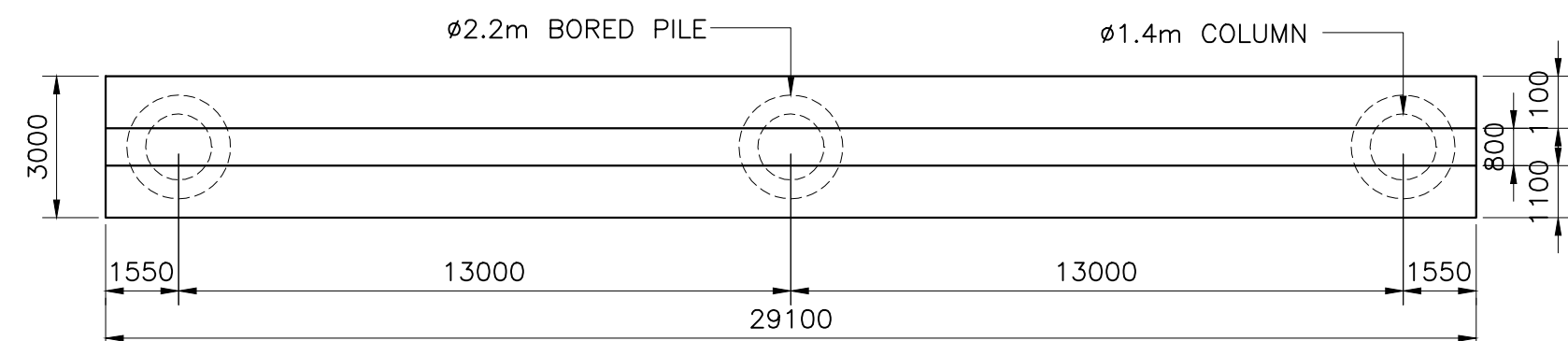


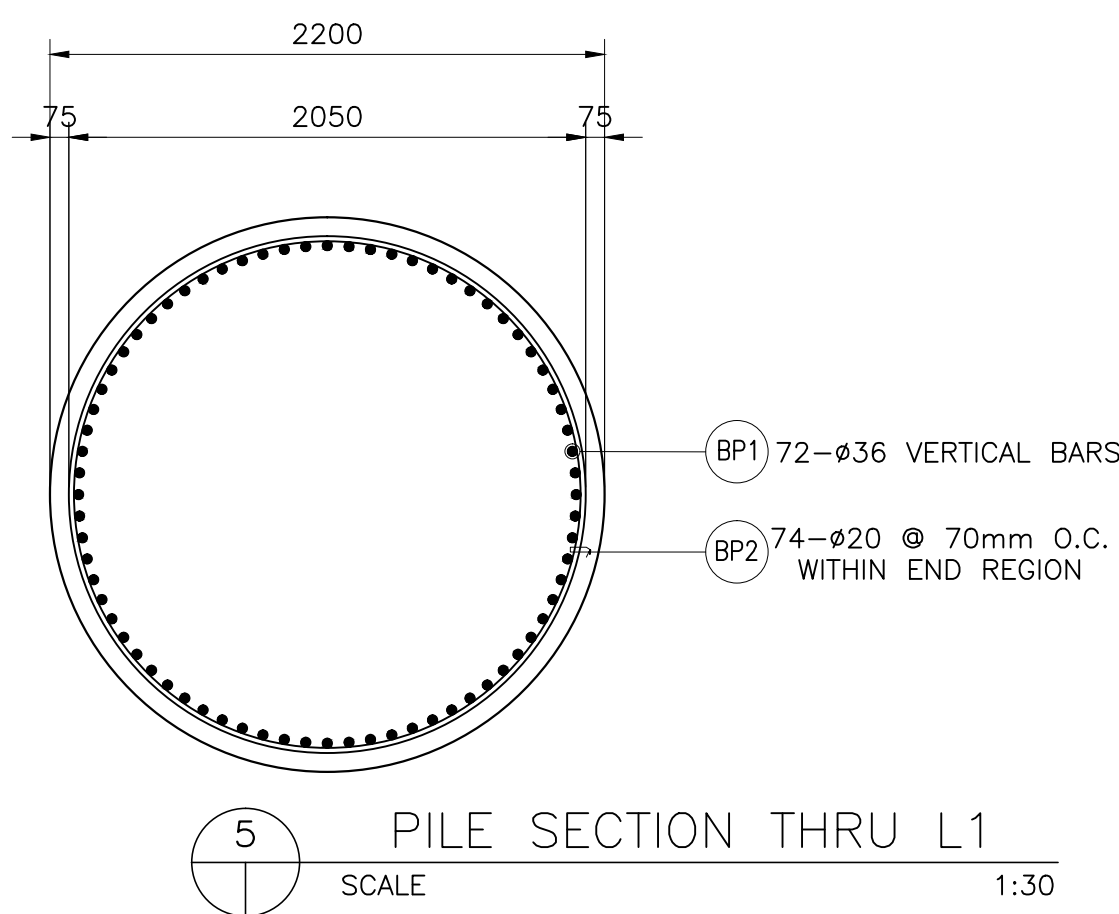
1 VERTICAL SECTION SCALE 1:80

2 SCHEMATIC DETAIL SCALE 1:80

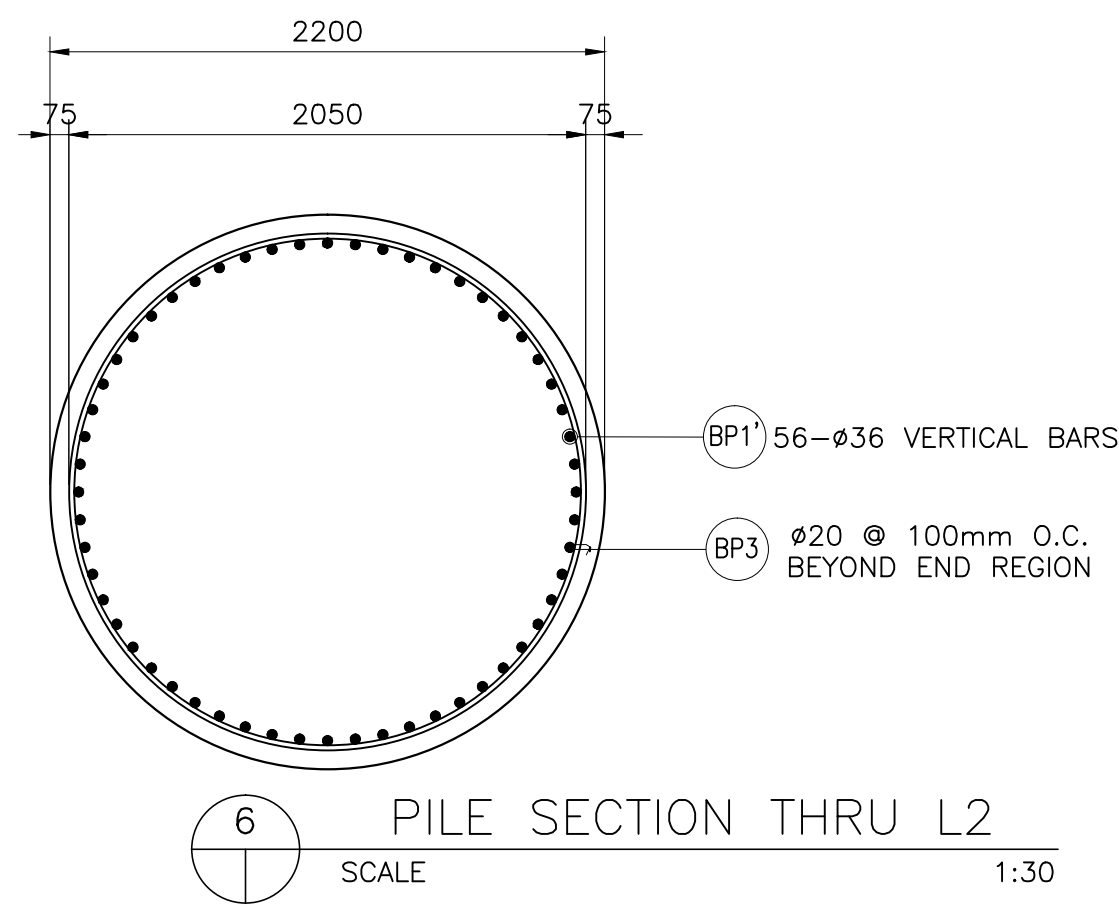
3 STIFFENER LAYOUT SCALE 1:80



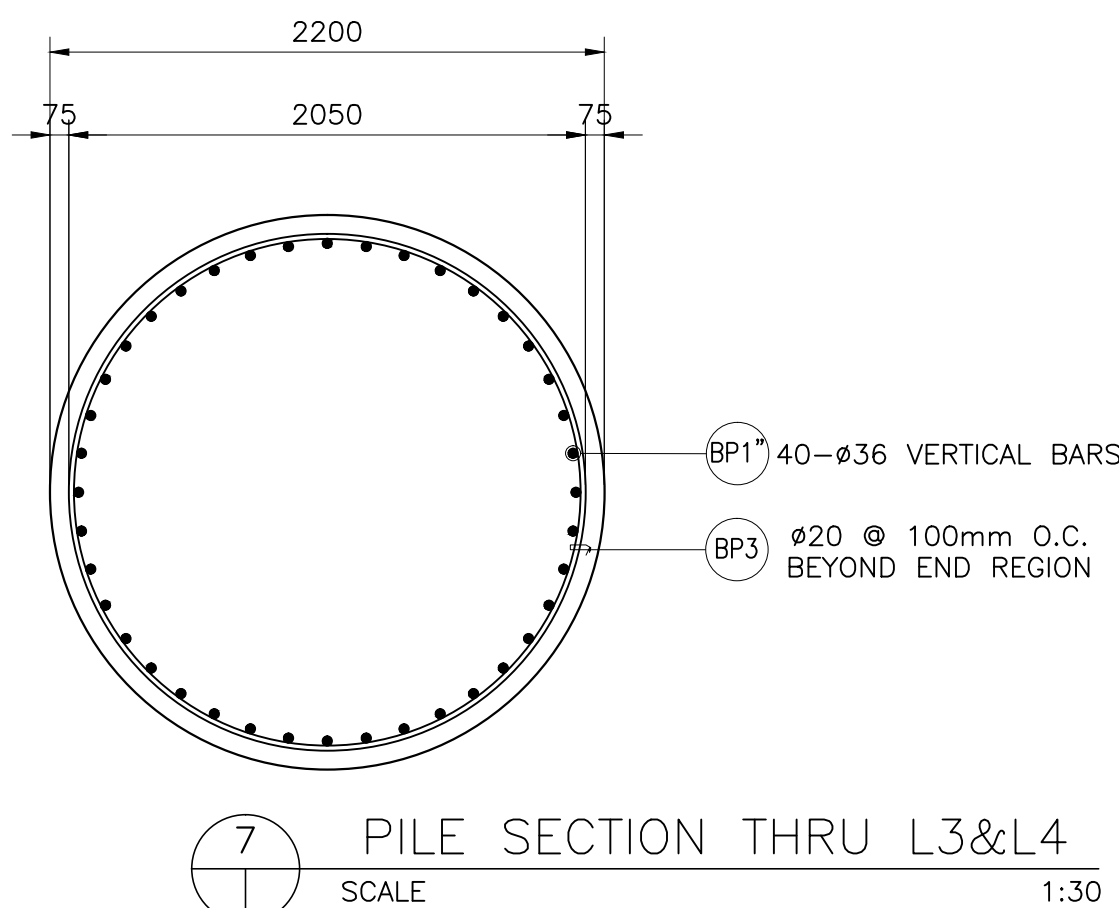
4 PIER PLAN SCALE 1:150



5 PILE SECTION THRU L1 SCALE 1:30



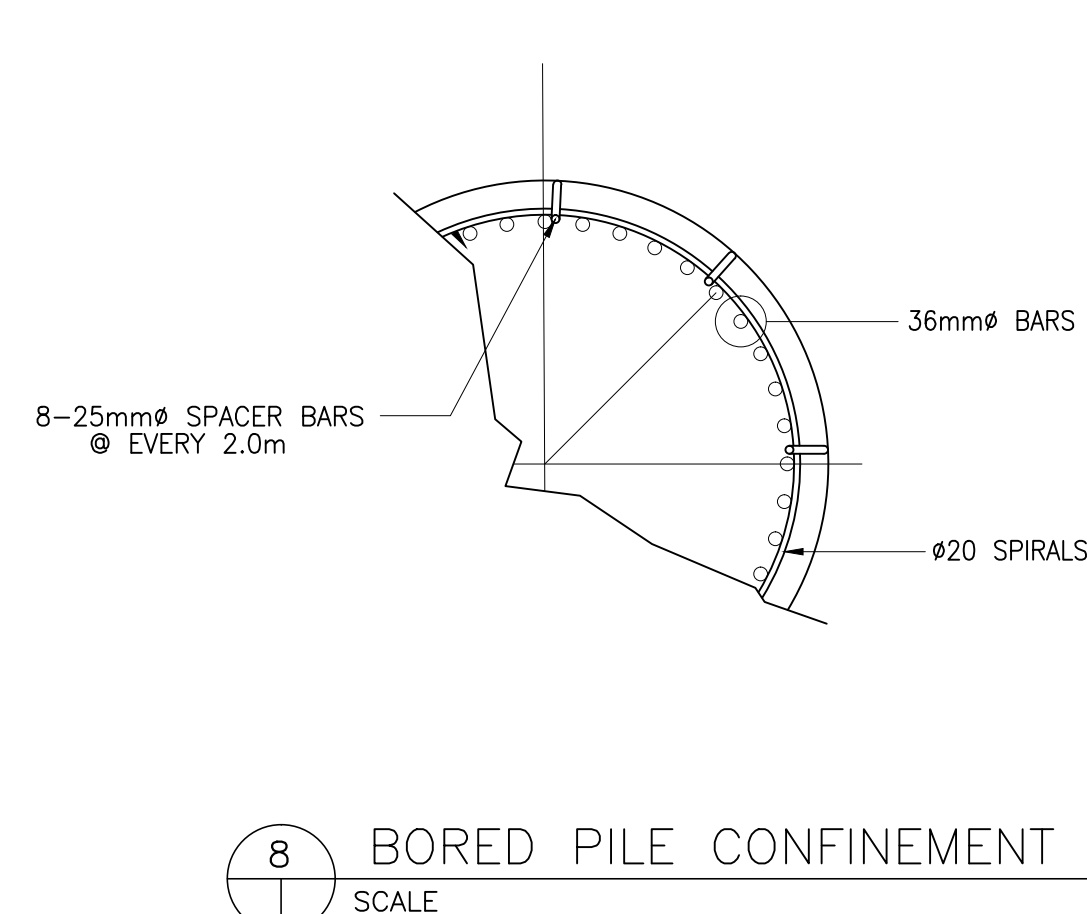
