

GROUND FLOOR PLAN

SCHEDULE OF FINISHES FOR ADMINISTRATION BUILDING
(REFER DRAWING NO. 11387-00-AR-DST-0002)

ADMIN BUILDING	FLOOR	DADO/SKIRTING	FALSE CEILING	INTERNAL WALL FINISH	CEILING FINISH	HVAC
OFFICER'S WORK AREA/ WORK AREA	F2	S2	FC1+FC2	IW1	-	AC
MEETING ROOM	F2	S2	FC1+FC2	IW1	-	AC
RECREATION ROOM	F2	S2	FC1+FC2	IW1	-	AC
STATION INCHARGE	F2	S2	FC1+FC2	IW1	-	AC
RECORD ROOM	F2	S2	FC1+FC2	IW1	-	-
TOILETS	F1	S1	-	-	C1	EX
PANTRY	F2	S1	-	-	C1	-
PASSAGE	F8	S4	FC1	IW1	-	-
ENTRANCE & STEPS	F8	-	-	-	C1	-
BRICK STEPS (EXIT)	F5	-	-	-	-	-
RAMP & PLATFORM	F4	-	-	-	-	-

SCHEDULE OF FINISHES FOR AMENITY BUILDING
(REFER DRAWING NO. 11387-00-AR-DST-0002)

AMENITY BUILDING	FLOOR	DADO/SKIRTING	FALSE CEILING	INTERNAL WALL FINISH	CEILING FINISH	HVAC
EXECUTIVE DINING	F2	S2	FC1+FC2	IW1	-	AC
TRAINING ROOM	F2	S2	-	IW1	C1	EX
KITCHEN	F1	S1	-	-	C1	EX
CHANGE ROOM	F2	S2	-	IW1	C1	EX
CANTEEN	F1	S1	-	-	C1	EX
WORKERS TOILET	F1	S1	-	-	C1	EX
DOCTOR'S ROOM	F2	S2	FC1+FC2	IW1	-	AC
CONNECTING WALKWAY	F5a	-	-	-	-	-
PASSAGE	F5a	S3	-	IW1	C1	-
ENTRANCE & STEPS	F8	-	-	-	C1	-
BRICK STEPS (EXIT)	F5	-	-	-	-	-
RAMP & PLATFORM	F4	-	-	-	-	-

- GENERAL NOTES :**
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
 - EL 0.000 CORRESPONDS TO FINISH GROUND LEVEL.
 - ALL CHAJJA SHALL HAVE DRIP MOULD & GROOVES UNDERNEATH ALL ALONG THE PERIPHERIES.
 - THE CONTRACTOR SHALL CHECK THE ACTUAL OPENING SIZES AT SITE AND THE NUMBERS OF DOOR & WINDOW ETC. IN THE DWG BEFORE FABRICATING/ PROCURING THE SAME.
 - FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER ELECTRICAL EQUIPMENT LAYOUT.
 - EXTERNAL PAINT SHALL BE SINGLE COAT OF PRIMER AND TWO COAT OF ANTI-FUNGAL ACRYLIC BASED PAINT ON EXTERNAL WALL. EXTERIOR TEXTURED PAINT FINISH SHALL BE PROVIDED ON EXTERNAL COLUMN, BEAM AND PARAPET.
 - HANDRAIL SHALL BE STAINLESS STEEL SS304 GRADE (UNO).
 - ANTI TERMITE TREATMENT SHALL BE PROVIDED UNDER FLOOR AND JUNCTION OF WALLS AND FLOOR.
 - CONCRETE HOLLOW BLOCK OF OPEN CAVITY TYPE SHALL BE GRADE A (7.0) OF SIZE 400X200X200 CONFORMING TO IS2185. UPTO CEILING HEIGHT (UNO)
 - ALUMINIUM FULLY GLAZED PARTITION SHALL BE OF POWDER COATED ALUMINIUM WITH 10MM THICK (MINIMUM THICKNESS) TOUGHENED GLASS WITH FROSTING FILMS - PATTERN AS APPROVED BY HPCL.
 - PLATFORM IN PANTRY & CANTEEN SHALL BE 600mm WIDE AND 900MM ABOVE FFL. PLATFORM SHALL BE OF 18-20MM THK POLISHED GRANITE.
 - HIGH GRADE 304 STAINLESS STEEL SINK SHALL BE AS PER SPECIFICATION.
 - FOR WORKERS TOILET, HEIGHT OF 115 THK BRICK PARTITION WALL (WC & SHOWER) SHALL BE 2.400m ABOVE FFL.
 - WINDOW BLINDS - ROLLER TYPE SHALL BE PROVIDED IN OFFICERS WORK AREA, STATION INCHARGE, MEETING ROOM AND RECREATION ROOM AS PER SPECIFICATION AND AS APPROVED BY HPCL.
 - TOILET WALLS SHALL BE 230 THK BRICK WALL (UNO).
 - FOR ELECTRICAL & INSTRUMENTATION CABLE ENTRY LOCATIONS REFER RESPECTIVE CABLE LAYOUT DRAWINGS.
 - ONLY MAJOR PENETRATIONS ARE INDICATIVELY SHOWN. CONTRACTOR TO DETAIL ALL REQUIRED ROOF & WALL PENETRATION.
 - WATER PROOFING SHALL BE LAID AS PER SPECIFICATION - WATER PROOFING WORKS.

LEGENDS

A/C - AIR CONDITION	GD - GLAZED DOOR
WB - WASH BASIN	AW - ALUMINIUM WINDOW
WC - WATER CLOSET	LP - LOW POINT
UR - URINAL	HP - HIGH POINT
EX - EXHAUST FAN	HPP - HIGH POINT PAVING
D - WOODEN DOOR	FFL - FINISHED FLOOR LEVEL
AD - ALUMINIUM DOOR	RTL - ROAD TOP LEVEL
AL - PVC DOOR	

- 200 THK HOLLOW CONCRETE BLOCK WALL
- 230 THK BRICK WALL
- 115 THK BRICK WALL
- 10MM THK ALUMINIUM GLAZED PARTITION
- HANDRAIL
- CEILING FAN

REFERENCE DRAWING

3		
2	ARCHITECTURAL ELEVATIONS	11387-01-AR-DRD-0003
1	ARCHITECTURAL ROOF PLAN & SECTIONS	11387-01-AR-DRD-0002

S.NO. REFERENCE DRAWING DRAWING NO.

KEY PLAN

--	--	--	--	--	--

SCALE - 1:100

A	14 JUNE 2019	ISSUED FOR REVIEW	VK	ND	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.

DRG.NO :- 11387-01-AR-DRD-0001 SHT 1 OF 1

TITLE :

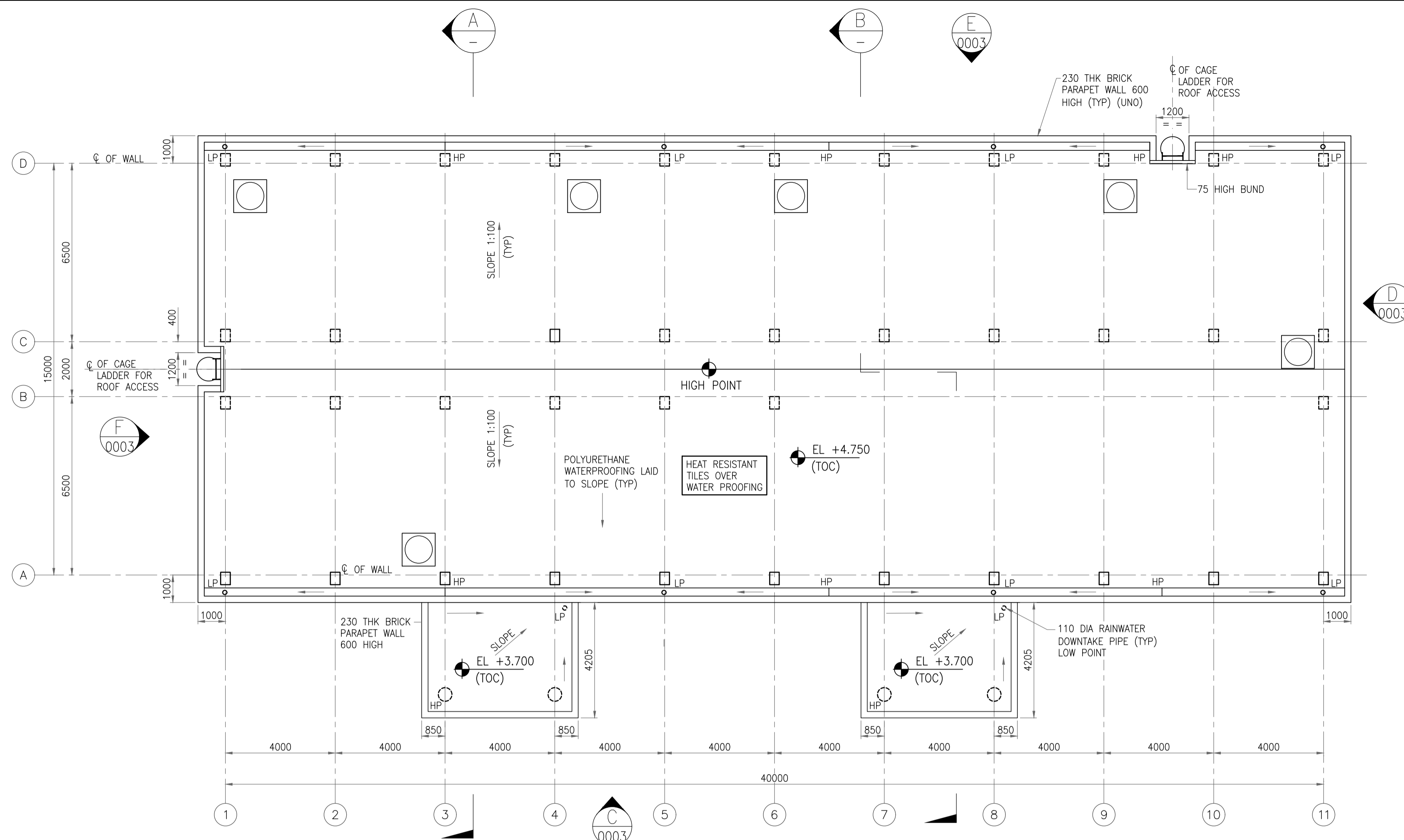
**AMENITY & ADMIN BUILDING
ARCHITECTURAL GROUND FLOOR PLAN**

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

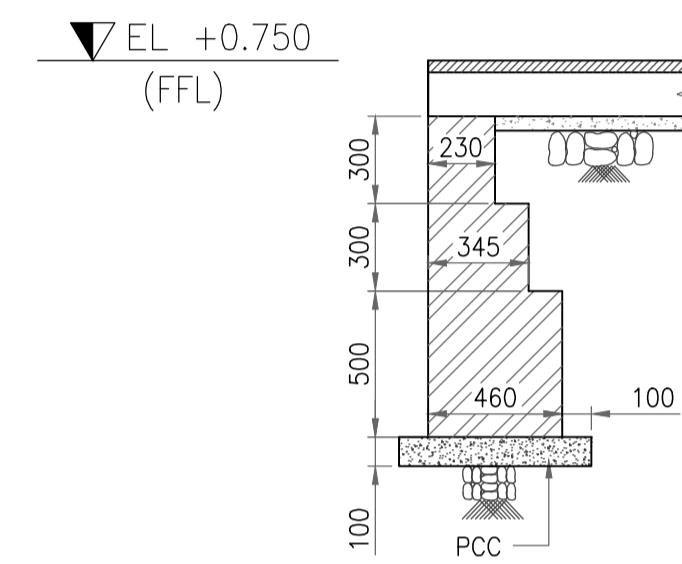
CONSULTANT :

RINA
 RINA Consulting S.p.A.

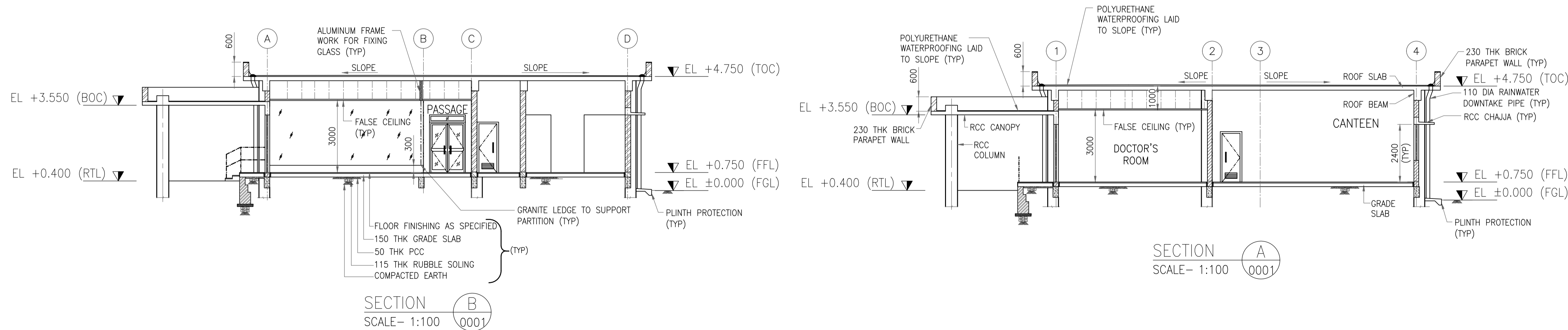
HINDUSTAN PETROLEUM CORPORATION LTD.



ROOF PLAN



TYP RETAINING WALL
DETAIL FOR PLATFORM
SCALE 1:25



SECTION A
SCALE- 1:100

SECTION B
SCALE- 1:100

GENERAL NOTES :

- FOR NOTES REFER DRAWING NO. 11387-01-AR-DRD-0001.
- POLYURETHANE WATERPROOFING SHALL BE LAID AS PER SPECIFICATION, WATER PROOFING WORKS.
- 5 NOS. WHITE COLOURED MULTILAYERED HDPE WATER TANK OF 500 LITRES CAPACITY SHALL BE PROVIDED ON ROOF.
- HEAT RESISTANT TERRACE TILES SHALL BE 300 MM X 300 MM X 10 MM WITH SOLAR REFRACTIVE INDEX > 84, LAID OVER POLYURETHANE WATERPROOFING. THE JOINTS SHALL BE GROUTED WITH MIX OF WHITE CEMENT & MARBLE POWDER IN RATIO OF 1:1.

REFERENCE DRAWING

3		
2	ARCHITECTURAL ELEVATIONS	11387-01-AR-DRD-0003
1	ARCHITECTURAL GROUND FLOOR PLAN	11387-01-AR-DRD-0001
S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN

SCALE - 1:100

A	14 JUNE 2019	ISSUED FOR REVIEW	VK	ND	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.

DRG.NO :- 11387-01-AR-DRD-0002

SHT 1 OF 1

TITLE :
**AMENITY & ADMIN BUILDING
ARCHITECTURAL ROOF PLAN & SECTIONS**

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

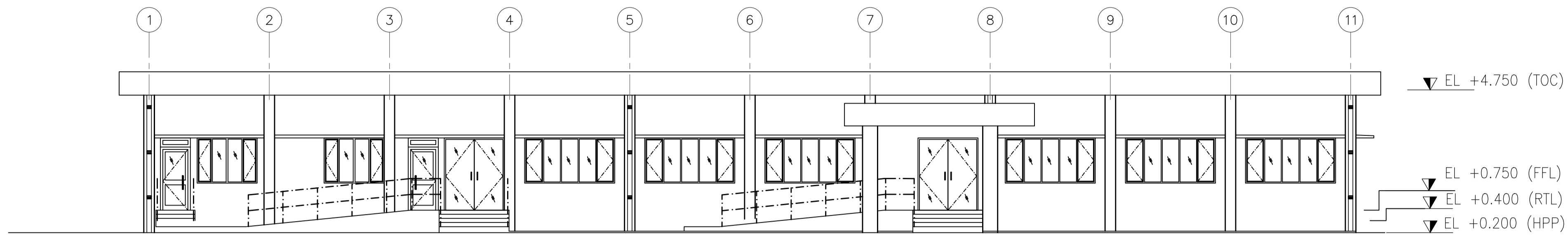
CONSULTANT :



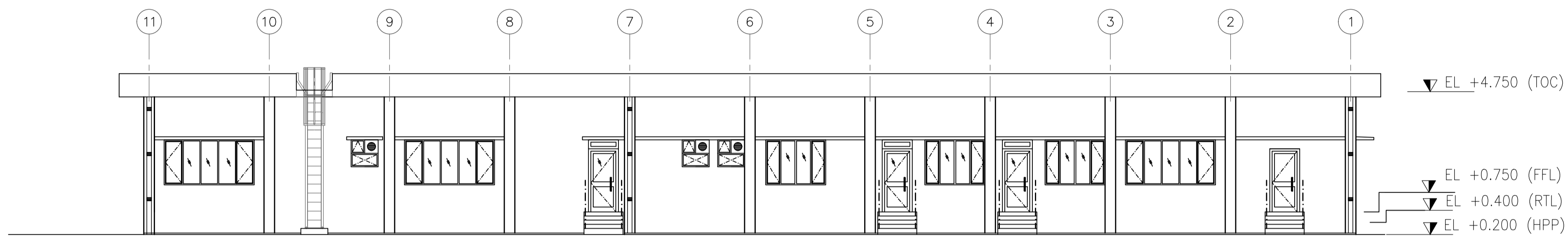
HINDUSTAN PETROLEUM
CORPORATION LTD.

GENERAL NOTES :

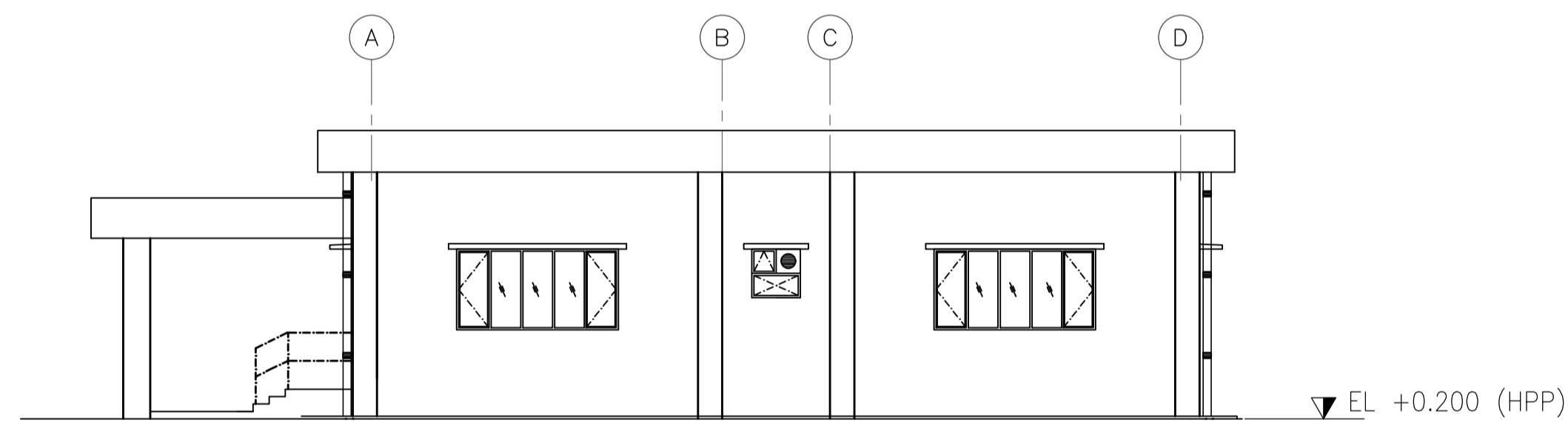
1. FOR NOTES AND REFERENCE DRAWINGS REFER DRAWING NO. 11387-01-AR-DRD-0001.



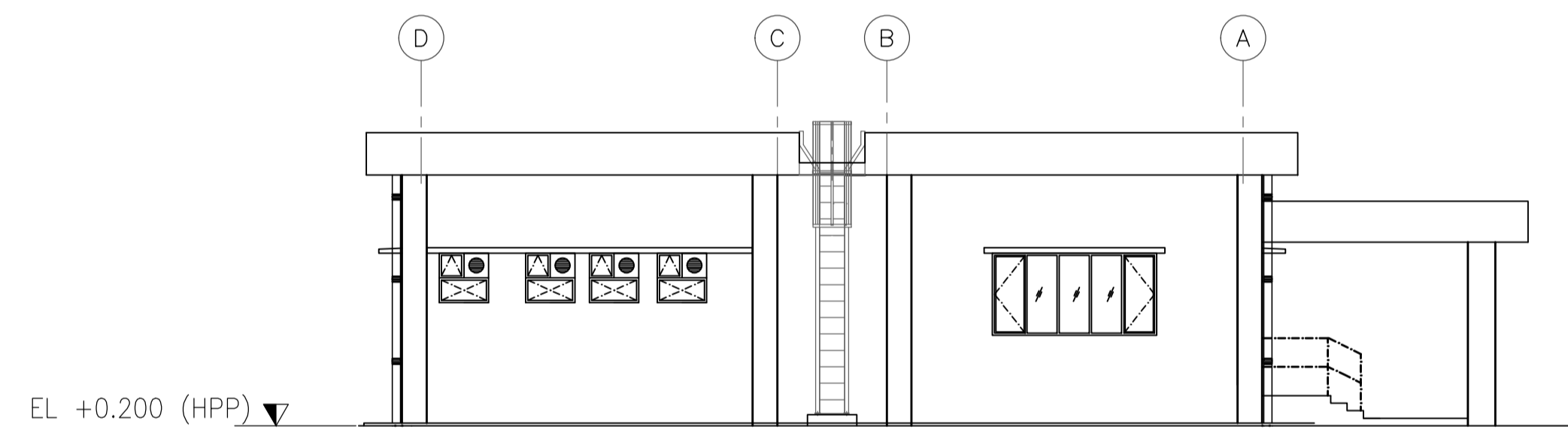
ELEVATION C
SCALE- 1:100



ELEVATION D
SCALE- 1:100



ELEVATION E
SCALE- 1:100



ELEVATION E
SCALE- 1:100

REFERENCE DRAWING

3		
2	ARCHITECTURAL ROOF PLAN & SECTIONS	11387-01-AR-DRD-0002
1	ARCHITECTURAL GROUND FLOOR PLAN	11387-01-AR-DRD-0001
S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN

SCALE - 1:100

A	14 JUNE 2019	ISSUED FOR REVIEW	VK	ND	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.

DRG.NO :- 11387-01-AR-DRD-0003

SHT 1 OF 1

TITLE :

AMENITY & ADMIN BUILDING
ARCHITECTURAL ELEVATIONS

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

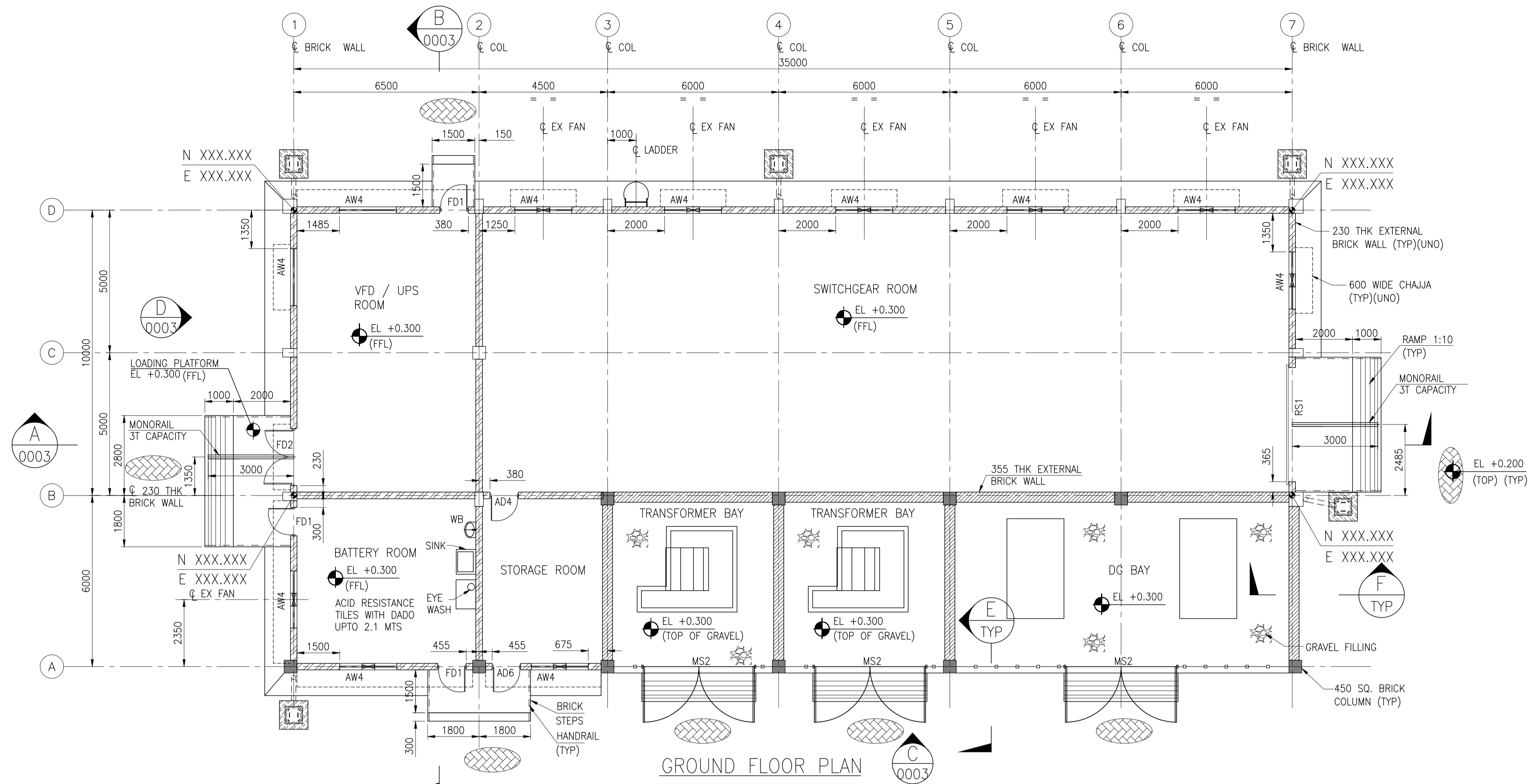
CONSULTANT :



HINDUSTAN PETROLEUM
CORPORATION LTD.



PLANT NORTH



GROUND FLOOR PLAN

GENERAL NOTES :

- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
- EL 0.000 CORRESPONDS TO FINISH GROUND LEVEL.
- CIVIL CONTRACTOR SHALL DEVELOP TRENCH LAYOUT AS PER POWER LAYOUT DRAWING AND TRENCH STANDARD DRAWING.
- ALL CHAJJA SHALL HAVE DRIP MOULD & GROOVES UNDERNEATH, ALL ALONG THE PERIPHERY.
- THE CONTRACTOR SHALL CHECK THE ACTUAL OPENING SIZES AT SITE AND THE NUMBERS OF DOOR & WINDOW ETC. IN THE DWG BEFORE FABRICATING / PROCURING THE SAME.
- FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER MCC ROOM ELECTRICAL LIGHTING LAYOUT.
- ANTI TERMITE TREATMENT SHALL BE PROVIDED UNDER FLOOR AND JUNCTION OF WALLS AND FLOOR.
- ONLY MAJOR PENETRATIONS ARE INDICATIVELY SHOWN. CONTRACTOR TO DETAIL ALL REQUIRED ROOF AND WALL PENETRATIONS.
- INTERNAL PLASTER SHALL BE 12 MM THICK CEMENT PLASTER 1:4 (1 CEMENT : 4 SAND) WITH ACRYLIC WASHABLE DISTEMPER.
- EXTERNAL PLASTER SHALL BE 20 MM THICK CEMENT MORTAR (12MM CEMENT MORTAR 1:4 (1 CEMENT, 4 SAND) + 8 MM THICK CEMENT MORTAR 1:4 USING WATER PROOFING COMPOUND WITH WATER PROOF CEMENT PAINT.
- BUS DUCT CUTOUT & CABLE ENTRY SHOWN ARE INDICATIVE, REFER RESPECTIVE CABLE LAYOUT DRAWINGS FOR LOCATION & DETAILS.
- FLOOR FINISH (MCC & VFD ROOM) SHALL BE 50 THK GRANULITHIC FLOOR LAID MONOLITHIC OVER BASE CONCRETE. 35-38MM UNDER-BED AND 12-15MM TOPPING MIXED WITH NON-METALLIC FLOOR HARDENER AS PER MANUFACTURE SPECIFICATION.
- RCC CEILING SHALL HAVE 6MM PLASTER SMOOTH FINISH OF MIN 1:4(1 CEMENT : 4 SAND) WITH ACRYLIC DISTEMPER.
- FOR ELECTRICAL CABLE TRENCH & SLEEVES LOCATION REFER ELECTRICAL LAYOUT.
- PANEL SUPPORT ARRANGEMENT AS PER APPROVED VENDOR DRAWING SHALL BE DESIGN & DETAIL BY CIVIL CONTRACTOR.

LEGENDS

BOS - BOTTOM OF STEEL		- 230 THK BRICK WALL
EL - ELEVATION		- 355 THK BRICK WALL
EX - EXHAUST FAN		- CHEQUERED PLATE
FFL - FINISHED FLOOR LEVEL		
HPP - HIGH POINT PAVING		
TOC - TOP OF CONCRETE		
TOS - TOP OF STEEL		

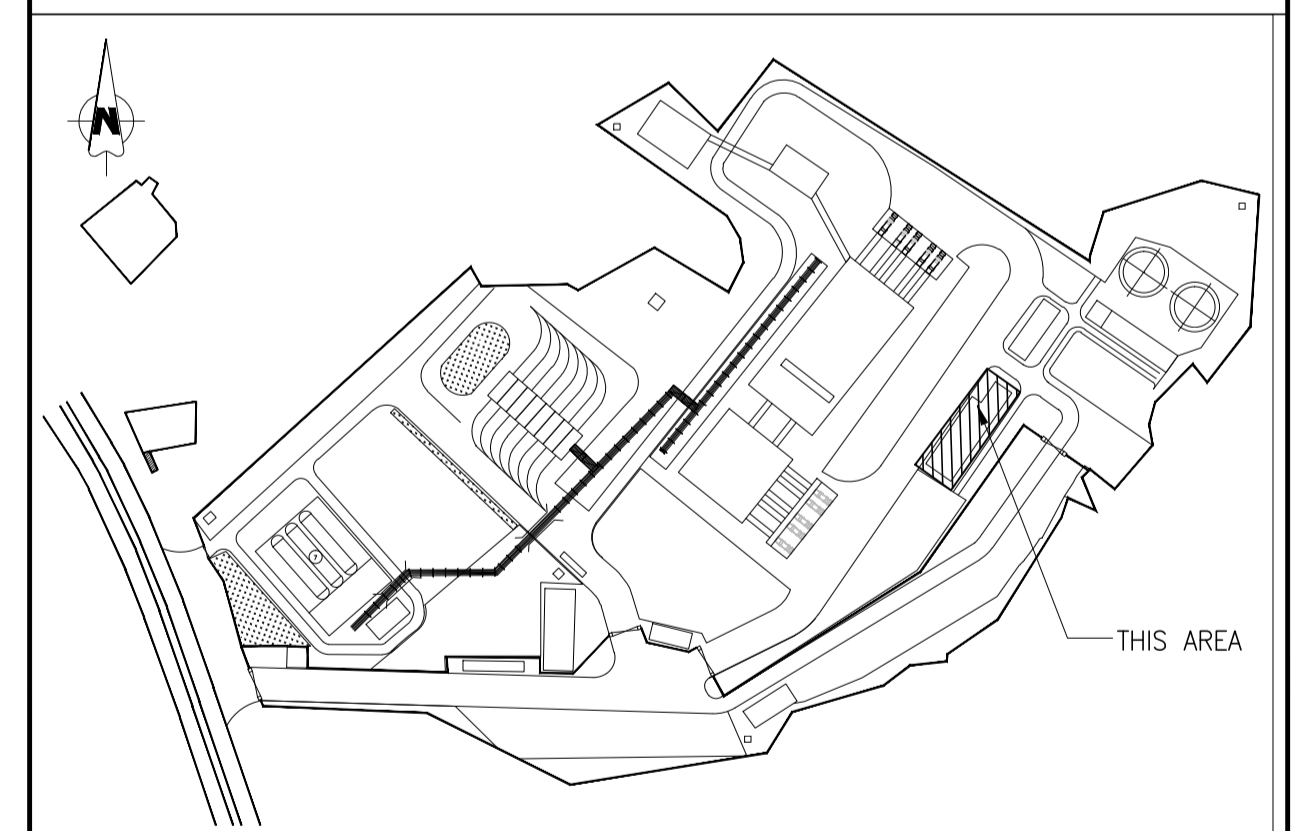
HOLD LIST

- DG & TRANSFORMER BAYS.
- LEVELS & CO-ORDINATES
- CABLE TRENCH LAYOUT
- MONORAIL CAPACITY, ELEVATION & LOCATION

REFERENCE DRAWING

2	ARCHITECTURAL SECTIONS & ELEVATIONS	11387-02-AR-DRD-0003
1	ARCHITECTURAL ROOF PLAN	11387-02-AR-DRD-0002
S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN



SCALE - AS SHOWN

A	01 JULY 2019	ISSUED FOR REVIEW	PK	ND	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.

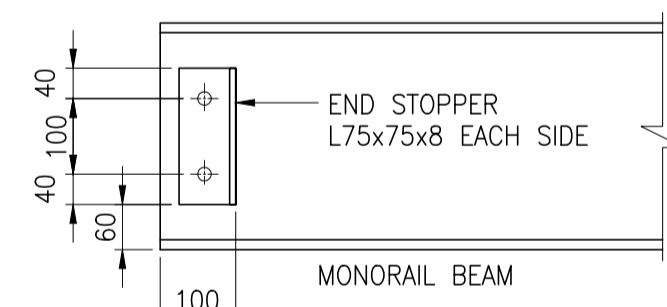
DRG.NO :- 11387-02-AR-DRD-0001 SHT 1 OF 1

TITLE :

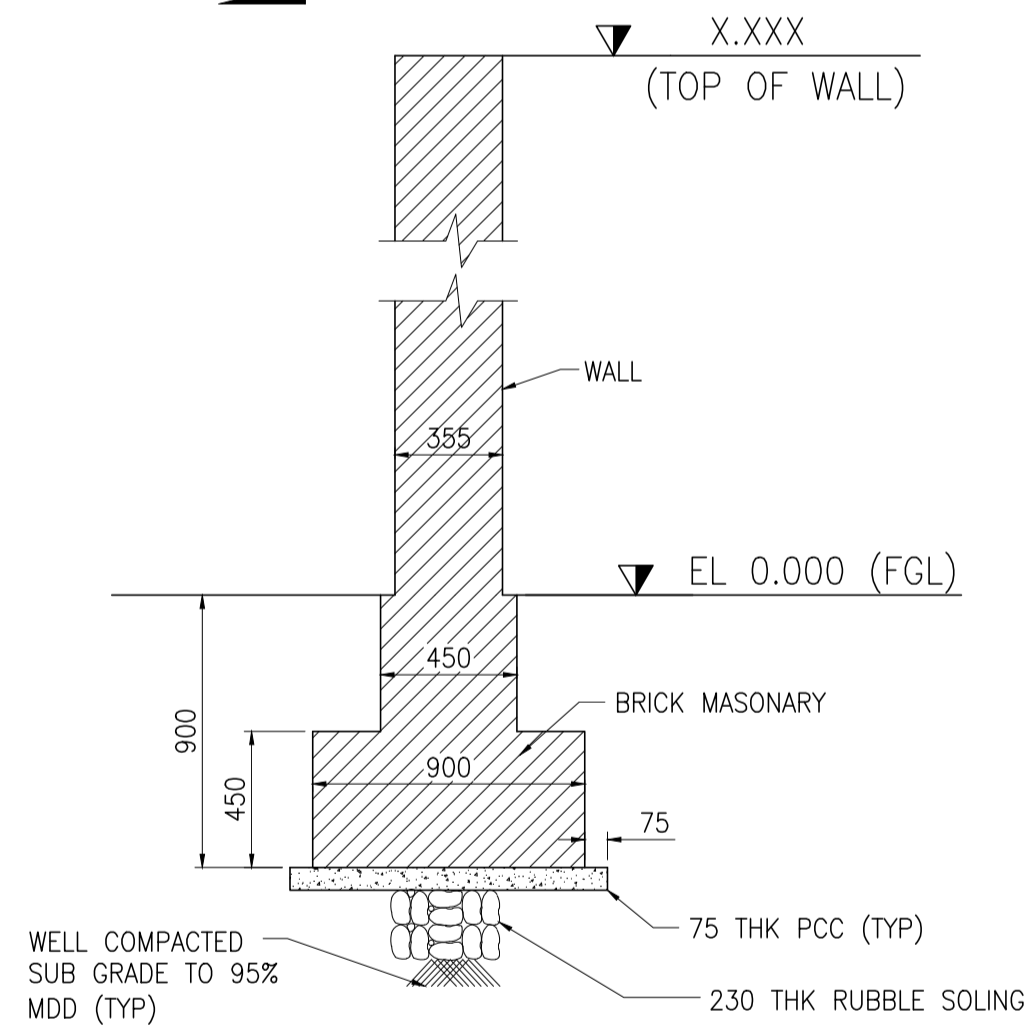
MCC ROOM
ARCHITECTURAL GROUND FLOOR PLAN

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

CONSULTANT :

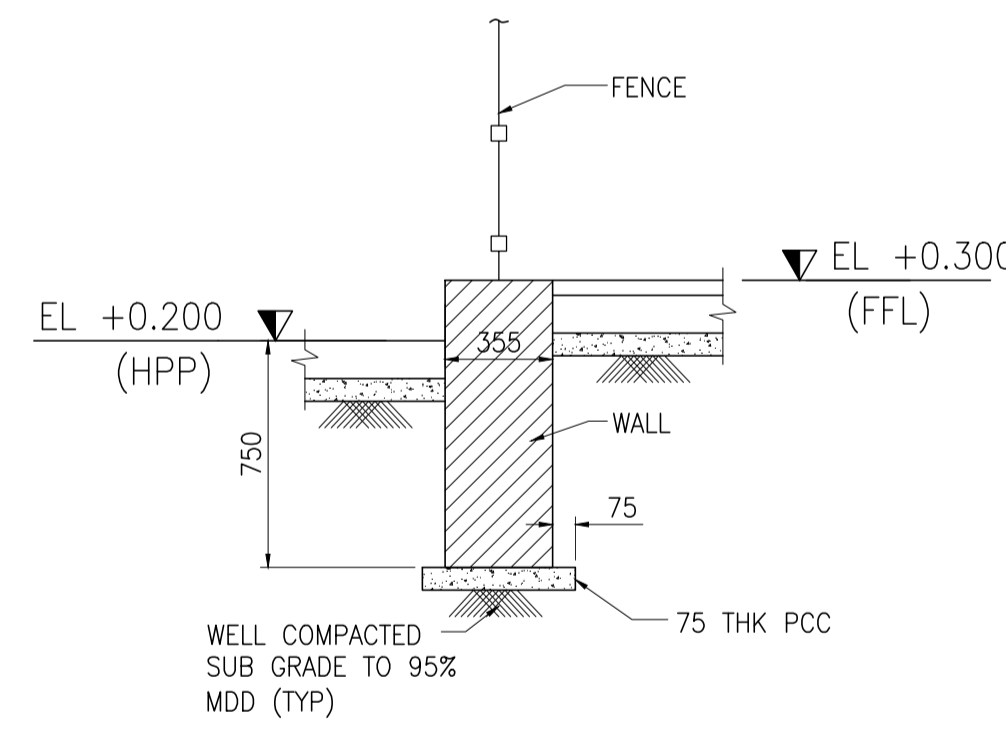


TYPICAL END STOPPER DETAIL FOR MONORAIL SCALE 1:10

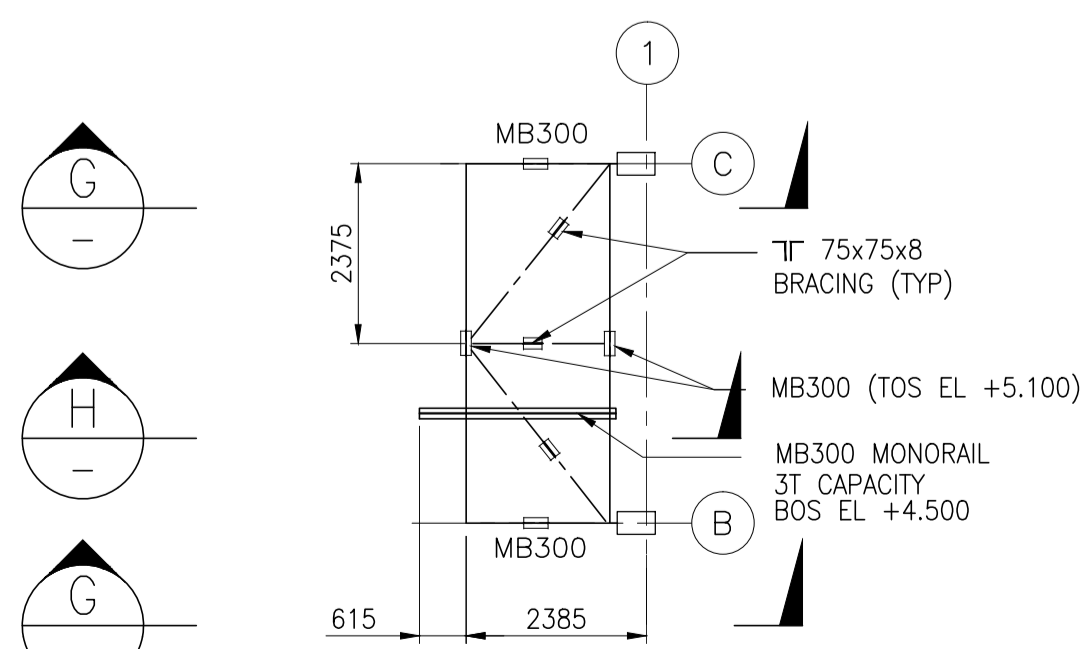


SECTION F SCALE- 1:25

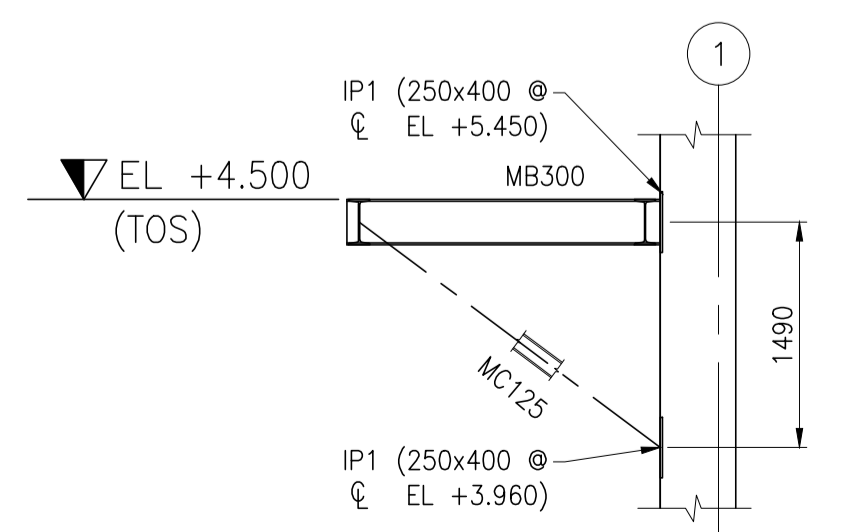
(FFL/TRENCH/RAMP NOT SHOWN FOR CLARITY)



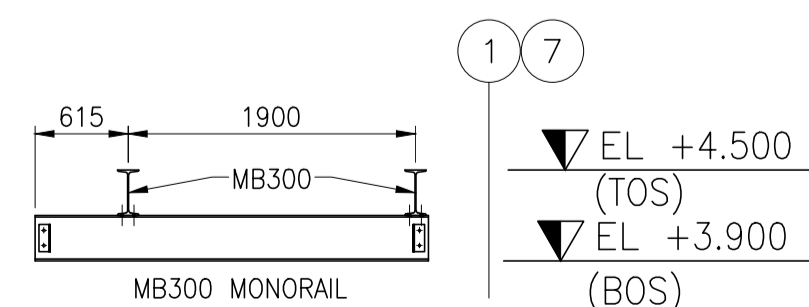
SECTION E SCALE- 1:25



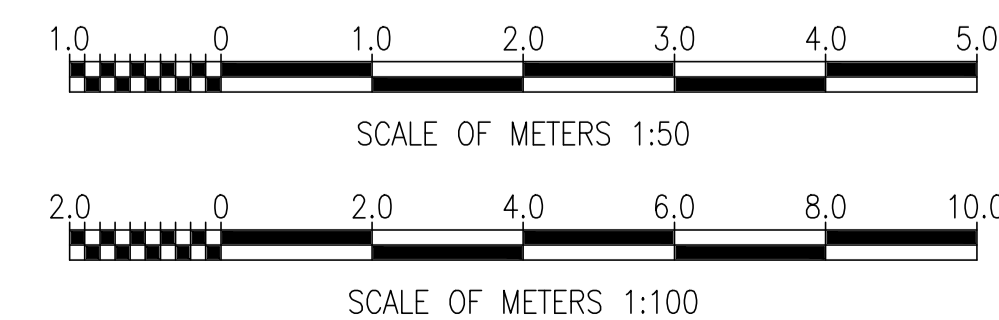
MONORAIL SUPPORTING ARRANGEMENT ON GRID 1 & MIRROR ON GRID 7



SECTION G SCALE- 1:50

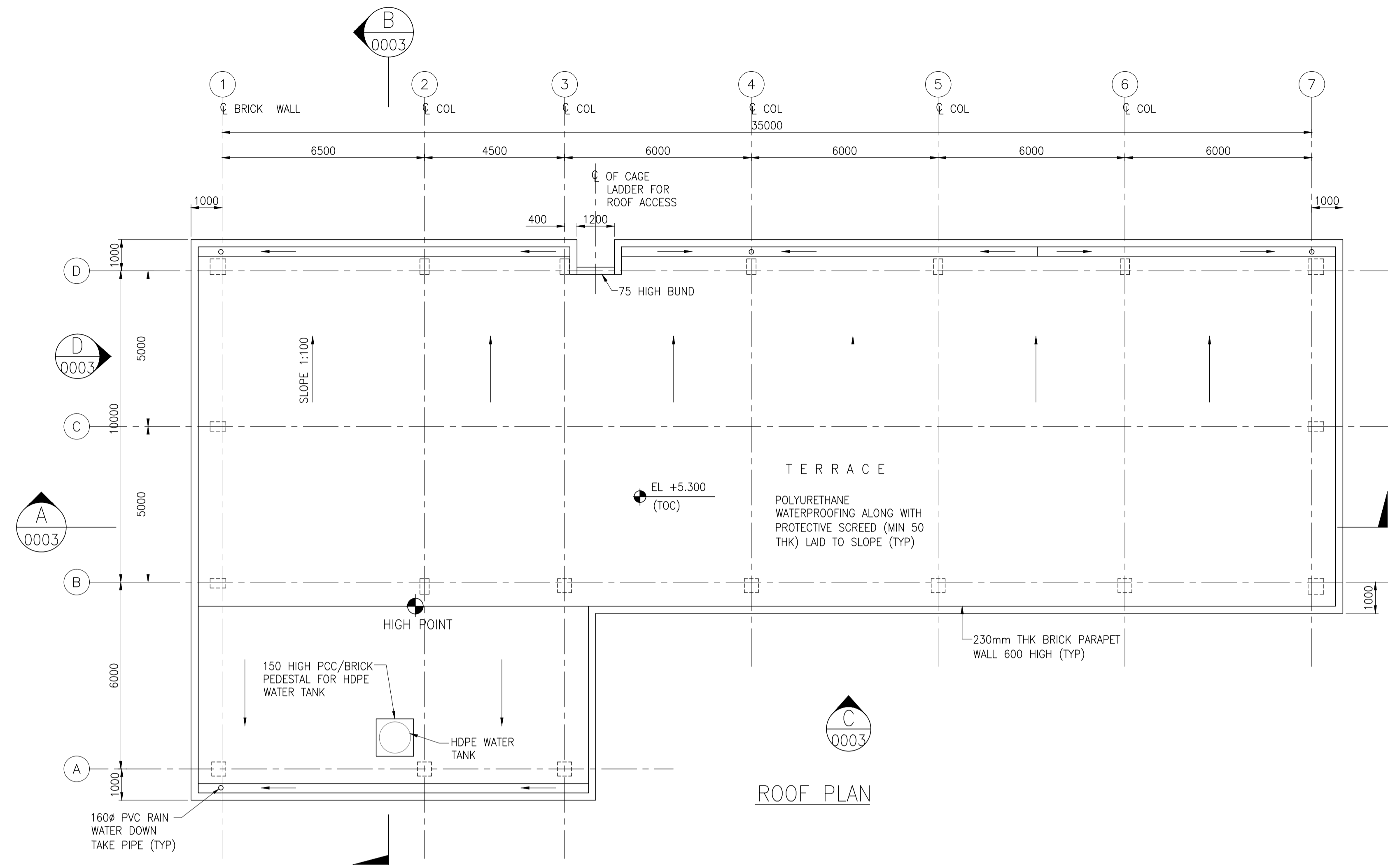


SECTION H SCALE- 1:50





PLANT NORTH



ROOF PLAN

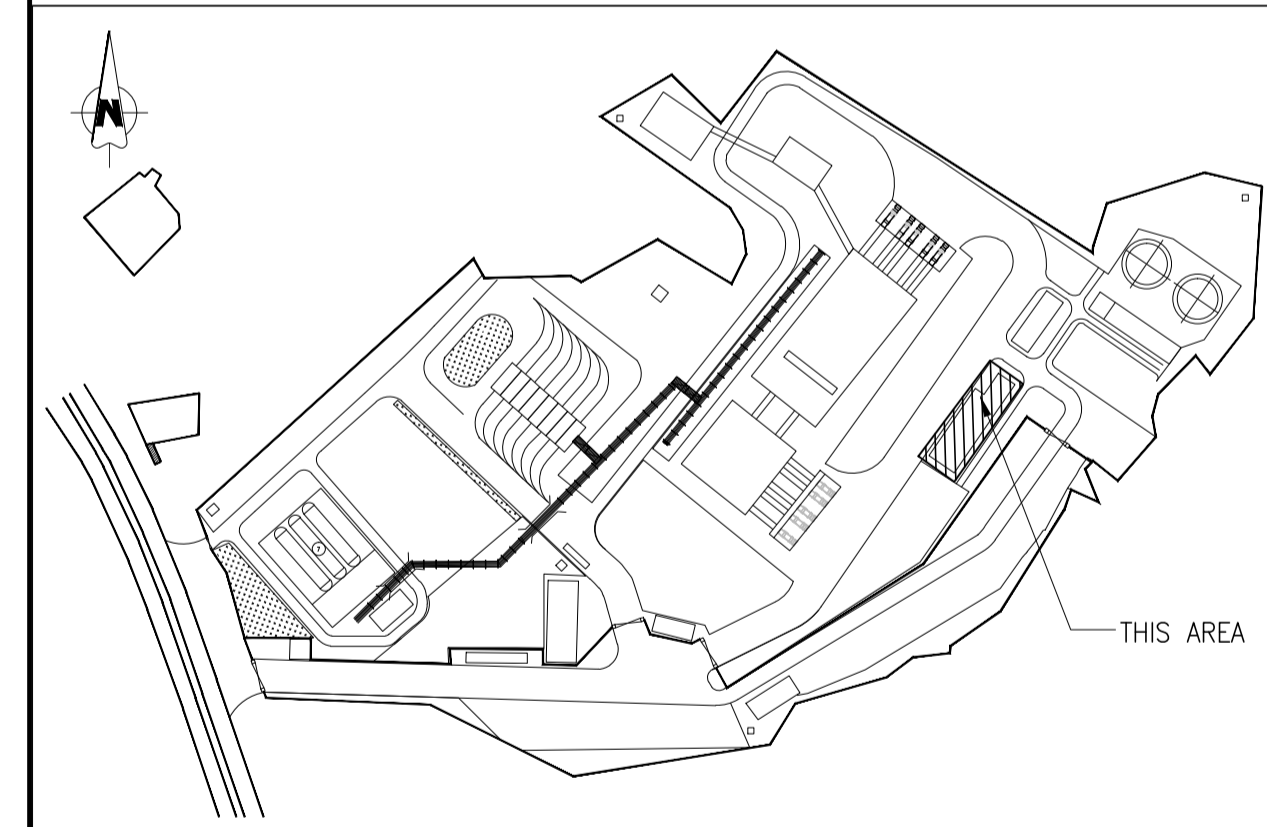
GENERAL NOTES :

- FOR NOTES REFER DRAWING NO. 11387-02-AR-DRD-0001.
- 1 NO. WHITE COLOURED MULTILAYERED HDPE WATER TANK OF 500 LITRES CAPACITY SHALL BE PROVIDED ON ROOF.

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.
2	ARCHITECTURAL SECTIONS & ELEVATIONS	11387-02-AR-DRD-0003
1	ARCHITECTURAL GROUND FLOOR PLAN	11387-02-AR-DRD-0001

KEY PLAN



SCALE - 1:100

REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	01 JULY 2019	ISSUED FOR REVIEW	PK	ND	SD/SK

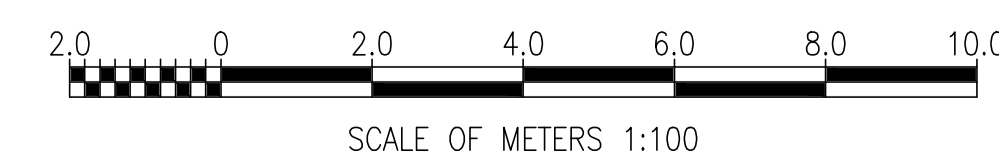
DRG.NO :- 11387-02-AR-DRD-0002 SHT 1 OF 1

TITLE :

MCC ROOM ARCHITECTURAL ROOF PLAN

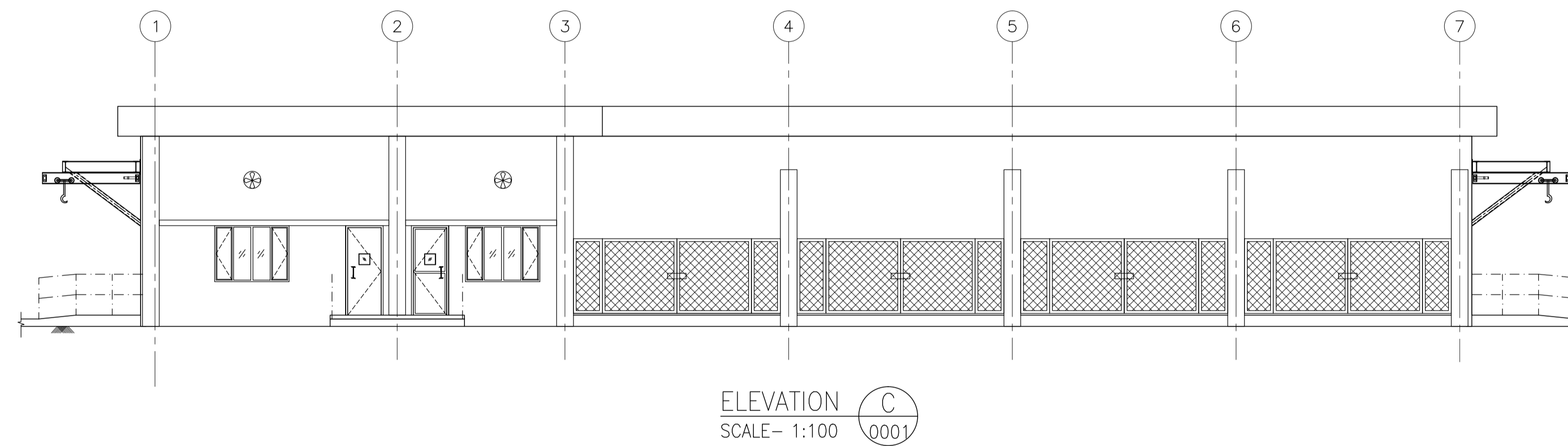
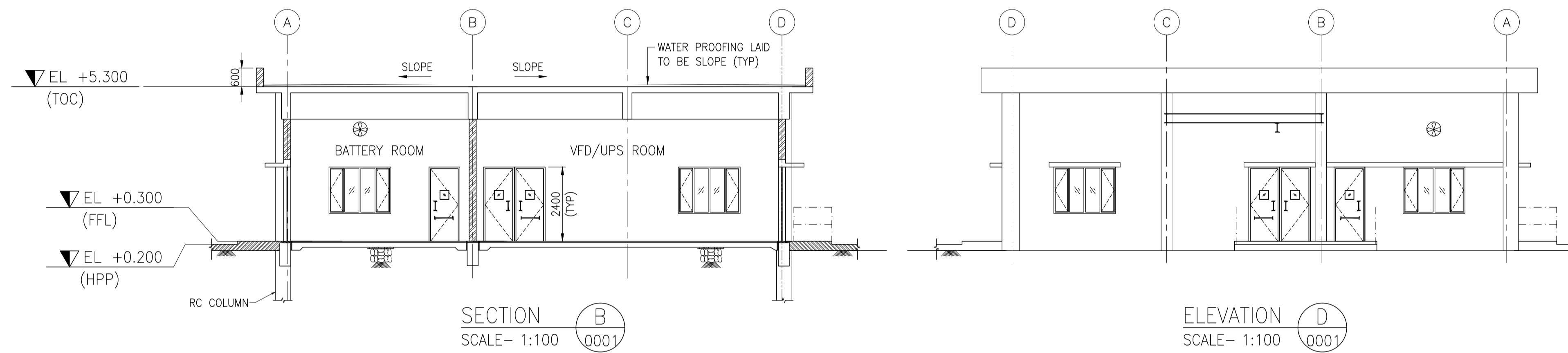
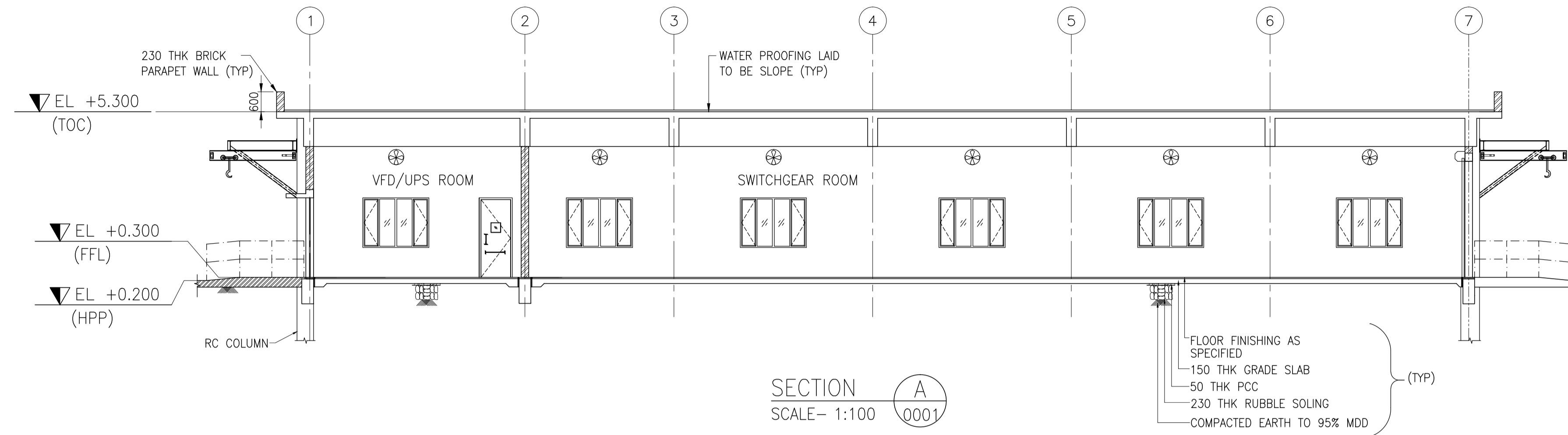
PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

CONSULTANT :



GENERAL NOTES :

- FOR NOTES REFER DRAWING NO. 11387-02-AR-DRD-0001.



