

Ref: BHE/PW/PUR/NTPRT-ACC PYLON/2758/Corg-03

Dt: 01/05/2023

-----Page 1 of 1-----

To,

ALL BIDDERS

Subject: **Corrigendum-02:** Clarifications to Bidder's queries

Tender Specification No: BHE/PW/PUR/NTPRT-ACC PYLON/2758

Job Description: Construction of 20 Nos of ACC Pylons (RC Circular Hollow Columns and RC Top Slab over RC Columns supporting Air Cooled Condenser Fan Deck (ACC) using Slip-form System) AT 3x800 MW PVUNL PROJECT PATRATU, DISTRICT-RAMGARH STATE- JHARKHAND

Bidders to kindly take note of the following:

AA) Issue of clarifications w.r.t. bidder's queries

S. No	Query	BHEL's Reply
1.	Pylons schematic/ engineering drawings needed	Attached with this corrigendum
2.	Is it Foundations for pylons available or yet to construct?	Raft is not in the scope of bidder
3.	if needed can we fabricate one more set of slipform to complete the job on time if yes can we mention the cost in the tender?	Maximum Six (06) Slip-form is payable under relevant BOQ item. Bidder may mobilise additional Slip-form beyond Six (06) to meet the completion schedule for which payment shall not be made by BHEL.
4.	Deck slab detailed drawings needed	Attached with this corrigendum

All other Terms and conditions of the Tender Specification shall remain unaltered unless expressly amended by BHEL in writing.

Bidders are requested to submit as a part of their offer, a copy of this corrigendum duly Digitally countersigned by the authorized signatory as a token of Bidder's unqualified acceptance of this corrigendum.

BIDDERS MAY PLEASE NOTE THAT SUBJECT TENDER IS E-TENDER AND THE OFFER IS TO BE SUBMITTED ONLY IN E-PROCUREMENT PORTAL → <https://eprocurebhel.co.in>

BIDDERS WHO HAVE ALREADY SUBMITTED THEIR OFFERS PRIOR TO ISSUANCE OF THIS CORRIGENDUM IN E-TENDER PORTAL ARE REQUIRED TO RE-SUBMIT THEIR OFFER AFTER TAKING COGNIZANCE OF THIS CORRIGENDUM.

Thanking you,
Yours Sincerely,

GM (Purchase)

GA AND RCC DETAILS OF ACC COLUMN

(UNIT-1)

Rev. No. 01



NTPC DOCUMENT No. 9585-001-315-PVC-C-1525A

CUSTOMER



PVUN- LIMITED

PROJECT

3x800MW Patratu Super Thermal Power Project

CONTRACTOR



Bharat Heavy Electricals Limited

ACC SUPPLIER

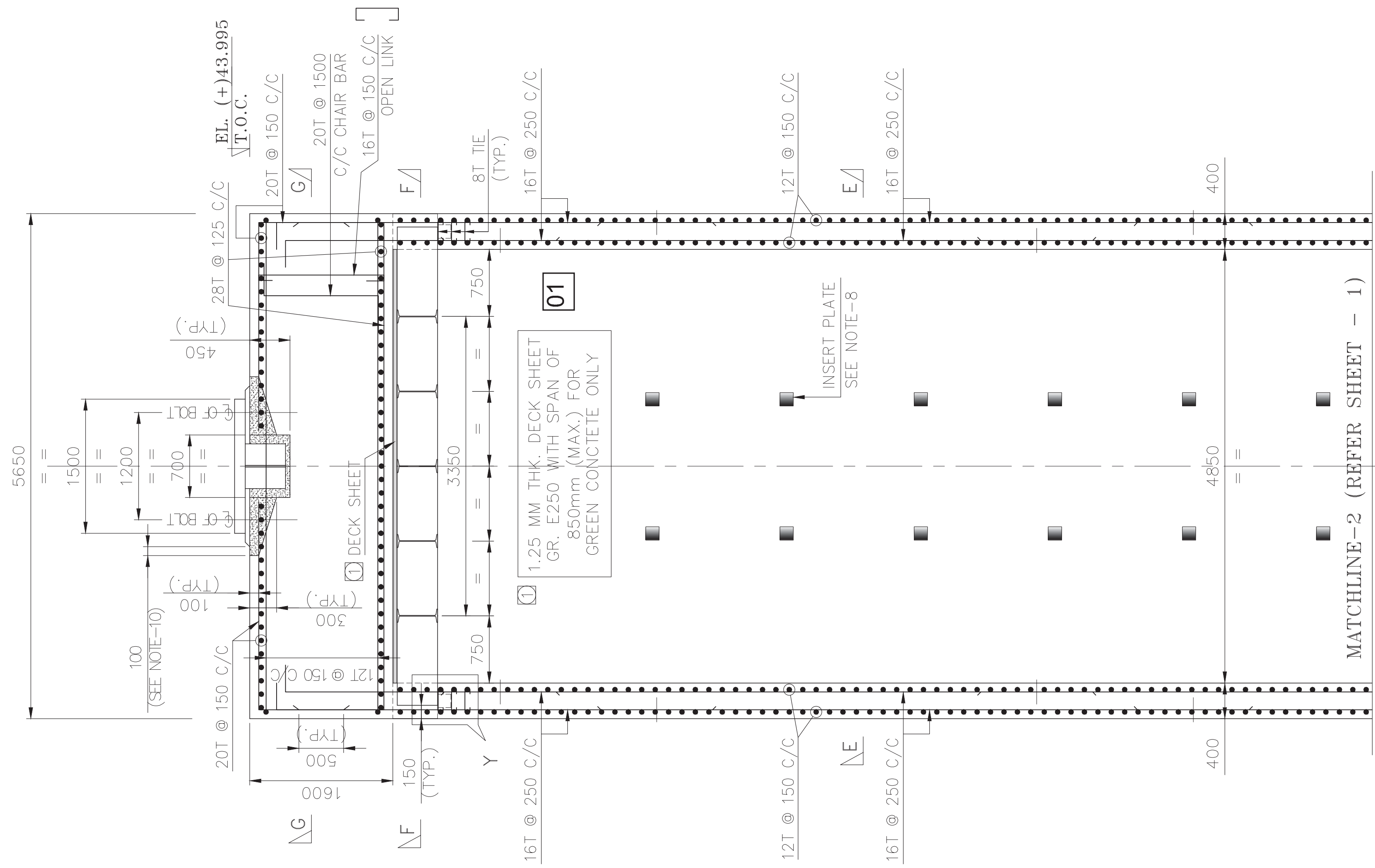


SPG, BELGIUM

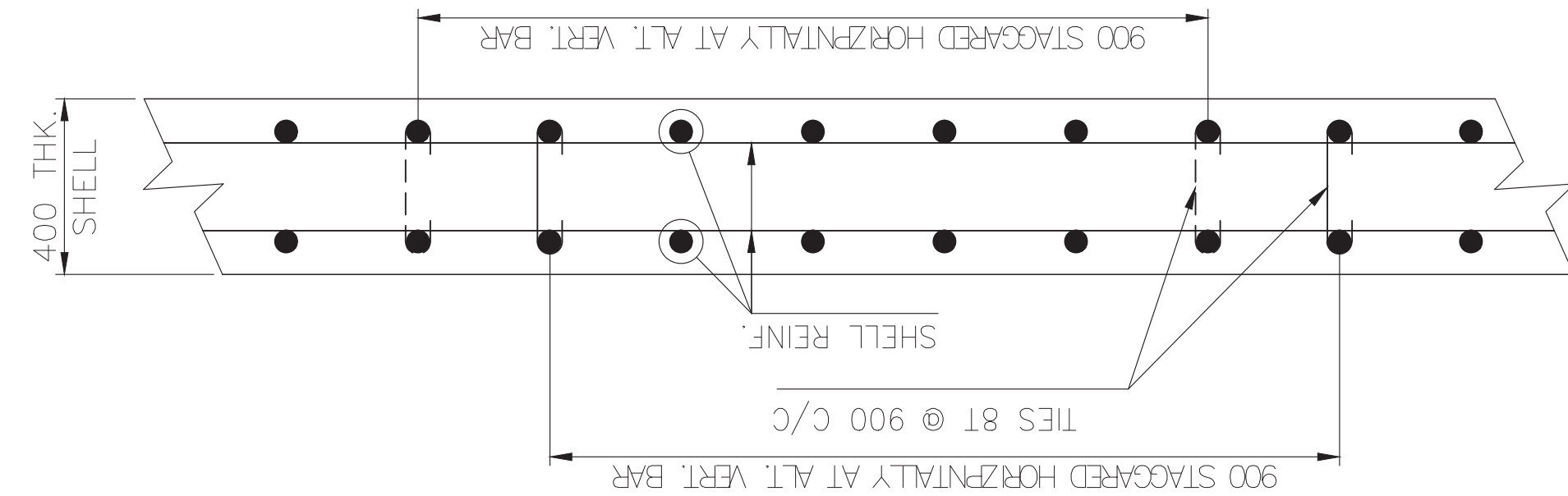
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DRN./DESIGNED BY	<u>PB</u>	--sd--	19.12.2022
CHECKED BY	<u>SC</u>	Signature Not Verified	19.12.2022
APPROVED BY	<u>SB</u>	Signature Not Verified	19.12.2022

Signature Not Verified
Date: 2022.12.21
18:34:57 IST
Reason: CAT
BHEL

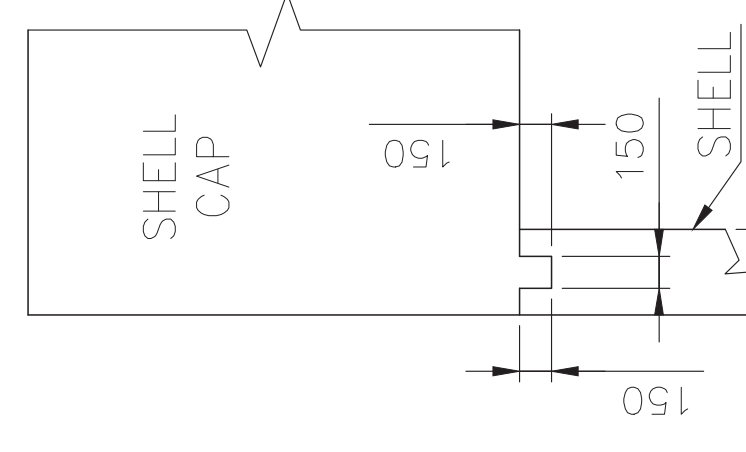
Standard Note/Declaration “ Drawings / Documents are being submitted to PVUNL/NTPC for information. BHEL hereby confirms full compliance to all the specified requirements of the contract specification, without any deviation, whatsoever. In case during the tenure of the contract, it is observed/found that the data/ information in the released Drawing/document is not meeting the contract specification, BHEL and its vendor will modify/ rectify/replace the Equipments/ System/Utilities to meet the specification without any commercial implication or any time extension to PVUNL/NTPC in this regard “.



