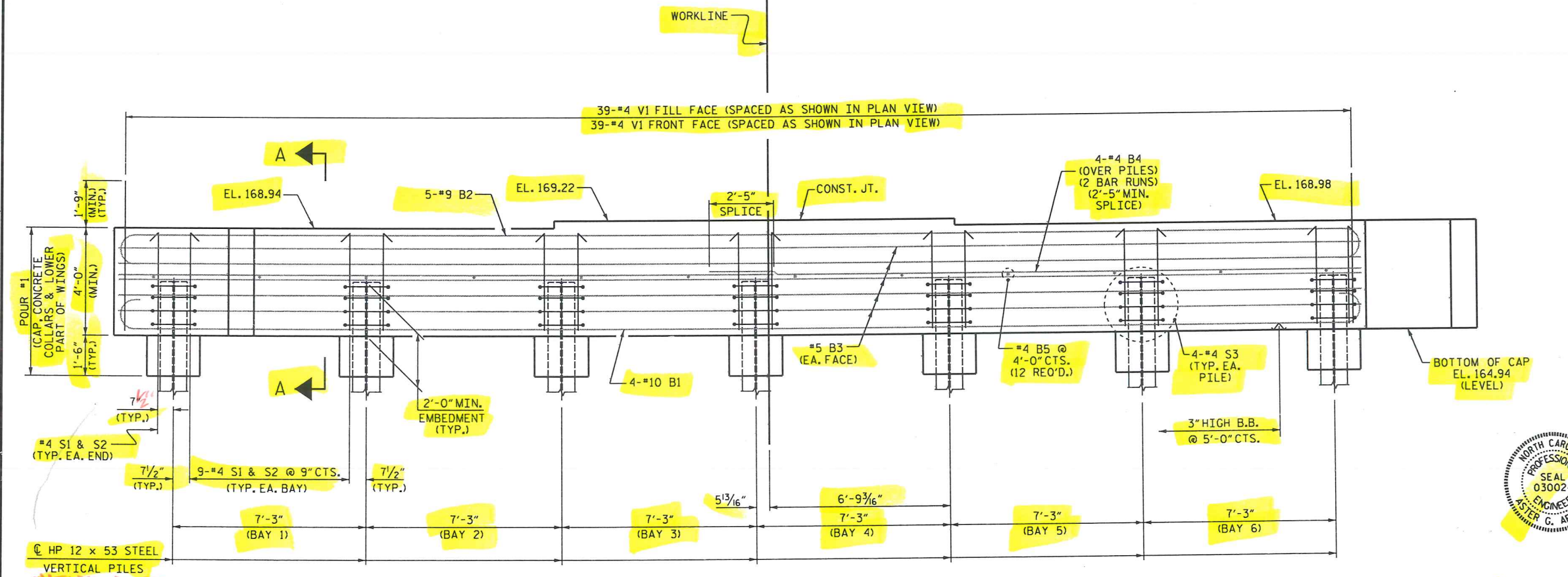


PLAN



ELEVATION

NOTES

- STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR #4 V1 BARS.
- SEE THE SUPERSTRUCTURE SHEETS FOR UPPER PART OF INTEGRAL END BENT DETAIL.
- THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT UPPER PART OF INTEGRAL PORTION AND WINGS ARE TO BE POURED WITH THE SUPERSTRUCTURE.
- SEE SUPERSTRUCTURE PLAN OF SPANS SHALL
- THE TOP SURFACE OF POUR #1 OF THE END BENT CAP AND WINGS, EXCLUDING THE BEARING AREA, SHALL BE RAKED TO A DEPTH OF 1/4\".
- STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENTS 1 & 2, SEE SECTION 450 OF THE STANDARD SPECIFICATION.

PROJECT NO. B-5670  
 NASH COUNTY  
 STATION: 16+98.00 -L-  
 SHEET 1 OF 3



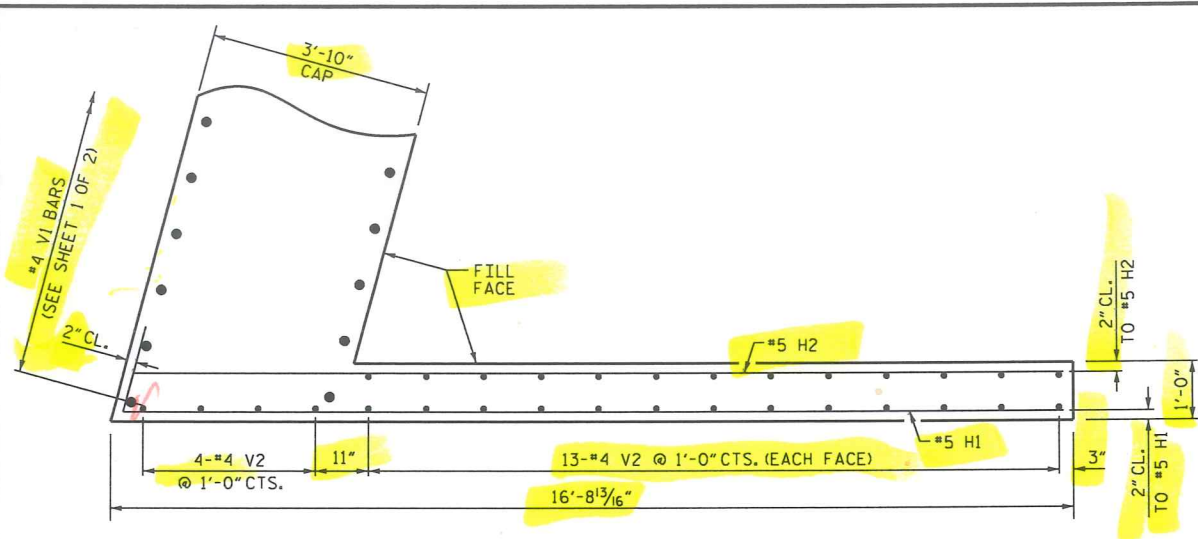
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUBSTRUCTURE  
 INTEGRAL  
 END BENT 1

DRAWN BY: M.M. AHMED DATE: 05/22  
 CHECKED BY: S. WANCE DATE: 05/22  
 DESIGN ENGINEER OF RECORD: M.M. AHMED DATE: 05/22

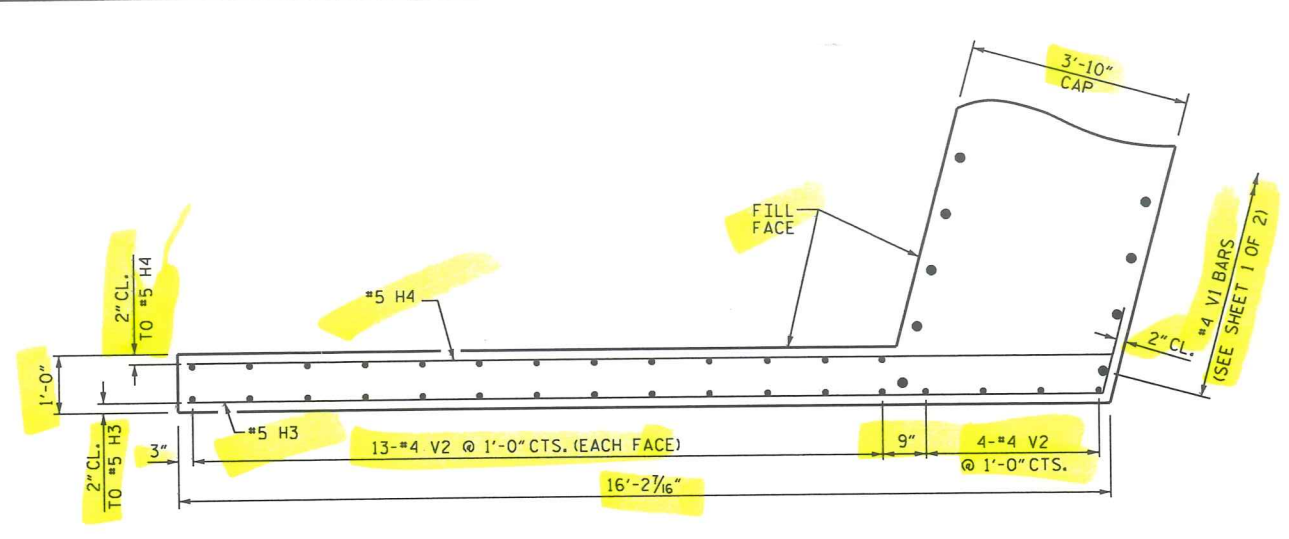
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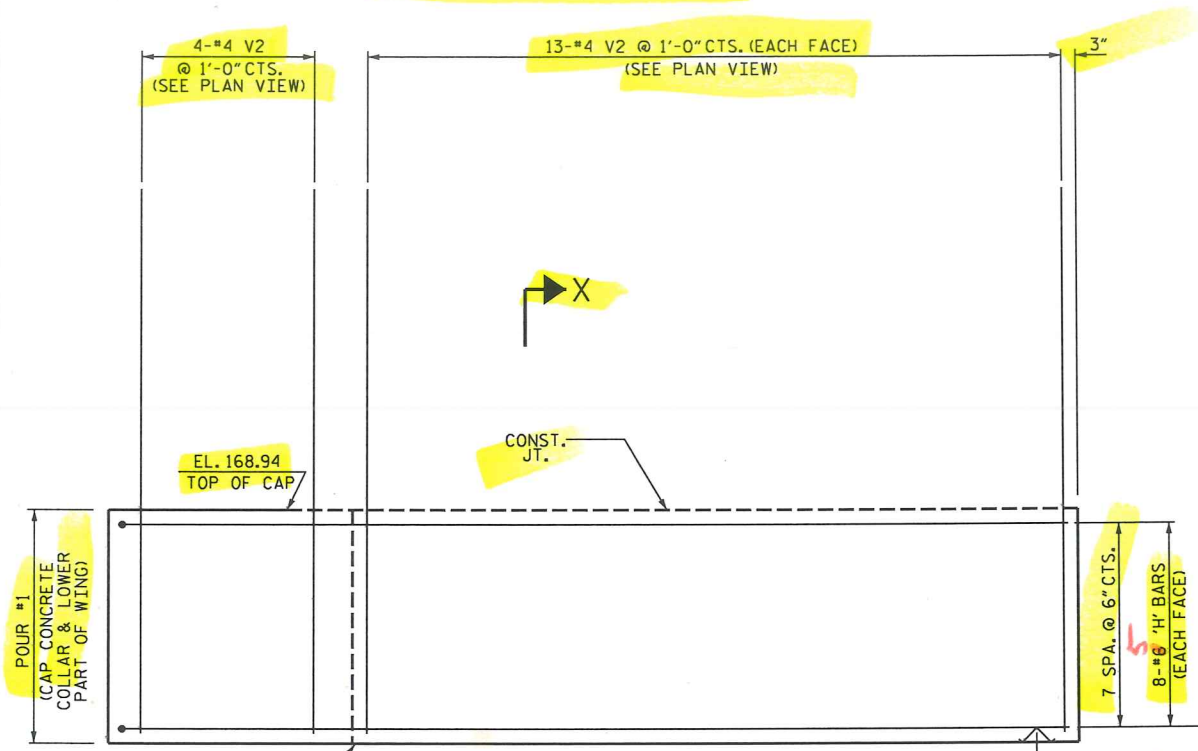




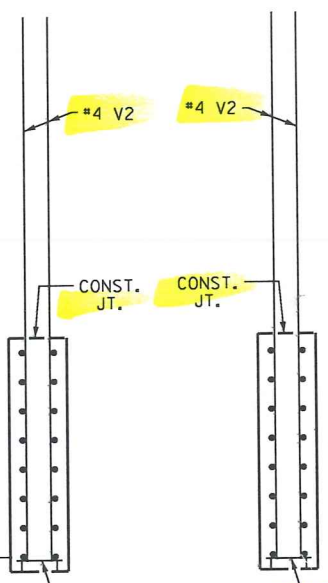
PLAN OF WING W1



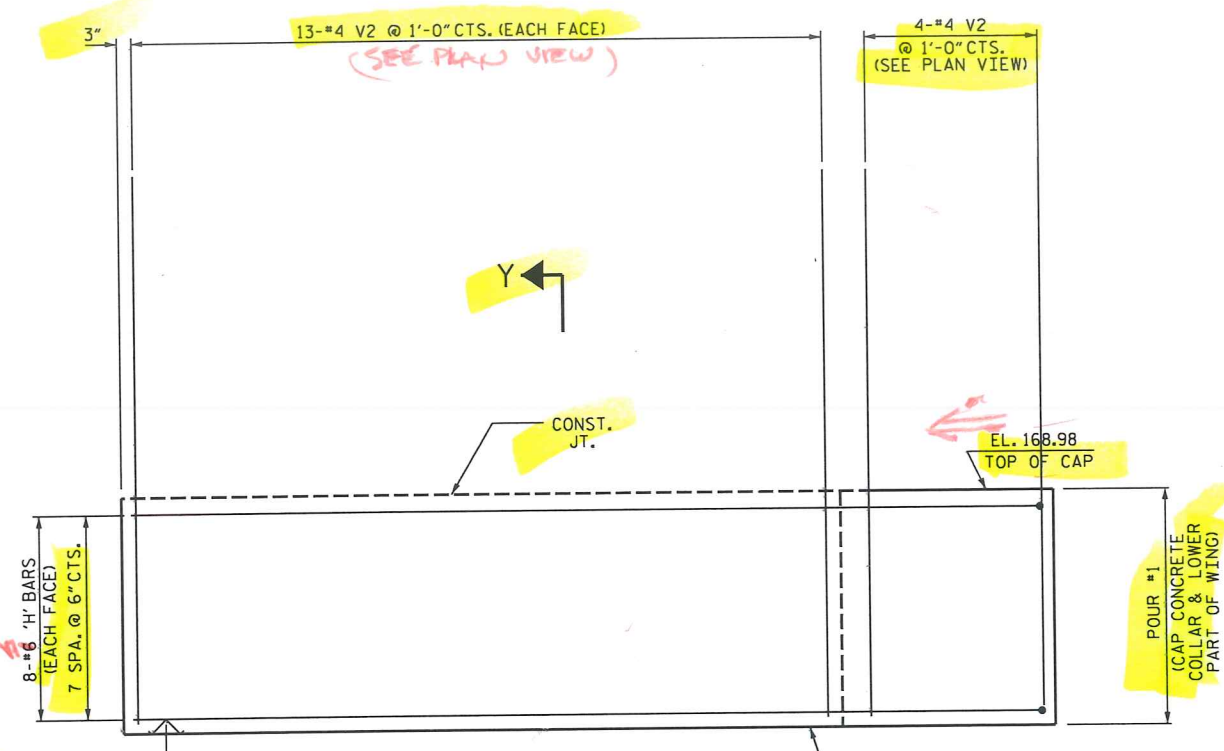
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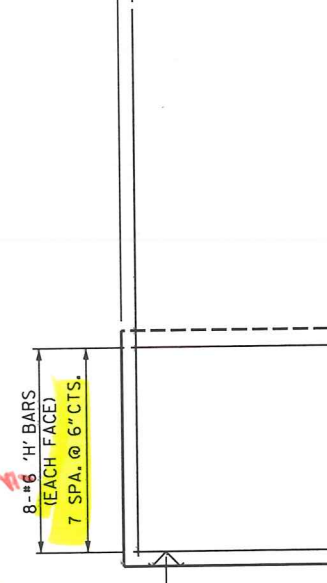
ELEVATION OF WING W1



