

## **Appendix 2-2**

### **TURBINE DELIVERY ROUTE (TDR) ASSESSMENT**

# MWP

## TURBINE DELIVERY ROUTE ASSESSMENT REPORT BALLINLA WINDFARM

Ballinla Wind Farm Limited

July 2025

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Appendix 1 – Turbine Delivery Route Assessment Drawings

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23882	MWP-00-00-RP-C-6001	P03	May 2025	SH	SH	PC	For Planning

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## 1. Introduction

MWP has been commissioned by Ballinla Wind Farm Limited to complete environmental, planning and engineering services in support of a planning application for a proposed wind energy development.

The Proposed Ballinla Wind Energy Development consists of a 7 wind turbine generator (WTG) wind farm and an on-site 110kV substation. A plan of the Proposed Development is provided in **Figure 1-1**.

In support of Ireland's goal to generate 80% of its electricity from renewable sources by 2030, the project intends to feed the national grid with clean and sustainable electricity.

The purpose of this report is to identify any potential pinch points along the WTG component delivery route where works will be required to facilitate delivery of the turbine components. The report should be read in conjunction with the drawings included as Appendix 1.

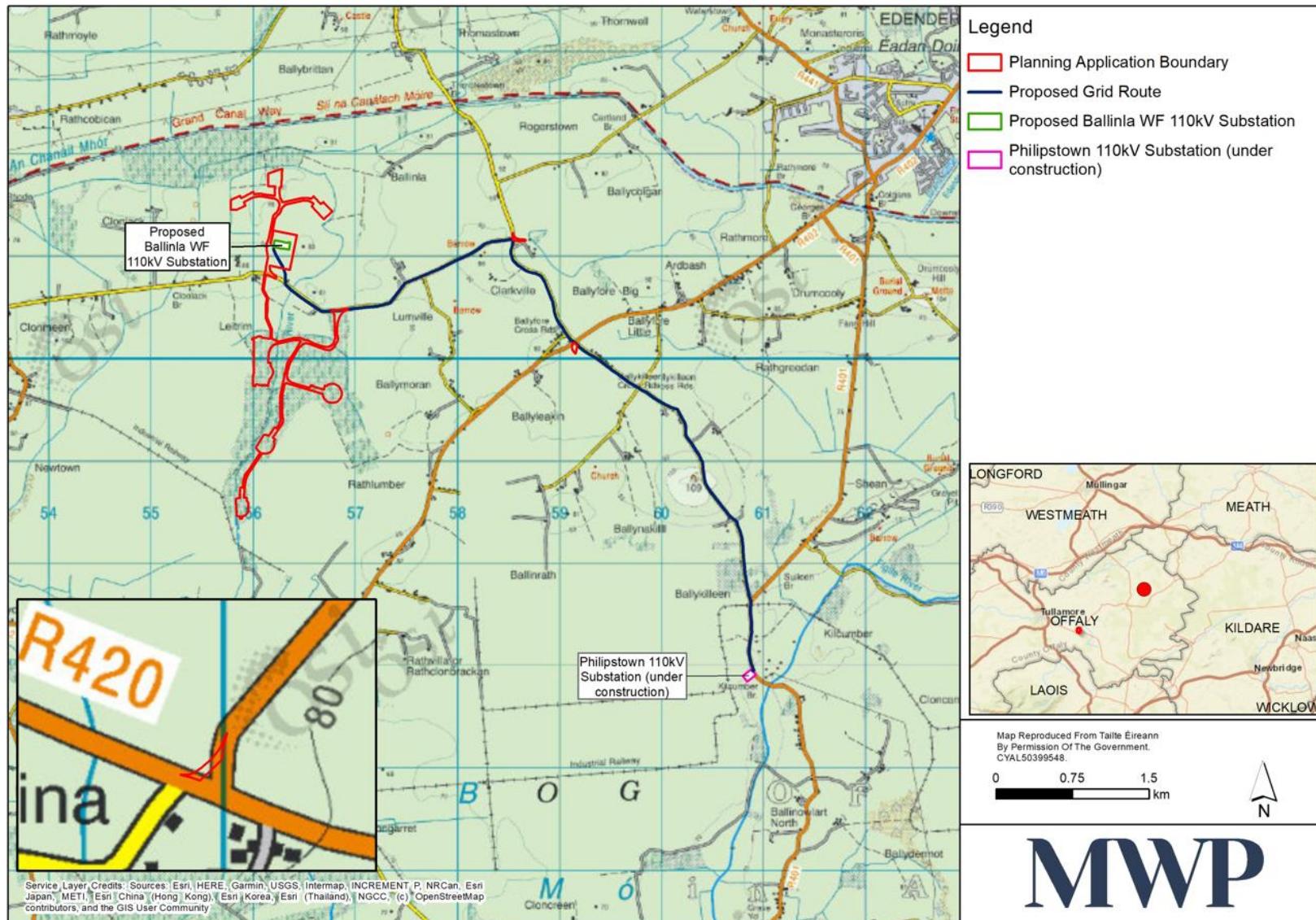


Figure 1-1: Proposed Wind Energy Development

## 2. Turbine Delivery Route Assessment

### 2.1 Delivery Route Overview

The Proposed Wind Energy Development is located in a rural area of east county Offaly. The site is approximately 4km west of the Edenderry town boundary and 24km east of Tullamore. The wind energy development consists of 7 No. WTGs with a maximum blade tip height of 185m. MWP have been requested to provide a study on the viability of delivering components for this class of turbine to the proposed development.

WTG blade and Tower Section deliveries are the most onerous factor for component deliveries in terms of swept paths and cleared area requirements. A blade delivery vehicle incorporating a blade length of 80m and a tower delivery vehicle with a 45.5m long and 4.6m Ø tower section have been considered as the design vehicles to assess the proposed component delivery route for Ballinla Wind Farm.

The components for each WTG are expected to be delivered in approximately 10 No. deliveries (approximately 70 No. deliveries in total). Due to their abnormal size, the blades, nacelle, drive train and cylindrical steel tower sections will be delivered at night to avoid disruption to daytime traffic. The components are expected to be delivered by sea to a port and transported to site along the national, regional and local road network. The oversize and overweight components will require pilot vehicles and Garda escort from port to site.

### 2.2 Proposed Delivery Route

All WTG components for the Proposed Development will arrive at one of Irelands deepwater ports, such as Bellview in Co. Waterford. From here, the components will travel via the national road and motorway network to Junction 5 (Kilbeggan/Tullamore) on the M6. Components will travel south on the N52 towards Tullamore. Due to vertical and horizontal alignment constraints the WTG blades and tower sections will take different routes from the N52/L2025 roundabout near Tullamore to Ballinagar village. A description of the section, both proposed routes, is provided below, and an overview of the proposed section is shown in

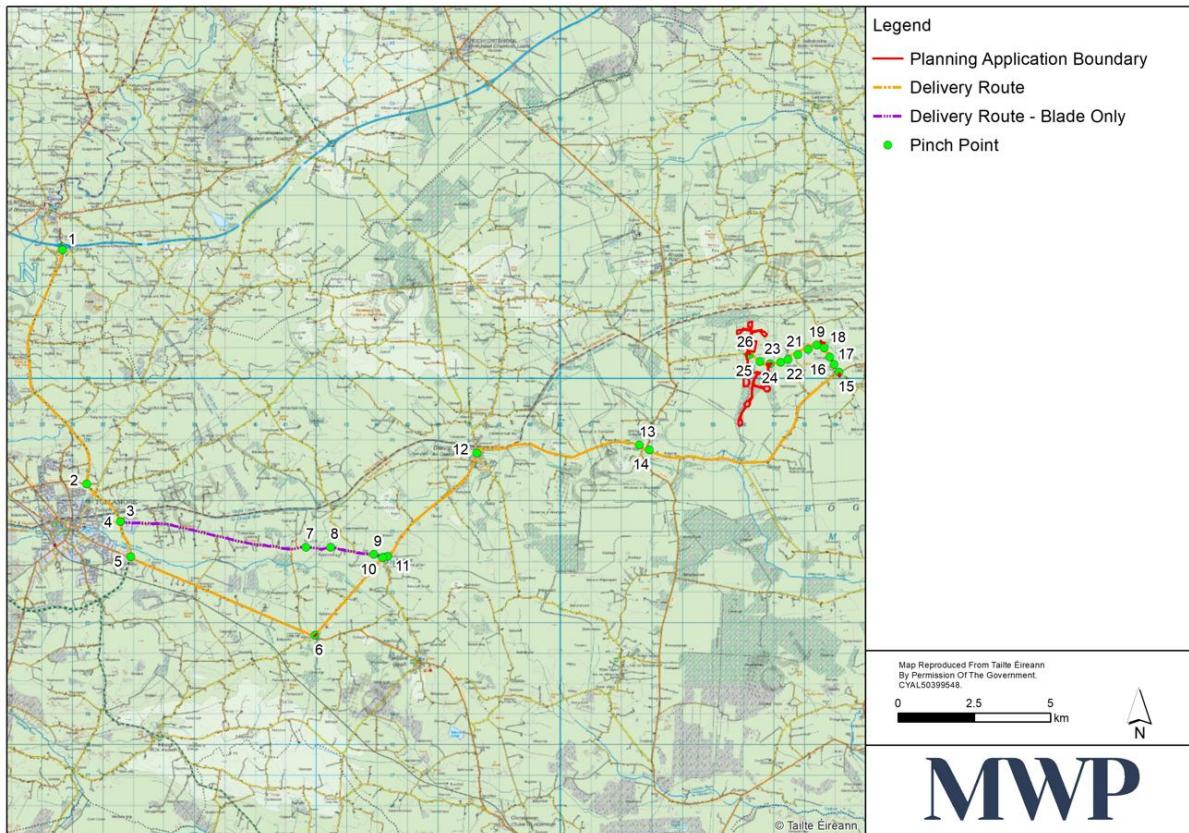
#### Turbine Blades

- Exit M6 at Junction 5
- M6/N52 roundabout, exit traveling south
- N52/R443 roundabout, exit travelling southeast on N52
- N52/L2025 roundabout, exit travelling east on L2025
- Continue east along L2025 through Cappincur, Clonmore and Toberleheen
- L2025/R402 junction at Ballinagar, exit travelling northeast on R402
- Continue northeast along R402 through Knockballyboy and Derrygowley
- R402 junction at Daingean, continue east on R402
- Continue east along R402 through Ballyhugh/Springfield, Killeenmore and Bogtown

- Three-point turning manoeuvre to be completed at the R402/L5006 junction at Ballyfore. Exit travelling north on local road
- Three-point turning manoeuvre to be completed at the L5006/L5010 junction. Exit to the west on L5010 towards Leitrim townland
- Site entrances located approximately 2km and 2.7km along the L5010 to the south and north shoulders of the road respectively

#### Turbine Tower Sections

- Exit M6 at Junction 5
- M6/N52 roundabout, exit traveling south
- N52/R443 roundabout, exit travelling southeast on N52
- N52/L2025 roundabout, exit travelling south on N52
- N52/R420 roundabout, exit travelling southeast on R420
- Continue southeast along R420 through Meelaghans
- R420/R402 junction at Ballina, exit travelling northeast on R420
- Continue northeast along R402 through Ballymooney
- L2025/R402 junction at Ballinagar, exit travelling northeast on R402
- Continue northeast along R402 through Knockballyboy and Derrygowley
- R402 junction at Daingean, continue east on R402
- Continue east along R402 through Ballyhugh/Springfield, Killeenmore and Bogtown
- Three-point turning manoeuvre to be completed at the R402/L5006 junction at Ballyfore. Exit travelling north on local road
- Three-point turning manoeuvre to be completed at the L5006/L5010 junction. Exit to the west on L5010 towards Leitrim townland
- Site entrances located approximately 2km and 2.7km along the L5010 to the south and north shoulders of the road respectively.



