

***ONLY STANDARD SHEETS MARKED WITH AN "✓" ARE IN THIS PROJECT #**

9058-0015

****REVISED OR ADDED**

✓*	SHEET NO.	TITLE	APPROVAL DATE**
	HW-211_01	ANTI-TRACKING PAD	11-09-22
	HW-286_01	DRAINAGE TRENCH EXCAVATION	11-09-22
	HW-505_01a	STRAIGHT ENDWALLS	02-28-24
	HW-505_01b	STEEL REINFORCING FOR STRAIGHT ENDWALLS (2" DIFF BASE TO FLOW LINE)	01-05-24
	HW-505_01c	STEEL REINFORCING FOR STRAIGHT ENDWALLS (STANDARD RIPRAP APPLICATION)	01-05-24
	HW-505_02	TYPE "D-G" & "L" ENDWALLS	01-05-24
	HW-586_01	CATCH BASIN AND DROP INLET TYPES "C" AND "C-L" STRUCTURES	01-05-24
	HW-586_02	CATCH BASIN (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE I STRUCTURES	01-05-24
	HW-586_03	CATCH BASIN (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE II STRUCTURES	01-05-24
	HW-586_04	PRECAST CATCH BASIN AND ROUND STRUCTURE	10-17-24
	HW-586_05	PRECAST CATCH BASIN TYPES FOR DOUBLE GRATE TYPE I	10-17-24
	HW-586_06	PRECAST CATCH BASIN TYPES FOR DOUBLE GRATE TYPE II	10-17-24
	HW-586_07a	CATCH BASIN TYPE "C" AND "C-L" TOPS	01-05-24
	HW-586_07b	CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE I TOPS	11-09-22
	HW-586_07c	CATCH BASIN TYPE "C" AND "C-L" DOUBLE GRATE TYPE II TOPS	11-08-22
	HW-586_07d	CATCH BASIN TYPE "C-G" AND "C-M" BARRIER CURB TOPS	11-09-22
	HW-586_08	CATCH BASIN FRAMES AND GRATES	11-09-22
	HW-586_09	CATCH BASIN LOCK DOWN TOPS	11-09-22
	HW-586_10a	MANHOLE FRAME AND COVER	01-05-24
	HW-586_10b	MANHOLE FRAME AND GRATE	01-05-24
	HW-586_10c	REINFORCED PRECAST CONCRETE MANHOLE	11-08-22
	HW-586_10d	MANHOLE NON-PRECAST CONCRETE UNIT	11-08-22
	HW-686_01a	CONCRETE PIPE CONNECTION SHEET 1	11-08-22
	HW-686_01b	CONCRETE PIPE CONNECTION SHEET 2	11-08-22
	HW-686_02a	DRAINAGE PIPE ENDS SHEET 1 [CORRUGATED METAL PIPE]	11-08-22
	HW-686_02b	DRAINAGE PIPE ENDS SHEET 2 [CONCRETE PIPE]	11-08-22
	HW-751_01	UNDERDRAINS AND UNDERDRAIN OUTLETS	10-17-24
	HW-803_01	PAVED APRONS	11-08-22
	HW-811_01	CONCRETE CURBING	11-08-22
	HW-813_01	GRANITE STONE TRANSITION CURBING	11-08-22
	HW-813_02	STONE CURBING	11-08-22
	HW-815_01	BITUMINOUS CONCRETE CURBING	11-08-22

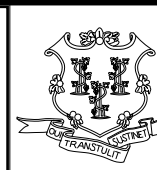
✓*	SHEET NO.	TITLE	APPROVAL DATE**
	HW-821_01a	TRANSITION - 45" F-SHAPE TO 45" VERTICAL SHAPE SHEET 1	11-08-22
	HW-821_01b	TRANSITION - 45" F-SHAPE TO 45" VERTICAL SHAPE SHEET 2	11-08-22
	HW-821_01c	TRANSITION - 45" F-SHAPE TO 45" VERTICAL SHAPE SHEET 3	11-08-22
	HW-821_02a	45" F-SHAPE PRECAST CONCRETE BARRIER CURB SHEET 1	11-08-22
	HW-821_02b	45" F-SHAPE PRECAST CONCRETE BARRIER CURB SHEET 2	11-08-22
	HW-821_03a	TRANSITION - 32" JERSEY SHAPE TO 45" VERTICAL SHAPE SHEET 1	11-08-22
	HW-821_03b	TRANSITION - 32" JERSEY SHAPE TO 45" VERTICAL SHAPE SHEET 2	11-08-22
	HW-821_03c	TRANSITION - 32" JERSEY SHAPE TO 45" VERTICAL SHAPE SHEET 3	11-08-22
	HW-821_03d	TRANSITION - 32" JERSEY SHAPE TO 45" VERTICAL SHAPE SHEET 4	11-08-22
	HW-821_03e	TRANSITION - 32" JERSEY SHAPE TO 45" F-SHAPE	11-08-22
	HW-821_04a	MERRITT PARKWAY NARROW MEDIAN BARRIER	11-08-22
	HW-821_04b	MERRITT PARKWAY - 2' WIDE MEDIAN BARRIER AND ROADSIDE BARRIER	11-08-22
	HW-821_05a	TRANSITION - 45" F-SHAPE TO 54" VERTICAL SHAPE SHEET 1	11-08-22
	HW-821_05b	TRANSITION - 45" F-SHAPE TO 54" VERTICAL SHAPE SHEET 2	11-08-22
	HW-821_06	54" VERTICAL SHAPE BARRIER	11-08-22
	HW-821_07	MISCELLANOUS DETAILS FOR BARRIER TRANSITIONS	11-08-22
	HW-821_08a	F-SHAPE CONC. BARRIER CURB (21"x45") TRANSITION FOR THRIE-BEAM	10-17-24
	HW-821_08b	F-SHAPE CONC. BARRIER CURB (21"x45") TRANSITION FOR THRIE-BEAM - REINF.	11-08-22
	HW-821_09a	SINGLE SLOPE CONC. BARRIER CURB (20"x42") TRANS. FOR THRIE-BEAM	11-08-22
	HW-821_09b	SINGLE SLOPE CONC. BARRIER CURB (20"x42") TRANS. FOR THRIE-BEAM - REINF.	11-08-22
	HW-821_10a	VERTICAL FACE CONC. (21"x54") TRANSITION FOR THRIE-BEAM	11-08-22
	HW-821_10b	VERTICAL FACE CONC. (21"x54") TRANSITION FOR THRIE-BEAM REINF.	11-08-22
	HW-821_11a	42" SINGLE SLOPE PRECAST CONCRETE BARRIER CURB -SHEET 1	01-05-24
	HW-821_11b	42" SINGLE SLOPE PRECAST CONCRETE BARRIER CURB -SHEET 2	01-05-24
✓	HW-822_01	TEMPORARY PRECAST CONCRETE BARRIER CURB	11-08-22
✓	HW-822_02a	TEMPORARY TRAFFIC BARRIER - DETAILS	11-08-22
	HW-822_02b	TEMPORARY TRAFFIC BARRIER (BOLTED)	10-17-24
	HW-822_02c	TEMPORARY TRAFFIC BARRIER & TEMPORARY TRAFFIC BARRIER (PINNED)	10-17-24
	HW-905_01	STONE WALL FENCE	11-09-22
	HW-906_01	WIRE FENCE	11-08-22

	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	CTDOT STANDARD SHEET	STANDARD SHEET TITLE: HIGHWAY STANDARD SHEET INDEX	STANDARD SHEET NO.: 1 OF 2
--	--------------	--	--	-------------------------	--	--------------------------------------

NOT TO SCALE

SIGNATURE BLOCK:

OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111



STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION



CTDOT
STANDARD SHEET

STANDARD SHEET TITLE:

HIGHWAY STANDARD SHEET INDEX

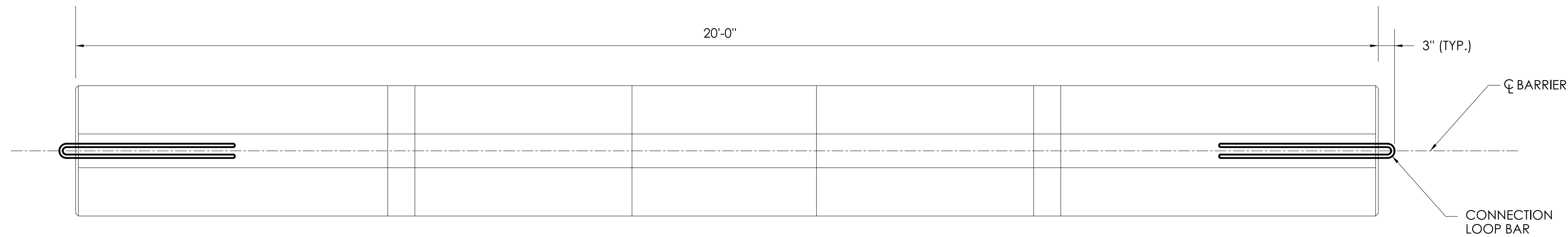
STANDARD SHEET NO.:

1 OF 2

*ONLY STANDARD SHEETS MARKED WITH AN " ✓ " ARE IN THIS PROJECT #9058-0015**REVISED OR ADDED

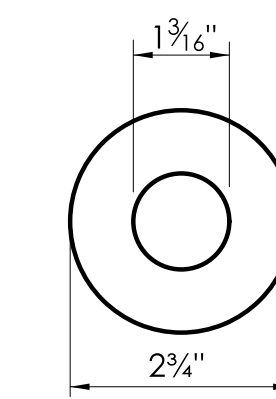
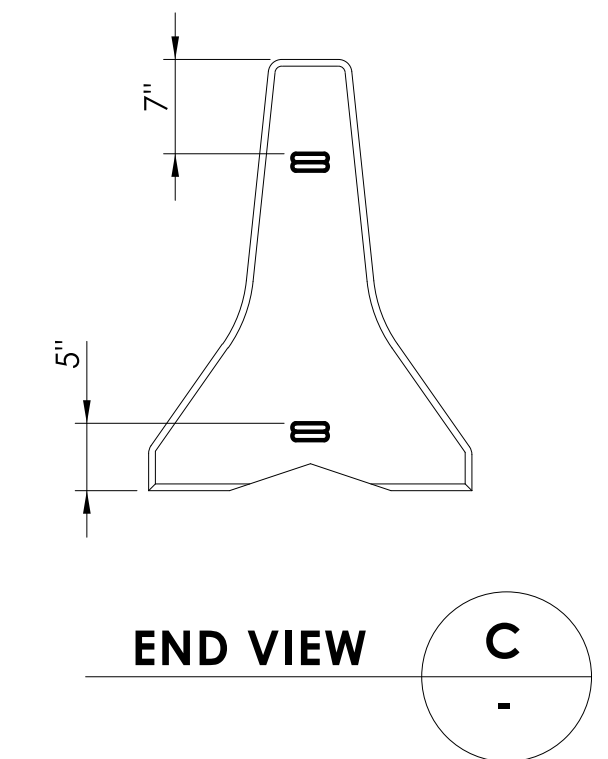
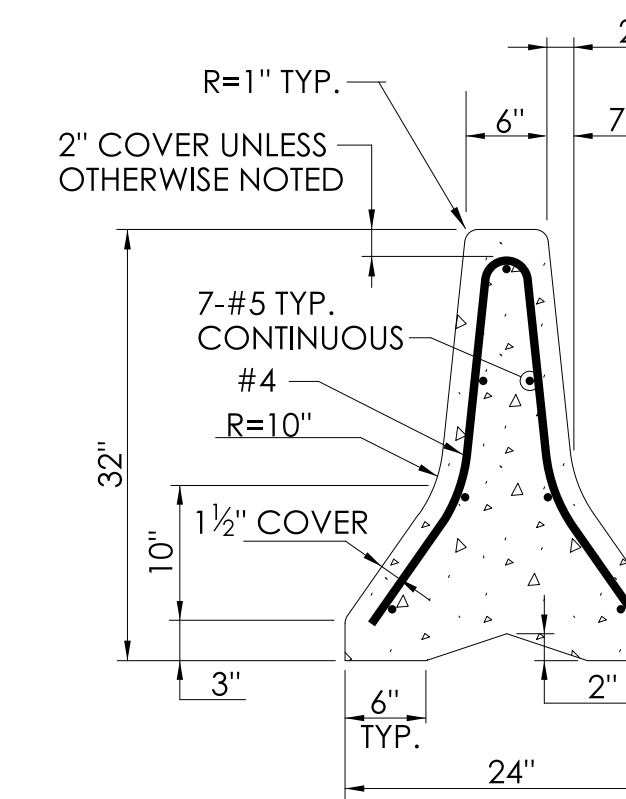
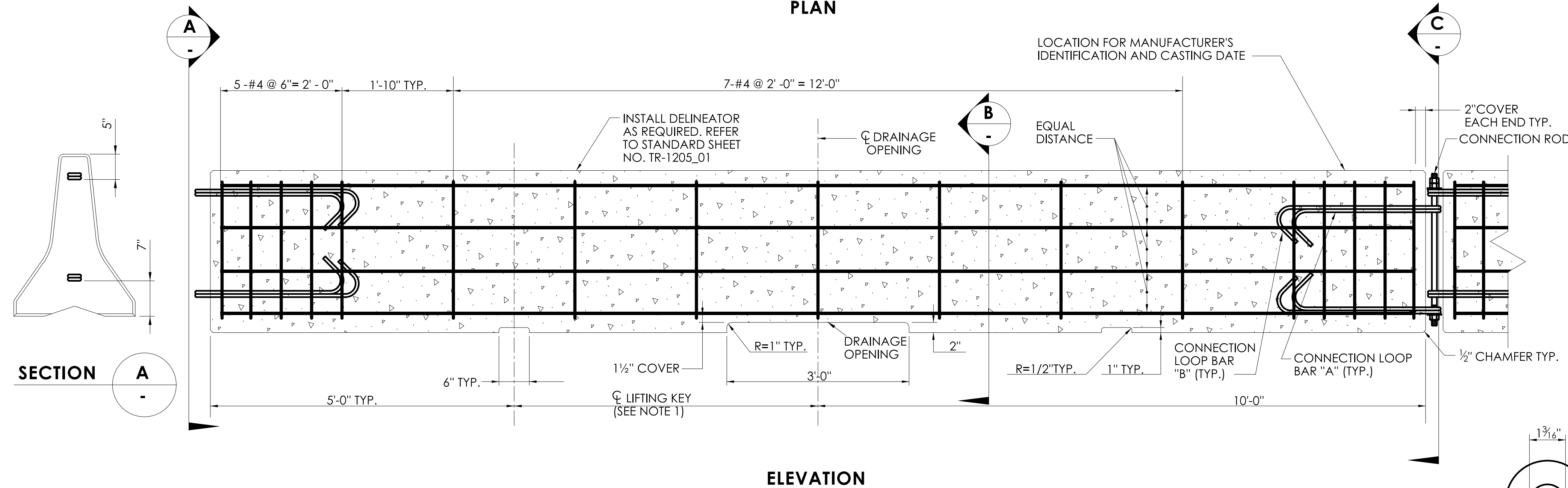
✓*	SHEET NO.	TITLE	APPROVAL DATE**
	HW-910_01	W-BEAM METAL BEAM RAIL HARDWARE	11-08-22
	HW-910_02	METAL BEAM RAIL (TYPE R-B 350) GUIDERAIL	11-08-22
	HW-910_03	METAL BEAM RAIL (TYPE MD-B 350) GUIDERAIL	11-08-22
	HW-910_04	METAL BEAM RAIL (TYPE R-B 350) SYSTEMS 5, 5A, & 6	11-08-22
	HW-910_05	METAL BEAM RAIL R-B 350 SPAN TYPE I, II, III SECTIONS	11-08-22
	HW-910_06	R-B 350 BRIDGE ATTACHMENT SAFETY SHAPE PARAPET	11-08-22
✓	HW-910_07	R-B 350 BRIDGE ATTACHMENT VERTICAL SHAPE PARAPET	11-08-22
	HW-910 09a	MISCELLANEOUS GUIDERAIL TRANSITIONS SHEET 1	11-08-22
	HW-910 09b	MISCELLANEOUS GUIDERAIL TRANSITIONS SHEET 2	11-08-22
	HW-910 10	METAL BEAM RAIL 8" x 6" BOX BEAM	11-08-22
	HW-910 11	CURVED GUIDERAIL TREATMENT DETAIL	11-08-22
	HW-910_12a	MERRITT PARKWAY GUIDERAIL LEADING END ATTACHMENTS AND SYSTEMS 2&3	11-08-22
	HW-910_12b	MERRITT PARKWAY GUIDERAIL HARDWARE DETAILS	11-08-22
	HW-910_12c	MERRITT PARKWAY GUIDERAIL TRAILING END ATTACHMENTS	11-02-22
	HW-910_12d	MERRITT PARKWAY MEDIAN GUIDERAIL AND END ANCHOR	10-17-24
	HW-910_13a	THRIE-BEAM METAL BEAM RAIL HARDWARE	11-08-22
	HW-910_13b	THRIE-BEAM TRANSITIONS	11-08-22
	HW-910_14a	THRIE-BEAM 350 BRIDGE ATTACHMENT	11-08-22
	HW-910_14b	THRIE-BEAM 350 GUIDERAIL TRANSITION TO R-B 350 GUIDERAIL	11-08-22
	HW-910_15	MD-B 350 MEDIAN BARRIER SAFETY SHAPE ATTACHMENT TYPE I	11-08-22
	HW-910_16	MD-B 350 MEDIAN BARRIER SAFETY SHAPE ATTACHMENT TYPE II	11-08-22
	HW-910_17	R-B TERMINAL SECTION	11-08-22
	HW-910_18	METAL BEAM RAIL (TYPE MD-I) GUIDERAIL	11-08-22
	HW-910_19a	METAL BEAM RAIL (MODIFIED TYPE R-I) AND END ANCHORAGE TYPE I	10-17-24
	HW-910_19b	METAL BEAM RAIL (MODIFIED TYPE R-I) AND END ANCHORAGE TYPE II	10-17-24
	HW-910_19c	METAL BEAM RAIL (MODIFIED TYPE R-I) SYSTEMS 2 AND 3	11-08-22
✓	HW-910_20	MASH W-BEAM HARDWARE	10-17-24
✓	HW-910_21	METAL BEAM RAIL (R-B MASH) GUIDERAIL	01-05-24
	HW-910_22	METAL BEAM RAIL (MD-B MASH) GUIDERAIL	11-08-22
	HW-910_23	METAL BEAM RAIL (R-B MASH) HALF & QUARTER POST SPACING GUIDERAIL	11-08-22
	HW-910_24	METAL BEAM RAIL SPAN SECTION TYPES II AND III	11-08-22

✓*	SHEET NO.	TITLE	APPROVAL DATE**
✓	HW-910_25a	METAL BEAM RAIL TRANSITION 350 TO MASH	10-17-24
	HW-910_25b	METAL BEAM RAIL MEDIAN APPLICATION TRANSITION 350 TO MASH GUIDERAIL	01-05-24
	HW-910_26	THRIE-BEAM ATTACHMENT HARDWARE	11-08-22
	HW-910_27	THRIE-BEAM ATTACHMENT	11-08-22
	HW-910_29	THRIE-BEAM BRIDGE ATTACHMENT TRAILING END	02-02-24
✓	HW-911_01	R-B END ANCHORAGE TYPE I AND II	10-17-24
	HW-911_02	MD-B END ANCHORAGE TYPE I	10-17-24
	HW-911_03	ANCHOR IN EARTH CUT SLOPE & ANCHOR IN ROCK CUT SLOPE	01-05-24
	HW-911_05	MERRITT PARKWAY GUIDERAIL END ANCHORS	11-08-22
	HW-913_01a	CHAIN LINK FENCE	11-08-22
	HW-913_01b	CHAIN LINK FENCE HARDWARE	11-08-22
	HW-913_02	CHAIN LINK FENCE GATES	11-08-22
	HW-918_01a	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 1	11-08-22
	HW-918_01b	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 2	11-08-22
	HW-918_01c	THREE CABLE GUIDERAIL (I-BEAM POSTS) SHEET 3	11-08-22
	HW-921_01	CONCRETE SIDEWALKS	11-08-22
	HW-922_01	BITUMINOUS CONCRETE SIDEWALK AND BITUMINOUS CONCRETE DRIVEWAY	11-08-22
	HW-924_01	CONCRETE DRIVEWAY RAMPS	10-17-24
	HW-930_01	OBJECT MARKER (MAINTENANCE)	10-17-24
✓	HW-949_01a	LANDSCAPE PLANTING	11-09-22
✓	HW-949_01b	TREE STAKING	11-02-22
	HW-1800_01	GRADING PLAN FOR IMPACT ATTENUATION SYSTEMS (FLARED AND TANGENTIAL)	10-17-24
	HW-1800 02	GRADING PLAN FOR IMPACT ATTENUATION SYSTEMS (MEDIAN/GORE)	10-17-24

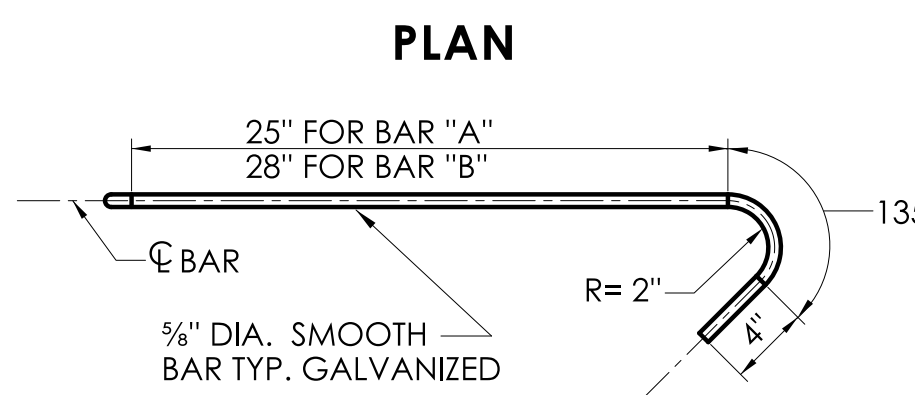


GENERAL NOTES:

1. ALTERNATE DESIGNS FOR LIFTING KEYS, HOLES OR OTHER HANDLING DEVICES MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. EXPECTED PERMANENT DYNAMIC DEFLECTION IS 3'-6" BASED ON TL-3 CRASH TESTS WITH 240' OF TPCBC.



