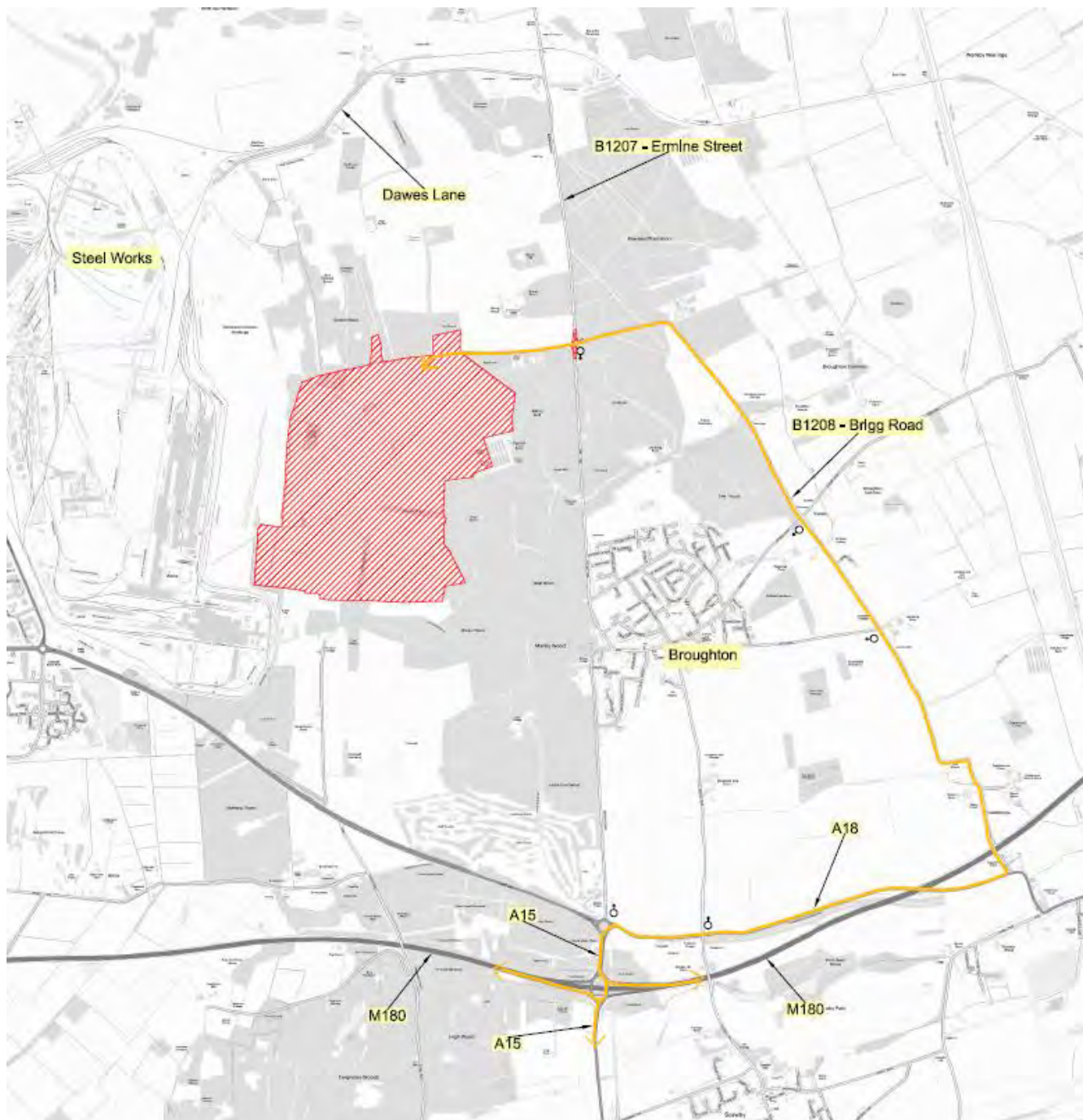


APPENDIX 9.1

PROPOSED STUDY AREA



Proposed Study Area (Construction Route to Site)

APPENDIX 9.2

ATC DATA DECEMBER 2017

Santon Solar, Scunthorpe ATC 01, B1207

Produced by Streetwise Services Ltd.

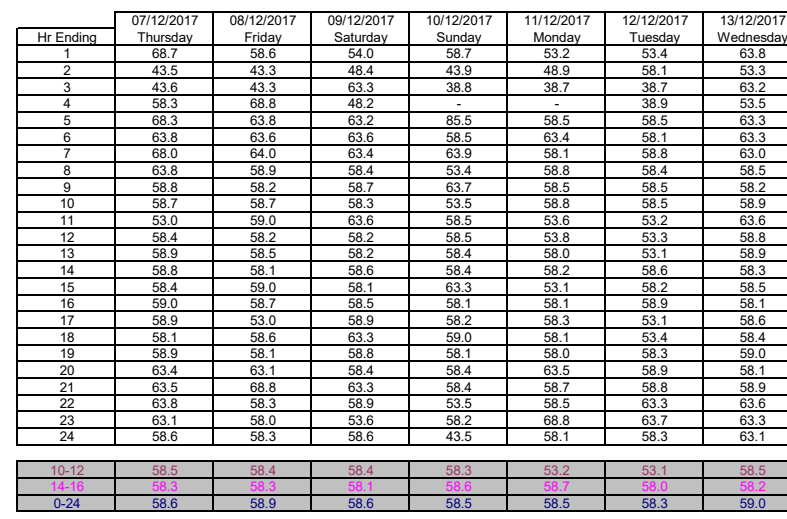


Week 1

	07/12/2017	08/12/2017	09/12/2017	10/12/2017	11/12/2017	12/12/2017	13/12/2017
Hr Ending	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday
1	61.3	50.5	50.5	45.0	48.0	49.7	60.5
2	40.5	43.0	45.0	43.0	45.5	43.8	53.0
3	34.2	33.6	54.7	35.5	38.0	38.0	63.0
4	48.0	48.0	43.0	-	-	38.0	50.5
5	49.6	52.2	51.8	56.1	47.5	48.5	51.8
6	53.7	52.3	50.7	51.8	51.8	49.2	51.8
7	51.4	52.7	51.1	48.0	49.7	48.9	50.6
8	51.0	49.6	49.3	41.9	47.9	48.1	49.4
9	51.0	50.9	50.9	48.0	50.1	48.6	50.8
10	48.3	47.9	51.1	45.4	49.1	47.2	49.9
11	46.4	48.7	51.2	48.6	46.1	47.6	50.1
12	48.0	48.9	50.2	50.4	47.7	48.0	48.5
13	49.8	50.2	51.4	50.7	49.7	46.8	49.6
14	48.9	49.0	50.2	50.1	48.2	46.8	47.4
15	48.0	49.8	51.1	51.4	48.1	47.1	48.3
16	49.6	51.0	50.7	51.1	49.2	48.5	48.5
17	49.3	48.0	50.8	48.1	48.3	46.9	48.7
18	50.2	51.2	52.1	49.3	48.2	46.5	49.5
19	50.1	51.0	50.9	50.2	50.5	50.3	49.6
20	52.0	51.8	51.2	53.3	52.3	49.7	51.2
21	53.4	51.5	52.8	52.5	50.4	50.0	47.7
22	51.4	51.6	48.0	49.0	49.2	50.3	53.4
23	53.0	51.0	48.8	52.6	55.2	56.0	51.9
24	48.0	50.7	46.8	41.3	42.0	45.5	52.3

10-12	47.2	48.8	50.7	49.6	46.9	47.8	49.4
14-16	48.9	50.3	50.9	51.3	48.7	47.7	48.4
0-24	49.9	50.0	50.7	50.0	48.9	47.8	49.6

85th Percentile



7 Day Ave	58.6
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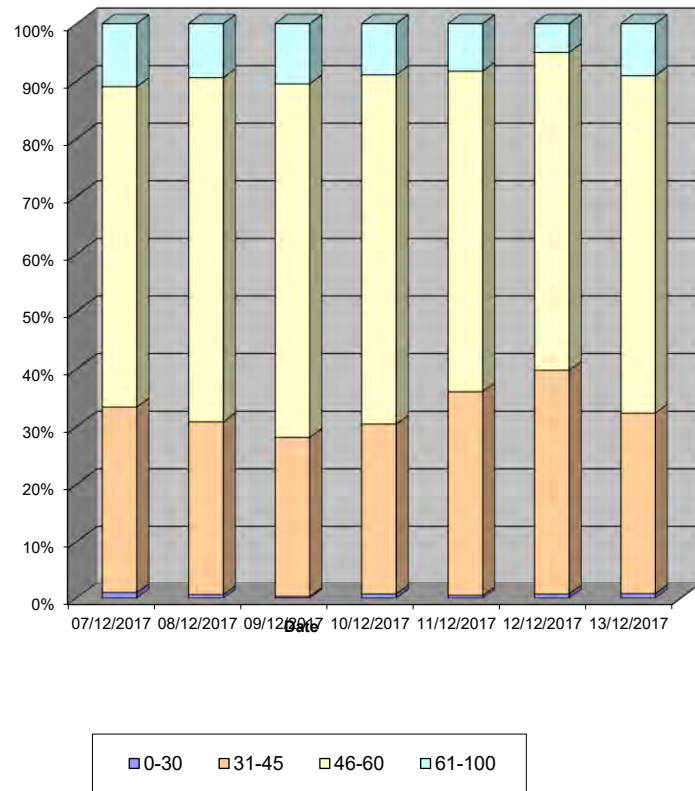
Santon Solar, Scunthorpe ATC 01, B1207

Produced by Streetwise Services Ltd.



Channel 1 - Northbound		Speed Summary						Week 1
Speed (MPH)	07/12/2017 Thursday	08/12/2017 Friday	09/12/2017 Saturday	10/12/2017 Sunday	11/12/2017 Monday	12/12/2017 Tuesday	13/12/2017 Wednesday	
0-30	18	12	4	6	7	14	14	
31-45	594	591	395	248	540	768	563	
46-60	1018	1167	869	505	843	1083	1044	
61-100	200	183	148	74	125	98	161	
TOTAL	1830	1953	1416	833	1515	1963	1782	

Speed Summary (MPH)



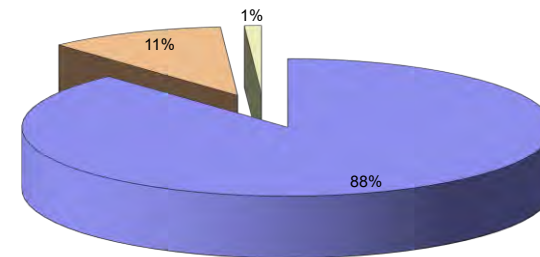
Santon Solar, Scunthorpe ATC 01, B1207

Produced by Streetwise Services Ltd.



Channel 1 - Northbound		Vehicle Class				Week 1
Day / Time	Classes	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13	
07/12/2017						
7-19		1306	206	23	1535	
6-22		1491	217	26	1734	
6-24		1525	217	26	1768	
0-24		1577	224	29	1830	
08/12/2017						
7-19		1481	167	17	1665	
6-22		1654	179	17	1850	
6-24		1694	182	17	1893	
0-24		1744	189	20	1953	
09/12/2017						
7-19		1079	90	3	1172	
6-22		1216	94	3	1313	
6-24		1247	101	3	1351	
0-24		1305	108	3	1416	
10/12/2017						
7-19		664	44	1	709	
6-22		741	48	1	790	
6-24		755	49	1	805	
0-24		778	54	1	833	
11/12/2017						
7-19		1140	158	6	1304	
6-22		1263	174	7	1444	
6-24		1283	174	7	1464	
0-24		1328	180	7	1515	
12/12/2017						
7-19		1437	229	31	1697	
6-22		1604	246	32	1882	
6-24		1623	246	32	1907	
0-24		1679	250	34	1963	
13/12/2017						
7-19		1290	185	22	1497	
6-22		1469	196	23	1688	
6-24		1503	201	23	1727	
0-24		1552	207	23	1782	
Average						
7-19		1200	154	15	1368	
6-22		1348	165	16	1529	
6-24		1377	167	16	1559	
0-24		1423	173	17	1613	

Total Vehicle Class Distribution



Santon Solar, Scunthorpe ATC 01, B1207

Produced by Streetwise Services Ltd.



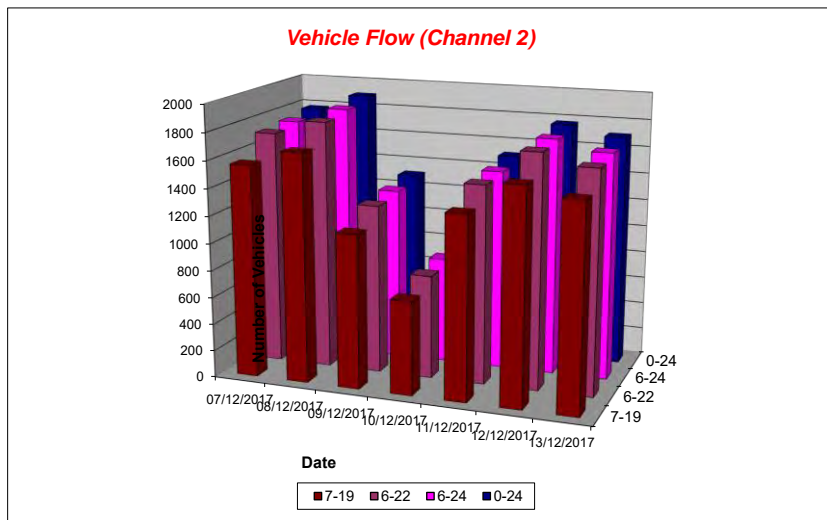
Channel 2 - Southbound									Vehicle Flow		Week 1
Hr Ending	07/12/2017 Thursday	08/12/2017 Friday	09/12/2017 Saturday	10/12/2017 Sunday	11/12/2017 Monday	12/12/2017 Tuesday	13/12/2017 Wednesday	5 Day Ave	7 Day Ave		
1	3	4	8	3	2	2	3	3	4		
2	1	3	4	4	2	3	0	2	2		
3	0	0	2	2	2	1	2	1	1		
4	1	4	6	2	2	0	2	2	2		
5	6	7	2	2	4	8	8	7	5		
6	24	22	15	8	22	20	25	23	19		
7	47	40	15	5	39	43	39	42	33		
8	132	110	39	6	111	99	128	116	89		
9	139	128	67	5	120	123	142	130	103		
10	119	112	105	41	77	75	94	95	89		
11	95	116	101	80	86	78	82	91	91		
12	108	113	101	83	69	96	108	99	97		
13	101	141	141	88	80	89	109	104	107		
14	97	147	131	88	78	109	101	106	107		
15	117	166	131	76	112	194	130	144	132		
16	160	199	97	76	144	177	119	160	139		
17	228	202	100	67	204	261	205	220	181		
18	181	167	74	44	169	212	203	186	150		
19	87	78	45	39	94	59	81	80	69		
20	49	48	54	33	32	45	50	45	44		
21	38	38	28	19	30	39	28	35	31		
22	23	22	17	15	16	18	16	19	18		
23	15	13	16	11	9	14	18	14	14		
24	7	18	9	8	5	6	11	9	9		
7-19	1564	1679	1132	693	1344	1572	1502	1532	1355		
6-22	1721	1827	1246	765	1461	1717	1635	1672	1482		
5-24	1743	1858	1271	794	1479	1737	1694	1695	1505		
0-24	1778	1898	1308	805	1509	1771	1704	1732	1539		

Santon Solar, Scunthorpe ATC 01, B1207

Produced by Streetwise Services Ltd.



