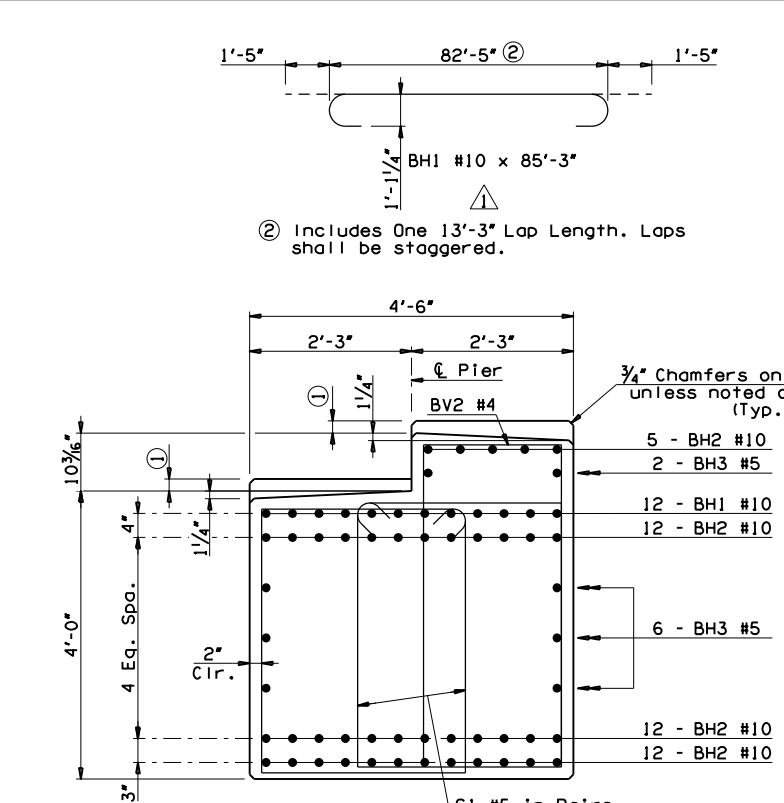
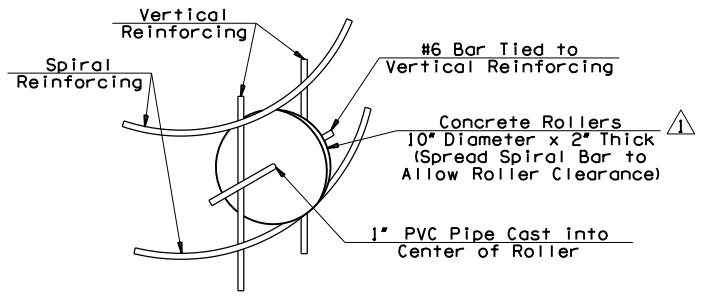
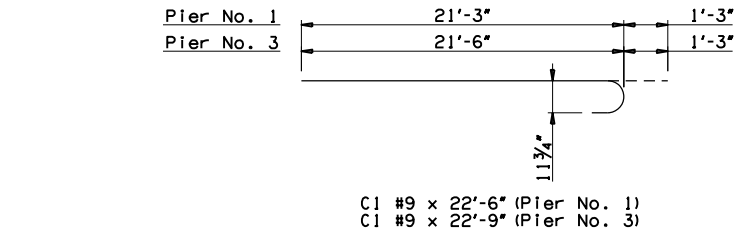


**NOTES:**  
 For Pier Nos. 1 & 3 construction details see Sheet No. 112.  
 For Pier No. 2 details see Sheet Nos. 114 & 115.  
 For Aesthetics shield details see Sheet Nos. 115A & 115B.

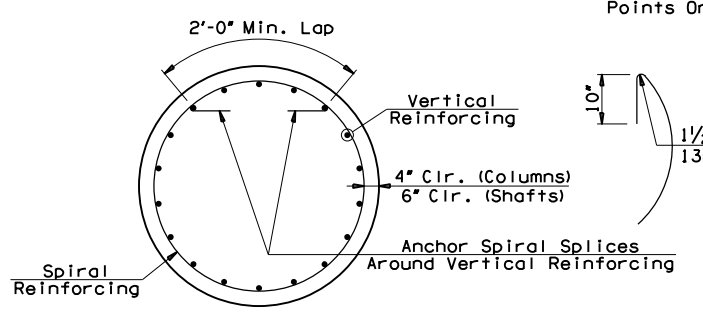


**TYPICAL SECTION THRU CAP**

① 2" Minimum Pedestal.

