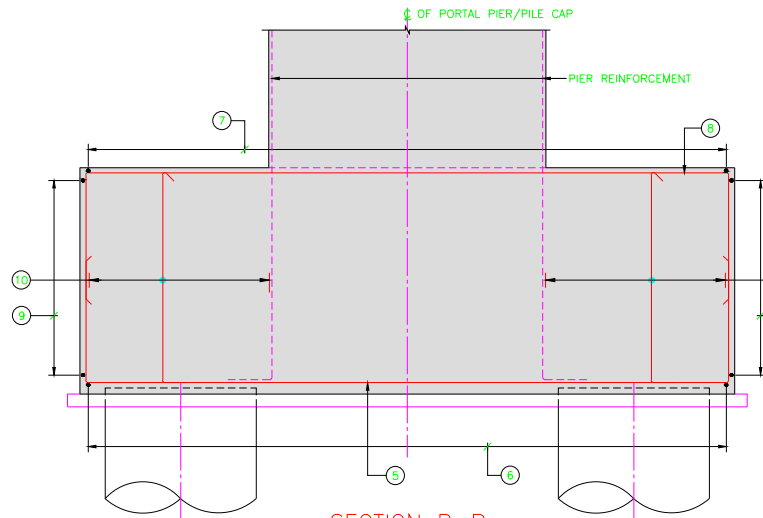
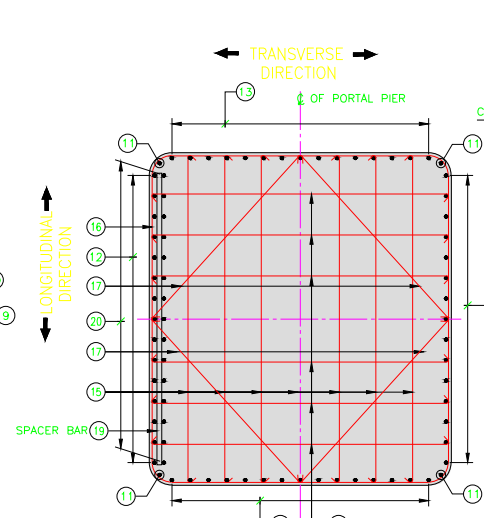


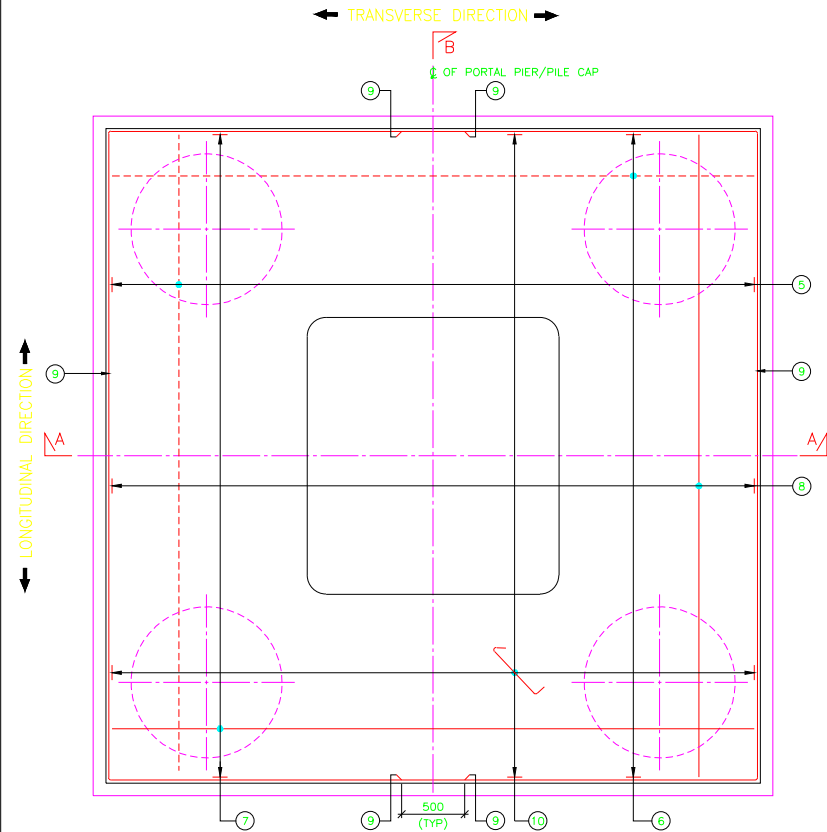
SECTION A-A  
(PORTAL PIER REINF. NOT SHOWN FOR CLARITY)  
(SCALE 1:30)



