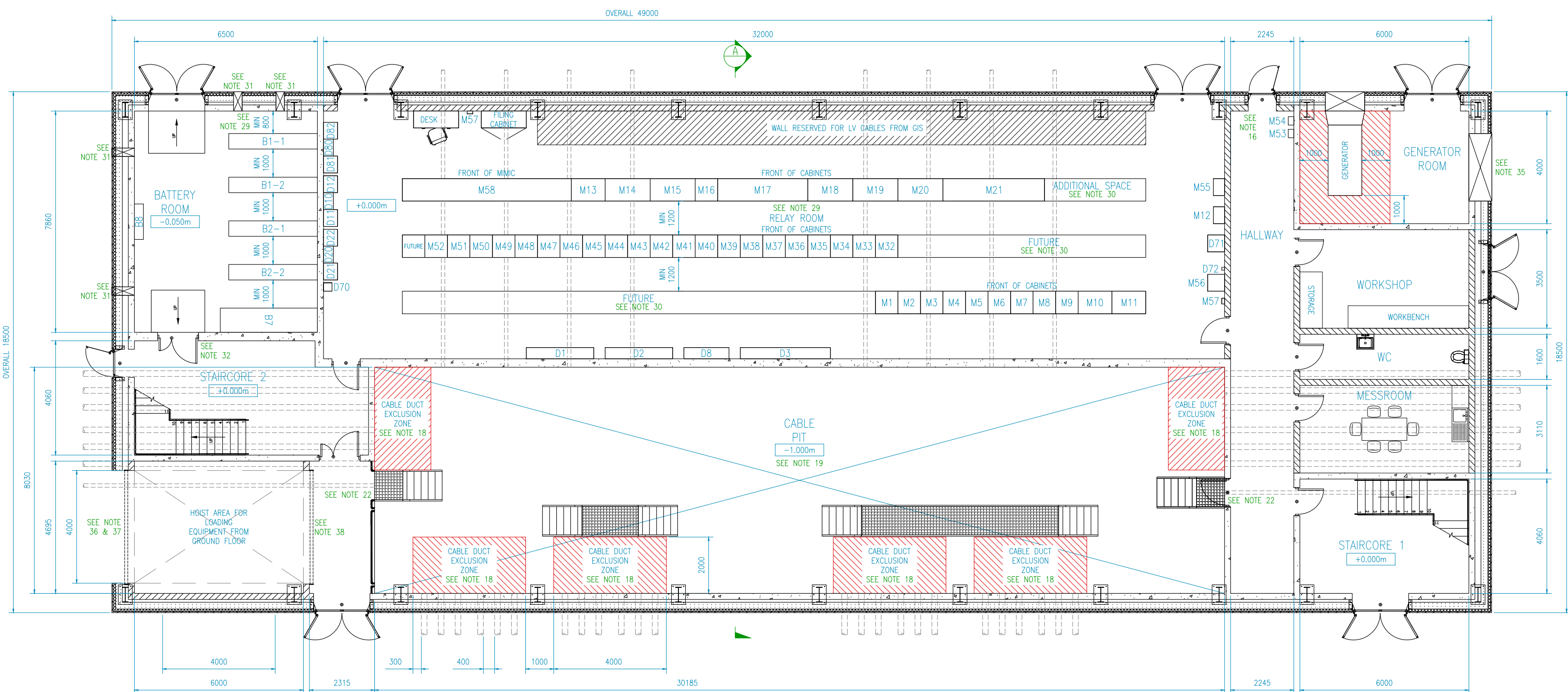


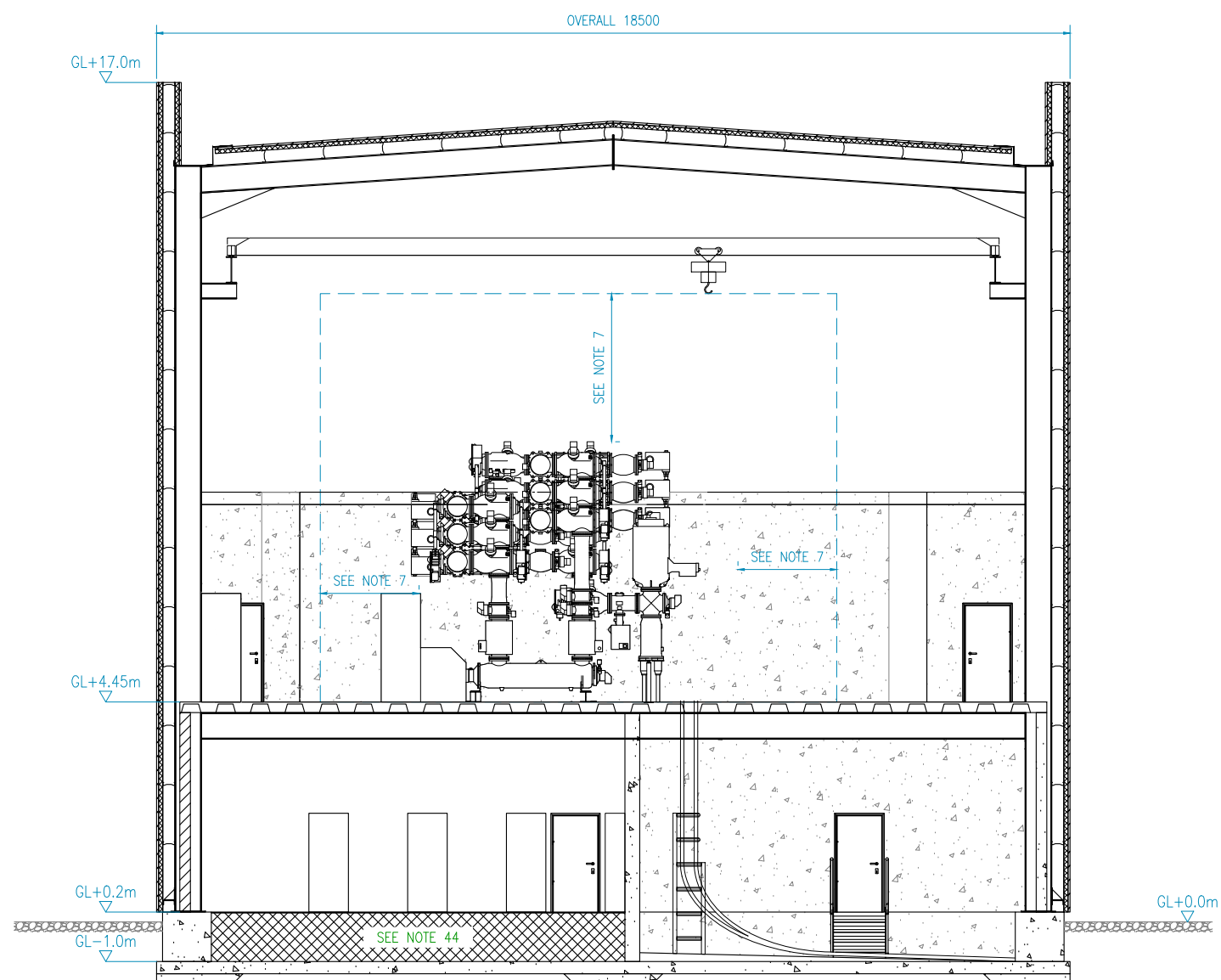




PLAN - FIRST FLOOR  
SCALE: NTS



PLAN - GROUND FLOOR  
SCALE: NTS



ELEVATION - SECTION A-A  
SCALE: NTS

CABINET DESIGNATION	DESCRIPTION	DIMENSIONS
B1-1	220V DC BATTERY 1, STAND 1	3150x550
B1-2	220V DC BATTERY 1, STAND 2	3150x550
B2-1	220V DC BATTERY 2, STAND 1	3150x550
B2-2	220V DC BATTERY 2, STAND 2	3150x550
B7	48V DC TELECOMS BATTERY	3450x660
B8	48V DC STATION BATTERY	1250x120
D1	220V DC DISTRIBUTION BOARD 1	2400x400
D2	220V DC DISTRIBUTION BOARD 2	2400x400
D3	48V DC DISTRIBUTION BOARD	1600x400
D4	AC DISTRIBUTION BOARD	3200x400
D10	220V BATTERY No.1 CHARGER 1 & BATTERY SUPERVISION	600x350
D11	220V BATTERY No.1 CHARGER 2 & BATTERY SUPERVISION	600x350
D12	220V BATTERY No.2 CHARGER 1 & BATTERY SUPERVISION	600x350
D13	220V BATTERY No.2 CHARGER 2 & BATTERY SUPERVISION	600x350
D14	24/48V BATTERY: CHARGER 1 & BATTERY SUPERVISION	600x350
D15	24/48V BATTERY: CHARGER 2 & BATTERY SUPERVISION	600x350