WASHER DETAIL



CONNECTION LOOP BAR

BAR "A" = 6'-0" TOTAL
BAR "B" = 6'-6" TOTAL

CONNECTION LOOP BAR

TWO HEAVY HEX NUTS AT TOP. ONE HEAVY HEX NUT AT BOTTOM. ONE STEEL FLAT WASHER TOP AND BOTTOM. SEE WASHER DETAIL. ALL GALVANIZED.

1" DIA. ROD GALVANIZED

THREAD CONNECTION ROD A MINIMUM OF 4" TYP.

CONNECTION ROD

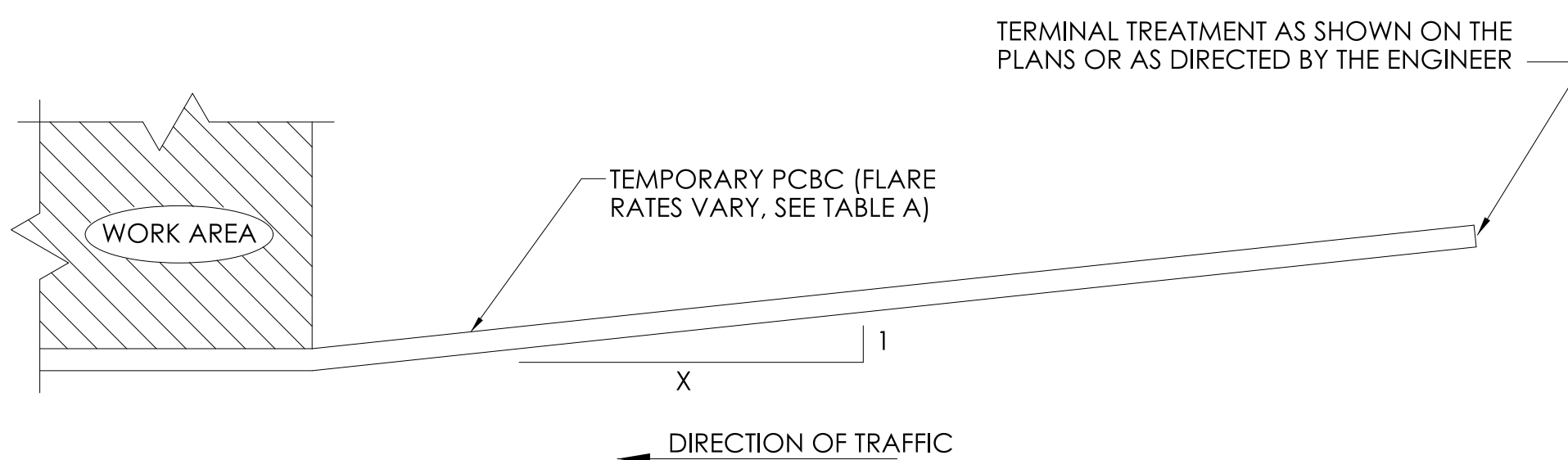


TABLE A FLARE RATES	
* SPEED	FLARE RATE (X : 1)
≤ 30MPH	4 : 1
> 30MPH BUT < 45MPH	6 : 1
≥ 45MPH NON-LIMITED ACCESS HIGHWAYS	8 : 1
ALL LIMITED ACCESS HGWAYS	10 : 1

* DESIGN SPEED THROUGH THE WORK AREA.

NOT TO SCALE

SIGNATURE BLOCK:

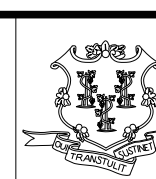
OFFICE OF ENGINEERING
2800 BERLIN TURNPIKE
NEWINGTON, CT 06111

SUBMITTED BY:

Digitally signed by
Leo Fontaine, P.E.
Date: 2022.09.27
15:00:00-04'00'

APPROVED BY:

Digitally signed by
Calabrese, Michael
Date: 2022.11.08
10:22:53-05'00'



STATE OF CONNECTICUT
DEPARTMENT
OF
TRANSPORTATION



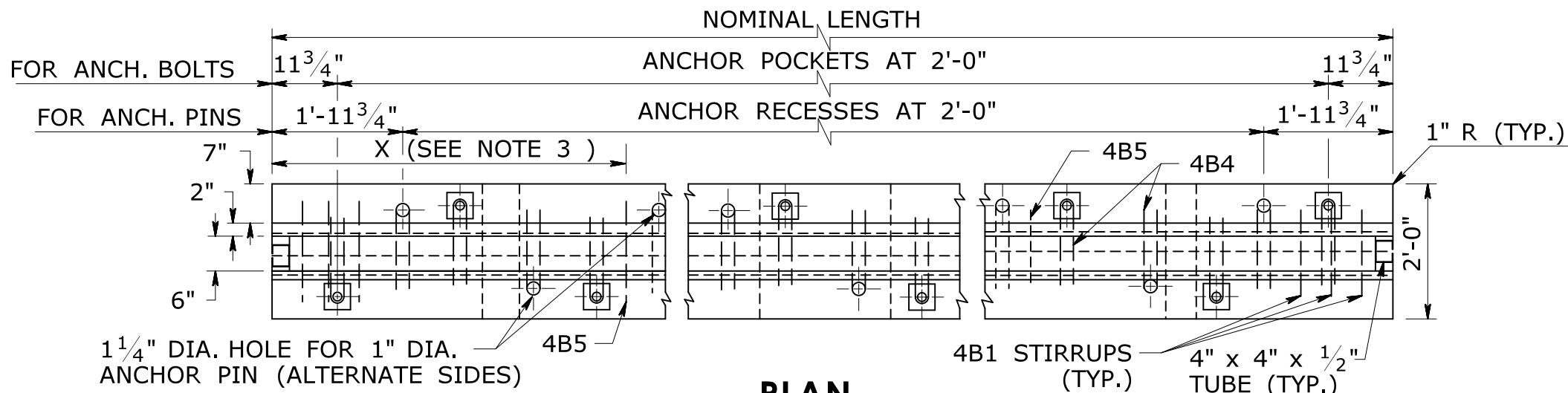
CTDOT
STANDARD SHEET

STANDARD SHEET TITLE:

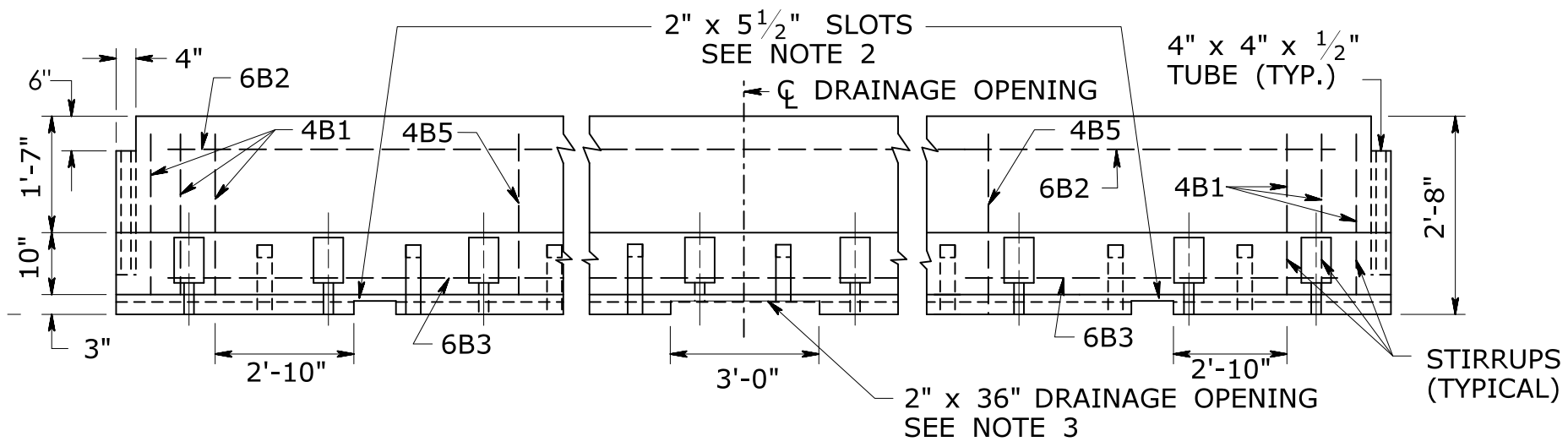
TEMPORARY PRECAST CONCRETE BARRIER CURB

STANDARD SHEET NO.:

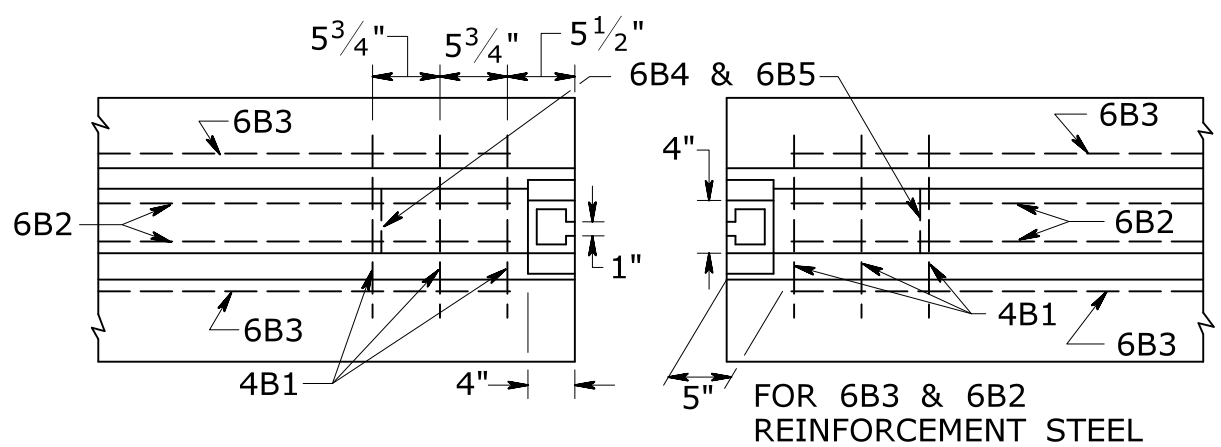
HW- 822_01



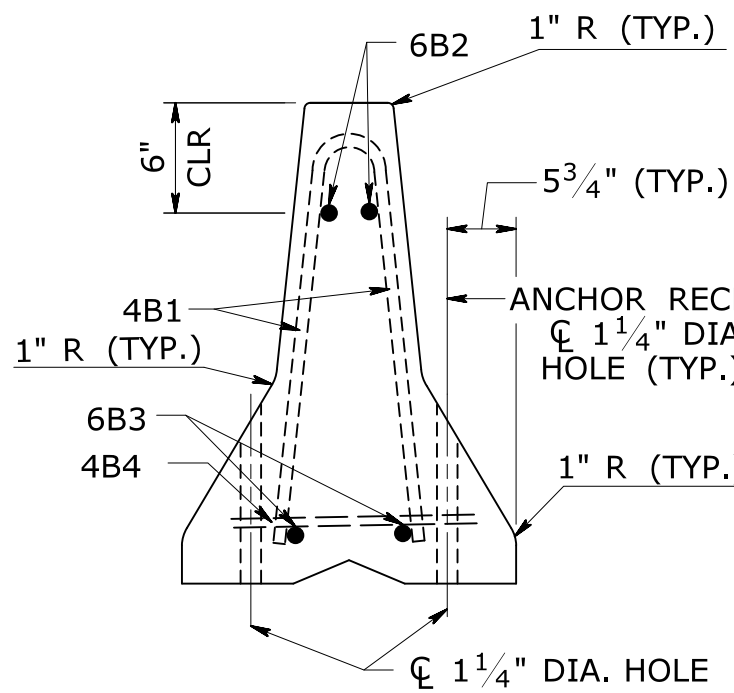
PLAN



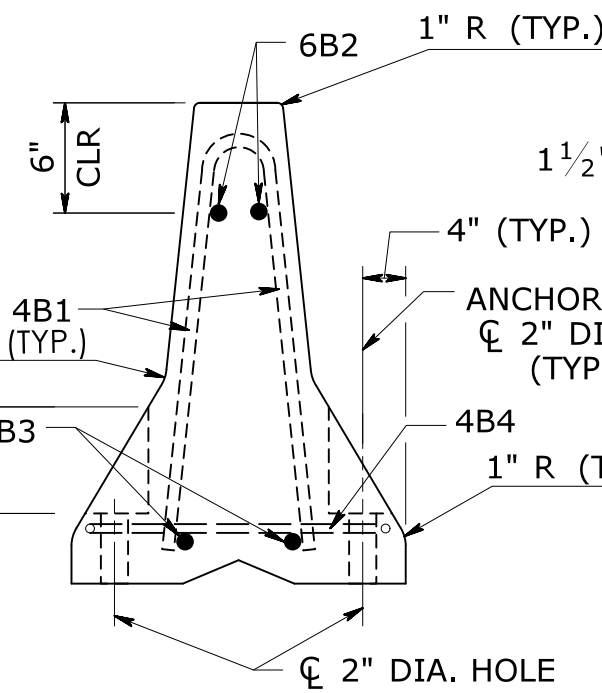
ELEVATION



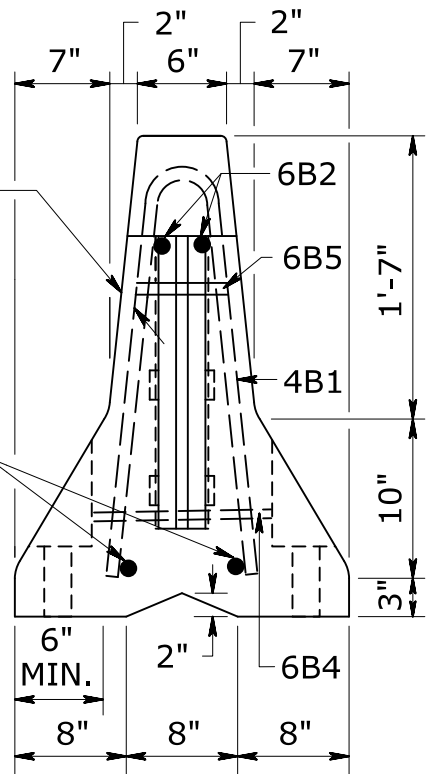
PLAN - BARRIER END



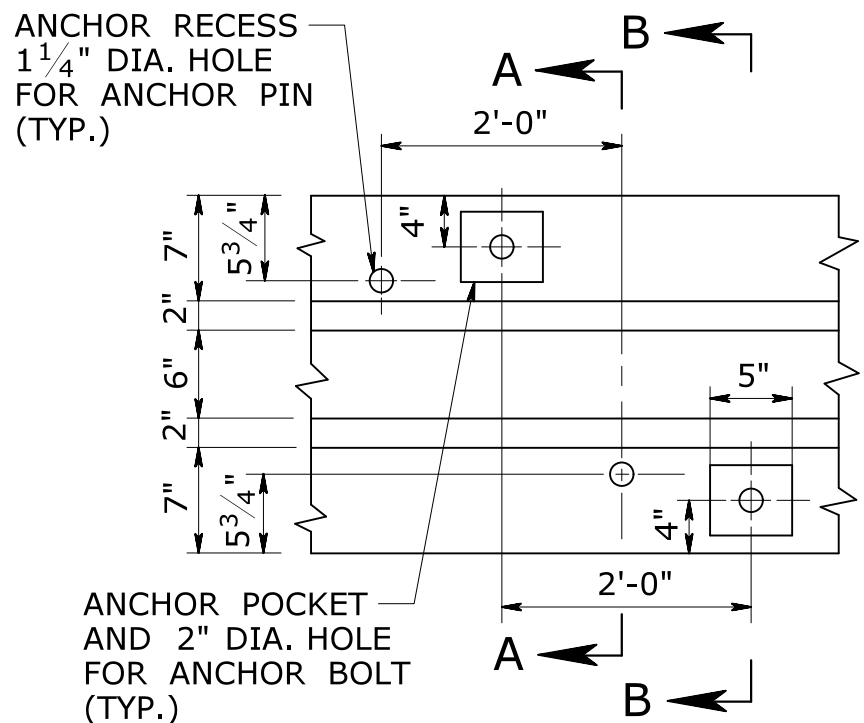
SECTION A-A



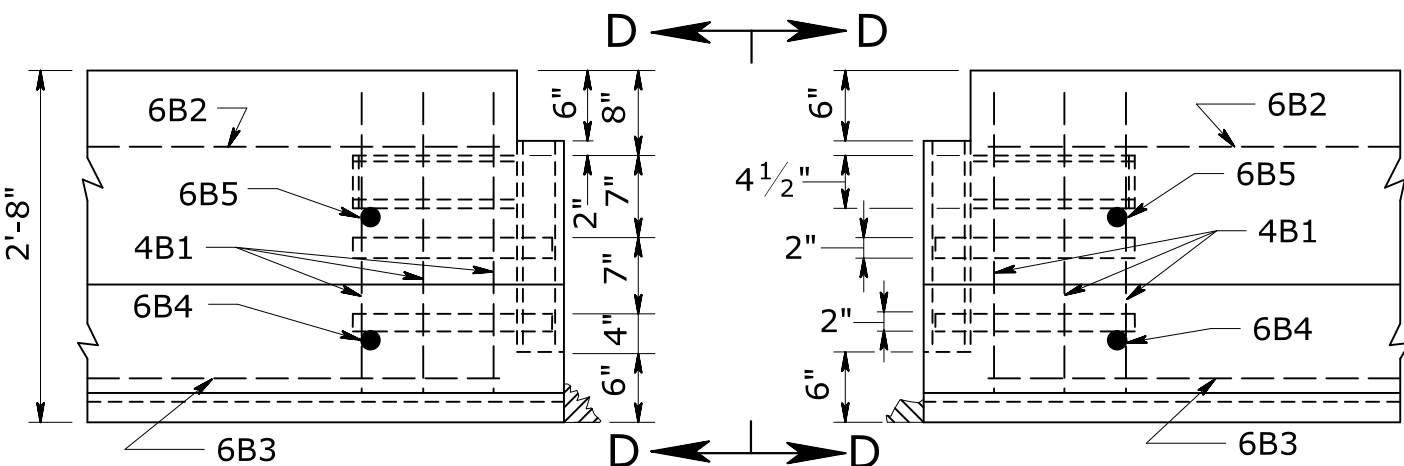
SECTION B-B



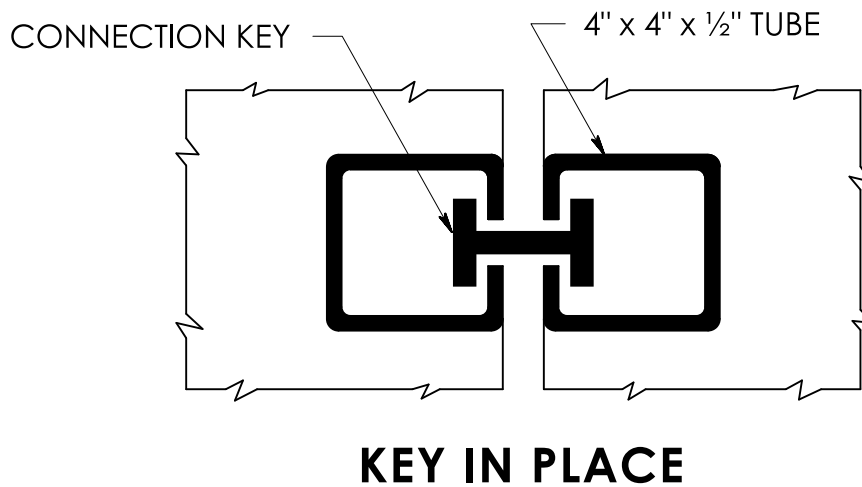
SECTION D-D



PLAN - ANCHOR RECESS/POCKET
SEE NOTE 5



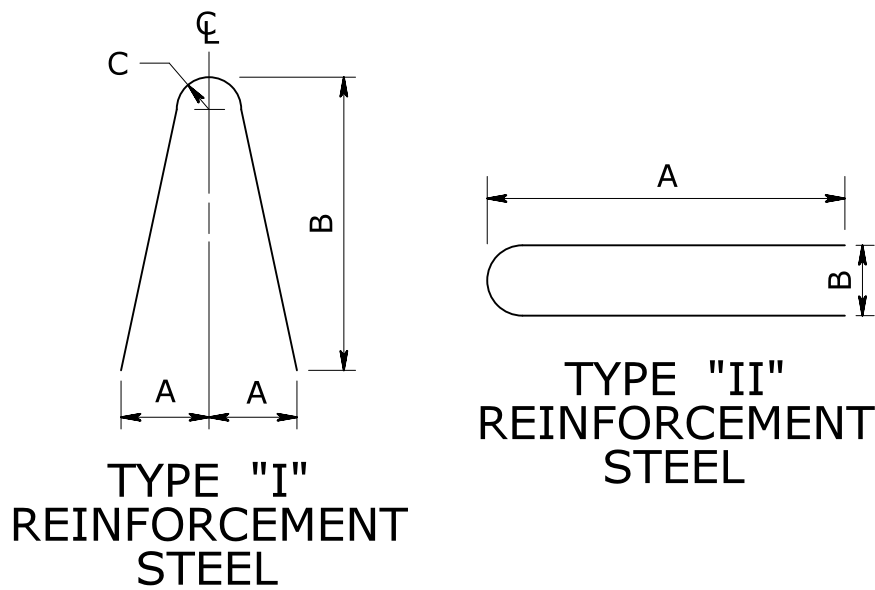
ELEVATION



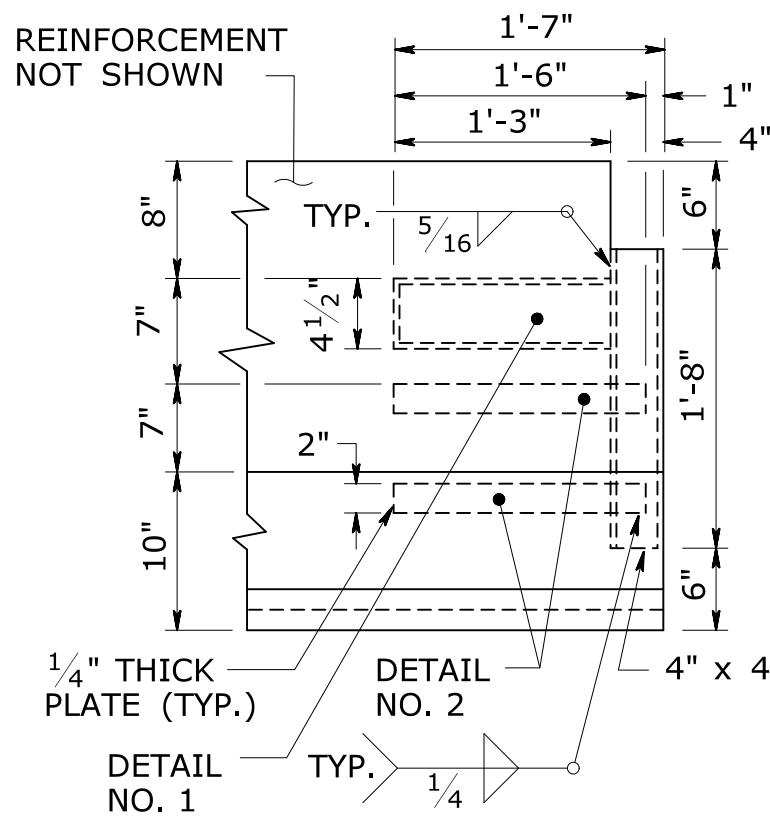
KEY IN PLACE

TABLE OF VARIABLE REINFORCEMENT STEEL			
NOMINAL LENGTH OF BARRIER UNIT	MARK	"X"	NO. EACH SECTION
20'	4B4	N.A.	19
20'	4B5	6'-11"	2
18'	4B4	N.A.	17
18'	4B5	6'-5"	2
16'	4B4	N.A.	15
16'	4B5	5'-11"	2
14'	4B4	N.A.	13
14'	4B5	7'-0"	1
12'	4B4	N.A.	11
12'	4B5	6'-0"	1
10'	4B4	N.A.	9
10'	4B5	5'-0"	1
8'	4B4	N.A.	7
8'	4B5	-	0
"X" DISTANCE FROM END OF BARRIER TO 4B5 REINFORCEMENT STEEL			

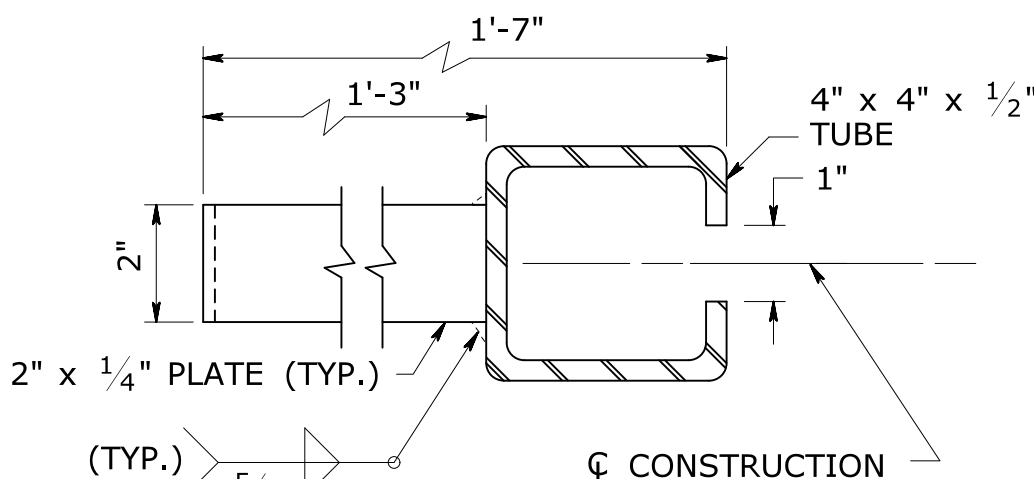
TEMPORARY TRAFFIC BARRIER



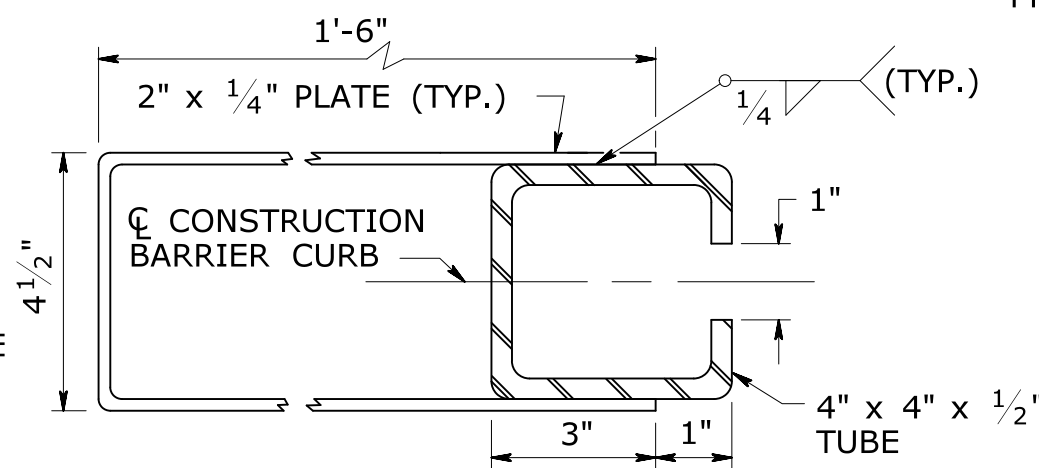
REINFORCEMENT STEEL LIST (EACH BARRIER SECTION)							
MARK	SIZE	NUMBER IN EACH SECTION	LENGTH	TYPE	A	B	C
4B1	#4	6	4'-11"	I	5"	26"	2"
4B4	#4	SEE NOTE 4	3'-1"	II	15 1/2"	4"	
4B5	#4	SEE NOTE 4	4'-11"	I	5"	26"	2"
6B2	#6	2	SEE NOTE 4	STR.			LONGITUDINAL (TOP) NORMAL SECTION
6B3	#6	2	SEE NOTE 4	STR.			LONGITUDINAL (BOTTOM) NORMAL SECTION
6B4	#6	2	1'-2"	STR.			TRANSVERSE (BOTTOM) NORMAL SECTION
6B5	#6	2	0'-6"	STR.			TRANSVERSE (TOP) NORMAL SECTION



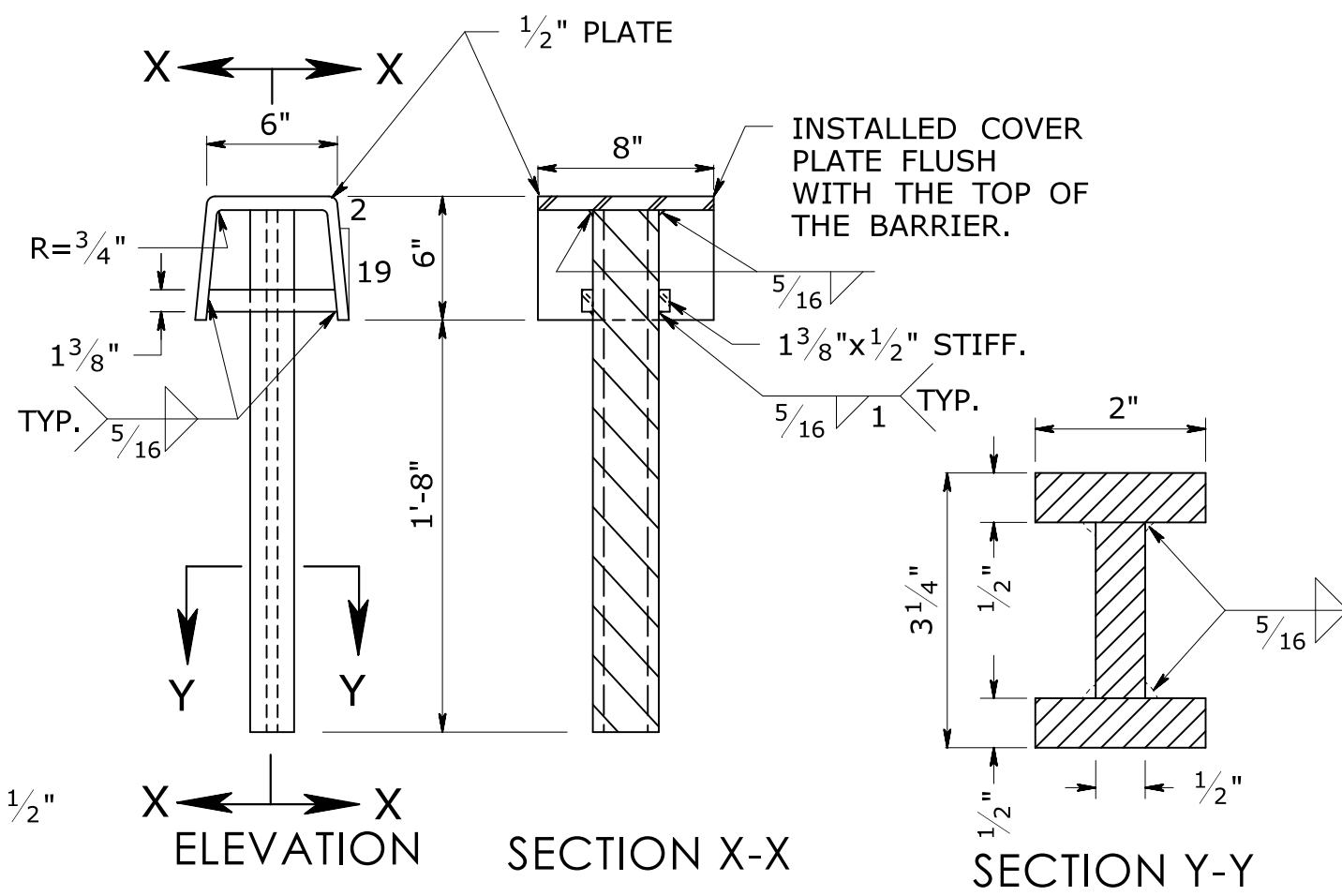
ELEVATION



PLAN VIEW
DETAIL NO. 1



PLAN VIEW
DETAIL NO. 2

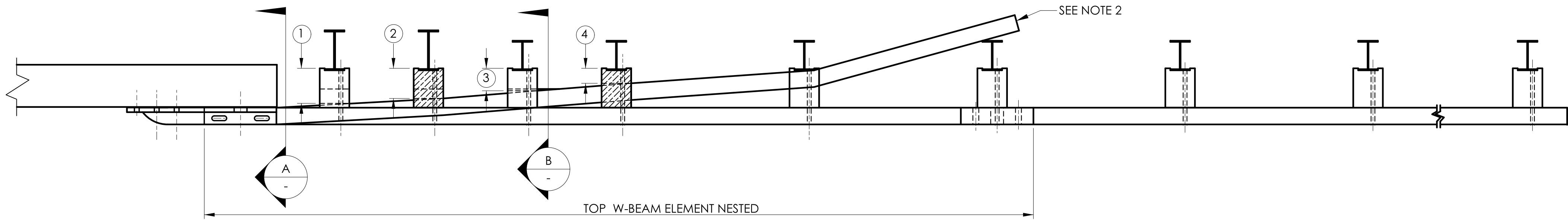


SECTION X-X

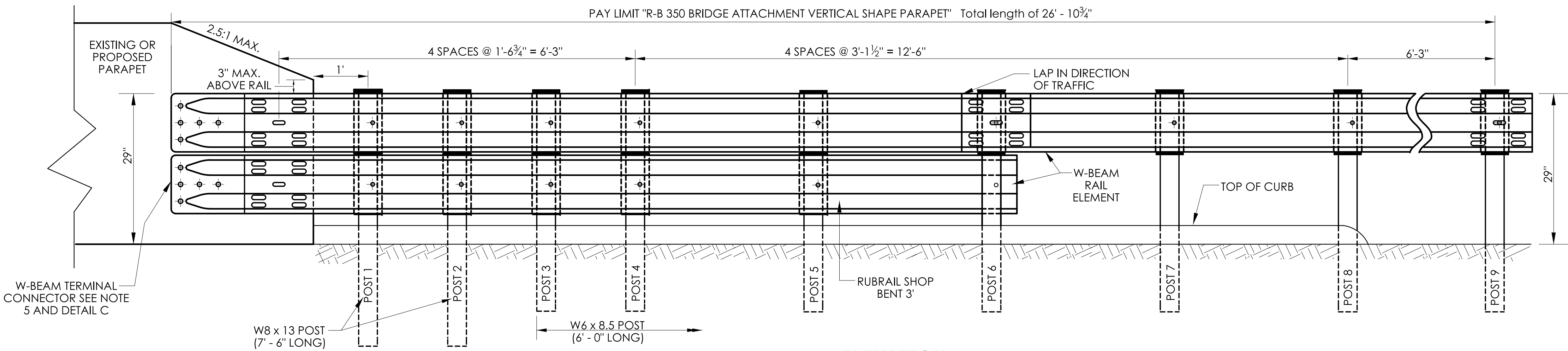
SECTION Y-Y

TEMPORARY TRAFFIC BARRIER CONNECTION DETAILS

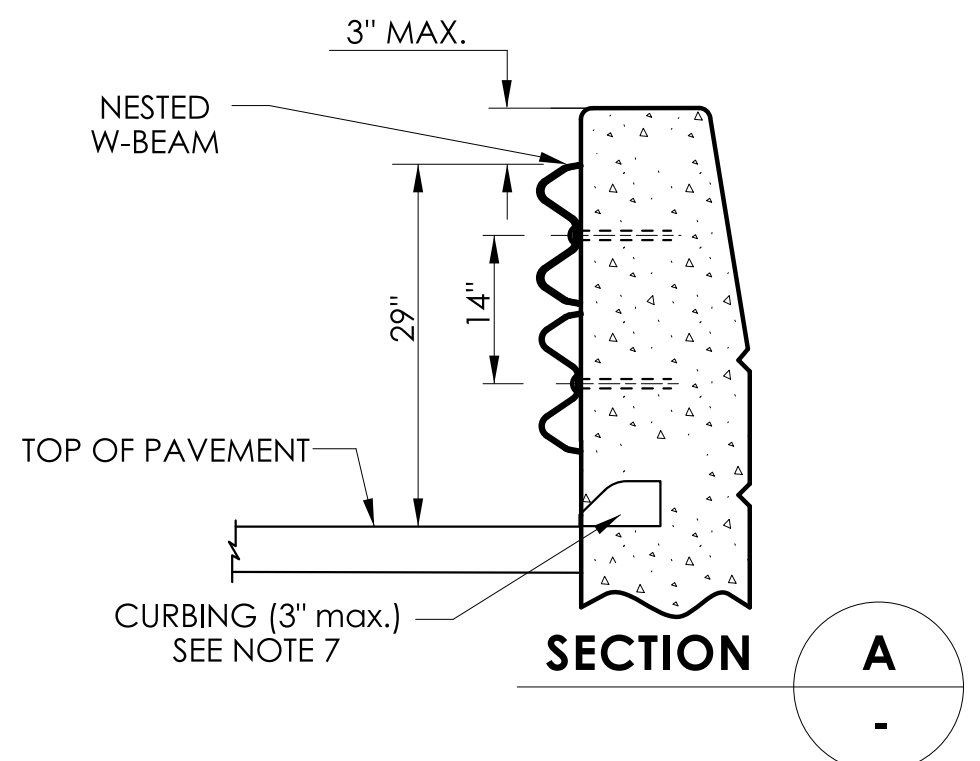
MASH 2016 COMPLIANT
APPROVAL ID: 2021-01



