

- NOTES:-**
1. ALL DIMENSIONS ARE IN MILLIMETRES & ELEVATIONS IN METRES.
 2. NO DIMENSION SHALL BE MEASURED FROM THE DRAWING.
 3. THIS DRAWING SHOWS THE LAYOUT PLAN OF AUTOMATIC BACKWASH STRAINER HOUSE NEAR POWERHOUSE CONFERENCE HALL.

FOR TENDER PURPOSE ONLY

SHEET 1 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)



CONSULTANTS
WAPCOS LIMITED
 (A GOVT. OF INDIA UNDERTAKING)

PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

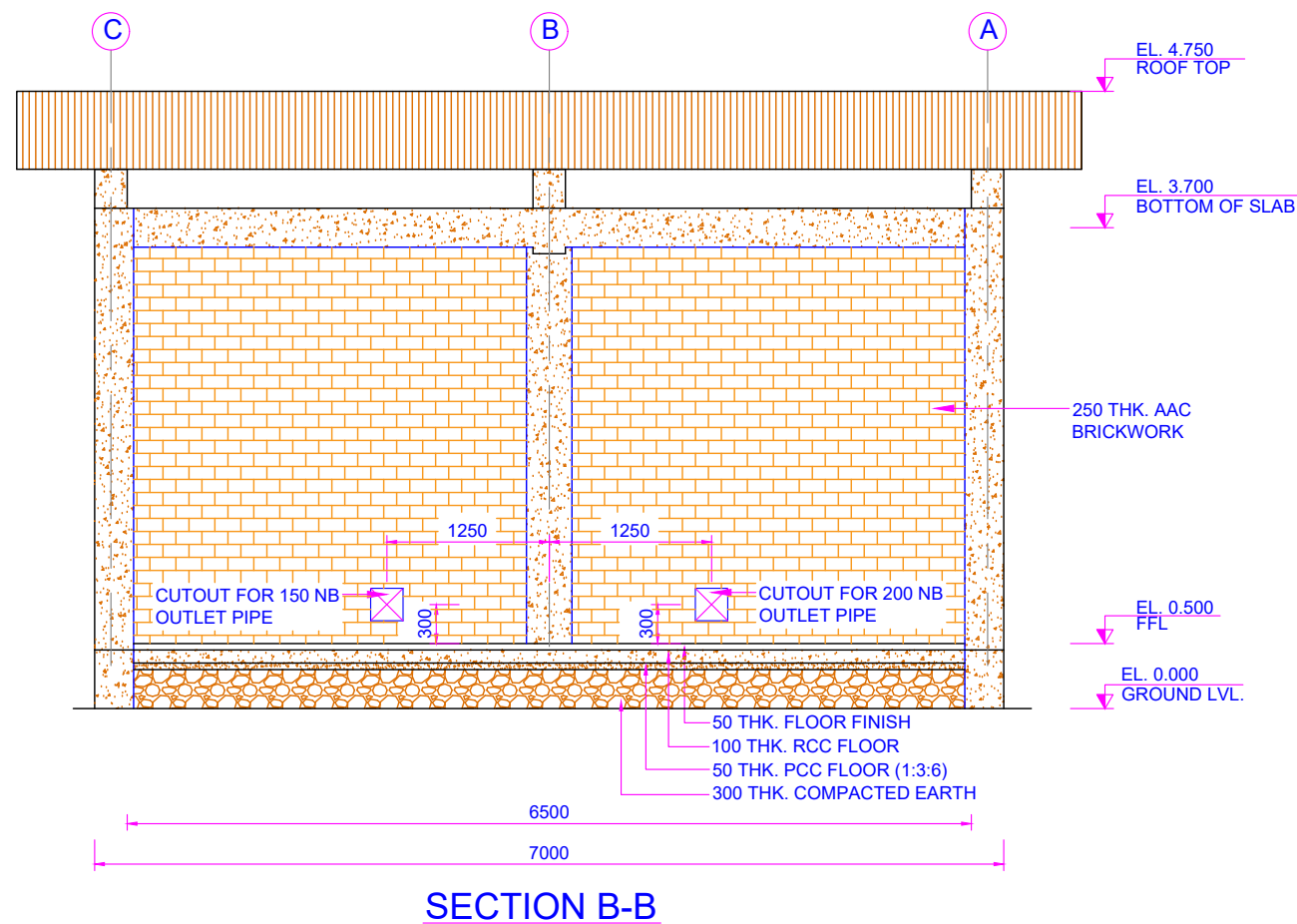
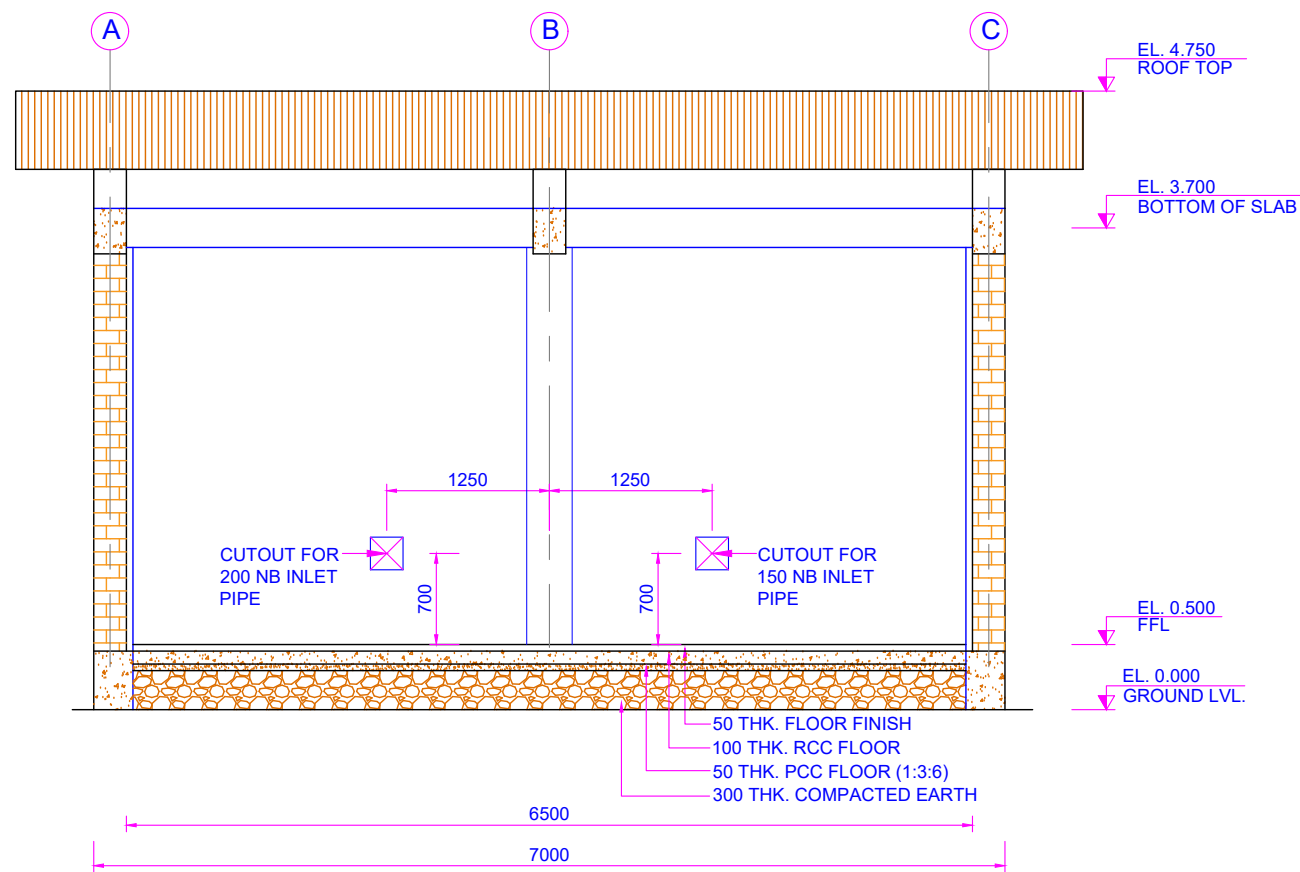
**AUTOMATIC BACKWASH STRAINER HOUSE
 LAYOUT PLAN**

Drawn	Designed	E&M Clearance	Checked	Approved
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PROJECT OFFICE, BJIMTHANGKHA BHUTAN, MAY, 2023 DRG. NO.: WAP/PHEP-I/ABS/T/2603 REV.

NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETRES & ELEVATIONS IN METRES.
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3. THIS DRAWING SHOWS THE SECTIONS OF AUTOMATIC BACKWASH STRAINER HOUSE NEAR POWERHOUSE CONFERENCE HALL.



FOR TENDER PURPOSE ONLY

SHEET 2 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)



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PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

AUTOMATIC BACKWASH STRAINER HOUSE SECTIONS

Drawn	Designed	E&M Clearance	Checked	Approved
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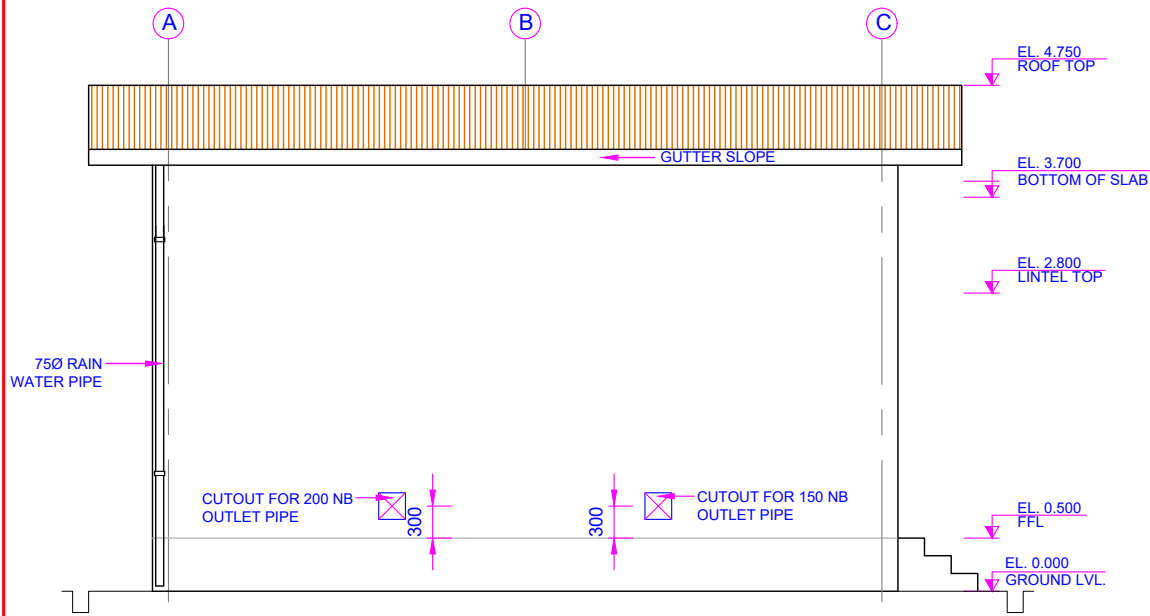
PROJECT OFFICE, BJIMTHANGKHA
BHUTAN, MAY, 2023