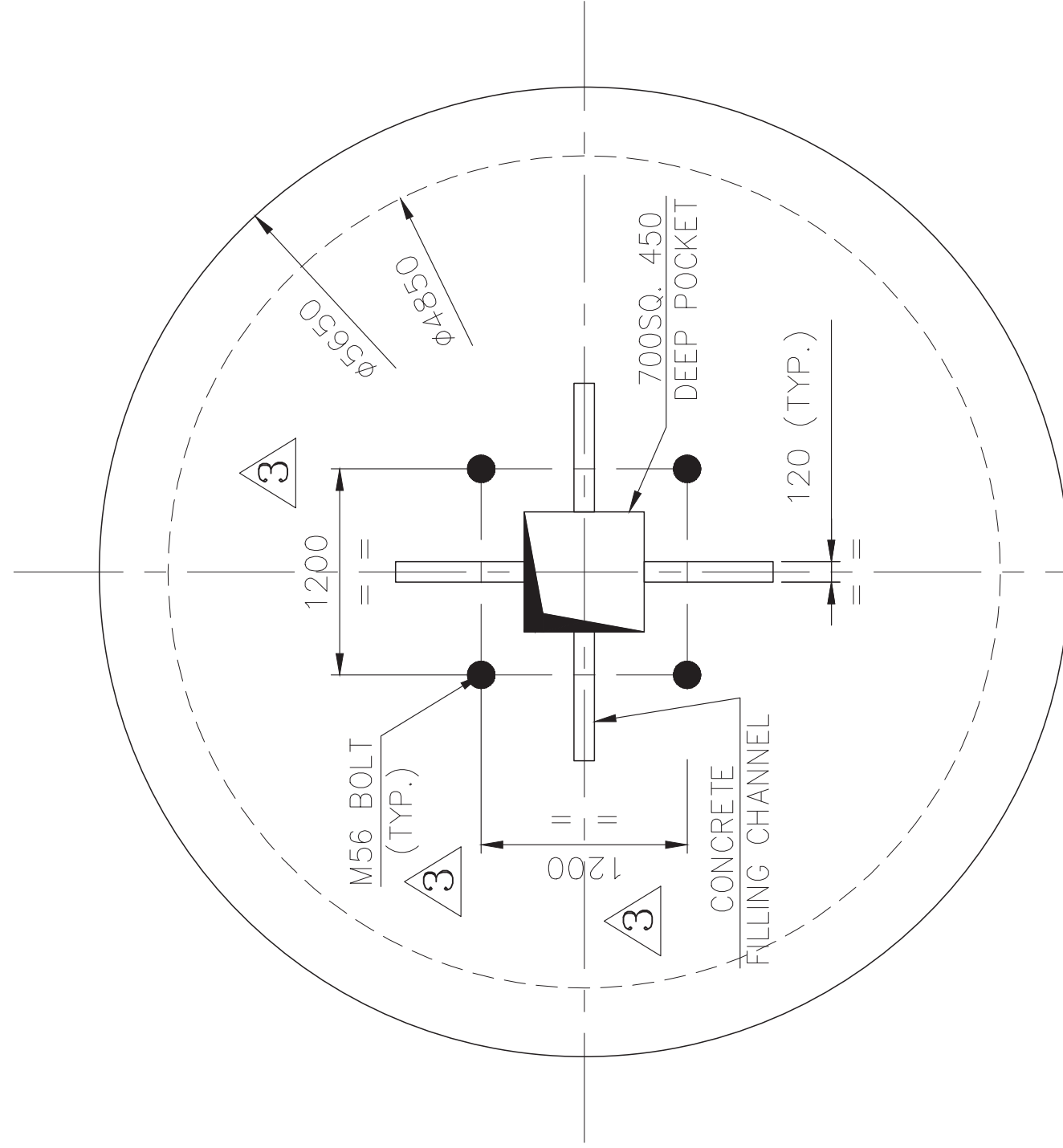
TYPICAL LONGITUDINAL SECTION FOR PYLON



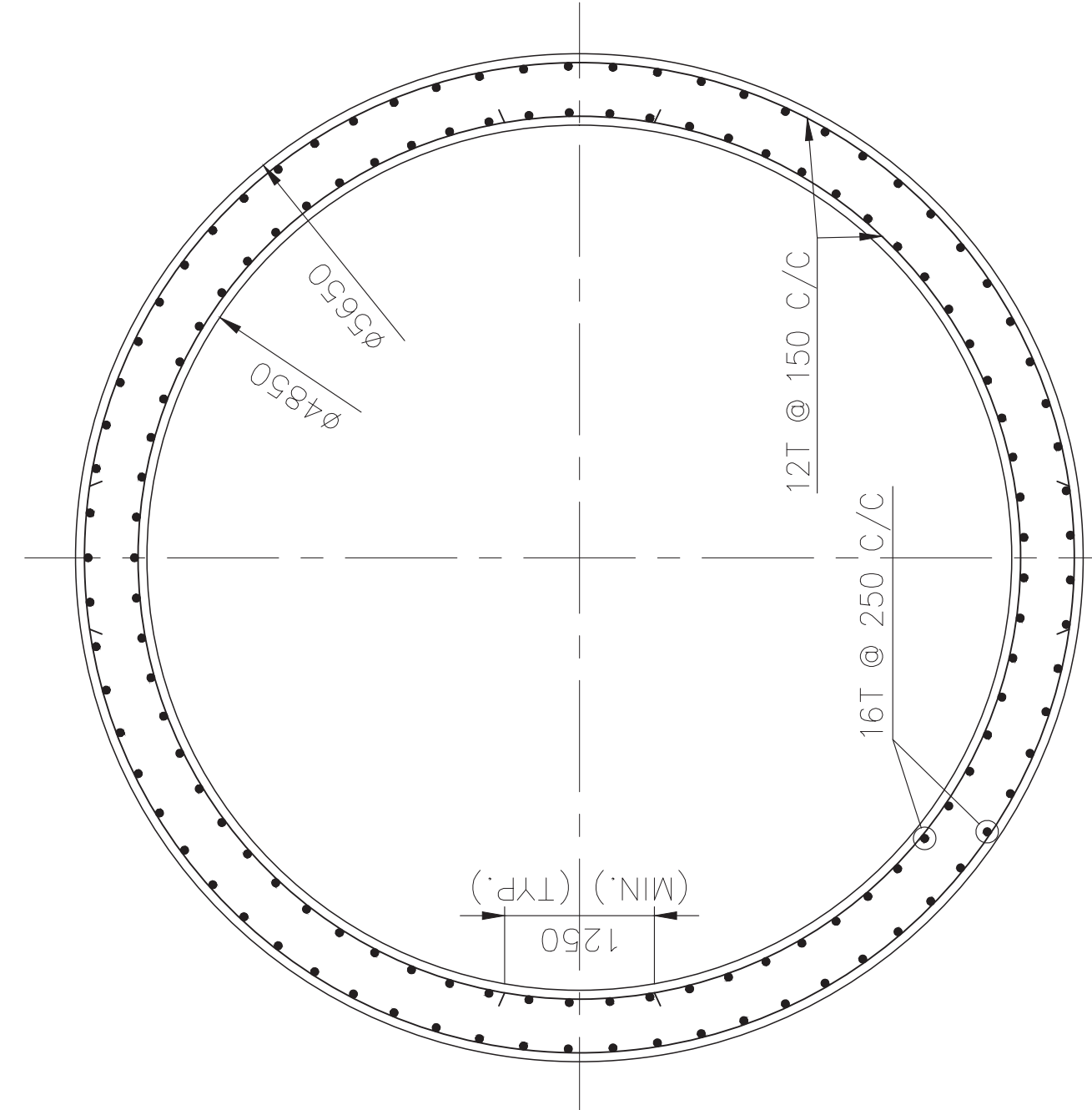
TYP. DETAIL OF
TIE FOR SHELL



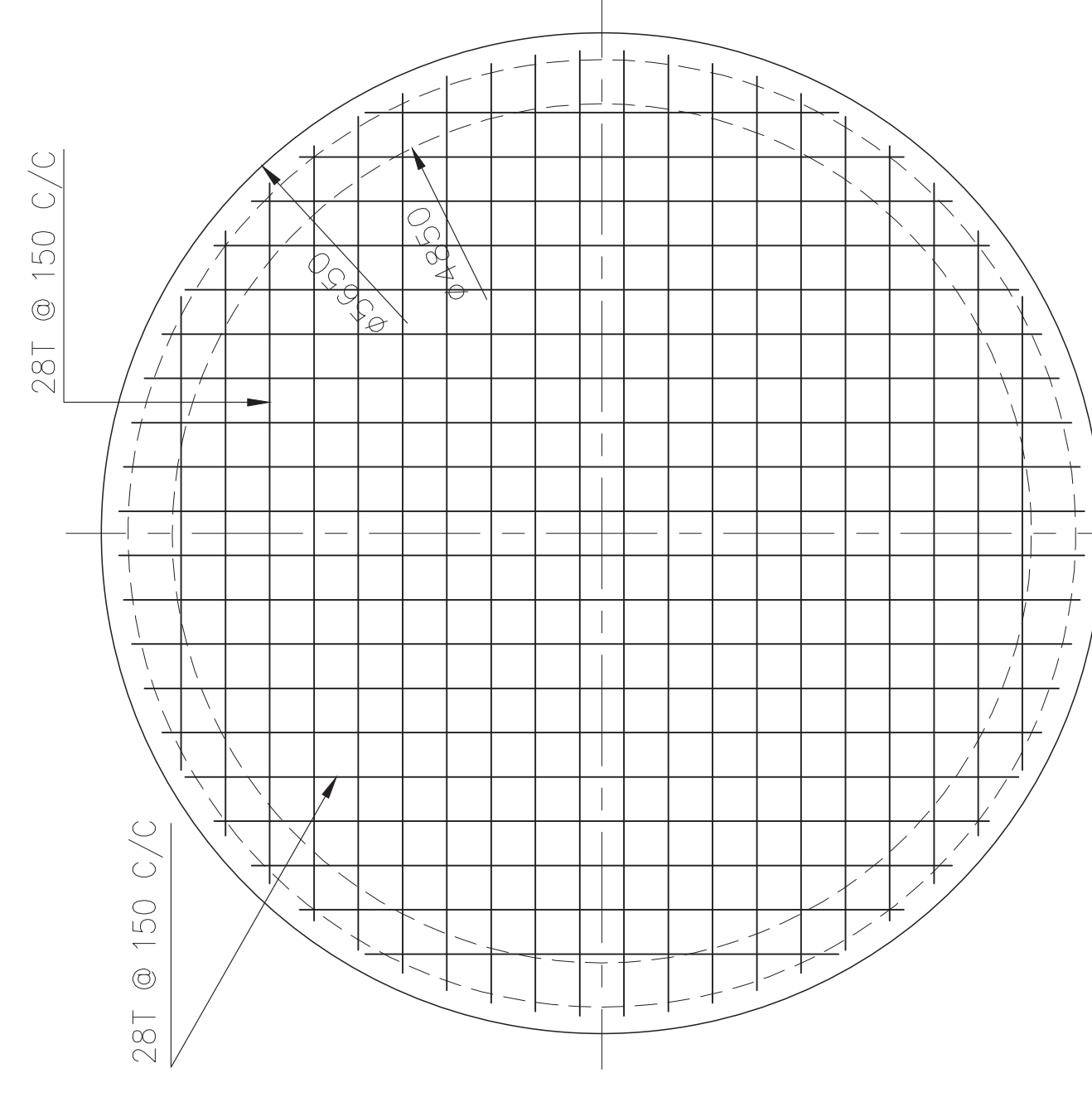
DETAIL : Y
CONSTRUCTION JOINT OF SHELL
AND SHELL CAP JUNCTION



