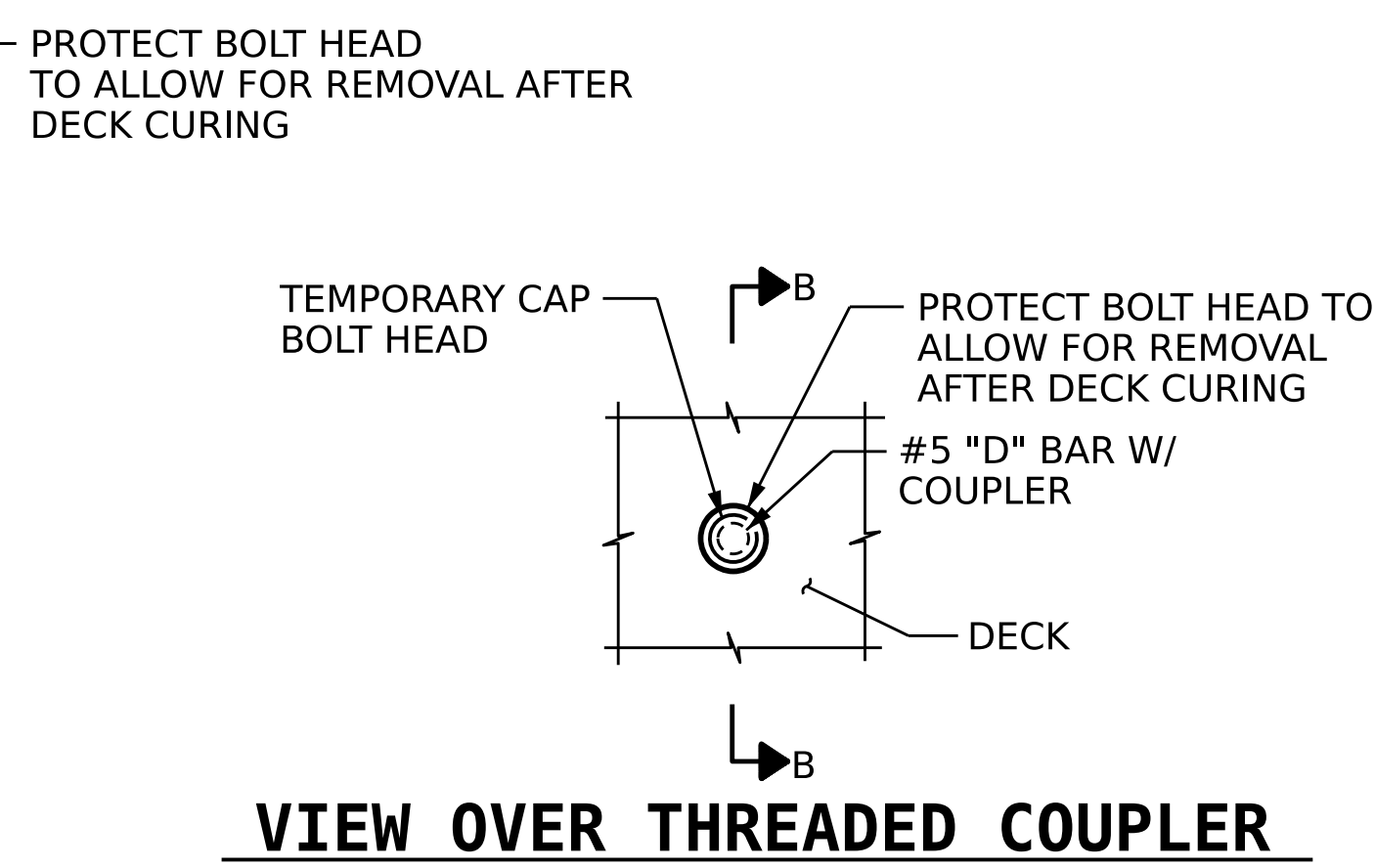
