



Maharatna Company

ISO 9001, ISO 14001,
OHSAS 18001 & SA 8000
certified company
SubContract Deptt.

Bharat Heavy Electricals Limited
(A Govt. Of India Undertaking)
Power Sector – Northern Region,
Plot No. 25 , Sector - 16A ,
Distt. Gautam Budh Nagar, NOIDA – 201301(INDIA)
Phone: 091-0120- 2416261/ 2416232
Email: deshraj@bhel.in/gvr@bhel.in

CORRIGENDUM – 04 Dtd 23/08/2019

Sub: Tender for the work of “CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL, C&I WORK OF NATURAL DRAUGHT COOLING TOWER (NDCT) INCLUDING SUPPLY OF MATERIALS, LABOUR, TOOLS AND PLANTS ETC., REQUIRED FOR 1X660 MW PANKI THERMAL POWER STATION, PANKI, KANPUR, U.P.”

TENDER NO. BHEL/NR/SCT/PANKI/NDCT/1167

The Corrigendum contains following amendment in the specifications and shall be a part of the above tender.

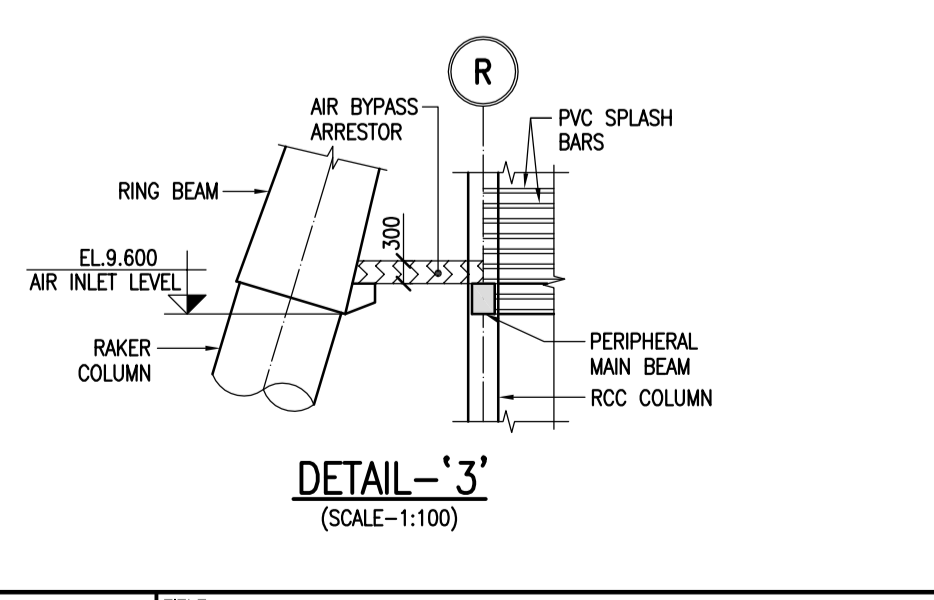
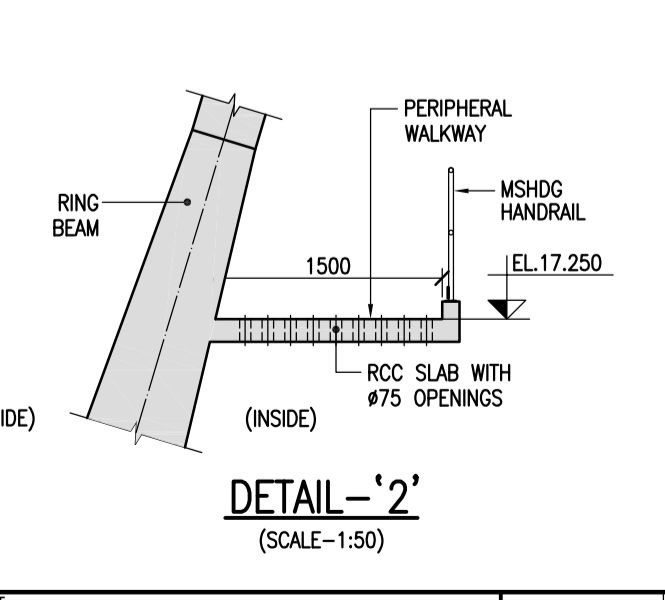
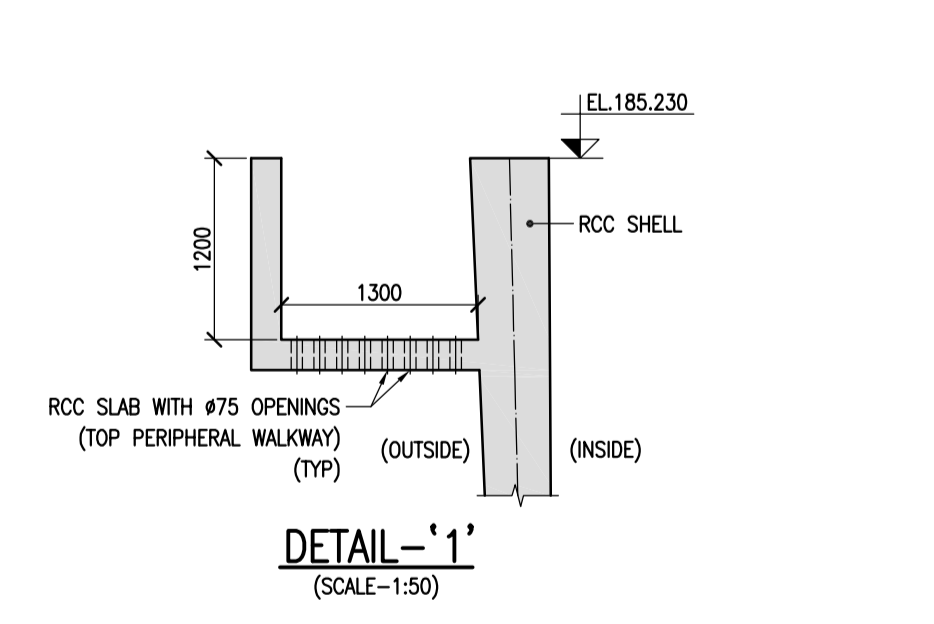
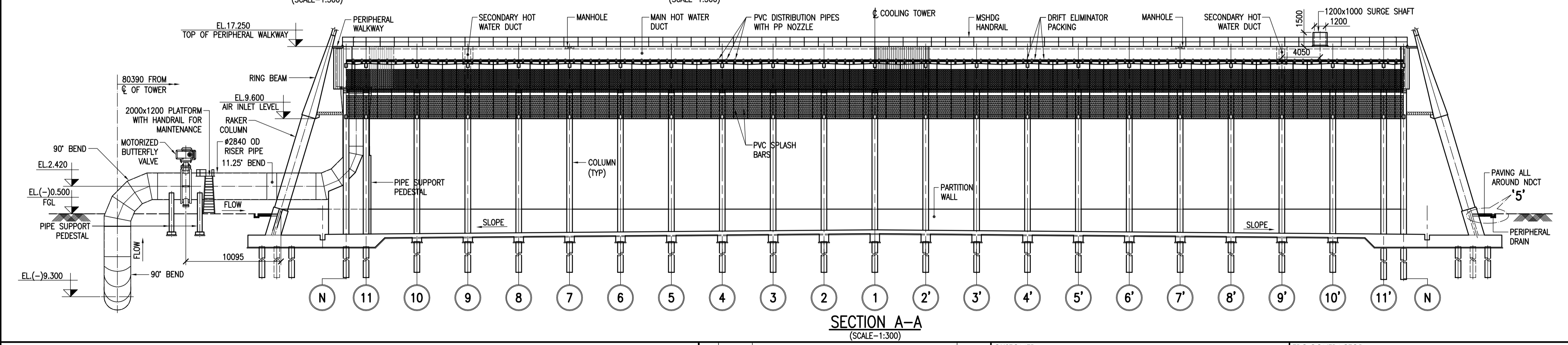
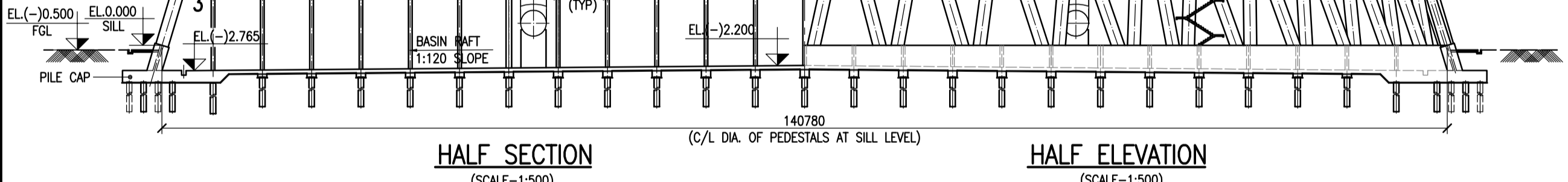
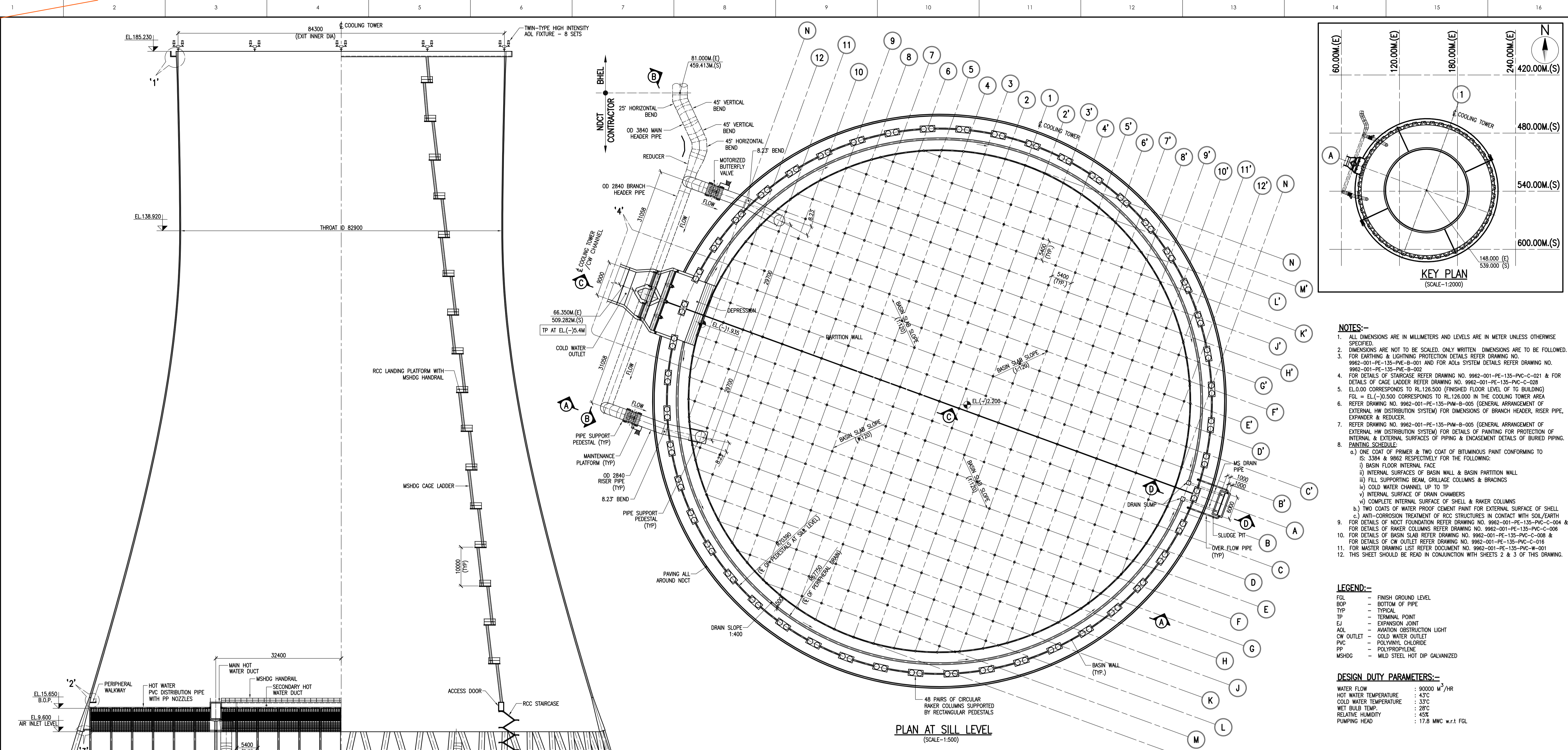
1.0 MODIFICATIONS IN TECHNICAL CONDITIONS OF CONTRACT (TCC):

