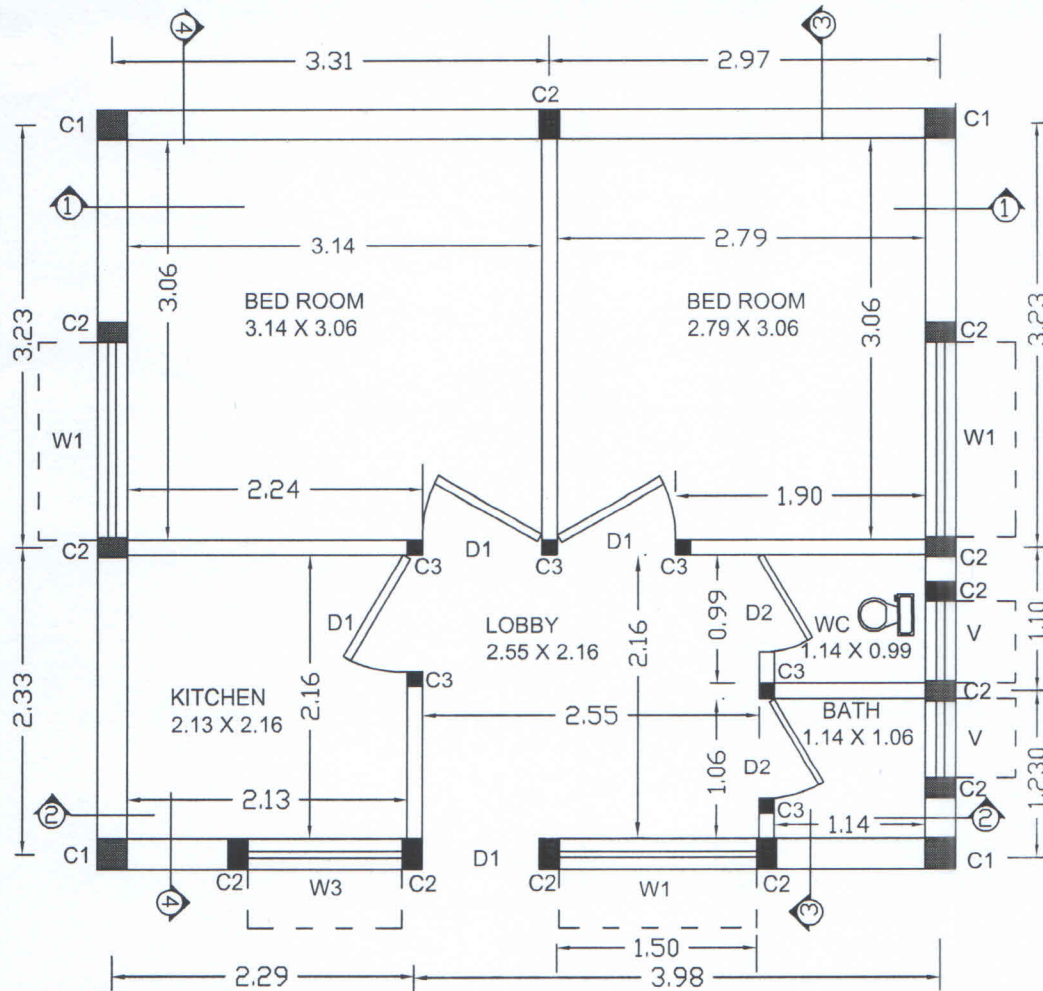


NOTES:-

- All dimensions are in m, unless wherever specified diameter of the bars shown in mm
- Dimensions are not to be scaled out, only written dimensions may be taken as correct.
- Nominal mix concrete 1:1.5:3 according IS 456 Clause 9.3
- The reinforcement shall be of high strength deformed steel bars conforming to IS:1786-2008
- Lap length and development length (L_d) for 10mm Φ is 500 mm
- Second class brick must be used
- Mortar 1:4 as per to Table 3 IS 4326-2013
- All walls are one Brick Thick Masonry walls or Autoclaved Aerated Block of Class 7.5
- Partition Wall of WC and Bath shall be constructed till full height after slab casting
- Refer DWG-2 to DWG-4 for earthquake resistance and structural detail.
- Ventilator size may be increased with a partially fixed portion to avoid giving two number of C-2 columns.



