



BHARAT HEAVY ELECTRICALS LIMITED
PROJECT ENGINEERING MANAGEMENT, NOIDA

Date-13-Jun-18

CORRIGENDUM- 02

PROJECT	:	2X490 MW NTPC DADRI STAGE-II-FGD SYSTEM
PACKAGE	:	HVAC for FGD
ENQUIRY NO	:	E-5948/2018 Dated 22.05.2018
SUBJECT	:	TECHNICAL AMENDMENT + DUE DATE EXTENSION

Type of Corrigendum			
Technical Corrigendum -	☒	Commercial Corrigendum -	☒

In reference to the above mentioned tender enquiry for **HVAC for FGD** package

Please note the following.

1. Due date is extended from **14-Jun-18** to **25-Jun-18** till **02:00 PM**. Bid opening shall be done at 03:00 PM on the due date
2. Refer Annexure-I for change in technical specification (attached).
3. Price Format has been revised due to changes in Annexure-I of Price format. Latest price format is attached.

Bidders who have submitted their offer may revise their bid accordingly.

All the other terms and conditions of the tender enquiry remain unchanged. All the bidders are requested to quote accordingly.

Yours faithfully,

For and on behalf of BHEL

Upendra Chaudhary
Dy. Manager



HVAC SYSTEM
2X490 MW NTPC NCTPP, DADRI STAGE-II
(FGD SYSTEM PACKAGE)

SPECIFICATION NO. PE-TS-436- (571-13000-A)-A001

ANNEXURE-1

DATE: 01.06.2018

SHEET 1 OF 2

AMENDMENT TO EXISTING CLAUSES OF TECHNICAL SPECIFICATION

Sl. No.	Clause	Existing description	To be read as (Amendment)
1	Sl. No. A-1 of ANNEXURE - A of price format (Doc No: PE-PF-436-(571-13000-A)-A001), and Sl. No. 4-a of SECTION : I, SUB-SECTION : C 1 of technical specification and other relevant clauses of complete technical specification regarding capacity of Air cooled condensing unit for FGD control room building.	DX type, air cooled condensing unit of minimum 25 TR (ACTUAL) capacity. The refrigerant compressor shall be Scroll, hermetic / Semi-hermetic type suitable for Refrigerant R-134a / R-407c / R-410a environment friendly HFC refrigerants with drive package, Suction and discharge valves, capacity control system, expansion valve, crank case heater etc. A control panel shall be provided to house all gauges and controls. The panel shall contain all necessary terminal strips to facilitate external wiring. The unit shall be complete with expansion valve, all necessary fittings, accessories, insulated refrigerant piping to and from AHUs, foundation bolts, nuts, washers etc complete in all respect.	DX type, air cooled condensing unit of minimum 30 TR (ACTUAL) capacity. The refrigerant compressor shall be Scroll, hermetic / Semi-hermetic type suitable for Refrigerant R-134a / R-407c / R-410a environment friendly HFC refrigerants with drive package, Suction and discharge valves, capacity control system, expansion valve, crank case heater etc. A control panel shall be provided to house all gauges and controls. The panel shall contain all necessary terminal strips to facilitate external wiring. The unit shall be complete with expansion valve, all necessary fittings, accessories, insulated refrigerant piping to and from AHUs, foundation bolts, nuts, washers etc complete in all respect.
2	Sl. No. B-1 of ANNEXURE - A of price format (Doc No: PE-PF-436-(571-13000-A)-A001), and Sl. No. 4-b of SECTION : I, SUB-SECTION : C 1 of technical specification and other relevant clauses of complete technical specification regarding capacity of UAF for FGD control room building.	Unitary air filtration unit with centrifugal fan with motor, pumps with motors, filters, UAF internals, inlet air louvers, piping as per IS: 1239 pt I (heavy class galvanised), valves, nozzles, back wash arrangement, galvanised drain piping etc. as per specification of capacity 85,000 CMH. Each UAF has 1 no centrifugal fan (1 x 100% duty) of capacity 85,000 CMH at min. 60 mmWC SP.	Unitary air filtration unit with centrifugal fan with motor, pumps with motors, filters, UAF internals, inlet air louvers, piping as per IS: 1239 pt I (heavy class galvanised), valves, nozzles, back wash arrangement, galvanised drain piping etc. as per specification of capacity 1,15,000 CMH . Each UAF has 1 no centrifugal fan (1 x 100% duty) of capacity 1,15,000 CMH at min. 60 mmWC SP.
3	SECTION : II, SUB-SECTION : 6 of technical specification and other relevant clauses of complete technical specification.	Estimated power consumption (EPC) figure for the system (for working drives only) has been considered as 79.5 KW. So long bidder's quoted guaranteed power consumption (GPC) above remains within this EPC, there will be no technical loading of bid on power	Estimated power consumption (EPC) figure for the system (for working drives only) has been considered as 90.5 KW . So long bidder's quoted guaranteed power consumption (GPC) above remains within this EPC, there will be no technical loading of bid on power consumption for