Channel 2 - Southbound									Average Speed		Week 1
Hr Ending	07/12/2017 Thursday	08/12/2017 Friday	09/12/2017 Saturday	10/12/2017 Sunday	11/12/2017 Monday	12/12/2017 Tuesday	13/12/2017 Wednesday	5 Day Ave	7 Day Ave		
1	54.7	48.0	46.8	44.7	45.5	63.0	45.5				
2	53.0	44.7	39.9	41.1	45.5	43.0	-				
3	-	-	53.0	43.0	40.5	33.0	50.5				
4	63.0	53.0	55.1	40.5	50.5		58.0				
5	52.2	50.9	48.0	43.0	49.2	49.2	51.8				
6	50.1	53.1	51.7	48.6	51.6	47.1	51.4				
7	49.5	53.1	51.0	60.5	48.4	48.2	51.1				
8	46.5	44.8	43.7	39.7	41.7	43.6	43.8				
9	45.5	46.7	47.7	46.0	44.4	43.5	45.1				
10	45.5	43.3	45.7	46.9	45.6	43.8	43.7				
11	44.4	44.4	45.4	47.5	44.7	44.6	44.9				
12	46.0	44.5	46.5	48.4	44.4	46.9	43.6				
13	48.1	44.9	46.5	47.3	47.5	48.0	43.1				
14	45.8	45.5	47.2	48.5	48.1	46.8	39.6				
15	47.3	46.3	46.2	47.1	47.7	42.0	45.6				
16	45.8	45.5	45.1	46.7	44.9	45.6	47.2				
17	43.8	45.8	46.0	47.8	44.7	42.8	44.3				
18	45.7	46.9	47.1	47.8	46.1	43.4	46.2				
19	49.3	46.7	48.0	50.9	46.6	45.7	45.0				
20	49.8	45.0	46.9	47.1	46.9	47.3	46.3				
21	48.7	49.6	48.5	44.3	45.9	46.7	46.8				
22	50.2	49.6	48.1	45.7	45.2	44.1	47.8				
23	46.5	48.0	43.5	47.5	46.3	48.7	53.3				
24	50.9	48.0	44.1	48.6	44.0	52.2	52.1				
10-12	45.3	44.4	45.9	48.0	44.5	45.9	44.1				
14-16	46.4	45.8	45.8	46.8	45.1	45.3	45.3				
0-24	46.3	46.0	46.5	47.6	45.6	44.6	45.1				
									7 Day Ave	46.0	



85th Percentile								
Hr Ending	07/12/2017 Thursday	08/12/2017 Friday	09/12/2017 Saturday	10/12/2017 Sunday	11/12/2017 Monday	12/12/2017 Tuesday	13/12/2017 Wednesday	
1	58.1	53.7	58.1	58.4	53.1	68.5	63.3	
2	53.0	53.9	48.1	48.4	48.8	53.4	-	
3	-	-	58.2	48.9	48.7	33.1	53.2	
4	63.3	58.4	85.5	48.1	58.5	-	68.3	
5	63.5	63.3	48.7	43.6	53.2	53.3	58.0	
6	58.9	63.3	68.5	53.3	58.2	53.6	63.7	
7	58.5	68.2	68.6	85.6	58.3	58.8	63.8	
8	58.4	53.5	53.2	48.2	48.8	53.5	48.3	
9	53.8	53.2	58.5	58.1	53.1	48.2	53.7	
10	53.8	53.6	58.7	53.4	53.5	48.9	53.4	
11	53.7	53.4	53.8	54.0	53.8	53.4	53.8	
12	53.7	53.9	53.4	58.5	53.8	53.3	53.7	
13	59.0	53.5	53.9	53.5	53.3	58.8	53.4	
14	53.3	53.2	53.7	59.0	59.0	53.2	48.1	
15	53.5	53.7	53.1	53.2	53.8	48.4	53.4	
16	53.4	53.7	53.6	58.4	53.7	53.2	53.3	
17	53.7	53.6	53.7	58.4	53.9	48.9	53.7	
18	53.2	53.8	58.0	53.3	53.9	48.6	53.3	
19	58.4	58.2	53.4	63.5	53.4	53.4	53.8	
20	58.5	58.8	58.4	53.1	53.1	63.4	53.2	
21	58.8	58.2	58.3	58.5	54.0	58.9	53.6	
22	58.5	59.0	64.0	54.0	53.8	53.6	54.0	
23	58.4	53.1	48.8	58.6	48.7	58.9	63.2	
24	58.5	58.1	53.7	53.9	53.4	63.5	63.9	
10-12	53.2	53.8	53.4	58.7	53.0	53.3	53.1	
14-16	53.6	53.4	53.7	53.4	53.2	53.8	54.0	
0-24	53.5	53.5	53.3	58.7	53.2	53.3	53.6	
						7 Day Ave	54.2	

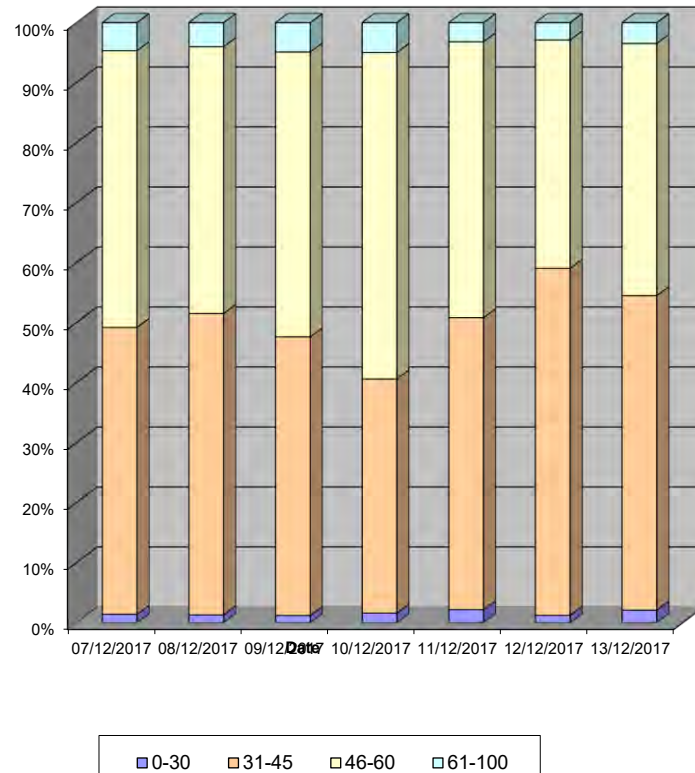
Santon Solar, Scunthorpe ATC 01, B1207

Produced by Streetwise Services Ltd.



Channel 2 - Southbound				Speed Summary				Week 1
Speed (MPH)	07/12/2017 Thursday	08/12/2017 Friday	09/12/2017 Saturday	10/12/2017 Sunday	11/12/2017 Monday	12/12/2017 Tuesday	13/12/2017 Wednesday	
0-30	25	25	16	13	33	22	36	
31-45	850	953	607	314	734	1024	893	
46-60	820	844	621	438	694	674	716	
61-100	83	76	64	40	48	51	59	
TOTAL	1778	1898	1308	805	1509	1771	1704	

Speed Summary (MPH)



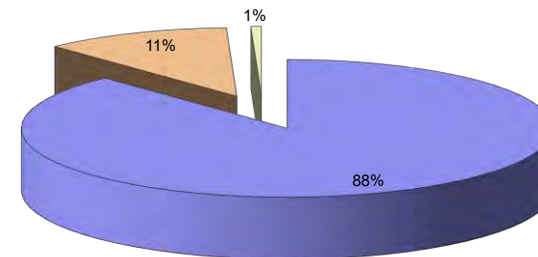
Santon Solar, Scunthorpe ATC 01, B1207

Produced by Streetwise Services Ltd.

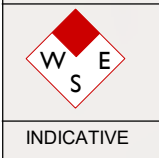
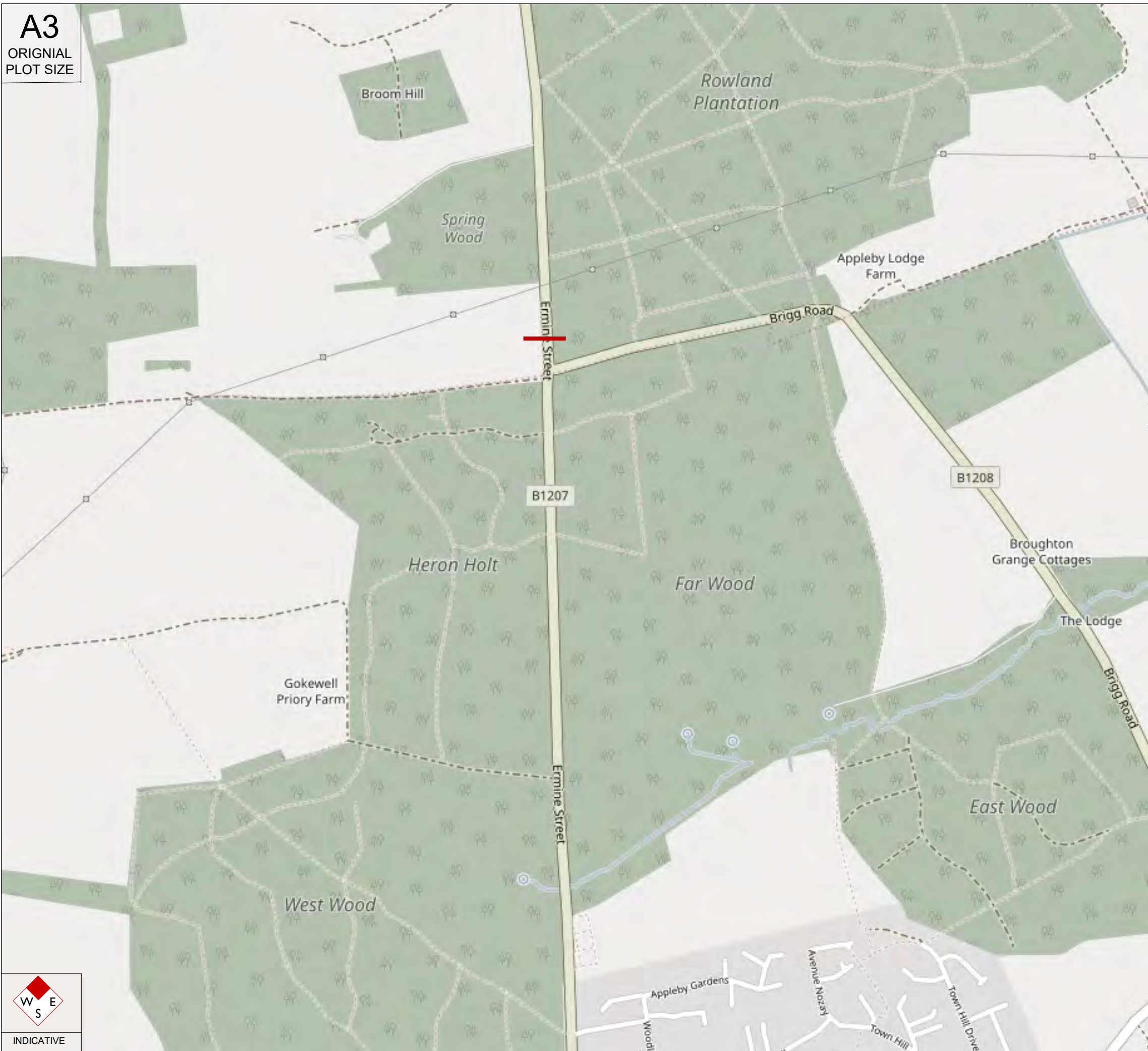


Channel 2 - Southbound				Vehicle Class				Week 1
Classes	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1,13				
Day / Time								
07/12/2017								
7-19	1345	200	19	1564				
6-22	1477	223	21	1721				
6-24	1499	223	21	1743				
0-24	1528	229	21	1778				
08/12/2017								
7-19	1490	178	11	1679				
6-22	1625	191	11	1827				
6-24	1656	191	11	1858				
0-24	1690	197	11	1898				
09/12/2017								
7-19	1035	94	3	1132				
6-22	1141	102	3	1246				
6-24	1163	105	3	1271				
0-24	1196	109	3	1308				
10/12/2017								
7-19	634	58	1	693				
6-22	700	64	1	765				
6-24	719	64	1	784				
0-24	734	70	1	805				
11/12/2017								
7-19	1159	180	5	1344				
6-22	1263	193	5	1461				
6-24	1277	193	5	1475				
0-24	1308	196	5	1509				
12/12/2017								
7-19	1365	198	9	1572				
6-22	1490	218	9	1717				
6-24	1510	218	9	1737				
0-24	1540	222	9	1771				
13/12/2017								
7-19	1295	190	17	1502				
6-22	1417	200	18	1635				
6-24	1445	201	18	1664				
0-24	1480	206	18	1704				
Average								
7-19	1189	157	9	1355				
6-22	1302	170	10	1482				
6-24	1324	171	10	1505				
0-24	1354	176	10	1539				

Total Vehicle Class Distribution



A3
ORIGINAL
PLOT SIZE



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NOTES:

Approximate ATC Location

Rev	Date	Details	Drawn by	Checked by	Approved by

Bristol

Cambridge

London

Manchester

Oxford

Welwyn Garden City

tpa

Transport Planning Associates

25 King Street

Bristol

BS1 4PB

0117 925 9400

www.tpa.uk.com

CLIENT:

PROJECT:

Little Crow, Scunthorpe

TITLE:

ATC Location

STATUS:

INFORMATION

SCALE: <div>NTS</div>	DATE:	DRAWN:	CHECKED:	APPROVED:
JOB NO:	DRAWING NO:	REVISION:		

APPENDIX 9.3

TRANSPORT STATEMENT (TPA, NOVEMBER 2018) AGRICULTURE



Little Crow

Solar Park

National significant infrastructure project in the Energy Sector

Little Crow Solar Park, Scunthorpe

TRANSPORT STATEMENT

CONTENTS	PAGE
1 INTRODUCTION	1
2 EXISTING SITE CONTEXT	2
3 TRANSPORT PLANNING POLCY AND GUIDANCE	4
4 DEVELOPMENT PROPOSALS	5
5 EFFECT OF THE PROPOSED DEVELOPMENT	7
6 SUMMARY AND CONCLUSION	10

LIST OF APPENDICES

- A Site Location**
- B Indicative Layout Drawings**
- C Construction Traffic Management Plan (CTMP)**

1 INTRODUCTION

- 1.1 This Transport Statement (TS) has been prepared by Transport Planning Associates (TPA) on behalf of INRG Solar (Little Crow) Ltd. to address the transport elements associated with the construction of a renewable led energy scheme on land to the east of the British Steel site and to the west of the B1207, at Scunthorpe, North Lincolnshire, DN16 1XP.
- 1.2 A plan showing the site location is included in **Appendix A**. The site comprises approximately 226.81 hectares of land located approximately 2.1 kilometres north of the village of Broughton. Junction 4 of the M180 is approximately 4.5 kilometres to the south.
- 1.3 The proposal is for the development of a renewable led energy scheme with Solar Photovoltaic (PV) Farm comprising 359,688 modules, power inverter cabinets and sub-stations with the potential to produce up to 150 MW of power annually, and a 90MW battery storage facility. An indicative site layout drawing is shown in **Appendix B**.
- 1.4 The solar park will generate clean renewable energy for the equivalent of over 40,000 homes a year. The anticipated CO₂ displacement is 50,000 tonnes per annum. Further details of the proposal and the technology used together with the proposed site layout are included within the supporting documents, submitted separately as part of the application.
- 1.5 The TS provides a review of the potential effects of the development proposals in transport terms. The report has been prepared in accordance with National Planning Practice Guidance (NPPG).
- 1.6 Once Solar Parks are operational, they generate very few traffic movements on a day to day basis. The transport effects of the proposals are greater during the temporary construction phase. Therefore, the TS is supported by a Construction Traffic Management Plan (CTMP). A copy of the CTMP is included within **Appendix C**.
- 1.7 Pre-application discussions have been held with officers at North Lincolnshire Council and Highways England. All comments have been taken on board in the preparation of this TS and supporting documents.
- 1.8 The remainder of this report is set out as follows:
- **Section 2** – Describes the existing site and the accessibility of the local area;
 - **Section 3** – Sets out the development proposals of the scheme;
 - **Section 4** – Considers the development in the context of national and local policy guidance;
 - **Section 5** – Considers the effect of the development in transport terms;
 - **Section 6** – Provides a summary and conclusion to the report.

