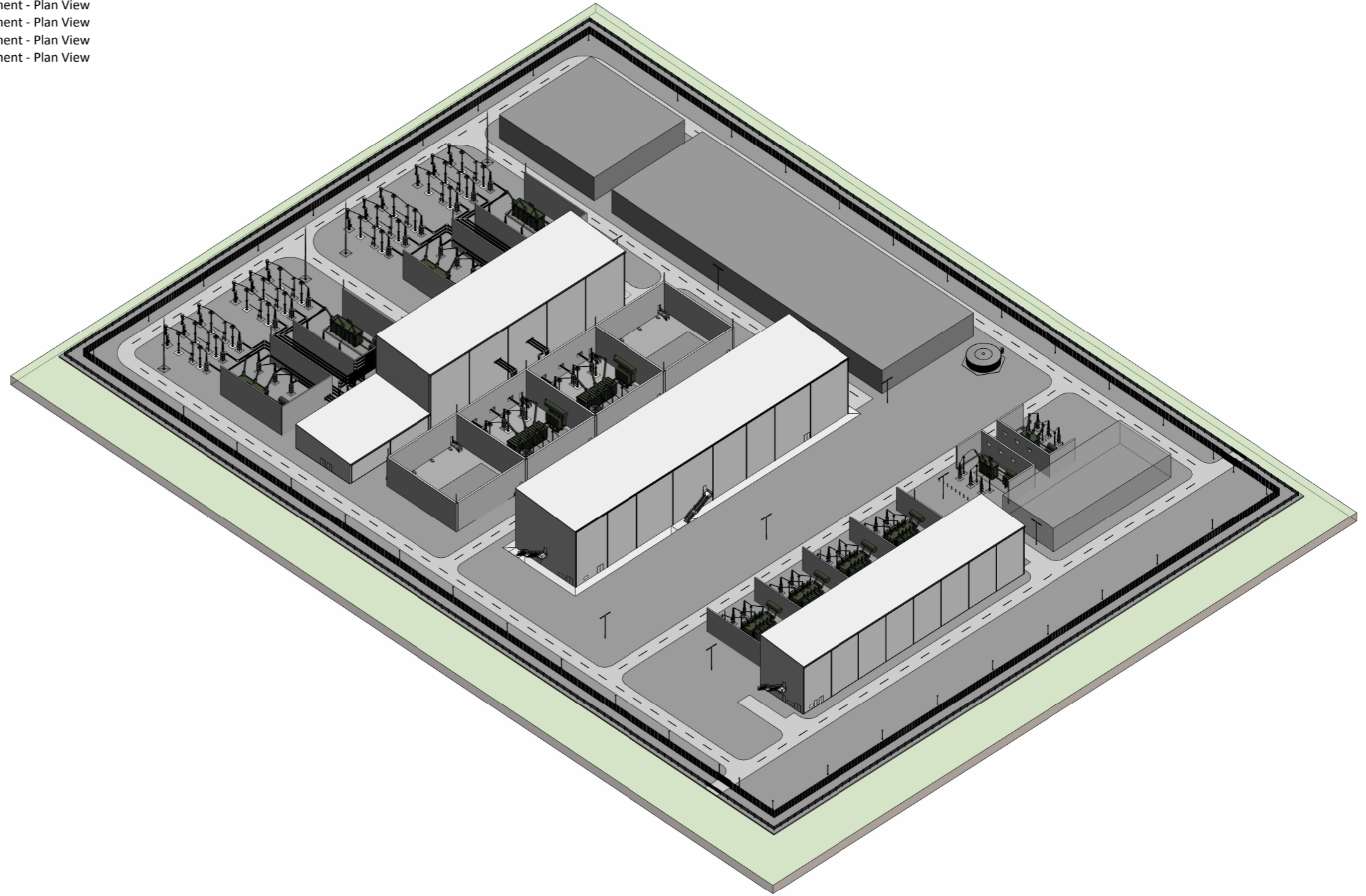


1 2 3 4 5 6 7 8

A
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F


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001	Cover Sheet
002	Overall Site Layout - Plan View
003	400 kV GIS Building and Associated Equipment - General Arrangement - Plan View
004	400 kV GIS Building and Associated Equipment - General Arrangement - Plan View
005	220 kV GIS Building and Associated Equipment - General Arrangement - Plan View
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007	110 kV GIS Building 16-Bay - Plan, Elevation, End View
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009	400 kV GIS Building 8-Bay - Plan, Elevation, End View
010	Site Elevations A, B and C
011	Site Elevation D and Sections E-E, F-F

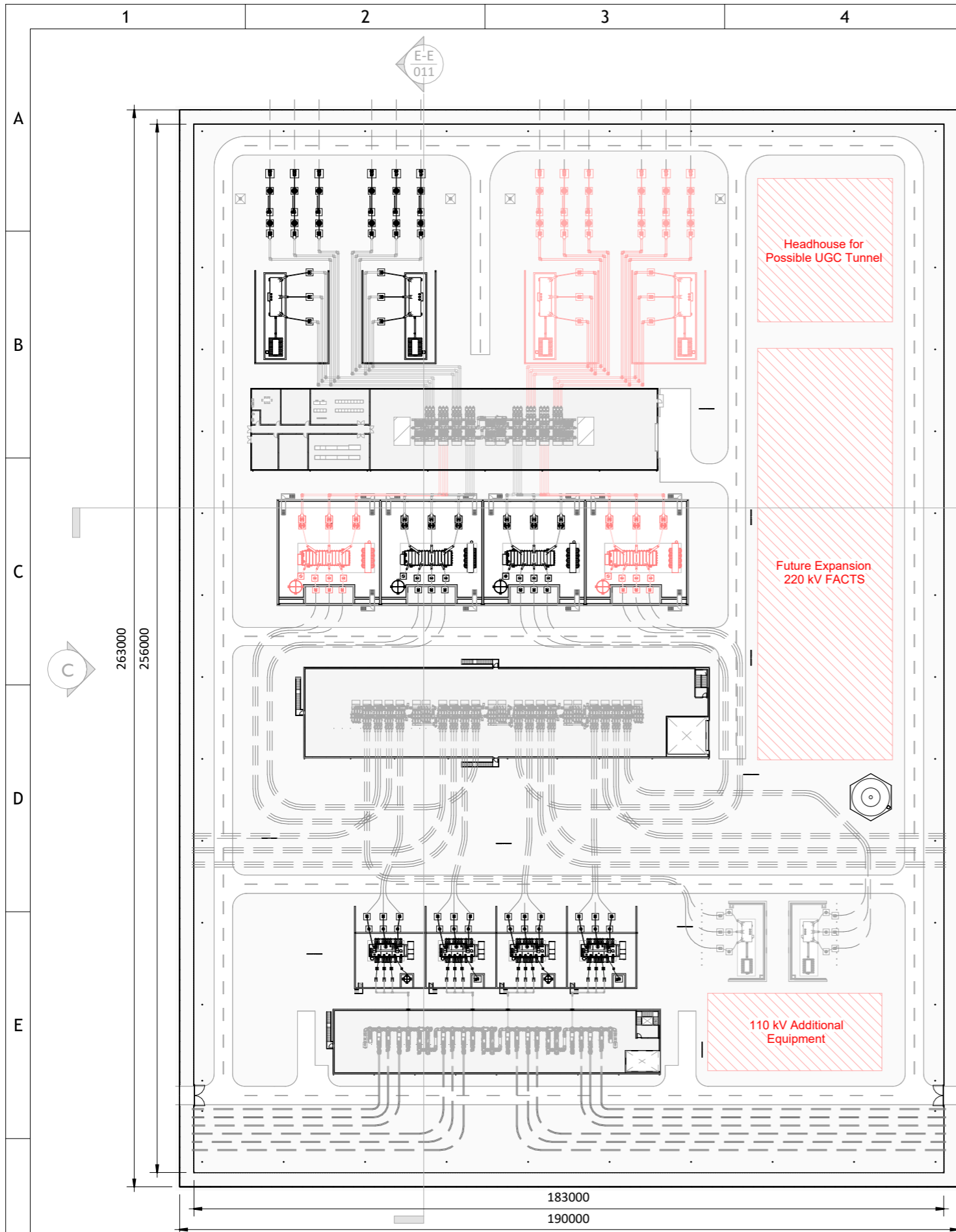


The intent of this layout is to allow space provision for planning. An allowance has been made for buildings sizes to accommodate different OEM's switchgear. It is expected that the building be optimized for the proposed switchgear to be installed.

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 EirGrid plc The Oval, 160 Shelbourne Road, Ballsbridge, Dublin 4, Ireland Telephone: +353 1 677 1700 Fax: +353 1 661 5375 Email: info@eirgrid.com Web: www.eirgrid.com	PROJECT 400-8/220-16/110-16 Standard Layout	
	DRAWING TITLE Cover Sheet	
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		SIZE A3
		SCALE 1 : 50
		DRAWING NUMBER XDN-LAY-STND-L-100
		SHEET 001
		REV 00

00	First Issue	TLI	N. Cowap	ESB DD D. Guistini N. McMahon	R. Barandika	N. Cowap	21/04/2026
REV	DESC	DRAWN	ORIGINATED	REVIEWED	CHECKED	APPROVED	DATE



