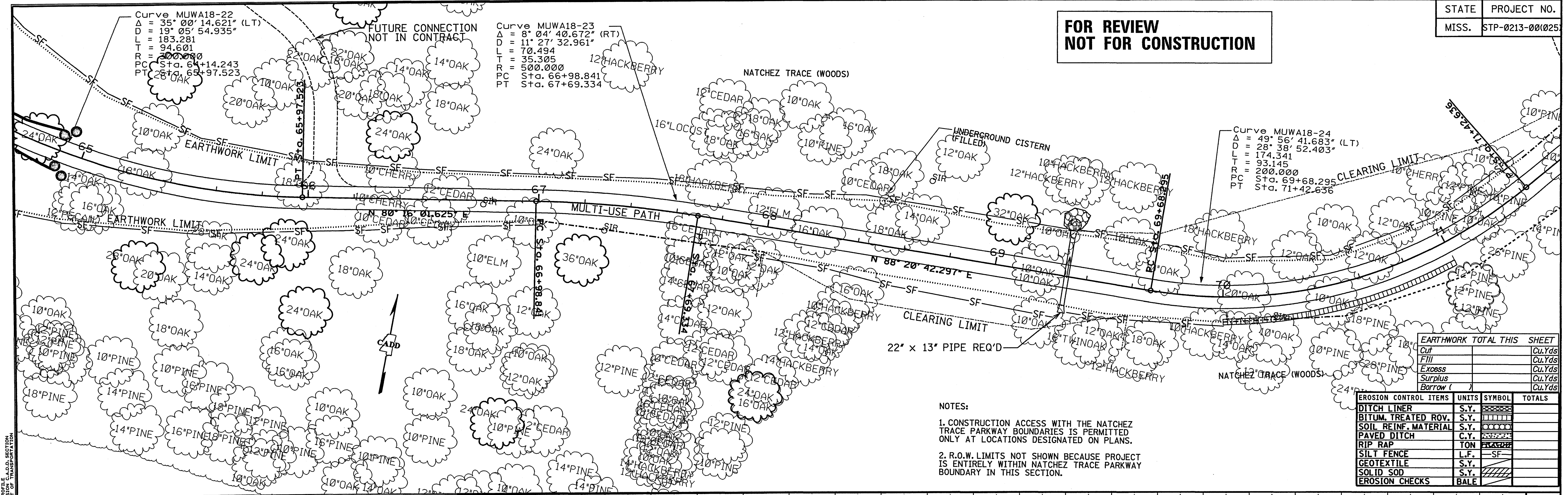
EARTHWORK TOTAL THIS SHEET	Cu.Yds
Cut	
Fill	
Excess	
Surplus	
Borrow ()	

**FOR REVIEW
NOT FOR CONSTRUCTION**



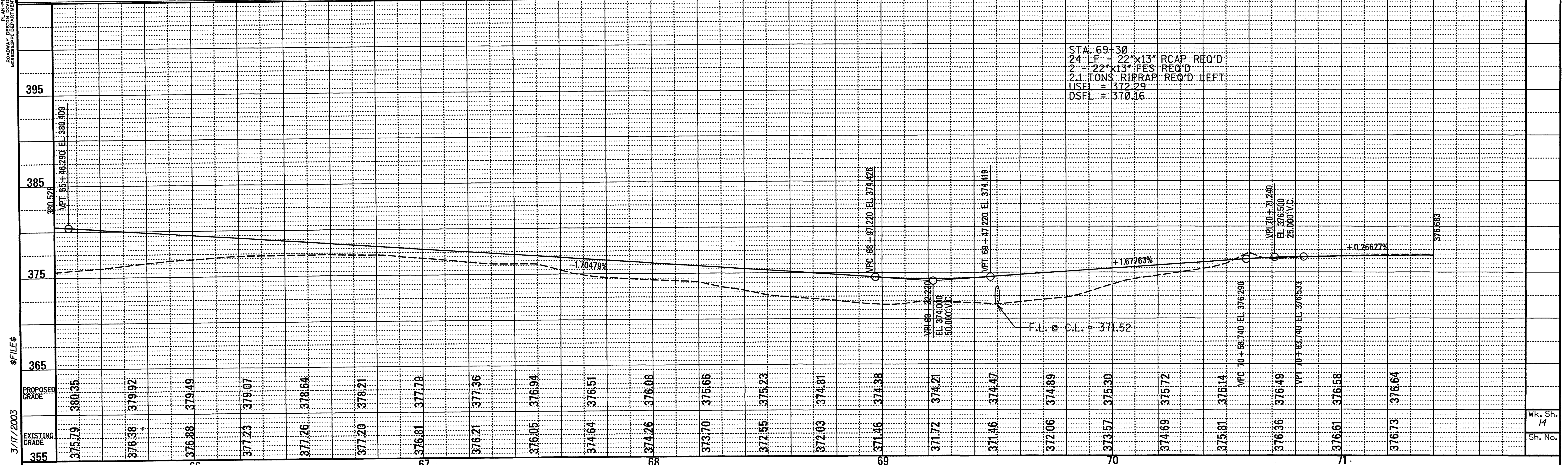
3/17/2003

**FOR REVIEW
NOT FOR CONSTRUCTION**



EARTHWORK TOTAL THIS SHEET		
Cut		Cu.Yds
Fill		Cu.Yds
Excess		Cu.Yds
Surplus		Cu.Yds
Borrow		Cu.Yds

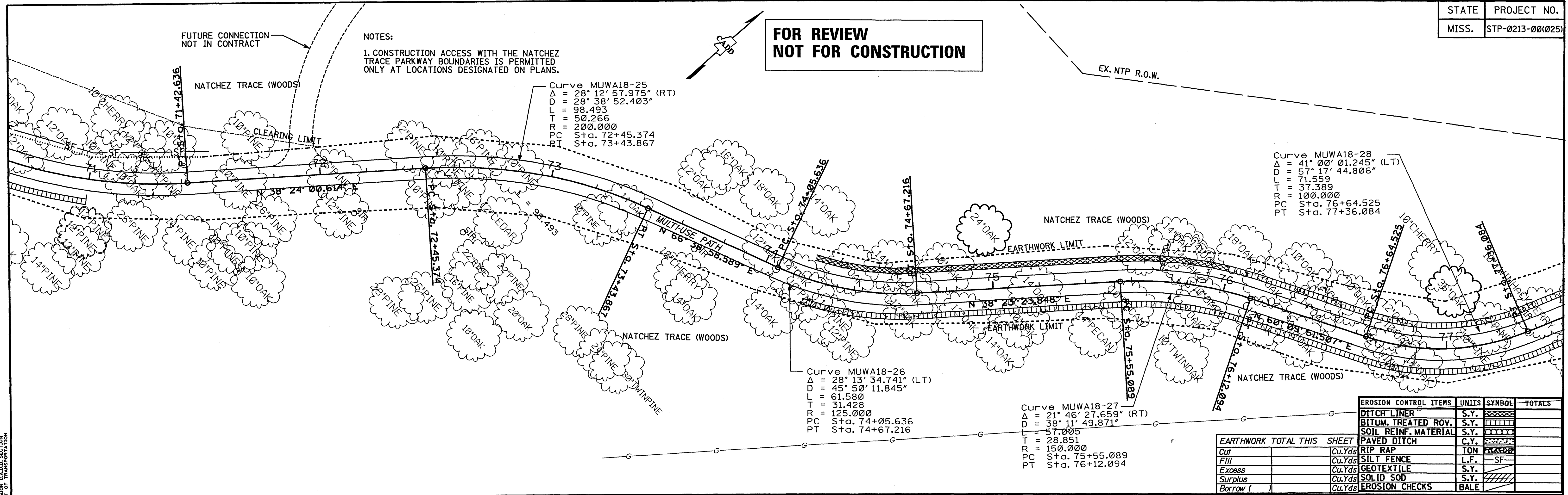
EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	



3/17/2003

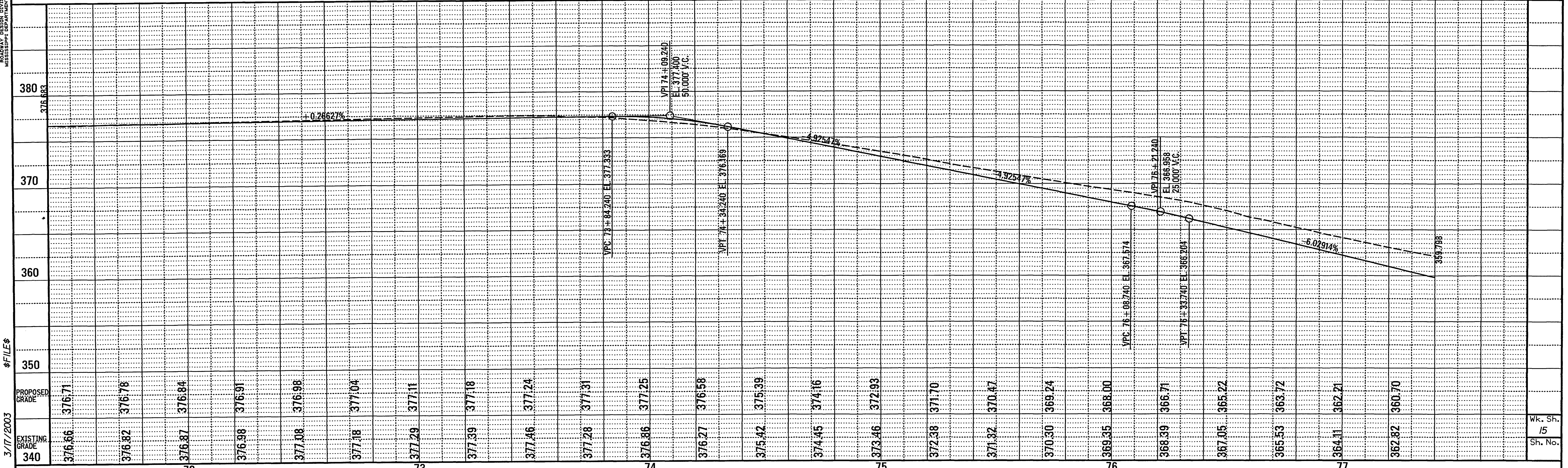
**FOR REVIEW
NOT FOR CONSTRUCTION**

NOTES:
1. CONSTRUCTION ACCESS WITH THE NATCHEZ TRACE PARKWAY BOUNDARIES IS PERMITTED ONLY AT LOCATIONS DESIGNATED ON PLANS.



EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	XXXXXX	
BITUM. TREATED ROV.	S.Y.	XXXXXX	
SOIL REINF. MATERIAL	S.Y.	XXXXXX	
PAVED DITCH	C.Y.	XXXXXX	
RIP RAP	TON	XXXXXX	
SILT FENCE	L.F.	SF	
GEOTEXTILE	S.Y.	XXXXXX	
SOLID SOD	S.Y.	XXXXXX	
EROSION CHECKS	BALE	XXXXXX	

EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow ()	Cu.Yds

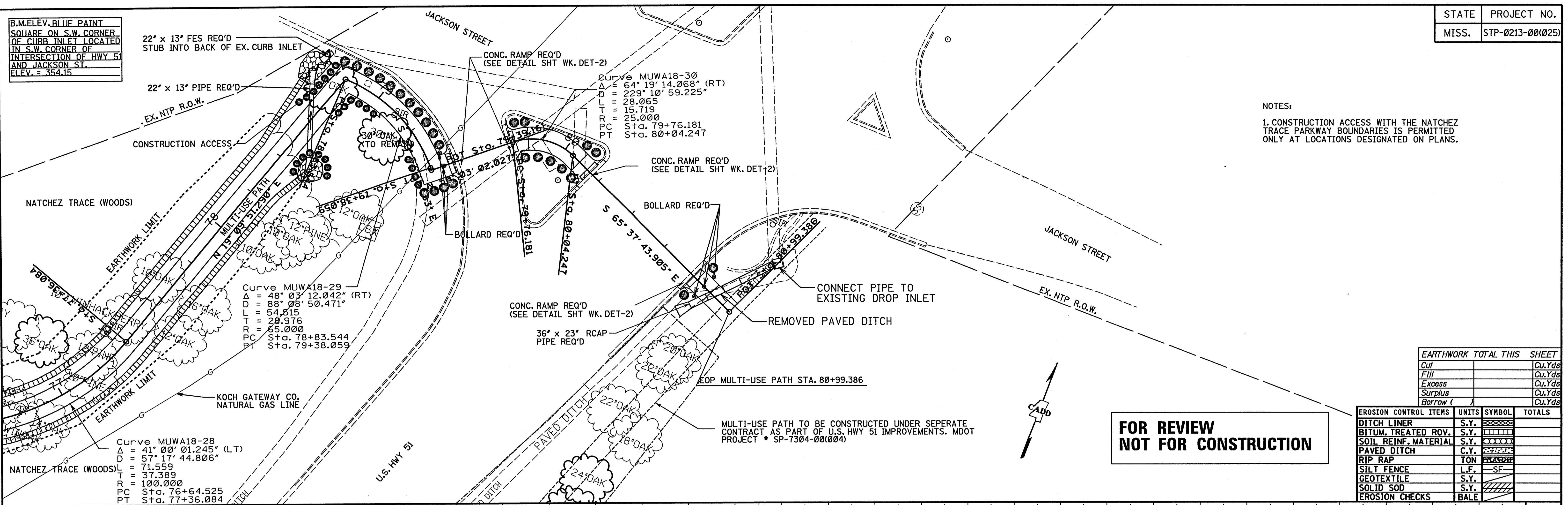


ROADWAY DESIGN DIVISION C.A.D.D. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

3/11/2003 \$ FILE\$

B.M. ELEV. BLUE PAINT SQUARE ON S.W. CORNER OF CURB INLET LOCATED IN S.W. CORNER OF INTERSECTION OF HWY 51 AND JACKSON ST. ELEV. = 354.15

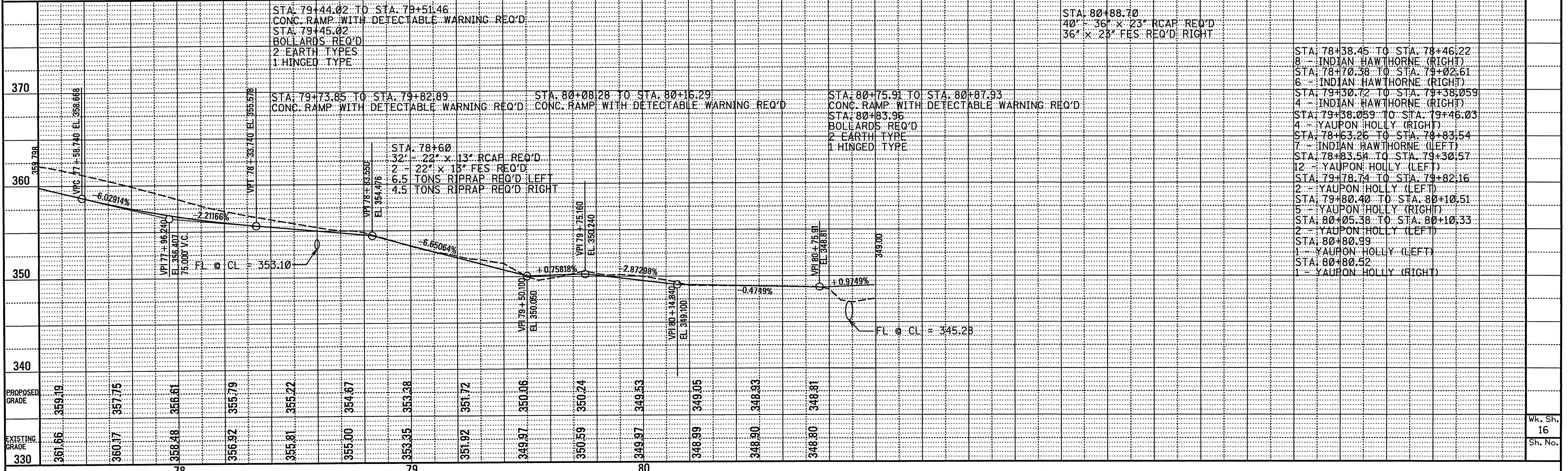
NOTES:
1. CONSTRUCTION ACCESS WITH THE NATCHEZ TRACE PARKWAY BOUNDARIES IS PERMITTED ONLY AT LOCATIONS DESIGNATED ON PLANS.



EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow ()	Cu.Yds

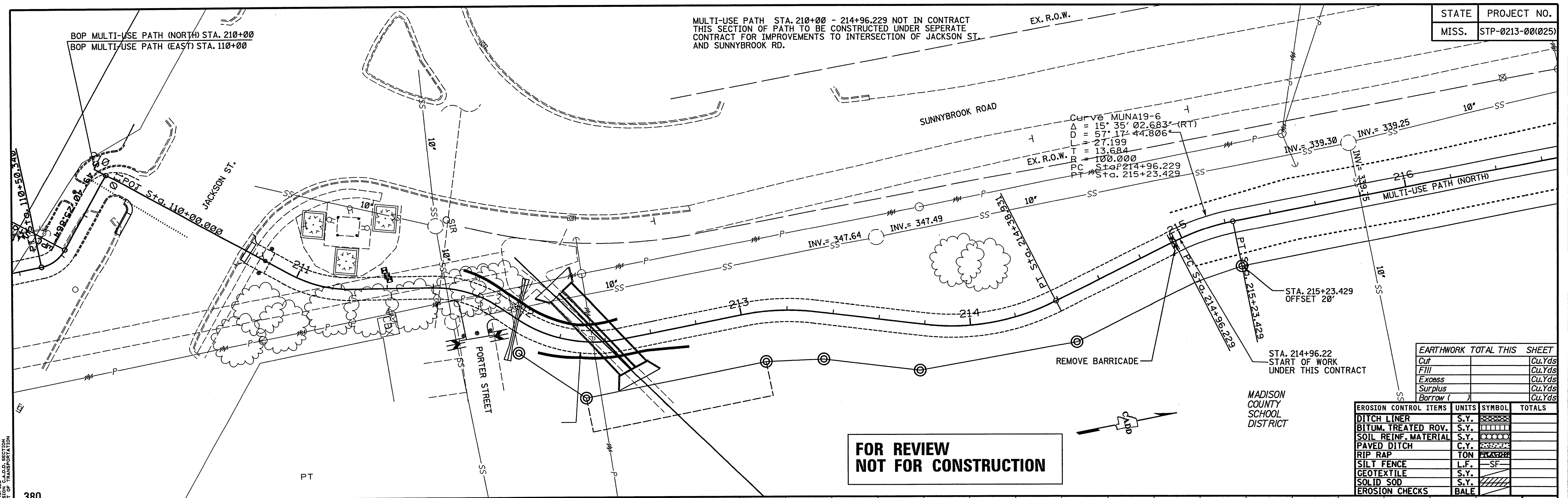
EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	

**FOR REVIEW
NOT FOR CONSTRUCTION**



MULTI-USE PATH STA. 210+00 - 214+96.229 NOT IN CONTRACT
 THIS SECTION OF PATH TO BE CONSTRUCTED UNDER SEPERATE
 CONTRACT FOR IMPROVEMENTS TO INTERSECTION OF JACKSON ST.
 AND SUNNYBROOK RD.

BOP MULTI-USE PATH (NORTH) STA. 210+00
 BOP MULTI-USE PATH (EAST) STA. 110+00



**FOR REVIEW
 NOT FOR CONSTRUCTION**

EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow ()	Cu.Yds

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	



PLAN/PROFILE AND SECTION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION

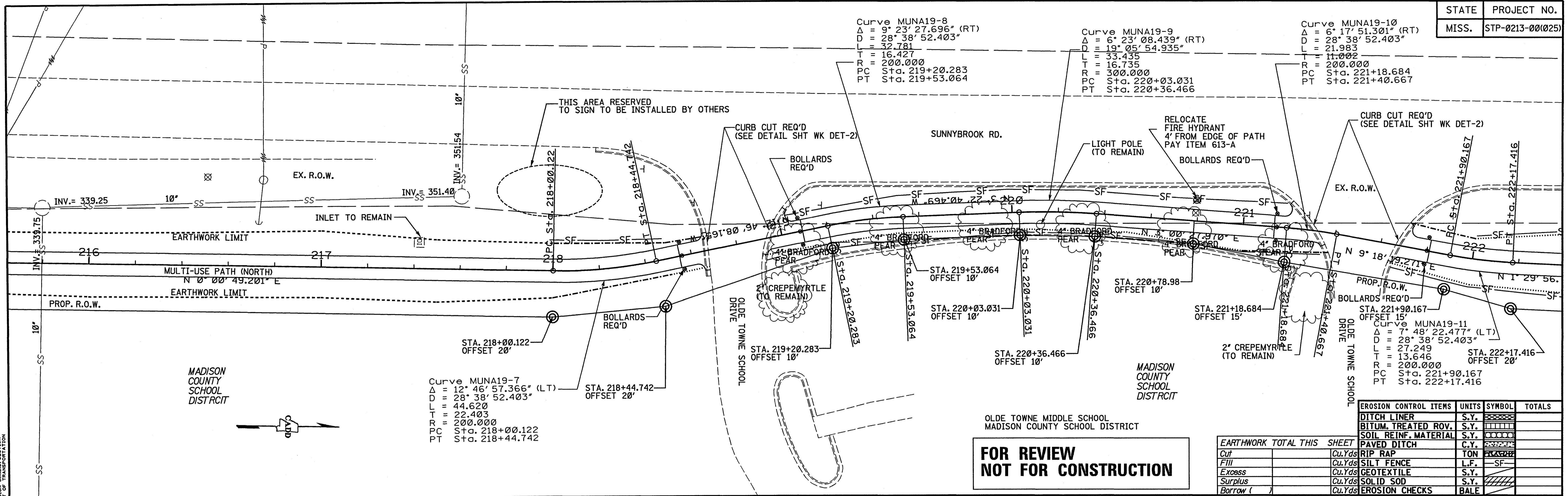
Curve MUNA19-8
 $\Delta = 9^{\circ} 23' 27.696''$ (RT)
 $D = 28^{\circ} 38' 52.403''$
 $L = 32.781$
 $T = 16.427$
 $R = 200.000$
 PC Sta. 219+20.283
 PT Sta. 219+53.064

Curve MUNA19-9
 $\Delta = 6^{\circ} 23' 08.439''$ (RT)
 $D = 19^{\circ} 05' 54.935''$
 $L = 33.435$
 $T = 16.735$
 $R = 300.000$
 PC Sta. 220+03.031
 PT Sta. 220+36.466

Curve MUNA19-10
 $\Delta = 6^{\circ} 17' 51.301''$ (RT)
 $D = 28^{\circ} 38' 52.403''$
 $L = 21.983$
 $T = 11.000$
 $R = 200.000$
 PC Sta. 221+18.684
 PT Sta. 221+40.667

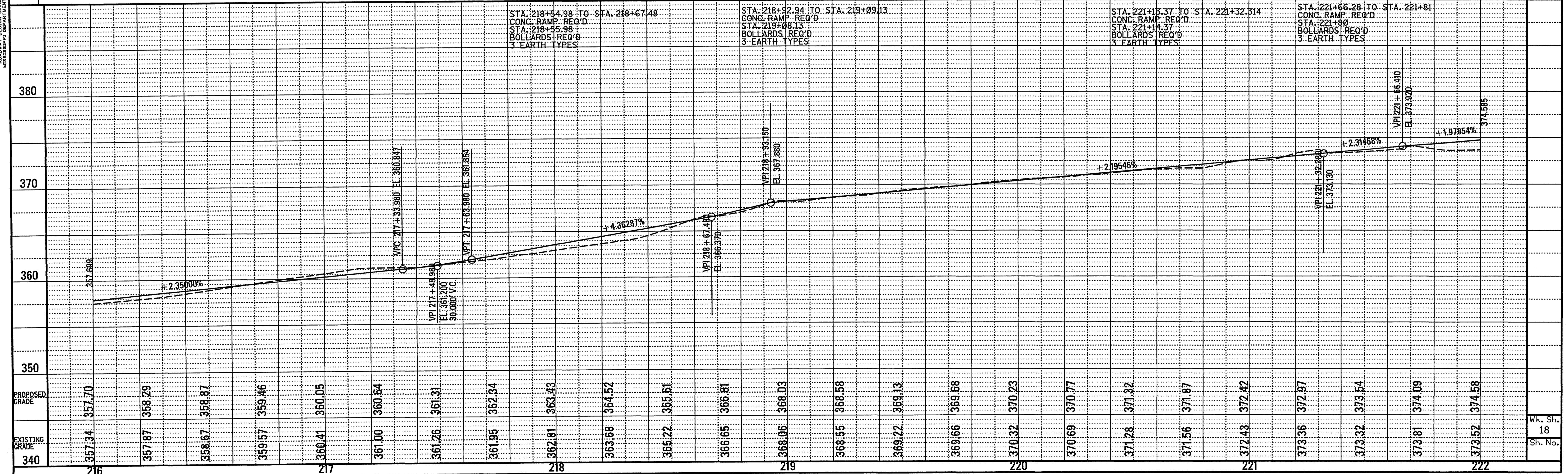
Curve MUNA19-7
 $\Delta = 12^{\circ} 46' 57.366''$ (LT)
 $D = 28^{\circ} 38' 52.403''$
 $L = 22.403$
 $T = 13.646$
 $R = 200.000$
 PC Sta. 218+00.122
 PT Sta. 218+44.742

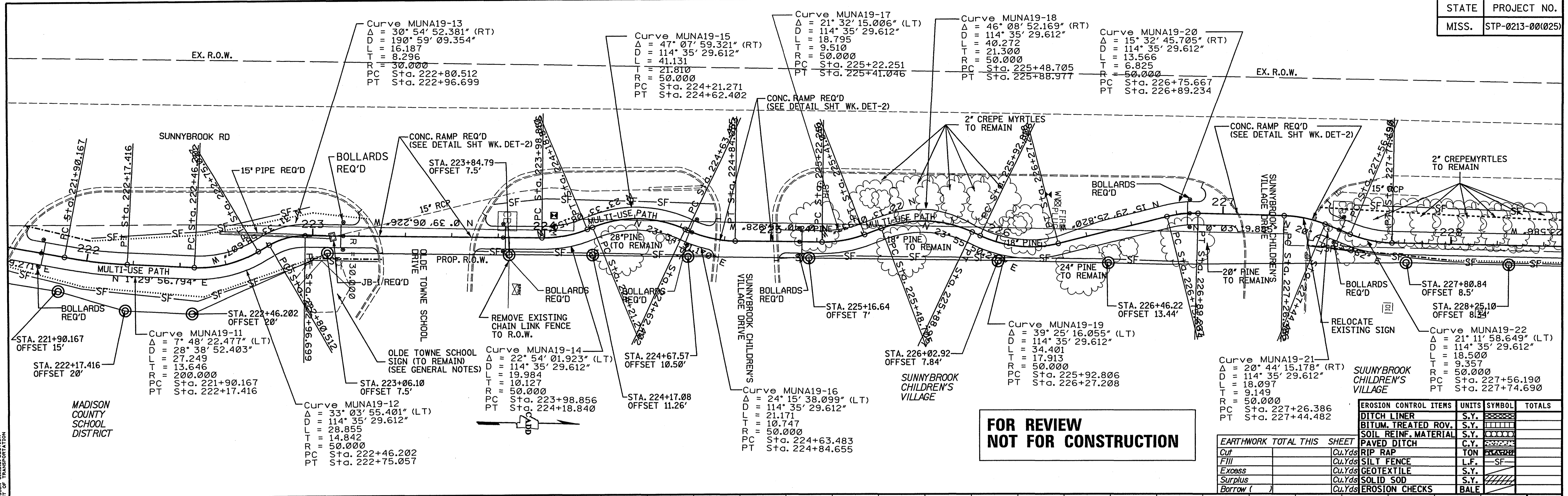
Curve MUNA19-11
 $\Delta = 7^{\circ} 48' 22.477''$ (LT)
 $D = 28^{\circ} 38' 52.403''$
 $L = 27.249$
 $T = 13.646$
 $R = 200.000$
 PC Sta. 221+90.167
 PT Sta. 222+17.416



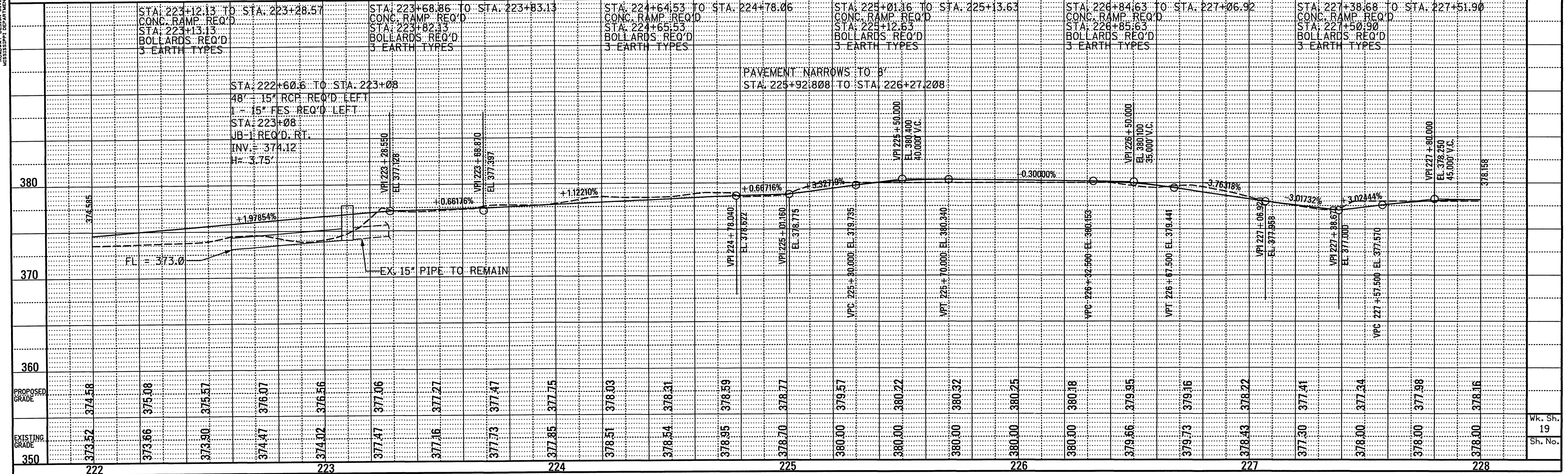
**FOR REVIEW
NOT FOR CONSTRUCTION**

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REIN. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	





EARTHWORK TOTAL THIS SHEET		UNITS	SYMBOL	TOTALS
Cut	Cu.Yds	RIP RAP	TON	
Fill	Cu.Yds	BITUM. TREATED ROV.	S.Y.	
Excess	Cu.Yds	SOIL REINF. MATERIAL	S.Y.	
Surplus	Cu.Yds	PAVED DITCH	C.Y.	
Borrow ()	Cu.Yds	SILT FENCE	L.F.	
		GEOTEXTILE	S.Y.	
		SOLID SOD	S.Y.	
		EROSION CHECKS	BALE	



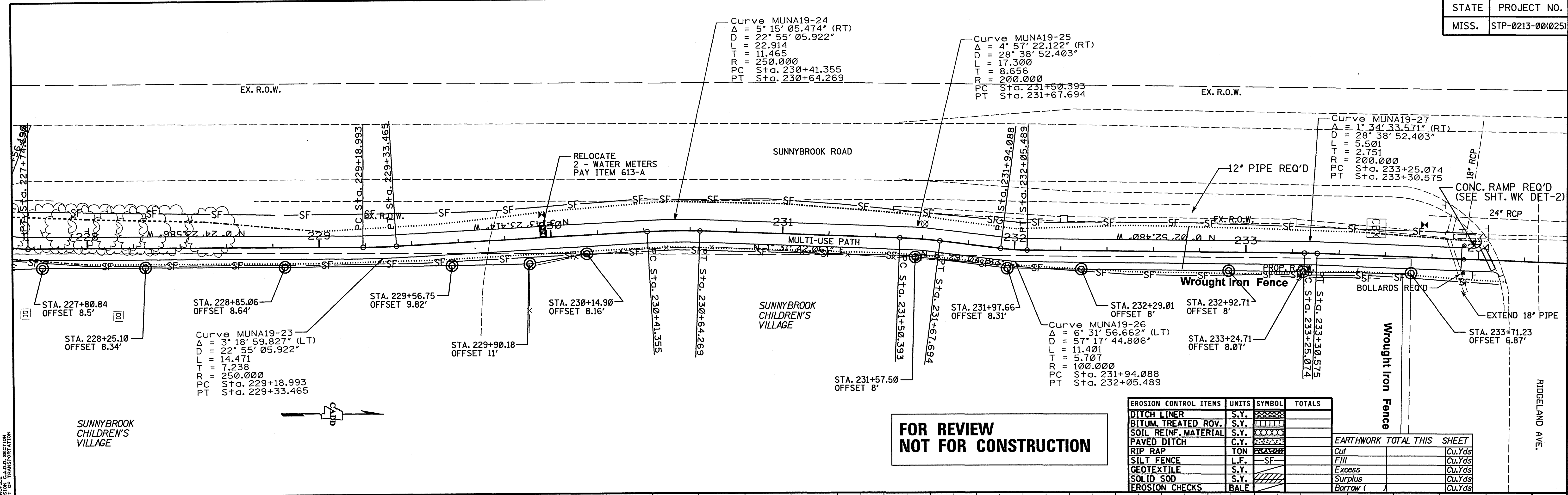
Curve MUNA19-24
 Δ = 5° 15' 05.474" (RT)
 D = 22° 55' 05.922"
 L = 22.914
 T = 11.465
 R = 250.000
 PC Sta. 230+41.355
 PT Sta. 230+64.269

Curve MUNA19-25
 Δ = 4° 57' 22.122" (RT)
 D = 28° 38' 52.403"
 L = 17.300
 T = 8.656
 R = 200.000
 PC Sta. 231+50.393
 PT Sta. 231+67.694

Curve MUNA19-27
 Δ = 1° 34' 33.571" (RT)
 D = 28° 38' 52.403"
 L = 5.501
 T = 2.751
 R = 200.000
 PC Sta. 233+25.074
 PT Sta. 233+30.575

Curve MUNA19-23
 Δ = 3° 18' 59.827" (LT)
 D = 22° 55' 05.922"
 L = 14.471
 T = 7.238
 R = 250.000
 PC Sta. 229+18.993
 PT Sta. 229+33.465

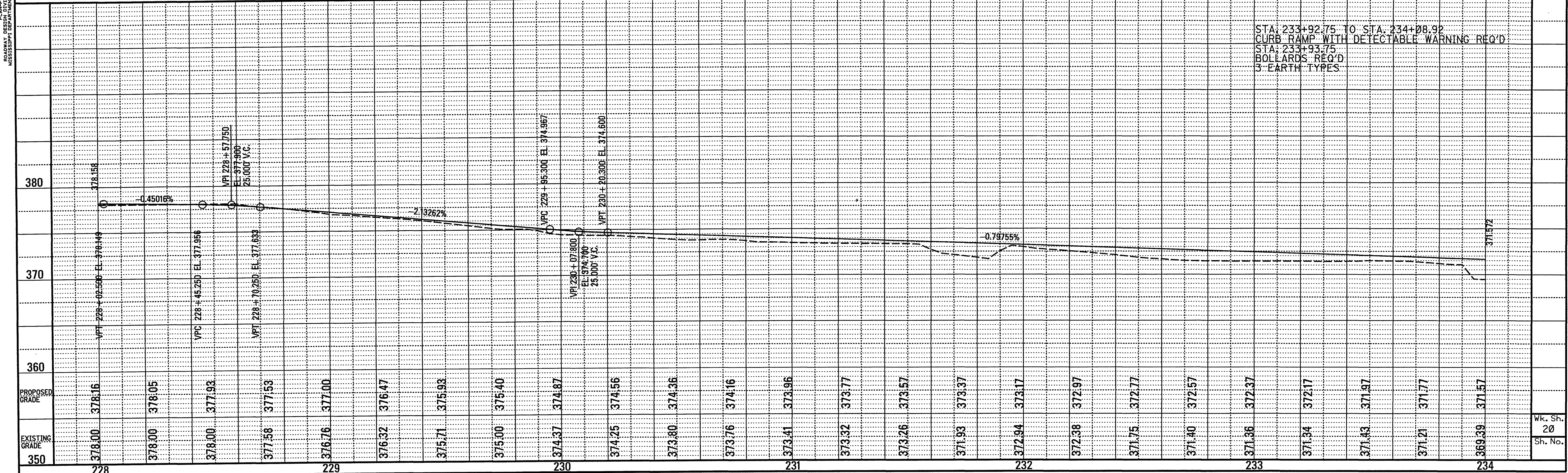
Curve MUNA19-26
 Δ = 6° 31' 56.662" (LT)
 D = 57° 17' 44.806"
 L = 11.401
 T = 5.707
 R = 100.000
 PC Sta. 231+94.088
 PT Sta. 232+05.489



**FOR REVIEW
 NOT FOR CONSTRUCTION**

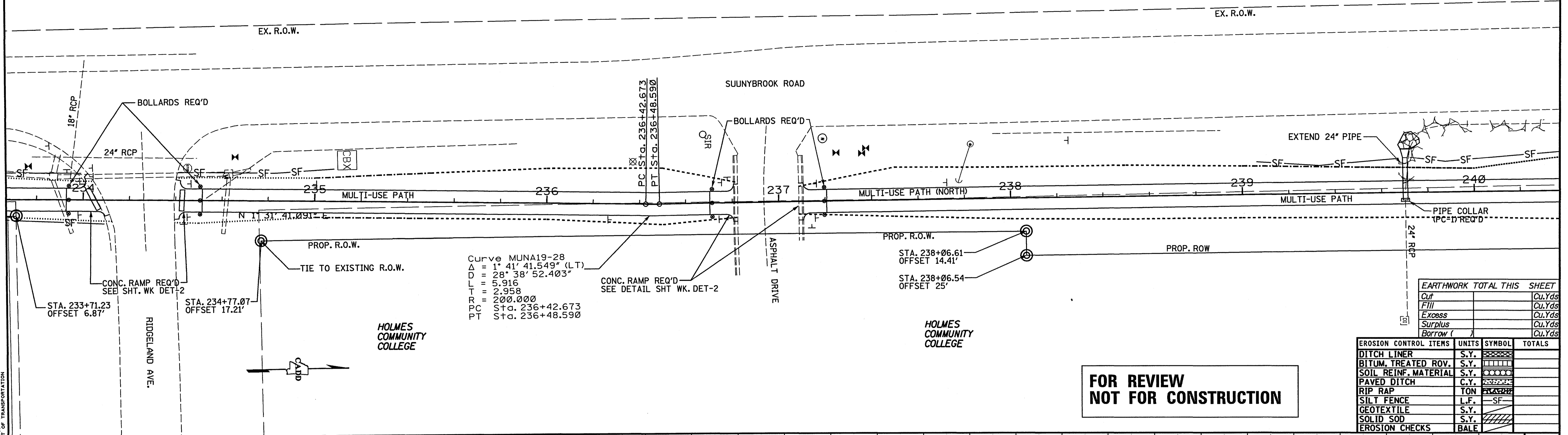
EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	

EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow ()	Cu.Yds



STA. 233+92.75 TO STA. 234+08.92
 CURB RAMP WITH DETECTABLE WARNING REQ'D
 STA. 233+93.75
 BOLLARDS REQ'D
 3' EARTH TYPES

PLAN/PROFILE BARS SECTION MISSOURI DEPARTMENT OF TRANSPORTATION

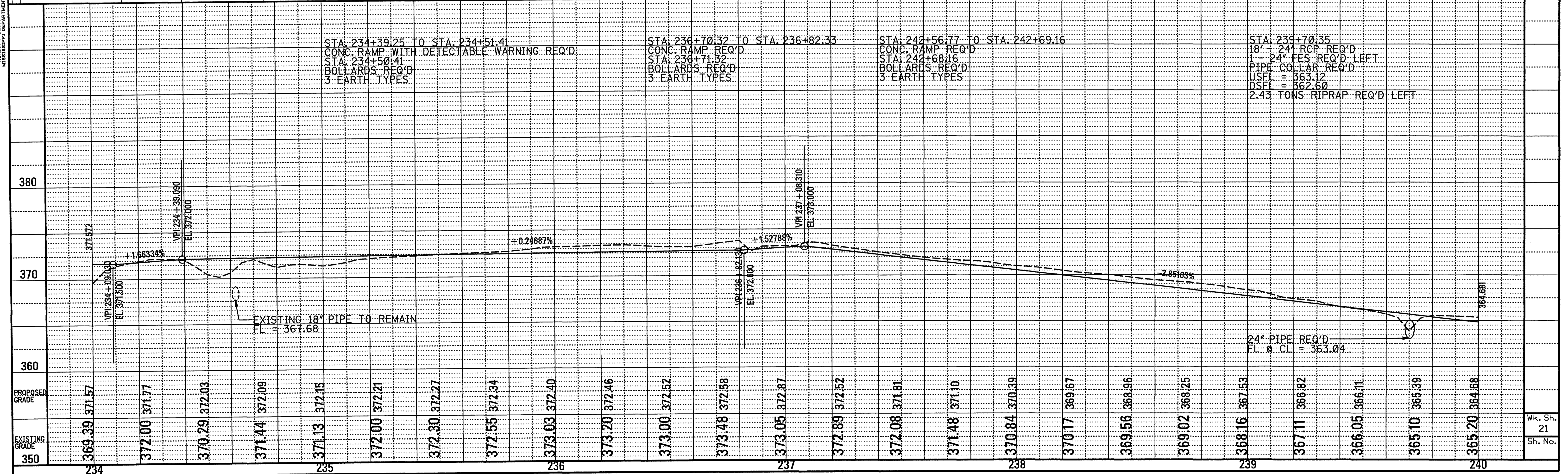


Curve MUNA19-28
 Δ = 1° 41' 41.549" (LT)
 D = 28° 38' 52.403"
 L = 5.916
 R = 200.000
 PT = 236+42.673
 PC = 236+48.590

EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow ()	Cu.Yds

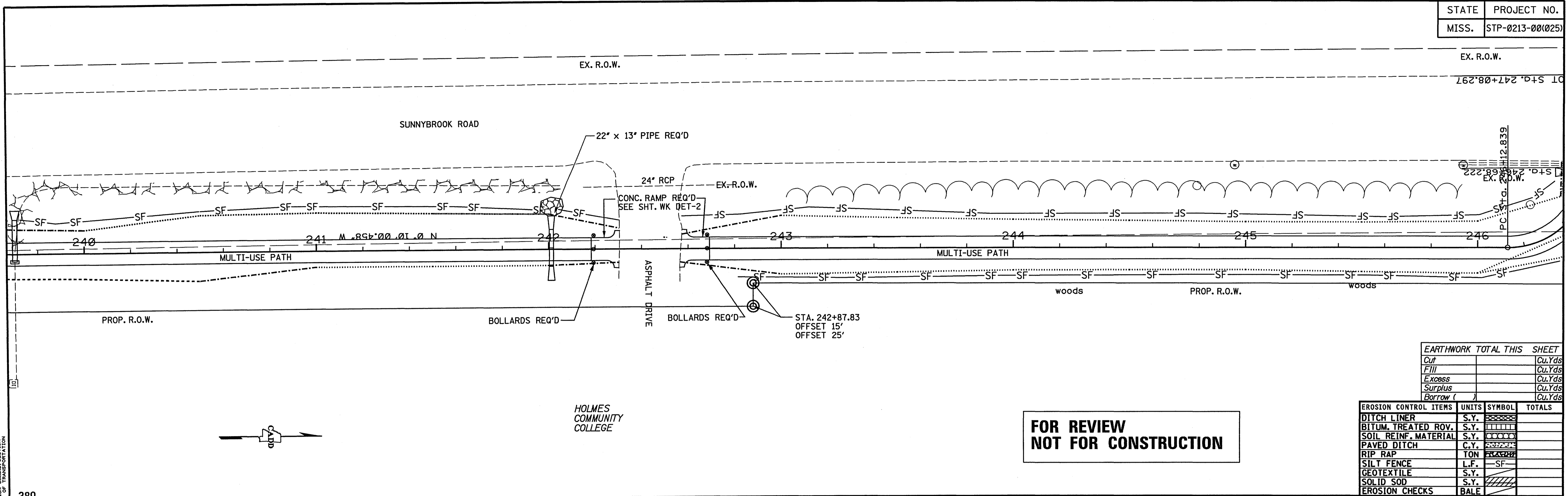
EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	

**FOR REVIEW
NOT FOR CONSTRUCTION**



PLAN/PROFILE ROADWAY DESIGN DIVISION CHA.D. SECTION MISSOURI DEPARTMENT OF TRANSPORTATION

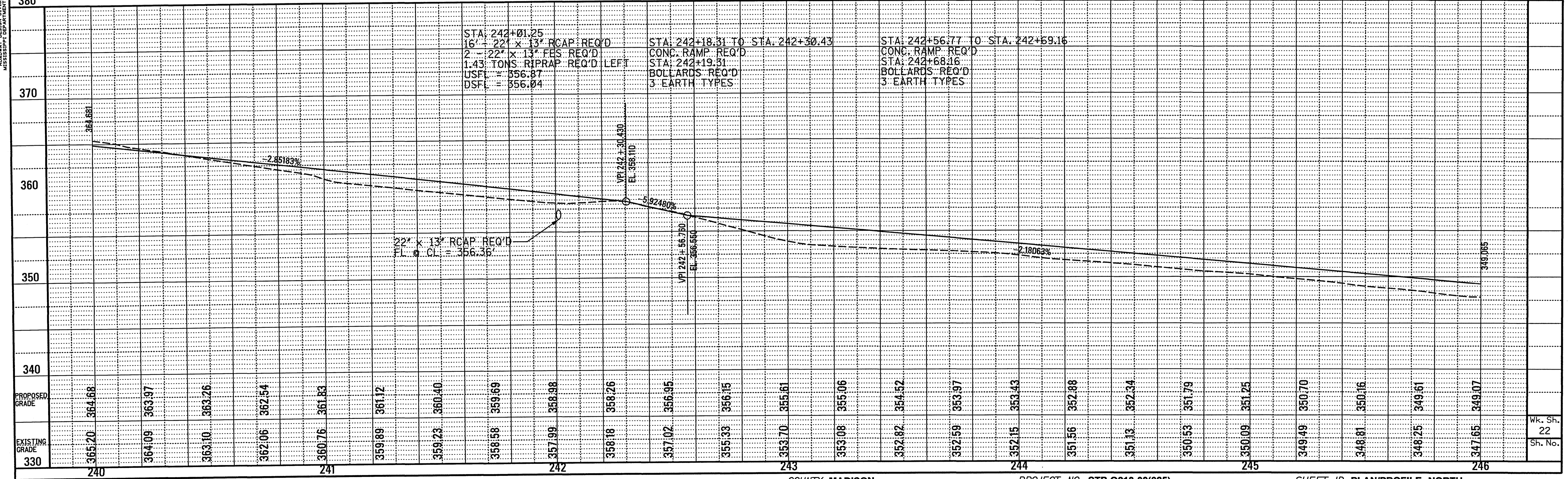
Wk. Sh.
21
Sh. No.



EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow ()	Cu.Yds

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	

**FOR REVIEW
NOT FOR CONSTRUCTION**



380

370

360

350

340

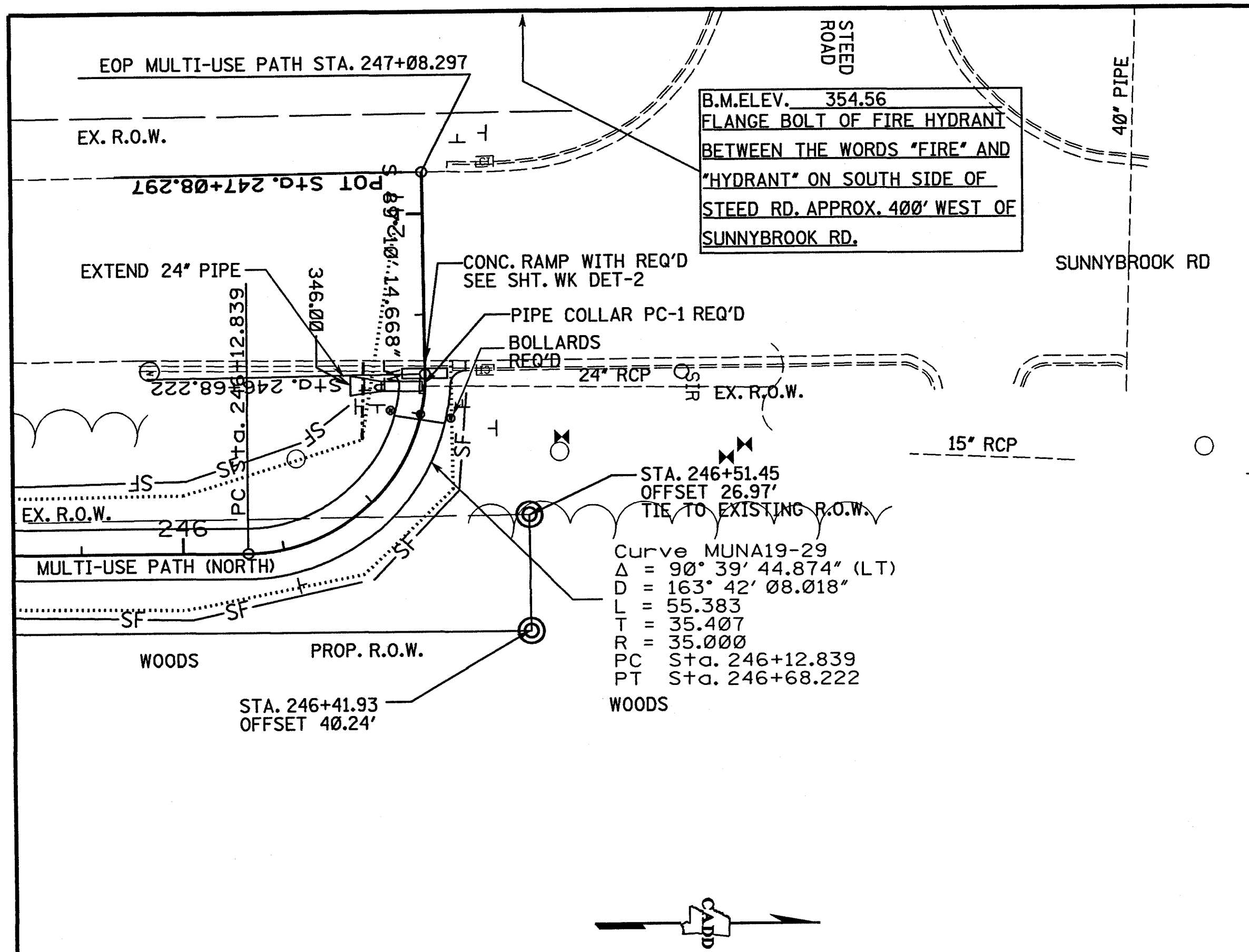
PROPOSED GRADE

EXISTING GRADE

330

Wk. Sh.
22

Sh. No.



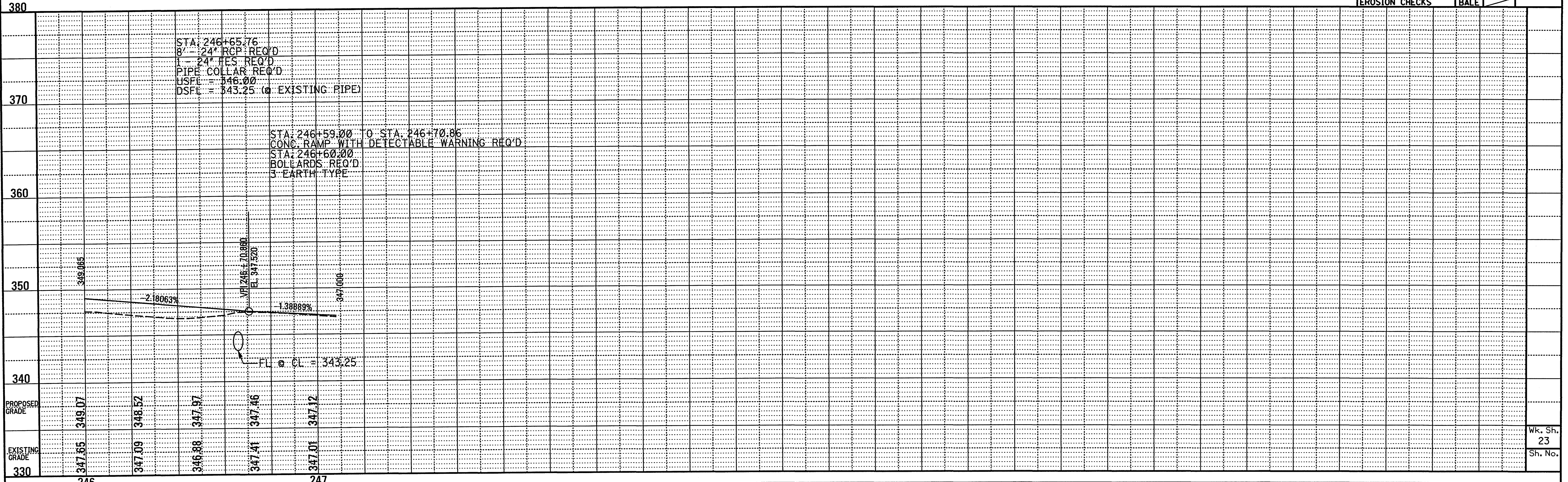
B.M. ELEV. 354.56
 FLANGE BOLT OF FIRE HYDRANT
 BETWEEN THE WORDS "FIRE" AND
 "HYDRANT" ON SOUTH SIDE OF
 STEED RD. APPROX. 400' WEST OF
 SUNNYBROOK RD.



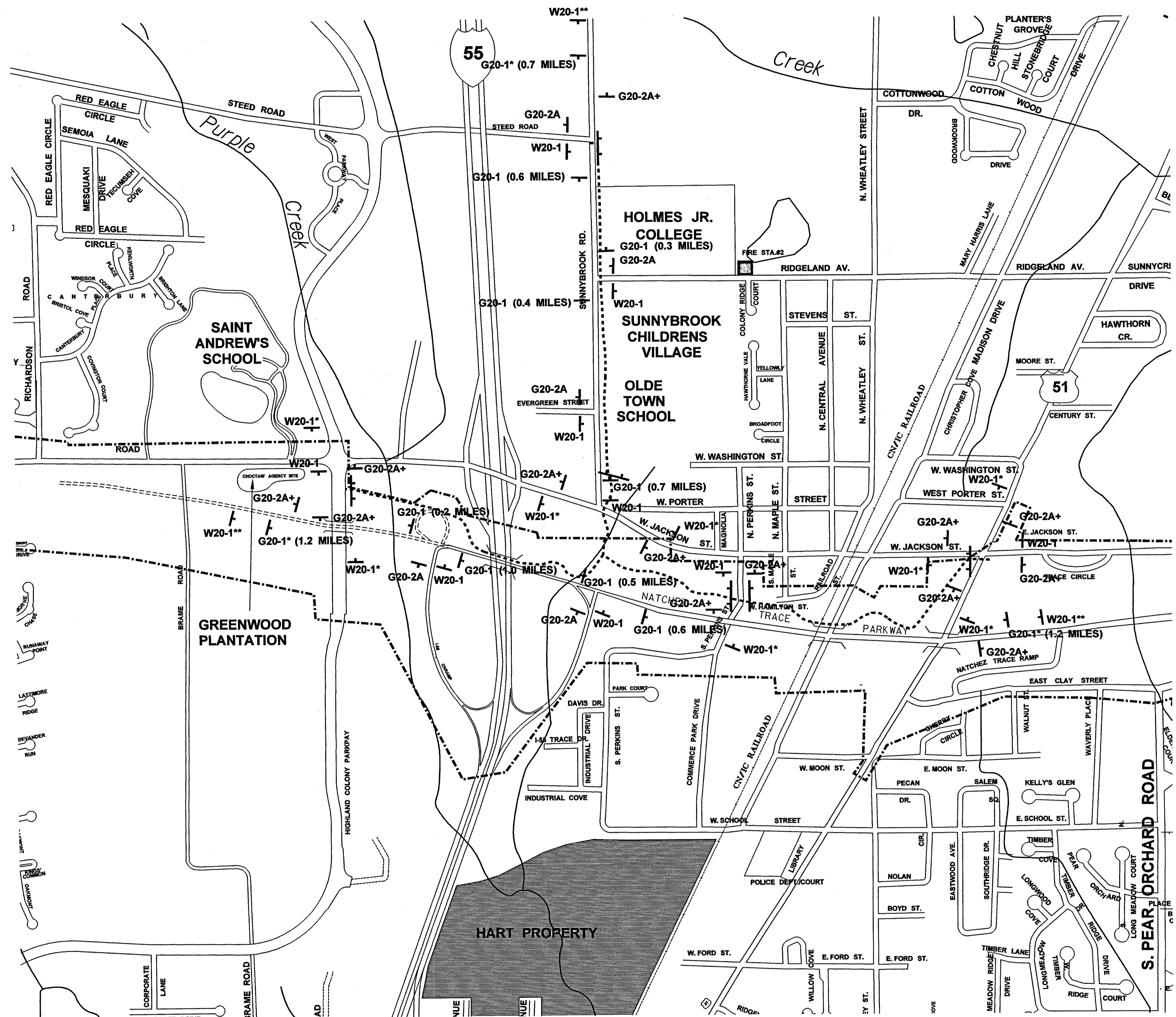
**FOR REVIEW
NOT FOR CONSTRUCTION**

EARTHWORK TOTAL THIS SHEET	
Cut	Cu.Yds
Fill	Cu.Yds
Excess	Cu.Yds
Surplus	Cu.Yds
Borrow ()	Cu.Yds

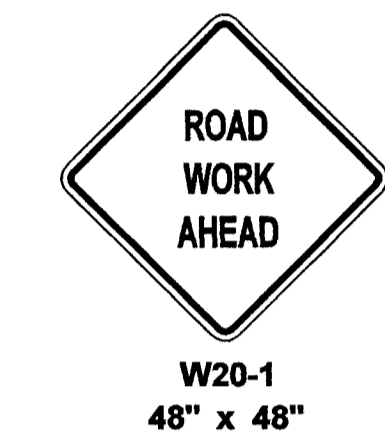
EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	
SILT FENCE	L.F.	[Symbol]	
GEOTEXTILE	S.Y.	[Symbol]	
SOLID SOD	S.Y.	[Symbol]	
EROSION CHECKS	BALE	[Symbol]	



PLAN PROFILE
 ROADWAY DESIGN DIVISION LAND SECTION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION

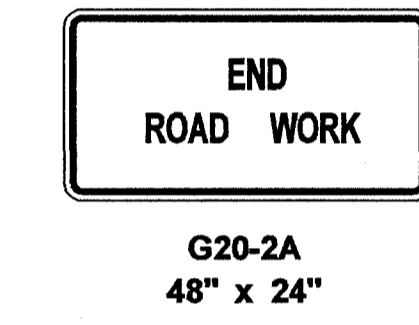
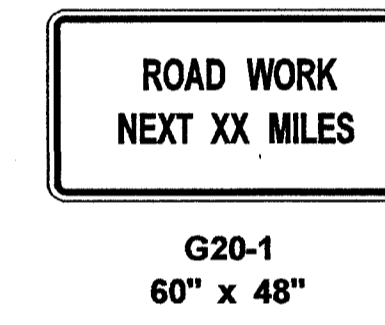


LEGEND



- T TRAFFIC SIGN
- T TYPE III BARRICADE

- * SIGN TO BE PLACED 1000' IN ADVANCE OF WORK ZONE
- ** SIGN TO BE PLACED 1500' IN ADVANCE OF WORK ZONE
- + SIGN TO BE PLACED 500' BEYOND END OF WORK ZONE



NOTES:

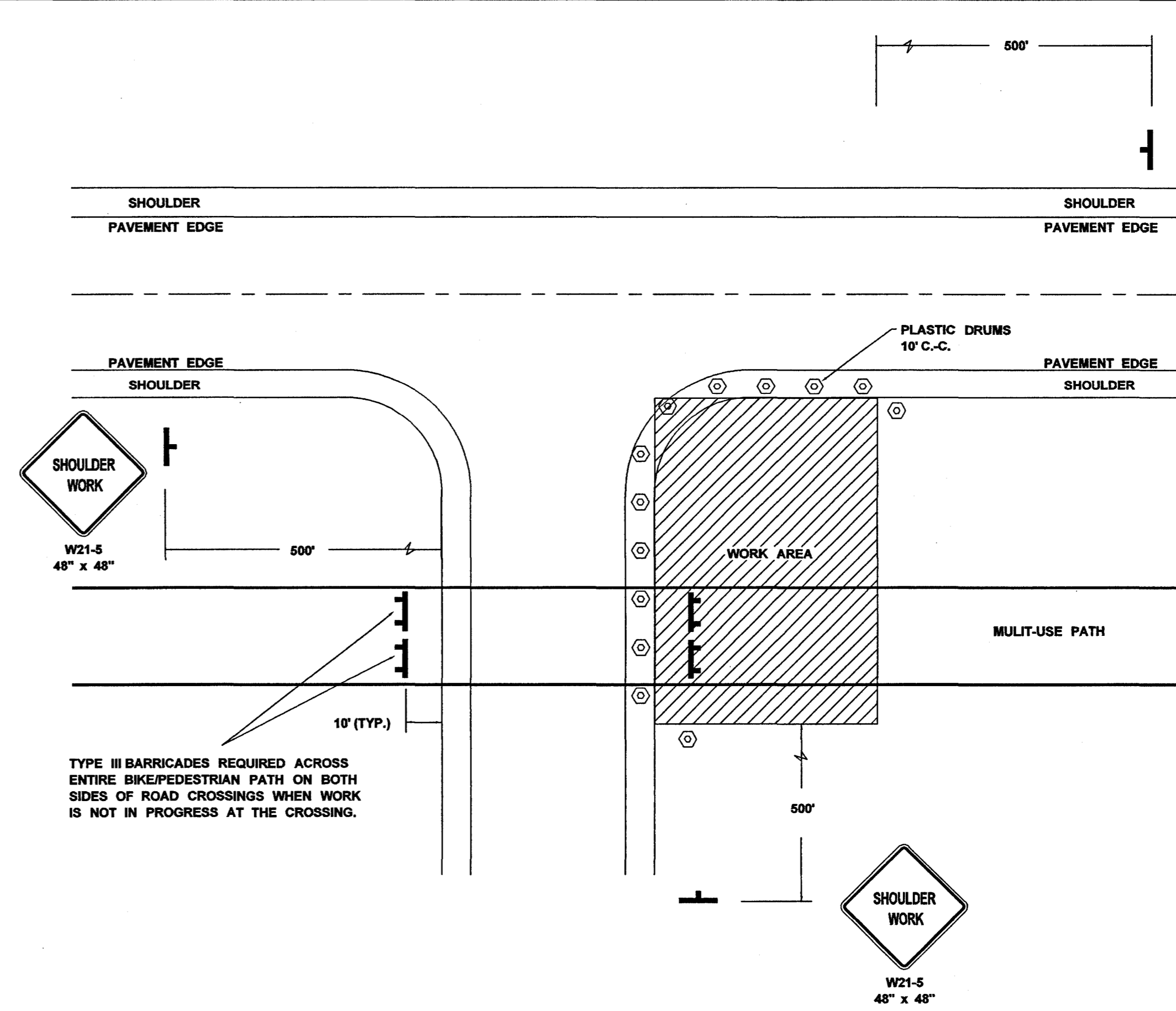
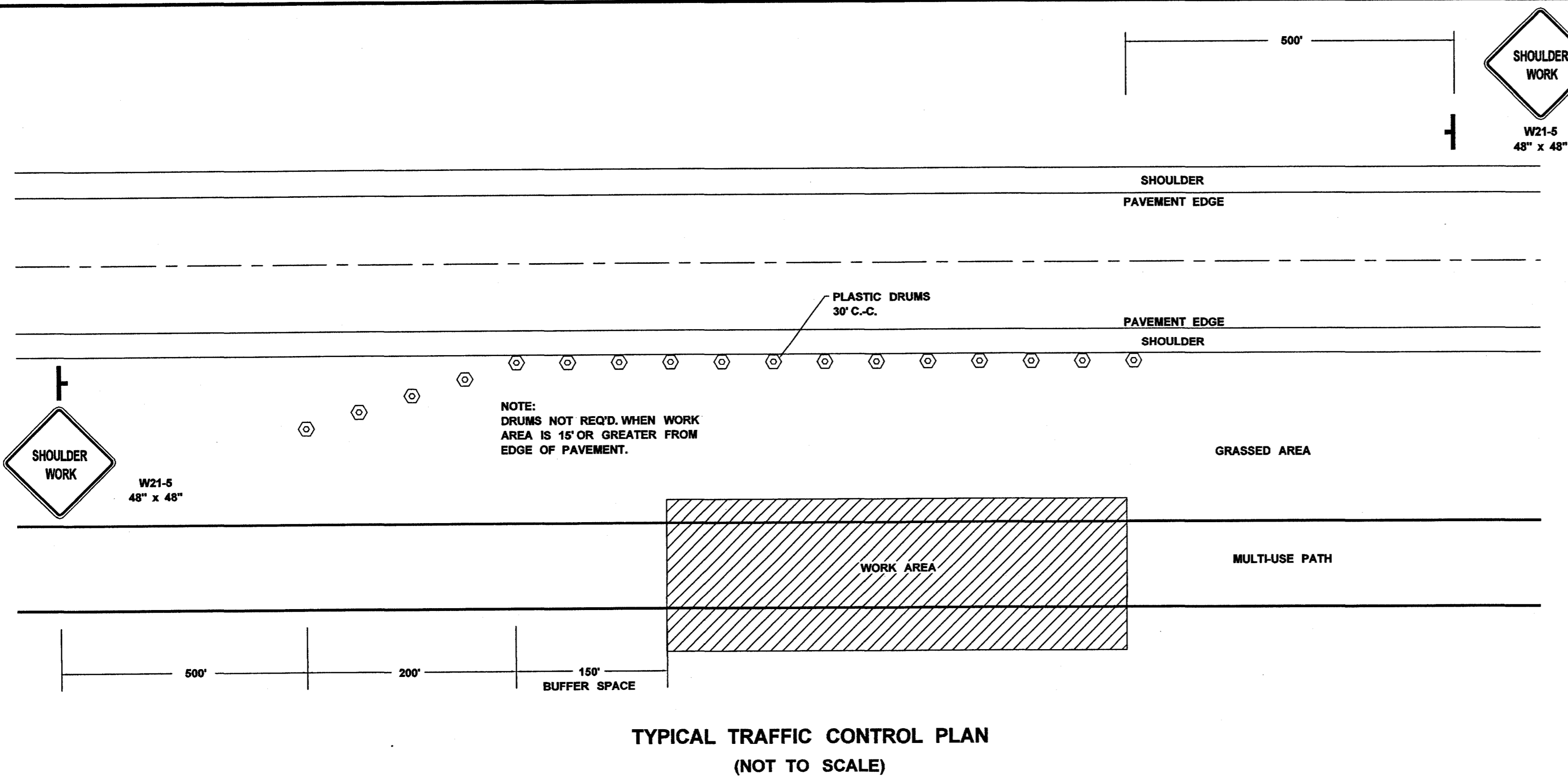
1. ALL W20-1 SIGNS TO BE PLACED A MINIMUM OF 100' FROM BEGINNING OF CONSTRUCTION UNLESS OTHERWISE NOTED. ALL TYPE III BARRICADES TO BE PLACED ACROSS ENTIRE BIKE/PEDESTRIAN PATH (SEE TRAFFIC CONTROL PLAN).
2. ALL ITEMS SHOWN ON THIS SHEET ARE TO BE PAID FOR UNDER "MAINTENANCE OF TRAFFIC", PAY ITEM NO. 618-A.

