

Department of Engineering
Tim Bryan, P.E., County Engineer

3137 South Liberty Street, Canton, MS 39046
Office (601) 790-2525 FAX (601) 859-3430

MEMORANDUM

September 1, 2020

To: Sheila Jones, Supervisor, District I
Trey Baxter, Supervisor, District II
Gerald Steen, Supervisor, District III
Karl Banks, Supervisor, District IV
Paul Griffin, Supervisor, District V

From: Tim Bryan, P.E., PTOE
County Engineer

Re: MDOT Right-of-Way Permit
Simpson Road Bridge Replacement, LSBP-45(22)

The Engineering Department recommends that the Board agree to submit to MDOT the attached permit to perform work on MDOT right-of-way and authorize the Board President to sign said permit. This permit is to relocate the intersection of Simpson Road at Highway 17 approximately 150 ft south of its current location in conjunction with the replacement of a bridge on Simpson Road just west of Highway 17.

SHEILA JONES
District One

TREY BAXTER
District Two

GERALD STEEN
District Three

KARL BANKS
District Four

PAUL GRIFFIN
District Five

Applicant Contact Name: _____

Applicant Contact Phone #: _____

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION
APPLICATION FOR PERMIT TO CONSTRUCT DRIVEWAY WITH
CONNECTION TO STATE HIGHWAY AND AGREEMENT OF APPLICANT
GIVEN IN CONSIDERATION OF SUCH PERMIT**

(Please Print) Name: _____ Address: _____
Company (or) Individual Street/Route

City County State Zip Code

herein called the applicant, who at the present time proposes to construct a driveway connecting _____
_____ with Highway No. _____

between _____ and _____

Latitude (decimal degrees) _____ Longitude (decimal degrees) _____

in _____ County, Mississippi, does hereby make application to the Mississippi Department of Transportation, the duly authorized agent for the Mississippi Transportation Commission, for permission to construct the said driveway mentioned above and shown herein below and in consideration of a permit being granted to me for such construction, do hereby agree to construct such facility in accordance with the plan shown herein below and the rules and regulations of the Mississippi transportation Commission and do also further agree, with full understanding of the terms thereof, to all of the following:

- (a) That the Mississippi Department of Transportation does not purport to grant to said applicant any right, title, claim or easement in or upon said highway or right-of-way appurtenant thereto.
- (b) That the said Mississippi Department of Transportation may at any time require and compel the removal or reconstruction of said driveway or other facility therein described or referred to, as and when said Mississippi Department of Transportation deems it necessary. All expense of said removal or reconstruction is to be borne exclusively by the applicant and the Mississippi Department of Transportation is to be in no way liable.
- (c) Said applicant hereby expressly agrees for himself, his heirs, assigns and legal representatives, that upon request of said Mississippi Department of Transportation, he will without delay either reconstruct, remove or move to another location the facility herein described all in accordance with the terms of the request so made by the said Mississippi Department of Transportation. It being distinctly understood that said that any other location for said facility or driveway shall be primarily the choice of said Mississippi Department of Transportation but said new location will be made or designated by said Mississippi Department of Transportation after agreement with said applicant or its successors, if possible. It is understood and agreed that the Mississippi Department of Transportation, if this permit is granted and acted upon by the said applicant, will use all reasonable effort to avoid the necessity of requesting that the herein mentioned facility be removed, altered or reconstructed.
- (d) The plan of proposed construction set out below is incorporated herein by reference and made a part of this application as if fully copied out herein in words and figures.
- (e) It is agreed that this permit is void if all work shown on this plan is not completed in accordance with this plan within one year after date of approval.
- (f) It is agreed that any gas pumps at this location will be so placed that they or their island or islands will be a minimum of 12 feet behind the right of way line.
- (g) It is distinctly understood that no cars or vehicles will be parked or serviced within the limits of the highway right of way.
- (h) Pipe culverts shall comply with the Department's "MDOT PIPE CULVERT MATERIAL DESIGN CRITERIA", LATEST VERSION. (Reference: MDOT Website 'www.goMDOT.com'). Pipe headwalls, box culverts, bridges, inlets, junction boxes, headwalls, grates, etc. shall be designed, detailed and constructed in accordance with the Department's Roadway and Bridge Design Manuals and Standard Drawings and Mississippi Standard Specifications for Road and Bridge Construction.
- (i) The applicant is responsible for any conflicts with utilities on the highway right-of-way and is to secure permission from said utilities for said conflicts and for any necessary alterations.
- (j) Any work done by the applicant on the highway right-of-way shall be at his sole expense and may be utilized by the Mississippi Department of Transportation without payment thereof.
- (k) A copy of the approved plan is to be kept at the site of the work at all times during construction.
- (l) It is agreed that no trees or shrubs on the highway right-of-way will be cut, trimmed, or damaged during the process of the proposed work or maintenance of this work or facility except as shown on the plan.
- (m) All sod disturbed by the proposed work shall be neatly dressed and grassed in accordance with the vegetation schedule outlined elsewhere in this permit. The applicant shall maintain the dressed and grassed area for a sufficient length of time to insure a growing sod.

- (n) The applicant accepts the responsibility of the safety of the traveling public and his/her workers and agrees to furnish, place and maintain traffic control devices, if required, in accordance with Part 6 of the Manual On Uniform Traffic Control Devices For Streets and Highways (MUTCD), Current Edition as a minimum. The applicant shall attach a special traffic control plan to the application if special traffic control details are required.
- (o) The applicant does hereby covenant and agree to indemnify and hold harmless the Mississippi Transportation Commission and the Mississippi Department of Transportation from and against any claims, actions, suits, causes or demands, including court costs and reasonable attorney's fees, proximately resulting from acts or omissions of the applicant, or applicant's servants, agents or employees in the construction and maintenance of all facilities outlined under this permit.

Witness my signature this _____ day of _____, 20_____, which is applicable to sheets 1
 through _____ of permit number _____.

 Signature of Applicant

By: _____
 Printed Name and Title

STATE OF MISSISSIPPI
 COUNTY OF _____

Personally appeared before me, the undersigned authority, _____ whose
 Printed Name of Applicant

names(s) _____ subscribed to this instrument as the _____ of
 is/are _____ Title of Applicant

_____ who having been first fully sworn acknowledged that they
 Name of Company (or) Individual

executed the above agreement as the act and deed of the said applicant for the purpose and consideration and in the capacity therein expressed and on the date above written.

Given under my hand and seal of office this the _____ day of _____ 20_____

My Commission Expires: _____
 Signature of Notary Officer

Field Inspection By: _____ 20_____

Approved: MISSISSIPPI DEPARTMENT OF TRANSPORTATION

 Deputy Executive Director/Chief Engineer

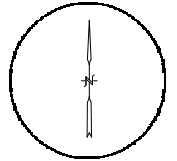
By: _____ 20_____

Installation Inspection By: _____ 20_____

Sheet No.: 3 of 31

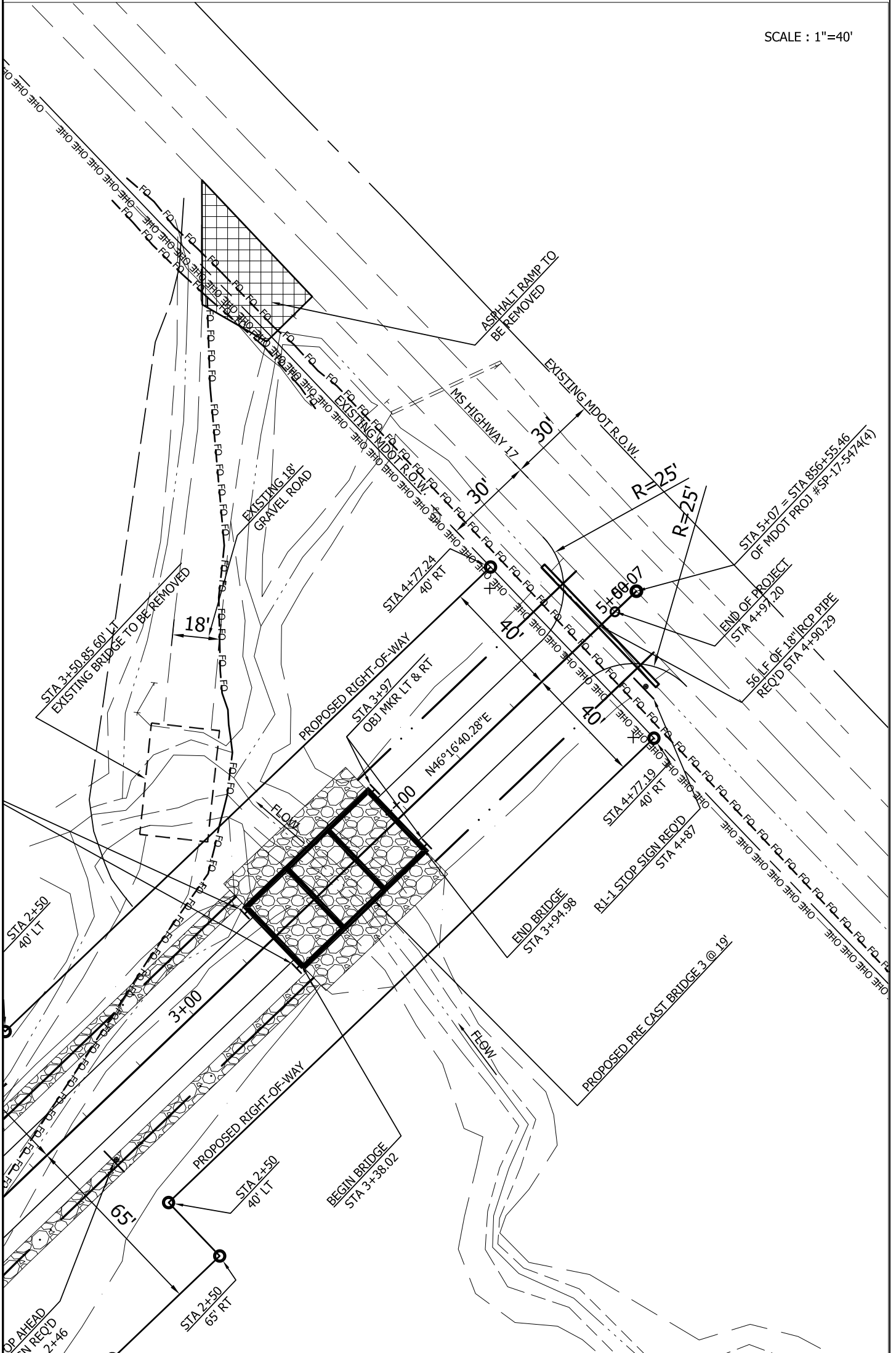
Permit No.: _____

REVISIONS			
APPLICANT		MDOT	
DATE	BY	DATE	BY



Show North

SCALE : 1"=40'



STATE OF MISSISSIPPI
OFFICE OF STATE AID ROAD CONSTRUCTION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED

COUNTY HIGHWAY

LOCAL SYSTEM BRIDGE PROJECT NO. LSBP-45(22)

**SIMPSON ROAD
 MADISON COUNTY**

LENGTH DATA

EXCEPTIONS

NONE

EQUATIONS

NONE

LENGTH OF ROADWAY	398.61 FT.	0.076 MI.
LENGTH OF BRIDGES	56.96 FT.	0.011 MI.
LENGTH OF PROJECT (NET)		0.087 MI.
LENGTH OF EXCEPTIONS	000.00 FT.	0.000 MI.
LENGTH OF PROJECT (GROSS)		0.087 MI.

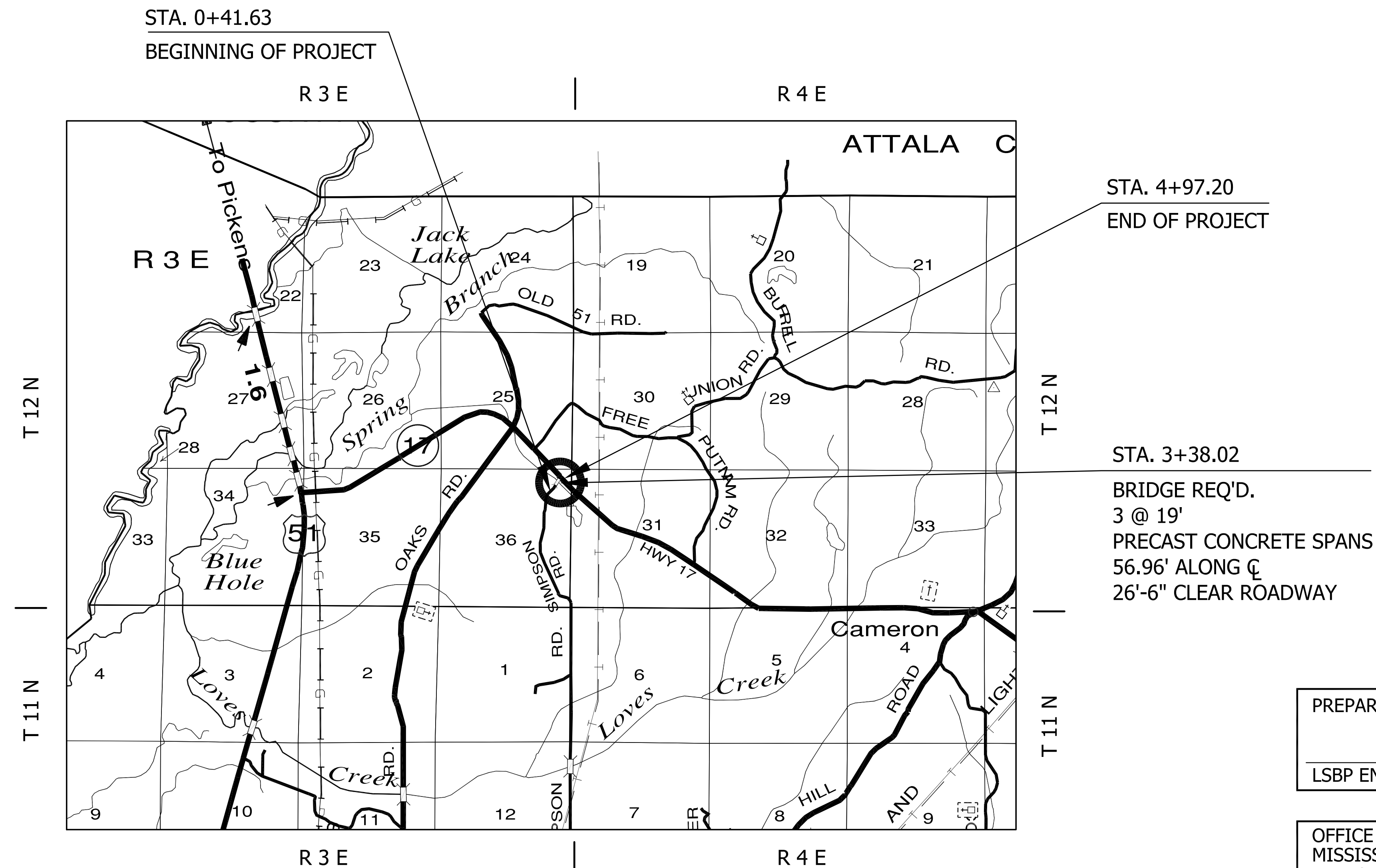
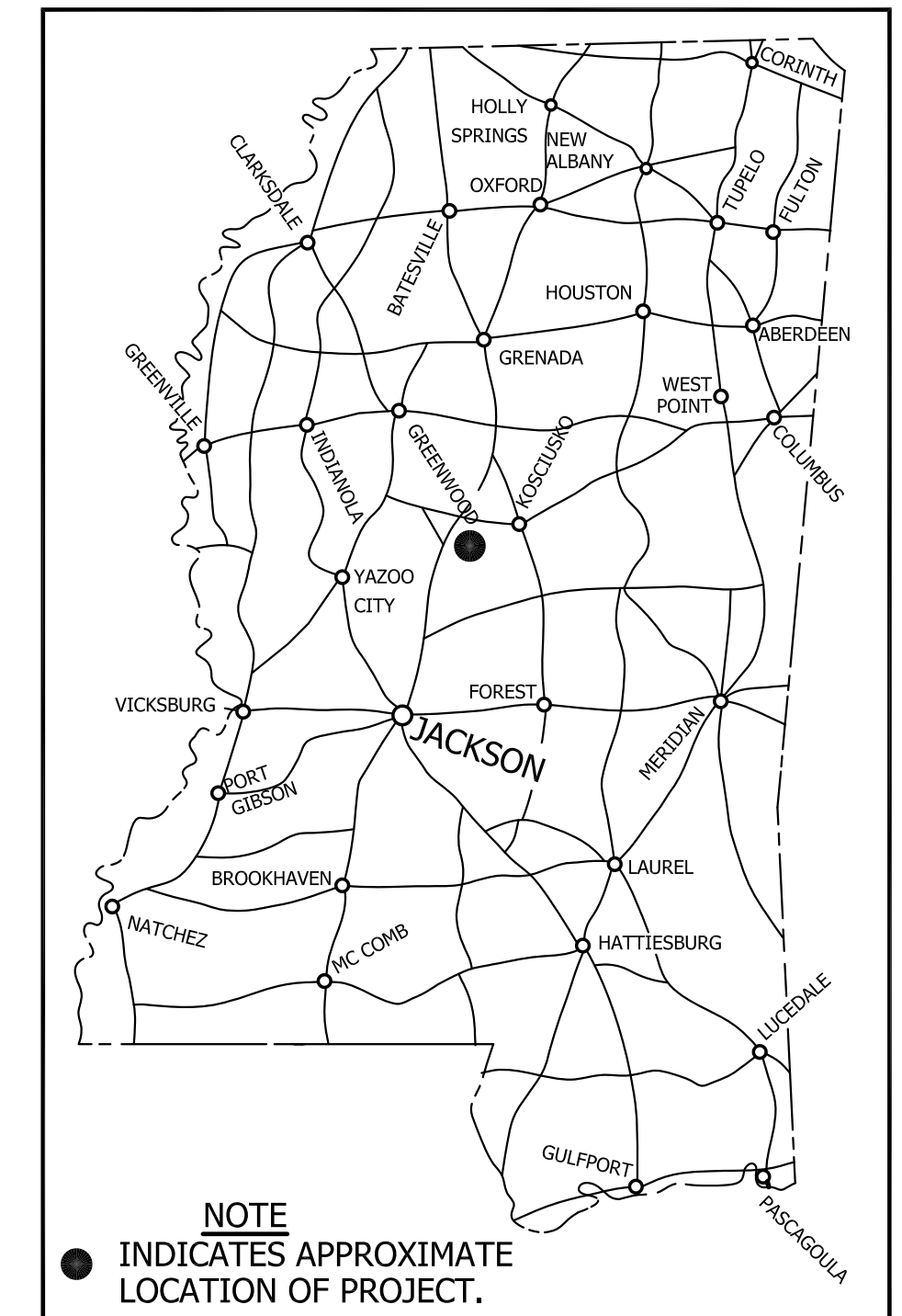
BRIDGE NUMBER - SA45-0144
 REPLACED WITH - SA45-A0144

SCALE:

PLAN	1" = 30'
PROFILE	HORIZ: 1" = 30'
	VERT: 1" = 5'
TITLE	1" = 3000'

INDEX

FOR INDEX SEE SHEET NO. 2



PREPARED BY
 John E. McKee, Jr. 06/26/2020
 LSBP ENGINEER DATE

OFFICE OF STATE AID ROAD CONSTRUCTION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 APPROVED
 STATE AID ENGINEER DATE

201902800.266

STANDARD SPECIFICATIONS FOR STATE AID ROAD AND BRIDGE CONSTRUCTION CURRENTLY APPROVED BY THE OFFICE OF STATE AID ROAD CONSTRUCTION OF THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION AND THE FEDERAL HIGHWAY ADMINISTRATION ARE MADE A PART HEREOF FULLY AND COMPLETELY AS IF ATTACHED HERETO, EXCEPT WHERE SUPERSEDED BY THE SPECIAL PROVISIONS, OR AMENDED BY REVISIONS.

PS&E ASSEMBLY - SIMPSON ROAD
 LSBP-45(22) MADISON COUNTY - 07-20-2020

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM	TOTAL QUANTITY		UNIT
		PLAN	FINAL	
**** ROADWAY ITEMS ****				
S-200-A	MOBILIZATION	L.S.		LUMP SUM
S-201-A	CLEARING AND GRUBBING	L.S.		LUMP SUM
② S-202-B	REMOVAL OF PRECAST BRIDGE @ STA. 3+50.85 60'LT	1.0		UNIT
S-202-D	REMOVAL OF ASPHALT (ALL DEPTHS)	116.0		SY
S-203-A	UNCLASSIFIED EXCAVATION (PM)	52.0		CU. YD.
S-203-F	CHANNEL EXCAVATION (FM)	440.0		CU. YD.
S-203-H	EXCESS EXCAVATION (FM)	4257.0		CU. YD.
S-304-B	GRANULAR MATERIAL (CLASS 5)(GROUP C)	270.0		TON
⑤ S-304-D	CRUSHED STONE	96.6		TON
S-603-C-A	18" REINFORCED CONCRETE PIPE, CLASS III	56.0		LF
S-617-A	RIGHT-OF-WAY MARKERS (TYPE II)	12.0		EACH
S-618-A	MAINTENANCE OF TRAFFIC	L.S.		LUMP SUM
S-618-B	ADDITIONAL CONSTRUCTION SIGNS	0.0		SQ. FT.
① S-630-A	REFLECTORIZED TRAFFIC WARNING SIGN (ENCAPSULATED LENS)	1.0		EACH
S-630-B	REFLECTORIZED TRAFFIC REGULATORY SIGN (ENCAPSULATED LENS)	1.0		EACH
S-630-C	REFLECTORIZED TRAFFIC OBJECT MARKER (ENCAPSULATED LENS) (TYPE 3)	4.0		EACH
**** EROSION CONTROL ITEMS ****				
901-S-212-A	AGRICULTURAL LIMESTONE	1.4		TON
S-212-B	COMMERCIAL FERTILIZER (13-13-13)	0.694		TON
S-212-F	AMMONIUM NITRATE	0.1		TON
S-214-A	SEEDING	0.694		ACRE
S-215-A	VEGETATIVE MATERIALS FOR MULCH	2.1		TON
S-233-A	TEMPORARY SILT FENCE (TYPE I)(AOS 0.15-0.84)	1800.0		LF
S-235-A	TEMPORARY EROSION CHECKS	20.0		BALE
④ 237-A	WATTLES, 12"	200.0		LF
⑤ S-304-D	CRUSHED STONE	10.0		TON
S-815-A	LOOSE RIPRAP, 200 LB.	319.0		TON
S-815-E	GEOTEXTILE UNDER RIPRAP (TYPE V) (AOS 0.21-0.43)	442.0		SQ. YD.
**** BRIDGE ITEMS ****				
PRECAST CONCRETE SPANS				
STA. 3+38.02 3 @ 19'				
S-803-A	TEST PILE	2.0		EACH
S-803-B	CONVENTIONAL STATIC PILE LOAD TEST	0.0		EACH
S-803-C	14" PRESTRESSED CONCRETE PILING	450.0		LF
S-803-F	20" PREFORMED PILE HOLE	200.0		LF
S-806-A	19' PRECAST CONCRETE SLAB UNIT, 3.5' INTERIOR	18.0		EACH
S-806-B	19' PRECAST CONCRETE SLAB UNIT, CURB	6.0		EACH
S-806-H	BEAM TYPE RAILING WITH CONCRETE POSTS	114.0		LF
S-806-I	29.0' PRECAST CONCRETE CAP, INTERMEDIATE UNIT, CONCRETE PILE	2.0		EACH
S-806-J	29.0' PRECAST CONCRETE CAP, END UNIT, CONCRETE PILE	2.0		EACH
S-806-M	7.5' PRECAST CONCRETE WING	4.0		EACH
S-815-A	LOOSE RIPRAP, 300 LB.	397.0		TON
S-815-E	GEOTEXTILE UNDER RIPRAP (TYPE V) (AOS 0.21-0.43)	457.0		SQ. YD.

- ① VANDAL RESISTANT HARDWARE REQUIRED
- ② INCLUDES REMOVAL OF EX. BRIDGE END OBJECT MARKERS AND WEIGHT LIMIT SIGNS
- ③ BACKFILL OF PREFORMED PILE HOLE TO BE ABSORBED
- ④ MISSISSIPPI DEPARTMENT OF TRANSPORTATION 2017 STANDARD SPECIFICATIONS
- ⑤ CEMENTITIOUS MATERIAL EXPOSURE TO SULFATES IS NEGLIGIBLE.
- ⑥ SIZE 610

SHEET INDEX

SHEET NO.	TITLE
1	TITLE SHEET
2	QUANTITY AND INDEX SHEET
2-A	TYPICAL SECTION SHEET
2-B	SCHEDULE SHEET
2-C	DETAIL SHEET
2-D	TRAFFIC CONTROL PLAN
I	BRIDGE LAYOUT SHEET
II	BRIDGE RIPRAP DETAIL SHEET
SA-TSP-1	TRAFFIC SIGN PLACEMENT
SA-RW-1	RIGHT OF WAY MARKERS
6314	TYPICAL INSTALLATION AND DETAILS OF DELINEATORS AND DISTANCE REFERENCE SIGNS
6351	TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)
6358	HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS
6101	TYPICAL TEMPORARY EROSION/SEDIMENT CONTROL MEASURES
6102	DETAILS OF SEDIMENT BARRIER APPLICATIONS
6103	DETAILS OF SILT FENCE INSTALLATION
6104	DITCH CHECK STRUCTURES - TYPICAL APPLICATIONS AND DETAILS
6105	TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL FEATURES
6106	DETAILS OF EROSION CONTROL WATTLE DITCH CHECK
6501	PIPE CULVERT INSTALLATION
PC-01-09	PRECAST CONCRETE SPANS FOR USE WITH W-BEAM RAIL, 23'-0" ROADWAY, 24'-0" ROADWAY, 26'-6" ROADWAY
PC-03-09	19' X 3.5' PRECAST CONCRETE SLAB UNIT FOR USE WITH W-BEAM RAIL WITH CONCRETE POSTS
PC-11-09	PRECAST CONCRETE CAPS FOR USE WITH 19 FT. & 31 FT. PRECAST CONCRETE SPANS & W-BEAM RAIL, 26'-6" ROADWAY
PC-15-09	BEARING PAD & PLACEMENT DETAILS FOR USE WITH 23', 24', 26.5', 28' & 30' CLEAR ROADWAYS NORMAL AND 30° SKEW SPANS
PC-16-09	PRECAST ABUTMENT WINGWALL FOR USE WITH 19 FT. & 31 FT. PRECAST CONCRETE SPANS & W-BEAM RAIL, 23 FT., 24 FT. & 26.5 FT. ROADWAYS
CP-01	14", 16", 18" & 20" PRESTRESSED CONCRETE PILES
3	PLAN AND PROFILE SHEET



PREPARED BY
 John E. McKee, Jr. 06/26/2020
 LSBP ENGINEER DATE

RATES OF APPLICATION USED FOR ESTIMATING QUANTITIES

ITEM	RATE
Agricultural Limestone	2.0 Tons / Acre
Commercial Fertilizer (13-13-13)	1.0 Tons / Acre
Ammonium Nitrate	200 Lbs / Acre
*Vegetative Materials For Mulch (Mar. 1 – Nov. 15)	2.0 Tons / Acre
*Vegetative Materials For Mulch (Nov. 15 – Mar. 1)	3.0 Tons / Acre
Granular Material (Class 5, Group "C")	67.7 Tons / Sta.
Crushed Stone (Size 610)	1.8 Tons / Cu. Yd.

GENERAL NOTES

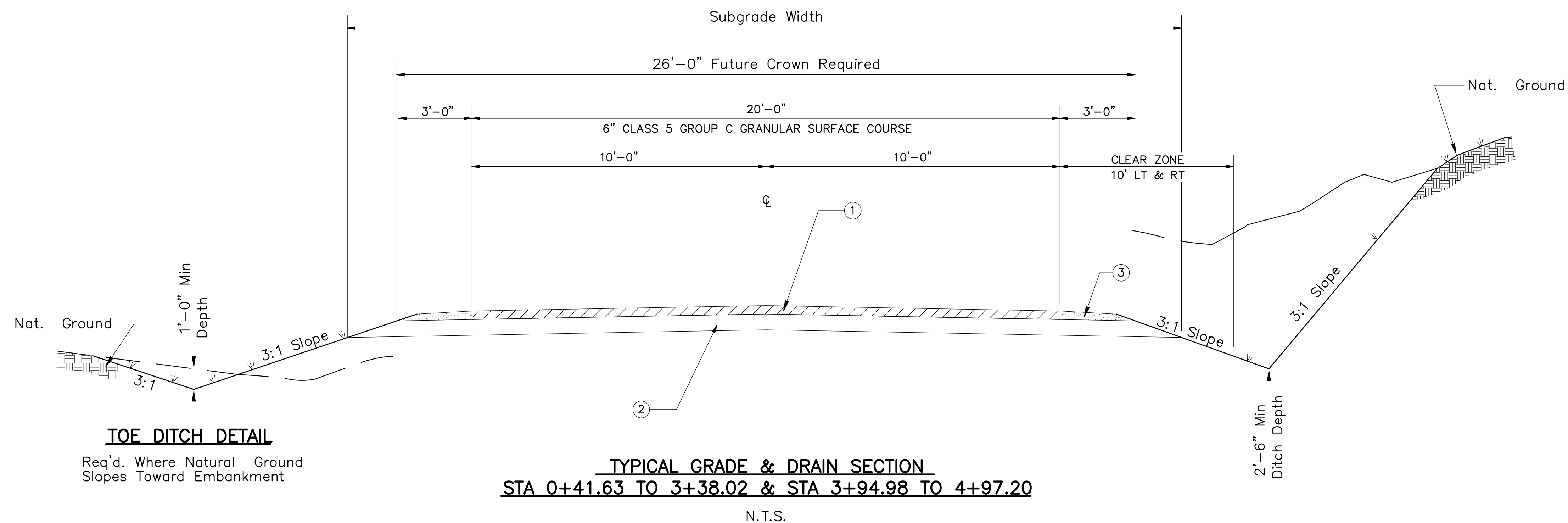
Erosion Control Measures To Be Applied On Indicated Area (VVV) As Per Seasonal Limitations.

- ① 6" And Variable Granular Material (Class 5, Group C) Surface Course Req'd
- ② Existing/Design Roadway Subgrade
- ③ Granular Material (Class 5, Group C) Req'd. At Shoulders

***NOTES:**

The Ammonium Nitrate Is To Be Applied After Grass Growth Is Established.

* This Rate Of Application Is To Be Used Per Seasonal Limitation Indicated. However, Plan Quantities For These Items Are Based On A Rate Of Application Of 3.0 Tons / Acre.



SIGNS REQ'D			
STATION	TYPE	RIPRAP REMARKS	SIDE
W3-1	W3-1	STOP AHEAD	RT
3+36	OM3-L	OBJECT MARKER	LT
3+36	OM3-R	OBJECT MARKER	RT
3+97	OM3-L	OBJECT MARKER	RT
3+97	OM3-R	OBJECT MARKER	LT
R1-1	R1-1	STOP	RT

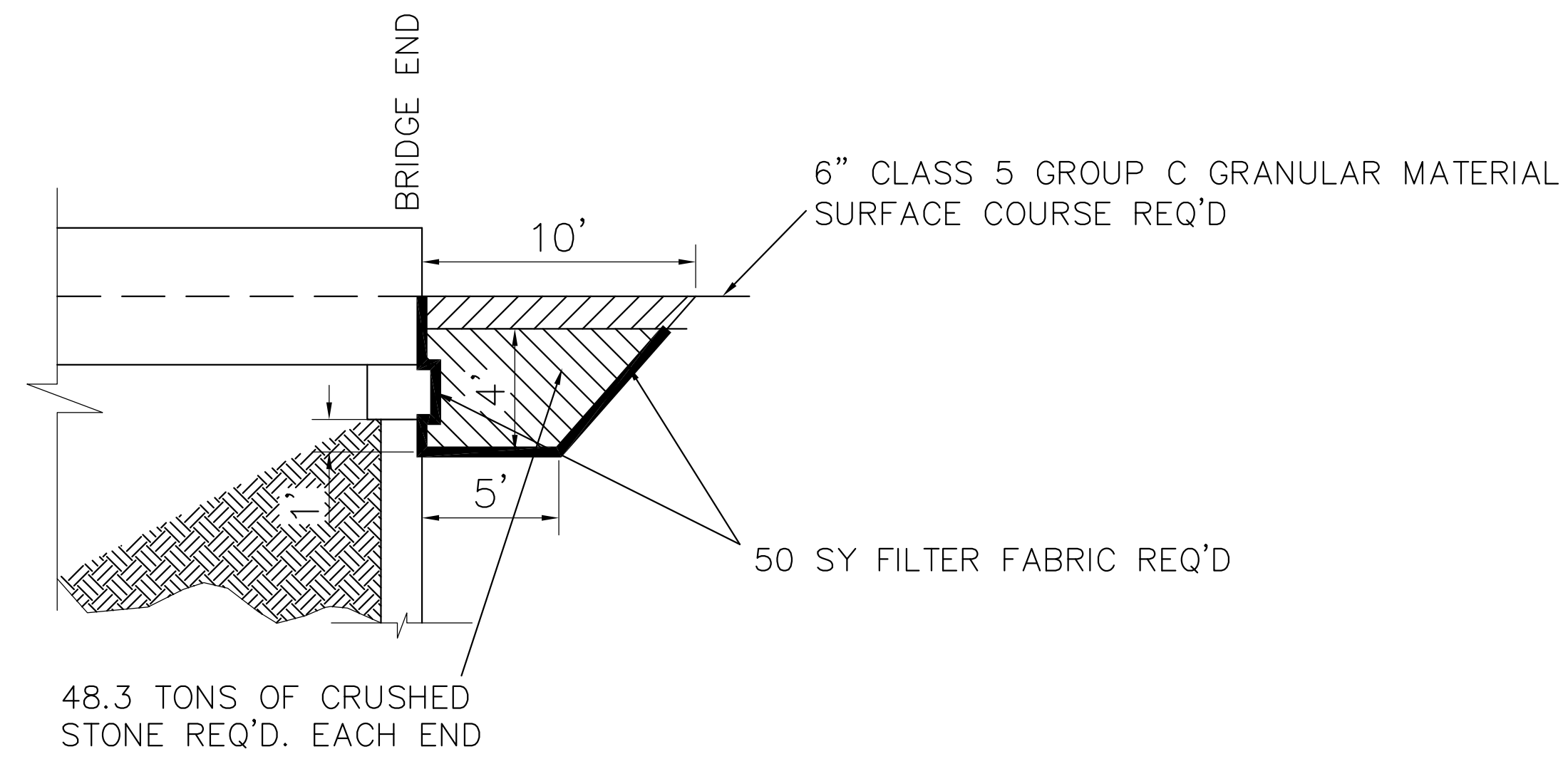
RIPRAP REQ'D			
AREA	RIPRAP (300 lb)	RIPRAP (200 lb)	FILTER FABRIC
ROADWAY DITCHES (200 lb)	0.0	297.0	342.0
BRIDGE CHANNEL (300 lb)	397.0	0.0	457.0
DITCH CHECKS (200 lb)	0.0	22.0	0.0
TOTALS	397.0	319.0	799.0
UNITS	TON	TON	S.Y.

GRANULAR MATERIAL REQ'D	
AREA	AMOUNT
ROADWAY (SURFACE)	222.0
SHOULDERS	48.0
TOTALS	270.0
UNITS	TON

ASPHALT REMOVAL REQ'D	
LOCATION	AREA
STA 4+88.61	116.0
TOTALS	116.0
UNITS	SY

CRUSHED STONE REQ'D		
AREA	610 STONE	FILTER FABRIC
BRIDGE ENDS	96.6	100.0
DITCH CHECKS	10.0	0.0
TOTALS	106.6	100.0
UNITS	TON	S.Y.

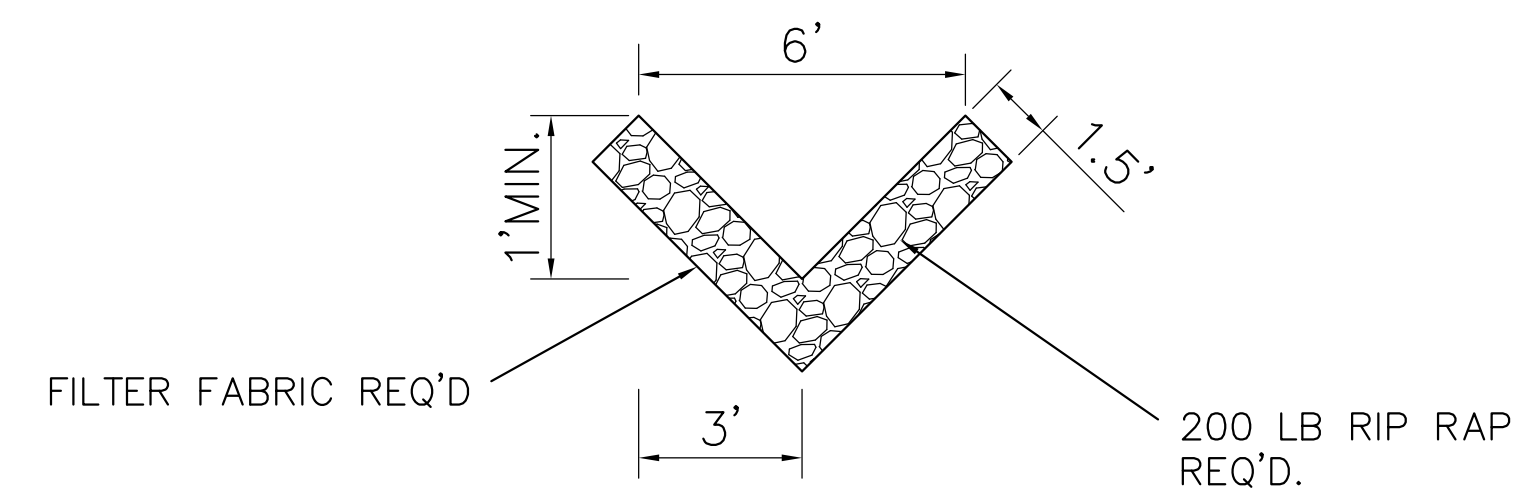
NOTE: CRUSHED STONE AND FILTER FABRIC SHOWN ON BRIDGE END DETAIL SHALL EXTEND ENTIRE LENGTH OF BRIDGE END CAP



BRIDGE END DETAIL

N.T.S.

NOTE: RIP RAP DITCH LINING TREATMENT SHALL BE PLACED AT LOCATIONS INDICATED IN THE PLANS

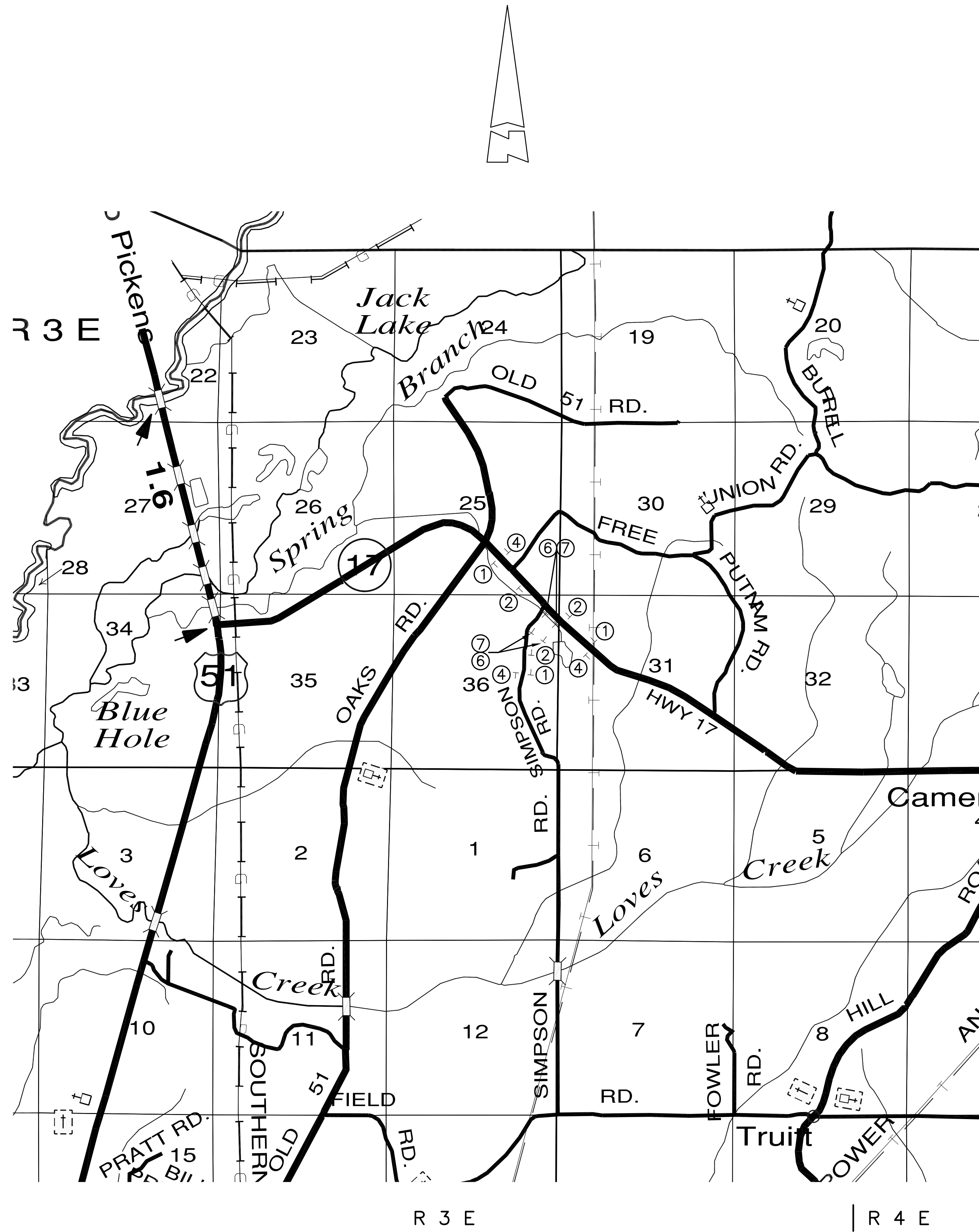


RIP RAP DITCH DETAIL

N.T.S.

SIGN SCHEDULE		
SIGN	TYPE	DESCRIPTION
①	W20-1	ROAD WORK AHEAD
②	W20-1	ROAD WORK 500 FT
④	G20-2	END ROADWORK
⑥	R11-2a	ROAD CLOSED
⑦	TYPE III	BARRICADE ACROSS ENTIRE ROADWAY

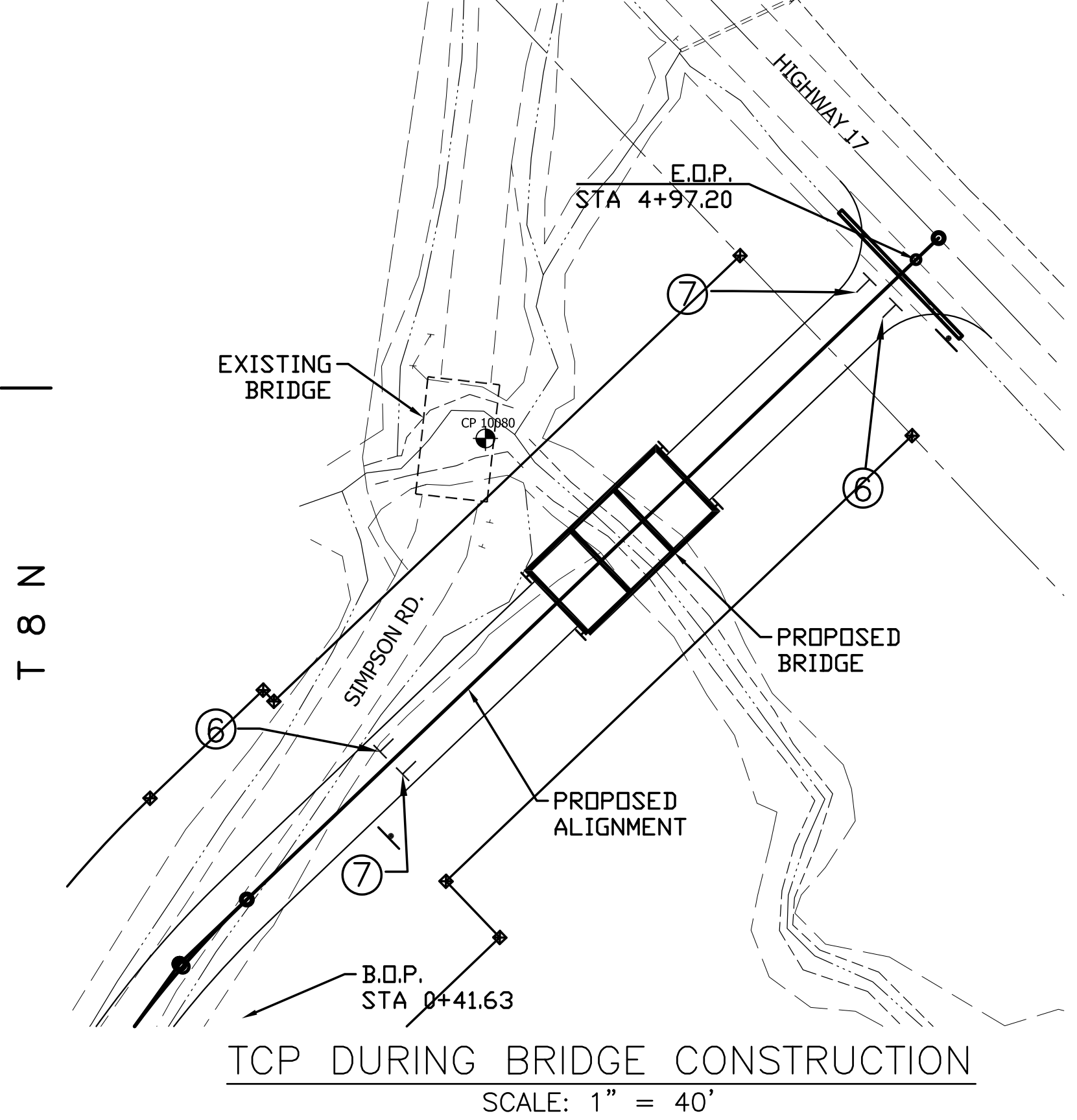
* ORANGE AND BLACK 4" HIGH LETTERS



TRAFFIC CONTROL PLAN
SCALE: 1" = 2000'

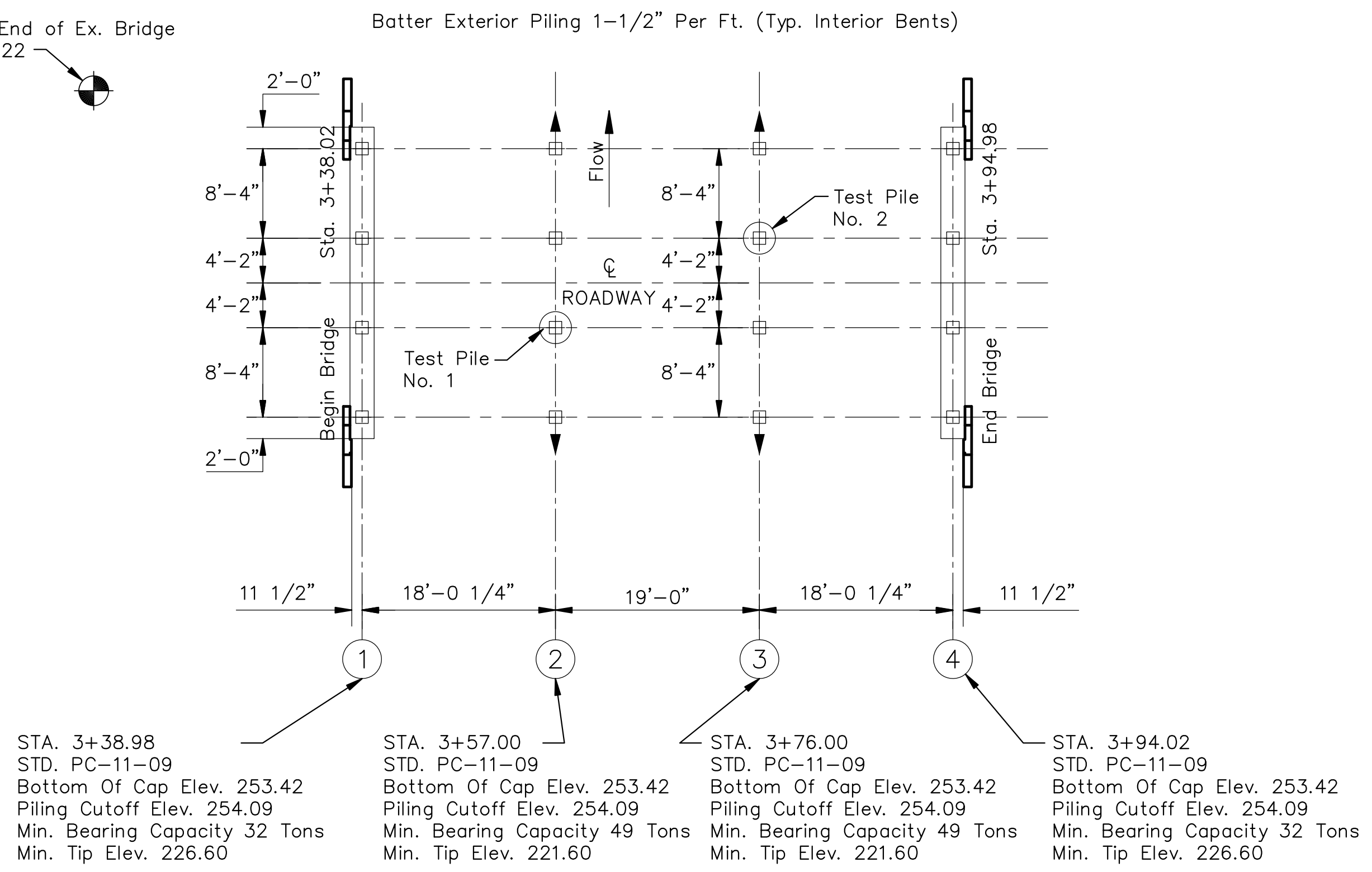
- GENERAL NOTES:**
1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
 2. CONTRACTOR SHALL INSTALL TRAFFIC CONTROL DEVICES SUCH AS CONES, DRUMS, FLASHERS, BARRICADES, SIGNS, ETC., TO SAFELY CHANNEL OR DIRECT TRAFFIC. WHEN NECESSARY, FLAGGERS SHALL BE USED IN CONJUNCTION WITH TRAFFIC CONTROL DEVICES (FLAGGER AHEAD SIGN REQUIRED IN ADVANCE OF FLAGGERS EXCEPT DURING BRIEF PERIODS OR EMERGENCY SITUATIONS.)
 3. THESE ARE MINIMUM REQUIREMENTS AND IN NO WAY RELIEVE THE CONTRACTOR OF HIS OBLIGATION TO MAINTAIN TRAFFIC IN A SAFE MANNER.
 4. TRAFFIC CONTROL DEVICES SHALL BE INSTALLED WHENEVER NECESSARY, REMAIN IN PLACE ONLY AS LONG AS THEY ARE NEEDED, AND REMOVED IMMEDIATELY THEREAFTER.
 5. SEE STANDARD DRAWINGS 6358 AND SA-TSP-1 FOR CORRECT PLACEMENT AND INSTALLATION OF BARRICADES AND SIGNS.
 6. PAY FOR INSTALLATION, MAINTENANCE, AND REMOVAL OF TRAFFIC CONTROL DEVICES WILL BE MADE UNDER PAY ITEM NOS. S-618-A AND S-618-B.
 7. CONTRACTOR SHALL INSTALL ADVANCE WARNING SIGNS SUCH AS WATCH FOR TRUCKS, TRUCKS TURNING, TRUCKS CROSSING, ETC., AND PLACE FLAGGERS AS DIRECTED BY THE COUNTY ENGINEER ALONG PUBLIC ROADS ON EACH SIDE OF BORROW PIT ENTRANCE OR CROSSING OF PUBLIC ROADS.
 8. SEE SPECIAL PROVISION NO. 901-S-618-1 FOR ADDITIONAL REQUIREMENTS.