Existing Clause	Modified Clause
Annexure-I: BOQ cum Rate Schedule	
Sl. No. 22.4: Providing & fixing 2800 NB Double Flanged Moto Actuated Butterfly valves of approved make conforming to AWWA C-504 / BS: 5155 in CI construction with Rubber/Ebonite lining (for corrosion protection against Sea Water) with mating flanges, and complete accessories and Duplex SS Shaft and Duplex SS hardware as per specifications and data sheets including aligning, erecting, testing etc. complete as per specifications, drawings and as directed by engineer	Sl. No. 22.4: Providing & fixing 2800 NB Double Flanged Motor Actuated Butterfly valves of approved make conforming to AWWA C-504 / BS: 5155 in CI construction with mating flanges, and complete accessories and SS Shaft and SS hardware as per specifications and data sheets including aligning, erecting, testing etc. complete as per specifications, drawings and as directed by engineer.
Technical Specification for Natural Draught Cooling Tower (Book 1 of 2), Specification No.: PE-TS-426-165-N002:	
BHEL GA DRG. NO.: PE-V1-426-165-N001 (Sheet 01 OF 03), Rev. 0	BHEL GA DRG. NO.: PE-V1-426-165-N001 (Sheet 01 OF 03), Rev. 02 (revised drawing attached)
BHEL GA DRG. NO.: PE-V1-426-165-N001 (Sheet 02 OF 03), Rev. 0	BHEL GA DRG. NO.: PE-V1-426-165-N001 (Sheet 02 OF 03), Rev. 02 (revised drawing attached)
BHEL GA DRG. NO.: PE-V1-426-165-N001 (Sheet 03 OF 03), Rev. 0	BHEL GA DRG. NO.: PE-V1-426-165-N001 (Sheet 03 OF 03), Rev. 02 (revised drawing attached)

