



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

June 29, 2023

**Addendum No. 1**

RE: Contract # C204851

WBS # 34497.3.12

STATE FUNDED

**Cleveland County (R-2707D, R-2707E)**

US-74 SHELBY BYPASS FROM EAST OF NC-150 TO WEST OF SR-1001  
(STONE POINT ROAD).

**July 18, 2023 Letting**

To Whom It May Concern:

Reference is made to the proposal and plans furnished to you on this project.

The following revisions have been made to the Utility Construction Plans.

Sheet No.	Revision
UC-03A, UC-03B, UC-03C	Updates to the detail sheets for the City of Shelby waterline design addressing comments received from NCDEQ for permit. Adjusted scale of details for better clarity and legibility
UC-05	Updates to the detail sheets for the City of Shelby waterline design addressing comments received from NCDEQ for permit. Added a blow off assembly to the end of the waterline.

Please void the above listed Sheets in your Plans and staple the revised Sheets thereto.

The following revisions have been made to the Structure Plans.

Sheet No.	Revision
S1-19	Changed total weight of reinforcing steel for barrier rail to 9,166 lbs.
S1-21, S2-23, S7-22, S8-19, S9-19	Changed superstructure Class AA concrete volumes.

Mailing Address:  
NC DEPARTMENT OF TRANSPORTATION  
CONTRACT STANDARDS AND DEVELOPMENT  
1591 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1591

Telephone: (919) 707-6900  
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Location:  
1020 BIRCH RIDGE DR.  
RALEIGH, NC 27610

Website: [www.ncdot.gov](http://www.ncdot.gov)

Please void the above listed Sheets in your Plans and staple the revised Sheets thereto.

The following revisions have been made to the proposal.

<b>Page No.</b>	<b>Revision</b>
Proposal Cover	Note added that reads "Includes Addendum No. 1 Dated 06-29-2023".

Please void the above listed existing Page in your proposal and staple the revised Page thereto.

On the item sheets the following pay item revisions have been made:

<u>Item</u>	<u>Description</u>	<u>Old Quantity</u>	<u>New Quantity</u>
0018-0098000000-E 220	PRE-SPLITTING OF ROCK	1,200 SY	DELETED
0308-5872500000-E 1550	BORE AND JACK OF 12"	235 LF	DELETED
0309-5872500000-E 1550	BORE AND JACK OF 24"	340 LF	575 LF
0420-5606000000-E 1515	2" BLOW OFF	NEW ITEM	1 EA

The Contractor's bid must include these pay item revisions.

The electronic bidding file has been updated to reflect these revisions. Please download the Addendum File and follow the instructions for applying the addendum. Bid Express will not accept your bid unless the addendum has been applied.

The contract will be prepared accordingly.

Sincerely,

DocuSigned by:  
  
 F81B6038A47A442...

Ronald E. Davenport, Jr., PE  
 State Contract Officer

RED/cms  
 Attachments

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH, N.C.

PROPOSAL

**INCLUDES ADDENDUM No. 1 DATED 06-29-2023**

DATE AND TIME OF BID OPENING: **Jul 18, 2023 AT 02:00 PM**

CONTRACT ID C204851  
WBS 34497.3.12

FEDERAL-AID NO. STATE FUNDED  
COUNTY CLEVELAND  
T.I.P NO. R-2707D, R-2707E  
MILES 6.099  
ROUTE NO. US-74  
LOCATION US-74 SHELBY BYPASS FROM EAST OF NC-150 TO WEST OF SR-1001  
(STONE POINT RD).

TYPE OF WORK GRADING, DRAINAGE, PAVING, SIGNING, AND STRUCTURES.

**NOTICE:**

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

**BIDS WILL BE RECEIVED AS SHOWN BELOW:**

**THIS IS A ROADWAY & STRUCTURE PROPOSAL**

**5% BID BOND OR BID DEPOSIT REQUIRED**

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cc: Mr. Boyd Tharrington, PE  
Mr. Mark Stafford, PE  
Mr. Ken Kennedy, PE  
Mr. Mike Gwyn  
Project File (2)

Mr. Forrest Dungan, PE  
Ms. Jaci Kincaid  
Mr. Jon Weathersbee, PE

County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
<b>ROADWAY ITEMS</b>						
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0000400000-N	801	CONSTRUCTION SURVEYING	Lump Sum	L.S.	
0003	0000700000-N	SP	FIELD OFFICE	Lump Sum	L.S.	
0004	0001000000-E	200	CLEARING & GRUBBING .. ACRE(S)	Lump Sum	L.S.	
0005	0008000000-E	200	SUPPLEMENTARY CLEARING & GRUBBING	5 ACR		
0006	0015000000-N	205	SEALING ABANDONED WELLS	18 EA		
0007	0022000000-E	225	UNCLASSIFIED EXCAVATION	2,310,000 CY		
0008	0028000000-N	SP	TYPE I STANDARD APPROACH FILL STATION ***** (13+08.49 -Y42-)	Lump Sum	L.S.	
0009	0028000000-N	SP	TYPE I STANDARD APPROACH FILL STATION ***** (20+16.72 -Y2-)	Lump Sum	L.S.	
0010	0028000000-N	SP	TYPE I STANDARD APPROACH FILL STATION ***** (23+21.80 -Y3-)	Lump Sum	L.S.	
0011	0028000000-N	SP	TYPE I STANDARD APPROACH FILL STATION ***** (36+78.38 -RAMP A-)	Lump Sum	L.S.	
0012	0028000000-N	SP	TYPE I STANDARD APPROACH FILL STATION ***** (810+00.00 -L- LT)	Lump Sum	L.S.	
0013	0028000000-N	SP	TYPE I STANDARD APPROACH FILL STATION ***** (810+00.00 -L- RT)	Lump Sum	L.S.	
0014	0028000000-N	SP	TYPE I STANDARD APPROACH FILL STATION ***** (849+00.00 -L- LT)	Lump Sum	L.S.	
0015	0028000000-N	SP	TYPE I STANDARD APPROACH FILL STATION ***** (849+00.00 -L- RT)	Lump Sum	L.S.	

County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0016	0030000000-N	SP	TYPE II MODIFIED APPROACH FILL, STATION ***** (19+82.46 -Y1-)	Lump Sum	L.S.	
0017	0036000000-E	225	UNDERCUT EXCAVATION	28,750 CY		
0019	0106000000-E	230	BORROW EXCAVATION	590,000 CY		
0020	0127000000-N	235	EMBANKMENT SETTLEMENT GAUGES	3 EA		
0021	0134000000-E	240	DRAINAGE DITCH EXCAVATION	40,680 CY		
0022	0141000000-E	240	BERM DITCH CONSTRUCTION	5,500 LF		
0023	0156000000-E	250	REMOVAL OF EXISTING ASPHALT PAVEMENT	56,900 SY		
0024	0192000000-N	260	PROOF ROLLING	90 HR		
0025	0194000000-E	265	SELECT GRANULAR MATERIAL, CLASS III	21,800 CY		
0026	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZATION	37,700 SY		
0027	0199000000-E	SP	TEMPORARY SHORING	14,780 SF		
0028	0225000000-E	SP	REINFORCED SOIL SLOPES	4,655 SY		
0029	0248000000-N	SP	GENERIC GRADING ITEM EARTHWORK FOR DRY DETENTION BASIN @ 641+74 -L- LT	Lump Sum	L.S.	
0030	0248000000-N	SP	GENERIC GRADING ITEM EARTHWORK FOR DRY DETENTION BASIN @ 668+45 -L- LT	Lump Sum	L.S.	
0031	0248000000-N	SP	GENERIC GRADING ITEM EARTHWORK FOR DRY DETENTION BASIN @ 780+45 -L- LT	Lump Sum	L.S.	
0032	0248000000-N	SP	GENERIC GRADING ITEM EARTHWORK FOR DRY DETENTION BASIN @ 813+87 -L- LT	Lump Sum	L.S.	

County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0033	0248000000-N	SP	GENERIC GRADING ITEM EARTHWORK FOR DRY DETENTION BASIN @ 885+44 -L- LT	Lump Sum	L.S.	
0034	0248000000-N	SP	GENERIC GRADING ITEM EARTHWORK FOR DRY DETENTION BASIN @ 886+66 -L- RT	Lump Sum	L.S.	
0035	0248000000-N	SP	GENERIC GRADING ITEM EARTHWORK FOR DRY DETENTION BASIN @ 896+75 -L- RT	Lump Sum	L.S.	
0036	0248000000-N	SP	GENERIC GRADING ITEM EARTHWORK FOR HAZARDOUS SPILL BASIN @ 647+57 -L- RT	Lump Sum	L.S.	
0037	0248000000-N	SP	GENERIC GRADING ITEM EARTHWORK FOR HAZARDOUS SPILL BASIN @ 655+58 -L- LT	Lump Sum	L.S.	
0038	0248000000-N	SP	GENERIC GRADING ITEM EARTHWORK FOR HAZARDOUS SPILL BASIN @ 682+60 -L- RT	Lump Sum	L.S.	
0039	0248000000-N	SP	GENERIC GRADING ITEM EARTHWORK FOR HAZARDOUS SPILL BASIN @ 686+94 -L- LT	Lump Sum	L.S.	
0040	0255000000-E	SP	GENERIC GRADING ITEM HAULING AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL	300 TON		
0041	0318000000-E	300	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	7,780 TON		
0042	0320000000-E	300	FOUNDATION CONDITIONING GEOTEXTILE	22,470 SY		
0043	0342000000-E	310	*** SIDE DRAIN PIPE (30")	608 LF		
0044	0342000000-E	310	*** SIDE DRAIN PIPE (36")	472 LF		
0045	0342000000-E	310	*** SIDE DRAIN PIPE (42")	332 LF		
0046	0343000000-E	310	15" SIDE DRAIN PIPE	3,924 LF		
0047	0344000000-E	310	18" SIDE DRAIN PIPE	1,984 LF		

County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0048	0345000000-E	310	24" SIDE DRAIN PIPE	984 LF		
0049	0348000000-E	310	*** SIDE DRAIN PIPE ELBOWS (15")	52 EA		
0050	0348000000-E	310	*** SIDE DRAIN PIPE ELBOWS (18")	28 EA		
0051	0348000000-E	310	*** SIDE DRAIN PIPE ELBOWS (24")	10 EA		
0052	0348000000-E	310	*** SIDE DRAIN PIPE ELBOWS (30")	8 EA		
0053	0348000000-E	310	*** SIDE DRAIN PIPE ELBOWS (36")	8 EA		
0054	0350000000-E	SP	**** RC PIPE CULVERTS, CONTRACTOR DESIGN (42")	332 LF		
0055	0350000000-E	SP	**** RC PIPE CULVERTS, CONTRACTOR DESIGN (48")	348 LF		
0056	0350000000-E	SP	**** RC PIPE CULVERTS, CONTRACTOR DESIGN (54")	368 LF		
0057	0354000000-E	310	**** RC PIPE CULVERTS, CLASS ***** (30", V)	248 LF		
0058	0354000000-E	310	**** RC PIPE CULVERTS, CLASS ***** (48", V)	156 LF		
0059	0354000000-E	310	**** RC PIPE CULVERTS, CLASS ***** (66", V)	348 LF		
0060	0366000000-E	310	15" RC PIPE CULVERTS, CLASS III	9,192 LF		
0061	0372000000-E	310	18" RC PIPE CULVERTS, CLASS III	7,640 LF		
0062	0378000000-E	310	24" RC PIPE CULVERTS, CLASS III	7,096 LF		
0063	0384000000-E	310	30" RC PIPE CULVERTS, CLASS III	4,284 LF		
0064	0390000000-E	310	36" RC PIPE CULVERTS, CLASS III	1,472 LF		



County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0065	0396000000-E	310	42" RC PIPE CULVERTS, CLASS III	16 LF		
0066	0402000000-E	310	48" RC PIPE CULVERTS, CLASS III	112 LF		
0067	0408000000-E	310	54" RC PIPE CULVERTS, CLASS III	204 LF		
0068	0420000000-E	310	66" RC PIPE CULVERTS, CLASS III	388 LF		
0069	0448000000-E	310	***** RC PIPE CULVERTS, CLASS IV (48")	852 LF		
0070	0448000000-E	310	***** RC PIPE CULVERTS, CLASS IV (66")	156 LF		
0071	0448200000-E	310	15" RC PIPE CULVERTS, CLASS IV	4,110 LF		
0072	0448300000-E	310	18" RC PIPE CULVERTS, CLASS IV	1,628 LF		
0073	0448400000-E	310	24" RC PIPE CULVERTS, CLASS IV	1,196 LF		
0074	0448500000-E	310	30" RC PIPE CULVERTS, CLASS IV	136 LF		
0075	0448600000-E	310	36" RC PIPE CULVERTS, CLASS IV	284 LF		
0076	0448700000-E	310	42" RC PIPE CULVERTS, CLASS IV	1,436 LF		
0077	0576000000-E	310	*** CS PIPE CULVERTS, ***** THICK (36", 0.079")	228 LF		
0078	0582000000-E	310	15" CS PIPE CULVERTS, 0.064" THICK	176 LF		
0079	0588000000-E	310	18" CS PIPE CULVERTS, 0.064" THICK	224 LF		
0080	0594000000-E	310	24" CS PIPE CULVERTS, 0.064" THICK	300 LF		
0081	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (16", 0.281")	178 LF		

County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0082	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (18", 0.312")	78 LF		
0083	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (30", 0.500")	86 LF		
0084	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (42", 0.625")	98 LF		
0085	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (48", 0.688")	210 LF		
0086	0973100000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B IN SOIL (60", 0.875")	114 LF		
0087	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (16", 0.281")	178 LF		
0088	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (18", 0.312")	78 LF		
0089	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (30", 0.500")	86 LF		
0090	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (42", 0.625")	98 LF		
0091	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (48", 0.688")	210 LF		
0092	0973300000-E	330	*** WELDED STEEL PIPE, ***** THICK, GRADE B NOT IN SOIL (60", 0.875")	114 LF		
0093	0995000000-E	340	PIPE REMOVAL	5,626 LF		
0094	1000000000-E	462	6" SLOPE PROTECTION	1,620 SY		
0095	1004500000-E	505	GENERIC GRADING ITEM GEOTEXTILE FOR SUBGRADE STABILIZATION	151,515 SY		
0096	1011000000-N	500	FINE GRADING	Lump Sum	L.S.	

County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0097	1044000000-E	501	LIME TREATED SOIL (SLURRY METHOD)	153,820 SY		
0098	1066000000-E	501	LIME FOR LIME TREATED SOIL	1,860 TON		
0099	1077000000-E	SP	#57 STONE	570 TON		
0100	1099500000-E	505	SHALLOW UNDERCUT	3,600 CY		
0101	1099700000-E	505	CLASS IV SUBGRADE STABILIZATION	7,200 TON		
0102	1110000000-E	510	STABILIZER AGGREGATE	1,000 TON		
0103	1121000000-E	520	AGGREGATE BASE COURSE	153,300 TON		
0104	1176000000-E	542	SOIL CEMENT BASE	153,820 SY		
0105	1187000000-E	542	PORTLAND CEMENT FOR SOIL CEMENT BASE	4,320 TON		
0106	1198000000-E	542	AGGREGATE FOR SOIL CEMENT BASE	3,440 TON		
0107	1220000000-E	545	INCIDENTAL STONE BASE	2,000 TON		
0108	1275000000-E	600	PRIME COAT	26,300 GAL		
0109	1297000000-E	607	MILLING ASPHALT PAVEMENT, **** DEPTH (1-1/2")	60,360 SY		
0110	1330000000-E	607	INCIDENTAL MILLING	3,400 SY		
0111	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	39,530 TON		
0112	1503000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	83,370 TON		
0113	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	18,530 TON		

County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0114	1523000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	64,680 TON		
0115	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	10,810 TON		
0116	1693000000-E	654	ASPHALT PLANT MIX, PAVEMENT REPAIR	1,130 TON		
0117	1840000000-E	665	MILLED RUMBLE STRIPS (ASPHALT CONCRETE)	125,500 LF		
0118	1869000000-E	710	***** PORT CEM CONC PAVEMENT, MISCELLANEOUS (WITHOUT DOWELS) (12")	1,000 SY		
0119	2022000000-E	815	SUBDRAIN EXCAVATION	1,243.2 CY		
0120	2026000000-E	815	GEOTEXTILE FOR SUBSURFACE DRAINS	2,700 SY		
0121	2033000000-E	815	SUBDRAIN FINE AGGREGATE	168 CY		
0122	2036000000-E	815	SUBDRAIN COARSE AGGREGATE	453.6 CY		
0123	2044000000-E	815	6" PERFORATED SUBDRAIN PIPE	2,700 LF		
0124	2070000000-N	815	SUBDRAIN PIPE OUTLET	8 EA		
0125	2077000000-E	815	6" OUTLET PIPE	48 LF		
0126	2099000000-E	816	SHOULDER DRAIN	39,360 LF		
0127	2110000000-E	816	4" SHOULDER DRAIN PIPE	39,360 LF		
0128	2121000000-E	816	4" OUTLET PIPE FOR SHOULDER DRAINS	3,200 LF		
0129	2132000000-N	816	CONCRETE PAD FOR SHOULDER DRAIN PIPE OUTLET	60 EA		
0130	2143000000-E	818	BLOTTING SAND	30 TON		

County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0131	2190000000-N	828	TEMPORARY STEEL PLATE COVERS FOR MASONRY DRAINAGE STRUCTURE	20 EA		
0132	2209000000-E	838	ENDWALLS	78.4 CY		
0133	2220000000-E	838	REINFORCED ENDWALLS	28.2 CY		
0134	2253000000-E	840	PIPE COLLARS	5.921 CY		
0135	2264000000-E	840	PIPE PLUGS	0.342 CY		
0136	2275000000-E	SP	FLOWABLE FILL	403 CY		
0137	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	367 EA		
0138	2297000000-E	840	MASONRY DRAINAGE STRUCTURES	38.394 CY		
0139	2308000000-E	840	MASONRY DRAINAGE STRUCTURES	201 LF		
0140	2352000000-N	840	FRAME WITH GRATE, STD 840.**** (840.20)	2 EA		
0141	2354000000-N	840	FRAME WITH GRATE, STD 840.22	7 EA		
0142	2364000000-N	840	FRAME WITH TWO GRATES, STD 840.16	13 EA		
0143	2364200000-N	840	FRAME WITH TWO GRATES, STD 840.20	96 EA		
0144	2365000000-N	840	FRAME WITH TWO GRATES, STD 840.22	182 EA		
0145	2366000000-N	840	FRAME WITH TWO GRATES, STD 840.24	22 EA		
0146	2367000000-N	840	FRAME WITH TWO GRATES, STD 840.29	15 EA		
0147	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	6 EA		

County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0148	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	1 EA		
0149	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	3 EA		
0150	2396000000-N	840	FRAME WITH COVER, STD 840.54	32 EA		
0151	2462000000-E	836	*** SLUICE GATE (18")	1 EA		
0152	2462000000-E	836	*** SLUICE GATE (24")	2 EA		
0153	2462000000-E	836	*** SLUICE GATE (30")	1 EA		
0154	2535000000-E	846	*** X *** CONCRETE CURB (8" X 18")	400 LF		
0155	2542000000-E	846	1'-6" CONCRETE CURB & GUTTER	950 LF		
0156	2549000000-E	846	2'-6" CONCRETE CURB & GUTTER	2,960 LF		
0157	2556000000-E	846	SHOULDER BERM GUTTER	12,750 LF		
0158	2577000000-E	846	CONCRETE EXPRESSWAY GUTTER	1,940 LF		
0159	2612000000-E	848	6" CONCRETE DRIVEWAY	445 SY		
0160	2619000000-E	850	4" CONCRETE PAVED DITCH	130 SY		
0161	2655000000-E	852	5" MONOLITHIC CONCRETE ISLANDS (KEYED IN)	1,180 SY		
0162	2703000000-E	854	CONCRETE BARRIER, TYPE ***** (T)	1,100 LF		
0163	2703000000-E	854	CONCRETE BARRIER, TYPE ***** (T1)	1,000 LF		
0164	2703000000-E	854	CONCRETE BARRIER, TYPE ***** (T2 MODIFIED)	525 LF		

County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0165	2703000000-E	854	CONCRETE BARRIER, TYPE ***** (T2)	600 LF		
0166	2724000000-E	857	PRECAST REINFORCED CONCRETE BARRIER, SINGLE FACED	4,750 LF		
0167	2815000000-N	858	ADJUSTMENT OF DROP INLETS	7 EA		
0168	2905000000-N	859	CONVERT EXISTING DROP INLET TO JUNCTION BOX	4 EA		
0169	3001000000-N	SP	IMPACT ATTENUATOR UNITS, TYPE TL-3	9 EA		
0170	3030000000-E	862	STEEL BEAM GUARDRAIL	55,950 LF		
0171	3045000000-E	862	STEEL BEAM GUARDRAIL, SHOP CURVED	250 LF		
0172	3105000000-N	862	STEEL BEAM GUARDRAIL TERMINAL SECTIONS	12 EA		
0173	3150000000-N	862	ADDITIONAL GUARDRAIL POSTS	20 EA		
0174	3210000000-N	862	GUARDRAIL END UNITS, TYPE CAT-1	29 EA		
0175	3287000000-N	SP	GUARDRAIL END UNITS, TYPE TL-3	71 EA		
0176	3288000000-N	SP	GUARDRAIL END UNITS, TYPE TL-2	22 EA		
0177	3317000000-N	SP	GUARDRAIL ANCHOR UNITS, TYPE B- 77	53 EA		
0178	3360000000-E	863	REMOVE EXISTING GUARDRAIL	5,768 LF		
0179	3380000000-E	862	TEMPORARY STEEL BEAM GUARDRAIL	1,050 LF		
0180	3387000000-N	SP	TEMPORARY GUARDRAIL ANCHOR UNITS, TYPE ***** (W-TR)	4 EA		
0181	3389150000-N	SP	TEMPORARY GUARDRAIL END UNITS, TYPE ***** (TL-3)	3 EA		

County: CLEVELAND

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0182	3389400000-E	865	DOUBLE FACED CABLE GUIDERAIL	21,200 LF		
0183	3389500000-N	865	ADDITIONAL GUIDERAIL POSTS	20 EA		
0184	3389600000-N	865	CABLE GUIDERAIL ANCHOR UNITS	28 EA		
0185	3436000000-N	862	GENERIC GUARDRAIL ITEM (CAT-1)	1 EA		
0186	3503000000-E	866	WOVEN WIRE FENCE, 47" FABRIC	80,230 LF		
0187	3509000000-E	866	4" TIMBER FENCE POSTS, 7'-6" LONG	4,896 EA		
0188	3515000000-E	866	5" TIMBER FENCE POSTS, 8'-0" LONG	1,529 EA		
0189	3536000000-E	866	CHAIN LINK FENCE, 48" FABRIC	1,280 LF		
0190	3542000000-E	866	METAL LINE POSTS FOR 48" CHAIN LINK FENCE	107 EA		
0191	3548000000-E	866	METAL TERMINAL POSTS FOR 48" CHAIN LINK FENCE	8 EA		
0192	3557000000-E	866	ADDITIONAL BARBED WIRE	200 LF		
0193	3564000000-E	866	SINGLE GATES, **** HIGH, ** WIDE, ** OPENING (48", 12', 12')	9 EA		
0194	3628000000-E	876	RIP RAP, CLASS I	9,790 TON		
0195	3635000000-E	876	RIP RAP, CLASS II	9,120 TON		
0196	3642000000-E	876	RIP RAP, CLASS A	220 TON		
0197	3649000000-E	876	RIP RAP, CLASS B	10,760 TON		
0198	3651000000-E	SP	BOULDERS	720 TON		



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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0199	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	61,880 SY		
0200	4048000000-E	902	REINFORCED CONCRETE SIGN FOUNDATIONS	31 CY		
0201	4054000000-E	902	PLAIN CONCRETE SIGN FOUNDATIONS	4 CY		
0202	4057000000-E	SP	OVERHEAD FOOTING	172 CY		
0203	4060000000-E	903	SUPPORTS, BREAKAWAY STEEL BEAM	19,640 LB		
0204	4066000000-E	903	SUPPORTS, SIMPLE STEEL BEAM	14,604 LB		
0205	4072000000-E	903	SUPPORTS, 3-LB STEEL U-CHANNEL	7,300 LF		
0206	4082100000-N	906	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STA ***** (29+50 -L- RAMP D)	Lump Sum	L.S.	
0207	4082100000-N	906	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STA ***** (815+20 -L-)	Lump Sum	L.S.	
0208	4082100000-N	906	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STA ***** (845+35 -L-)	Lump Sum	L.S.	
0209	4082100000-N	906	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STA ***** (846+85 -L-)	Lump Sum	L.S.	
0210	4082100000-N	906	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STA ***** (864+00 -L-)	Lump Sum	L.S.	
0211	4082100000-N	906	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STA ***** (871+00 -L-)	Lump Sum	L.S.	
0212	4082100000-N	906	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STA ***** (878+00 -L-)	Lump Sum	L.S.	
0213	4082100000-N	906	SUPPORTS, OVERHEAD SIGN STRUCTURE AT STA ***** (905+00 -L-)	Lump Sum	L.S.	

