

- ### NOTES
- ALL ELECTRICAL EQUIPMENT SHALL BE TROPICALISED IN COMPLIANCE WITH LOCAL CLIMATIC CONDITIONS.
 - FEEDER RATING AND CABLE SIZE TO BE FINALIZED AS PER SIZING CALCULATION DURING DETAIL ENGINEERING.
 - THE METERS SHALL BE DIGITAL MULTIFUNCTIONAL METER.
 - THIS DRAWING SHALL BE STUDIED ALONG WITH ALL OTHER RELATED ELECTRICAL DOCUMENTS.
 - ACTUAL SIZE OF CABLE SHALL BE DECIDED ON BASIS OF CABLE SIZING CALCULATION AND APPROVED CABLE SCHEDULE.
 - OUTDOOR ELECTRICAL MATERIAL SHALL BE PROVIDED IN COMPLIANCE WITH THE RELEVANT HAZARDOUS AREA CLASSIFICATION.
 - AMMETER AND VOLTMETER SHALL BE DIGITAL TYPE WITH BUILT IN SELECTOR SWITCH
 - ALL INDICATING LAMPS SHALL BE LED TYPE.
 - SINGLE EMERGENCY STOP PUSH BUTTON SHALL BE KEPT AT GUARD ROOM TO OPEN ALL INCOMERS OF ELECTRICAL DISTRIBUTION AT ANY EMERGENCY VENDER TO KEEP PROVISION FOR THE SAME.
 - UPS AND AUXILIARY LOAD (LIKE PANEL HEATER, LIGHT) OF GDS, FDS, CCTV, METERING SKID, SCADA (FUTURE) WILL BE FED FROM UPS ACBD AND EDB MCCB FEEDER AS MENTIONED IN SLD.
 - SOLAR CHARGER SHALL BE KEPT AS OFF WHEN DG IS FEEDING BUS C.

LEGEND

	MINIATURE CIRCUIT BREAKER (MCB)
	MOULDED CASE CIRCUIT BREAKER (MCCB)
	INDICATION LAMP
	EARTH.
	AMMETER
	VOLTMETER
	CURRENT TRANSFORMER
	MULTIFUNCTION METER
	FUSE
	AMMETER SELECTOR SWITCH
	VOLTAGE SELECTOR SWITCH
	INVERTER
	RECTIFIER
	BATTERY
	TRAFD.
	STATIC SWITCH
	INTERLOCK
	CHANGE OVER SWITCH
	EXPLOSION PROOF FUSE BOX
	SOLID STATE VOLTAGE STABILIZER
	DESIEL GENERATOR SET

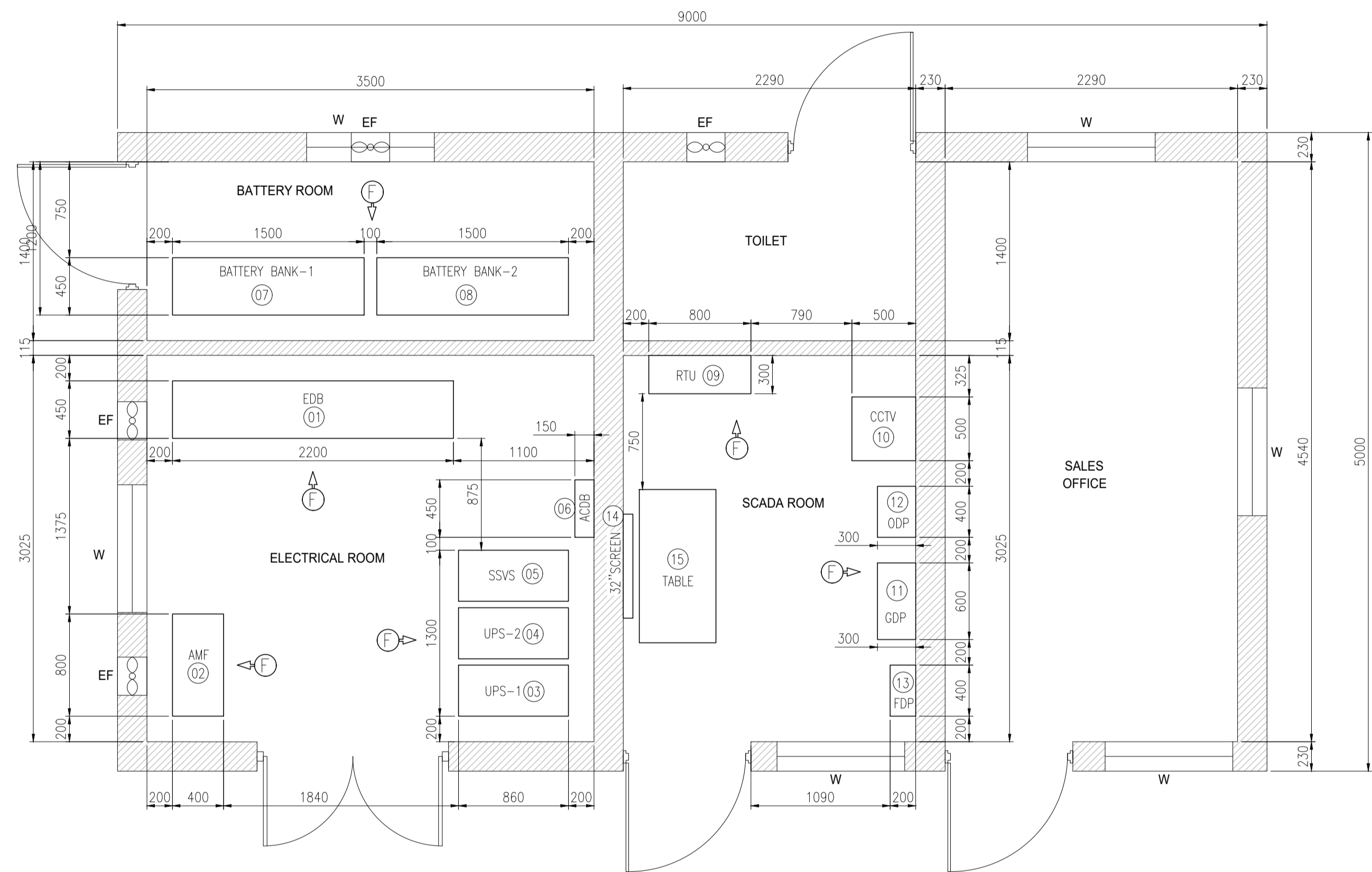
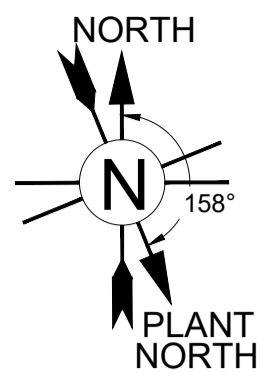
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Rev	01.09.2024	ISSUED FOR APPROVAL	HRK	SKN	AKN	-
Rev	D M Y	Modifications	Drawn	Checked	Approved	Validated

CUSTOMER: **Gasonet SERVICES (RJ) LIMITED**

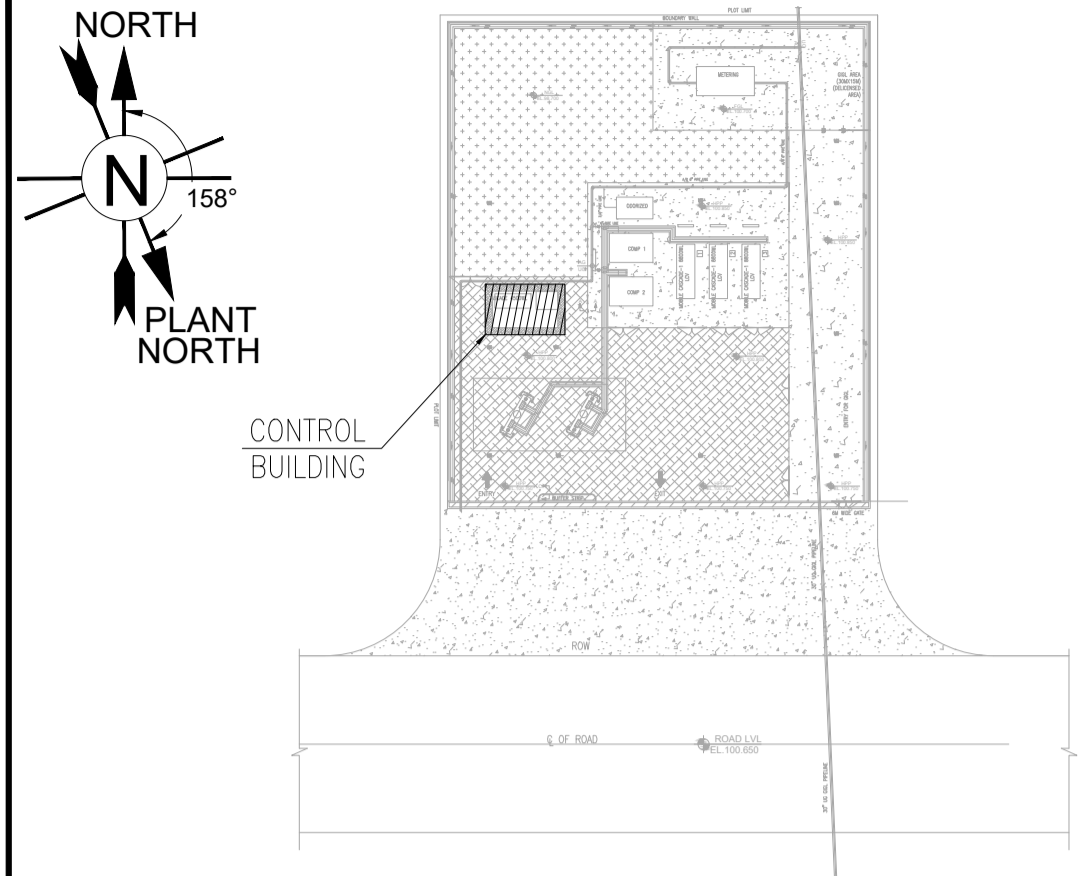
SUBJECT: **SINGLE LINE DIAGRAM FOR CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DISTT. BIKANER (RJ)**

	Size	A1	Scale	NTS	Sheet	1	of	1	Rev.	A
	Drawing No.	RGPL-GNET-RJ-CGS-ELE-DR-6001								



**EQUIPMENT LAYOUT OF CONTROL BUILDING
GROUND FLOOR PLAN LAYOUT**
(SCALE 1:50)

KEY PLAN



REFERENCE DRAWING

SR. NO.	DRAWING TITLE	DRAWING NO.
1	PLOT PLAN OF CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DIST. CHURU (RJ)	REPL-GNET-RJ-CGS-CNG-001-Rev-M

NOTES

- ALL DIMENSIONS ARE IN MM & LEVELS ARE IN METER UNLESS, UNTIL SPECIFIED.
- MINOR CHANGES AND MODIFICATIONS MAY BE MADE TO SUIT ACTUAL SITE CONDITIONS, WHILE COMPLYING TO STATUTORY REQUIREMENTS.
- EQUIPMENT DIMENSIONS SHOWN IN THIS DRAWING ARE INDICATIVE. FINAL DRAWING SHALL BE PREPARED BY AFTER GETTING DETAIL INPUTS FROM VENDORS/CONTRACTOR
- SUFFICIENT SPACE IN DIRECTION OF REQUIREMENT FOR MAINTENANCE AND STATUTORY TO BE MAINTAINED BETWEEN ELECTRICAL AND INSTRUMENT PANEL AND FROM WALL TO PANEL.
- 2 Nos. OF SPLIT AC SHALL BE INSTALLED OFFICE/CONTROL ROOM.
- 2 Nos. FLAME PROOF EXHAUST FAN SHALL BE INSTALLED IN BATTERY ROOM.
- EQUIPMENT POSITIONING SHALL BE, AS PER SITE CONDITION AND AS PER PROVISION CONTAINED IN OISD-149, DISTANCE BETWEEN PANELS SHALL BE MAINTAINED AS PER OISD 149.
 . AT THE SIDE OF VARIOUS SWITCH BOARDS AND FROM WALL : 1000MM (OTHERWISE LESS THAN 200 MM)
 . AT THE FRONT OF VARIOUS SWITCHBOARDS : 1500MM
 . BETWEEN FRONT TO FRONT OF TWO SWITCHBOARDS. (SAY DRAWOUT MCCS) FACING EACH OTHER.: 2000 MM
 . REAR CLEARANCE IN OTHER CASES : MORE THAN 750MM OTHERWISE LESS THAN 200MM.
- PLOT FGL (FINISHED GROUND LEVEL) EL. 100.00 SHALL BE MINIMUM 500mm ABOVE THAN THE NEAREST EXISTING VILLAGE ROAD AS SUGGESTED BY IOCL.
- ALL ELECTRICAL CONDUITS SHALL BE CONCEALED TYPE EXCEPT IN AREAS WHERE FALSE CEILING IS PROVIDED. CONDUITS SHALL BE LAID BEFORE CONCRETING AS PER ELECTRICAL DRAWING.
- CONTRACTOR TO PLAN SUITABLE PLUMBING PLAN IN LINE WITH THE WATER TANK LOCATION. ALL PLUMBING PIPES SHALL BE INCASED.

PANEL DETAILS

PANEL TAG	DESCRIPTION	WIDTH (MM)	DEPTH (MM)	HEIGHT (MM)	MOUNTING TYPE
1	EDB	2200*	450*	2000*	FLOOR
2	AMF PANEL	800*	400*	1475*	FLOOR
3	UPS UNIT-1	400*	860*	770*	FLOOR
4	UPS UNIT-2	400*	860*	770*	FLOOR
5	UPS SSVS BYPASS	400*	860*	770*	FLOOR
6	UPS ACDB	450*	150*	250*	WALL
7	BATTERY BANK-1	1500*	450*	1000*	FLOOR
8	BATTERY BANK-2	1500*	450*	1000*	FLOOR
9	RTU PANEL	800*	300*	800*	WALL
10	CCTV PANEL	500*	500*	300*	WALL
11	GAS DETECTION PANEL	600*	300*	600*	WALL
12	ODORIZOR PLC PANEL	400*	300*	600*	WALL
13	FIRE DETECTION PANEL	400*	200*	600*	WALL
14	32 INCH CCTV	815*	75*	350*	WALL
15	OPERATOR CONSOLE TABLE	1200*	600*	750*	FLOOR

* SHALL BE FINALIZED BY AFTER GETTING DETAIL INPUTS FROM VENDORS/CONTRACTOR

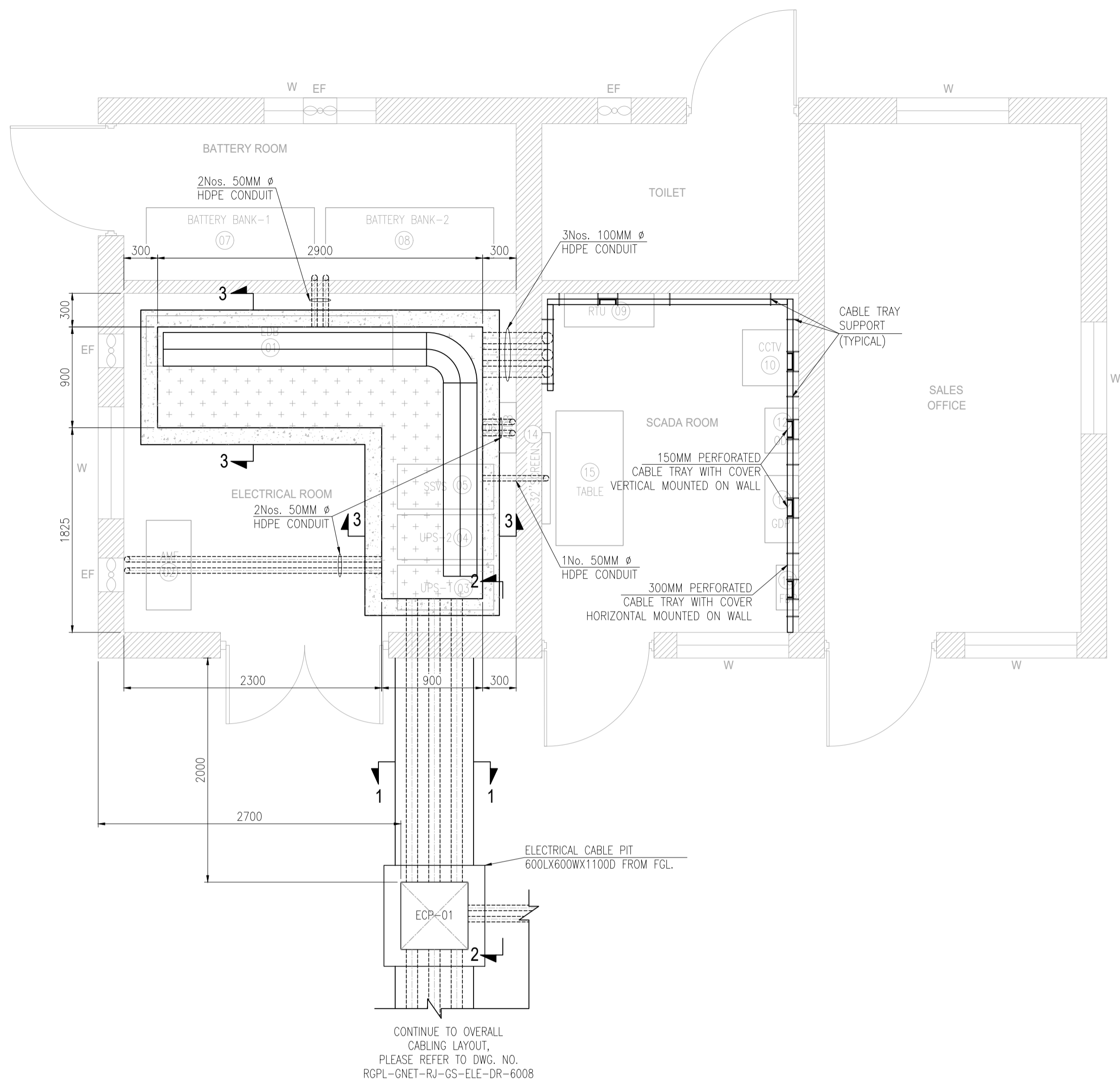
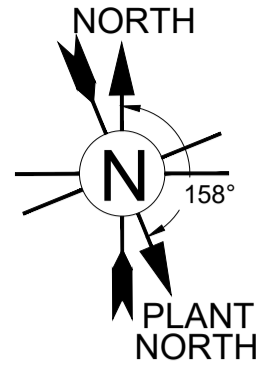
ISSUED FOR APPROVAL

Rev.	01.09.2024	ISSUED FOR APPROVAL	Modifications	HRK	SKN	AKN	-
	D M Y			Drawn	Checked	Approved	Validated

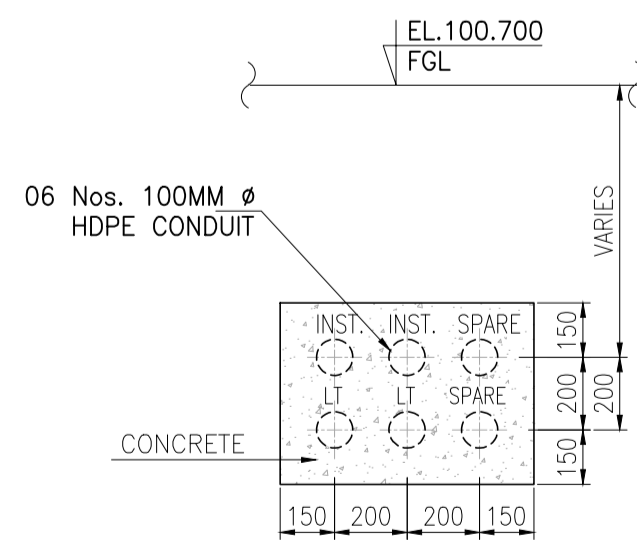
CUSTOMER: **Gasonet GASONET SERVICES (RJ) LIMITED**

SUBJECT: **EQUIPMENT LAYOUT OF CONTROL BUILDING FOR CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DISTT. BIKANER (RJ)**

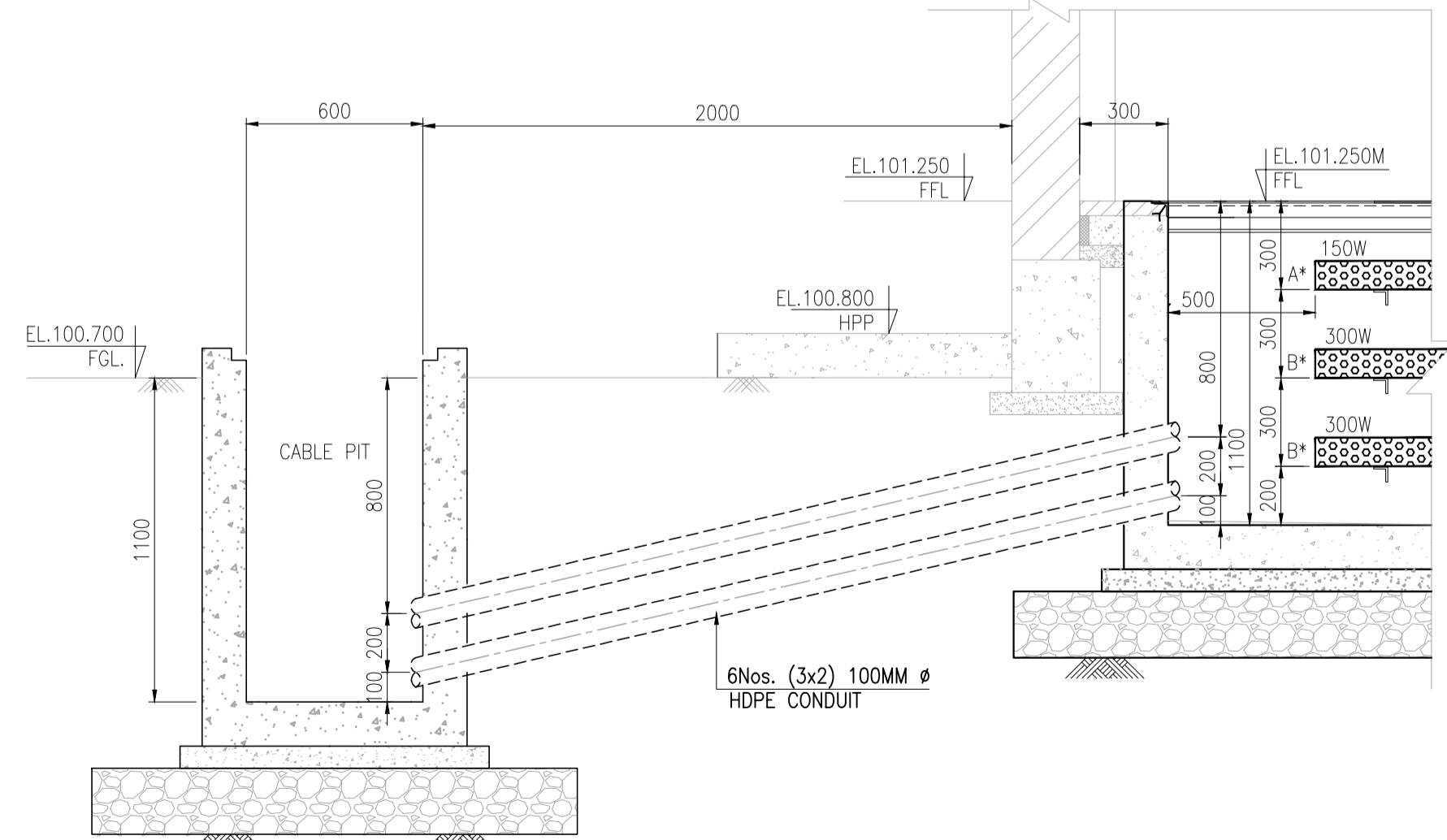
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	Drawing No.	RGPL-GNET-RJ-CGS-ELE-DR-6002								



