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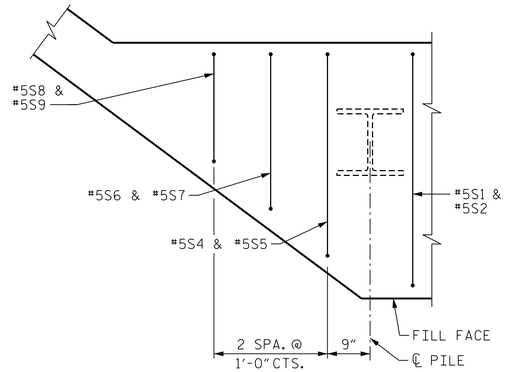
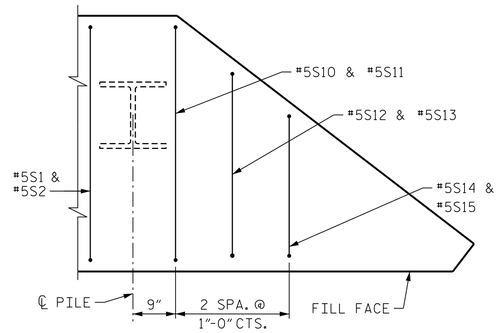


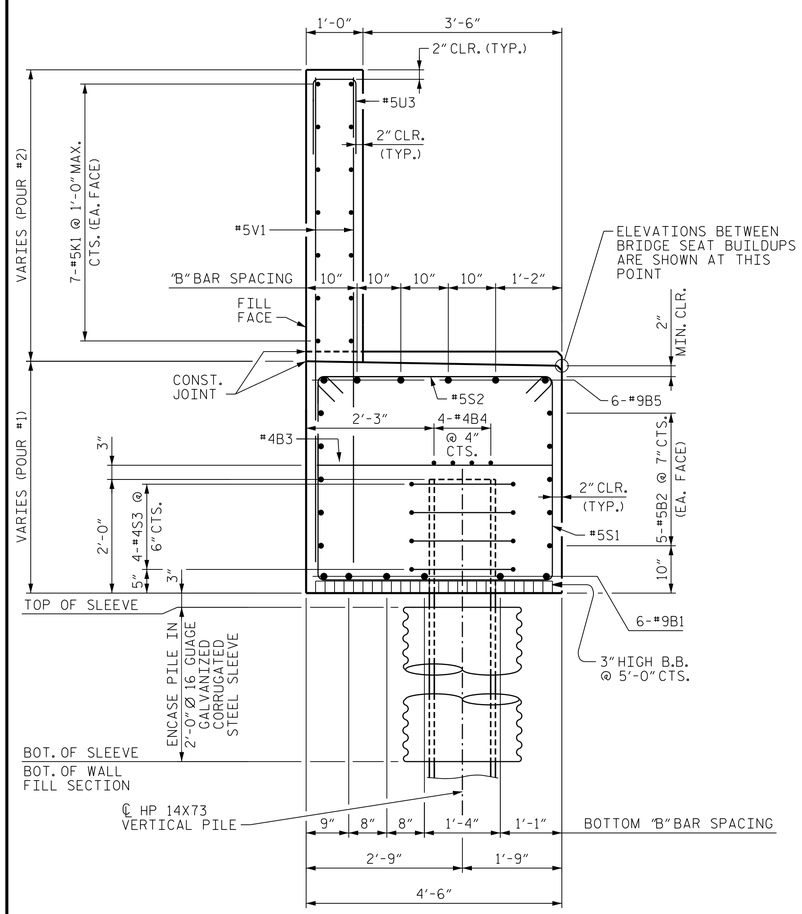
DETAIL "B"

("H" & "B" BARS NOT SHOWN FOR CLARITY)