HVAC SYSTEM
2X490 MW NTPC NCTPP, DADRI STAGE-II
(FGD SYSTEM PACKAGE)

SPECIFICATION NO. PE-TS-436- (571-13000-A)-A001

ANNEXURE-1

DATE: 01.06.2018

SHEET 2 OF 2

		consumption for evaluation. However, if bidder's quoted GPC exceeds EPC, there shall be technical loading of bid for evaluation @ Rs 1, 97,080/-per KW of additional power over EPC. Bidder's guaranteed power consumption at motor input terminals (not shaft power) as furnished in relevant schedule shall be demonstrated by the successful bidder during performance testing at works/site. In case power consumption is noted higher than EPC / bidder's quoted GPC whichever is higher, during inspection/ PG test, penalty @ Rs 1,97,080/- per KW shall be levied on vendor.	evaluation. However, if bidder's quoted GPC exceeds EPC, there shall be technical loading of bid for evaluation @ Rs 1, 97,080/- per KW of additional power over EPC. Bidder's guaranteed power consumption at motor input terminals (not shaft power) as furnished in relevant schedule shall be demonstrated by the successful bidder during performance testing at works/site. In case power consumption is noted higher than EPC / bidder's quoted GPC whichever is higher, during inspection/ PG test, penalty @ Rs 1,97,080/- per KW shall be levied on vendor.
--	--	--	---



**2X490 MW NTPC NCTPP, DADRI STAGE-II
(FGD System Package)
HVAC SYSTEM
GAURANTEE POWE CONSUMPTION**

SPECIFICATION No: PE-TS-436-(571-13000-A)-A001

SECTION : II

SUB-SECTION : 6

REV. NO. 01

DATE: JUNE 2018

SHEET: 1 OF 1

Guaranteed Power Consumption For Air Conditioning System

NAME OF PROJECT:		2X490 MW NTPC NCTPP, DADRI STAGE-II (FGD SYSTEM PACKAGE)				
NAME OF PACKAGE:		HVAC SYSTEM				
TECHNICAL SPECIFICATION No:		PE-TS-436-(571-13000-A)-A001				
S.NO.	DESCRIPTION OF EQUIPMENT	NO OF EQUIPMENT		TOTAL GUARANTEED POWER CONSUMPTION FOR EACH EQUIPMENT AT MOTOR INPUT TERMINAL AND CONTROL PANEL (IN KW)	DUTY FACTOR	TOTAL KW
		WORKING	STANDBY			
		3A	3B	4	5	6=3Ax4x5
1	AC SYSTEM					
1.1	AIR COLLED CONDENSING UNIT					
1.1.1	OUTDOOR UNIT	1	1			
1.1.2	INDOOR UNIT	1	1			
1.1.3	FRESH AIR FAN FOR ABOVE AHU ROOM	1	0			
2	VENTILATION SYSTEM					
2.1	UAF					
2.1.1	UAF FAN	1	0			
2.1.2	UAF PUMP	1	0			
TOTAL (KW)						

