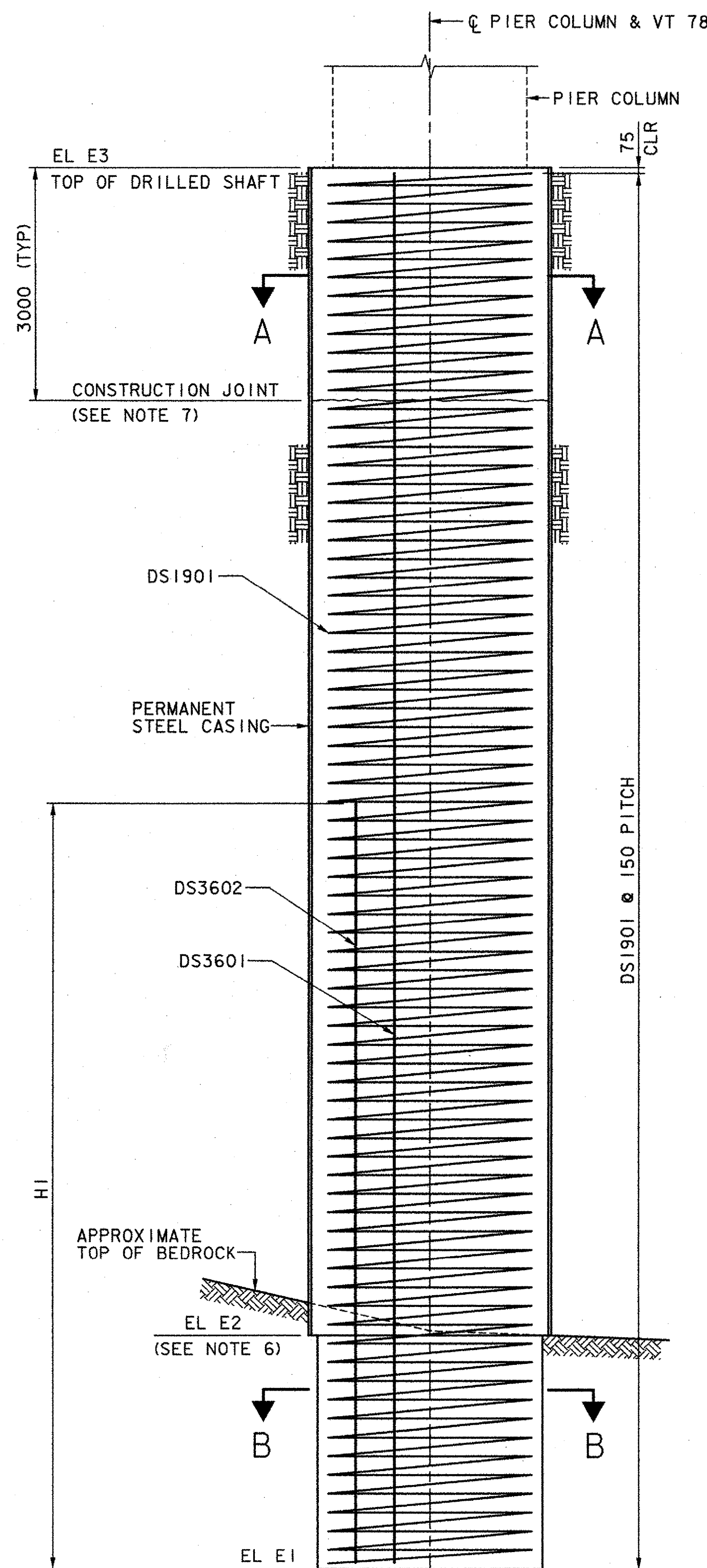