**Figure 2-1: Proposed Turbine Delivery Route**

## 2.3 Swept Path Analysis

A vehicle swept path analysis (SPA) of an 80m blade on a vehicle with an overall length of 93m (truck and blade) was completed using Autodesk® Vehicle Tracking software.

Analysing aerial photography, topographical survey, GIS and information from site visits for the proposed route highlighted pinch points that required a vehicle tracking model.

The Autodesk model was developed for the 80m blade with a 11.7m overhang on a Scania R500 truck and bogie trailer (dolly blade clamp), see **Figure 2-2**, in assessing the route from M6 Junction 5 (Kilbeggan/Tullamore) to the site entrances. An additional Autodesk model was developed for a tower section, see **Figure 2-3** to assess the delivery route. In both cases, the type of trailer modelled are available from heavy haulage / turbine transport companies.

The Autodesk model was developed for a 80m blade with a 11.7m overhang on a Scania R500 truck and bogie trailer (dolly blade clamp), see **Figure 2-2**, in assessing the route from M6 Junction 5 (Kilbeggan/Tullamore) to the site entrances. An additional Autodesk model was developed for a tower section, see **Figure 2-3** in assessing the route from M6 Junction 5 (Tullamore) to the site entrance in Ballina. In both cases the type of trailer used for the model is common for transporting turbine blades and tower sections and are available from heavy haulage / turbine transport companies.

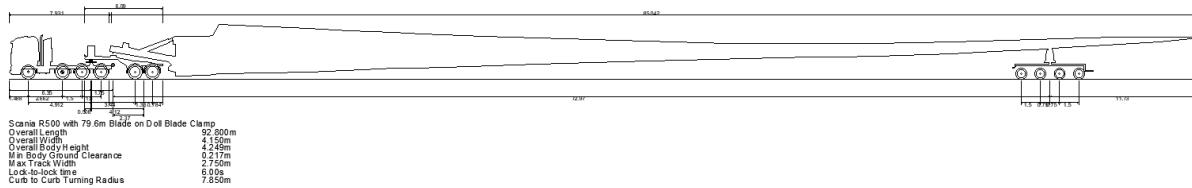


Figure 2-2: Blade configuration details used for Autodesk Vehicle Tracking

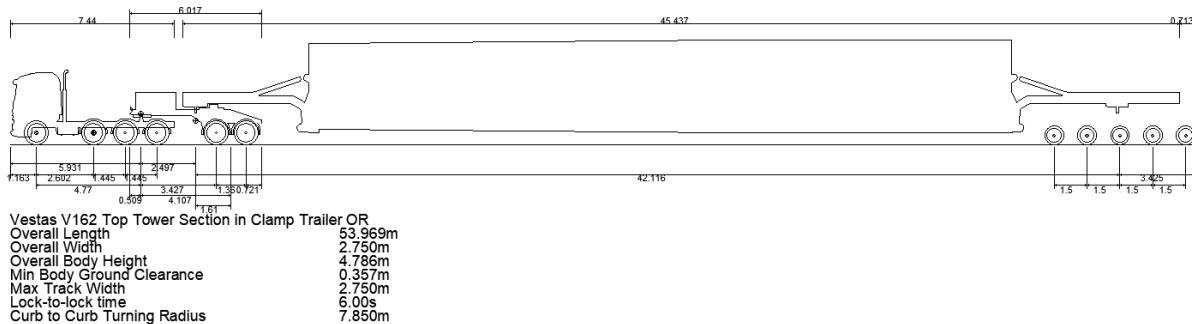


Figure 2-3: Tower configuration details used for Autodesk Vehicle Tracking

An automatic steering principle within the software was used where possible but otherwise a manual override system is used with a conservative maximum steering angle of 30° to help alter the path of the bogie past constraints at pinch points.

The Swept Path Analysis output is illustrated in the drawings included in **Appendix 1**. This shows the extents of the wheel swept path, vehicle body swept path and blade swept path as the delivery truck manoeuvres around each pinch point. This information highlights areas that require widening or clearance along the route. See **Table 3-1** for an overview of works required to public roads along the turbine delivery route. The images within the table are extracts from the Autodesk model, the coloured lines represent different elements of the delivery vehicle.

- **Cyan** – Vehicle outline
- **Red** – Wheelbase footprint (truck & trailer)
- **Green** – Load footprint (tower/blade)

## 2.4 Delivery Route Enabling Works

The pinch points assessed as part of the Turbine Delivery Route Assessment for the proposed Ballinla Wind Farm are presented in **Table 3-1** below. The enabling works required at each pinch point are also summarised in the following table.

**Table 3-1: Overview of Works Required along Turbine Delivery Rout**

Ref #	Location Drawing Number	Swept Path Drawing Number	Description of Location	Description of Enabling Works	Street view photo of site location
1	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-0001	M6 Junction 5 Kilbeggan/Tullamore southern roundabout	<ul style="list-style-type: none"> <li>• Traffic signs to be removed from the roundabout</li> <li>• Section of the roundabout requires strengthening and surfacing for blade and oversized component deliveries (surfacing currently in place for another Wind Farm)</li> </ul>	
2	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-0002	Ardan Road Roundabout N52 and R443 roundabout located north of Tullamore Town	<ul style="list-style-type: none"> <li>• Section of the roundabout requires widening and surfacing (surfacing currently in place for another Wind Farm)</li> </ul>	

Ref #	Location Drawing Number	Swept Path Drawing Number	Description of Location	Description of Enabling Works	Street view photo of site location
3	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-0003	Cappancur Roundabout (Blade Only)  N52 and L2025 roundabout located east of Tullamore Town east along the L2025	<ul style="list-style-type: none"> <li>• Traffic signs to be removed</li> <li>• Blade oversails of barriers</li> <li>• Blade comes in close proximity to a lamp post at the roundabout</li> <li>• Section of the roundabout requires widening and surfacing</li> </ul>	
4	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-0004	Cappancur Roundabout  For Tower Sections & Oversized Components Only  N52 and L2025 roundabout located east of Tullamore Town south along the N52	<ul style="list-style-type: none"> <li>• Traffic/road signs to be removed</li> </ul>	
5	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-0005	Cloncollog Roundabout  For Tower Sections & Oversized Components Only  N52 and R420 roundabout located southeast of Tullamore Town east along the R420	<ul style="list-style-type: none"> <li>• Tower sections oversail roundabout.</li> <li>• Road signs may need to be removed (already socketed for other Wind Farm Deliveries)</li> </ul>	

Ref #	Location Drawing Number	Swept Path Drawing Number	Description of Location	Description of Enabling Works	Street view photo of site location
6	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-1100	For Tower Sections & Oversized Components Only  R402 and R402 junction located in Ballina north along the R402	<ul style="list-style-type: none"> <li>• Traffic signage to be removed</li> <li>• Traffic bollards to be removed</li> <li>• Fencing to be removed</li> <li>• Overrun area already surfaced for other Wind Farm deliveries</li> </ul>	
7	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-0007	East of Tullamore on L2025 between Clonmore and Toberleheen	<ul style="list-style-type: none"> <li>• Trees and hedgerows to be trimmed</li> <li>• Telegraph stay wire to be relocated</li> <li>• Blade oversails hedgeline on southern side of the road.</li> </ul>	
8	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-0008	East of Tullamore on L2025 within Toberleheen		

Ref #	Location Drawing Number	Swept Path Drawing Number	Description of Location	Description of Enabling Works	Street view photo of site location
9	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-0009	East of Toberleheen on L2025 approaching Ballinagar village	<ul style="list-style-type: none"> <li>• Trees to be trimmed</li> <li>• Traffic signs to be removed</li> <li>• Blade vehicle to overrun onto footpath (wedges or similar required to transition to footpath)</li> </ul>	
10	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-0010	Centre of Ballinagar Village along L2005 and the junction with R402	<ul style="list-style-type: none"> <li>• Traffic/road signs to be removed</li> <li>• Bollards to be removed</li> <li>• Lamp post to be relocated</li> <li>• Electricity pole to be relocated</li> <li>• Electricity pole stay wire to be removed</li> <li>• Fence to be removed</li> <li>• Section of roads widening and surfacing is required</li> </ul>	 

Ref #	Location Drawing Number	Swept Path Drawing Number	Description of Location	Description of Enabling Works	Street view photo of site location
11	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-0011	Exiting Ballinagar village northeast along R402 towards Daingean	<ul style="list-style-type: none"> <li>• Electricity pole to be relocated</li> <li>• Electricity pole stay wire to be relocated</li> <li>• Road signs to be removed</li> <li>• Trees to be trimmed</li> </ul>	
12	23882-MWP-HR-00-DR-C-1100	23882-MWP-HR-00-DR-C-0012	Centre of Daingean Village heading east along R402 towards Ballyhugh/Springfield	<ul style="list-style-type: none"> <li>• Lamp posts to be relocated</li> <li>• Electricity pole to be relocated</li> <li>• Road signs to be removed</li> <li>• Blade vehicle to overrun onto footpath and concrete traffic island (wedges or similar required to transition to footpath)</li> </ul>	

Ref #	Location Drawing Number	Swept Path Drawing Number	Description of Location	Description of Enabling Works	Street view photo of site location
13	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0013	Mount Lucas West Western side of the R402 and R400 junction at Ballyhugh/Springfield	<ul style="list-style-type: none"> <li>• Street furniture on traffic splitter to be removed</li> </ul>	
14	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0014	Mount Lucas East Eastern side of the R402 and R400 junction at Ballyhugh / Springfield	<ul style="list-style-type: none"> <li>• Street furniture on traffic splitter island to be removed</li> </ul>	

Ref #	Location Drawing Number	Swept Path Drawing Number	Description of Location	Description of Enabling Works	Street view photo of site location
15	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0015	Ballyfore  R402 / L5006 junction located in Ballyfore. 3-point turn required to turn components north along the L5006	<ul style="list-style-type: none"> <li>• Temporary turning head to be constructed in field to the south of the junction</li> <li>• Trees require trimming and removal</li> <li>• Hedgerows to be removed</li> <li>• Road signs to be removed</li> <li>• Lamp posts to be removed</li> <li>• Bollard to be removed</li> <li>• ESB Pole to be relocated</li> <li>• ESB Minipillar to be moved</li> <li>• EIR Minipillar to be moved</li> </ul>	 
16	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0016	Last row of houses in Ballyfore north along local road	<ul style="list-style-type: none"> <li>• Trees and vegetation to be pruned.</li> <li>• Speed Limit sign to be socketed and removed for relocated.</li> </ul>	

Ref #	Location Drawing Number	Swept Path Drawing Number	Description of Location	Description of Enabling Works	Street view photo of site location
17	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0017	Existing Ballyfore north along local road towards Ballinla	<ul style="list-style-type: none"> <li>• Trees and vegetation require trimming</li> </ul>	
18	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0018	Existing Ballyfore and entering Ballinla, before Ballinla local road junction	<ul style="list-style-type: none"> <li>• Trees and vegetation to be trimmed back</li> <li>• Pole to be relocated</li> </ul>	
19	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0019	Entering Ballinla west along local road L5010 towards Lumville	<ul style="list-style-type: none"> <li>• Turning head to be constructed in adjacent field to the east to allow deliveries to make 90° turn</li> <li>• Gate and gate post to be removed in same 3<sup>rd</sup> party lands</li> <li>• Vegetated traffic island to be strengthened and surfaced</li> </ul>	

