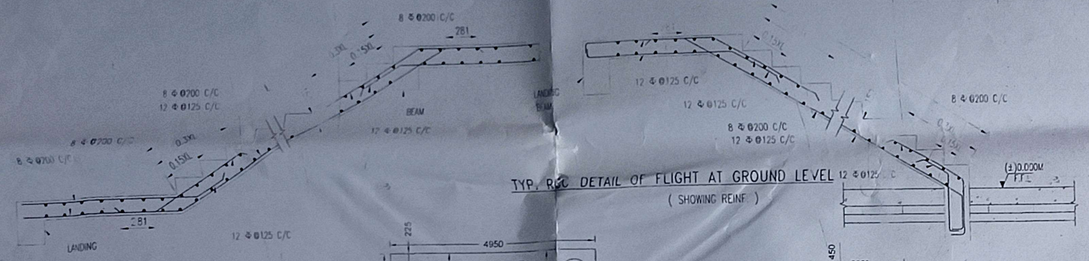
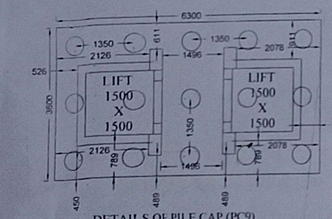
REINFORCEMENT DETAILING OF R.C.C. SLAB (TYPICAL)

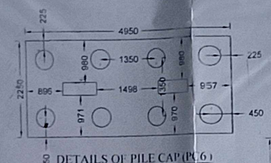


TYP. RCC DETAIL OF FLIGHT AT GROUND LEVEL
(SHOWING REINF.)

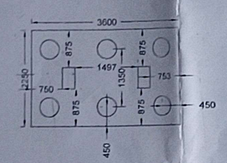
TYP. RCC DETAIL OF FLIGHT AT TYPICAL FLOORS
(SHOWING REINF.)



