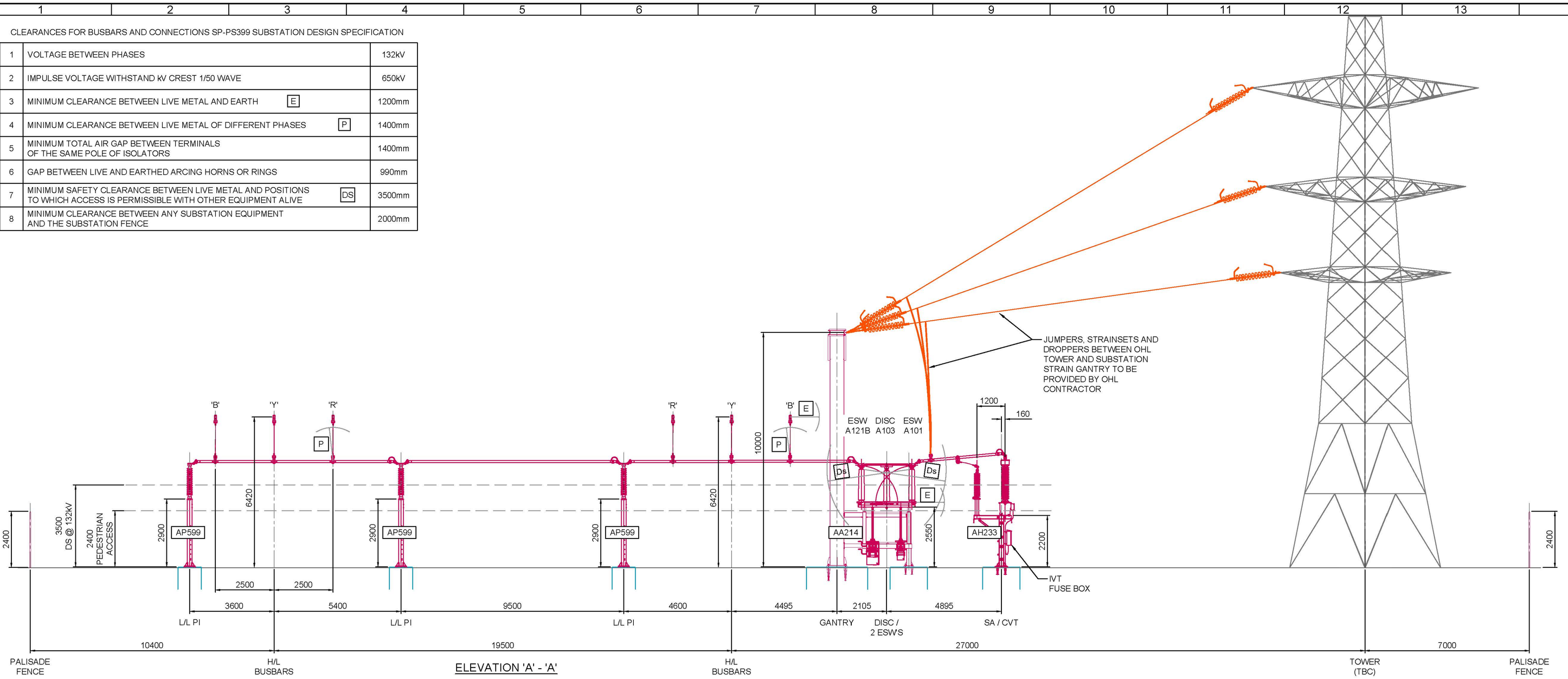
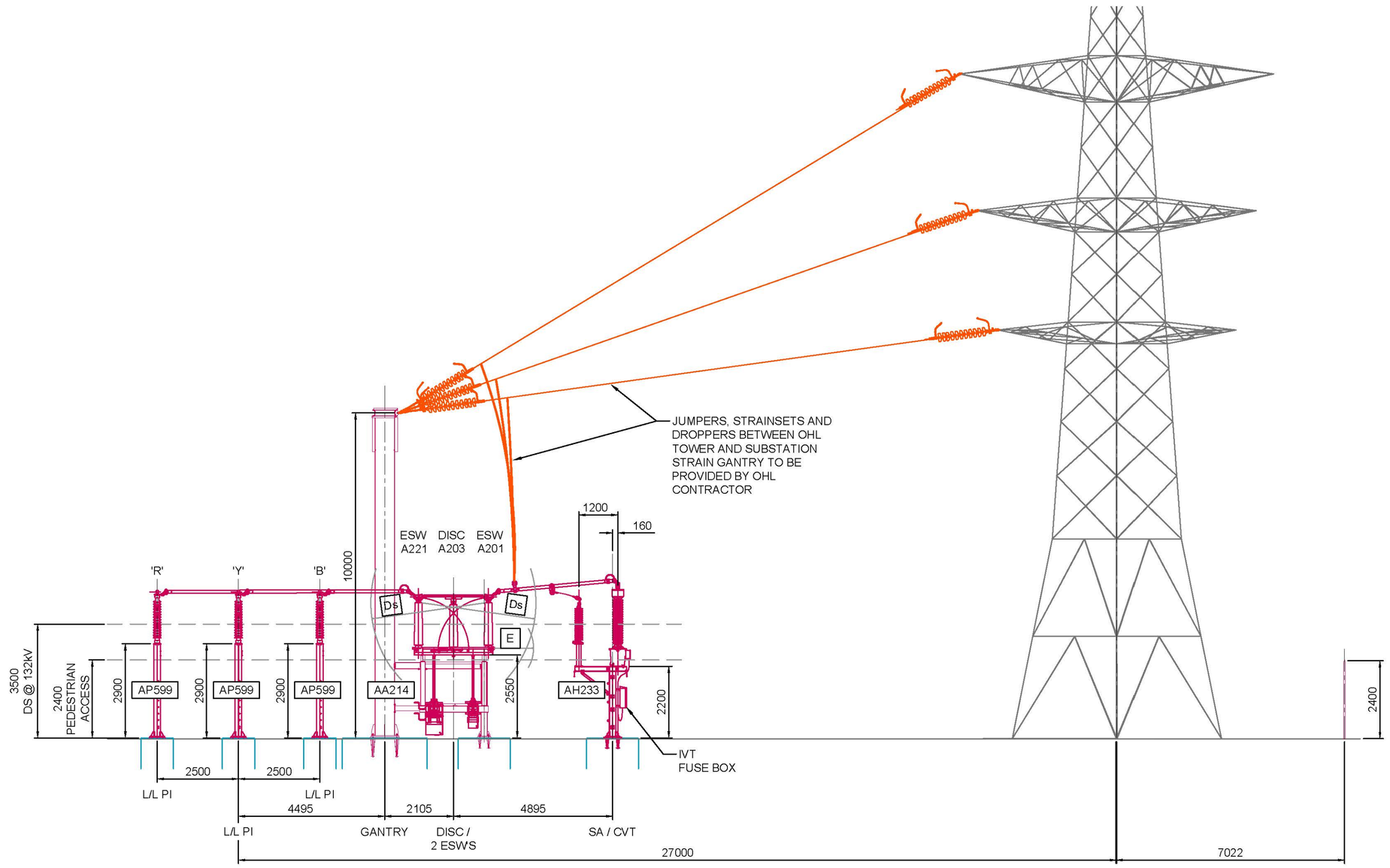
CLEARANCES FOR BUSBARS AND CONNECTIONS SP-PS399 SUBSTATION DESIGN SPECIFICATION