PLAN

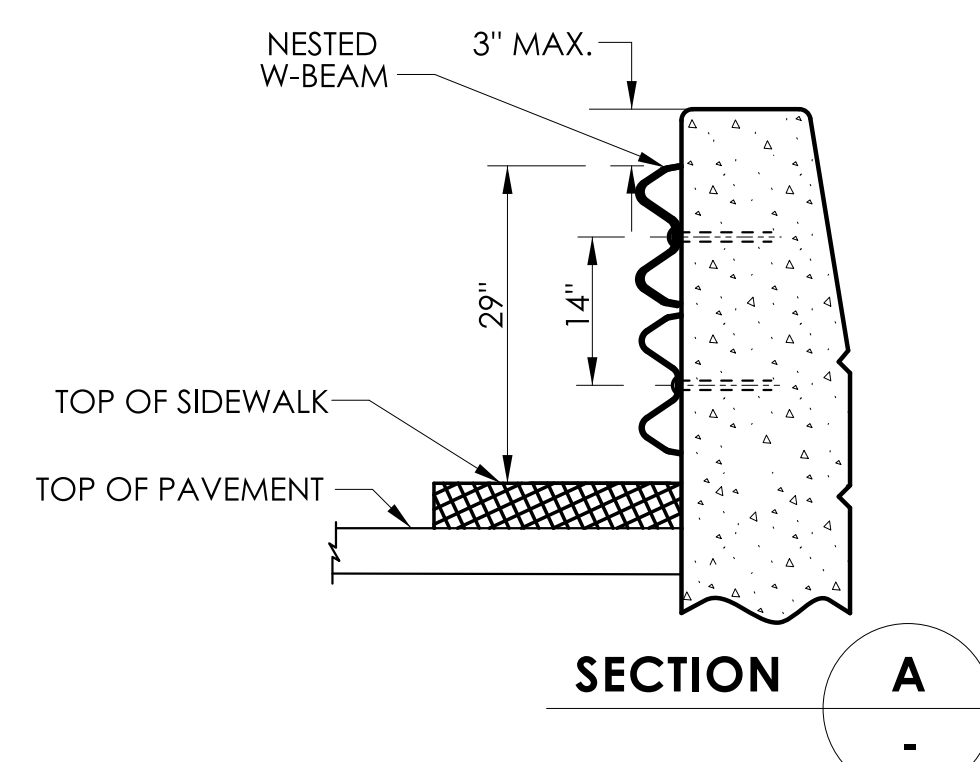


ELEVATION



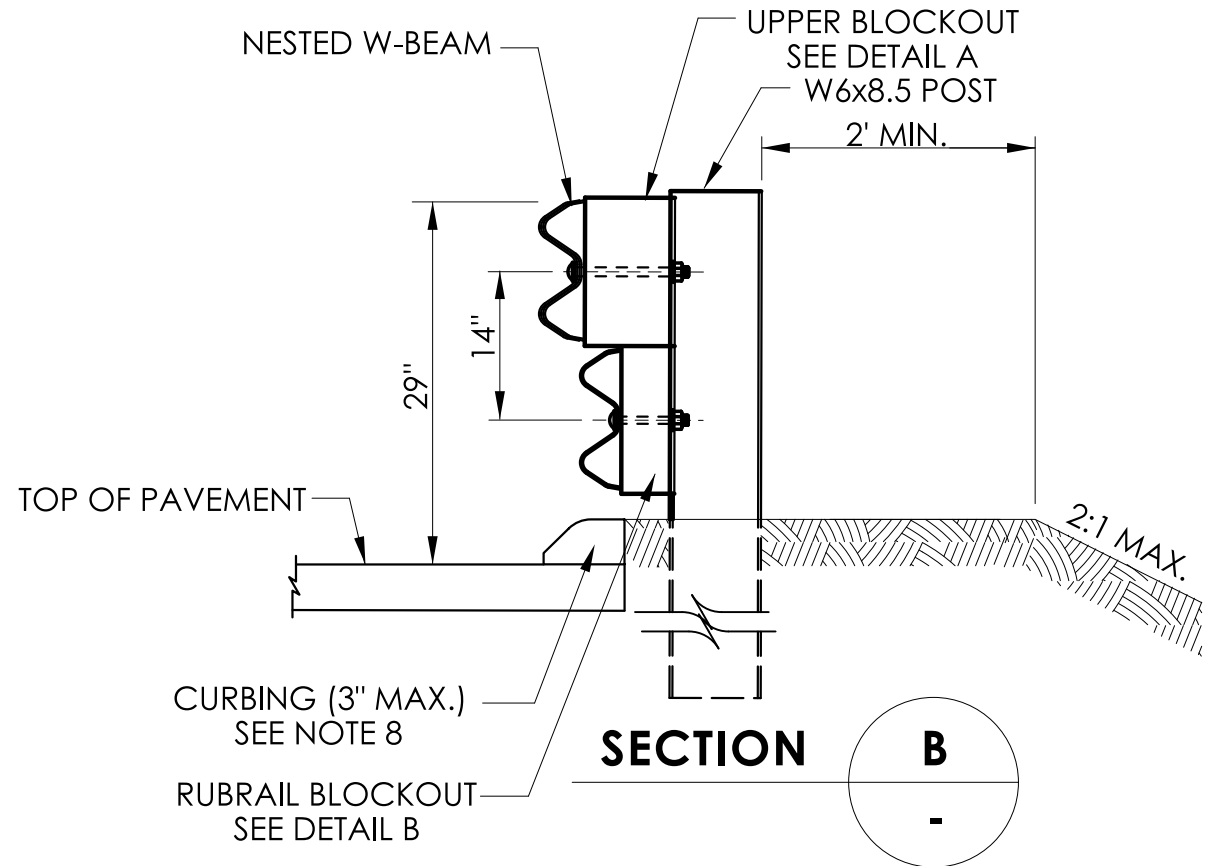
SECTION A

WITH CURBING



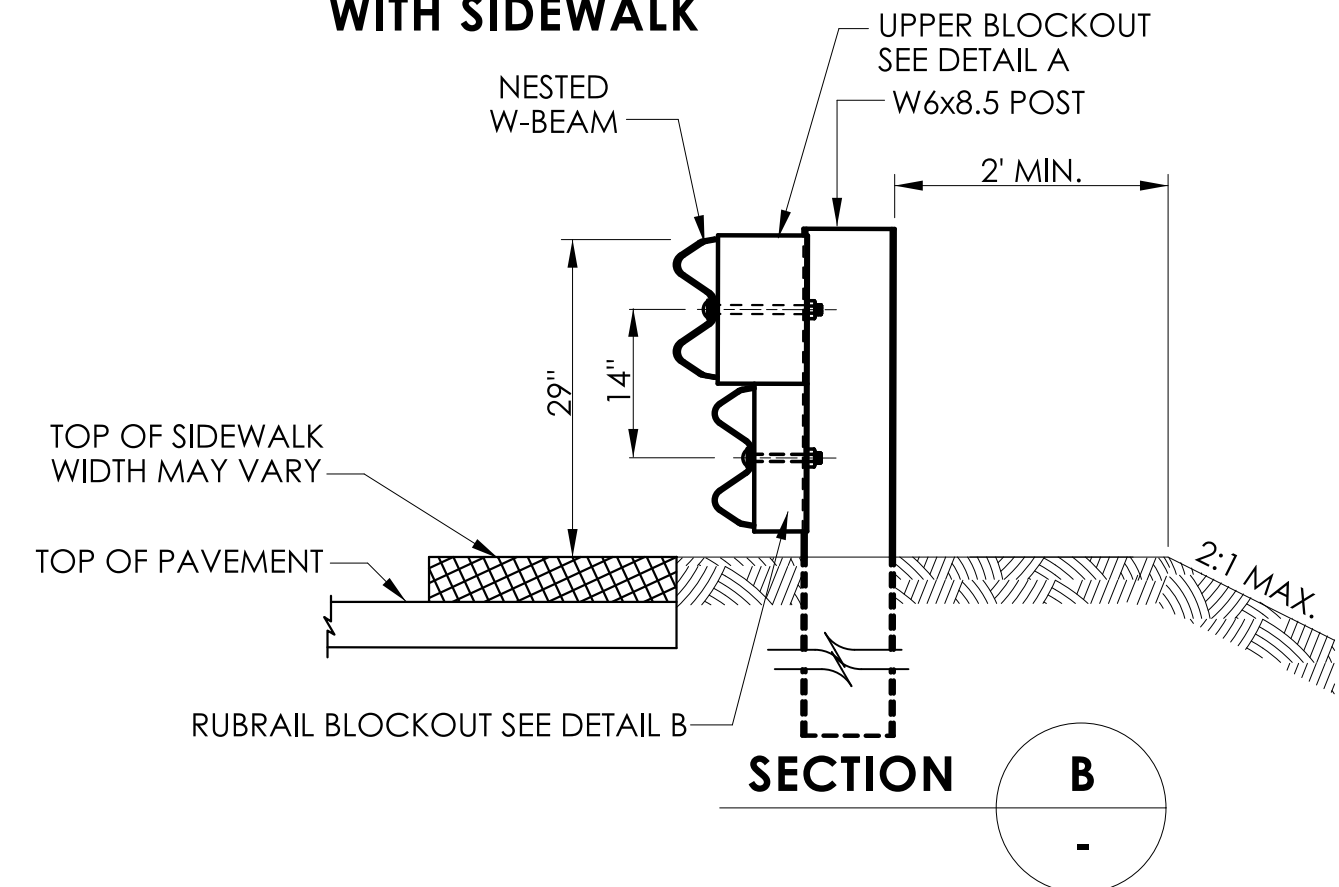
SECTION A

WITH SIDEWALK



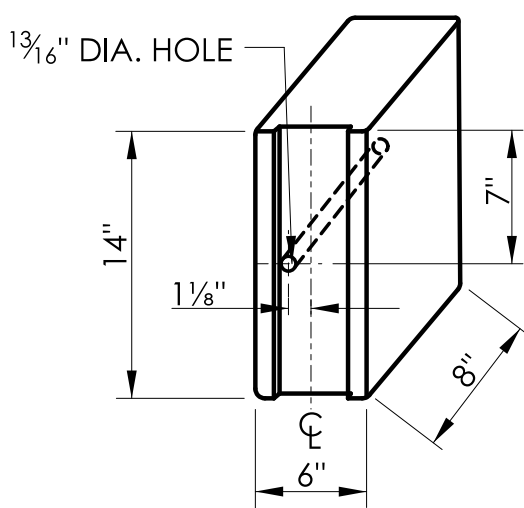
SECTION B

WITH CURBING

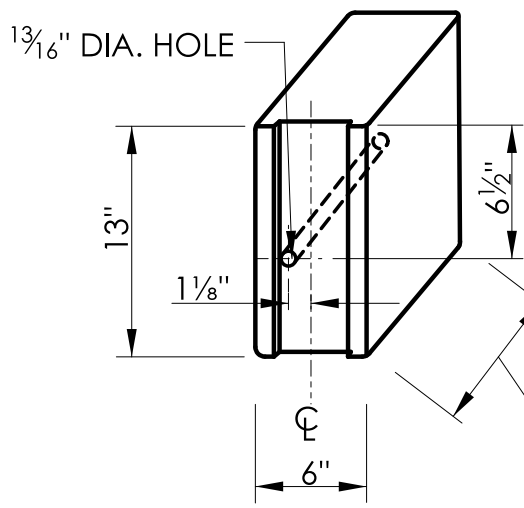


SECTION B

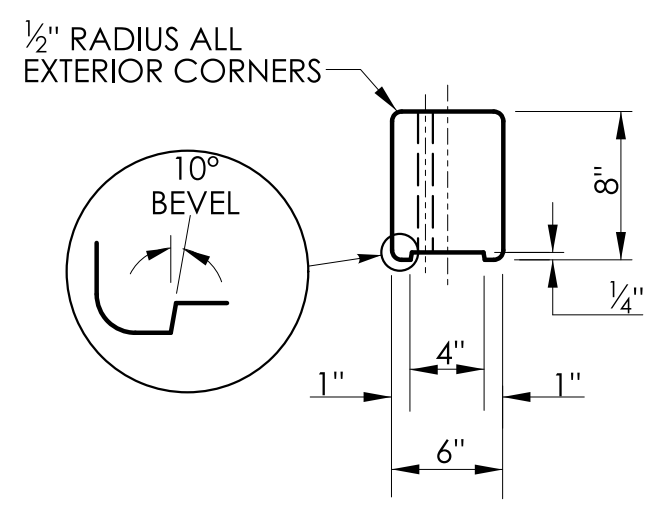
WITH SIDEWALK



DETAIL A
UPPER BLOCKOUT

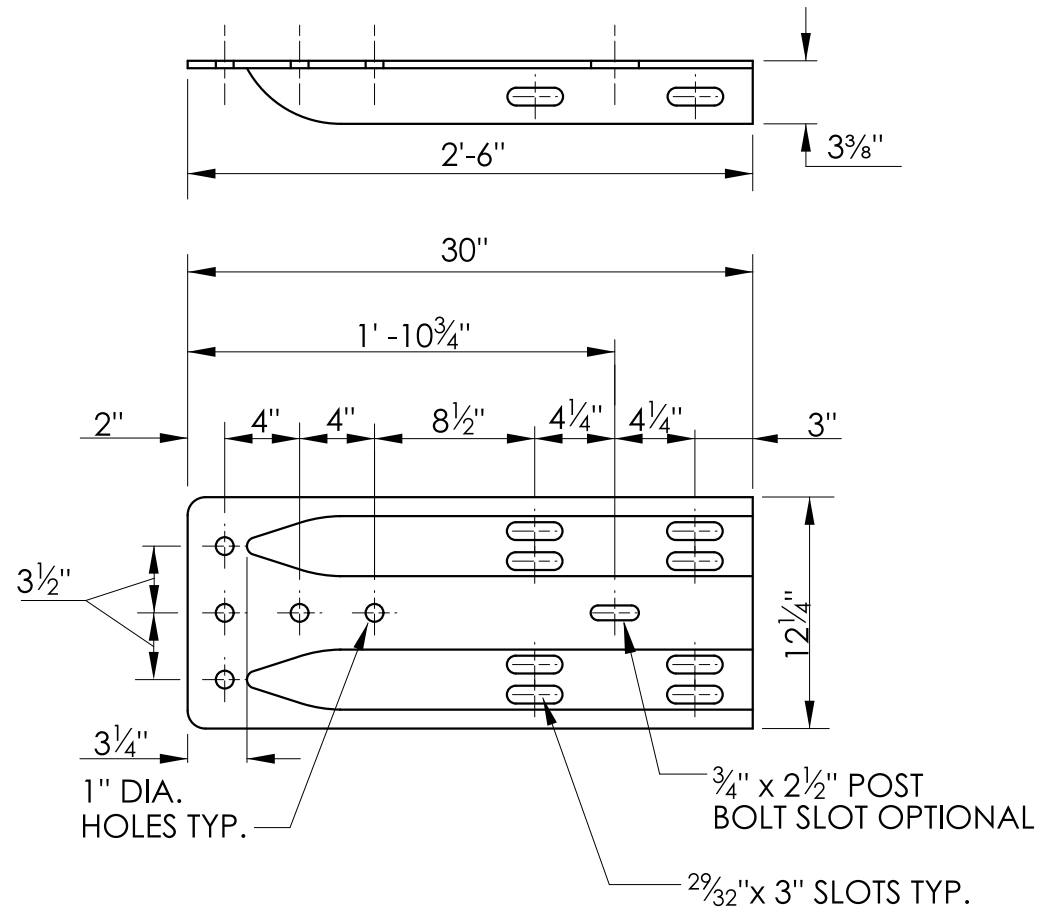


DETAIL B
RUBRAIL BLOCKOUT



TOP

RUBRAIL BLOCKOUTS 13" HIGH x 6" WIDE		
POST	THICKNESS	BOLT LENGTH
①	7"	9"
②	6"	8"
③	4½"	6"
④	3"	5"



DETAIL C
W-BEAM TERMINAL CONNECTOR
CLASS B TYPE II
SEE NOTE 5

GENERAL NOTES:

1. RUBRAIL BLOCKOUTS FOR POSTS 1 THROUGH 4 ARE ATTACHED TO POST AND RAIL WITH A ⅝" BUTTONHEAD BOLTS (SEE CHART FOR BOLT LENGTH). RUBRAIL ONLY IS ATTACHED TO POST 5 WITH A ⅝" x 1¼" BUTTONHEAD BOLT.
2. THE RUBRAIL SHALL BE SHOP BENT IN THE LAST 3' TO FACILITATE INSTALLATION. DO NOT ATTACH RUBRAIL TO BACK OF POST 6.
3. ANCHORAGE:

(A) AT EXISTING PARAPETS EACH W-BEAM TERMINAL CONNECTOR SHALL BE ANCHORED USING FOUR ⅝" x 12" CHEMICALLY ANCHORED BOLTS WITH WASHERS OR AS DETAILED ON STRUCTURE SHEETS. MAXIMUM BOLT PROJECTION BEYOND THE NUT SHALL BE ½". THE 12" MINIMUM LENGTH OF CHEMICALLY ANCHORED BOLTS SHALL INCLUDE A MINIMUM EMBEDMENT DEPTH OF 10" INTO SUITABLY REINFORCED CONCRETE OR AS RECOMMENDED BY THE MANUFACTURER OF BONDING MATERIAL.

(B) FOR NEW PARAPETS OR BARRIERS, THE W-BEAM TERMINAL CONNECTORS SHALL BE ANCHORED AS DETAILED ON THE STRUCTURE SHEETS.
4. ADDITIONAL BLOCKOUTS WITH POSTS 1 THROUGH 6 SHOULD BE AVOIDED.
5. FOR SINGLE DIRECTION ROADWAY:

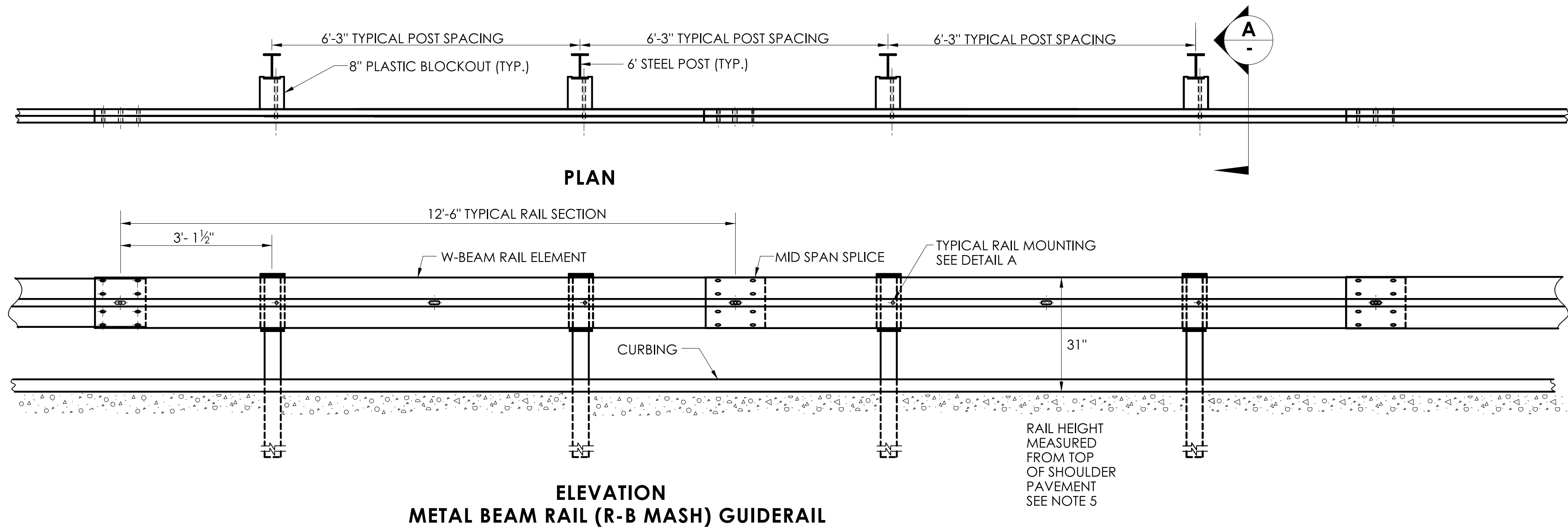
INSTALL W-BEAM TERMINAL CONNECTOR BETWEEN NESTED GUIDE RAIL ELEMENTS.

FOR DUAL DIRECTION ROADWAY FOR APPROACHING TRAFFIC:

INSTALL W-BEAM TERMINAL CONNECTOR BETWEEN NESTED GUIDE RAIL ELEMENTS.