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0214	4096000000-N	904	SIGN ERECTION, TYPE D	37 EA		
0215	4102000000-N	904	SIGN ERECTION, TYPE E	273 EA		
0216	4108000000-N	904	SIGN ERECTION, TYPE F	48 EA		
0217	4109000000-N	904	SIGN ERECTION, TYPE *** (OVERHEAD) (A)	6 EA		
0218	4109000000-N	904	SIGN ERECTION, TYPE *** (OVERHEAD) (B)	5 EA		
0219	4110000000-N	904	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (A)	46 EA		
0220	4110000000-N	904	SIGN ERECTION, TYPE *** (GROUND MOUNTED) (B)	13 EA		
0221	4114000000-N	904	SIGN ERECTION, MILEMARKERS	18 EA		
0222	4116000000-N	904	SIGN ERECTION, OVERLAY (GROUND MOUNTED)	6 EA		
0223	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (B)	1 EA		
0224	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (D)	2 EA		
0225	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (E)	1 EA		
0226	4116200000-N	904	SIGN ERECTION, REPOSITION OVERHEAD	4 EA		
0227	4138000000-N	907	DISPOSAL OF SUPPORT, STEEL BEAM	11 EA		
0228	4141000000-N	907	DISPOSAL OF SUPPORT, WOOD	1 EA		
0229	4152000000-N	907	DISPOSAL OF SIGN SYSTEM, STEEL BEAM	11 EA		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0230	4155000000-N	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	235 EA		
0231	4158000000-N	907	DISPOSAL OF SIGN SYSTEM, WOOD	2 EA		
0232	4192000000-N	907	DISPOSAL OF SUPPORT, U-CHANNEL	3 EA		
0233	4234000000-N	907	DISPOSAL OF SIGN, A OR B (OVERHEAD)	6 EA		
0234	4236000000-N	907	DISPOSAL OF SIGN, A & B (GROUND MOUNTED)	1 EA		
0235	4238000000-N	907	DISPOSAL OF SIGN, D, E OR F	1 EA		
0236	4370000000-N	SP	GENERIC SIGNING ITEM DISPOSAL OF FLASHER SYSTEM	Lump Sum	L.S.	
0237	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	1,106 SF		
0238	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	672 SF		
0239	4410000000-E	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	313 SF		
0240	4415000000-N	1115	FLASHING ARROW BOARD	4 EA		
0241	4420000000-N	1120	PORTABLE CHANGEABLE MESSAGE SIGN	4 EA		
0242	4430000000-N	1130	DRUMS	1,255 EA		
0243	4445000000-E	1145	BARRICADES (TYPE III)	720 LF		
0244	4455000000-N	1150	FLAGGER	275 DAY		
0245	4465000000-N	1160	TEMPORARY CRASH CUSHIONS	8 EA		
0246	4470000000-N	1160	REMOVE & RESET TEMPORARY CRASH CUSHION	5 EA		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0247	4480000000-N	1165	TMA	3 EA		
0248	4485000000-E	1170	PORTABLE CONCRETE BARRIER	8,550 LF		
0249	4500000000-E	1170	REMOVE AND RESET PORTABLE CONCRETE BARRIER	5,770 LF		
0250	4510000000-N	1190	LAW ENFORCEMENT	96 HR		
0251	4650000000-N	1251	TEMPORARY RAISED PAVEMENT MARKERS	396 EA		
0252	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	118,500 LF		
0253	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	750 LF		
0254	4700000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	200 LF		
0255	4709000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 90 MILS)	90 LF		
0256	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	63 EA		
0257	4770000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (II)	3,200 LF		
0258	4770000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (IV)	3,330 LF		
0259	4785000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (12") (II)	1,300 LF		
0260	4800000000-N	1205	COLD APPLIED PLASTIC PAVEMENT MARKING CHARACTER, TYPE ** (II)	32 EA		
0261	4805000000-N	1205	COLD APPLIED PLASTIC PAVEMENT MARKING SYMBOL, TYPE ** (II)	43 EA		
0262	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	347,898 LF		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0263	4820000000-E	1205	PAINT PAVEMENT MARKING LINES (8")	17,200 LF		
0264	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	60 LF		
0265	4840000000-N	1205	PAINT PAVEMENT MARKING CHARACTER	8 EA		
0266	4845000000-N	1205	PAINT PAVEMENT MARKING SYMBOL	6 EA		
0267	4847096000-E	SP	POLYUREA PAVEMENT MARKING LINES, ***, ** MILS (STANDARD GLASS BEADS) (12", 20 MILS)	15,600 LF		
0268	4847096000-E	SP	POLYUREA PAVEMENT MARKING LINES, ***, ** MILS (STANDARD GLASS BEADS) (6", 20 MILS)	228,500 LF		
0269	4847096000-E	SP	POLYUREA PAVEMENT MARKING LINES, ***, ** MILS (STANDARD GLASS BEADS) (8", 20 MILS)	50 LF		
0270	4850000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (4")	100 LF		
0271	4855000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (6")	1,000 LF		
0272	4865000000-E	1205	REMOVAL OF PAVEMENT MARKING LINES (12")	400 LF		
0273	4875000000-N	1205	REMOVAL OF PAVEMENT MARKING SYMBOLS & CHARACTERS	5 EA		
0274	4900000000-N	1251	PERMANENT RAISED PAVEMENT MARKERS	10 EA		
0275	4905100000-N	SP	NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKER	3,185 EA		
0276	4915000000-E	1264	7' U-CHANNEL POSTS	18 EA		
0277	4955000000-N	1264	OBJECT MARKERS (END OF ROAD)	18 EA		
0278	5255000000-N	1413	PORTABLE LIGHTING	Lump Sum	L.S.	

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0279	5325400000-E	1510	4" WATER LINE	640 LF		
0280	5325600000-E	1510	6" WATER LINE	9,681 LF		
0281	5325800000-E	1510	8" WATER LINE	2,174 LF		
0282	5326200000-E	1510	12" WATER LINE	5,029 LF		
0283	5329000000-E	1510	DUCTILE IRON WATER PIPE FITTINGS	30,750 LB		
0284	5538000000-E	1515	4" VALVE	2 EA		
0285	5540000000-E	1515	6" VALVE	16 EA		
0286	5546000000-E	1515	8" VALVE	5 EA		
0287	5558000000-E	1515	12" VALVE	17 EA		
0288	5589100000-E	1515	1" AIR RELEASE VALVE	5 EA		
0289	5606400000-E	1515	4" BLOW OFF	2 EA		
0290	5643100000-E	1515	3/4" WATER METER	1 EA		
0291	5648000000-N	1515	RELOCATE WATER METER	24 EA		
0292	5649000000-N	1515	RECONNECT WATER METER	7 EA		
0293	5666000000-N	1515	FIRE HYDRANT	3 EA		
0294	5672000000-N	1515	RELOCATE FIRE HYDRANT	2 EA		
0295	5673000000-E	1515	FIRE HYDRANT LEG	95 LF		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0296	5686500000-E	1515	WATER SERVICE LINE	2,955 LF		
0297	5709600000-E	1520	12" FORCE MAIN SEWER	2,312 LF		
0298	5768000000-N	1520	SANITARY SEWER CLEAN-OUT	1 EA		
0299	5768500000-E	1520	SEWER SERVICE LINE	10 LF		
0300	5769000000-E	1520	DUCTILE IRON SEWER PIPE FITTINGS	3,460 LB		
0301	5798000000-E	1530	ABANDON *** UTILITY PIPE (2")	500 LF		
0302	5801000000-E	1530	ABANDON 8" UTILITY PIPE	210 LF		
0303	5804000000-E	1530	ABANDON 12" UTILITY PIPE	1,102 LF		
0304	5815000000-N	1530	REMOVE WATER METER	25 EA		
0305	5815500000-N	1530	REMOVE FIRE HYDRANT	3 EA		
0306	5835600000-E	1540	12" ENCASEMENT PIPE	210 LF		
0307	5836000000-E	1540	24" ENCASEMENT PIPE	1,195 LF		
0309	5872500000-E	1550	BORE AND JACK OF *** (24")	575 LF		
0310	5888000000-E	SP	GENERIC UTILITY ITEM POLYETHYLENE ENCASEMENT	230 LF		
0311	6000000000-E	1605	TEMPORARY SILT FENCE	169,330 LF		
0312	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	6,060 TON		
0313	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	39,755 TON		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0314	6012000000-E	1610	SEDIMENT CONTROL STONE	18,890 TON		
0315	6015000000-E	1615	TEMPORARY MULCHING	307.5 ACR		
0316	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	16,600 LB		
0317	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEEDING	86 TON		
0318	6024000000-E	1622	TEMPORARY SLOPE DRAINS	20,830 LF		
0319	6029000000-E	SP	SAFETY FENCE	3,560 LF		
0320	6030000000-E	1630	SILT EXCAVATION	180,510 CY		
0321	6036000000-E	1631	MATTING FOR EROSION CONTROL	409,000 SY		
0322	6037000000-E	SP	COIR FIBER MAT	6,655 SY		
0323	6038000000-E	SP	PERMANENT SOIL REINFORCEMENT MAT	6,700 SY		
0324	6042000000-E	1632	1/4" HARDWARE CLOTH	21,990 LF		
0325	6048000000-E	SP	FLOATING TURBIDITY CURTAIN	1,380 SY		
0326	6069000000-E	1638	STILLING BASINS	240 CY		
0327	6070000000-N	1639	SPECIAL STILLING BASINS	58 EA		
0328	6071012000-E	SP	COIR FIBER WATTLE	12,180 LF		
0329	6071014000-E	SP	COIR FIBER WATTLE BARRIER	1,010 LF		
0330	6071020000-E	SP	POLYACRYLAMIDE (PAM)	15,520 LB		



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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0331	6071030000-E	1640	COIR FIBER BAFFLE	26,185 LF		
0332	6071050000-E	SP	*** SKIMMER (1-1/2")	29 EA		
0333	6071050000-E	SP	*** SKIMMER (2")	33 EA		
0334	6071050000-E	SP	*** SKIMMER (2-1/2")	9 EA		
0335	6071050000-E	SP	*** SKIMMER (3")	1 EA		
0336	6071050000-E	SP	*** SKIMMER (4")	7 EA		
0337	6084000000-E	1660	SEEDING & MULCHING	282 ACR		
0338	6087000000-E	1660	MOWING	178 ACR		
0339	6090000000-E	1661	SEED FOR REPAIR SEEDING	3,450 LB		
0340	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	10.25 TON		
0341	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	6,300 LB		
0342	6108000000-E	1665	FERTILIZER TOPDRESSING	188.75 TON		
0343	6111000000-E	SP	IMPERVIOUS DIKE	600 LF		
0344	6114500000-N	1667	SPECIALIZED HAND MOWING	220 MHR		
0345	6114800000-N	SP	MANUAL LITTER REMOVAL	100 MHR		
0346	6114900000-E	SP	LITTER DISPOSAL	10 TON		
0347	6117000000-N	SP	RESPONSE FOR EROSION CONTROL	200 EA		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0348	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	20 EA		
0349	6120000000-E	SP	CULVERT DIVERSION CHANNEL	2,100 CY		
0350	6123000000-E	1670	REFORESTATION	3.3 ACR		
0351	6126000000-E	SP	STREAMBANK REFORESTATION	1.5 ACR		
0352	6132000000-N	SP	GENERIC EROSION CONTROL ITEM LOG	21 EA		
0353	6133000000-N	SP	GENERIC EROSION CONTROL ITEM CONSTRUCTION SURVEYING FOR MITIGATION	Lump Sum	L.S.	
0354	6133000000-N	SP	GENERIC EROSION CONTROL ITEM DIVERSION PUMPING FOR MITIGATION	Lump Sum	L.S.	
0355	6133000000-N	SP	GENERIC EROSION CONTROL ITEM SITE GRADING FOR MITIGATION	Lump Sum	L.S.	
0356	6138000000-E	SP	GENERIC EROSION CONTROL ITEM IMPERVIOUS SELECT MATERIAL	1,500 CY		
0357	6147000000-E	SP	GENERIC EROSION CONTROL ITEM BRUSH TOE	630 LF		
0420	5606000000-E	1515	2" BLOW OFF	1 EA		
<b>CULVERT ITEMS</b>						
0358	8126000000-N	414	CULVERT EXCAVATION, STA ***** (717+13.00 -L-)	Lump Sum	L.S.	
0359	8126000000-N	414	CULVERT EXCAVATION, STA ***** (743+18.00 -L-)	Lump Sum	L.S.	
0360	8126000000-N	414	CULVERT EXCAVATION, STA ***** (796+86.00 -L-)	Lump Sum	L.S.	
0361	8133000000-E	414	FOUNDATION CONDITIONING MATERIAL, BOX CULVERT	1,995 TON		
0362	8196000000-E	420	CLASS A CONCRETE (CULVERT)	1,974.8 CY		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0363	8245000000-E	425	REINFORCING STEEL (CULVERT)	311,704 LB		
<b>WALL ITEMS</b>						
0364	8504000000-E	460	CONCRETE BARRIER RAIL WITH MOMENT SLAB	290 LF		
0365	8801000000-E	SP	MSE RETAINING WALL NO **** (1)	1,750 SF		
0366	8847000000-E	SP	GENERIC RETAINING WALL ITEM ARCHITECTURAL SURFACE TREATMENT (SOUND BARRIER WALL)	169,000 SF		
0367	8847000000-E	SP	GENERIC RETAINING WALL ITEM SOUND BARRIER WALL NO. NW10A	16,487 SF		
0368	8847000000-E	SP	GENERIC RETAINING WALL ITEM SOUND BARRIER WALL NO. NW3A	87,214 SF		
<b>STRUCTURE ITEMS</b>						
0369	8017000000-N	SP	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS AT STA ***** (849+00.00 -L- LT)	Lump Sum	L.S.	
0370	8017000000-N	SP	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS AT STA ***** (849+00.00 -L- RT)	Lump Sum	L.S.	
0371	8035000000-N	402	REMOVAL OF EXISTING STRUCTURE AT STATION ***** (849+00.00 -L- LT)	Lump Sum	L.S.	
0372	8035000000-N	402	REMOVAL OF EXISTING STRUCTURE AT STATION ***** (849+00.00 -L- RT)	Lump Sum	L.S.	
0373	8065000000-N	SP	ASBESTOS ASSESSMENT	Lump Sum	L.S.	
0374	8091000000-N	410	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 13+08.49 -Y42-)	Lump Sum	L.S.	
0375	8091000000-N	410	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 19+82.46 -Y1-)	Lump Sum	L.S.	

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0376	8091000000-N	410	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 20+16.72 -Y2-)	Lump Sum	L.S.	
0377	8091000000-N	410	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 23+21.80 -Y3-)	Lump Sum	L.S.	
0378	8091000000-N	410	FOUNDATION EXCAVATION FOR BENT ** AT STATION ***** (1, 36+78.38 -RAMP A-)	Lump Sum	L.S.	
0379	8096000000-E	450	PILE EXCAVATION IN SOIL	251 LF		
0380	8097000000-E	450	PILE EXCAVATION NOT IN SOIL	218 LF		
0381	8105560000-E	411	4'-0" DIA DRILLED PIERS IN SOIL	199.2 LF		
0382	8105660000-E	411	4'-0" DIA DRILLED PIERS NOT IN SOIL	183.4 LF		
0383	8111600000-E	411	PERMANENT STEEL CASING FOR 4'-0" DIA DRILLED PIER	186.8 LF		
0384	8112730000-N	450	PDA TESTING	4 EA		
0385	8113000000-N	411	SID INSPECTIONS	2 EA		
0386	8115000000-N	411	CSL TESTING	2 EA		
0387	8121000000-N	412	UNCLASSIFIED STRUCTURE EXCAVATION AT STATION ***** (849+00.00 -L- LT)	Lump Sum	L.S.	
0388	8121000000-N	412	UNCLASSIFIED STRUCTURE EXCAVATION AT STATION ***** (849+00.00 -L- RT)	Lump Sum	L.S.	
0389	8147000000-E	420	REINFORCED CONCRETE DECK SLAB	103,381 SF		
0390	8161000000-E	420	GROOVING BRIDGE FLOORS	107,943 SF		
0391	8182000000-E	420	CLASS A CONCRETE (BRIDGE)	1,824.9 CY		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0392	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ***** (13+08.49 -Y42-)	Lump Sum	L.S.	
0393	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ***** (19+82.46 -Y1-)	Lump Sum	L.S.	
0394	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ***** (20+16.72 -Y2-)	Lump Sum	L.S.	
0395	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ***** (23+21.80 -Y3-)	Lump Sum	L.S.	
0396	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ***** (36+78.38 -RAMP A-)	Lump Sum	L.S.	
0397	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ***** (810+00.00 -L- LT)	Lump Sum	L.S.	
0398	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ***** (810+00.00 -L- RT)	Lump Sum	L.S.	
0399	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ***** (849+00.00 -L- LT)	Lump Sum	L.S.	
0400	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ***** (849+00.00 -L- RT)	Lump Sum	L.S.	
0401	8217000000-E	425	REINFORCING STEEL (BRIDGE)	348,669 LB		
0402	8238000000-E	425	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)	24,421 LB		
0403	8277000000-E	430	MODIFIED 72" PRESTRESSED CONC GIRDERS	5,940 LF		
0404	8328200000-E	450	PILE DRIVING EQUIPMENT SETUP FOR *** STEEL PILES (HP 12 X 53)	141 EA		
0405	8328200000-E	450	PILE DRIVING EQUIPMENT SETUP FOR *** STEEL PILES (HP 14 X 73)	144 EA		
0406	8364000000-E	450	HP 12 X 53 STEEL PILES	7,065 LF		

County: CLEVELAND

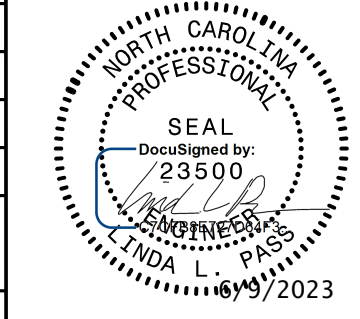
Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0407	8384000000-E	450	HP 14 X 73 STEEL PILES	5,145 LF		
0408	8391000000-N	450	STEEL PILE POINTS	23 EA		
0409	8392500000-E	450	PREDRILLING FOR PILES	105 LF		
0410	8503000000-E	460	CONCRETE BARRIER RAIL	3,801.92 LF		
0411	8510000000-E	460	CONCRETE MEDIAN BARRIER	280.7 LF		
0412	8531000000-E	462	4" SLOPE PROTECTION	3,446 SY		
0413	8608000000-E	876	RIP RAP CLASS II (2'-0" THICK)	1,223 TON		
0414	8622000000-E	876	GEOTEXTILE FOR DRAINAGE	1,370 SY		
0415	8657000000-N	430	ELASTOMERIC BEARINGS	Lump Sum	L.S.	
0416	8692000000-N	SP	FOAM JOINT SEALS	Lump Sum	L.S.	
0417	8706000000-N	SP	EXPANSION JOINT SEALS	Lump Sum	L.S.	
0418	8867000000-E	SP	GENERIC STRUCTURE ITEM 54" PRESTRESSED CONCRETE FLORIDA I-BEAMS	3,116.3 LF		
0419	8867000000-E	SP	GENERIC STRUCTURE ITEM MODIFIED 54" PRESTRESSED CONCRETE GIRDERS	2,472.47 LF		

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Total Amount Of Bid For Entire Project :