**CONSTRUCTION SIGNING
(NOT TO SCALE)**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL PLAN	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
DATE	REVISION
BY	
DESIGN TEAM	N-S CHECKED DATE
FILENAME:	TCP.dgn
WORKING NUMBER	TC-1
SHEET NUMBER	

ROADWAY DESIGN DIVISION C.A.D.D. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

STATE	PROJECT NO.
MISS.	STP-0213-00(025)



TYPICAL TRAFFIC CONTROL PLAN @ ROAD CROSSINGS
(NOT TO SCALE)

LEGEND

	TRAFFIC SIGN
	TYPE III BARRICADE
	* SIGN TO BE PLACED 1000' IN ADVANCE OF WORK ZONE
	** SIGN TO BE PLACED 1500' IN ADVANCE OF WORK ZONE
	+ SIGN TO BE PLACED 500' BEYOND END OF WORK ZONE

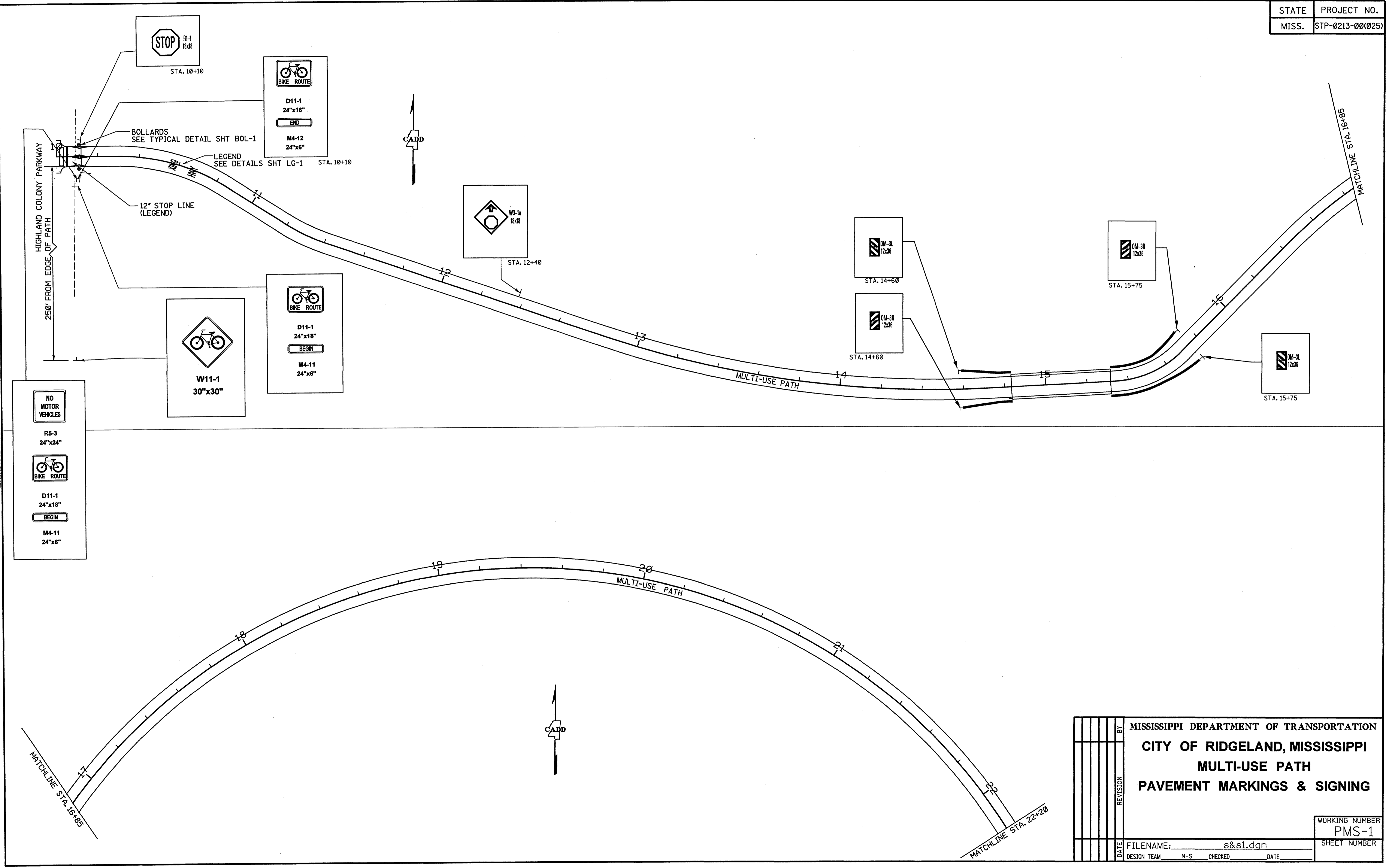
NOTES:

- ALL W20-1 SIGNS TO BE PLACED A MINIMUM OF 100' FROM BEGINNING OF CONSTRUCTION UNLESS OTHERWISE NOTED. ALL TYPE III BARRICADES TO BE PLACED ACROSS ENTIRE BIKE/PEDESTRIAN PATH (SEE TRAFFIC CONTROL PLAN).
- ALL ITEMS SHOWN ON THIS SHEET ARE TO BE PAID FOR UNDER "MAINTENANCE OF TRAFFIC", PAY ITEM NO. 618-A.

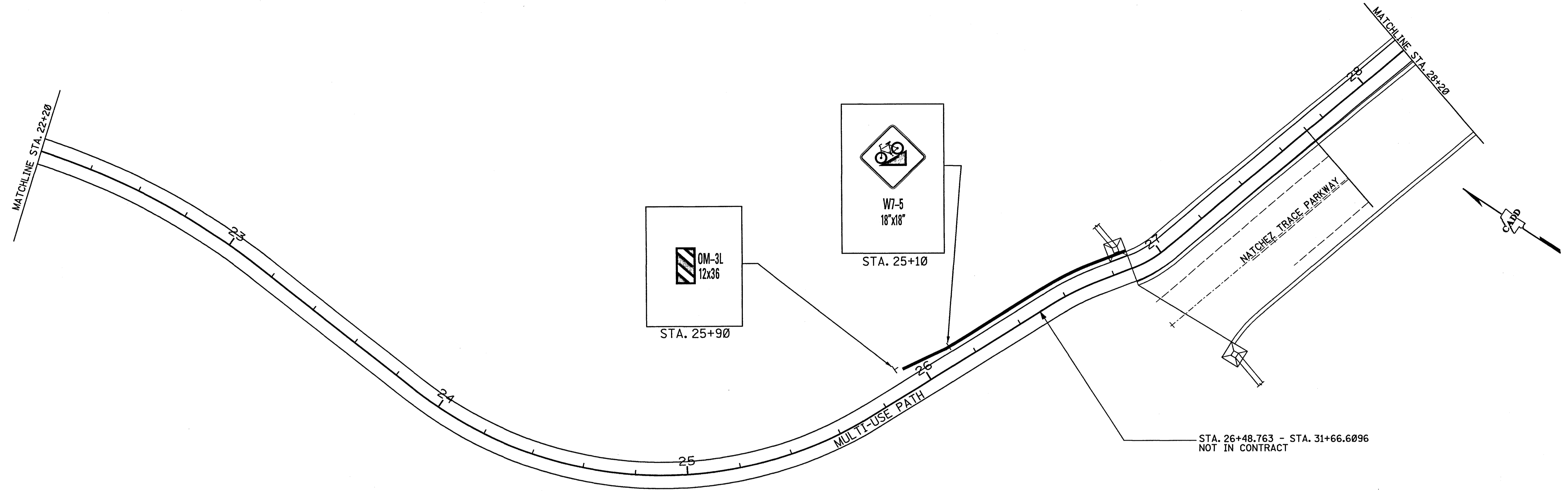
ROADWAY DESIGN DIVISION C.A.D.D. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL PLAN	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
DATE	WORKING NUMBER
DESIGN TEAM	TC-2
FILENAME: TCP2.dgn	SHEET NUMBER
DATE	
DESIGN TEAM	
N-S	
CHECKED	
DATE	

ROADWAY DESIGN DIVISION CADD SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

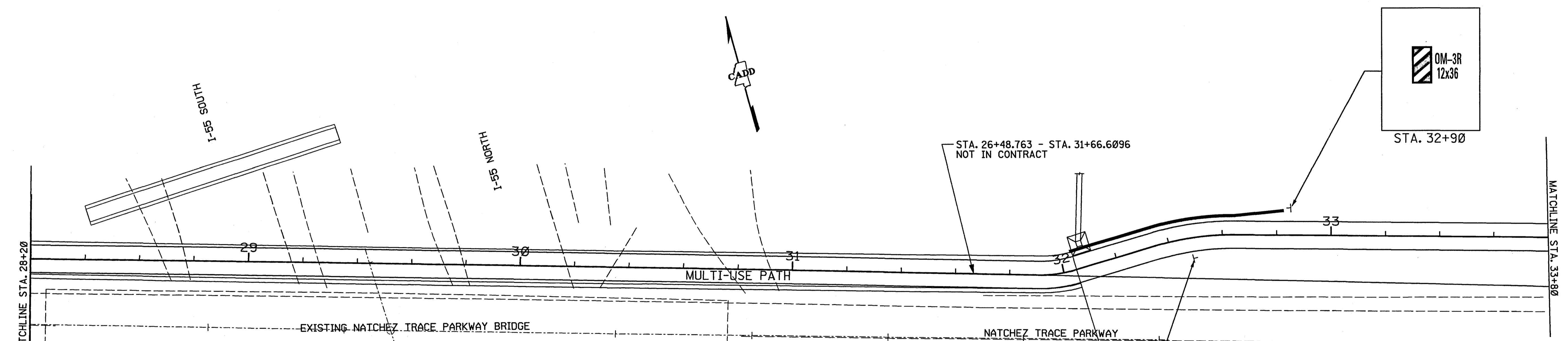


MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
PAVEMENT MARKINGS & SIGNING	
WORKING NUMBER	PMS-1
FILENAME:	s&s1.dgn
DESIGN TEAM:	N-S CHECKED: DATE:
SHEET NUMBER	



STA. 26+48.763 - STA. 31+66.6096
NOT IN CONTRACT

ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

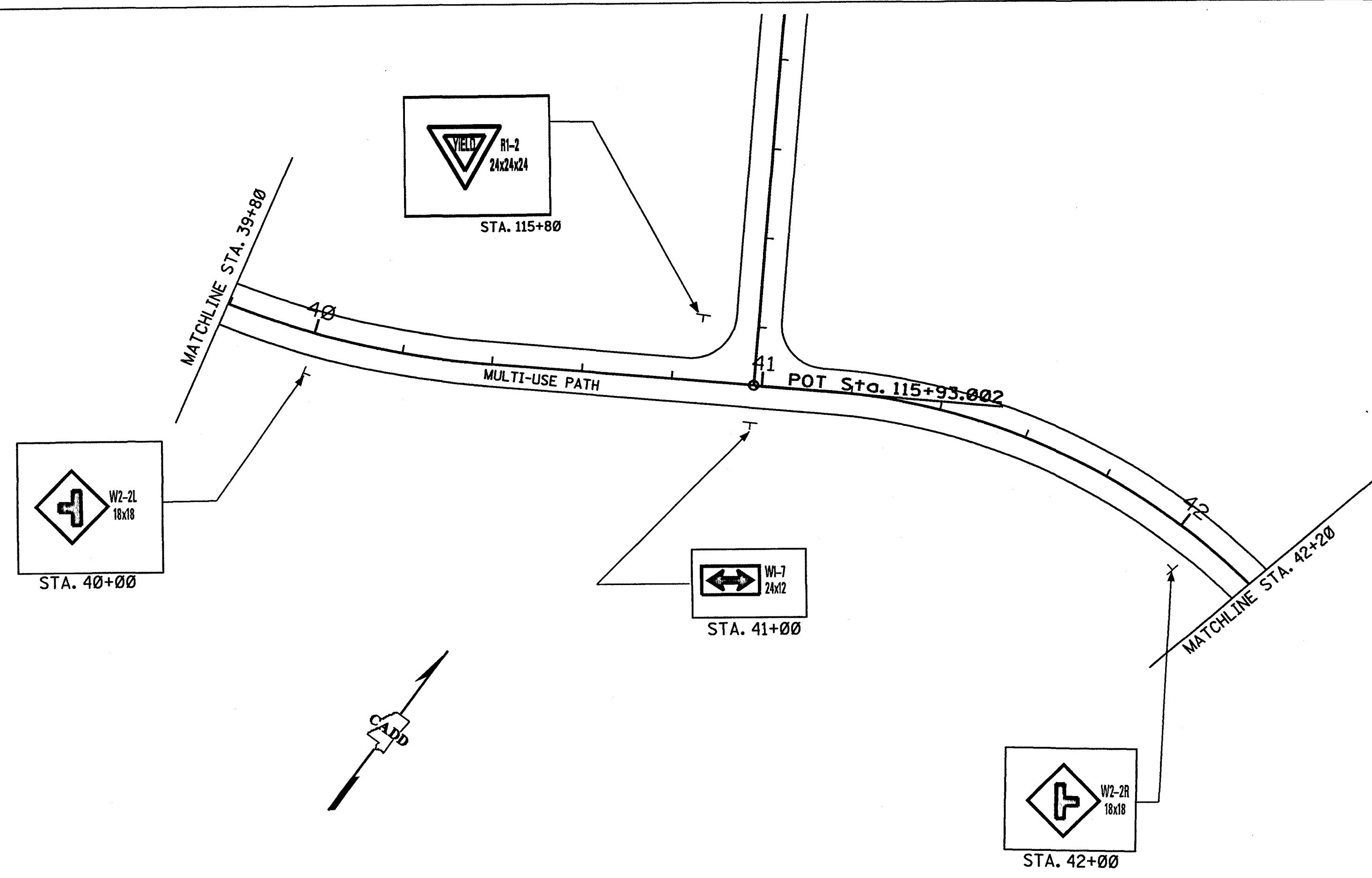
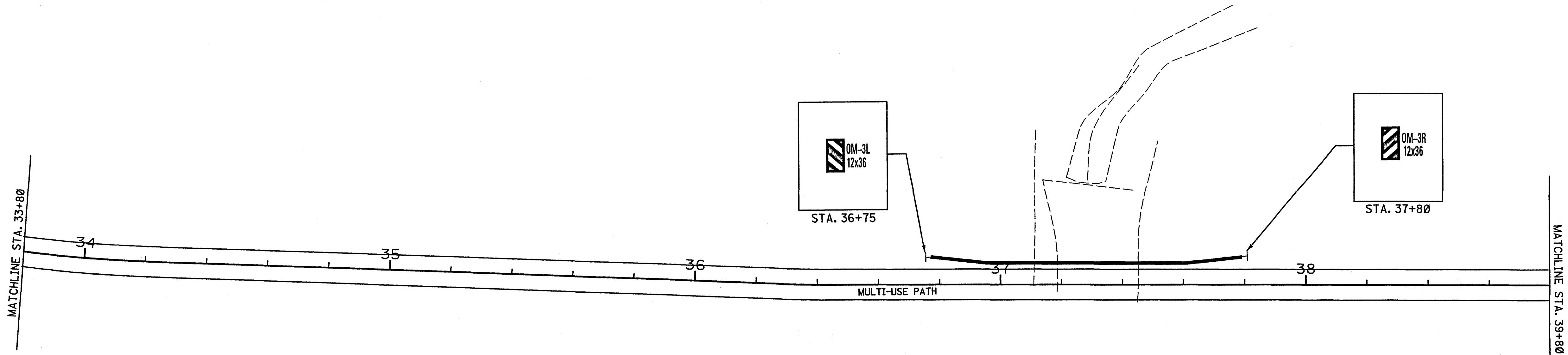


STA. 26+48.763 - STA. 31+66.6096
NOT IN CONTRACT

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
PAVEMENT MARKINGS & SIGNING	
WORKING NUMBER	PMS-2
SHEET NUMBER	
FILENAME:	s&s2.dgn
DESIGN TEAM:	N-S CHECKED: DATE:

STA. 32+50

STATE	PROJECT NO.
MISS.	STP-0213-00(025)



ROADWAY DESIGN DIVISION CADD SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

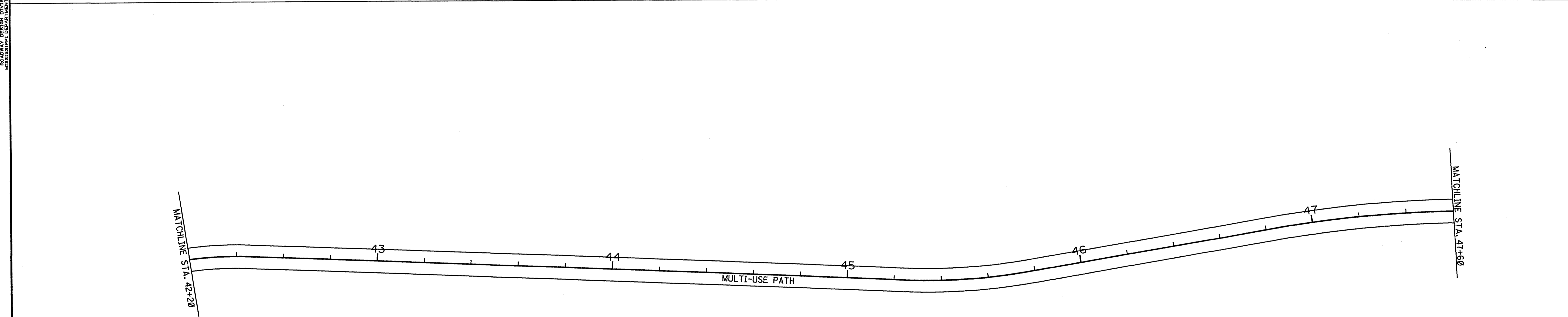
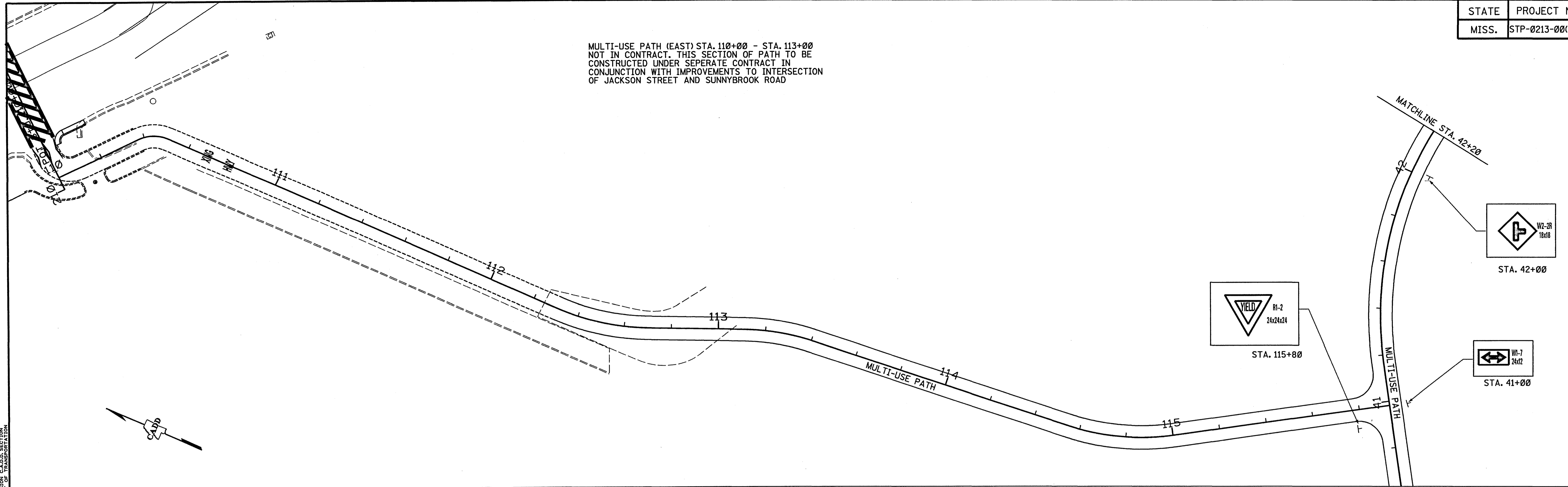
\$FILE\$

3/17/2003

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
PAVEMENT MARKINGS & SIGNING	
WORKING NUMBER	PMS-3
FILENAME:	s&s3.dgn
DESIGN TEAM: Neel-Schaffer	CHECKED: _____ DATE: _____
SHEET NUMBER	

STATE	PROJECT NO.
MISS.	STP-0213-00(025)

MULTI-USE PATH (EAST) STA. 110+00 - STA. 113+00
 NOT IN CONTRACT. THIS SECTION OF PATH TO BE
 CONSTRUCTED UNDER SEPERATE CONTRACT IN
 CONJUNCTION WITH IMPROVEMENTS TO INTERSECTION
 OF JACKSON STREET AND SUNNYBROOK ROAD



ROADWAY DESIGN DIVISION C.A.D.D. SECTION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION

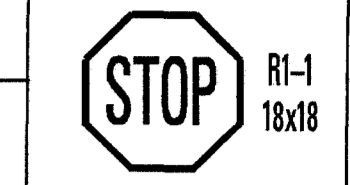
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
PAVEMENT MARKINGS & SIGNING	
WORKING NUMBER	PMS-4
FILENAME:	s&s4.dgn
DESIGN TEAM	N-S CHECKED DATE
DATE	
REVISION	
BY	

LEGEND
"XING"
"BIKE"
"PED"
SEE DETAILS
SHT LG-1

SIGN GROUP "C"
53+75

SIGN GROUP "B"
53+45

SIGN GROUP "A"
53+45



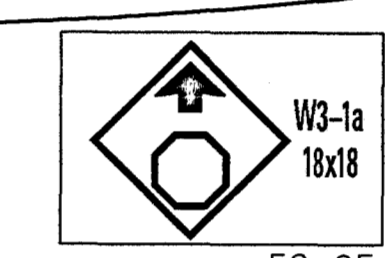
53+75

12" STOP LINE
(LEGEND)(WHITE)

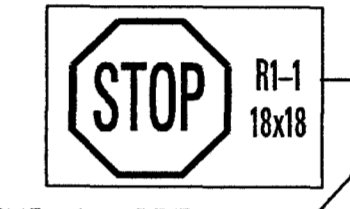
BOLLARDS REQ'D
SEE DETAILS BOL-1

BOLLARDS REQ'D
SEE DETAIL SHT BOL-1

LEGEND
SEE DETAILS SHT LG-1



52+85



53+40

12" LEGEND (WHITE)
24" CENTER - CENTER SPACING

LEGEND
"XING"
"BIKE"
"PED"
SEE DETAILS
SHT LG-1

53+70

SIGN GROUP "A"
53+75

SIGN GROUP "B"
53+75

SIGN GROUP "C"
53+75

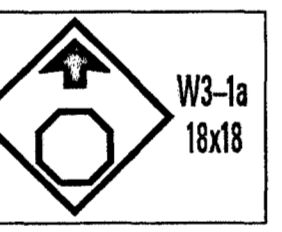
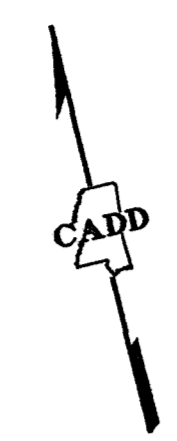
MATCHLINE STA. 47+60

MATCHLINE STA. 54+00

MULTI-USE PATH

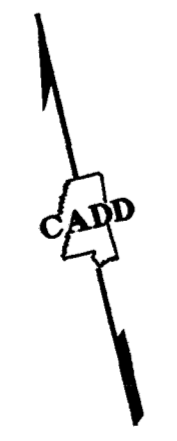
MULTI-USE PATH

MATCHLINE STA. 59+40



52+85

LEGEND
SEE DETAILS SHT LG-1



MATCHLINE STA. 54+00

MULTI-USE PATH

NO MOTOR VEHICLES
R5-3
24"x24"

D11-1
24"x18"

SIGN GROUP "A"

M7-5
12"x9"

D11-1
24"x18"

W11A-2
30"x30"

SIGN GROUP "B"

W11-1
30"x30"

SIGN GROUP "C"

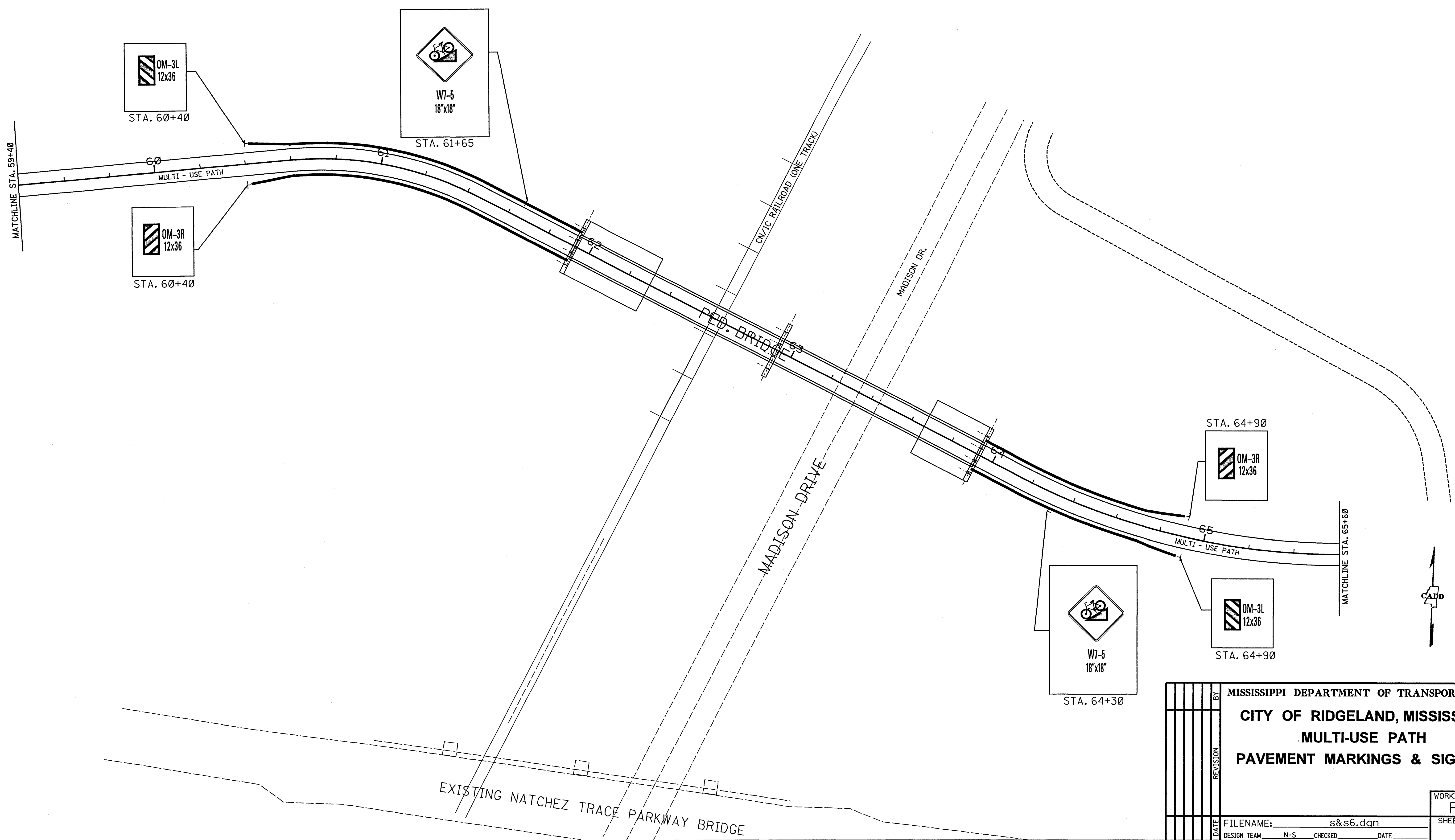
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIGDELAND, MISSISSIPPI	
MULTI-USE PATH	
PAVEMENT MARKINGS & SIGNING	
WORKING NUMBER	PMS-5
DATE	FILENAME: s&s5.dgn
DESIGN TEAM	Neel-Schaffer
CHECKED	DATE
SHEET NUMBER	

PLAN CADD SECTION
ROADWAY DESIGN
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

\$FILE\$

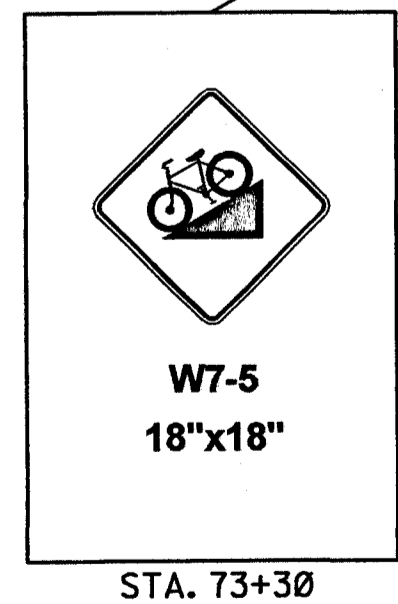
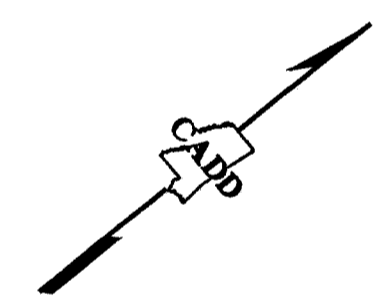
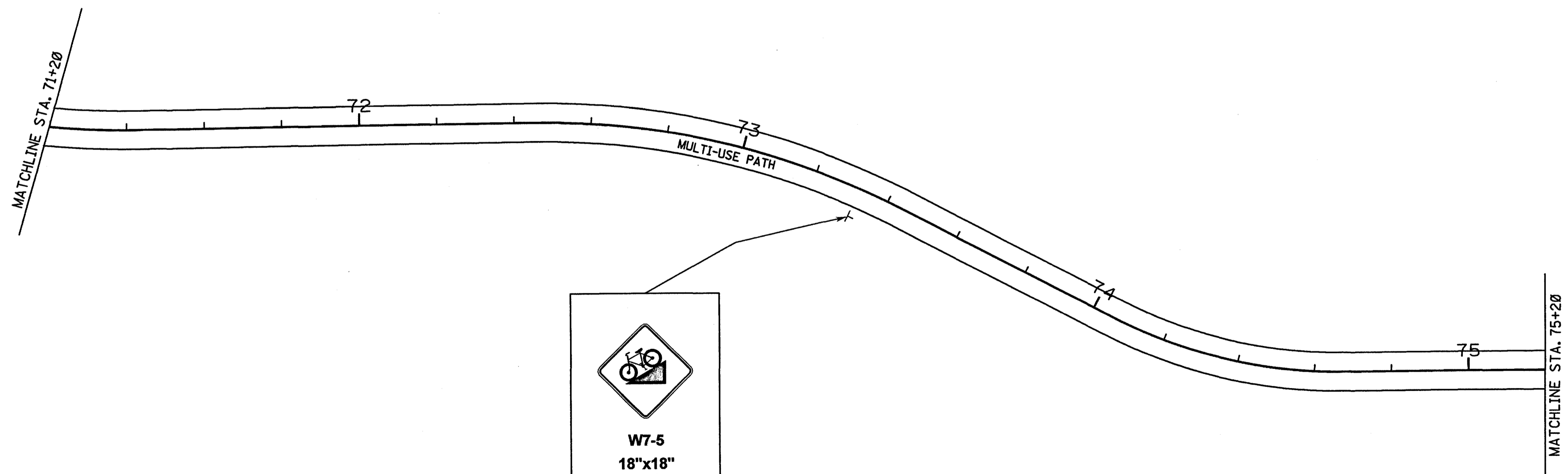
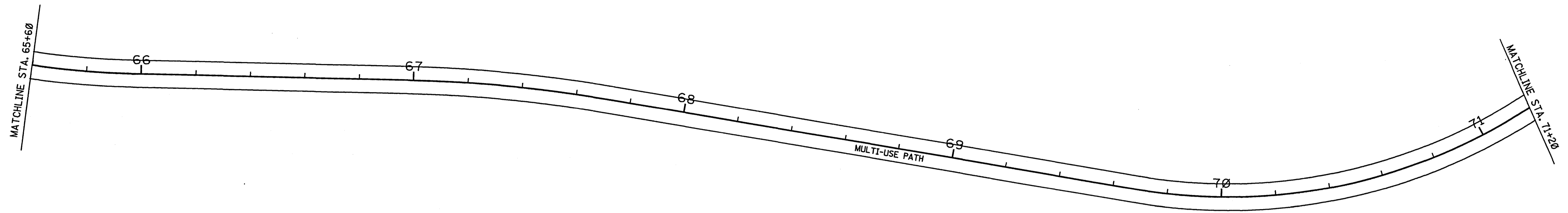
3/12/2003

PLAN, CADD, SECTION
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION



BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		CITY OF RIDGELAND, MISSISSIPPI	
		MULTI-USE PATH	
		PAVEMENT MARKINGS & SIGNING	
DATE	FILENAME:	s&s6.dgn	WORKING NUMBER
DESIGN TEAM	N-S	CHECKED	DATE
			PMS-6
			SHEET NUMBER

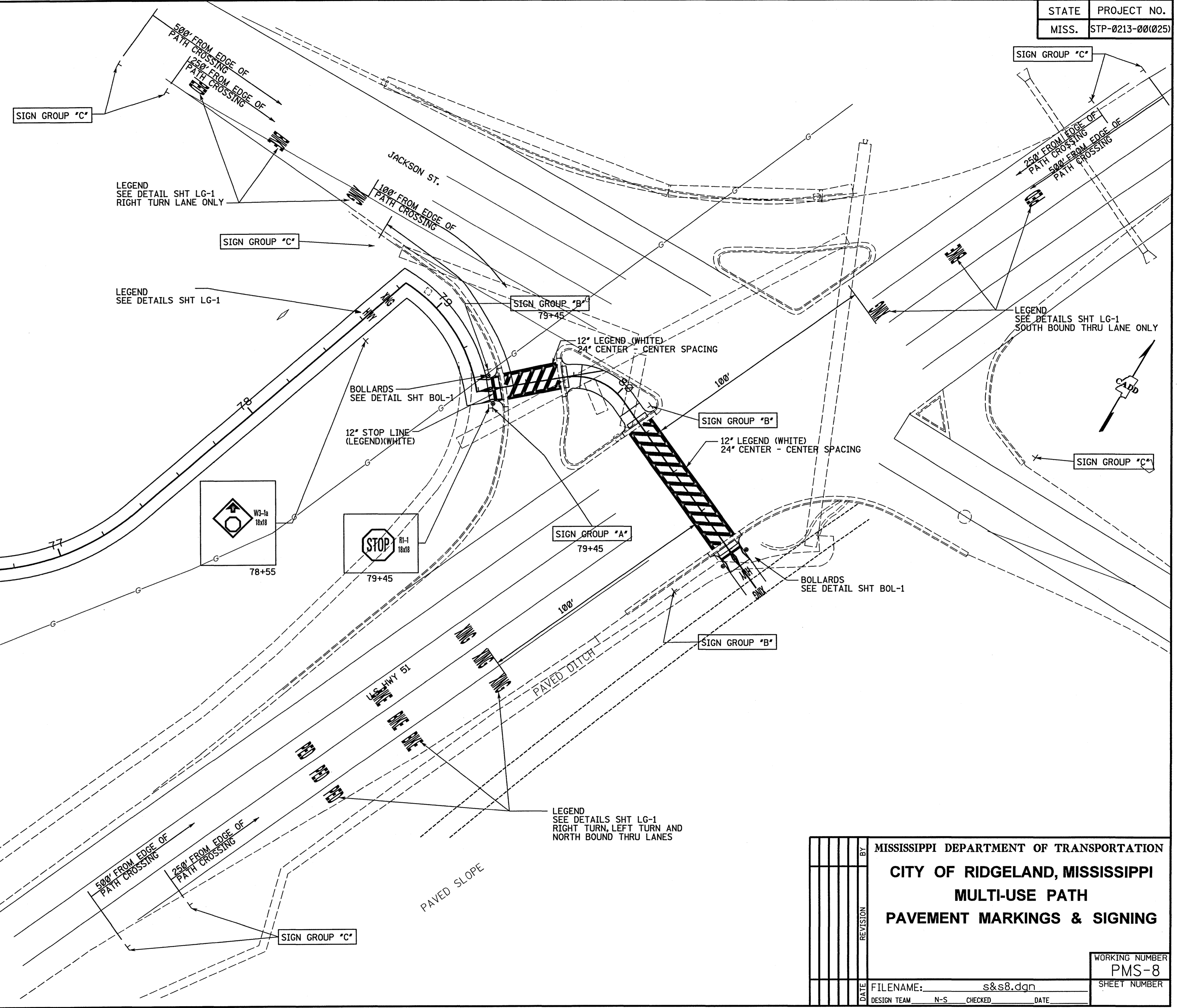
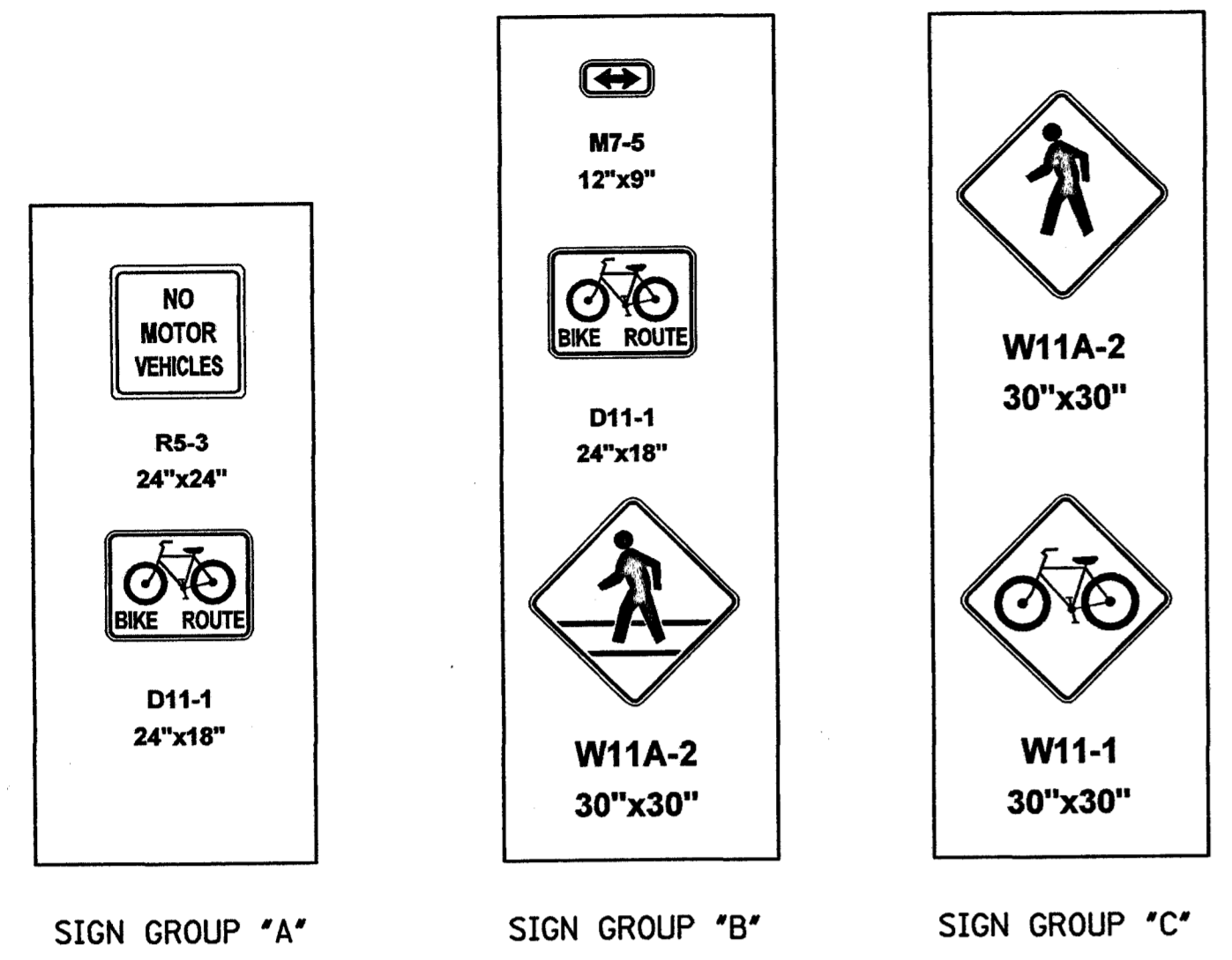
STATE	PROJECT NO.
MISS.	STP-0213-00(025)



STA. 73+30

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
PAVEMENT MARKINGS & SIGNING	
WORKING NUMBER	PMS-7
FILENAME:	s&s7.dgn
DESIGN TEAM	N-S
CHECKED	DATE

ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

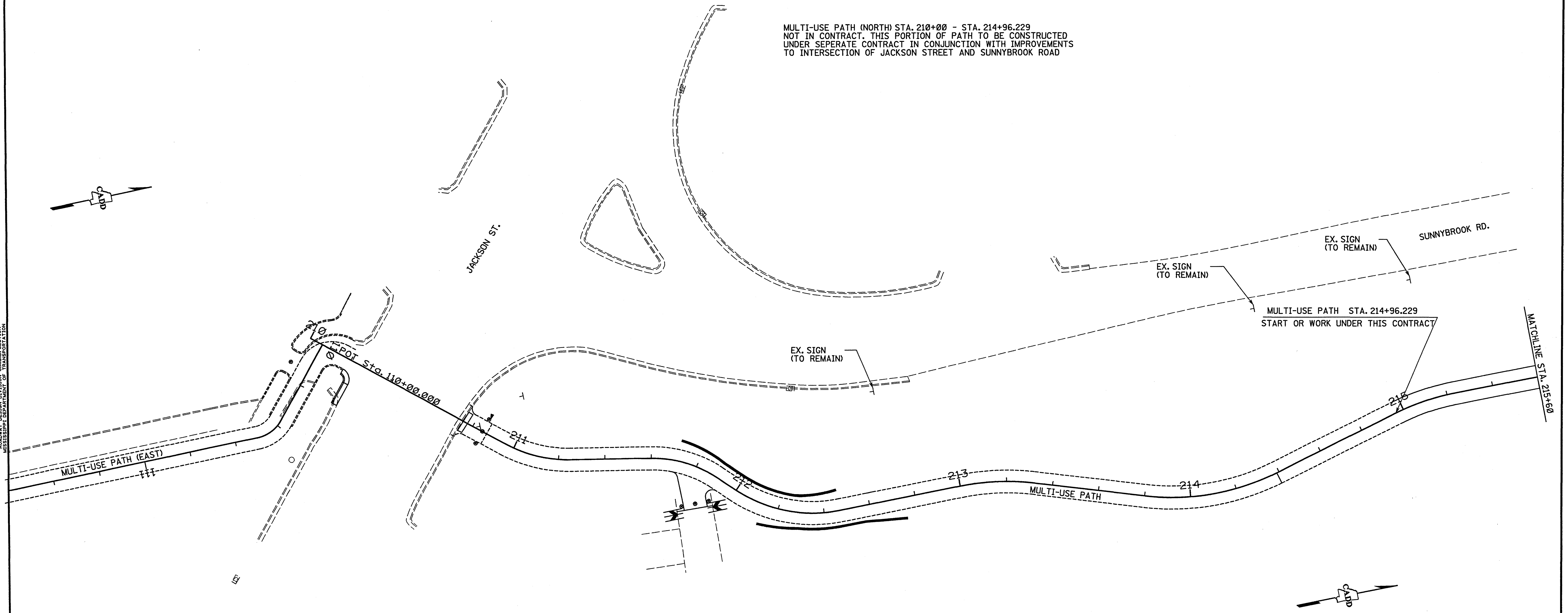


ROADWAY DESIGN DIVISION CADD SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

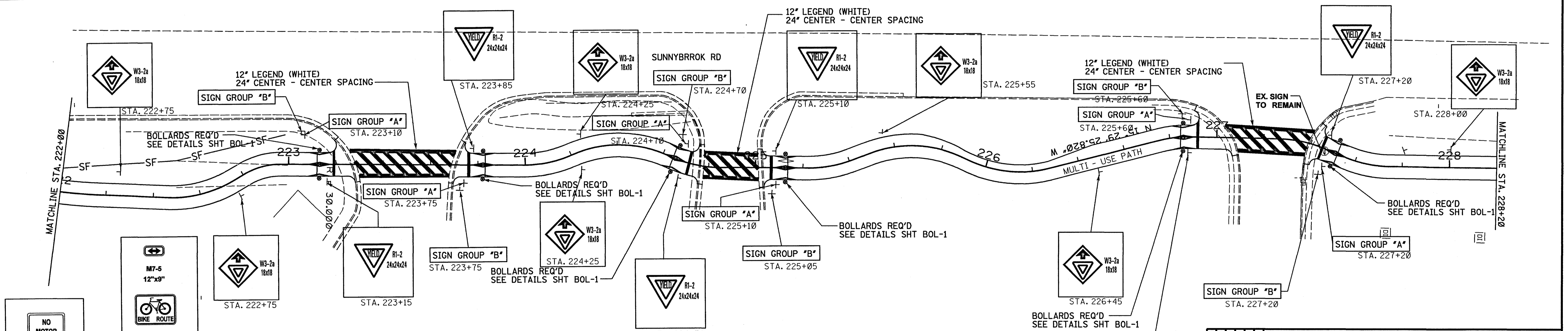
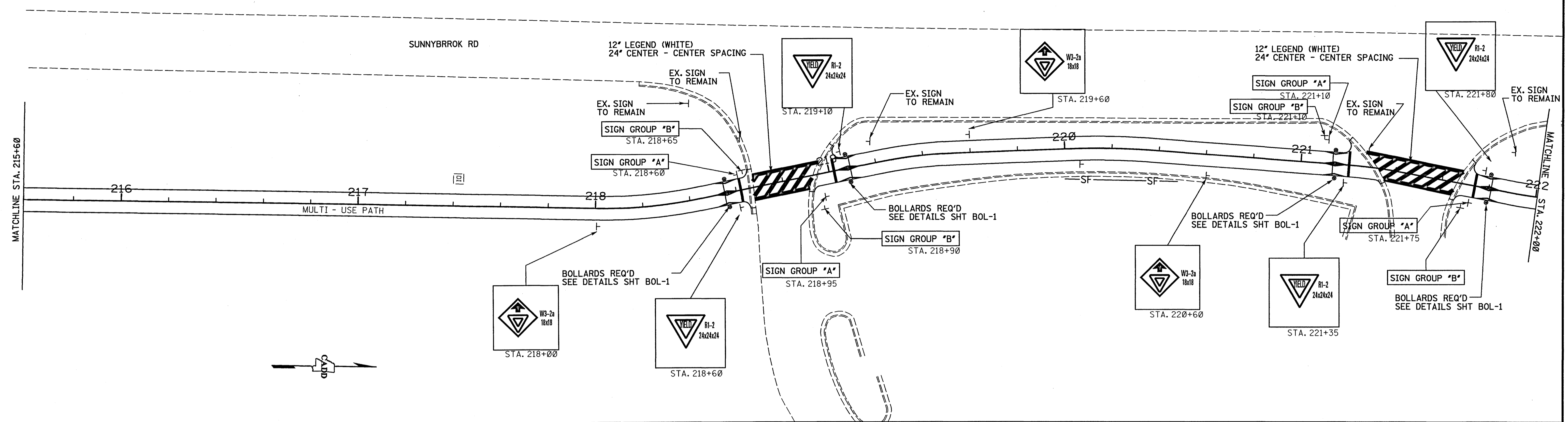
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		CITY OF RIDGELAND, MISSISSIPPI	
		MULTI-USE PATH	
		PAVEMENT MARKINGS & SIGNING	
DATE	FILENAME: s&s8.dgn	WORKING NUMBER	PMS-8
DESIGN TEAM	N-S	CHECKED	DATE
			SHEET NUMBER

MULTI-USE PATH (NORTH) STA. 210+00 - STA. 214+96.229
 NOT IN CONTRACT. THIS PORTION OF PATH TO BE CONSTRUCTED
 UNDER SEPERATE CONTRACT IN CONJUNCTION WITH IMPROVEMENTS
 TO INTERSECTION OF JACKSON STREET AND SUNNYBROOK ROAD

PLAN
 ROADWAY DESIGN DIVISION, CIVIL SECTION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
PAVEMENT MARKINGS & SIGNING	
WORKING NUMBER	PMS-9
SHEET NUMBER	
FILENAME:	s&s9.dgn
DESIGN TEAM	N-S
CHECKED	
DATE	



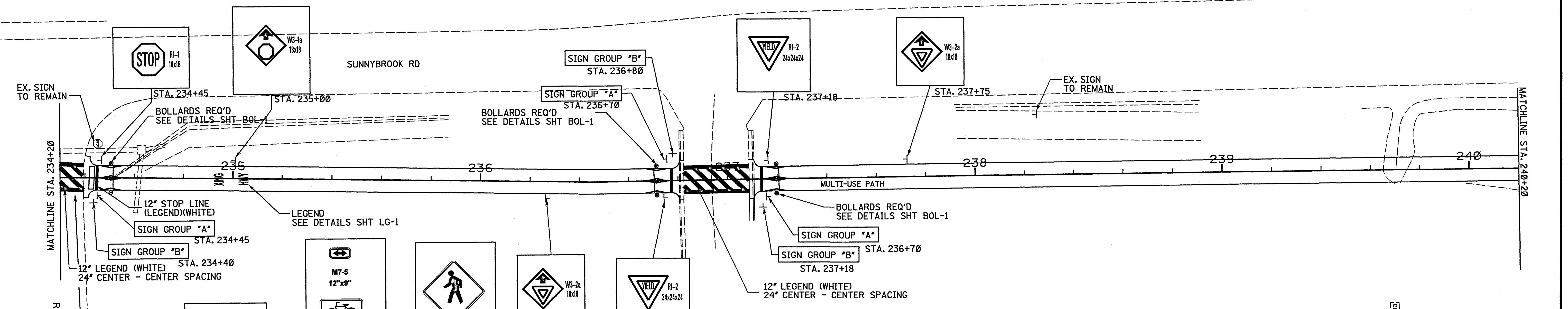
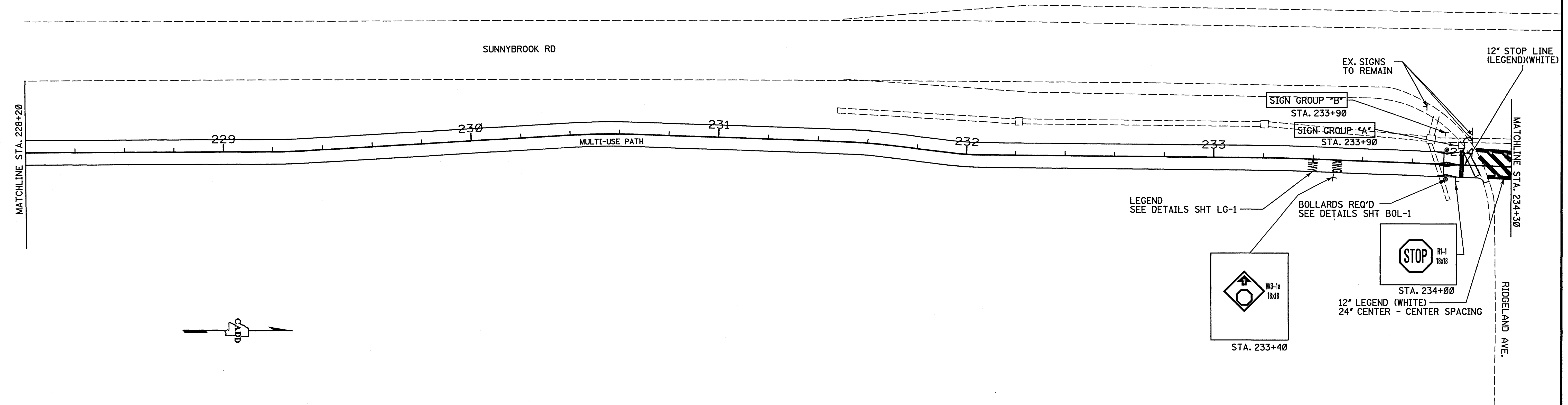
NO MOTOR VEHICLES R5-3 24"x24"	M7-5 12"x9"
BIKE ROUTE D11-1 24"x18"	W3-2a 18x18 STA. 222+75
BIKE ROUTE D11-1 24"x18"	YIELD R1-2 24x24x24 STA. 223+15
WALKER W11A-2 30"x30"	YIELD R1-2 24x24x24 STA. 224+70

SIGN GROUP "A"

SIGN GROUP "B"

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
PAVEMENT MARKINGS & SIGNING	
WORKING NUMBER	PMS-10
SHEET NUMBER	
DATE	FILENAME: s&sl0.dgn
DESIGN TEAM	N-S CHECKED DATE

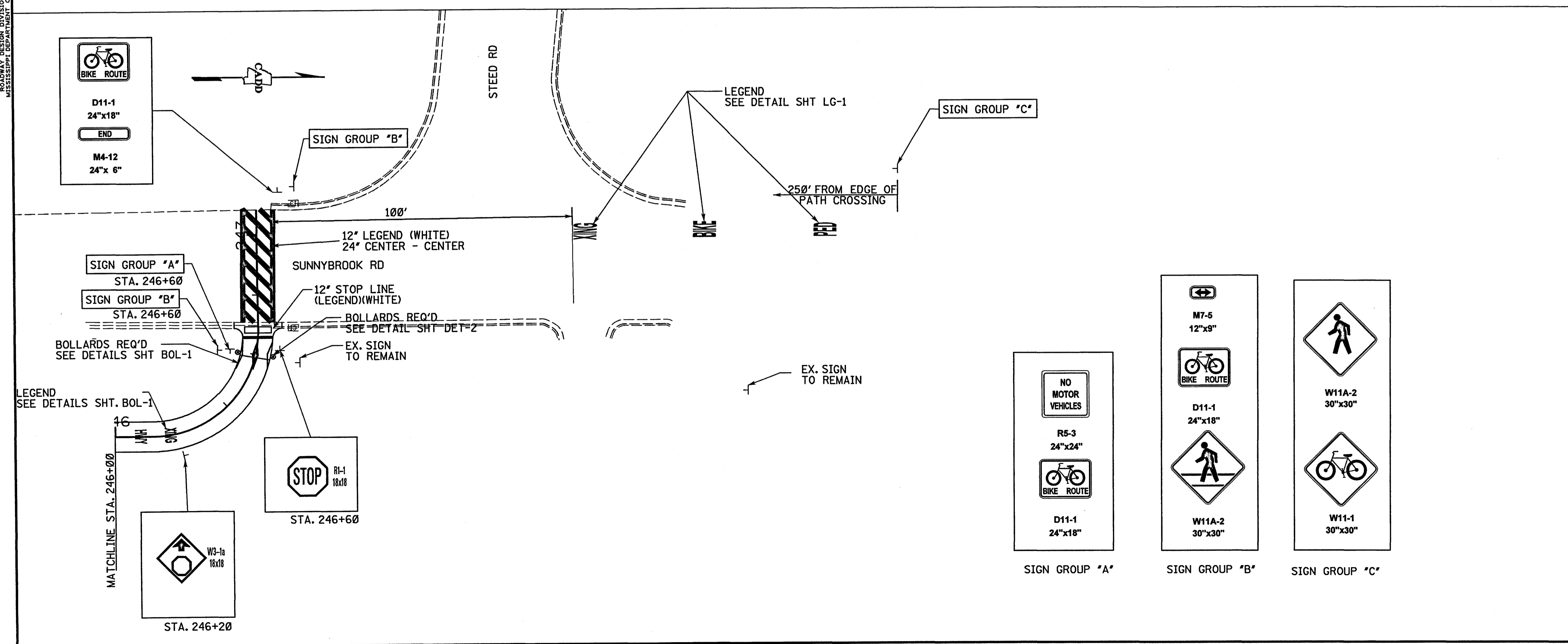
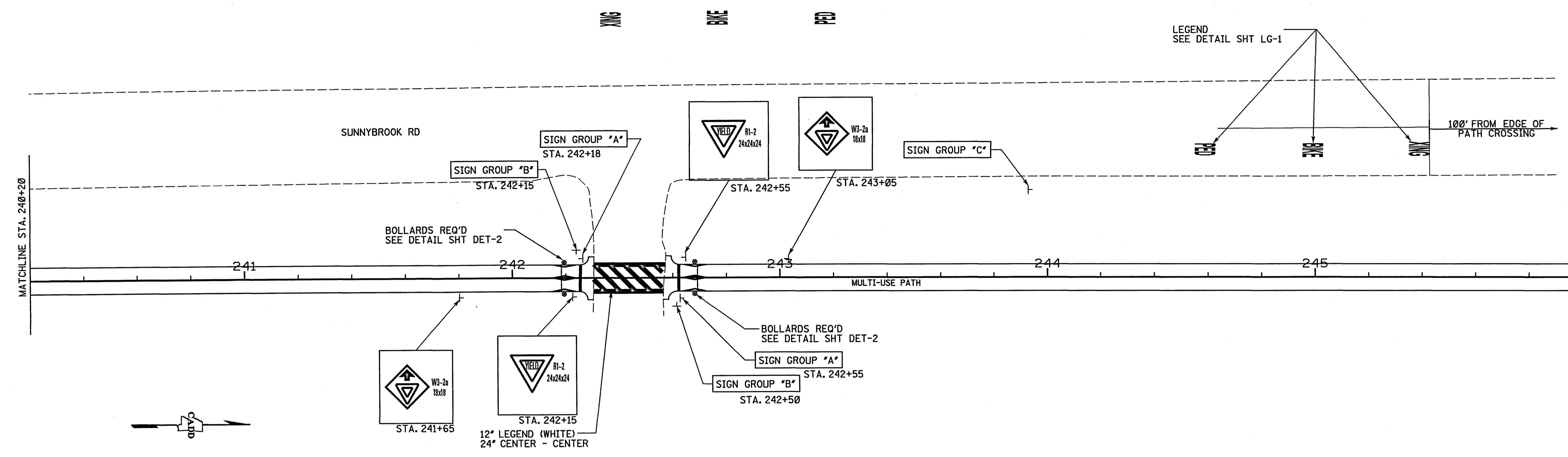
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 ROADWAY DESIGN DIVISION C.A.D.D. SECTION