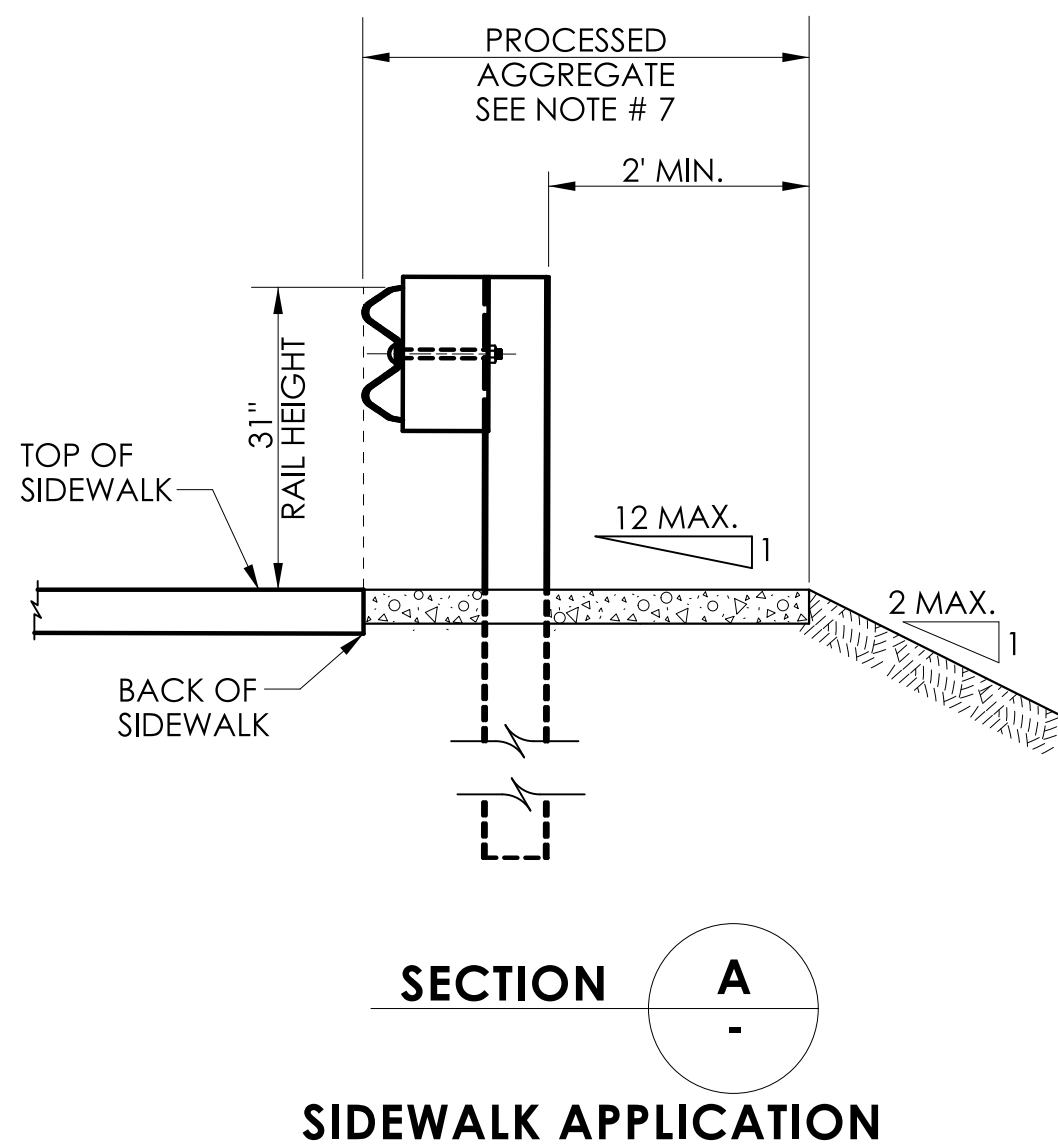
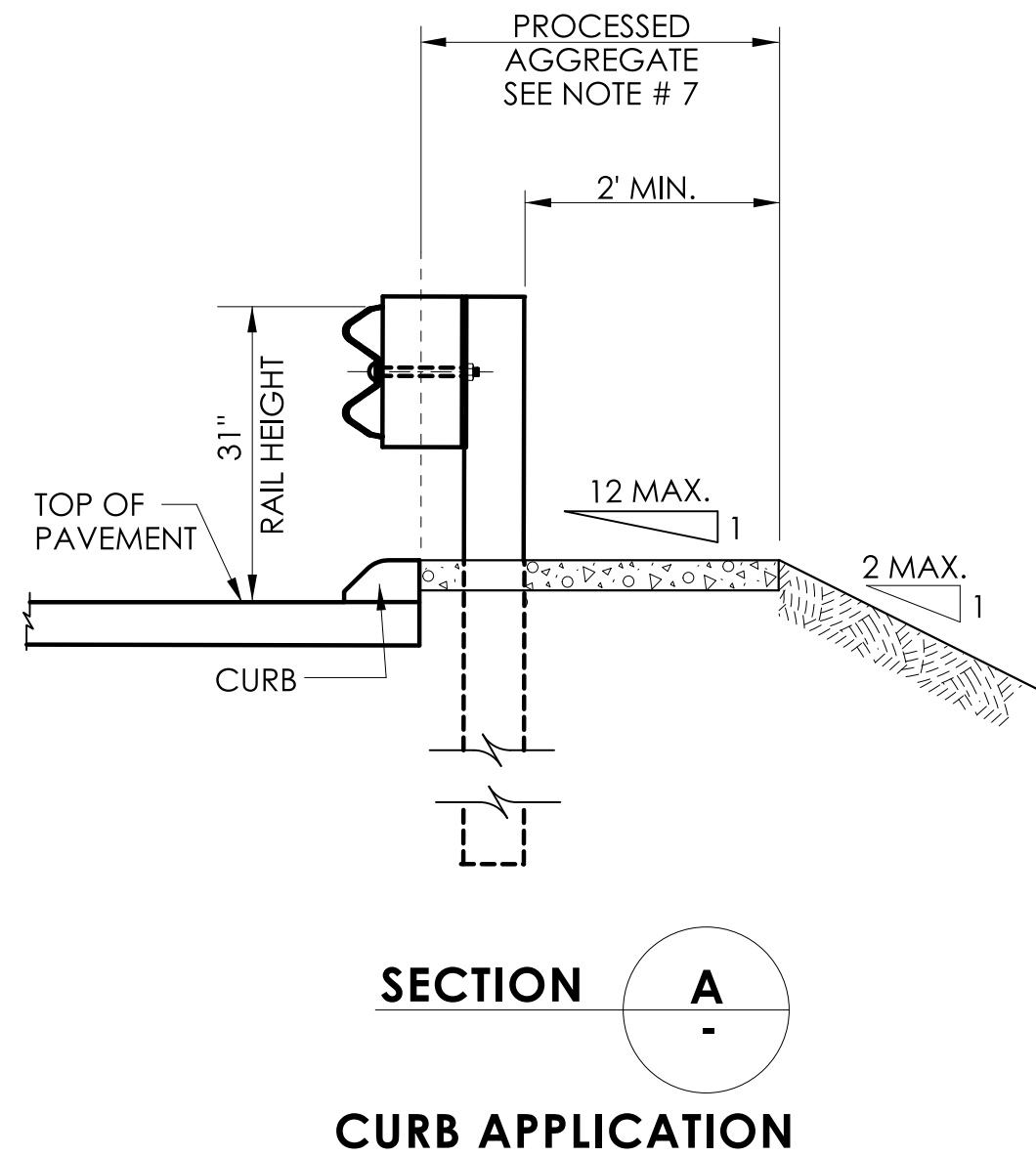
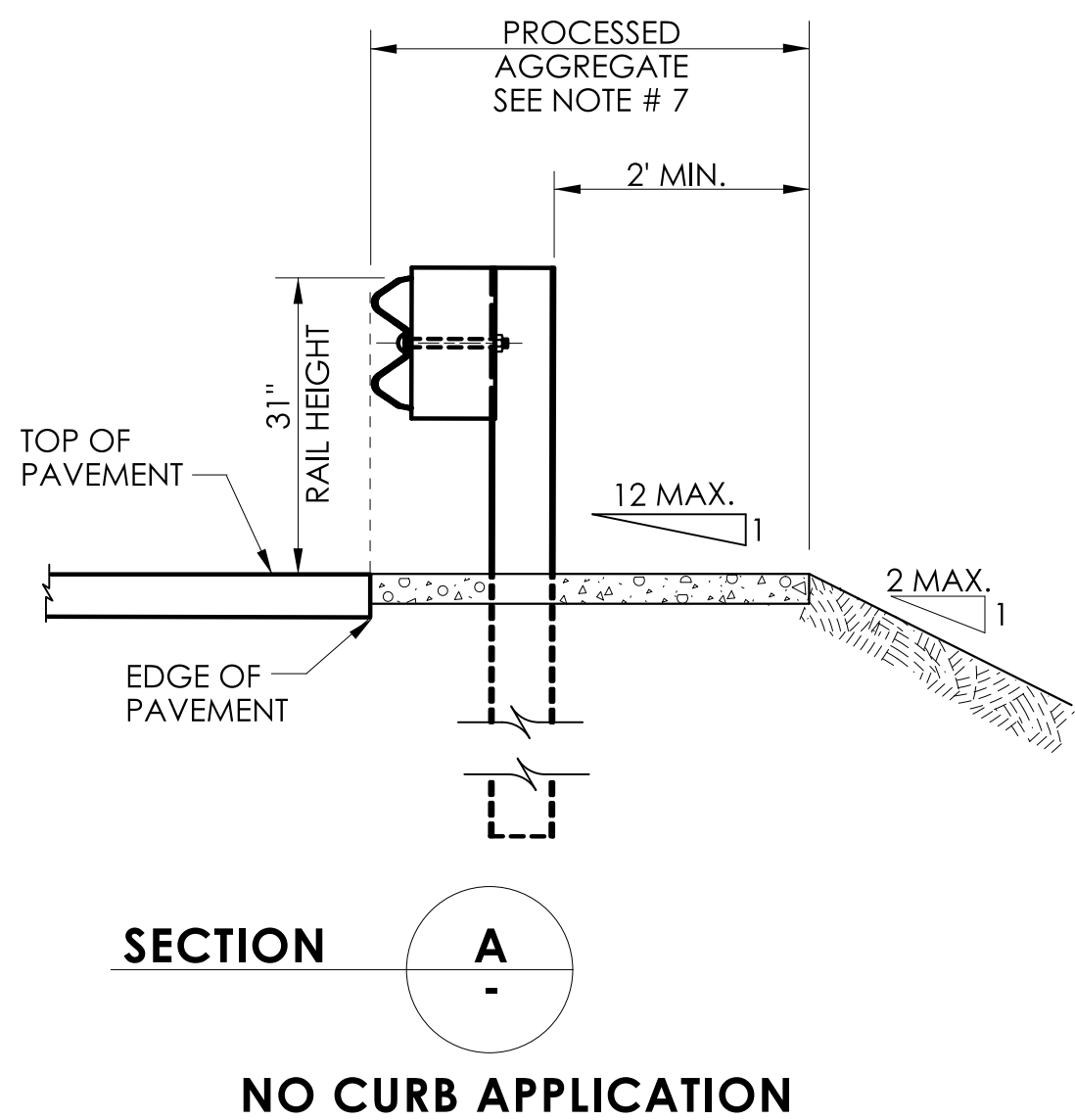
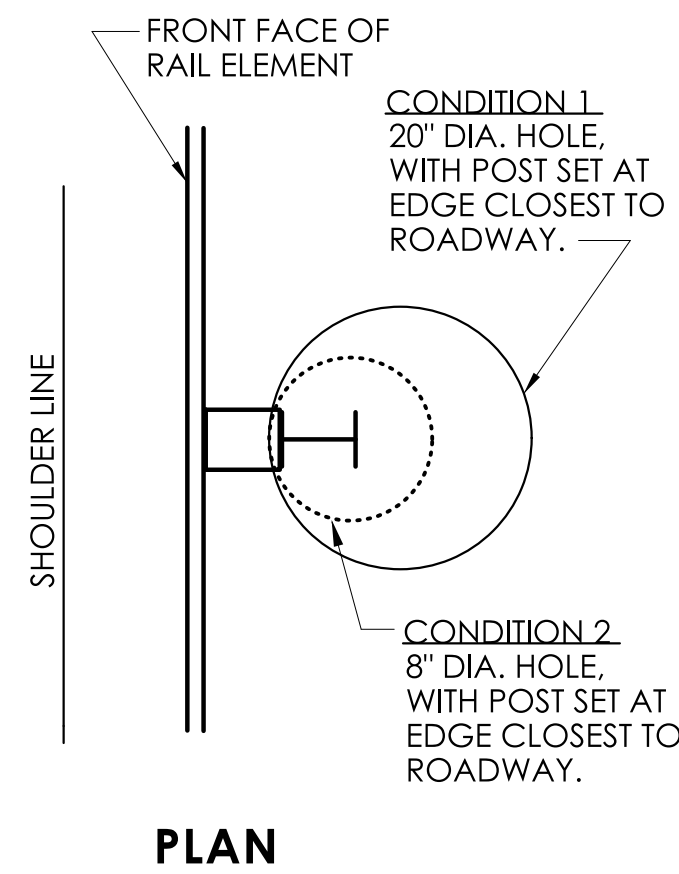
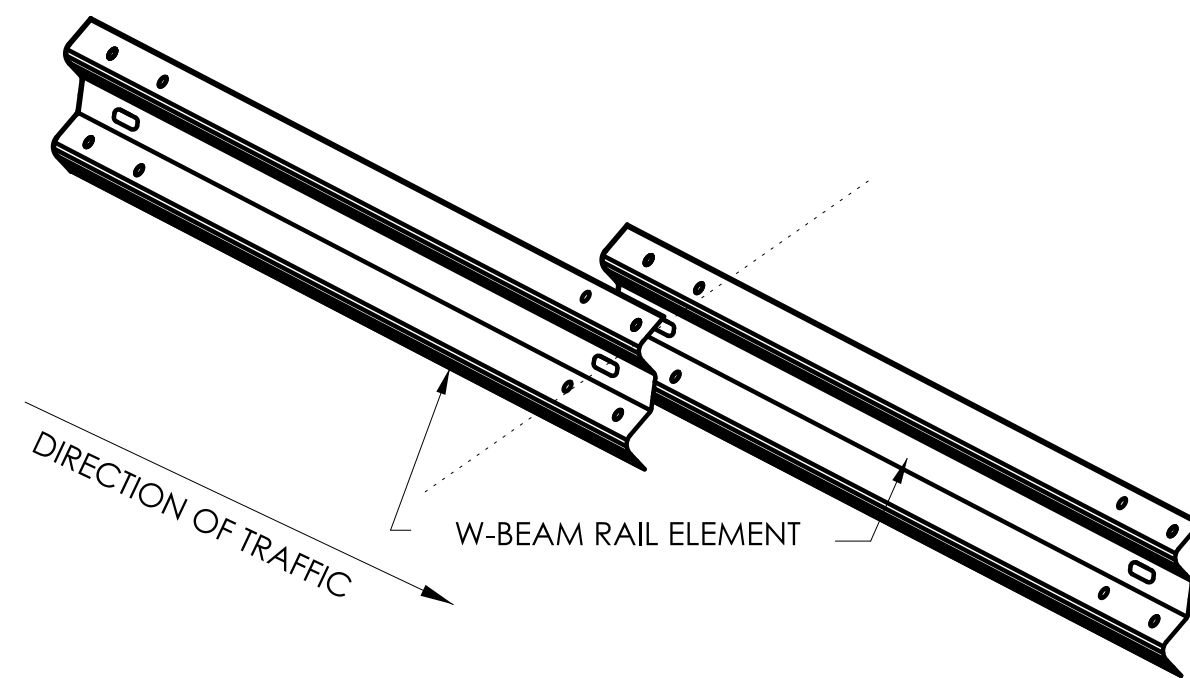
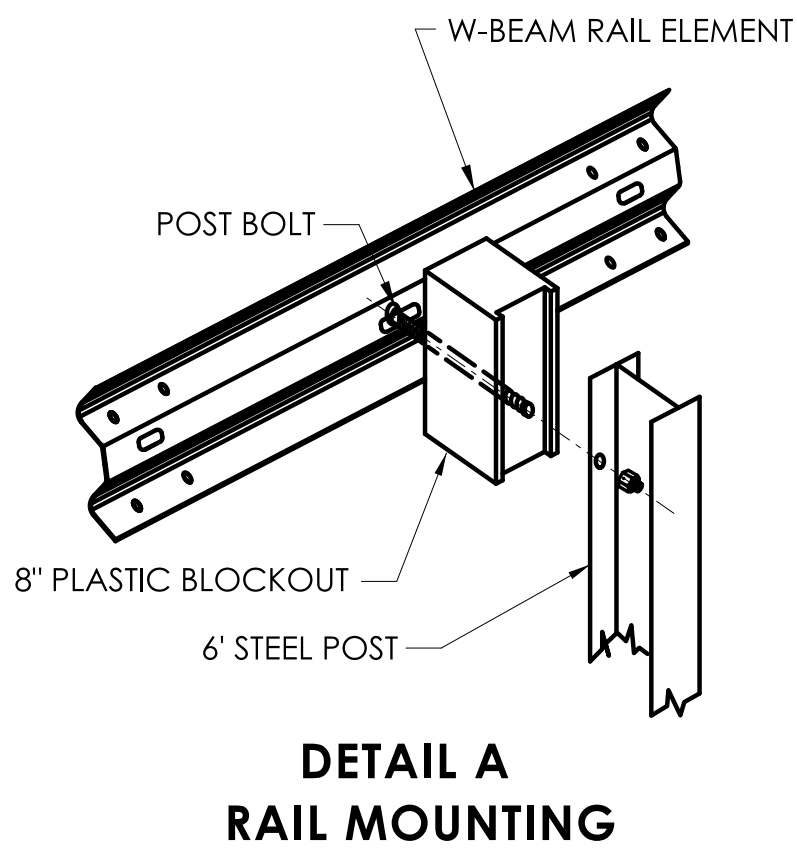
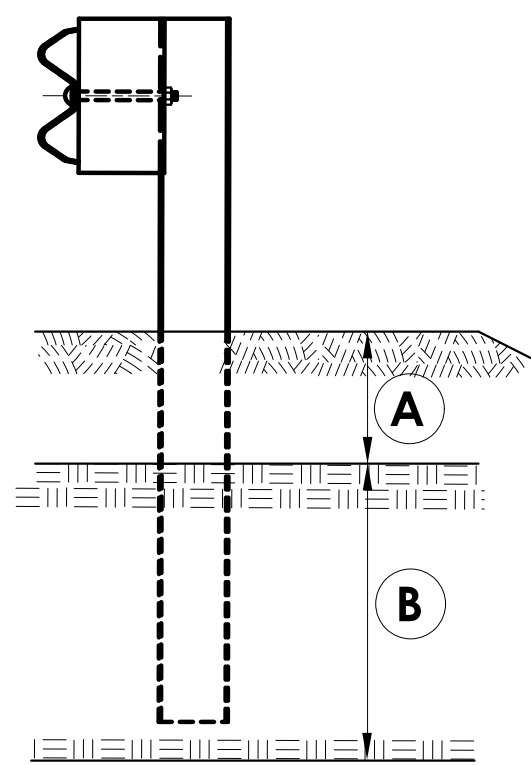
FOR TRAILING END:

INSTALL W-BEAM TERMINAL CONNECTOR OUTSIDE OF THE NESTED GUIDE RAIL ELEMENTS.
6. MINIMUM RAIL HEIGHT FOR NEW CONSTRUCTION SHALL BE 29" +/- 1".
7. USE MODIFIED 4" BITUMINOUS CONCRETE PARK CURBING REDUCED TO A 3 INCH REVEAL BENEATH THE RUBRAIL IF CURBING IS REQUIRED.



GENERAL NOTES:

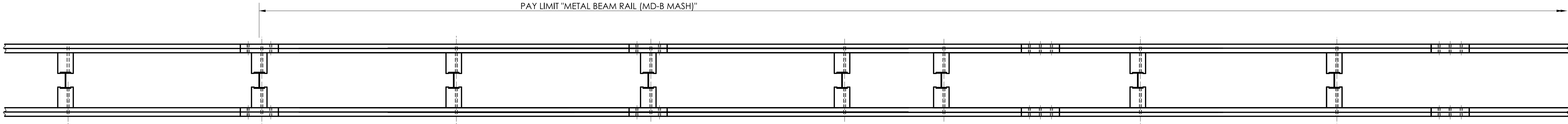
1. SEE SHEET HW-910_20 FOR MASH W-BEAM HARDWARE AND W-BEAM DELINEATOR DETAILS.
2. THREE BLOCKOUTS MAY BE USED FOR ONE POST ONLY. TWO BLOCKOUTS MAY BE USED FOR A SERIES OF POSTS. THE COST OF ADDITIONAL BLOCKOUTS AND LONGER BOLTS SHALL BE INCLUDED IN THE PRICE PER FOOT OF GUIDERAIL. EXTRA BLOCKOUTS AT TRANSITIONS TO BRIDGE PARAPETS SHOULD BE AVOIDED. DO NOT USE ADDITIONAL BLOCKS IF IT CAUSES THE POST TO BE DRIVEN BEYOND AN EMBANKMENT HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.
3. IF BLOCKOUTS DO NOT AVOID POST FROM OBSTRUCTION, ONE POST MAY BE OMITTED IF 50 FEET OF GUIDERAIL EXISTS ON BOTH SIDES OF LOCATION. USE METAL BEAM RAIL SPAN SECTION TYPE II OR III FOR MORE THAN ONE CONSECUTIVE OMITTED POST, SEE SHEET HW-910_24.
4. W-BEAM GUIDERAIL MAY BE PLACED 1' OR MORE FROM THE EDGE OF PAVEMENT ONLY ON SLOPES 10:1 OR FLATTER AND WITHOUT CURBING.
5. IF THE RAIL IS INSTALLED WITHIN 2' OF THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE SHOULDER SLOPE EXTENDED TO THE RAIL. IF THE RAIL IS INSTALLED BEYOND 2' FROM THE EDGE OF PAVEMENT, THE RAIL HEIGHT IS MEASURED FROM THE GROUND DIRECTLY BELOW THE RAIL.
6. RAIL HEIGHT CONSTRUCTION TOLERANCE IS +/- 1 INCH.
7. FOR NEW CONSTRUCTION, PLACE 6 INCH LAYER OF PROCESSED AGGREGATE. FOR CONSTRUCTION PROJECTS WITH GUIDERAIL UPGRADE, THE CONTRACT PLANS MAY CALL OUT PROCESSED AGGREGATE ONLY TO BE PLACED IN LOCATION(S) OF EXISTING VERTICAL PAVEMENT EDGE DROP OFF AS A LEVELING MATERIAL, FILLING IN DEPRESSED AREAS.



GENERAL NOTES:

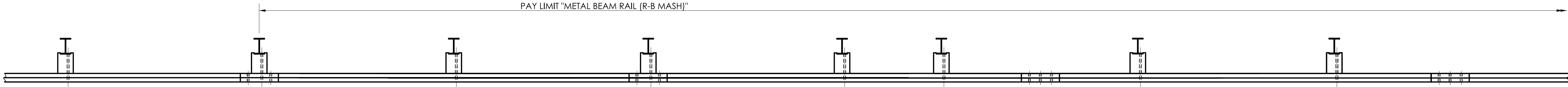
GENERAL NOTES:

1. SEE SHEET HW-910_20 FOR HARDWARE AND W-BEAM DELINEATOR DETAILS.
2. NO POST(S) SHALL BE OMITTED WITHIN THE LENGTH OF GUIDERAIL TRANSITION.