INDOOR CABLE TRAY & TRENCH LAYOUT OF CONTROL BUILDING
(SCALE 1:30)



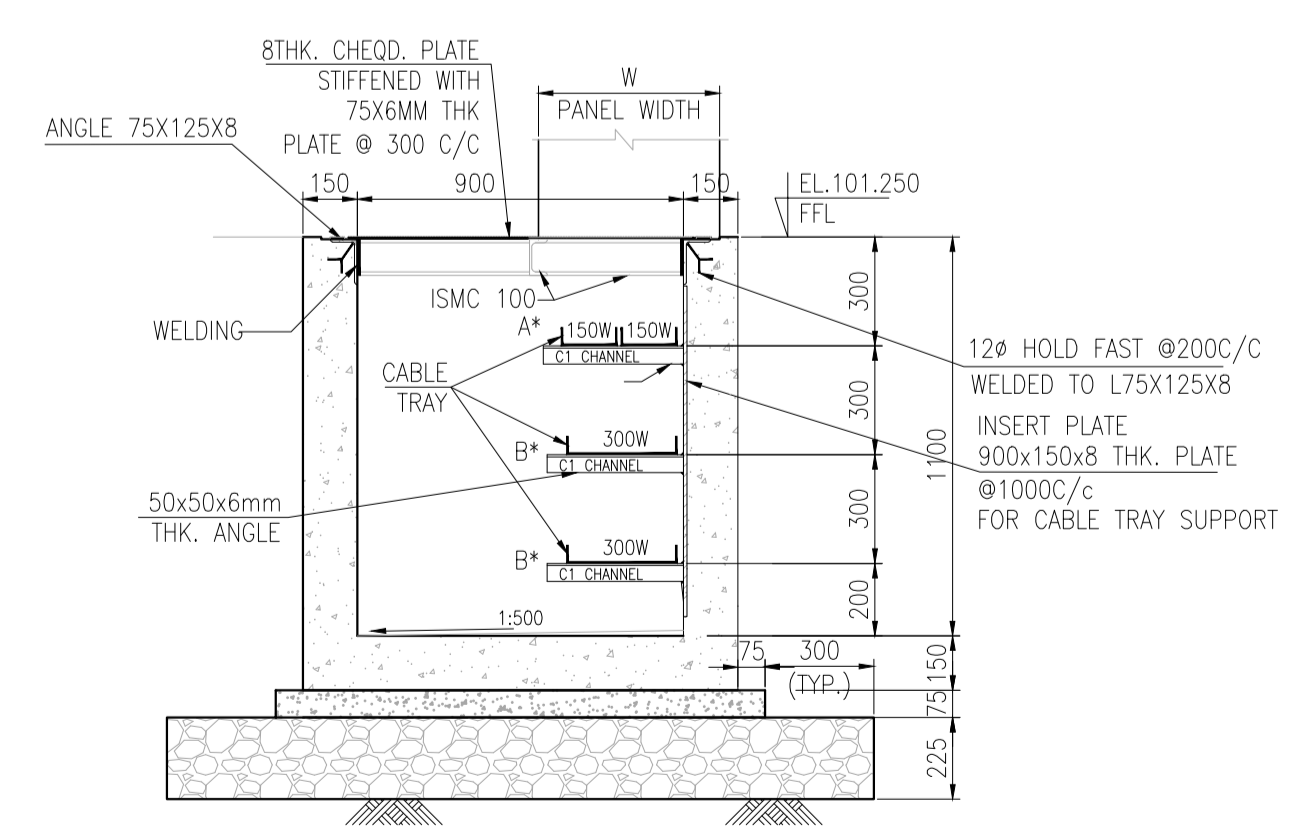
SECTION 1-1
(SCALE 1:20)



SECTION 2-2
(SCALE 1:20)

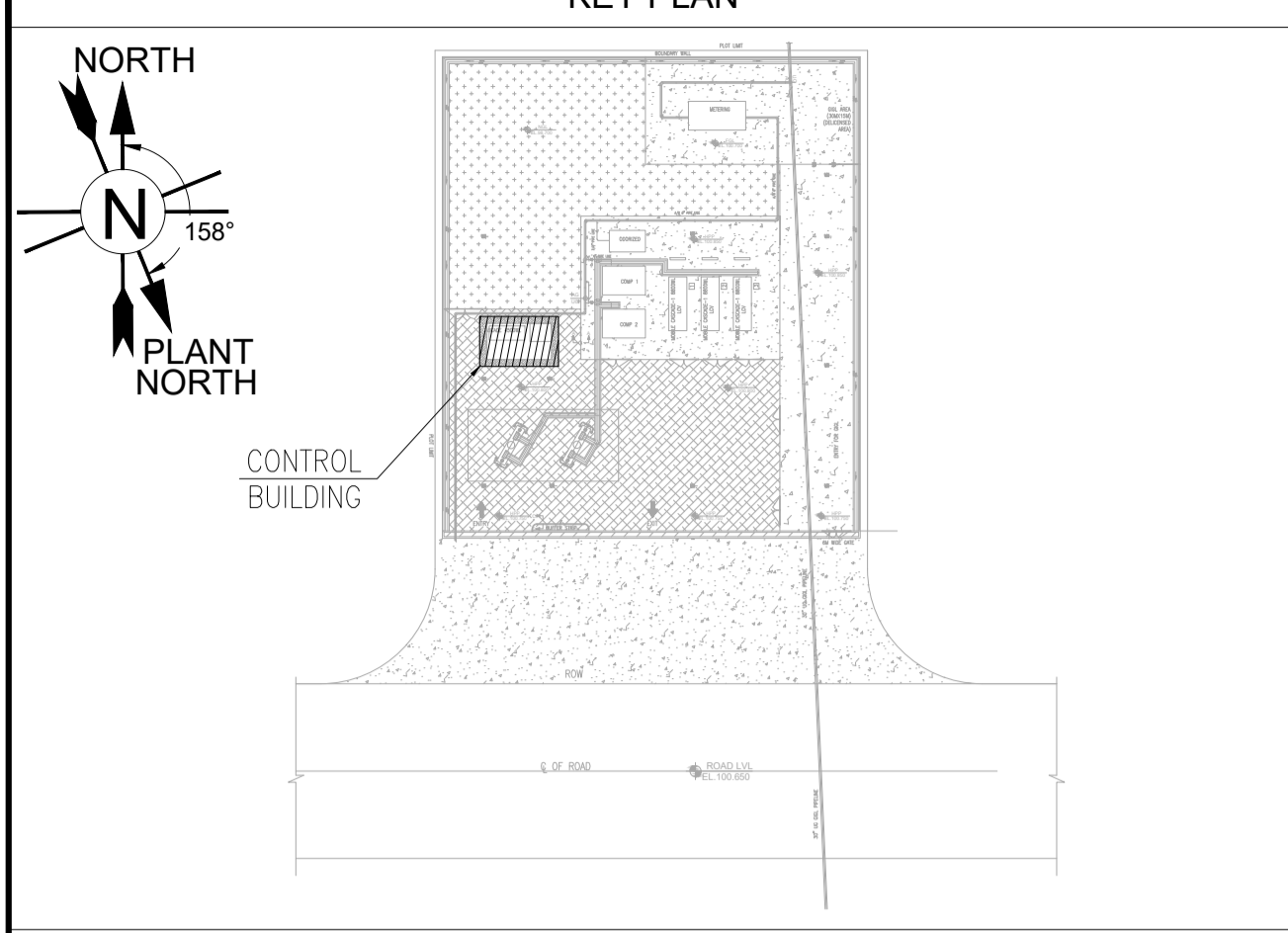
PANEL DETAILS					
PANEL TAG	DESCRIPTION	WIDTH (MM)	DEPTH (MM)	HEIGHT (MM)	MOUNTING TYPE
1	EDB	2200*	450*	2000*	FLOOR
2	AMF PANEL	800*	400*	1475*	FLOOR
3	UPS UNIT-1	400*	860*	770*	FLOOR
4	UPS UNIT-2	400*	860*	770*	FLOOR
5	UPS SSVS BYPASS	400*	860*	770*	FLOOR
6	UPS ACDB	450*	150*	250*	WALL
7	BATTERY BANK-1	1500*	450*	1000*	FLOOR
8	BATTERY BANK-2	1500*	450*	1000*	FLOOR
9	RTU PANEL	800*	300*	800*	WALL
10	CCTV PANEL	500*	500*	300*	WALL
11	GAS DETECTION PANEL	600*	300*	600*	WALL
12	ODORIZOR PLC PANEL	400*	300*	600*	WALL
13	FIRE DETECTION PANEL	400*	200*	600*	WALL
14	32 INCH CCTV	815*	75*	350*	WALL
15	OPERATOR CONSOLE TABLE	1200*	600*	750*	FLOOR

* SHALL BE FINALIZED BY AFTER GETTING DETAIL INPUTS FROM VENDORS/CONTRACTOR



SECTION 3-3
(SCALE 1:20)

NOTE:
A* : TRAY FOR INSTRUMENTATION AND CONTROL CABLES
B* : TRAY FOR ELECTRICAL CABLES



REFERENCE DRAWING		
SR. NO.	DRAWING TITLE	DRAWING NO.
1	PLOT PLAN OF CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DIST. CHURU (RJ)	REPL-GNET-RJ-CGS-CNG-001-Rev-M
2	EQUIPMENT LAYOUT OF CONTROL BUILDING OF CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DIST. CHURU (RJ)	REPL-GNET-RJ-CGS-ELE-DR-6002
3	OVERALL CABLING LAYOUT OF CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DIST. CHURU (RJ)	REPL-GNET-RJ-CGS-ELE-DR-6008

- NOTES**
- ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE MENTIONED.
 - THIS LAYOUT IS VALID FOR ELECTRICAL CABLE TRENCH LAYOUT ONLY.
 - EXACT LOCATION OF CROSS CHANNELS FOR SUPPORTING PANELS SHALL BE DECIDED AT SITE.
 - OPENING PORTION OF CUTOUTS SHALL BE COVERED WITH 8mm THICK CHECKERED PLATE.
 - BOLTS, NUTS AND WASHER SHALL BE HARD CHROME / CADMIUM PLATED.
 - CABLE SHALL BE NEATLY ARRANGED IN THE TRAY IN SUCH A MANNER THAT CRIS-CROSSING IS AVOIDED TAKE ON TO THE PANEL IS FACILITATED.
 - POWER AND CONTROL CABLES SHALL HAVING TAGS, THESE TAGS SHALL BE FIXED AT EVERY BEND, TERMINATION POINT, BRANCHING POINT FROM GROUP OR CABLES EVERY 05 MTRS. STRAIGHT LENGTH.
 - LV POWER CABLES AND CONTROL CABLES SHALL BE LAID IN SEPARATE TRAY.
 - WHENEVER CABLES ARE ENTERING FROM OUTDOOR AND INDOOR AFTER LAYING OF CABLES BOTH END OF PIPE SLEEVES / CONDUITS SHALL BE SEALED WITH WATER PROOF & FIRE PROOF COMBINED.
 - ALL CABLE TRAY SHALL BE PRE FABRICATED HOT DIP GALVANIZED STEEL.
 - THE CABLE TRAY ACCESSORIES SHALL BE HOT DEEP GALVANIZED STEEL AND SUPPORT SHALL BE PAINTED.
 - MS STEEL SHALL FORM NO IS:2062-1992 / IS:4759-1996.
 - ALL CABLE TRAY AND CABLE ARMORED THROUGH GLAND GROUNDED PROPERLY.
 - ELECTRICAL EQUIPMENT ARRANGEMENT ARE TENTATIVE. EQUIPMENT SHALL BE REARRANGED AS PER SPACE AVAILABLE IN THE SALES RO BUILDING. THIS SHALL BE DONE AT THE TIME OF INSTALLATION.

LEGEND & BOM			
S.NO.	SYMBOL	DESCRIPTION	MIN. QTY.
1	150W	150MM CABLE PERFORATED TRAY ALONG WITH SUPPORT, BEND AND HARDWARES ETC.	30 Mtrs.
2	300W	300MM CABLE PERFORATED TRAY ALONG WITH SUPPORT, BEND AND HARDWARES ETC.	20 Mtrs.
3	=====	50MM DIA. DOUBLE CORRUGATED HDPE CONDUIT	10 Mtrs.
4	=====	100MM DIA. DOUBLE CORRUGATED HDPE CONDUIT	20 Mtrs.

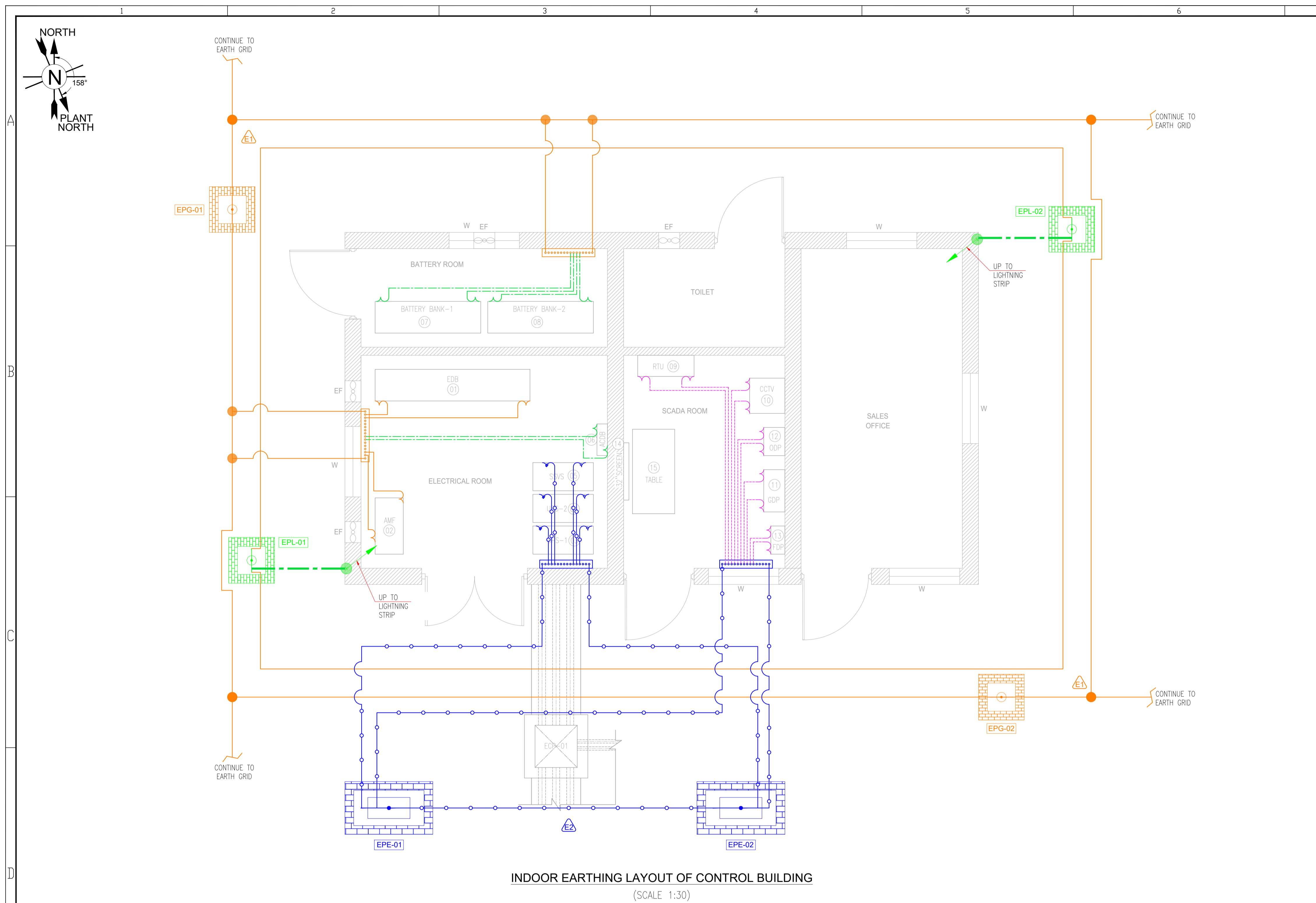
ISSUED FOR APPROVAL

A	02.09.2024	ISSUED FOR APPROVAL	HRK	SKN	AKN	-
Rev	D M Y	Modifications	Drawn	Checked	Approved	Validated

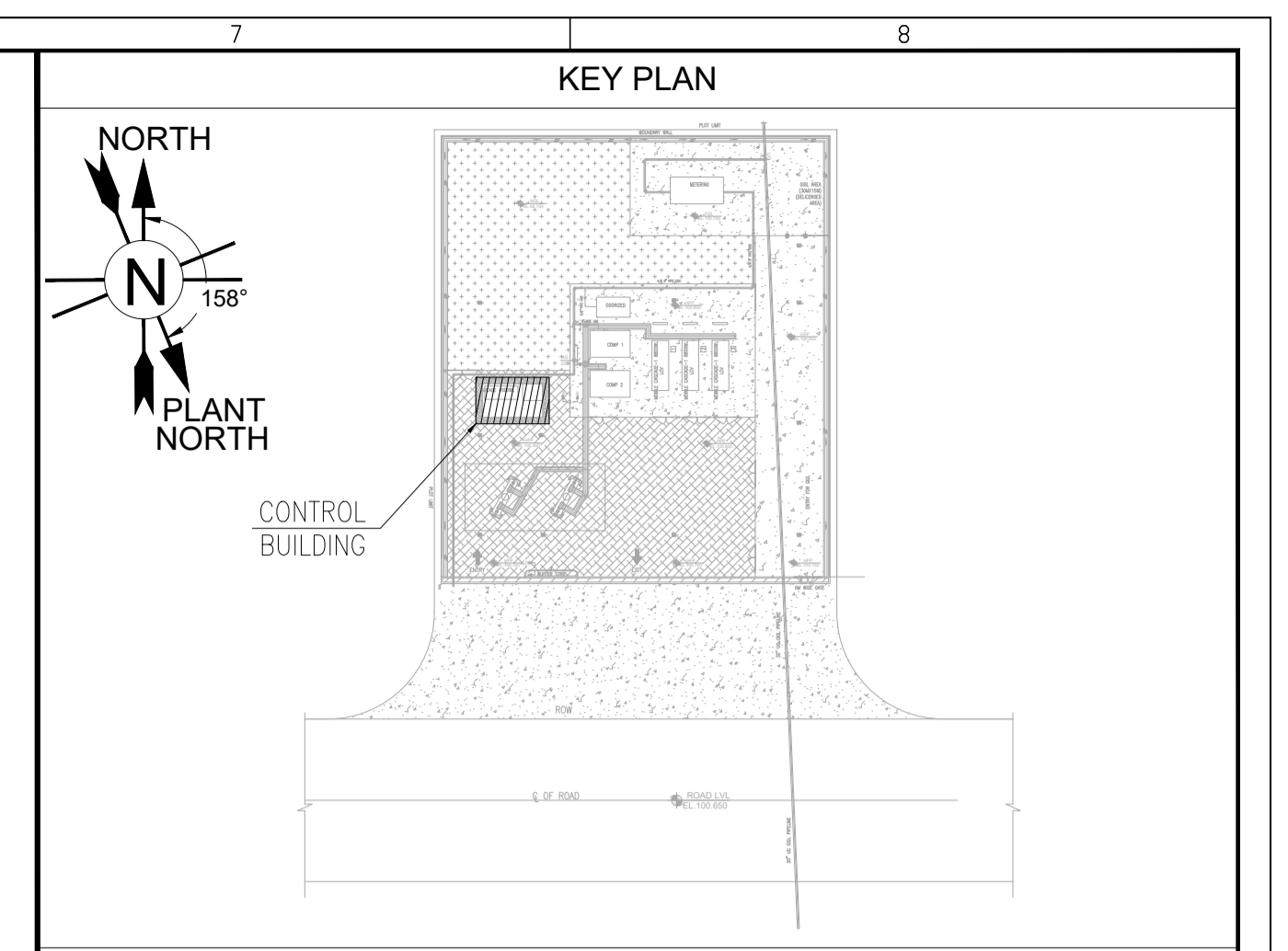
CUSTOMER: **Gasonet GASONET SERVICES (RJ) LIMITED**

SUBJECT: **INDOOR CABLE TRAY & TRENCH LAYOUT OF CONTROL BUILDING FOR CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DIST. BIKANER (RJ)**

	Size	Scale	Sheet	Rev.
	A1	1:30, 1:20	1 of 1	A
Drawing No: RGPL-GNET-RJ-CGS-ELE-DR-6003				



INDOOR EARTHING LAYOUT OF CONTROL BUILDING
(SCALE 1:30)



REFERENCE DRAWING		
SR. NO.	DRAWING TITLE	DRAWING NO.
1	PLOT PLAN OF CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DIST. CHURU (RJ)	REPL-GNET-RJ-CGS-CNG-001-Rev-M
2	EQUIPMENT LAYOUT OF CONTROL BUILDING OF CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DIST. CHURU (RJ)	REPL-GNET-RJ-CGS-ELE-DR-6002
3	OVERALL EARTHING LAYOUT OF CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DIST. CHURU (RJ)	REPL-GNET-RJ-CGS-ELE-DR-6007

- NOTES**
- ALL DIMENSIONS ARE IN mm & LEVELS ARE IN m.
 - FOLLOW WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
 - EARTHING ROUTE IS SUGGESTIVE ONLY, MAY VARY TO SUIT AT SITE CONDITION.
 - THE MAIN EARTHGRID SHALL BE FORMED WITH 50x6mm G.I. FLAT BURIED AT THE DEPTH OF 600mm, AROUND THE BUILDING AT 1500mm AS A DISTANCE FROM THE OUTER WALL OF THE BUILDING.
 - THE MAIN GRID SHALL BE IN SINGLE LAYER TO ACHIEVE THE RESISTANCE LESS THAN 1 Ohm AS PER IS: 3043.
 - TO PROTECT THE WELDED JOINT BELOW THE GROUND LEVEL FROM CORROSION, TWO COATS OF BITUMEN COMPOUND AND JUTE COVERING SHALL BE PROVIDED.
 - THE EARTH ELECTRODE SHALL BE 100mm ϕ , 3000mm LONG G.I. PIPE. ELECTRODE SHALL BE INSTALLED IN TO GROUND AND CONNECTED TO GROUND CONDUCTOR.
 - THE ABOVE GROUND CATHODICALLY UNPROTECTED PIPELINE FACILITIES SHALL BE CONNECTED TO STATION EARTHING SYSTEM.
 - ALL PANELS AND BOARDS SHALL BE EARTHED AT 2 POINTS.
 - MINIMUM GAP SHALL BE MAINTAINED TO AVOID THE CONTACT BETWEEN G.I. AND Cu. EARTHING STRIP.
 - ALL ELECTRICAL EQUIPMENT SHALL BE EARTHED AS PER IS:3043.
 - ALL STEEL STRUCTURE/CABLE RACKS/RISER SHALL BE SUITABLY CONNECTED TO EARTHING SYSTEM.
 - INSTALLATION AND TESTING OF THE EARTHING SYSTEM SHALL BE CARRIED OUT IN ACCORDANCE WITH IS:3043.
 - THE INSTRUMENTATION EARTH ELECTRODE SHALL BE 600x600x3mm THK. Cu. PLATE EARTH ELECTRODE SHALL BE INSTALLED INTO GROUND.
 - DISTANCE BETWEEN TWO EARTH PIT SHALL BE 6000mm AS A MINIMUM.
 - THE GROUND CONDUCTOR AT ROAD CROSSING SHALL BE LAID AT A DEPTH OF 1000MM (MIN.) BELOW GROUND LEVEL.
 - SUITABLE SLEEVES WITH ADEQUATE SPARES CAPACITY SHALL BE PROVIDED WHEREVER EARTHING ARE CROSSING THE ROAD OR ENTERING THE BUILD. OR CROSSING FROM ONE ROOM TO ANOTHER ROOM.
 - SEALING SHALL BE PROVIDED IN SLEEVES TO PREVENT INGRESS OF WATER IN BUILDING.
 - QUANTITY OF EARTHING MATERIALS SHOWN IN THE TABLE ARE TENTATIVE ONLY & QTY. MAY VARY TO SUIT AT SITE CONDITION.
 - THIS DRAWING IS INDICATIVE AND FOR GUIDANCE ONLY.
 - ELECTRONIC EARTH PIT SHALL BE PROVIDED FOR TELECOM, UPS, PLC, INSTRUMENTATION AS PER IS:3043.
 - ALL LIGHTING POLES SHALL BE EARTH BY 25x3 G.I. FLAT & CONNECTED TO NEAREST MAIN GRID.
 - LIGHTNING ARRESTER (AT TOP OF PARAPET) HEIGHT SHALL BE 3MTR. HIGHER THAN THE CASCADE TOP. FOR THE SAME, CONCRETE BLOCK LOCALLY TO BE CONSTRUCTED ABOVE THE PARAPET.

