

DATE: 2/10/2023  
TIME: 6:58:59 PM

USER: c:\pwworking\john.c.morrison\john.c.morrison\dwg\142020\Drawings\402-103-U-5748-S2-51-910131.dwg  
DWG: 142020\Drawings\402-103-U-5748-S2-51-910131.dwg  
APP: AutoCAD 2023  
PLOT: PLOT

FOR PLAN FOR BRIDGE APPROACH SLAB FOR FLEXIBLE PAVEMENT, SEE SHEET 1 OF 3

**NOTES:**

FOR REINFORCED BRIDGE APPROACH FILL FABRIC WALL, INCLUDING GEOTEXTILE, IMPERMEABLE GEOMEMBRANE, 4" DIA. DRAINAGE PIPE, #78M STONE, AND SELECT MATERIAL, SEE ROADWAY PLANS.

GEOTEXTILE SHALL BE TYPE 1 IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS SECTION 1056.

EXISTING 4" DIA. CORRUGATED PERFORATED DRAINAGE PIPE SHALL BE EXTENDED, COORDINATE DRAIN EXTENSION WITH CONSTRUCTION SEQUENCING AND TEMPORARY SHORING REQUIREMENTS.

APPROACH SLAB SHALL NOT BE CONSTRUCTED PRIOR TO COMPLETION OF THE BRIDGE DECK.

THE JOINT SHALL BE SAWED PRIOR TO THE CASTING OF THE BARRIER RAIL AND PARAPET AND END POST.

AREA BETWEEN THE WINGWALL AND APPROACH SLAB SHALL BE GRADED TO DRAIN THE WATER AWAY FROM THE FILL FACE OF THE BRIDGE AND SHALL BE PAVED. SEE ROADWAY PLANS.

#6 D1 DOWELS TO BE ADHESIVELY ANCHORED IN THE EXISTING APPROACH SLAB. LEVEL ONE FIELD TESTING IS REQUIRED AND THE YIELD LOAD OF THE DOWELS IS 13.2 KIPS FOR ADHESIVELY ANCHORED ANCHOR BOLTS OR DOWELS, SEE SECTION 420-13 OF THE STANDARD SPECIFICATIONS. OVERALL DOWEL LENGTH SHALL BE DETERMINED BY THE MANUFACTURER OF THE ADHESIVELY ANCHORED ANCHOR SYSTEM. PLAN LENGTH OF #6 D1 DOWELS BASED ON 10" EMBEDMENT.

FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.

THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE FOAM JOINT SEAL SHALL BE 2".

THE #5 S104 AND S105 BARS SHALL BE INSTALLED, USING AN ADHESIVE ANCHORING SYSTEM, AFTER SAWING THE JOINT. THE YIELD LOAD FOR THE #5 S104 AND S105 BARS IS 18.6 KIPS. FIELD TESTING FOR THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

