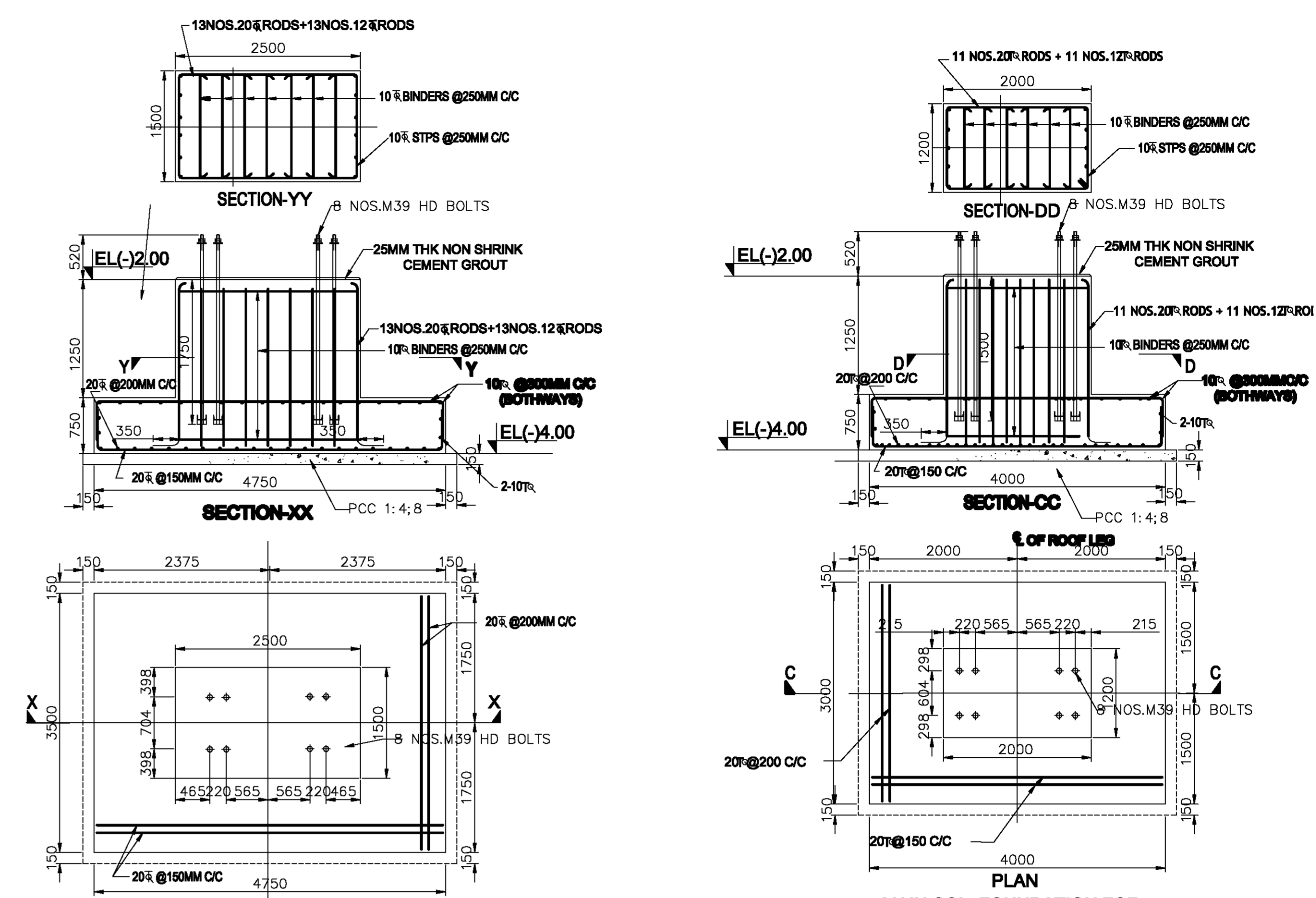
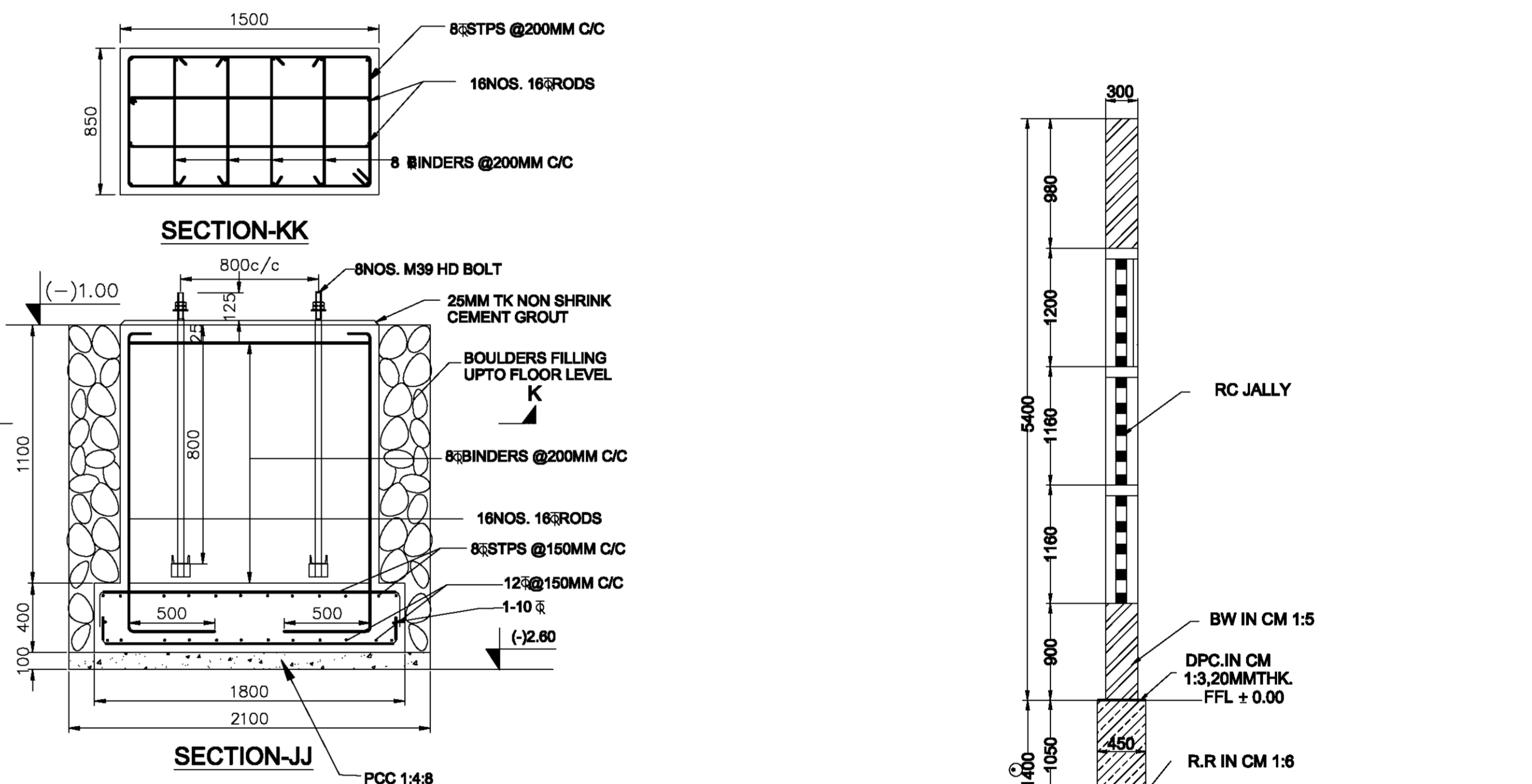