EARTHING STRIP CONNECTION TO PANEL		
PANEL TAG	DESCRIPTION	EARTHING STRIP/WIRE
1	EDB	50x6MM GI STRIP
2	AMF PANEL	50x6MM GI STRIP
3	UPS UNIT-1	25x3MM CU STRIP
4	UPS UNIT-2	25x3MM CU STRIP
5	UPS SSVS BYPASS	25x3MM CU STRIP
6	UPS ACDB	25x3MM GI STRIP
7	BATTERY BANK-1	25x3MM GI STRIP
8	BATTERY BANK-2	25x3MM GI STRIP
9	RTU PANEL	10SQ.MM. CU WIRE
10	CCTV PANEL	10SQ.MM. CU WIRE
11	GAS DETECTION PANEL	10SQ.MM. CU WIRE
12	ODORIZOR PLC PANEL	10SQ.MM. CU WIRE
13	FIRE DETECTION PANEL	10SQ.MM. CU WIRE
14	32 INCH CCTV	N.A.
15	OPERATOR CONSOLE TABLE	N.A.

EARTHING LEGEND & BOM				
S.NO.	SYMBOL	SIZE	DESCRIPTION	MIN. QTY.
01.		50x6mm G.I. STRIP	EARTHING STRIP FOR MAIN GRID & PANEL	100 Mtrs.
02.		25x3mm Cu. STRIP	EARTHING STRIP FOR ELECTRONIC PANEL (CONTROL & INSTRUMENTATION PANELS)	40 Mtrs.
03.		25x3mm G.I. STRIP	EARTHING STRIP FOR POLE (GATE, FENCE, LIGHTING & INSTRUMENTATION POLE)	30 Mtrs.
04.		10sq.mm CU WIRE	EARTHING WIRE FOR FC, JB & BATTERY BANK	50 Mtrs.
05.		600x600x3mm Cu. PLATE EARTH ELECTRODES	EARTH PIT FOR ELECTRONIC EQUIPMENT (EPE)	02 Nos.
06.		100mm ϕ , 3 Mtr. LONG G.I. EARTH PIPE ELECTRODES	CHEMICAL PIT FOR MAIN GRID (EPG)	02 Nos.
			CHEMICAL PIT FOR NEUTRAL (EPN)	02 Nos.
			CHEMICAL PIT FOR LIGHTNING (EPL)	--
07.		50x6mm G.I./CU STRIP	EARTH BUS	04 Nos.
08.		AS PER PANEL	RISER FOR EQUIPMENT	AS REQUIRED
09.		AS PER PANEL	EARTHING STRIP JOINT/BOLTING	AS REQUIRED

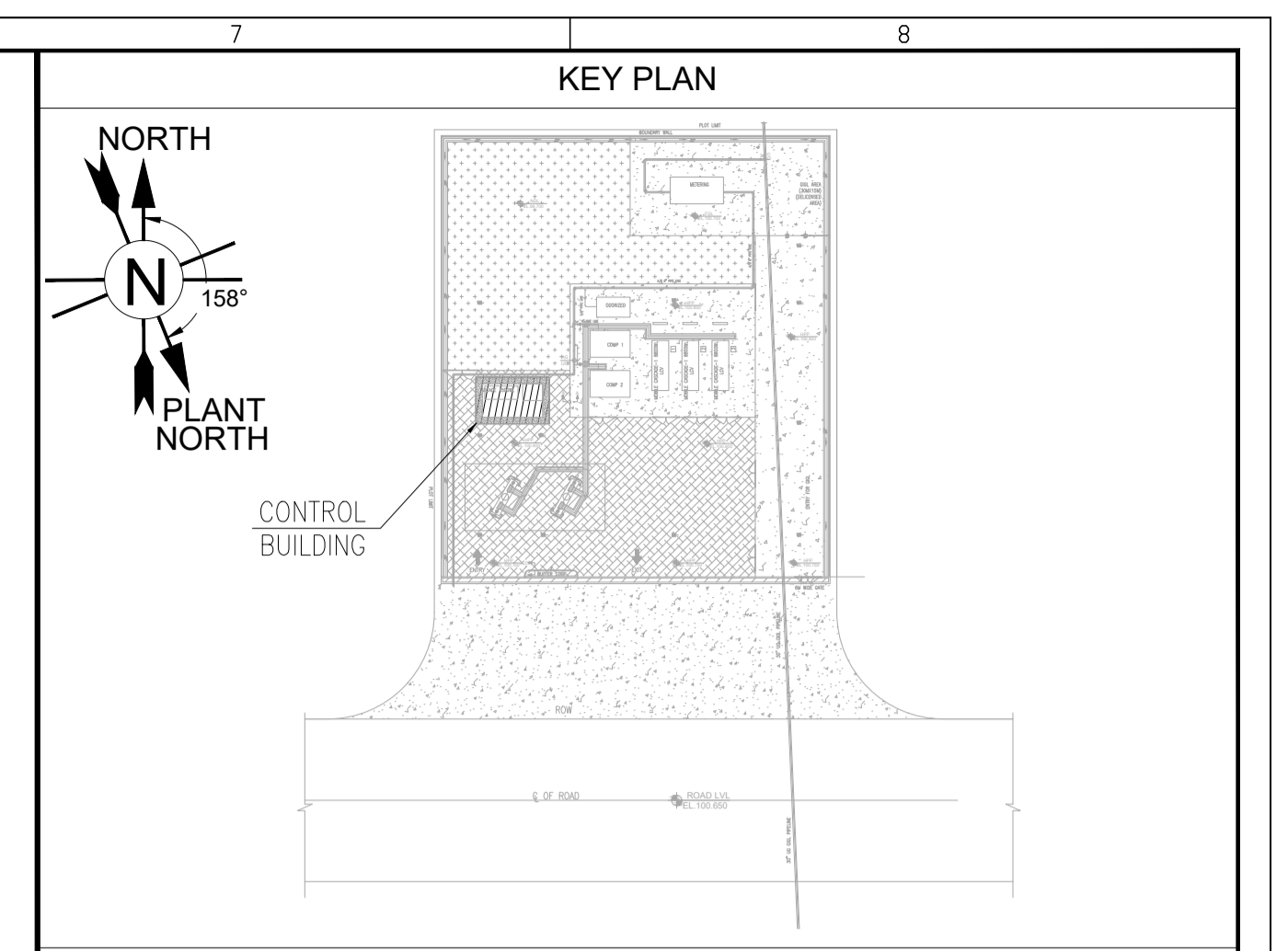
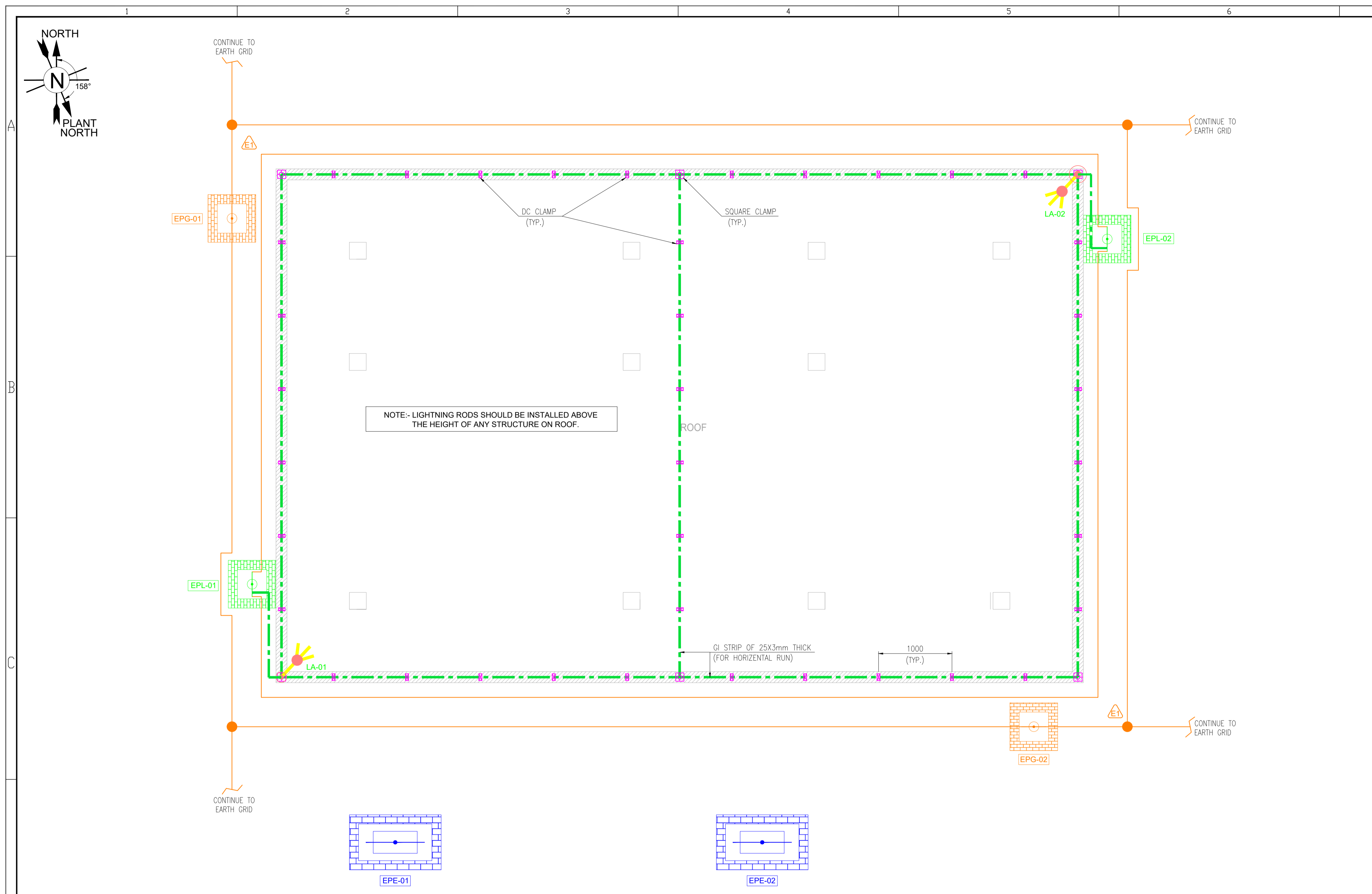
NOTE: FOR TOTAL EARTHING LAYOUT BOQ, PLEASE CONSIDER BOTH OUTDOOR & INDOOR EARTHING LAYOUT BOQ.

ISSUED FOR APPROVAL

Rev.	02.09.2024	ISSUED FOR APPROVAL	Modifications	HRK	SKN	AKN	--
Drawn				Checked	Approved	Validated	

CUSTOMER: **Gasonet GASONET SERVICES (RJ) LIMITED**

SUBJECT: **INDOOR EARTHING & LIGHTNING LAYOUT OF CONTROL BUILDING FOR CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DISTT. BIKANER (RJ)**



NOTES

1. FOR NOTES, LEGEND, BOQ & REFERENCE DRAWINGS PLEASE REFER TO SHEET 01 OF THIS DRAWING.

**INDOOR LIGHTNING LAYOUT OF CONTROL BUILDING
ROOF PLAN**
(SCALE 1:30)

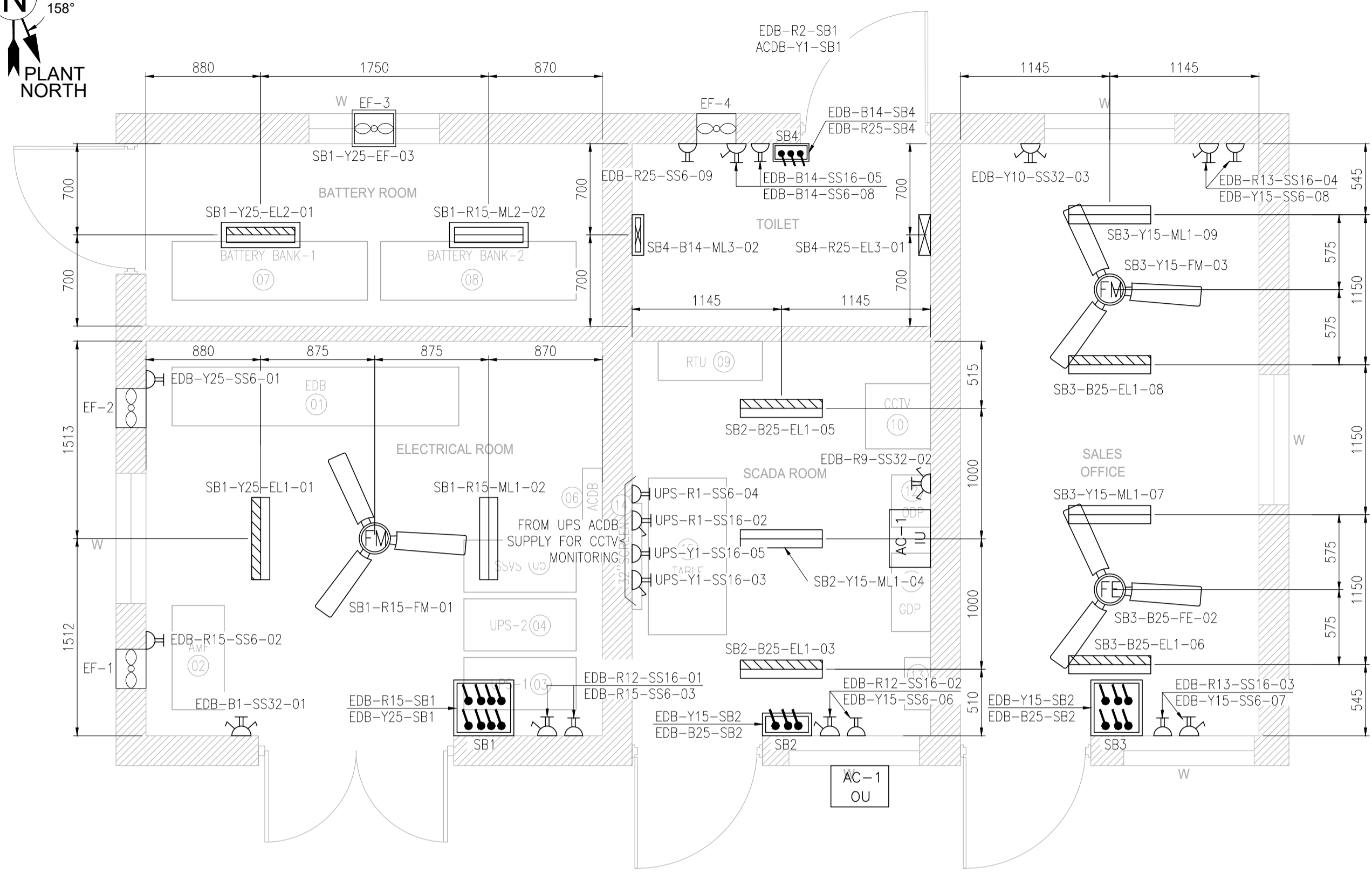
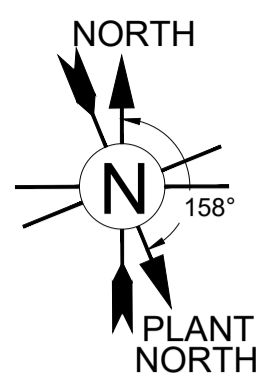
LIGHTNING LEGEND & BOM				
S.NO.	SYMBOL	SIZE	DESCRIPTION	MIN. QTY.
1.		-	OBLONG TEST/JUNCTION CLAMP FOR CONNECTION 25X3mm COPPER TAPE TO 25X3mm COPPER TAPE	02 Mtrs.
2.		-	LIGHTNING PROTECTION DOWN CONDUCTOR SOFT DRAWN BARE COPPER TAPE 25X3MM TO COPPER TAPE 25X3MM	-- Mtrs.
3.		-	LIGHTNING ROD (25 MM DIA 300 MM LONG GI TUBE MOUNTED ON 5M POLE)	02 Nos.
4.		25X3MM G.I. STRIP	GI STRIP OF 25X3 MM THICK ON PARAPET OR SURFACE OF WALL FOR LIGHTNING CONDUCTOR COMPLETE WITH JOINTS AND OTHER ACCESSORIES AS REQUIRED. (FOR HORIZONTAL RUN).	50 Mtrs.
5.		25X3MM G.I. TAPE	GI TAPE OF 25X3 MM THICK ON PARAPET OR SURFACE OF WALL FOR LIGHTNING CONDUCTOR COMPLETE WITH JOINTS AND OTHER ACCESSORIES AS REQUIRED. (FOR VERTICAL RUN).	20 Mtrs.
6.		-	SQUARE CLAMP	10 Nos.
7.		-	DC CLAMP	60 Nos.

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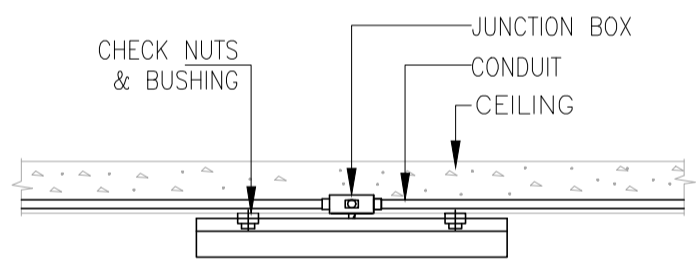
Rev.	02.09.2024	ISSUED FOR APPROVAL	HRK	SKN	AKN	-
	D M Y	Modifications	Drawn	Checked	Approved	Validated

CUSTOMER **Gasonet GASONET SERVICES (RJ) LIMITED**

SUBJECT **INDOOR EARTHING & LIGHTNING LAYOUT OF CONTROL BUILDING FOR CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DISTT. BIKANER (RJ)**

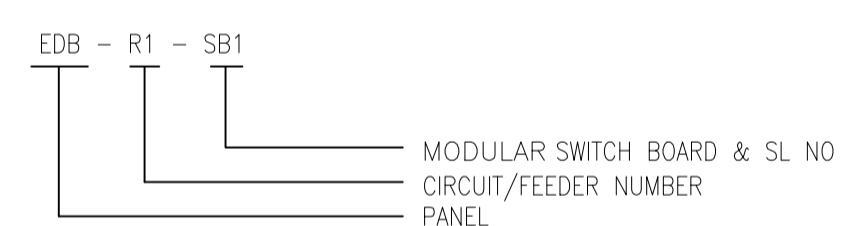


INDOOR LIGHTING LAYOUT OF CONTROL BUILDING
(SCALE 1:30)

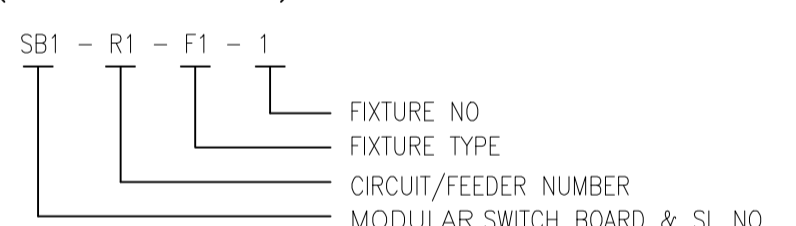


TYPICAL LTG. FIXTURE MOUNTED ON CEILING

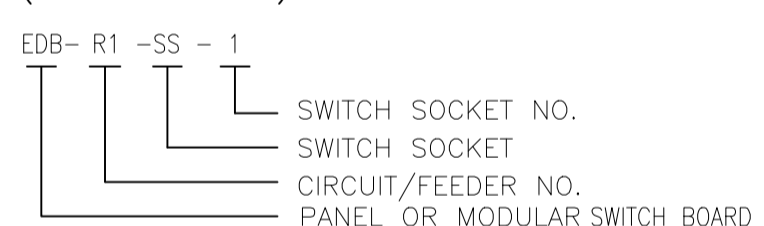
SWITCHBOARD INCOMING NUMBERING SYSTEM (NORMAL & EMERGENCY LIGHTING)



