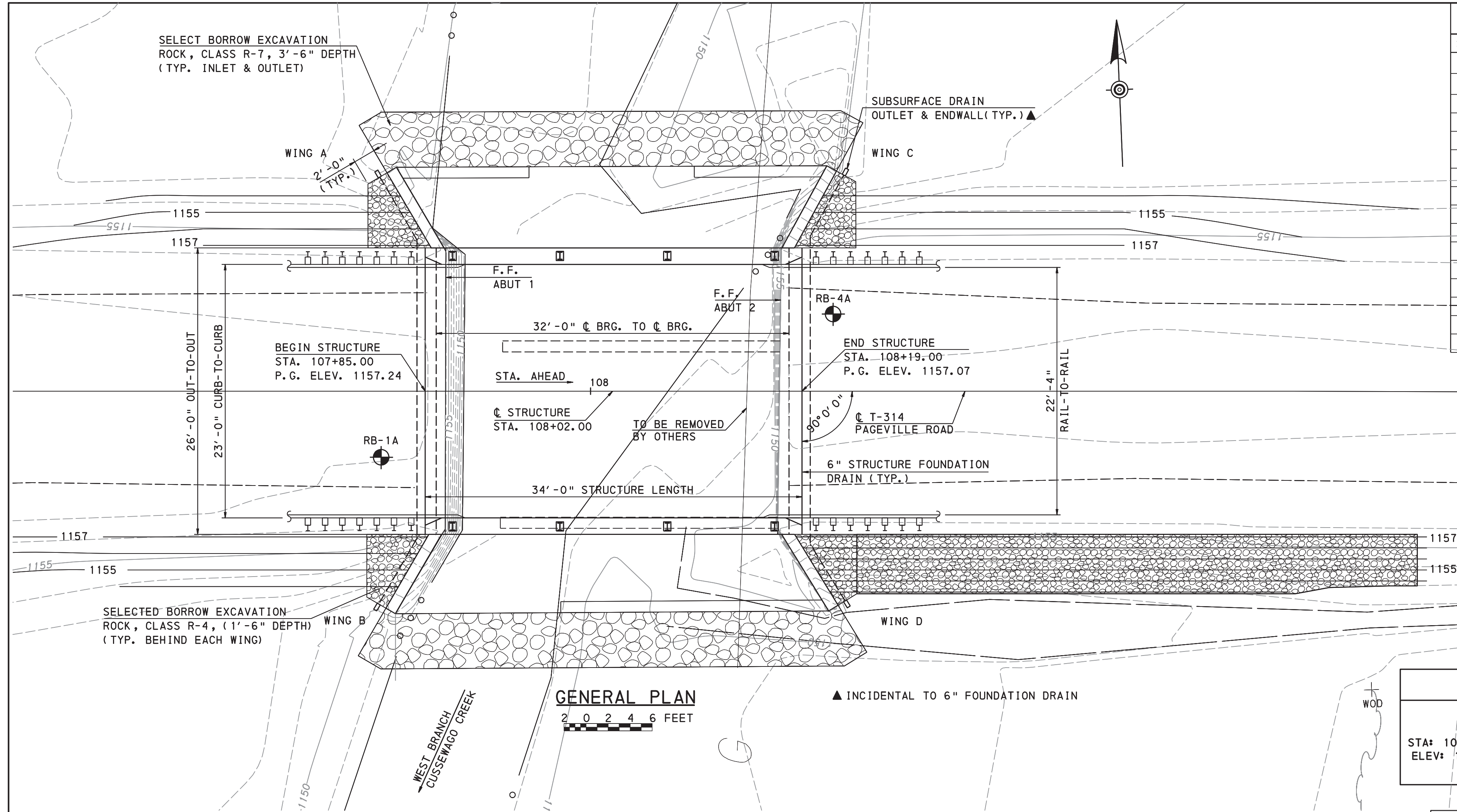


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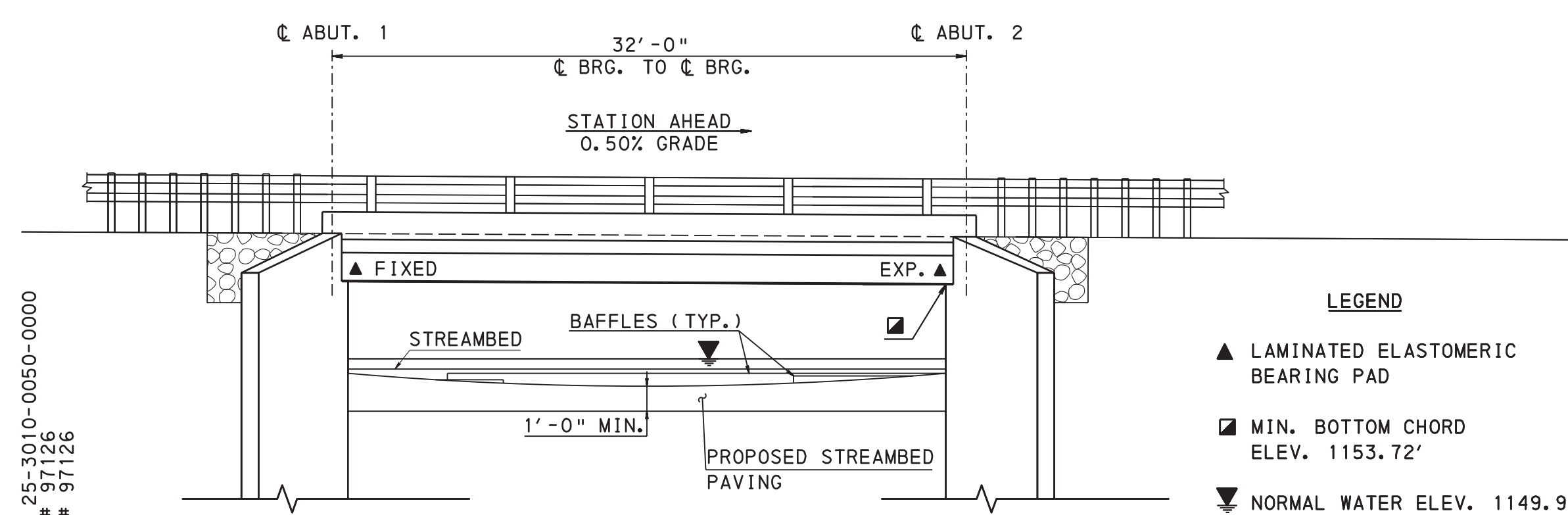
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INDEX OF DRAWINGS	
SHEET NO.	TITLE
1	GENERAL PLAN
2	QUANTITIES & GENERAL NOTES
3	TYPICAL SECTION & DECK ELEVATIONS
4	REMOVAL DETAILS
5	ABUTMENT ELEVATIONS
6	ABUTMENT 1 DETAILS
7	ABUTMENT 2 DETAILS
8	STREAMBED PAVING DETAILS
9	FLEXBEAM MODULE DETAILS - 1
10	FLEXBEAM MODULE DETAILS - 2
11	FLEXBEAM MODULE DETAILS - 3
12	BEARING PADS, SOLE PLATES, & ANCHOR BOLTS
13	FOUNDATION DRAIN & WATERPROOFING DETAILS
14	SOIL BORINGS
15	SOIL BORINGS
16	SOIL BORINGS



GENERAL PLAN
 2 0 2 4 6 FEET



ELEVATION
 2 0 2 4 6 FEET

- LEGEND**
- ▲ LAMINATED ELASTOMERIC BEARING PAD
 - MIN. BOTTOM CHORD ELEV. 1153.72'
 - ▼ NORMAL WATER ELEV. 1149.9

SUPPLEMENTAL DRAWINGS		
DESCRIPTION	DWG. NO.	APP. DATE
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	6-1-10
BACKFILL AT STRUCTURES	RC-12M	2-8-19
GUIDE RAIL TO BRIDGE BARRIER TRANSITIONS	RC-50M	2-8-19
PA TYPE 10M BRIDGE BARRIER	BC-709M	1-31-19
ANCHOR SYSTEMS	BC-734M	1-31-19
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	1-31-19
BRIDGE DRAINAGE	BC-751M	1-31-19
CONCRETE DECK SLAB DETAILS	BC-752M	9-30-16
BEARINGS	BC-755M	1-31-19
TYPICAL WATERPROOFING AND EXPANSION JOINT DETAILS	BC-788M	1-31-19

Mark	Description	By	Chk'd	Recm'd	Date
REVISIONS					

S.R. 3010 PREVIOUSLY KNOWN AS L.R. 25102

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
 ERIE COUNTY
 S.R. 3010, SEC. B00
 SEGMENT 0050, OFFSET 0000
 STA. 108+02.00
 OVER WEST BRANCH CUSSEWAGO CREEK
 SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
 GENERAL PLAN

PREPARED BY
 DISTRICT 1-0
 BRIDGE UNIT
 MARK A. NICHOLSON
 REGISTERED PROFESSIONAL ENGINEER
 No. 062279

RECOMMENDED
 Mark A. Nicholson, P.E.
 DISTRICT BRIDGE ENGINEER

SHEET 1 OF 16
 & SUPPLEMENTAL DRAWINGS
 S - 39096

DES: HWW DWG: HWW/WMJ CKD: MPA/EJK

BMS# 25-3010-0050-0000
 ECMS# 97126
 MPMS# 97126

D-9002 CADD (02-30) REVISED (10-04) PLOTTED: 13-MAY-2020 08:57

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GENERAL NOTES

- SUPERSTRUCTURE DIMENSIONS SHOWN ARE FOR A NORMAL TEMPERATURE OF 68° F.
- ALL DIMENSIONS SHOWN ARE HORIZONTAL, EXCEPT AS NOTED.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE & ADJACENT FACILITIES/STRUCTURES IN THE FIELD (PRIOR TO FABRICATION & CONSTRUCTION) AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION.
- PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE PENNSYLVANIA DEPT. OF TRANSPORTATION SPECIFICATIONS, PUBLICATION 408, AASHTO/AWS D1.5 BRIDGE WELDING CODE, 2008. INCLUDING CURRENT SUPPLEMENTS, AND CONTRACT SPECIAL PROVISIONS.
- THE INFORMATION SHOWN ON THE PLANS FOR THE EXISTING BRIDGE IS NOT PART OF THE PLANS, PROPOSAL, OR CONTRACT AND IS NOT TO BE CONSIDERED A BASIS FOR THE COMPUTATION OF THE UNIT PRICES USED FOR BIDDING PURPOSES. THERE IS NO EXPRESSED OR IMPLIED AGREEMENT THAT THE INFORMATION IS CORRECTLY SHOWN. THE BIDDER IS NOT TO RELY ON THIS INFORMATION, BUT IS TO ASSUME THE POSSIBILITY THAT CONDITIONS AFFECTING THE COST AND/OR QUANTITIES OF WORK TO BE PERFORMED MAY DIFFER FROM THOSE INDICATED.
- CONSTRUCTION DETAILS OTHER THAN THOSE SHOWN SHALL CONFORM TO THE STANDARD DRAWINGS.
- PROVIDE 2 IN. CONCRETE COVER ON REINFORCEMENT BARS, EXCEPT AS NOTED.
- RAKE FINISH ALL HORIZONTAL CONSTRUCTION JOINTS, EXCEPT AS INDICATED.
- VERIFY ALL DIMENSIONS AND GEOMETRY OF THE EXISTING STRUCTURE IN THE FIELD AS NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION.
- BRIDGE IS NOT WEIGHT RESTRICTED. SEE PUBLICATION 408 105.17 FOR CONSTRUCTION LOADING LIMITS.
- PREVENT ANY REMOVAL DEBRIS OR CONSTRUCTION DEBRIS FROM ENTERING WEST BRANCH CUSSEWAGO CREEK.
- NOTIFY THE REGIONAL HEADQUARTERS OF THE FISH COMMISSION PRIOR TO CONSTRUCTION AND COOPERATE WITH FISH COMMISSION DURING CONSTRUCTION. (NORTHWEST REGIONAL HEADQUARTERS, 11528 STATE HWY 98 MEADVILLE, PA 16335, 814-336-2426)

DESIGN SPECIFICATIONS

- AASHTO DESIGN DIVISION, LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, 2014 AND AS SUPPLEMENTED BY DESIGN MANUAL PART 4, APRIL 2015 EDITION (INCLUDING REVISIONS).
- PROVIDE STRUCTURAL STEEL AS INDICATED, CONFORMING TO ASTM 50CR, EXCEPT AS NOTED.
- LIVE LOAD DISTRIBUTION TO GIRDERS IS BASED UPON DESIGN MANUAL, PART 4 DISTRIBUTION FACTOR METHOD.

DESIGN LIVE LOADS

- PHL-93 OR P-82 (204 kip PERMIT LOAD).
- FATIGUE DESIGN IS BASED UPON THE FOLLOWING: STEEL STRUCTURES: ADTT 3 (2018).

DEAD LOADS

- INCLUDES 40 LBS. PER SQ. FT. FOR FUTURE WEARING SURFACE ON THE DECK SLAB.

CONCRETE NOTES

- USE CLASS AAP CEMENT CONCRETE OPTIMIZED AGGREGATE MIX IN PRECAST FLEXBEAM MODULES.
- USE CLASS AA CEMENT CONCRETE FOR BARRIER & ALL CHEEKWALLS.
- USE CLASS A CEMENT CONCRETE FOR ABUTMENT CAPS & STREAMBED PAVING.
- USE ULTRA HIGH PERFORMANCE CONCRETE IN MODULE JOINTS.
- PLACE CHEEKWALL CONCRETE AFTER FLEXBEAM MODULES ARE SET AND CLOSURE POURS ARE COMPLETED.
- A HIGHER CLASS CONCRETE MAY BE SUBSTITUTED FOR A LOWER CLASS CONCRETE AT NO ADDITIONAL COST TO THE DEPARTMENT.
- CHAMFER EXPOSED CONCRETE EDGES 1" X 1" EXCEPT AS NOTED.
- USE REMOVABLE FORMS TO CONSTRUCT THE UHPC JOINT CLOSURE POUR.
- DECK SLAB THICKNESS INCLUDES 1/2" INTEGRAL WEARING SURFACE.
- APPLY PENETRATING SEALER (FOR BRIDGE SUPERSTRUCTURE) TO THE TOP, FRONT FACE AND ENDS OF THE CURBS ON THE DECK.
- APPLY PENETRATING SEALER (FOR BRIDGE SUBSTRUCTURE) TO THE TOP, FRONT FACE, BACK FACE, AND ENDS OF THE ABUTMENT CAPS.

REINFORCEMENT

- USE EPOXY-COATED REINFORCEMENT BARS IN ALL LOCATIONS EXCEPT AS NOTED.
- PROVIDE GRADE 60 REINFORCING STEEL BARS THAT MEET THE REQUIREMENTS OF ASTM A615/A 615M-96a. DO NOT WELD (GRADE 60) REINFORCING STEEL BARS UNLESS SPECIFIED. (GRADE 40) REINFORCING STEEL BARS MAY BE SUBSTITUTED WITH A PROPORTIONAL INCREASE IN CROSS SECTIONAL AREA, IF APPROVED BY THE CHIEF BRIDGE ENGINEER. DO NOT USE RAIL STEEL A618/A 616M REINFORCING BARS IN BRIDGE ABUTMENTS, SHEAR BLOCKS, CURBS OR WHERE BENDING OR WELDING OF THE REINFORCEMENT BAR IS INDICATED.
- WELDING OF REINFORCEMENT BARS DURING FABRICATION OR CONSTRUCTION IS NOT PERMITTED UNLESS SPECIFIED OR APPROVED BY THE CHIEF ENGINEER.
- GALVANIZED REINFORCING STEEL BARS MAY BE SUBSTITUTED FOR EPOXY COATED REINFORCING STEEL BARS AT NO ADDITIONAL COST TO THE DEPARTMENT.

MISCELLANEOUS

- REPAIR ANY AREAS DAMAGED BEYOND THE REMOVAL LIMITS AT NO EXPENSE TO THE DEPARTMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY FORMING NECESSARY FOR PROPER FIT OF THE PROPOSED CONSTRUCTION.
- EXISTING PLANS: NONE AVAILABLE

UTILITY NOTES

- COORDINATE, LOCATE, AND CONDUCT ALL WORK RELATED TO PUBLIC AND PRIVATE UTILITIES IN ACCORDANCE WITH PUBLICATION 408, SECTION 105.06 AND 107.12.
- VERIFY AND LOCATE ALL EXISTING UTILITIES PRIOR TO STARTING WORK AND CONDUCT OPERATIONS IN A MANNER WHICH ENSURES THE UTILITIES WILL NOT BE DISTURBED OR ENDANGERED AND ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE TO UTILITIES DURING CONSTRUCTION. THE DEPARTMENT DOES NOT ASSUME RESPONSIBILITY FOR REIMBURSEMENT, PARTICIPATION IN DESIGN AND/OR REVISIONS OR LIABILITY FOR ACCURACY OF TYPE, SIZE AND LOCATION OF ANY UTILITY. COORDINATE THE REQUIREMENTS FOR PROTECTION AND/OR RELOCATION OF UTILITIES WITH THE UTILITY OWNER PRIOR TO STARTING WORK.

APPROXIMATE QUANTITIES - BRIDGE STRUCTURE DESIGNED

ITEM NO.	ITEM	UNIT	TOTAL	LGD.
8120-0001	BRIDGE SUPERSTRUCTURE, AS DESIGNED, S-39096			(A)
	CLASS 3 EXCAVATION	CY	74	
	SELECTED BORROW EXCAVATION ROCK, CLASS R-4	CY	20	
	SELECTED BORROW EXCAVATION, COARSE AGGREGATE, NO. 57	CY	18	▲
	SELECTED BORROW EXCAVATION ROCK, CLASS R-7	CY	58	
	ELASTOMERIC MEMBRANE WATERPROOFING SYSTEM INSTALLED ON OTHER SURFACES	SY	24	(A)
	ELASTOMERIC MEMBRANE WATERPROOFING SYSTEM INSTALLED ON BRIDGE DECK	SY	87	(A)
	CLASS A CEMENT CONCRETE	CY	24	
	CLASS AA CEMENT CONCRETE	CY	2	
	6" STRUCTURE FOUNDATION DRAIN	LF	82	
	STRUCTURE BACKFILL	CY	38	
	ULTRA HIGH PERFORMANCE CONCRETE	CY	4	(A)
	DOWEL HOLES, 18" DEPTH, EPOXY GROUT	EACH	44	(A)
	FABRICATED STRUCTURAL STEEL	LB	16,137	
	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE) SILANE SEALER	SY	57	(A)
	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUBSTRUCTURE) SILANE SEALER	SY	46	(A)
	LAMINATED NEOPRENE BEARING PAD	EACH	20	
	PRECAST FLEXBEAM MODULE	EACH	5	(A)
	TYPE 10M BRIDGE BARRIER	LF	68	
1002-0053	REINFORCEMENT BARS, EPOXY COATED	LB	1,882	
1018-0050	REMOVAL OF PORTION OF EXISTING BRIDGE	LS	1	(A)

(A) - SEE SPECIAL PROVISIONS

▲ - COST OF GEOTEXTILE, CLASS 1 IS INCIDENTAL TO THE COST OF THE NO.57 COARSE AGGREGATE, SEE PUB. 408 SECTION 1001.3(c) & (d)

■ - EXCLUDES FABRICATED STRUCTURAL STEEL

MISCELLANEOUS NOTES

PENNDOT SURVEY BOOK: NO.20475, DATED 2/27/19.

BENCH MARKS:

BENCHMARK #1: SQ CUT HEADWALL 16' LT, STA. 106+60.
 BENCHMARK #2: MAG NAIL IN 18" ASPEN 27' RT, STA. 108+56.
 BENCHMARK #3: PDH DISK 13' RT, STA. 107+86.

ABBREVIATIONS:

R.F. - REAR FACE
 F.F. - FRONT FACE
 E.F. - EACH FACE
 W.P. - WORK POINT
 ELEV. - ELEVATION
 BOT. - BOTTOM
 MAX. - MAXIMUM
 MIN. - MINIMUM
 SPA. - SPACING
 TYP. - TYPICAL
 CONSTR. JT. - CONSTRUCTION JOINT
 STA. - STATION
 P.C.P. - PREFORMED CELLULAR POLYSTYRENE

THE EXISTING STRUCTURAL MEMBERS CONTAIN LEAD PAINT AND OTHER TOXIC MATERIALS, BASED ON LABORATORY TESTING:
 LEAD (Pb): 340600 mg/Kg
 CHROMIUM (Cr): 1080 mg/Kg
 ARSENIC (As): NOT DETECTED
 CADMIUM (Cd): NOT DETECTED

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

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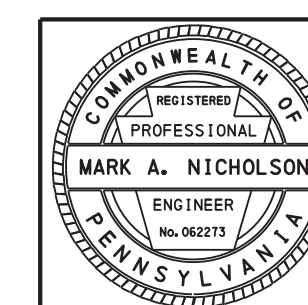
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 DEPARTMENT OF TRANSPORTATION

ERIE COUNTY
S.R. 3010, SEC. B00
SEGMENT 0050, OFFSET 0000
STA. 108+02.00
 OVER WEST BRANCH CUSSEWAGO CREEK
 SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
QUANTITIES & GENERAL NOTES

SHEET 2 OF 16

RECOMMENDED 5/18/2020

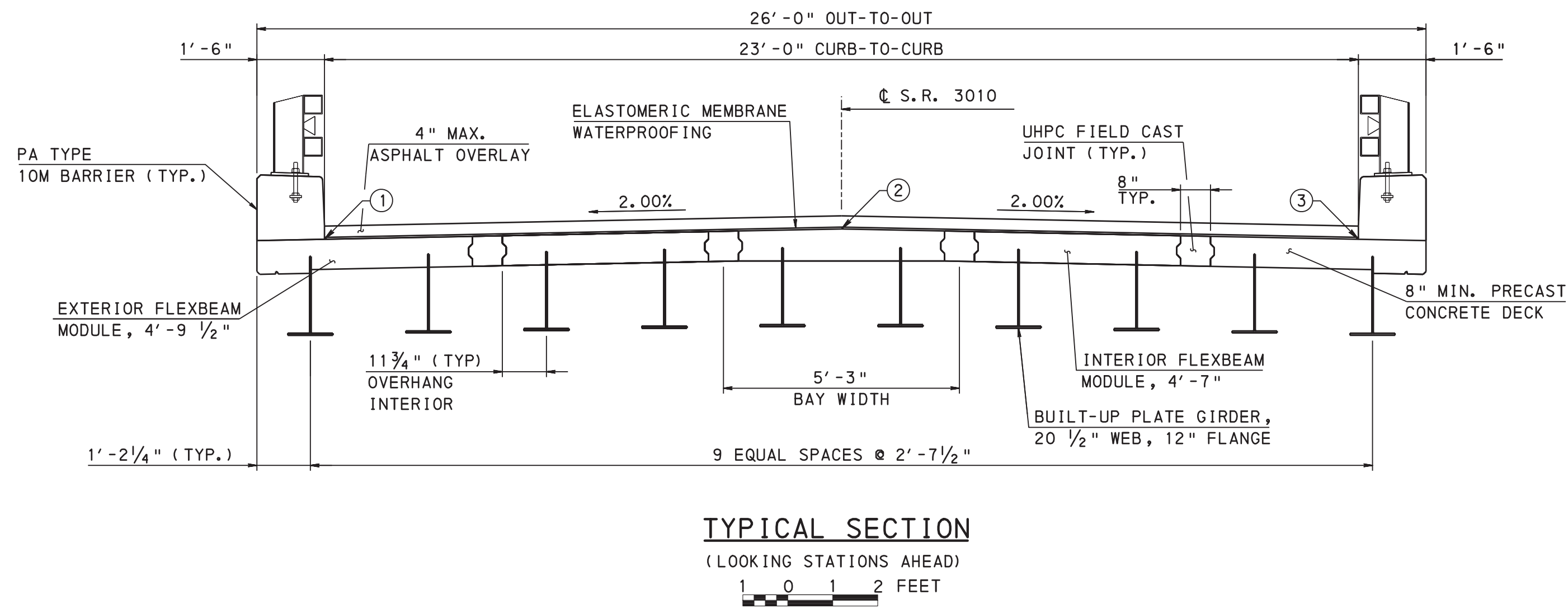
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DES: HWW DWG: HWW CKD: MPA/EJK

D-9002 CADD (02-30) REVISED (10-04) PLOTTED: 13-MAY-2020 08:57

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STRUCTURE DATA

EXISTING STRUCTURE	PROPOSED STRUCTURE
STATION: 108+02.00	STATION: 108+02.00
TYPE: STEEL I-BEAM	TYPE: FLEX BEAM
NORMAL CLEAR SPAN: 30'-4"±	NORMAL CLEAR SPAN: 30'-4"±
SKEW: 90°	SKEW: 90°
EXISTING CURB TO CURB: 22'-2"	PROPOSED CURB TO CURB: 23'-0"
EXISTING OUT TO OUT: 25'-0"	PROPOSED OUT TO OUT: 26'-0"
AVG. UNDERCLEARANCE: 5'-0"	AVG. UNDERCLEARANCE: 5'-0"

TOP OF CONCRETE DECK ELEVATIONS			
STATION	PT. ①	PT. ②	PT. ③
107+85.00	1156.68	1156.91	1156.68
107+86.00	1156.68	1156.91	1156.68
107+90.00	1156.66	1156.89	1156.66
107+95.00	1156.63	1156.86	1156.63
108+00.00	1156.61	1156.84	1156.61
108+02.00	1156.60	1156.83	1156.60
108+05.00	1156.58	1156.81	1156.58
108+10.00	1156.56	1156.79	1156.56
108+15.00	1156.53	1156.76	1156.53
108+18.00	1156.52	1156.75	1156.52
108+19.00	1156.52	1156.75	1156.52

ELEVATIONS GIVEN AT THE FIRST AND LAST STATIONS LISTED FOR EACH POINT ARE LOCATED AT BEGIN STRUCTURE AND END STRUCTURE.