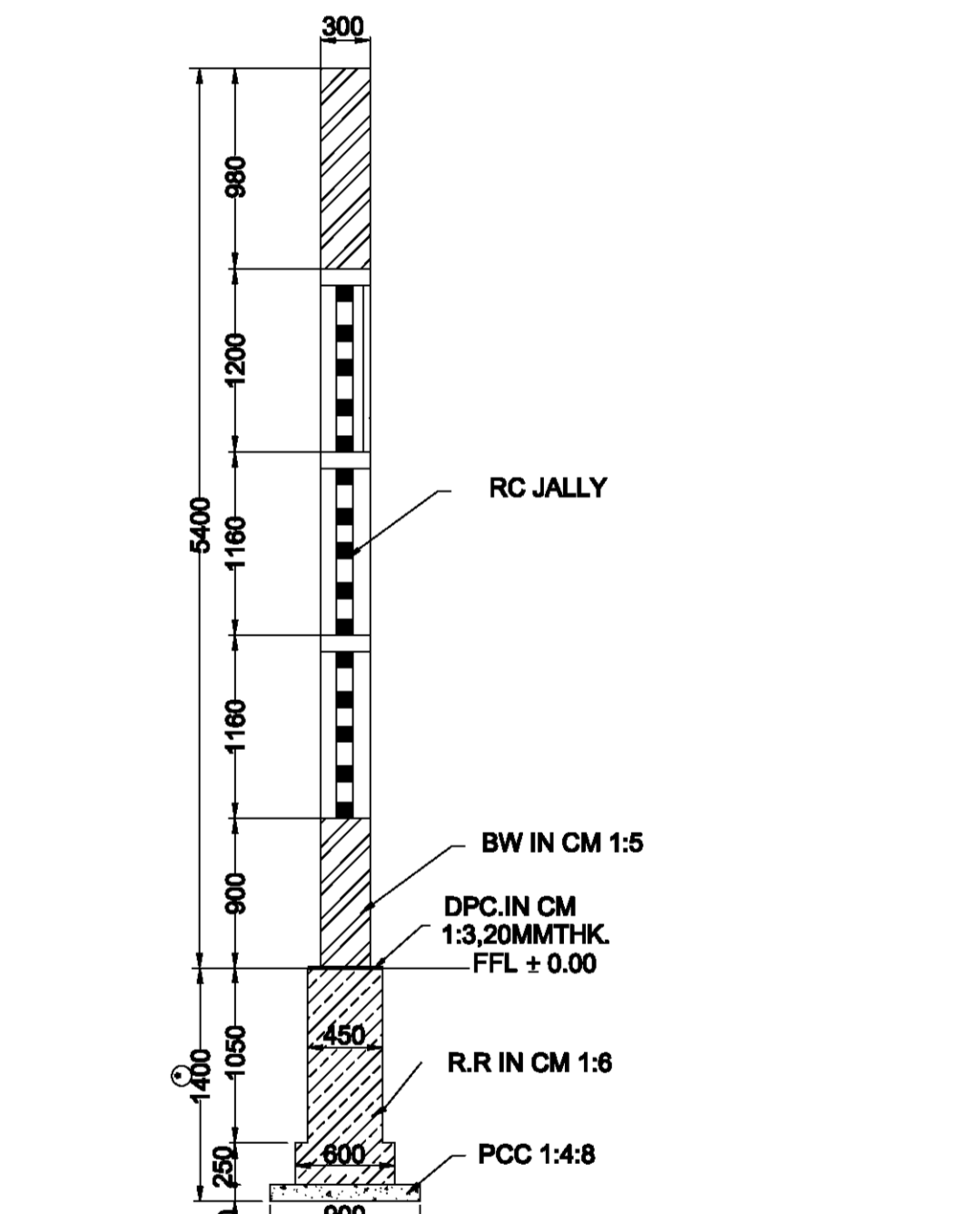
PLAN



PLAN FOUNDATION FOR D7, D8, E7, E8, F7, F8 (6 Nos)



PLAN FOUNDATION DETAILS OF SHEETING COLUMN TYPE-II (21 Nos)

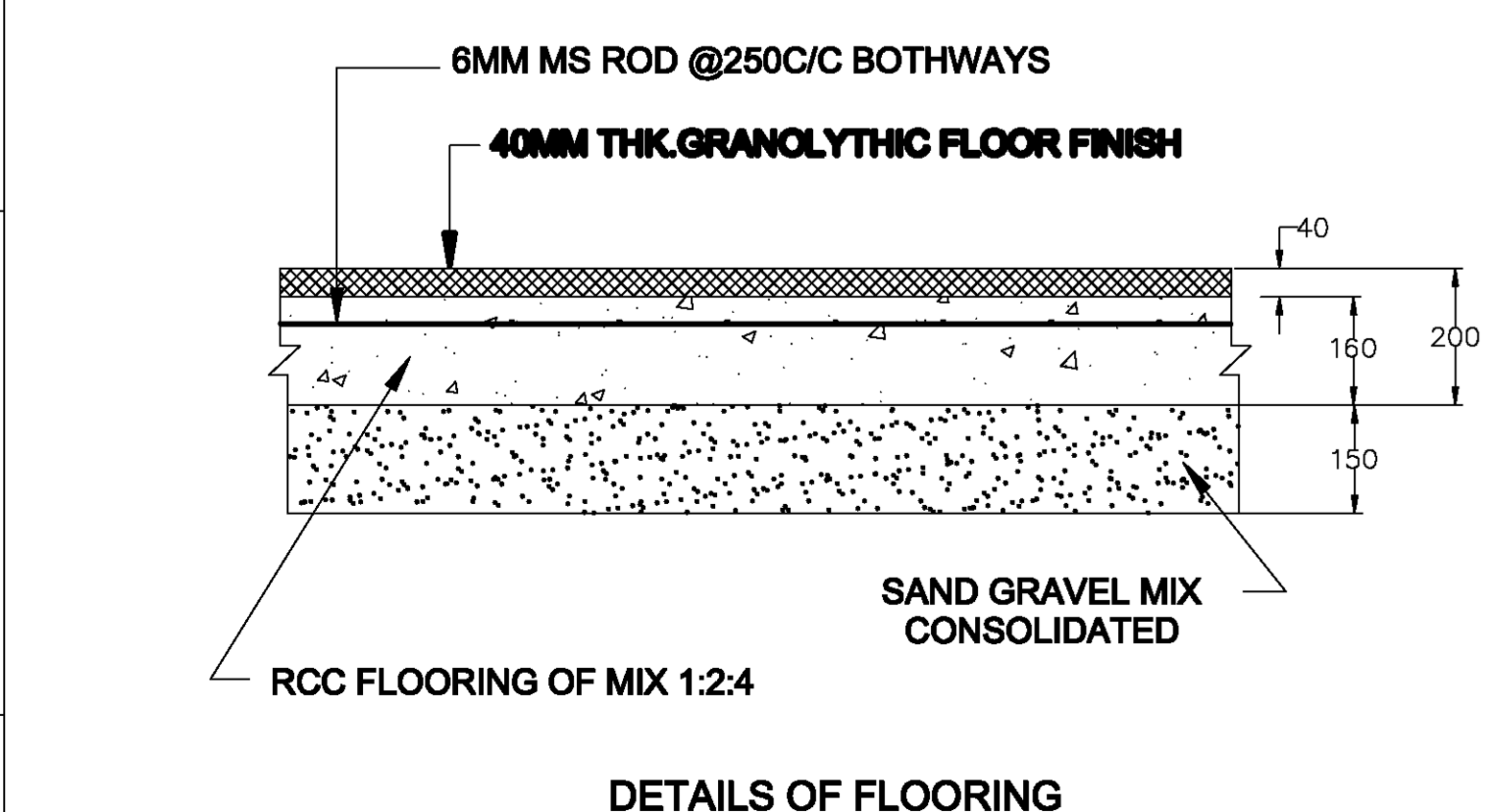


DETAILS OF PERIPHERY WITH RC JALLEY WALL FOUNDATION

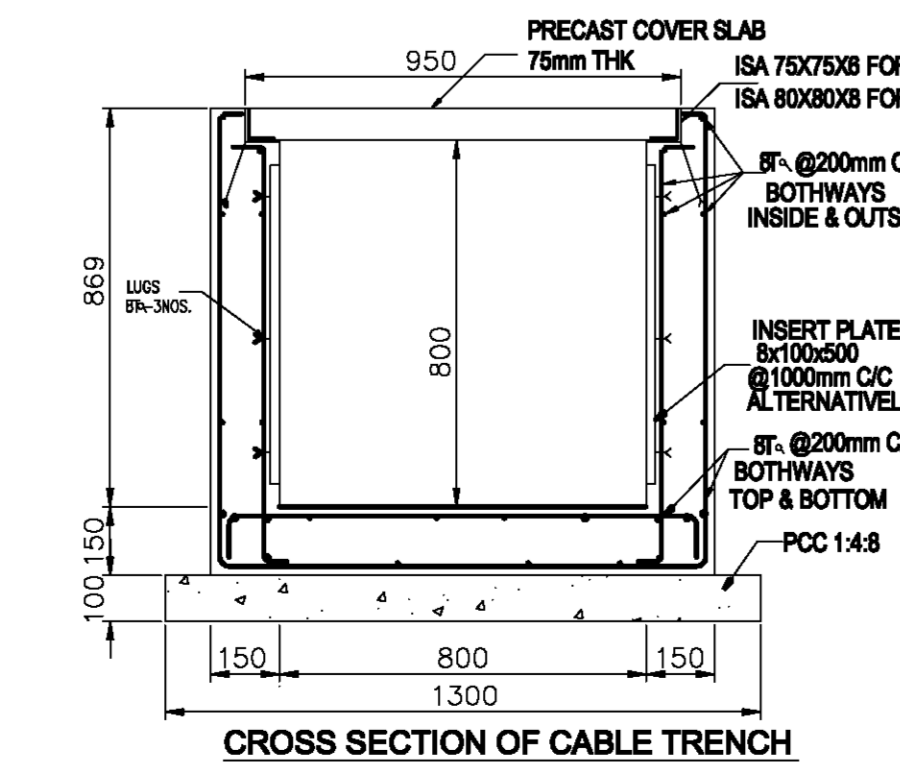
- NOTES:-
- 1) ALL DIMENSIONS ARE IN MM & LEVELS ARE IN M
  - 2) DO NOT SCALE THE DRAWINGS. FOLLOW WRITTEN DIMENSION ONLY
  - 3) CLEAR COVER TO REINFORCEMENT AS FOLLOWS
  - 4) FOOTING - 40MM  
a) PEDESTAL SIDE & TOP - 40MM  
b) CONCRETE GRADE M20
  - 5) ALL REINFORCEMENT BARS SHALL BE HIGH YIELD STRENGTH DEFORMED BARS CONFORMING TO IS: 1782-LATEST REVISION
  - 6) FOR CABLE TRENCH LAYOUT REF. SEPARATE DRAWING
  - 7) FOR RC JALLEY DETAILS REFER SEPARATE DRAWING
  - 8) GRANITE BOULDERS SHALL BE FILLED AROUND THE SHEETING COLUMN
  - 9) FOR PERIPHERY WALL LOCATION WITH REF. TO COL. FDN. REFER SEPARATE DRG.
  - 10) IF FOUNDATION SOIL IS LOOSE AT FOUNDING LEVEL, REFILLING WITH SAND/PCC SHALL BE DONE UPTO SUITABLE DEPTH IN CONSULTATION WITH DESIGN SECTION
  - 11) ALL HD BOLTS SHALL CONFORM TO IS:2082
  - 12) THE ARRANGEMENT OF BLDG. & SIZES OF FOUNDATIONS SHOWN IN THE DRAWING BASED ON PRELIMINARY ENGG. THE SAME MAY VARY DURING RELEASE OF CONSTRUCTION DRAWING AFTER DETAILED ENGINEERING