REFERENCE DRAWING

2	ARCHITECTURAL ROOF PLAN	11387-02-AR-DRD-0002
1	ARCHITECTURAL GROUND FLOOR PLAN	11387-02-AR-DRD-0001
S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN

SCALE - 1:100

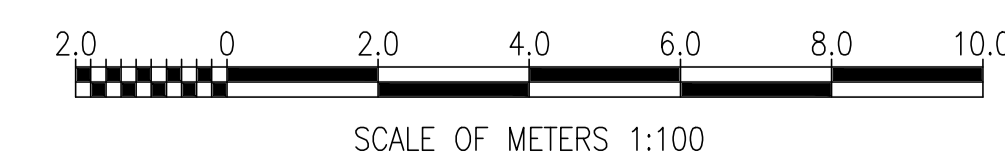
A	01 JULY 2019	ISSUED FOR REVIEW	PK	ND	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.

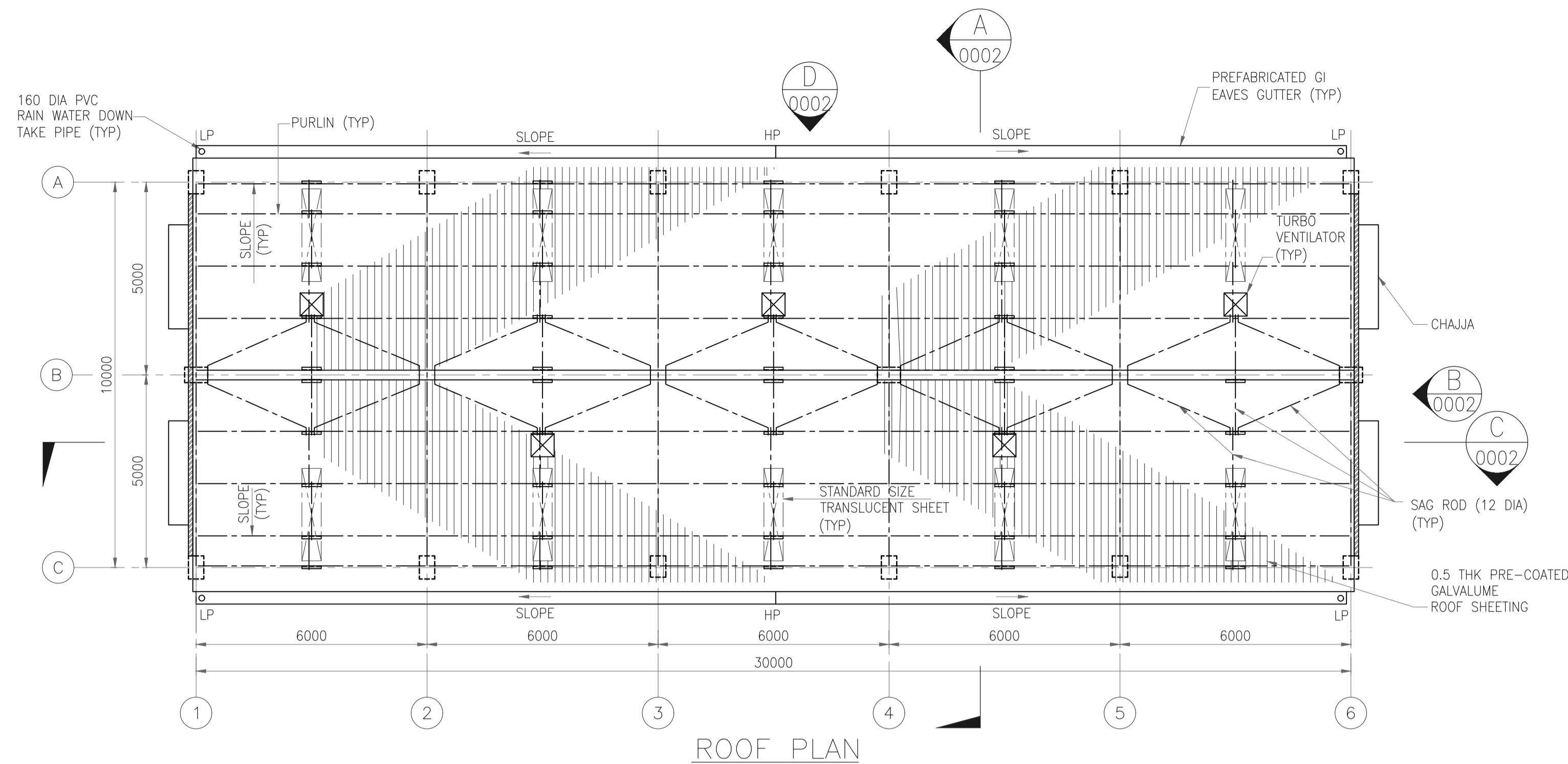
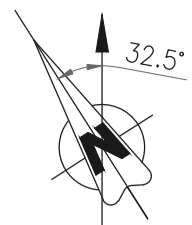
DRG.NO :- 11387-02-AR-DRD-0003 SHT 1 OF 1

TITLE :
**MCC ROOM
ARCHITECTURAL SECTIONS & ELEVATIONS**

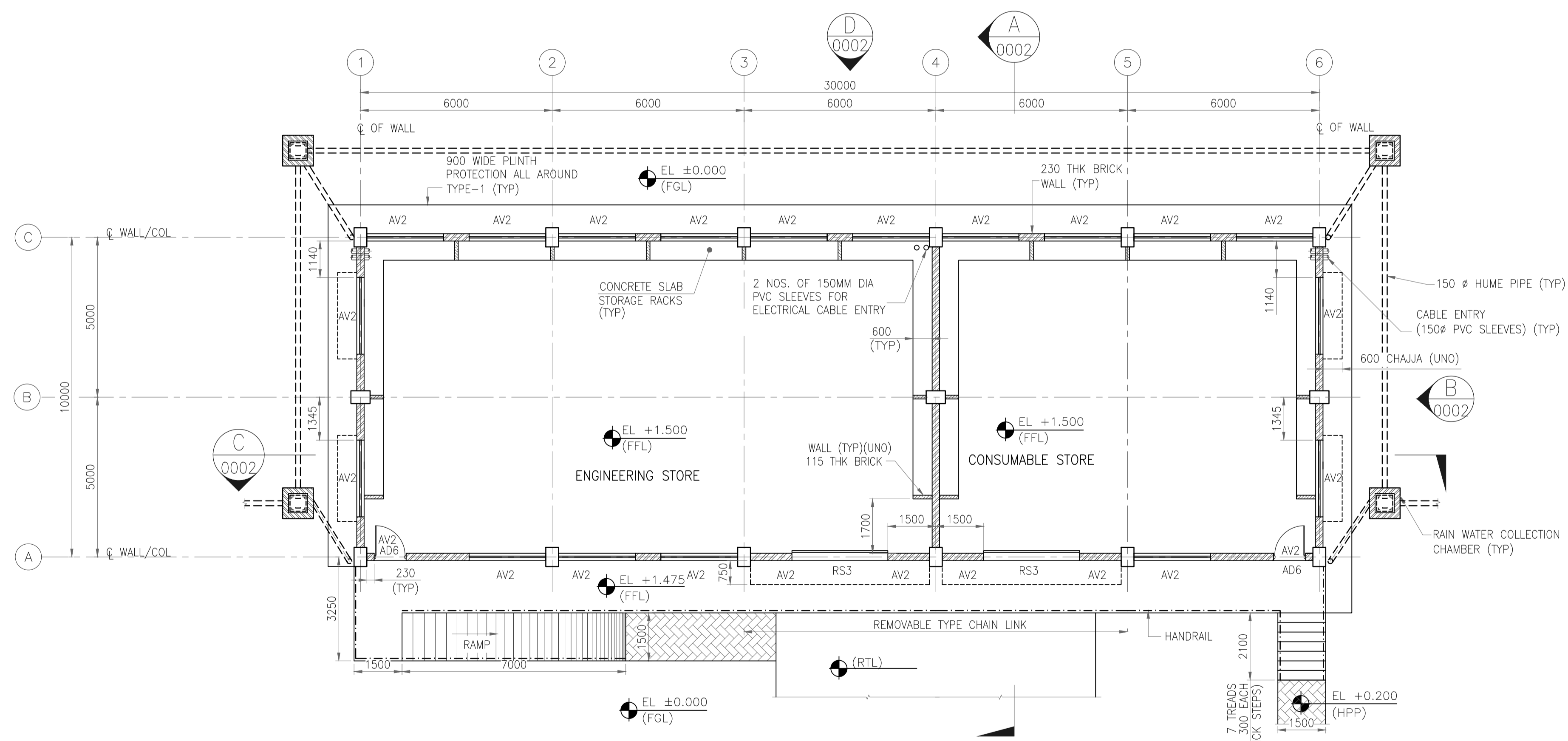
PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

CONSULTANT :





ROOF PLAN



GROUND FLOOR PLAN

GENERAL NOTES :

- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
- FGL EL 0.000 CORRESPONDS TO FINISHED GROUND LEVEL.
- ALL CHAJJA SHALL HAVE DRIP MOULD & GROOVES UNDERNEATH ALL ALONG THE PERIPHERIES.
- THE CONTRACTOR SHALL CHECK THE ACTUAL OPENING SIZES AT SITE, THE NUMBERS OF DOOR & WINDOW ETC. IN THE DWG BEFORE FABRICATING/PROCURING THE SAME.
- FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER ELECTRICAL EQUIPMENT LAYOUT.
- ANTI TERMITE TREATMENT SHALL BE PROVIDED UNDER FLOOR AND JUNCTION OF WALLS AND FLOOR.
- ONLY MAJOR PENETRATIONS ARE INDICATIVELY SHOWN. CONTRACTOR TO DETAIL ALL REQUIRED ROOF AND WALL PENETRATIONS.
- INTERNAL PLASTER SHALL BE 12 MM THICK CEMENT PLASTER 1:4 (1 CEMENT : 4 SAND) WITH ACRYLIC WASHABLE DISTEMPER.
- EXTERNAL PLASTER SHALL BE 20 MM THICK CEMENT MORTAR (12MM CEMENT MORTAR 1:4 (1 CEMENT, 4 SAND) + 8 MM THICK CEMENT MORTAR 1:4 USING WATER PROOFING COMPOUND WITH WATER PROOF CEMENT PAINT.
- CABLE ENTRY SHOWN ARE INDICATIVE, REFER RESPECTIVE CABLE LAYOUT DRAWINGS FOR LOCATION & DETAILS.
- FLOOR FINISH SHALL BE 50 THK GRANULITHIC FLOOR LAID MONOLITHIC OVER BASE CONCRETE. (35-38MM UNDER-BED AND 12-15MM TOPPING MIXED WITH NON-METALLIC FLOOR HARDENER AS PER MANUFACTURE SPECIFICATION.)
- VENTILATORS AV2 NOT SHOWN IN PLANE AT DOOR/ROLLING SHUTTER LOCATION FOR CLARITY, REFER ELEVATION.
- OPENING SHOWN FOR TURBO VENTILATOR IS INDICATIVE ONLY. CONTRACTOR TO FIX THE TURBO VENTILATOR SUITABLY TO AVOID FOULING WITH PURLINS & SAG ROD.

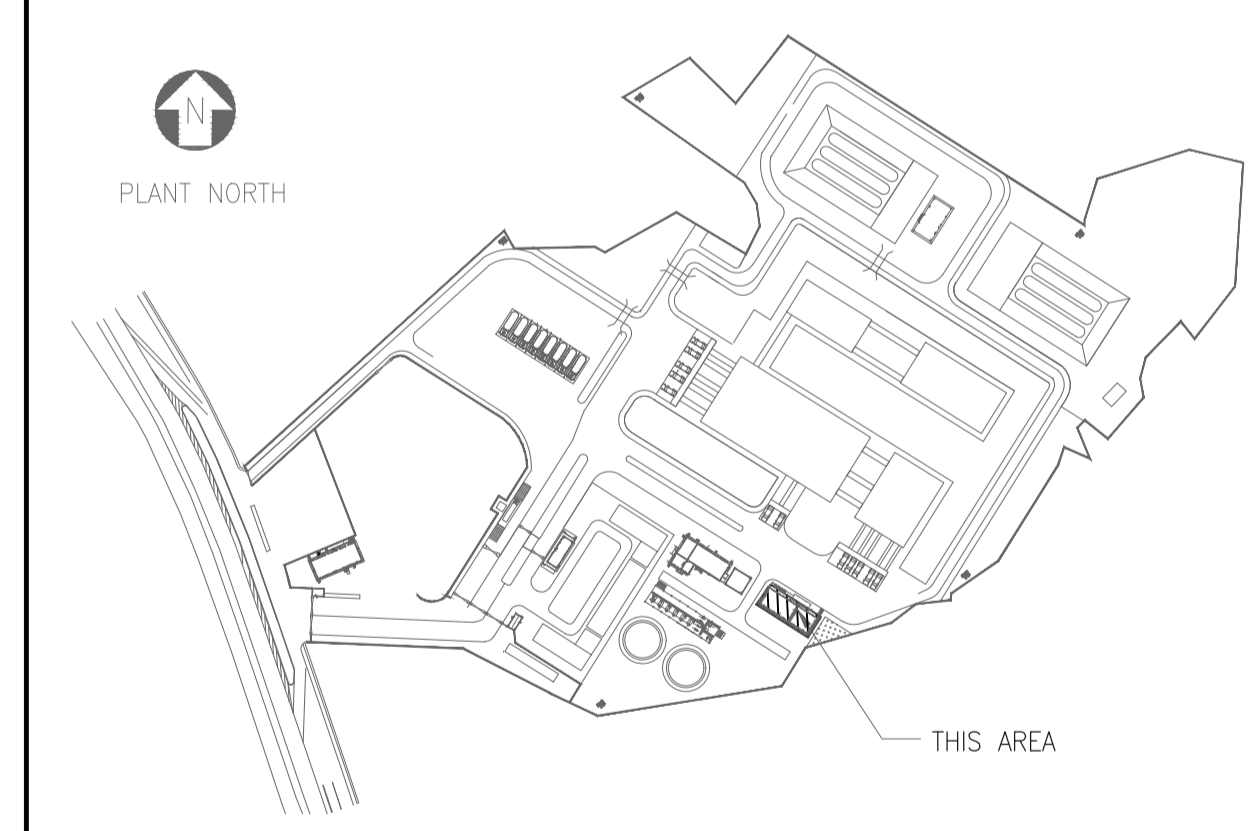
LEGENDS

- EL - ELEVATION
- FFL - FINISHED FLOOR LEVEL
- FGL - FINISHED GROUND LEVEL
- RTL - ROAD TOP LEVEL
- TOC - TOP OF CONCRETE
- 230 RHK BRICK WALL
- 115 THK BRICK WALL

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.
2	ARCHITECTURAL SECTIONS & ELEVATIONS	11387-03-AR-DRD-0002
1	PLOT PLAN	11387-12-PI-PLN-003

KEY PLAN



SCALE - 1:100

REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
0	30 AUG 2019	ISSUED FOR CONSTRUCTION	VK	ND	SD/SK

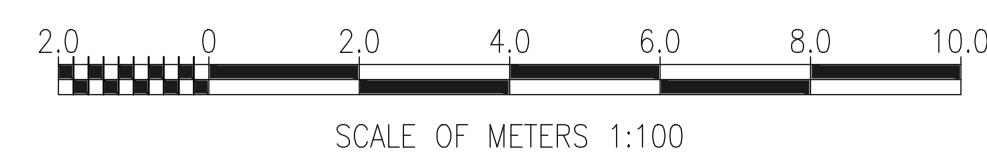
DRG.NO :- 11387-03-AR-DRD-0001 SHT 1 OF 1

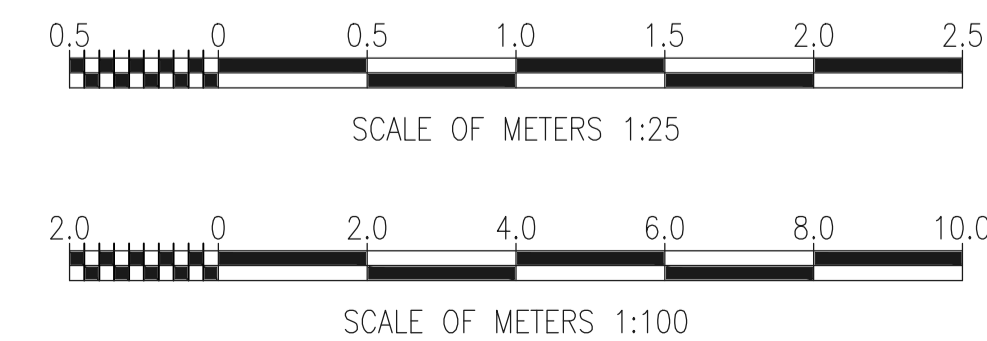
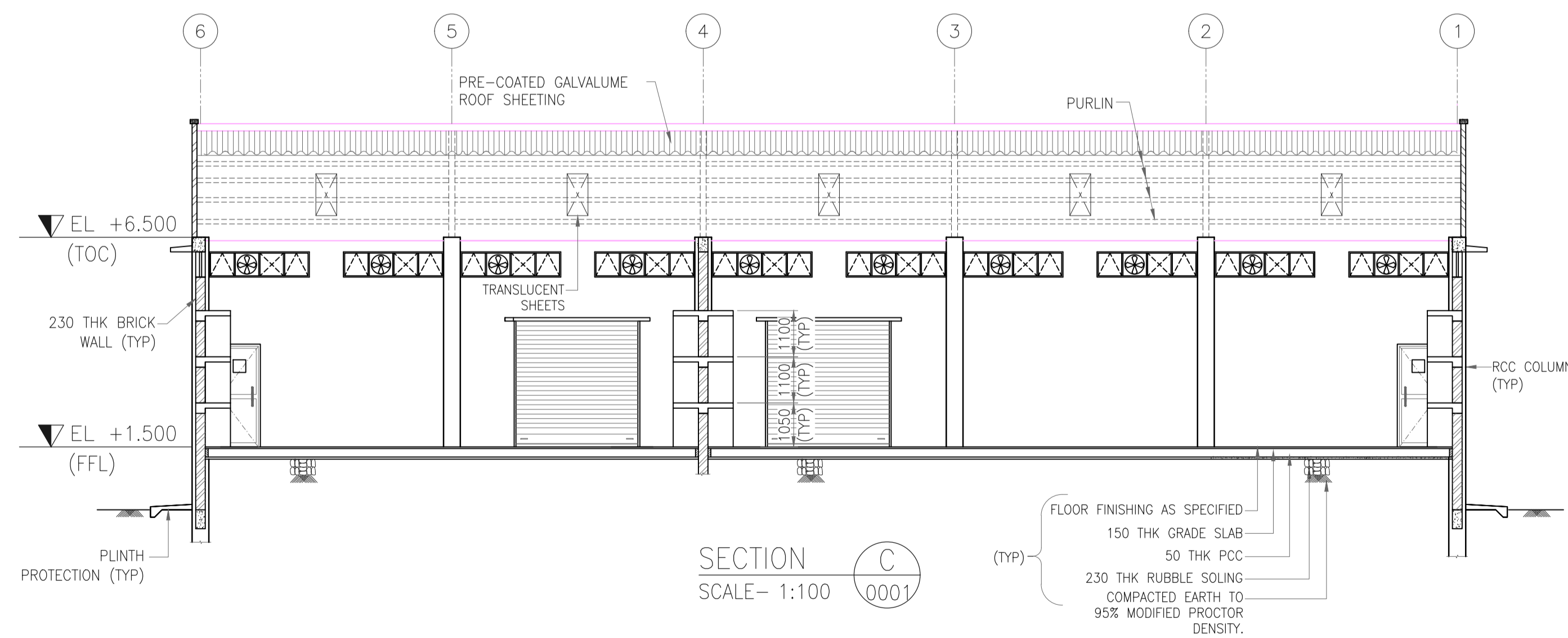
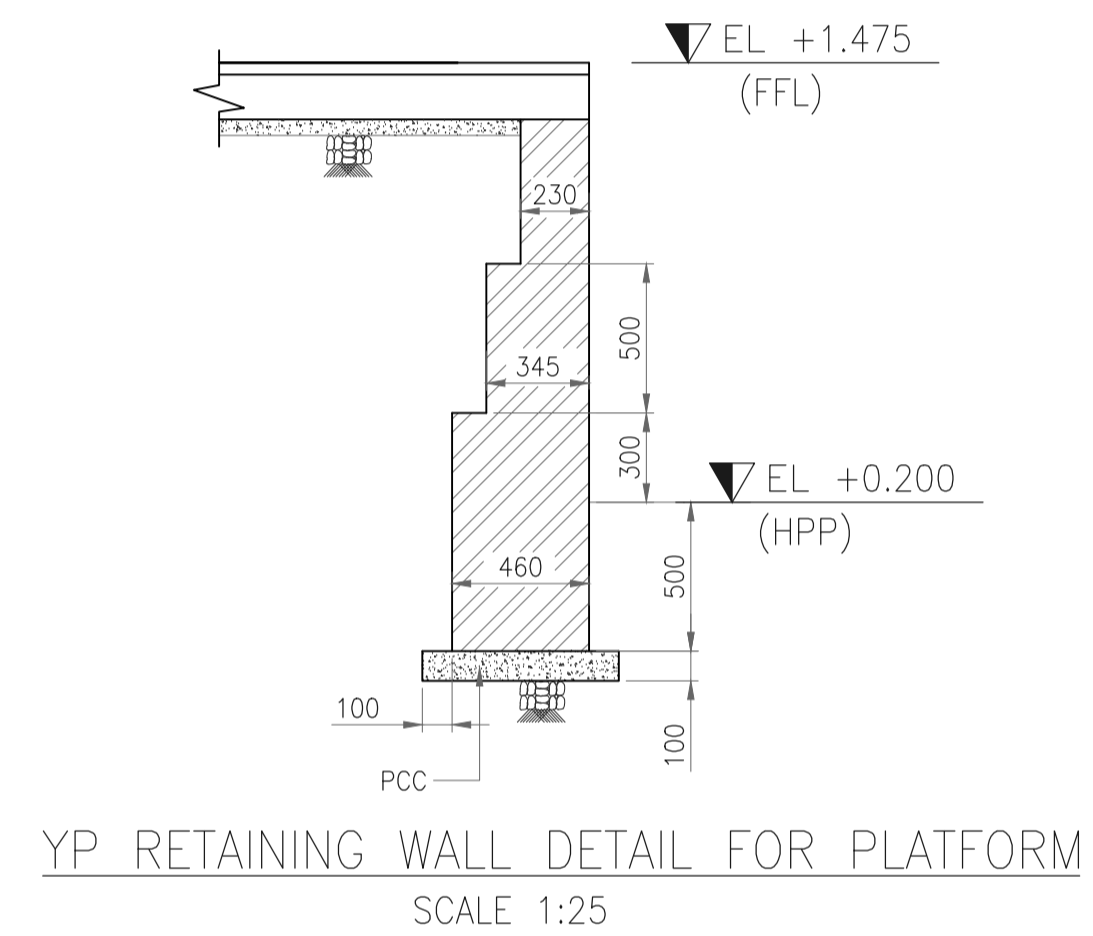
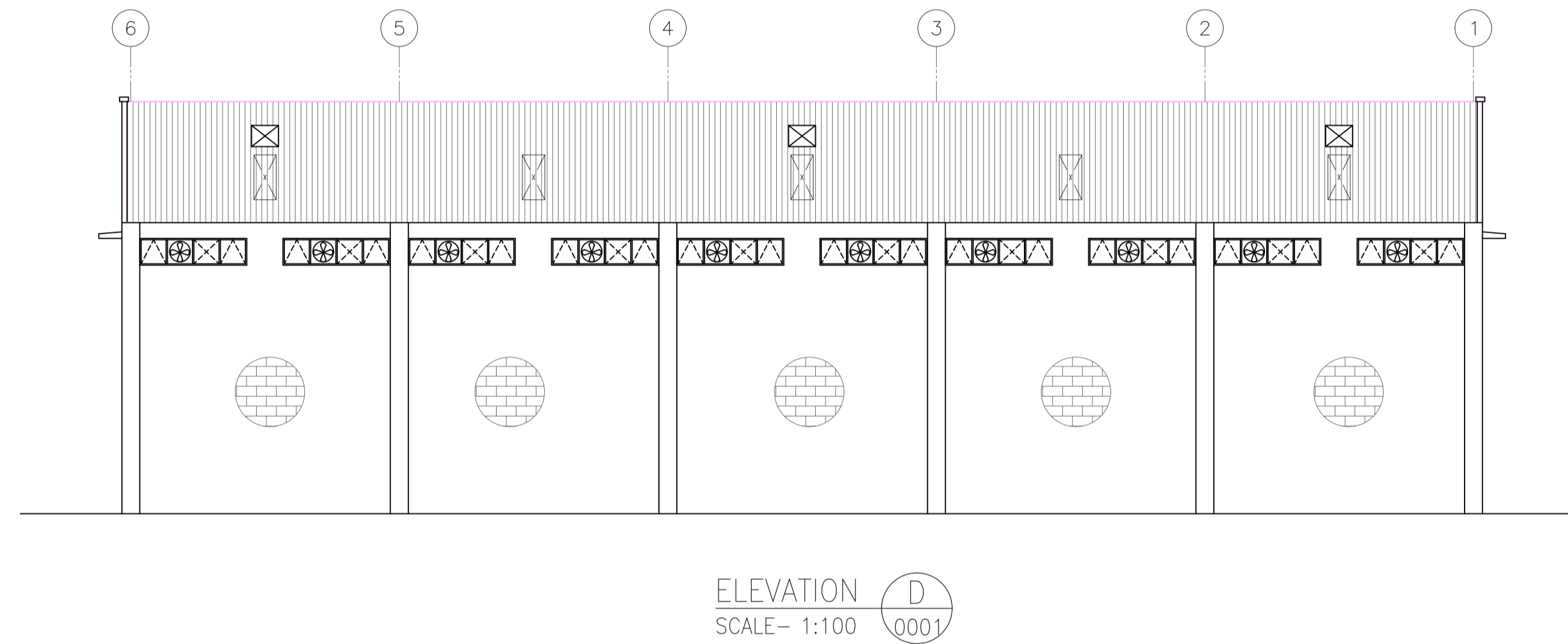
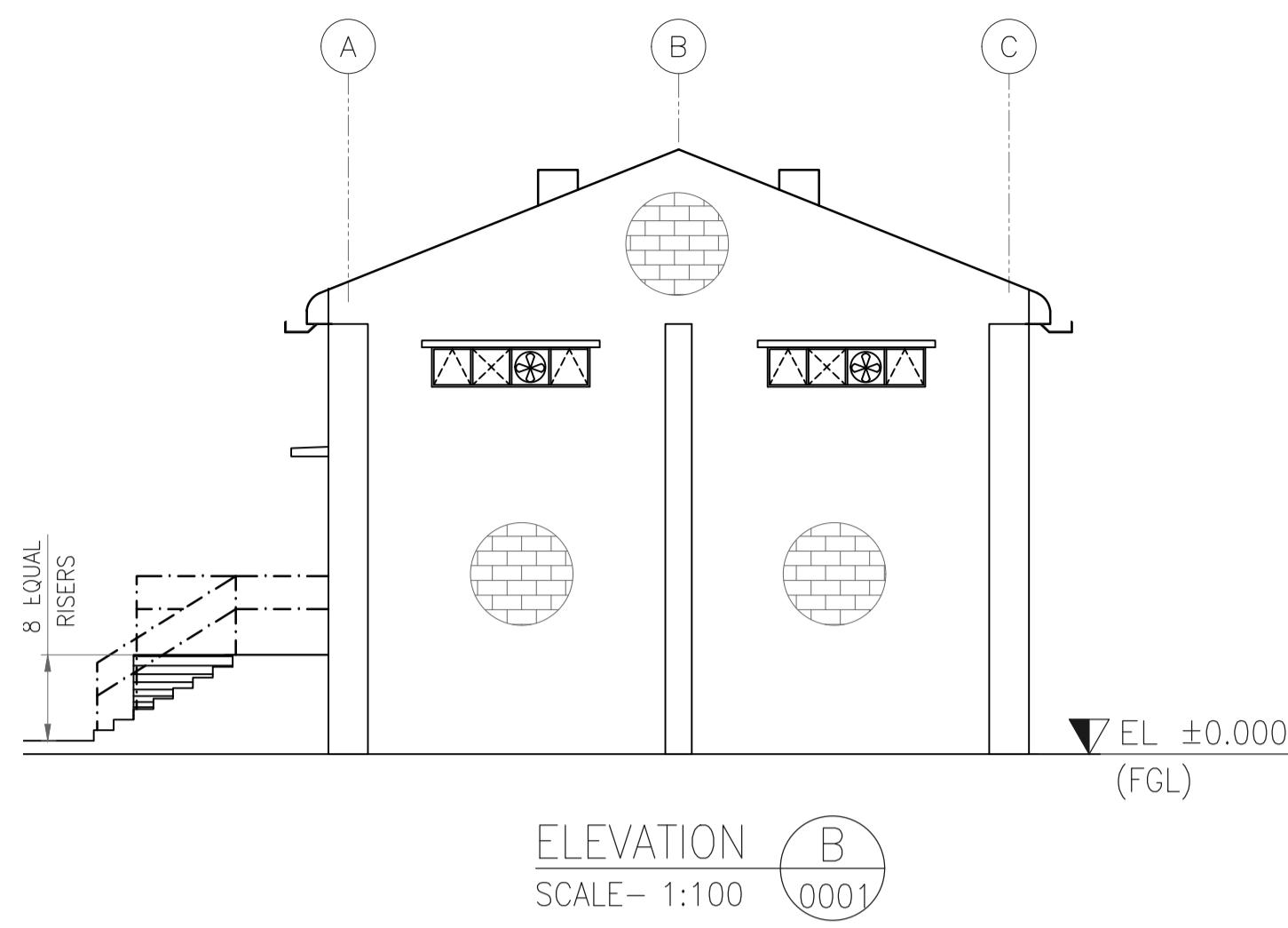
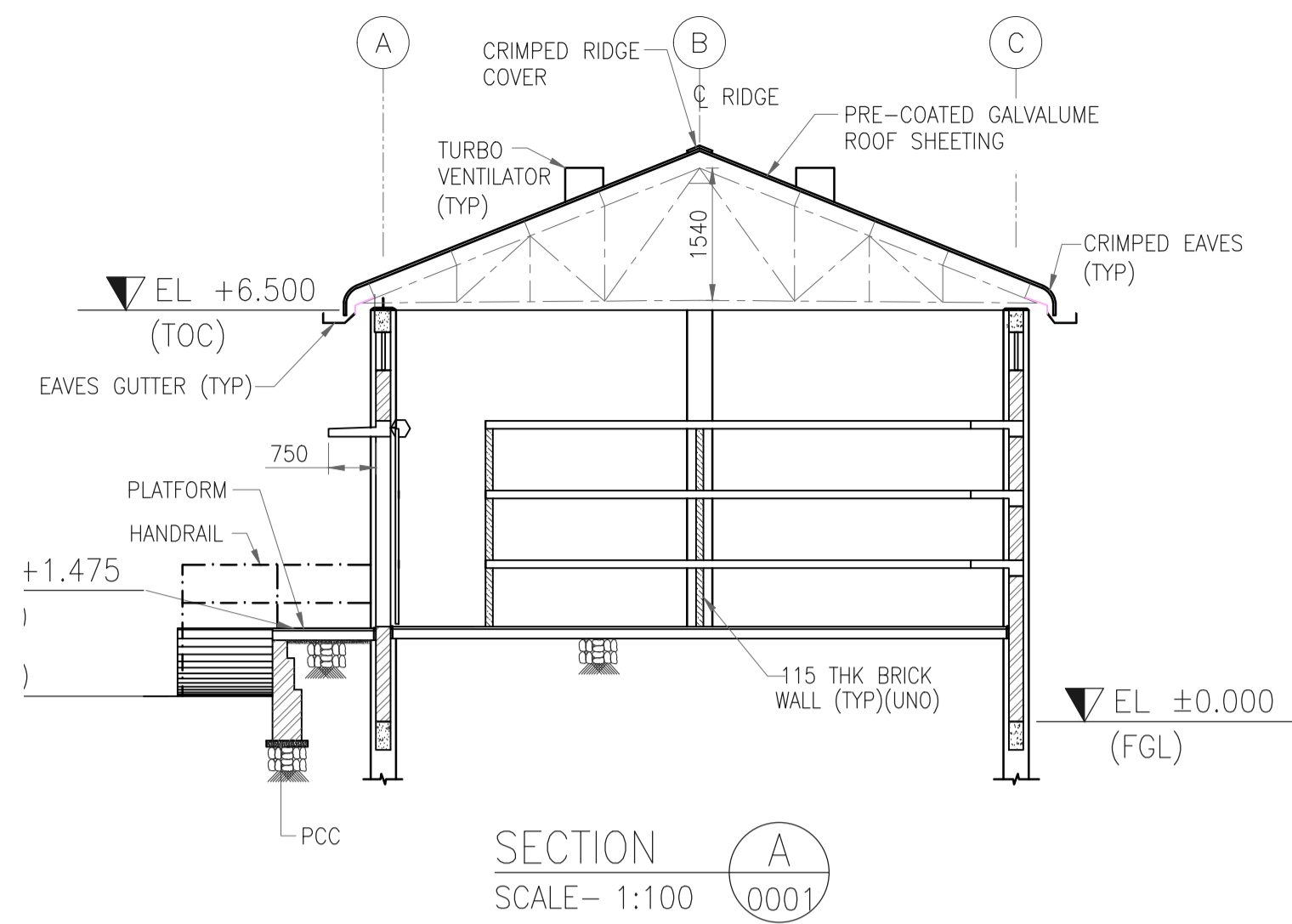
TITLE :

WAREHOUSE ARCHITECTURAL PLANS

PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :





GENERAL NOTES :

- FOR NOTES REFER DRAWING NO. 11387-03-AR-DRD-0001.

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.
2	TRUSS LAYOUT	11387-03-AR-DRD-0002
1	ARCHITECTURAL PLANS	11387-03-AR-DRD-0001

KEY PLAN

SCALE - 1:100

REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
0	30 AUG 2019	ISSUED FOR CONSTRUCTION	VK	ND	SD/SK

DRG.NO :- 11387-03-AR-DRD-0002 SHT 1 OF 1

TITLE :
**WAREHOUSE
ARCHITECTURAL SECTIONS & ELEVATIONS**

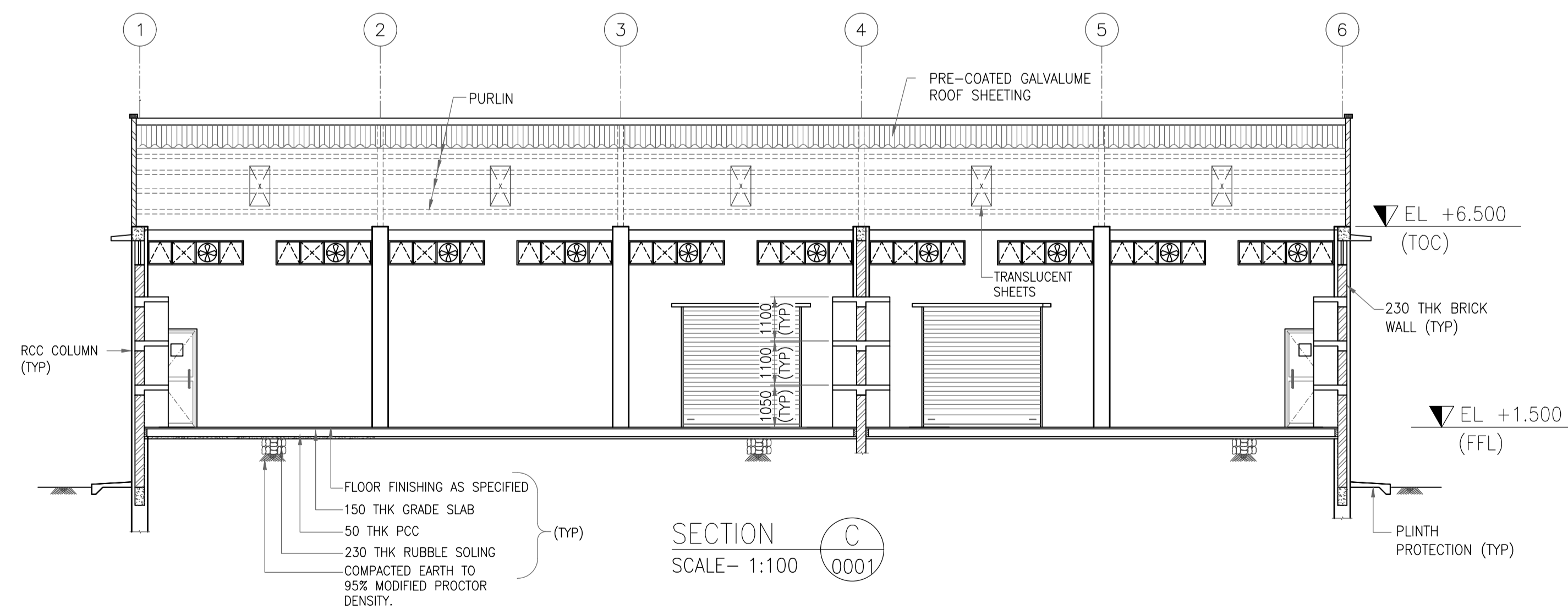
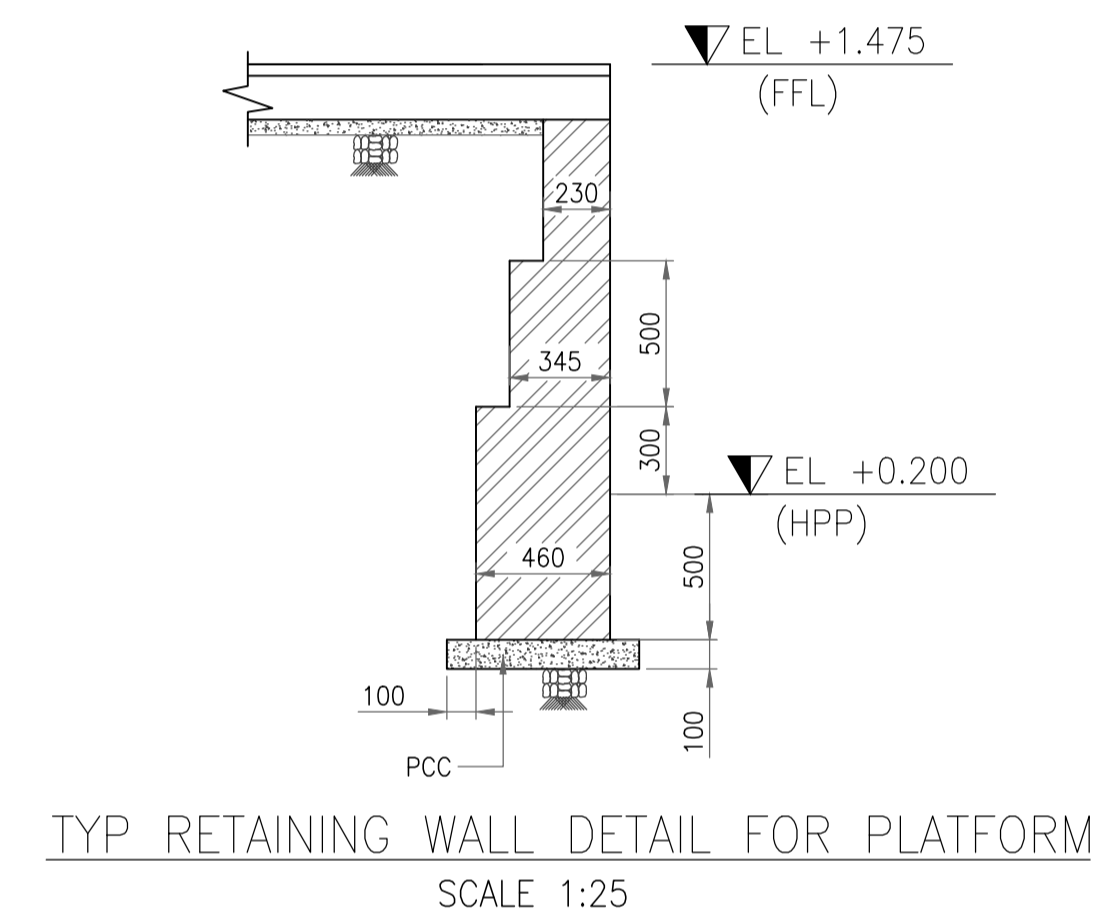
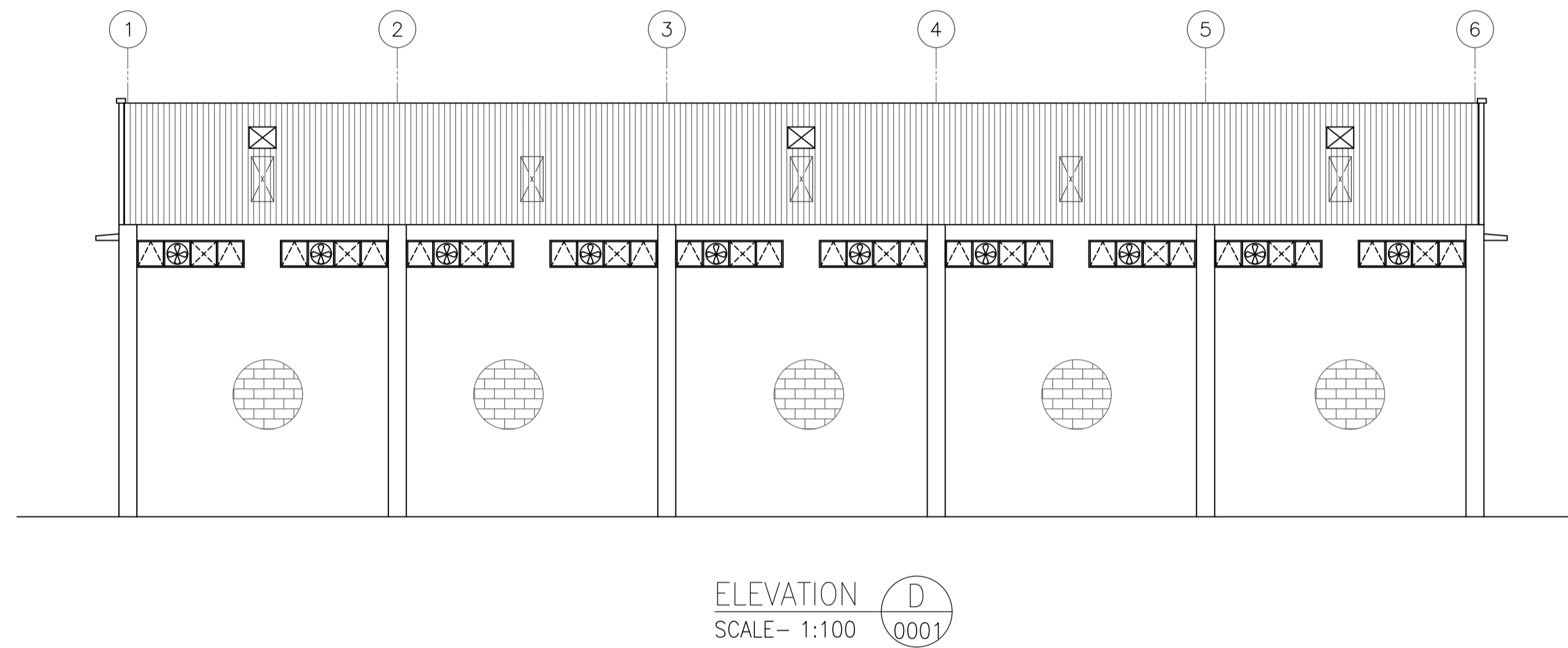
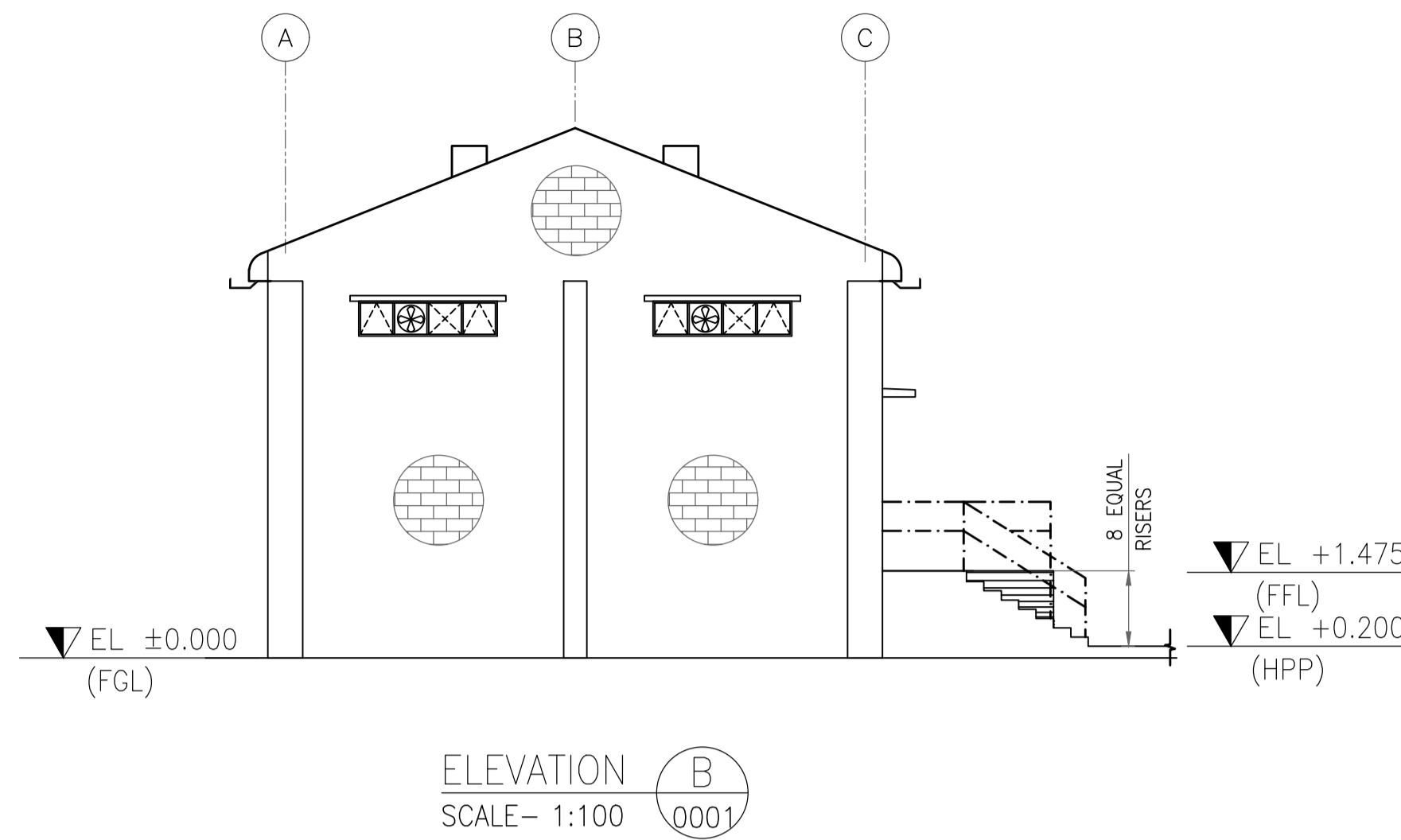
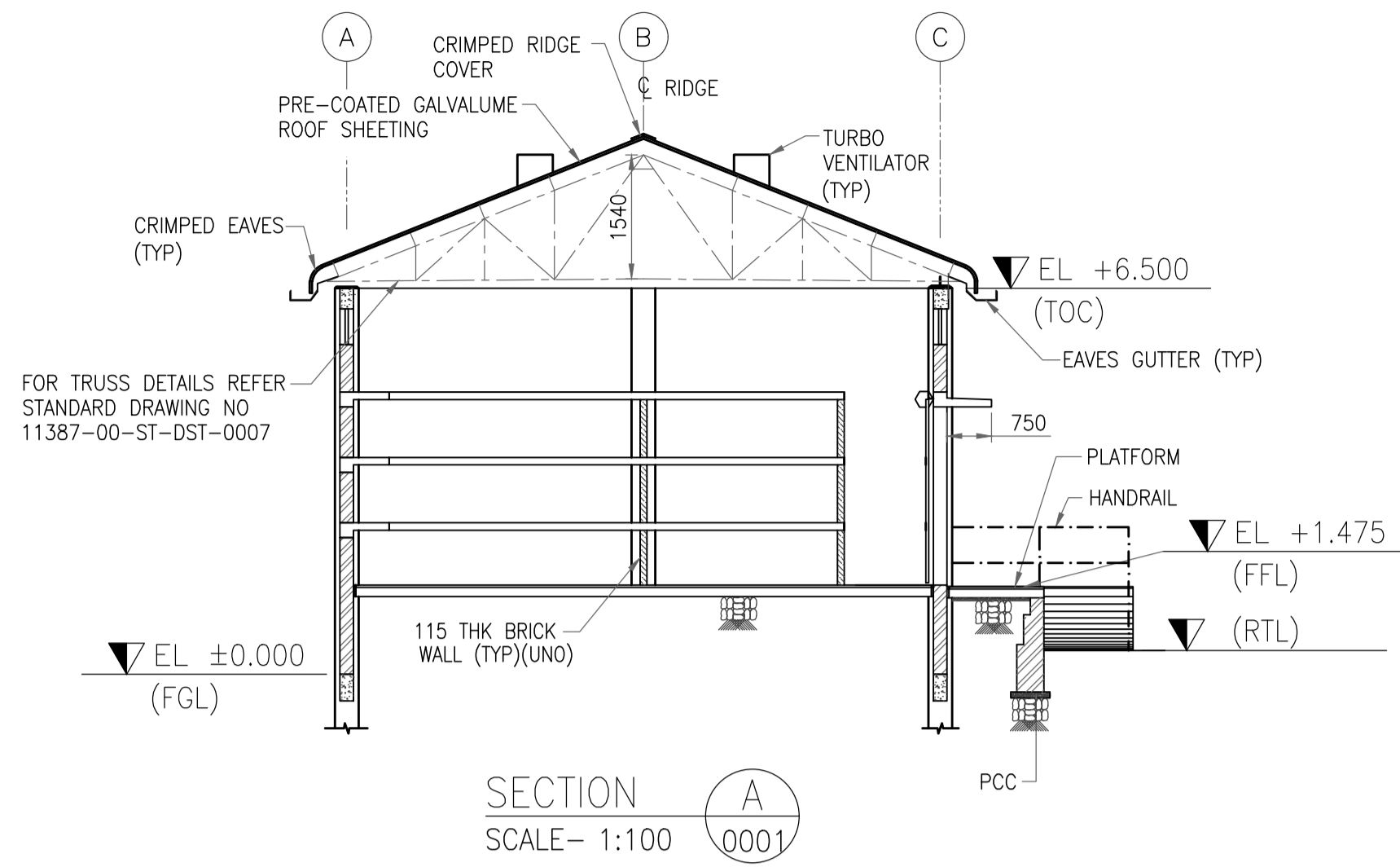
PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :



GENERAL NOTES :

- FOR NOTES REFER DRAWING NO. 11387-03-AR-DRD-0001.



REFERENCE DRAWING	
3	
2	
1	ARCHITECTURAL PLANS 11387-03-AR-DRD-0001
S.NO.	REFERENCE DRAWING DRAWING NO.

KEY PLAN	

SCALE - 1:100					
A	14 JUNE 2019	ISSUED FOR REVIEW	VK	ND	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
DRG.NO :- 11387-03-AR-DRD-0002					SHT 1 OF 1

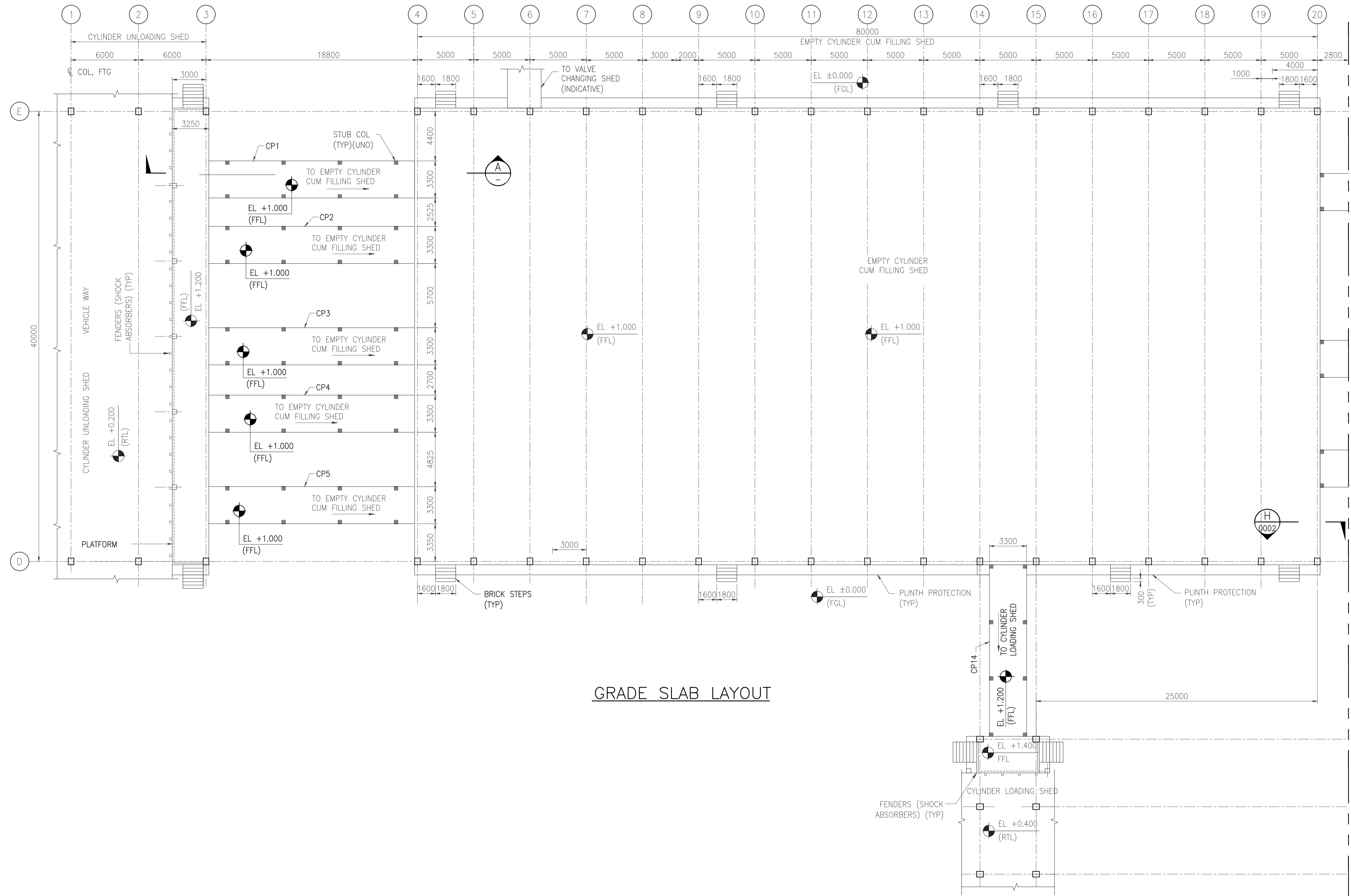
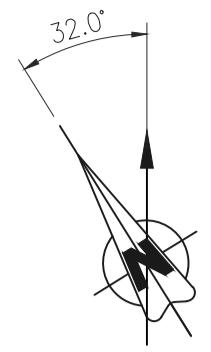
TITLE :
**WAREHOUSE
ARCHITECTURAL SECTIONS & ELEVATIONS**

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

CONSULTANT :



HINDUSTAN PETROLEUM CORPORATION LTD.



GRADE SLAB LAYOUT

GENERAL NOTES :

- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & CO-ORDINATES ARE IN METERS.
- FGL EL 0.000 CORRESPONDS TO FINISHED GROUND LEVEL.
- FOR TYPICAL GENERAL NOTES REFER DRAWING NO. 11387-00-CI-DST-0004.
- FLOOR FINISH SHALL BE 20 MM THICK ANTISTATIC & ELECTRICALLY CONDUCTIVE MASTIC FLOORING CONFIRMING TO IS : 8374 & AS DIRECTED BY THE ENGINEER-IN-CHARGE.
- FENDERS (SHOCK ABSORBERS) SHALL BE LOCATED SUITABLY AT SITE AS PER INSTRUCTION OF ENGINEER IN CHARGE.