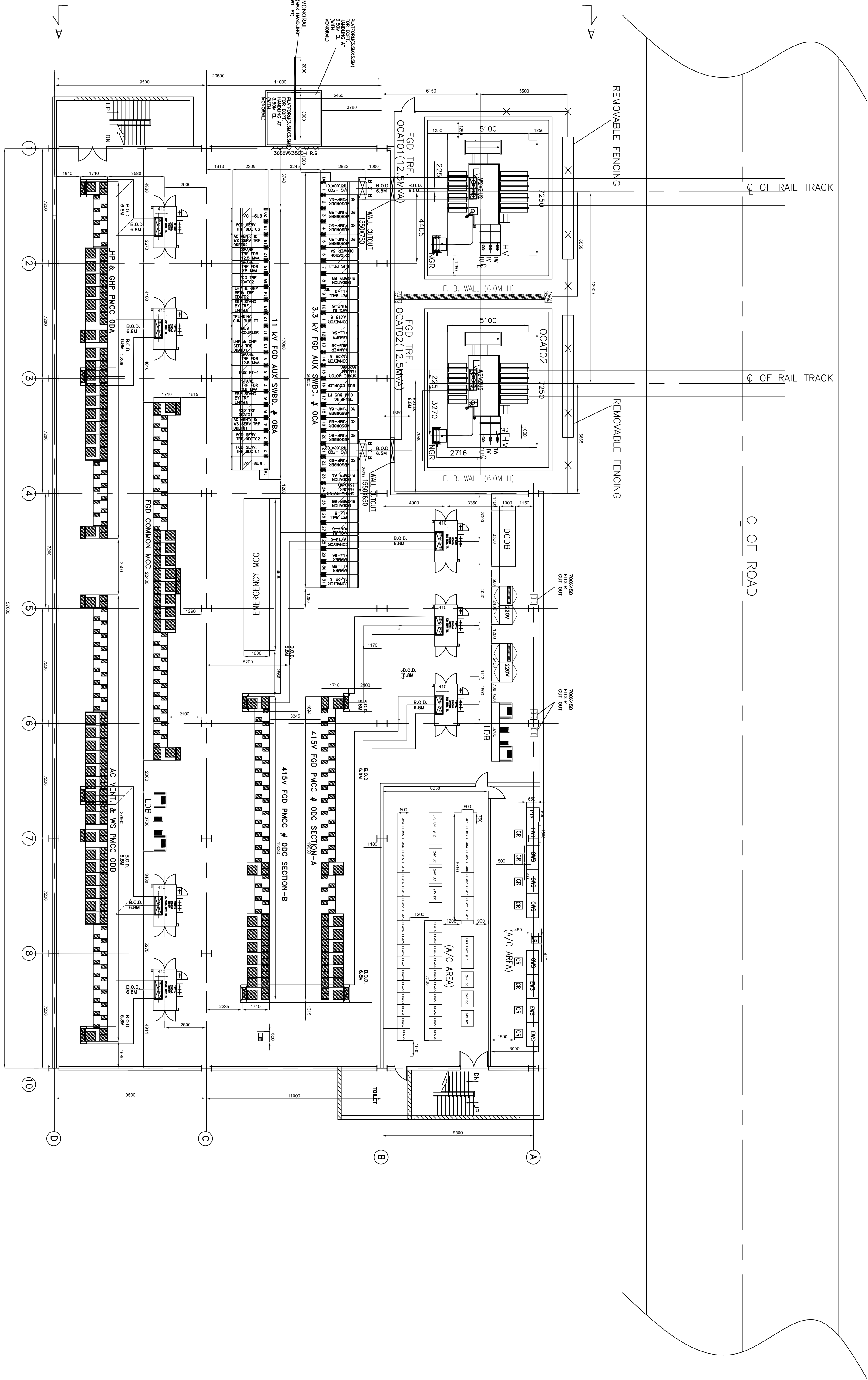
Note: Estimated power consumption (EPC) figure for the system (for working drives only) has been considered as 90.5 KW. So long bidder's quoted guaranteed power consumption (GPC) above remains within this EPC, there will be no technical loading of bid on power consumption for evaluation. However, if bidder's quoted GPC exceeds EPC, there shall be technical loading of bid for evaluation @ Rs 1, 97,080/-per KW of additional power over EPC.