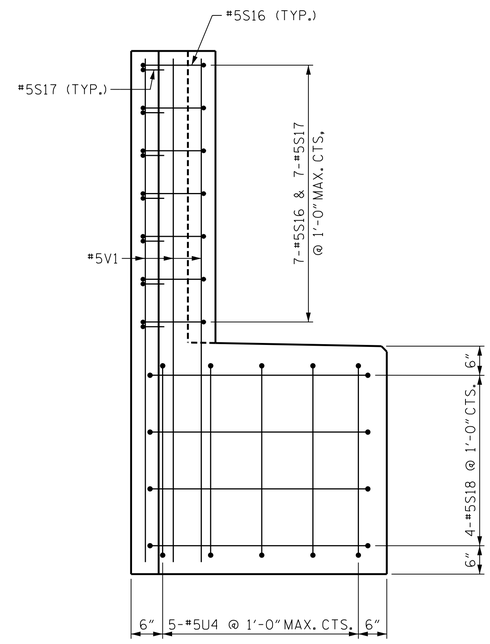


DETAIL "C"

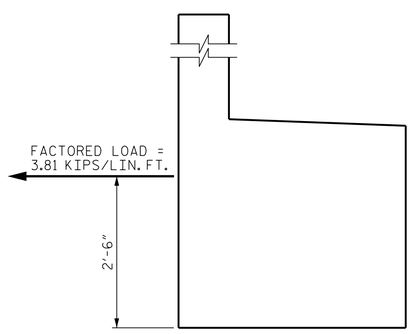
("B", S18, AND U4 BARS NOT SHOWN FOR CLARITY)



SECTION A-A



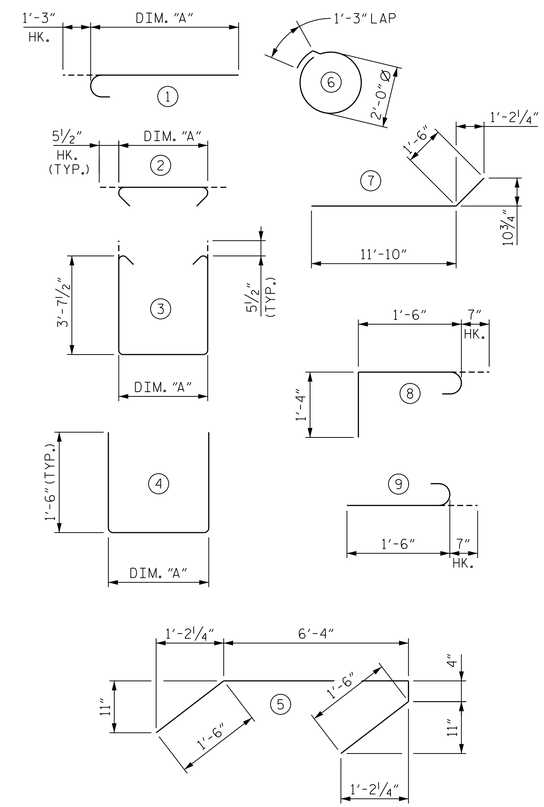
VIEW C-C



TIE BACK DETAIL

(SEE MSE RETAINING WALL PLANS FOR NOTES)