DRG. NO.: WAP/PHEP-I/ABS/T/2603

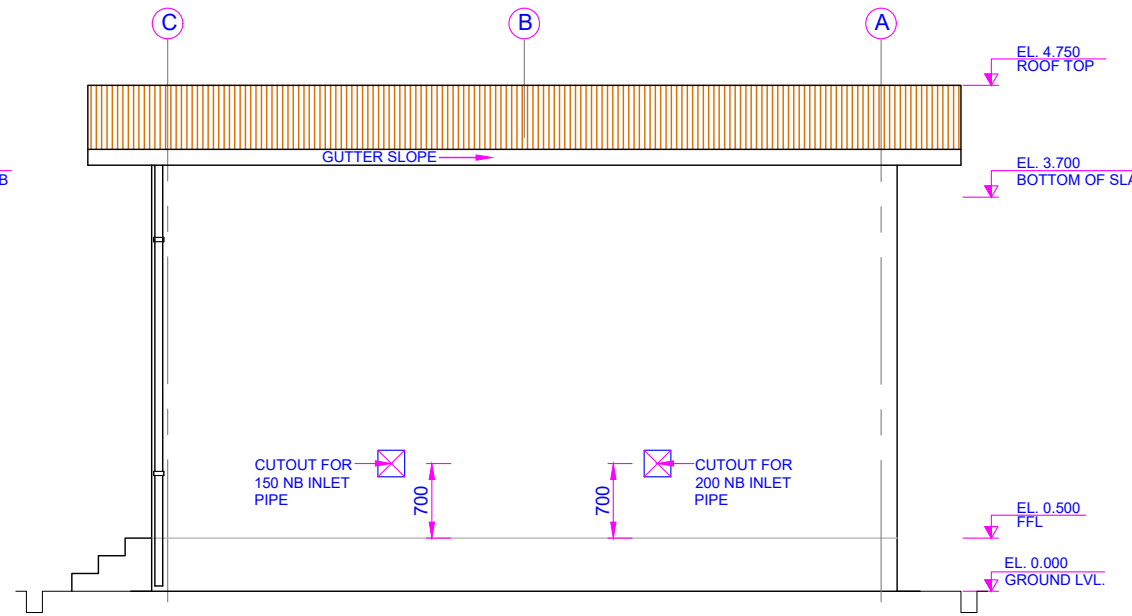
REV.

NOTES:-

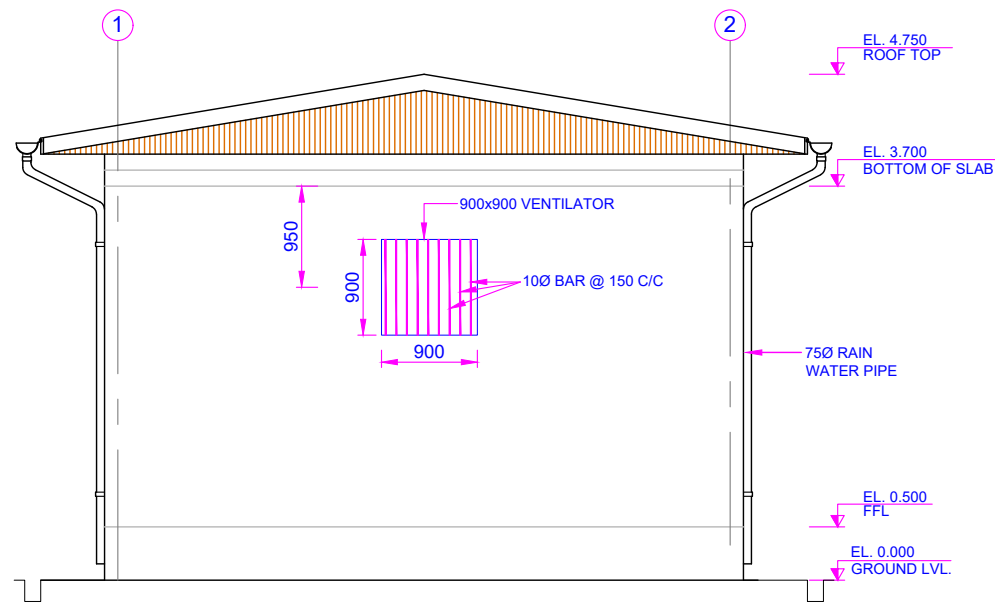
1. ALL DIMENSIONS ARE IN MILLIMETRES & ELEVATIONS IN METRES.
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3. THIS DRAWING SHOWS THE ELEVATIONS OF AUTOMATIC BACKWASH STRAINER HOUSE NEAR POWERHOUSE CONFERENCE HALL.



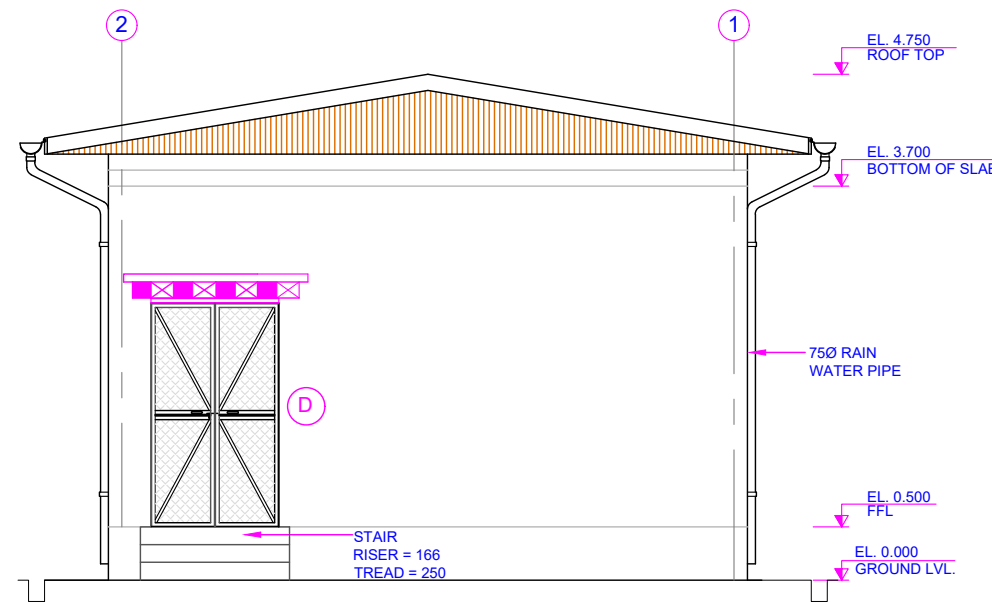
ELEVATION-A



ELEVATION-C



ELEVATION-B



ELEVATION-D

FOR TENDER PURPOSE ONLY

SHEET 3 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)



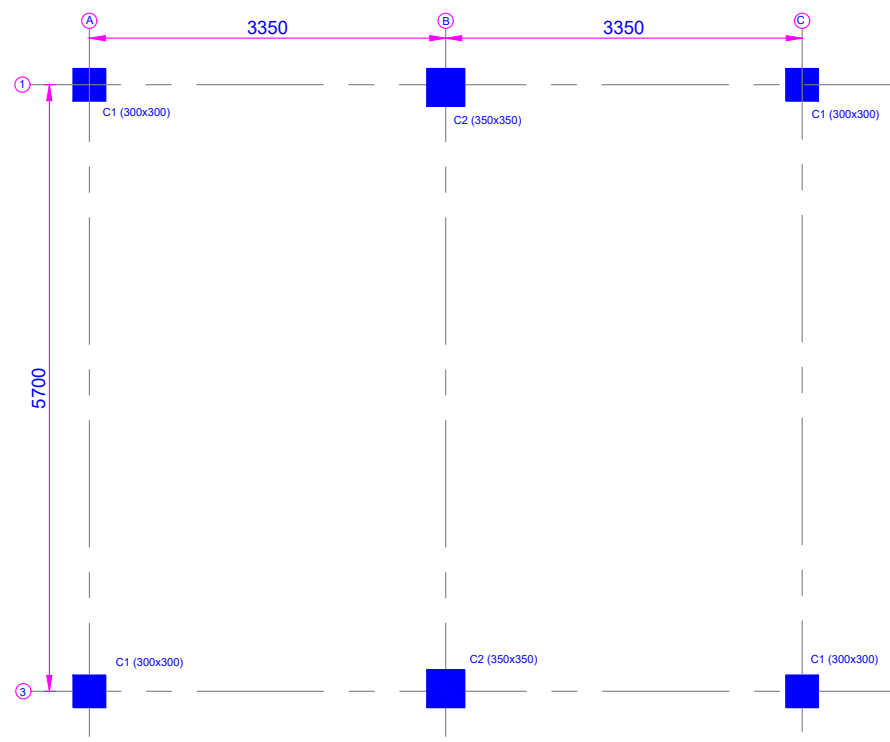
CONSULTANTS
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PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

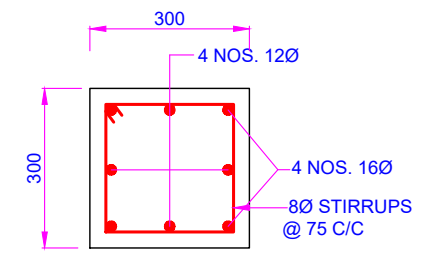
**AUTOMATIC BACKWASH STRAINER HOUSE
ELEVATIONS**