LEGENDS

TOC - TOP OF CONCRETE	COL - COLUMN
RTL - ROAD TOP LEVEL	T - TOP
FGL - FINISHED GROUND LEVEL	B - BOTTOM
TYP - TYPICAL	B/W - BOTH WAYES
THK - THICKNESS	PDL - PEDESTAL
CP - CONNECTING PLATFORM	SPS - SPECIAL PIPE SUPPORT
▣ - STUB COL	
▨ - BRICK WALL	

HOLD LIST

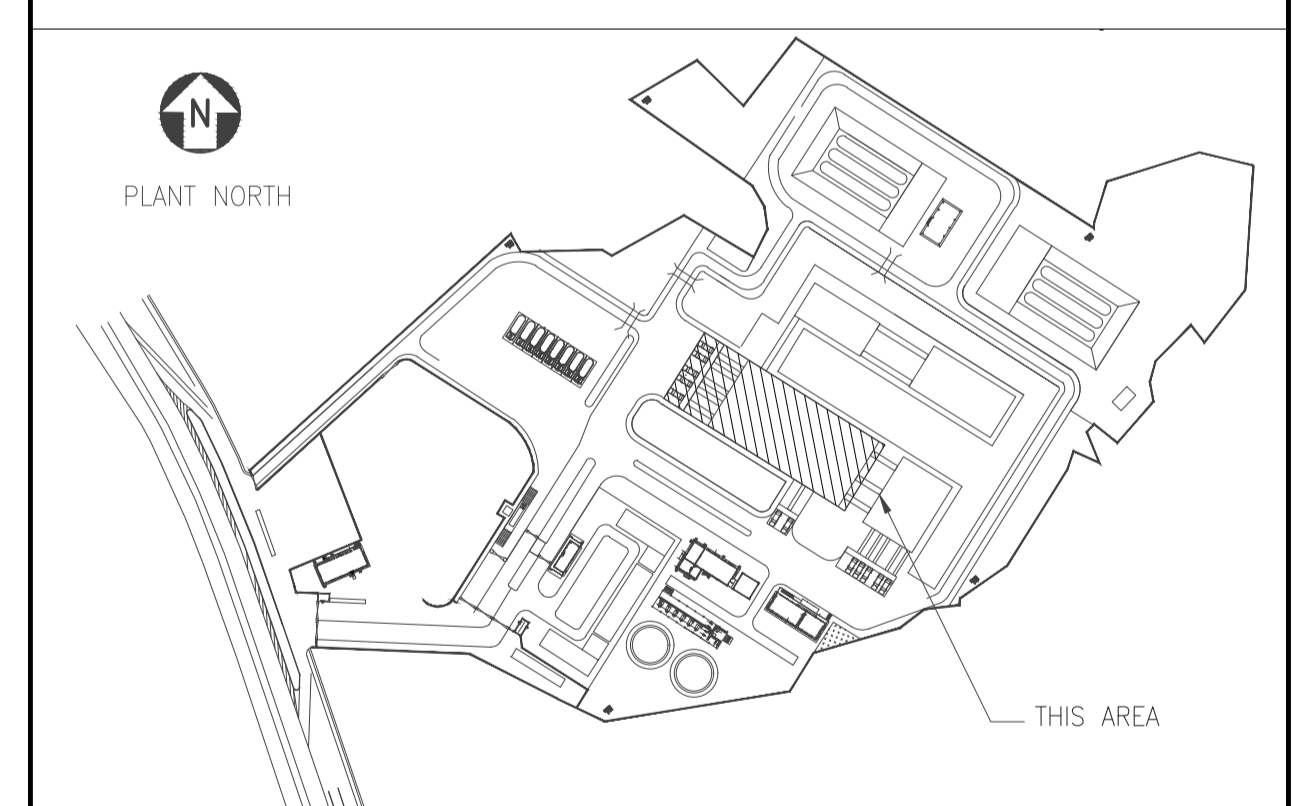
- LEVELS & CO-ORDINATES
- INLINE TEST BATH

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.
7	TIE BEAM LAYOUT & DETAILS	11387-04-CI-LAY-0011
6	STRUCTURAL LAYOUT & DETAILS FOR PLATFORM	11387-04-CI-LAY-0010
5	PLINTH BEAM LAYOUT & DETAILS	11387-04-CI-LAY-0008
4	STRUCTURAL LAYOUT & DETAILS	11387-04-CI-LAY-0006
3	FOUNDATION LAYOUT	11387-04-CI-LAY-0001
2	GENERAL NOTES - CONCRETE WORK	11387-00-CI-DST-0004
1	PLOT PLAN	11387-12-PI-PLN-0003

S.NO.	REFERENCE DRAWING	DRAWING NO.
-------	-------------------	-------------

KEY PLAN



SCALE - 1:200

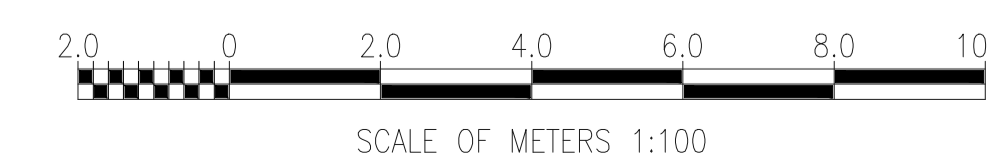
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	06 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK

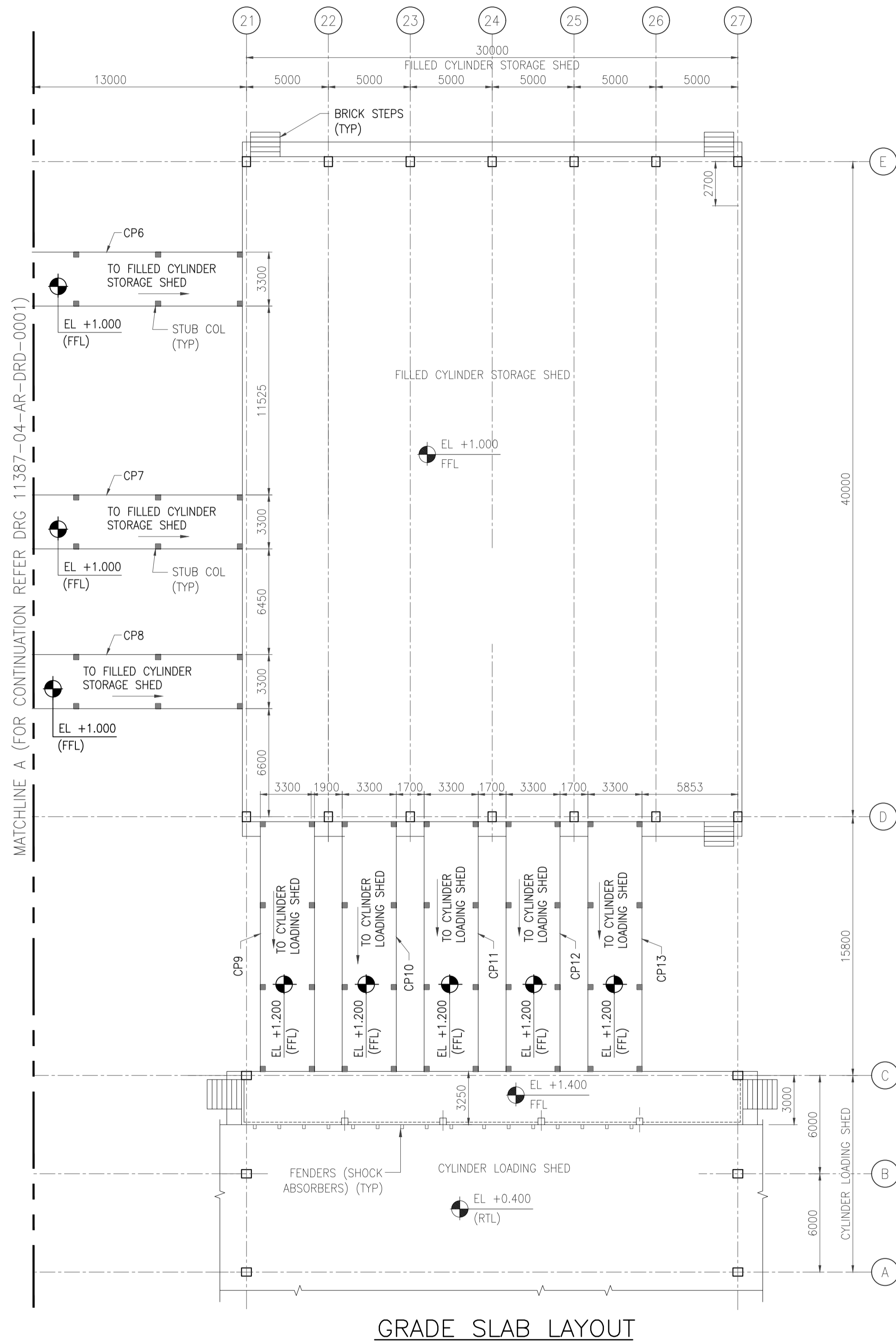
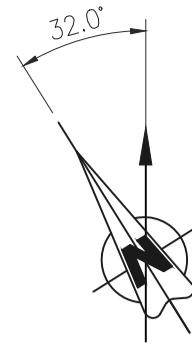
DRG.NO :- 11387-04-AR-DRD-0001 SHT 1 OF 1

TITLE :
EMPTY CYLINDER & FILLED CYLINDER SHED ARCHITECTURAL GROUND FLOOR PLANS

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC:





GRADE SLAB LAYOUT

GENERAL NOTES :

- FOR NOTES & LEGENDS REFER DWG NO. 11387-04-CI-LAY-0003.

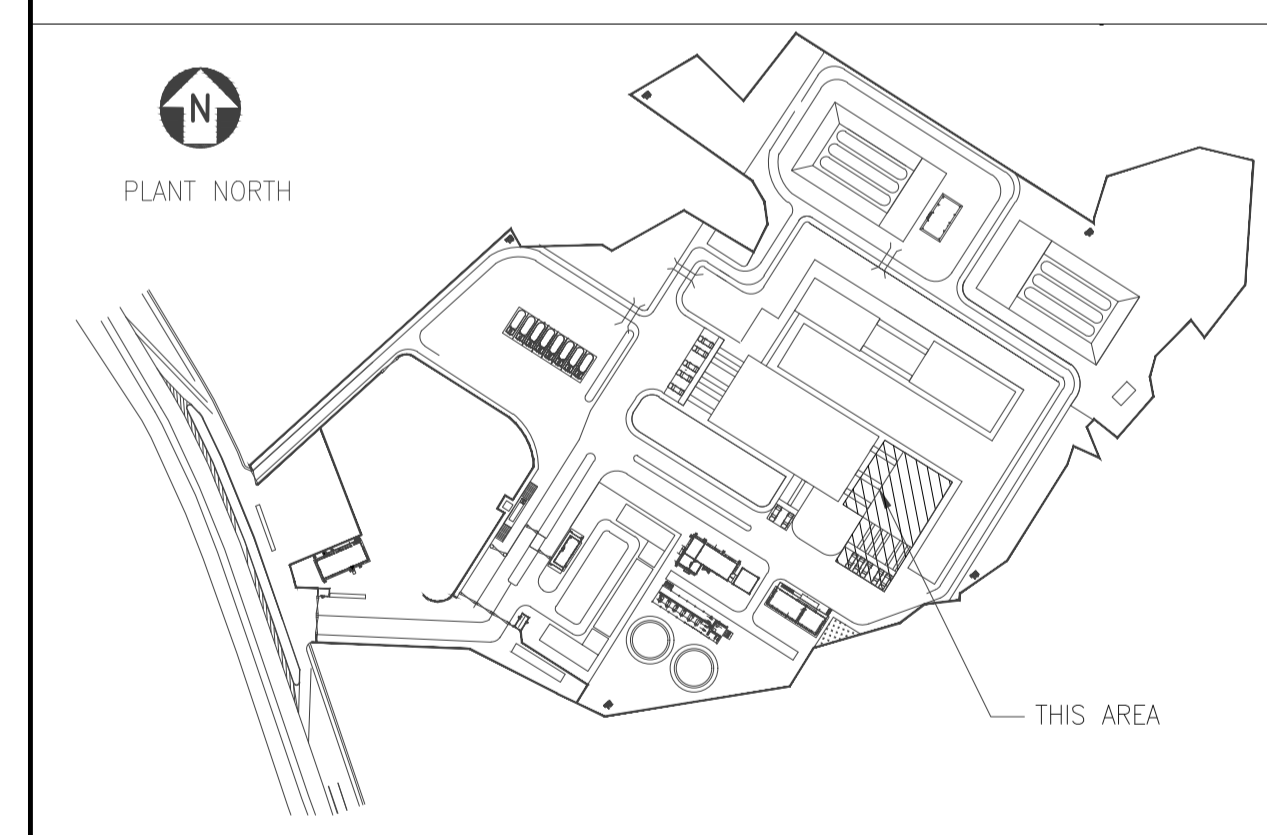
HOLD LIST

- LEVELS & CO-ORDINATES
- INLINE TEST BATH

REFERENCE DRAWING

1	GRADE SLAB LAYOUT	11387-04-CI-LAY-0003
S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN



SCALE - 1:200

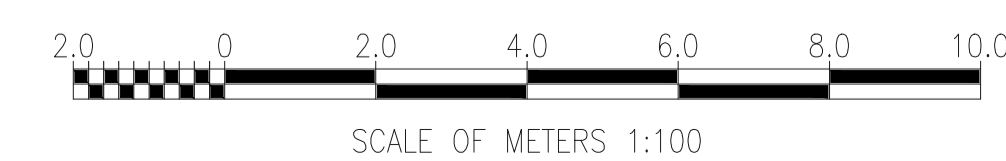
A	06 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.

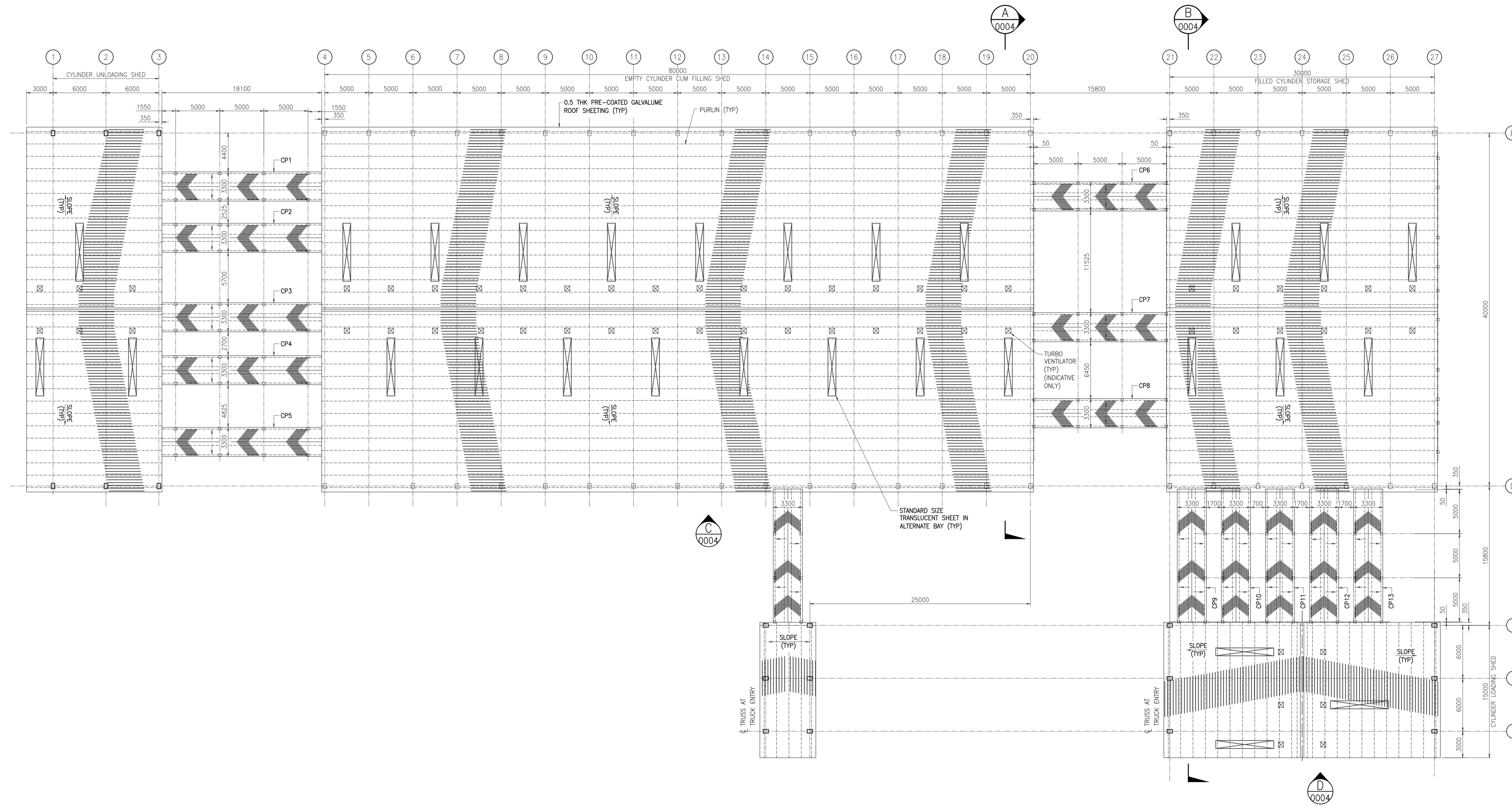
DRG.NO :- 11387-04-AR-DRD-0002 SHT 1 OF 1

TITLE :
**EMPTY CYLINDER & FILLED CYLINDER SHED
ARCHITECTURAL GROUND FLOOR PLANS**

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC:





- GENERAL NOTES :**
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
 2. EL. 0.000 CORRESPONDS TO FINISHED GROUND LEVEL.
 3. ALL GUSSET PLATES SHALL BE MIN 10mm THK UNO.
 4. ALL STRUCTURAL STEEL SECTIONS/PLATES SHALL CONFORM TO IS 2062 E250B AND STRUCTURAL BOLTS SHALL BE OF GRADE 8.8 CONFORMING TO IS 3757.
 5. FOR LEGENDS REFER DRAWING NO. 11387-00-ST-DST-0001.
 6. FIXING OF SHEETING SHALL BE AS PER SPECIFICATION - ROOFING & SIDING WORKS.
 7. TURBO VENTILATORS SHOWN ARE INDICATIVE ONLY.

HOLD LIST

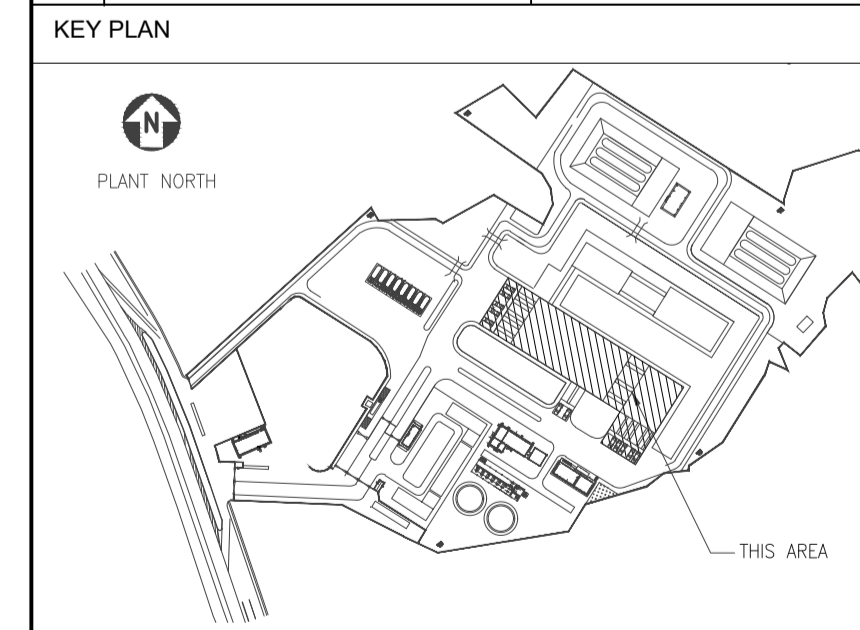
1. FLOOR FINISH LEVELS

LEGENDS

COL = COLUMN
 CP = CONNECTING PLATFORM
 TYP = TYPICAL
 E.P. = ELEVATION
 C.L. = CENTER LINE

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.



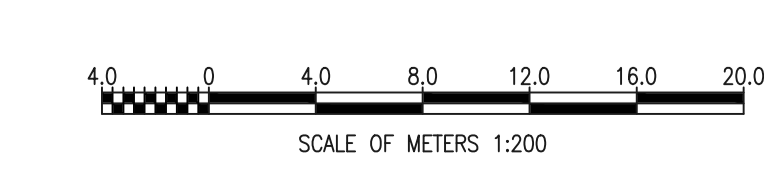
SCALE - 1:200

A	06 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK	APPD.

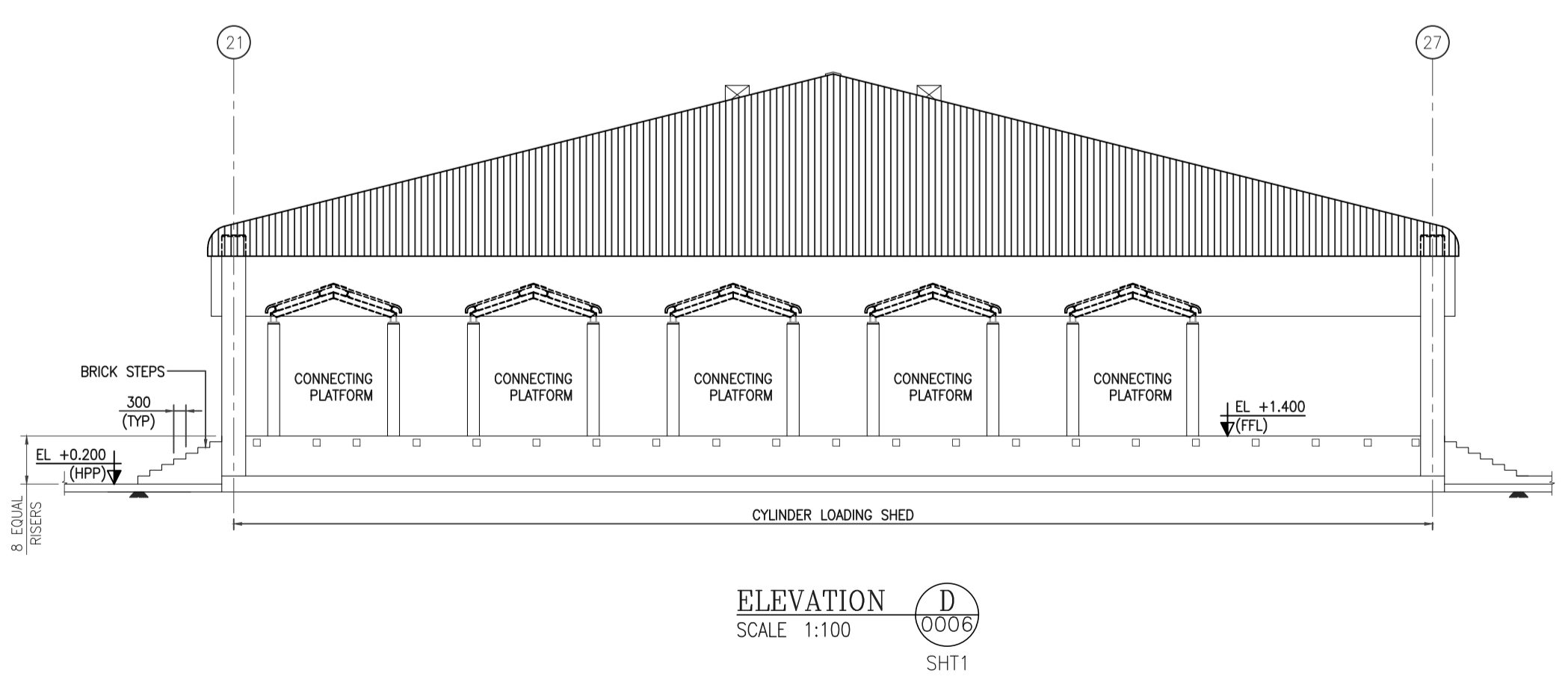
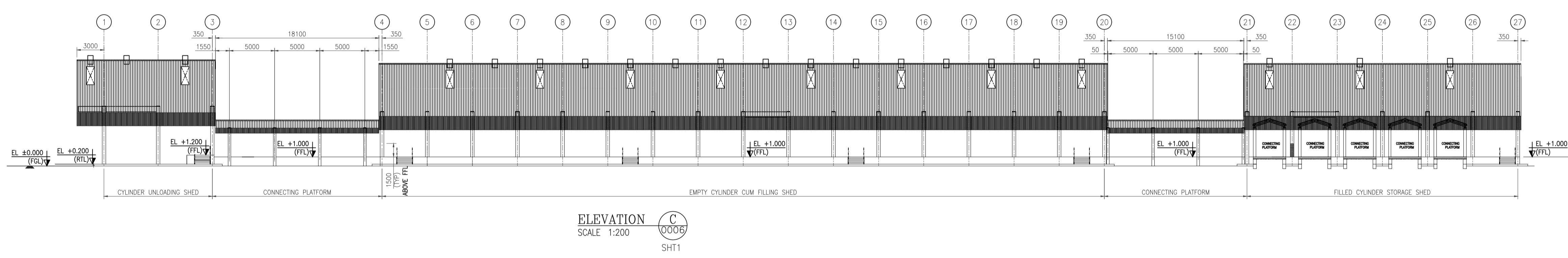
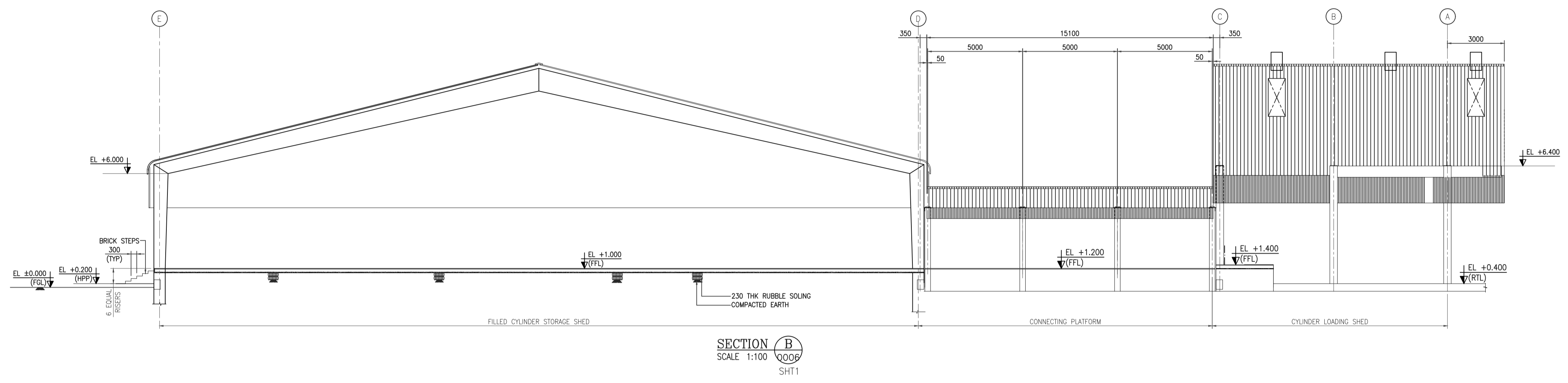
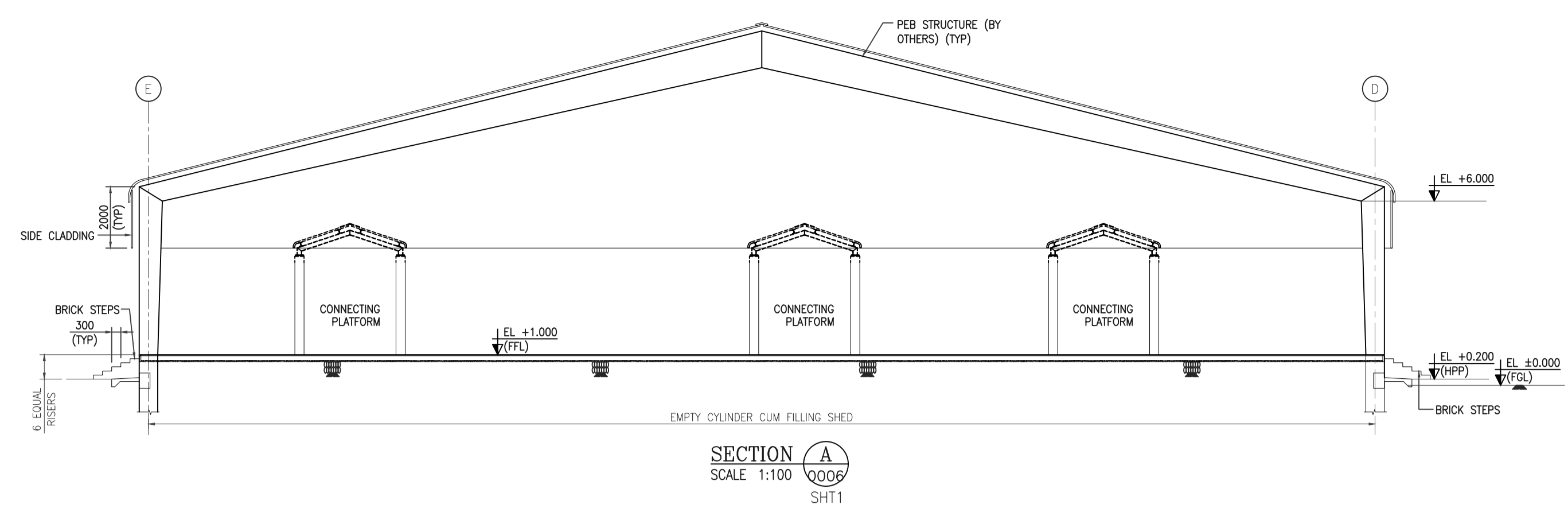
DRG. NO. - 11387-04-AR-DRD-0003 SHT 1 OF 1

TITLE :
 EMPTY CYLINDER & FILLED CYLINDER SHED
 ARCHITECTURAL ROOF PLAN

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND



GENERAL NOTES :
 1. FOR NOTES REFER DRAWING NO. 11387-04-CI-LAY-0006-SHT1.



HOLD LIST
 1. FLOOR FINISH
 2. LEVELS

REFERENCE DRAWING		
S.NO.	REFERENCE DRAWING	DRAWING NO.

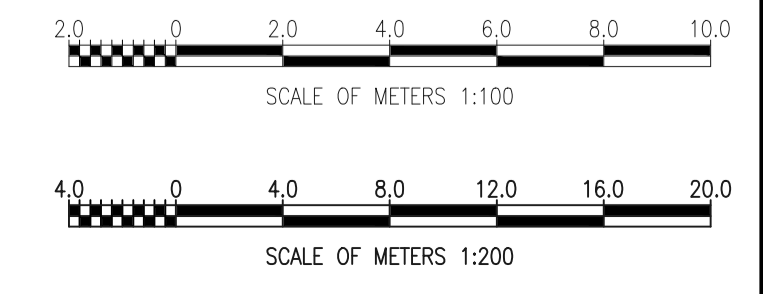
KEY PLAN					

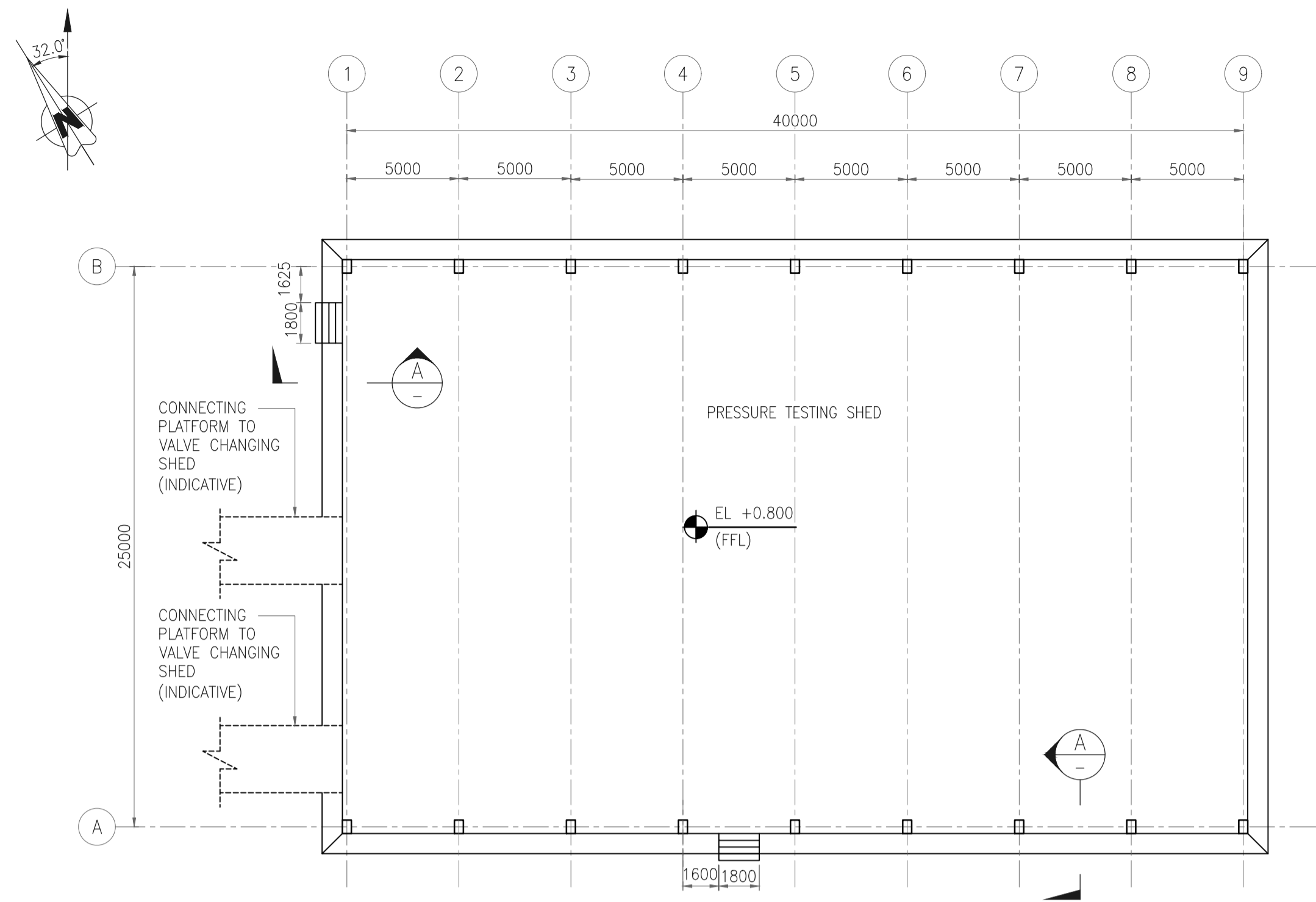
SCALE - 1:200					
A	04 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK	APPD.

DRG NO.: 11387-04-AR-DRD-0004 SHT 1 OF 1
 TITLE :
EMPTY CYLINDER & FILLED CYLINDER SHED ARCHITECTURAL SECTIONS & ELEVATIONS

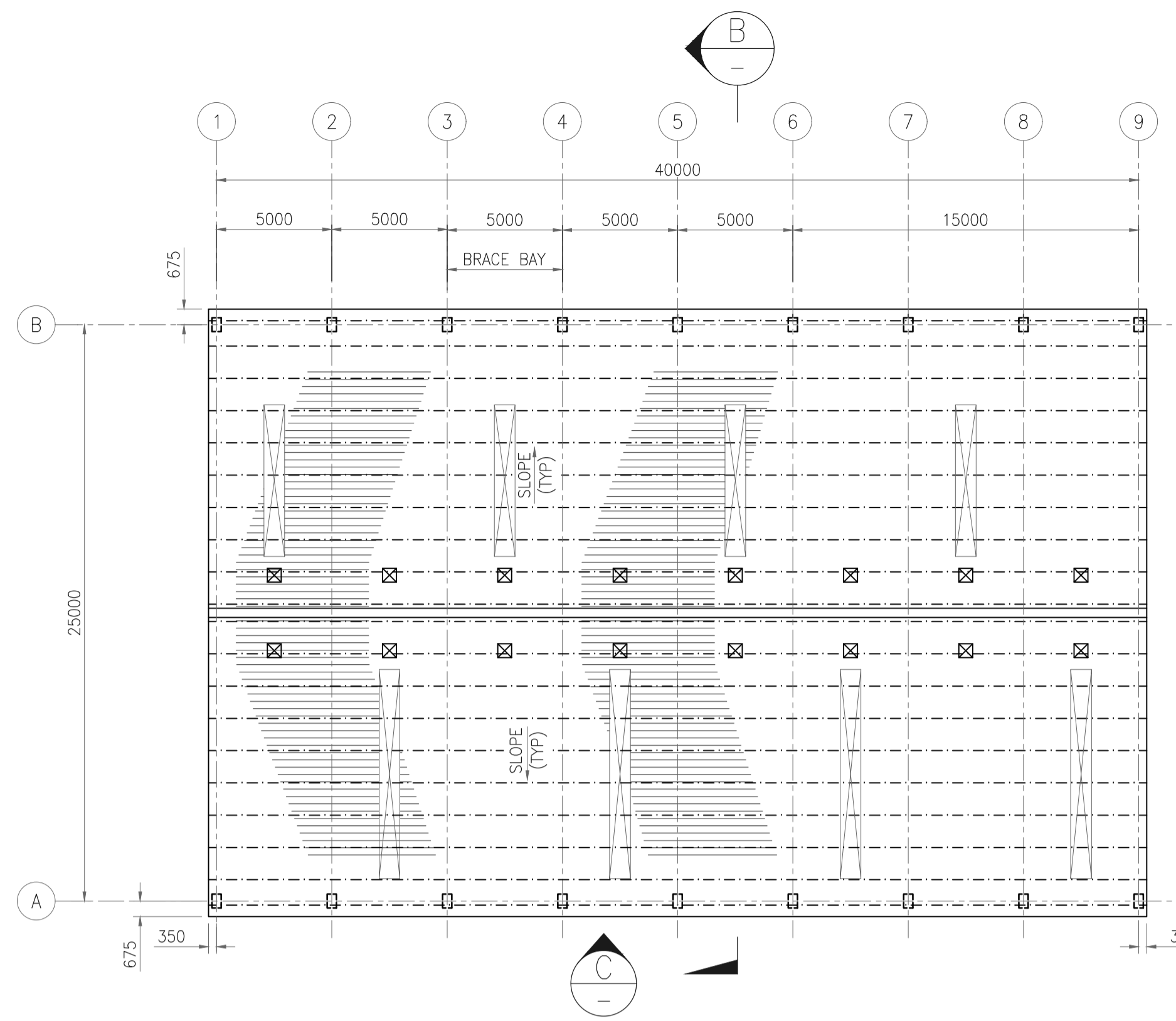
PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :   **HINDUSTAN PETROLEUM CORPORATION LTD.**
 RINA Consulting S.p.A.

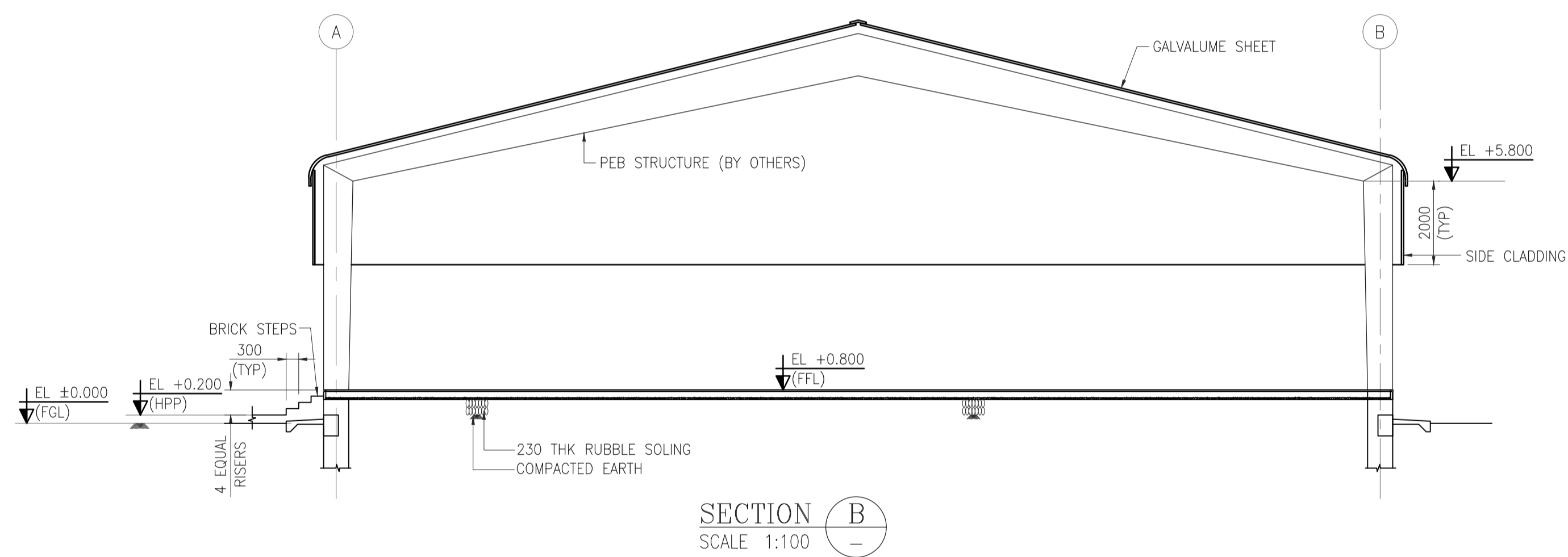




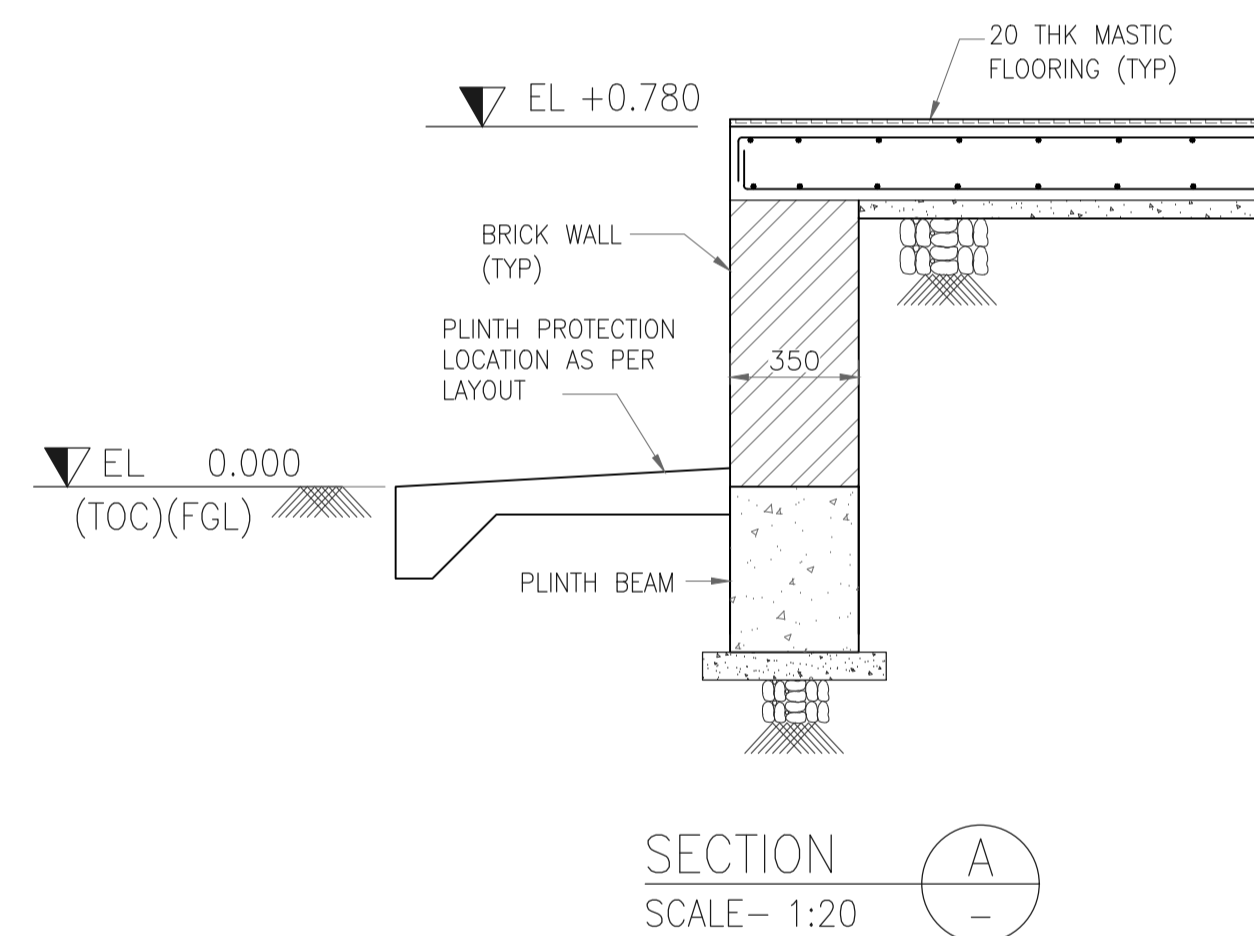
GROUND FLOOR LAYOUT



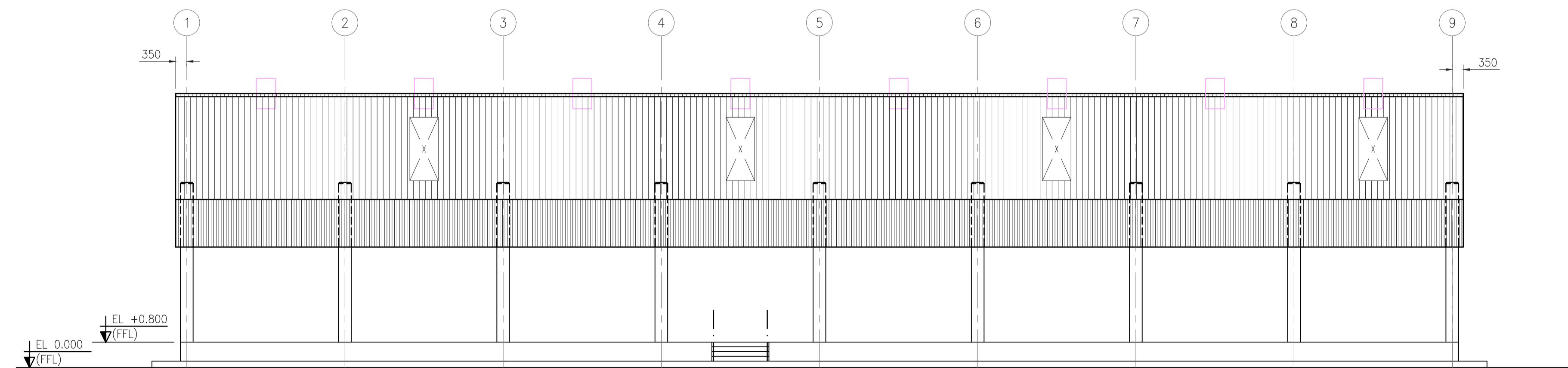
ROOF LAYOUT



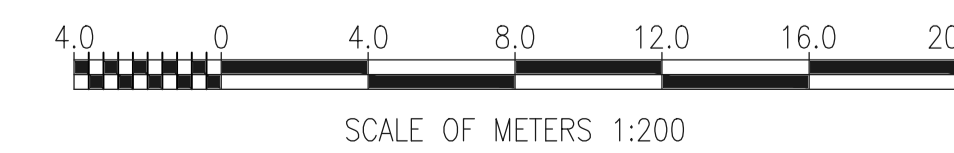
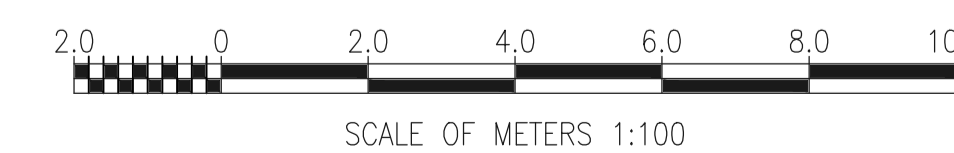
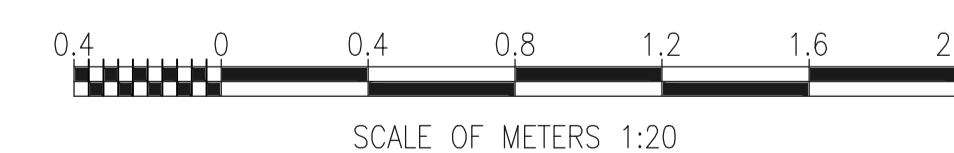
SECTION B
SCALE 1:100



SECTION A
SCALE - 1:20



ELEVATION C
SCALE 1:100



- GENERAL NOTES :**
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & CO-ORDINATES ARE IN METERS.
 - FGL EL 0.000 CORRESPONDS TO FINISHED GROUND LEVEL.
 - CONCRETE SHALL BE OF GRADE M25 FOR GRADE SLAB WITH 20 mm & DOWN SIZE AGGREGATES (UNO).
 - REINFORCEMENT SHALL BE OF GRADE Fe 415/500D.
 - FOR TYPICAL GENERAL NOTES REFER DRAWING NO. 11387-00-CI-DST-0004.
 - FLOOR FINISH SHALL BE 20 MM THICK ANTISTATIC & ELECTRICALLY CONDUCTIVE MASTIC FLOORING CONFIRMING TO IS : 8374 & AS DIRECTED BY THE ENGINEER-IN-CHARGE.
 - FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER ELECTRICAL EQUIPMENT LAYOUT.
 - FILLING SHALL BE DONE IN LAYERS NOT EXCEEDING 200mm IN LOOSE THICKNESS AND COMPACTED TO 95% DRY DENSITY.
 - 125 MICRON POLYTHENE SHEET SHALL BE PROVIDED ABOVE THE BLINDING CONCRETE WITH MIN OVERLAP OF 300mm. ALL CONCRETE SURFACES IN DIRECT CONTACT WITH EARTH SHALL BE PAINTED WITH 1000 MICRON BLACK BITUMEN PAINT.
 - REFER DWG 11387-00-CI-DST-0008 FOR TYPICAL DETAIL OF ISOLATION JOINT AROUND FOUNDATION IN GRADE SLAB AREA.
 - FOR LOCATION & ORIENTATION OF PEDESTAL FOUNDATIONS REFER PIPING LAYOUT.

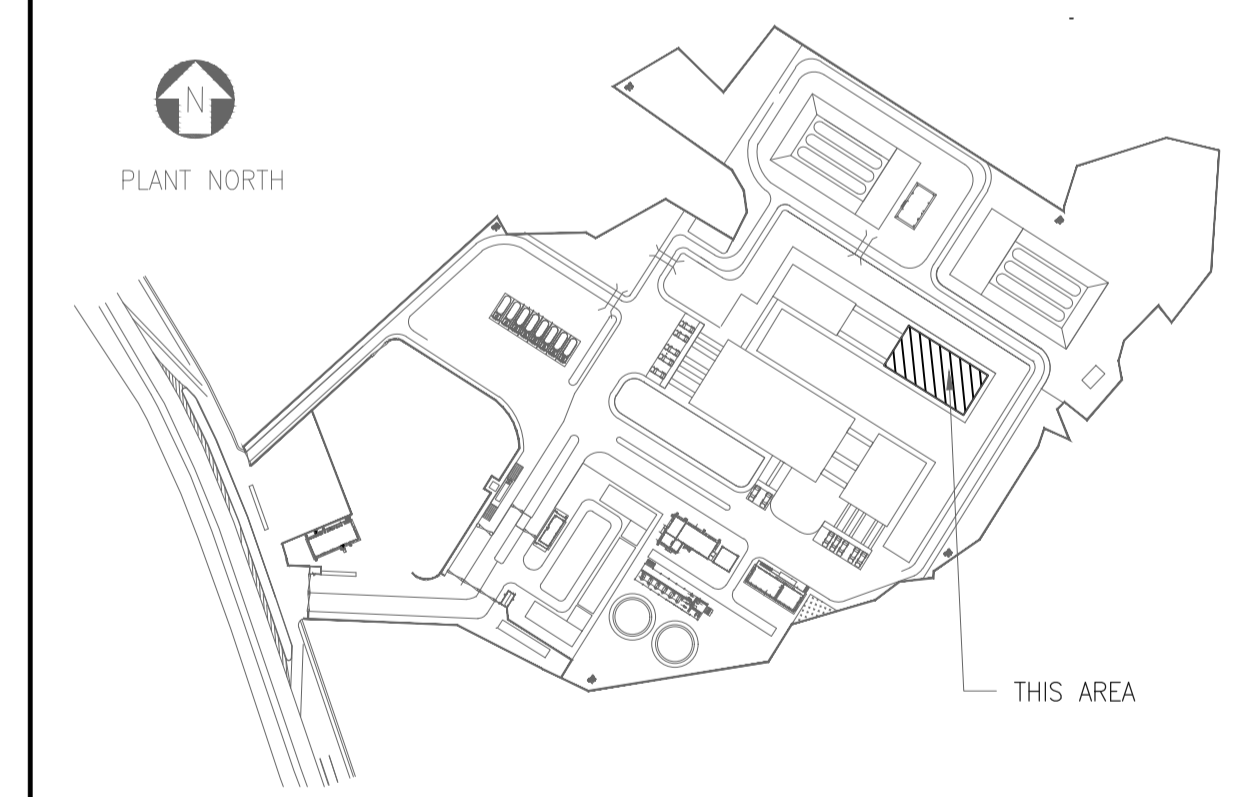
HOLD LIST

- FLOOR FINISH LEVELS.

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN



SCALE - 1:200

REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	06 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK

DRG.NO :- 11387-06-AR-DRD-0001 SHT 1 OF 1

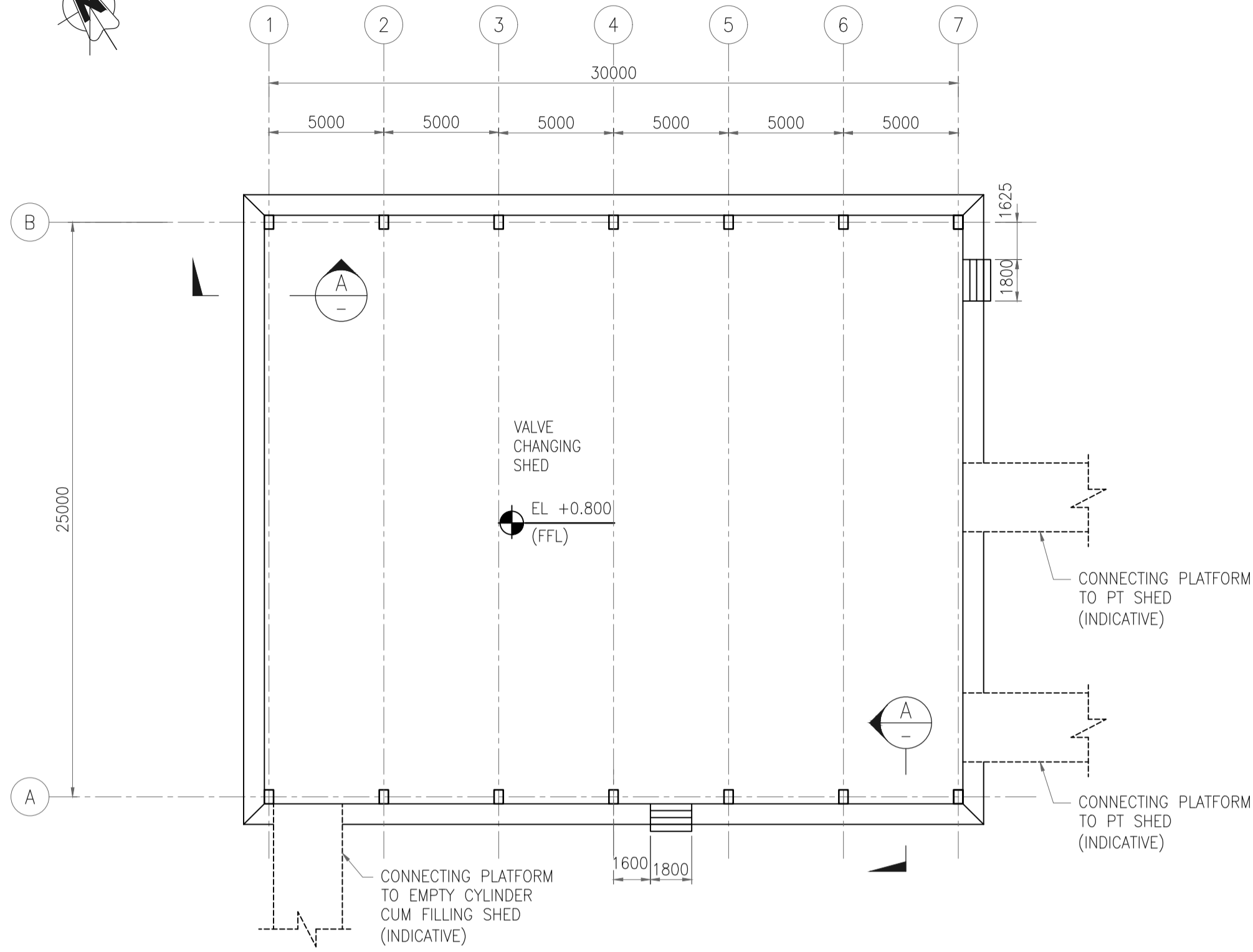
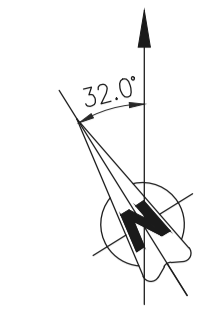
TITLE : **PRESSURE TESTING SHED ARCHITECTURAL PLANS, SECTIONS & ELEVATIONS**

PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

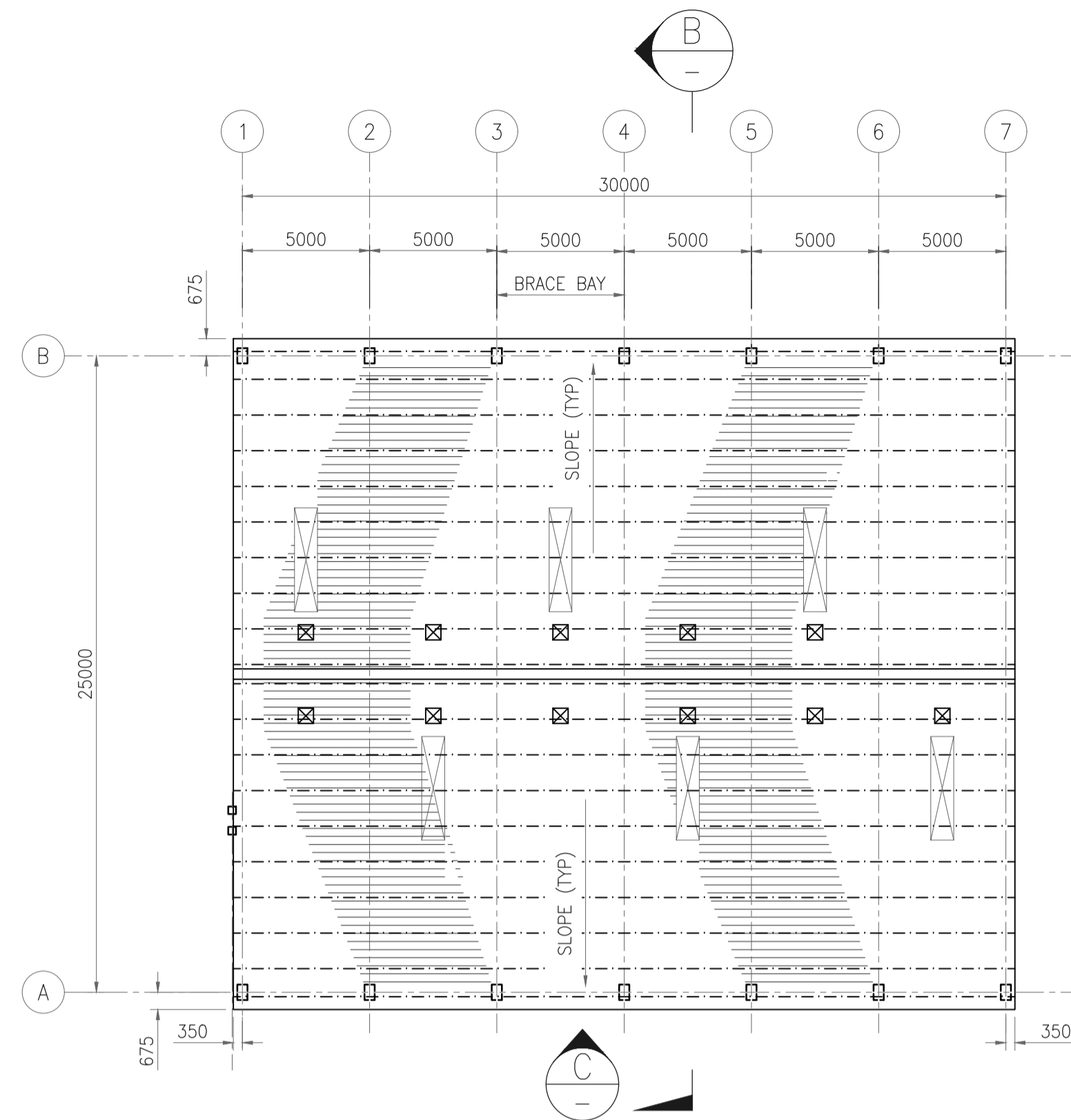
EPMC :



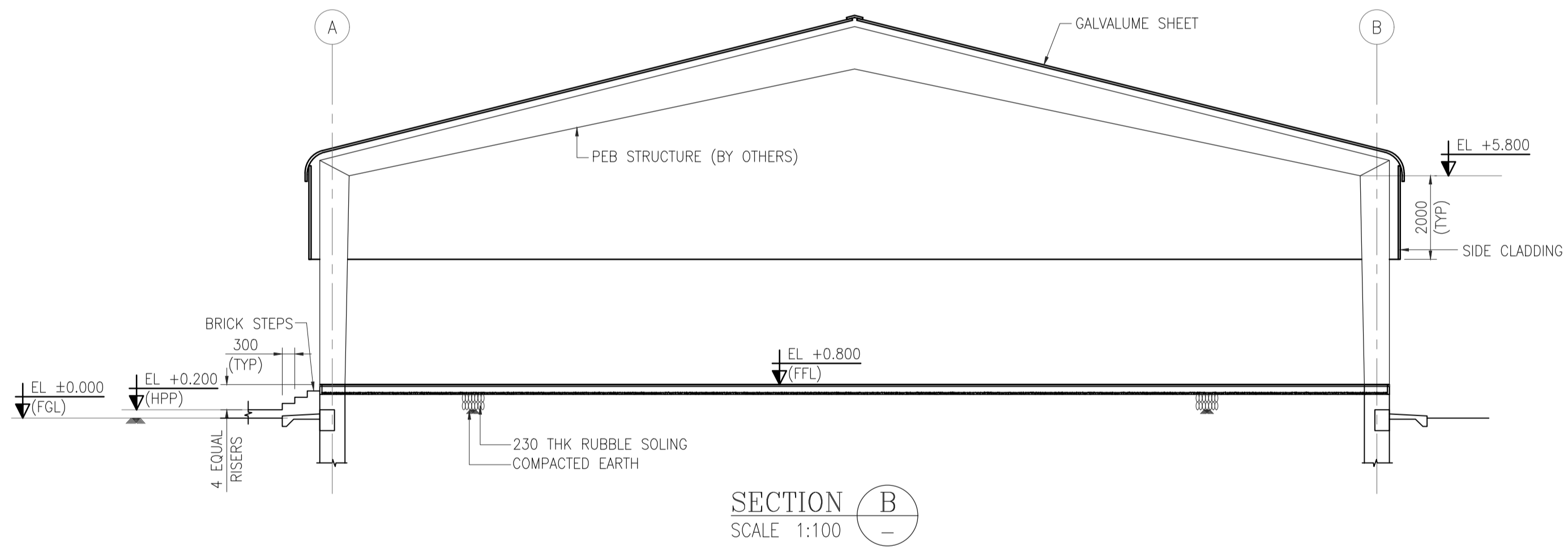
HINDUSTAN PETROLEUM CORPORATION LTD.