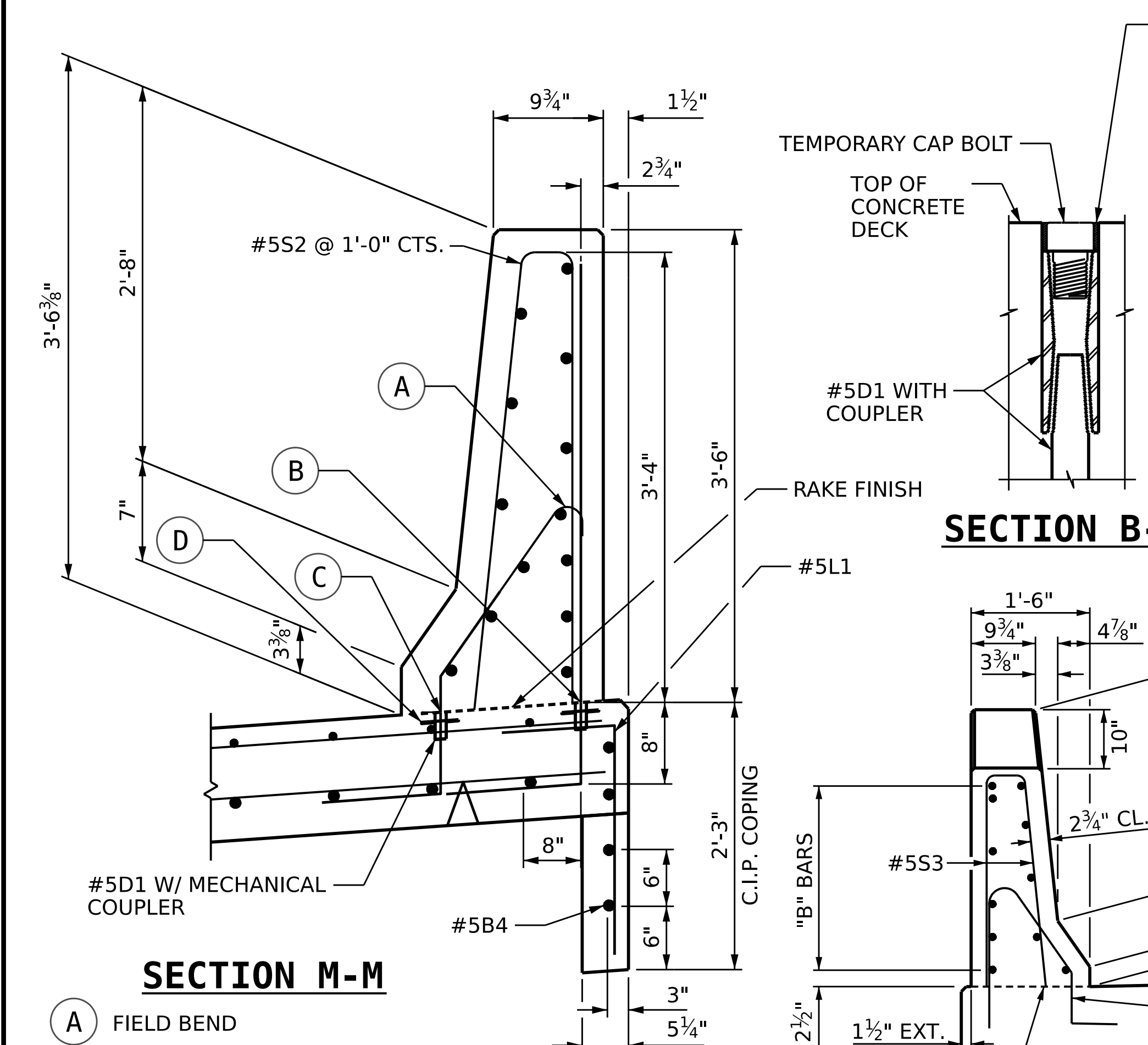