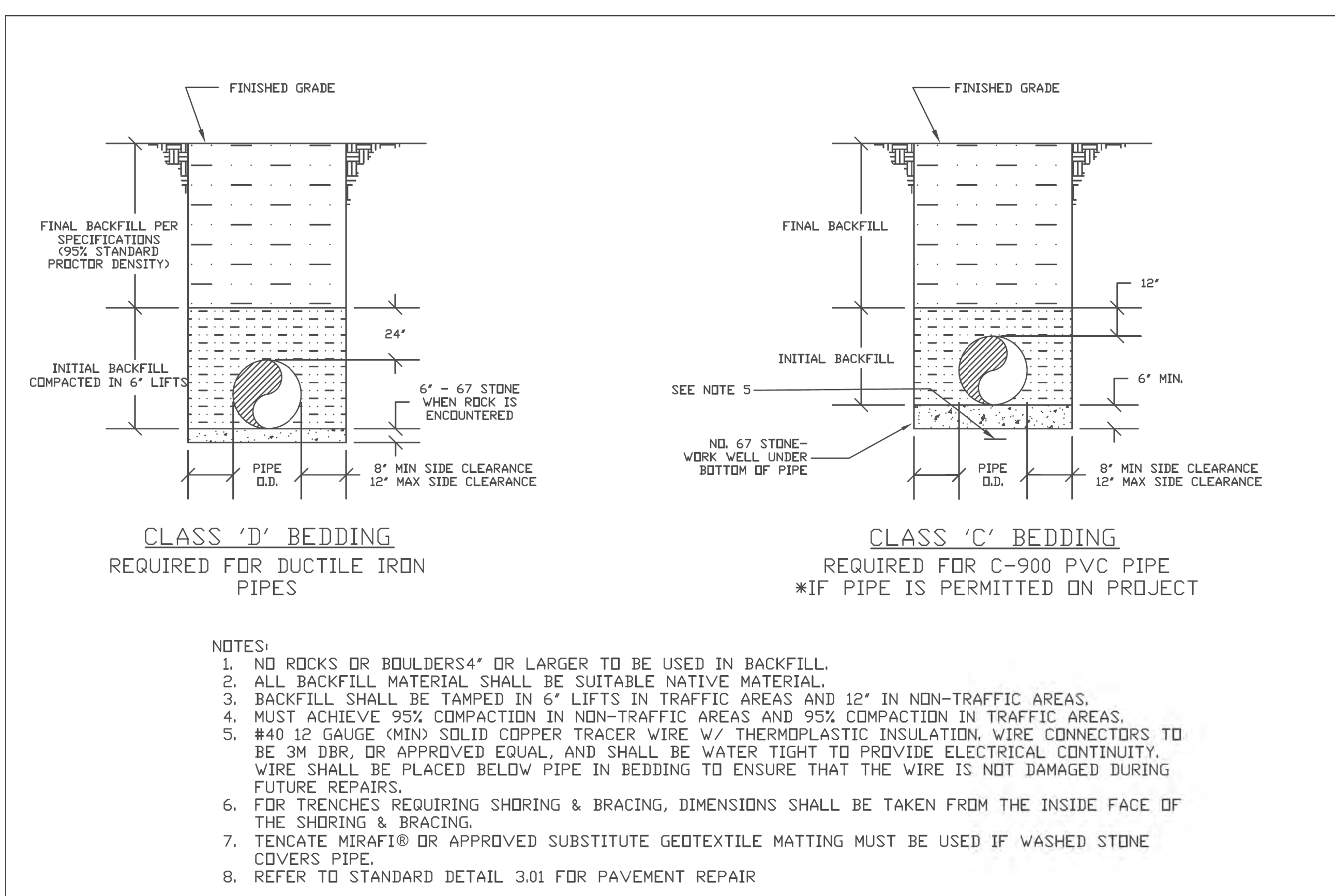


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PROJECT REFERENCE NO. <b>R-2707D</b>	SHEET NO. <b>UC-03A</b>
DESIGNED BY: LEW	
DRAWN BY: GMM	
CHECKED BY: LLP	
APPROVED BY:	
REVISER:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151 UTILITY CONSTRUCTION PLANS ONLY

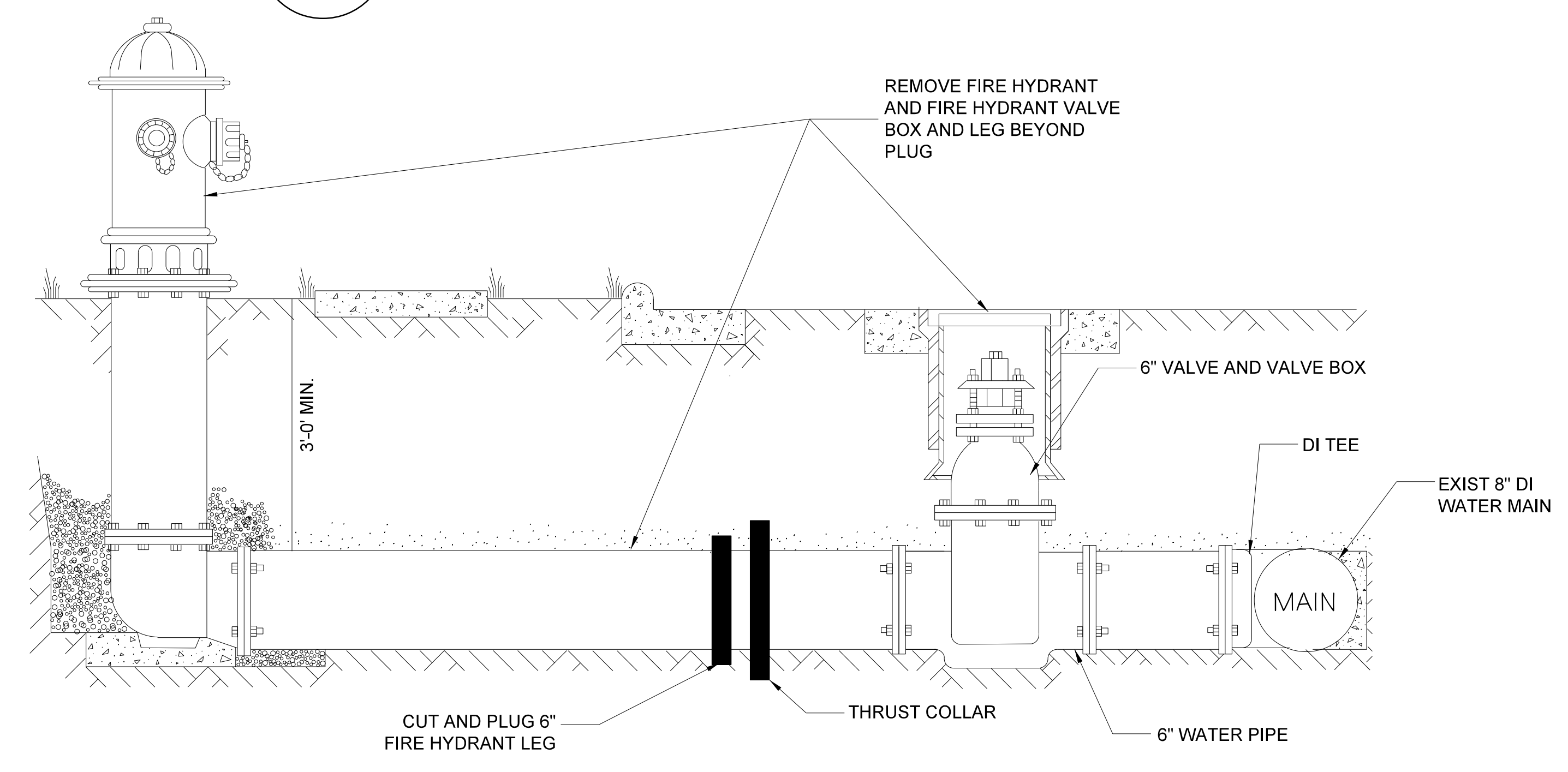
DOCUMENT NOT CONSIDERED FINAL  
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UTILITY CONSTRUCTION

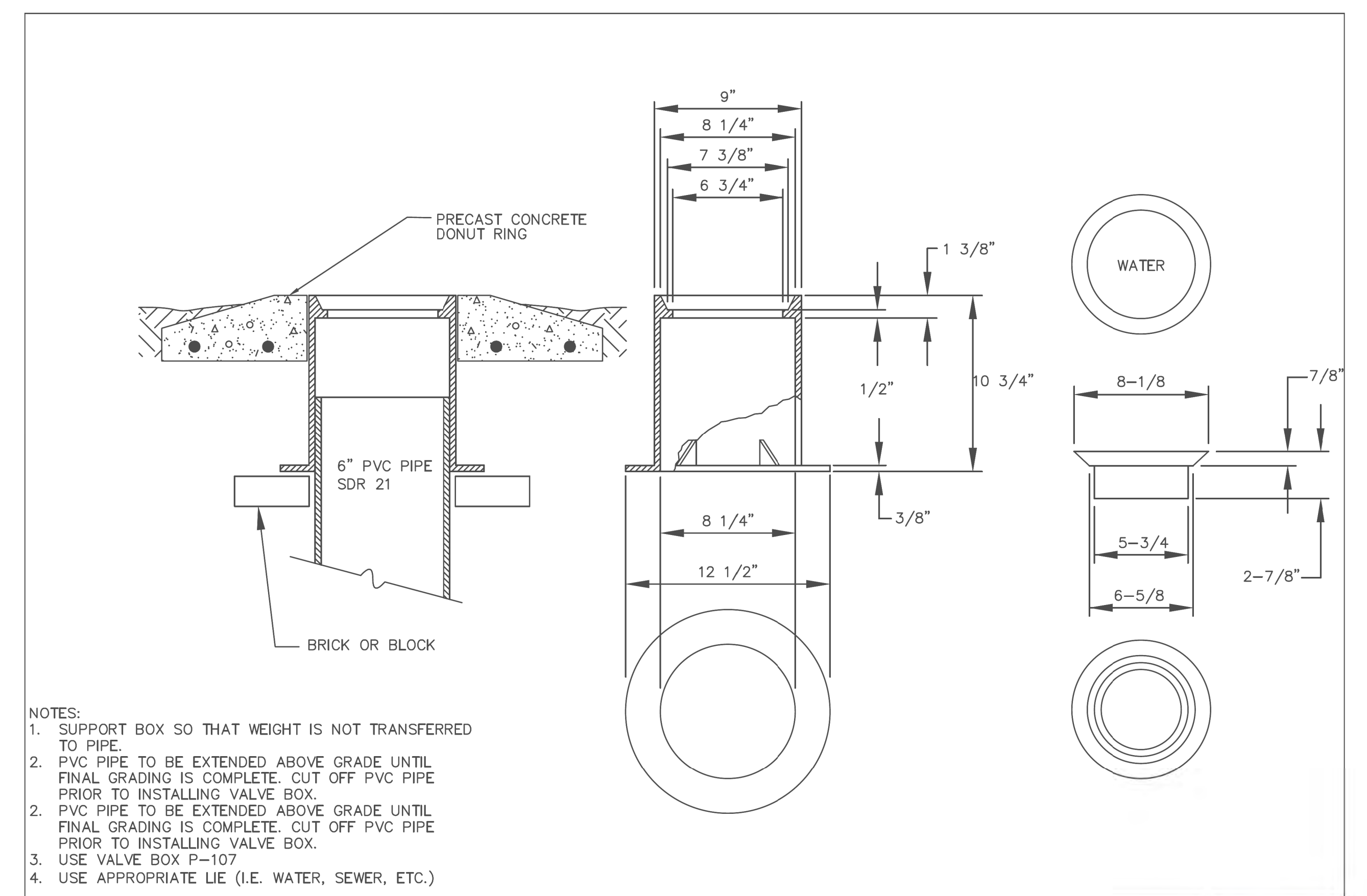


<b>SHELBY STANDARD DETAILS - 2021</b>	<b>PIPE BEDDING AND BACKFILLING - CLASS D&amp;C</b>	
DATE	REVISED	6.01A

1 PIPE BEDDING AND BACKFILL



3 FIRE HYDRANT REMOVAL



- NOTES:**
1. SUPPORT BOX SO THAT WEIGHT IS NOT TRANSFERRED TO PIPE.
  2. PVC PIPE TO BE EXTENDED ABOVE GRADE UNTIL FINAL GRADING IS COMPLETE. CUT OFF PVC PIPE PRIOR TO INSTALLING VALVE BOX.
  3. PVC PIPE TO BE EXTENDED ABOVE GRADE UNTIL FINAL GRADING IS COMPLETE. CUT OFF PVC PIPE PRIOR TO INSTALLING VALVE BOX.
  4. USE VALVE BOX P-107
  5. USE APPROPRIATE LIE (I.E. WATER, SEWER, ETC.)

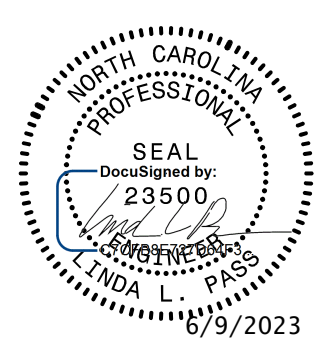
<b>SHELBY STANDARD DETAILS - 2021</b>	<b>STANDARD VALVE BOX</b>	
DATE	REVISIONS	6.02

2 STANDARD VALVE BOX PIPE BEDDING AND BACKFILL



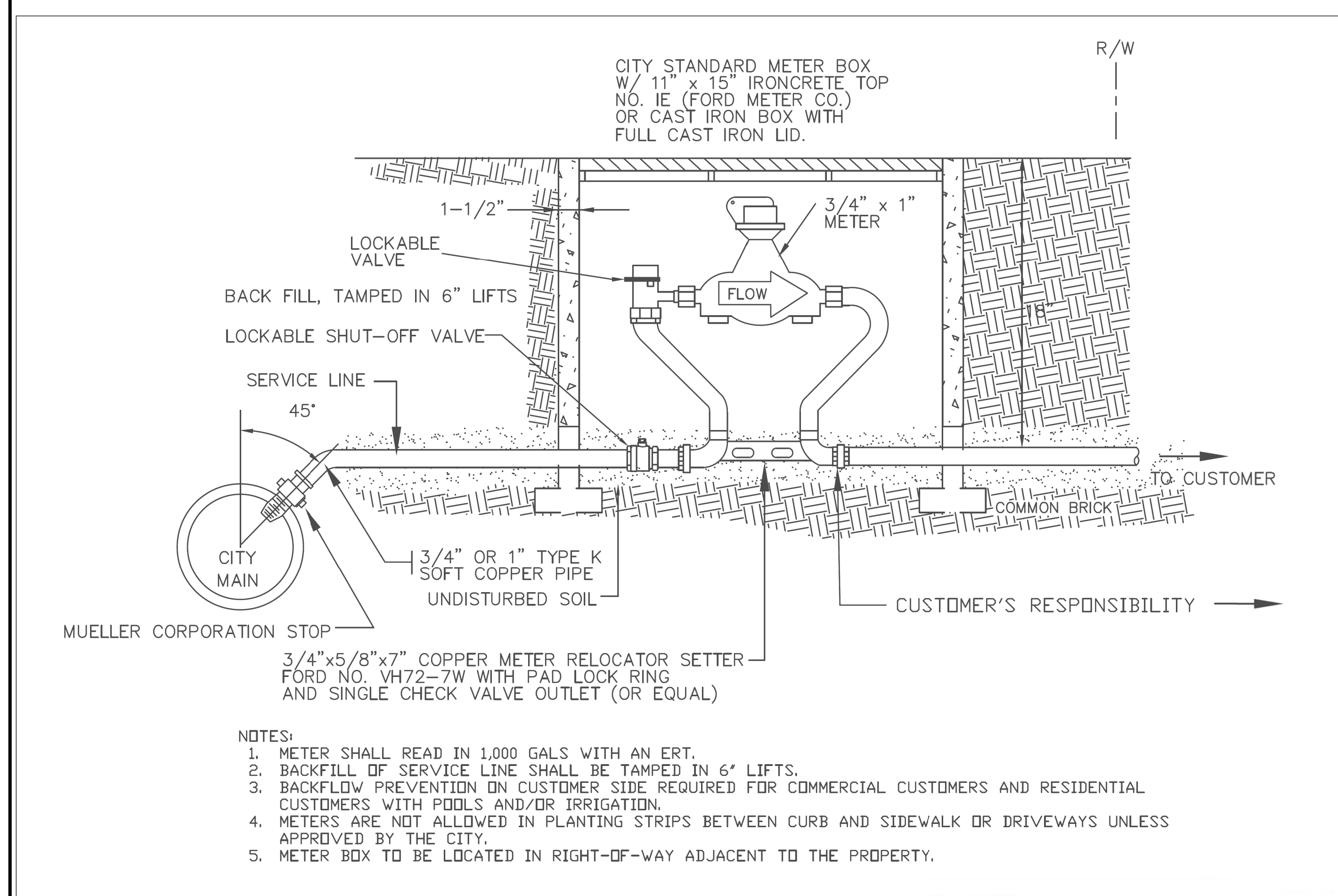


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 Raleigh, NC 27606  
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 Fax. (919) 851-7024  
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PROJECT REFERENCE NO.	R-2707D	SHEET NO.	UC-03B
DESIGNED BY:	LEW		
DRAWN BY:	GMM		
CHECKED BY:	LLP		
APPROVED BY:			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

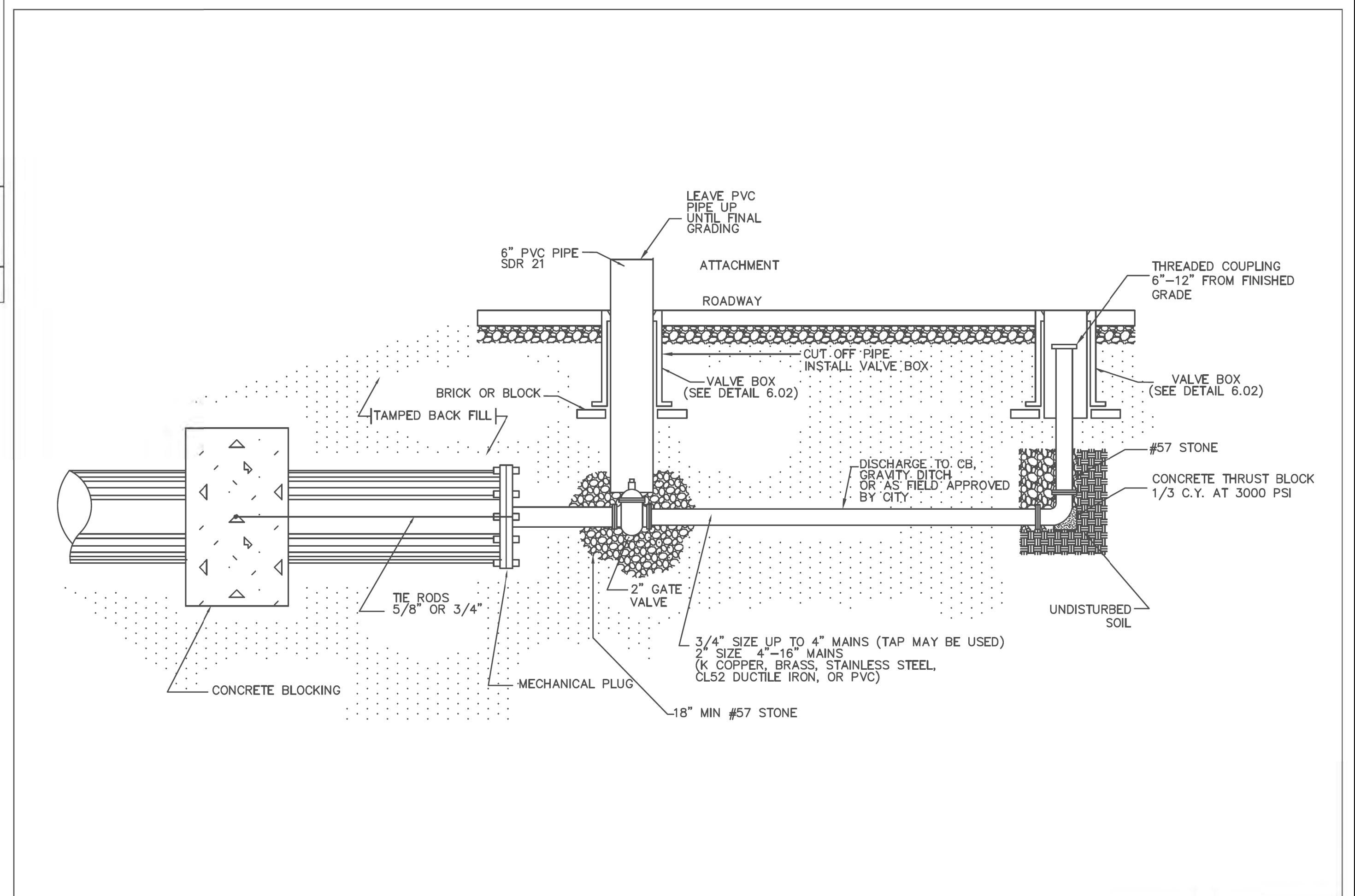
**DOCUMENT NOT CONSIDERED FINAL  
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**UTILITY CONSTRUCTION**



SHELBY STANDARD DETAILS - 2021		STANDARD 3/4" OR 1" METER ASSEMBLY	 <b>6.03</b>
DATE	REVISIONS		

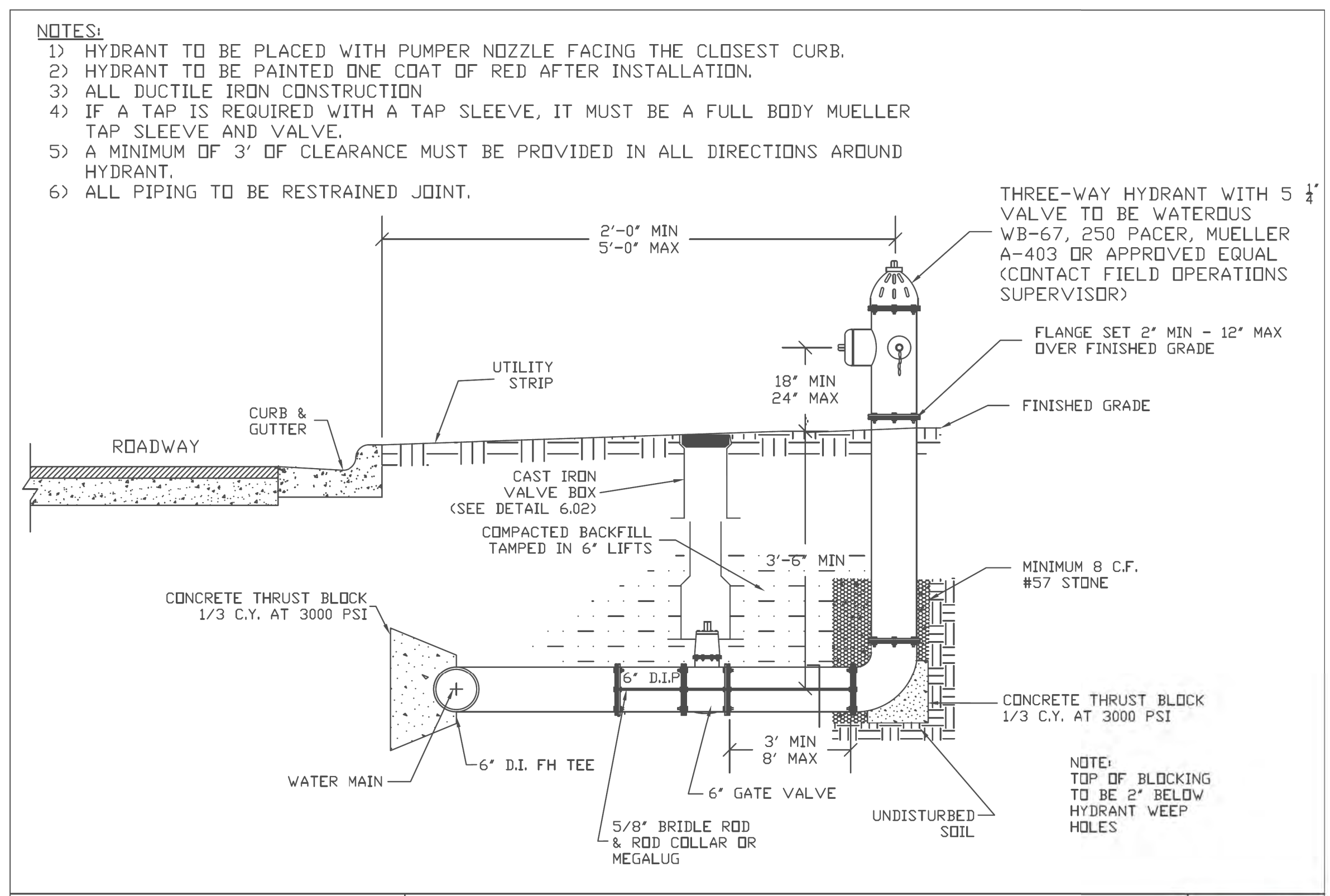
**4 STANDARD 3/4" METER ASSEMBLY**  
**03B**