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

BAR	NO.	SIZE	TYPE	DIM. "A"	LENGTH	WEIGHT
B1	12	#9	1	31'-1"	32'-4"	1320
B2	20	#5	STR.	--	30'-6"	637
B3	14	#4	STR.	--	4'-2"	39
B4	8	#4	STR.	--	30'-3"	162
B5	12	#9	1	31'-8"	32'-11"	1343
H1	28	#5	7	--	13'-4"	390
H2	28	#5	STR.	--	5'-0"	147
K1	28	#5	STR.	--	30'-5"	889
K2	4	#5	STR.	--	4'-5"	19
S1	50	#5	3	4'-2"	12'-4"	644
S2	50	#5	2	4'-2"	5'-1"	266
S3	48	#4	6	--	7'-7"	244
S4	1	#5	3	2'-2"	10'-4"	11
S5	1	#5	2	2'-2"	3'-1"	4
S6	1	#5	3	2'-11"	11'-1"	12
S7	1	#5	2	2'-11"	3'-10"	4
S8	1	#5	3	3'-8"	11'-10"	13
S9	1	#5	2	3'-8"	4'-7"	5
S10	1	#5	3	4'-1"	12'-3"	13
S11	1	#5	2	4'-1"	5'-0"	6
S12	1	#5	3	3'-4"	11'-6"	12
S13	1	#5	2	3'-4"	4'-3"	5
S14	1	#5	3	2'-7"	10'-9"	12
S15	1	#5	2	2'-7"	3'-6"	4
S16	7	#5	8	--	3'-5"	25
S17	7	#5	9	--	2'-1"	16
S18	4	#5	5	--	9'-8"	41
U1	11	#5	4	4'-2"	7'-2"	83
U2	1	#5	4	3'-8"	6'-8"	7
U3	52	#5	4	8"	3'-8"	199
U4	5	#5	4	3'-6"	6'-6"	34
V1	106	#5	STR.	--	10'-0"	1106
V2	36	#5	STR.	--	11'-11"	448
V3	3	#5	STR.	--	9'-4"	30

REINFORCING STEEL	LBS.	8,190
CLASS A CONCRETE		
POUR #1 (CAP, LOWER PART OF WINGS)	CU. YDS.	40.1
POUR #2 (BACKWALL & UPPER PART OF WINGS)	CU. YDS.	18.6
TOTAL	CU. YDS.	58.7
HP 14x73 STEEL PILES NO. 12	LIN. FT.	840
PILE DRIVING EQUIPMENT SETUP FOR HP14x73 STEEL PILES	EA.	12

NOTES

THE TOP SURFACE OF THE END BENT CAP SHALL BE CURED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS EXCEPT THAT THE MEMBRANE CURING COMPOUND METHOD SHALL NOT BE USED.

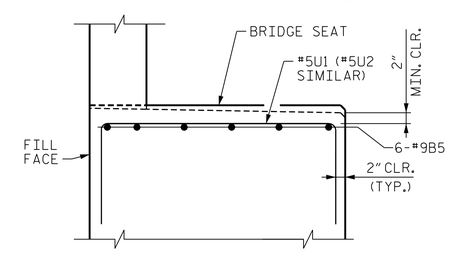
THE TOP SURFACE OF THE END BENT CAP EXCEPT THE BRIDGE SEAT BUILDUPS SHALL BE SLOPED TRANSVERSELY FROM THE FILL FACE TO THE BACK FACE AT THE RATE OF 2%.

STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS.

BACKWALL SHALL BE PLACED BEFORE APPLYING THE PROTECTIVE COATING.

SEE "GENERAL DRAWING FOUNDATION LAYOUT" FOR ADDITIONAL NOTES FOR DRIVING PILES.

THE 2'-0" Ø 16 GAUGE GALVANIZED CORRUGATED STEEL SLEEVE SHALL MEET THE REQUIREMENTS SPECIFIED IN ARTICLE 1032-3 OF THE STANDARD SPECIFICATIONS AND SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD SPECIFICATIONS.



SECTION B-B

(TYPICAL WHERE INDICATED AT BRIDGE SEATS)

PROJECT NO. B-3186/B-5898

HAYWOOD COUNTY

STATION: 27+54.43 -Y1RT-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE END BENT 1 SECTIONS AND DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 040791 ENGINEER W. BRIAN WATSON

W. Brian Watson 1/24/2022

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St., Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						
NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO. S02-38
1	--	--	3	--	--	TOTAL SHEETS 48
2	--	--	4	--	--	

DES BY: N. DAVIS	DATE: 06/21	DWG BY: B. PETERSON	DATE: 06/21
DES CHK: R. BECK	DATE: 07/21	CHK BY: R. BECK	DATE: 07/21

PLOT DRIVER: NCDOT STRUCTURES DEFAULT PLOTTER.plt PENTABLE: NCDOT STRUCTURES DEFAULT PEN.tbl
USER: PPETERSO DATE: 1/24/2022 TIME: 1:34:17 PM
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