6 PILE SECTION THRU L2 SCALE 1:30



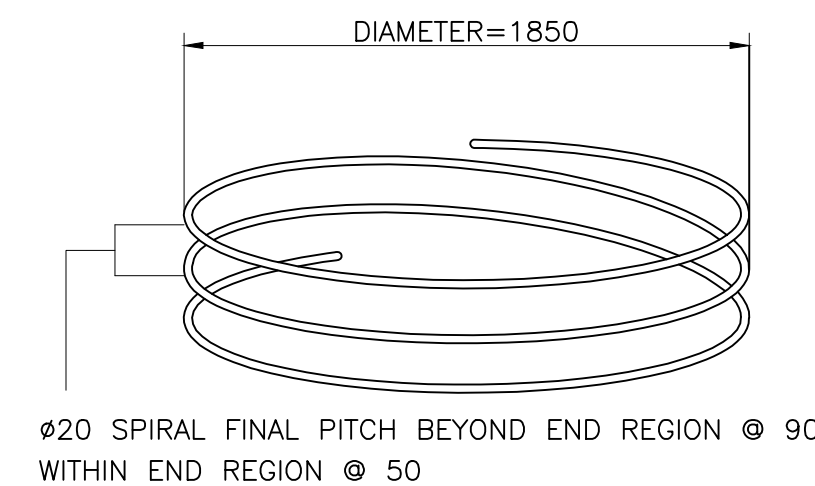
7 PILE SECTION THRU L3&L4 SCALE 1:30

NOTES:

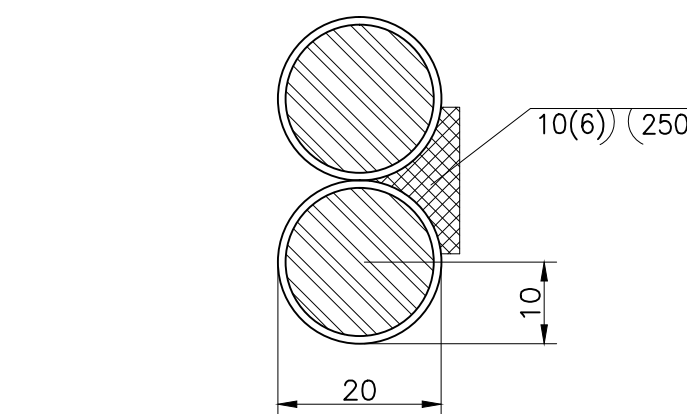
- THE REINFORCEMENT ARE LAP-WELD CONNECTED (FLARED-V-GROOVE TYPE)
- SPIRAL REINFORCEMENT ARE LAP WELD CONNECTED. WELDING SHALL BE IN ACCORDANCE WITH ANSI/AWS. D1.4-92, STRUCTURAL WELDING CODE REINFORCEMENT STEEL, USE ELECTRODE E90XX-X.