- CONSTRUCTION NOTES:**
1. THROUGH TRAFFIC WILL BE DETOURED AROUND THE PROJECT. LOCAL TRAFFIC WILL HAVE ACCESS AT ALL TIMES FROM BOTH ENDS OF THE PROJECT.
 2. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE SIGNING AND MAINTENANCE OF THE SIGNING AS SHOWN ON SHEET 2-D.
 3. CONTRACTOR SHALL PLACE THE "ROAD CLOSED" AND TYPE III BARRICADES ACROSS THE PROPOSED ROADWAY DURING CONSTRUCTION OF NEW BRIDGE AND ALIGNMENT. ONCE NEW BRIDGE AND ROADWAY ARE READY FOR THE TRAFFIC TO BE SWAPPED, CONTRACTOR SHALL MOVE THE SIGNS AND BARRICADES TO THE OLD ROADWAY WHILE GRADING AND BRIDGE REMOVAL OCCUR.



TCP DURING BRIDGE CONSTRUCTION
SCALE: 1" = 40'

Boring B-1
Taken @ North End of Ex. Bridge
Surf. El. = 255.22



LOG OF BORING NO. 1
LSBP-45(22) SIMPSON ROAD
MADISON COUNTY, MISSISSIPPI

LOCATION: Existing North Bridge End
TYPE: 6" Short-flight auger to 10', then rotary wash to completion.

DEPTH, FT.	SYMBOL	DESCRIPTION OF MATERIAL	AUSHD	BLOWS PER FT.	PERCENTAGE OF WATER	WATER CONTENT	LL	PL	PH	VOLUME CHANGE %	DRY DENSITY, PCF	CR. (EST.) NO. 200 SIEVE
0		SURFACE EL. 255.22 ± 0.0										
10		Stiff tan silty clay (CL) with sand - soft below 4'		10	26	18	8					59
17		Medium dense light gray and tan very silty clay (CL-ML) with sand		17	23	18	5					59
13		Stiff light gray and tan sandy clay (CH)		13	51	15	36					52
30		Medium dense light gray silty sand (SM) with gravel - dense, tan 25' to 33'		30								19.4
43		- very dense below 33'		43								
62		Very dense light gray sand (SP-SM), slightly silty		62								8.7
66		- light gray and tan below 58'		66								
69				69								
62				62								
67				67								
100+				100+								
30		Very stiff dark gray sandy clay (CL)		30	36	13	23					59.1
29		Boring was completed at 80'		29								

DATE: 11/1/19
COMMENTS: Automatic hammer corrections applied
GROUNDWATER DATA: Free water encountered at an approximate depth of 10' during auger drilling. Water level at an approximate depth of 7' after about 15 minutes.

DRAINAGE DESIGN DATA

DRAINAGE AREA	A =	0.39	SQ. MI.
Q25	=	428.0	C.F.S.
Q100	=	551.0	C.F.S.
REQUIRED OPENING	=	85.60	SQ. FT.
*DESIGN OPENING	=	161.0	SQ. FT.

GENERAL NOTES:

- SPECIFICATIONS: MISSISSIPPI STANDARD SPECIFICATIONS FOR STATE AID ROAD AND BRIDGE CONSTRUCTION. CURRENT EDITION.
- NO UNAUTHORIZED CHANGE OF PLANS WILL BE PERMITTED.
- TEST PILES SHALL BE DRIVEN AS PERMANENT PILES AT LOCATIONS SHOWN ON THE PILE LAYOUT AND WILL BE PAID FOR AS TEST PILES ONLY.
- NO PAYMENT WILL BE ALLOWED FOR EXCAVATION INCIDENTAL TO CONSTRUCTION OF END BENTS OR PILE ENCASEMENTS.
- ALL WORK FOR WHICH NO PAY ITEMS ARE PROVIDED IN THE PROPOSAL WILL NOT BE PAID FOR DIRECTLY AND COMPENSATION THEREFOR WILL BE CONSIDERED INCLUDED IN THE PRICES AND PAYMENTS FOR BID ITEMS.
- PILING QUANTITIES ARE ESTIMATED ONLY AND SHALL NOT BE USED TO ESTIMATE LENGTH OF TEST PILE.
- TEST PILES REPORT TO BE SUBMITTED TO THE OFFICE OF STATE AID AND APPROVED PRIOR TO ORDERING PERMANENT PILE LENGTHS.
- CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH SECTION S-804.03.19 OF THE SPECIFICATIONS.
- NO PAY ITEM IS PROVIDED FOR FOUNDATION EXCAVATION FOR BRIDGE.
- ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.
- TEST PILES SHALL BE DRIVEN WITHOUT PRE-FORMED HOLE.
- CONCRETE BRIDGE AND PILE EXPOSURE TO SULFATES IS NEGLIGIBLE.
- PREVIOUS WEIGHT LIMIT AND OBJECT MARKER SIGNS TO BE REMOVED FROM THE PROJECT & BECOME PROPERTY OF THE CONTRACTOR.
- EXISTING TIMBER END WALLS SHALL BE REMOVED BY CONTRACTOR UNDER PAY ITEM S-202-A "REMOVAL OF OBSTRUCTIONS" AND DISPOSED OF OFFSITE.

NOTE:

IF TEST PILING DOES NOT ACHIEVE TEST PILE BEARING WITHIN 10.0 FEET BELOW SPECIFIED TEST PILE MINIMUM TIP ELEVATION, THE BRIDGE ENGINEER SHALL BE NOTIFIED PRIOR TO ANY FURTHER TEST PILING BEING DRIVEN. AFTER REVIEW OF THE TEST PILE REPORT, THE BRIDGE ENGINEER WILL THEN DETERMINE WHETHER OR NOT TO REQUIRE A LOAD TEST. LOAD TEST, WHEN REQUIRED, WILL BE PAID FOR AS SET FORTH IN THE CONTRACT DOCUMENTS FOR THIS PROJECT.

TEST PILE SCHEDULE

TEST PILE NO.	MIN. BEARING	MIN. TIP ELEVATION
1	54 TONS	216.60
2	54 TONS	216.60

SUMMARY OF HYDRAULIC DESIGN DATA

BRIDGE	* DESIGN YEAR Q25		* DESIGN YEAR Q100		FLOOD OF RECORD	
	DISCH. (C.F.S.)	H. WATER (ELEV.)	DISCH. (C.F.S.)	H. WATER (ELEV.)	DISCH. (C.F.S.)	H. WATER (ELEV.)
3+38.02	428.0	252.45	551.0	NA	NA	NA

* HEAD WATER ELEVATION VALUES SHOWN ON THESE PLANS ARE THEORETICAL AND MAY VARY FROM ACTUAL CONDITIONS.

ESTIMATED BRIDGE QUANTITIES

ITEM	19' SPAN EXTERIOR CURB UNIT	19' SPAN 3.5' INTERIOR UNIT	29' CONC. CAP END UNIT	29' CONC. CAP INT. UNIT	BEAM TYPE RAIL W/ CONC. POSTS	ABUT. WINGS	14" CONCRETE PILES	TEST PILES	LOOSE RIPRAP (300#)	FILTER FABRIC	20" PREFORMED PILE HOLES
LOCATION	EACH	EACH	EACH	EACH	LIN. FT.	EACH	LIN. FT.	EACH	TONS	SQ.YD.	LIN FT
END BENTS			2.0			4.0	240.0		397.0	457.0	100.0
INT. BENTS				2.0			210.0	2.0			100.0
END SPANS	4.0	12.0			76.0						
INT. SPANS	2.0	6.0			38.0						
TOTALS	6.0	18.0	2.0	2.0	114.0	4.0	450.0	2.0	397.0	457.0	200.0

NOTE:

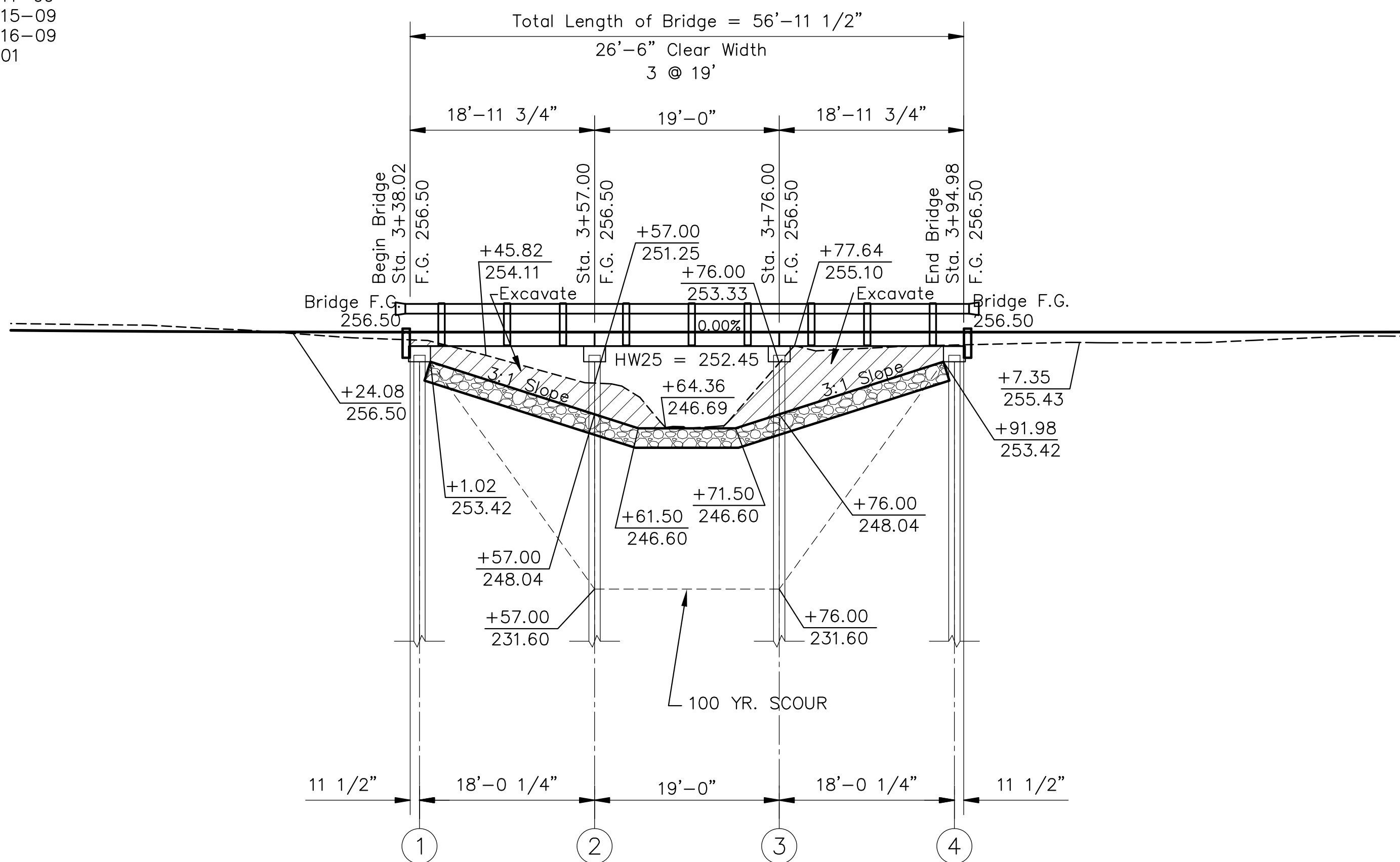
THE PILING QUANTITIES ARE ESTIMATED ONLY AND SHALL NOT BE USED TO ESTIMATE LENGTH OF TEST PILES.

ESTIMATED LENGTH FOR PILING IS BASED ON MINIMUM TIP ELEVATIONS. FINAL PAY LENGTH WILL BE APPROVED BY BRIDGE ENGINEER.

BRIDGE LAYOUT SHEET

Standards Required

- PC-01-09
- PC-03-09
- PC-11-09
- PC-15-09
- PC-16-09
- CP-01

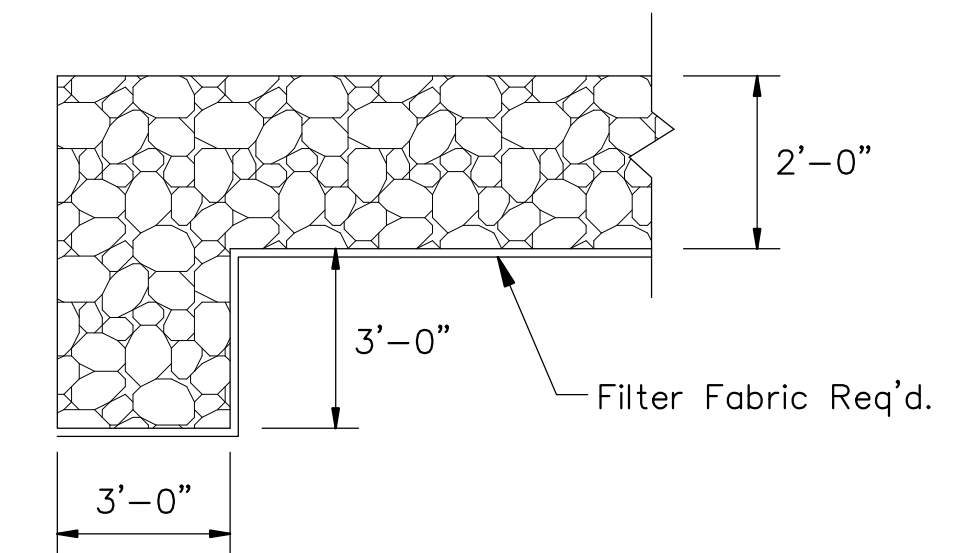
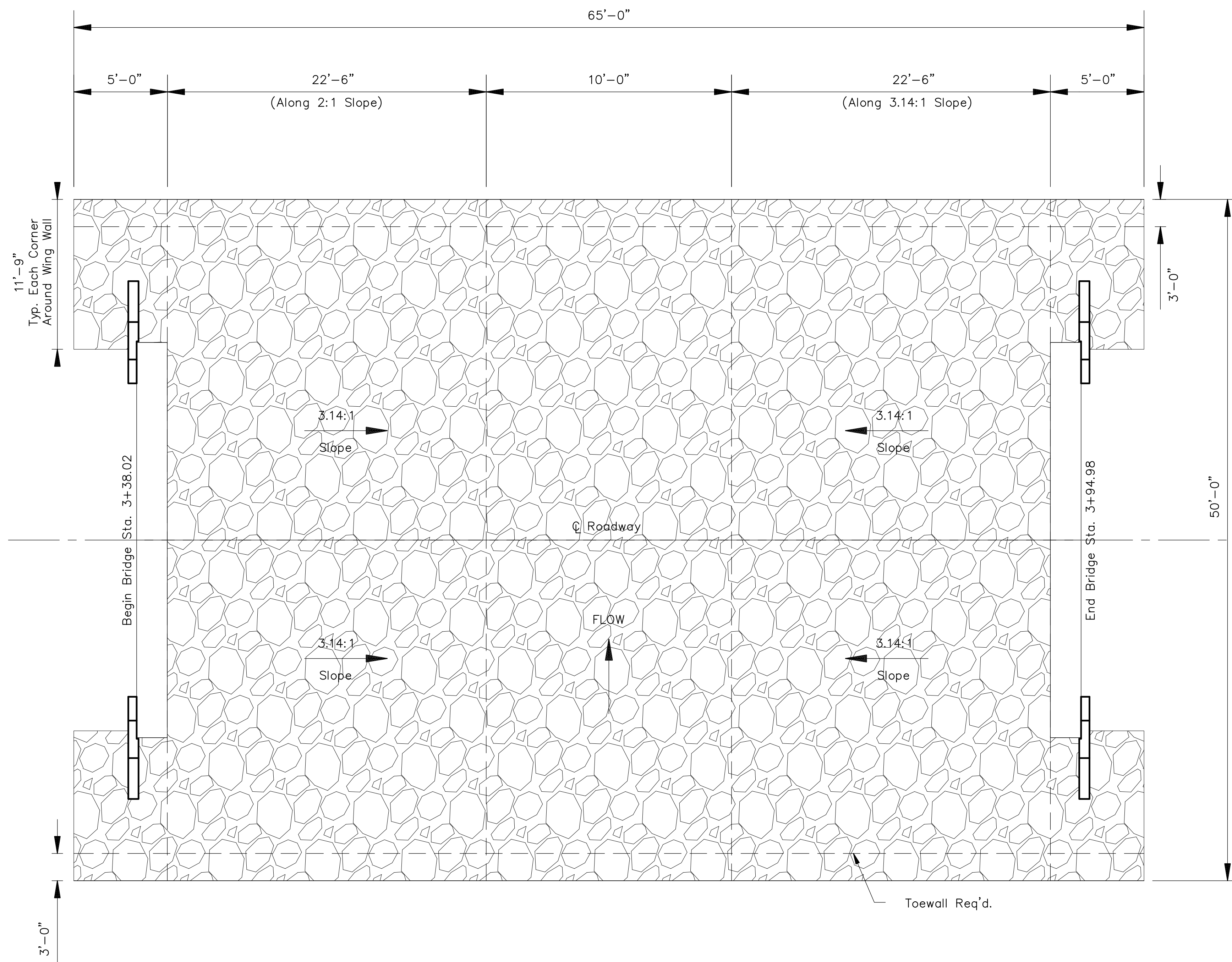


Quantities

397 Tons 300 lb. Riprap Req'd.
457 Sq. Yds. Filter Fabric Req'd.

NOTE

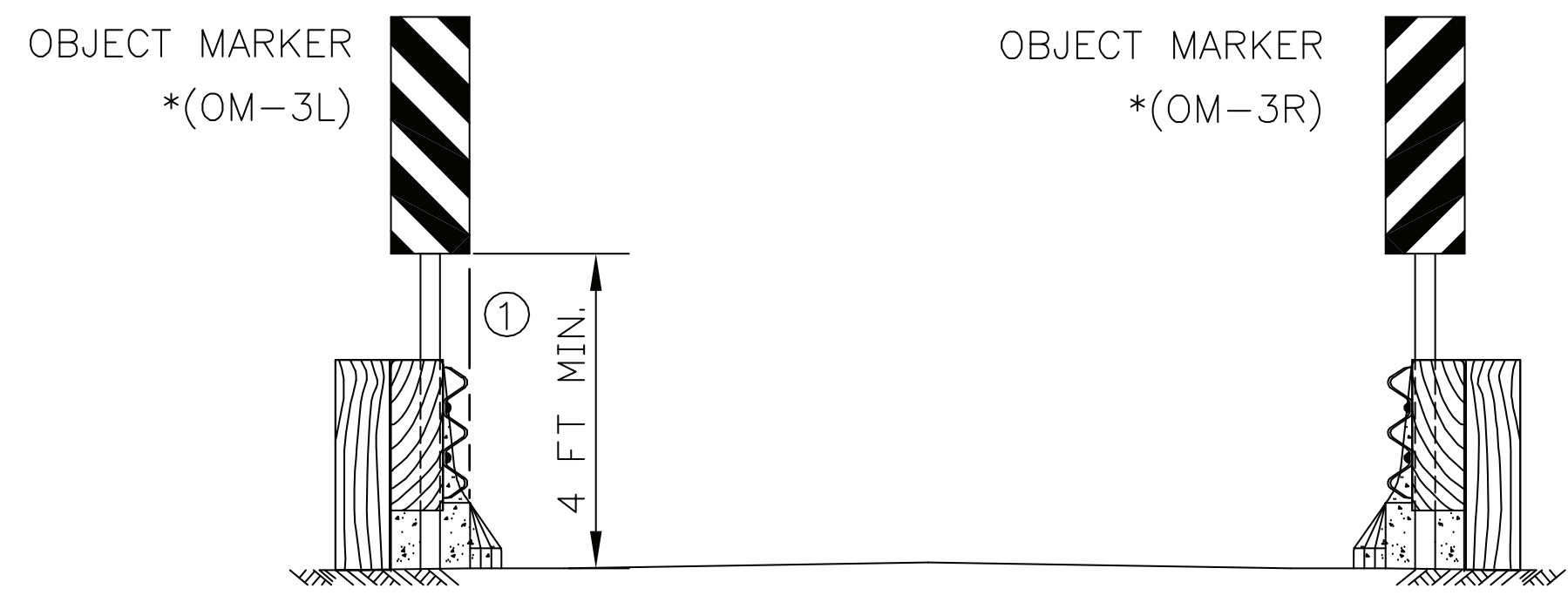
Min. 3'-0" Riprap Toewall At Upstream And Downstream Req'd.



RIPRAP TOEWALL DETAIL
N.T.S.

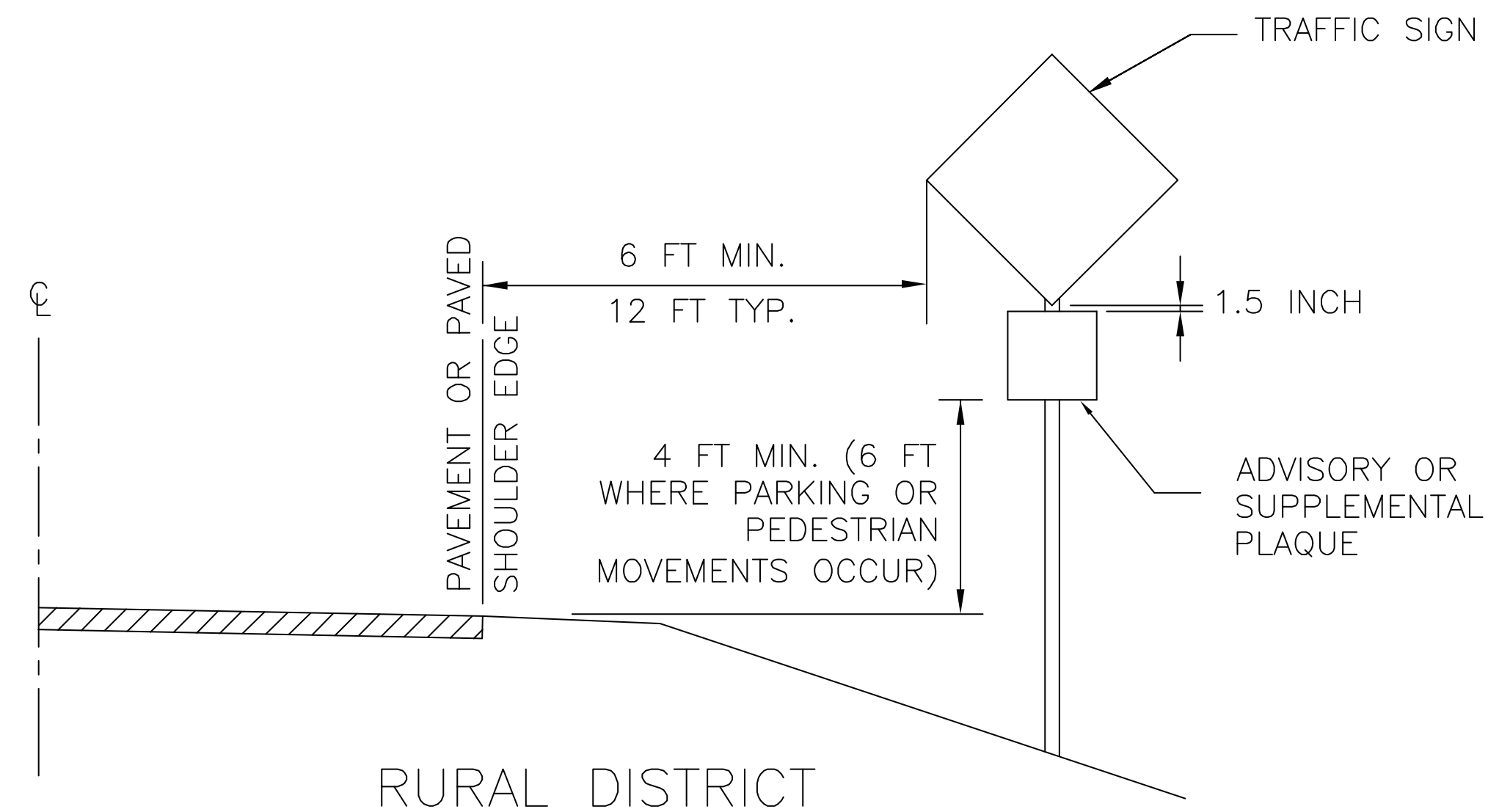
RIPRAP DETAIL AT BRIDGE ENDS

N.T.S.

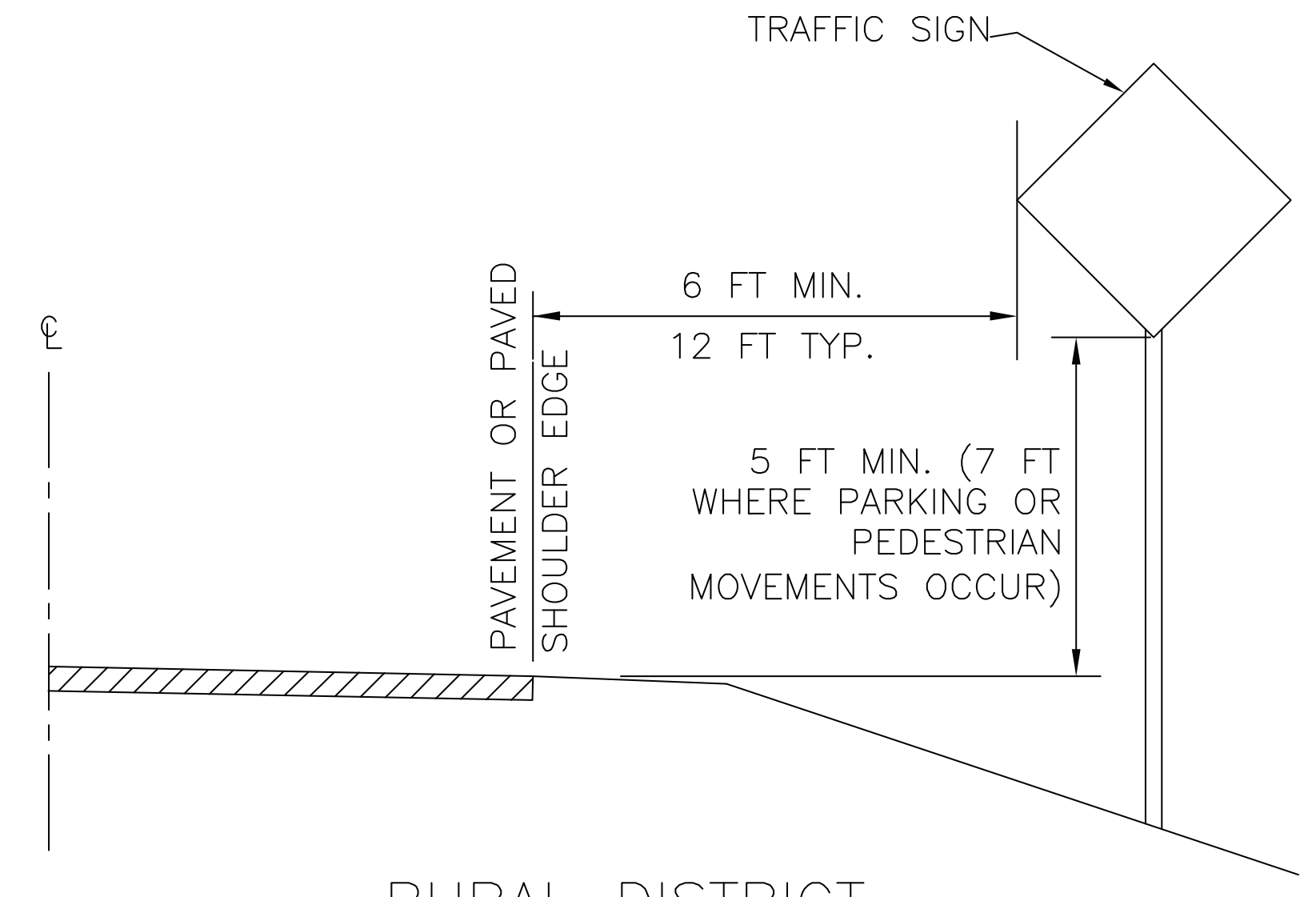


TYPE 3 OBJECT MARKER INSTALLATION
AT BRIDGE ENDS

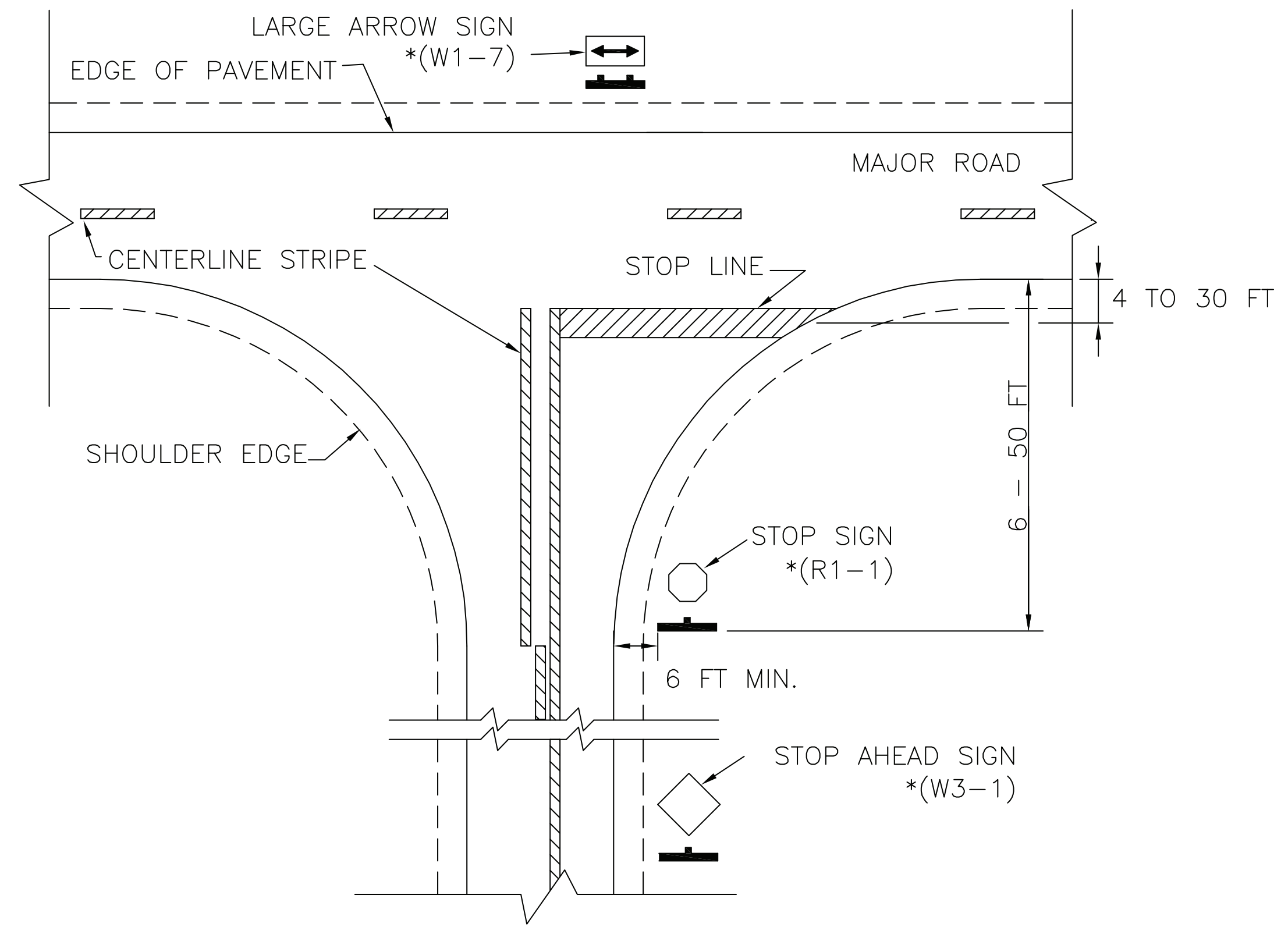
① INSIDE EDGE OF MARKER SHALL BE IN LINE WITH INNER EDGE OF THE OBSTRUCTION AND SHOULD BE AS NEAR THE OBSTRUCTION AS PRACTICAL.



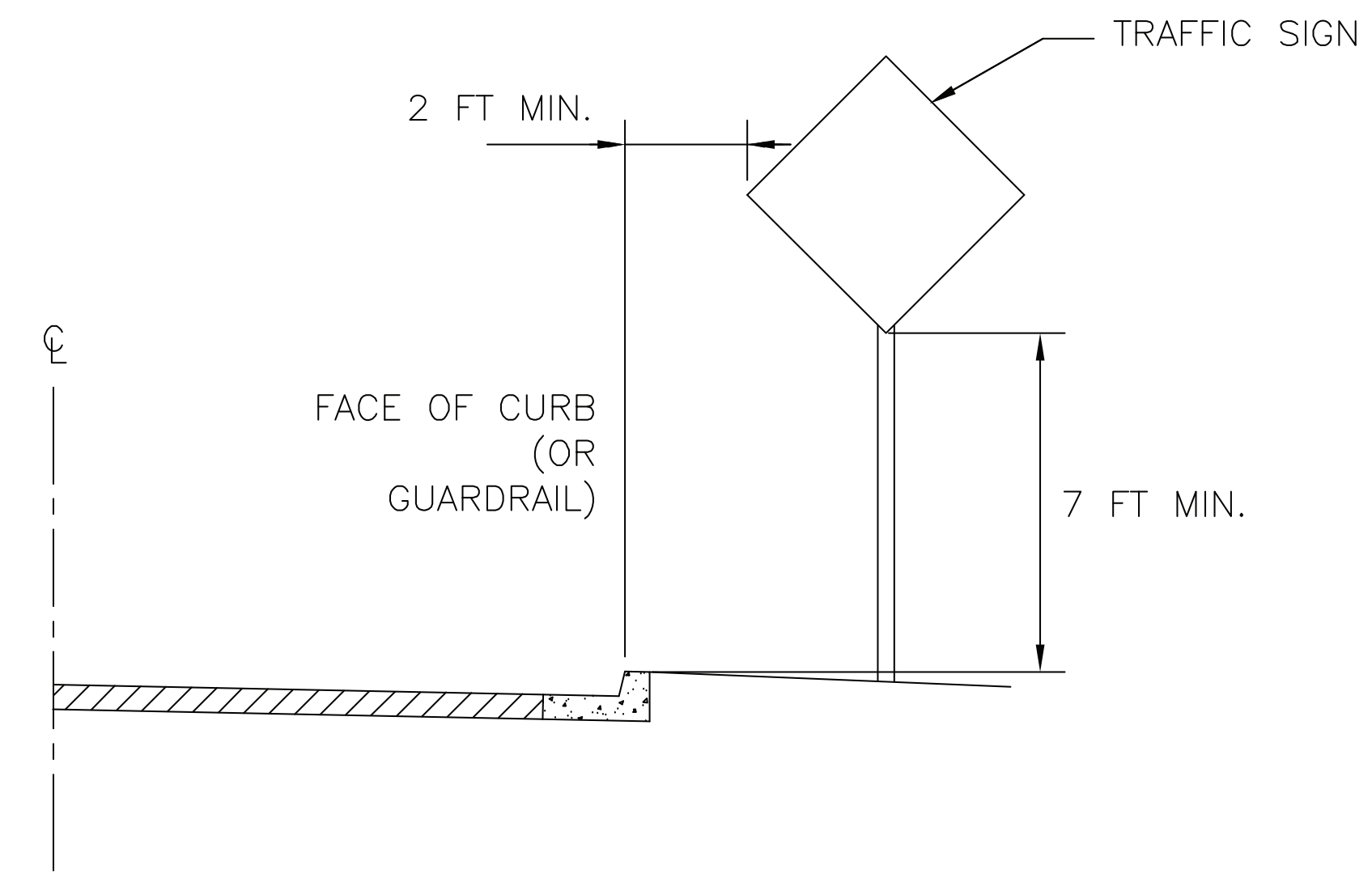
RURAL DISTRICT
(SHOULDER AND SIDE SLOPE SECTION)



RURAL DISTRICT
(SHOULDER AND SIDE SLOPE SECTION)



TYPICAL TEE INTERSECTION
(PLAN VIEW)



BUSINESS OR RESIDENTIAL DISTRICT
(CURB & GUTTER SECTION)

NOTES:
SIGN SIZE SHALL BE THAT DESIGNATED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) FOR CONVENTIONAL ROADS.

THE 6-FT LATERAL OFFSET SHOWN FOR RURAL ROADS MAY BE REDUCED TO NO LESS THAN 2 FT ON LOW-VOLUME ROADS (ADT <400) IF ROADSIDE FEATURES SUCH AS TERRAIN, SHRUBBERY, AND/OR TREES PREVENT NORMAL INSTALLATION.

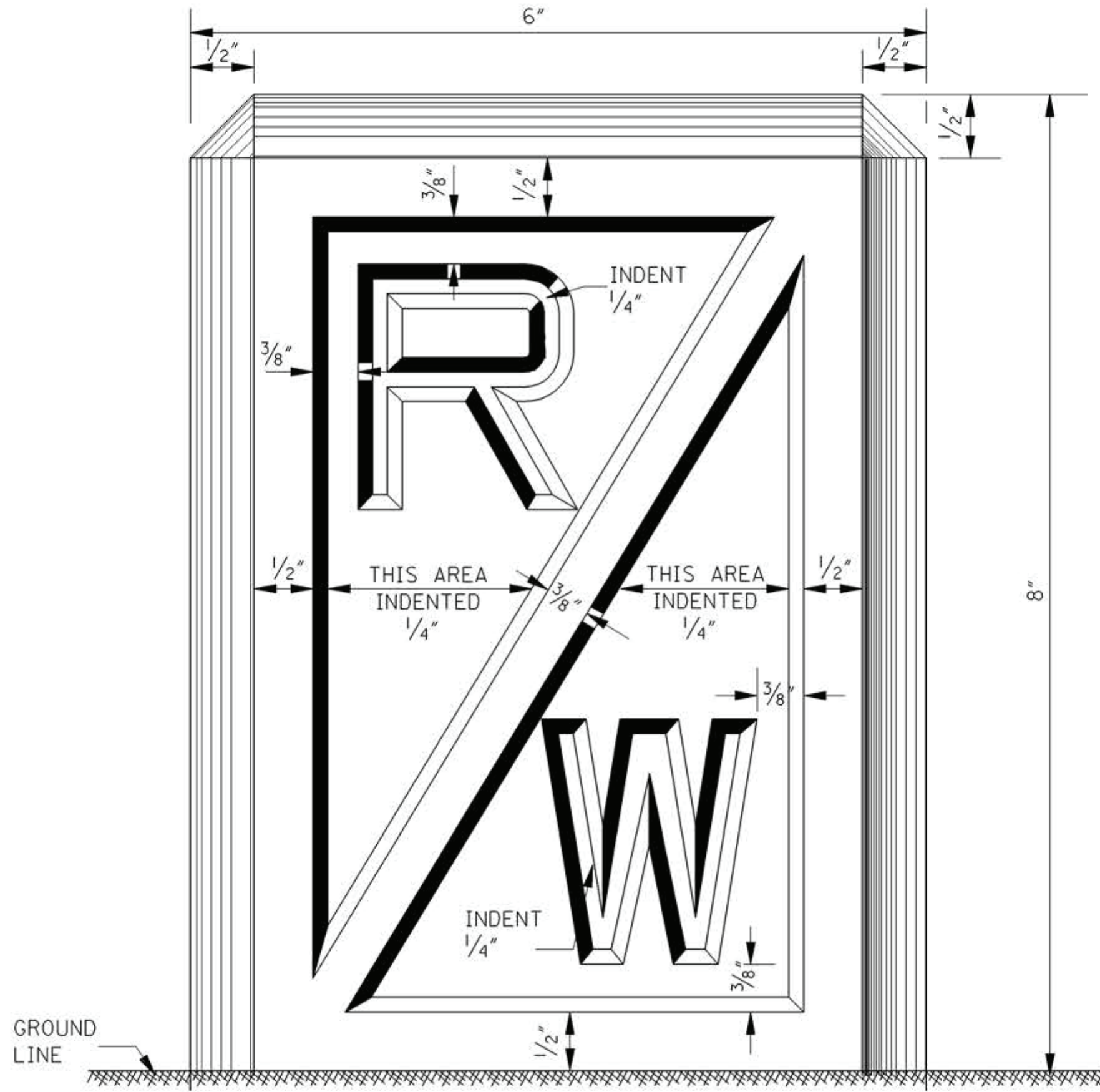
STOP SIGNS *(R1-1) SHOULD BE LOCATED 6 FT TO 50 FT FROM THE INTERSECTING PAVEMENT EDGE AND AS CLOSE AS PRACTICAL TO THE INTERSECTION WHILE PROVIDING MAXIMUM VISIBILITY. IF STOP SIGN VISIBILITY IS RESTRICTED, A STOP AHEAD SIGN SHALL BE INSTALLED IN ADVANCE OF THE STOP SIGN. SEE MUTCD.

POSTS FOR TRAFFIC SIGNS SHALL BE EITHER 4"x4" S4S TREATED TIMBER, OR STEEL.

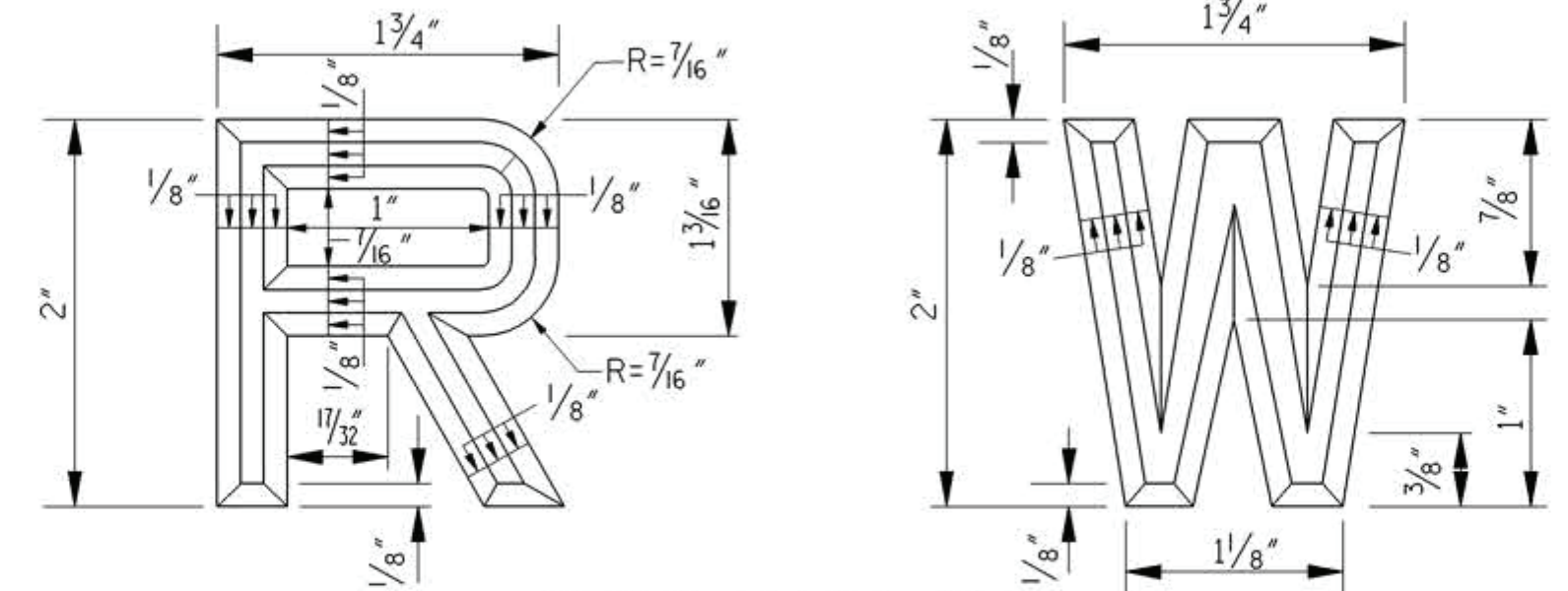
*SIGN TYPE DESIGNATION REFERS TO THE MUTCD.