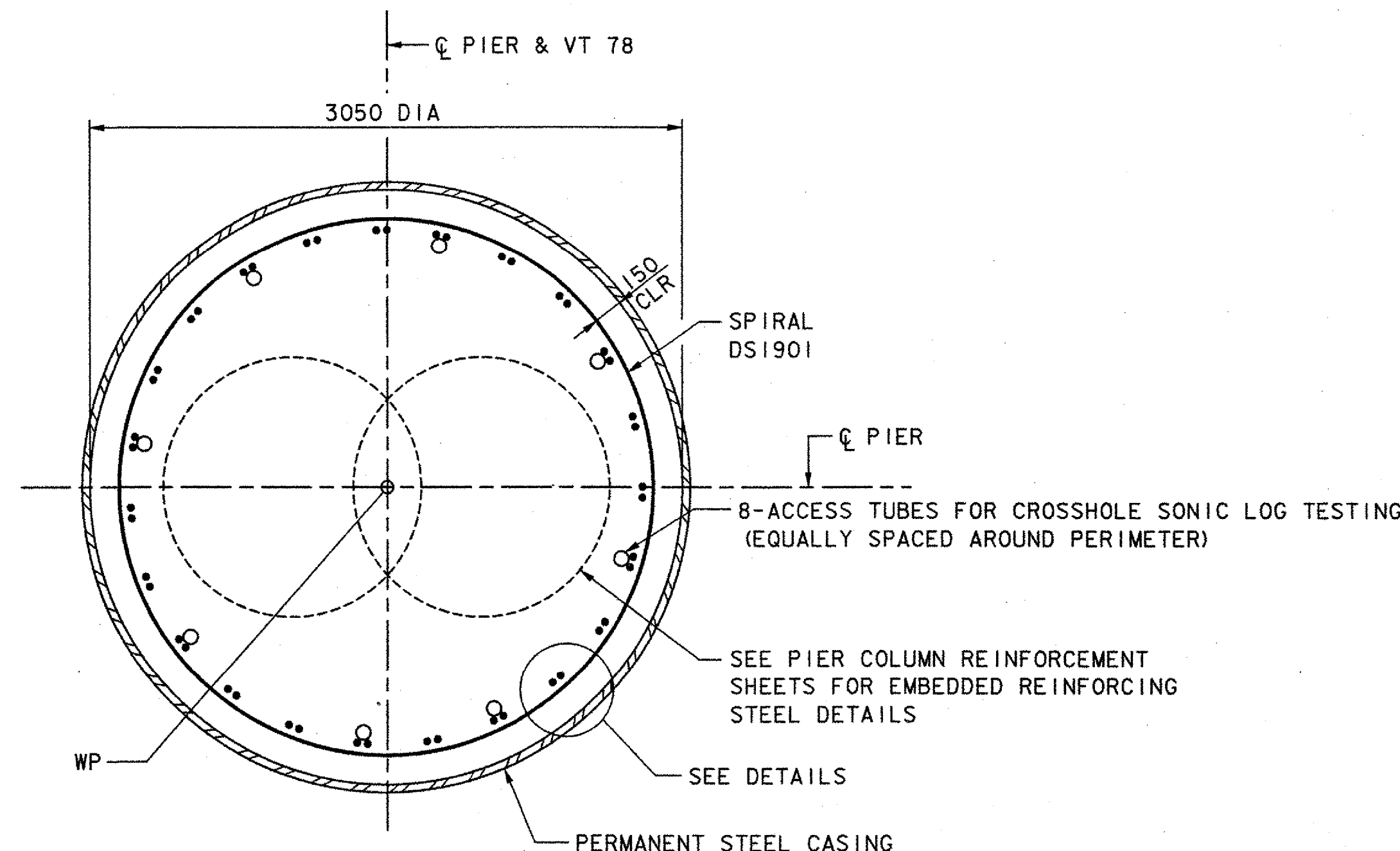