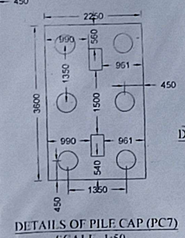
DETAILS OF PILE CAP (PC9)
SCALE -1:50



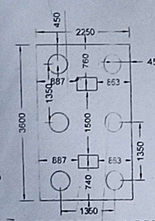
DETAILS OF PILE CAP (PC6)
SCALE -1:50



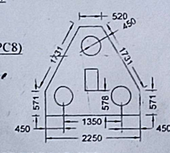
DETAILS OF PILE CAP (PC4)
SCALE -1:50



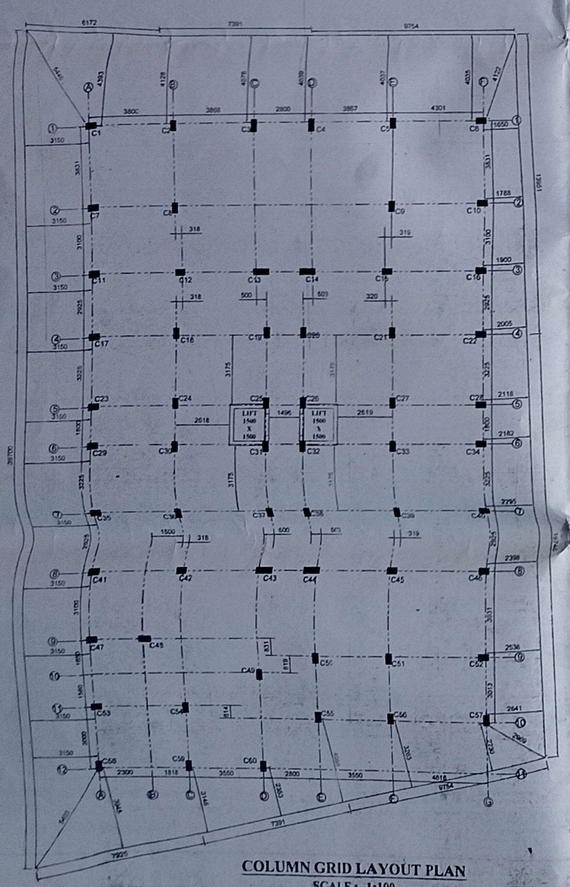
DETAILS OF PILE CAP (PC7)
SCALE -1:50



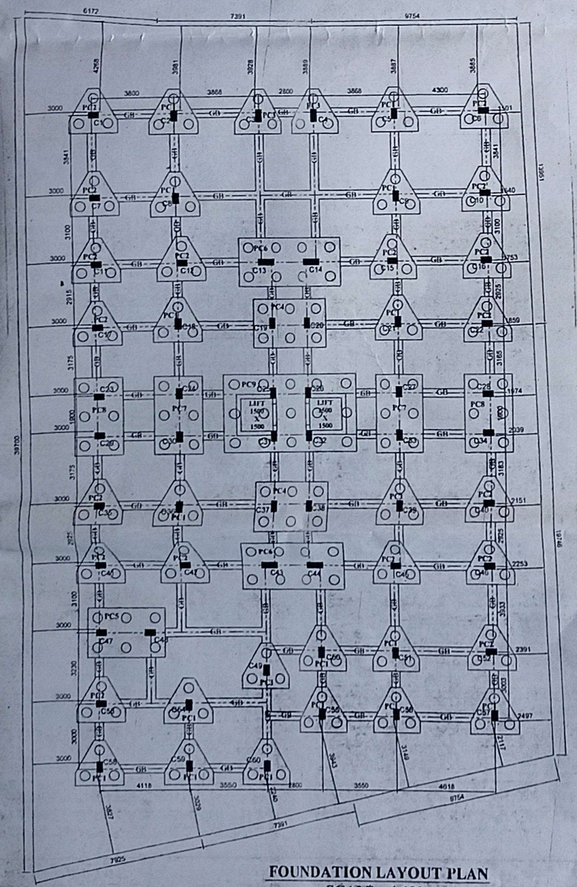
DETAILS OF PILE CAP (PC8)
SCALE -1:50



DETAILS OF PILE CAP (PC1)
SCALE -1:50



COLUMN GRID LAYOUT PLAN
SCALE :- 1:100



FOUNDATION LAYOUT PLAN
SCALE :- 1:100

DETAIL -W

TYPICAL DETAIL OF LINK

SCHEDULE OF FLOOR SLAB

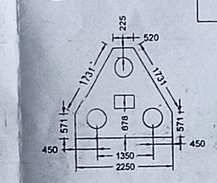
SLAB MKD.	SIZE	REINFORCEMENTS			
		AT SHORT SPAN		AT LONG SPAN	
		SUPPORT	SPAN	SUPPORT	SPAN
S	125	8ØTOR @150C/C	8ØTOR @150C/C	8ØTOR @200C/C	8ØTOR @200C/C
S1	150	12ØTOR @150C/C MAIN REINFORCEMENT 10 ØTOR @ 200 C/C DISTRIBUTOR			

