GENERAL NOTES:
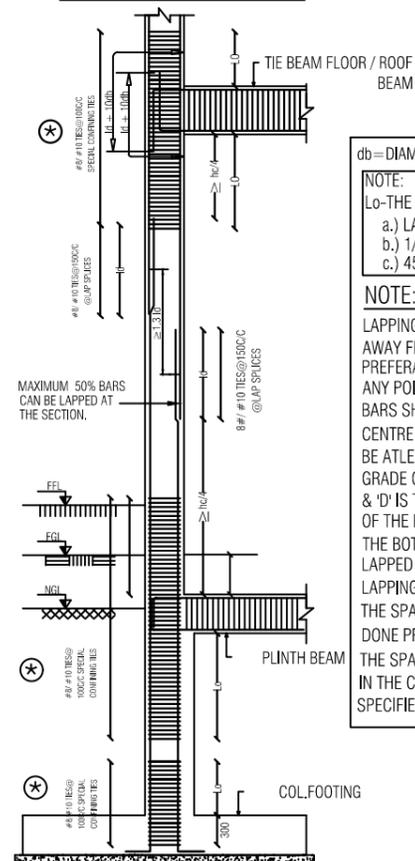
1) Drawings shall be read in conjunction with architectural dwgs.
2) All dimensions are in mm unless specified otherwise.
3) Dimensions of the drawings shall not be scaled.
4) Written dimensions should be followed. In case of any discrepancy the
   same shall be referred to the architect.
5) Steel grade is Fe 415 D for all bars except 6mm bars, which shall be of mild steel.
6) Reinforcement Concrete shall be M25 for all R.C.C items.
7) Normal cover to all reinforcement shall be
   (a) Foundation-60 mm (b) Column-40 mm (c) Beam-25mm (d) Slab-15 mm
8) Lap length requirement are as follows
   (a) Not more than 50%bars shall be lapped at a section(U.N.O)
   (b) Laps are 48 times dia of bar
       No lapping shall be done for cantilever beam.
   (c)When bars of 2 different diameters are to be lapped, lap length shall be based on
       diameter of smaller bar.
9) Spacer bars of 25mm dia or maximum dia of longitudinal bar, whichever is higher
   shall be provided between 2 layers of longitudinal reinforcement in beam.
10) The concrete is assumed to be machine mixed.
11) All covers shall be ensured by precast cover blocks made of C:M 1:3 and dip cured
    for 7 days with embedded binding wires for tying them.
12) All top bars of slab shall be supported with chairs of appropriate dia at 1000 mm c/c.
13) Isolated Footing is adopted,SBC:200kN/m²
14) Foundation is designed for G+2

TYP DUCTILE DETAILING AT THE JUNCTION OF COLUMNS & FLOOR BEAM / PLNTH BEAM

⊛ DIAMETER & SHAPE OF TIES REFER COLUMN DETAIL DRAWING

TIE BEAM FLOOR / ROOF BEAM

MAXIMUM 50% BARS CAN BE LAPPED AT THE SECTION.

PLINTH BEAM

COL.FOOTING

db=DIAMETER OF THE BAR IN BEAM

NOTE:
Lo-THE LENGTH SHALL NOT BE LESS THAN
a.) LARGER LATERAL DIMENSION OF THE COL.
b.) 1/6 OF CLEAR HEIGHT OF THE COL.
c.) 450mm