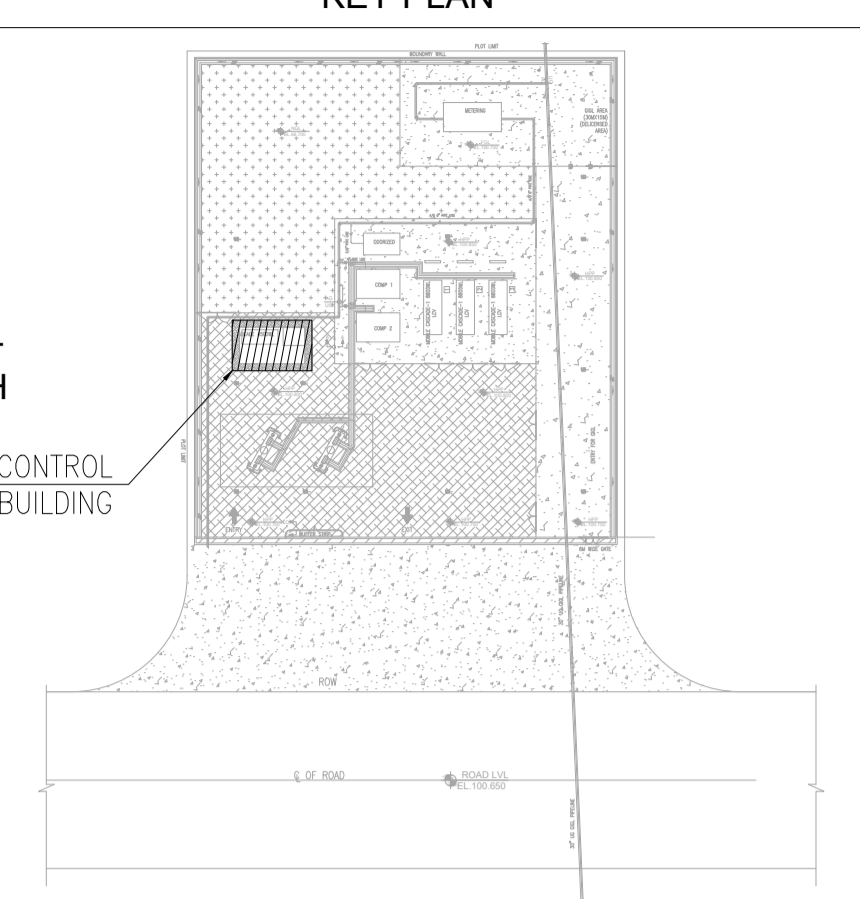
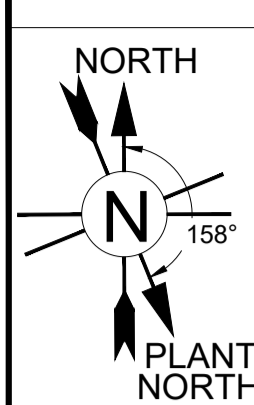
CIRCUIT NUMBERING SYSTEM (NORMAL LIGHTING)



CIRCUIT NUMBERING SYSTEM (SWITCH SOCKET)



SYMBOL	TAG	DESCRIPTION	QTY.
	ML1	SURFACE MOUNTED WEATHER PROOF LED 35W LIGHT FITTING OF PHILLIPS OR EQUIVALENT APPROVED MAKE COMPLETE WITH ALL ACCESSORIES SUCH AS LED MODULE, DRIVER, OPTICS, THERMAL SINK, CONNECTOR BLOCKS ETC INCLUDING INSTALLATION	09
	EL1	ML1- FED BY MAIN SUPPLY EL1- FED BY EMERGENCY SUPPLY	
	ML2	FLAMEPROOF & WEATHERPROOF 40W LED LIGHT FITTING OF PHILLIPS OR EQUIVALENT APPROVED MAKE COMPLETE WITH ALL ACCESSORIES SUCH AS LED MODULE, DRIVER, OPTICS, THERMAL SINK, CONNECTOR BLOCKS ETC INCLUDING INSTALLATION (MOUNTED IN BATTERY ROOM)	02
	EL2	ML2- FED BY MAIN SUPPLY EL2- FED BY EMERGENCY SUPPLY	
	ML3	SUPPLY AND FIXING OF LED WALL LIGHT 9W FITTING OF PHILLIPS OR EQUIVALENT APPROVED MAKE COMPLETE WITH ALL ACCESSORIES SUCH AS LED MODULE, DRIVER, OPTICS, THERMAL SINK, CONNECTOR BLOCKS ETC INCLUDING INSTALLATION	02
	EL3	ML3- FED BY MAIN SUPPLY EL3- FED BY EMERGENCY SUPPLY	
	FM	1200MM SWEEP CEILING FAN WITH ELECTRONIC REGULATOR (5 STAR BEE CERTIFIED)	03
	FE	FM- FED BY MAIN SUPPLY FE- FED BY EMERGENCY SUPPLY	
	AC	2.0TR. SPLIT TYPE WALL MOUNTED A/C (5 STAR BEE CERTIFIED)	01
	SS6	5 PIN 6A MODULAR SOCKET WITH 10A MODULAR SWITCH	09
	SS16	6 PIN 6/16A MODULAR SOCKET WITH 10/20A MODULAR SWITCH	07
	SS32	RECESSED MOUNTED INDUSTRIAL TYPE 3 PIN 32 A METAL CLAD SOCKET AND PLUG, 20A MCB (MOTOR DUTY) HOUSED IN A 16 GAUGE M.S. BOX	03
	SB	MODULAR SWITCH BOARD	04
	EF	230V 12" SWEEP EXHAUST FAN	03
	EF (FLP)	FLP TYPE 12" DIA IP 65 EXHAUST FAN WITH LOUVERS (MOUNTED IN BATTERY ROOM)	01



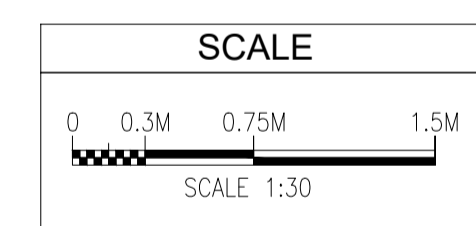
REFERENCE DRAWING

SR. NO.	DRAWING TITLE	DRAWING NO.
1	PLOT PLAN OF CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DISTT. CHURU (RJ)	REPL-GNET-RJ-CGS-CNG-001-Rev-M
2	EQUIPMENT LAYOUT OF CONTROL BUILDING OF CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DISTT. CHURU (RJ)	REPL-GNET-RJ-CGS-ELE-DR-6002
3	OUTDOOR LIGHTING LAYOUT OF CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DISTT. CHURU (RJ)	REPL-GNET-RJ-CGS-ELE-DR-6006

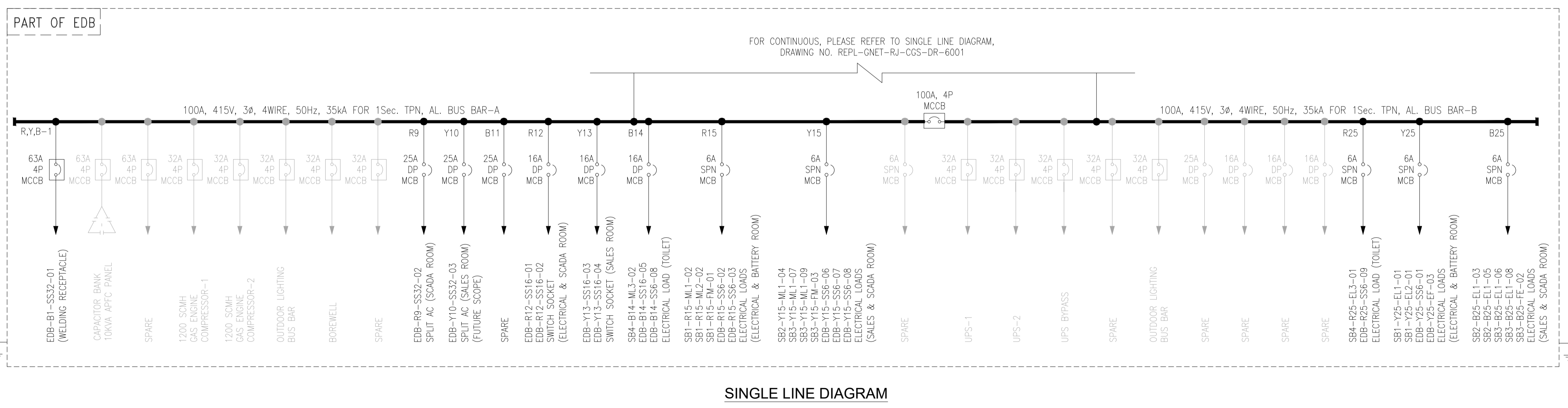
NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS & LEVELS ARE IN METERS.
- FOLLOW WRITTEN DIMENSIONS ONLY. DO NOT SCALE.
- MOUNTING HEIGHT OF EQUIPMENTS SHALL BE AS UNDER:
A) TOP OF MODULAR SWITCH BOARD - 1200MM FROM F.F.L.
B) TOP OF LIGHTING DB - 1500MM FROM F.F.L.
C) TOP OF 6/16A RECEPTACLE - 1200MM FROM F.F.L.
D) TOP OF 32A 240V MCB BOX FOR SPLIT A/C - 300MM FROM F.F.L.
- 32A 240V MCB IN M.S. BOX FOR SPLIT A/C SHALL BE FED FROM EDB.
- FOR EXHAUST FAN 6A SOCKET SHALL BE PROVIDED NEAR THE EXHAUST FAN CUTOUT AND SWITCH SHALL BE LOCATED IN MODULAR SWITCH BOARD ALONG WITH OTHER MODULAR SWITCHES.
- THE LIGHT FITTINGS LOCATION ARE INDICATIVE WITH RESPECT TO PANEL LOCATIONS IN THE CONTROL & ELECTRICAL ROOMS. LOCATIONS OF THE FITTINGS MAY BE CHANGED TO SUIT THE SITE CONDITION.
- WIRES SHALL BE PVC INSULATED AND SHALL BE OF 1.1KV GRADE AS PER IS:694. CONDUCTOR SHALL BE STRANDED COPPER AND SIZE SHALL BE 2.5 SQ.MM FROM ILDB TO MODULAR SWITCH BOARD & 2.5 SQ.MM FROM MODULAR SWITCH BOARD TO FITTINGS/POINTS. 4 SQ. MM FOR AC POINT AND 6 PIN, 16A, 230V, SOCKET.
- WHEN GROUP OF CIRCUITS OF SAME PHASE ARE RUN IN A SINGLE PVC CONDUIT, THE EARTH WIRE SHALL BE COMMON.
- PVC CONDUIT RUN SHALL BE LAID TO SUIT SITE CONDITIONS.
- CONCEALED PVC CONDUIT SHALL BE USED IN THE BUILDING FOR ALL LIGHT FITTINGS/SWITCH SOCKET.
- CONDUIT SHALL BE OF MINIMUM 25MM DIA. MAXIMUM NUMBER OF WIRES PERMISSIBLE IN CONDUIT SHALL BE SEVEN FOR WIRE SIZE OF 2.5 SQ.MM.
- LUX LEVEL SHALL BE MEASURED AT SITE AND IF REQUIRED ADDITIONAL FITTINGS SHALL BE PROVIDED TO ACHIEVE SPECIFIED LUX LEVEL.
- THIS DRAWING IS FOR GENERAL GUIDANCE ONLY.
- 12 SWG WIRE SHALL BE RUN IN CONDUIT.
- NON-METALLIC CONDUIT OF FOLLOWING SIZE SHALL GENERALLY BE USED FOR INTERNAL WIRING.
(a) EDB TO LDB 32MM
(b) EDB TO AC POINT 25MM
(c) SWITCH SOCKET 25MM
(d) EXHAUST FAN 25MM
(e) SB TO LIGHTING 19/25MM
(f) SB TO CEILING FAN POINT 19/25MM
- BATTERY ROOM EXHAUST FAN SHALL BE FLAME PROOF WITH LOUVERS (450MM).
- ELECTRICAL ROOM EXHAUST FAN SHALL BE WITH LOUVERS (450MM).
- TOILET EXHAUST SHALL BE WITH LOUVERS (300MM).

SCALE



ISSUED FOR APPROVAL



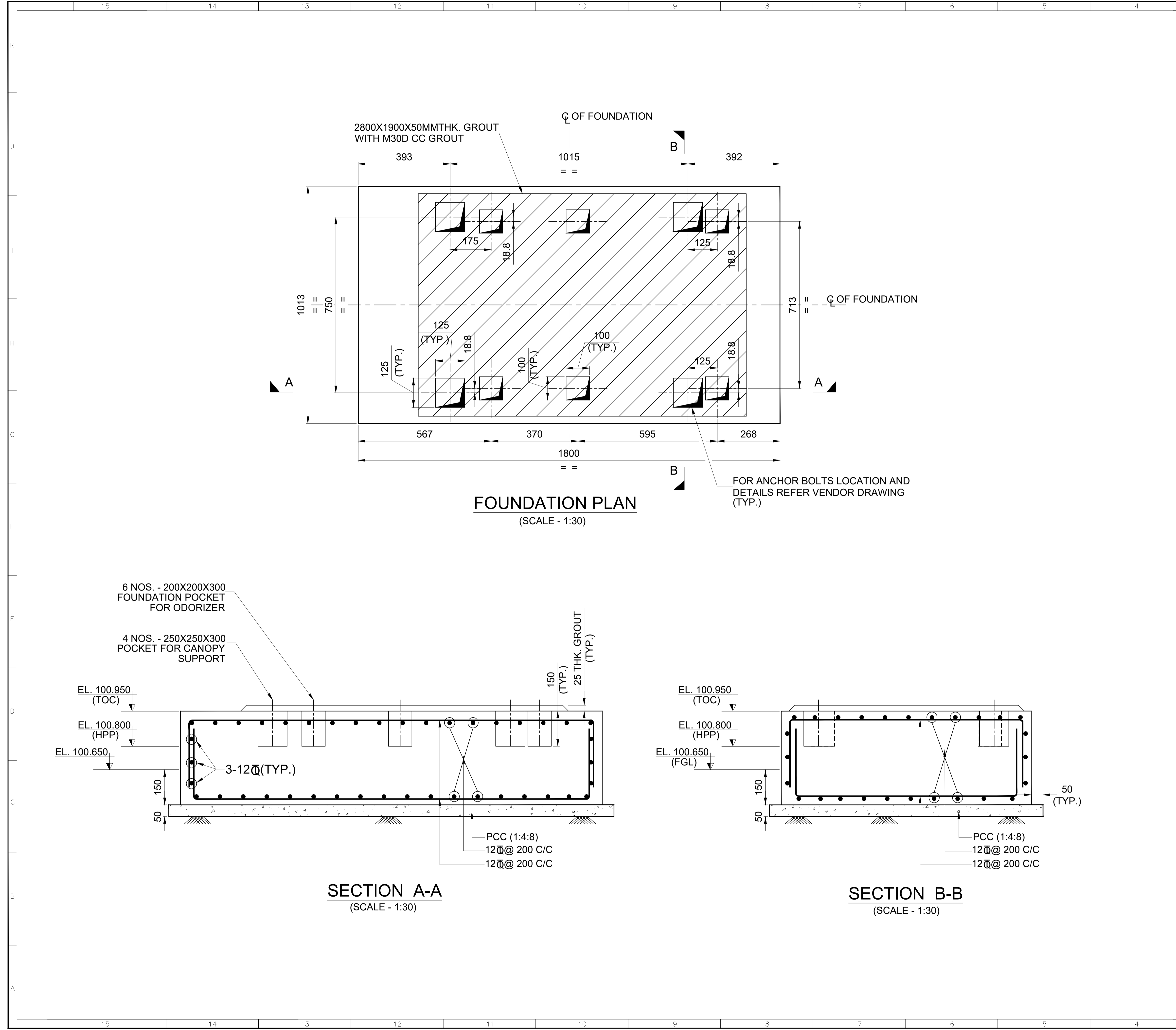
SINGLE LINE DIAGRAM

A	02.09.2024	ISSUED FOR APPROVAL		HRK	SKN
Rev.	D M Y	Modifications		Drawn	Checked

CUSTOMER
Gasonet GASONET SERVICES (RJ) LIMITED

SUBJECT
INDOOR LIGHTING LAYOUT OF CONTROL BUILDING FOR CGS CUM MOTHER STATION CHURU, TEH.- CHURU, DISTT. BIKANER (RJ)

	Size	A1	Scale	1:30	Sheet	1	of	1	Rev.	A
	Drawing No.	RGPL-GNET-RJ-CGS-ELE-DR-6005								



REFERENCE DRAWINGS		
S.NO.	DRAWING TITLE	DRAWING NUMBER
1.	CGS CUM MOTHER STATION CHURU	REPL-GNET-RJ-CGS-CNG-001

NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS & LEVELS ARE IN METRES.
- FOLLOW WRITTEN DIMENSIONS ONLY & DO NOT SCALE.
- GRADE OF CONCRETE MIX SHALL BE M-25 CONFORMING TO IS 456 .
- ALL ANCHOR BOLTS AND POCKETS TO BE GROUTED WITH M-30D (6MM DOWN GRADED AGGREGATES) CEMENT CONCRETE GROUT.
- REINFORCEMENT SHALL BE HYSD BARS OF GRADE Fe 500 CONFORMING TO IS 1786.
- CLEAR COVER TO MAIN REINFORCEMENT SHALL BE AS FOLLOWS:-
 - a) FOUNDATION = 50mm
- FGL EL.+100.700 AS MARKED & HPP. EL. 100.800 CORRESPONDS AS MARKED.
- FOR ORIENTATION AND LOCATION REFER DRAWING NO. REPL-GNET-RJ-CGS-CNG-001.
- ASSUMED NET SAFE BEARING CAPACITY OF SOIL IS CONSIDERED 5.00 T/m² AT DEPTH OF 300 MM BELOW FGL .

LEGEND

TOC	=	TOP OF CONCRETE
HPP	=	HIGHEST PAVEMENT POINT
BOF	=	BOTTOM OF FOUNDATION
G.A.	=	GENERAL ARRANGEMENT
TYP.	=	TYPICAL

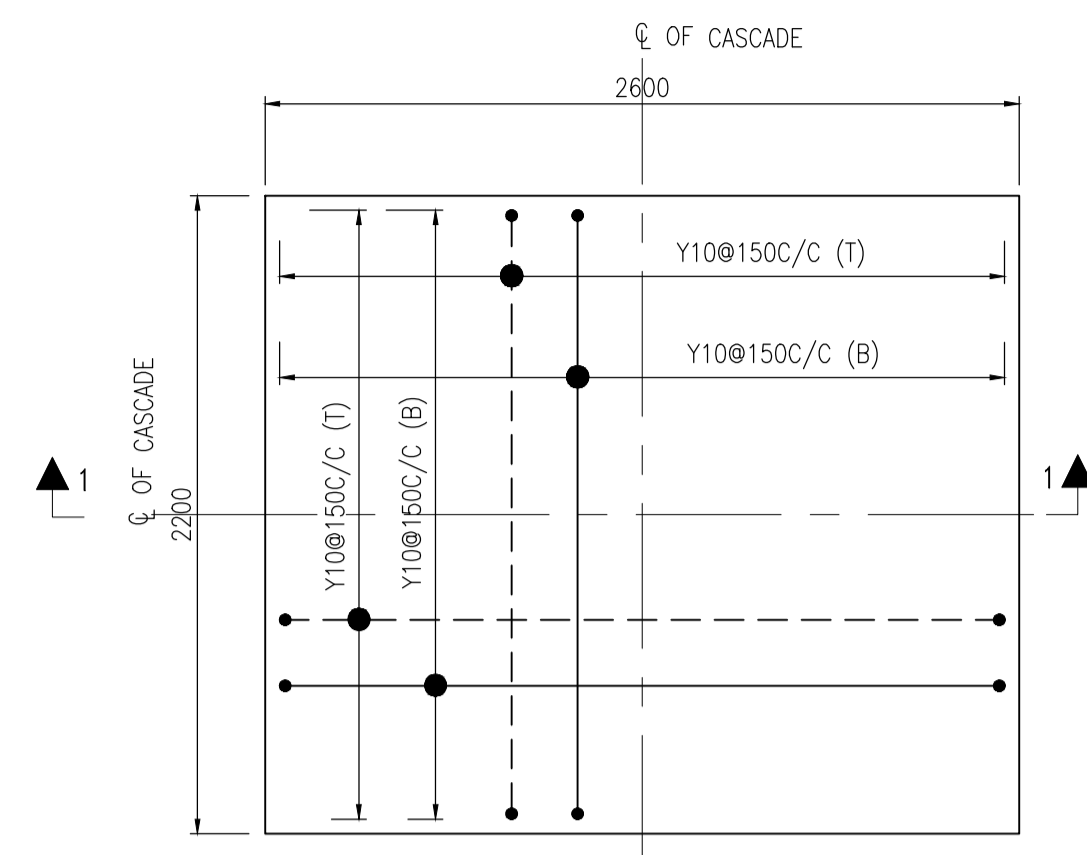
ISSUED FOR CONSTRUCTION

1	23.09.2024	ISSUED FOR CONSTRUCTION	YKB	PKN	AKN	-
0	12.08.2024	ISSUED FOR CONSTRUCTION	YKB	PKN	AKN	-

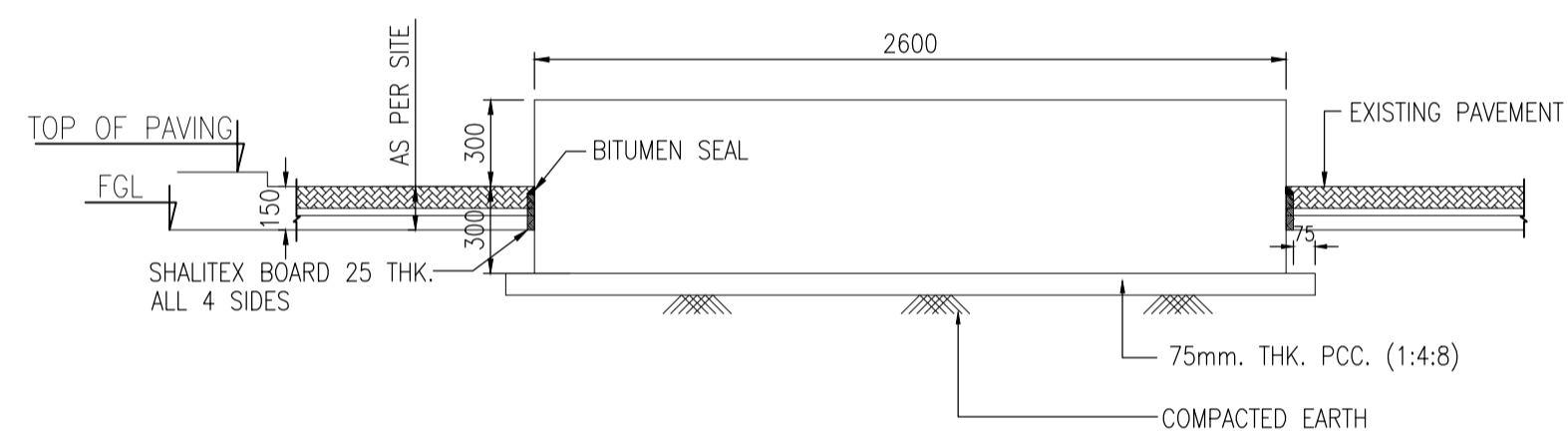
CUSTOMER: **Gasnet** GASONET SERVICES (RJ) LIMITED
 SUBJECT: ODORIZER FOUNDATION & DETAIL FOR OF CGS CUM MOTHER STATION DISTT. BIKANER (RJ)

Size	Scale	Sheet	Rev.
A1	1:200	1 of 1	1

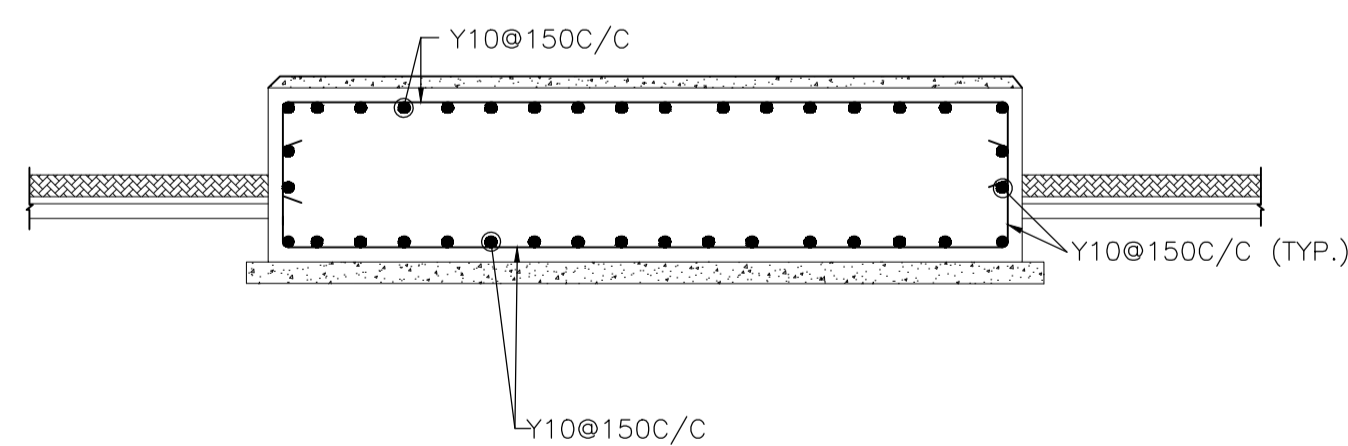
Drawing No. REPL-GNET-RJ-CGS-CNG-005-Rev-1
Resonance Energy Pvt. Ltd.