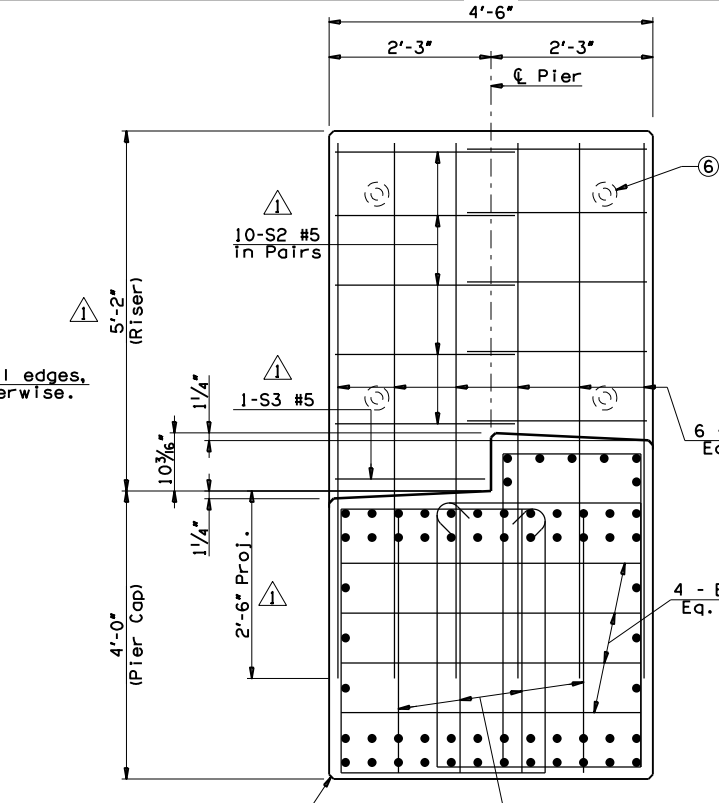


**DETAILS OF ROLLER INSTALLATION**

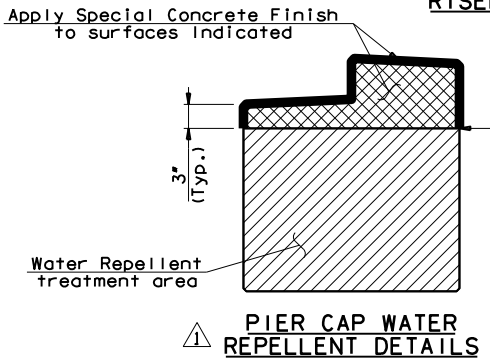


**DETAIL OF SPIRAL REINFORCING STEEL**

**NOTE:**  
 Spiral bars shall conform to AASHTO M32. Spiral bar length does not include lap. If lap is required, the length of the lap shall be as shown.

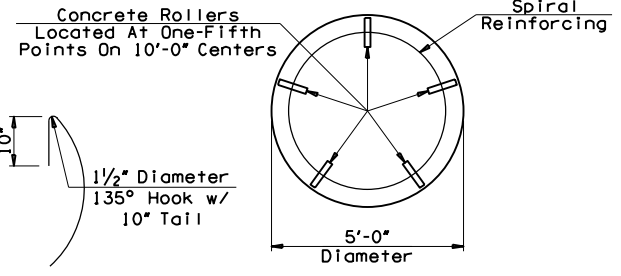


**END OF PIER CAP AND RISER REINFORCING**

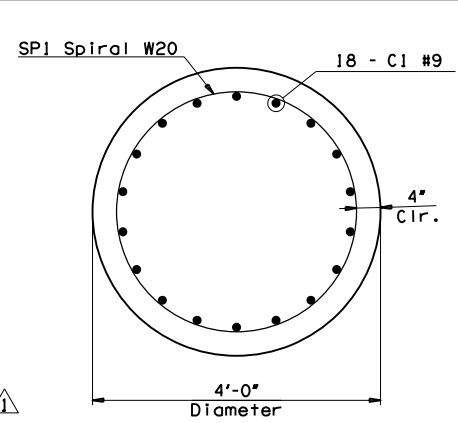


**PIER CAP WATER REPELLENT DETAILS**

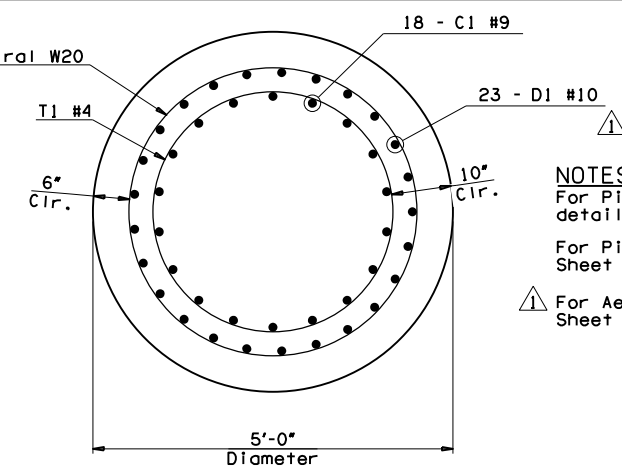
⑤ Mask sides and ends of Pier Cap along this line to provide a clean, straight finish at bottom of Special Concrete Finish Application. See Sheet No. 14 for Special Concrete Finish Specifications.



**ROLLER PLACEMENT**



**SECTION A-A**



**SECTION B-B**

⑥ 1/4" Dia. x 28" Threaded Rod w/A563 Nuts and 4" Dia. Washers. Cast-In-Place in shield. Cost to be included in other items of work. Typical.