F.F.L (+ 0.00) REFERS TO R.L +82.75 M

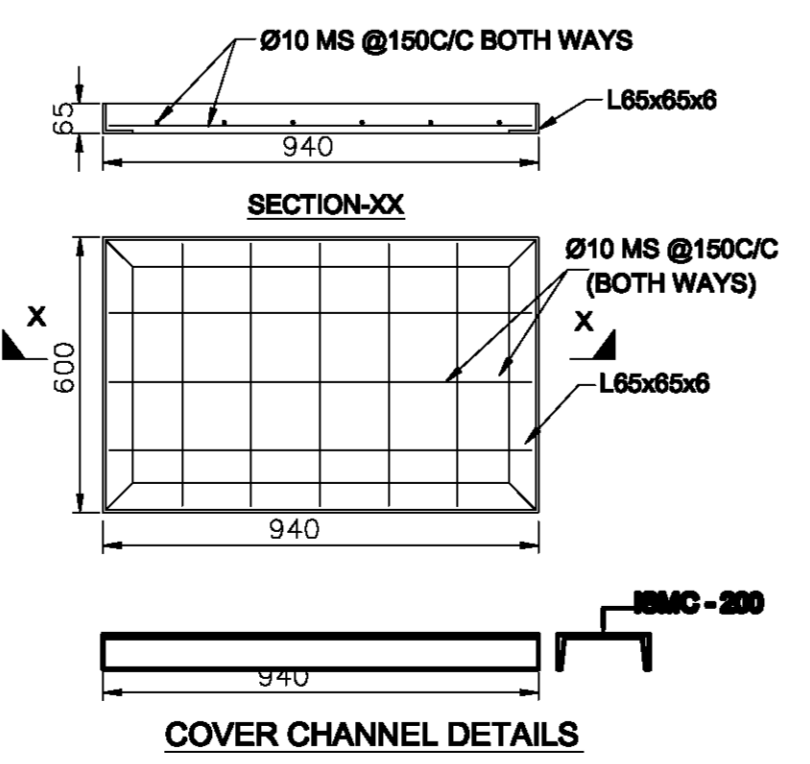
TENDER PURPOSE ONLY



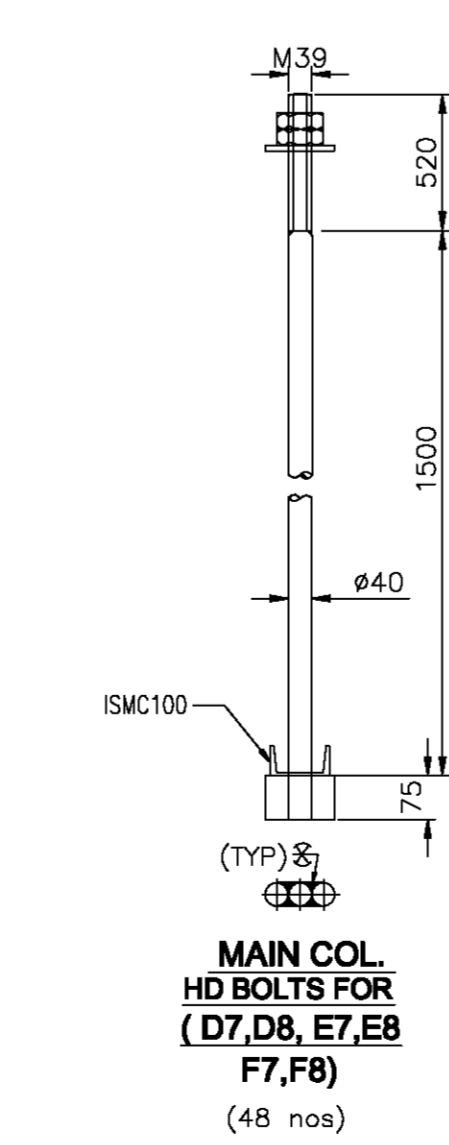
DETAILS OF FLOORING



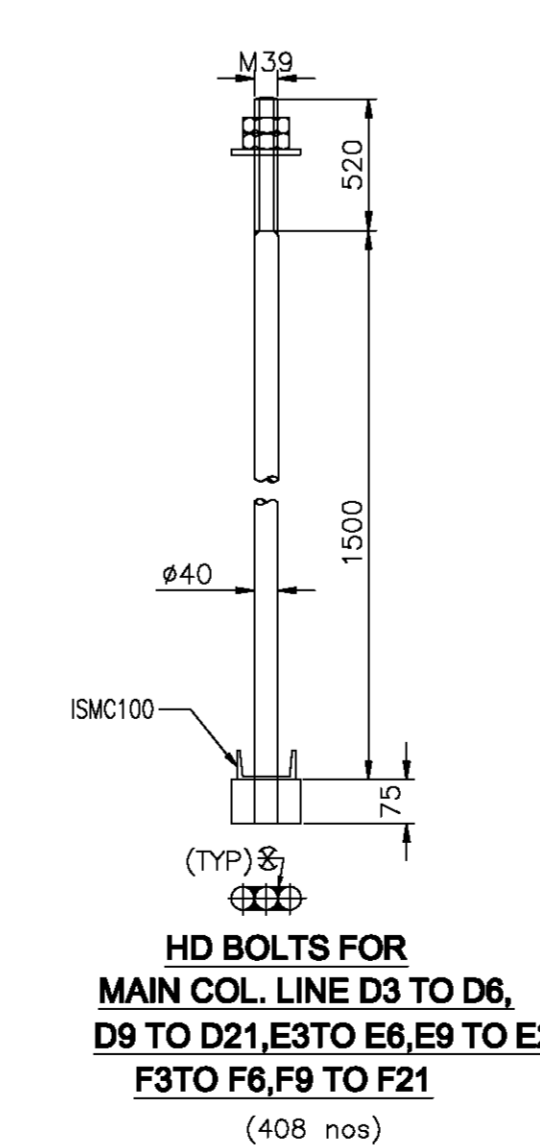
CROSS SECTION OF CABLE TRENCH



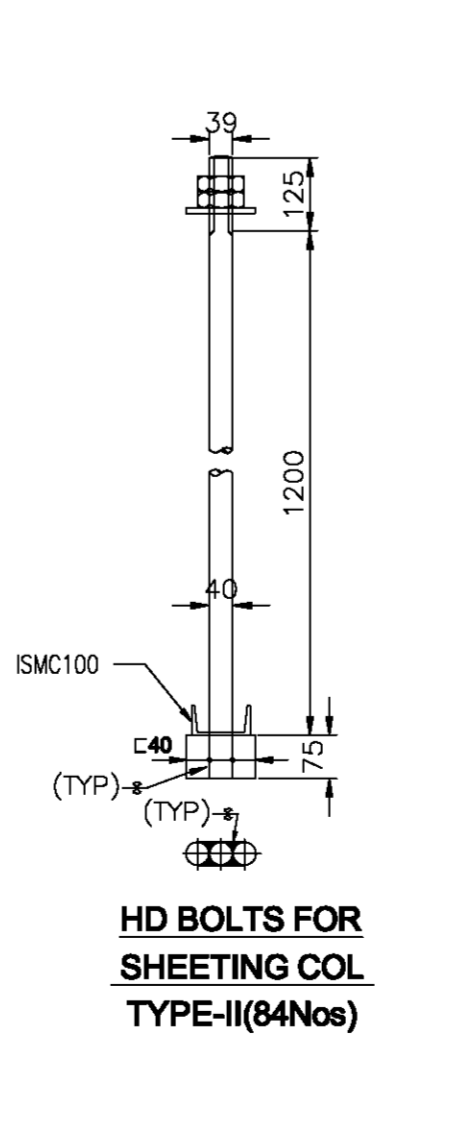
COVER CHANNEL DETAILS



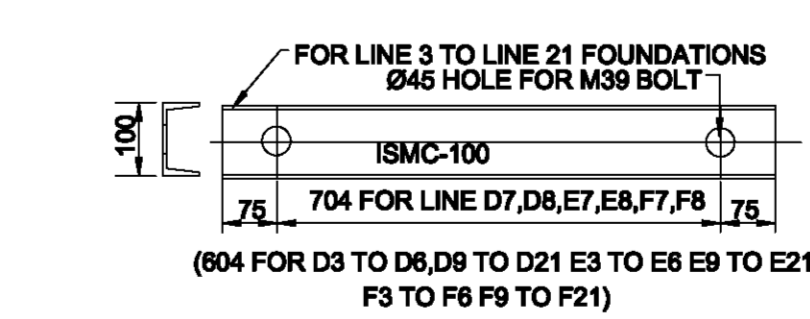
MAIN COL. HD BOLTS FOR (D7, D8, E7, E8, F7, F8) (48 nos)



