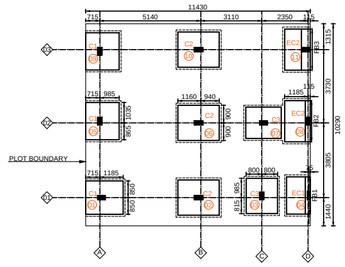
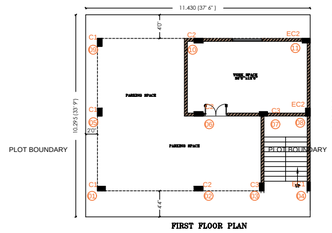
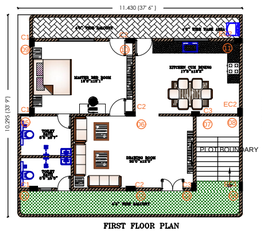


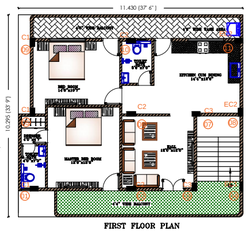
CENTER LINE PLAN
FOUNDATION LEVEL PLAN
(SCALE 1:100)

NOTE : THIS CENTER LINE DRAWING SHALL BE CHECKED AND APPROVED BY ARCHITECT BEFORE EXECUTION OF THE WORK AND IF ANY CHANGE TAKES PLACE PLEASE INFORM THIS OFFICE.

NOTE :- AT FOUNDATION LEVEL BELOW EVERY FOOTING 300 mm THK. BOULDERS SOLING SHOULD BE DONE BEFORE LAYING OF P.C.C.





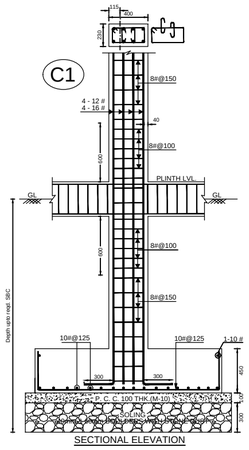


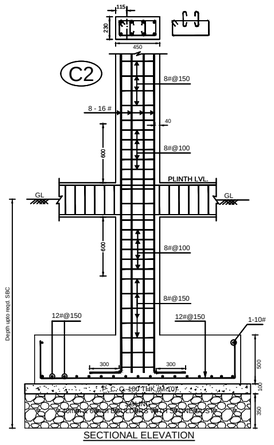
SCHEDULE OF COLUMNS & FOOTINGS (M20:Fe500)

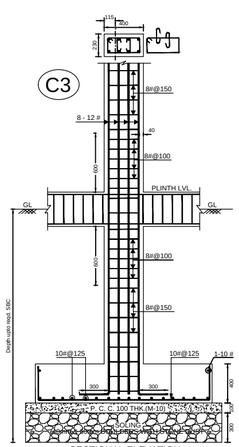
COLUMN NO.	EXCAVATION SIZE	PCC THK.	FOOTING SIZE	DEPTH OF FOOTING	TYPE OF FOOTING	REINFORCEMENT		COLUMN DETAILS FOUNDATION TO TERRACE SLAB		
						ALONG L	ALONG B	SIZE	VERTICAL BARS	TIES
C1	1900x2100	100	1700x1900	450	PAD	10 # @125	10 # @125	230x400	4 - 12 # 4 - 16 #	8#@100-150 C/C
C2	2000x2300	100	1800x2100	500	PAD	12 # @150	12 # @150	230x450	8 - 16 #	8#@100-150 C/C
C3	1800x2000	100	1600x1800	400	PAD	10 # @125	10 # @125	230x400	8 - 12 #	8#@100-150 C/C
EC1	1300x2100	100	1200x1900	450	ECCENTRIC	12 # @150	12 # @150	150x450	8 - 16 #	8#@100-150 C/C
EC2	1400x2300	100	1300x2100	500	ECCENTRIC	12 # @150	12 # @150	230x400	4 - 12 # 4 - 16 #	8#@100-150 C/C

