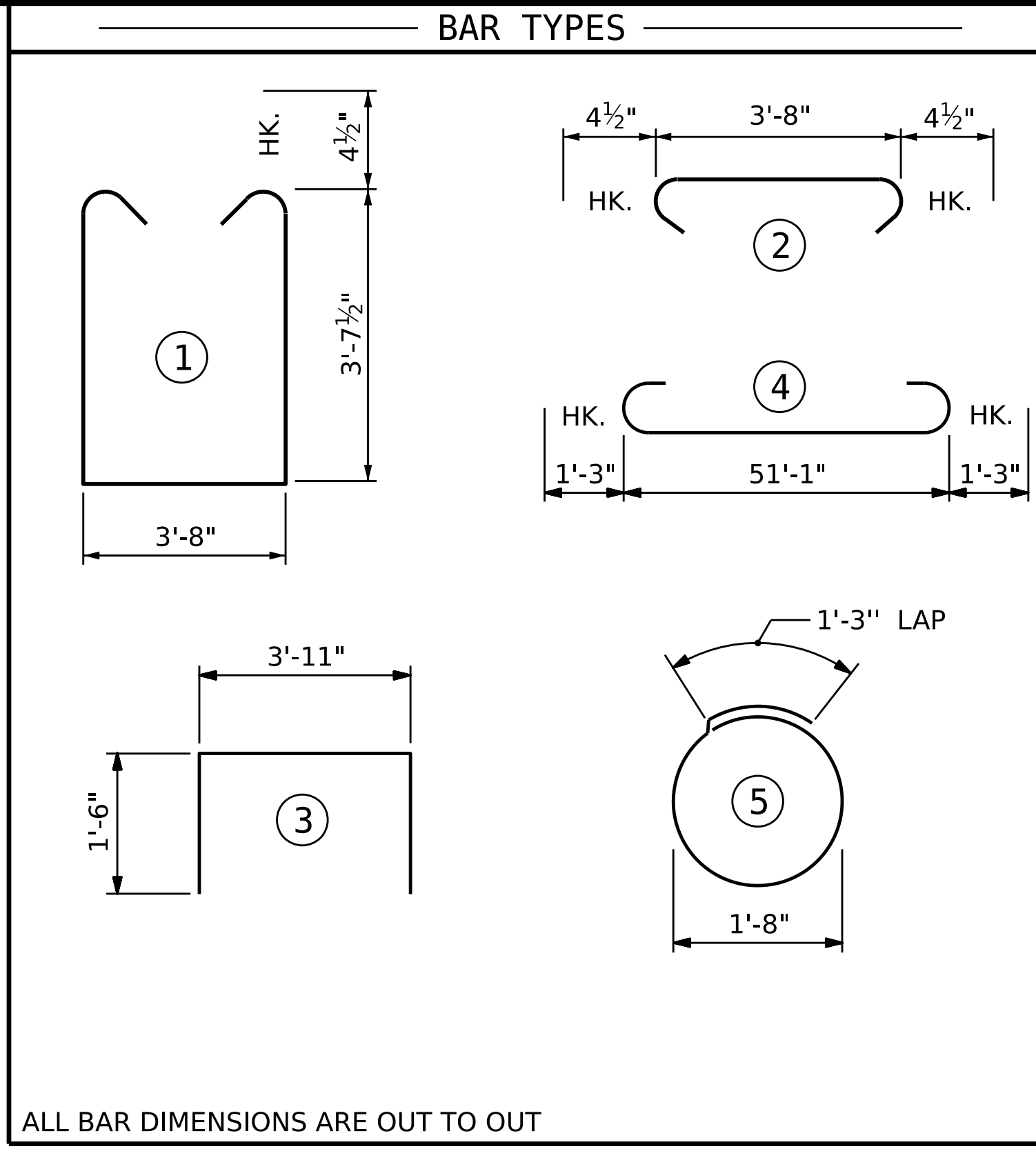


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