NOTE:
LAPPING OF COLUMN BARS SHALL BE DONE AWAY FROM BEAM-COLUMN JUNCTIONS; PREFERABLY AT THE MIDDLE OF FLOORS. AT ANY POINT, NOT MORE THAN 50% OF COLUMN BARS SHALL BE LAPPED AND CENTRE TO CENTRE DISTENCE BETWEEN THE LAPS SHALL BE ATLEAST "1.3 Id" WHERE Id = 48D FOR M-25 GRADE CONCRETE AND Fe 415 D GRADE STEEL & 'D' IS THE DIAMETER OF THE LESSER DIAMETER OF THE BARS BEING LAPPED. THE BOTTOM BARS IN THE BEAMS SHALL BE LAPPED CLOSER TO THE COLUMNS AND LAPPING SHALL BE AVOIDED AT THE MIDDLE OF THE SPANS. FOR TOP BARS LAPPING SHALL BE DONE PREFERABLY AT CENTRE OF THE SPANS. THE SPACING OF TIES AT OTHER LOCATION IN THE COLUMN SHALL BE PROVIDED AS SPECIFIED IN THE DETAILS OF COLUMNS.
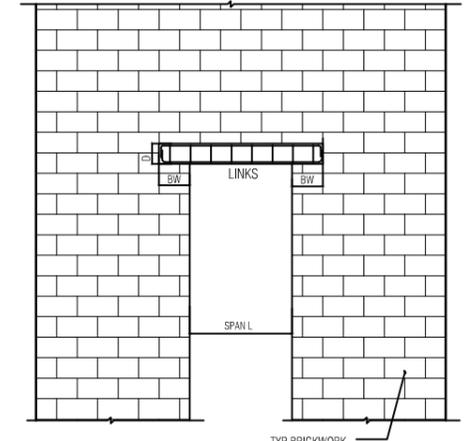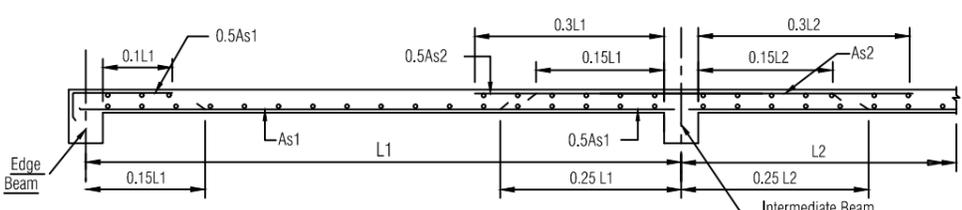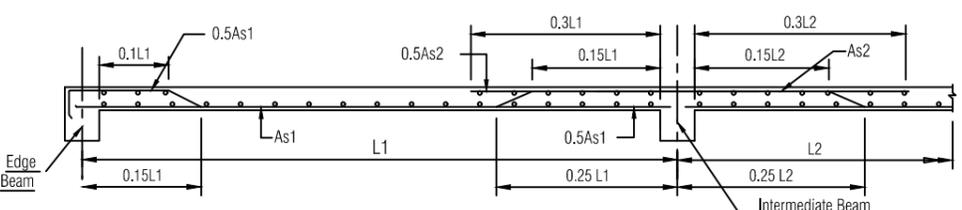
TYPICAL DETAIL FOR LINTEL
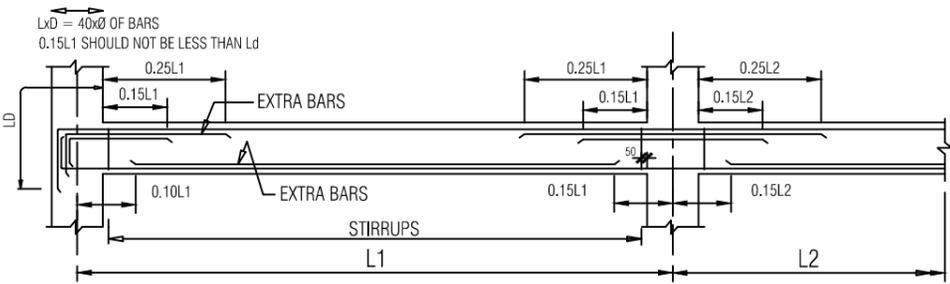
LINKS
BW
SPAN L
TYP BRICKWORK

MAIN REINF
LINKS
200 THICK WALL
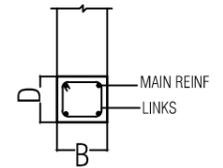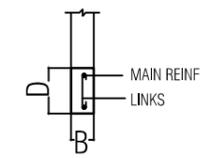
MAIN REINF
LINKS
100 THICK WALL

REBAR DETAILS IN SLAB PANELS USING STRAIGHT BARS
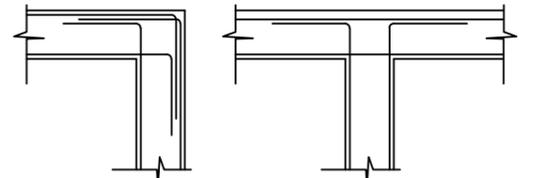(BARS ALONG SHORTER SPAN SHALL BE PLACED FIRST)

0.5As1   0.3L1   0.3L2
0.1L1   0.5As2   0.15L1   0.15L2   As2
Edge Beam
As1   L1   0.5As1   L2
0.15L1   0.25 L1   0.25 L2
Intermediate Beam

REBAR DETAILS IN SLAB PANELS USING BENT UP BARS
(BARS ALONG SHORTER SPAN SHALL BE PLACED FIRST)