CASCADe FOUNDATION PLAN
SHOWING GA & R/F DETAILS
(SCALE 1:25)



SECTION 1-1
SHOWING GA DETAILS
(SCALE 1:25)



SECTION 1-1
SHOWING R/F DETAILS
(SCALE 1:25)

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS, LEVELS ARE IN METERS.
3. PROPOSED FINISHED GROUND LEVEL (FGL) EL.(±)0.00 SHALL BE MATCH WITH EXISTING FINISHED GROUND LEVEL.
4. 5T/SQM. SBC HAS BEEN CONSIDERED FOR THE FOUNDATION DESIGN WITH SOIL IMPROVEMENT. AS MENTIONED IN CASCADe FOUNDATION DRAWING.
5. HIGH STRENGTH DEFORMED BARS OF FE500D SHALL BE USED AS PER IS:1786 IN ALL RCC WORK.
6. LAP LENGTH(LD) SHALL BE 50D FOR ALL REINFORCEMENT BARS.
7. CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
 - a) FOUNDATION (BOTTOM) = 75mm
 - b) FOUNDATION (TOP) = 50mm
 - c) FOUNDATION (SIDE) = 50mm
9. IN THE PRESENCE OF LOOSE SOIL, RUBBLE STONE SOLING (BOULDERS OF SIZE 100 TO 150MM) SHOULD BE DONE OVER SUBGRADE SOIL WHICH SHOULD BE COMPACTED TO ACHIEVE 95% OF MDD. SAME SHOULD BE TESTED WITH CORE CUTTER OR SAND REPLACEMENT METHOD UNDER THE SUPERVISION OF SITE INCBHAGGE. FILLING SHOULD BE DONW IN THE LAYER OF MAXIMUM THICKNESS 150 MM.
10. LOCATION OF CASCADe FOUNDATION TO BE CONFIRMED WITH APPROVED PLOT PLAN.
11. BLOCK LOCATION AND SIZES FOR LADDER FOUNDATION SHALL BE PROVIDED AS PER CASCADe VENDOR/SUIT AT SITE.
12. THE BASE PLATE DIMENSION OF THE EQUIPMENT SHALL NOT EXCEED THE FOUNDATION DIMENSION.
13. NON-SHRINKABLE CEMENT GROUT (SHRINKKOMP 20 OR ANY OTHER EQUIVALENT APPROVED BRAND) SHALL BE USED FOR GROUTING HOLDING DOWN BOLTS IN POCKET HOLES/ BOTTOM OF BASE FRAME FOR EQUIPMENT FOUNDATION.
14. SUB-GRADE SOIL SHALL BE WELL COMPACTED TO ACHIEVE 95% OF MDD AND COMPACTION TEST SHALL BE PERFORMED UNDER THE SUPERVISION OF SITE IN-CHARGE. HOWEVER IN TEST SHALL BE PERFORMED UNDER THE SUPERVISION OF SITE IN-CHARGE. HOWEVER IN THE CASE OF LOOSE SUB GRADE SOIL THEN LOOSE SOIL SHALL BE REPLACED WITH RUBBLE SOILING AS MENTIONED IN NOTE-9.
15. SUITABLE PRECAUTION SHALL BE TAKEN WHILE EXCAVATION TO AVOID UNDER PINNING OF SOIL BELOW CASCADe FOUNDATION.

LEGEND & BOM

- HPP = HIGHEST PAVEMENT POINT
- TOG = TOP OF GROUT
- TOC = TOP OF CONCRETE
- TYP = TYPICAL
- TOS = TOP OF STEEL
- DET. = DETAIL
- BOBP = BOTTOM OF BASE PLATE
- BOS = BOTTOM OF STEEL
- TOGR = TOP OF GRATING

ISSUED FOR CONSTRUCTION

1	23.09.2024	ISSUED FOR CONSTRUCTION	RV	PKV	AKN	-
0	12.08.2024	ISSUED FOR CONSTRUCTION	RV	PKV	AKN	-
Rev.	D M Y	Modifications	Drawn	Checked	Approved	Validated

CUSTOMER: **Gasnet GASONET SERVICES (RJ) LIMITED**

SUBJECT: **4500 WL CAPACITY CASCADe FOUNDATION DETAILS OF CGS CUM MOTHER STATION**

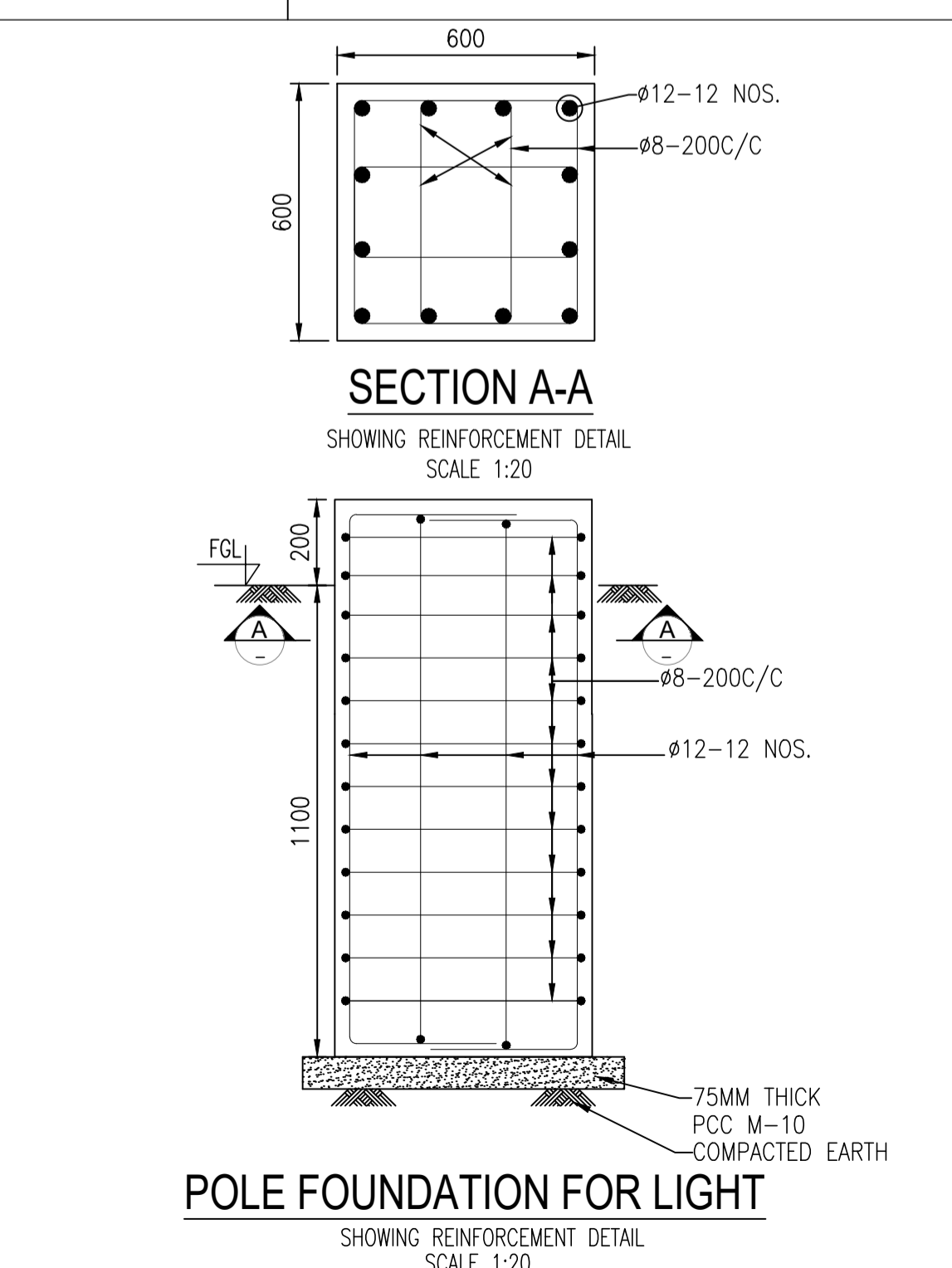
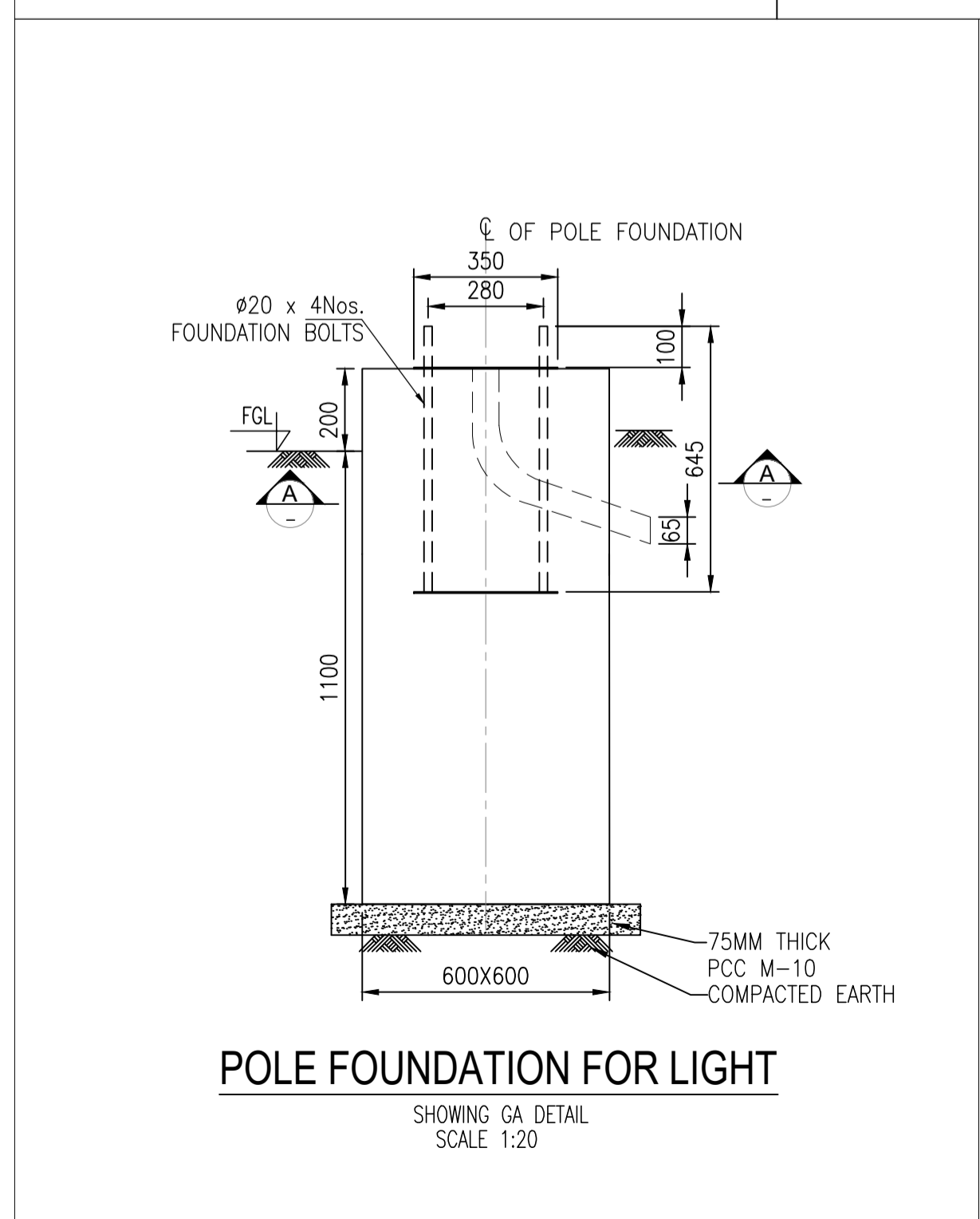
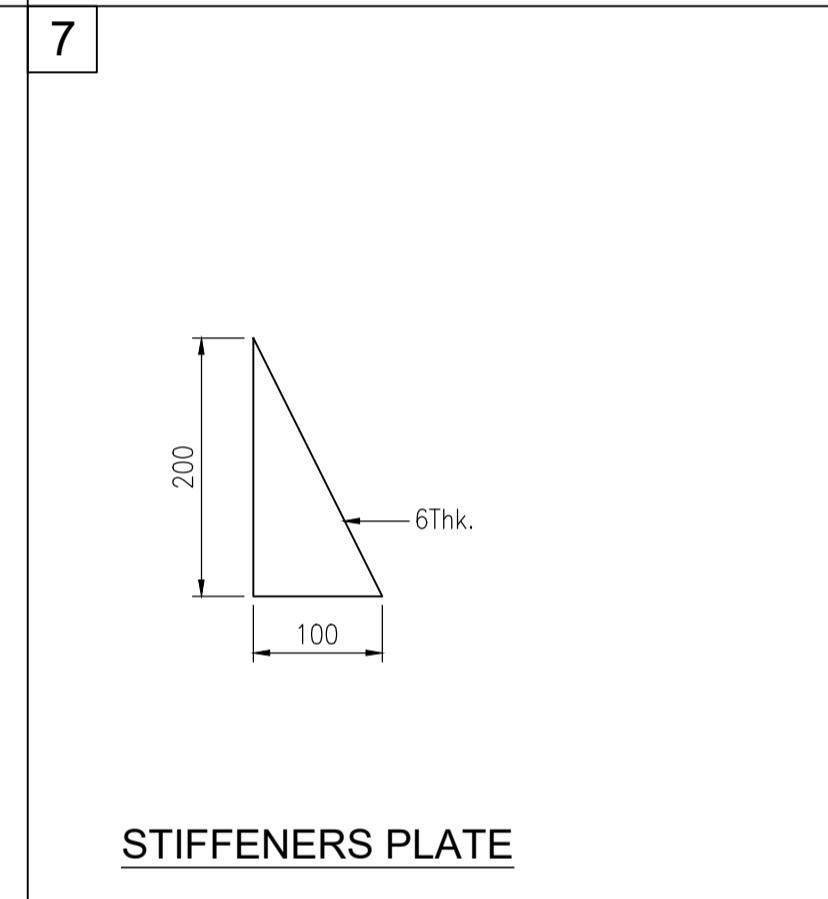
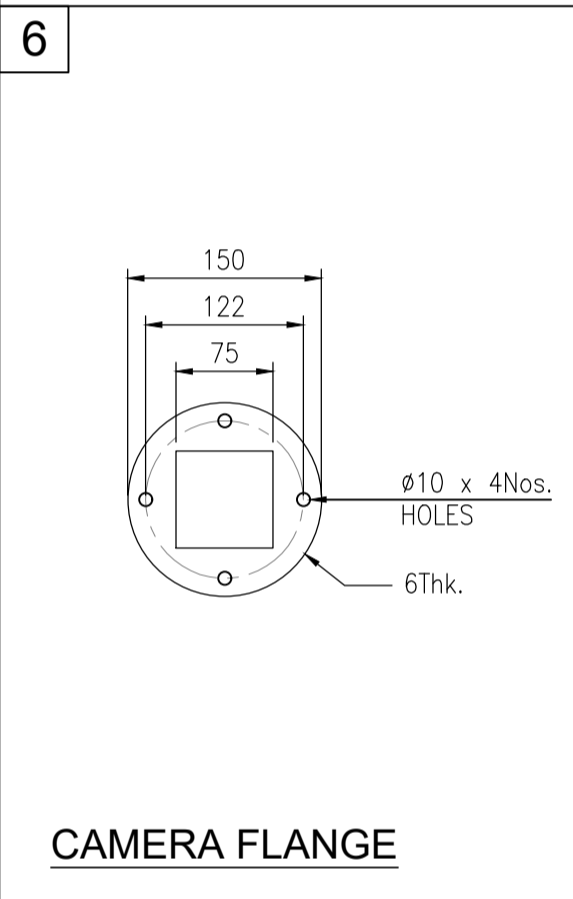
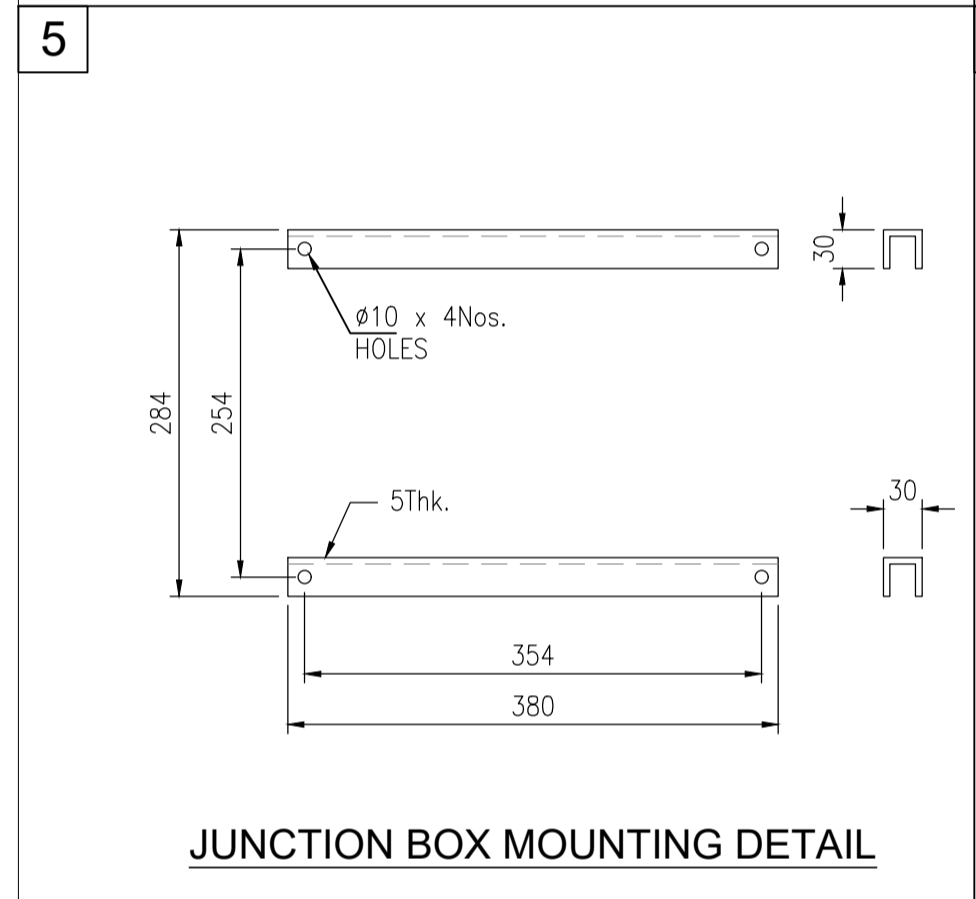
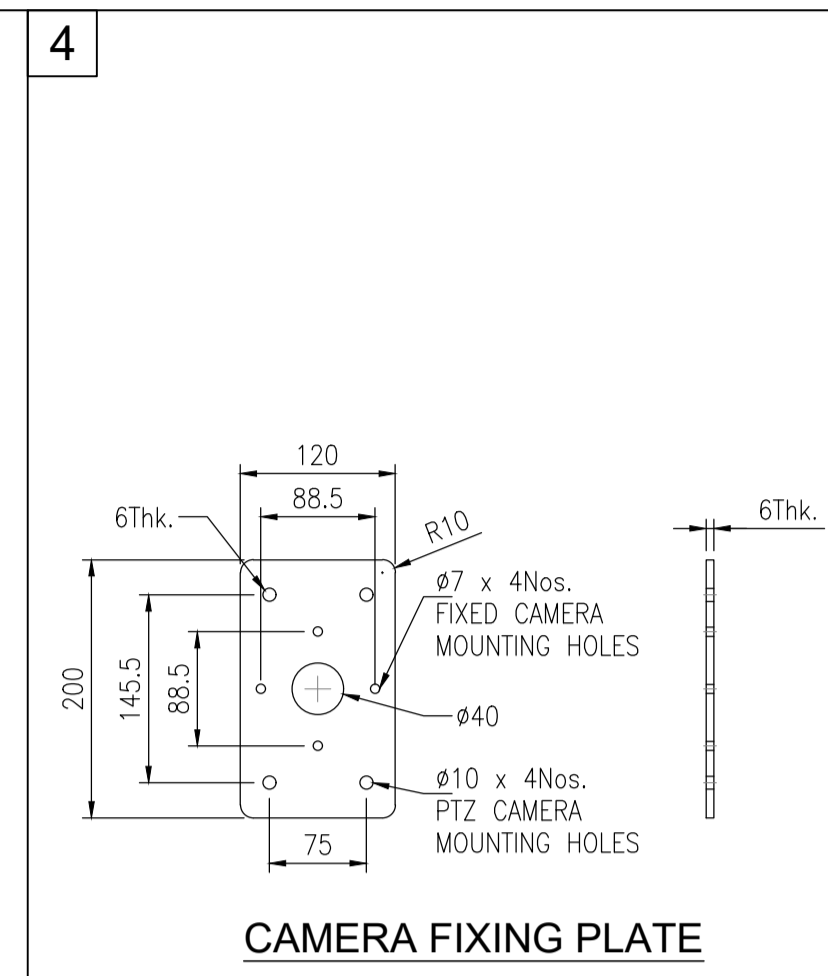
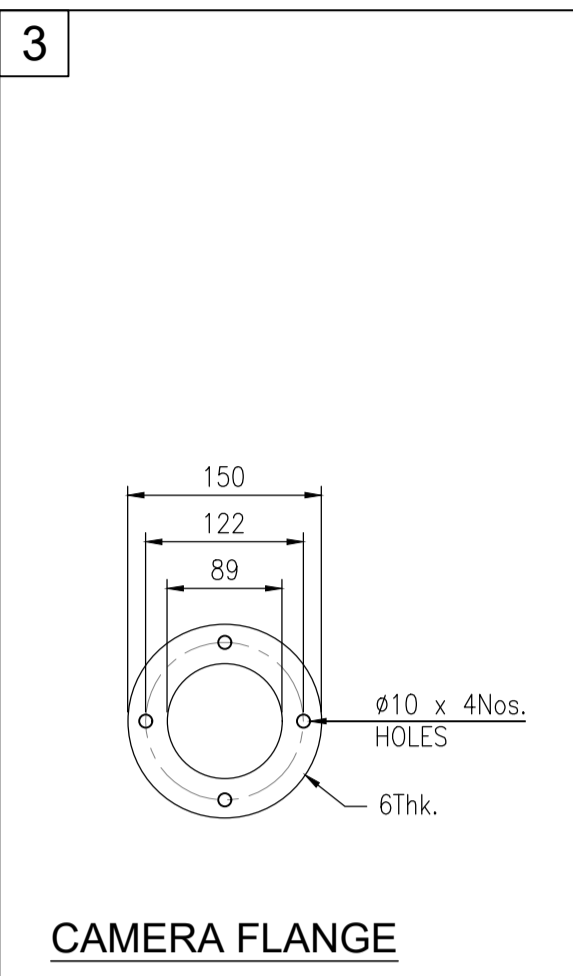
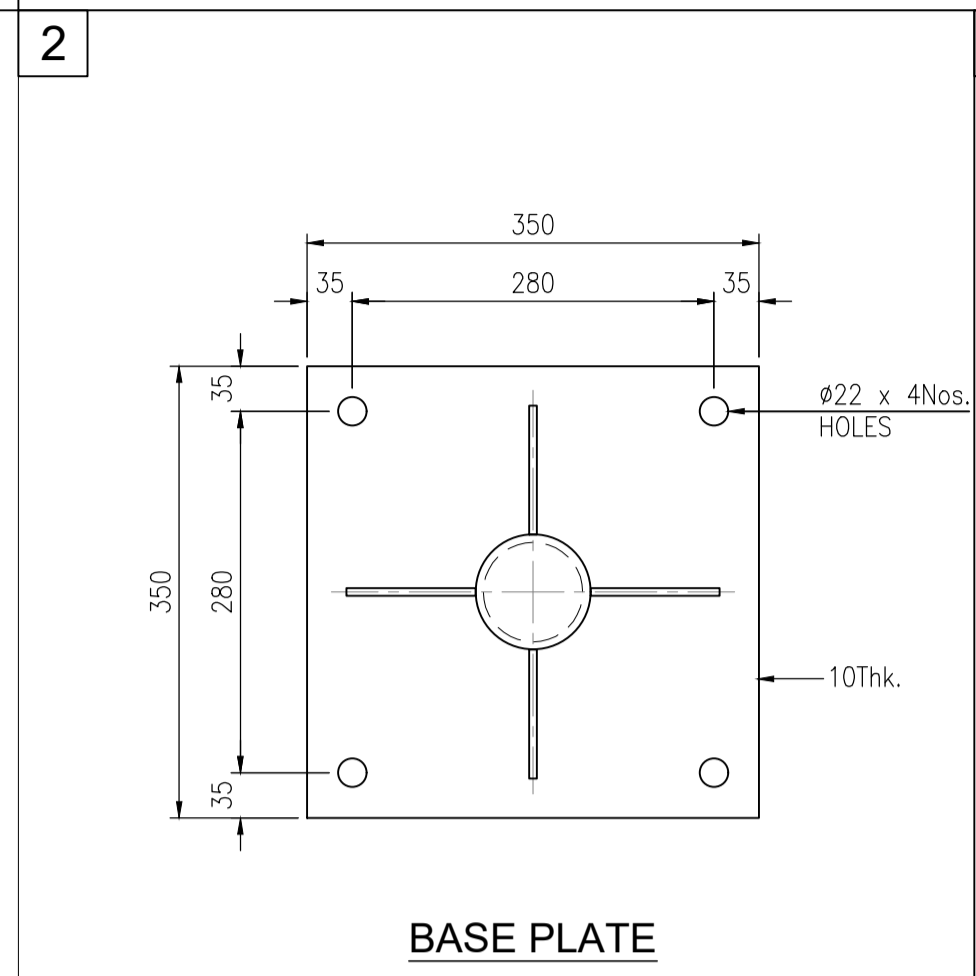
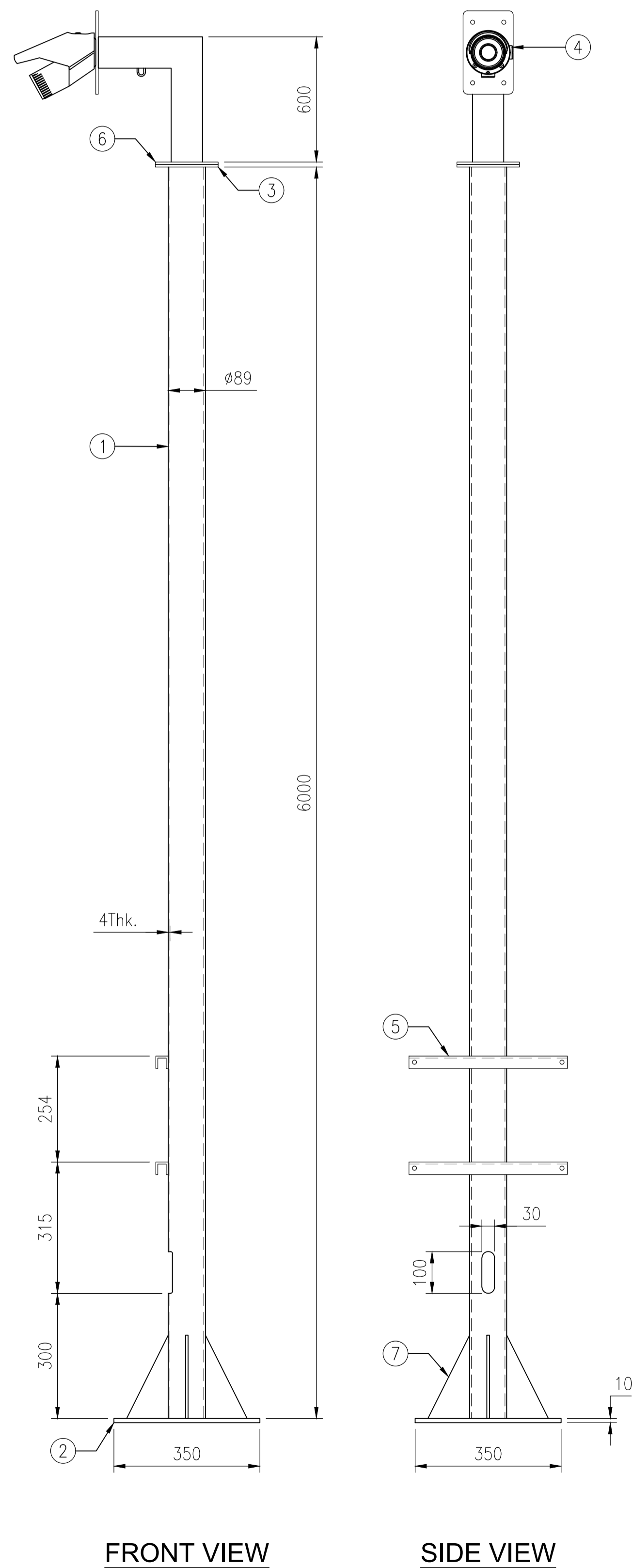
	Size	Scale	Sheet	Rev.
	A1	1:15	1 of 1	1
Resonance Energy Pvt. Ltd.		REPL-GNET-RJ-CGS-CNG-006		