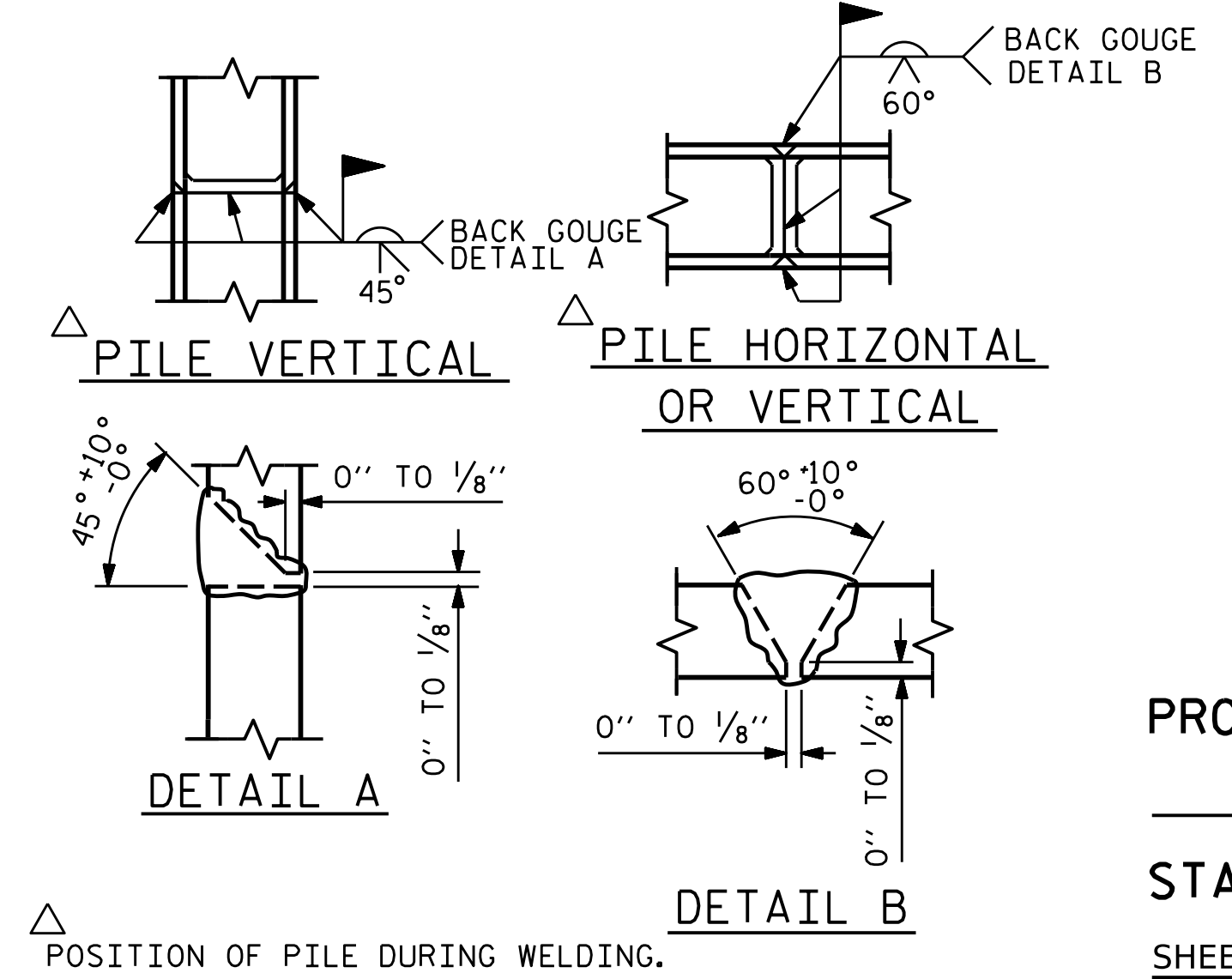
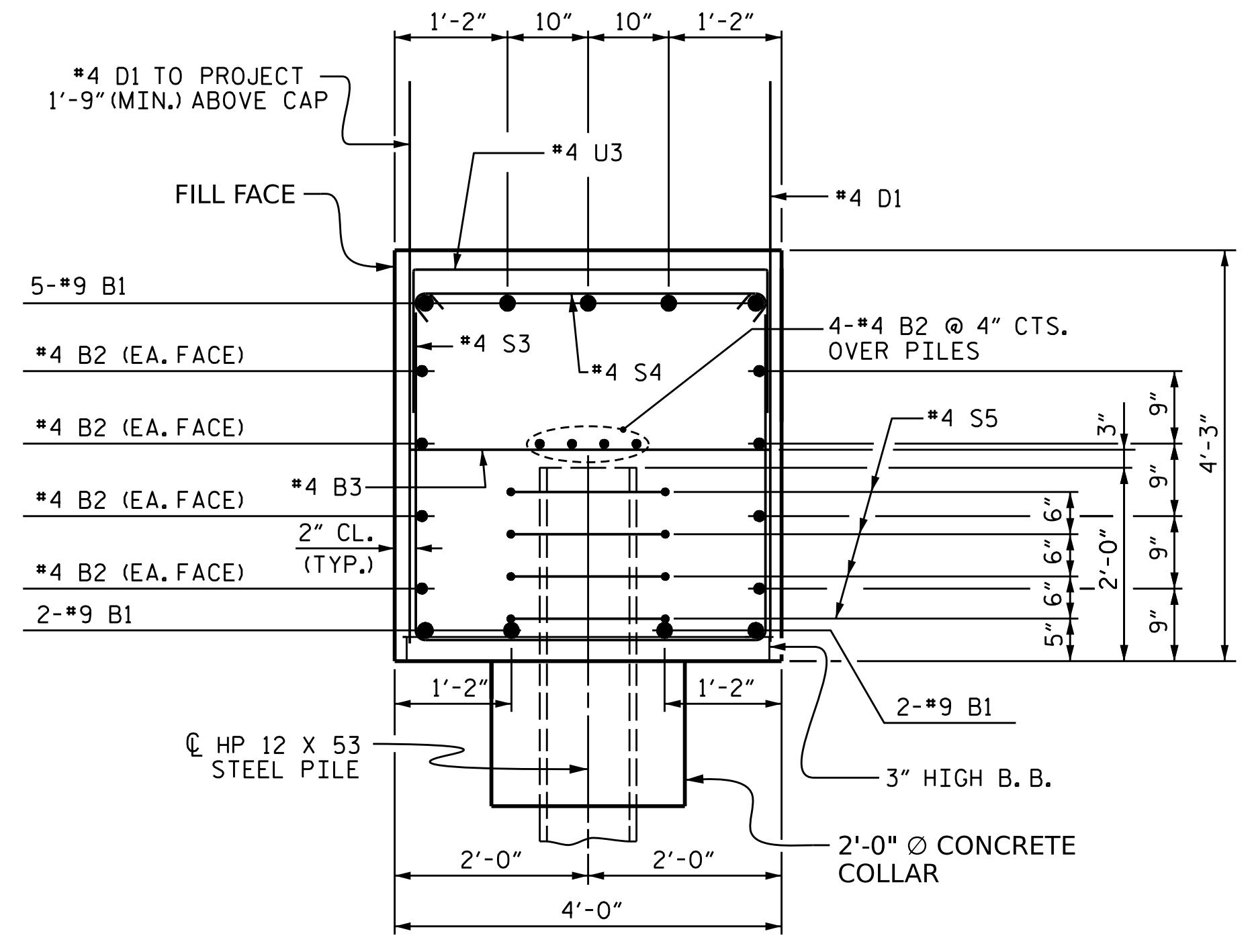