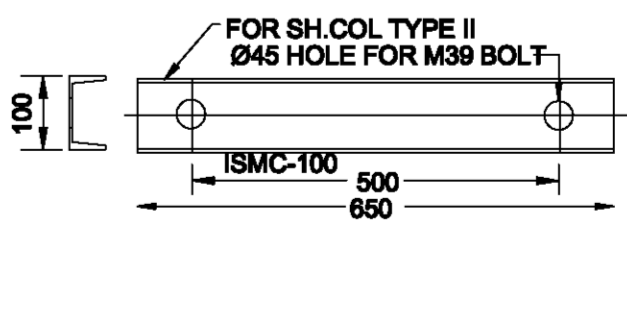
HD BOLTS FOR MAIN COL. LINE D3 TO D6, D9 TO D21, E3 TO E8, E9 TO E21, F3 TO F8, F9 TO F21 (408 nos)



HD BOLTS FOR SHEETING COL. TYPE-II(84nos)

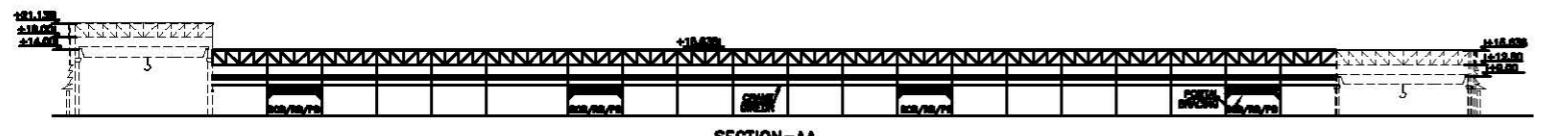


FOR LINE 3 TO LINE 21 FOUNDATIONS 245 HOLE FOR M39 BOLT

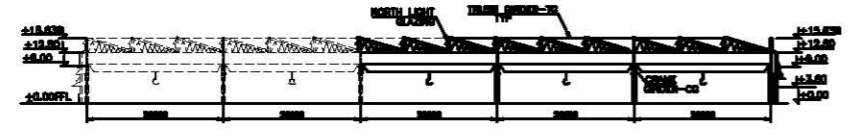


FOR SH. COL. TYPE II 245 HOLE FOR M39 BOLT

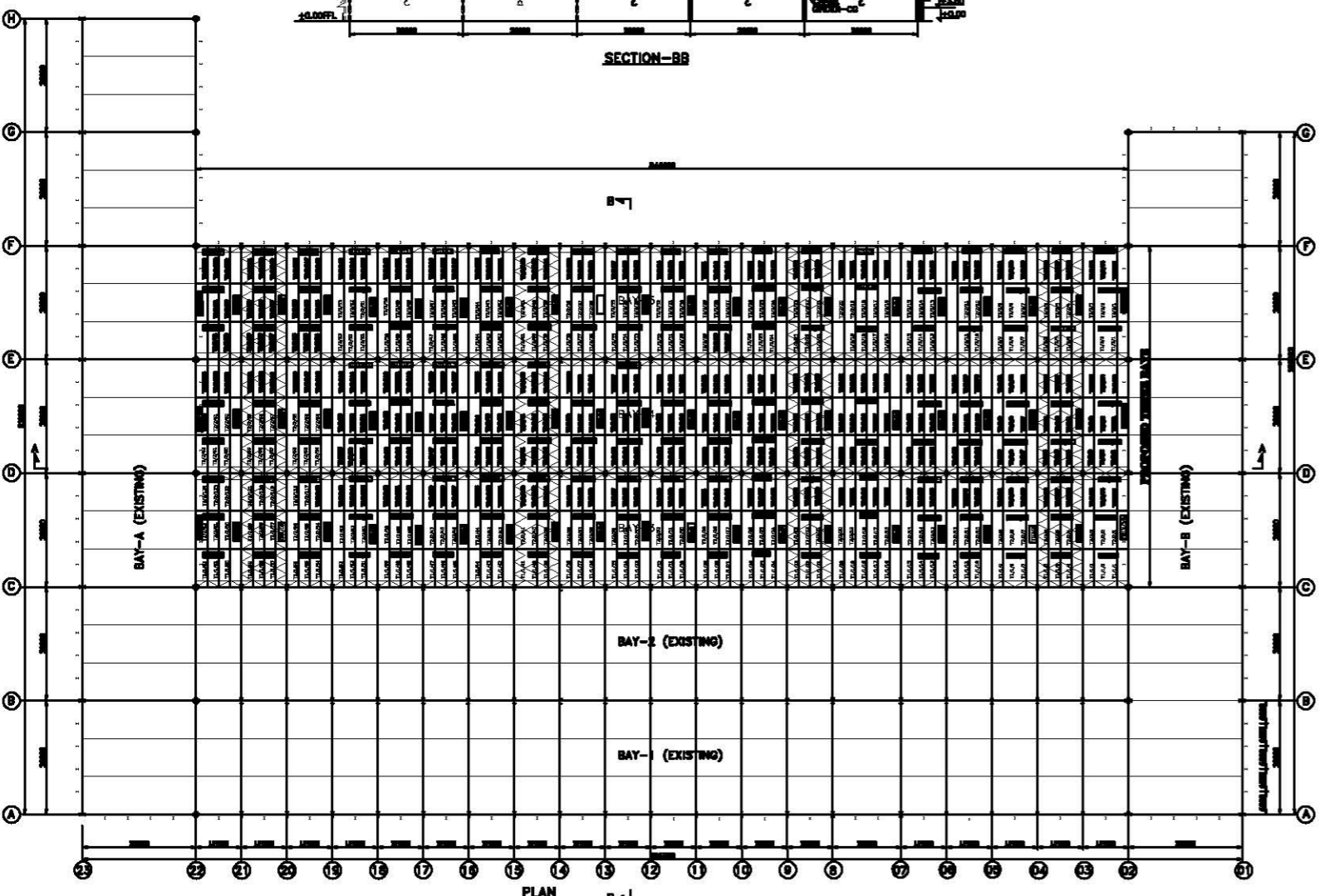
TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		15000 MW CAPACITY AUGMENTATION WORK NEW WORK SHOP - BLOCK- No.2 (BLDG. No.108)	
DATE	ISSUE	WEIGHT (kg)	REF TO KEST / 03 DMS
01/01/2009	01	1.10	1.30
TITLE		DRAWING NO :	
DETAILS OF FOUNDATION & OTHER CIVIL WORKS FOR EXTENSION WORKS IN BLOCK-II		BHE-CP-00:364 /2009	
REV	DATE	DESCRIPTION	SIGN



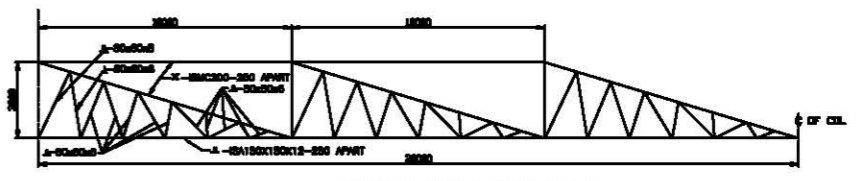
SECTION-AA



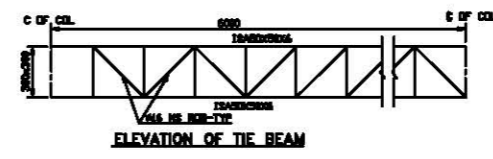
SECTION-BB



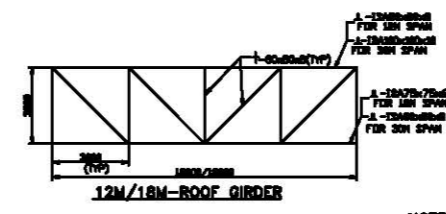
PLAN



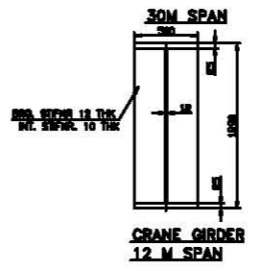
TRUSSED GIRDER(30X12M GRID)