FLOOR PLAN DETAIL

Schedule of Door & Windows

Name	Lintel	Width	Sill lvl	Description
D1	2.10	0.90	--	PVC DOOR
D2	2.10	0.75	--	
W1	2.10	1.50	0.90	VENTILATOR
W3	2.10	0.60	0.90	
V	2.10	0.60	1.80	

NOTES:-

Clear height of DU = 2.85 m

Chajja projection over windows is 450 mm .

Confinement Column sizes : C1 - 230 mm X 230 mm , C2 - 230 mm X150 mm , C3- 115 mm X115 mm

* All the Dimensions in m

DRG. No. - NIT/CED/2017/PMAY -OPI-CMB-FR-ZIV,V/DWG-1

NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR

**BUILDING NAME:
PMAY HFA
OPTION 1
CONFINED MASONRY
BUILDING
FLAT ROOF
ZONE IV, V**

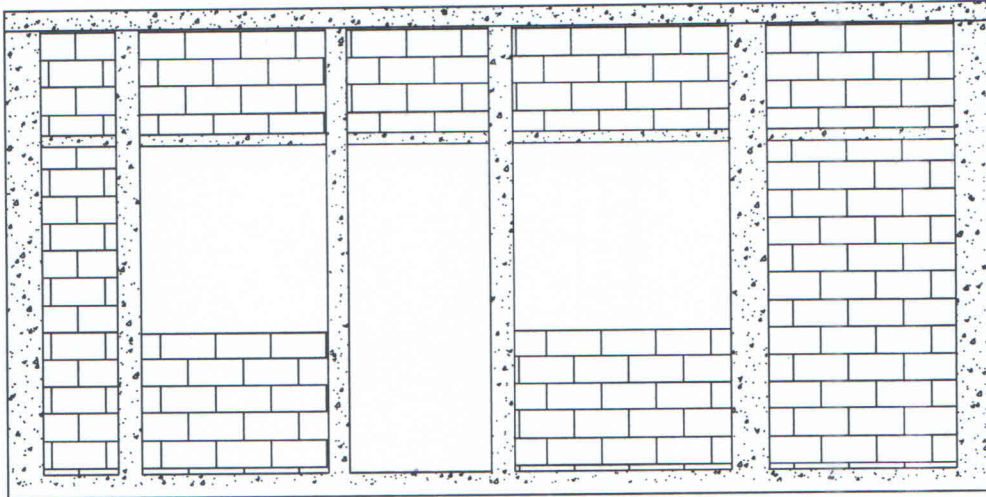
**DRAWING TITLE:
FLOOR PLAN**

**DESIGNED BY:
Dr. Pardeep Kumar
Dr. Hemant Kumar Vinayak**

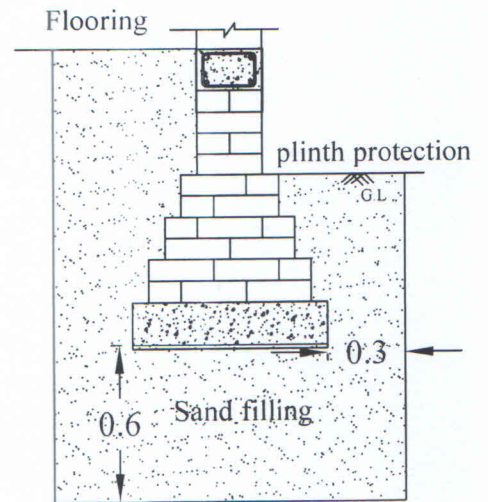
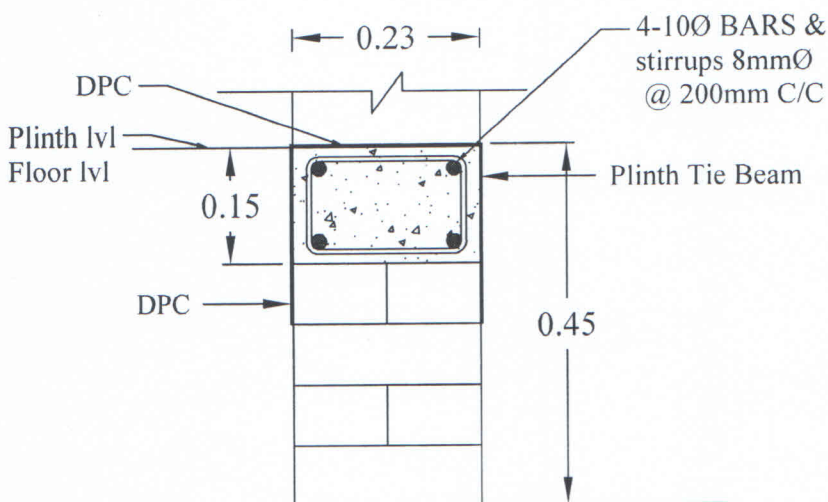
Dr. Hemant Kumar Vinayak
Assistant Professor