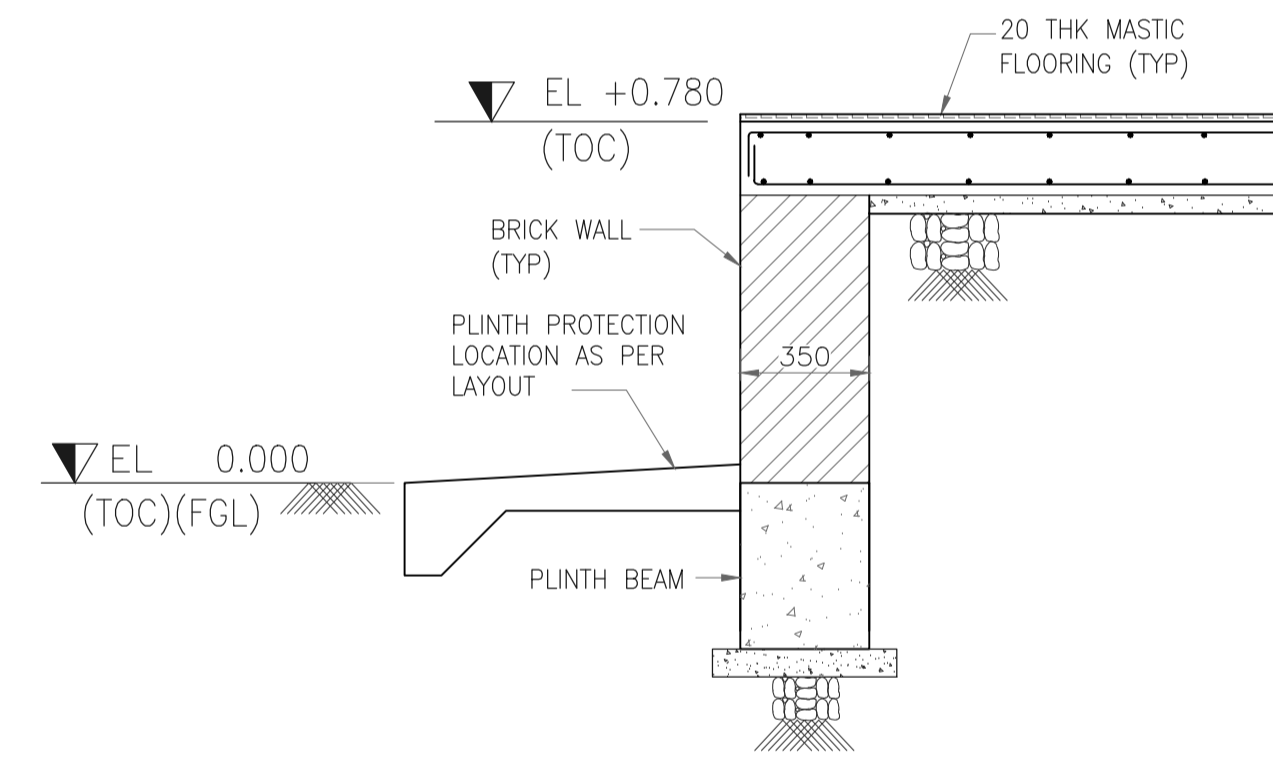
GROUND FLOOR LAYOUT



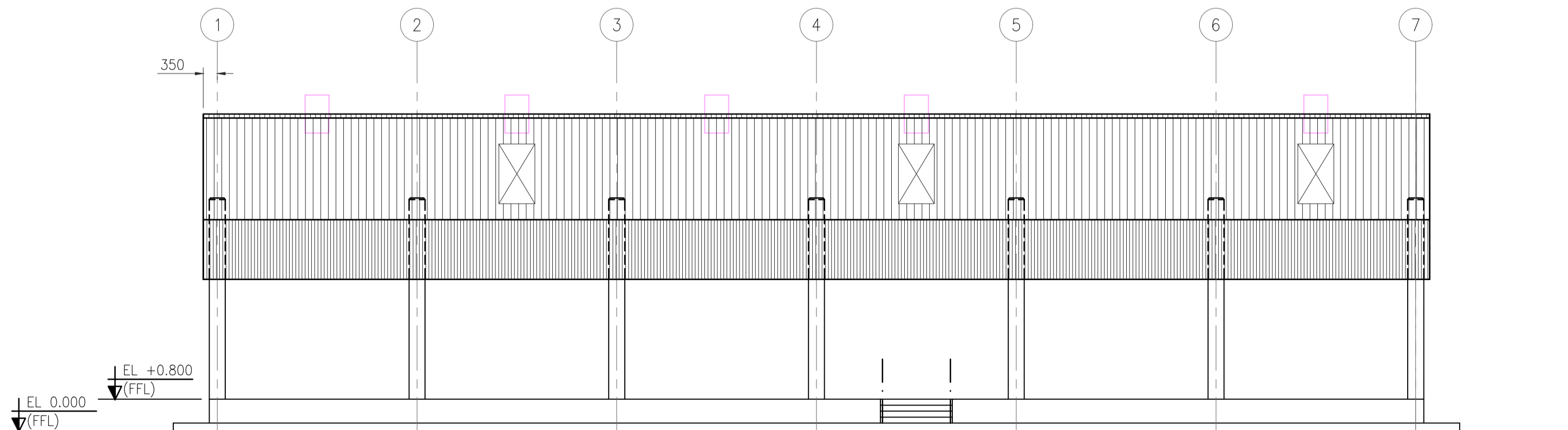
ROOF LAYOUT



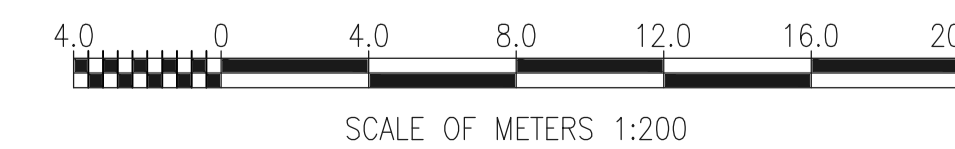
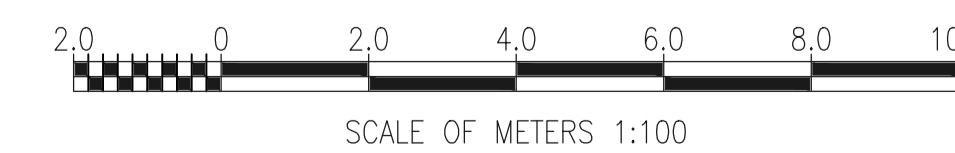
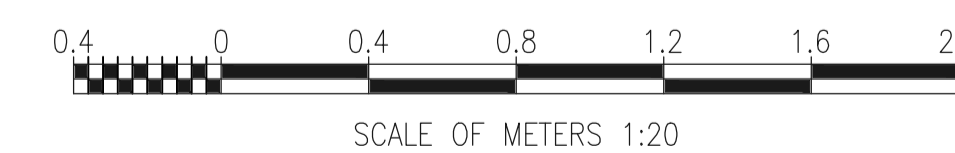
SECTION B
SCALE 1:100



SECTION A
SCALE - 1:20



ELEVATION C
SCALE 1:100



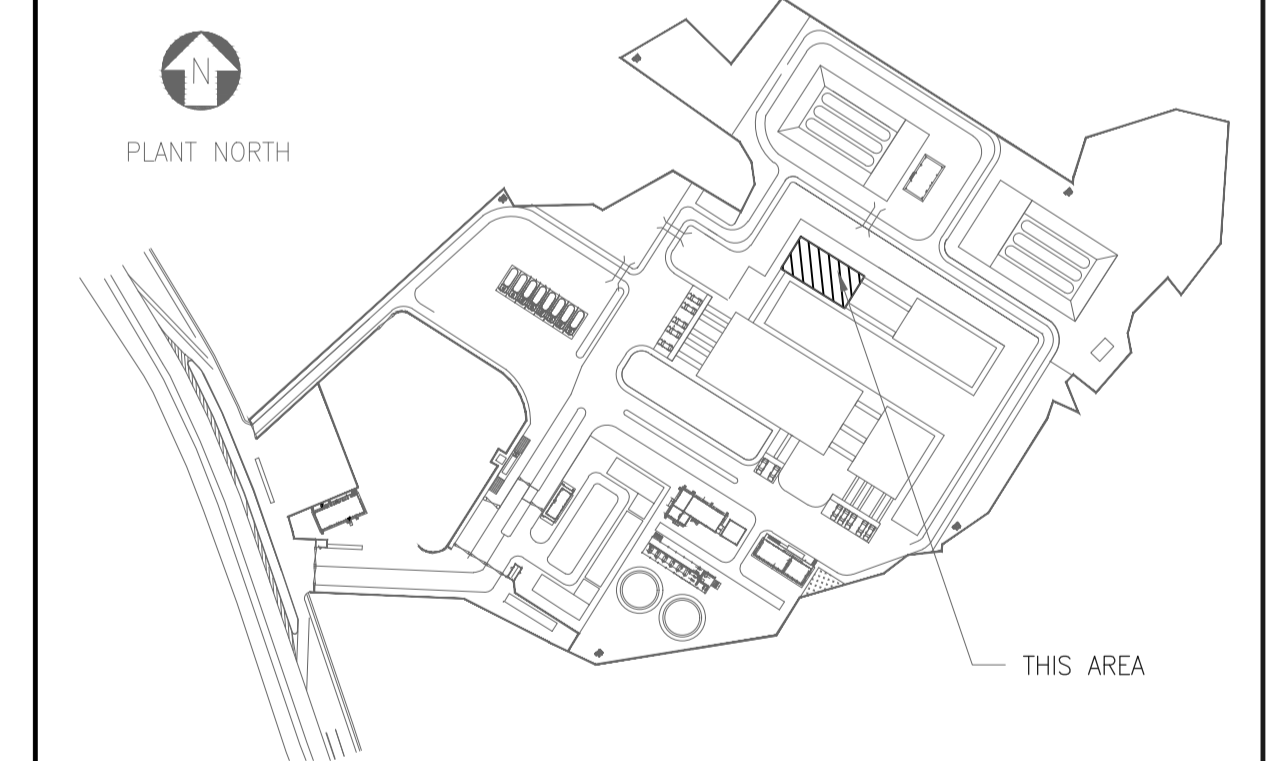
GENERAL NOTES :

- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & CO-ORDINATES ARE IN METERS.
- FGL EL 0.000 CORRESPONDS TO FINISHED GROUND LEVEL.
- CONCRETE SHALL BE OF GRADE M25 FOR GRADE SLAB WITH 20 mm & DOWN SIZE AGGREGATES (UND).
- REINFORCEMENT SHALL BE OF GRADE Fe 415/500D.
- FOR TYPICAL GENERAL NOTES REFER DRAWING NO. 11387-00-CI-DST-0004.
- FLOOR FINISH SHALL BE 20 MM THICK ANTISTATIC & ELECTRICALLY CONDUCTIVE MASTIC FLOORING CONFIRMING TO IS : 8374 & AS DIRECTED BY THE ENGINEER-IN-CHARGE.
- FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER ELECTRICAL EQUIPMENT LAYOUT.
- FENDERS (SHOCK ABSORBERS) SHALL BE LOCATED SUITABLY AT SITE AS PER INSTRUCTION OF ENGINEER IN CHARGE.
- FILLING SHALL BE DONE IN LAYERS NOT EXCEEDING 200mm IN LOOSE THICKNESS AND COMPACTED TO 95% DRY DENSITY.
- 125 MICRON POLYTHENE SHEET SHALL BE PROVIDED ABOVE THE BLINDING CONCRETE WITH MIN OVERLAP OF 300mm. ALL CONCRETE SURFACES IN DIRECT CONTACT WITH EARTH SHALL BE PAINTED WITH 1000 MICRON BLACK BITUMEN PAINT.
- REFER DWG 11387-00-CI-DST-0008 FOR TYPICAL DETAIL OF ISOLATION JOINT AROUND FOUNDATION IN GRADE SLAB AREA.
- FOR LOCATION & ORIENTATION OF PEDESTAL FOUNDATIONS REFER PIPING LAYOUT.

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN



SCALE - 1:200

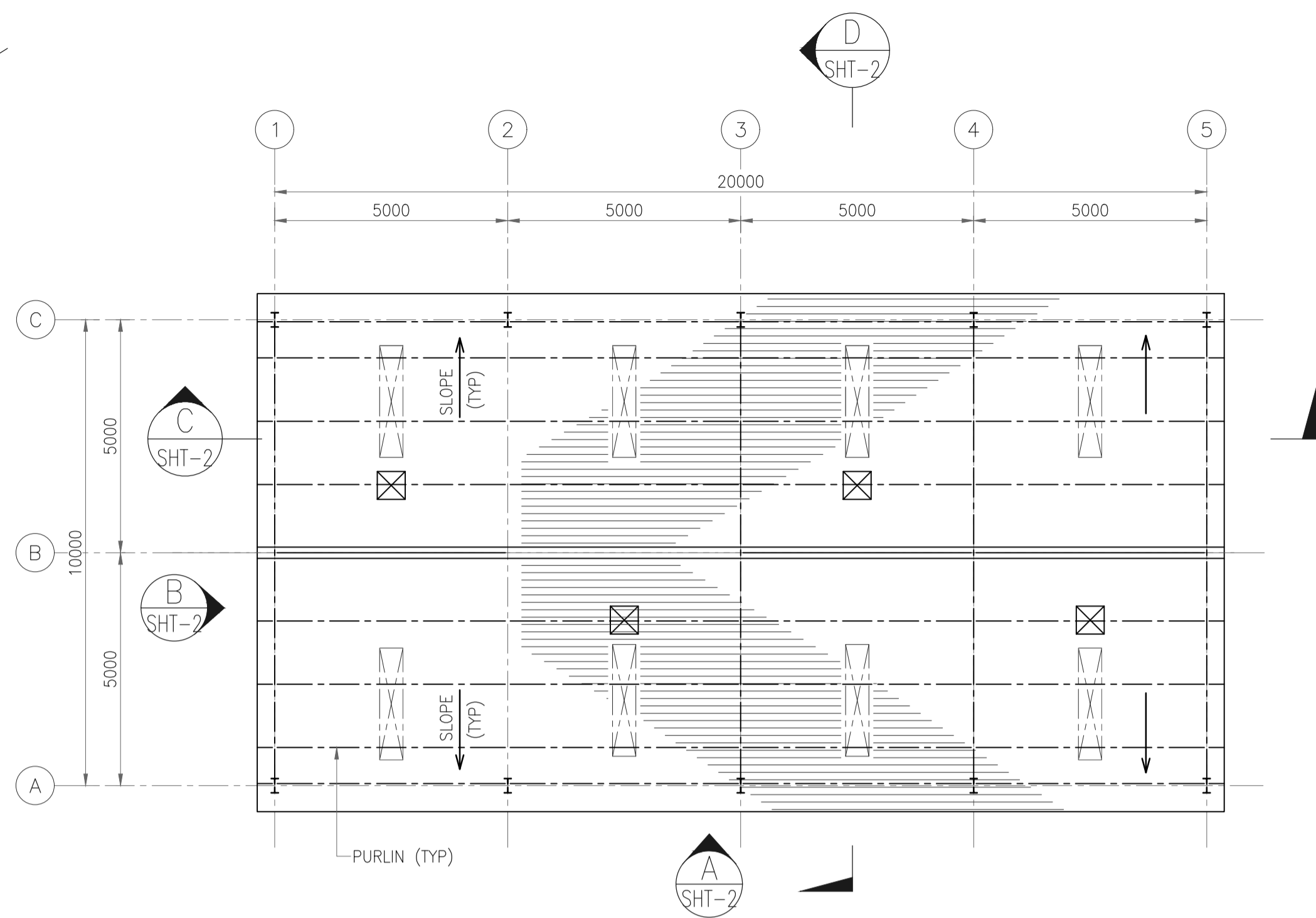
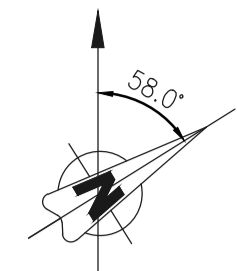
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	06 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK

DRG.NO :- 11387-07-AR-DRD-0001 SHT 1 OF 1

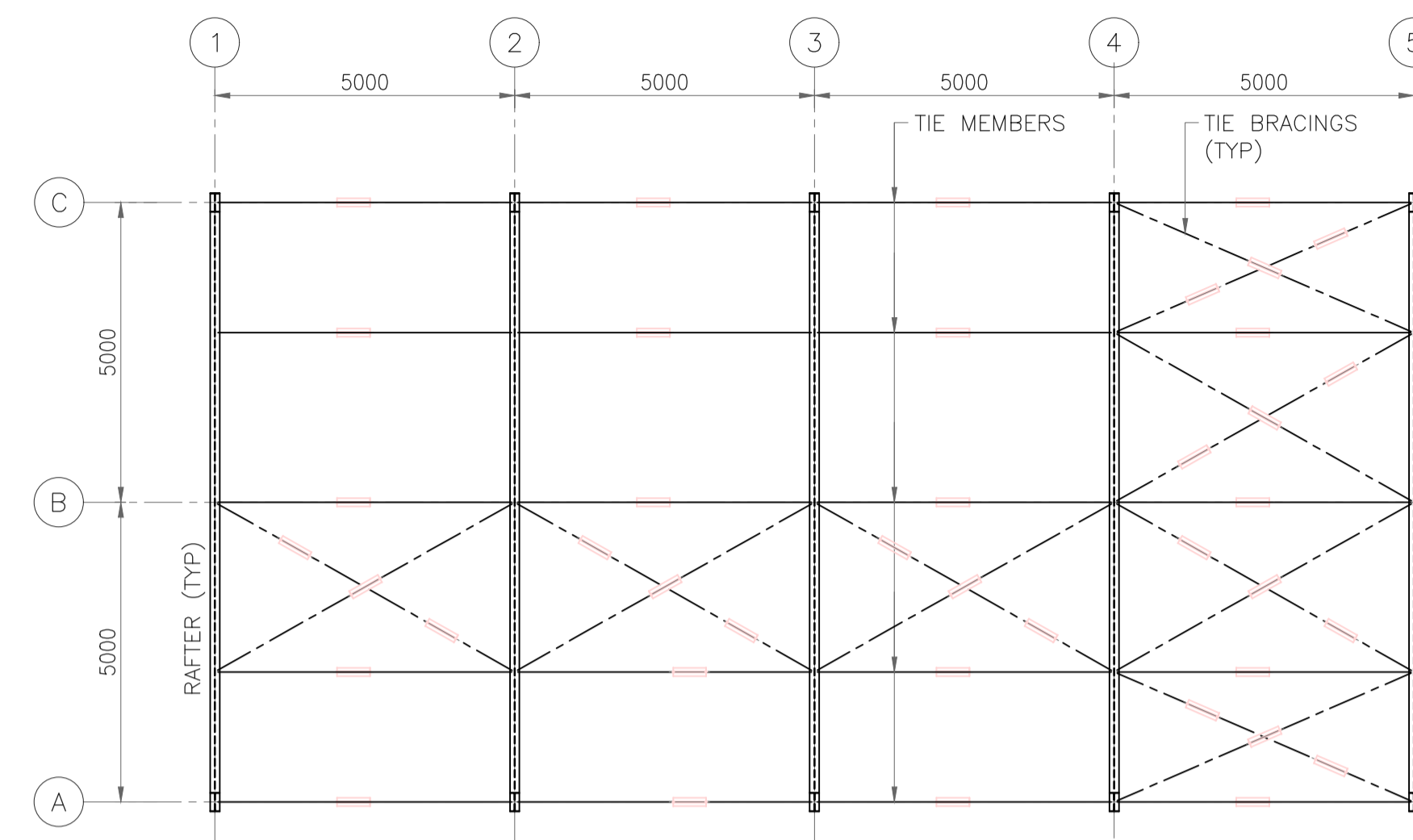
TITLE :
**VALVE CHANGING SHED
ARCHITECTURAL PLANS,
SECTIONS & ELEVATIONS**

PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

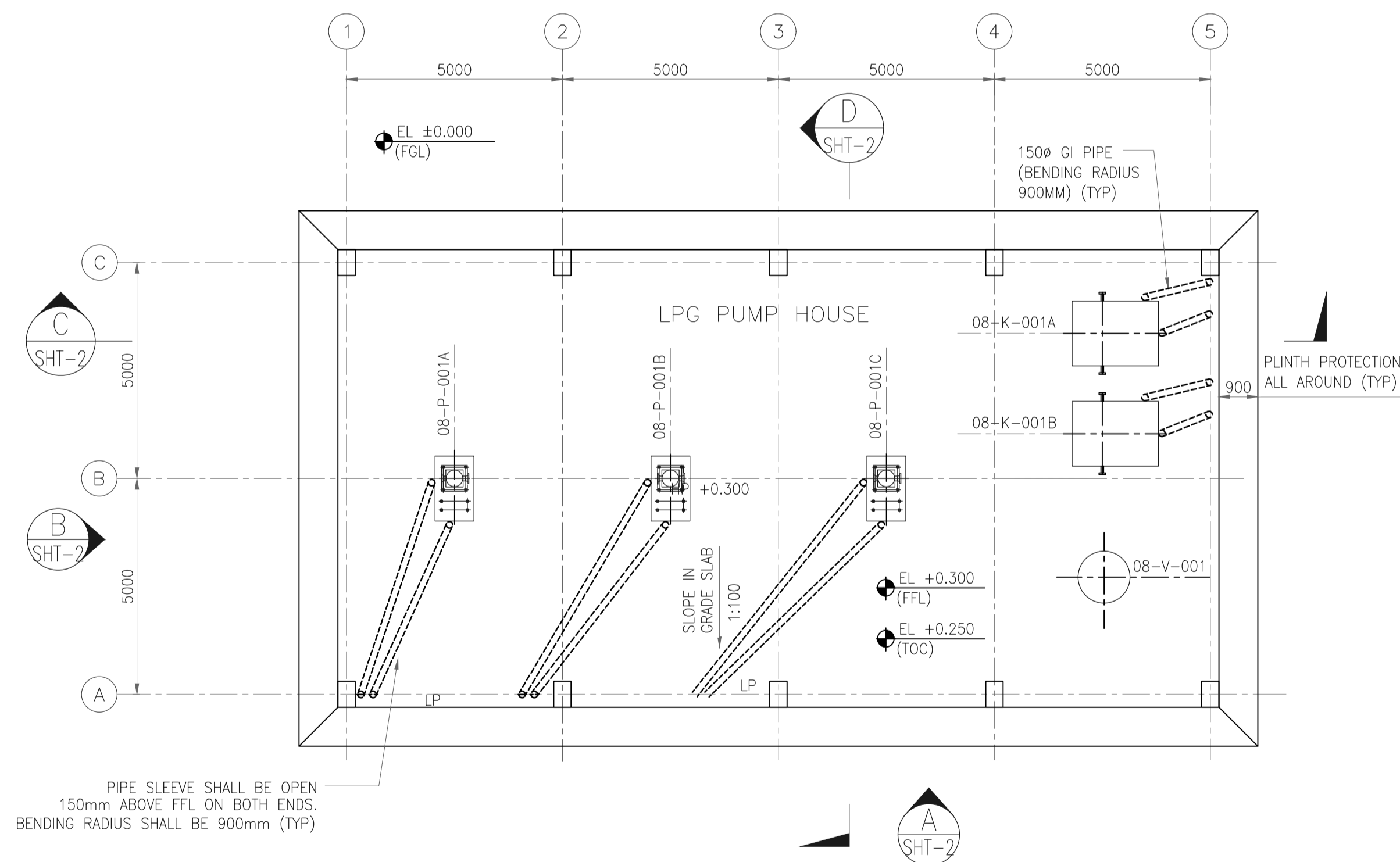




ROOF PLAN



ROOF LAYOUT



GROUND FLOOR PLAN

PIPE SLEEVE SHALL BE OPEN 150mm ABOVE FFL ON BOTH ENDS. BENDING RADIUS SHALL BE 900mm (TYP)

GENERAL NOTES :

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & CO-ORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
2. EL 0.000 CORRESPONDS TO FINISHED GROUND LEVEL.
3. FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER ELECTRICAL EQUIPMENT LAYOUT.
4. CABLE ENTRY SHOWN ARE INDICATIVE, REFER RESPECTIVE CABLE LAYOUT DRAWINGS FOR LOCATION & DETAILS.
5. FLOOR FINISH SHALL BE 50 THK GRANOLITHIC FLOOR LAID MONOLITHIC OVER BASE CONCRETE. (35-38MM UNDER-BED AND 12-15MM TOPPING MIXED WITH NON-METALLIC FLOOR HARDENER AS PER MANUFACTURE SPECIFICATION.)
6. OPENING SHOWN FOR TURBO VENTILATOR IS INDICATIVE ONLY. CONTRACTOR TO FIX THE TURBO VENTILATOR SUITABLY TO AVOID FOULING WITH PURLINS & SAG ROD.
7. FOR LEGENDS REFER DRAWING NO. 11387-00-ST-DST-0001.
8. FIXING OF SHEETING SHALL BE AS PER SPECIFICATION - ROOFING & SIDING WORKS.

LEGENDS

- EL - ELEVATION
- FFL - FINISHED FLOOR LEVEL
- FGL - FINISHED GROUND LEVEL
- HP - HIGH POINT
- LP - LOW POINT
- RTL - ROAD TOP LEVEL
- TOC - TOP OF CONCRETE

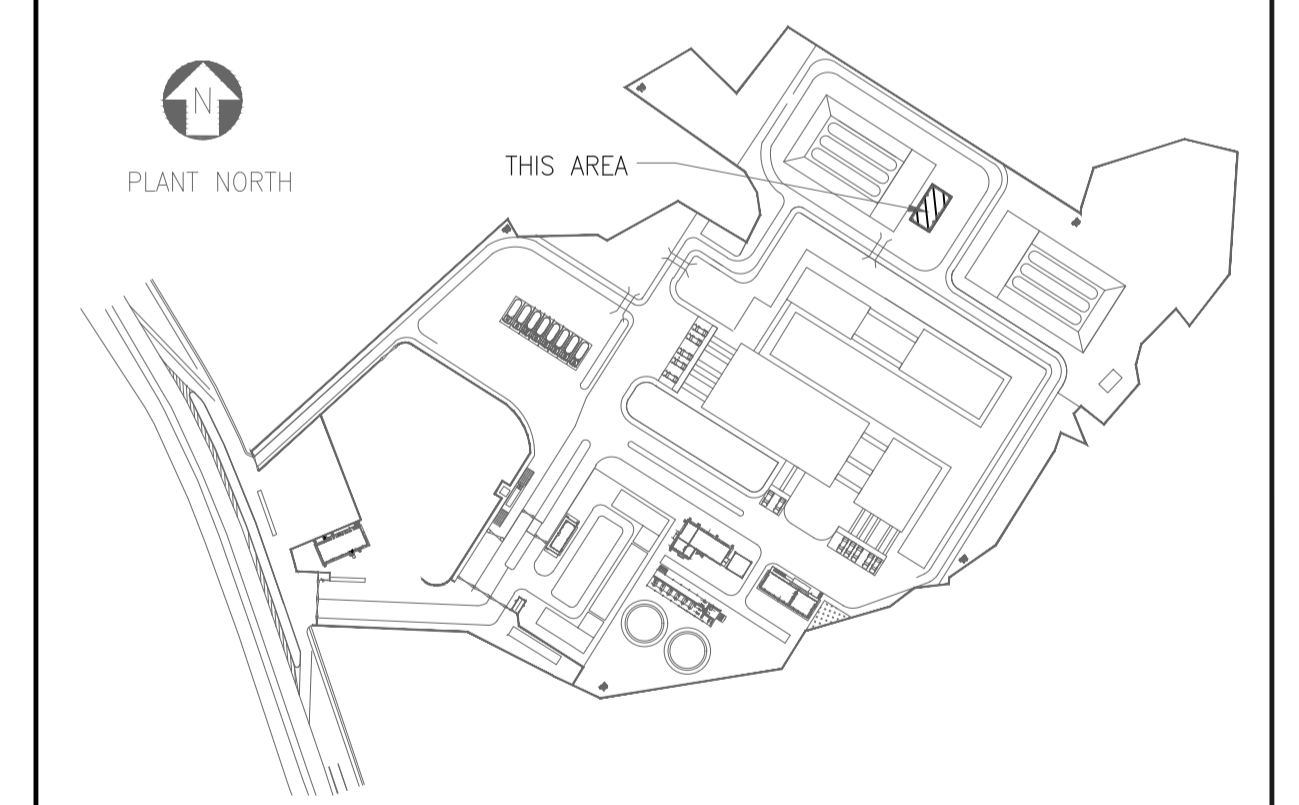
HOLD LIST

1. LEVELS & CO-ORDINATES

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN



SCALE - 1:100

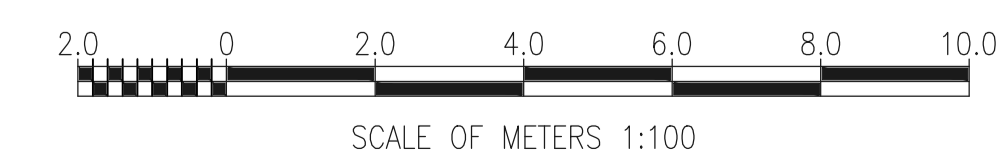
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	06 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK

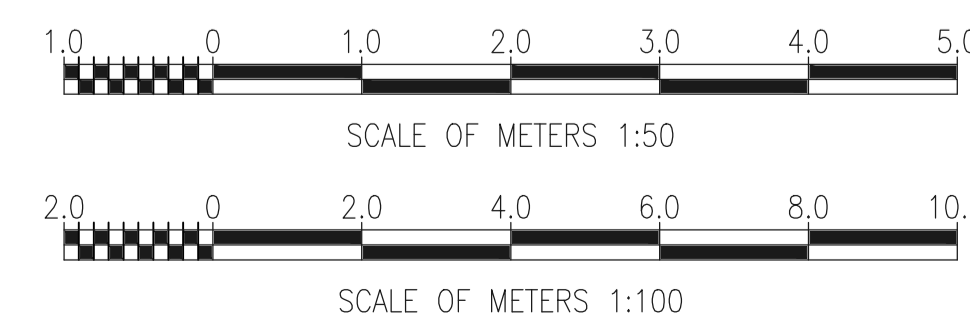
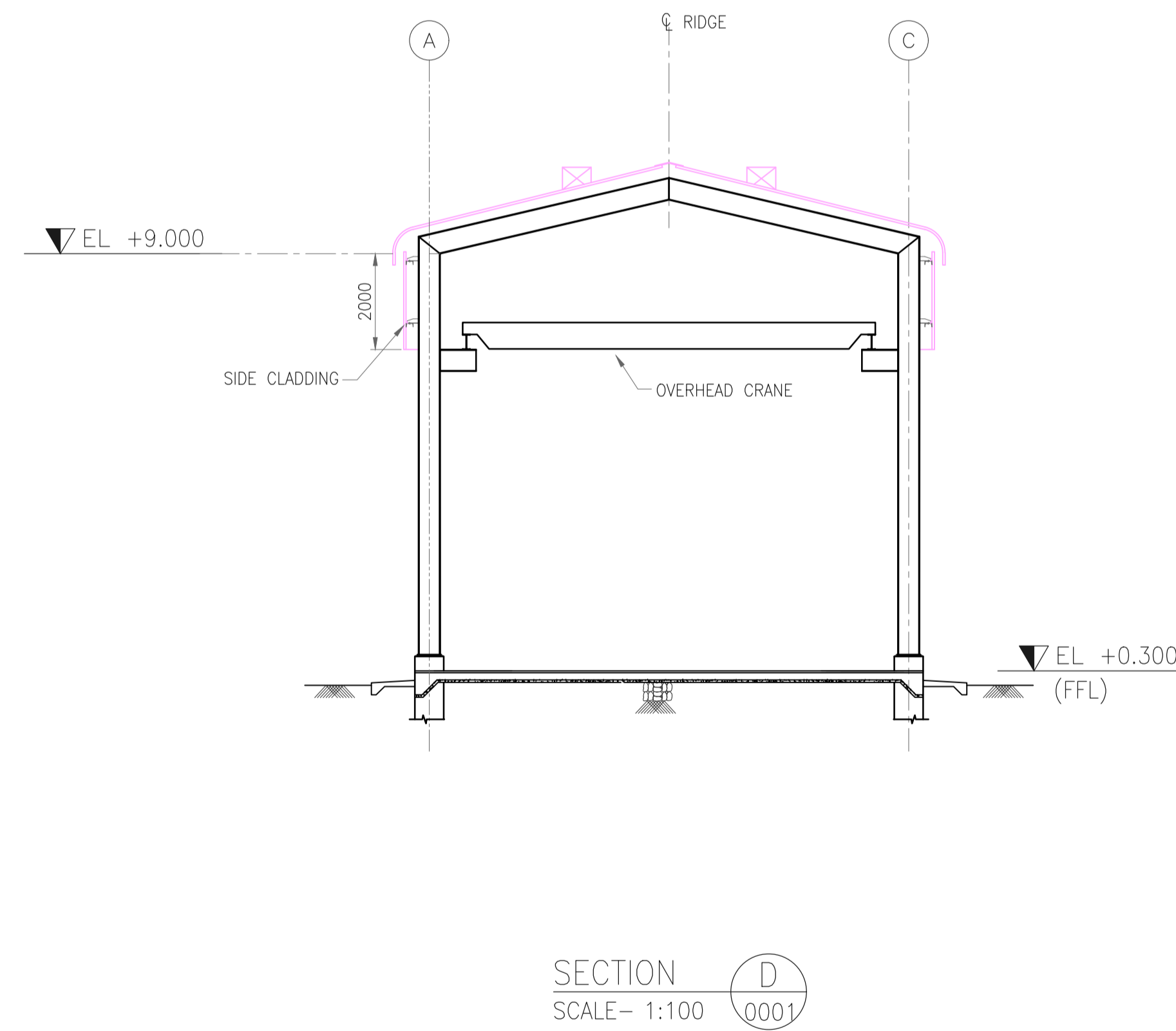
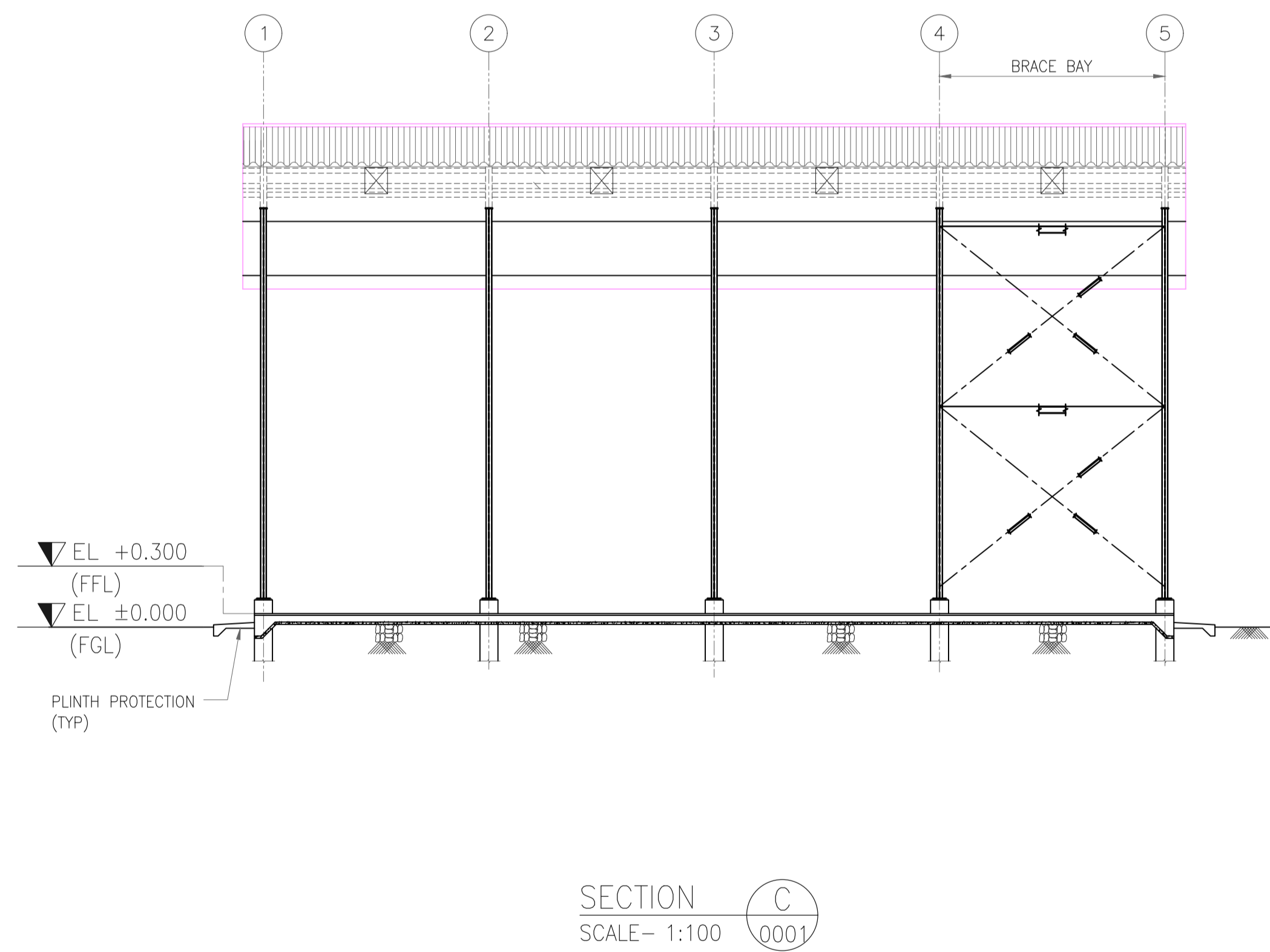
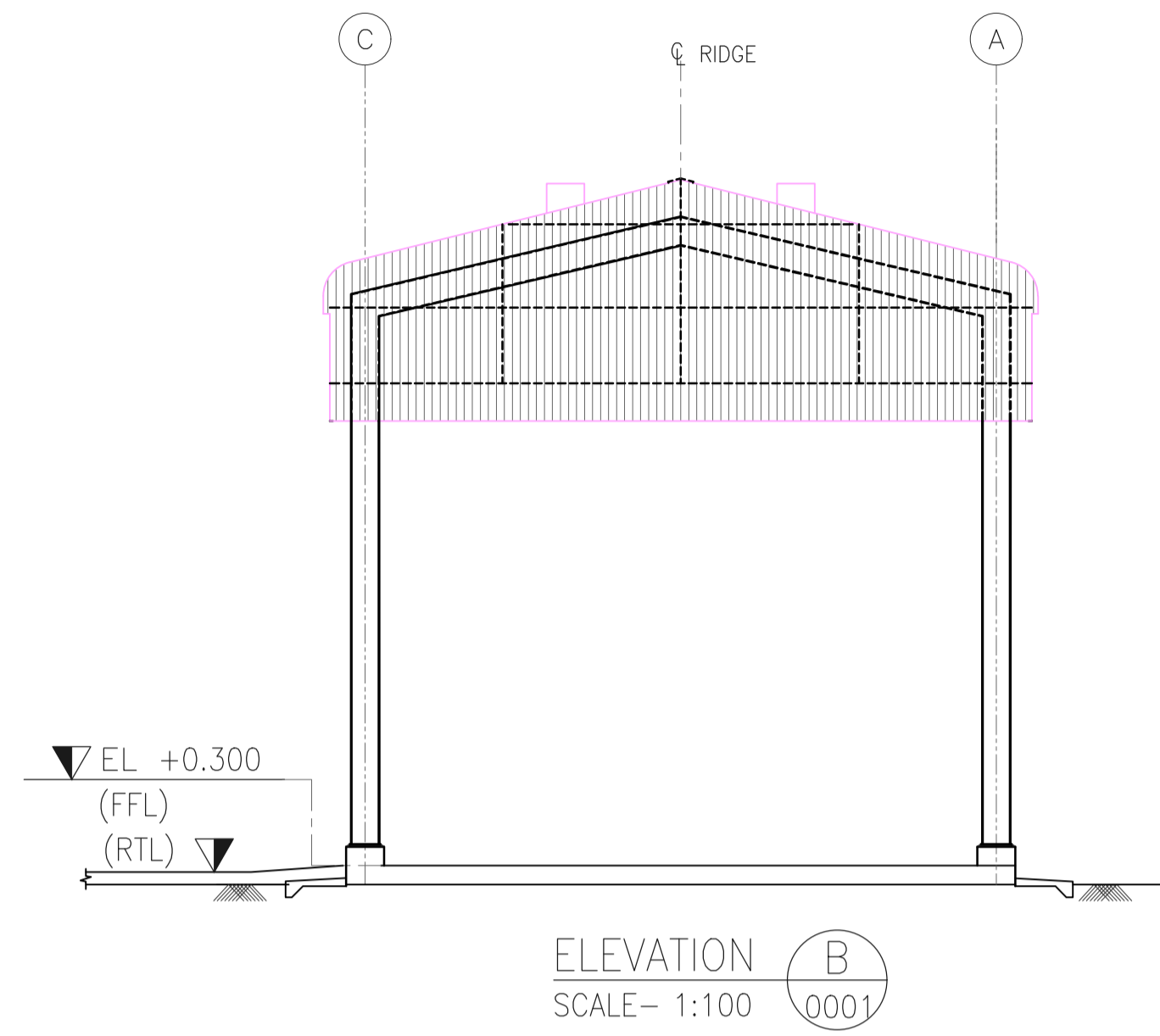
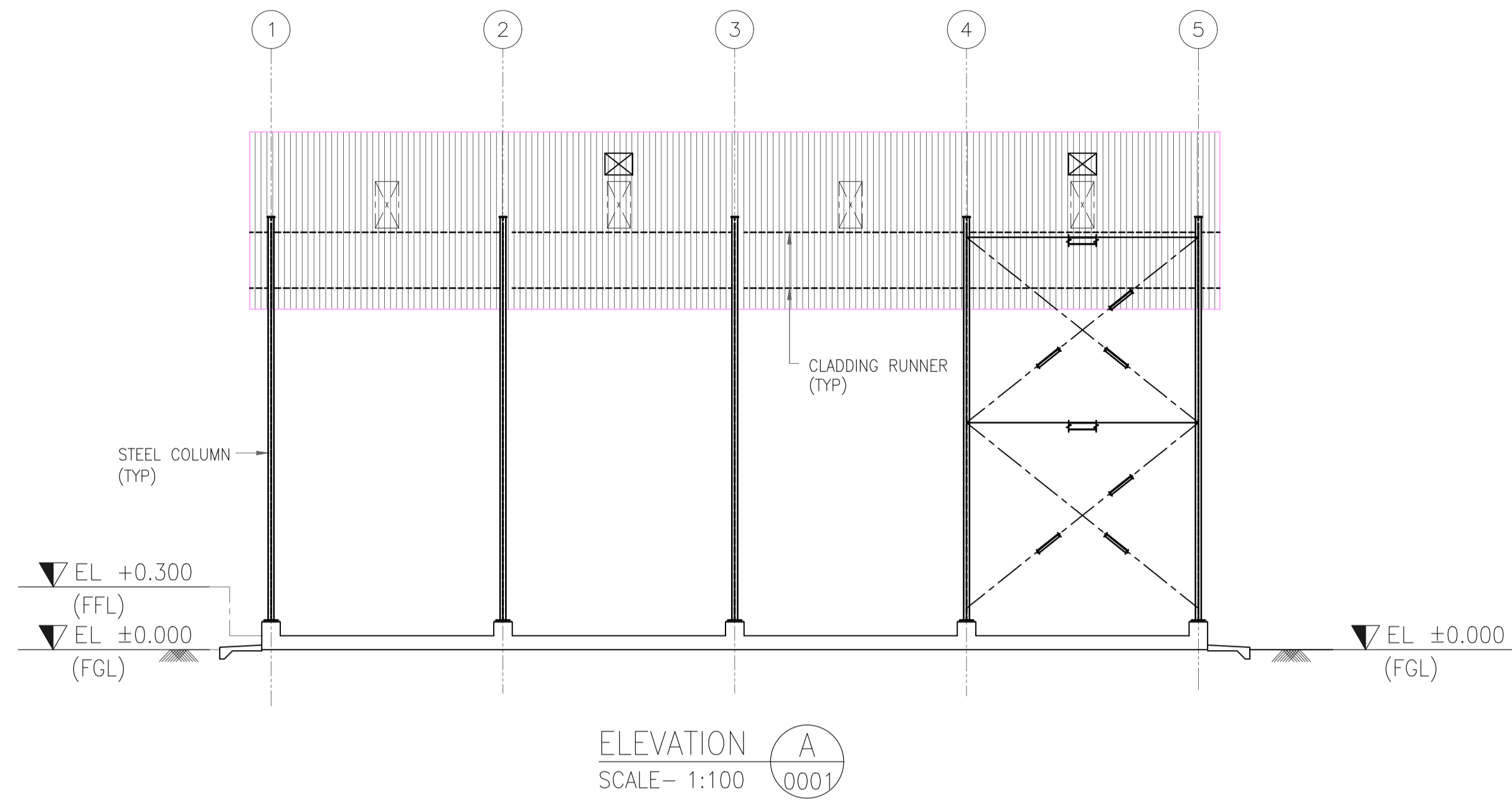
DRG.NO :- 11387-08-AR-DRD-0001 SHT 1 OF 2

TITLE :
LPG PUMP HOUSE ARCHITECTURAL PLANS

PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :





GENERAL NOTES :
 1. FOR NOTES REFER DRG. NO. 11387-08-AR-DRD-0001 SHEET-1.

LEGENDS
 EL - ELEVATION
 FFL - FINISHED FLOOR LEVEL
 FGL - FINISHED GROUND LEVEL
 RTL - ROAD TOP LEVEL
 TOC - TOP OF CONCRETE

REFERENCE DRAWING		
S.NO.	REFERENCE DRAWING	DRAWING NO.

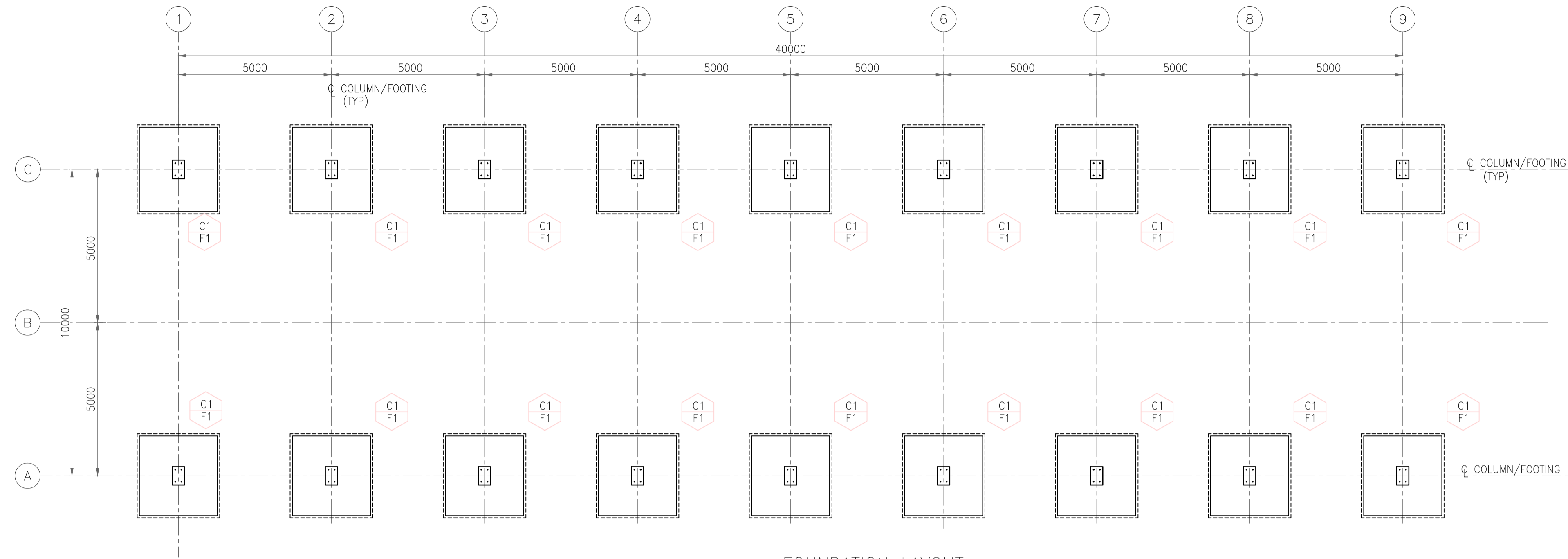
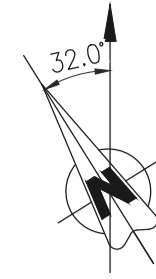
SCALE - 1:100					
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	06 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK

DRG.NO :- 11387-08-AR-DRD-0001 SHT 2 OF 2

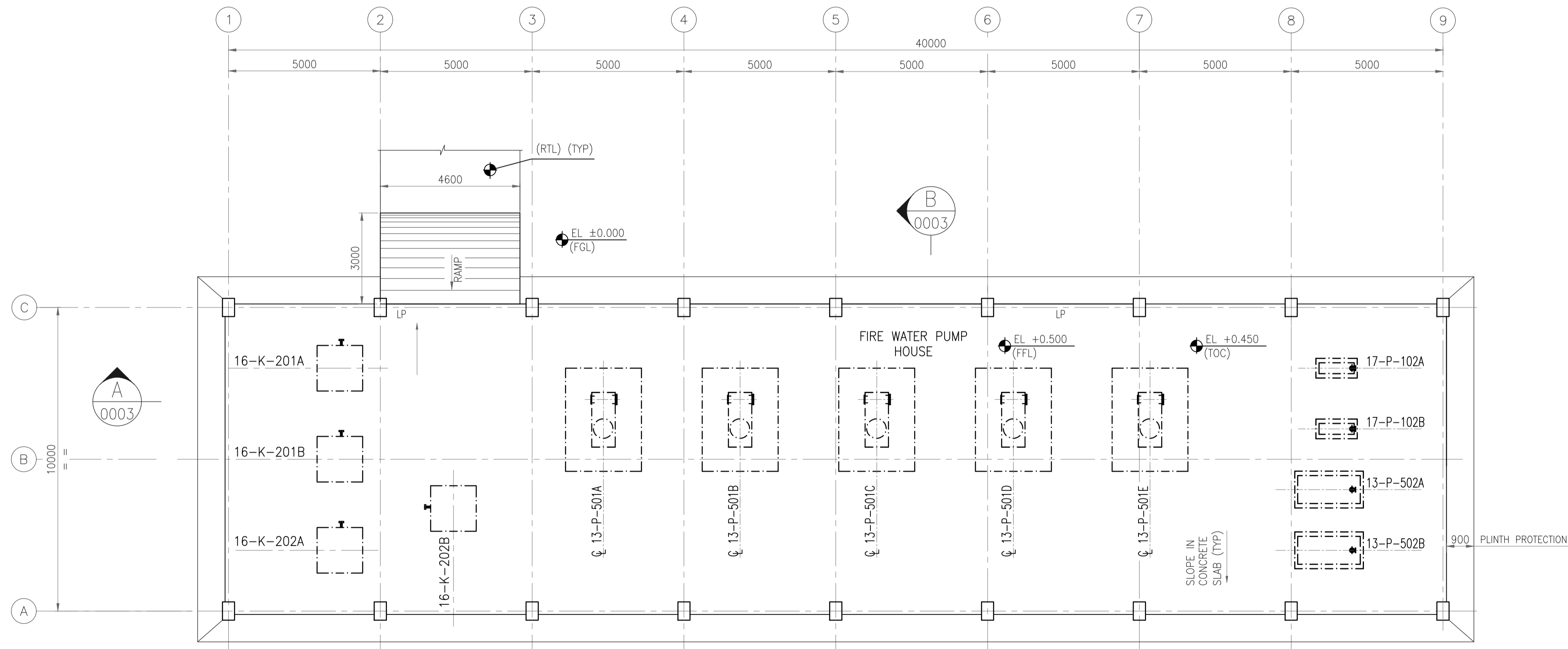
TITLE :
LPG PUMP HOUSE
ARCHITECTURAL SECTION,
ELEVATION & DETAILS

PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND





FOUNDATION LAYOUT
(FOOTING AND COLUMN SHOWN ARE INDICATIVE ONLY)



GROUND FLOOR PLAN

GENERAL NOTES :

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
2. EL 0.000 CORRESPONDS TO FINISHED GROUND LEVEL.
3. CABLE ENTRY SHOWN ARE INDICATIVE, REFER RESPECTIVE CABLE LAYOUT DRAWINGS FOR LOCATION & DETAILS.
4. FLOOR FINISH SHALL BE 50 THK GRANULITHIC FLOOR LAID MONOLITHIC OVER BASE CONCRETE. (35-38MM UNDER-BED AND 12-15MM TOPPING MIXED WITH NON-METALLIC FLOOR HARDENER AS PER MANUFACTURE SPECIFICATION).

LEGENDS

- C1 F1 - COLUMN MARK
- F1 - FOOTING MARK
- EL - ELEVATION
- FFL - FINISHED FLOOR LEVEL
- FGL - FINISHED GROUND LEVEL
- HP - HIGH POINT
- LP - LOW POINT
- RTL - ROAD TOP LEVEL
- TOC - TOP OF CONCRETE

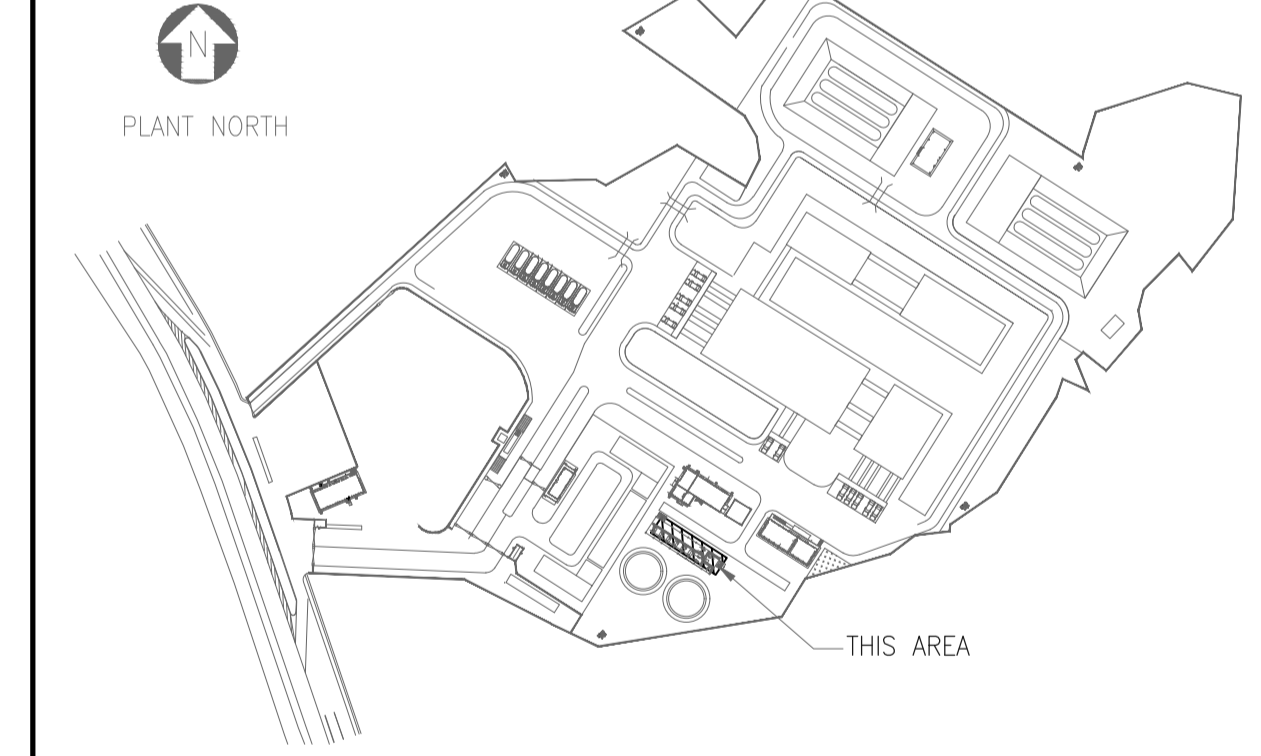
HOLD LIST

1. LEVELS

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN



SCALE - 1:100

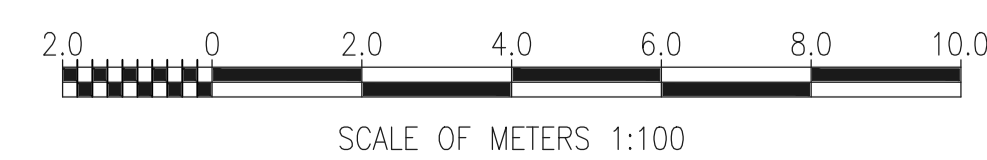
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	06 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK

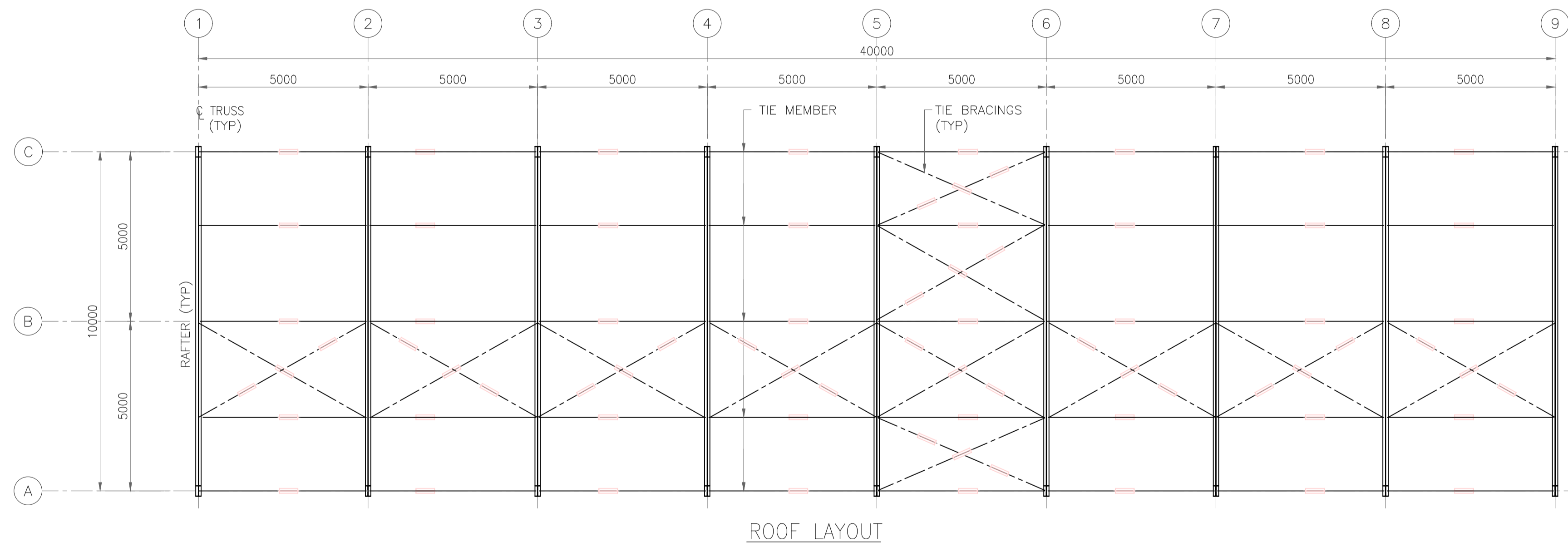
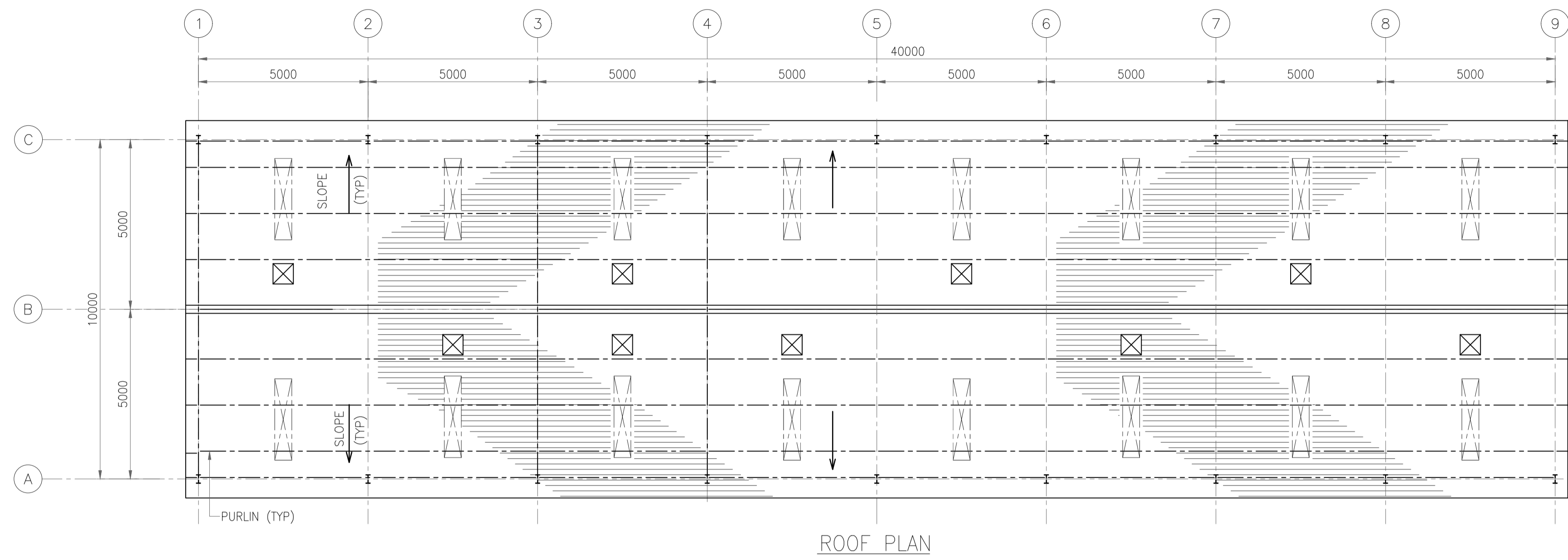
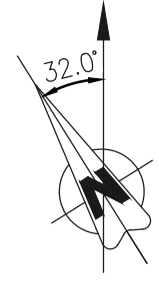
DRG.NO :- 11387-09-AR-DRD-0001 SHT 1 OF 1

TITLE :
**FIRE WATER PUMP HOUSE
ARCHITECTURAL PLANS**

PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :





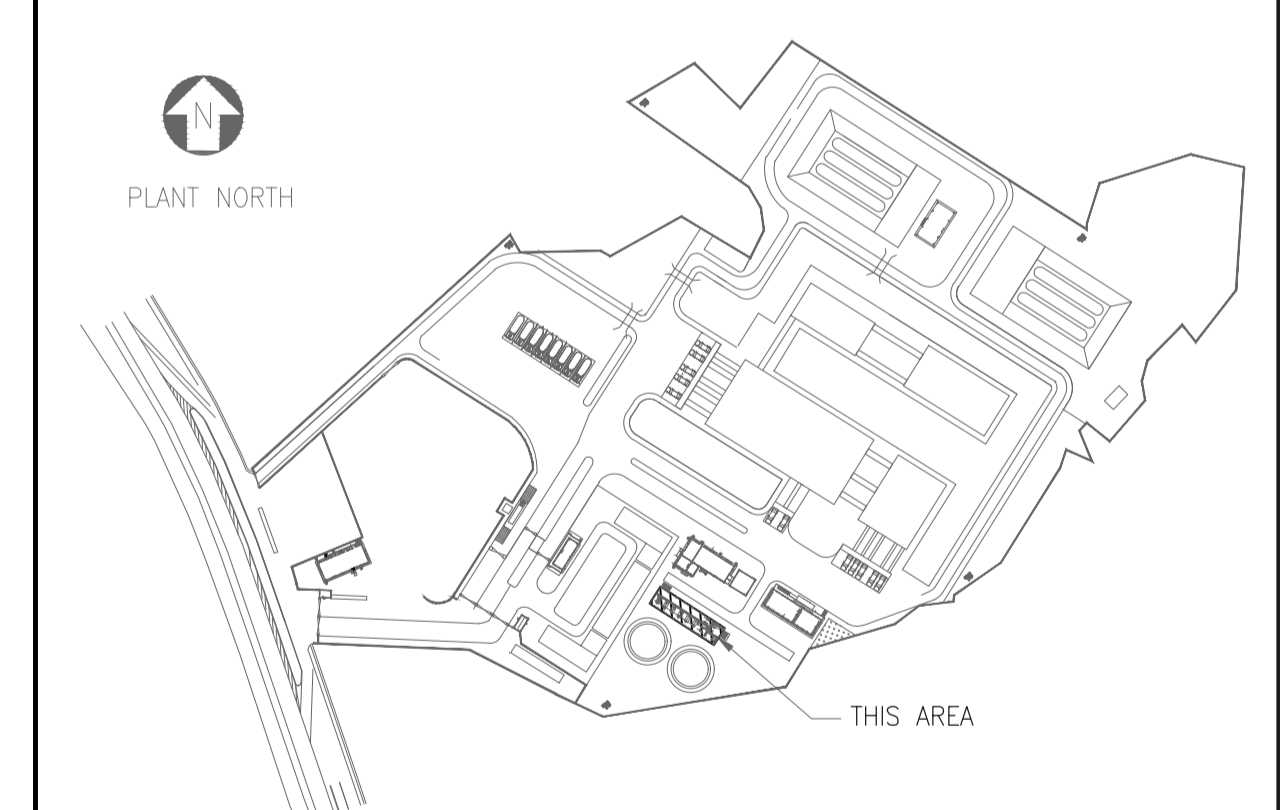
GENERAL NOTES :

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
2. EL. 0.000 CORRESPONDS TO FINISHED GROUND LEVEL.
3. OPENING SHOWN FOR TURBO VENTILATOR IS INDICATIVE ONLY. CONTRACTOR TO FIX THE TURBO VENTILATOR SUITABLY TO AVOID FOULING WITH PURLINS & SAG ROD.
4. FOR LEGENDS REFER DRAWING NO. 11387-00-ST-DST-0001.
5. FIXING OF SHEETING SHALL BE AS PER SPECIFICATION - ROOFING & SIDING WORKS.