- NOTE 1: THIS IS A CONCEPTUAL DESIGN FOR GUIDANCE ONLY. ALL DIMENSIONS AND REFERENCES GIVEN ARE INDICATIVE ONLY. LAYOUT TO BE FURTHER OPTIMISED DURING DETAILED DESIGN PENDING SPECIFIC EQUIPMENT SUPPLIER AND SITE DETAILS.
- NOTE 2: VEHICULAR ACCESS TO ALL HV PLANT SHALL BE PERMITTED WITHOUT THE NEED FOR UNNECESSARY PROXIMITY OUTAGES. CONSIDERATION OF LV CABLE TRENCH LAYOUTS AND TRAFFIC-BEARING TRENCH COVERS SHALL BE CONSIDERED DURING DETAILED DESIGN.
- NOTE 3: GIS HALLS / BUILDING LAYOUTS TO BE DESIGNED FOR SF6 FREE SWITCHGEAR. GIS HALLS HAVE BEEN INCREASED BY 20% TO ACCOMMODATE THE LARGER SF6 FREE SWITCHGEAR. 16 BAY 220 kV AND 110 kV GIS HALLS HAS BEEN INCREASED A FURTHER 5 M TO ACCOUNT FOR ADDITIONAL SWITCHGEAR BUFFER LENGTHS.
- NOTE 4: LIGHTNING MAST, LV TRENCH DUCT ROUTES, MARSHALLING/INTERFACE CABINETS AND LIGHTING FIXTURES SHALL BE CONSIDERED DURING DETAIL DESIGN.
- NOTE 5: REFER TO THE AUXILIARY SUPPLY FUNCTIONAL SPECIFICATION XDS-GFS-008-001 FOR LV POWER SUPPLY REQUIREMENTS. THE SECONDARY MAINS LV SUPPLY IS TO BE PROVIDED FROM THE LOCAL MV DISTRIBUTION NETWORK. THIS CAN BE VIA A POLE MOUNTED TRANSFORMER LOCATED OUTSIDE THE PALISADE FENCE OR VIA A GROUND MOUNTED TRANSFORMER IN A KIOSK LOCATED INSIDE THE PALISADE FENCE. THE PRECISE LOCATION OF THE POLE MOUNTED TRANSFORMER AND THE GROUND MOUNTED TRANSFORMER, AS THE CASE MAY BE, ARE SITE SPECIFIC AND WILL BE BY AGREEMENT WITH EIRGRID.
- NOTE 6: A DETAILED ARRANGEMENT SHALL CONSIDER PROXIMITY OF THE PROPERTY BOUNDARY FENCE TO THE PALISADE FENCE, ENSURING THAT IT CANNOT BE USED AS A CLIMBING AID TO SCALE THE PALISADE FENCE. ARRANGEMENT SHALL BE SITE SPECIFIC AND SHALL BE AGREED WITH EIRGRID DURING THE DETAILED DESIGN PHASE.
- NOTE 7: DUCTING AND SPACE PROVISION TO BE INCLUDED FOR 2 FUTURE FREESTANDING ELECTRIC VEHICLE CHARGING POINTS.
- NOTE 8: REMOVABLE BOLLARDS/CRASH BARRIER TO PROTECT CABLE SEALING ENDS FROM VEHICLES.
- NOTE 9: SUPPORT STEELWORK / CONCRETE STRUCTURAL CHECKS TO BE PERFORMED IN DETAILED DESIGN FOR CHOSEN SWITCHGEAR SPECIFICATIONS
- NOTE 10: EXTERNAL GIB FLANGES SHALL REQUIRE ADDITIONAL HOODS OR COVERS TO PROTECT FROM WEATHERING AND THE DESIGN SHOULD ALLOW FOR SUCH SPACE IF REQUIRED.
- NOTE 11: DESIGN OF GIB DUCTING SHOULD AIM TO MINIMISE THE OVERALL SYSTEM VOLUME AND NUMBER OF CONNECTIONS.
- NOTE 12: EIRGRID 400 kV STANDARD GIS BUILDING TO BE SINGLE STORY WITH NO CABLE BASEMENT.
- NOTE 13: SUBSTATION EMERGENCY GENERATOR AND BATTERY ROOM ONLY REQUIRED IN ONE GIS BUILDING (110 kV BUILDING). GENERATOR EXHAUST COWL TO BE POSITIONED ON OPPOSITE WALL TO ANY BATTERY ROOM VENTILATION
- NOTE 14: CABLE RATINGS STUDIES WILL BE REQUIRED TO PROVE ALL TRANSFORMER CONNECTION CIRCUITS ACHIEVE THEIR APPROPRIATE RATINGS.
- NOTE 15: SUBSTATION LAYOUT TO ENSURE THERE IS ADEQUATE CLEARANCE BETWEEN ANY GIB, SUPPORT STEELWORK, BUILDING EXTERIORS AND ADJACENT OUTDOOR EQUIPMENT TO ALLOW ACCESS FOR MAINTENANCE PERSONNEL / MEWP.
- NOTE 16: SINGLE SLOPED ROOFS (MINIMUM 1 IN 6 SLOPE) TO BE UTILISED ON ALL GIS BUILDINGS TO AVOID WATER DOWNPIPES ON BOTH SIDES
- NOTE 17: NO PARAPETS ALLOWED ON BUILDING ROOFS
- NOTE 18: THE NEUTRAL EARTHING OF THE 110 kV SIDE OF A 220/110 kV TRANSFORMER SHOULD IN ALL CASES HAVE THE SPACE PROVISION FOR THE INSTALLATION OF NEUTRAL EARTHING REACTORS. THE SCOPE OF THE DEVELOPMENT WILL DETAIL WHAT IS INITIALLY REQUIRED.
- NOTE 19: REQUIREMENT FOR TRANSFORMER NEUTRAL EARTH REACTORS ON 220/110 kV TO BE CONFIRMED BASED ON PROJECT SPECIFIC REQUIREMENTS.
- NOTE 20: ALL REINFORCED CONCRETE ELEMENTS AND OTHER PRINCIPLE STRUCTURAL ELEMENTS WILL BE DESIGNED FOR A 50-YEAR DESIGN LIFE TO MINIMISE POTENTIAL REPAIR MAINTENANCE DURING THE LIFE SPAN OF THE SUBSTATION WORKS.
- NOTE 21: ALL STRUCTURAL STEEL IS TO BE HOT DIPPED GALVANISED IN LINE WITH ESB/EIRGRID SPECIFICATIONS TO HELP MINIMISE MAINTENANCE INTERVENTIONS DURING THE LIFE SPAN OF THE SUBSTATION WORKS.
- NOTE 22: NOISE STUDIES TO BE PERFORMED FOR ONSITE CONDITIONS. TO CURB NOISE EMISSIONS THE TRANSFORMER BUND DESIGN INCORPORATES FIREWALLS ON THREE SIDES WITH OPTION FOR FOURTH REMOVABLE WALL PANEL.
- NOTE 23: DETAILED DESIGN TO REVIEW IF NOISE ISOLATION BETWEEN TRANSFORMER AND GROUND TO PREVENT BASS FREQUENCIES ENTERING THE GROUND AND ADJACENT DWELLINGS IS REQUIRED
- NOTE 24: BESPOKE EARTHING DESIGN TO BE PERFORMED IN DETAILED DESIGN FOR SPECIFIC PROJECT SITE / GROUND CONDITIONS.
- NOTE 25: DETAILED DESIGN TO MAKE PROVISION FOR SAFE HANDLING OF ANY HEAVY EQUIPMENT INTO THE CABLE BASEMENT OR GIS HALLS.
- NOTE 26: SEPARATION DISTANCES IN ACCORDANCE WITH IEC 61936-1 TO BE MAINTAINED BETWEEN HV EQUIPMENT / PHASES, TRANSFORMERS AND BETWEEN TRANSFORMERS AND BUILDINGS.
- NOTE 27: GROUND INVESTIGATION SURVEYS TO BE PERFORMED ONSITE TO INFORM THE DRAINAGE DESIGN.
- NOTE 28: STANDARDISED LAYOUT TO INCLUDE A DEDICATED WATER STORAGE TANK (WITH MINIMUM 45,000 LITRES CAPACITY PER GIS BUILDING WITH FOOTPRINT OVER 1,000 M²). STORAGE WATER TANK REQUIREMENT MAY BE REMOVED IF A LOCAL FIRE HYDRANT OR OPEN WATER SUPPLY IS AVAILABLE (I.E. ADJACENT RIVER, STREAM OR RETENTION POND.)
- NOTE 29: TRANSFORMER SHORT CIRCUIT CURRENT TO BE DETERMINED DURING DETAILED DESIGN AND NEUTRAL EARTH RESISTORS / REACTORS INCORPORATED IF REQUIRED.
- NOTE 30: SWEEP PATH ANALYSIS TO BE PERFORMED FOR SUBSTATION SITE ACCESS ROAD/S AND INTERNAL ROADS TO CONFIRM LAYOUT IS FIT FOR PURPOSE FOR ALL ABNORMAL AND NORMAL EQUIPMENT MOVEMENTS ONSITE.
- NOTE 31: ADEQUATE SPACE AND CLEARANCES TO BE ALLOWED WITHIN GIS BUILDINGS TO ALLOW FOR GIS GAS REFILLING CART TO BE MOVED AND OPERATED.

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PROJECT
400-8/220-16/110-16
Standard Layout

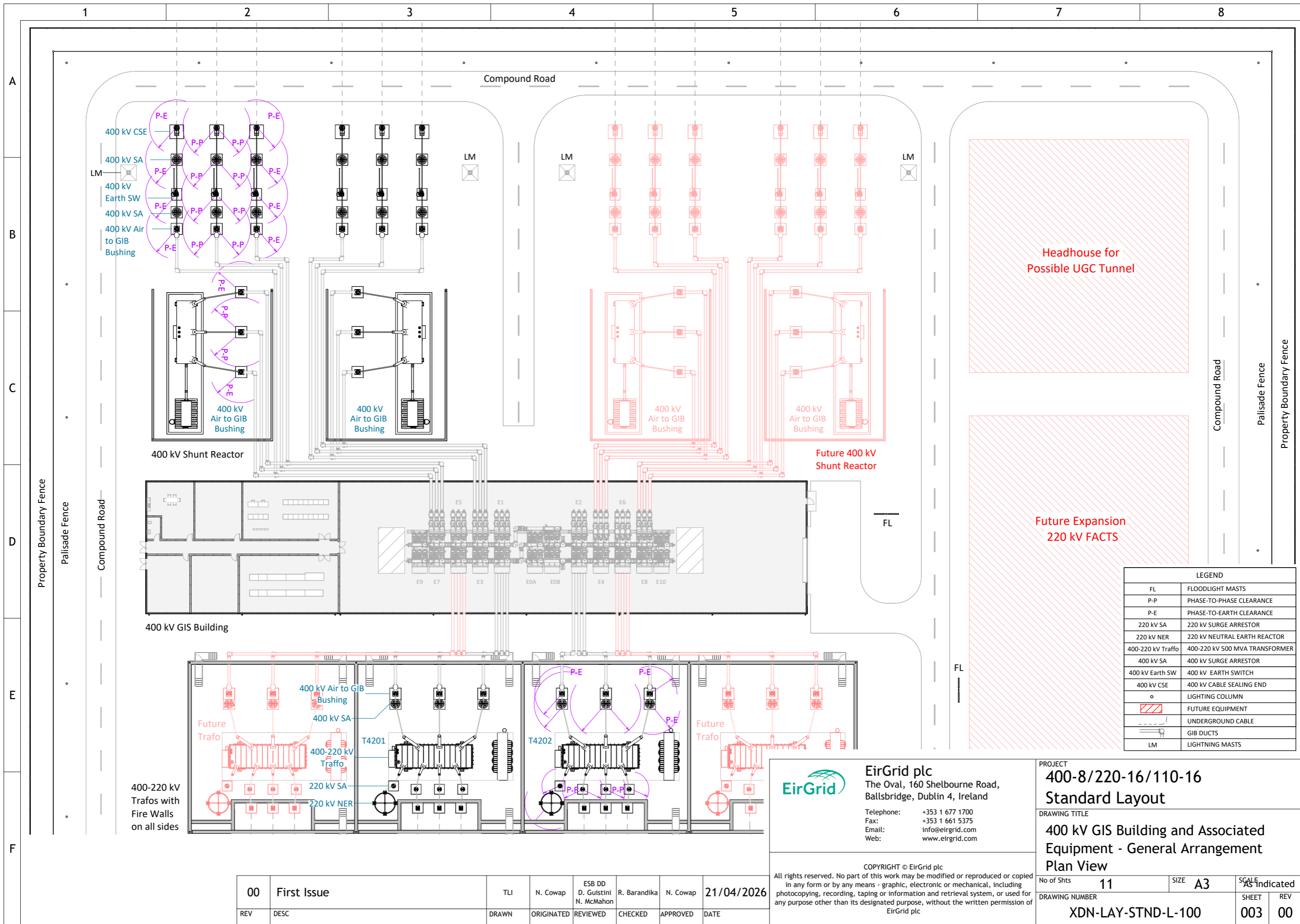
DRAWING TITLE
Overall Site Layout
Plan View

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No of Shts	11	SIZE	A3	SCALE	1 : 1200
DRAWING NUMBER	XDN-LAY-STND-L-100			SHEET	002
				REV	00

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LEGEND	
FL	FLOODLIGHT MASTS
P-P	PHASE-TO-PHASE CLEARANCE
P-E	PHASE-TO-EARTH CLEARANCE
220 kV SA	220 kV SURGE ARRESTOR
220 kV NER	220 kV NEUTRAL EARTH REACTOR
400-220 kV Trafo	400-220 kV 500 MVA TRANSFORMER
400 kV SA	400 kV SURGE ARRESTOR
400 kV Earth SW	400 kV EARTH SWITCH
400 kV CSE	400 kV CABLE SEALING END
o	LIGHTING COLUMN
▨	FUTURE EQUIPMENT
---	UNDERGROUND CABLE
□	GIB DUCTS
LM	LIGHTNING MASTS

