

Outer Dowsing Offshore Wind

Clarification Note:

Abnormal Load Alternative Routes

Deadline 3

Date: December 2024

Document Reference: 20.13

Rev: 1.0

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Acronyms & Definitions

Abbreviations / Acronyms

Abbreviation / Acronym	Description
AIL	Abnormal Indivisible Load
AIP	Approvals in Principal
EIA	Environmental Impact Assessment
ExA	Examining Authority
ISH	Issue Specific Hearing
LCC	Lincolnshire County Council
OnSS	Onshore Substation

Terminology

Term	Definition
The Applicant	GT R4 Ltd. The Applicant making the application for a DCO. The Applicant is GT R4 Limited (a joint venture between Corio Generation (and its affiliates), Total Energies and Gulf Energy Development (GULF)), trading as Outer Dowsing Offshore Wind. The Project is being developed by Corio Generation, TotalEnergies and GULF.
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP).
Effect	Term used to express the consequence of an impact. The significance of an effect is determined by correlating the magnitude of the impact with the sensitivity of the receptor, in accordance with defined significance criteria.
EIA Regulations	Infrastructure Planning (Environmental Impact Assessment) Regulations 2017
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Regulations, including the publication of an Environmental Statement (ES).
Impact	An impact to the receiving environment is defined as any change to its baseline condition, either adverse or beneficial.
Onshore substation (OnSS)	The Project's onshore HVAC substation, containing electrical equipment, control buildings, lightning protection masts, communications masts, access, fencing and other associated equipment, structures or buildings; to enable connection to the National Grid
Outer Dowsing Offshore Wind (ODOW)	The Project.

1 Introduction

1. The Applicant has submitted document 6.3.27.1 (Transport Assessment Annexe A ‘Special Order AIL Swept Path Analysis’ (APP-218) showing an Abnormal Indivisible Load (AIL) route from the Port of Sutton Bridge to the Onshore Substation (OnSS) site at Surfleet Marsh. This is the proposed route for the very large components required at the OnSS, of which the 400kV transformers are the heaviest loads.
2. The proposed route in document 6.3.27.1 crosses the river Welland at Fosdyke Bridge. During Issue Specific Hearing (ISH) 3 on the 5th of December, the Applicant was asked by the Examining Authority (ExA) whether this bridge has been assessed to carry the load required, if it has sufficient capacity, and whether an alternative route has been considered. If an alternative route was required, would this involve additional environmental impacts that have not been assessed.
3. The ExA also pointed out certain anomalies with figures in document 6.3.27.1.
4. This clarification note is provided to address the questions raised by the ExA.

2 Update to Transport Assessment Annex A ‘Special Order AIL Swept Path Analysis 6.3.27.1 (APP-218)

5. The Applicant is submitting an updated version of this document at Deadline 3, having made the following corrections, in response to the ExA’s comments during ISH3.
6. Corrections made:
 - Page 8 – uploading error with missing layers corrected;
 - Page 9 – uploading error with missing layers corrected; and
 - Page 11 – missing swept path – this has been deleted as it is not required.