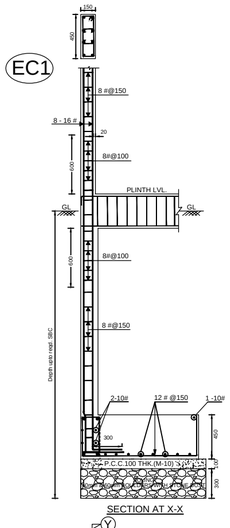
SCHEDULE OF BEAMS (M20:Fe500)

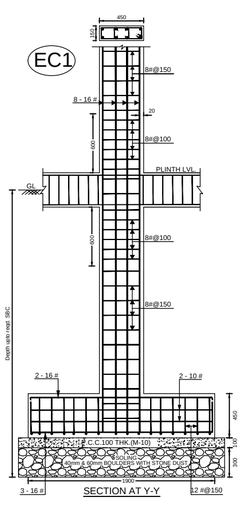
BEAM NO.	SIZE		BOTTOM REINFORCEMENT		TOP REINFORCEMENT		STIRRUPS		SIDE FACE REINFORCEMENT	REMARK
	B	D	STRAIGHT	EXTRA BOTT. BARS AT MID SPAN (0.7 x L)	STRAIGHT	EXTRA TOP BARS (UPTO 0.25xL FROM FACE OF COLUMN)	UPTO 2D FROM FACE OF COLUMN	AT MID SPAN		
FB1	250	450	3 - 16 #		2 - 16 #		12 # @ 150 C/C	12 # @ 150 C/C	2 - 10 #	
FB2	250	500	3 - 16 #		3 - 16 #		12 # @ 150 C/C	12 # @ 150 C/C	2 - 10 #	
FB3	450	500	4 - 16 #		4 - 16 #		12 # @ 150 C/C	12 # @ 150 C/C	2 - 10 #	