2 EXISTING SITE CONTEXT

- 2.1 This section summarises the existing situation surrounding site, including details of site location and its accessibility by car and non-car modes of transport.

Site Location

- 2.2 The location of the site in its wider geographical context is shown in **Appendix A**.
- 2.3 The site comprises approximately 226.81 hectares of land located approximately 2.1 kilometres north of the village of Broughton. Junction 4 of the M180 is approximately 4.5 kilometres to the south.

Local Highway Network

- 2.4 The B1207 is situated to the east of the site, operating in a north to south alignment. It is a single carriageway road connecting the small town of Broughton to south of the site, to the village of Winterton to the north. Within the vicinity of the site, national speeds limits apply. The B1207 to the south of the site, towards the village of Broughton, is subject to a 7.5 tonne weight restriction, except for loading. As such, no Heavy Goods Vehicles (HGVs) are permitted to travel along this route
- 2.5 The B1208 operates eastwards from the site before turning to the south where it connects to the A18 and M180 at Junction 4. It is also a single carriageway road where national speed limits apply. The B1208 does not have any weight restrictions in place, and is used by HGVs associated with the Steel Works, which is accessible from Dawes Lane to the north of the site,

Accessibility by Non-Car Modes of Transport

- 2.6 The closest settlement to the site is the small town of Broughton, situated approximately 2.1km to the south. Two bus routes operate through Broughton, as follows:
- Number 4: Scunthorpe – Ashby – Broughton – Brigg - Horsby (60 minute frequency);
 - Number 642: Scunthorpe – Broughton – Hibaldston – Redbourne (two per day).

Summary

- 2.7 The site is in a suitable location for a Solar Park in terms of transport. Whilst there is not a significant level of public transport accessibility in the area, the operation of the site generates very few trips (see Section 5).

- 2.8 The roads leading to the site, notably the B1208, already serve HGVs associated with the Steel Works, which is accessible from Dawes Lane to the north of the site. Therefore, the roads are suitable for construction traffic associated with the temporary construction period. Construction movement is also considered further in Section 5.

3 TRANSPORT PLANNING POLICY AND GUIDANCE

3.1 The proposals have been considered in the context of the following documents:

- National Planning Policy Framework (2012);
- National Planning Practice Guidelines (2014);
- National Policy Statement for Energy (EN-1);
- National Policy Statement for Renewable Energy Infrastructure (EN-3);
- North Lincolnshire Local Plan (2003) and Saved Policies (2007);
- North Lincolnshire Core Strategy (2011);
- North Lincolnshire Local Transport Plan (2011)
- North Lincolnshire Planning for Renewable Energy SPD (2011)

3.2 The main thrust of transport policy contained within these documents is to provide development in suitable locations and to reduce car dependency. In particular, encouragement is given to development that is designed and located to reduce average journey lengths.

3.3 In relation to a the proposed renewable energy development, National Policy Statement EN-1 states that *“if a project is likely to have significant transport implications, the applicant’s ES should include a transport assessment, using the NATA/WebTAG139 methodology stipulated in Department for Transport guidance, or any successor to such methodology. Where appropriate, the applicant should prepare a travel plan including demand management measures to mitigate transport impacts”*.

3.4 In relation to the movement of construction materials, National Policy Statement EN-3 states *“Government policy encourages multi-modal transport and the IPC should expect materials (fuel and residues) to be transported by water or rail routes where possible... Road transport may be required to connect the site to the rail network, waterway or port. Therefore, any application should incorporate suitable access leading off from the main highway network. If the existing access is inadequate and the applicant has proposed new infrastructure, the IPC will need to be satisfied that the impacts of the new infrastructure are acceptable as set out in Section 5.13 of EN-1”*.

3.5 The North Lincolnshire Planning for Renewable Energy SPD states that schemes need to demonstrate how any environmental effect can be minimised through the construction process.

3.6 The site is situated in a suitable location for a Solar Park and, as such, the proposals comply with transport policy. Through the documents submitted as part of the application, in particular the CTMP and its proposed measures, the effects of the development on the local transport network will be minimised.

4 DEVELOPMENT PROPOSALS

- 4.1 An indicative site layout drawing is shown in **Appendix D**.
- 4.2 The main element of the project is the installation of a ground mounted solar park with a maximum design capacity of up to 150MWp (megawatts peak) to achieve a maximum export capacity value of 100MW. The photovoltaic panels will be laid out in rows across the site. In order to fully utilise the network connection capacity when the solar park is not exporting at peak capacity, the proposal will also include up to 50 MW of battery based electricity storage containers. There will also be electrical connection infrastructure, and a new substation compound is planned to be centrally located within the site, and will connect to the existing overhead electricity pylons which traverse the site.
- 4.3 The solar park will generate clean renewable energy for the equivalent of over 40,000 homes a year. The anticipated CO₂ displacement is 50,000 tonnes per annum.

Site Access

- 4.4 As stated, once Solar Parks are operational, they generate very few traffic movements on a day to day basis. The transport effects of the proposals are greater during the temporary construction phase. Therefore, the access has been designed to accommodate construction vehicles.
- 4.5 All construction vehicles will access the site via the existing farm access road from the B1207, as shown at **Figure 2.1** of the CTMP, which is contained in **Appendix C**. The access proposals have been discussed with North Lincolnshire Council.
- 4.6 Banksman will be provided at the site access to ensure the safe movement of construction vehicles when accessing and exiting the site.
- 4.7 The width of the access junction where it meets the B1207 is approximately 17 metres and visibility splays of 2.4 x 215 metres can be achieved in both directions, as shown at **Figure 2.1** of the CTMP.
- 4.8 The access track is a consistent width of around 3.2 metres and is straight. **Figure 2.2** of the CTMP demonstrates that a 16.5m long articulated vehicle, the largest that will need to access the site, can traverse the track from the B1207.
- 4.9 A passing area will be provided on the northern edge of the access track approximately 20 metres from the junction with the B1207, as shown on **Figure 2.1** of the CTMP.

- 4.10 The passing area will be 40 metres long and four metres wide, and will be large enough to allow for two 16.5 metre long articulated vehicles to pass one another without obstructing the adjacent highway.
- 4.11 Temporary signage will be erected in the vicinity of the site during the construction phase. Diagram 7301 'WORKS TRAFFIC' in the Traffic Signs Regulations and General Directions (TSRGD) will be used to indicate the access and will read 'WORKS TRAFFIC LARGE VEHICLE TURNING'. These signs will be white text and red background 1050 x 750 mm mounted in 'A' frames as illustrated at **Figure 2.1 of the CTMP**. The temporary signs will be located outside of the junction visibility splays and will be in place for the duration of the construction phase.

5 EFFECT OF THE PROPOSED DEVELOPMENT

- 5.1 The section sets out the effect of the development on the local transport network.

Effects during Operation

- 5.2 Once Solar Parks are operational, they generate very few traffic movements on a day to day basis.
- 5.3 Upon operation, general maintenance of the site will be carried out by the existing farm tenant resulting in zero external vehicle trips. However there are anticipated to be around four visits to the site a year (one per quarter) for equipment maintenance. These would typically be made by light van or 4x4 type vehicles. Whilst the contractor's compound will have been removed, space will remain within the site on the access tracks for such a vehicle to turn around to ensure that reversing will not occur onto the highway.
- 5.4 As there will only be one vehicle visit for maintenance every three months, there is no material effect of the development on the local transport network, on the site is operational.

Effects during Construction

- 5.5 The construction phase for the solar farm includes the preparation of the site, installing the access tracks, erection of security fencing, assembly and erection of the PV strings, installation of the inverters/transformers and grid connection.
- 5.6 A Construction Traffic Management Plan (CTMP) will be implemented during the construction phase of the Proposed Development. A CTMP is shown within **Appendix C** of this Transport Statement. The aim of the CTMP is to minimise the effect of the construction phase on the highway network.
- 5.7 The CTMP sets out how many vehicles will visit the site during the construction period. On average there will be approximately eight deliveries, or 16 two-way movements, per day by HGVs. In addition, there will also be a small number of construction movements associated with smaller vehicles such as the collection of skips for waste management and the transportation of construction workers and sub-contractors. It is likely that that there could be up to 10-14 LGV movements per day. This includes minibuses transporting construction workers.
- 5.8 This low level of construction vehicle movement means that there will not be a material effect on the highway network during the construction period.
- 5.9 The CTMP also sets out the routing of construction vehicles. This has been discussed with officers at North Lincolnshire Council and Highways England. The proposed routes already

serve HGVs associated with the Steel Works, which is accessible from Dawes Lane to the north of the site, and are therefore subject to use by large vehicles. The proposed construction traffic route is therefore suitable for use by the relatively low number of HGVs that will be associated with the construction period. The likelihood of background traffic being delayed significantly is low. The construction vehicle route avoids settlements such as Broughton to minimise the effect of vehicles.

5.10 The CTMP contains a package of mitigation measures to minimise the effect of construction traffic on the surrounding transport network. These include:

- Banksmen will be provided at the site access to ensure the safe movement of construction vehicles when accessing and exiting the site;
- Signage will be provided at the site access to highlight the presence of construction vehicles;
- The setup of a booking system to ensure that vehicle arrivals/departures are scheduled to avoid peak traffic periods on the local highway network, and to ensure only one vehicle arrives at a time;
- Installation of signs to direct construction vehicles associated with the development along the route. Delivery drivers, contractors and visitors will be provided with a route plan in advance of delivering to site to ensure that vehicles follow the identified route;
- Advisory signs informing contractors and visitors that parking is not permitted on-street on the B1207 or on the site access track;
- All signage and barriers on the agreed haulage route will be inspected twice daily by the site manager (once in the morning and once at lunchtime), to ensure they are kept in a well maintained condition and located in safe and appropriate locations;
- A compound area for contractors will be set up on-site including appropriate parking spaces. Contractors and visitors will be advised that parking facilities will be provided on-site in advance of visiting the site and that they should not park on-street;
- A wheel wash will be provided which hoses down vehicles so that no construction vehicles exiting the site compound will take mud or debris onto the local highway network;
- A road sweeper will be provided for surrounding local roads along the construction traffic route to alleviate any residual debris generated during the construction phase;
- The site will be secured at all times with Heras fencing;
- A requirement for engines to be switched off on-site when not in use;
- Spraying of areas with water supplied as and when conditions dictate to prevent dust;
- Vehicles carrying waste material off-site to be sheeted;
- Turning areas will be provided to ensure vehicles can exit the site in a forward gear;
- All residents along the construction traffic route, will be provided with contact details of the Site Manager, which will also be provided on a site-board at the entrance to the site; and
- Site operatives will be encouraged to use sustainable forms of travel, such as walking, cycling, public transport or car sharing where possible.

Summary

- 5.11 Once operational, very few vehicles trips will be associated with the development. Just four visits to the site a year (one per quarter) is required to provide maintenance to equipment.
- 5.12 During the construction period, there will be approximately six HGVs and 10 LGVs visiting the site per day. It is unlikely that these trips will occur during the highway network peak hours. Therefore, there will not be a material effect on the highway network. A Construction Traffic Management Plan (CTMP) will be implemented during the construction phase. This will minimise the effect of construction vehicles on the highway network.

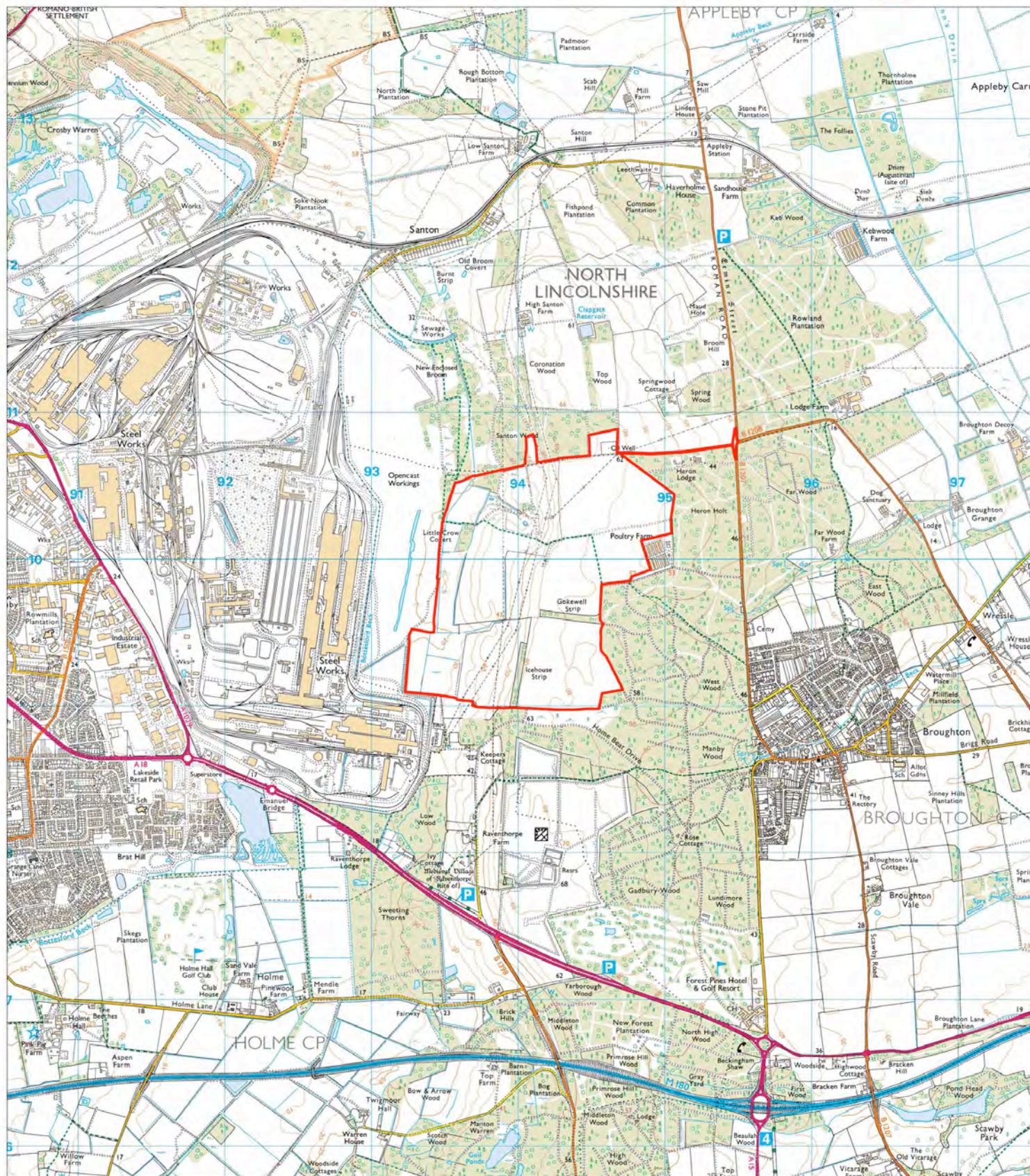
6 SUMMARY AND CONCLUSION

- 6.1 This Transport Statement (TS) has reviewed the transport elements associated with the construction of a renewable led energy scheme on land to the east of the British Steel site and to the west of the B1207, at Scunthorpe, North Lincolnshire.
- 6.2 The site currently comprises approximately 209 hectares of undeveloped land located approximately 2.1 kilometres north of the village of Broughton. Junction 4 of the M180 is approximately 4.5 kilometres to the south.
- 6.3 The main element of the proposal is the installation of a ground mounted solar park with a maximum design capacity of up to 150MWp (megawatts peak) and up to 90MW of battery storage capacity.
- 6.4 The solar park will generate clean renewable energy for the equivalent of over almost 40,000 homes a year. The anticipated CO₂ displacement is 50,000 tonnes per annum.
- 6.5 The site is in a suitable location for a Solar Park in terms of transport. The roads leading to the site, notably the B1208, are already serve HGVs associated with the Steel Works, which is accessible from Dawes Lane to the north of the site. Therefore, the roads are suitable for construction traffic associated with the temporary construction period. Construction movement is also considered further in Section 5.
- 6.6 All vehicles will access the site via the existing farm access road from the B1207. The access has been designed to accommodate the largest construction vehicle. Banksman will be provided at the site access to ensure the safe movement of construction vehicles when accessing and exiting the site.
- 6.7 Once operational, very few vehicles trips will be associated with the development. Just four visits to the site a year (one per quarter) is required to provide maintenance to equipment.
- 6.8 During the construction period there will be, on average, approximately six HGVs and 10 LGVs visiting the site per day. It is unlikely that any of these trips will occur during the highway network peak hours. Therefore, there will not be a material effect on the highway network. A Construction Traffic Management Plan (CTMP) will be implemented during the construction phase. This will minimise the effect of construction traffic on the highway network.
- 6.9 In light of the above information, it is considered the development proposals are acceptable from a transport perspective.