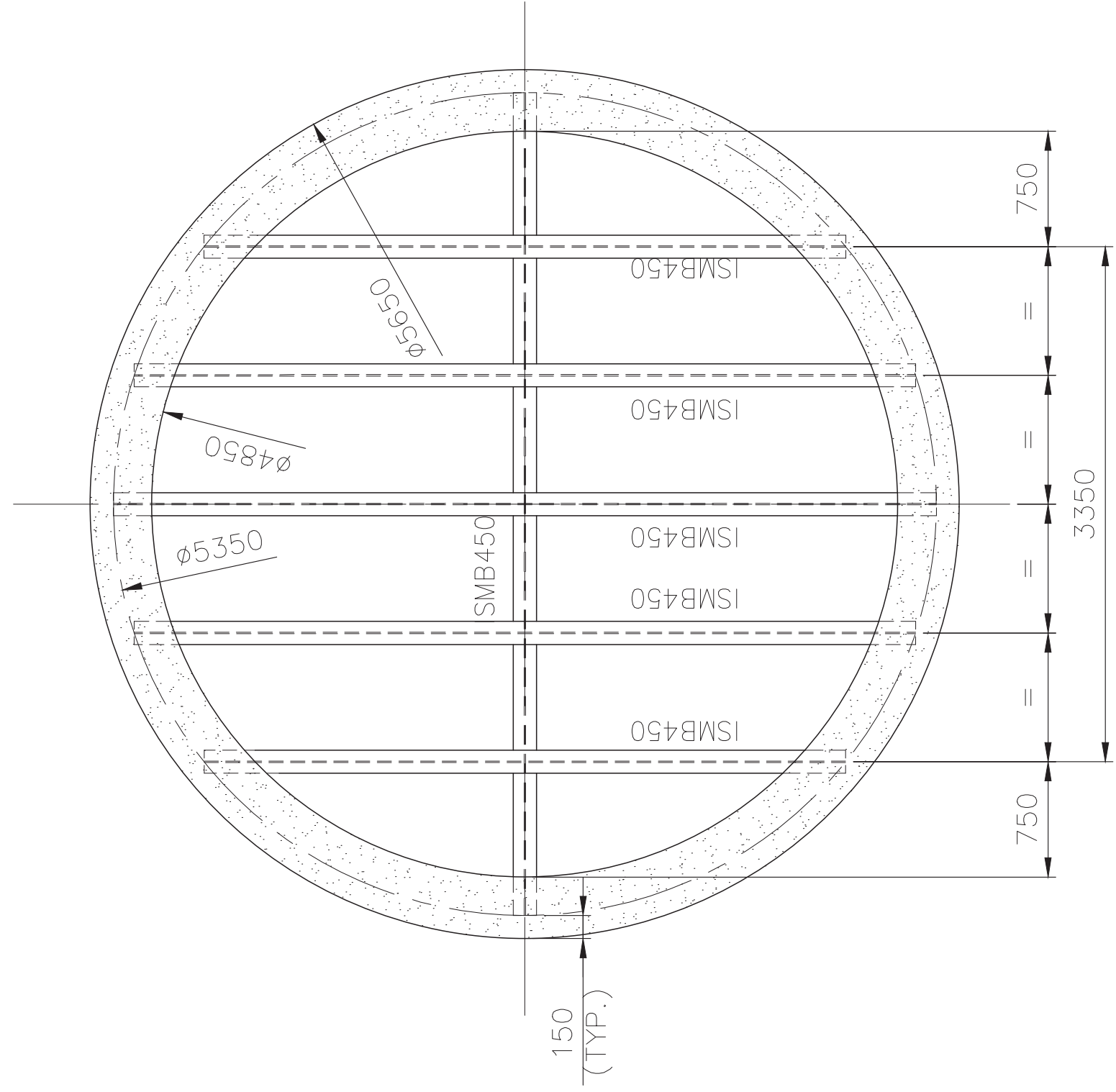
SECTION : G-G



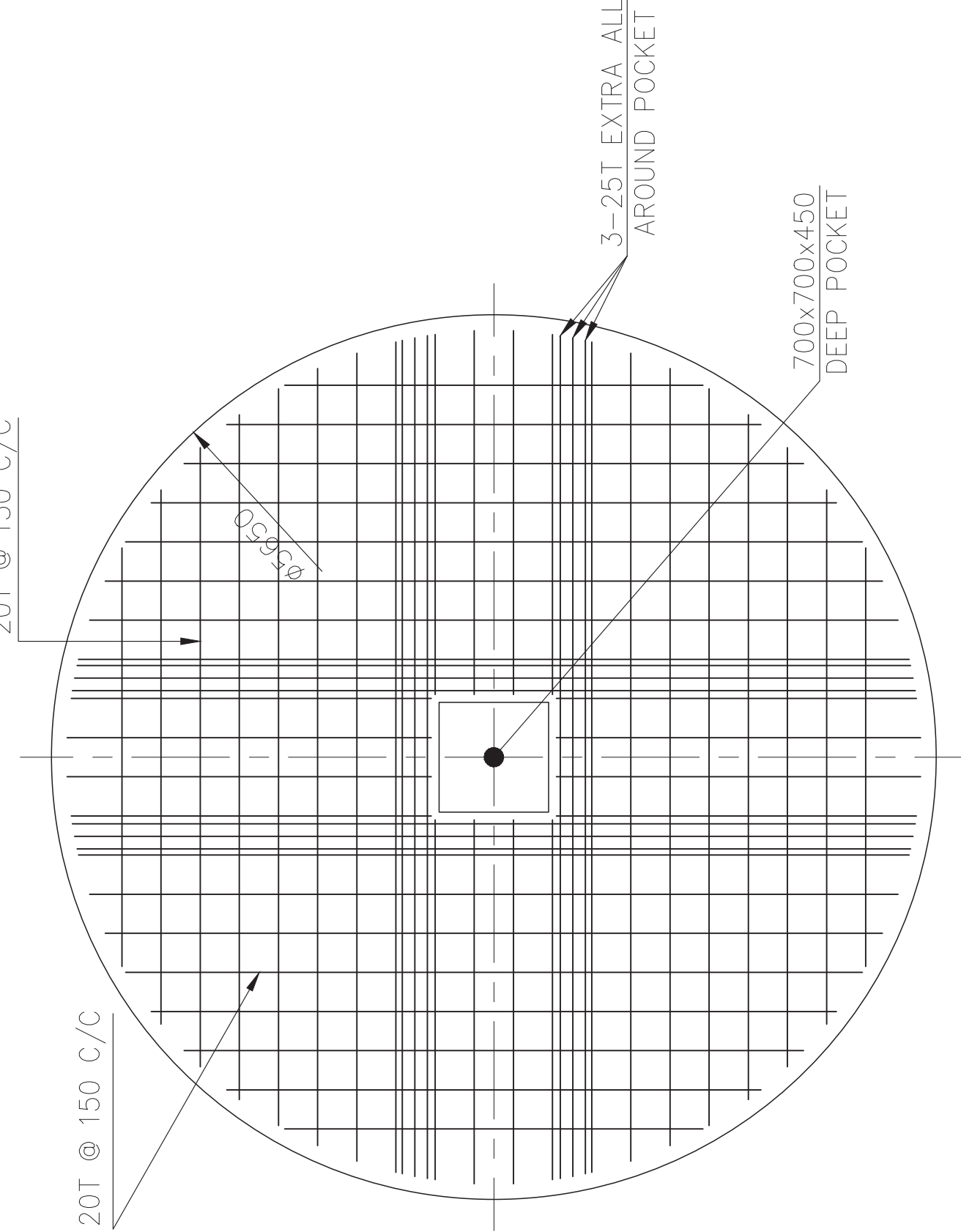
SECTION : E-E



BOT. REINFORCEMENT
DETAIL OF SHELL CAP



SECTION : F-F



TOP REINFORCEMENT DETAIL OF SHELL CAP



GENERAL NOTES:-

1. FOR GENERAL ARRANGEMENT REFER DRAWING **9585-001-110-PVM-B-022A**
2. FOR LOAD DATA (UNIT-1) REFER DRAWING **9585-001-110-PVC-V-008**
3. ALL DIMENSIONS ARE IN MM AND ELEVATION IN METERS (UNLESS NOTED OTHERWISE).
4. CLEAR COVER FOR REINFORCEMENT :
FOR COLUMN SHELL = 50
FOR TOP SLAB = 30
5. a) LAP LENGTH (Lp) SHALL BE 46 x DIA OF BARS.
b) LAP SHOULD BE PROVIDE IN STAGGERED MANNER.
6. GRADE OF CONCRETE M-30 AS PER IS:456-2000.
7. REINFORCEMENT SHALL BE HYSD BAR OF GRADE Fe-500D CONFORMING TO IS:1786-2008.
8. FOR LOCATION AND DETAIL OF INSERT PLATES REFER THE FOLLOWING DRAWINGS :
a) PIPING INSERT : **9585-001-315-PVC-C-1526A**
b) GANTRY INSERT : **9585-001-572-PVC-U-003 (FOR G6),9585-001-572-PVC-U-004(FOR G8), AND 9585-001-572-PVC-U-002 (FOR G5)**
- c) **CABLE TRAY INSERT: 9585-001-110-PVC-W-009**
9. EARTH FILLING INSIDE AND OUTSIDE OF PYLON SHOULD BE DONE SIMULTANEOUSLY, MAINTAINING SAME SOIL LEVEL AT BOTH SIDE.
10. THE GROUTING FOUR DEVICE IS TO BE POSITIONED (OR DIMENSIONED) IN ACCORDANCE WITH LOCAL DISPOSITION.
11. **INSERT ON TOP OF ACC COLUMN (ANCHOR BOLT DETAIL): 9585-001-315-PVC-C-1526D**

01 11. INSERT ON TOP OF ACC COLUMN (ANCHOR BOLT DETAIL): 9585-001-315-PVC-C-1526D

[illegible]

GA AND RCC DETAILS OF ACC COLUMN

(UNIT-2)