Bidder's guaranteed power consumption at motor input terminals (not shaft power) as furnished in relevant schedule shall be demonstrated by the successful bidder during performance testing at works/ site. In case power consumption is noted higher than EPC / bidder's quoted GPC whichever is higher, during inspection/ PG test, penalty @ Rs 1,97,080/- per KW shall be levied on vendor.

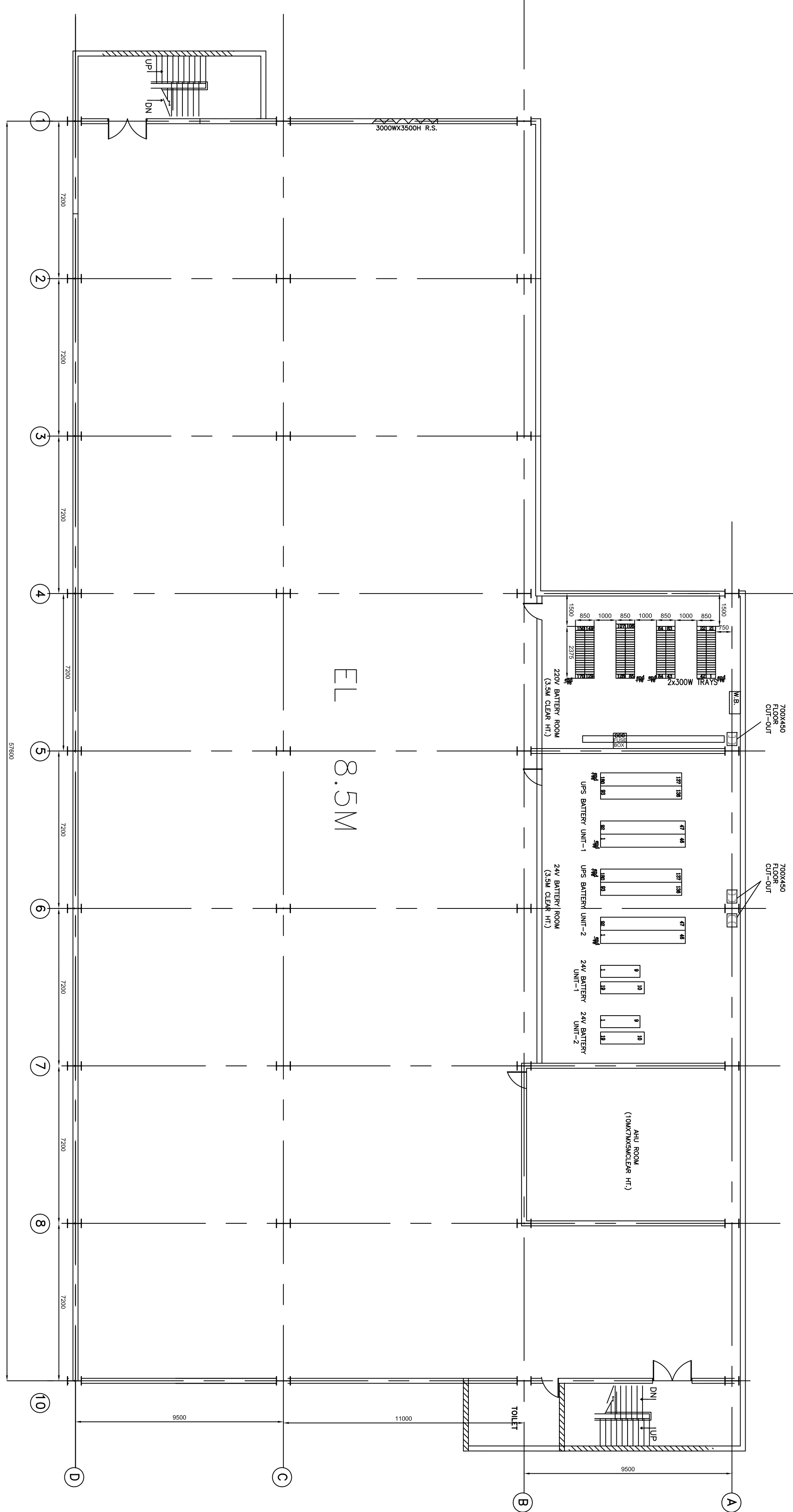
Particulars of bidder / authorised representative

