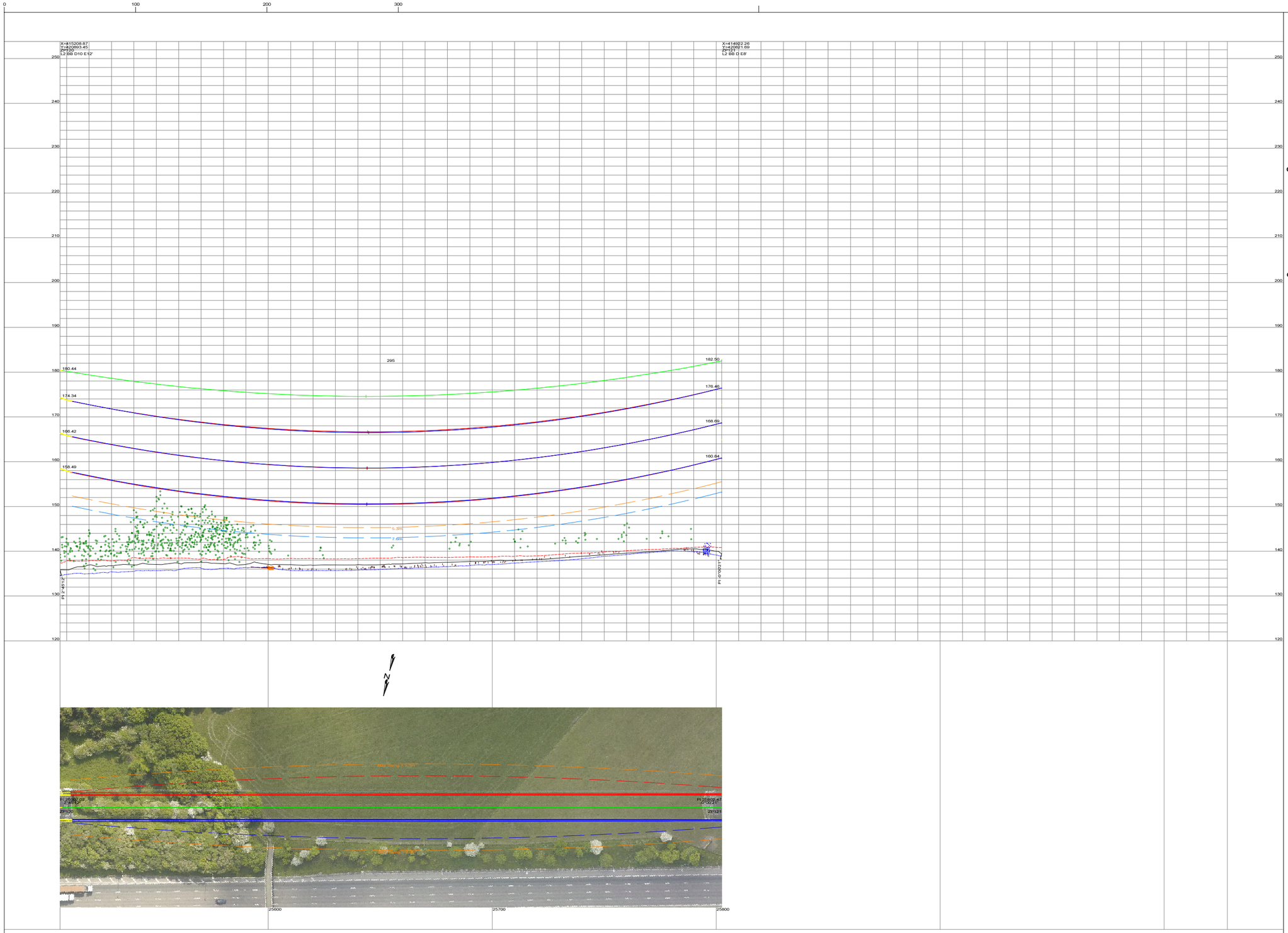

ZP120 - ZP122, 275kV, 500mm² ACAR - Collybia, bundle of 2, Displayed Rated Temp 75 Creep FE
ZP120 - ZP122, 275kV, 500mm² ACAR - Collybia, bundle of 2, Displayed Rated Temp 75 Creep FE
ZP120 - ZP122, 275kV, 500mm² ACAR - Collybia, bundle of 2, Displayed Rated Temp 75 Creep FE
ZP120 - ZP122, 400kV, 500mm² ACAR - Collybia, bundle of 2, Displayed Rated Temp 75 Creep FE
ZP120 - ZP122, 400kV, 500mm² ACAR - Collybia, bundle of 2, Displayed Rated Temp 75 Creep FE
ZP120 - ZP122, 400kV, 500mm² ACAR - Collybia, bundle of 2, Displayed Rated Temp 75 Creep FE
ZP120 - ZP122, 0kV, 160mm² OPGW - Fibral, Displayed Survey 22 Creep FE

Clearance at 275KV/400KV Displayed

ISSUE	A		
DRAWN	JS 24/06/15	FIRST ISSUE	As Surveyed
CHECKED	KM 26/06/15		
APPROVED			

6.0 m Horiz. Scale

3.0 m Vert. Scale

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National Grid Overhead Line Profiles

Profile Description:
This profile is derived from the use of LiDAR data and shows the position and status of the power line at the time of survey. Please note that ground levels may have changed since the survey date.

As the amount of power increases in the lines the conductors heat up and become longer, creating greater sag. A computer model has been applied to show the conductor at the maximum rated temperature. Please note that on an average day the conductors may not be at rated temperature and their height above ground is likely to change.

The profile states the lines current voltage. Any construction under the lines should allow for the likely possibility of upgrading of the line from 132kV to 275kV or 275kV to 400kV. Any permanent structures should adhere to the increased clearances.

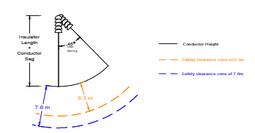
It remains the responsibility of the third party to ensure the safety clearances are met by their proposed operations by using the bottom conductor attachment points as reference benchmarks.

Drawing Key:
The following clearances are derived from the Energy Networks Association Technical Specification 43-8.

Feature Description