Ref #	Location Drawing Number	Swept Path Drawing Number	Description of Location	Description of Enabling Works	Street view photo of site location
				<ul style="list-style-type: none"> <li>• Hedgerow and trees to be pruned</li> <li>• Pole to be relocated</li> </ul>	
20	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-1101	Entering Lumville west along local road L5010 towards Leitrim	<ul style="list-style-type: none"> <li>• Tree and vegetation to be trimmed</li> </ul>	
21	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0021	Centre of Lumville west along local road L5010 before local junction	<ul style="list-style-type: none"> <li>• Tree and vegetation to be trimmed</li> <li>• Sections of the road verge to be widened and surfaced</li> </ul>	
22	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0022	Centre of Lumville west along local road after local junction	<ul style="list-style-type: none"> <li>• Trees and vegetation to be trimmed</li> <li>• Potential for blade to oversail gate and gate posts.</li> <li>• Pole to be relocated</li> </ul>	

Ref #	Location Drawing Number	Swept Path Drawing Number	Description of Location	Description of Enabling Works	Street view photo of site location
				<ul style="list-style-type: none"> <li>Sections of the road requires widening and surfacing</li> </ul>	
23	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-1101	Exiting Lumville west along local road L5010 towards Leitrim	<ul style="list-style-type: none"> <li>Trees and hedges require trimming</li> <li>Sections of the road verge requires widening and surfacing</li> </ul>	
24	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0024	Entering Leitrim west along local road L5010, site entrance to the south	<ul style="list-style-type: none"> <li>Trees and Vegetation to be trimmed</li> <li>Pole to be relocated</li> <li>Section of the road requires widening and surfacing</li> </ul>	
25	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0025	Centre Leitrim northwest along local road L5010 towards site entrance	<ul style="list-style-type: none"> <li>Trees and Vegetation to be trimmed</li> <li>4 No. poles to be removed</li> <li>Sections of the road requires widening and surfacing</li> <li>Diversion/piping of existing roadside drainage required at widened areas.</li> </ul>	

Ref #	Location Drawing Number	Swept Path Drawing Number	Description of Location	Description of Enabling Works	Street view photo of site location
26	23882-MWP-HR-00-DR-C-1101	23882-MWP-HR-00-DR-C-0026	Centre Leitrim northwest along local road L5010, site entrance to the north	<ul style="list-style-type: none"> <li>• Trees and vegetation to be pruned</li> <li>• Low parapet wall to be removed</li> <li>• Hedgerow to be removed</li> <li>• Pole to be removed</li> </ul>	

### **3. Recommendations and Conclusions**

The swept path analysis of the proposed WTG component delivery route has identified areas where component overrun requires works to be completed prior to deliveries occurring. These works have been detailed in the drawings appended to this report.

Prior to commencement of any works and delivery of turbine components to site, a permit for moving abnormal loads to the wind farm site will be sought from An Garda Síochána and the local councils along the selected haulage route. A detailed transportation plan with a breakdown of the timing of deliveries will be established at construction stage.

## **Appendix 1**

### **Turbine Delivery Route Drawings**



DO NOT SCALE FROM THIS DRAWING.  
USE FIGURED DIMENSIONS IN ALL CASES.  
VERIFY DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO  
THE DESIGNERS IMMEDIATELY.  
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE DESIGNERS  
SPECIFICATION.  
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- ALL LEVELS ARE IN METRES RELATED TO ORDNANCE DATUM MALIN HEAD OSGM15.
- ALL CO-ORDINATES ARE TO IRISH TRANSVERSE MERCATOR (ITM) AND IN METERS.
- ANY DISCREPANCIES BETWEEN THESE DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- DRAWINGS ARE NOT TO BE SCALED.
- ALL DIMENSIONS ARE IN METRES, UNLESS NOTED OTHERWISE.

WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND

REFERENCE DRAWINGS:		
DRAWING NO.	DRAWING TITLE	

PD	2001/25	ISSUED FOR PLANNING	OR	BS
PD	2001/26	ISSUED FOR INFORMATION	OR	BS
PD	2803/24	ISSUED FOR INFORMATION	OR	BS
PD	12/02/24	ISSUED FOR INFORMATION	OR	BS

REV DATE DESCRIPTION BY APP

PROJECT:

BALLINLA WIND FARM

TITLE: HAUL ROUTE WIDENING WORKS -  
MASTER SHEET FROM M6-N52  
JUNCTION TO MOUNT LUCAS

CLIENT:

BALLINLA WIND FARM LIMITED

**MWP**

ENGINEERING AND ENVIRONMENTAL CONSULTANTS

CORK | TRALEE | LONDON | LIMERICK

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PROJECT NUMBER:	DATE:	SCALE @ A:
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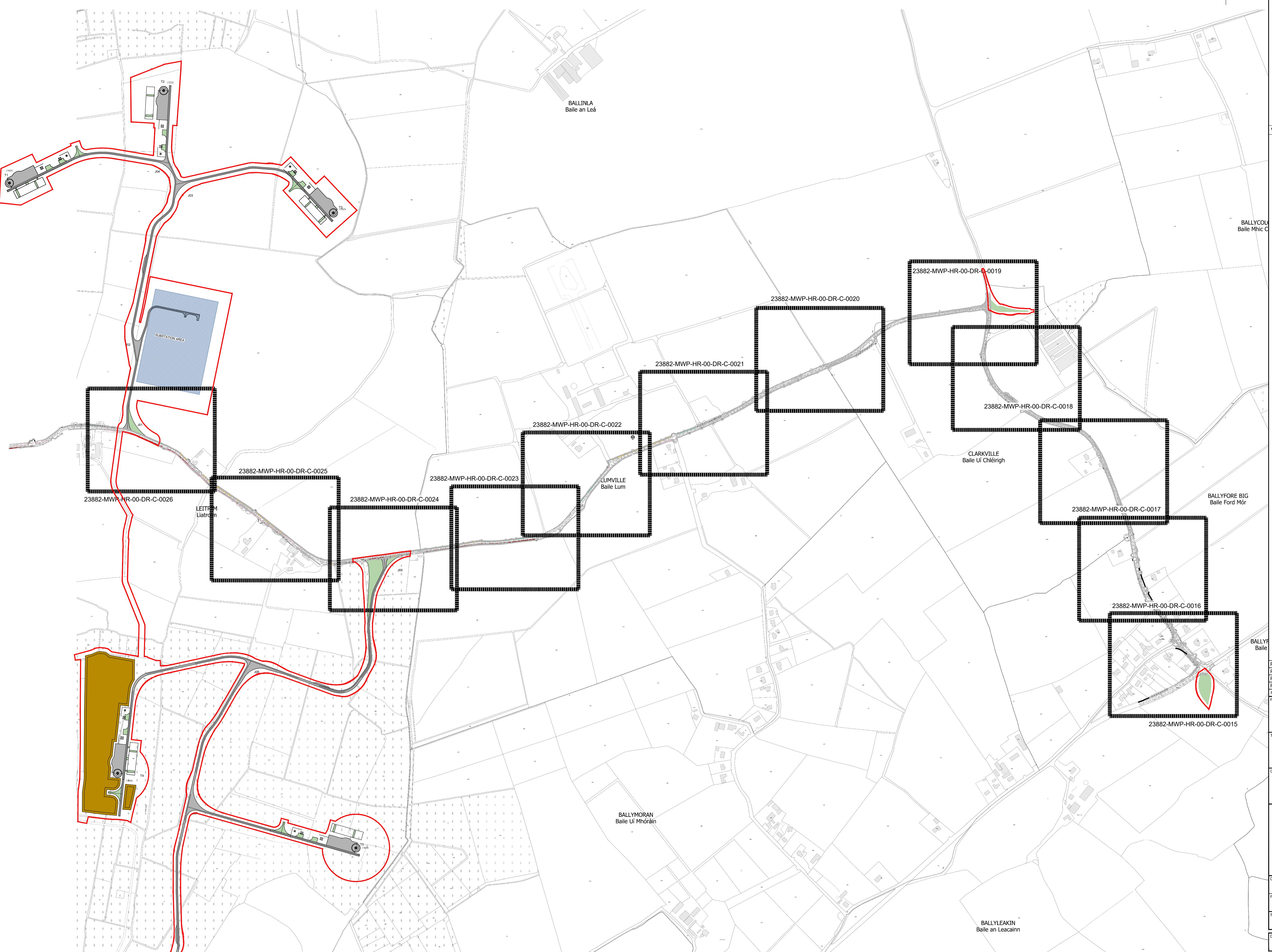
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  3. ALL CO-ORDINATES ARE TO IRISH NATION GRID (ING) AND IN METRES.
  4. ANY DISCREPANCIES BETWEEN THESE DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
  5. DRAWINGS ARE NOT TO BE SCALED.
  6. THE SWEEP PATH ANALYSIS REPRESENTS THE MINIMUM FOOTPRINT REQUIREMENTS FOR THE SPECIFIC VEHICLE SHOWN AND THERE IS NO SAFETY FACTOR OR MARGIN INCLUDED.

WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND

	PLANNING BOUNDARY
	CONSTRUCTION WORKS AREA / TEMPORARY ACCESS TRACK
	MATERIAL DEPOSITION AREA
	SUBSTATION AREA



P04	20/01/25	ISSUED FOR PLANNING	O.R. P.C.
P03	23/12/24	ISSUED FOR INFORMATION	O.R. P.C.
P02	18/11/24	ISSUED FOR INFORMATION	O.R. P.C.
P01	18/01/24	ISSUED FOR INFORMATION	O.R. P.C.
REV	DATE	DESCRIPTION	BY APP

PROJECT:

BALLINLA WIND FARM

TITLE:  
HAUL ROUTE WIDENING WORKS  
MASTER SHEET

CLIENT:  
BALLINLA WIND FARM LIMITED

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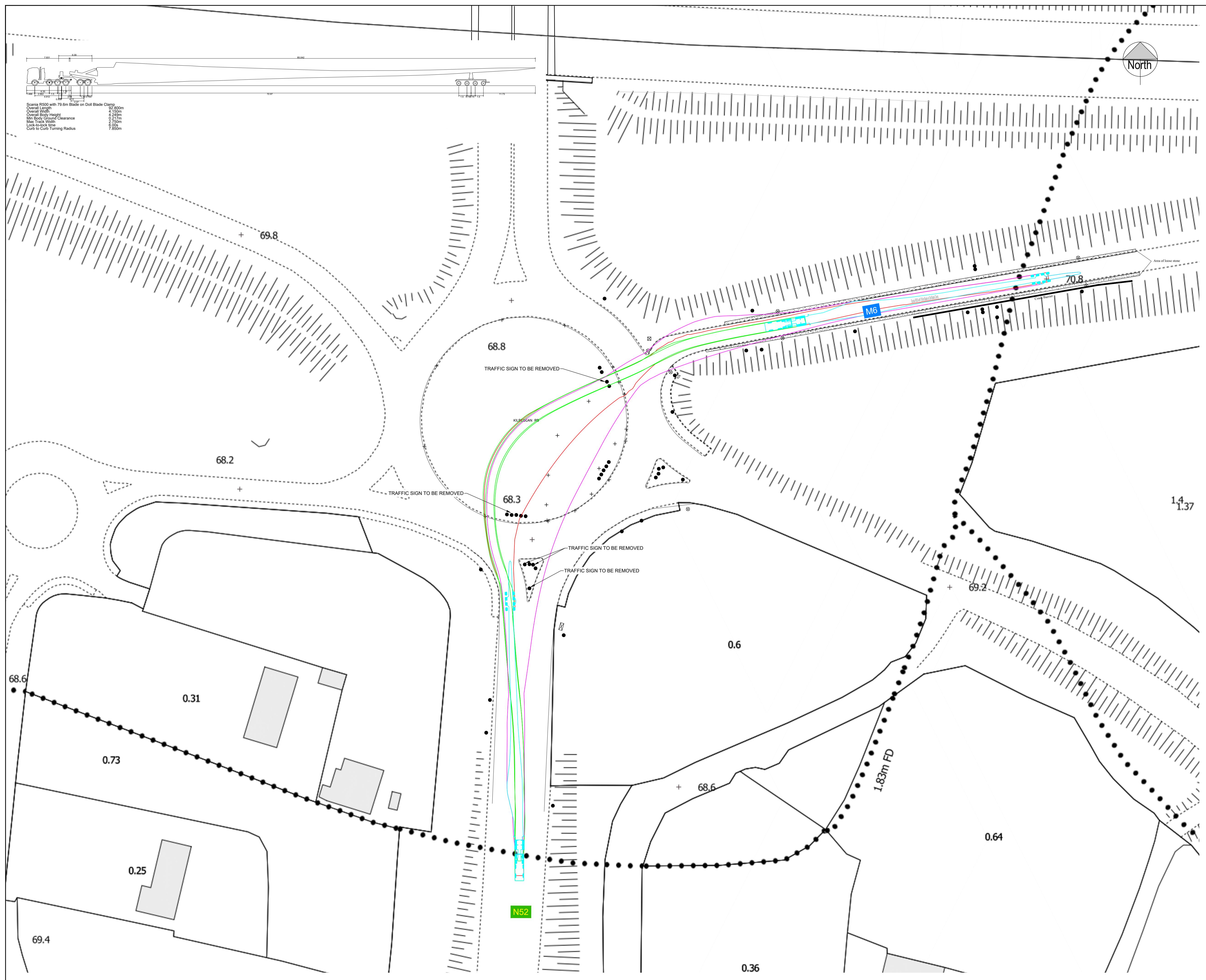
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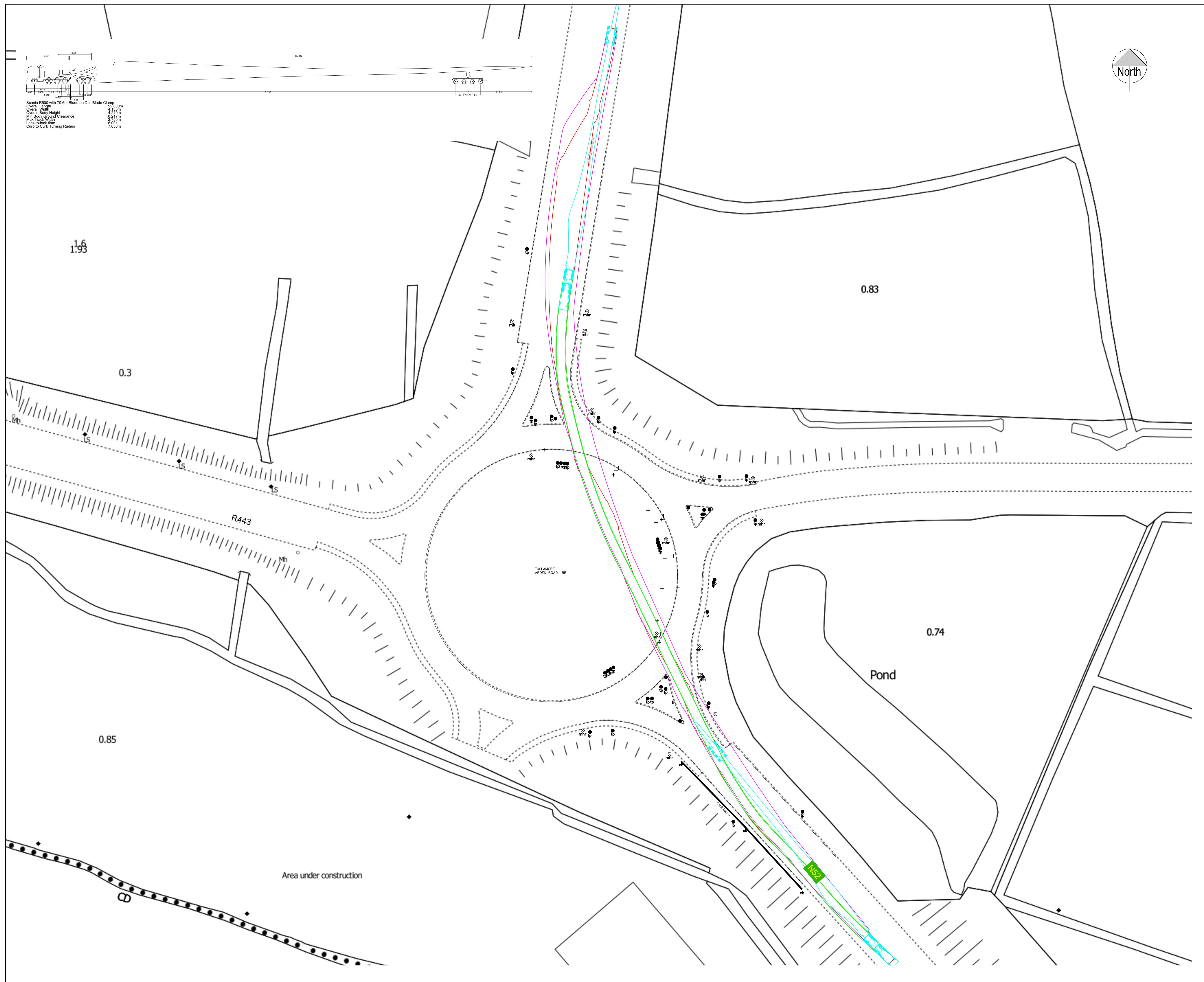
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## ND FARM SWEEP PATH ANALYSIS (SPA) LEGEND

- The diagram consists of three horizontal lines of different colors: a green line at the top, a red line in the middle, and a magenta line at the bottom. Each line is accompanied by a label to its right: 'EXTENT OF BODY OUTLINE' for the green line, 'EXTENT OF WHEELBASE FOOTPRINT' for the red line, and 'EXTENT OF LOAD OUTLINE' for the magenta line.

REFERENCE DRAWINGS:	
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29.04.25	ISSUED FOR PLANNING	O.R.	B.S.
DATE	DESCRIPTION	BY	APP
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BALLINLA WIND FARM

**HAUL ROUTE WIDENING WORKS -  
N52/R443 ROUNDABOUT**

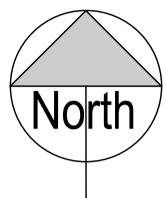
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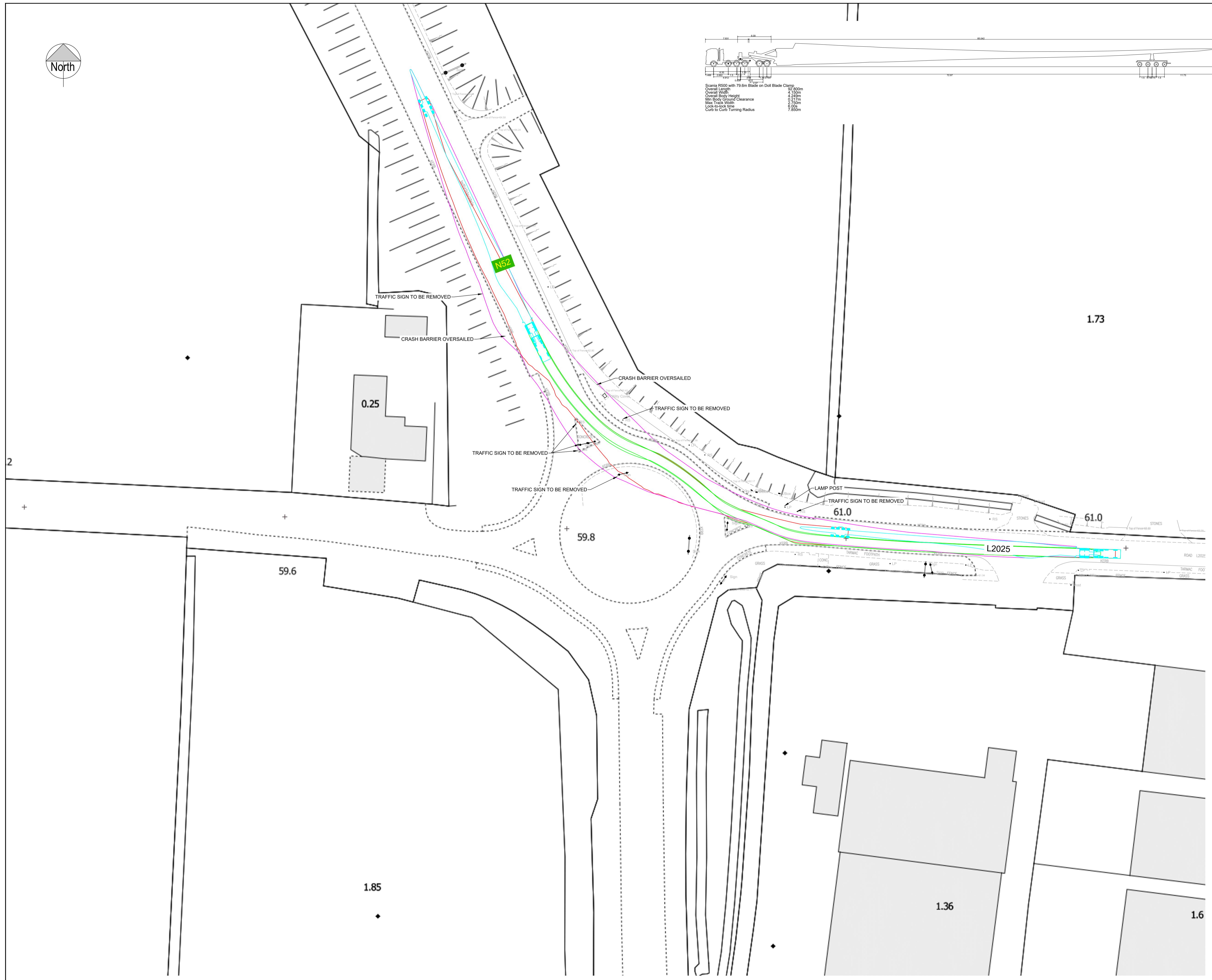
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## ND FARM SWEEP PATH ANALYSIS (SPA) LEGEND

- EXTENT OF BODY OUTLINE
  - EXTENT OF WHEELBASE FOOTPRINT
  - EXTENT OF LOAD OUTLINE

**REFERENCE DRAWINGS:**

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BALLINLA WIND FARM

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HAUL ROUTE WIDENING WORKS -  
N52/I 2025 ROUNDABOUT