PLAN OF BARRIER RAIL



VIEW OVER THREADED COUPLER

- SECTION M-M**
- (A) FIELD BEND
 - (B) #5D3 @ 1'-0" CTS. (THREADED INTO COUPLER)
 - (C) #5D2 @ 1'-0" CTS. (THREADED INTO COUPLER)
 - (D) COUPLER HEAD SHALL BE RECESSED 3/16" BELOW FINISHED SURFACE.

DRAWN BY :	L. LEE	DATE :	06/2023
CHECKED BY :	S. NATARAJAN	DATE :	06/2023
DESIGN ENGINEER OF RECORD:	D. TUTTLE	DATE :	06/2023

END OF RAIL DETAILS
APPLIES TO LEFT SIDE PERMANENT BARRIER ONLY

NOTES

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 HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

SHIFT, BEND, OR CUT REINFORCING STEEL AS NECESSARY TO CLEAR JOINT BLOCKOUT.

#5D1 AND #5D2 SHALL BE MACHINE THREADED TO FIT TO COUPLER AND DELIVERED CONNECTED. THREADS SHALL BE GREASED TO PERMIT EASY SEPARATION AFTER INSTALLATION.

THE #5D1 COUPLED TO #5D2 OR #5D3 SHALL BE PUSHED INTO GREEN CONCRETE AFTER POURING AND SCREEDING THE DECK. THE COUPLER SHALL BE INSTALLED TO BE 3/16" BELOW THE TOP OF THE FINISHED CONCRETE DECK. ONCE DECK HAS CURED, #5D2 AND #5D3 SHALL BE UNTHREADED AND SET ASIDE. A TEMPORARY BOLT SHALL BE INSTALLED IN THE COUPLER AND SEALED TO PREVENT DEBRIS INTRUSION AND PROTECT THE THREADS. WHEN CONSTRUCTING THE STAGE III CONCRETE BARRIER, REMOVE SEALER AND TEMPORARY BOLT AND THREAD #5D2 AND #5D3 IN TO COUPLER.

PRIOR TO CURING, THE AREA UNDERNEATH THE STAGE III RIGHT CONCRETE BARRIER SHALL BE RAKE FINISHED TO A SURFACE ROUGHNESS OF 3/16"

THE CONTRACTOR MAY SUBMIT ALTERNATIVE DETAILS FOR ANCHORING THE MEDIAN BARRIER INTO THE DECK TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION OF THE DECK. ANY ALTERNATIVE METHODS APPROVED FOR CONSTRUCTION SHALL BE AT NO ADD'L COST TO THE DEPARTMENT.

S1, S2, D1, D2 AND D3 BARS IN THE BARRIER AND DECK SHALL BE SHIFTED SLIGHTLY, AS NECESSARY, TO PROVIDE 2" MIN. CLEARANCE TO ALL OPEN JOINTS IN THE BARRIER.