DRILLED SHAFT NOTES:

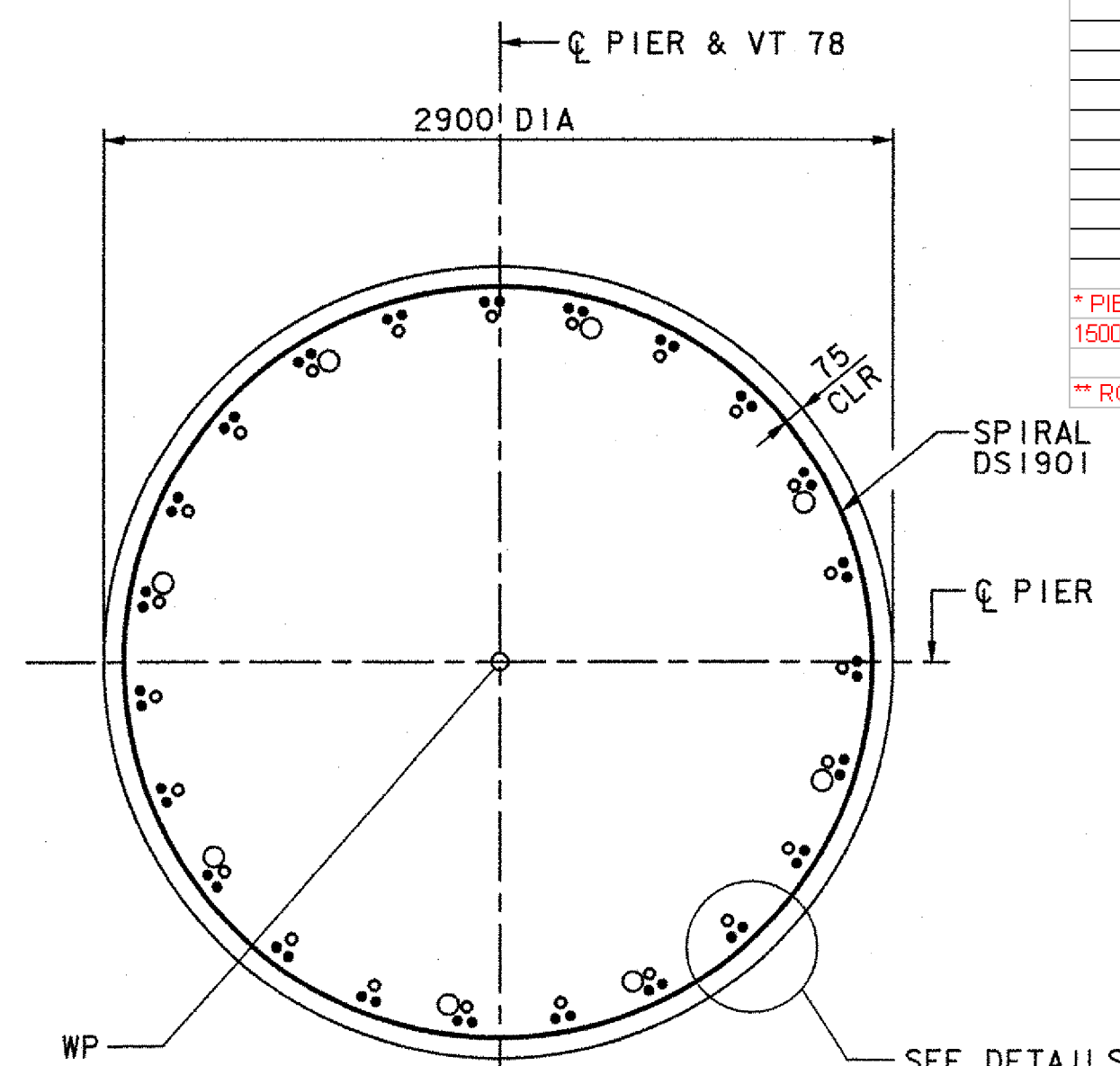
1. THE CASING MAY BE USED AS A TEMPORARY COFFERDAM FOR CONSTRUCTING THE PIER COLUMNS. THE COLUMN FORMWORK CLEARANCES SHALL CONSIDER SHAFT ALIGNMENT AND LOCATION TOLERANCES.
2. VERTICAL REINFORCING AND SPIRAL REINFORCING (INCLUDING SPLICES) BELOW THE TOP OF THE DRILLED SHAFT SHALL BE INCLUDED IN THE COST OF ITEMS 512.31, DRILLED SHAFT IN EARTH (3.05 m DIA) AND 512.32, DRILLED SHAFT IN ROCK (2.90 m DIA) WITH THE FOLLOWING EXCEPTION: THE COST OF VERTICAL REINFORCING AND SPIRALS IN THE PIER COLUMN EXTENDING BELOW THE TOP OF THE DRILLED SHAFT SHALL BE INCLUDED IN ITEM 507.15, REINFORCING STEEL.
3. VERTICAL REINFORCING SHALL NOT BE SPLICED WITHIN 4400 mm OF THE BASE OF THE PERMANENT STEEL CASING. NO MORE THAN 50% OF THE VERTICAL REINFORCING MAY BE SPLICED AT ANY LOCATION. MINIMUM LAP LENGTH SHALL BE 2500 mm FOR VERTICAL REINFORCING.
4. THE SPIRAL REINFORCEMENT SHALL TERMINATE WITH 1/2 TURNS AT EACH END OF THE SHAFT. LAP LENGTHS FOR SPIRALS SHALL BE 48 BAR DIAMETERS.
5. ALL CONCRETE BELOW THE TOP OF THE DRILLED SHAFT SHALL BE INCLUDED IN THE COST OF ITEMS 512.31, DRILLED SHAFT IN EARTH (3.05 m DIA) AND 512.32, DRILLED SHAFT IN ROCK (2.90 m DIA).
6. ELEVATION E2 CORRESPONDS TO THE MINIMUM ROCK SOCKET EMBEDMENT REQUIRED BY DESIGN AT EACH SHAFT BASED ON TIP ELEVATION E1. THE ACTUAL TOP OF BEDROCK MAY BE HIGHER THAN ELEVATION E2. IF THE TOP OF BEDROCK IS LOWER THAN ELEVATION E2, THE BRIDGE DESIGNER SHALL BE NOTIFIED.
7. ELIMINATE CONSTRUCTION JOINT AT SHAFT NO 3 AND NO 11.