BALTIMORE WIND FARM OWNER

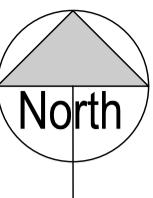
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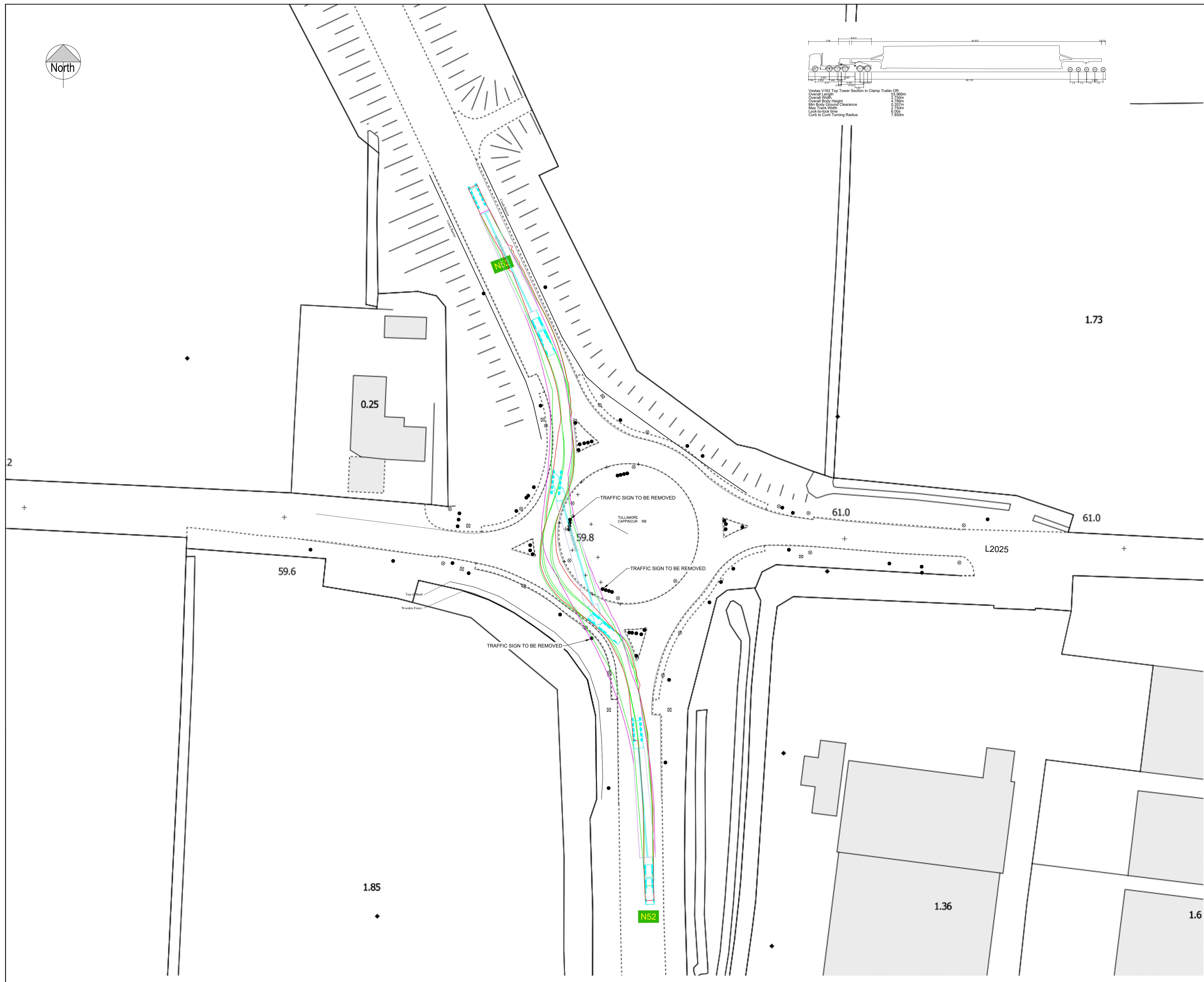
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North



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## ND FARM SWEPT PATH ANALYSIS (SPA) LEGEND

- EXTENT OF BODY OUTLINE
  - EXTENT OF WHEELBASE FOOTPRINT
  - EXTENT OF LOAD OUTLINE

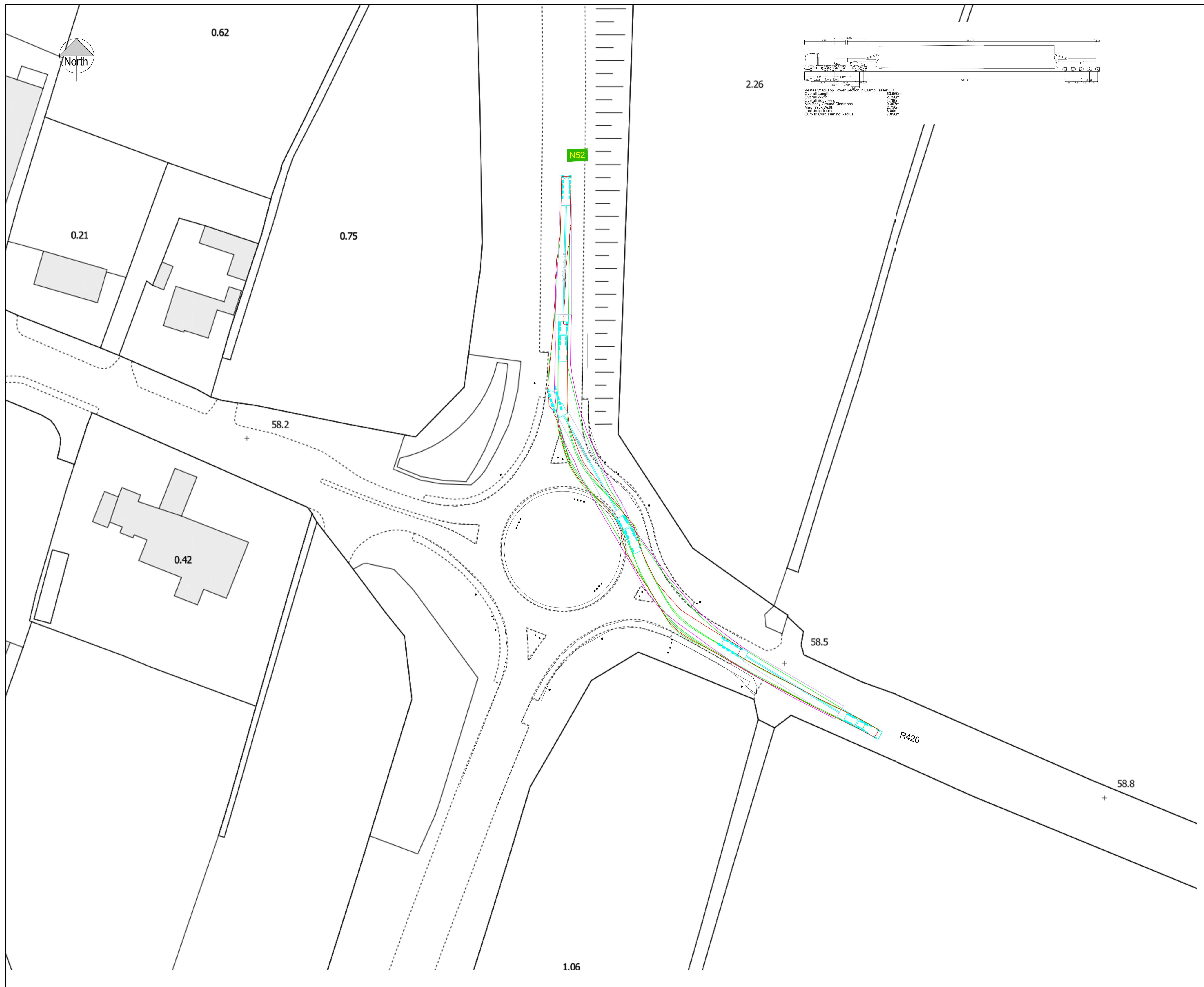
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## **HAUL ROUTE WIDENING WORKS - N52/L2025 ROUNABOUT - TOWER**

DALMIA CEMENT FARM LIMITED

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WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND		
EXTENT OF BODY OUTLINE		
EXTENT OF WHEELBASE FOOTPRINT		
EXTENT OF LOAD OUTLINE		

REFERENCE DRAWINGS:	
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PROJECT:  
BALLINLA WIND FARM

TITLE:  
HAUL ROUTE WIDENING WORKS -  
N52/R420 ROUNDABOUT - TOWER  
SECTIONS

CLIENT:  
BALLINLA WIND FARM LIMITED

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WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND		
	EXTENT OF BODY OUTLINE	
	EXTENT OF WHEELBASE FOOTPRINT	
	EXTENT OF LOAD OUTLINE	

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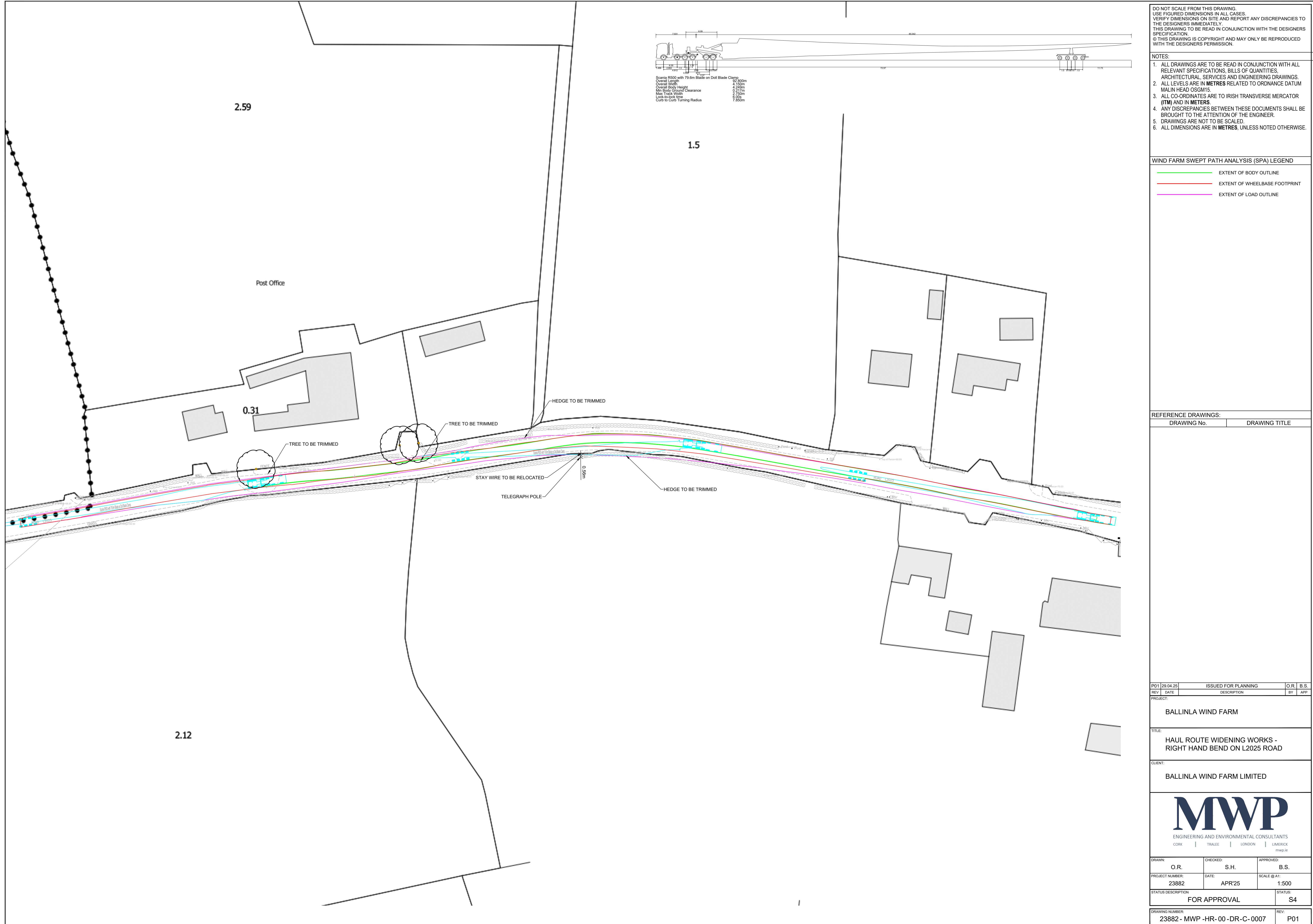
BALLINLA WIND FARM

TITLE:  
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R420/R402 JUNCTION - TOWER SECTIONS