Rev. No. 01



NTPC DOCUMENT No. 9585-001-315-PVC-C-1525B

CUSTOMER



PVUN- LIMITED

PROJECT

3x800MW Patratu Super Thermal Power Project

CONTRACTOR



Bharat Heavy Electricals Limited

ACC SUPPLIER

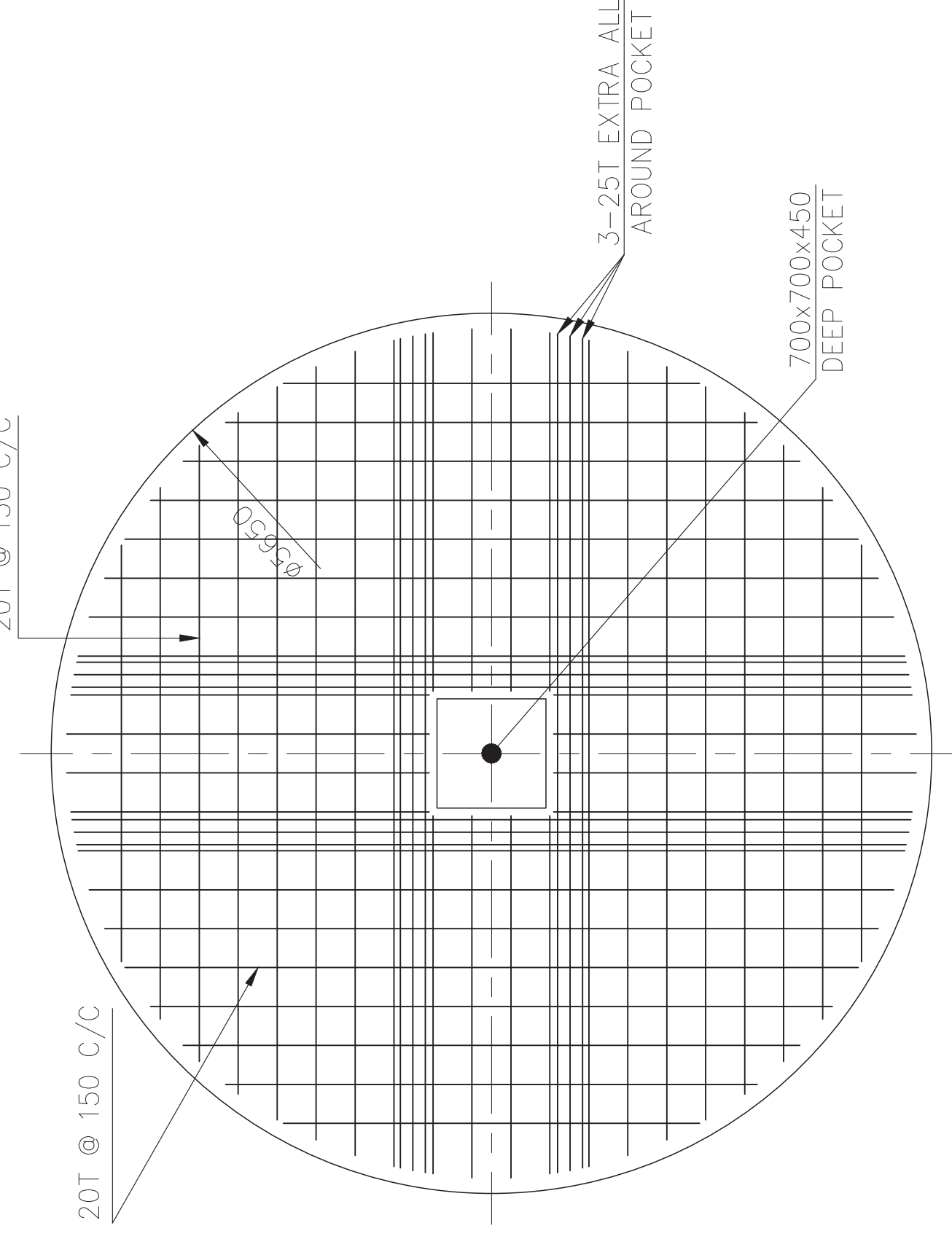
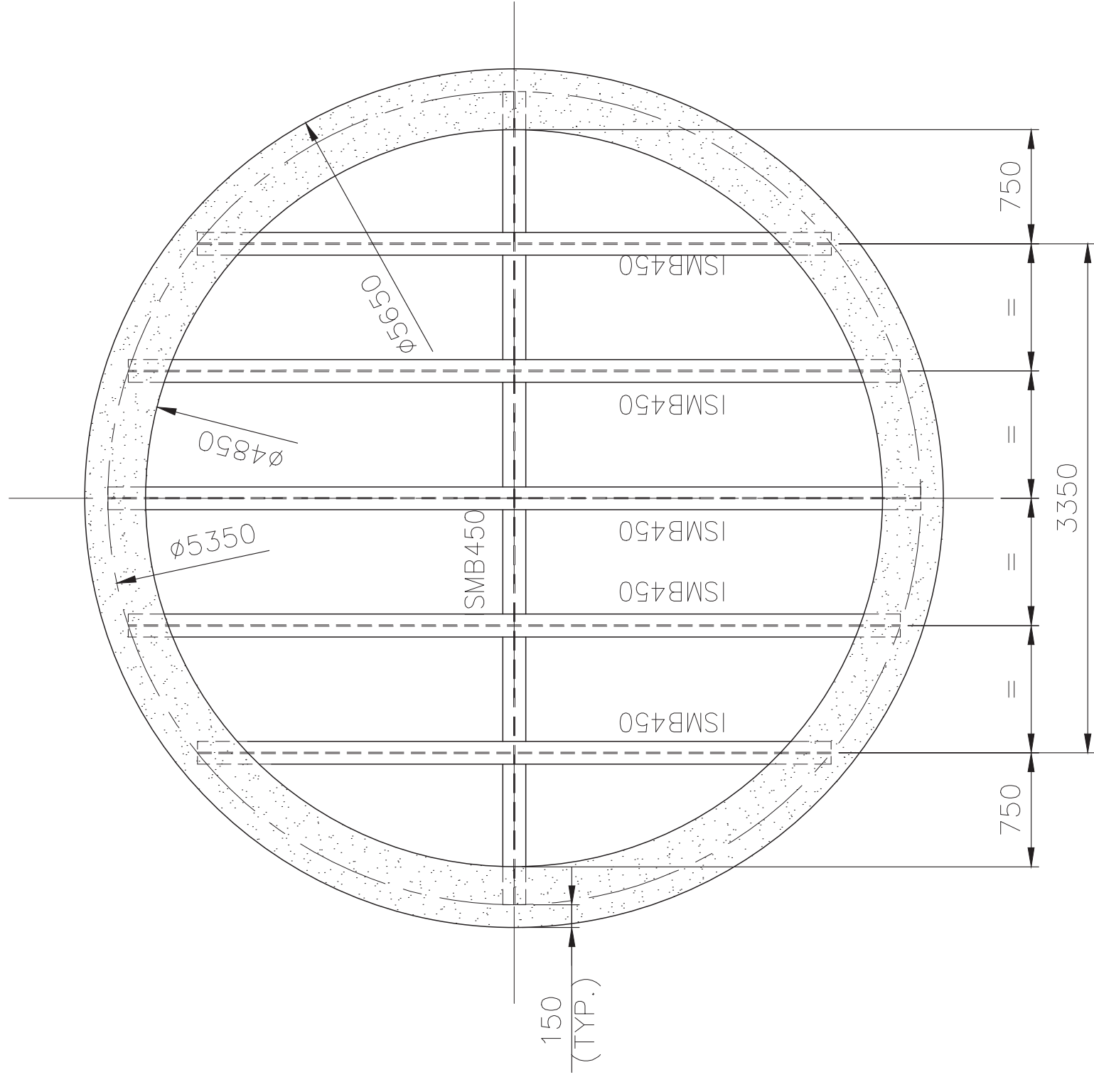
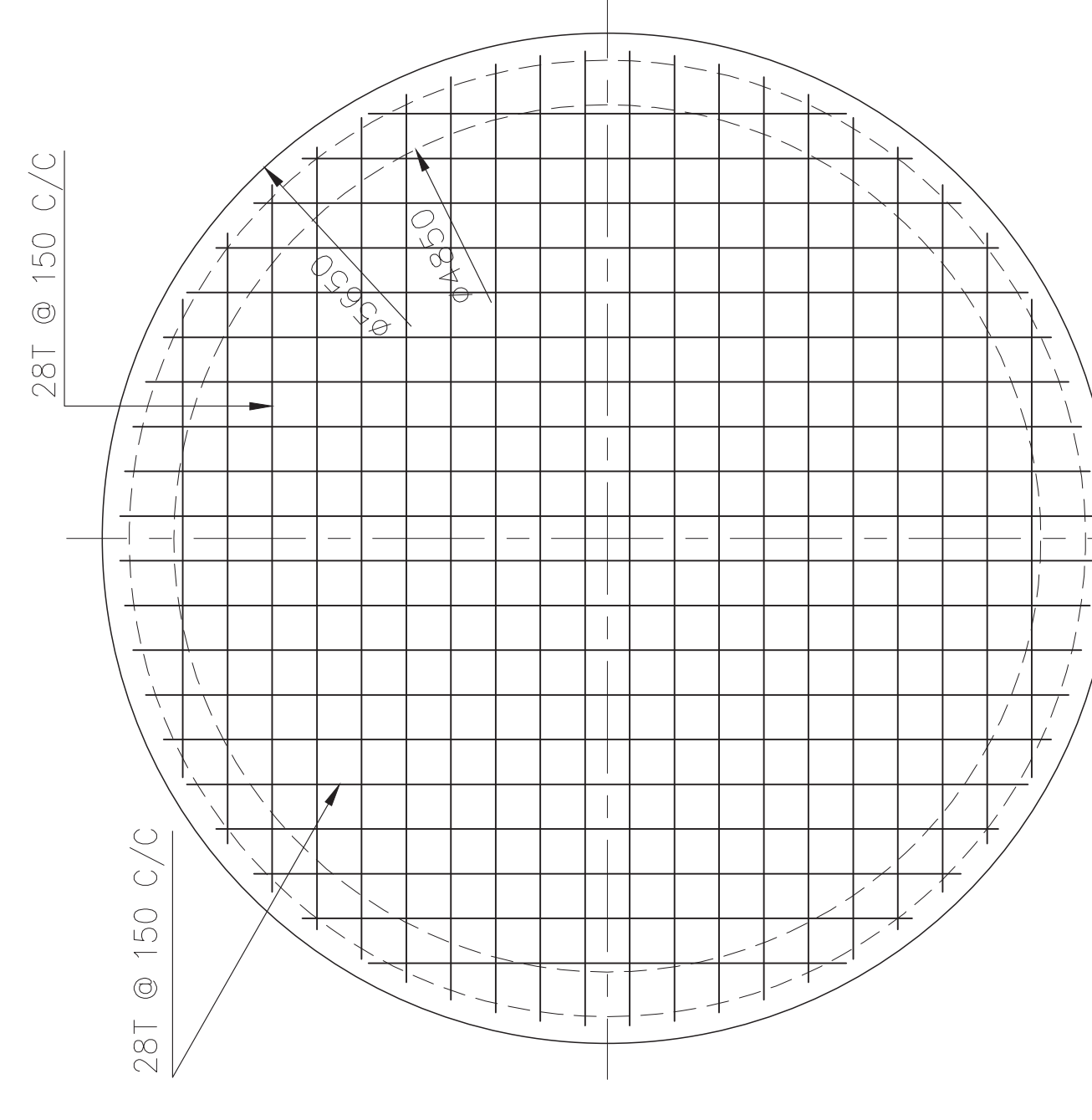
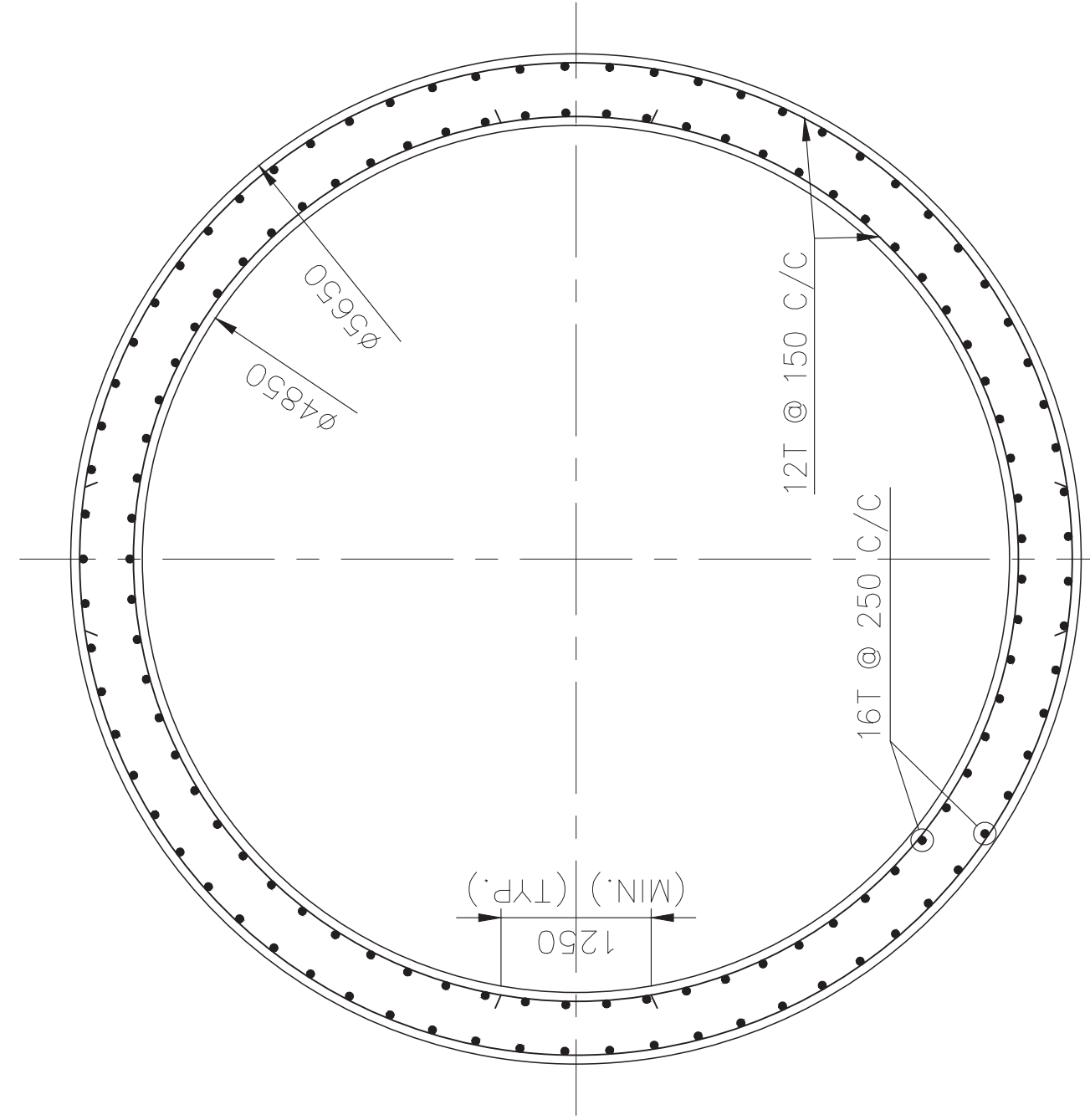
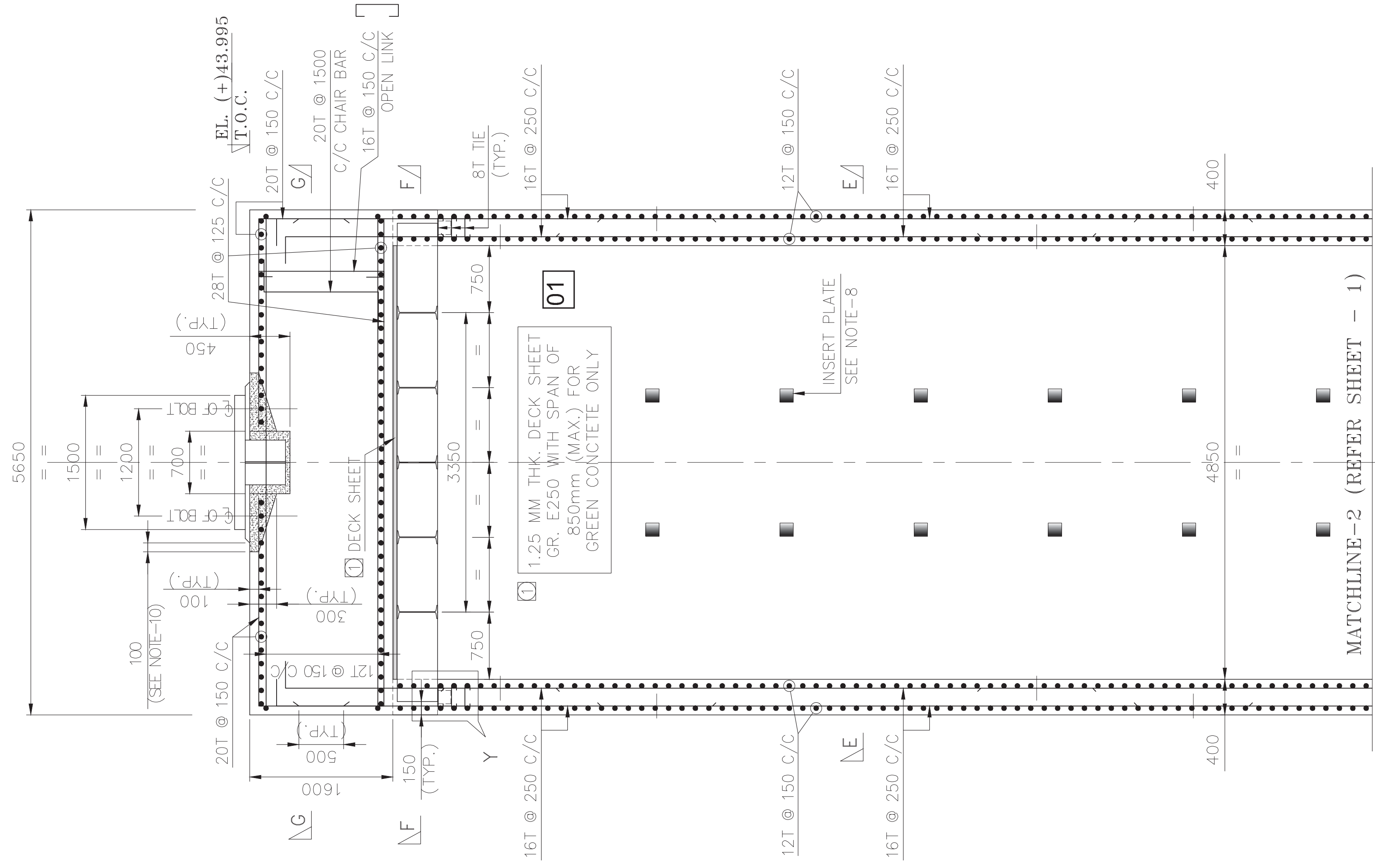


SPG, BELGIUM

	<u>NAME</u>	<u>SIGN</u>	<u>DATE</u>
DRN./DESIGNED BY	<u>PB</u>	--sd--	20.12.2022
CHECKED BY	<u>SC</u>	Signature Not Verified	20.12.2022
APPROVED BY	<u>SB</u>	Signature Not Verified	20.12.2022

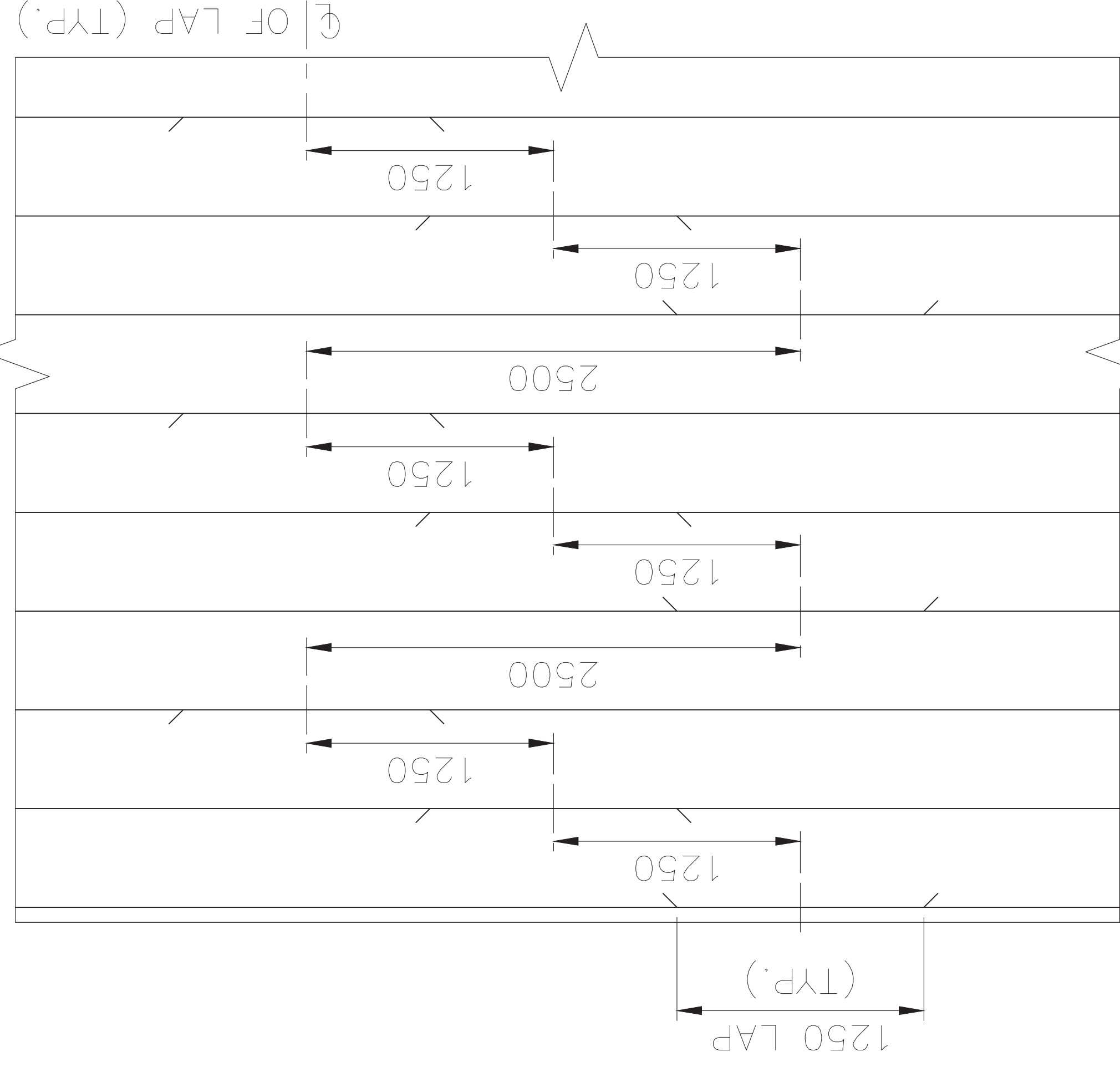
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Reason: CAT
Catrel

Standard Note/Declaration " Drawings / Documents are being submitted to PVUNL/NTPC for information. BHEL hereby confirms full compliance to all the specified requirements of the contract specification, without any deviation, whatsoever. In case during the tenure of the contract, it is observed/found that the data/ information in the released Drawing/document is not meeting the contract specification, BHEL and its vendor will modify/ rectify/replace the Equipments/ System/Utilities to meet the specification without any commercial implication or any time extension to PVUNL/NTPC in this regard ".



