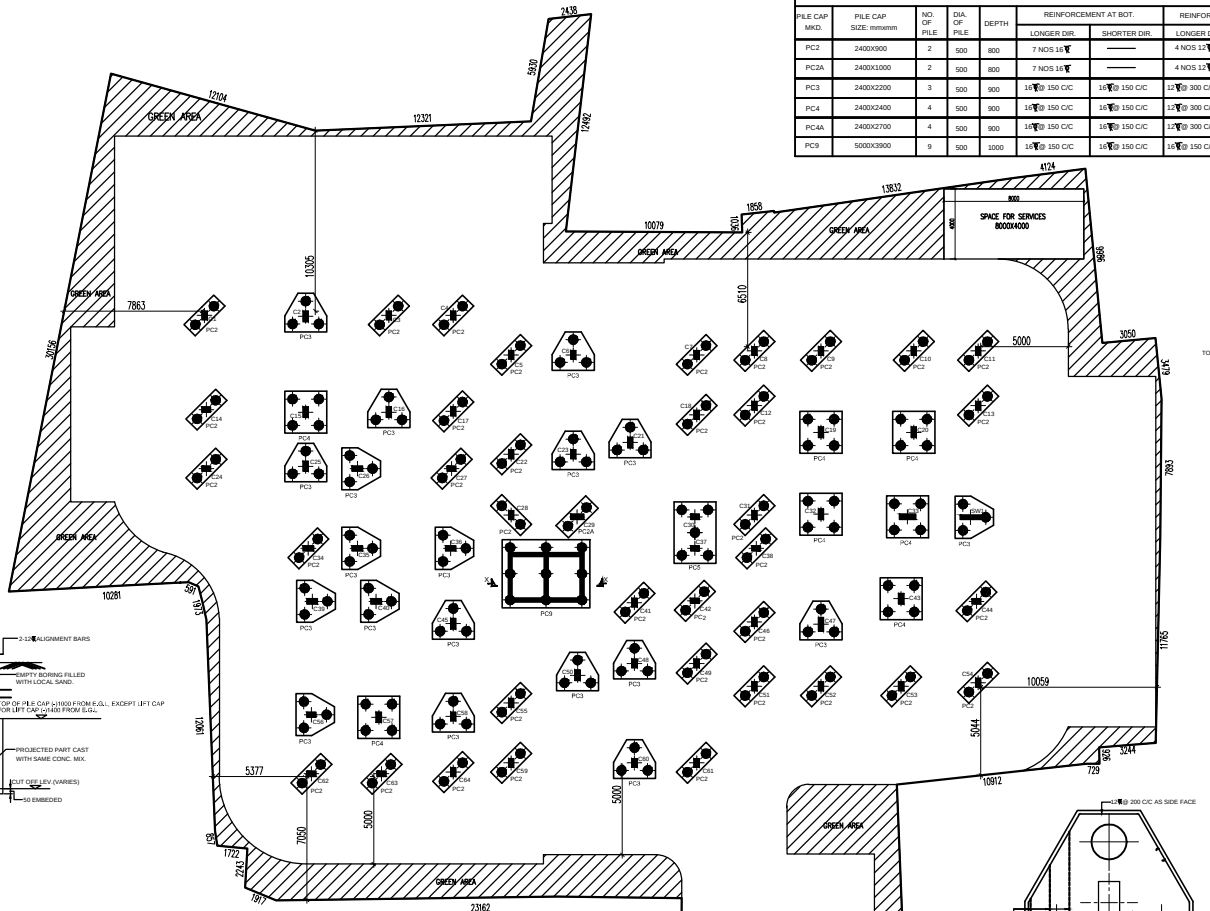
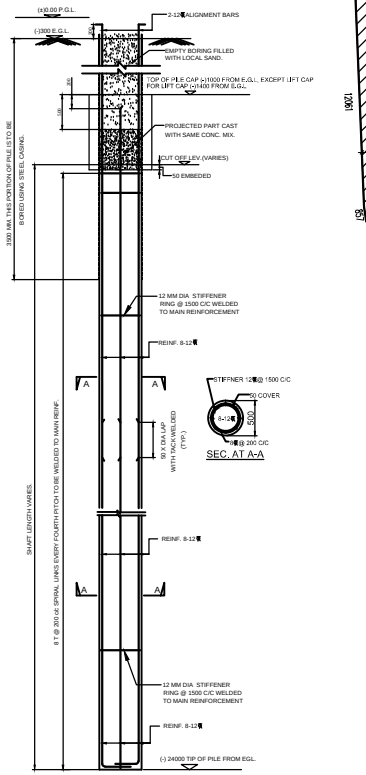
SCHEDULE OF PILE CAP.									
PILE CAP MKD.	PILE CAP SIZE: mmxmm	NO. OF PILE	DIA. OF PILE	DEPTH	REINFORCEMENT AT BOT.		REINFORCEMENT AT TOP		SKIN REINFORCE ALONG DEPTH	LINK FOR PILE CAP
					LONGER DIR.	SHORTER DIR.	LONGER DIR.	SHORTER DIR.		
PC2	2400X900	2	500	800	7 NOS 16⌀	———	4 NOS 12⌀	———	12⌀@ 200 C/C	10⌀4-L @ 200 C/C
PC2A	2400X1000	2	500	800	7 NOS 16⌀	———	4 NOS 12⌀	———	12⌀@ 200 C/C	10⌀4-L @ 200 C/C
PC3	2400X2200	3	500	900	16⌀@ 150 C/C	16⌀@ 150 C/C	12⌀@ 300 C/C	12⌀@ 300 C/C	12⌀@ 200 C/C	———
PC4	2400X2400	4	500	900	16⌀@ 150 C/C	16⌀@ 150 C/C	12⌀@ 300 C/C	12⌀@ 300 C/C	12⌀@ 200 C/C	———
PC4A	2400X2700	4	500	900	16⌀@ 150 C/C	16⌀@ 150 C/C	12⌀@ 300 C/C	12⌀@ 300 C/C	12⌀@ 200 C/C	———
PC9	5000X3900	9	500	1000	16⌀@ 150 C/C	16⌀@ 150 C/C	16⌀@ 150 C/C	16⌀@ 150 C/C	12⌀@ 200 C/C	———