RATING SUMMARY WITH FUTURE WEARING SURFACE

		FLEX BEAM					
		H20	HS20	ML-80	PHL-93	P-82	TK527
INVENTORY RATING (IR)	DISTRIBUTION FACTOR	0.282	0.282	0.282	0.282	N/A	0.282
	LOCATION (ft)	14.400	12.800	14.400	16.000	N/A	14.400
	LIMIT STATE	STR-I	STR-I	STR-I	STR-I	N/A	STR-I
RATING FACTOR		4.03M	3.45M	2.50M	2.15M	N/A	2.73M
OPERATING RATING (OR)	DISTRIBUTION FACTOR	0.282	0.282	0.282	0.282	0.282	0.282
	LOCATION (ft)	14.400	12.800	14.400	16.000	14.400	14.400
	LIMIT STATE	STR-II	STR-II	STR-II	STR-IA	STR-II	STR-II
RATING FACTOR		5.23M	4.48M	3.24M	2.79M	2.37M	3.54M
MAXIMUM FACTORED MOMENT RESISTANCE (kip-ft)		798.69		SPAN LENGTH (ft) = 32.00			
LOCATION (ft)		16.00					
MAXIMUM FACTORED SHEAR RESISTANCE (kips)		184.88					
LOCATION (ft)		0.00					
CRITICAL MEMBER: EXTERIOR BEAM							

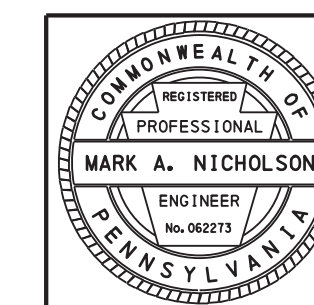
SYMBOL DESIGNATION FOR RATING FACTORS:
M - MOMENT RATING FACTOR CONTROLS
V - SHEAR RATING FACTOR CONTROLS

Mark	Description	By	Chk'd.	Recm'd.	Date
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SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
TYPICAL SECTION & DECK ELEVATIONS



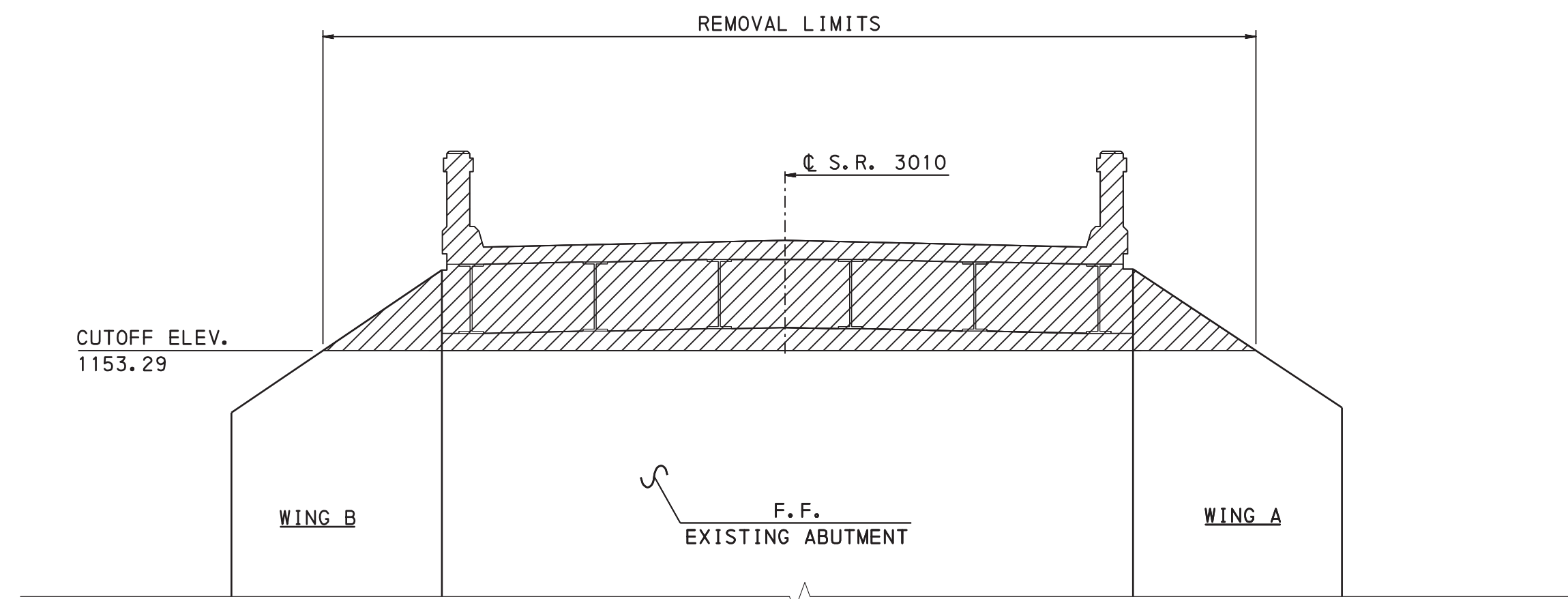
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SHEET 3 OF 16

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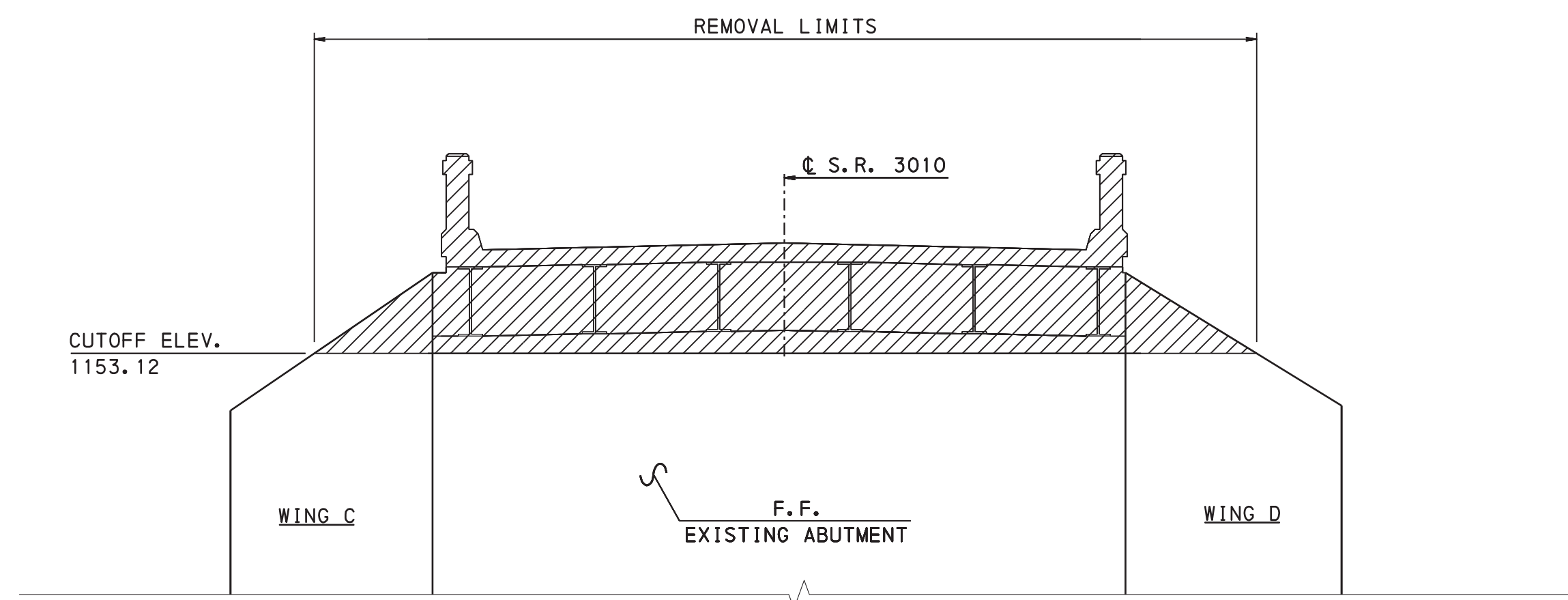
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ABUTMENT 1 REMOVAL SECTION

2 0 2 4 FEET

(LOOKING STA. BACK)



ABUTMENT 2 REMOVAL SECTION

2 0 2 4 FEET

(LOOKING STA. AHEAD)

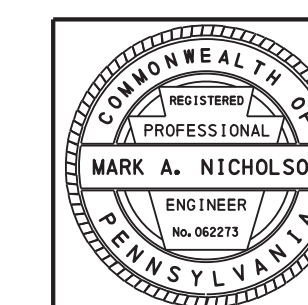


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REMOVAL DETAILS



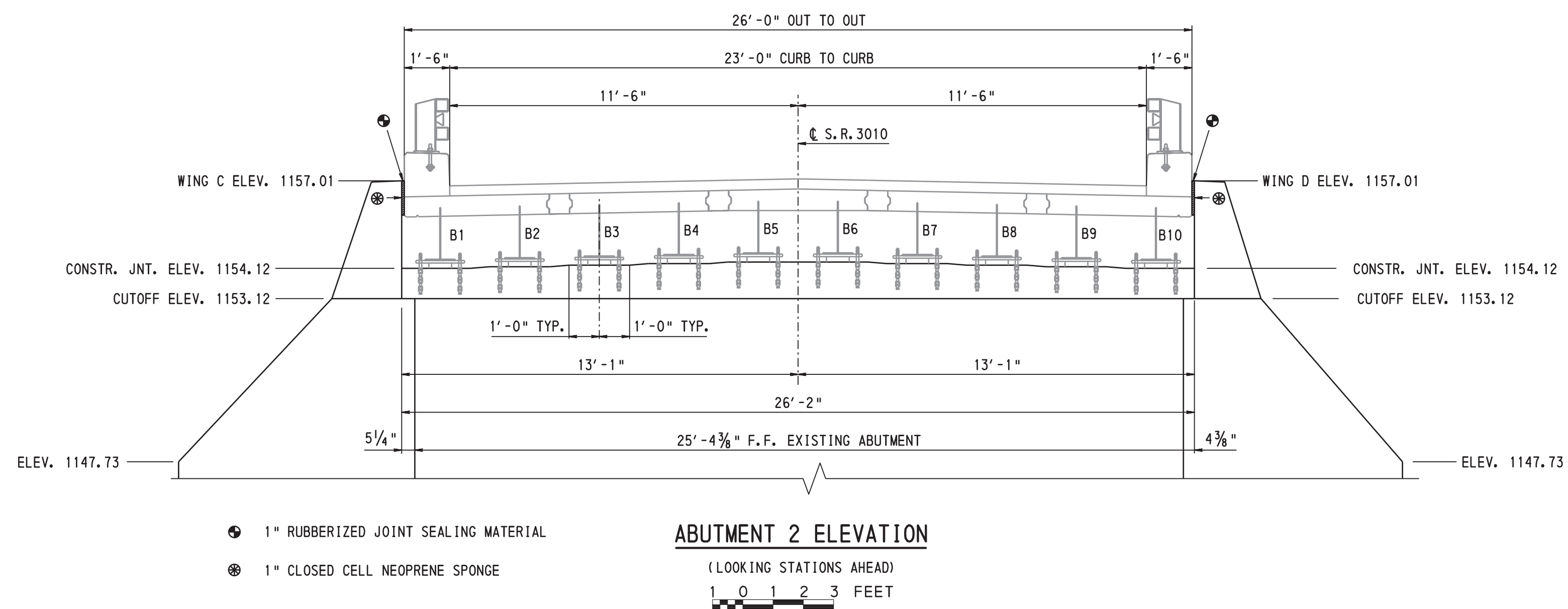
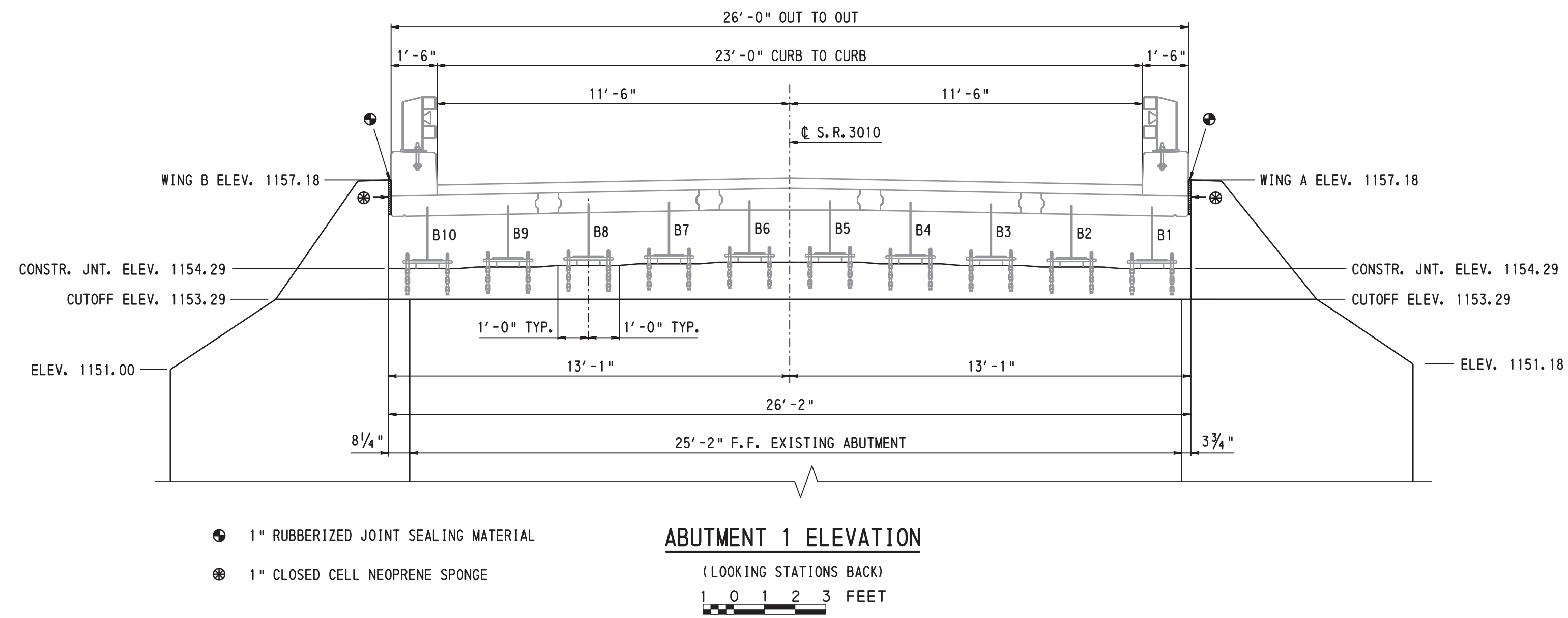
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SHEET 4 OF 16

S - 39096

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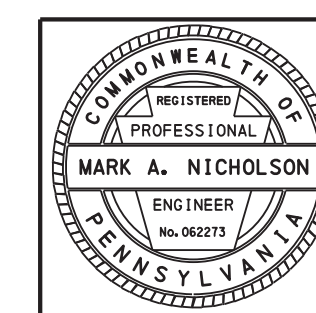
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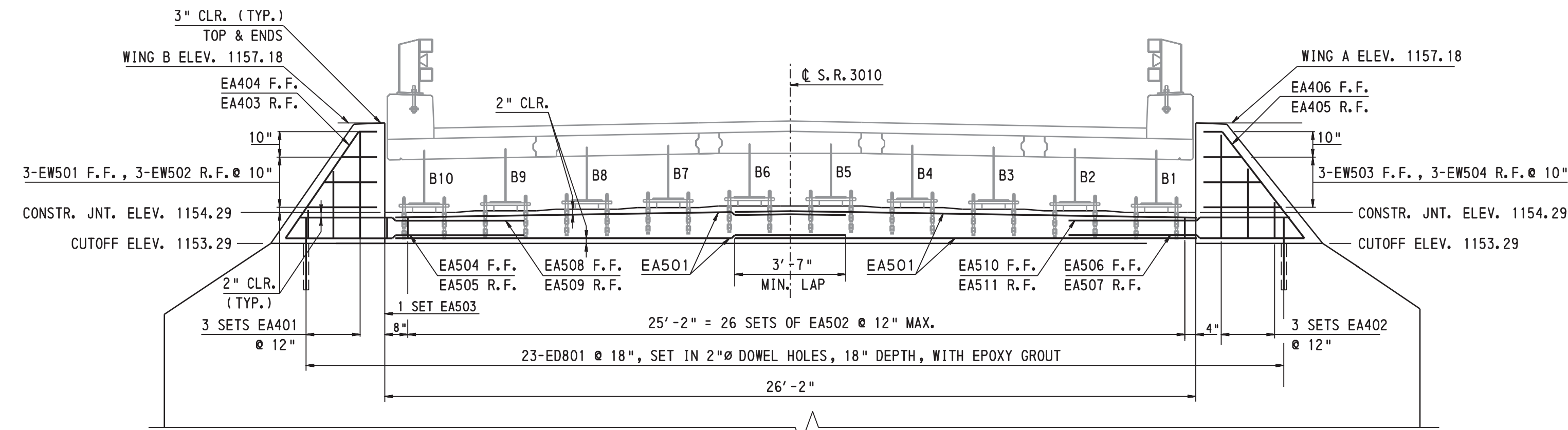
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 SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
ABUTMENT ELEVATIONS

RECOMMENDED 5/18/2020

SHEET 5 OF 16

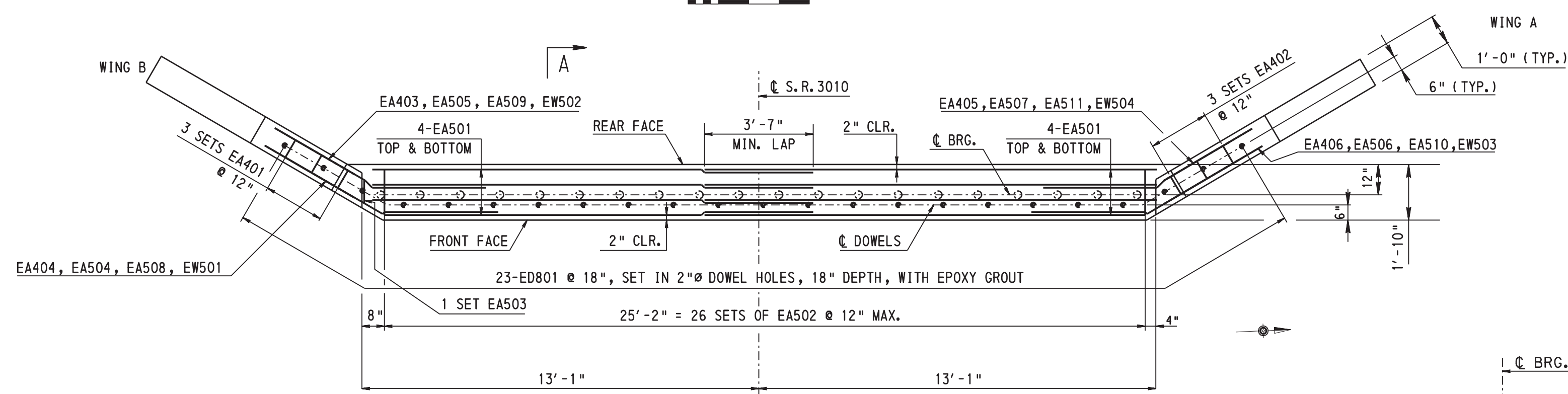
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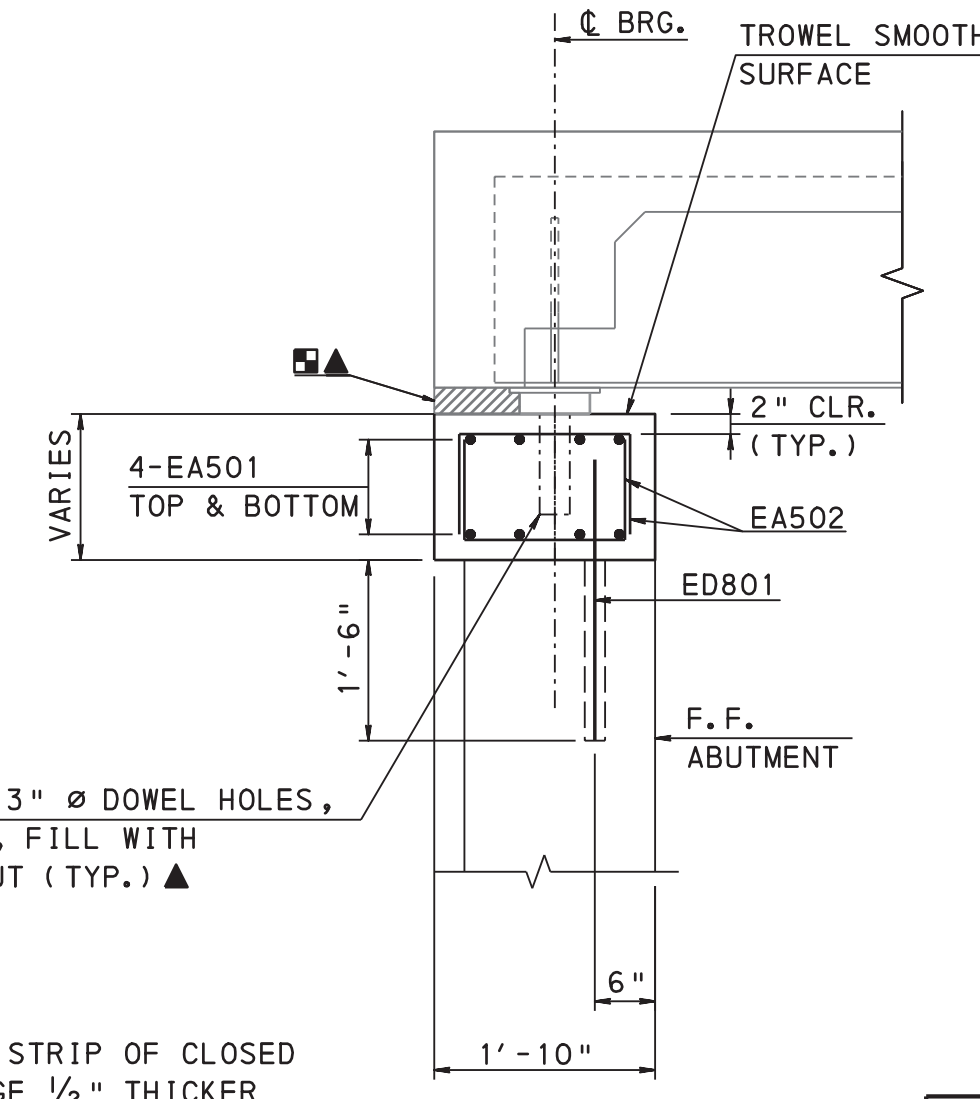
ABUTMENT 1 CAP ELEVATION