TRANSVERSE ELEVATION
(EMBEDDED PIER COLUMN REINFORCING NOT SHOWN)
NOT TO SCALE



SECTION A-A
SCALE: 1:25



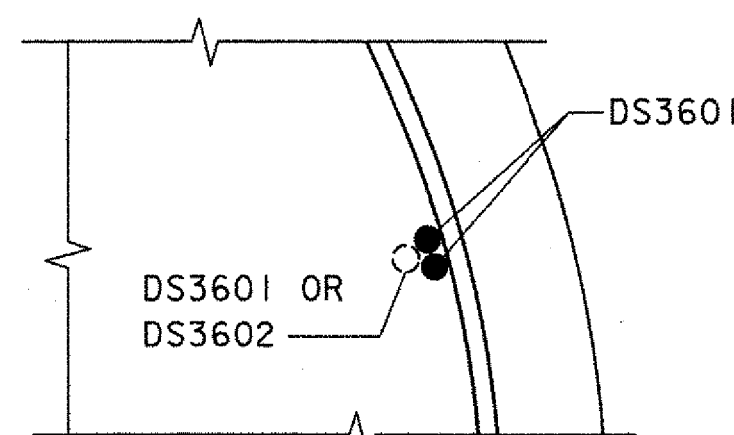
SECTION B-B
SCALE: 1:25

SHAFT #	REV. E2	REV. E1	3602 Bars	3601 Bars
1	22.41	19.31	Added 8 Bars	Splice 1.09m
2	No Change	No Change	No Change	No Change
3	22.24	19.14	No Change	*
4	18.37	15.37	No Change	Splice 2.430m
5	15.22	12.12	No Change	Splice 0.78m
6	11.79	8.79	No Change	Splice 0.81m
7	10.13	7.13	Splice 0.67m	Splice 0.67m
8	19.18	16.18	No Change	Splice 0.82m
9	17.67	14.67	No Bars	2 of 3 Bars Spliced 0.93m
10	18.63	15.63	Added 8 Bars	Splice 1.57m
11	20.2	17.2	No Bars	Splice 0.60m
12	14.32	11.32	No Change	Splice Not Required
13	13.24	10.24	No Change	Splice 0.66m
14	11.49	8.49	No Change	*
15	No Change	No Change	No Change	No Change
16	9.65	6.55	No Change	Extended 1.06m
17	8.3	5.3	No Change	Extended 0.60 m
18	No Change	No Change	No Change	No Change
19	8.12**	5.1	No Change	No Change
20	No Change	No Change	No Change	No Change
21	10.23	7.23	No Change	No Change
22	No Change	No Change	No Change	No Change

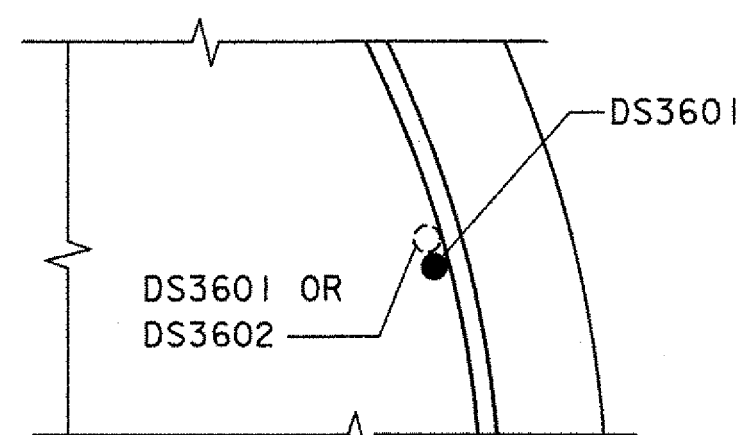
* PIER STEM SPIRALS ADDED ON AT BOTTOM OF CAGE TO MAINTAIN 1500 OVERLAP BETWEEN DRILLED SHAFT SPIRALS AND PIER SPIRALS
** ROCK SOCKET SHORTENED TO 3.0 METERS