3 Fosdyke Bridge

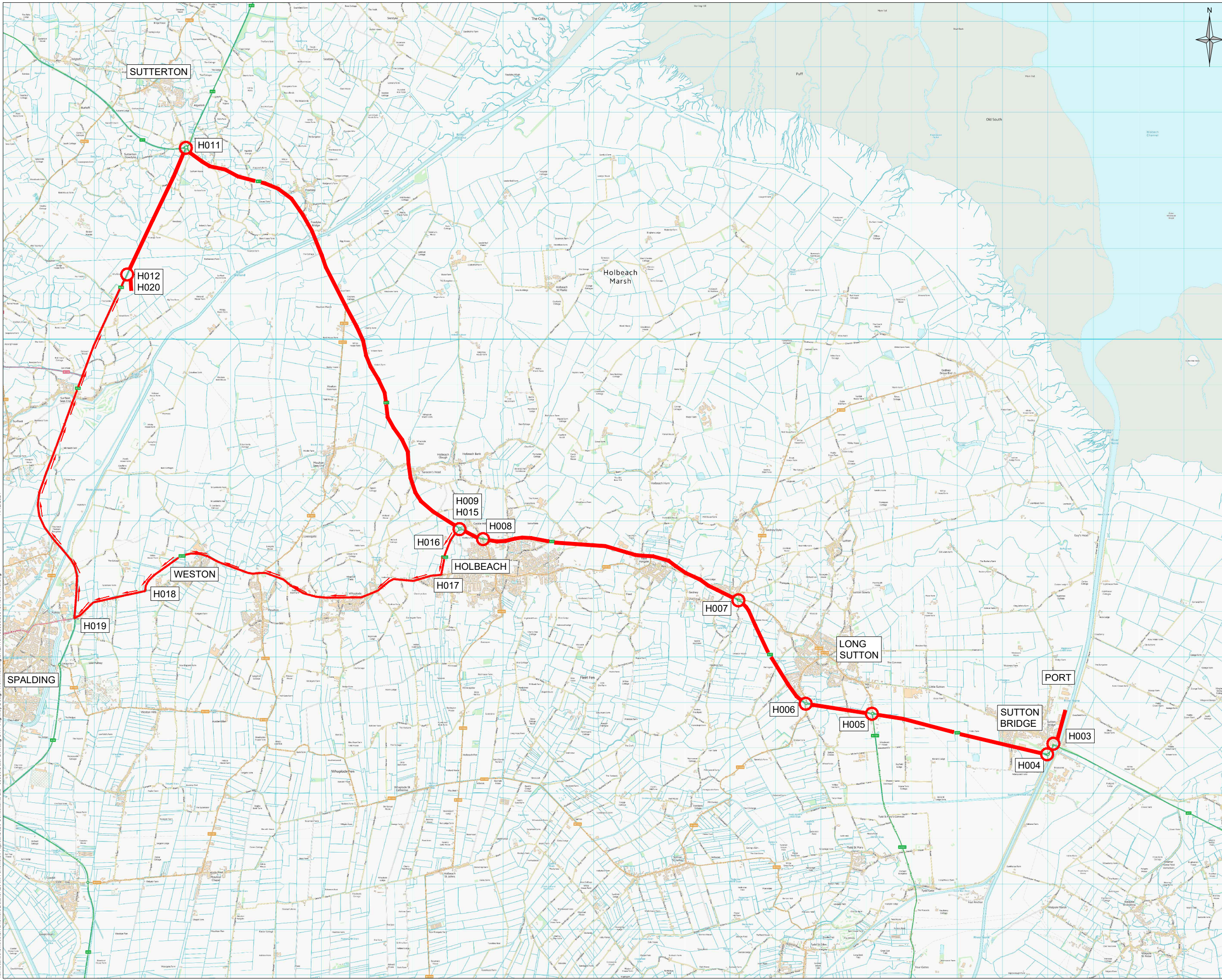
7. The AIL route (shown in document 6.3.27.1 (APP-218)) from Sutton Bridge follows the A17 and crosses the river Welland at Fosdyke Bridge, which is potentially a constraint. The Applicant has engaged with the Lincolnshire County Council (LCC) Senior Bridge Inspection engineer who provided the most recent Approvals in Principle (AIP) for AIL crossings at Fosdyke Bridge. The Outer Dowsing Offshore Wind 400kV transformer load could exceed any previous approvals and a bridge assessment would be required by a suitable consulting engineer to support an AIP application
8. The Applicant has not appointed a supplier for the onshore substation and the weight and size of the AILs have not been confirmed. The 400kV transformers will be the heaviest component and are potentially heavier than those moved along the same route from Sutton Bridge for the Triton Knoll project.
9. Once the transformer specifications have been confirmed, the Applicant will instruct a suitable engineer to carry out the necessary inspections and assessment to establish the load capacity and, if suitable, support an application to LCC for approval of the use of the bridge.