- CARE SHOULD BE TAKEN NOT TO DAMAGE BORED PILE/COLUMN MAIN BARS DURING WELDING.
- SPIRAL REINFORCEMENT SHOULD BE BUTT WELDED WHERE SPIRAL PITCH IS 50mm OR LESS. OTHERWISE USE LAP WELD SPLICE.
- ADDITIONAL STIFFENERS/GUIDE BARS MAY BE PROVIDED TO STABILIZE THE PILE REINFORCEMENT DURING FABRICATION/ERECTION SUBJECT TO THE APPROVAL OF THE ENGINEER.
- DIRTY CONCRETE (MINIMUM 600mm HEIGHT) SHOULD BE REMOVED PRIOR TO CONSTRUCTION OF BACKWALL AND COPING BEAM.
- CONCRETE - CONCRETE SHALL CONFORM TO THE REQUIREMENT OF CLASS AA CONCRETE WITH 28MPa. CYLINDER STRENGTH AND 19mm MAXIMUM AGGREGATE SIZE.
- REINFORCEMENT - ALL REINFORCEMENT STEEL SHALL BE DEFORMED BAR CONFORMING TO AASHTO M31 (ASTM 315) GRADE 60. SPLICES OF ADJACENT LONGITUDINAL STEEL SHALL BE STAGGERED 100 BAR DIAMETER APART, LENGTH OF SPLICES SHALL BE 2200mm.
- THE STABILIZATION FOR BORED PILE EXCAVATION (SUCH AS USING BENTONITE SLURRY OR TEMPORARY STEEL CASING ETC.) SHALL BE CONSIDERED BY THE CONTRACTOR AND THE COST IS SUBSIDIARY IN PAY ITEM 400(17). THE CONTRACTOR SHALL SUBMIT THE CONSTRUCTION METHOD FOR ENGINEERS APPROVAL BEFORE CONSTRUCTION.



