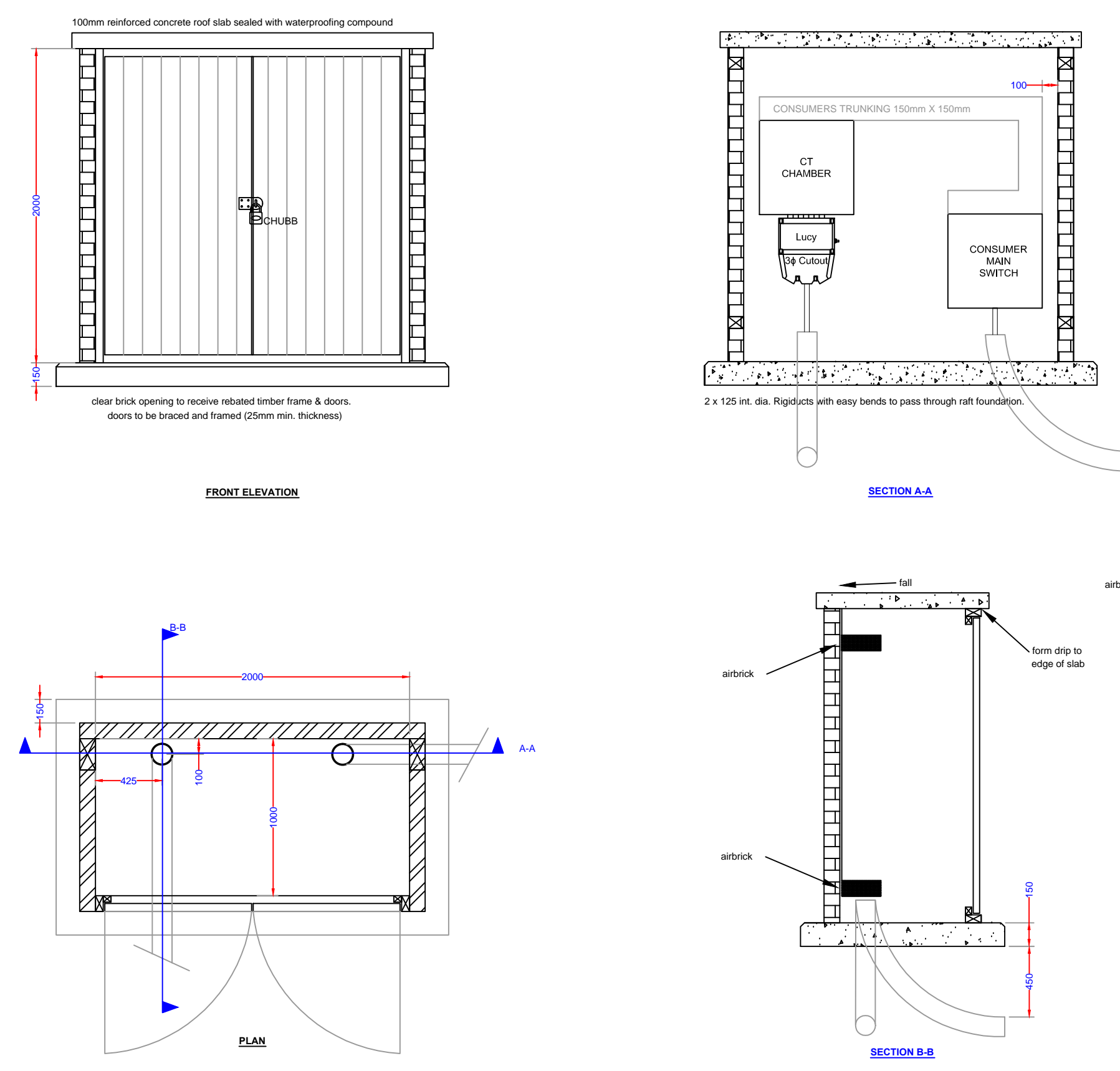


Metering Cabinet details  
Scale 1:30



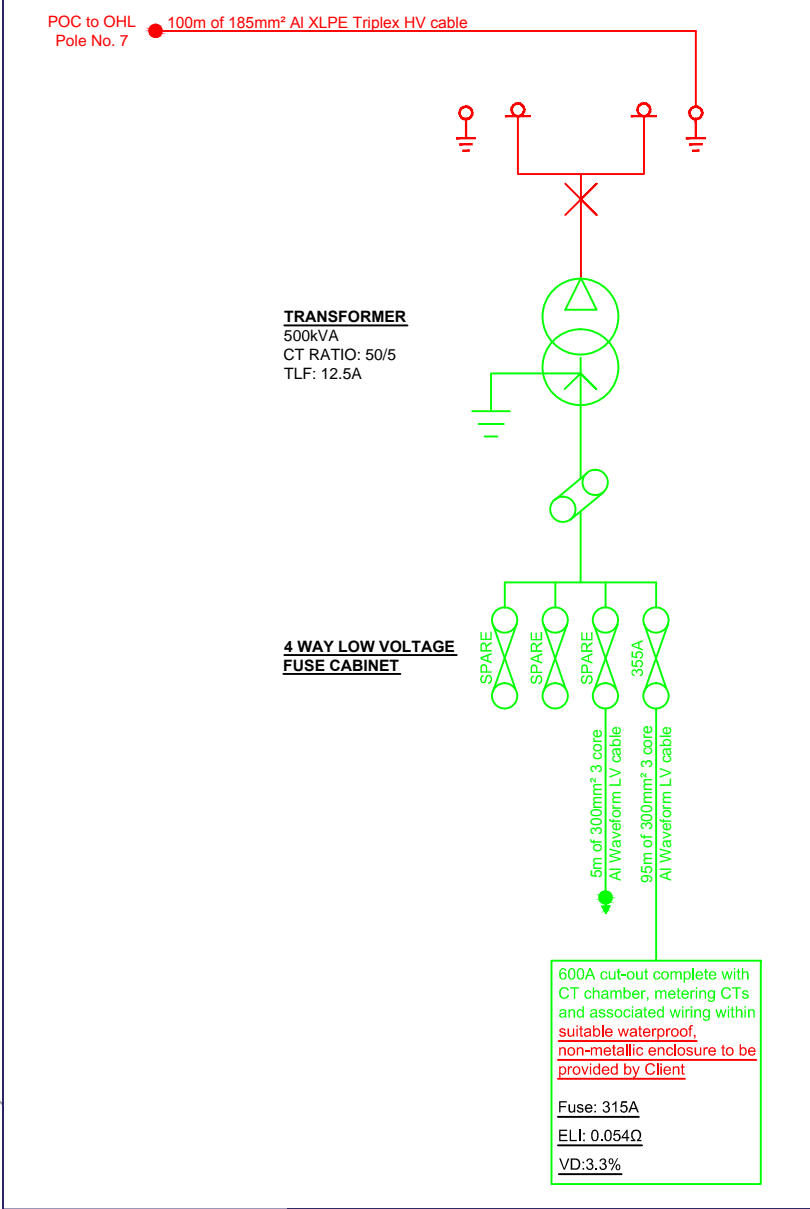
1. It is required that the equipment be made compatible with the following:
  - 1.1. The equipment shall be suitable for use in an outdoor environment.
  - 1.2. The equipment shall be suitable for use in an environment where it may be subjected to high levels of humidity and condensation.
  - 1.3. The equipment shall be suitable for use in an environment where it may be subjected to high levels of dust and dirt.
  - 1.4. The equipment shall be suitable for use in an environment where it may be subjected to high levels of vibration.
  - 1.5. The equipment shall be suitable for use in an environment where it may be subjected to high levels of noise.
  - 1.6. The equipment shall be suitable for use in an environment where it may be subjected to high levels of electromagnetic interference (EMI).
  - 1.7. The equipment shall be suitable for use in an environment where it may be subjected to high levels of radio frequency interference (RFI).
  - 1.8. The equipment shall be suitable for use in an environment where it may be subjected to high levels of lightning strikes.
  - 1.9. The equipment shall be suitable for use in an environment where it may be subjected to high levels of fire risk.
  - 1.10. The equipment shall be suitable for use in an environment where it may be subjected to high levels of theft risk.
2. The equipment shall be suitable for use in an environment where it may be subjected to high levels of humidity and condensation.
3. The equipment shall be suitable for use in an environment where it may be subjected to high levels of dust and dirt.
4. The equipment shall be suitable for use in an environment where it may be subjected to high levels of vibration.
5. The equipment shall be suitable for use in an environment where it may be subjected to high levels of noise.
6. The equipment shall be suitable for use in an environment where it may be subjected to high levels of electromagnetic interference (EMI).
7. The equipment shall be suitable for use in an environment where it may be subjected to high levels of radio frequency interference (RFI).
8. The equipment shall be suitable for use in an environment where it may be subjected to high levels of lightning strikes.
9. The equipment shall be suitable for use in an environment where it may be subjected to high levels of fire risk.
10. The equipment shall be suitable for use in an environment where it may be subjected to high levels of theft risk.

