PAP/2023/0071

Proposed Solar Farm
Land east of Meriden Road

Transport Statement

For

Enviromena

motion

Document Control Sheet

Proposed Solar Farm

Land east of Meriden Road

Enviromena

This document has been issued and amended as follows:

Date	Issue	Prepared by	Approved by
01st February 2023	1st Draft	AN	JR

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Contents

Appendices

1.0 Introduction

1.1 Motion has prepared this Transport Statement on behalf of Enviromena, in relation to an application to construct of a temporary Solar Farm providing 47.6MW (AC) output, to include the installation of ground-mounted solar panels together with associated works, equipment and necessary infrastructure on land east of Meriden Road, Coventry, CV7 7DE ("the application site"). The application site is located within the administrative boundary of Warwickshire County Council (WCC). The application site's location is shown below in figure 1.1.

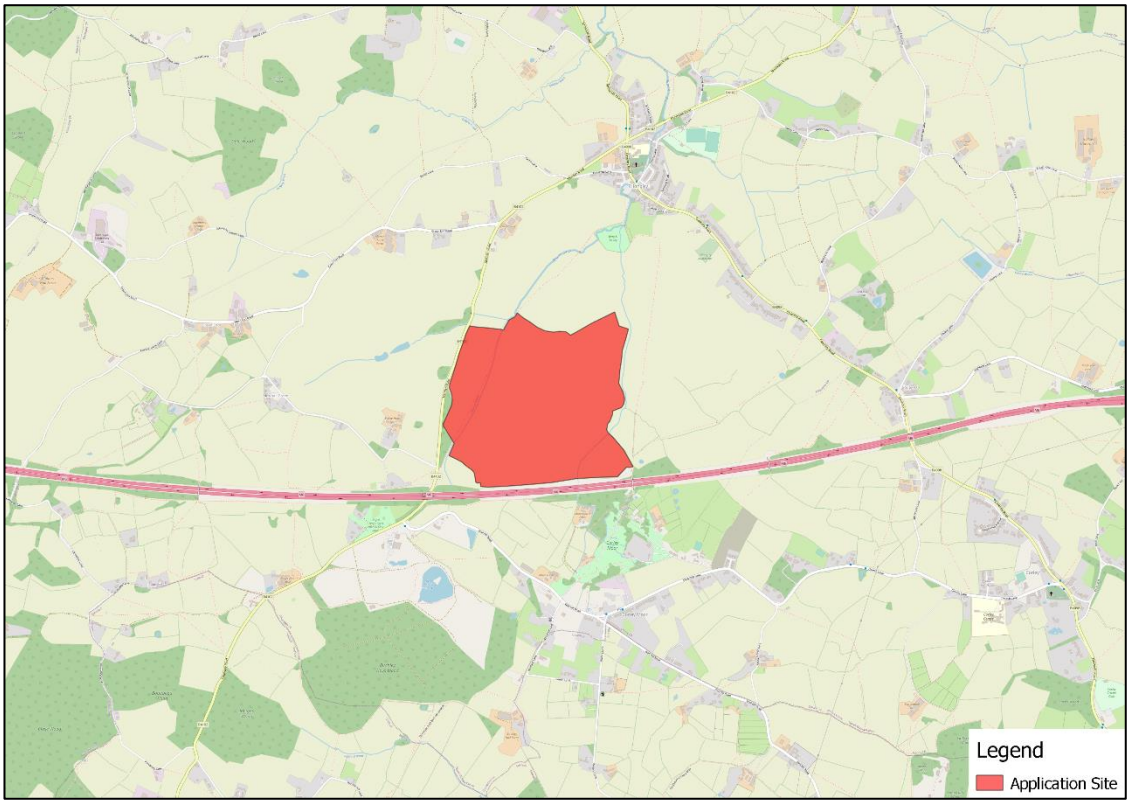


Figure 1.1 – application site location

1.2 The Application Site currently comprises a field of circa 61.87 hectares. This planning application seeks permission for the construction of a solar farm facility on land east of Meriden Road (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, 2021, published by the Department for Communities and Local Government (NPPF). Paragraph 113 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 110 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;

c) the design of streets, parking areas, other transport elements and the content of associated standards reflects the current national guidance including the National Design Guide and the National Model Design Code; and

d) 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 111 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 is prepared in accordance with this guidance.

Scope of Report

1.7 This Transport Statement 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 application 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 Transport Statement 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 shows the local highway network surrounding the application site.