			BY	OFFICE OF STATE AID ROAD CONSTRUCTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION
			REVISION	TRAFFIC SIGN PLACEMENT
			DATE	BY: JBM DATE: NOVEMBER 16, 2004 DRAWING NUMBER: SA-TSP-1

**TYPE I MARKER
(ALTERNATE NO. 1)**

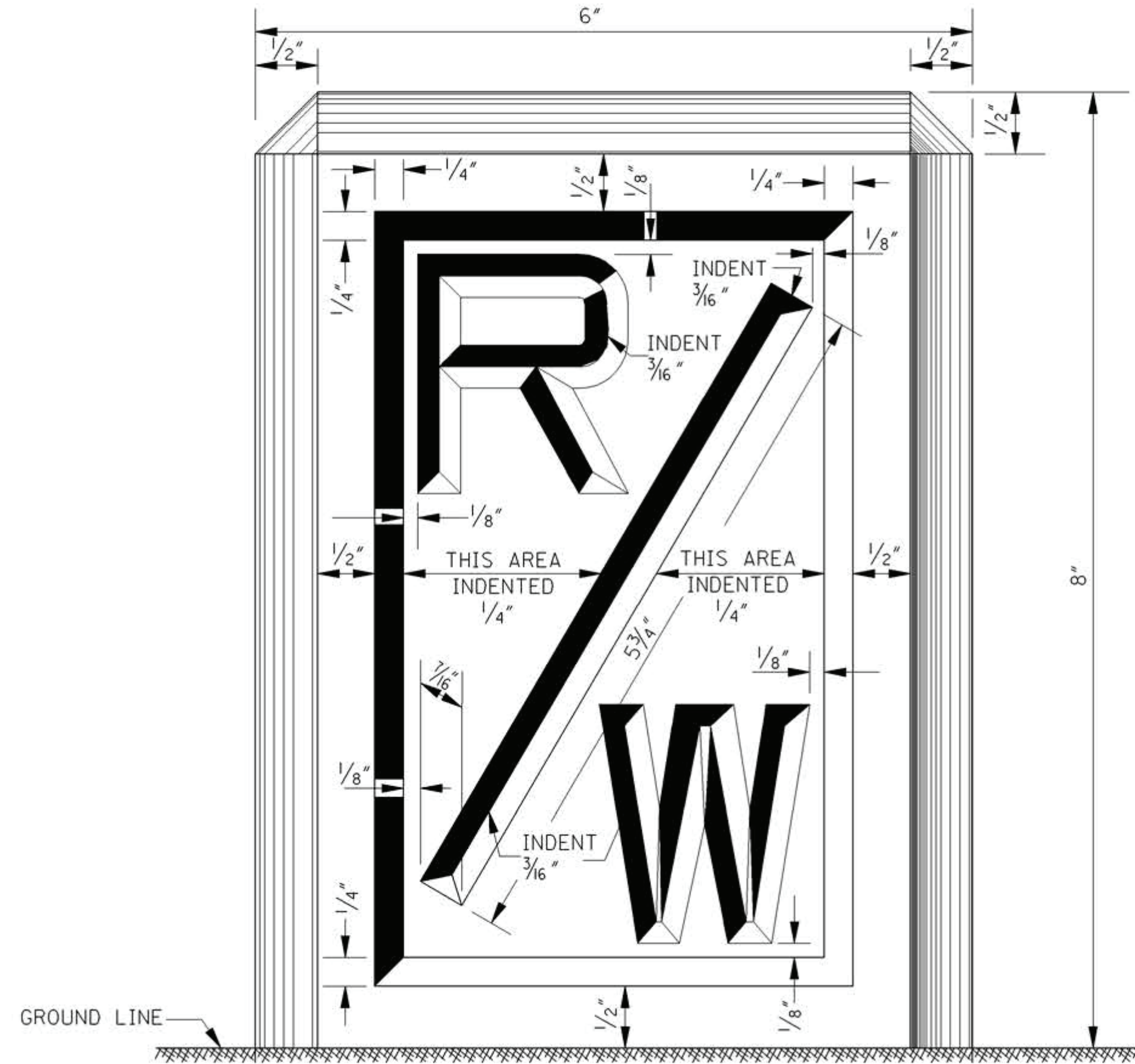


FACE OF MARKER

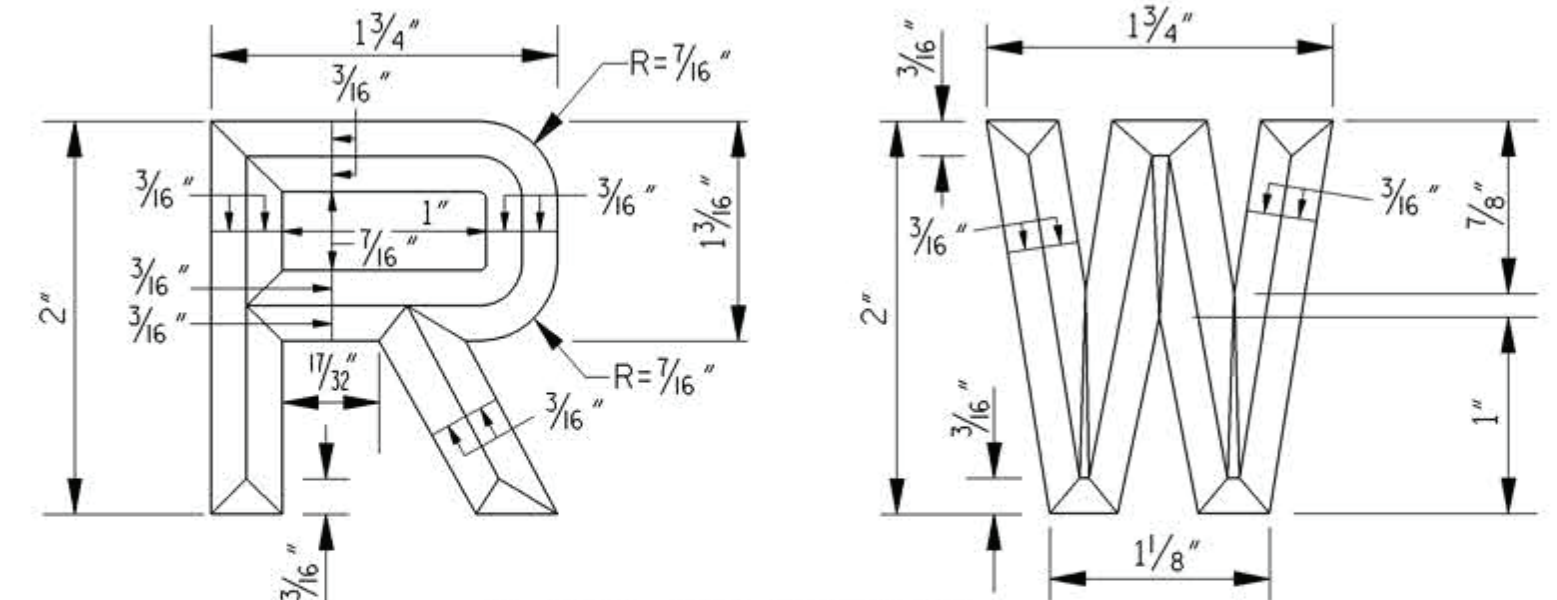


DETAIL OF LETTERS

**TYPE I MARKER
(ALTERNATE NO. 2)**

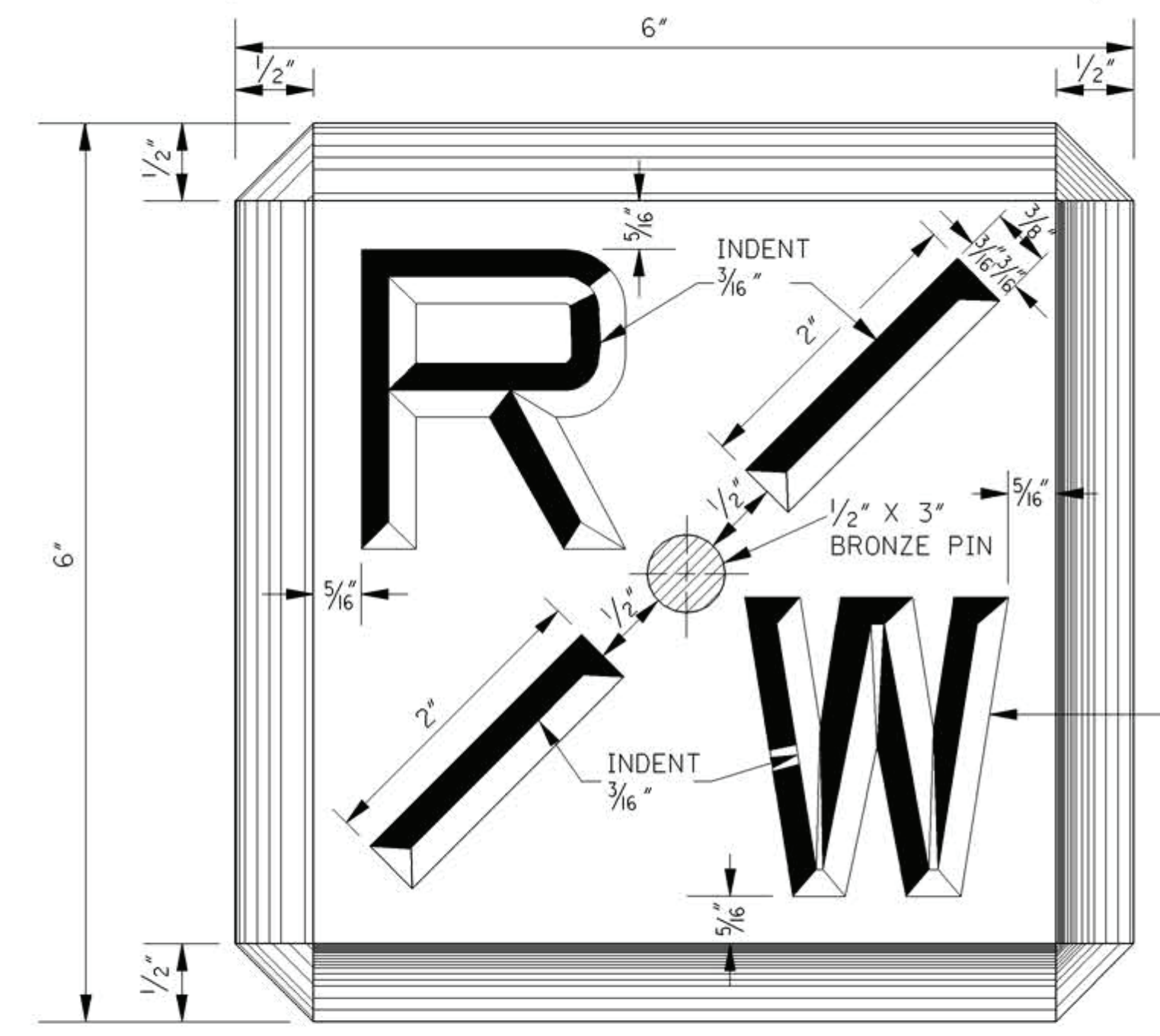


FACE OF MARKER



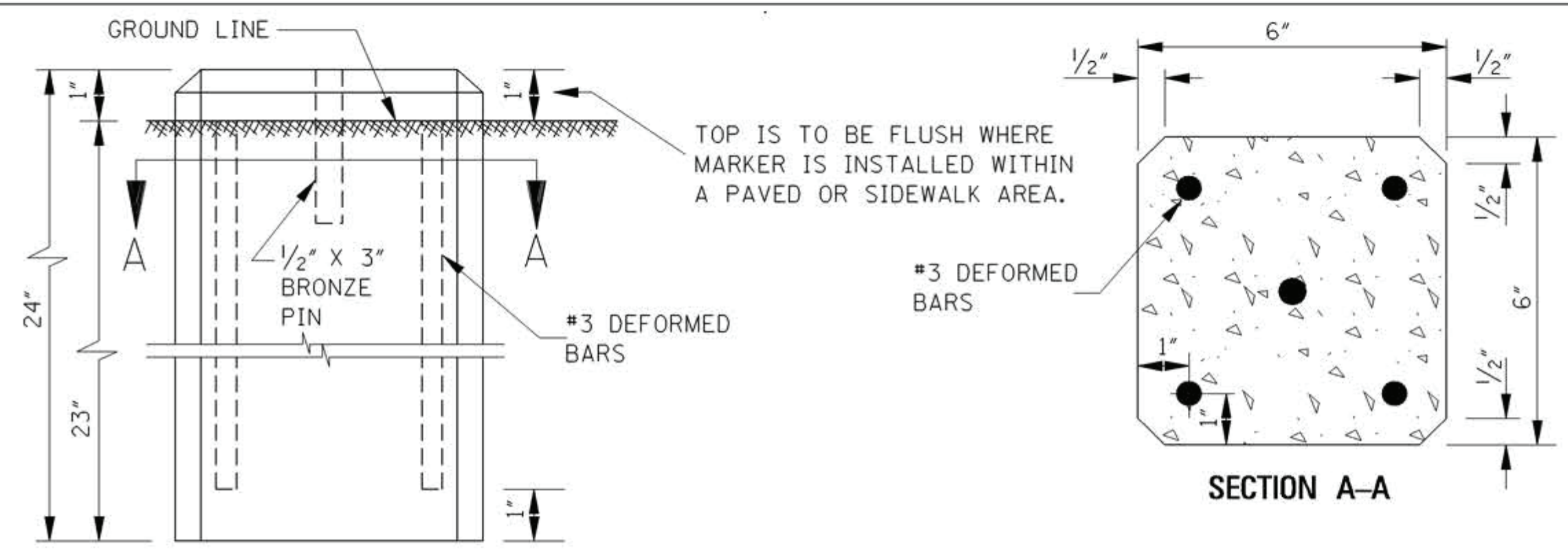
DETAIL OF LETTERS

**TYPE II MARKER
(FLUSH TYPE FOR USE IN BUILT-UP AREAS)**



TOP OF MARKER

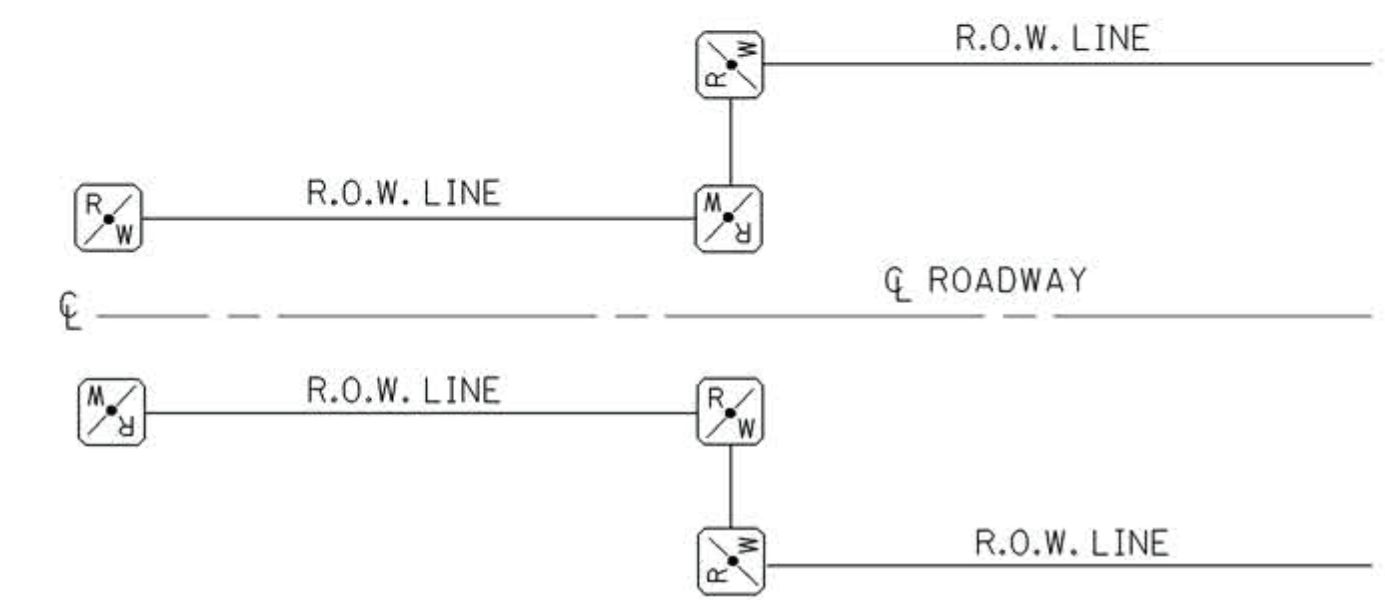
FOR DIMENSIONS OF LETTERS, SEE "DETAIL OF LETTERS" FOR TYPE I, ALT. NO. 2.



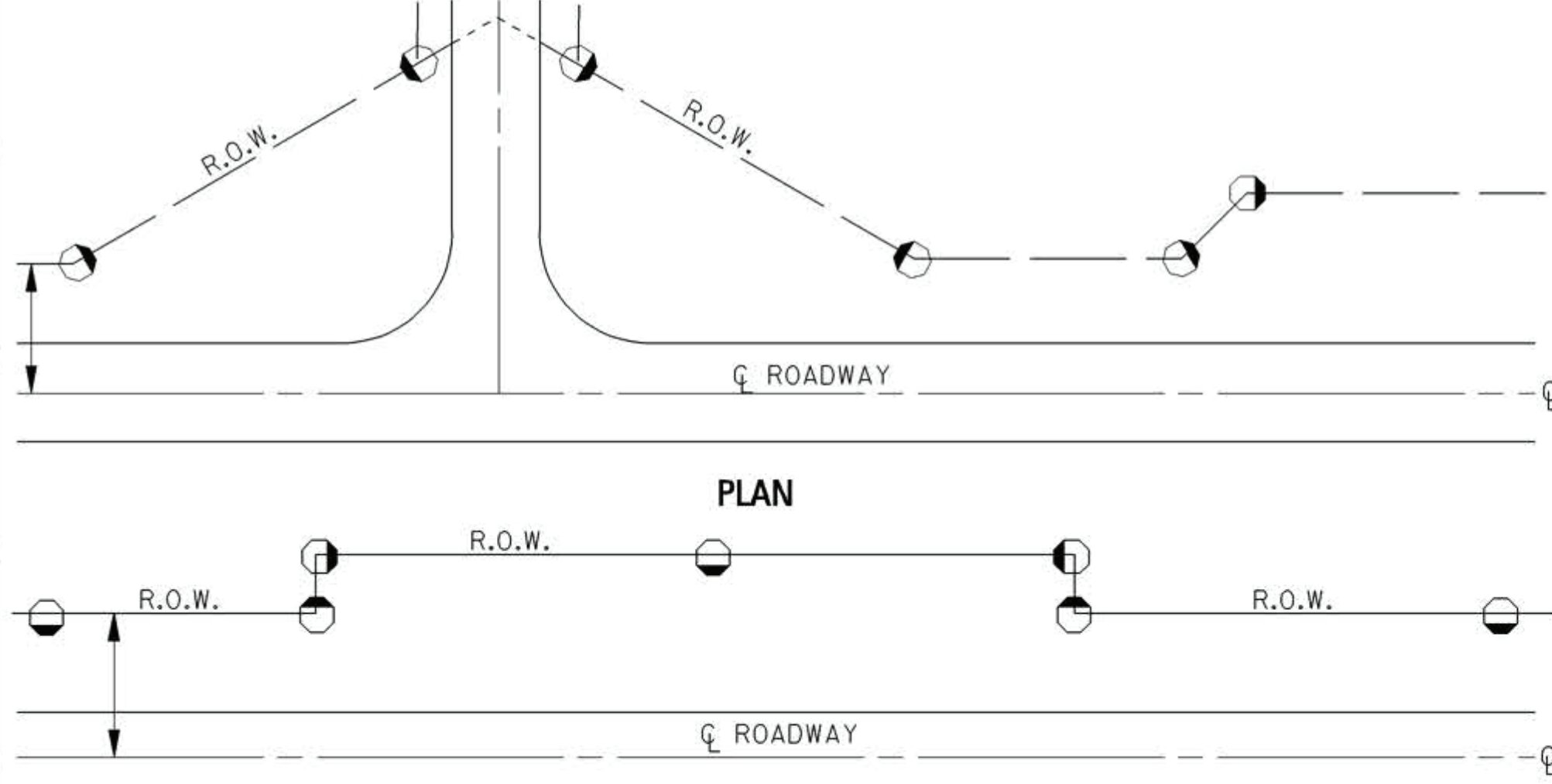
ELEVATION

REINFORCING AND INSTALLATION DETAILS

SECTION A-A

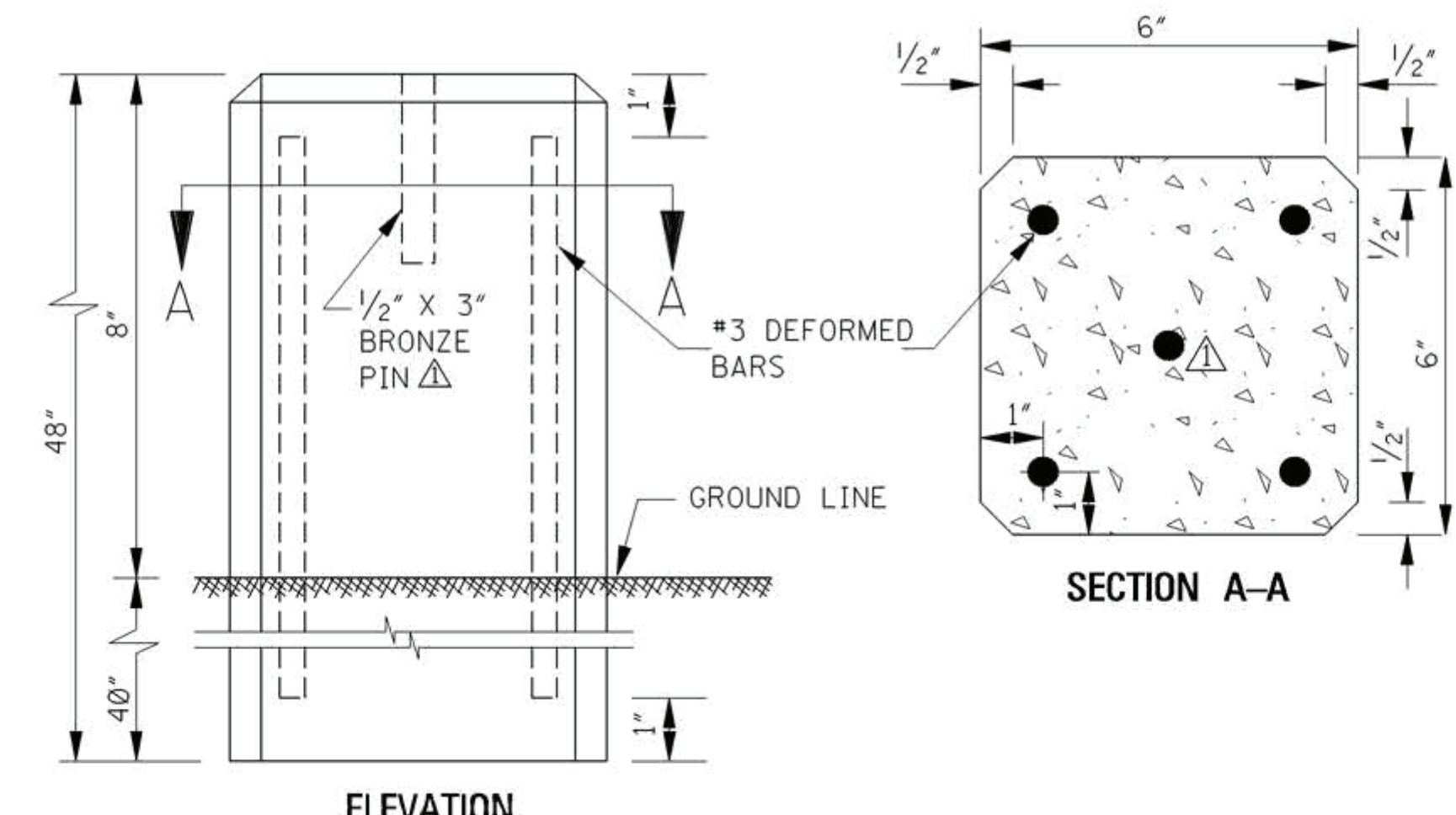


PLAN
MARKER ARRANGEMENT FOR ADDITIONAL RIGHT-OF-WAY



PLAN

MARKER ARRANGEMENT FOR ADDITIONAL RIGHT-OF-WAY



ELEVATION

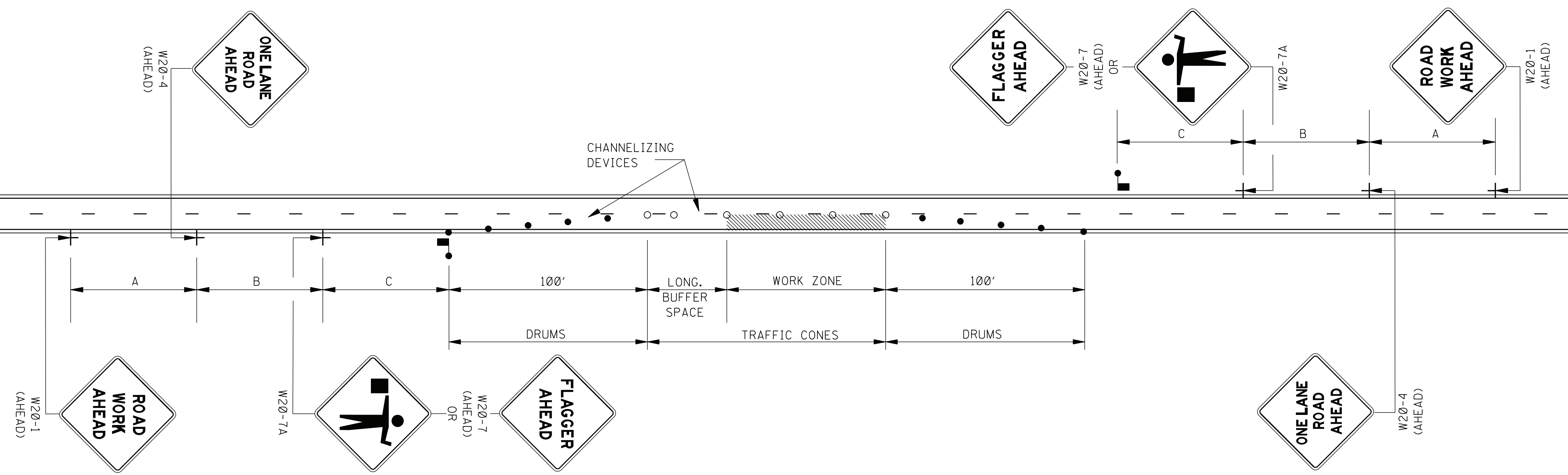
REINFORCING AND INSTALLATION DETAILS

SECTION A-A

GENERAL NOTES:

1. THE CONCRETE SHALL HAVE A MINIMUM CEMENT CONTENT OF 470 LBS. OF CEMENT PER CUBIC YARD OF CONCRETE.
2. THE MARKERS SHALL BE PLACED AS INDICATED ELSEWHERE ON PLANS.
3. TYPE II MARKERS SHALL BE USED UNLESS OTHERWISE APPROVED.

DATE	ISSUE DATE: September 19, 2017	SHEET NUMBER	SA-RW-1
REVISION		BY	OFFICE OF STATE AID ROAD CONSTRUCTION
			RIGHT-OF-WAY MARKER



- LEGEND**
- FLAGGER
 - RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
 - TRAFFIC CONES (28" HEIGHT MINIMUM)

GENERAL NOTES:


- THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE. FLAGGER STATIONS SHALL BE LOCATED SUCH THAT APPROACHING VEHICLES WILL HAVE SUFFICIENT DISTANCE TO STOP. VALUES IN STOPPING SIGHT DISTANCE COLUMN MAY BE USED AS A MINIMUM FOR THIS DISTANCE.

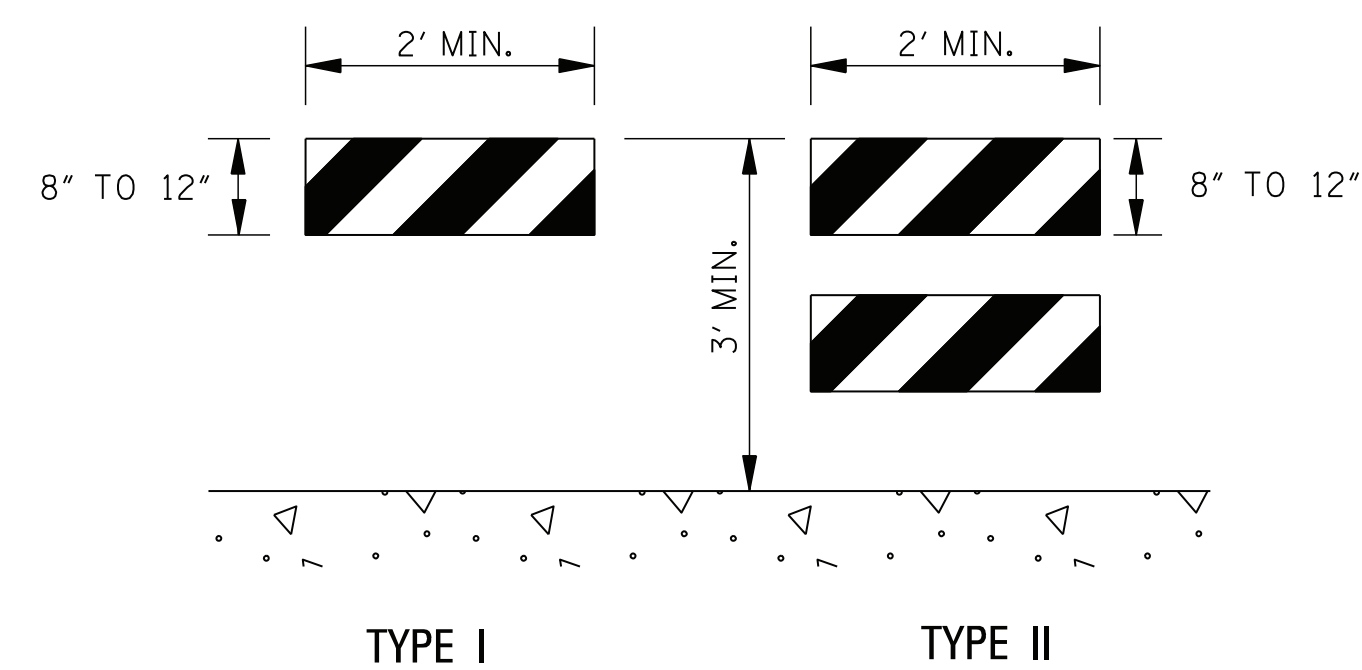
POSTED SPEED AND/OR DESIGN SPEED mph	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL BUFFER SPACE (ft) [†]	STOPPING SIGHT DISTANCE
	TAPER	ALONG LANE LINE & WORK ZONE		
25	20	50	55	155
30	20	60	85	200
35	20	70	120	250
40	20	80	170	305
45	20	90	220	360
50	20	100	280	425
55	20	110	335	495
60	20	120	415	570
65	20	130	485	645

[†] NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

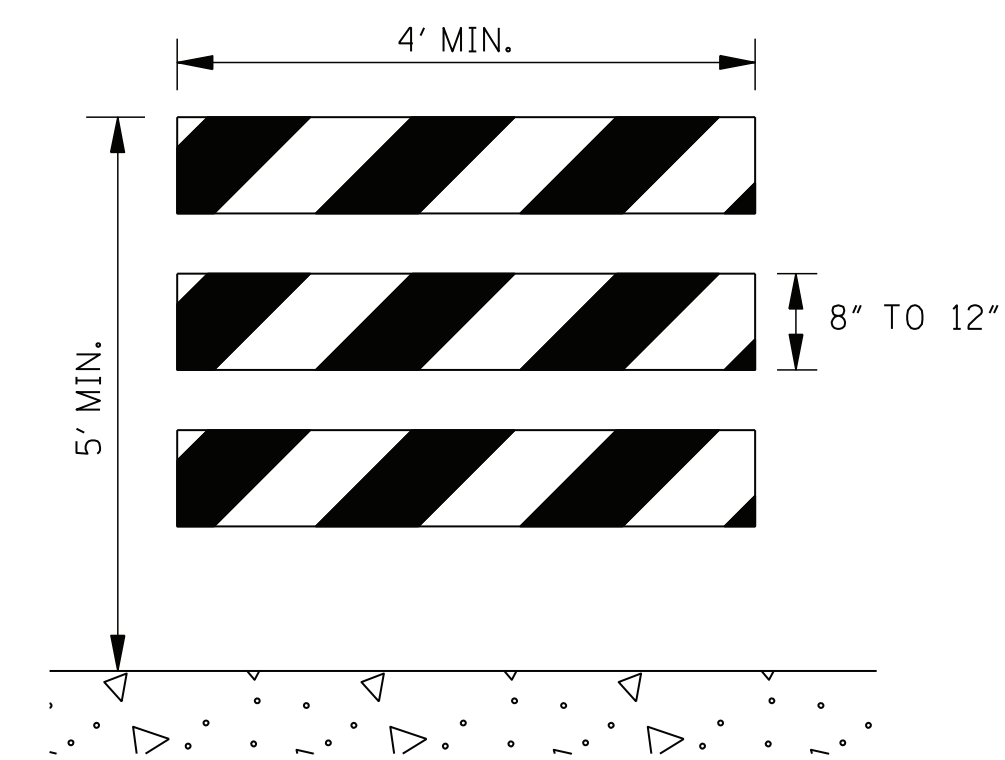
- ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 28" IN HEIGHT.
- DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" x 36" AND BLACK COPY ON FLUORESCENT ORANGE SHEETING.
- WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
- ADDITIONAL FLAGGERS MAY BE NEEDED AS DIRECTED BY THE ENGINEER.
- WHEN WORK IS REQUIRED AT NIGHT, FLAGGER STATIONS SHALL BE ILLUMINATED.
- CHANNELIZING DEVICE TYPES FOR:
 - APPROACH AND EXIT TAPERS- RETROREFLECTIVE PLASTIC DRUMS
 - ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES (28" HEIGHT)
- ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

ROAD TYPE	A	B	C
URBAN (35 MPH OR LESS)	100 FT.	100 FT.	100 FT.
URBAN (40 - 70 MPH)	350 FT.	350 FT.	350 FT.
RURAL	500 FT.	500 FT.	500 FT.
EXPRESSWAY / FREEWAY	1000 FT.	1500 FT.	2640 FT.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center">TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)</p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		TCP-1	
SHEET NUMBER		6351	



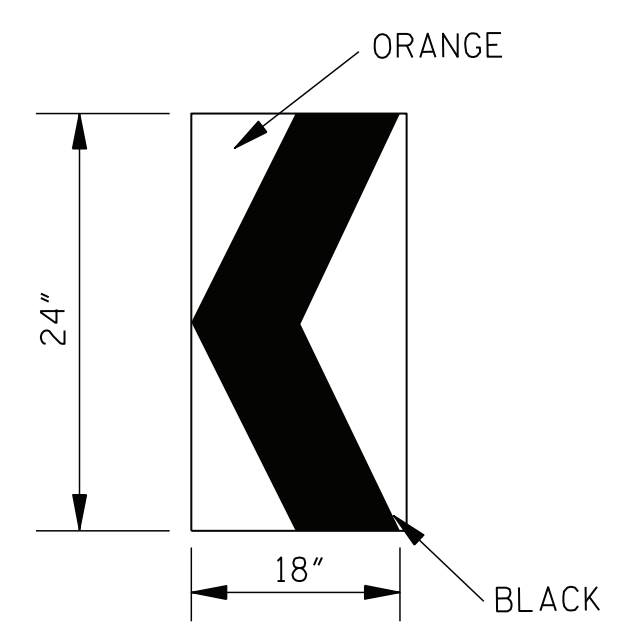
TYPE I TYPE II



TYPE III

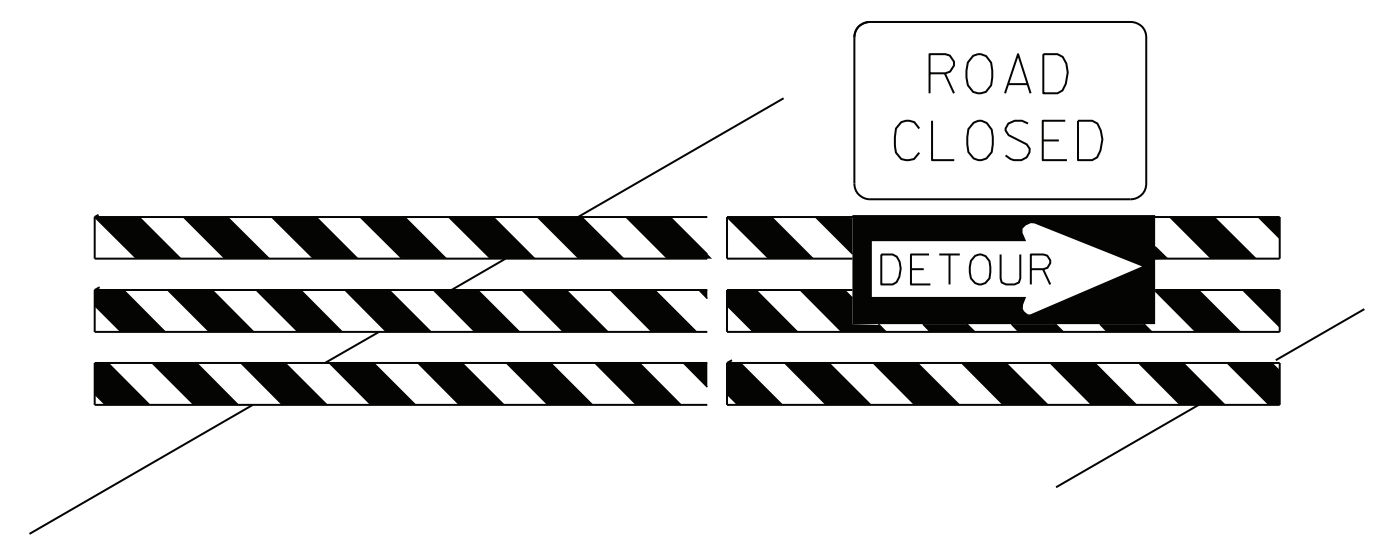
STANDARD BARRICADES

1. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
2. RAIL STRIPE SHOULD BE 6 INCHES, EXCEPT THAT 4-INCH WIDE STRIPES MAY BE USED IF RAIL LENGTHS ARE LESS THAN 36 INCHES.
3. DO NOT PLACE SANDBAGS OR OTHER DEVICES TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
4. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.
5. BARRICADES ARE CLASSIFIED BY FHWA AS CATEGORY II WORK ZONE DEVICES WHICH REQUIRE CRASHWORTHINESS ACCEPTANCE LETTERS. TO DATE, 2-IN. THICK TIMBER RAILS HAVE NOT BEEN SUCCESSFULLY CRASH TESTED. A LIST OF CRASHWORTHY BARRICADES AND OTHER CATEGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE:
http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/cat2.cfm



**CHEVRON SIGN
DETAIL**

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 CRASHWORTHY SUPPORT.
3. CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHOULD BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPE.

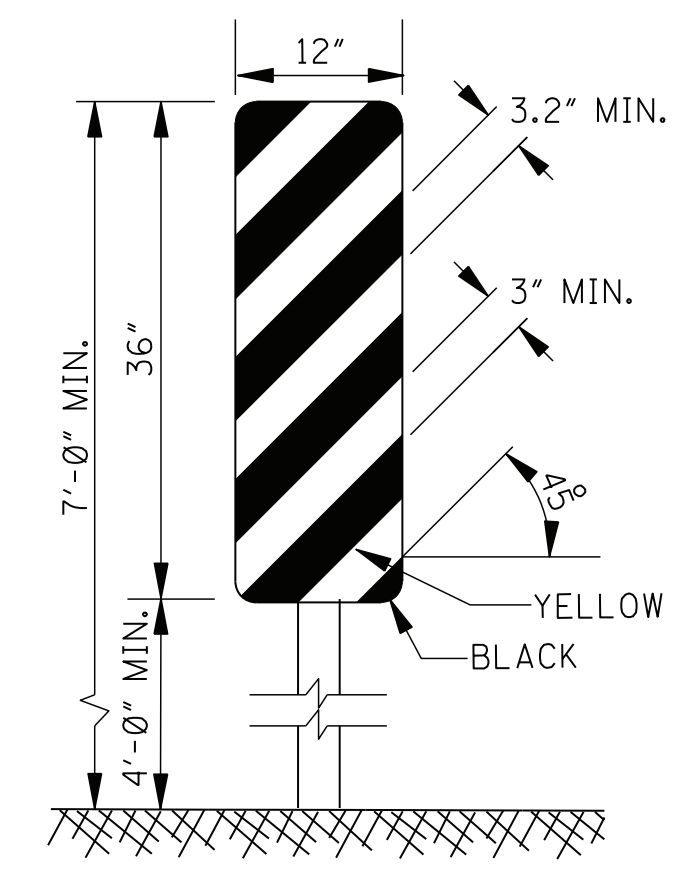


BARRICADE CLOSING A ROAD

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 RETROREFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS

- * 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.