SHELBY STANDARD DETAILS - 2021		BLOW OFF	 <b>6.09</b>
DATE	REVISIONS		

**5 BLOW OFF ASSEMBLY**  
**03B**



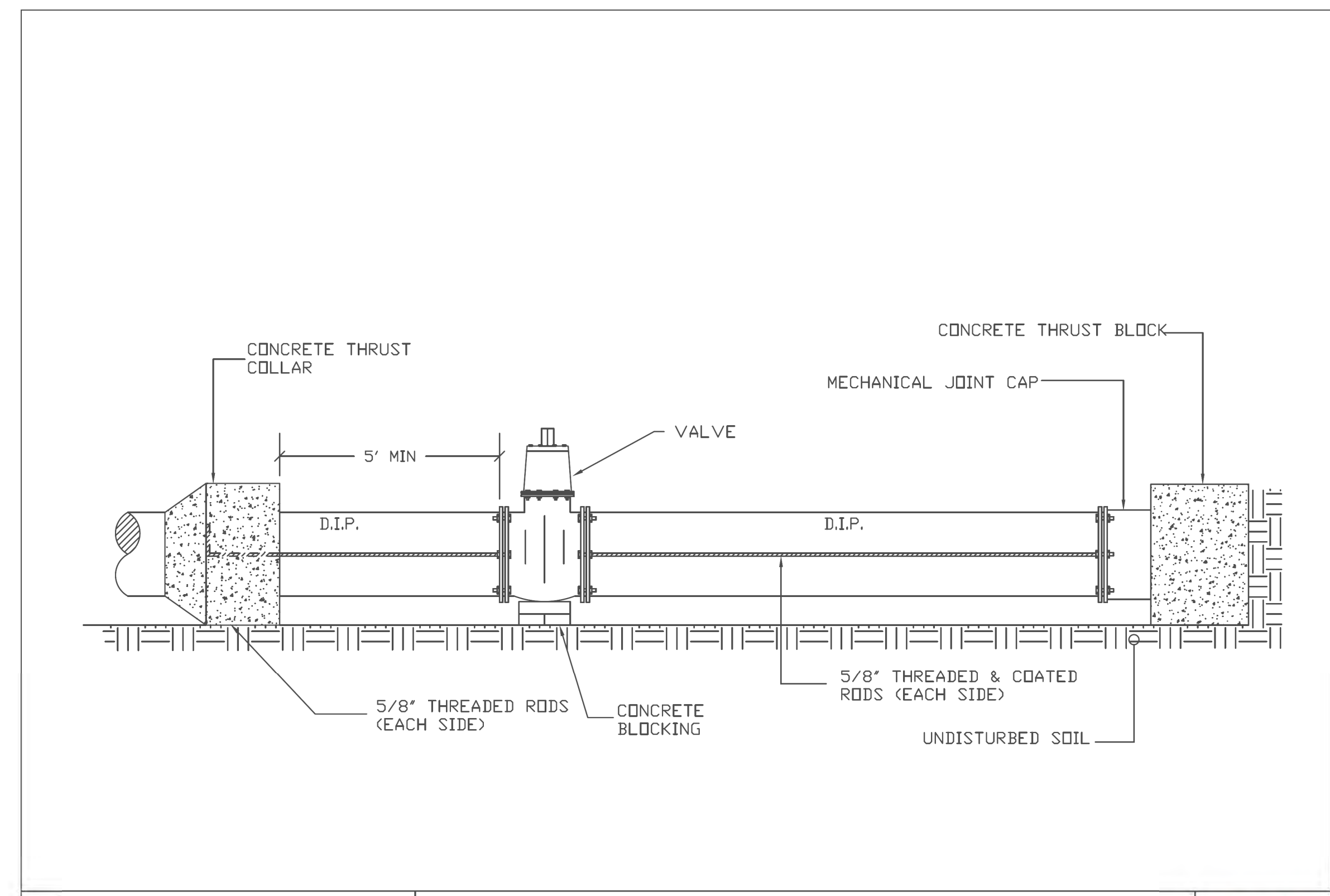


SHELBY STANDARD DETAILS - 2021	
DATE	REVISIONS

**STANDARD HYDRANT INSTALLATION**

**6.06**

**6**  
03C **STANDARD HYDRANT INSTALLATION**

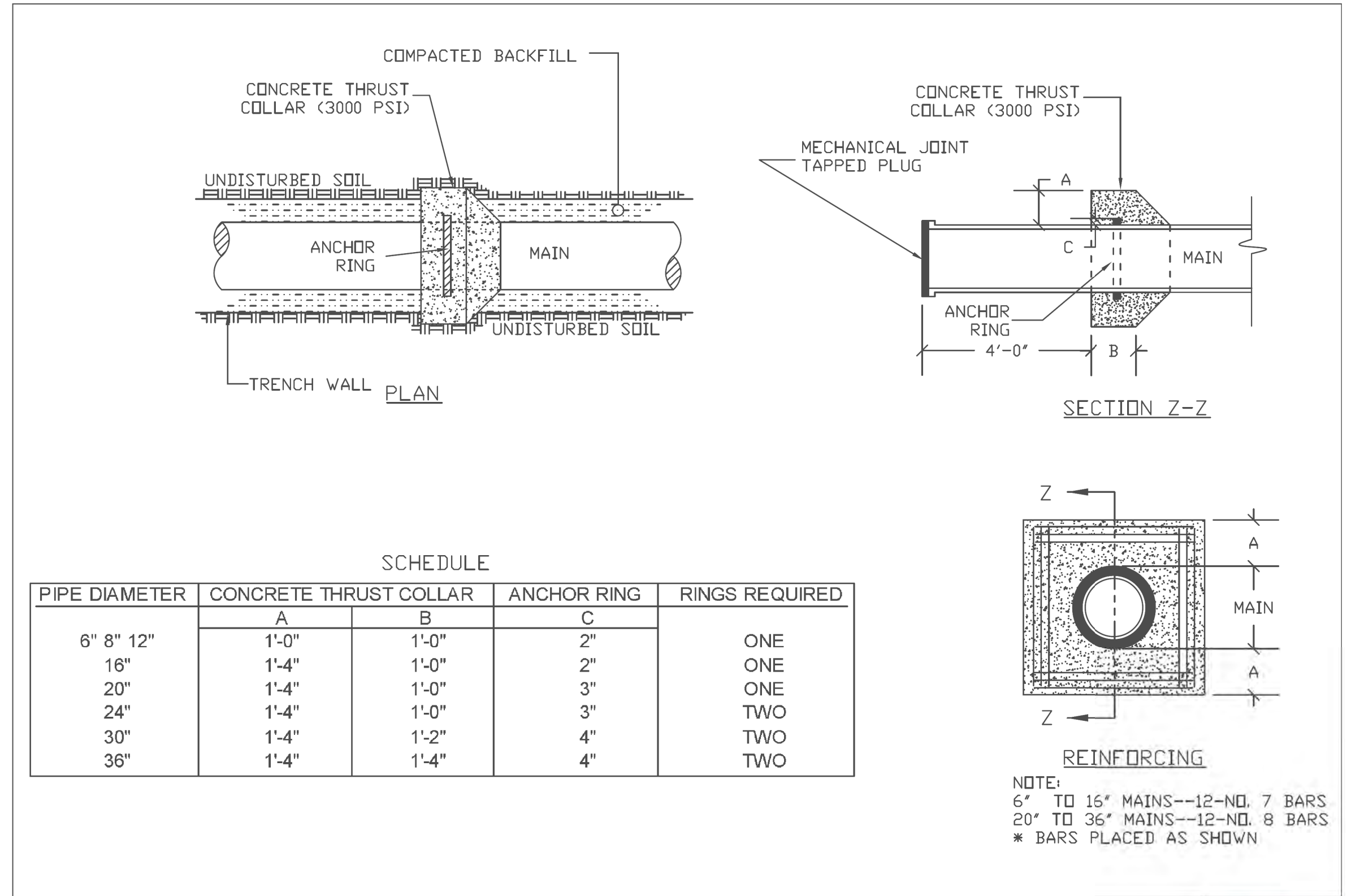


SHELBY STANDARD DETAILS - 2021	
DATE	REVISIONS

**STANDARD CAPPING DETAIL**

**6.10**

**7**  
03C **STANDARD CAPPING DETAIL**

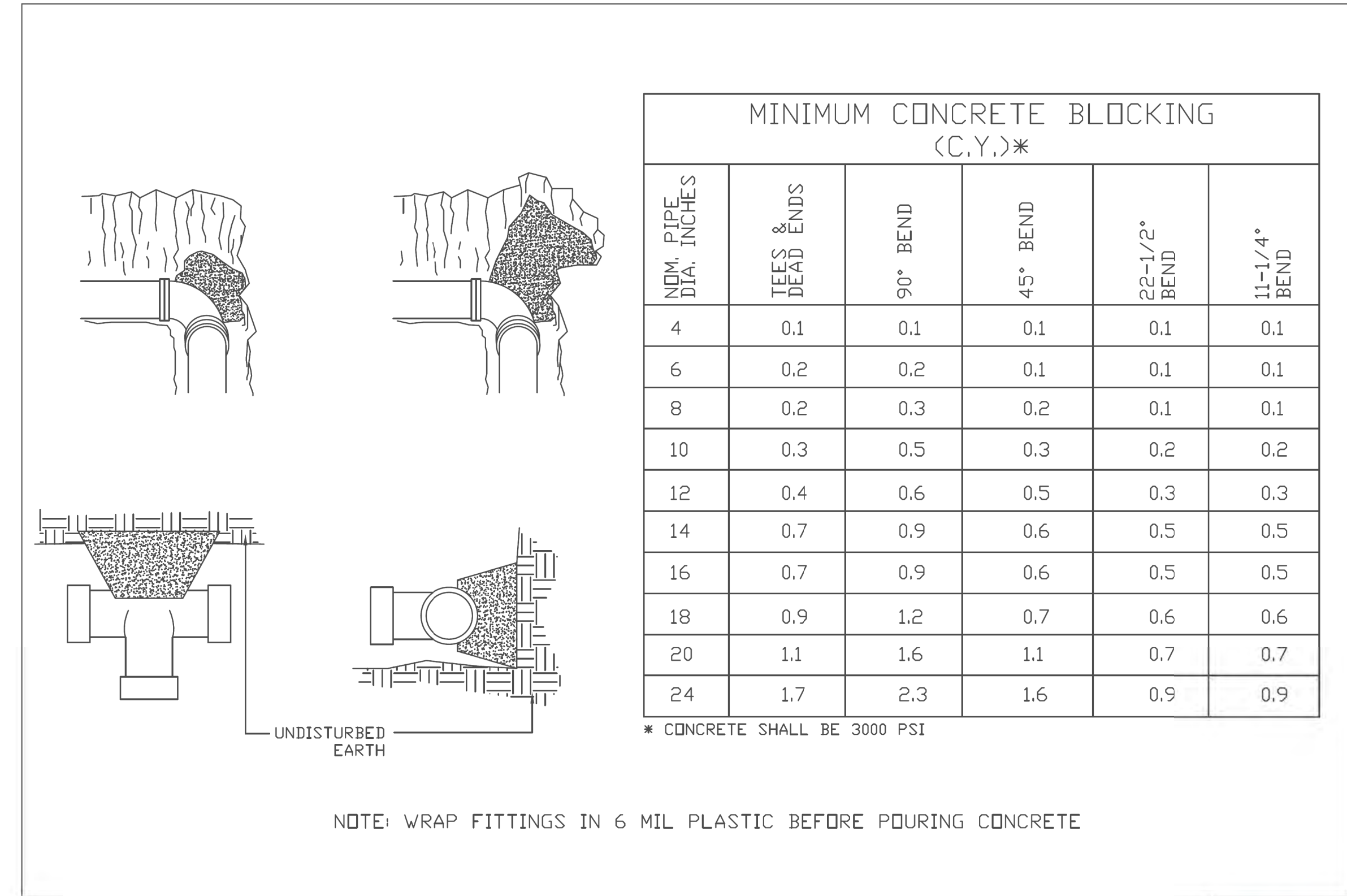


SHELBY STANDARD DETAILS - 2021	
DATE	REVISIONS

**STANDARD THRUST COLLAR INSTALLATION**

**6.11**

**8**  
03C **STANDARD THRUST COLLAR INSTALLATION**



SHELBY STANDARD DETAILS - 2021	
DATE	REVISIONS

**STANDARD REACTION BLOCKING**

**6.12**

**9**  
03C **STANDARD REACTION BLOCKING**

PROJECT REFERENCE NO. <b>R-2707D</b>	SHEET NO. <b>UC-03C</b>
DESIGNED BY: LEW	
DRAWN BY: GMM	
CHECKED BY: LLP	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

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**UTILITY CONSTRUCTION**

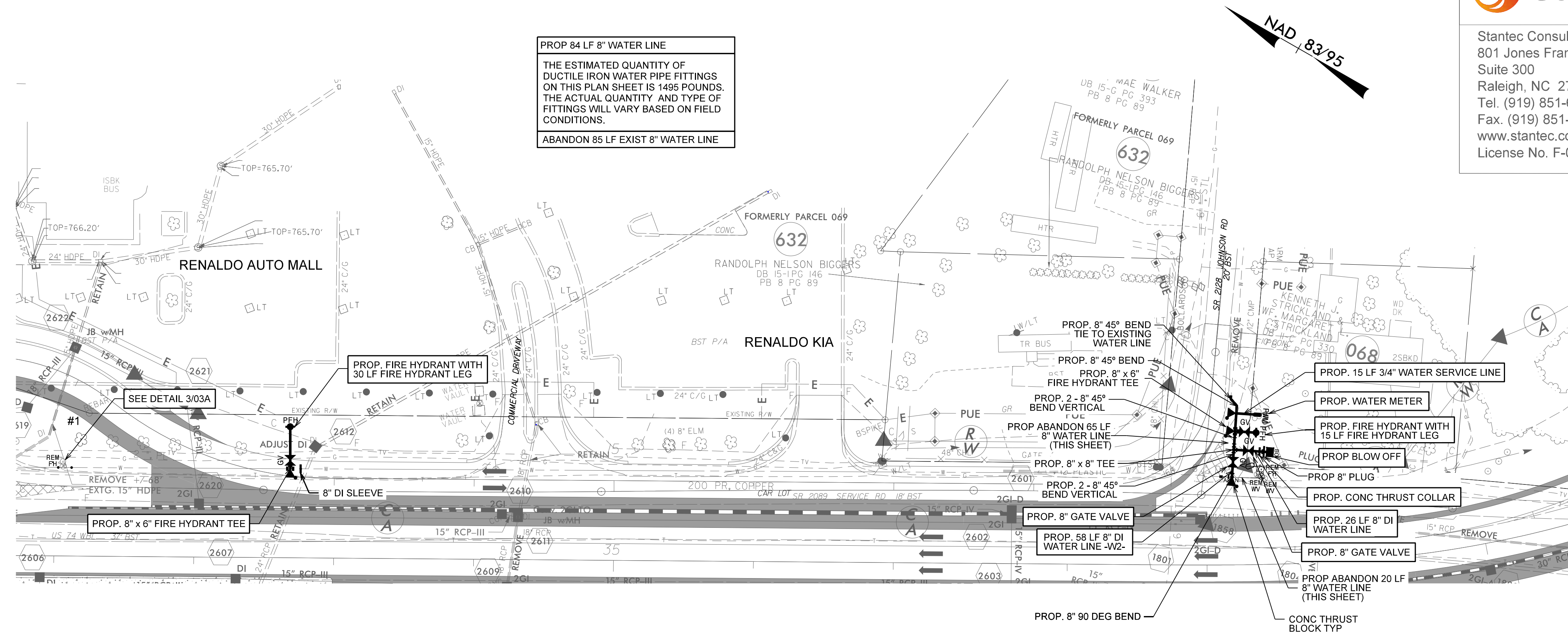




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PROJECT REFERENCE NO.	R-2707D	SHEET NO.	UC-05
DESIGNED BY:	LEW		
DRAWN BY:	GMM		
CHECKED BY:	LLP		
APPROVED BY:			
REVISED:			
UTILITIES ENGINEERING SEC.		UTILITY CONSTRUCTION PLANS ONLY	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			

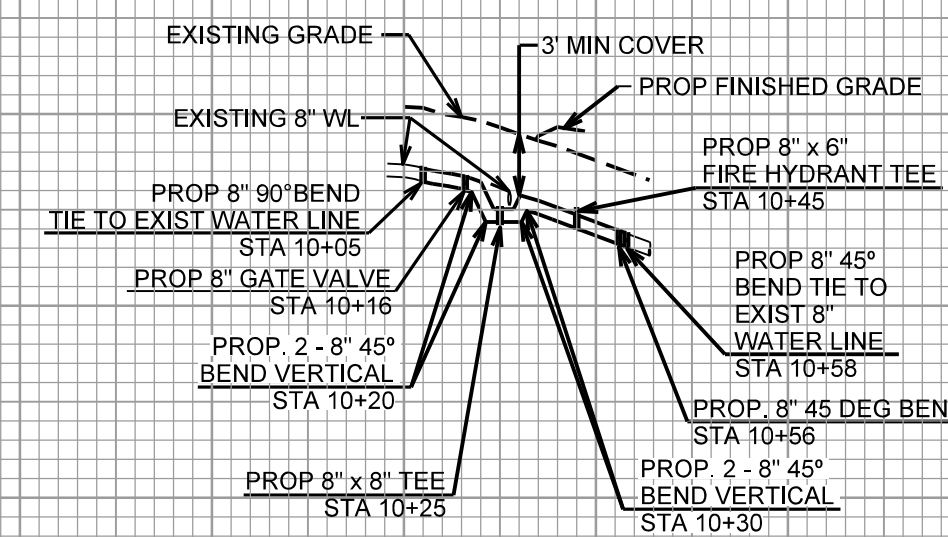
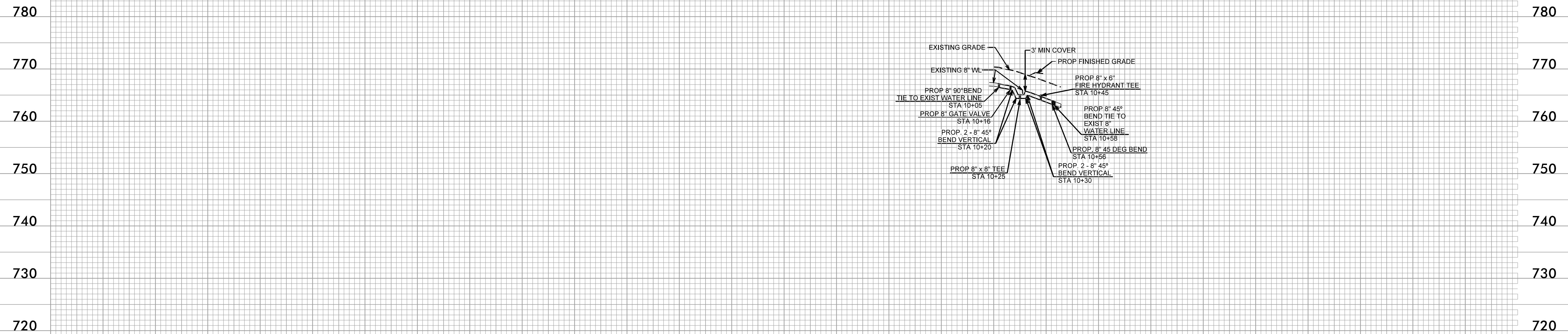
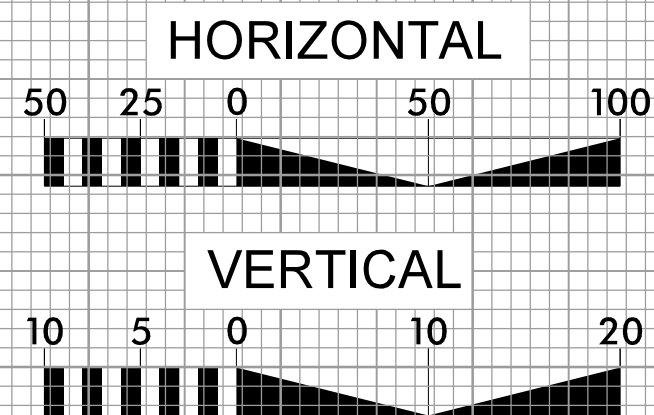
**PROP 84 LF 8" WATER LINE**  
 THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 1495 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.  
**ABANDON 85 LF EXIST 8" WATER LINE**



### UTILITY CONSTRUCTION

- NOTES:
1. MAINTAIN MINIMUM 36" COVER BELOW FINAL GRADE FOR ALL WATER LINES.
  2. WHERE PROPOSED WATER CROSSES UNDER A CLOSED/PIPED DRAINAGE SYSTEM PROVIDE 2 FT MINIMUM VERTICAL CLEARANCE.
  3. ABANDON WATER LINE IN LOCATIONS SHOWN IN ABANDONMENT INCLUDES ALL FITTINGS AND APPURTENANCES ABANDONMENT OF THE WATER LINE TO BE IN ACCORDANCE WITH THE CITY OF SHELBY'S REQUIREMENTS.