Drawn	Designed	E&M Clearance	Checked	Approved
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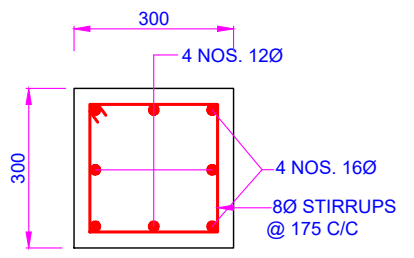
PROJECT OFFICE, BJIMTHANGKHA BHUTAN, MAY, 2023	DRG. NO.: WAP/PHEP-I/ABS/T/2603	REV.
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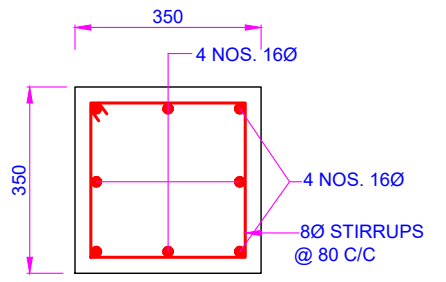
COLUMN LAYOUT PLAN



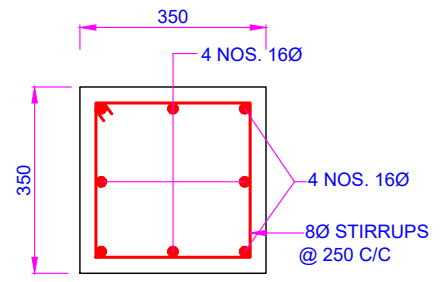
SECTION 1-1



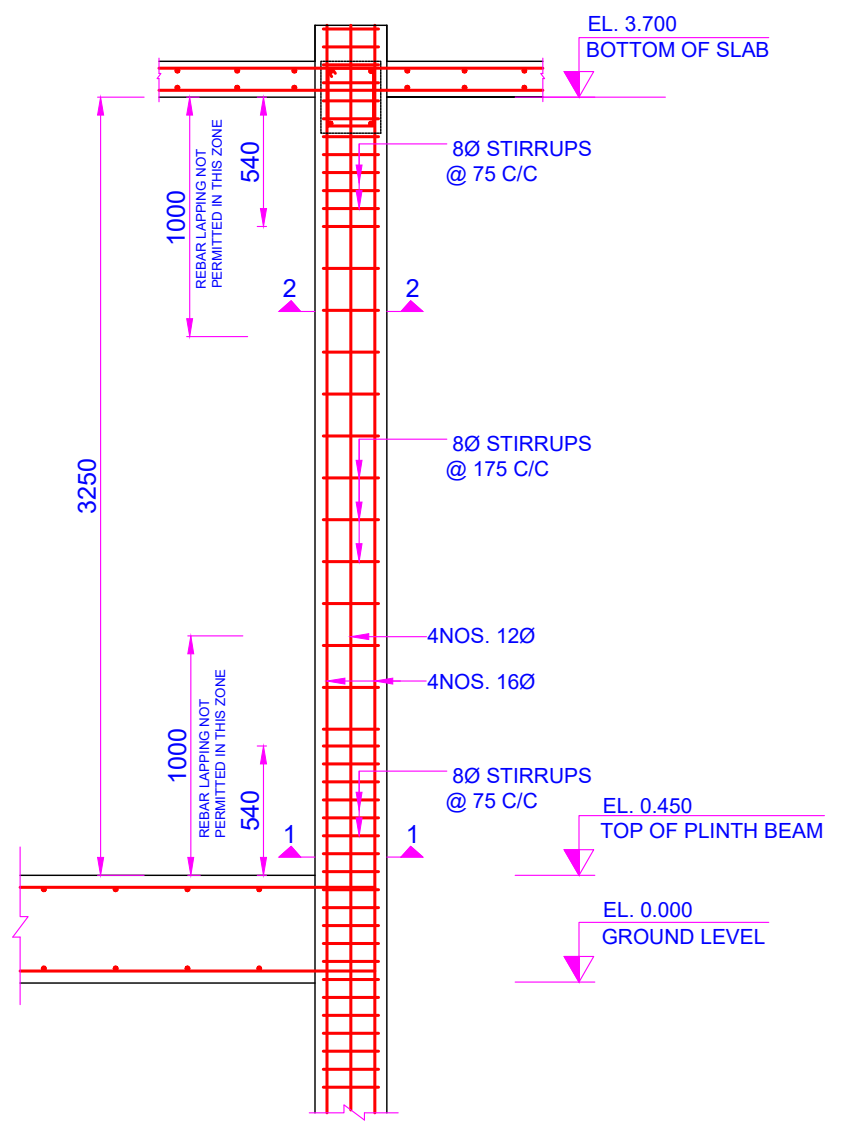
SECTION 2-2



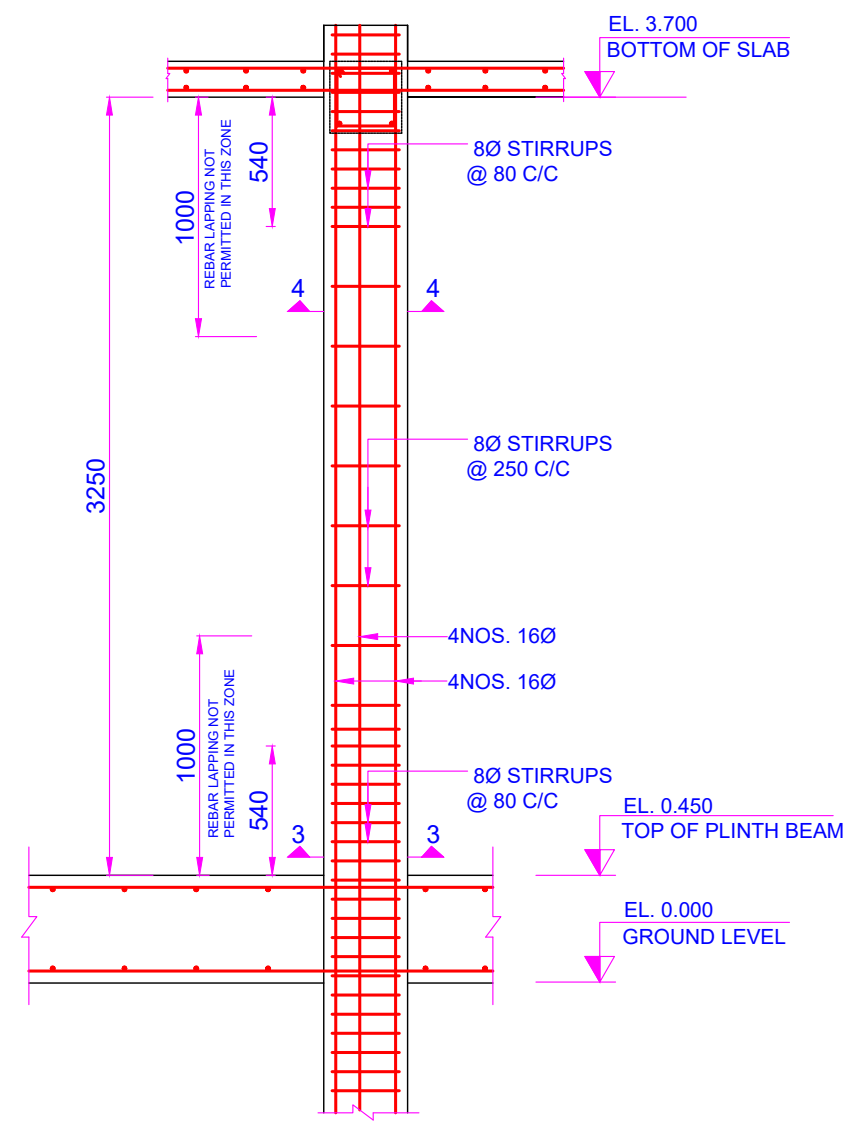
SECTION 3-3



SECTION 4-4



C1 COLUMN DETAILS



C2 COLUMN DETAILS

NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETRES & ELEVATIONS IN METRES.
2. NO DIMENSION SHALL BE MEASURED FROM THE DRAWING.
3. THIS DRAWING SHOWS THE COLUMN LAYOUT & REINFORCEMENT DETAILS OF AUTOMATIC BACKWASH STRAINER HOUSE NEAR POWERHOUSE CONFERENCE HALL.

FOR TENDER PURPOSE ONLY

SHEET 4 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)