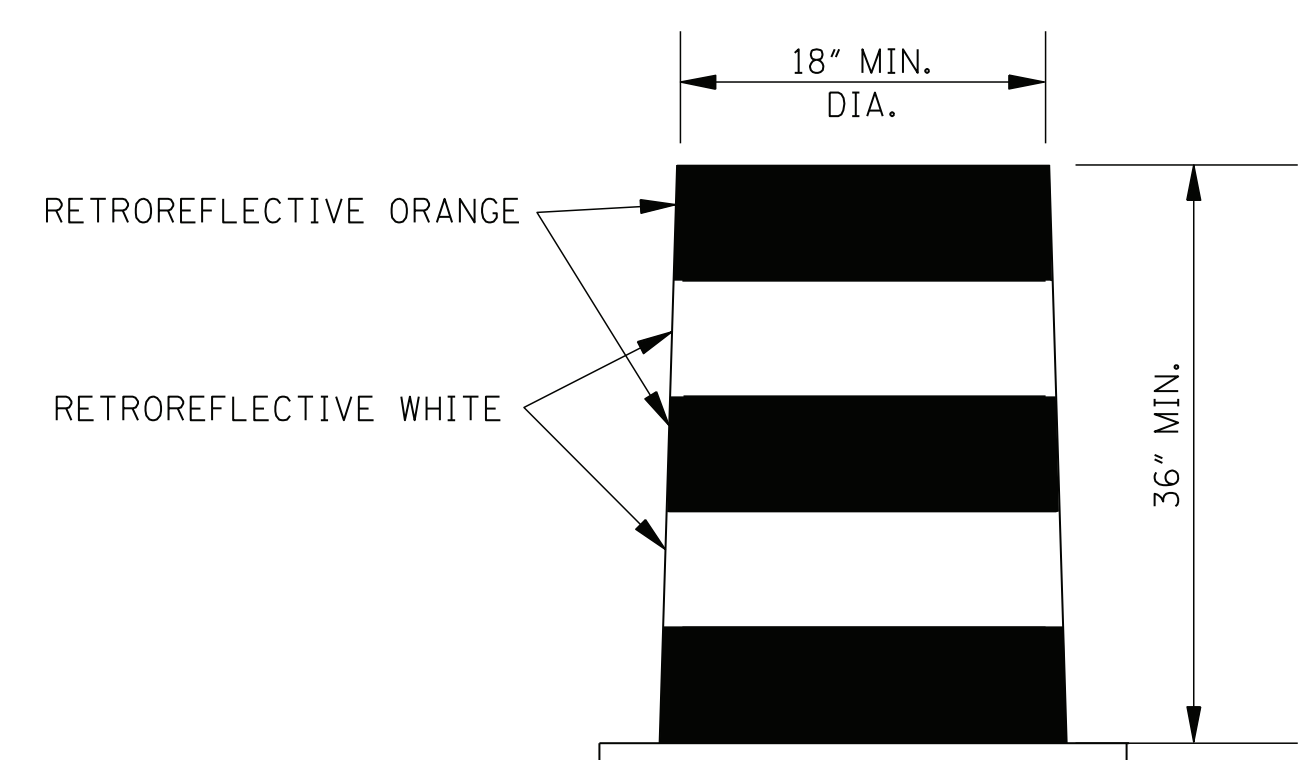


**TYPE 3 OBJECT MARKER
(OM-3R)**

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

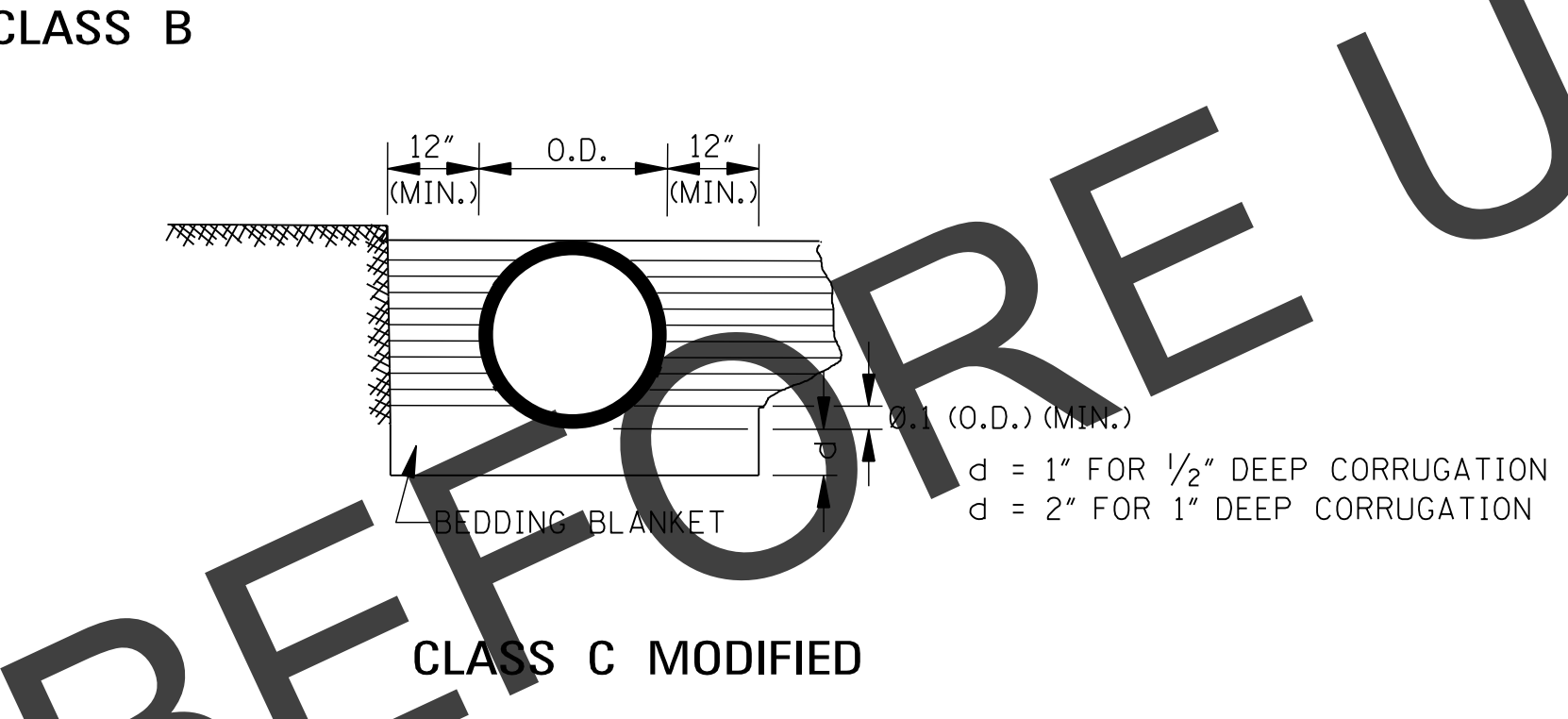
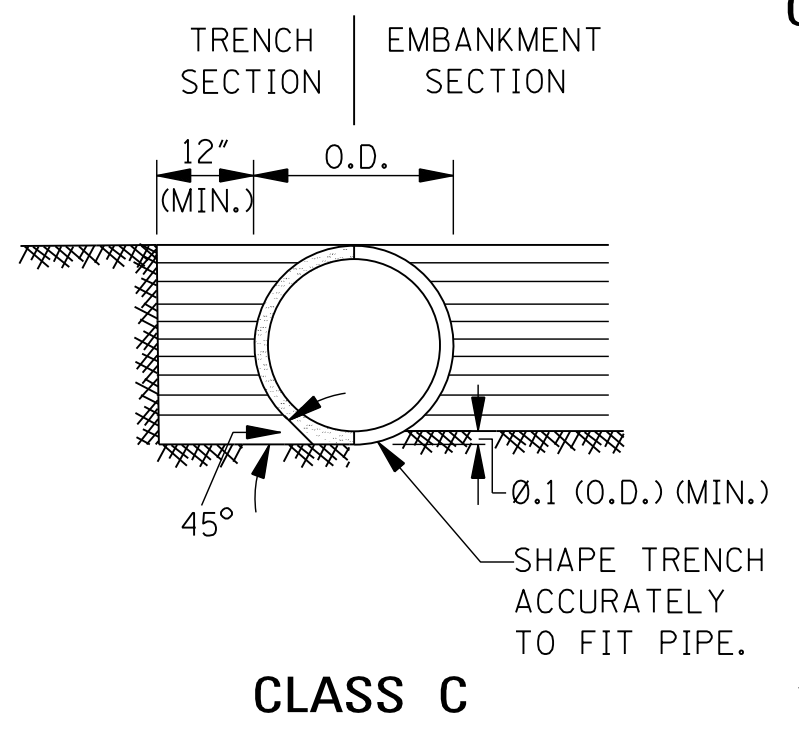
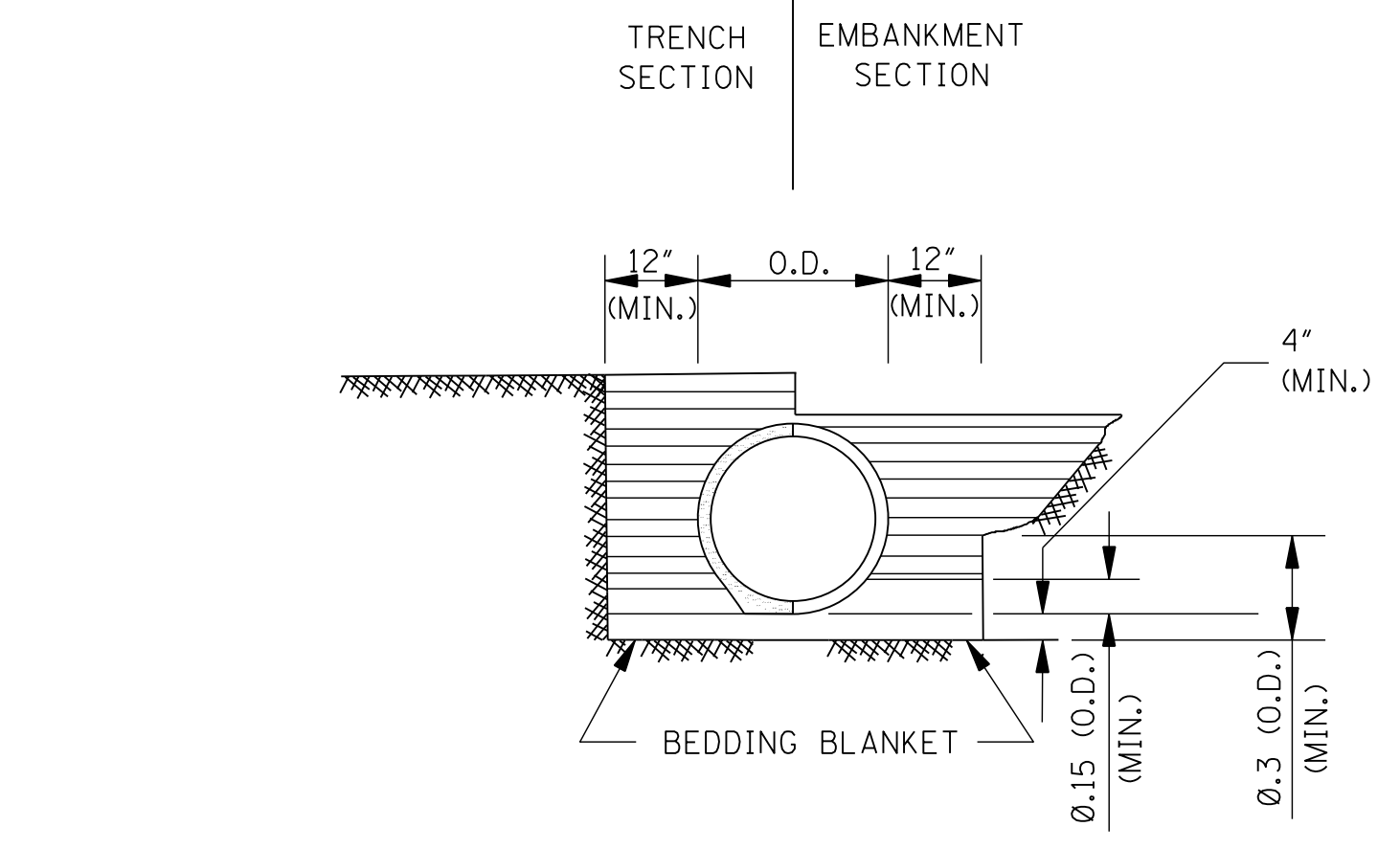
1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) RETROREFLECTIVE, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE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

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p>HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS</p>	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		TCP-8	
SHEET NUMBER		6358	



CORRUGATED STEEL AND ALUMINUM PIPE (ROUND)					
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
		2 3/8" X 1/2" CORRUGATED STEEL HELICAL	3" X 1" OR 5" X 1" CORRUGATED STEEL HELICAL	2 3/8" X 1/2" CORRUGATED ALUMINUM HELICAL	
12"	12"	207' / - / 125'	259' / - / 157'	- / - / -	- / - / -
15"	12"	165' / - / 100'	207' / - / 125'	- / - / -	- / - / -
18"	12"	138' / - / 83'	172' / - / 104'	242' / - / -	- / - / -
24"	12"	103' / - / 62'	129' / - / 78'	181' / - / 109'	- / - / -
30"	12"	82' / - / -	103' / - / 69'	145' / - / 97'	- / - / -
36"	12"	68' / - / -	86' / - / 62'	120' / - / 87'	155' / - / 94'
42"	12"	58' / - / -	73' / - / 51'	103' / - / 73'	133' / - / 80'
48"	12"	51' / - / -	64' / - / -	90' / - / 62'	116' / - / 70'
54"	12"	- / 46' / -	57' / 58' / -	80' / 82' / 54'	103' / 106' / 62'
60"	12"	- / 42' / -	- / 52' / -	72' / 74' / 48'	93' / 95' / 52'
66"	12"	- / 38' / -	- / 47' / -	- / 66' / -	84' / 86' / -
72"	12"	- / 35' / -	- / 43' / -	- / 61' / -	77' / 79' / -
78"	12"	- / 32' / -	- / 40' / -	- / 56' / -	- / 73' / -
84"	12"	- / 29' / -	- / 37' / -	- / 52' / -	- / 68' / -
90"	12"	- / 27' / -	- / 34' / -	- / 49' / -	- / 63' / -
96"	12"	- / - / -	- / 32' / -	- / 46' / -	- / 59' / -
102"	24"	- / - / -	- / 30' / -	- / 43' / -	- / 55' / -
108"	24"	- / - / -	- / - / -	- / 40' / -	- / 52' / -
114"	24"	- / - / -	- / - / -	- / 38' / -	- / 50' / -
120"	24"	- / - / -	- / - / -	- / 36' / -	- / 47' / -

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 36M/M 36 & AASHTO M 196M/M 196).



CLASS OF PIPE	MAXIMUM HEIGHT OF FILL OVER REINFORCED CONCRETE PIPE	
	CLASS "C" BEDDING	CLASS "B" BEDDING
III	12'	19'
IV	18'	30'
V	28'	48'
SPECIAL DESIGN	>28'	>48'

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

CORRUGATED METAL PIPE ARCHES						
EQUIV. DIAMETER (in)	PIPE DIMENSION (SPAN X RISE) (in)	MINIMUM COVER	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)
				+ 4 tons/ft ²		+ 4 tons/ft ²
			2 3/8" X 1/2" CORRUGATION HELICAL		2 3/8" X 1/2" CORRUGATION RIVETED OR HELICAL	
15"	17" X 13"	12"	0.064"	13'	0.060"	13'
18"	21" X 15"	12"	0.064"	12'	0.060"	12'
24"	28" X 20"	12"	0.064"	12'	0.075"	12'
30"	35" X 24"	12"	0.064"	12'	0.075"	12'
36"	42" X 29"	12"	0.064"	12'	0.105"	12'
42"	49" X 33"	12"	0.079"	12'	0.105"	12'
48"	57" X 38"	12"	0.109"	12'	0.135"	12'
54"	64" X 43"	12"	0.109"	12'	0.135"	12'
60"	71" X 47"	12"	0.138"	12'	0.164"	12'
66"	77" X 52"	12"	0.168"	12'		
72"	83" X 57"	12"	0.168"	12'		
			3" X 1" CORRUGATION HELICAL		5" X 1" CORRUGATION HELICAL	
48"	53" X 41"	12"	0.079"	12'		
54"	60" X 46"	15"	0.079"	20'		
60"	66" X 51"	15"	0.079"	20'		
66"	73" X 55"	18"	0.079"	20'		
72"	81" X 59"	18" / 18"	0.079" / 0.109"	17' / 17'		
78"	87" X 63"	18" / 18"	0.079" / 0.109"	16' / 16'		
84"	95" X 67"	18" / 18"	0.079" / 0.109"	16' / 16'		
90"	103" X 71"	18" / 18"	0.109" / 0.109"	16' / 16'		
96"	112" X 75"	21" / 21"	0.109" / 0.109"	16' / 16'		
102"	117" X 79"	21" / 21"	0.109" / 0.109"	16' / 16'		
108"	128" X 83"	24" / 24"	0.138" / 0.138"	16' / 16'		
114"	137" X 87"	24" / 24"	0.138" / 0.138"	16' / 16'		
120"	142" X 91"	27" / 27"	0.168" / 0.168"	16' / 16'		

NOTES:
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 36M/M 36 & AASHTO M 196M/M 196).

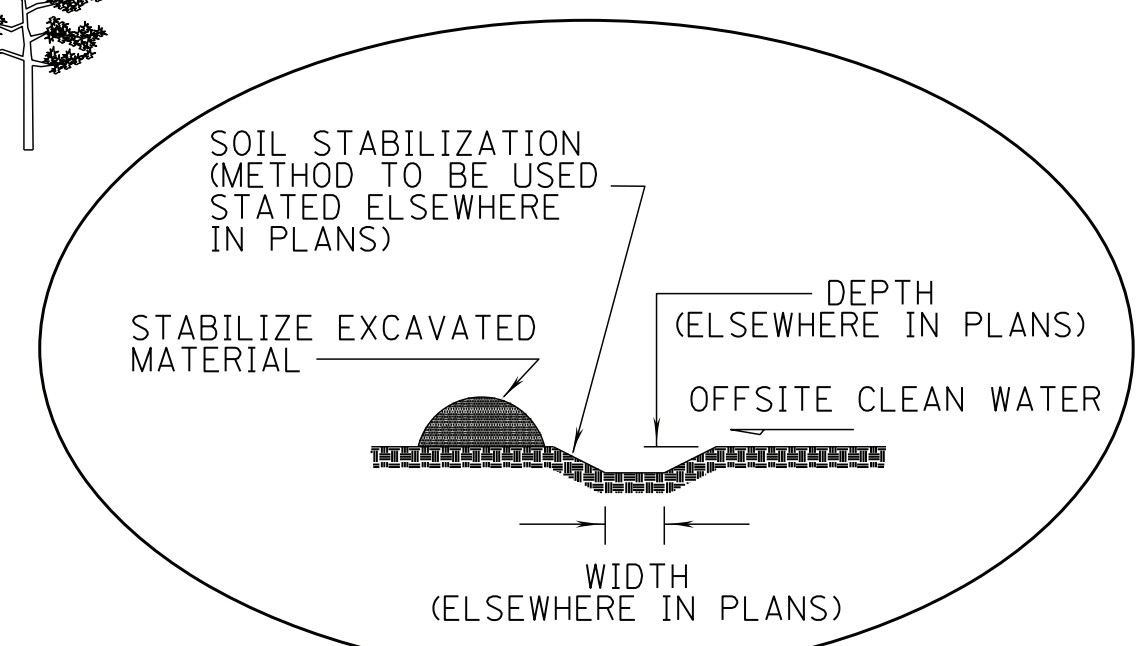
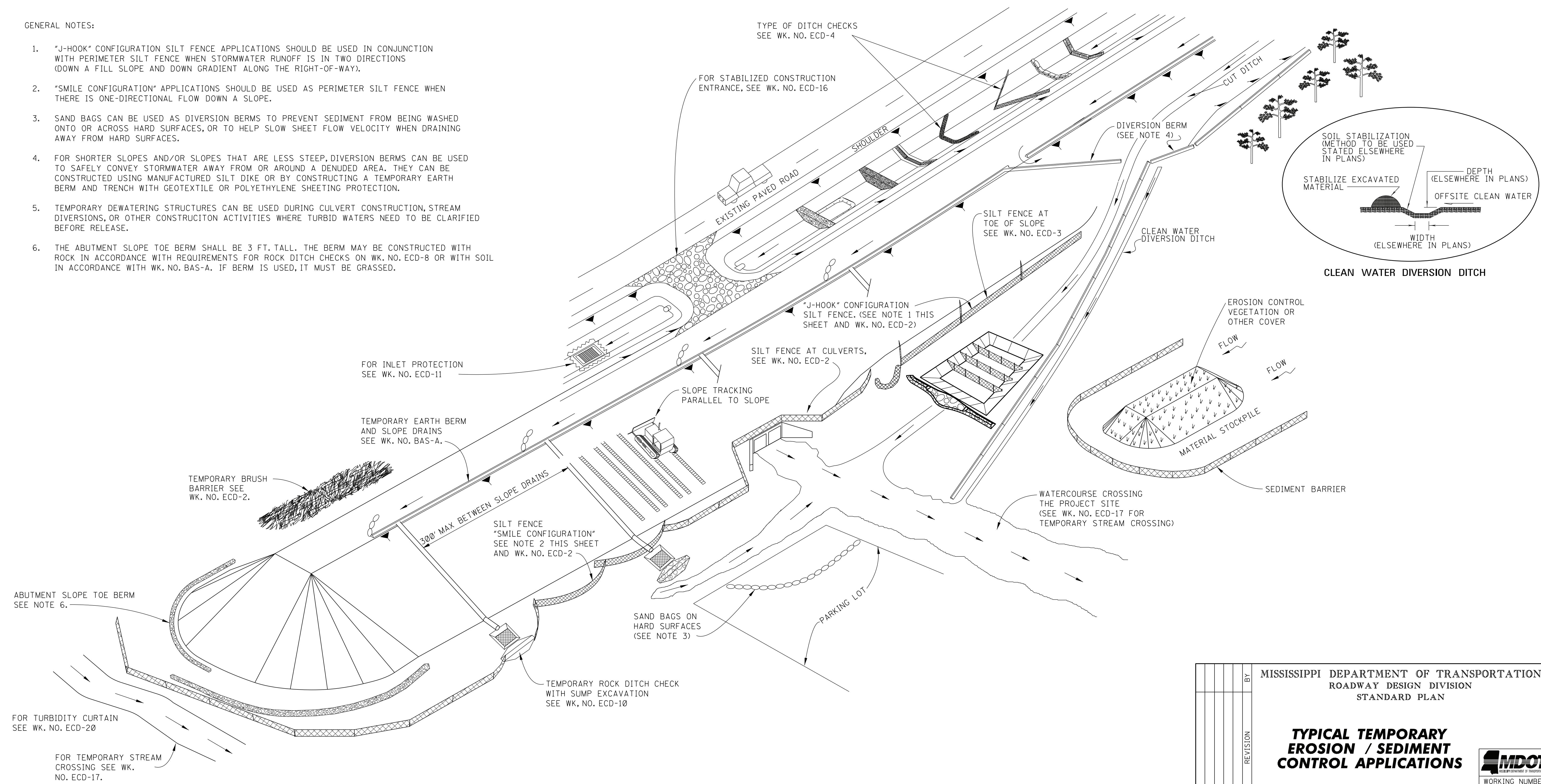
† 2. BEARING PRESSURES FOR GIVEN FILL HEIGHT SHALL HAVE FOUNDATION MATERIALS INVESTIGATED TO DETERMINE BEARING CAPACITY.

- 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.
 4. THE BACKFILL SHALL BE EITHER CLASS "B", CLASS "C", OR CLASS "C" MODIFIED. A MINIMUM COMPACTION LEVEL OF 95% STANDARD PROCTOR DENSITY PER AASHTO T99 SHALL BE ACHIEVED BY USE OF VIBRATORY PLATE. HYDROHAMMER TYPE COMPACTION SHALL NOT BE USED OVER THE PIPE. ALL COMPACTION EQUIPMENT USED SHALL BE APPROVED BY THE ENGINEER.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p style="text-align: center;">PIPE CULVERT INSTALLATION</p>	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		PI-1	
SHEET NUMBER		6501	

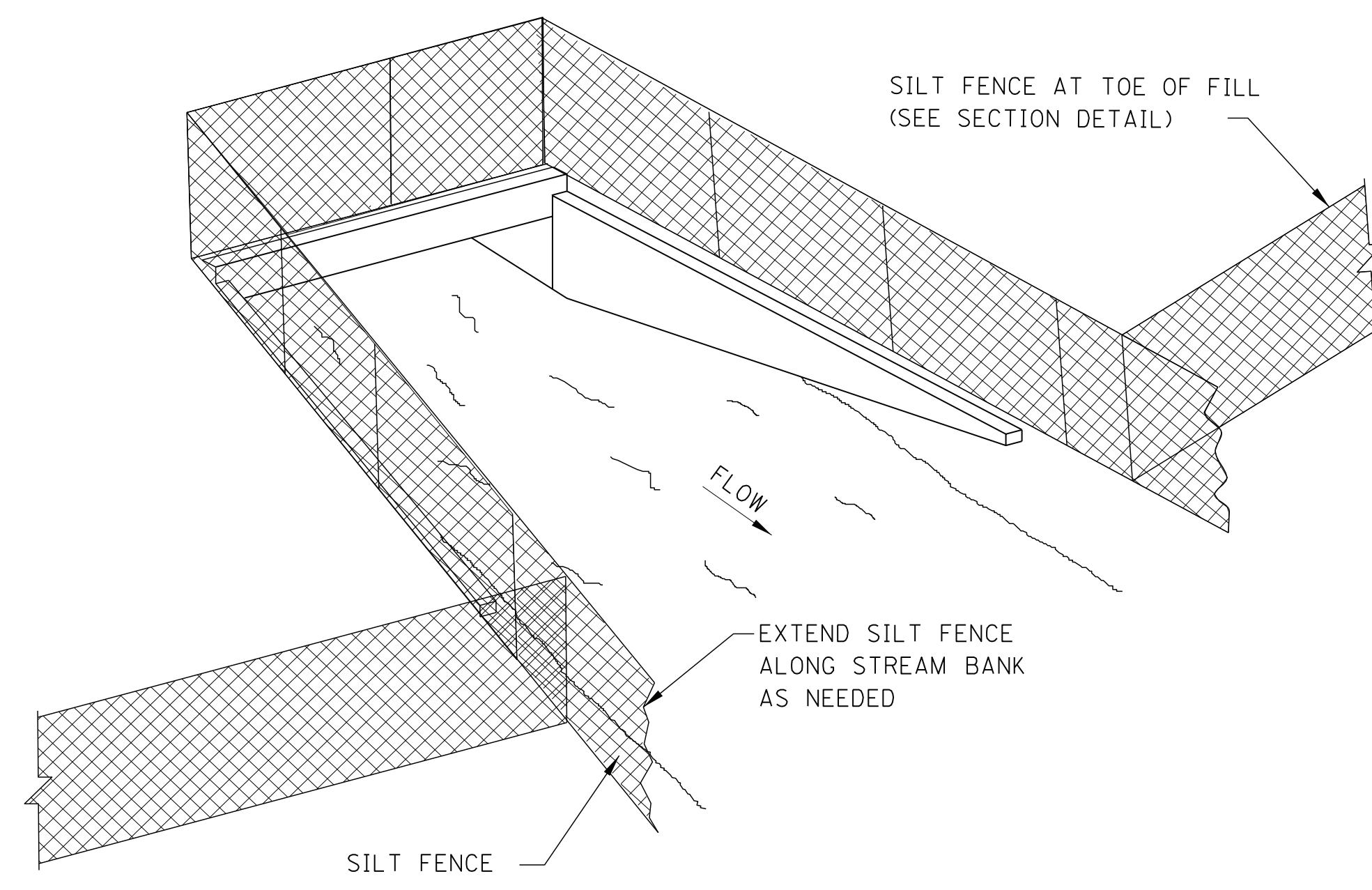
GENERAL NOTES:

1. "J-HOOK" CONFIGURATION SILT FENCE APPLICATIONS SHOULD BE USED IN CONJUNCTION WITH PERIMETER SILT FENCE WHEN STORMWATER RUNOFF IS IN TWO DIRECTIONS (DOWN A FILL SLOPE AND DOWN GRADIENT ALONG THE RIGHT-OF-WAY).
2. "SMILE CONFIGURATION" APPLICATIONS SHOULD BE USED AS PERIMETER SILT FENCE WHEN THERE IS ONE-DIRECTIONAL FLOW DOWN A SLOPE.
3. SAND BAGS CAN BE USED AS DIVERSION BERMS TO PREVENT SEDIMENT FROM BEING WASHED ONTO OR ACROSS HARD SURFACES, OR TO HELP SLOW SHEET FLOW VELOCITY WHEN DRAINING AWAY FROM HARD SURFACES.
4. FOR SHORTER SLOPES AND/OR SLOPES THAT ARE LESS STEEP, DIVERSION BERMS CAN BE USED TO SAFELY CONVEY STORMWATER AWAY FROM OR AROUND A DENUDED AREA. THEY CAN BE CONSTRUCTED USING MANUFACTURED SILT DIKE OR BY CONSTRUCTING A TEMPORARY EARTH BERM AND TRENCH WITH GEOTEXTILE OR POLYETHYLENE SHEETING PROTECTION.
5. TEMPORARY DEWATERING STRUCTURES CAN BE USED DURING CULVERT CONSTRUCTION, STREAM DIVERSIONS, OR OTHER CONSTRUCTION ACTIVITIES WHERE TURBID WATERS NEED TO BE CLARIFIED BEFORE RELEASE.
6. THE ABUTMENT SLOPE TOE BERM SHALL BE 3 FT. TALL. THE BERM MAY BE CONSTRUCTED WITH ROCK IN ACCORDANCE WITH REQUIREMENTS FOR ROCK DITCH CHECKS ON WK. NO. ECD-8 OR WITH SOIL IN ACCORDANCE WITH WK. NO. BAS-A. IF BERM IS USED, IT MUST BE GRASSED.

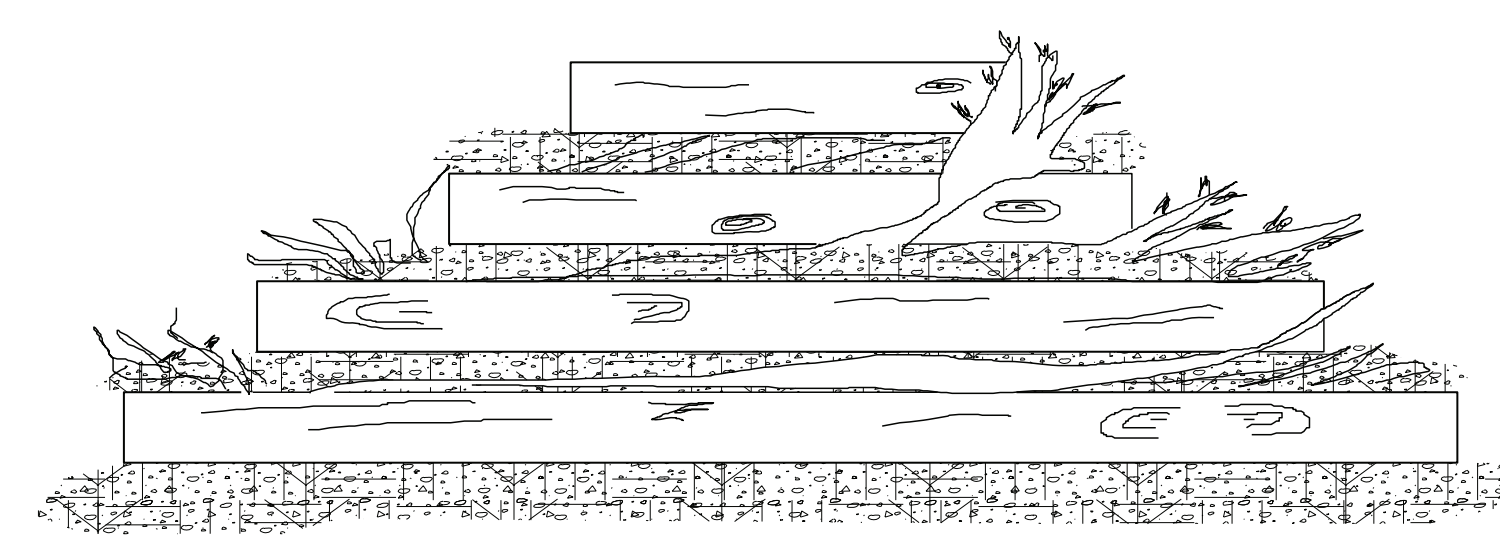


CLEAN WATER DIVERSION DITCH

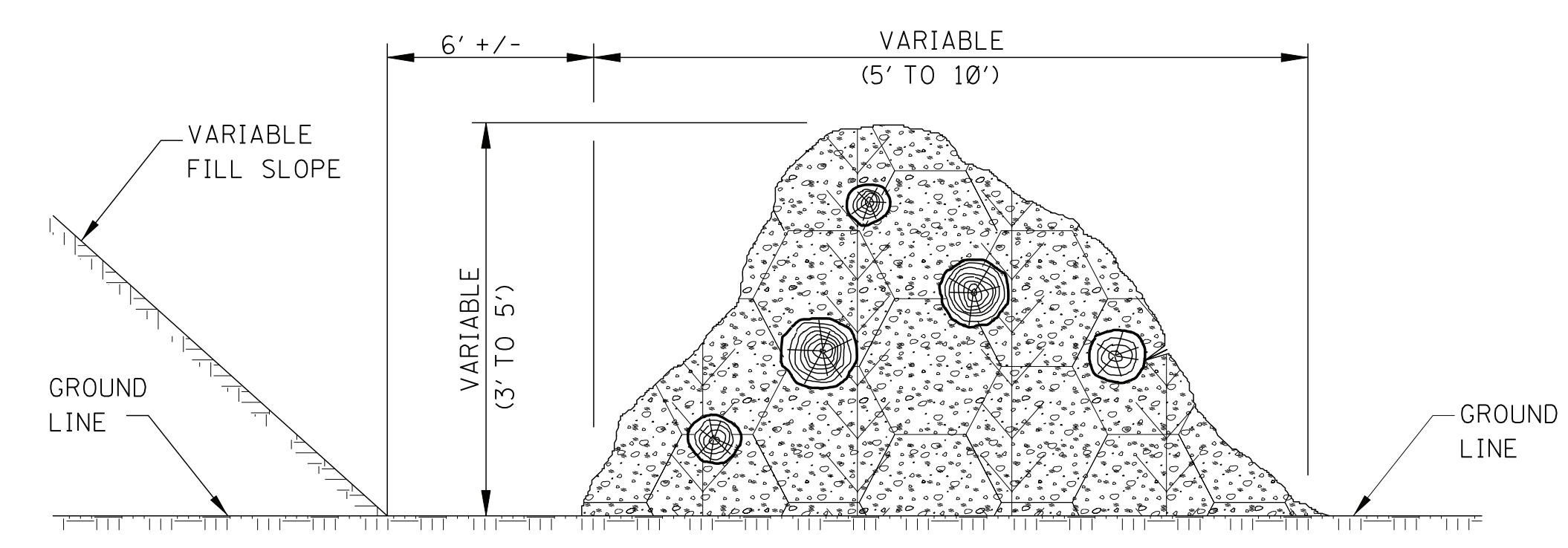
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		ROADWAY DESIGN DIVISION	
DATE		STANDARD PLAN	
		TYPICAL TEMPORARY EROSION / SEDIMENT CONTROL APPLICATIONS	
		MDOT MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
		WORKING NUMBER ECD-1	
		SHEET NUMBER 6101	
		ISSUE DATE: AUGUST 01, 2017	



SEDIMENT BARRIER AT CROSS DRAIN



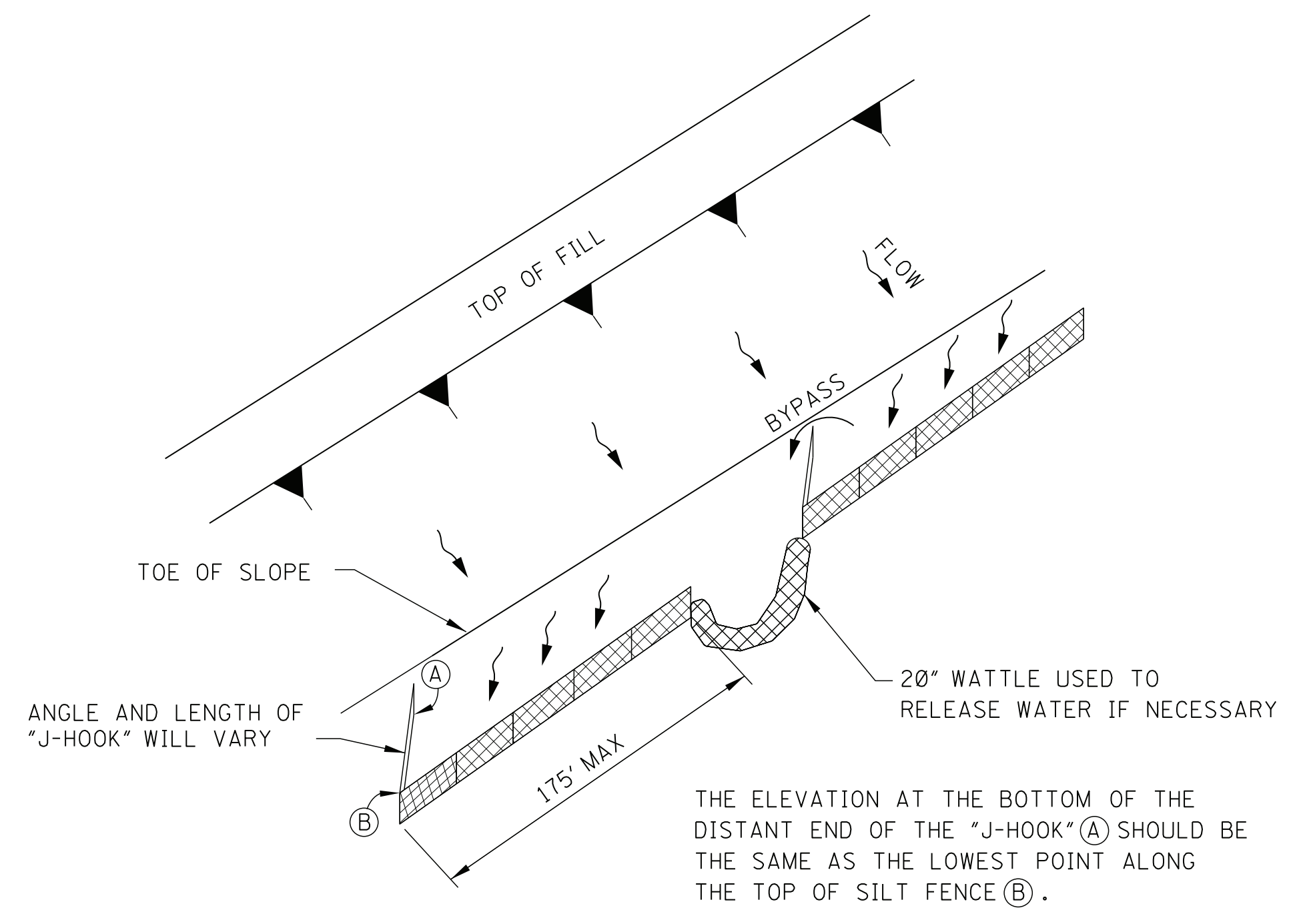
FRONT ELEVATION



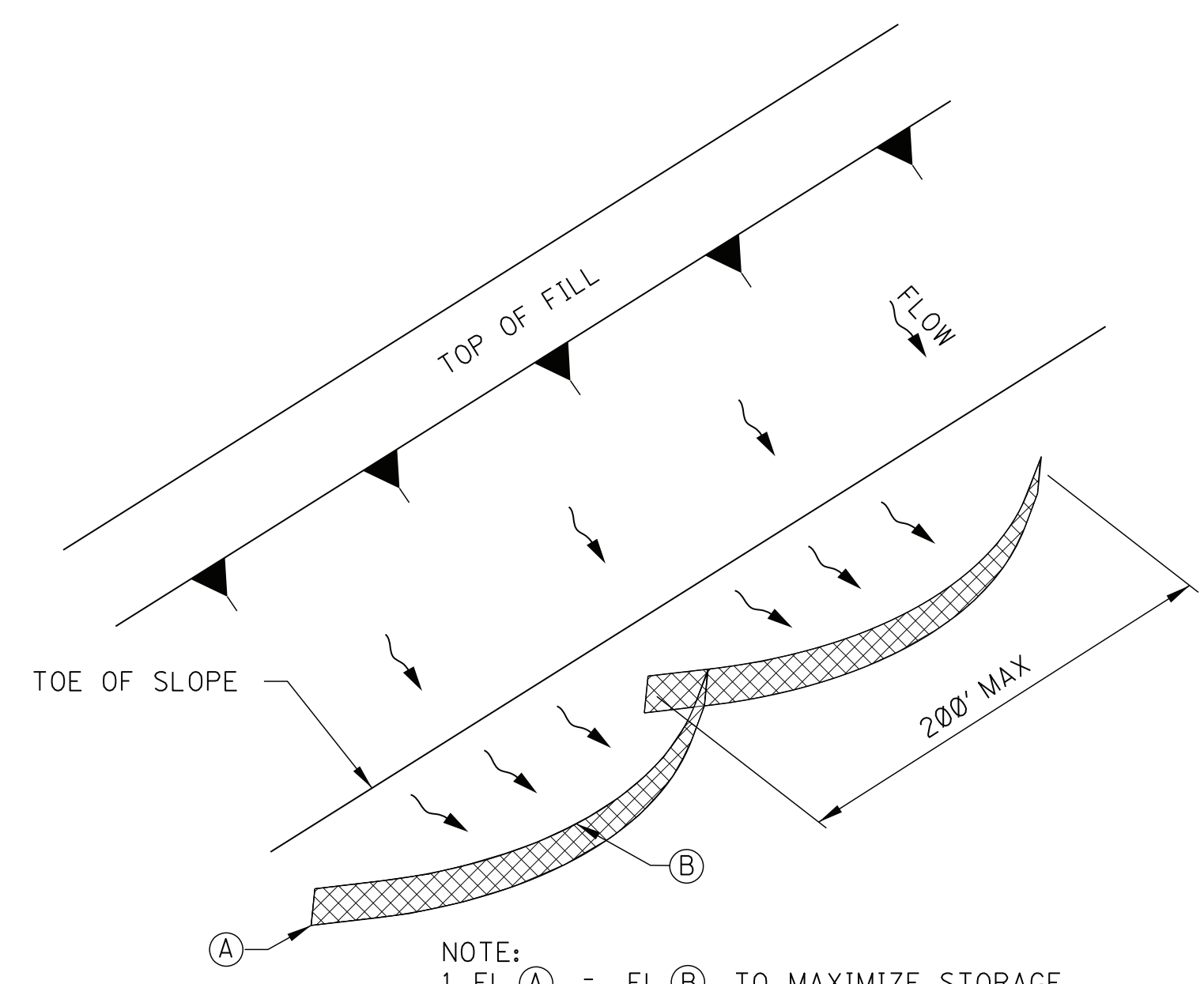
SIDE ELEVATION

TEMPORARY BRUSH BARRIER

- NOTES:
- BRUSH BARRIER MAY BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
 - PLACE BRUSH, LOG AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TO TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED OR PERMITTED BY THE ENGINEER.
 - TO ALLOW WATER TO SEEP THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.
 - THE BRUSH BARRIER MAY BE CHOKED WITH FILTER FABRIC. THE COST OF FABRIC TO BE INCLUDED IN OTHER ITEMS BID.
 - TEMPORARY BRUSH BARRIER WILL NOT BE MEASURED FOR SEPARATE PAYMENT.

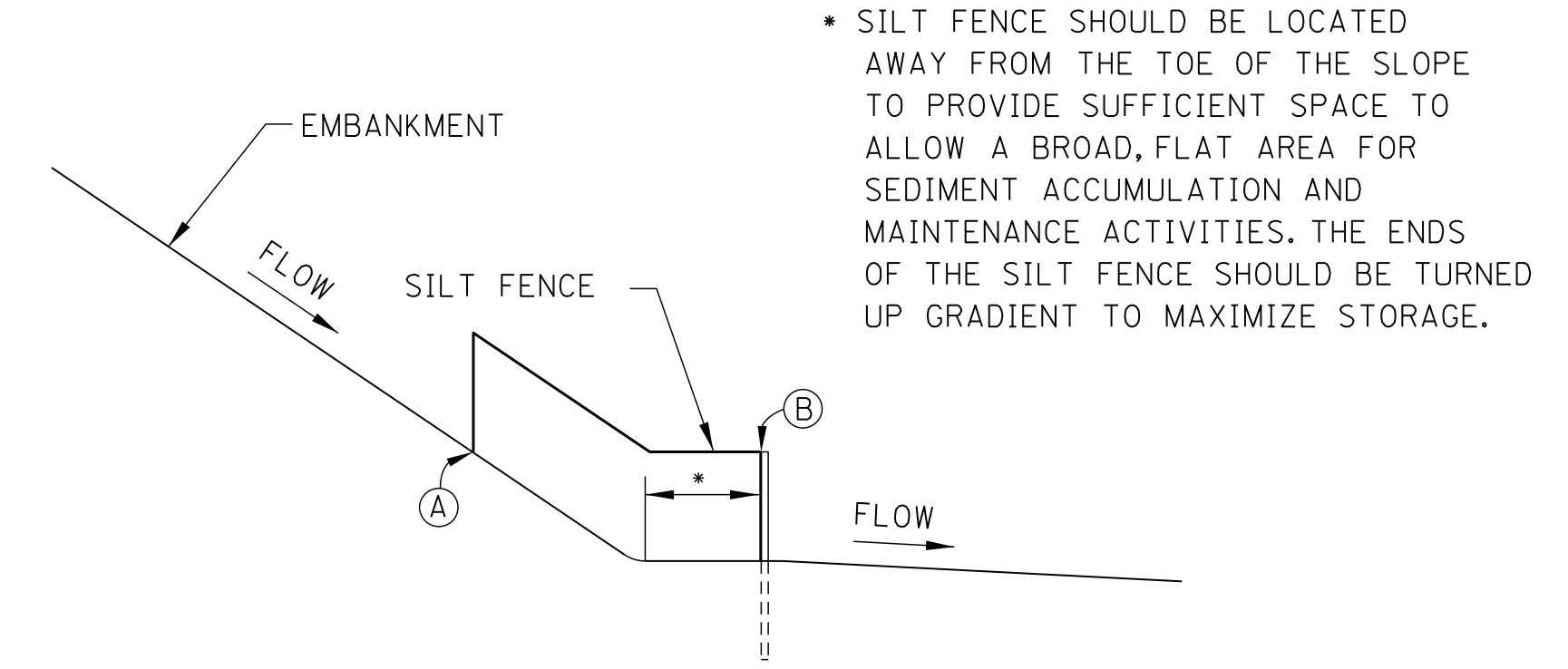


"J-HOOK" SILT FENCE APPLICATION




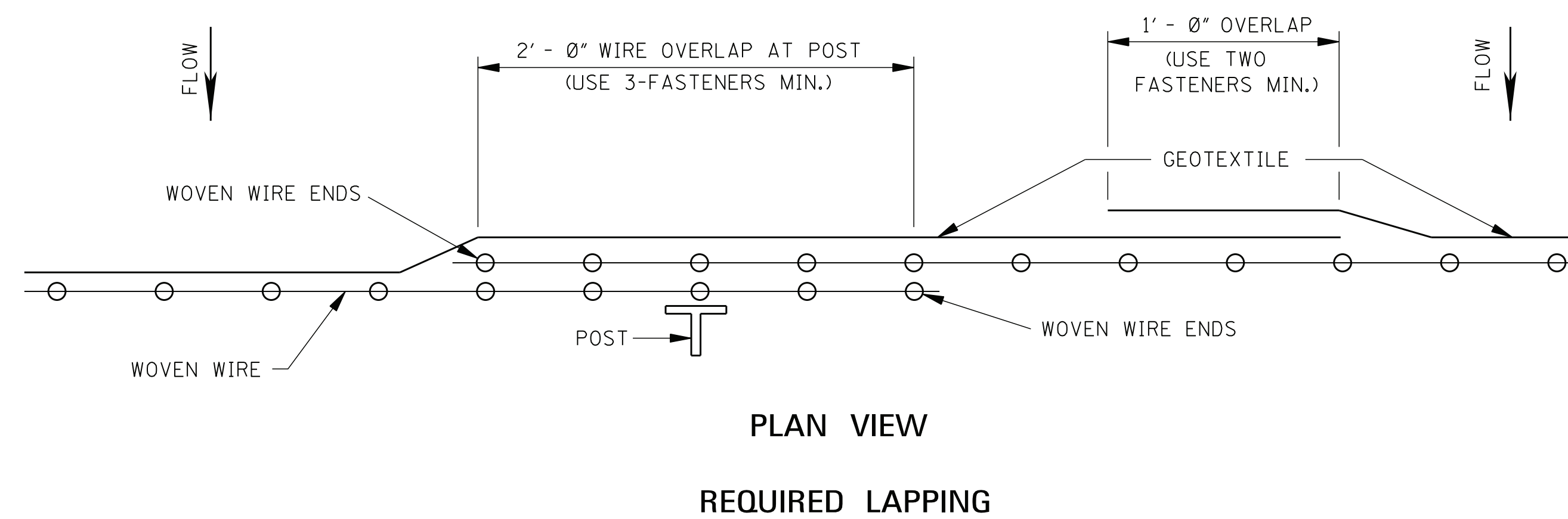
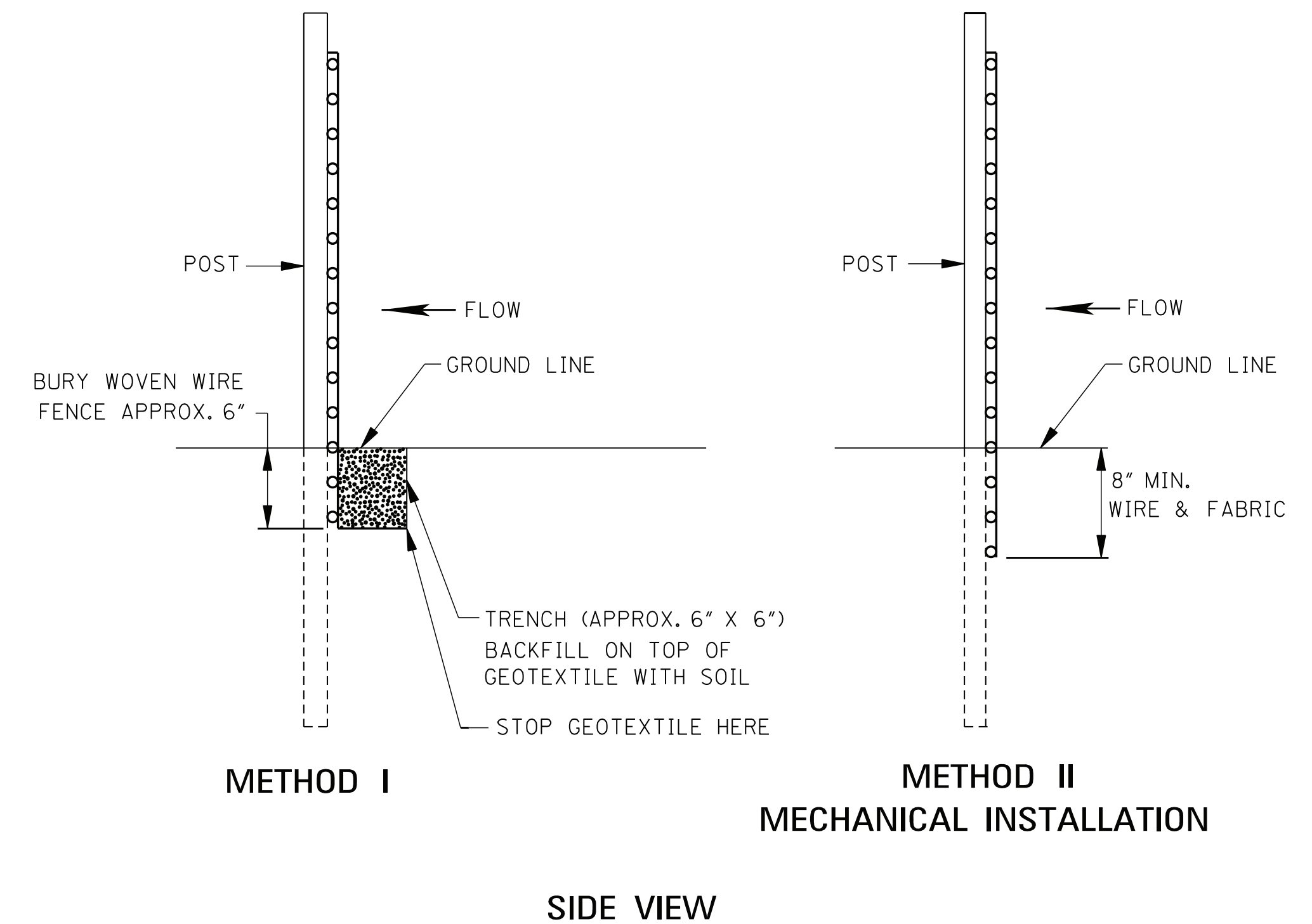
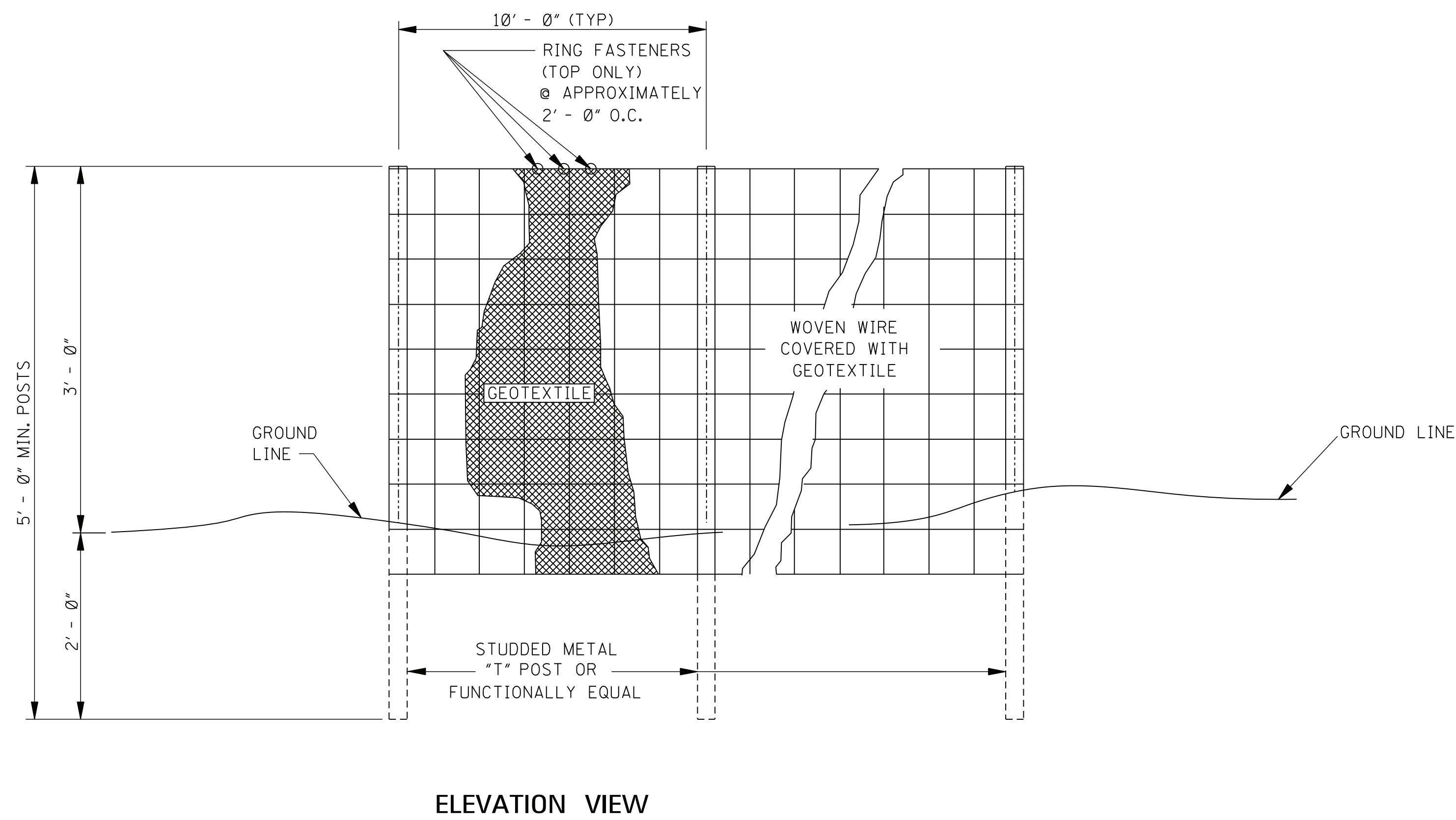
"SMILE-CONFIGURATION" SILT FENCE APPLICATION