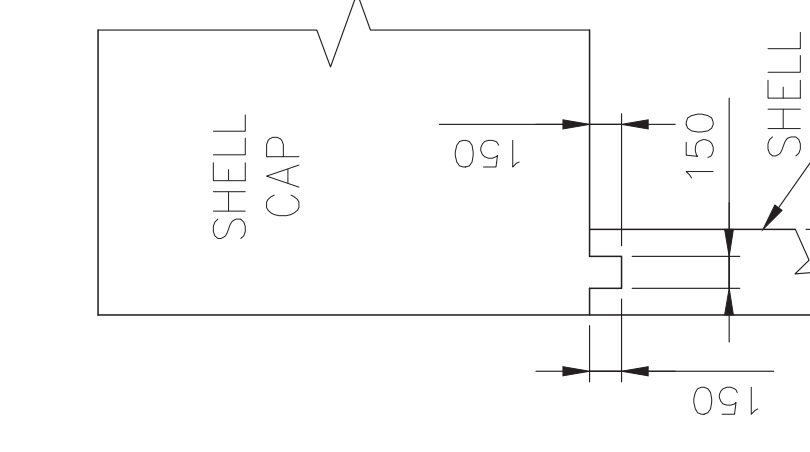
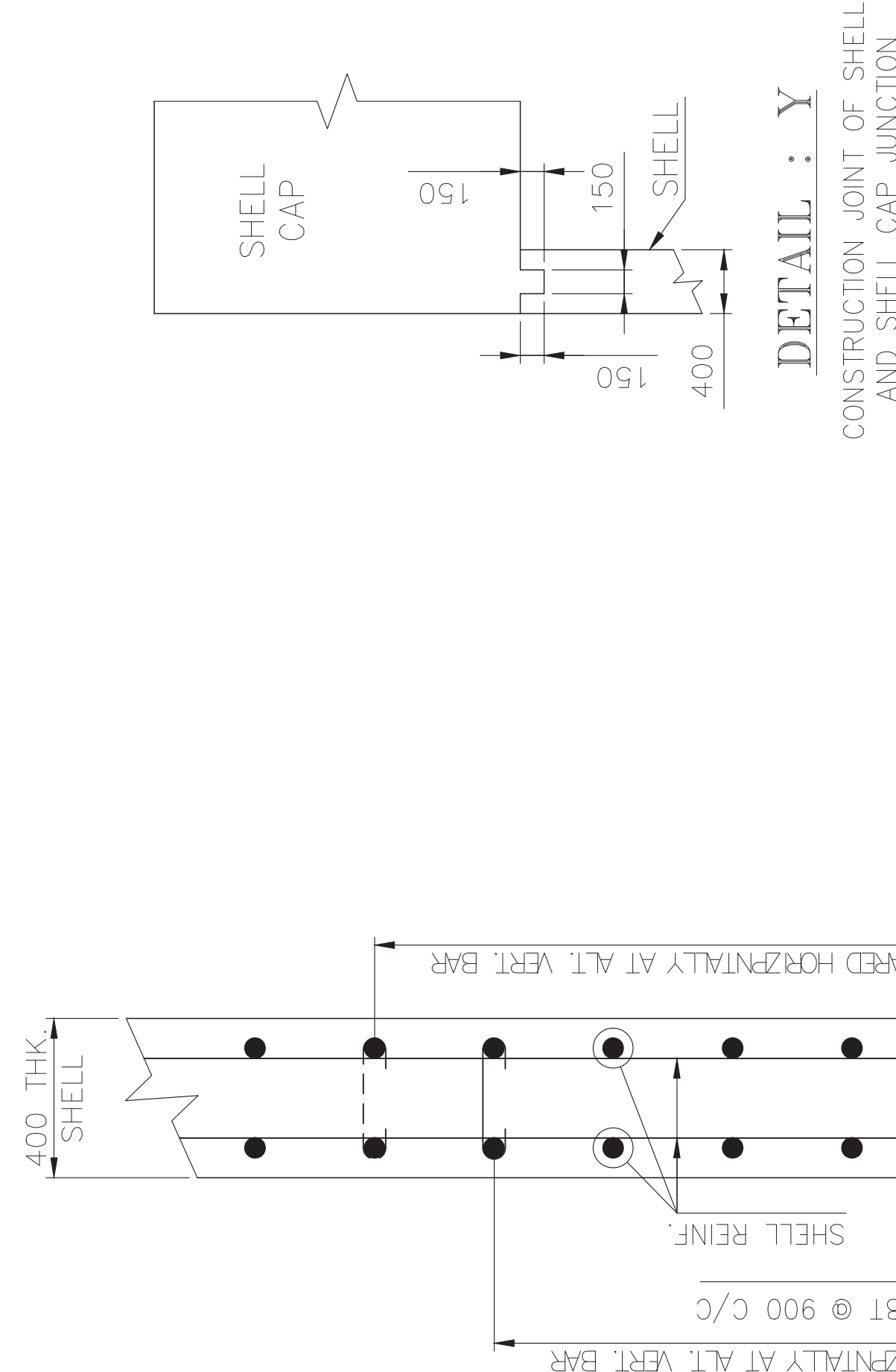
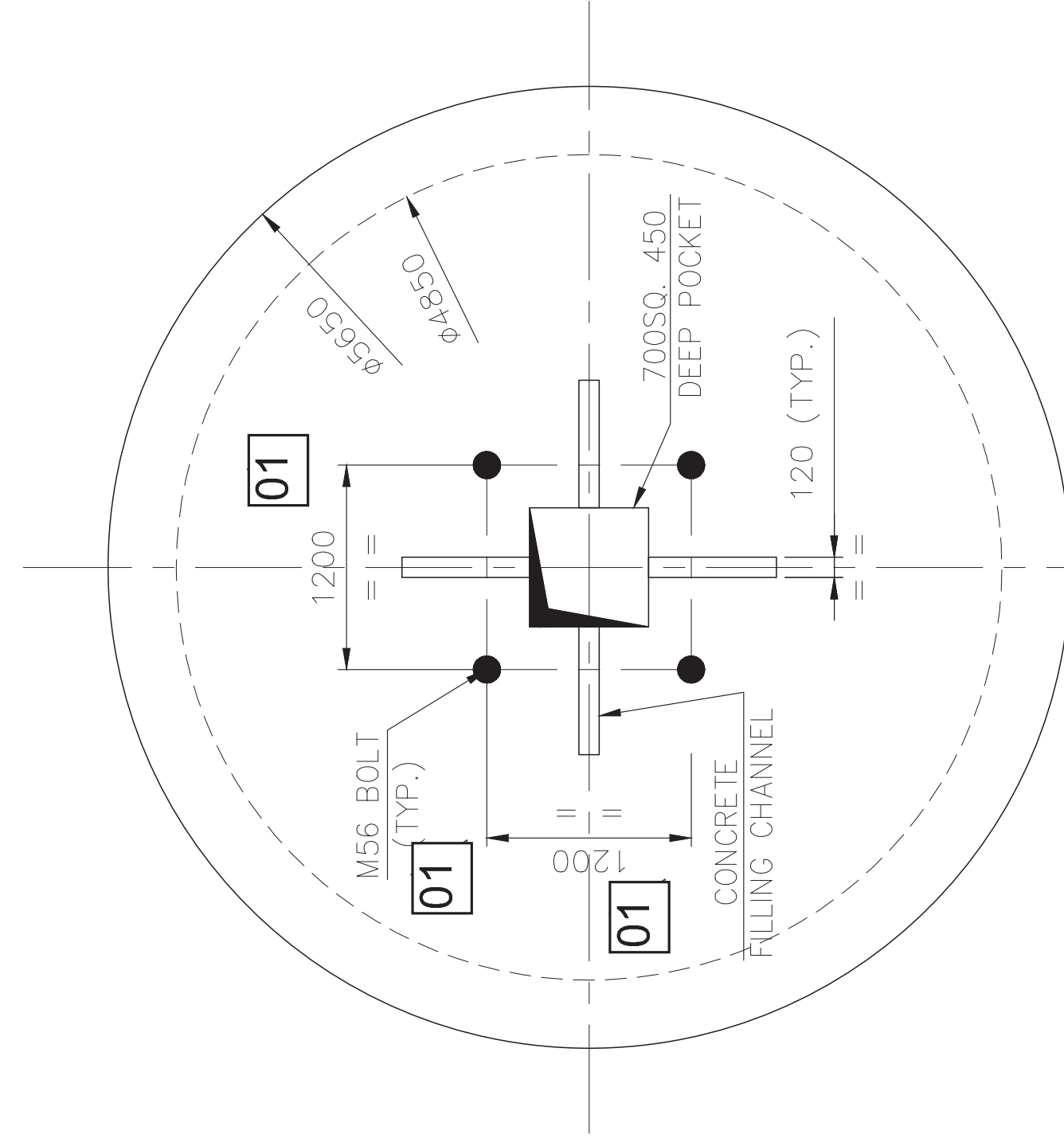
BILL OF QUANTITY (PER PYLON)		
APPROX. R.C.C. QTY (CUM.)	APPROX. STEEL QTY (MT.)	
349.00	12T = 11,000	
	16T = 4,000	
	20T = 10,000	
	25T = 19,000	
	28T = 3,000	
	TOTAL = 40,000	

TYP. ELEVATION SHOWING STAGGARED
BAR FOR SHELL WALL AT EACH FACE



GENERAL NOTES:-

1. FOR GENERAL ARRANGEMENT REFER DRAWING **9585-001-110-PVM-B-022A**
2. FOR LOAD DATA (UNIT-2) REFER DRAWING **9585-001-110-PVC-V-008A**
3. ALL DIMENSIONS ARE IN MM AND ELEVATION IN METERS (UNLESS NOTED OTHERWISE).
4. CLEAR COVER FOR REINFORCEMENT :
FOR COLUMN SHELL = 50
FOR TOP SLAB = 30
5. a) LAP LENGTH (Lp) SHALL BE 46 x DIA. OF BARS.
b) LAP SHOULD BE PROVIDE IN STAGGERED MANNER.
6. GRADE OF CONCRETE M-30 AS PER IS:456-2000.
7. REINFORCEMENT SHALL BE HYSD BAR OF GRADE Fe-500D CONFORMING TO IS:1786-2008.
8. FOR LOCATION AND DETAIL OF INSERT PLATES REFER THE FOLLOWING DRAWINGS :
a) PIPING INSERT : **9585-001-315-PVC-C-1526A**
b) GANTRY INSERT : **9585-001-572-PVC-U-003 (FOR G6),9585-001-572-PVC-U-004(FOR G8) AND 9585-001-572-PVC-U-002 (FOR G5)**
- c) CABLE TRAY INSERT: **9585-001-110-PVC-W-009**
9. EARTH FILLING INSIDE AND OUTSIDE OF PYLON SHOULD BE DONE SIMULTANEOUSLY, MAINTAINING SAME SOIL LEVEL AT BOTH SIDE.
10. THE GROUTING POUR DEVICE IS TO BE POSITIONED (OR DIMENSIONED) IN ACCORDANCE WITH LOCAL DISPOSITION.
11. **INSERT ON TOP OF ACC COLUMN (ANCHOR BOLT DETAIL): 9585-001-315-PVC-C-1526D**



	PRE	DATE	ALTERED	CHECKED	APPROVED	NOTE	SUBJECT
	PRE = PRELIMINARY					CTD = CERTIFIED DRAWING	CFC = CERTIFIED FOR CONSTRUCTION ASB = AS BUILT
0	06.06.2022	P.B.	S.C.	S.B.		FIRST ISSUE	
1	30.09.2022	P.B.	S.C.	S.B.		HOLD RELEASED	
2	14.12.2022	P.B.	S.C.	S.B.		REVISED AS MARKED	
3							
4							

	Date	Name	Document Description	Content/Key
Drawn	06.06.2022	P. B.	R.C.C. DETAIL OF COLUMN FOR A.C.C. UNIT-2	DWG 0018
Checked	06.06.2022	S. C.		
Released	06.06.2022	S. B.		
Copyright acc. to ISO 16016				

GA AND RCC DETAILS OF ACC COLUMN

(UNIT-3)