APPENDIX A

KEY: SITE LOCATION PLAN

APPLICATION BOUNDARY



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LITTLE CROW SOLAR PARK - SITE LOCATION PLAN

Pegasus
Design

APPENDIX B

INRG SOLAR (LITTLE CROW) LTD

In respect of
**Little Crow Solar Farm,
Scunthorpe**

Construction Traffic Management Plan

November 2018



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- A Site Layout

1 INTRODUCTION

- 1.1 This draft Construction Traffic Management Plan (CTMP) has been prepared to address the transport elements associated with the construction of a renewable led energy scheme on land to the east of the British Steel site and to the west of the B1207, at Scunthorpe, North Lincolnshire, DN16 1XP. It describes the access and route arrangements that are proposed for the period of construction activities at the site.
- 1.2 The site comprises approximately 226.81 hectares of land located approximately 2.1 kilometres north of the village of Broughton. Junction 4 of the M180 is approximately 4.5 kilometres to the south.
- 1.3 The proposal is for the development of a renewable led energy scheme with Solar Photovoltaic (PV) Farm comprising 359,688 modules, power inverter cabinets and sub-stations with the potential to produce up to 150 MW of power annually, and a 90MW battery storage facility. The draft CTMP assumes that construction of the entire development will take place in a single phase. Further details of the proposal and the technology used together with the proposed site layout are included within the supporting documents, submitted separately as part of the planning application.
- 1.4 This CTMP has been produced further to a detailed site visit and sets out the proposed construction deliveries and mitigation measures for the route to the site.

Need for Secondary Consents

- 1.5 No traffic regulation orders, temporary traffic management, footway closures or parking suspensions are required as a result of the construction phase at the site.

Report Structure

- 1.6 This CTMP sets out the strategy for the following;
- (i) construction traffic routing;
 - (ii) site access;
 - (iii) site compound and internal routing;
 - (iv) vehicle size, number and frequency; and
 - (v) proposed mitigation measures.
- 1.7 It will be the responsibility of the appointed contractor to comply with all statutory regulations and guidelines as appropriate, in relation to construction and movement activities.

- 1.8 The site manager's details will be provided to the highway authority in advance of any work being carried out.

2 SITE ACCESS

- 2.1 All construction vehicles will access the site via the existing farm access road from the B1207, as shown at **Figure 2.1**.
- 2.2 The width of the access junction where it meets the B1207 is approximately 17 metres and visibility splays of 2.4 x 215 metres can be achieved in both directions, as shown at **Figure 2.1**.
- 2.3 The access track is a consistent width of around 3.2 metres and is straight. **Figure 2.2** demonstrates that a 16.5m long articulated vehicle, the largest that will need to access the site, can traverse the track from the B1207.
- 2.4 A passing place will be provided on the northern edge of the access track approximately 20 metres from the junction with the B1207, as shown on **Figure 2.1**.
- 2.5 The passing place will be 40 metres long and four metres wide, and will be large enough to allow for two 16.5 metre long articulated vehicles to pass one another without obstructing the adjacent highway.
- 2.6 All construction vehicles will enter and exit the site in a forward gear. Banksmen will not direct general traffic, but will indicate to heavy and large construction vehicles when it is appropriate for them to enter and leave the site. Priority will always be given to the background traffic on the adjacent highway network.
- 2.7 Temporary signage will be erected in the vicinity of the site during the construction phase. Diagram 7301 'WORKS TRAFFIC' in the Traffic Signs Regulations and General Directions (TSRGD) will be used to indicate the access and will read 'WORKS TRAFFIC LARGE VEHICLE TURNING'. These signs will be white text and red background 1050 x 750 mm mounted in 'A' frames as illustrated at **Figure 2.1**. The temporary signs will be located outside of the junction visibility splays and will be in place for the duration of the construction phase.

3 CONSTRUCTION TRAFFIC ROUTING

- 3.1 The designated route for all traffic associated with the construction is illustrated on **Figure 3.1**. Visitors, delivery drivers and contractors will be advised of the agreed route in advance of driving to the site.
- 3.2 It is proposed that construction traffic will arrive from the M180 junction 4, the A15, the A18, the B1208 and B1207 to the site access.

Details of the Route

- 3.3 From the M180 junction 4 vehicles will use the A15 northbound to the Briggate Lodge Roundabout and then travel east along the A18 towards Brigg.
- 3.4 From the A18, vehicles will turn left onto the B1208. The B1208 measures between approximately 5.5 and six metres wide. Vehicles will travel along the B1208 to the junction with the B1207 and then continue straight ahead into the site access.
- 3.5 The swept path analysis of an HGV accessing and egressing the access track is provided at **Figure 2.2**.
- 3.6 The B1207 south of the site access, towards the village of Broughton is subject to a 7.5 tonne weight restriction, except for loading, as shown on **Figure 3.1**. As such, no Heavy Goods Vehicles (HGVs) will be permitted to travel through the village.
- 3.7 The roads leading to the site already serve HGVs associated with the Steel Works, which is accessible from Dawes Lane to the north of the site, and are therefore subject to use by large vehicles. The proposed construction traffic route is therefore considered to be suitable for use by the relatively low number of HGVs that will be associated with the construction period. The likelihood of background traffic being delayed significantly is low.

Management of Deliveries

- 3.8 Advisory signs will be provided along the construction traffic route, as shown on **Figure 3.2** with the exact positions to be agreed with North Lincolnshire Council (NLC) officers. The signs will be compliant with Chapter 8 of the Traffic Signs Manual, where applicable, and will be in place for the duration of the construction phase at the site.
- 3.9 Due to the relatively low number of vehicles associated with the construction phase at the site, there is not anticipated to be any delay to background traffic and background traffic will always be given priority on the B1207.

- 3.10 No traffic regulation orders, temporary traffic management, footway closures or parking suspensions are required as a result of the construction phase at the site.
- 3.11 The phone number of the Site Manager will be made available to all drivers of vehicles that will be accessing the site. The drivers of the HGVs will be required to call ahead, either whilst stopped or using their hands-free. Drivers will be advised to stop at either the A18 eastbound or the A15 northbound layby areas located approximately 1.5 kilometres east of the roundabout junction between the A15 and the A18 and 250 metres north of Junction 4 of the M180 respectively. This will allow enough time for banksmen to prepare at the site access. Similarly, when the HGVs are egressing the site, the driver will notify the Site Manager in order to allow banksmen to prepare to assist with existing vehicles.
- 3.12 The following procedure will be initiated when deliveries are made to the site:

Procedure for Arrival to Site

- Driver to call ahead to site when they reach the A18 layby;
 - The banksmen are mobilised and will go to position at the site access;
 - Driver will be informed the operators are in place and it is appropriate to travel to the site via the agreed route;
 - Each of the operatives will have a 'walkie-talkie' and will be able to communicate with each other, the site manager and the HGV drivers, as necessary;
 - Banksmen will assist HGVs to manoeuvre at the site access junction, but will not direct general traffic.
- 3.13 The contractor will employ qualified banksmen who are experienced at traffic management.
- 3.14 The following procedure will be initiated when HGVs are leaving the site:

Procedure for Leaving the Site

- Before drivers depart the site the site manager will be notified. They will then mobilise the banksmen at the site access;
- Drivers will be advised when the banksmen and operatives are in place and will leave the site;
- Banksmen will guide the drivers exiting the site access.

Summary

- 3.15 The proposed construction traffic route is considered to provide a direct route from the highway network to the site. It is of a consistent width and considered appropriate to accommodate HGV traffic associated with the construction phase, as set out in **Chapter 5**.
- 3.16 The route is currently also used by HGV traffic generated by the local Steel Works and therefore is suitable for traffic generated during the construction phase of the development.

- 3.17 The use of any other roads other than the designated and signposted route shall not be permitted and this shall be enforced through the agreement of the CTMP.
- 3.18 Appropriate mitigation measures will be provided throughout the construction phase in order to manage the arrival and departures of HGVs at the site, as set out further in **Chapter 6**.

4 SITE COMPOUND AND INTERNAL ROUTING

Contractor's Compound

- 4.1 A contractor's compound is proposed to be located at the end of the access track where all vehicles will be able to turn. All construction vehicles will therefore enter and exit the site in forward gear. The location of the construction compound is shown on the site layout at **Appendix A**.
- 4.2 The Compound will include for up to 50 parking spaces for construction workers and visitors as well as a staff office, storage and staff welfare facilities, the location is shown at **Appendix A**.
- 4.3 No parking by contractors, visitors or delivery vehicles will be permitted on the B1207 or the access track at any time during the construction phase and visitors will be advised of the parking arrangements in advance of travelling to the site. The site manager will monitor that parking is taking place in the designated area up to four times per day.
- 4.4 The construction works will be wholly contained within the site and as such no diversion of pedestrian routes, parking suspensions or closure of lanes are required.

Internal Roads

- 4.5 The solar farm layout will include permanent four metre wide access tracks throughout the site allowing for the movement of construction and maintenance vehicles.
- 4.6 It is proposed that these access tracks are completed during the initial stages of construction so temporary haul routes are not necessary.
- 4.7 The tracks will provide ground protection and enable it to support the loading of HGVs and plant and reduce the propensity of debris being taken on to the adjacent access track and highway. Internal access tracks will be constructed of graded stone on top of permeable matting.
- 4.8 If ground conditions dictate, wheel washing facilities will be provided at a contractor's compound, or at the end of the access track within the proposed passing place, to ensure no mud is taken onto the local highway network and a road sweeper will be deployed by the applicant, should this become necessary.
- 4.9 Wheel wash facilities will be provided in the form of a portable automated high pressure washer with motion sensors to conserve water. All construction vehicles will therefore have to exit through the wheel wash area and as such will reduce the spread of mud and dirt onto the local highway network.

5 VEHICLE TRIP ATTRACTION

Construction Phase

- 5.1 The applicant has advised that the construction period will take approximately 11 months (up to 47 weeks). Construction activities will be carried out Monday to Friday 0800-1800 and between 0800 and 1330 on Saturdays.
- 5.2 The construction phase for the solar farm includes the preparation of the site, installing the access tracks, erection of security fencing, assembly and erection of the PV strings, installation of the inverters/transformers and grid connection.
- 5.3 The construction of the battery storage facility will include the preparation of the site, installation of the access roads, erection of security fencing, assembly of the battery system, and installation of the switch room and grid connection.
- 5.4 The construction period will include the use of HGVs to bring the equipment onto the site and this will be strictly managed to ensure that vehicle movement is controlled and kept to a minimum. It should be noted that unlike wind farms, the construction of a solar farm and battery storage facility does not require equipment to be delivered by abnormal loads (i.e. vehicles over 16.5m in length).
- 5.5 Deliveries to the site shall be reported to the site manager and will be made on the smallest possible vehicles for that particular item of plant or material, to ensure that vehicles can manoeuvre safely.

Solar Farm

- 5.6 The components which are required to construct the solar farm will arrive in 40ft containers by 15.4m long articulated vehicles. From experience elsewhere, the applicant has confirmed that around 140 15.4m articulated vehicles are required for every 10MWp at the site, split equally between the modules and mounting structures. The site is proposed to generate 135.87MWp and as such this will equate to around 1,903 deliveries by 15.4m articulated vehicles. Assuming all deliveries arrive within a 47 week period and Monday to Saturday, this equates to, on average, around seven deliveries (14 movements) per day by the largest vehicle.
- 5.7 Inverter stations will be delivered to the site through the construction period. These are likely to be up to 11m in length. The proposed solar farm will have a total of 48 inverters. It is assumed that the inverters will be transported individually due to their weight and as such this would equate to a total of 48 deliveries.
- 5.8 In addition, the Distribution Network Operator (DNO) will install a switchgear cabinet, which connects the underground grid connection cable of the solar farm to the distribution network.

- It is typically no larger than 6m long, 2.55m wide and 2.6m high. The cabinet will arrive at the site by the smallest possible vehicle, which could be a 10m rigid lorry. A total of one delivery is required.
- 5.9 It is likely that the material required for the access tracks will arrive by 10m rigid vehicles. The precise number will depend on the type and the amount of material required, but for the purpose of this assessment we have assumed that one delivery is required per five acres, resulting in a total of 104 deliveries.
- 5.10 A number of front end JCBs will also be required to transport equipment around the site, and to distribute stone as necessary. This is a similar size to a tractor and will either be transported to the site or be driven to the site.
- 5.11 A maximum of between 80 and 100 construction workers are anticipated to be on site during peak times during the construction period. A temporary construction compound will be provided and will provide storage, parking for contractors and turning for HGVs.
- 5.12 The location where staff will travel from is unknown at this stage as it will depend on the appointed contractor. However, it is envisaged that the majority of non-local workforce will stay at local accommodation and be transported to the site by minibuses to minimise the impact on the strategic and local highway network.
- 5.13 In summary, the following heavy goods movements could be associated with the construction period of the solar farm, as set out in **Table 5.1**.

Table 5.1 Heavy Goods Vehicle Movements – Construction Period

Activity	Type of Vehicle	Total Number of Deliveries
Solar Modules & Mounting	16.5m Articulated	1,903 (3,806 two-way movements)
Inverters	11m Rigid	48 (96 two-way movements)
DNO Substation	10m Rigid	1 (2 two-way movements)
Customer Switchgear Cabinet	10m Rigid	1 (2 two-way movements)
Control Room Cabinet	10m Rigid	1 (2 two-way movements)
Access Tracks	10m Rigid	104 (208 two-way movements)
General	Front End JCB by low loader	4 (8 two-way movements)
TOTAL		2,062 deliveries (average of 8 deliveries per day or 16 two way movements per day)*
5% Buffer		2,165 deliveries (average of 8 deliveries per day or 16 two way movements per day)*
* Deliveries taking place over a 47 week period (282 working days).		

- 5.14 **Table 5.1** therefore confirms that a maximum of **2,062** deliveries (**4,124** two-way movements) could be made by HGVs associated with the construction of the solar farm, at an average of

around **eight** deliveries, or **16** two-way movements per day. If a 5% buffer is added to traffic flows to represent a worst case, the number of deliveries will still be approximately eight per day (16 two-way movements).