NOTE: ANCHOR AND INSTALL SILT FENCE PER DETAILS SHOWN ON WK. NO. ECD-3



SILT FENCE SECTION AT TOE OF FILL

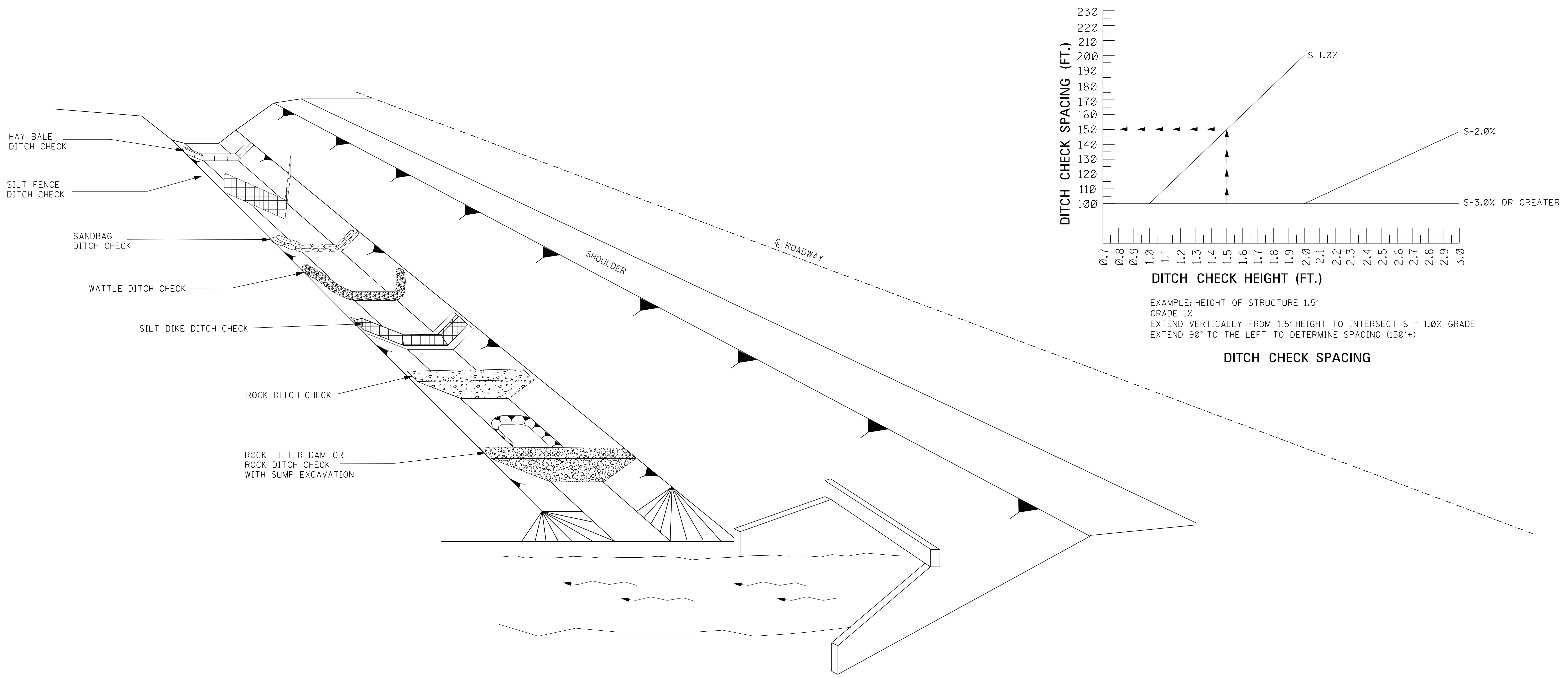
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		ROADWAY DESIGN DIVISION	
DATE		STANDARD PLAN	
		DETAILS OF SEDIMENT BARRIER APPLICATIONS	
		 WORKING NUMBER ECD-2 SHEET NUMBER 6102	
		ISSUE DATE: AUGUST 01, 2017	



GENERAL NOTES:

- SILT FENCES SHOULD BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
- SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHOULD BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STEAMS AND CHANNELS.
- SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR BACK-UP FENCE IF FIRST FENCE BECOMES FULL.
- WHENEVER POSSIBLE SILT FENCE SHOULD BE CONSTRUCTED ACROSS A LEVEL AREA IN THE SHAPE OF A SMILE. THIS AIDS IN PONDING OF RUNOFF AN FACILITATES SEDIMENTATION.
- THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SILT FENCE.
- METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF DETAIL.
- WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
- GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE.


BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p>DETAILS OF SILT FENCE INSTALLATION</p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		ECD-3	
SHEET NUMBER		6103	

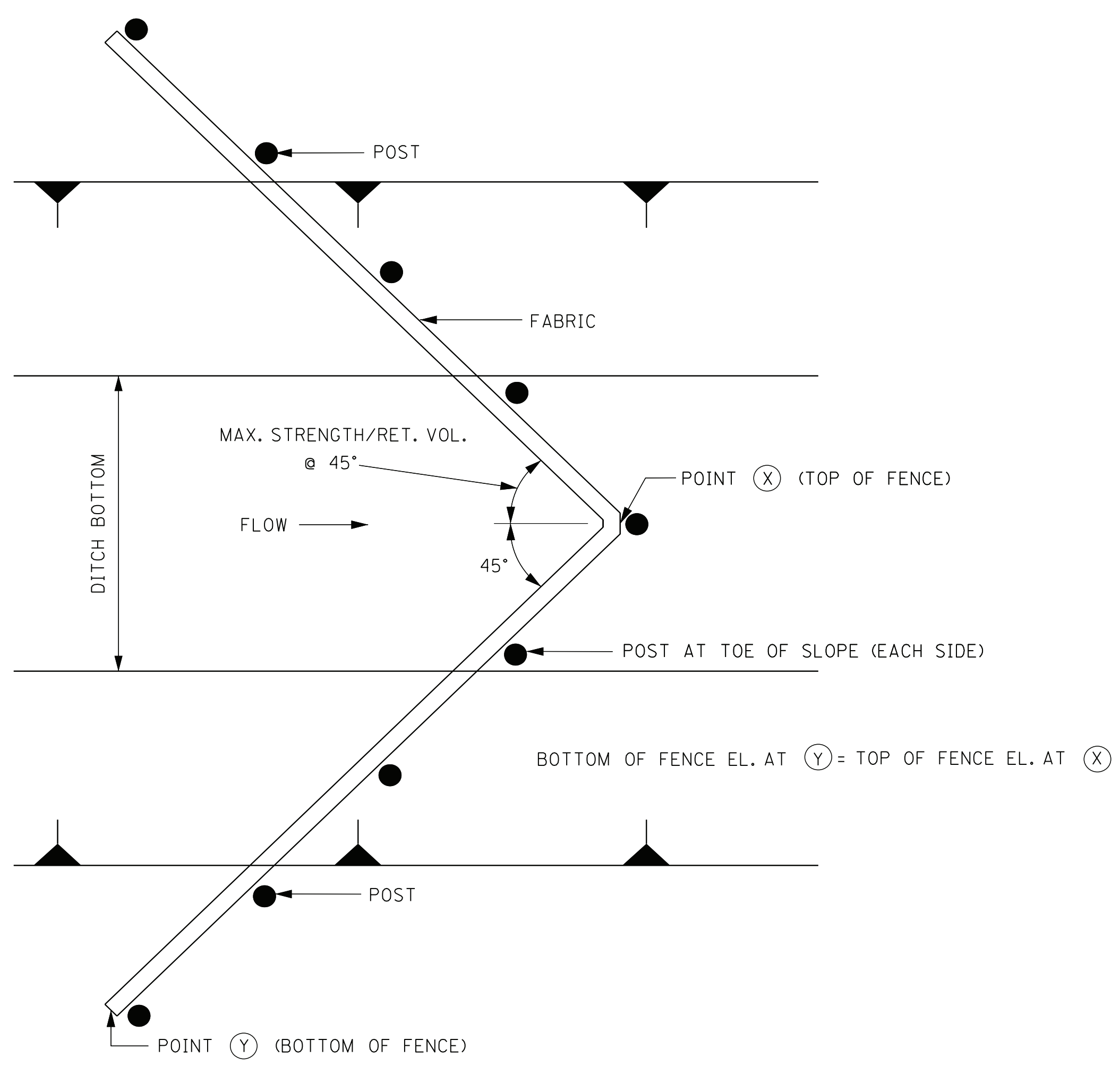


EXAMPLE: HEIGHT OF STRUCTURE 1.5'
 GRADE 1%
 EXTEND VERTICALLY FROM 1.5' HEIGHT TO INTERSECT S = 1.0% GRADE
 EXTEND 90° TO THE LEFT TO DETERMINE SPACING (150'+)

GENERAL NOTES:

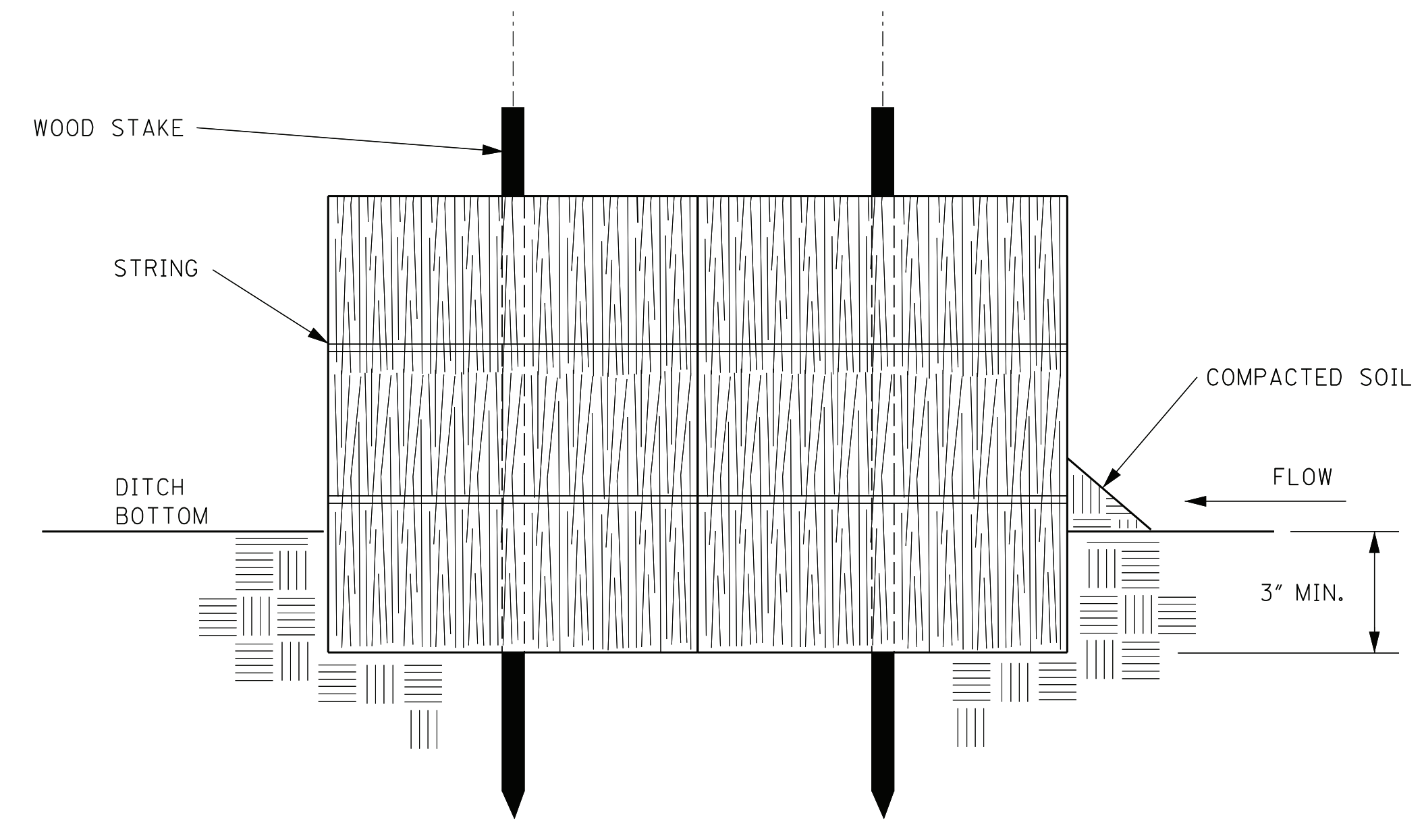
1. THE DITCH CHECK PERSPECTIVE ILLUSTRATES A TOOL BOX OF TEMPORARY PRACTICES THAT MAY BE USED. DITCH CHECKS ARE INSTALLED TO CONTROL RUNOFF VELOCITY AND THUS REDUCE EROSION AND PROVIDE FOR TRAPPING OF SEDIMENTS.
2. SELECTION OF THE APPROPRIATE DITCH CHECK SHOULD BE A FUNCTION OF CONSTRUCTION PHASE, DRAINAGE AREA, DITCH GRADIENT, SOIL TYPE, ECONOMY AND SAFETY.
3. DITCH CHECKS CAN BE REMOVED FOR MAINTENANCE AND/OR REPLACEMENT BUT MUST REMAIN IN PLACE UNTIL UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED. MAINTENANCE INCLUDES REMOVAL OF SEDIMENT BEGINNING WHEN SEDIMENT ACCUMULATION REACHES 1/2 THE CAPACITY OR HEIGHT OF THE STRUCTURE AND NEVER ALLOWING FOR SEDIMENT TO ACCUMULATE MORE THAN 1/2 THE VOLUME OR HEIGHT OF THE DITCH CHECK STRUCTURE.
4. HAY BALES SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
5. SILT FENCE DITCH CHECKS SHOULD BE USED WHERE IT HAS BEEN DETERMINED THAT HAY BALE CHECKS ARE INADEQUATE. SILT FENCE DITCH CHECKS SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
6. SANDBAG DITCH CHECKS SHOULD BE USED FOR VELOCITY REDUCTION AND MINIMAL SEDIMENT TRAPPING IN CONCRETE PAVED DITCHES OR IN DITCHES THAT HAVE ROCK BOTTOMS.
7. WATTLE DITCH CHECKS CAN BE USED FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.
8. SILT DIKES CAN BE USED IN DITCHES WITH CONCENTRATED FLOWS WITHIN THE CLEAR ZONE WHERE RIPRAP CAN NOT BE USED, AS CONSTRUCTION PROGRESSES.
9. ROCK DITCH CHECKS WITH SUMP EXCAVATION CAN BE PLACED IN DITCHES TO ASSURE ON-SITE SEDIMENT TRAPPING REQUIREMENTS ARE MET. DITCH CHECK WITH SUMP EXCAVATION IS USED WHEN DITCHES RECEIVE DRAINAGE FROM CUT OR FILL SLOPES OR OTHER CRITICAL AREAS WHERE SOIL EROSION IS EXPECTED. DRAINAGE AREA FOR A TEMPORARY SEDIMENT TRAP SHOULD BE LIMITED TO 3 ACRES. THEY CAN BE USED IN SERIES TO INCREASE ON-SITE SEDIMENT TRAPPING EFFICIENCY.
10. DITCH CHECKS, IN NO CASE, SHALL BE PLACED IN LIVE STREAMS.
11. CONFIGURATION AND SPACING MAY BE ADJUSTED IF APPROVED BY THE ENGINEER TO ACCOMMODATE TRAVELWAY SAFETY, WATER FLOW, OR SOIL AND INSTALLATION CHALLENGES.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		DITCH CHECK STRUCTURES, TYPICAL APPLICATIONS AND DETAILS	
DATE		ISSUE DATE: AUGUST 01, 2017	
		 WORKING NUMBER ECD-4 SHEET NUMBER 6104	

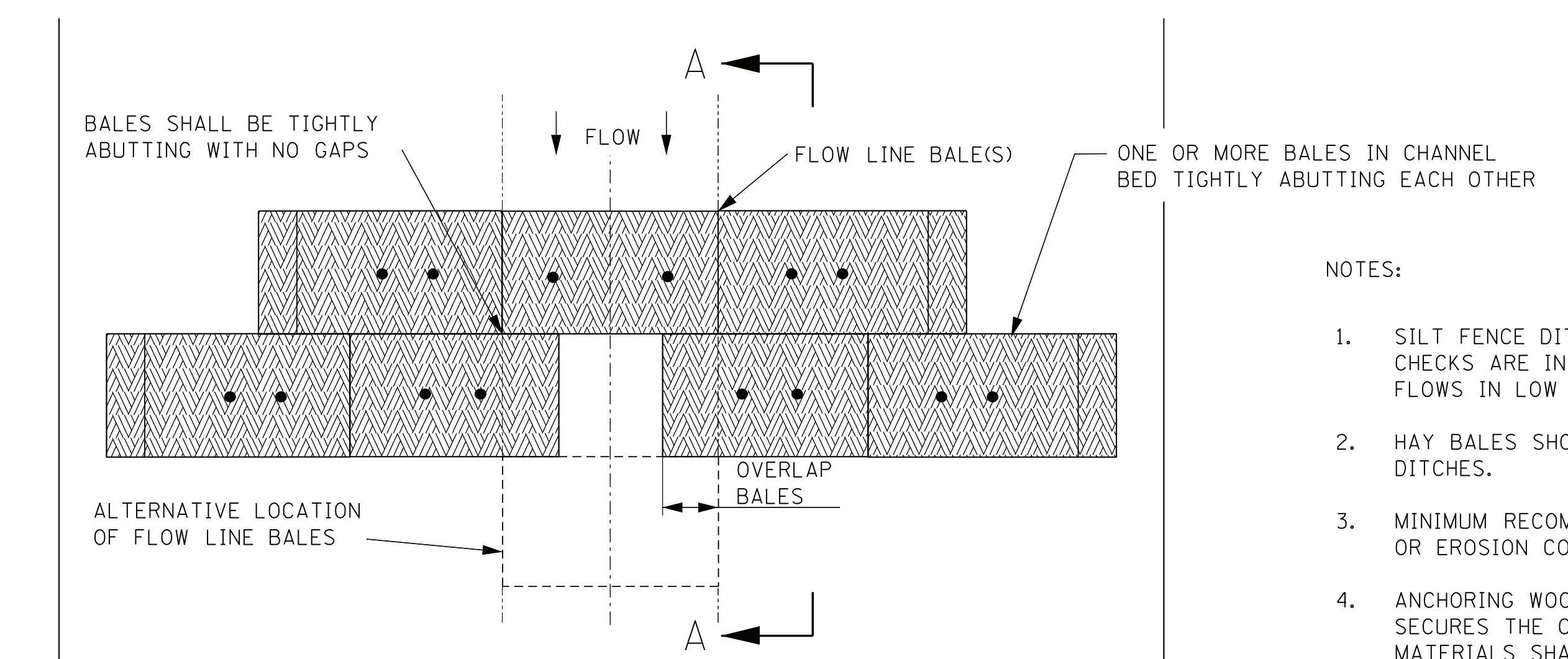


PLAN VIEW

- NOTES:
1. ANCHOR AND INSTALL PER DETAILS FOR SILT FENCE SPACING GUIDELINES ON WK. NO. ECD-4.
 2. A "W" SHAPE MAY BE USED FOR WIDER DITCHES.



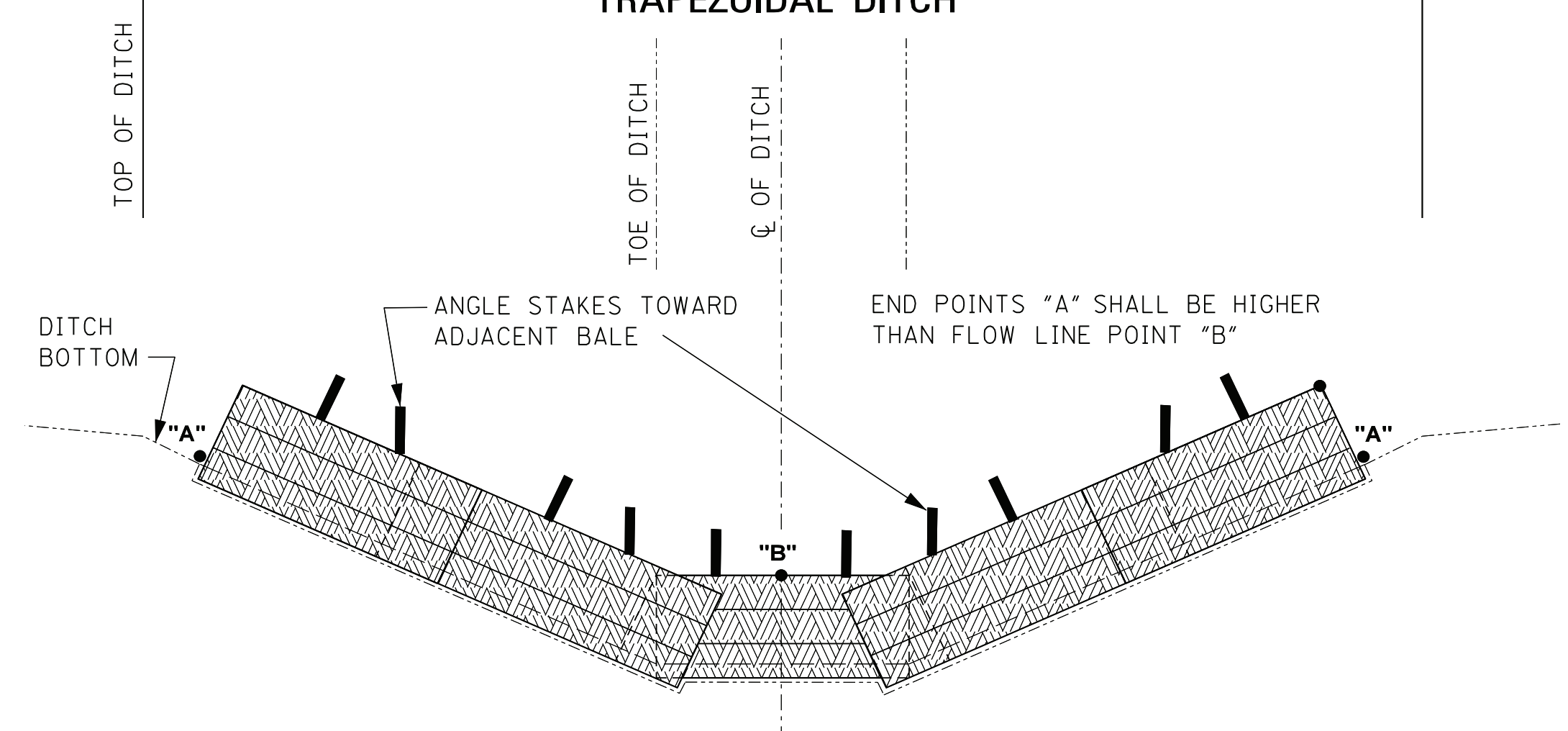
SECTION A-A




PLAN VIEW
TRAPEZOIDAL DITCH

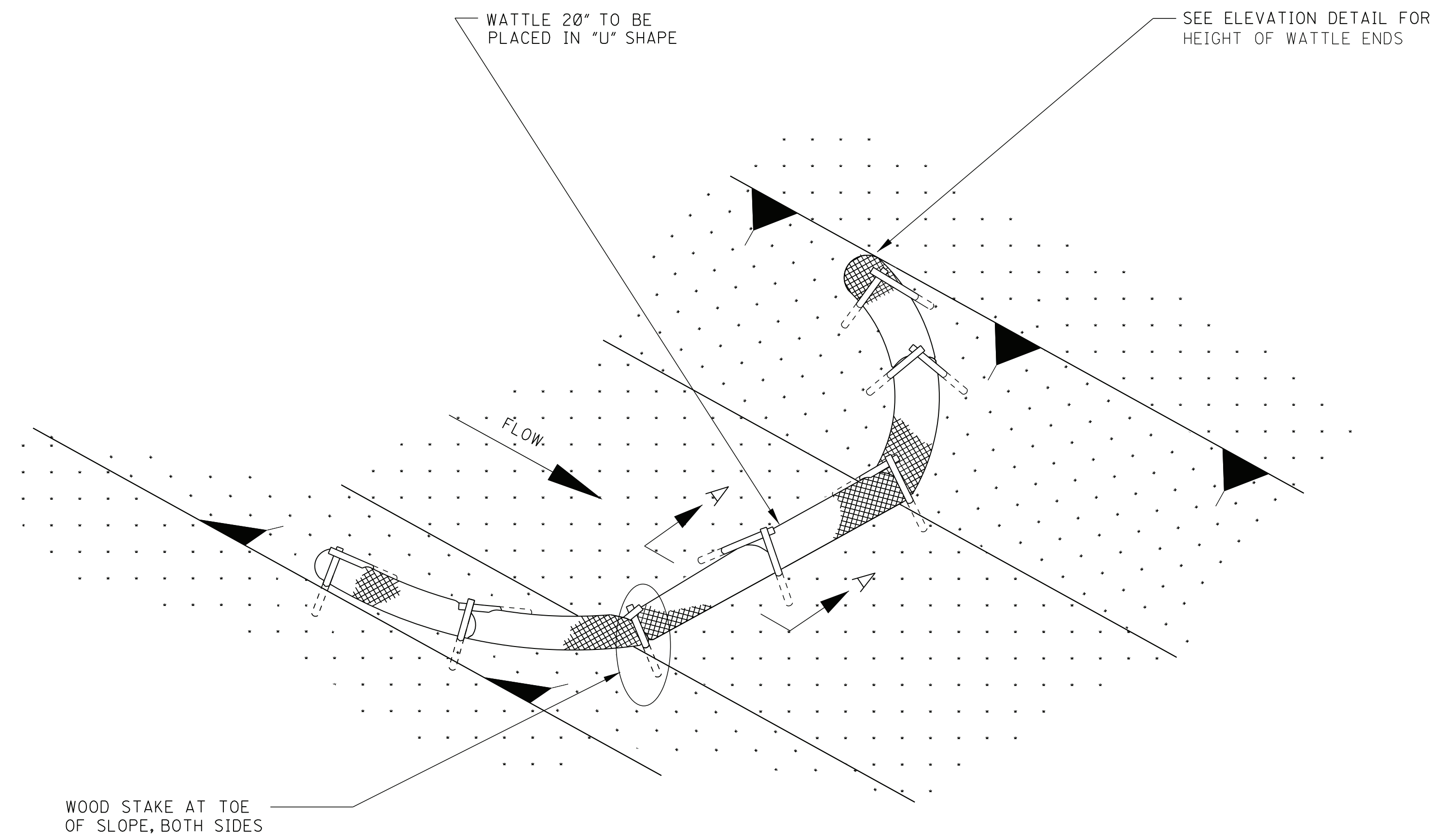
NOTES:

1. SILT FENCE DITCH CHECKS SHOULD BE USED WHERE IT HAS BEEN DETERMINED THAT HAY BALE CHECKS ARE INADEQUATE. SILT FENCE DITCH CHECKS SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
2. HAY BALES SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
3. MINIMUM RECOMMENDED CHECK SPACING IS 100 FEET UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON WK. NO. ECD-4.
4. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. A MINIMUM OF TWO STAKES PER BALE IS REQUIRED. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
5. BALES SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 3 INCHES.
6. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES. THE BALES SHALL BE PLACED WITH BINDINGS PARALLEL TO THE GROUND.
7. SOIL IS COMPACTED ALONG THE BASE OF THE UPSTREAM FACE TO PREVENT PIPING.
8. MULTIPLE ADJACENT ROWS OF BALES ARE REQUIRED AS SHOWN.

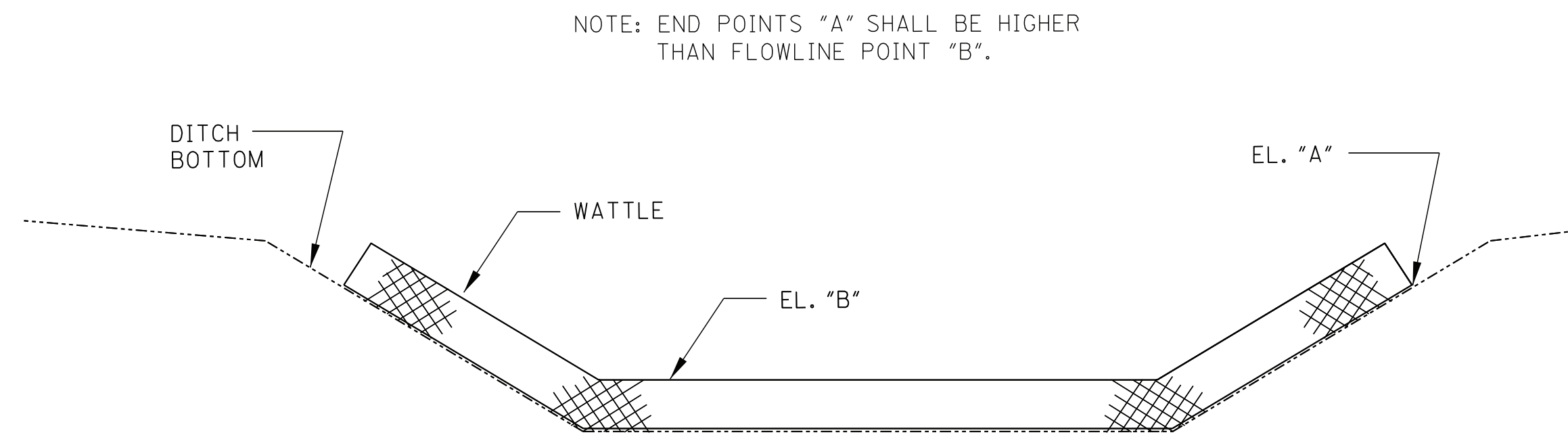


PROFILE VIEW
TRAPEZOIDAL DITCH

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		TEMPORARY EROSION, SEDIMENT, AND WATER POLLUTION CONTROL MEASURES (SILT FENCE AND HAY BALE DITCH CHECKS)	
DATE		ISSUE DATE: AUGUST 01, 2017	
		 WORKING NUMBER ECD-5 SHEET NUMBER 6105	

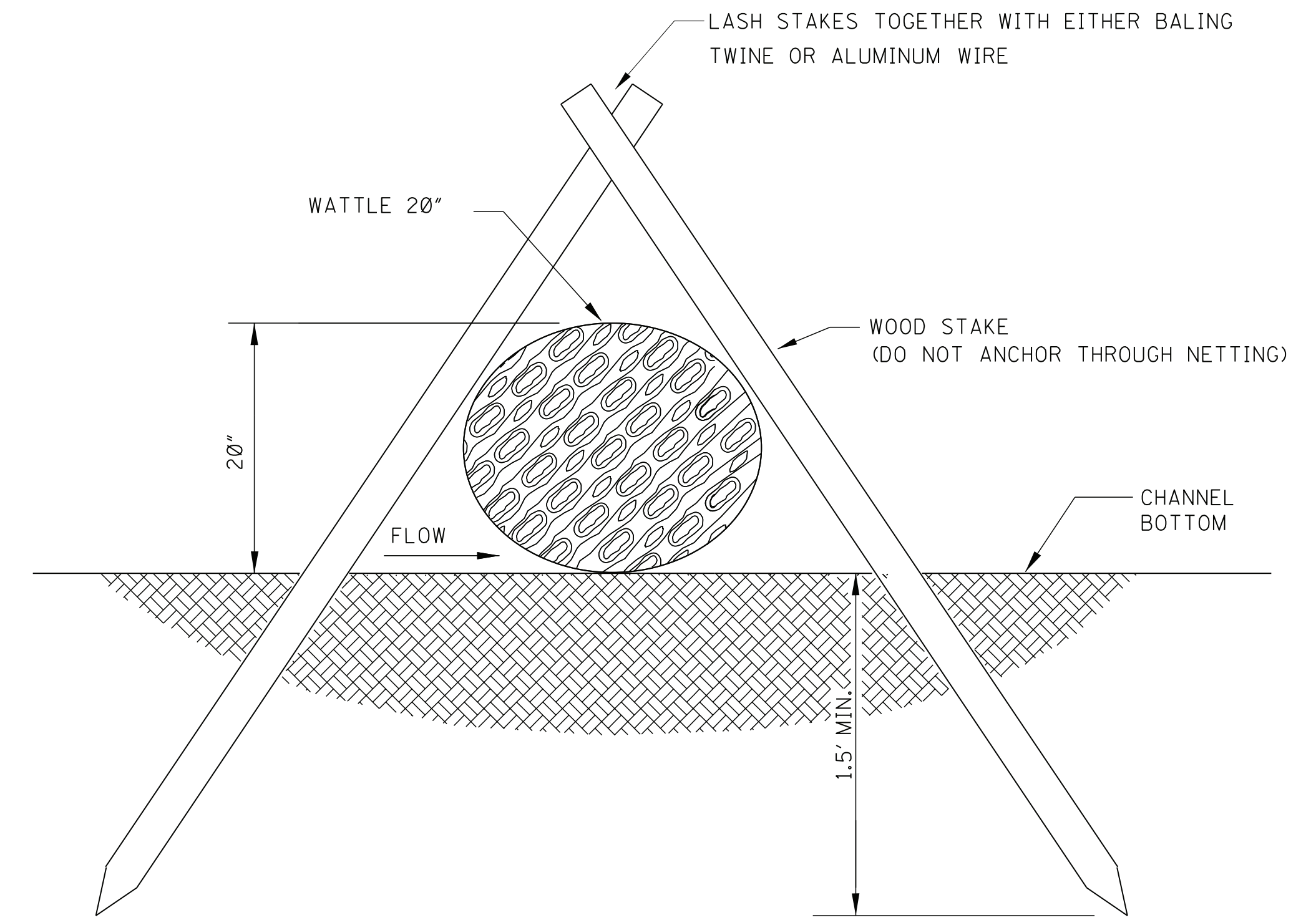


DETAIL (DITCH CHECK)



NOTE: END POINTS "A" SHALL BE HIGHER THAN FLOWLINE POINT "B".

ELEVATION DETAIL

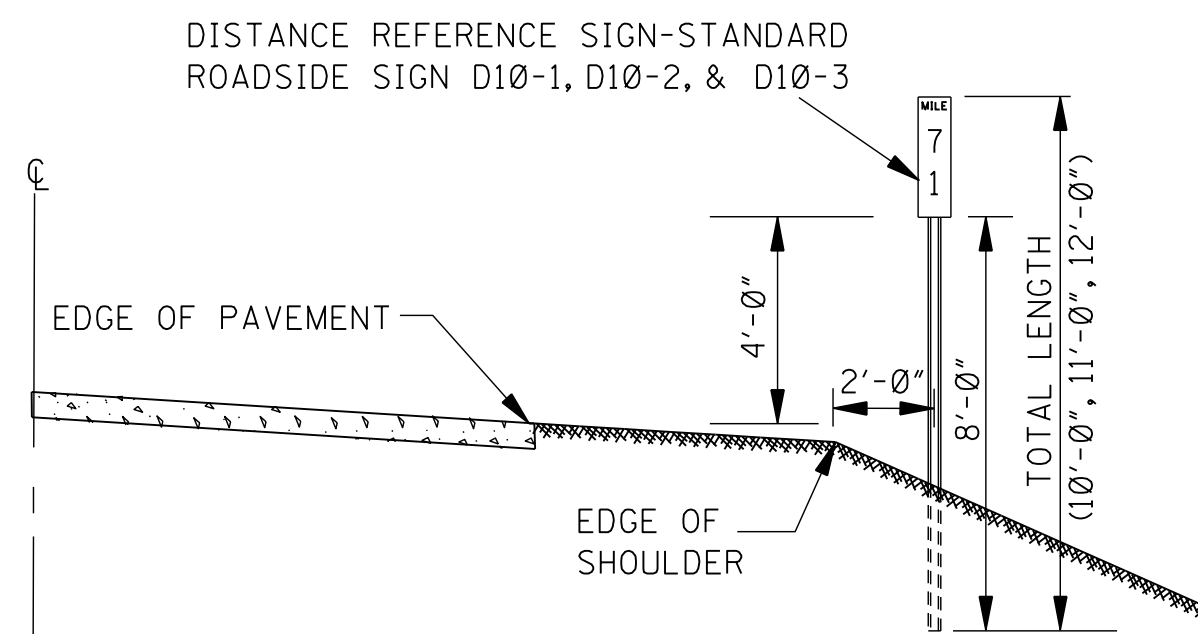


SECTION A-A

NOTES:

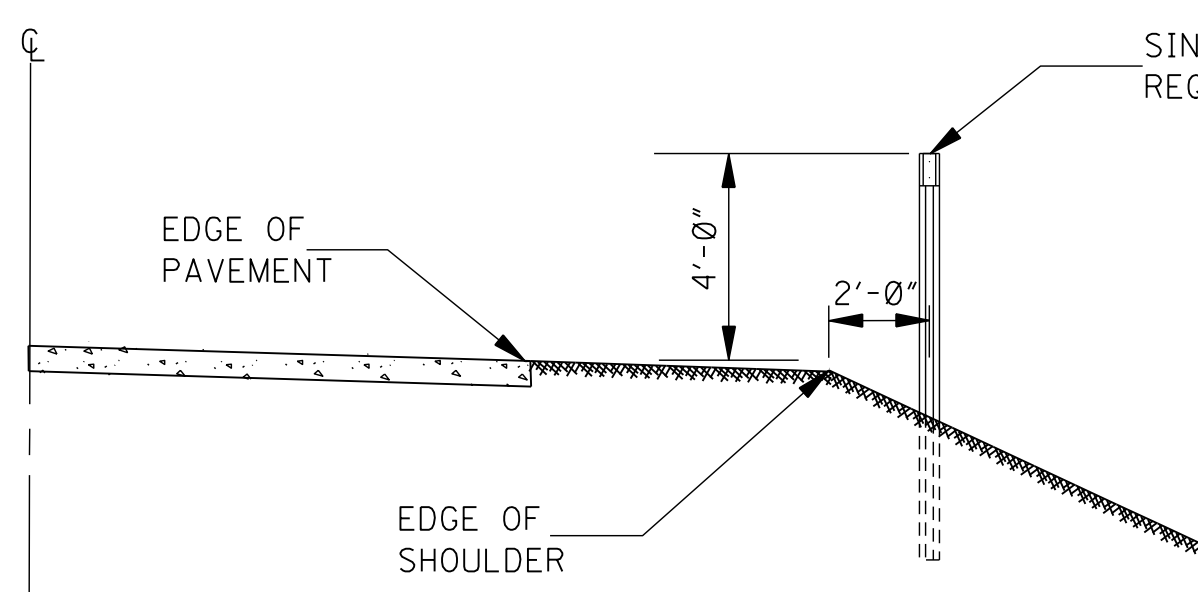
1. WATTLE DITCH CHECKS CAN BE USED FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.
2. THE PLACEMENT INTERVAL BETWEEN WATTLE DITCH CHECK SHALL BE 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON WK. NO. ECD-4.
3. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, DRIVEN, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
4. TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.
5. WATTLES SHOULD NOT BE USED IN HARD BOTTOM CHANNELS.
6. IN THE EVENT WATTLES CANNOT BE SECURED IN PLACE USING WOOD STAKES, SAND BAGS MAY BE USED IN LIEU OF WOOD STAKES IN ORDER TO SECURE THE WATTLES IN PLACE. IF SANDS BAGS ARE USED IN THIS APPLICATION THEY WILL NOT BE A SEPARATE PAY ITEM.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center">DETAILS OF EROSION CONTROL WATTLE DITCH CHECK</p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		ECD-6	
SHEET NUMBER		6106	

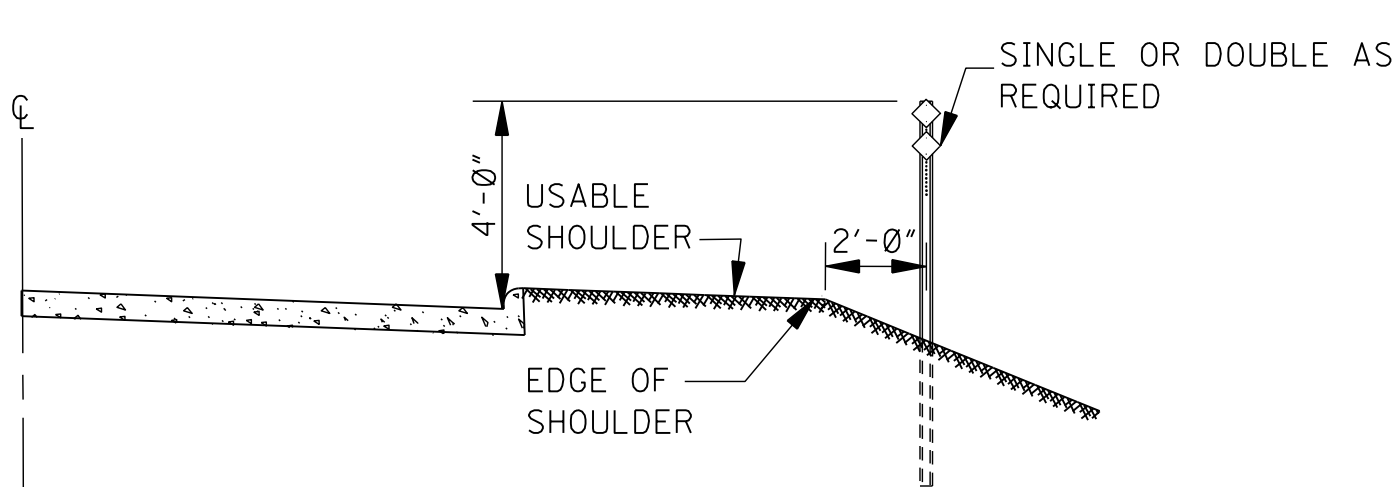


DISTANCE REFERENCE SIGN MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY

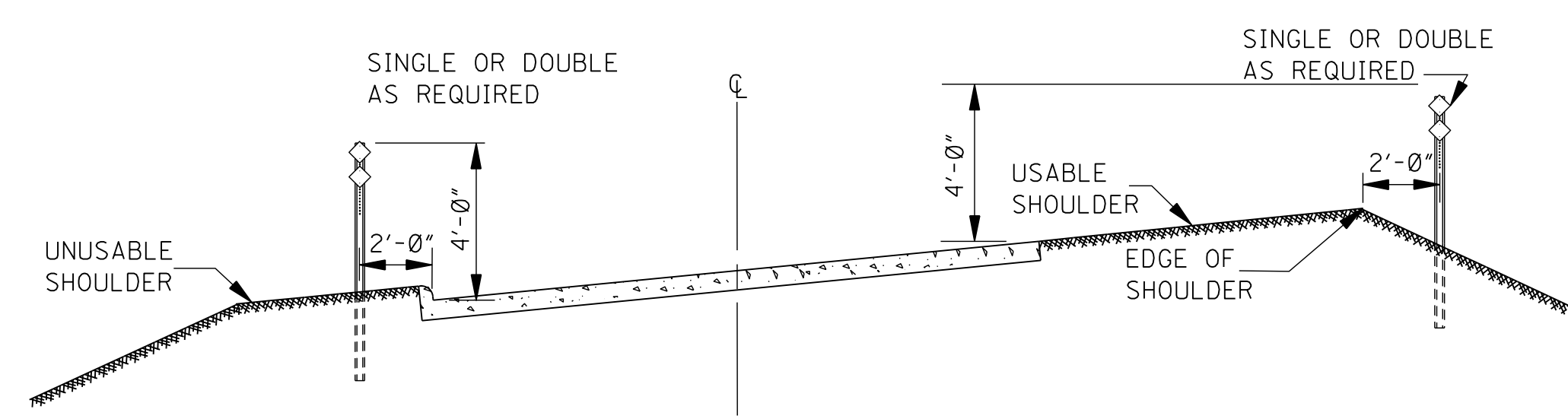
NOTE: SIGN MOUNTING ON LEFT LANE SHOULDER SHALL BE 90° OPPOSITE THE RIGHT LANE STATION. IF CONDITIONS ARE SUCH THAT MILE SIGN CANNOT BE LOCATED WITHIN 50 FEET OF ITS TRUE LOCATION, IT SHALL BE OMITTED ENTIRELY.