SECTION X-X



ELEVATION OF WING W2



SECTION Y-Y

PROJECT NO. **B-5670**  
**NASH** COUNTY  
 STATION: **16+98.00** -L-

SHEET 2 OF 3



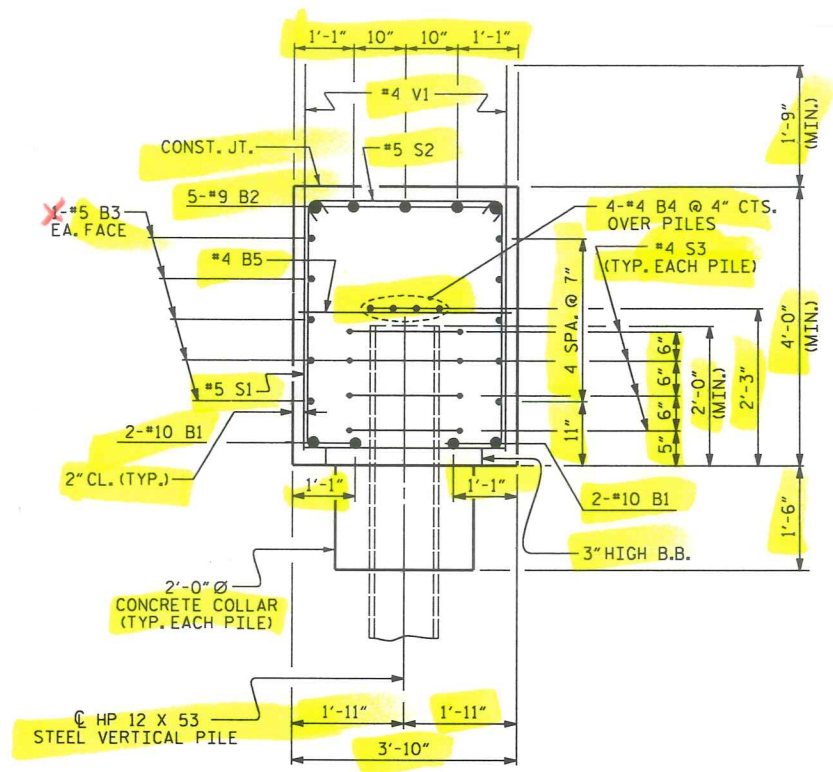
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**SUBSTRUCTURE**  
**INTEGRAL**  
**END BENT 1**

DRAWN BY: **M.M. AHMED** DATE: **05/22**  
 CHECKED BY: **S. WANCE** DATE: -  
 DESIGN ENGINEER OF RECORD: **M.M. AHMED** DATE: -

DOCUMENT NOT CONSIDERED  
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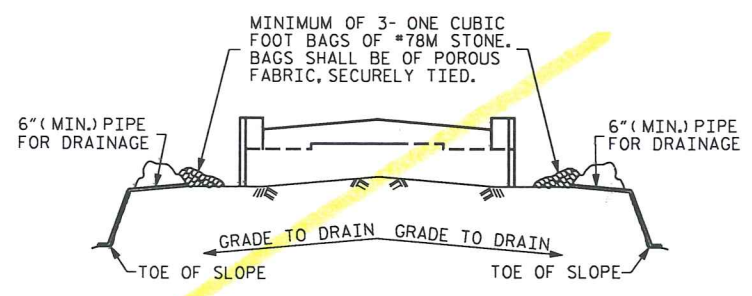




SECTION A-A

BAR TYPES					BILL OF MATERIAL				
INTEGRAL END BENT #1									
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT				
B1	4	#10	1	49'-4"	849				
B2	5	#9	1	49'-0"	833				
B3	10	#5	STR	46'-6"	485				
B4	8	#4	STR	24'-7"	131				
B5	12	#4	STR	3'-6"	28				
H1	8	#5	5	17'-2"	143				
H2	8	#5	5	17'-0"	142				
H3	8	#5	6	16'-9"	140				
H4	8	#5	6	16'-11"	141				
S1	56	#5	2	11'-8"	681				
S2	56	#5	3	4'-5"	258				
S3	28	#4	4	6'-6"	122				
V1	62	#4	STR	5'-7"	231				
V2	60	#4	STR	9'-4"	374				
REINFORCING STEEL = 4558 LBS									
CLASS A CONCRETE									
POUR #1 (CAP, CONCRETE COLLARS & LOWER PART OF WINGS) 32.4 C.Y.									
TOTAL 32.4 C.Y.									
HP 12 x 53 STEEL PILES									
No. 7 245 LIN FT.									
PILE REDRIVES 24 EA.									

AS PER JOELLE #ASTER!  
 INFO INCLUDED NOW ON GEOTECH SHEET.



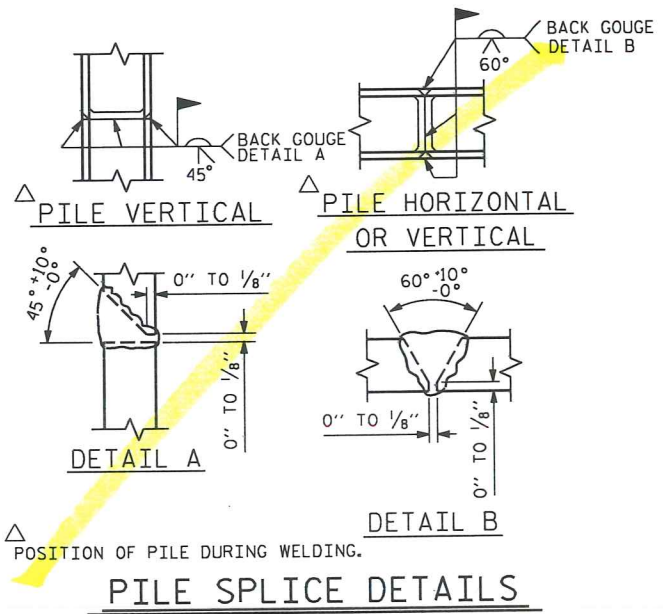
MINIMUM OF 3- ONE CUBIC FOOT BAGS OF #78M STONE. BAGS SHALL BE OF POROUS FABRIC, SECURELY TIED.

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



PROJECT NO. B-5670  
 NASH COUNTY  
 STATION: 16+98.00 -L-  
 SHEET 3 OF 3

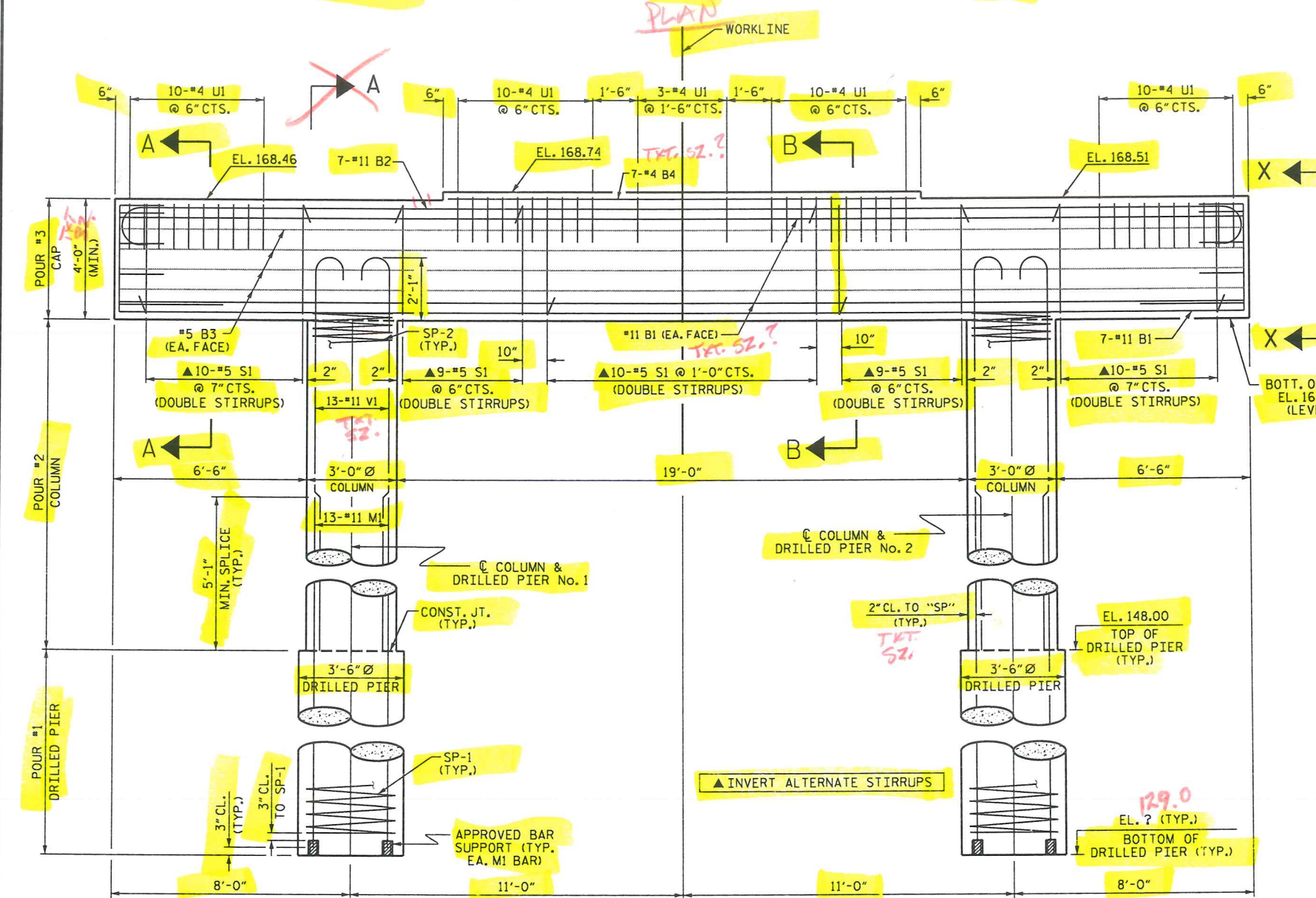
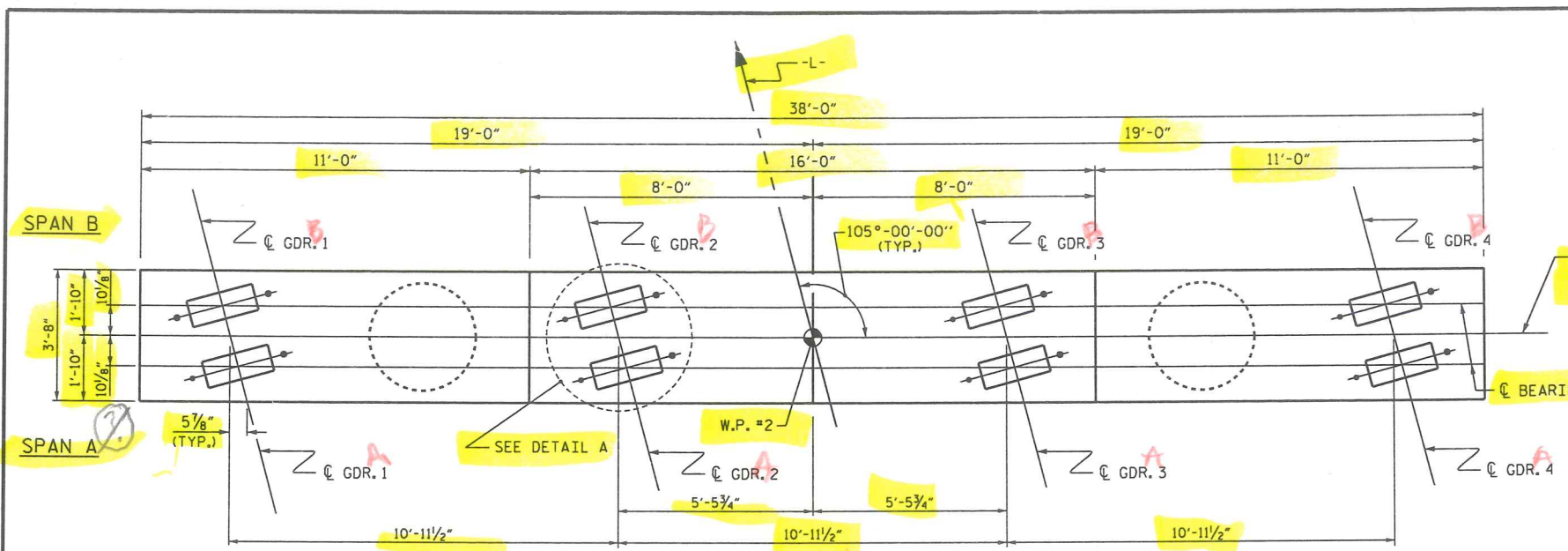
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUBSTRUCTURE  
 INTEGRAL END BENT 1

DRAWN BY: M.M. AHMED DATE: 05/22  
 CHECKED BY: S. WANCE DATE: -  
 DESIGN ENGINEER OF RECORD: M.M. AHMED DATE: -

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

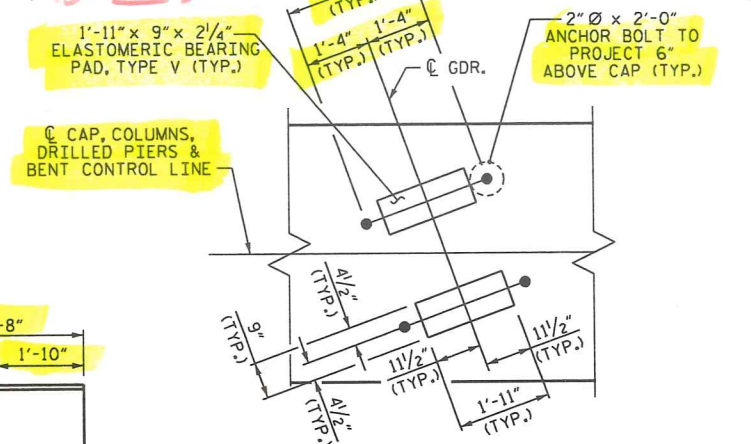
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NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
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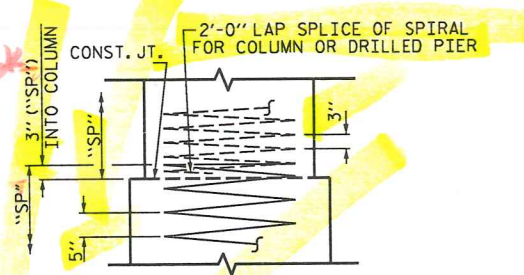


- NOTES**
- STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS.
  - HOOKS ON #V BARS MAY BE TURNED AS NECESSARY FOR PLACING REINFORCING STEEL.
  - ALL STEEL IN THE DRILLED PIERS IS INCLUDED IN THE PAY ITEMS FOR "REINFORCING STEEL" AND "SPIRAL COLUMN REINFORCING STEEL" OR "EPOXY COATED SPIRAL COLUMN REINFORCING STEEL".
  - THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE LONGITUDINAL REINFORCEMENT FOR THE DRILLED PIERS IS DETAILED WITH 3 FEET OF EXTRA LENGTH.
  - SPLICING OF THE LONGITUDINAL BARS IN THE DRILLED PIER WILL NOT BE PERMITTED.
  - THE LOCATION OF THE CONSTRUCTION JOINT IN THE DRILLED PIERS IS BASED ON AN APPROXIMATE GROUND LINE ELEVATION. IF THE CONSTRUCTION JOINT IS ABOVE THE ACTUAL GROUND ELEVATION, THE CONTRACTOR SHALL PLACE THE CONSTRUCTION JOINT 1 FOOT BELOW THE GROUND LINE.