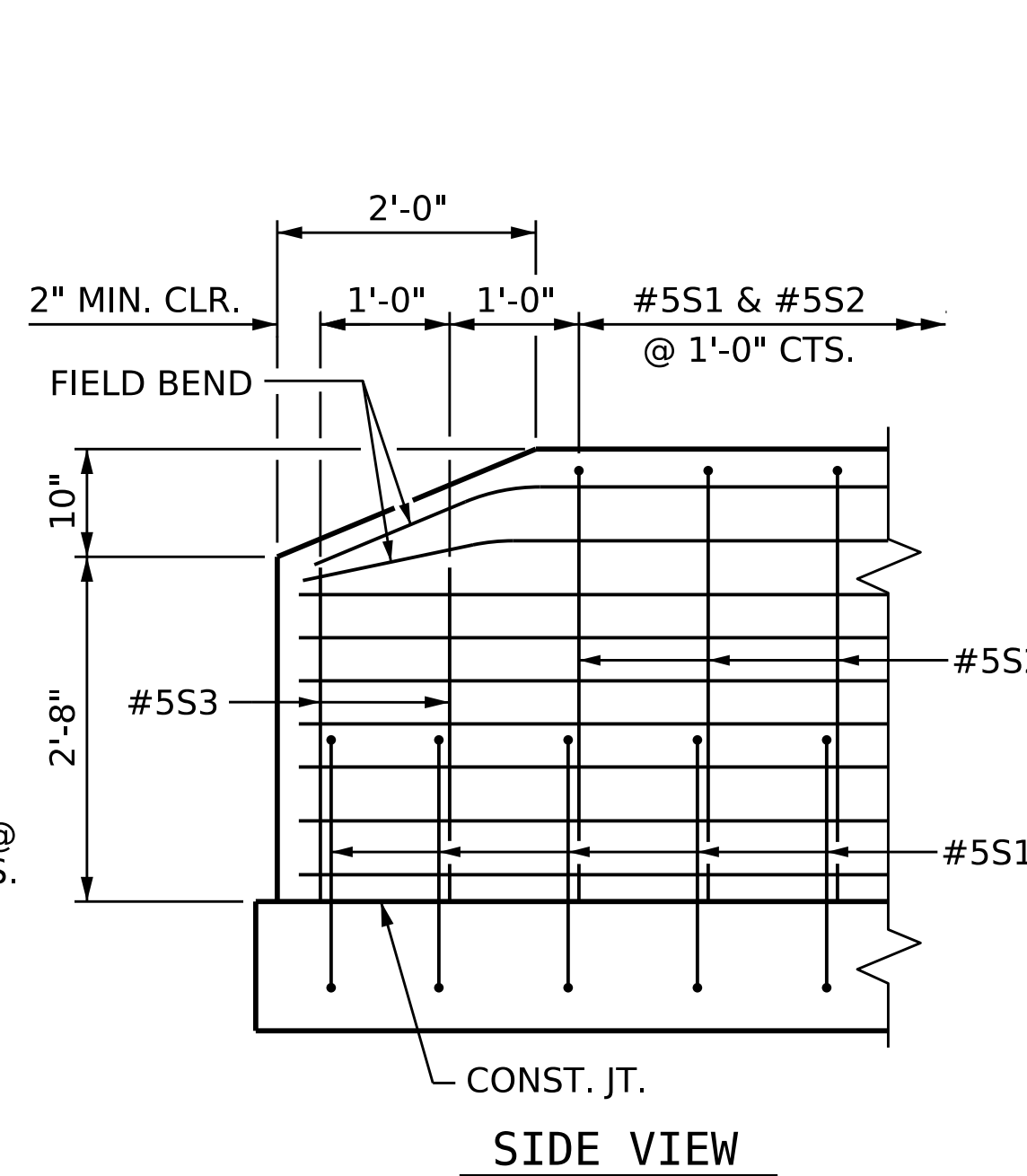
THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS FOR THE D1, D2, D3 AND COUPLER PRIOR TO FABRICATION TO ENSURE PROPER FIT.

DO NOT GROOVE WITHIN 6" OF EXPOSED BARRIER COUPLERS IN DECK SURFACE.