2.0 All other terms and conditions against this NIT shall remain unchanged.

3.0 This corrigendum is to be submitted duly signed and stamped along with the Techno-commercial bid (Part- I).

AGM/SCP



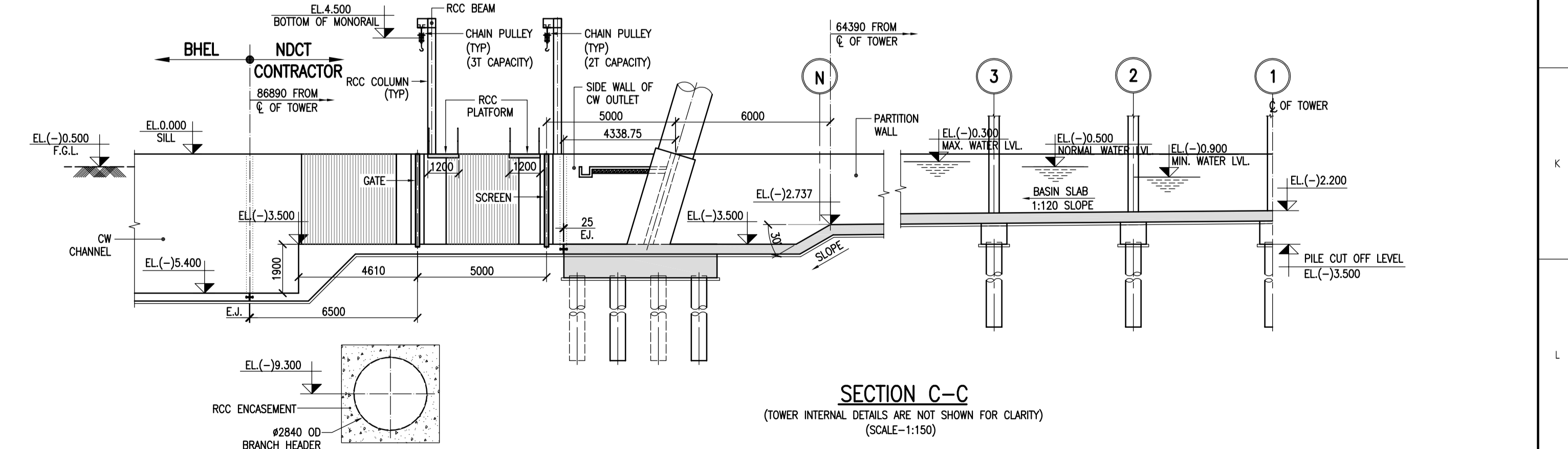
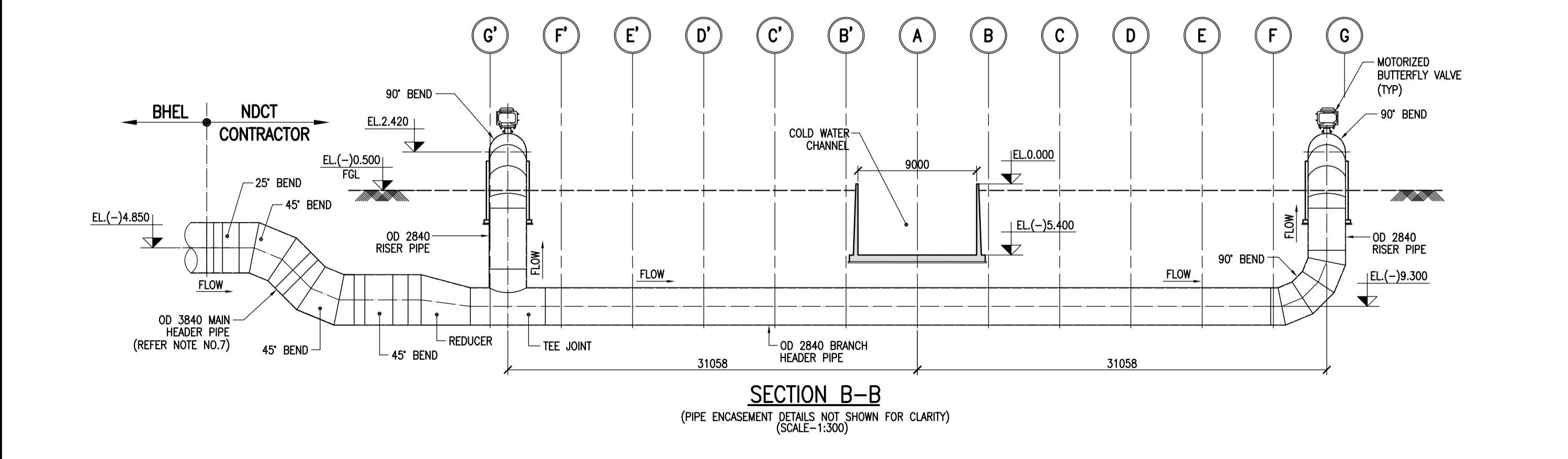
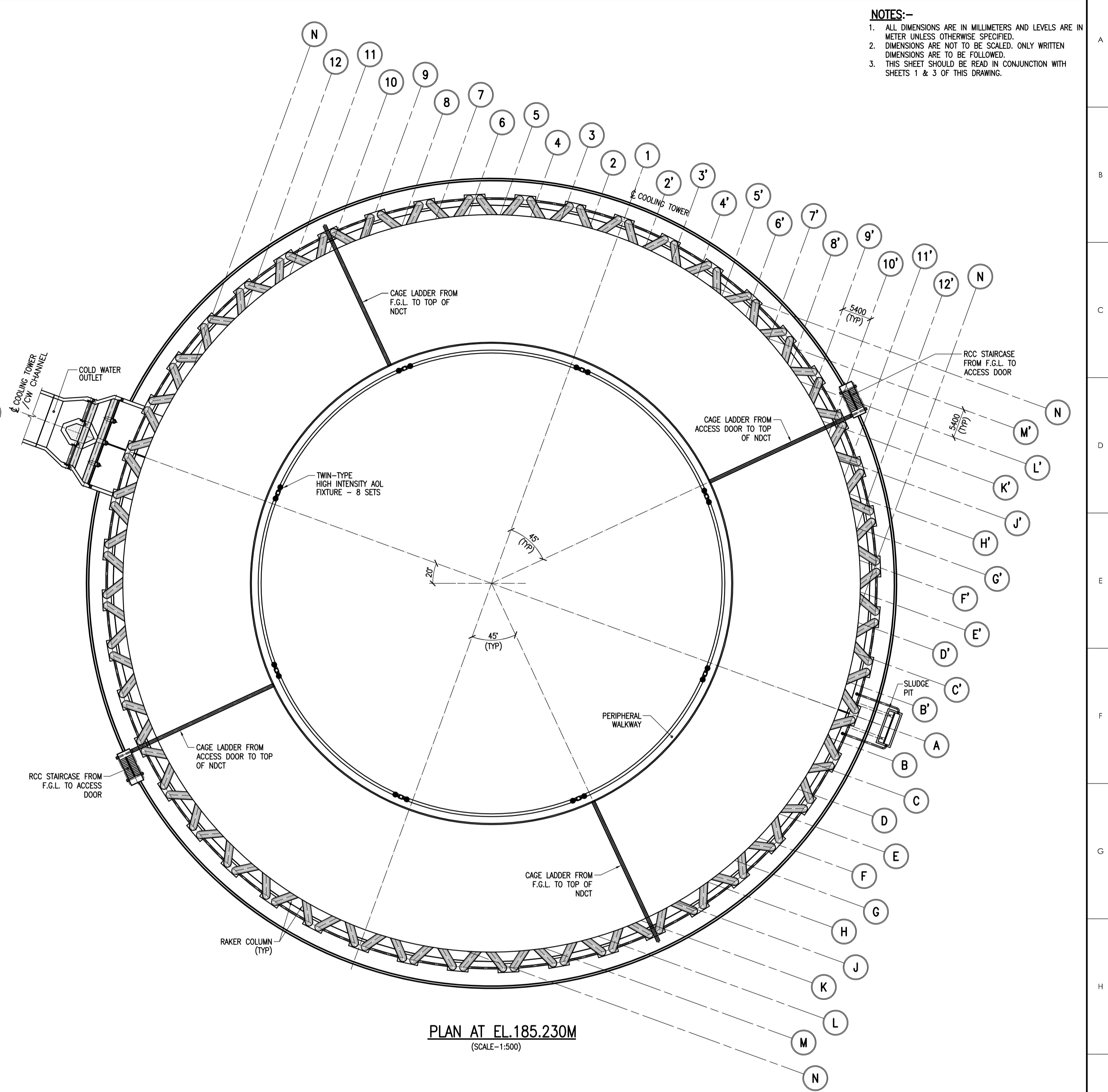
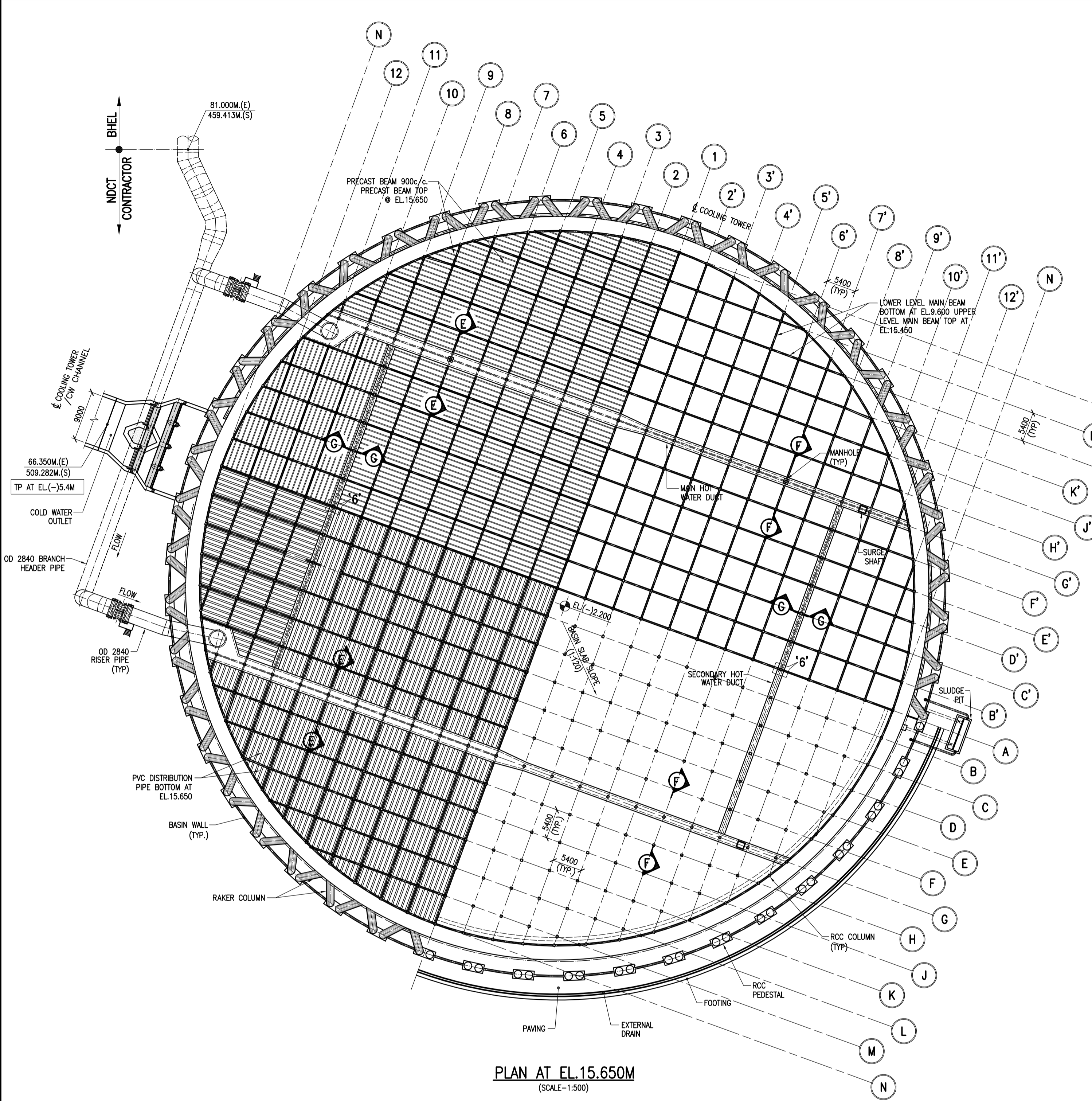
- NOTES:-**
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
 - DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
 - FOR EARTHING & LIGHTNING PROTECTION DETAILS REFER DRAWING NO. 9962-001-PE-135-PVE-B-001 AND FOR ADLS SYSTEM DETAILS REFER DRAWING NO. 9962-001-PE-135-PVE-B-002
 - FOR DETAILS OF STAIRCASE REFER DRAWING NO. 9962-001-PE-135-PVC-C-021 & FOR DETAILS OF CAGE LADDER REFER DRAWING NO. 9962-001-PE-135-PVC-C-028