(LOOKING STATIONS BACK)
1 0 1 2 3 FEET



ABUTMENT 1 CAP PLAN

1 0 1 2 3 FEET

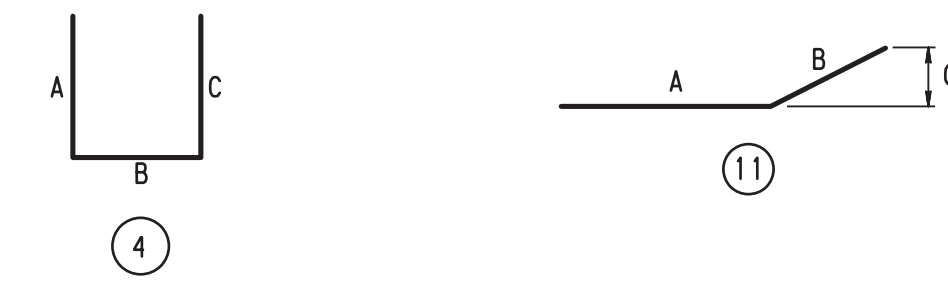


ABUTMENT 1 CAP SECTION A-A

12 0 12 INCHES

- 3" WIDE CONTINUOUS STRIP OF CLOSED CELL NEOPRENE SPONGE 1/2" THICKER THAN BEARING PAD & SOLE PLATE
- ▲ INCIDENTAL TO LAMINATED NEOPRENE BEARING PAD

ABUTMENT 1 REINFORCEMENT										
MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	REMARKS		
EA401	4	6	2'-6" TO 7'-6"	4	11" TO 3'-5"	8"	11" TO 3'-5"	3 SETS OF 2 BARS. VARY EA. SET BY 2'-6"		
EA402	4	6	3'-0" TO 7'-4"	4	1'-2" TO 3'-4"	8"	1'-2" TO 3'-4"	3 SETS OF 2 BARS. VARY EA. SET BY 2'-2"		
EA403	4	1	4'-8"	11	4'-4 1/2"	3 1/2"	2 3/4"			
EA404	4	1	5'-0"	11	4'-4"	8"	6 1/4"			
EA405	4	1	4'-10"	11	4'-6 1/2"	3 1/2"	2 1/2"			
EA406	4	1	5'-3"	11	4'-6 1/2"	8 1/2"	6 1/4"			
EA501	5	16	15'-0"	STR.						
EA502	5	52	2'-10"	4	8"	1'-6"	8"	26 SETS OF 2 BARS		
EA503	5	2	2'-1"	4	8"	9"	8"	1 SET OF 2 BARS		
EA504	5	1	8'-4"	11	4'-7"	3'-9"	1'-10 5/8"			
EA505	5	1	7'-6"	11	3'-8 1/2"	3'-9 1/2"	1'-10 7/8"			
EA506	5	1	8'-3"	11	4'-5 1/2"	3'-9 1/2"	1'-10 7/8"			
EA507	5	1	7'-5"	11	3'-7 1/2"	3'-9 1/2"	1'-10 7/8"			
EA508	5	1	7'-9"	11	4'-0"	3'-9"	1'-10 1/2"			
EA509	5	1	6'-11"	11	3'-2"	3'-9"	1'-10 7/8"			
EA510	5	1	7'-8"	11	3'-11"	3'-9"	1'-10 7/8"			
EA511	5	1	6'-10"	11	3'-1"	3'-9"	1'-10 7/8"			
ED801	8	23	2'-4"	STR.						
EW501	5	3	1'-3" TO 2'-7"	STR.				3 LENGTHS VARY EA. BAR BY 8"		
EW502	5	3	11" TO 2'-3"	STR.				3 LENGTHS VARY EA. BAR BY 8"		
EW503	5	3	1'-5" TO 2'-11"	STR.				3 LENGTHS VARY EA. BAR BY 9"		
EW504	5	3	1'-0" TO 2'-6"	STR.				3 LENGTHS VARY EA. BAR BY 9"		



Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					

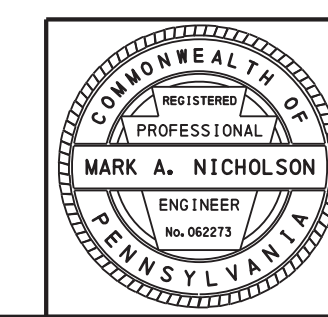
S.R. 3010 PREVIOUSLY KNOWN AS L.R. 25102

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ERIE COUNTY
S.R. 3010, SEC. B00
SEGMENT 0050, OFFSET 0000
STA. 108+02.00
 OVER WEST BRANCH CUSSEWAGO CREEK
 SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
ABUTMENT 1 DETAILS

RECOMMENDED: 5/18/2020

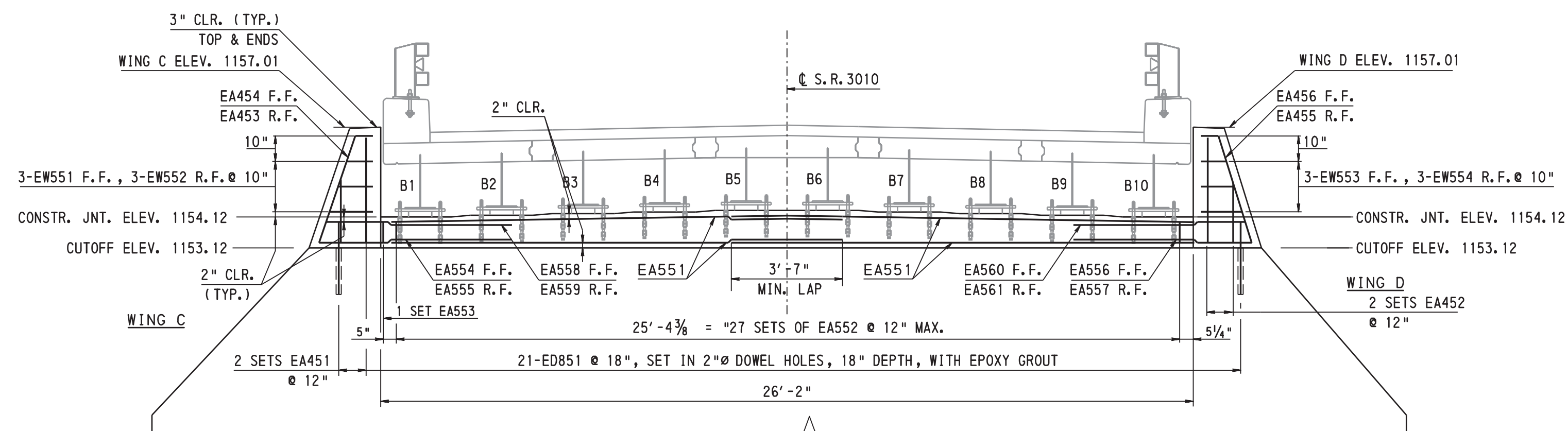
SHEET 6 OF 16

S - 39096



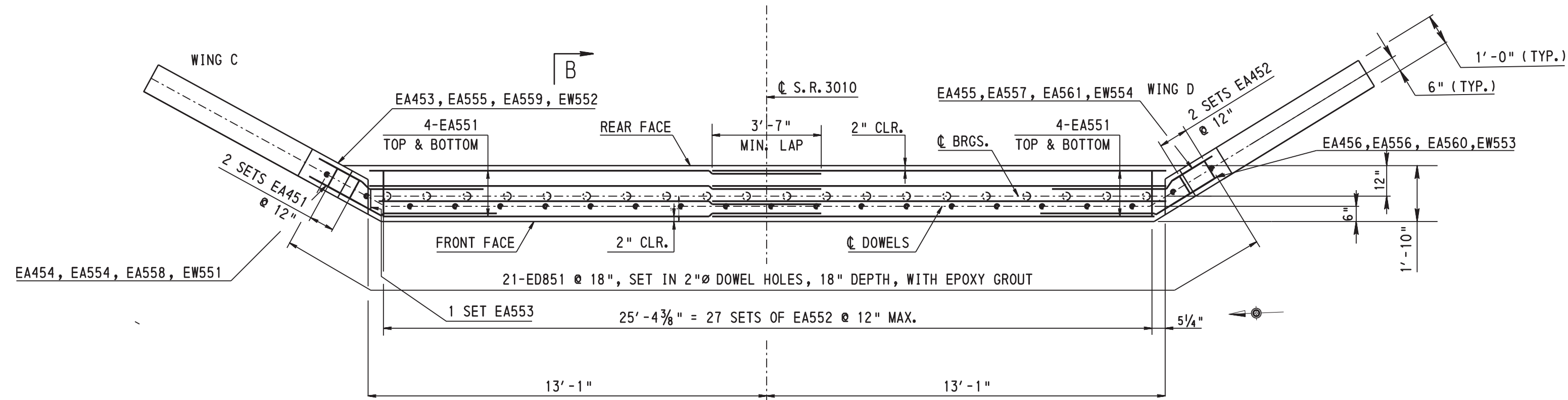
D-9002 CADD (02-30) REVISED (10-04) PLOTTED: 13-MAY-2020 08:57

OPERATOR: C:\Users\hnowinner\Desktop\er1a 3010\SHEETFILES\7 - ABUTMENT 2 DETAILS.dgn



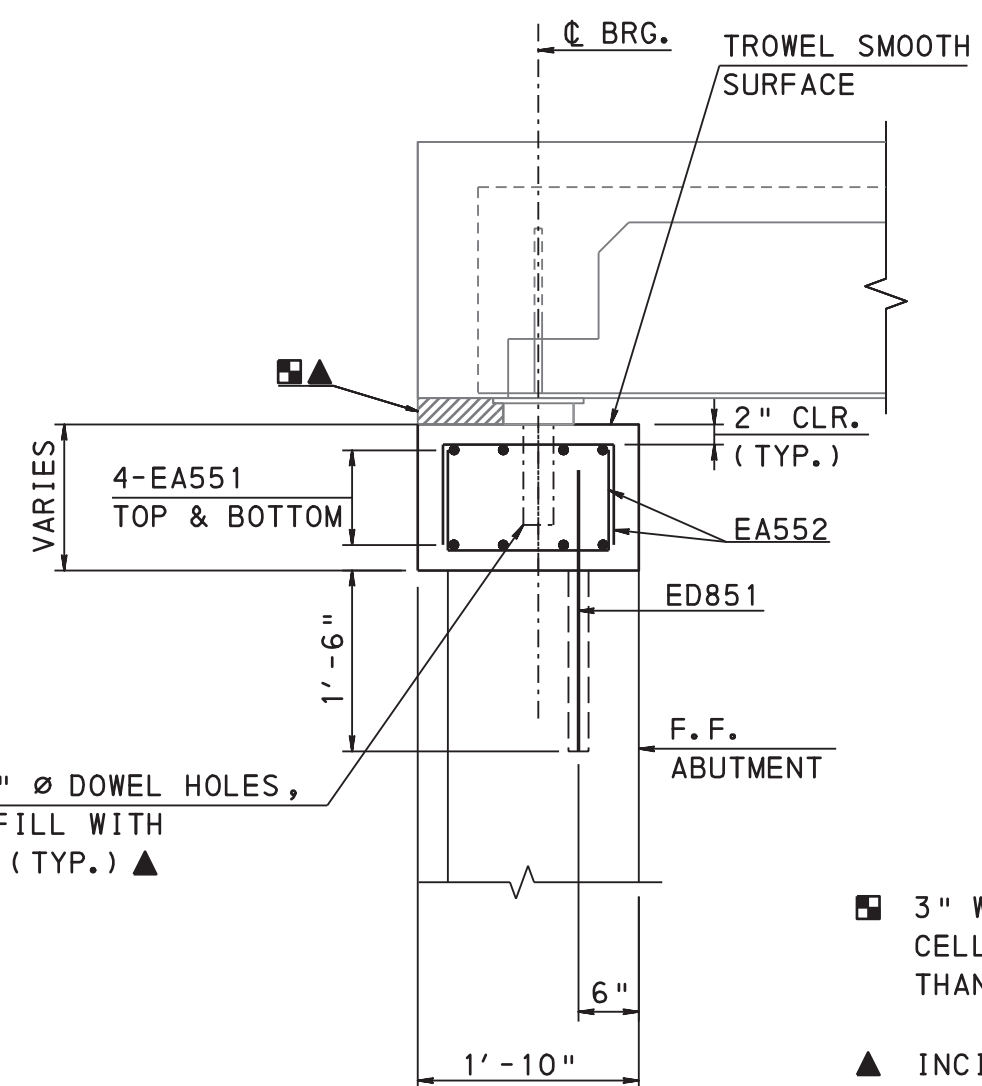
ABUTMENT 2 CAP ELEVATION

(LOOKING STATIONS AHEAD)
1 0 1 2 3 FEET



ABUTMENT 2 CAP PLAN

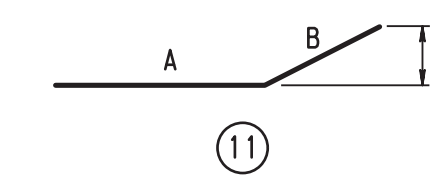
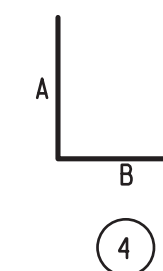
1 0 1 2 3 FEET



ABUTMENT 2 CAP SECTION B-B

12 0 12 INCHES

ABUTMENT 2 REINFORCEMENT								
MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	REMARKS
EA451	4	4	4'-8" TO 7'-6"	4	2'-0" TO 3'-5"	8"	2'-0" TO 3'-5"	2 SETS OF 2 BARS. VARY EA. SET BY 2'-10"
EA452	4	4	4'-6" TO 7'-6"	4	1'-11" TO 3'-5"	8"	1'-11" TO 3'-5"	2 SETS OF 2 BARS. VARY EA. SET BY 3'-0"
EA453	4	1	3'-10"	11	3'-7 1/2"	2 1/2"	2 3/4"	
EA454	4	1	4'-4"	11	3'-8"	8"	6 3/4"	
EA455	4	1	3'-10"	11	3'-7 1/2"	2 1/2"	2 1/4"	
EA456	4	1	4'-3"	11	3'-7 1/2"	7 1/2"	6 3/4"	
EA551	5	16	15'-0"	STR.				
EA552	5	54	2'-10"	4	8"	1'-6"	8"	27 SETS OF 2 BARS
EA553	5	2	2'-1"	4	8"	9"	8"	1 SET OF 2 BARS
EA554	5	1	6'-6"	11	3'-9"	2'-9"	1'-4"	
EA555	5	1	5'-8"	11	3'-9"	1'-11"	10 7/8"	
EA556	5	1	6'-6"	11	3'-9"	2'-9"	1'-5"	
EA557	5	1	5'-7"	11	3'-9"	1'-11"	11 3/4"	
EA558	5	1	6'-3"	11	3'-9"	2'-6"	1'-2 1/2"	
EA559	5	1	5'-5"	11	3'-9"	1'-8"	9 1/4"	
EA560	5	1	6'-1"	11	3'-9"	2'-4"	1'-3"	
EA561	5	1	5'-4"	11	3'-9"	1'-7"	9 3/4"	
ED851	8	21	2'-4"	STR.				
EW551	5	3	11" TO 1'-6"	STR.				3 LENGTHS VARY EA. BAR BY 3 1/2"
EW552	5	3	6" TO 1'-2"	STR.				3 LENGTHS VARY EA. BAR BY 4"
EW553	5	3	11" TO 1'-6"	STR.				3 LENGTHS VARY EA. BAR BY 3 1/2"
EW554	5	3	6" TO 1'-1"	STR.				3 LENGTHS VARY EA. BAR BY 3 1/2"



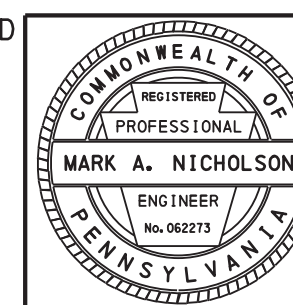
Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					

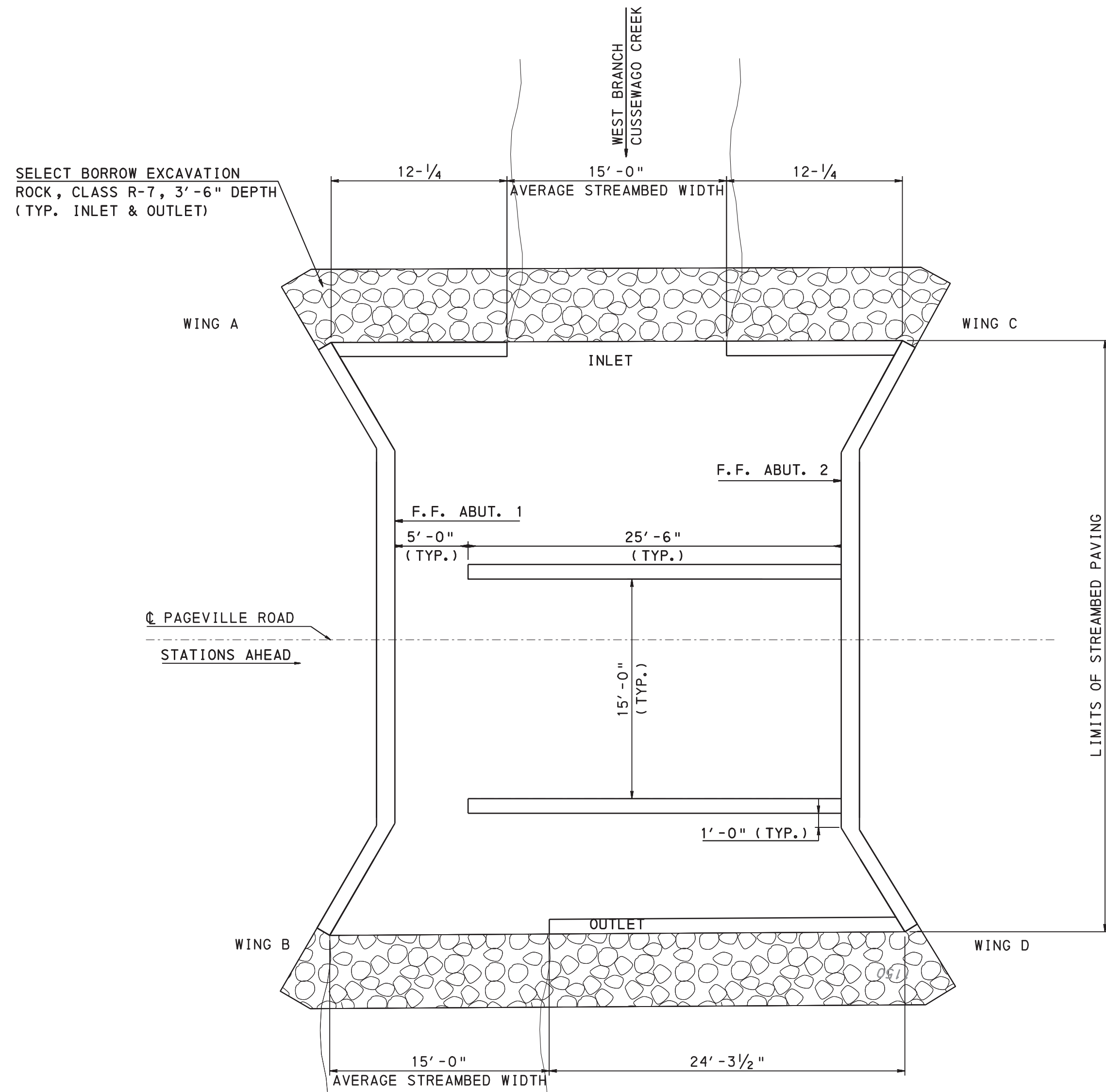
S.R. 3010 PREVIOUSLY KNOWN AS L.R. 25102

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
ERIE COUNTY
S.R. 3010, SEC. B00
SEGMENT 0050, OFFSET 0000
STA. 108+02.00
 OVER WEST BRANCH CUSSEWAGO CREEK
 SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
ABUTMENT 2 DETAILS