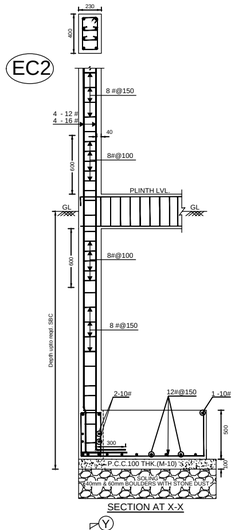


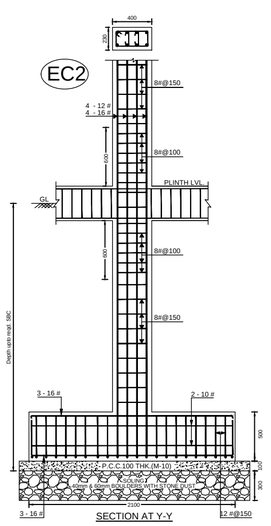


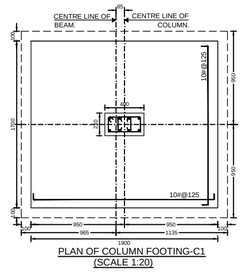


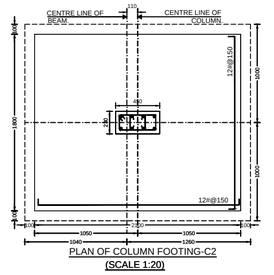


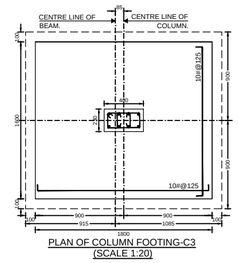


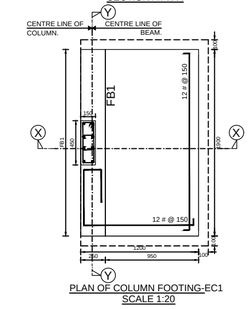


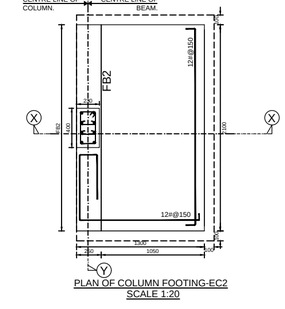












GENERAL NOTES

1. BASIC REFERANCE CODE : IS 456 - 2000
2. EXTRA TOP OR BENT-UP BARS SHALL BE EXTENDED UPTO L/3 IN ADJACENT SPAN OVER A CONTINUOUS SUPPORT, AND ANCHOR DOWN AT END SUPPORT.
3. TOP BARS OF ALL CANTILEVER BEAM / SLAB SHOULD BE EXTENDED ON OPPOSITE SIDE UP TO 1.5 TIMES CANTILEVER PROJECTION UNO.
4. U.N.O. MINIMUM LAP LENGTH SHALL BE 50 TIMES OF BAR DIAMETER OF SMALLER BAR AT ANY SECTION.
5. CONFINING STIRRUPS IN BEAM COLUMN JUNCTION SHALL BE PROVIDED AT THE SPACING INDICATED, HOWEVER IF BEAMS ARE CONNECTED ON ALL THE FOUR DIRECTIONS OF COLUMN THE SPACING SHOULD BE DOUBLED.
6. AT BEAM & COLUMN JUNCTION, BEAM BARS IF IN CONFLICT WITH COLUMN BARS SHALL BE GRADUALLY BENT & PLACED CLEAR OFF COLUMN BARS. UNDER NO CIRCUMSTANCES COLUMNS VERTICAL BARS SHALL BE BENT TO ACCOMODATE BEAM BARS.
7. STIRRUPS FOR CANTILEVER BEAMS TO HAVE HOOK AT BOTTOM.
8. AT PLINTH LVL, OUTER BEAM BOTTOM @ SAME LVL & INNER BEAM TOP @ SAME LVL. IF PLINTH SLAB IS GIVEN, IF WILL BE RESTING ABOVE INNER BEAM INDEPENDENTLY, COMPLETE BEAM SHALL CAST BELOW PLINTH SLAB BOTTOM.
9. ALL LAPS SHALL BE STAGGERED & NOT MORE THAN 50% BARS TO BE LAPPED AT ANY GIVEN SECTION.
10. USE OF NEEDLE VIBRATOR AND SUPER PLASTISIZER RECOMMENDED FOR R.C.C. WORK.
11. USE DENSIFIED COATED PLYWOOD FOR SHUTTERING & FORMWORK.
12. BOTTOM OF ALL OUTER BEAM SHALL BE 150MM BELOW GROUND LVL AND SHOULD HAVE CLEAR AIR GAP OF 150MM FOR B.C. SOIL STRUCTURE.
13. AT ANY LVL WHERE COLUMN SIZE GETS REDUCED IN EITHER DIMENSION BEAM IS ABSOLUTELY ESSENTIAL.
14. CURING :-
    EXPOSED SURFACE OF CONCRETE SHALL BE KEPT CONTINUOUSLY IN WET CONDITION MINIMUM FOR 14 DAYS.
15. DESHUTTERING PERIOD SHALL NOT BE LESS THAN SPECIFIED BELOW
    a) Vertical faces of column, beams, & wall -24 hrs.
    b) Slabs I) Spanning upto 4.5m, -7 days
       II) Spanning over 4.5m, -14 days
    c) Beams I) Spanning upto 6.0m, -14 days
       II) Spanning over 6.0m, -21 days
    * Due care should be taken to ascertain that requisite strength of concrete is gained before commencement of deshuttering
16. NOMINAL COVER

		Mild	Moderate
I	Footings	50	50
II	Columns (to links of column)	40	40
III	Slabs	20	25
IV	Beams (to stirrups of beam)	20	30
V	Lift wall/shear wall	35	35