D16	24/48V BATTERY: CHARGER 3 & BATTERY SUPERVISION	600x350
D17	48V 5WPS TELECOMS	600x350
D18	24/48V BATTERY: CHARGER 4 & BATTERY SUPERVISION	600x350
D19	24/48V BATTERY: CHARGER 5 & BATTERY SUPERVISION	600x350
D20	220V BATTERY No.1 CHARGER 1 & BATTERY SUPERVISION	600x350
D21	220V BATTERY No.1 CHARGER 2 & BATTERY SUPERVISION	600x350
D22	220V BATTERY No.2 CHARGER 1 & BATTERY SUPERVISION	600x350
D23	220V BATTERY No.2 CHARGER 2 & BATTERY SUPERVISION	600x350
D24	24/48V BATTERY: CHARGER 1 & BATTERY SUPERVISION	600x350
D25	24/48V BATTERY: CHARGER 2 & BATTERY SUPERVISION	600x350
D26	48V 5WPS TELECOMS	600x350
D27	TELECOMS ISOLATION SWITCH	100x100
M1	OPMUX 1	800x800
M2	OPMUX 2	800x800
M3	OPMUX 3	800x800
M4	OPMUX 4	800x800
M5	OP SERVICES	800x800
M6	48V DC TELECOMS DISTRIBUTION BOARD	600x600
M7	MAIN DISTRIBUTION FRAME	900x900
M8	NOC RTU 1 (INCL OPS CLOCK)	800x800
M9	NOC RTU 2 (INCL OPS CLOCK)	800x800
M10	TELEMETRING 1	1200x800
M11	TELEMETRING 2	1200x800
M12	DC RTU	600x400