**④ 3 DRILLED SHAFTS - PIER 1**

MARK	SIZE	NO.	FORM	LENGTH
REINFORCING STEEL				
D1	#10	69	STR.	19'-6"
SP2	W20	3	SPIRAL	515'-7"
T1	#4	27	BENT	12'-6"

**④ 3 DRILLED SHAFTS - PIER 3**

MARK	SIZE	NO.	FORM	LENGTH
REINFORCING STEEL				
D1	#10	69	STR.	21'-6"
SP2	W20	3	SPIRAL	565'-11"
T1	#4	27	BENT	12'-6"

④ Included in the price bid per Linear Foot of "DRILLED SHAFTS 60" DIAMETER".

**SUMMARY OF QUANTITIES - PIERS**

ITEM	UNIT	PIER NO. 1	PIER NO. 2	PIER NO. 3	TOTAL
SPECIAL CONCRETE FINISH	S.Y.	59.00	48.00	59.00	166.00
CLASS A CONCRETE	C.Y.	66.5	103.70	66.90	237.10
CLASS P CONCRETE	C.Y.	4.58	4.58	4.58	13.73
REINFORCING STEEL	LB.	577.19	738.48	590.00	1,905.67
EPOXY COATED REINFORCING STEEL	LB.	27,652.00	48,322.00	27,698.00	103,672.00
WATER REPELLENT (VISUALLY INSPECTED)	S.Y.	82.00	89.00	82.00	253.00
DRILLED SHAFTS 60" DIAMETER	L.F.	60.00	66.00	66.00	192.00
CROSSHOLE SONIC LOGGING	EA.	1.00	1.00	1.00	3.00

**PIER TABLE OF VARIABLES**

PIER	STA. "A"	ELEV. "B"	ELEV. "C"	ELEV. "D"	ELEV. "E"	ELEV. "F"	ELEV. "G"	ELEV. "H"	ELEV. "I"	ELEV. "J"	ELEV. "K"
1	105+82.02	719.16	719.36	719.57	719.77	718.31	718.52	718.72	718.92	719.00	718.15
3	108+02.02	719.13	719.34	719.54	719.74	718.29	718.49	718.69	718.89	718.97	718.12

**BAR LIST - PIER NO. 1**

MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIATION
EPOXY COATED REINFORCING STEEL					
BH1	#10	12	BENT	85'-3"	-
BH2	#10	41	STR.	82'-5"	-
BH3	#5	8	STR.	72'-10"	-
BH4	#4	8	BENT	6'-0"	-
BV1	#4	8	BENT	5'-5"	-
BV2	#4	76	BENT	10'-11"	-
BV3	#5	12	BENT	15'-10"	-
C1	#9	54	BENT	22'-6"	-
P1	#4	70	BENT	5'-7"	-
P2	#4	21	BENT	8'-0"	-
P3	#4	21	BENT	7'-8"	-
S1	#5	152	BENT	13'-5"	-
S2	#5	20	BENT	8'-3"	-
S3	#5	2	BENT	7'-1"	-
SU	#3	44	BENT	10'-9"	-
SV	#4	28	STR.	10'-1" AVG.	9'-8" TO 10'-6"
REINFORCING STEEL					
SP1	W20	3	SPIRAL	282'-11"	-

**BAR LIST - PIER NO. 3**

MARK	SIZE	NO.	FORM	LENGTH	LENGTH VARIATION
EPOXY COATED REINFORCING STEEL					
BH1	#10	12	BENT	85'-3"	-
BH2	#10	41	STR.	82'-5"	-
BH3	#5	8	STR.	72'-10"	-
BH4	#4	8	BENT	6'-0"	-
BV1	#4	8	BENT	5'-5"	-
BV2	#4	76	BENT	10'-11"	-
BV3	#5	12	BENT	15'-10"	-
C1	#9	54	BENT	22'-9"	-
P1	#4	70	BENT	5'-7"	-
P2	#4	21	BENT	8'-0"	-
P3	#4	21	BENT	7'-8"	-
S1	#5	152	BENT	13'-5"	-
S2	#5	20	BENT	8'-3"	-
S3	#5	2	BENT	7'-1"	-
SU	#3	44	BENT	10'-9"	-
SV	#4	28	STR.	10'-1" AVG.	9'-8" TO 10'-6"
REINFORCING STEEL					
SP1	W20	3	SPIRAL	288'-9"	-

② Includes one 13'-3" lap lengths.  
 ③ Includes one 3'-8" lap lengths.

145TH OVER I-44 TULSA & ROGERS COUNTIES DESIGN JMO 2/14  
 BRIDGE "A" DETAIL SJL 2/14  
 CHECK MUY 10/14  
**PIER DETAILS**  
 (SHEET 2 OF 6)  
**GARVER**  
 STATE OF OKLAHOMA DEPARTMENT OF TRANSPORTATION  
 JOB PIECE NO. 21899(04) SHEET NO. 113