UKPN MATERIALS LIST						
DIS2440 - Reach Community Solar Farm						
Description/Supplier	Network Approval	Manufacturer Model/Type Reference or Drawing No.	Approved Supplier	Approved Document Number	Comments	SNF Number
137013176, 500 V HV, Single Phase, OMCN, HV Metal Housing Unit Type	UKPN	Complies with EU Safety 2014	Electra Energy Group	EN61879-1	Complies with new EU Issues	666007
WIND-CT Transformer - enclosed Ring Main Unit Remote Controlled Actuator on 4-16 kv cables and K10	UKPN	DUK000631	UK Power Networks	EA 01-0050	Includes UK actuator	14500A
Complete GRP housing Assembled Enclosure 800x600x200	UKPN	Complete GRP Housing Assembled Enclosure 800x600x200	UK Power Networks	EA 01-0050	ENCLOSURE GRP PHASEBRED BRANDED 800x600x200 400 kg 2600mm x 200mm x 2320 High	485694
1000 600A Three phase Heavy duty cut-out	UKPN	630065009	Leeds Switchgear, Headfield Road, Thaxted, Cambridgeshire, CB23 3JY	EA 01-0050	Insulated 600A rated 3-Phase Heavy duty cut-out suitable for use on transformers up to 2500kVA. The cut-out is suitable for use on transformers up to 2500kVA. The cut-out is suitable for use on transformers up to 2500kVA. The cut-out is suitable for use on transformers up to 2500kVA.	120044
Fuse Carrier 4 Way 600A	UKPN	EE0284 Drawing No. EE0284-GA	Schneider Electric, 11000 Boulevard de la Vallée, 91000 Evry-Courcouronnes, France	N/A	600A Transformer Mounted CT Distribution Cabinet, suitable for use on transformers up to 2500kVA. The cabinet comprises of 4 outgoing 600A ways. One set of 600A ways have general connection and Regulated coil rack fitted to fuseways	139751
335A 60-2-2007 Table 905 (82mm Central)	UKPN	335A8307	UK Power Networks	EA 01-0050	Maximum Power Disconnection Dimensions to BS 88-5: 2007 Table 2.82mm centre for use on Metal-Enclosed and Service Cable Tag	139291
335A 60-2-2007 Table 905 (82mm Central)	UKPN	335A8307	UK Power Networks	EA 01-0050	Maximum Power Disconnection Dimensions to BS 88-5: 2007 Table 2.82mm centre for use on Metal-Enclosed and Service Cable Tag	114741
300mm <sup>2</sup> aluminium overhead main cable with solid aluminium conductor, PVC insulation and copper waveform conductor made of copper conductor with a 3.6kV PVC sheath	UKPN	V381320A0404	UK Power Networks	N/A		025891
Triple 100mm <sup>2</sup> angle core 130F main cable with sheath of solid aluminium conductor, PVC insulation, 100mm <sup>2</sup> angle core wires and red PE water sheath	UKPN	VX000742E2C10	UK Power Networks	N/A		080011
Waveform to 385 to 300mm <sup>2</sup> Flat End	UKPN	840-03650-483	UK Power Networks	N/A	Weathering joint	037967
The tape for use up to 230V	UKPN	15 01 1003	UK Power Networks	N/A	The tape must be marked with UK Power Networks logo. Provided in 60m coils of 230mm wide x 2mm thick. To be laid over entire run of cable and 2m overlap	040402
125mm solid rigid PVC (6m length)	UKPN	881216	UK Power Networks	N/A	LV, 110V and 230V main cables	20451
400S 7.5kV Class 0.5	UKPN		UK Power Networks	N/A	Class 0.5 Rating 7.5kV Detail under the Entry Short Time withstand length 60s for 5.0 seconds	03000A
600A CT Chamber	UKPN	CT Approved	UK Power Networks	N/A	600A Current Transformer GRP enclosure for use in single service supplies in order to house metering current transformers equipped with WAGO metering terminal. Single clear of terminals up to 300mm <sup>2</sup> maximum of stranded cable	414098
Table K10	UKPN	Schneider	UK Power Networks	N/A	TS02 Series 2	07466
Log bolt holder and tie hook	UKPN	UK Power Networks	UK Power Networks	N/A	Standard Size	07466
Dispersion plates for the ring main units	UKPN	UK Power Networks	UK Power Networks	N/A	Standard Size	07466
Earth rod consisting galvanised 20mm x 2.0mm diameter	UKPN	88203	UK Power Networks	EA 01-0051	Extensive Galvanised	03859V
Earth rod drawing and 10mm Carbon Steel	UKPN	07289	UK Power Networks	EA 01-0051		03859V
Earth rod coupling female - 10mm Copper Alloy	UKPN	02276	UK Power Networks	EA 01-0051		03859V
Earth electrode - 30mm bar coated copper	UKPN	N/A	UK Power Networks	EA 01-0051	(BS 5296)	03859V
Earth Rod Clamp Head to Galvanised Copper Alloy	UKPN	091670	UK Power Networks	EA 01-0051		03859V