### 8" WATER LINE -W2-



6/2/2023  
c:\p\stn\_transportation\dms42729\R2707D\_ut\_psh05copy.dgn



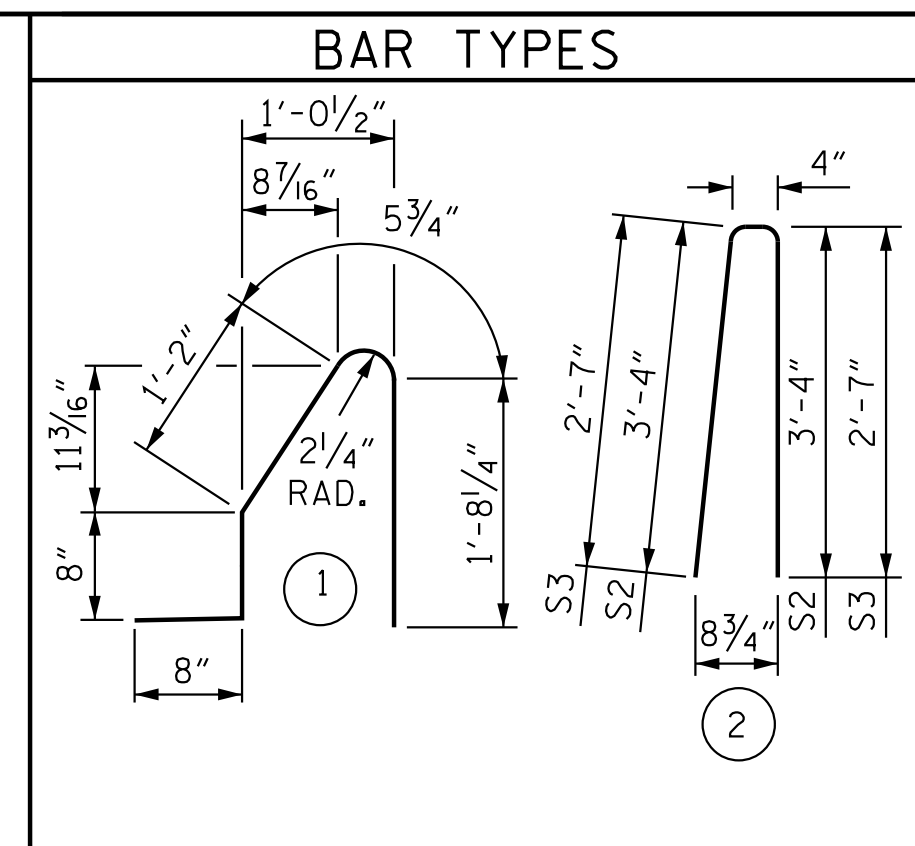
### NOTES

THE BARRIER RAIL IN A CONTINUOUS UNIT SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN ALL UNITS HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF BARRIER RAIL SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

THE JOINT IN THE DECK SLAB SHALL BE SAWED PRIOR TO THE CASTING OF BARRIER RAIL.

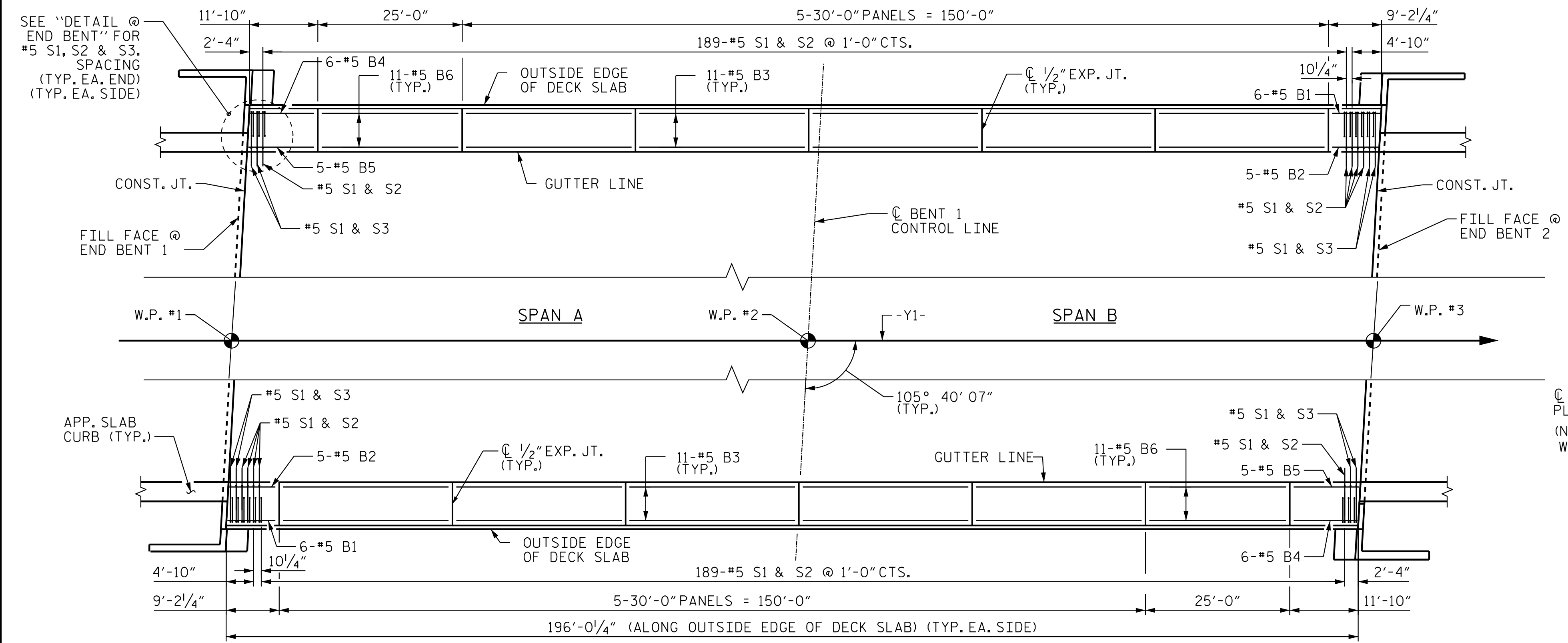


ALL BAR DIMENSIONS ARE OUT TO OUT

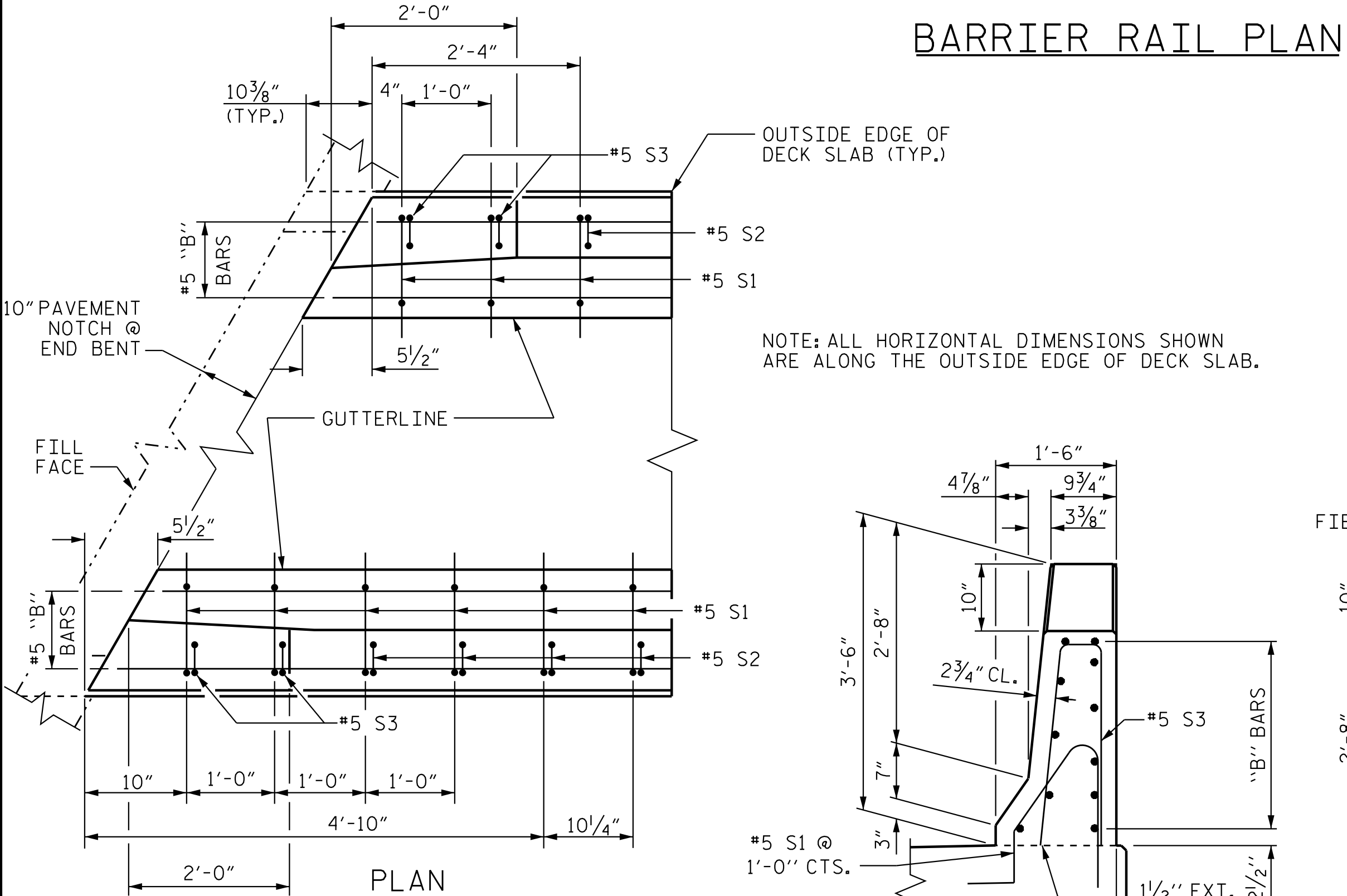
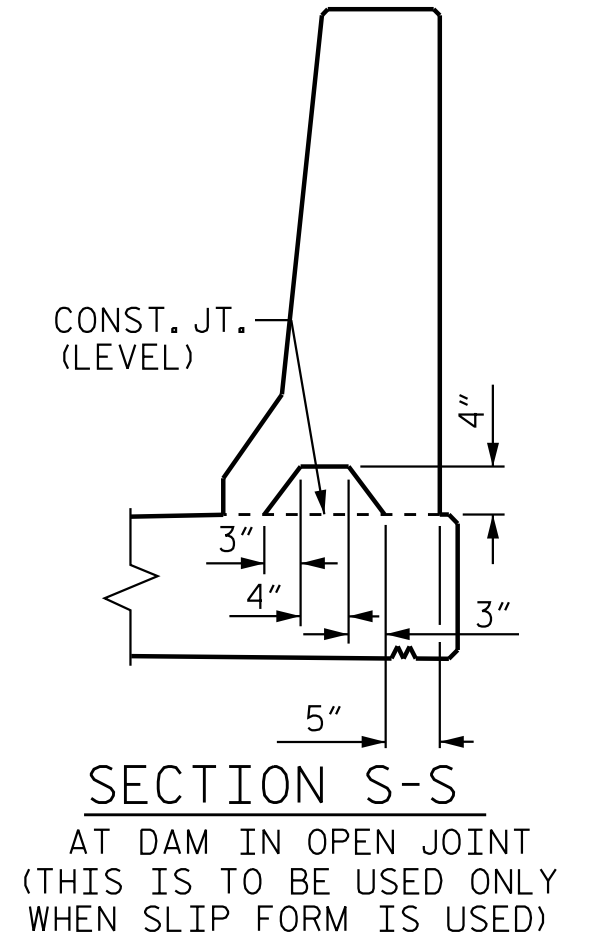
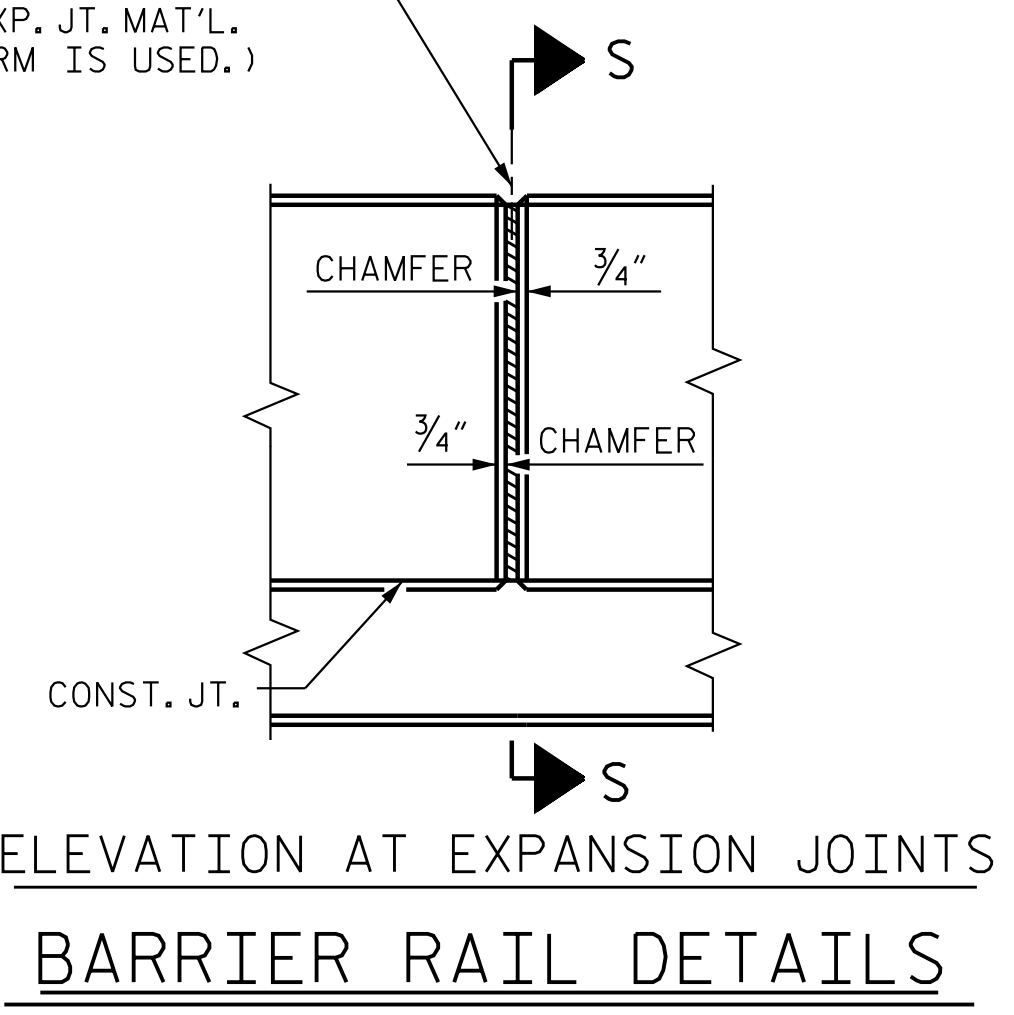
### BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY

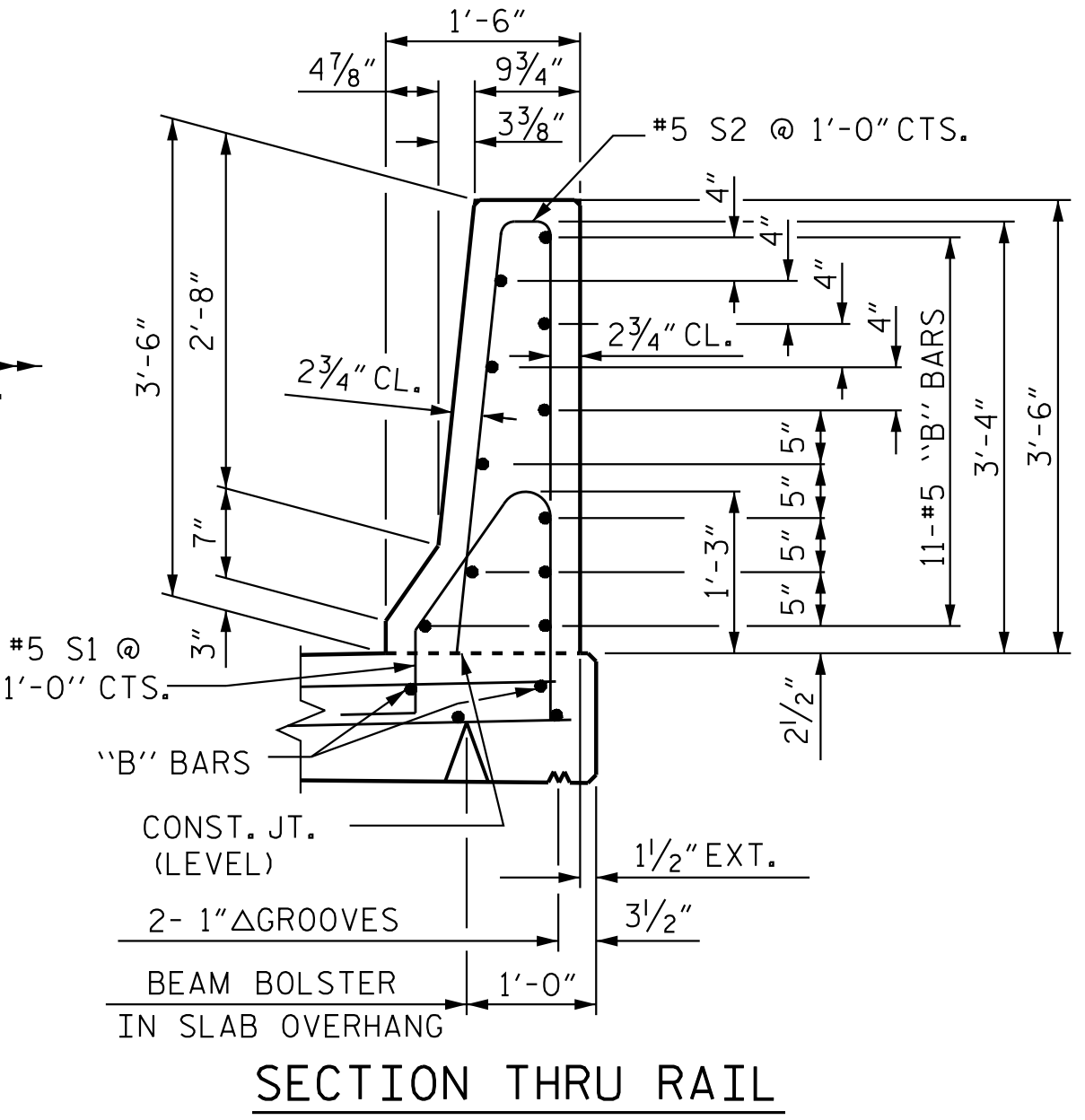
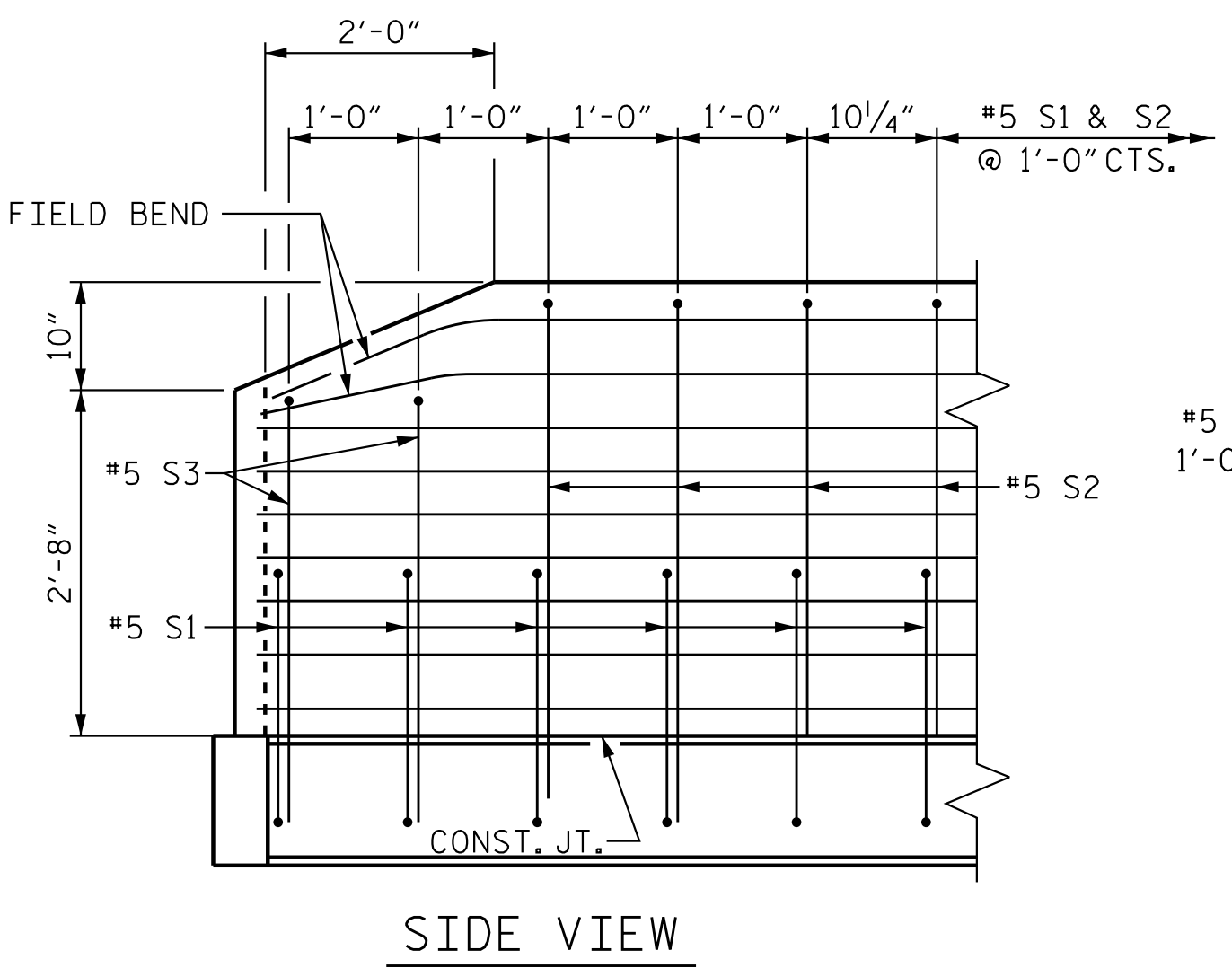
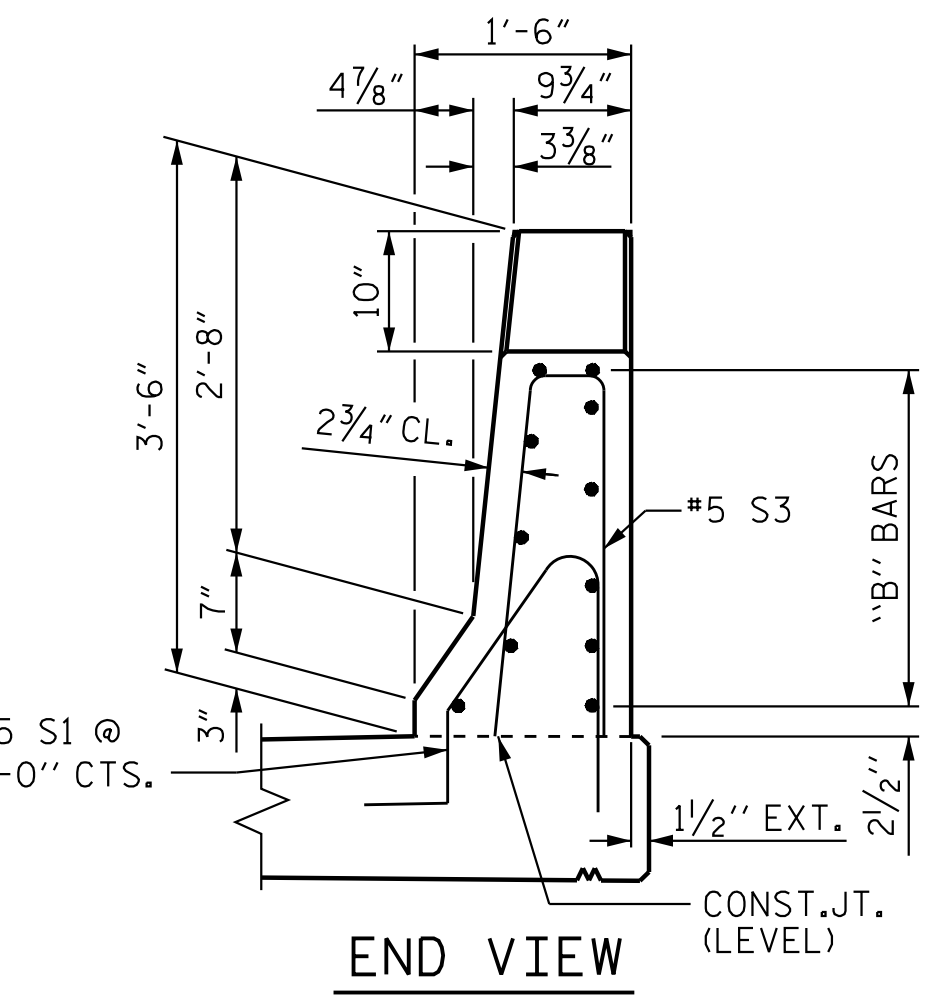
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	12	#5	STR	8'-8"	108
* B2	10	#5	STR	8'-4"	87
* B3	110	#5	STR	29'-6"	3385
* B4	12	#5	STR	11'-5"	143
* B5	10	#5	STR	11'-9"	123
* B6	22	#5	STR	24'-6"	562
* S1	392	#5	1	4'-8"	1908
* S2	384	#5	2	7'-0"	2804
* S3	8	#5	2	5'-6"	46
* EPOXY COATED REINFORCING STEEL					9,166 LBS.
CLASS AA CONCRETE					53.2 CU. YDS.
CONCRETE BARRIER RAIL					392.0 LIN. FT.