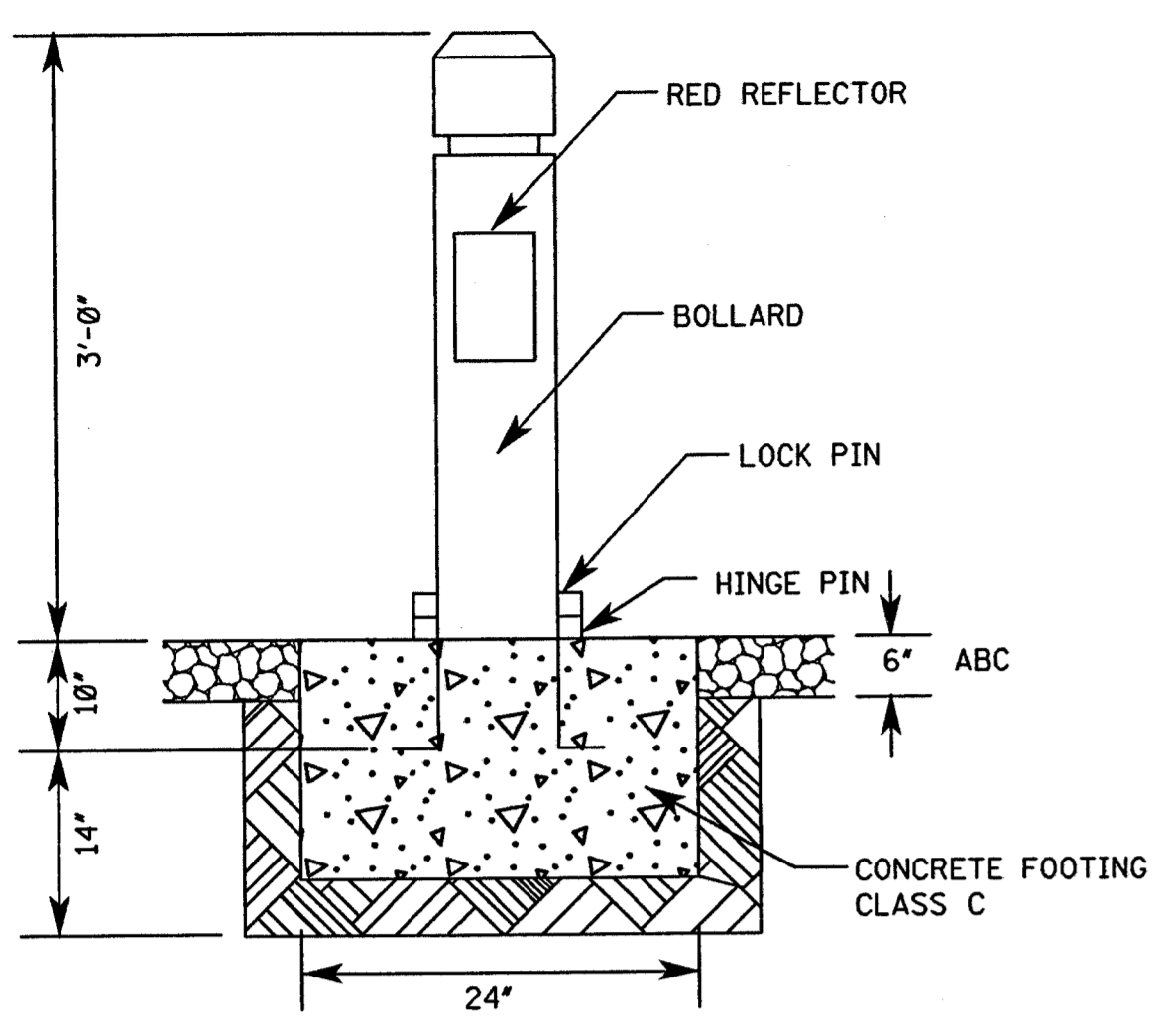
LEGEND
 "PED"
 "BIKE"
 "XING"
 SEE DETAILS SHT LG-1

 R5-3 24"x24" D11-1 24"x18"	 D11-1 24"x18" W11A-2 30"x30"	 W11A-2 30"x30" W11-1 30"x30"
SIGN GROUP "A"	SIGN GROUP "B"	SIGN GROUP "C"

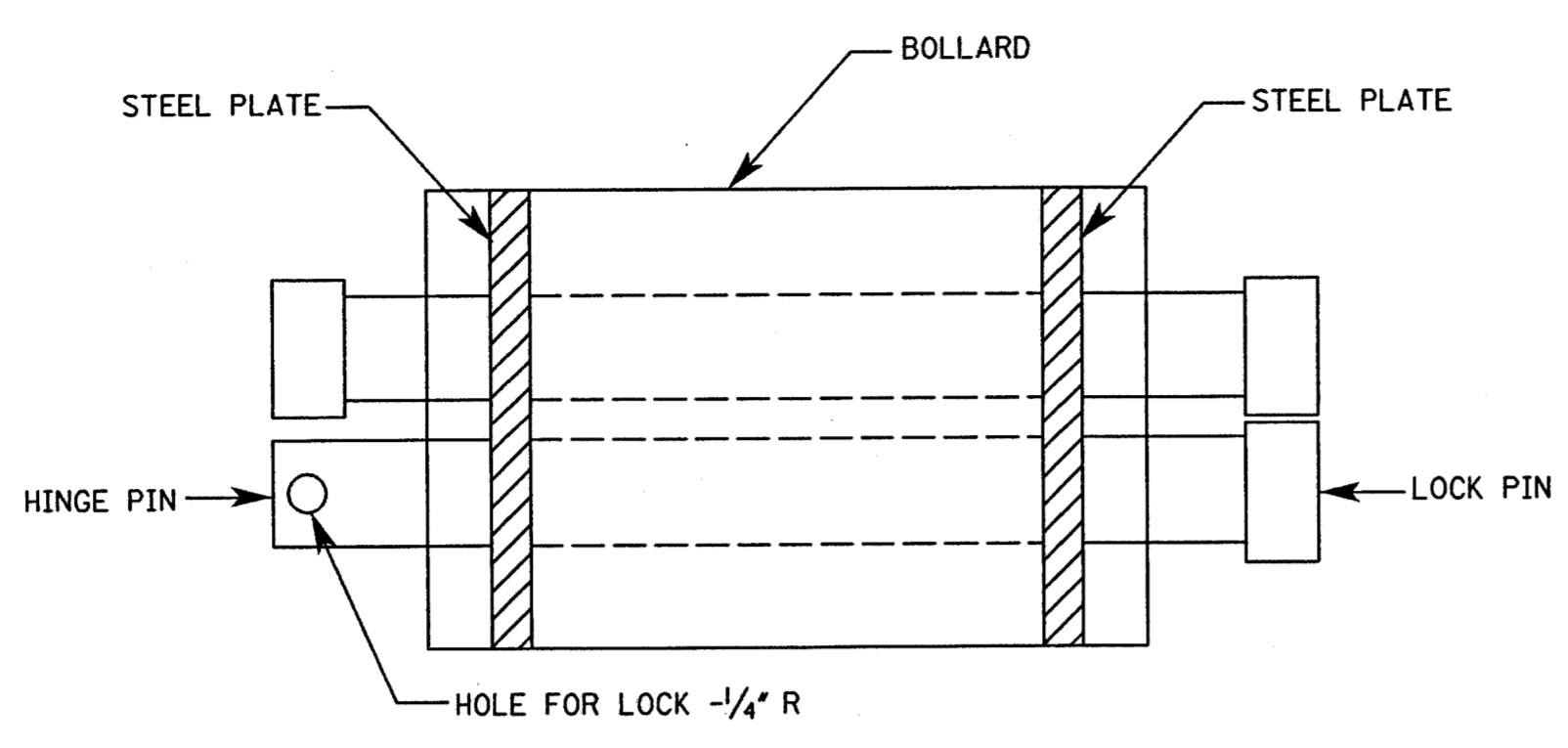
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
PAVEMENT MARKINGS & SIGNING	
DATE	BY
DESIGN TEAM	REVISION
FILENAME: s&s11.dgn	WORKING NUMBER: PMS-11
DESIGN TEAM: N-S	CHECKED: DATE
SHEET NUMBER	



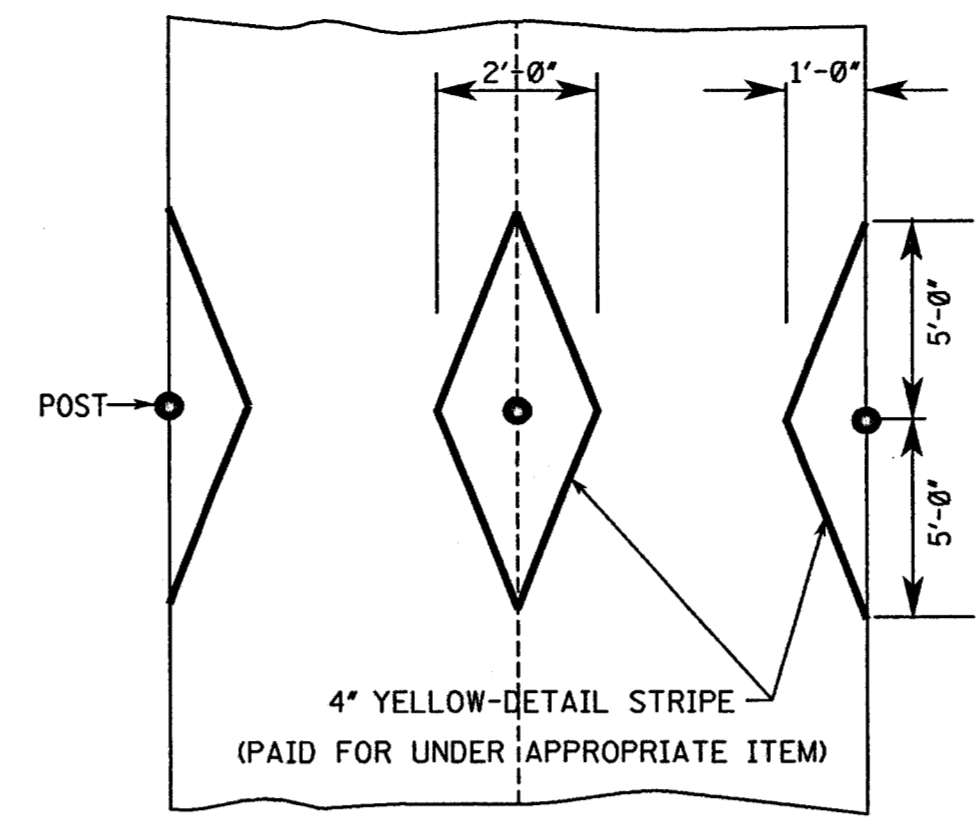
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CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
PAVEMENT MARKINGS & SIGNING	
WORKING NUMBER	PMS-12
FILENAME:	s&s12.dgn
DESIGN TEAM	N-S CHECKED DATE
DATE	
REVISION	
BY	
DATE	



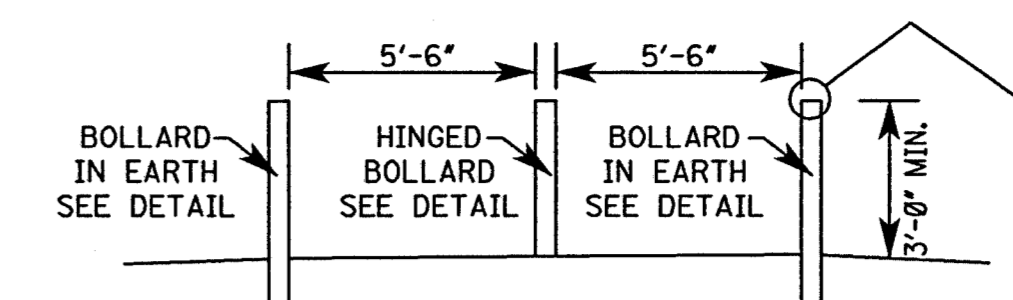
HINGED BARRIER BOLLARD



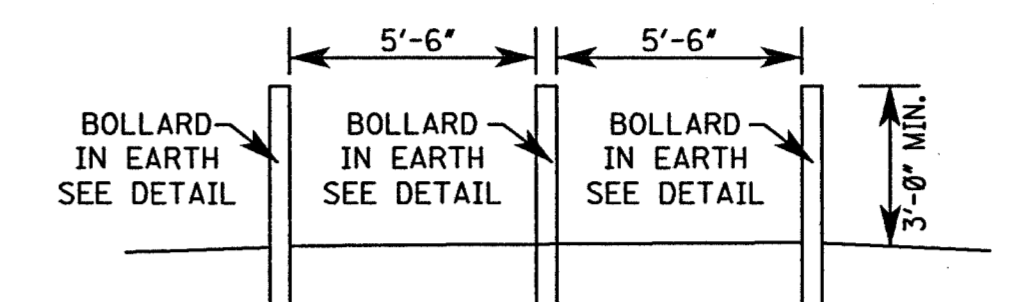
HINGED BARRIER BOLLARD
PLAN VIEW



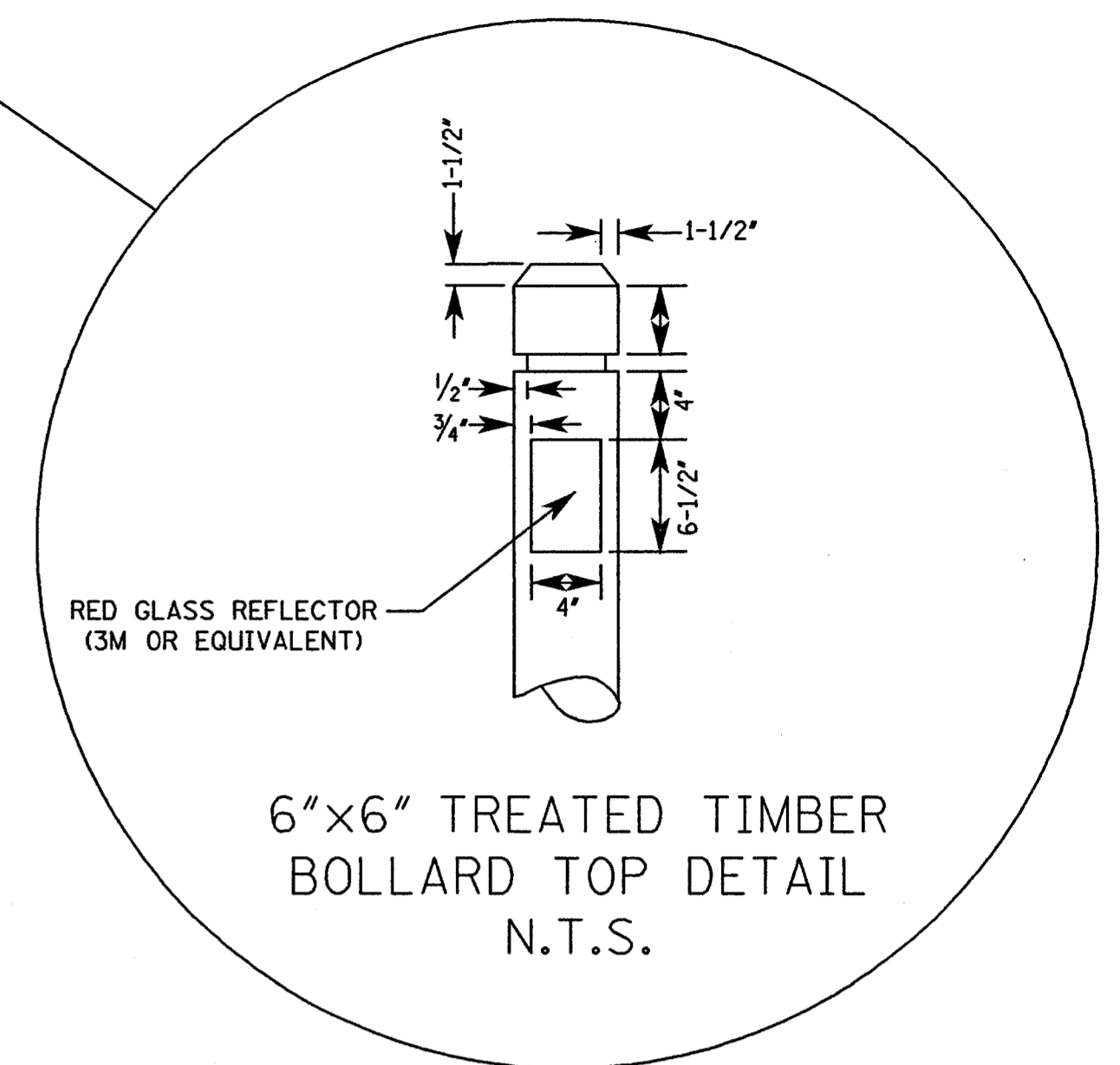
MARKING DETAIL



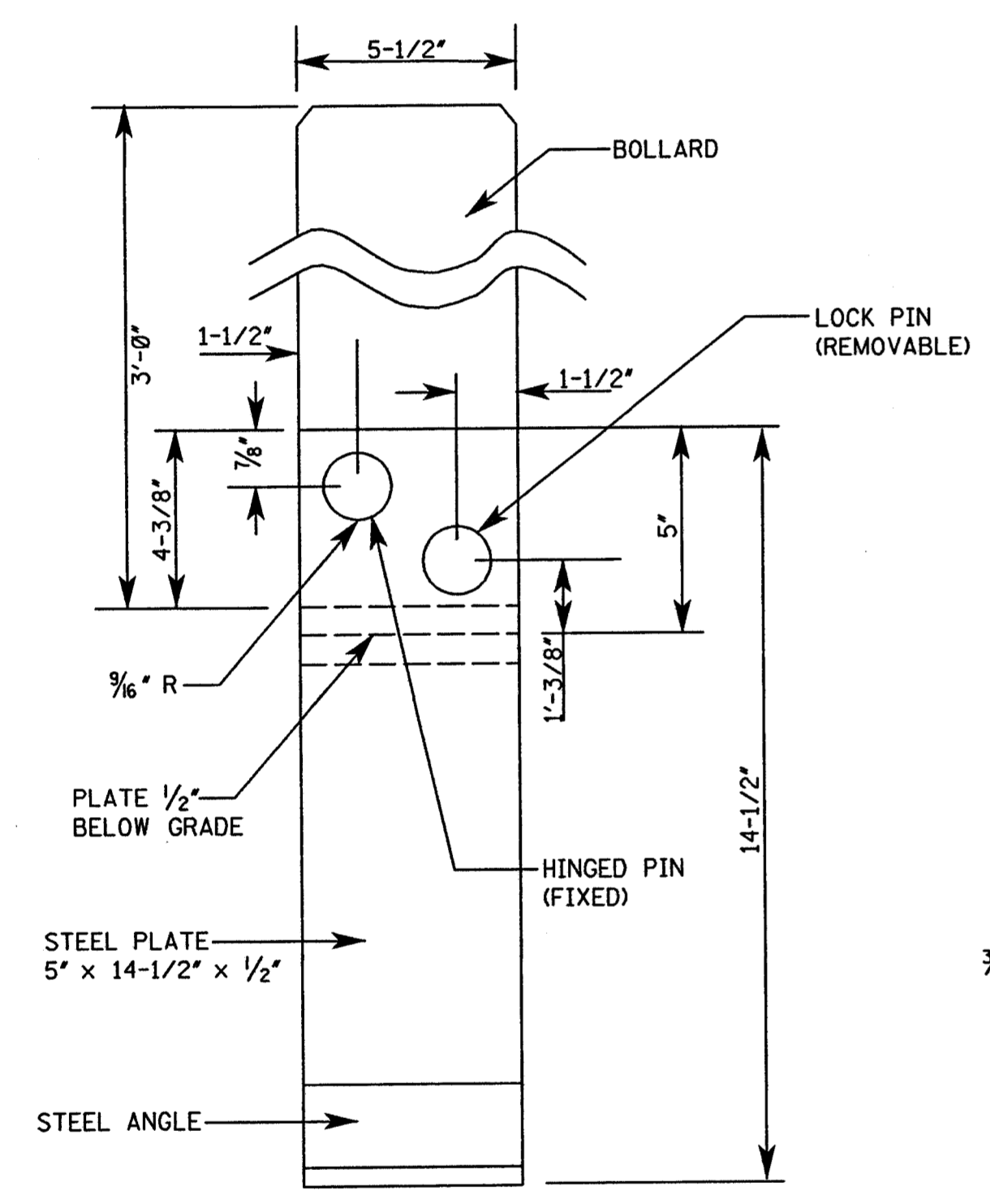
"HINGED" BOLLARD DETAIL
N.T.S.



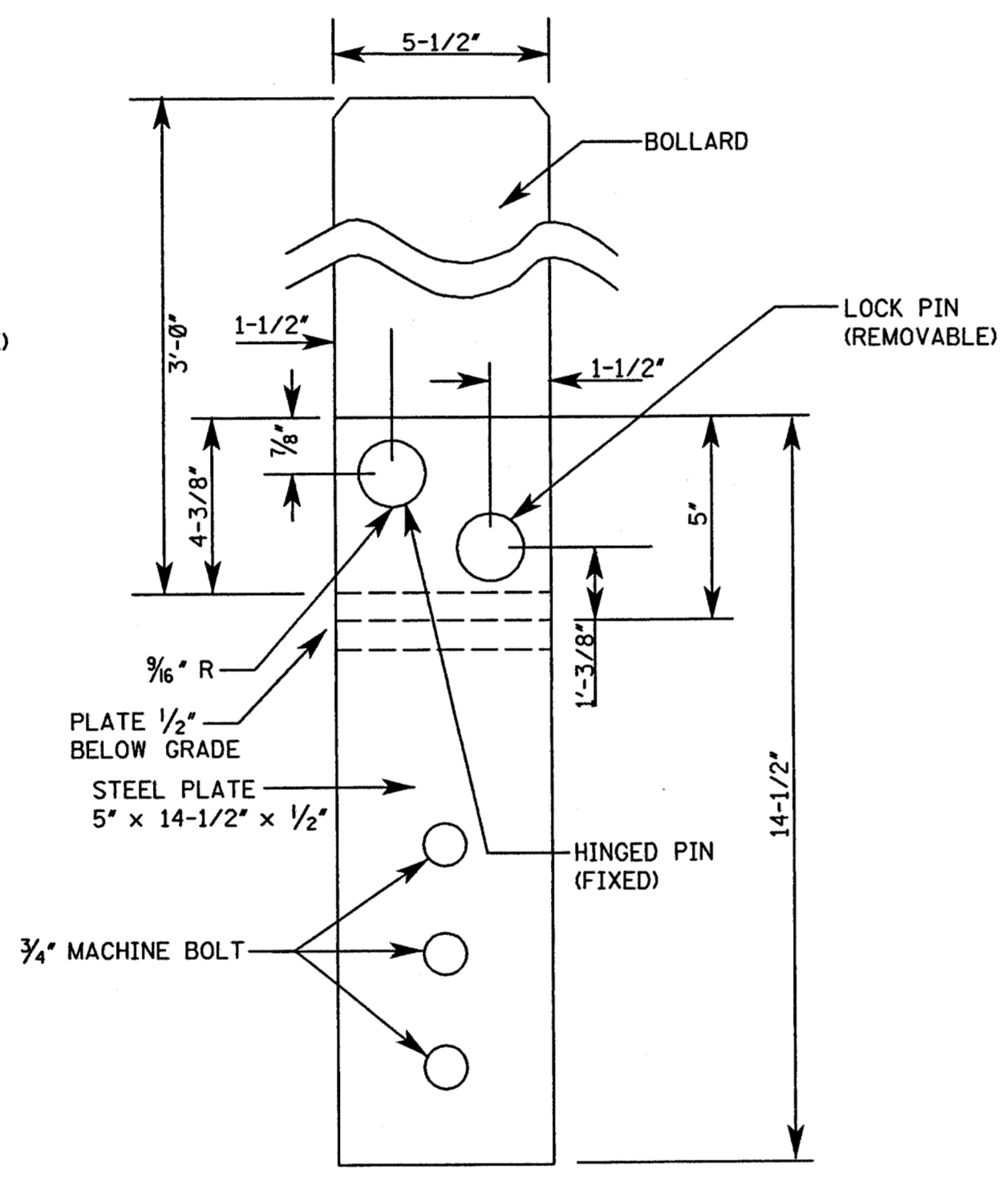
"EARTH" BOLLARD DETAIL
N.T.S.



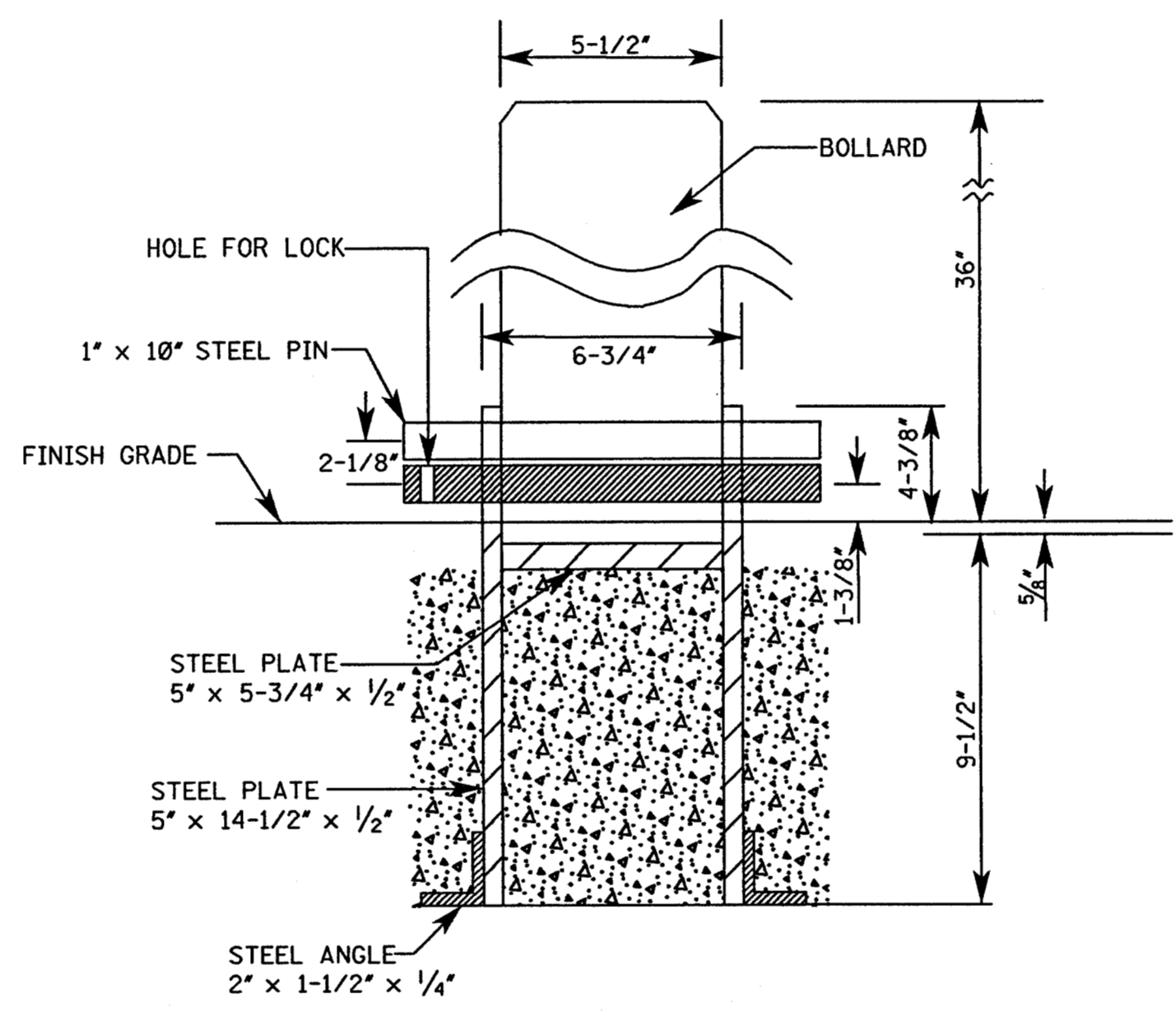
6"x6" TREATED TIMBER
BOLLARD TOP DETAIL
N.T.S.



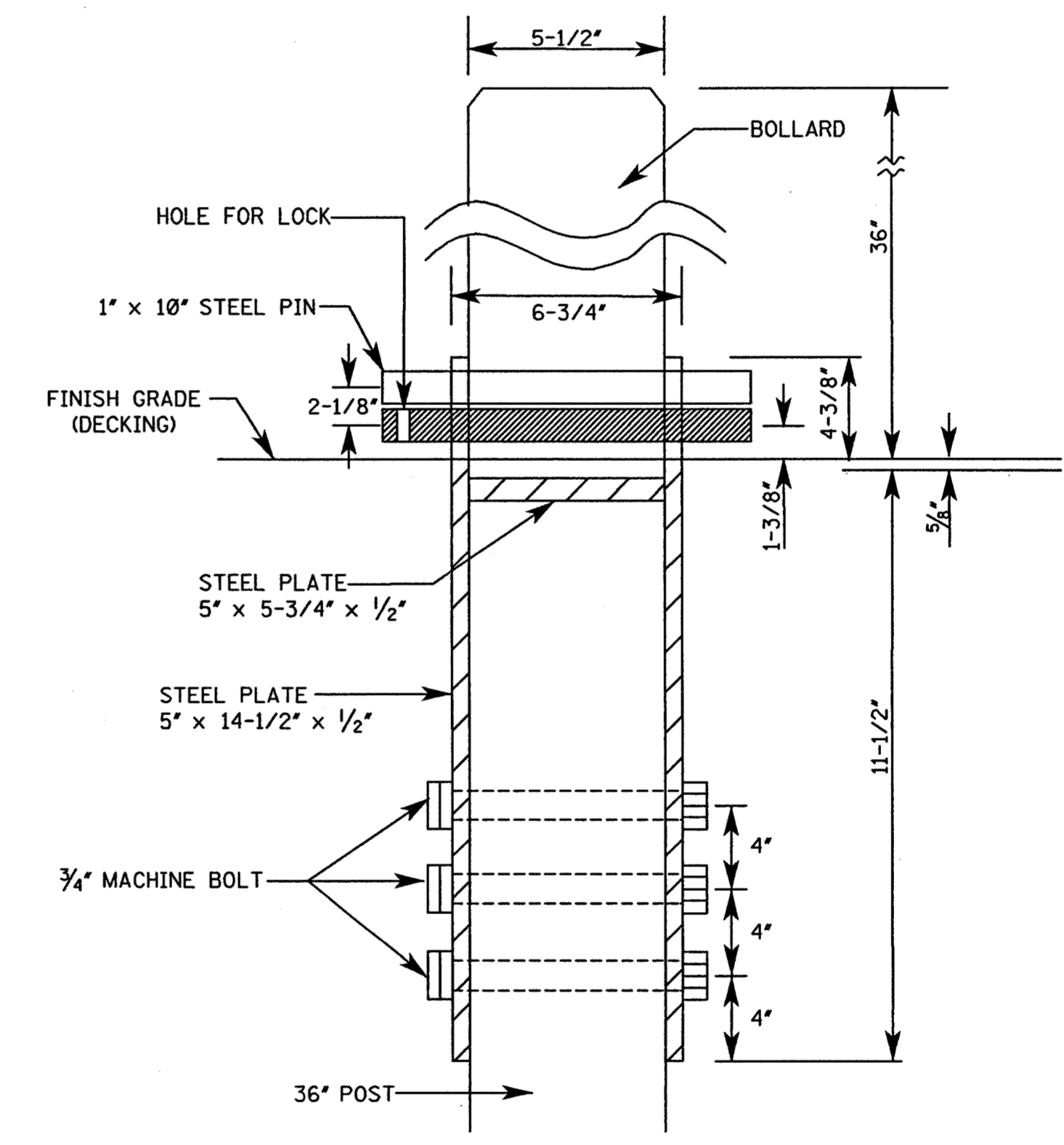
HINGED BARRIER BOLLARD
RIGHT SIDE ELEVATION



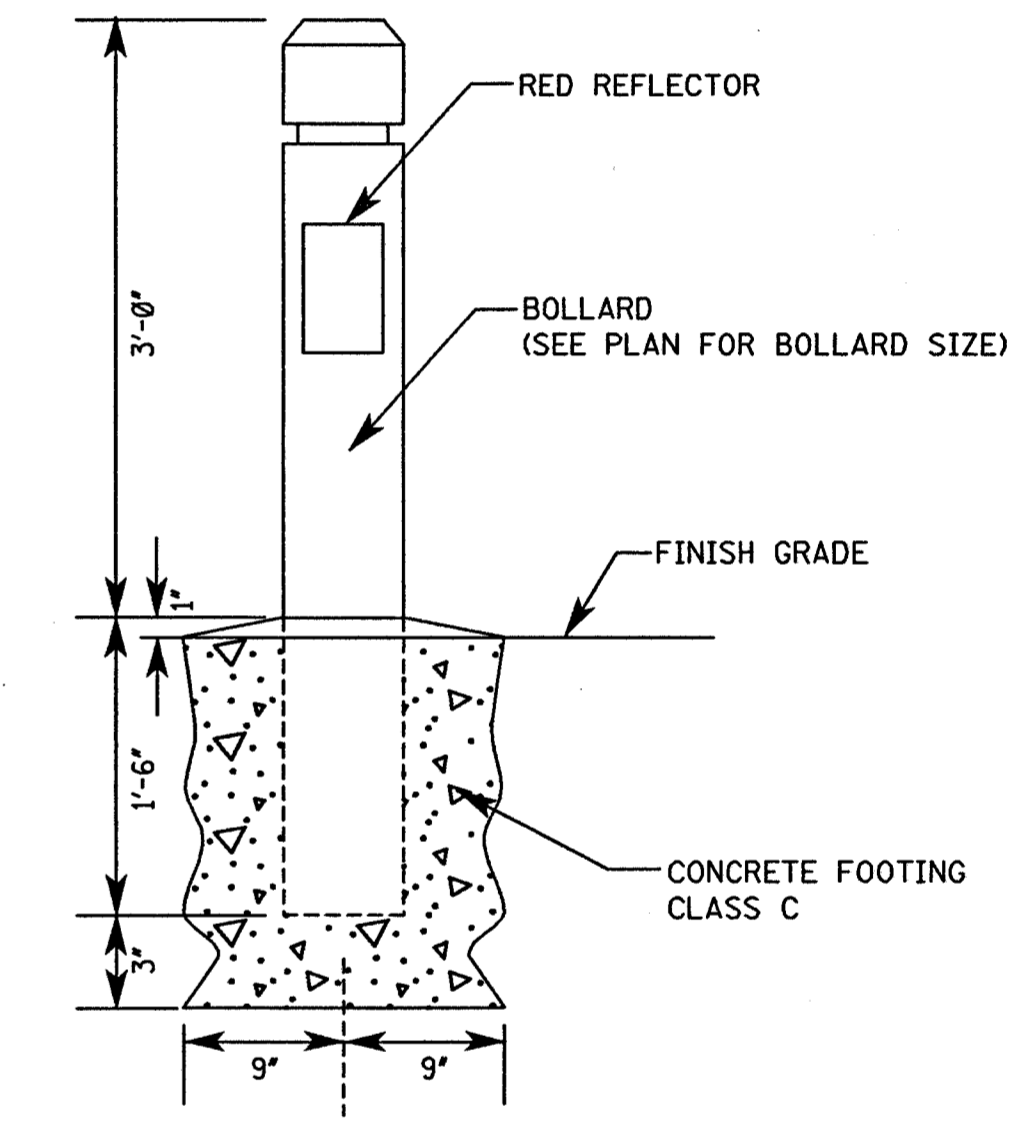
HINGED BARRIER BOLLARD
RIGHT SIDE ELEVATION



HINGED BARRIER BOLLARD
SECTION THROUGH LOCK PIN



HINGED BARRIER BOLLARD
SECTION THROUGH LOCK PIN



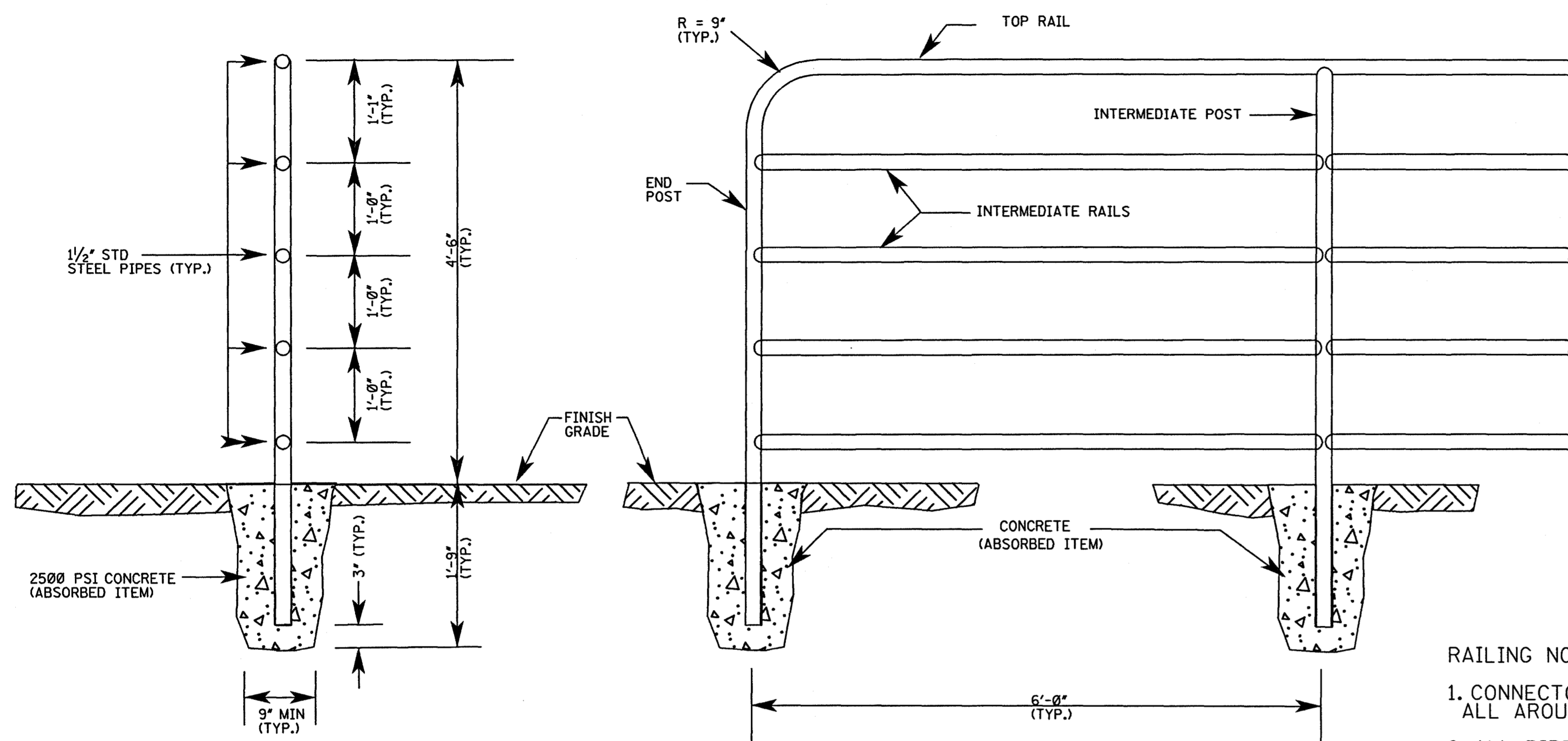
DETAIL
BOLLARD IN EARTH

NOTE:
BOLLARD POST TO BE REFLECTORIZED
BOLLARD FOOTING TO BE PLACED PRIOR
TO FINAL SURFACE COURSE.
BOLLARD PLACEMENT OFFSET FROM INTERSECTION
IS NOTED ON PLANS.
BOLLARDS TO BE INSTALLED BY THE CONTRACTOR
BOLLARDS AND POST ARE TO BE PRESSURE-TREATED AND
GROUND CONTACT RATED

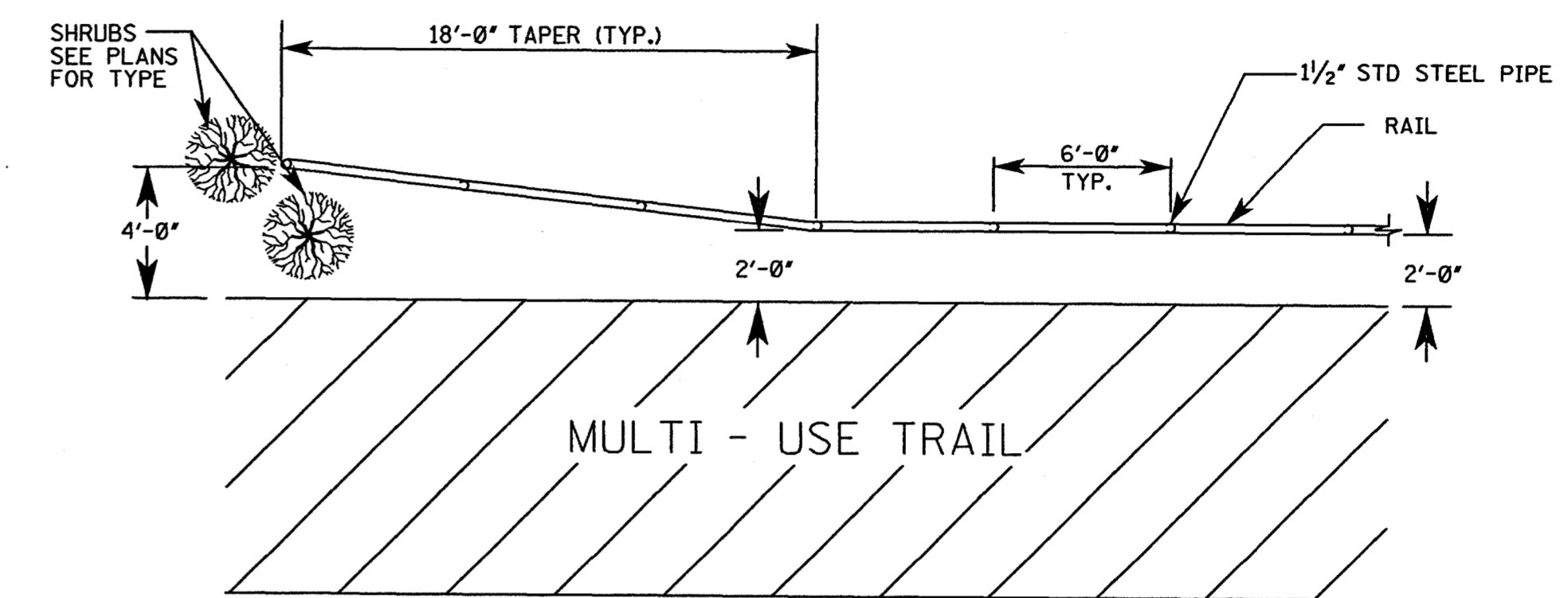
NOTE
1. ALL CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 601
2. ALL LUMBER SHALL MEET THE REQUIREMENTS OF SECTIONS 718 AND 820.
3. ALL STEEL SHALL MEET THE REQUIREMENTS OF SECTION 810 718 AND 820.
4. ALL ITEMS ON THIS SHEET RELATED TO EARTH BOLLARDS ARE TO BE
INCLUDED IN PAY ITEM #907-630-N-PP
5. ALL ITEMS ON THIS SHEET RELATED TO HINGED BOLLARDS ARE TO BE
INCLUDED IN PAY ITEM #907-630-O-PP AND #907-630-P-PP

NOTE:
"HINGED" BOLLARDS ARE LOCATED AT ALL THE NATCHEZ
LOCATIONS. (SEE DETAIL)

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		BOLLARD DETAILS	
DATE			
FILENAME: BOLLARDET.DGN		Project No.: STP-0213-00(025)	
DESIGN TEAM: N-S		County: MADISON	
CHECKED: _____		WORKING NUMBER BOL-1	
DATE: _____		SHEET NUMBER	



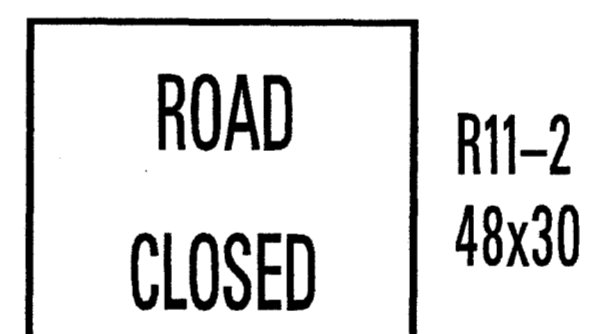
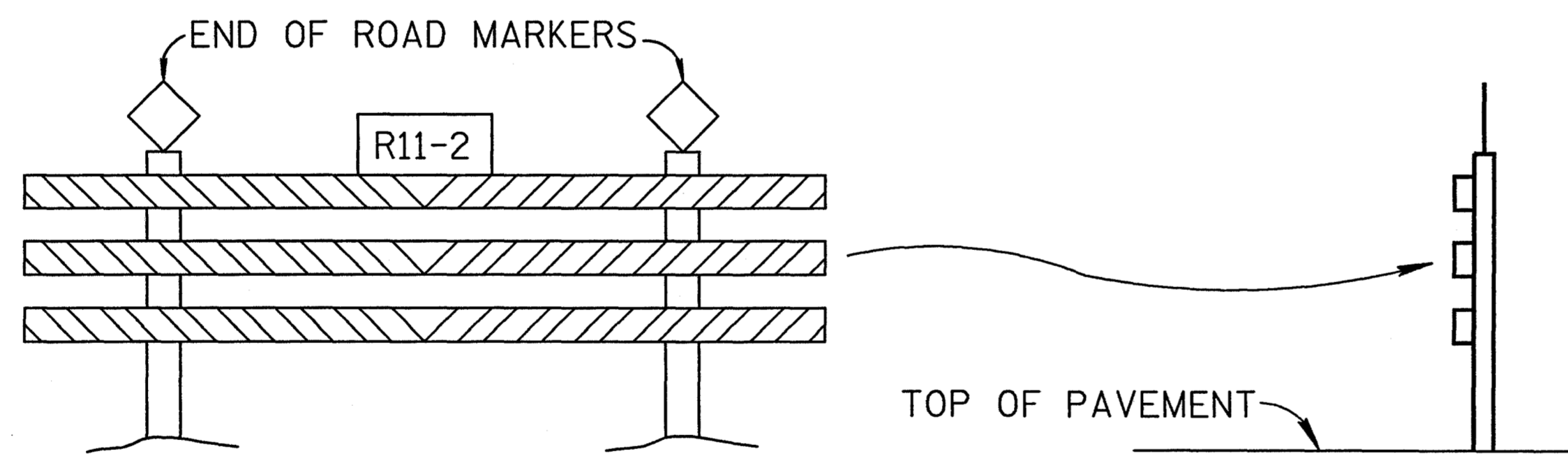
TYPICAL RAIL DETAILS
N.T.S.



TYPICAL RAIL INSTALLATION PLAN
N.T.S.

RAILING NOTES:

1. CONNECTORS BETWEEN POST AND RAILS SHALL BE FILLET WELDED ALL AROUND AND GROUND SMOOTH.
2. ALL PIPE SHALL BE 1/2" STANDARD WEIGHT ASTM A53 GRADE B OR A501 STEEL PIPE.
3. ALL STEEL PIPE SHALL BE HOT DIP GALVANIZED (G60).
4. ALL RAILINGS SHALL BE PRIMED AND PAINTED WITH ONE COAT OF PRIMER AND TWO COATS OF TOP COAT (COLOR).
5. CONTRACTOR SHALL SUBMIT COLOR CHART TO OWNER FOR TOP COAT COLOR SELECTION.

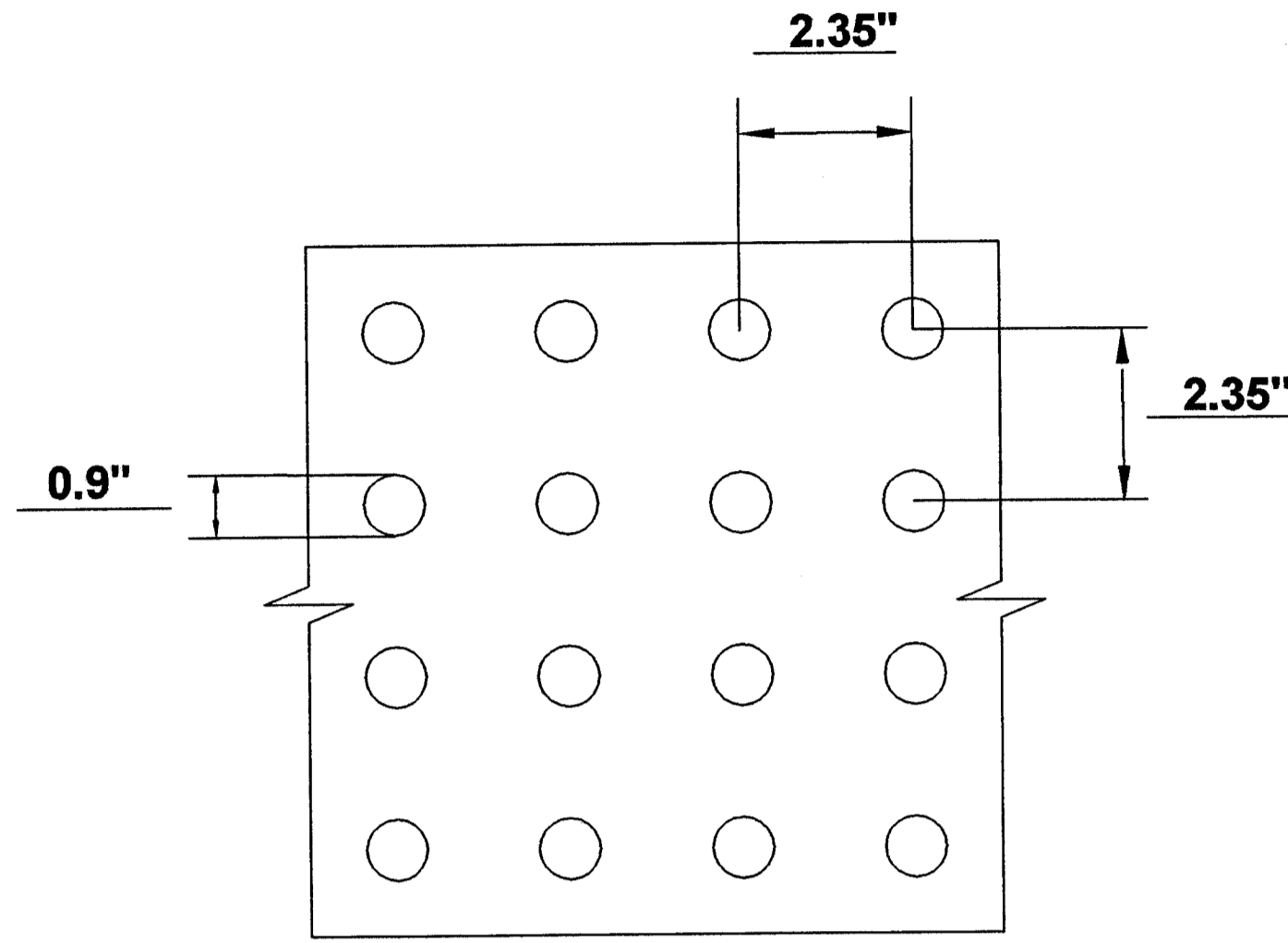


ROADWAY CLOSURE DETAIL
(LONG-TERM)

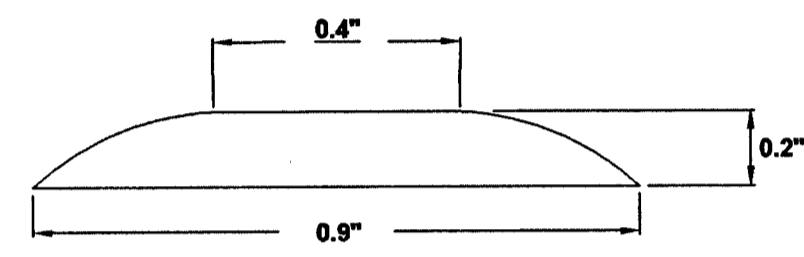
TYPE III BARRICADE REQ'D. (24' WIDE) (RED AND WHITE STRIPES - ENCAPSULATED LENS REFLECTIVE SHEETING). END OF ROAD MARKERS ARE ABSORBED PAY ITEMS (18" DIAMOND ENCAPSULATED LENS PANELS). BARRICADES AND SIGNS TO BE PAID FOR UNDER PAY ITEM 675-G4. BARRICADES (PERMANENT) TO REMAIN IN PLACE AFTER COMPLETION OF PROJECT.

PLAN SECTION C.A.D.D. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

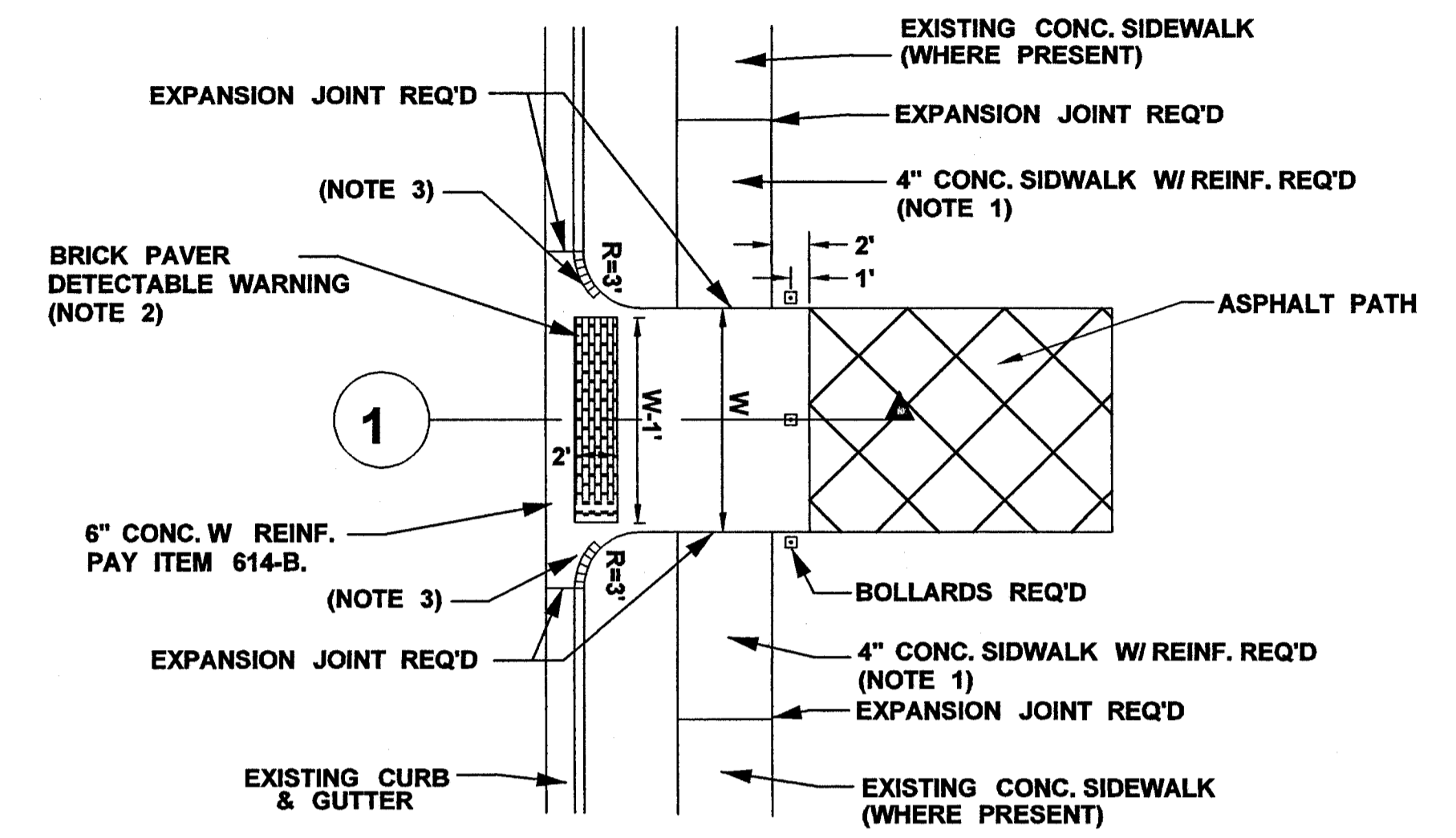
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		RAIL DETAILS	
DATE			
PROJECT NO.:		STP-0213-00(025)	
COUNTY:		RIDGELAND	
FILENAME:		BOLLARDET2.DGN	
DESIGN TEAM	N-S	CHECKED	DATE
WORKING NUMBER		DET-1	
SHEET NUMBER			



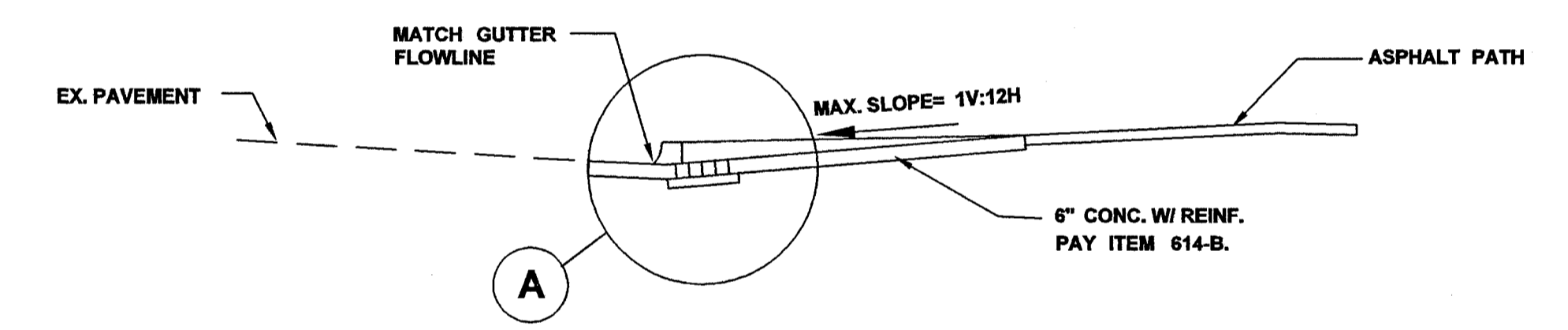
DETAIL-TRUNCATED DOME PATTERN/SPACING
(TYPICAL ALL DETECTABLE WARNINGS)
 N.T.S.



TYPICAL SECTION-TRUNCATED DOME
 N.T.S.

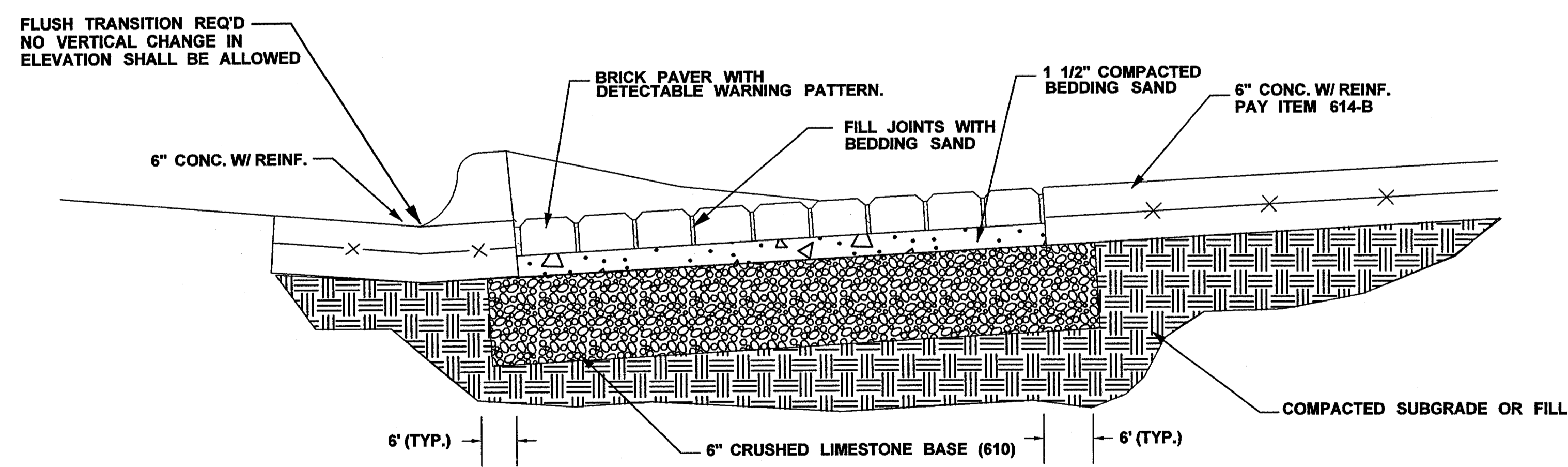


CURB RAMP WITH DETECTABLE WARNING (TYP.)
 N.T.S.



SECTION 1
 N.T.S.

- NOTES:**
1. REMOVE EXISTING SIDEWALK EACH SIDE FOR THE MINIMUM DISTANCE REQ'D TO PROVIDE A FINISHED LONGITUDINAL SLOPE ON NEW SIDEWALK NOT STEEPER THAN 1V:12H. NEW SIDEWALKS SHALL BE FLUSH WITH NEW AND EXISTING PAVEMENT AT END. CARRY DEMOLITION AND REPLACEMENT OF SIDEWALK TO NEXT TRANSVERSE JOINT IN EXISTING SIDEWALK. STREET SIDE OF WARNING STRIP SHALL ALIGN WITH BACK OF CURB.
 2. BRICK PAVERS FOR DETECTABLE WARNINGS SHALL BE "PAVESTONE DETECTABLE WARNING PAVERS" OR APPROVED BY EQUAL PAVER. COLOR SHALL BE PAVESTONE "CHARCOAL" OR APPROVED EQUAL.
 3. TRANSITION CURB TO FLUSH AT MID POINT OF RADIUS.