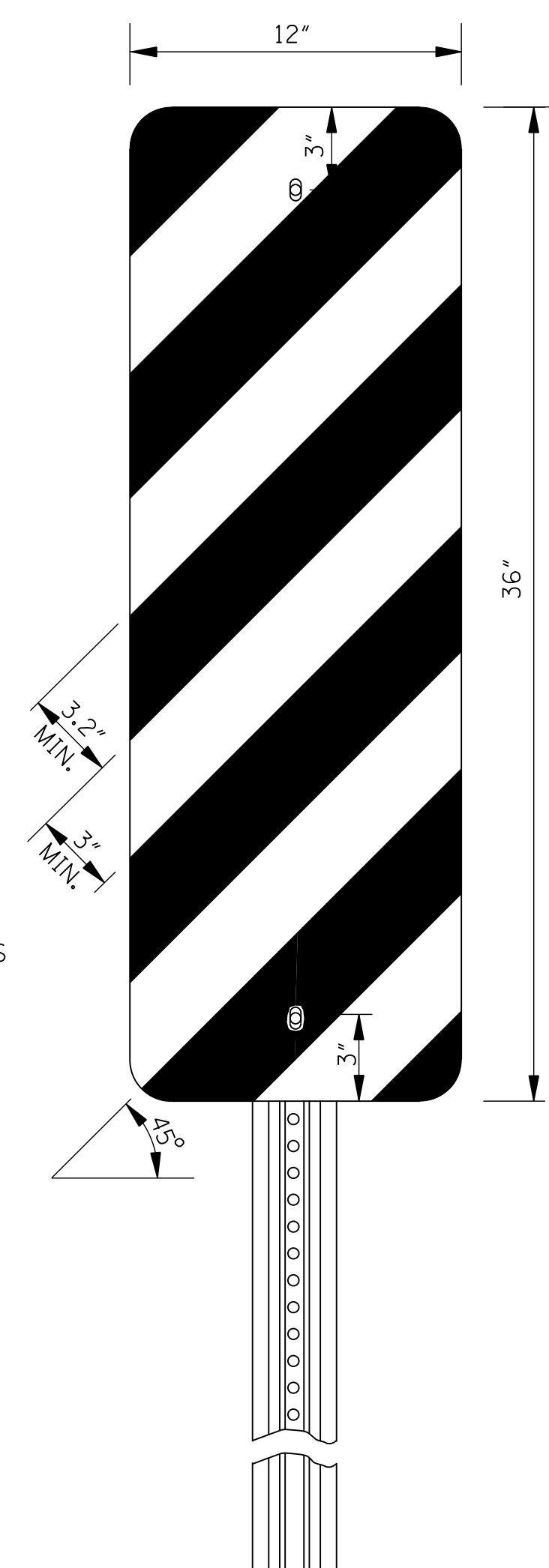
DELINEATOR MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY OR RAMP



DELINEATOR MOUNTING ON OUTSIDE SHOULDER WITH MOUNTABLE CURB ALONG MAIN FACILITY OR RAMP

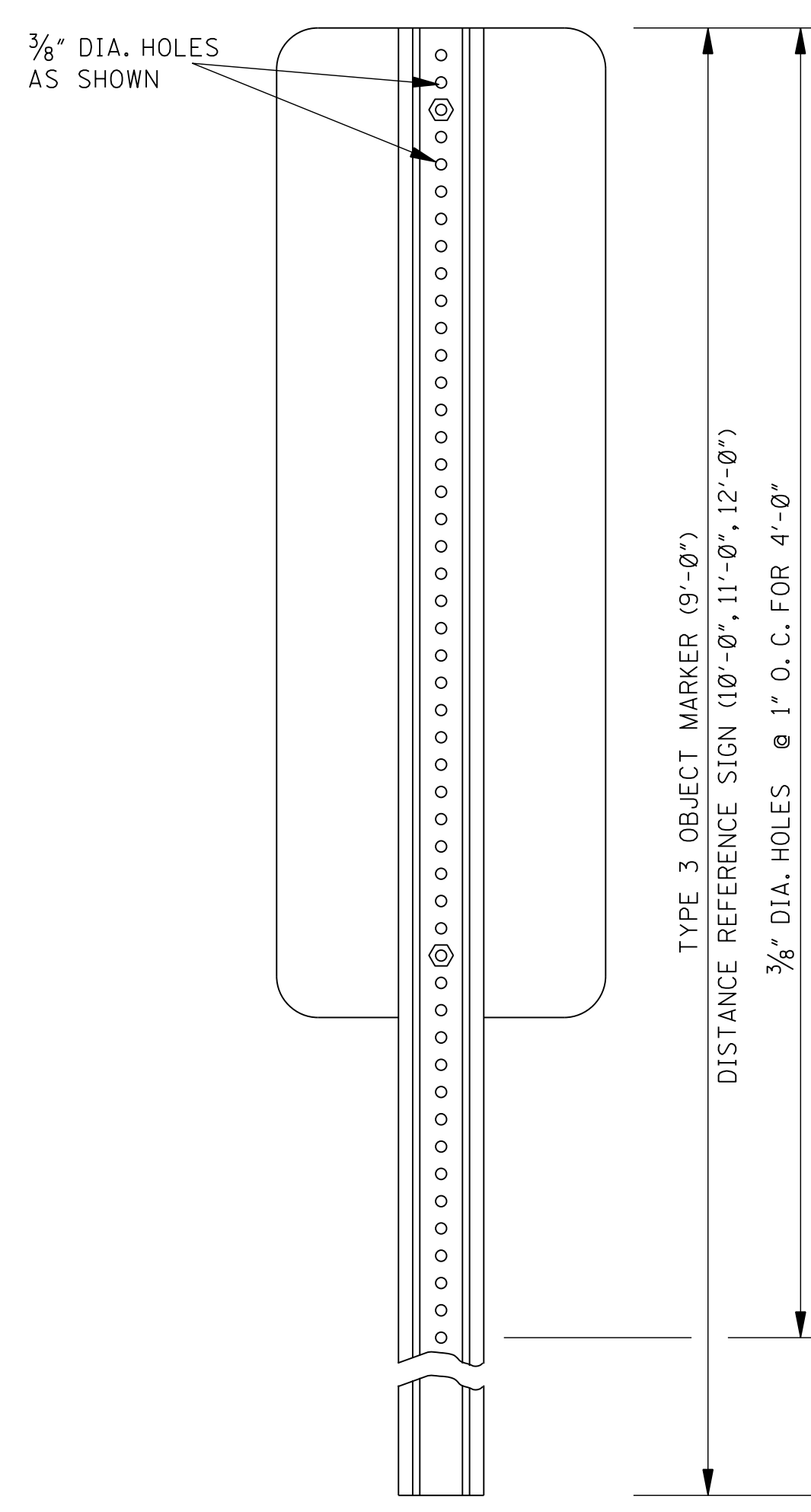


DELINEATOR MOUNTING ON INTERCHANGE LOOPS WITH UNMOUNTABLE CURB ON INSIDE



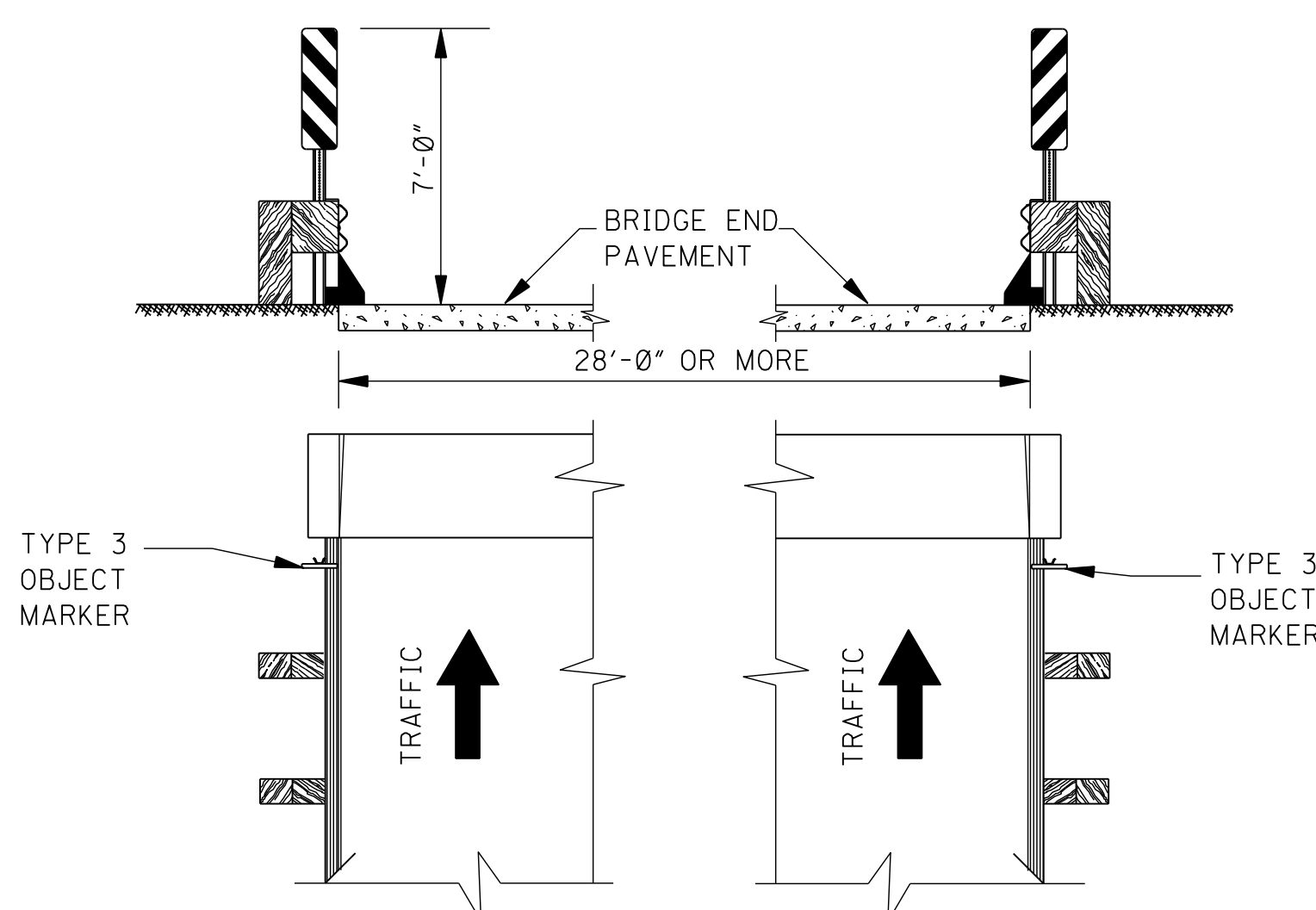
DETAIL OF TYPE 3 OBJECT MARKER

NOTE: COLORS- BLACK AND YELLOW. STRIPING SHOWN ABOVE FOR RIGHT SIDE ONLY. STRIPES SLANT DOWNWARD TO THE RIGHT FOR LEFT SIDE OF BRIDGE END. SEE DETAIL BELOW.

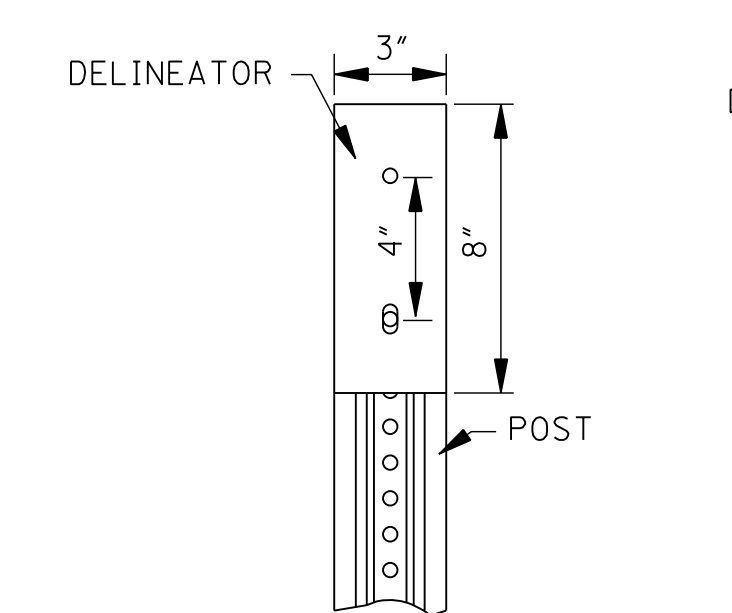


REAR VIEW OF TYPE 3 OBJECT MARKER OR DISTANCE REFERENCE SIGN ASSEMBLY

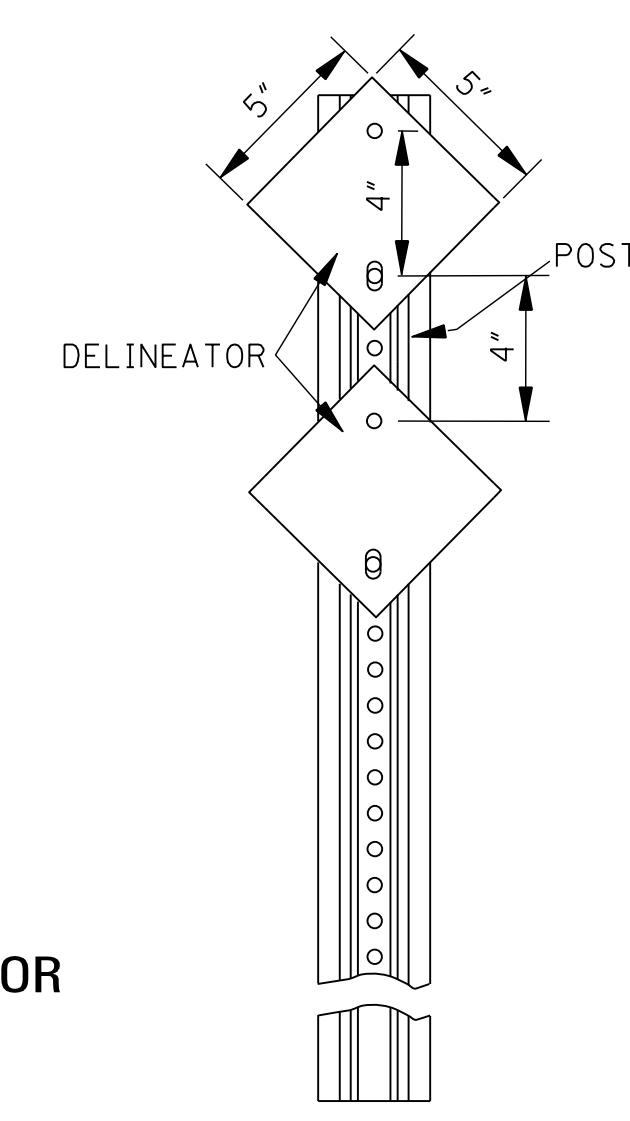
NOTE: TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGNS SHALL BE FASTENED TO U-SECTION POSTS WITH 3/8" DIA. BLIND FASTENERS OF THE COLLAR TYPE.



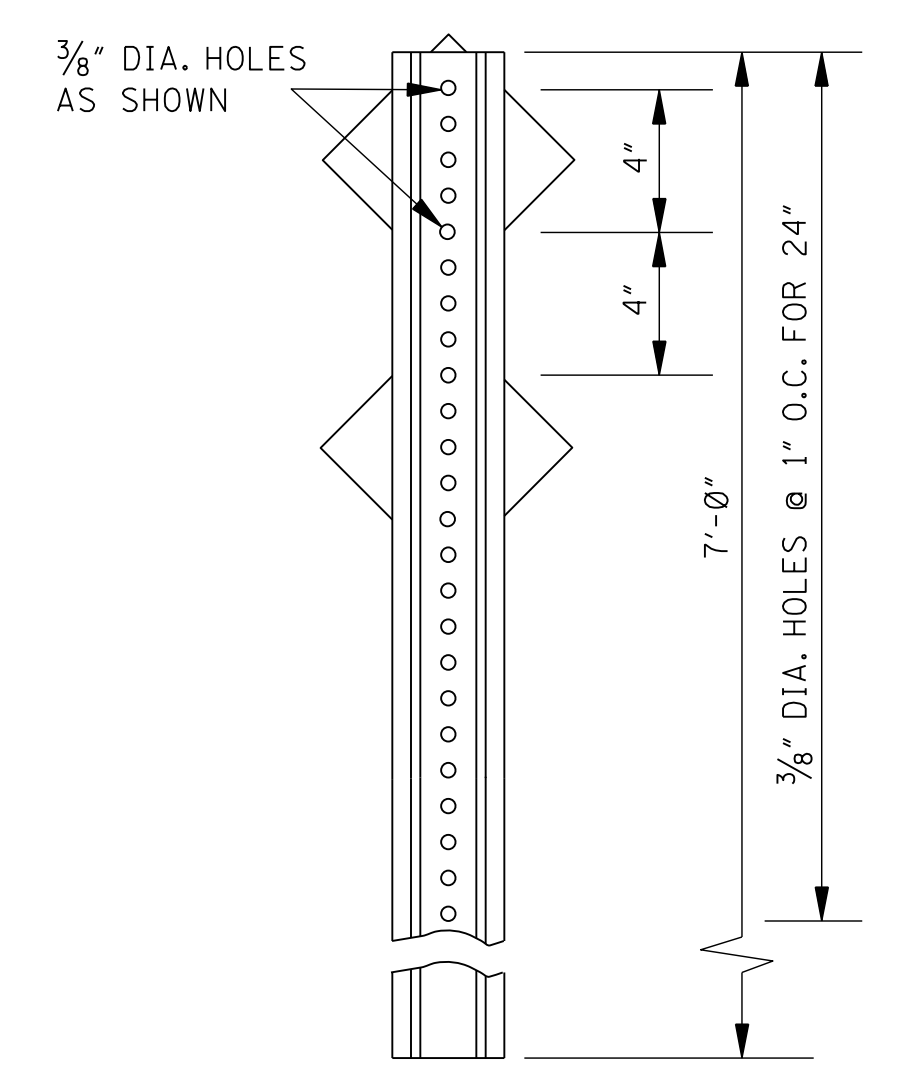
DETAIL OF TYPE 3 OBJECT MARKER INSTALLATION



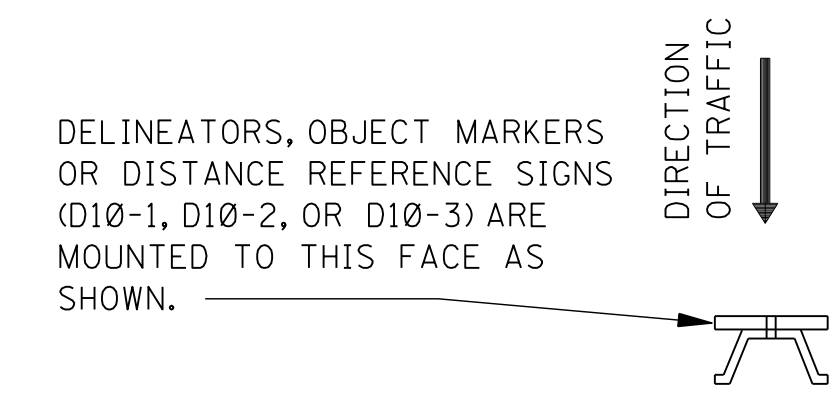
DETAIL OF SINGLE WHITE OR SINGLE YELLOW DELINEATOR



DETAIL OF DOUBLE WHITE OR DOUBLE YELLOW DELINEATOR



REAR VIEW OF DELINEATOR ASSEMBLY




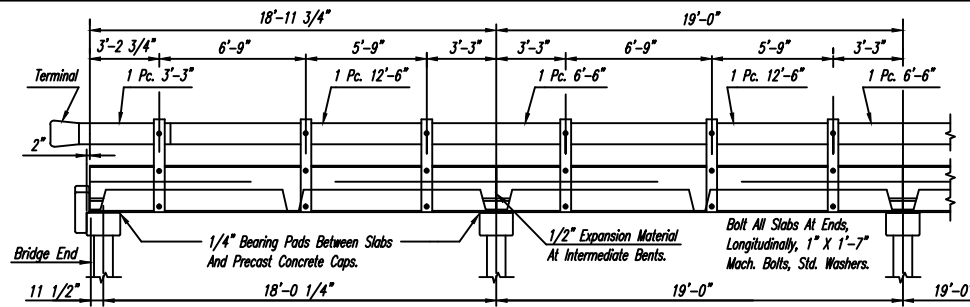
MOUNTING DETAIL

NOTE: DELINEATORS SHALL BE FASTENED TO U-SECTION POSTS WITH 1/4" DIA. BLIND FASTENERS OF THE COLLAR TYPE.

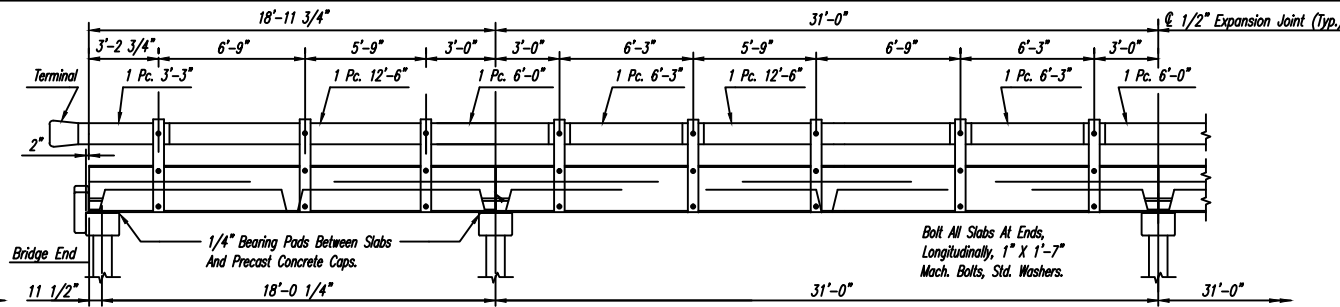
GENERAL NOTES:

1. DELINEATORS AND TYPE 3 OBJECT MARKER SHALL BE REFLECTIVE SHEETING ON 0.080" THICK ALUMINUM SHEET OR 14 GAGE GALVANIZED SHEET STEEL.
2. DELINEATOR, TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGN POSTS SHALL BE GALVANIZED STEEL. THE POSTS SHALL BE FABRICATED BEFORE THE METAL IS GALVANIZED.
3. WEIGHT WITHOUT GROUND PLATES:
 A. DELINEATOR POST 7'-0" - 2.0 lb/ft TO 2.5 lb/ft
 B. TYPE 3 OBJECT MARKER POST 9'-0" - 2.5 lb/ft TO 3.0 lb/ft
 C. DISTANCE REFERENCE SIGN POST 10'-0", 11'-0", & 12'-0" - 3.0 lb/ft TO 3.5 lb/ft
4. UNIT PRICE OF DELINEATORS AND TYPE 3 OBJECT MARKERS SHALL INCLUDE COST OF POST. DISTANCE REFERENCE SIGN POST WILL BE PAID FOR PER FOOT.
5. RADIUS IN BENDS OF POST CROSS SECTION NOT TO EXCEED 3/8" FOR HOT ROLLED SECTION.
6. GROUND PLATE NOT REQUIRED ON U-SECTION POST.

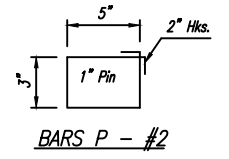
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p>TYPICAL INSTALLATION AND DETAILS OF DELINEATORS AND DISTANCE REFERENCE SIGNS</p> 	
DATE			
ISSUE DATE: AUGUST 01, 2017		WORKING NUMBER SN-8	SHEET NUMBER 6314



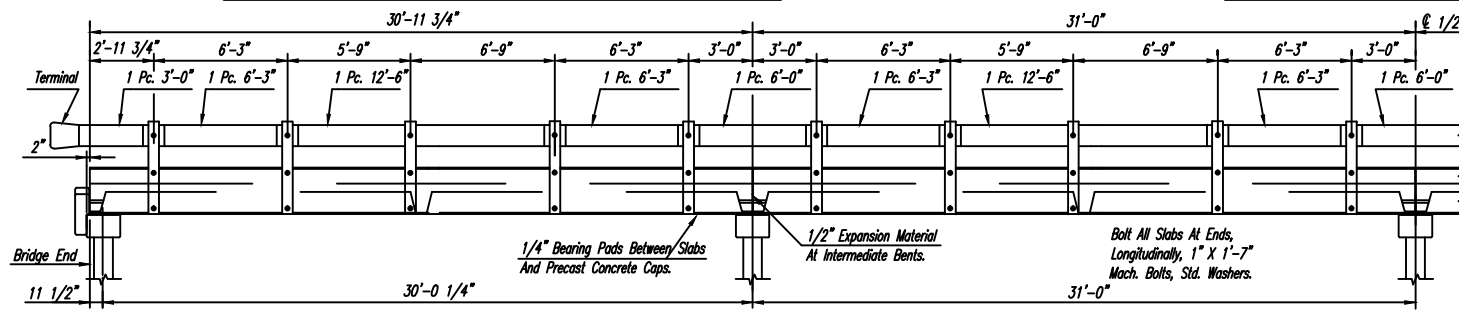
ELEVATION - 19' END SPAN & 19' INTERMEDIATE SPAN



ELEVATION - 19' END SPAN & 31' INTERMEDIATE SPAN

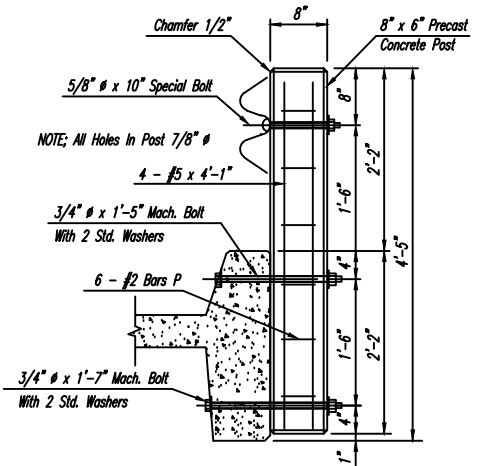


BARS P - #2



ELEVATION - 31' END SPAN & 31' INTERMEDIATE SPAN

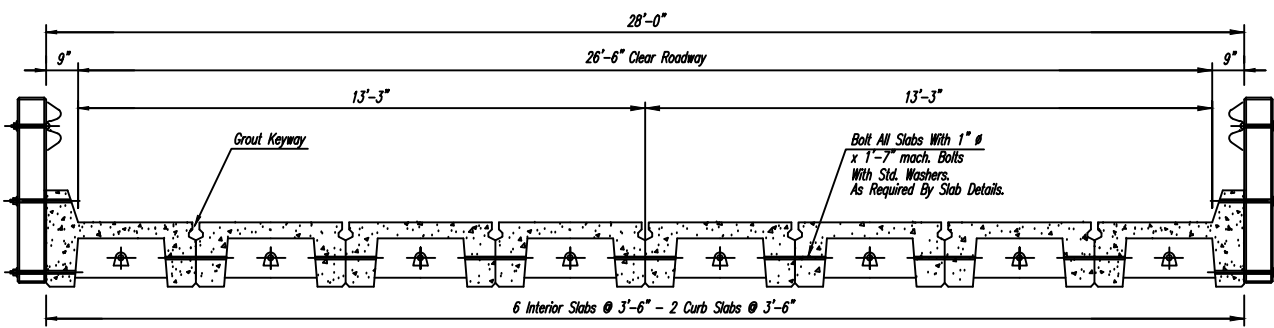
NOTE: All Rail Shall Be Type I, Class B, (10 Ga.), Steel "W" Beam. Sections Shall Be Lapped At Posts Only In The Direction Of Approaching Traffic. Bolts For Rail To Post Shall Be 5/8" # x 10" Button Head, Oval Shoulder With Hex Nuts And Standard Washers. Bolts For Splice Shall Be 5/8" # x 1 1/4" Button Head, Oval Shoulder With Hex Nuts. 8 Splice Bolts At Each Lap Joint.



PRECAST POST DETAIL

PAY ITEM S-806-H: Beam Type Railing With Concrete Posts - per linear foot.

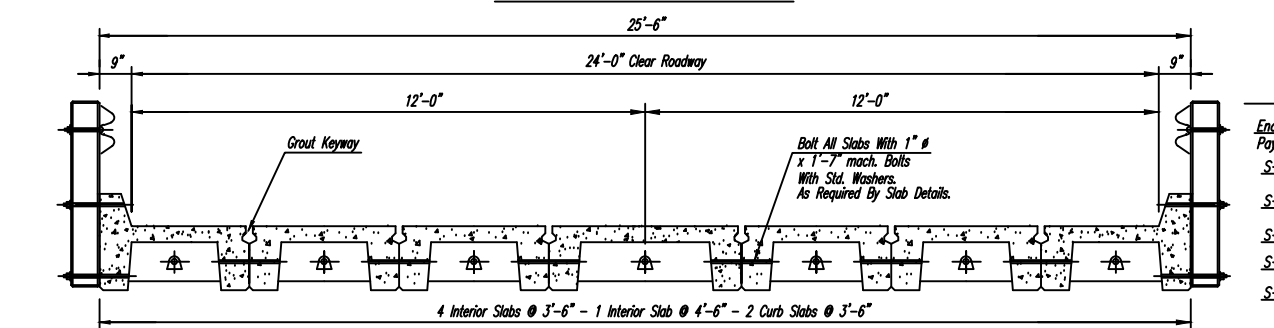
THIS STANDARD IS NOT APPROVED BY FHWA FOR USE ON FEDERALLY FUNDED PROJECTS



SECTION OF 26'-6" ROADWAY

PAY ITEMS FOR 26'-6" ROADWAY

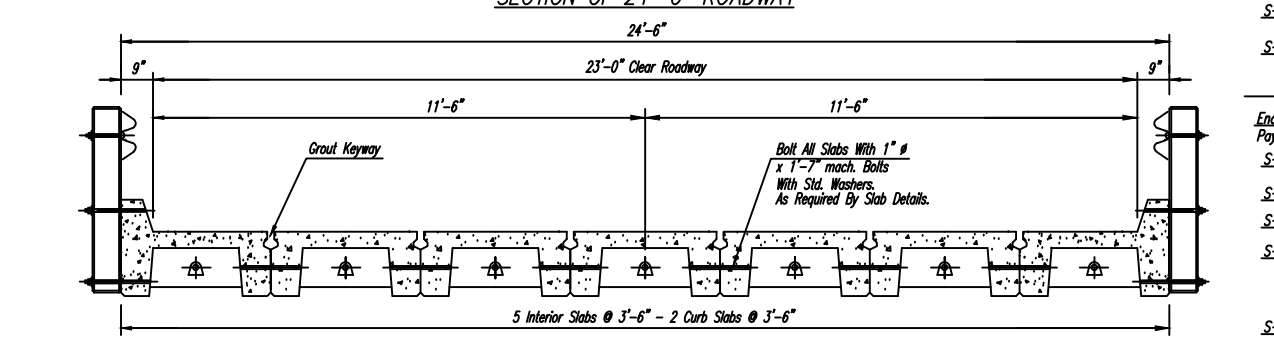
End Span		Intermediate Span	
Pay Item No.	Quantity	Pay Item No.	Quantity
S-806-A: 19' / 31' Precast Concrete Slab Unit, 3.5' Interior	6 Each	S-806-A: 19' / 31' Precast Concrete Slab Unit, 3.5' Interior	6 Each
S-806-B: 19' / 31' Precast Concrete Slab Unit, Curb	2 Each	S-806-B: 19' / 31' Precast Concrete Slab Unit, Curb	2 Each
S-806-H: Beam Type Railing With Concrete Posts	19' / 31' 38.0 L.F. / 62.0 L.F.	S-806-H: Beam Type Railing With Concrete Posts	19' / 31' 38.0 L.F. / 62.0 L.F.
S-806-I: 29.0' Precast Concrete Cap, Steel Intermediate Unit, Concrete Pile	1 Each	S-806-I: 29.0' Precast Concrete Cap, Steel Intermediate Unit, Concrete Pile	1 Each
S-806-J: 29.0' Precast Concrete Cap, End Unit, Concrete Pile	1 Each		
S-806-M: 7.5' Precast Concrete Wing	2 Each		



SECTION OF 24'-0" ROADWAY

PAY ITEMS FOR 24'-0" ROADWAY

End Span		Intermediate Span	
Pay Item No.	Quantity	Pay Item No.	Quantity
S-806-A: 19' / 31' Precast Concrete Slab Unit, 3.5' Interior	4 Each	S-806-A: 19' / 31' Precast Concrete Slab Unit, 3.5' Interior	4 Each
S-806-B: 19' / 31' Precast Concrete Slab Unit, 4.5' Interior	1 Each	S-806-B: 19' / 31' Precast Concrete Slab Unit, 4.5' Interior	1 Each
S-806-B: 19' / 31' Precast Concrete Slab Unit, Curb	2 Each	S-806-B: 19' / 31' Precast Concrete Slab Unit, Curb	2 Each
S-806-H: Beam Type Railing With Concrete Posts	19' / 31' 38.0 L.F. / 62.0 L.F.	S-806-H: Beam Type Railing With Concrete Posts	19' / 31' 38.0 L.F. / 62.0 L.F.
S-806-I: 26.5' Precast Concrete Cap, Steel Intermediate Unit, Concrete Pile	1 Each	S-806-I: 26.5' Precast Concrete Cap, Steel Intermediate Unit, Concrete Pile	1 Each
S-806-J: 26.5' Precast Concrete Cap, End Unit, Concrete Pile	1 Each		
S-806-M: 7.5' Precast Concrete Wing	2 Each		



SECTION OF 23'-0" ROADWAY

PAY ITEMS FOR 23'-0" ROADWAY

End Span		Intermediate Span	
Pay Item No.	Quantity	Pay Item No.	Quantity
S-806-A: 19' / 31' Precast Concrete Slab Unit, 3.5' Interior	5 Each	S-806-A: 19' / 31' Precast Concrete Slab Unit, 3.5' Interior	5 Each
S-806-B: 19' / 31' Precast Concrete Slab Unit, Curb	2 Each	S-806-B: 19' / 31' Precast Concrete Slab Unit, Curb	2 Each
S-806-H: Beam Type Railing With Concrete Posts	19' / 31' 38.0 L.F. / 62.0 L.F.	S-806-H: Beam Type Railing With Concrete Posts	19' / 31' 38.0 L.F. / 62.0 L.F.
S-806-I: 25.5' Precast Concrete Cap, Steel Intermediate Unit, Concrete Pile	1 Each	S-806-I: 25.5' Precast Concrete Cap, Steel Intermediate Unit, Concrete Pile	1 Each
S-806-J: 25.5' Precast Concrete Cap, End Unit, Concrete Pile	1 Each		
S-806-M: 7.5' Precast Concrete Wing	2 Each		

GENERAL NOTES

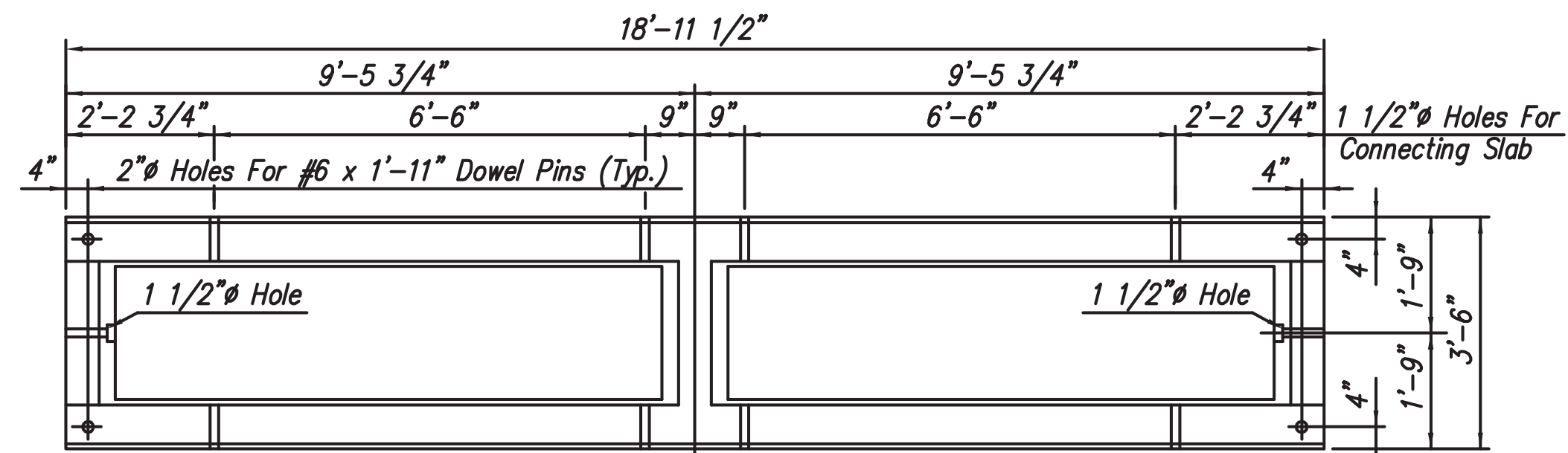
Specifications: Current Mississippi Standard Specifications For State Aid Road And Bridge Construction. All Units Shall Be Accurately Placed On Preset Caps With All Slab To Cap Dowels Installed And All Bolts, Transverse And Longitudinal, Installed. Hardware Shall Be Galvanized Or Cadmium Plated. All Material And Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly And Compensation Therefore Will Be Considered Included In The Prices And Payments For Bid Items.

DESIGN DATA:

Specifications:.....AASHTO LRFD Bridge Design Specifications, 4th Edition, 2007, Through 2009 Interims
Design Loading:.....HL-93
fy = 60,000 p.s.i.; f'c = 4,500 p.s.i.; n = 7

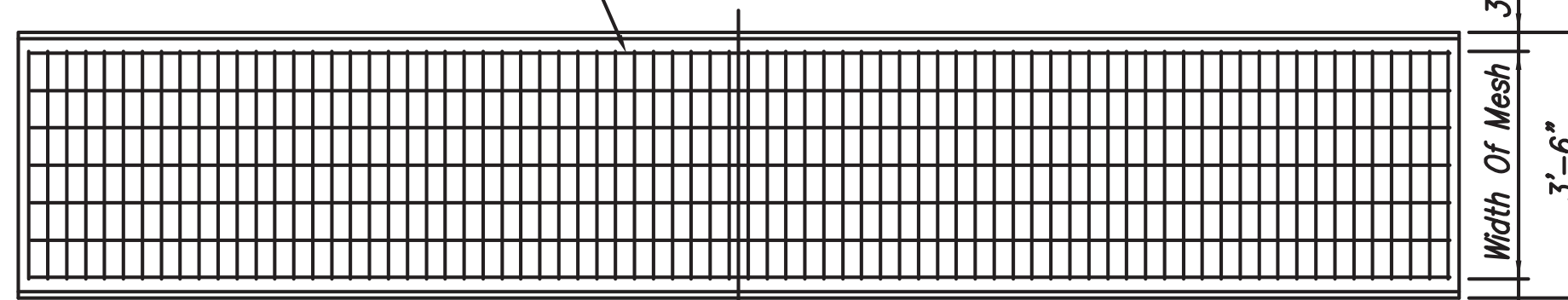
OFFICE OF STATE AID ROAD CONSTRUCTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
PRECAST CONCRETE SPANS FOR USE WITH W-BEAM RAIL 23'-0" ROADWAY 24'-0" ROADWAY 26'-6" ROADWAY	
STATE AID ENGINEER: J. BROOKS MILLER, Sr.	ISSUED BY: F.C.H.
BRIDGE ENGINEER: FRED HOLLIS	DATE: 6-11
DESIGNED BY: M.B.E.	DRAWING NUMBER: PC-01-09

P00012324265 (N.T.S.) 06/07/2005

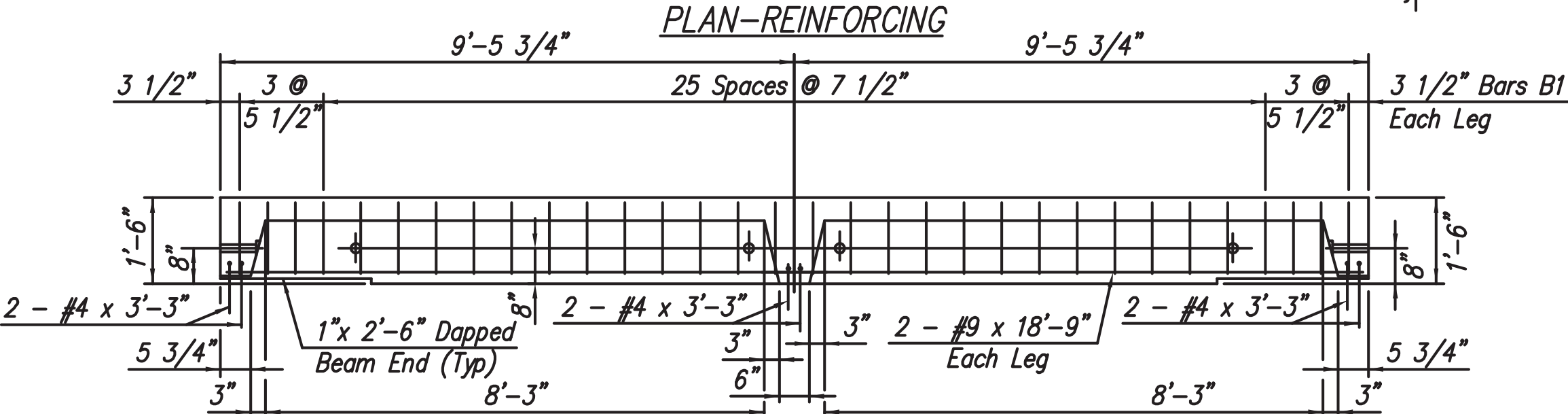


PLAN Bolt All Slabs Transversely At 3 Points. One At Each End And One Near The Center.