Department of Civil Engineering
National Institute of Technology,
Hamirpur -177005 (H.P.)

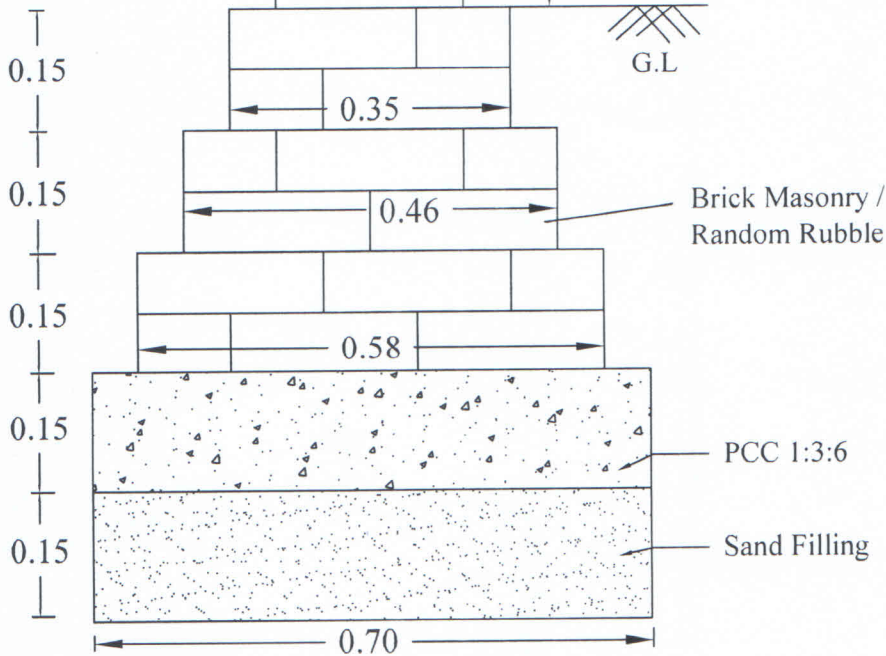
Dr. Pardeep Kumar
Associate Professor (Structural Engg)
Civil Engineering Department
NIT, Hamirpur (H.P.)-177005



ELEVATION



• In case of foundation to be constructed in expansive soil



FOOTING DETAILS

DRG. No. - NIT/CED/2017/PMAY-OP1-CMB-FR-ZIV,V/DWG-2

NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR

BUILDING NAME:
PMAY HFA
OPTION 1
CONF. MASONRY BUILDING
FLAT ROOF
ZONE IV,V

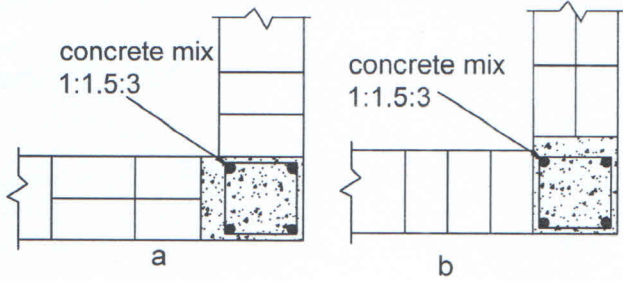
DRAWING TITLE:
FOOTING DETAIL &
ELEVATION