- 5.15 In addition to the HGV movements identified in **Table 5.1**, there will also be a small number of construction movements associated with smaller vehicles such as the collection of skips for waste management and the transportation of construction workers and sub-contractors. It is likely that that there could be up to 10-14 LGV movements per day. This includes minibuses transporting construction workers.
- 5.16 Where possible, construction deliveries will be coordinated to avoid HGV movements during the traditional AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00). Due to the site operational hours (08:00-18:00), construction worker travel will occur outside of the peak hours.

Battery Storage

- 5.17 Components which are required to construct the battery storage facility will arrive in 20ft containers by 16.5 metre long articulated vehicles.
- 5.18 Each of the battery units will require four containers measuring 6.1m x 2.4m, and a TRAFO/Inverter unit measuring up to 6.1m x 2.4m. Two containers and Inverter Units will therefore arrive per delivery. It is forecast that there will be a total of approximately 18 deliveries for the entire site.
- 5.19 In summary, it is proposed that the following heavy goods vehicle movements could be associated with the construction phase of the development as set out in **Table 5.2**.

Table 5.2 – Heavy Goods Vehicle Movements – Construction Phase

Activity	Type of Vehicle	Total number of Deliveries
Battery Modules (up to 90 MW)	16.5m Articulated	18 (36 two-way movements)
General Deliveries (cables, fencing etc.)	16.5m Articulated or 10m Rigid	65 (110 two-way movements)
Contractor's Compound	16.5m Articulated	10 (20 two-way movements)
Total		71 deliveries (average of less than one delivery per day or up to two two-way movements)
* Based upon a 47 week construction phase i.e. 282 days		

Operational Phase

- 5.20 After commissioning, general maintenance of the site will be carried out by the existing farm tenant. However there are anticipated to be around four visits to the site a year (one per quarter) for additional equipment maintenance. These would typically be made by light van or 4x4 type vehicles. Whilst the contractor's compound will have been removed, space will remain within the site on the access tracks for such a vehicle to turn around to ensure that reversing will not occur onto the highway

Summary

- 5.21 Based on the above, it is expected that there will be a maximum of around 16 large vehicles per day accessing the site over the 26 week period when deliveries will occur. There will also be construction workers arriving at the site first thing in the morning and departing in the evening, although the numbers involved are forecast to be relatively low on a day-to-day basis. The level of traffic during the temporary six month construction phase is not considered to be material and it is considered that this will not have an impact on the safety or operation of the local highway network.

6 PROPOSED MITIGATION MEASURES

- 6.1 The Construction Company will introduce measures to minimise the impact resulting from construction activities. These will be managed by the Project Manager and Site Supervisor.
- 6.2 The Site Manager will assume responsibility for the operation of the site. The details of the Site Manager will be provided to the highway authority in advance of any works being carried out:
- 6.3 Mitigation measures will include:
- (i) signs to direct construction vehicles associated with the development will be installed along the route. Delivery drivers, contractors and visitors will be provided with a route plan in advance of delivering to site to ensure that vehicles follow the identified route.
 - (ii) advisory signs informing contractors and visitors that parking is not permitted on-street on the B1207 or on the site access track.
 - (iii) all signage and barriers on the agreed haulage route will be inspected twice daily by the site manager (once in the morning and once at lunchtime), to ensure they are kept in a well maintained condition and located in safe and appropriate locations.
 - (iv) a compound area for contractors will be set up on-site including appropriate parking spaces. Contractors and visitors will be advised that parking facilities will be provided on-site in advance of visiting the site and that they should not park on-street.
 - (v) a wheel wash will be provided which hoses down vehicles so that no construction vehicles exiting the site compound will take mud or debris onto the local highway network.
 - (vi) a road sweeper will be provided for surrounding local roads along the construction traffic route to alleviate any residual debris generated during the construction phase.
 - (vii) the site will be secured at all times with Heras fencing.
 - (viii) a requirement for engines to be switched off on-site when not in use.
 - (ix) spraying of areas with water supplied as and when conditions dictate to prevent dust.
 - (x) vehicles carrying waste material off-site to be sheeted.
 - (xi) turning areas will be provided to ensure vehicles can exit the site in a forward gear.
 - (xii) banksmen will be provided at the site access to indicate to construction traffic when it is safe for them to enter and exit the site; and
 - (xiii) all residents of Brigg Road, along the construction traffic route, will be provided with contact details of the Site Manager, which will also be provided on a site-board at the entrance to the site.

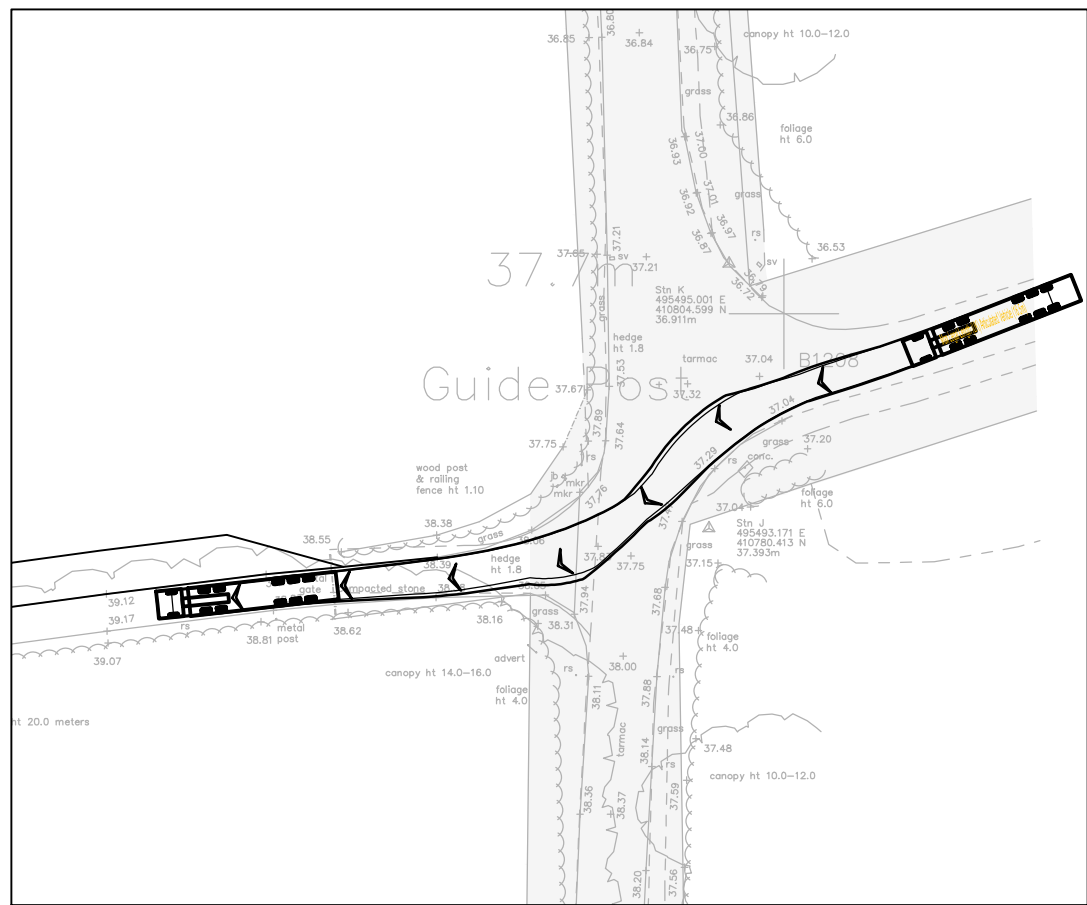
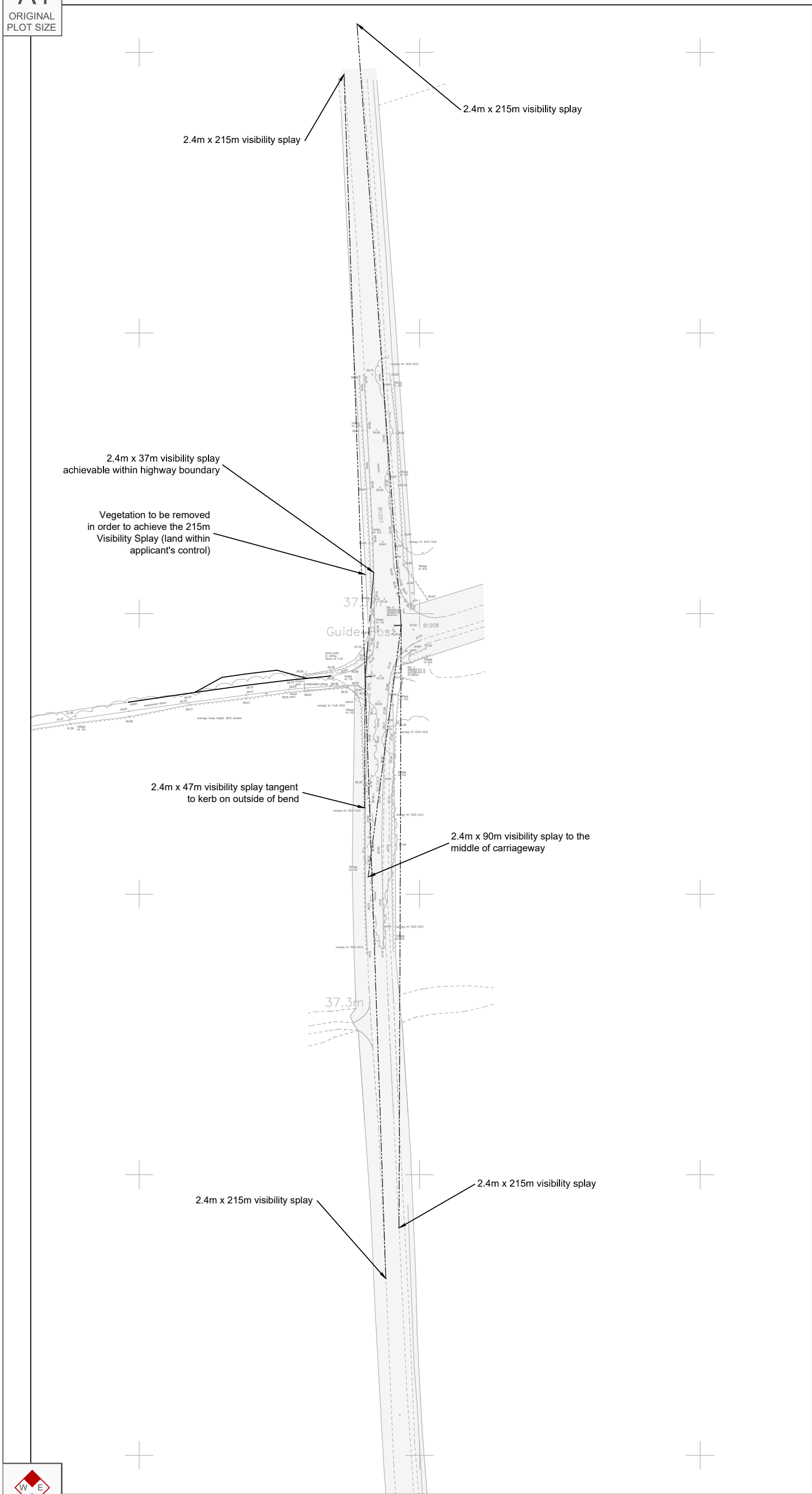
Mitigation in Local Villages

- 6.4 In addition to the above measure which will be provided on site and along the identified construction traffic route, mitigation measures are proposed along roads within local villages to reduce the impact of the construction phase on local residents and businesses.
- 6.5 These mitigation measures will be focussed on reducing existing vehicle speeds within the villages of Appleby, Broughton and Wressle.
- 6.6 These measure include;
- (i) Installation of temporary Vehicle Activated Signs (VAS) at key locations in the area. The purpose of the VAS will be to increase driver awareness of their speeds and to seek to reduce the speeds of vehicles, particularly HGVs, in these locations.
 - (ii) No HGVs will be permitted to access the site via routes through the villages of Broughton or Appleby.
 - (iii) Newsletters will be delivered to local residents and a website will be made available to provide information on construction phases and events throughout the construction period
 - (iv) Broughton Primary School is located approximately one kilometre west of the B1208 Brigg Road. As such, much of the school's catchment area is located away from the proposed construction route. It is therefore not anticipated that construction traffic would conflict with daily school activities and routines. However, construction traffic activities will be arranged to avoid coinciding with the morning and afternoon school peak hours, where possible.

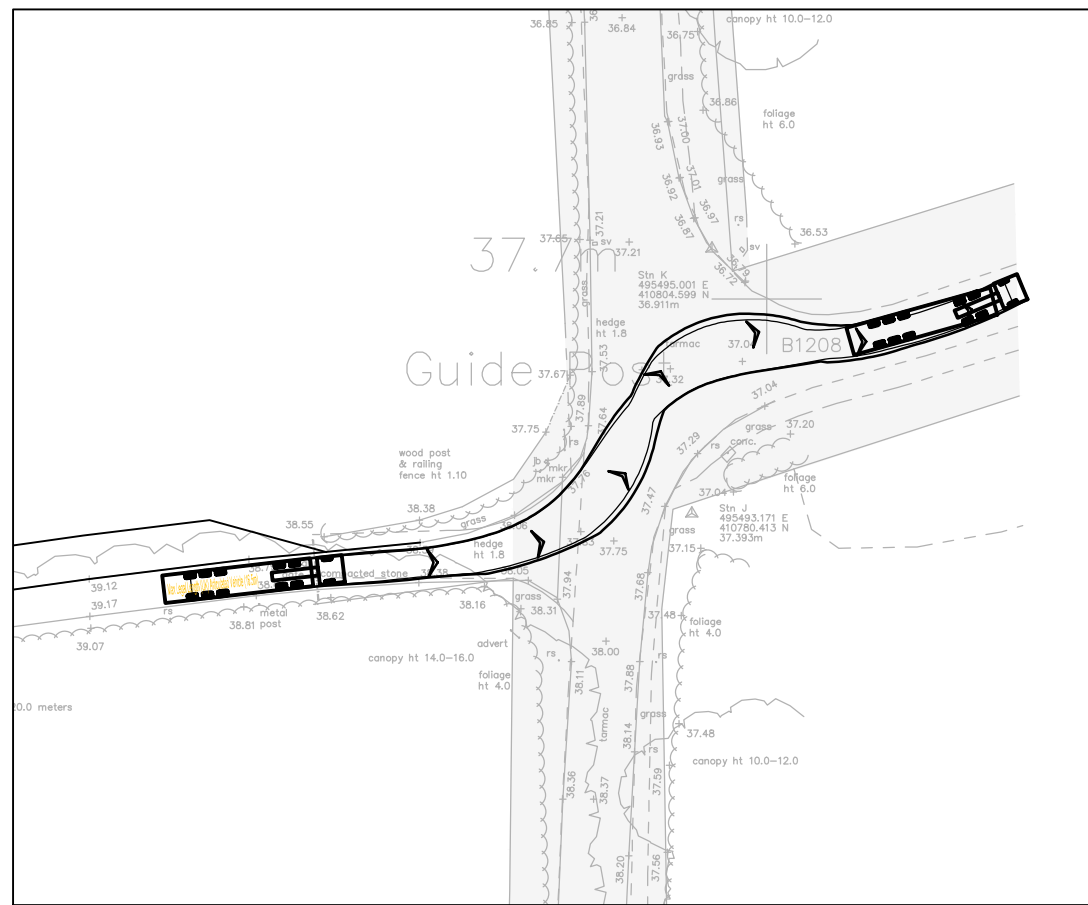
7 CONDITION SURVEYS

- 7.1 A pre-commencement Walk-Over condition survey on the local highway network will be carried out and agreed with highway officers at NLC, in order to assess the baseline condition of the adopted highway.
- 7.2 The extent of the survey will be agreed with highway officers and is anticipated to include the B1207 in the vicinity of the site access only. The wider road network, including the B1208, is already used by HGVs and as such any damage caused would not be able to be attributed to the construction of this site.
- 7.3 The survey will incorporate a photographic record as appropriate. This would be followed by a further condition survey with highway officers with a further photographic record covering the same extents at the end of construction activities, in order to identify and agree any remedial works reasonably attributable to construction activities.