6 x 3 - D6 x D7 Welded Wire Mesh Top & Bottom. Lap 6" Min. @ Splice

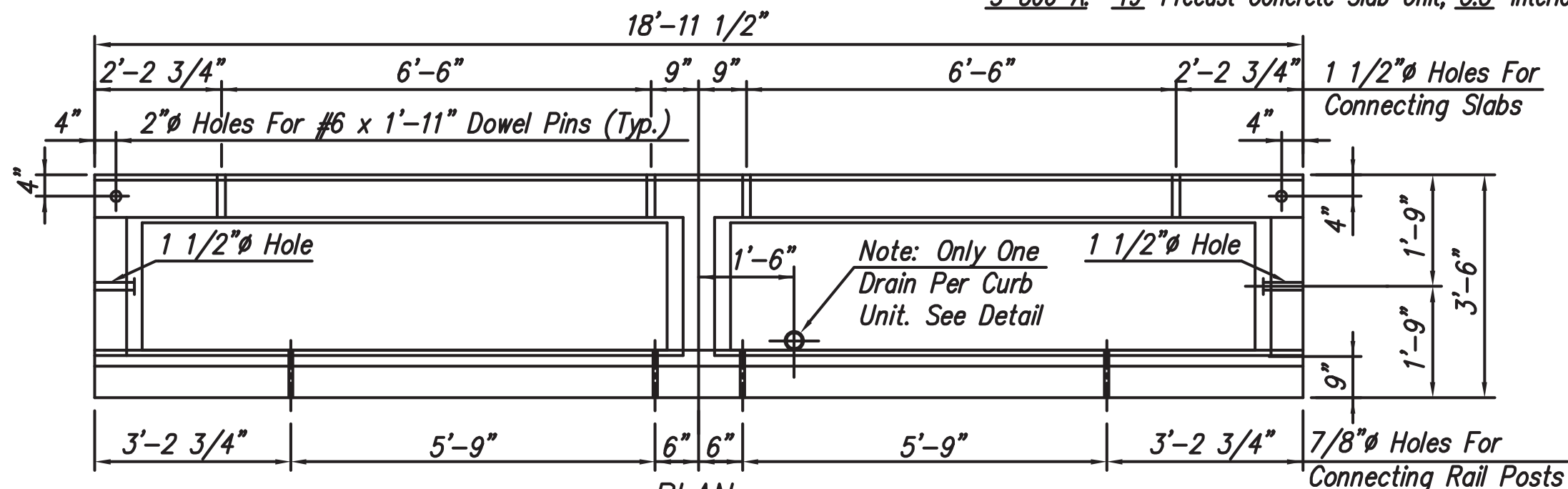


PLAN-REINFORCING

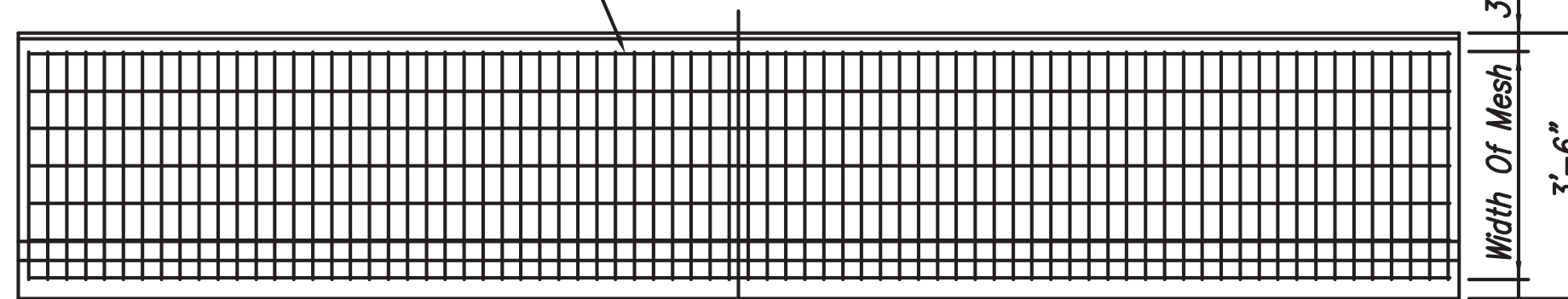


ELEVATION INTERIOR UNIT

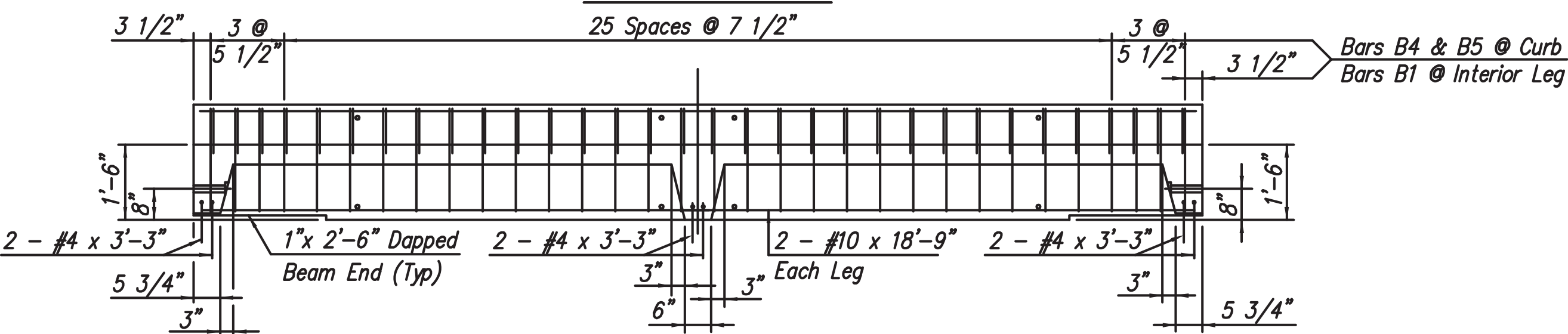
PAY ITEM S-806-A: 19' Precast Concrete Slab Unit, 3.5' Interior - per each



6 x 3 - D6 x D7 Welded Wire Mesh Top & Bottom. Lap 6" Min. @ Splice

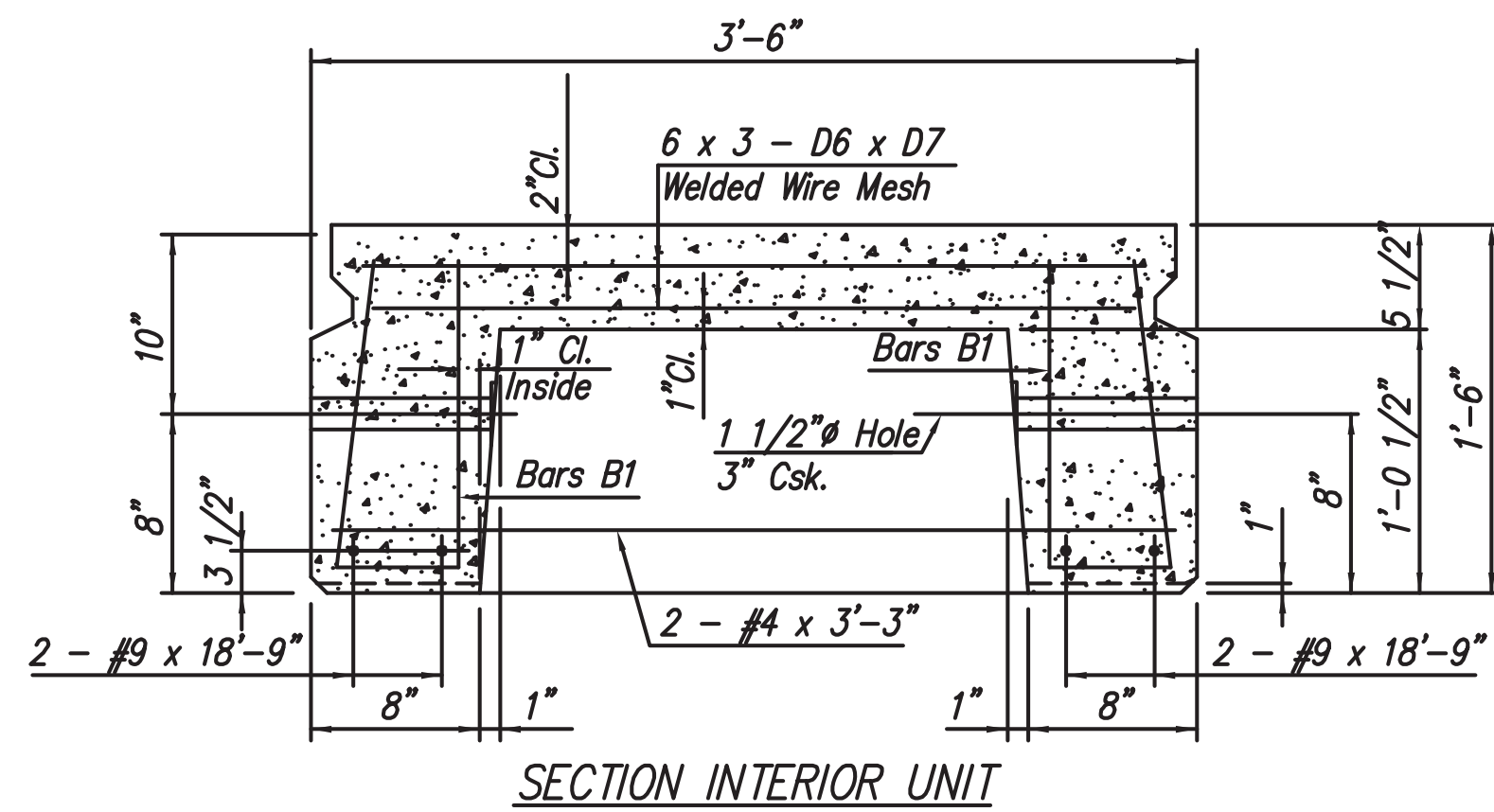


PLAN-REINFORCING

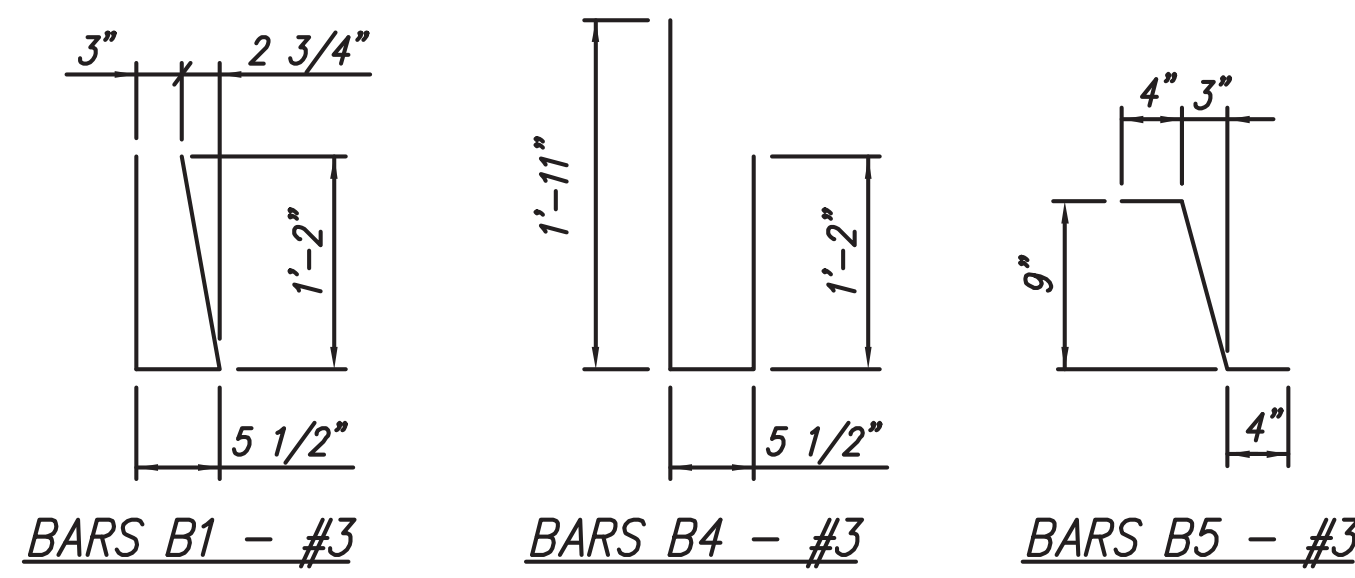


ELEVATION CURB UNIT

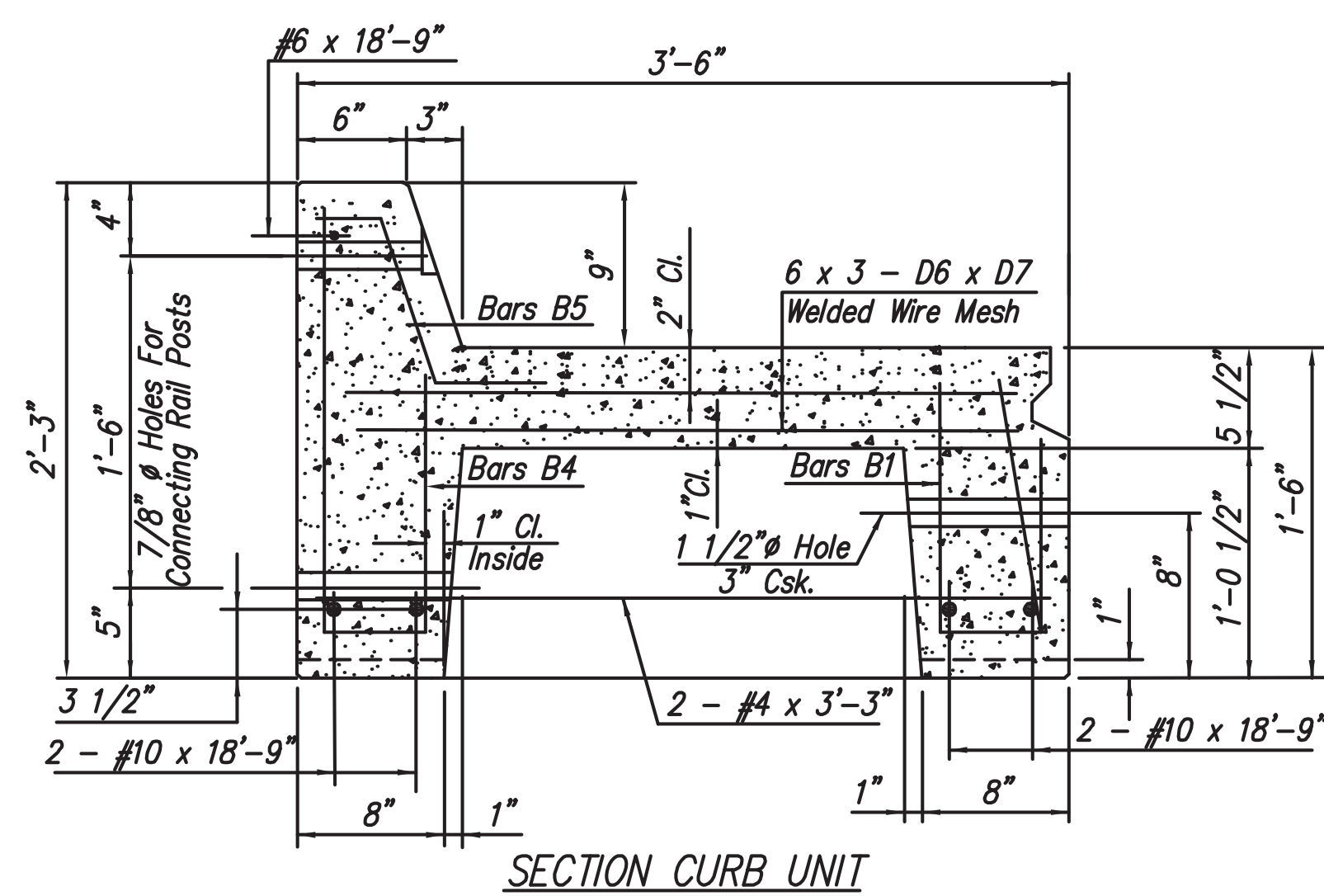
PAY ITEM S-806-B: 19' Precast Concrete Slab Unit, Curb - per each



SECTION INTERIOR UNIT

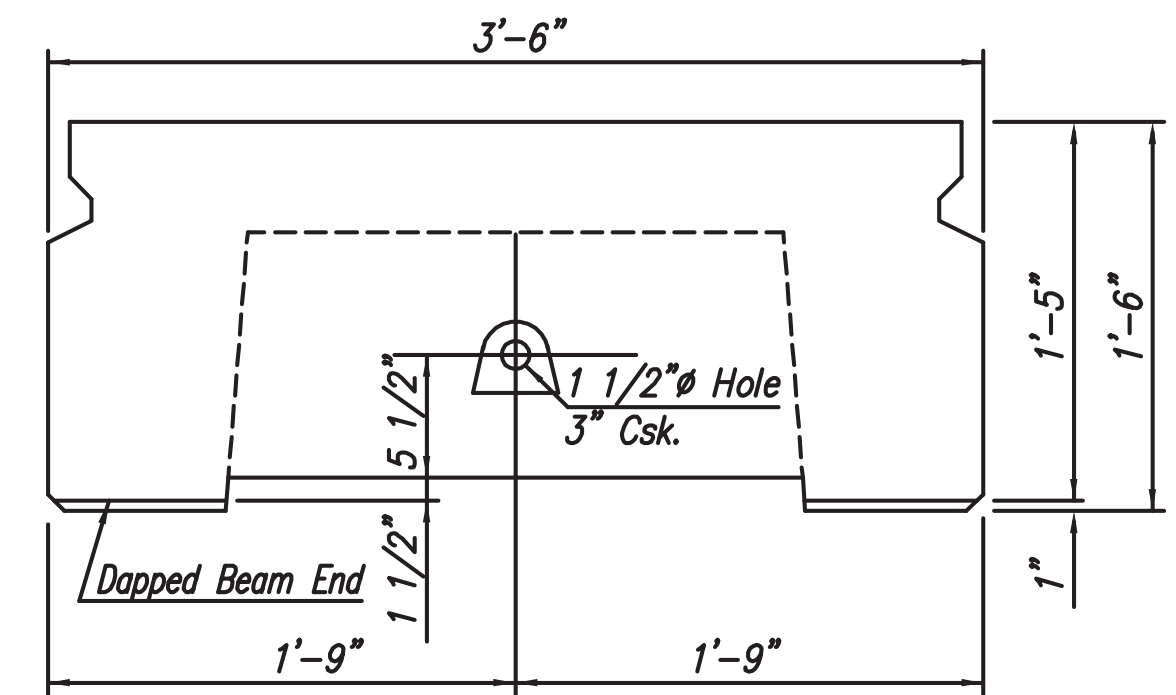


BAR BENDING DETAILS
Dimensions Are Out To Out.

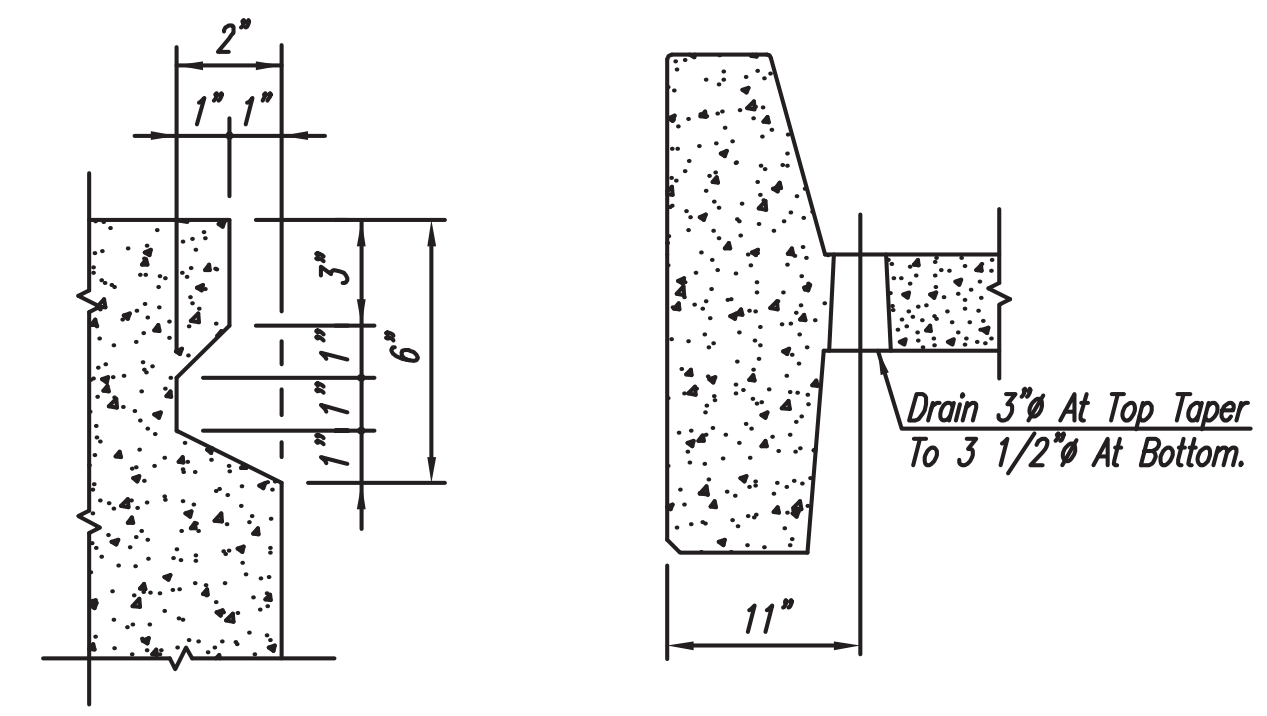


SECTION CURB UNIT

NOTE: Cable Lifting Loops Are Allowed When Located In Keyways, Cut Off Below Deck, And Not Visible After Placing Keyway Grout.



END ELEVATION



KEY DETAIL

SECTION AT DRAIN

GENERAL NOTES

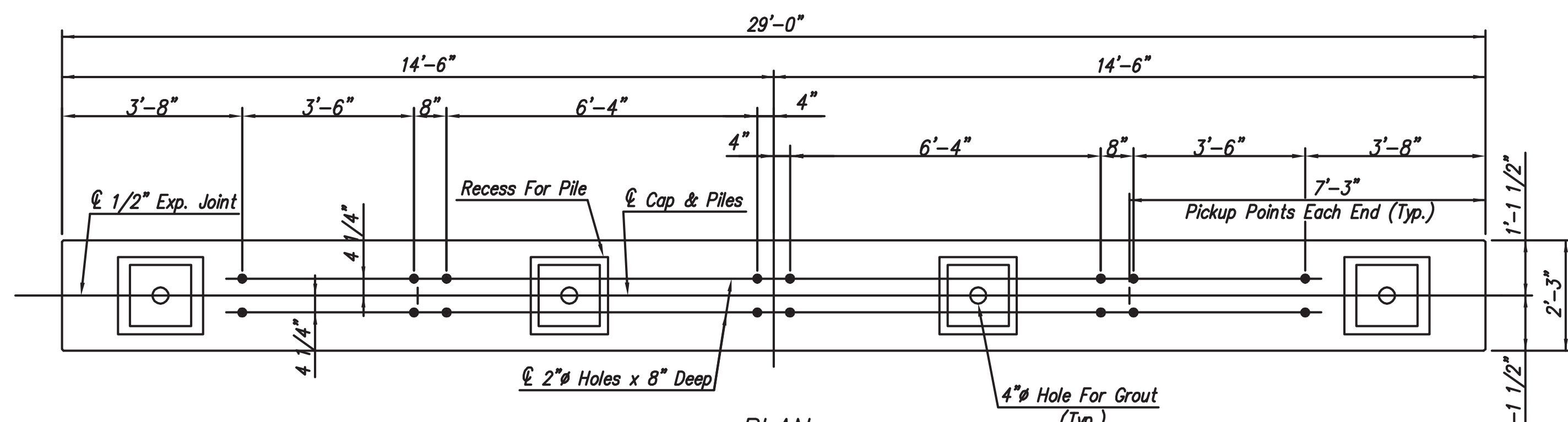
- Specifications: Current Mississippi Standard Specifications For State Aid Road And Bridge Construction.
- All Concrete Shall Obtain A Minimum Compressive Strength Of 4,500 p.s.i. At 28 Days, And Shall Obtain A Minimum Compressive Strength Of 2,500 p.s.i. Before Units Are Lifted From Forms.
- All Concrete Edges Shall Be Chamfered 3/4" Unless Otherwise Noted.
- All Concrete Corners Shall Be Rounded To A 1/4" Radius.
- All Reinforcing Steel Shall Be A.S.T.M. A615, Grade 60.
- Dimensions For Reinforcing Steel Are To The Centerline Of The Bars, Unless Otherwise Noted.
- All Reinforcing Steel Shall Be Accurately Located In The Forms And Firmly Held In Place By Means Of Steel Wire Supports.
- Wire Mesh Shall Conform To "Specification For Welded Deformed Steel Wire Mesh For Concrete Reinforcement" (A.S.T.M. A497) For Deformed Wire And "Specification For Welded Steel Wire Fabric For Concrete Reinforcement" (A.S.T.M. A185) For Smooth Wire.
- All Material And Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly And Compensation Therefore Will Be Considered Included In The Prices And Payments For Bid Items.

DESIGN DATA:

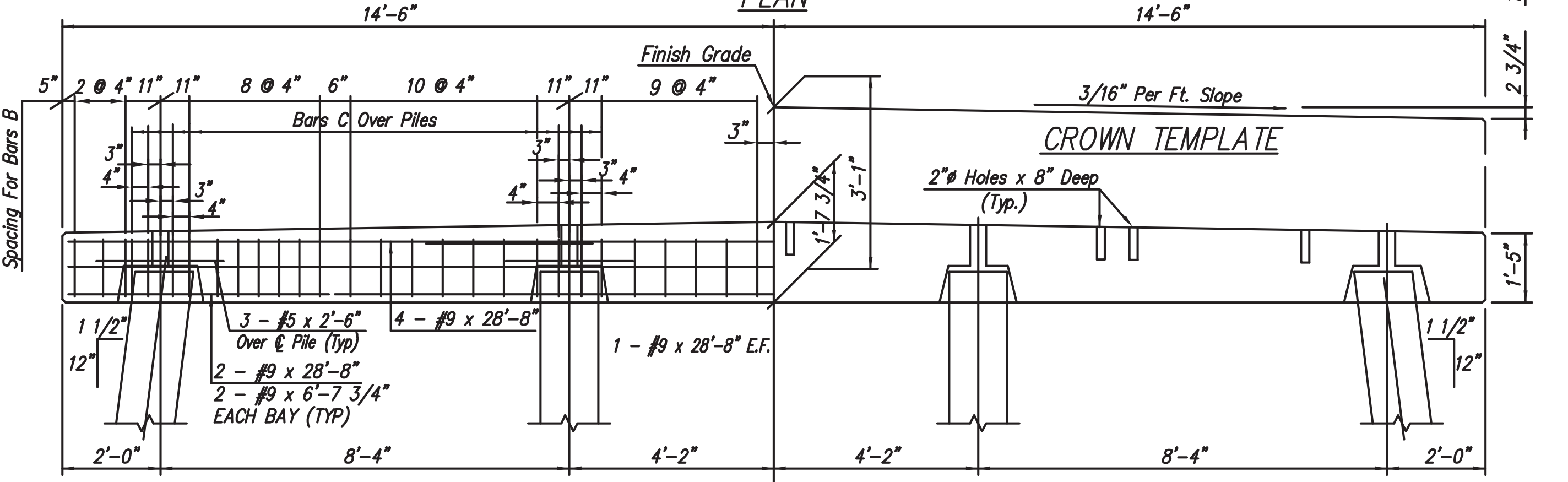
Specifications:.....2007 AASHTO LRFD Bridge Design Specifications, 4th Edition, 2007, Through 2009 Interims
Design Loading:.....HL-93
fy = 60,000 p.s.i.; fc = 4,500 p.s.i.; n = 7

BY	OFFICE OF STATE AID ROAD CONSTRUCTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION
REVISIONS	19' x 3.5' PRECAST CONCRETE SLAB UNIT FOR USE WITH W-BEAM RAIL WITH CONCRETE POSTS

STATE AID ENGINEER: J. BROOKS MILLER, Sr.	ISSUED BY: F.C.H.	DRAWING NUMBER: PC-03-09
BRIDGE ENGINEER: FRED HOLLIS	DESIGNED BY: M.B.E.	DATE: 6-11



PLAN

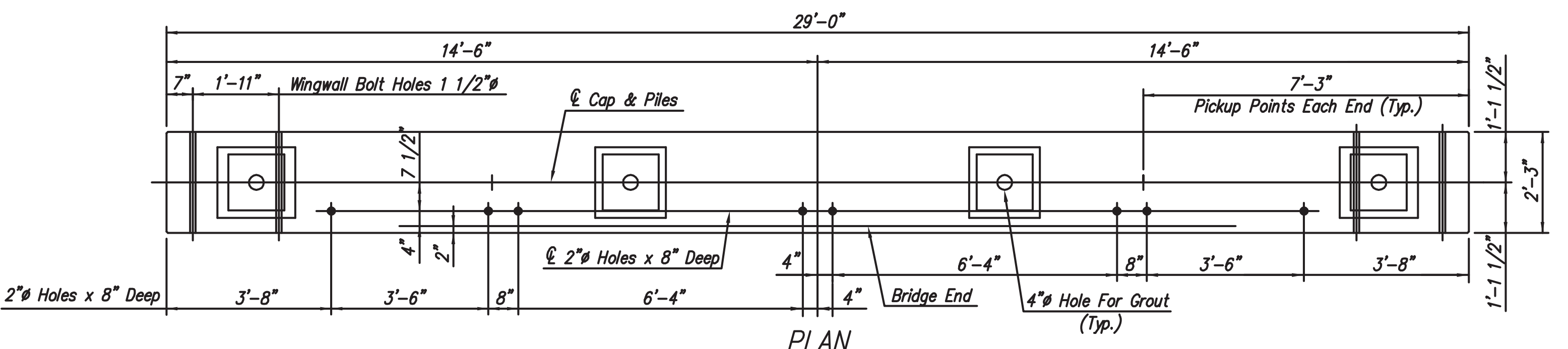


ELEVATION INTERMEDIATE UNIT

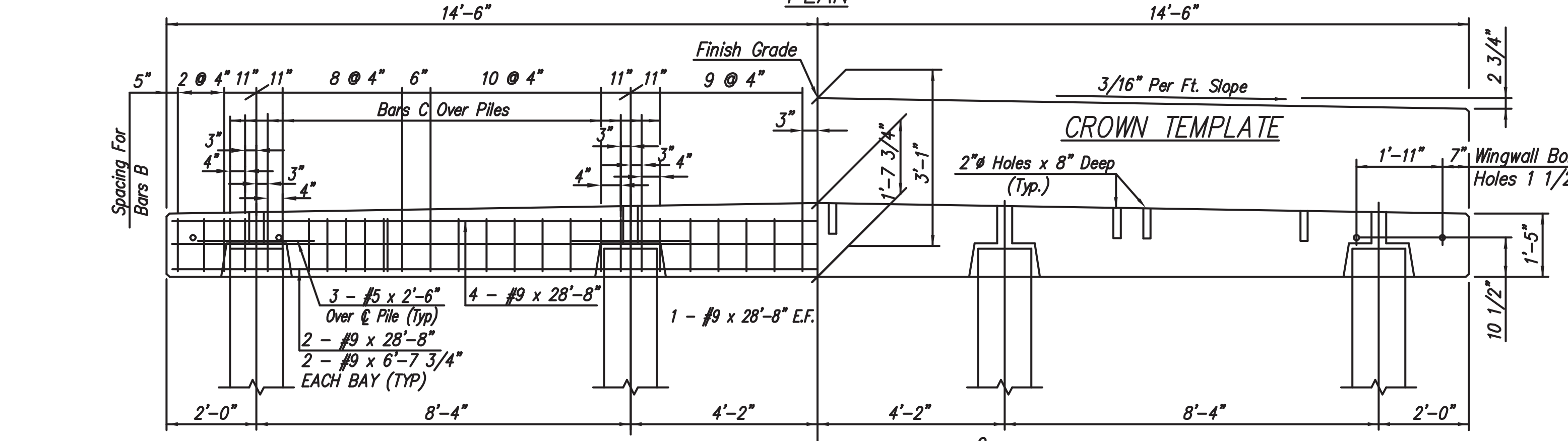
NOTE: Piles Shall Be In Accordance With Guidelines On Sheet PC-14-09.

Minimum Factored Pile Bearing Capacity
 19'-19" ~ 49 Tons (STR1)
 19'-31" ~ 58 Tons (STR1)
 31'-31" ~ 65 Tons (STR1)

PAY ITEM
 S-806-f: 29' Precast Concrete Cap, Steel Intermediate Unit, Concrete Pile - per each.



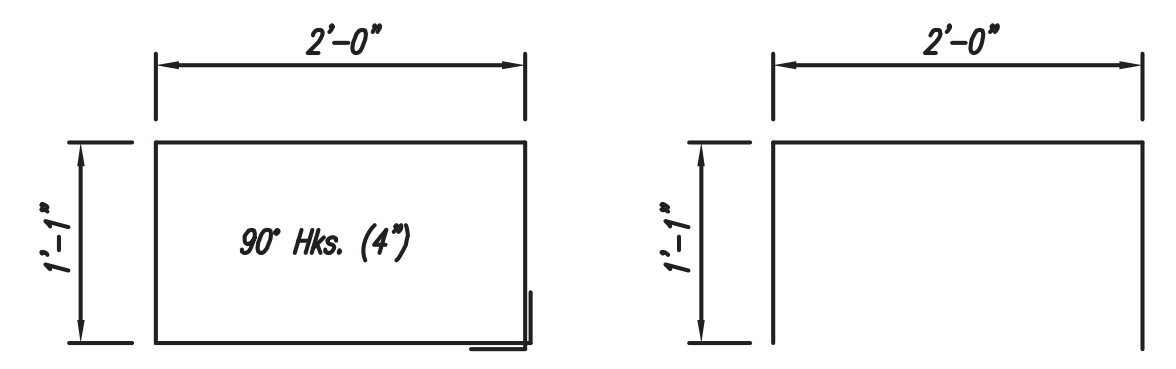
PLAN



ELEVATION END UNIT

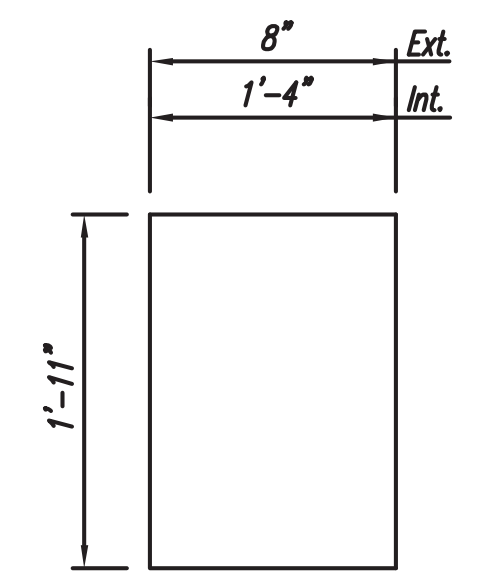
Minimum Factored Pile Bearing Capacity
 19' ~ 32 Tons (STR1)
 31' ~ 42 Tons (STR1)

PAY ITEM
 S-806-j: 29' Precast Concrete Cap, End Unit, Steel Concrete Pile - per each.



BAR BENDING DETAILS

Dimensions Are Out To Out



NEOPRENE BEARING PADS

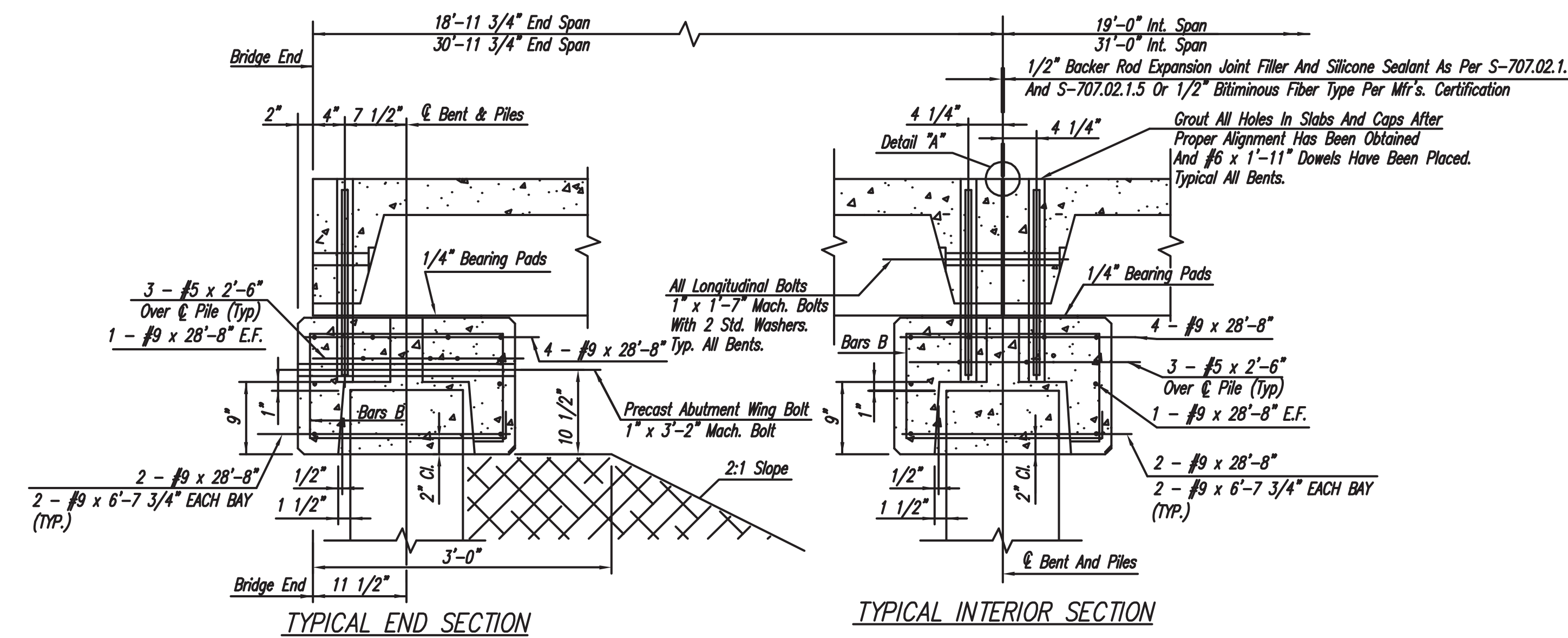
See Plan No. PC-15-09 For Details

GENERAL NOTES

Specifications: Current Mississippi Standard Specifications For State Aid Road And Bridge Construction.
 All Concrete Shall Obtain A Minimum Compressive Strength Of 3000 p.s.i. At 28 Days, And A Minimum Compressive Strength Of 2500 p.s.i. Before Caps Are Lifted From Forms.
 The Top Surface Of Caps Shall Have A Rubbed Finish In Accordance With Section S-804.03.19.3.1 Of The Specifications.
 All Concrete Edges Shall Be Chamfered 3/4".
 Reinforcing Steel Shall Be Deformed Bars Conforming To A.S.T.M. A615 Grade 60. All Reinforcing Steel Shall Be Accurately Located In The Forms And Securely Held In Place By Means Of Steel Wire Supports.
 Grout For Cap To Piling Connection Shall Be Non-Shrink Commercial Type Or Epoxy Type In Accordance With Section S-806.03.5
 Handling And Placing Precast Caps, Slabs, Barrier Rail, And Wings" Of The Specifications.
 Hardware Shall Be Galvanized Or Cadmium Plated.
 All Material And Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly And Compensation Therefore Will Be Considered Included In The Prices And Payments For Bid Items.

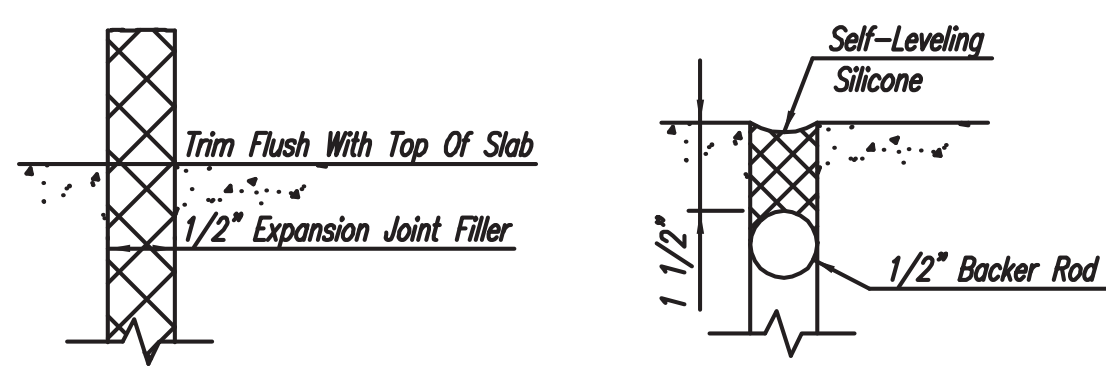
DESIGN DATA:

Specifications:.....A.A.S.H.T.O. LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION, 2007, THROUGH 2009 INTERIMS
 Design Loading:.....HL-93
 fy = 60,000 p.s.i. fc = 3,000 p.s.i. n = 9



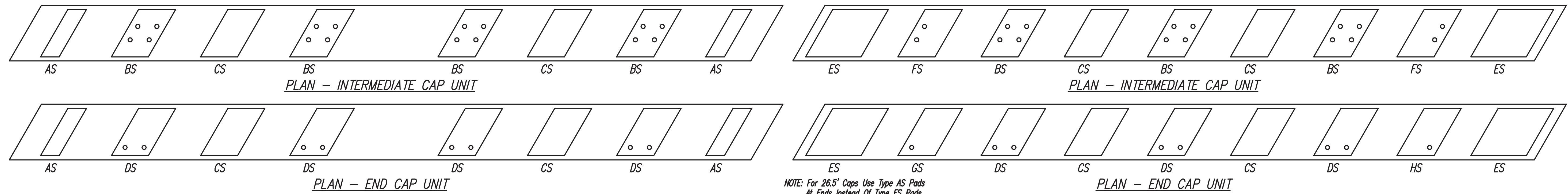
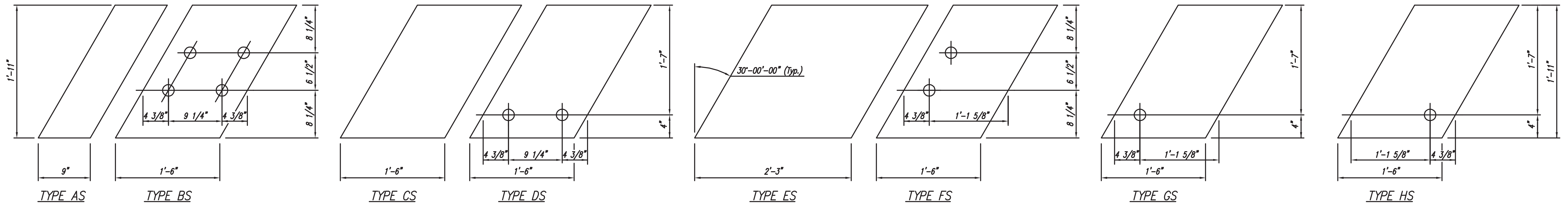
TYPICAL END SECTION

TYPICAL INTERIOR SECTION



DETAIL "A"

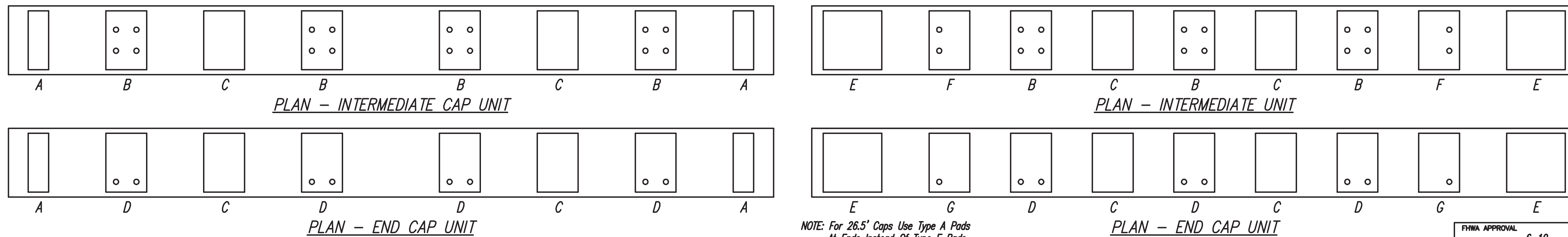
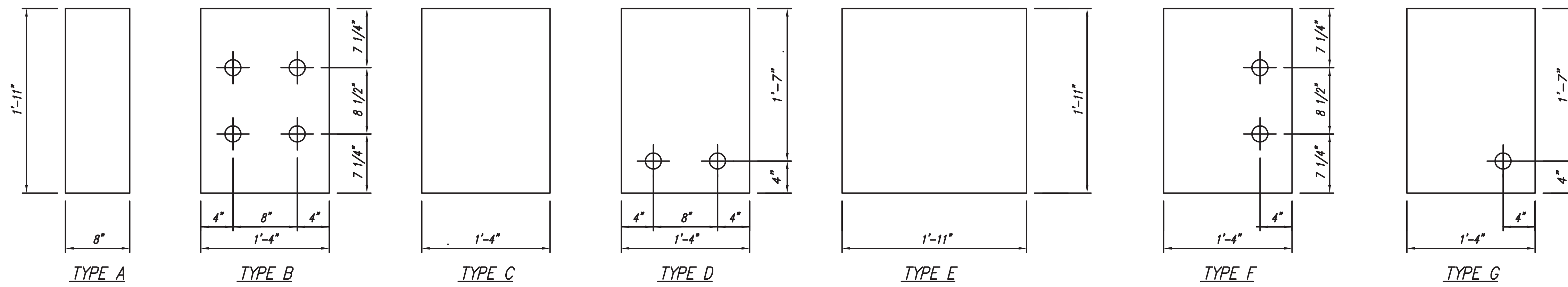
OFFICE OF STATE AID ROAD CONSTRUCTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
PRECAST CONCRETE CAPS FOR USE WITH 19 FT. & 31 FT. PRECAST CONCRETE SPANS & W-BEAM RAIL 26'-6" ROADWAY	
STATE AID ENGINEER: J. BROOKS MILLER, Sr.	DRAWN BY: M.B.E.
BRIDGE ENGINEER: FRED HOLLIS	ISSUED BY: F.C.H.
DESIGNED BY: M.B.E.	DATE: 6-11
DRAWING NUMBER: PC-11-09	



NEOPRENE PAD PLACEMENT - 23' & 24' CLEAR ROADWAYS

NEOPRENE PAD PLACEMENT - 26.5', 28', & 30' CLEAR ROADWAYS

NOTE: For 26.5' Caps Use Type AS Pads At Ends Instead Of Type ES Pads.



NEOPRENE PAD PLACEMENT - 23' & 24' CLEAR ROADWAYS

NEOPRENE PAD PLACEMENT - 26.5', 28', & 30' CLEAR ROADWAYS

NOTE: For 26.5' Caps Use Type A Pads At Ends Instead Of Type E Pads.

GENERAL NOTES:

Specifications:
 Hardness A.S.T.M. D2240 70 Durometer ±5
 Tensile Strength A.S.T.M. D412 2500
 Ultimate Elongation Minimum % 300
 All Holes Are 2 inches In Diameter
 Thickness Of The Pads Shall Be 1/4" Unless Otherwise Designated On The Plans. Pads May Be Cut From Stock Using Appropriate Saw Or Shear, And Holes May Be Drilled. Pads Will Not Be Paid For Separately And Compensation Therefore Shall Be Considered Included In The Prices And Payment For Bid Items.