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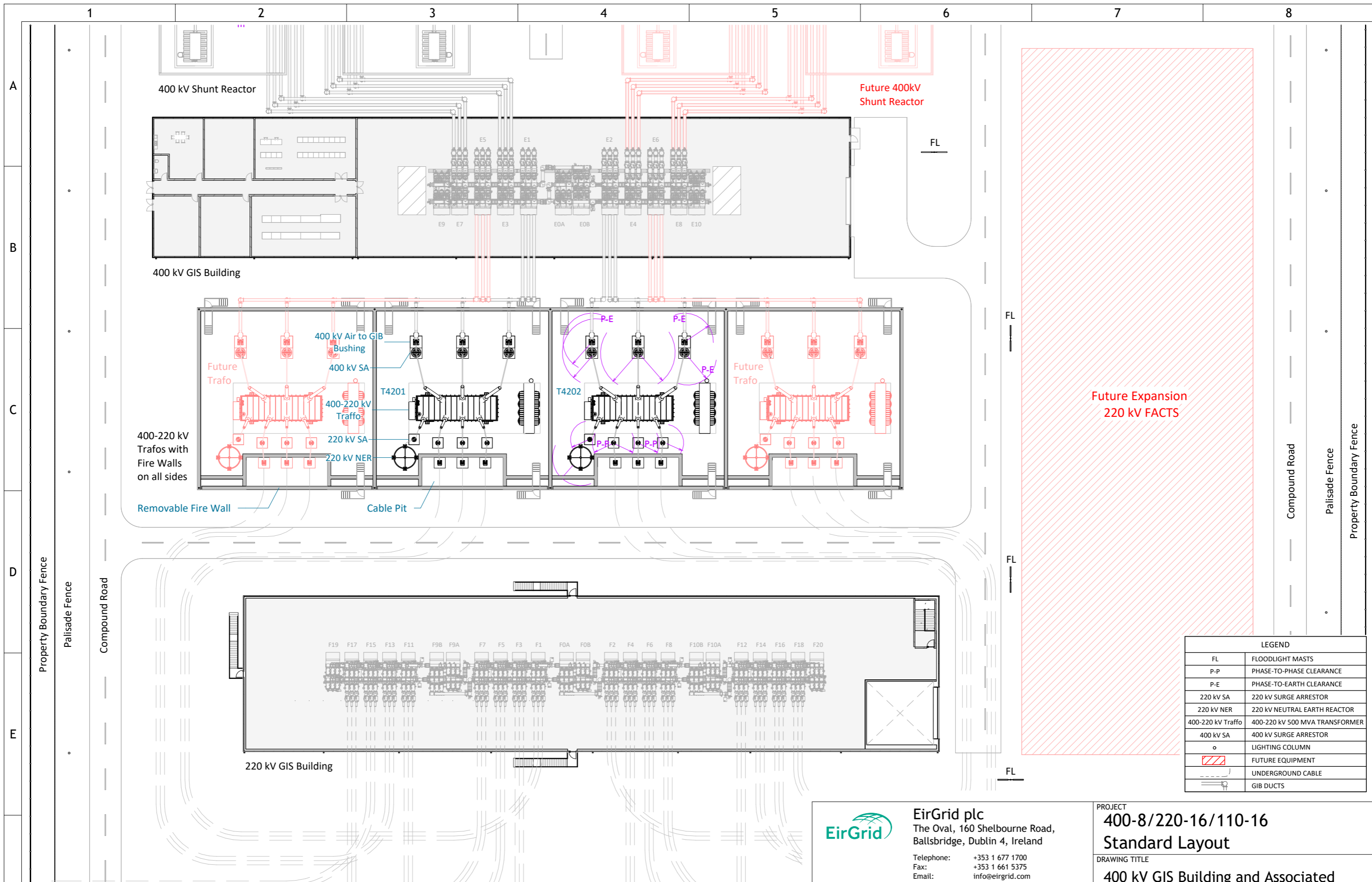
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PROJECT		400-8/220-16/110-16	
DRAWING TITLE		Standard Layout	
400 kV GIS Building and Associated Equipment - General Arrangement Plan View			
No of Shts	11	SIZE	A3
DRAWING NUMBER	XDN-LAY-STND-L-100	SCALE	AS INDICATED
SHEET	003	REV	00

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LEGEND	
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P-P	PHASE-TO-PHASE CLEARANCE
P-E	PHASE-TO-EARTH CLEARANCE
220 kV SA	220 kV SURGE ARRESTOR
220 kV NER	220 kV NEUTRAL EARTH REACTOR
400-220 kV Trafo	400-220 kV 500 MVA TRANSFORMER
400 kV SA	400 kV SURGE ARRESTOR
○	LIGHTING COLUMN
	FUTURE EQUIPMENT
	UNDERGROUND CABLE
	GIB DUCTS

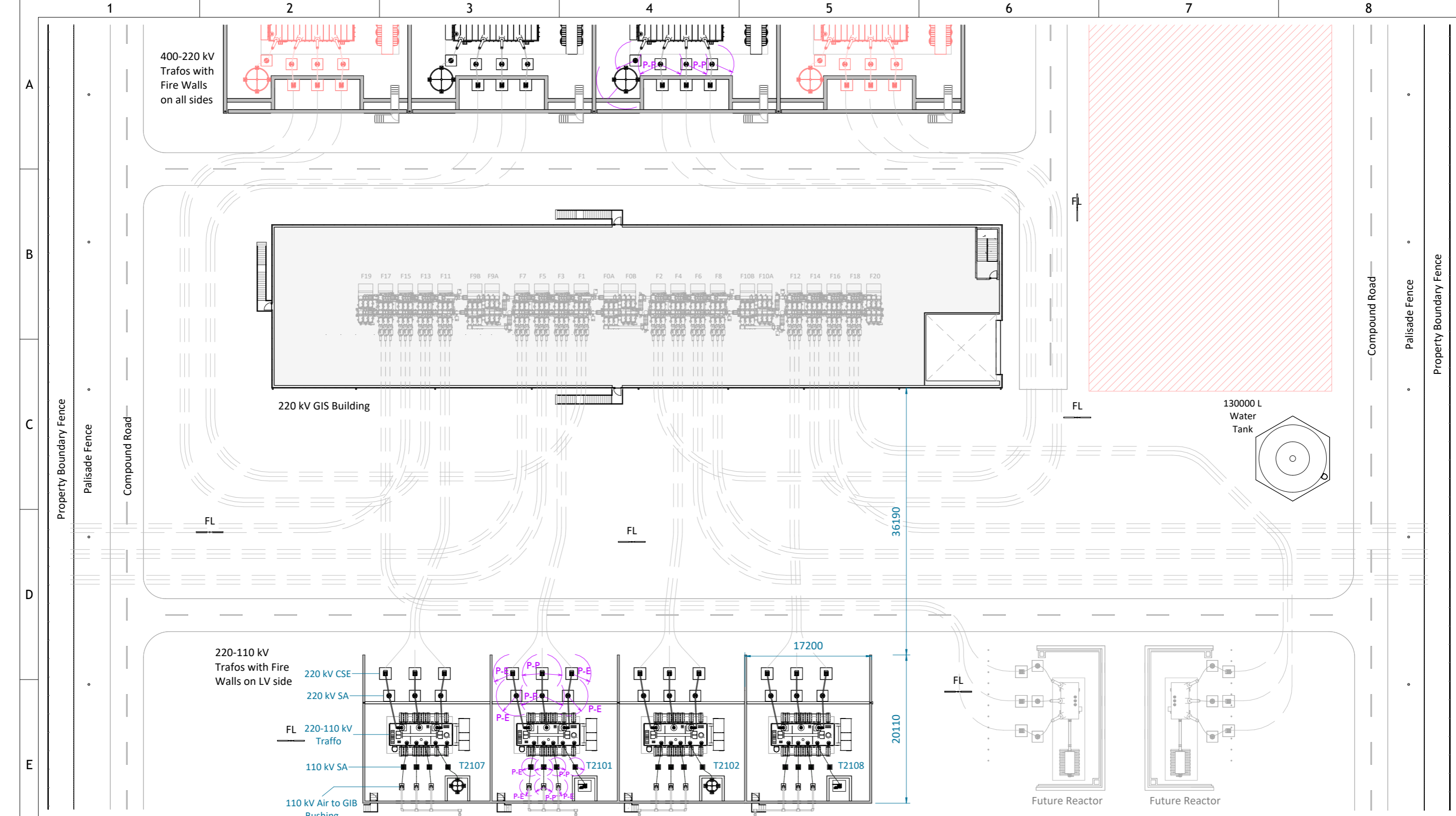
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PROJECT		400-8/220-16/110-16	
DRAWING TITLE		Standard Layout	
400 kV GIS Building and Associated Equipment - General Arrangement Plan View		No of Shts	11
DRAWING NUMBER		SIZE	A3
XDN-LAY-STND-L-100		SCALE	As Indicated
SHEET	004	REV	00

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400-220 kV
Trafos with
Fire Walls
on all sides

220 kV GIS Building

130000 L
Water
Tank

220-110 kV
Trafos with Fire
Walls on LV side

220 kV CSE
220 kV SA
220-110 kV
Traffo
110 kV SA
110 kV Air to GIB
Bushing

Future Reactor

Future Reactor

LEGEND	
FL	FLOODLIGHT MASTS
P-P	PHASE-TO-PHASE CLEARANCE
P-E	PHASE-TO-EARTH CLEARANCE
110 kV SA	110 kV SURGE ARRESTOR
110 kV NER	110 kV NEUTRAL EARTH REACTOR
110 kV NES	110 kV NEUTRAL EARTH SWITCH
220 kV CSE	220 kV CABLE SEALING END
220-110 kV Traffo	220-110 kV 250 MVA TRANSFORMER
220 kV SA	220 kV SURGE ARRESTOR
○	LIGHTING COLUMN
▨	FUTURE EQUIPMENT
---	UNDERGROUND CABLE
—	GIB DUCTS

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PROJECT
400-8/220-16/110-16

Standard Layout

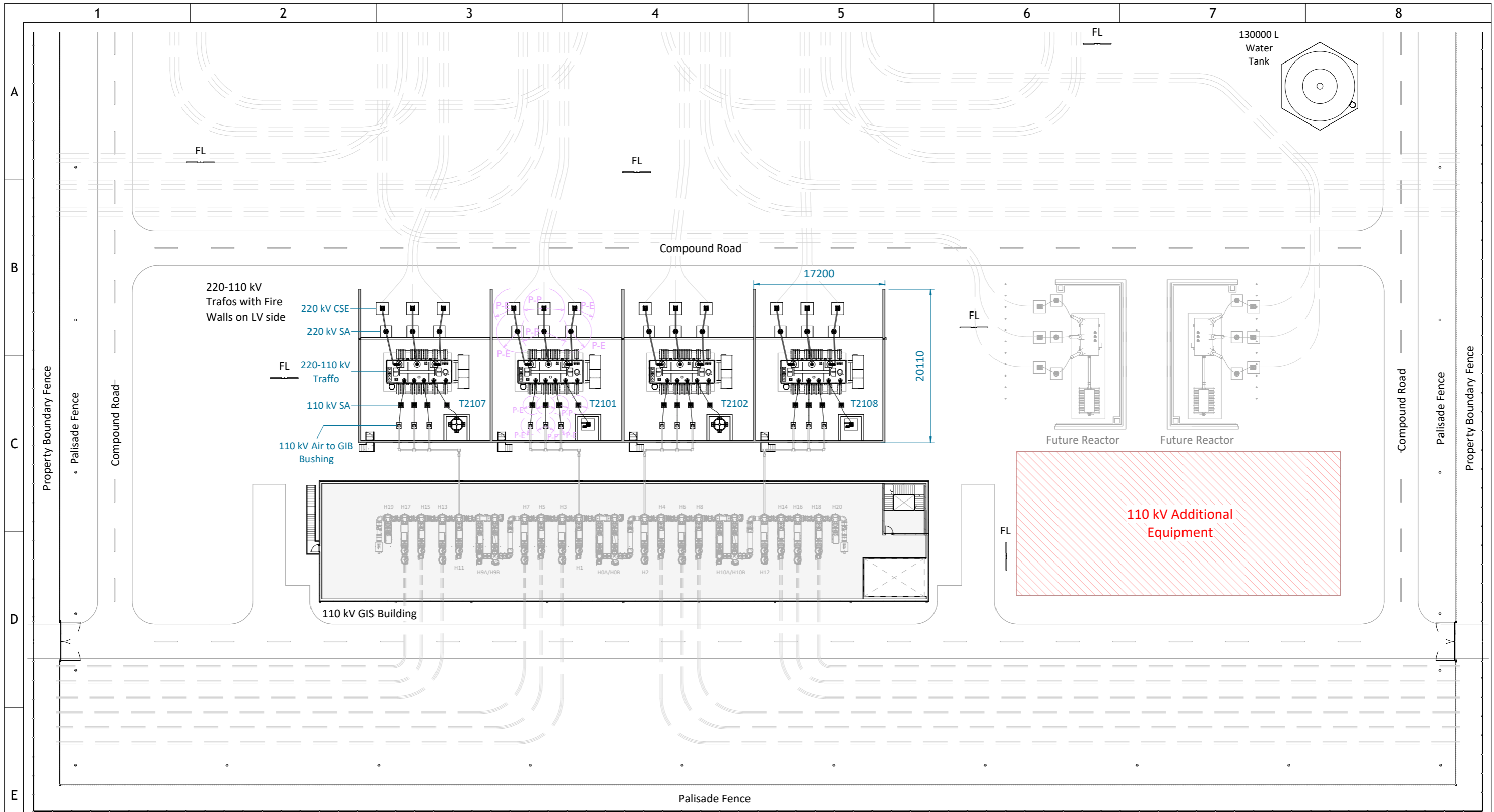
DRAWING TITLE
**220 kV GIS Building and Associated
Equipment - General Arrangement
Plan View**

No of Shts **11** SIZE **A3** SCALE **As Indicated**

DRAWING NUMBER
XDN-LAY-STND-L-100

SHEET **005** REV **00**

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LEGEND	
FL	FLOODLIGHT MASTS
P-P	PHASE-TO-PHASE CLEARANCE
P-E	PHASE-TO-EARTH CLEARANCE
110 kV SA	110 kV SURGE ARRESTOR
110 kV NER	110 kV NEUTRAL EARTH REACTOR
110 kV NES	110 kV NEUTRAL EARTH SWITCH
220 kV CSE	220 kV CABLE SEALING END
220-110 kV Traffo	220-110 kV 250 MVA TRANSFORMER
220 kV SA	220 kV SURGE ARRESTOR
○	LIGHTING COLUMN
▨	FUTURE EQUIPMENT
---	UNDERGROUND CABLE
—	GIB DUCTS

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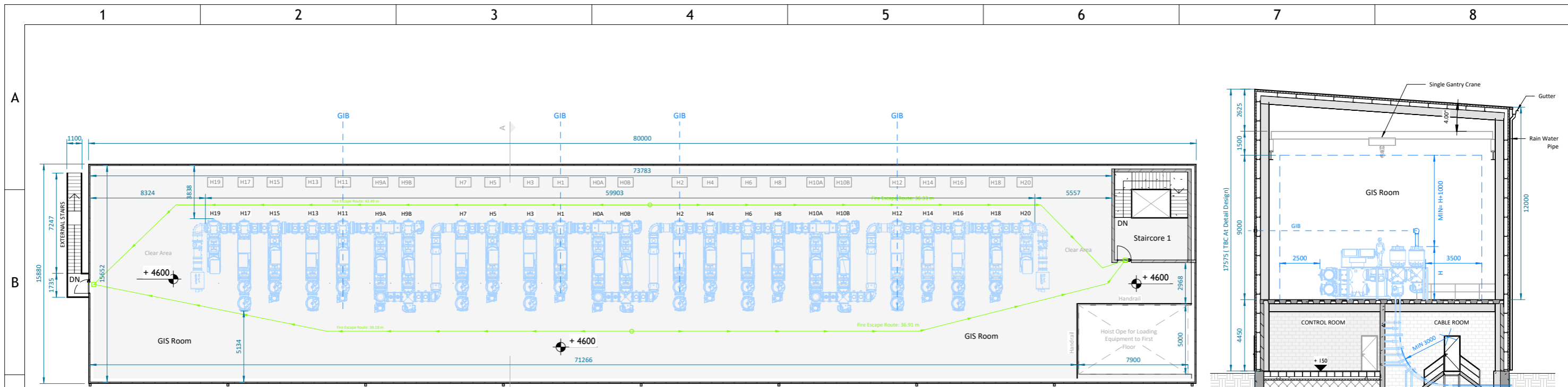
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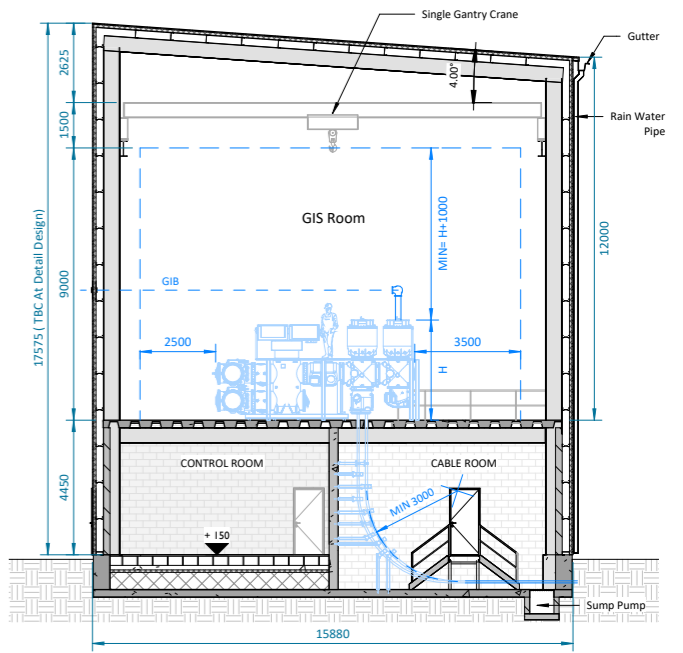
PROJECT		400-8/220-16/110-16	
DRAWING TITLE		Standard Layout	
DRAWING NUMBER		XDN-LAY-STND-L-100	
No of Shts	11	SIZE	A3
SCALE	As Indicated	SHEET	006
REV	00		

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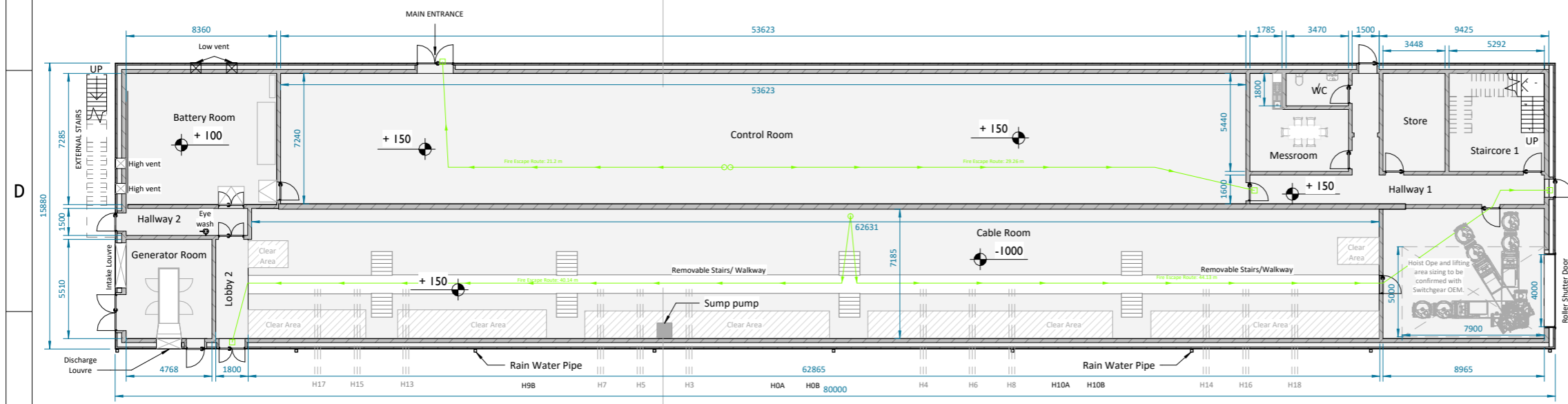
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PLAN - FIRST FLOOR NTS



SECTION A-A Scale 1:250



PLAN - GROUND FLOOR NTS

- SWITCHGEAR
- NOTE 1: 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 SHALL BE NOTED AT THE DETAILED DESIGN PHASE, WITH LV CABLING ROUTED ACCORDINGLY.
- NOTE 2: SPECIFIC SWITCHGEAR FLOOR REQUIREMENTS ARE TO SUIT THE MANUFACTURER'S SPECIFICATIONS AND ARE TO BE EVALUATED AT THE DETAILED DESIGN STAGE.
- NOTE 3: STANDING CLEARANCE SHOWN FOR INFORMATIONAL PURPOSES ONLY. INTEGRATED LCC OPTION ALSO ALLOWABLE.
- NOTE 4: ADDITIONAL WORK MAY BE REQUIRED IF GROUND MOUNTED LCC'S ARE INSTALLED.
- NOTE 5: HIGH FREQUENCY KEYS TO BE LAID WITHIN THE FLOOR AND SUIT SWITCHGEAR MANUFACTURER REQUIREMENTS FOR FURTHER DETAILS ON EIRGRID EARTHING REQUIREMENTS. REFER TO EIRGRID'S FUNCTIONAL SPECIFICATION I005-GFS-12-001.
- NOTE 6: FOR CLARITY, GIS ACCESS PLATFORMS ARE NOT SHOWN AND SHALL BE EVALUATED AT THE DETAILED DESIGN PHASE.
- NOTE 7: BUILDING DESIGN TO BE OPTIMISED WHEN SWITCHGEAR TYPE IS KNOWN.
- NOTE 8: SPACE WITHIN THE GIS HALL TO BE RESERVED FOR A 12" BULK CABINET FOR CONDITION MONITORING EQUIPMENT.
- NOTE 9: THE GIS SWITCHGEAR DESIGN SHALL ACCOUNT FOR A MAXIMUM 60 MINUTE EVACUATION TIME OF GAS CHAMBERS. THE FINAL DESIGN OF BUILDING AND EQUIPMENT SHALL INCLUDE FOR ADDITIONAL "BUFFER" COMPARTMENTS WHICH MAY BE REQUIRED TO REDUCE CHAMBER SIZES TO MEET THIS REQUIREMENT.
- CABLE INSTALLATION
- NOTE 10: THE MAXIMUM LENGTH OF A CABLE THAT CAN BE PUSHED INTO THE CABLE ROOM IS 100m ROUTE LENGTH.
- NOTE 11: 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. SPARE OR UNNEEDED OPENINGS TO BE SEALED OR REMOVED TO LIMIT POSSIBILITY OF WATER INGRESS.
- NOTE 12: 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 ADVISE.
- NOTE 13: AN OPENING MUST BE PROVIDED FOR EACH CIRCUIT TO ALLOW FOR SUITABLE CABLE PULLING DUCTS.
- NOTE 14: CABLE SUPPORT STEELWORK TO BE PROVIDED BY THE CONTRACTOR. WALL TO BE CAPABLE OF SUPPORTING HV CABLES, RING CT'S ETC.
- NOTE 15: AN OPENING SHALL BE PROVIDED UNDER THE STAIRS/WALKWAY FOR CABLE PULLING.
- NOTE 16: SUITABLE ANCHOR POINTS SHALL BE INSTALLED FOR CABLE PULLING AS REQUIRED.
- NOTE 17: INDICATIVE MODULAR/RELOCATABLE WALKWAY BRIDGES HAVE BEEN SHOWN WITHIN THE CABLE PIT AND ARE INTENDED TO PROVIDE AN UNIMPACTED 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 18: CABLE PIT ENTRY LOCATIONS ARE INDICATIVE ONLY. DUCTING SHALL BE FACILITATED TO SUIT THE ULTIMATE DEVELOPMENT OF THE STATION TO REDUCE THE POSSIBILITY OF WATER INGRESS.
- NOTE 19: LINK ASSESSMENT TO BE CARRIED OUT AT DETAILED DESIGN STAGE TO EVALUATE THE REQUIREMENTS FOR FORCED VENTILATION WITHIN CABLE PIT.
- NOTE 20: LINK ROSES LOCATED IN THE CABLE BASEMENTS SHALL BE READILY ACCESSIBLE FOR OPERATIONS STAFF FOR MAINTENANCE PURPOSES WITH SAFETY SIGNAGE AS OUTLINED IN THE EIRGRID CABLE SPECIFICATIONS.
- HALLWAY
- NOTE 21: FIRE AND INTRUDER ALARM PANELS TO BE LOCATED IN THE VICINITY OF THE MAIN ENTRANCE.
- RELAY ROOM
- NOTE 22: RELAY ROOM MUST BE SIZED APPROPRIATELY TO ALLOW FOR ULTIMATE DEVELOPMENT OF STATION.
- NOTE 23: SPACE SHOULD BE PROVIDED FOR FUTURE TELECOMS AND PROTECTION PANELS.
- NOTE 24: A TELECOMS EARTH BAR SHALL BE INSTALLED IN CLOSE PROXIMITY TO THE DCU EARTH.
- NOTE 25: NO ELECTRICAL EQUIPMENT (INCL. BATTERIES) SHALL BE INSTALLED DIRECTLY IN FRONT OF VENTS.
- NOTE 26: RELAY ROOM FLOOR CONSTRUCTION TO SUIT ROOM REQUIREMENTS.
- NOTE 27: TELECOMMUNICATION DUCTS SHALL BE ROUTED DIRECTLY TO THE RELAY ROOM AS PER ESB TELECOMS REQUIREMENTS.
- NOTE 28: INDICATIVE RELAY ROOM CABLE ACCESS SHOWN.
- ROOF
- NOTE 29: ROOF ACCESS IS TO BE EVALUATED AT THE DETAILED DESIGN STAGE BY CONDUCTING A RISK ASSESSMENT.
- NOTE 30: ROOF TO BE SINGLE PITCH TYPE WITHOUT PARAPETS.
- FIRE ESCAPES
- NOTE 31: ESCAPE DISTANCE AS PER BUILDING REGULATION TECHNICAL GUIDANCE DOCUMENT B (TSD-B)
- NOTE 32: ESCAPE DISTANCE TO BE IN LINE WITH BUILDING REGULATIONS TECHNICAL GUIDANCE DOCUMENT B (TSD-B) FIRE SAFETY - VOLUME 1 BUILDING OTHER THAN FLAT HOUSES.
- EQUIPMENT ACCESS AND HANDLING
- NOTE 33: EQUIPMENT ACCESS DOOR TO BE SIZED SUCH THAT A STANDARD ESB TRUCK CAN BE REVERSED IN THE HOST AREA (MIN 4000mm WIDTH) AND IN ACCORDANCE WITH GIS MANUFACTURER RECOMMENDATIONS TO ENSURE SAFE DELIVERY OF EQUIPMENT.
- NOTE 34: ROLLER SHUTTER DOOR EXTENDING TO CEILING LEVEL OF THE GROUND FLOOR OF THE GIS BUILDING.
- NOTE 35: 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 FLOOR OF THE BUILDING, IN LINE WITH THE REGULATIONS.
- NOTE 36: HOST OPS TO BE SIZED APPROPRIATELY TO FACILITATE LIFTING OF SWITCHGEAR ASSEMBLIES.
- NOTE 37: GIS HALL GANTRY CRANE SPECIFICATIONS TO BE CONFIRMED IN DETAILED DESIGN TO SUIT SWITCHGEAR COMPONENT WEIGHTS AND DIMENSIONS. BUILDING ENVELOPE TO BE DESIGNED ACCORDINGLY.
- NOTE 38: APPROPRIATE RISK ASSESSMENTS AND METHOD STATEMENTS ARE REQUIRED TO ENSURE SAFE HANDLING OF HEAVY EQUIPMENT AND PLANT IS INCORPORATED INTO FINAL DESIGN.
- BATTERY ROOM AND GENERATOR
- NOTE 39: MINIMUM CLEAR DISTANCE BETWEEN 220V BATTERY STANDS AND WALL/STRUCTURAL ELEMENTS IS 800mm. SCREENED VENTS TO HIGH LEVEL AND 2 CIVIL LEVELS ARE TO BE INSTALLED IN THE BATTERY ROOM AS PER ESB CLARE 2 ON ADJACENT EXTERNAL WALL AND LOCATED TO AVOID INTAKE OF GENERATOR EXHAUST FUMES. (NOTES TO BE CONFIRMED DEPENDING ON BATTERY TYPE.)
- NOTE 40: ADDITIONAL EXIT DOOR IN BATTERY ROOM REQUIREMENT TBC IN LINE WITH FIRE REGULATIONS.
- NOTE 41: ONLY SINGLE ROW 24V & 48V BATTERY STANDS MAY BE LOCATED AGAINST A WALL.
- NOTE 42: SMALLER GENERATOR ACCESS DOOR REQUIREMENT SUBJECT TO GENERATOR TYPE AND SPECIFIC ACCESS REQUIREMENTS.

- GENERAL
NOTE 1: THIS DRAWING IS PRODUCED FOR INFORMATION PURPOSES ONLY. ALL DIMENSIONS, REFERENCES (E.G. LIGHTING MAST LOCATIONS ETC.) GIVEN ARE INDICATIVE AND SHOULD NOT BE USED AS PART OF A DETAILED DESIGN.
NOTE 2: THIS IS AN INTERIM PLANNING APPLICATION DRAWING. DETAILED DESIGN IS REQUIRED PENDING CONFIRMATION OF SPECIFIC EQUIPMENT SUPPLIER AND SITE DETAILS.
NOTE 3: 110 kV BUILDING HAS BEEN SPECIFICALLY DESIGNED TO ACCOMMODATE 4 NO. TRANSFORMER BAYS (BROUKE CONNECTION), 6 NO. SECTIONALISING CIRCUIT BREAKERS, 2 NO. WIND COUPLERS, AND 12 NO. FEEDER BAYS (CABLE CONNECTION). THE FINAL BUILDING DESIGN SHALL MATCH THE APPROPRIATE SINGLE LINE DIAGRAM.
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 DETAILED DESIGN STAGE AND TAKE INTO ACCOUNT SPECIFIC EXISTING SITE GROUND CONDITIONS.
NOTE 7: THIS IS AN INTERIM PLANNING APPLICATION DRAWING. TO ENSURE PLANNING APPLICATIONS TAKE ACCOUNT OF THE WORK CASE SCENARIO THE INCREASED BUILDING SIZE REQUIRED TO CATER FOR SPASMS FREE SWITCHGEAR.
NOTE 8: FOR THE PURPOSE OF THIS DRAWING 500 FREE GIS IS SHOWN AS 20% LARGER THAN CURRENT 500 GIS USED ON RECENT EIRGRID PROJECTS. THE DESIGN IS A CONSERVATIVE ESTIMATE BASED ON THE INFORMATION AVAILABLE AT THE TIME. THE SITE LAYOUT AND BUILDING SIZE NEED TO BE OPTIMISED BASED ON THE SWITCHGEAR ORDERED.

- SWITCHGEAR
NOTE 9: (AS ILLUSTRATED ON DRAWING) THE SWITCHGEAR SHOWN ON THIS DRAWING IS INDICATIVE ONLY. DIMENSIONS OF THE OVERALL BUILDING SHALL BE DESIGNED TO SUIT MANUFACTURER SPECIFIC DIMENSIONS. ENVELOPE AROUND THE SWITCHGEAR SHALL BE WITH MANUFACTURER RECOMMENDATIONS FOR ON-GOING OPERATION, MAINTENANCE AND REPLACEMENT OF HV PLANT.
NOTE 10: REQUIREMENT FOR GIS OVERPRESSURE VENTS TO BE CONFIRMED BY GIS SUPPLIER.
NOTE 11: ALL OPES IN GIS ROOM FOR LV AND HV CABLES TO BE FIRE SEALED.
NOTE 12: (AS ILLUSTRATED ON DRAWING) MINIMUM CLEAR AREA ON BOTH SIDES OF THE GIS FOR THE HV TEST EQUIPMENT IS 3000mm. MINIMUM DISTANCE TO BE CONFIRMED WITH MANUFACTURER. ADDITIONAL SPACE FOR MAINTENANCE AND OPERATIONS MAY BE REQUIRED BASED ON ESB & OEM REQUIREMENTS.

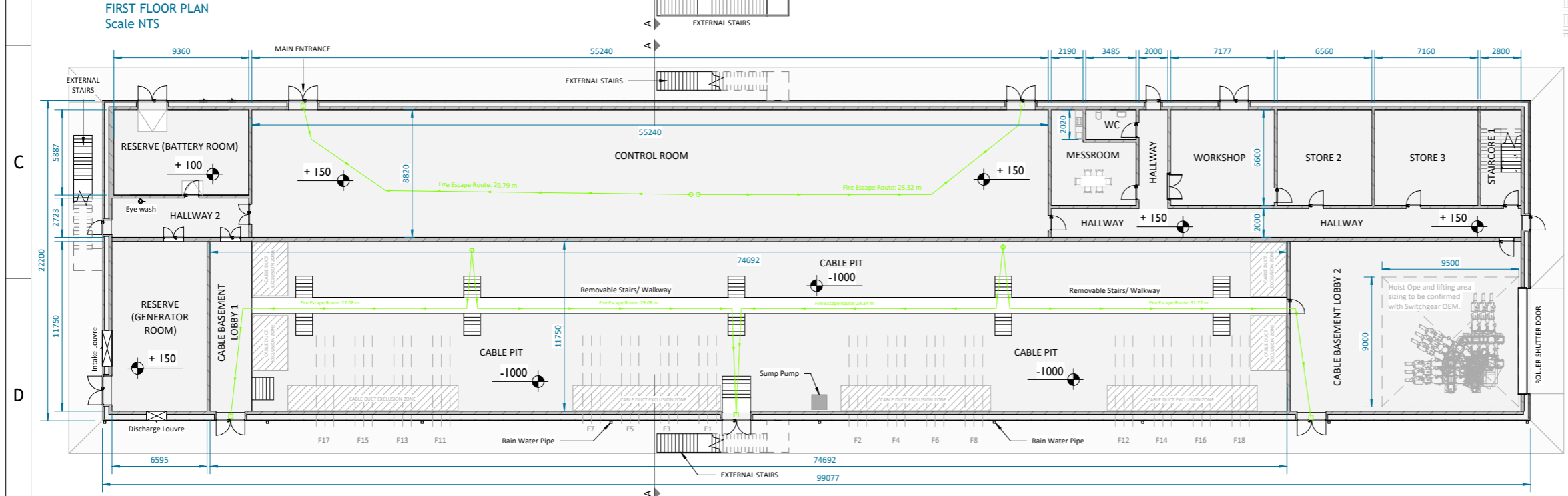
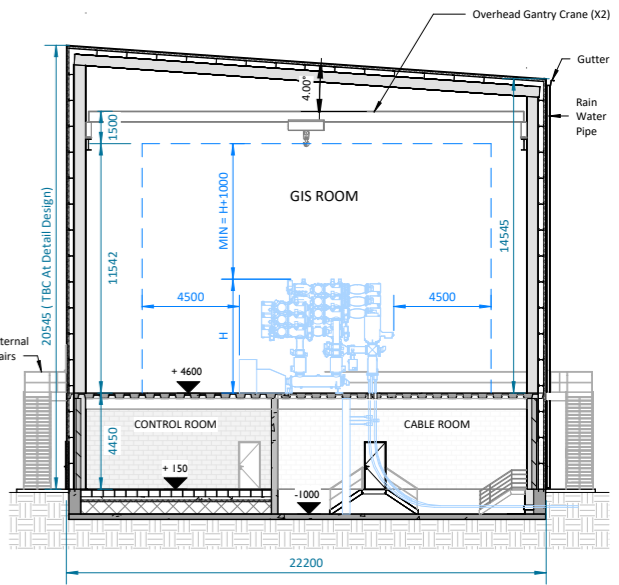
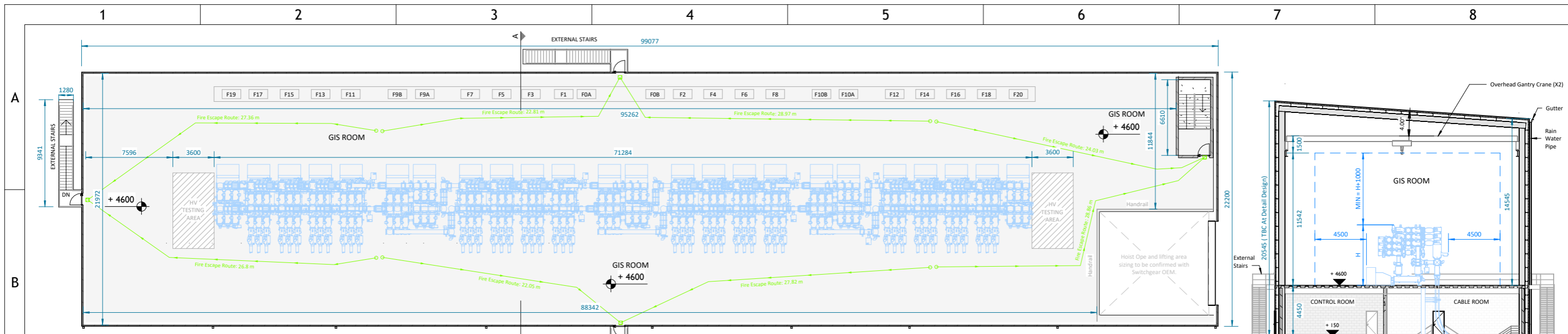
00	First Issue	TLI	N. Cowap	ESB DD D. Guistini N. McMahon	R. Barandika	N. Cowap	21/04/2026
REV	DESC	DRAWN	ORIGINATED	REVIEWED	CHECKED	APPROVED	DATE

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PROJECT		400-8/220-16/110-16	
DRAWING TITLE		Standard Layout	
DRAWING NUMBER		XDN-LAY-STND-L-100	
No of Shts	11	SIZE	A3
SCALE	As Indicated	SHEET	007
REV	00		



- GENERAL
 NOTE 1: THIS DRAWING IS PRODUCED FOR INFORMATION PURPOSES ONLY. ALL DIMENSIONS, REFERENCES (EG. LIGHTNING MAST LOCATIONS ETC) GIVEN ARE INDICATIVE AND SHOULD NOT BE USED AS PART OF A DETAILED DESIGN OR AS A TENDER DOCUMENT.
 NOTE 2: THIS IS A CONCEPTUAL DESIGN. DETAILED DESIGN IS REQUIRED PENDING CONFIRMATION OF SPECIFIC EQUIPMENT SUPPLIER AND SITE DETAILS.
 NOTE 3: 220 kV BUILDING HAS BEEN SPECIFICALLY DESIGNED TO ACCOMMODATE 4 NO. TRANSFORMER BAYS (CABLE CONNECTION), 6 NO. SECTIONALISING CIRCUIT BREAKERS, 2 NO. WING COUPLERS, AND 12 NO. FEEDER BAYS (CABLE CONNECTION). THE FINAL BUILDING DESIGN SHALL MATCH THE APPROPRIATE SINGLE LINE DIAGRAM.
 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 ATX 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: THIS IS AN INTERIM PLANNING APPLICATION DRAWING. TO ENSURE PLANNING APPLICATIONS TAKE ACCOUNT OF THE WORST CASE SCENARIO FOR THE INCREASED BUILDING SIZE REQUIRED TO CATER FOR SF6-GAS FREE SWITCHGEAR.
 NOTE 8: FOR THE PURPOSE OF THIS DRAWING SF6 FREE GIS IS SHOWN AS 20% LARGER THAN CURRENT SF6 GIS USED ON RECENT EIRGRID PROJECTS. THE DESIGN IS A CONSERVATIVE ESTIMATE BASED ON THE INFORMATION AVAILABLE AT THE TIME. THE SITE LAYOUT AND BUILDING SIZE NEED TO BE OPTIMISED BASED ON THE SWITCHGEAR ORDERED.
- SWITCHGEAR
 NOTE 9: (AS ILLUSTRATED ON DRAWING) THE SWITCHGEAR SHOWN ON THIS DRAWING IS INDICATIVE ONLY. DIMENSIONS OF THE OVERALL BUILDING SHALL BE DESIGNED TO SUIT MANUFACTURER SPECIFIC DIMENSIONS. ENVELOPE AROUND THE SWITCHGEAR SHALL BE WITH MANUFACTURER RECOMMENDATIONS FOR ON-GOING OPERATION, MAINTENANCE AND REPLACEMENT OF HV PLANT.

NOTE 10: REQUIREMENT FOR GIS OVERPRESSURE VENTS TO BE CONFIRMED BY GIS SUPPLIER.
 NOTE 11: ALL OPENS IN GIS ROOM FOR LV AND HV CABLES TO BE FIRE SEALED.
 NOTE 12: (AS ILLUSTRATED ON DRAWING) MINIMUM CLEAR AREA ON BOTH SIDES OF THE GIS FOR THE HV TEST EQUIPMENT IS 3600 mm. MINIMUM DISTANCE TO BE CONFIRMED WITH MANUFACTURER. ADDITIONAL SPACE FOR MAINTENANCE AND OPERATIONS MAY BE REQUIRED BASED ON ESB & OEM REQUIREMENTS.
 NOTE 13: 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 DETAILED DESIGN PHASE, WITH LV CABLING ROUTED ACCORDINGLY.
 NOTE 14: SPECIFIC SWITCHROOM FLOOR REQUIREMENTS ARE TO SUIT THE MANUFACTURER'S SPECIFICATIONS AND ARE TO BE EVALUATED AT THE DETAILED DESIGN STAGE.
 NOTE 15: STANDALONE LCC SHOWN FOR INFORMATIONAL PURPOSES ONLY. INTEGRATED LCC OPTION ALSO ALLOWABLE.
 NOTE 16: ADDITIONAL WIDTH MAY BE REQUIRED IF GROUND MOUNTED LCC'S ARE INSTALLED.
 NOTE 17: HIGH FREQUENCY MESH IS TO BE LAID WITHIN THE GIS FLOOR AND SUIT SWITCHGEAR MANUFACTURER REQUIREMENTS. FOR FURTHER DETAILS ON EIRGRID EARTHING REQUIREMENTS, REFER TO EIRGRID'S FUNCTIONAL SPECIFICATION XDS-GIS-12-001.
 NOTE 18: FOR CLARITY, GIS ACCESS PLATFORMS ARE NOT SHOWN AND SHALL BE EVALUATED AT THE DETAILED DESIGN PHASE.
 NOTE 19: BUILDING DESIGN TO BE OPTIMISED WHEN SWITCHGEAR TYPE IS KNOWN.
 NOTE 20: SPACE WITHIN THE GIS HALL TO BE RESERVED FOR A 15" RACK CABINET FOR CONDITION MONITORING EQUIPMENT.
 NOTE 21: THE GIS SWITCHGEAR DESIGN SHALL ACCOUNT FOR A MAXIMUM 60 MINUTE EVACUATION TIME OF GAS CHAMBERS. THE FINAL DESIGN OF BUILDING AND EQUIPMENT SHALL INCLUDE FOR ADDITIONAL "BUFFER" COMPARTMENTS WHICH MAY BE REQUIRED TO REDUCE CHAMBER SIZES TO MEET THIS REQUIREMENT.

- CABLE INSTALLATION
 NOTE 22: THE MAXIMUM LENGTH OF A CABLE THAT CAN BE PUSHED INTO THE CABLE ROOM IS 100m ROUTE LENGTH.
 NOTE 23: 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. SPARE OR UNNEEDED OPENINGS TO BE SEALED OR REMOVED TO LIMIT POSSIBILITY OF WATER INGRESS.
 NOTE 24: 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 25: AN OPENING MUST BE PROVIDED FOR EACH CIRCUIT TO ALLOW FOR SUITABLE CABLE PULLING DUCTS.
 NOTE 26: CABLE SUPPORT STEELWORK TO BE PROVIDED BY THE CONTRACTOR. WALL TO BE CAPABLE OF SUPPORTING HV CABLES, RING CT'S etc.
 NOTE 27: AN OPENING SHALL BE PROVIDED BESIDE THE STAIRS FOR CABLE PULLING.
 NOTE 28: SUITABLE ANCHOR POINTS SHALL BE INSTALLED FOR CABLE PULLING AS REQUIRED.
 NOTE 29: 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 CONSTRUCTED WITH A NON-METALLIC MATERIAL, I.E. GLASS REINFORCED PLASTIC.
 NOTE 30: 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 31: RISK ASSESSMENT TO BE CARRIED OUT AT DETAILED DESIGN STAGE TO EVALUATE THE REQUIREMENT FOR FORCED VENTILATION WITHIN CABLE PIT.
 NOTE 32: LINK BOXES LOCATED IN THE CABLE BASEMENTS SHALL BE READILY ACCESSIBLE FOR OPERATIONS STAFF FOR MAINTENANCE PURPOSES WITH SAFETY SIGNAGE AS OUTLINED IN THE EIRGRID CABLE SPECIFICATIONS.

- HALLWAY
 NOTE 33: FIRE AND ALARM PANELS TO BE LOCATED IN THE VICINITY OF THE MAIN ENTRANCE.
- RELAY ROOM
 NOTE 34: RELAY ROOM MUST BE SIZED APPROPRIATELY TO ALLOW FOR ULTIMATE DEVELOPMENT OF SUBSTATION.
 NOTE 35: SPACE SHOULD BE CONSIDERED FOR ADDITIONAL TELECOMS AND PROTECTION PANELS.
 NOTE 36: A TELECOMS EARTH BAR SHALL BE INSTALLED IN CLOSE PROXIMITY TO THE OCC RTU.
 NOTE 37: NO ELECTRICAL EQUIPMENT (INCL. BATTERIES) SHALL BE INSTALLED DIRECTLY IN FRONT OF VENTS.
 NOTE 38: RELAY ROOM FLOOR CONSTRUCTION TO SUIT ROOM REQUIREMENTS.
 NOTE 39: TELECOMMUNICATION DUCTS SHALL BE ROUTED DIRECTLY TO THE RELAY ROOM AS PER ESB TELECOMS REQUIREMENTS.
 NOTE 40: INDICATIVE RELAY ROOM CABLE ACCESS SHOWN.
- ROOF
 NOTE 41: ROOF ACCESS IS TO BE EVALUATED AT THE DETAIL DESIGN STAGE BY CONDUCTING A RISK ASSESSMENT.
 NOTE 42: ROOF TO BE SINGLE PITCH TYPE WITHOUT PARAPETS.
- FIRE ESCAPES
 NOTE 43: ESCAPE DISTANCE AS PER BUILDING REGULATION TECHNICAL GUIDANCE DOCUMENT B (TGD-B)
 NOTE 44: ESCAPE DISTANCE TO BE IN LINE WITH BUILDING REGULATIONS TECHNICAL GUIDANCE DOCUMENT B 2024 FIRE SAFETY - VOLUME 1: BUILDING OTHER THAN DWELLING HOUSES.

- EQUIPMENT ACCESS AND HANDLING
 NOTE 45: EQUIPMENT ACCESS DOOR TO BE SIZED SUCH THAT A STANDARD ESB TRUCK CAN BE REVERSED IN THE HOIST AREA (MIN 4000mm WIDTH) AND IN ACCORDANCE WITH GIS MANUFACTURER RECOMMENDATIONS TO ENSURE SAFE DELIVERY OF EQUIPMENT.
 NOTE 46: ROLLER SHUTTER DOOR EXTENDS TO CEILING LEVEL OF THE GROUND FLOOR OF THE GIS BUILDING.
 NOTE 47: ROLLER SHUTTER DOOR TO BE INSTALLED BETWEEN THE HOIST 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 48: HOIST OPE TO BE SIZED APPROPRIATELY TO FACILITATE LIFTING OF SWITCHGEAR ASSEMBLIES.
 NOTE 49: GIS HALL GANTRY CRANE SPECIFICATIONS BE CONFIRMED IN DETAILED DESIGN TO SUIT SWITCHGEAR COMPONENT WEIGHTS AND DIMENSIONS. BUILDING ENVELOPE TO BE DESIGNED ACCORDINGLY.
 NOTE 50: APPROPRIATE RISK ASSESSMENTS AND METHOD STATEMENTS ARE REQUIRED TO ENSURE SAFE HANDLING OF HEAVY EQUIPMENT AND PLANT IS INCORPORATED INTO FINAL DESIGN.
- BATTERY ROOM AND GENERATOR (IF APPLICABLE)
 NOTE 51: MINIMUM CLEAR DISTANCE BETWEEN 220V BATTERY STANDS AND WALLS/STRUCTURAL ELEMENTS IS 800mm. 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 AND LOCATED TO AVOID INTAKE OF GENERATOR EXHAUST FUMES. (NOTES TO BE CONFIRMED DEPENDING ON BATTERY TYPE.)
 NOTE 52: ADDITIONAL EXIT DOOR IN BATTERY ROOM. REQUIREMENT TBC IN LINE WITH FIRE REGULATIONS.
 NOTE 53: ONLY SINGLE ROW 24V & 48V BATTERY STANDS MAY BE LOCATED AGAINST A WALL.
 NOTE 54: SMALLER GENERATOR ACCESS DOOR REQUIREMENT SUBJECT TO GENERATOR TYPE AND SPECIFIC ACCESS REQUIREMENTS.

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 Web: www.eirgrid.com

PROJECT
 400-8/220-16/110-16
Standard Layout
DRAWING TITLE
 220 kV GIS Building 16-Bay
 Plan, Elevation, End View

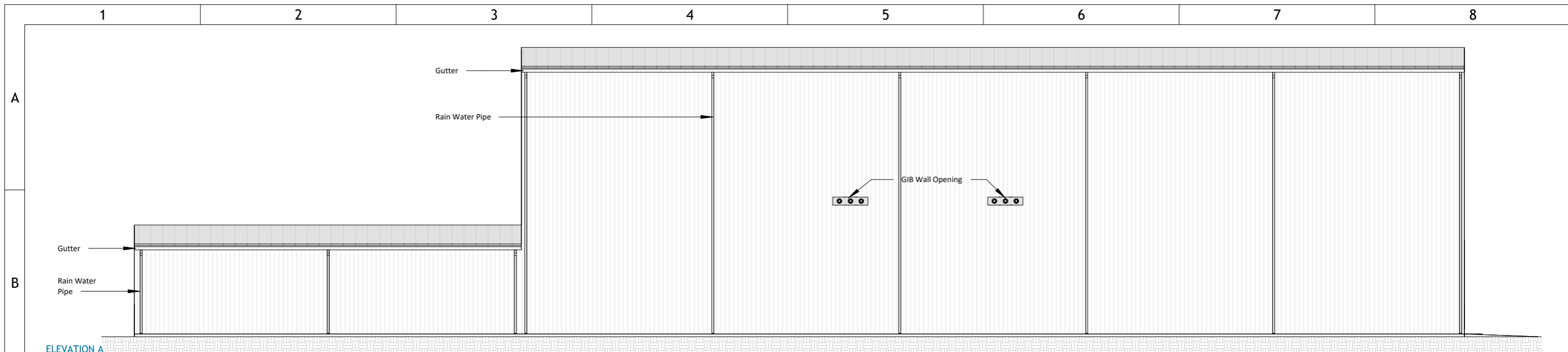
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DRAWING NUMBER	XDN-LAY-STND-L-100			SHEET	008
				REV	00

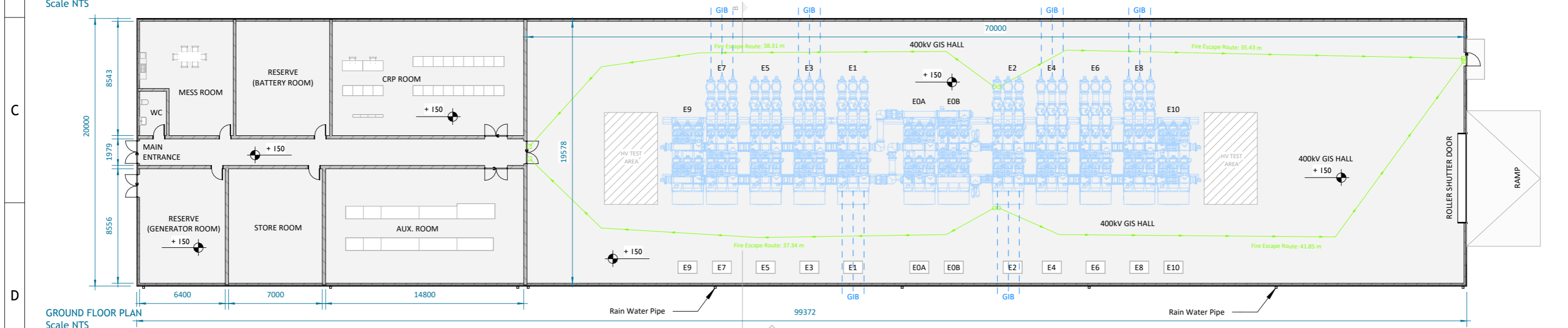
00	First Issue	TLI	N. Cowap	ESB DD D. Guistini N. McMahon	R. Barandika	N. Cowap	21/04/2026
REV	DESC	DRAWN	ORIGINATED	REVIEWED	CHECKED	APPROVED	DATE

DRAWING IS NOT TO SCALE - IF IN DOUBT, ASK

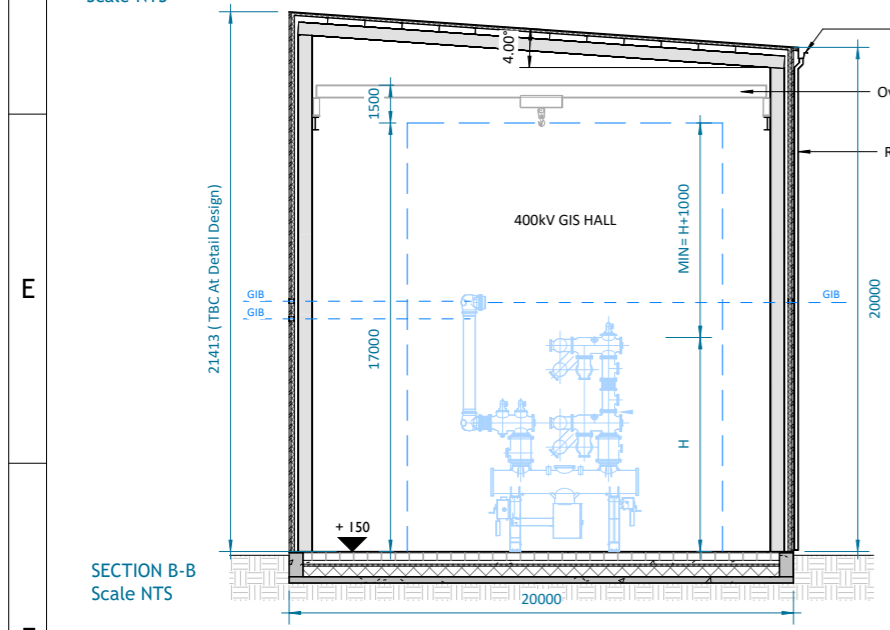
DRAWING IS NOT TO SCALE - IF IN DOUBT, ASK



ELEVATION A
Scale NTS



GROUND FLOOR PLAN
Scale NTS



SECTION B-B
Scale NTS

- GENERAL
NOTE 1: THIS DRAWING IS PRODUCED FOR INFORMATION PURPOSES ONLY. ALL DIMENSIONS, REFERENCES GIVEN ARE INDICATIVE AND SHOULD NOT BE USED AS PART OF A DETAILED DESIGN OR AS A TENDER DOCUMENT.
NOTE 2: THIS IS A CONCEPTUAL DESIGN. DETAILED DESIGN IS REQUIRED PENDING CONFIRMATION OF SPECIFIC EQUIPMENT SUPPLIER AND SITE DETAILS.
NOTE 3: 400 kV BUILDING HAS BEEN SPECIFICALLY DESIGNED TO ACCOMMODATE 3 No. TRANSFORMER BAYS (BUSDUCT CONNECTION), 2 No. SECTIONALISING CIRCUIT BREAKERS, 2 No. WING COUPLERS, AND 5 No. FEEDER BAYS (BUSDUCT CONNECTION). THE FINAL BUILDING DESIGN SHALL MATCH THE APPROPRIATE SINGLE LINE DIAGRAM.
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: THIS IS AN INTERIM PLANNING APPLICATION DRAWING, TO ENSURE PLANNING APPLICATIONS TAKE ACCOUNT OF THE WORST CASE SCENARIO FOR THE INCREASED BUILDING SIZE REQUIRED TO CATER FOR SF6-GAS FREE SWITCHGEAR.
NOTE 8: FOR THE PURPOSE OF THIS DRAWING SF6-FREE GIS IS SHOWN AS 20% LARGER THAN CURRENT SF6 GIS USED ON RECENT EIRGRID PROJECTS. THE DESIGN IS A CONSERVATIVE ESTIMATE BASED ON THE INFORMATION AVAILABLE AT THE TIME. THE SITE LAYOUT AND BUILDING SIZE NEED TO BE OPTIMISED BASED ON THE SWITCHGEAR ORDERED.

- SWITCHGEAR
NOTE 9: (AS ILLUSTRATED ON DRAWING) THE SWITCHGEAR SHOWN ON THIS DRAWING IS INDICATIVE ONLY. DIMENSIONS OF THE OVERALL BUILDING SHALL BE DESIGNED TO SUIT MANUFACTURER SPECIFIC DIMENSIONS. ENVELOPE AROUND THE SWITCHGEAR SHALL BE WITH MANUFACTURER RECOMMENDATIONS FOR ON-GOING OPERATION, MAINTENANCE AND REPLACEMENT OF HV PLANT.
NOTE 10: REQUIREMENT FOR GIS OVERPRESSURE VENTS TO BE CONFIRMED BY GIS SUPPLIER.
NOTE 11: ALL OPENS IN GIS ROOM FOR LV AND HV CABLES TO BE FIRE SEALED.
NOTE 12: (AS ILLUSTRATED ON DRAWING) MINIMUM CLEAR AREA ON BOTH SIDES OF THE GIS FOR THE HV TEST EQUIPMENT IS 3600 mm. MINIMUM DISTANCE TO BE CONFIRMED WITH MANUFACTURER. ADDITIONAL SPACE FOR MAINTENANCE AND OPERATIONS MAY BE REQUIRED BASED ON ESB OEM REQUIREMENTS.
NOTE 13: 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 DETAILED DESIGN PHASE, WITH LV CABLING ROUTED ACCORDINGLY.
NOTE 14: SPECIFIC SWITCHROOM FLOOR REQUIREMENTS ARE TO SUIT THE MANUFACTURER'S SPECIFICATIONS AND ARE TO BE EVALUATED AT THE DETAIL DESIGN STAGE.
NOTE 15: STANDALONE LCC SHOWN FOR INFORMATIONAL PURPOSES ONLY. INTEGRATED LCC OPTION ALSO ALLOWABLE.
NOTE 16: ADDITIONAL WIDTH MAY BE REQUIRED IF GROUND MOUNTED LCC'S ARE INSTALLED.
NOTE 17: HIGH FREQUENCY MESH IS TO BE LAID WITHIN THE GIS FLOOR AND SUIT SWITCHGEAR MANUFACTURER REQUIREMENTS. FOR FURTHER DETAILS ON EIRGRID EARTHING REQUIREMENTS, REFER TO EIRGRID'S FUNCTIONAL SPECIFICATION XDS-GFS-12-001.

- RELAY ROOM
NOTE 23: (AS ILLUSTRATED ON DRAWING) RELAY ROOM MUST BE SIZED APPROPRIATELY TO ALLOW FOR ULTIMATE DEVELOPMENT OF SUBSTATION.
NOTE 24: (AS ILLUSTRATED ON DRAWING) SPACE SHOULD BE CONSIDERED FOR ADDITIONAL TELECOMS AND PROTECTION PANELS.
NOTE 25: A TELECOMS EARTH BAR SHALL BE INSTALLED IN CLOSE PROXIMITY TO THE DCC RTU.
NOTE 26: NO ELECTRICAL EQUIPMENT (INCL. BATTERIES) SHALL BE INSTALLED DIRECTLY IN FRONT OF VENTS.
NOTE 27: (AS ILLUSTRATED ON DRAWING) RELAY ROOM FLOOR CONSTRUCTION TO SUIT ROOM REQUIREMENTS.
NOTE 28: TELECOMMUNICATION DUCTS SHALL BE ROUTED DIRECTLY TO THE RELAY ROOM AS PER ESB TELECOMS REQUIREMENTS.
NOTE 29: INDICATIVE RELAY ROOM CABLE ACCESS SHOWN

- ROOF
NOTE 30: ROOF ACCESS IS TO BE EVALUATED AT THE DETAIL DESIGN STAGE BY CONDUCTING A RISK ASSESSMENT.
NOTE 31: ROOF TO BE SINGLE PITCH TYPE WITHOUT PARAPETS.

- FIRE ESCAPES
NOTE 32: ESCAPE DISTANCE AS PER BUILDING REGULATION TECHNICAL GUIDANCE DOCUMENT B (TGD-B)
NOTE 33: ESCAPE DISTANCE TO BE IN LINE WITH BUILDING REGULATIONS TECHNICAL GUIDANCE DOCUMENT B 2024 FIRE SAFETY - VOLUME 1 BUILDING OTHER THAN DWELLING HOUSES.

- EQUIPMENT ACCESS AND HANDLING
NOTE 34: EQUIPMENT ACCESS DOOR TO BE SIZED SUCH THAT A STANDARD ESB TRUCK CAN BE REVERSED IN THE HOIST AREA (MIN 4000mm WIDTH) AND IN ACCORDANCE WITH GIS MANUFACTURER RECOMMENDATIONS TO ENSURE SAFE DELIVERY OF EQUIPMENT.
NOTE 35: GIS HALL GANTRY CRANE SPECIFICATIONS BE CONFIRMED IN DETAILED DESIGN TO SUIT SWITCHGEAR COMPONENT WEIGHTS AND DIMENSIONS. BUILDING ENVELOPE TO BE DESIGNED ACCORDINGLY.
NOTE 36: APPROPRIATE RISK ASSESSMENTS AND METHOD STATEMENTS ARE REQUIRED TO ENSURE SAFE HANDLING OF HEAVY EQUIPMENT AND PLANT IS INCORPORATED INTO FINAL DESIGN.