M13	SYNCHRONISING PANEL	1200x800
M14	EVENT RECORDER/AMP 1	1600x800
M15	EVENT RECORDER/AMP 2	1600x800
M16	BATTERY SUPERVISION	800x800
M17	SIGNAL INTERPOSING	3200x800
M18	BUSBAR PROTECTION 1	1600x800
M19	BUSBAR PROTECTION 2	1600x800
M20	BUSBAR PROTECTION 3	1600x800
M21	CUSTOMER INTERFACE	3200x800
M22	F3 COUPLER PROTECTION	800x800
M23	F7 PROTECTION	800x800
M24	F5 PROTECTION	800x800
M25	F3 PROTECTION	800x800
M26	F1 PROTECTION	800x800
M27	F1 PROTECTION	800x800
M28	F1 PROTECTION	800x800
M29	F1 PROTECTION	800x800
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M51	F1 PROTECTION	800x800
M52	F1 PROTECTION	800x800
M53	F1 PROTECTION	800x800
M54	F1 PROTECTION	800x800
M55	F1 PROTECTION	800x800
M56	F1 PROTECTION	800x800
M57	F1 PROTECTION	800x800
M58	F1 PROTECTION	800x800

#### GENERAL

- NOTE 1: THIS DRAWING IS PRODUCED FOR INFORMATION PURPOSES ONLY. ALL DIMENSIONS, REFERENCES (E.G. LIGHTNING MAST LOCATIONS ETC.) GIVEN ARE INDICATIVE AND SHOULD NOT BE USED AS PART OF A DETAILED DESIGN.