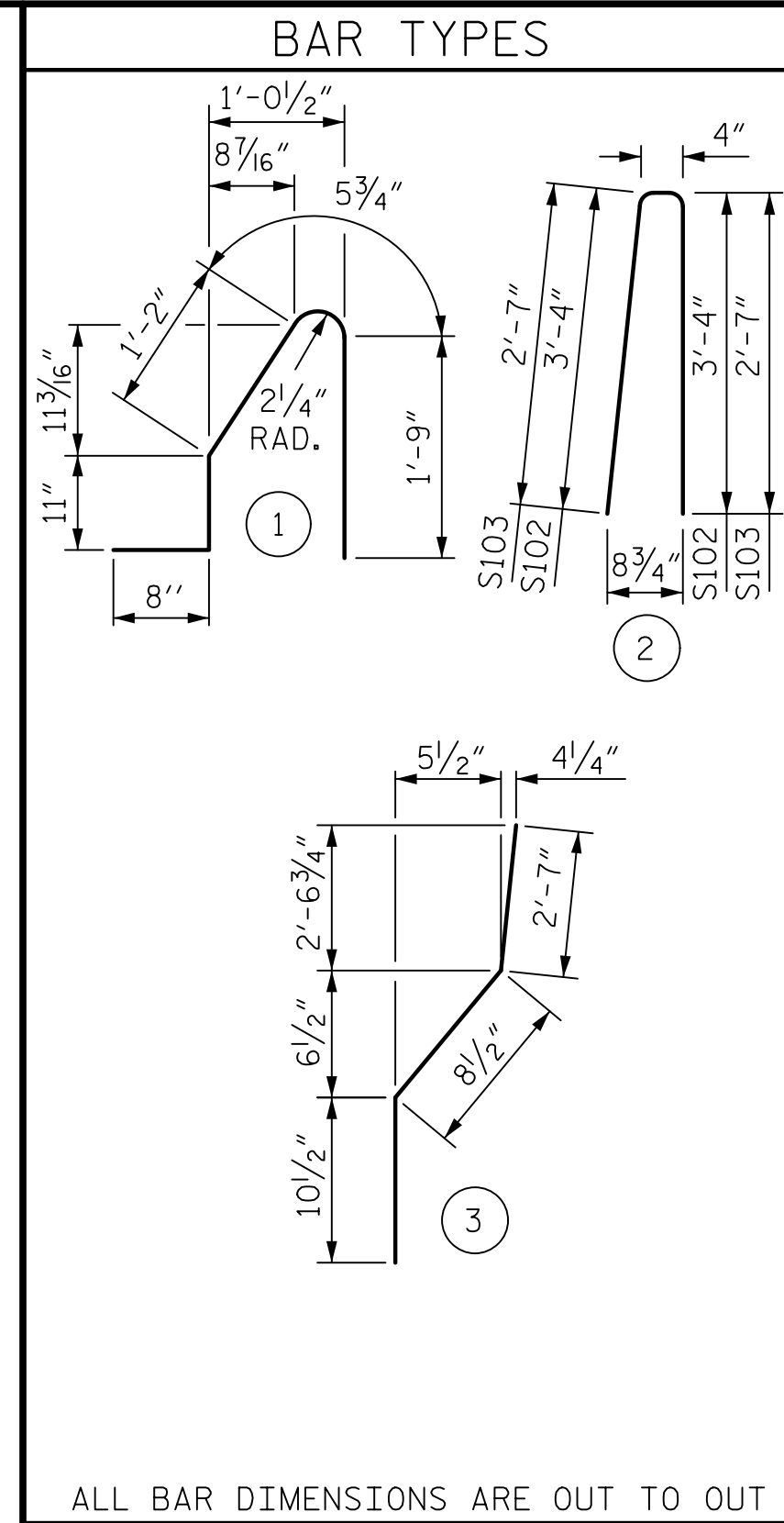
THE COST OF TEMPORARY DRAINAGE AND TEMPORARY BERM AND SLOPE DRAINS WILL BE PAID FOR UNDER THE LUMP SUM PRICE FOR BRIDGE APPROACH SLABS.

THE COST OF THE BARRIER RAIL ON THE APPROACH SLAB SHALL BE INCLUDED IN THE LINEAR FOOT CONTRACT PRICE BID FOR "CONCRETE BARRIER RAIL".

THE BARRIER RAIL ON EACH APPROACH SLAB SHALL NOT BE CAST UNTIL ALL APPROACH SLAB CONCRETE HAS BEEN CAST AND REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

ALL REINFORCING STEEL IN THE BARRIER RAILS SHALL BE EPOXY COATED.