 - EL.0.00 CORRESPONDS TO RL.126.500 (FINISHED FLOOR LEVEL OF TG BUILDING)
 - FGL = EL.(-)0.500 CORRESPONDS TO RL.126.000 IN THE COOLING TOWER AREA
 - REFER DRAWING NO. 9962-001-PE-135-PVM-B-005 (GENERAL ARRANGEMENT OF EXTERNAL HW DISTRIBUTION SYSTEM) FOR DIMENSIONS OF BRANCH HEADER, RISER PIPE, EXPANDER & REDUCER.
 - REFER DRAWING NO. 9962-001-PE-135-PVM-B-005 (GENERAL ARRANGEMENT OF EXTERNAL HW DISTRIBUTION SYSTEM) FOR DETAILS OF PAINTING FOR PROTECTION OF INTERNAL & EXTERNAL SURFACES OF PIPING & ENCASMENT DETAILS OF BURIED PIPING.
 - PAINTING SCHEDULE:-**
 - ONE COAT OF PRIMER & TWO COAT OF BITUMINOUS PAINT CONFORMING TO IS: 3384 & 9862 RESPECTIVELY FOR THE FOLLOWING:
 - BASIN FLOOR INTERNAL FACE
 - INTERNAL SURFACES OF BASIN WALL & BASIN PARTITION WALL