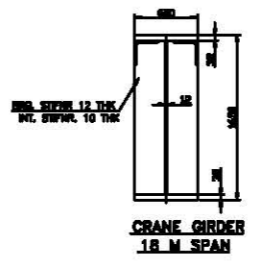
ELEVATION OF THE BEAM



12M/18M-ROOF GIRDER



CRANE GIRDER 12 M SPAN



CRANE GIRDER 18 M SPAN

NOTES:-

- (A) GENERAL:-
1. ALL DIMENSIONS ARE IN 'MM' & LEVELS ARE IN METRES. FOLLOW WRITTEN DIMENSION ONLY DO NOT SCALE THE DRAWING.
  2. THE CUTTING PLAN SHALL BE PREPARED BY THE FABRICATOR BEFORE TAKING UP ANY FABRICATION.
  3. ONLY AFTER OBTAINING APPROVAL FOR THE CUTTING PLAN IN WRITING, THE FABRICATOR SHALL COMMENCE THE FABRICATION.
  4. ERECTION BOLTS SHALL NOT BE REMOVED EVEN AFTER COMPLETION OF WELDING.
  5. PORTIONS OF THE STRUCTURAL STEEL MEMBERS TO BE EMBEDDED IN CONCRETE SHALL BE CEMENT FINISHED.
  6. SHAPES AND SIZES OF MEMBERS SHALL BE CHECKED BY FULL SCALE LAYOUT AND IF ANY DISCREPANCY IS NOTED SAME SHALL BE BROUGHT TO THE NOTICE OF ENGINEER-IN-CHARGE AS WELL AS CIVIL DESIGNER.
  7. THE STRUCTURAL ARRANGEMENT AND SIZES SHOWN IN THE DRAWING IS BASED ON PRELIMINARY DATA. THE SAME MAY VARY AFTER DECIDED ENDS.

(B) MARKING:-

1. ALL FABRICATED ITEMS SHALL BE CLEARLY MARKED AS PER ERECTION MARKS SHOWN IN FABRICATION DRAWING.
2. ERECTION MARK OF EACH COMPONENT SHALL BE PREPARED WITH DRAWING NUMBER.

(C) MATERIAL:-

1. ALL ROLLED SECTION AND PLATES (THICKNESS 20MM AND LESS) SHALL CONFORM TO IS 4106/RS2002-1982. PLATES THICKNESS EXCEEDING 20MM AND ALSO PLATES USED FOR CRANE GIRDERS AND OTHER MEMBERS SUBJECTED TO DYNAMIC LOADS SHALL CONFORM TO IS 4106/RS4106G RS2002-1982.
2. ALL BLACK HEXAGONAL BOLTS/NUTS & LOCK NUTS SHALL BE OF 20mm NOMINAL DIAMETER CONFORMING TO IS1363-PART-1,3 /2002 CLASS 6.8 OR 8.8 UNLESS OTHERWISE SPECIFIED. ALL BOLTS FOR GLAZING RUNNERS SHALL BE 16 MM DIAMETER. DIAMETER OF HOLES FOR PERMANENT BOLTS SHALL BE 1.5mm LARGER THAN THE BOLTS AND 3mm LARGER FOR ERECTION BOLTS. WASHERS SHALL CONFORM TO IS2010-1975.

(D) FABRICATION

1. MAXIMUM SURFACE UNIFORMITY ON CONTACT SURFACE OF BASE PLATE & GIP PLATE SHALL NOT EXCEED 0.5mm. MAXIMUM GAP BETWEEN BEARING END OF COLUMN SHAFT & BASE PLATE AT ANY PLACE SHALL NOT EXCEED 1mm. IF THIS IS ACHIEVED BY COLD BENDING AND GRINDING, MACHINING OF COLUMN END NEED NOT BE DONE.
2. FABRICATION INSPECTION AND ERECTION OF STEEL STRUCTURES SHALL BE DONE IN ACCORDANCE WITH TECHNICAL SPECIFICATION AND SPECIAL INSTRUCTIONS IF ANY.
3. PILET WELDS TERMINATING AT THE SIDES ARE ENDS OF PARTS SHALL BE RETURNED AROUND THE CORNERS AT A DISTANCE OF NOT LESS THAN 20MM.

(E) WELDING

1. THE WELDING CODE OF PRACTICE & PROCEDURES SPECIFICATION FOR ELECTRODES / CONSUMABLES etc. SHALL CONFORM TO AWS D-1-10(LATEST) AND AS PER G.C.P. ISSUED BY ENEL AND ALSO SPECIFIED IN THE TECHNICAL SPECIFICATION OF THE TENDER DOCUMENT.

(F) CONNECTIONS

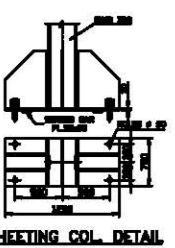
1. ALL PILET WELDS SHALL BE MINIMUM 6mm CONTIGUOUS AND MAXIMUM 8mm PILET CONTIGUOUS UNLESS OTHERWISE SPECIFIED.
2. ALL MEMBERS SHALL BE WELDED TO THE GUSSETERS FOR THE FULL CONTACT LENGTH AVAILABLE.

(G) PAINTING

- ANTIRUST ENAMEL PAINT OF APPROVED QUALITY AFTER ERECTION AND ALSO SPECIFIED IN THE TENDER DOCUMENT.

(H) INSPECTION

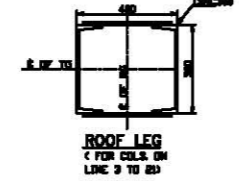
1. ALL FABRICATION AND STEEL STRUCTURE WILL BE INSPECTED BY A THIRD PARTY INSPECTION AGENCY AS PER QUALITY CONTROL PROCEDURE ISSUED BY ENEL.



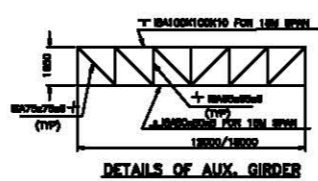
SHEETING COL. DETAIL



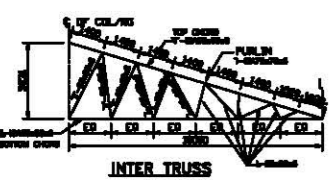
RAIN WATER GUTTER



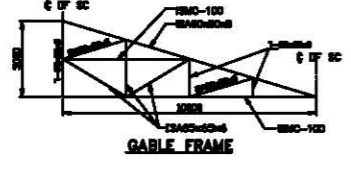
ROOF LEG (FOR COLS. IN LINE 3 TO 23)



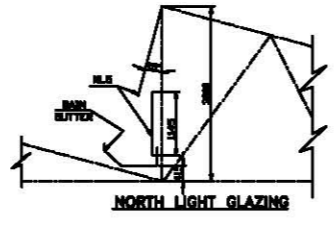
DETAILS OF AUX. GIRDER



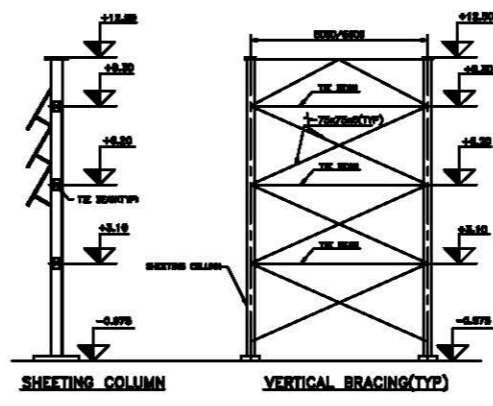
INTER TRUSS



GABLE FRAME

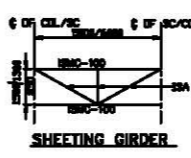


NORTH LIGHT GLAZING



SHEETING COLUMN

VERTICAL BRACING(TYP)