DESIGNED BY:
Dr. Pardeep Kumar
Dr. Hemant Kumar Vinayak

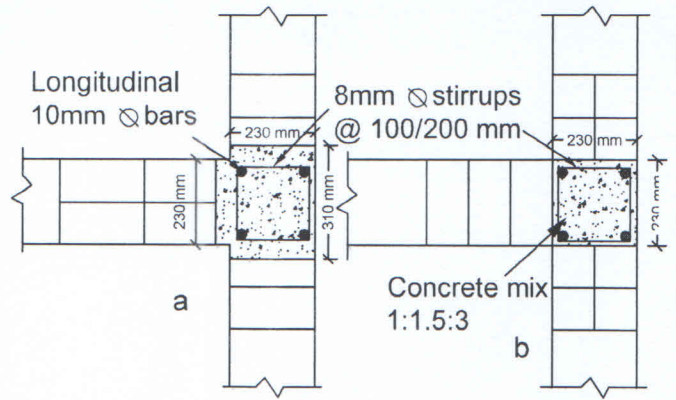
• All dimensions are in meter

Hemant Kumar Vinayak
Dr. Hemant Kumar Vinayak
Assistant Professor
Department of Civil Engineering
National Institute of Technology,
Hamirpur -177005 (H.P.)

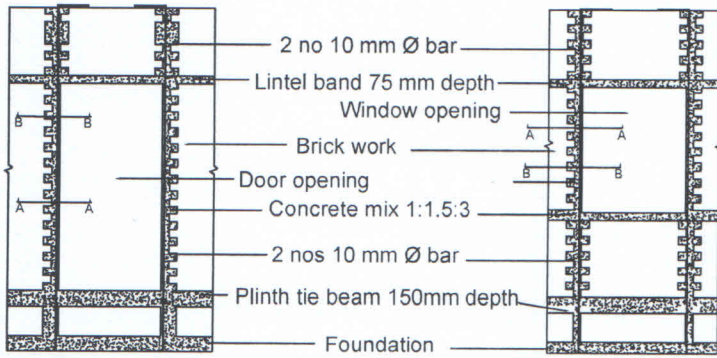
Pardeep Kumar
Dr. Pardeep Kumar
Associate Professor (Structural Engg.)
Civil Engineering Department
NIT, Hamirpur (H.P.)-177005



CORNER VERTICAL STEEL
a & b :- alternate courses in one brick wall

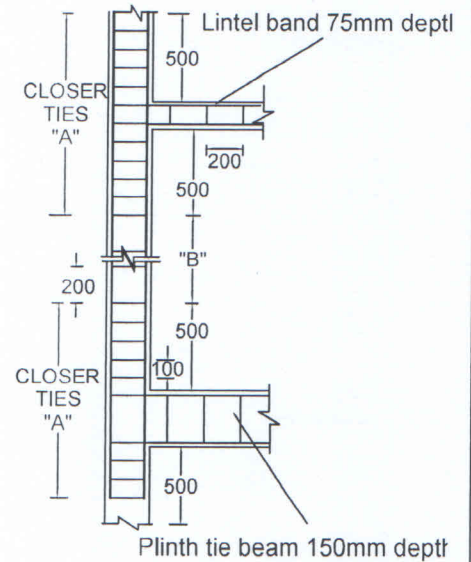


INTERMEDIATE VERTICAL STEEL
a & b :- alternate courses in one brick wall

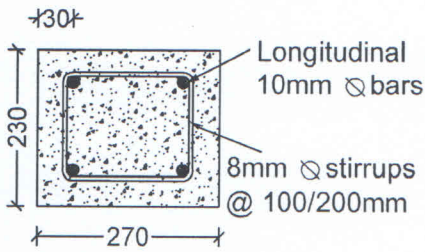


DETAIL OF CONFINED R/F OF DOOR

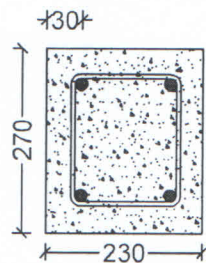
DETAIL OF CONFINED R/F OF WINDOW



DETAILS CONFINED COLUMN JUNCTION



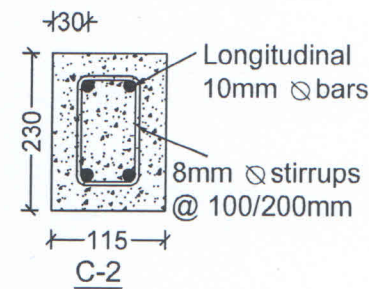
cross section of corner confined column course -a