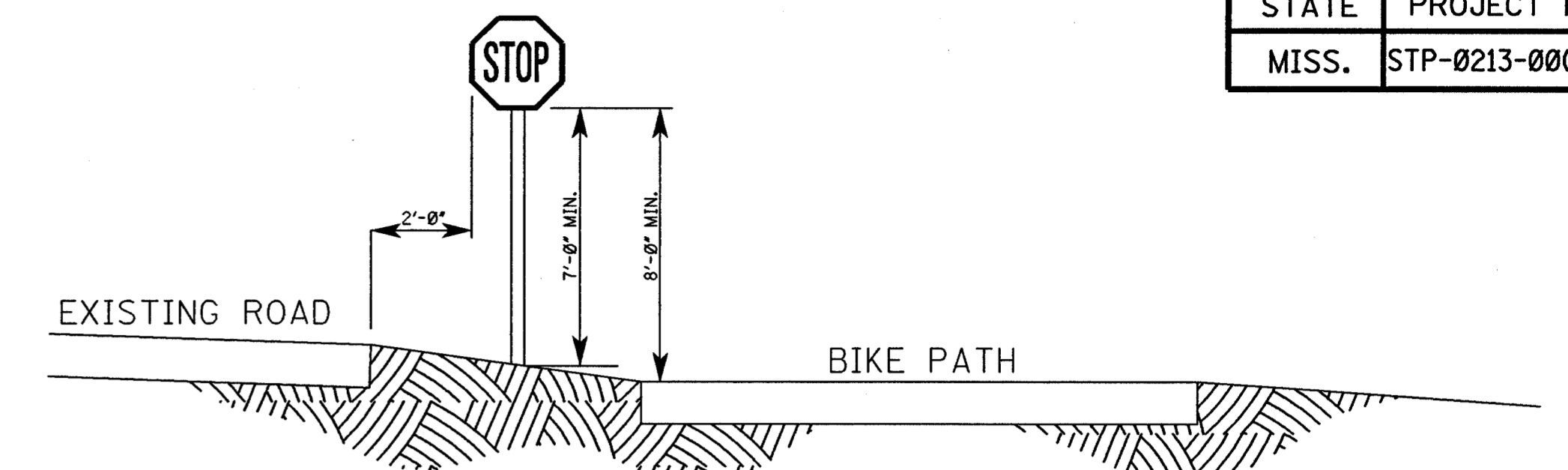
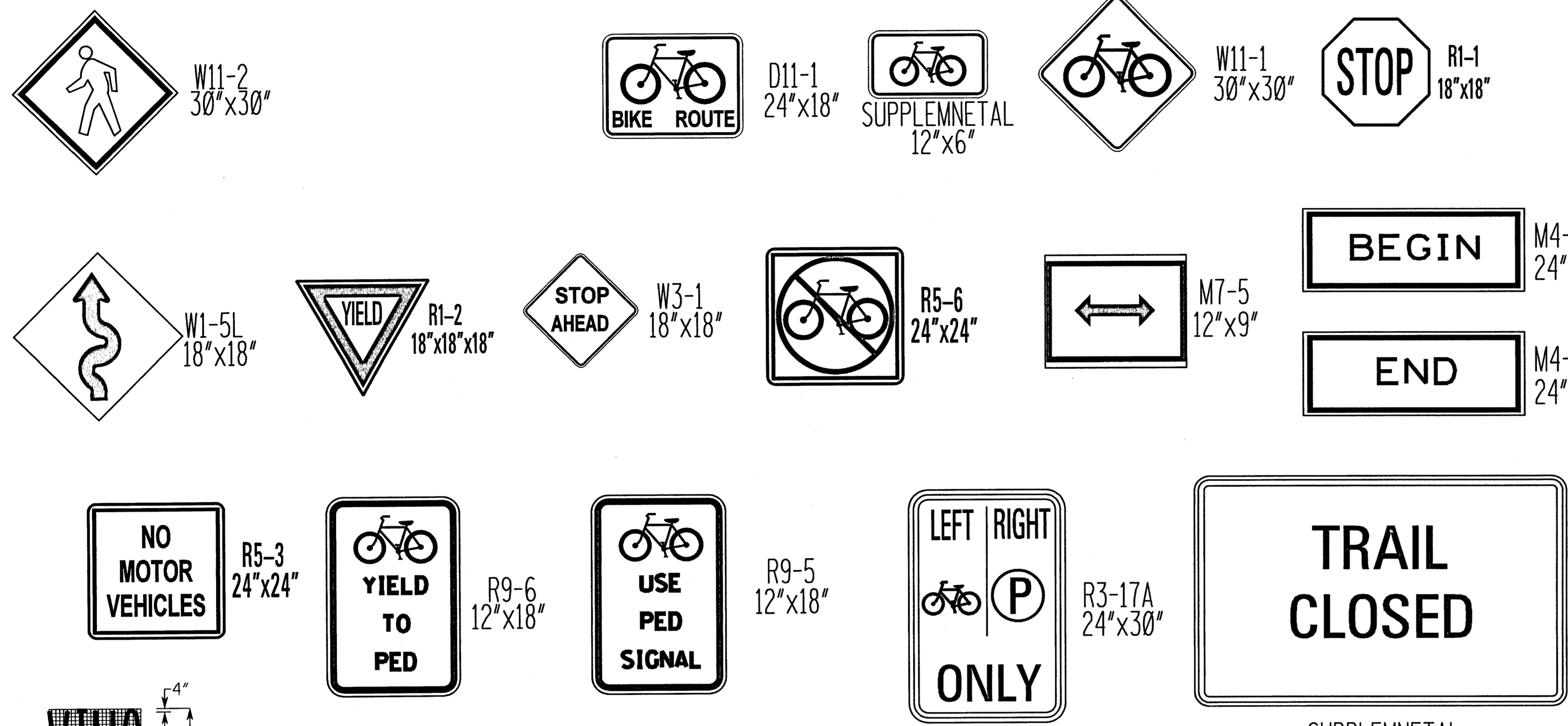


A TYPICAL INSTALLATION DETAIL
BRICK PAVER DETECTABLE WARNING
 N.T.S.

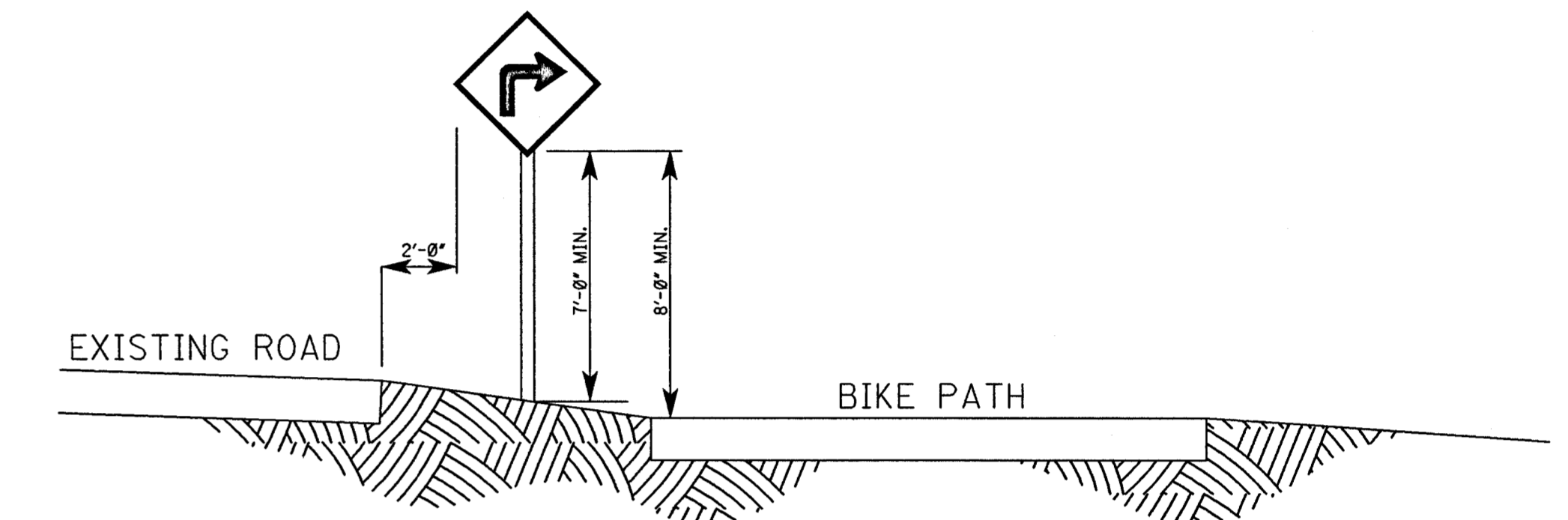
FOR REVIEW
NOT FOR CONSTRUCTION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI	
MULTI-USE PATH	
CURB CUT AND RAMP DETAILS	
Project No.: STP-0213-00(025)	
County: MADISON	
DATE	WORKING NUMBER
DESIGN TEAM	DET-2
N-S	CHECKED
DATE	SHEET NUMBER
	DET-2

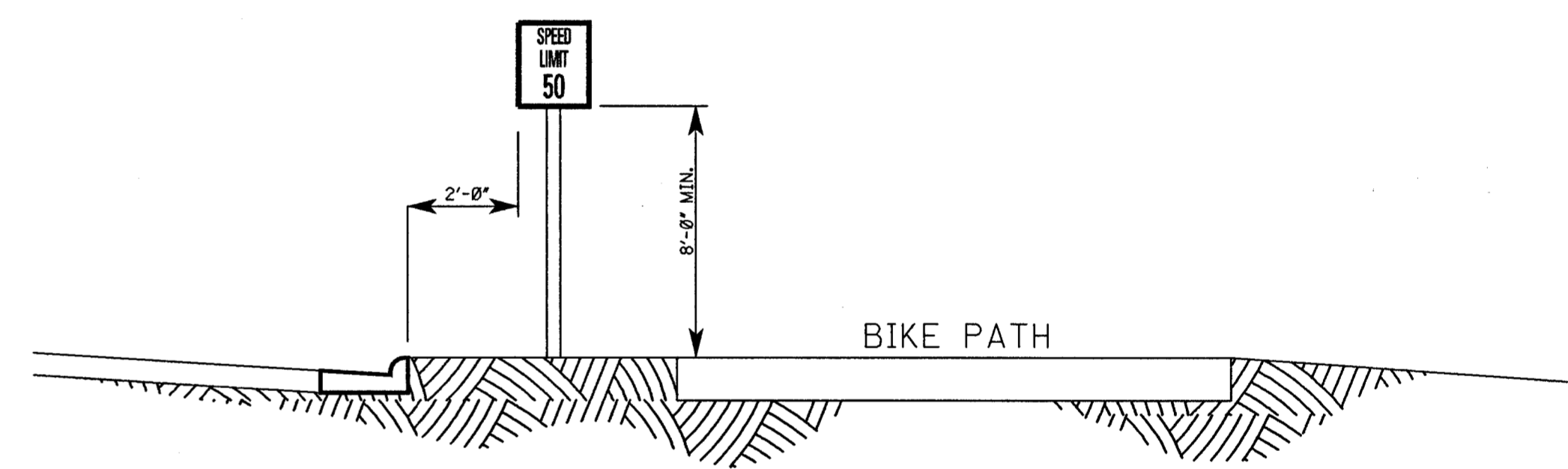
ROADWAY DESIGN DIVISION, S.A.D.D. SECTION, MISSISSIPPI DEPARTMENT OF TRANSPORTATION



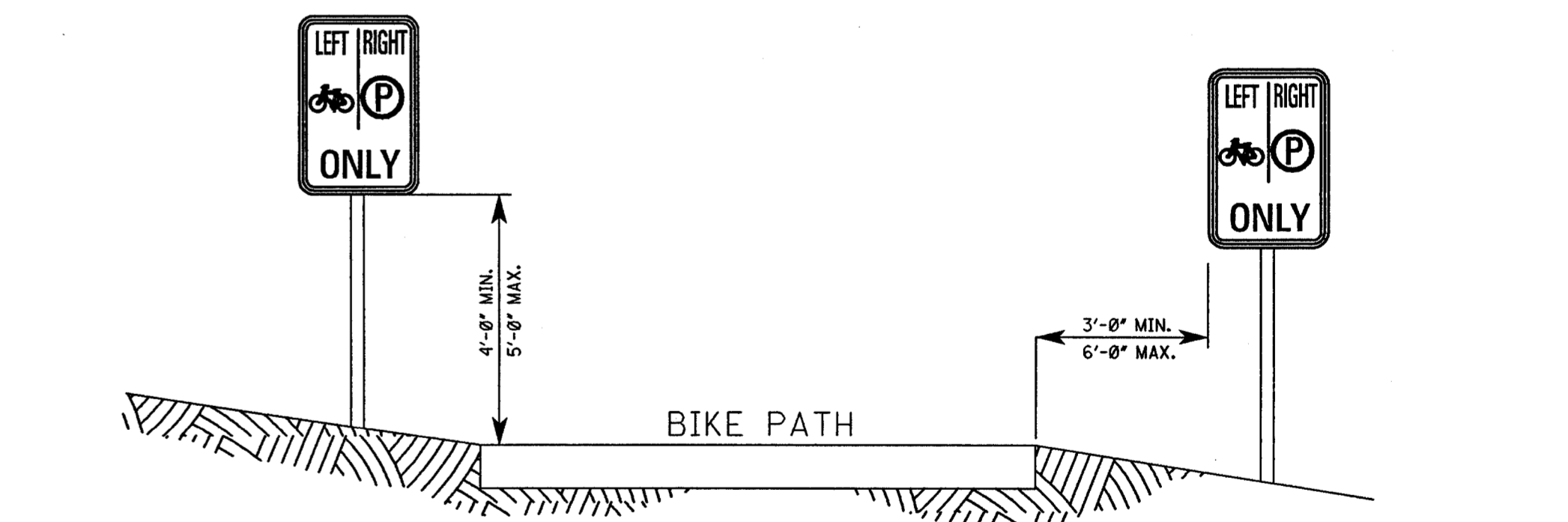
ROADSIDE SIGN



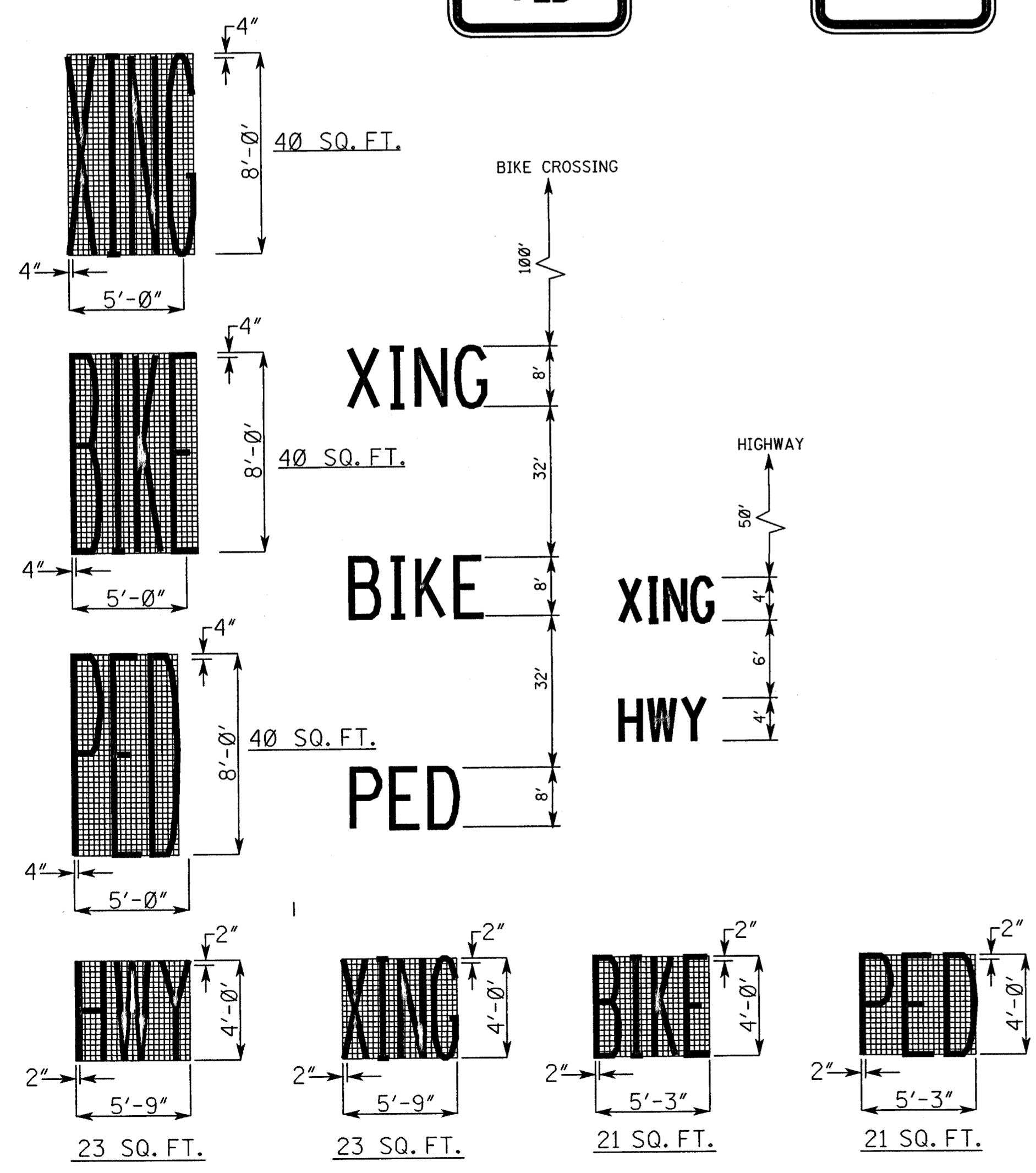
WARNING SIGN



ROADSIDE SIGN



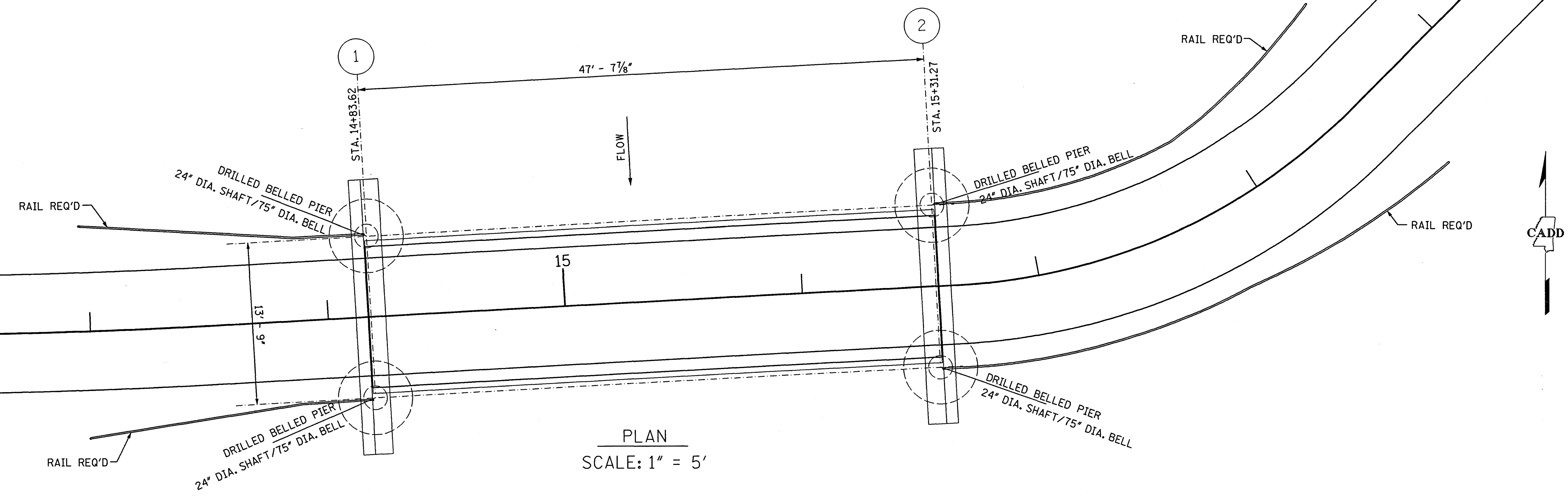
SIGN PLACEMENT ON TRAIL



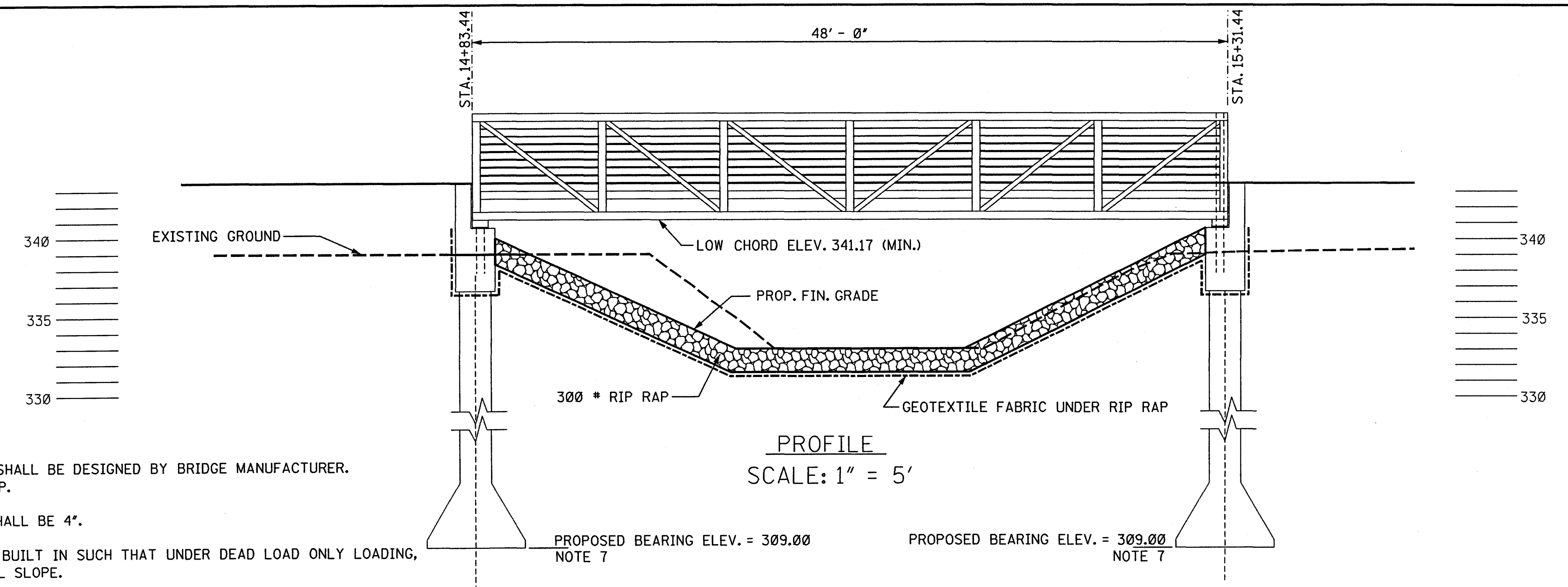
- NOTES**
1. THE DESIGN OF SIGNS FOR BICYCLE FACILITIES SHOULD BE IDENTICAL TO THAT USED FOR MOTOR VEHICLE TRAVEL.
 2. THE SIGN DIMENSIONS SHOWN SHALL BE CONSIDERED STANDARD FOR THIS BICYCLE FACILITY
 3. THE SMALLER SIGNS ARE INTENDED FOR EXCLUSIVE BICYCLE USE.
 4. WHERE SIGNS ARE FOR EXCLUSIVE USE OF BICYCLISTS, CARE SHOULD BE TAKEN THAT THEY ARE LOCATED SO THAT MOTORIST ARE NOT CONFUSED BY THEM.
 5. WHERE INDICATED ON PLANS, ANGLE "STOP" AND "YIELD" SIGNS TOWARD THE BIKE PATH.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
CITY OF RIDGELAND, MISSISSIPPI MULTI-USE PATH PAVEMENT MARKINGS & SIGNING	
DATE	BY
DESIGN TEAM: Neel-Schaffer	CHECKED: _____
FILENAME: LG-1.DGN	DATE
WORKING NUMBER	LG-1
SHEET NUMBER	

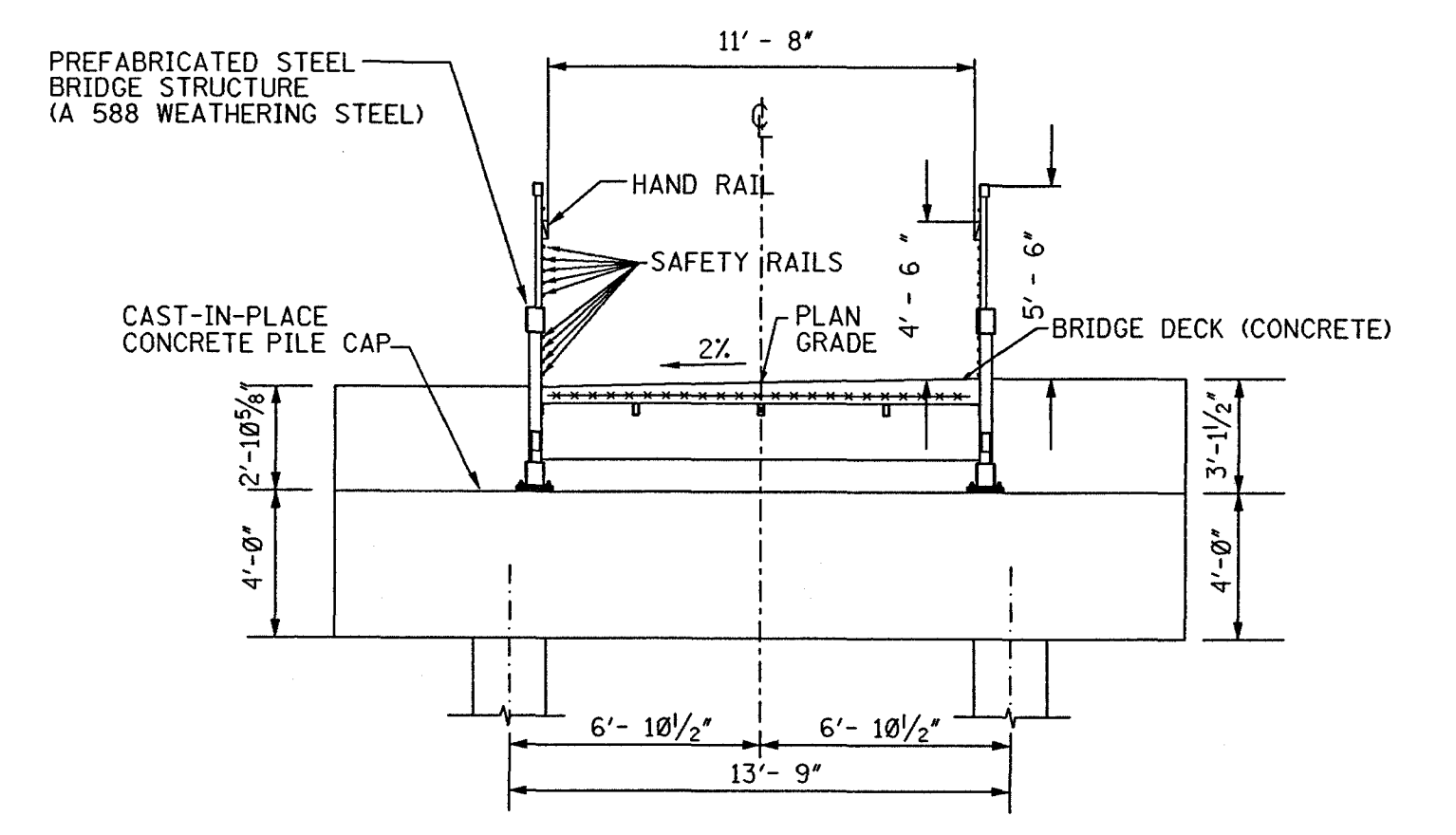
PLAN
 ROADWAY DESIGN DIVISION, C.A.D.D. SECTION,
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION



PLAN
SCALE: 1" = 5'



PROFILE
SCALE: 1" = 5'



SECTION
SCALE: 1" = 5'

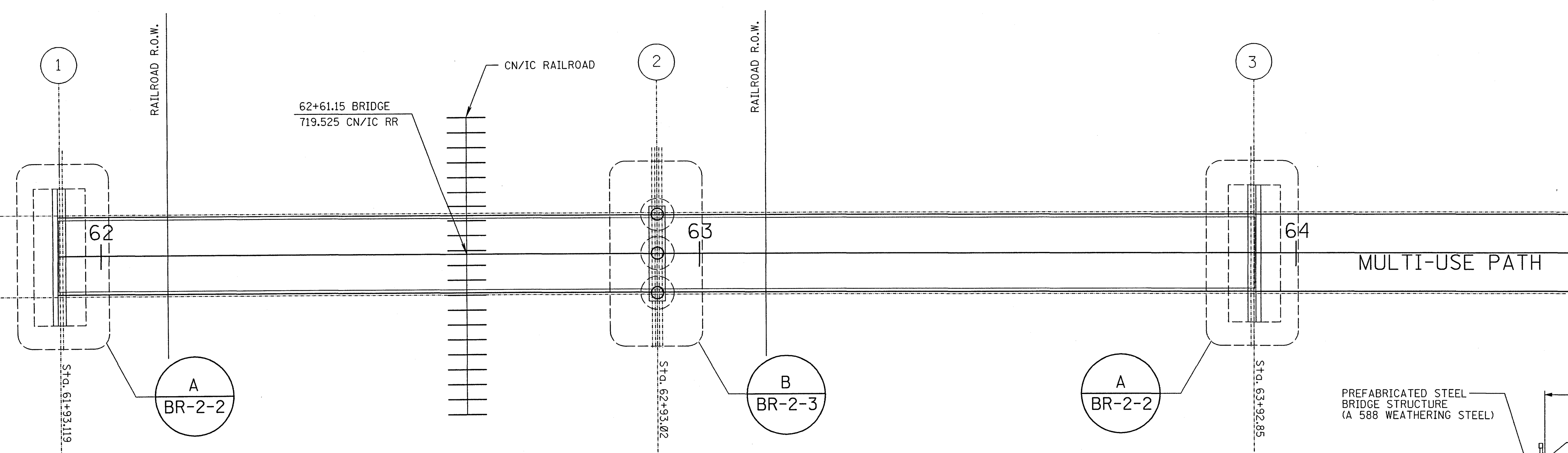
- NOTES:
- BRIDGE DECK SHALL BE CONCRETE. DECK SHALL BE DESIGNED BY BRIDGE MANUFACTURER. DECK ABSORBED IN PAY ITEM 907-899-A-PP.
 - MAX. SPACING BETWEEN SAFETY RAILS SHALL BE 4".
 - BRIDGE STRUCTURE SHALL HAVE CAMBER BUILT IN SUCH THAT UNDER DEAD LOAD ONLY LOADING, BRIDGE SHALL HAVE A FLAT LONGITUDINAL SLOPE.
 - CONCRETE FOR BRIDGE FOUNDATIONS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
 - REINFORCING STEEL FOR BRIDGE FOUNDATION SHALL CONFORM TO ASTM A 615, GRADE 60.
 - BRIDGE SUPER STRUCTURE SHALL BE CONSTRUCTED OF A588 "WEATHERING" STEEL.
 - ACTUAL BEARING ELEVATION SHALL BE DETERMINED BY GEOTECHNICAL ENGINEER BASED UPON OBSERVATION OF DRILLING.
 - BRIDGE TRUSS CONFIGURATION SHALL BE GENERALLY AS SHOWN. BRIDGE MANUFACTURER SHALL DETERMINE EXACT TRUSS CONFIGURATION BASED UPON DESIGN.

BRIDGE DESIGN LOADS:
 PREFABRICATED STEEL BRIDGE SHALL BE DESIGNED FOR THE FOLLOWING LOADS:
 DEAD LOAD: TO BE DETERMINED BY DESIGN
 LIVE LOAD: 85 PSF
 SINGLE VEHICLE LOAD: 10,000 PSI
 WIND LOAD: PER CODE
 SEISMIC LOAD: PER CODE

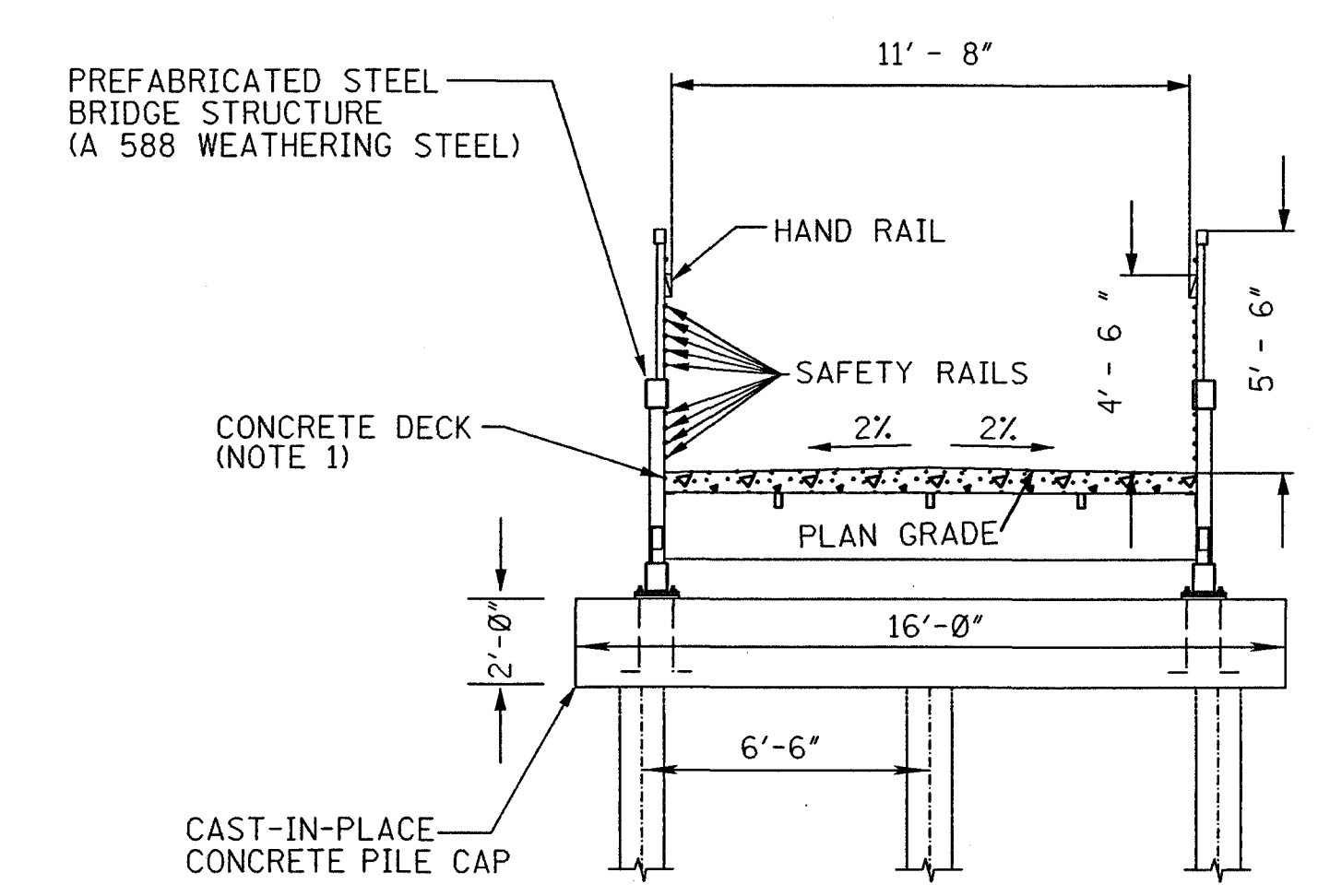
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		PLAN/PROFILE BRIDGE CROSSING @ PURPLE CREEK	
DATE	FILENAME: BRIDGE2.dgn		
DESIGN TEAM	N-S	CHECKED	SHEET NUMBER

ROADWAY DESIGN DIVISION CADD SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

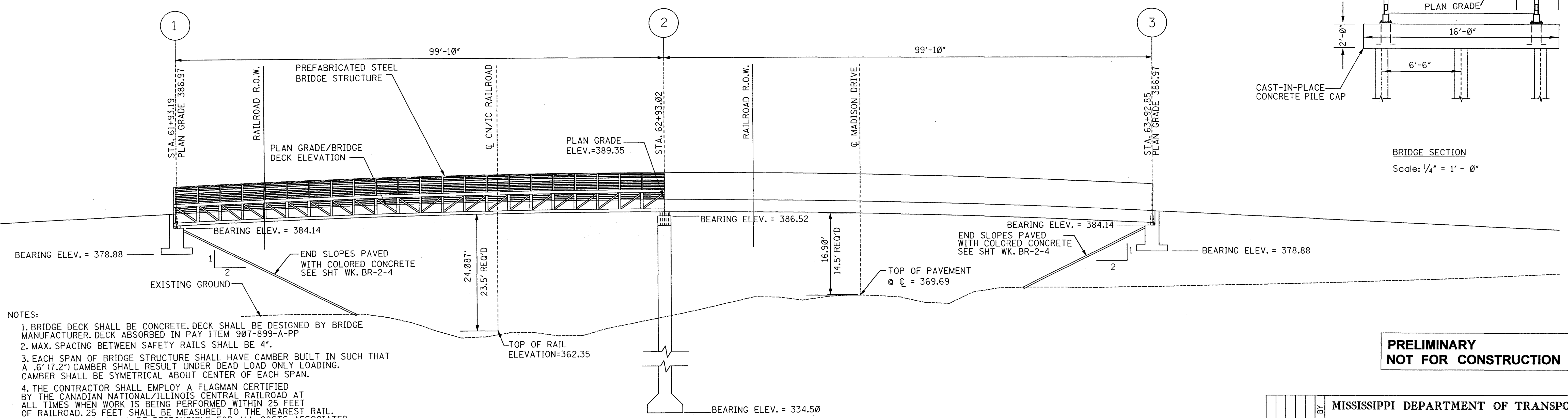
STATE	PROJECT NO.
MISS.	STP-0213-00(025)



BRIDGE PLAN
Scale: 1" = 10'



BRIDGE SECTION
Scale: 1/4" = 1' - 0"



BRIDGE PROFILE
1" = 10'

BRIDGE DESIGN LOADS:
PREFABRICATED STEEL BRIDGE SHALL BE DESIGNED FOR THE FOLLOWING LOADS:
DEAD LOAD: TO BE DETERMINED BY DESIGN
LIVE LOAD: 85 PSF
SINGLE VEHICLE LOAD: 10,000 PSI
WIND LOAD: PER CODE
SEISMIC LOAD: PER CODE

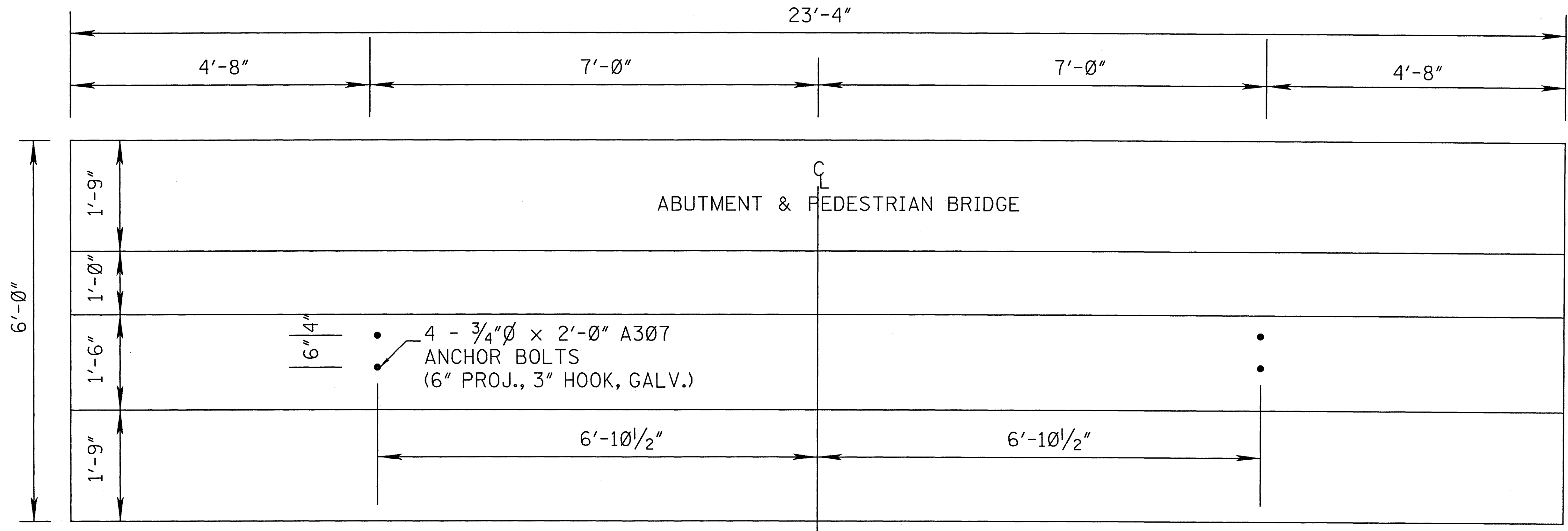
- NOTES:
- BRIDGE DECK SHALL BE CONCRETE. DECK SHALL BE DESIGNED BY BRIDGE MANUFACTURER. DECK ABSORBED IN PAY ITEM 907-099-A-PP
 - MAX. SPACING BETWEEN SAFETY RAILS SHALL BE 4".
 - EACH SPAN OF BRIDGE STRUCTURE SHALL HAVE CAMBER BUILT IN SUCH THAT A .6" (7.2") CAMBER SHALL RESULT UNDER DEAD LOAD ONLY LOADING. CAMBER SHALL BE SYMMETRICAL ABOUT CENTER OF EACH SPAN.
 - THE CONTRACTOR SHALL EMPLOY A FLAGMAN CERTIFIED BY THE CANADIAN NATIONAL/ILLINOIS CENTRAL RAILROAD AT ALL TIMES WHEN WORK IS BEING PERFORMED WITHIN 25 FEET OF RAILROAD. 25 FEET SHALL BE MEASURED TO THE NEAREST RAIL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH EMPLOYMENT OF THE FLAGMAN.
 - CONCRETE FOR BRIDGE FOUNDATIONS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
 - REINFORCING STEEL FOR BRIDGE FOUNDATION SHALL CONFORM TO ASTM A 615, GRADE 60.
 - ALL EXPOSED CONCRETE SHALL BE COLORED BROWN.
 - TRUSS CONFIGURATION SHALL BE DETERMINED BY BRIDGE MANUFACTURER BUT SHALL PRESENT A SYMMETRICAL APPEARANCE ABOUT THE CENTER SUPPORT WHEN VIEWED IN PROFILE.
 - BRIDGE SUPERSTRUCTURE SHALL BE CONSTRUCTED OF A588 "WEATHERING" STEEL.
 - CONTRACTOR SHALL VERIFY BRIDGE BEARING ELEVATION WITH BRIDGE MANUFACTURER BEFORE BEGINNING FOUNDATIONS.

**PRELIMINARY
NOT FOR CONSTRUCTION**

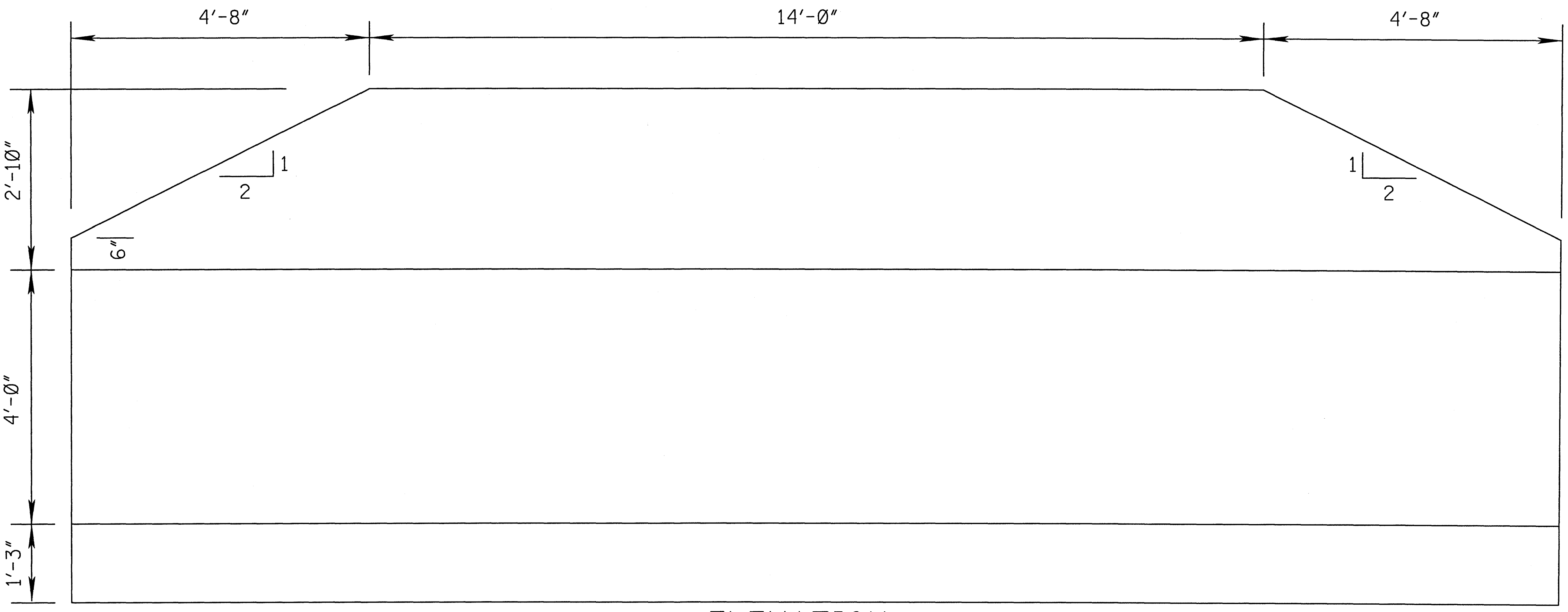
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
PEDESTRIAN BRIDGE PLAN, PROFILE & SECTION MULTI-USE PATH RIDGELAND, MS	
PROJECT NO.: STP-0213-00(025) COUNTY: MADISON	WORKING NUMBER BR-2-1 SHEET NUMBER
FILENAME: brdplanprof.dgn	DESIGN TEAM: N-S CHECKED: DATE:

ROADWAY DESIGN DIVISION, C.A.D.D. SECTION, MISSISSIPPI DEPARTMENT OF TRANSPORTATION

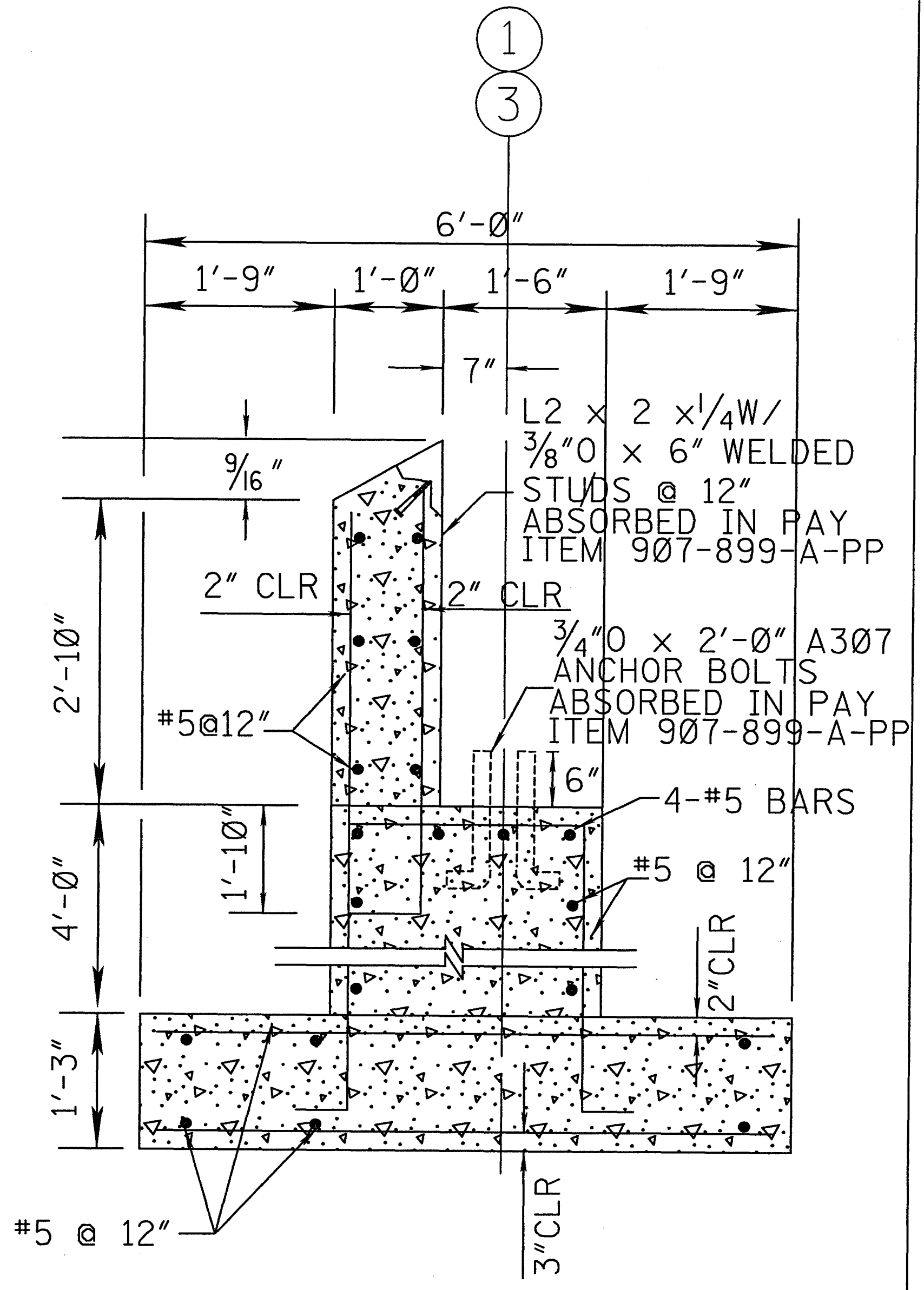
STATE	PROJECT NO.
MISS.	STP-0213-00(025)



A PLAN
BR-2-2 Scale: 1" = 1'



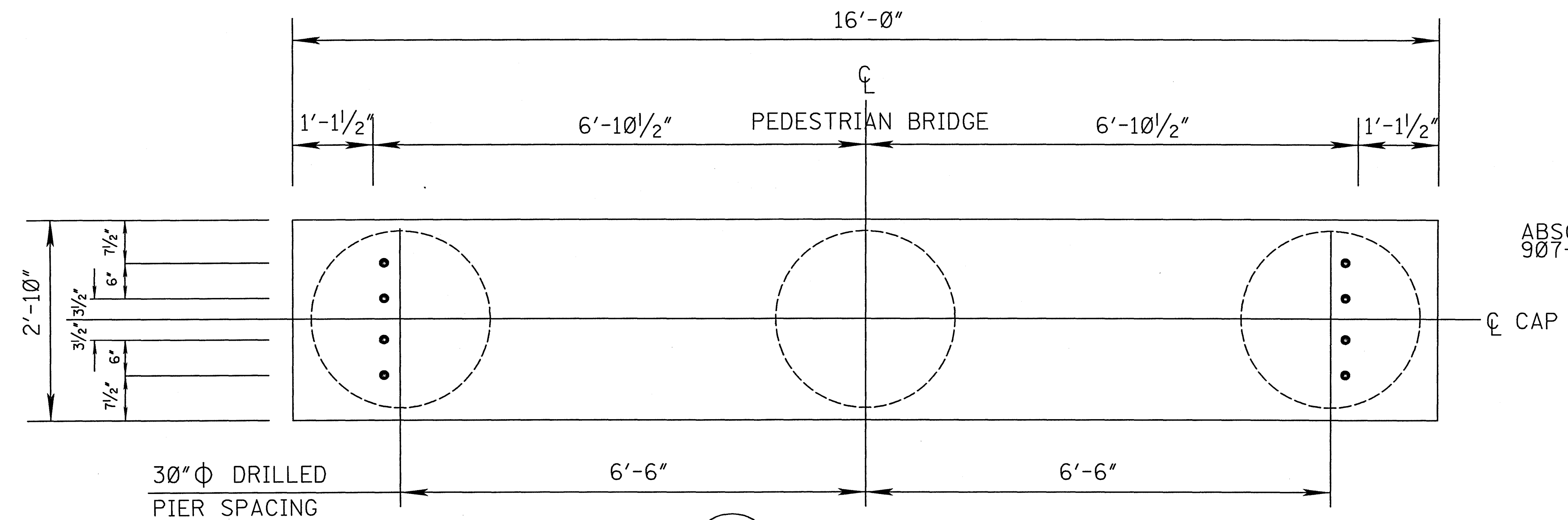
ELEVATION
Scale: 1" = 1'



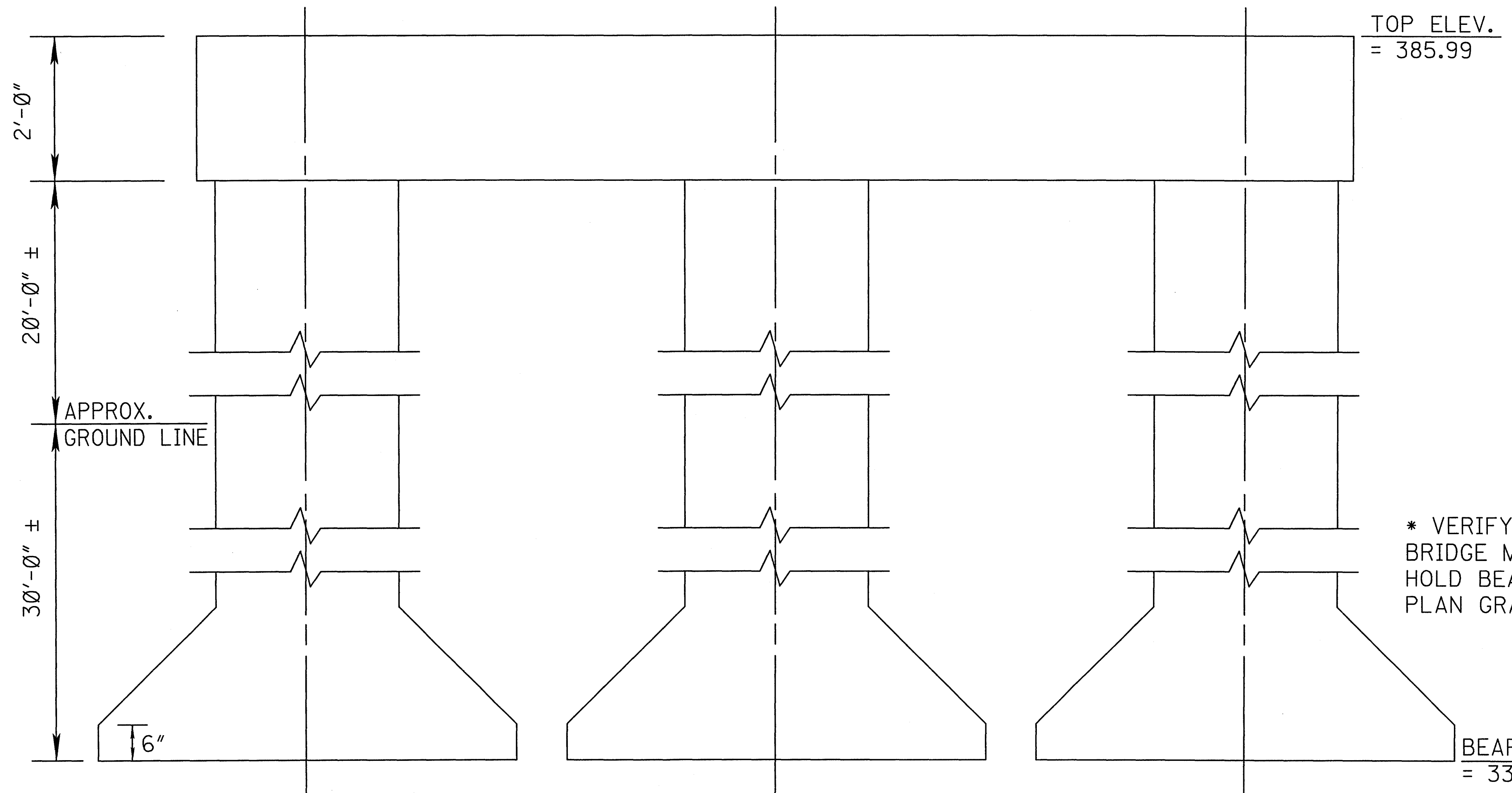
SECTION
Scale: 1" = 1'

PLAN
DESIGN
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		PEDESTRIAN BRIDGE ABUTMENT	
DATE	DESIGN TEAM	FILENAME: brdgplanprof.dgn	WORKING NUMBER BR-2-2
	N-S	CHECKED	SHEET NUMBER

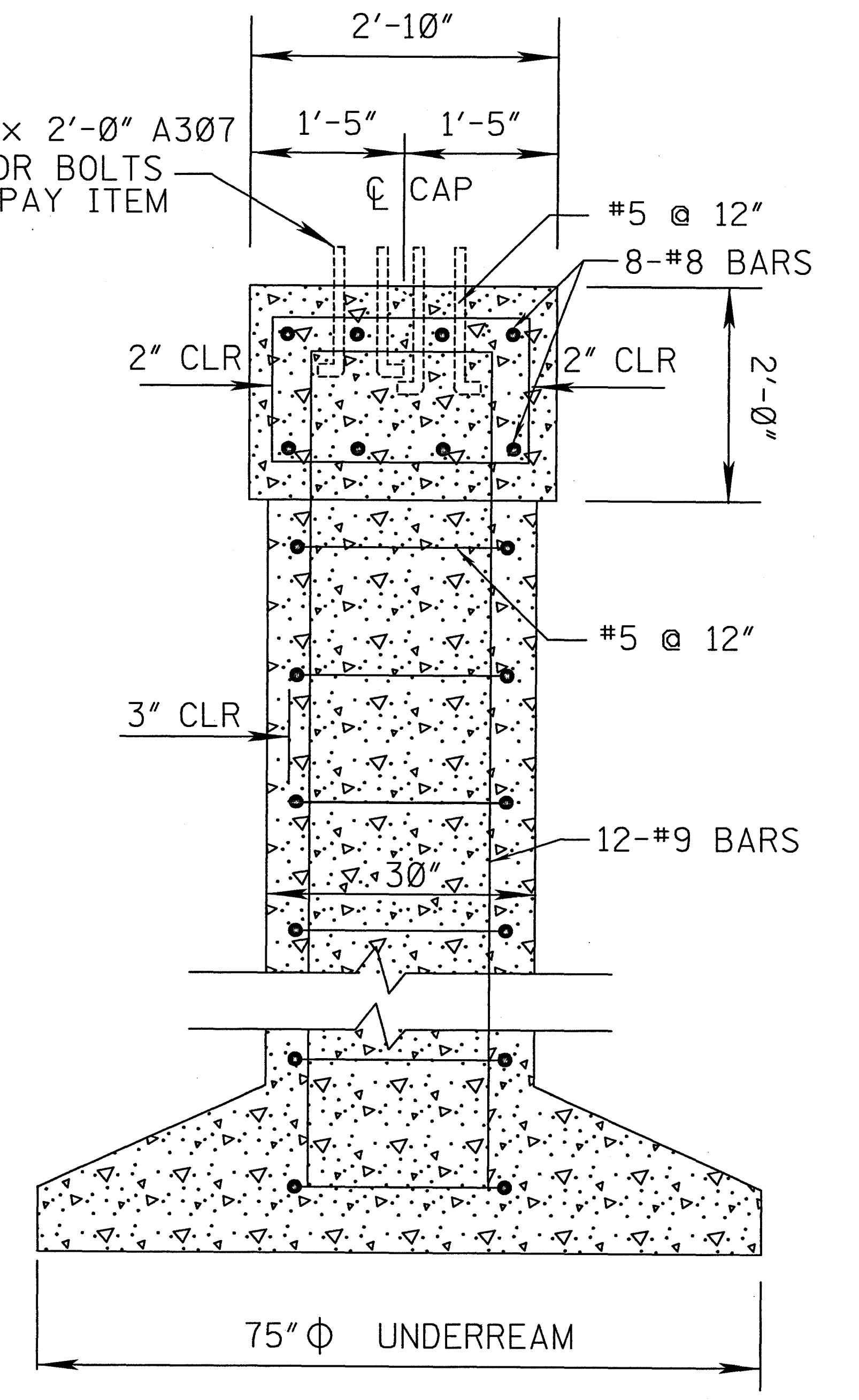


B PLAN
BR-2-3 Scale: 1" = 1'



ELEVATION
Scale: 1" = 1'

3/4" Ø × 2'-0" A307 ANCHOR BOLTS
ABSORBED IN PAY ITEM
907-899-A-PP

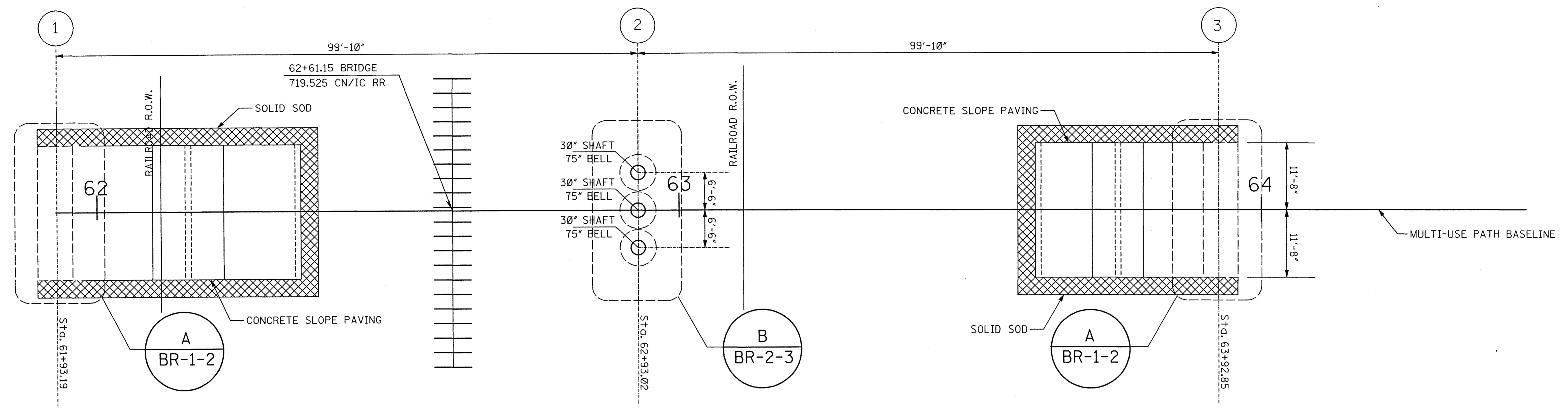


SECTION
Scale: 1" = 1'

* VERIFY TO ELEVATION WITH
BRIDGE MANUFACTURER.
HOLD BEARING ELEVATION AND
PLAN GRADE.