- BATTERY ROOM AND GENERATOR (IF APPLICABLE)
NOTE 37: MINIMUM CLEAR DISTANCE BETWEEN 220V BATTERY STANDS AND WALLS/STRUCTURAL ELEMENTS IS 800mm.
NOTE 38: SCREENED VENTS (HIGH LEVEL AND 2 LOW LEVEL) ARE TO BE INSTALLED IN THE BATTERY ROOM AS PER IEC 62485-2 ON ADJACENT EXTERNAL WALL AND LOCATED TO AVOID INTAKE OF GENERATOR EXHAUST FUMES. (NOTES TO BE CONFIRMED DEPENDING ON BATTERY TYPE.)
NOTE 39: ADDITIONAL EXIT DOOR IN BATTERY ROOM, REQUIREMENT TBC IN LINE WITH FIRE REGULATIONS.
NOTE 40: SMALLER GENERATOR ACCESS DOOR REQUIREMENT SUBJECT TO GENERATOR TYPE AND SPECIFIC ACCESS REQUIREMENTS.

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PROJECT
400-8/220-16/110-16
Standard Layout

DRAWING TITLE
400 kV GIS Building 8-Bay
Plan, Elevation, End View

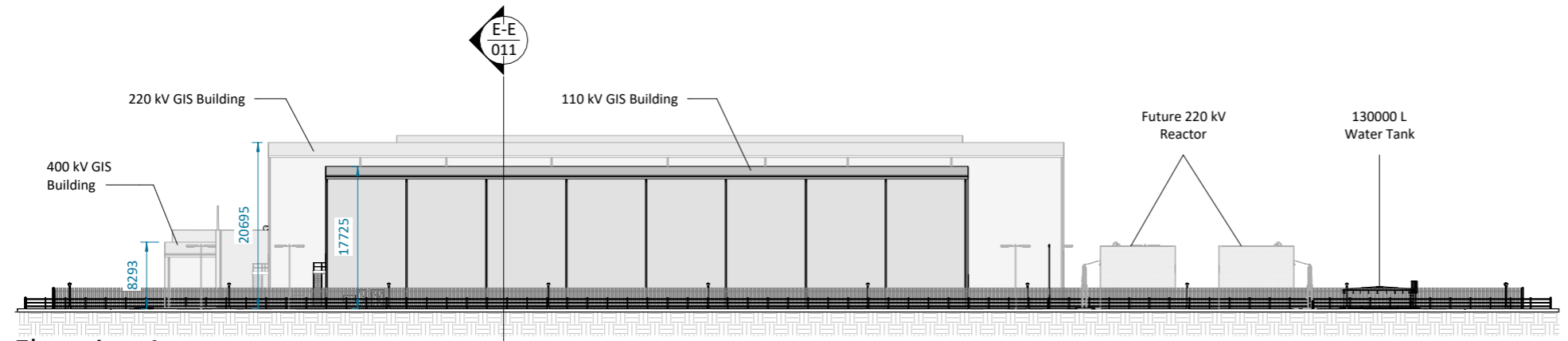
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No of Shts	11	SIZE	A3	SCALE	NTS
DRAWING NUMBER	XDN-LAY-STND-L-100			SHEET	REV
				009	00

00	First Issue	TLI	N. Cowap	ESB DD D. Guistini N. McMahon	R. Barandika	N. Cowap	21/04/2026
REV	DESC	DRAWN	ORIGINATED	REVIEWED	CHECKED	APPROVED	DATE

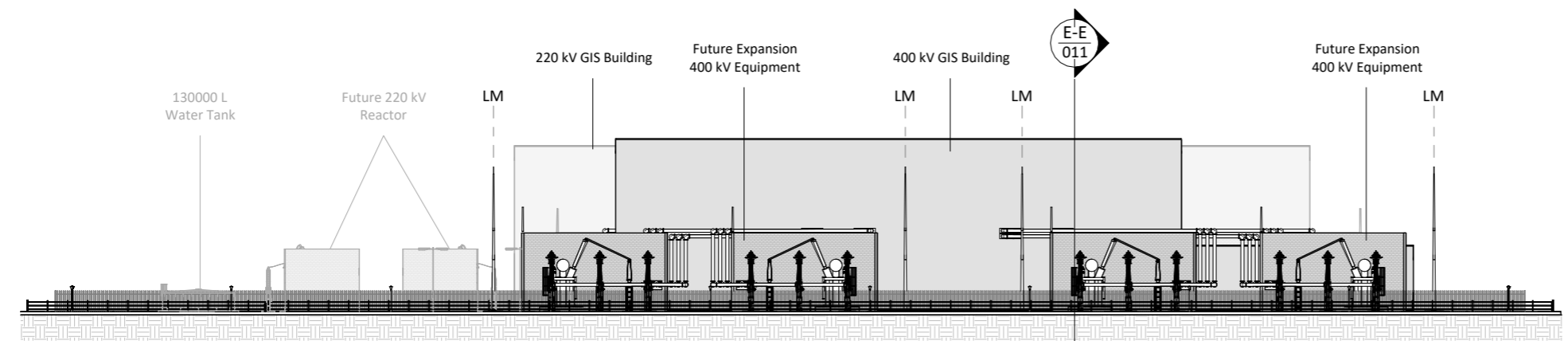
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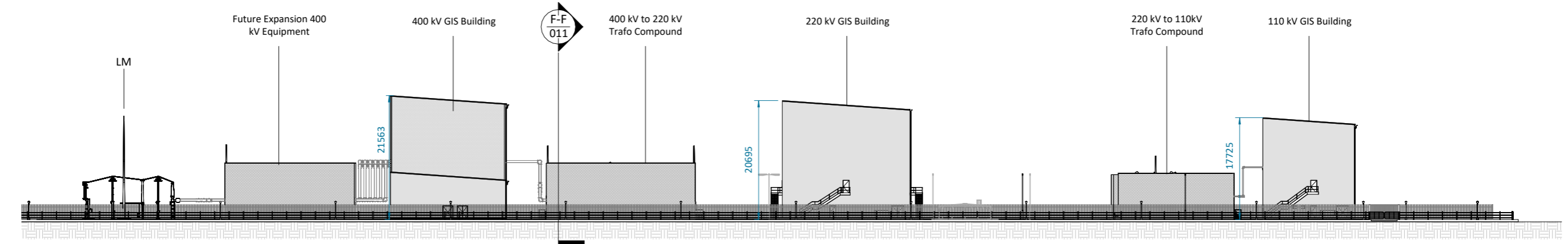
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Elevation B
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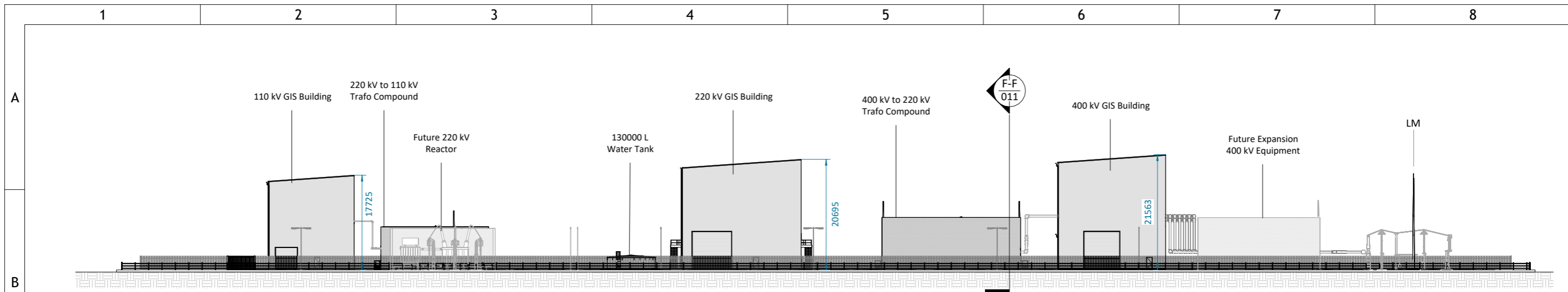
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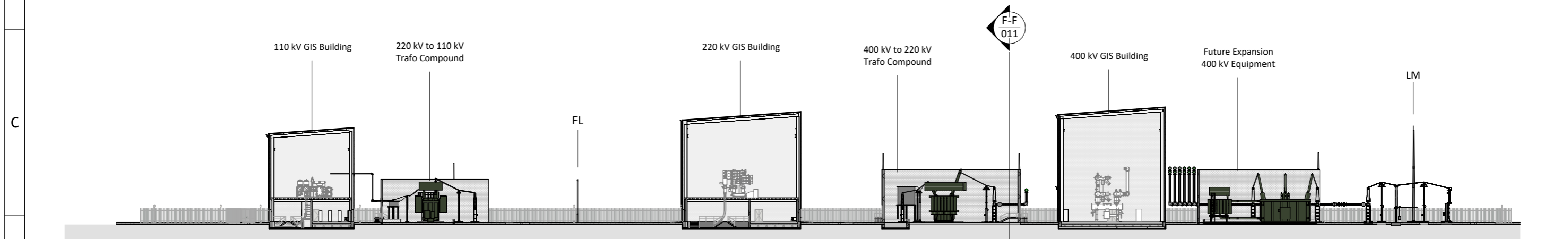
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 EirGrid plc The Oval, 160 Shelbourne Road, Ballsbridge, Dublin 4, Ireland Telephone: +353 1 677 1700 Fax: +353 1 661 5375 Email: info@eirgrid.com Web: www.eirgrid.com	PROJECT 400-8/220-16/110-16 Standard Layout	
	DRAWING TITLE Site Elevations A, B and C	
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DRAWING NUMBER XDN-LAY-STND-L-100		SHEET 010 REV 00

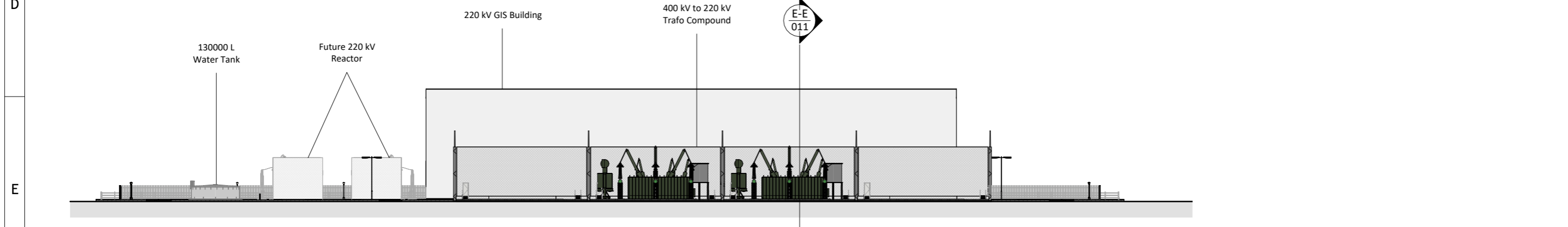
00	First Issue	TLI	N. Cowap	ESB DD D. Guistini N. McMahon	R. Barandika	N. Cowap	21/04/2026
REV	DESC	DRAWN	ORIGINATED	REVIEWED	CHECKED	APPROVED	DATE



Elevation D
Scale:1 : 750



Section E-E
Scale:1 : 750



Section F-F
Scale:1 : 750

DRAWING IS NOT TO SCALE - IF IN DOUBT, ASK

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PROJECT
400-8/220-16/110-16
Standard Layout

DRAWING TITLE
Site Elevation D and Sections E-E, F-F

00	First Issue	TLI	N. Cowap	ESB DD D. Guistini N. McMahon	R. Barandika	N. Cowap	21/04/2026
REV	DESC	DRAWN	ORIGINATED	REVIEWED	CHECKED	APPROVED	DATE

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No of Shts	11	SIZE	A3	SCALE	1 : 750	
DRAWING NUMBER	XDN-LAY-STND-L-100		SHEET	011	REV	00