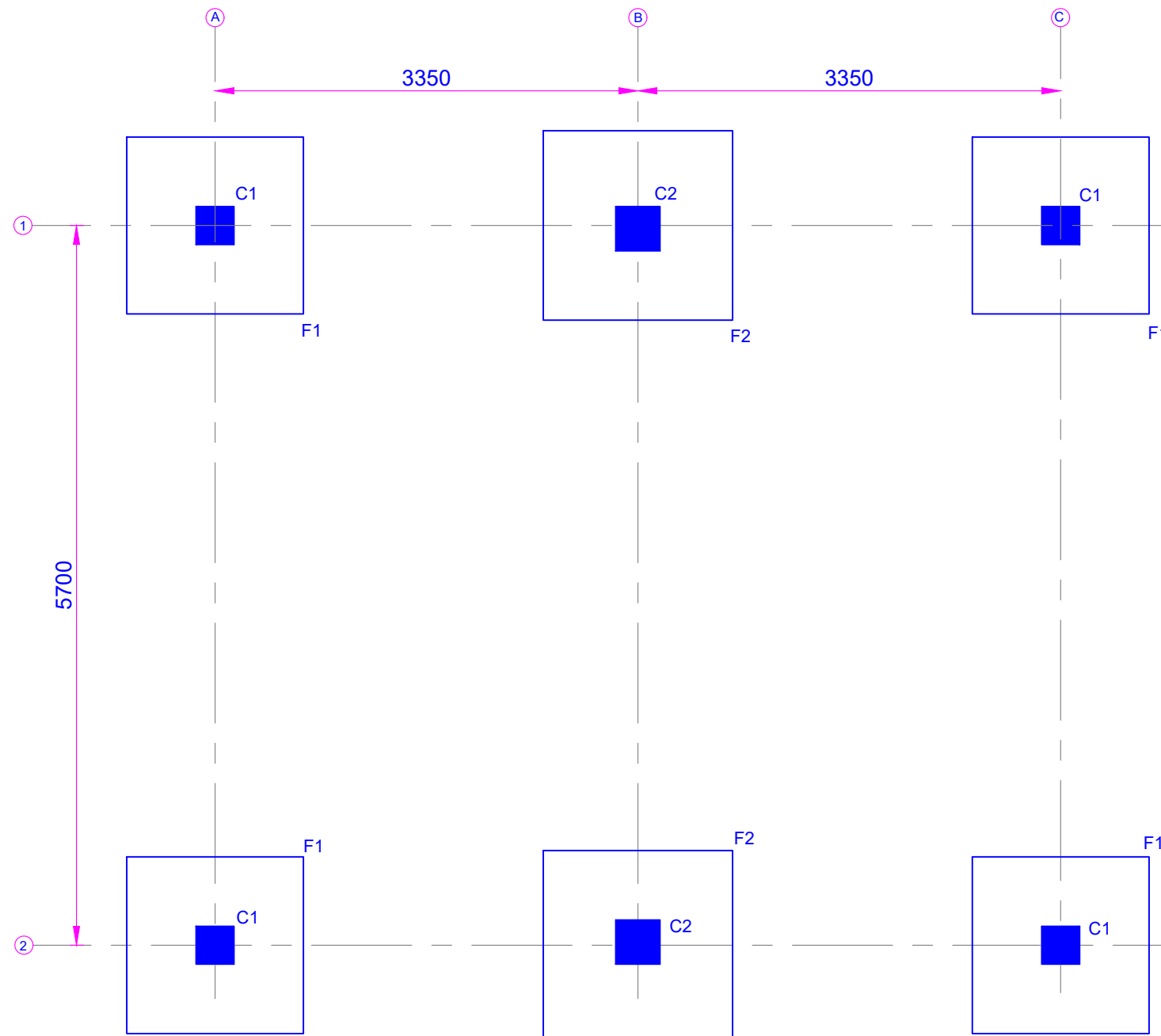


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PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

**AUTOMATIC BACKWASH STRAINER HOUSE
COLUMN LAYOUT & REINFORCEMENT DETAILS**

Drawn	Designed	E&M Clearance	Checked	Approved
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FOOTING LAYOUT PLAN

NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETRES & ELEVATIONS IN METRES.
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FOR TENDER PURPOSE ONLY

SHEET 5 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)



CONSULTANTS
WAPCOS LIMITED
(A GOVT. OF INDIA UNDERTAKING)

PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

**AUTOMATIC BACKWASH STRAINER HOUSE
FOOTING LAYOUT PLAN**

Drawn	Designed	E&M Clearance	Checked	Approved
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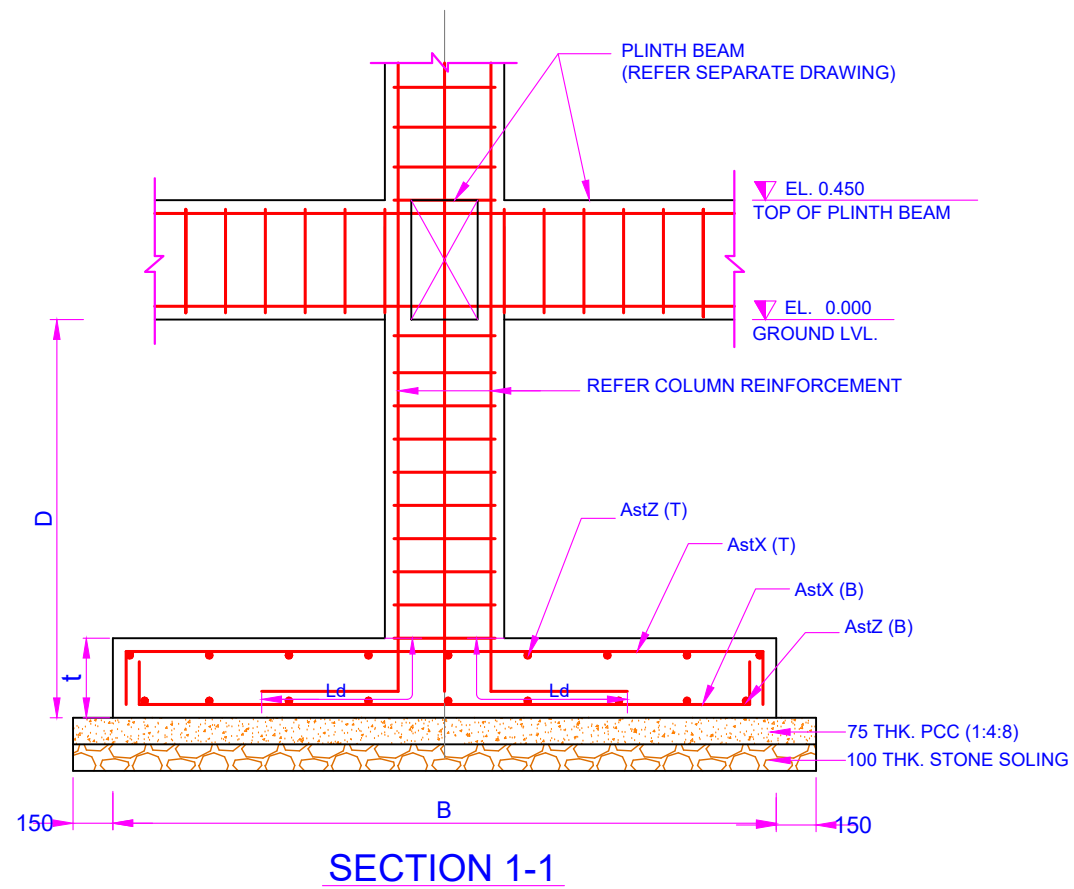
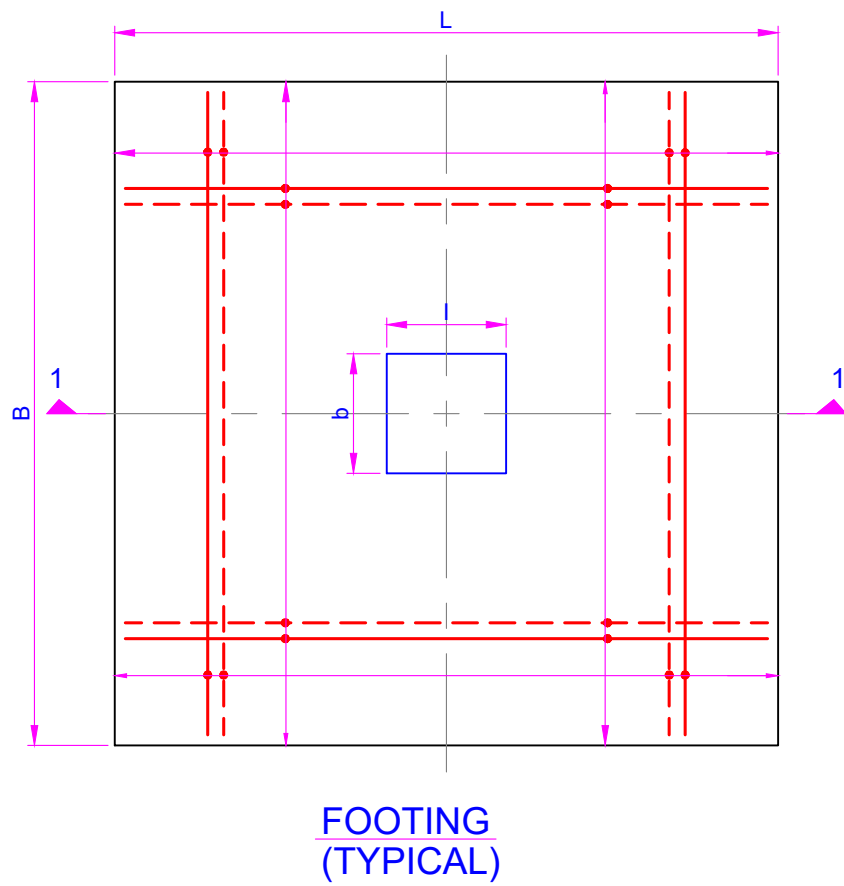
PROJECT OFFICE, BJIMTHANGKHA
BHUTAN, MAY, 2023

DRG. NO.: WAP/PHEP-I/ABS/T/2603

REV.

NOTES:-

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FOOTING SCHEDULE

Foundation Mark	Column		Foundation				Top Reinforcement		Bottom Reinforcement	
	l (mm)	b (mm)	L (mm)	B (mm)	D (mm)	t (mm)	AstX(T)	AstZ(T)	AstX(B)	AstZ(B)
F 1	300	300	1400	1400	1500	250	12 mm @ 200 mm	12 mm @ 200 mm	12 mm @ 200 mm	12 mm @ 200 mm
F 2	350	350	1500	1500	1500	250	12 mm @ 200 mm	12 mm @ 200 mm	12 mm @ 200 mm	12 mm @ 200 mm

FOR TENDER PURPOSE ONLY

SHEET 6 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)



CONSULTANTS
WAPCOS LIMITED
(A GOVT. OF INDIA UNDERTAKING)

PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

**AUTOMATIC BACKWASH STRAINER HOUSE
FOOTING REINFORCEMENT DETAILS**

Drawn	Designed	E&M Clearance	Checked	Approved
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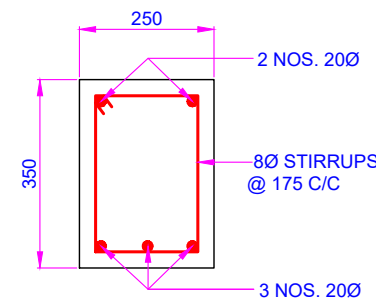
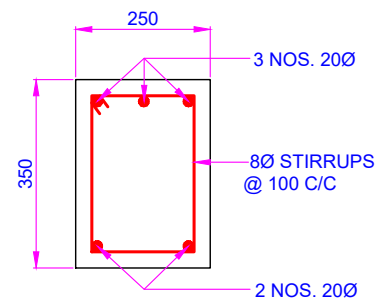
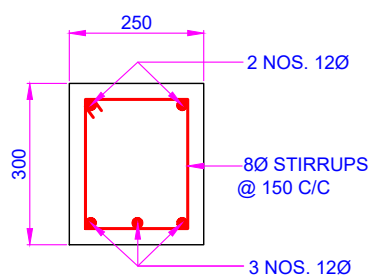
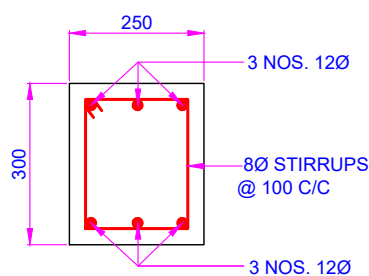
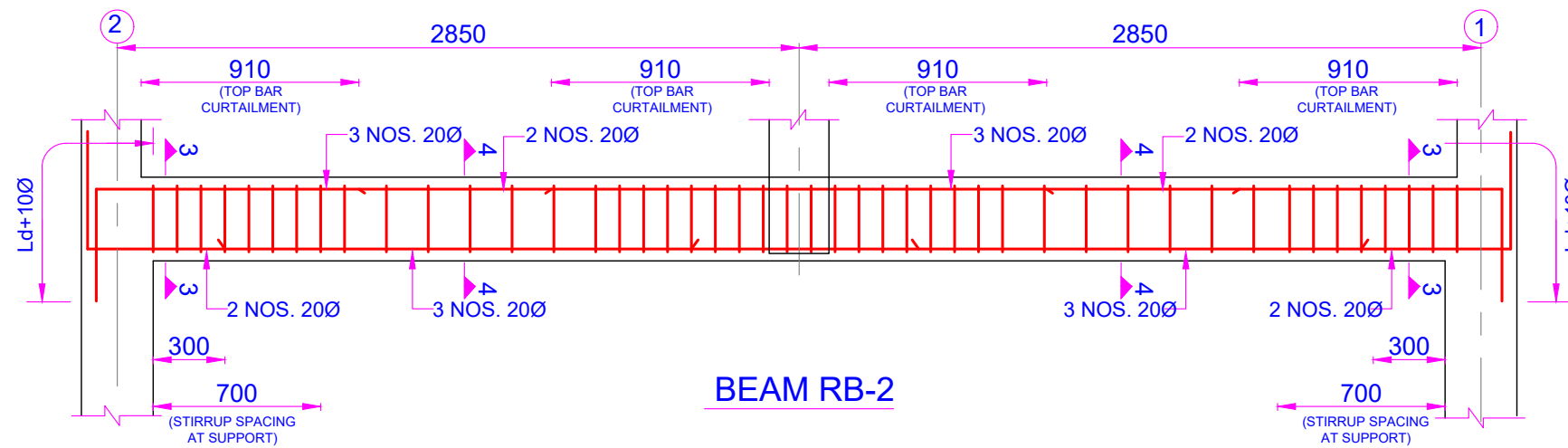
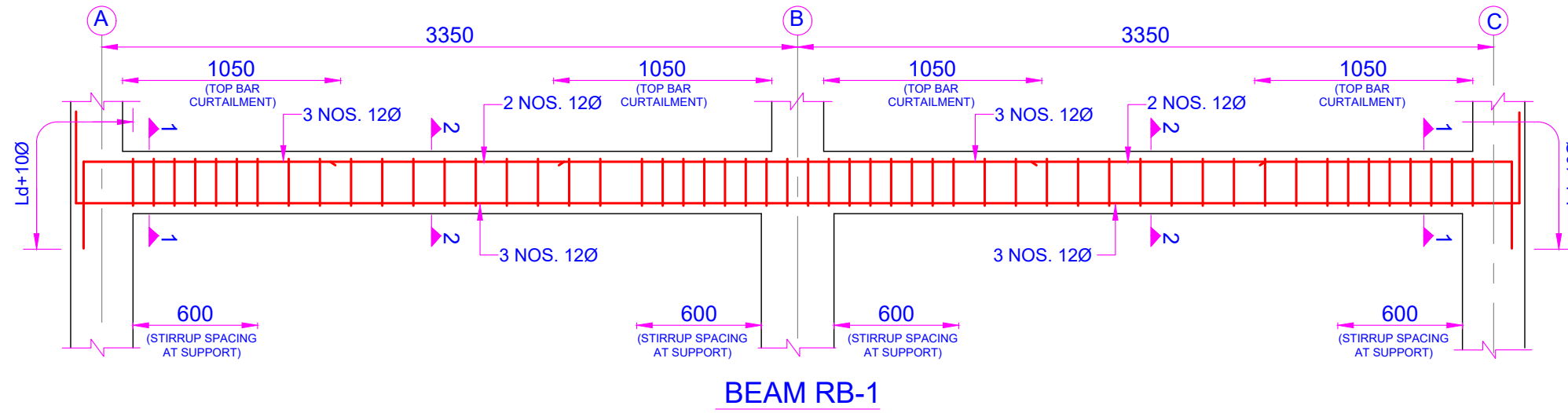
PROJECT OFFICE, BJIMTHANGKHA
BHUTAN, MAY, 2023

DRG. NO.: WAP/PHEP-II/ABS/T/2603

REV.

NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETRES & ELEVATIONS IN METRES.
2. NO DIMENSION SHALL BE MEASURED FROM THE DRAWING.
3. THIS DRAWING SHOWS THE ROOF BEAM REINFORCEMENT DETAILS OF AUTOMATIC BACKWASH STRAINER HOUSE NEAR POWERHOUSE CONFERENCE HALL.



FOR TENDER PURPOSE ONLY

SHEET 7 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)



CONSULTANTS
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(A GOVT. OF INDIA UNDERTAKING)

PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

**AUTOMATIC BACKWASH STRAINER HOUSE
ROOF BEAM REINFORCEMENT DETAILS**

Drawn	Designed	E&M Clearance	Checked	Approved
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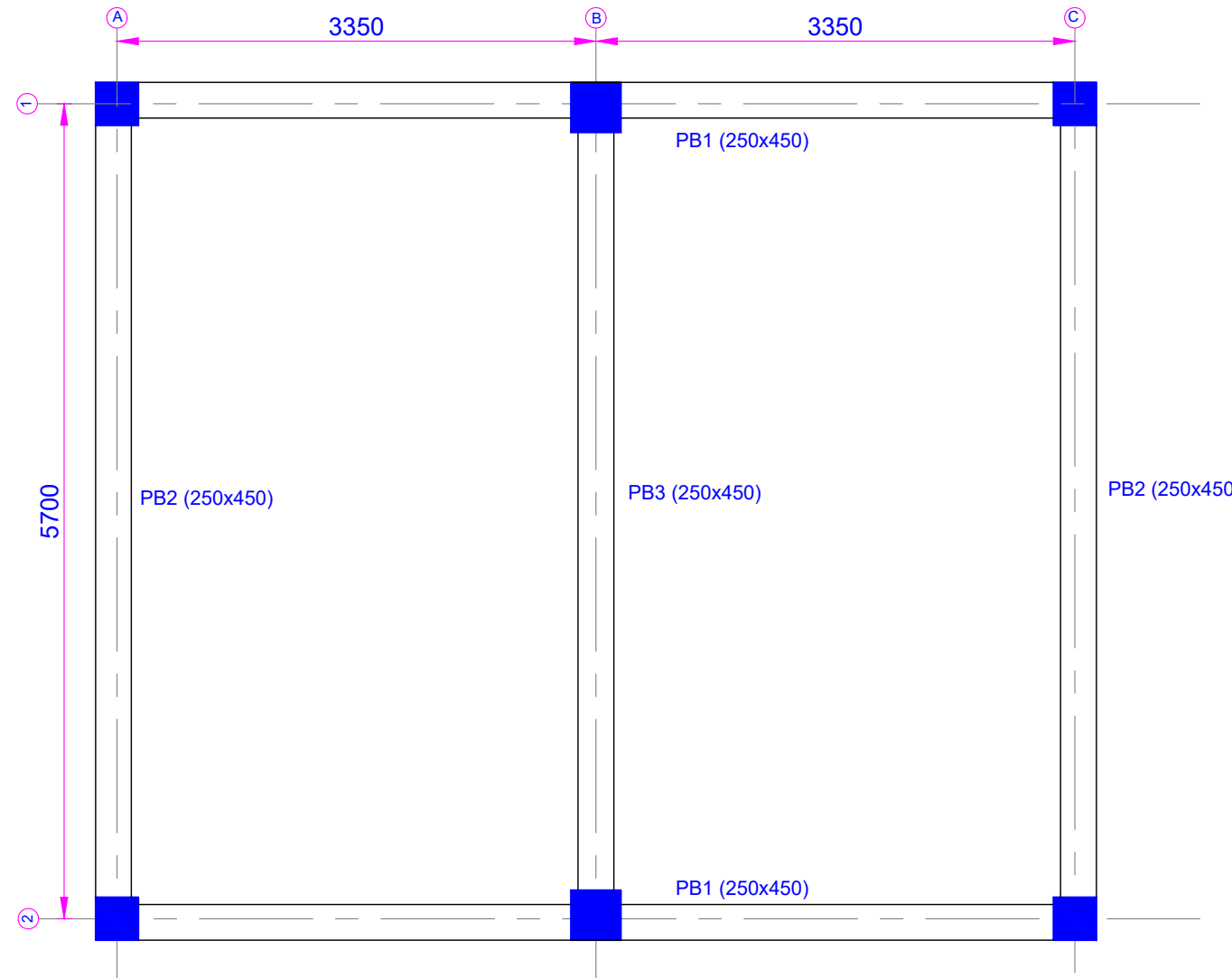
PROJECT OFFICE, BJIMTHANGKHA
BHUTAN, MAY, 2023

DRG. NO.: WAP/PHEP-I/ABS/TT/2603

REV.

NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETRES & ELEVATIONS IN METRES.
2. NO DIMENSION SHALL BE MEASURED FROM THE DRAWING.
3. THIS DRAWING SHOWS THE PLINTH BEAM LAYOUT PLAN OF AUTOMATIC BACKWASH STRAINER HOUSE NEAR POWERHOUSE CONFERENCE HALL.