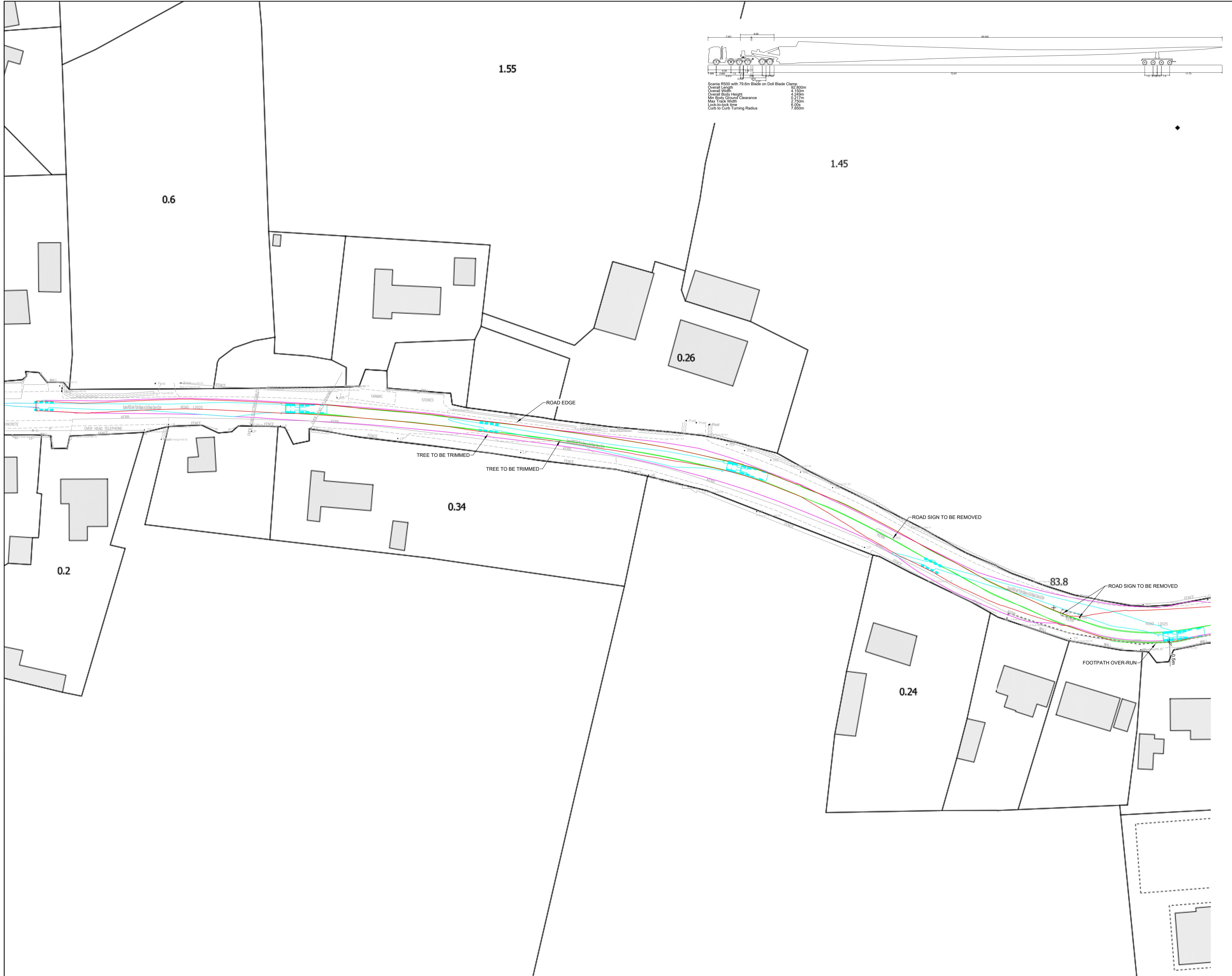
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BALLINLA WIND FARM LIMITED

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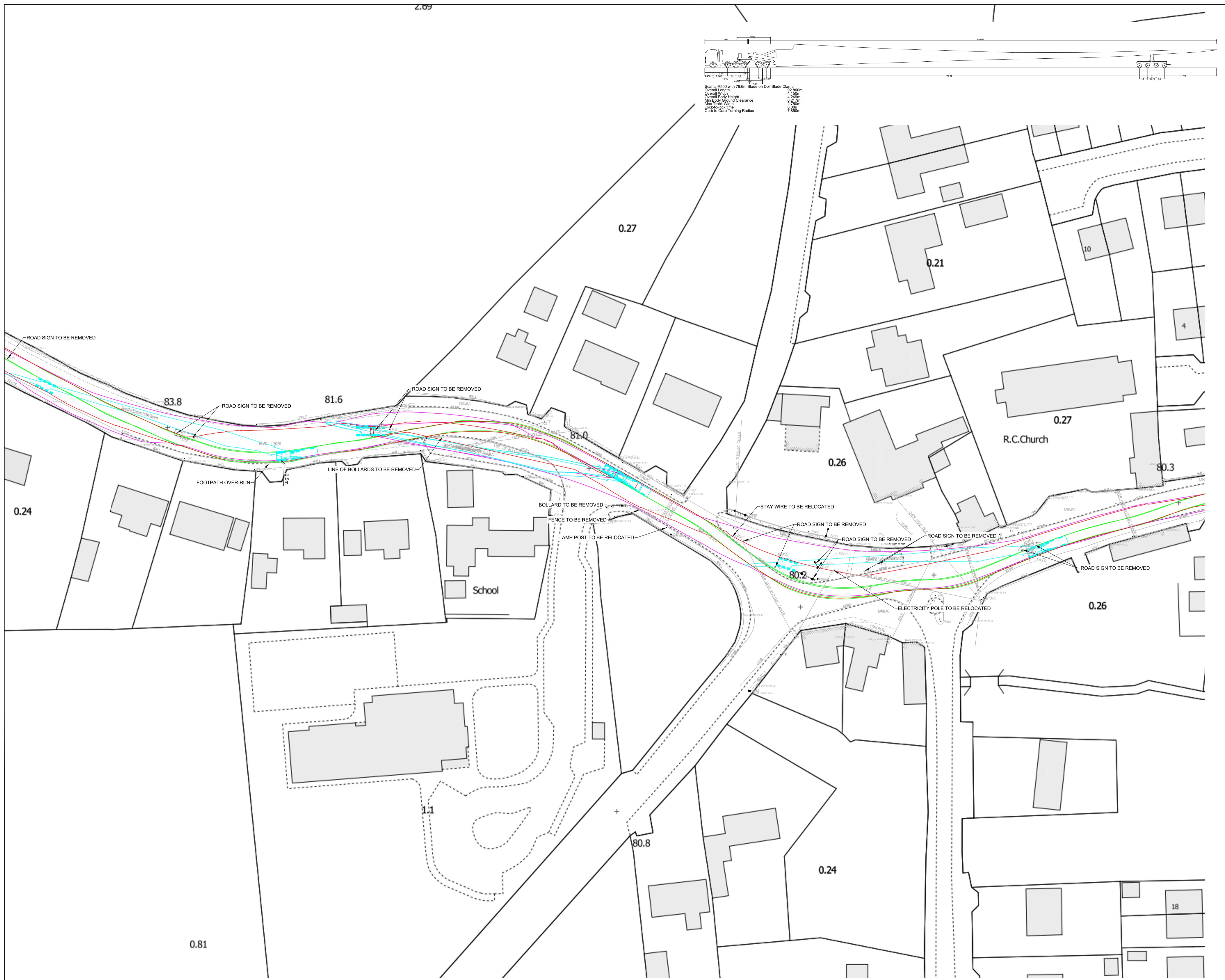
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<b>WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND</b>		
<b>REFERENCE DRAWINGS:</b>		
DRAWING NO.	DRAWING TITLE	
P01   29.04.25   ISSUED FOR PLANNING   O.R.   B.S. REV   DATE   DESCRIPTION   BY   APP	PROJECT:  BALLINLA WIND FARM	
TITLE: HAUL ROUTE WIDENING WORKS S-BEND ON L2025 ROAD - SHEET 1		
CLIENT: BALLINLA WIND FARM LIMITED		
<b>MWP</b> ENGINEERING AND ENVIRONMENTAL CONSULTANTS CORK   TRALEE   LONDON   LIMERICK mwp.ie		
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**WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND**

- EXTENT OF BODY OUTLINE
- EXTENT OF WHEELBASE FOOTPRINT
- EXTENT OF LOAD OUTLINE

**REFERENCE DRAWINGS:**  
DRAWING NO. DRAWING TITLE

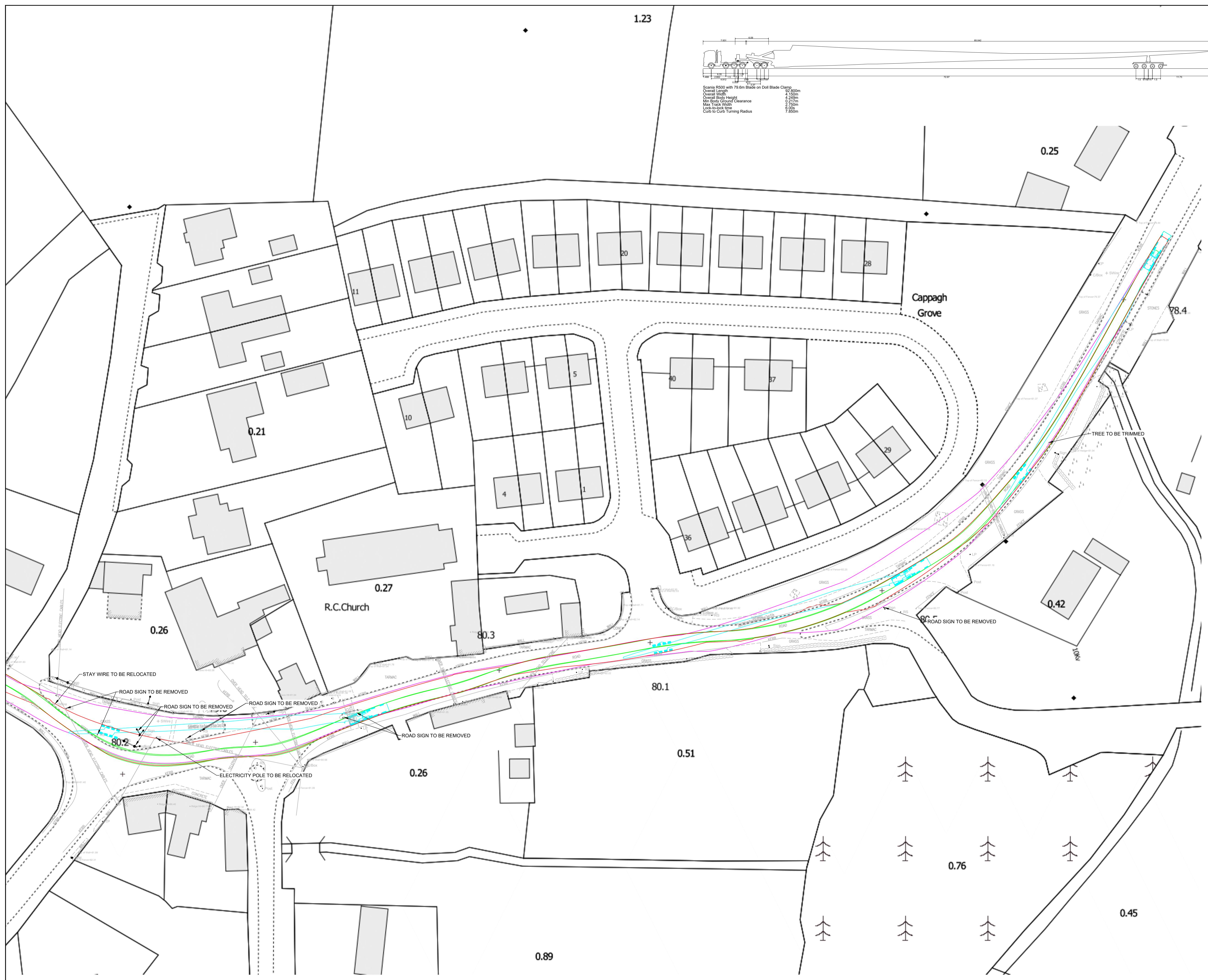
**PO1 29.04.25 ISSUED FOR PLANNING O.R. B.S.**  
REV DATE DESCRIPTION BY APP  
PROJECT: BALLINLA WIND FARM