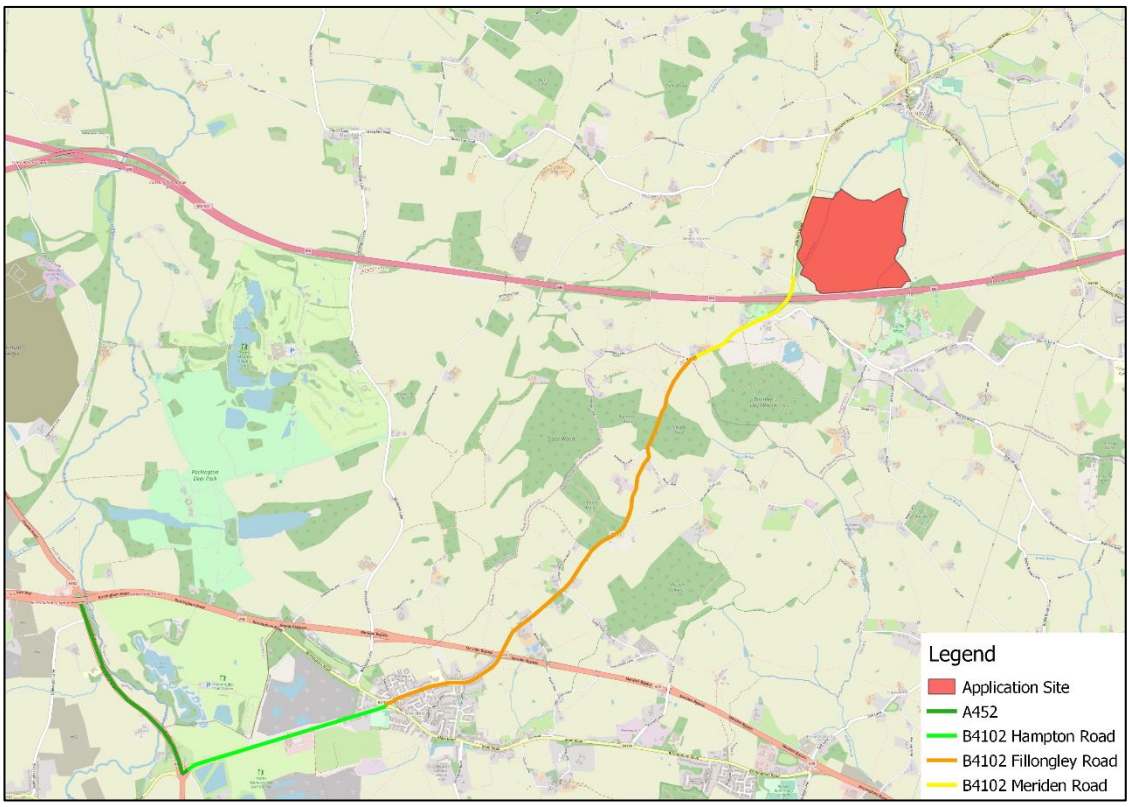


Figure 2.1 – Local Highway Network

2.2 The application site can be reached by taking the A452 off the A45 and following this road until the junction with Hampton Road (B4102) is reached. Construction vehicles will travel east along the B4102 where it becomes the Fillingley Road (B4102) at the roundabout. Construction vehicles will then travel north east along the B4102 where it becomes the Meriden Road (B4102). This leads to the application site.

Road Safety

Recorded Personal Injury Collision Data

2.3 Personal Injury Collision (PIC) data was obtained from CrashMap for the adjoining highway network for the most recent three year period available, 1st January 2019 to 31st December 2021. No PIC's were identified within the vicinity of the site access. It is therefore considered that there is no evidence of an existing road safety concern at the application sites access.

Non-Motorised Users

2.4 There is one public right of way within the application site. This runs from the site access to Coventry Road (B4098). The public right of way will remain operational through the construction period and will have signs at either end of the public right of way to advise users of the construction. During both the construction and operational phase, the public right of way will be fenced to ensure users safety. For the

duration of the construction phase, a qualified banksman will be positioned at either side of the public right of way to identify users and stop any potential conflict between construction vehicles and users. The location of the public right of way in relation to the application site can be viewed below in figure 2.2:

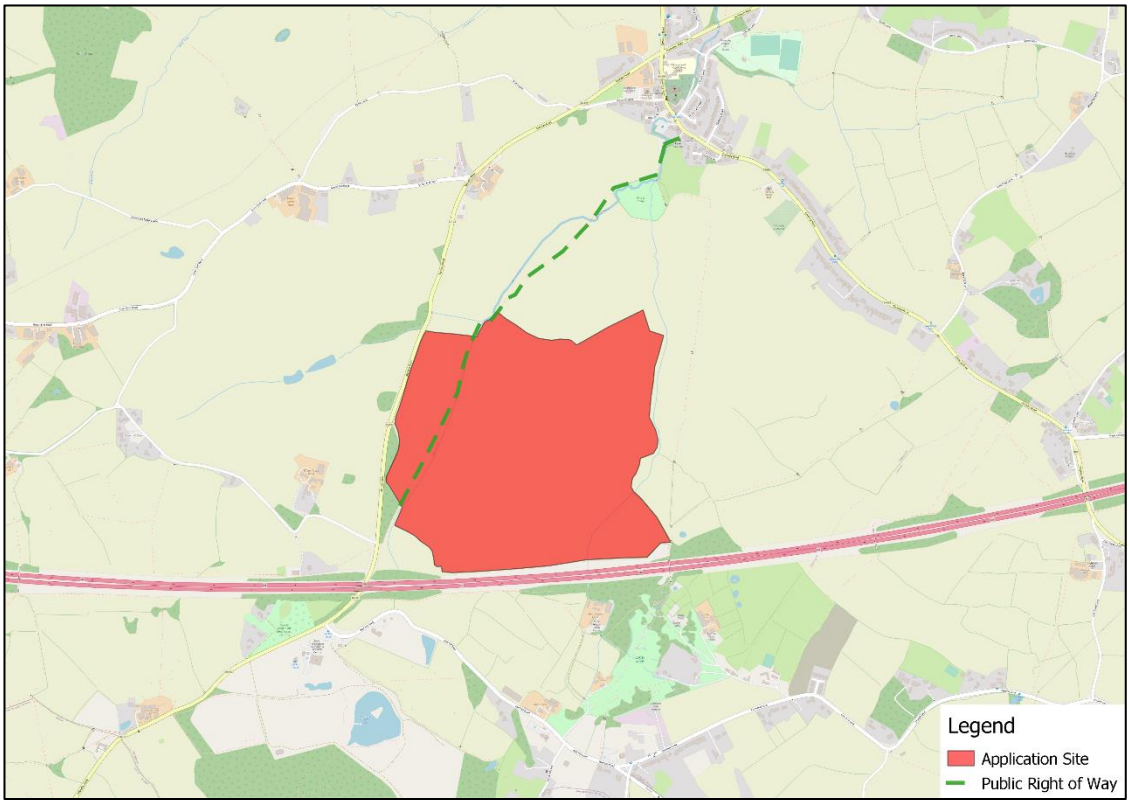


Figure 2.2 – Location of public right of way

Planned Development and Infrastructure

2.5 No permitted developments have been identified in the local area to the application site which need to be taken into consideration in the TS.

2.6 No planned transport schemes or infrastructure have been identified in the local area to the application site which need to be taken into consideration in the TS.

3.0 Proposed Development

Proposed Development

Development Description

3.1 The application site currently comprises a plot of land circa 61.87 hectares in area. This planning application seeks permission for the construction of a temporary Solar Farm providing 47.6MW (AC) output, to include the installation of ground-mounted solar panels together with associated works, equipment and necessary infrastructure on land east of Meriden Road (the Proposed Development). The Architect's Site Layout Plans are included at **Appendix A**.

3.2 The solar panels, frames and other site construction materials would be transported to the internal access road on articulated lorries up to 16.5m in length.

3.3 Site Access

3.4 There is an existing access of Meriden Road (B4102) which measures a width of 32m when the flares are accounted for. This access can accommodate the entry and egress of 16.5m articulated lorry, a swept path analysis showing this can be seen below at **Appendix B**. This access currently accommodates large farm vehicles accessing the development plot and further illustrates the access suitability for the access of articulated vehicles.

3.5 Construction vehicles will then travel approximately 80 metes along the access track to reach the access to the development plot. Note a small section of the access track will be widened to accommodate the movement of a16.5m articulated vehicles. A plan showing the extent of road widening required can be seen at **Appendix C**.

3.6 The access to the development plot will be widened on the southern side to accommodate the movement of 16.5m articulated vehicles. This widening along with a swept path analysis demonstrating a 16.5m articulated lorry can enter and egress from the development plot can be viewed at **Appendix D**.