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6 METER POLE FOR LIGHT

MOUNTING ARRANGEMENT

POLE ACCESSORIES



BILL OF MATERIALS		
ITEM	DESCRIPTION	QTY
1	6 METER POLE	1
2	BASE PLATE	1
3	LIGHT FLANGE	1
4	LIGHT FIXING PLATE	1
5	JUNCTION BOX MOUNTING DETAIL	1
6	LIGHT FLANGE	1
7	STIFFENERS PLATE	1

NOTES
1. ALL DIMENSIONS ARE IN MM. UNLESS SPECIFIED OTHERWISE.

ISSUED FOR CONSTRUCTION

Rev.	D	M	Y	Modifications	Drawn	Checked	Approved	Validated
1	23	09	2024	ISSUED FOR CONSTRUCTION	RV	PKV	AKN	-
0	12	08	2024	ISSUED FOR CONSTRUCTION	RV	PKV	AKN	-

CUSTOMER: **Gasnet GASONET SERVICES (RJ) LIMITED**

SUBJECT: **LIGHT POLE GA DRAWING OF CGS CUM MOTHER STATION**

	Size	Scale	Sheet	Rev.
	A1	NTS	1 OF 1	1

REPL-GNET-RJ-CGS-CNG-009

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Indoor Illumination Calculation_CGS cum MS, Churu, Bikaner

Partner for Contact:
Order No.:
Company:
Customer No.:

Date: 02.09.2024
Operator:

Operator
Telephone
Fax
e-Mail

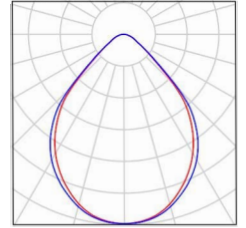
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Indoor Illumination Calculation_CGS cum MS, Churu, Bikaner / Luminaire parts list

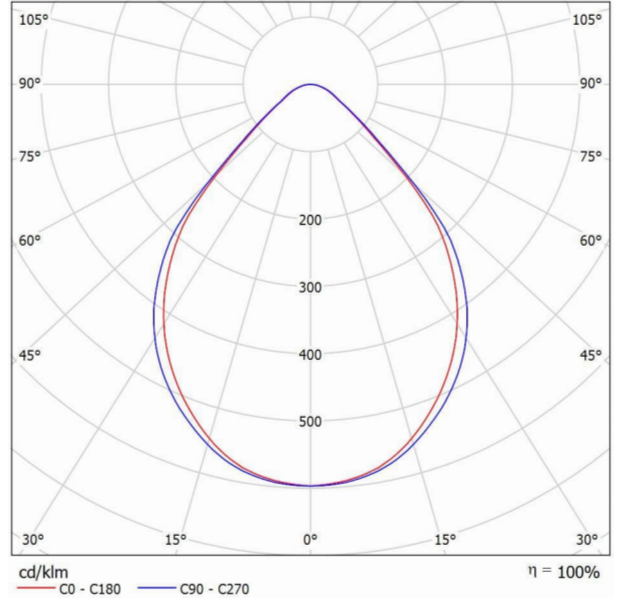
11 Pieces PHILIPS SM340C PSD L1200 SI 1 x36S/940
MLO
Article No.:
Luminous flux (Luminaire): 3600 lm
Luminous flux (Lamps): 3600 lm
Luminaire Wattage: 35.0 W
Luminaire classification according to CIE: 100
CIE flux code: 71 94 99 100 100
Fitting: 1 x 36S/940 (Correction Factor 1.000).



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 e-Mail

PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO / Luminaire Data Sheet

Luminous emittance 1:



Luminaire classification according to CIE: 100
 CIE flux code: 71 94 99 100 100

FlexBlend heading the way to efficient and flexible furnished offices areas Philips FlexBlend is an attractive family of surface mounted and suspended luminaires, next to Flexblend recessed. The luminaire range is enabling building owners to advance their lighting operations, by offering office-compliant lighting with a return on investment of less than 3 to 4 years. FlexBlend provides the required flexibility through the adaptability in design. This gives the possibility to install the luminaires easily in the field, at any moment. Even when today's luminaire is suspended, tomorrow this can be adapted to a surface mounted installation at the venue. And the other way around. The surface mounted and suspended luminaire range fit to many different office spaces like open plan office, corridors, reception or meeting rooms. FlexBlend is offered in both lines and as standalone, using the same lighting module. This gives the option to the users to use FlexBlend as standalone now, and tomorrow, as line. The controller is integrated in the luminaire. As technology is changing fast, the ideal lighting solution is also expected to be ready to incorporate innovations that can help optimize operations further. For this reason, FlexBlend holds all connectivity and future ready options available. As System Ready luminaire it can be paired with lighting management systems such as the Philips SpaceWise, and to software-based lighting systems as Interact Office wired (PoE) and Interact Office wireless and/or existing and upcoming sensor innovations. The luminaire range is therefore future ready and can be delivered without any system component, and in a next phase, in the field to be upgraded. An attractive opportunity for new installations and renovations.

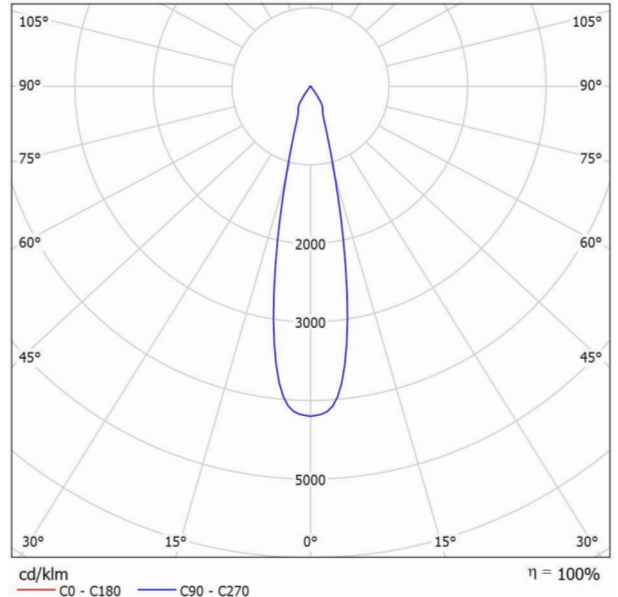
Luminous emittance 1:

Glare Evaluation According to UGR											
ρ Ceiling	70	70	50	50	30	70	70	50	50	30	
ρ Walls	50	30	50	30	30	50	30	50	30	30	
ρ Floor	20	20	20	20	20	20	20	20	20	20	
Room Size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	16.7	17.7	17.0	17.9	18.1	17.1	18.1	17.3	18.3	18.5
	3H	17.0	17.9	17.3	18.1	18.4	17.3	18.2	17.6	18.5	18.7
	4H	17.1	18.0	17.5	18.2	18.5	17.5	18.3	17.8	18.6	18.9
	6H	17.3	18.1	17.6	18.3	18.6	17.7	18.4	18.0	18.7	19.0
	8H	17.3	18.1	17.7	18.4	18.7	17.7	18.5	18.1	18.8	19.1
4H	12H	17.4	18.1	17.7	18.4	18.7	17.8	18.5	18.1	18.8	19.1
	2H	16.8	17.6	17.1	17.9	18.2	17.1	18.0	17.4	18.2	18.5
	3H	17.2	17.9	17.6	18.2	18.6	17.5	18.2	17.9	18.5	18.9
	4H	17.5	18.1	17.9	18.4	18.8	17.8	18.4	18.2	18.7	19.1
	6H	17.7	18.3	18.1	18.6	19.0	18.1	18.6	18.5	19.0	19.4
8H	8H	17.8	18.3	18.2	18.7	19.1	18.2	18.7	18.6	19.1	19.5
	12H	17.9	18.3	18.3	18.7	19.1	18.3	18.7	18.7	19.1	19.5
	4H	17.6	18.1	18.0	18.5	18.9	17.9	18.4	18.3	18.7	19.2
	6H	17.9	18.3	18.4	18.8	19.2	18.3	18.7	18.7	19.1	19.5
	8H	18.1	18.4	18.6	18.9	19.4	18.5	18.8	19.0	19.3	19.7
12H	12H	18.2	18.5	18.7	19.0	19.5	18.7	19.0	19.2	19.4	19.9
	4H	17.6	18.0	18.0	18.4	18.8	17.9	18.3	18.3	18.7	19.1
	6H	18.0	18.3	18.5	18.8	19.2	18.3	18.6	18.8	19.1	19.6
8H	18.2	18.5	18.7	18.9	19.4	18.5	18.8	19.0	19.3	19.8	
Variation of the observer position for the luminaire distances S											
S = 1.0H	+0.9 / -1.3					+0.7 / -1.3					
S = 1.5H	+2.0 / -2.1					+2.1 / -2.0					
S = 2.0H	+3.5 / -2.5					+3.7 / -2.4					
Standard table	BK02					BK02					
Correction											
Summand	-0.0					0.4					
Corrected Glare Indices referring to 3600lm Total Luminous Flux											

Operator
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PHILIPS RS340B 1 xLED17S/840 MB / Luminaire Data Sheet

Luminous emittance 1:



Luminaire classification according to CIE: 100
 CIE flux code: 98 99 100 100 100

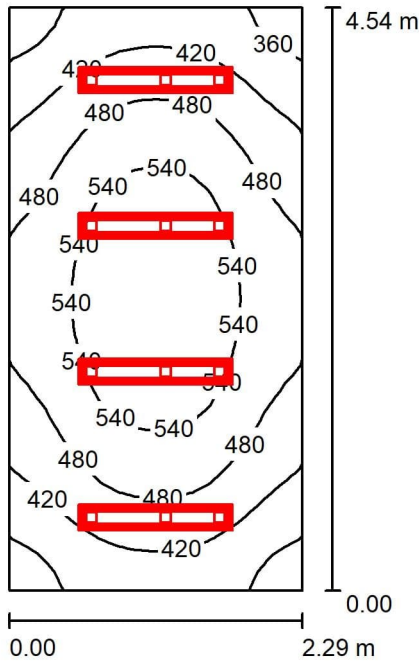
A flexible and affordable fixed downlight for retail stores. Thanks to the GreenSpace Accent family, retailers and building operators can now make the switch from CDM to LED lighting and enjoy significant energy savings for a reasonable initial investment. This GreenSpace Accent downlight has regular cut-out and specific lumen packages to make retrofit installation quick and easy. Furthermore, the fixed downlights offer multiple system integration and dimming options, including wired as well as wireless. For fashion and food retailers, every GreenSpace Accent downlight is available with special LED flavors and fresh food LED lighting recipes to show the merchandise in the very best light. Check out our Fashion and Food catalog pages to find out more about PremiumWhite, PremiumColor, Fresh Meat, Rosé, Frost and Champagne.

Luminous emittance 1:

Glare Evaluation According to UGR											
ρ Ceiling	70	70	50	50	30	70	70	50	50	30	
ρ Walls	50	30	50	30	30	50	30	50	30	30	
ρ Floor	20	20	20	20	20	20	20	20	20	20	
Room Size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	13.3	13.9	13.5	14.1	14.3	13.3	13.9	13.5	14.1	14.3
	3H	13.3	13.9	13.6	14.1	14.4	13.3	13.9	13.6	14.1	14.4
	4H	13.3	13.9	13.6	14.1	14.4	13.3	13.9	13.6	14.1	14.4
	6H	13.3	13.8	13.6	14.1	14.4	13.3	13.8	13.6	14.1	14.4
	12H	13.3	13.8	13.6	14.1	14.4	13.3	13.8	13.6	14.1	14.4
4H	2H	13.1	13.7	13.4	14.0	14.2	13.1	13.7	13.4	14.0	14.2
	3H	13.2	13.7	13.6	14.0	14.3	13.2	13.7	13.6	14.0	14.3
	4H	13.3	13.7	13.6	14.0	14.4	13.3	13.7	13.6	14.0	14.4
	6H	13.3	13.7	13.7	14.0	14.4	13.3	13.7	13.7	14.0	14.4
	12H	13.3	13.6	13.7	14.0	14.4	13.3	13.6	13.7	14.0	14.4
8H	4H	13.2	13.5	13.6	13.9	14.3	13.2	13.5	13.6	13.9	14.3
	6H	13.3	13.5	13.8	13.9	14.4	13.3	13.5	13.8	13.9	14.4
	8H	13.3	13.5	13.8	14.0	14.4	13.3	13.5	13.8	14.0	14.4
	12H	13.4	13.5	13.9	14.0	14.5	13.4	13.5	13.9	14.0	14.5
	12H	4H	13.2	13.5	13.6	13.9	14.3	13.2	13.5	13.6	13.9
6H		13.3	13.5	13.7	13.9	14.4	13.3	13.5	13.7	13.9	14.4
8H		13.3	13.5	13.8	13.9	14.4	13.3	13.5	13.8	13.9	14.4
Variation of the observer position for the luminaire distances S											
S = 1.0H	+5.4 / -4.4					+5.4 / -4.4					
S = 1.5H	+8.1 / -4.7					+8.1 / -4.7					
S = 2.0H	+10.1 / -5.2					+10.1 / -5.2					
Standard table	BK01					BK01					
Correction											
Summand	-4.7					-4.7					
Corrected Glare Indices referring to 1800lm Total Luminous Flux											

Operator
Telephone
Fax
e-Mail

Sales Room / Summary



Height of Room: 3.800 m, Mounting Height: 3.800 m, Light loss factor: 0.70

Values in Lux, Scale 1:59

Surface	ρ [%]	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Workplane	/	477	331	587	0.694
Floor	20	380	288	448	0.757
Ceiling	80	96	75	112	0.777
Walls (4)	50	245	91	575	/

Workplane:

Height: 0.760 m
Grid: 32 x 16 Points
Boundary Zone: 0.000 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.550, Ceiling / Working Plane: 0.201.

Luminaire Parts List

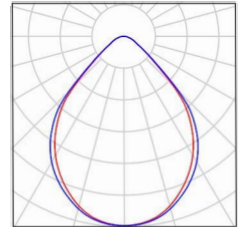
No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	4	PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO (1.000)	3600	3600	35.0
			Total: 14400	Total: 14400	140.0

Specific connected load: $13.47 \text{ W/m}^2 = 2.82 \text{ W/m}^2/100 \text{ lx}$ (Ground area: 10.40 m^2)

Operator
Telephone
Fax
e-Mail

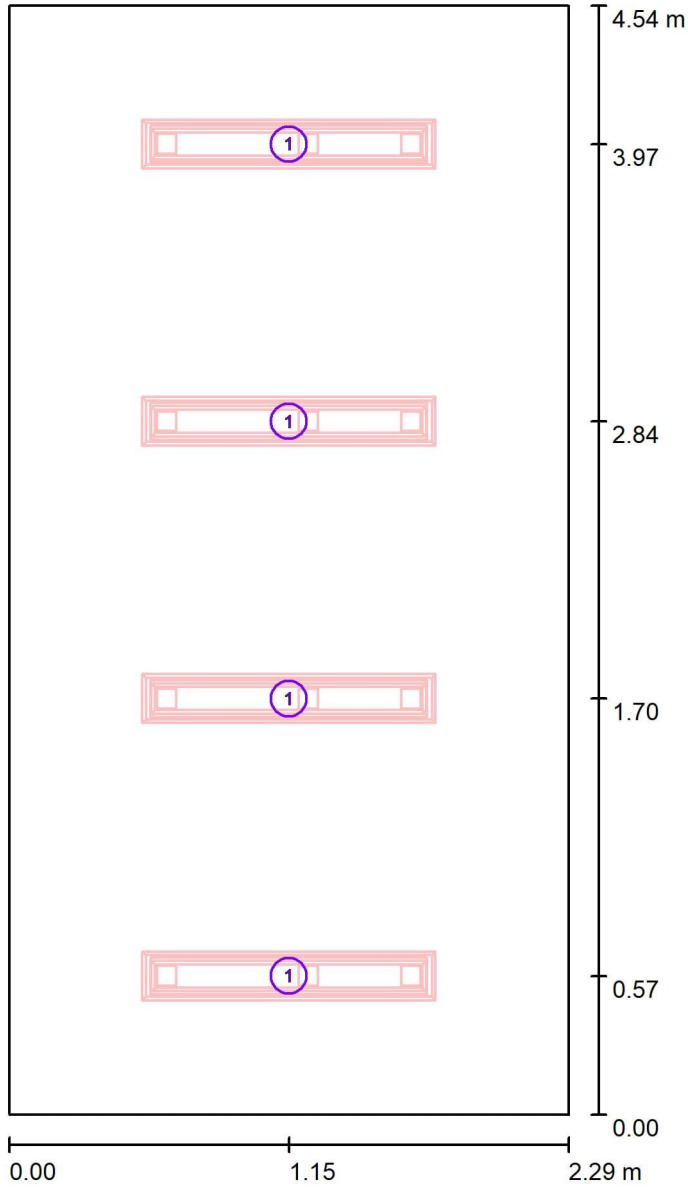
Sales Room / Luminaire parts list

4 Pieces PHILIPS SM340C PSD L1200 SI 1 x36S/940
MLO
Article No.:
Luminous flux (Luminaire): 3600 lm
Luminous flux (Lamps): 3600 lm
Luminaire Wattage: 35.0 W
Luminaire classification according to CIE: 100
CIE flux code: 71 94 99 100 100
Fitting: 1 x 36S/940 (Correction Factor 1.000).