1	VOLTAGE BETWEEN PHASES	132kV
2	IMPULSE VOLTAGE WITHSTAND kV CREST 1/50 WAVE	650kV
3	MINIMUM CLEARANCE BETWEEN LIVE METAL AND EARTH [E]	1200mm
4	MINIMUM CLEARANCE BETWEEN LIVE METAL OF DIFFERENT PHASES [P]	1400mm
5	MINIMUM TOTAL AIR GAP BETWEEN TERMINALS OF THE SAME POLE OF ISOLATORS	1400mm
6	GAP BETWEEN LIVE AND EARTHED ARCING HORNS OR RINGS	990mm
7	MINIMUM SAFETY CLEARANCE BETWEEN LIVE METAL AND POSITIONS TO WHICH ACCESS IS PERMISSIBLE WITH OTHER EQUIPMENT ALIVE [DS]	3500mm
8	MINIMUM CLEARANCE BETWEEN ANY SUBSTATION EQUIPMENT AND THE SUBSTATION FENCE	2000mm



ELEVATION 'A' - 'A'



ELEVATION 'B' - 'B'

NOTES

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS AND SPECIALISTS DRAWINGS & SPECIFICATIONS.
2. ANY DISCREPANCIES BETWEEN THIS DRAWING AND ANY OTHER TO BE REPORTED TO THE ENGINEER IMMEDIATELY.
3. ALL WORKS TO COMPLY WITH THE MOST CURRENT BRITISH STANDARDS.
4. ALL DIMENSIONS IN MILLIMETERS UNLESS STATED OTHERWISE. NO DIMENSIONS ARE TO BE SCALED OFF THE DRAWING. USE FIGURED DIMENSIONS ONLY.
5. ALL DIMENSIONS TO BE ±3mm UNLESS SPECIFIED OTHERWISE.