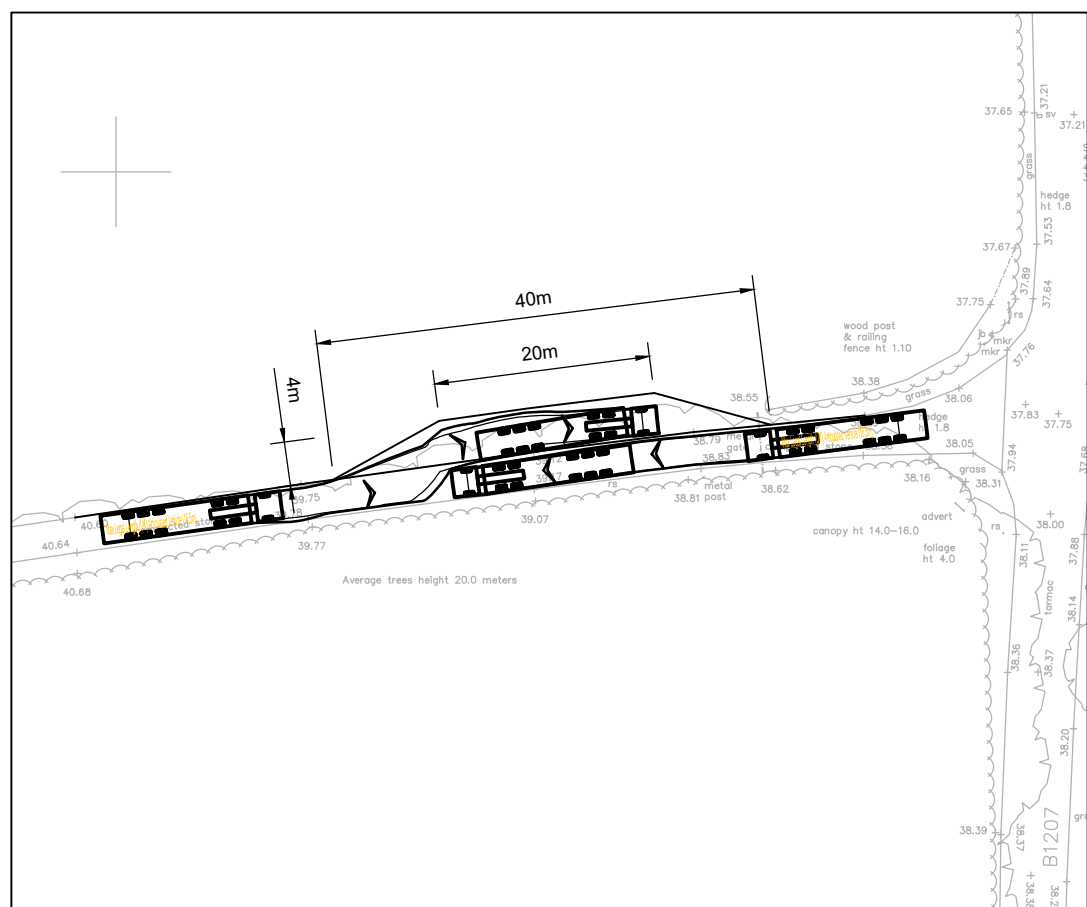
FIGURES



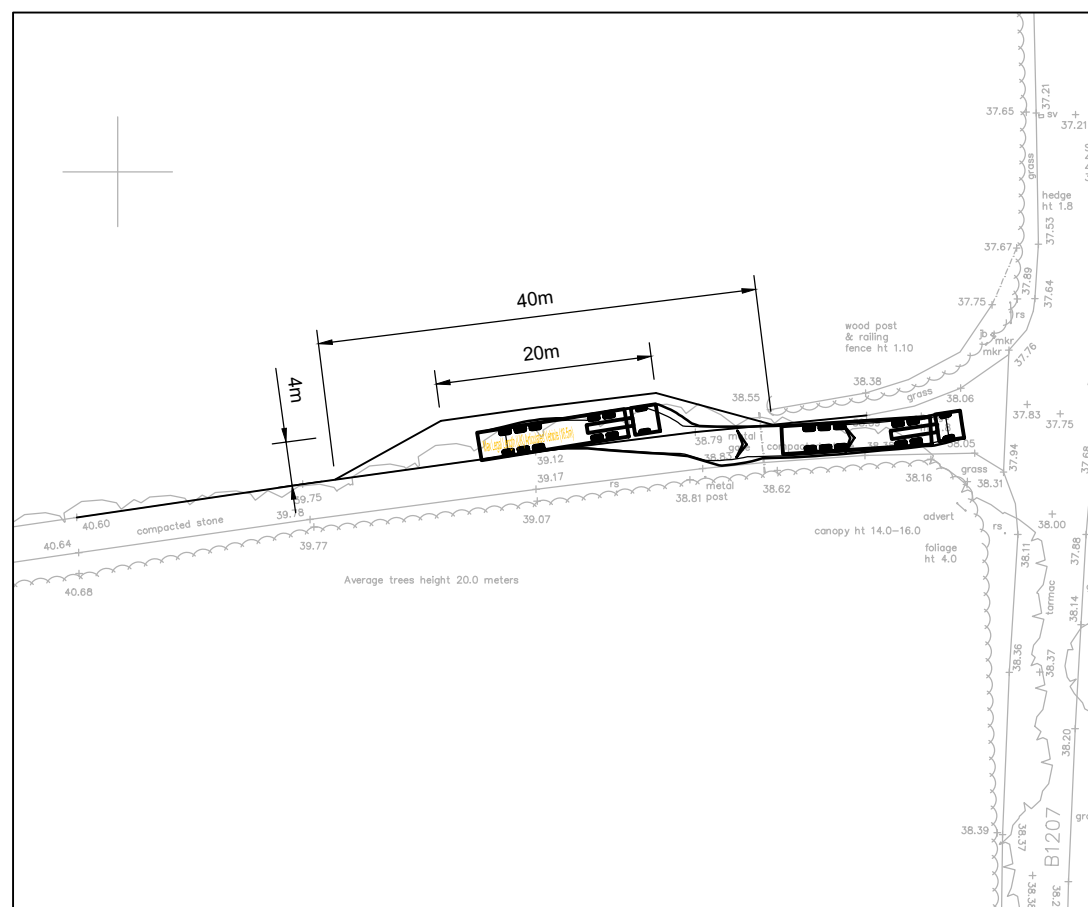
Articulated Vehicle Entering East Access SCALE 1:500



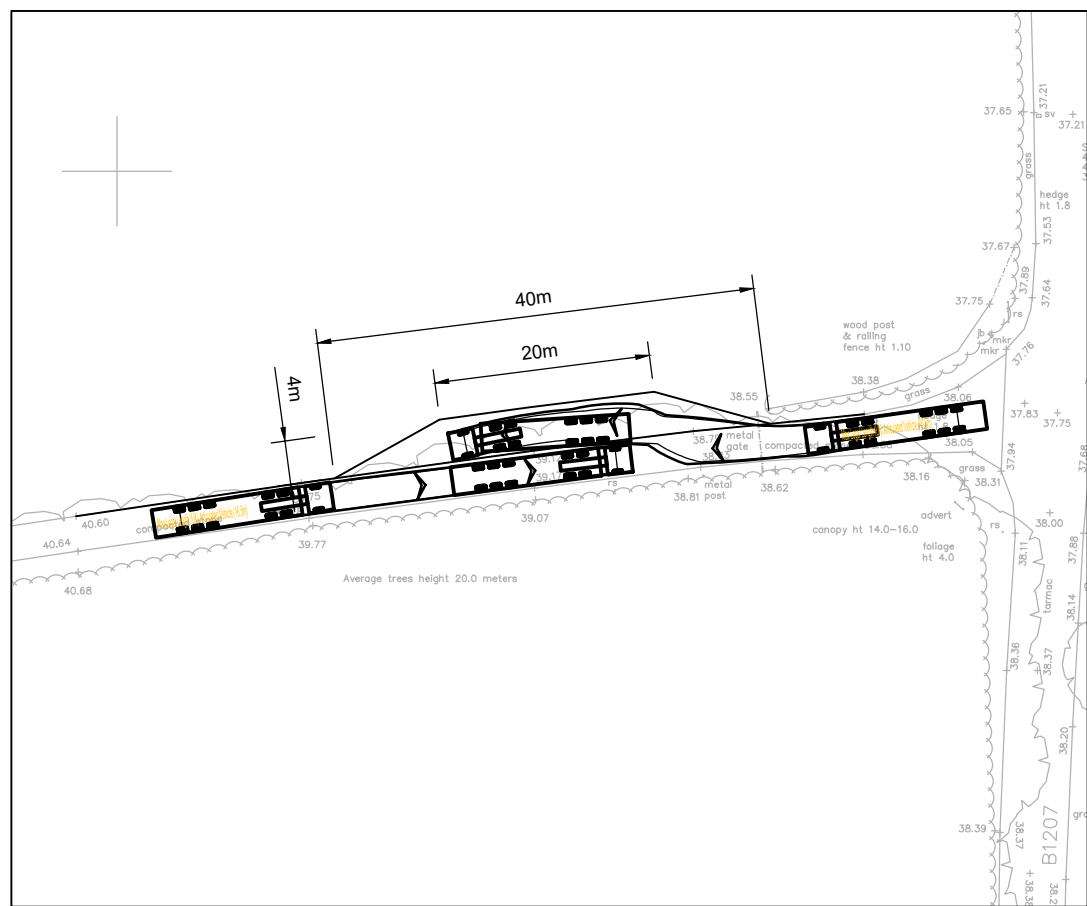
Articulated Vehicle Exiting East Access SCALE 1:500



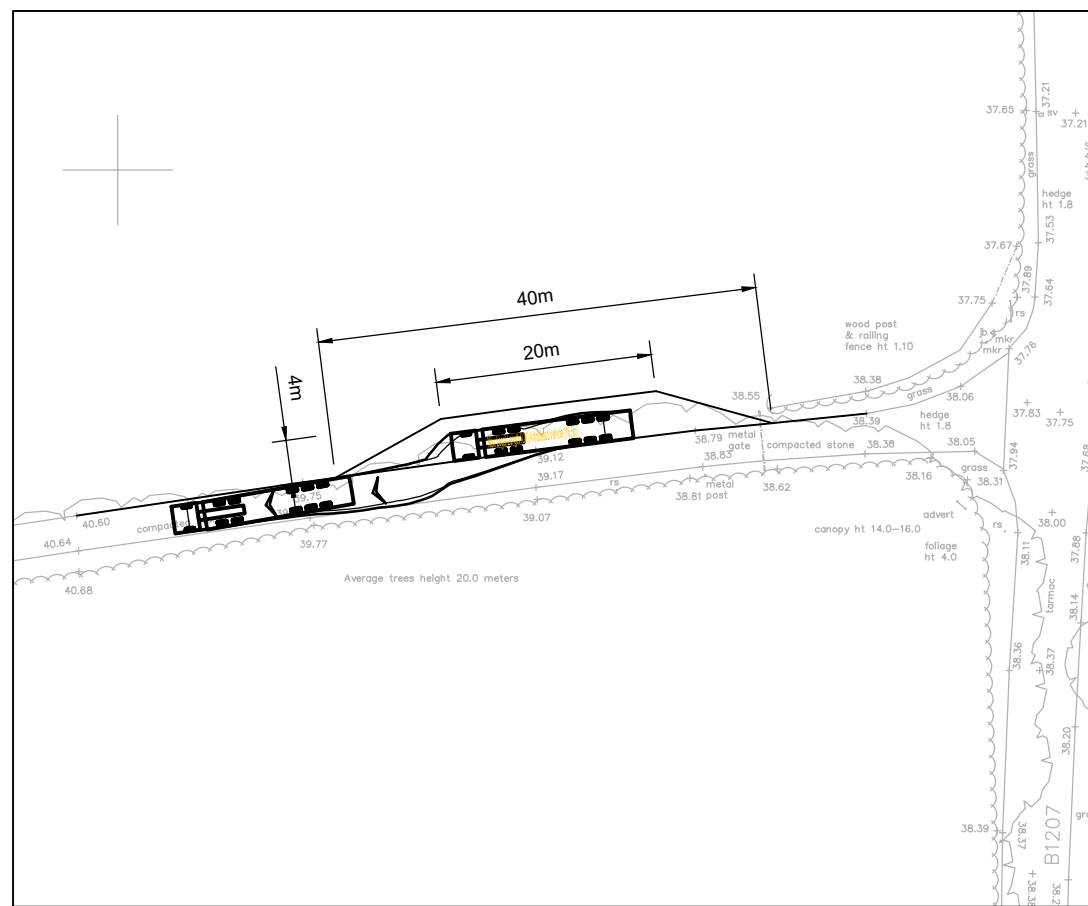
Articulated Vehicle Entering Bay from West SCALE 1:500



Articulated Vehicle Exiting Bay to East SCALE 1:500



Articulated Vehicle Entering Bay from East SCALE 1:500

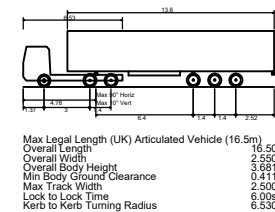
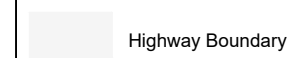


Articulated Vehicle Exiting Bay to West SCALE 1:500

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NOTES:

1. The extend of adopted highway has been taken from a scale 1:5000 ordinance survey based highway plan received from North Lincolnshire Council on 10.08.17 and is only indicative.