1/2" EXP. JT. MAT'L HELD IN PLACE WITH GALVANIZED NAILS.  
(NOTE: OMIT EXP. JT. MAT'L. WHEN SLIP FORM IS USED.)



NOTE: ALL HORIZONTAL DIMENSIONS SHOWN ARE ALONG THE OUTSIDE EDGE OF DECK SLAB.



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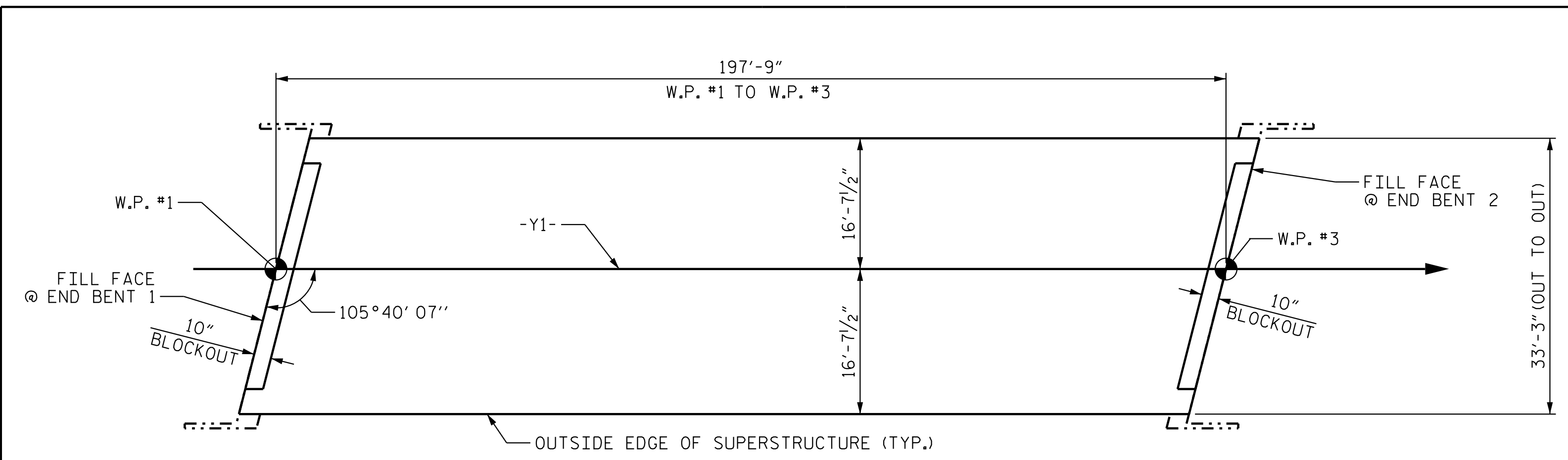
### END OF RAIL DETAILS

ASSEMBLED BY : J. E. HAGENBUSH	DATE : 01/23/18	MAA/GM	DESIGN
CHECKED BY : N. D'ALUIO	DATE : 01/30/18	MAA/GM	ENGINEER
DRAWN BY : ARB 5/87	REV. 7/12	MAA/GM	OF RECORD: J. KELVINGTON
CHECKED BY : SJD 9/87	REV. 6/13	MAA/GM	DATE : 06/22/23
	REV. 12/17	MAA/GM	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

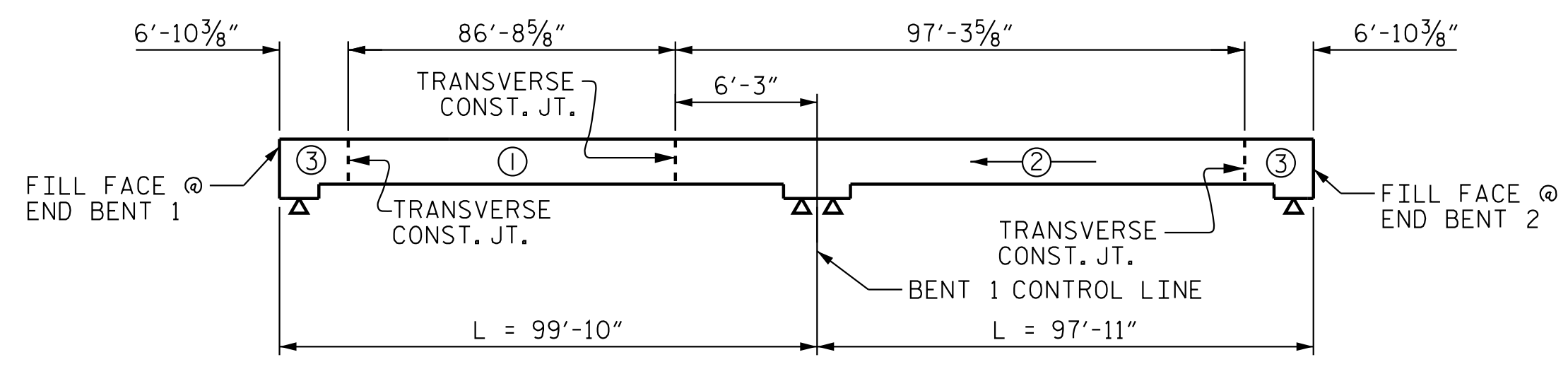
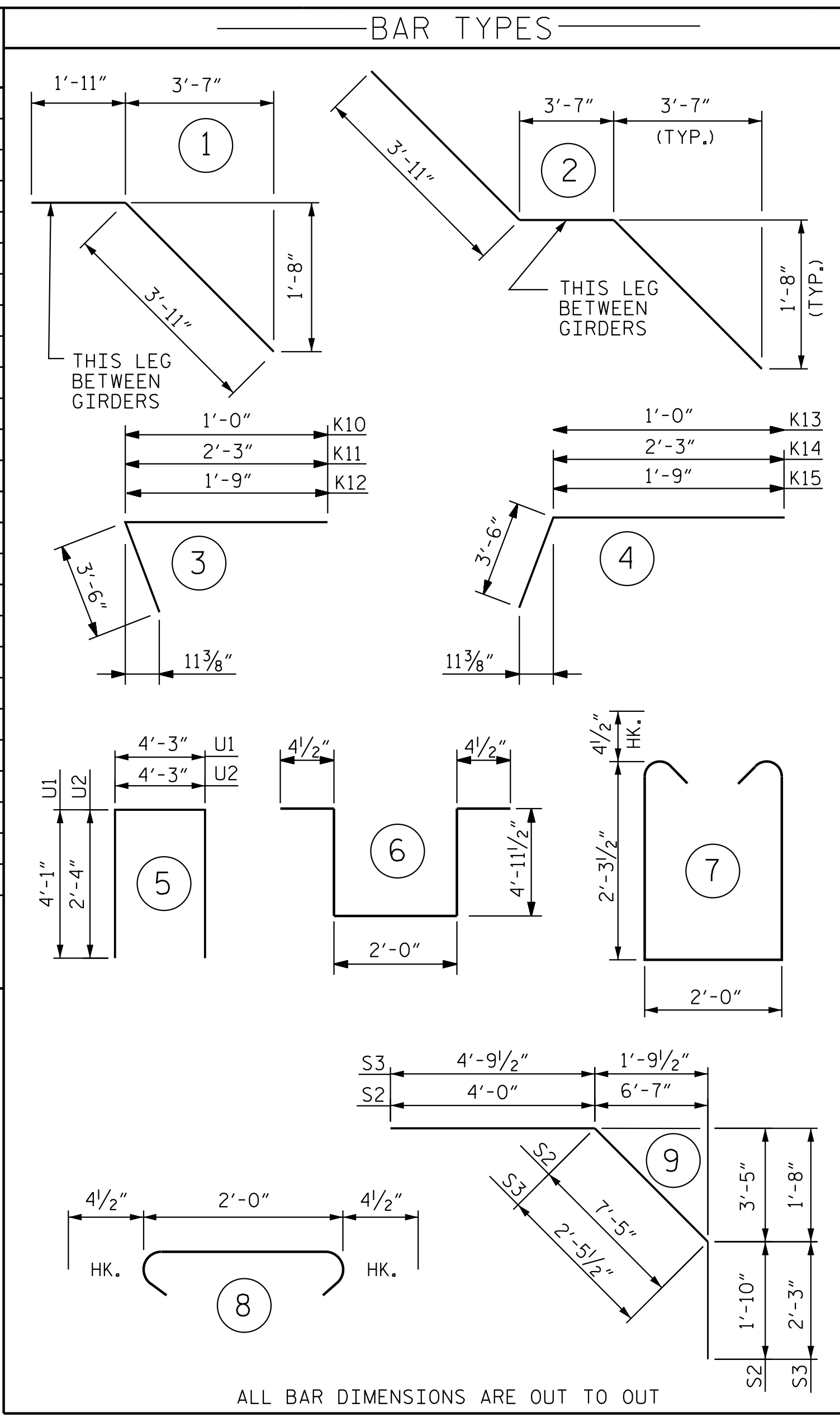
PROJECT NO. R-2707D  
CLEVELAND COUNTY  
STATION: 19+82.46 -Y1-

REVISIONS						SHEET NO. S1-19
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 32
2			4			



LAYOUT FOR COMPUTING AREA  
REINFORCED CONCRETE DECK SLAB  
(SQ. FT. = 6,575)

REINFORCING BAR SCHEDULE SPANS A & B													
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT		
*A1	299	#5	STR	32'-9"	10213	K1	20	#4	STR	17'-1"	228		
A2	299	#5	STR	32'-9"	10213	K2	6	#4	STR	5'-3"	21		
						K3	6	#4	STR	5'-6"	22		
*A101	4	#5	STR	28'-10"	120	K4	18	#4	STR	7'-9"	93		
*A102	4	#5	STR	24'-5"	102	K5	18	#4	STR	8'-4"	100		
*A103	4	#5	STR	19'-11"	83	K6	6	#4	STR	6'-1"	24		
*A104	4	#5	STR	15'-6"	65	K7	6	#4	STR	5'-2"	21		
*A105	4	#5	STR	11'-1"	46	K8	10	#4	1	5'-10"	39		
*A106	4	#5	STR	6'-7"	27	K9	10	#4	2	11'-9"	78		
*A107	4	#5	STR	2'-2"	9	K10	2	#4	3	4'-6"	6		
						K11	4	#4	3	5'-9"	15		
A201	4	#5	STR	28'-10"	120	K12	2	#4	3	5'-3"	7		
A202	4	#5	STR	24'-4"	102	K13	18	#4	4	4'-6"	54		
A203	4	#5	STR	19'-11"	83	K14	4	#4	4	5'-9"	15		
A204	4	#5	STR	15'-5"	64	K15	2	#4	4	5'-3"	7		
A205	4	#5	STR	11'-0"	46	K16	12	#4	STR	5'-1"	41		
A206	4	#5	STR	6'-6"	27								
A207	4	#5	STR	2'-1"	9	U1	32	#4	5	12'-5"	265		
						U2	22	#4	5	8'-11"	131		
*B1	96	#5	STR	50'-9"	5081	U3	18	#4	6	12'-8"	152		
*B2	42	#6	STR	20'-6"	1293	U4	6	#4	7	7'-4"	29		
*B3	183	#5	STR	32'-3"	6156								
*B4	42	#6	STR	23'-0"	1451	S1	90	#4	8	2'-9"	165		
B5	112	#5	STR	50'-5"	5889	*S2	64	#4	9	13'-3"	566		
						*S3	44	#4	9	9'-6"	279		
*G1	2	#5	STR	33'-11"	71								
										REINFORCING STEEL	18,066	LBS.	
										EPOXY COATED REINFORCING STEEL	25,562	LBS.	



POURING SEQUENCE  
ALONG -Y1-  
⊕ = INDICATES POUR NUMBER AND DIRECTION OF POUR

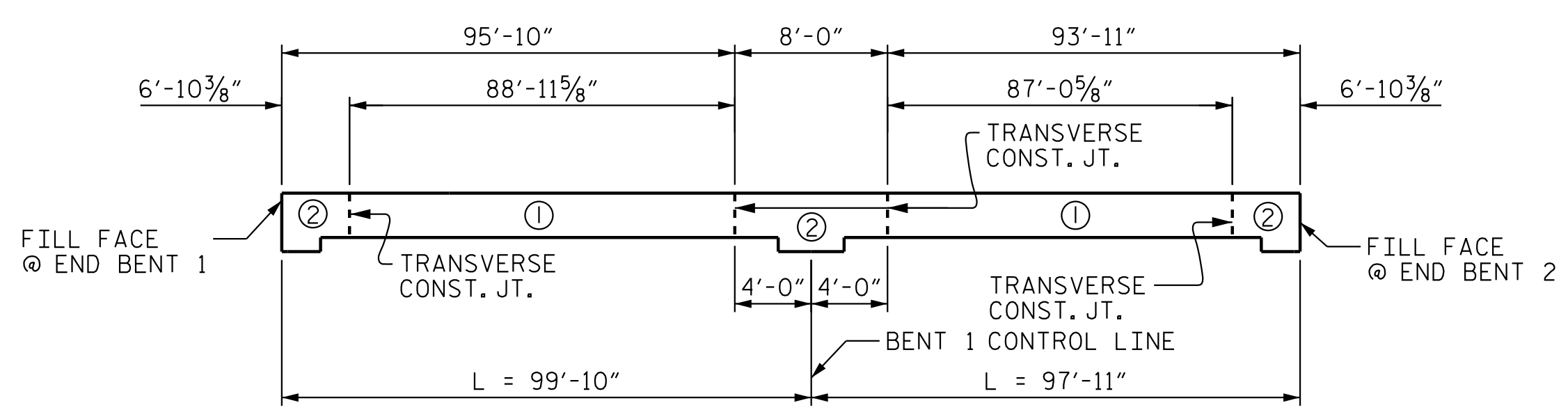
—SUPERSTRUCTURE BILL OF MATERIAL—			
	CLASS AA CONCRETE (CU. YDS.)	REINFORCING STEEL (LBS.)	EPOXY COATED REINFORCING STEEL (LBS.)
POUR #1	88.2		
POUR #2	109.4		
POUR #3	63.8		
TOTALS**	261.4	18,066	25,562

\*\*QUANTITIES FOR BARRIER RAIL ARE NOT INCLUDED

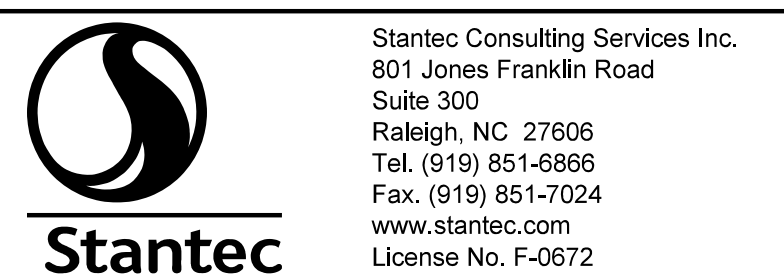
BAR SIZE	SUPERSTRUCTURE EXCEPT APPROACH SLABS, PARAPET, AND BARRIER RAIL		APPROACH SLABS		PARAPET AND BARRIER RAIL
	EPOXY COATED	UNCOATED	EPOXY COATED	UNCOATED	
#4	1'-11"	1'-7"	1'-11"	1'-7"	2'-6"
#5	2'-5"	2'-0"	2'-5"	2'-0"	3'-1"
#6	2'-10"	2'-5"	3'-7"	2'-5"	3'-8"
#7	4'-2"	2'-9"			
#8	4'-9"	3'-2"			

GROOVING BRIDGE FLOORS	
APPROACH SLABS	765 SQ.FT.
BRIDGE DECK	5,330 SQ.FT.
TOTAL	6,095 SQ.FT.

PROJECT NO. R-2707D  
CLEVELAND COUNTY  
STATION: 19+82.46 -Y1-



OPTIONAL POURING SEQUENCE  
POUR 2 CAN NOT BE STARTED UNTIL BOTH ADJACENT 1 POURS REACH A MINIMUM OF 3,000 PSI



DRAWN BY: J. F. KENNEDY DATE: 01/24/18  
CHECKED BY: N. D'AIUTO DATE: 01/25/18  
DESIGN ENGINEER OF RECORD: J. KELVINGTON DATE: 06/22/23



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

SUPERSTRUCTURE  
BILL OF MATERIAL

REVISIONS						SHEET NO. S1-21
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 32
2			4			

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6/22/2023 11:41:56 AM jHagenbush c:\pvt\work\king\gms55345\192707D\_SML\_BM\_220488.dgn



**SUPERSTRUCTURE REINFORCING STEEL LENGTHS ARE BASED ON THE FOLLOWING MINIMUM SPLICE LENGTHS**

BAR SIZE	SUPERSTRUCTURE EXCEPT APPROACH SLABS, PARAPET, AND BARRIER RAIL		APPROACH SLABS		PARAPET AND BARRIER RAIL
	EPOXY COATED	UNCOATED	EPOXY COATED	UNCOATED	
#4	1'-11"	1'-7"	1'-11"	1'-7"	2'-6"
#5	2'-5"	2'-0"	2'-5"	2'-0"	3'-1"
#6	2'-10"	2'-5"	3'-7"	2'-5"	3'-8"
#7	4'-2"	2'-9"			
#8	4'-9"	3'-2"			

**CLASS AA CONC. BREAKDOWN**

POUR #1	115.8 C.Y.
POUR #2	146.8 C.Y.
POUR #3	84.1 C.Y.
<b>TOTAL CLASS AA CONC.</b>	<b>346.6 CY</b>

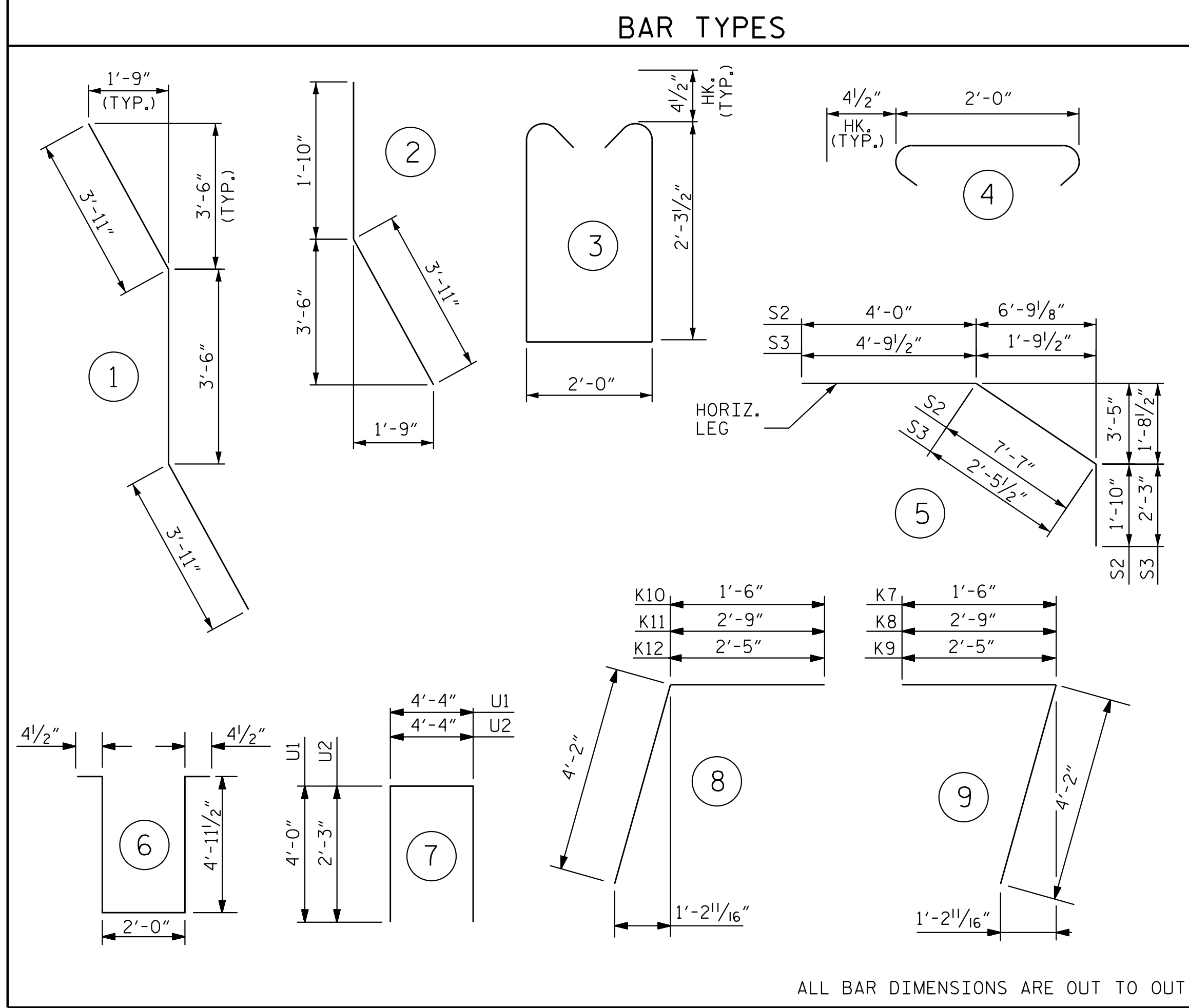
**GROOVING BRIDGE FLOORS**

APPROACH SLABS	1,747 SQ.FT.
BRIDGE DECK	7,442 SQ.FT.
<b>TOTAL</b>	<b>9,189 SQ.FT.</b>

**SUPERSTRUCTURE BILL OF MATERIAL**

	CLASS AA CONCRETE (CU. YDS.)	REINFORCING STEEL (LBS.)	EPOXY COATED REINFORCING STEEL (LBS.)
<b>TOTALS **</b>	<b>336.1</b>	<b>24,405</b>	<b>36,793</b>