Operator
Telephone
Fax
e-Mail

Sales Room / Luminaires (layout plan)



Scale 1 : 31

Luminaire Parts List

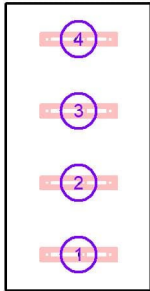
No.	Pieces	Designation
1	4	PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO

Operator
 Telephone
 Fax
 e-Mail

Sales Room / Luminaires (coordinates list)

PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO

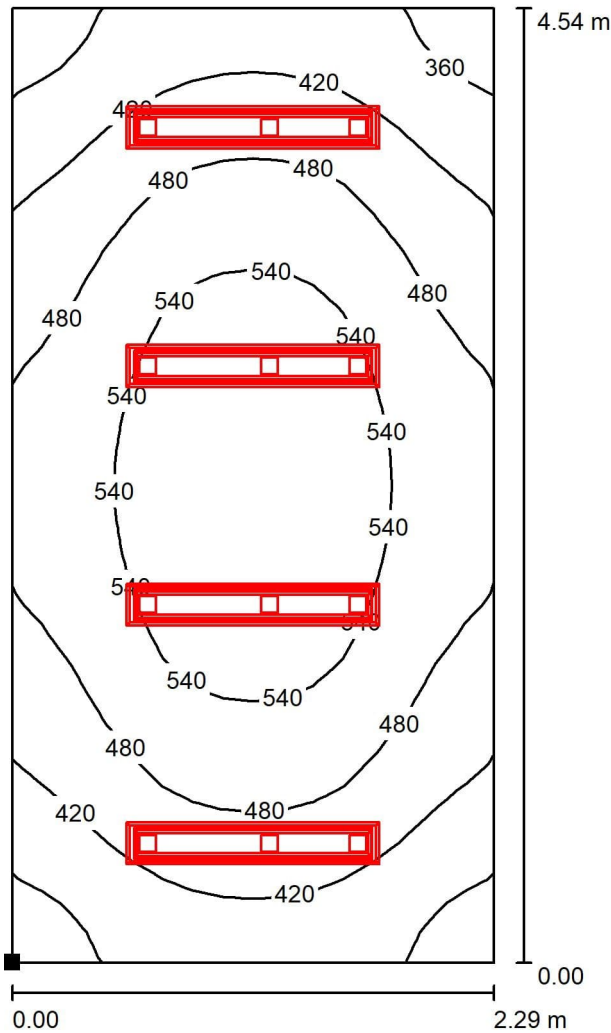
3600 lm, 35.0 W, 1 x 1 x 36S/940 (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	1.145	0.567	3.800	0.0	0.0	90.0
2	1.145	1.702	3.800	0.0	0.0	90.0
3	1.145	2.837	3.800	0.0	0.0	90.0
4	1.145	3.972	3.800	0.0	0.0	90.0

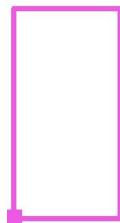
Operator
 Telephone
 Fax
 e-Mail

Sales Room / Workplane / Isolines (E)



Values in Lux, Scale 1 : 36

Position of surface in room:
 Marked point:
 (0.000 m, 0.000 m, 0.760 m)

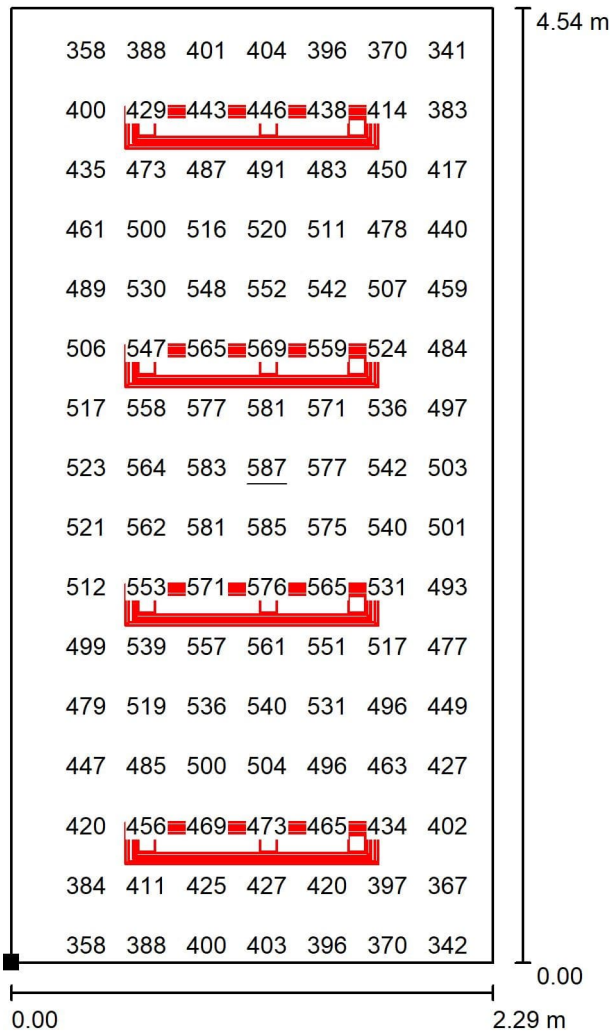


Grid: 32 x 16 Points

E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	$u0$	E_{min} / E_{max}
477	331	587	0.694	0.564

Operator
Telephone
Fax
e-Mail

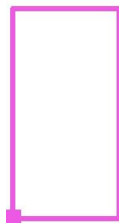
Sales Room / Workplane / Value Chart (E)



Values in Lux, Scale 1 : 36

Not all calculated values could be displayed.

Position of surface in room:
Marked point:
(0.000 m, 0.000 m, 0.760 m)



Grid: 32 x 16 Points

E_{av} [lx]
477

E_{min} [lx]
331

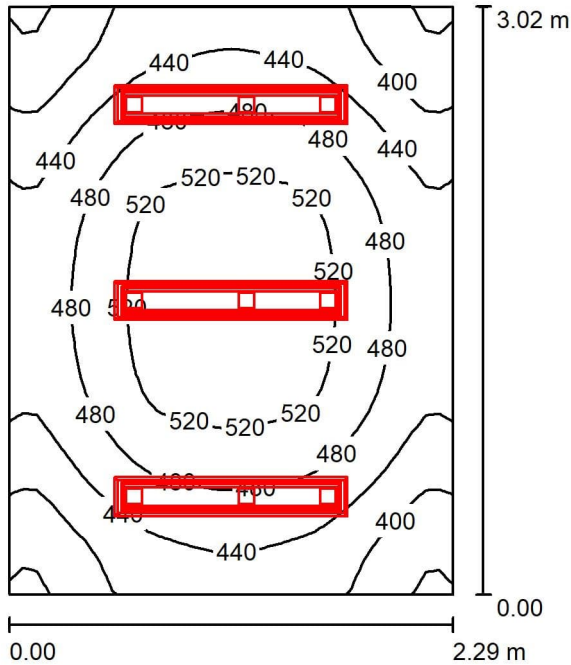
E_{max} [lx]
587

u_0
0.694

E_{min} / E_{max}
0.564

Operator
Telephone
Fax
e-Mail

Scada Room / Summary



Height of Room: 3.800 m, Mounting Height: 3.800 m, Light loss factor: 0.70

Values in Lux, Scale 1:39

Surface	ρ [%]	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Workplane	/	463	346	545	0.747
Floor	20	353	284	399	0.804
Ceiling	80	104	77	124	0.740
Walls (4)	50	258	98	673	/

Workplane:

Height: 0.760 m
Grid: 32 x 32 Points
Boundary Zone: 0.000 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.604, Ceiling / Working Plane: 0.224.

Luminaire Parts List

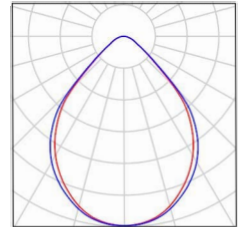
No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	3	PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO (1.000)	3600	3600	35.0
			Total: 10800	Total: 10800	105.0

Specific connected load: 15.16 W/m² = 3.27 W/m²/100 lx (Ground area: 6.93 m²)

Operator
Telephone
Fax
e-Mail

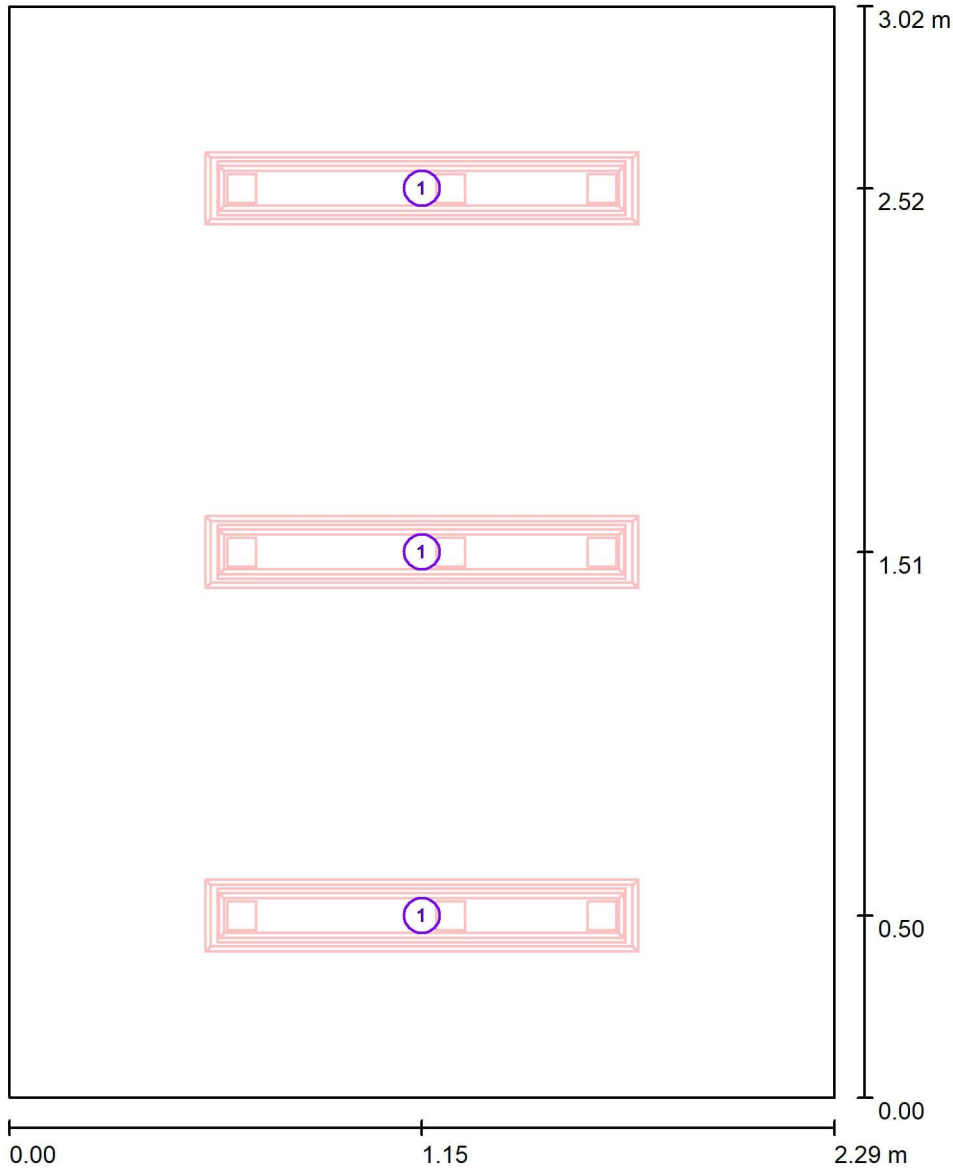
Scada Room / Luminaire parts list

3 Pieces PHILIPS SM340C PSD L1200 SI 1 x36S/940
MLO
Article No.:
Luminous flux (Luminaire): 3600 lm
Luminous flux (Lamps): 3600 lm
Luminaire Wattage: 35.0 W
Luminaire classification according to CIE: 100
CIE flux code: 71 94 99 100 100
Fitting: 1 x 36S/940 (Correction Factor 1.000).



Operator
 Telephone
 Fax
 e-Mail

Scada Room / Luminaires (layout plan)



Scale 1 : 21

Luminaire Parts List

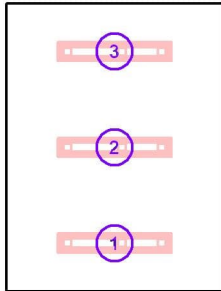
No.	Pieces	Designation
1	3	PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO

Operator
 Telephone
 Fax
 e-Mail

Scada Room / Luminaires (coordinates list)

PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO

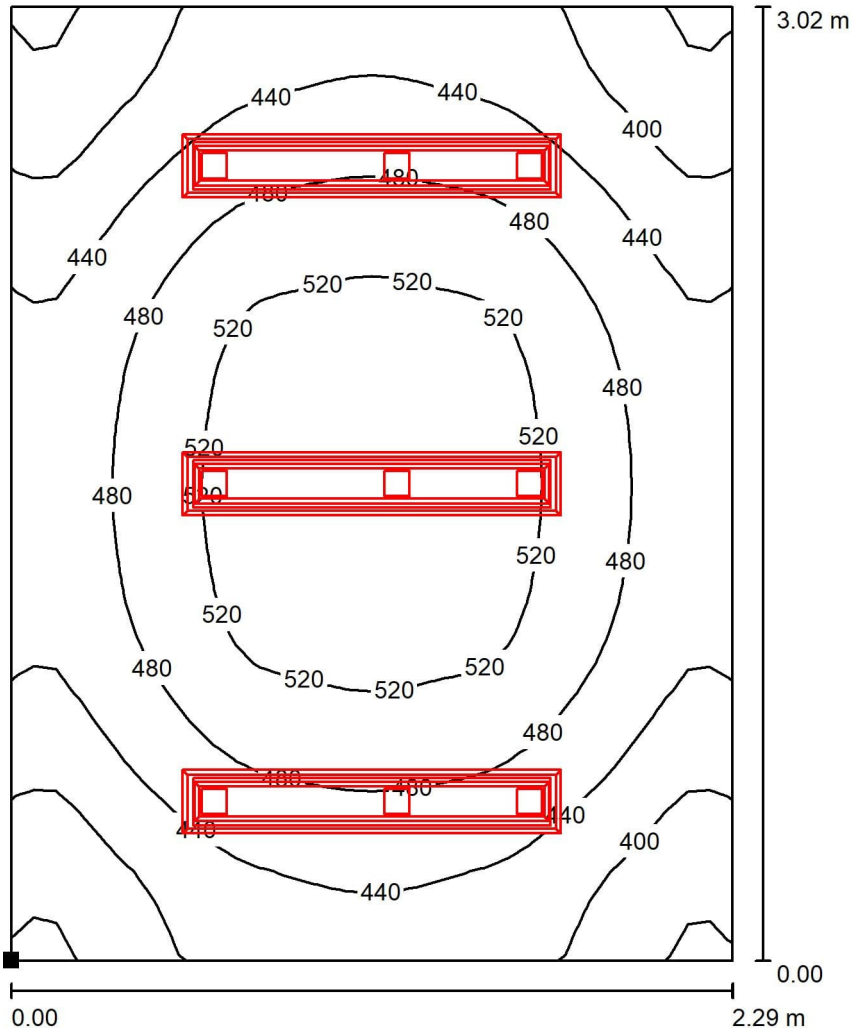
3600 lm, 35.0 W, 1 x 1 x 36S/940 (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	1.145	0.504	3.800	0.0	0.0	90.0
2	1.145	1.512	3.800	0.0	0.0	90.0
3	1.145	2.521	3.800	0.0	0.0	90.0

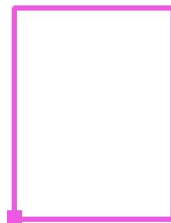
Operator
Telephone
Fax
e-Mail

Scada Room / Workplane / Isolines (E)



Values in Lux, Scale 1 : 24

Position of surface in room:
Marked point:
(0.000 m, 0.000 m, 0.760 m)

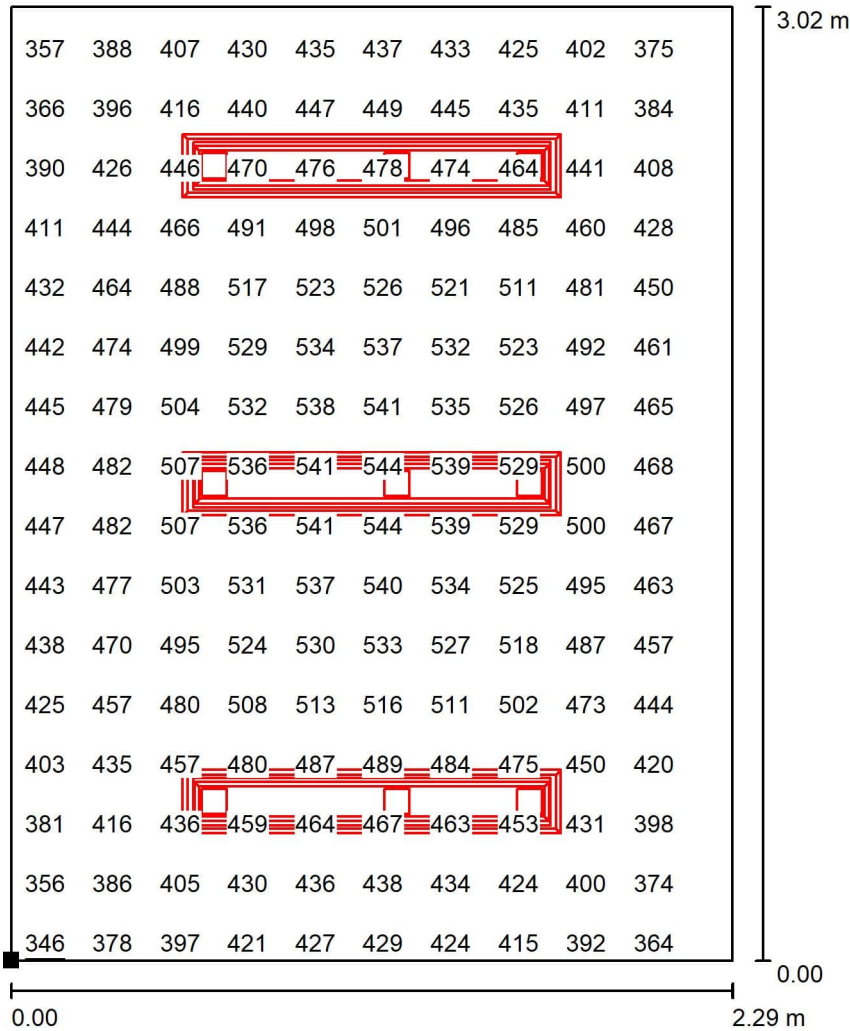


Grid: 32 x 32 Points

E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u_0	E_{min} / E_{max}
463	346	545	0.747	0.636

Operator
Telephone
Fax
e-Mail

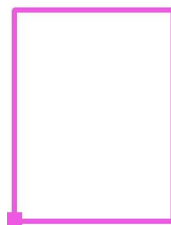
Scada Room / Workplane / Value Chart (E)



Values in Lux, Scale 1 : 24

Not all calculated values could be displayed.

Position of surface in room:
Marked point:
(0.000 m, 0.000 m, 0.760 m)

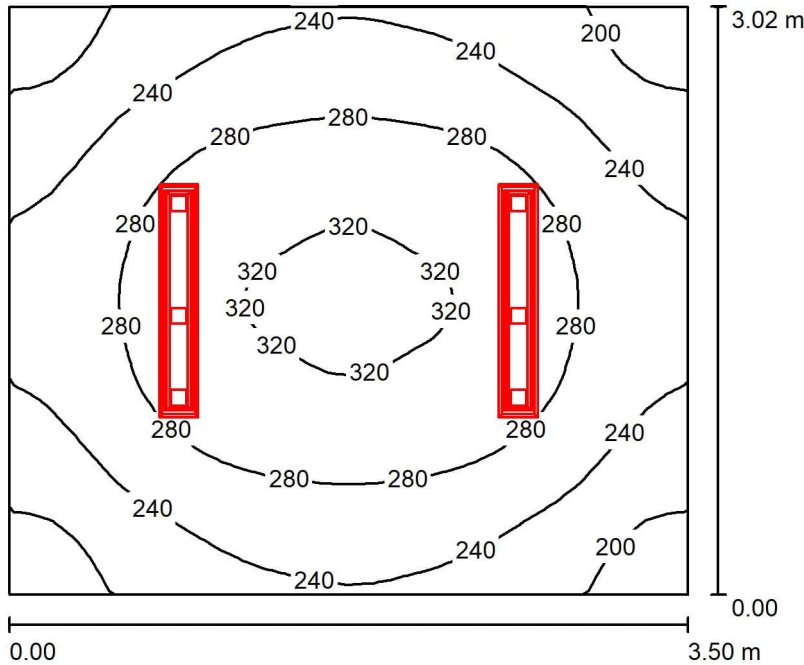


Grid: 32 x 32 Points

E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u_0	E_{min} / E_{max}
463	346	545	0.747	0.636

Operator
Telephone
Fax
e-Mail

Electrical Room / Summary



Height of Room: 3.800 m, Mounting Height: 3.800 m, Light loss factor: 0.70

Values in Lux, Scale 1:39

Surface	ρ [%]	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Workplane	/	262	175	327	0.668
Floor	20	207	155	245	0.747
Ceiling	80	49	37	59	0.753
Walls (4)	50	123	46	293	/

Workplane:

Height: 0.760 m
Grid: 32 x 32 Points
Boundary Zone: 0.000 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.491, Ceiling / Working Plane: 0.188.