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN



SCALE - 1:100

A	06 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
DRG.NO :- 11387-09-AR-DRD-0002					SHT 1 OF 1

TITLE :

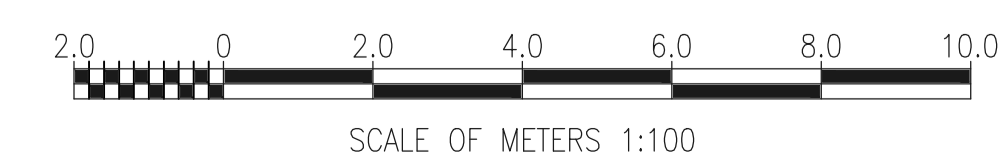
**FIRE WATER PUMP HOUSE
ARCHITECTURAL PLANS**

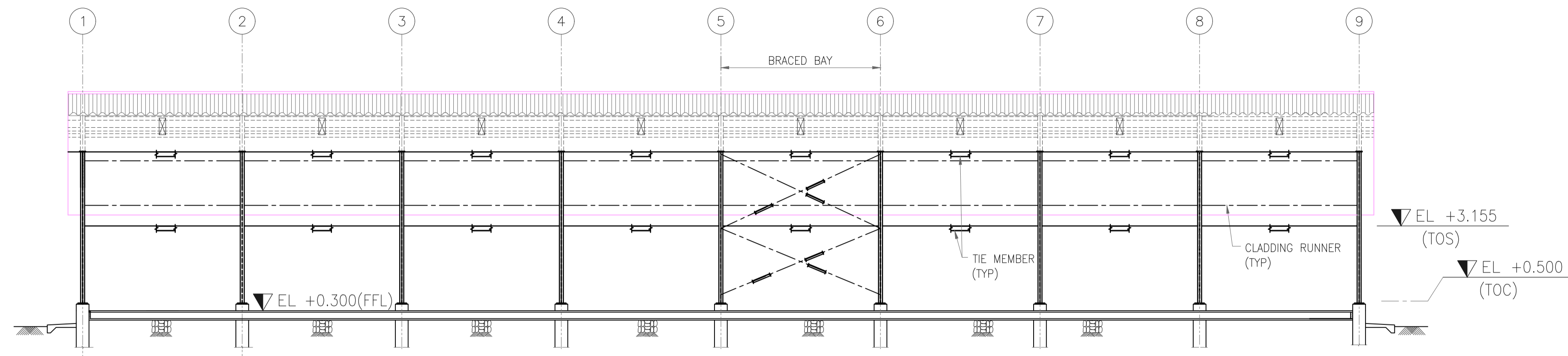
PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :

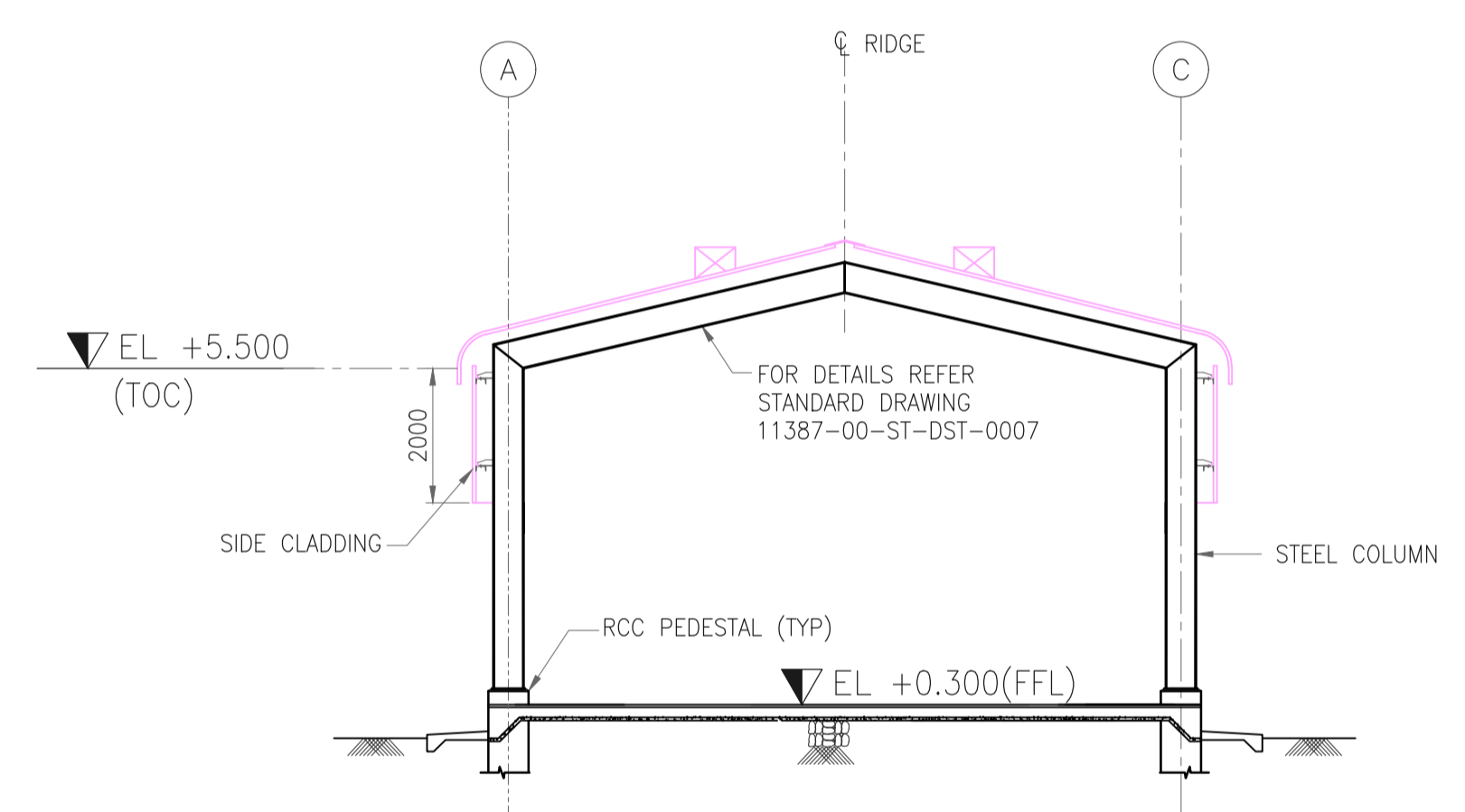

RINA
 RINA Consulting S.p.A.


**HINDUSTAN PETROLEUM
CORPORATION LTD.**





SECTION A
SCALE- 1:100 0001



SECTION B
SCALE- 1:100 0001

GENERAL NOTES :
 1. FOR NOTES REFER DRG. NO. 11387-09-AR-DRD-0001.

HOLD LIST
 1 CABLE TRENCH DETAILS

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.

SCALE - 1:100

A	06 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.

DRG.NO :- 11387-09-AR-DRD-0003 SHT 1 OF 1

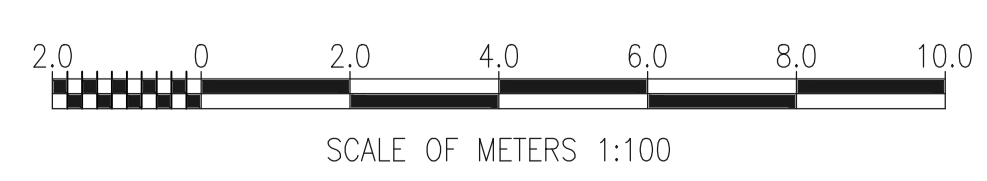
TITLE :
**FIRE WATER PUMP HOUSE
 ARCHITECTURAL SECTIONS**

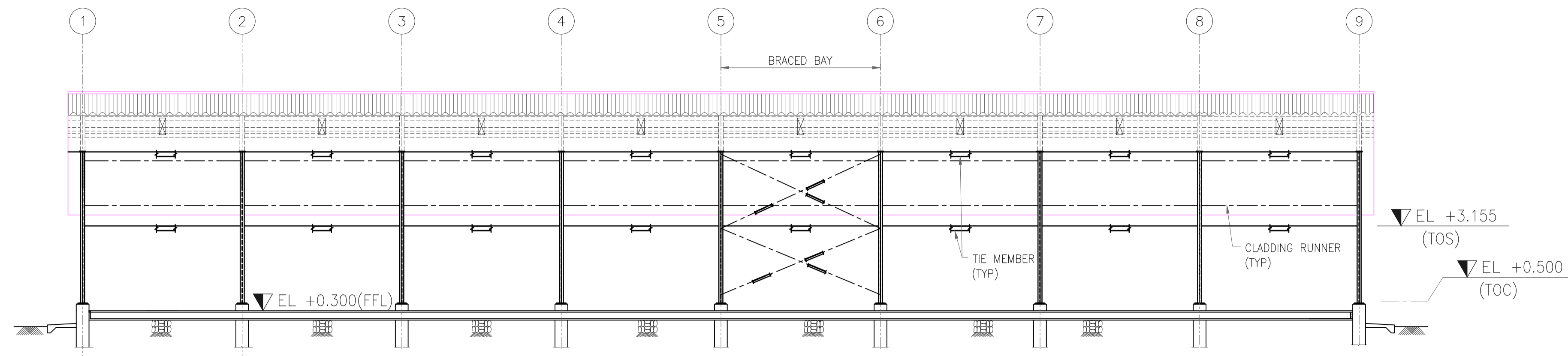
PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :

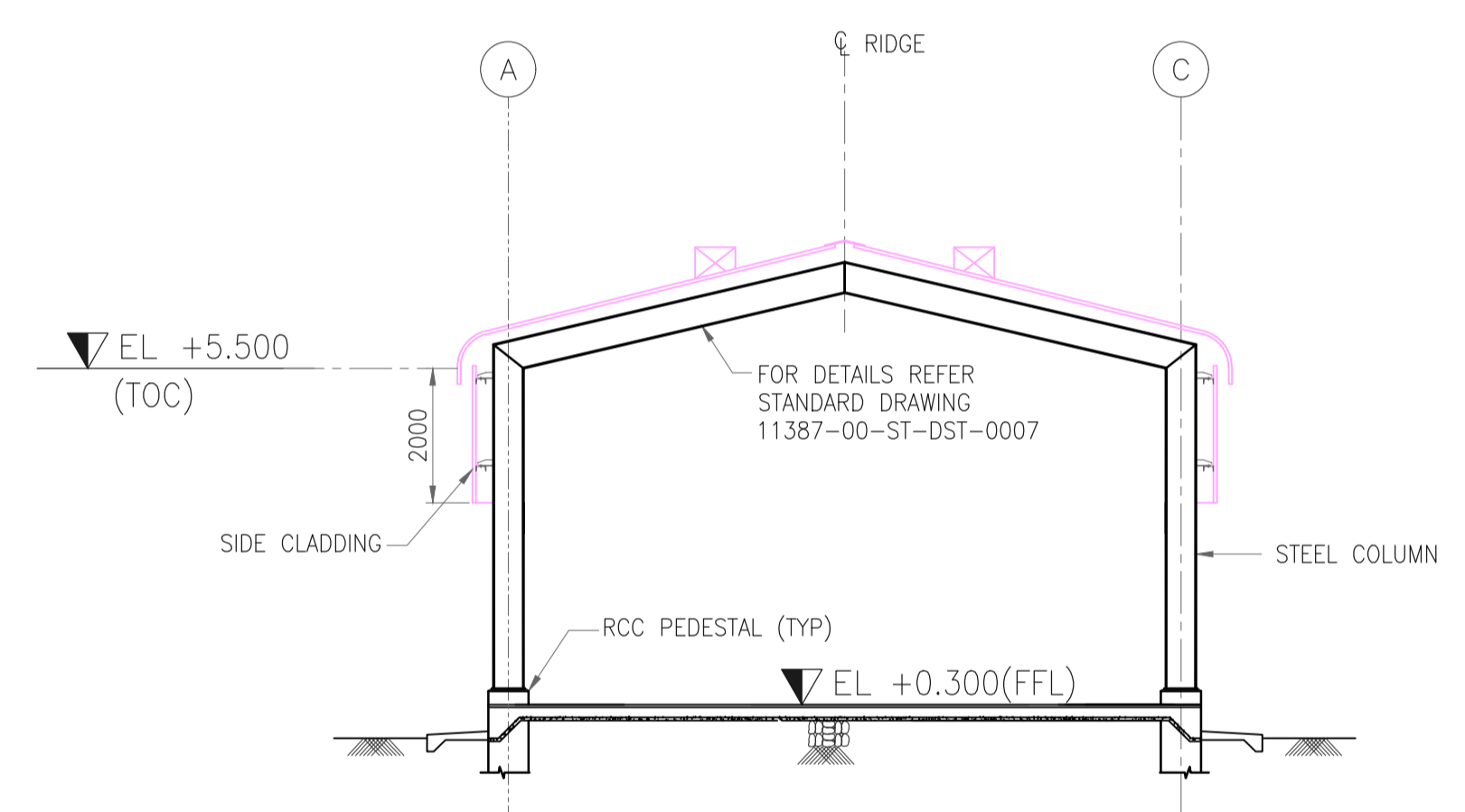

RINA
 RINA Consulting S.p.A.


**HINDUSTAN PETROLEUM
 CORPORATION LTD.**





SECTION A
SCALE- 1:100 0001



SECTION B
SCALE- 1:100 0001

GENERAL NOTES :

- FOR NOTES REFER DRG. NO. 11387-09-AR-DRD-0001.

HOLD LIST

- CABLE TRENCH DETAILS

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.

SCALE - 1:100

REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	06 SEPT 2019	ISSUED FOR REVIEW	PK	RD	SD/SK

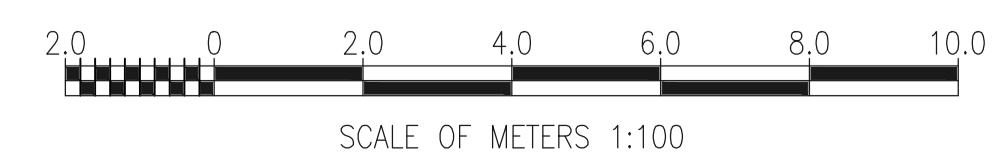
DRG.NO :- 11387-09-AR-DRD-0003 SHT 1 OF 1

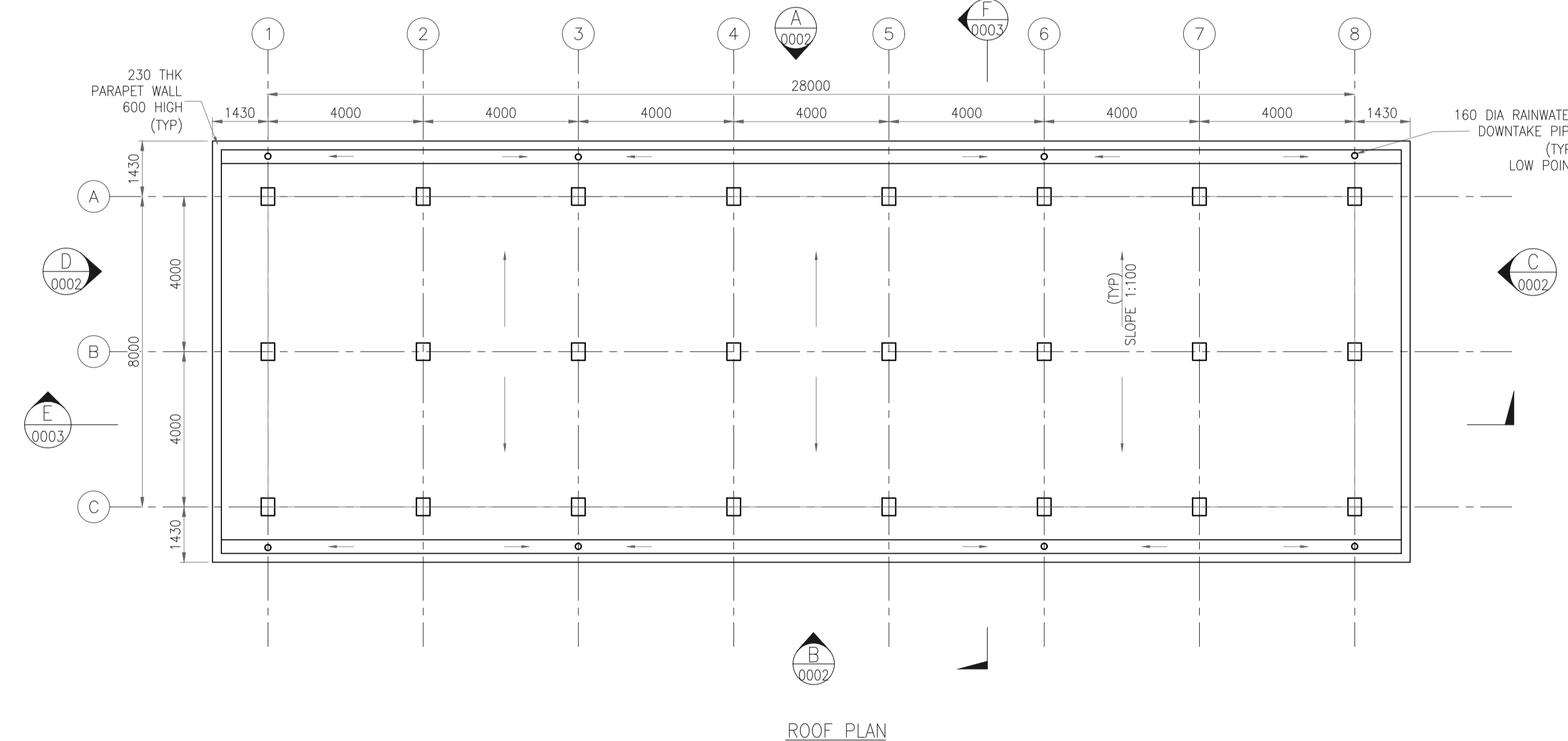
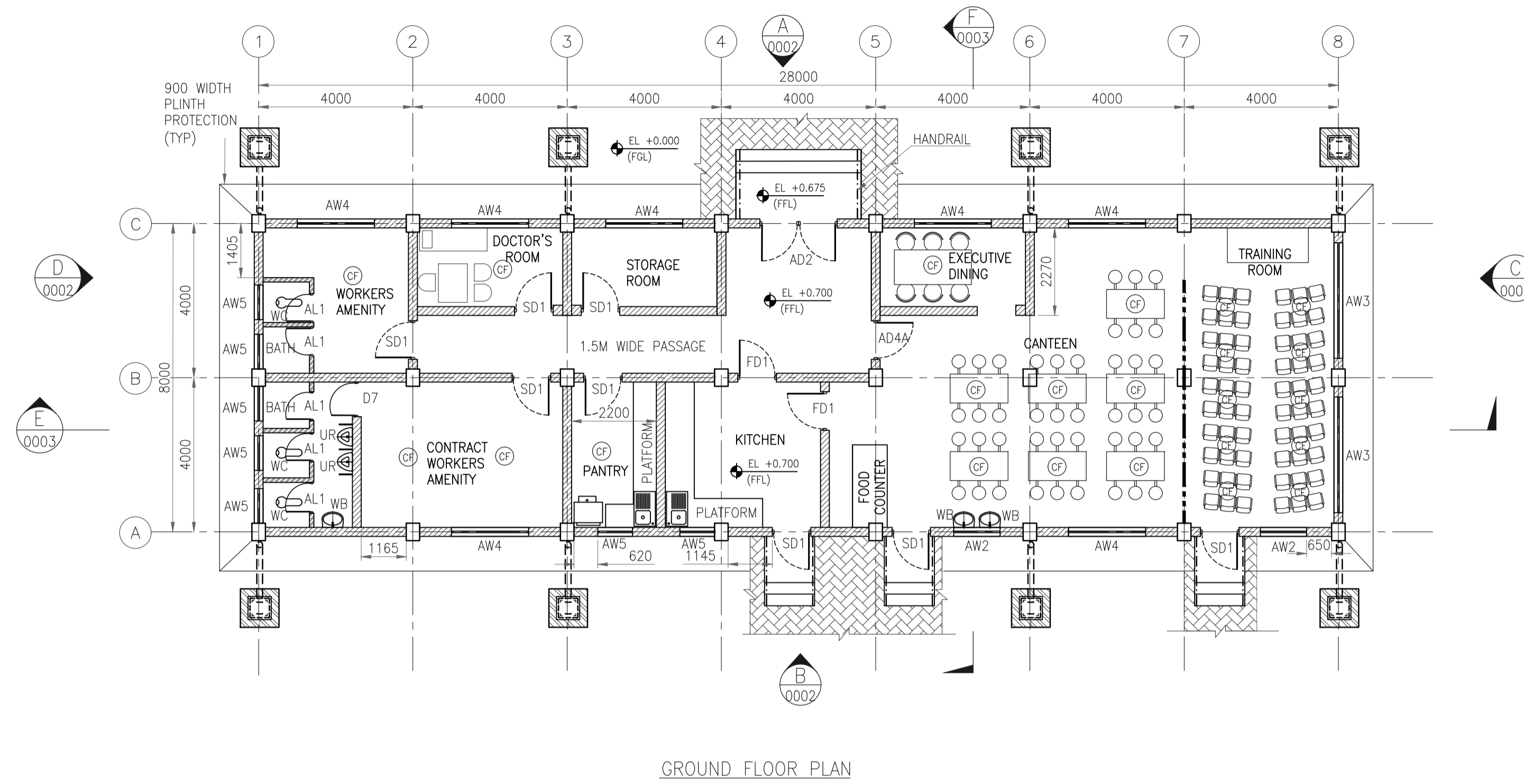
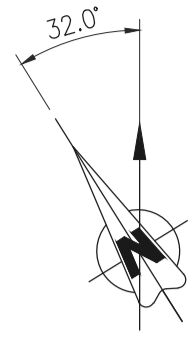
TITLE :
**FIRE WATER PUMP HOUSE
ARCHITECTURAL SECTIONS**

PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :
RINA
RINA Consulting S.p.A.

HP
HINDUSTAN PETROLEUM
CORPORATION LTD.





SCHEDULE OF FINISHES

	FLOOR	DADO/SKIRTING	FALSE CEILING	INTERNAL WALL FINISH	CEILING FINISH	HVAC
WORKERS AMENITY	F5	S3	-	IW1	C1	-
CONTRACT WORKERS AMENITY	F5	S3	-	IW1	C1	-
STORAGE ROOM	F5	S3	-	IW1	C1	-
TOILETS AREA (BATH & W.C.)	F1	S1	-	-	C1	EX
ENTRANCE & STEPS	F8	-	-	-	C1	-
REST ALL ROOMS	F5	S3	-	IW1	C1	-

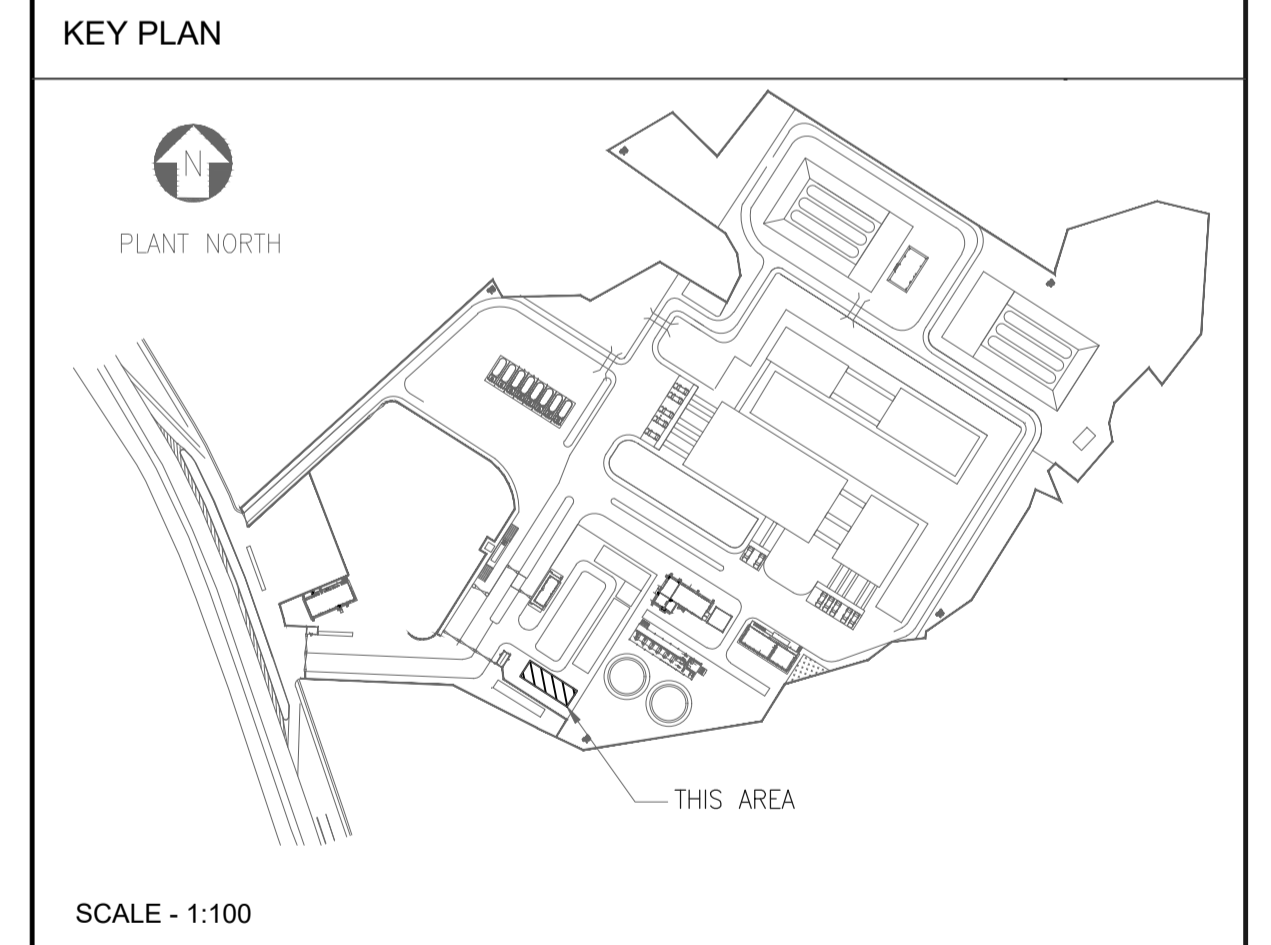
- GENERAL NOTES :**
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
 - EL 0.000 CORRESPONDS TO FINISH GROUND LEVEL. FOR FGL REFER PLOT PLAN.
 - ALL CHAJJA SHALL HAVE DRIP MOULD & GROOVES UNDERNEATH ALL ALONG THE PERIPHERIES.
 - THE CONTRACTOR SHALL CHECK THE ACTUAL OPENING SIZES AT SITE AND THE NUMBERS OF DOOR & WINDOW ETC. IN THE DWG BEFORE FABRICATING/ PROCURING THE SAME.
 - FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER ELECTRICAL EQUIPMENT LAYOUT.
 - EXTERNAL PAINT SHALL BE SINGLE COAT OF PRIMER AND TWO COAT OF ANTI-FUNGAL, ACRYLIC BASED PAINT ON EXTERNAL WALL. EXTERIOR TEXTURED PAINT FINISH SHALL BE PROVIDED ON EXTERNAL COLUMN, BEAM AND PARAPET.
 - HANDRAIL SHALL BE STAINLESS STEEL SS304 GRADE (UNO).
 - ANTI TERMITE TREATMENT SHALL BE PROVIDED UNDER FLOOR AND JUNCTION OF WALLS AND FLOOR.
 - CONCRETE HOLLOW BLOCK OF OPEN CAVITY TYPE SHALL BE GRADE A (7.0) OF SIZE 400X200X200 CONFORMING TO IS2185. UPTO CEILING HEIGHT (UNO)
 - ALUMINIUM FULLY GLAZED PARTITION SHALL BE OF POWDER COATED ALUMINIUM WITH 10MM THICK (MINIMUM THICKNESS) TOUGHENED GLASS WITH FROSTING FILMS - PATTERN AS APPROVED BY HPCL.
 - PLATFORM IN PANTRY & CANTEEN SHALL BE 600MM WIDE AND 900MM ABOVE FFL. PLATFORM SHALL BE OF 18-20MM THK POLISHED GRANITE.
 - HIGH GRADE 304 STAINLESS STEEL SINK SHALL BE AS PER SPECIFICATION.
 - FOR WORKERS TOILET, HEIGHT OF 115 THK BRICK PARTITION WALL (WC & SHOWER) SHALL BE 2.400m ABOVE FFL.
 - WINDOW BLINDS - ROLLER TYPE SHALL BE PROVIDED IN OFFICERS WORK AREA, STATION INCHARGE, MEETING ROOM AND RECREATION ROOM AS PER SPECIFICATION AND AS APPROVED BY HPCL.
 - FOR ELECTRICAL & INSTRUMENTATION CABLE ENTRY LOCATIONS REFER RESPECTIVE CABLE LAYOUT DRAWINGS.
 - ONLY MAJOR PENETRATIONS ARE INDICATIVELY SHOWN. CONTRACTOR TO DETAIL ALL REQUIRED ROOF & WALL PENETRATION.
 - WATER PROOFING SHALL BE LAID AS PER SPECIFICATION - WATER PROOFING WORKS.

LEGENDS

- WB - WASH BASIN
- WC - WATER CLOSET
- UR - URINAL
- [Hatched Box] - 230 THK BRICK WALL
- [Diagonal Hatched Box] - 115 THK BRICK WALL
- [Dashed Line] - HANDRAIL
- [Circle with CF] - CEILING FAN

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.
2	ARCHITECTURAL ELEVATIONS	11387-15-AR-DRD-0002
1	ARCHITECTURAL SECTIONS	11387-15-AR-DRD-0003



REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	16 SEPT 2019	ISSUED FOR REVIEW	SLD	DP	SK

DRG.NO :- 11387-15-AR-DRD-0001 SHT 1 OF 1

TITLE :

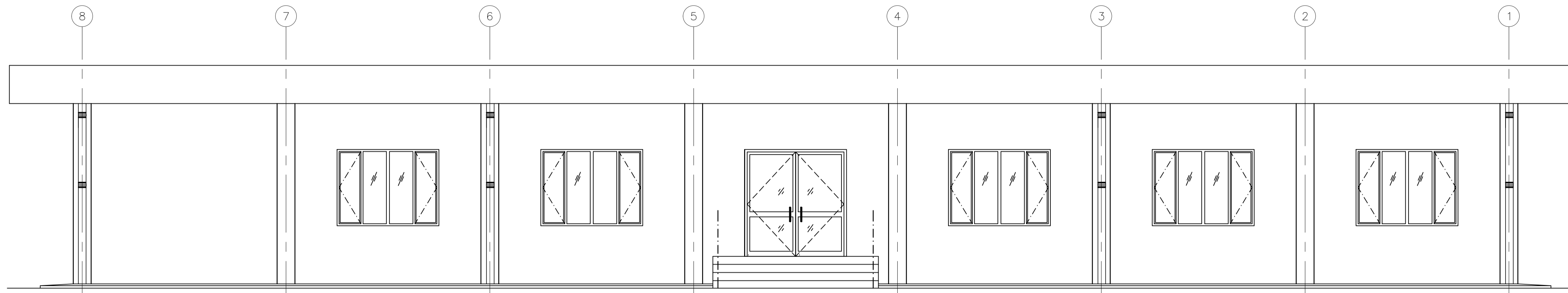
**WORKERS' AMENITY BUILDING
ARCHITECTURAL PLANS**

PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

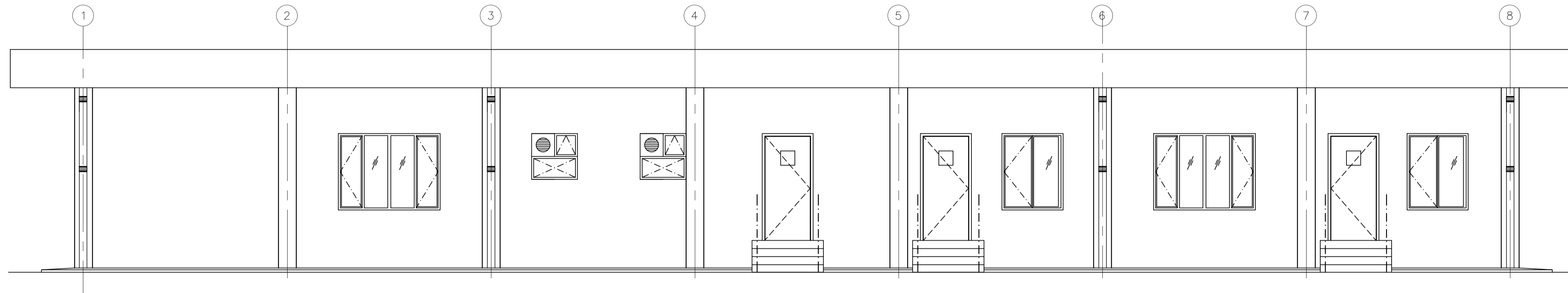
EPMC :

HINDUSTAN PETROLEUM CORPORATION LTD.

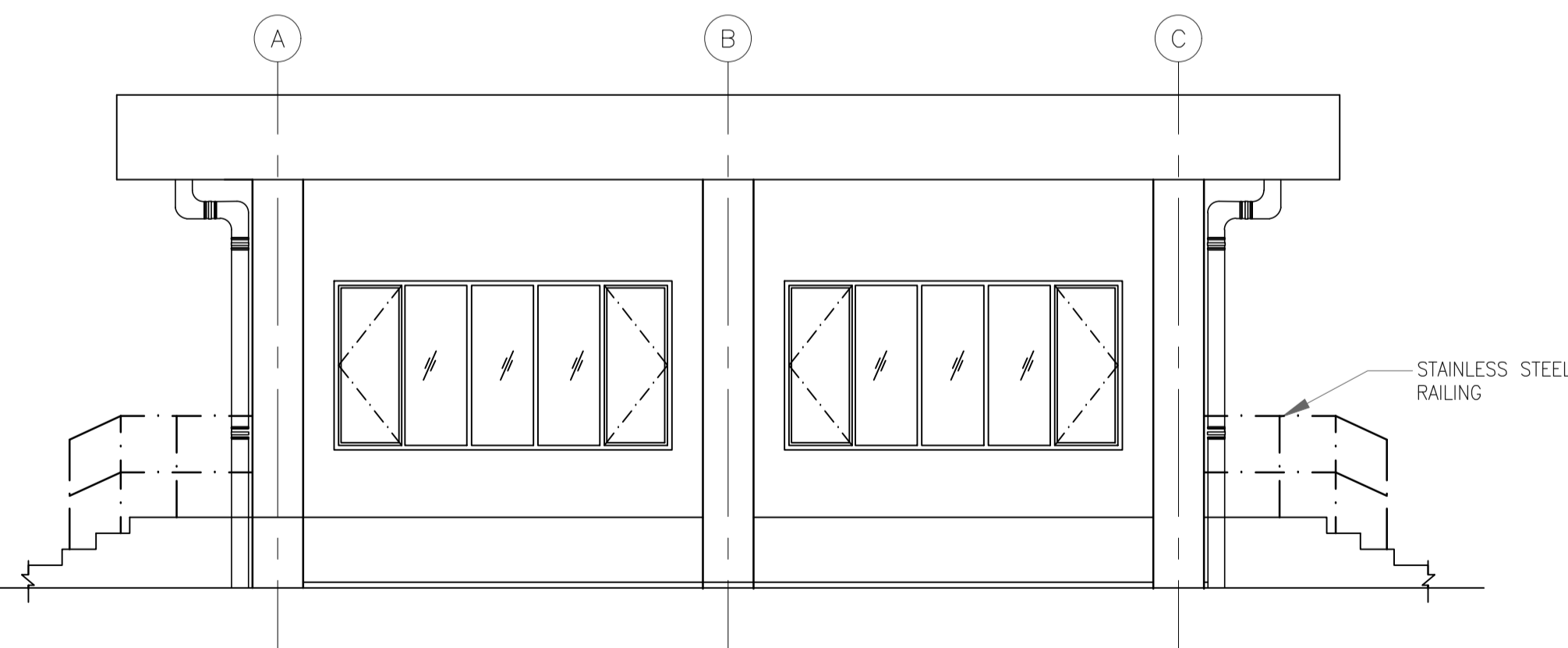
RINA Consulting S.p.A.



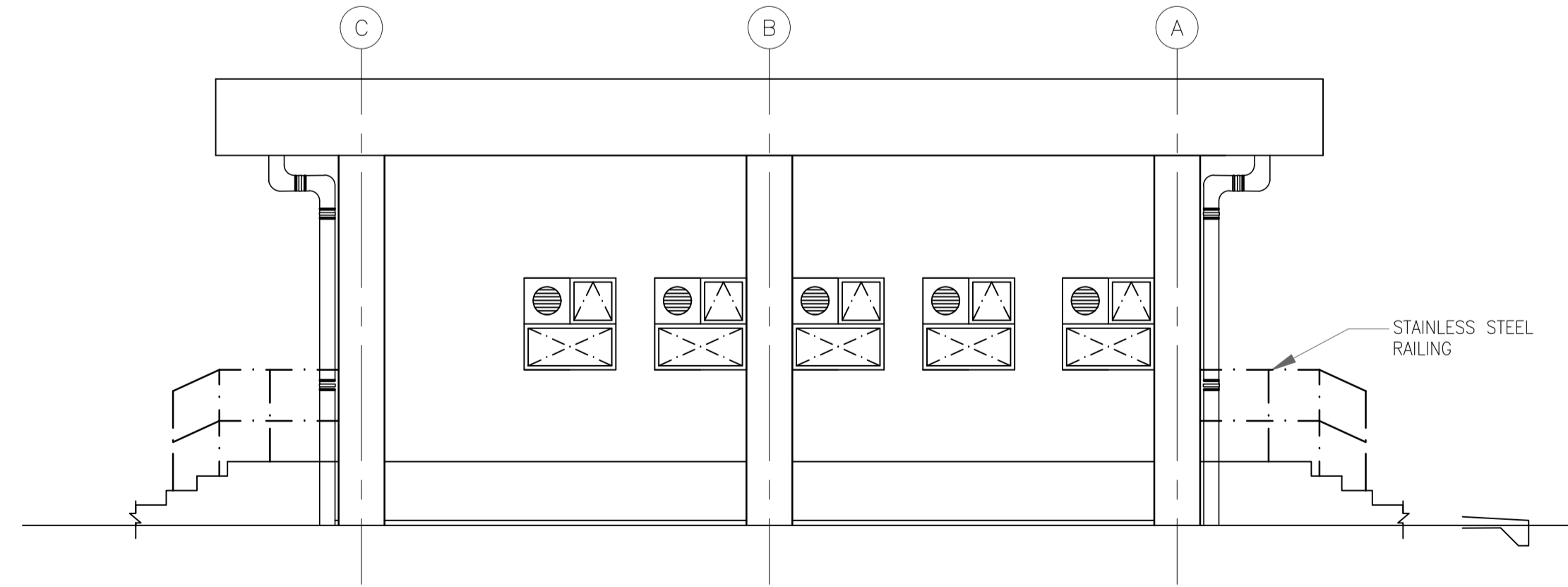
ELEVATION A
SCALE- 1:50



ELEVATION B
SCALE- 1:50



ELEVATION C
SCALE- 1:50



ELEVATION D
SCALE- 1:50

REFERENCE DRAWING

3	ARCHITECTURAL SECTIONS	11387-15-AR-DRD-0003
2	ARCHITECTURAL PLANS	11387-15-AR-DRD-0001
1	PLOT PLAN	11387-12-PI-PLN-001
S.NO.	REFERENCE DRAWING	DRAWING NO.

SCALE - 1:50

A	16 SEPT 2019	ISSUED FOR REVIEW	SLD	DP	SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
DRG.NO :-	11387-15-AR-DRD-0002				SHT 1 OF 1

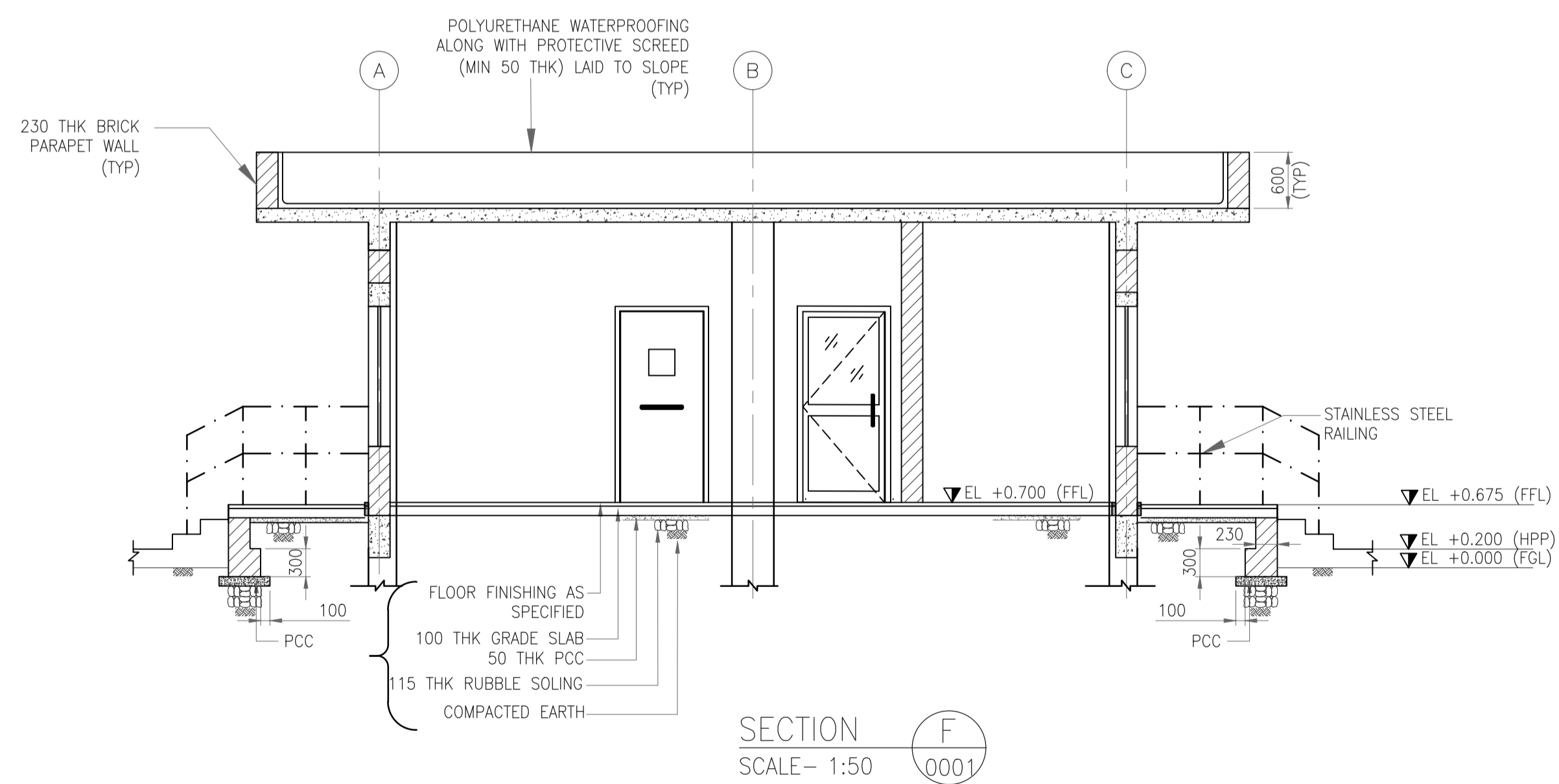
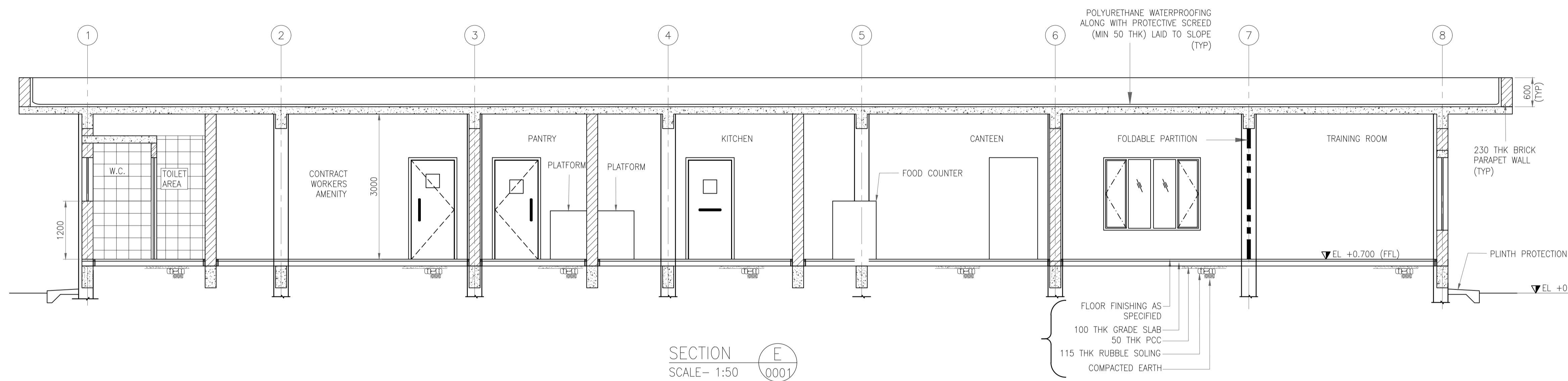
TITLE :
**WORKERS AMENITY BUILDING
ARCHITECTURAL ELEVATIONS**

PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :



**HINDUSTAN PETROLEUM
CORPORATION LTD.**



LEGENDS

- 230 THK BRICK WALL
- HANDRAIL
- 115 THK BRICK WALL

REFERENCE DRAWING

2	ARCHITECTURAL ELEVATIONS	11387-15-AR-DRD-0002
2	ARCHITECTURAL PLANS	11387-15-AR-DRD-0001
1	PLOT PLAN	11387-12-PI-PLN-001
S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN

SCALE - 1:100

A	16 SEPT 2019	ISSUED FOR REVIEW	SLD	DP	SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.