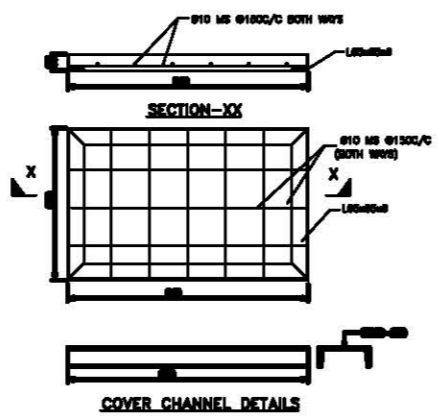
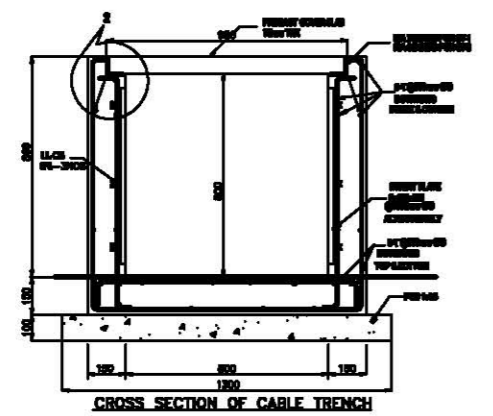
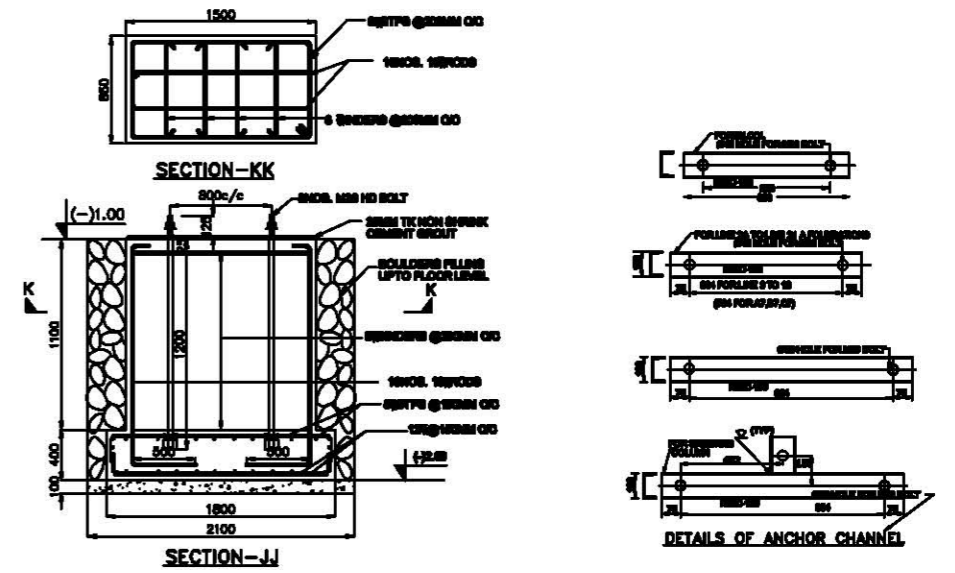
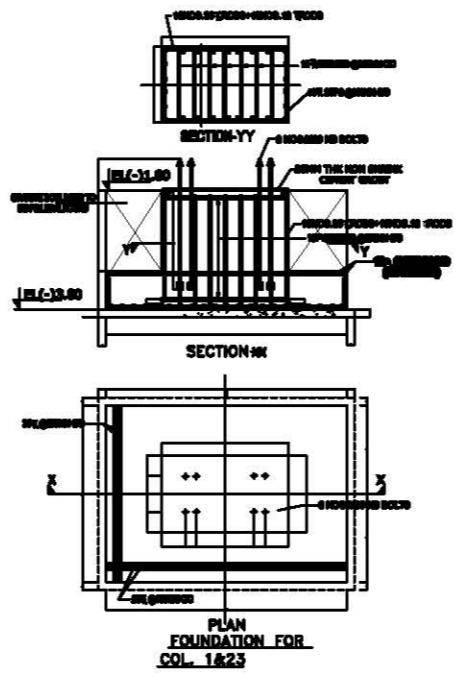
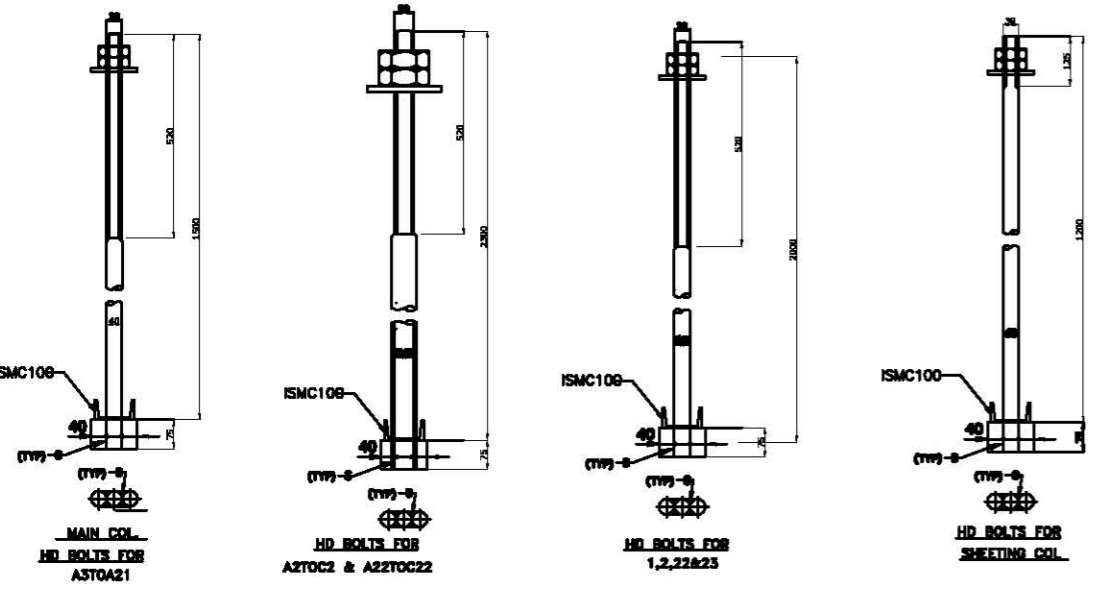
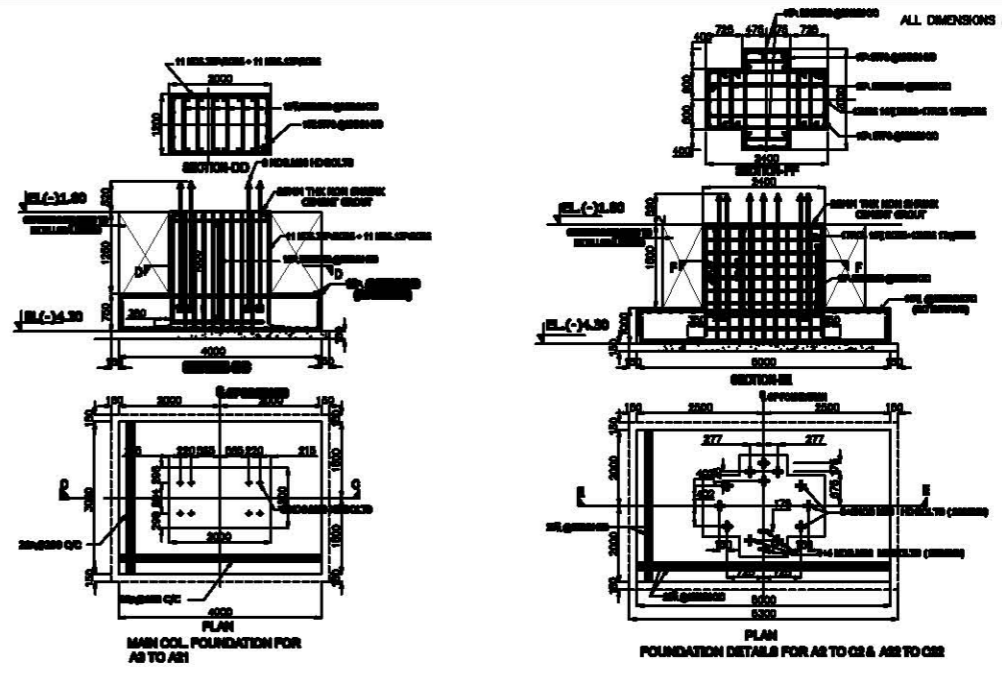
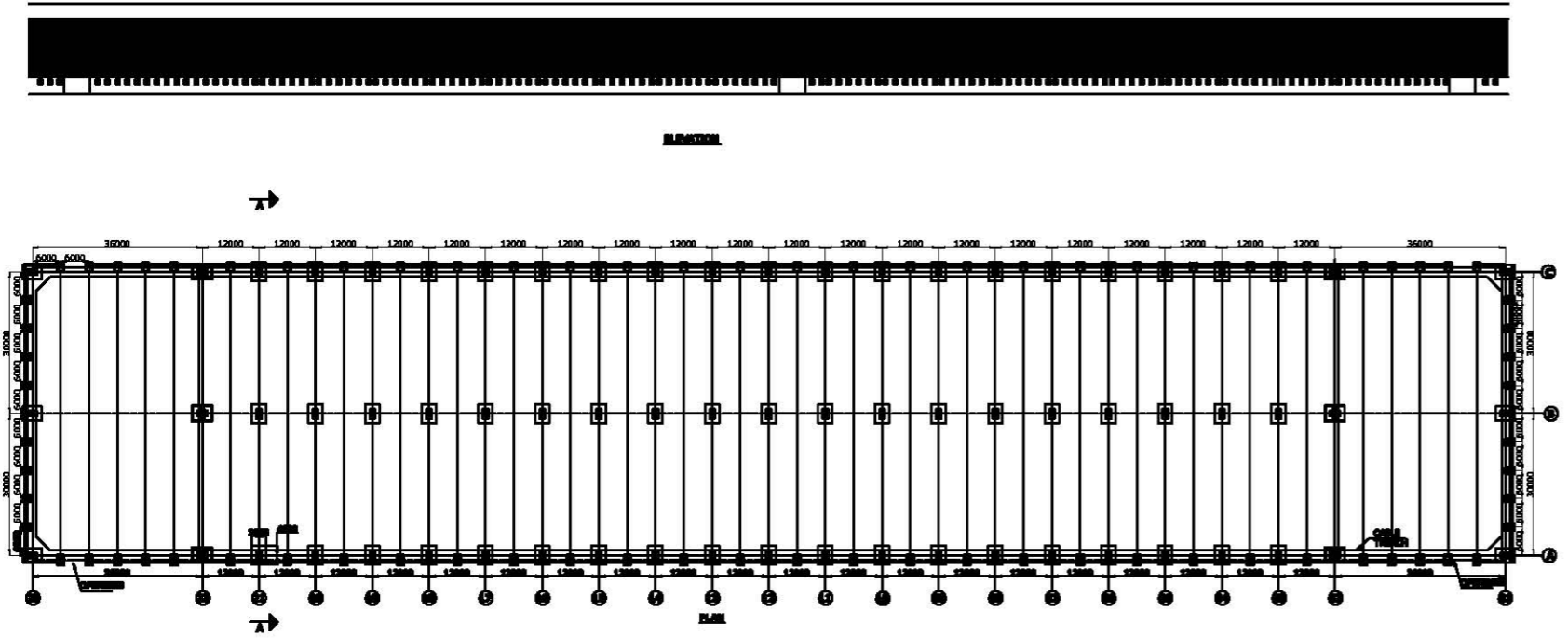
SHEETING GIRDER