RECOMMENDED 5/18/2020

SHEET 7 OF 16
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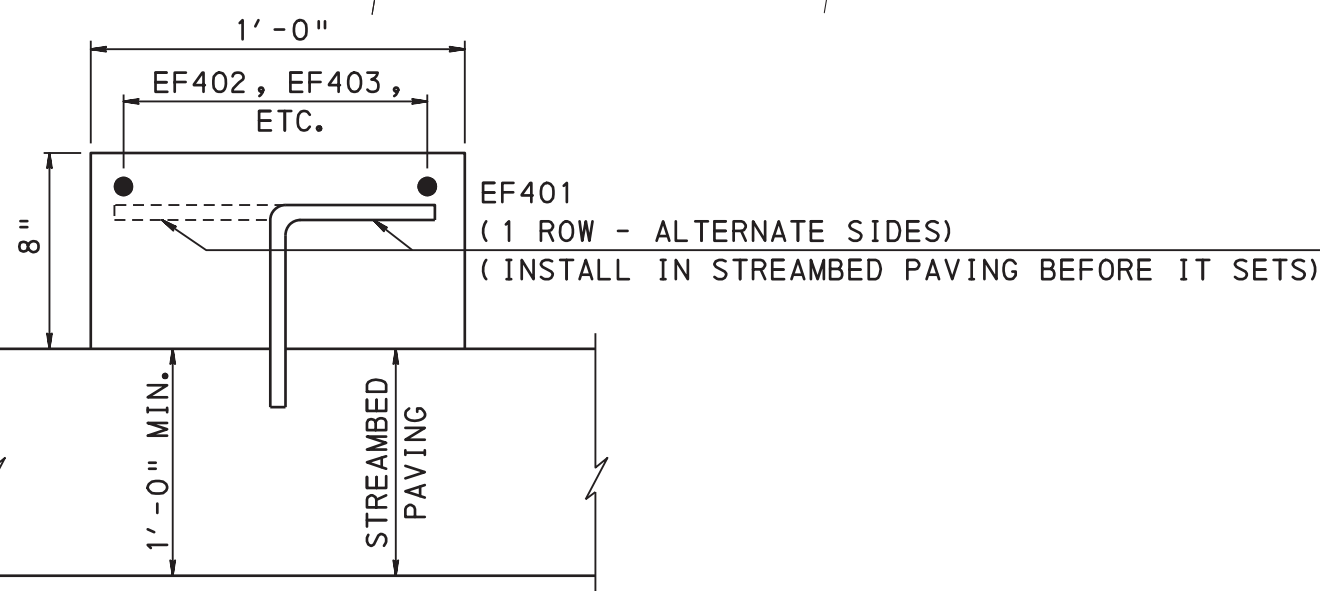




STREAMBED PAVING & BAFFLE PLAN

2 0 2 4 6 FEET

SELECT BORROW EXCAVATION ROCK, CLASS R-7, 3'-6" DEPTH (TYP. INLET & OUTLET)

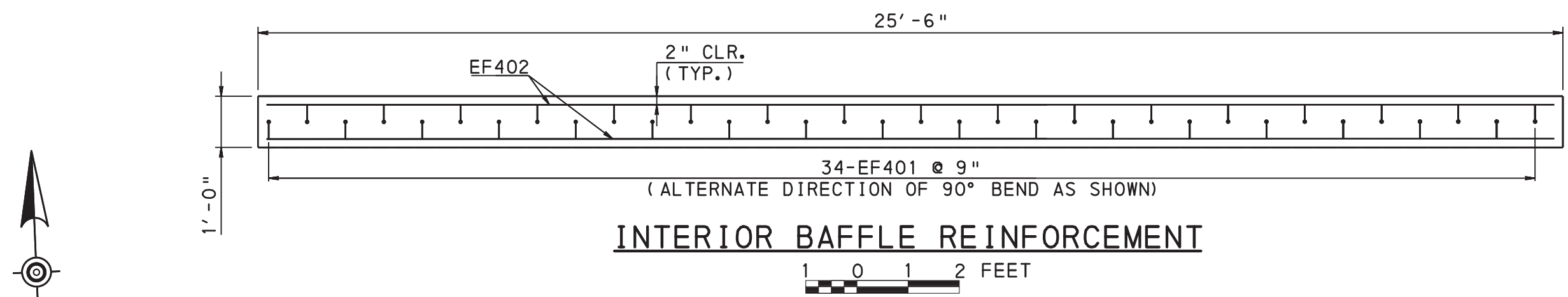


TYPICAL BAFFLE DETAIL

NO SCALE

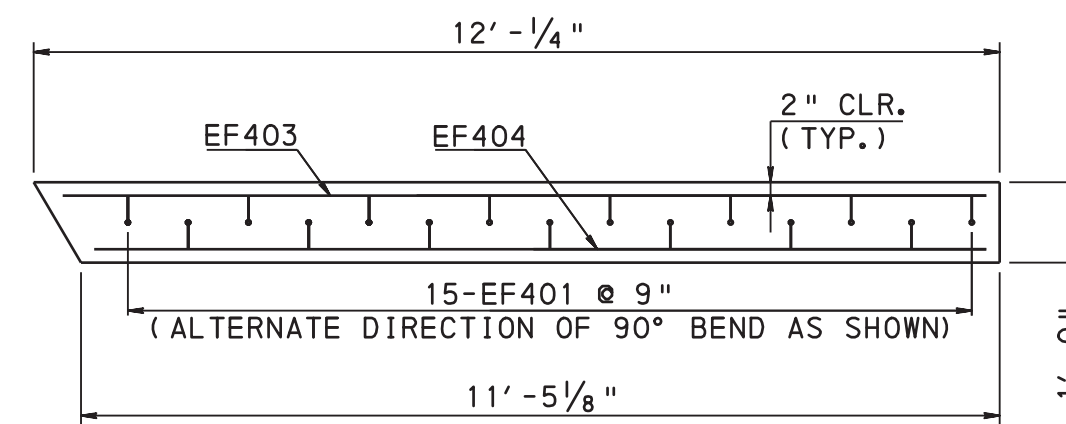
NOTES:

TOP OF BAFFLE SHALL BE A MINIMUM OF 4" BELOW STREAMBED



INTERIOR BAFFLE REINFORCEMENT

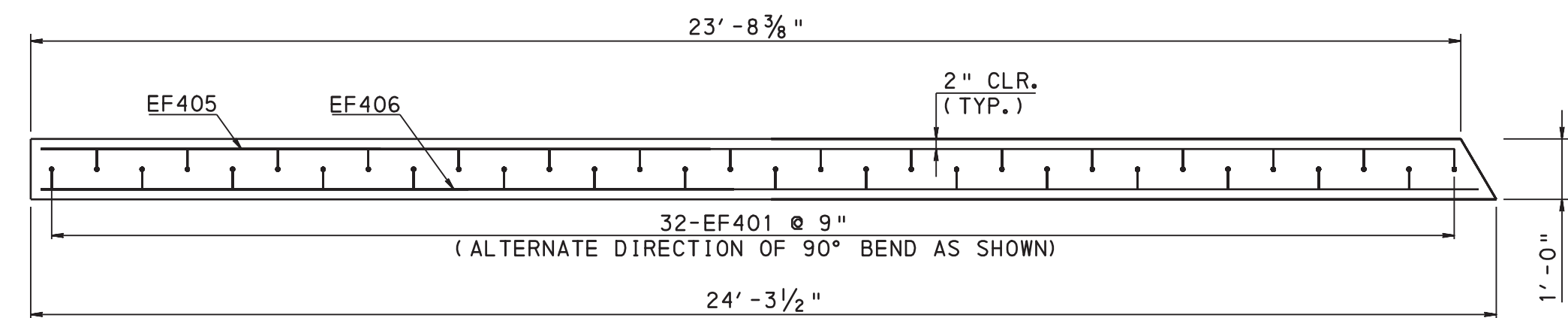
1 0 1 2 FEET



INLET BAFFLE REINFORCEMENT

(INLET STA. AHEAD BAFFLE SHOWN. ROTATE ORIENTATION AS NEEDED FOR ALL BAFFLES.)

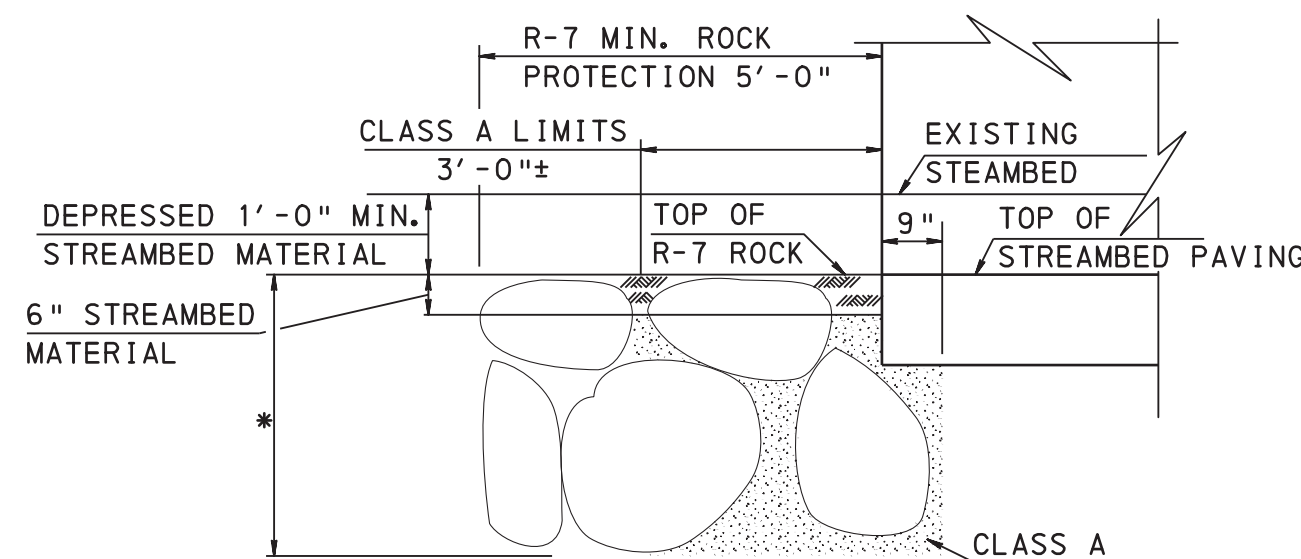
1 0 1 2 FEET



OUTLET BAFFLE REINFORCEMENT

1 0 1 2 FEET

STREAMBED PAVING REINFORCEMENT								
MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	REMARKS
EF401	4	130	10"	11	6"	4"		
EF402	4	4	25'-2"	STR.				
EF403	4	2	11'-8"	STR.				
EF404	4	2	11'-1"	STR.				
EF405	4	1	23'-5"	STR.				
EF406	4	1	23'-10"	STR.				



CURTAIN WALL SECTION

1 0 1 2 FEET

* TO BOTTOM OF WINGWALL FOOTING OR BOTTOM OF ROCK LINING WHICH EVER IS DEEPER (3'-6" MIN.). FILL VOIDS IN ROCK WITH VIBRATED CLASS A CEMENT CONCRETE 6" BELOW STREAMBED TO BOTTOM OF ROCK. FILL TOP 6" OF R-7 WITH NATURAL STREAMBED MATERIAL

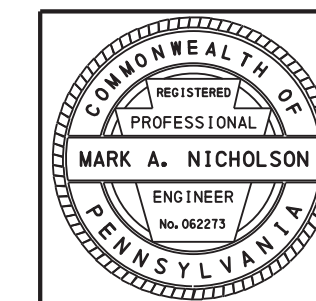
Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					

S.R. 3010 PREVIOUSLY KNOWN AS L.R. 25102

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ERIE COUNTY
S.R. 3010, SEC. B00
SEGMENT 0050, OFFSET 0000
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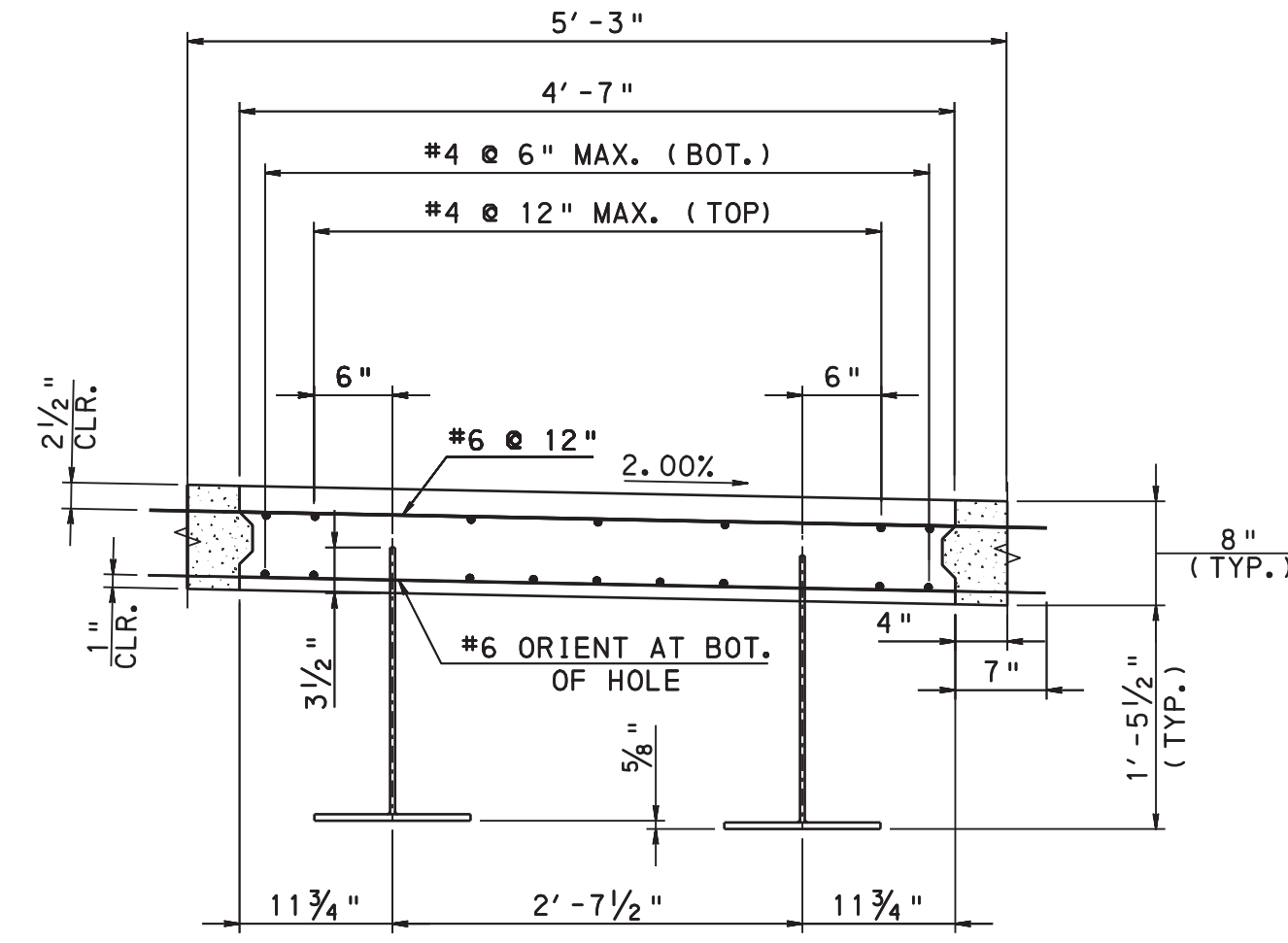
OVER WEST BRANCH CUSSEWAGO CREEK
SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
STREAMBED PAVING DETAILS



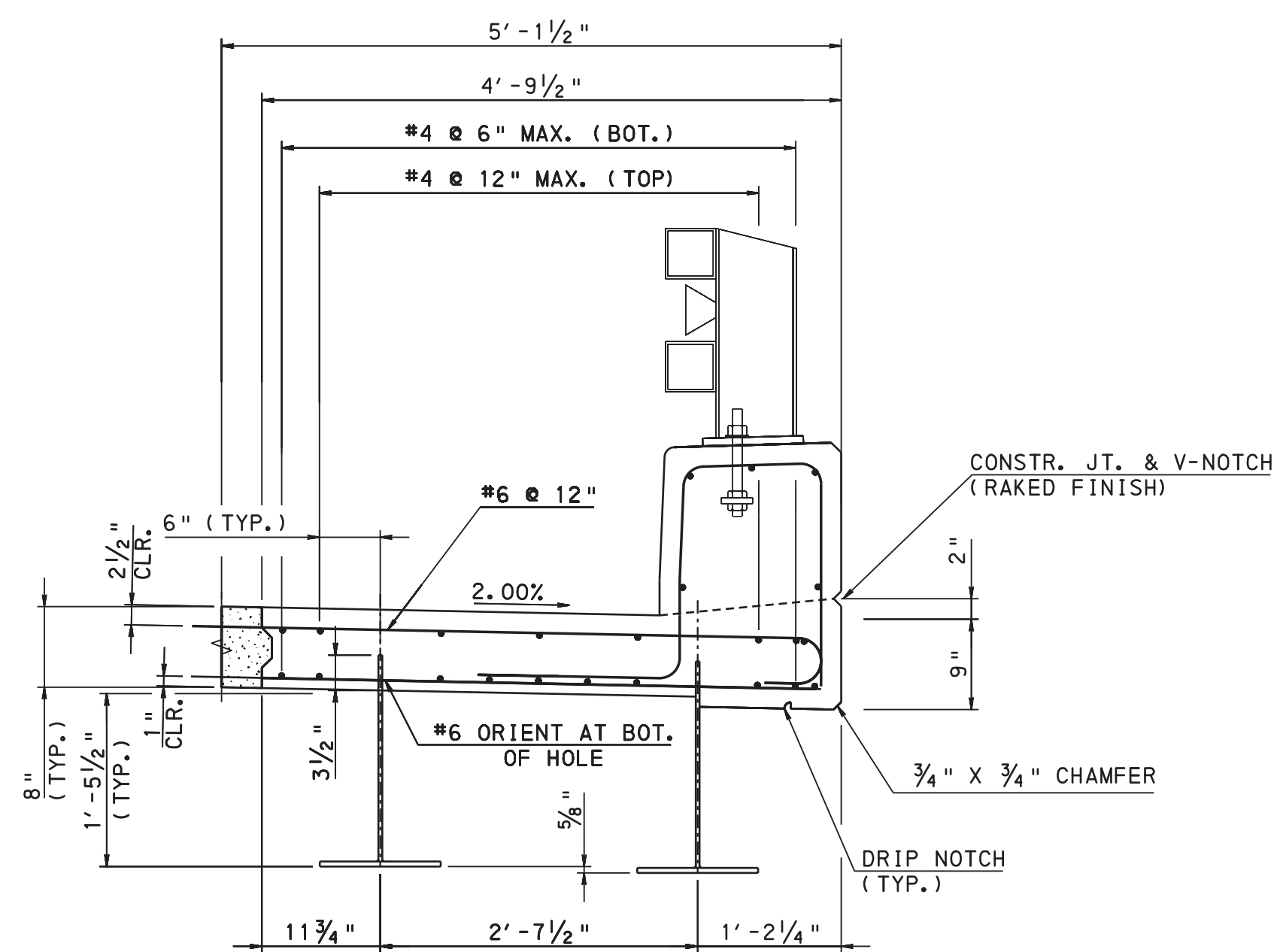
RECOMMENDED 5/18/2020

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INTERIOR MODULE
(RIGHT HAND SHOWN, LEFT HAND SIMILAR)
6 0 6 12 INCHES



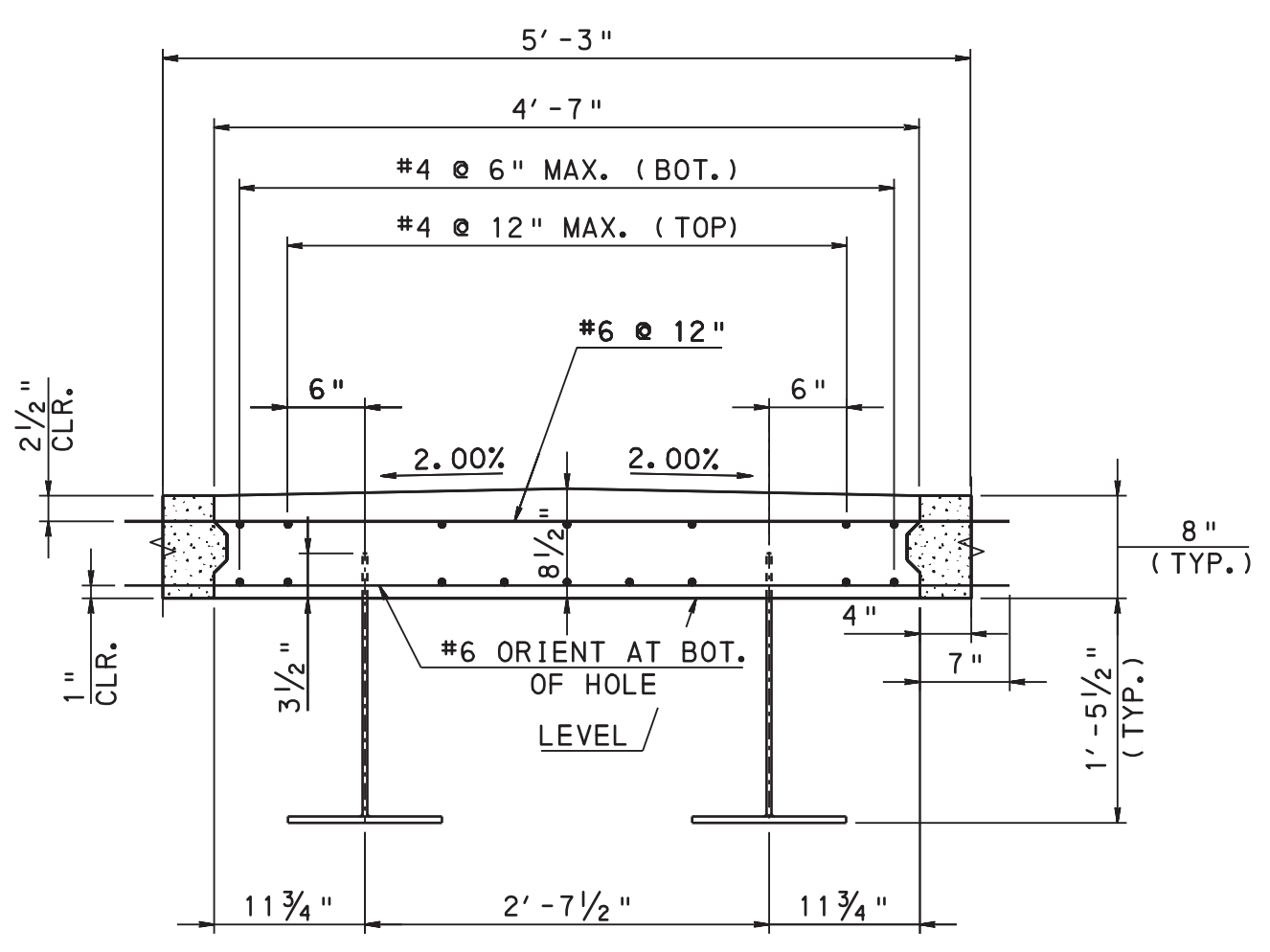
EXTERIOR MODULE
(RIGHT HAND SHOWN, LEFT HAND SIMILAR)
6 0 6 12 INCHES