LEGEND

- NEW WPD EQUIPMENT
- NEW FOUNDATIONS
- EQUIPMENT TO BE SUPPLIED BY OVERHEAD LINE CONTRACTOR

ASSOCIATED DRAWINGS

J00625-L-001 - OVERALL ELECTRICAL SITE LAYOUT
J00625-L-003 - ELECTRICAL LAYOUT - ELEVATIONS 'C'-'C' & 'D'-'D'
J00625-L-004 - BUSBARS AND CONNECTORS LAYOUT ELEVATION 'A'-'A'
J00625-L-005 - BUSBARS AND CONNECTORS LAYOUT ELEVATION 'B'-'B'
J00625-L-006 - BUSBARS AND CONNECTORS LAYOUT ELEVATION 'C'-'C'
J00625-L-007 - BUSBARS AND CONNECTORS LAYOUT ELEVATION 'D'-'C'
J00625-L-008 - BUSBAR AND CONNECTOR PACK
J00625-L-009 - EARTHING LAYOUT
J00625-L-010 - ABOVE GROUND EARTHING PACK
J00625-L-017 - MEWP ACCESS LAYOUT
J00625-C-100 - CIVIL GA
J00625-L-015 - LIGHTING LAYOUT

132 and 33kV PRIMARY PLANT				
LEGEND	EQUIPMENT	SUPPLIER	DRAWING No.	STATUS
CVT	CAPACITOR VOLTAGE TRANSFOMER	ABB	1HSE220072-277	TYPICAL
SA	SURGE ARRESTER	ABB	1HSA137-0448	TYPICAL
DISC / 2 ESWS	DISCONNECTOR / 2 EARTH SWITCHES	GE	DIN - 46647	TYPICAL
PI	POST INSULATOR	ALLIED INSULATORS	5828 O M	TYPICAL

132kV EQUIPMENT SUPPORT STRUCTURES					
LEGEND	EQUIPMENT	HEIGHT	SUPPLIER	DRAWING No.	STATUS
AP599	POST INSULATOR STRUCTURE	2900mm	KELVIN	J00667/GA/AP599	TBA
AH233	CAPACITOR VOLTAGE TRANSF / SURGE ARRESTER STRUCTURE	2200mm	KELVIN	J00667/GA/AH233	TBA
AA214	LINE LANDING GANTRY STRUCTURE WITH DISC + 2ESWS	10000mm	KELVIN	J00667/GA/AA214	TBA

OUTSTANDING ISSUES - TO BE ADDRESSED / CONFIRMED	
REF	REMARKS
PRIMARY EQUIPMENT	ALL EQUIPMENT SHOWN TYPICAL.. DRAWINGS TO BE SUPPLIED.

SCALE AT 1:100
0m 2.5m 5m 7.5m

REV	DATE	DRWN BY	CHK'D BY	APP'D BY	DESCRIPTION
C	21.02.20	GY	JW	JB	STRUCTURE REFERENCES ADDED.
B	25.01.20	GY	JW	JB	ELECTRIFIED FENCE AND ESW INDUCED CURRENT SWITCHING CAPABILITY CONFIRMED AS NOT REQUIRED. PI NOW TYPICAL.
A	25.11.19	GY	JW	JB	ORIGINAL ISSUE.

STATUS
FOR APPROVAL

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CLIENT
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PROJECT
WOODINGTON SOLAR FARM

TITLE
132kV SUBSTATION
OVERALL ELECTRICAL SITE LAYOUT
ELEVATION 'A'-'A' & 'B'-'B'

DRAWN	CHK'D	APP'D	SCALE (@ A1)	SHEET No.
GY 25.11.19	JW 25.11.19	JB 25.11.19	1:100	1 of 1

DRAWING NUMBER
J00625-L-002

REVISION
C