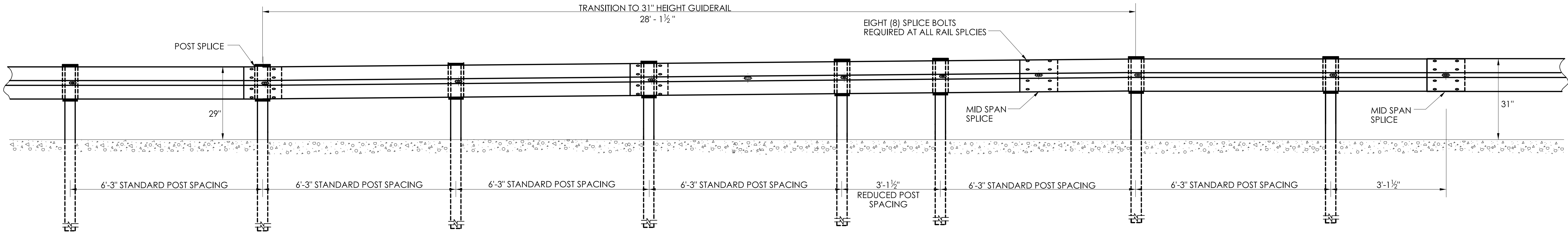
PLAN

METAL BEAM RAIL MD-B 350 TRANSITION TO METAL BEAM RAIL MD-B MASH







PLAN

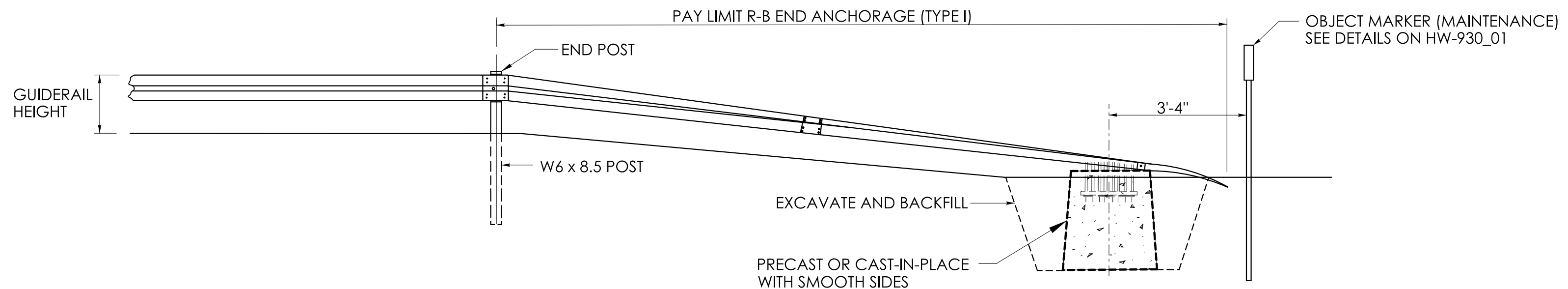
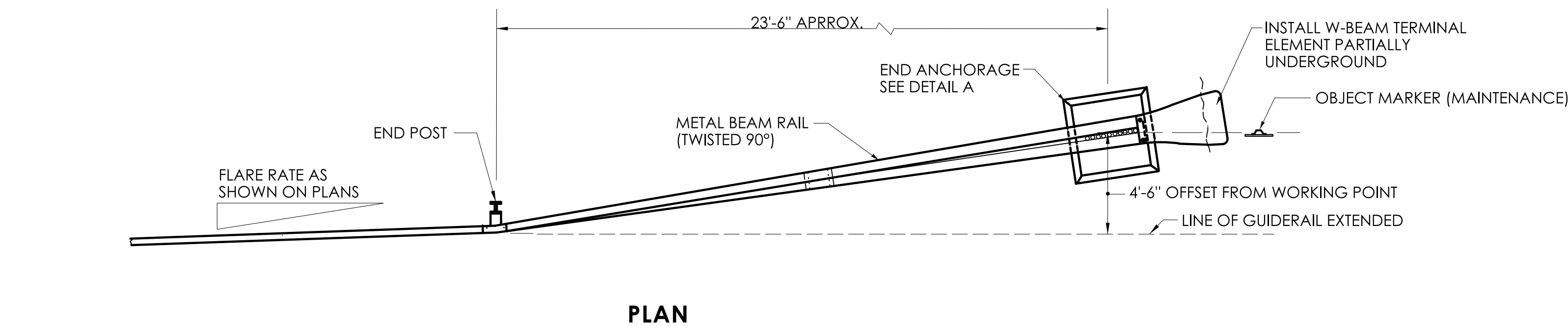
METAL BEAM RAIL R-B 350 TRANSITION TO METAL BEAM RAIL R-B MASH



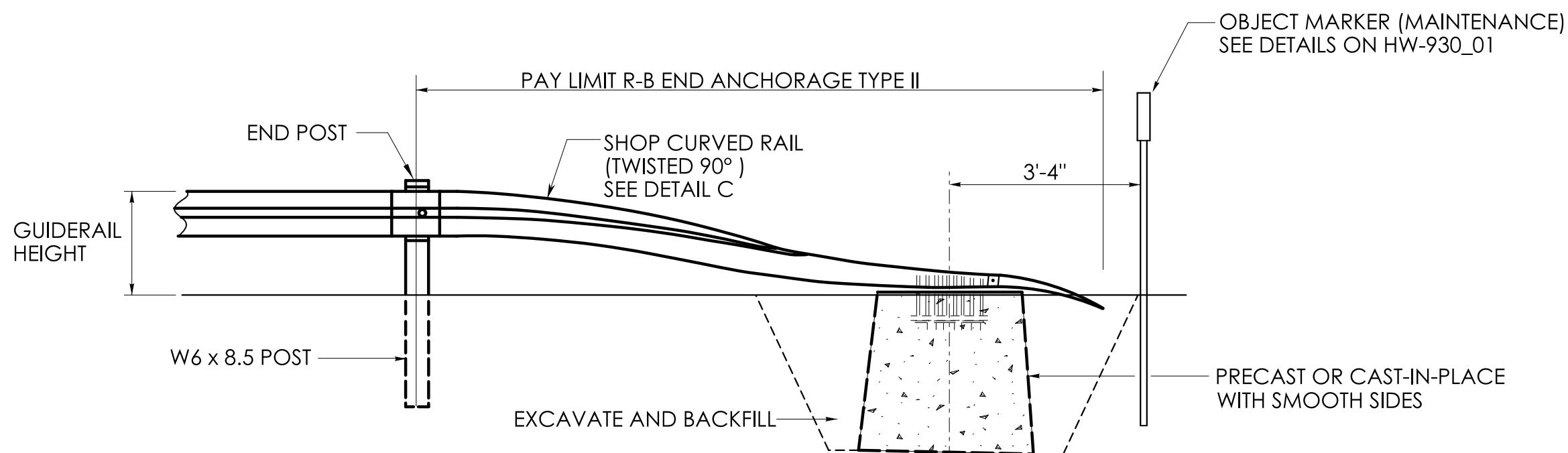
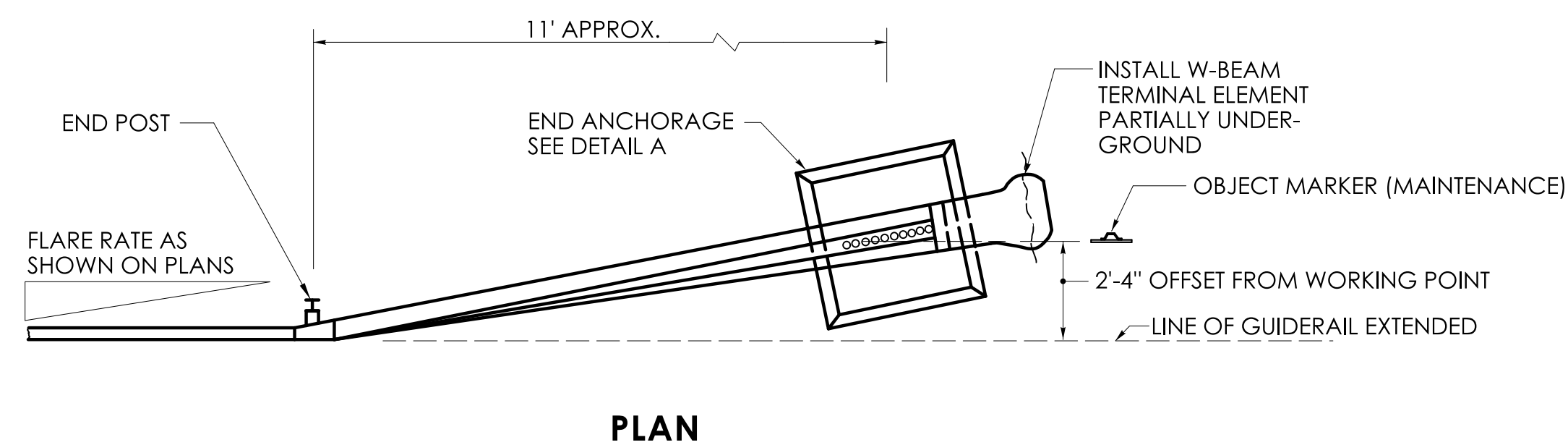
ELEVATION

	NOT TO SCALE	SIGNATURE BLOCK: OFFICE OF ENGINEERING 2800 BERLIN TURNPIKE NEWINGTON, CT 06111	SUBMITTED BY:  Digitally signed by Leo Fontaine, P.E. Date: 2024.08.16 11:06:19-04'00'	APPROVED BY:  Digitally signed by Michael N. Calabrese, P.E. Date: 2024.10.17 22:59:42-04'00'	 STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION	 CTDOT STANDARD SHEET	STANDARD SHEET TITLE: METAL BEAM RAIL TRANSITION 350 TO MASH GUIDERAIL	STANDARD SHEET NO.: HW- 910_25a

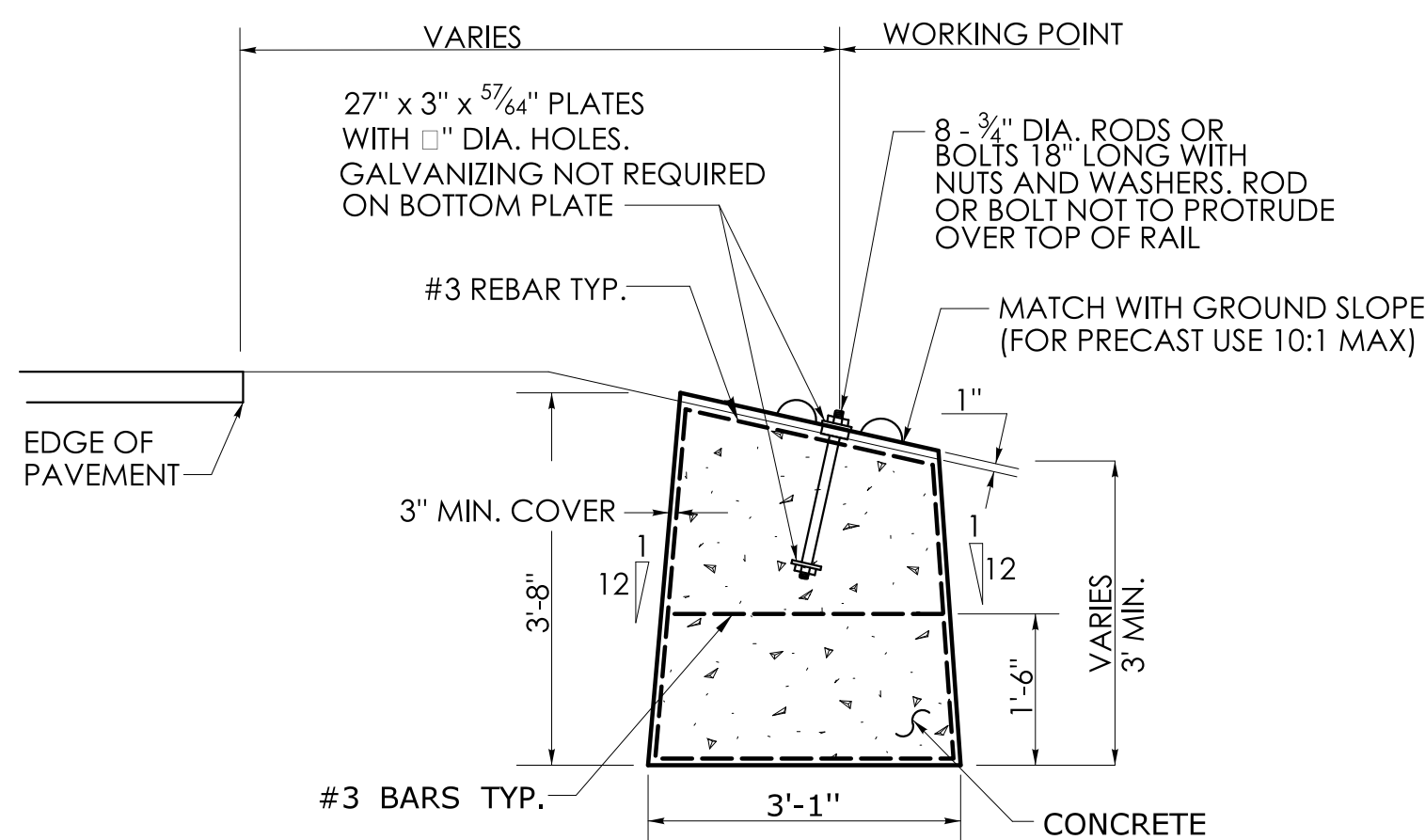
- GENERAL NOTES:**
1. J-HOOK BOLTS MAY BE SUBSTITUTED FOR BOTTOM PLATE ANCHORAGE IN CONCRETE END ANCHORS USING THE SAME SIZE, STRENGTH, AND LENGTH AS NOTED ON THE PLANS.
 2. INSTALLATION OF RADII DIFFERENT THAN WHAT IS SHOWN IN DETAIL "C" FOR R-B END ANCHORAGE TYPE II MUST BE APPROVED BY THE ENGINEER.



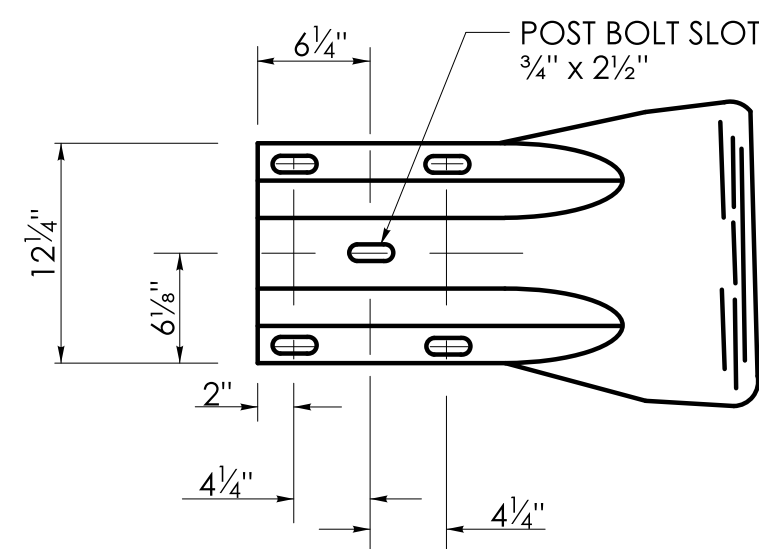
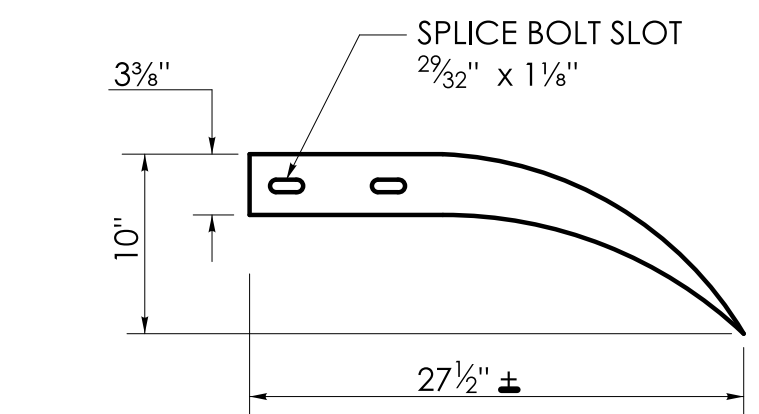
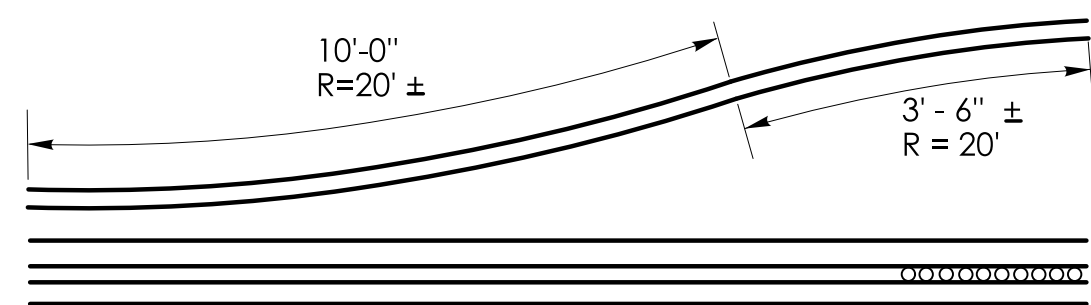
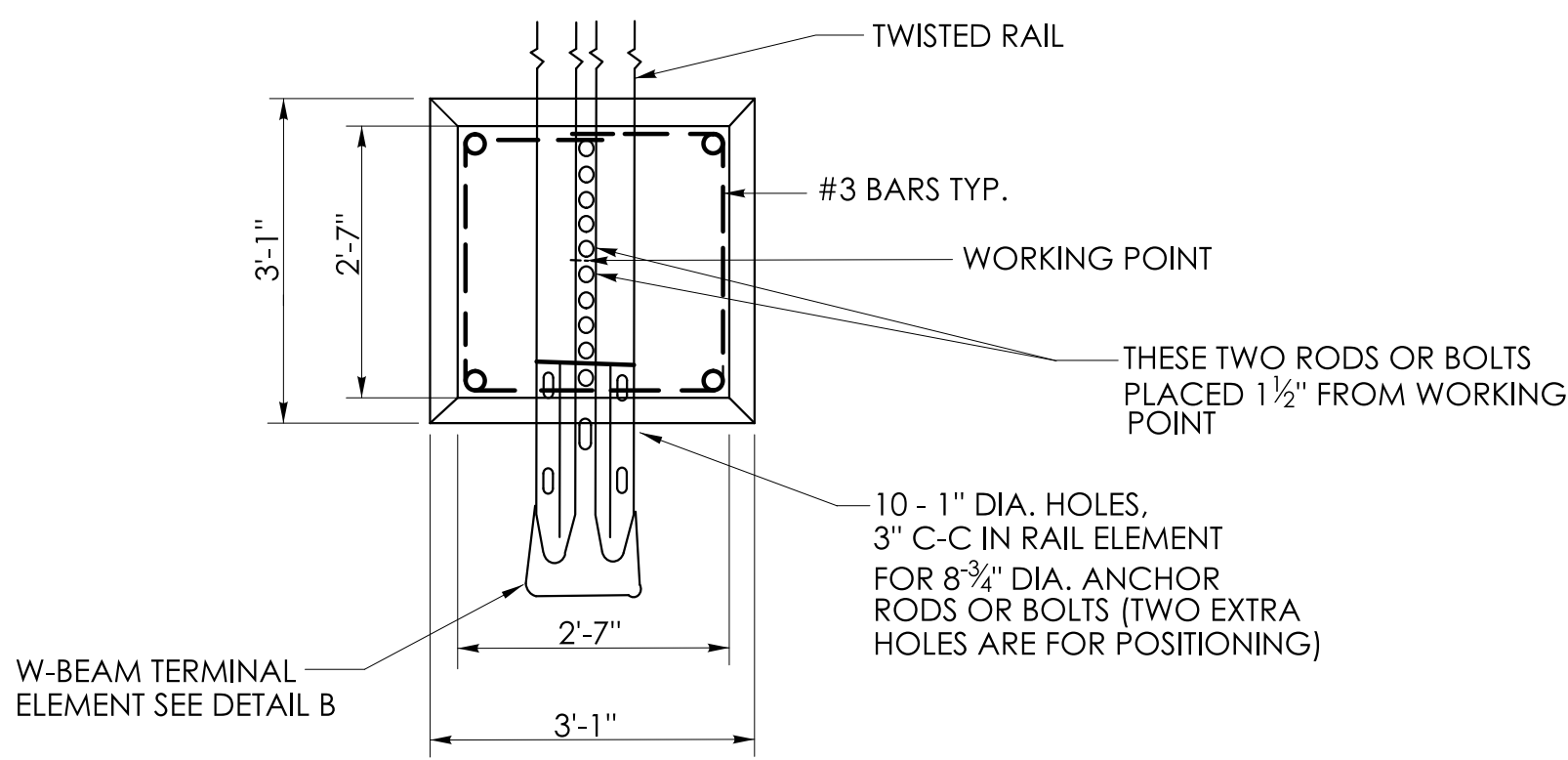
R-B END ANCHORAGE TYPE I