0.5As1   0.3L1   0.3L2
0.1L1   0.5As2   0.15L1   0.15L2   As2
Edge Beam
As1   L1   0.5As1   L2
0.15L1   0.25 L1   0.25 L2
Intermediate Beam

SCHEDULE FOR LINTELS

SPAN L(mm)	B(mm)	D(mm)	REINFORCEMENT TOP	REINFORCEMENT BOT.	LINKS	BEARING (BW)
UP TO 1000	100	150	1-Ø10	1-Ø10	Ø8/150c/c	300
UP TO 1000	200	150	2-Ø10	2-Ø10	Ø8/120c/c	300
UP TO 2000	200	200	2-Ø10	3-Ø10	Ø8/180c/c	300
UP TO 2500	200	250	2-Ø10	3-Ø12	Ø8/180c/c	450
UP TO 3000	200	300	2-Ø12	4-Ø12	Ø10/180c/c	450

TYPICAL BEAM ELEVATION DETAILS

LxD = 40xØ OF BARS
0.15L1 SHOULD NOT BE LESS THAN Ld

0.25L1   0.25L2
0.15L1   EXTRA BARS   0.15L1   0.15L2
0.10L1   EXTRA BARS   0.15L1   0.15L2
STIRRUPS
L1   L2

PLAN SHOWING STEEL TERMINATION DETAILS AT THE JUNCTIONS FOR FOUNDATION BEAMS AND LINTELS

CLIENT: WEST FACING RESIDENCE @ BANGLORE

MC.TERRA

CONSULTANTS:
STRUCTURAL CONSULTANT
Abhilash Joy
32/702, St. Vincent Convent Road
Palarivattom, Cochin- 25
Phone: 0484-2339779
Email: abhilashjoy@vsnl.net

DEPT. CODE	NAME	SIGN	DATE
DRN	Jeena		08-09-2016
DESN	Neethu		
CHD	Renjini		
APPD	Abhilash Joy		

TITLE: GENERAL NOTES

PROJECT NO:1725

DRAWING NO.: 1

SHEET 1 OF 6   REV. 0

SCHEDULE OF ISOLATED FOOTINGS

FOOTING ID	EXCAVATION SIZE [Lx' X Ly']	FOOTING SIZE [Lx X Ly]	FOOTING THICKNESS		REINFORCEMENT DETAILS		CONCRETE
			DMax	DMin	Along X,Sx	Along Y,Sy	
F1	1100 X 1100	800 X 800	400	150	#10 @ 150 c/c	#10 @ 150 c/c	M 25
F2	1850 X 1650	1550 X 1350	400	150	#10 @ 150 c/c	#10 @ 150c/c	M 25
F3	2350 X 2150	2050 X 1850	400	150	#10 @ 120 c/c	#10 @ 120 c/c	M 25

	GRADE OF CONCRETE			
GROUND FLOOR TO TERRACE	M25	300 / 200 ●-4 - Y16 ○-2 - Y12 Y8@ 150/200 C/C	400 / 200 ●-8 - Y16 Y8@ 150/200 C/C	
GROUND FLOOR TO FOUNDATION	M25	300 / 200 ●-4 - Y16 ○-2 - Y12 Y8@ 150/200 C/C	400 / 200 ●-8 - Y16 Y8@ 150/200 C/C	300 / 200 ●-4 - Y16 ○-2 - Y12 Y8@ 150/200 C/C
COLUMN ID		C1,C2,C4,C6,C7	C5,C8,C9,C10,C11,C12	C3

PLINTH BEAM DETAILS

200

400

2-#16

8Ø @ 150 c/c

2-#16

PB1

SECTION A-A

GL

Plinth Beam

150

Column Bars

Upto hard strata

Dmin

Ld

Dmax

Well compacted earth

TYPICAL FOOTING PLAN

Sx

Sy

A — A

Column

Footing

P.C.C

10 CM THICK PCC LAYER
BASEMENT FLOOR LEVEL

PLASTERING with CM 1:3

BRICK WORK

EXISTING GL

PLINTH BEAM

10 CM THICK PCC

TYPICAL PLINTH BEAM SECTION DETAILS.

TYPICAL STAIR DETAIL

1200

LANDIND BEAM

100 THK.

10Ø@150C/C

10Ø@150C/C

300

L/5

150

Floor Level

plinth beam / floor beam

2-#16

300

2-#16

200

LANDING BEAM