PLINTH BEAM LAYOUT PLAN

FOR TENDER PURPOSE ONLY

SHEET 8 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)



CONSULTANTS
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PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

**AUTOMATIC BACKWASH STRAINER HOUSE
PLINTH BEAM LAYOUT PLAN**

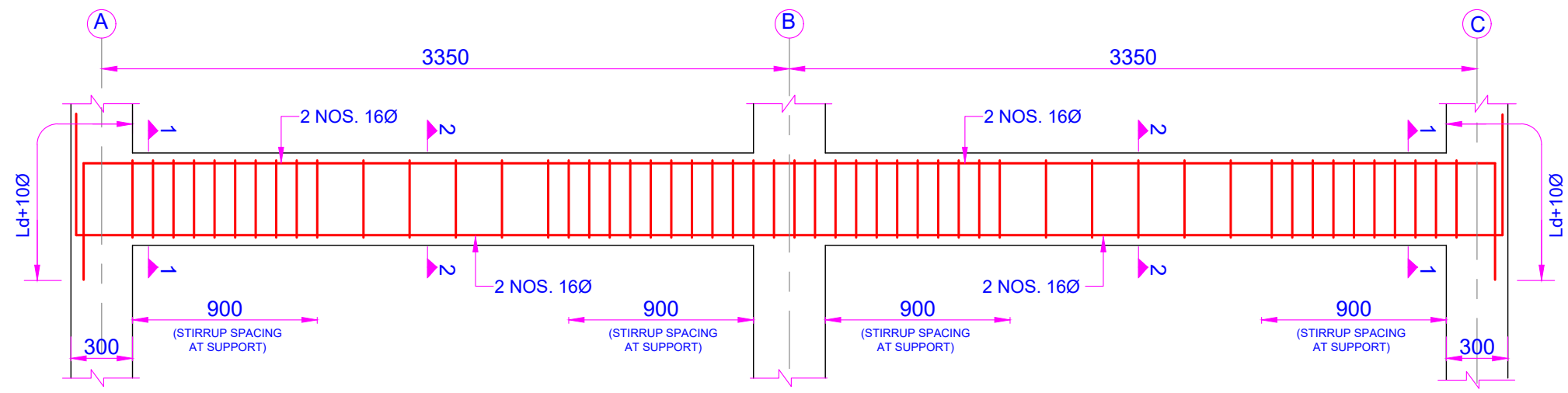
Drawn	Designed	E&M Clearance	Checked	Approved
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PROJECT OFFICE, BJIMTHANGKHA
BHUTAN, MAY, 2023

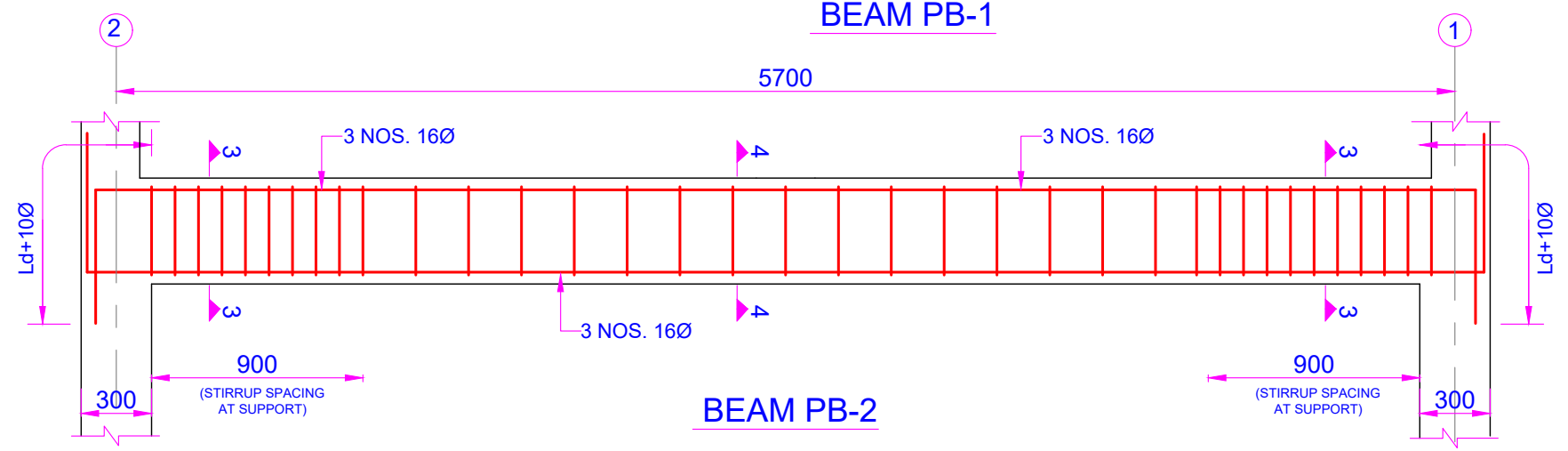
DRG. NO.: WAP/PHEP-I/ABS/T/2603

REV.

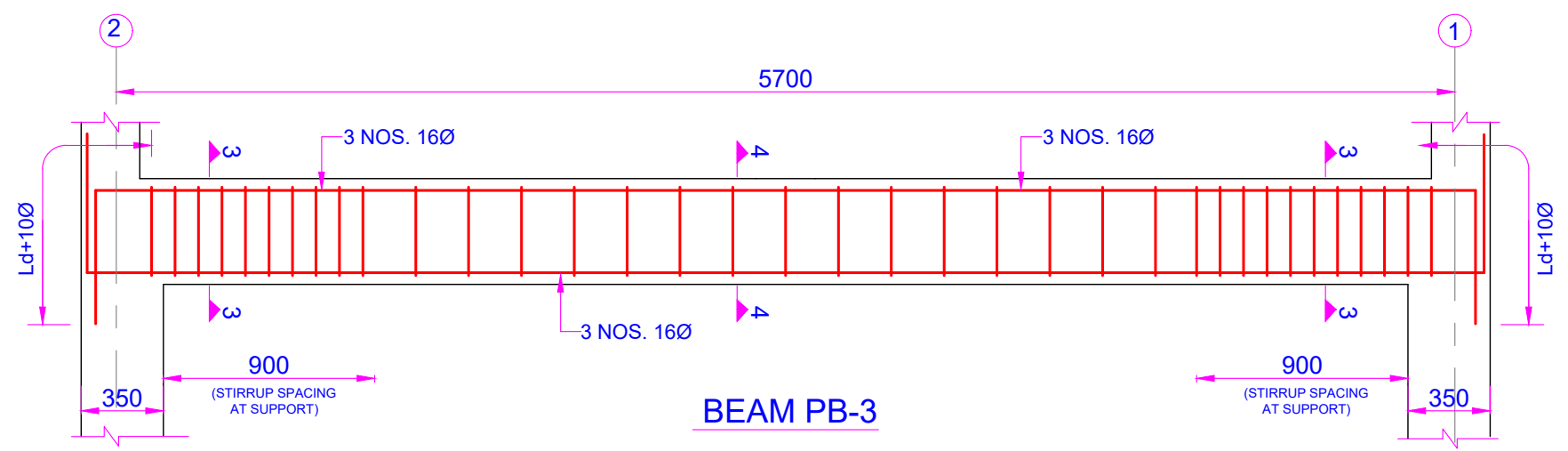
- NOTES:-**
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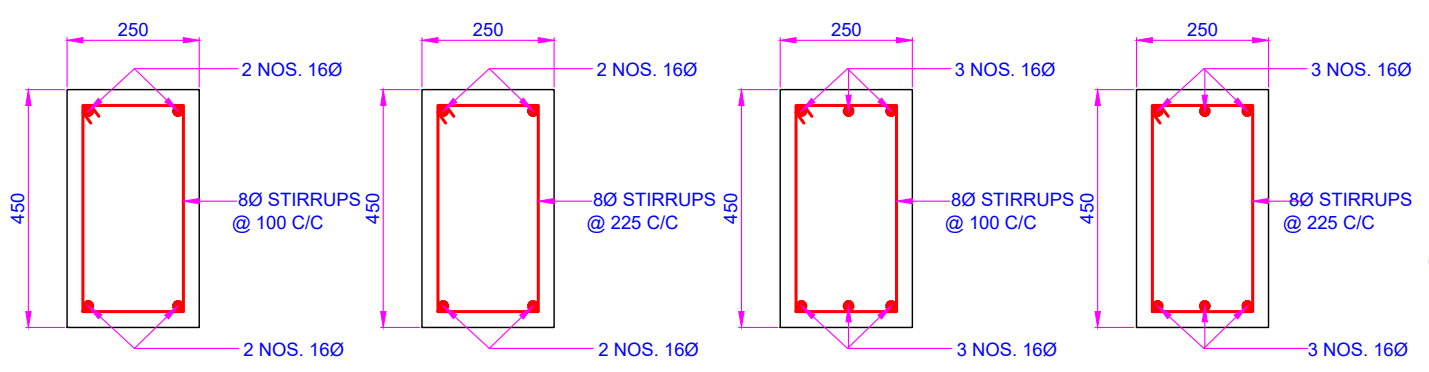
BEAM PB-1



BEAM PB-2



BEAM PB-3

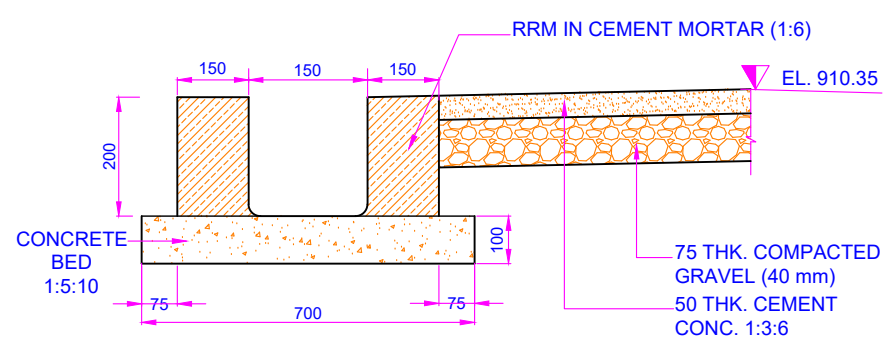


SECTION 1-1

SECTION 2-2

SECTION 3-3

SECTION 4-4



PLINTH PROTECTION & DRAINAGE ARRANGEMENT

FOR TENDER PURPOSE ONLY

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)