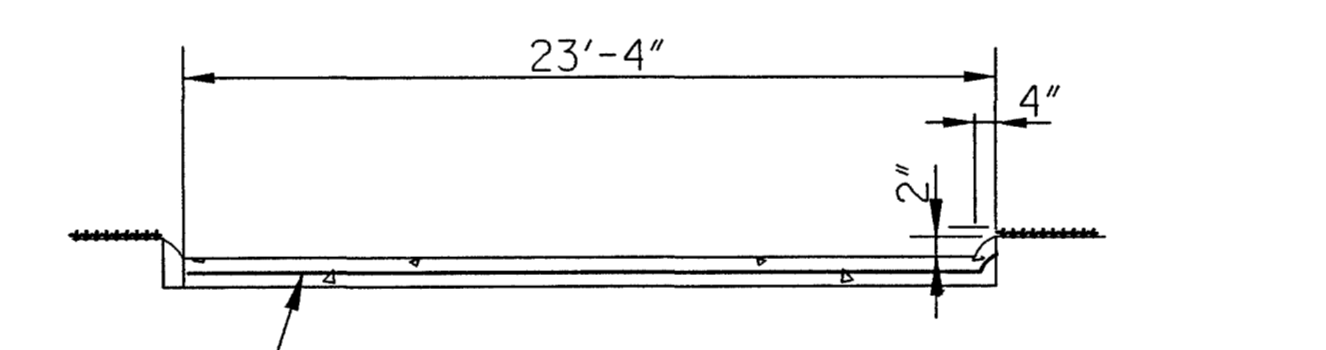
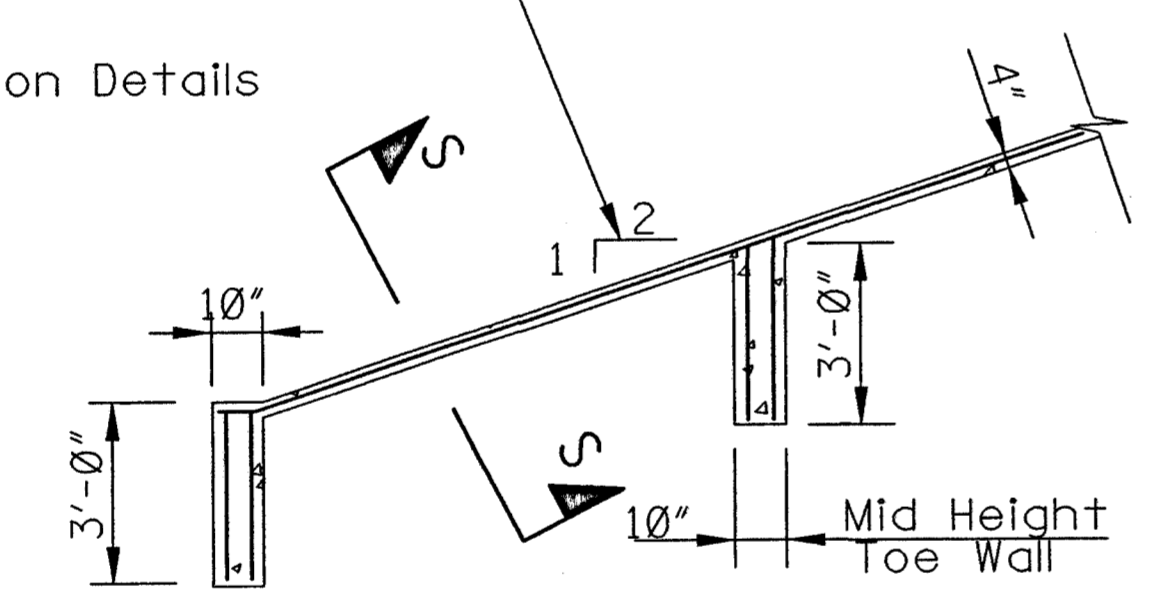
BY: MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
PEDESTRIAN BRIDGE CENTER SUPPORT	
DATE	FILENAME: brdgplanprof.dgn
DESIGN TEAM	N-S CHECKED DATE
WORKING NUMBER	BR-2-3
SHEET NUMBER	

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION



For Bars Extending From Abutment Into Slope Paving, Bend In Field To Fit Slope.
Slope Shown Is Normal To Abutment

NOTE:
See Abutment Foundation Details



6 x 6-W1.4 x W1.4
Welded Wire Fabric Weighing 0.21 Lbs
Per Sq. Ft. (Not A Separate Pay Item.)

SLOPE PAVING DETAILS

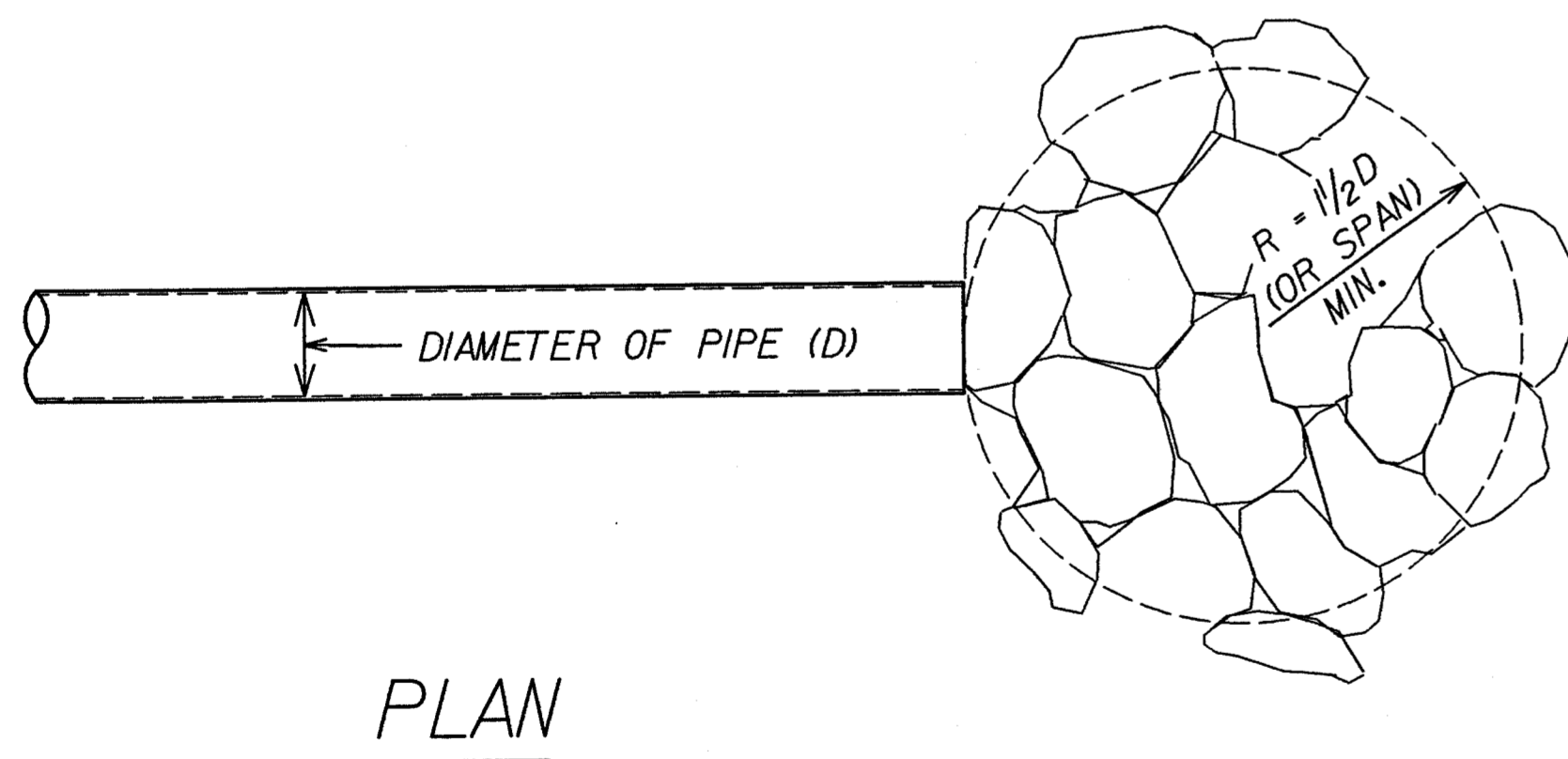
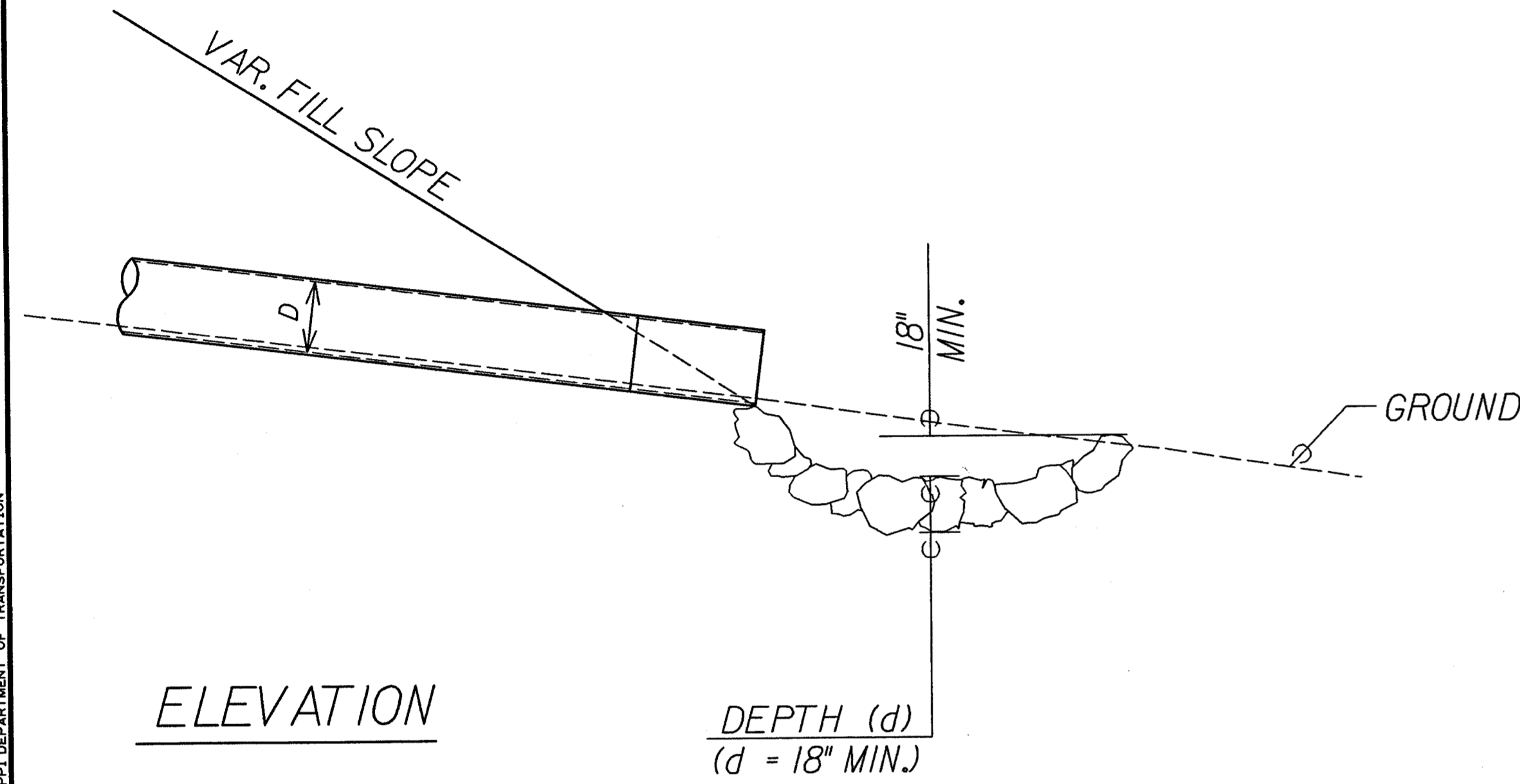
**PRELIMINARY
NOT FOR CONSTRUCTION**

- NOTES:
- SLOPE PAVING SHALL HAVE DEEP SCORED CONTROL JOINTS AS FOLLOWS:
TRANSVERSE JOINTS @ 3 EQUAL SPACES OR 12' WHICHEVER IS LESS.
LONGITUDINAL JOINTS @ 3 EQUAL SPACES OR 12' WHICHEVER IS LESS.
 - CONCRETE FOR SLOPE PAVING WHICH WILL BE EXPOSED TO VIEW SHALL BE COLORED BROWN.

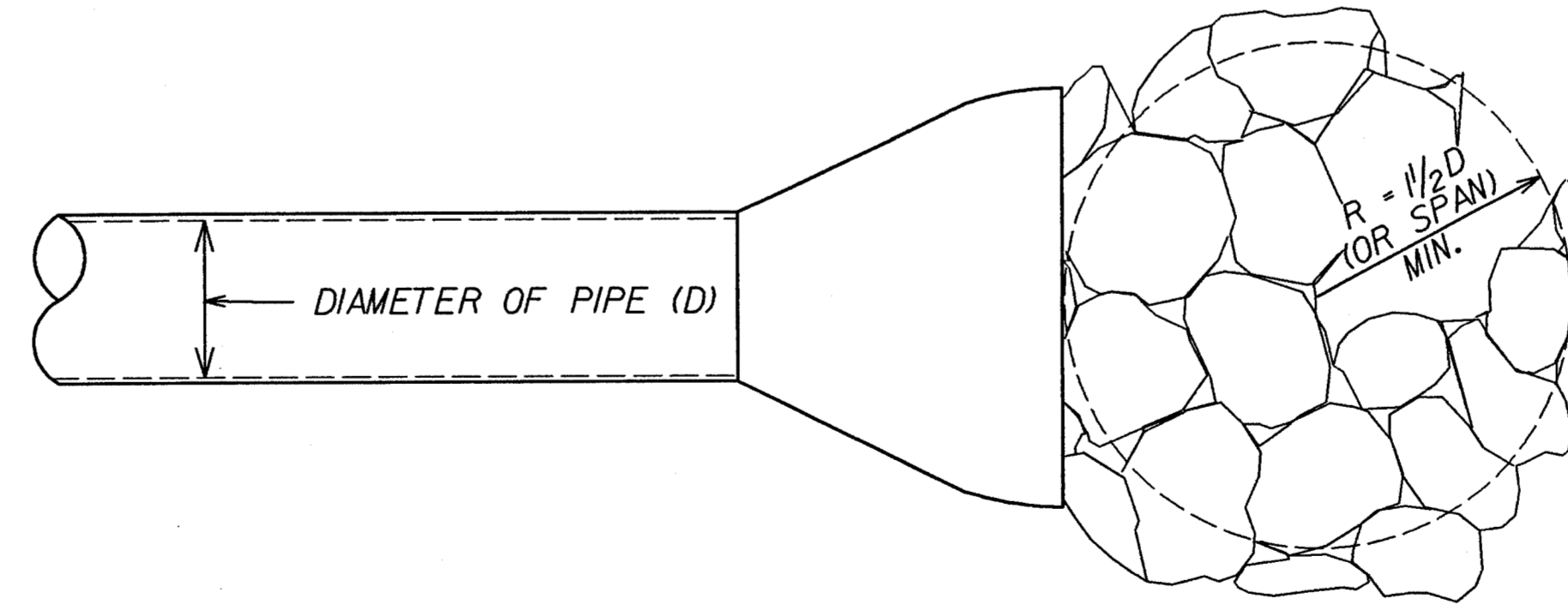
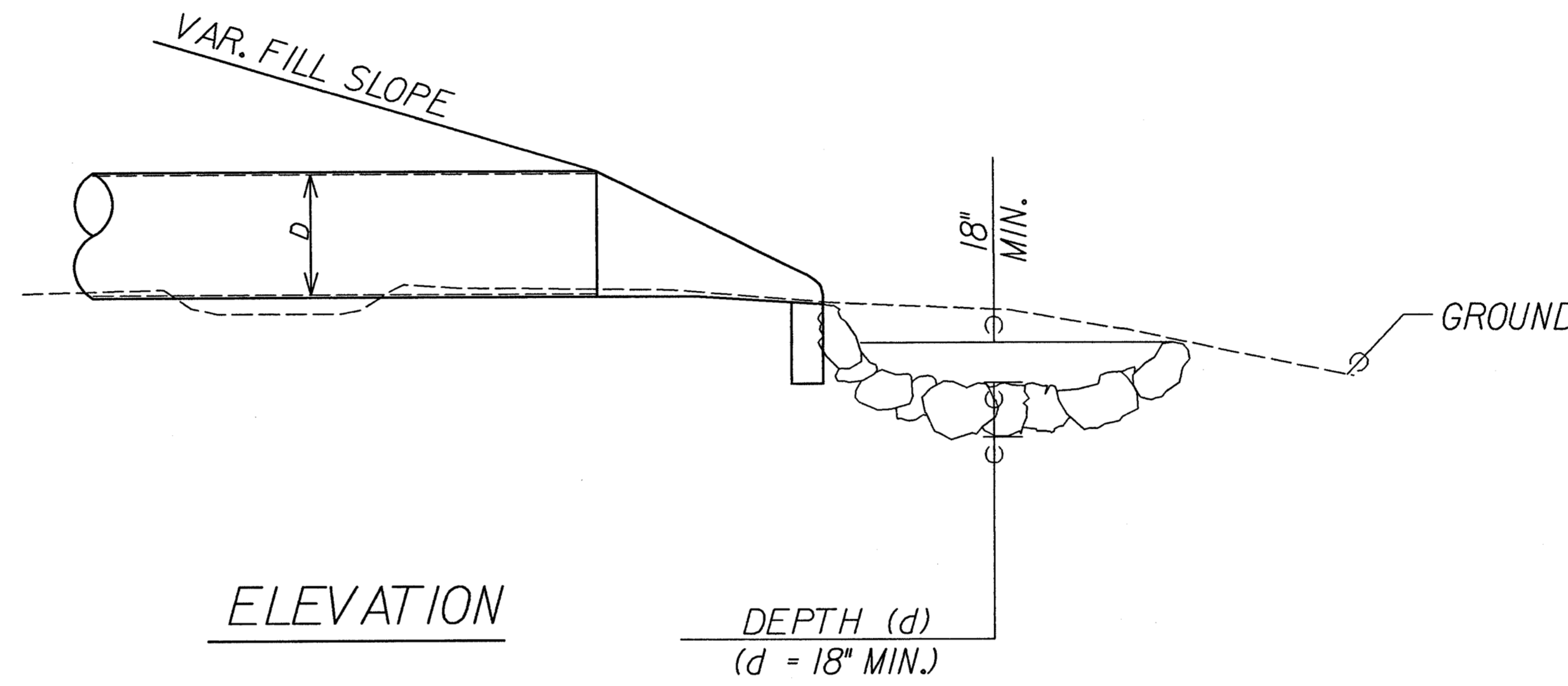
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
PEDESTRIAN BRIDGE FOUNDATION PLAN MULTI-USE PATH RIDGELAND, MS	
PROJECT NO.: STP-0213-00(025) COUNTY: MADISON	
DATE	WORKING NUMBER
DESIGN TEAM	BR-2-4
N-S	CHECKED
	DATE

PLAN, S.S. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

1. LOOSE RIPRAP SHALL BE PLACED AT LOCATION WHERE SHOWN ON THE PLANS OR AS DESIGNATED BY THE ENGINEER.
2. QUANTITIES SHOWN WILL BE THE BASIS OF PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
3. RIPRAP SHALL BE ROCK SIZE 100 LBS.
4. EXCAVATION TO BE ABSORBED IN THE PRICE OF RIPRAP



TYPICAL
NO END TREATMENT



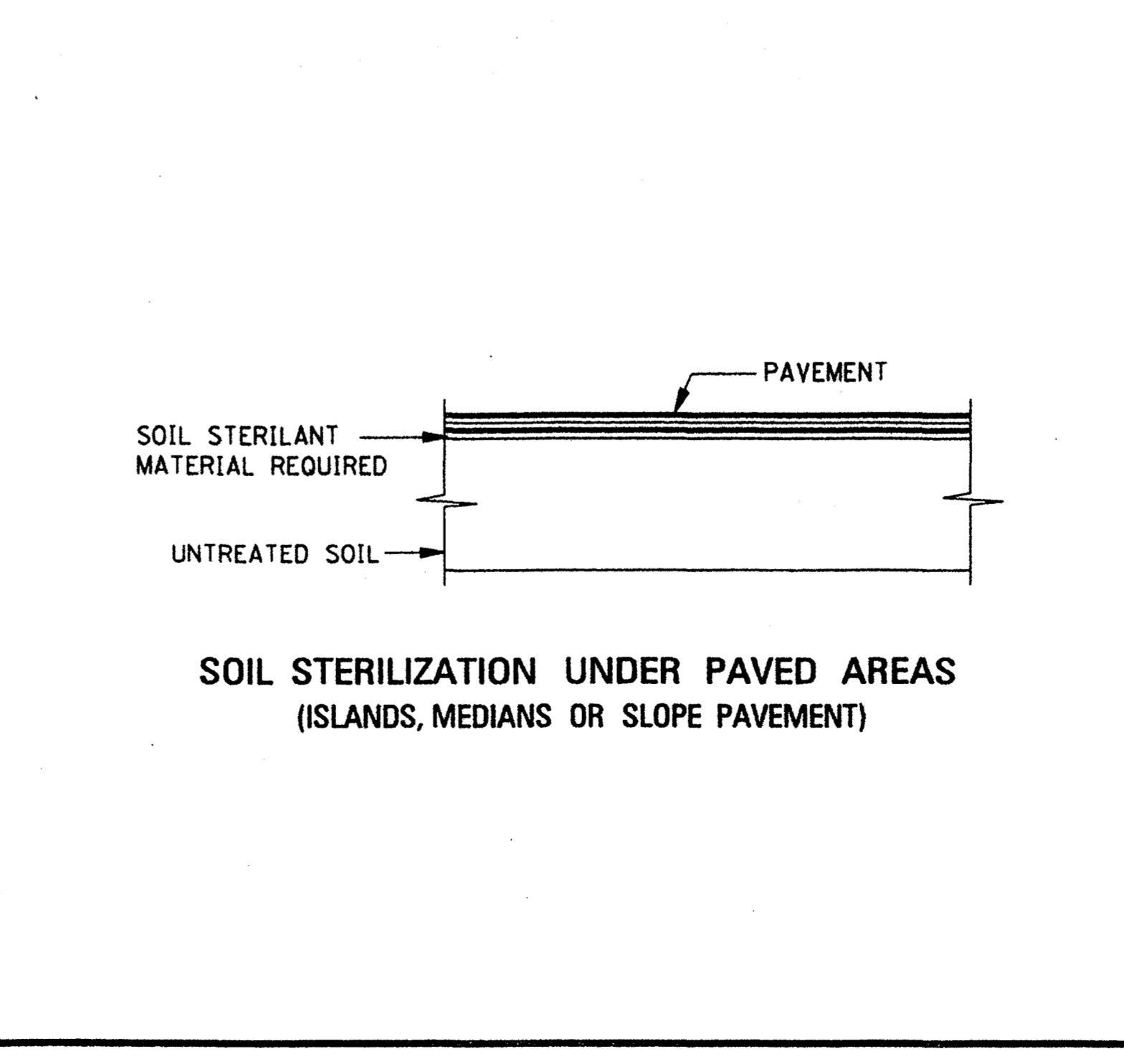
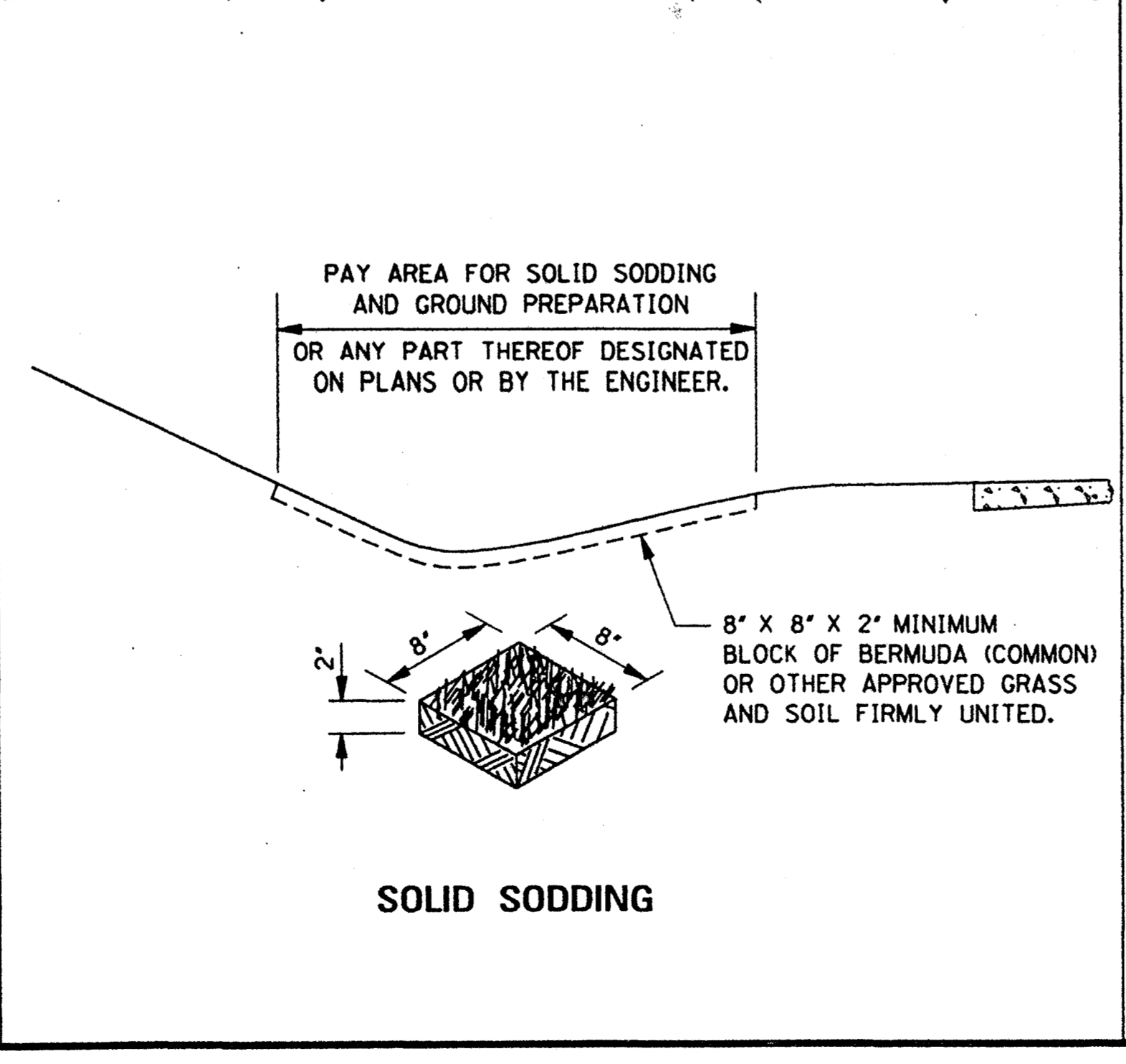
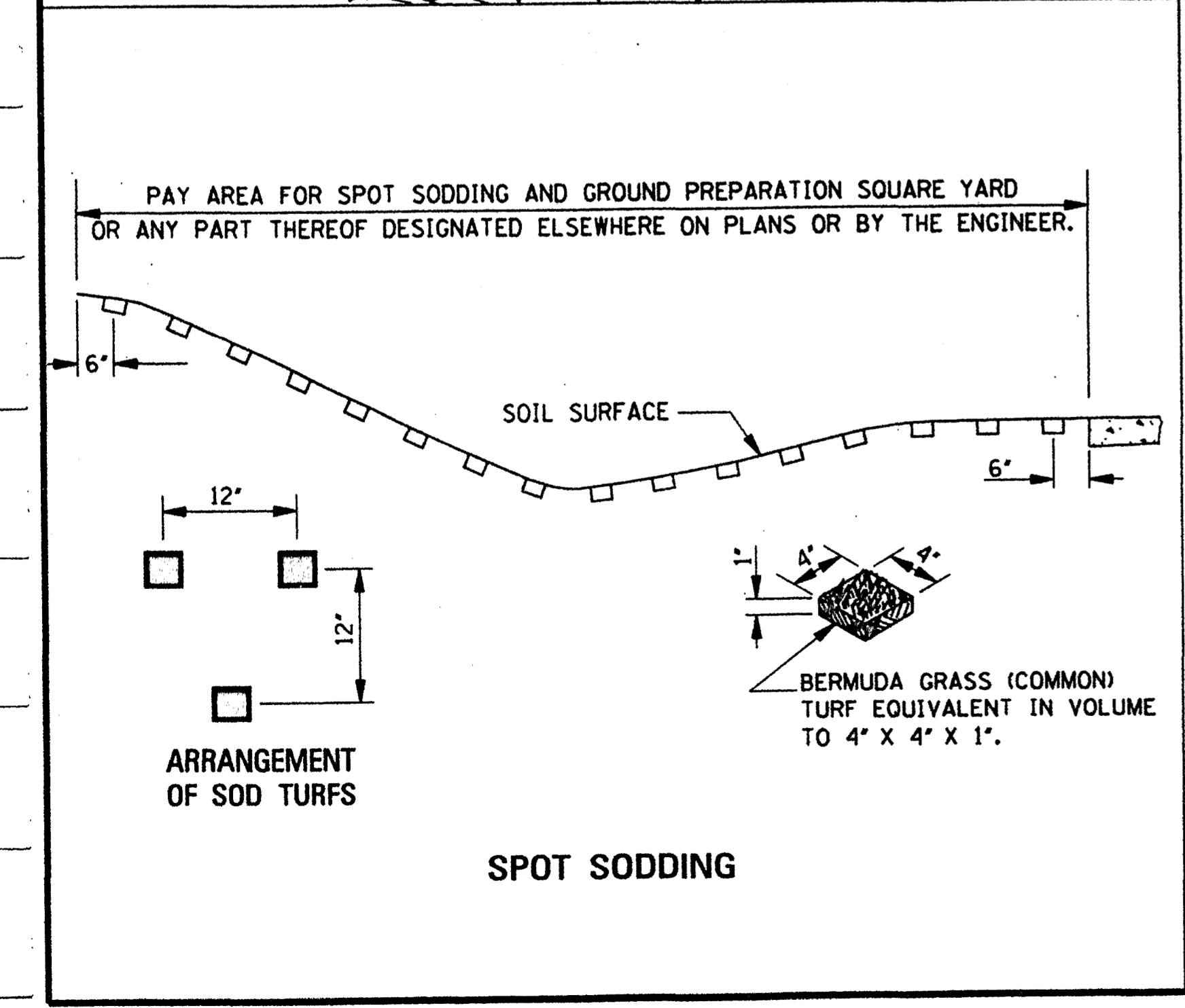
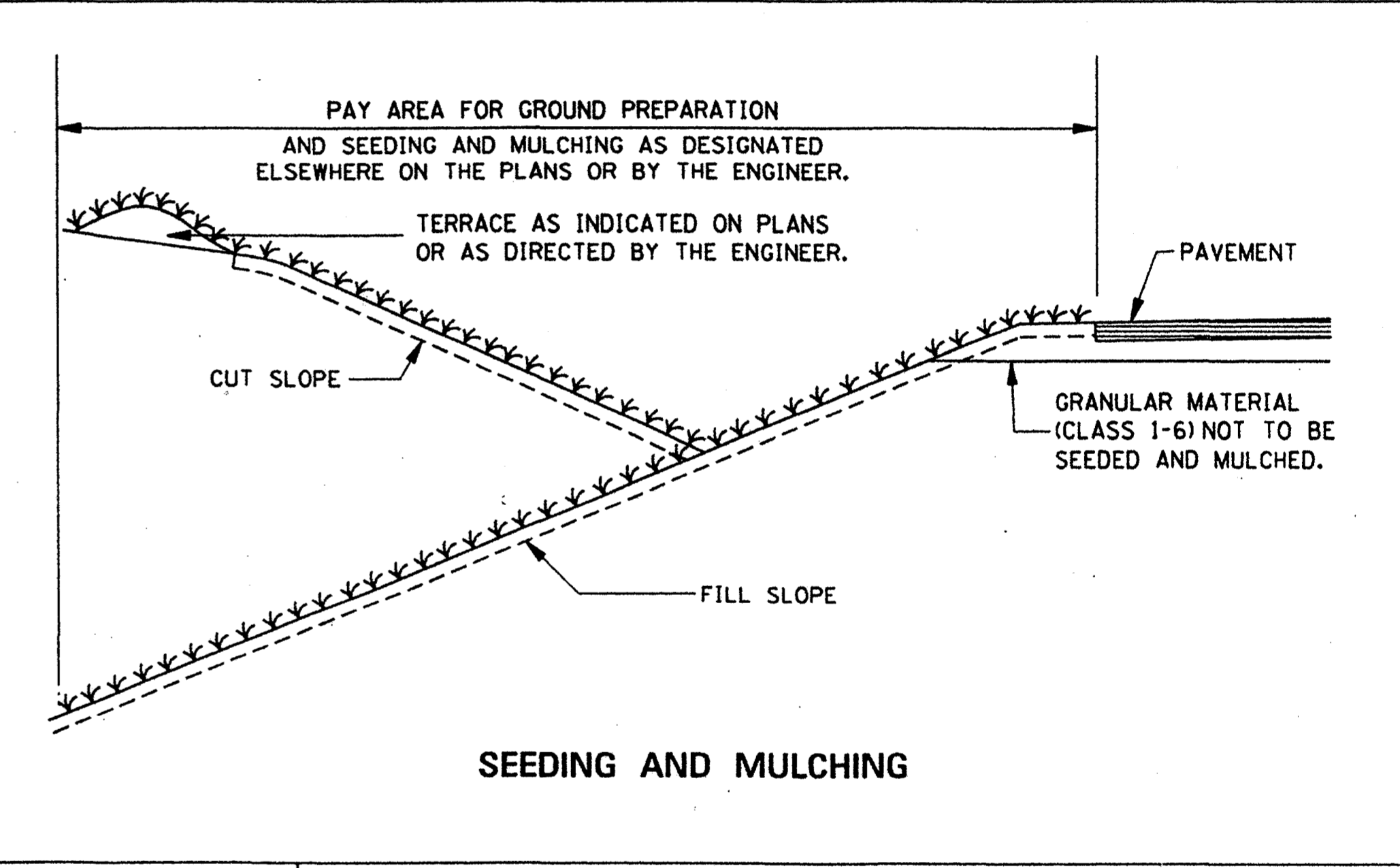
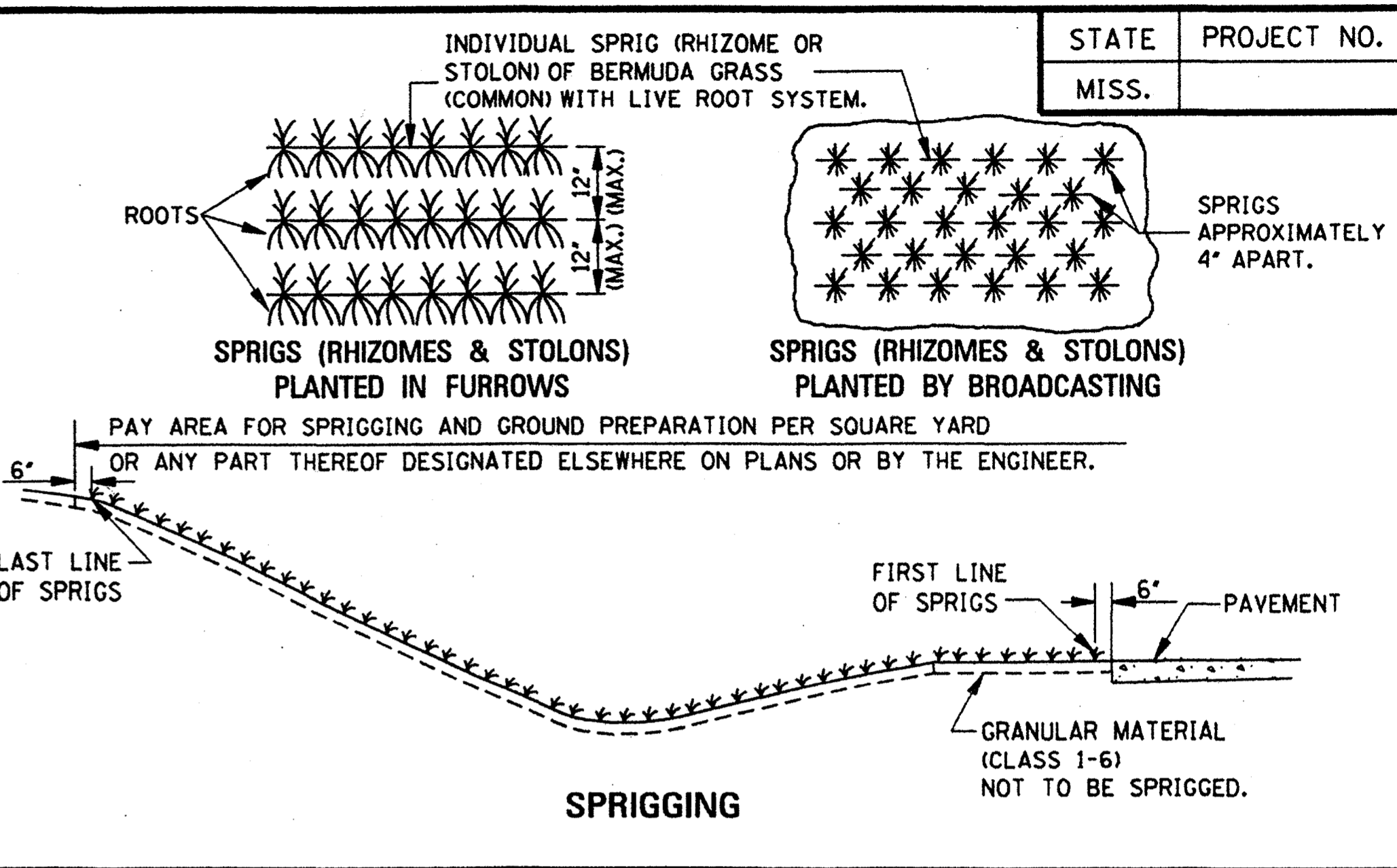
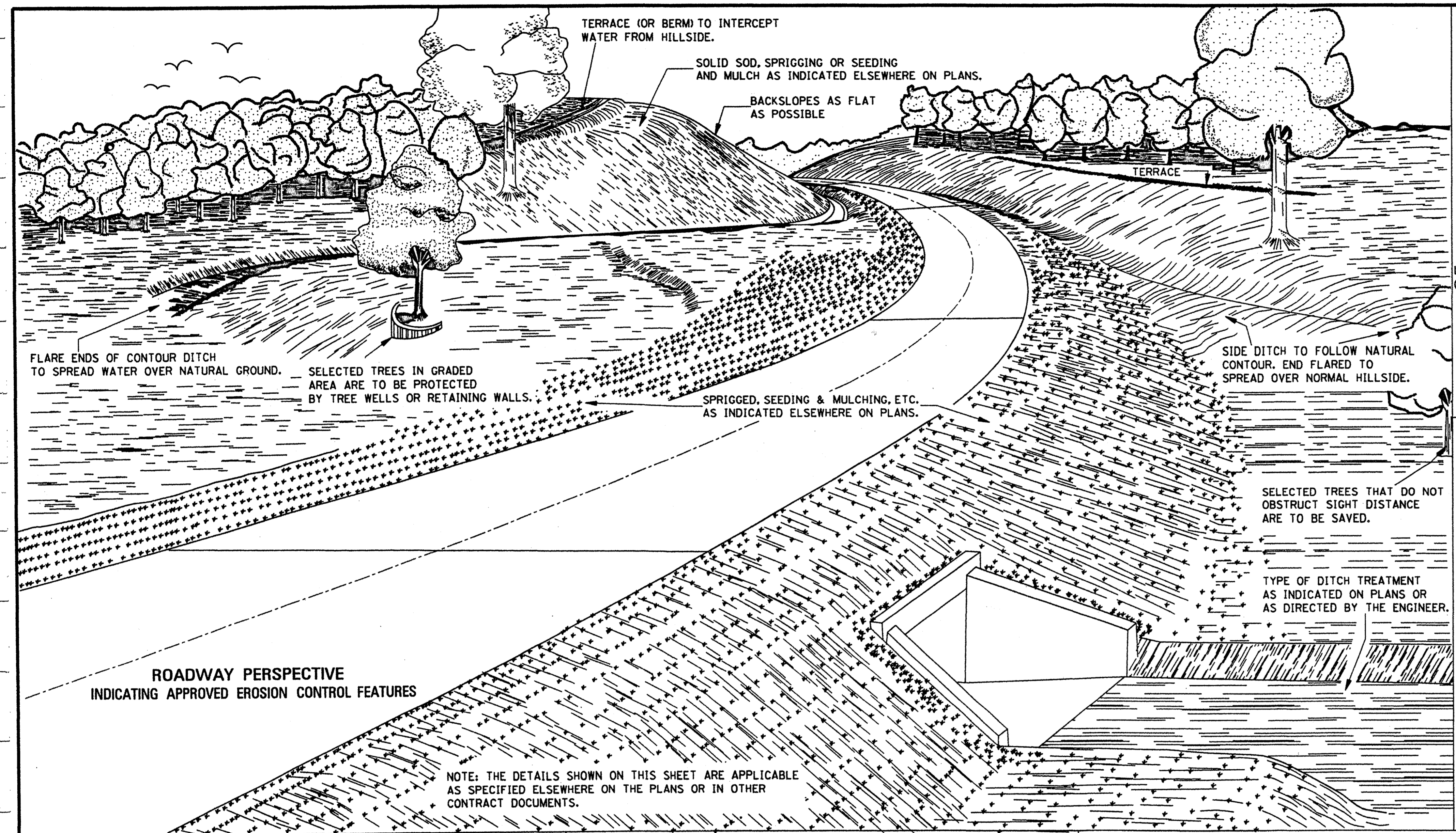
TYPICAL
WITH END SECTION

PIPE SIZE In.	RIPRAP	EXCAVATION
	TON	CU.YD.
18	1.37	1.28
24	2.43	2.28
30	3.82	3.56
36	5.5	5.13
42	7.44	6.99
48	9.71	9.12
54	12.3	11.54
22 x 13	2.11	1.99
29 x 18	3.54	3.34
36 x 23	5.71	5.36
44 x 27	8.31	7.81
51 x 31	11.40	10.70
58 x 36	14.87	13.97
65 x 40	18.35	17.24
73 x 45	23.20	21.80

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
LOOSE RIPRAP FOR SCOUR CONTROL AT PIPE CULVERT	
PROJ. NO. STP-0213-00(025)	
MADISON CO.	
DATE	WORKING NUMBER
FILENAME: RIPRAP.DGN	RIPRAP1
DESIGN TEAM: NEEL-SCHAFFER	CHECKED: _____
DATE: _____	SHEET NUMBER

2259 PART-2 details/ripap.dgn MISSISSIPPI DEPARTMENT OF TRANSPORTATION **DDYY 201 02:45 PM DSN: TLENAME

STATE	PROJECT NO.
MISS.	



GENERAL NOTE:

1. LONGITUDINAL AND TRANSVERSE MEASUREMENTS FOR THE PAY AREA SHALL BE TAKEN ALONG THE SLOPES.

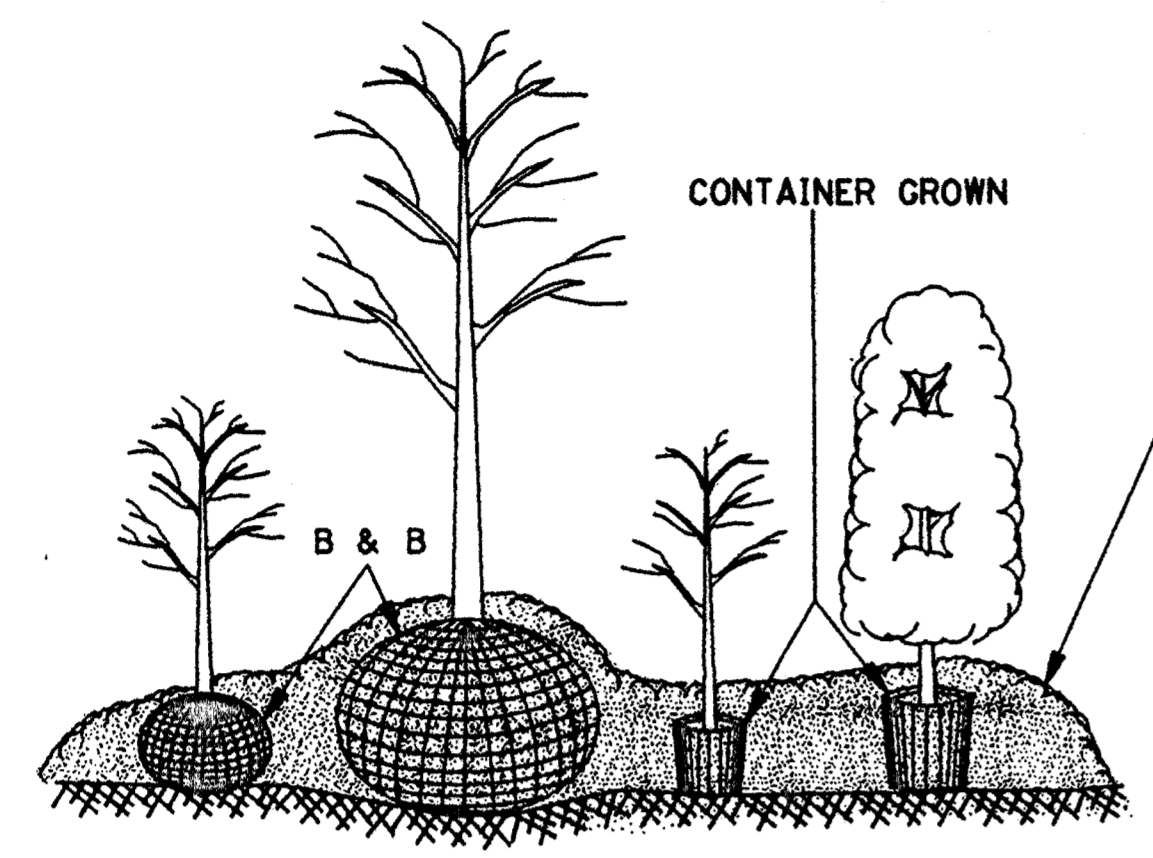
BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
REVISION	ROADWAY DESIGN DIVISION
DATE	STANDARD PLAN

EROSION CONTROL

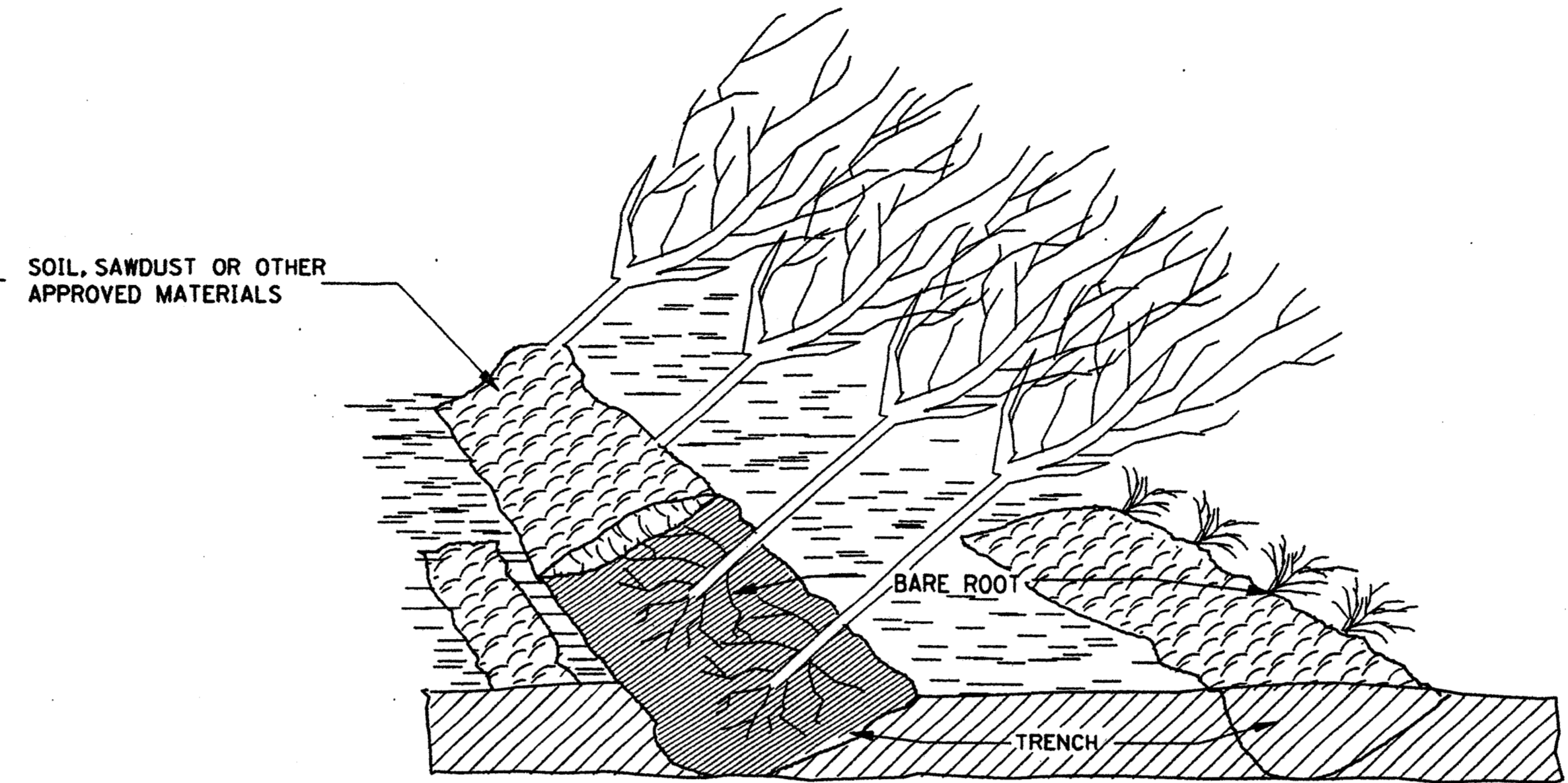
WORKING NUMBER EC-1

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 140

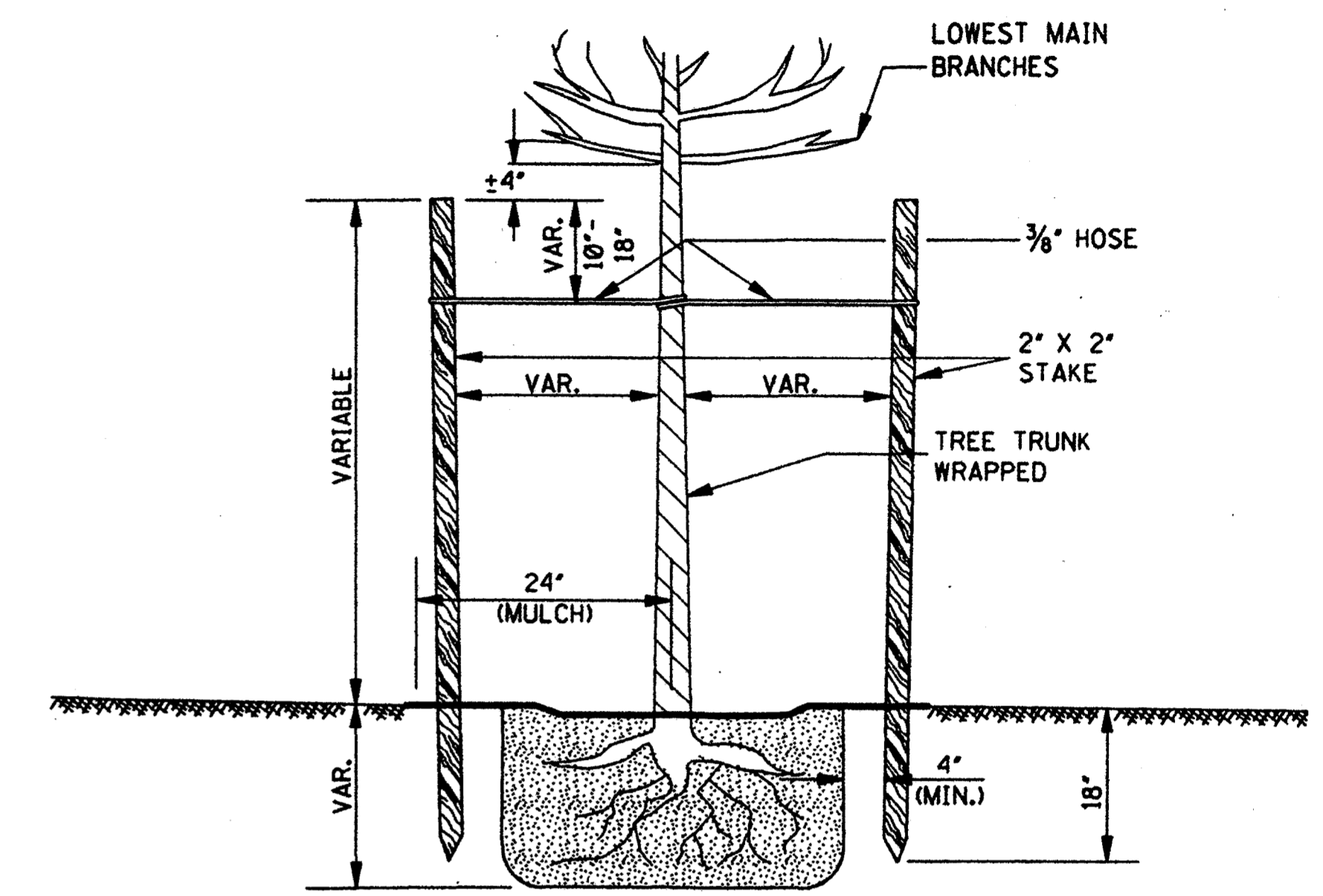


B & B AND CONTAINER GROWN PLANTS

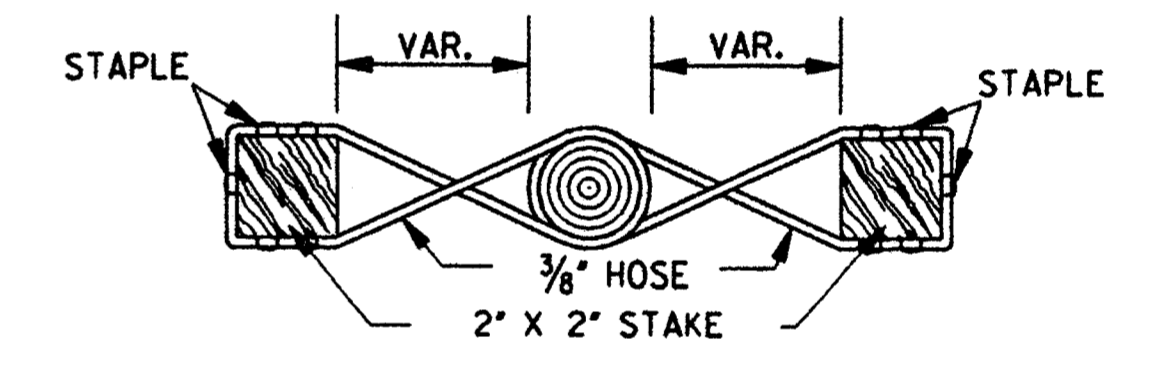


BARE ROOT PLANTS

NOTE: METHOD OF "HEELING IN" BEFORE PLANTING CONSISTS OF PLACING THE PLANTS IN A TRENCH AND COVERING THE ROOTS WITH DIRT. THIS MAY BE DONE ON TRUCK FOR EASE OF MOVEMENT. SAW DUST OR OTHER APPROVED MATERIAL MAY BE USED. ROOTS MUST BE KEPT MOIST AT ALL TIMES.



ELEVATION

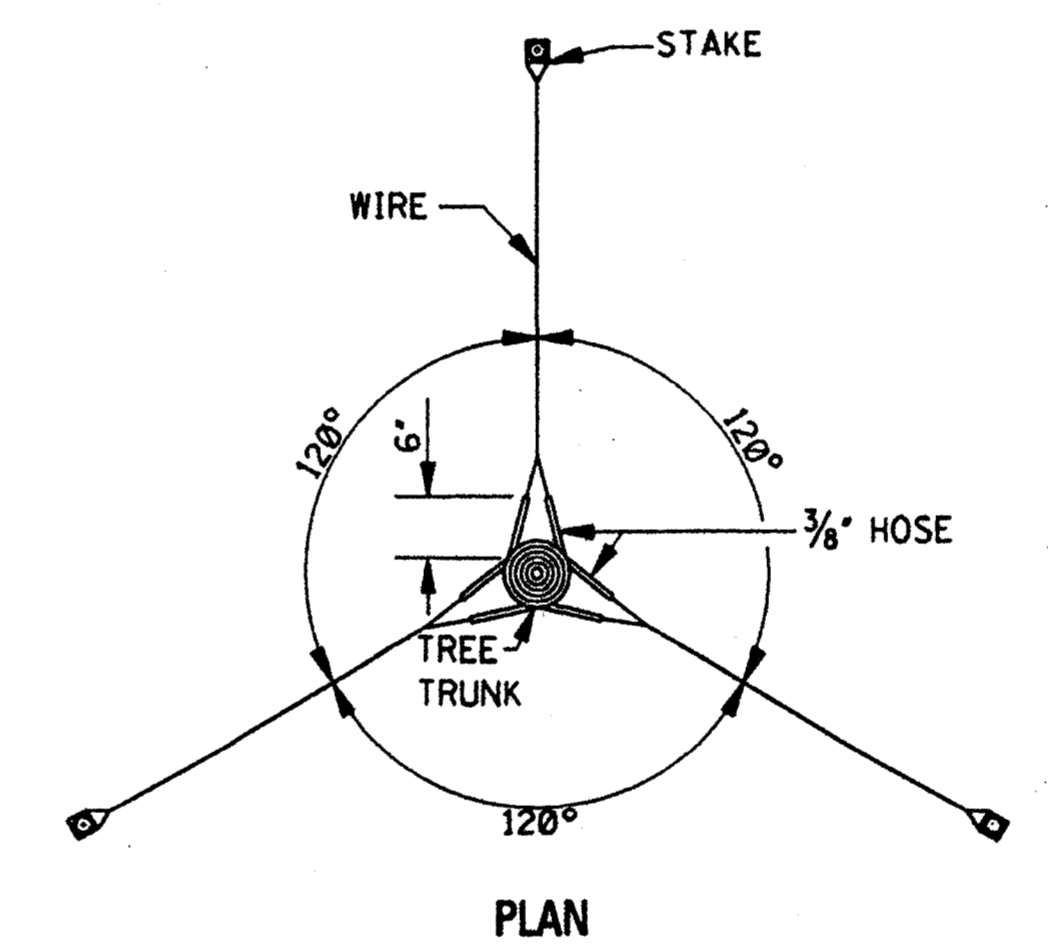
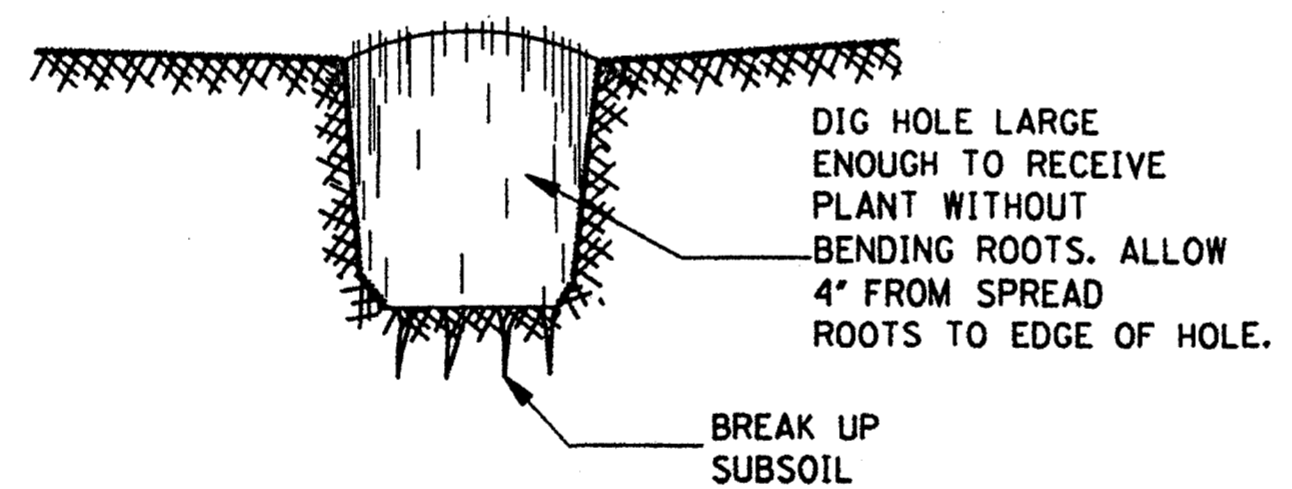
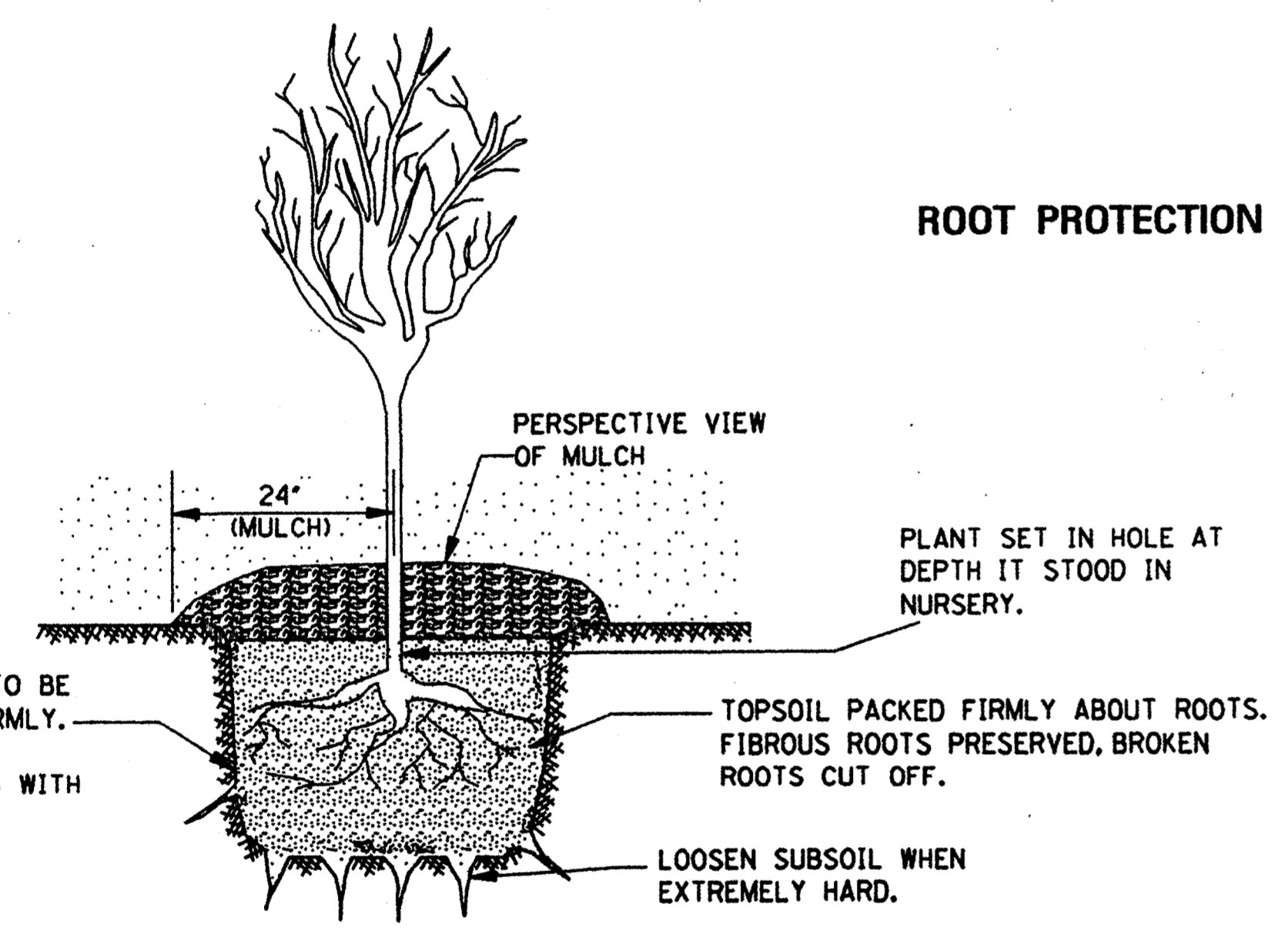


PLAN

DOUBLE VERTICAL STAKING METHOD

NOTE: ALL TREES SHALL BE STAKED OR GUYED. THE TRUNK OF ALL SMOOTH BARKED TREES SHALL BE WRAPPED. LARGE SHRUBS TO BE STAKED AND WRAPPED WHEN SPECIFIED ON PLANS.