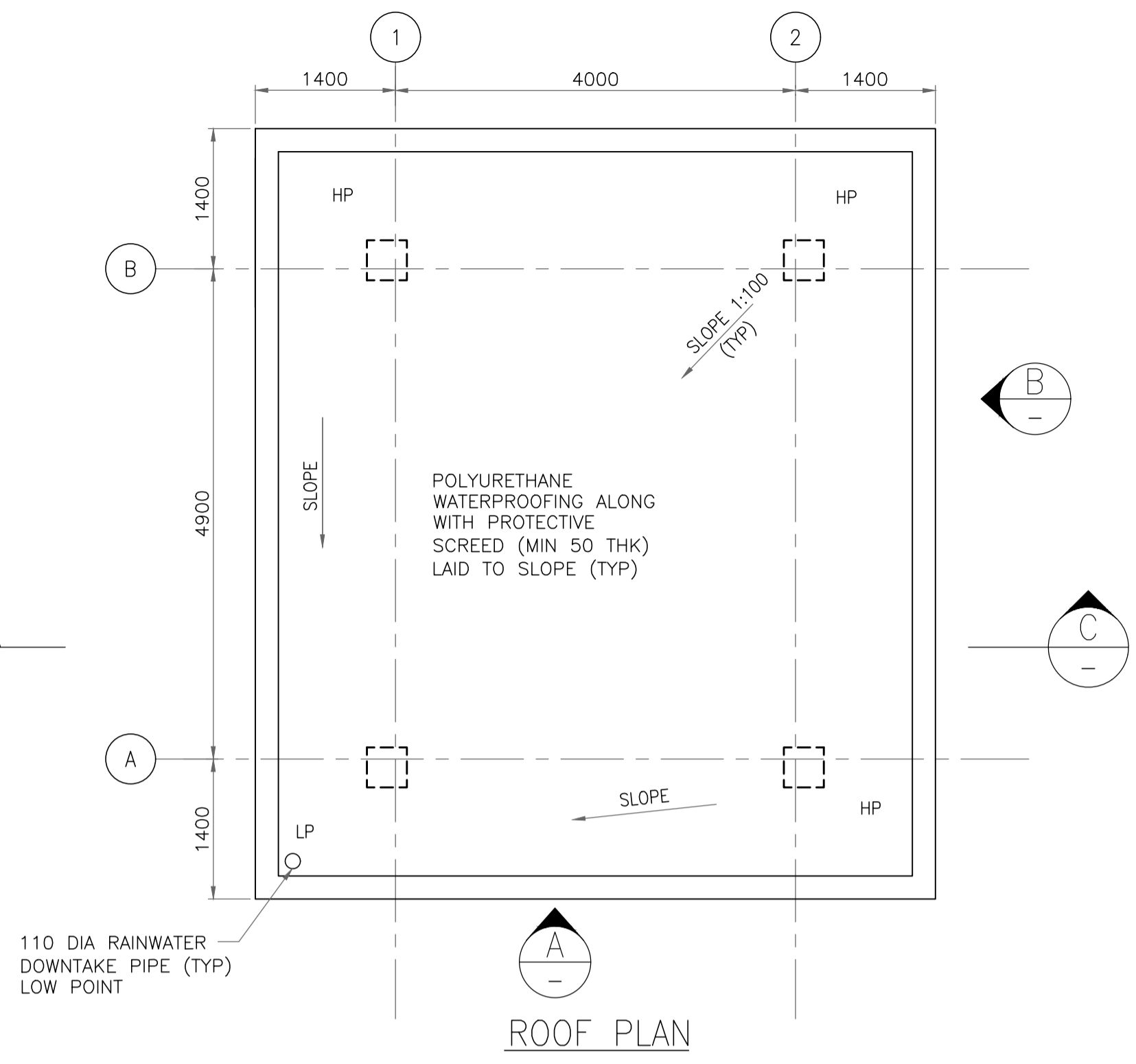
DRG.NO :- 11387-15-AR-DRD-0003 SHT 1 OF 1

TITLE :
**WORKERS AMENITY BUILDING
ARCHITECTURAL SECTIONS**

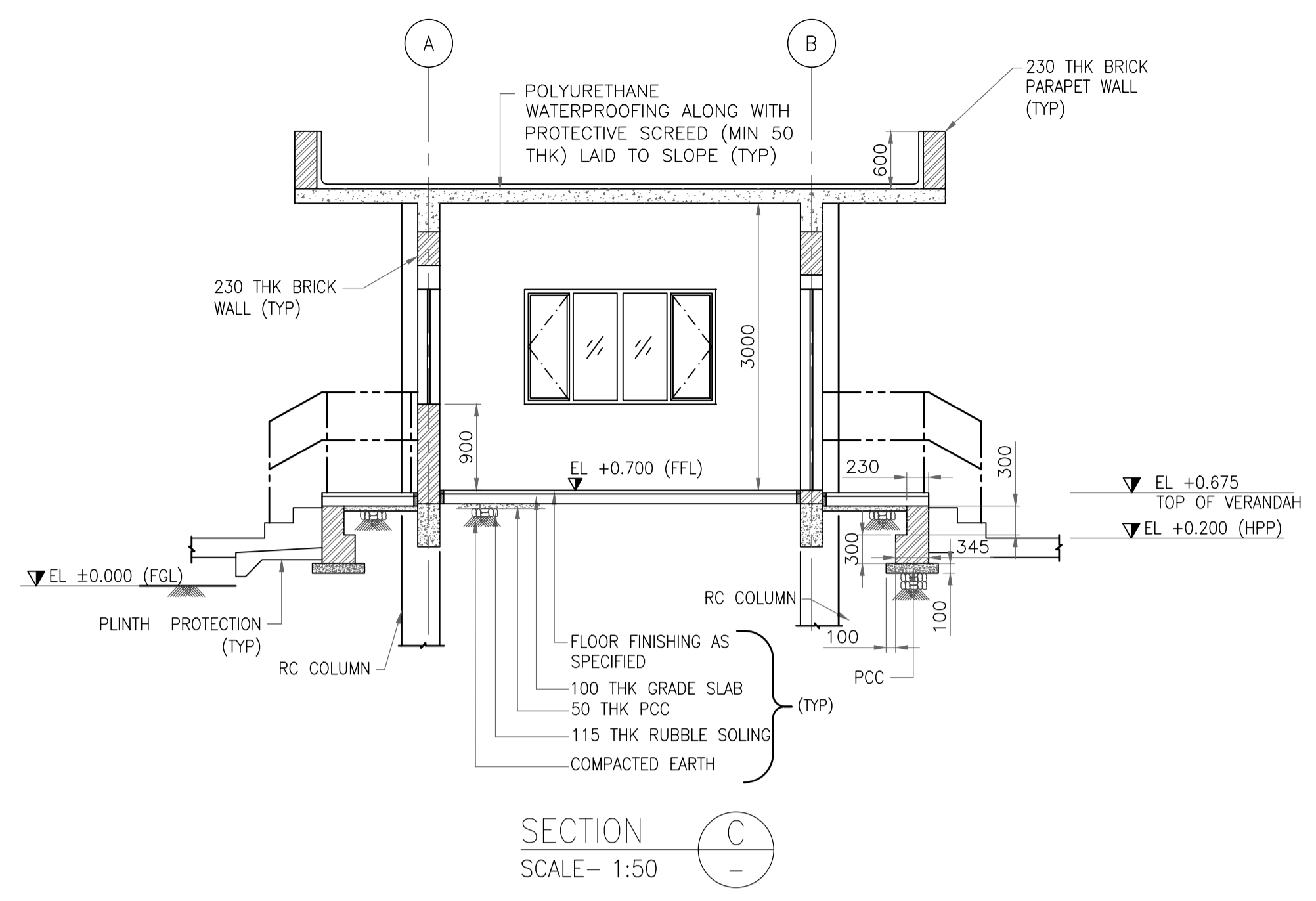
PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :

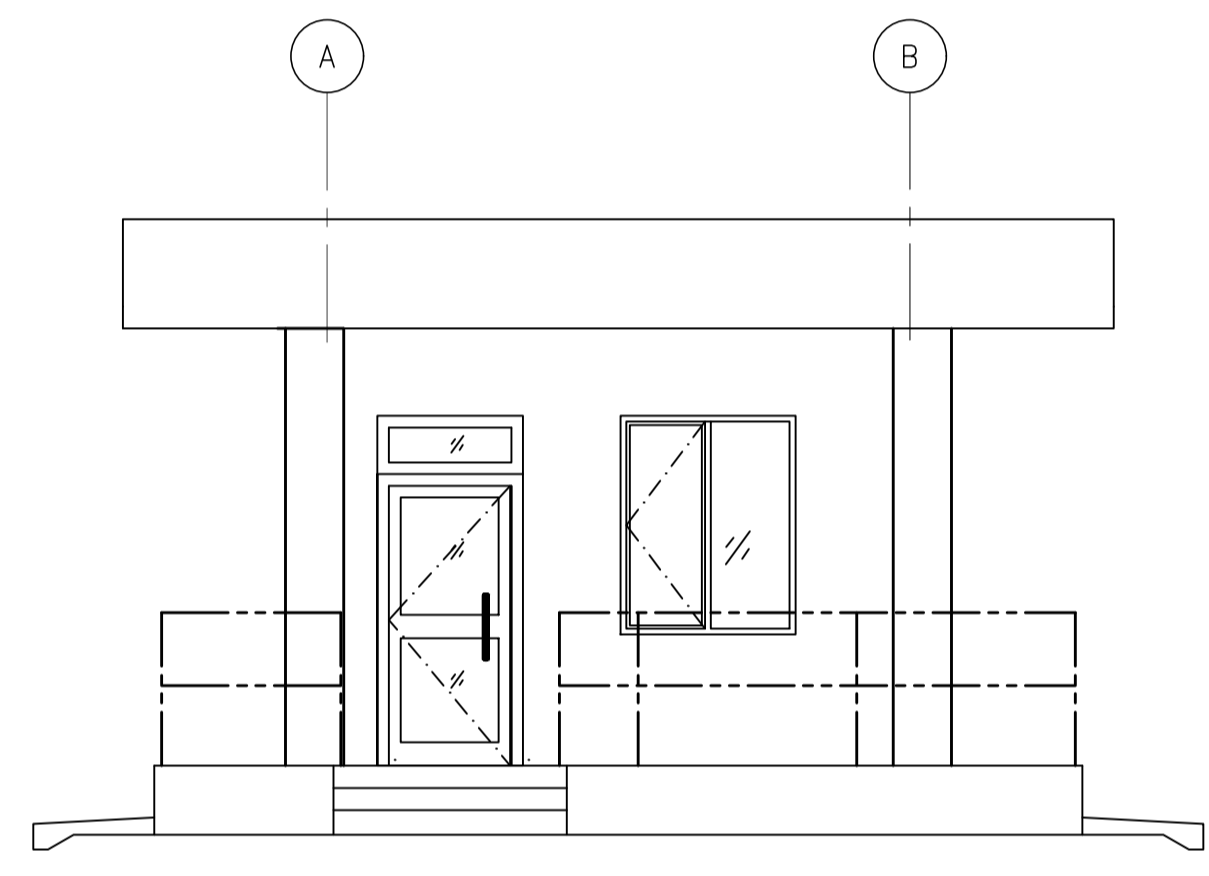




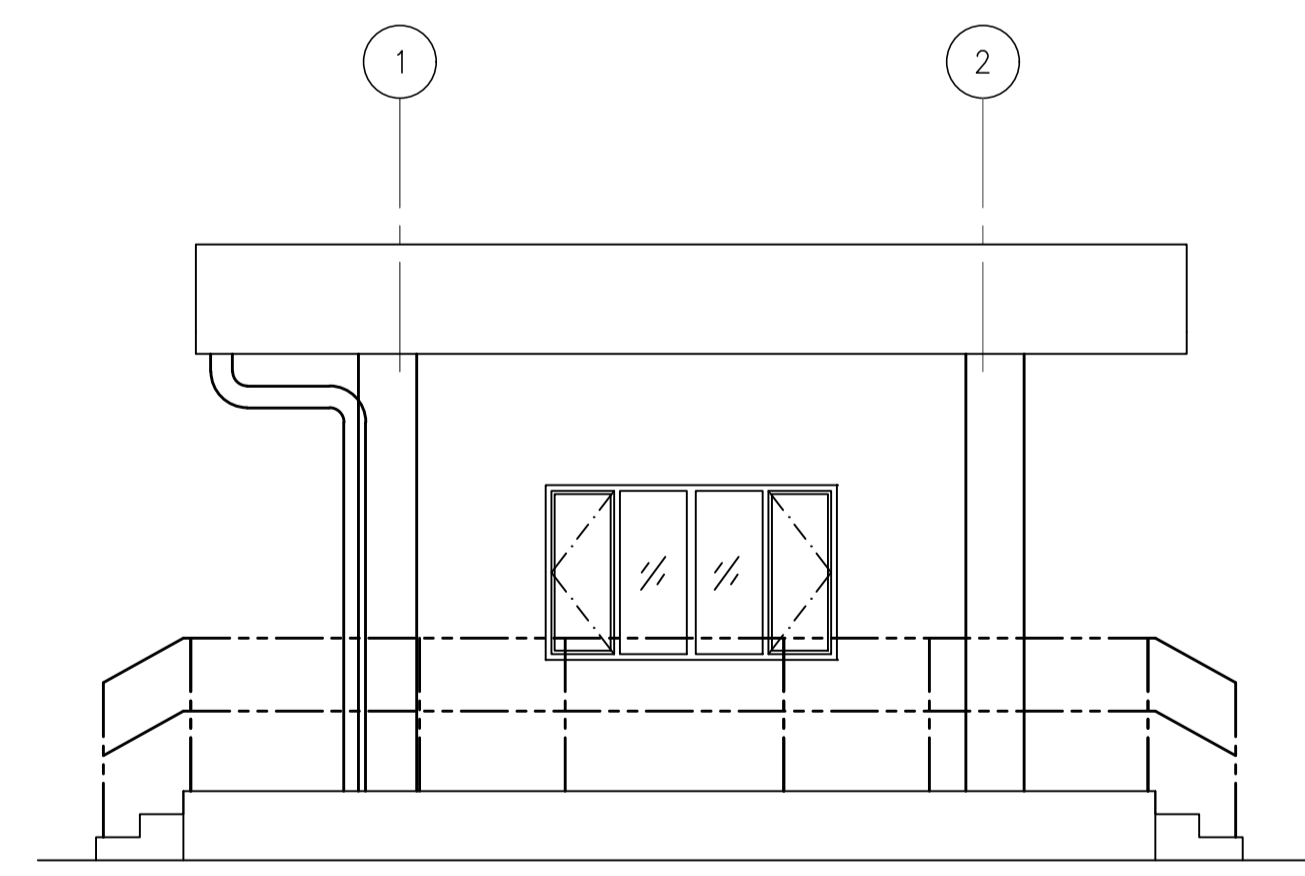
ROOF PLAN



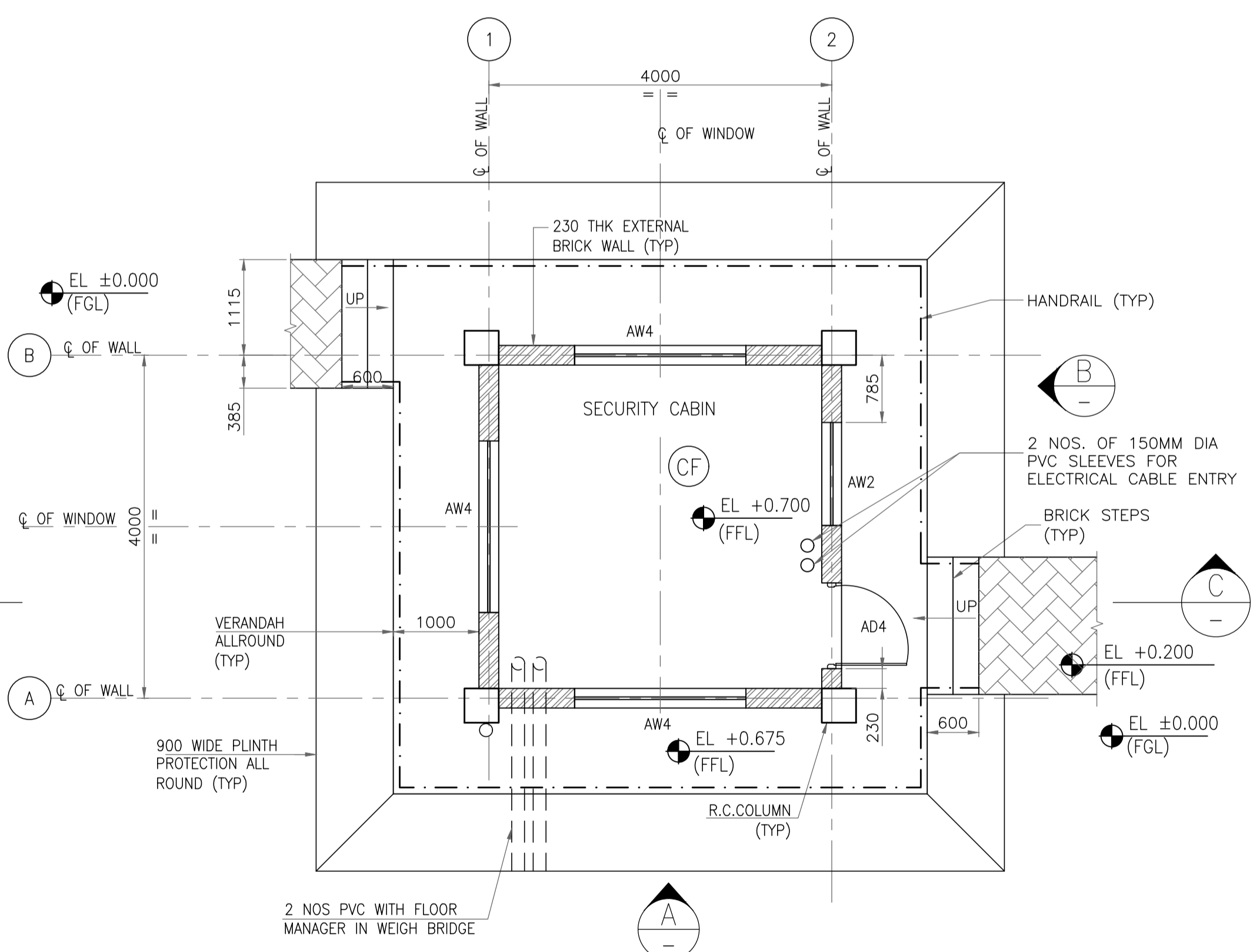
SECTION C-C
SCALE- 1:50



ELEVATION B-B
SCALE- NTS



ELEVATION A-A
SCALE- 1:50



GROUND FLOOR PLAN

SCHEDULE OF FINISHES
(REFER DRAWING NO. 11387-00-AR-DST-0002)

ROOM	FLOOR FINISH	SKIRTING	INTERNAL WALL	EXTERNAL WALL	CEILING
BUILDING IN GENERAL				EW1	
SECURITY CABIN	F5b	S3	IW1	-	C1
VERANDAH / STEPS	F5b	-	-	-	C1

GENERAL NOTES :

- ALL DIMENSIONS ARE IN MM & CO-ORDINATES, ELEVATIONS ARE IN METERS.
- FGL ±0.00 CORRESPONDS TO FINISH GROUND LEVEL.
- FOR ORIENTATION & LOCATION REFER PLOT PLAN.
- THE CONTRACTOR SHALL CHECK ALL THE CUTOUT ACTUAL SIZE AT SITE AND SHALL INCORPORATE THE SAME IN THE DOOR AND WINDOWS DRAWING BEFORE FABRICATION AFTER APPROVAL OF ENGINEER IN CHARGE.
- FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER ELECTRICAL EQUIPMENT LAYOUT.
- FOR ELECTRICAL & INSTRUMENTATION CABLE ENTRY LOCATIONS REFER RESPECTIVE CABLE LAYOUT DRAWINGS.
- ONLY MAJOR PENETRATION ARE INDICATIVE SHOWN, CONTRACTOR TO DETAIL ALL REQUIRED ROOF & WALL PENETRATION.
- EXTERNAL PAINT SHALL BE SINGLE COAT OF PRIMER AND TWO COAT OF ANTIFUNGAL, ACRYLIC BASED PAINT ON EXTERNAL WALL. EXTERIOR TEXTURED PAINT FINISH SHALL BE PROVIDED ON EXTERNAL COLUMN, BEAM, PARAPET AND FLOWER BED.
- ANTI TERMITE TREATMENT SHALL BE PROVIDED UNDER FLOOR AND JUNCTION OF WALLS AND FLOOR.
- WATER PROOFING SHALL BE LAID AS PER SPECIFICATION - WATER PROOFING WORKS.
- REAR WINDOW MARKED "*" SHOULD BE PROVIDED FOR SECURITY CABIN ONLY AND NOT FOR WEIGH BRIDGE CABIN.

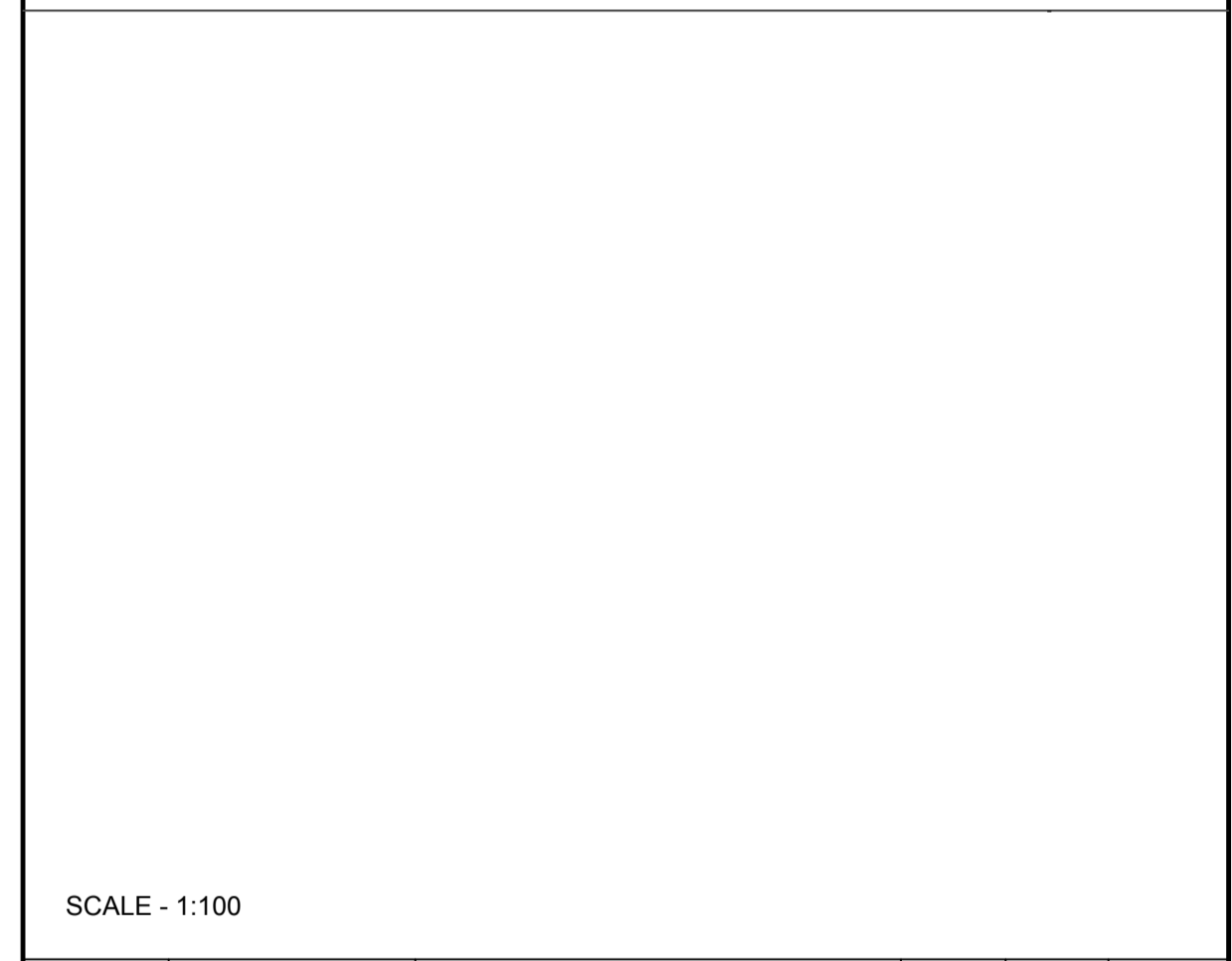
LEGENDS

- HP - HIGH POINT
- LP - LOW POINT
- HPP - HIGH POINT PAVING
- AW - ALUMINUM WINDOW
- AD - ALUMINUM DOOR
- RTL - ROAD TOP LEVEL
- FFL - FINISHED FLOOR LEVEL
- FGL - FINISHED GROUND LEVEL
- CF - CEILING FAN

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.
3	DOOR, WINDOW, ROLLING SHUTTER & VENTILATOR SCHEDULE	11387-00-AR-DST-0003/0004
2	ARCHITECTURAL STANDARD DETAILS	11387-00-AR-DST-0001
1	OVERALL PLOT PLAN	11387-12-PI-PLN-0001

KEY PLAN



REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
0	14 JUNE 2019	ISSUED FOR REVIEW	VK	ND	SD/SK

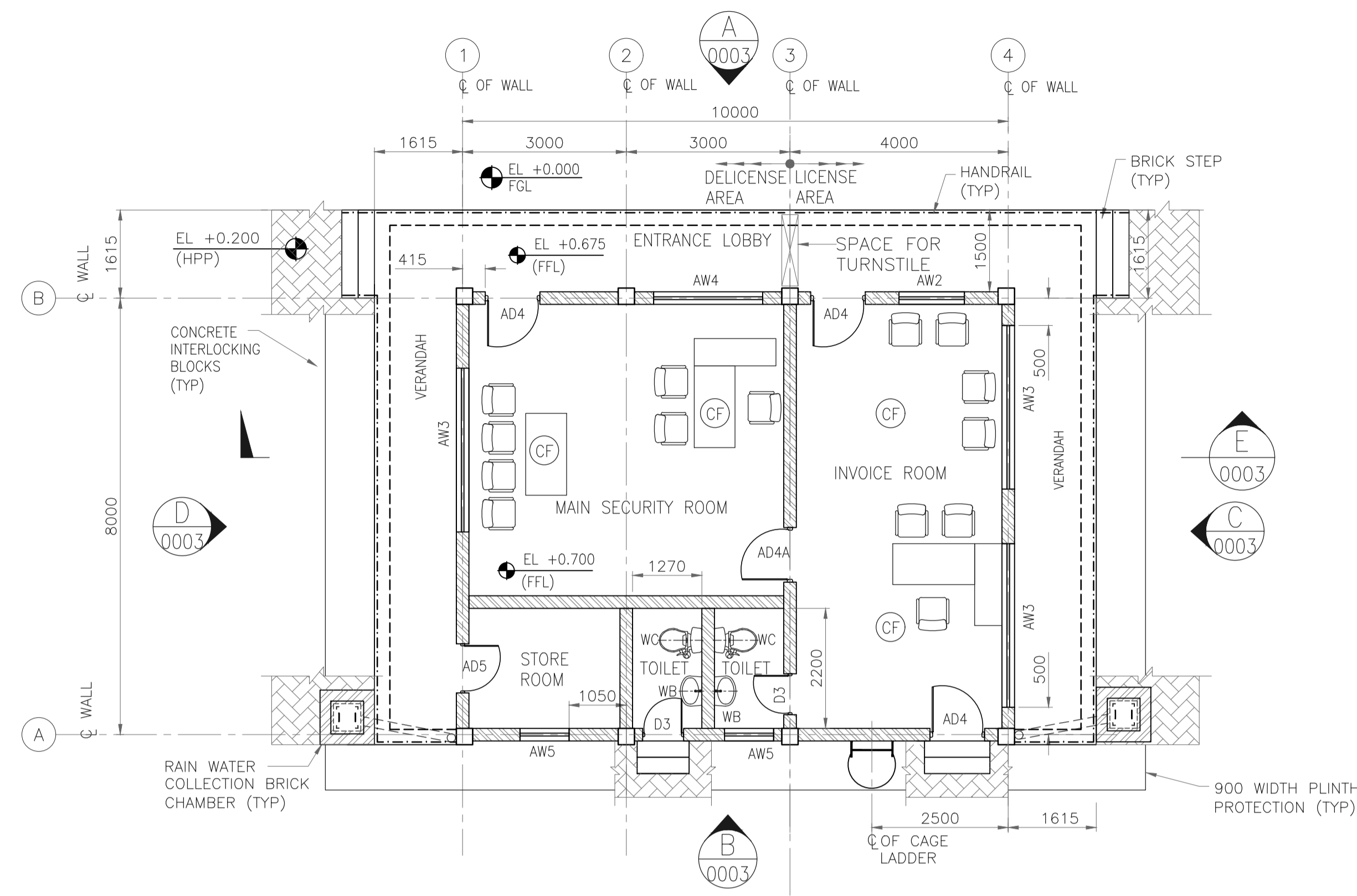
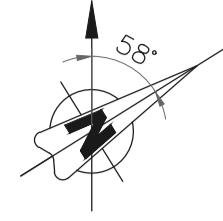
DRG.NO :- 11387-16-AR-DRD-0001 SHT 1 OF 1

TITLE :
**SECURITY CABIN
ARCHITECTURAL PLAN, SECTIONS
& ELEVATIONS**

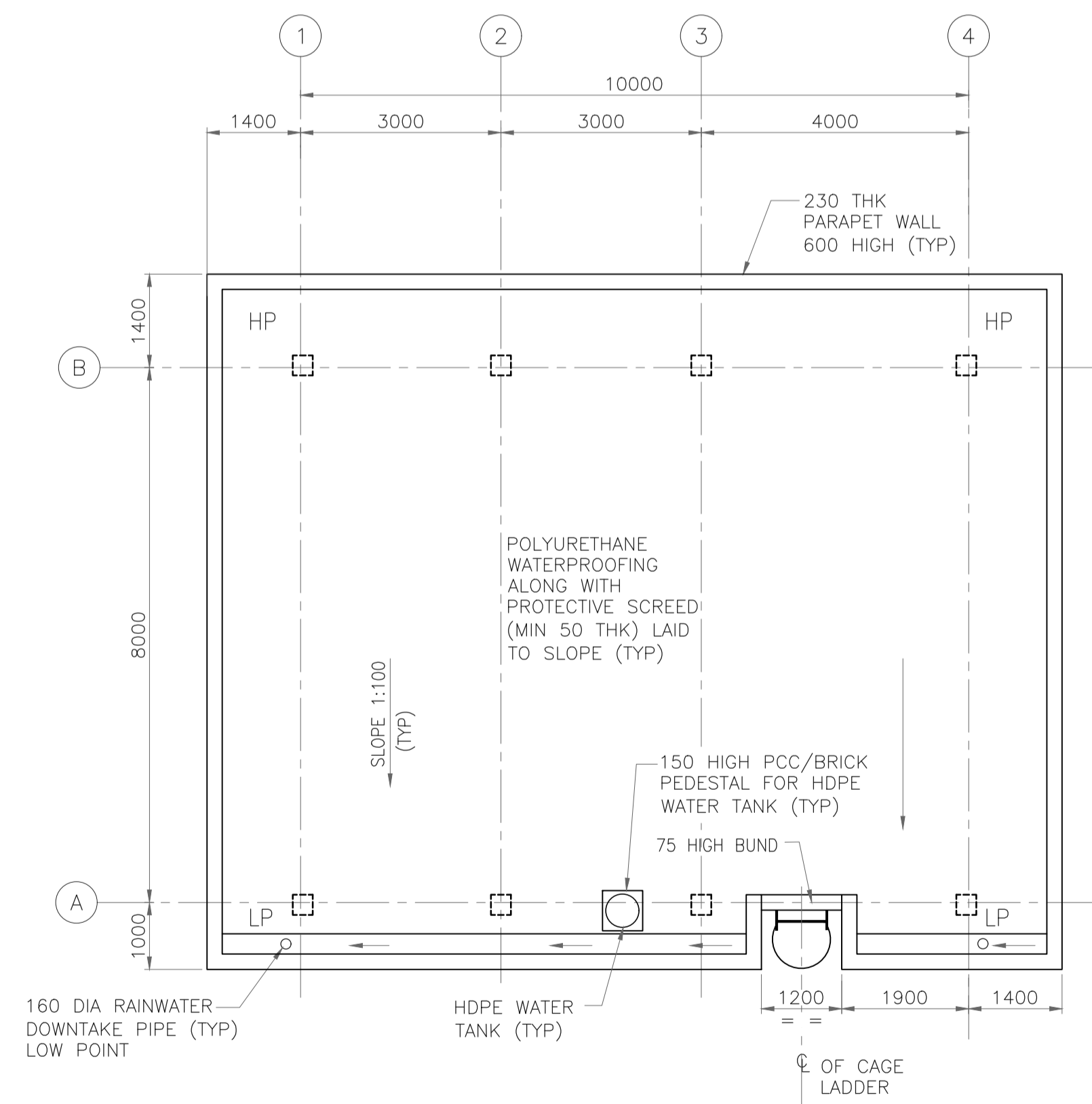
PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

CONSULTANT :
RINA
RINA Consulting S.p.A.

HP
HINDUSTAN PETROLEUM
CORPORATION LTD.



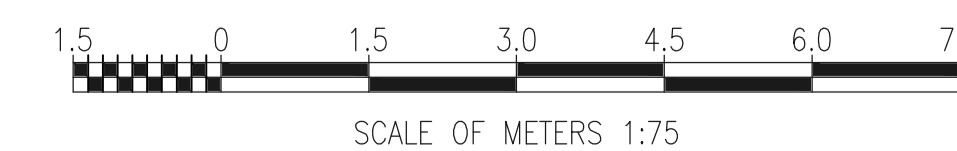
GROUND FLOOR PLAN



ROOF PLAN

SCHEDULE OF FINISHES

	FLOOR	DADO/SKIRTING	FALSE CEILING	INTERNAL WALL FINISH	CEILING FINISH	HVAC
INVOICE ROOM	F5	S3	-	IW1	C1	-
MAIN SECURITY ROOM	F5	S3	-	IW1	C1	-
STORE ROOM	F5	S3	-	IW1	C1	-
TOILETS	F1	S1	-	-	C1	EX
ENTRANCE & STEPS	F8	-	-	-	C1	-



GENERAL NOTES :

- ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS & CO-ORDINATES ARE IN METERS.
- FGL ±0.00 CORRESPONDS TO FINISHED GROUND LEVEL. FOR FGL REFER PLOT PLAN.
- THE CONTRACTOR SHALL CHECK ALL THE CUTOUT ACTUAL SIZE AT SITE AND SHALL INCORPORATE THE SAME IN THE DOOR AND WINDOWS DRAWING BEFORE FABRICATION AFTER APPROVAL OF ENGINEER IN CHARGE.
- FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER ELECTRICAL EQUIPMENT LAYOUT.
- FOR ELECTRICAL & INSTRUMENTATION CABLE ENTRY LOCATIONS REFER RESPECTIVE CABLE LAYOUT DRAWINGS.
- ONLY MAJOR PENETRATION ARE INDICATIVE SHOWN, CONTRACTOR TO DETAIL ALL REQUIRED ROOF & WALL PENETRATION.
- EXTERNAL PAINT SHALL BE SINGLE COAT OF PRIMER AND TWO COAT OF ANTIFUNGAL, ACRYLIC BASED PAINT ON EXTERNAL WALL. EXTERIOR TEXTURED PAINT FINISH SHALL BE PROVIDED ON EXTERNAL COLUMN, BEAM & PARAPET.
- HANDRAIL SHALL BE STAINLESS STEEL SS304 GRADE (UNO).
- ANTI TERMITE TREATMENT SHALL BE PROVIDED UNDER FLOOR AND JUNCTION OF WALLS AND FLOOR.
- WATER PROOFING SHALL BE LAID AS PER SPECIFICATION - WATER PROOFING WORKS.

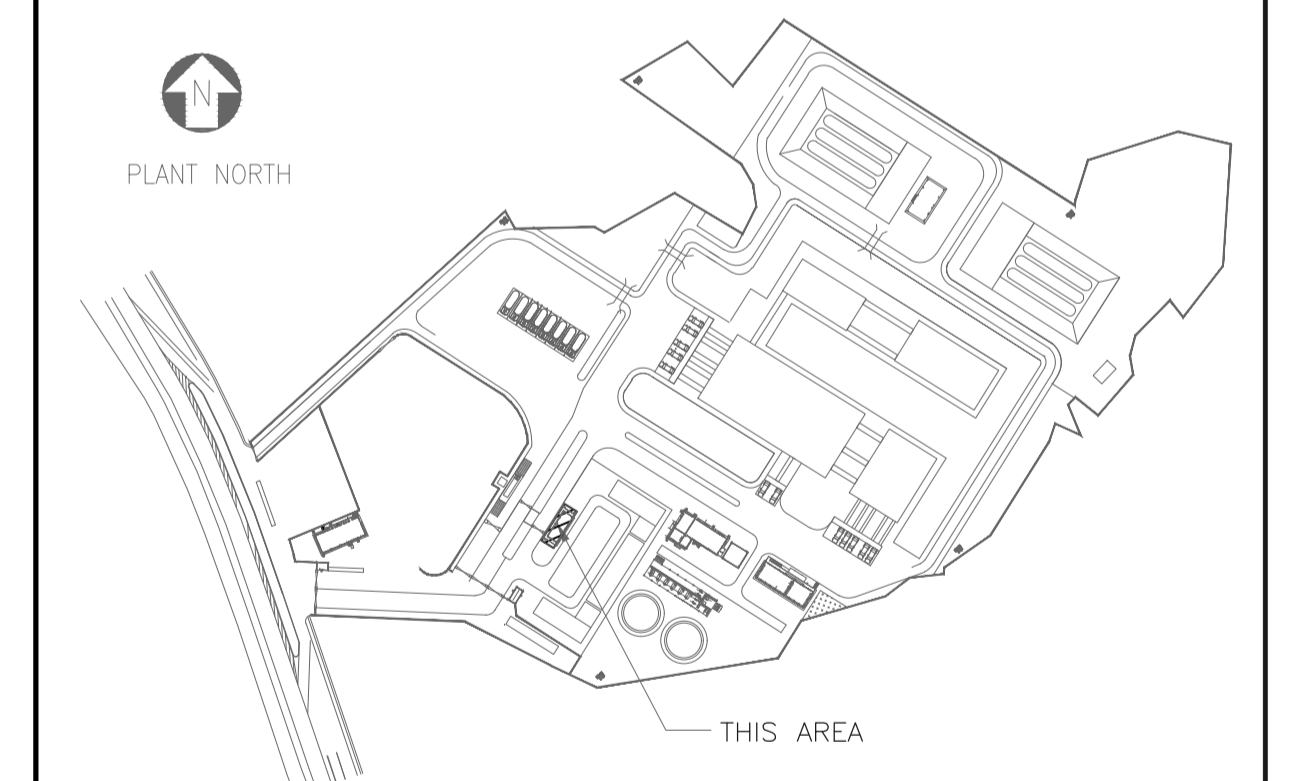
LEGENDS

- HP - HIGH POINT
- LP - LOW POINT
- HPP - HIGH POINT PAVING
- AW - ALUMINUM WINDOW
- GD - GLAZED DOOR
- RTL - ROAD TOP LEVEL
- FFL - FINISHED FLOOR LEVEL
- ▨ - BRICK WALL
- ⊙ - CEILING FAN

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.
3		
2	ARCHITECTURAL SECTIONS & ELEVATIONS	11387-16-AR-DRD-0003
1	PLOT PLAN	11387-12-PI-PLN-003

KEY PLAN



SCALE - 1:75

REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
0	06 SEPT 2019	ISSUED FOR CONSTRUCTION	VK	ND	SD/SK

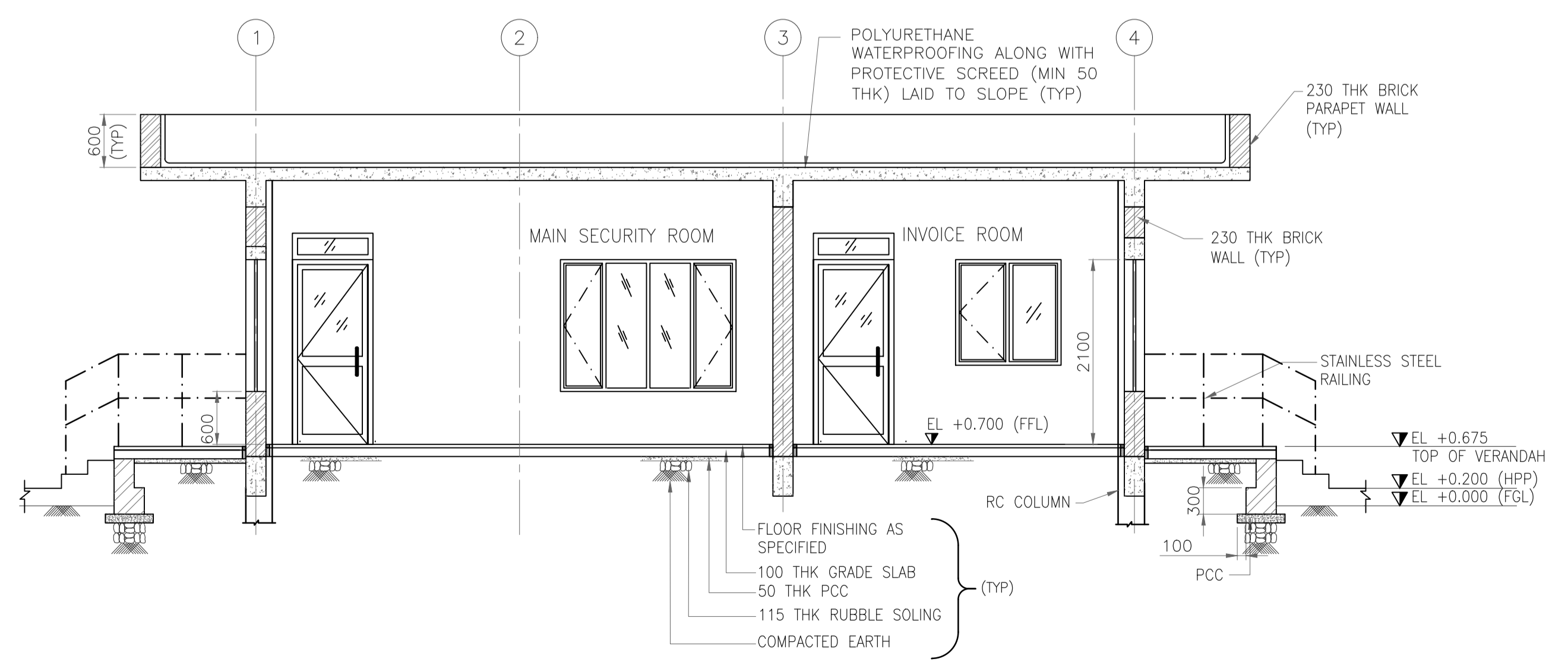
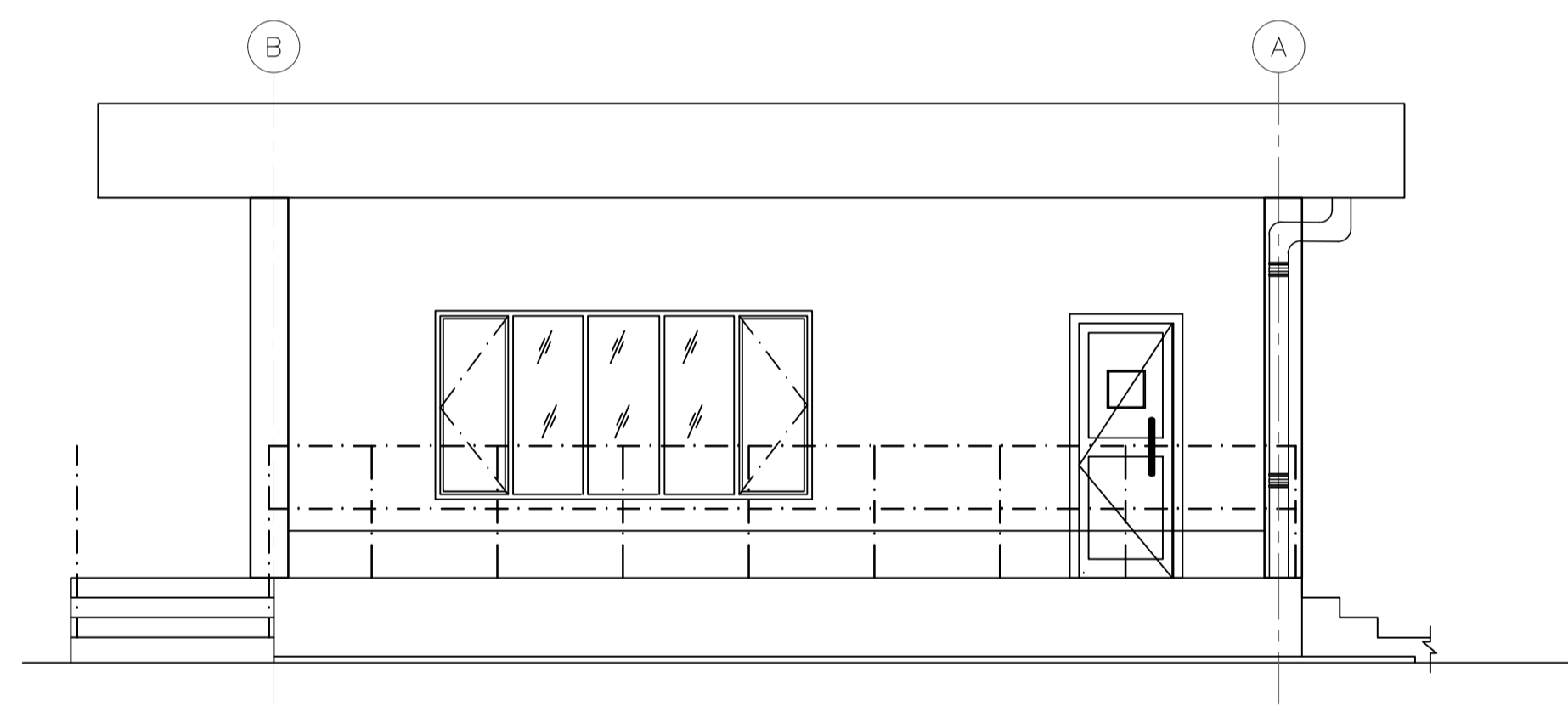
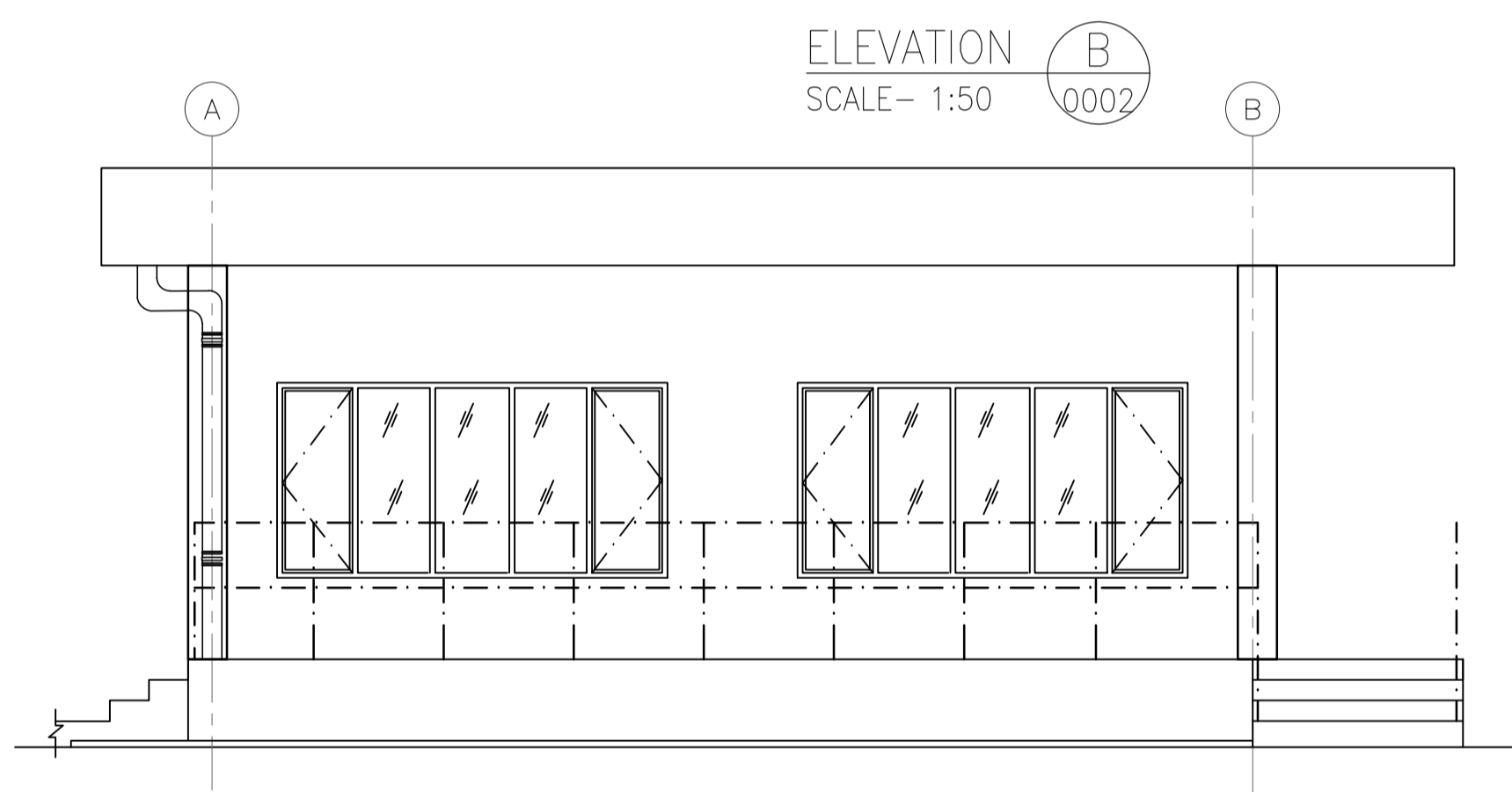
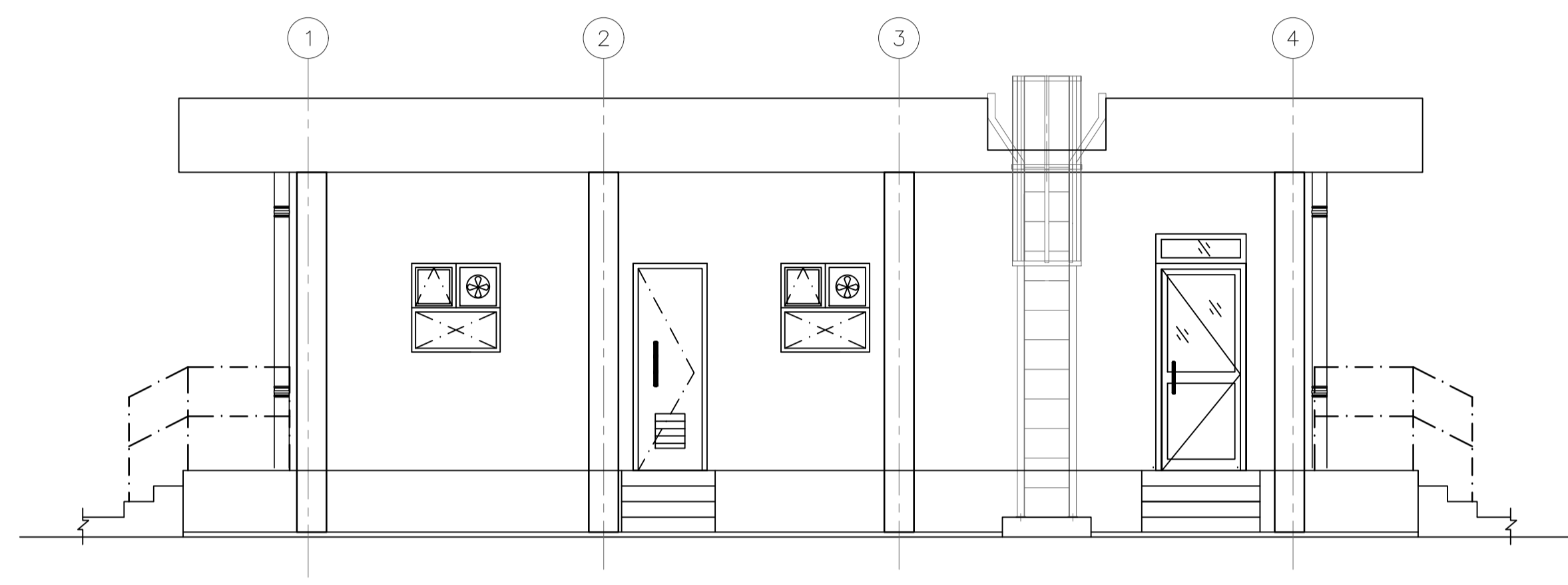
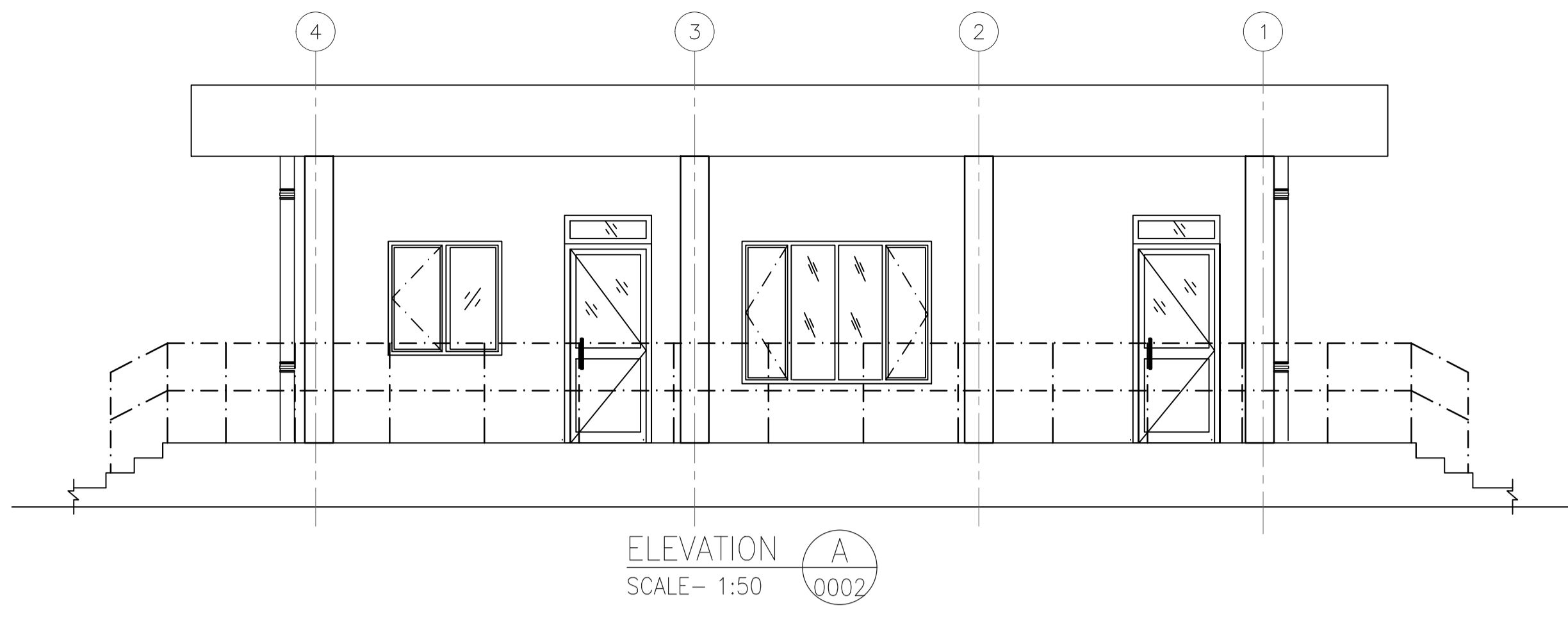
DRG.NO :- 11387-16-AR-DRD-0002 SHT 1 OF 1

TITLE :
**INVOICE ROOM
ARCHITECTURAL PLANS**

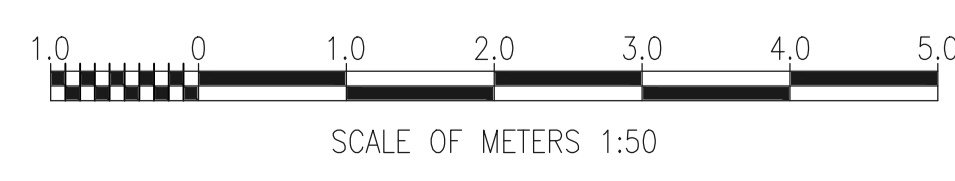
PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :





SECTION E
SCALE - 1:50



GENERAL NOTES :
1. FOR NOTES REFER DRAWING NO. 11387-16-AR-DRD-0002.

REFERENCE DRAWING		
3		
2		
1	ARCHITECTURAL PLANS	11387-16-AR-DRD-0002
S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN					

SCALE - 1:50					
0	06 SEPT 2019	ISSUED FOR CONSTRUCTION	VK	ND	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
DRG.NO :- 11387-16-AR-DRD-0003					SHT 1 OF 1

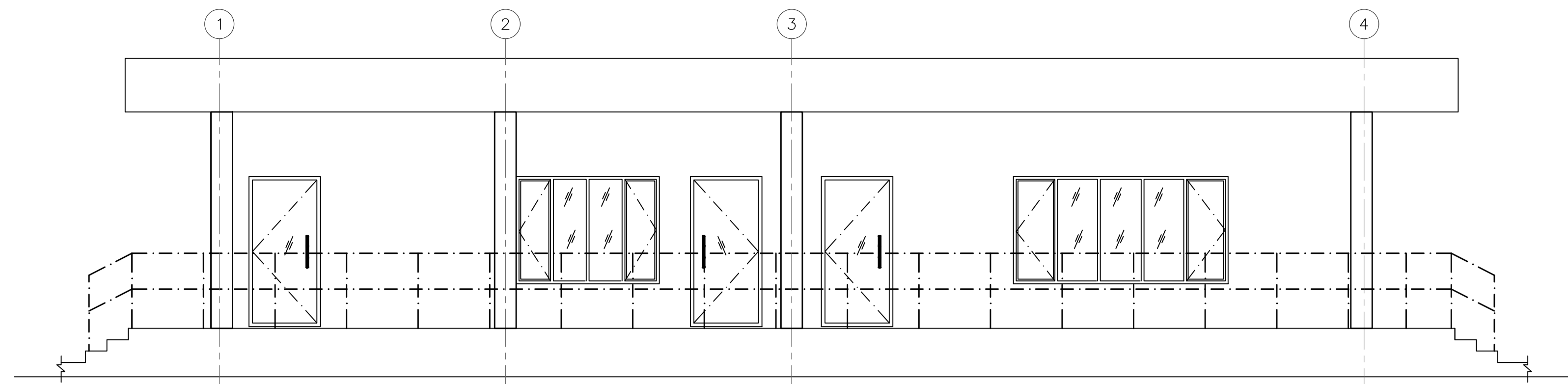
TITLE :
INVOICE ROOM
ARCHITECTURAL SECTIONS & ELEVATIONS

PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

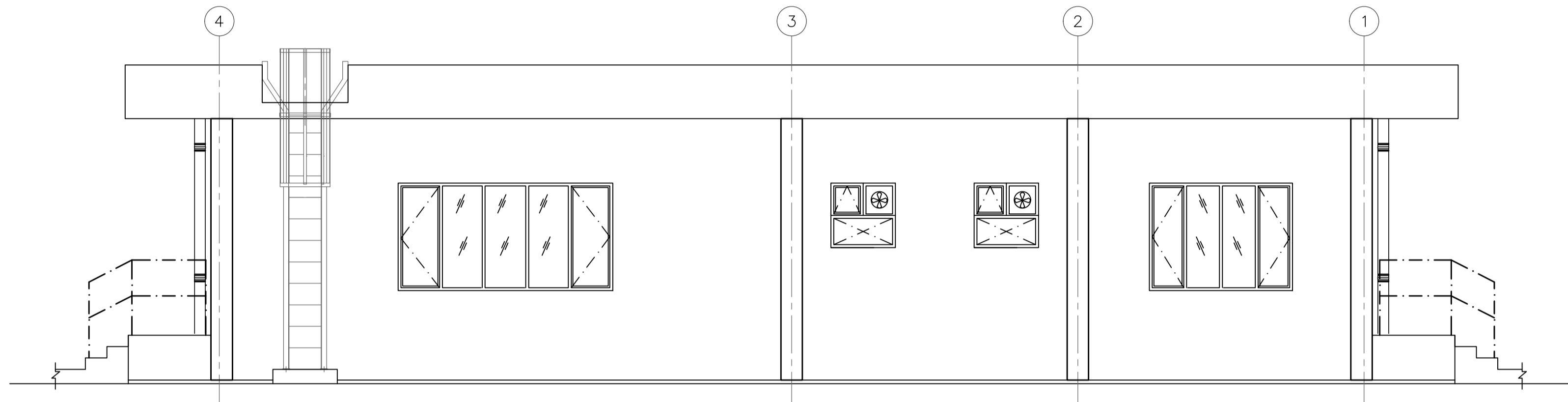
EPMC :


RINA
 RINA Consulting S.p.A.

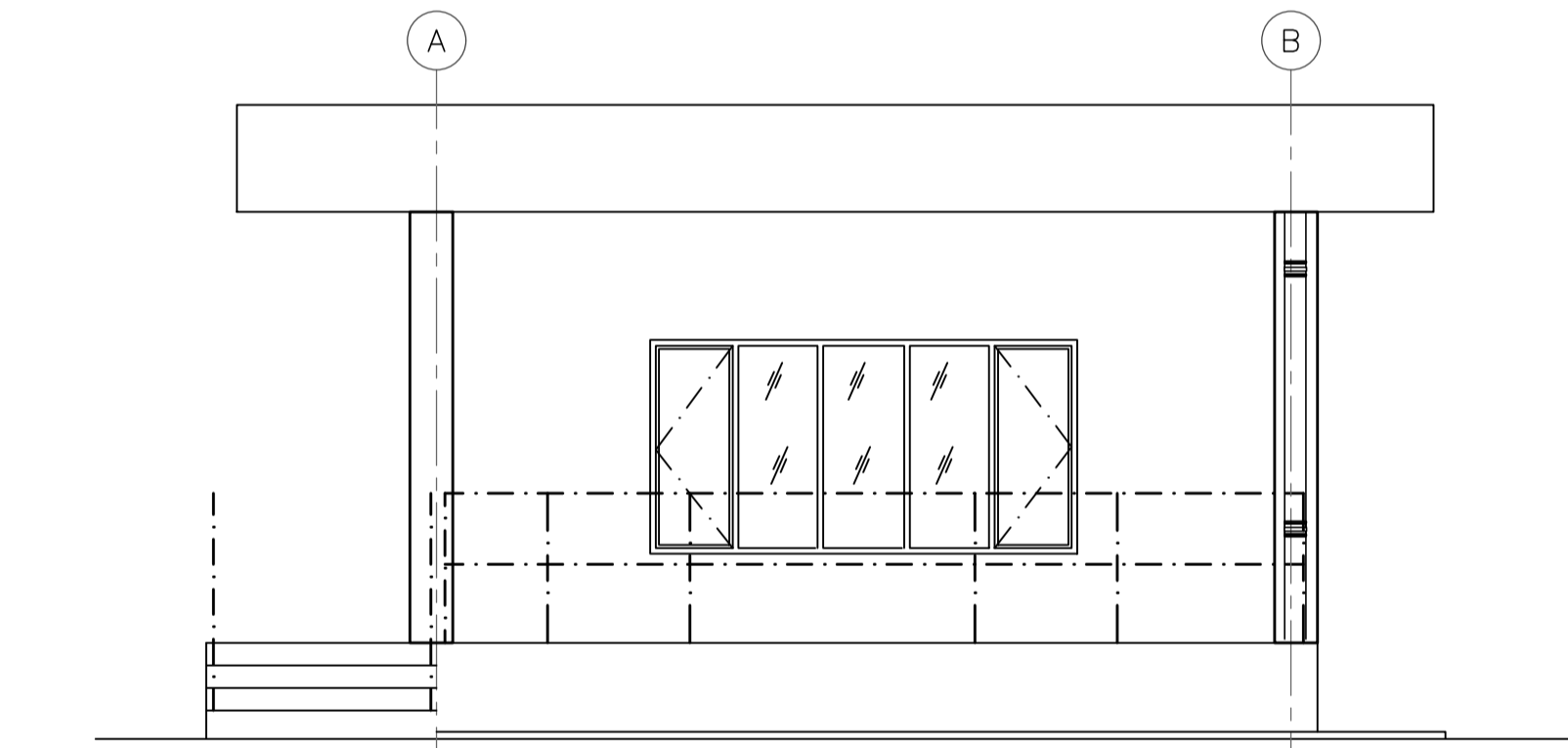

HINDUSTAN PETROLEUM
 CORPORATION LTD.



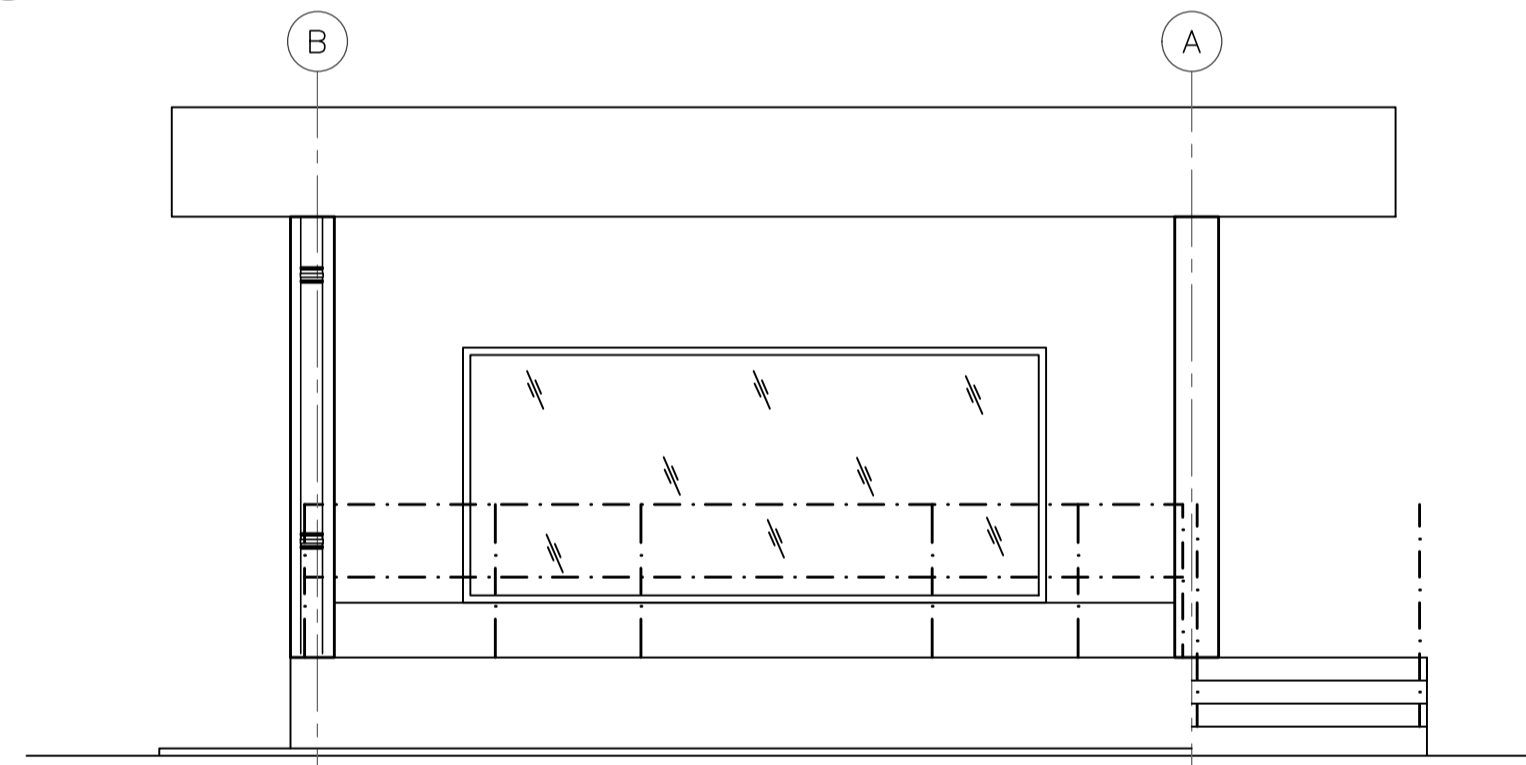
ELEVATION A
SCALE- 1:50



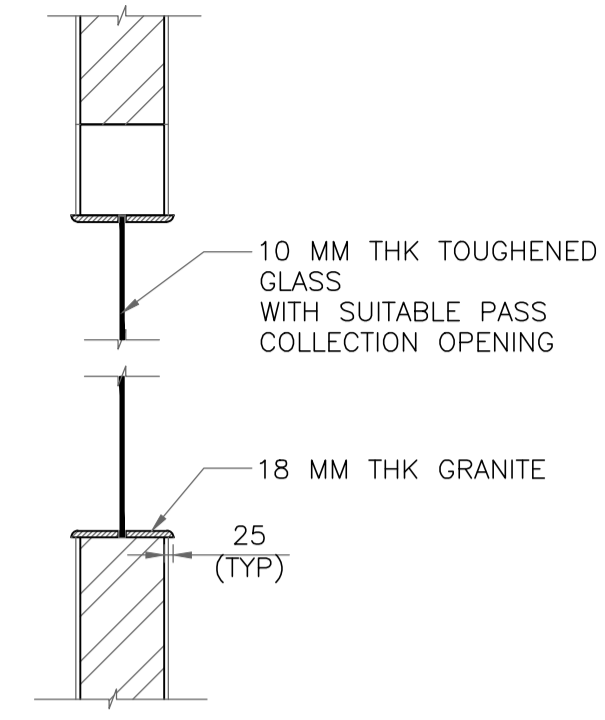
ELEVATION B
SCALE- 1:50



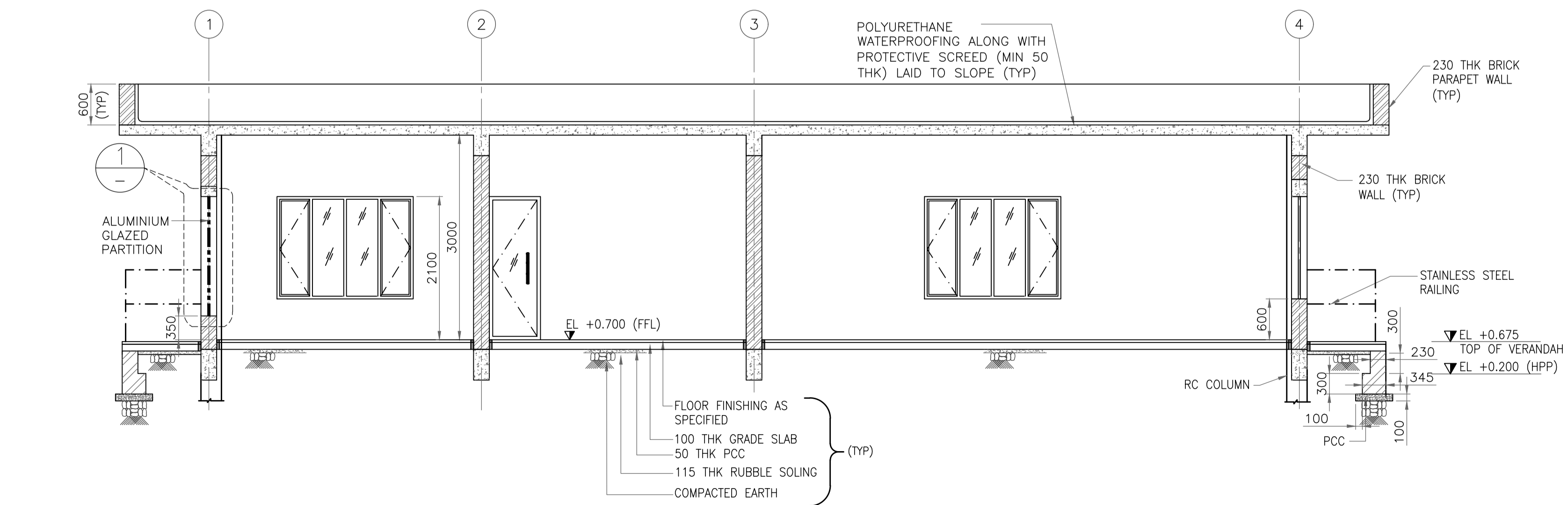
ELEVATION C
SCALE- 1:50



ELEVATION D
SCALE- 1:50



DETAIL 1
SCALE- 1:20



SECTION E
SCALE- 1:50

GENERAL NOTES :
1. FOR NOTES REFER DRAWING NO. 11387-16-AR-DRD-0004 SHT 1.