3.7 A further swept path analysis can be viewed at **Appendix E** which shows the 16.5m articulated lorry turning around within the development. This turning area will consist of an area of hardstanding within the application site for vehicles to manoeuvre. It is recognised the swept path analysis shows the turning manoeuvre colliding with solar panels however this is an indicative location for the turning area to demonstrate an HGV can turn on site. Further to this the solar farm will be constructed from the east to the west and therefore the HGV will perform the turning manoeuvre then unload the final solar panels where the turning area is located. The turning area affects approximately 40 solar panels whilst a 16.5m articulated lorry can hold 572 solar panels so it can be seen that one lorry is sufficient to undertake this operation.

3.8 The first 10m of the internal accesses to the development will be hardstanding which would be driven on prior to accessing the public highway which would reduce the risk of mud being trafficked onto the public highway and the ensuing nuisance this can cause.

Access Route

3.9 It is proposed that all HGV construction traffic will route to the application site via the route illustrated on **Figure 3.1** below.

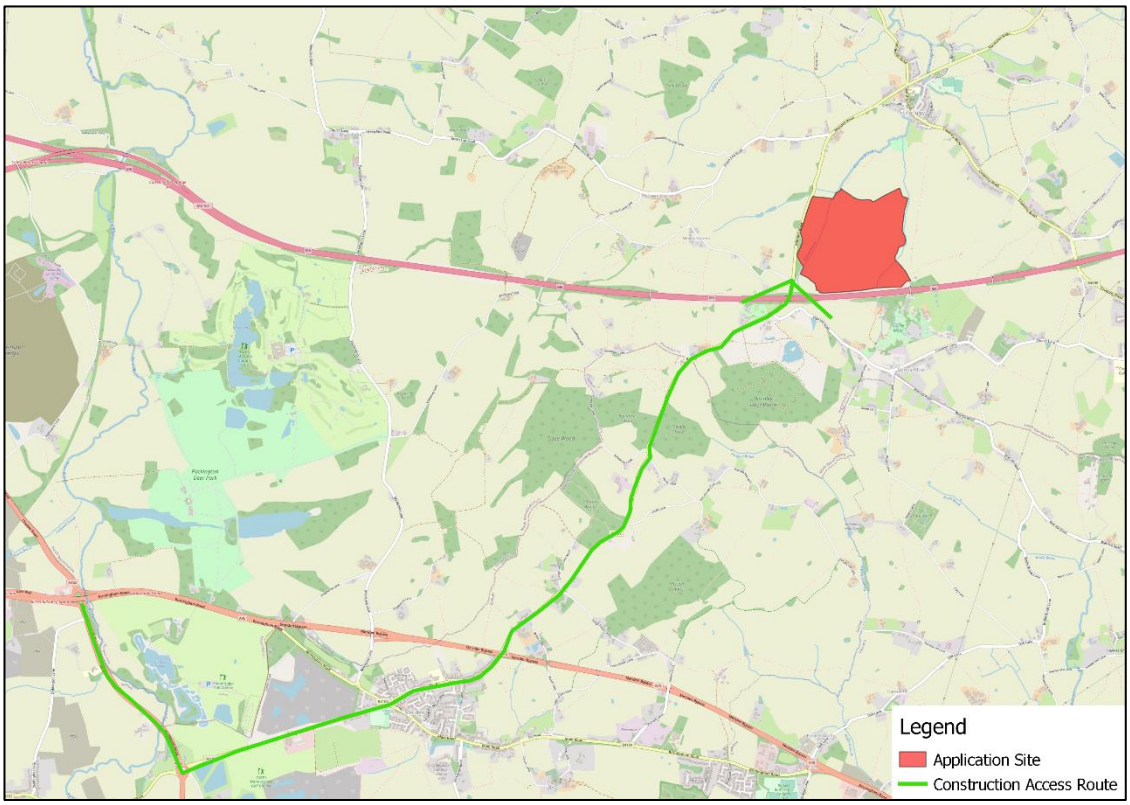


Figure 3.1 – Site Location and Construction Access Route

3.10 The Construction Traffic will reach the site as shown in figure 3.1 above and detailed as follows:

- Taking the A452 off the A45. The A452 is a dual carriageway with two lanes in each direction and regularly accommodates HGVs.
- Construction vehicles will take Hampton Road (B4102) off the A45 via a roundabout. Hampton Road is a single carriageway road with a single lane of traffic in either direction, it has a width of circa 5.5m.
- Construction vehicles will then take the second exit at the roundabout to continue north east along Fillongley Road (B4102). Fillongley Road has two road narrowing's that restrict traffic to one way at a time, this narrowing is of an approximate width of 3.5m. Fillongley Road also has a school along its course. Construction vehicles will not route to or from the site during the hours of 08:00 – 09:00 and 15:00 – 16:00 to avoid school drop off and pick up times.
- Construction vehicles will continue north east along Fillongley Road where it becomes Meriden Road. Meriden Road (B4102) continues north east and provides connection to the site access.

3.11 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 daily two-way traffic movements
Construction	28 weeks	6 commercial vehicles
Operation	Permanent	2 per day on two occasions each month.

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

3.12 Table 3.1 shows the highest increase in average two-way daily traffic movements is expected during the 28 week construction phase. Average two-way daily commercial vehicle movements are expected to amount to six two way movements per day.

3.13 It should be noted that during the first two weeks of site setup at the Application Site that HGV movements are likely to be higher than throughout the rest of the construction period with an estimated 12-16 HGV movements per day for initial site setup.

3.14 During the operational phase, traffic movements are expected to be minimal. Operational traffic would comprise one van accessing the application site twice per month i.e. two two-way vehicle movements per month.

3.15 Due to the proximity of the application site to the Strategic Road Network it is likely that commercial vehicle movements in the vicinity of the site are sufficiently high that an increase of six two-way daily vehicle movements is unlikely to cause a disturbance to other users.

Abnormal loads

3.16 There are no abnormal loads proposed in relation to the Proposed Development.

4.0 Traffic impact and mitigation

Highway Safety

Traffic Volumes

4.1 The temporary increase in traffic volumes and especially the heavy vehicle component of the traffic volume could lead to adverse highway safety impacts however the proposal is for a 28 week construction period and as such is not likely to have a road safety impact.

4.2 A DfT traffic counter is located along the B4102 to the south of the site. Whilst not immediately adjacent to the application site, it is considered that minimal changes to traffic flows would occur between the counter and the site access due to a lack of major junctions along this section of road. The latest manual survey was undertaken in 2019 and indicates an average daily flow of 7,919 vehicles, of which 132 were HGVs. In view of this, the predicted trip generation is likely to result in minimal changes in traffic flows along the B4102, particularly HGV movements.