LEGEND

- WB - WIND BRACING
- CG - CRANE GIRDER(DWG.)
- SC - SHEETING COLUMN
- COL - COLUMN(DWG.)
- RG - ROOF GIRDER
- T - TRUSS
- TO - TRUSS ORIGIN
- NLS - NORTH LIGHT GLAZING
- CB - CENTRAL CHANG BRACING
- VB - VERTICAL BRACING
- RB - RAFTER BRACING

TENDER PURPOSE ONLY

TYPE OF PRODUCT: <b>4000 MW CAPACITY AUGMENTATION WORK</b>		OR NAME OF CUSTOMER/PROJECT: <b>VIEW WORK SHIP - BLOCK- No.5 (BLDG. No.10)</b>	
DATE: DRAWN BY: CHECKED BY: APPROVED BY:	DATE: DRAWN BY: CHECKED BY: APPROVED BY:	DATE: DRAWN BY: CHECKED BY: APPROVED BY:	DATE: DRAWN BY: CHECKED BY: APPROVED BY:
GENERAL AND STRUCTURAL ARRANGEMENT FOR BLOCK-II		DRAWING NO: <b>BHE:CP:00:365/2008</b>	



- NOTES:-
- 1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED
  - 2) CLEAR COVER TO REINFORCEMENT AS FOLLOWS
  - 3) REINFORCEMENT SHALL BE AS PER IS 456-2000
  - 4) ALL REINFORCEMENT BARS SHALL BE HIGH YIELD STRENGTH DEFORMED BARS COMPLIANT TO IS 1786-2008
  - 5) FOR CABLE TRENCH LAYOUT, SEE ELECTRICAL DRAWING
  - 6) FOR LARGER CABLES REFER ELECTRICAL DRAWING
  - 7) CONCRETE SHALL BE PLACED ALONG THE FULL LENGTH OF COLUMN FOUNDATIONS AS SHOWN
  - 8) THE APPROVED AND NUMBER SHALL BE SHOWN IN THE COVERED REGION ON FULL SCALE DRAWING. THIS SET MUST BE APPROVED.

TENDER PURPOSE ONLY

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		15000MW CAPACITY AUGMENTATION PHASE 3			
Bharat Heavy Electricals Ltd NEW PUNE POWER HOUSE PLANT TELECOMPHALL - BOKSA		DATE	SCALE	REV	BY
REV	DATE	SCALE	REV	BY	DATE
DRAWING NO. : 00/006:00:366/0000		REV			
DETAILS OF FOUNDATION & OTHER CIVIL WORKS		U 01			