**TITLE: HAUL ROUTE WIDENING WORKS - S-BEND ON L2025 ROAD - SHEET 2**

**CLIENT: BALLINLA WIND FARM LIMITED**

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WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND

- EXTENT OF BODY OUTLINE
- EXTENT OF WHEELBASE FOOTPRINT
- EXTENT OF LOAD OUTLINE

REFERENCE DRAWINGS:  
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P01	29.04.25	ISSUED FOR PLANNING	O.R. B.S.
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BALLINLA WIND FARM

TITLE:  
HAUL ROUTE WIDENING WORKS -  
L2025/R402 JUNCTION - BALLINAGAR

CLIENT:  
BALLINLA WIND FARM LIMITED

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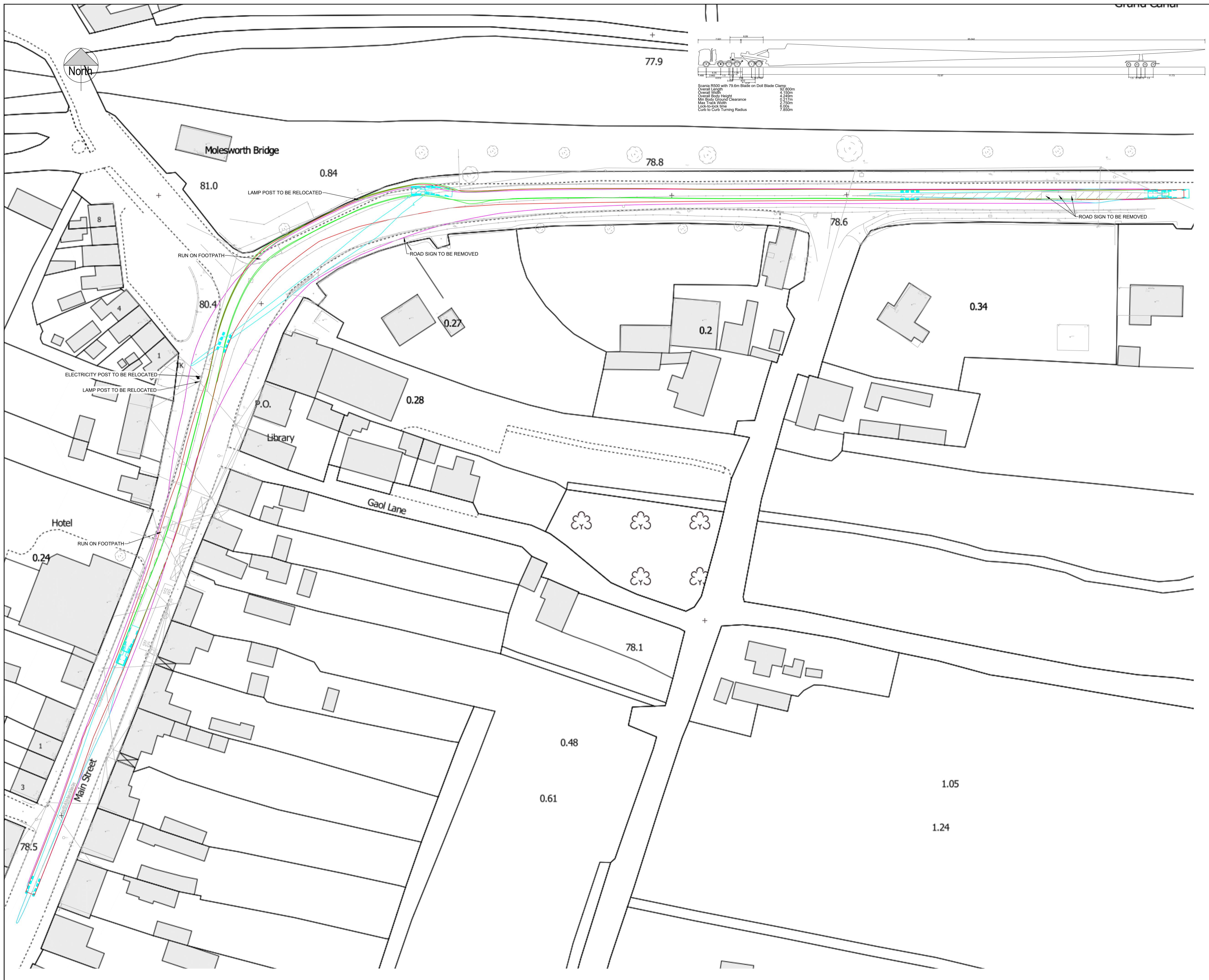
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**WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND**

- EXTENT OF BODY OUTLINE
- EXTENT OF WHEELBASE FOOTPRINT
- EXTENT OF LOAD OUTLINE

**REFERENCE DRAWINGS:**  
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P01 29.04.25 ISSUED FOR PLANNING O.R. B.S.  
REV DATE DESCRIPTION BY APP

**BALLINLA WIND FARM**

**TITLE:**  
HAUL ROUTE WIDENING WORKS -  
RIGHT HAND BEND IN DAINGEAN

**CLIENT:**

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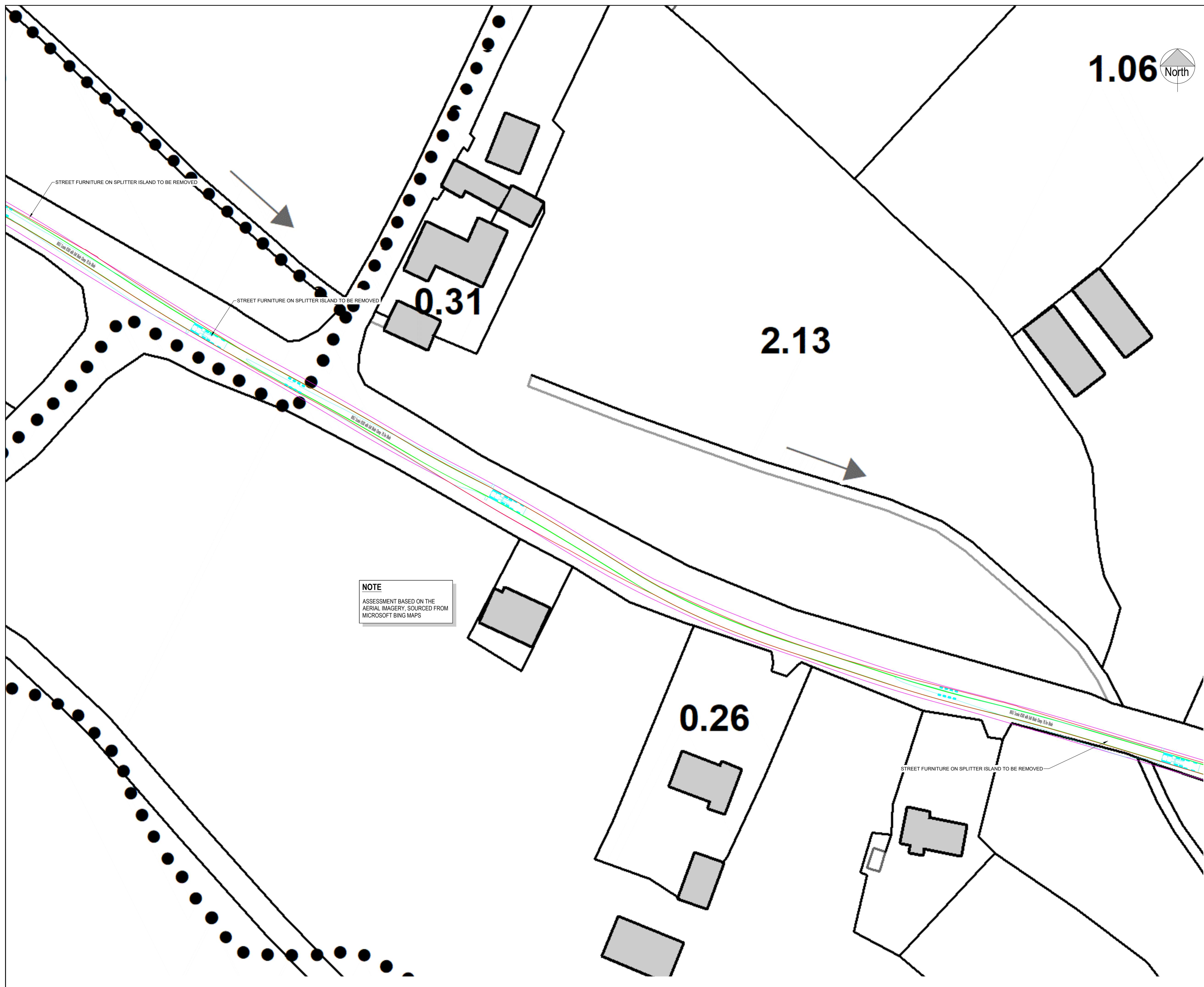
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**NOTE**  
ASSESSMENT BASED ON THE  
AERIAL IMAGERY, SOURCED FROM  
MICROSOFT BING MAPS

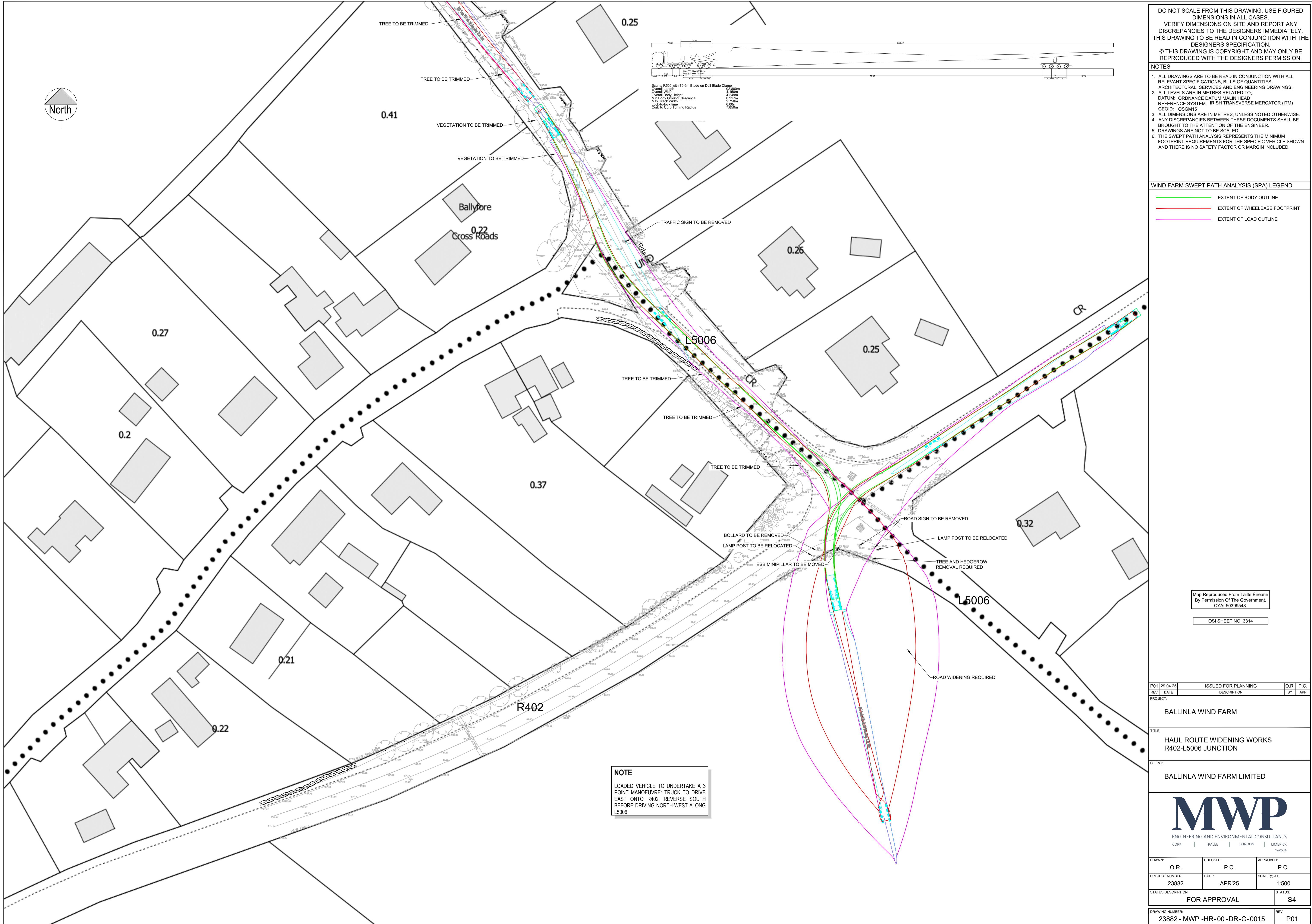
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STREET FURNITURE ON SPLITTER ISLAND TO BE REMOVED