Name	Designation	Signature	DATE	Company Seal

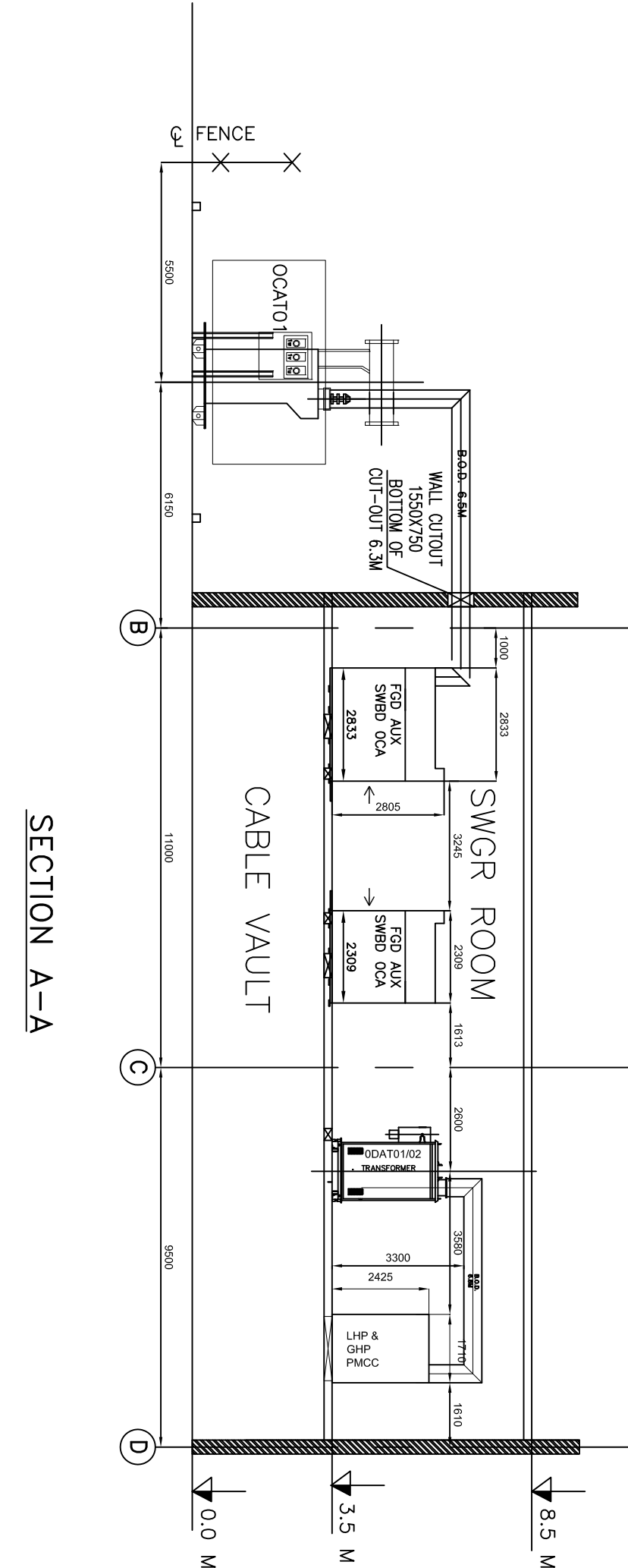