B	23.01.18	Visibility Splay added to East Junction	DR	RR	JD
A	07.12.17	Bay added to the drawing	DR	KSS	MB
Rev	Date	Details	Drawn by	Checked	Approved

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Welwyn Garden City

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PROJECT:
LITTLE CROW SOLAR
FARM, SCUNTHORPE

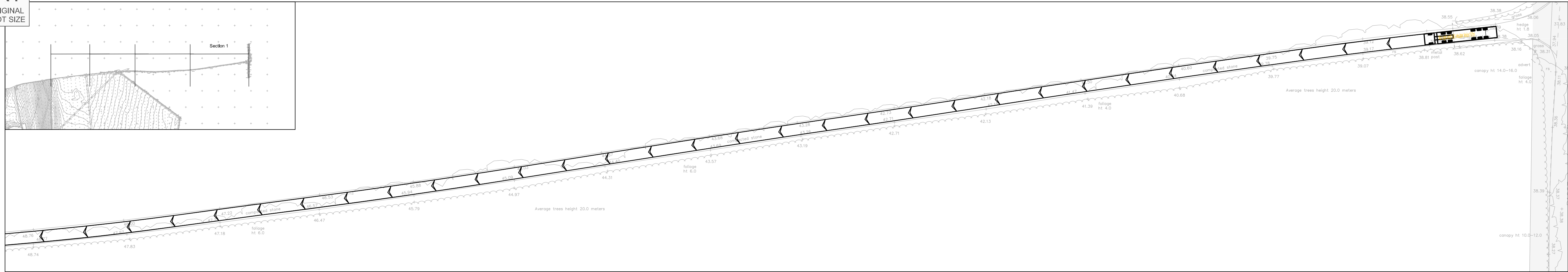
TITLE:
Visibility Splay and Swept
Path Analysis At Site Access

STATUS:

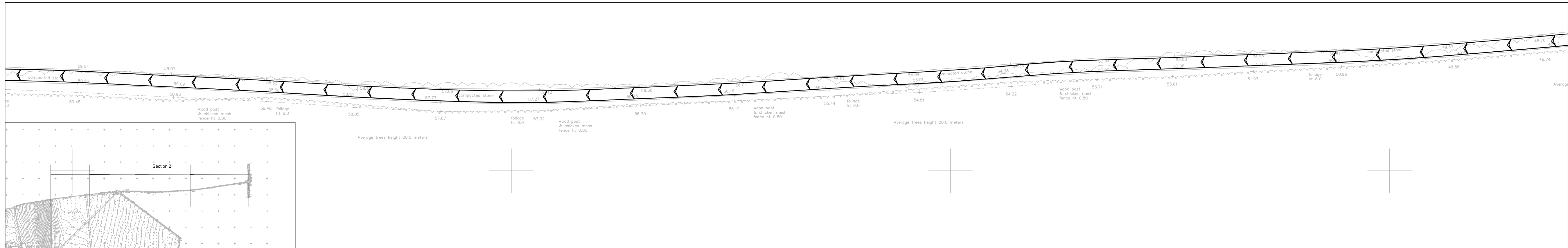
INFORMATION

SCALE: As shown	DATE: 12.12.17	DRAWN: DR	CHECKED: KSS	APPROVED: JD
JOB NO: 1705-57		DRAWING NO: Figure 2.1		REVISION: B

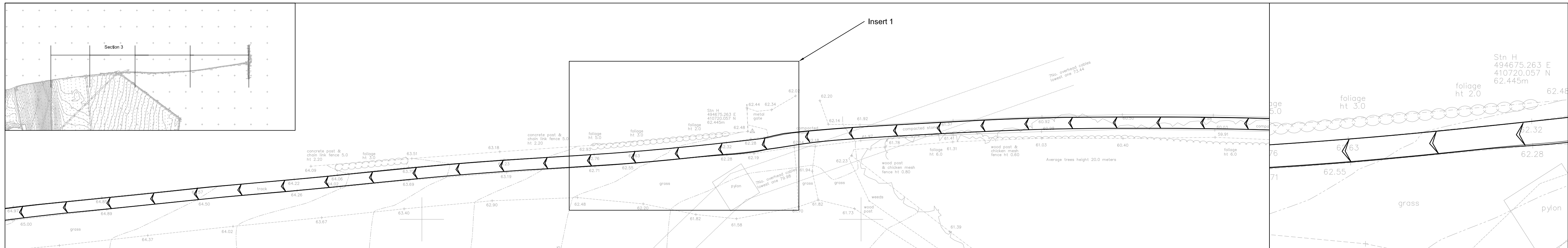
A1
ORIGINAL
PLOT SIZE



Articulated Vehicle entering site - Section 1

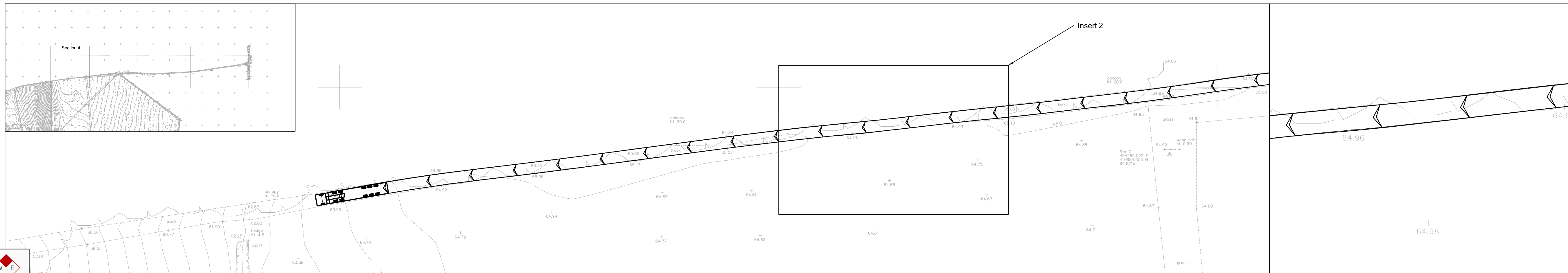


Articulated Vehicle entering site - Section 2



Articulated Vehicle entering site - Section 3

Insert 1 SCALE 1:250

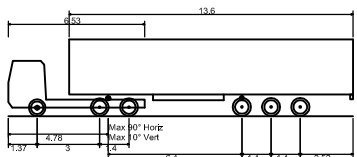


Articulated Vehicle entering site - Section 4

Insert 2 SCALE 1:250

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NOTES:



Max Legal Length (UK) Articulated Vehicle (16.5m)	
Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to Lock Time	6.00s
Kerb to Kerb Turning Radius	6.530m

-	-	-	-	-
Rev	Date	Details	Drawn by	Checked by Approved by

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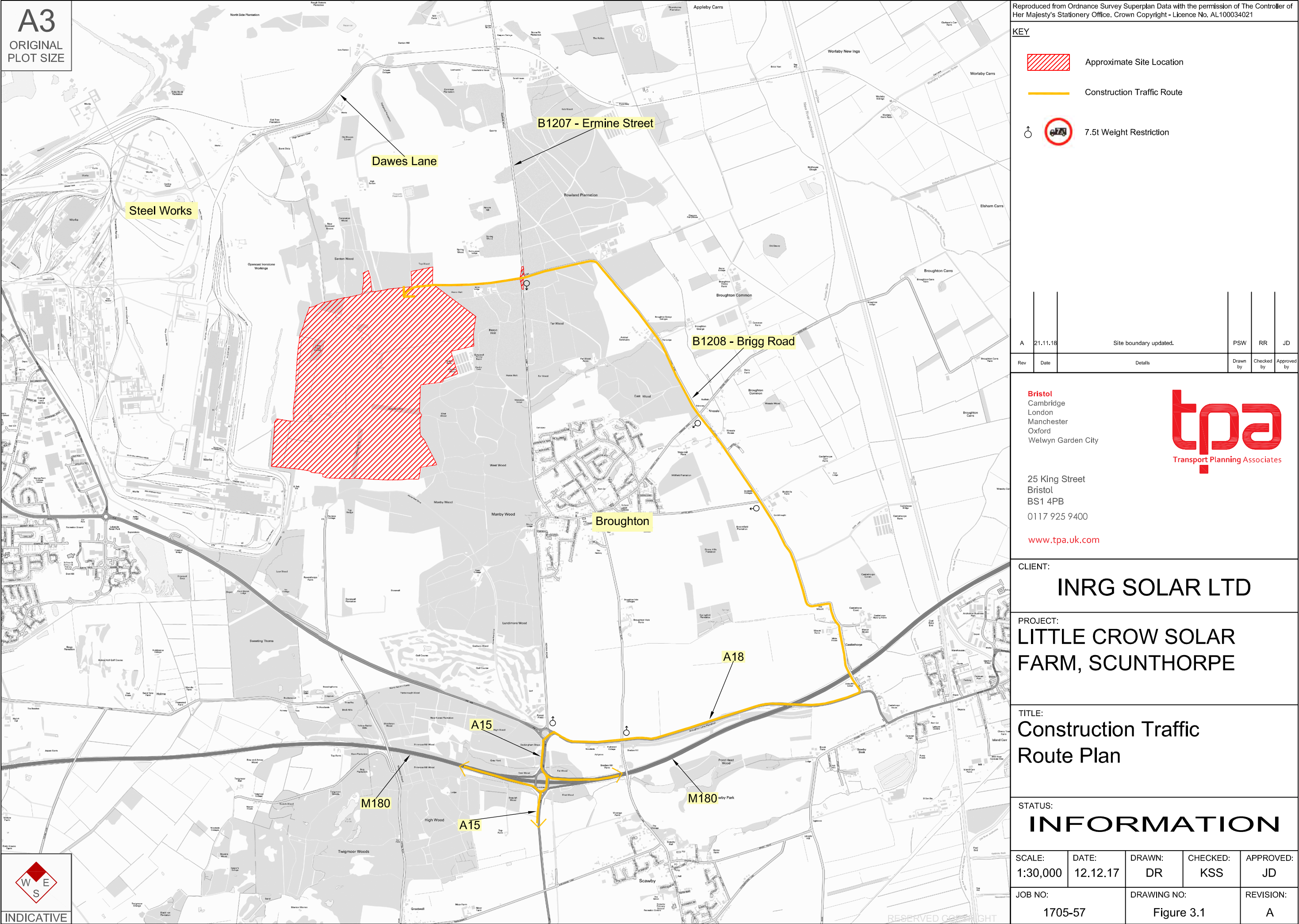
CLIENT: INRG SOLAR LTD

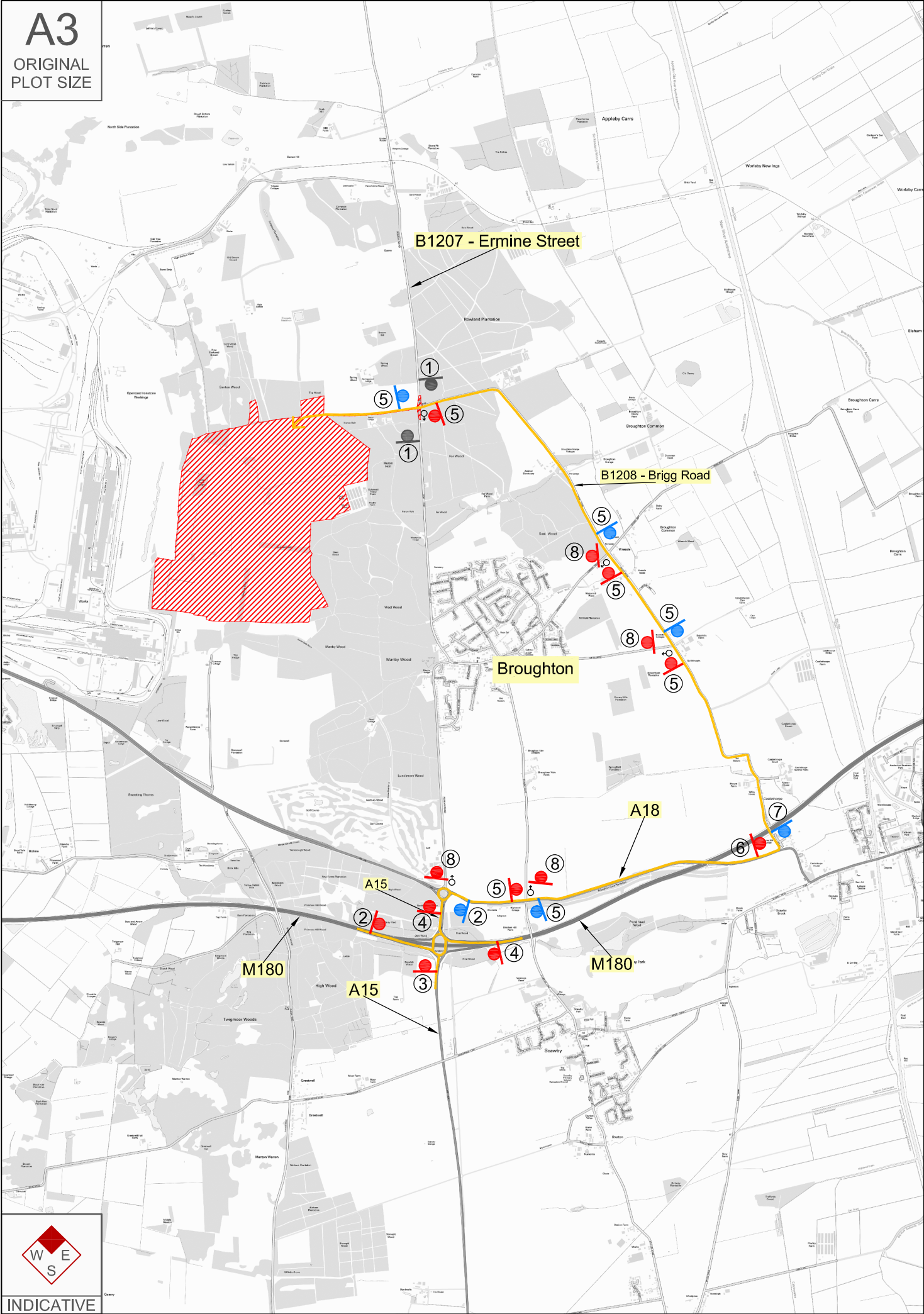
PROJECT:
LITTLE CROW SOLAR
FARM, SCUNTHORPE

TITLE: Swept Path Analysis of an Articulated Vehicle

STATUS: **INFORMATION**

SCALE: 1:500	DATE: 12.12.17	DRAWN: DR	CHECKED: KSS	APPROVED: JD
JOB NO: 1705-57		DRAWING NO: Figure 2.2		REVISION:





① = SIGN 1 (see note 1)



② = SIGN 2 (see note 2)



③ = SIGN 3 (see note 2)



④ = SIGN 4 (see note 2)



⑤ = SIGN 5 (see note 2)



⑥ = SIGN 6 (see note 2)



⑦ = SIGN 7 (see note 2)



⑧ = SIGN 8 (see note 1)



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NOTES:

1. The diagram 7301 'WORKS TRAFFIC' in the Traffic Signs Regulations and General Directions (TSRGD)
2. The diagram 2701.1 'Oak Farm Estate' in the Traffic Signs Regulations and General Directions (TSRGD)

KEY

- Approximate Site Location
- Construction traffic route for all HGV's and construction related traffic accessing and egressing site
- Signs for construction traffic accessing site
- Signs for construction traffic egressing site
- Signs for general traffic
- 7.5t Weight Restriction

Rev	Date	Details	Drawn by	Checked by	Approved by
B	21.11.18	Site boundary updated.	PSW	RR	JD
A	19.02.18	'No Access to Solar Park' sign added	DR	RR	JD

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CLIENT:

INRG SOLAR LTD

PROJECT:

**LITTLE CROW SOLAR
PARK, SCUNTHORPE**

TITLE:

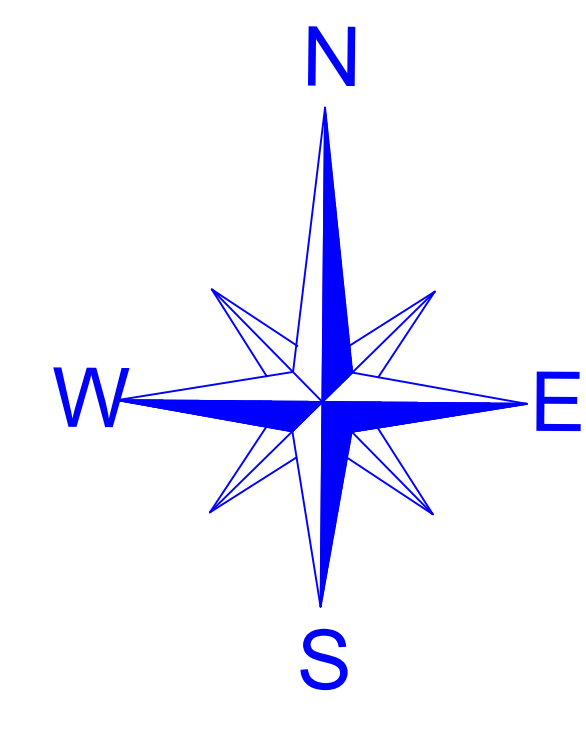
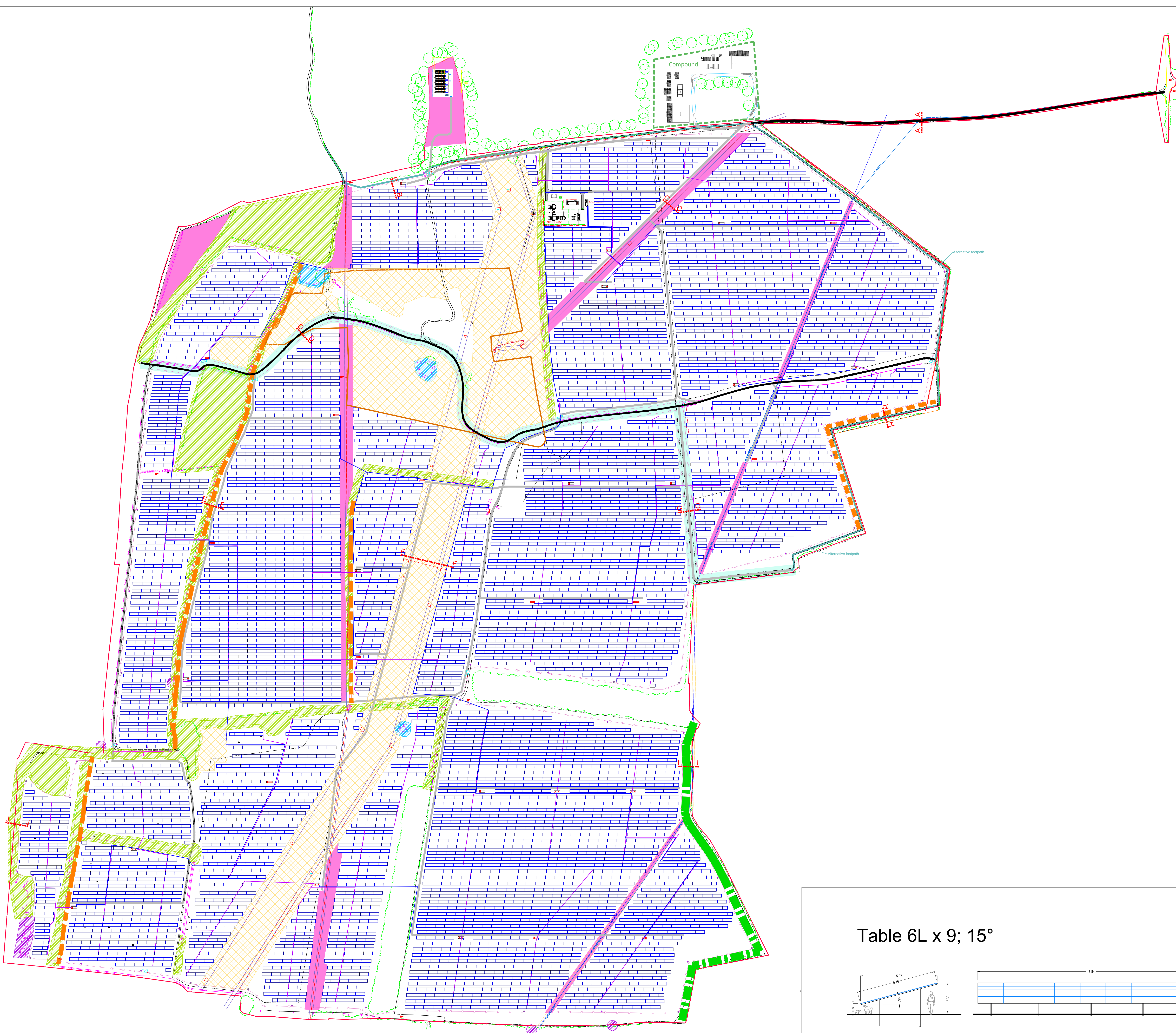
**Proposed Signage For
Construction Route**

STATUS:

INFORMATION

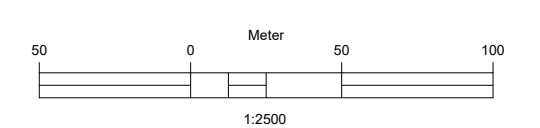
SCALE: 1:40,000	DATE: 12.12.17	DRAWN: DR	CHECKED: KSS	APPROVED: JD
JOB NO: 1705-57	DRAWING NO: Figure 3.2	REVISION: B		

APPENDIX A



Electrical design

Station A
Inverter:
AC-Combiner:
Strings:
Panels:



Key

- Table
- Existing Access Track
- New Access Track
- Public Footpath (gap = 15,00m)
- Buffer Woodland (15,0m)
- Swales (Buffer 8,00m)
- Pond (Buffer 5,00m)
- Hedges (Buffer 5,00m)
- Badger Zone (Buffer 20,00m)
- Zone for Winter Birds : 22,5ha
- Zone for Arable Weeds / Species Rich Grasslands : 5,4ha
- Transformer Station
- Construction Area
- Exclusion Zone Archeological
- Fence
- Gate / Entrance
- Trench AC
- Trench MV
- CCTV
- Alternative Footpath

Regulations 2009 Document Paragraph Reference Number
Regulation 5(2)(o)

PROJECT NAME

Little Crow Solar Park

DRAWING Table layout
DRAWING N° A10BOC0

GEOGRAPHICAL SITE:
COORDINATES 53.5773° N 0.5786° W
NN/MSL 60.0m
SUNANGLE 13.42°
DATE 21.12.2017 / 12:00

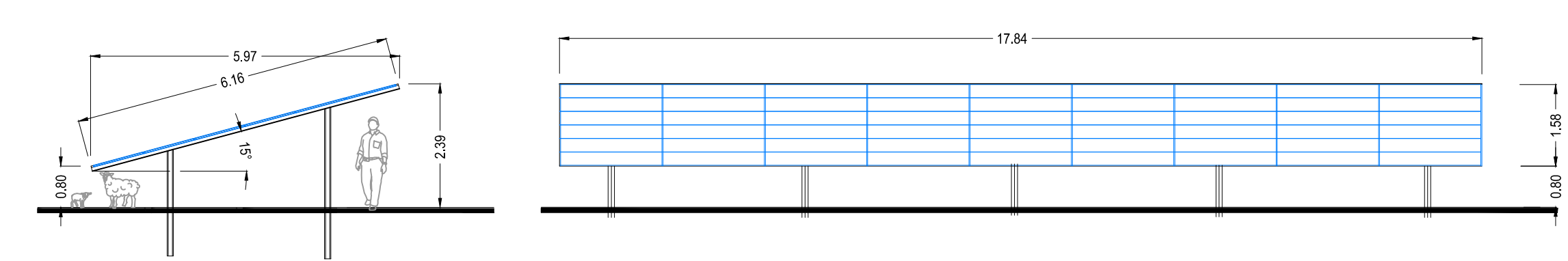
SITE SYSTEM:		CHANGE	
SYSTEM LAYOUT	6L x 9	6L x 9	
NUMBER OF TABLES	6.449 pc	345 pc	
PANEL ORIENTATION	Landscape		
NUMBER OF PANELS	357.561		
		10.07.2016	Added 50MW battery
		10.07.2016	moved Fence and roads
		02.08.2016	divers changes
		08.08.2016	divers changes

SITE TECHNOLOGY:		DRAW	
MODULE NAME		DATE	NAME
MODULE SIZE		01.08.2016	M. Redel
MODULE POWER	380 W	10.07.2016	M. Redel
TYPE OF PANELS	POLY	16.07.2016	M. Redel
ANGLE OF PANELS	15°	02.08.2016	M. Redel
TABLE SHADOW	1.0 m	08.08.2016	
ROW DISTANCES			
		CHECK	
		CHECK	
		Signature:	

SITE TOTAL POWER
DC POWER 135.87 MWp
AC-POWER nom.
AC-POWER max.

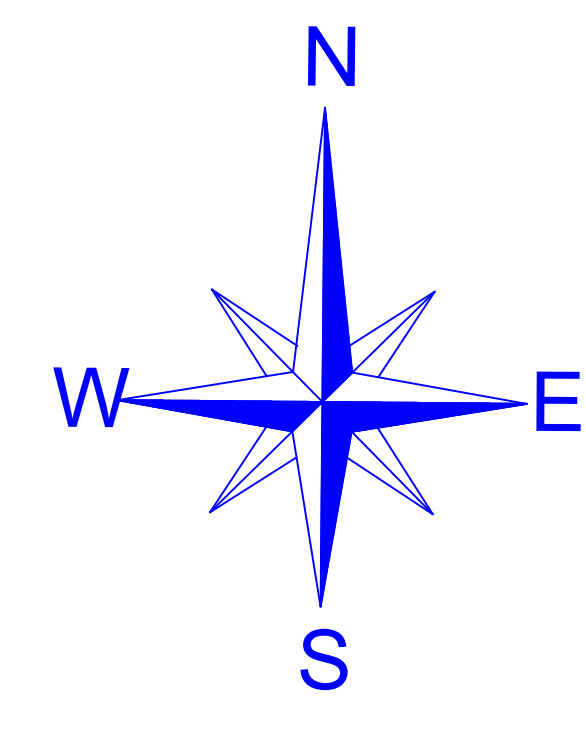
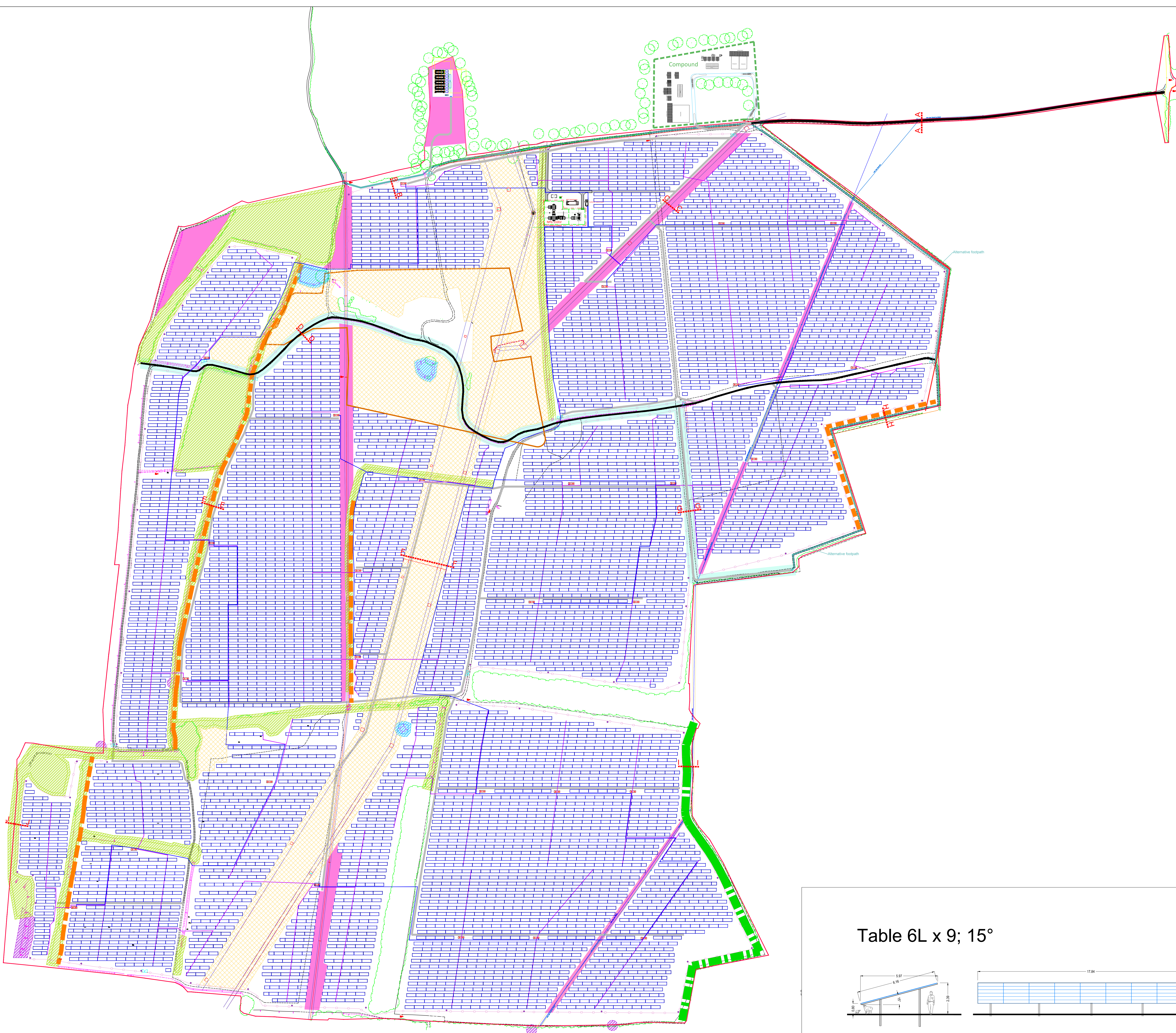
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Paper size A0
GREEN CELLS GROUP

Table 6L x 9; 15°



Section Scale
1:100

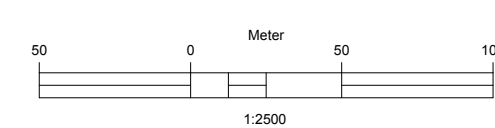
APPENDIX C



Electrical design

Station A

Inverter:
AC-Combiner:
Strings:
Panels:



Key

- Table
- Existing Access Track
- New Access Track
- Public Footpath (gap = 15,00m)
- Buffer Woodland (15,0m)
- Swales (Buffer 8,00m)
- Pond (Buffer 5,00m)
- Hedges (Buffer 5,00m)
- Badger Zone (Buffer 20,00m)
- Zone for Winter Birds : 22,5ha
- Zone for Arable Weeds / Species Rich Grasslands : 5,4ha
- Transformer Station
- Construction Area
- Exclusion Zone Archeological
- Fence
- Gate / Entrance
- Trench AC
- Trench MV
- CCTV
- Alternative Footpath

Regulations 2009 Document Paragraph Reference Number

Regulation 5(2)(o)

PROJECT NAME

Little Crow Solar Park

DRAWING Table layout
DRAWING N° A10BOC0

GEOGRAPHICAL SITE:

COORDINATES 53.5773° N 0.5786° W
NN/MSL 60.0m
SUNANGLE 13.42°
DATE 21.12.2017 / 12:00

SITE SYSTEM:

SYSTEMLAYOUT 6L x 9
NUMBER OF TABLES 6.449 pc
PANEL ORIENTATION Landscape
NUMBER OF PANELS 357.561

SITE TECHNOLOGY:

MODULE NAME
MODULE SIZE
MODULE POWER 380 W
TYPE OF PANELS POLY
ANGLE OF PANELS 15°
TABLESHADOW 1.0 m
ROWDISTANCES

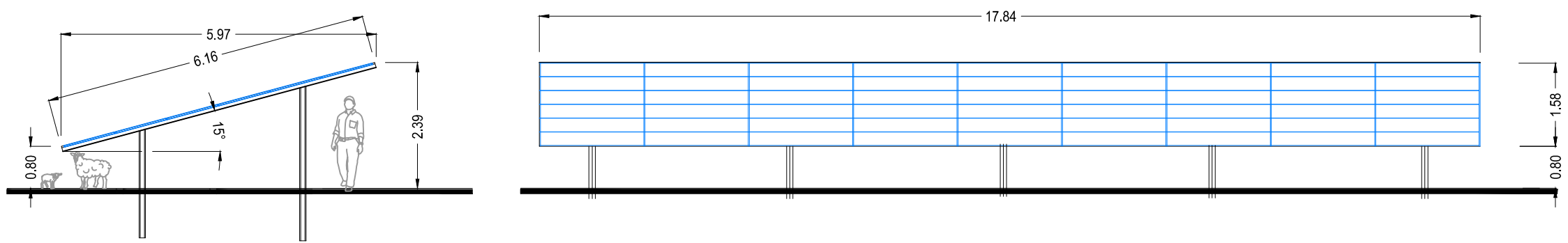
SITE TOTAL POWER 135.87 MWp

DC POWER
AC-POWER nom.
AC-POWER max.

Scale 1:2500
Paper size A0

GREENCELLS GROUP

Table 6L x 9; 15°



Section Scale 1:100