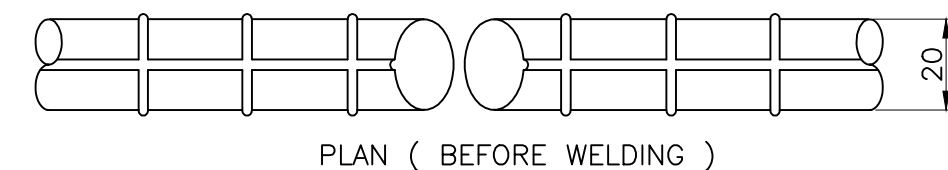
8 BORED PILE CONFINEMENT RING & SPACER DETAIL SCALE NTS



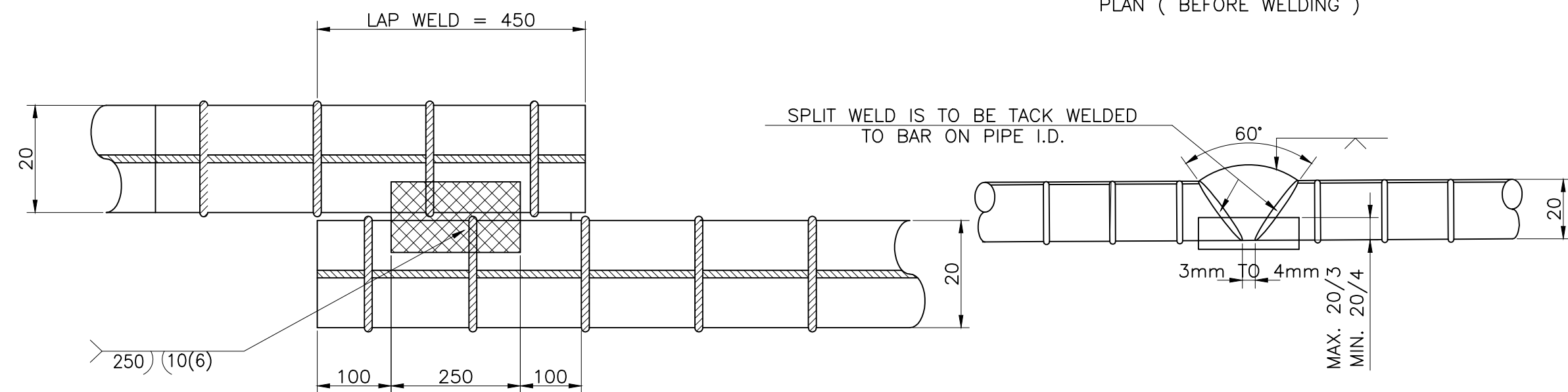
ø20 SPIRAL FINAL PITCH BEYOND END REGION @ 90 WITHIN END REGION @ 50



DOUBLE FLARED -V- GROOVE WELD SECTION - A



PLAN (BEFORE WELDING)