Rev. No. 01



NTPC DOCUMENT No. 9585-001-315-PVC-C-1525C

CUSTOMER



PVUN- LIMITED

PROJECT

3x800MW Patratu Super Thermal Power Project

CONTRACTOR



Bharat Heavy Electricals Limited

ACC SUPPLIER

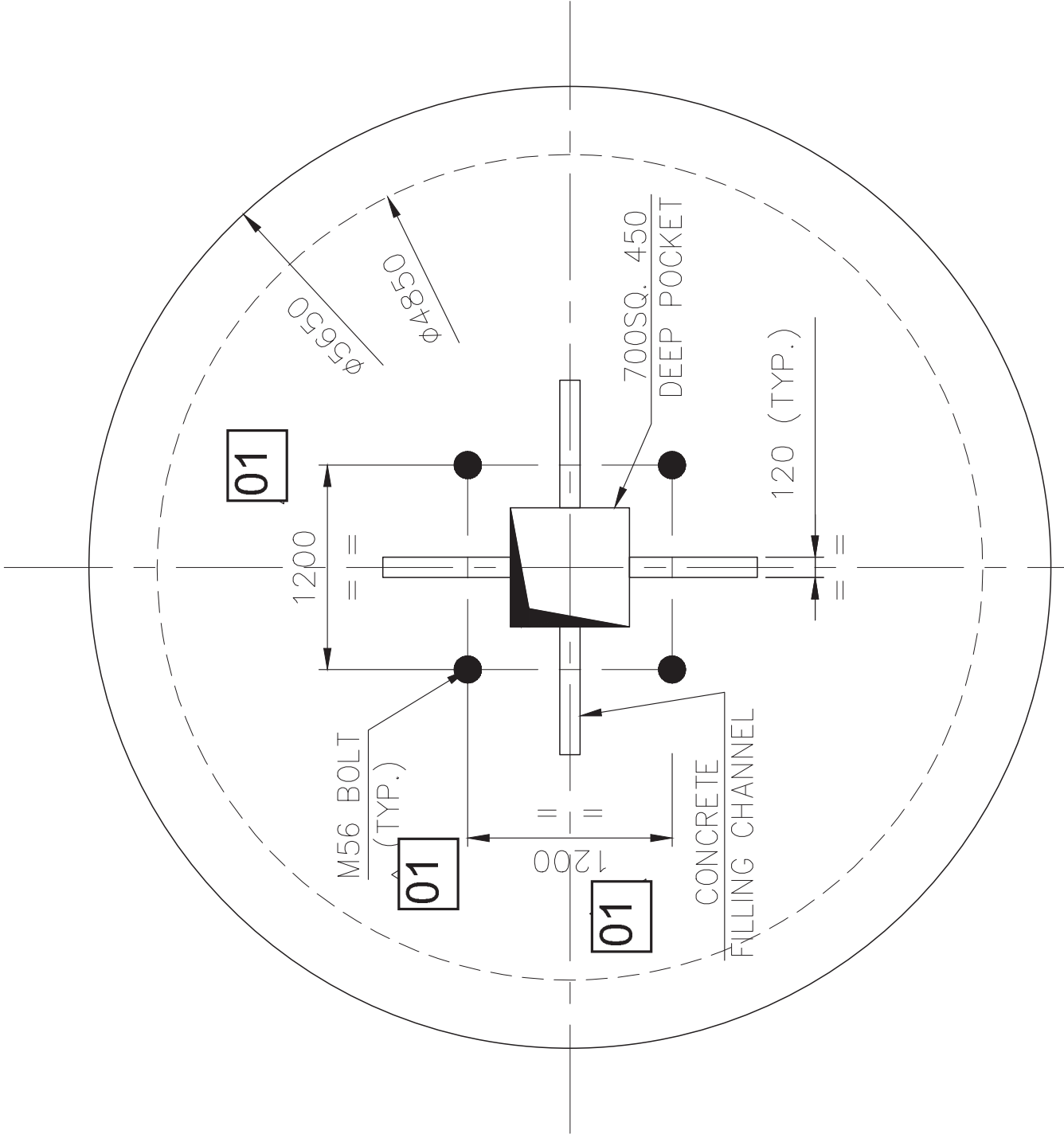
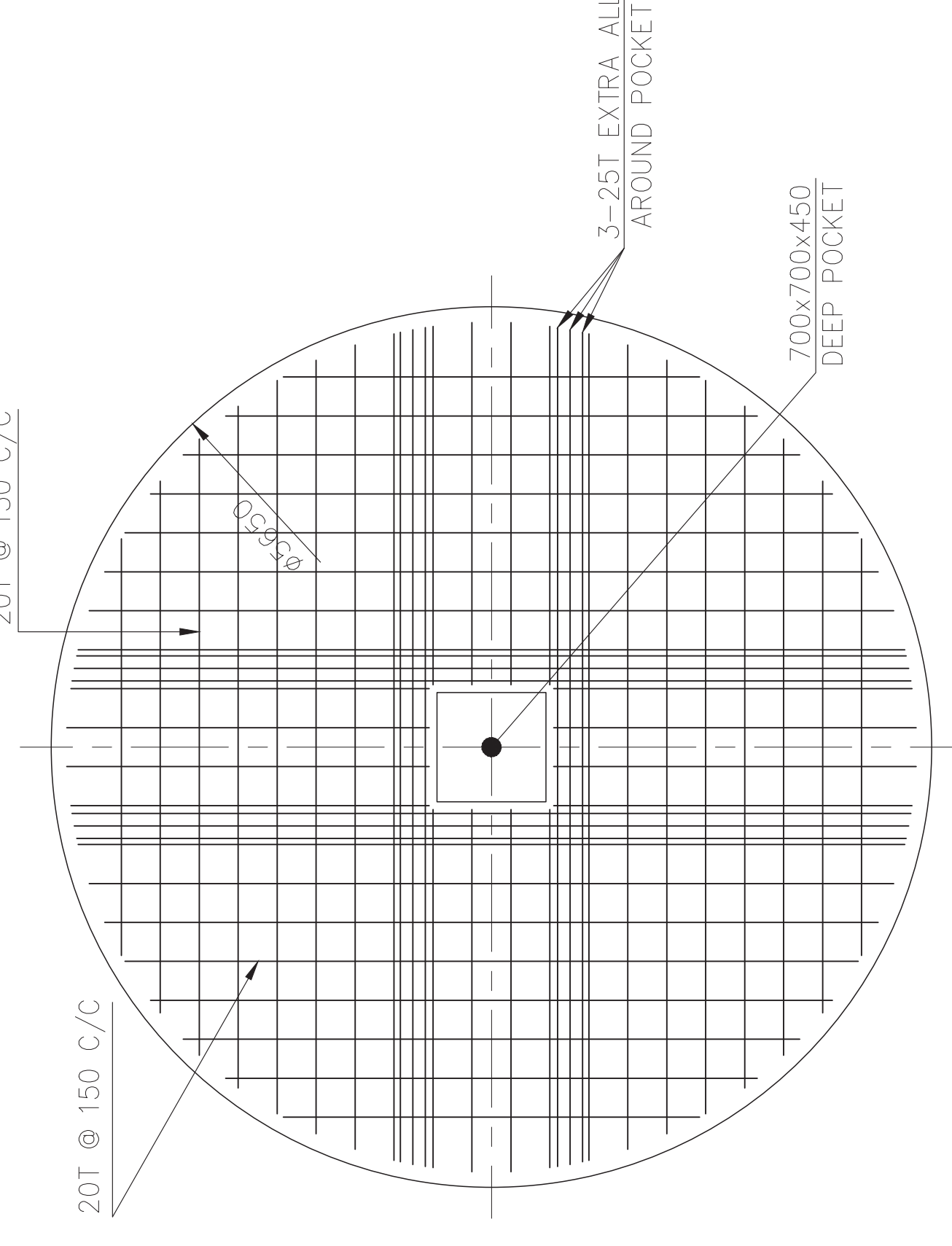
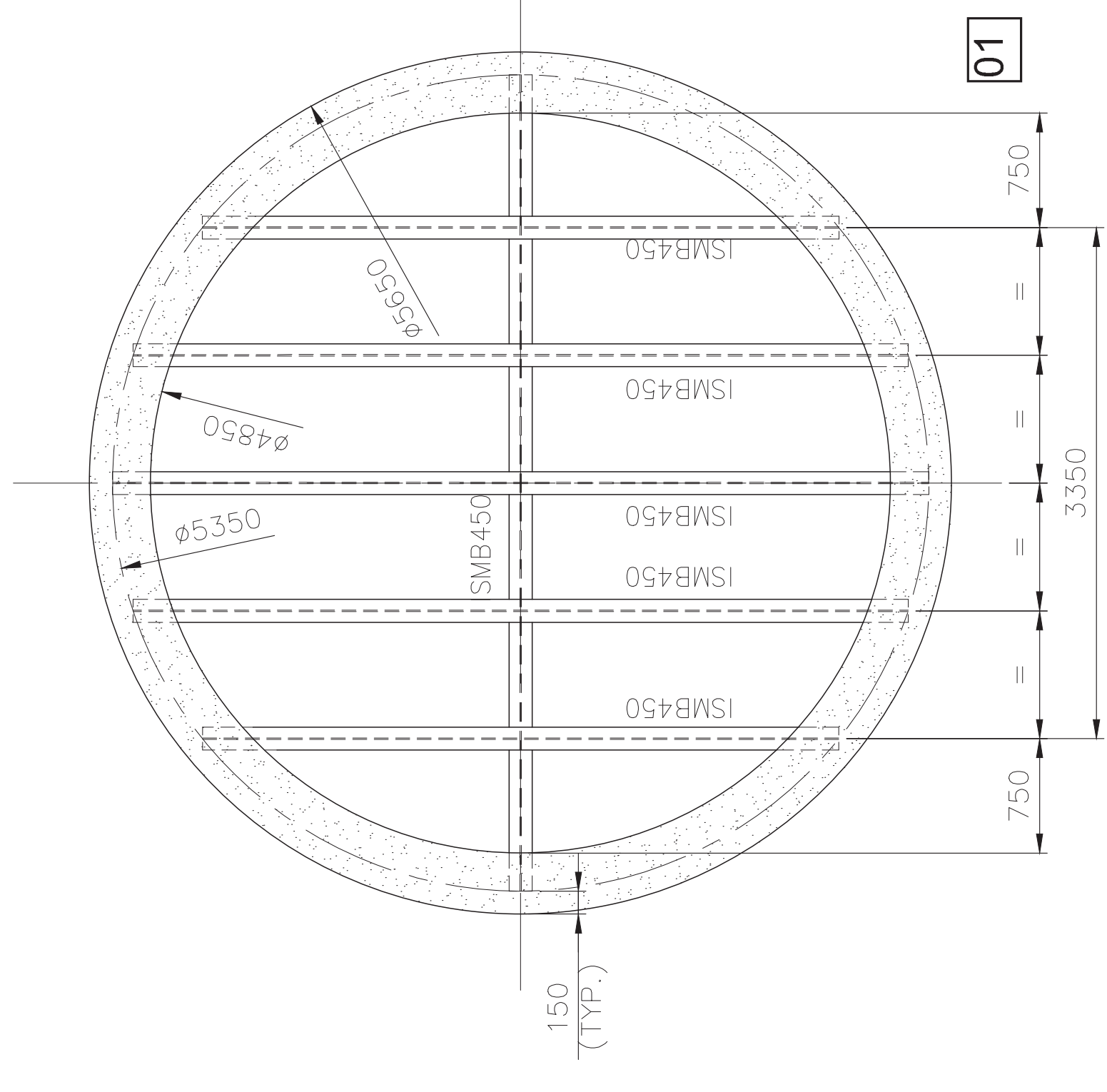
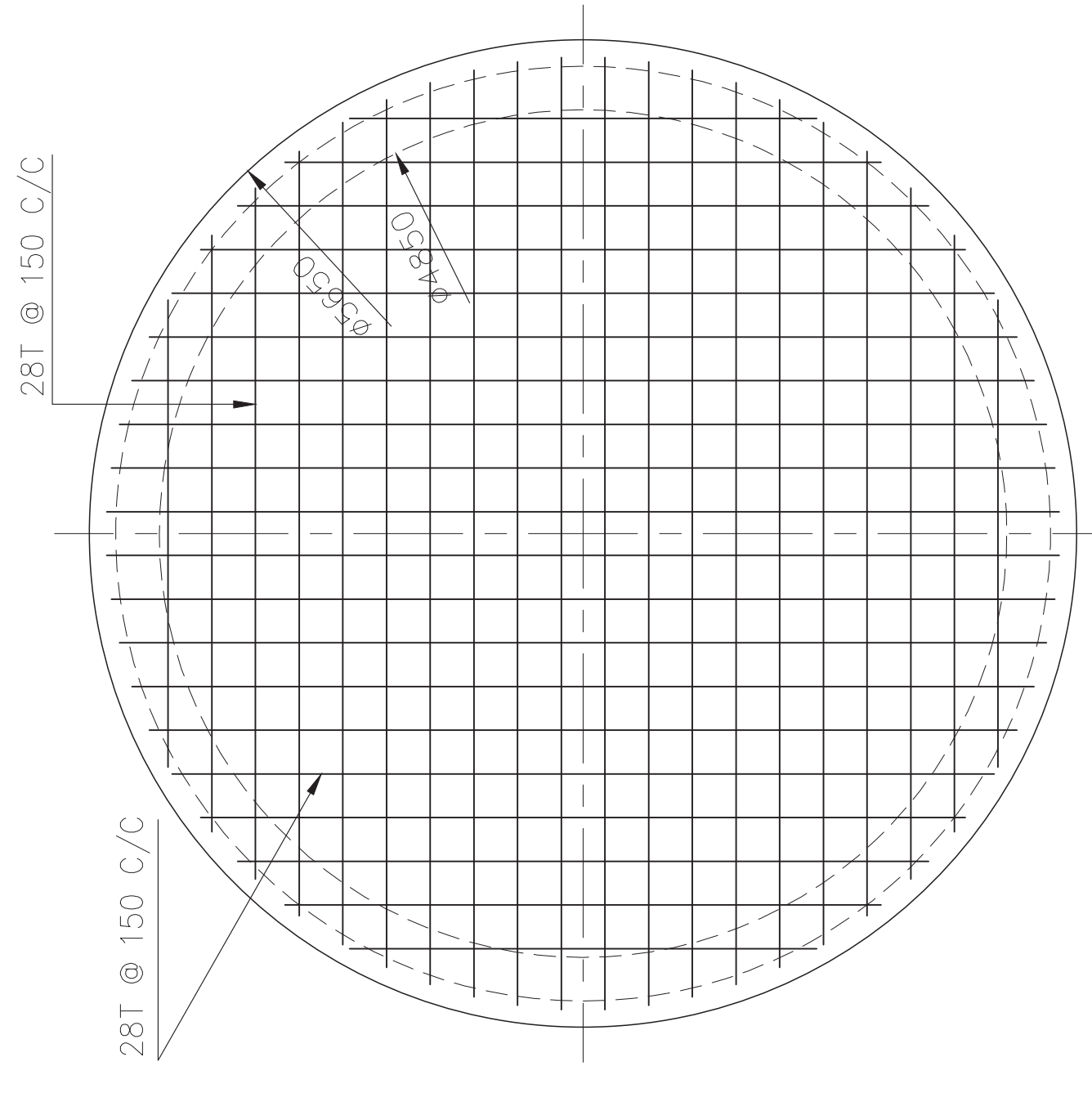
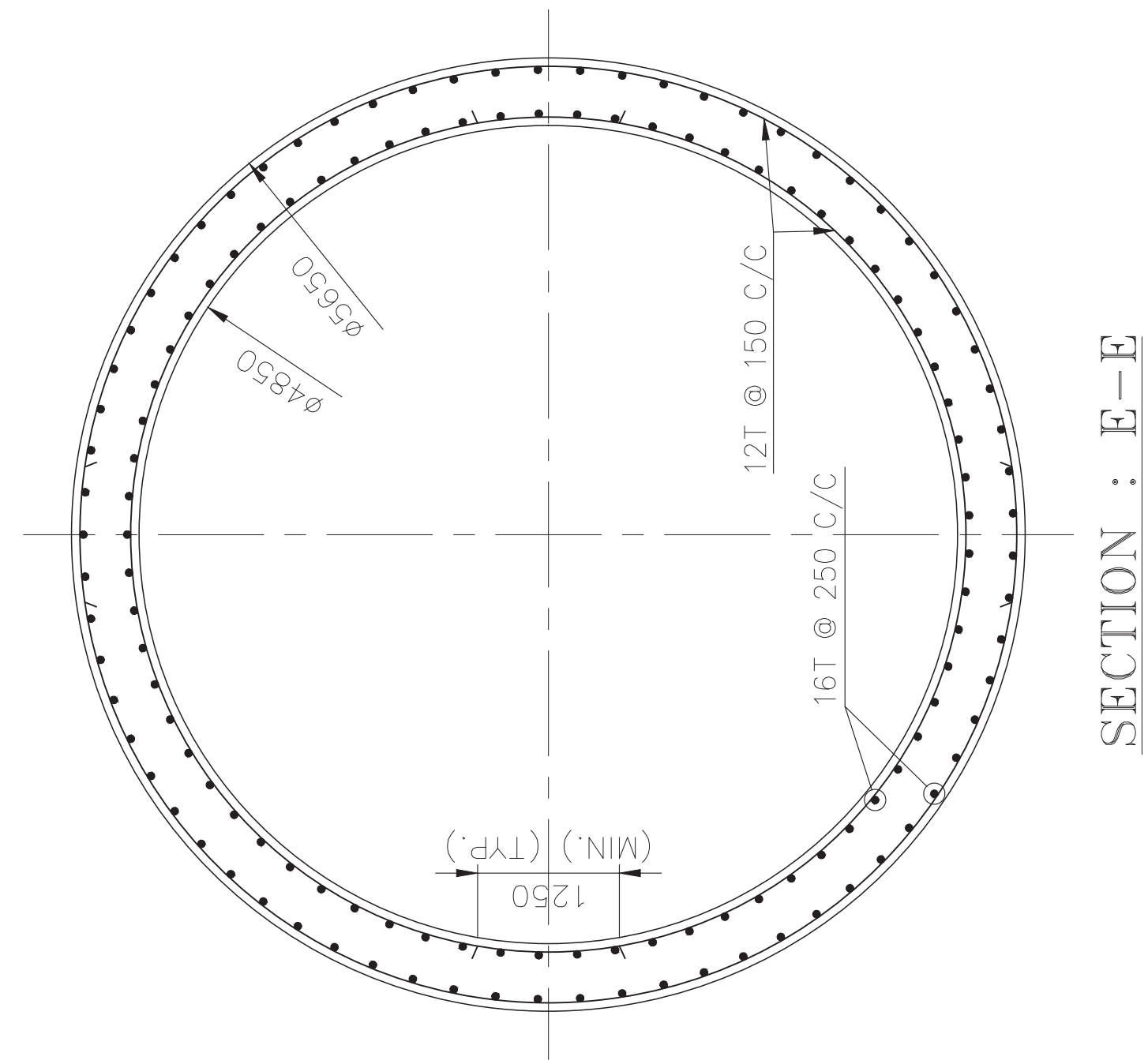
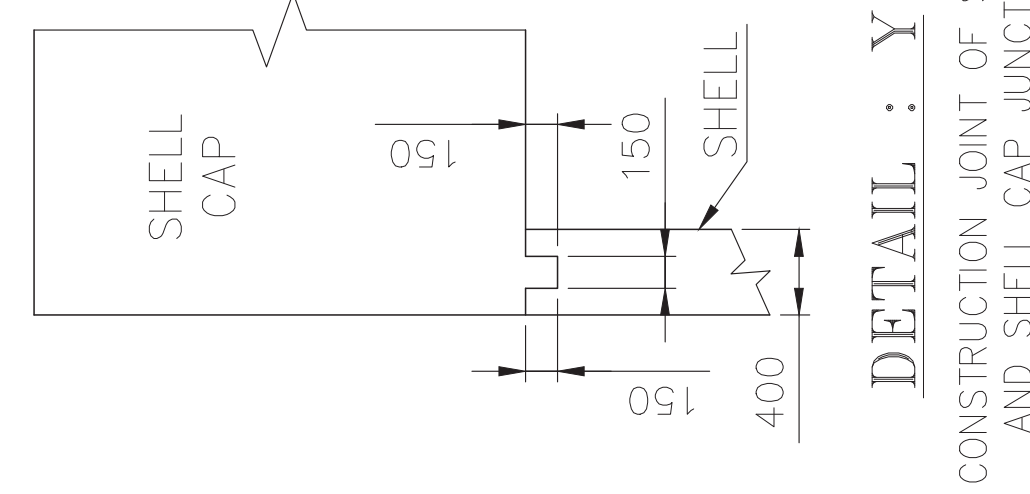
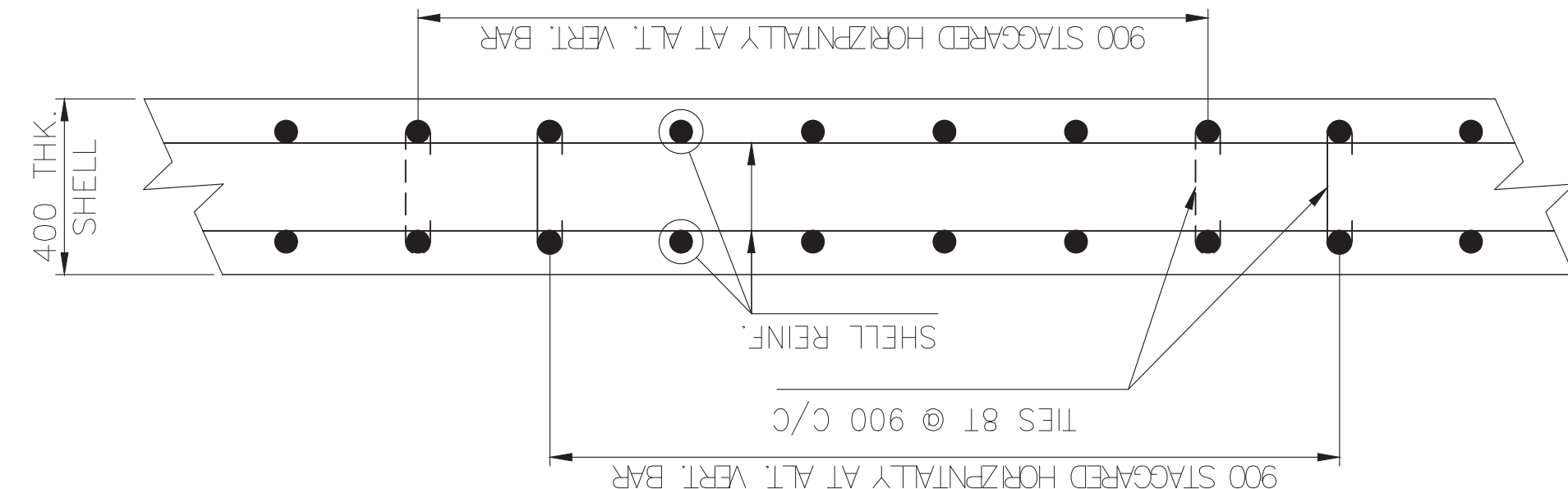
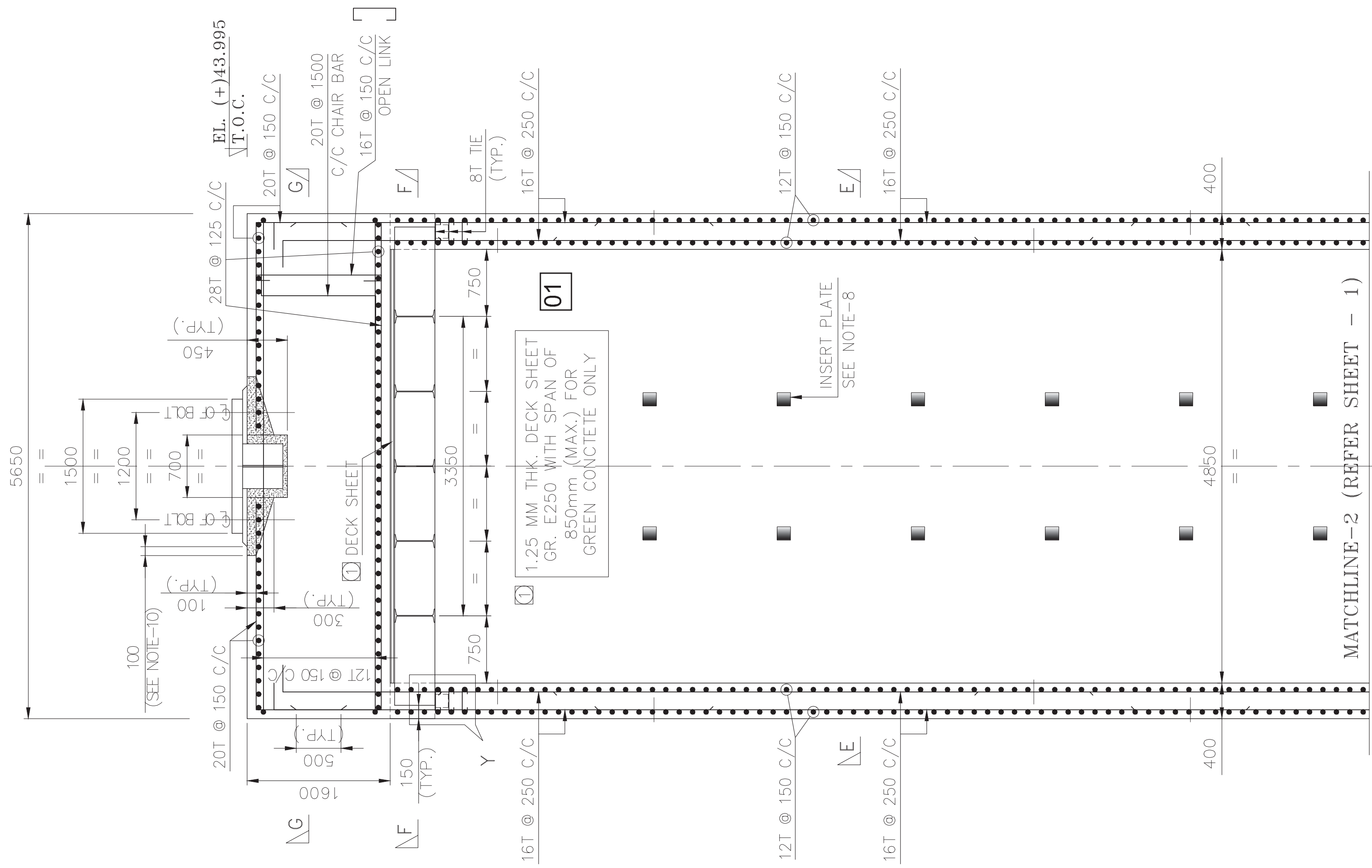