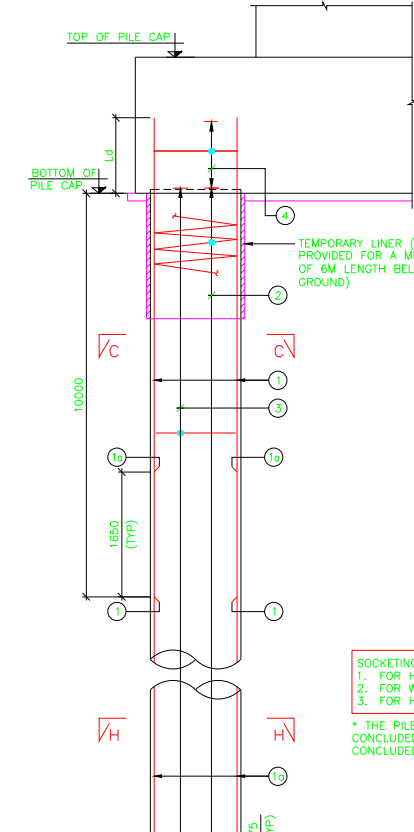
SECTION B-B  
(PORTAL PIER REINF. NOT SHOWN FOR CLARITY)  
(SCALE 1:30)



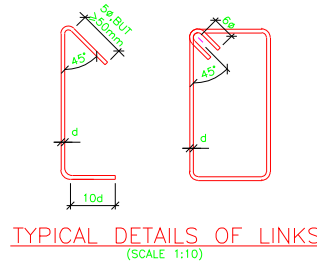
SECTION F-F  
(SCALE 1:25)



PLAN OF LHS & RHS PILE CAP  
(SCALE 1:30)  
(BAR NO. 10 SHALL NOT BE PROVIDED ABOVE THE PILE & BELOW THE PIER)  
(LAPPING OF REINFORCEMENT IS NOT PERMITTED IN PILE CAP)

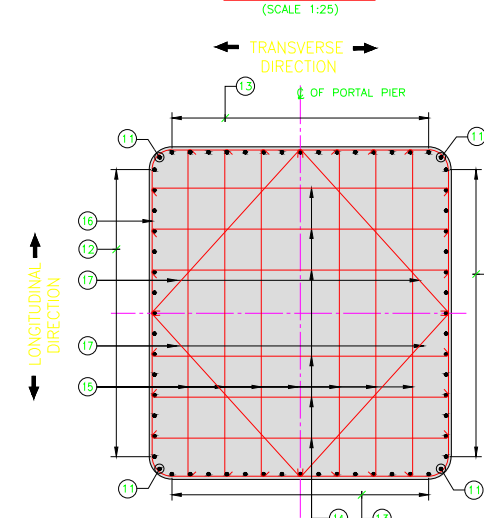


PILE REINFORCEMENT  
(SCALE 1:50)

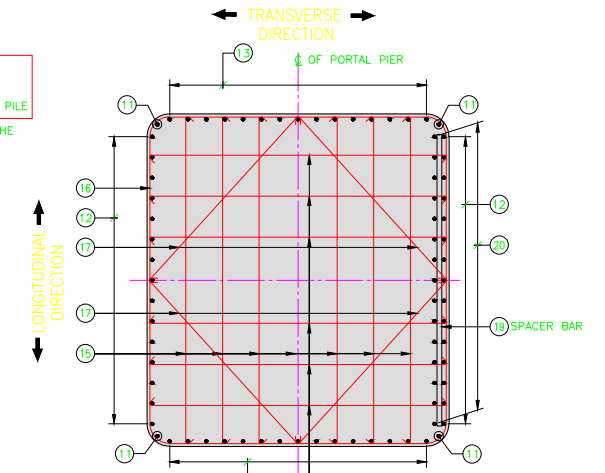


TYPICAL DETAILS OF LINKS  
(SCALE 1:10)