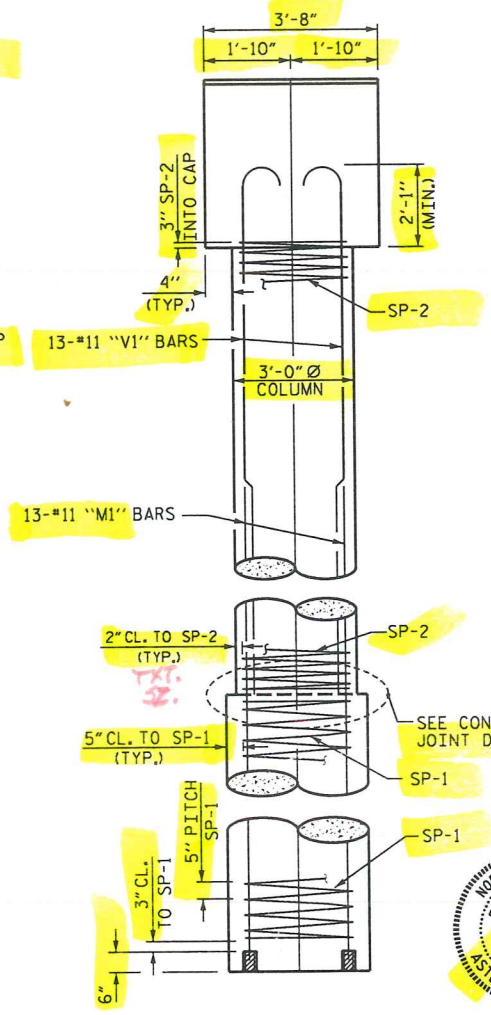
FOR DRILLED PIER INSTALLATION INFORMATION, SEE PILE AND DRILLED PIER FOUNDATION TABLES, SHEET S-3.



**DETAIL "A"**  
(TYP. EA. GDR.)



**CONSTRUCTION JOINT DETAIL**



**END ELEVATION**

PROJECT NO. **B-5670**  
**NASH** COUNTY  
 STATION: **16+98.00 -L-**  
 SHEET 1 OF 2



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**SUBSTRUCTURE BENT 1**

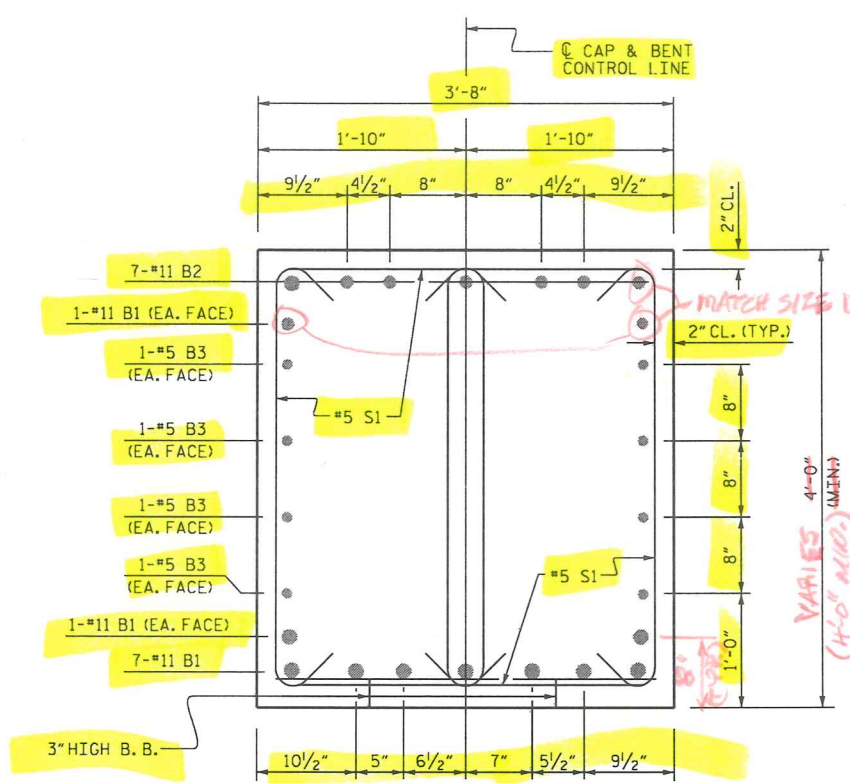
DRAWN BY: **M.M. AHMED** DATE: **SEP 2020**  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DESIGN ENGINEER OF RECORD: **M.M. AHMED** DATE: \_\_\_\_\_

DIMENSIONS & REINFORCING STEEL ARE TYPICAL FOR EACH COLUMN & DRILLED PIER UNLESS OTHERWISE NOTED.

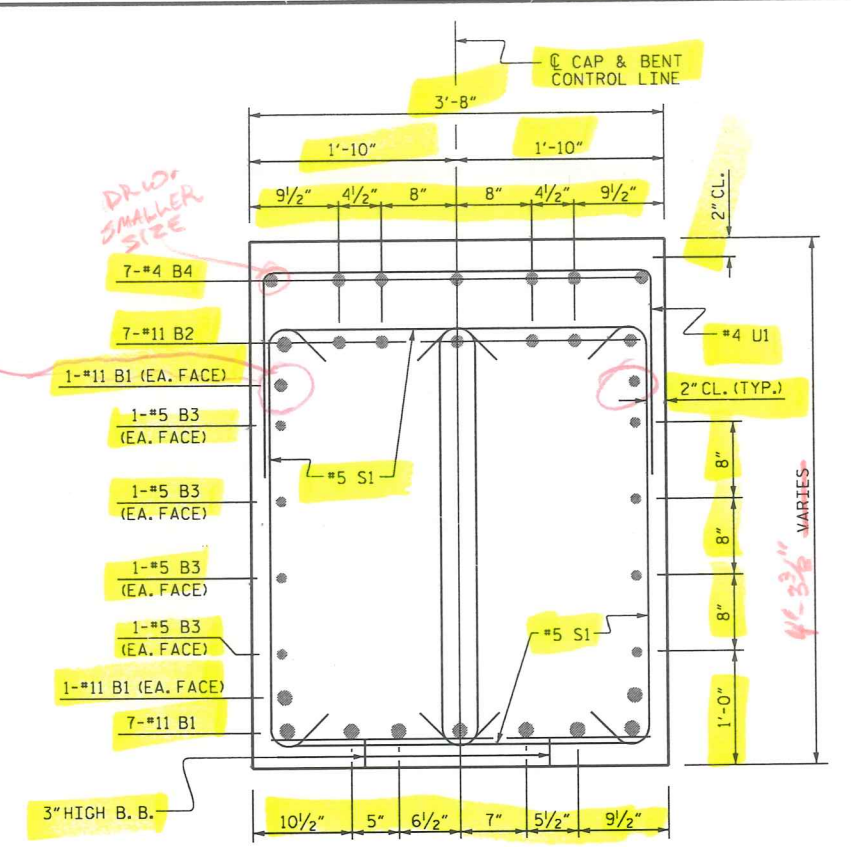
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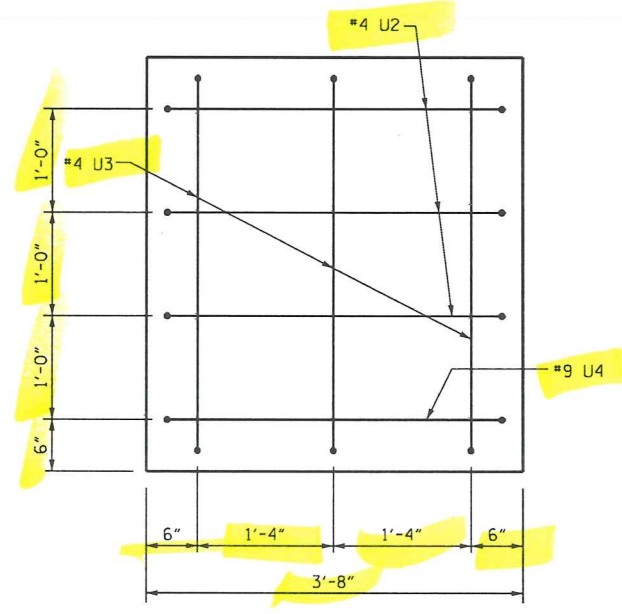




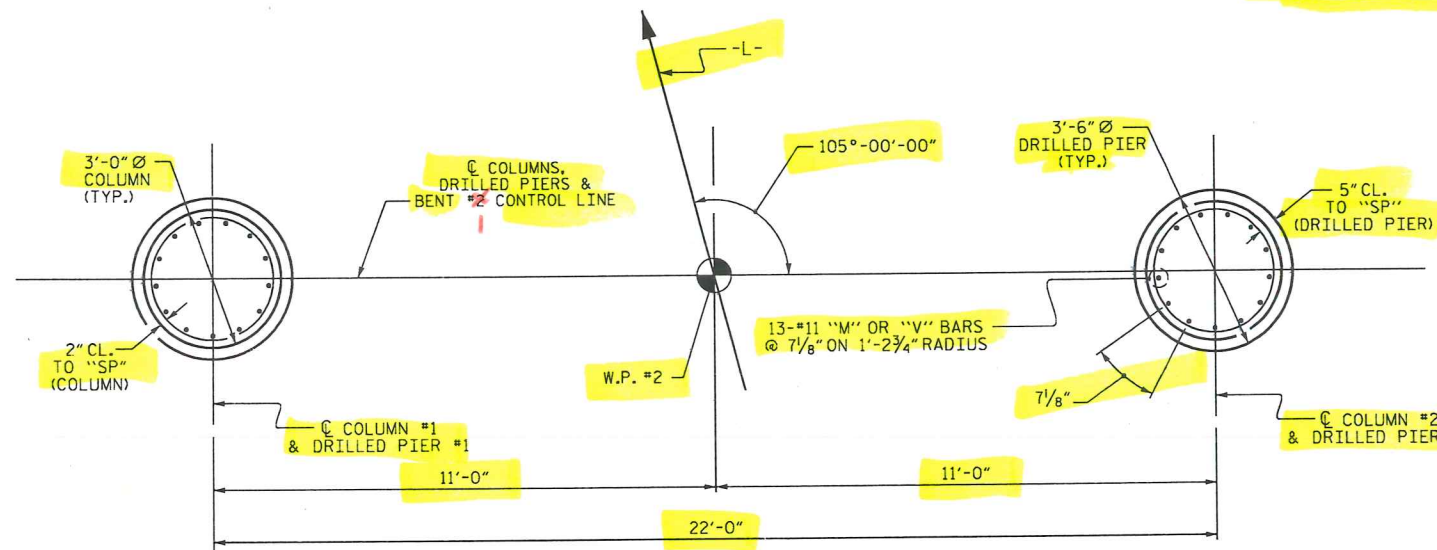
SECTION A-A



SECTION B-B

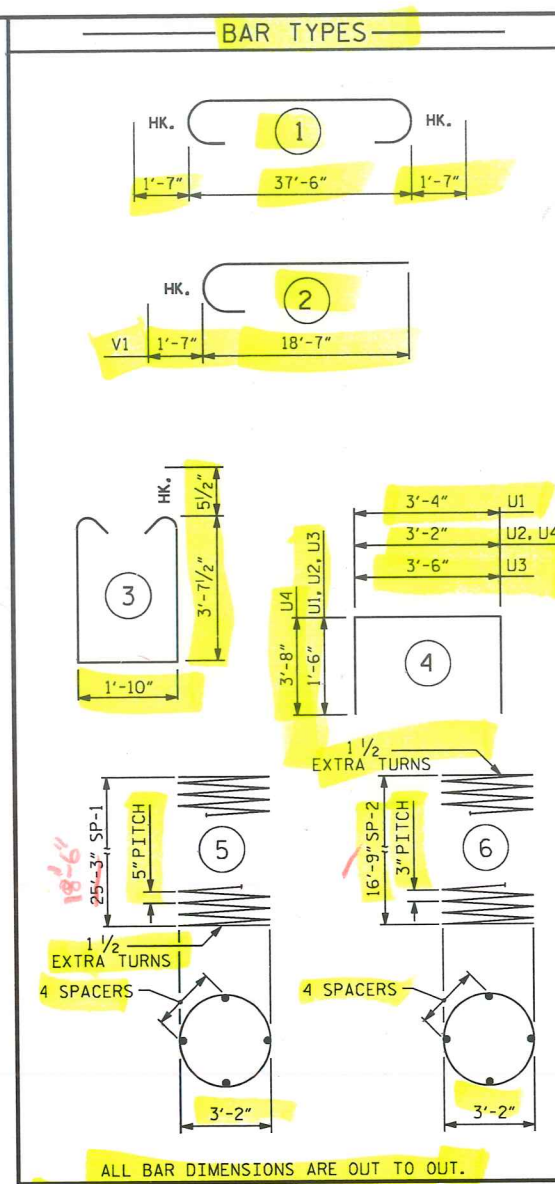


SECTION X-X  
(TYPICAL BOTH ENDS)



PLAN OF COLUMNS AND DRILLED PIERS

(DIMENSIONS AND REINFORCING STEEL ARE TYPICAL FOR EACH COLUMN AND DRILLED PIER)



BILL OF MATERIAL

BENT 1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	11	#11	STR	37'-8"	2,201
B2	7	#11	1	40'-8"	1,512
B3	8	#5	STR	37'-8"	314
B4	7	#4	STR	15'-8"	73
M1	26	#11	STR	20'-2"	2,786
S1	96	#5	3	10'-0"	1001
U1	43	#4	4	6'-4"	182
U2	6	#4	4	6'-2"	25
U3	6	#4	4	6'-6"	26
U4	2	#9	4	10'-6"	71
V1	26	#11	2	20'-2"	2,786

REINFORCING STEEL	14,653 LBS.
SPIRAL COLUMN REINFORCING STEEL	3,254 LBS.
SP-1	561'-3" 982
SP-2	570'-0" 381
TOTAL SPIRAL COLUMN REINFORCING STEEL	1,971

CLASS A CONCRETE BREAKDOWN		
POUR 2 (COLUMNS)	8.7	11.4 CU.YDS.
POUR 3 (CAP)	21.3	34.9 CU.YDS.
TOTAL CLASS A CONCRETE	46.3	30.0

3'-6" Ø DRILLED PIERS	
DRILLED PIER CONCRETE POUR 1 (DRILLED PIERS)	13.6
	34.7 CU.YDS.

3'-6" Ø DRILLED PIERS IN SOIL	50.50 LIN. FT.
3'-6" Ø DRILLED PIERS NOT IN SOIL	24.00 LIN. FT.
▲ CSL TUBES	316.00 LIN. FT.