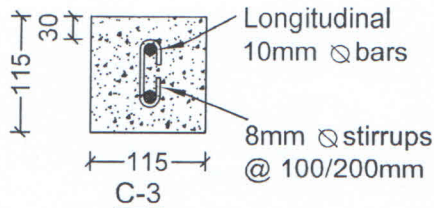
cross section of corner confined column course -b

"A"=Closer ties=Spacing of hoops @ 100mm c/c

"B"=Spacing of hoops @ 200mm c/c



C-2



C-3

DRG. No. - NIT/CED/2017/PMAY -OP1-CMB-FR-ZIV,V/DWG-3

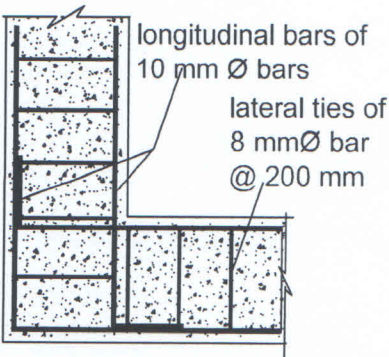
NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR

**BUILDING NAME:
PMAY HFA
OPTION I
CONF. MASONRY BUILDING
FLAT ROOF
ZONE IV,V**

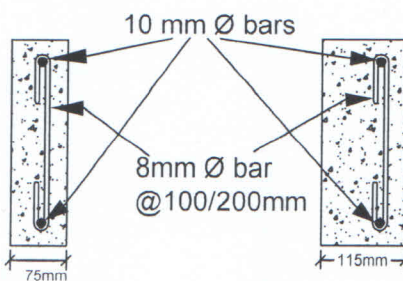
**DRAWING TITLE:
DETAILS OF R/F AROUND
WINDOW & DOOR,
VERTICAL R/F,
CROSS SECTION OF BAND**

**DESIGNED BY:
Dr. Pardeep Kumar
Dr. Hemant Kumar Vinayak**

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National Institute of Technology,
Hamirpur -177005 (H.P.)