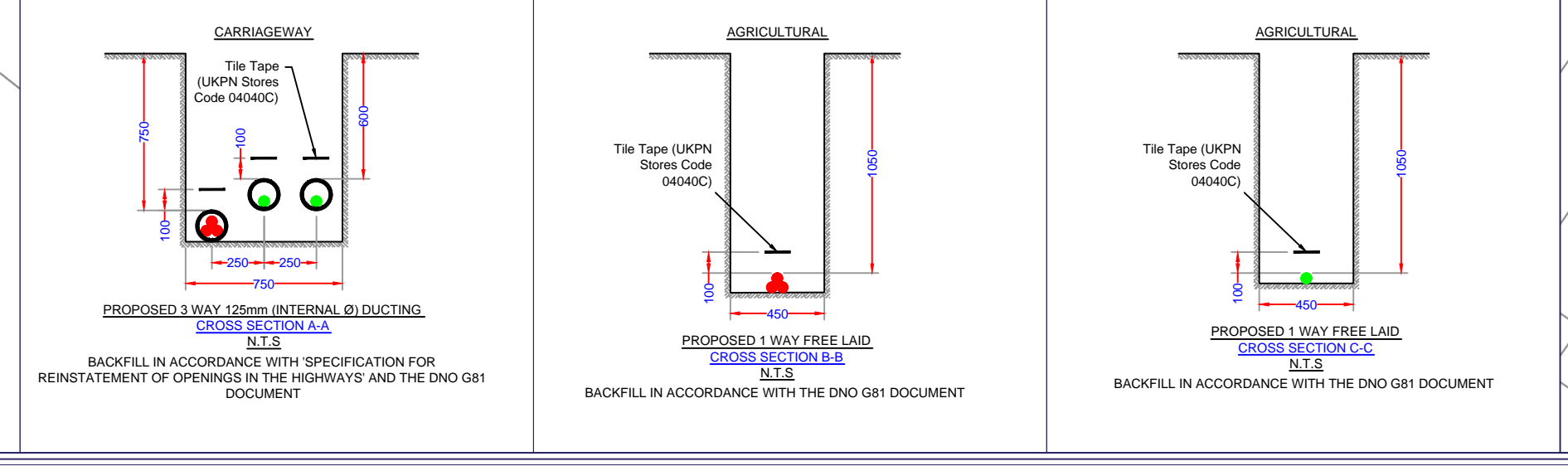
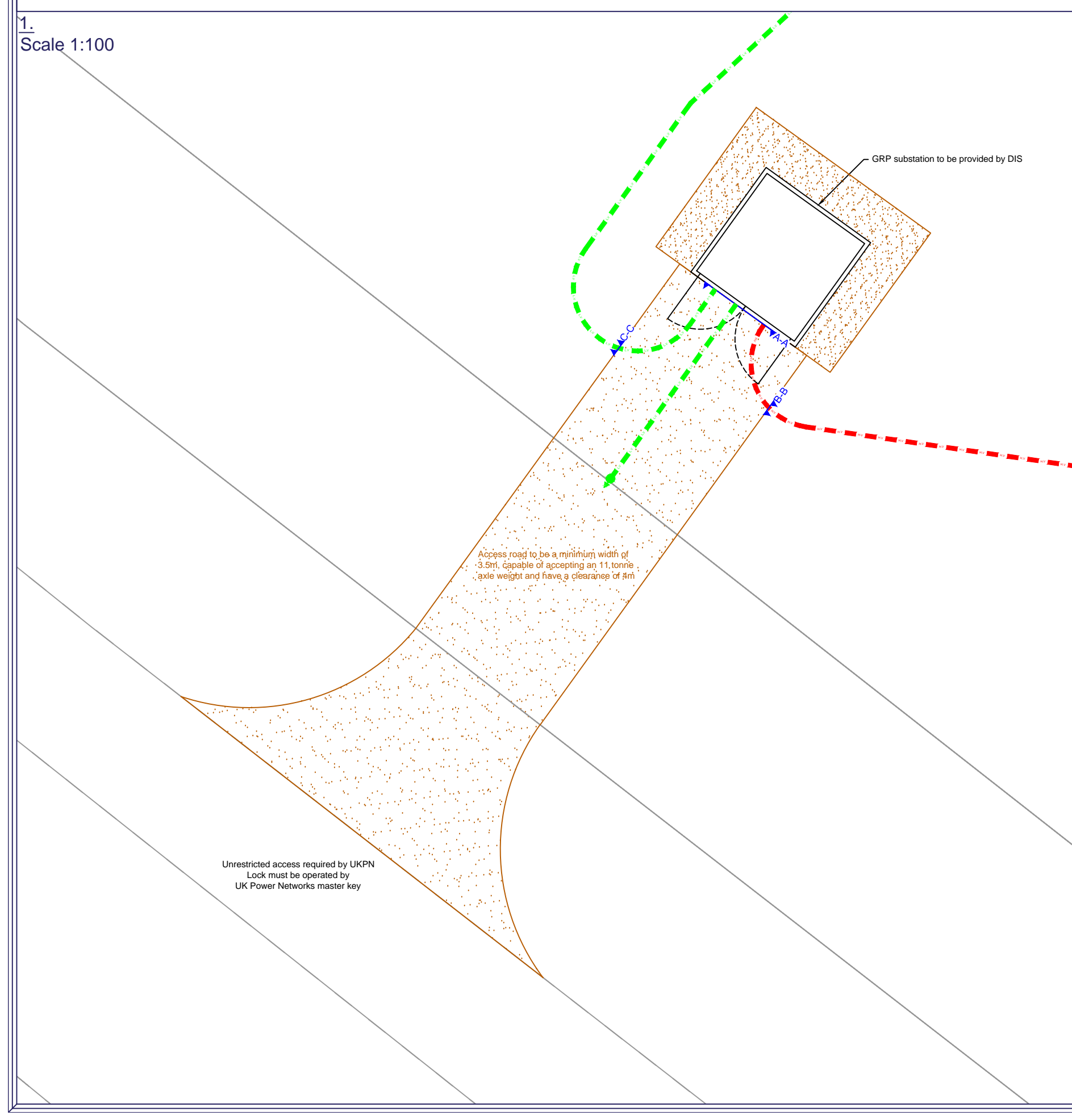
CONSTRUCTION RESPONSIBILITIES		
	CLIENT	DIS
DIS2440 - Reach Solar Farm	✓	
Completing and Agree all related Legals	✓	
On Site Excavation and Reinstatement to approved design	✓	
Supply and Install Ducts to DIS Design on site to approved design	✓	
Provide on site As-laid	✓	
Supply and Install HV and LV Cable		✓
Construct Substation Plinth	✓	
Construct/provide GRP Substation Housing		✓
Provide Enclosure for Main LV Cut-outs	✓	
Substation Earthing in accordance to Earthing Design and approved drawing		✓
Substation small power, heating and lighting		✓
Provide 24/7 pedestrian substation access		✓
Provide substation vehicle access	✓	
Supply and Install Switchgear		✓
Terminate HV and LV Mains Cables		✓
Supply and Install Main Cut-outs		✓
Supply and Install CT cabinets		✓
Supply and Install CT's		✓

REV	AMENDMENT	BY	DATE
A	Substation location revised	DW	01.09.15
B	Materials list revised, metering cabinet details added	DW	30.09.15

**NOTES**  
 Civils must include ducts, tape tie, warning marker tape and draw cords in accordance with the adopting authority  
 No allowances have been made for secondary supplies  
 No allowance has been made for diversion or disconnection of existing cables or plant



**FOR CONSTRUCTION**



**DRAGON**  
 INFRASTRUCTURE SOLUTIONS  
 12 SHETTY CLOSE, CASWELL ROAD,  
 BRACKMILLS INDUSTRIAL ESTATE,  
 NORTHAMPTON, NN4 7PL  
 TEL: 0345 365 0204  
 WWW.DRAGONIS.NET

CLIENT: Midsummer Energy  
 PROJECT: Reach Community Solar Farm, Reach, Cambs. CB25 0JF.  
 TITLE: General Arrangement  
 SCALE: 1:500 @ AD  
 DRAWN: DW  
 DESIGNED: JT  
 CHECKED: AUTHORIZED  
 FIRST ISSUE DATE:  
 TO BE READ IN CONJUNCTION WITH DIS2440-SUB-1  
 DIS2440-GA-1  
 REV: B