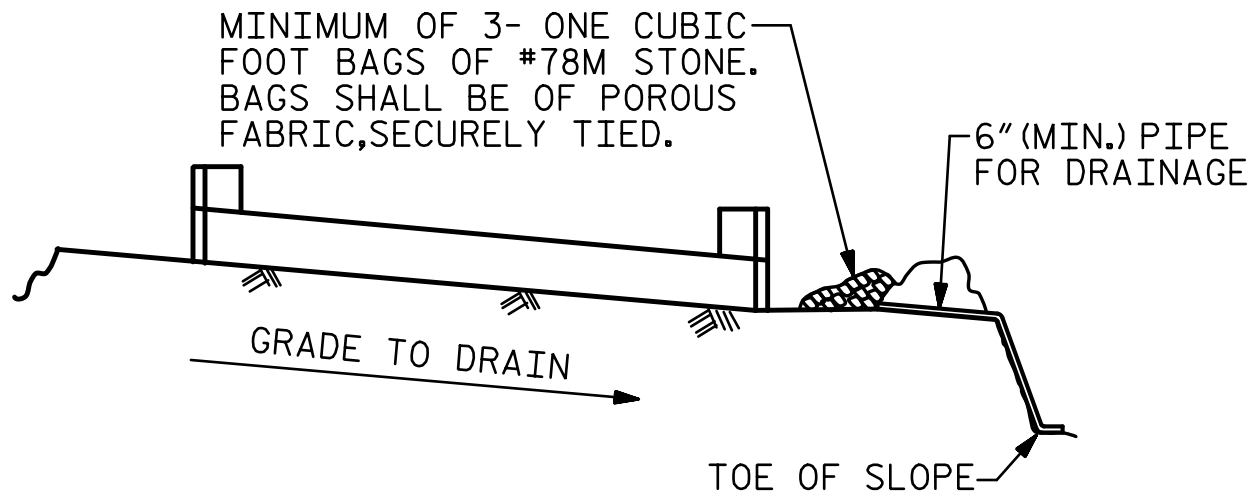


R:\Structures\ustation\401_027_17BP\14_R\58_SMU_EB04_014_550009.dgn
5:01:49 PM
10/31/2025
J Jones