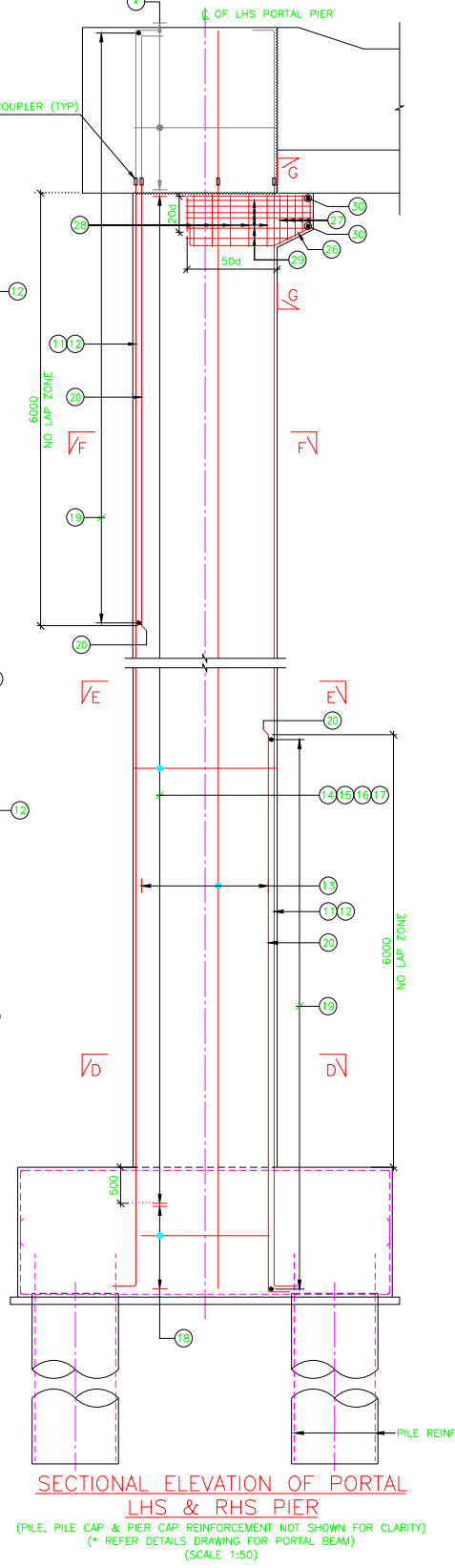
SOCKETING LENGTH:  
1. FOR HARD ROCK-ONE TIMES DIA. OF PILE  
2. FOR WEATHERED ROCK-2.5 TIMES DIA. OF PILE  
3. FOR HIGHLY WEATHERED ROCK-6 TIMES DIA. OF PILE  
\* THE PILE LENGTH HAS BEEN DERIVED BASED ON THE CONCLUDED PILE LOAD TEST FOR SIMILAR STRATA & CONCLUDED GC LETTER BY 2656 & 2610.



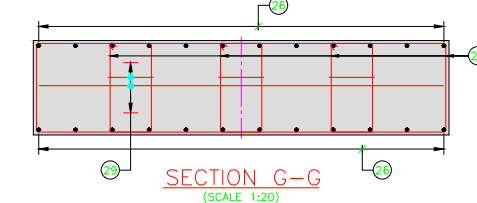
SECTION E-E  
(SCALE 1:25)



SECTION D-D  
(SCALE 1:25)



SECTIONAL ELEVATION OF PORTAL LHS & RHS PIER  
(PILE, PILE CAP & PIER CAP REINFORCEMENT NOT SHOWN FOR CLARITY)  
(\* REFER DETAILS DRAWING FOR PORTAL BEAM)  
(SCALE 1:50)

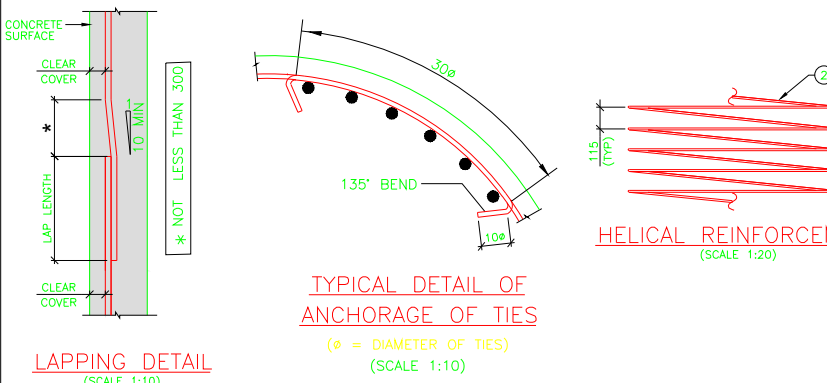


SECTION G-G  
(SCALE 1:20)