- NOTE 2: THIS IS A CONCEPTUAL DESIGN. DETAILED DESIGN IS REQUIRED PENDING CONFIRMATION OF SPECIFIC EQUIPMENT SUPPLIER AND SITE DETAILS.
- NOTE 3: BUILDING HAS BEEN SPECIFICALLY DESIGNED TO ACCOMMODATE 2 NO. TRANSFORMER BAYS (CABLE CONNECTION) AND 6 NO. FEEDER BAYS (CABLE CONNECTION).
- NOTE 4: WHERE THERE IS MORE THAN ONE MINIMUM DISTANCE STATED FOR A SPECIFIC AREA THE LARGEST MINIMUM DISTANCE SHOULD BE ADHERED TO.
- NOTE 5: FIRE AND ATEX ZONES NOT SHOWN, THIS SHOULD BE CONSIDERED DURING DETAILED CUSTOMER DESIGN.
- NOTE 6: CIVIL CALCULATIONS ARE TO BE CARRIED OUT AT THE DETAIL DESIGN STAGE AND TAKE INTO ACCOUNT SPECIFIC, EXISTING SITE GROUND CONDITIONS.
- NOTE 7: (AS ILLUSTRATED ON DRAWING): THE SWITCHGEAR SHOWN ON THIS DRAWING IS INDICATIVE ONLY. DIMENSIONS OF THE OVERALL BUILDING SHALL BE DESIGNED TO SUIT MANUFACTURED SPECIFIC DIMENSIONS ENVELOPE AROUND THE SWITCHGEAR SHALL BE WITH MANUFACTURER'S RECOMMENDATIONS FOR ON-GOING OPERATION, MAINTENANCE AND REPLACEMENT OF HV PLANT.
- NOTE 8: REQUIREMENT FOR GIS OVERPRESSURE VENTS TO BE CONFIRMED BY GIS SUPPLIER.
- NOTE 9: ALL OPES IN GIS ROOM FOR LV AND HV CABLES TO BE FIRE SEALED.
- NOTE 10: (AS ILLUSTRATED ON DRAWING): MINIMUM CLEAR AREA ON BOTH SIDES OF THE GIS FOR THE HV TEST EQUIPMENT IS 3000mm.
- NOTE 11: LV CABLE ROUTING FOR FUTURE SWITCHGEAR BAYS SHALL BE CONSIDERED AS PART OF THE DETAILED DESIGN. DIFFERENCES IN LENGTH BETWEEN THE RELAY ROOM AND THE SWITCHGEAR HALL MUST BE NOTED AT THE DETAIL DESIGN PHASE, WITH LV CABLES ROUTED ACCORDINGLY.
- NOTE 12: SPECIFIC SWITCHROOM FLOOR REQUIREMENTS ARE TO SUIT THE MANUFACTURER'S SPECIFICATIONS AND ARE TO BE EVALUATED AT THE DETAIL DESIGN STAGE.
- NOTE 13: BOTH OPTIONS OF LOC, INTEGRATED AND STANDALONE, HAVE BEEN SHOWN FOR INFORMATIONAL PURPOSES.
- NOTE 14: HIGH FREQUENCY MESH IS TO BE LAID WITHIN THE GIS FLOOR AND SUIT SWITCHGEAR MANUFACTURER REQUIREMENTS FOR FURTHER DETAILS ON EARTHING REQUIREMENTS, REFER TO EIRGRID'S FUNCTIONAL SPECIFICATION XDS-GFS-12-001.
- NOTE 15: GIS ACCESS PLATFORMS SHOWN ARE INDICATIVE ONLY AND SHALL BE EVALUATED AT THE DETAIL DESIGN PHASE.
- NOTE 16: (AS ILLUSTRATED ON DRAWING): ROLLER SHUTTER DOOR EXTENDS TO GROUND LEVEL OF THE GROUND FLOOR OF THE GIS BUILDING.