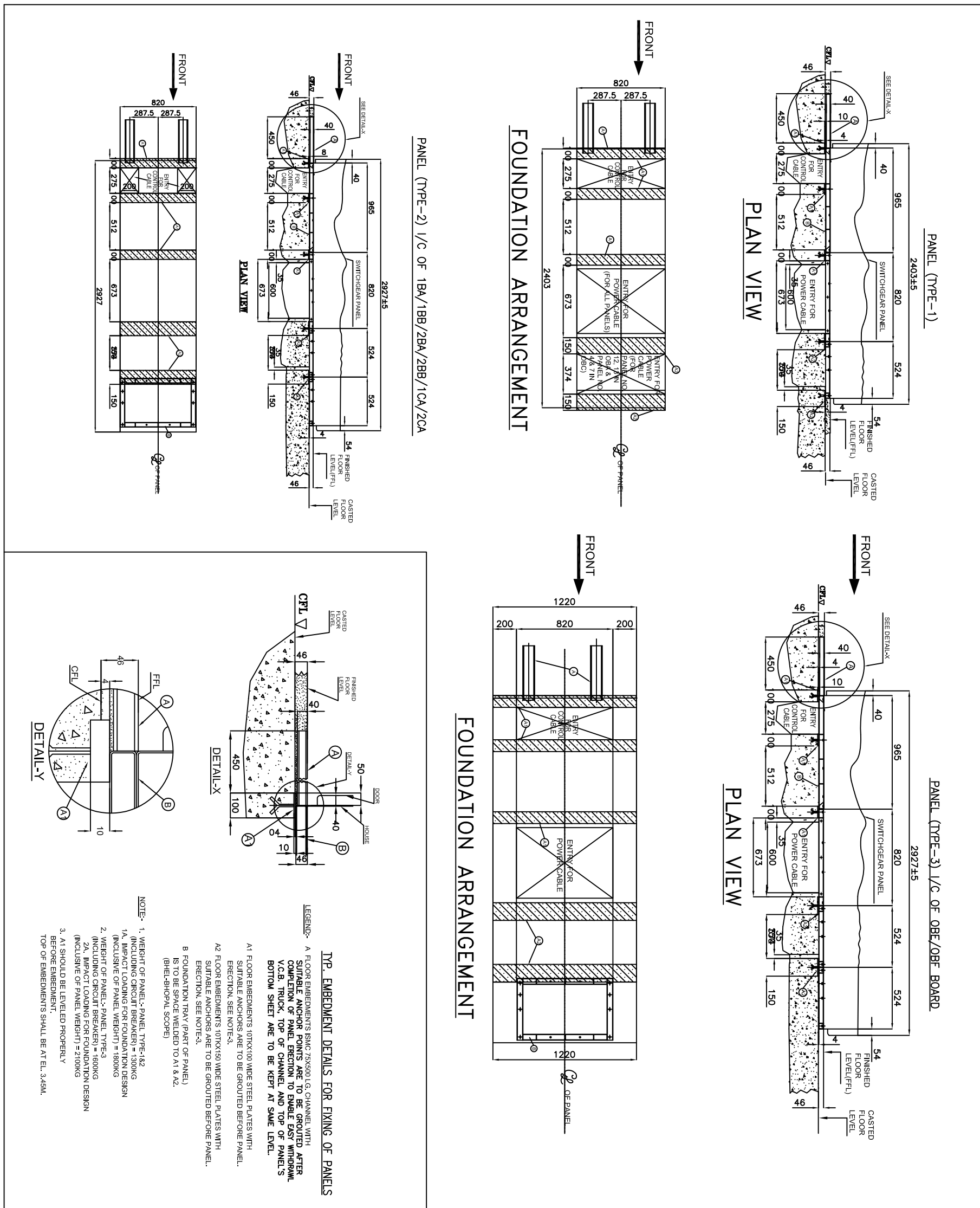
FGD CONTROL ROOM LAYOUT



PLAN AT 3.5M



PLAN AT 8.5M



FOR TENDER PURPOSE ONLY