ALL BAR DIMENSIONS ARE OUT TO OUT.  
 \*\*\* THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.  
 \*\* THE SP-2 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR.  
 ▲ NO SEPARATE PAYMENT WILL BE MADE FOR CSL TUBES. CSL TUBES WILL BE INCLUDED IN THE UNIT BID PRICE FOR DRILLED PIERS.

PROJECT NO. B-5670  
 NASH COUNTY  
 STATION: 16+98.00 -L-  
 SHEET 2 OF 2



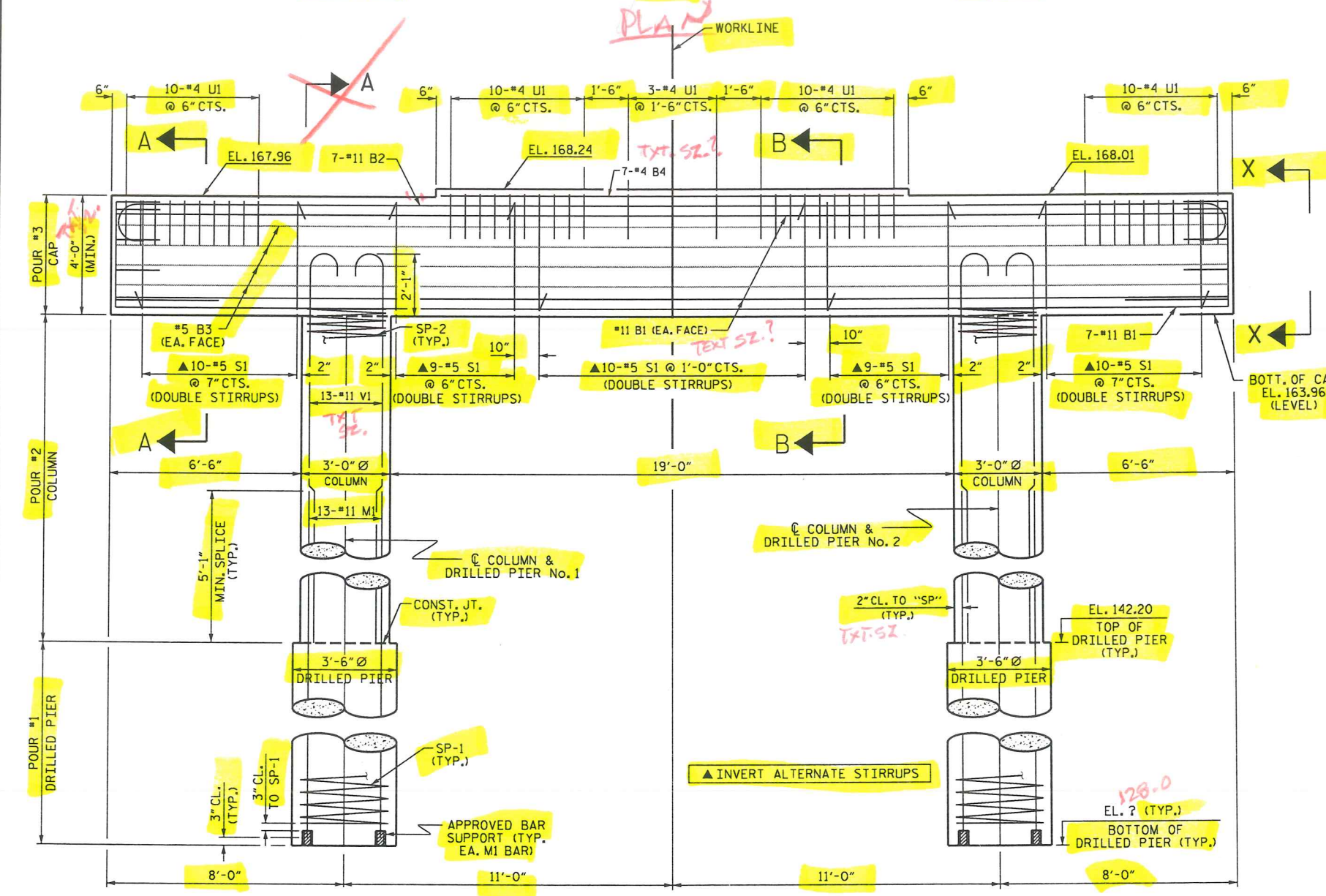
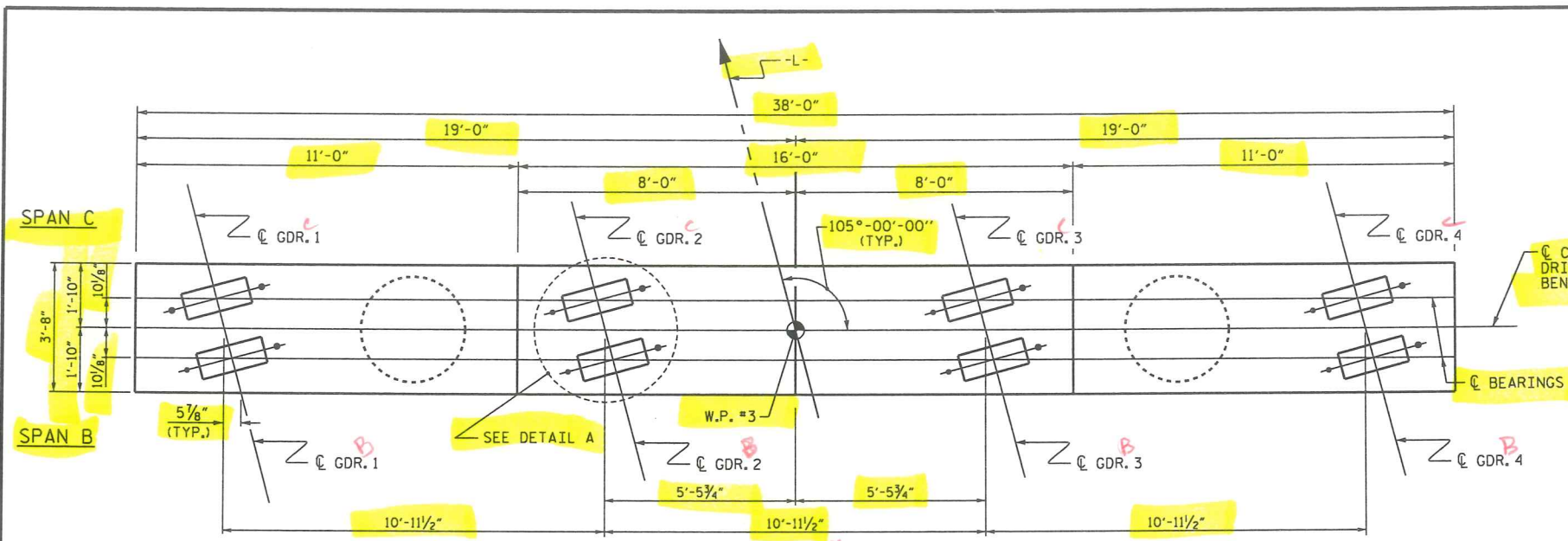
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUBSTRUCTURE  
 BENT #1

DRAWN BY: M.M. AHMED DATE: SEP 2020  
 CHECKED BY: DATE: -  
 DESIGN ENGINEER OF RECORD: M.M. AHMED DATE: -

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**NOTES**

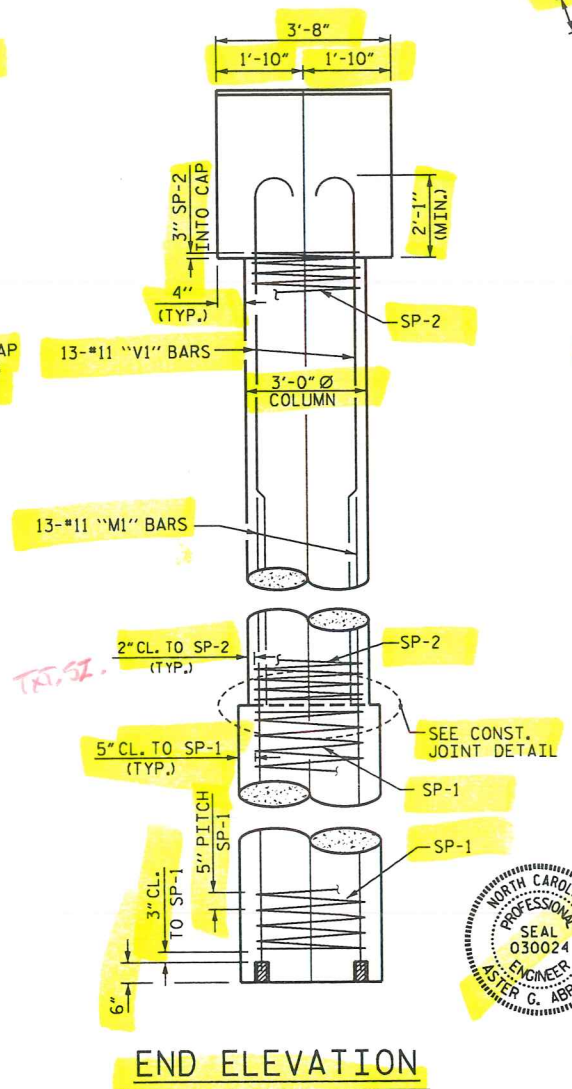
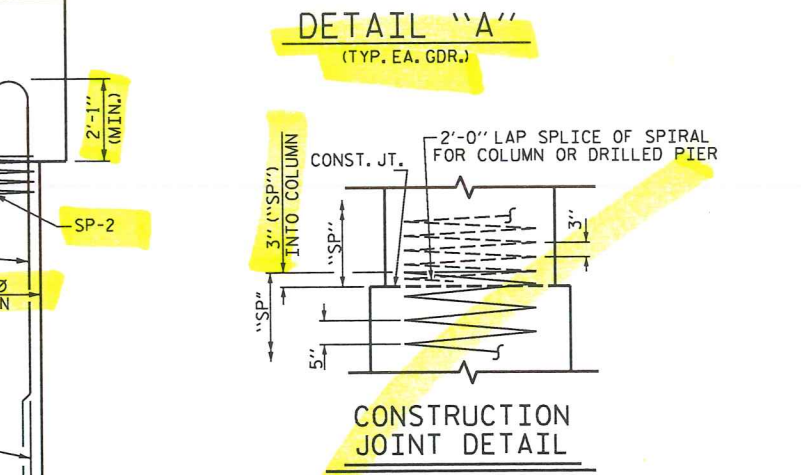
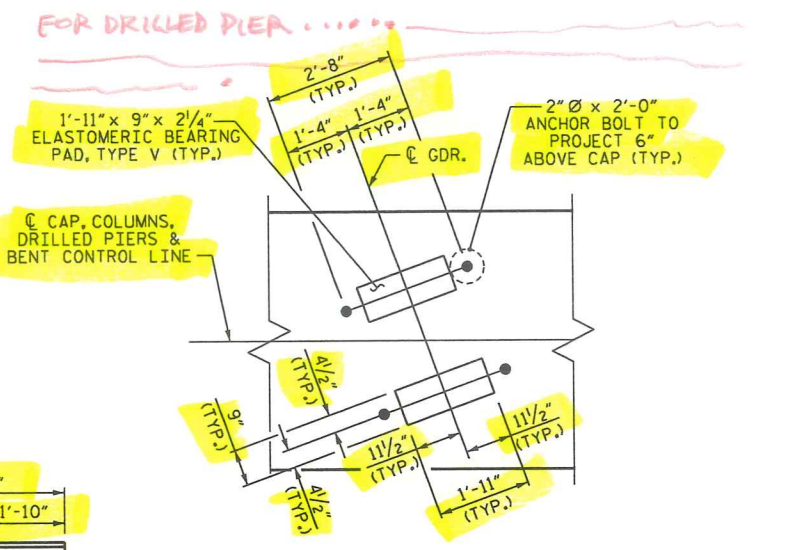
STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS.

HOOKS ON "V" BARS MAY BE TURNED AS NECESSARY FOR PLACING REINFORCING STEEL.

ALL STEEL IN THE DRILLED PIERS IS INCLUDED IN THE PAY ITEMS FOR "REINFORCING STEEL" AND "SPIRAL COLUMN REINFORCING STEEL" OR "EPOXY COATED SPIRAL COLUMN REINFORCING STEEL".

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE LONGITUDINAL REINFORCEMENT FOR THE DRILLED PIERS IS DETAILED WITH 3 FEET OF EXTRA LENGTH.

SPLICING OF THE LONGITUDINAL BARS IN THE DRILLED PIER WILL NOT BE PERMITTED.



PROJECT NO. **B-5670**  
**NASH** COUNTY  
 STATION: **16+98.00 -L-**

SHEET 1 OF 2

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SUBSTRUCTURE BENT 2**



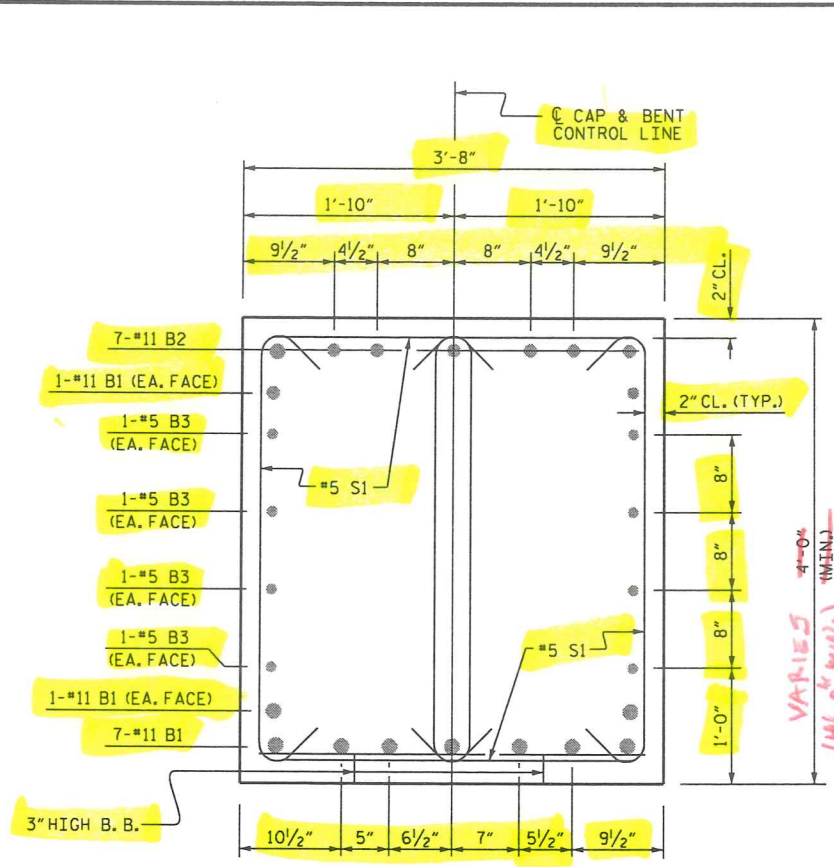
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 CHECKED BY: DATE: -  
 DESIGN ENGINEER OF RECORD: **M.M. AHMED** DATE: -