NOTE:
SEE TYPE 10M BARRIER DETAIL ON SHEET 11 FOR CURB REINFORCEMENT

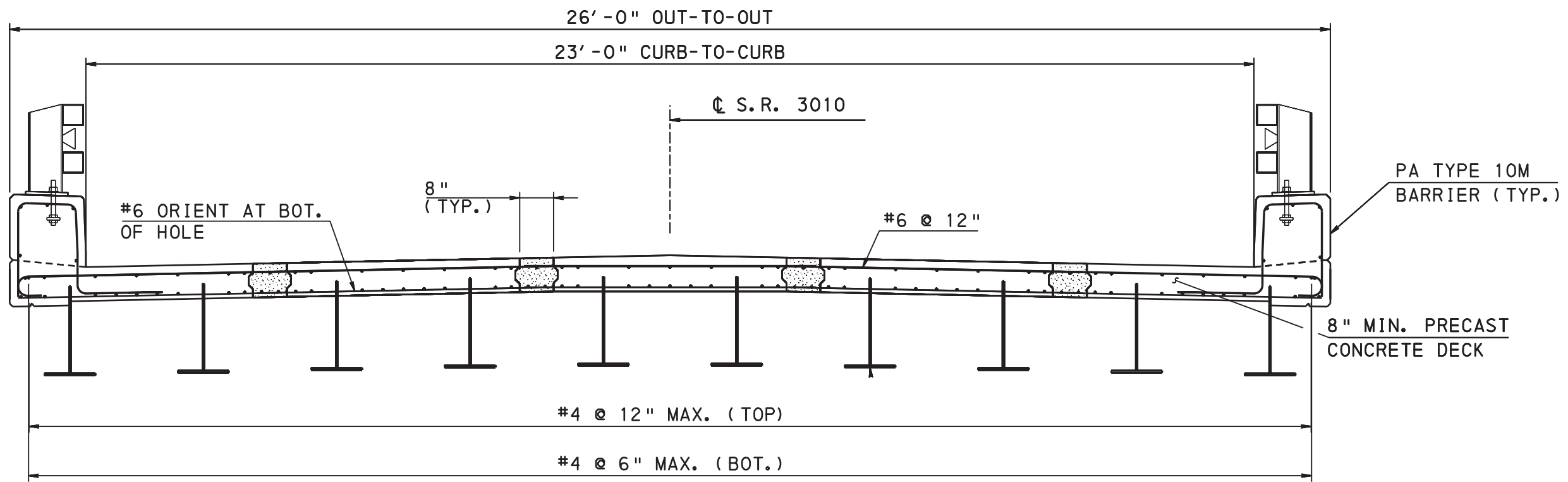
NOTES:

- SUBMIT SHOP DRAWINGS FOR FLEX BEAM MODULES AND ASSOCIATED COMPONENTS.
- NO-LOAD CAMBER TOLERANCE AT MIDSPAN SHALL BE 0 IN. TO +0.5 IN. NO-LOAD CAMBER OF GIRDERS SHALL MEET THE REQUIREMENTS SPECIFIED IN THE DESIGN DRAWINGS. CAMBER PRIOR TO WELDING AND PRIMING.
- HOLES SHALL BE DRILLED. PUNCHING MAY BE ALLOWED BUT WILL BE SUBJECT TO APPROVAL. IF PUNCHING IS USED, CUT HOLES CLEAN WITHOUT TORN OR RAGGED EDGES.
- LIFTING DEVICES SHALL BE DESIGNED BY THE CONTRACTOR AND SUBMITTED AS PART OF THE SHOP DRAWING SUBMISSION.
- DO NOT MAKE WELDS BY MANUAL SHIELDED METAL ARC PROCESS FOR PRIMARY GIRDER WELDS, SUCH AS FLANGE-TO-WEB WELDS OR FOR SHOP SPLICES OF WEBS AND FLANGES.
- CASTING OF THE DECK SHALL BE FULLY SUPPORTED.
- STEEL T REQUIRES MIDSPAN SUPPORT TO NO LOAD CONDITION DURING CASTING.
- INTERFACE OF PRECAST MODULES ALONG THE TRANSVERSE AND LONGITUDINAL JOINTS SHALL BE BLAST CLEANED TO CREATE AN EXPOSED AGGREGATE FINISH.
- PRE-WET PRECAST INTERFACE OF JOINT WITH WATER TO CREATE A SATURATED SURFACE CONDITION.
- THE STEEL SUPERSTRUCTURE SHALL BE DETAILED AND FABRICATED FOR TOTAL DEAD LOAD FIT (TDLF). GIRDER WEBS SHALL BE PLUMB UNDER THE FULL DEAD LOAD EXISTING AT THE END OF CONSTRUCTION.
- PROVIDE CHARPY V-NOTCH (CVN) TESTING FOR ZONE 2 FOR ALL MEMBERS SUBJECTED TO TENSION PER PUB. 408, SECTION 1105.02(a) 5.
- FILLET WELD SIZES ARE GOVERNED BY MATERIAL THICKNESS IN ACCORDANCE WITH AASHTO/AWS EXCEPT AS NOTED.
- SLIGHTLY STAGGER LONGITUDINAL REBARS IN THE BRIDGE DECK SUCH THAT NO REBAR IN THE TOP MAT IS DIRECTLY ABOVE A REBAR IN THE BOTTOM MAT.

LEGEND



CENTER MODULE
6 0 6 12 INCHES



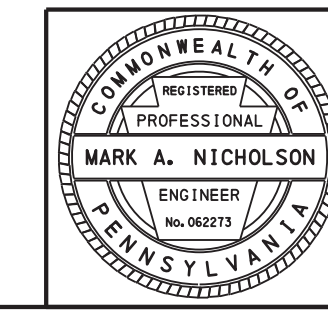
TYPICAL DECK SECTION
1 0 1 2 FEET

Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					

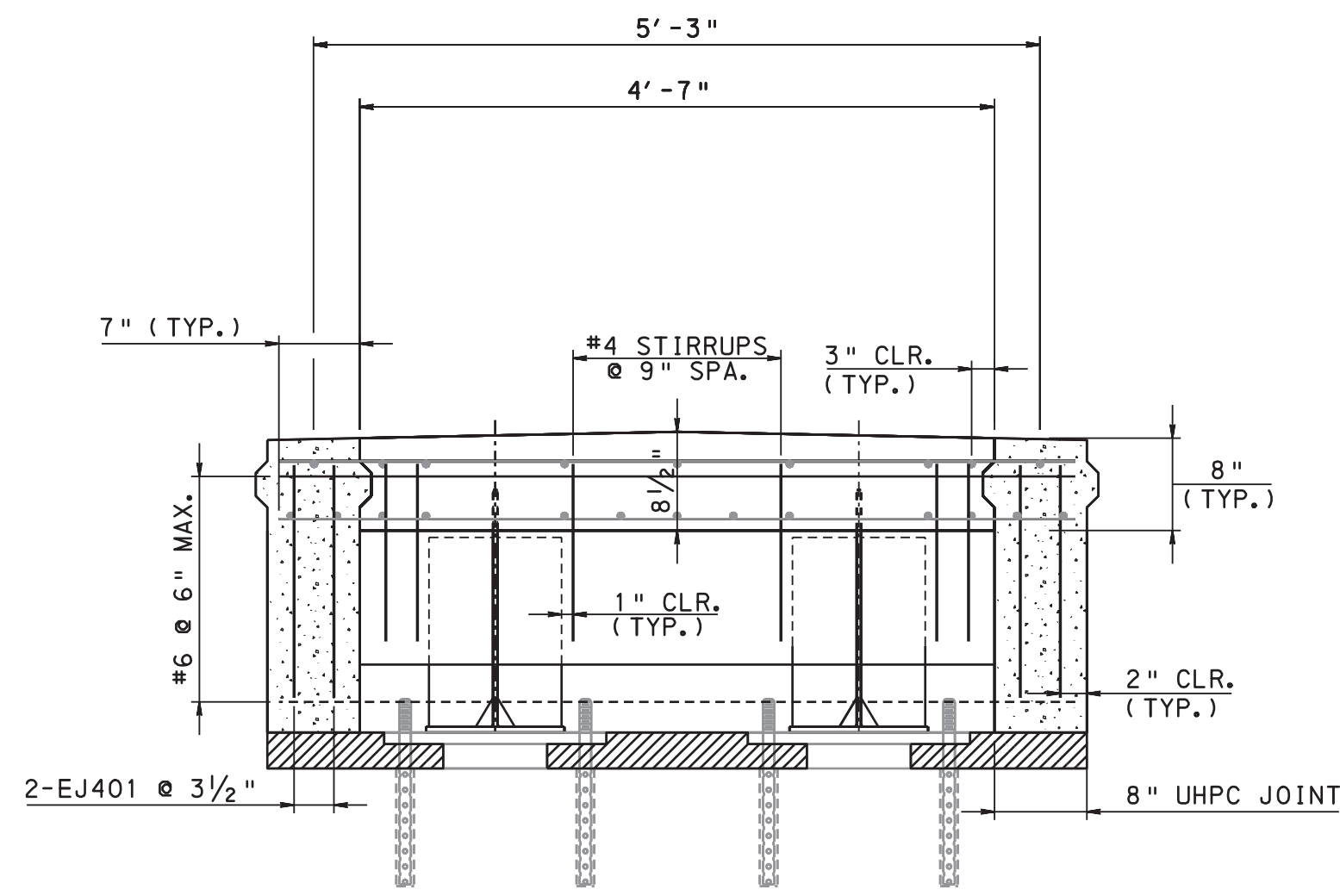
S.R. 3010 PREVIOUSLY KNOWN AS L.R. 25102

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ERIE COUNTY
S.R. 3010, SEC. B00
SEGMENT 0050, OFFSET 0000
STA. 108+02.00
OVER WEST BRANCH CUSSEWAGO CREEK
SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
FLEXBEAM MODULE DETAILS - 1

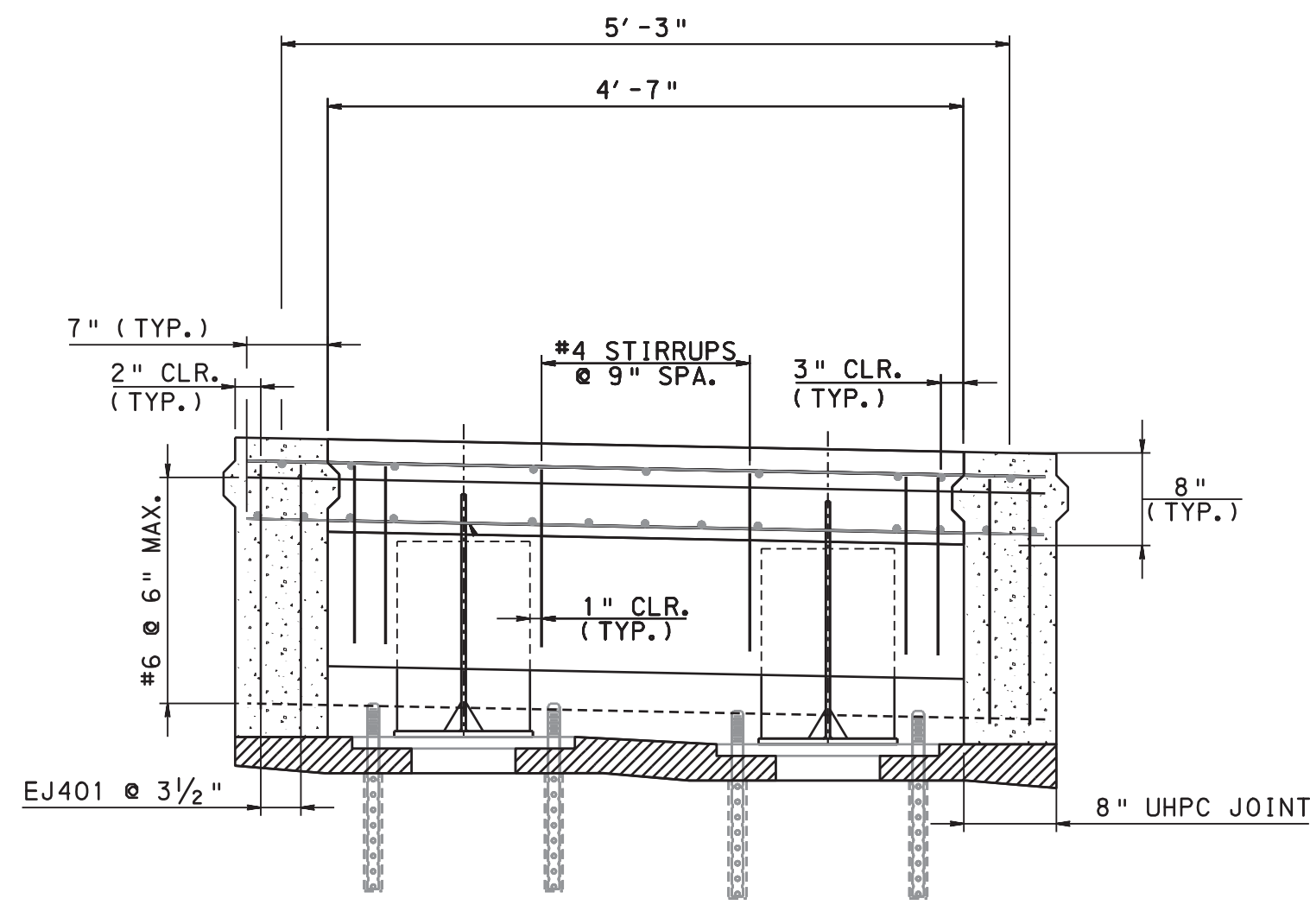


RECOMMENDED	5/18/2020	SHEET 9 OF 16
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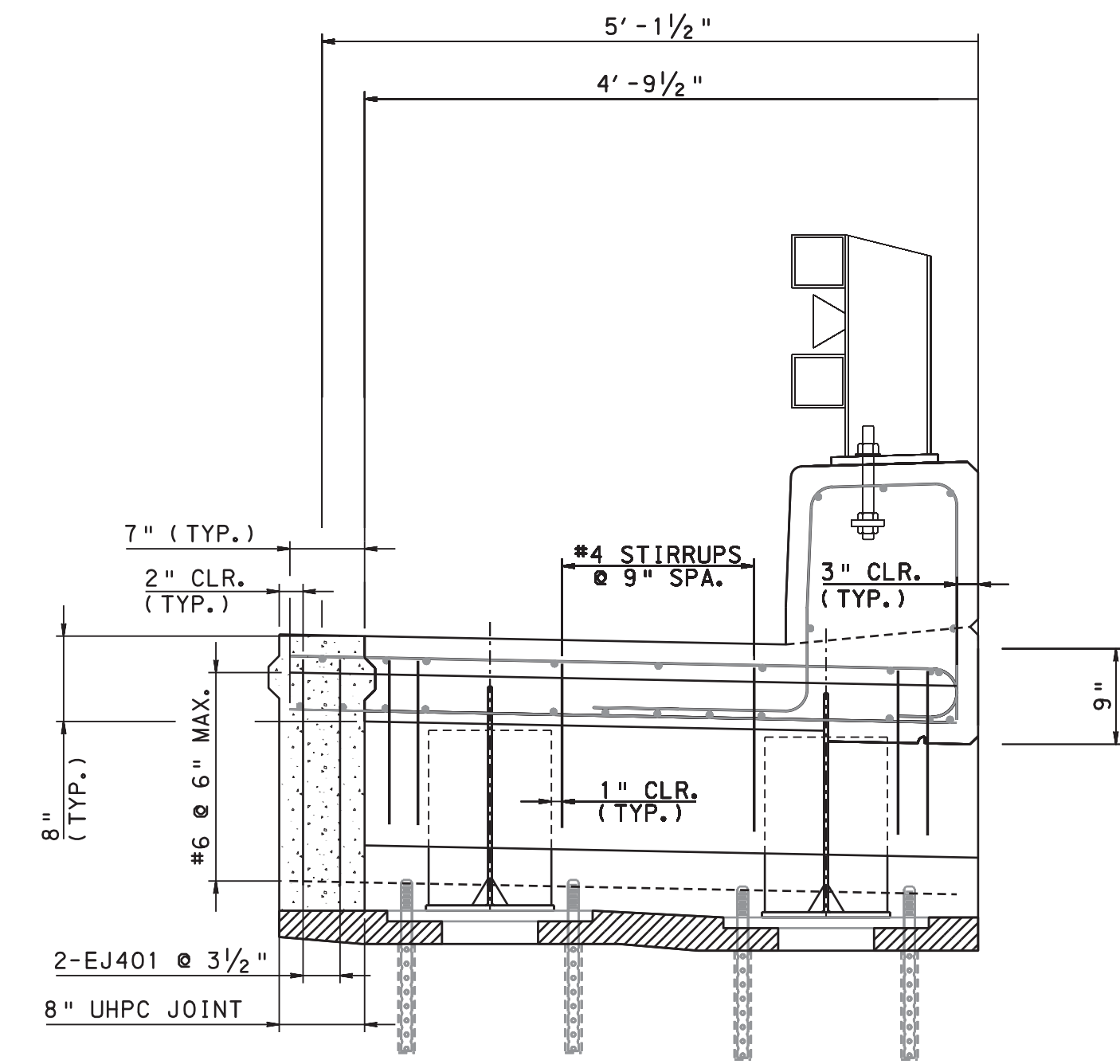
CENTER MODULE END DIAPHRAGM ELEVATION

(LOOKING AT ABUTMENT)
6 0 6 12 INCHES



INTERIOR MODULE END DIAPHRAGM ELEVATION

(LOOKING AT ABUTMENT,
RIGHT HAND SHOWN, LEFT HAND SIMILAR)
6 0 6 12 INCHES



EXTERIOR MODULE END DIAPHRAGM ELEVATION

(LOOKING AT ABUTMENT,
RIGHT HAND SHOWN, LEFT HAND SIMILAR)
6 0 6 12 INCHES

UHPC JOINT REINFORCEMENT												
MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	REMARKS
EJ401	4	16	7'-0"	9	6"	4"	1'-9"	2'-7"	5"	8"	9"	
EJ402	4	12	32'-10"	STR.								

LEGEND

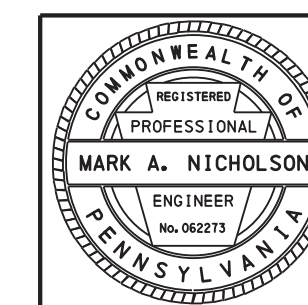
- 3" WIDE CONTINUOUS STRIP OF CLOSED CELL NEOPRENE SPONGE 1/2" THICKER THAN BEARING PAD & SOLE PLATE
- UHPC JOINT
- P.C.P. 1/4" THICKER THAN BEARING PAD & SOLE PLATE

Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					

S.R. 3010 PREVIOUSLY KNOWN AS L.R. 25102

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

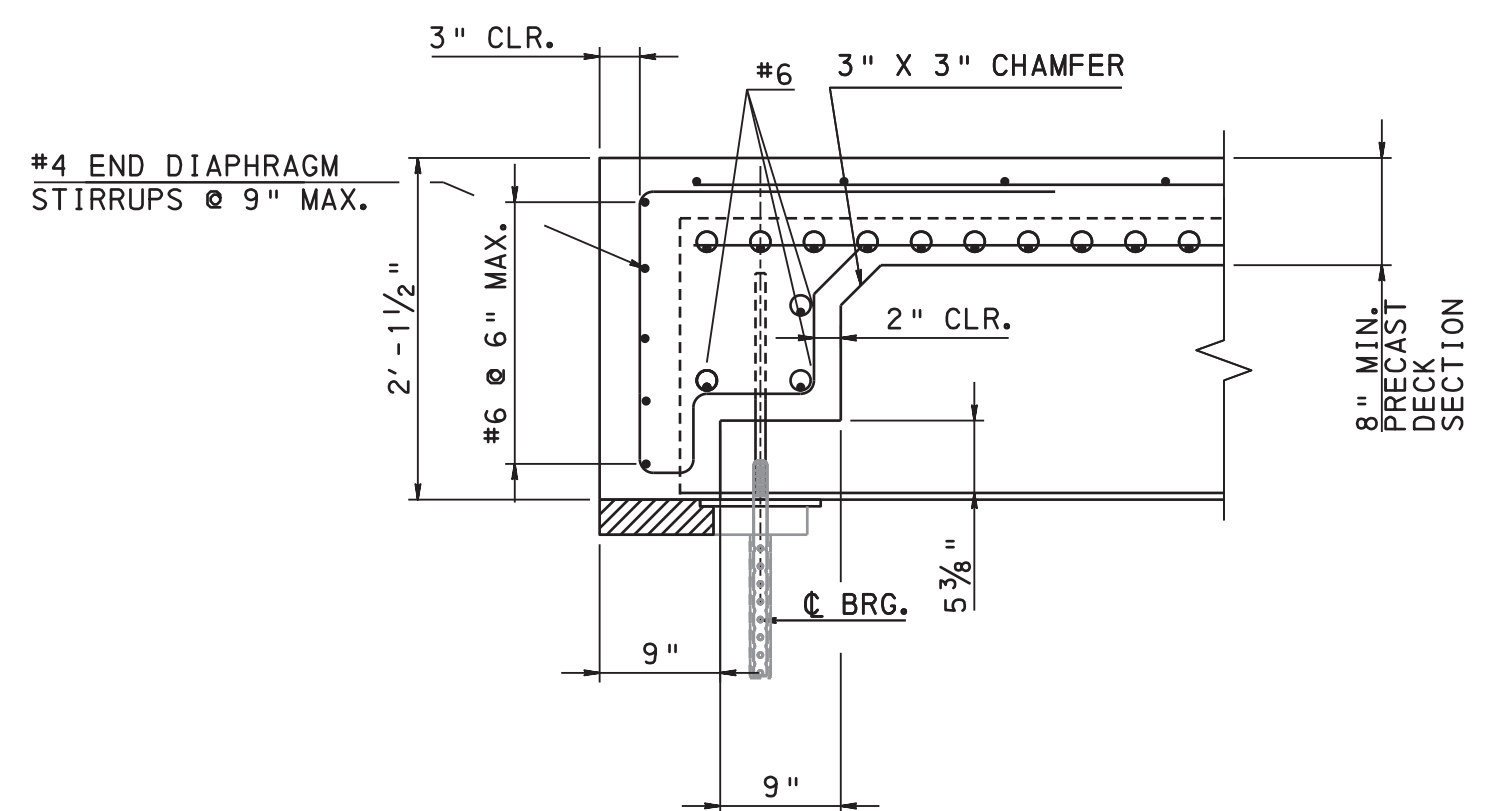
ERIE COUNTY
S.R. 3010 SEC. B00
SEGMENT 0050, OFFSET 0000
STA. 108+02.00
OVER WEST BRANCH CUSSEWAGO CREEK
SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
FLEXBEAM MODULE DETAILS - 2



