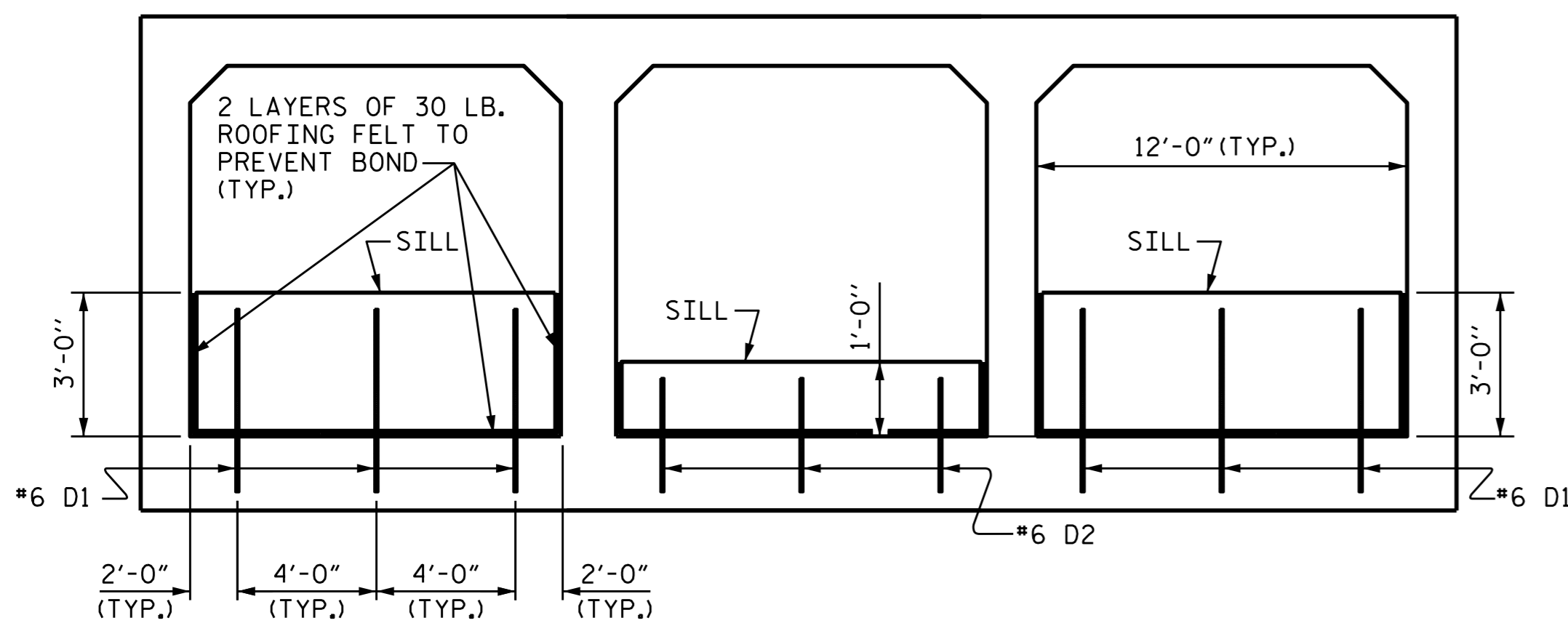
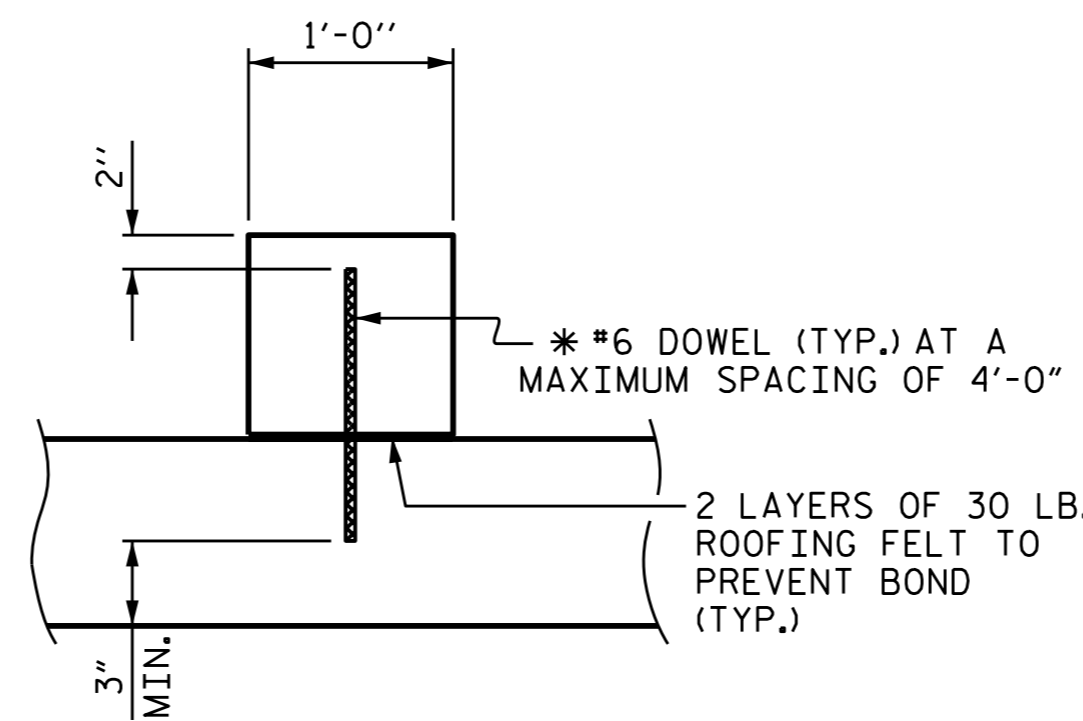