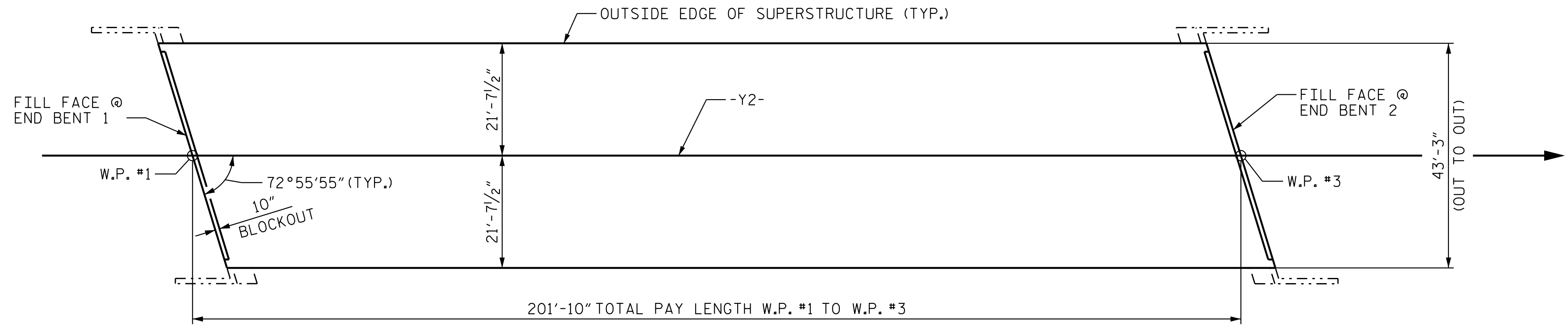
\*\*QUANTITIES FOR BARRIER RAIL ARE NOT INCLUDED



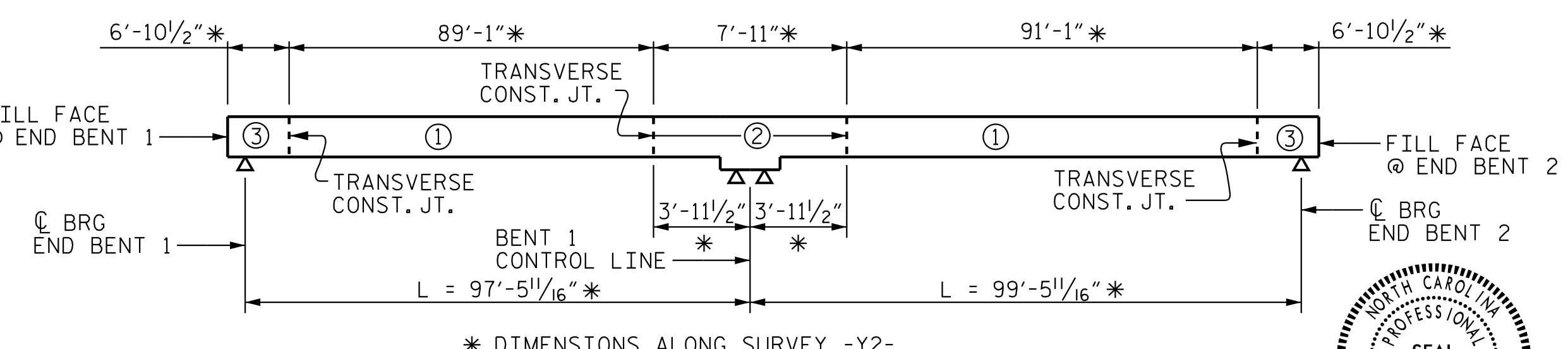
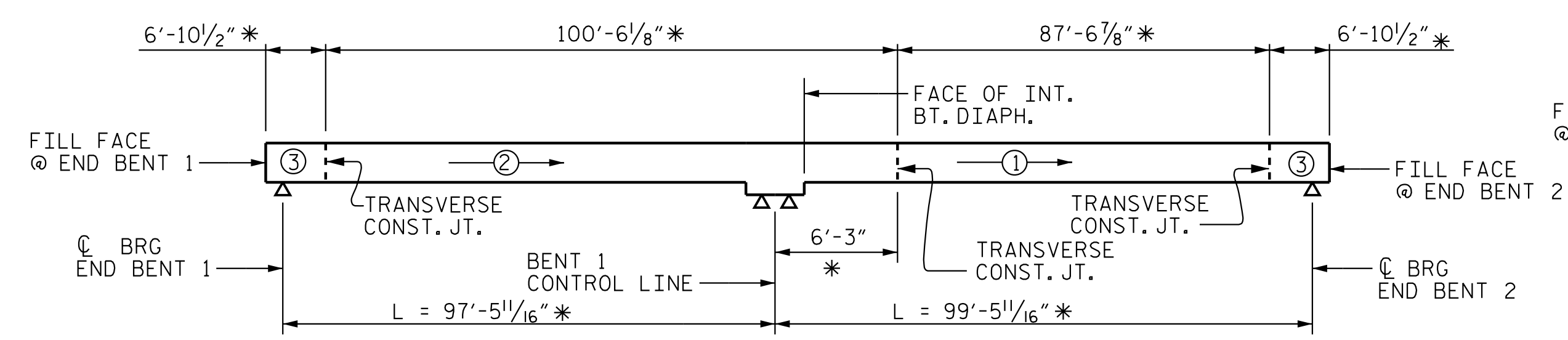
**REINFORCING BAR SCHEDULE (DECK & DIAPHRAGM)**

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* A1	299	#5	STR	42'-9"	13332
A2	299	#5	STR	42'-9"	13332
* A101	4	#5	STR	39'-3"	164
* A102	4	#5	STR	35'-2"	147
* A103	4	#5	STR	31'-2"	130
* A104	4	#5	STR	27'-1"	113
* A105	4	#5	STR	23'-0"	96
* A106	4	#5	STR	18'-11"	79
* A107	4	#5	STR	14'-10"	62
* A108	4	#5	STR	10'-9"	45
* A109	4	#5	STR	6'-8"	28
* A110	4	#5	STR	2'-8"	11
A201	4	#5	STR	39'-2"	163
A202	4	#5	STR	35'-1"	146
A203	4	#5	STR	31'-0"	129
A204	4	#5	STR	27'-0"	113
A205	4	#5	STR	22'-11"	96
A206	4	#5	STR	18'-10"	79
A207	4	#5	STR	14'-9"	62
A208	4	#5	STR	10'-8"	45
A209	4	#5	STR	6'-7"	27
A210	4	#5	STR	2'-6"	10
* B1	124	#5	STR	51'-9"	6693
B2	152	#5	STR	51'-6"	8165
* B3	252	#5	STR	36'-1"	9484
* B4	53	#5	STR	26'-0"	1437
* B5	56	#6	STR	21'-0"	1766
* B6	56	#6	STR	23'-10"	2005
* G1	2	#5	STR	44'-8"	93

REINFORCING STEEL	24,405 LBS.
* EPOXY COATED REINFORCING STEEL	36,793 LBS.



**LAYOUT FOR COMPUTING AREA OF REINFORCED CONCRETE DECK SLAB (SQ. FT. = 8,729)**



**\* DIMENSIONS ALONG SURVEY -Y2- POURING SEQUENCE**

**OPTIONAL POURING SEQUENCE**

NOTE: POUR ② & ③ CAN NOT BE STARTED UNTIL BOTH ADJACENT POURS REACH A MINIMUM COMP. STRENGTH OF 3000 PSI.

PROJECT NO. R-2707D  
 CLEVELAND COUNTY  
 STATION: 20+16.72 -Y2-

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SUPERSTRUCTURE BILL OF MATERIALS**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-23
1			3			TOTAL SHEETS 35
2			4			



Stantec Consulting Services Inc.  
 801 Jones Franklin Road  
 Suite 300  
 Raleigh, NC 27606  
 Tel. (919) 851-6866  
 Fax. (919) 851-7024  
 www.stantec.com  
 License No. F-0672

DRAWN BY: M. B. ISENHOUR DATE: 10/08/18  
 CHECKED BY: V. E. FRAGA DATE: 10/18/18  
 DESIGN ENGINEER OF RECORD: J.T. KELVINGTON DATE: 06/22/23

6/22/2023  
 jhagenbush  
 6/22/2023  
 6/22/2023

**—SUPERSTRUCTURE BILL OF MATERIAL—**

	CLASS AA CONCRETE (CU. YDS.)	REINFORCING STEEL (LBS.)	EPOXY COATED REINFORCING STEEL (LBS.)
POUR #1	103.1		
POUR #2	141.1		
POUR #3	68.1		
<b>TOTALS**</b>	<b>312.3</b>	<b>30,734</b>	<b>37,031</b>

\*\*QUANTITIES FOR BARRIER RAIL ARE NOT INCLUDED

**GROOVING BRIDGE FLOORS**

APPROACH SLABS	1,788	SQ.FT.
BRIDGE DECK	6,672	SQ.FT.
<b>TOTAL</b>	<b>8,460</b>	<b>SQ.FT.</b>

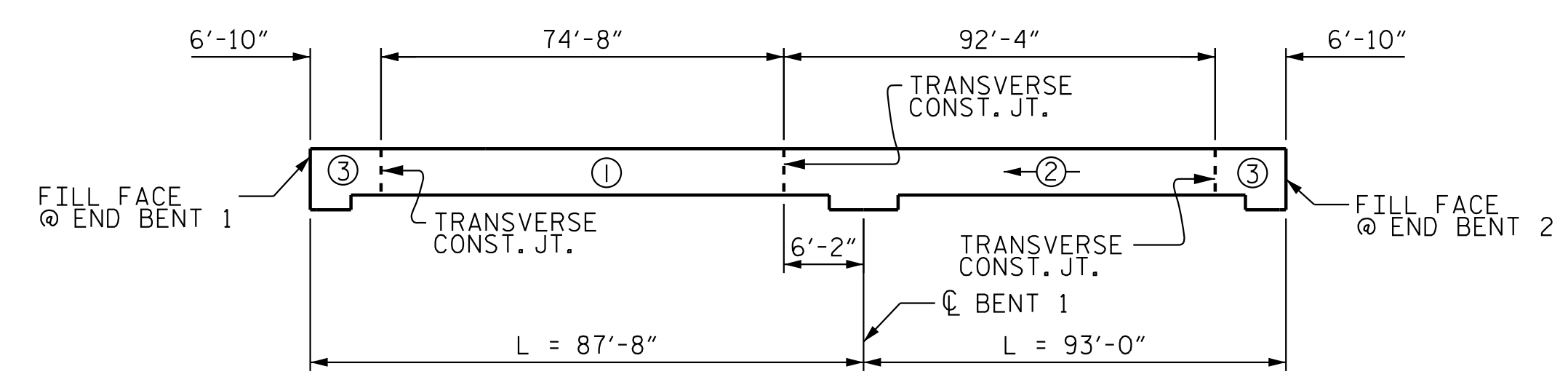
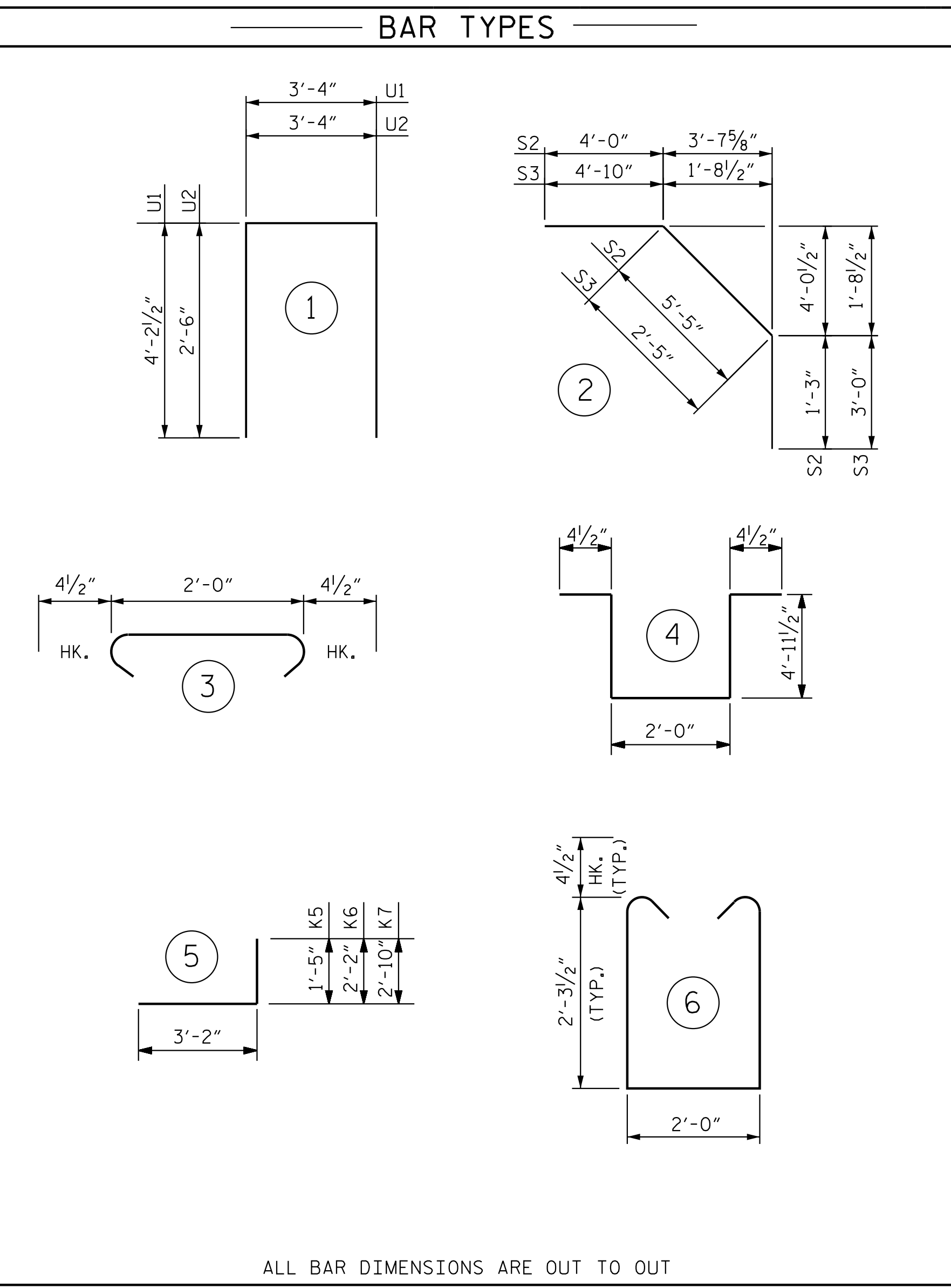
**SUPERSTRUCTURE REINFORCING STEEL LENGTHS ARE BASED ON THE FOLLOWING MINIMUM SPLICE LENGTHS**

BAR SIZE	SUPERSTRUCTURE EXCEPT APPROACH SLABS, PARAPET, AND BARRIER RAIL		APPROACH SLABS		PARAPET AND BARRIER RAIL
	EPOXY COATED	UNCOATED	EPOXY COATED	UNCOATED	
#4	1'-11"	1'-7"	1'-11"	1'-7"	2'-6"
#5	2'-5"	2'-0"	2'-5"	2'-0"	3'-1"
#6	2'-10"	2'-5"	3'-7"	2'-5"	3'-8"
#7	4'-2"	2'-9"			
#8	4'-9"	3'-2"			

**REINFORCING BAR SCHEDULE (DECK AND DIAPHRAGM)**

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*A1	357	#5	STR	42'-9"	15,918
A2	357	#5	STR	42'-9"	15,918
*B1	124	#6	STR	46'-10"	8723
*B2	246	#6	STR	21'-10"	8067
*B3	56	#6	STR	17'-8"	1486
*B4	56	#6	STR	20'-6"	1724
B5	260	#5	STR	46'-2"	12519
B6	6	#5	STR	50'-0"	313
*G1	2	#5	STR	42'-9"	89
K1	20	#4	STR	22'-3"	297
K2	12	#4	STR	8'-0"	64
K3	6	#4	STR	9'-6"	38
K4	36	#4	STR	10'-10"	260
K5	4	#4	5	4'-7"	12
K6	4	#4	5	5'-4"	14
K7	12	#4	5	6'-0"	48
K8	12	#4	STR	4'-10"	39
K9	6	#4	STR	8'-4"	33
K10	10	#4	STR	18'-10"	126
S1	120	#4	3	2'-9"	220
*S2	84	#4	2	10'-8"	599
*S3	62	#4	2	10'-3"	425
U1	62	#4	1	11'-9"	487
U2	16	#4	1	8'-4"	89
U3	27	#4	4	12'-8"	228
U4	6	#4	6	7'-4"	29

REINFORCING STEEL 30,734 LBS.  
EPOXY COATED REINFORCING STEEL 37,031 LBS.

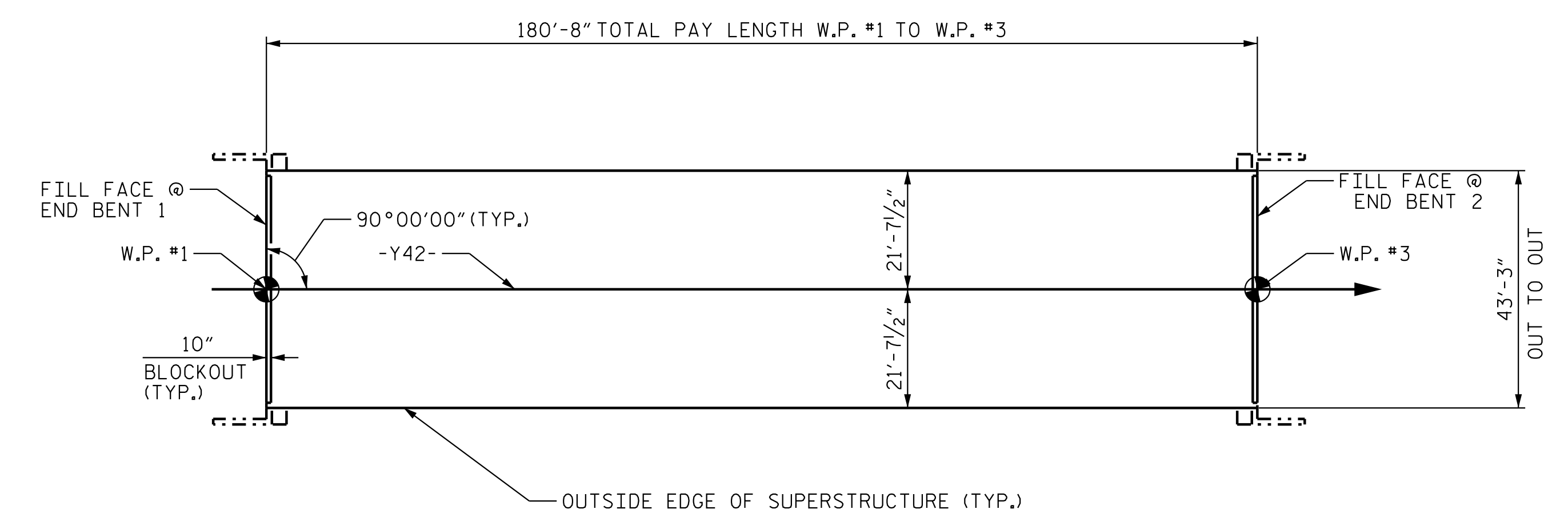


**POURING SEQUENCE**

POUR ② CAN NOT BE STARTED UNTIL ADJACENT ① POUR CONCRETE HAS ATTAINED A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI

POUR ③ CAN NOT BE STARTED UNTIL ADJACENT ① OR ② POUR CONCRETE HAS ATTAINED A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI

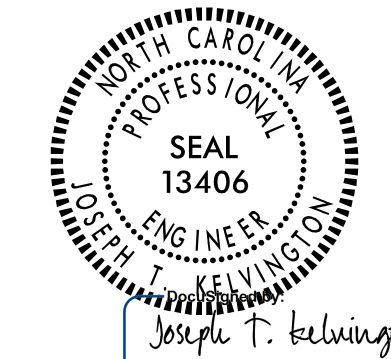
⊕ → = INDICATES POUR NUMBER AND DIRECTION OF POUR



6/22/2023 12:24:48 PM jHogenbush

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801 Jones Franklin Road  
Suite 300  
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www.stantec.com  
License No. F-0672

DRAWN BY: J. B. GEILE DATE: 10/11/18  
CHECKED BY: A. L. BOYKIN DATE: 02/17/23  
DESIGN ENGINEER OF RECORD: J. T. KELVINGTON DATE: 06/22/23