 - FILL SUPPORTING BEAM, GRILLAGE COLUMNS & BRACINGS
 - COLD WATER CHANNEL UP TO TP
 - INTERNAL SURFACE OF DRAIN CHAMBERS
 - COMPLETE INTERNAL SURFACE OF SHELL & RAKER COLUMNS
 - TWO COATS OF WATER PROOF CEMENT PAINT FOR EXTERNAL SURFACE OF SHELL
 - ANTI-CORROSION TREATMENT OF RCC STRUCTURES IN CONTACT WITH SOIL/EARTH
 - FOR DETAILS OF NDCCT FOUNDATION REFER DRAWING NO. 9962-001-PE-135-PVC-C-004 & FOR DETAILS OF RAKER COLUMNS REFER DRAWING NO. 9962-001-PE-135-PVC-C-006
 - FOR DETAILS OF BASIN SLAB REFER DRAWING NO. 9962-001-PE-135-PVC-C-008 & FOR DETAILS OF CW OUTLET REFER DRAWING NO. 9962-001-PE-135-PVC-C-016
 - FOR MASTER DRAWING LIST REFER DOCUMENT NO. 9962-001-PE-135-PVC-W-001
 - THIS SHEET SHOULD BE READ IN CONJUNCTION WITH SHEETS 2 & 3 OF THIS DRAWING.