**DIMENSIONS & REINFORCING STEEL ARE TYPICAL FOR EACH COLUMN & DRILLED PIER UNLESS OTHERWISE NOTED.**

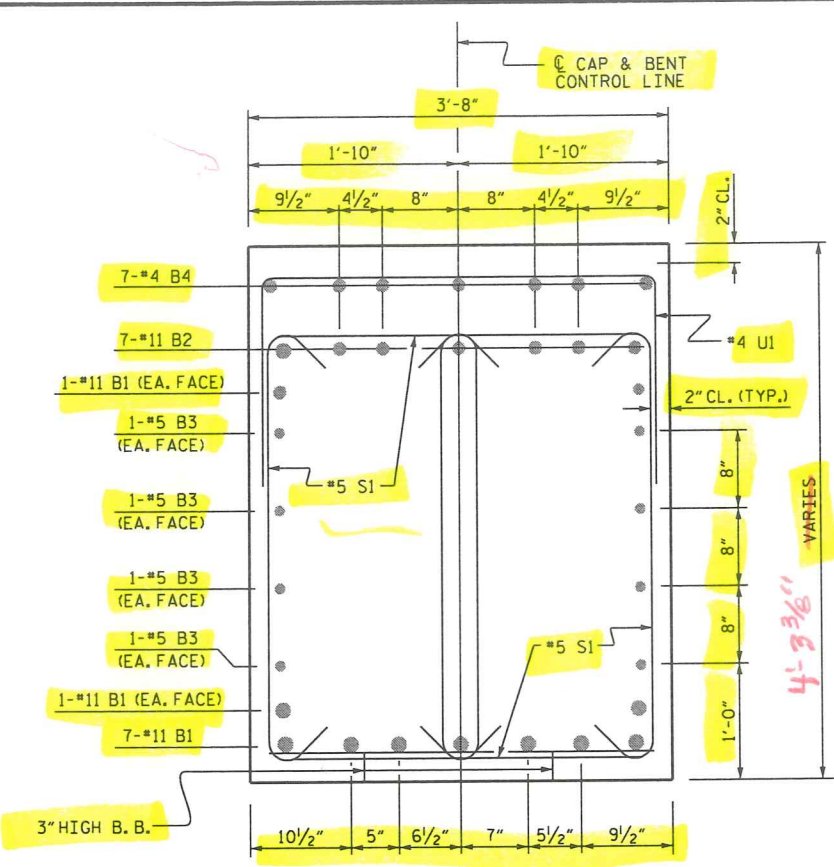
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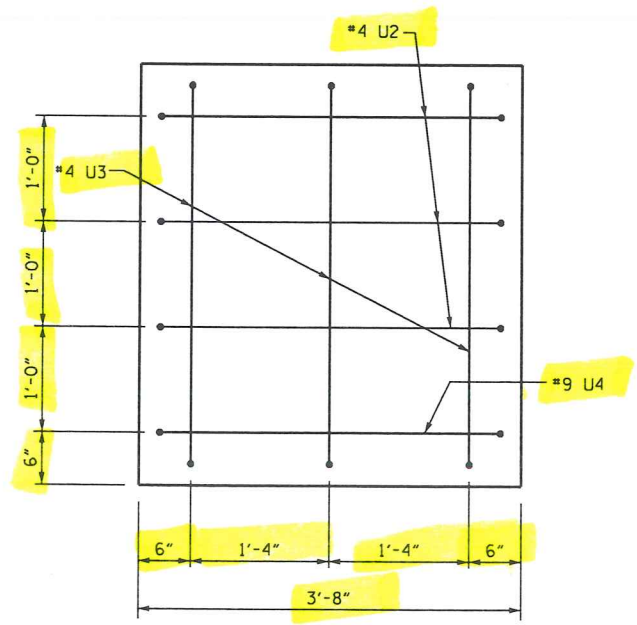




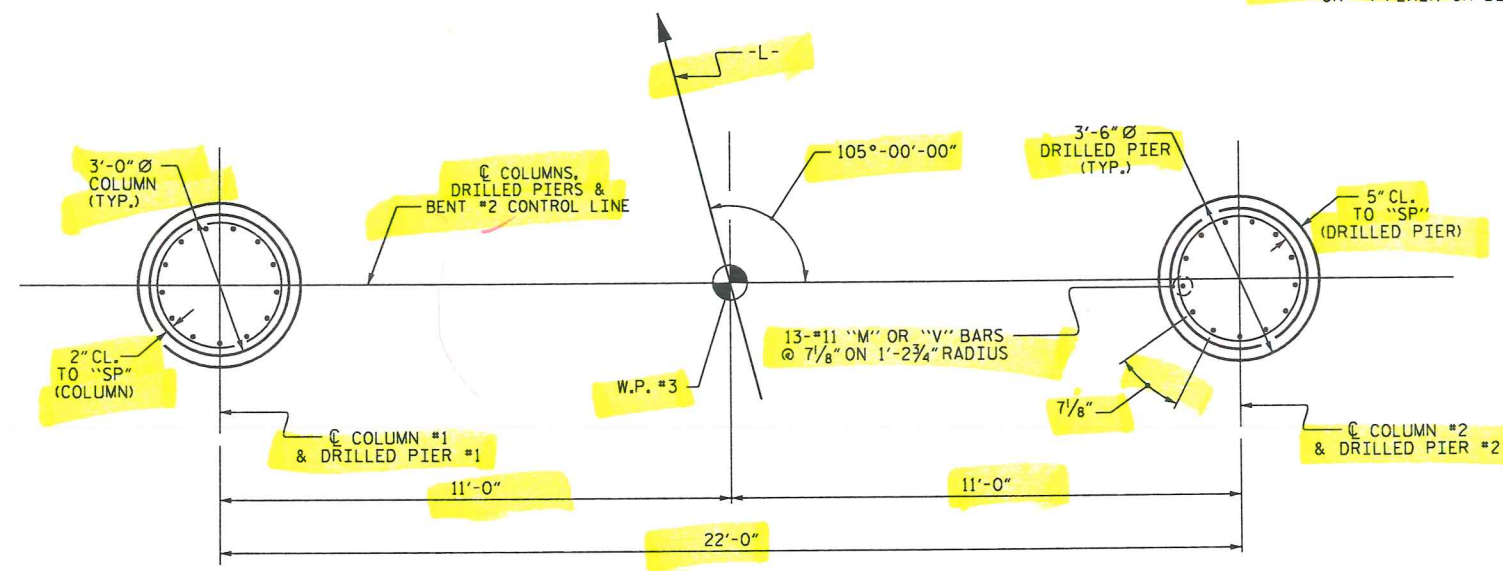
SECTION A-A



SECTION B-B

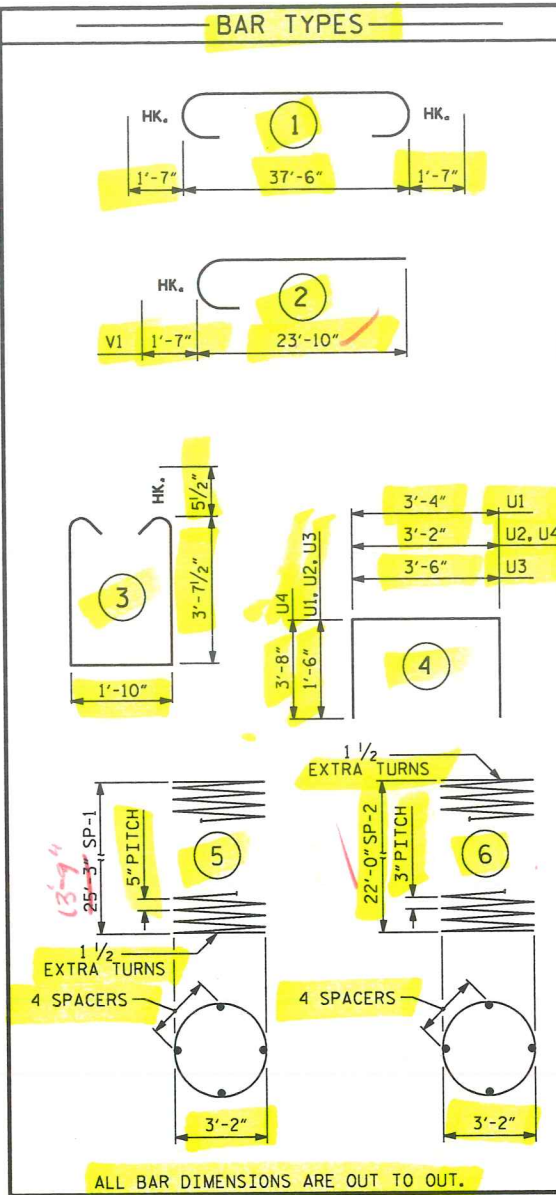


SECTION X-X  
(TYPICAL BOTH ENDS)



PLAN OF COLUMNS AND DRILLED PIERS

(DIMENSIONS AND REINFORCING STEEL ARE TYPICAL FOR EACH COLUMN AND DRILLED PIER)



ALL BAR DIMENSIONS ARE OUT TO OUT.  
 \*\*\* THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.  
 \*\* THE SP-2 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR.

▲ NO SEPARATE PAYMENT WILL BE MADE FOR CSL TUBES. CSL TUBES WILL BE INCLUDED IN THE UNIT BID PRICE FOR DRILLED PIERS.

BILL OF MATERIAL					
BENT 2					
BAR NO.	NO.	SIZE	TYPE	WEIGHT	
B1	11	#11	STR	37'-8"	2,201
B2	7	#11	1	40'-8"	1,512
B3	8	#5	STR	37'-8"	314
B4	7	#4	STR	15'-8"	73
M1	26	#11	STR	22'-1	2
S1	96	#5	3	10'-0"	1001
U1	43	#4	4	6'-4"	182
U2	6	#4	4	6'-2"	25
U3	6	#4	4	6'-6"	26
U4	2	#9	4	10'-6"	71
V1	26	#11	2	25'-5"	3,511
REINFORCING STEEL				14,653	LBS.
SPIRAL COLUMN REINFORCING STEEL				982	LBS.
SP-1	2	***	5	561'-3"	982
SP-2	2	***	6	759'-0"	508
TOTAL SPIRAL COLUMN REINFORCING STEEL				1,581	LBS.
CLASS A CONCRETE BREAKDOWN					
POUR 2 (COLUMNS)				11.4	CU.YDS.
POUR 3 (CAP)				21.3	34.9
TOTAL CLASS A CONCRETE				46.3	CU.YDS.
3'-6" Ø DRILLED PIERS					
DRILLED PIER CONCRETE POUR 1 (DRILLED PIERS)				10.2	34.7
3'-6" Ø DRILLED PIERS IN SOIL :				50.50	LIN. FT.
3'-6" Ø DRILLED PIERS NOT IN SOIL :				24.00	LIN. FT.
▲ CSL TUBES				316.00	LIN. FT.

PROJECT NO. B-5670  
 NASH COUNTY  
 STATION: 16+98.00 -L-  
 SHEET 2 OF 2



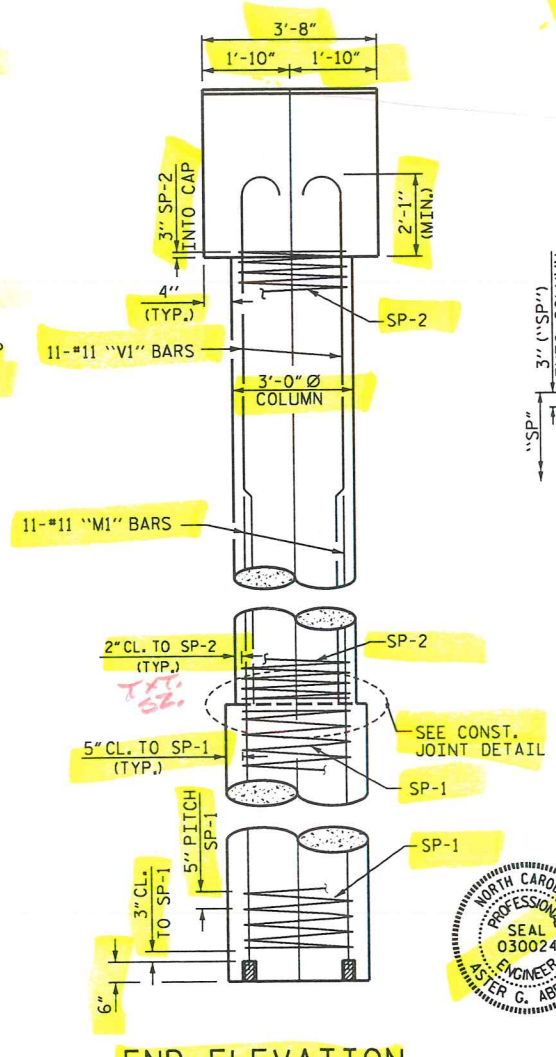
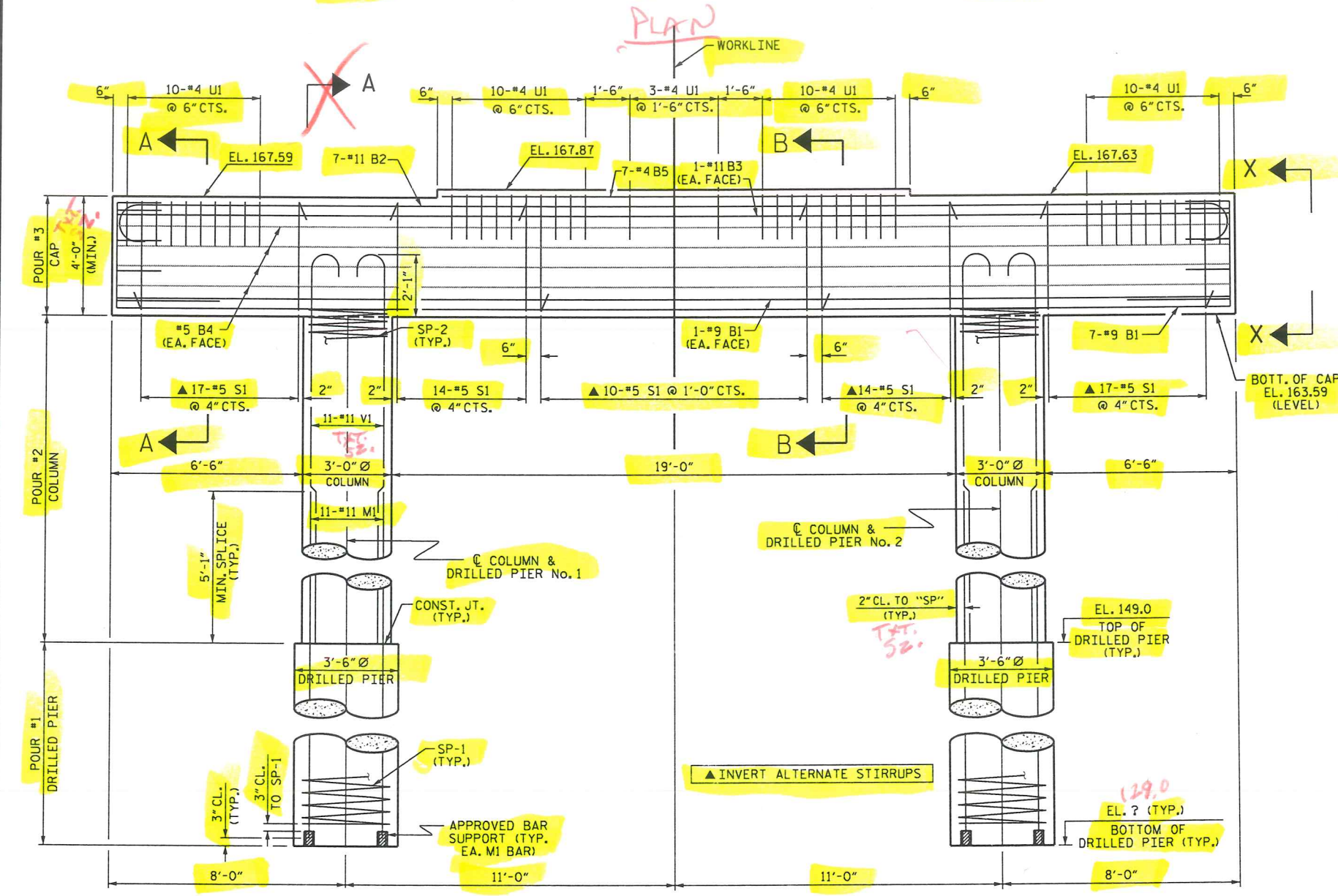
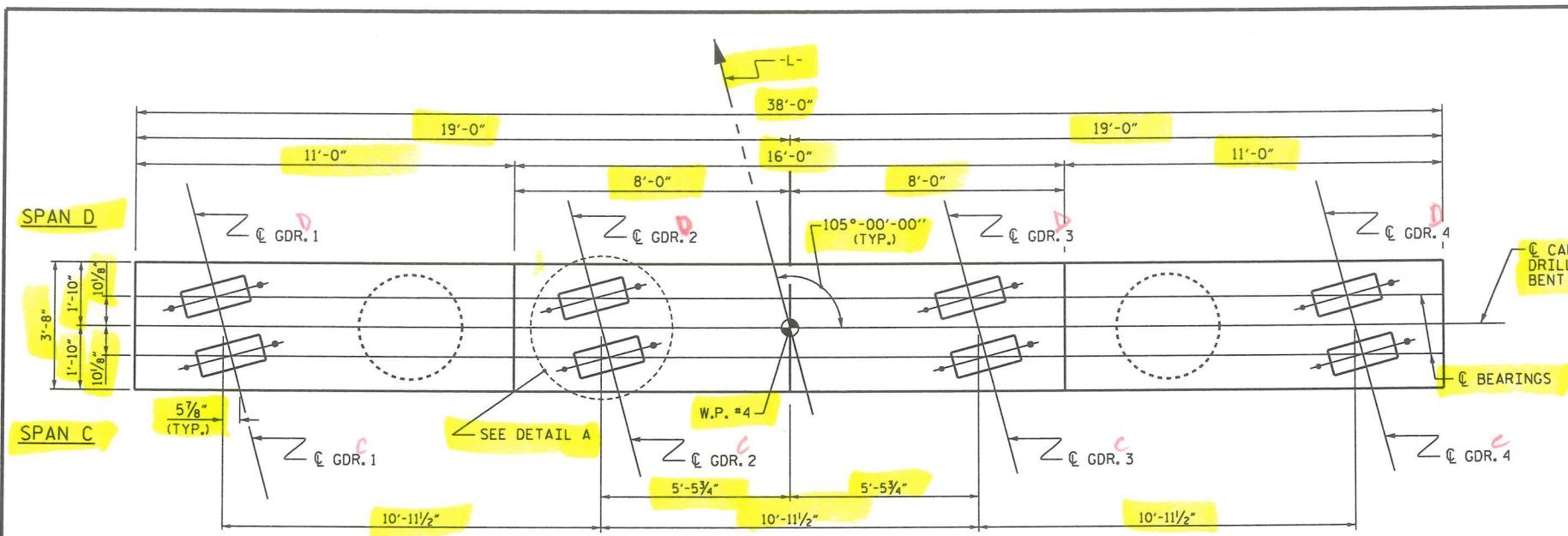
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUBSTRUCTURE  
 BENT #2