PLAN VIEW SHOWING SILL/BAFFLE LOCATIONS



ELEVATION



SECTION THROUGH SILL

* DOWELS MAY BE PUSHED INTO GREEN CONCRETE AFTER SLAB HAS BEEN FLOAT FINISHED.

CULVERT SILL DETAILS

(BAFFLES SIMILAR)

NOTES

MATERIAL EXCAVATED FROM THE EXISTING BED SHALL BE STOCKPILED FOR USE IN THE PROPOSED CULVERT AND SHALL PROVIDE A CONTINUOUS LOW FLOW CHANNEL AS SHOWN. THE MATERIAL SHALL BE NATURAL STONE WITH A GRADATION SIZE SIMILAR TO THAT OF CLASS B RIP RAP. STONES LARGER THAN 6 INCHES SHALL NOT BE PLACED WITHIN THE LOW FLOW CHANNEL. BED MATERIAL SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER.

THE STOCKPILED MATERIAL SHALL BE PLACED TO PROVIDE A 1 FOOT DEPTH LOW FLOW CHANNEL, AND SHALL BE PLACED TO THE LEVEL OF 3' BETWEEN THE HIGH FLOW SILLS/BAFFLES.

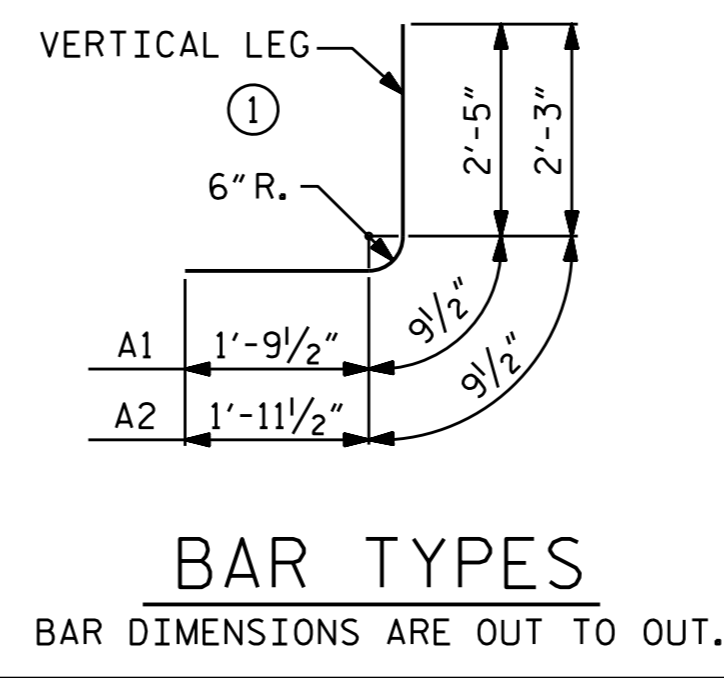
THE TOP OF BED MATERIAL SHOULD MATCH THE STREAM BED ELEVATION IN THE LOW FLOW CHANNEL OF THE STREAM.

BED MATERIAL SHALL BE SUPPLEMENTED BY CLASS B RIP RAP AS NECESSARY IN THE LEFT AND RIGHT BARRELS ONLY.

BED MATERIAL SHALL BE PLACED ON TOP OF THE SUPPLEMENTAL FILL, IF USED, TO PROVIDE A FLAT SURFACE FOR ANIMAL PASSAGE.