SPG, BELGIUM

	<u>NAME</u>	<u>SIGN</u>	<u>DATE</u>
DRN./DESIGNED BY	<u>PB</u>	--sd--	20.12.2022
CHECKED BY	<u>SC</u>	Signature Not Verified	20.12.2022
APPROVED BY	<u>SB</u>	Signature Not Verified	20.12.2022

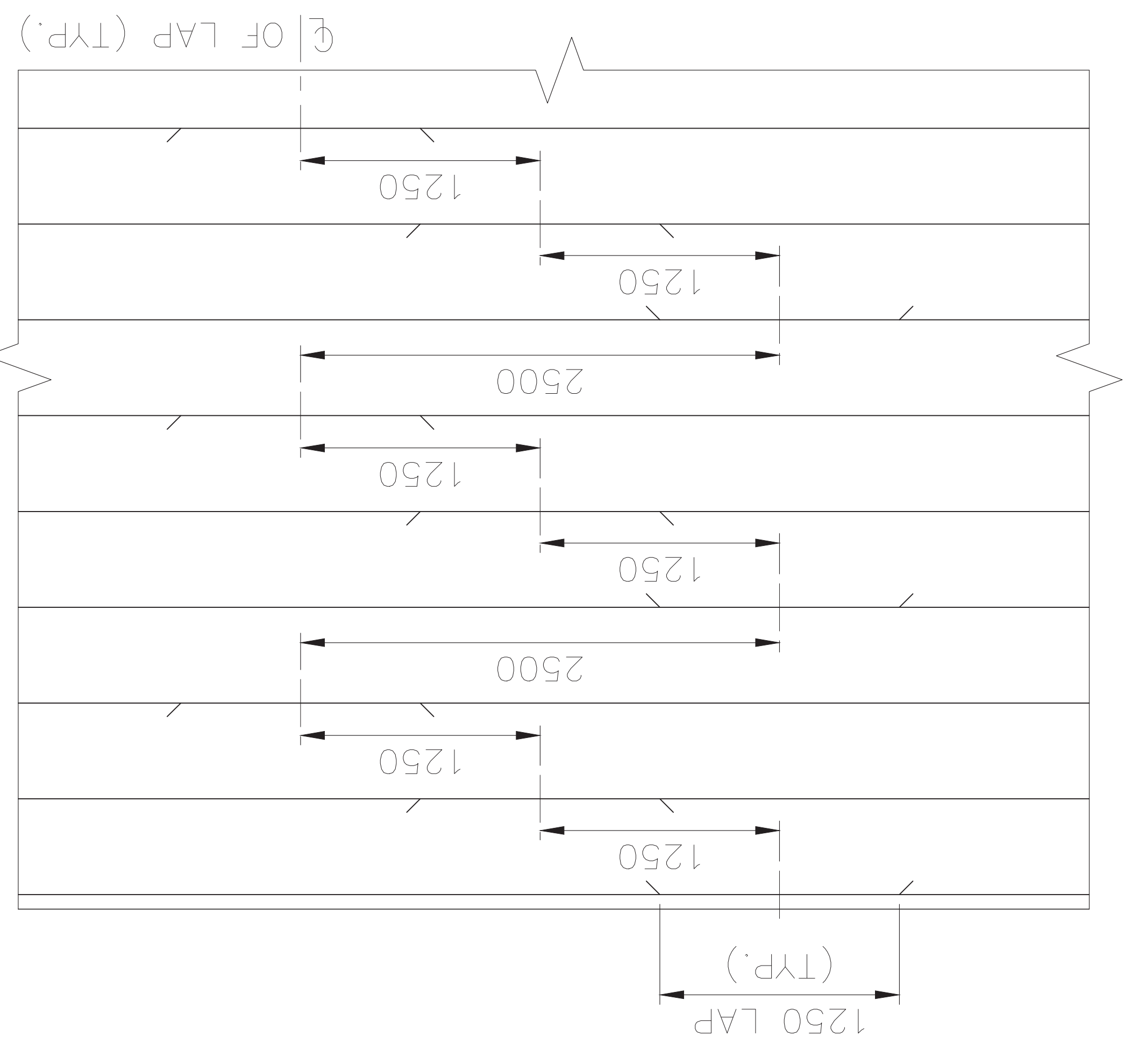
Digitally signed by
Bishwanath Prasad
Date: 2022.12.21
18:37:11 IST
Reason: CAT
etrel

Standard Note/Declaration “ Drawings / Documents are being submitted to PVUNL/NTPC for information. BHEL hereby confirms full compliance to all the specified requirements of the contract specification, without any deviation, whatsoever. In case during the tenure of the contract, it is observed/found that the data/ information in the released Drawing/document is not meeting the contract specification, BHEL and its vendor will modify/ rectify/replace the Equipments/ System/Utilities to meet the specification without any commercial implication or any time extension to PVUNL/NTPC in this regard “.