- NOTE 17: THE MAXIMUM LENGTH OF A CABLE THAT CAN BE PUSHED INTO THE CABLE ROOM IS 100m ROUTE LENGTH.
- NOTE 18: (AS ILLUSTRATED ON DRAWING): BUILDING DESIGNER AND CABLE DESIGNER SHALL CO-ORDINATE WORKS TO ENSURE THERE ARE NO OBSTRUCTIONS LOCATED 2m DIRECTLY IN FRONT OF THE CABLE DUCTS AND 300mm TO THE SIDE OF THE CABLE DUCT WHERE THE DUCT ENTERS THE CABLE ROOM.
- NOTE 19: (AS ILLUSTRATED ON DRAWING): ADEQUATE AREA TO BE PROVIDED IN THE VICINITY OF THE GIS BUILDING TO ALLOW SPACE FOR SETTING UP THE EQUIPMENT NEEDED FOR CABLE PULLING OPERATIONS. THIS AREA IS APPROX. 12m X 12m FOR EACH CABLE CIRCUIT, CABLE DESIGNER TO CONSIDER.
- NOTE 20: AN OPENING MUST BE PROVIDED FOR EACH CIRCUIT TO ALLOW FOR SUITABLE CABLE PULLING DUCTS.
- NOTE 21: CABLE SUPPORT STEELWORK TO BE PROVIDED BY THE CONTRACTOR. WALL TO BE CAPABLE OF SUPPORTING HV CABLES, RING CT'S ETC.
- NOTE 22: (AS ILLUSTRATED ON DRAWING): AN OPENING SHALL BE PROVIDED UNDER THE STAIRS FOR CABLE PULLING.
- NOTE 23: SUITABLE ANCHOR POINTS SHALL BE INSTALLED FOR CABLE PULLING.
- NOTE 24: (AS ILLUSTRATED ON DRAWING): INDICATIVE MODULAR/RELOCATABLE WALKWAY BRIDGES HAVE BEEN SHOWN WITHIN THE CABLE PIT AND ARE INTENDED TO PROVIDE AN UNIMPEDED ROUTE OF ESCAPE FROM THE PIT IN THE EVENT OF AN EMERGENCY. BRIDGES ARE TO BE CONSTRUCTED WITH A NON-METALLIC MATERIAL, I.E. GLASS REINFORCED PLASTIC.
- NOTE 25: CABLE PIT ENTRY DUCTS LOCATIONS ARE INDICATIVE ONLY. DUCTING SHALL BE FACILITATED TO SUIT THE ULTIMATE DEVELOPMENT OF THE STATION TO REDUCE THE POSSIBILITY OF WATER INGRESS.
- NOTE 26: RISK ASSESSMENT TO BE CARRIED OUT AT DETAIL DESIGN STAGE TO EVALUATE THE REQUIREMENT FOR FORCED VENTILATION WITHIN CABLE PIT.
- NOTE 27: LINK BOXES LOCATED IN THE CABLE BASEMENTS SHALL BE READILY ACCESSIBLE FOR OPERATIONS STAFF FOR MAINTENANCE PURPOSES WITH SAFETY SOUNGAS AS OUTLINE IN THE EIRGRID CABLE SPECIFICATIONS.
- NOTE 28: TELECOMMUNICATION DUCTS SHALL BE ROUTED DIRECTLY TO THE RELAY ROOM AS PER ESB TELECOMS REQUIREMENTS.
- NOTE 29: (AS ILLUSTRATED ON DRAWING): MINIMUM CLEAR DISTANCE BETWEEN 220V BATTERY STANDS AND WALLS IS 800mm.
- NOTE 30: BATTERIES SHOULD BE LOCATED AWAY FROM THE WALL TO ENSURE ACCESS TO ALL BATTERY CELLS FOR MAINTENANCE. BATTERIES SHOULD NOT BE LOCATED IN FRONT OF AIR VENTS.
- NOTE 31: (AS ILLUSTRATED ON DRAWING): SCREENED VENTS (2 HIGH LEVEL AND 2 LOW LEVEL) ARE TO BE INSTALLED IN THE BATTERY ROOM AS PER IEC 62485-2 ON ADJACENT EXTERNAL WALL. MINIMUM VENT DIMENSIONS: 900 x 225mm.