00/296:00:367/2009

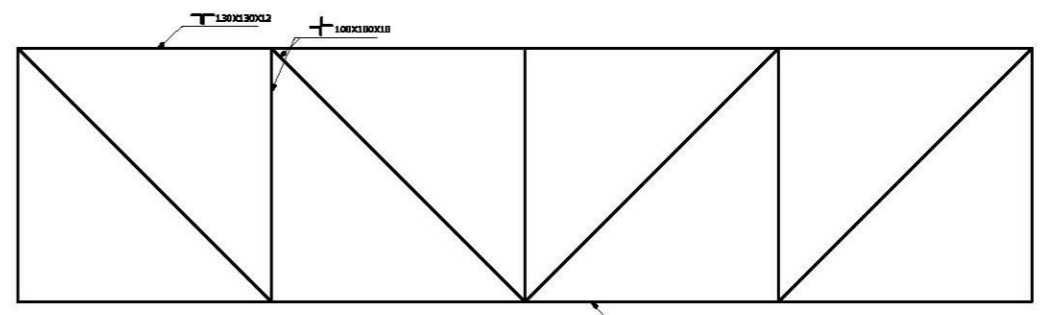
ALL DIMENSIONS ARE IN MILLIMETERS



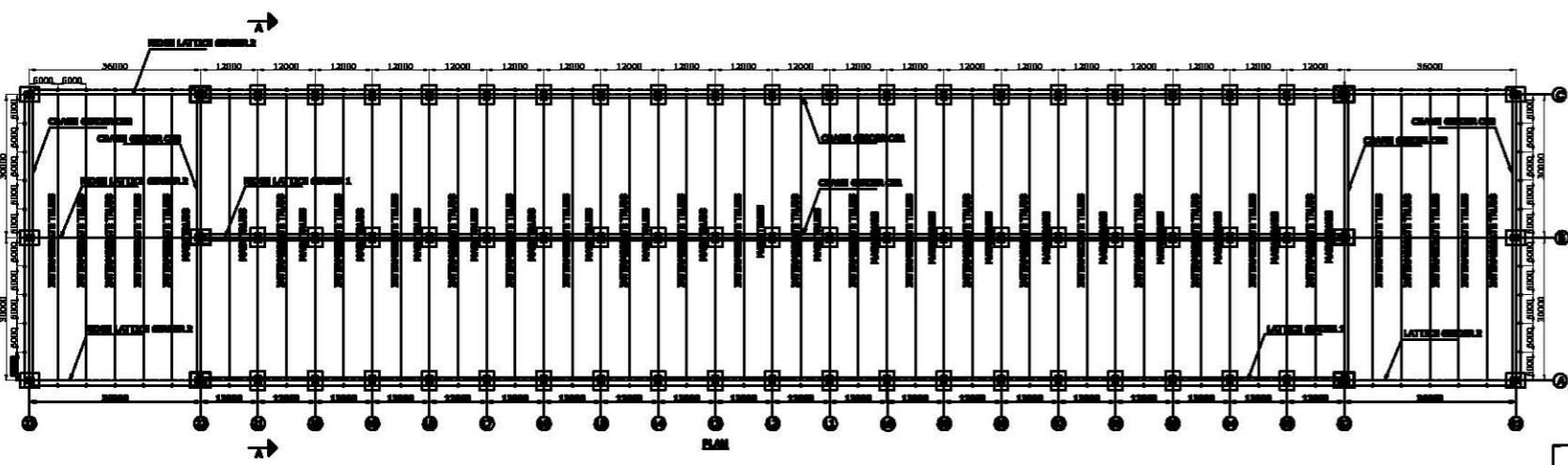
ELEVATION



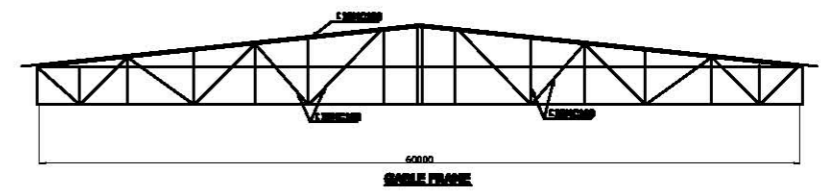
PLAN VIEW OF ROOF LATTICE GIRDER



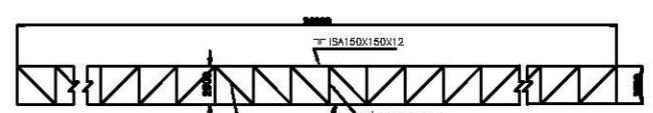
ROOF LATTICE GIRDER ELEVATION



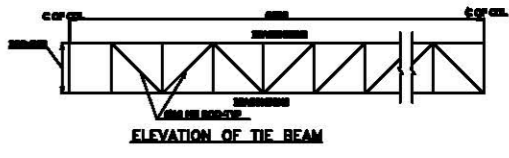
PLAN



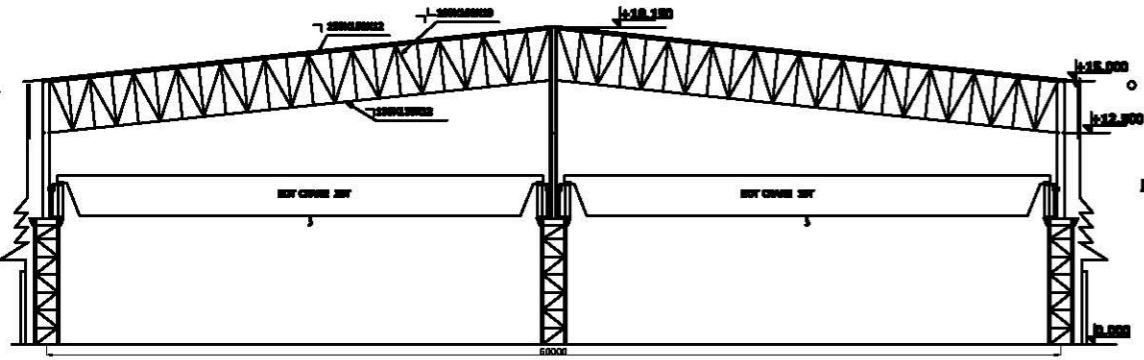
ROOF GIRDER



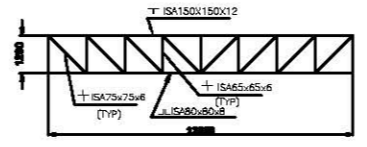
DETAILS OF AUX. GIRDER



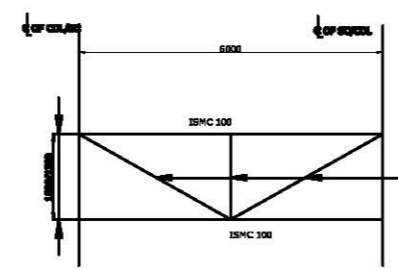
ELEVATION OF THE BEAM



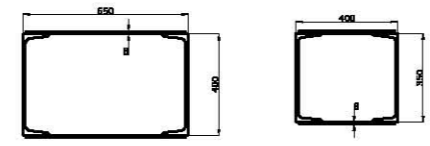
MAIN TRUSS SECTION AA



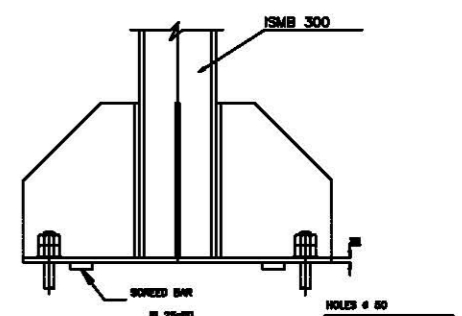
DETAILS OF AUX. GIRDER



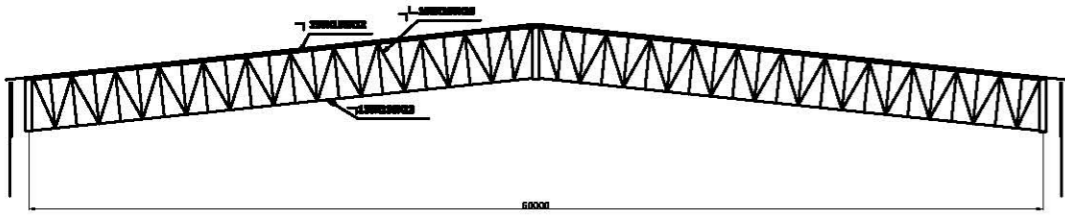
SHEETING GIRDER



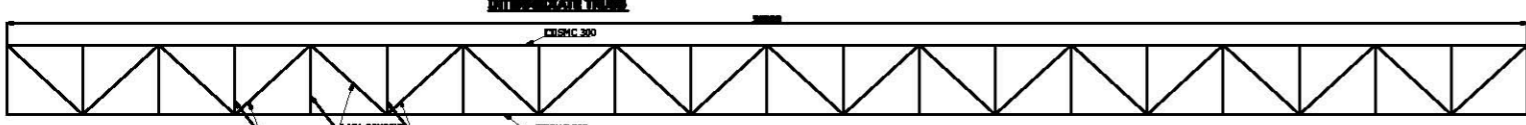
ROOF LINE FOR COLS 3 TO 20



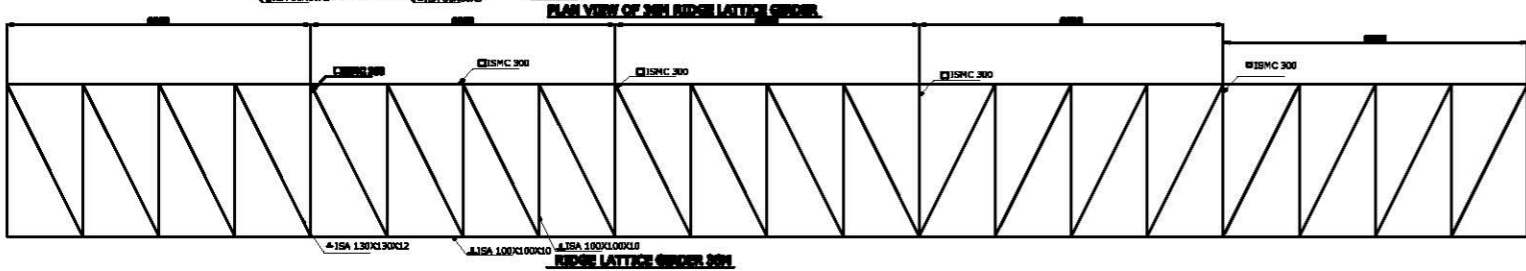
SHEETING COL. DETAIL



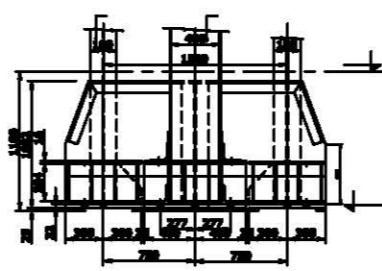
INTERMEDIATE TRUSS



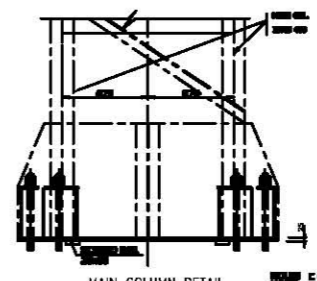
PLAN VIEW OF 30M ROOF LATTICE GIRDER



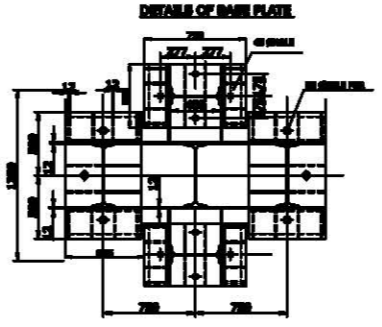
ROOF LATTICE GIRDER 30M



DETAILS OF MAIN PLATE



MAIN COLUMN DETAIL



30M SPAN CRANE GIRDER

1. ALL DIMENSIONS ARE IN 'MM' & LEVELS ARE IN METERS. DO NOT SCALE THE DRAWING.
2. THE CUTTING PLAN SHALL BE PREPARED BY THE FABRICATOR.
3. ONLY AFTER OBTAINING APPROVAL FOR THE CUTTING PLAN IN WRITING, THE FABRICATOR SHALL COMMENCE THE WORK.
4. ENDWORK WELDS SHALL NOT BE REMOVED EVEN AFTER.
5. PORTIONS OF THE STRUCTURAL STEEL MEMBERS TO BE OMITTED.
6. SHIPPER AND SIZES OF MEMBERS SHALL BE CHECKED BY FULL.
7. NOTED SAME SHALL BE BROUGHT TO THE NOTICE OF ENGINEER-IN-CHARGE AS WELL AS CIVIL ENGINEER. THE STRUCTURAL ARRANGEMENT AND MEMBER SIZES SHOWN IN THE DRAWING IS BASED ON PRELIMINARY ENDS. THE SAME MAY VARY AFTER DETAILED ENDS.
8. THE STRUCTURAL ARRANGEMENT & MEMBER SIZE SHOWN IN THE ENDS IS BASED ON PRELIMINARY ENDS. THIS MAY VARY AFTER DETAILED ENDS.

TENDER PURPOSE ONLY

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		15000MW CAPACITY AUGMENTATION SCHEME PHASE 3	
DRAWN BY		DATE	SCALE
CHECKED BY		DATE	SCALE
DESIGNED BY		DATE	SCALE
APPROVED BY		DATE	SCALE
PROJECT NO.		DATE	SCALE
STRUCTURAL ARRANGEMENT FOR SYSTEM BENDER BLOCK		PROJECT NO. 00/296:00:367/2009	REV. 00