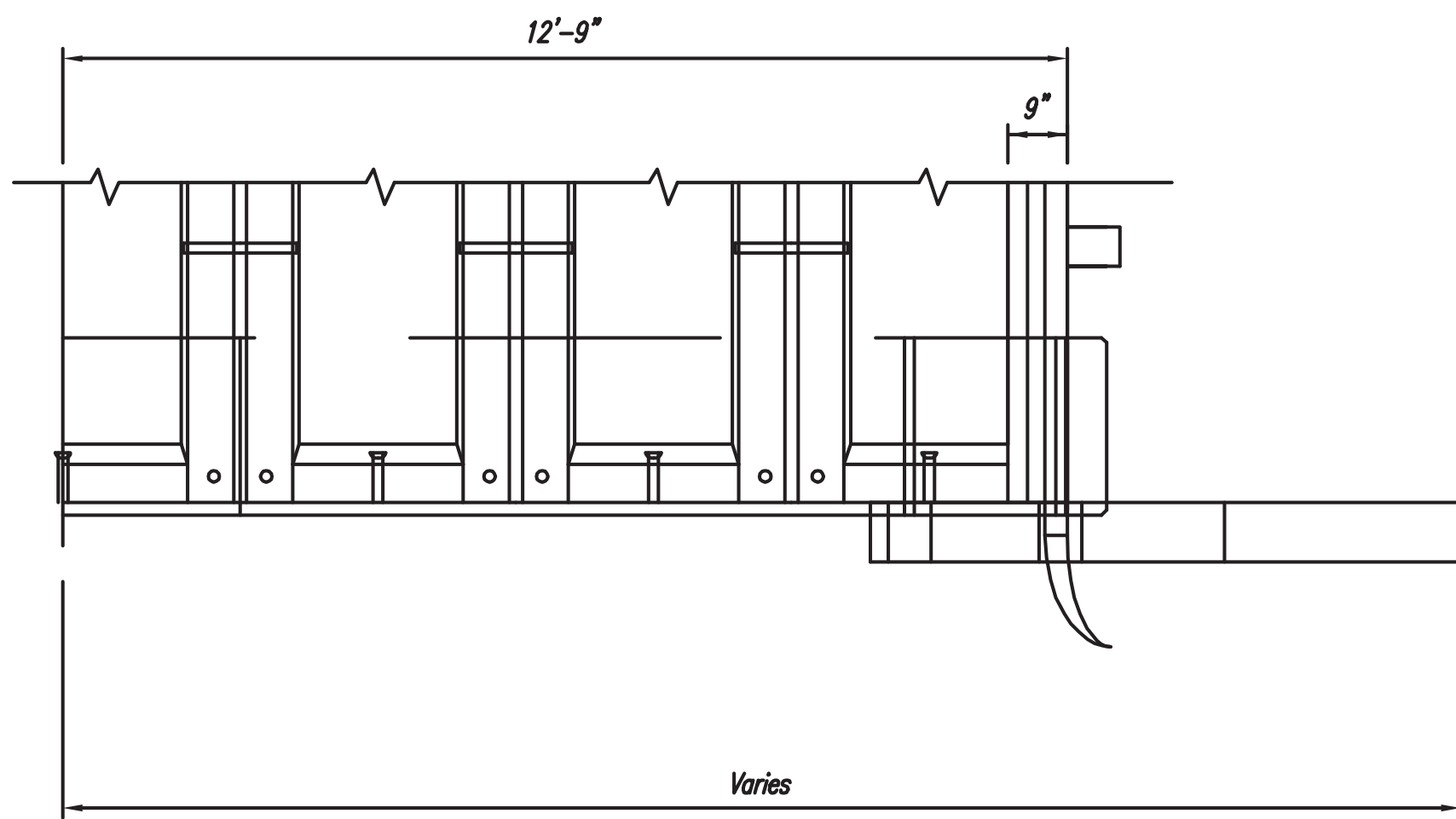
DESIGN DATA:

Specifications:.....A.S.H.T.O. LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION, 2007, THROUGH 2009 INTERIMS

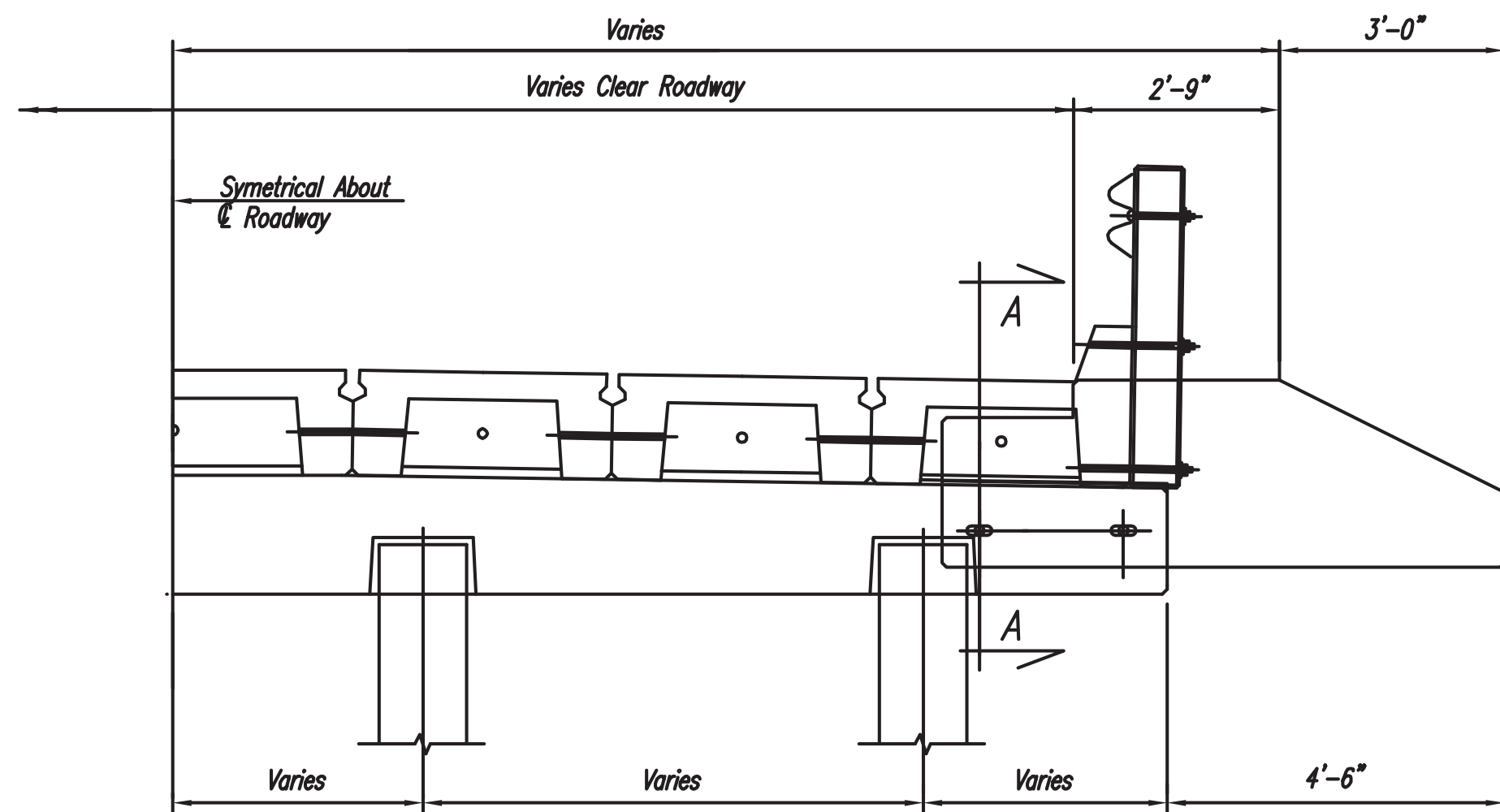
OFFICE OF STATE AID ROAD CONSTRUCTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION			
JOM MRE BY	Add Pad Types & Rev. Loc. Rev. ASHTO LRFD 2008	BEARING PAD & PLACEMENT DETAILS FOR USE WITH 23', 24', 26.5', 28', & 30' CLEAR ROADWAYS NORMAL AND 30° SKEW SPANS	
		DATE	REVISIONS
DATE	DESIGNED BY:	ISSUED BY:	DRAWING NUMBER:
3-12	M.B.E.	F.C.H.	PC-15-09
4-11	M.B.E.	6-11	

FWMA APPROVAL	6-10
STATE AID ENGINEER:	J. BROOKS MILLER, Sr.
BRIDGE ENGINEER:	FRED HOLLIS

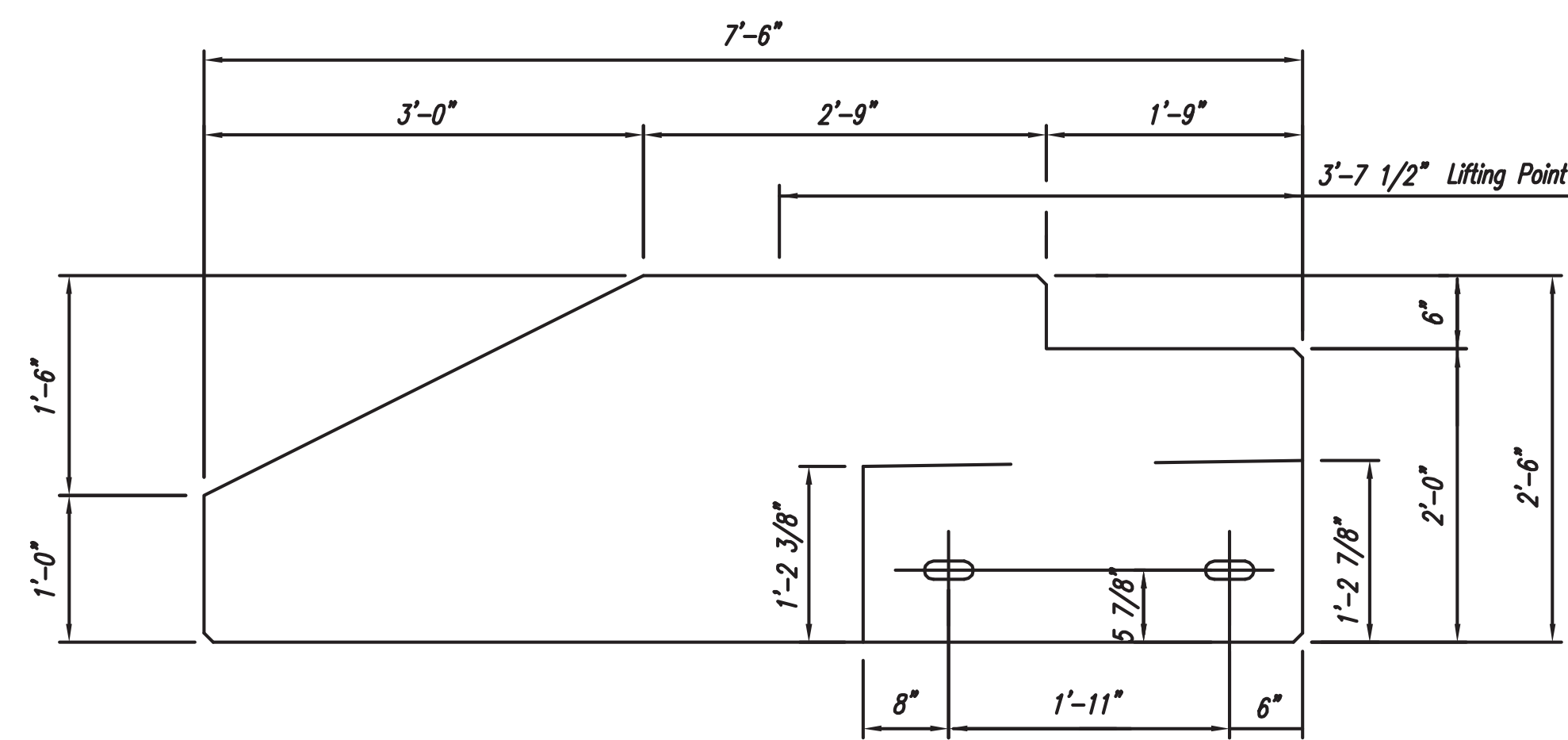
PC-15 PADS (N.T.S.) 06/01/2005



HALF PLAN

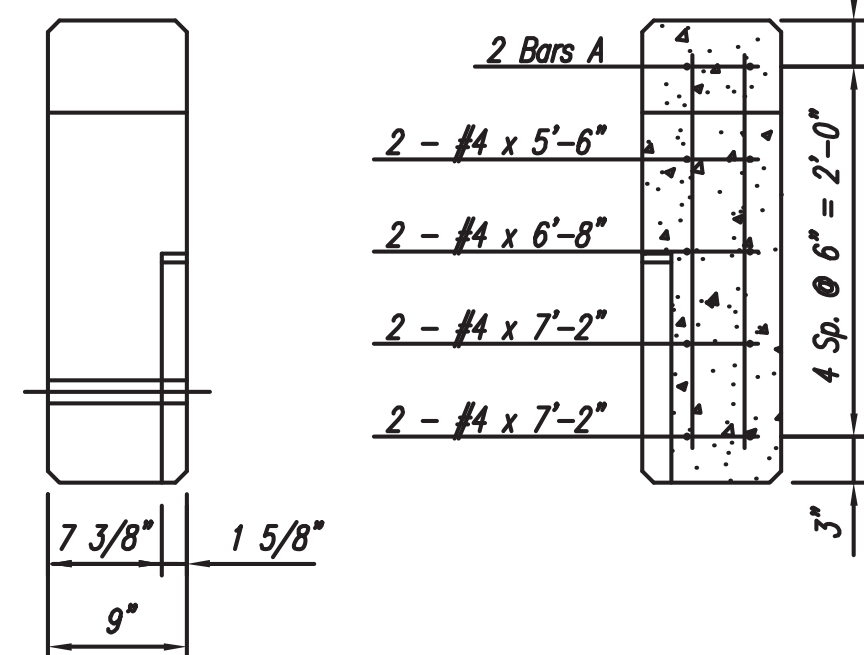


HALF ELEVATION

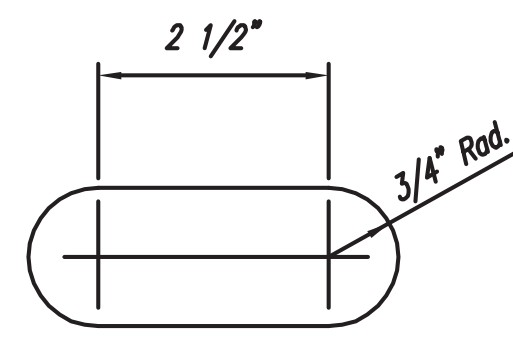


ELEVATION

LEFT WING
Showing Concrete Dimensions

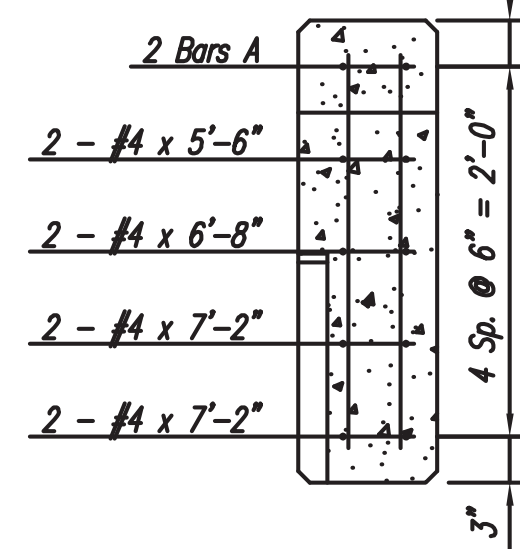


RIGHT END ELEVATION

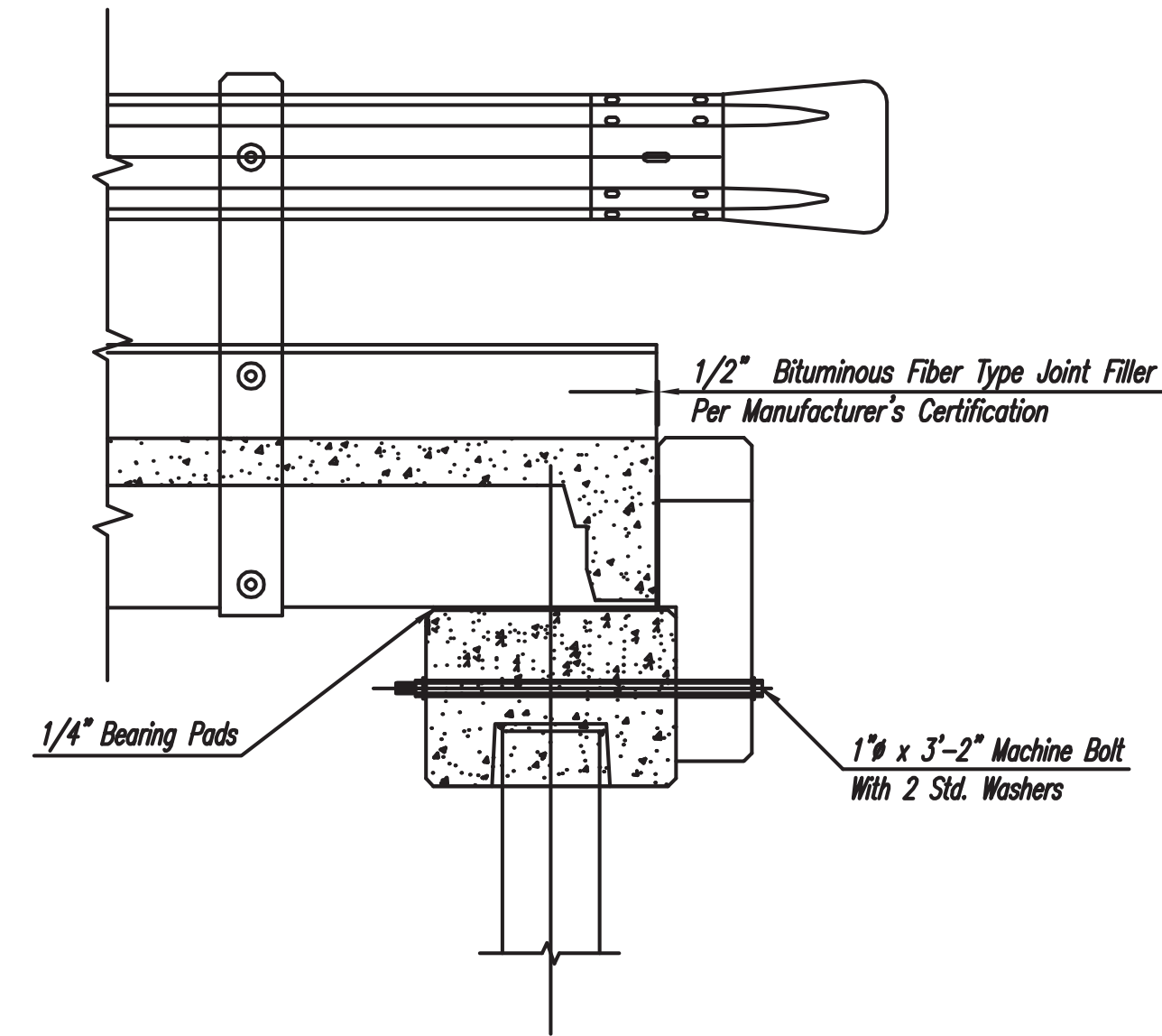


SLOT DETAIL

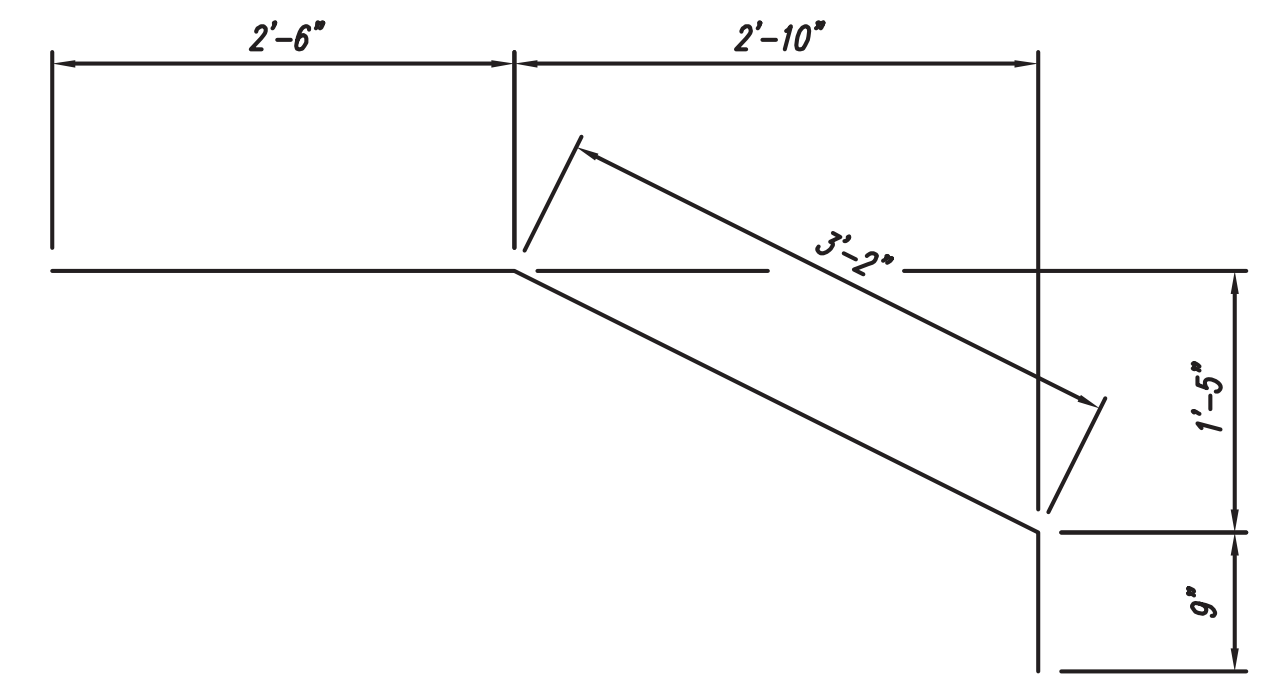
PAY ITEM
S-806-M: 7.5' Precast Concrete Wing - per each.



SECTION B-B



SECTION A-A



BARS A - #5

BAR BENDING DETAILS

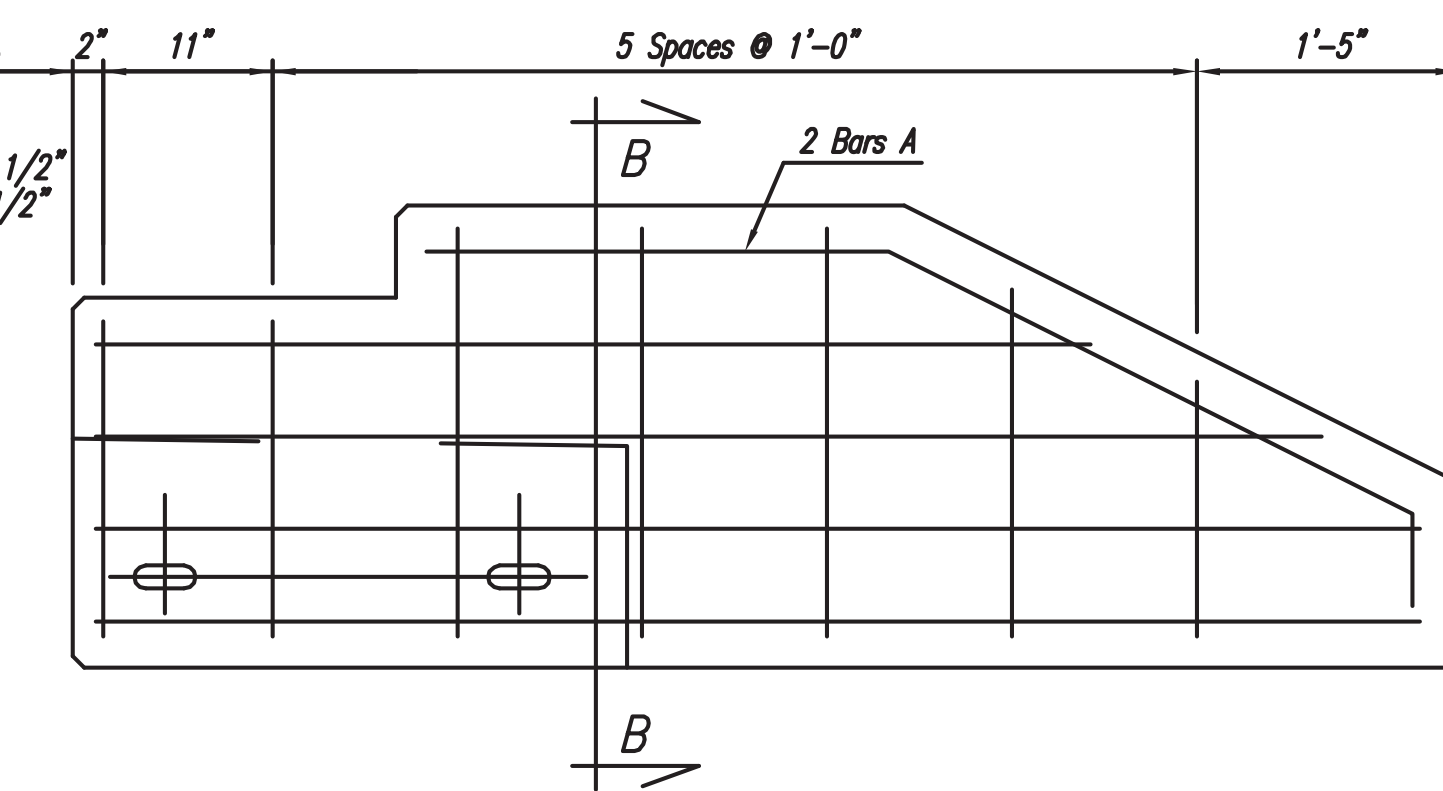
Dimensions Are Out To Out

GENERAL NOTES

Specifications: Current Mississippi Standard Specifications For State Aid Road And Bridge Construction.
All Concrete Shall Obtain A Minimum Compressive Strength Of 3000 p.s.i. At 28 Days, And Shall Obtain A Minimum Compressive Strength Of 2500 p.s.i. Before Units Are Lifted From Forms.
All Concrete Edges Shall Be Chamfered 3/4" Unless Otherwise Noted.
All Concrete Corners Shall Be Rounded To A 1/4" Radius.
All Reinforcing Steel Shall Be A.S.T.M. A615, Grade 60.
Dimensions For Reinforcing Steel Are To The Centerline Of The Bars, Unless Otherwise Noted.
All Reinforcing Steel Shall Be Accurately Located In The Forms And Firmly Held In Place By Means Of Steel Wire Supports.
All Hardware Shall Be Galvanized Or Cadmium Plated.
All Material And Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly And Compensation Therefore Will Be Considered Included In The Prices And Payments For Bid Items.

DESIGN DATA:

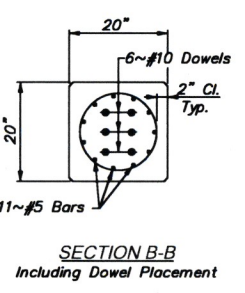
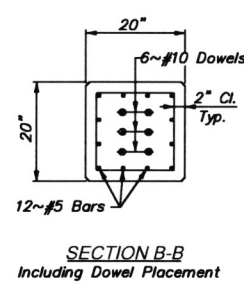
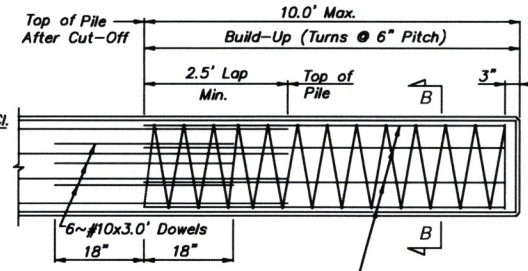
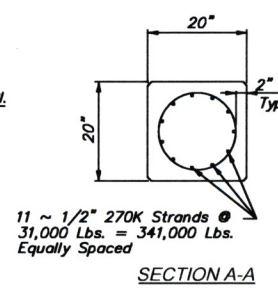
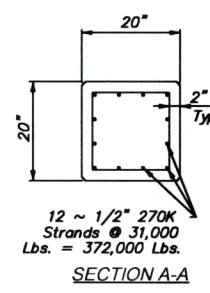
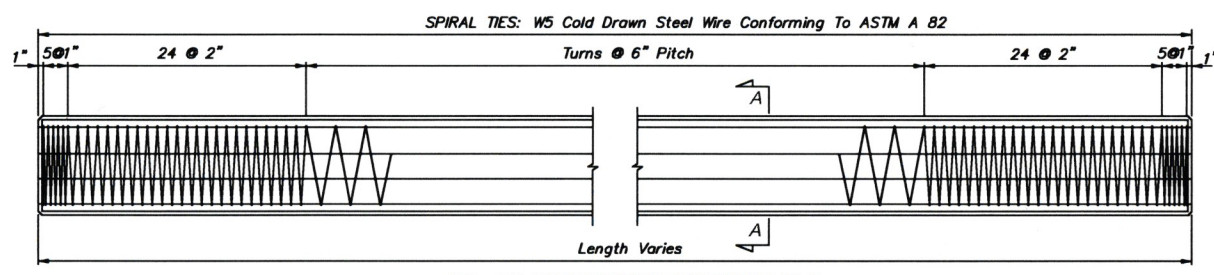
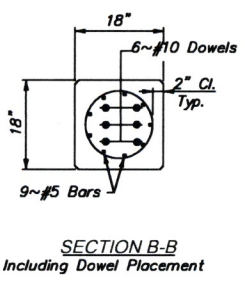
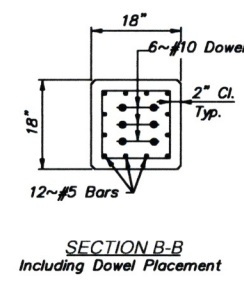
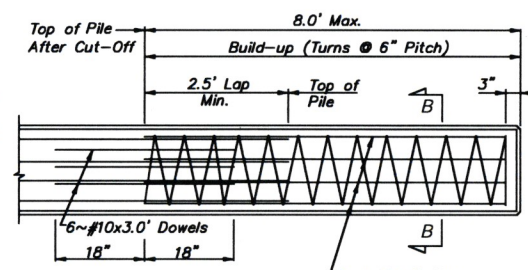
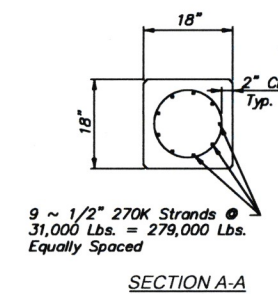
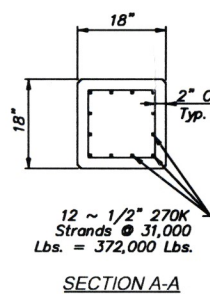
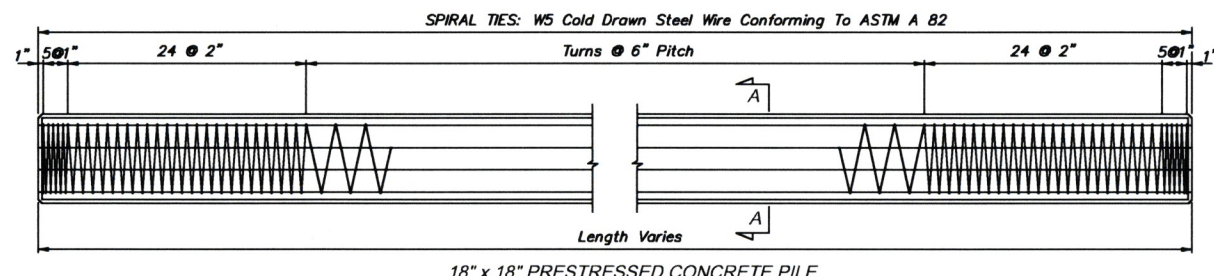
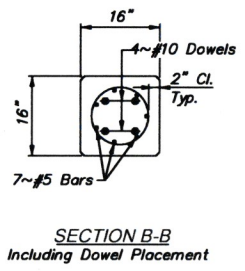
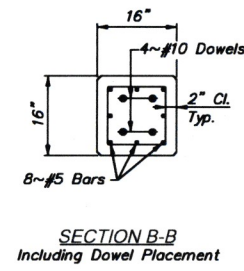
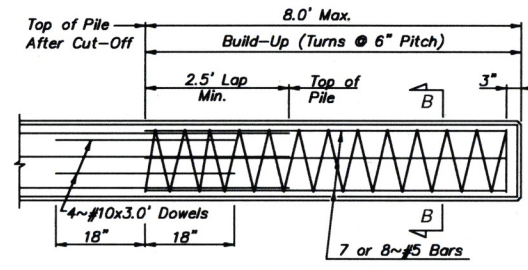
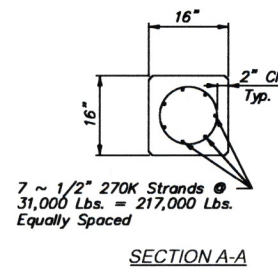
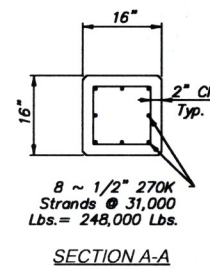
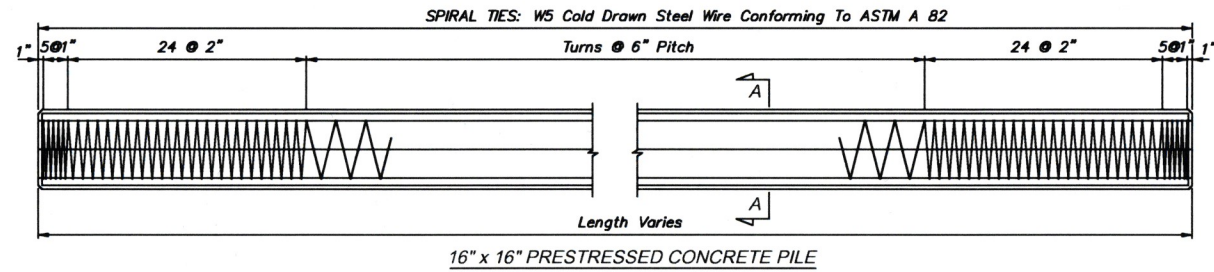
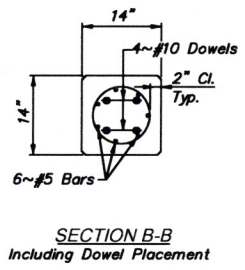
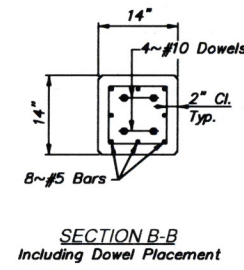
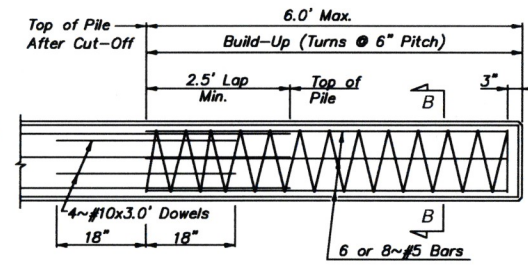
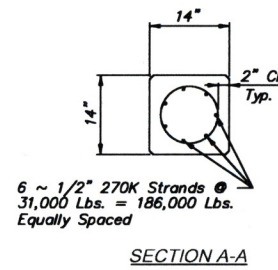
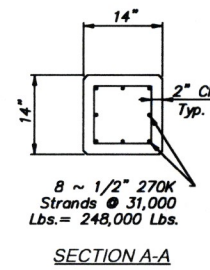
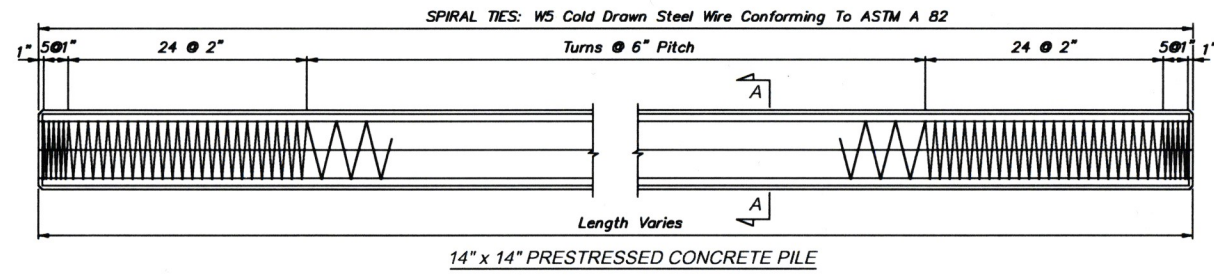
Specifications:.....A.A.S.H.T.O. LRFD BRIDGE DESIGN SPECIFICATIONS, 4th EDITION, 2007, THROUGH 2009 INTERIMS



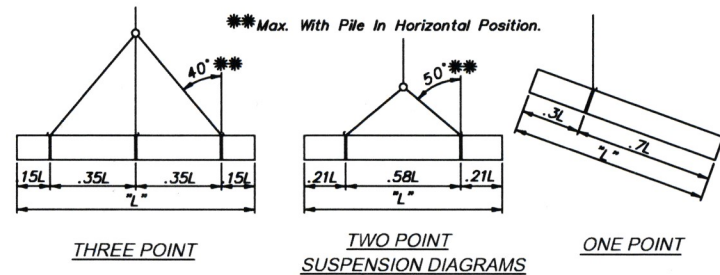
ELEVATION

RIGHT WING
Showing Reinforcing

OFFICE OF STATE AID ROAD CONSTRUCTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION			
PRECAST ABUTMENT WINGWALL FOR USE WITH 19 FT. & 31 FT. PRECAST CONCRETE SPANS & W-BEAM RAIL 23 FT., 24 FT., & 26.5 FT. ROADWAYS			
STATE AID ENGINEER: J. BROOKS MILLER, Sr.	DATE: 09-11	DESIGNED BY: M.B.E.	ISSUED BY: F.C.H.
BRIDGE ENGINEER: FRED HOLLIS	DATE: 4-11	DESIGNED BY: M.B.E.	DATE: 6-11
			DRAWING NUMBER: PC-16-09



NOTE: Piles Shall Be Marked Plainly With Removable Band Of Paint To Indicate Proper Pickup Points For Attaching Handling Lines.



MAXIMUM LENGTH "L"			
PILE SIZE		Single Point Pick-Up	Two Point Pick-Up
14" x 14"	SQUARE	54.0'	78.0'
	CIRCULAR	60.0'	84.0'
16" x 16"	SQUARE	64.0'	91.0'
	CIRCULAR	62.0'	87.0'
18" x 18"	SQUARE	64.0'	92.0'
	CIRCULAR	66.0'	93.0'
20" x 20"	SQUARE	70.0'	101.0'
	CIRCULAR	70.0'	98.0'

GENERAL NOTES

Prestressed Strands Shall Be Type 270K Seven Wire, Uncoated Low Relaxation And Shall Conform To The Requirements of ASTM A 416 With An Initial Tension Of 31,000 Lbs. Applied To Each Low Relaxation Type Strand And Shall Have A Minimum Ultimate Strength Of 41,300 Lbs.
Piles Shall Be Manufactured In Accordance With Current Mississippi Standard Specifications For State Aid Road And Bridge Construction, With Particular Attention Directed To Sections 711, 803 & 804.
Wire Ties Shall Be Cold Drawn Steel Wire Per ASTM A 82. Spiral Ties Shall Be Tied To All Corner Strands Or Bars. Corners Shall Be Chamfered Uniformly, 1" For 16" Sq. To 18" Sq. And 1 1/2" for 20" Sq. or Larger.
Strands Shall Be Cut Flush With Ends Of Piles. All Reinforcing Steel Shall Conform To ASTM A 615, Grade 60.
If Bridges Are Built In Coastal Areas, Prestressed Concrete Piles Must Be 16" Square Or Larger.

CONCRETE PILE BUILD-UP NOTE:

A Precast Section May Be Built-Up By Providing Cored Or Drilled Dowel Holes 18" Minimum Deep As Shown In Build-Up Details Hereon. Dowels Shall Be Adequately Bonded With An Approved Grout.
Concrete Shall Be Class "A" Or "B".

DESIGN DATA:

Specifications:
AASHTO LRFD Bridge Design Specifications, 4th EDITION, 2007, Through 2009 Interims

FNWA APPROVAL	03-11
STATE AID ENGINEER:	J. BROOKS MILLER, SR.
BRIDGE ENGINEER:	FRED HOLLIS

OFFICE OF STATE AID ROAD CONSTRUCTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

14", 16", 18" & 20" SQUARE
PRESTRESSED CONCRETE PILES

DRAWN BY:	M.B.E.	ISSUED:	F.C.H.	DRAWING NUMBER:	CP-01
CHECKED BY:	M.B.E.	DATE:	03-11		

UTILITY OWNERS
 AT&T Distribution (Phone 770-602-2121)
 2310 7th Street
 Meridian, MS 39301
 Cameron Community Water System, Inc.
 (Phone 601-854-6231)
 P.O. Box 674
 Canton, MS 39046
 MS One Call Locate Number:
 20020613350724

B.M. ELEVATION	255.18
CP-10080 PK CNTR BRDG EAST SIDE	
54.11 FT. LT. STA.	3+57.52
NORTHING	1218570.23
EASTING	2418528.94

B.M. ELEVATION	255.38
CP-1 PK NAIL IN APRON OF ROAD	
186.75 FT. LT. STA.	4+88.61
NORTHING	1218756.68
EASTING	2418531.99

B.M. ELEVATION	259.90
CP-4 PK IRON ROD NEAR PP	
381.37 FT. RT. STA.	4+77.79
NORTHING	1218338.63
EASTING	2418916.84

GENERAL NOTES

Existing Utilities Conflicting With Proposed Construction To Be Adjusted By Others In Accordance With Section II - 2 - 8 Of The S.O.P.
 Disturbed Area = 0.694 acres

HYDRAULIC DESIGN

< 25 Acres - Rational Method
 > 25 Acres - "Flood Frequency of Rural Streams In Mississippi, 2013" USGS

Elevations Based On Mean Sea Level Datum

Elevations Referenced To Cross Roads As Shown On USGS Quad Topographic Map

Drainage Area Taken From USGS Topographic Maps and Stream Stats Website

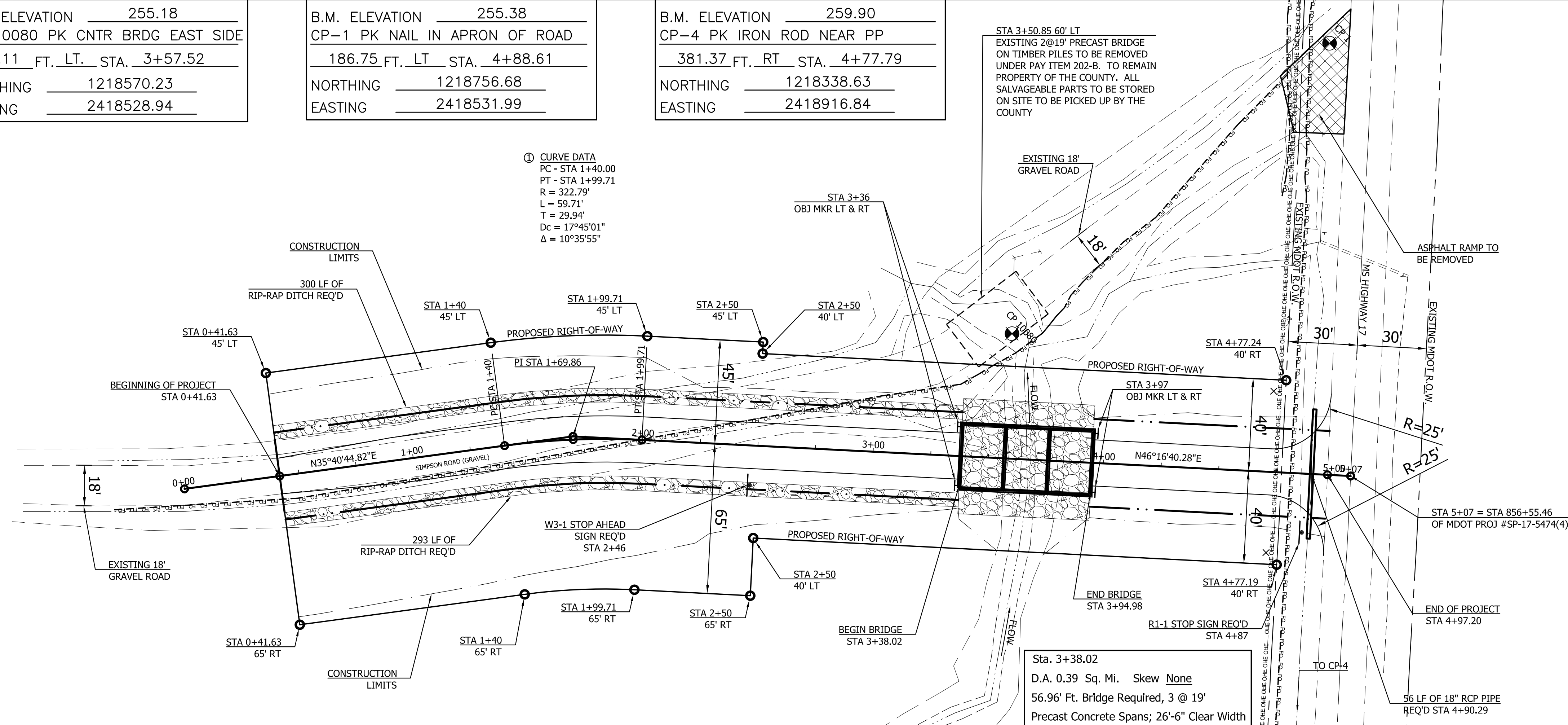
SHRINKAGE FACTOR

Unclassified Excavation = 1.40
 Granular Material (Cl. 5, Gp. "C") (LVM) = 1.50
 Crushed Stone = 1.80

DESIGN DATA

Design Speed = 30 MPH
 Current ADT (2020) = 20 (MDOT)

CURVE DATA
 PC - STA 1+40.00
 PT - STA 1+99.71
 R = 322.79'
 L = 59.71'
 T = 29.94°
 Dc = 17°45'01"
 Δ = 10°35'55"



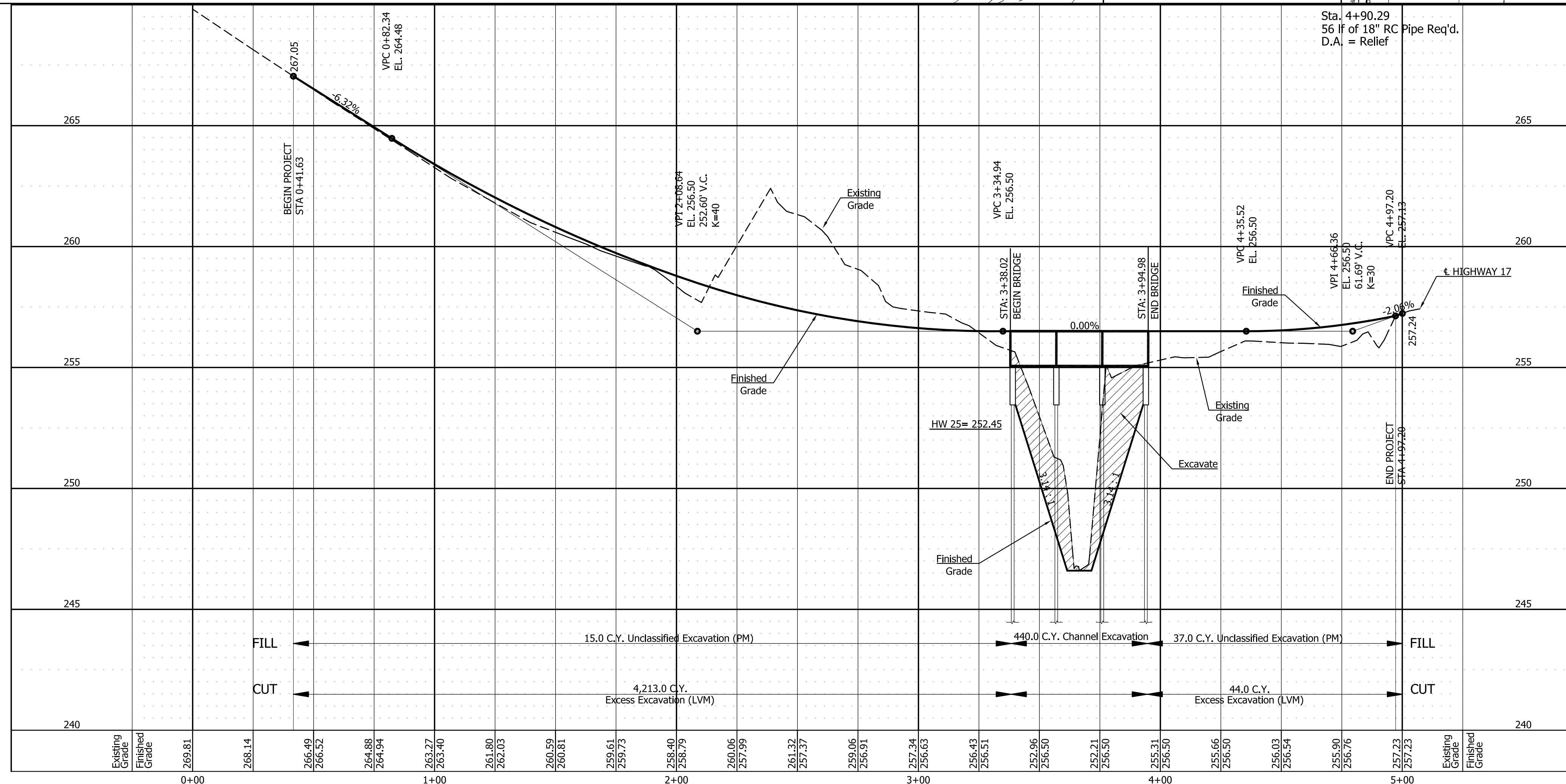
NOTES:

- APPROXIMATELY 60 CY OF THE EXCESS EXCAVATION SHALL BE UTILIZED ON SITE TO TOP (4 TO 6 INCHES) THE EXISTING ROADWAY AFTER TRAFFIC HAS BEEN SWAPPED IN ORDER TO ESTABLISH GROWTH AND COVERAGE (NO SEPERATE PAY ITEM, COST TO BE ABSORBED IN PRICE OF EXCESS EXCAVATION).

SHEET TOTALS

ROW Markers	12.0	Each
Unclassified Excavation (PM)	52.0	Cubic Yard
Channel Excavation (FM)	440.0	Cubic Yard
Excess Excavation (FM)	4,257.0	Cubic Yard
Riprap (Size 300 Lb.)	397.0	Ton
Geotextile	457.0	Square Yard
Silt Fence	1800.0	LF

SIMPSON ROAD



PLAN - PROFILE SHEET

Mississippi Department of Transportation
Completion of Work Certification

This permit requires that the named applicant submit the following certification with signature(s) and insure proper filing with MDOT's District Permit Department before the permit is closed and all associated bonds are released:

Permit Representative's signature(s) acknowledges the following:

We/(I), certify that the requirements of this permit have been constructed as stated in the approved final permit. Furthermore, no work performed as an exercise of the approved permit, has been relocated or altered without such change being shown on an approved revision of the permit or approved addenda thereto.

Printed Name of Applicant

Signature of Applicant