DRAWN BY: M.M. AHMED DATE: AUG 2020  
 CHECKED BY: DATE: -  
 DESIGN ENGINEER OF RECORD: M.M. AHMED DATE: -

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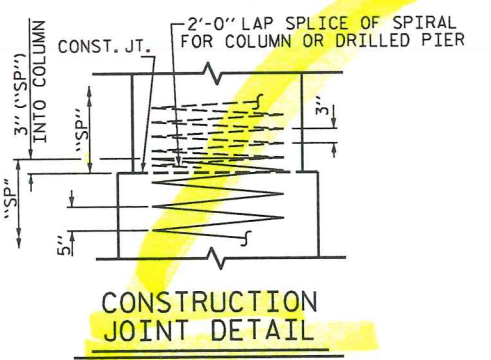
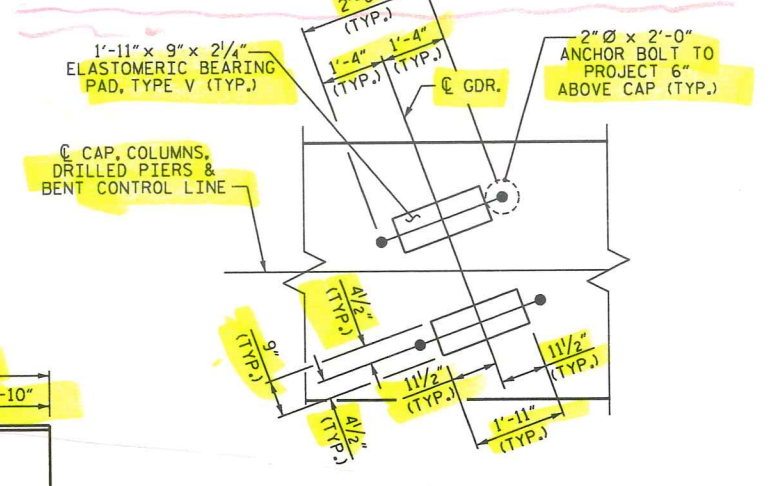




**NOTES**

- STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS.
- HOOKS ON #4 BARS MAY BE TURNED AS NECESSARY FOR PLACING REINFORCING STEEL.
- ALL STEEL IN THE DRILLED PIERS IS INCLUDED IN THE PAY ITEMS FOR "REINFORCING STEEL" AND "SPIRAL COLUMN REINFORCING STEEL" OR "EPOXY COATED SPIRAL COLUMN REINFORCING STEEL".
- THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE LONGITUDINAL REINFORCEMENT FOR THE DRILLED PIERS IS DETAILED WITH 3 FEET OF EXTRA LENGTH.
- SPLICING OF THE LONGITUDINAL BARS IN THE DRILLED PIER WILL NOT BE PERMITTED.
- THE LOCATION OF THE CONSTRUCTION JOINT IN THE DRILLED PIERS IS BASED ON AN APPROXIMATE GROUND LINE ELEVATION. IF THE CONSTRUCTION JOINT IS ABOVE THE ACTUAL GROUND ELEVATION, THE CONTRACTOR SHALL PLACE THE CONSTRUCTION JOINT 1 FOOT BELOW THE GROUND LINE.

**FOR DRILLED PIER....**



PROJECT NO. **B-5670**

**NASH** COUNTY

STATION: **16+98.00 -L-**

SHEET 1 OF 2



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

**SUBSTRUCTURE  
BENT 3**

DRAWN BY: **M.M. AHMED** DATE: **AUG 2020**

CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

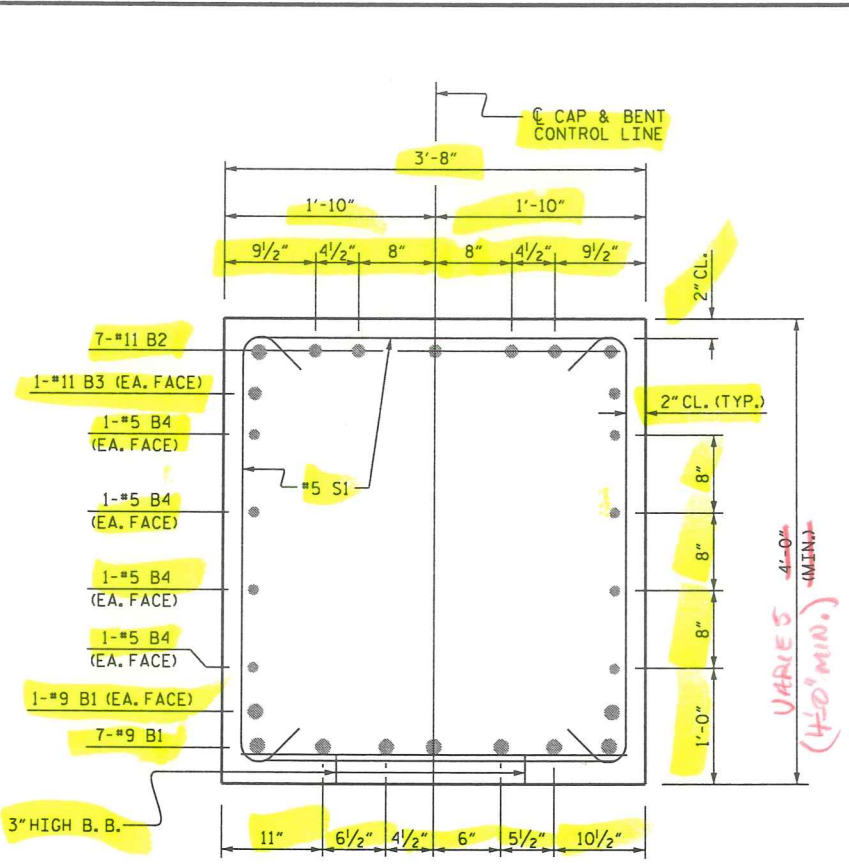
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DIMENSIONS & REINFORCING STEEL ARE TYPICAL FOR EACH COLUMN & DRILLED PIER UNLESS OTHERWISE NOTED.

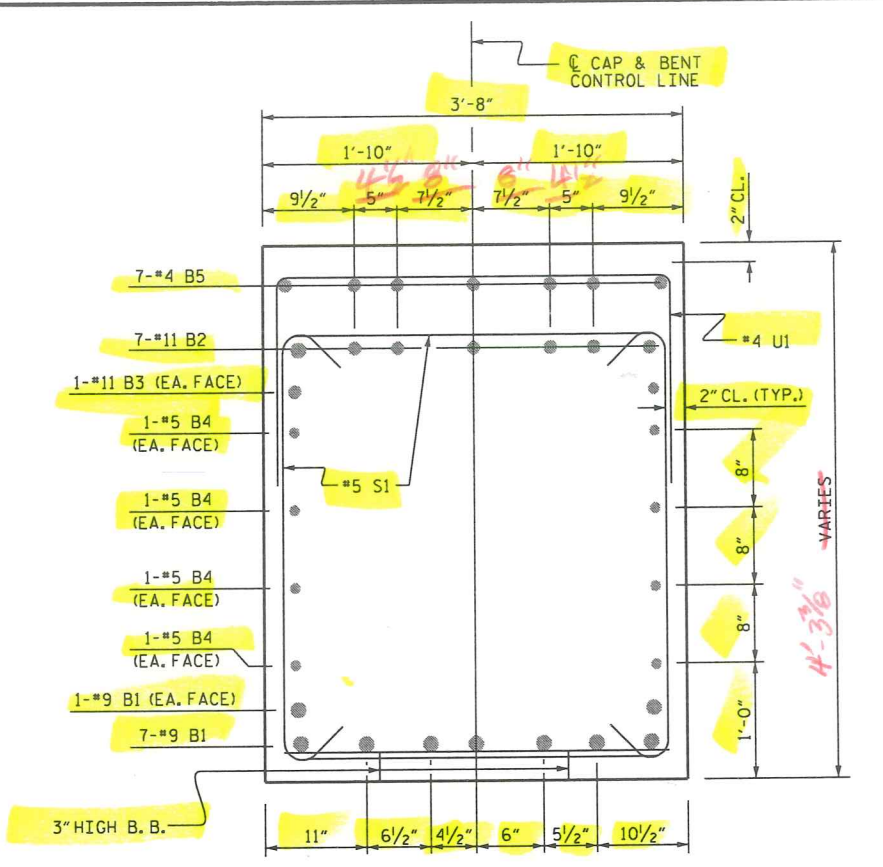
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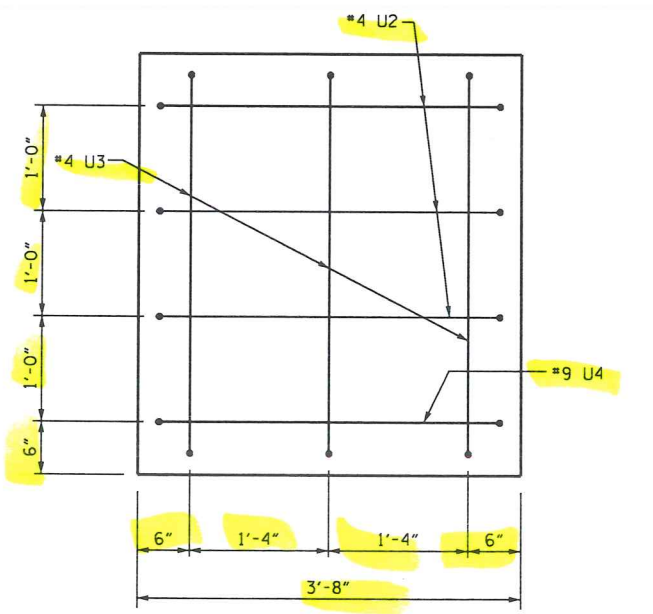




