



Links Solar Farm and BESS
Land off Links Road, Braintree

Transport Statement

For

Links Solar Farm Ltd.

Document Control Sheet

Links Solar Farm and BESS

Land off Links Road, Braintree

Links Solar Farm Ltd.

This document has been issued and amended as follows:

Date	Issue	Prepared by	Approved by
11/05/2021	1 st Draft	CH	JNR
17/05/2021	2 nd Draft	JNR	JNR
27/05/2021	3 rd Draft	CH	JNR

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1.0 Introduction

Preamble

- 1.1 Motion is retained by Links Solar Farm Ltd. to prepare a transport statement in relation to the development of land off Links Road, Braintree, Essex, CM77 8EP (The "Site"). The Site is located within the administrative boundary of Essex County Council (ECC) and Braintree District Council (BDC) and is shown on Figure 1.1 below.

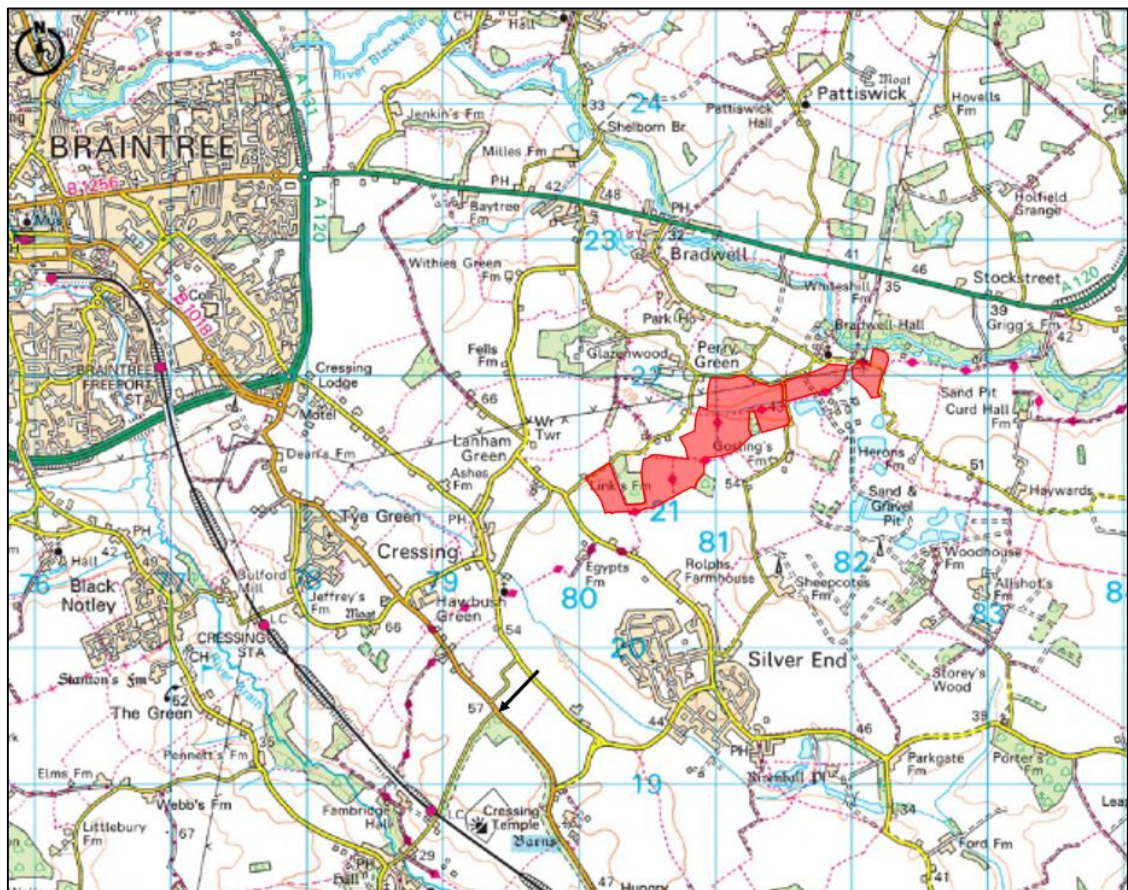


Figure 1.1: Site Location

- 1.2 The Site currently comprises a field of approximately 63.5 hectares. This planning application seeks permission for the construction of a combined solar farm and battery energy storage system (BESS) facility on land Links Road, southeast of Braintree (the Proposed Development).

Transport Planning Policy and Guidance

- 1.3 The requirement to prepare a transport statement is set out in the National Planning Policy Framework, 2019, published by the Department for Communities and Local Government (NPPF). Paragraph 111 of NPPF states:

"All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed."

- 1.4 The criteria against which development should be assessed is set out in NPPF paragraph 108 that states:

In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- b) safe and suitable access to the site can be achieved for all users; and*
- c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.*

- 1.5 Paragraph 109 of the NPPF sets out the highway grounds on which development could be prevented or refused:

“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”

- 1.6 Detailed guidance on the scope and content required for transport statements is provided in the government’s planning practice guidance. This Transport Statement (TS) is prepared in accordance with this guidance.

Scope of Report

- 1.7 This TS has been prepared in accordance with current best practice guidelines and demonstrates that:

- The proposals accord with national and local policies relevant to transport;
- Safe and suitable access to the Site can be achieved by all modes; and,
- The level of traffic associated with the proposals will not lead to severe impact to the existing operation and free flow of traffic on the adjoining highway network.

- 1.8 Following this introduction, this TS is split into 5 sections as follows:

- Section 2 assesses existing conditions;
- Section 3 provides an overview of the proposed development and details of the proposed access, parking and servicing arrangements;
- Section 4 assesses the trip generating potential of the proposals and provides an overview of the impacts these are likely to have; and
- Section 5 summarises the key findings and conclusions of this report.

2.0 Existing Conditions

Highway Network

2.1 Figure 2.1 below illustrates the local highway network surrounding the Site.

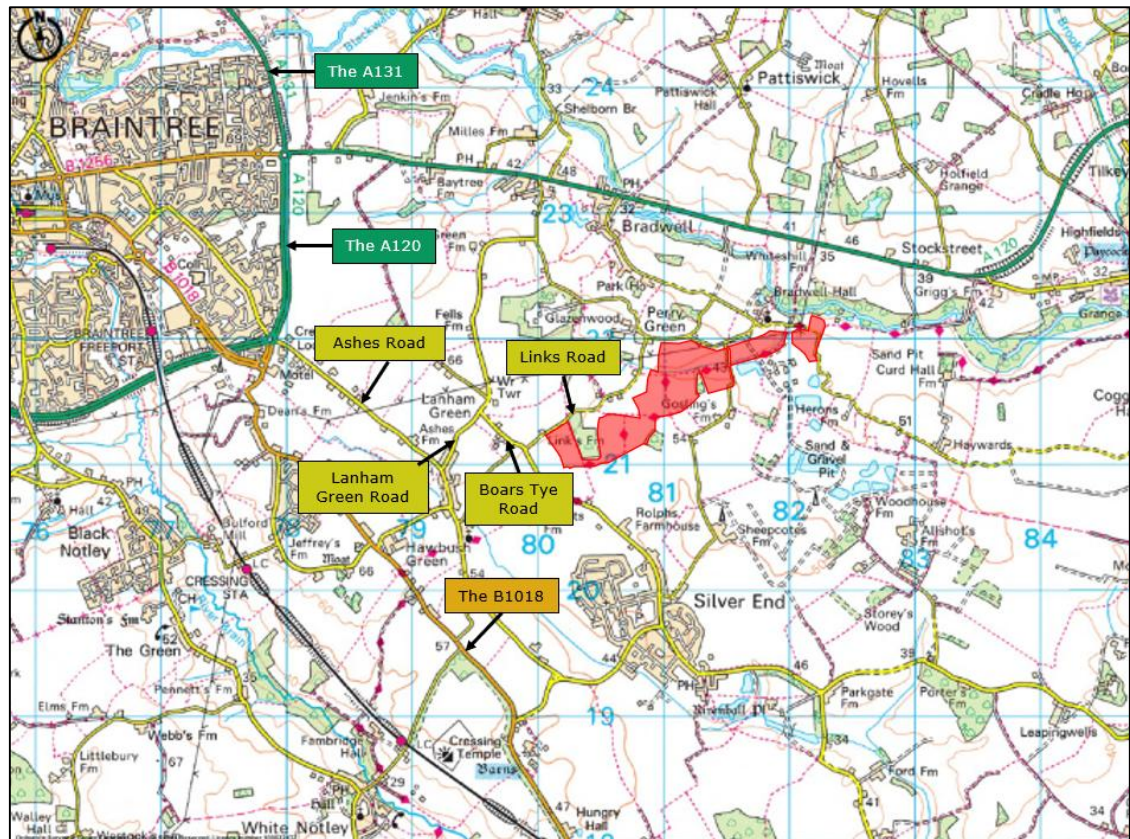


Figure 2.1: Local Highway Network

- 2.2 On a local level, Links Road connects Boars Tye Road to Fiveash Lane. In the vicinity of the Site boundary, Links Road is circa 2.9 metres wide and is a single carriageway comprising one lane. There is no street lighting on Links Road and no pedestrian footways on either side of the carriageway. Links Road is subject to a 60mph speed limit.
- 2.3 To the west of the Site, Links Road connects to Boars Tye Road, a single carriageway road with one lane in each direction, which connects to Lanham Green Road. Boars Tye Road is approximately 6 metres wide and has neither street lighting nor pedestrian footways on either side of the carriageway.
- 2.4 Lanham Green Road connects to Ashes Road which, in turn, connects to the A20. The A120 connects to the A131, and the A12 to the east of the Site and the M11, the A1184, and the A10 to the west of the Site.

Road Safety

Recorded Personal Injury Collision Data

- 2.5 Personal Injury Collision (PIC) data was obtained from CrashMap for the adjoining highway network for the most recent five year period available, 1st January 2016 to 31st December 2020. No PIC's were identified in the road network adjacent to the Site.

Non-Motorised Users

2.6 There are several public footpaths as part of the Site, as shown in Figure 2.2 below.

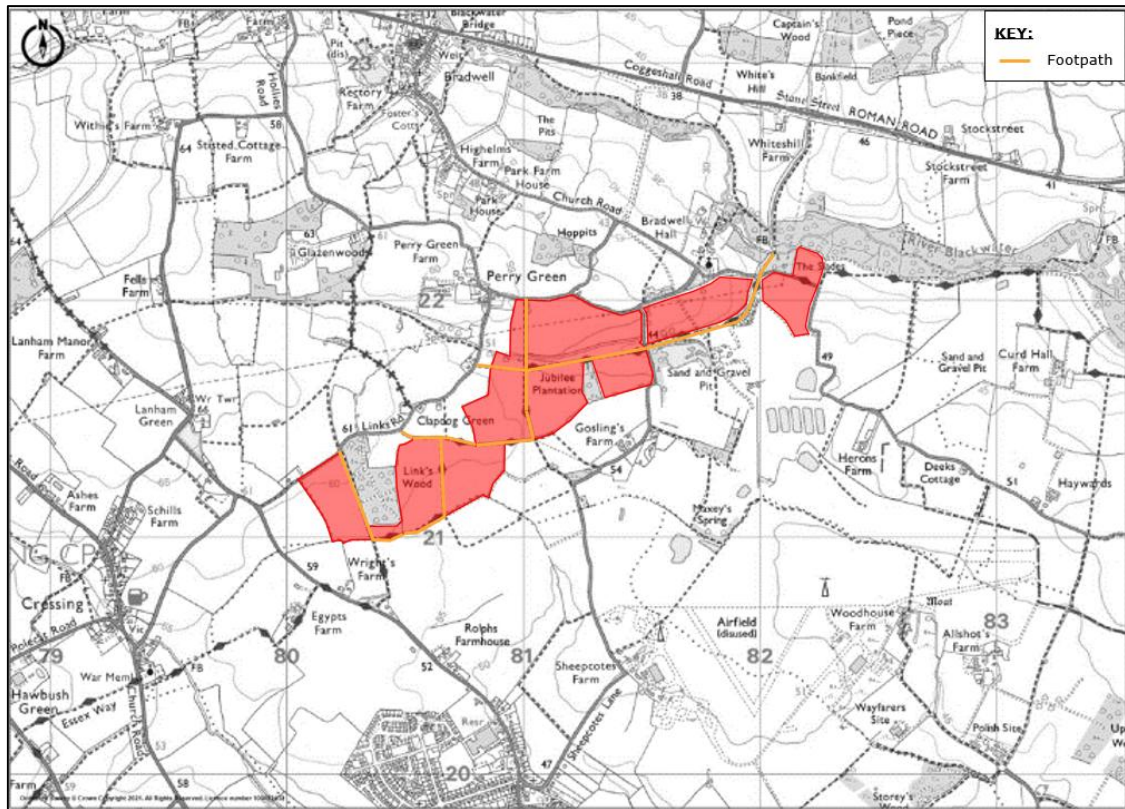


Figure 2.2: Public Rights of Way

Planned Development and Infrastructure

- 2.7 No permitted developments have been identified in the local area to the Site which need to be taken into consideration in the TS.
- 2.8 No planned transport schemes or infrastructure have been identified in the local area to the Site which need to be taken into consideration in the TS.

3.0 Proposed Development

Proposed Development

Development Description

3.1 The Site currently comprises a greenfield plot of land circa 63.5 hectares in area. The Proposed Development includes the installation, inter alia, of the following:

- rows of solar photovoltaic ('PV') panels;
- batteries within shipping containers (or similar);
- inverters within containers (or similar);
- DNO Substation and Customer Switchroom;
- cable connection;
- internal access tracks;
- perimeter fence; and
- CCTV cameras.

3.2 A Site layout plan is included at [Appendix A](#).

3.3 The solar panels and other site construction materials could be transported to the Site on articulated lorries up to 16.5m in length.

Site Access

3.4 The Site is currently accessed via an entry point on Links Road approximately 700 metres from the junction with Boars Tye Road. It is proposed that this access point (the western access) continue to be used as the main entrance for construction and maintenance traffic.

3.5 In order to provide vehicle access to development zones ('DZ') 9-12 for construction purposes, it is proposed that temporary accesses are constructed in the northeast section of the Site. These would provide access from the Site to Cuthedge Lane in order to deliver materials and equipment from DZ 8 to DZs 9-12. Articulated lorries would only access the Site via the western access from Links Road. The proposed eastern access points are shown below in [Figure 3.1](#).

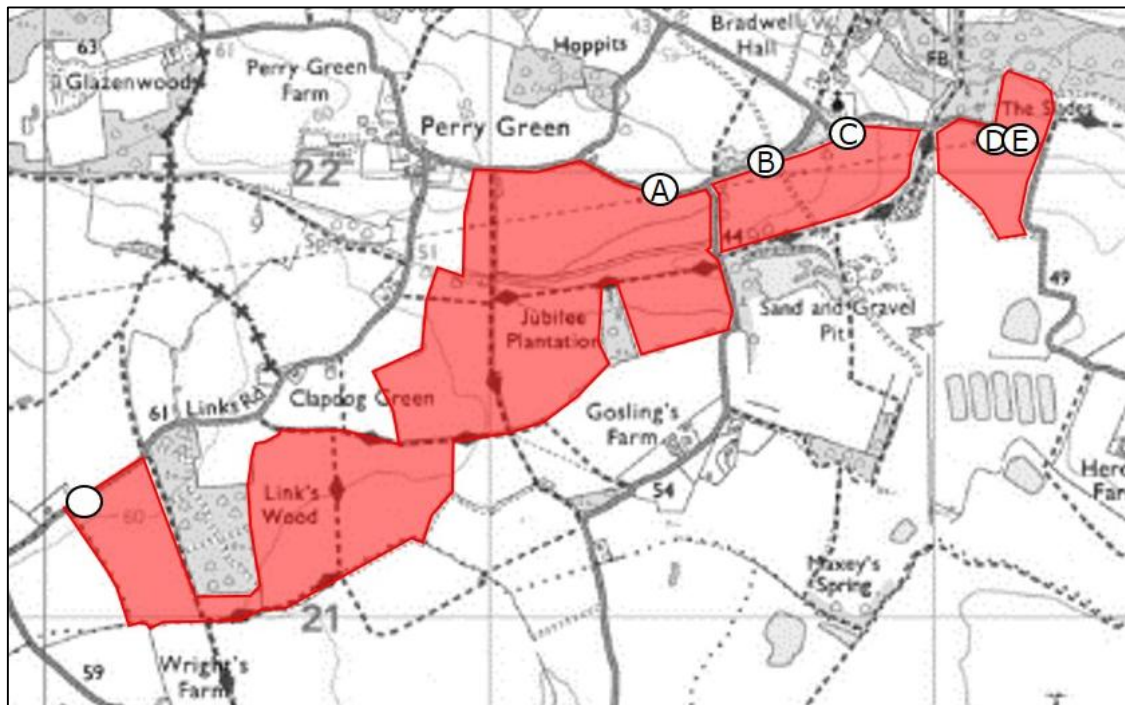


Figure 3.1: Proposed Eastern Access Points

- 3.6 Although construction of these accesses would require removal of hedgerow / vegetation, this would be kept to the minimum required. Additionally, upon completion of the construction phase, the hedgerow / vegetation could be reinstated, removing any residual, long term impacts.
- 3.7 The proposed western access has good visibility in both directions with 2 x 120 metres visibility to the right of the junction and 2 x 120 metres unobstructed visibility to the left of the junction. Visibility splays are included at [Appendix B](#).
- 3.8 The proposed eastern accesses have good visibility in both directions from the junction. Visibility splays are included in [Appendix B](#).
- 3.9 Within the Site an area of hardstanding would be set aside for vehicles to manoeuvre in to enable all vehicles, including articulated lorries, to enter and leave in forward gears. The provision of an area of hardstanding within the Site for vehicles to manoeuvre in and over which they would drive prior to accessing the public highway would reduce the risk of mud being trafficked onto the public highway and the ensuing nuisance this can cause.
- 3.10 Similarly, an area of hardstanding would be provided for parking within the Site. This would prevent construction traffic from parking on the public highway as well as reducing the risk of construction vehicles trafficking mud on to the highway.

Access Route

- 3.11 It is proposed that all HGV construction traffic will route to the Site via the A120 as illustrated on [Figure 3.2](#) below.

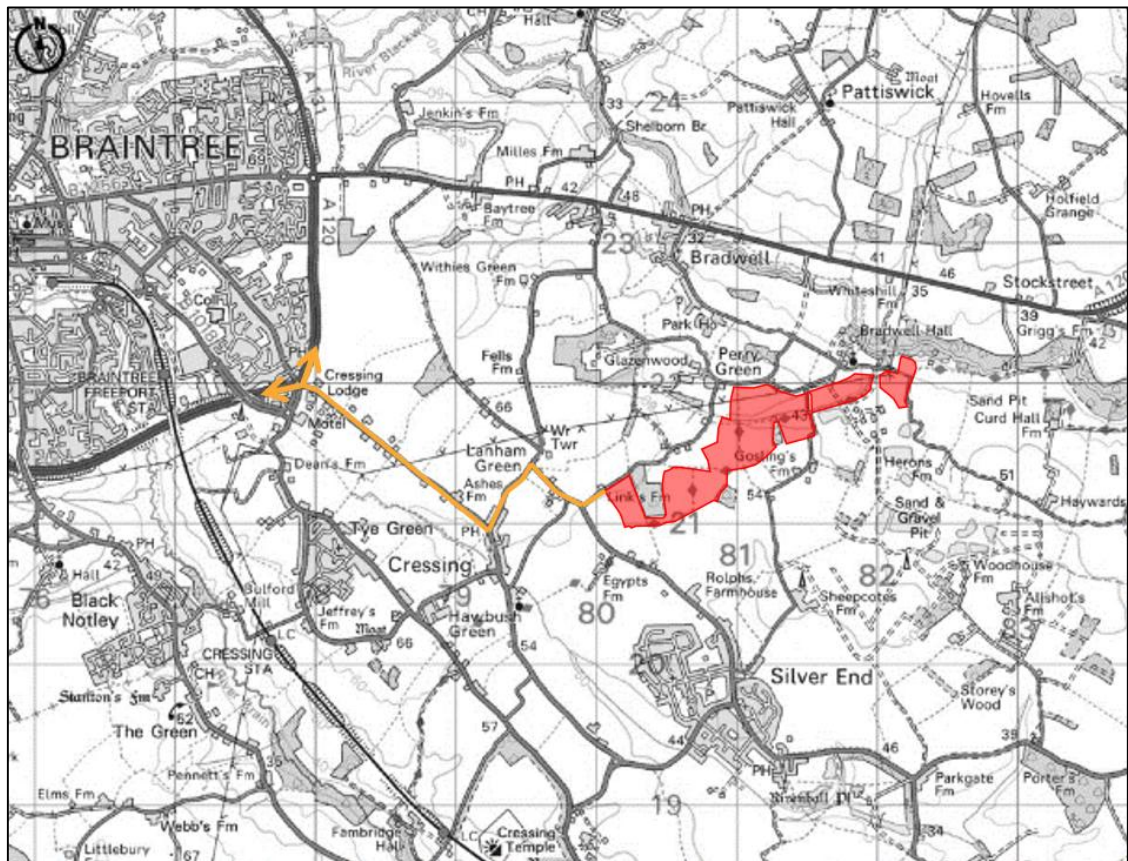


Figure 3.2: Site Location and Construction Access Route

- 3.12 This approach routes development traffic to the Site via the shortest route to and from the Strategic Road Network which comprises the A120 followed by Long Green, Ashes Road, Lanham Green Road, Boars Tye Road and finally Links Road.
- 3.13 In order to avoid unnecessary articulated lorry trips on the local highway, it is proposed that materials and equipment are delivered to the Site at the western access onto Links Road, then distributed within the Site by smaller vehicles following a temporary internal access route, as shown below in [Figure 3.3](#).

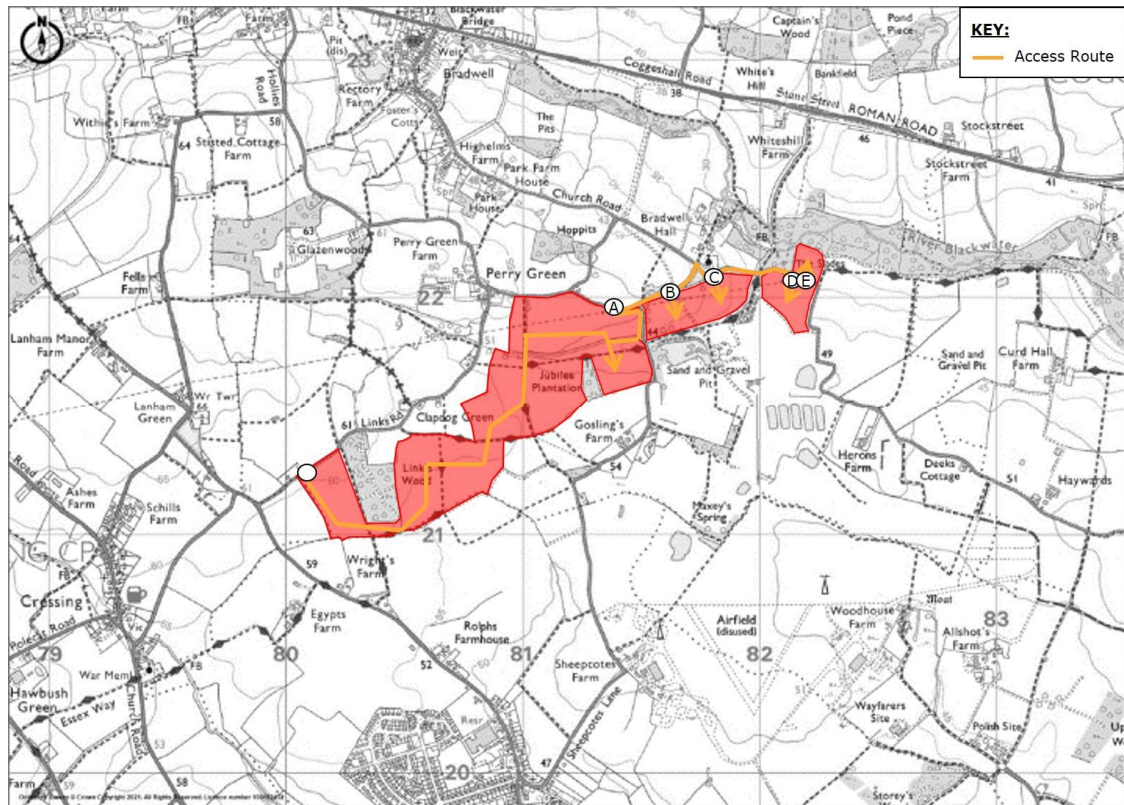


Figure 3.3: Internal Access Route

Vehicle movements

3.14 The Proposed Development comprises two phases: construction and operation. Forecast average daily two-way traffic movements associated with both phases is presented in Table 3.1 below.

Phase	Duration	Average two-way daily traffic movements		
		Cars / vans (<3.5t)	Heavy vehicles (>3.5t)	Total Traffic
Construction	Up to 16 weeks	50	12	60
Operation	Permanent	2 on two occasions each month.		

Table 3.1: Forecast Development Average Daily Two-way Traffic Movements

3.15 Table 3.1 shows that the highest increase in average two-way daily traffic movements is expected during the construction phase. Average two-way daily HGV movements are expected to amount to 12 (that is 6 lorries arriving and 6 leaving) with 50 car / van movements. Car / van movements include inter alia, staff / contractors arriving at Site and small deliveries.

3.16 During the operational phase, traffic movements are expected to be minimal. Operational traffic would comprise 1 van accessing the Site twice per month i.e. 4 two-way vehicle movements per month.

3.17 There are no abnormal loads proposed in relation to either phase of the Proposed Development.

4.0 Traffic impact and mitigation

Highway Safety

Traffic Volumes

- 4.1 The temporary increase traffic volumes and especially the heavy vehicle component of the traffic volume could lead to adverse highway safety impacts.
- 4.2 Due to the design of the local highway network around the Site, it is anticipated that there is currently a large quantity of regular traffic on Ashes Road, Lanham Green Road and Boars Tye Road. As a result, the expected change in traffic volumes as a result of the development is unlikely to be discernible.

Visibility

- 4.3 The proposed western access has good visibility in both directions with 2 x 120 metres visibility to the right of the junction and 2 x 120 metres unobstructed visibility to the left of the junction. Visibility splays are included at [Appendix B](#).
- 4.4 The proposed eastern accesses have good visibility in both directions from the junctions. Visibility splays are included at [Appendix B](#).

Construction Traffic Management Plan

- 4.5 Notwithstanding the de minimis change in highway capacity which is expected to arise from the construction phase of the Proposed Development, it is unlikely there is currently a large volume of HGV traffic on the local highway network surrounding the Site. There is therefore the potential that even minimal increases in HGV traffic of 12 movements per day could result in disturbance to users of this section of the road, albeit for a temporary period of up to 16 weeks.
- 4.6 In order to reduce or avoid this potential disturbance arising from heavy goods vehicles, a Construction Traffic Management Plan (CTMP) is proposed.

Residual impacts

- 4.7 On completion of the 16-week construction period, construction traffic would cease. There would therefore be no residual traffic related impacts arising from the temporary construction phase of the Proposed Development.
- 4.8 During the operational phase, traffic movements are expected to amount to 4 vehicle movements per month. Traffic volumes of this magnitude would be imperceptible on a daily basis. No residual traffic related impacts arising from the permanent operational phase of the Proposed Development.

5.0 Summary and Conclusion

- 5.1 Motion is retained by Links Solar Farm Ltd. to prepare a transport statement in relation to the development of land off Links Road, Braintree, Essex, CM77 8EP. The Site is located within the administrative boundary of ECC and BDC.
- 5.2 The Site currently comprises a field of approximately 63.5 hectares. This planning application seeks permission for the construction of a combined solar farm and BESS facility on land Links Road, southeast of Braintree.
- 5.3 HGV construction traffic will route to the Site via the A120, Long Green, Ashes Road, Lanham Green Road, Boars Tye Road and Links Road. This approach routes development traffic to the Site via the shortest route to and from the Strategic Road Network which comprises the A120 in the vicinity of the Site. It is proposed that materials and equipment are delivered by articulated lorries to the Site at the western access onto Links Road, then distributed within the Site by smaller vehicles following a temporary internal construction road.
- 5.4 During the operational phase of the development, there would be a minimal increase in traffic volumes with operational traffic (one van) expected to access the Site on two occasions per month at the most.
- 5.5 The construction phase of the Proposed Development would lead to a temporary increase in traffic on the road network surrounding the Site. This would be for a temporary 16-week period. On average during this 16-week period, it is expected that the Proposed Development would lead to an increase in traffic movements of 62 two-way vehicle movements per day. Changes of this magnitude would have a de minimis impact on highway capacity.
- 5.6 It is currently expected that there is very little HGV traffic travelling along Links Road so that even the minimal increase in HGV traffic arising from the Proposed Development of 12 vehicle movements per day on average, has the potential to result in disturbance to other users. It is therefore proposed that a Construction Traffic Management Plan (CTMP) is prepared and agreed with the local highway authority prior to commencement of activities at the Site.
- 5.7 There are no residual traffic impacts identified.
- 5.8 In conclusion, the Proposed Development provides an opportunity to provide new, non-carbon energy generating facilities at a location which can be safely accessed by construction and operational vehicles and at which the temporary traffic impacts during construction would be de minimis. Traffic management measures can be put in place to reduce or avoid potential residual impacts arising from road traffic during the temporary 16 week construction period. In short:
- The proposals accord with national and local policies relevant to transport;
 - Safe and suitable access to the Site can be achieved by all modes; and,
 - The level of traffic associated with the proposals will not lead to severe impact to the existing operation and free flow of traffic on the adjoining highway network.
- 5.9 In accordance with paragraph 109 of NPPF, there are therefore no transport or highway reasons why planning permission should be prevented or refused.

Appendix A

Site Layout Plans

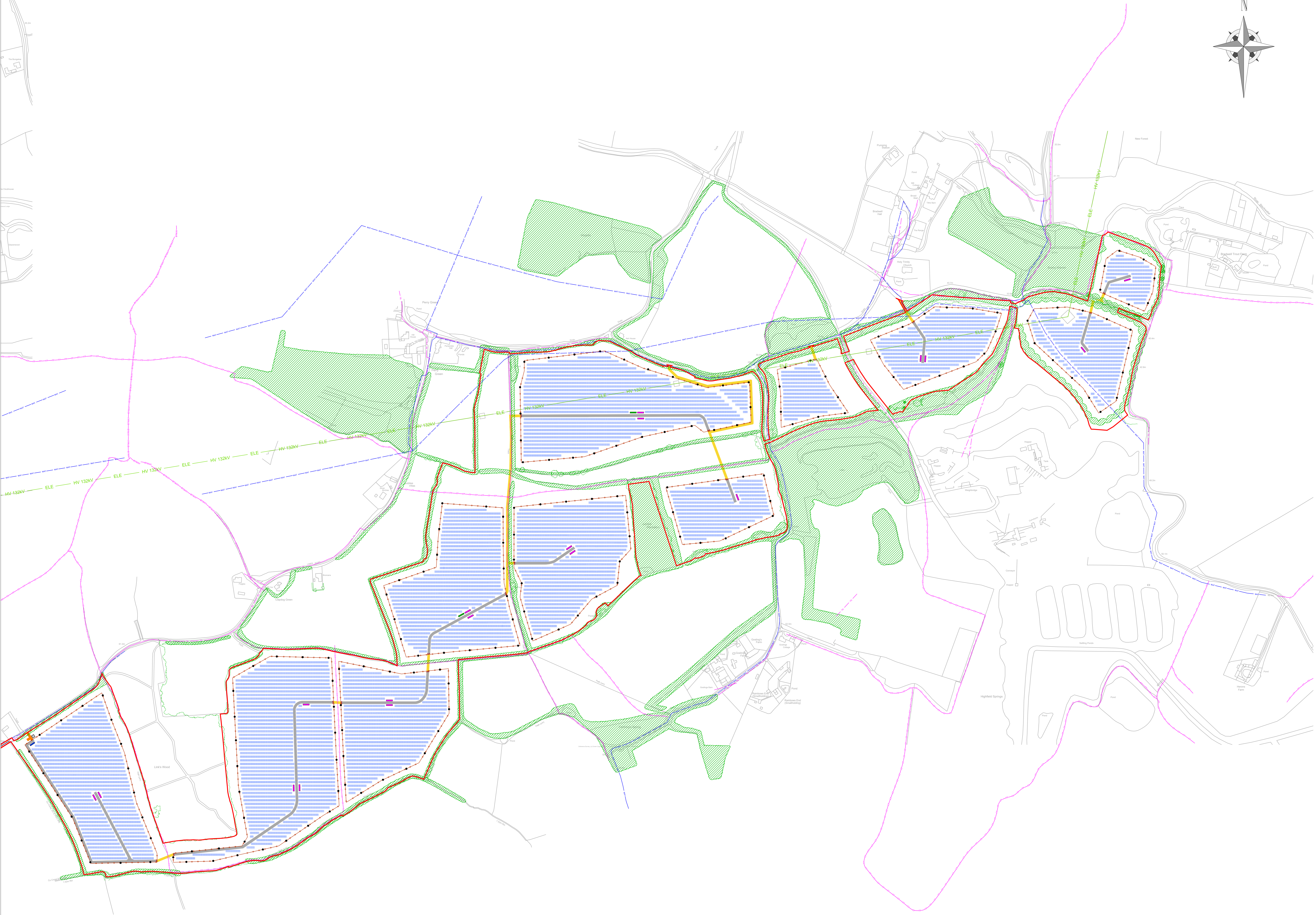
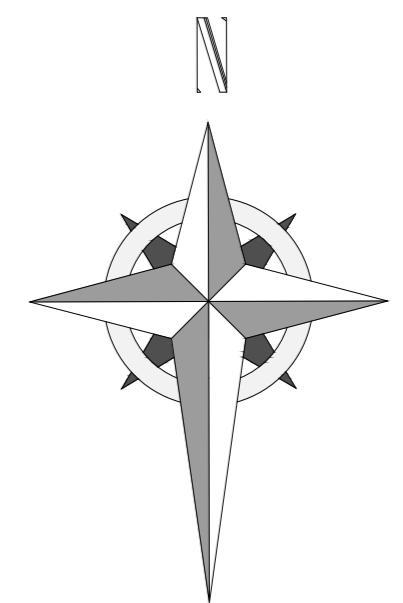
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01	18.02.21	Final Issue	JF	LM
02	19.03.21	Updated to Sur Comments	JF	LM
03	23.03.21	Updated to Sur Comments	JF	LM
04	23.04.21	Updated to Sur Comments	JF	LM
05	24.04.21	Updated to Sur Comments	JF	LM
06	07.05.21	Updated to Sur Comments	JF	LM
07	07.05.21	Updated to Sur Comments	JF	LM
08	19.05.21	Updated to Sur Comments	JF	LM
09	24.05.21	Updated to Sur Comments	JF	LM
10	24.05.21	Updated to Sur Comments	JF	LM
11	24.05.21	Updated to Sur Comments	JF	LM
12	24.05.21	Updated to Sur Comments	JF	LM
13	24.05.21	Updated to Sur Comments	JF	LM
14	24.05.21	Updated to Sur Comments	JF	LM

LEGEND:

- PROPOSED SITE
- DNO ACCESS
- MAINTENANCE ACCESS
- SITE ACCESS
- FOOTPATH
- BT TELECOMS
- PERIMETER FENCELINE
- WATER MAIN
- WATER MAIN
- EXISTING OH CABLE ROUTE
- PROPOSED CABLE ROUTE
- EXISTING VEGETATION
- EXISTING ANCIENT WOODLAND

SITE INFRASTRUCTURE:

- DNO SUBSTATION
- SOLAR PANELS MODULES (PITCH 7m R.S. 3.2m)
- CUSTOMER SUBSTATION
- SECURITY GATE
- CCTV CAMERA
- INVERTER
- BATTERY



Status: **FOR PLANNING**

Project: **Links Braintree Solar Farm**



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Drawing Title: **Links Braintree Indicative Layout External**

Drawn: JF
Checked: LM
Project Code: LCS038
Drawing Number: PLE-01
Scale: 1:2500
Sheet Size: A0

First Issued: 08.02.2021
Revision: 14

1 LINKS BRAINTREE INDICATIVE LAYOUT EXTERNAL

Scale: 1:2500@A0



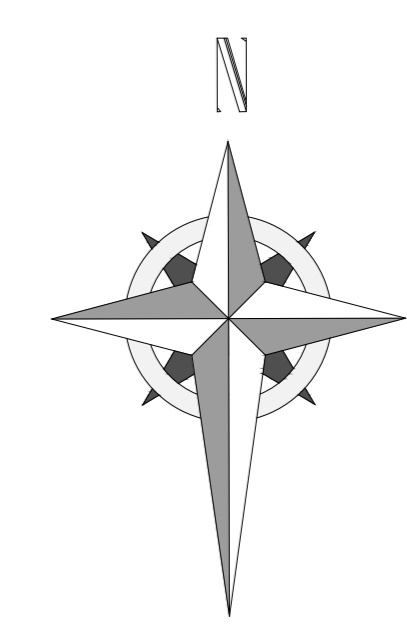
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Revisions:

Revision	Date	Revision Notes	Drawn	Inspected
01	18.02.21	Final Issue	JF	LM
02	21.02.21	Updated to BUL Comments	JF	LM
03	24.04.21	Updated to BUL Comments	JF	LM
04	09.05.21	Amended Red Line, Amended Zones	BC	LM
05	17.05.21	Updated to BUL Comments	JF	LM
06	20.05.21	Updated to BUL Comments	BC	LM
07	20.05.21	Updated to BUL Comments	JF	LM

LEGEND:

- PLANNING APPLICATION BOUNDARY
- DEVELOPMENT ZONES



Status: **FOR PLANNING**

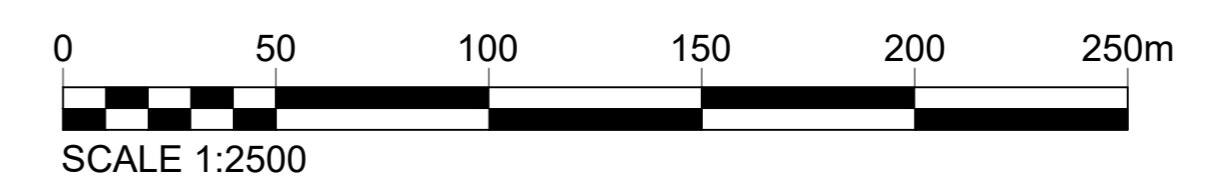
Project: **Links Braintree Solar Farm**



Drawing Title: **Links Braintree Development Zone Plan**

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JF	LM	08.02.21
Project Code:	Drawing Number:	
LCS038	DZ-01	
Sheet Size:	Scale:	Revision:
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1 LINKS BRAINTREE DEVELOPMENT ZONE PLAN
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Appendix B

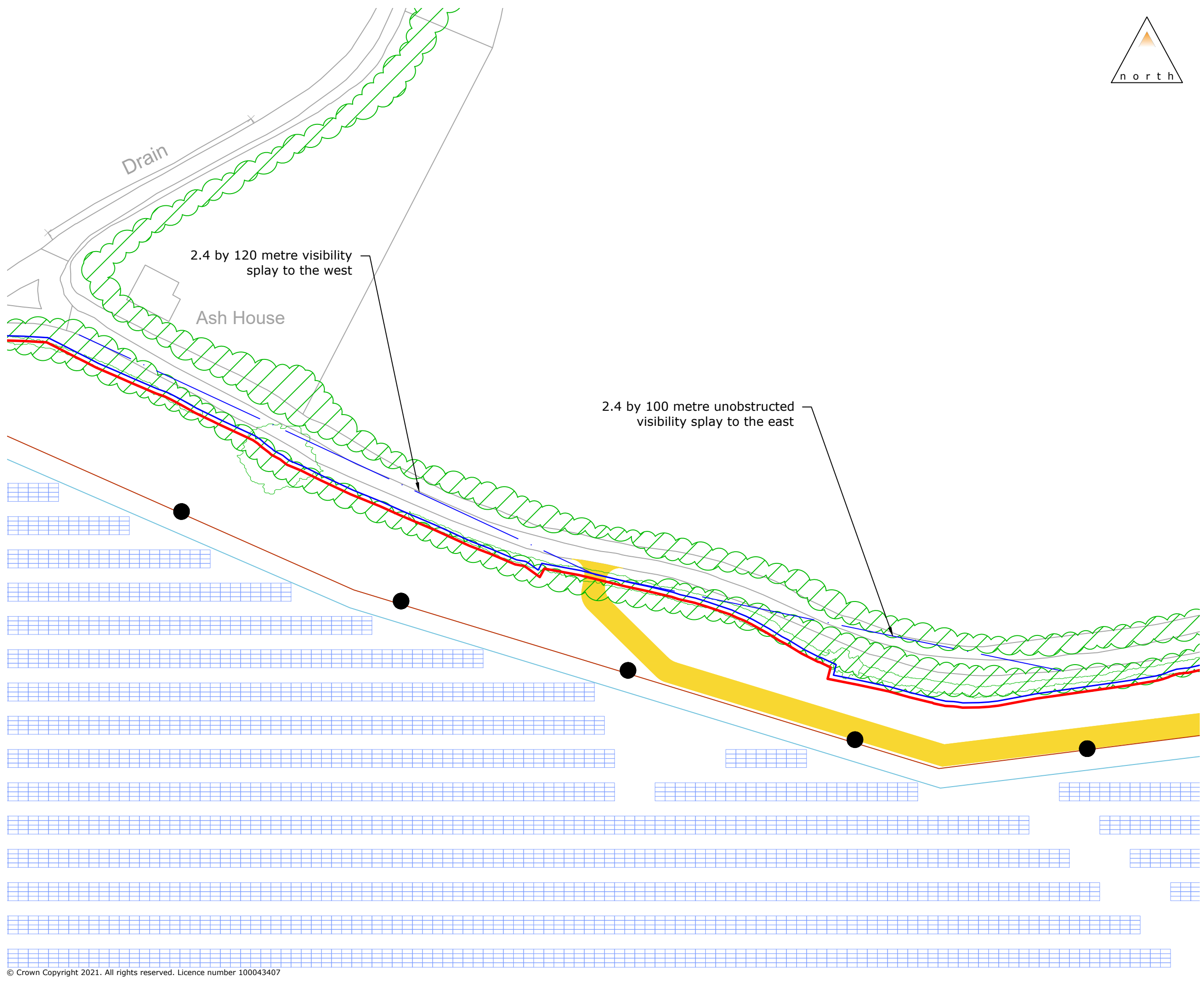
Visibility Splays



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Drawn:	AN	Checked: JR
Approved:	JR	
Drawing:	2102007-01	Revision: B

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Rev:	Description:	Date:	Rev By:	Chk'd:
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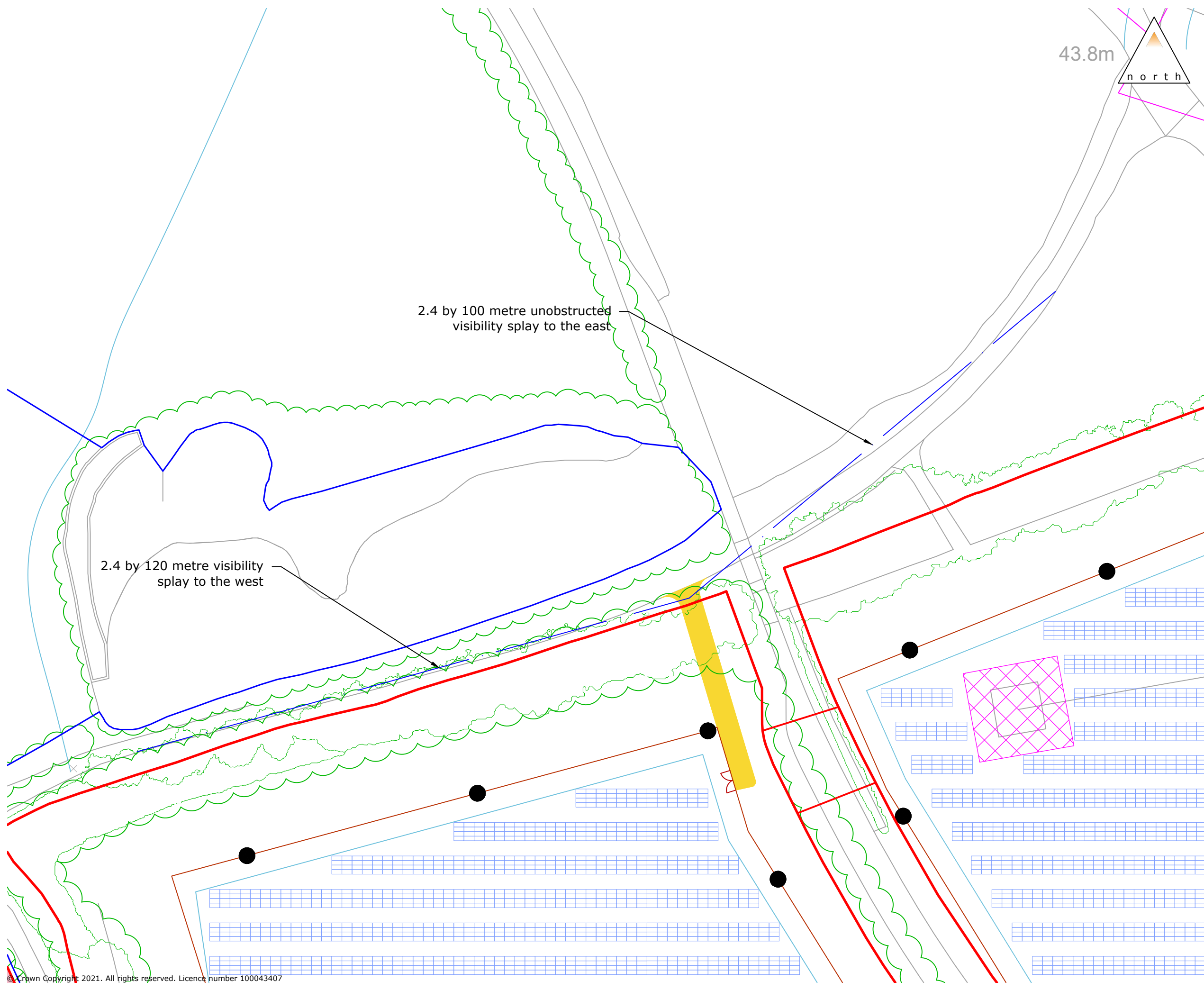
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Scale: 1:750 (@ A3) Date: 28/05/2021

Drawn: CH Checked: JR Approved: JR

Drawing: **2102007-03A** Revision: **A**



43.8m



2.4 by 100 metre unobstructed
visibility splay to the east

2.4 by 120 metre visibility
splay to the west



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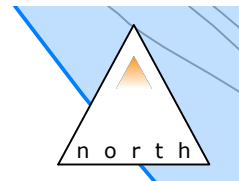
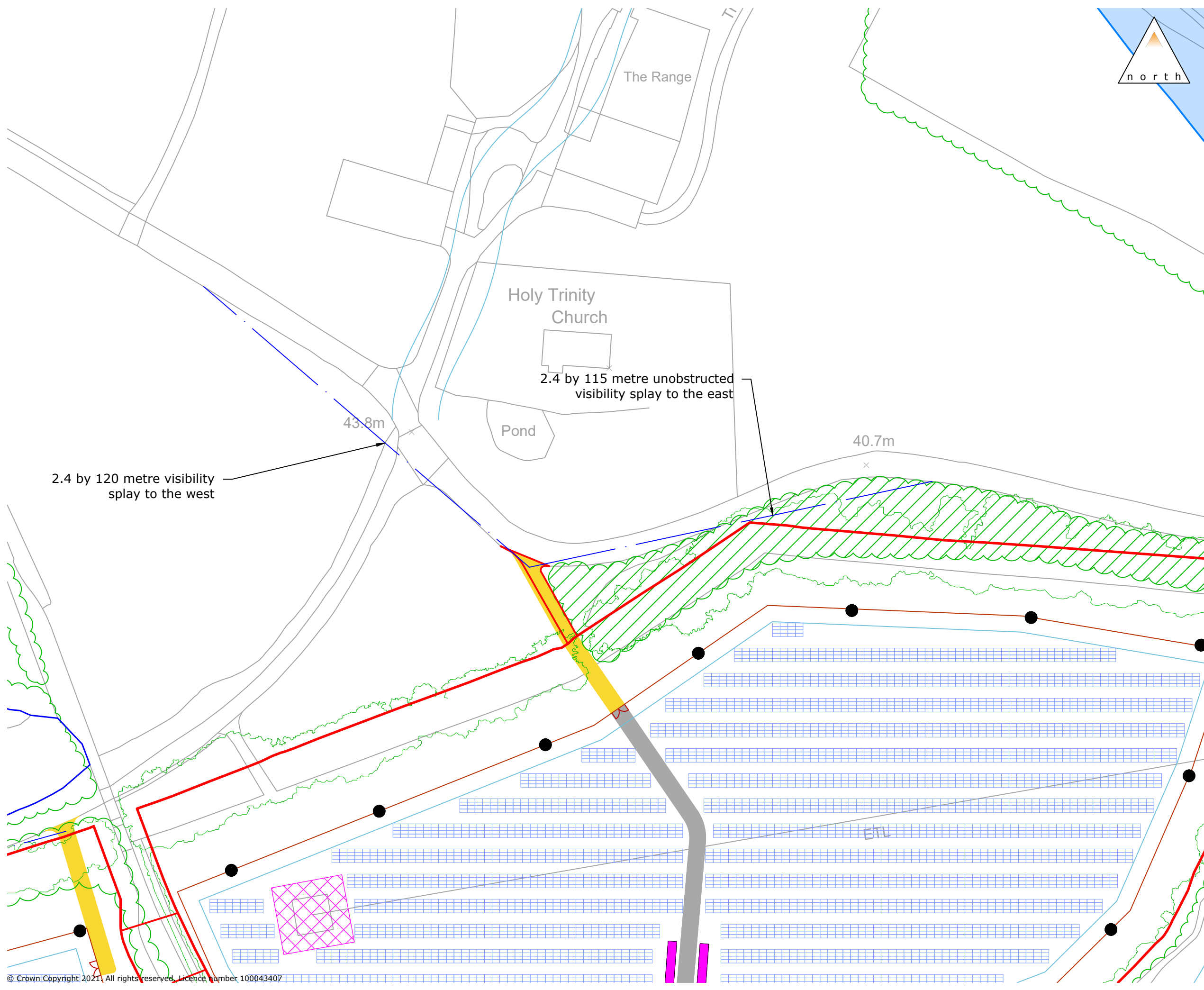
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Drawn: CH Checked: JR Approved: JR

Drawing: **2102007-03B** Revision: **A**



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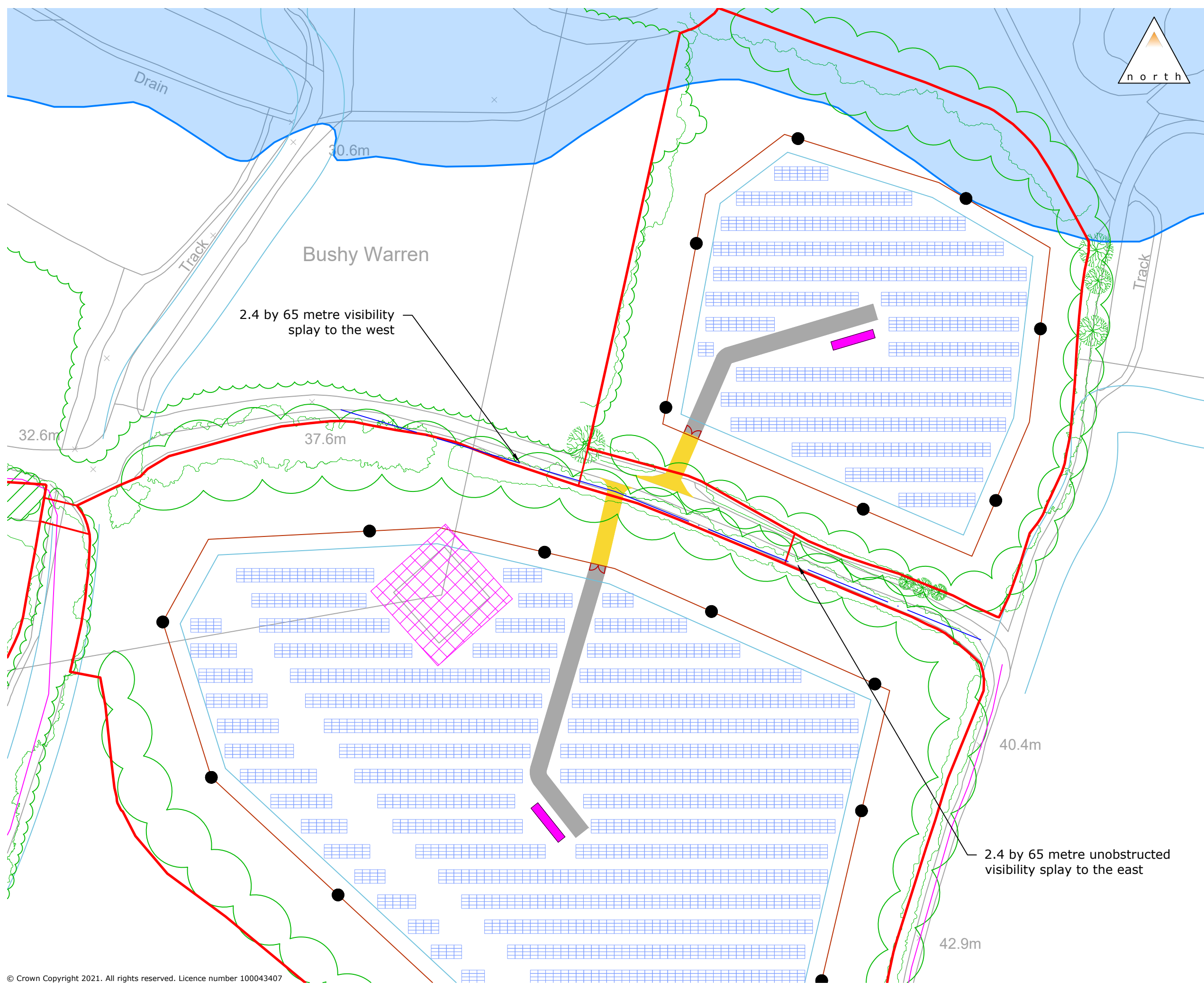
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Drawn: CH Checked: JR Approved: JR

Drawing: **2102007-03C** Revision: **A**

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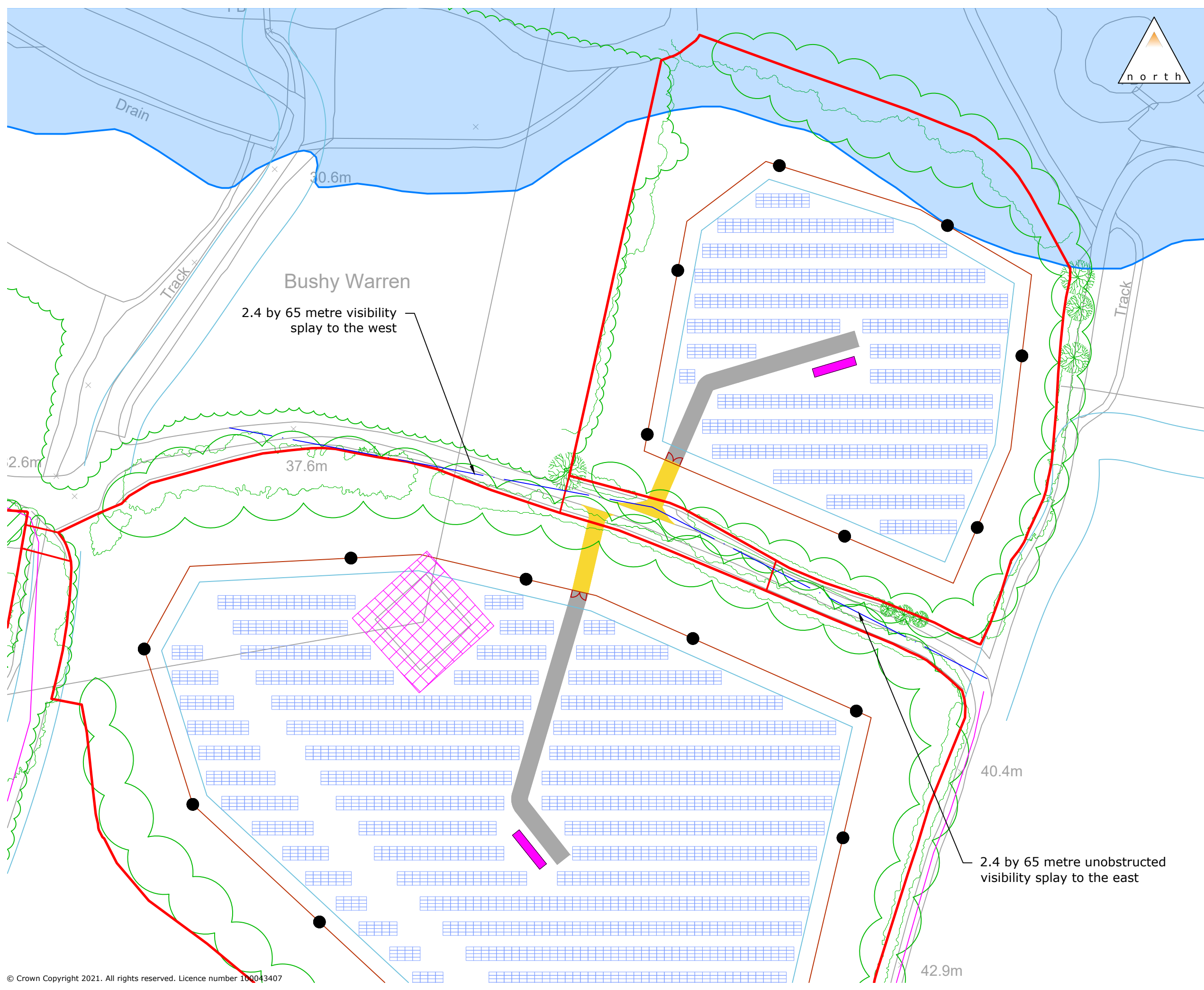
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Drawn: CH Checked: JR Approved: JR

Drawing: **2102007-03E** Revision: **A**