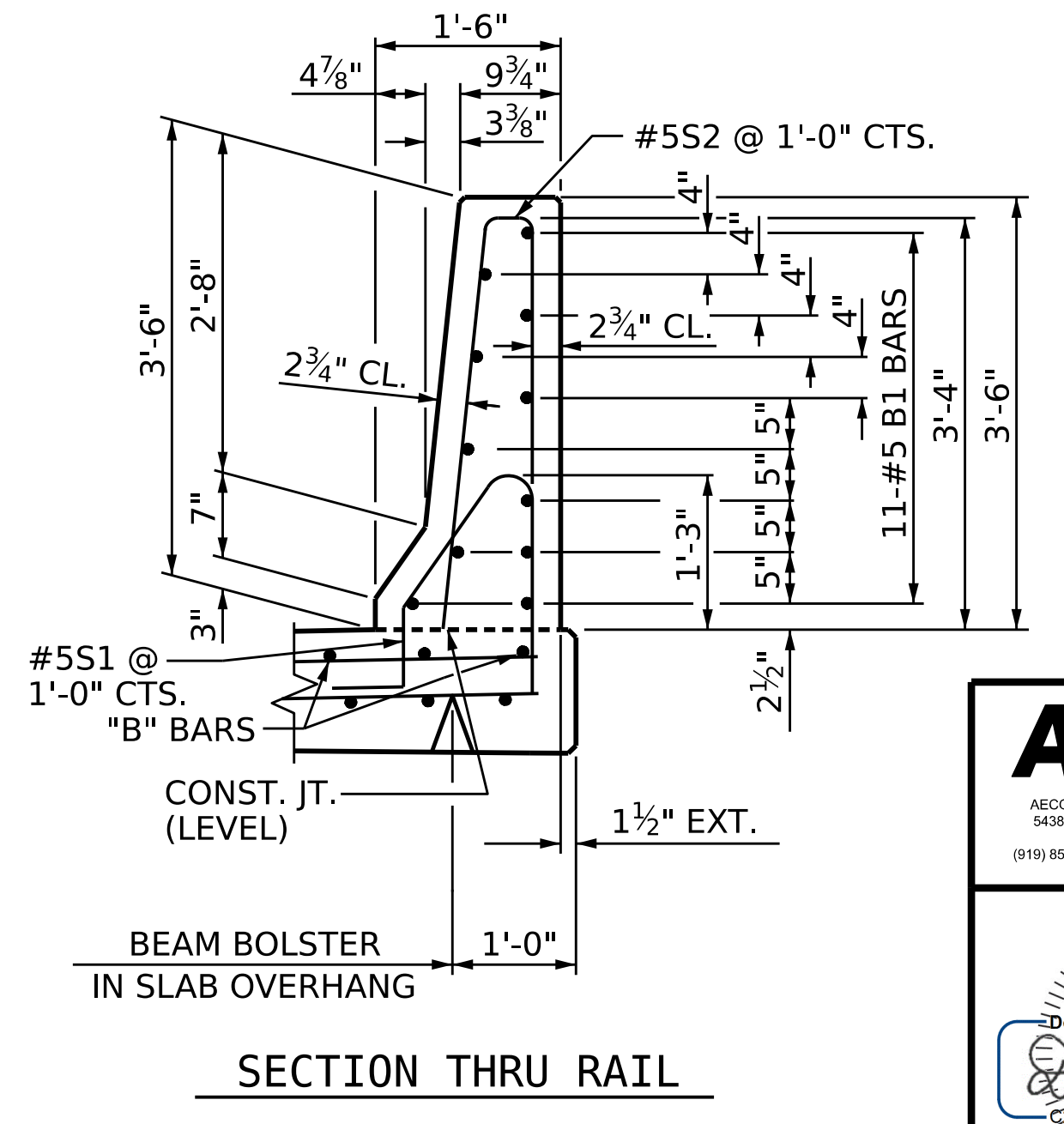
FOR MECHANICAL COUPLERS, SEE SPECIAL PROVISIONS.

FINAL STAGE BARRIER COUPLER NOTES

1. INSTALL #5 "D" BARS (WITH FEMALE COUPLER END) IN DECK AT LOCATIONS SHOWN ON "CONCRETE BARRIER RAIL" SHEET.
 2. INSTALL TEMPORARY BOLT INTO COUPLER. BOLT SHALL NOT PROJECT ABOVE THE TOP OF THE DECK.
 3. BOLT HEAD SHALL BE PROTECTED TO ALLOW FOR REMOVAL AFTER CURING OF DECK. ENGINEER SHALL APPROVE METHOD.
 4. POUR AND SCREED DECK.
 5. AT FINAL STAGE, REMOVE BOLT TO INSTALL #5 "D" BAR (WITH THREADED END) FOR FINAL STAGE BARRIER.
- COST OF THE TEMPORARY BOLT AND SEALING THE BOLT ARE INCIDENTAL.