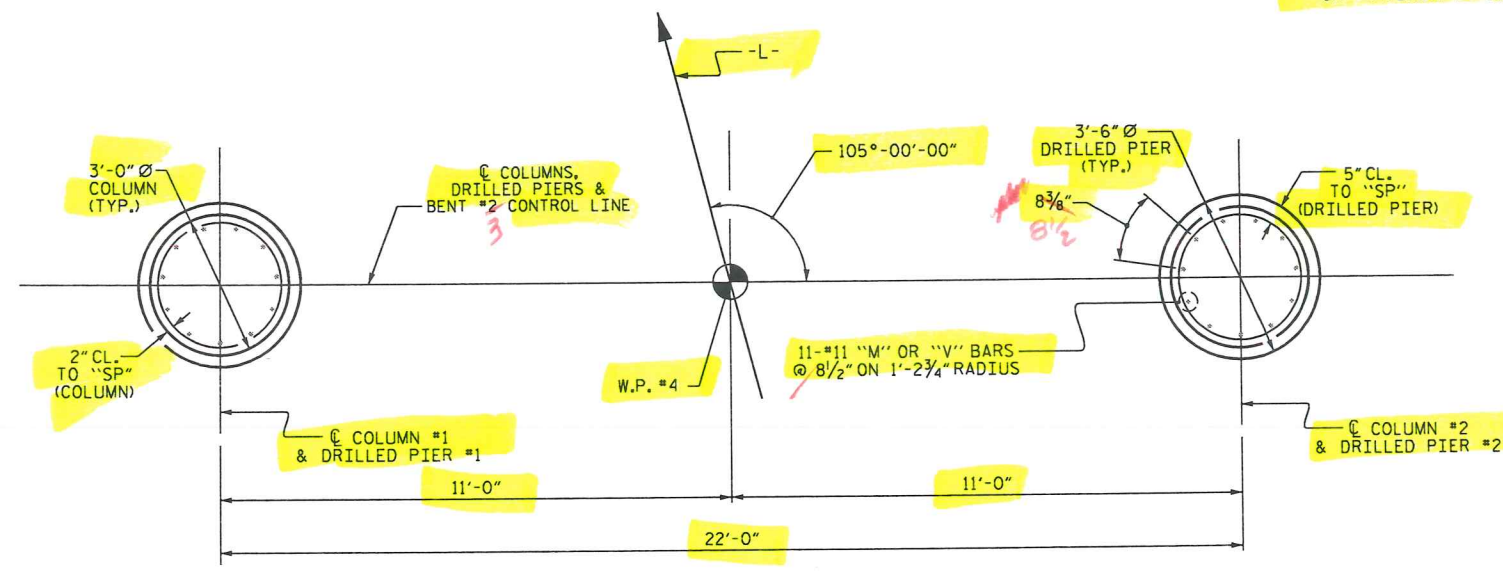
SECTION A-A



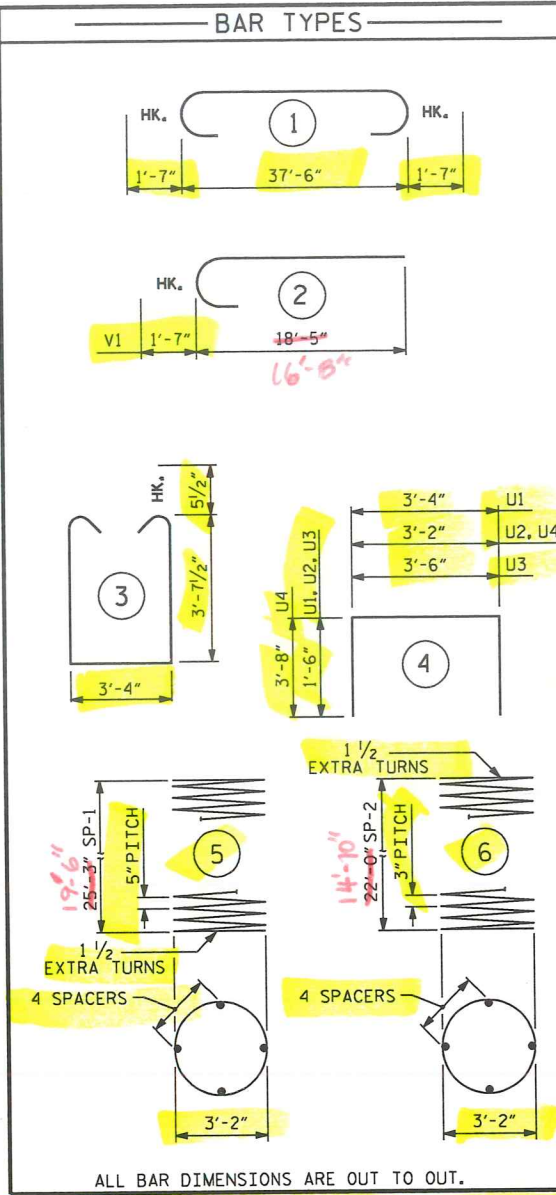
SECTION B-B



SECTION X-X  
(TYPICAL BOTH ENDS)



PLAN OF COLUMNS AND DRILLED PIERS  
(DIMENSIONS AND REINFORCING STEEL ARE TYPICAL FOR EACH COLUMN AND DRILLED PIER)



ALL BAR DIMENSIONS ARE OUT TO OUT.  
 \*\*\* THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.  
 \*\*\* THE SP-2 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR.  
 ▲ NO SEPARATE PAYMENT WILL BE MADE FOR CSL TUBES. CSL TUBES WILL BE INCLUDED IN THE UNIT BID PRICE FOR DRILLED PIERS.

BILL OF MATERIAL					
BENT 3					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	9	#9	STR	37'-8"	1,153
B2	7	#11	1	40'-8"	1,512
B3	2	#11	STR	37'-8"	400
B4	8	#5	STR	37'-8"	314
B5	7	#4	STR	15'-8"	73
M1	22	#11	STR	27'-10"	?
S1	72	#5	3	11'-6"	864
U1	43	#4	4	6'-4"	182
U2	6	#4	4	6'-2"	25
U3	6	#4	4	6'-6"	26
U4	2	#9	4	10'-6"	71
V1	22	#11	2	20'-0"	2,338
REINFORCING STEEL				14,653	LBS.
SPIRAL COLUMN REINFORCING STEEL				325	LBS.
SP-1	2	***	5	561'-3"	982
SP-2	2	**	6	495'-0"	331
TOTAL SPIRAL COLUMN REINFORCING STEEL				1503	LBS.
TOTAL CLASS A CONCRETE				42.5	CU.YDS.
CLASS A CONCRETE BREAKDOWN					
POUR 2 (COLUMNS)				7.7	7.6 CU.YDS.
POUR 3 (CAP)				21.3	34.9 CU.YDS.
TOTAL CLASS A CONCRETE				29.0	
3'-6" Ø DRILLED PIERS					
DRILLED PIER CONCRETE POUR 1 (DRILLED PIERS)				14.3	34.7 CU.YDS.
3'-6" Ø DRILLED PIERS IN SOIL				50.50	LIN. FT.
3'-6" Ø DRILLED PIERS NOT IN SOIL				24.00	LIN. FT.
▲ CSL TUBES				316.00	LIN. FT.

PROJECT NO. B-5670  
 NASH COUNTY  
 STATION: 16+98.00 -L-  
 SHEET 2 OF 2

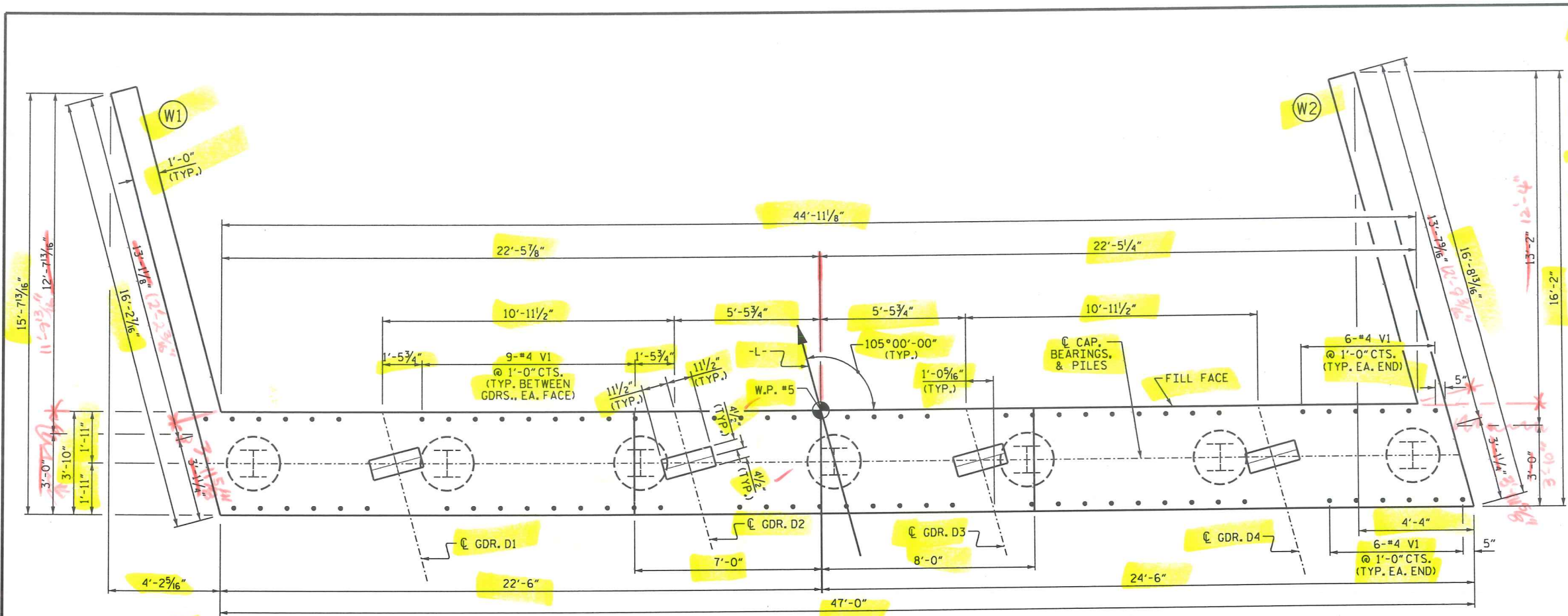


DRAWN BY: M.M. AHMED DATE: AUG 2020  
 CHECKED BY: DATE: -  
 DESIGN ENGINEER OF RECORD: M.M. AHMED DATE: -

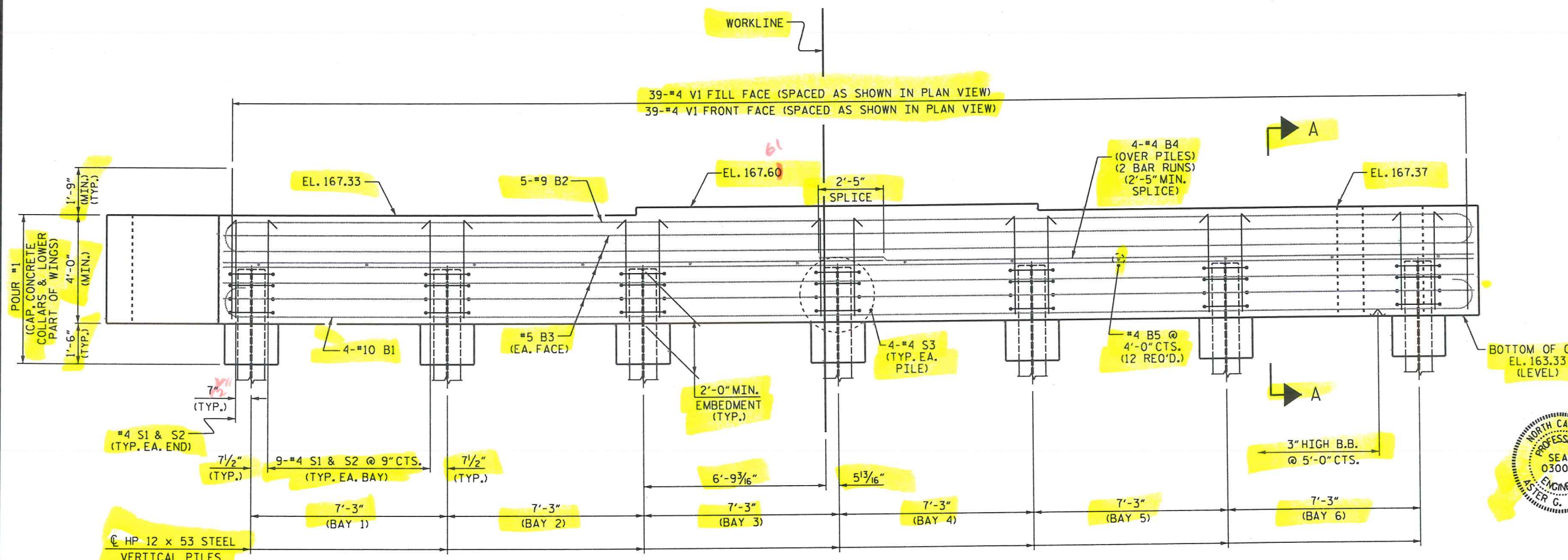
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PLAN



ELEVATION

NOTES

STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR #4 V1 BARS.

SEE THE SUPERSTRUCTURE SHEETS FOR UPPER PART OF INTEGRAL END BENT DETAIL.

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT UPPER PART OF INTEGRAL PORTION AND WINGS ARE TO BE POURED WITH THE SUPERSTRUCTURE.

SEE SUPERSTRUCTURE PLANS OF SPANS.

THE TOP SURFACE OF POUR #1 OF THE END BENT CAP AND WINGS, EXCLUDING THE BEARING AREA, SHALL BE RAKED TO A DEPTH OF 1/4".

STEEL #4-PILE POINTS...

PROJECT NO. B-5670  
 NASH COUNTY  
 STATION: 16+98.00 -L-  
 SHEET 1 OF 3



STATE OF NORTH CAROLINA  
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 RALEIGH