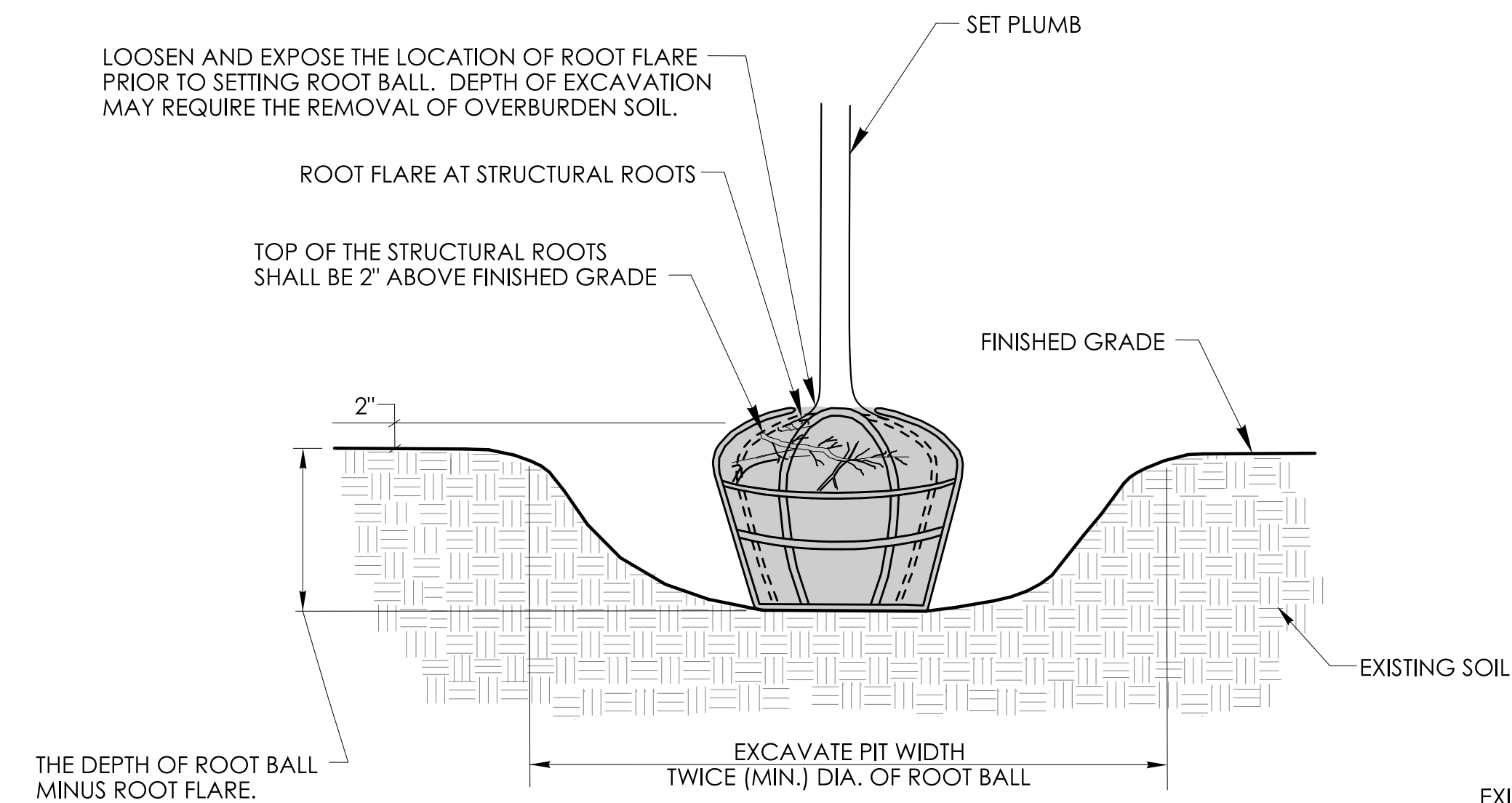


R-B END ANCHORAGE TYPE II

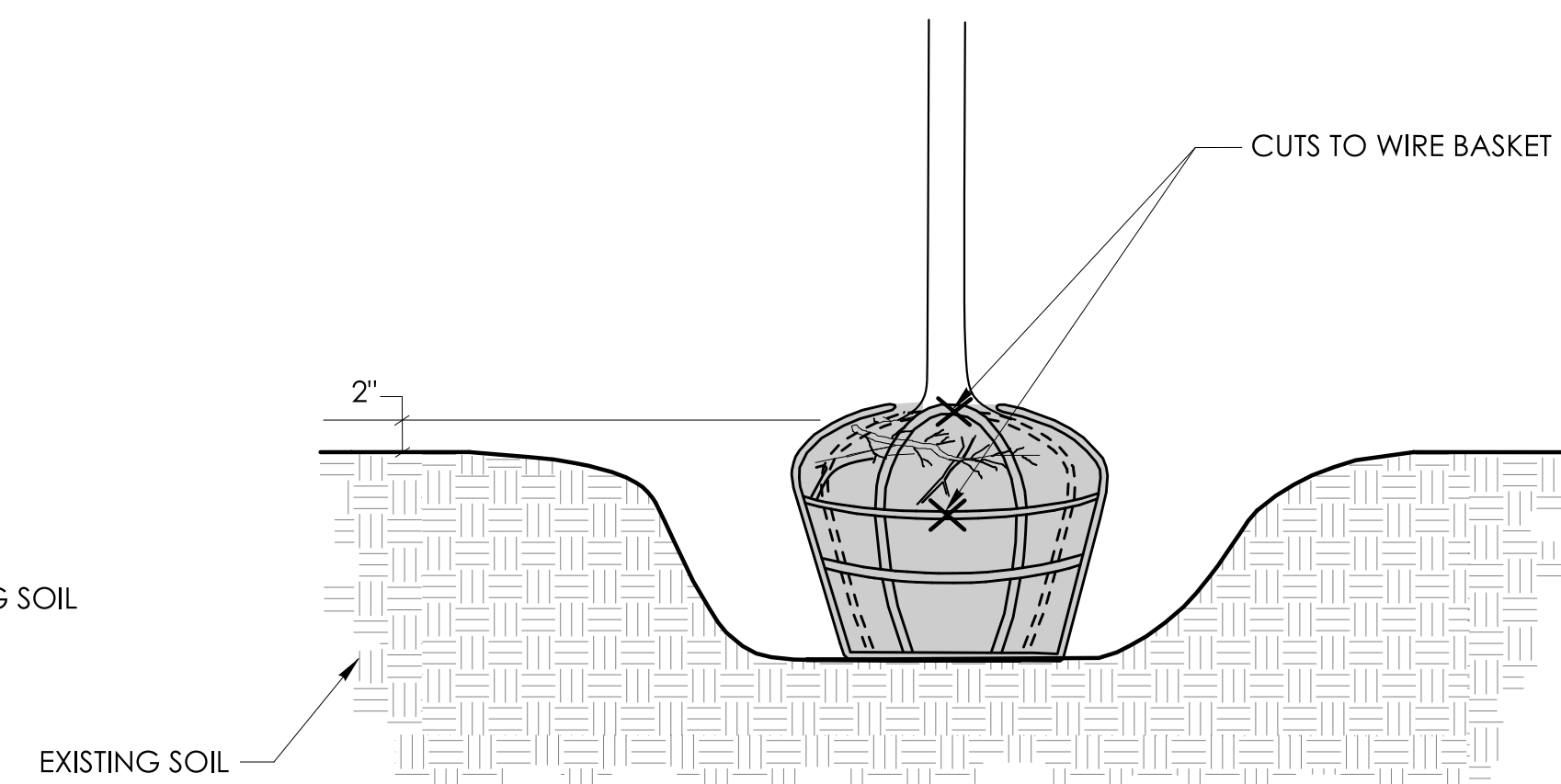


**DETAIL A
ROADSIDE CONCRETE END ANCHOR**
SEE NOTE 2



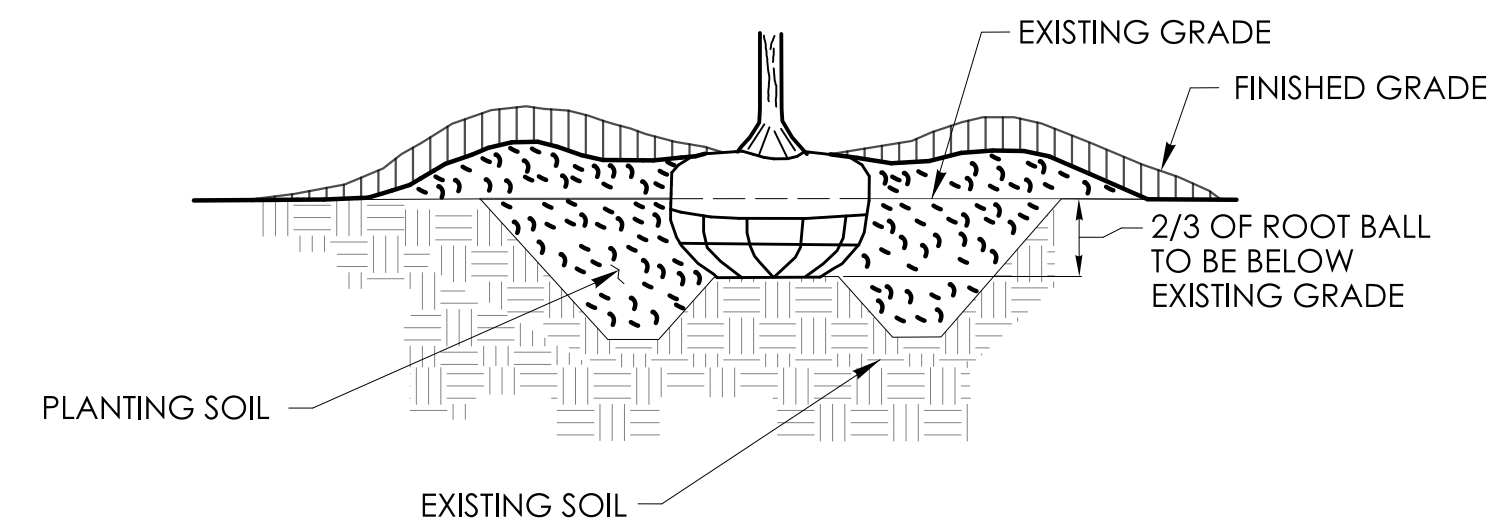


PIT EXCAVATION AND SETTING OF PLANTING

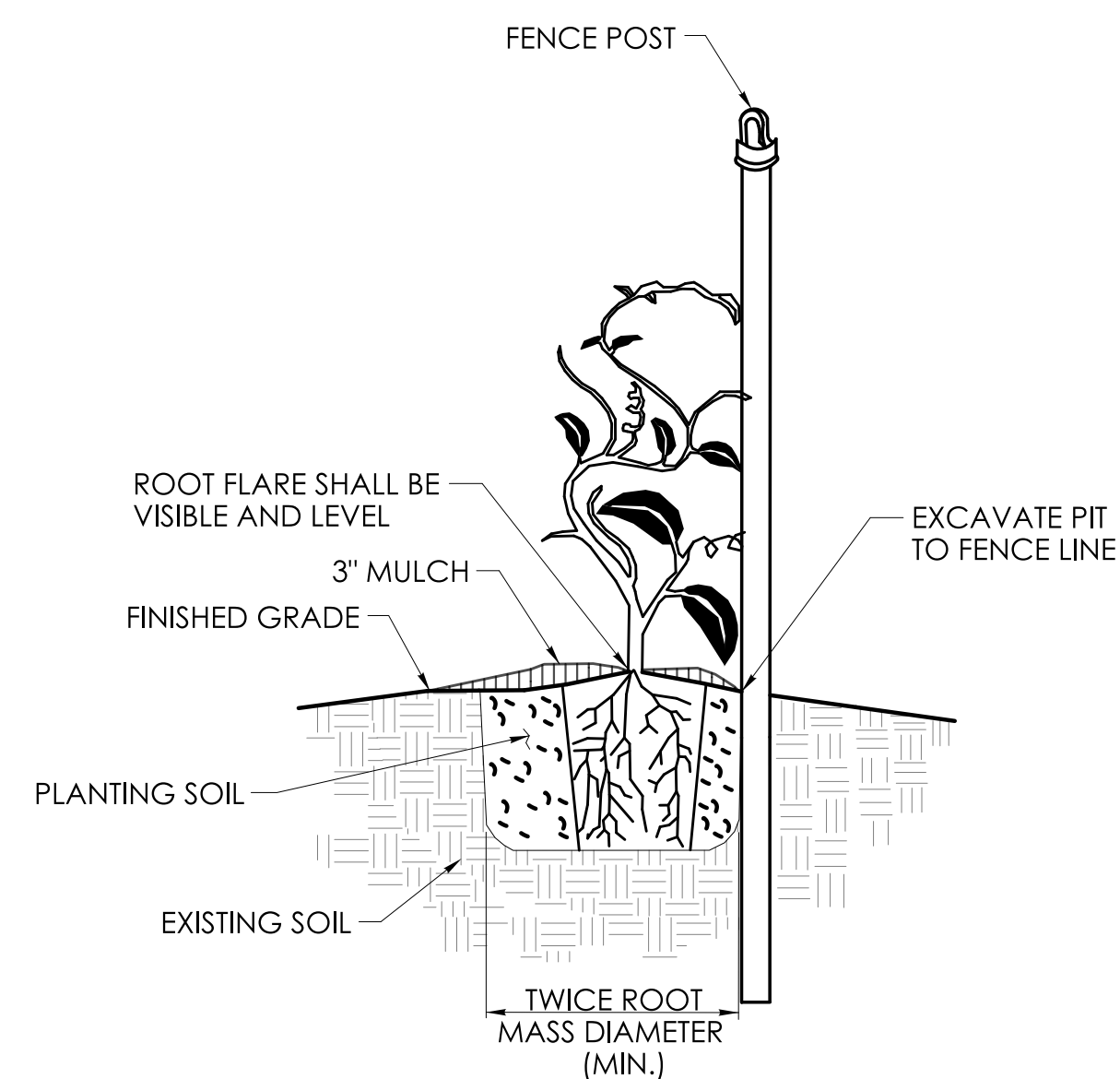


WIRE BASKET REMOVAL

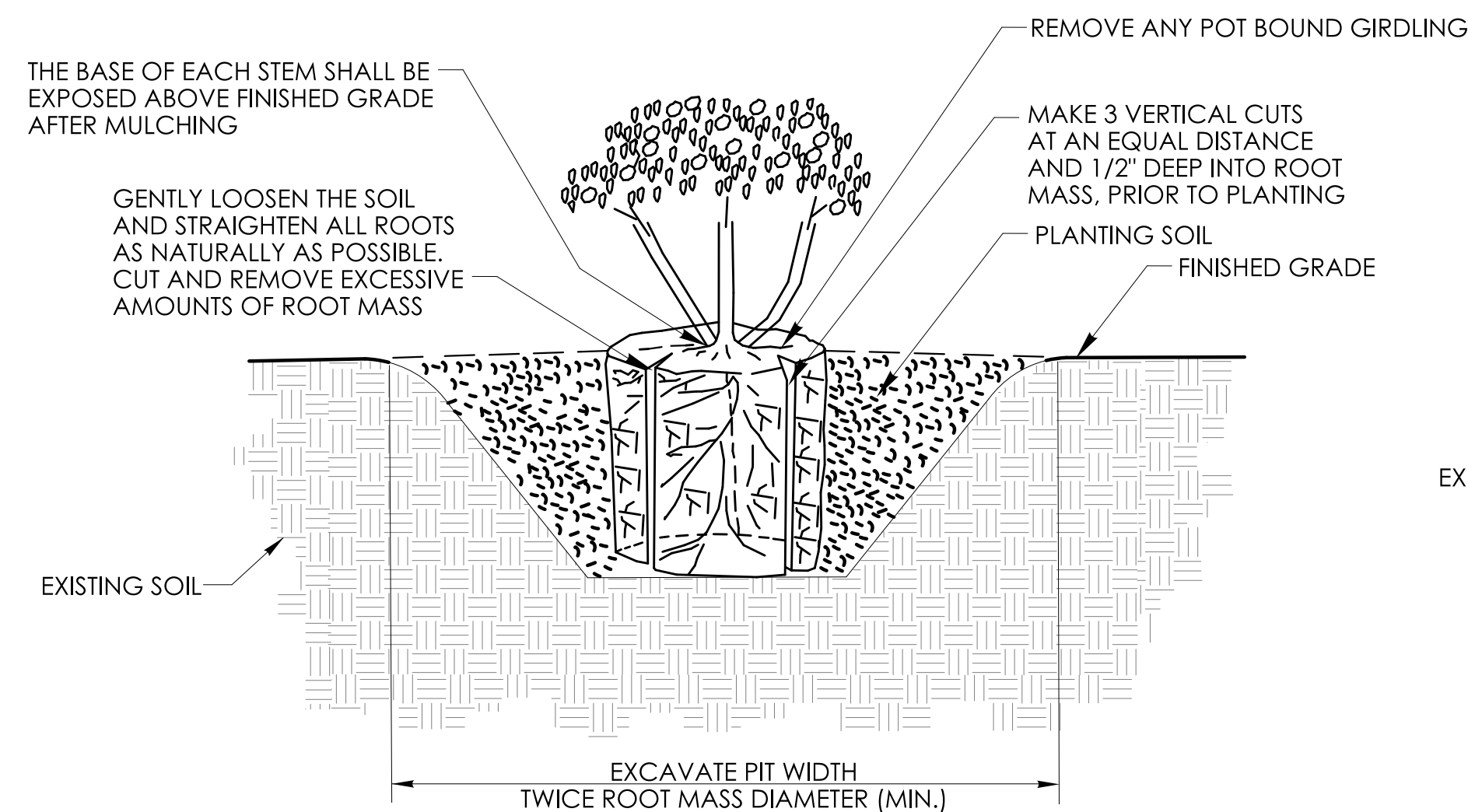
NOTE: IF WIRE BASKETS ARE USED, THE CONTRACTOR SHALL CUT ALL OF THE HORIZONTAL WIRES IN THE TOP $\frac{2}{3}$ OF THE ROOT BALL AND BEND DOWN OR REMOVE THE TOP $\frac{1}{3}$ OF THE WIRE BASKET