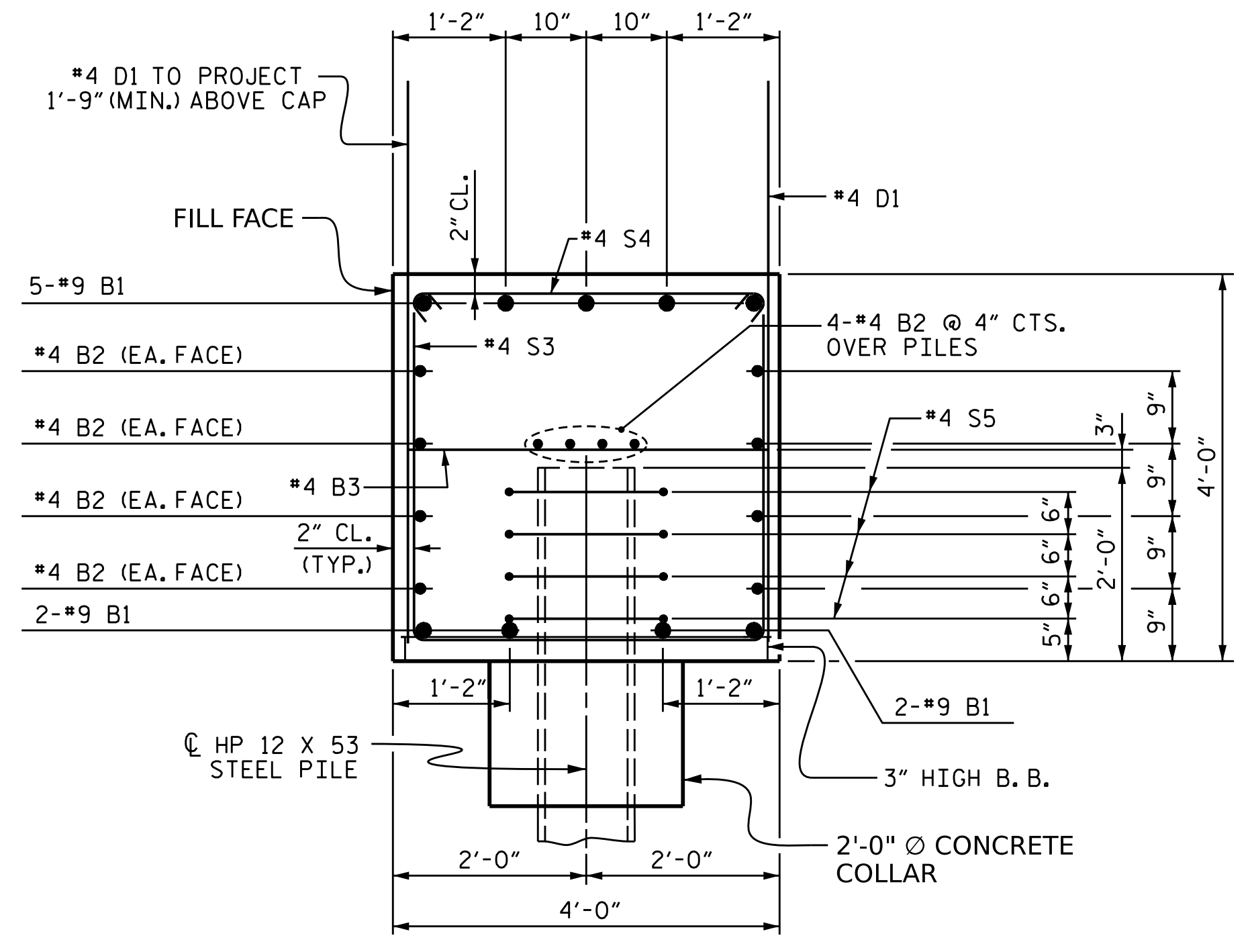
**TEMPORARY DRAINAGE AT END BENT**