FOUNDATION LAYOUT PLAN.

SCALE - 1:100

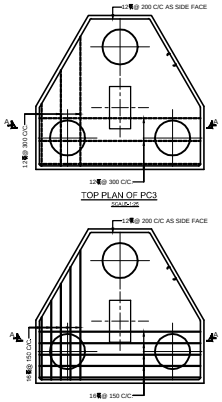


TYPICAL DETAIL OF PILE SHAFT.

PILE CAPACITY 55 TON.

PILE DIA=500

SCALE=1:25

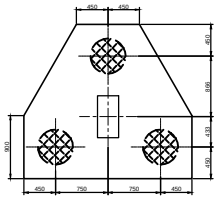


TOP PLAN OF PC3

SCALE=1:25

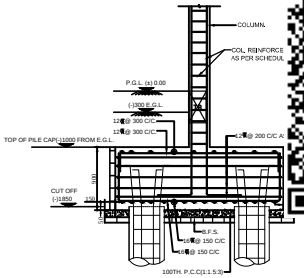
BOT. PLAN OF PC3

SCALE=1:25



PLAN OF PC3

SCALE=1:25



SECTION AT A-A (PC3)

SCALE=1:25

NOTES :-

1) ALL DIMENSIONS & DIAMETERS ARE IN MILLIMETER.
2) GRADE OF CONC. : ALL DESIGN MIX.
   i. PILE :-M25, WITH MINIMUM CEMENT CONTENT @ 400 Kg/CUM OF CONC.
   ii. PILE CAP :- M30.
   iii. COLUMN & LIFT :- AS PER SCHEDULE.
   iv. REST ALL :- AS PER RESPECTIVE FLOOR COLUMNS GRADE OF CONC.
3) P.C.C SHALL BE M20 AS PER IS: 456.
4) TOR STEEL REINFORCEMENT SHALL CONFORM TO LATEST IS: 1786 CODES WITH YIELD STRESS 500 MPa.
5) CLEAR COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:-
   a) PILE : 40 MM ALL SIDES FROM OUTERMOST MAIN BAR.
   b) PILE CAP : 75 MM ALL SIDES FROM OUTERMOST MAIN BAR.
   c) FOOTING : 50 MM ALL SIDES FROM OUTERMOST MAIN BAR.
   d) COLUMN : 40 MM ALL SIDES FROM OUTERMOST MAIN BAR.
   e) TIE BEAM : 30 MM ALL SIDES FROM OUTERMOST MAIN BAR.
   f) FLOOR BEAM : 30 MM ALL SIDES FROM OUTERMOST MAIN BAR.
   g) SLAB : 20 MM ALL SIDES FROM OUTERMOST MAIN BAR.
   h) AVERT SLAB : 20 MM ALL SIDES FROM OUTERMOST MAIN BAR.
6) MINIMUM LAP LENGTH :-
   FOR PILE : 40 Ø WITH 3 SETS LAP WELDING IN BOTH SIDES FOR A LENGTH OF 60 MM, FOR REST :-
   LAP LENGTH OF BARS TO BE PROVIDE AS 'K0' Ø DIA OF BAR.

Type of Steel	Value of k for concrete mixes				
	M20	M25	M30	M35	M40
Fe 500	57	49	45	40	36

7) MAXIMUM LOAD ON EACH PILE :
   FOR 500Ø 24.00 M. TIP PILES - 55 MT.
   AS PER THE SOIL INVESTIGATION REPORT PREPARED BY BY M/S GEOTEST ENGINEERS PVT. LTD. REP. BY ALOK ROY.