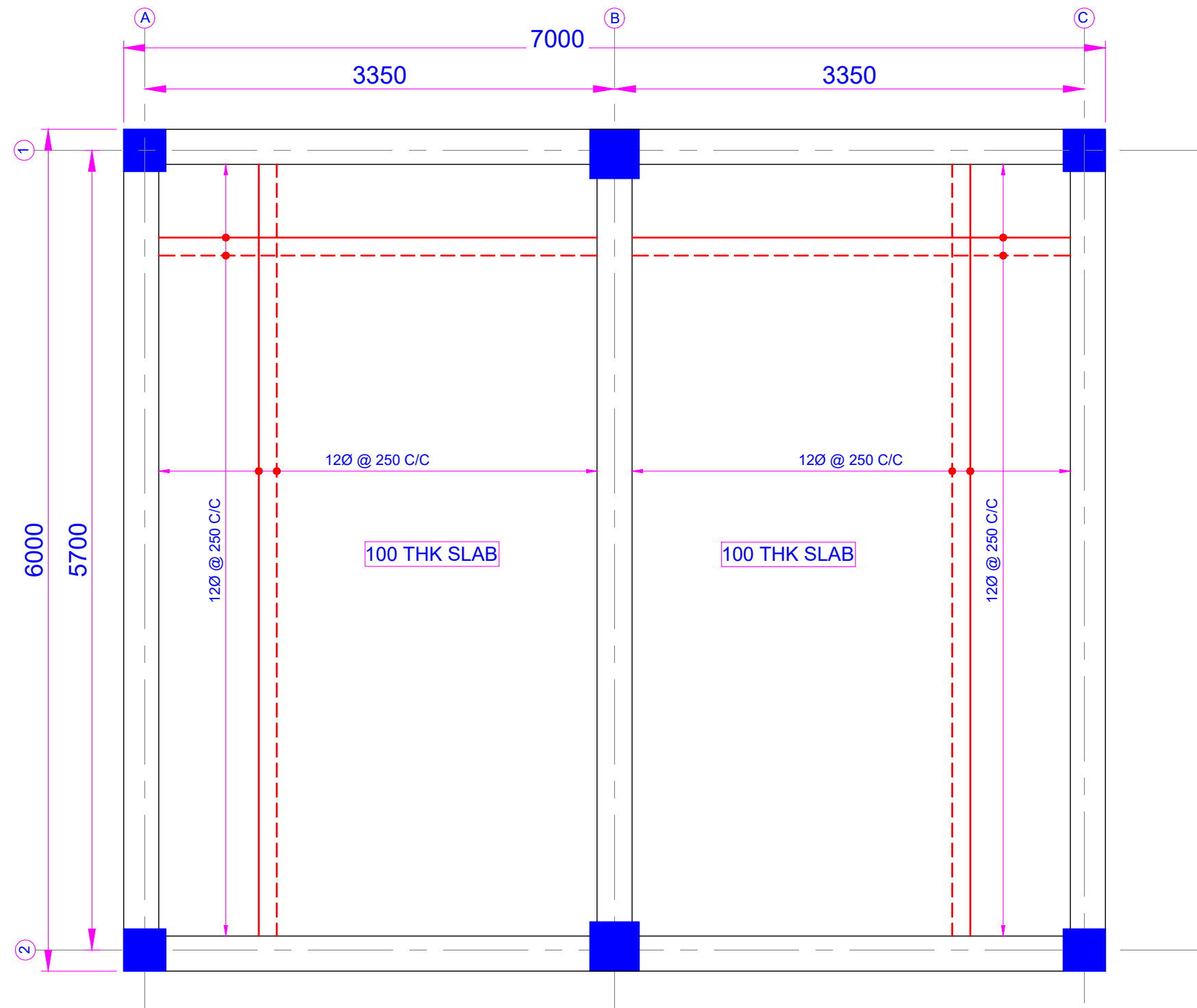


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PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

**AUTOMATIC BACKWASH STRAINER HOUSE
PLINTH BEAM REINFORCEMENT DETAILS**

Drawn	Designed	E&M Clearance	Checked	Approved
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FLOOR SLAB REINFORCEMENT DETAILS

NOTES:-

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3. THIS DRAWING SHOWS THE FLOOR SLAB REINFORCEMENT DETAILS OF AUTOMATIC BACKWASH STRAINER HOUSE NEAR POWERHOUSE CONFERENCE HALL.

FOR TENDER PURPOSE ONLY

SHEET 10 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)

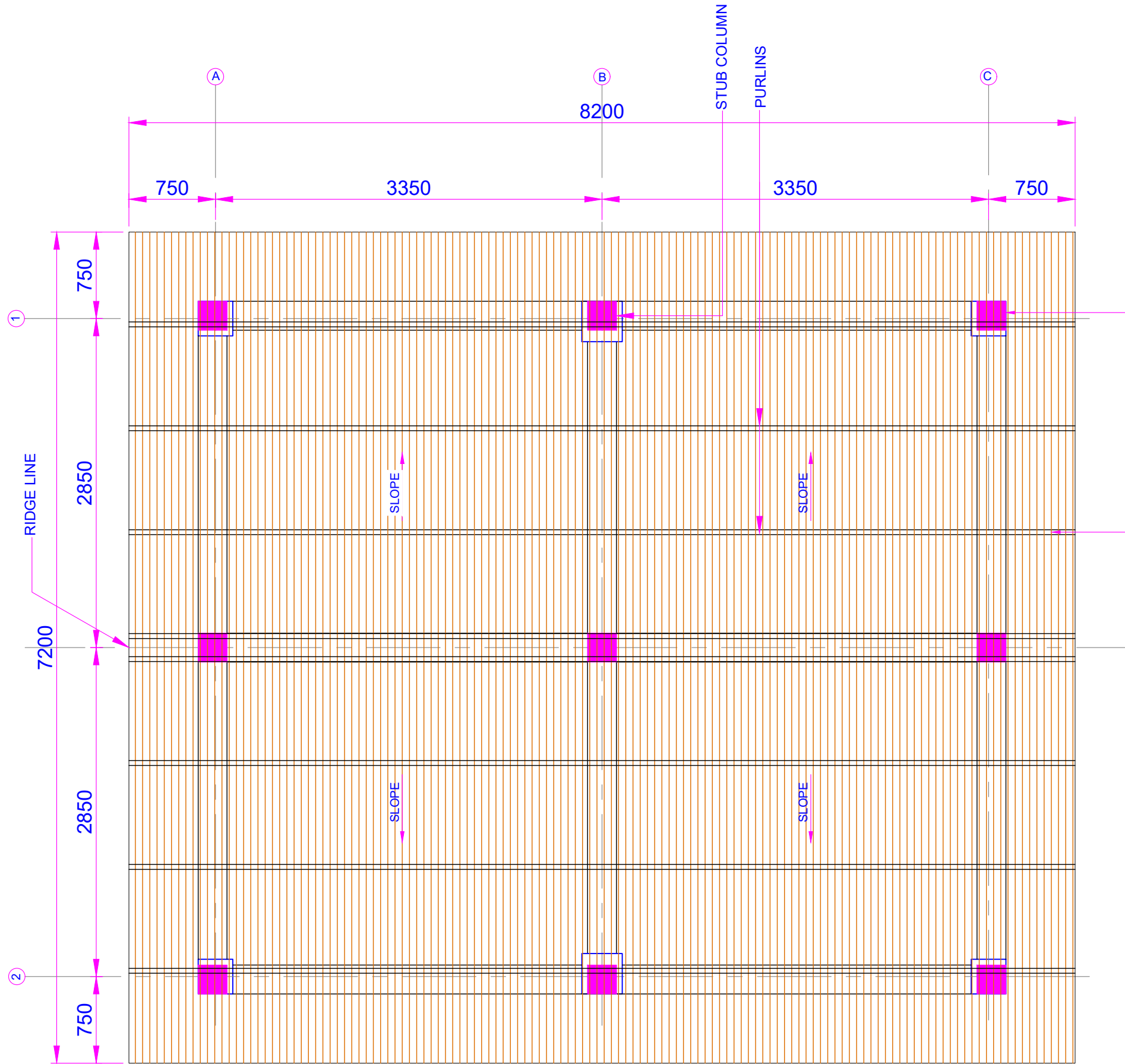


CONSULTANTS
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PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

**AUTOMATIC BACKWASH STRAINER HOUSE
FLOOR SLAB REINFORCEMENT DETAILS**

Drawn	Designed	E&M Clearance	Checked	Approved
PROJECT OFFICE, BJIMTHANGKHA BHUTAN, MAY, 2023		DRG. NO.: WAP/PHEP-I/ABS/T/2603		REV.



TRUSS LAYOUT PLAN

NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETRES & ELEVATIONS IN METRES.
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3. THIS DRAWING SHOWS THE TRUSS LAYOUT PLAN OF AUTOMATIC BACKWASH STRAINER HOUSE NEAR POWERHOUSE CONFERENCE HALL.

FOR TENDER PURPOSE ONLY

SHEET 11 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)



CONSULTANTS
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PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

**AUTOMATIC BACKWASH STRAINER HOUSE
TRUSS LAYOUT PLAN**

Drawn	Designed	E&M Clearance	Checked	Approved
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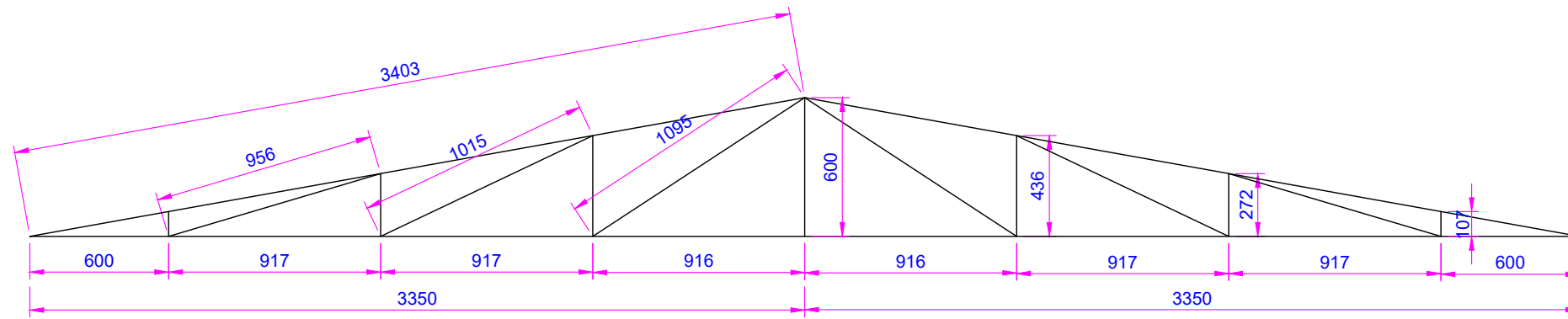
PROJECT OFFICE, BJIMTHANGKHA
BHUTAN, MAY, 2023