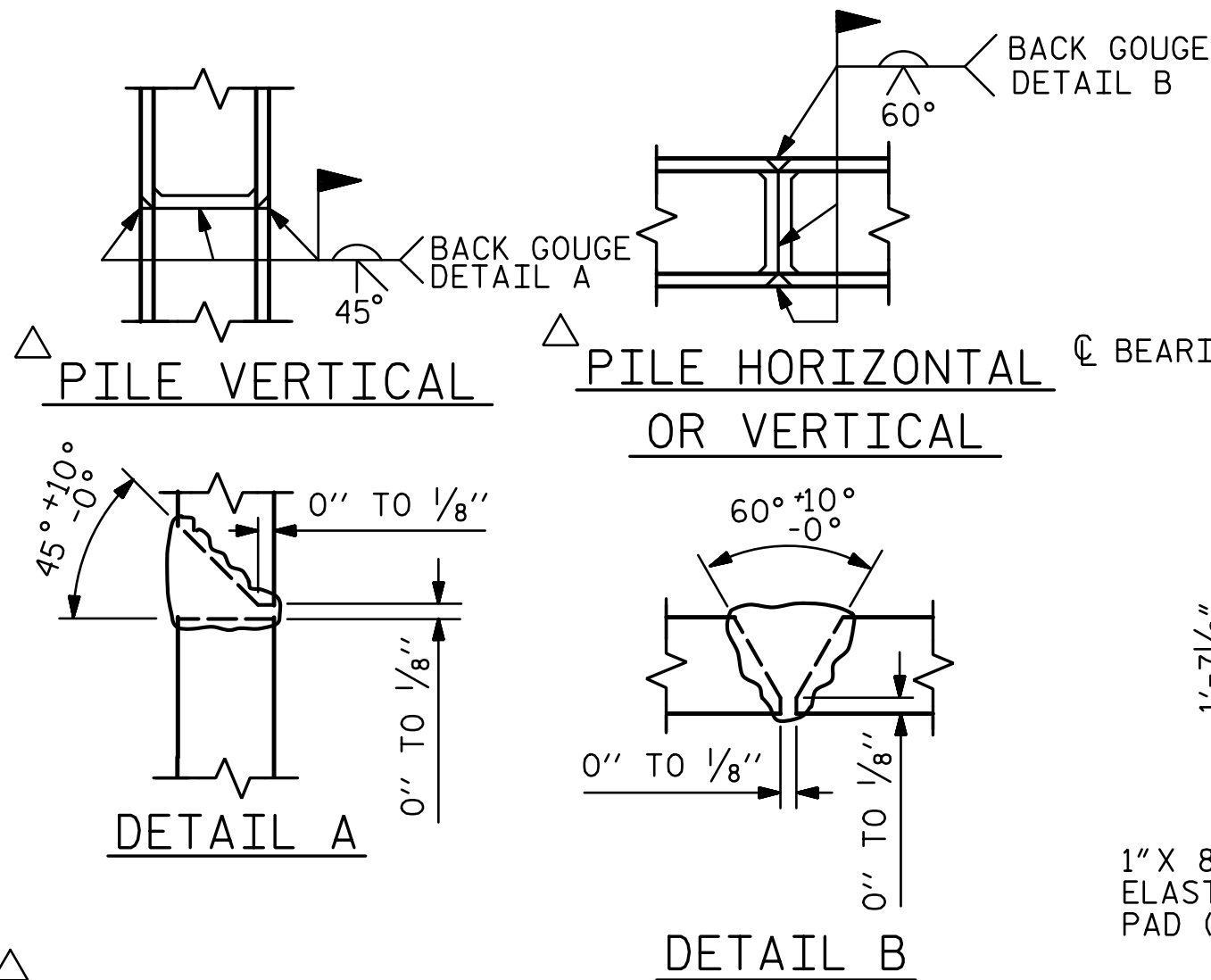


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

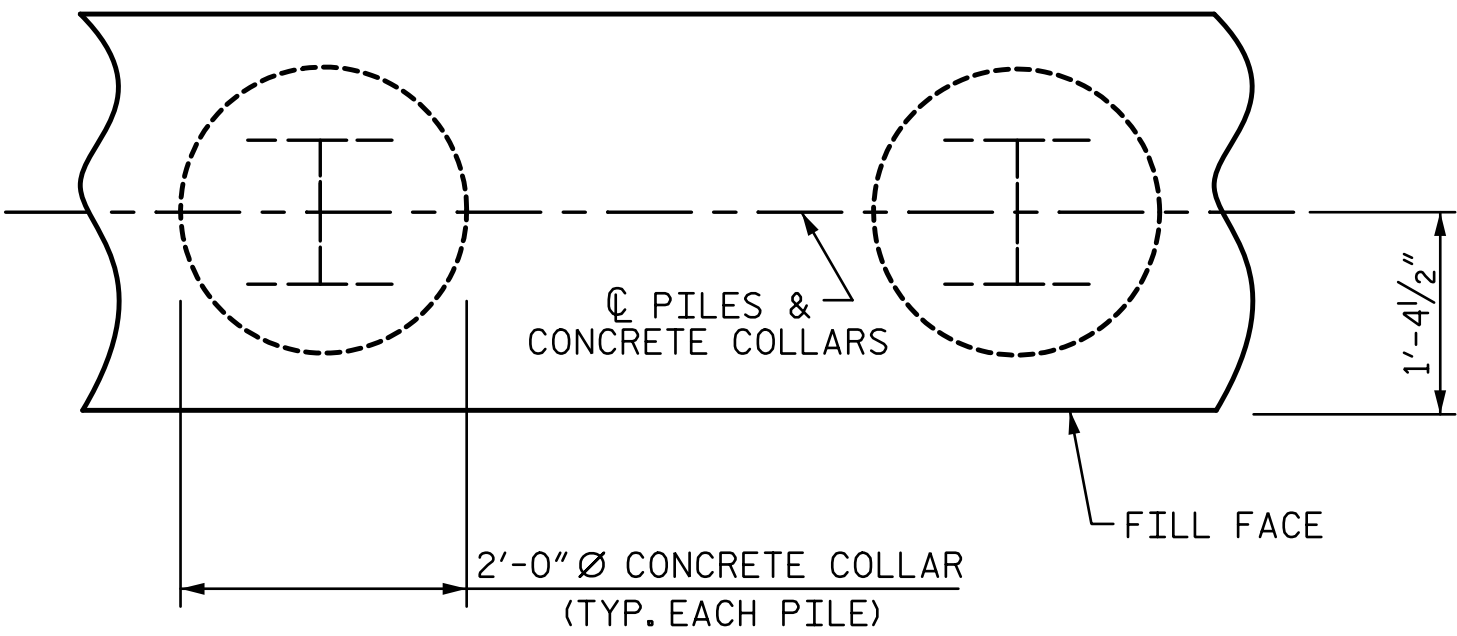
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR EFFECTIVENESS.

NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



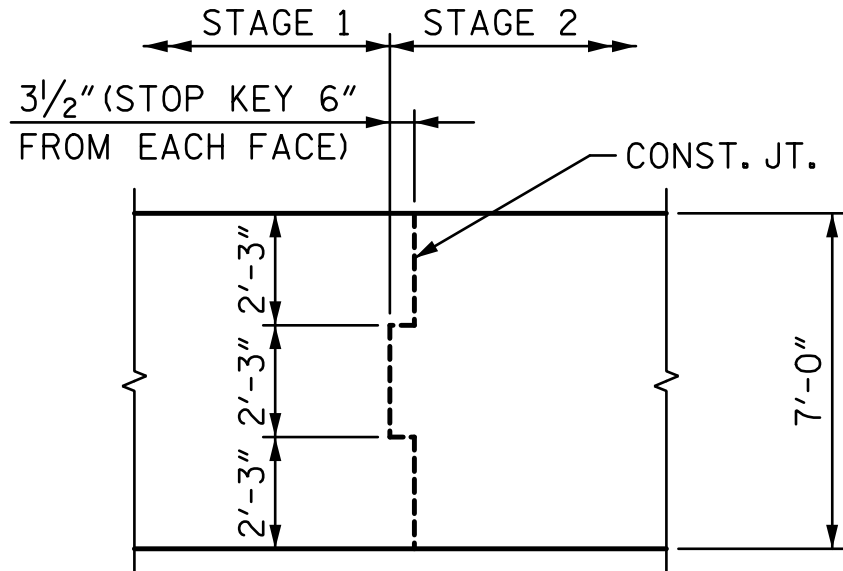
PILE SPLICE DETAILS



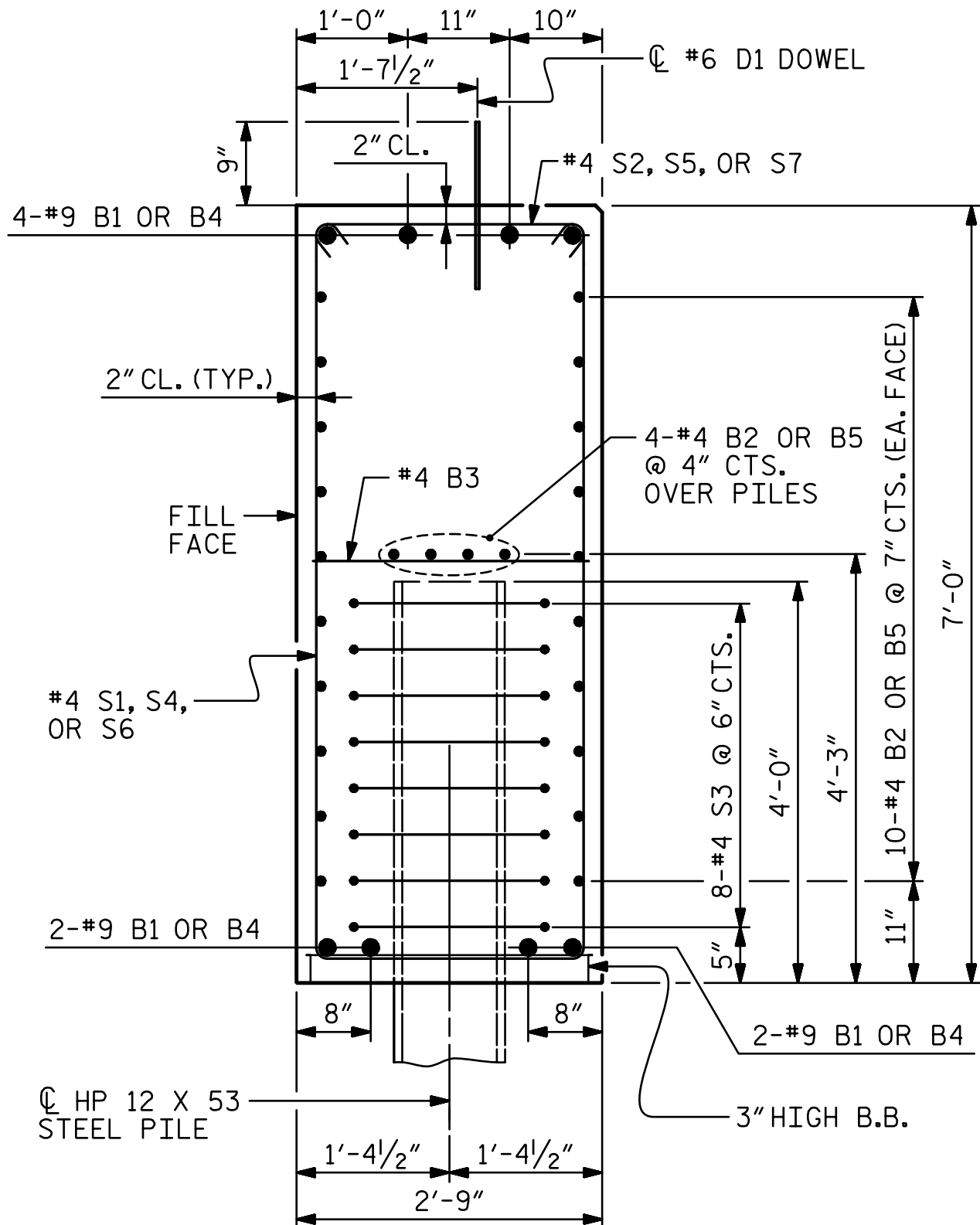
CORROSION PROTECTION FOR STEEL PILES DETAIL