8) POSITIONAL ECCENTRICITY OF ANY PILE MORE THAN 50mm. FOR SINGLE PILE AND 75 mm. FOR GROUP OF PILES SHALL NOT BE PERMITTED.
9) THE PILE HEADS SHALL PROJECT IN TO PILE CAP FOR 50 mm. THE HEADS TO BE NEATLY FORMED TO THE REQUIRED DIA.
10) ALL TIES TO BE SPOT WELDED WITH VERTICAL REINFORCEMENT.
11) BORING OF PILE :-
   i. BORING SHOULD BE DONE WITH DMC METHOD AND BENTONITE SUSPENSION SHOULD BE USED WITH SP.GR. 1.04 TO 1.2 gm/cm3 DURING DRILLING AS IS 2911 (PART-4 SEC 2) CL A.3.1.
   i. FOR PLACING OF CONCRETE IN PILE BORES, A FUNNEL SHOULD BE USED AND METHOD OF CONCRETING SHOULD BE SUCH THAT THE ENTIRE VOLUME OF THE PILE SHAFT IS FILLED UP WITHOUT THE FORMATION OF VOIDS OR MIXING OF SOIL AND DRILLING FLUID WITHIN CONCRETE.
12) VERTICAL LOAD TESTING OF PILE SHOULD CONFIRM IS-2911 (PART-4).
13) RCC BORED CAST IN SITU PILE SHOULD CONFIRM IS-2911 (PART-1, SEC-4)
14) EXT. TOP & BOTT.
   FLOOR, BEAM-i) EXT. TOP TO BE PROVIDED AT L/4 FROM SUPPORT.
   ii) EXT. BOTT. TO BE EXTENDED L/5 FROM SUPPORT.
   SLAB -i) EXT. TOP TO BE PROVIDED IN ALL SUPPORTS FOR A LENGTH OF L/3 FROM SUPPORT.
15) ALL DRAWINGS SHALL BE CORRELATED WITH ARCHITECTURAL DRAWINGS & ANY DISCREPANCY SHALL BE BROUGHT TO NOTICE OF THE ENGINEER BEFORE EXECUTION.
16) THIS DRAWING TO BE READ ALONGWITH SPECIFICATIONS & ALL REFERENCE DRAWING.
17) ALL THE WORKS SHALL BE DONE AS PER RELEVANT IS CODE PERTAINING TO WORK.
18) CONTRACTOR MUST VERIFY ALL DIMENSION AT SITE BEFORE EXECUTION OF WORK NO CLAIM WILL BE ENTERTAINED. CONTRACTOR SHALL BE RESPONSIBLE TO PROPER LINE AND LEVEL OF STRUCTURE.
19) DESIGN IS BASED ON AS PER IS-456, IS-875, IS-1893, IS-2911, IS-13920 & SP-16.
20) STRUCTURAL DESIGN IS DONE FOR 'G+III' STORIED BUILDING ONLY.
21) SEISMIC ZONE CONSIDERED FOR DESIGN AS ZONE-III & SMRF.