DIRECT LAP JOINT WITH BARS IN CONTACT

DETAILS OF SINGLE-V-GROOVE BUTT WELD






9 DETAILS OF TIES REINFORCEMENT LAP-WELD CONNECTION SCALE NTS

SCHEDULE OF REINFORCEMENT FOR PIER 1 BORED PILE

BAR BENDING DIAGRAM	BAR MARK	SIZE (mm)	SPACING (mm)	QTY	BAR SHAPE	BAR DIMENSION					LOCATION	BAR LENGTH (m)	TOTAL LENGTH (m)	UNIT WEIGHT (kg./m.)	TOTAL WEIGHT (kg.)	VOLUME CONCRETE (cu.m.)
						ALL DIMENSIONS ARE OUT TO OUT OF BARS										
						a	b	c	d	e						
	FOR ONE (1) BORED PILE (L=31m, Ø2200mm)															
	BP1	36	AS SHOWN	72	A	0.50	8.5	—	—	—	BORED PILE	9.00	648.00	7.991	5182	118
	BP1'	36	AS SHOWN	56	B	9.00	—	—	—	—		9.00	504.00	7.991	4030	
	BP1"	36	AS SHOWN	40	B	9.00	—	—	—	—		9.00	360.00	7.991	2879	
	BP1"	36	AS SHOWN	40	B	9.54	—	—	—	—		9.54	381.60	7.991	3052	
	BP2	20	70	74	D	0.20	7.0	—	—	—		7.2	532.80	2.468	1315	
	BP3	20	100	259	D	0.20	7.0	—	—	—		7.2	1864.80	2.468	4602	
	BP4	25	AS SHOWN	120	C	0.15	0.141	0.20	0.141	0.15		0.782	75.07	3.854	289	
												TOTAL			21421 Kgs	118 cu.m

NOTE:
PURSUANT TO SECTION 4 OF ANNEX "A" OF THE REVISED IMPLEMENTING RULES AND REGULATIONS OF RA 9184, APPROVED BY THE AUTHORIZED DPMH OFFICIALS OF DETAILED ENGINEERING SURVEYS AND DESIGNS UNDERTAKEN BY THE CONSULTANTS NEITHER DIMINISHES THE RESPONSIBILITY OF THE LATTER FOR THE TECHNICAL INTEGRITY OF THE SURVEYS AND DESIGNS NOR TRANSFER ANY PART OF THAT RESPONSIBILITY TO THE APPROVING OFFICIALS.
THE DESIGN CONSULTANT SHALL BE HELD FULLY RESPONSIBLE FOR THE FAILURE OF THE FACILITIES/STRUCTURES DUE TO FAULTY DESIGN EXCEPT FOR THE CHANGES MADE WITHOUT THE CONFORMITY OF THE CONSULTANT.

ENGR. ALBERTO C. CANETE
TEAM LEADER

CONSULTANTS		SUBMITTED BY		DESIGNED BY		BCDA Bureau of Construction and Development Authority		REVISIONS		DATE		PROJECT TITLE		SCALE		DRAWING STATUS				
<div>Urban Integrated Consultants, Inc. 1001 CORPORATE BLDG., 8 LAKES STREET, WISRA, DILMAN, QUEZON CITY, 1128</div>		<div> EFREN L. DAVID PRESIDENT - UICI</div> <div>DATE: -</div>		<div> ALBERTO C. CANETE, P.P., F.ASEP PROJECT MANAGER - UICI</div> <div>DATE: -</div>		<div> RYAN PAUL S. GALURA PROJECT MANAGER</div> <div>DATE: -</div>		<div> JOVITO M. SUNGA OIC - PMD</div> <div>DATE: -</div>		A			DETAILED ENGINEERING DESIGN OF THE PROPOSED AIRPORT-NCC ACCESS ROAD, MACARTHUR-NCC ACCESS ROAD, MACARTHUR-SCTEX ACCESS ROAD & OLYMPIC VILLAGE ACCESS ROAD		AS SHOWN		DRAFT DRAWING			
						CHECKED BY		APPROVED BY		B			PROJECT CODE		DRAWING NO.		SIZE			
										C			SHEET CONTENT AIRPORT TO NCC (STA.0+000 - STA.1+500) - SACOBIA		P2SB-38		A1			
										D			PIER 1 BORED PILE DETAILS		DATE APPROVED		DATE REVISED		REV.	
										E					-		-			
										F										