DRG. NO.: WAP/PHEP-I/ABS/T/2603

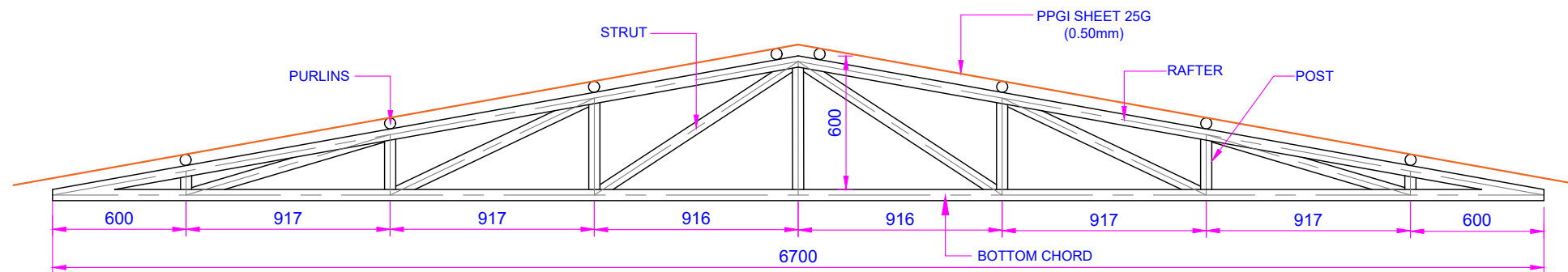
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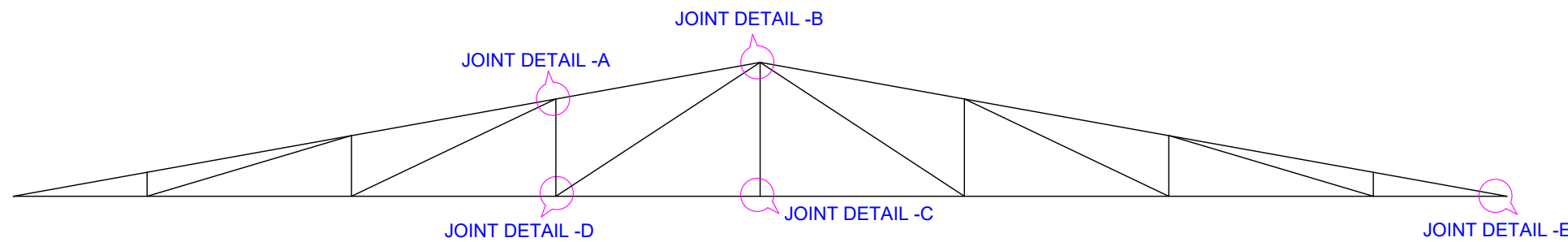
1. ALL DIMENSIONS ARE IN MILLIMETRES & ELEVATIONS IN METRES.
2. NO DIMENSION SHALL BE MEASURED FROM THE DRAWING.
3. THIS DRAWING SHOWS THE TRUSS ARRANGEMENT OF AUTOMATIC BACKWASH STRAINER HOUSE NEAR POWERHOUSE CONFERENCE HALL.



TRUSS ELEVATION



TYPICAL TRUSS DETAILS



JOINT DETAILS

SCHEDULE OF TRUSS MEMBERS

SL.No	MEMBER	SIZE
1	BOTTOM CHORD/TIE	NB 50 OD, 3.6 mm thick
2	RAFTER	NB 50 OD, 3.6 mm thick
3	POST	NB 32 OD, 3.2 mm thick
4	STRUT	NB 32 OD, 3.2 mm thick
5	PURLIN	NB 32 OD, 3.2 mm thick

FOR TENDER PURPOSE ONLY

SHEET 12 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)



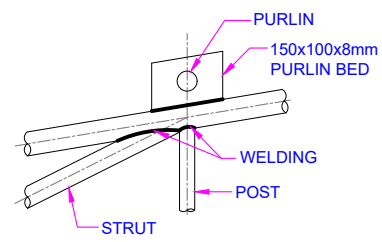
CONSULTANTS
WAPCOS LIMITED
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PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

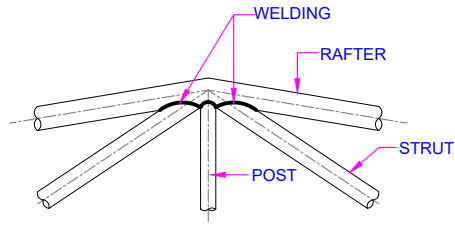
**AUTOMATIC BACKWASH STRAINER HOUSE
TRUSS ARRANGEMENT**

Drawn	Designed	E&M Clearance	Checked	Approved
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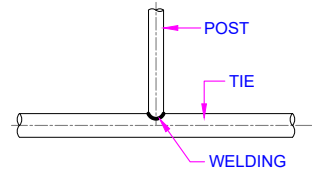
PROJECT OFFICE, BJIMTHANGKHA BHUTAN, MAY, 2023 DRG. NO.: WAP/PHEP-I/ABS/T/2603 REV.



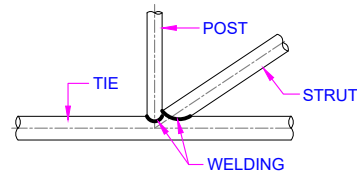
JOINT DETAIL -A



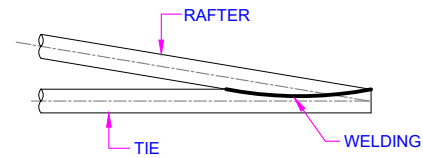
JOINT DETAIL -B



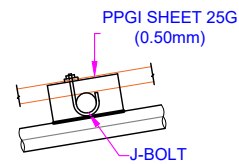
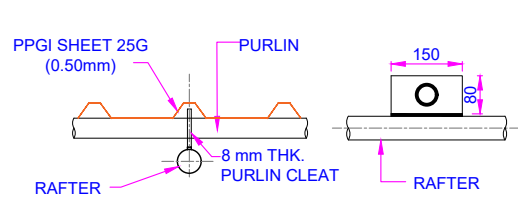
JOINT DETAIL -C



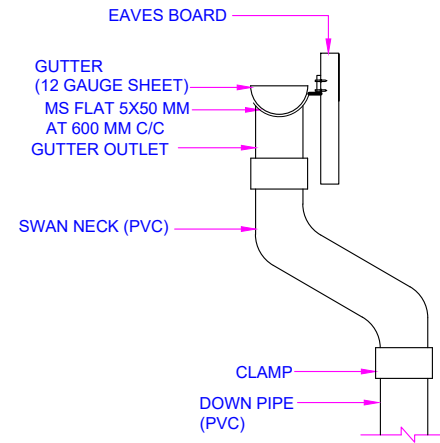
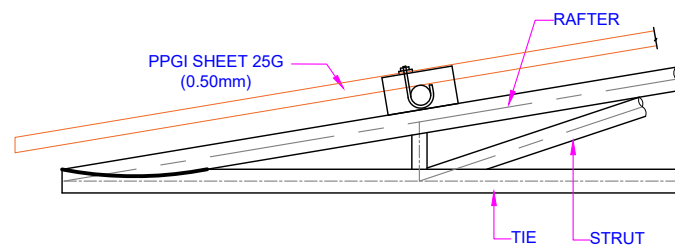
JOINT DETAIL -D



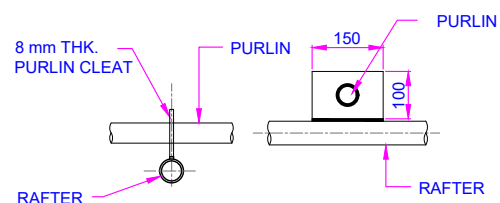
JOINT DETAIL -E



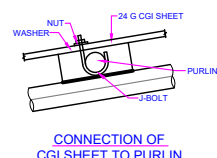
CONNECTION OF PPGI SHEET TO PURLIN & PURLIN TO RAFTER



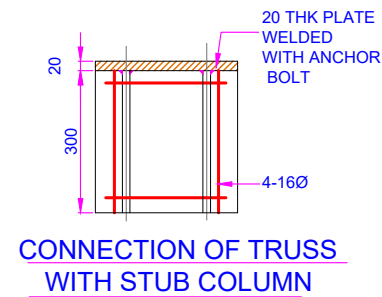
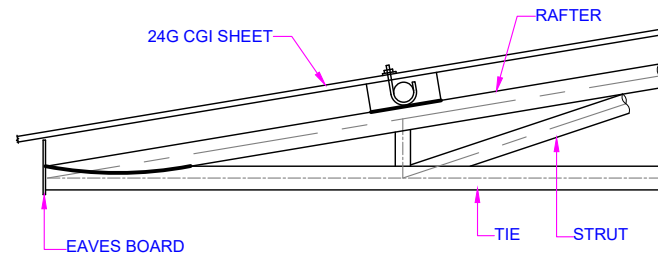
GUTTER DETAILS



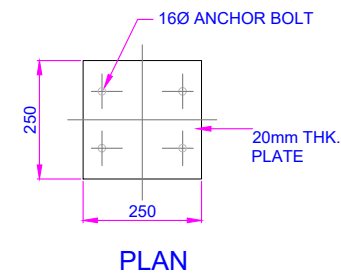
CONNECTION OF PURLIN TO RAFTER



CONNECTION OF CGI SHEET TO PURLIN



CONNECTION OF TRUSS WITH STUB COLUMN



PLAN

NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETRES & ELEVATIONS IN METRES.
2. NO DIMENSION SHALL BE MEASURED FROM THE DRAWING.
3. THIS DRAWING SHOWS THE JOINT DETAILS OF TRUSS OF AUTOMATIC BACKWASH STRAINER HOUSE NEAR POWERHOUSE CONFERENCE HALL.

FOR TENDER PURPOSE ONLY

SHEET 13 OF 13

PUNATSANGCHHU HYDROELECTRIC PROJECT AUTHORITY (BHUTAN)



CONSULTANTS
WAPCOS LIMITED
(A GOVT. OF INDIA UNDERTAKING)

PUNATSANGCHHU-I H.E. PROJECT (BHUTAN)

**AUTOMATIC BACKWASH STRAINER HOUSE
TRUSS JOINTS DETAILS**

Drawn	Designed	E&M Clearance	Checked	Approved
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PROJECT OFFICE, BJIMTHANGKHA BHUTAN, MAY, 2023	DRG. NO.: WAP/PHEP-I/ABS/T/2603	REV.
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