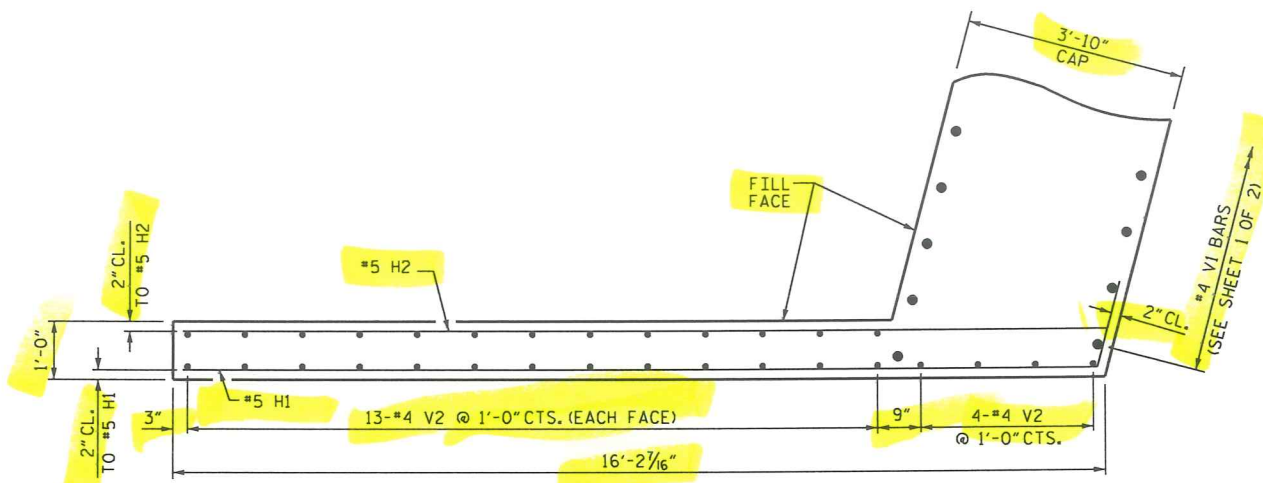
SUBSTRUCTURE  
 INTEGRAL  
 END BENT 2

DRAWN BY: M.M. AHMED DATE: 05/22  
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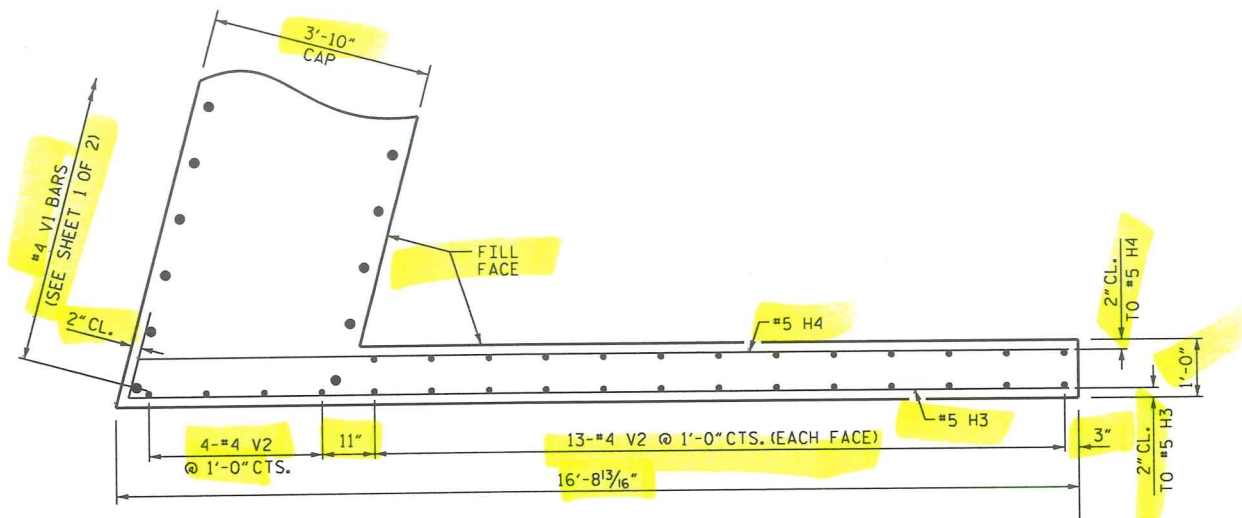
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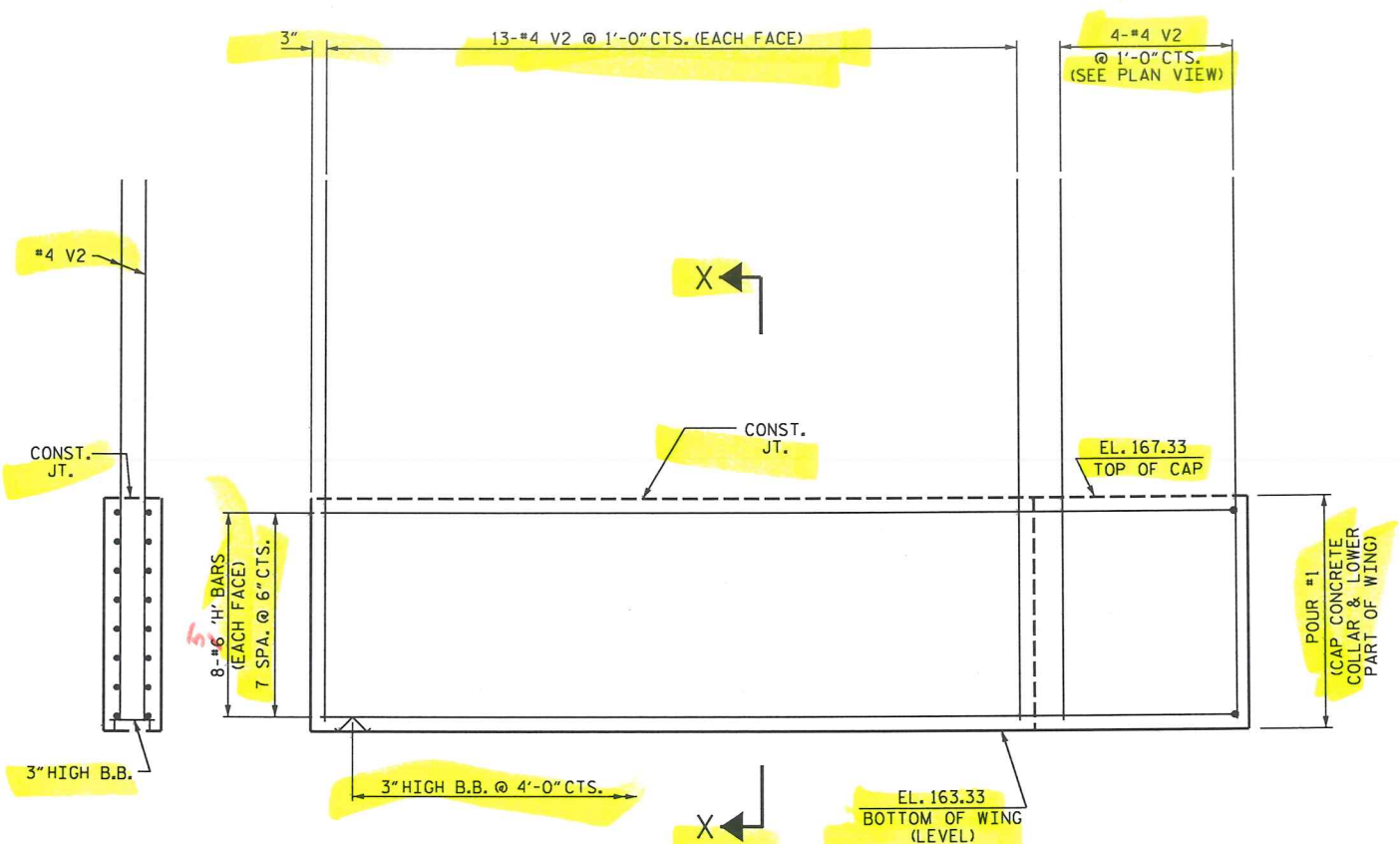




PLAN OF WING W1

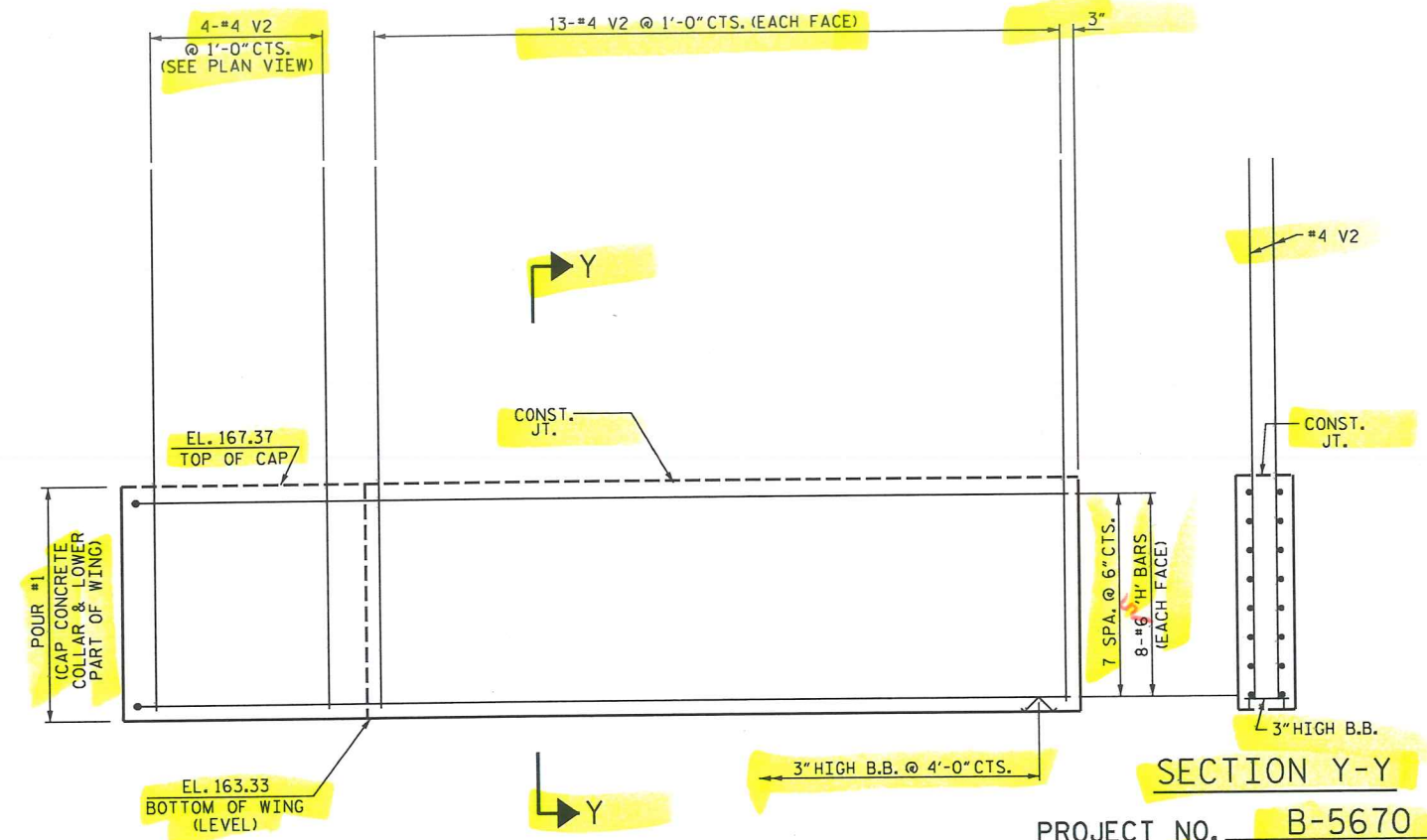


PLAN OF WING W2



SECTION X-X

ELEVATION OF WING W1



ELEVATION OF WING W2

SECTION Y-Y

PROJECT NO. B-5670  
 NASH COUNTY  
 STATION: 16+98.00 -L-  
 SHEET 2 OF 3



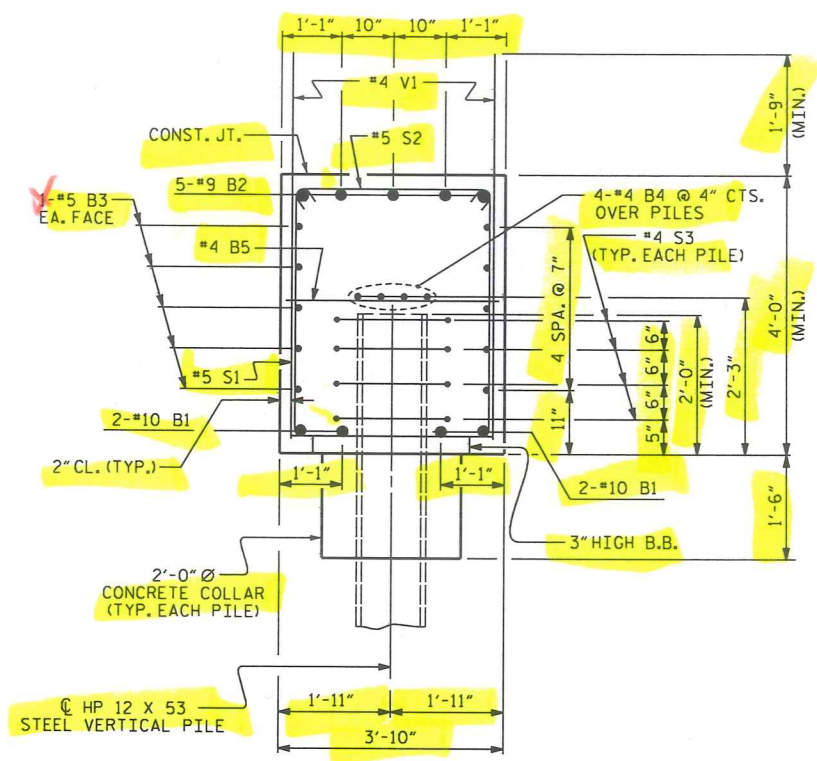
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUBSTRUCTURE  
 INTEGRAL  
 END BENT 2

DRAWN BY: M.M. AHMED DATE: 05/22  
 CHECKED BY: S. WANCE DATE: *MMV*  
 DESIGN ENGINEER OF RECORD: M.M. AHMED DATE:

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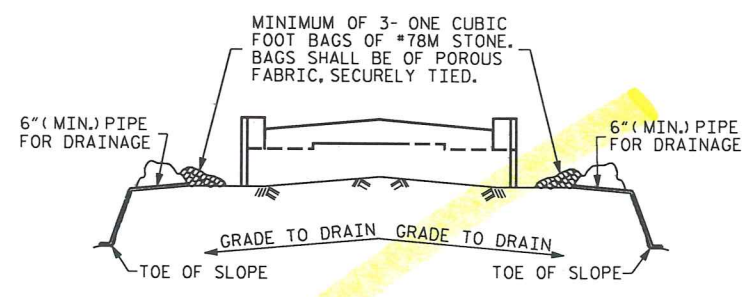
**SECTION A-A**

BILL OF MATERIAL				
INTEGRAL END BENT #2				
BAR	NO.	SIZE	TYPE	WEIGHT
B1	4	#10	1	849
B2	5	#9	1	833
B3	10	#5	STR	485
B4	8	#4	STR	131
B5	12	#4	STR	28
H1	8	#5	6	140
H2	8	#5	6	141
H3	8	#5	5	143
H4	8	#5	5	142
S1	56	#5	2	681
S2	56	#5	3	258
S3	28	#4	4	122
V1	62	#4	STR	231
V2	72	#4	STR	465
REINFORCING STEEL				= 4649 LBS
CLASS A CONCRETE				4558
POUR #1 (CAP, CONCRETE COLLARS & LOWER PART OF WINGS)				32.4 C.Y.
POUR #2 (UPPER PART OF WINGS)				7.2 C.Y.
TOTAL				32.4 C.Y.
HP 12 x 53 STEEL PILES				245 LIN. FT.
No. 7				4 EA.

BAR TYPES	

ALL BAR DIMENSIONS ARE OUT TO OUT.



MINIMUM OF 3- ONE CUBIC FOOT BAGS OF #78M STONE. BAGS SHALL BE OF POROUS FABRIC, SECURELY TIED.

6\" (MIN.) PIPE FOR DRAINAGE

GRADE TO DRAIN

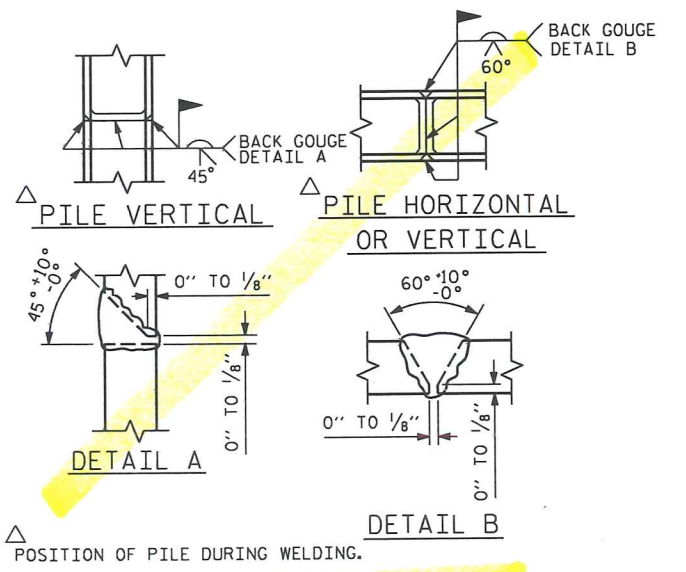
TOE OF SLOPE

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**

PROJECT NO. **B-5670**

**NASH** COUNTY

STATION: **16+98.00 -L-**

SHEET 3 OF 3



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

**SUBSTRUCTURE**  
**INTEGRAL**  
**END BENT 2**

DRAWN BY: **M.M. AHMED** DATE: **05/22**

CHECKED BY: **S. WANCE** DATE: **-**

DESIGN ENGINEER OF RECORD: **M.M. AHMED** DATE: **-**

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