Visibility

4.3 The national speed limit applies to Meriden Road, for this type of road this constitutes a speed limit of 60 miles per hour. A 60mph speed limit equates to a required visibility of 215 metres in each direction. A visibility splay has been prepared from the access off Meriden Road, this can be seen at **Appendix F** and demonstrates visibility of 215m can be achieved in either direction.

4.4 To achieve the required visibility of 215m, vegetation overgrow within the verge of the B4102 will be trimmed back. Highway Boundary Highways England map indicates the section of the B4102 and surrounding verge either side of the M6 Toll is National Highway outside RedLine (Low), an extract from Highway Boundary Highways England map is shown below which shows the section of the B4102 in question.

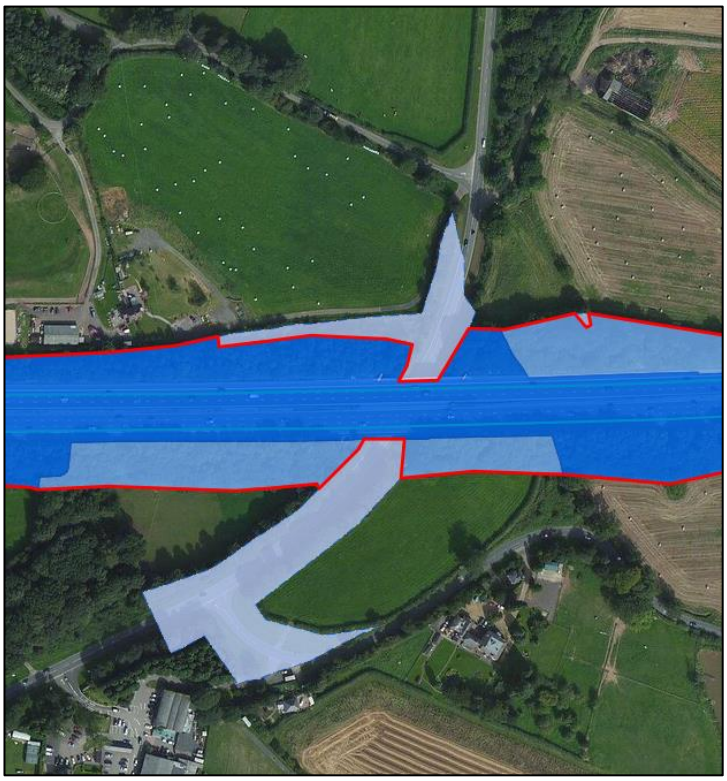


Figure 4.1 – Highway Boundary Highways England map extract

4.5 The relevant party will be contacted prior to any highway vegetation maintenance.

Construction Traffic Management Plan

4.6 Notwithstanding the de minimis change in highway capacity which is expected to arise from the construction phase of the proposed development, it is proposed to provide a Construction Traffic Management Plan (CTMP) to reduce or avoid this potential disturbance arising from heavy goods vehicles during the construction period.

Residual impacts

4.7 On completion of the 28 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 four 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 has prepared this Transport Statement on behalf of Enviromena, in relation to the construction of a temporary Solar Farm providing 47.6MW (AC) output, to include the installation of ground-mounted solar panels together with associated works, equipment and necessary infrastructure on land east of Meriden Road, Coventry, CV7 7DE ("the application site"). The application site is located within the administrative boundary of Warwickshire County Council (WCC).

5.2 The application site currently comprises a field of circa 61.87 hectares. This planning application seeks permission for the construction of a solar farm facility on land east of Meriden Road (the Proposed Development).

5.3 HGV construction traffic will route to the application by taking the A452 off the A45 and following this road until the junction with Hampton Road (B4102) is reached. Construction vehicles will travel east along the B4102 where it becomes the Fillingley Road (B4102) at the roundabout. Construction vehicles will then travel north east along the B4102 where it becomes the Meriden Road (B4102). This leads to the application site.

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 application 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 application site. This would be for a temporary 28 week period. On average during this 28 week period, it is expected that the Proposed Development would lead to an increase in traffic movements of six two-way vehicle movements per day. Changes of this magnitude would have a de minimis impact on highway capacity.

5.6 Due to the proximity of the application site to the Strategic Road Network it is likely that commercial vehicle movements in the vicinity of the site are sufficiently high that an increase six two-way daily vehicle movements is unlikely to cause a disturbance to other users.

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 minimus. Traffic management measures can be put in place to reduce or avoid potential residual impacts arising from road traffic during the temporary 28 week construction period. In short:

- The proposals accord with national and local policies relevant to transport;
- Safe and suitable access to the application 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 111 of NPPF, there are therefore no transport or highway reasons why planning permission should be prevented or refused.

Appendix A

Site Layout

Site Boundary

Security Fence

Access

Transformer

DNO Substation

Customer Switchgear Enclosure

PRoW

N

131.4m

129.5m

138.1m

135.5m

133.7m

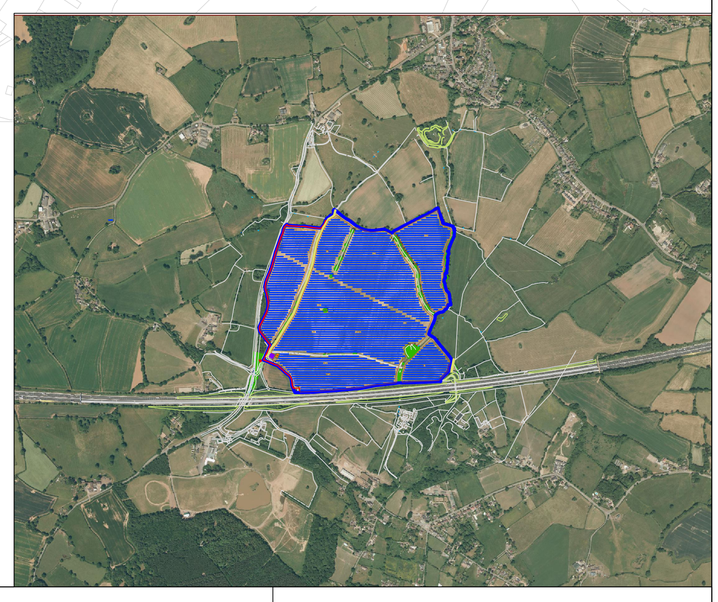
139.9m

MERIDEN ROAD

B 4102

M 6

Total DC Power (kW)	45,976
Total AC Power (kVA)	44,352
Number of Modules	83,592
Number of Inverters	126
Mounting system	Fix, 2 Portrait
Tilt	25°
Pitch (m)	10.50



COMMENTS:

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Rev A	Fix structure , tilt 25 degrees, pitch 10.5m	AMS		02/06/2022
Rev B	Transformers station, changed DC	AMS		07/07/2022
Rev C	Transformers station, changed DC, 352kVA inverters	AMS		16/01/2023
Rev D	Topo inlcuded and hedge buffer	AMS		25/01/2023
Rev E	Added buffer and table reallocations	AMS		09/02/2023
Rev F	Added buffer and table reallocations	AMS		14/02/2023

REVISION:	DESCRIPTION:	REVISED BY:	APPROVED BY:	DATE:

Scale:	Drawn by:	Checked by:	Signed by PM:	Date checked:	Page:	Sheet size:
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SITE ADDRESS:

Nailcote Farm
Nailcote Lane
Berkswell, Coventry

CV7 7DE

PROJECT NAME: Nailcote Farm

TITLE: General Layout

DRAWING No.: P.NailcoteFarm_01_GeneralLayout

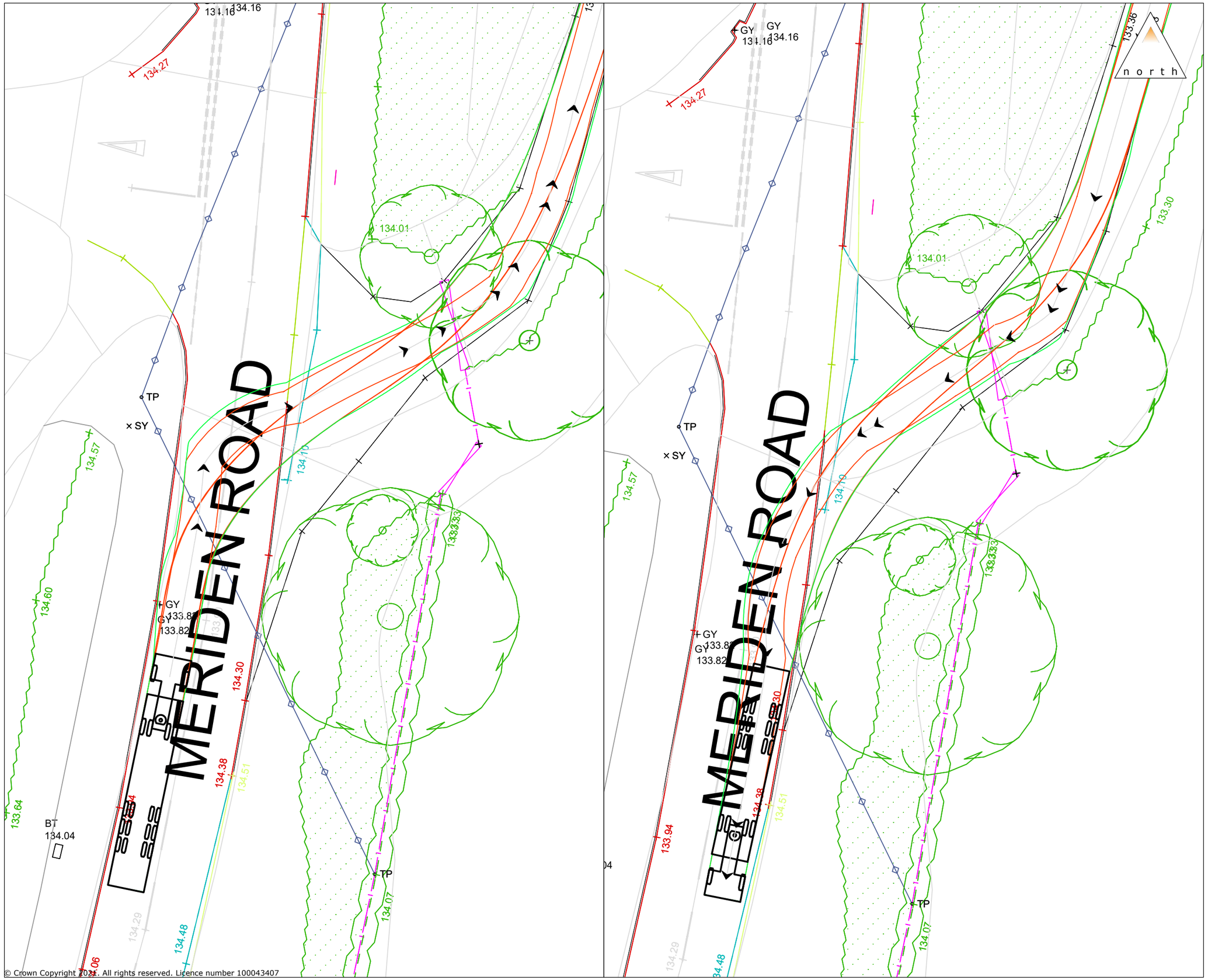
REV: Rev F

ENVIROMENA

ADDRESS:
Enviromena Project Management UK Ltd
Tel: +44 330 107 1415
15 Diddenham Court, Grazeley
Reading, RG7 1JQ, United Kingdom

Appendix B

Swept Path Analysis
(access junction)



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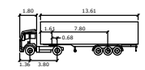

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Trailer Width	: 2.55	Steering Angle	: 42.7
Tractor Track	: 2.55	Articulating Angle	: 70.0
Trailer Track	: 2.55		

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Project:
Land East of Meriden Road

Title:
Swept Path Analysis
Access Junction - HGV

Client:
Enviromena

Drawing Status:

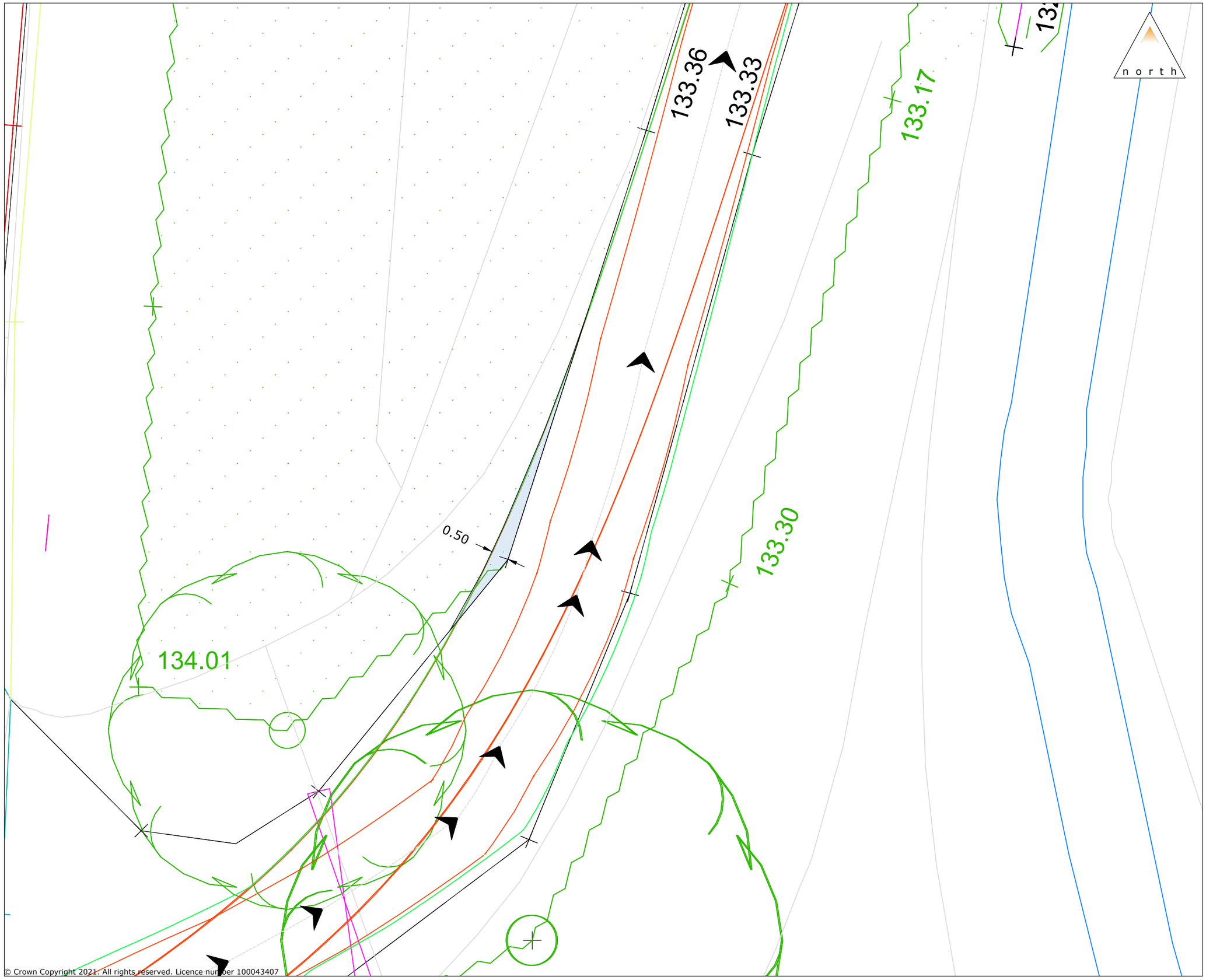
Scale: 1:250 (@ A3) Date:26/01/2023

Drawn: AN Checked: JNR Approved: JNR

Drawing: Revision:
2210072 - TK01

Appendix C

Road Widening Plan



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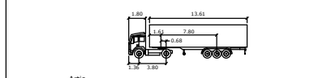

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Tractor Track	: 2.55	Articulating Angle	: 70.0
Trailer Track	: 2.55		

Legend:

Area of road widening

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Project:
Land East of Meriden Road

Title:
Road Widening Plan

Client:
Enviromena

Drawing Status:

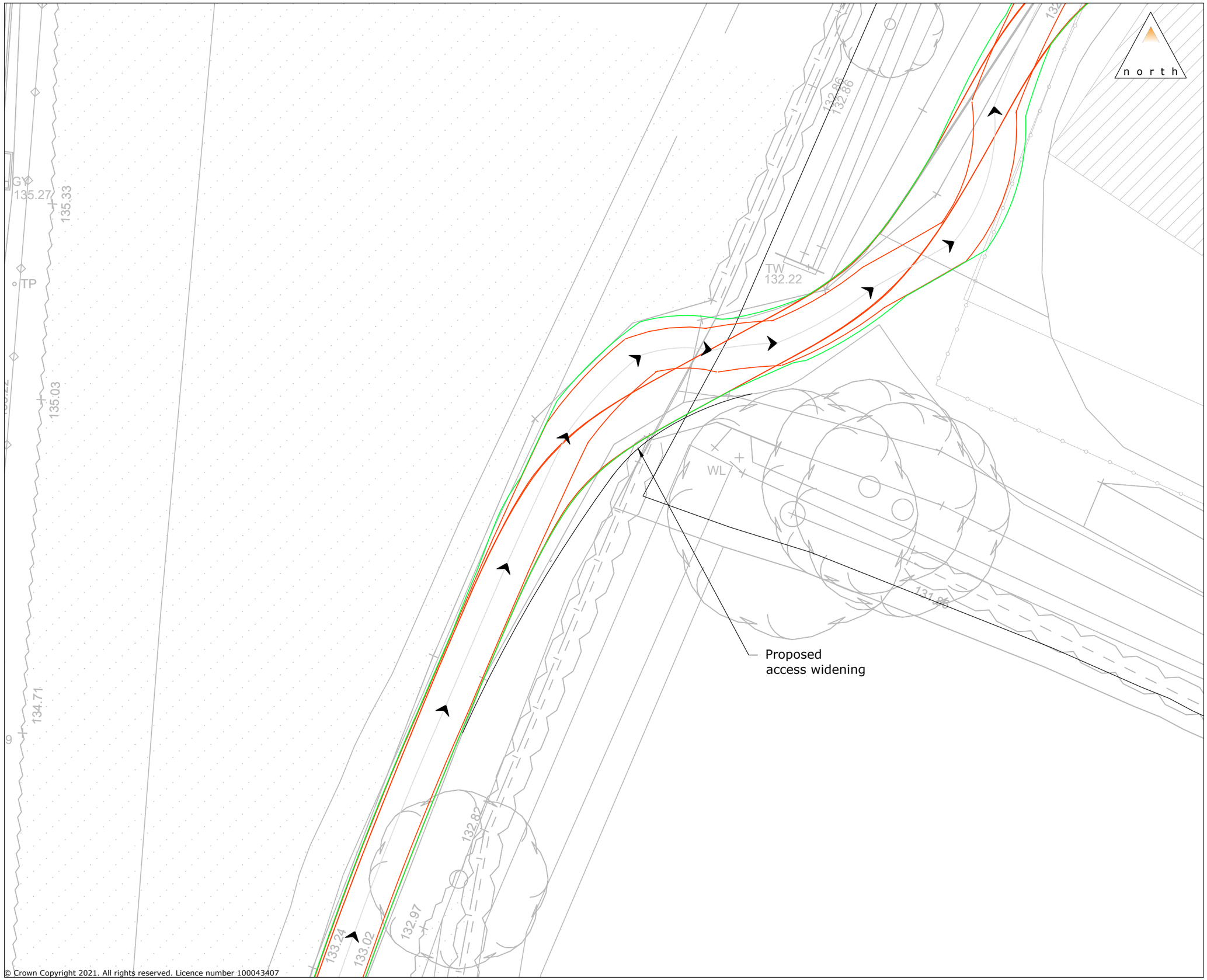
Scale: 1:100 (@ A3) Date:26/01/2023

Drawn: AN Checked: JNR Approved: JNR

Drawing: 2210072 - 02 Revision:

Appendix D

Swept Path Analysis
(access)



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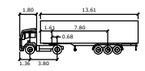

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Trailer Track	: 2.55		

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Project:
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Title:
Swept Path Analysis
Access to Development - HGV

Client:
Enviromena

Drawing Status:

Scale: 1:200 (@ A3) Date:26/01/2023

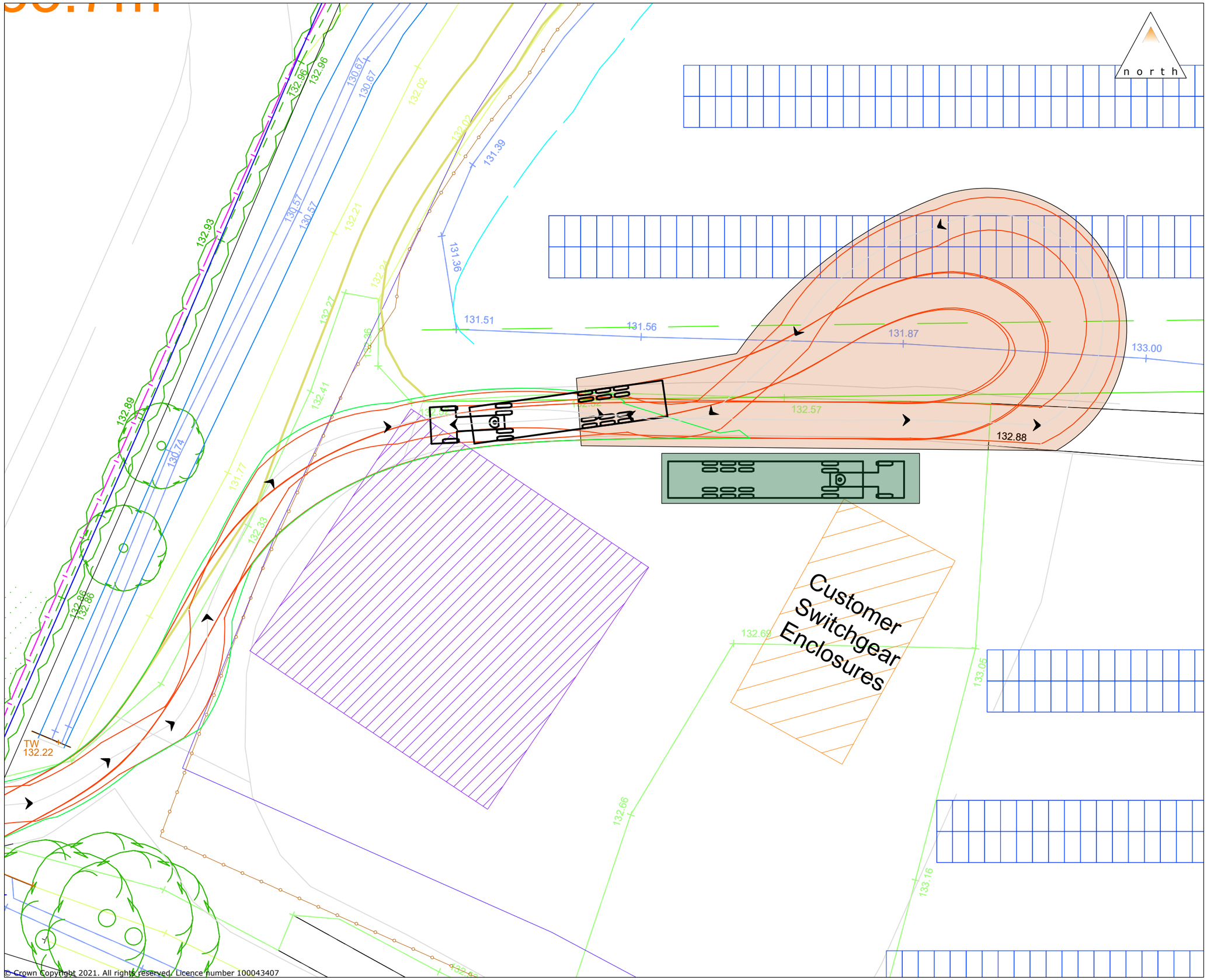
Drawn: AN Checked: JNR Approved: JNR

Drawing: Revision:
2210072 - TK02

Appendix E

Swept Path Analysis

(turning manoeuvre)



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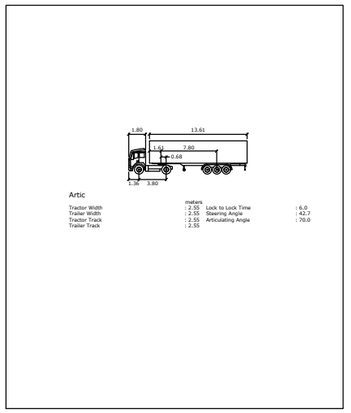

Legend:

- HGV Turning Area
- HGV Parking Area

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Project:
Land East of Meriden Road

Title:
Swept Path Analysis
HGV Turning Manoeuvre

Client:
Enviromena

Drawing Status:

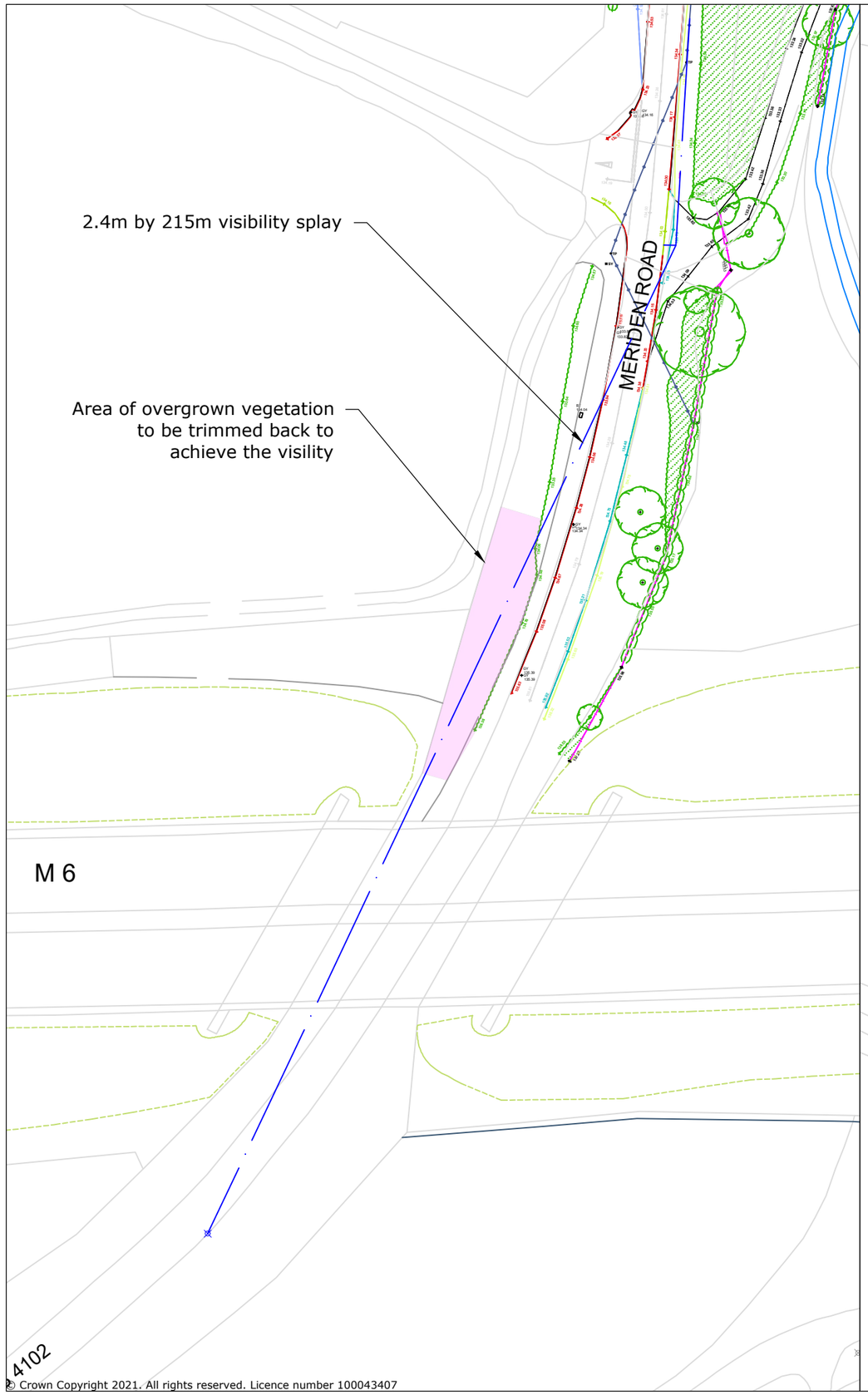
Scale: 1:250 (@ A3) Date:26/01/2023

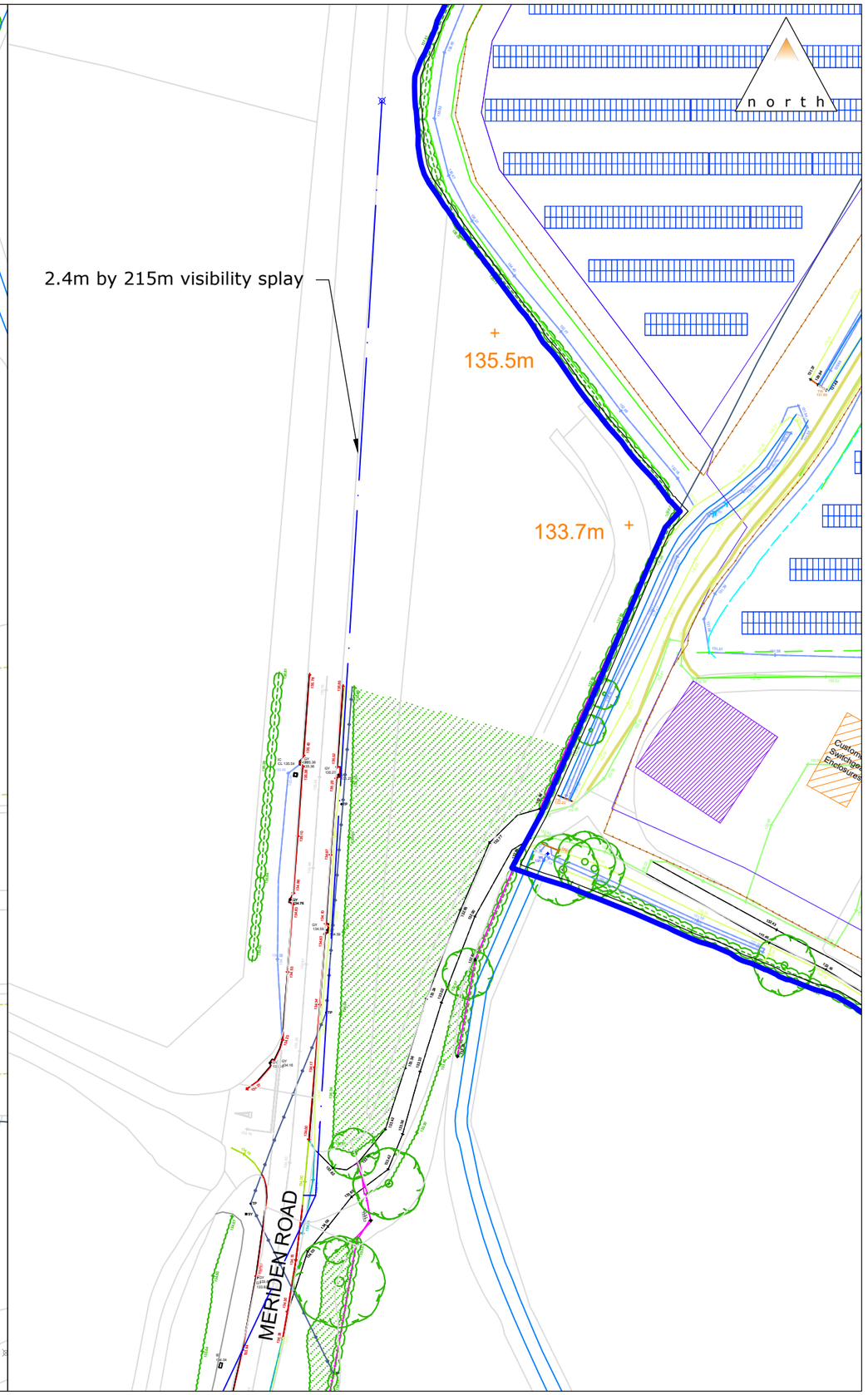
Drawn: AN Checked: JNR Approved: JNR

Drawing: Revision:
2210072 - TK03

Appendix F

Visibility Splay





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Visibility Splay

Client:
Enviromena

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Drawing: Revision:
2210072 - 01