- LEGEND:-**
- FGL - FINISH GROUND LEVEL
 - BOP - BOTTOM OF PIPE
 - TP - TYPICAL
 - TP - TERMINAL POINT
 - EJ - EXPANSION JOINT
 - AOL - AVIATION OBSTRUCTION LIGHT
 - CW OUTLET - COLD WATER OUTLET
 - PVC - POLYVINYL CHLORIDE
 - PP - POLYPROPYLENE
 - MSHDG - MILD STEEL HOT DIP GALVANIZED

- DESIGN DUTY PARAMETERS:-**
- WATER FLOW - 90000 M³/HR
 - HOT WATER TEMPERATURE - 43°C
 - COLD WATER TEMPERATURE - 33°C
 - NET BLD. TEMP. - 28°C
 - RELATIVE HUMIDITY - 45%
 - PUMPING HEAD - 17.8 MWC w.r.t FGL

2 04/07/19 BASED ON NTPC COMMENTS DI. 03.04.2019 ARK 1 15/03/19 BASED ON NTPC COMMENTS DI.19.02.2019 HHS 0 20/06/19 FOR APPROVAL COS REV. NO. DATE DESCRIPTION DRAWN		CUSTOMER UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED CONSULTANT DEVELOPMENT CONSULTANTS PRIVATE LIMITED, KOLKATA	EPC CONTRACTOR BHARAT HEAVY ELECTRICALS LIMITED CONSULTANT NTPC LIMITED (A Govt. of India Enterprise)	NDCCT CONSULTANT SPECTRUM Techno Consultants Pvt Ltd 401, Rukar Bhavan, Plot No. 9, Sector-17, Vashi, Navi Mumbai 401 705 India. Email: info@spectrumworld.net PROJECT 1X660 MW PANKI THERMAL POWER STATION	DRAWN BY: ARK CHECKED BY: UNB APPROVED BY: UKR DATE: 04/07/19 SCALE: AS SHOWN	TITLE GENERAL ARRANGEMENT OF NATURAL DRAUGHT COOLING TOWER SITCL DRG. NO. 792-E-DD-101 BHCL DRG. NO. PE-VI-426-165-N001 NTPC DRG. NO. 9962-001-PE-135-PVM-B-001 (SHEET 1 OF 3)	REV. NO. 2 SHEET SIZE: A1
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CUSTOMER UTTAR PRADESH RAJYA VIDYUT UTPADAN NIGAM LIMITED		EPC CONTRACTOR BHARAT HEAVY ELECTRICALS LIMITED		NDCT CONSULTANT SPECTRUM Techno Consultants Pvt Ltd 401, Raktar Bhawan, Plot No. 9, Sector-17, Vashi, Navi Mumbai 400 705 India. Email: info@spectrumworld.net		DRAWN BY: ARK CHECKED BY: UNB APPROVED BY: UKR DATE: 04/07/19 SCALE: AS SHOWN		TITLE GENERAL ARRANGEMENT OF NATURAL DRAUGHT COOLING TOWER	
CONSULTANT DEVELOPMENT CONSULTANTS PRIVATE LIMITED, KOLKATA		PROJECT 1X660 MW PANKI THERMAL POWER STATION (A Govt. of India Enterprise)		REVISIONS		STICPL DRG. NO.: 792-E-DD-101 BHEL DRG. NO.: PE-VI-426-165-N001 NTPC DRG. NO.: 9962-001-PE-135-PVM-B-001 (SHEET 2 OF 3)		REV. NO.: 2 THIS DRAWING IS THE PROPERTY OF SPECTRUM Techno Consultants Pvt Ltd & IS SUBJECT TO THEIR RECITAL, AND MUST NOT BE REPRODUCED OR COPIED WITHOUT THEIR WRITTEN PERMISSION. SHEET SIZE: A1	