ROOT PROTECTION ("HEELING-IN") DURING STORAGE



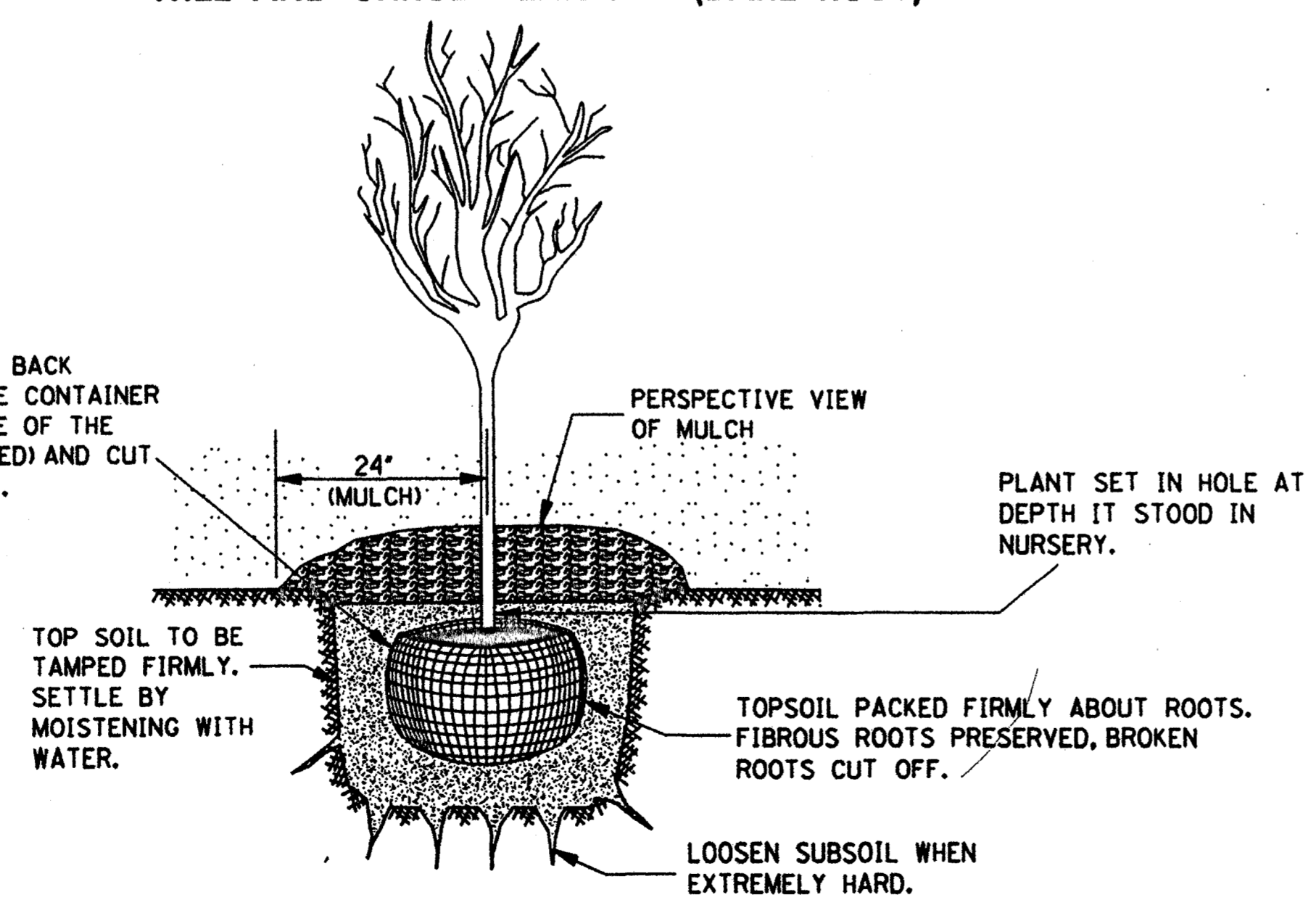
PLAN

TREE AND SHRUB PLANTING (BARE ROOT)

TOP SOIL TO BE TAMPED FIRMLY. SETTLE BY MOISTENING WITH WATER.

TOPSOIL PACKED FIRMLY ABOUT ROOTS. FIBROUS ROOTS PRESERVED, BROKEN ROOTS CUT OFF.

LOOSEN SUBSOIL WHEN EXTREMELY HARD.



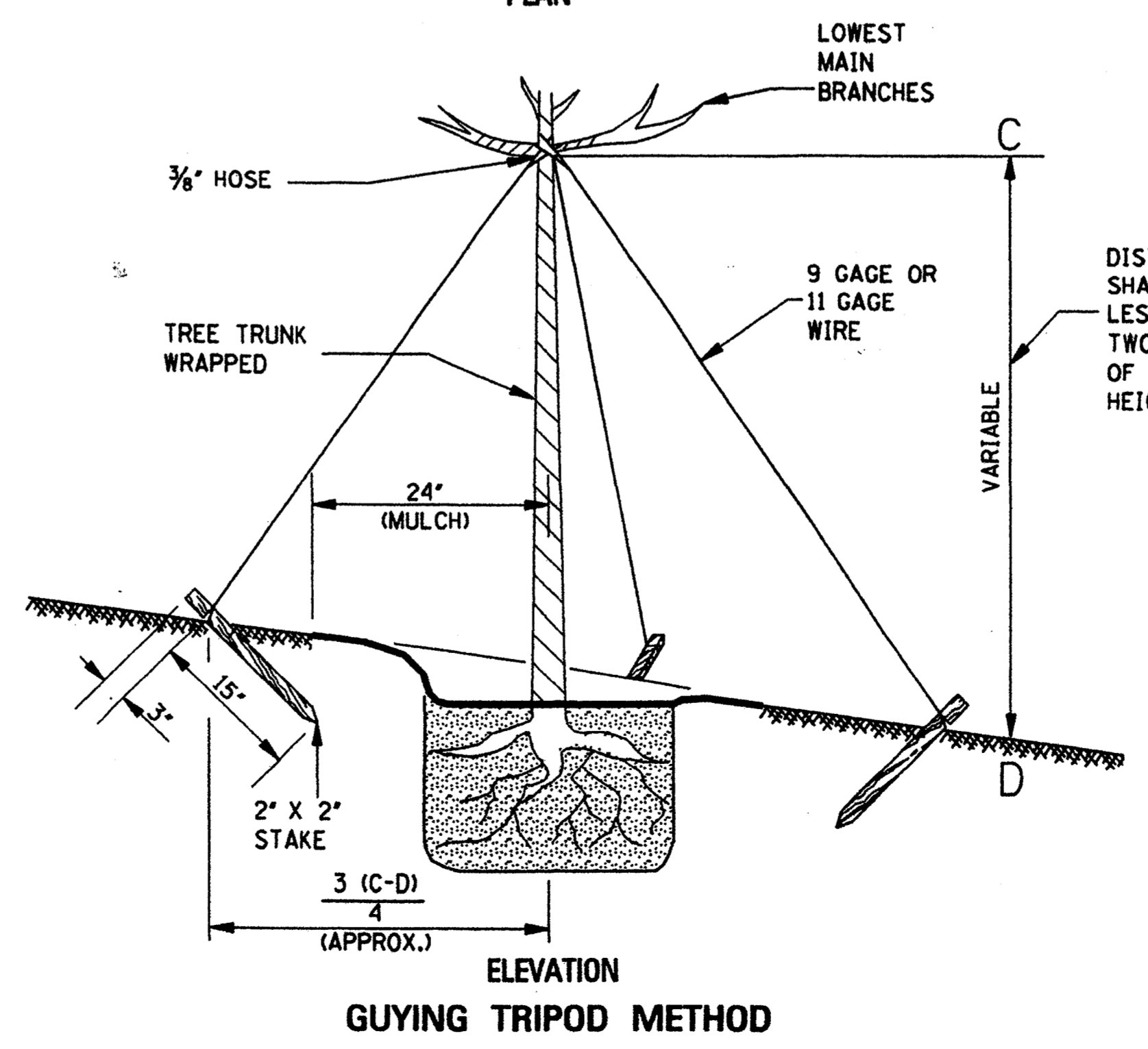
TREE AND SHRUB PLANTING (B & B OR CONTAINER GROWN)

LOOSEN BURLAP AT TOP OF BALL AND ROLL BACK OR CUT OFF TOP ONE-THIRD. IF PLANTS ARE CONTAINER GROWN, REMOVE CONTAINER AND THE OUTSIDE OF THE ROOT MASS SHALL BE SCARIFIED (OR ROUGHED) AND CUT VERTICALLY IN 5 PLACES AROUND THE BACK. DO NOT BREAK BALL OF SOIL FROM ROOTS.

TOP SOIL TO BE TAMPED FIRMLY. SETTLE BY MOISTENING WITH WATER.

TOPSOIL PACKED FIRMLY ABOUT ROOTS. FIBROUS ROOTS PRESERVED, BROKEN ROOTS CUT OFF.

LOOSEN SUBSOIL WHEN EXTREMELY HARD.



**ELEVATION
GUYING TRIPOD METHOD**

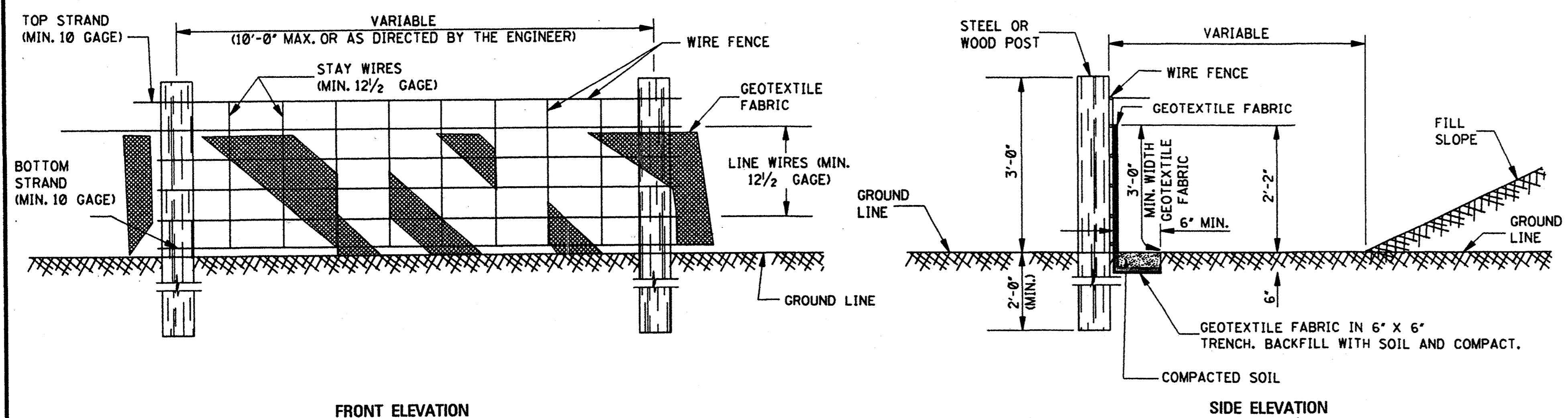
DISTANCE C-D SHALL NOT BE LESS THAN TWO-THIRDS OF THE TREE HEIGHT

GENERAL NOTES:

1. THE TYPE(S), RATE(S) OF APPLICATION AND PLACEMENT OF FERTILIZER AND MULCH SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		ROADWAY DESIGN DIVISION	
DATE		STANDARD PLAN	
TYPICAL PLANTING DETAILS FOR TREES & SHRUBS			
WORKING NUMBER		PD-1	
SHEET NUMBER		141	
ISSUE DATE:		OCTOBER 1, 1998	





FRONT ELEVATION

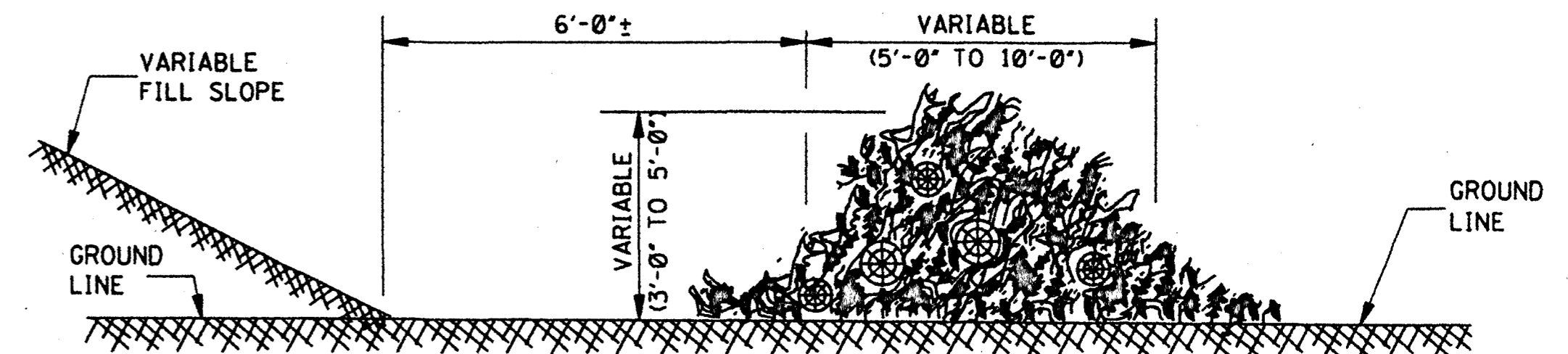
SIDE ELEVATION

TEMPORARY SILT FENCE

- NOTES:
1. WIRE SHALL BE MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
 2. GEOTEXTILE FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE FASTENED ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.
 3. STEEL POST SHALL BE 5'-0" IN HEIGHT AND OF THE SELF-FASTENER ANGLE STEEL TYPE. WOOD POST SHALL BE A MINIMUM OF 5'-0" IN HEIGHT AND 3" OR MORE IN DIAMETER. WIRE FENCE SHALL BE FASTENED TO WOODEN POST WITH NOT LESS THAN 9 GAGE WIRE STAPLES 1' LONG.
 4. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATIONS MAY BE USED WITHOUT WIRE FENCE.



FRONT ELEVATION



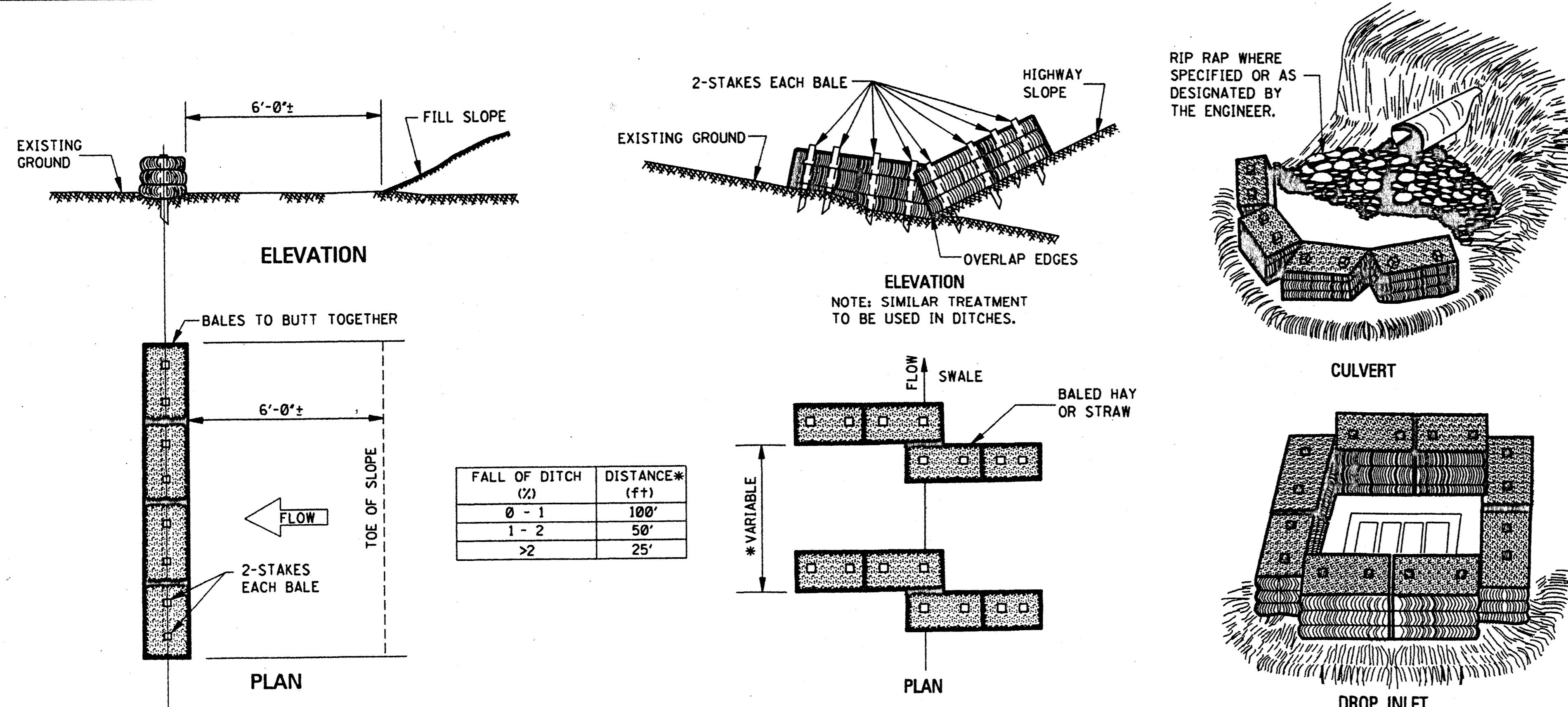
SIDE ELEVATION

TEMPORARY BRUSH BARRIER

- NOTES:
1. BRUSH BARRIER TO BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
 2. PLACE BRUSH, LOG AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TOP TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
 3. TO ALLOW WATER TO FLOW THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.

GENERAL NOTES:

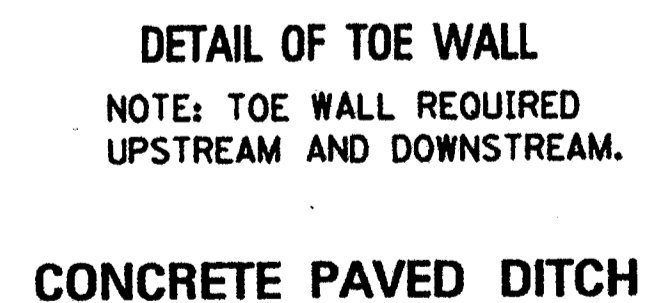
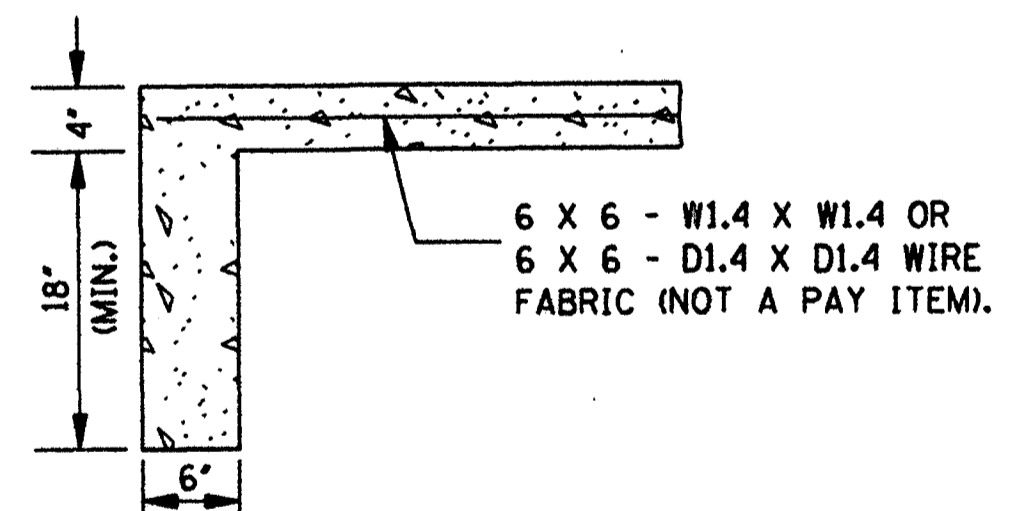
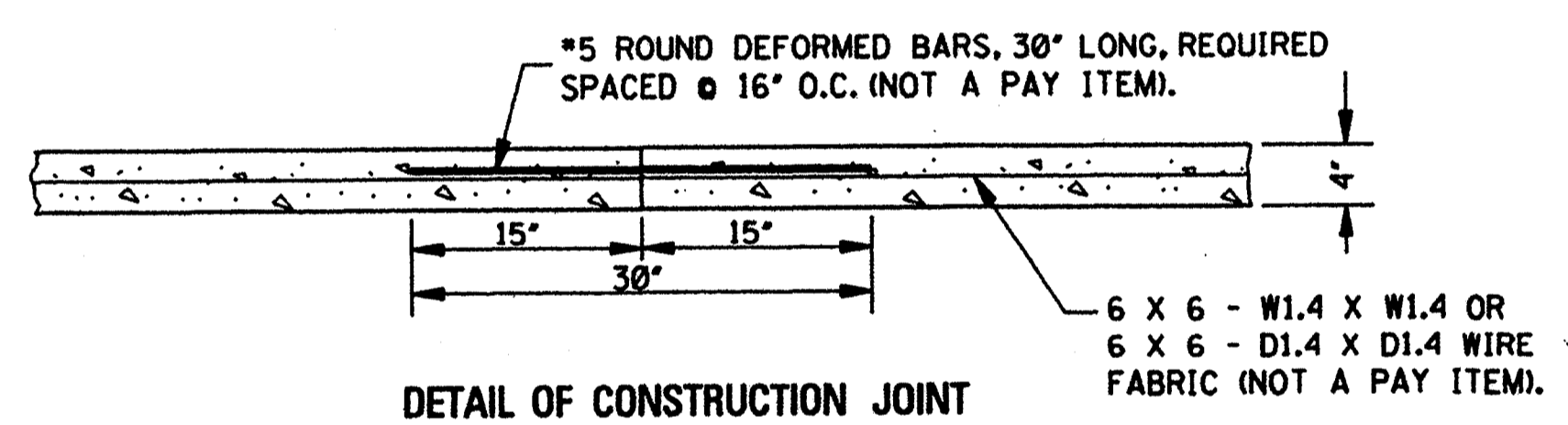
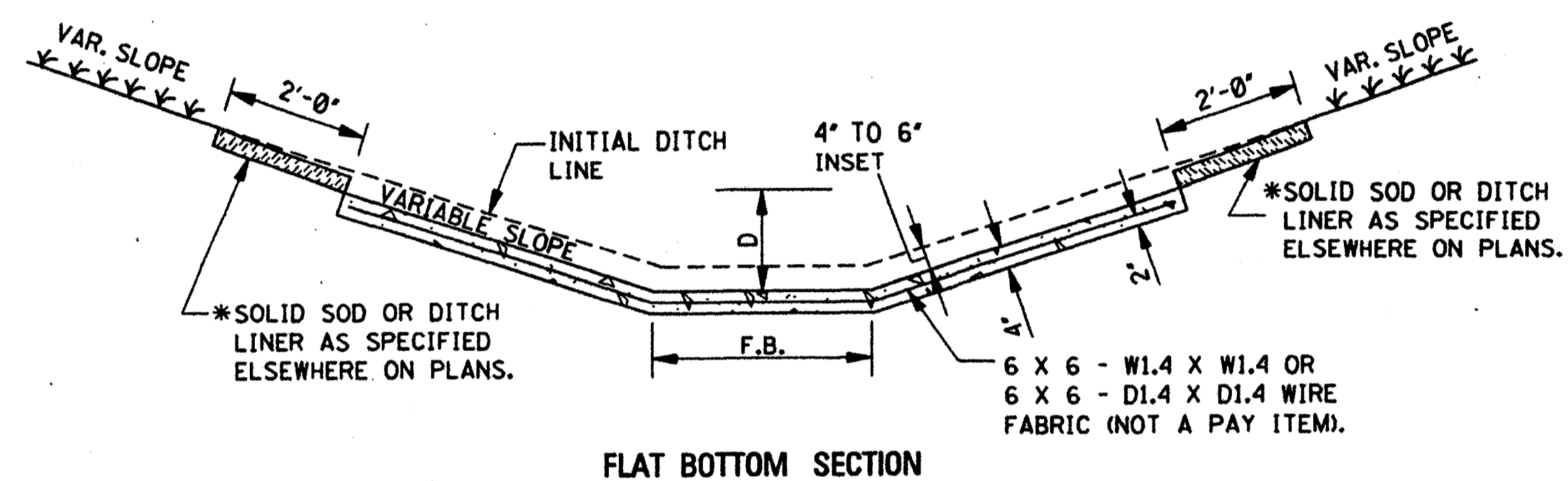
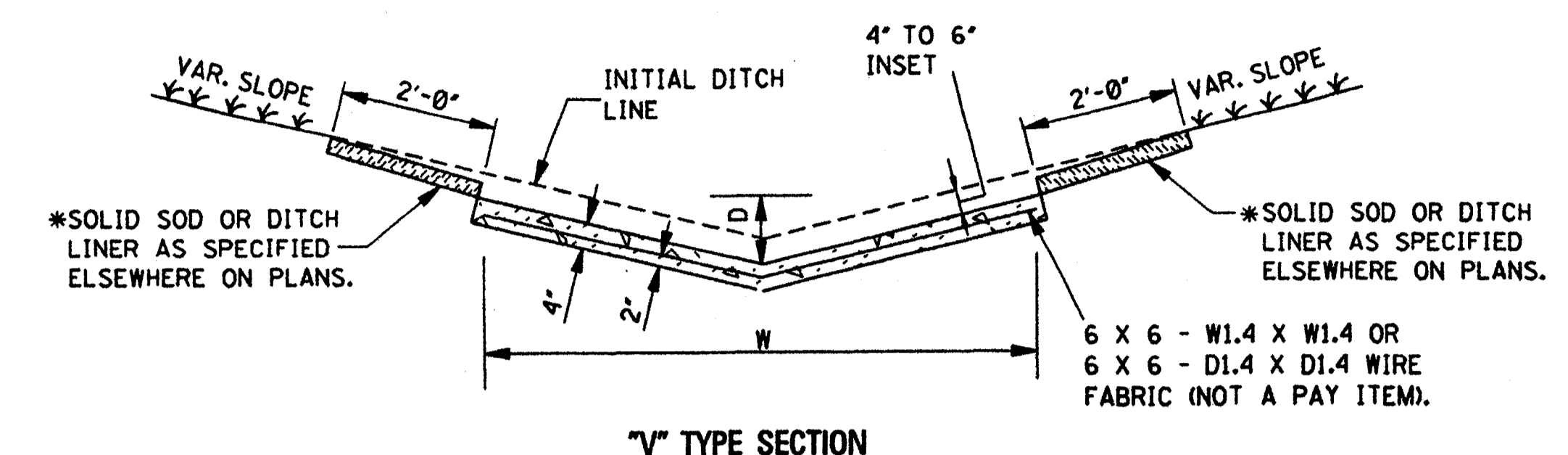
1. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL MATERIALS AND PERFORM ALL WORK FOR THE PROPER INSTALLATION, MAINTENANCE AND REMOVAL OF TEMPORARY EROSION CONTROL MEASURES NECESSARY TO CONTROL SILTATION.
2. TEMPORARY BRUSH BARRIERS SHALL BE USED AS REQUIRED BUT WILL NOT BE MEASURED FOR SEPARATE PAYMENT.
3. THE USE OF TEMPORARY EROSION CONTROL MEASURES OTHER THAN TEMPORARY BRUSH BARRIERS WILL ONLY BE REQUIRED AND MEASURED FOR SEPARATE PAYMENT WHEN APPROPRIATE PAY ITEM(S) IS INCLUDED IN THE BID SCHEDULE OF THE PROPOSAL.



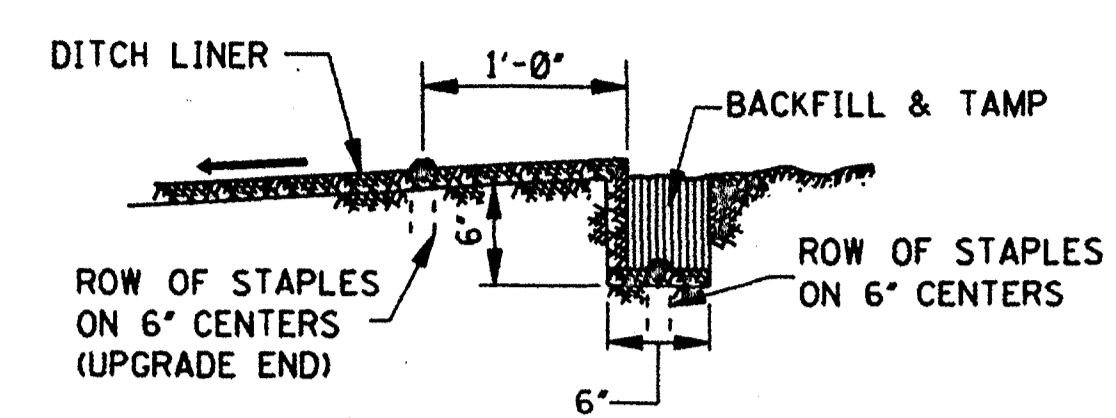
TEMPORARY EROSION CHECKS USING HAY OR STRAW BALES

NOTE: EMBED ALL BALES 3" MINIMUM INTO GROUND AND STAKE (2" X 2" X 36") SECURELY.

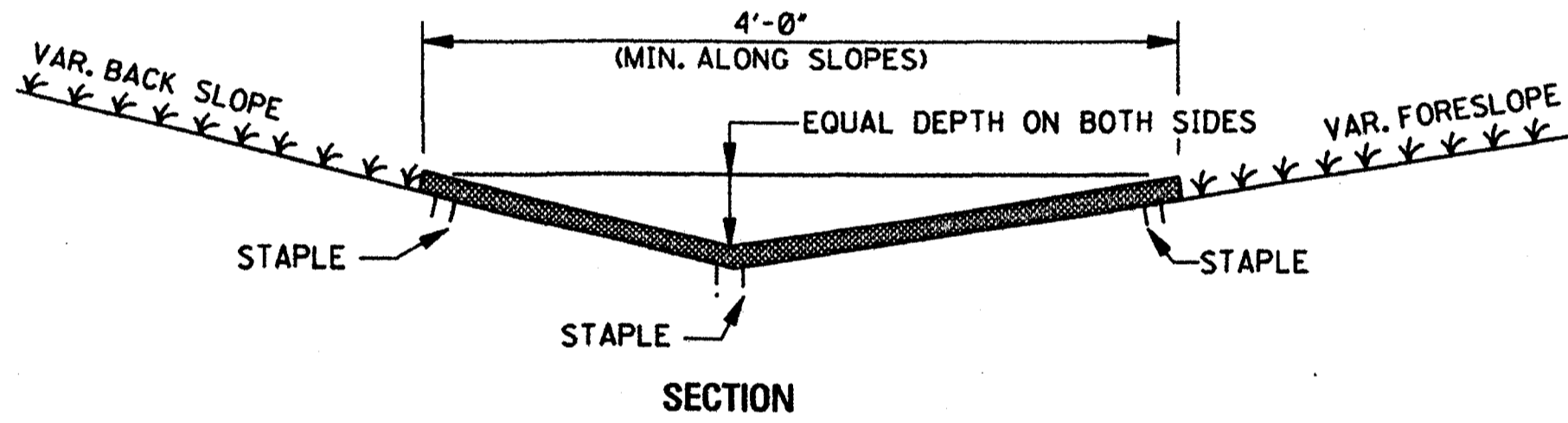
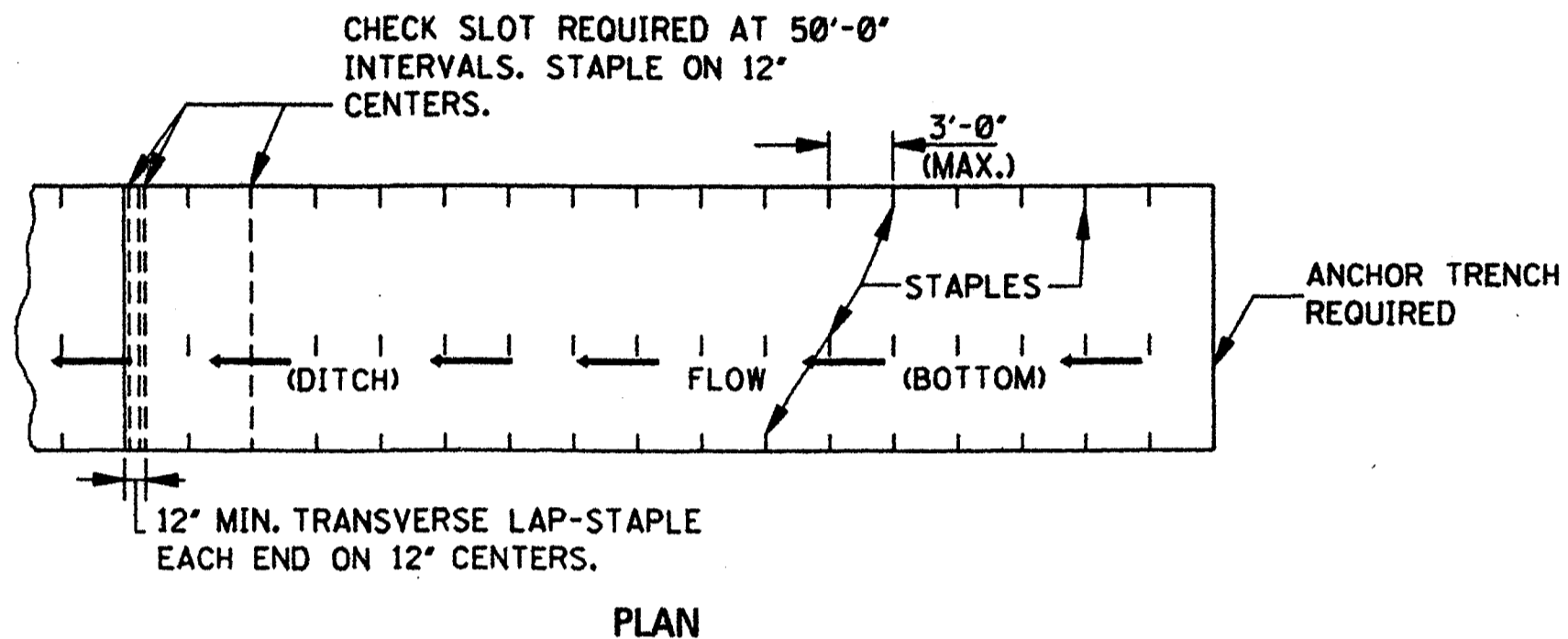
MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN		
<p>TYPICAL TEMPORARY EROSION CONTROL MEASURES (SILT FENCE, HAY BALES & BRUSH BARRIER)</p>		
REVISION	BY	WORKING NUMBER TEC-1 SHEET NUMBER 142
DATE	ISSUE DATE: OCTOBER 1, 1998	



- NOTES:
- CONCRETE PAVED DITCHES SHALL BE GROOVED AT 20'-0" INTERVALS. THE GROOVES SHALL BE CUT TO A DEPTH OF NOT LESS THAN 1".
 - DIMENSIONS D & W ARE AS FOLLOWS:
D(MINIMUM) = 6"
D(NOMINAL) = 9"
W(MINIMUM) = 24"
 - CHAIR SUPPORTS FOR THE WIRE MESH WILL NOT BE REQUIRED. HOWEVER, THE CONTRACTOR SHALL PLACE THE WIRE MESH IN A SATISFACTORY AND WORKMANLIKE MANNER TO ENSURE THAT THE FINAL POSITION IS REASONABLY NEAR THE POSITION INDICATED.
 - *4. CENTER ROW OF STAPLES MAY BE OMITTED ON DITCH LINER.

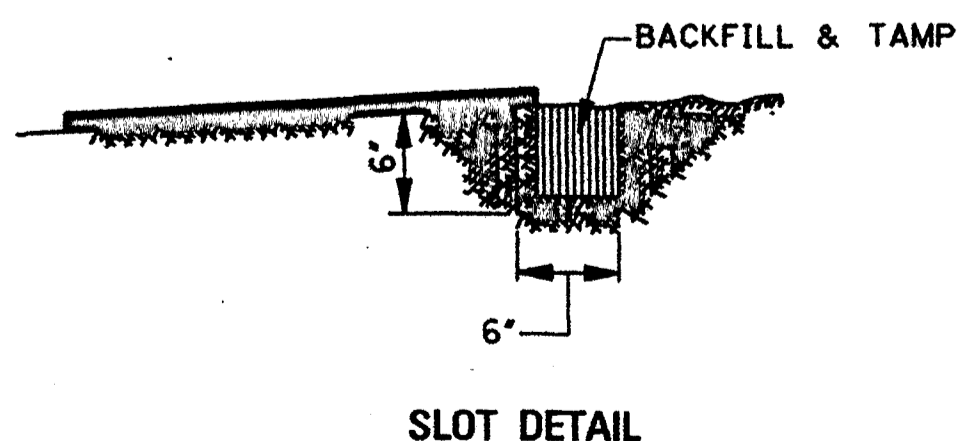
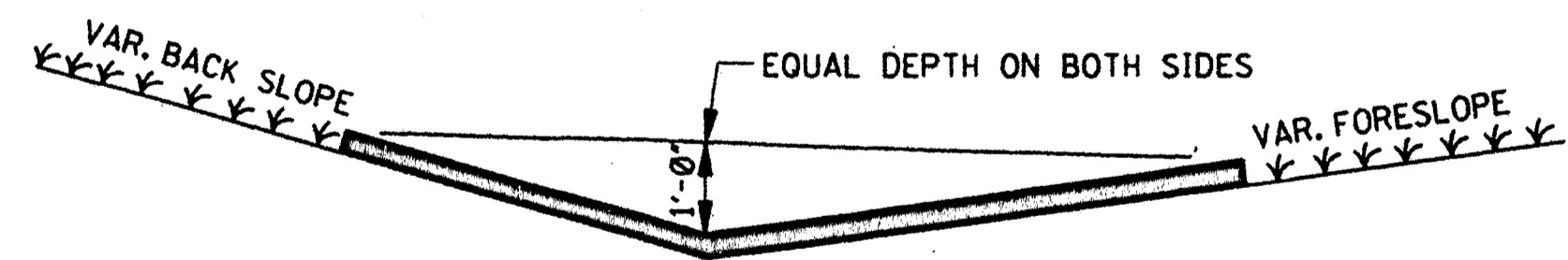


NOTE: ANCHOR TRENCH REQUIRED AT THE BEGINNING AND ENDING OF EACH AREA TO BE COVERED, EXCEPT DOWNSTREAM END ADJOINING A STRUCTURE.



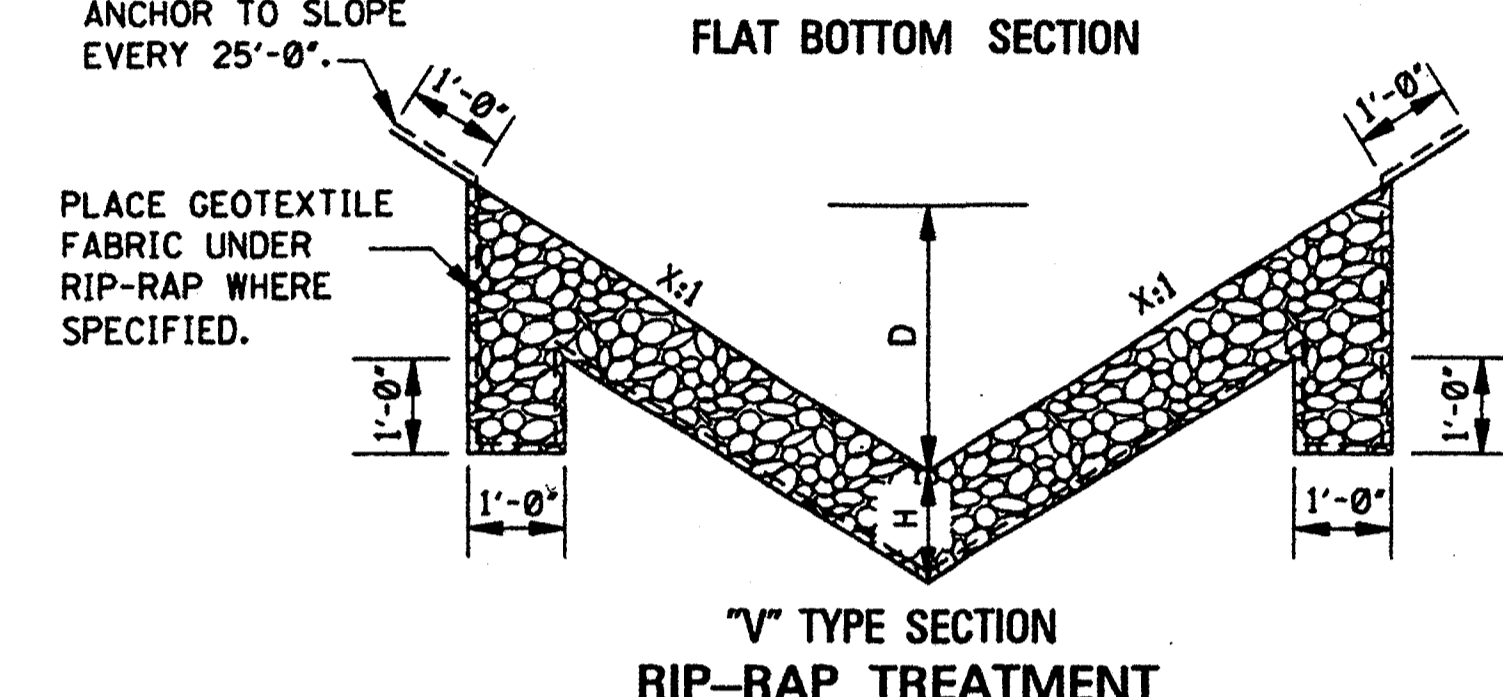
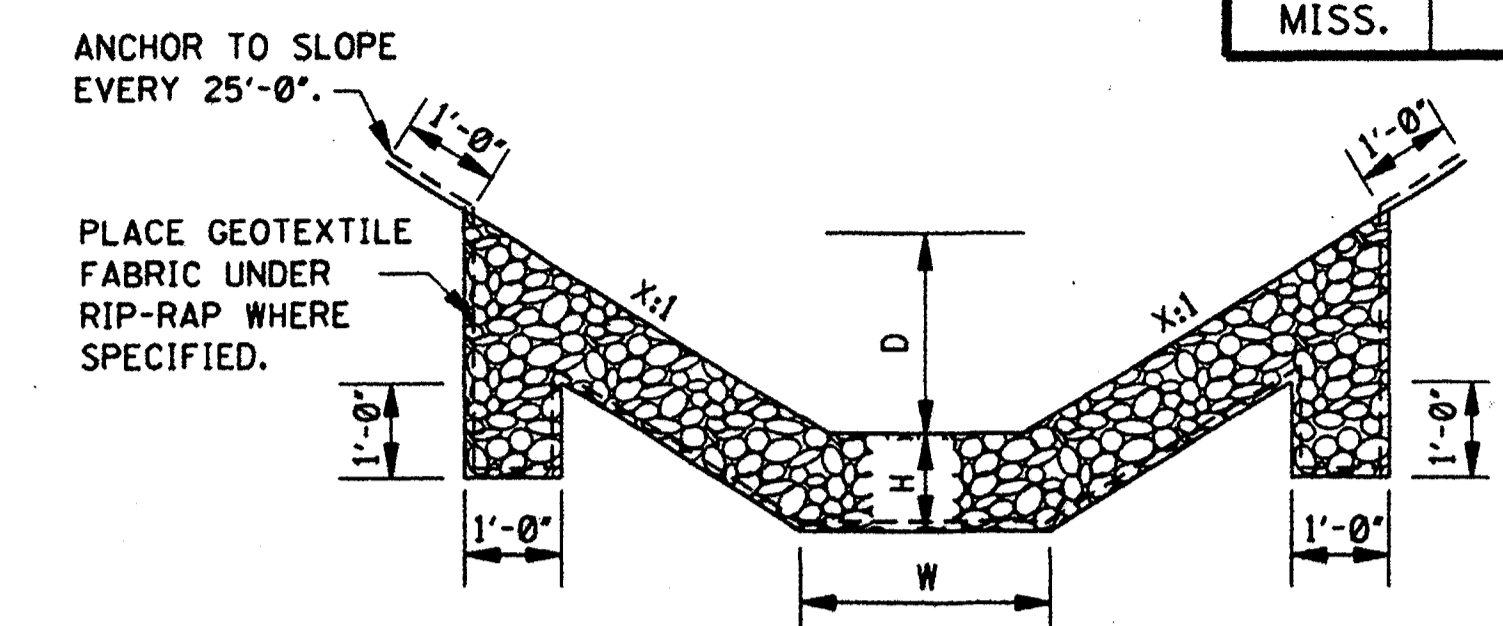
DITCH LINER TREATMENT
(EXCELSIOR BLANKET, JUTE MESH OR EROSION CONTROL FABRIC)

NOTE: DITCHES TREATED WITH DITCH LINER WILL BE VEGETATED PRIOR TO TREATMENT, UNLESS OTHERWISE INDICATED.



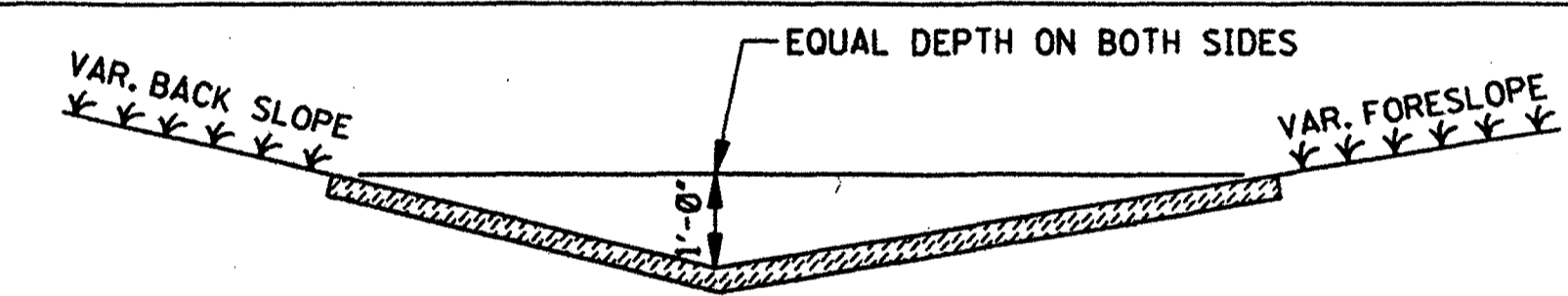
BITUMINOUS TREATED ROVING

NOTE: UPGRADE AND DOWNGRADE ENDS OF THE BITUMINOUS TREATED ROVING SHALL BE BURIED IN A 6" MINIMUM VERTICAL SLOT AND THE SOIL TAMPED FIRMLY AGAINST IT.

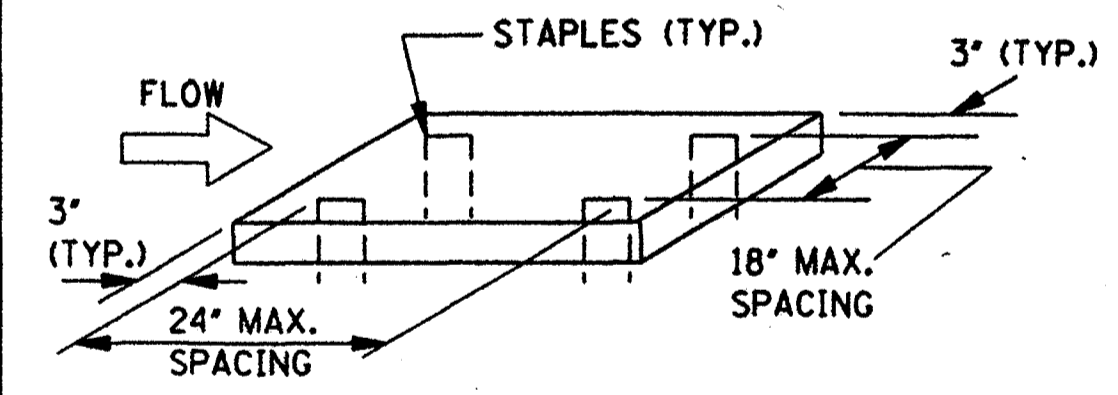


- NOTES:
- DIMENSIONS D, W AND X ARE VARIABLE AND ARE SHOWN ELSEWHERE ON THE PLANS.
 - THE RIP-RAP SIZE AND MINIMUM DEPTH "H" FOR RIP-RAP TREATMENT ARE AS FOLLOWS.

RIP-RAP SIZE & MINIMUM DEPTH "H"	
H (in)	RIP-RAP SIZE (lbs)
12"	100
18"	300



SOLID SOD TREATMENT

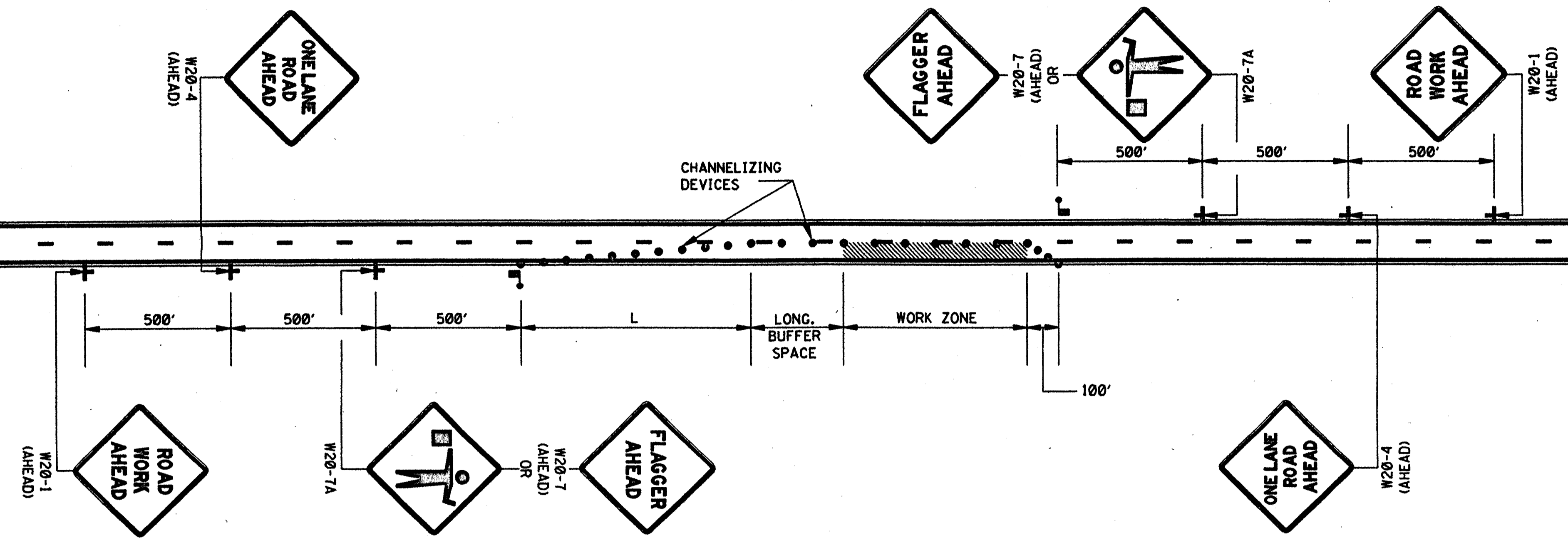


NOTE: SOLID SOD (STRIPS OR BLOCKS) ARE TO BE STAPLED, PINNED, PEGGED OR STAKED AT THE FOUR CORNERS OR AT THE MAXIMUM SPECIFIED SPACING.

GENERAL NOTE:
1. FOR LOCATION OF APPROPRIATE DITCH TREATMENTS, SEE PLAN SHEETS AS DENOTED BY THE FOLLOWING LEGEND OR AS DIRECTED BY THE ENGINEER:

- DITCH LINER
- BITUMINOUS TREATED ROVING
- SOLID SOD
- CONCRETE PAVED DITCH
- RIP-RAP

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
DETAILS OF TYPICAL DITCH TREATMENTS	
REVISION	BY
DATE	ISSUE DATE: OCTOBER 1, 1998
WORKING NUMBER DT-1	
SHEET NUMBER 145	



- LEGEND**
- FLAGGER
 - CHANNELIZING DEVICES


GENERAL NOTES:

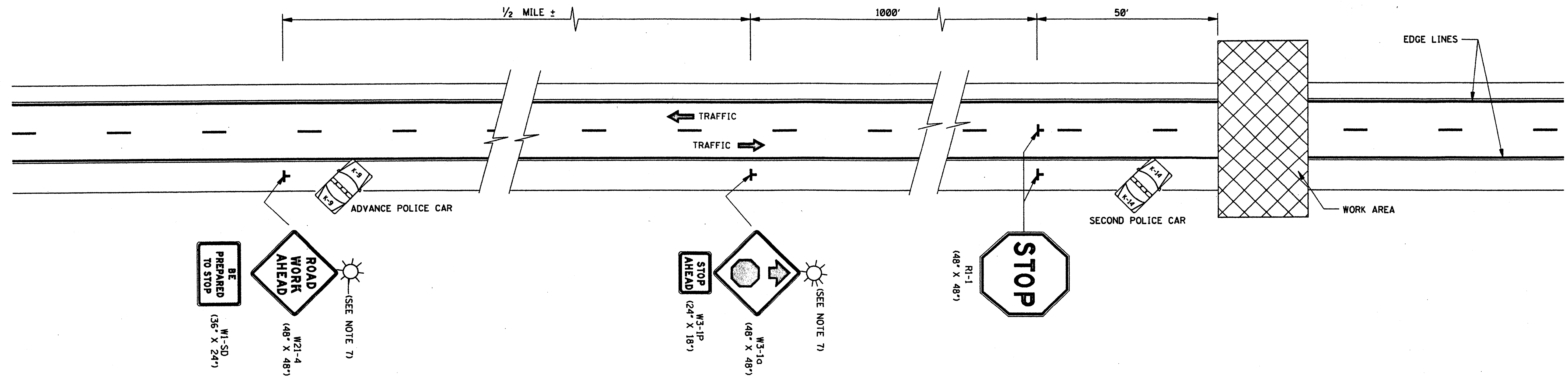
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		MINIMUM LONGITUDINAL BUFFER SPACE (ft)	TAPER † RATES
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
≤40	40	80	170	27:1
45	45	90	220	45:1
50	50	100	280	50:1
55	55	110	335	55:1
60	60	120	415	60:1
65	65	130	485	65:1
70	70	140	575	70:1

† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
 $L = WS$ FOR SPEEDS OF 45 mph OR GREATER
 $L = WS^2/60$ FOR SPEEDS OF 40 mph OR LESS
 WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
 W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
 S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 24" IN HEIGHT.
3. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" x 48".
5. WHEN THERE IS NO EXISTING HAZARD OR AT THE END OF THE WORK DAY, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
6. WHERE THE WORK ZONE IS STATIONARY, THE W20-7 (500 FT.) SIGN OR THE W20-7A SIGN TOGETHER WITH THE W20-7 (500 FT.) SUPPLEMENTAL PLATE SHOULD BE USED TO INDICATE THE DISTANCE TO THE FLAGGER.