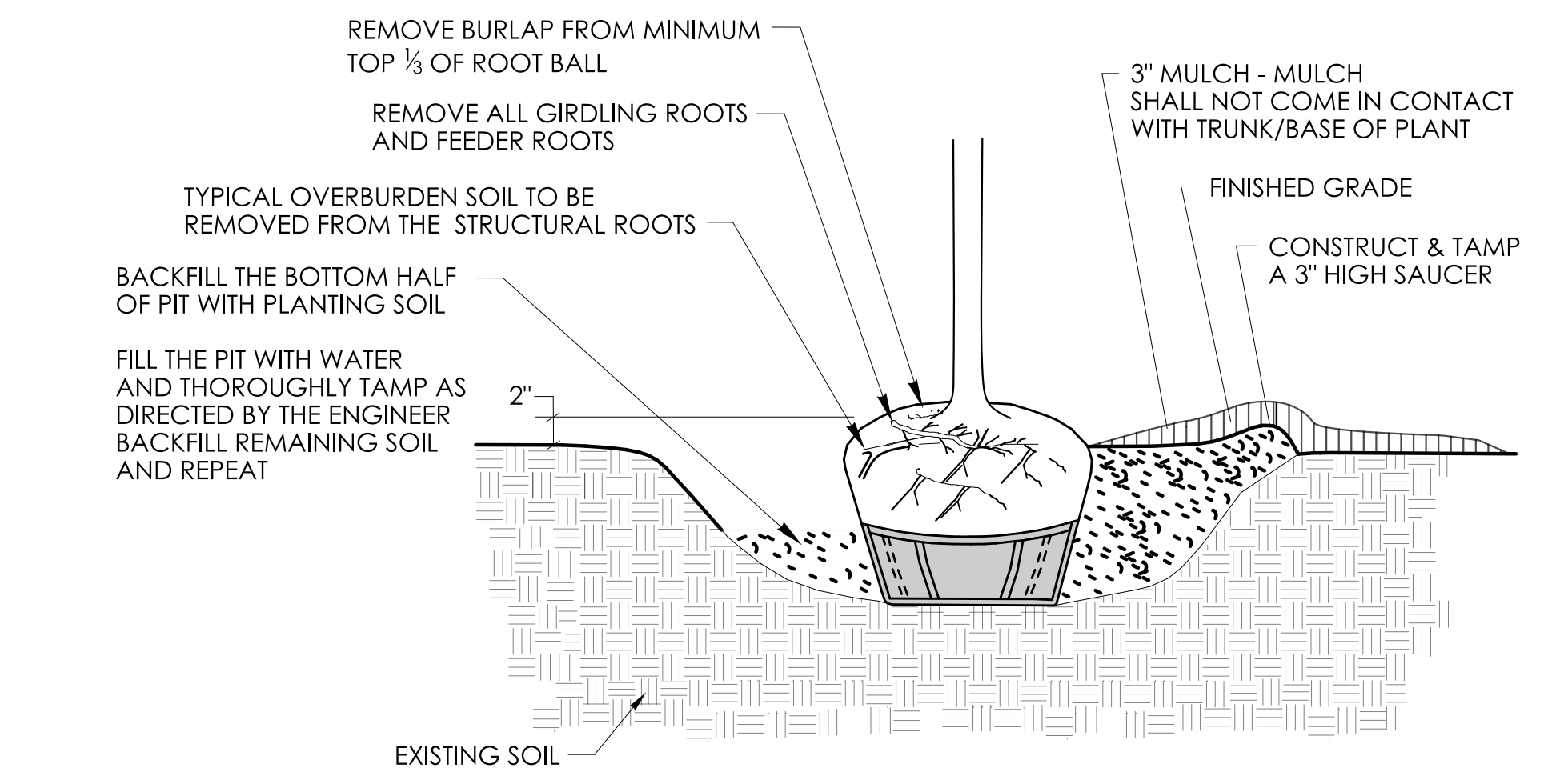
HEAVY CLAY PLANTINGS



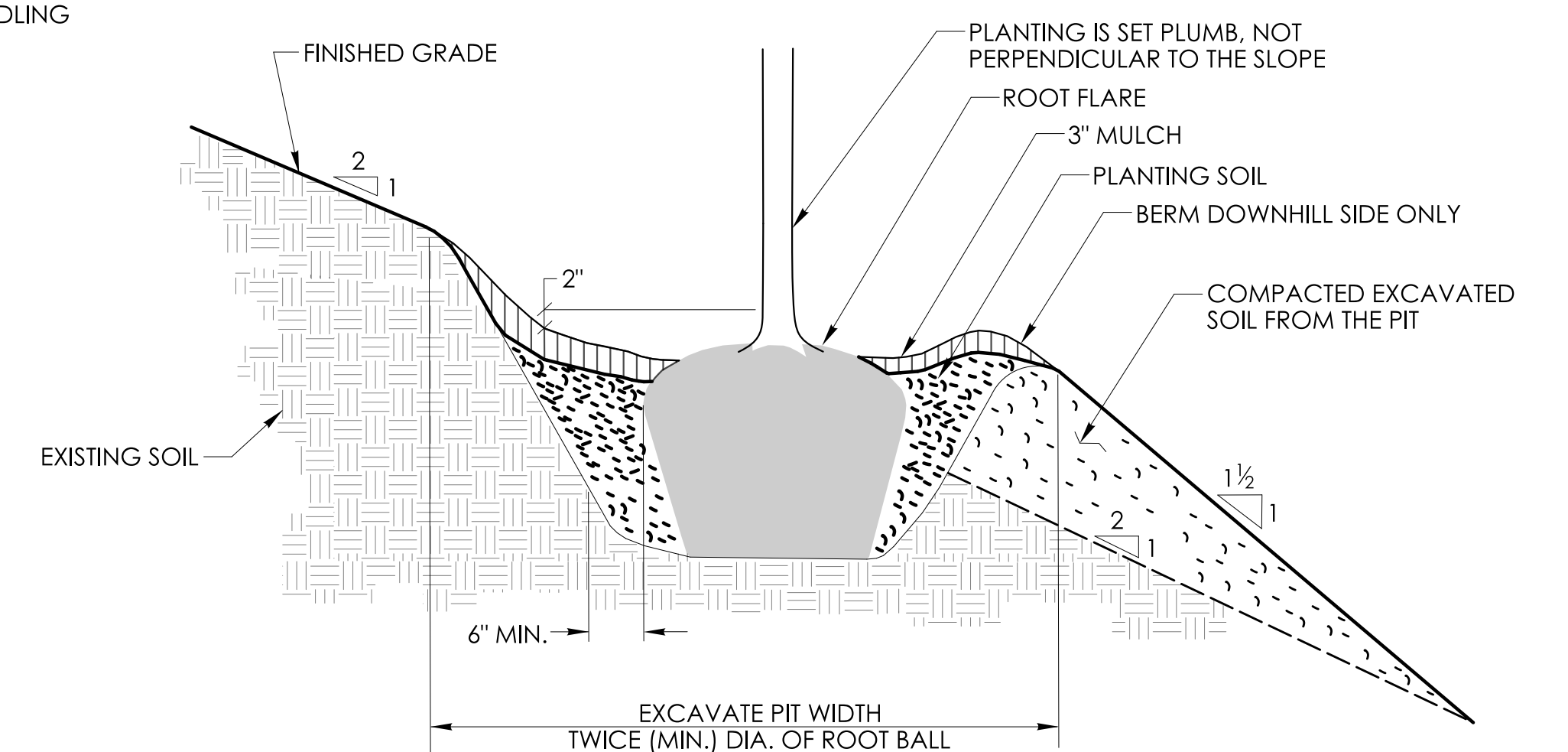
VINE PLANTING



CONTAINER GROWN PLANTING

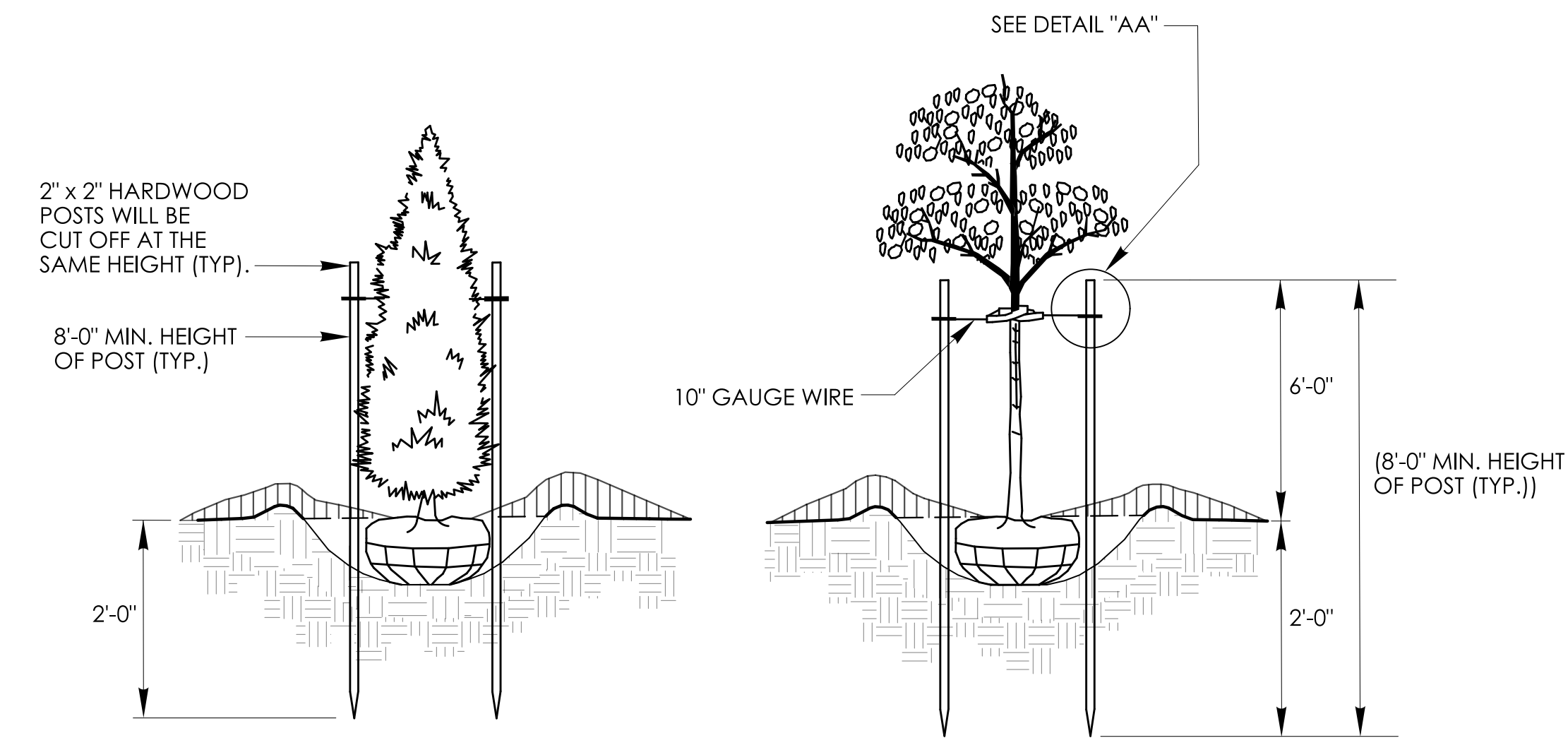


BACKFILL AND MULCH FOR PLANTING

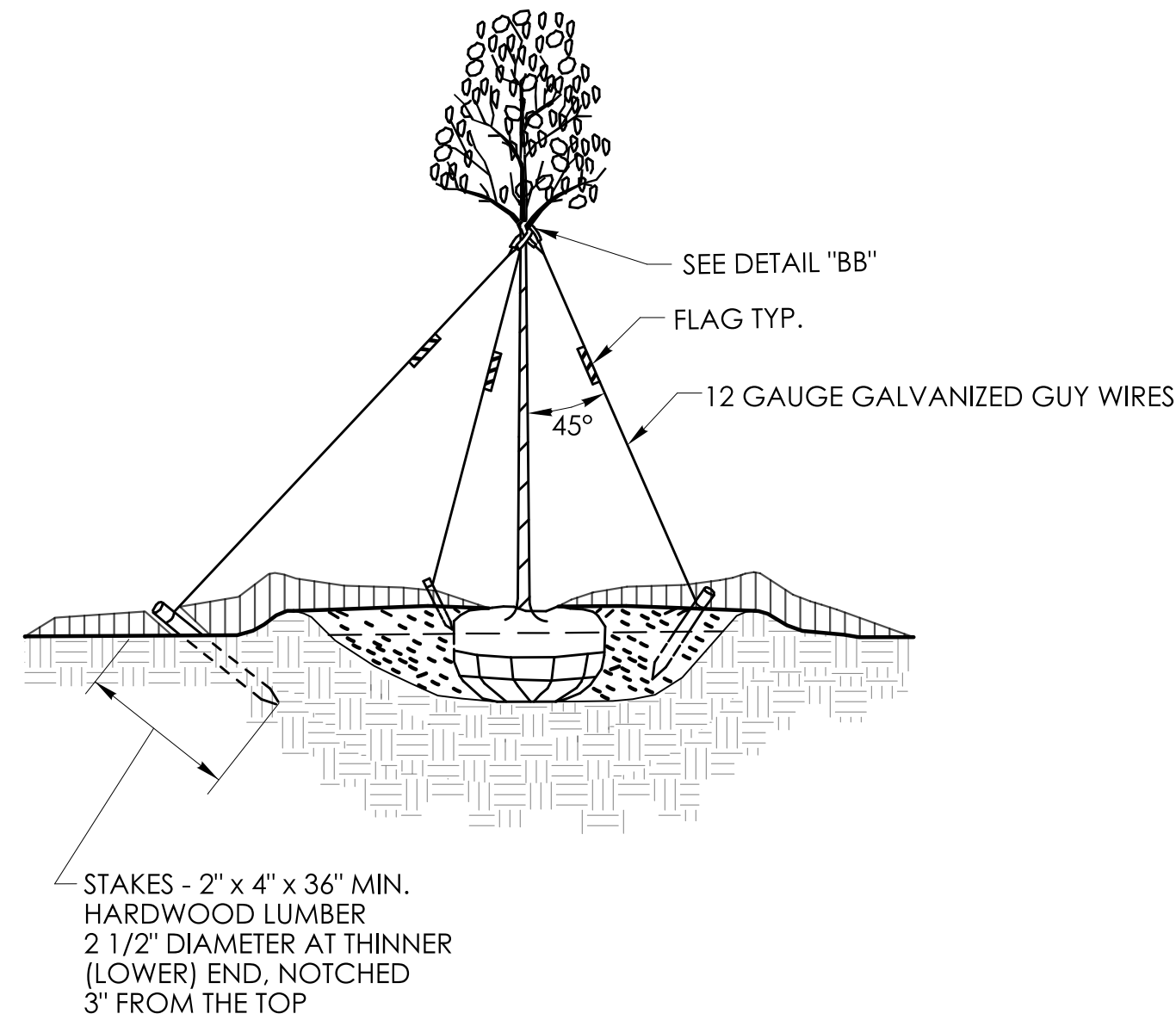


SLOPE PLANTING

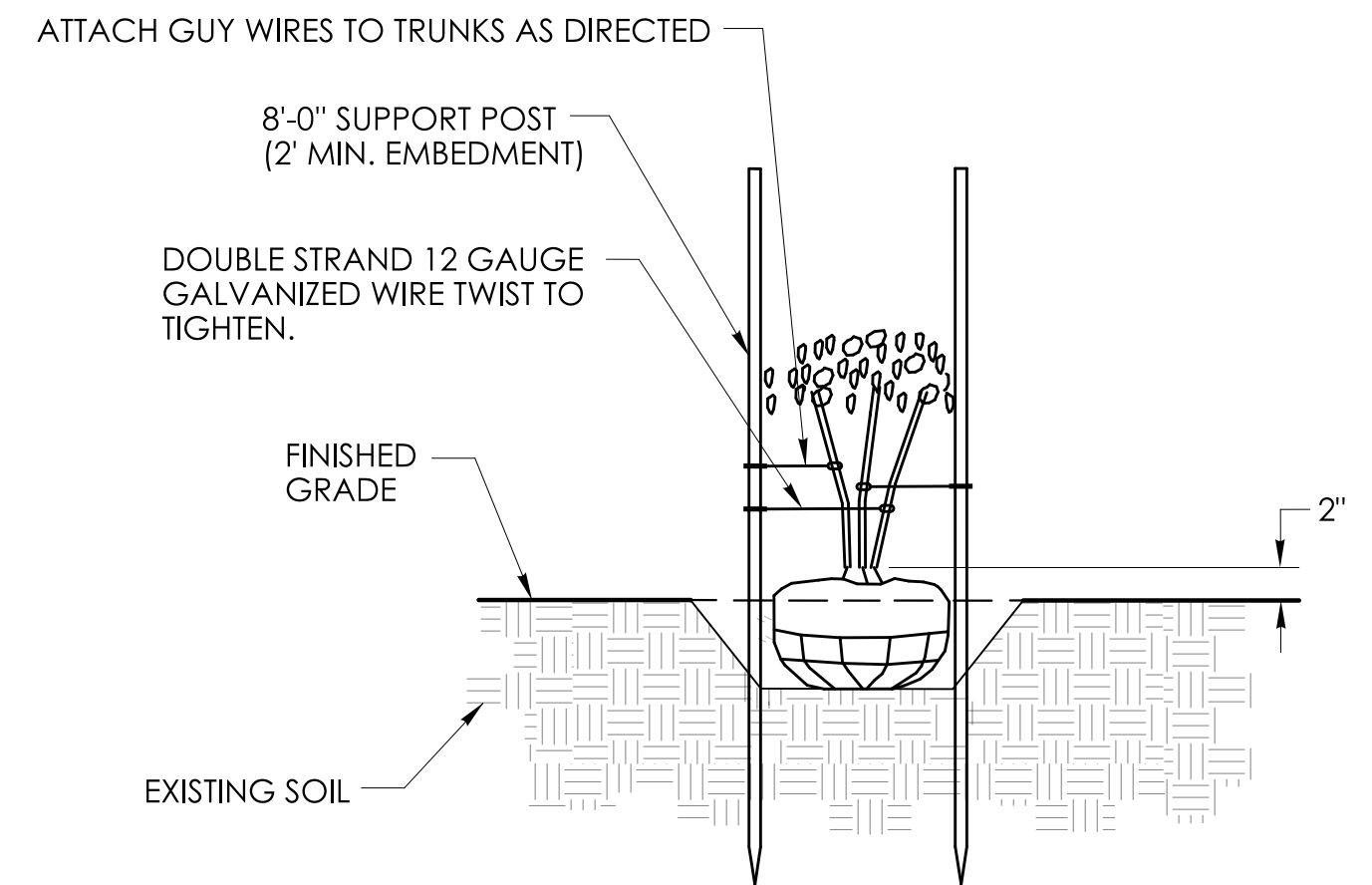
<div> <div>NOT TO SCALE</div> </div>	<div>SIGNATURE BLOCK:</div> <div> <div>OFFICE OF ENGINEERING</div> <div>2800 BERLIN TURNPIKE</div> <div>NEWINGTON, CT 06111</div> </div>	<div>SUBMITTED BY:</div> <div> <div>  </div> <div> <div>Digitally signed by</div> <div>Leo Fontaine, P.E.</div> <div>Date: 2022.09.27 15:19:40-04'00'</div> </div> </div>	<div>APPROVED BY:</div> <div> <div>  </div> <div> <div>Digitally signed by</div> <div>Michael</div> <div>Date: 2022.11.08 15:19:40-04'00'</div> </div> </div>	<div> <div>STATE OF CONNECTICUT</div> <div>DEPARTMENT OF TRANSPORTATION</div> <div>  </div> </div>	<div> <div>CTDOT</div> <div>STANDARD SHEET</div> </div>	<div>STANDARD SHEET TITLE:</div> <div>LANDSCAPE PLANTING</div>	<div>STANDARD SHEET NO.:</div> <div>HW- 949_01a</div>



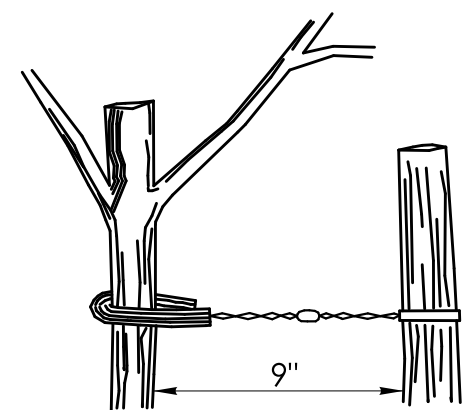
TWO STAKES



THREE GUYS AND STAKES



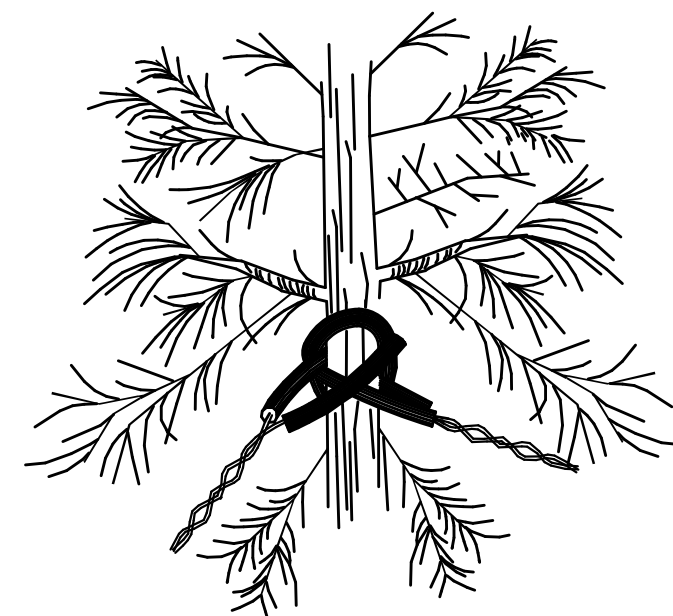
STAKING FOR MULTI-STEMMED TREES



DETAIL "AA"
POST AND GUY WIRE

ANCHOR TREE TO POST(S) USING
GALVANIZED GUY WIRE AND 3/8" MIN.
INSIDE DIAMETER RUBBER HOSE

GUY WIRES SHOULD BE PLACED AT
LEAST HALF WAY UP THE TRUNK



DETAIL "BB"
GUY WIRES AROUND TRUNK

ANCHOR TREE TO STAKES USING
GALVANIZED GUY WIRES AND 3/8" MIN.
INSIDE DIAMETER RUBBER HOSE

GUY WIRES SHOULD BE PLACED AT
LEAST HALF WAY UP THE TRUNK

GENERAL NOTES:

1. THE CONTRACTOR SHALL SUBMIT A STAKING PLAN FOR APPROVAL.
2. THE CONTRACTOR SHALL SUBMIT THE USE OF ANY OTHER MATERIALS FOR APPROVAL.
3. USE 3 POSTS FOR STAKING TREES 3" CALIPER OR GREATER AND EVERGREEN TREES 8' HIGH OR GREATER
4. USE DOUBLE STRAND 12 GAUGE GALVANIZED GUY WIRE FOR DECIDUOUS TREES GREATER THAN OR EQUAL TO 3" CALIPER AND USE DOUBLE STRAND 10 GAUGE GALVANIZED GUY WIRE FOR EVERGREEN TREES GREATER THAN OR EQUAL TO 8" CALIPER