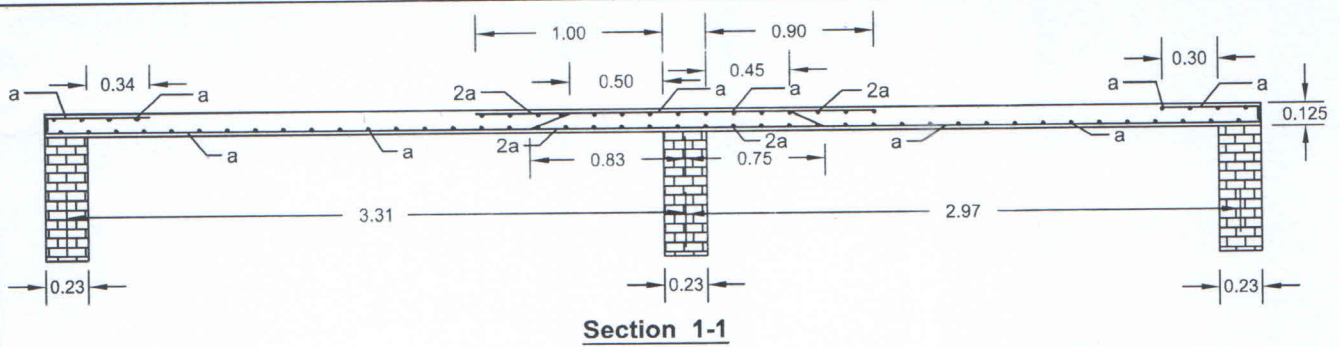


DETAILS OF PLINTH TIE BEAM /LINTEL BAND

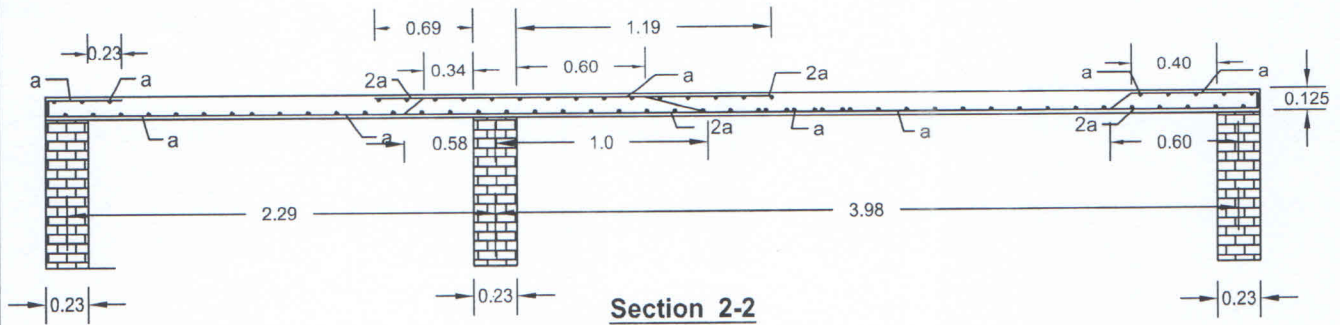


SECTION A-A SECTION B-B

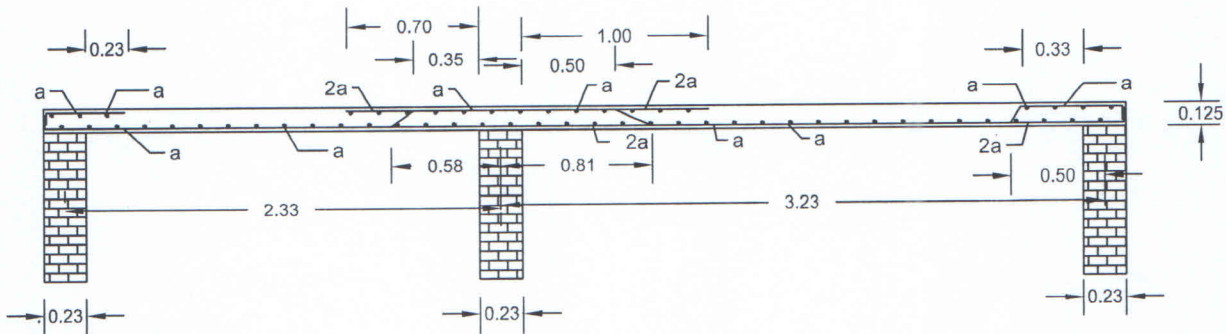
Dr. Pardeep Kumar
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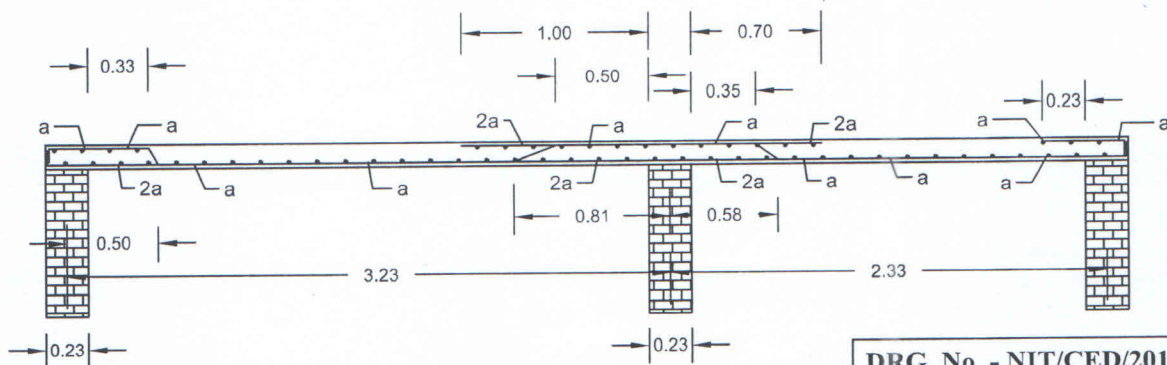
Section 1-1



Section 2-2



Section 3-3



Section 4-4

- Clear cover for slab should be 20mm.
- All dimensions are in meter

SCHEDULE OF BARS
a. 8 mm Ø @ 150 mm c/c

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DRG. No. - NIT/CED/2017/PMAY -
OP1-MB-FR-ZIV,V/DWG-4

NATIONAL INSTITUTE OF
TECHNOLOGY HAMIRPUR

BUILDING NAME:
PMAY HFA OPTION 1
CONFINED MASONRY BUILDING
FLAT ROOF ZONE IV,V

DRAWING TITLE:
SLAB DETAILS

DESIGNED BY:
Dr. Pardeep Kumar
Dr. Hemant Kumar Vinayak