REFERENCE DRAWING		
3		
2		
1	ARCHITECTURAL PLANS	11387-16-AR-DRD-0004 SHT 1
S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN					

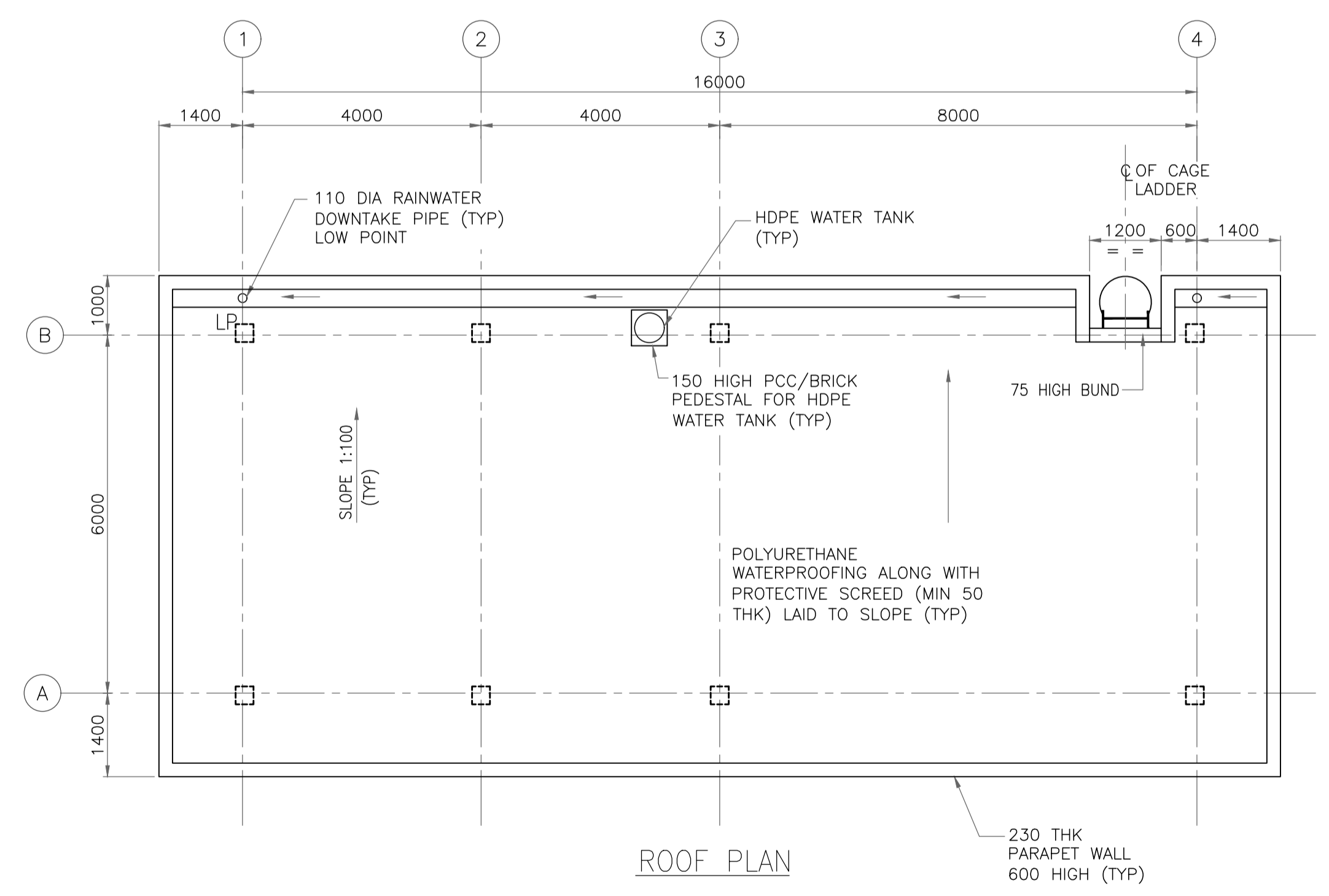
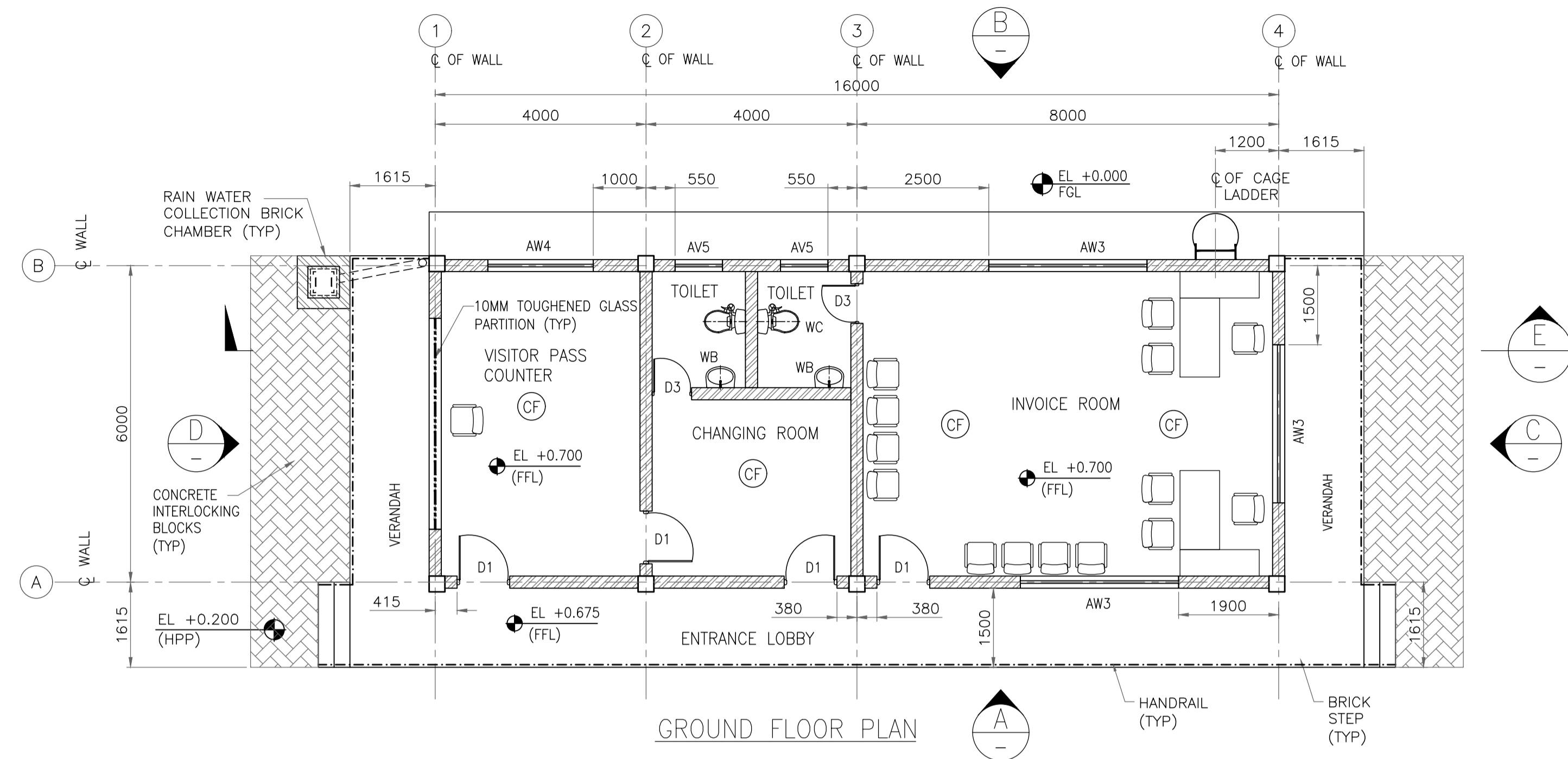
SCALE - 1:50					
A	14 JUNE 2019	ISSUED FOR REVIEW	VK	ND	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
DRG.NO :-	11387-16-AR-DRD-0004			SHT 2 OF 2	

TITLE :
**MAIN SECURITY BUILDING
ARCHITECTURAL SECTIONS & ELEVATIONS**

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

CONSULTANT :
RINA
RINA Consulting S.p.A.

HP
HINDUSTAN PETROLEUM
CORPORATION LTD.



SCHEDULE OF FINISHES

MAIN SECURITY ROOM	FLOOR	DADO/SKIRTING	FALSE CEILING	INTERNAL WALL FINISH	CEILING FINISH	HVAC
INVOICE ROOM	F5	S3	-	IW1	-	-
CHANGING ROOM	F5	S3	-	IW1	-	-
VISITOR PASS COUNTER	F5	S3	-	IW1	-	-
TOILETS	F1	S1	-	-	C1	EX
ENTRANCE & STEPS	F8	-	-	-	C1	-

- GENERAL NOTES :**
- ALL DIMENSIONS ARE IN MM & CO-ORDINATES, ELEVATIONS ARE IN METERS.
 - FGL ±0.00 CORRESPONDS TO FINISH GROUND LEVEL.
 - THE CONTRACTOR SHALL CHECK ALL THE CUTOUT ACTUAL SIZE AT SITE AND SHALL INCORPORATE THE SAME IN THE DOOR AND WINDOWS DRAWING BEFORE FABRICATION AFTER APPROVAL OF ENGINEER IN CHARGE.
 - FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER ELECTRICAL EQUIPMENT LAYOUT.
 - FOR ELECTRICAL & INSTRUMENTATION CABLE ENTRY LOCATIONS REFER RESPECTIVE CABLE LAYOUT DRAWINGS.
 - ONLY MAJOR PENETRATION ARE INDICATIVE SHOWN, CONTRACTOR TO DETAIL ALL REQUIRED ROOF & WALL PENETRATION.
 - EXTERNAL PAINT SHALL BE SINGLE COAT OF PRIMER AND TWO COAT OF ANTI-FUNGAL, ACRYLIC BASED PAINT ON EXTERNAL WALL. EXTERIOR TEXTURED PAINT FINISH SHALL BE PROVIDED ON EXTERNAL COLUMN, BEAM & PARAPET.
 - HANDRAIL SHALL BE STAINLESS STEEL SS304 GRADE (UNO).
 - ANTI TERMITE TREATMENT SHALL BE PROVIDED UNDER FLOOR AND JUNCTION OF WALLS AND FLOOR.
 - ALUMINIUM FULLY GLAZED PARTITION SHALL BE OF POWDER COATED ALUMINIUM WITH 10MM THICK (MINIMUM THICKNESS) TOUGHENED GLASS WITH FROSTING FILMS - PATTERN AS APPROVED BY HPCL.
 - WATER PROOFING SHALL BE LAID AS PER SPECIFICATION - WATER PROOFING WORKS.

- LEGENDS**
- HP - HIGH POINT
 - LP - LOW POINT
 - HPP - HIGH POINT PAVING
 - AW - ALUMINUM WINDOW
 - GD - GLAZED DOOR
 - RTL - ROAD TOP LEVEL
 - FFL - FINISHED FLOOR LEVEL
 - BRICK WALL
 - CF - CEILING FAN

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.
3		
2		
1	ARCHITECTURAL SECTIONS & ELEVATIONS	11387-16-AR-DRD-0004 SHT 2

KEY PLAN

SCALE
SCALE - 1:75

REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	14 JUNE 2019	ISSUED FOR REVIEW	VK	ND	SD/SK

DRG.NO :- 11387-16-AR-DRD-0004 SHT 1 OF 2

TITLE :

**MAIN SECURITY BUILDING
ARCHITECTURAL PLANS**

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

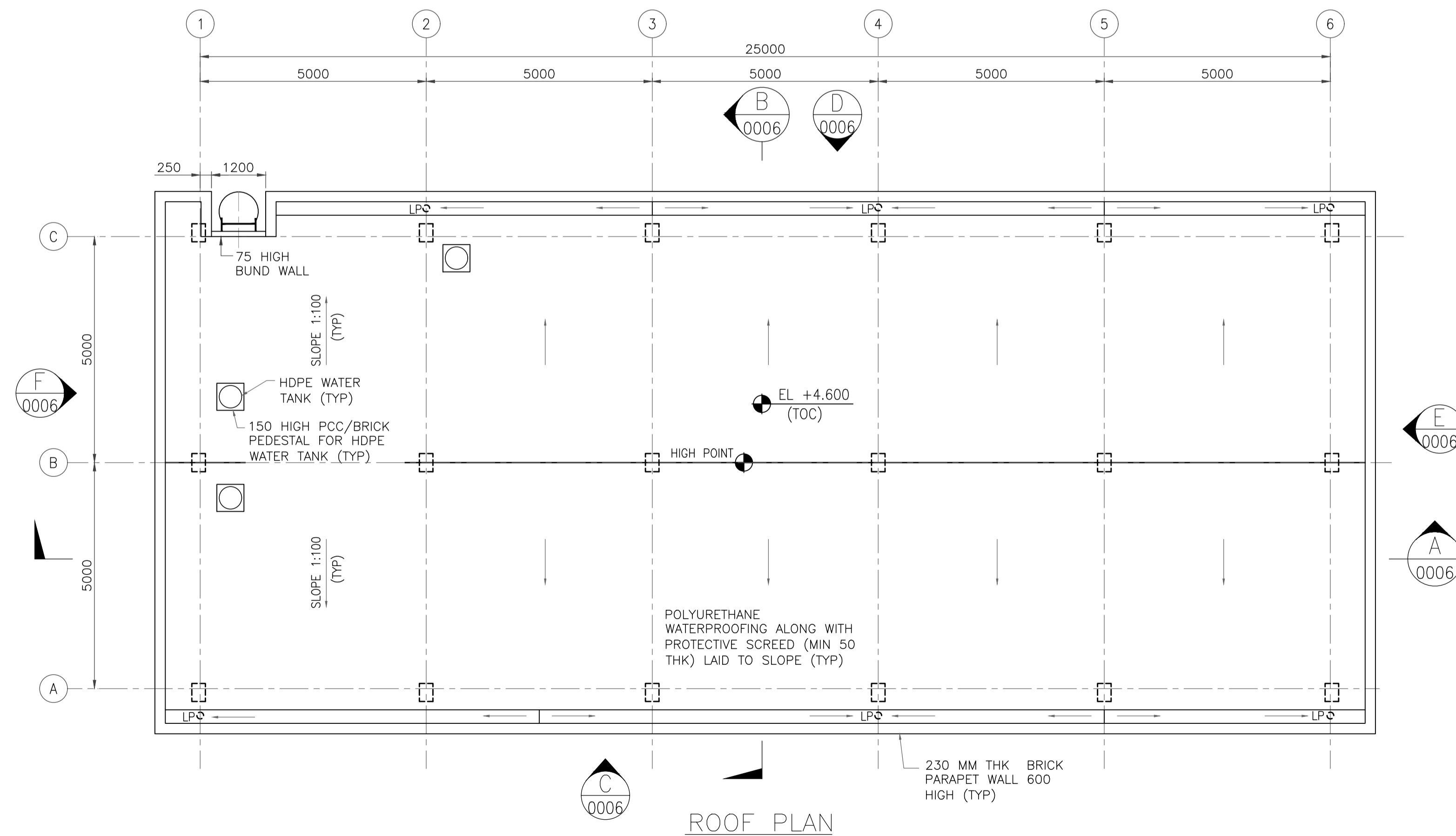
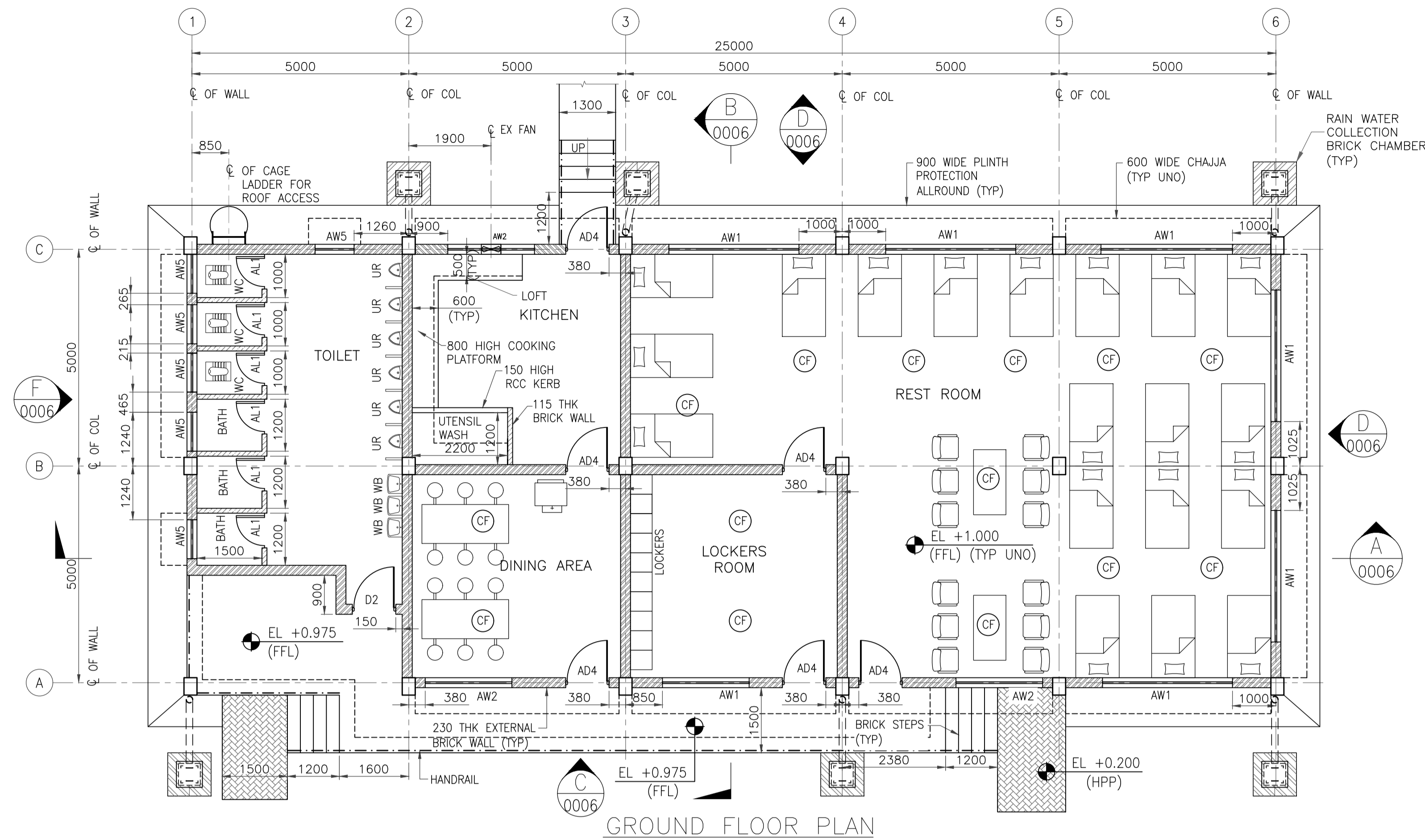
CONSULTANT :



RINA Consulting S.p.A.



HINDUSTAN PETROLEUM CORPORATION LTD.



- GENERAL NOTES :**
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS & COORDINATES ARE IN METERS UNLESS NOTED OTHERWISE.
 - EL 0.000 CORRESPONDS TO FINISH GROUND LEVEL.
 - ALL CHAJJA SHALL HAVE DRIP MOULD & GROOVES UNDERNEATH ALL ALONG THE PERIPHERIES.
 - THE CONTRACTOR SHALL CHECK THE ACTUAL OPENING SIZES AT SITE AND THE NUMBERS OF DOOR & WINDOW ETC. IN THE DWG BEFORE FABRICATING/ PROCURING THE SAME.
 - FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER ELECTRICAL EQUIPMENT LAYOUT.
 - EXTERNAL PAINT SHALL BE SINGLE COAT OF PRIMER AND TWO COAT OF ANTI-FUNGAL, ACRYLIC BASED PAINT ON EXTERNAL WALL. EXTERIOR TEXTURED PAINT FINISH SHALL BE PROVIDED ON EXTERNAL COLUMN, BEAM AND PARAPET.
 - HANDRAIL SHALL BE STAINLESS STEEL SS304 GRADE (UNO).
 - ANTI TERMITE TREATMENT SHALL BE PROVIDED UNDER FLOOR AND JUNCTION OF WALLS AND FLOOR.
 - PLATFORM IN PANTRY & CANTEEN SHALL BE 600mm WIDE AND 900MM ABOVE FFL. PLATFORM SHALL BE OF 18-20MM THK POLISHED GRANITE.
 - FOR ELECTRICAL & INSTRUMENTATION CABLE ENTRY LOCATIONS REFER RESPECTIVE CABLE LAYOUT DRAWINGS.
 - ONLY MAJOR PENETRATIONS ARE INDICATIVELY SHOWN. CONTRACTOR TO DETAIL ALL REQUIRED ROOF & WALL PENETRATION.
 - WATER PROOFING SHALL BE LAID AS PER SPECIFICATION - WATER PROOFING WORKS.
 - FOR SCHEDULE OF FINISHES REFER 11387-00-AR-DST-0002.
 - 3 NOS. WHITE COLOURED MULTILAYERED HDPE WATER TANK OF 500 LITRES CAPACITY SHALL BE PROVIDED ON ROOF.
 - HEAT RESISTANT TERRACE TILES SHALL BE 300 MM X 300 MM X 10 MM WITH SOLAR REFRACTIVE INDEX > 84, LAID OVER POLYURETHANE WATERPROOFING. THE JOINTS SHALL BE GROUTED WITH MIX OF WHITE CEMENT & MARBLE POWDER IN RATIO OF 1:1.

LEGENDS

A/C - AIR CONDITION	GD - GLAZED DOOR
WB - WASH BASIN	AW - ALUMINUM WINDOW
WC - WATER CLOSET	LP - LOW POINT
UR - URINAL	HP - HIGH POINT
EX - EXHAUST FAN	HPP - HIGH POINT PAVING
D - WOODEN DOOR	FFL - FINISHED FLOOR
AD - ALUMINUM DOOR	REVEL - ROAD TOP LEVEL

[Hatched Box] - 230 THK BRICK WALL
 [Dotted Box] - 115 THK BRICK WALL
 [Dashed Line] - HANDRAIL
 [Circle with CF] - CEILING FAN

REFERENCE DRAWING

3		
2	ARCHITECTURAL ELEVATIONS	11387-16-AR-DRD-0006-SHT 2
1	ARCHITECTURAL SECTIONS	11387-16-AR-DRD-0006-SHT 1

S.NO. REFERENCE DRAWING DRAWING NO.

KEY PLAN

--	--	--	--	--	--

SCALE - 1:100

A	14 JUNE 2019	ISSUED FOR REVIEW	VK	ND	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.

DRG.NO :- 11387-16-AR-DRD-0005 SHT 1 OF 1

TITLE :

**DRIVER'S AMENITY
ARCHITECTURAL PLANS**

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

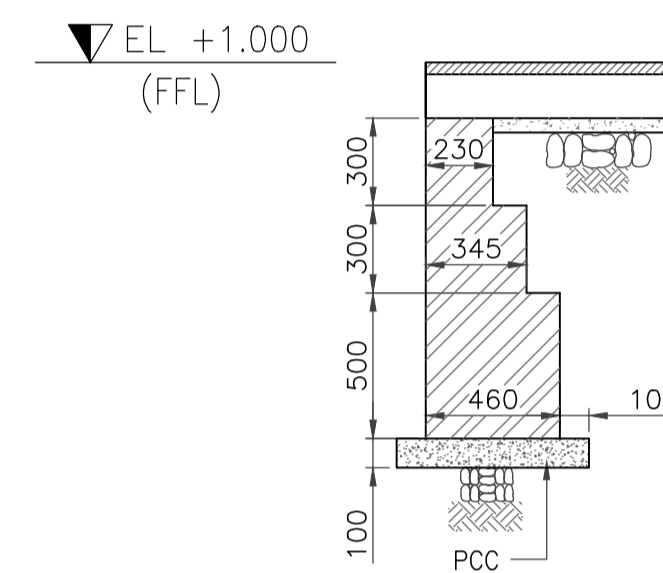
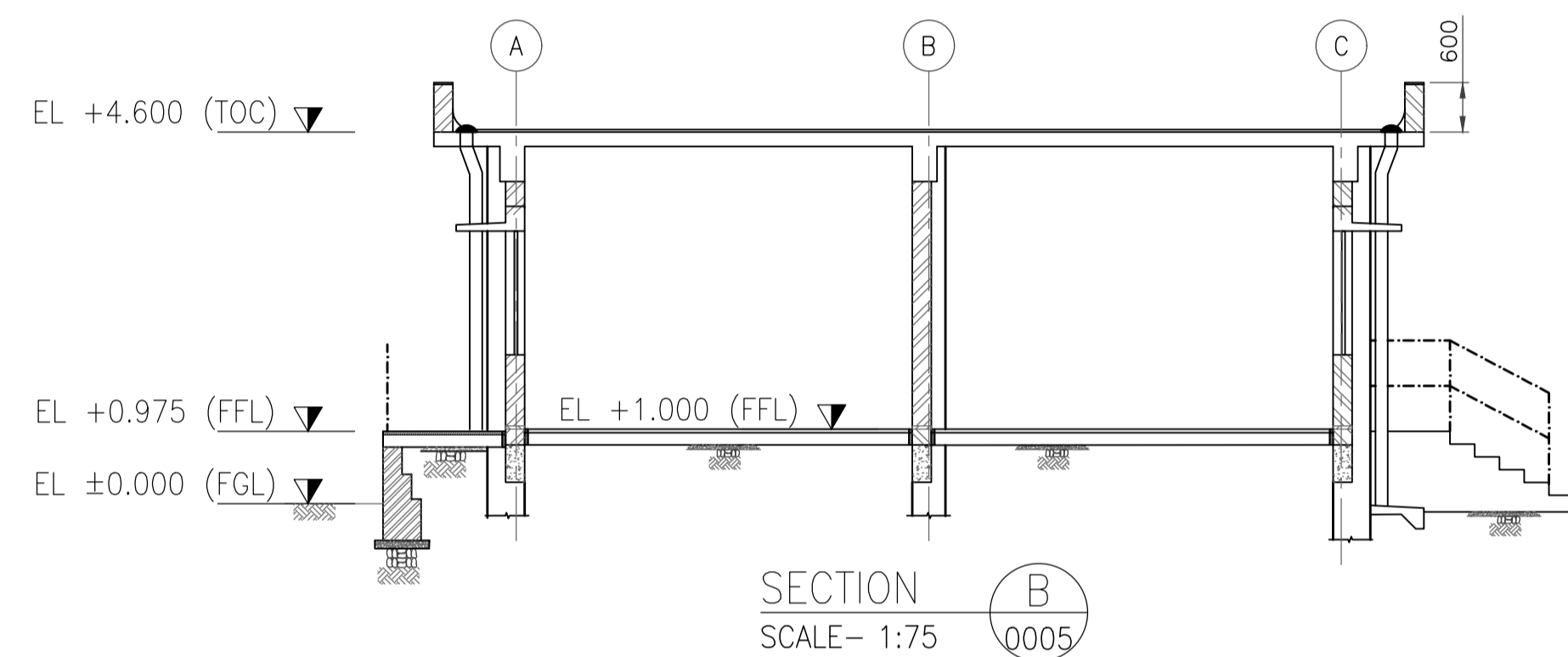
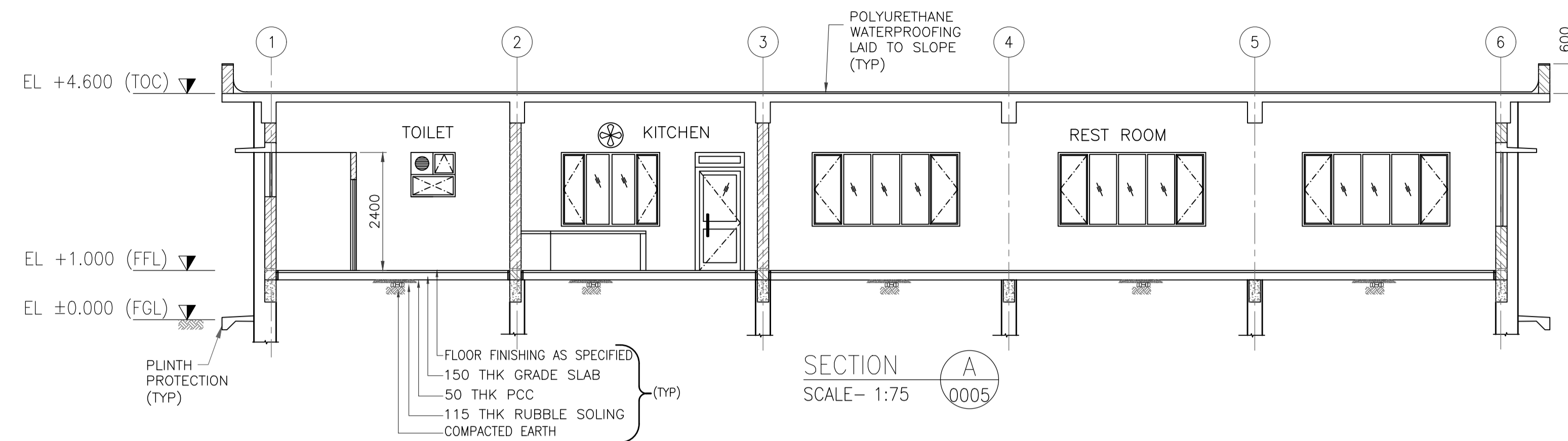
CONSULTANT :



RINA
RINA Consulting S.p.A.



HP
HINDUSTAN PETROLEUM CORPORATION LTD.



TYP RETAINING WALL IN BRICKWORK
DETAIL FOR PLATFORM
SCALE 1:25

SCHEDULE OF FINISHES FOR AMENITY BUILDING
(REFER DRAWING NO. -DST-0002)

AMENITY BUILDING	FLOOR	DADO/SKIRTING	FALSE CEILING	INTERNAL WALL FINISH	CEILING FINISH	HVAC
WORKERS TOILET	F1	S1	-	-	C1	-
KITCHEN	F1	S1	-	-	C1	-
DINING ROOM	F1	S1	-	-	C1	-
LOCKERS ROOM	F2	S2	-	IW1	C1	-
REST ROOM	F2	S2	-	IW1	C1	-
PASSAGE	F5a	S3	-	IW1	C1	-
ENTRANCE & STEPS	F8	-	-	-	C1	-
PLATFORM	F4	-	-	-	-	-

GENERAL NOTES :

- FOR NOTES AND REFERENCE DRAWINGS REFER DRAWING NO. 11387-16-AR-DRD-0005.

REFERENCE DRAWING

3		
2	ARCHITECTURAL ELEVATIONS	11387-16-AR-DRD-0006 SHT 2
1	ARCHITECTURAL PLANS	11387-16-AR-DRD-0005
S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN

SCALE - 1:100

REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	14 JUNE 2019	ISSUED FOR REVIEW	VK	ND	SD/SK

DRG.NO :- 11387-16-AR-DRD-0006

SHT 1 OF 2

TITLE :

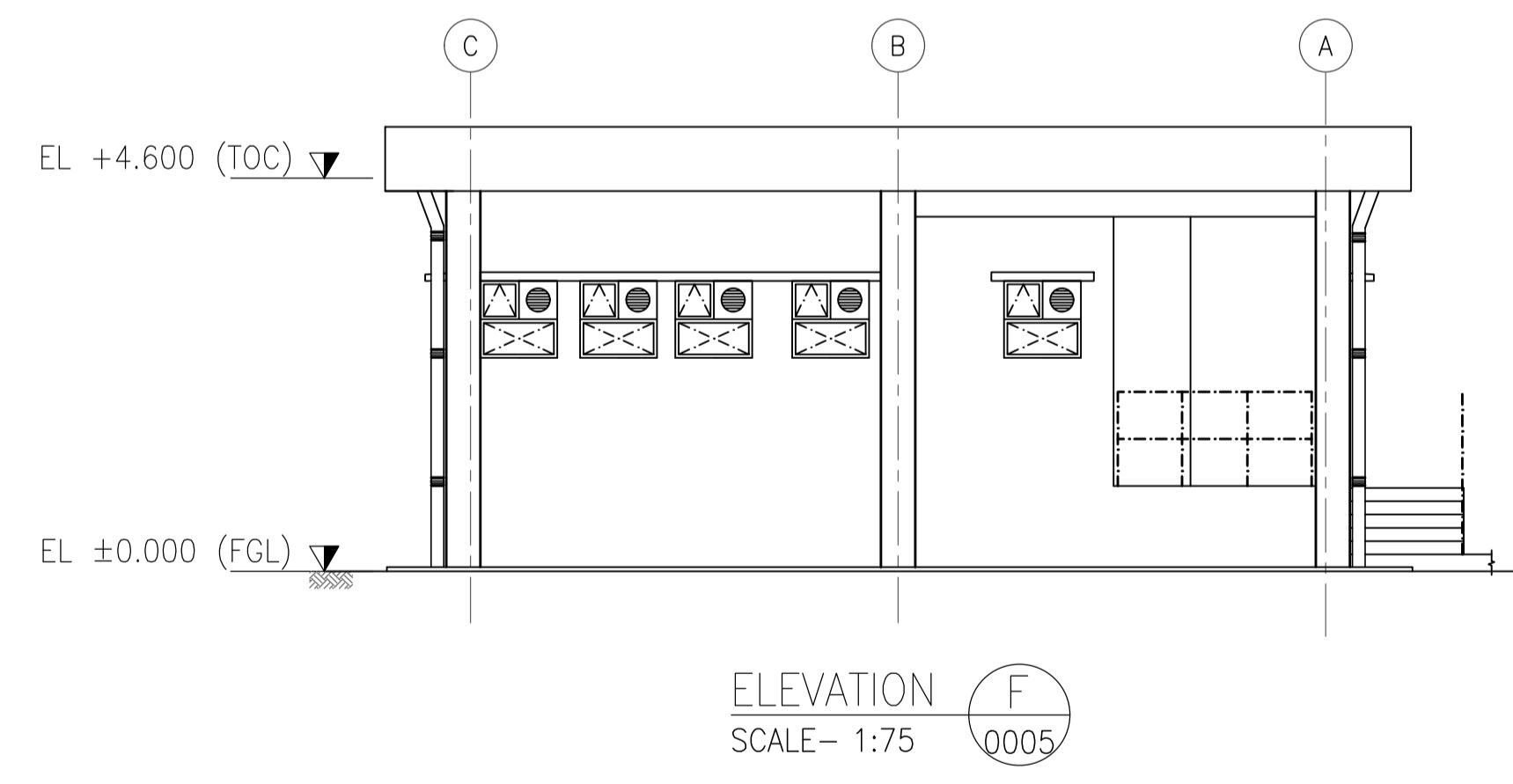
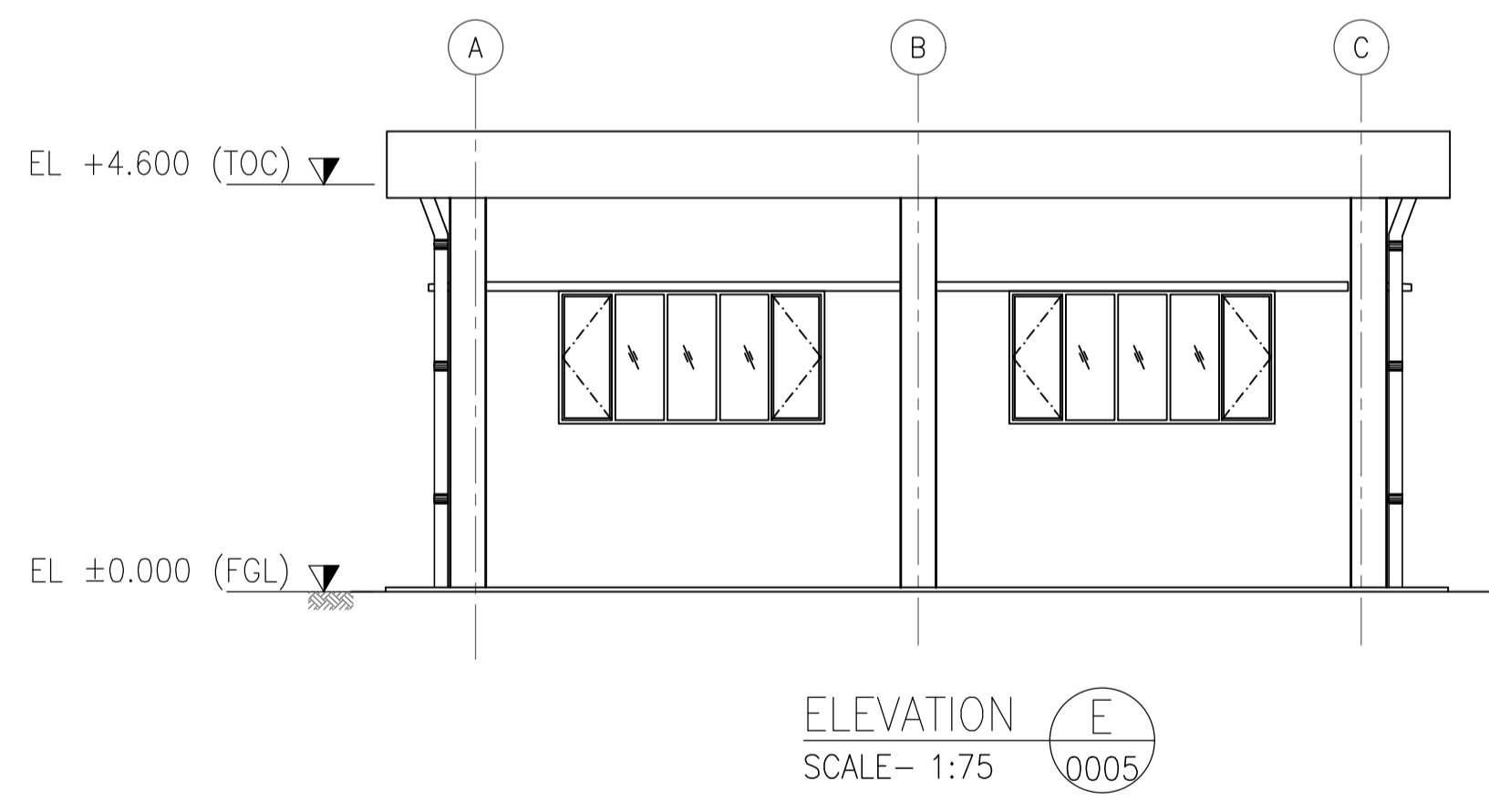
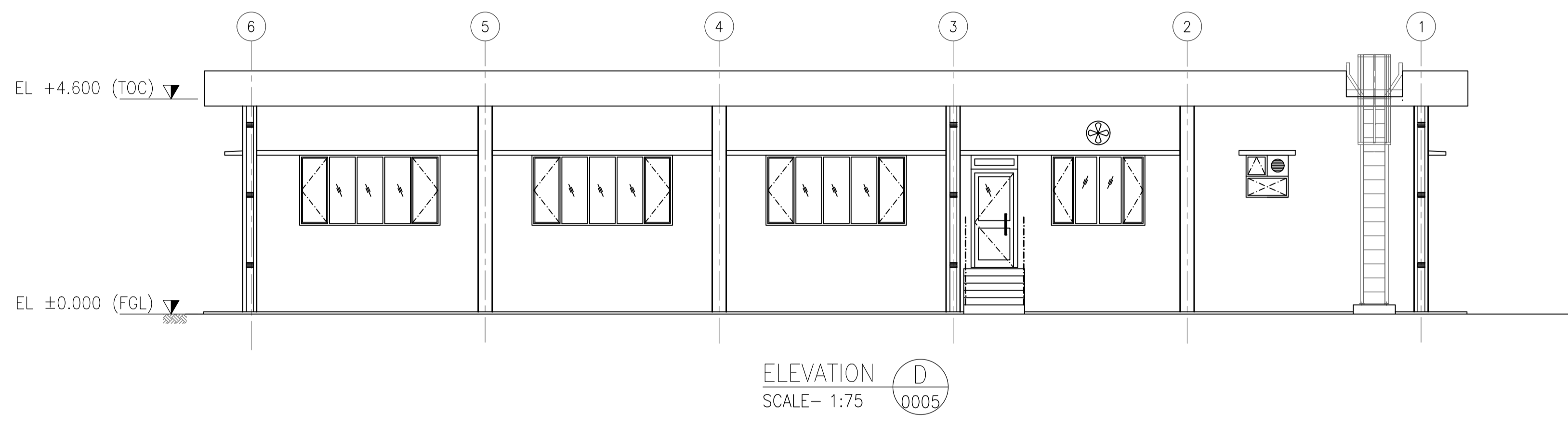
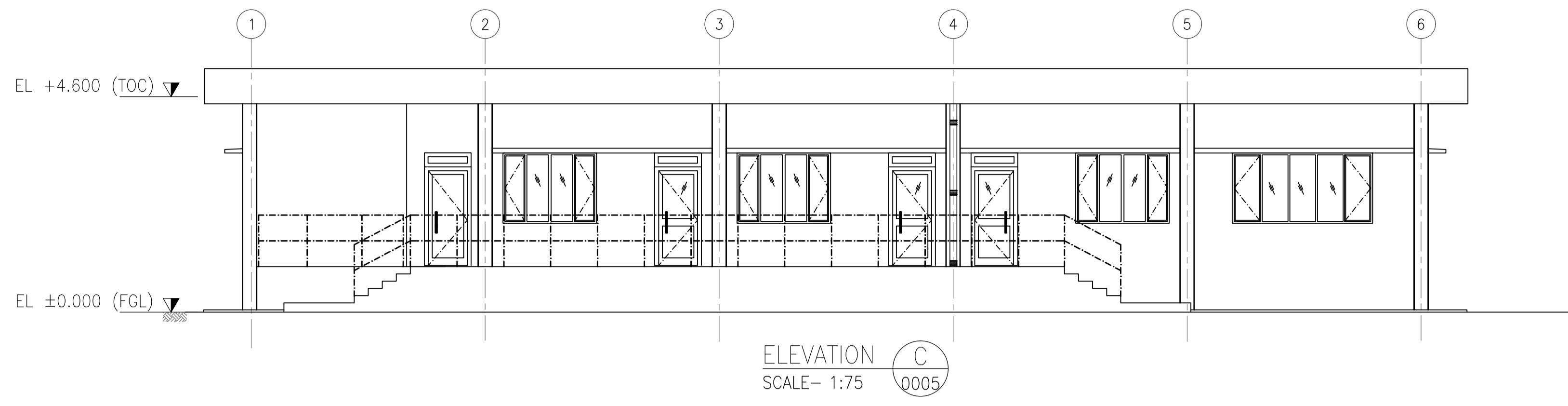
DRIVER'S AMENITY
ARCHITECTURAL SECTIONS

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

CONSULTANT :



HINDUSTAN PETROLEUM
CORPORATION LTD.



GENERAL NOTES :
1. FOR NOTES AND REFERENCE DRAWINGS REFER DRAWING NO. 11387-16-AR-DRD-0005.

REFERENCE DRAWING		
3		
2	ARCHITECTURAL SECTIONS	11387-16-AR-DRD-0006 SHT 1
1	ARCHITECTURAL PLANS	11387-16-AR-DRD-0005
S.NO.	REFERENCE DRAWING	DRAWING NO.

KEY PLAN

SCALE - 1:100					
A	14 JUNE 2019	ISSUED FOR REVIEW	VK	ND	SD/SK
REV NO.	DATE	REVISIONS	BY	CHK.	APPD.

DRG.NO :- 11387-16-AR-DRD-0006 SHT 2 OF 2

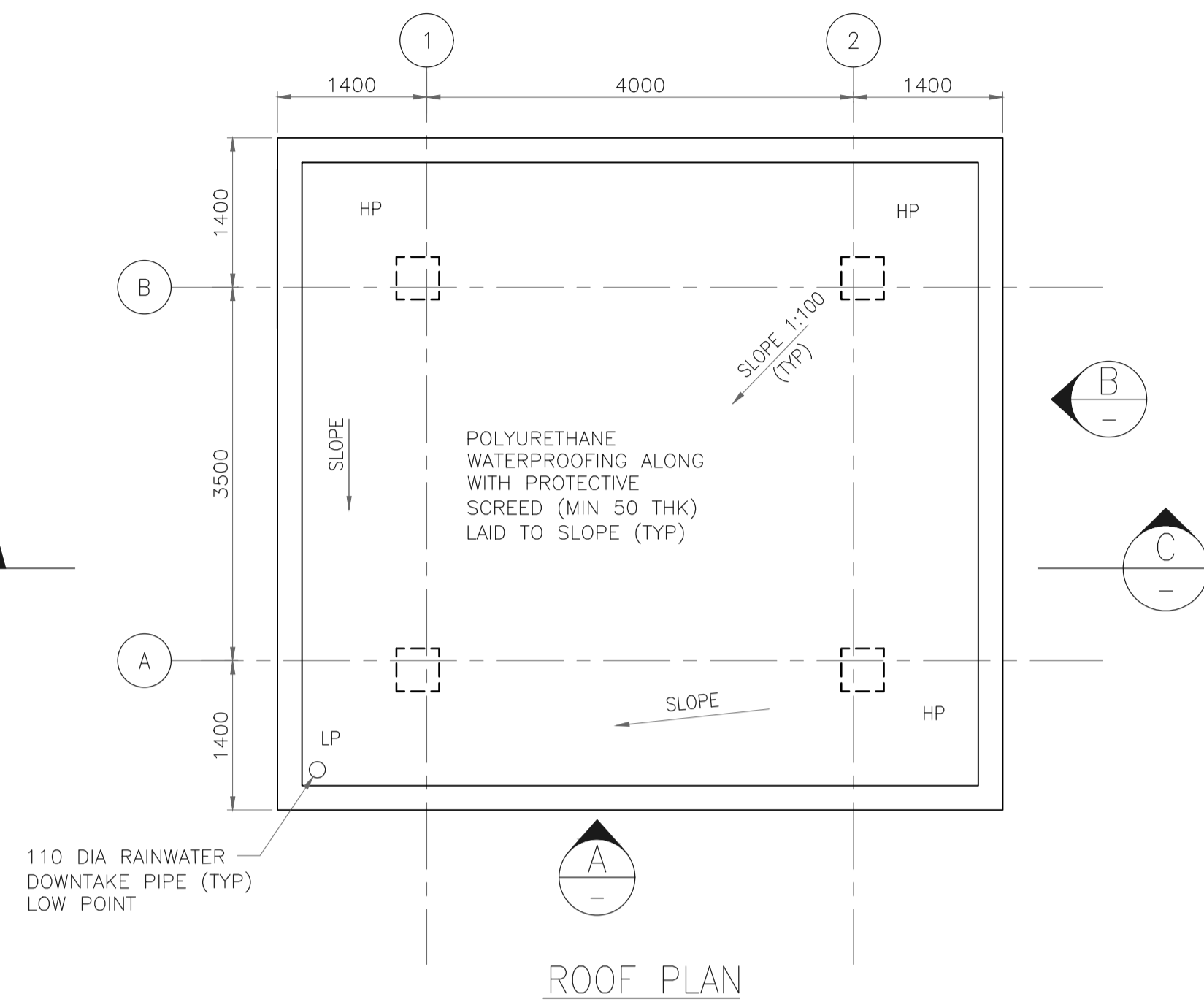
TITLE :
**DRIVER'S AMENITY
ARCHITECTURAL ELEVATIONS**

PROJECT : EPMC FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

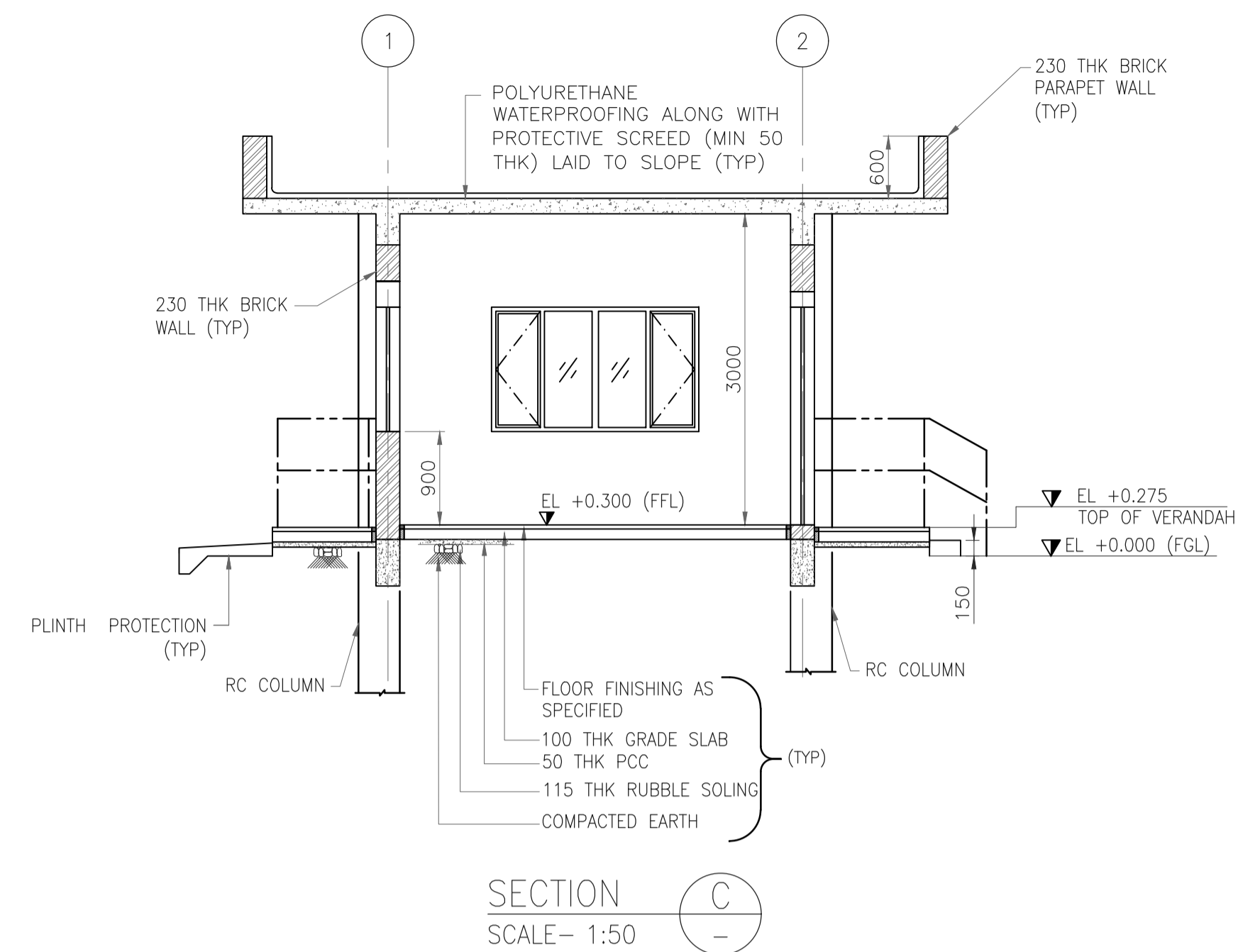
CONSULTANT :


RINA
 RINA Consulting S.p.A.