**BILL OF MATERIAL**

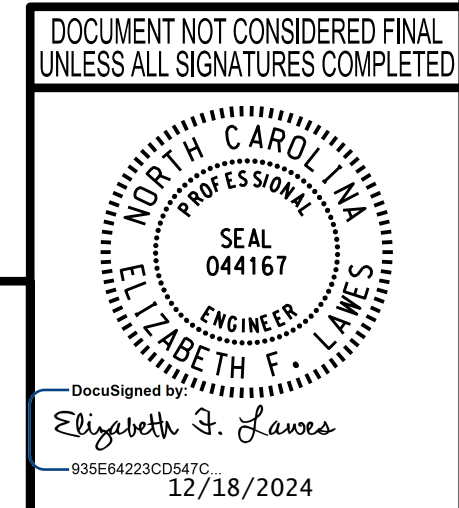
END BENT 1						END BENT 2					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	9	#9	4	53'-7"	1640	B1	9	#9	4	53'-7"	1640
B2	24	#4	STR	26'-9"	429	B2	24	#4	STR	26'-9"	429
B3	13	#4	STR	3'-8"	32	B3	13	#4	STR	3'-8"	32
D1	84	#4	STR	6'-0"	337	D1	84	#4	STR	6'-0"	337
H1	24	#5	STR	14'-9"	369	H1	24	#5	STR	14'-9"	369
H2	8	#5	STR	14'-6"	121	H2	8	#5	STR	14'-6"	121
S3	65	#4	1	11'-8"	507	S3	65	#4	1	11'-8"	507
S4	65	#4	2	4'-5"	192	S4	65	#4	2	4'-5"	192
S5	32	#4	5	6'-6"	139	S5	32	#4	5	6'-6"	139
V2	48	#4	STR	6'-0"	192	V2	48	#4	STR	6'-0"	192
U3	32	#4	3	6'-11"	148	U3	32	#4	3	6'-11"	148
REINFORCING STEEL						REINFORCING STEEL					
4,106						4,106					
CLASS "A" CONCRETE BREAKDOWN						CLASS "A" CONCRETE BREAKDOWN					
POUR #1 - CAP & LOWER WING C.Y. 34.0						POUR #1 - CAP & LOWER WING C.Y. 34.0					
POUR #3 - UPPER WING* C.Y. 34.0						POUR #3 - UPPER WING* C.Y. 34.0					
CLASS "A" CONCRETE TOTAL C.Y. 34.0						CLASS "A" CONCRETE TOTAL C.Y. 34.0					

\*UPPER WING QUANTITIES INCLUDED IN THE SUPERSTRUCTURE BILL OF MATERIAL SHEET S-20.



PROJECT NO. **BR-0100**  
**RUTHERFORD** COUNTY  
 STATION: **18+28.00 -L-**  
 SHEET 4 OF 4

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUBSTRUCTURE  
**END BENTS 1 & 2  
 DETAILS &  
 BILL OF MATERIAL**



**wsp**  
 WSP USA Inc.  
 434 FAYETTEVILLE STREET  
 SUITE 1500  
 RALEIGH, NC 27601  
 TEL: 1.919.836.4040  
 LICENSE NO. F-0165

DESIGNED BY: J. WHEATLEY DATE: MAY 2024  
 DRAWN BY: M. HOBBS DATE: MAY 2024  
 CHECKED BY: E. LAWES DATE: MAY 2024  
 DESIGN ENGINEER OF RECORD: E. LAWES DATE: MAY 2024

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

TOTAL SHEETS: 30