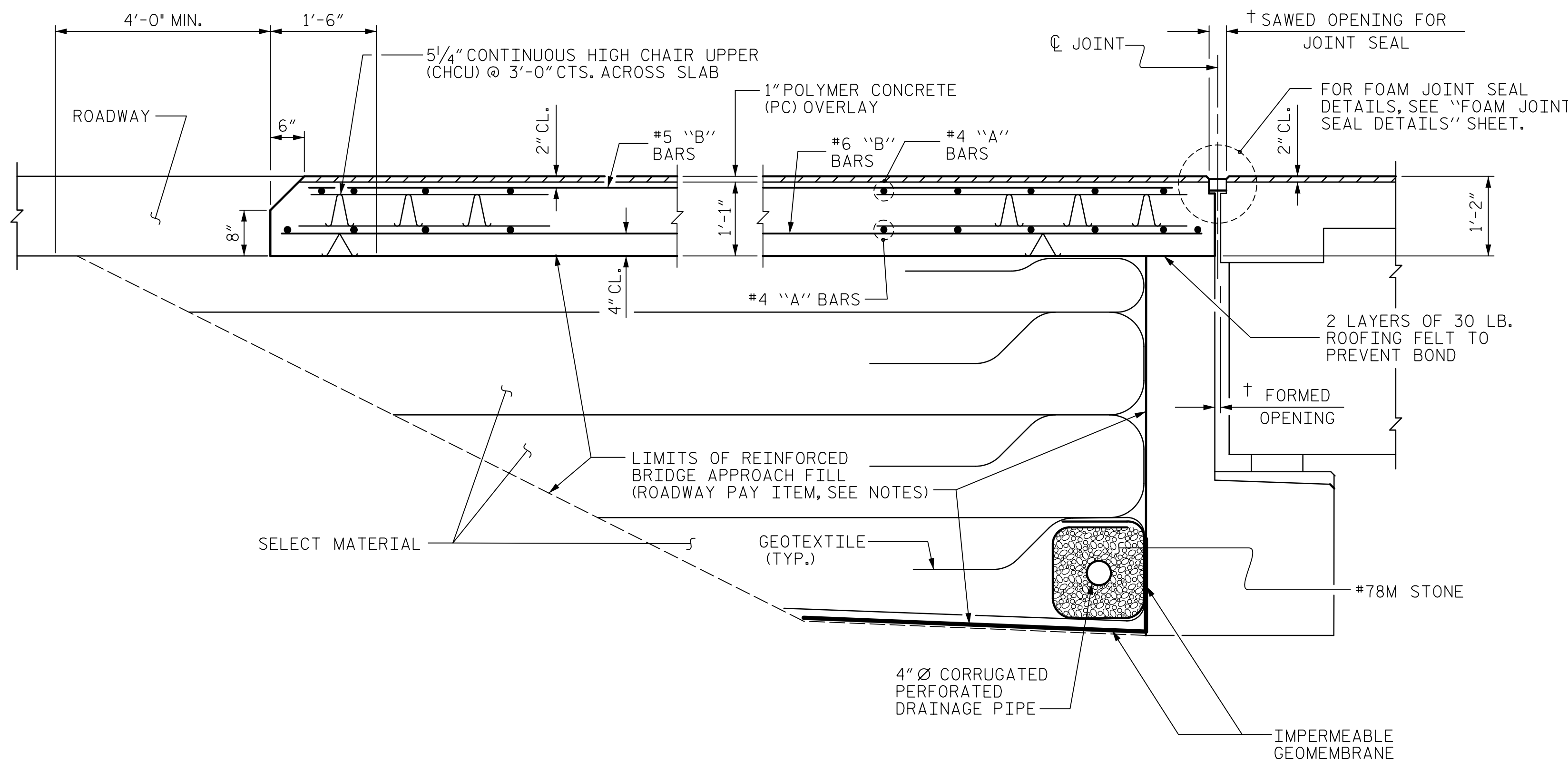
SEE PRESERVATION SHEETS FOR PC OVERLAY DETAILS, QUANTITIES AND CONSTRUCTION SEQUENCING.



BILL OF MATERIAL FOR ONE APPROACH SLAB (2 REQ'D)						
BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT	
*A1	12	#4	STR	24'-3"	194	
A2	14	#4	STR	24'-3"	227	
*B1	51	#5	STR	11'-2"	594	
B2	51	#6	STR	11'-8"	894	
*D1	11	#6	STR	2'-4"	39	
REINFORCING STEEL				LBS.	1,121	
*EPOXY COATED REINFORCING STEEL				LBS.	827	
CLASS AA CONCRETE				C. Y.	13.2	
BILL OF MATERIAL FOR ONE BARRIER RAIL (2 REQ'D)						
BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT	
*B101	11	#5	STR	11'-6"	132	
*S101	8	#5	1	5'-0"	42	
*S102	6	#5	2	7'-0"	44	
*S103	2	#5	2	5'-6"	11	
*S104	4	#5	3	4'-2"	17	
*S105	4	#5	STR	3'-4"	14	
*EPOXY COATED REINFORCING STEEL				LBS.	260	
CLASS AA CONCRETE				C. Y.	1.7	
CONCRETE BARRIER RAIL				LIN. FT.	12.0	

ALL BAR DIMENSIONS ARE OUT TO OUT

SPLICE LENGTHS		
BAR SIZE	EPOXY COATED	UNCOATED
#4	2'-0"	1'-9"
#5	2'-6"	2'-2"
#6	3'-10"	2'-7"



PAYMENT FOR BARRIER RAIL TO BE ADDED TO THE LINEAR FOOT QUANTITY ON THE BARRIER RAIL SHEET (BR) AND INCLUDED IN THE "TOTAL BILL OF MATERIAL" ON THE GENERAL DRAWING

PROJECT NO. U-5748  
WAKE COUNTY  
STATION: 24+88.00 -L-

SHEET 2 OF 3

**AECOM**  
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2/10/2023

STATE OF NORTH CAROLINA  
**DEPARTMENT OF TRANSPORTATION**  
RALEIGH

STANDARD  
BRIDGE APPROACH SLAB FOR FLEXIBLE PAVEMENT  
**(SOUTHBOUND LANES)**

REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. S2-51  
TOTAL SHEETS 119

ASSEMBLED BY : M.L. CATER	DATE : 08/2021
CHECKED BY : J.C. MORRISON	DATE : 08/2021
DRAWN BY : FCJ 11/88	REV. 6/13 MAA/GM
CHECKED BY : ARB 11/88	REV. 12/17 MAA/THC
	REV. 5/18 MAA/THC

**SECTION THRU SLAB**

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED