**GENERAL NOTES** 1. DO NOT SCALE THIS DRAWING THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE 132KV CONNECTION DOCUMENT ST:SD2A AND DRAWINGS LISTED BELOW. THIS DRAWING IDENTIFIES THE REQUIREMENTS FOR THE NGED COMPOUND, NGED CONTROL BUILDING AND ASSOCIATED CIRCUIT ENTRY/IES AND VEHICULAR ACCESS. IT DOES NOT DETAIL THE CUSTOMER COMPOUND AND CONTROL BUILDING. DETAILED CIVIL DESIGN WORKS ARE THE RESPONSIBILITY OF THE CUSTOMER, BUT THE INFORMATION PROVIDED ON THIS DRAWING MAY BE INCORPORATED INTO THE CUSTOMERS OVERALL CIVIL SITEWORKS DRAWING AS NECESSARY (ASSUMING THAT THE CUSTOMER HAS CHECKED THE VIABILITY OF THE INFORMATION TO THE PRESENTED SITE CONDITIONS). THE CUSTOMER MUST CARRY OUT SUITABLE GROUND INVESTIGATION AND A FLOOD RISK ASSESSMENT TO ENSURE THE VIABILITY OF THEIR DESIGN. 6. THE CUSTOMER MUST CARRY OUT THEIR OWN STRUCTURAL CALCULATIONS. 7. THE SUPPORT STRUCTURES SHOWN ON THE DRAWING ARE INDICATIVE ONLY. ALTERNATIVE DESIGNS CAN BE SUBMITTED FOR NGED REVIEW. 8. SITE TOPOGRAPHY - THE NGED SUBSTATION COMPOUND SURFACE SHALL BE CONFIGURED SO THAT THERE IS A MAXIMUM GRADIENT OF 1 IN 60 FALL ACROSS THE AREA BUT WHERE A GREATER INCLINE WOULD BE ADVANTAGEOUS, NGED MAY CONSIDER A DIFFERENT VALUE ON A SITE BY SITE BASIS. NGED COMPOUND, 2M MAINTENANCE STRIP AND 1M MIN AROUND NGED CONTROL BUILDING TO BE STRIPPED OFF 225MM TOP SOIL AND BACK FILLED TO FINISHED SITE LEVEL WITH 150MM THICK TYPE 1 SUB BASE AND FINISHED WITH 75MM LAYER OF 20MM SINGLE SIZED GRANITE CHIPPINGS. TERRAM T1300 GEOTEXTILE TO BE PLACED BETWEEN THE TYPE 1 SUB BASE AND GRANITE CHIPPINGS LAYERS. 10. THE CUSTOMER IS TO INSTALL SUFFICIENT SURFACE WATER DRAINAGE TO PREVENT A POTENTIAL BUILD-UP OF GROUND WATER. THIS DRAINAGE SYSTEM SHOULD CONVEY WATER TO A SUITABLE POINT OF DISPOSAL. 11. THE CUSTOMER IS TO FULLY DETAIL THE ACCESS ROAD CONSTRUCTION AND ALL CABLE ROUTES WITH ASSOCIATED DUCTING AND CABLE TROUGHS. 12. NO THIRD PARTY UTILITY ASSETS ARE TO BE LOCATED BENEATH/WITHIN THE NGED COMPOUND WITHOUT PRIOR APPROVAL. 13. ALL NGED SITES ARE TO HAVE A CATEGORY 1 SECURITY LEVEL AT 132kV. 14. FOR MAINS WATER AND FOUL WATER SERVICES, SANITARY SERVICES SHALL BE PROVIDED IN ACCORDANCE NGED WITH ST:SD2A COMPOUND 15. THE MEANS OF OHL TERMINATION IS SUBJECT OHL CONNECTION DESIGN ANALYSIS FOR INSTANCE ANCHOR BLOCKS MAY BE DEPLOYED IN PREFERENCE TO CHAIR STRUCTURES. 16. STEEL TOWER CABLE MASTS HAVE NOT BEEN CONSIDERED IN THE DESIGN - A SITE SPECIFIC 132KV SUBSTATION LAYOUT DESIGN WILL NEED TO BE PREPARED TO ACCOMMODATE THESE MASTS. VOLTAGE MOTORISED LOW HIGH LEVEL POST MANUAL LOW LEVEL VOLTAGE CIRCUIT MANUAL LOW LEVEL PI BUSBAR CCTV/ CSE/SURGE TRANSFORMERS LEVEL DISCONNECTOR INSULATOR 3PH DISCONNECTOR TRANSFORMERS Breaker DISCONNECTOR SUPPORT COMPOÚND ARRESTORS REFERENCE DRAWINGS AND EARTH SWITCH BUSBAR SUPPORT LIGHTING COLUMN DRG STATUS SWITCHYARD CONNECTION TYPE INFORMATION ONLY CONTROL BUILDING LAYOUT CABLE MESH CONNECTION GCS0020-3 0 SITE LAYOUT - CABLE CONNECTION (PLAN VIEW) GCS0020-4 O SITE LAYOUT - CABLE CONNECTION (ELEVATION VIEWS) INFORMATION ONLY CONTROL BUILDING LAYOUT CABLE MESH CONNECTION GCS0020-5 0 TYPICAL NGED CONTROL BUILDING LAYOUT - LOOP CONNECTION INFORMATION ONLY CONTROL BUILDING LAYOUT CABLE MESH CONNECTION SLD -132KV LOOP IN-LOOP OUT INCOMERS INFORMATION ONLY CONTROL BUILDING LAYOUT CABLE MESH CONNECTION PEC - PORTABLE EARTH CONNECTION POINT 3850mm MIN ABOVE PALISADE FENCE OPTIONAL ELECTRIC FENCE EXTENSION 4000 7500 3500 6000 4500 8000 4500 ELEVATION A NGED COMPOUND HL 3PH PI SUPPORT STRUCTURE LOW LEVEL FUTURE CIRCUIT HL 3PH PI HL 3PH PI HL 3PH PI SUPPORT HL 3PH PI 3PH PI SUPPORT SUPPORT Breaker LOW LEVEL SUPPORT STRUCTURE SUPPORT STRUCTURE STRUCTURE DISCONNECTOR STRUCTURE DISCONNECTOR DISCONNECTO 3700 7260 5000 5000 5000 7259 <u>ELEVATION B</u> **Electricity Distribution** Engineering Design Department (East Midlands) national**grid** Pegasus Business Park, Castle Donington, DE74 2TU. Rev No. NGED 145KV STANDARDS A PJB KRS CH 24.01.25 FENCE CLEARANCE DIMENSIONS UPDATED. LOOP CONNECTION PLANT LAYOUT O PJB KRS CH 03.11.23 ORIGINAL ISSUE 1:100@A1 GCS0020-4 LOOP IN SUBSTATION WITH AN UG CABLE CONNECTION - ELEVATION Rev | Drawn | Chk'd | App'd | Date Revision Note DO NOT SCALE DRAWING. ONLY USE STATED DIMENSIONS. IF IN DOUBT, ASK. ALL RIGHTS ARE RESERVED TO NGED (EAST MIDLANDS) PLC. NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY  $_{\parallel}$  MEANS, INCLUDING PHOTOCOPYING AND RECORDING, OR STORED IN A RETRIEVAL SYSTEM OF ANY NATURE, WITHOUT PERMISSION.

INFORMATION