SCHEDULE OF R.C. PILE FOUNDATION

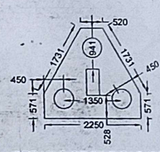
FOUNDATION MARKED	UNDER COL. MARKED	NO. & DIA. OF PILE	LENGTH OF PILE (m)	REINFORCEMENT OF PILE	DIMENSION OF PILE CAP (L X W X D) mm	REINFORCEMENT OF PILE CAP
PC1	C2,C5,C8,C9,C18,C21,C36,C39,C49-C51,C5--C60	3 NOS-450 ø	19.5-20 =17.50	VERTICAL 8 NOS.-12 ø TOR LATERAL TIE 8 ø TOR @ 75 C/C FOR 1500mm FROM TOP & BOTTOM REST PORTION 8 ø TOR @ 150 C/C	AS PER DRAWING	TOP: 16 ø TOR @ 150C/C BOTHWAYS BOTTOM: 16 ø TOR @ 1 C/C BOTHWAYS FACE BAR: 1-10 Ø TOR BAR ROUGHOUT THE PERIMETER OF THE PILE CAP TOP & SIDE COVER 5 M BOTTOM COVER 75MM
PC2	C1,C6,C7,C10-C12,C15-C17,C22,C35,C40-C42,C45,C46,C5--C53	3 NOS-450 ø	19.5-20 =17.50	VERTICAL 8 NOS.-12 ø TOR LATERAL TIE 8 ø TOR @ 75 C/C FOR 1500mm FROM TOP & BOTTOM REST PORTION 8 ø TOR @ 150 C/C	AS PER DRAWING	TOP: 16 ø TOR @ 150C/C BOTHWAYS BOTTOM: 16 ø TOR @ 1 C/C BOTHWAYS FACE BAR: 1-10 Ø TOR BAR ROUGHOUT THE PERIMETER OF THE PILE CAP TOP & SIDE COVER 5 M BOTTOM COVER 75MM
PC3	C3,C4	3 NOS-450 ø	19.5-20 =17.50	VERTICAL 8 NOS.-12 ø TOR LATERAL TIE 8 ø TOR @ 75 C/C FOR 1500mm FROM TOP & BOTTOM REST PORTION 8 ø TOR @ 150 C/C	AS PER DRAWING	TOP: 16 ø TOR @ 150C/C BOTHWAYS BOTTOM: 16 ø TOR @ 1 C/C BOTHWAYS FACE BAR: 1-10 Ø TOR BAR ROUGHOUT THE PERIMETER OF THE PILE CAP TOP & SIDE COVER 5 M BOTTOM COVER 75MM
PC4	(C19,C20),(C37,C38).	6 NOS-450 ø	19.5-20 =17.50	VERTICAL 8 NOS.-12 ø TOR LATERAL TIE 8 ø TOR @ 75 C/C FOR 1500mm FROM TOP & BOTTOM REST PORTION 8 ø TOR @ 150 C/C	3600 X 2250 X 1000	TOP: 16 ø TOR @ 150C/C BOTHWAYS BOTTOM: 16 ø TOR @ 1 C/C BOTHWAYS FACE BAR: 1-10 Ø TOR BAR ROUGHOUT THE PERIMETER OF THE PILE CAP TOP & SIDE COVER 5 M BOTTOM COVER 75MM
PC5	(C47,C48).	6 NOS-450 ø	19.5-20 =17.50	VERTICAL 8 NOS.-12 ø TOR LATERAL TIE 8 ø TOR @ 75 C/C FOR 1500mm FROM TOP & BOTTOM REST PORTION 8 ø TOR @ 150 C/C	3600 X 2250 X 1000	TOP: 16 ø TOR @ 150C/C BOTHWAYS BOTTOM: 16 ø TOR @ 1 C/C BOTHWAYS FACE BAR: 1-10 Ø TOR BAR ROUGHOUT THE PERIMETER OF THE PILE CAP TOP & SIDE COVER 5 M BOTTOM COVER 75MM
PC6	(C13,C14),(C43,C44).	8 NOS-450 ø	19.5-20 =17.50	VERTICAL 8 NOS.-12 ø TOR LATERAL TIE 8 ø TOR @ 75 C/C FOR 1500mm FROM TOP & BOTTOM REST PORTION 8 ø TOR @ 150 C/C	4950 X 2250 X 1000	TOP: 16 ø TOR @ 150C/C BOTHWAYS BOTTOM: 16 ø TOR @ 1 C/C BOTHWAYS FACE BAR: 1-10 Ø TOR BAR ROUGHOUT THE PERIMETER OF THE PILE CAP TOP & SIDE COVER 5 M BOTTOM COVER 75MM
PC7	(C24,C30),(C27,C33).	6 NOS-450 ø	19.5-20 =17.50	VERTICAL 8 NOS.-12 ø TOR LATERAL TIE 8 ø TOR @ 75 C/C FOR 1500mm FROM TOP & BOTTOM REST PORTION 8 ø TOR @ 150 C/C	2250 X 3600 X 1000	TOP: 16 ø TOR @ 150C/C BOTHWAYS BOTTOM: 16 ø TOR @ 1 C/C BOTHWAYS FACE BAR: 1-10 Ø TOR BAR ROUGHOUT THE PERIMETER OF THE PILE CAP TOP & SIDE COVER 5 M BOTTOM COVER 75MM
PC8	(C2,3,C29),(C28,C34).	6 NOS-450 ø	19.5-20 =17.50	VERTICAL 8 NOS.-12 ø TOR LATERAL TIE 8 ø TOR @ 75 C/C FOR 1500mm FROM TOP & BOTTOM REST PORTION 8 ø TOR @ 150 C/C	2250 X 3600 X 1000	TOP: 16 ø TOR @ 150C/C BOTHWAYS BOTTOM: 16 ø TOR @ 1 C/C BOTHWAYS FACE BAR: 1-10 Ø TOR BAR ROUGHOUT THE PERIMETER OF THE PILE CAP TOP & SIDE COVER 5 M BOTTOM COVER 75MM
PC9	(C25,C26,C31,C32&LIFT).	6 NOS-450 ø	19.5-20 =17.50	VERTICAL 8 NOS.-12 ø TOR LATERAL TIE 8 ø TOR @ 75 C/C FOR 1500mm FROM TOP & BOTTOM REST PORTION 8 ø TOR @ 150 C/C	6300 X 3600 X 1000	TOP: 16 ø TOR @ 150C/C BOTHWAYS BOTTOM: 16 ø TOR @ 1 C/C BOTHWAYS FACE BAR: 1-10 Ø TOR BAR ROUGHOUT THE PERIMETER OF THE PILE CAP TOP & SIDE COVER 5 M BOTTOM COVER 75MM