(END BENT No.1 SHOWN, END BENT No. 2 SIMILAR BY ROTATION)

BAR TYPES			
		ALL BAR DIMENSIONS ARE OUT TO OUT.	
END BENT No.1 (STAGE 1) HP 12 X 53 STEEL PILES NO: 4 LIN. FT.= 60.0	END BENT No.1 (STAGE 2) HP 12 X 53 STEEL PILES NO: 3 LIN. FT.= 45.0	END BENT No. 2 (STAGE 1) HP 12 X 53 STEEL PILES NO: 4 LIN. FT.= 60.0	END BENT No. 2 (STAGE 2) HP 12 X 53 STEEL PILES NO: 3 LIN. FT.= 45.0
PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES NO: 4	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES NO: 3	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES NO: 4	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES NO: 3
PILE EXCAVATION IN SOIL LIN. FT.= 0.0	PILE EXCAVATION IN SOIL LIN. FT.= 0.0	PILE EXCAVATION IN SOIL LIN. FT.= 4.0	PILE EXCAVATION IN SOIL LIN. FT.= 3.0
PILE EXCAVATION NOT IN SOIL LIN. FT.= 40.0	PILE EXCAVATION NOT IN SOIL LIN. FT.= 30.0	PILE EXCAVATION NOT IN SOIL LIN. FT.= 36.0	PILE EXCAVATION NOT IN SOIL LIN. FT.= 27.0



CONST. JT. DETAIL



SECTION A-A

(CONCRETE COLLAR NOT SHOWN FOR CLARITY. SEE "CORROSION PROTECTION FOR STEEL PILES DETAIL.")