RECOMMENDED 5/18/2020

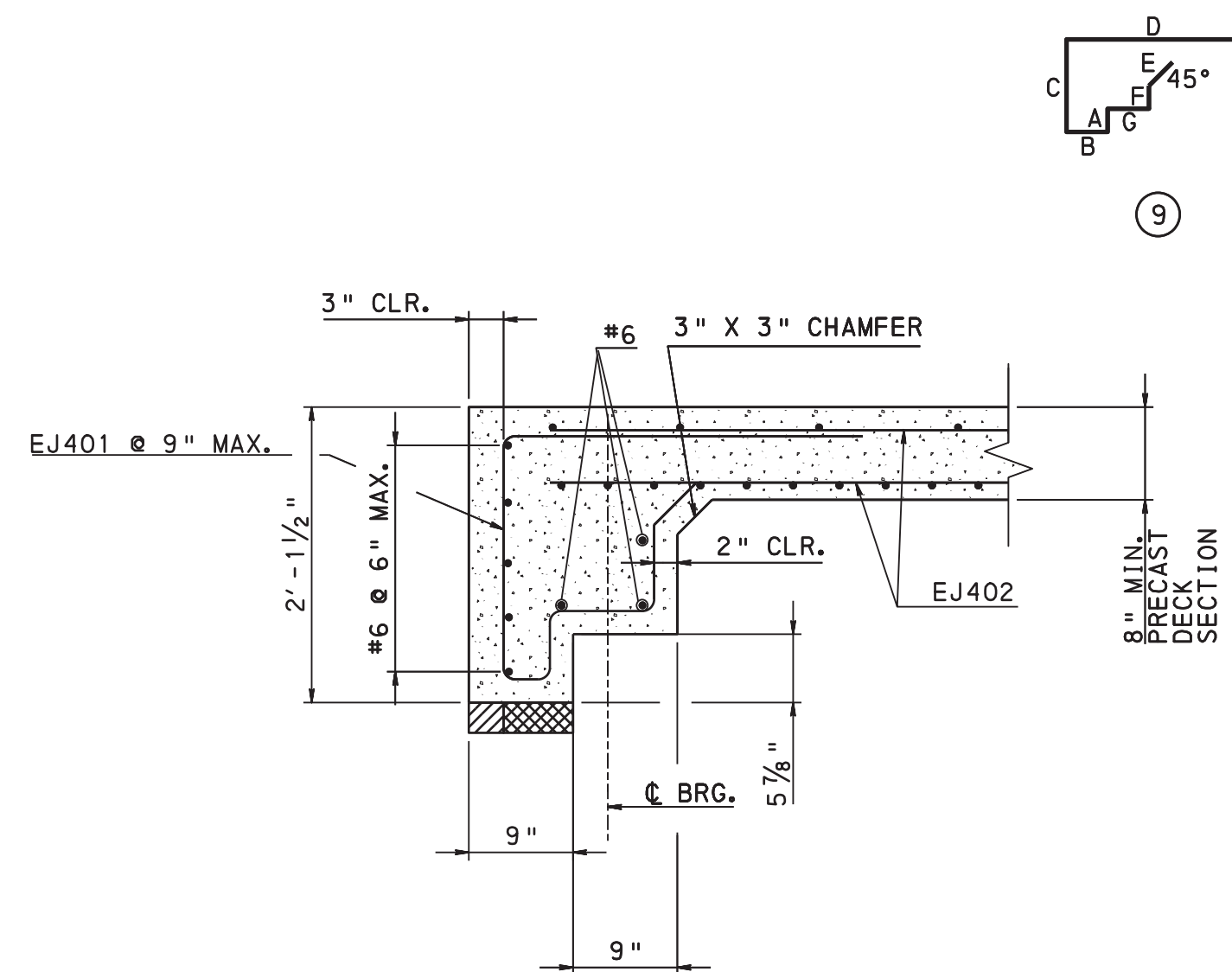
SHEET 10 OF 16

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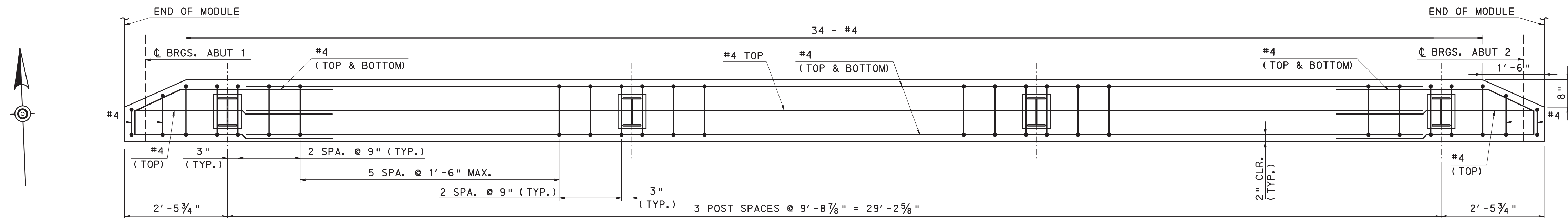
CONCRETE END DIAPHRAGM SECTION

6 0 6 12 INCHES



CONCRETE END DIAPHRAGM UHPC SECTION

6 0 6 12 INCHES

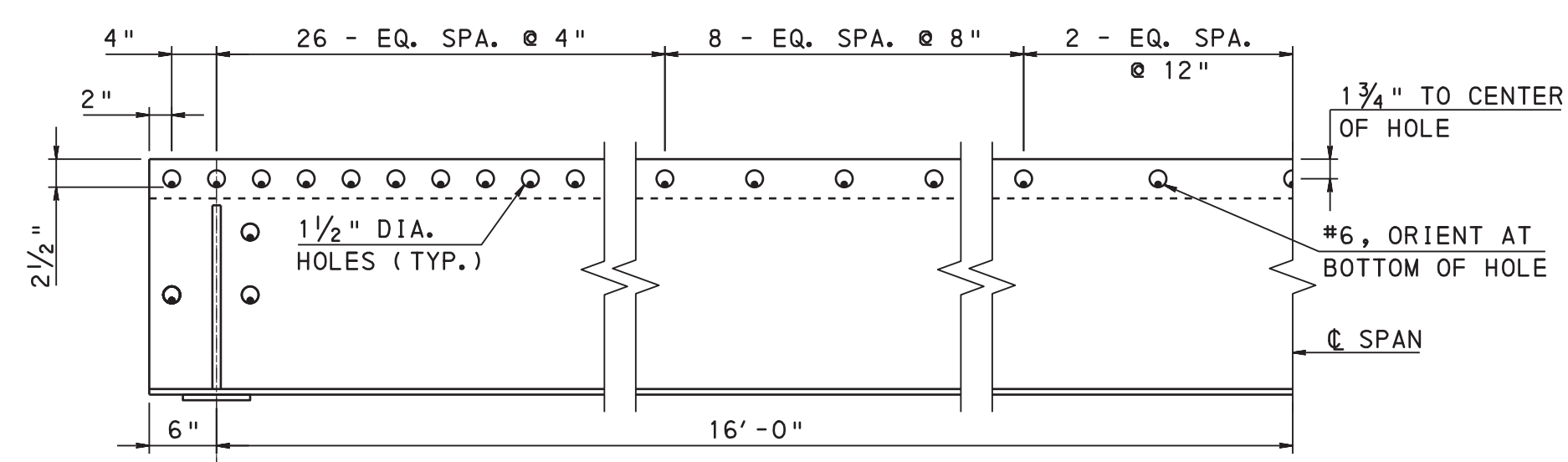


TYPE 10M BARRIER

(RIGHT BARRIER SHOWN. LEFT BARRIER SIMILAR, EXCEPT OPPOSITE HAND.)

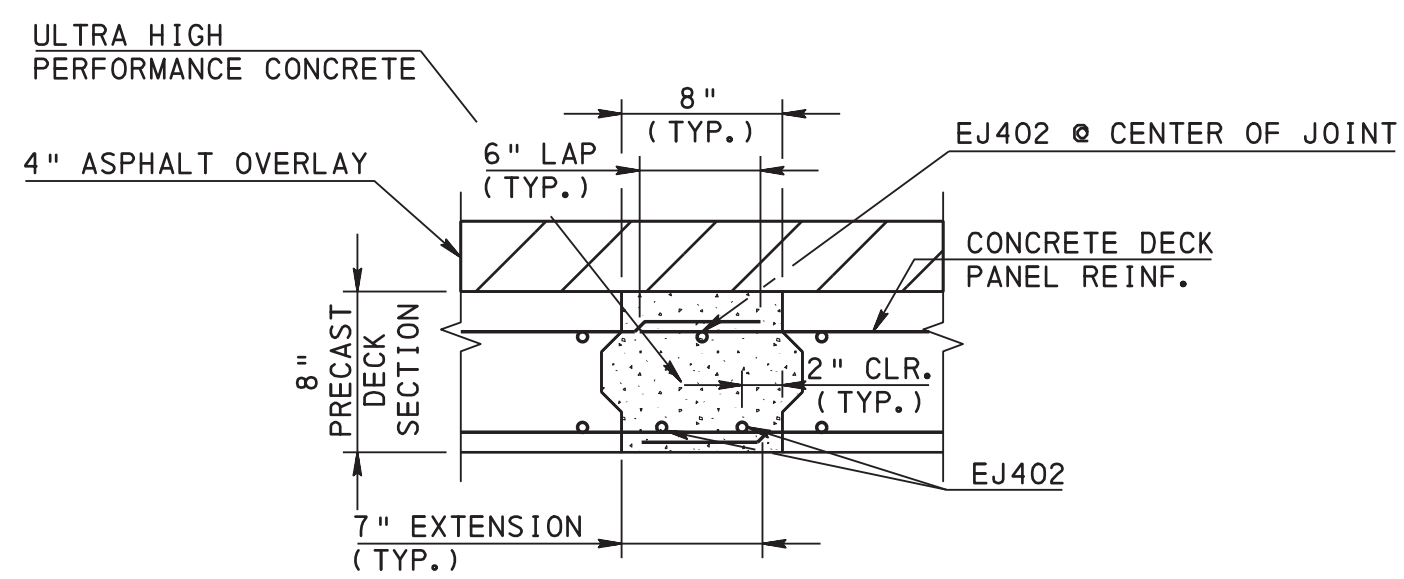
12 0 12 INCHES

NOTE:
BARRIER LAP SPLICE LENGTH: 2'-2" #4 BARS

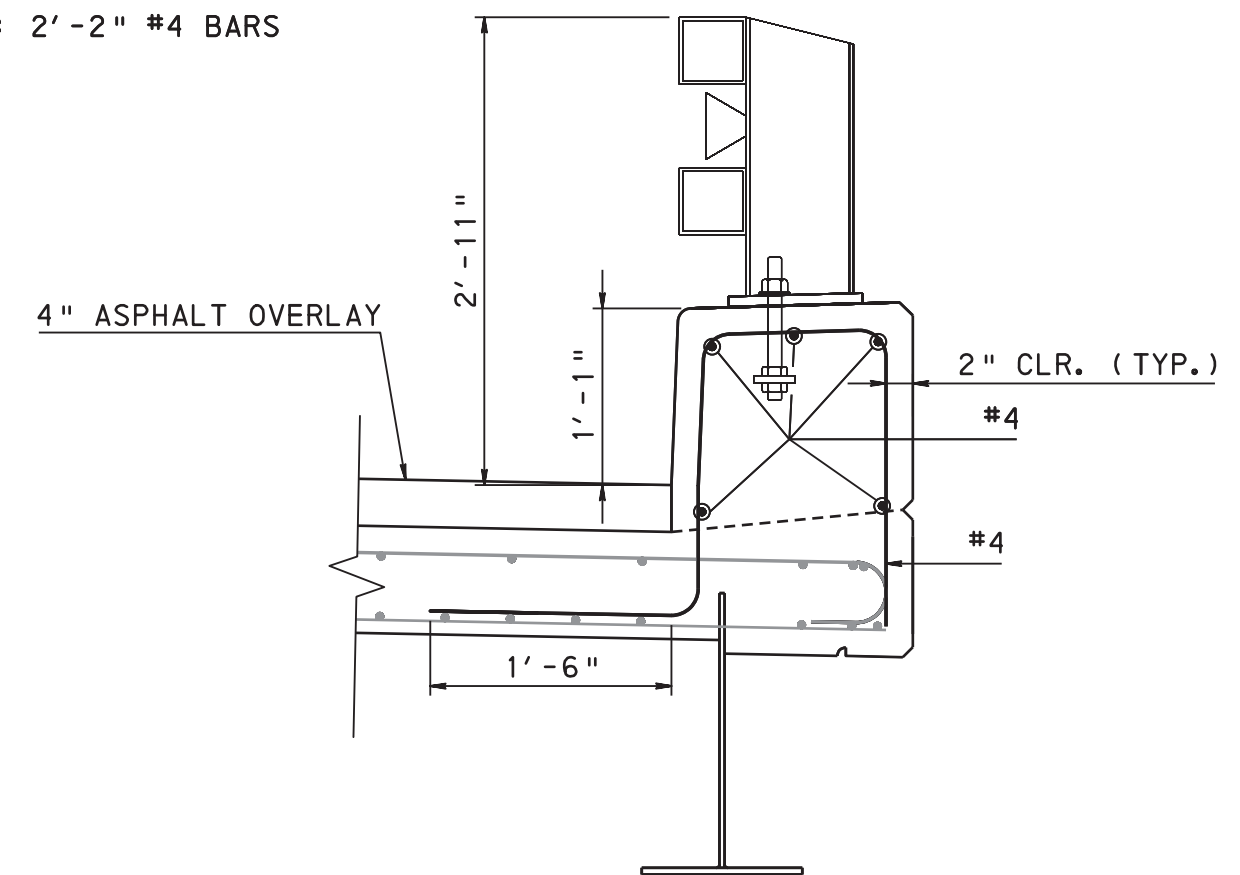


TYPICAL BEAM ELEVATION

6 0 6 12 INCHES

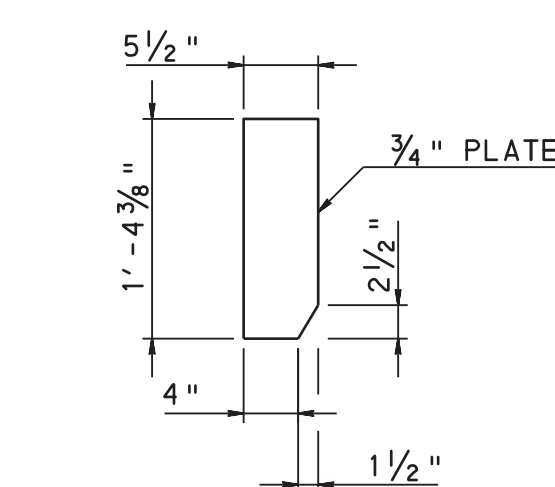


LONGITUDINAL JOINT CLOSURE POUR
NO SCALE



10-M BARRIER SECTION

6 0 6 12 INCHES



STIFFENER DETAIL

6 0 6 12 INCHES

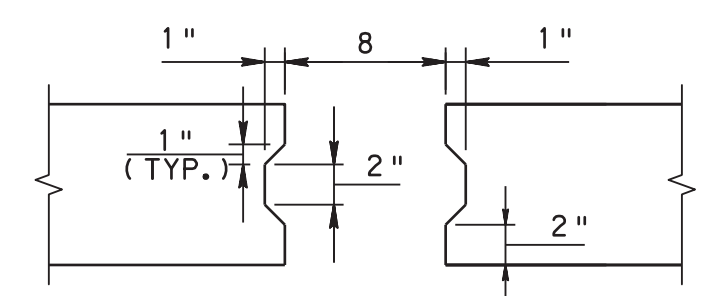
EXTERIOR & FIRST INTERIOR BEAM CAMBER TABLE

	LOCATION (TENTH POINTS)										
	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
A	0"	1/8"	3/16"	3/16"	5/16"	3/8"	5/16"	3/8"	1/2"	3/8"	0"
B	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
C	0"	1/4"	3/8"	3/8"	5/8"	1 1/16"	5/8"	3/8"	3/8"	1/4"	0"

INTERIOR BEAM CAMBER TABLE

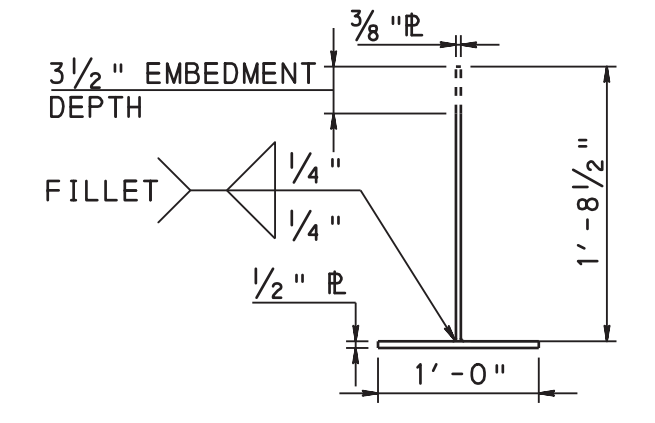
	LOCATION (TENTH POINTS)										
	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
A	0"	1/8"	3/16"	3/16"	5/16"	3/8"	5/16"	3/8"	1/2"	0"	0"
B	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"	0"
C	0"	1/8"	3/16"	3/16"	5/16"	3/8"	5/16"	3/8"	1/2"	0"	0"

NOTES:
A = DEAD LOAD DEFLECTION DUE TO SELF WEIGHT OF STEEL BEAM.
B = DEAD LOAD DEFLECTION DUE TO BARRIER. (USED FOR EXTERIOR AND FIRST INTERIOR GIRDER)
C = TOTAL CAMBER



LONGITUDINAL JOINT DETAIL

6 0 6 INCHES



GIRDER DETAIL

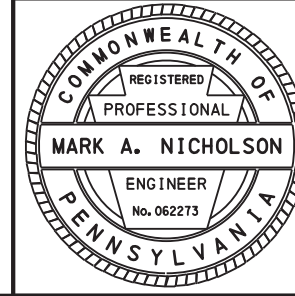
6 0 6 12 INCHES

Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					

S.R. 3010 PREVIOUSLY KNOWN AS L.R. 25102

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

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SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
FLEXBEAM MODULE DETAILS - 3

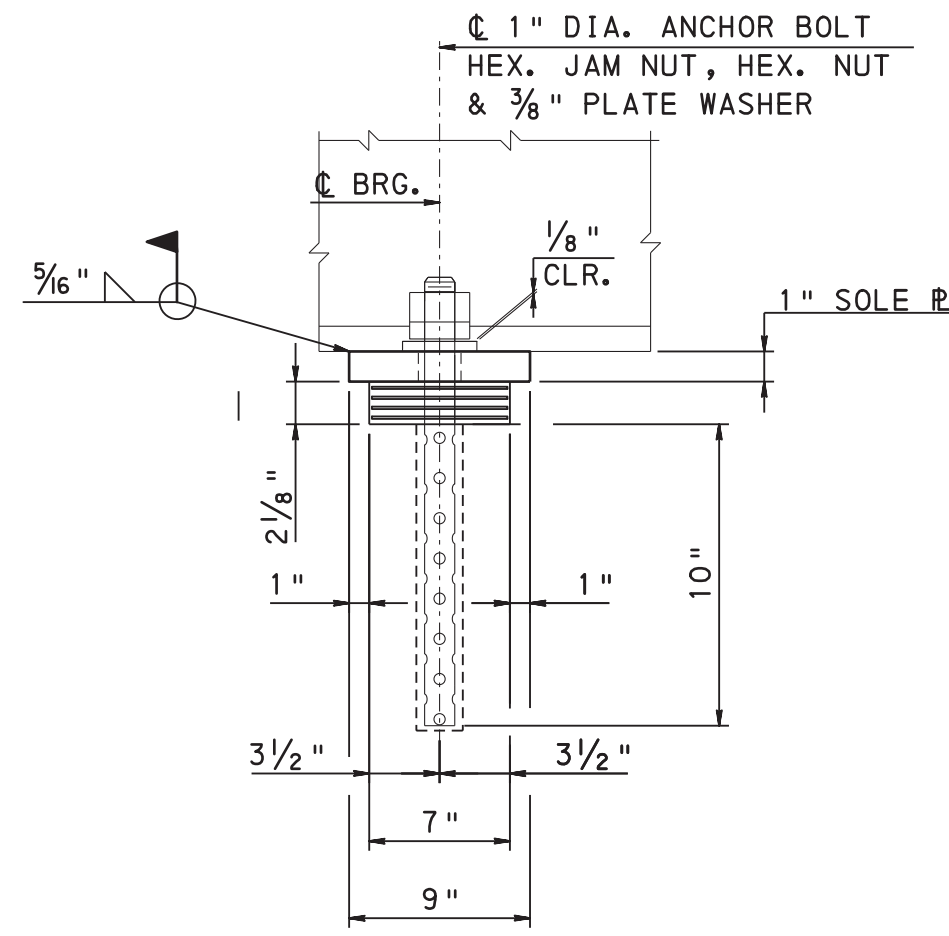


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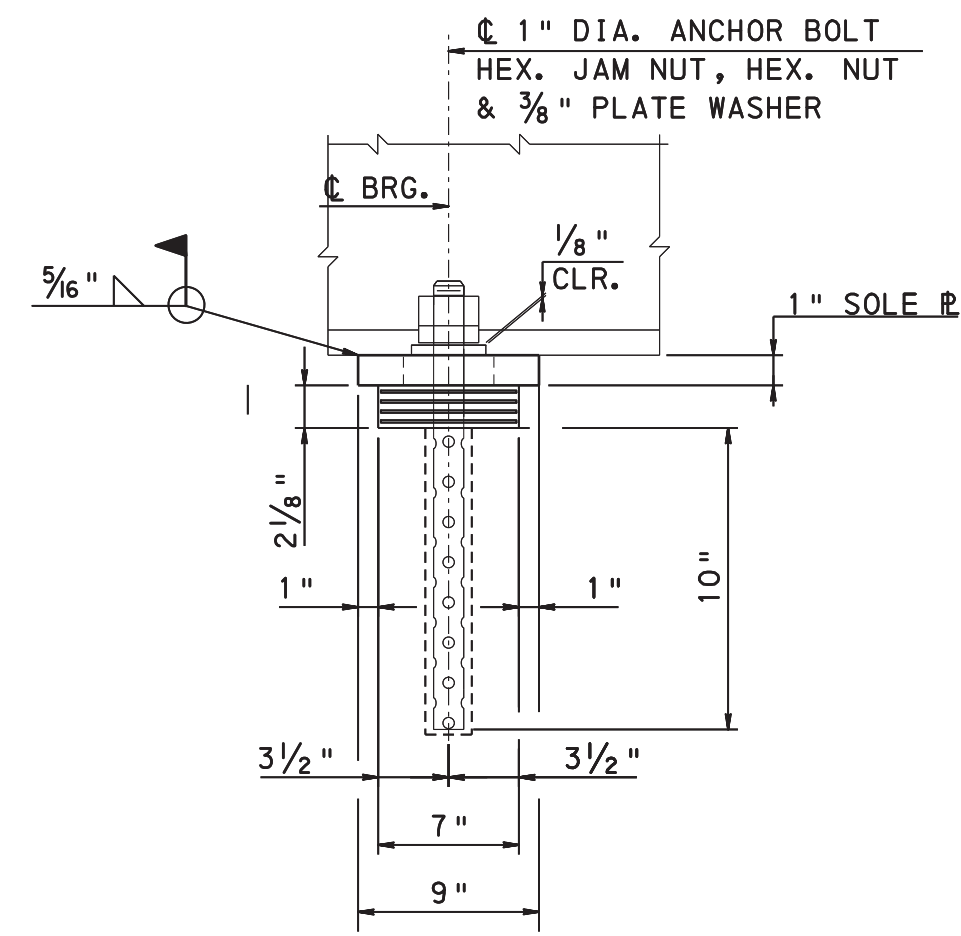
SHEET 11 OF 16

S - 39096

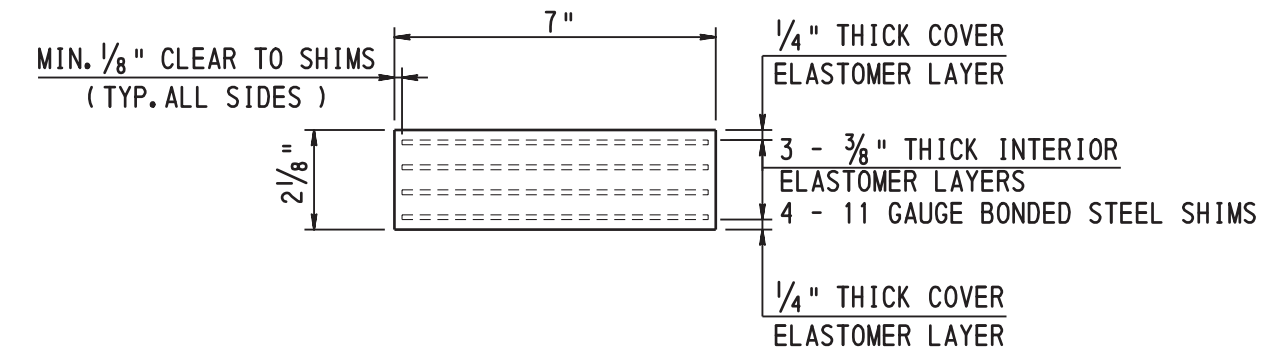
ELASTOMERIC BEARING PADS										
BEARING LOCATION	TYPE	SIZE		NUMBER OF INTERNAL LAYERS	INTERNAL LAYER THICKNESS	COVER LAYER THICKNESS	NUMBER OF STEEL LAMINATES	THICKNESS OF STEEL LAMINATES	TOTAL BEARING THICKNESS (T)	NUMBER REQUIRED
		W	L							
ABUT. 1	FIXED	9"	7"	3	0.375"	0.25"	4	0.125"	2.125"	10
ABUT. 2	EXPANSION	9"	7"	3	0.375"	0.25"	4	0.125"	2.125"	10



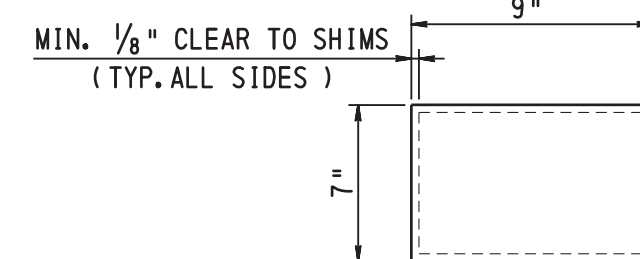
BEARING ASSEMBLY ELEVATION
NO SCALE
(ABUTMENT 1 - FIXED)



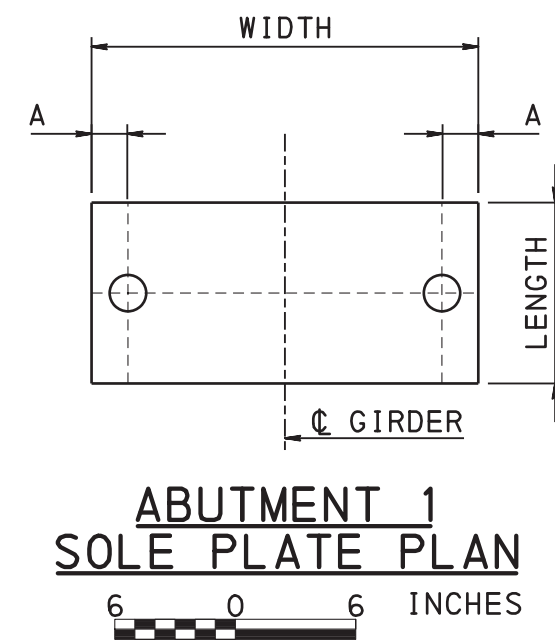
BEARING ASSEMBLY ELEVATION
NO SCALE
(ABUTMENT 2 - EXP.)