    In case of slab if main reinf. diamtr. exceeds 12mm then cover for moderate and severe exposure condition should be increased by 5mm
17. UNLESS SPECIFIED IN THE DWG.CONSTRUCTION JOINT SHOULD BE APPROVED BY ENGINEER AT SITE.CONSTRUCTION JOINT SHOULD BE AT QUARTER SPAN OF BEAM AND SLAB, IN NO CONDITION SHOULD BE AT THE SUPPORT.
18. DO NOT SCALE THE DWG., ONLY WRITTEN DIMENSION ARE TO BE FOLLOWED.
19. ALL DIMENSIONS ARE IN MM, EXCEPT IN LAYOUT, LEVELS ARE IN METER.
20. IN CASE OF ANY AMBIGUITY, PLEASE BRING IT TO THE NOTICE OF THIS OFFICE BEFORE EXECUTION OF WORK.
21. SHUTTERING & SCAFFOLDING IS AT THE RESPONSIBILITY OF CONTRACTOR.

GENERAL SAFETY NOTES

1. OUR RESPONSIBILITY SHALL REMAIN LIMITED TO SAFE AND SOUND STRUCTURAL DESIGN AS TRANSMITTED BY THIS DRAWING AND WE SHALL NOT REMAIN RESPONSIBLE FOR
   A) SAFETY OF OLD STRUCTURE DURING DEMOLITION.
   B) SAFETY OF ANY ADJOINING BUILDING /PERSONS STAYING IN ADJOINING BUILDING/ PERSONS & PROPERTIES ON ADJOINING ROADS.
   C) SAFETY OF CONSTRUCTION WORKER/ANY PERSONNEL AT WORK SITE DURING CONSTRUCTION
   D) CORRECTNESS/SAFETY OF ANY TEMPORARY STRUCTURE, SCAFFOLDING, SHUTTERING, CENTERING ERECTED @ SITE AND ANY INJURY TO ANY PERSONNEL ARISING OUT OF THEIR ACCIDENTS.
   E) ANY ACCIDENT OCCURRING DUE TO CONSTRUCTION OF ELEMENTS OF BUILDINGS NOT DESIGN BY US, MATERIAL OR WORKMANSHIP / FAULTY CONSTRUCTION PROCEDURE.
   F) ACCIDENT OCCURRING DUE TO PREMATURE DESHUTTERING FAULTY / SUBSTANDARD CONSTRUCTION MATERIAL OR WORKMANSHIP / FAULTY CONSTRUCTION PROCEDURE.
2. ALL STRUCTURAL CONCRETE SHOULD BE WEIGH BATCHED, MACHINE MIXED & MECHANICALLY VIBRATED.
3. SUPERVISION IF SPECIFICALLY ASKED FOR WILL BE PROVIDED TO THE EXTENT OF VERIFICATION OF REINFORCEMENT ON SITE BUT RESPONSIBILITY REGARDING CORRECT & SOUND CONSTRUCTION SHALL SOLELY REST WITH CONFRACTOR/ BUILDER / OWNER.

S.B.C OF SOIL : 180 kN/M2

GRADE OF CONCRETE :M20

GRADE OF STEEL : Fe500

NOTE : STRUCTURAL ENGINEER IS RESPONSIBLE FOR THIS DRAWING ONLY.

SCALE N.T.S

R0

REVISION	DESCRIPTION	DATE
R1		
R2		
R3		

DWG ID :

TITLE :- R.C.C DETAILS AT FOUNDATION LEVEL

PROJECT :- PROPOSED RESIDENTIAL BUILDING AT NAGPUR

CLIENT :- MR. ROSHAN BANGAR

ARCHITECT :- - - -

DESIGN FOR :- G + 2

DESIGN BY	DRAWN BY	CHECKED BY	DATE
ASHFAQUE A.	MUDASSIR R.	FAIZAN K.	14.10.2024
GOOD FOR CONS.	ADVANCE COPY	TENDER COPY	ESTIMATE COPY
●	○	○	○

FSA STRUCTURES
STRUCTURAL DESIGNERS & ENGINEERS

OFFICE ADDRESS :
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