4 Alternative routes

10. The Applicant has considered an alternative route, which would avoid Fosdyke Bridge, and consulted LCC regarding this route.
11. The Applicant discussed with LCC this alternative route between Sutton Bridge and the OnSS site if Fosdyke Bridge was deemed unsuitable. This route would follow the proposed route along the A17 to Holbeach, then take the A151 to Spalding where it would join the A16, which connects to the site. The alternative route has been added to the 'Swept Path Analysis Route Details' Drawing No. SHE.410.V05356.00013-H001 and is appended to this document.
12. LCC identified that this route has two bridges on the A16 that would require assessment prior to approval through the AIP process. It was noted that at the time of the consultation in August 2024, work was underway to widen the A151 / A16 Springfields roundabout, which has made it easier to negotiate.
13. LCC has provided the Applicant with design details of the two bridges on the A16 which would require assessment, if this route were to be used. It is noted that these two bridges are of a more recent design and have shorter spans compared Fosdyke Bridge.
14. Swept path drawings have been prepared for the alternative route junctions (Drawing Nos. SHE.410.V05356.00013-H015 to SHE.410.V05356.00013-H020) and these are appended to this document.
15. The impacts of the AIL movements would not be expected to be any greater if the alternative route was selected. Minor works, such as the temporary removal of signs, bollards and other street furniture may be required at junctions, whichever route is selected, and this is not expected to introduce any additional environmental impact.
16. In terms of assessment of the effects of the delivery of the transformer under Environmental Impact Assessment (EIA) Regulations, as with the original route option assessed in the ES, indicated in Chapter 26 Traffic and Transport [AS1-052] stated at paragraph 202:

“Given the delivery of AILs would be delivered during periods of low traffic flows on the highway network, were possible and with the implementation of traffic management measures, the magnitude of impact is considered to be low and therefore, the resulting adverse effect would be minor adverse significance which is not significant in terms of the EIA Regulations.”
17. The Applicant considers that the Port of Sutton Bridge is the most convenient port for AIL deliveries because of its proximity to the OnSS and the fact that it was successfully used for the Triton Knoll project.
18. Following the appointment of suppliers, confirmation of the size of components the optimum port and route will be confirmed. Whatever port and route are selected, the management arrangements will be similar and will require approval by LCC.

Appendices



- Notes:**
- 1. Swept Path Drawing Details
 - H001 - Route Plan
 - H002 - Vehicle Details
 - H003 - Sutton Bridge - Bridge Road / A17 Roundabout Junction
 - H004 - Sutton Bridge - A17/A1101 Roundabout
 - H005 - Sutton Bridge - A17/A1101 Roundabout
 - H006 - Sutton Bridge - A17/B1390 Roundabout
 - H007 - Sutton Bridge - A17/B1359 Roundabout
 - H008 - Holbeach - A17/B1168 Roundabout
 - H009 - Holbeach - A17/A151 Peppermint Roundabout
 - H010 - Not Used
 - H011 - A17/A16 Sutterton Roundabout
 - H012 - Sutterton - A16 Site Access
 - H013 - Not Used
 - H014 - Not Used
 - Alternative Route
 - H015 - Holbeach - A17/A151 Peppermint Roundabout
 - H016 - Holbeach - A151 Roundabout
 - H017 - Holbeach - A151 Roundabout
 - H018 - Weston - A151 Roundabout
 - H019 - Spalding - A151/A16 Roundabout
 - H020 - Sutterton - A16 Site Access

- Legend:**
- Primary Route Option considered
 - Alternative Route Option to be considered

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Rev	Amendments	Date	By	Chk	Auth



Drawing Status & Suitability Code

Client

Project
**ODOW
 ABNORMAL LOAD ROUTE ASSESSMENT**

Drawing Title
**SWEPT PATH ANALYSIS
 ROUTE DETAILS**

Scale 1:75,000	@ A3	SLR Project No. 410.V05356.00013-0003
Designed DPP	Drawn DPP	Checked DM
Date DEC 24	Date DEC 24	Date DEC 24
Drawing Number SHE.410.V05356.00013-H001		Rev. R1



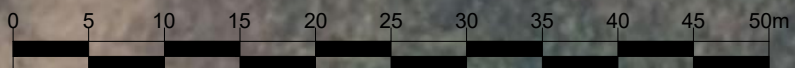
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1. DUE TO COMPLEXITIES OVER LINKAGES, THE REAR BRAKE TRACTOR IS NOT MODELLED.

Legend:



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TRACTOR NOT
MODELLED



Scale 1:500

Rev	Amendments	Date	By	Chk	Auth



Drawing Status & Suitability Code

Client

Project
ODOW
ABNORMAL LOAD ROUTE ASSESSMENT

Drawing Title
SWEPT PATH ANALYSIS - SECONDARY ROUTE
HOLBEACH
A17/A151 PEPPERMINT ROUNDABOUT

Scale 1:500	@ A3	SLR Project No. 410.V05356.00013-0003
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Notes:
 1. DUE TO COMPLEXITIES OVER LINKAGES, THE REAR BRAKE TRACTOR IS NOT MODELLED.

Legend:

REAR BRAKE TRACTOR NOT MODELLED

REAR AXLE STEERING OVERRIDE USED

REAR AXLE STEERING OVERRIDE USED

Rev	Amendments	Date	By	Chk	Auth



Drawing Status & Suitability Code

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Project
 ODOW
 ABNORMAL LOAD ROUTE ASSESSMENT

Drawing Title
 SWEEPED PATH ANALYSIS - SECONDARY ROUTE
 HOLBEACH
 A151 ROUNDABOUT

Scale
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 410.V05356.00013-0003

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Notes:
1. DUE TO COMPLEXITIES OVER LINKAGES, THE REAR BRAKE TRACTOR IS NOT MODELLED.

Legend:

REAR BRAKE TRACTOR NOT MODELLED

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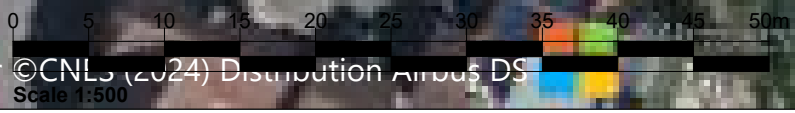
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ABNORMAL LOAD ROUTE ASSESSMENT

Drawing Title
SWEPT PATH ANALYSIS - SECONDARY ROUTE
HOLBEACH
A151 ROUNDABOUT

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SLR Project No.
410.V05356.00013-0003

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Drawing Number
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Legend:

REAR BRAKE TRACTOR NOT MODELLED

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ABNORMAL LOAD ROUTE ASSESSMENT

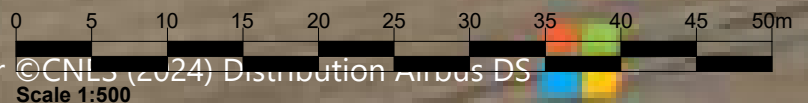
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A151 ROUNDABOUT

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Notes:
 1. DUE TO COMPLEXITIES OVER LINKAGES, THE REAR BRAKE TRACTOR IS NOT MODELLED.

Legend:

REAR BRAKE TRACTOR NOT MODELLED

Roundabout may have been made larger recently, this is the most upto date image available.

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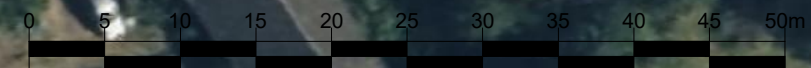
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 ABNORMAL LOAD ROUTE ASSESSMENT