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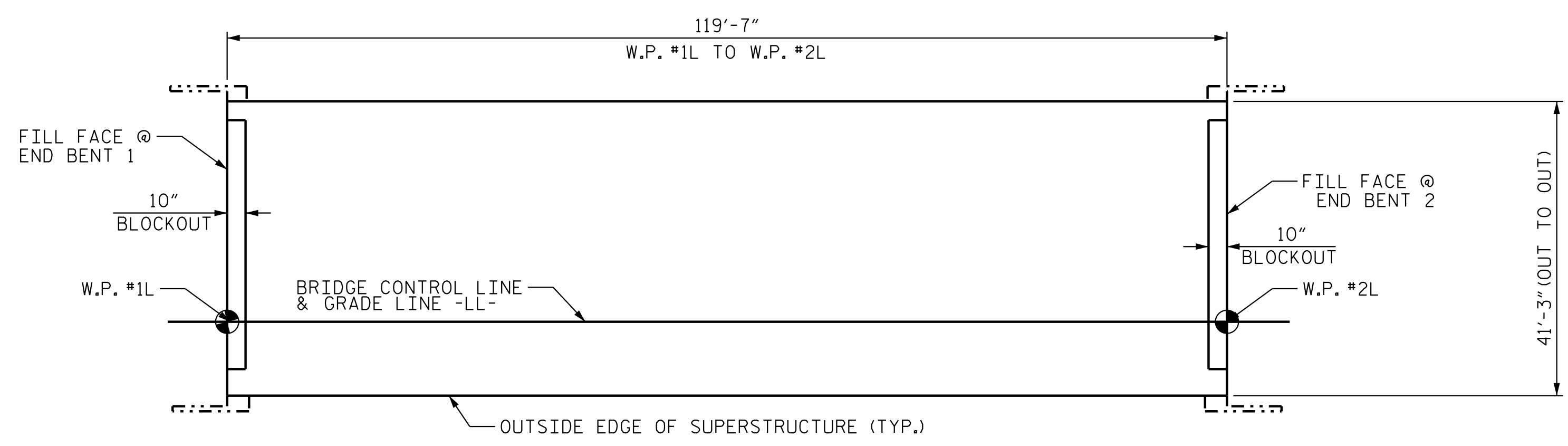
PROJECT NO. R-2707E  
CLEVELAND COUNTY  
STATION: 13+08.49 -Y42-

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

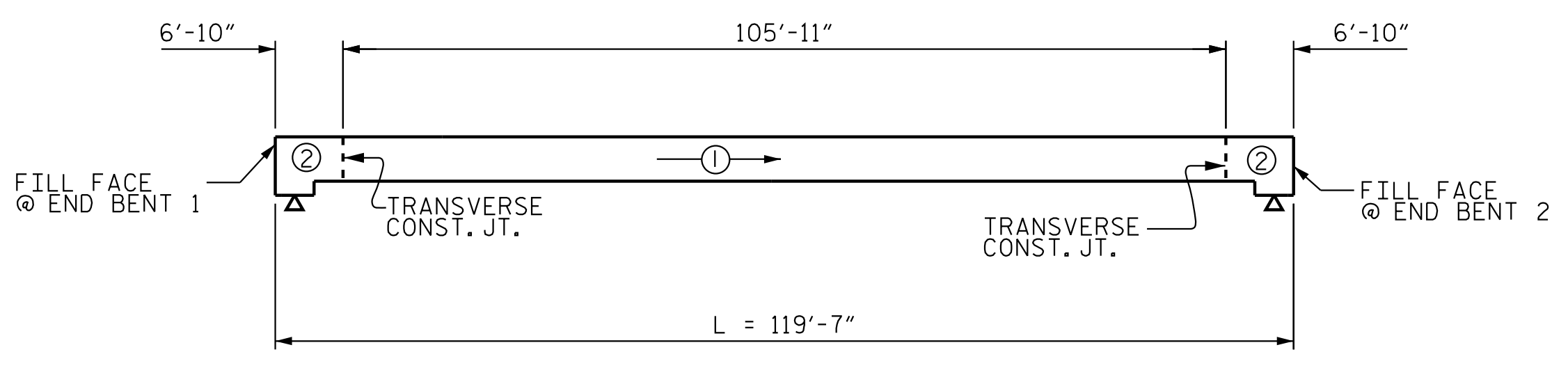
**SUPERSTRUCTURE BILL OF MATERIAL**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S7-22
2			4			TOTAL SHEETS 34



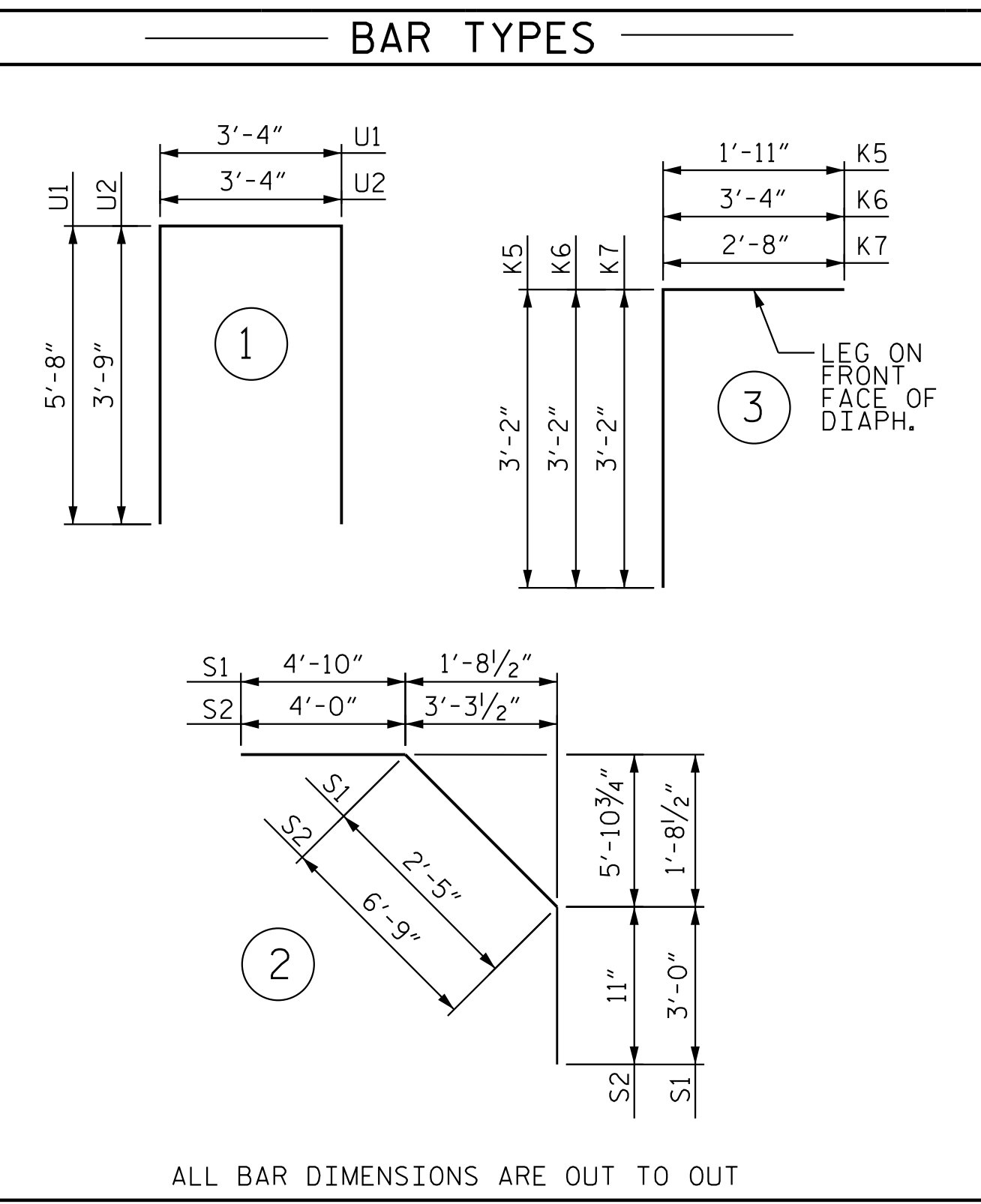


LAYOUT FOR COMPUTING AREA REINFORCED CONCRETE DECK SLAB (SQ. FT. = 4,933)



POURING SEQUENCE ALONG GRADE LINE -LL-  
⊕ → = INDICATES POUR NUMBER AND DIRECTION OF POUR

REINFORCING BAR SCHEDULE					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*A1	217	#5	STR	40'-9"	9223
A2	217	#5	STR	40'-9"	9223
*B1	58	#5	STR	60'-0"	3630
B2	82	#5	STR	59'-10"	5117
*B3	54	#6	STR	22'-11"	1859
*B4	54	#6	STR	25'-9"	2089
*G1	2	#5	STR	40'-9"	85
K1	28	#4	STR	21'-3"	397
K2	6	#4	STR	7'-0"	28
K3	30	#4	STR	9'-10"	197
K4	6	#4	STR	8'-6"	34
K5	4	#4	3	5'-1"	14
K6	20	#4	3	6'-6"	87
K7	4	#4	3	5'-10"	16
K8	12	#4	STR	6'-8"	53
*S1	60	#4	2	10'-3"	411
*S2	80	#4	2	11'-8"	623
U1	60	#4	1	14'-8"	588
U2	16	#4	1	10'-10"	116
REINFORCING STEEL				15,870 LBS.	
EPOXY COATED REINFORCING STEEL				17,920 LBS.	



ALL BAR DIMENSIONS ARE OUT TO OUT

SUPERSTRUCTURE BILL OF MATERIAL			
	CLASS AA CONCRETE	REINFORCING STEEL	EPOXY COATED REINFORCING STEEL
	(CU. YDS.)	(LBS.)	(LBS.)
POUR #1	140.2		
POUR #2	81.2		
TOTALS**	221.3	15,870	17,920

\*\*QUANTITIES FOR BARRIER RAIL ARE NOT INCLUDED

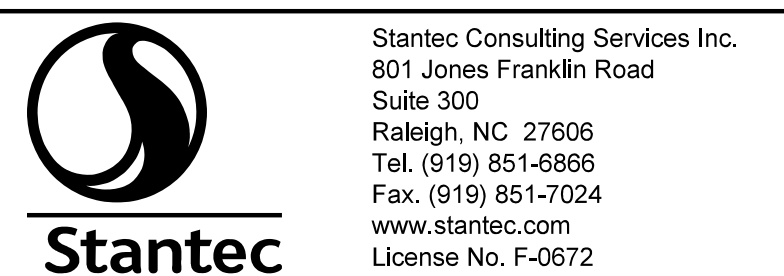
GROOVING BRIDGE FLOORS	
APPROACH SLABS	1692 SQ.FT.
BRIDGE DECK	4116 SQ.FT.
TOTAL	5808 SQ.FT.

BAR SIZE	SUPERSTRUCTURE EXCEPT APPROACH SLABS, PARAPET, AND BARRIER RAIL		APPROACH SLABS		PARAPET AND BARRIER RAIL
	EPOXY COATED	UNCOATED	EPOXY COATED	UNCOATED	
#4	1'-11"	1'-7"	1'-11"	1'-7"	2'-6"
#5	2'-5"	2'-0"	2'-5"	2'-0"	3'-1"
#6	2'-10"	2'-5"	3'-7"	2'-5"	3'-8"
#7	4'-2"	2'-9"			
#8	4'-9"	3'-2"			

PROJECT NO. R-2707D  
CLEVELAND COUNTY  
STATION: 810+00.00 -L-



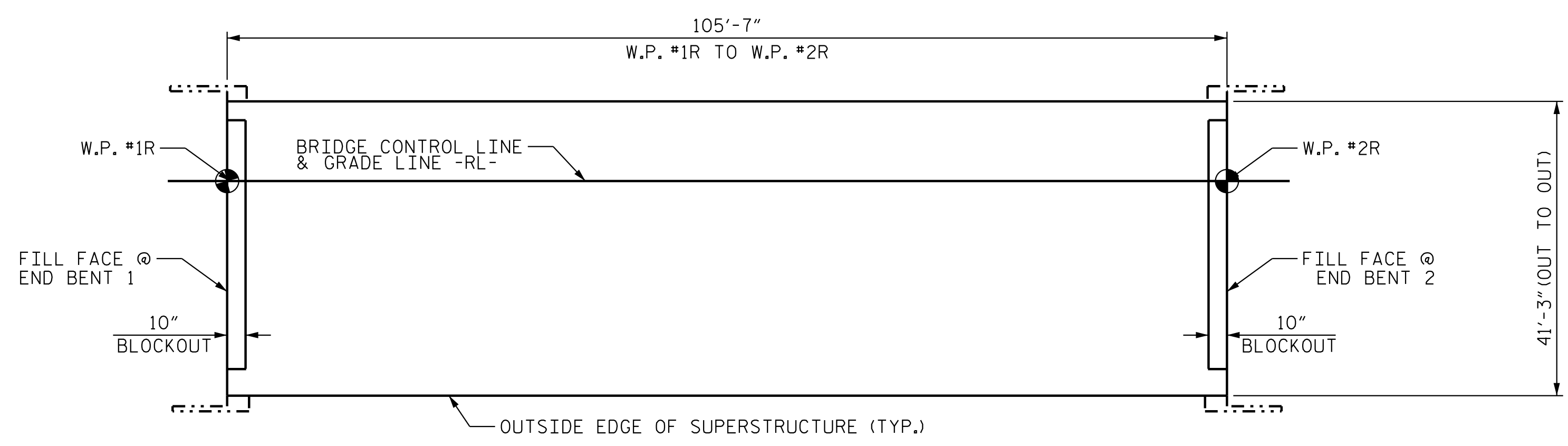
STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
SUPERSTRUCTURE BILL OF MATERIAL  
(LL)



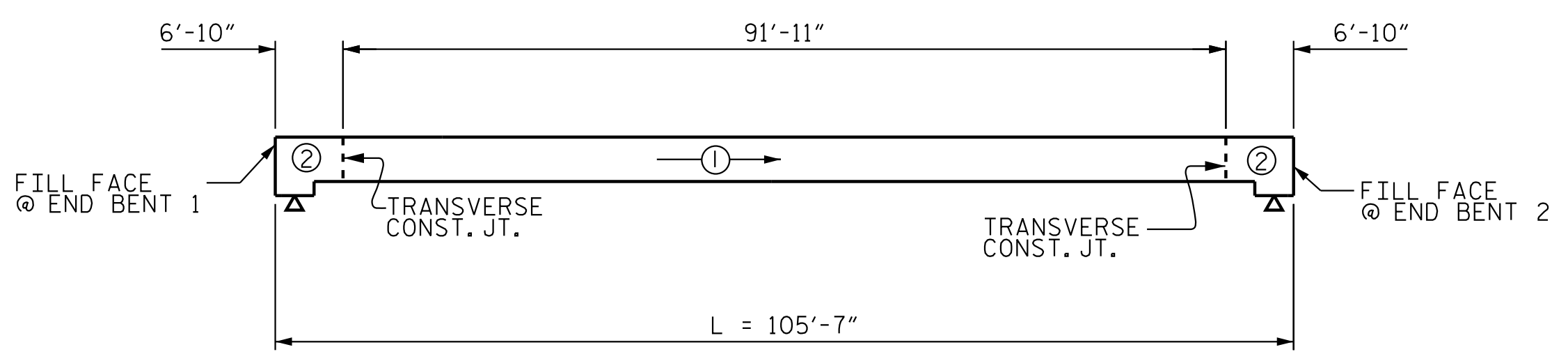
DRAWN BY: N. D'AIUTO DATE: 05/01/18  
CHECKED BY: J.T. KELVINGTON DATE: 12/05/22  
DESIGN ENGINEER OF RECORD: J.T. KELVINGTON DATE: 06/22/23

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REVISIONS						SHEET NO. S8-19	TOTAL SHEETS 30
NO.	BY:	DATE:	NO.	BY:	DATE:		
1			3				
2			4				

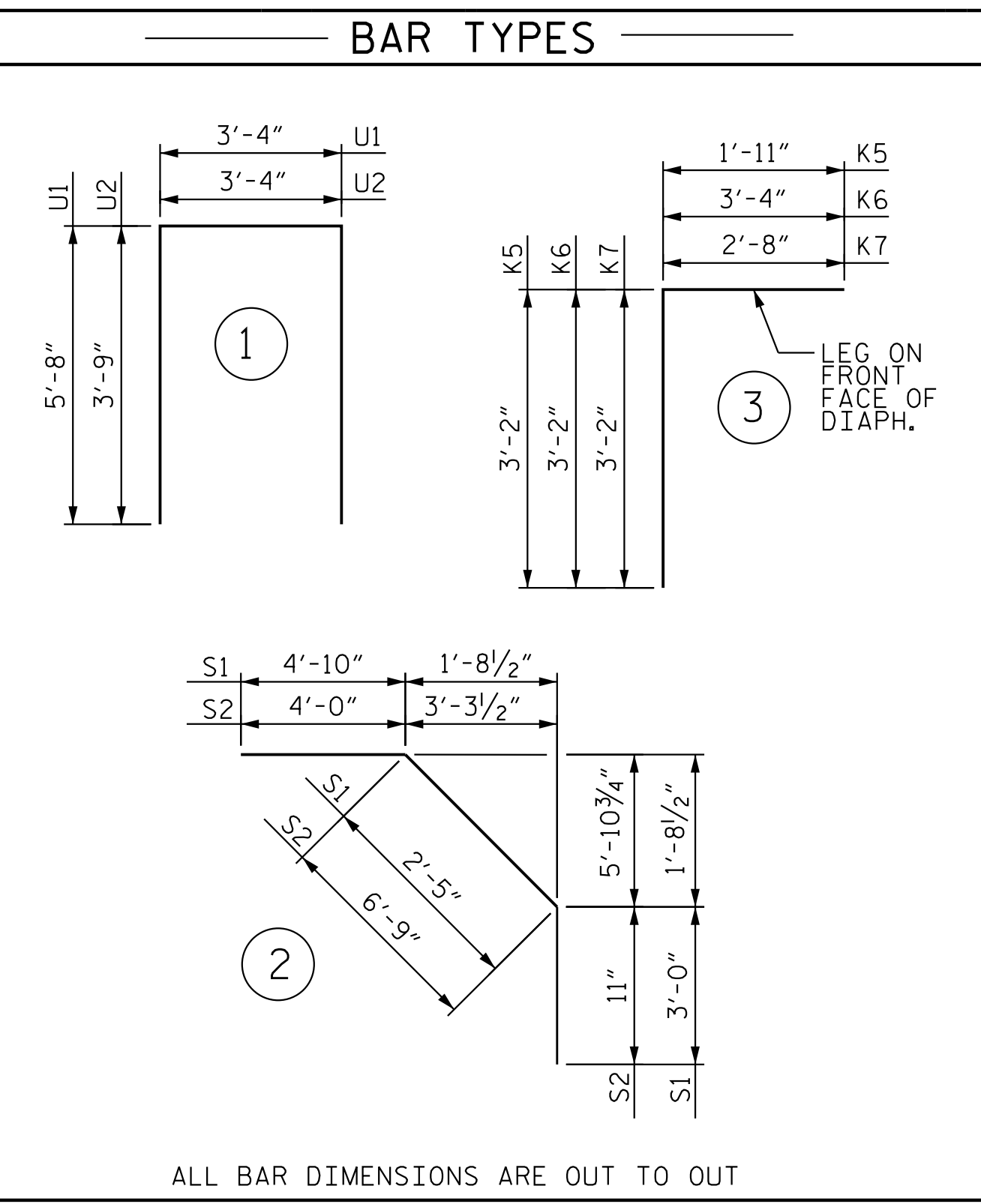


LAYOUT FOR COMPUTING AREA REINFORCED CONCRETE DECK SLAB (SQ. FT. = 4,356)



POURING SEQUENCE ALONG GRADE LINE -RL-  
⊕ → = INDICATES POUR NUMBER AND DIRECTION OF POUR

REINFORCING BAR SCHEDULE						
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	
*A1	191	#5	STR	40'-9"	8118	
A2	191	#5	STR	40'-9"	8118	
*B1	58	#5	STR	53'-0"	3206	
B2	82	#5	STR	52'-10"	4519	
*B3	54	#6	STR	20'-2"	1636	
*B4	54	#6	STR	23'-0"	1865	
*G1	2	#5	STR	40'-9"	85	
K1	28	#4	STR	21'-3"	397	
K2	6	#4	STR	7'-0"	28	
K3	30	#4	STR	9'-10"	197	
K4	6	#4	STR	8'-6"	34	
K5	4	#4	3	5'-1"	14	
K6	20	#4	3	6'-6"	87	
K7	4	#4	3	5'-10"	16	
K8	12	#4	STR	6'-8"	53	
*S1	60	#4	2	10'-3"	411	
*S2	80	#4	2	11'-8"	623	
U1	60	#4	1	14'-8"	588	
U2	16	#4	1	10'-10"	116	
REINFORCING STEEL				14,167 LBS.		
EPOXY COATED REINFORCING STEEL				15,944 LBS.		



ALL BAR DIMENSIONS ARE OUT TO OUT

SUPERSTRUCTURE BILL OF MATERIAL			
	CLASS AA CONCRETE	REINFORCING STEEL	EPOXY COATED REINFORCING STEEL
	(CU. YDS.)	(LBS.)	(LBS.)
POUR #1	122.9		
POUR #2	81.2		
TOTALS**	204.1	14,167	15,944

\*\*QUANTITIES FOR BARRIER RAIL ARE NOT INCLUDED

GROOVING BRIDGE FLOORS	
APPROACH SLABS	1,692 SQ.FT.
BRIDGE DECK	3,626 SQ.FT.
TOTAL	5,318 SQ.FT.

BAR SIZE	SUPERSTRUCTURE EXCEPT APPROACH SLABS, PARAPET, AND BARRIER RAIL		APPROACH SLABS		PARAPET AND BARRIER RAIL
	EPOXY COATED	UNCOATED	EPOXY COATED	UNCOATED	
#4	1'-11"	1'-7"	1'-11"	1'-7"	2'-6"
#5	2'-5"	2'-0"	2'-5"	2'-0"	3'-1"
#6	2'-10"	2'-5"	3'-7"	2'-5"	3'-8"
#7	4'-2"	2'-9"			
#8	4'-9"	3'-2"			

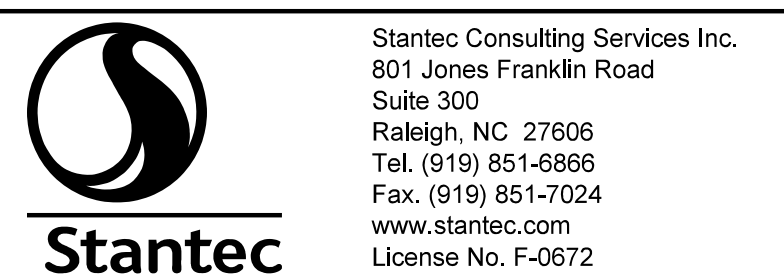
PROJECT NO. R-2707D  
CLEVELAND COUNTY  
STATION: 810+00.00 -L-



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
SUPERSTRUCTURE BILL OF MATERIAL  
(RL)

REVISIONS						SHEET NO. S9-19
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 30
2			4			

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DRAWN BY: N. D'AIUTO DATE: 05/01/18  
CHECKED BY: J.T. KELVINGTON DATE: 12/05/22  
DESIGN ENGINEER OF RECORD: J.T. KELVINGTON DATE: 06/22/23

6/22/2023 jHogenbush c:\pvt\work\king\dms7003\A\R2707D-SMU.LM-2200B9.dgn