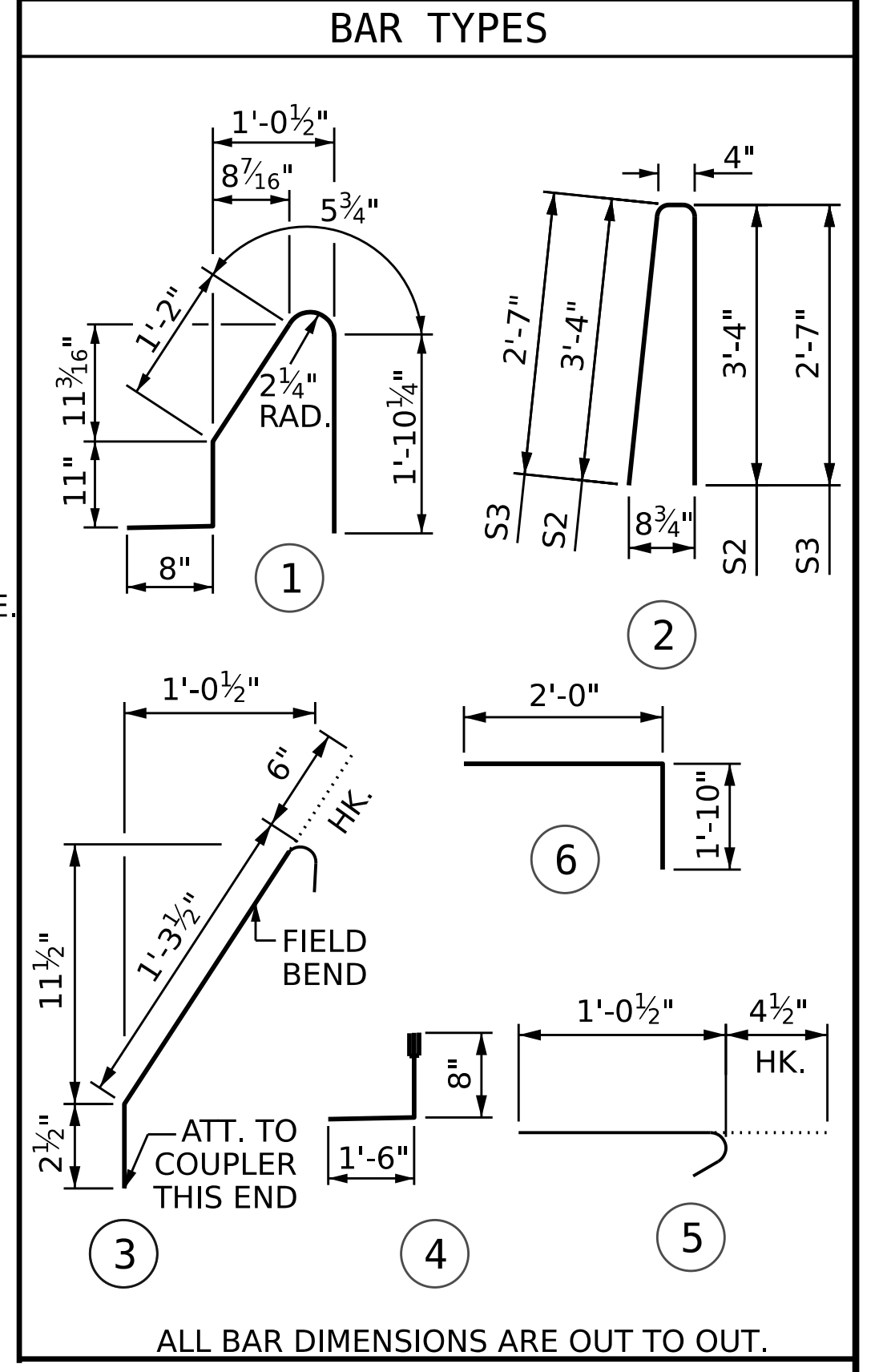
SIDE VIEW



SECTION THRU RAIL

BILL OF MATERIAL

CONCRETE BARRIER RAIL					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	44	5	STR	9'-8"	444
* S1	66	5	1	5'-1"	350
* S2	62	5	2	7'-0"	453
* S3	4	5	2	5'-6"	23
* D1	96	5	4	2'-2"	217
* D2	48	5	3	2'-0"	100
* D3	48	5	STR	3'-3"	163
* EPOXY COATED REINFORCING STEEL					1750 LBS.
CLASS AA CONCRETE					19.0 C.Y.
CONCRETE BARRIER RAIL					70.0 L.F.



PROJECT NO. **B-3186 / B-5898**
HAYWOOD COUNTY
 STATION: **24+70.00 -L LT-**
 SHEET 4 OF 4

AECOM
 AECOM TECHNICAL SERVICES OF NC, INC.
 5438 WADE PARK BOULEVARD, SUITE 200
 RALEIGH, NC 27607
 (919) 854-6200 www.aecom.com
 AECOM License No. FC6242

DESIGNED BY: *Shane Tuttle*
 DATE: 04/19/23
 CHECKED BY: *Shane Tuttle*
 DATE: 04/19/23
 STATE OF NORTH CAROLINA PROFESSIONAL ENGINEER
 SHANE TUTTLE
 License No. 28088

10/13/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

APPROACH SLAB DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S3-49
1			3			TOTAL SHEETS 50
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED