

Transport Statement

Date: 26 March 2024

Project: Proposed Solar Farm & Battery Energy Storage System,
Land Adjacent to the A614, Worksop, S80 3PA

Title: Transport Statement & Construction Traffic Management Plan

1. Introduction

- 1.1 SK has been appointed by One Planet Developments Ltd to advise on the transport implications of a proposed solar farm and battery energy storage system on land adjacent to the A614, Worksop, S80 3PA. The proposed layout is attached as Appendix A.
- 1.2 The site sits within the Bassetlaw District Council (BDC) Local Planning Authority area and Nottinghamshire County Council (NCC) Local Highway Authority area.
- 1.3 The report sets out the site in the baseline site context, examines the traffic associated with the construction and operational phases of the development, and sets out strategy that will be used to gain appropriate access to the site during both phases. The report has been undertaken in line with standard appraisal methods as set out in the following policy/assessment guidance:
 - Department for Levelling Up, Housing & Communities (2023), National Planning Policy Framework
 - Department for Levelling Up, Housing & Communities (2023), Planning Practice Guidance
 - Department for Transport (2007), Guidance on Transport Assessment
 - Bassetlaw District Council (2011), Core Strategy and Development Management Policies
- 1.4 Details of the decommissioning phase of the project are expected to be secured by way of appropriately worded planning condition.

2. Baseline Situation

Site Location & Characteristics

- 2.1 Figure 2.1 shows that the location of the site.
- 2.2 The site sits circa 6.5km to the southeast of Worksop and circa 8.5km to the southwest of Retford.

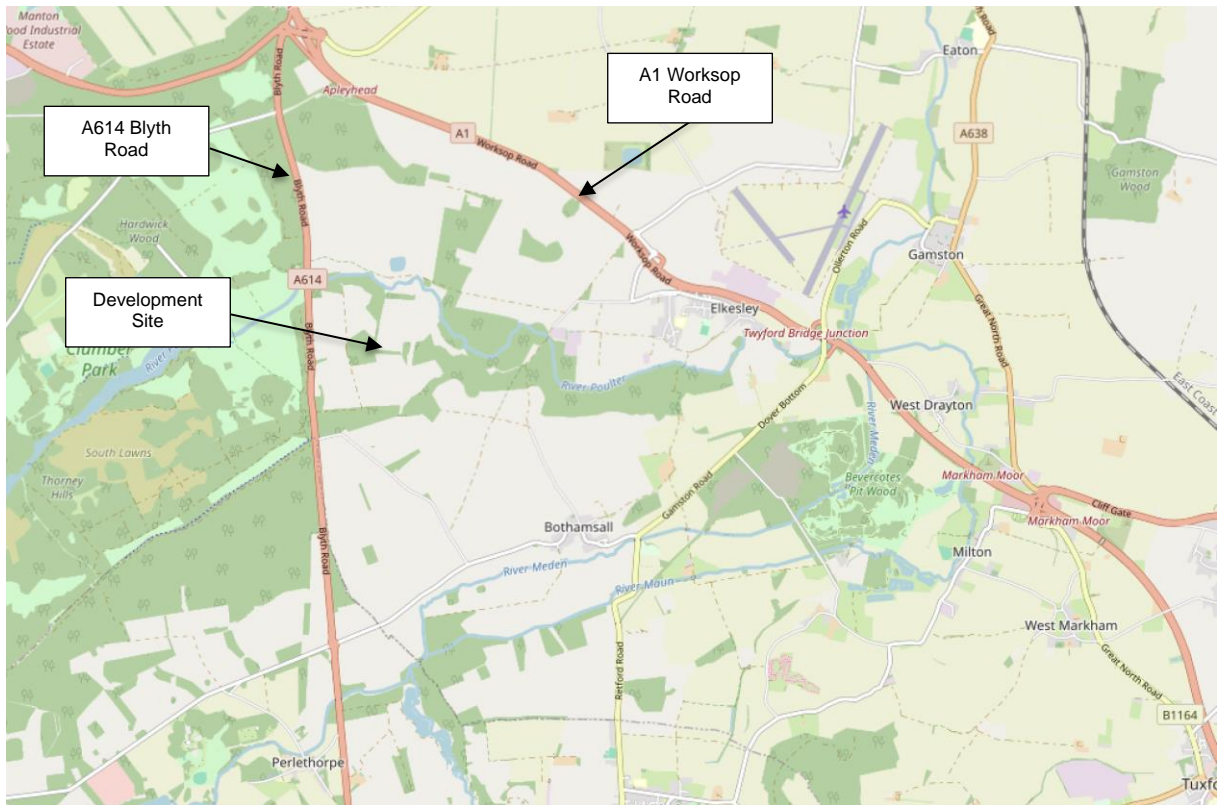


Figure 2.1: Site Location

[source: [OpenStreetMap Foundation](#) licensed under the [Open Database License](#)]

Local Highway Network

- 2.3 Vehicle access to the site is currently provided from a ghost island priority access onto the A614 Blyth Road. The existing access arrangements are shown on the plan in Appendix B.
- 2.4 In the vicinity of the site, the A614 Blyth Road has a 9.5m wide carriageway and is subject to the national speed limit. The plan in Appendix B shows that lateral visibility of 215m is available in either direction at the existing access junction from a setback distance of 2.4m, commensurate with the speed limit on Blyth Road.
- 2.5 Circa 3.5km north of the site, the A614 Blyth Road meets the A57 and A1 Worksop Road at the Apley Interchange roundabout.

Public Rights of Way

- 2.6 There are no Public Right of Way (PRoW) routes crossing the site.

Road Safety Record

- 2.7 Department for Transport (DfT) Open-Source Data ([Crashmap](#)) database has been used to establish collision patterns over the most recent five-year period available.¹
- 2.8 Figure 2.3 shows that there have been no collisions at the site access junction during the period assessed.
- 2.9 There have been three collisions on the A614 Blyth Road to the south of the site. All of the collisions were classified as slight.

¹ <https://www.crashmap.co.uk>

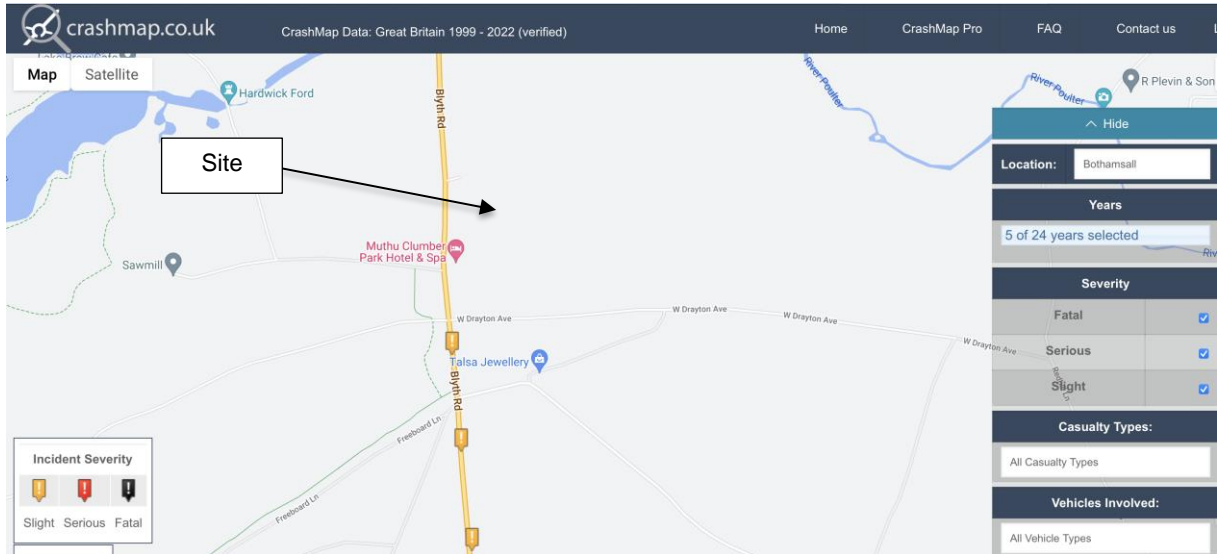


Figure 2.3: Road Safety Record
[source: [Crashmap](#)]

3 Development Proposal

- 3.1 The proposed layout is attached as Appendix A.
- 3.2 The planning application seeks consent for the construction and operation of a solar farm and battery energy storage system together with all associated works, equipment, necessary infrastructure, and landscaping.
- 3.3 Vehicle access during the construction and operational phase will be taken from the existing site access on the A614 Blyth Road. The existing ghost island arrangement will be retained, and the site access upgraded to provide suitable geometry for construction vehicle access. The proposed access improvement is shown in Appendix B.
- 3.4 Once operational the vehicle access will only be used by a minimal level of traffic relating to a maintenance vehicle once or twice a week and a DNO vehicle once or twice a month.
- 3.5 During the construction period vehicle trip generation will be more intensive and will attract large vehicles. The largest vehicle that will be used for deliveries is a 15.4m articulated lorry. Swept path analysis for this size of vehicle using the improved site access junction is shown in Appendix C. As access to the site will (temporarily) intensify during the construction period, it is therefore proposed to provide to adopt a number of other construction management measures to reduce potential conflicts and nuisance to other road users. These measures are set out in Section 5.
- 3.6 During construction there will be an average of 29 and peak of 43 construction staff working at the site. Parking will be provided on the site during the construction period to accommodate workers.
- 3.7 Once operational there will be no staff based at the site.

4 Traffic Impact

Construction Traffic Flows & Impact

- 4.1 During the construction period the site will attract more vehicle movements and larger vehicles than during the operational phase, however this will be limited in duration due to the temporary nature of the construction activity. The construction phase will last for approximately 6 months.
- 4.2 The maximum size of vehicle requiring access to the site will be 15.4m.
- 4.3 The applicant has provided information on the volume of traffic that will be generated during the construction period based on experience of other such sites and this is attached as Appendix D, with a summary provided below.

Type	In	Out	Total
HGV	1	1	2
Worker Vehicles	11	11	22
Total	12	12	24

Table 4.1: Daily Construction Phase Traffic – Minimum

Type	In	Out	Total
HGV	2	2	4
Worker Vehicles	29	29	58
Total	31	31	62

Table 4.2: Daily Construction Phase Traffic – Average

Type	In	Out	Total
HGV	5	5	10
Worker Vehicles	43	43	86
Total	48	48	96

Table 4.3: Daily Construction Phase Traffic – Peak

- 4.4 The tables above provide details of typical daily arrival and departure patterns during the construction period. The peak period will only occur for three weeks out of the six-month construction period.
- 4.5 The traffic generated during the construction phase will be staggered as different specialist workers arrive and leave the site at different periods across the day.
- 4.6 The level of traffic generated during the construction phase is not significant and will only occur for a temporary duration.

Operational Traffic Flows & Impact

- 4.7 Once operational the site will generate a minimal level of traffic relating to a maintenance vehicle once or twice a week and a DNO vehicle once or twice a month.

Decommissioning Traffic Flows & Impact

- 4.8 The decommissioning phase will occur circa 40 years after operation has started and an appropriate traffic management plan will be developed at a suitable time for this period. The decommissioning stage is expected to involve a similar level of generation as associated with the construction period.

5 Construction Traffic Management Plan Programme

- 5.1 The construction phase is expected to last for approximately six months. The phase includes site set-up, construction access modifications, internal access road construction, ground works, piling, installation of the solar panels and final connection.

Working Hours

5.2 Construction work will be undertaken seven days a week. No activities audible from the boundary of the nearest noise sensitive receptor will take place on Sundays during the construction period or at times outside:

- Monday to Saturday: 08:00 – 18:00

5.3 Delivery hours will occur between:

- Monday to Friday: 07:00 – 19:30
- Saturday: 08:00 – 17:30

5.4 No deliveries will take place on Sundays or bank holidays.

5.5 Any works required outside these hours will be agreed in advance with the Council.

Construction Access

5.6 As set out in Section 3, construction access will be gained from the A614 Blyth Road junction.

5.7 It is expected that HGV will access/egress the site travelling from/to the north to access the strategic network, as shown on Figure 5.1.



Figure 5.1: Construction Vehicle Access Route

5.8 During the short period of the construction phase the site access will be marshalled by a suitably qualified banksman so that all vehicles and departures are safely controlled. Temporary traffic management measures including appropriate signage for construction traffic will be used to provide warning to other road users of the site access location on approach and to guide construction vehicles.

5.9 Deliveries will be timed such that only a single HGV will be using the route to enter or leave the site at any time.

5.10 All vehicles will enter and leave the site in a forward gear.

Construction Compound & Parking

- 5.11 The compound area will be provided within the site and will accommodate parking, worker welfare facilities, and appropriate HGV unloading and turning space.
- 5.12 No contractor, visitor or delivery parking will be permitted on the local (off-site) highway network. Visitors and delivery drivers will be advised of the parking arrangements prior to attending the site.
- 5.13 As appropriate, wheel washing facilities will be provided. All construction vehicles will exit via the wheel washing area.

Construction Vehicle Types

- 5.14 It is expected that vehicles accessing the site will be normal size (HV), with the maximum vehicle a 15.4m articulated vehicle, and no abnormal loads will require access. The following types of vehicles are likely to require access during the construction phase:
 - Car / Van
 - Box Van (up to 8m long)
 - Rigid HV (up to 12m long)
 - Articulated HV (up to 15.4m long)

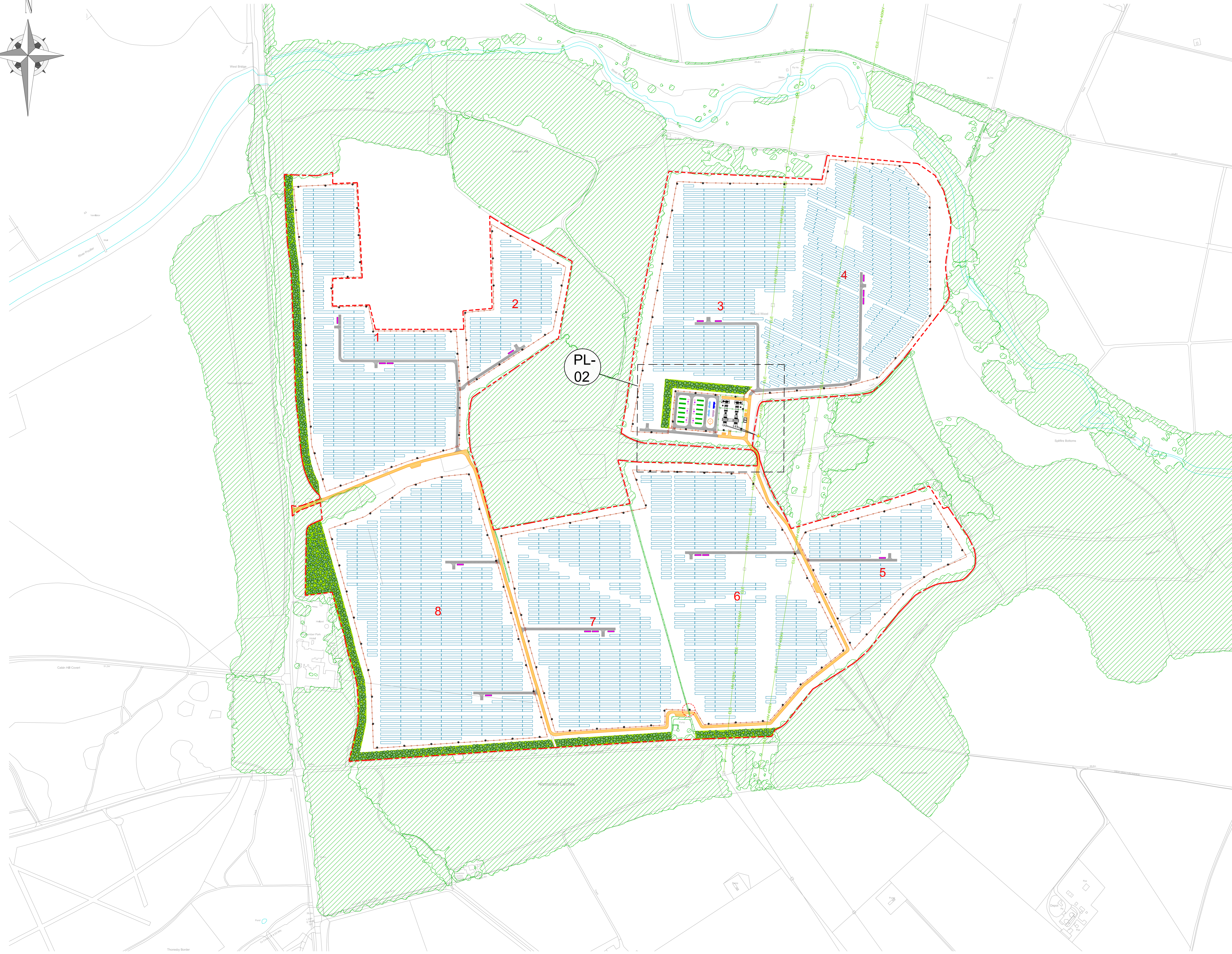
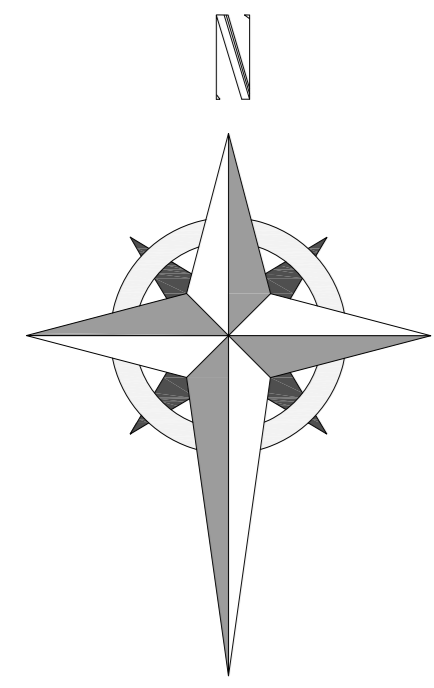
Local Consultation

- 5.15 Prior to construction the contractor will liaise with the local Parish Council and contact details for the on-site Project Manager will be provided.

6 Conclusions

- 6.1 This Transport Statement assesses the transport implications of constructing the proposed solar farm and battery energy storage system on land adjacent to the A614, Worksop, S80 3PA. Vehicle access to the site is currently provided from a ghost island arrangement on the A614 Blyth Road. The access will be upgraded to provide suitable geometry for large vehicle access that will be required during the construction phase.
- 6.2 The assessment shows that during the operational phase of the development it will be associated with a minimal level of traffic.
- 6.3 During the construction phase the development will attract more and larger vehicles, but this will be limited in duration and effect. However, the level of activity generated during the construction period is still not significant in highway capacity terms. Construction management measures will be adopted during this phase to minimise disruption and nuisance to other road users. This includes the use of a separate construction compound and identified construction route.
- 6.4 Given the low volume of traffic generated by the proposal it is concluded that the development will not have a significant impact on highway operation or road safety.

Appendix A



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Scaled dimensions must not be taken from this drawing. All dimensions are to be confirmed on site prior to commencement of work.

Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	04.03.24	First Issue	EM	JW
02	08.03.24	Layout Updated	EM	JW
03	12.03.24	Layout Updated	JC	JW
04	14.03.24	Layout Updated	JW	JW
05	15.03.24	Layout Updated	CS	JW
06	19.03.24	Panel Spots Updated	CS	JW
07	26.03.24	Tracks and RLB Amended	EM	JW

LEGEND:

- PLANNING APPLICATION BOUNDARY
- DNO ACCESS
- NEW ACCESS TRACK
- WATER COURSE
- PERIMETER FENCELINE
- PALISADE FENCE
- HV 400kV - ELE - HV 400kV - O/H 400kV CABLE
- HV 132kV - ELE - HV 132kV - O/H 132kV CABLE
- HV 400kV - ELE - HV 400kV
- HV 132kV - ELE - HV 132kV

SITE INFRASTRUCTURE:

- SECURITY GATE
- CCTV CAMERA
- POINT OF CONNECTION
- SOLAR ARRAY
- 132kV SUBSTATION
- WATER TANK
- LATTICE TOWER
- MV POWER STATION
- CUSTOMER SWITCHGEAR
- SPARE PARTS CONTAINER
- WELFARE CABIN
- BESS CONTAINER
- POWER CONVERSION SYSTEM
- TRANSFORMER
- HYDRANT

ENVIRONMENT:

- EXISTING VEGETATION
- TREE & SHRUB PLANTING (SEE PLANTING PLAN FOR FURTHER INFO)
- EXISTING VEGETATION TO BE REMOVED

Project:

Land Adjacent to the A614, Workshop, S80 3PA

Consultant:



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Status:

PLANNING

Drawing Title:

Proposed Site Layout Plan

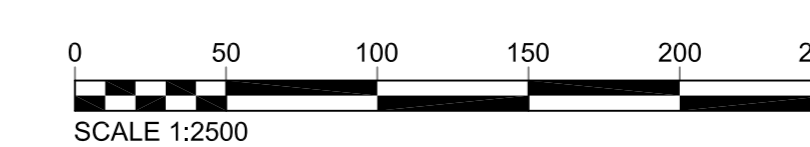
Drawn: EM	Checked: JW	First Issued: 04.03.2024
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Project Code: OPL011-	Drawing Number: PL-01
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Sheet Size: A0	Scale: 1:2500	Revision: 07
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1 NORMANTON LARCHES PROPOSED SITE LAYOUT PLAN

Scale: 1:2500@A0



Appendix B

THIS DRAWING MAY BE USED ONLY FOR THE PURPOSE INTENDED AND ONLY WRITTEN DIMENSIONS SHALL BE USED

NOTES
Layout subject to detailed design and confirmation of statutory undertakers' equipment.



Revision Details	By	Date	Suffix

Drawing Number
SK22410-001

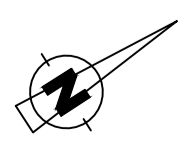
Normanton Larches

Drawing Title
Existing Site Access

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1:500

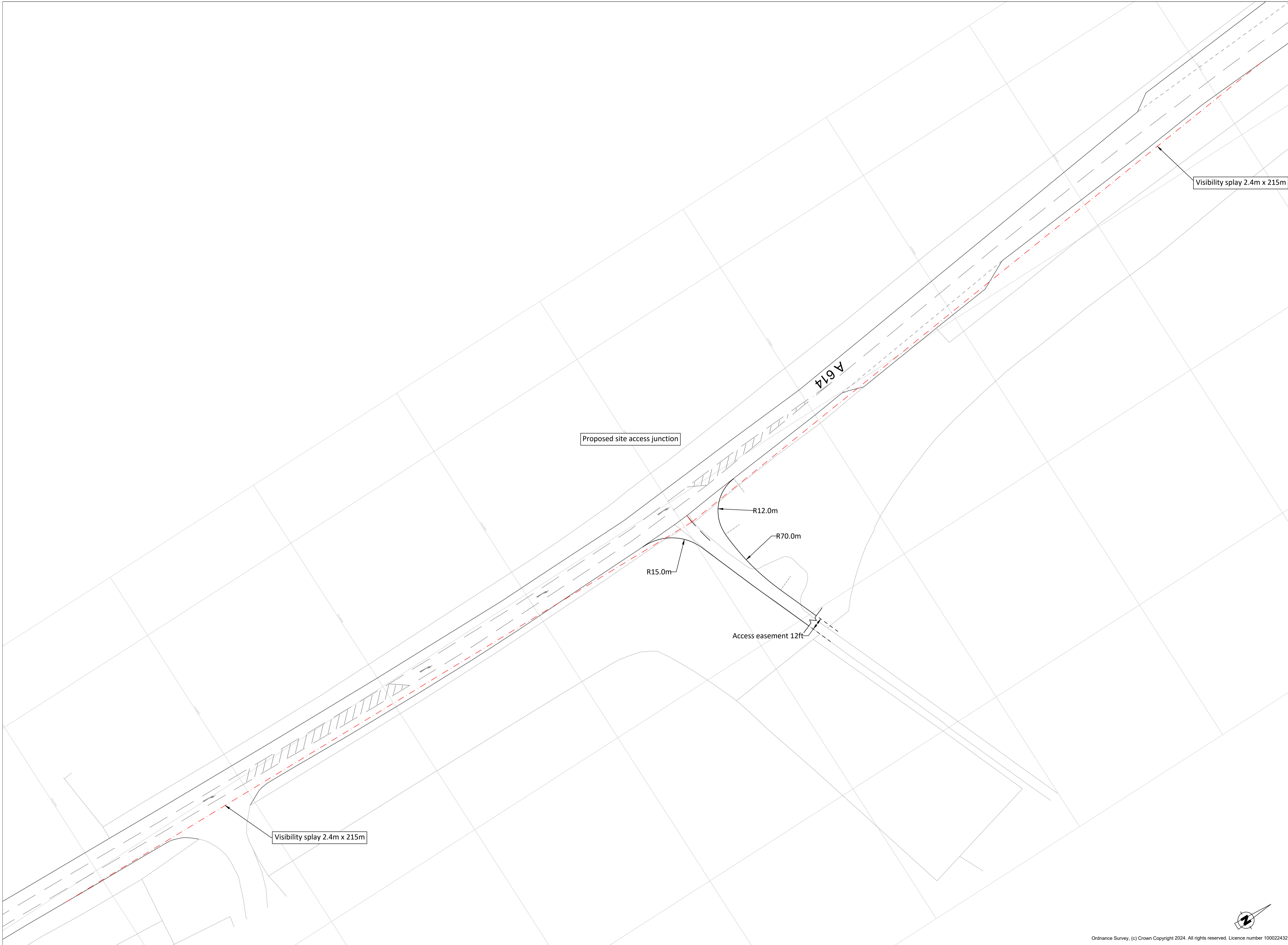
Drawn	JAT	Approved	LGS
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Check	LGS	Date	15.03.24
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NOTES
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Revision Details	By	Date	Suffix

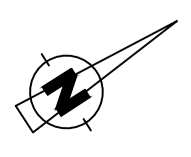
Drawing Number
SK22410-004

Normanton Larches

Drawing Title
**Proposed Site Access
General Arrangement**

Scale at A1
1:500

Drawn JAT	Approved LGS
Check LGS	Date 26.03.24

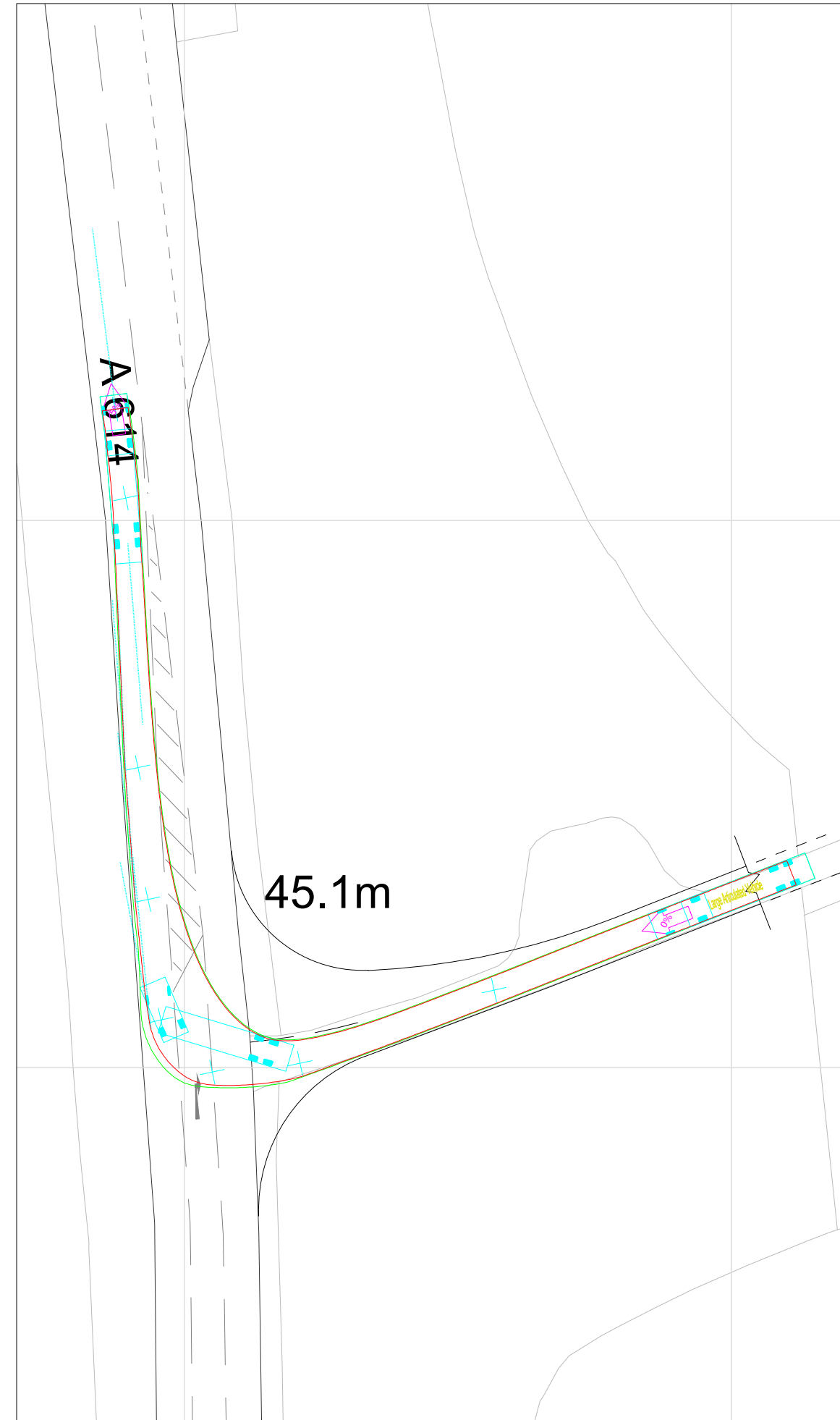
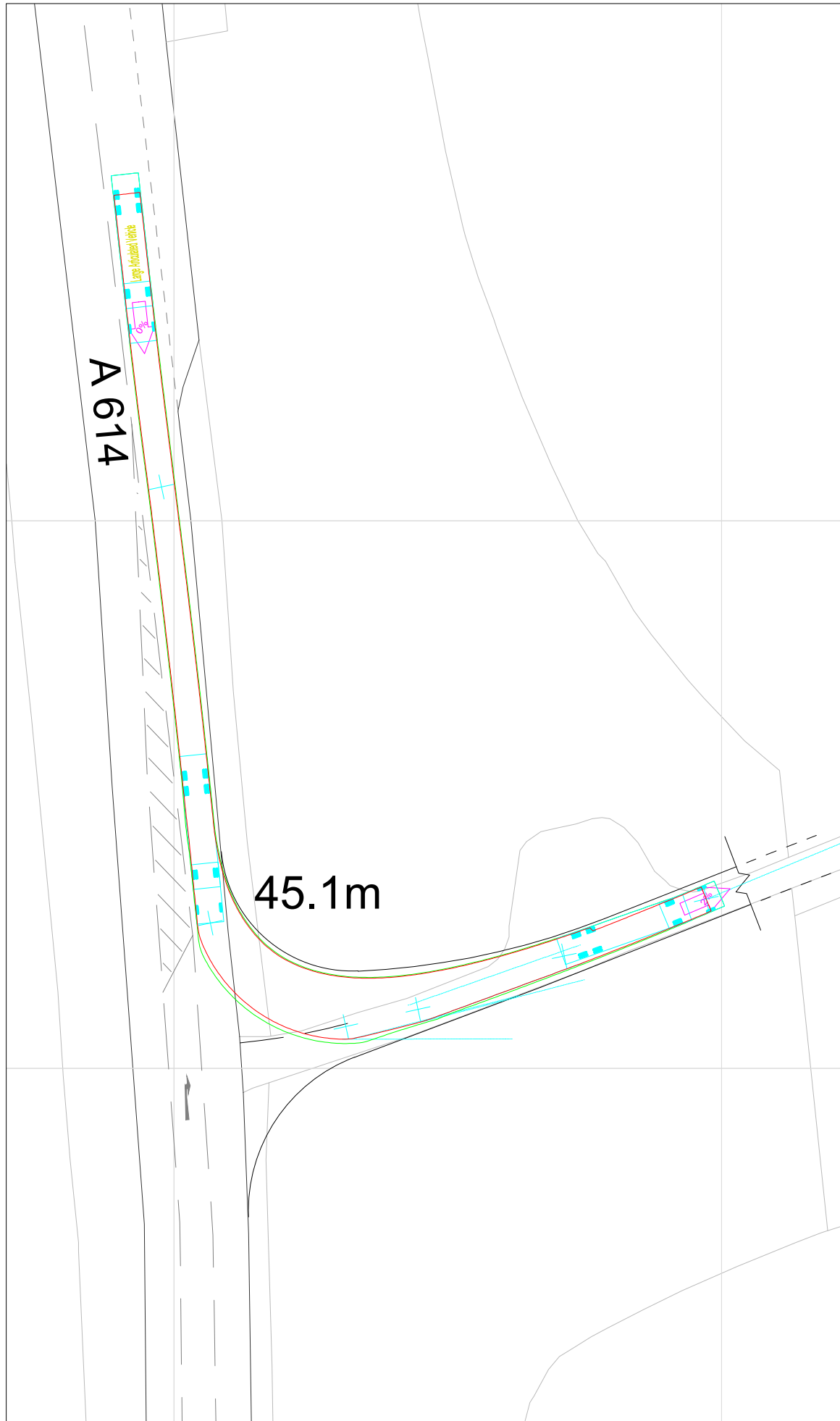


Appendix C

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NOTES

Layout subject to detailed design and confirmation of statutory undertakers' equipment.



Revision Details	By	Date	Suffix
	Check		

Drawing Number
SK22410-005

Normanton Larches

Drawing Title
Proposed Site Access
Swept Path Analysis
Large Articulated Vehicle

Scale at A3
1:500

Drawn JAT	Approved LGS
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Check LGS	Date 26.03.24
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Appendix D

Normanton Larches Solar Park



ONE PLANET

Traffic Movements

Construction HGV delivery

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6			
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20	Week 21	Week 22	Week 23	Week 24
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Fence	7	7	7																					
Site Set-Up / Welfare				5	5															5				
Construction Machinery					5																			
Civil works (foundations & track)						20	20	20																
Mounting Structure						10	10	10	10	10	10	10												
Solar Panels											20	20	20	20	20	20								
Module Testing											1									1				
Inverters															7	7								
Cable														5	5	5	5	5						
Transformers																	13							
Substation																					2			
Recycling Containers			1		1		1		2	2	2	2	2	2	2	1	1	1	1	1	1		1	
CCTV																			1					
Monitoring Equipment																			1					
Total HGV per day	1	1	1	1	2	4	4	4	2	2	5	5	3	4	5	5	3	1	0	1	0	0	0	0

Construction workers schedule

	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15	Week 16	Week 17	Week 18	Week 19	Week 20	Week 21	Week 22	Week 23	Week 24	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Fencing and Civil contractors	80	80	80																						
Piling & framing contractors								80	80	80	80	80	80	80											
Module mounting contractors												80	80	80	80	80	80								
Electrical contracors															80	80	80	80	80	80					
HV contractors																				40	40	40			
Project Managers				40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
Health & Safety				4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Security				40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
Other				60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	
Total worker vehicles per day	11	11	11	21	21	21	32	32	32	32	32	43	43	32	43	43	43	32	32	38	26	26	21	21	
Total (HGV + Worker Vehicles) per day	12	12	13	21	22	25	36	36	34	34	37	48	47	36	48	48	46	33	32	39	27	26	21	21	