- NOTE 32: (AS ILLUSTRATED ON DRAWING): ACCESS DOOR TO STAIRCORE 2 FROM HOST AREA, AND ADDITIONAL DOUBLE DOOR EXIT IN BATTERY ROOM TO BE SIZED APPROPRIATELY. SIZE REQUIREMENT IEC 60399-1 WITH FIRE REGULATIONS.
- NOTE 33: BATTERY ROOM FLOOR IS TO BE FITTED WITH NON-SLIP, ACID RESISTANT VINYL AS PER THE REQUIREMENTS OF XDS-GFS-13-001-R2.
- NOTE 34: DETAIL DESIGN IS TO CARRY OUT APPROPRIATE RISK ASSESSMENT & VENTILATION CALCULATIONS TO EVALUATE BATTERY ROOM VENT REQUIREMENTS.
- NOTE 35: (AS ILLUSTRATED ON DRAWING): MINIMUM DIESEL GENERATOR LOUVER DIMENSIONS 1200 x 1200mm.
- NOTE 36: (AS ILLUSTRATED ON DRAWING): EQUIPMENT ACCESS DOOR TO BE SIZED SUCH THAT A STANDARD ESB TRUCK CAN BE REVERSED IN THE HOST AREA (MIN 4000mm WIDTH).
- NOTE 37: (AS ILLUSTRATED ON DRAWING): ROLLER SHUTTER DOOR EXTENDS TO GROUND LEVEL OF THE GROUND FLOOR OF THE GIS BUILDING.
- NOTE 38: (AS ILLUSTRATED ON DRAWING): ROLLER SHUTTER DOOR TO BE INSTALLED BETWEEN THE HOST AREA AND THE CABLE PIT AND IS INTENDED TO PREVENT VERTICAL FIRE TRAVEL BETWEEN THE FIRST AND SECOND FLOORS OF THE BUILDING, IN LINE WITH FIRE REGULATIONS.
- NOTE 39: (AS ILLUSTRATED ON DRAWING): RELAY ROOM MUST BE SIZED APPROPRIATELY TO ALLOW FOR ULTIMATE DEVELOPMENT OF STATION.
- NOTE 40: (AS ILLUSTRATED ON DRAWING): SPACE SHOULD BE CONSIDERED FOR ADDITIONAL TELECOMS AND PROTECTION PANELS.
- NOTE 41: INDICATIVE CABLE ACCESS SHOWN.
- NOTE 42: A TELECOMS EARTH BAR SHALL BE INSTALLED IN CLOSE PROXIMITY TO THE DC RTU.
- NOTE 43: NO ELECTRICAL EQUIPMENT (INCL. BATTERIES) SHALL BE INSTALLED DIRECTLY IN FRONT OF VENTS.
- NOTE 44: (AS ILLUSTRATED ON DRAWING): RELAY ROOM FLOOR CONSTRUCTION TO SUIT ROOM REQUIREMENTS.
- NOTE 45: ROOF ACCESS
- NOTE 46: ROOF ACCESS IS TO BE EVALUATED AT THE DETAIL DESIGN STAGE BY CONDUCTING A RISK ASSESSMENT.

00	FIRST ISSUE	DA	NK	CF	01/09/2020
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<b>EIRGRID</b> EirGrid plc The Oval, 160 Shelbourne Road, Ballsbridge, Dublin 4, Ireland Telephone: +353 1 877 1700 Fax: +353 1 661 5375 Email: info@eirgrid.com Web: www.eirgrid.com					
PROJECT GENERIC DESIGN STANDARD 220kV GIS STATION DRAWING TITLE 220kV GIS STATION LAYOUT PLAN VIEW - 8 BAY STATION					
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No of Sheets	2	SIZE	A1	SCALE	NTS
DRAWING NUMBER	XDN-LAY-ELV-STND-F-005	SHEET	002	REV	00