SHAFT NO	SHAFT DIMENSIONS				LONGITUDINAL REINFORCEMENT				
	STATION (m)	EL E1 (m)	EL E2 (m)	EL E3 (m)	DETAIL TYPE	TOTAL NO OF BARS *	DS3601 NO OF BARS	DS3602 NO OF BARS	LENGTH HI (m)
1	11+017.400	20.400	23.500	27.000	1	40	40	-	-
2	11+064.800	12.500	15.600	25.500	3	93	93	-	-
3	11+112.200	19.600	22.700	25.500	1	44	44	-	-
4	11+159.600	17.800	20.800	25.500	2	72	72	-	-
5	11+207.000	12.900	15.222	26.000	3	99	66	33	10.68
6	11+254.400	9.600	12.600	26.000	3	117	78	39	12.22
7	11+301.800	7.800	10.800	26.000	3	123	82	41	13.16
8	11+349.200	17.000	20.000	26.000	2	78	78	-	-
9	11+396.600	15.600	18.600	24.000	3	87	87	-	-
10	11+444.000	17.400	20.400	24.000	2	72	72	-	-
11	11+491.400	17.800	20.800	23.000	2	78	78	-	-
12	11+538.800	11.400	14.400	25.000	3	117	78	39	10.91
13	11+586.200	11.100	14.100	26.500	3	99	66	33	12.41
14	11+633.600	8.800	11.800	26.500	3	93	62	31	15.41
15	11+681.000	6.200	9.300	26.500	3	123	82	41	14.33
16	11+728.400	7.800	10.900	26.500	3	99	66	33	14.74
17	11+775.800	5.900	8.900	26.000	3	99	66	33	17.03
18	11+823.200	4.700	9.200	26.000	2	78	39	39	21.60
19	11+870.600	5.100	9.700	26.000	3	117	78	39	14.77
20	11+918.000	2.700	7.200	26.000	3	93	62	31	20.35
21	11+965.400	5.600	10.100	26.500	3	93	62	31	15.22
22	12+012.800	9.500	12.500	26.000	3	99	66	33	12.58

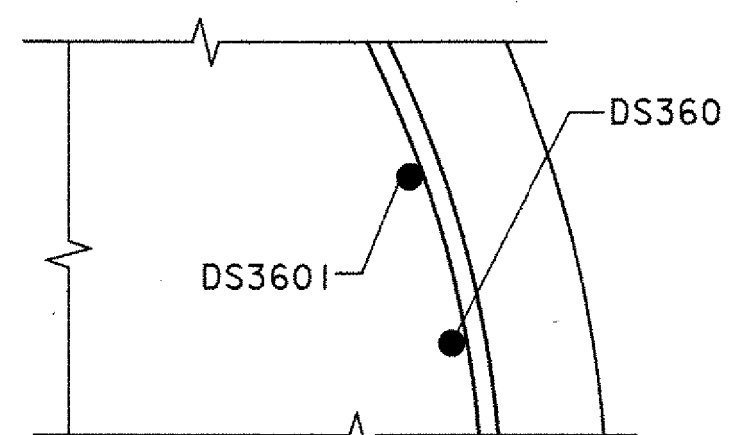
* THE CONTRACTOR SHALL PROVIDE THE AGENCY ONE EXTRA BAR (#36) PER SHAFT FOR TESTING PURPOSES. COST SHALL BE INCLUDED IN DRILLED SHAFT ITEMS.



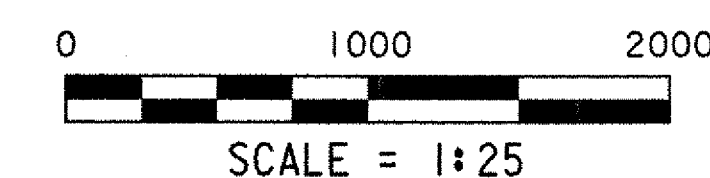
DETAIL - TYPE 3
NOT TO SCALE



DETAIL - TYPE 2
NOT TO SCALE



DETAIL - TYPE 1
NOT TO SCALE



REVISION TABLE			
NO.	DATE	DESCRIPTION	BY
△	3/9/04	REVISED NO OF BARS	SWJ

**STATE OF VERMONT
AGENCY OF TRANSPORTATION**

Town Of	ALBURG-SWANTON	Bridge No.	2
Highway No.	VT 78	Log Sta.	
		Surv. Sta.	

VT 78 OVER MISSISQUOI BAY

DRILLED SHAFT DETAILS

Designed By	A. S. ROBINSON	Drawn By	W. LAVERGNE (TS)
Checked By	S. W. JOHNSON	Date	11/03
		Bridge Design Supervisor	S. W. JOHNSON Date 11/03

PROJECT	ALBURG-SWANTON	PROJECT NO.	BRF 036-1 (1)
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I.G.C. Info.	File No. ZE072ds2	Sheet SS 41 of SS 57
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