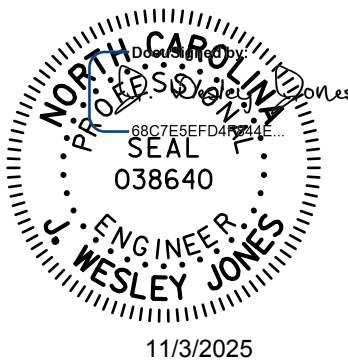
BILL OF MATERIAL						BILL OF MATERIAL					
END BENT 1 (STAGE 1)						END BENT 1 (STAGE 2)					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#9	1	22'-6"	612	B3	6	#4	STR	2'-5"	10
B2	24	#4	STR	21'-3"	341	B4	8	#9	1	24'-7"	669
B3	6	#4	STR	2'-5"	10	B5	24	#4	STR	23'-4"	374
D1	10	#6	STR	1'-6"	23	D1	12	#6	STR	1'-6"	27
H1	16	#4	2	11'-2"	119	H3	32	#4	3	8'-10"	189
H2	16	#4	2	10'-10"	116						
K1	8	#4	STR	3'-3"	17	K1	8	#4	STR	3'-3"	17
S1	25	#4	4	16'-5"	274	S1	31	#4	4	16'-5"	340
S2	25	#4	5	3'-2"	53	S2	31	#4	5	3'-2"	66
S3	32	#4	6	6'-6"	139	S3	24	#4	6	6'-6"	104
S4	1	#4	4	16'-6"	11	S4	1	#4	4	16'-6"	11
S5	1	#4	5	3'-3"	2	S5	1	#4	5	3'-3"	2
S6	1	#4	4	16'-9"	11	S6	1	#4	4	16'-9"	11
S7	1	#4	5	3'-6"	2	S7	1	#4	5	3'-6"	2
V1	30	#4	STR	9'-7"	192	V1	26	#4	STR	9'-7"	166
REINFORCING STEEL					1922 LBS.	REINFORCING STEEL					1988 LBS.
CLASS A CONCRETE BREAKDOWN						CLASS A CONCRETE BREAKDOWN					
POUR #1 CAP, LOWER PART OF WINGS & COLLARS					18.1 C.Y.	POUR #1 CAP, LOWER PART OF WINGS & COLLARS					19.8 C.Y.
POUR #2 UPPER PART OF WINGS					1.5 C.Y.	POUR #2 UPPER PART OF WINGS					1.3 C.Y.
TOTAL CLASS A CONCRETE					19.6 C.Y.	TOTAL CLASS A CONCRETE					21.1 C.Y.
END BENT 2 (STAGE 1)						END BENT 2 (STAGE 2)					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#9	1	22'-6"	612	B3	6	#4	STR	2'-5"	10
B2	24	#4	STR	21'-3"	341	B4	8	#9	1	24'-7"	669
B3	6	#4	STR	2'-5"	10	B5	24	#4	STR	23'-4"	374
D1	10	#6	STR	1'-6"	23	D1	12	#6	STR	1'-6"	27
H3	32	#4	3	8'-10"	189	H1	16	#4	2	11'-2"	119
						H2	16	#4	2	10'-10"	116
K1	8	#4	STR	3'-3"	17	K1	8	#4	STR	3'-3"	17
S1	25	#4	4	16'-5"	274	S1	31	#4	4	16'-5"	340
S2	25	#4	5	3'-2"	53	S2	31	#4	5	3'-2"	66
S3	32	#4	6	6'-6"	139	S3	24	#4	6	6'-6"	104
S4	1	#4	4	16'-6"	11	S4	1	#4	4	16'-6"	11
S5	1	#4	5	3'-3"	2	S5	1	#4	5	3'-3"	2
S6	1	#4	4	16'-9"	11	S6	1	#4	4	16'-9"	11
S7	1	#4	5	3'-6"	2	S7	1	#4	5	3'-6"	2
V1	26	#4	STR	9'-7"	166	V1	30	#4	STR	9'-7"	192
REINFORCING STEEL					1850 LBS.	REINFORCING STEEL					2060 LBS.
CLASS A CONCRETE BREAKDOWN						CLASS A CONCRETE BREAKDOWN					
POUR #1 CAP, LOWER PART OF WINGS & COLLARS					17.5 C.Y.	POUR #1 CAP, LOWER PART OF WINGS & COLLARS					20.4 C.Y.
POUR #2 UPPER PART OF WINGS					1.3 C.Y.	POUR #2 UPPER PART OF WINGS					1.5 C.Y.
TOTAL CLASS A CONCRETE					18.8 C.Y.	TOTAL CLASS A CONCRETE					21.9 C.Y.

PROJECT NO. **B-6029**

MACON COUNTY

STATION: **17+07.50 -L-**

SHEET 4 OF 4



stv STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENT DETAILS

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

S-14
TOTAL SHEETS 17

DRAWN BY : LEM	DATE : 7-17
CHECKED BY : JTG	DATE : 11-17
DESIGN ENGINEER OF RECORD : JWJ	DATE : 10-25