SCHEDULE OF GRADE BEAM :-

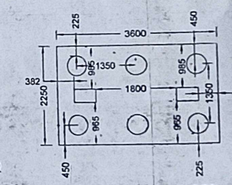
BEAM MKD.	SIZE	REINFORCEMENTS				STIRRUPS
		REIN. AT COLUMN ZONE		REIN. AT MID-ZONE		
		TOP	BOTTOM	TOP	BOTTOM	
GB	400X700	8-16 ø TOR	5-16 ø TOR	5-16 ø TOR	8-16 ø TOR	4L-10ØTOR @200C/C



DETAILS OF PILE CAP (PC2)
SCALE -1:50



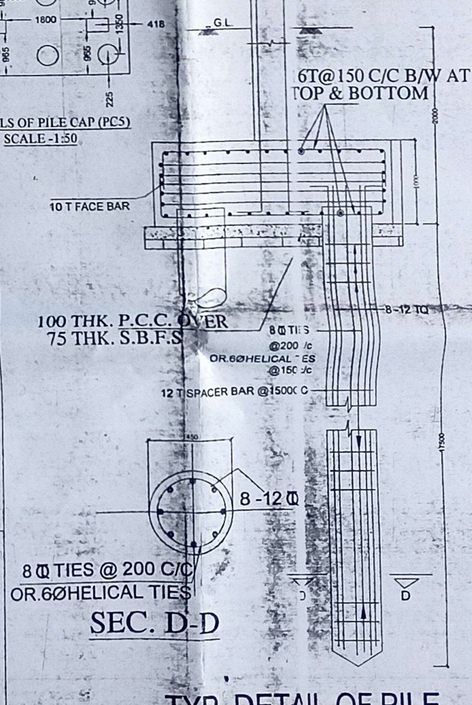
DETAILS OF PILE CAP (PC3)
SCALE -1:50



DETAILS OF PILE CAP (PC5)
SCALE -1:50

SCHEDULE OF R.C.C. COLUMN

GR. MRD	COLUMN MARKED	FLOOR MARKED	COL. DETAILS
GR-I	C1,C2,C5-C12, C15-C42,C45-C60. (300X500).	GR. TO TOP FLOOR	300 / 500: 4-20 ϕ; 8 ϕ TIES @ 150 C/C; 8-16 ϕ; 8 ϕ TIES @ 150 C/C
GR-II	C3,C4. (300X600).	GR. TO TOP FLOOR	300 / 600: 6-20 ϕ; 8 ϕ TIES @ 150 C/C; 8-16 ϕ; 8 ϕ TIES @ 150 C/C
GR-II	C13,C14, C43,C44. (300X800).	GR. TO TOP FLOOR	300 / 800: 6-20 ϕ; 8 ϕ TIES @ 150 C/C; 12-16 ϕ; 8 ϕ TIES @ 150 C/C



TYP. DETAIL OF PILE

STRUCTURAL PLAN FOR PROPOSED G+IV STORIED RESIDENTIAL BUILDING PLAN AT MOUZA:- GHUNI J.L.NO.:- 23, R.S.NO.:- 232, TOUZI NO.:-1250, R.S.KH. NO:-1093, IN R.S./ DAG NO.:- 3050,3051, L.R.KH.NO.:- 3800,3801, 3803,4003,7919,7920,10314,10316, P.S.:- NEW TOWN, DIST.:- NORTH 24 PARGANAS, UNDER JYANGRA HATIARA 2 NO. GRAM PANCHAYET.