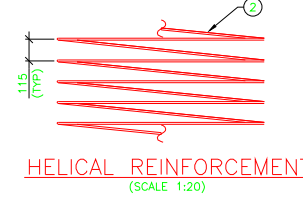
- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METER, UNLESS OTHERWISE SPECIFIED.
  - DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
  - THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH GENERAL ARRANGEMENT DRAWINGS AND RAIL ALIGNMENT DRAWINGS.
  - IF ANY AMBIGUITY IS FOUND IN DRAWINGS OR AT SITE, THE SAME SHALL BE BROUGHT TO DESIGNER'S/ ENGINEER'S NOTICE BEFORE EXECUTION.
  - REINFORCEMENT STEEL SHALL BE HYSD BARS OF GRADE Fe 500 CONFORMING TO IS:1786-2008
  - GRADE OF CONCRETE SHALL BE AS FOLLOWS:  
LEVELING COURSE : RCC M20  
PILE : RCC M35  
PILE CAP : RCC M35  
PIER : RCC M50
  - CLEAR COVER TO ALL REINFORCEMENT SHALL BE:  
PILE : 75 mm  
PILE CAP : 75 mm  
PIER : 50 mm
  - DEVELOPMENT LENGTH AND LAP LENGTH SHALL BE AS GIVEN BELOW :
- | GRADE OF CONCRETE  | M35 | M50 |
|--------------------|-----|-----|
| DEVELOPMENT LENGTH | 46d | 41d |
| LAP LENGTH         | 65d | 58d |
- WHERE d IS THE DIA. OF BAR.
- NOT MORE THAN 50% OF THE BAR SHALL BE LAPPED AT ANY LOCATION.
  - FOR NUMBER OF REINFORCEMENT, REFER TO SCHEDULE OF REINFORCEMENT ONLY.

- LEGENDS:**
- TOP REINFORCEMENT
  - BOTTOM REINFORCEMENT
  - HYSD Fe500 BARS
  - REINFORCEMENT
  - DEVELOPMENT LENGTH

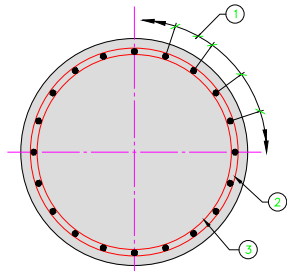
SCHEDULE OF REINFORCEMENT					
ITEM	BAR MARK	BAR DIA.	SHAPE	TOTAL Nos./ SPACINGS	REMARKS
PILE	1	25		20 NOS	VERTICAL BAR
	19	20		20 NOS	VERTICAL BAR
	2	10	⊗	115 PITCH HELICAL REINFORCEMENT	
	3	16	⊗	1500 c/c	RING
PILE CAP	4	16	⊗	300 c/c	RING
	5	25	⊔	125 c/c	BOTTOM BAR
	6	25	⊔	125 c/c	BOTTOM BAR
	7	25	⊔	125 c/c	TOP BAR
PIER	8	25	⊔	125 c/c	TOP BAR
	9	12	⊔	125 c/c	SIDE FACE BAR
	10	16	⊔	250 c/c	LONGITUDINAL TRANSVERSE DIRECTION
	11	32	⊔	4 Nos.	
CORBEL	12	32	⊔	2x15 Nos.	
	13	25	⊔	2x15 Nos.	
	14	10	⊔	150 c/c	6 LEGGED
	15	10	⊔	150 c/c	6 LEGGED
	16	10	⊔	150 c/c	2 LEGGED
	17	10	⊔	150 c/c	2 LEGGED
	18	10	⊔	150 c/c	2 LEGGED
	19	32	⊔	1000 c/c	SPACER BAR
	20	20	⊔	2x15 Nos.	
	21 & 25				NOT USED
	26	25	⊔	12 Nos.	
	27	10	⊔	4 Nos.	8 LEGGED
	28	10	⊔	5 Nos.	8 LEGGED
	29	12	⊔	6 Nos.	8 LEGGED
	30	20	⊔	2 Nos.	ANCHOR BAR



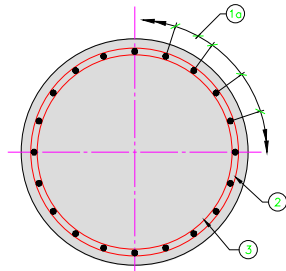
TYPICAL DETAIL OF ANCHORAGE OF TIES  
( $\phi$  = DIAMETER OF TIES)  
(SCALE 1:10)



HELICAL REINFORCEMENT  
(SCALE 1:20)



SECTION C-C  
(SCALE 1:20)



SECTION H-H  
(SCALE 1:20)

CONCEPTUAL / TENDER DRAWING