CERTIFICATE OF OWNER.

I/WE CONFIRM THAT THE ERECTION OF BUILDING TO BE UNDERTAKEN SHALL BE STRICTLY IN ACCORDANCE WITH THE WEST BENGAL MUNICIPALITY BUILDING RULES 2007 & AMENDMENT 2016.

SIGN. OF ARCHITECT

CERTIFICATE OF GEO-TECHNICAL ENGINEER

IT IS HEREBY CERTIFIED THAT THE STRUCTURAL DRAWINGS ARE PREPARED FOR EARTHQUAKE RESISTANCE IN ACCORDANCE WITH THE WEST BENGAL MUNICIPALITY BUILDING RULES 2007 & AMENDMENT 2016 .

SIGN. OF GEO-TECHNICAL ENGINEER

CERTIFICATE OF STRUCTURAL ENGINEER

CERTIFIED THAT, THE STRUCTURAL DRAWING & DESIGN OF BOTH FOUNDATION & SUPER STRUCTURE OF THE BUILDING BUILDINGS HAS BEEN MADE CONSIDERING THE SOIL TEST REPORT, AS PER THE RULES AND REGULATIONS MADE UNDER THE ACT AND ALSO CONSIDERING ALL POSSIBLE LOADS, SEISMIC LOAD AND THE MOMENTS GENERATED BY THE PROPOSED STRUCTURE AS PER THE BUREAU OF INDIAN STANDARD AND NATIONAL BUILDING CODE OF INDIA AND CERTIFIED THAT IT IS SAFE & STABLE IN ALL RESPECT AND THESE PROVISIONS SHALL BE ADHERED TO DURING THE CONSTRUCTION.

SIGN. OF STRUCTURAL ENGINEER

STRUCTURAL CONSULTANT
ENGINEERS FORUM
69/401, H. P. DUTTA LANE (GOLF GARDEN)
KOLKATA - 33.
PHONE - 3566-7944 / 9874561607
email : engg_forum2005@yahoo.co.in

ARCHITECT:
RAJ AGRAWAL & ASSOCIATES
ARCHITECTS,PLANNERS AND INTERIOR DESIGNERS.
8B, ROYD STREET (2ND FLOOR), KOLKATA-16.

PROJECT:-

PROPOSED G+7TH STORIED RESIDENTIAL BUILDING AT H.N. & L.N. BAG NOS.- 100,100,104,105 & 108 L.N. KOLKTAN NOS.- 1040,1041,1042,1043,1044,1045,1046 MOUZA-TEGHARIA, J.L. NO.- 8, TOWN NO. - 10 , R.S NO.- 116, P.R- BAGUIATI, WARD NO.- 0 , DISTRICT- NORTH 24 PARGANAS, UNDER KOLKATAN MUNICIPAL CORPORATION.

TITLE : SANCTION DRAWING (STRUCTURE)

JOB NO. : 08/2024-2025

DRG. NO. : EF/S/01

DRAWN BY : KATICK

SCALE : 1:100,1:25.

DATE : 30.04.2025