NAME OF THE OWNERS

1. PRAMOD ROUT.
2. SADANANDA SARKAR.
3. MOUSUMI MISTRI.
4. ARCHANA SINGH.
5. ASWINI KUMAR DUTTA.
6. RAJENDRA NATH DUTTA. (RAJU KUMAR DUTTA)

-: NOTES :-

A. GENERAL:-

1. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRE.
2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
3. ALL FOUNDATIONS SHALL BE REST ON VIRGIN SOIL OR DEEP THOROUGHLY COMPACTED SOIL AS PER SPECIFICATION, WHENEVER THE SOIL CONTAIN THE LOOSE SOIL POCKETS, THE SAME SHALL BE REMOVED AND REFILLED WITH THE P.C.C.

B. CONCRETE WORK:

CONCRETE/CONCRETING:

1. ALL CONCRETE WORK SHALL BE AS PER IS:456 (LATEST REVISION)
2. ALL STRUCTURAL REINFORCED CONCRETE WORK SHALL BE WITH DESIGN MIX CONCRETE OF GRADE AS FOLLOWS UNLESS NOTED OTHERWISE.
a). S/C GRADE CONC. FOR SUB & SUPER STRUCTURES ARE M-35.
3. PLAIN CONCRETE WORK SHALL BE OF THE FOLLOWING GRADES OF NORMAL MIX CONCRETE.
a). 1:5:10 PLUM CONCRETE FOR FILLING CONCRETE UNDER FOUNDATION (WITH MAXIMUM AGGREGATE SIZE OF 40 MM.) AND AS - P.T. TRENCHES ETC.
b). M-15 FOR LEAN CONCRETE BELOW FOUNDATIONS & PLINTH PROTECTION.
4. THE MINIMUM CLEAR COVER FOR PROTECTION OF MAIN REINFORCEMENT SHALL BE AS FOLLOWS:

STRUCTURAL ELEMENT	COVER		
	TOP	BOTTOM	SIDES
a) TIE BEAM	25	25	25
b) COLUMNS	40		40
c) FLOOR BEAM	25	25	25
d) SLAB	20	20	20
e) FOUNDATION	50	50	50

C. REINFORCEMENTS:

1. ALL REINFORCING STEEL SHALL BE OF TESTED QUALITY.
2. (a). HIGH YIELD STRENGTH DEFORMED BAR REINFORCEMENT (YIELD STRESS, Fe= 500 MPa.) SHALL CONFORM TO IS:1786, (LATEST REVISION)
3. LAPS AND SPLICES OF REINFORCEMENT TO SUIT AVAILABLE LENGTH OF BARS SHALL BE MADE AS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER AT SITE.
4. ALL HOOKS, BEENDS, LAPS AND SPLICES SHALL BE AS PER IS:2502.
5. THE LAP/ANCHORAGE LENGTH OF BARS OF DIAMETER 'D' SHALL BE AS FOLLOWS:-

CONCRETE GRADE	DEFORMED BARS	
	TENSION	COMPRESSION
M-25	41ØD	33ØD

6. LAPPING OF BARS SHALL BE SUITABLY STAGGERED AND IN NO CASE MORE THAN 50% BARS SHALL BE LAPPED AT ANY SECTION.
7. LAPPING OF BARS FOR BEAM AND SLAB SHALL BE AVOIDED IN THE MAXIMUM TENSION ZONES.
8. DEVELOPMENT ILENGTH (Ld) = 50XDIA OF THE BAR.

CERTIFICATE OF OWNERS

I SHALL NOT CONSTRUCT THE BUILDING IN DEVIATION OF THE SUBMITTED PLANS AND DRAWINGS.