Luminaire Parts List

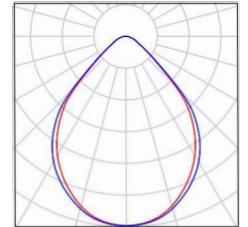
No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	2	PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO (1.000)	3600	3600	35.0
			Total: 7200	Total: 7200	70.0

Specific connected load: $6.61 \text{ W/m}^2 = 2.52 \text{ W/m}^2/100 \text{ lx}$ (Ground area: 10.59 m^2)

Operator
Telephone
Fax
e-Mail

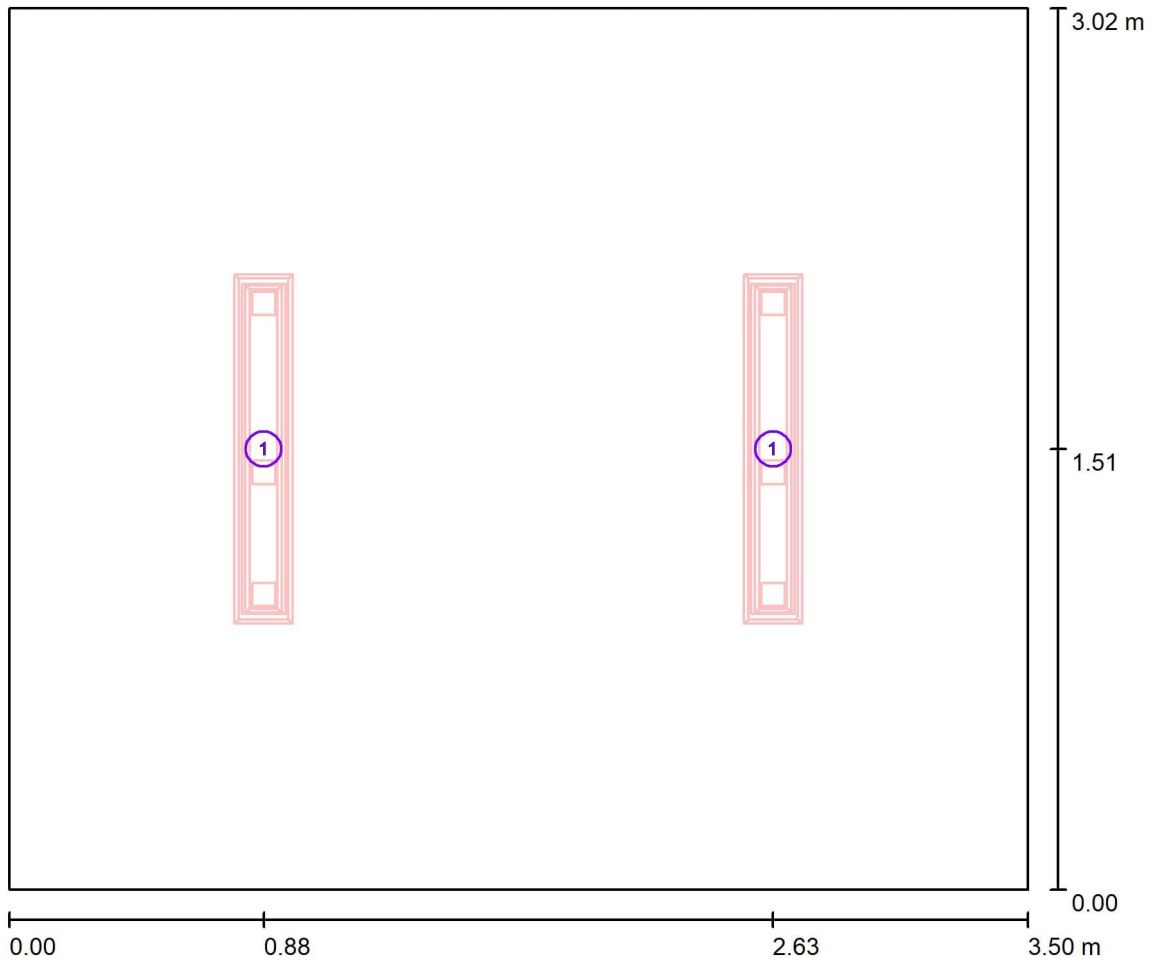
Electrical Room / Luminaire parts list

2 Pieces PHILIPS SM340C PSD L1200 SI 1 x36S/940
MLO
Article No.:
Luminous flux (Luminaire): 3600 lm
Luminous flux (Lamps): 3600 lm
Luminaire Wattage: 35.0 W
Luminaire classification according to CIE: 100
CIE flux code: 71 94 99 100 100
Fitting: 1 x 36S/940 (Correction Factor 1.000).



Operator
Telephone
Fax
e-Mail

Electrical Room / Luminaires (layout plan)



Scale 1 : 26

Luminaire Parts List

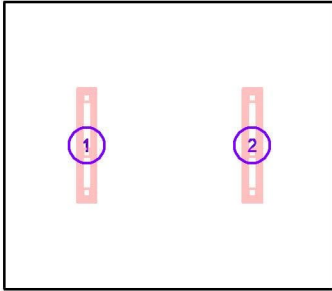
No.	Pieces	Designation
1	2	PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO

Operator
 Telephone
 Fax
 e-Mail

Electrical Room / Luminaires (coordinates list)

PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO

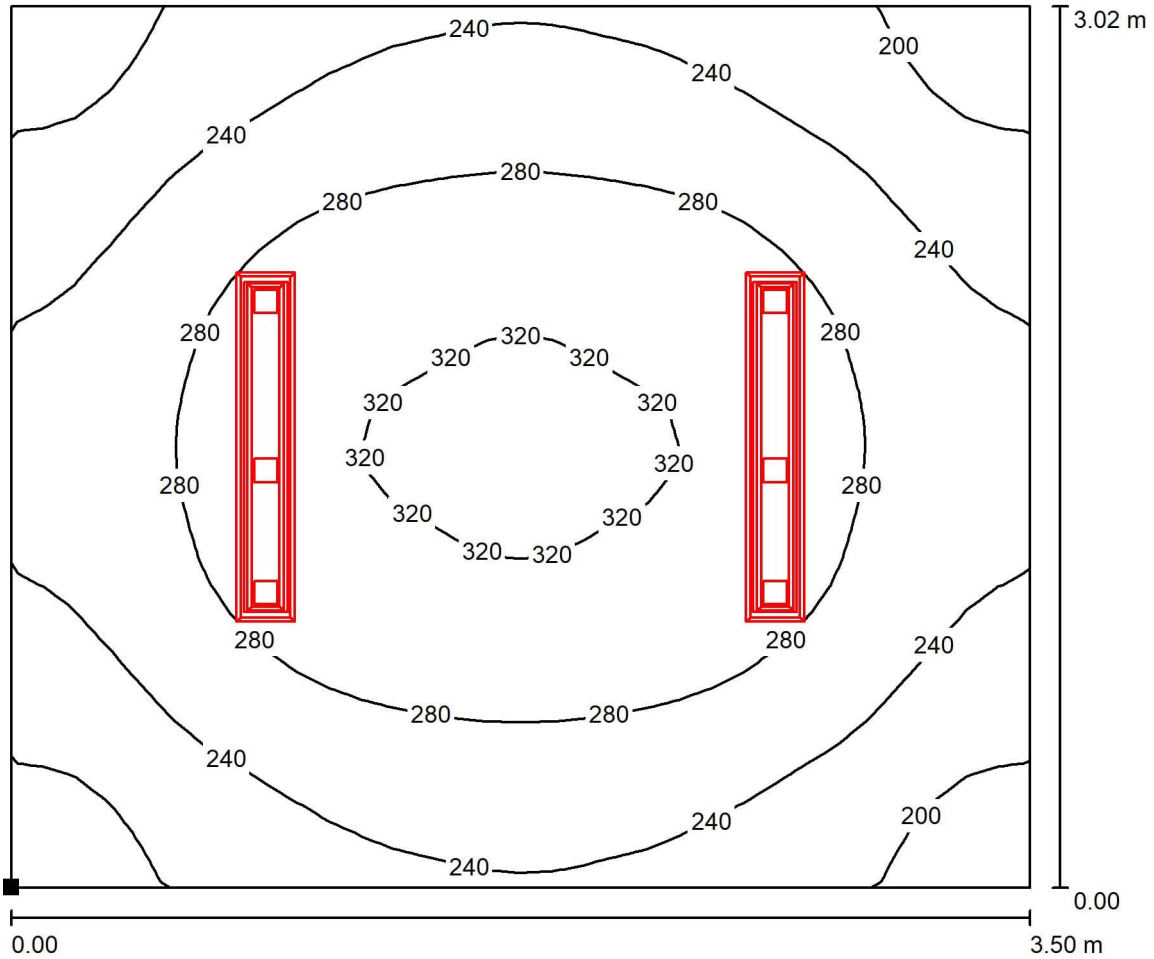
3600 lm, 35.0 W, 1 x 1 x 36S/940 (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	0.875	1.512	3.800	0.0	0.0	0.0
2	2.625	1.512	3.800	0.0	0.0	0.0

Operator
 Telephone
 Fax
 e-Mail

Electrical Room / Workplane / Isolines (E)



Values in Lux, Scale 1 : 26

Position of surface in room:
 Marked point:
 (0.000 m, 0.000 m, 0.760 m)

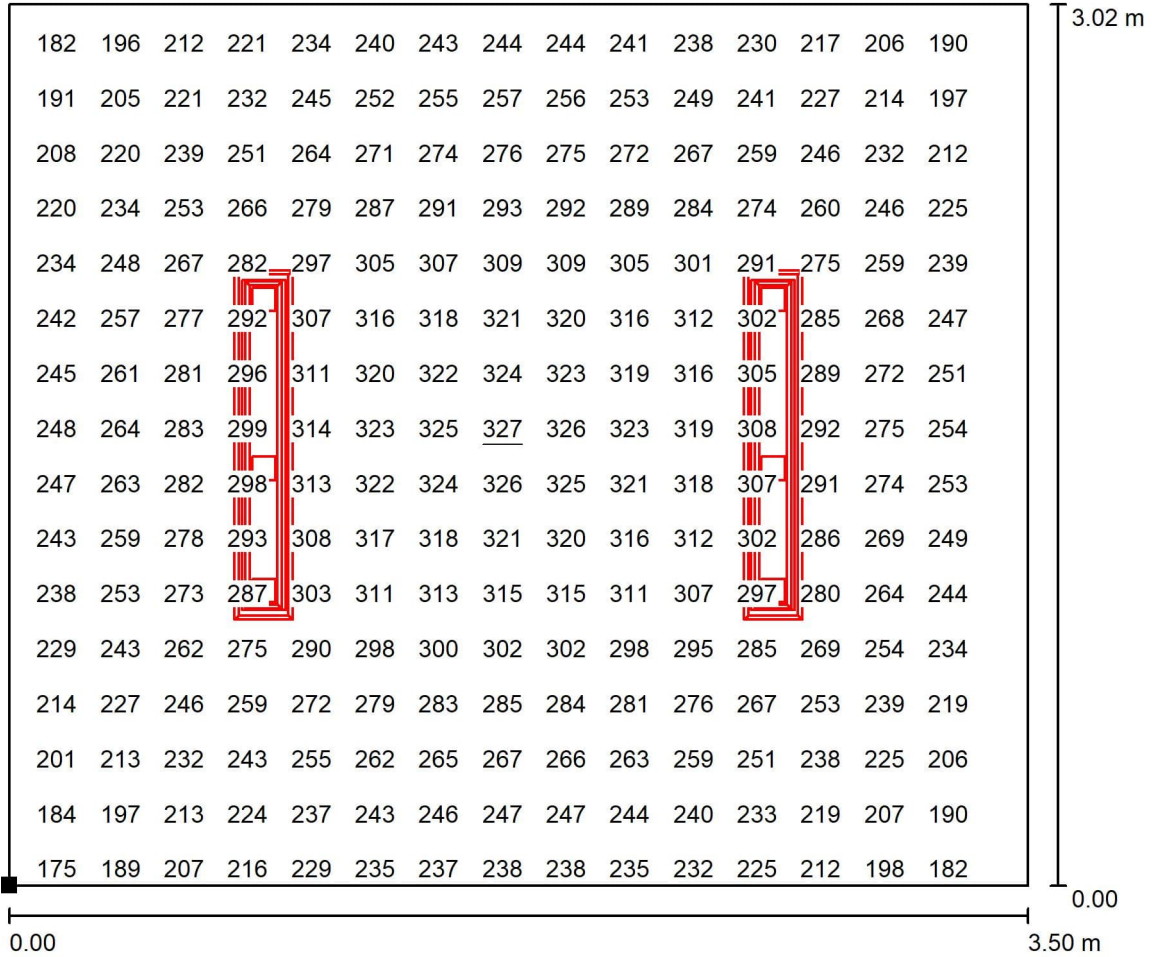


Grid: 32 x 32 Points

E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u_0	E_{min} / E_{max}
262	175	327	0.668	0.535

Operator
Telephone
Fax
e-Mail

Electrical Room / Workplane / Value Chart (E)



Values in Lux, Scale 1 : 26

Not all calculated values could be displayed.

Position of surface in room:
Marked point:
(0.000 m, 0.000 m, 0.760 m)



Grid: 32 x 32 Points

E_{av} [lx]
262

E_{min} [lx]
175

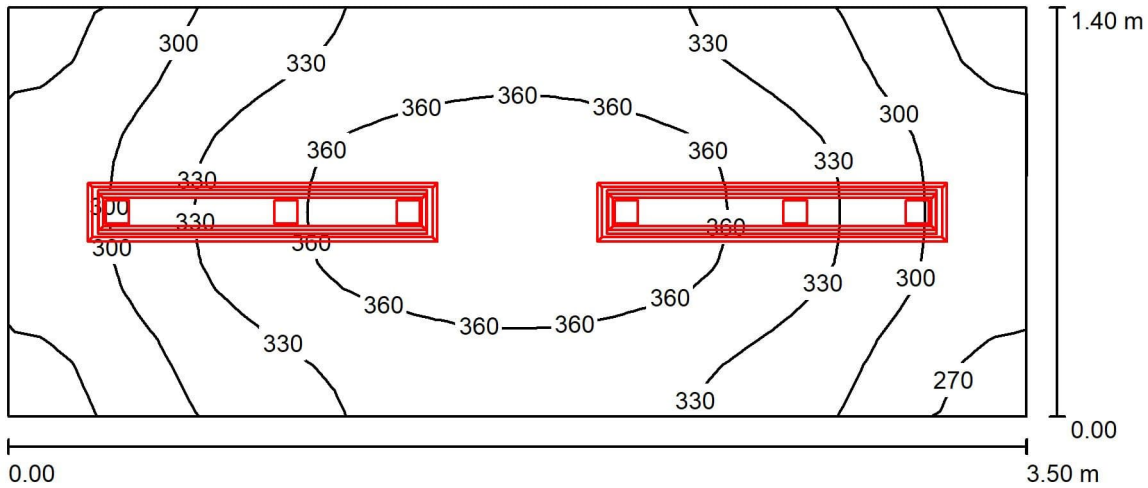
E_{max} [lx]
327

u0
0.668

E_{min} / E_{max}
0.535

Operator
Telephone
Fax
e-Mail

Battery Room / Summary



Height of Room: 3.800 m, Mounting Height: 3.800 m, Light loss factor: 0.70

Values in Lux, Scale 1:26

Surface	ρ [%]	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u0
Workplane	/	327	257	378	0.788
Floor	20	241	203	269	0.843
Ceiling	80	88	65	103	0.741
Walls (4)	50	206	81	466	/

Workplane:

Height: 0.760 m
Grid: 32 x 16 Points
Boundary Zone: 0.000 m

Illuminance Quotient (according to LG7): Walls / Working Plane: 0.709, Ceiling / Working Plane: 0.270.

Luminaire Parts List

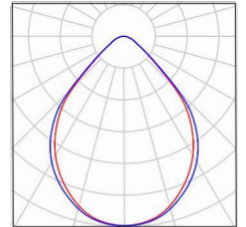
No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	2	PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO (1.000)	3600	3600	35.0
Total:			7200	7200	70.0

Specific connected load: 14.29 W/m² = 4.37 W/m²/100 lx (Ground area: 4.90 m²)

Operator
Telephone
Fax
e-Mail

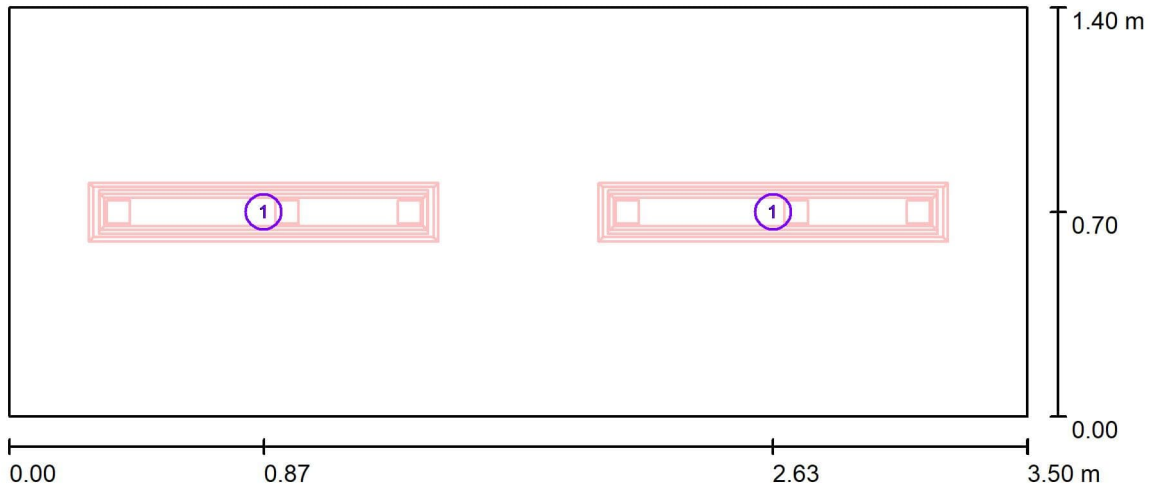
Battery Room / Luminaire parts list

2 Pieces PHILIPS SM340C PSD L1200 SI 1 x36S/940
MLO
Article No.:
Luminous flux (Luminaire): 3600 lm
Luminous flux (Lamps): 3600 lm
Luminaire Wattage: 35.0 W
Luminaire classification according to CIE: 100
CIE flux code: 71 94 99 100 100
Fitting: 1 x 36S/940 (Correction Factor 1.000).



Operator
Telephone
Fax
e-Mail

Battery Room / Luminaires (layout plan)



Scale 1 : 26

Luminaire Parts List

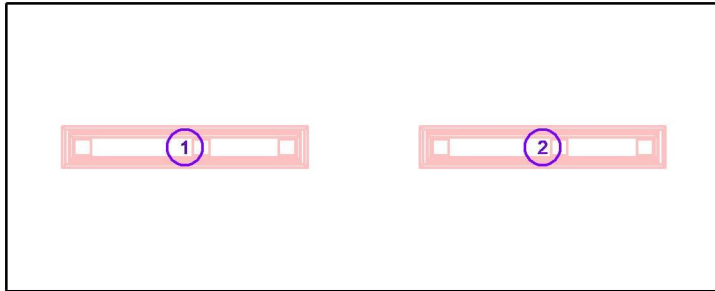
No.	Pieces	Designation
1	2	PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO

Operator
 Telephone
 Fax
 e-Mail

Battery Room / Luminaires (coordinates list)

PHILIPS SM340C PSD L1200 SI 1 x36S/940 MLO

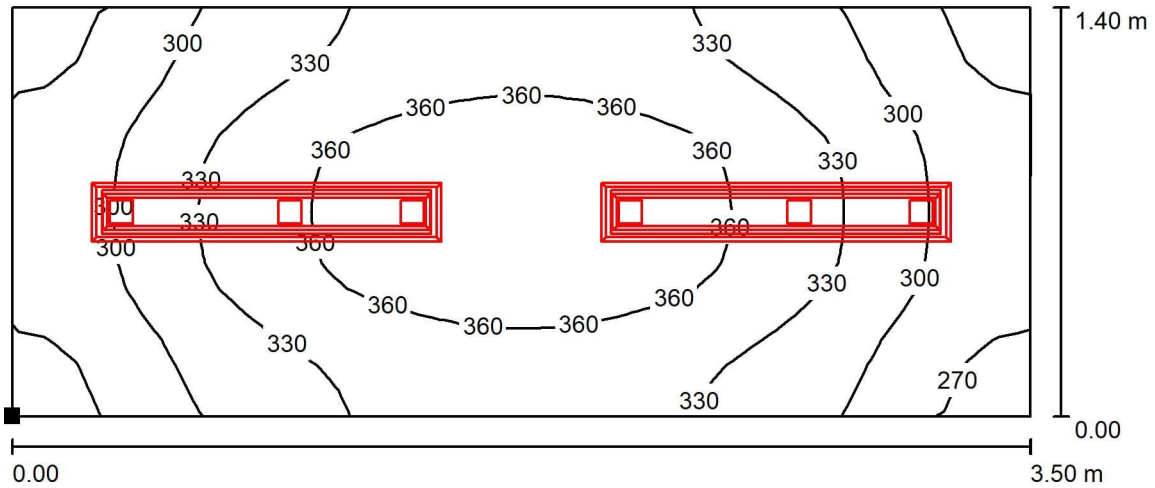
3600 lm, 35.0 W, 1 x 1 x 36S/940 (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	0.875	0.700	3.800	0.0	0.0	90.0
2	2.625	0.700	3.800	0.0	0.0	90.0

Operator
Telephone
Fax
e-Mail

Battery Room / Workplane / Isolines (E)



Values in Lux, Scale 1 : 26

Position of surface in room:
Marked point:
(0.000 m, 0.000 m, 0.760 m)



Grid: 32 x 16 Points

E_{av} [lx]
327

E_{min} [lx]
257

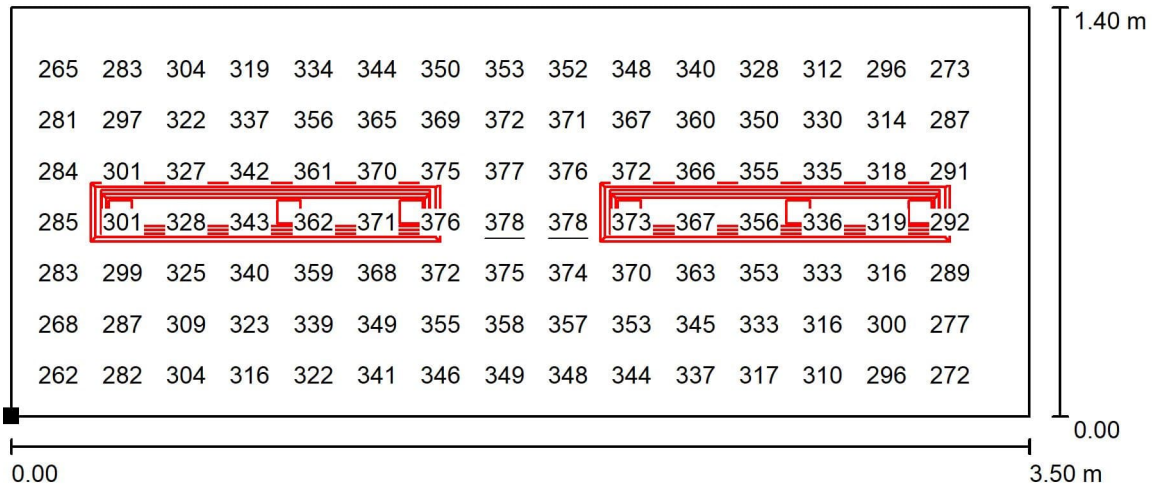
E_{max} [lx]
378

u_0
0.788

E_{min} / E_{max}
0.680

Operator
Telephone
Fax
e-Mail

Battery Room / Workplane / Value Chart (E)



Values in Lux, Scale 1 : 26

Not all calculated values could be displayed.

Position of surface in room:
Marked point:
(0.000 m, 0.000 m, 0.760 m)



Grid: 32 x 16 Points

E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	$u0$	E_{min} / E_{max}
327	257	378	0.788	0.680