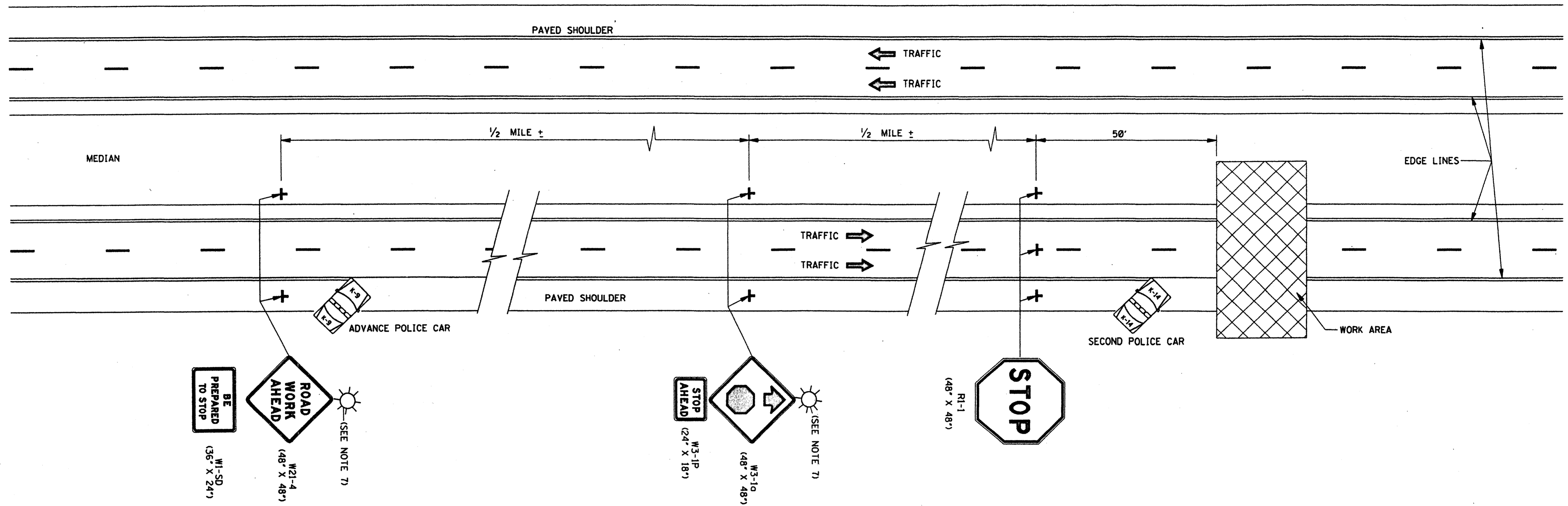
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)	
DATE			
ISSUE DATE: OCTOBER 1, 1998		WORKING NUMBER TCP-1	 SHEET NUMBER 250



GENERAL NOTES:

- THIS TYPE OF HIGHWAY CLOSURE SHALL ONLY BE USED FOR EMERGENCIES OR FOR CONSTRUCTION OPERATIONS WHEN THE DURATION OF CLOSURE WILL NOT EXCEED 30 MINUTES. AFTER THE HIGHWAY HAS BEEN CLOSED AND REOPENED VIA THIS PROCEDURE, A MINIMUM PERIOD OF 30 MINUTES SHALL ELAPSE BEFORE ANOTHER SHORT DURATION CLOSURE, EXCEPT WITH THE APPROVAL OF THE ENGINEER.
- AT LEAST TWO POLICEMEN AND TWO POLICE CARS SHALL BE PROVIDED ON EACH APPROACH TO THE CLOSURE. EACH POLICE CAR SHALL HAVE A ROOF MOUNTED ROTATING BLUE LIGHT OR LIGHT BAR.
- ROAD CLOSURES ARE NOT PERMITTED ON HOLIDAYS OR BETWEEN THE HOURS OF 6 AM TO 9 AM, 11 AM TO 1 PM AND 3 PM TO 6 PM ON MONDAY THROUGH FRIDAY, EXCEPT BY PERMISSION OF THE ENGINEER.
- THE ADVANCE POLICE CAR AND THE "W21-4 (48" X 48")", "W1-SD (36" X 24")", "W3-1a (48" X 48")", AND "W3-1p (24" X 18")" SIGNS SHALL BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES.
- TRAFFIC CONTROL FOR THE CLOSURE SHALL BE ACCOMPLISHED IN THE FOLLOWING ORDER:
 - ADVANCE POLICE CAR, LIGHTS AND FLASHERS ON.
 - "W21-4 (48" X 48")" AND "W1-SD (36" X 24")" SIGNS ERECTED.
 - "W3-1a (48" X 48")" AND "W3-1p (24" X 18")" SIGNS ERECTED.
 - SECOND POLICE CAR, LIGHTS AND FLASHERS ON.
 - "R1-1 (48" X 48")" SIGNS ERECTED TO STOP TRAFFIC. THE ORDER OF ERECTION SHALL BE IN THE FOLLOWING ORDER: RIGHT SHOULDER THEN CENTER.
- TRAFFIC CONTROL SHALL BE REMOVED IN THE FOLLOWING ORDER:
 - WITH TRAFFIC STOPPED REMOVE THE "R1-1 (48" X 48")" SIGNS TOWARD THE RIGHT SHOULDER IN THE FOLLOWING ORDER: CENTER THEN SIGN ON THE RIGHT SHOULDER.
 - AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING, THE "W3-1a (48" X 48")" AND "W3-1p (24" X 18")" SIGNS SHALL BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.
 - AFTER ALL CARS HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE "W21-4 (48" X 48")" AND "W1-SD (36" X 24")" SIGNS SHALL BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.
- UNILLUMINATED SECTIONS OF HIGHWAYS SHALL NOT BE CLOSED DURING HOURS OF DARKNESS EXCEPT FOR EMERGENCIES OR WITH THE APPROVAL OF THE ENGINEER. WHEN THE HIGHWAY MUST BE CLOSED DURING HOURS OF DARKNESS, A TYPE B HIGH INTENSITY FLASHING BARRICADE WARNING LIGHT SHALL BE USED ON EACH W21-4 AND W3-1a SIGN.
- IF AN ENTRANCE RAMP IS LOCATED BETWEEN THE W21-4 AND R1-1, THE "W21-4 (48" X 48")", "W1-SD (36" X 24")", "W3-1a (48" X 48")", AND "W3-1p (24" X 18")" SIGNS SHALL ALSO BE ERECTED ON THE RAMP SHOULDER.
- SIGN "W1-SD (36" X 24")" IS 4" SERIES "C" BLACK LEGEND AND BORDER ON ORANGE BACKGROUND.
- ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC, INCLUDING SECURING POLICE SERVICES.
- THE ABOVE DURATION WILL APPLY TO EACH APPROACH TO THE CLOSURE.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
SHORT DURATION CLOSING OF TWO-LANE TWO-WAY HIGHWAYS	
WORKING NUMBER TCP-8	SHEET NUMBER 257
ISSUE DATE: OCTOBER 1, 1998	




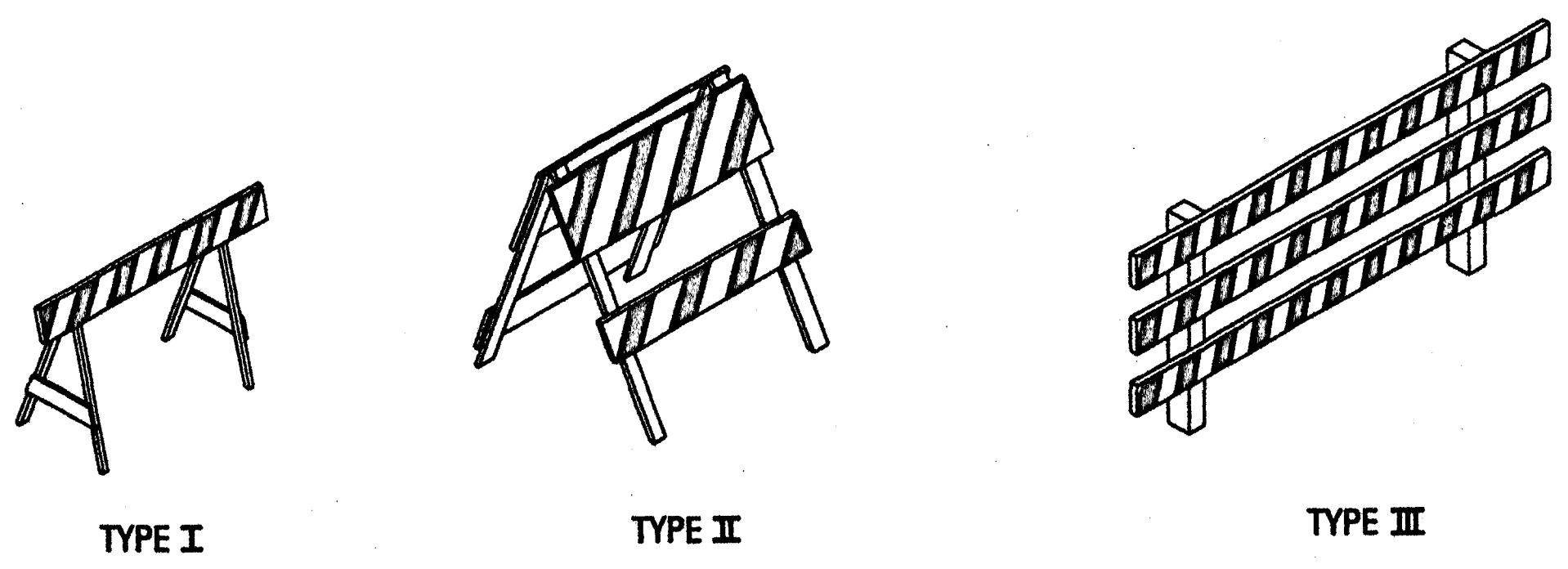
GENERAL NOTES:

1. THIS TYPE OF HIGHWAY CLOSURE SHALL ONLY BE USED FOR EMERGENCIES OR FOR CONSTRUCTION OPERATIONS WHEN THE DURATION OF CLOSURE WILL NOT EXCEED 15 MINUTES. AFTER THE DIVIDED HIGHWAY HAS BEEN CLOSED AND REOPENED VIA THIS PROCEDURE A MINIMUM PERIOD OF 30 MINUTES SHALL ELAPSE BEFORE ANOTHER SHORT DURATION CLOSURE, EXCEPT WITH THE APPROVAL OF THE ENGINEER.
2. AT LEAST TWO POLICEMEN AND TWO POLICE CARS SHALL BE PROVIDED ON EACH APPROACH TO THE CLOSURE. EACH POLICE CAR SHALL HAVE A ROOF MOUNTED ROTATING BLUE LIGHT OR LIGHT BAR.
3. ROAD CLOSURES ARE NOT PERMITTED ON HOLIDAYS OR BETWEEN THE HOURS OF 6 AM TO 9 AM, 11 AM TO 1 PM AND 3 PM TO 6 PM ON MONDAY THROUGH FRIDAY, EXCEPT BY PERMISSION OF THE ENGINEER.
4. THE ADVANCE POLICE CAR AND THE "W21-4 (48" X 48")", "W1-SD (36" X 24")", "W3-1a (48" X 48")", AND "W3-1P (24" X 18")" SIGNS SHALL BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES.

5. TRAFFIC CONTROL FOR THE CLOSURE SHALL BE ACCOMPLISHED IN THE FOLLOWING ORDER:
 - A. ADVANCE POLICE CAR, LIGHTS AND FLASHERS ON.
 - B. "W21-4 (48" X 48")" AND "W1-SD (36" X 24")" SIGNS ERECTED.
 - C. "W3-1a (48" X 48")" AND "W3-1P (24" X 18")" SIGNS ERECTED.
 - D. SECOND POLICE CAR, LIGHTS AND FLASHERS ON.
 - E. "RI-1 (48" X 48")" SIGNS ERECTED TO STOP TRAFFIC. THE ORDER OF ERECTION SHALL BE TOWARD THE MEDIAN SHOULDER IN THE FOLLOWING ORDER: RIGHT SHOULDER, THEN CENTER, THEN MEDIAN SHOULDER.
6. TRAFFIC CONTROL SHALL BE REMOVED IN THE FOLLOWING ORDER:
 - A. WITH TRAFFIC STOPPED REMOVE THE "RI-1 (48" X 48")" SIGNS TOWARD THE RIGHT SHOULDER IN THE FOLLOWING ORDER: MEDIAN, THEN CENTER, THEN SIGN ON RIGHT SHOULDER.
 - B. AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING, THE "W3-1a (48" X 48")" AND "W3-1P (24" X 18")" SIGNS SHALL BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.
 - C. AFTER ALL CARS HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE "W21-4 (48" X 48")" AND "W1-SD (36" X 24")" SIGNS SHALL BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.

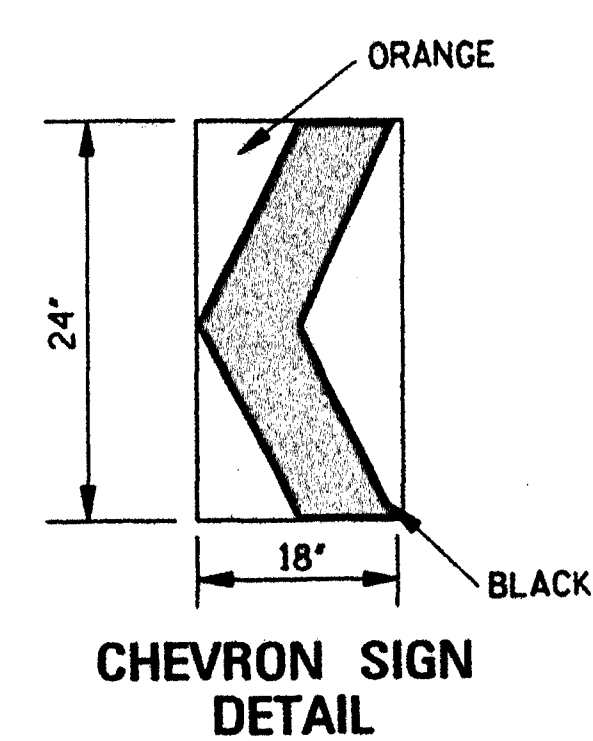
7. UNILLUMINATED SECTIONS OF HIGHWAYS SHALL NOT BE CLOSED DURING HOURS OF DARKNESS EXCEPT FOR EMERGENCIES OR WITH THE APPROVAL OF THE ENGINEER. WHEN THE HIGHWAY MUST BE CLOSED DURING HOURS OF DARKNESS, A TYPE B HIGH INTENSITY FLASHING BARRICADE WARNING LIGHT SHALL BE USED ON EACH W21-4 AND W3-1a SIGN.
8. IF AN ENTRANCE RAMP IS LOCATED BETWEEN THE W21-4 AND RI-1, THE "W21-4 (48" X 48")", "W1-SD (36" X 24")", "W3-1a (48" X 48")", AND "W3-1P (24" X 18")" SIGNS SHALL ALSO BE ERECTED ON THE RAMP SHOULDER.
9. SIGN "W1-SD (36" X 24")" IS 4" SERIES "C" BLACK LEGEND AND BORDER ON ORANGE BACKGROUND.
10. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC, INCLUDING SECURING POLICE SERVICES.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
SHORT DURATION CLOSING OF DIVIDED HIGHWAYS	
WORKING NUMBER TCP-9	 SHEET NUMBER 258
ISSUE DATE: OCTOBER 1, 1998	

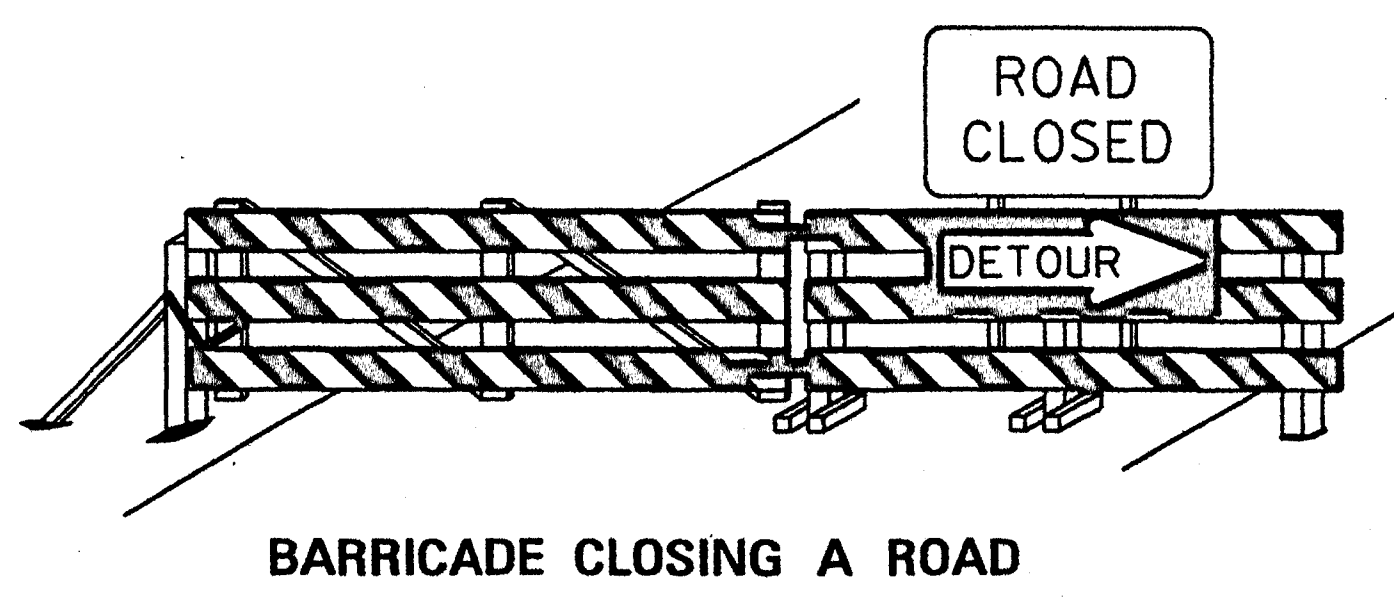


STANDARD BARRICADES

1. A TYPE I BARRICADE CONSISTS OF ONE (1) HORIZONTAL RAIL SUPPORTED BY A DEMOUNTABLE FRAME OR A LIGHT "A" FRAME. A TYPE I BARRICADE NORMALLY WOULD BE USED ON CONVENTIONAL ROADS OR URBAN STREETS AND ARTERIALS.
2. A TYPE II BARRICADE CONSISTS OF TWO (2) HORIZONTAL RAILS ON A LIGHT "A" FRAME. TYPE II BARRICADES ARE INTENDED FOR USE ON EXPRESSWAYS AND FREEWAYS AND OTHER HIGH-SPEED ROADWAYS.
3. TYPE I AND TYPE II BARRICADES ARE INTENDED FOR USE WHERE THE HAZARD IS RELATIVELY SMALL AS, FOR EXAMPLE, ON CITY STREETS, OR FOR THE MORE OR LESS CONTINUOUS DELIMITING OF A RESTRICTED ROADWAY, OR FOR TEMPORARY DAYTIME USE.
4. A TYPE III BARRICADE CONSISTS OF THREE (3) HORIZONTAL RAILS SUPPORTED BY FIXED POSTS, A RIGID SKID, A HEAVY DEMOUNTABLE FRAME OR A HEAVY, HINGED "A" FRAME.
5. TYPE III BARRICADES ARE INTENDED FOR USE ON CONSTRUCTION AND MAINTENANCE PROJECTS AS WING BARRICADES AND AT ROAD CLOSURES, WHERE THEY MUST REMAIN IN PLACE FOR EXTENDED PERIODS.
6. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
7. DO NOT PLACE SANDBAGS OR OTHER DEVICES TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
8. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.



1. A CHEVRON SIGN CONSISTS OF A BLACK CHEVRON TYPE MARKING ON AN ORANGE BACKGROUND AND SHALL POINT IN THE DIRECTION OF TRAFFIC FLOW.
2. THE CHEVRON SIGN SHALL BE MOUNTED ON FIXED POST OR RIGID SKID.
3. CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHALL BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPE.

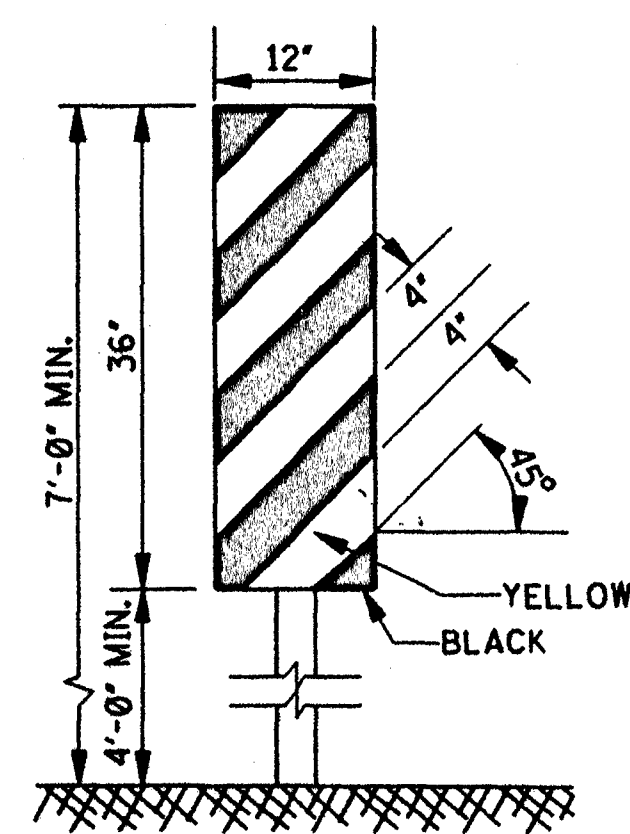


BARRICADE CLOSING A ROAD

BARRICADE CHARACTERISTICS

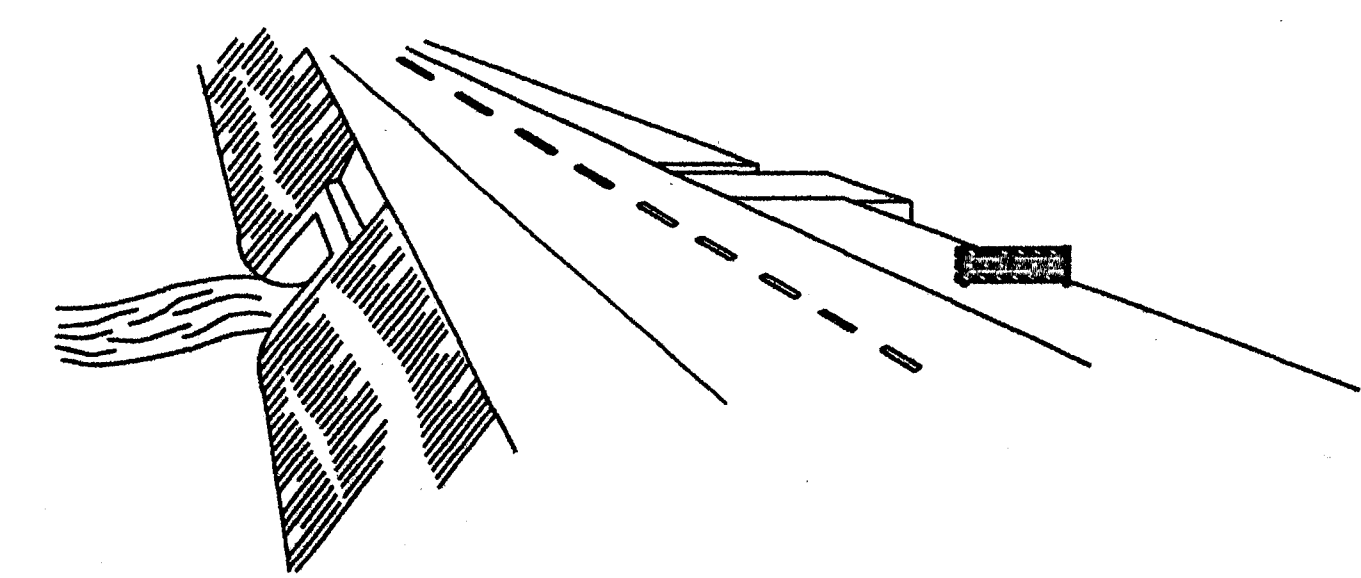
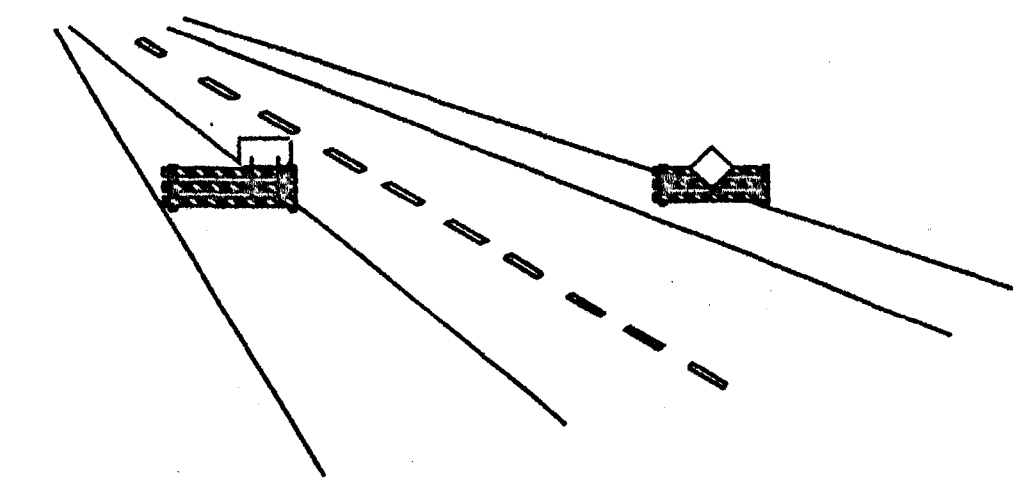
	I	II	III
WIDTH OF RAIL **	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL **	24" MIN.	24" MIN.	48" MIN.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF REFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS
TYPE OF FRAME	LIGHT	LIGHT "A" FRAME	POST OR SKID

* 1. FOR RAILS LESS THAN 36' LONG, 4" WIDE STRIPES MAY BE USED.
 ** 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 in² OF REFLECTIVE AREA FACING TRAFFIC.



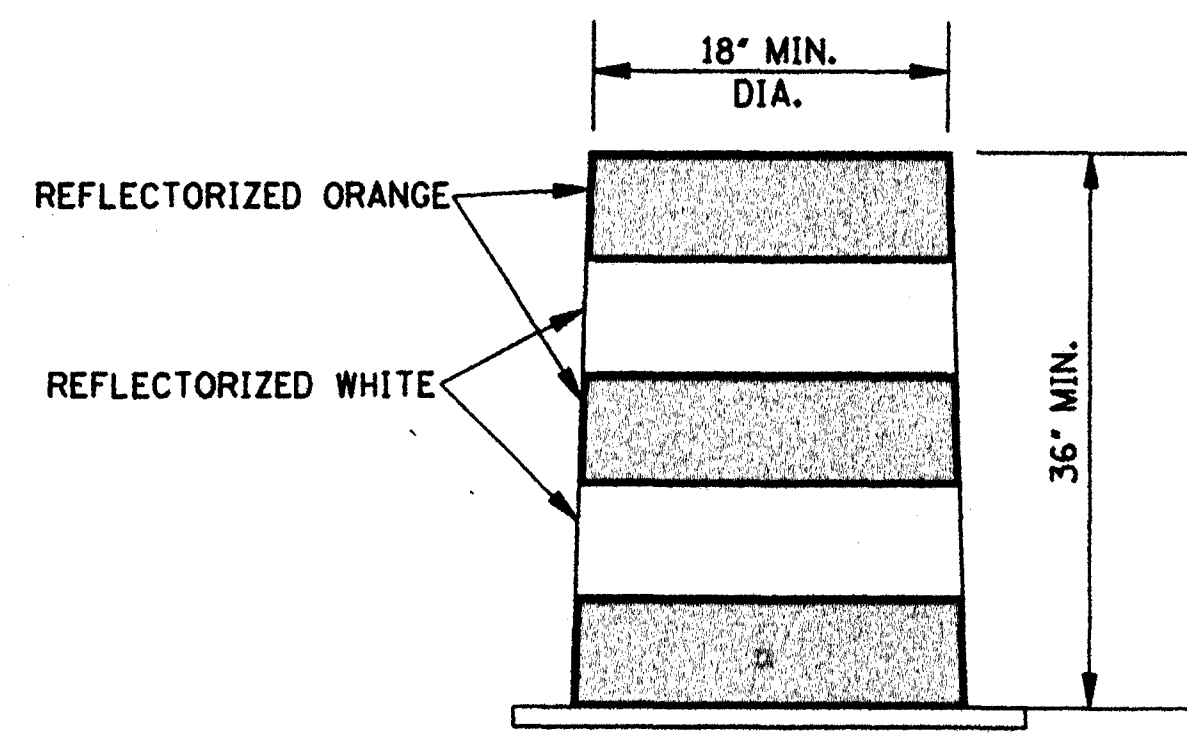
TYPE 3 OBJECT MARKER (OM-3R)

1. TYPE 3 OBJECT MARKERS SHALL BE USED AT ALL EXPOSED BRIDGE ABUTMENTS AND AT OTHER LOCATIONS AS DEEMED NECESSARY BY THE ENGINEER.
2. THE OM-3R IS SHOWN. THE OM-3L IS SIMILAR EXCEPT THE STRIPES SLOPE DOWNWARD FROM THE UPPER LEFT SIDE TO THE LOWER RIGHT SIDE AND SHALL BE PLACED ON THE LEFT SIDE OF THE OBJECT.
3. THE INSIDE EDGE OF THE MARKER SHALL BE IN LINE WITH THE INNER EDGE OF THE OBSTRUCTION.



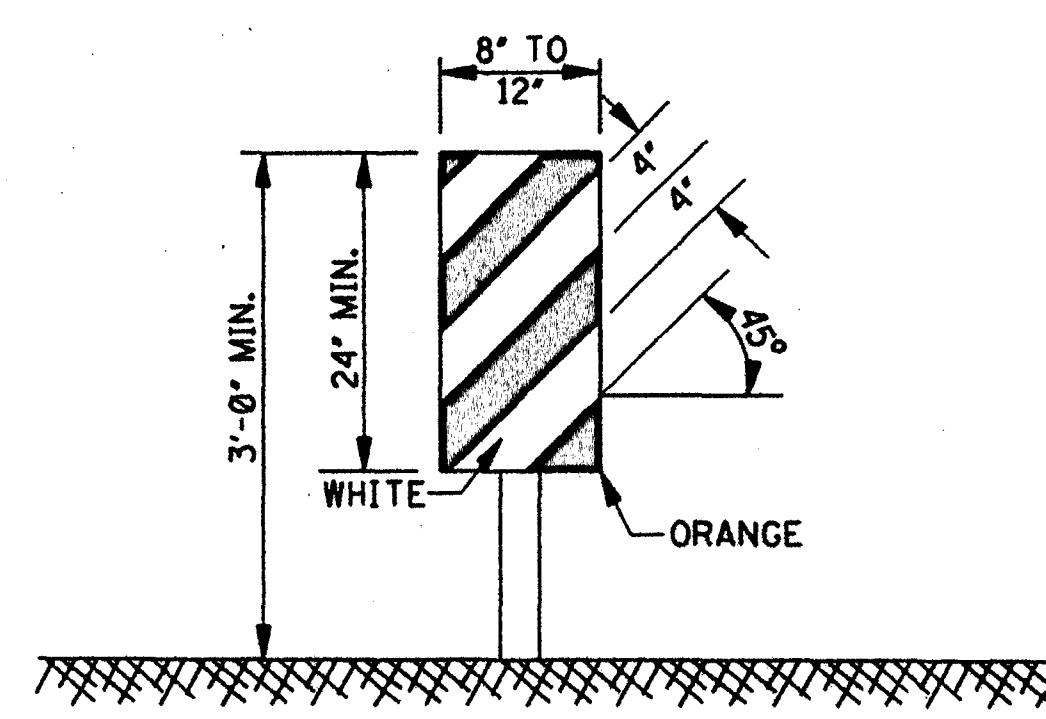
WING BARRICADES

1. WING BARRICADES ARE TYPE III BARRICADES ERECTED ON THE SHOULDER ON ONE OR BOTH SIDES OF THE PAVEMENT TO GIVE THE SENSATION OF A NARROWING OR RESTRICTED ROADWAY. WING BARRICADES MAY BE USED AS A MOUNTING FOR THE ADVANCE WARNING SIGNS OR FLASHERS.
2. WING BARRICADES SHOULD BE USED:
 - A. IN ADVANCE OF A CONSTRUCTION PROJECT EVEN WHEN NO PART OF THE ROADWAY IS ACTUALLY CLOSED.
 - B. IN ADVANCE OF ALL BRIDGE OR CULVERT WIDENING OPERATIONS.



PLASTIC DRUM STRIPING DETAIL

1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) REFLECTORIZED, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE & 2 WHITE) 6" WIDE.
2. DRUMS SHOULD NEVER BE PLACED IN THE ROADWAY WITHOUT WARNING SIGNS.
3. WHERE PRACTICAL PLASTIC DRUMS SHALL BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.



VERTICAL PANEL

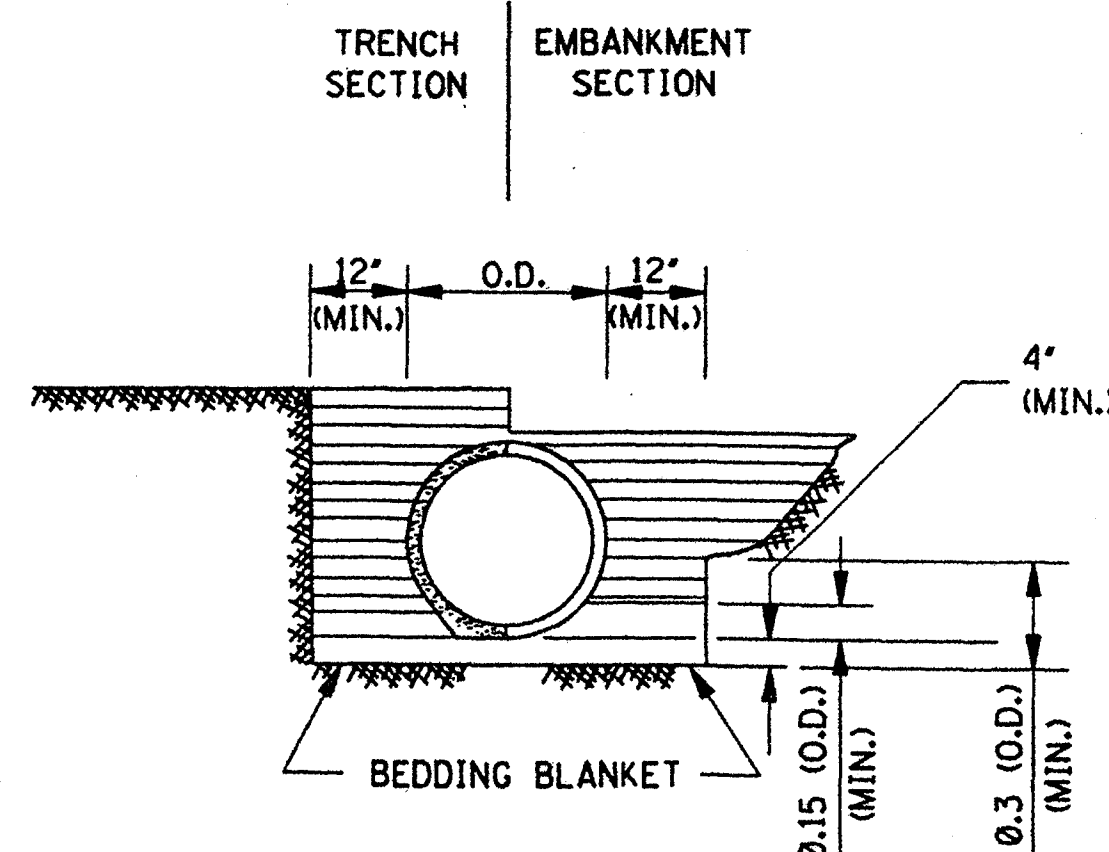
1. VERTICAL PANELS CONSIST OF AT LEAST ONE PANEL 8" TO 12" IN WIDTH AND A MINIMUM OF 24" IN HEIGHT.
2. THE DIAGONAL STRIPES SHALL SLOPE DOWNWARD IN THE DIRECTION THAT TRAFFIC IS TO PASS THE PANEL. THE PANELS SHALL BE MOUNTED WITH THE TOP A MINIMUM OF 36" ABOVE THE ROADWAY ON A SINGLE LIGHTMASS POST.
3. VERTICAL PANELS USED ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH-SPEED ROADWAYS SHALL HAVE A MINIMUM OF 270 in² OF RETROREFLECTIVE AREA FACING TRAFFIC.
4. FOR TWO-WAY TRAFFIC OPERATIONS, BACK-TO-BACK PANELS SHALL BE USED.

- GENERAL NOTES:
1. MARKINGS ON ALL DEVICES SHOWN ON THIS SHEET SHALL BE HIGH INTENSITY REFLECTIVE SHEETING.
 2. THE TRAFFIC CONTROL PLAN WILL LIST THE VARIOUS TRAFFIC CONTROL DEVICES REQUIRED FOR EACH PROJECT.

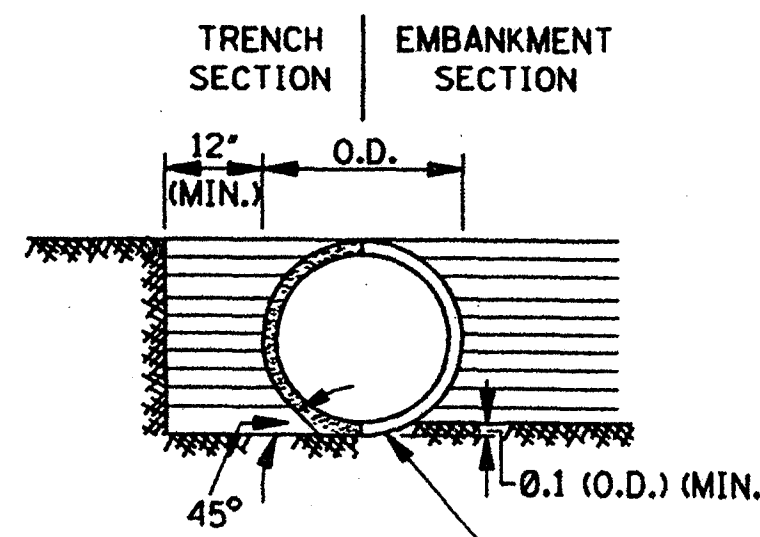
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p>HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS</p> 	
DATE			
ISSUE DATE: OCTOBER 1, 1998		WORKING NUMBER TCP-10	SHEET NUMBER 259

CORRUGATED STEEL AND ALUMINUM PIPE (ROUND) H-20 LOADING						
PIPE DIAMETER (in)	MINIMUM COVER FROM TOP OF PIPE TO TOP OF SUBGRADE (in)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft)				
		SHEET THICKNESS (in)				
		0.064 STEEL 0.060 ALUM. 16 GAGE	0.079 STEEL 0.075 ALUM. 14 GAGE	0.109 STEEL 0.105 ALUM. 12 GAGE	0.138 STEEL 0.135 ALUM. 10 GAGE	0.168 STEEL 0.164 ALUM. 8 GAGE
		2 1/2" x 1/2" CORRUGATED STEEL / RIVETED, WELDED OR HELICAL		3" x 1" OR 5" x 1" CORRUGATED STEEL / RIVETED, WELDED, HELICAL OR BOLTED		2 1/2" x 1/2" CORRUGATED ALUMINUM RIVETED OR HELICAL
12"	12"	84' / - / 45'	91' / - / 45'	- / - / 78'	- / - / 81'	- / - / 84'
15"	12"	67' / - / -	73' / - / -	- / - / -	- / - / -	- / - / -
18"	12"	56' / - / 30'	61' / - / 30'	- / - / 52'	- / - / 54'	- / - / 56'
24"	12"	42' / - / 22'	46' / - / 22'	59' / - / 39'	- / - / 41'	- / - / 42'
30"	12"	34' / - / 18'	36' / - / 18'	47' / - / 31'	- / - / 32'	- / - / 34'
36"	12"	28' / 48' / 15'	30' / 60' / 15'	39' / 78' / 26'	41' / 89' / 27'	- / 101' / 28'
42"	12"	31' / 41' / -	43' / 51' / 26'	46' / 64' / 43'	48' / 71' / 43'	50' / 79' / 44'
48"	12"	27' / 36' / -	37' / 45' / -	45' / 57' / 40'	46' / 61' / 41'	47' / 66' / 43'
54"	12"	- / 32' / -	33' / 40' / -	43' / 52' / 35'	44' / 55' / 37'	45' / 59' / 38'
60"	12"	- / 29' / -	- / 36' / -	43' / 49' / -	43' / 51' / 33'	44' / 54' / 34'
66"	12"	- / 26' / -	- / 33' / -	42' / 47' / -	43' / 49' / 30'	43' / 51' / 31'
72"	12"	- / 24' / -	- / 30' / -	- / 44' / -	41' / 47' / -	43' / 49' / 29'
78"	12"	- / 22' / -	- / 28' / -	- / 41' / -	- / 46' / -	39' / 47' / -
84"	12"	- / 21' / -	- / 26' / -	- / 38' / -	- / 45' / -	35' / 46' / -
90"	12"	- / 19' / -	- / 24' / -	- / 35' / -	- / 43' / -	- / 45' / -
96"	12"	- / 18' / -	- / 22' / -	- / 33' / -	- / 40' / -	- / 44' / -
102"	24"	- / 17' / -	- / 21' / -	- / 31' / -	- / 38' / -	- / 42' / -
108"	24"	- / - / -	- / 20' / -	- / 30' / -	- / 35' / -	- / 39' / -
114"	24"	- / - / -	- / 19' / -	- / 28' / -	- / 34' / -	- / 37' / -
120"	24"	- / - / -	- / - / -	- / 27' / -	- / 32' / -	- / 35' / -

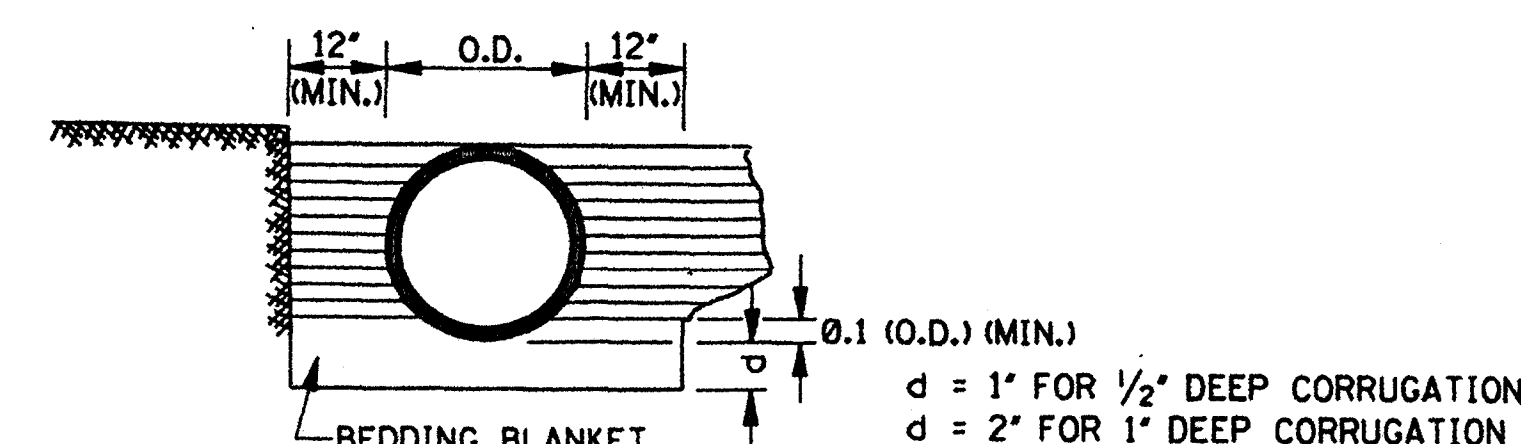
NOTE: THE AVERAGE INSIDE DIAMETER SHALL NOT VARY MORE THAN ONE (1) PERCENT OR 1/2", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS (AASHTO M 36/M 36 & AASHTO M 196/M 196).



CLASS B



CLASS C



CLASS C MODIFIED

MAXIMUM HEIGHT OF FILL OVER REINFORCED CONCRETE PIPE			
CLASS OF PIPE	TYPE OF BACKFILL	MAXIMUM COVER (ft)	
		CLASS 'C' BEDDING	CLASS 'B' BEDDING
III	NORMAL	16'	-
IV	NORMAL	23'	28'
V	NORMAL	30'	36'
IV	IMPERFECT	-	90'
V	IMPERFECT	-	115'

NOTE: CLASS OF PIPE AND BEDDING TO BE CONSISTENT THROUGHOUT THE PIPE LENGTH.

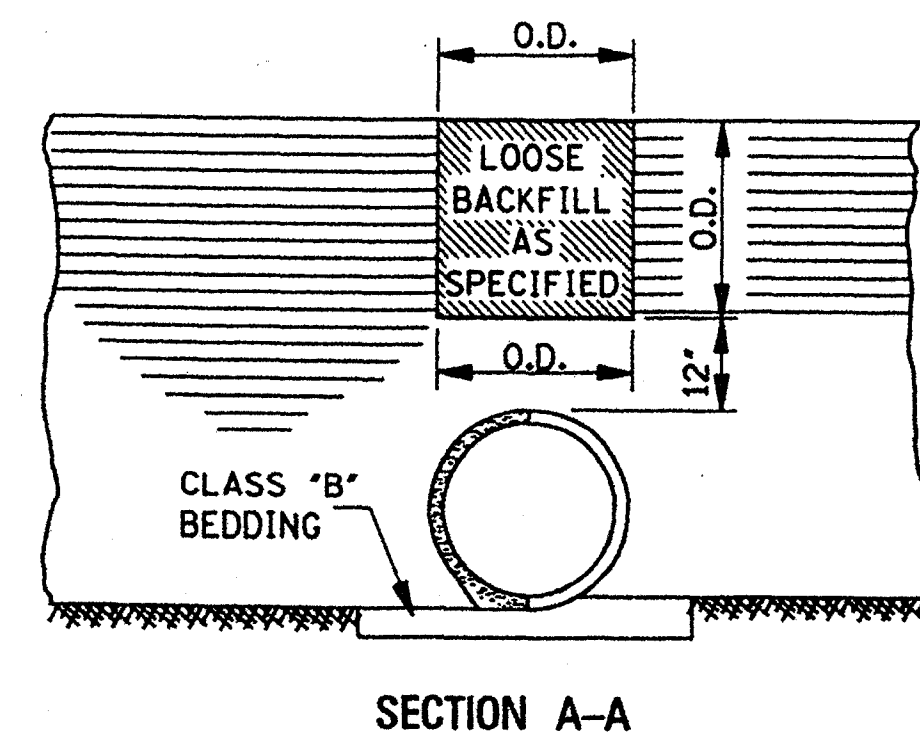
MAXIMUM HEIGHT OF FILL OVER CLASS 2 NONREINFORCED CONCRETE PIPE, PERFORATED AND/OR PLAIN, FOR UNDERDRAINS				
PIPE SIZE (in)	MAXIMUM COVER (ft)			
	BEDDING CLASS 'C'/CLASS 'B'			
	TRENCH	SAND & GRAVEL	DAMP CLAY	PROJECTING
4"	2.00'	*	*	34'/42'
6"	2.00'	*	*	25'/30'
8"	2.25'	*	16' / *	19'/24'
10"	2.50'	*	12' / 20'	16'/19'
12"	2.75'	*	12' / 18'	14'/17'

NOTE: CLASS OF PIPE AND BEDDING TO BE CONSISTENT THROUGHOUT THE PIPE LENGTH.

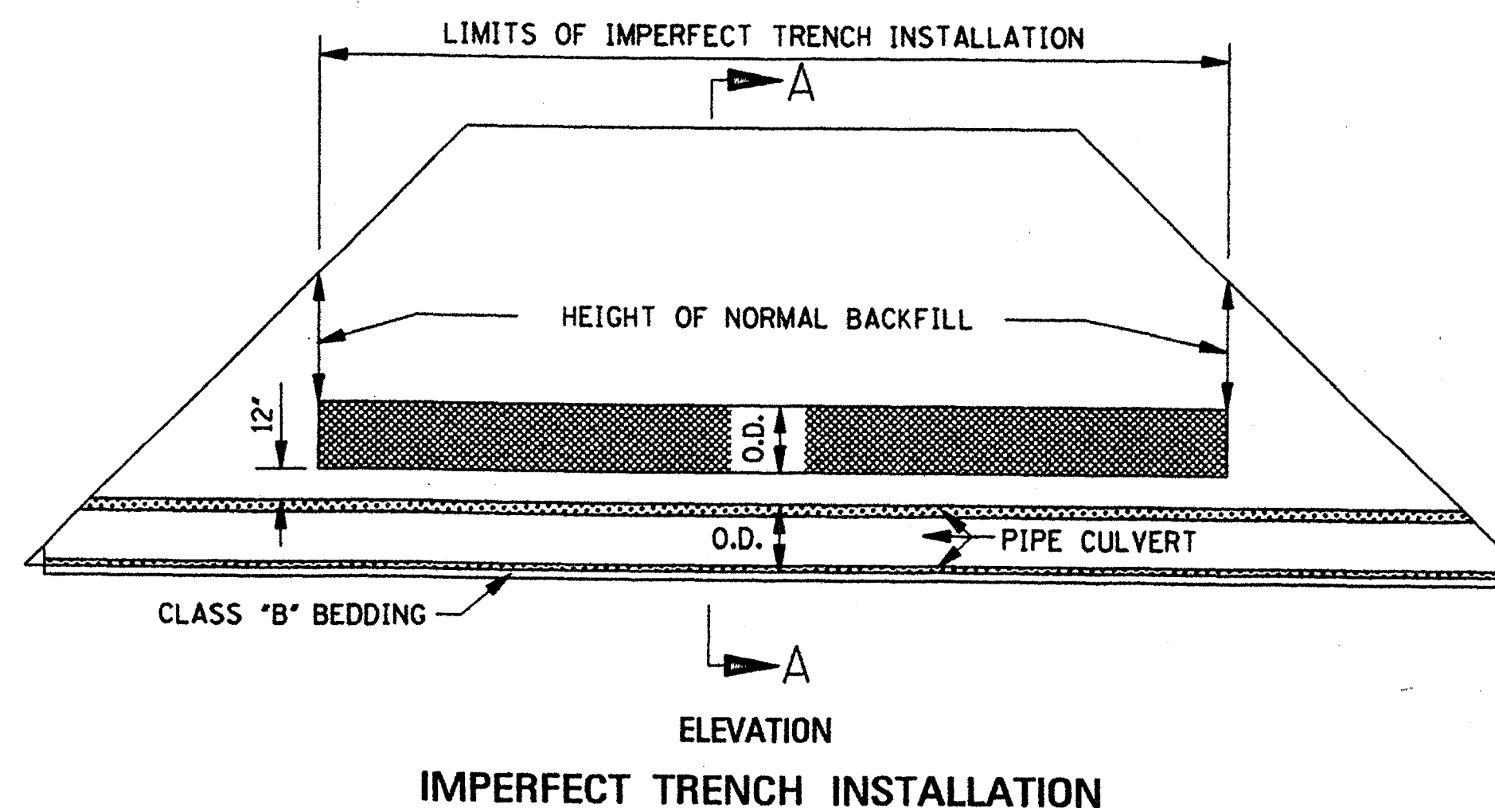
CORRUGATED METAL PIPE ARCHES H-20 LOADING									
EQUIV. DIAMETER (in)	PIPE DIMENSION (SPAN X RISE) (in)	MINIMUM CORNER RADIUS (in)	MINIMUM COVER FROM TOP OF PIPE TO TOP OF SUBGRADE FOR 2 tons/ft ² (in)	STEEL			ALUMINUM		
				MINIMUM THICKNESS REQUIRED (in)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft) FOR THE FOLLOWING CORNER BEARING PRESSURE (tons/ft ²)		MINIMUM THICKNESS REQUIRED (in)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft) FOR THE FOLLOWING CORNER BEARING PRESSURE (tons/ft ²)	
					2 tons/ft ²	3 tons/ft ²		2 tons/ft ²	3 tons/ft ²
				2 1/2" x 1/2" CORRUGATION RIVETED, WELDED OR HELICAL			2 1/2" x 1/2" CORRUGATION RIVETED OR HELICAL		
15"	17' x 13'	3"	18"	0.064"	13'	15'+	0.060"	15'	-
18"	21' x 15'	3"	18"	0.064"	12'	15'+	0.060"	14'	-
24"	28' x 20'	3"	18"	0.064"	10'	15'+	0.060"	10'	15'+
30"	35' x 24'	3"	18"	0.079"	9'	14'	0.060"	9'	14'
36"	42' x 29'	3 1/2"	18"	0.079"	9'	13'	0.075"	9'	13'
42"	49' x 33'	4"	18"	0.079"	8'	12'	0.105"	8'	12'
48"	57' x 38'	5"	18"	0.109"	8'	12'	0.135"	8'	12'
54"	64' x 43'	6"	18"	0.109"	8'	12'	0.135"	8'	12'
60"	71' x 47'	7"	18"	0.138"	8'	12'	0.164"	8'	12'
66"	77' x 52'	8"	18"	0.168"	8'	12'			
72"	83' x 57'	9"	18"	0.168"	9'	13'			
				5" x 1" OR 3" x 1" CORRUGATION RIVETED, WELDED OR HELICAL					
36"	40' x 31'	5"	18"	0.079"	12'	15'+			
42"	46' x 36'	6"	18"	0.079"	12'	15'+			
48"	53' x 41'	7"	18"	0.079"	12'	15'+			
54"	60' x 46'	8"	18"	0.079"	12'	15'+			
60"	66' x 51'	9"	18"	0.079"	12'	15'+			
66"	73' x 55'	12"	18"	0.079"	15'+	-			
72"	81' x 59'	14"	18"	0.079"	15'	-			
78"	87' x 63'	14"	18"	0.079"	14'	15'+			
84"	95' x 67'	16"	18"	0.109"	13'	15'+			
90"	103' x 71'	16"	24"	0.109"	12'	15'+			
96"	112' x 75'	18"	24"	0.109"	11'	15'+			

NOTE: 1. THE AVERAGE INSIDE DIAMETER SHALL NOT VARY MORE THAN ONE (1) PERCENT OR 1/2", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS. (AASHTO M 36/M 36 & AASHTO M 196/M 196).

† 2. BEARING PRESSURES EXCEEDING 2 tons/ft² REQUIRED FOR GIVEN FILL HEIGHT SHALL HAVE FOUNDATION MATERIALS INVESTIGATED TO DETERMINE BEARING CAPACITY.



SECTION A-A

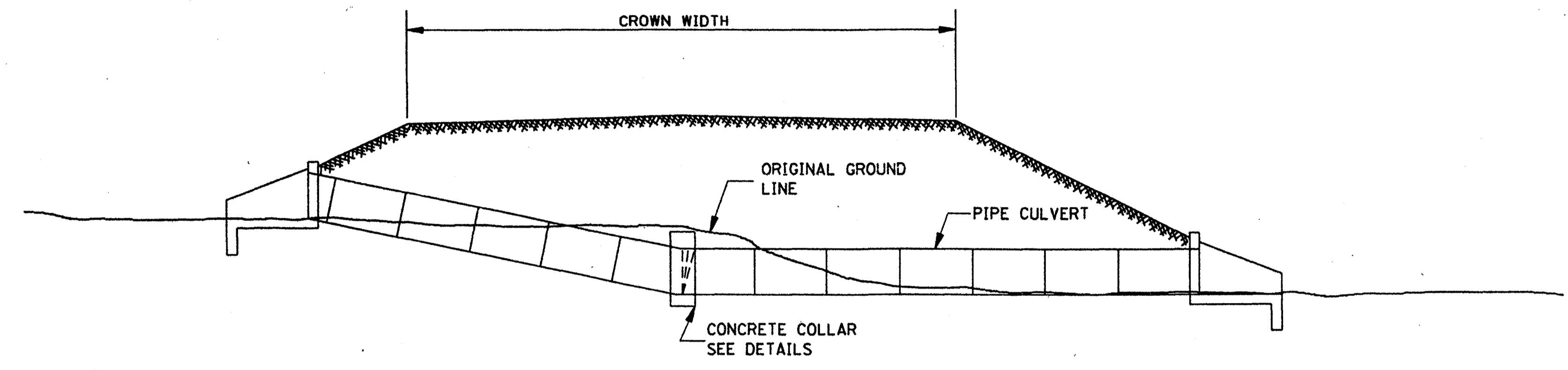


IMPERFECT TRENCH INSTALLATION

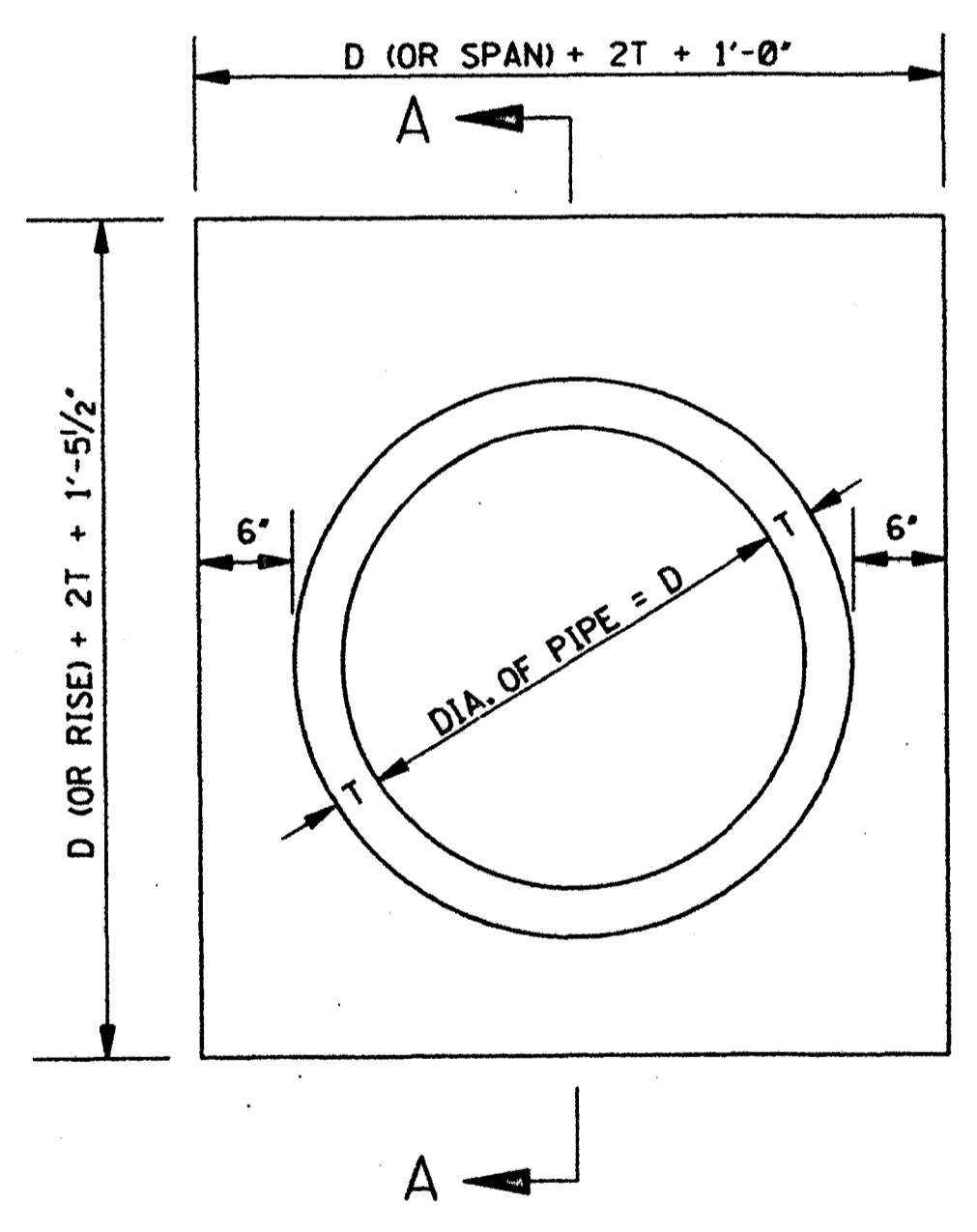
GENERAL NOTES:

1. MINIMUM SPACING BETWEEN MULTIPLE LINES OF PARALLEL PIPE SHALL BE THE DISTANCE REQUIRED FOR INSTALLING THE ADJACENT FLARED END SECTIONS OR AS SHOWN ON THE HEADWALL DRAWINGS FOR CONDUITS REQUIRING HEADWALLS.
2. UNLESS OTHERWISE INDICATED, THE TOP OF THE PIPE SHALL BE BELOW THE TOP OF THE SUBGRADE, AND A MINIMUM OF 12" OF COVER OVER THE TOP OF THE PIPE SHALL BE MAINTAINED BETWEEN THE SHOULDER LINES.
3. WHERE PRE-BED PIPE IS INSTALLED, FLARED END SECTIONS FROM OTHER MANUFACTURERS MAY BE JOINED TO PRE-BED PIPE PROVIDED A CONCRETE COLLAR IS PLACED AT THE CONTRACTOR'S EXPENSE AND A DEFORMATION TO THE PIPE'S FLOWLINE IS NOT EVIDENT ON FINAL PLACEMENT.

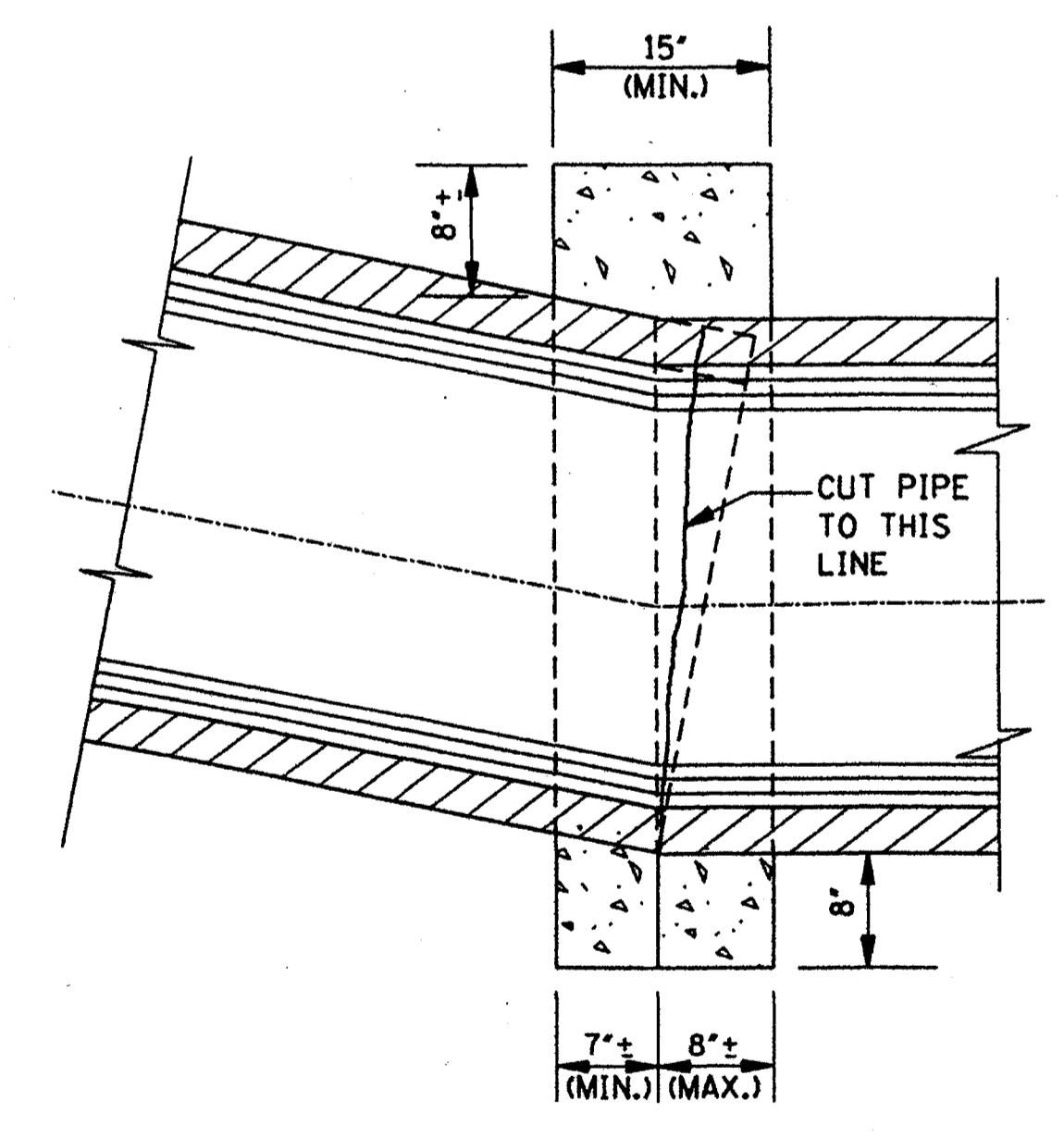
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p style="text-align: center;">PIPE CULVERT INSTALLATION</p>	
DATE			
ISSUE DATE:		OCTOBER 1, 1998	
WORKING NUMBER		PI-1	
SHEET NUMBER		300	



TYPICAL INSTALLATION FOR PIPE CULVERT WITH BROKEN FLOW LINE



ELEVATION OF CONCRETE COLLAR
NOTE: CIRCULAR PIPE IS SHOWN, ARCH PIPE IS SIMILAR.