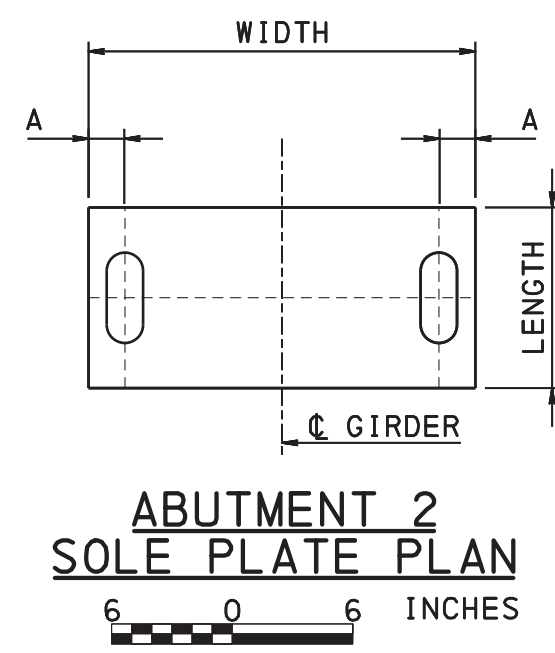
ABUTMENT 1 & 2 ELASTOMERIC BEARING PAD ELEVATION
NO SCALE



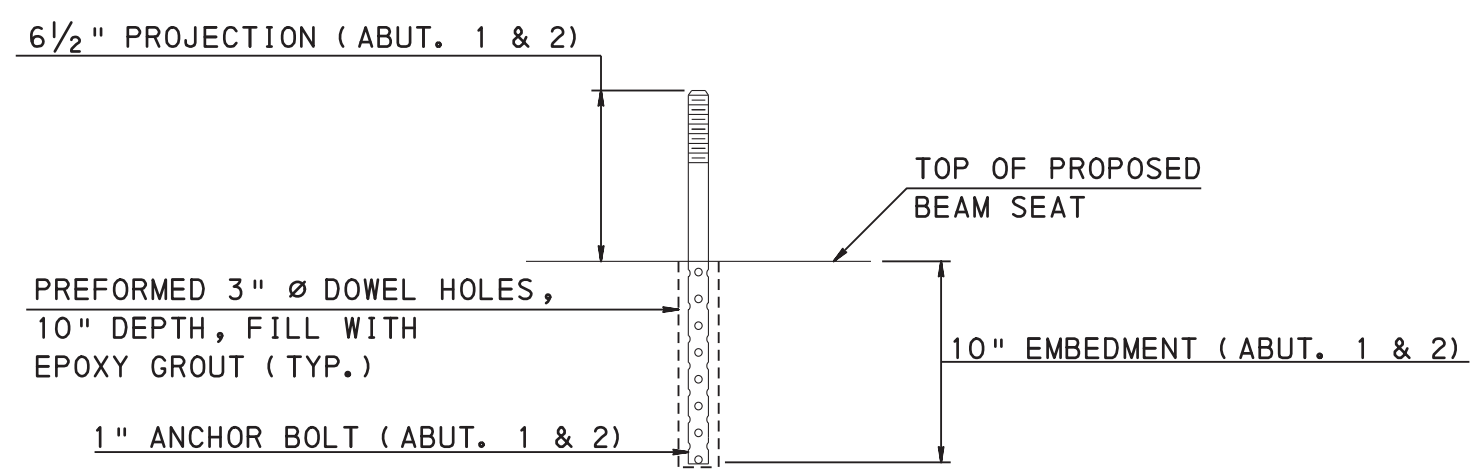
TYPICAL ELASTOMERIC BEARING PAD PLAN AT ABUTMENT 1 & 2
NO SCALE



ABUTMENT 1 SOLE PLATE PLAN
6 0 6 INCHES



ABUTMENT 2 SOLE PLATE PLAN
6 0 6 INCHES



ANCHOR BOLT DETAIL
NO SCALE

NOTES:

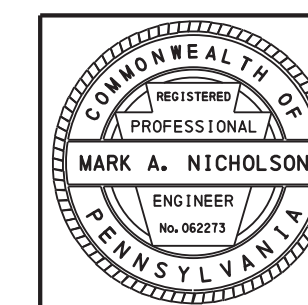
- MANUFACTURE ALL BEARINGS IN ACCORDANCE WITH THE COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PLANS AND SPECIFICATIONS PUB. 408 SECTION 1113.02, 1113.03, AND DM-4.
- ALL BEARING PADS ARE TO BE MOLDED TO DESIGN DIMENSIONS. CUTTING TO SIZE AFTER FABRICATION IS PROHIBITED.
- PROVIDE NEOPRENE TYPE 50 ±5 DUROMETER, MINIMUM LOW-TEMPERATURE GRADE 3.
- PROVIDE INTERNAL SHIMS AS PER ASTM A570/A570M GRADE 36.
- SMOOTH CUT, DEBURR, GRIT BLAST, AND DEGREASE METAL SHIMS.
- FABRICATOR MAY USE CONTRACT DRAWINGS TO FABRICATE BEARING PADS.
- PROVIDE A TROWEL SMOOTH SURFACE OF THE BEARING AREA DIRECTLY UNDER THE GIRDERS AND THE AREA EXTENDING 2" OUTSIDE OF THAT AREA.
- PLACE ALL BEAMS WITH THEIR WEBS VERTICAL.
- SEE BC-775M FOR ADDITIONAL NOTES AND DETAILS NOT SHOWN.
- ALL SOLE PLATES, ANCHOR BOLTS, AND HARDWARE ARE INCIDENTAL TO LAMINATED NEOPRENE BEARING PAD.

Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					

S.R. 3010 PREVIOUSLY KNOWN AS L.R. 25102

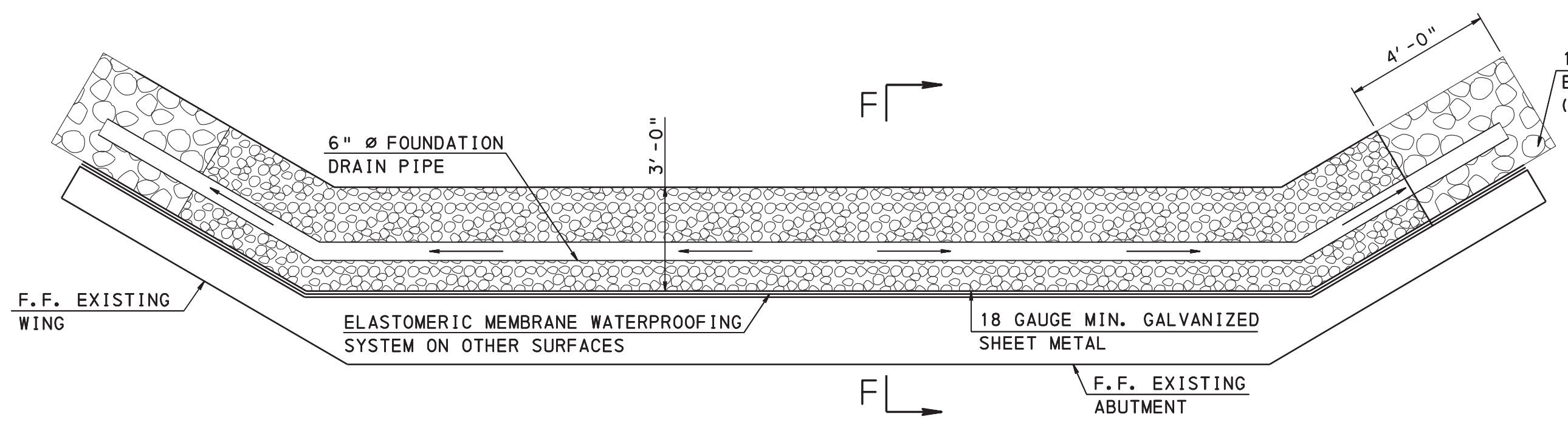
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

ERIE COUNTY
S.R. 3010, SEC. B00
SEGMENT 0050, OFFSET 0000
STA. 108+02.00
OVER WEST BRANCH CUSSEWAGO CREEK
SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
BEARING PADS, SOLE PLATES, & ANCHOR BOLTS



SOLE PLATES							
LOCATION	BEARING TYPE	SIZE (L X W)	DIM. A	DIM. B	THICKNESS	NUMBER REQUIRED	SLOTTED HOLE LENGTH/HOLE DIAMETER
ABUTMENT 1	FIXED	9" X 1'-7 1/4"	1 13/16"	---	1"	10	1 13/16" H. D.
ABUTMENT 2	EXP.	9" X 1'-7 1/4"	1 13/16"	---	1"	10	4 1/2" S.H.L. / 1 13/16" H. D.

OPERATOR: C:\Users\hwiner\Desktop\ER16 3010\SHEETFILES\13 - FOUNDATION DRAIN AND WATERPROOFING DETAILS.dgn
 FILE NAME: C:\Users\hwiner\Desktop\ER16 3010\SHEETFILES\13 - FOUNDATION DRAIN AND WATERPROOFING DETAILS.dgn
 D-9002 CADD (02-20) REVISED (10-04) PLOTTED: 13-MAY-2020 08:57



FOUNDATION DRAIN PLAN

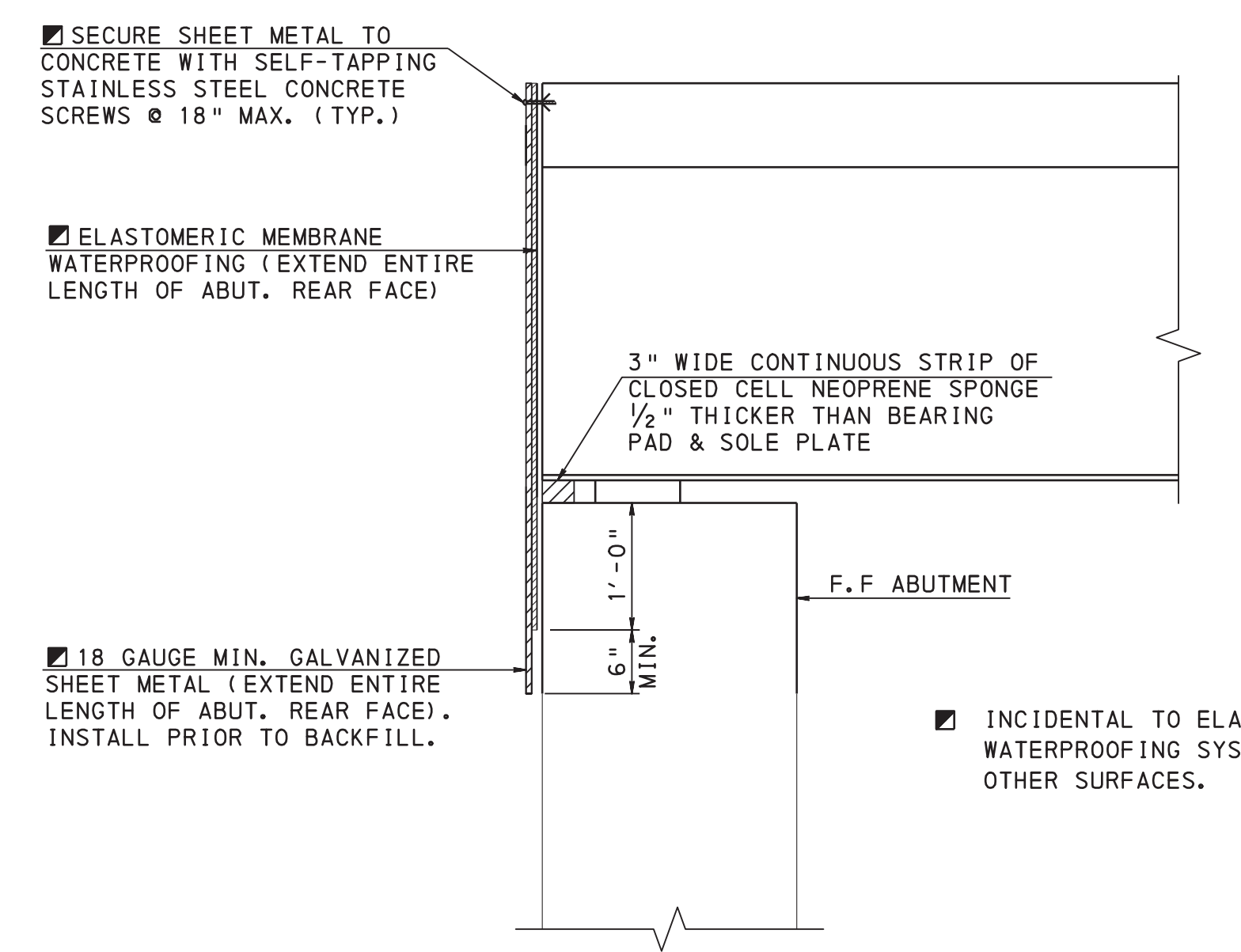
1 0 1 2 3 FEET

NOTE:
SLOPE DRAIN 1/8" MIN. DROP PER 1'-0" RUN (TYP.) IN DIRECTION INDICATED.

1/2 CY OF SELECTED BORROW EXCAVATION ROCK, CLASS R-4 (TYP.)

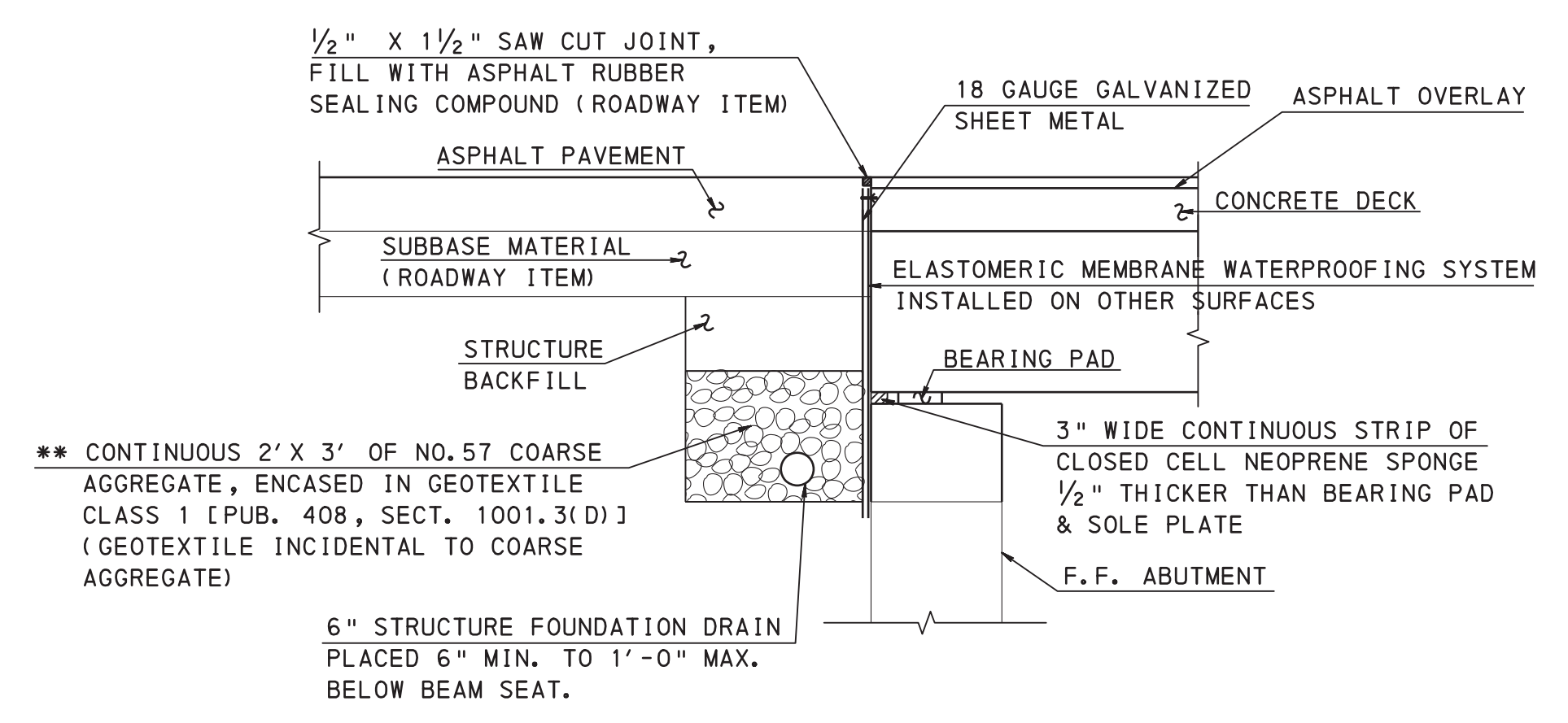
18 GAUGE MIN. GALVANIZED SHEET METAL

18 GAUGE MIN. GALVANIZED SHEET METAL (EXTEND ENTIRE LENGTH OF ABUT. REAR FACE). INSTALL PRIOR TO BACKFILL.



TYPICAL ABUTMENT WATERPROOFING DETAIL

6 0 6 12 INCHES



SECTION F-F
NO SCALE

** NO. 57 COARSE AGGREGATE ENCASED IN GEOTEXTILE IS NOT REQUIRED IF NO. 57 COARSE AGGREGATE BACKFILL IS USED.

** CONTINUOUS 2' X 3' OF NO. 57 COARSE AGGREGATE, ENCASED IN GEOTEXTILE CLASS 1 [PUB. 408, SECT. 1001.3(D)] (GEOTEXTILE INCIDENTAL TO COARSE AGGREGATE)

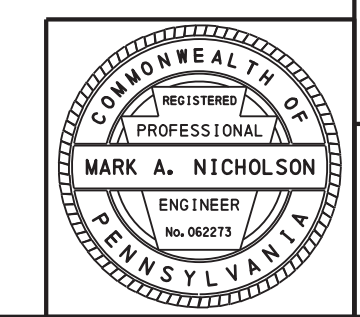
6" STRUCTURE FOUNDATION DRAIN PLACED 6" MIN. TO 1'-0" MAX. BELOW BEAM SEAT.