Drawing Title
 SWEPT PATH ANALYSIS - SECONDARY ROUTE
 SPALDING
 A151/A16 ROUNDABOUT

Scale
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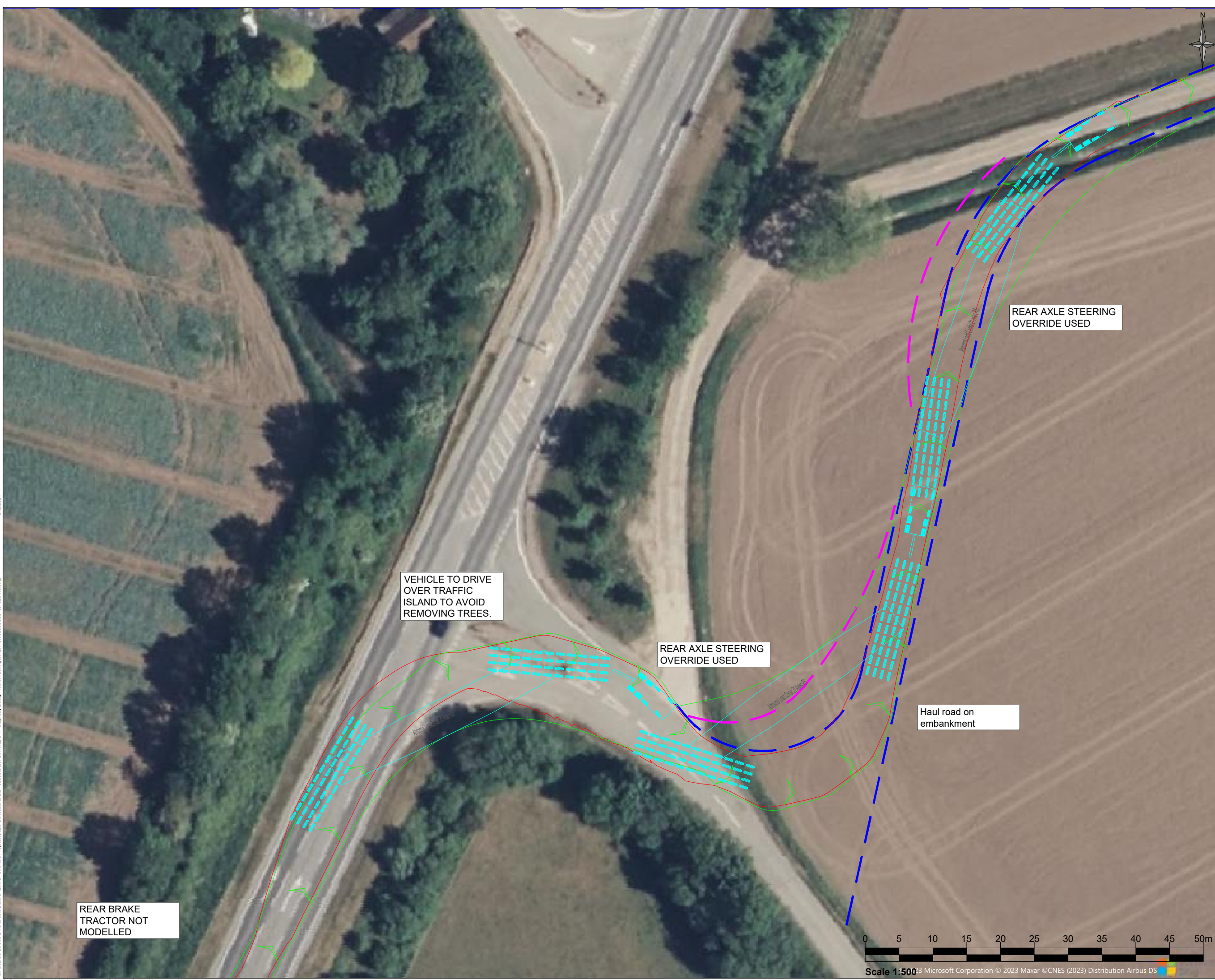
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Notes:
 1. DUE TO COMPLEXITIES OVER LINKAGES, THE REAR BRAKE TRACTOR IS NOT MODELED.

Legend:



REAR BRAKE TRACTOR NOT MODELLED

VEHICLE TO DRIVE OVER TRAFFIC ISLAND TO AVOID REMOVING TREES.

REAR AXLE STEERING OVERRIDE USED

REAR AXLE STEERING OVERRIDE USED

Haul road on embankment



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Rev	Amendments	Date	By	Chk	Auth



Drawing Status & Suitability Code
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Project
 ODOV
 ABNORMAL LOAD ROUTE ASSESSMENT

Drawing Title
 SWEEP PATH ANALYSIS
 SUTTERTON
 A16 SITE ACCESS

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 410.V05356.00013-0003

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