GENERAL NOTES:-

1. FOR GENERAL ARRANGEMENT REFER **DRG. 9585-001-110-PVM-B-022A**
2. FOR LOAD DATA **OF UNIT-3 REFER DRG. 9585-001-110-PVC-V-008A**
3. ALL DIMENSIONS ARE IN MM AND ELEVATION IN METERS (UNLESS NOTED OTHERWISE).
4. CLEAR COVER FOR REINFORCEMENT :
FOR COLUMN SHELL = 50
FOR TOP SLAB = 30
5. a) LAP LENGTH (Lp) SHALL BE 46 x DIA OF BARS.
b) LAP SHOULD BE PROVIDE IN STAGGERED MANNER.
6. GRADE OF CONCRETE M-30 AS PER IS:456-2000.
7. REINFORCEMENT SHALL BE HYSD BAR OF GRADE Fe-500D CONFORMING TO IS:1786-2008.
8. FOR LOCATION AND DETAIL OF INSERT PLATES REFER THE FOLLOWING DRAWINGS :
a) PIPING INSERT : **9585-001-315-PVC-C-1526A**
b) GANTRY INSERT : **9585-001-572-PVC-U-003 (FOR G6) 9585-001-572-PVC-U-004(FOR G8), AND 9585-001-572-PVC-U-002 (FOR G5)**
- c) **CABLE TRAY INSERT: 9585-001-110-PVC-W-009**
9. EARTH FILLING INSIDE AND OUTSIDE OF PYLON SHOULD BE DONE SIMULTANEOUSLY, MAINTAINING SAME SOIL LEVEL AT BOTH SIDE.
10. THE GROUTING FOUR DEVICE IS TO BE POSITIONED (OR DIMENSIONED) IN ACCORDANCE WITH LOCAL DISPOSITION.
11. **INSERT ON TOP OF ACC COLUMN (ANCHOR BOLT DETAIL): 9585-001-315-PVC-C-1526D**



BILL OF QUANTITY (PER PYLON)		
APPROX. R.C.C. QTY (CU.M.)	APPROX. STEEL QTY (MT.)	
349.00	12T = 11.000	
	16T = 4.000	
	20T = 10.000	
	25T = 19.000	
	28T = 3.000	
TOTAL = 40.000		

[illegible]

INSERT ON TOP OF ACC COLUMN (ANCHORAGE ACC)

Rev. No. 00



NTPC DOCUMENT No. 9585-001-315-PVC-C-1526D

CUSTOMER



PVUN- LIMITED

PROJECT

3x800MW Patratu Super Thermal Power Project

CONTRACTOR



Bharat Heavy Electricals Limited

ACC SUPPLIER



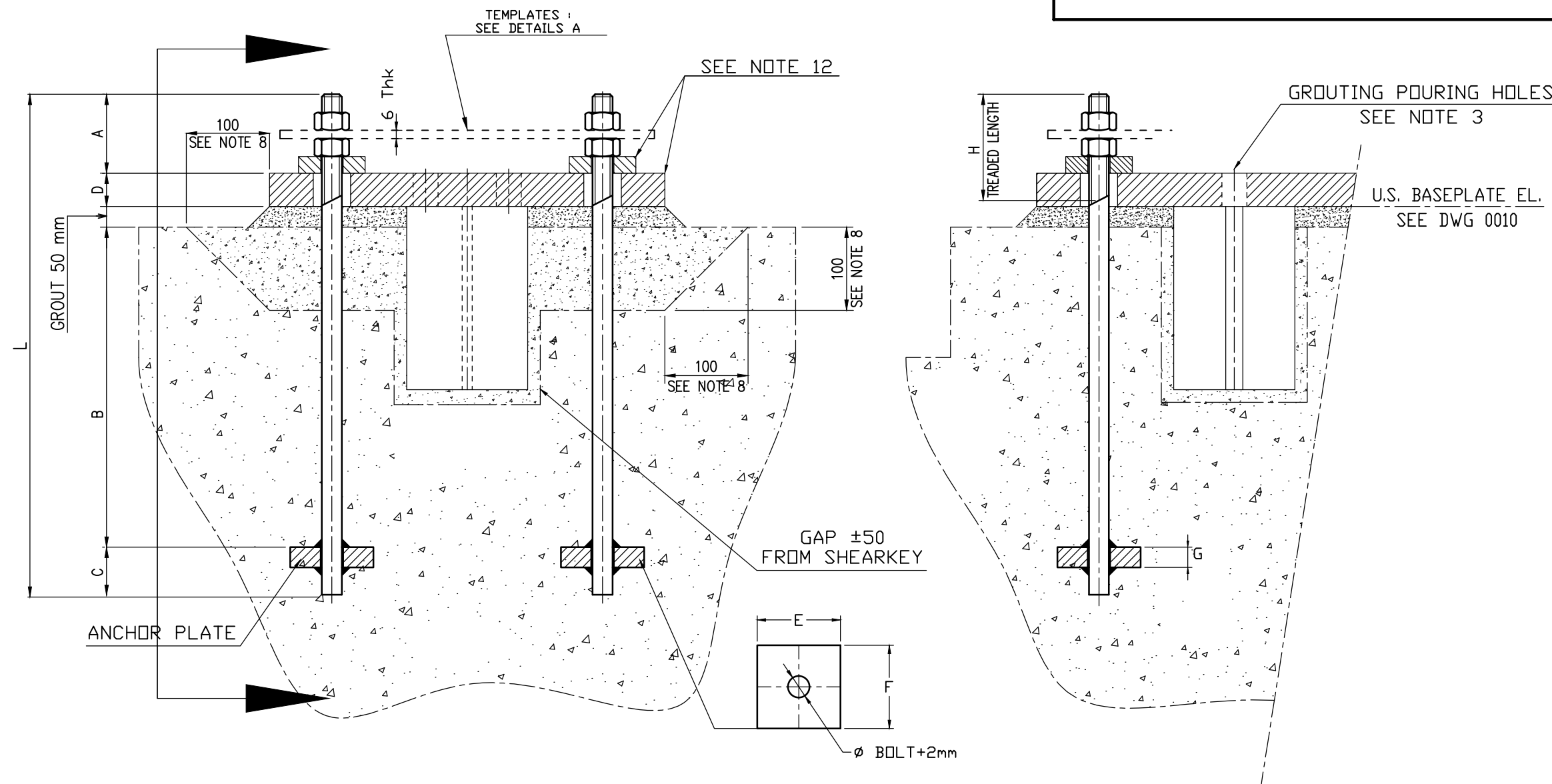
SPG, BELGIUM

	<u>NAME</u>	<u>SIGN</u>	<u>DATE</u>
DRN./DESIGNED BY	<u>GT</u>	--sd--	21.12.2022
CHECKED BY	<u>DM</u>	Signature Not Verified	21.12.2022
APPROVED BY	<u>PM</u>	Signature Not Verified	21.12.2022

Signature Not Verified
Date: 2022.12.21
18:41:04 IST
Reason: CAT
BHEL

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REFERENCE DRAWINGS :
PTT-DWG 0010 : FOUNDATION LOADING ACC



NOTES

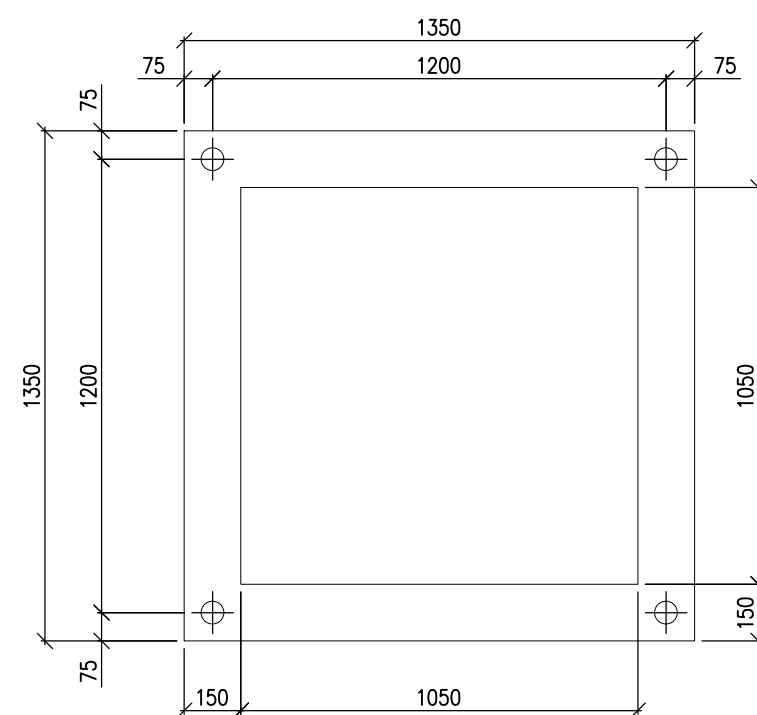
1. UNLESS NOTED OTHERWISE, ON DESIGN DRAWINGS TWO NUTS REQUIRED PER ANCHOR BOLT AT TOP THREADED ENDS.
2. ANCHOR BOLTS & NUTS PROPERTY CLASS 8.8
3. CAVITIES/RESERVATIONS IN CONCRETE TO BE FILLED IN WITH GROUTING. THE GROUTING IS CHLORIDE FREE, NON SHRINK, NON METALLIC, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH EQUIVALENT TO STRUCTURAL CONCRETE AT 14 DAYS
4. UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE IN mm.
5. ANCHOR BOLT LENGTHS HAVE BEEN DESIGNED ON BASIS OF CONCRETE QUALITY DEFINED IN S.P.G.D.C. CONNECTION DESIGN NOTE DND 2001 LENGTHS MENTIONED IN THIS DRAWING ARE MINIMAL VALUES
6. THE FINAL TIGHTENING OF THE ANCHOR BOLTS SHALL BE DONE WHEN THE GROUTING IS SUFFICIENTLY HARDENED.
7. THE ANCHOR BOLTS WILL BE PLACED BY THE CIVIL WORKS, UPPER THREADED PART WITH A PLASTIC TAPE
8. THE GROUTING POUR DEVICE IS TO BE POSITIONED (OR DIMENSIONED) IN ACCORDANCE WITH LOCAL DISPOSITION.
9. REQUIRED THREADING PROCEDURE : ROLLED
10. UNLESS SPECIFIED OTHERWISE, PROTECTION FOR ANCHOR BOLT : NO PROTECTION EXCEPT PART ABOVE CONCRETE WHICH IS FIELD PROTECTED BY PAINT.
11. DESIGN OF FOUNDATION BY OTHERS BASED ON LOAD GIVEN IN PTT-DWG 0016
12. BASES PLATES AND SQUARE WASHERS ARE INCLUDED IN THE 3D MODELS OF THE STEEL STRUCTURES

ANCHOR BOLTS DIMENSIONS AND QUANTITIES PER UNIT

[illegible]

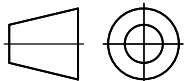
TEMPLATE FOR ACC STRUCTURE

DETAIL A



DRAWING RELEASED FOR
CONSTRUCTION



3						
2						
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	DATE	ALTERED	CHECKED	APPROVED	NOTE	STATUS
PRE = PRELIMINARY		CTD = CERTIFIED DRAWING		CFC = CERTIFIED FOR CONSTRUCTION		ASB = AS BUILT
CUSTOMER:						
		PVUN-NTPC LIMITED 9585-001-315-PVC-C-1526D				
PROJECT:		PATRATU STTP (3x800 MW)				
		BHARAT HEAVY ELECTRICALS LTD HEEP, HARIDWAR				
	Date	Name	Document Designation			Content/Key
Drawn	30.06.2022	GT	ANCHORAGE ACC			DWG
Checked	30.06.2022	DM	(INSERT ON TOP OF ACC COLUMN)			2340
Released	30.06.2022	PM				
Copyright acc. to ISO 16016						
 		Projection 	Scale NA Format A0	Document Id. PTT-DWG2340 1	Ver. 1/1	Page 1/1
SPG DRY COOLING						