THE ENTIRE COST OF WORK REQUIRED TO PLACE EXCAVATED OR SUPPLEMENTAL MATERIAL AS SHOWN ON THE PLANS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE BID FOR CULVERT EXCAVATION.

THE ENTIRE COST OF WORK REQUIRED TO CONSTRUCT THE SILLS/BAFFLES SHALL BE INCLUDED IN THE VARIOUS PAY ITEMS.



REINFORCING BAR SCHEDULE PHASE 1						REINFORCING BAR SCHEDULE PHASE 2					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
A1	134	#4	1	5'-0"	448	A1	134	#4	1	5'-0"	448
A2	268	#5	1	5'-0"	1398	A2	134	#5	1	5'-0"	699
A200	104	#5	STR.	16'-3"	1763	A100	95	#5	STR.	38'-7"	3823
A201	1	#5	STR.	13'-1"	14	A101	4	#5	STR.	25'-5"	106
A202	1	#5	STR.	5'-11"	6	A102	4	#5	STR.	10'-2"	42
A203	1	#5	STR.	12'-2"	13						
A204	1	#5	STR.	5'-1"	5	A250	103	#5	STR.	24'-1"	2587
						A251	1	#5	STR.	20'-0"	21
A400	130	#5	STR.	16'-3"	2203	A252	1	#5	STR.	12'-11"	13
A401	1	#5	STR.	15'-11"	17	A253	1	#5	STR.	5'-9"	6
A402	1	#5	STR.	10'-2"	11	A254	1	#5	STR.	20'-2"	21
A403	1	#5	STR.	4'-6"	5	A255	1	#5	STR.	13'-1"	14
A404	1	#5	STR.	10'-9"	11	A256	1	#5	STR.	5'-11"	6
A405	1	#5	STR.	5'-1"	5						
						A300	254	#4	STR.	20'-0"	3393
B1	101	#4	STR.	13'-8"	922	A301	4	#4	STR.	27'-4"	73
B2	134	#4	STR.	11'-4"	1014	A302	4	#4	STR.	15'-11"	43
B3	134	#4	STR.	13'-8"	1223	A303	4	#4	STR.	4'-6"	12
C1	129	#4	STR.	23'-5"	2018	A450	129	#5	STR.	24'-1"	3240
						A451	1	#5	STR.	18'-7"	19
D1	9	#6	STR.	3'-8"	50	A452	1	#5	STR.	12'-10"	13
						A453	1	#5	STR.	7'-1"	7
S3	6	#8	STR.	19'-6"	312	A454	1	#5	STR.	21'-8"	23
						A455	1	#5	STR.	15'-11"	17
						A456	1	#5	STR.	10'-2"	11
						A457	1	#5	STR.	4'-6"	5
PHASE 1 REINFORCING STEEL 11438 LBS.						PHASE 2 REINFORCING STEEL 24133 LBS.					
PHASE 1 STRUCTURE QUANTITIES						PHASE 2 STRUCTURE QUANTITIES					
CLASS A CONCRETE						CLASS A CONCRETE					
BARREL _____ 83.6 C.Y.						BARREL _____ 219.2 C.Y.					
WINGS ETC. _____ 33.5 C.Y.						WINGS ETC. _____ 47.7 C.Y.					
TOTAL _____ 117.1 C.Y.						TOTAL _____ 266.9 C.Y.					
REINFORCING STEEL						REINFORCING STEEL					
BARREL _____ 11438 LBS.						BARREL _____ 24133 LBS.					
WINGS ETC. _____ 2405 LBS.						WINGS ETC. _____ 2405 LBS.					
TOTAL _____ 13843 LBS.						TOTAL _____ 26538 LBS.					
CULVERT EXCAVATION LUMP SUM						CULVERT EXCAVATION LUMP SUM					
FOUNDATION COND. MAT'L. 87 TONS						FOUNDATION COND. MAT'L. 115 TONS					

SPLICE CHART		
BAR	SIZE	SPLICE LENGTH
A200	5	1'-9"
A300	4	1'-5"
A400	5	1'-9"
B1	4	1'-5"
B3	4	1'-5"
C1	4	1'-11"
S3	8	4'-11"

PROJECT NO. B-5395
RUTHERFORD COUNTY
 STATION: 21+66.21 -L-

SHEET 5 OF 7



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 TRIPLE 12 FT. X 12 FT.
 CONCRETE BOX CULVERT
 85°-00'-00" SKEW

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	C-5	
1			3			TOTAL SHEETS	
2			4			7	

DRAWN BY: H. T. BARBOUR DATE: 6-12-15
 CHECKED BY: V. X. NGUYEN DATE: 7-15
 DESIGN ENGINEER OF RECORD: J. P. McCARTHA DATE: 8-18-15