Tower Base
Ground / Model Key Points
Parallel Power Lines
River Navigable
Lake Navigable
Pond Not Navigable
Swimming Pool
Stream Not Navigable
Roads
Bridges
Footpath/Sidewalk/Track
Motorways
Railways
Fence
Wall
Building
Vegetation
Power Line Crossing Wires
Street Furniture
Power Line Crossing Structures
Lattice Area
Processing Plant / Industrial
Substation
Temporary Object
Intercollated Ground Points

Item	Description of Clearance	Minimum Clearance (metre) at 400kV
1	To Ground	7.6
2	To Normal Road Surface	8.1
3	To road surface of designated "6.1 metres high load" routes	9.2
4	To motorway or other road surface where "skycradle" can be used	10.5
5	To motorway road surface where scaffolding is to be used on: (i) Normal 3 lane motorways (ii) Elevated 2 lane motorways	16.3 13.3
6	To any object/building on which a person may stand. Including ladders, access platform, etc.	5.3
7	To any object to which access is not required AND on which a person cannot stand or lean a ladder	3.1
8	To trees under or adjacent to line and: (i) Unable to support ladder/climber (ii) Capable of supporting ladder/climber (iii) Trees falling towards line with line conductors hanging vertically only	3.1 5.3 3.1
9	To trees in orchards and hop gardens	5.3
10	To irrigators, slurry guns and high pressure hoses	30.0
11	To street lighting standards with: (i) Standard in normal upright position (ii) Standard falling towards line with line conductors hanging vertically only (iii) Standard falling towards line	4.0 4.0 1.9

Swing Clearances:
The conductors may swing (blow-out) to a maximum of 45 Degrees during very strong winds, clearances need to be maintained for this situation.



National Grid plc — UK Transmission
Warwick Technology Park, Gallows Hill, Warwick, CV34 6DA

Title: Towers ZP120 to ZP121
Left - B333, B387, B235 Right - A388
Chainage 25507 to 25802
Survey Date: 19/05/14

Site	ZP 4ZU046 - Rochdale		A0 CAD
Originator Drawing Number	28_NG_0373		ISSUE
NGT Drawing Number	ZP044-220_13914_A	Sheet No. 73 / No. of Sheets 164	A
SCALE:-	NGT Project No		

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