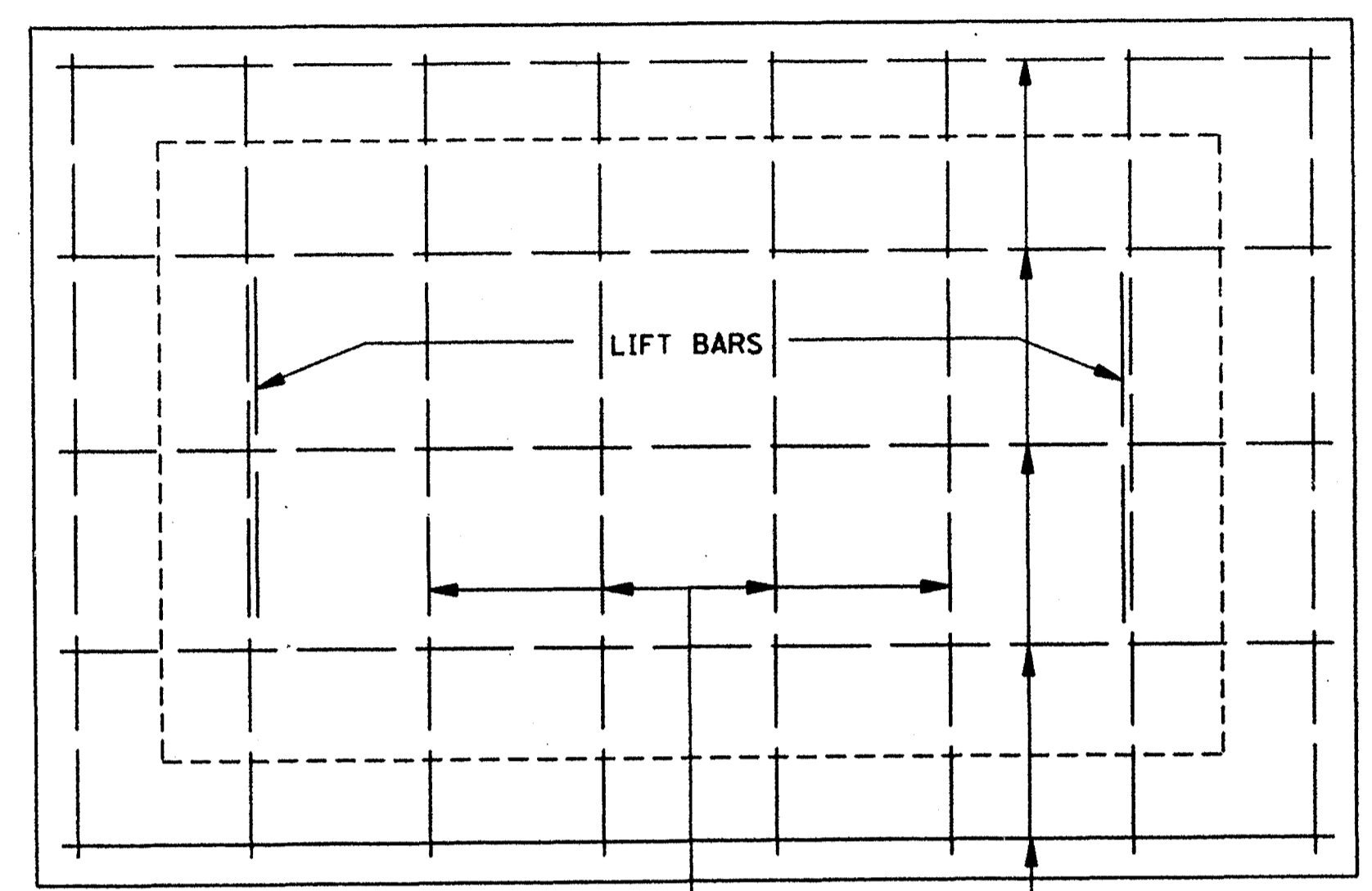
SECTION A-A

GENERAL NOTE:

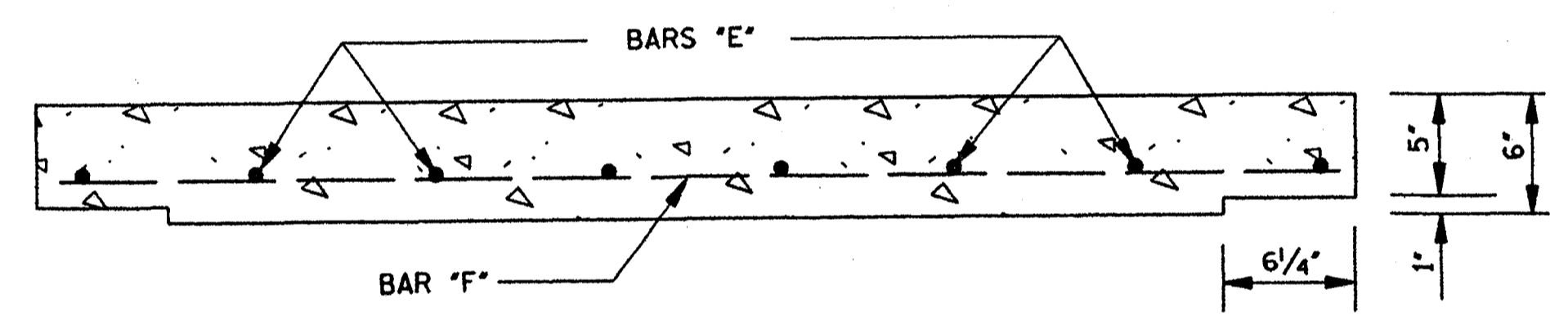
1. THE FOLLOWING QUANTITIES SHALL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE:

QUANTITIES FOR CONCRETE COLLAR FOR PIPE CULVERTS			
CIRCULAR PIPE		ARCH PIPE	
DIA. OF PIPE	CLASS "B" CONCRETE (yd ³)	SIZE OF PIPE	CLASS "B" CONCRETE (yd ³)
12"	0.240		
15"	0.260	18 x 11	0.280
18"	0.320	22 x 13	0.310
24"	0.410	29 x 18	0.410
30"	0.510	36 x 23	0.490
36"	0.620	44 x 27	0.600
42"	0.730	51 x 31	0.690
48"	0.850	58 x 36	0.820
54"	0.980	65 x 40	0.920
60"	1.110	73 x 45	1.070
66"	1.248	88 x 54	1.366
72"	1.393		

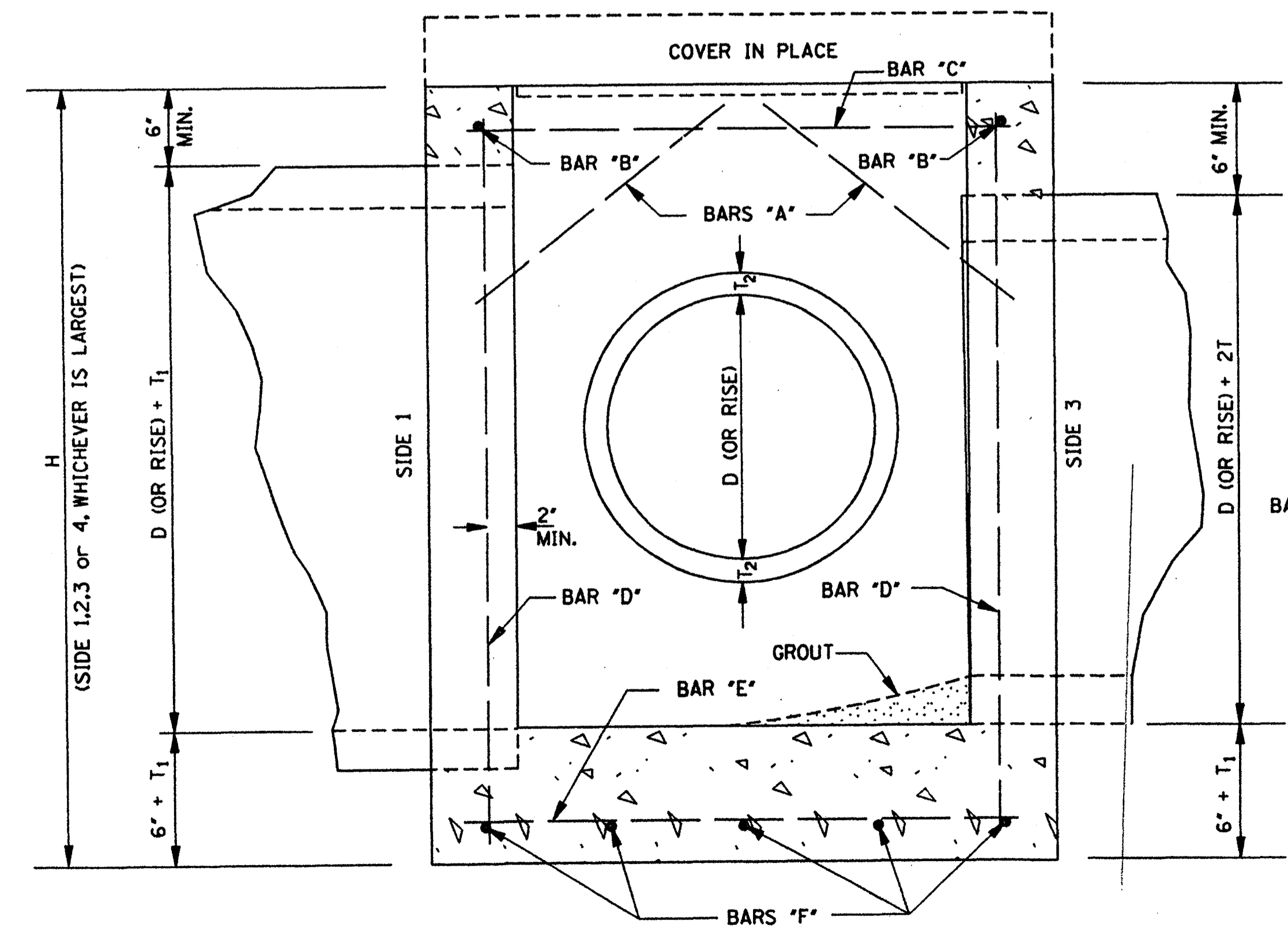
REVISION		BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
DATE		ISSUE DATE:		OCTOBER 1, 1998	
				CONCRETE PIPE COLLAR	
				 WORKING NUMBER PC-1 SHEET NUMBER 301	



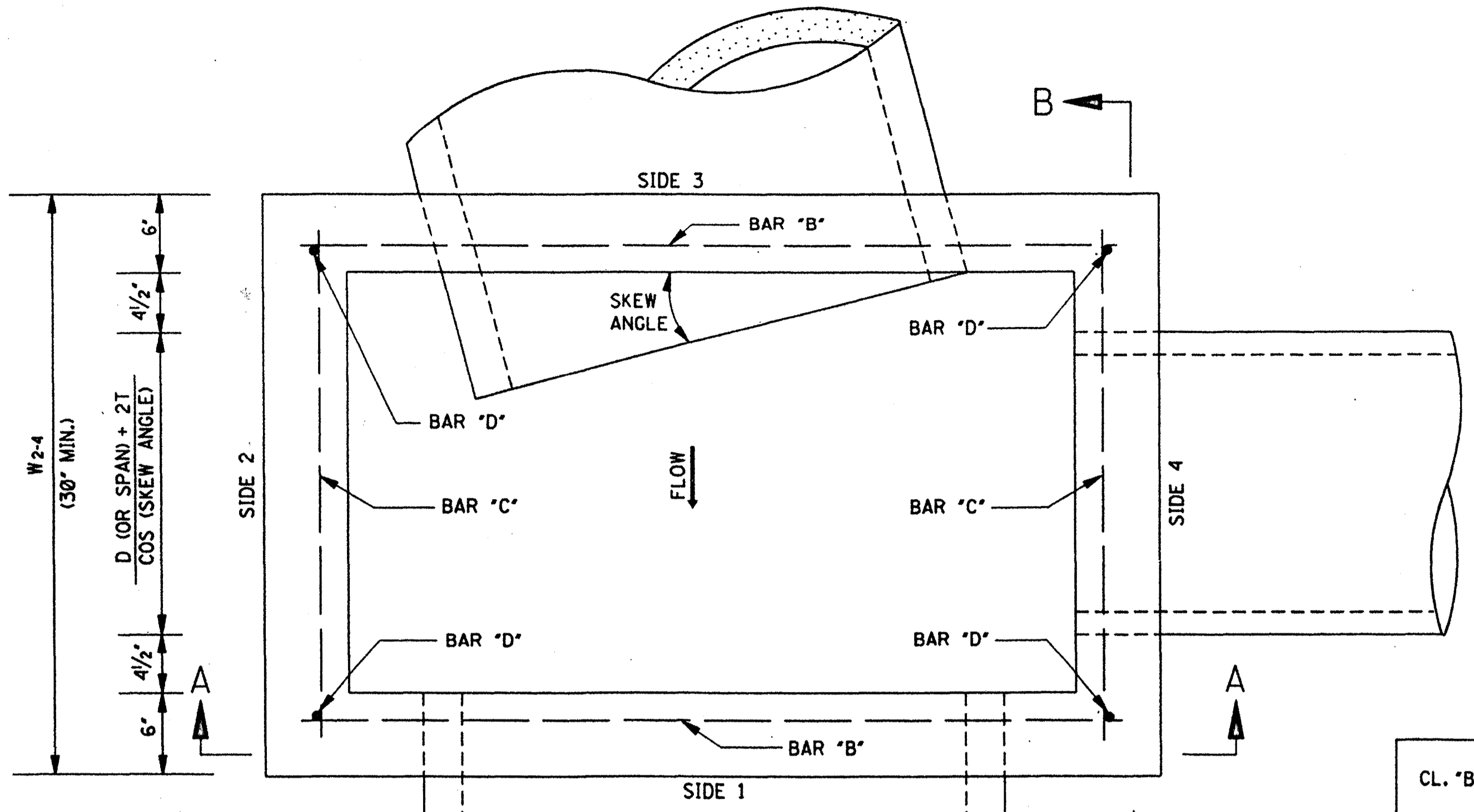
PLAN OF COVER



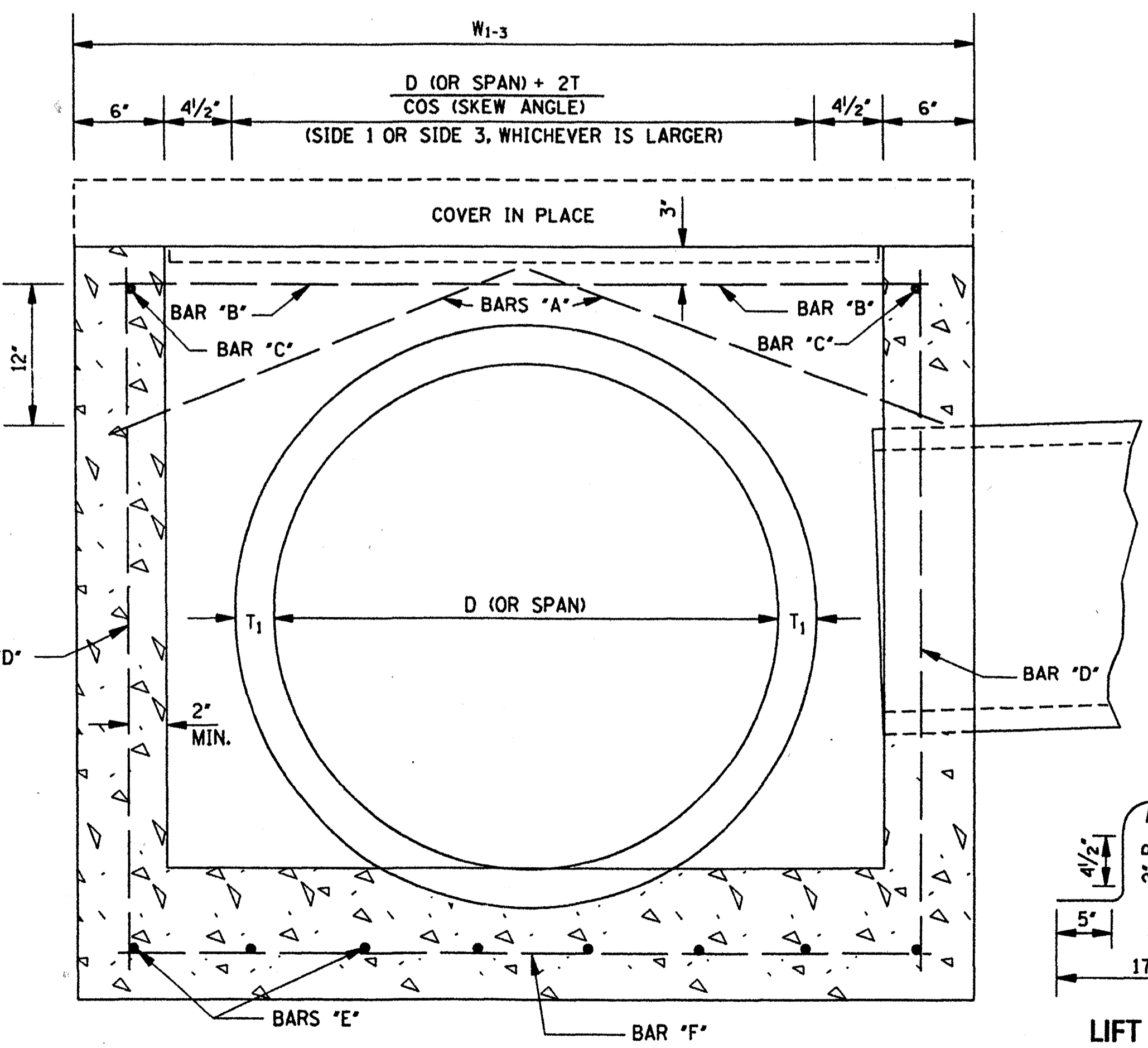
ELEVATION OF COVER



SECTION B-B



PLAN



SECTION A-A

REINFORCING BAR LIST			
BAR	SIZE	NUMBER REQUIRED	LENGTH
A	#4	2 PER PIPE OPENING	$\sqrt{196 + \left(\frac{W}{2} + 2\right)^2}$
B	#4	2	$W_{1-3} - 6'$
C	#4	2	$W_{2-4} - 6'$
D	#4	4	$H - 6'$
E	#4	$2 \left[\left(\frac{W_{1-3}}{9'} \right)^{**} + 1 \right]$	$W_{2-4} - 4'$
F	#4	$2 \left[\left(\frac{W_{2-4}}{9'} \right)^{**} + 1 \right]$	$W_{1-3} - 4'$

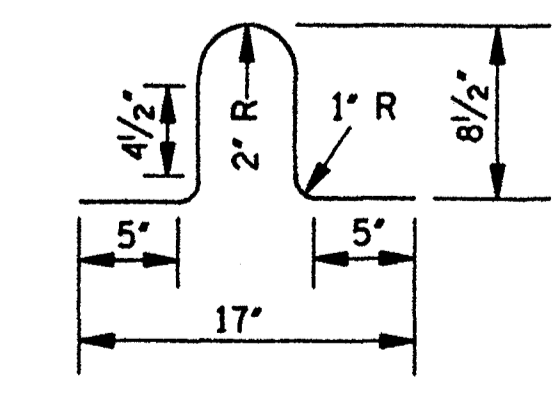
NOTE: VARIABLES AND DESIGNATIONS ARE AS FOLLOWS:
D (OR SPAN) = PIPE DIAMETER (OR SPAN)
W₁₋₃ = WIDTH OF SIDE 1 & SIDE 3
W₂₋₄ = WIDTH OF SIDE 2 & SIDE 4
W = W₁₋₃ OR W₂₋₄ (SIDE OF ENTERING PIPE)
** = ROUND TO NEAREST WHOLE NUMBER

CL. "B" CONC. (yd³) = [(Q1 + Q2) / 46,656] - Σ PIPE OPENING DEDUCTIONS
WHERE: Q1 = [5'W₁₋₃W₂₋₄] + [(1'W₁₋₃ - 12.5')W₂₋₄ - 12.5'] + [(T₁ + 6')W₁₋₃W₂₋₄]
Q2 = 12'[H - (T₁ + 6')] [(W₁₋₃ - 12') + W₂₋₄]

COMMON PIPE SIZE			COMMON PIPE SIZE		
CIRCULAR PIPE			ARCH PIPE		
PIPE SIZE	T	PIPE OPENING DEDUCTION (yd ³)	PIPE SIZE	T	PIPE OPENING DEDUCTION (yd ³)
18"	2 1/2"	0.053	22" x 13"	2 1/2"	0.053
24"	3"	0.091	29" x 18"	3"	0.087
30"	3 1/2"	0.138	36" x 23"	3 1/2"	0.129
36"	4"	0.196	44" x 27"	4"	0.185
42"	4 1/2"	0.263	51" x 31"	4 1/2"	0.245
48"	5"	0.340	58" x 36"	5"	0.318
54"	5 1/2"	0.427	65" x 40"	5 1/2"	0.394
60"	6"	0.524	73" x 45"	6"	0.489
66"	6 1/2"	0.630			
72"	7"	0.747			


GENERAL NOTES:

1. REINFORCING STEEL QUANTITIES TO BE COMPUTED FROM BAR LIST AND SHOWN ELSEWHERE ON THE PLANS.
2. QUANTITIES FOR JUNCTION BOXES SHOWN ON THE PLANS WILL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
3. CONCRETE SHALL BE CLASS "B" AND REINFORCING STEEL SHALL BE DEFORMED BARS.
4. SIDE 1 OF THE JUNCTION BOX WILL ALWAYS BE THE OUTFLOW SIDE.
5. IF PIPES ARE SKEWED MORE THAN 15° OR IF SKEWED PIPES PRODUCE CONFLICTS WITH ANOTHER OPENING, THE PIPE SHALL BE BROKEN BACK TO THE WALL OF THE JUNCTION BOX.



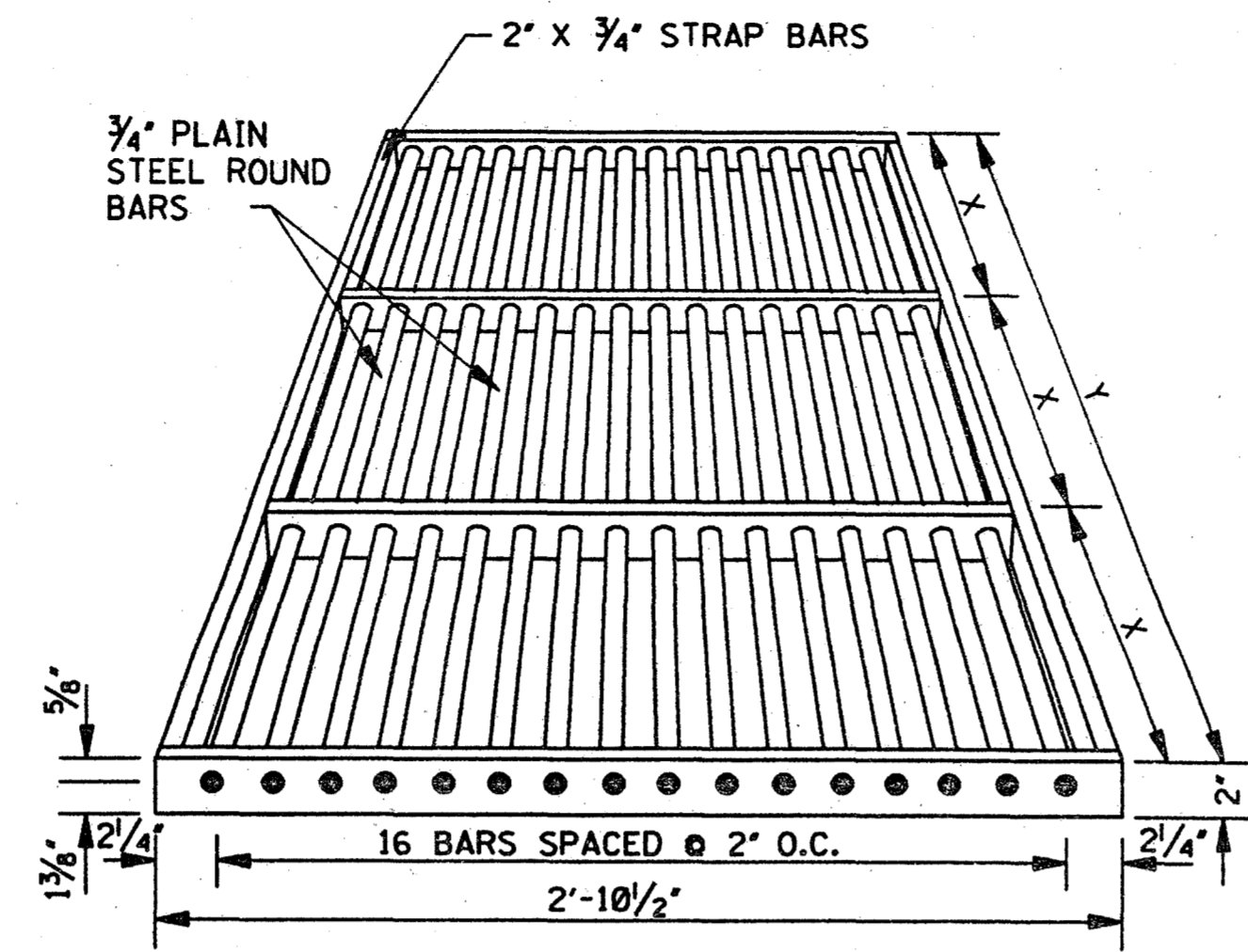
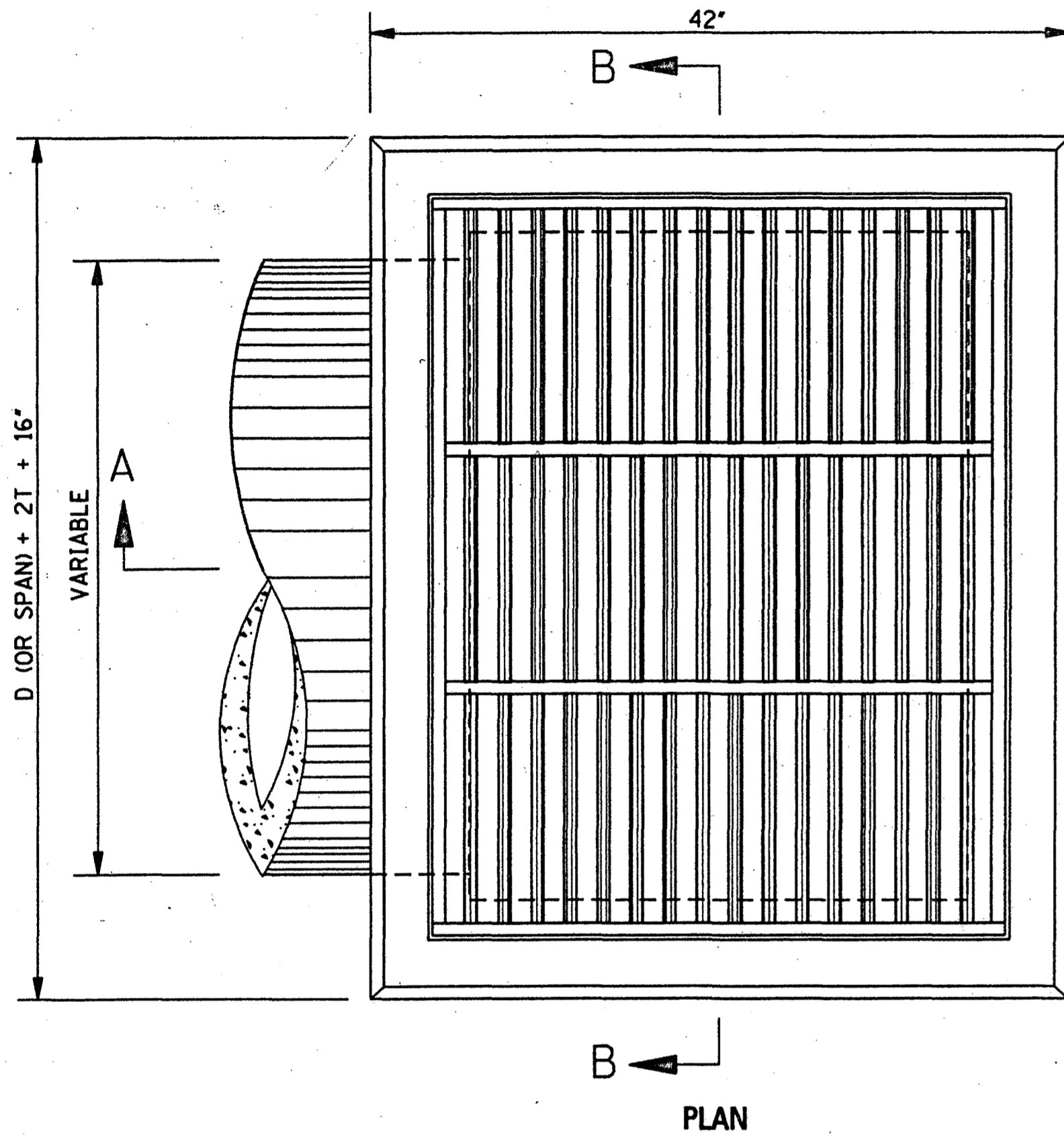
LIFT BAR

NOTE: LIFT BAR TO BE FABRICATED FROM A #4 BAR 30' LONG. TWO LIFT BARS ARE REQUIRED. REINFORCING STEEL FOR 2 LIFT BARS = 3.3 lbs.

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
REVISION	ROADWAY DESIGN DIVISION
	STANDARD PLAN
JUNCTION BOX FOR PIPE CULVERTS	
DATE	ISSUE DATE: OCTOBER 1, 1998
	 WORKING NUMBER JB-1 SHEET NUMBER 302

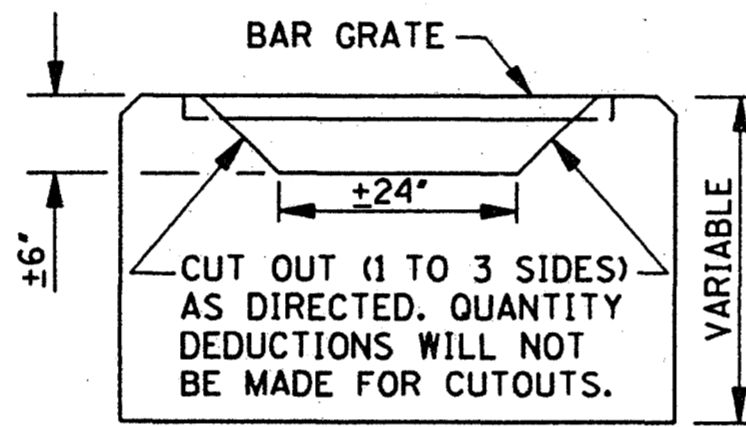
'A', #4 BARS	AS PER TABLE
'B', #4 BARS	D (OR SPAN) + 2T + 9"
'C', #4 BARS	34"
'D', #4 BARS	D (OR RISE) + T + 4"

BARS "A", "B", "C" & "D"

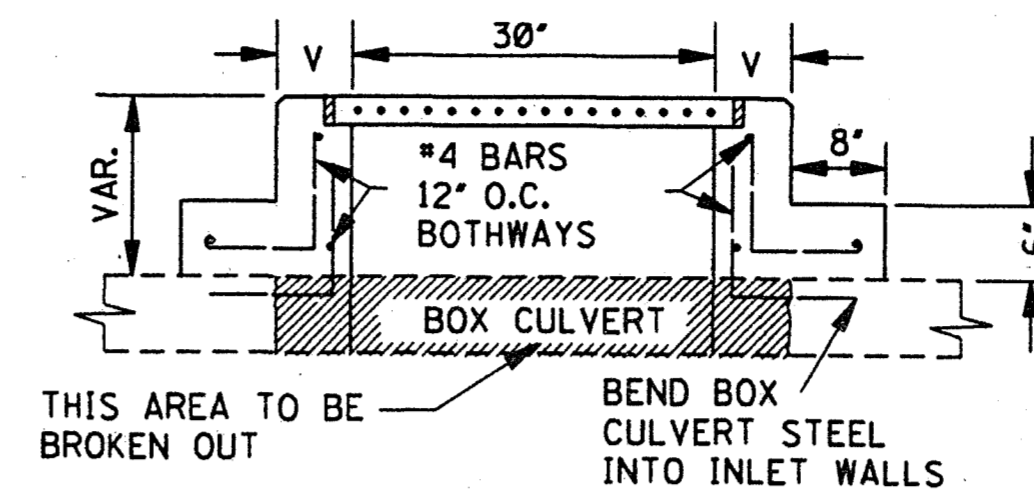


BAR GRATE DETAILS

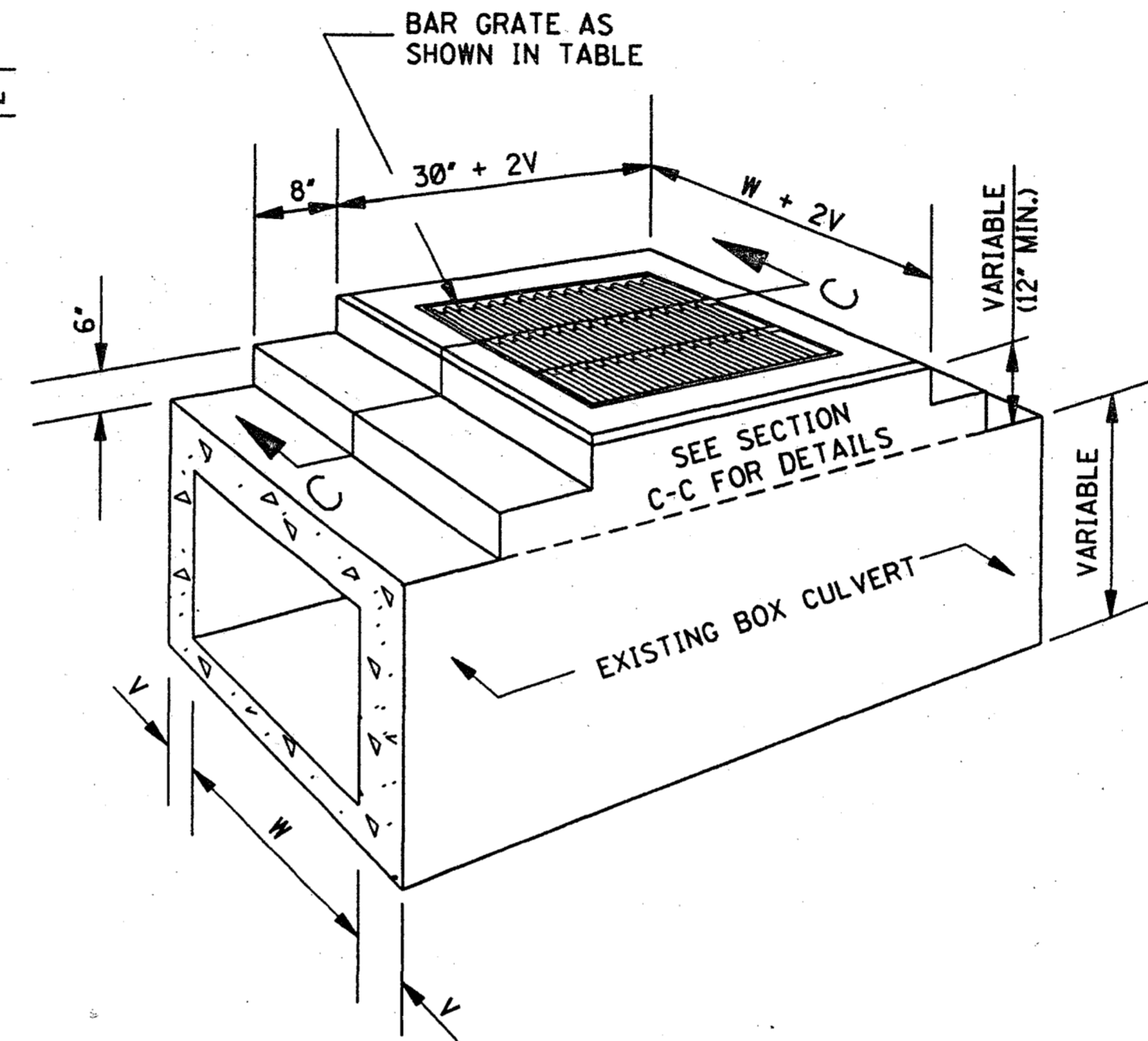
NOTE: JUNCTIONS OF ROUND AND STRAP BARS SHALL BE WELDED. GRATE SHALL BE SHOP COATED WITH APPROVED COAL TAR PITCH VARNISH.



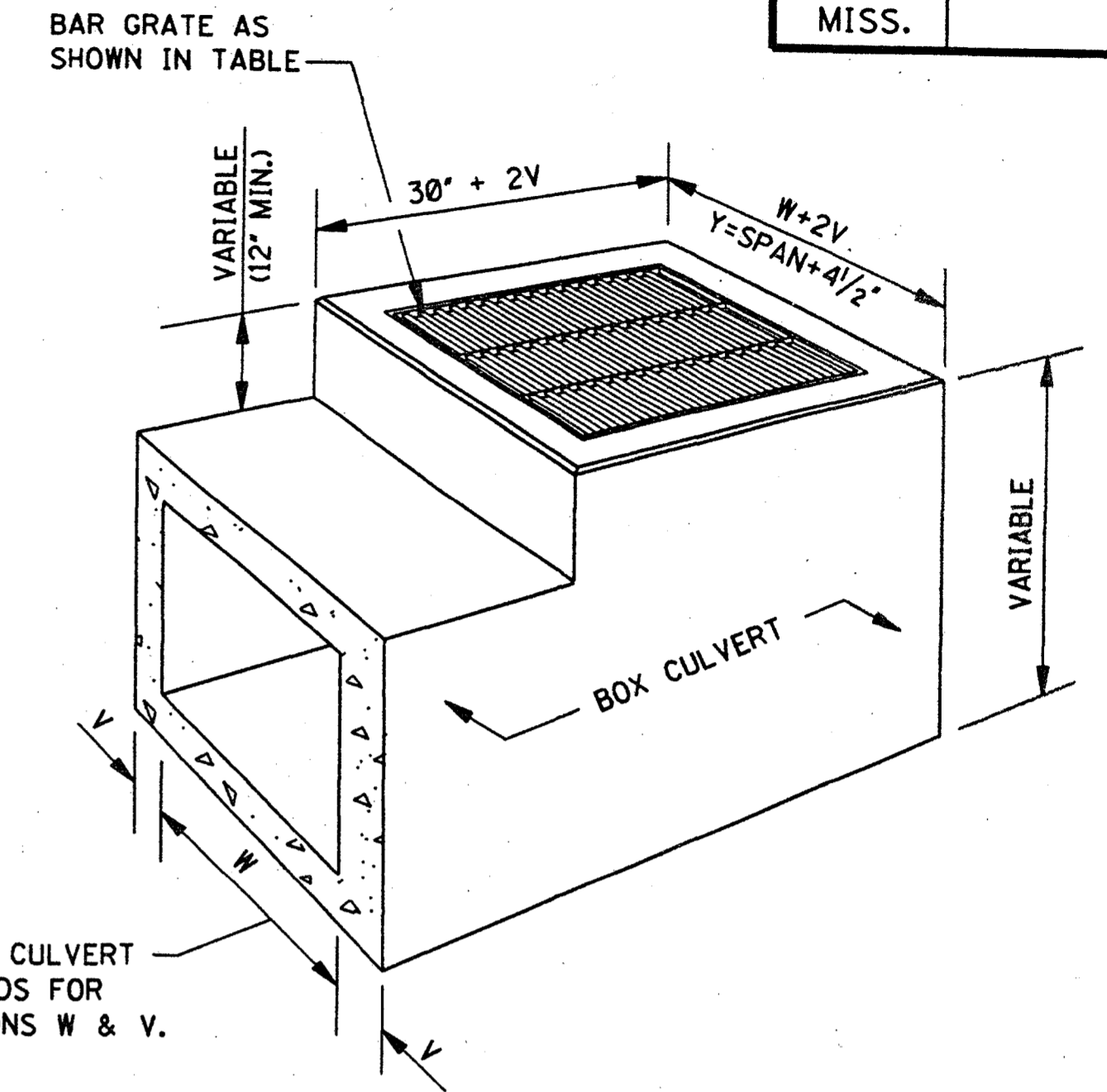
ELEVATION
MODIFIED PIPE OR
BOX CULVERT INLET



SECTION C-C



SECTIONAL PERSPECTIVE
INLET ON EXISTING BOX CULVERT



SECTIONAL PERSPECTIVE
INLET USED IN LIEU OF HEADWALLS

PIPE INLETS		BOX CULVERT INLETS							
PIPE SIZE	Y	X	NO. X-SPANS	WEIGHT (lbs)	BOX CULVERT SIZE	Y	X	NO. X-SPANS	WEIGHT (lbs)
18"	2'-7 1/2"	1'-3 3/4"	2	127	2' X 2'	2'-4 1/2"	1'-2 1/4"	2	119
22" X 13"	2'-11 1/2"	1'-5 3/4"	2	139	3' X 2'	3'-4 1/2"	1'-1 1/2"	3	166
24"	3'-2 1/2"	1'-7 1/4"	2	147	4' X 2'	4'-4 1/2"	1'-5 1/2"	3	200
29" X 18"	3'-7"	1'-2 1/2"	3	173	5' X 2'	5'-4 1/2"	1'-4 1/8"	4	247
30"	3'-9 1/2"	1'-3 3/4"	3	180	6' X 2'	6'-4 1/2"	1'-3 3/4"	5	293
36"	4'-4 1/2"	1'-5 1/2"	3	200	7' X 2'	7'-4 1/2"	1'-5 1/4"	5	328
42"	4'-11 1/2"	1'-2 1/8"	4	232	8' X 2'	8'-4 3/4"	1'-4 3/4"	6	374
48"	5'-6 1/2"	1'-4 3/8"	4	252	3' X 3'	3'-4 1/2"	1'-1 1/2"	3	166
54"	6'-1 1/2"	1'-6 3/8"	4	272	4' X 3'	4'-4 1/2"	1'-5 1/2"	3	247
60"	6'-8 1/2"	1'-4 7/8"	5	305	5' X 3'	5'-4 1/2"	1'-4 1/8"	4	200
					6' X 3'	6'-4 1/2"	1'-3 3/4"	5	293

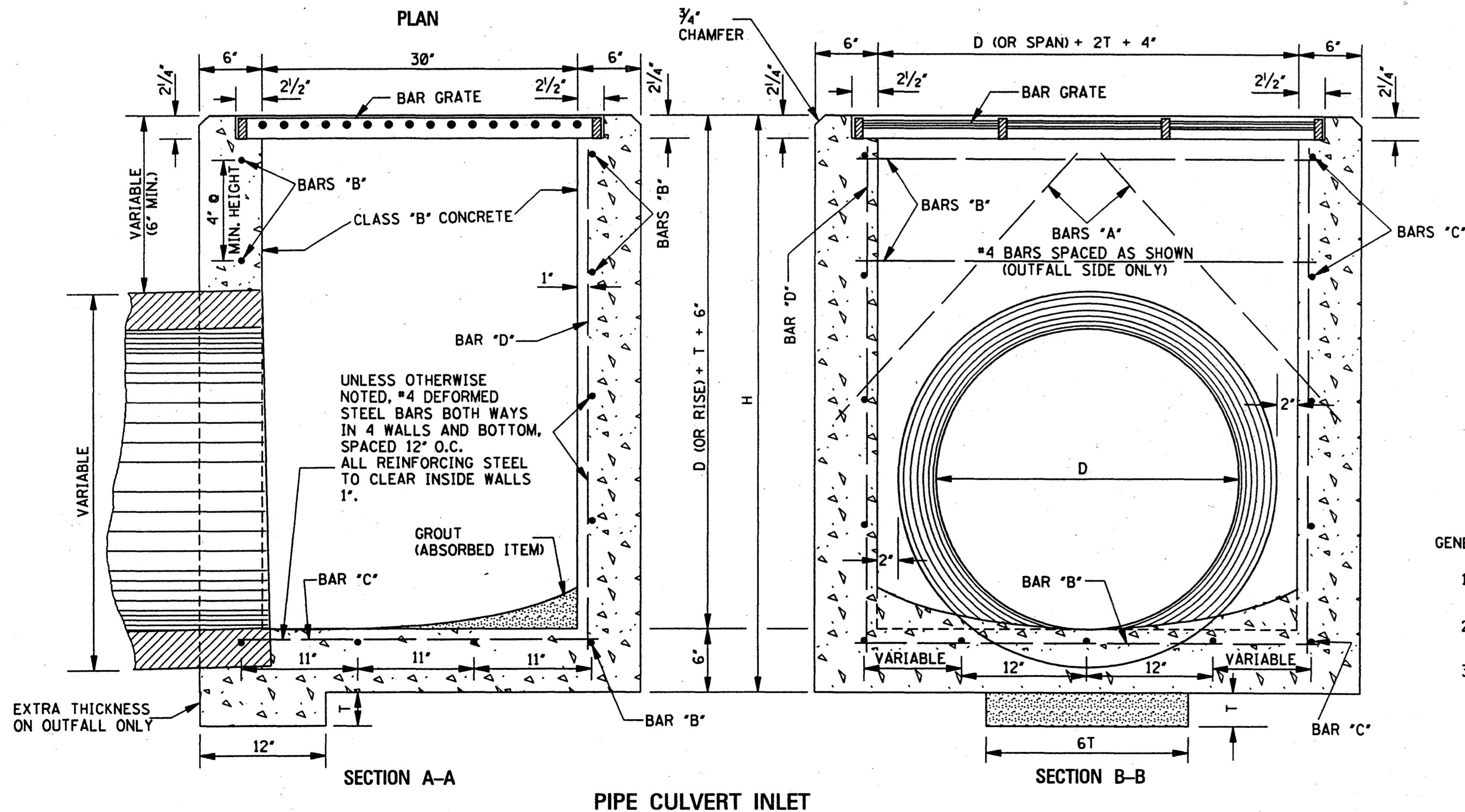
LENGTH AND WEIGHT OF GRATING

PIPE SIZE	MIN. DEPTH TO F.L.	MIN. DEPTH INLET CONC * (yd ³)	STEEL (lbs)	EACH ADDED FOOT CONC (yd ³)	STEEL (lbs)	PIPE OPENING DEDUCTION (yd ³)	T	BARS/SIZES							
								'A' #4		'B' #4		'C' #4		'D' #4	
								NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.
18"	2.209'	0.623	42	0.213	13	0.053	2 1/2"	2 @ 21"	8 @ 32"	7 @ 34"	9 @ 24 1/2"				
22" X 13"	1.833'	0.586	42	0.225	14	0.053	2 1/2"	2 @ 25"	8 @ 36"	7 @ 34"	9 @ 20"				
24"	2.750'	0.800	55	0.235	14	0.091	3"	2 @ 25"	9 @ 39"	9 @ 34"	9 @ 31"				
29" X 18"	2.250'	0.742	57	0.248	16	0.087	3"	2 @ 30"	9 @ 43 1/2"	9 @ 34"	11 @ 25"				
30"	3.292'	0.992	70	0.256	16	0.138	3 1/2"	2 @ 30"	9 @ 46"	11 @ 34"	11 @ 37 1/2"				
36"	3.834'	1.198	85	0.278	17	0.196	4"	2 @ 33"	10 @ 53"	13 @ 34"	11 @ 44"				
42"	4.375'	1.418	93	0.299	18	0.263	4 1/2"	2 @ 36"	10 @ 60"	13 @ 34"	11 @ 50 1/2"				
48"	4.917'	1.653	109	0.321	19	0.340	5"	2 @ 39"	11 @ 67"	15 @ 34"	11 @ 57"				
54"	5.458'	1.902	136	0.343	21	0.427	5 1/2"	2 @ 42"	12 @ 74"	19 @ 34"	13 @ 63 1/2"				
60"	6.000'	2.165	146	0.364	21	0.524	6"	2 @ 47"	12 @ 81"	19 @ 34"	13 @ 70"				

*NOTE: ONE (1) PIPE OPENING HAS BEEN DEDUCTED FROM THE STRUCTURE.

GENERAL NOTES:


1. THE MDOT STANDARD SPECIFICATIONS SHALL APPLY TO ITEMS UNLESS OTHERWISE SPECIFIED.
2. QUANTITIES SHOWN WILL BE THE BASIS OF PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
3. BOX CULVERTS:
 - A. UNLESS OTHERWISE SHOWN, THE DETAILS OF THE BOX CULVERT INLETS SHALL CONFORM TO THOSE SHOWN FOR THE PIPE INLETS.
 - B. BOX CULVERT REINFORCEMENT SHALL BE CONTINUED AND RESHAPED TO ACCOMMODATE THE INLET BOX. ADDITIONAL BARS SHALL BE THE SAME DIAMETER AS THOSE IN THE BOX CULVERT AND THE CONCRETE SHALL BE THE SAME. QUANTITIES ARE TO BE COMPUTED IN CONJUNCTION WITH QUANTITIES FOR BOX CULVERT.



SECTION A-A

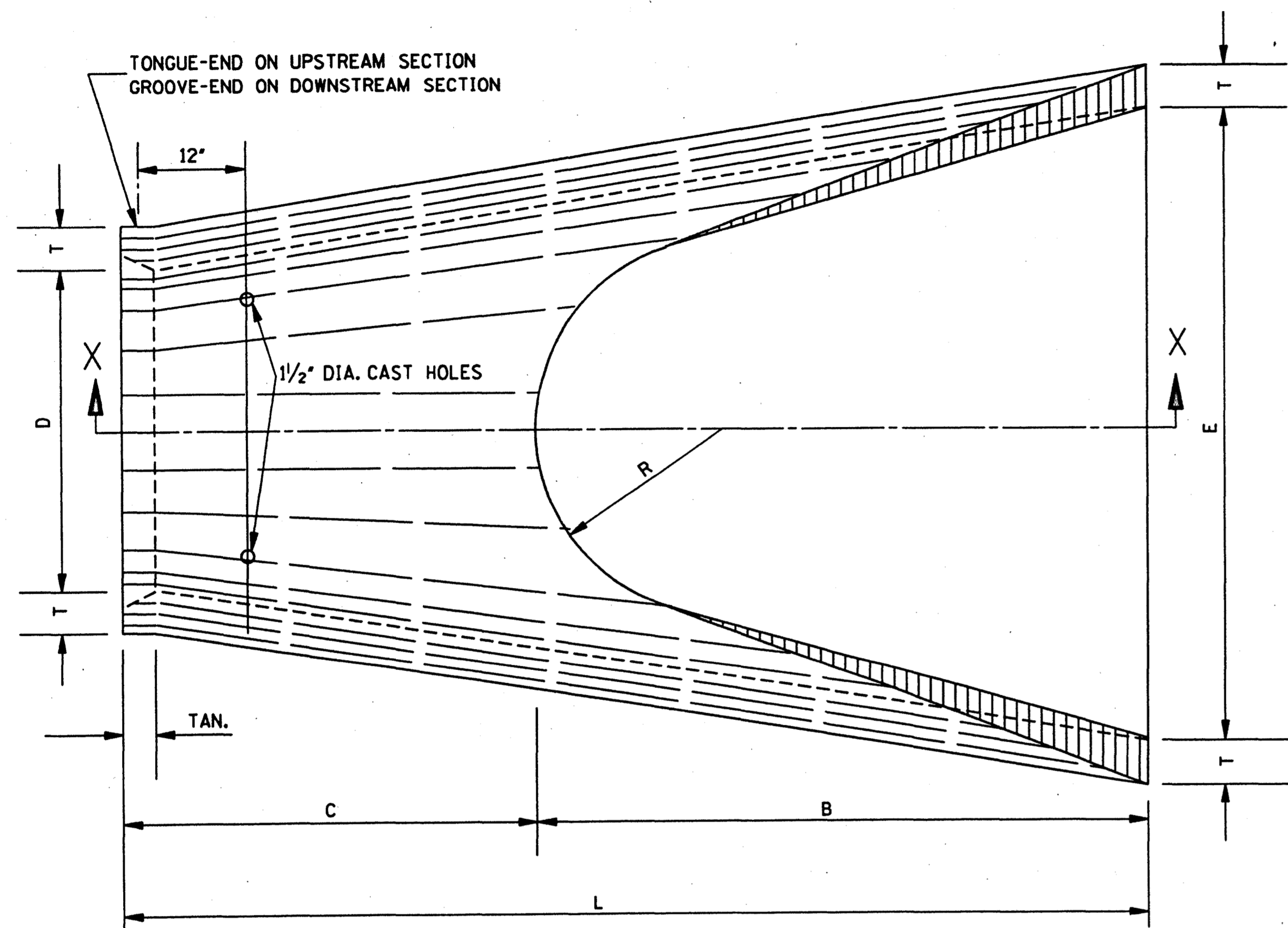
PIPE CULVERT INLET

SECTION B-B

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p>DROP INLET AND GRATE DETAILS FOR PIPE AND BOX CULVERTS</p> 	
DATE			
ISSUE DATE: OCTOBER 1, 1998		WORKING NUMBER B-9	SHEET NUMBER 325

BELL AND SPIGOT END OPTION

NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.

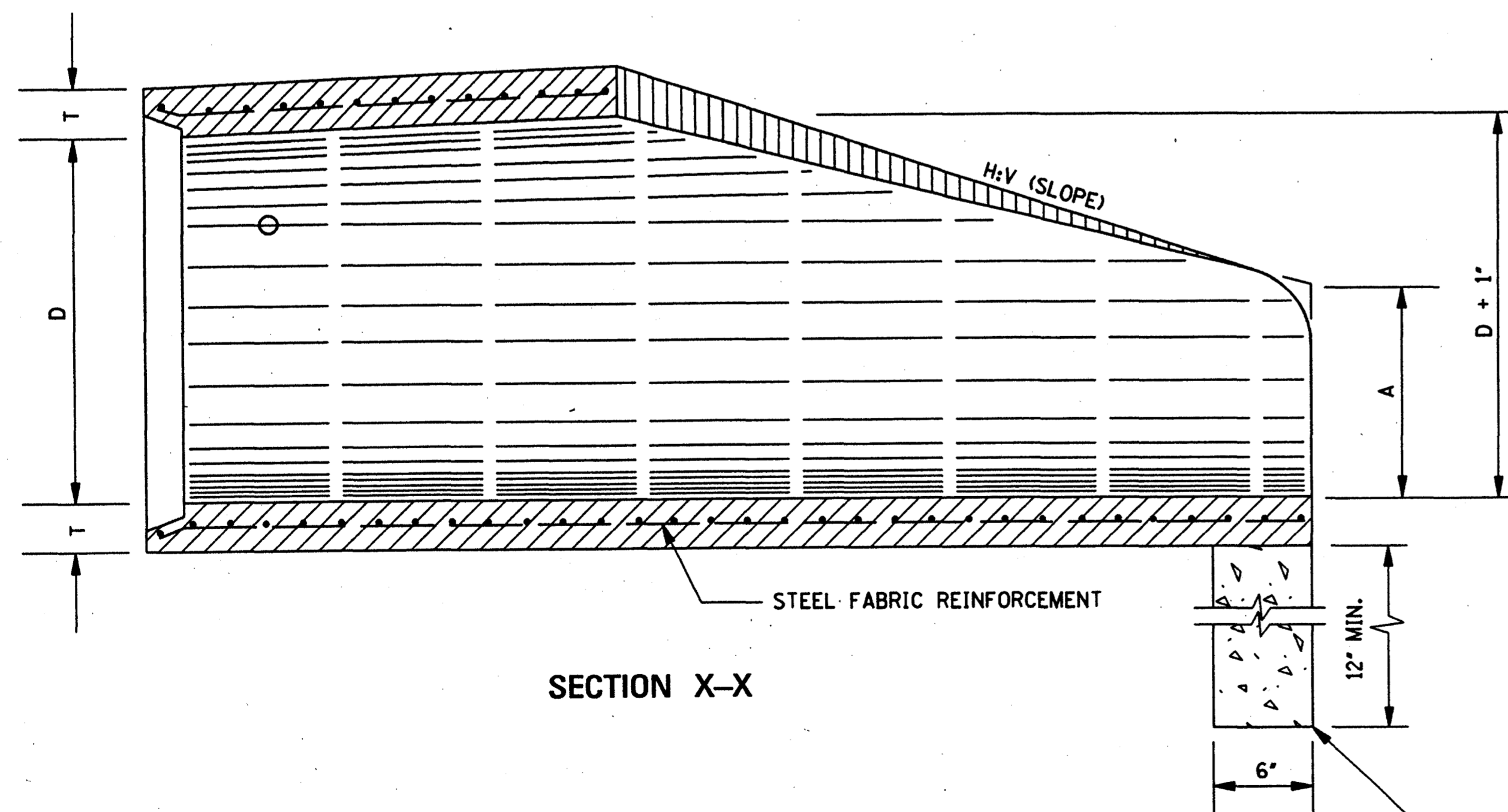


PLAN OF DOWNSTREAM END

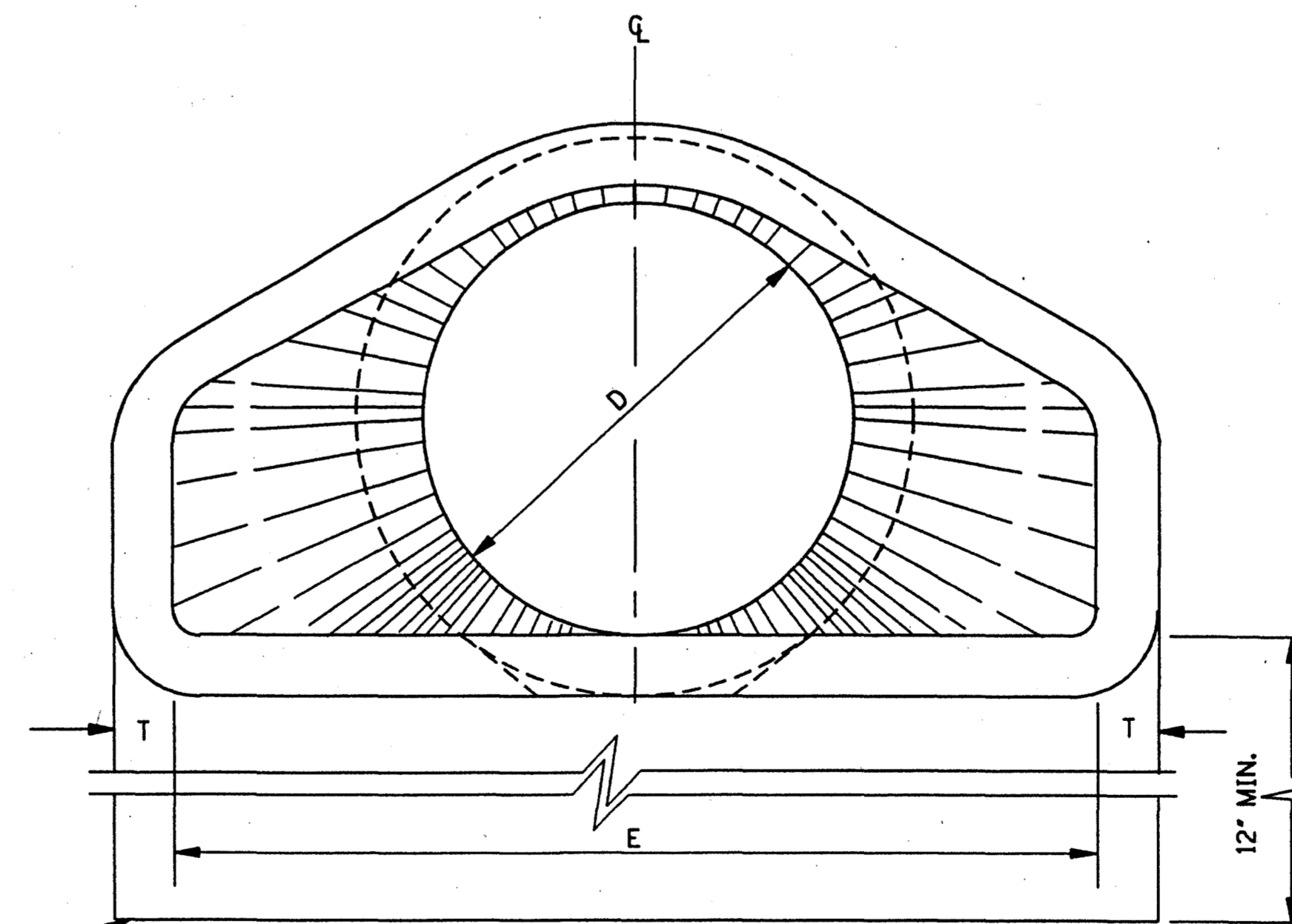
TABLE OF DIMENSIONS							
D	T	H:V	A	B	C	E	L
15'	2 1/4'	3:1	6'	2'-3"	4'-1"	2'-8"	6'-1"
18'	2 1/2'	3:1	9'	2'-3"	3'-10"	3'-0"	6'-1"
24'	3'	3:1	10'	3'-8"	2'-6"	4'-0"	6'-2"
30'	3 1/2'	3:1	1'-0"	4'-6"	1'-8"	5'-0"	6'-2"
36'	4'	3:1	1'-3"	5'-3"	2'-11"	6'-0"	8'-2"
42'	4 1/2'	3:1	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"
48'	5'	3:1	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"
54'	5 1/2'	3:1	2'-4"	6'-6"	1'-10"	7'-6"	8'-4"
* 60'	6'	3:1	2'-10"	6'-6"	1'-10"	8'-0"	8'-4"
* 66'	6 1/2'	3:1	3'-4"	6'-6"	1'-10"	8'-6"	8'-4"
* 72'	7'	3:1	3'-10"	6'-6"	1'-10"	9'-0"	8'-4"

* NOTE: SEE GENERAL NOTE 2.

TOE WALL CONC. QUANTITY (yd ³)
0.056
0.063
0.083
0.102
0.123
0.134
0.145
0.156
0.167
0.177
0.188



SECTION X-X




END ELEVATION

TOE WALL REQUIRED ON ALL DOWNSTREAM FLARED END SECTIONS. TOE WALL AT UPSTREAM END WILL BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER. TO BE PAID FOR AS CLASS "B" STRUCTURAL CONCRETE - MINOR STRUCTURES.

GENERAL NOTES:

1. REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M 170, TABLE 2, WALL B.
2. 2 - 1 1/2" DIA. CAST HOLES REQUIRED AS SHOWN TO ACCOMMODATE 2 - 1" DIA. TIE BOLTS, USED IN TIEING SECTION TO PIPE CULVERT.
3. LENGTH (L) OF A BELL-END OPTION MAY VARY BY A NOMINAL EXTENSION ON THE BELL END.
4. FLARED END SECTIONS ARE NOT TO BE USED INSIDE THE CLEAR ZONE.
5. ALL SIZES OF FLARED END SECTIONS FOR CIRCULAR CONCRETE PIPE MAY BE FURNISHED WITH EITHER BELL AND SPIGOT OR TONGUE AND GROOVE ENDS.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center">FLARED END SECTION FOR CONCRETE PIPE</p> 	
DATE			
ISSUE DATE: OCTOBER 1, 1998		WORKING NUMBER FE-1	SHEET NUMBER 328