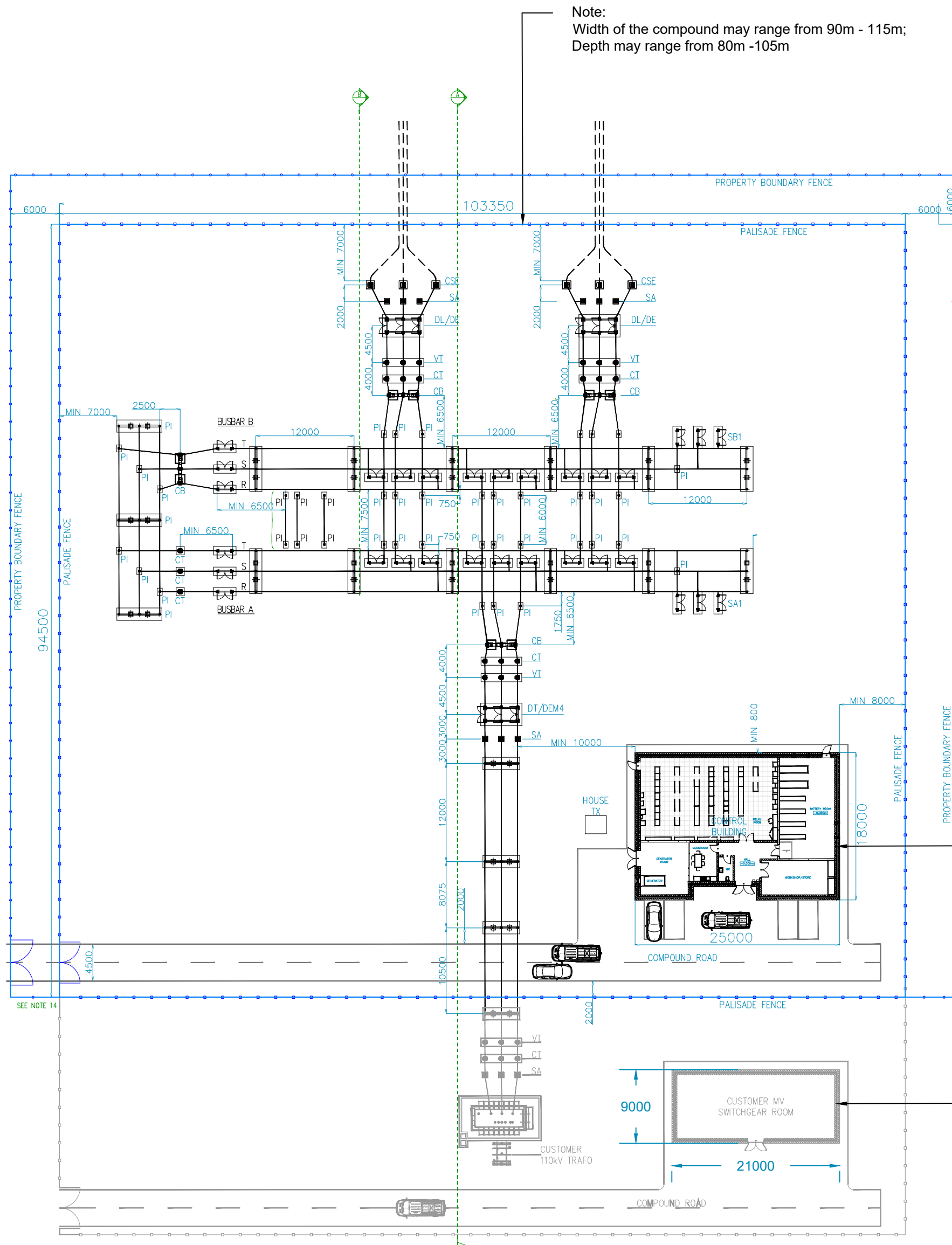
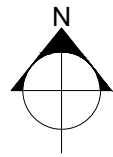




Note:
Width of the compound may range from 90m - 115m;
Depth may range from 80m -105m

Note:
Proposed Control Room
width of 20-30m and a depth of 15m-21m

Note:
Proposed MV Switch Room
width of 15-25m and a depth of 6m-12m

SCALE BAR



- Notes
1. Verifying Dimensions: The contractor shall verify dimensions against such other drawings or site conditions as pertain to this part of the work.
 2. Existing Services: Any information concerning the location of existing services (above and below ground) indicated on this drawing is intended for general guidance only. All services should be checked on site prior to any work commencing.
 3. If received electronically it is the recipient's responsibility to print to correct scale. Only written dimensions should be used.
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LEGEND	
LM	LIGHTNING MAST
SA	SURGE ARRESTER
VT	VOLTAGE TRANSFORMER
CT	CURRENT TRANSFORMER, SINGLE PHASE
PI	POST INSULATOR
LT	LINE TRAP (TYPICALLY R & T PHASES)
DL/DE	LINE/EARTH DISCONNECT
DT/DEM4	TRAF0/EARTH DISCONNECT
CB	CIRCUIT BREAKER
DA	DB
SA1/SA2	SB1/SB2
CSE	CABLE SEALING END

- NEW C-TYPE STATION
- FUTURE RING STATION (SPACE ONLY)

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:
RELOCATION OR ADDITIONAL POST INSULATORS MAY BE REQUIRED, SUBJECT TO DETAIL DESIGN. NOT SHOWN FOR CLARITY.

NOTE 3:
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 4:
LIGHTNING MAST, LV TRENCH DUCT ROUTES, MARSHALLING/INTERFACE CABINETS AND LIGHTING FIXTURES SHALL BE CONSIDERED DURING DETAIL DESIGN.

NOTE 5 (AS ILLUSTRATED ON DRAWING):
TWO PHASES OF THE LOW LEVEL BAY CONDUCTORS ARE ARRANGED CLOSER TOGETHER TO AVOID UNNECESSARY PROXIMITY OUTAGES ON ADJACENT BAYS. TO BE REPEATED FOR ALL BAYS.

NOTE 6 (AS ILLUSTRATED ON DRAWING):
INDEPENDENT SUPPORTED SPAN ON LOW LEVEL BAY CONDUCTORS BETWEEN DA AND DB. THE CONNECTION AT THE PI SHOULD BE ABLE TO BE BROKEN TO ALLOW THE LINK BETWEEN DA AND DB TO BE DISCONNECTED. PI AND SPAN TO BE INSTALLED ON ALL FUTURE BAYS IN THE C-TYPE (PHASE 1) STATION.

NOTE 7 (AS ILLUSTRATED ON DRAWING):
DISTANCE BETWEEN CT AND CB ON WING COUPLER TO BE A MINIMUM OF 6500mm FROM THE BUSBAR SIDE OF THE OPEN DISCONNECT. DISTANCE BETWEEN DISCONNECT AND ADJACENT LOW LEVEL BAY CONDUCTOR TO BE A MINIMUM OF 6500mm.

NOTE 8 (AS ILLUSTRATED ON DRAWING):
6500mm DISTANCE REQUIRED BETWEEN BUSBAR AND CB ON EACH BAY.

NOTE 9 (AS ILLUSTRATED ON DRAWING):
DIESEL GENERATOR AND STATION RURAL FEEDING ARRANGEMENT SHALL BE IN LINE WITH ERGRID STATION AUXILIARY POWER SUPPLIES SPECIFICATION.

NOTE 10:
THIS LAYOUT RELATES PRIMARILY TO NEW SUBSTATIONS AND SIGNIFICANT EXTENSIONS PROJECTS. OTHER DEVELOPMENT OF EXISTING SUBSTATIONS (BROWN-FIELD) SHALL MAKE ALL REASONABLE EFFORTS TO BRING THE ARRANGEMENT IN LINE WITH THIS STANDARD (INCREASED CLEARANCES, NEW WRAP-AROUND COUPLER, AND SECTIONALISER CONFIGURATION). THE DEVELOPMENT SHALL NOT WORSEN ANY EXISTING O&M CLEARANCES WHICH MAY NOT BE IN ACCORDANCE WITH THIS STANDARD LAYOUT.

NOTE 11 (AS ILLUSTRATED ON DRAWING):
REQUIREMENT FOR SURGE ARRESTERS IN CUSTOMER COMPOUND TO BE DETERMINED BASED ON INSULATION CO-ORDINATION STUDY.

NOTE 12:
MINIMUM ELECTRICAL CLEARANCES SHALL COMPLY AS OUTLINED IN ERGRID GENERAL REQUIREMENTS SPECIFICATION XDS-GFS-00-001.

NOTE 13:
BAY CONDUCTOR PHASING TO BE AGREED BASED ON PARTICULAR PROJECT REQUIREMENTS.

A	Annotations added	JC	COM	21/01/2026
Rev	Description	By	CB	Date



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Project ROI - SUBSTATIONS

Title 110kV - SUBSTATION
Sheet 1

Status Drawn By PM/Checked by
DRAFT JP GG
Site Ref Scale @ A2 Original Date Created
- 1:500 -

Drawing Number Rev
ELGIN-SUBSTATION-006 A