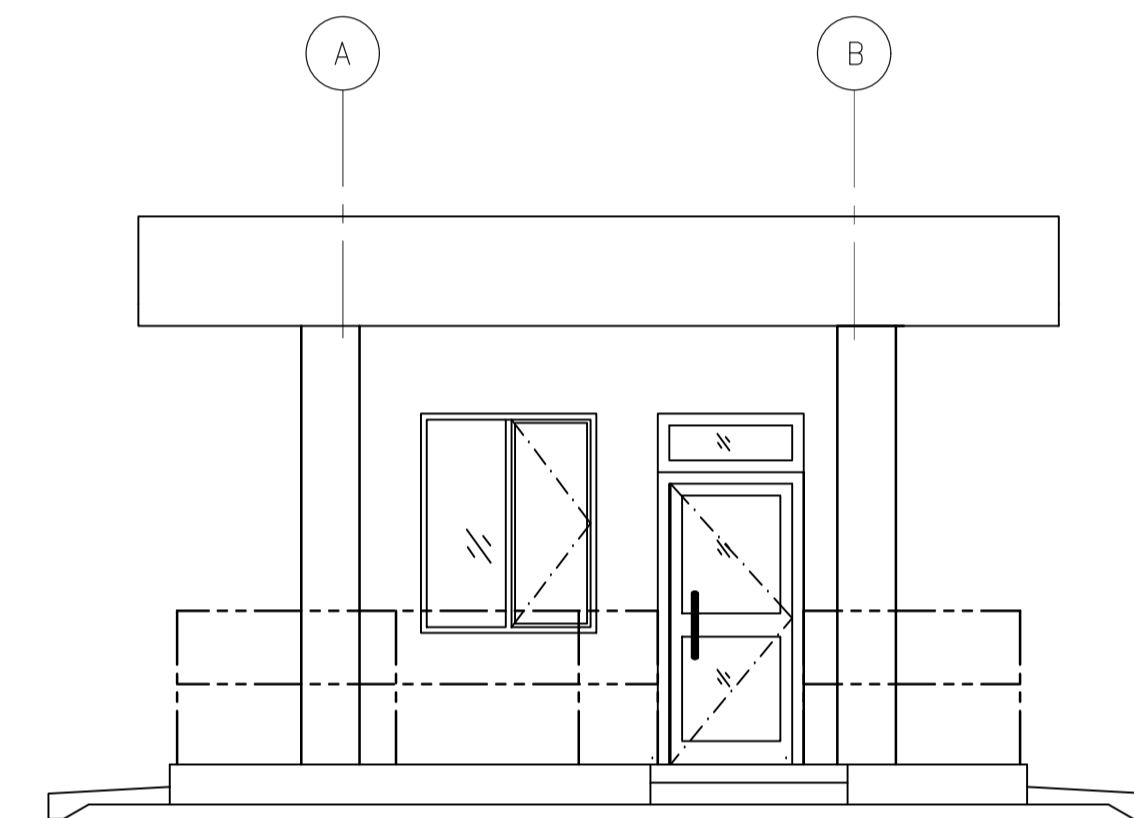

**HINDUSTAN PETROLEUM
CORPORATION LTD.**



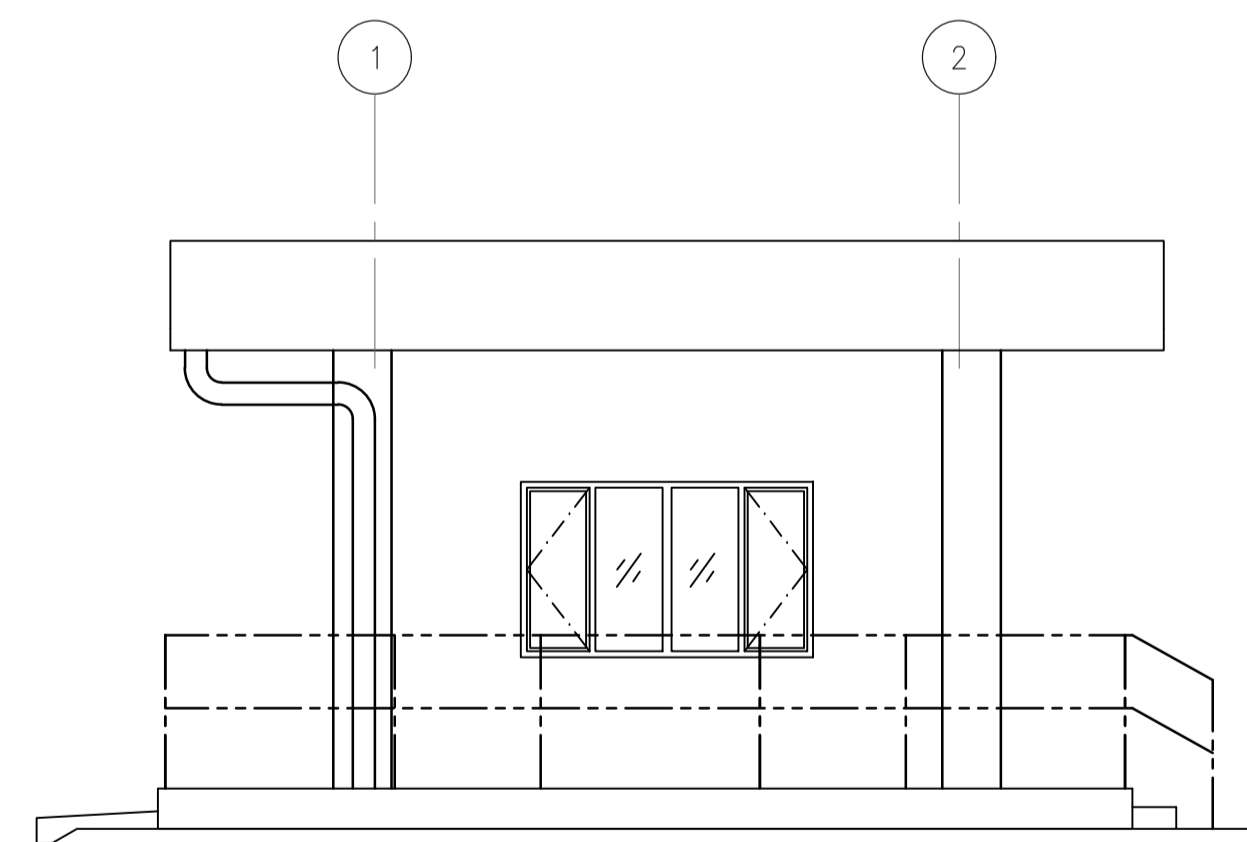
ROOF PLAN



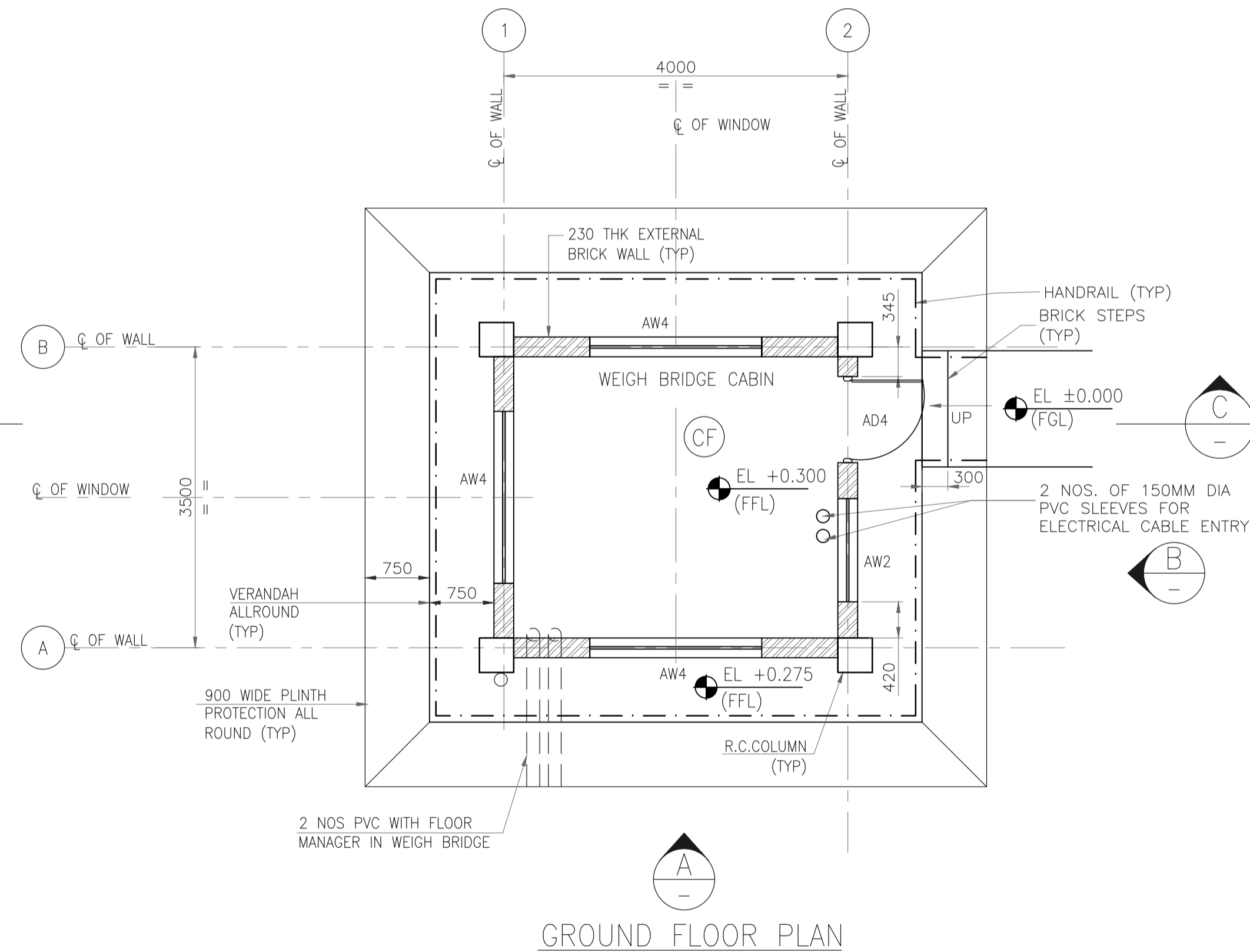
SECTION C-C
SCALE- 1:50



ELEVATION B-B
SCALE- NTS



ELEVATION A-A
SCALE- 1:50



GROUND FLOOR PLAN

SCHEDULE OF FINISHES
(REFER DRAWING NO. 11387-00-AR-DST-0002)

ROOM	FLOOR FINISH	SKIRTING	INTERNAL WALL	EXTERNAL WALL	CEILING
BUILDING IN GENERAL				EW1	
WEIGH BRIDGE CABIN	F5b	S3	IW1	-	C1
VERANDAH / STEPS	F5b	-	-	-	C1

NOTES :

- ALL DIMENSIONS ARE IN MM & CO-ORDINATES, ELEVATIONS ARE IN METERS.
- FGL ±0.00 CORRESPONDS TO FINISH GROUND LEVEL.
- FOR ORIENTATION & LOCATION REFER PLOT PLAN.
- THE CONTRACTOR SHALL CHECK ALL THE CUTOUT ACTUAL SIZE AT SITE AND SHALL INCORPORATE THE SAME IN THE DOOR AND WINDOWS DRAWING BEFORE FABRICATION AFTER APPROVAL OF ENGINEER IN CHARGE.
- FOR CONDUIT LAYOUT & FIXTURE DETAILS REFER ELECTRICAL EQUIPMENT LAYOUT.
- FOR ELECTRICAL & INSTRUMENTATION CABLE ENTRY LOCATIONS REFER RESPECTIVE CABLE LAYOUT DRAWINGS.
- ONLY MAJOR PENETRATION ARE INDICATIVE SHOWN, CONTRACTOR TO DETAIL ALL REQUIRED ROOF & WALL PENETRATION.
- EXTERNAL PAINT SHALL BE SINGLE COAT OF PRIMER AND TWO COAT OF ANTI-FUNGAL, ACRYLIC BASED PAINT ON EXTERNAL WALL. EXTERIOR TEXTURED PAINT FINISH SHALL BE PROVIDED ON EXTERNAL COLUMN, BEAM, PARAPET AND FLOWER BED.
- ANTI TERMITE TREATMENT SHALL BE PROVIDED UNDER FLOOR AND JUNCTION OF WALLS AND FLOOR.
- WATER PROOFING SHALL BE LAID AS PER SPECIFICATION - WATER PROOFING WORKS.

LEGENDS

- HP - HIGH POINT
- LP - LOW POINT
- HPP - HIGH POINT PAVING
- AW - ALUMINUM WINDOW
- AD - ALUMINUM DOOR
- RTL - ROAD TOP LEVEL
- FFL - FINISHED FLOOR LEVEL
- FGL - FINISHED GROUND LEVEL
- CF - CEILING FAN

REFERENCE DRAWING

S.NO.	REFERENCE DRAWING	DRAWING NO.
3	DOOR, WINDOW, ROLLING SHUTTER & VENTILATOR SCHEDULE	11387-00-AR-DST-0003/0004
2	ARCHITECTURAL STANDARD DETAILS	11387-00-AR-DST-0001
1	OVERALL PLOT PLAN	11387-12-PI-PLN-0001

SCALE - 1:100

REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
A	16 AUG 2019	ISSUED FOR REVIEW	SLD	DP	SK

DRG.NO :- 11387-16-AR-DRD-0007 SHT 1 OF 1

TITLE :
**WEIGH BRIDGE CABIN
ARCHITECTURAL PLAN, SECTIONS
& ELEVATIONS**

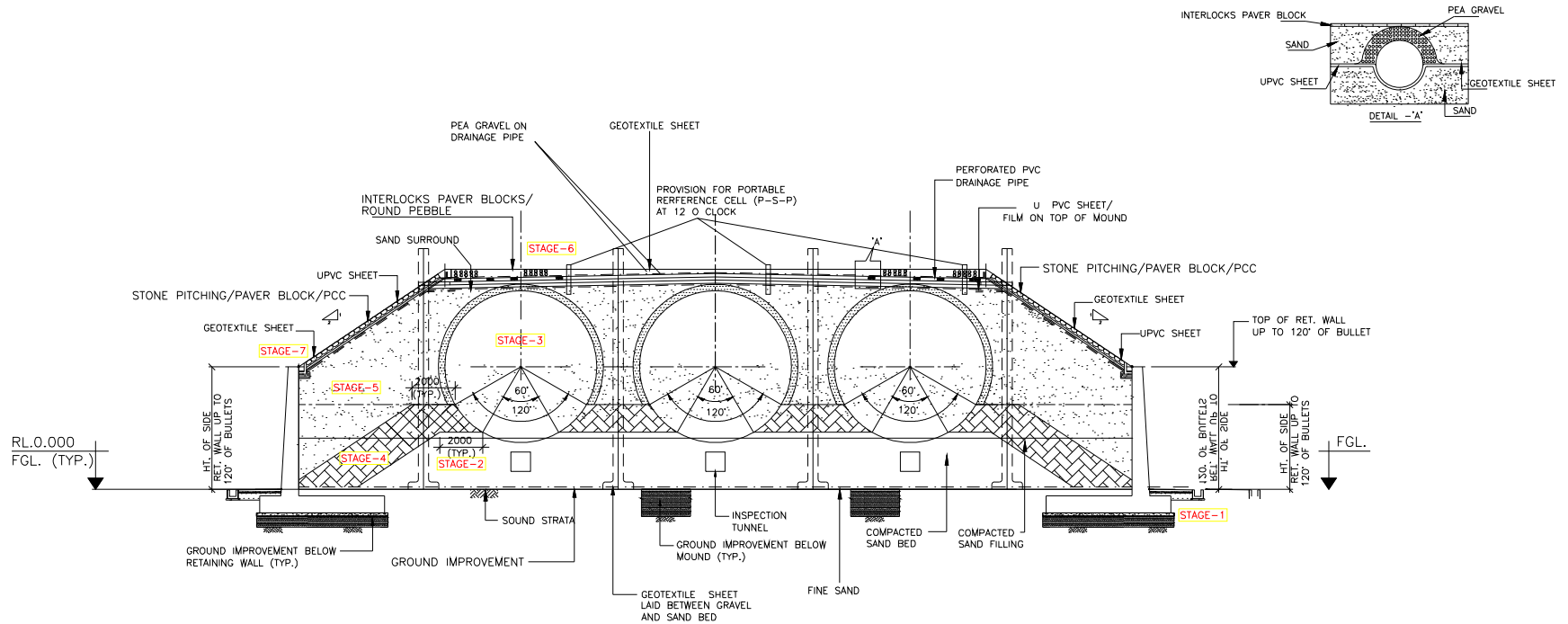
PROJECT : EPMC SERVICES FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC :



**HINDUSTAN PETROLEUM
CORPORATION LTD.**

MOUNDED STORAGE CONSTRUCTION METHODOLOGY



STAGE 1 – EXCAVATING PREPARATION OF FORMATION LEVEL.

STAGE 2 – INITIAL SAND BED TO 60 DEG LEVEL.

STAGE 3 – INSTALLATION OF TANKS.

STAGE 4 – RAISING SAND BED TO 120 DEG LEVEL FOR HYDROTESTING.

STAGE 5 – GENERAL MOUND FILLING.


STAGE 6 – CONSTRUCTION OF DRAINAGE LAYER.

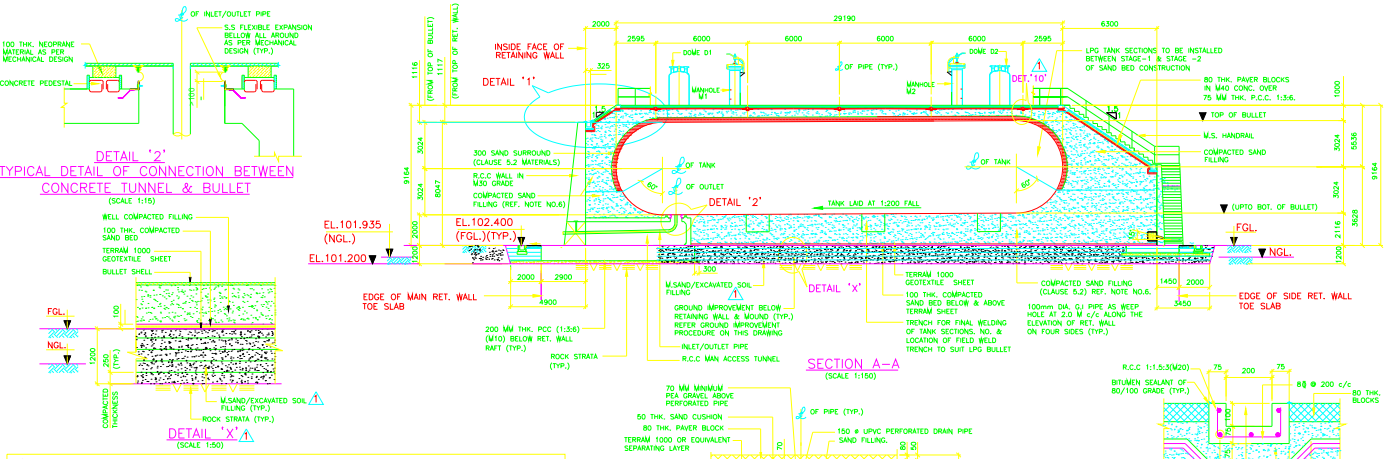
STAGE 7 – CONSTRUCTION OF SLOPE PROTECTION.

NOTE:

THIS IS ONLY REPRESENTATIVE DRAWING AND MAY BE MODIFIED AS PER THE DESIGN CONSIDERATION KEEPING THE BASIC PRINCIPLE.

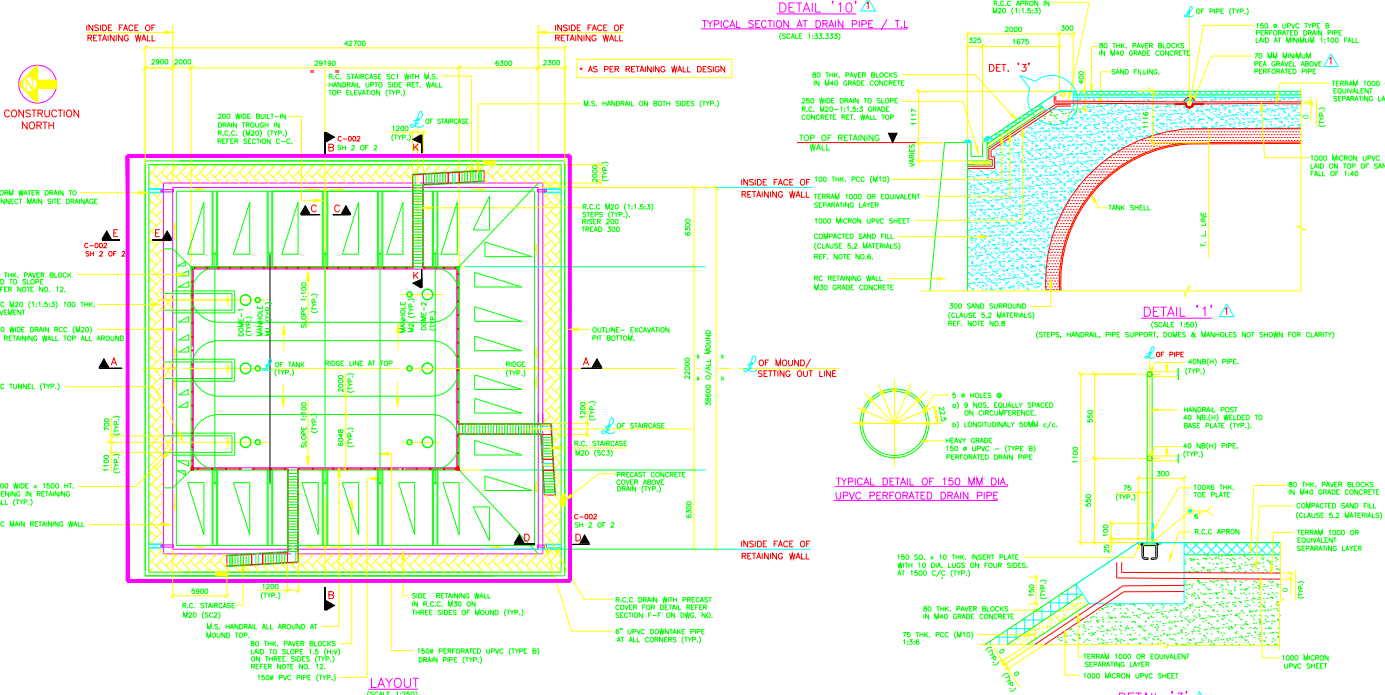
- D – 1.5 METER FOR VESSELS UP TO 1.5 METER DIA.
- 2.0 METER FOR ALL OTHER CASES.

CLIENT :		 HINDUSTAN PETROLEUM CORPORATION LIMITED HINDUSTAN BHAVAN – LPG PROJECTS DEPARTMENT	
DRN. BY	PSW	PROJECT: CONSTRUCTION OF 3 X 350 MT CAPACITY MOUNDED LPG STORAGE BULLET AT BARHI LPG PLANT	ITEM NO.: 11387 A/B/C
CHK. BY	SHD	TITLE: 3 X 350 MT LPG MOUNDED BULLET GENERAL ARRANGEMENT PLAN, SECTIONS & DETAILS FOR LPG STORAGE BULLET AREA	JOB NO.: 11387
APP. BY	SHD		CAD FILE: 001-GA DRG.
SCALE:	QTY OF EQUIP	DRG. NO.	SHEET
	NTS	3 NOS.	1 OF 2
		HPCL/B/11387/C-001	REV. 1



GROUND IMPROVEMENT PROCEDURE FOR MOUND AREA AS PER SOIL REPORT BY PROF. G.B. CHAUDHARI

- EXCAVATE & REMOVE ALL LOOSE MATERIAL BELOW MOUND AREA INCLUDING RETAINING WALLS/PAVING, UP TO A DEPTH OF 1.2 M. BELOW FGL. AS SHOWN ON THIS DRAWING. ROLL THIS SURFACE USING TO 1 VIBRO ROLLER.
- BELOW MOUND AREA PROVIDE M.SAND/EXCAVATED SOIL FILLING PAD IN LAYERS AS SHOWN ON THIS DRAWING AS FOLLOWS:
 - PLACE ABOUT 300 MM LOOSE THICK M.SAND/EXCAVATED SOIL IN LAYERS COMPACTED TO 250 MM AS SHOWN ON THIS DRAWING.
 - SPRINKLE WATER AT THE RATE OF 10 LITERS PER SQ.M. AND ALLOW WATER TO SOAK.
 - ROLL THIS SURFACE USING TO 1. DEAD WEIGHT SINGLE STEEL DRUM VIBRATORY ROLLER TO MOVE WITH VIBRATIONS FOR 15 MINUTES INITIALLY AND THEREAFTER FOR 1.5 HOURS PER 100 SQ. M. COMPACTED TO ACHIEVE 98% MINIMUM DRY DENSITY.
 - REPEAT THIS PROCEDURE IN LAYERS AS SHOWN IN DETAIL 'X' AND REACH UP TO BOTTOM OF PCC BELOW RET. WALL RAFT / FINISHED GROUND LEVEL (FGL) AS SHOWN ON THIS DRAWING.

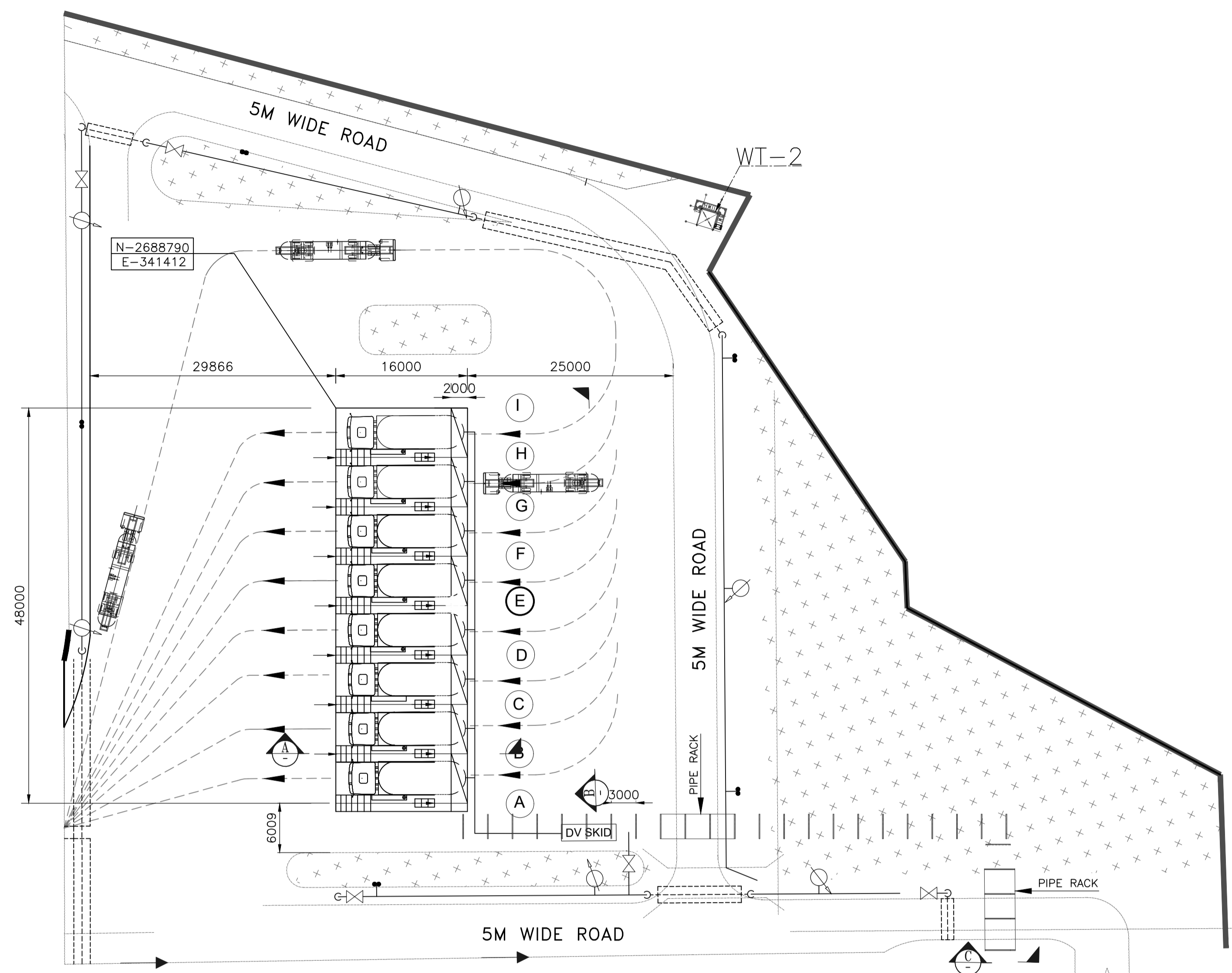
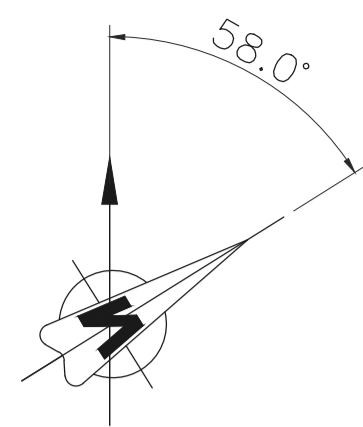


- GENERAL NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS IN METRES. (U.L.O.)
 - FGL IS EL.102.400.
 - PRECAUTIONS SHALL BE TAKEN TO PROTECT EXCAVATION AND SUBGRADE FORMATION LEVEL FROM SURFACE WATER.
 - EXCAVATION SHALL BE CARRIED OUT FOR A DEPTH OF 1.2 M BELOW R.C.WALLS & MOUND AREA RESPECTIVELY, FROM FGL AS PER SOIL REPORT BY PROF. G.B.CHAUDHARI. STRATA VERIFICATION SHALL BE MADE BY THE TESTER STARTING GROUND IMPROVEMENT WORK.
 - GEOTEXTILE LAYER OF TERRAM 1000 SHALL BE LAD AT 100 MM ABOVE FGL, ALONG MOUND SLOPES AND ABOVE TANKS, WITH 500 MM LAP AT JOINTS. THIS SHALL BE CUT AND BENT BELOW AND ABOVE AT DOMES, MANHOLE COVERS, & APRON BEAM AS REQUIRED, AS SHOWN ON DRAWING.
 - SAND FILLING SHALL BE CARRIED OUT FOR MOUND CONSTRUCTION BELOW & ABOVE FGL. THIS FILLING SHALL BE CARRIED OUT IN LAYERS OF 250-300 MM RESPECTIVELY COMPACTED THICKNESSES, COMPACTING EACH LAYER USING VIBRO ROLLER SO AS TO ACHIEVE A 98% MAXIMUM DRY DENSITY.
 - TRENCHES SHALL BE MADE AT TANK FIELD JOINTS, PROPERLY BRACED AND BACKFILLED WITH SAND/MURUM AS PER NOTE NOS. 6 & 9.
 - FILLING AROUND TANKS SHALL BE 300 MM THICK USING SAND AND THIS SHALL BE HAND COMPACTED SO AS TO ACHIEVE A MINIMUM 93% OF MAXIMUM DRY DENSITY.
 - SAND FILLING BETWEEN ABOVE & BY THE SIDES OF TANKS SHALL BE LAD IN LAYERS OF 300 MM LOOSE HAND COMPACTED OR LIGHT MACHINE COMPACTED SO AS TO ACHIEVE A MIN. 93% OF MAXIMUM DRY DENSITY AND TO REQUIRED LEVEL & SLOPES ON THREE SIDES OF MOUND. THIS FILLING SHALL BE PLACED ON EACH SIDE OF TANKS, SIMULTANEOUSLY, SO AS TO AVOID DISPLACEMENT OF TANKS DURING CONSTRUCTION.
 - 1000 MICRON UPVC SHEET SHALL BE LAD ABOVE VESSELS AND MOUND SLOPES OF COMPACTED SAND FILL ABOVE TANKS WITH 500 MM LAP AT JOINTS AS PER SPECIFICATIONS. HOSE SHEET OVERLAPPING LOWER ONE. SHEET SHALL BE CUT & BENT UP AT DOMES, MANHOLE COVERS AND APRON BEAM AS REQUIRED.
 - 150 MM LAYER OF PEA GRAVEL OF 8 MM TO 20 MM SIZE SHALL BE LAD AROUND PERFORATED DRAIN PIPES ABOVE SAND LAYER.
 - 80 MM THICK INTERLOCKING TYPE CONCRETE PAVER BLOCKS IN MAD GRADE CONCRETE SHALL BE LAD OVER MOUND SLOPES & MOUND TOP USING CEMENT SLURRY FOR FILLING JOINTS SO AS TO MAKE IT IMPERMEABLE FINISH.
 - TOP SOIL LAYERS AS REQUIRED, BELOW PAVING SHALL BE REMOVED AND COMPACTED WITH MURUM/SELECTED EXCAVATED MATERIAL. PAVING SHALL BE CONSTRUCTED IN ALTERNATE PANELS OF LENGTH NOT EXCEEDING 4.5M.
 - ALL R.C. SURFACES FOR RETAINING WALL, ACCESS TUNNEL & PAVER BLOCKS ON SIDE SLOPES SHALL RECEIVE TWO COATS OF BEATHERSHIELD OR EQUIVALENT BRAND AND PRIMER AS PER SPECIFICATIONS.
 - FOR NOTES ON R.C.C. WORK REF. DWG. NO. SIS/HPCL/AD/1903/C-003, SH 1 OF 2.
 - HANDRAIL SHALL BE MADE USING 40 NB (H) PIPE AS PER IS:12329. PROVIDE TOE PLATES TO HANDRAIL OF STAIRCASES AND AROUND THE MOUND TOP. PAINTING OF HANDRAIL SHALL BE CARRIED OUT WITH 2 COATS OF EPOXY PRIMER & EPOXY PAINT OF APPROVED MAKE & SHADE AS PER SPECIFICATIONS.

SPACE FOR STAMPING

THIS DRAWING IS THE PROPERTY OF SHARP TANKS & STRUCTURALS (P.) LIMITED AND MUST NOT BE COPIED OR LENT WITHOUT THEIR PERMISSION IN WRITING

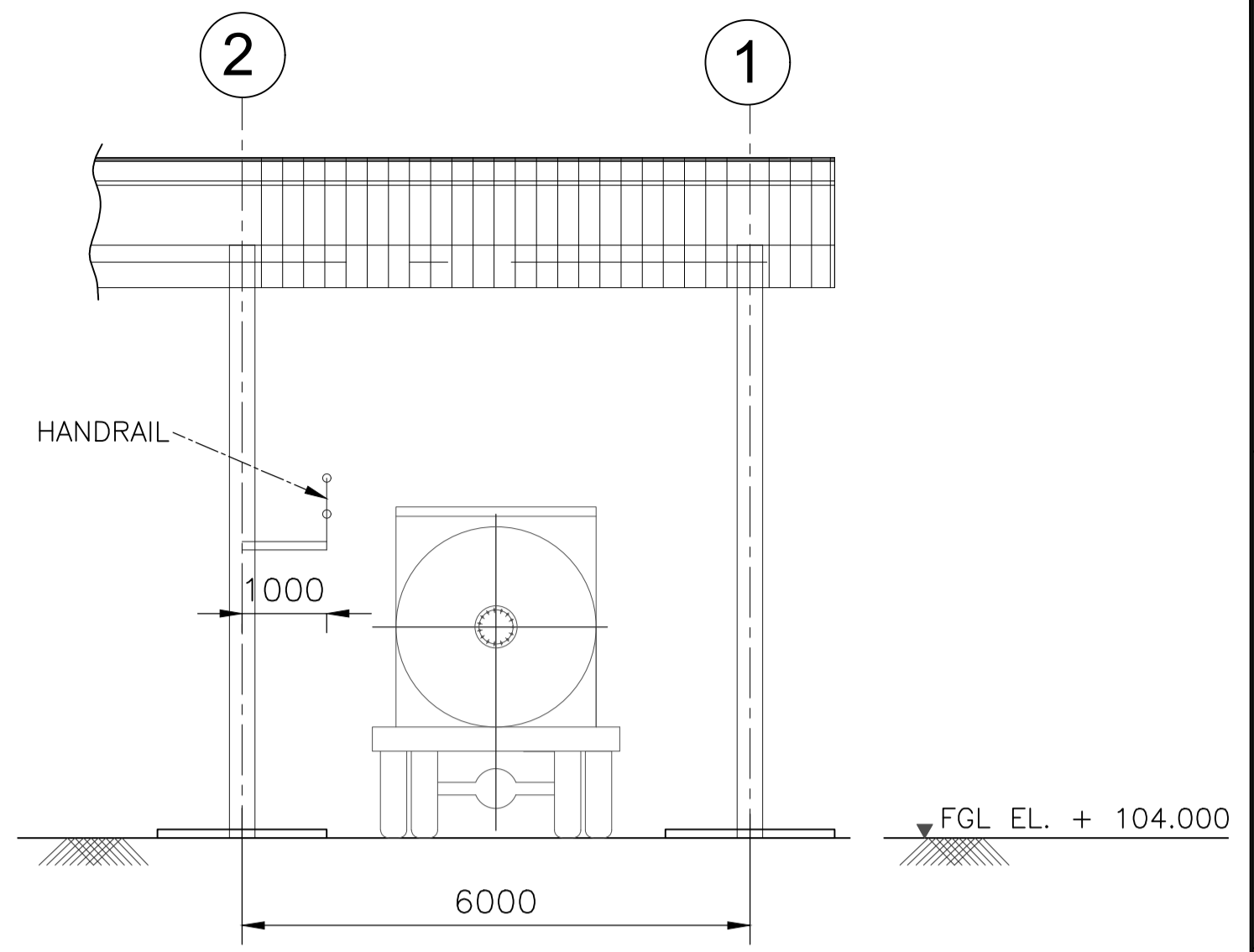
CLIENT :		HINDUSTAN PETROLEUM CORPORATION LIMITED HINDUSTAN BHAVAN - LPG PROJECTS DEPARTMENT	
DRN. BY :	PSW	PROJECT :	CONSTRUCTION OF 3 X 350 MT CAPACITY MOUNDED LPG STORAGE BULLET AT BARRH LPG PLANT
CHK. BY :	SHD	TITLE :	3 X 350 MT LPG MOUNDED BULLET GENERAL ARRANGEMENT PLAN, SECTIONS & DETAILS FOR LPG STORAGE BULLET AREA
APP. BY :	SHD	JOB NO. :	11387 A/B/C
SCALE :	1:100	DWG. NO. :	001-GA DRG.
		SHEET :	1 OF 2
		REV. :	



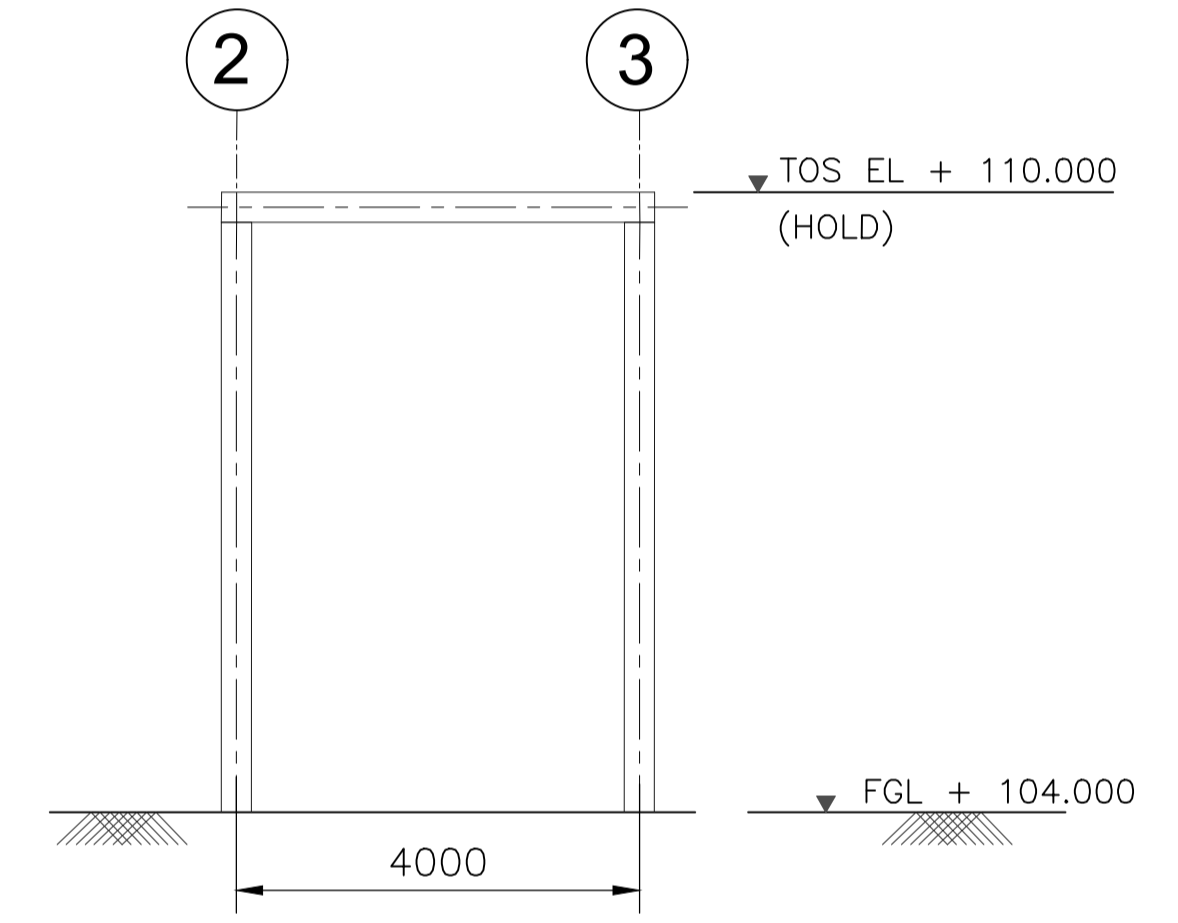
FOR CONT.REFER DWG. NO.
11387-04-PI-EQP-0001

FOR CONT.REFER DWG. NO.
11387-07-PI-EQP-0001

PLAN



SECTION B
(SCALE: 1:75)



SECTION C
(SCALE: 1:75)

NOTES:-
1) ALL DIMENSIONS ARE IN MM AND ALL LEVELS ARE IN METER UNLESS NOTED OTHERWISE.
2) FGL EL. +100.000M CORRESPONDS TO RL. +381.00M

LEGEND:-

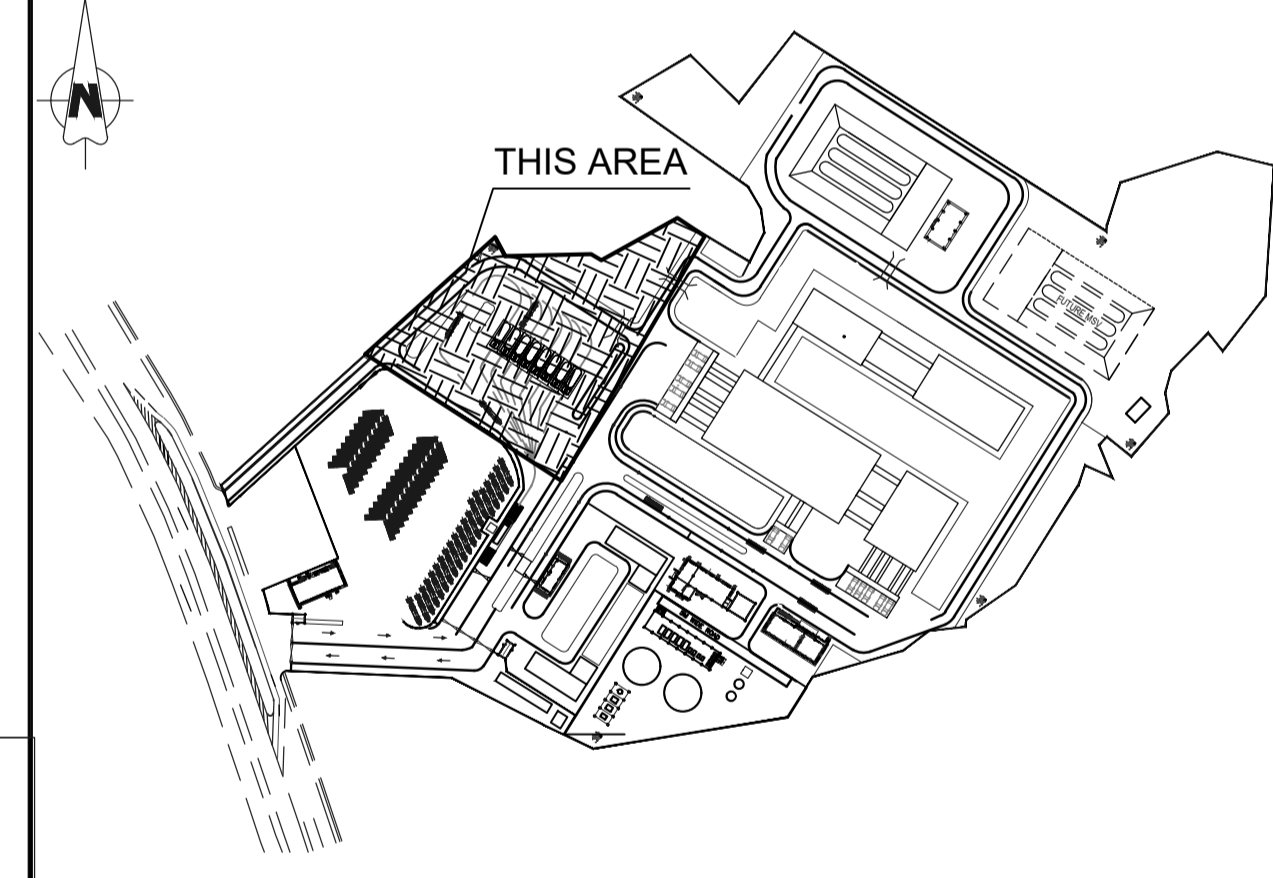
FGL	FINISHED GROUND LEVEL	— C —	CENTER LINE
TOG	TOP OF GROUTING	— B —	BOUNDARY WALL
FFL	FINISHED FLOOR LEVEL	— G —	GREEN BELT
HPP	HIGHEST PAVING POINT	— R —	GRATING
— R —	ROAD CROSSING (HUME PIPE)	— S —	DELUGE VALVE SKID
— W —	WATER MONITOR	— F —	FIRE WATER LINE (U/G)
— I —	ISOLATION VALVE	— A —	FIRE WATER LINE (A/G)
		— H —	DOUBLE HEADED HYDRANT

HOLD:-
1. VENDOR DATA FOR LOADING ARMS
2. TANKER DETAILS.

REFERENCE DRAWING:-

S.NO.	REFERENCE DRAWING	DRAWING NO.
1	OVER ALL PLOT PLAN	11387-12-P1-PLN-0001
2	EQUIPMENT LAYOUT KEY PLAN	11387-00-PI-EQP-0001

KEY PLAN



SCALE - 1:300

REV NO.	DATE	REVISIONS	BY	CHK.	APPD.
0	19 SEP 2019	RE-ISSUED FOR REVIEW	AA	AMM	SK
A	29 JUNE 2019	ISSUED FOR REVIEW	AN	AMM	SK

DRG.NO :- 11387-10-PI-EQP-0001 SHEET - 1 OF 1

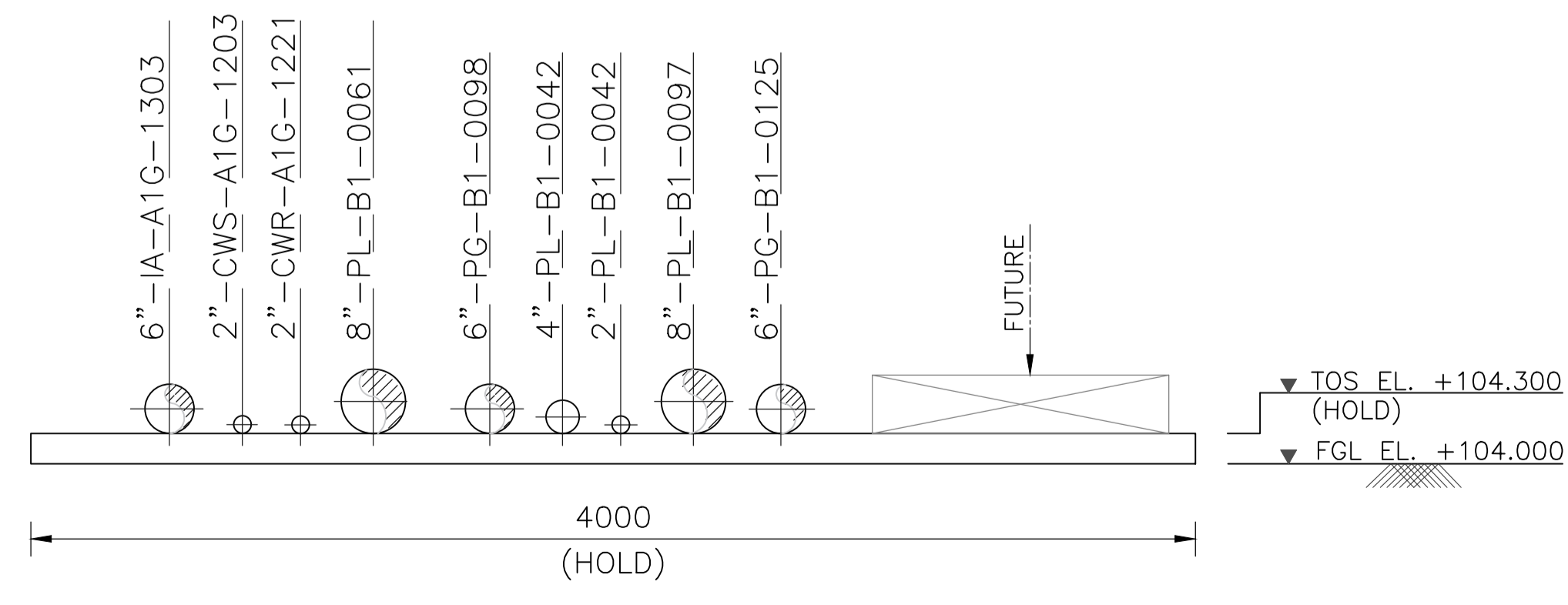
TITLE :

EQUIPMENT LAYOUT TT GANTRY

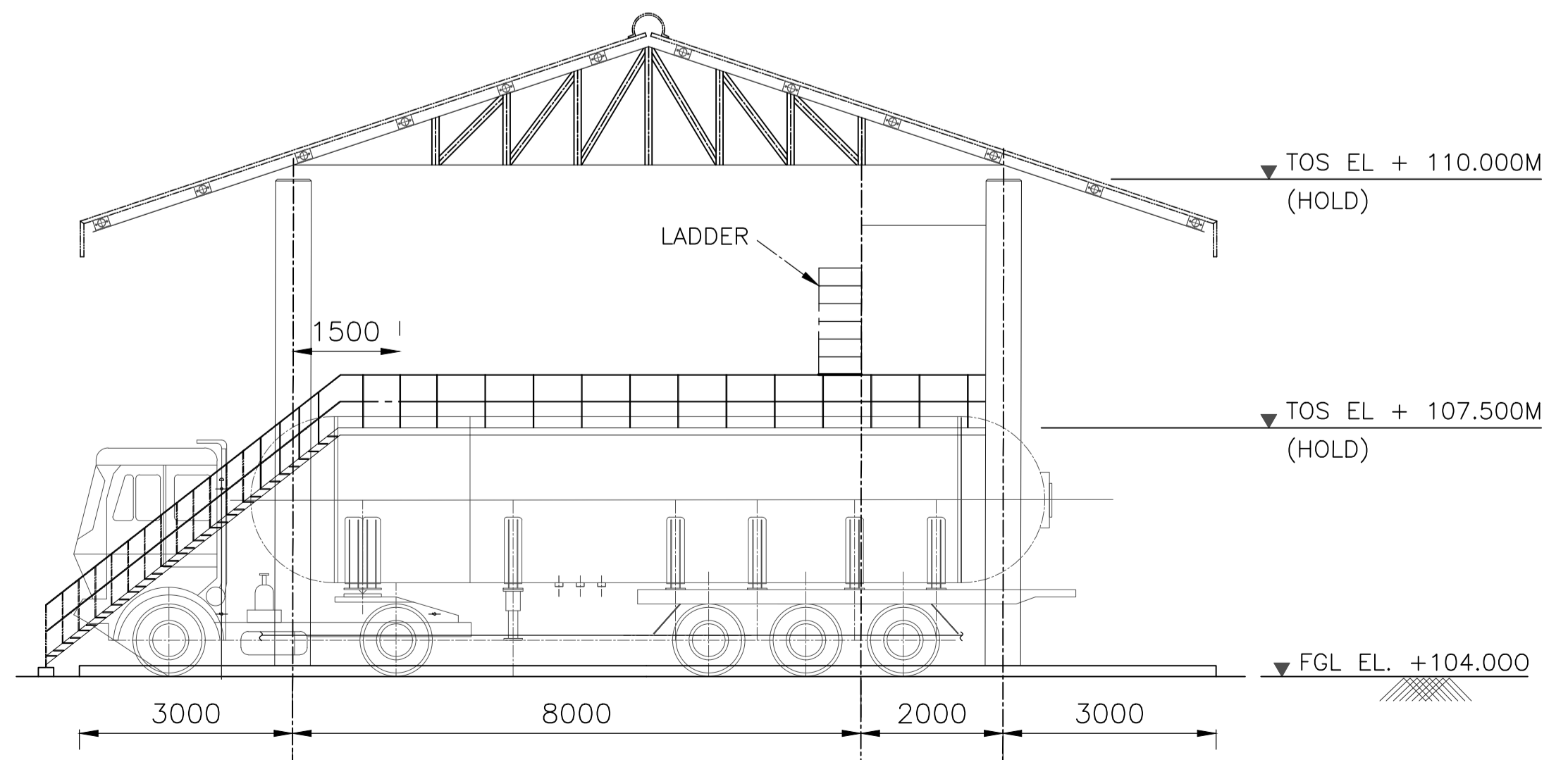
PROJECT : EPMC SERVICE FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC : RINA Consulting S.p.A.

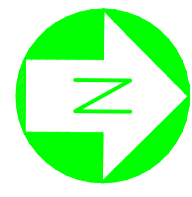
CLIENT : HINDUSTAN PETROLEUM CORPORATION LTD. MUMBAI



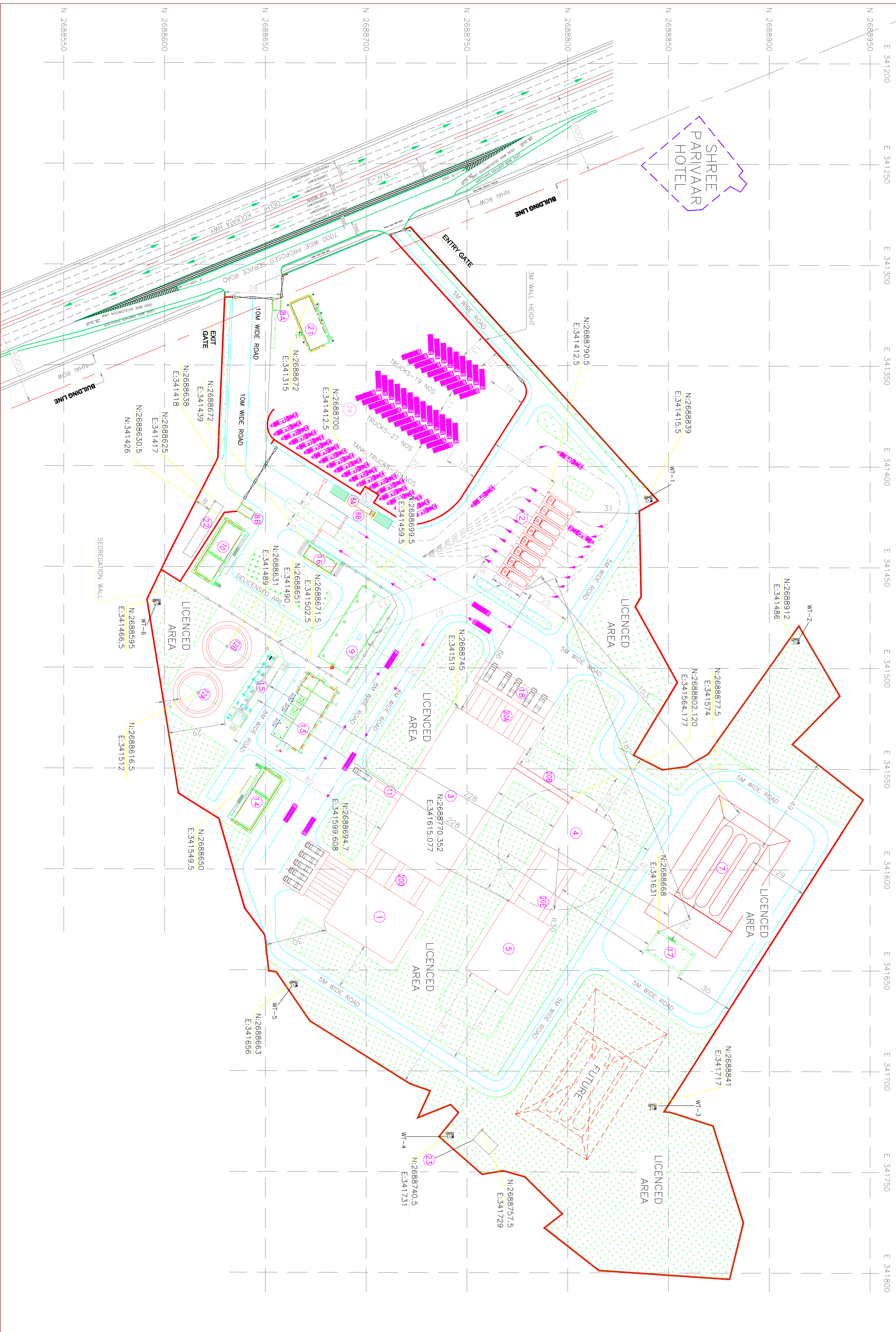
SECTION D
(SCALE: 1:20)



SECTION A
(SCALE: 1:75)



PLANT NORTH



SR. NO.	DESCRIPTION	DIMENSIONS (METER)	FGL	SR. NO.	DESCRIPTION	DIMENSIONS (METER)	FGL
1	FILED CYLINDER STORAGE SHED	40 X 30	104	15	FIRE WATER PUMP HOUSE & AIR COMPRESSOR	40 X 10(HOLD)	104
2	BULK TIT UNLOADING GANGRY (8 BAY)	48 X 16	104	16	INVOICE ROOM	10 X 8	104
3	EMPTY CYLINDER CUM FILLING SHED	80 X 40	102.5	17	LPG PUMP & COMPRESSOR HOUSE	20 X 10	101
4	VALVE CHANGING SHED	30 X 25	102.5	18	CYLINDER UNLOADING PLATFORM	40 X 12	102.5
5	PRESSURE TESTING SHED	40 X 25	102.5	19	CYLINDER LOADING PLATFORM	30 X 12	104
6A	WEIGH BRIDGE CABIN	4 X 3.5	105	20A	CONNECTING PLATFORM (5 NO.)	18 X 3	104
6B	WEIGH BRIDGE	17x5	105	20B	CONNECTING PLATFORM (1 NO.)	32 X 3	104
7	MOUNDED STORAGE VESSEL	30 X 40	101	20C	CONNECTING PLATFORM (5 NO.)	15 X 3	104
8A	GATE CABIN 1	8 X 4	105	20D	CONNECTING PLATFORM (3 NO.)	15 X 3	104
8B	GATE CABIN 2	8 X 4	105	21	DRIVERS RESTROOM	25 X 10	102.5
9	ADMIN & CONTROL BUILDING	40 X 15	104	22	CAR PARKING & TWO WHEELER PARKING	30 X 5	104
10	WORKER AMENITIES BUILDING	30 X 15	104	23	EFFLUENT TREATMENT PLANT	11 X 6.5	---
11	CONNECTING PLATFORM (2 NO.)	15 X 3	104	24	TIT PARKING	---	---
12A	FIRE WATER TANK	Ø18.5 X 12.75(H)	104	25	WATCH TOWER (ØNOS)	---	---
12B	FIRE WATER TANK	Ø18.5 X 12.75(H)	104				
13	M.C. ROOM	25 X 16	104				
14	WAREHOUSE	30 X 10	104				

NOTES:-
 1) ALL DIMENSIONS ARE IN MM AND ALL LEVELS & COORDINATES ARE IN METER UNLESS NOTED OTHERWISE.
 2) FGL EL. +100.00MM CORRESPONDS TO RL. +381.00MM

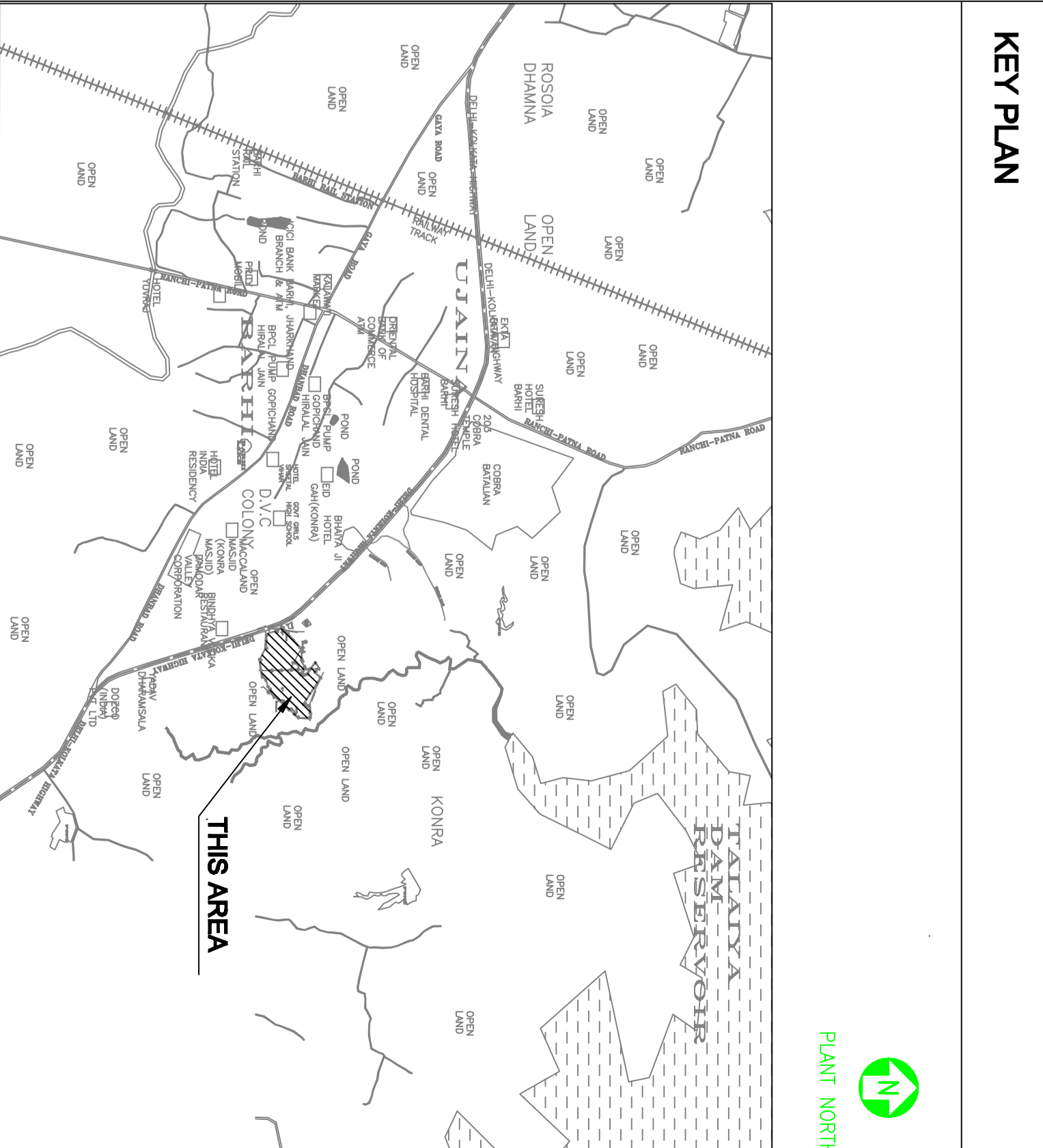
PLANT ADDRESS: PLOT NO. 13/8 BARHI INDUSTRIAL AREA, JUDA, VILLAGE - KOURA, THANA - BARHI, DIST. HAZARIBAGH, JHARKHAND - 825405.
 SURVEY PLOT NUMBER: 1489 part, 1528, 1527, 1530, 1531 part, 1532, 1533, 1529
 KHATA NO. 38,55,56,78,78/21/04

LEGEND:-

	CENTER LINE
	BOUNDARY WALL
	WATCH TOWER
	GREEN BELT
	H.M
	HIGH MAST
	EXISTING FACILITY
	CULVERT
	FENCING

REFERENCE DRAWING:-

2	GRID SURVEY DRAWING	BSA/HPCL/BA/RIH/GRID SURVEY-DWG
1	BOUNDARY DRAWING OF HPCL LPG BOTTLING PLANT	BSA/HPCL/BA/RIH/BOUNDARY-DWG REV-0
S.NO.	REFERENCE DRAWING	DRAWING NO.



SCALE: 1:1000

0	23 AUG 2019	ISSUED FOR DESIGN	AN	AMM	SK
C	14 JUNE 2019	ISSUED FOR APPROVAL	AN	AMM	SK
B	7 JUNE 2019	ISSUED FOR APPROVAL	AN	AMM	SK
A	27 MAY 2019	ISSUED FOR REVIEW	AN	AMM	SK
REV. NO.	DATE	REVISIONS	BY	CHK.	APPD.

DRG.NO:- 11387-12-PL-PLN-001
 TITLE: OVERALL PLOT PLAN
 SHEET - 1 OF 1

PROJECT : EPMC SERVICE FOR LPG BOTTLING PLANT, BARHI, JHARKHAND

EPMC : RINA Consulting S.p.A.

CLIENT : HINDUSTAN PETROLEUM CORPORATION LTD. MUMBAI

SHEET : A1