Pramod Rout
Sadananda Sarkar
Mousumi Mistri
Archana Singh
Aswini Kumar Dutta
Rajendra Nath Dutta
(Raju Kumar Dutta)

DATE:- -: SIGNATURE OF OWNERS:-

-:CERTIFICATE OF ARCHITECT/L.B.S.:-

I CERTIFY THAT ALL THE ARCHITECTURAL DRAWINGS OF THE PROJECT AT MOUZA GHUNI, J.L. NO.-23, R.S. NO.-232, TOUZI NO.-1250,R.S.KH.NO.-1093 IN R.S.DAG NO.-3050,3051, L.R.KH.NO.-3800, 3801,3803,4003,7919,7920,10314, 10316, HAVE BEEIN PREPARED BY ME COMPLYING WITH THE PROVISION OF NEW TOWN DEVELOPMENT AUTHORITY ACT (BUILDING RULES) & KOLKATA GAZETTE NOTIFICATION FROM HIDCO/UD DEPTT. vide no-698-UD/DM/HIDA/I-43/2013 DI 04/03/2014 FOR THE PROJECTS WITHIN NEW TOWN KOLKATA PLANNING AREA IRAJARHAT. NO SUCH WRONG & INCORRECT INFORMATION HAS BEEN FURNISHED BY ME INCLUDING AREA CALCULATION CHARTS IN THIS DRAWING & NO VIOLATION OF THE PROVISION OF THESE RULES WILL BE FOUND IN ANY OF THE DRAWINGS & DOCUMENTS SUBMITTED TO THE SANCTIONING AUTHORITY FOR OBTAINING SANCTION.

MONALISA BISWAS NASKAR
L.B.S. /I/1641
KOLKATA MUNICIPAL CORPORATION
Mob. : +91 9903483483

DATE :- -: SIG. OF ARCHITECT/L.B.S. :-

-:CERTIFICATE OF GEO - TECHINICAL ENGINEER:-

IT IS CERTIFIED THAT COMPREHENSIVE GEO-TECHNICAL REPORT ON SOIL INVESTIGATION HAS BEEN PREPARED BY ME FOR DESIGN & CALCULATION OF THE FOUNDATION BY ANALYZING THE SOIL SAMPLES FOR ESTIMATING THE BEARING CAPACITY OF THE SOIL ON WHICH FOUNDATION OF THE STRUCTURE WILL BE CONSTRUCTED I SHALL ALSO CHECK THE NATURE OF THE SOIL AFTIER EXCAVATION AT SITE SO THAT FOUNDATION IS EXTENDED UP TO THE APPROPRIATE DEPTH THAT HAS BEEN PROPOSED IN THE GEOTECHNICAL REPORT.

Bhaskarjyoti Roy
Mr. Bhaskarjyoti Roy
B.C.E., M.I.E., M.I.G.S.
Chartered Engineer
Empanelment No.-CT/I/44/(K.M.C.)

DATE :- -: SIG. OF GEO-TEC. ENGINEER :-

-:CERTIFICATE OF STRUCTURAL ENGINEER:-

I CERTIFY THAT THE STRUCTURAL DRAWING & DESIGN OF BOTH THE FOUNDATION & SUPERSTRUCTURE OF THE BUILDING HAS BEEN MADE CONSIDERING THE SOIL TEST REPORT (AS PER THESE RULES, REGULATIONS & CODE MADE) & ALSO CONSIDERING ALL POSSIBLE LOADS, SEISMIC LOAD & THE MOMENTS GENERATED BY THE PROPOSED STRUCTURE AS PER CORRENT CODES OF BUREAU OF INDIA STANDARD & NATIONAL BUILDING CODE OF INDIA & CERTIFY THAT IT IS SAFE & STABLE IN ALL RESPECT OF G+IV STORIES & THESE PROVISION SHALL BE ADHERED TO DURING THE CONSTRUCTION.

Vetted

SUDDHASIL BHAUMIK
B.Tech.(Civil), M.Tech (Struct.)
M.I.E., M.I.G.S.(LM-4023)
Chartered Engineer (162240/7)
KMC-BSE-11/563

DATE :- -: SIG. OF STRUCTURAL ENGINEER :-

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Mobile No.:+91 9903483483
E-mail:- monalisa.foundation@gmail.com