Mark	Description	By	Chk' d.	Recm' d.	Date
REVISIONS					

S.R. 3010 PREVIOUSLY KNOWN AS L.R. 25102

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

ERIE COUNTY
S.R. 3010, SEC. B00
SEGMENT 0050, OFFSET 0000
STA. 108+02.00
 OVER WEST BRANCH CUSSEWAGO CREEK
 SUPERSTRUCTURE REPLACEMENT & STREAMBED PAVING
FOUNDATION DRAIN & WATERPROOFING DETAILS



RECOMMENDED 5/18/2020

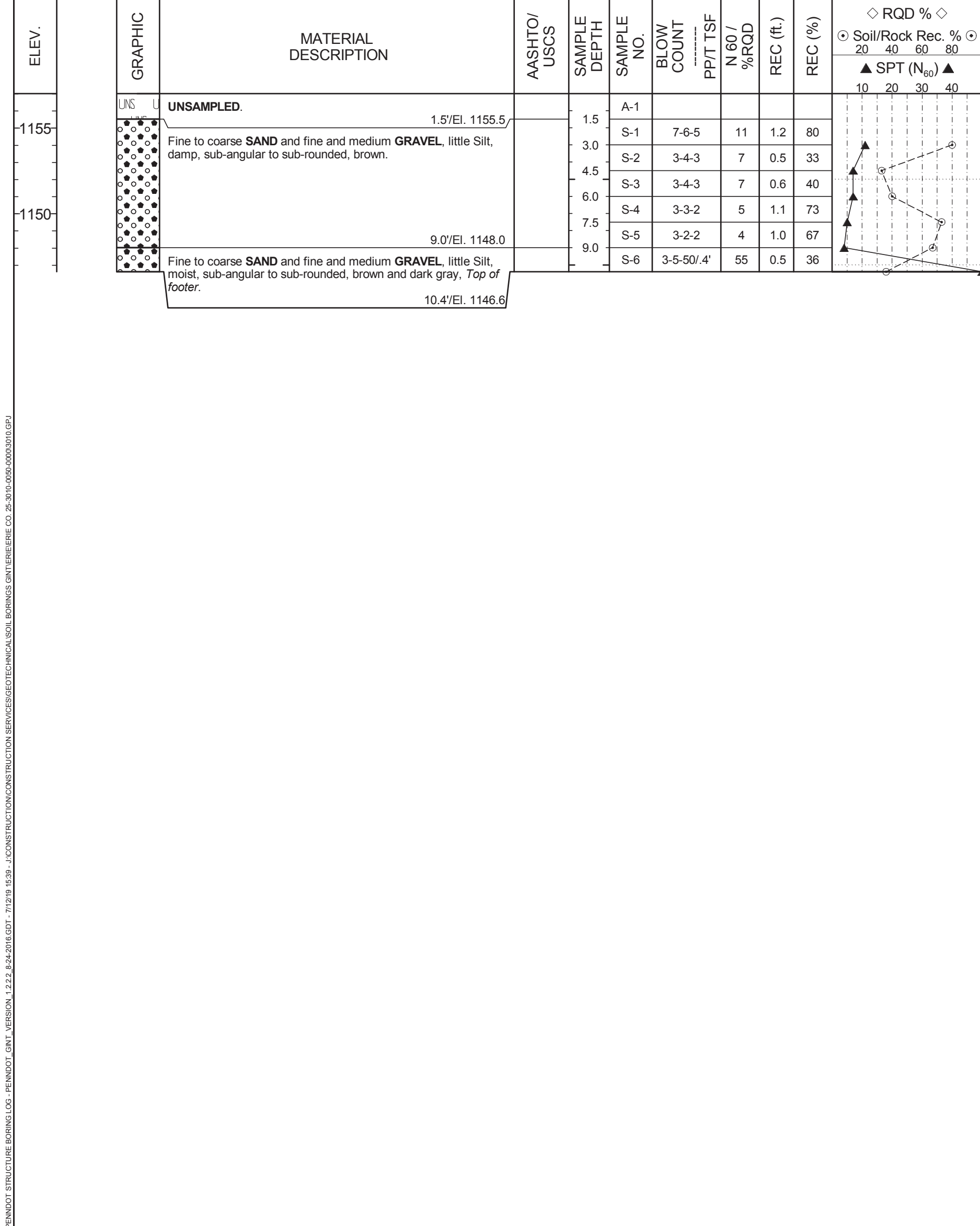
SHEET 13 OF 16

S - 39096

DES: HWW DWG: HWW CKD: MPA/EJK

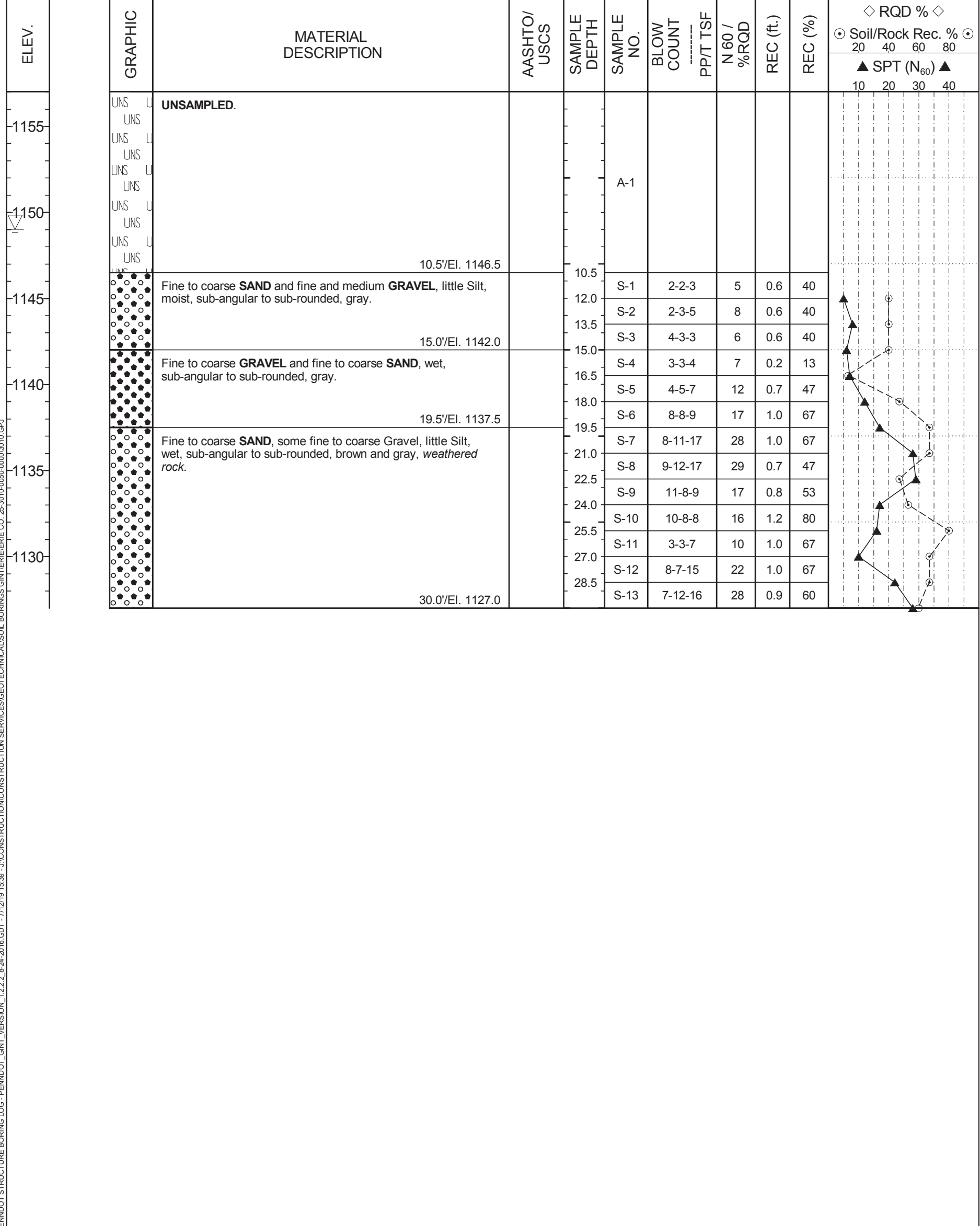
SUBSTRUCTURE UNIT: LOG 1 OF 1

BORING NUMBER: RB-1	BORING LOCATION STATION: 107+84.0 OFFSET: 6.0 FT. RT.	START: 05/24/2019 8:00 AM FINISH: 05/24/2019 10:00 AM	HAMMER: SAFETY EFFICIENCY: 0.6 ERa
DRILLING METHOD AND EQUIPMENT: DRILLING METHOD-NO RECORD, SAFETY, SIMCO		SIZE OF CORE: "NO RECORD"	VERTICAL SCALE: 0 FT. 5 FT.
DRILLING INSPECTOR: WILL CAMPBELL DRILLER & DRILLING COMPANY: JEFF RINDFUSS R. RINDFUSS DRILLING, L.P.		TOP OF BORING ELEVATION: 1157.0 FT.	
▽ 0 HR. READING - ELAPSED TIME: Dry - 0.0 hr. ▼ 24 HR. READING - ELAPSED TIME: NR - NR			



SUBSTRUCTURE UNIT: LOG 1 OF 1

BORING NUMBER: RB-1A	BORING LOCATION STATION: 107+81.0 OFFSET: 6.0 FT. RT.	START: 05/24/2019 10:30 AM FINISH: 05/24/2019 1:30 PM	HAMMER: SAFETY EFFICIENCY: 0.6 ERa
DRILLING METHOD AND EQUIPMENT: DRILLING METHOD-NO RECORD, SAFETY, SIMCO		SIZE OF CORE: "NO RECORD"	VERTICAL SCALE: 0 FT. 5 FT.
DRILLING INSPECTOR: WILL CAMPBELL DRILLER & DRILLING COMPANY: JEFF RINDFUSS R. RINDFUSS DRILLING, L.P.		TOP OF BORING ELEVATION: 1157.0 FT.	
▽ 0 HR. READING - ELAPSED TIME: El. 1149.0 ft. - 0.0 hr. ▼ 24 HR. READING - ELAPSED TIME: NR - NR			



GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SUBSURFACE CONDITIONS MAY DIFFER FROM THE CONDITIONS REPORTED AT THE SPECIFIC LOCATIONS. ALSO, THE PASSAGE OF TIME MAY RESULT IN A CHANGE OF CONDITIONS AT THE BORING LOCATIONS.

LEGEND

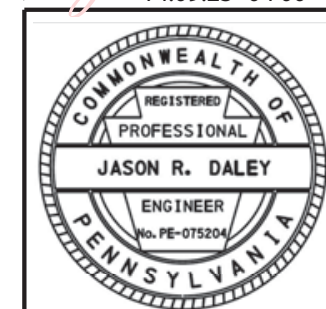
- PP POCKET PENETROMETER
- T TORVANE
- NTS NOT TO SCALE

THE DESCRIPTIONS OF THE MATERIALS HAVE BEEN VERIFIED.
CTF

THE SUBSURFACE EXPLORATION DATA THAT ARE PRESENTED ON THESE DRAWINGS (INCLUDING BORING LOGS, EARTH SAMPLES, ROCK CORES, CLASSIFICATION OF MATERIALS AND DEPTH OF BORINGS) ACCURATELY REPRESENT THE CONDITIONS ENCOUNTERED BY THE TEST BORING PROGRAM AT EACH BORING LOCATION.

Jason R. Daley
GEOTECHNICAL ENGINEER/ENGINEERING GEOLOGIST DATE: 4/20/2020

Jason R. Daley, P.E. Digitally signed by Jason R. Daley, P.E. Date: 2020.04.20 14:09:23 -0400



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
ERIE COUNTY
S.R. 3010, SEC. B00
SEGMENT 0050, OFFSET 0000
STA. 108+02.00
OVER WEST BRANCH OF CUSSEWAGO CREEK
SUPERSTRUCTURE REP. & STREAMBED PAVING
STRUCTURE BORINGS

Jason R. Daley 4/20/2020
DISTRICT GEOTECHNICAL ENGINEER DATE

SHEET 14 OF 16

S - 39096

SUBSTRUCTURE UNIT: LOG 1 OF 1

BORING NUMBER: **RB-2** BORING LOCATION: STATION: 107+86.0 OFFSET: 6.0 FT. RT.
 START: 05/24/2019 2:00 PM FINISH: 05/24/2019 3:00 PM HAMMER: EFFICIENCY: ERa
 DRILLING METHOD AND EQUIPMENT: DOUBLE TUBE WIRE LINE-NQ, HAMMER-NO RECORD, SIMCO
 SIZE OF CORE: "NO RECORD" VERTICAL SCALE: 0 FT. 5 FT. TOP OF BORING ELEVATION: 1156.6 FT.
 DRILLING INSPECTOR: WILL CAMPBELL
 DRILLER & DRILLING COMPANY: JEFF RINDFUSS R. RINDFUSS DRILLING, L.P.
 0 HR. READING - ELAPSED TIME: El. 1148.2 ft. - 0.0 hr.
 24 HR. READING - ELAPSED TIME: NR - NR

ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT	PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	RQD %			
											Soil/Rock Rec. %	SPT (N ₆₀)		
											20	40	60	80
1155		CEMENT CONCRETE, looked like all mechanical breaks. Cored through Abut. #1.												
1145					R-1				13.4	100				
														13.4/EI. 1143.2

SUBSTRUCTURE UNIT: LOG 1 OF 1

BORING NUMBER: **RB-3** BORING LOCATION: STATION: 108+18.0 OFFSET: 6.0 FT. LT.
 START: 05/28/2019 8:00 AM FINISH: 05/28/2019 10:00 AM HAMMER: EFFICIENCY: ERa
 DRILLING METHOD AND EQUIPMENT: DOUBLE TUBE WIRE LINE-NQ, HAMMER-NO RECORD, SIMCO
 SIZE OF CORE: "NO RECORD" VERTICAL SCALE: 0 FT. 5 FT. TOP OF BORING ELEVATION: 1156.8 FT.
 DRILLING INSPECTOR: WILL CAMPBELL
 DRILLER & DRILLING COMPANY: JEFF RINDFUSS R. RINDFUSS DRILLING, L.P.
 0 HR. READING - ELAPSED TIME: El. 1148.8 ft. - 0.0 hr.
 24 HR. READING - ELAPSED TIME: NR - NR


ELEV.	GRAPHIC	MATERIAL DESCRIPTION	AASHTO/USCS	SAMPLE DEPTH	SAMPLE NO.	BLOW COUNT	PP/T TSF	N 60 / %RQD	REC (ft.)	REC (%)	RQD %			
											Soil/Rock Rec. %	SPT (N ₆₀)		
											20	40	60	80
1155		CEMENT CONCRETE, looks like cracking @0.8' & 1.7' hard to fell.												
1145					R-1				13.3	100				
														13.3/EI. 1143.5

GENERAL NOTES

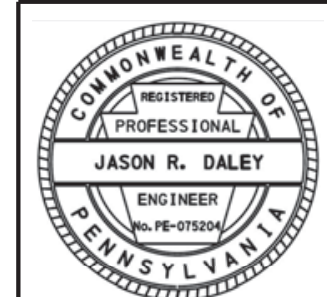
THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.
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LEGEND

- PP POCKET PENETROMETER
- T TORVANE
- NTS NOT TO SCALE

THE DESCRIPTIONS OF THE MATERIALS HAVE BEEN VERIFIED.


Digitally signed by Jason R. Daley, P.E. Date: 2020.04.20 14:09:59 -0400



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
 ERIE COUNTY
 S.R. 3010, SEC. B00
 SEGMENT 0050, OFFSET 0000
 STA. 108+02.00
 OVER WEST BRANCH OF CUSSEWAGO CREEK
 SUPERSTRUCTURE REP. & STREAMBED PAVING
 STRUCTURE BORINGS

SHEET 15 OF 16

4/20/2020
 DATE

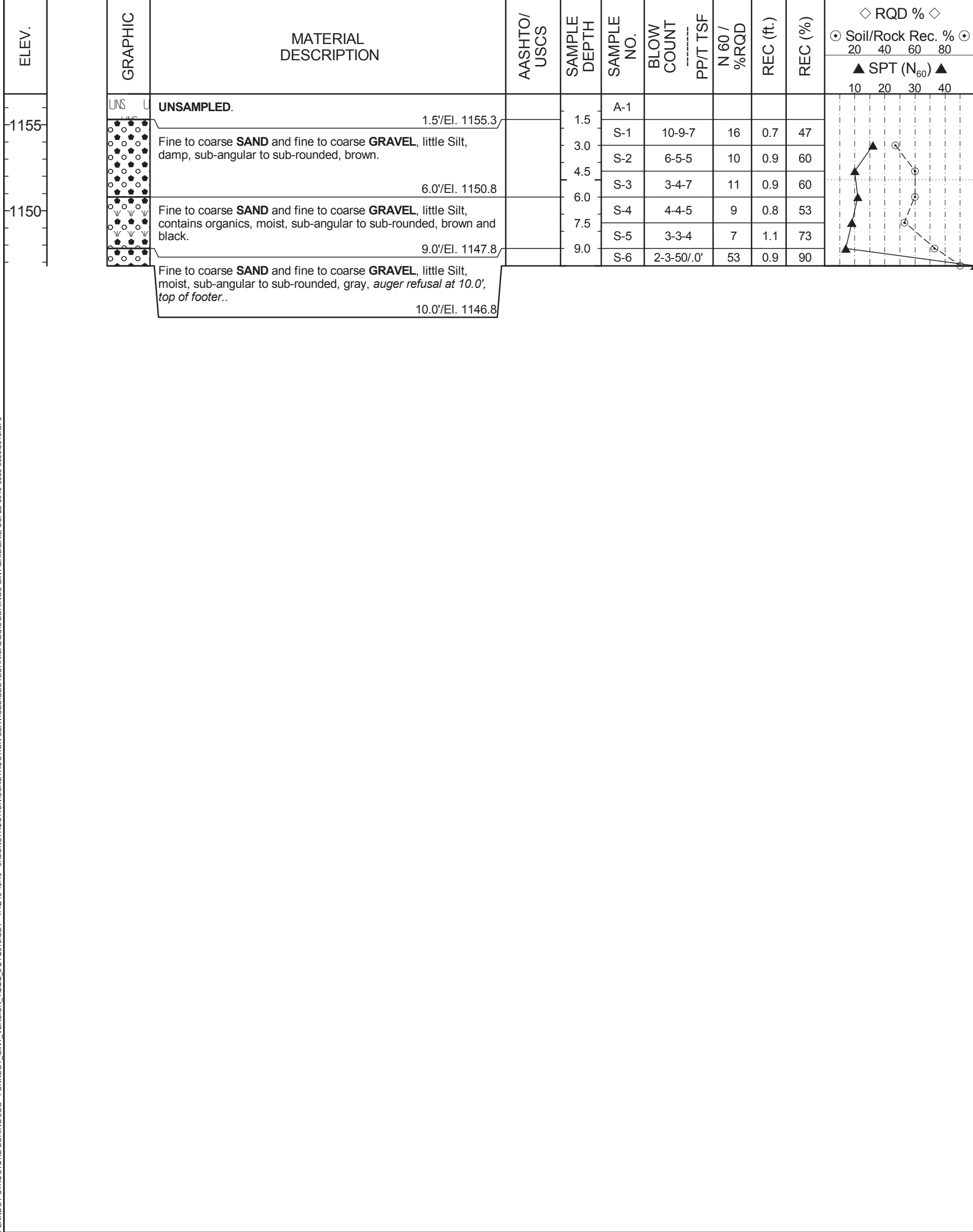
S - 39096

SUBSTRUCTURE UNIT: LOG 1 OF 1

BORING NUMBER: RB-4
BORING LOCATION: STATION: 108+20.0
 OFFSET: 7.0 FT. LT.
START: 05/28/2019 10:30 AM
FINISH: 05/28/2019 1:30 PM
HAMMER: SAFETY
EFFICIENCY: 0.6 ERa

DRILLING METHOD AND EQUIPMENT:
 DRILLING METHOD-NO RECORD, SAFETY,
 SIMCO

DRILLING INSPECTOR: WILL CAMPBELL
DRILLER & DRILLING COMPANY: JEFF RINDFUSS
 R. RINDFUSS DRILLING, L.P.

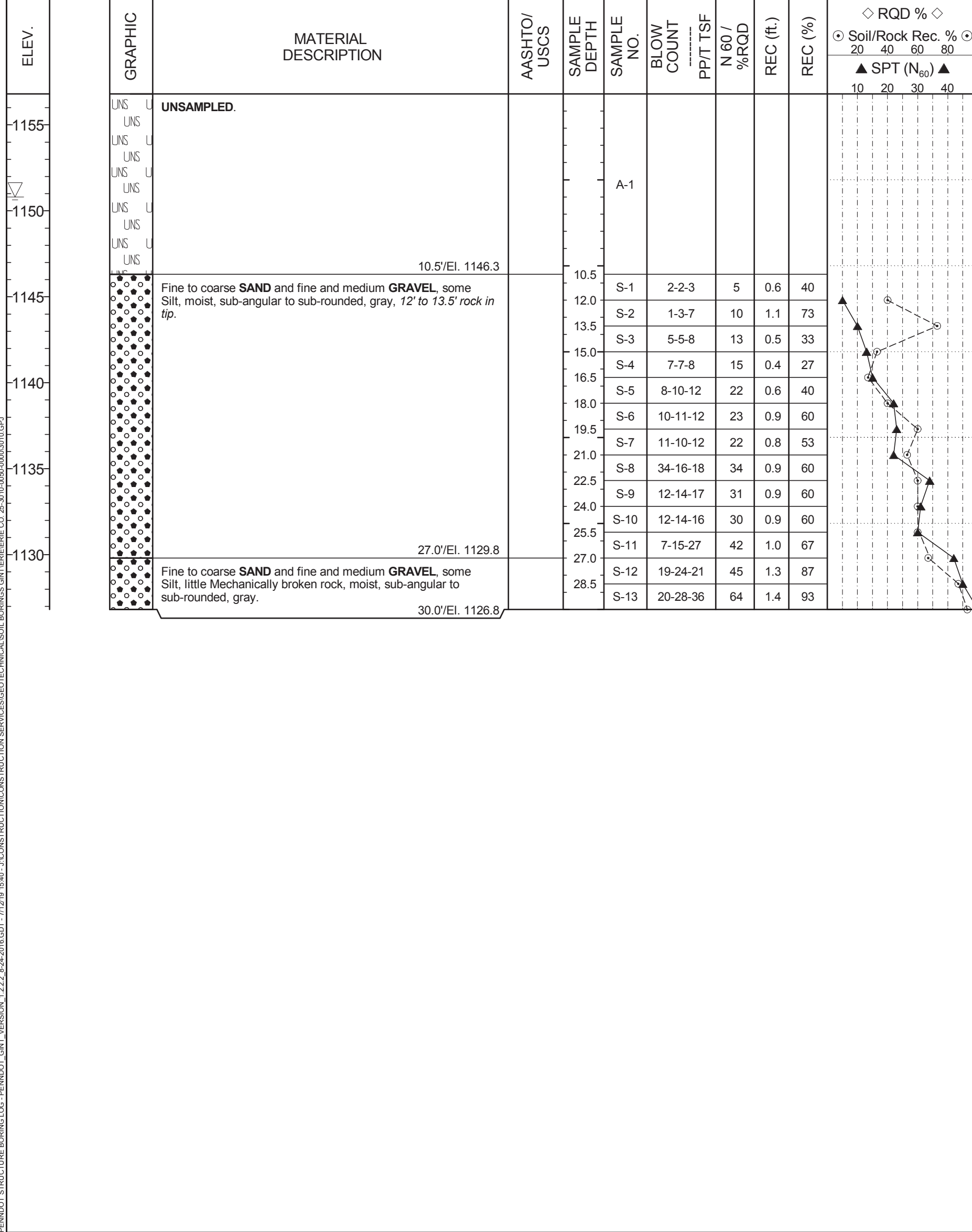


SUBSTRUCTURE UNIT: LOG 1 OF 1

BORING NUMBER: RB-4A
BORING LOCATION: STATION: 108+22.0
 OFFSET: 7.0 FT. LT.
START: 05/28/2019 2:00 PM
FINISH: 05/28/2019 3:00 PM
HAMMER: SAFETY
EFFICIENCY: 0.6 ERa

DRILLING METHOD AND EQUIPMENT:
 DRILLING METHOD-NO RECORD, SAFETY,
 SIMCO

DRILLING INSPECTOR: WILL CAMPBELL
DRILLER & DRILLING COMPANY: JEFF RINDFUSS
 R. RINDFUSS DRILLING, L.P.



GENERAL NOTES

THIS SHEET IS INCLUDED FOR THE CONVENIENCE OF THE DEPARTMENT. REFER TO PUBLICATION 408 SECTION 102.05 FOR FURTHER INFORMATION.

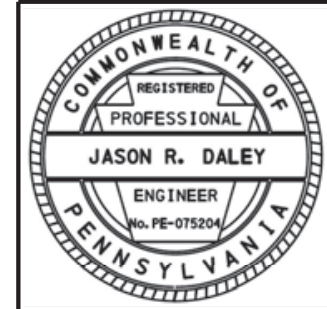
FOR ADDITIONAL SOIL AND ROCK DESCRIPTIONS SEE PUBLICATION 222.

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LEGEND

- PP POCKET PENETROMETER
- T TORVANE
- NTS NOT TO SCALE

Jason R. Daley, P.E. Digitally signed by Jason R. Daley, P.E. Date: 2020.04.20 14:10:36 -0400



COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION
 ERIE COUNTY
 S.R. 3010, SEC. B00
 SEGMENT 0050, OFFSET 0000
 STA. 108+02.00
 OVER WEST BRANCH OF CUSSEWAGO CREEK
 SUPERSTRUCTURE REP. & STREAMBED PAVING
 STRUCTURE BORINGS

SHEET 16 OF 16
 DATE 4/20/2020
 S - 39096