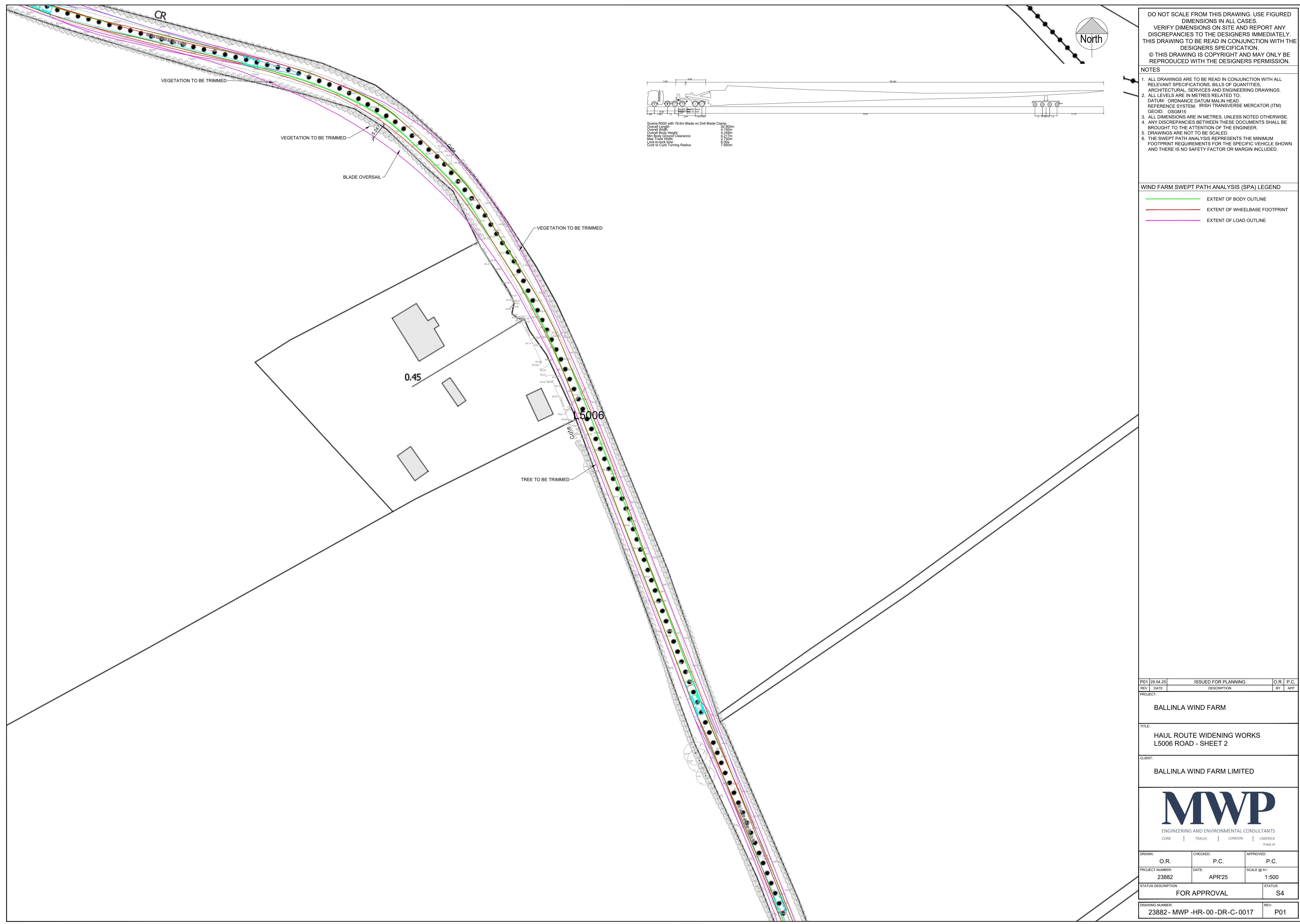
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<b>WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND</b> <ul style="list-style-type: none"> <li>EXTENT OF BODY OUTLINE</li> <li>EXTENT OF WHEELBASE FOOTPRINT</li> <li>EXTENT OF LOAD OUTLINE</li> </ul>																																																																															
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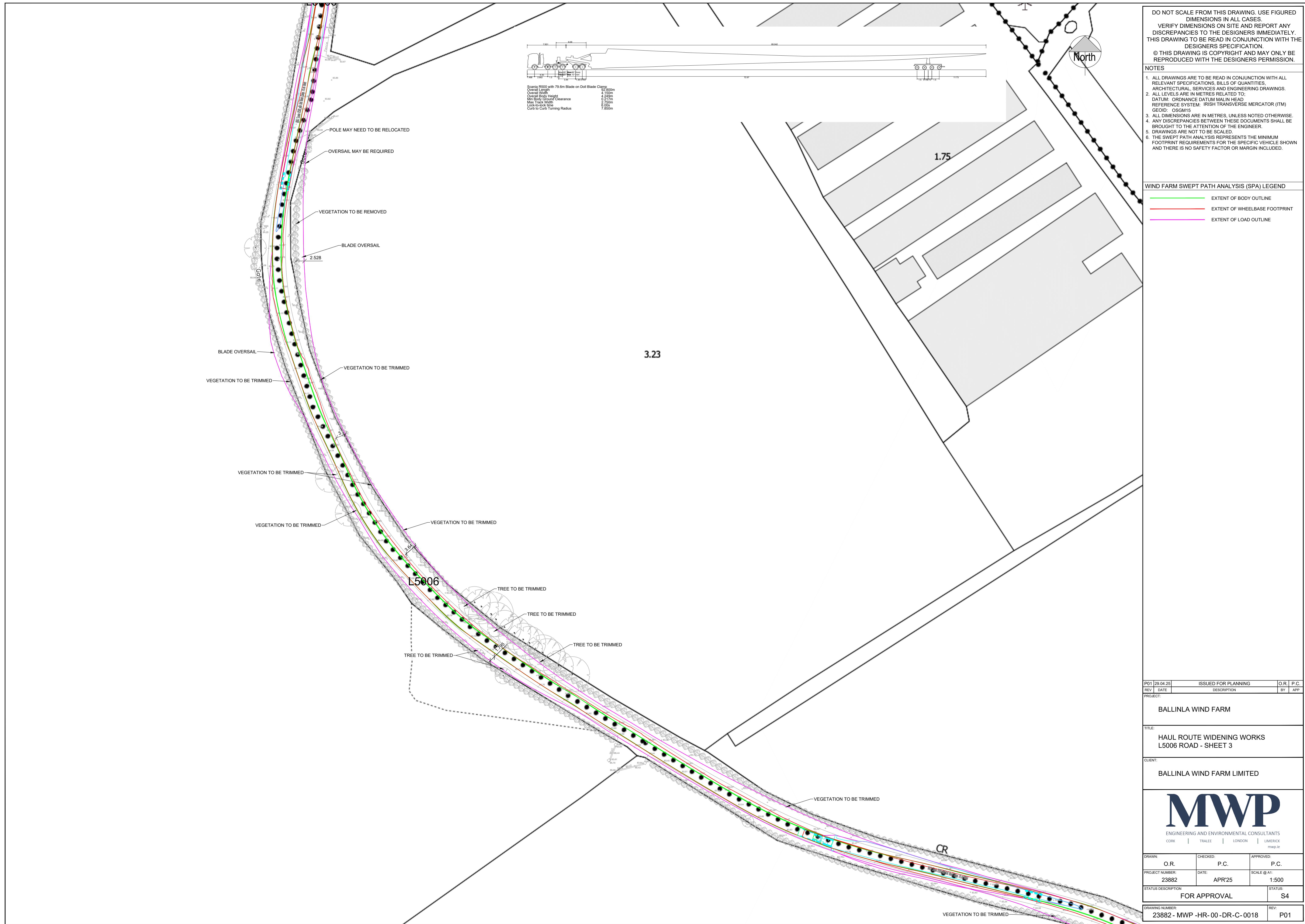


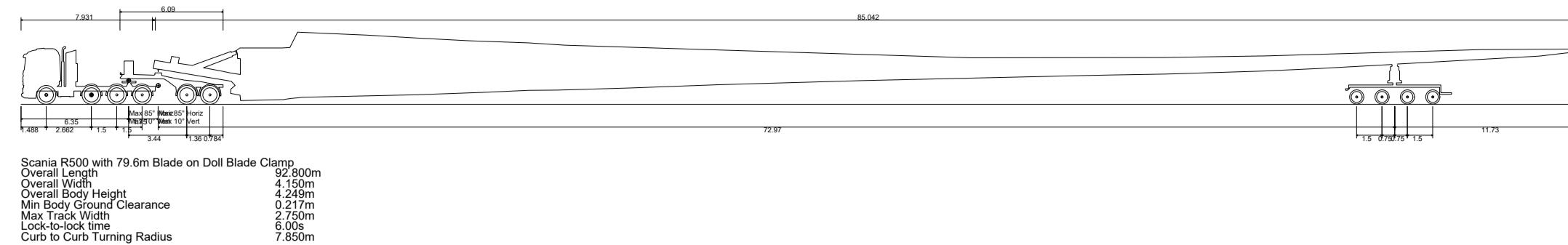
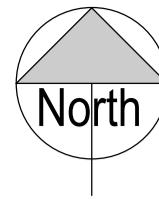
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PO1   29.04.25   ISSUED FOR PLANNING   O.R.   P.C. REV   DATE   DESCRIPTION   BY   APP					
PROJECT: BALLINLA WIND FARM					
TITLE: HAUL ROUTE WIDENING WORKS SPLITTER ISLAND ON R402 SHEET 2					
CLIENT: BALLINLA WIND FARM LIMITED					
<b>MWP</b> ENGINEERING AND ENVIRONMENTAL CONSULTANTS CORK   TRALEE   LONDON   LIMERICK mwp.ie					
DRAWN:	CHECKED:	APPROVED:	P.C.	P.C.	P.C.
PROJECT NUMBER: 23882	DATE: APR'25	SCALE @ A1:	1:500		
STATUS DESCRIPTION: FOR APPROVAL	STATUS: S4				
DRAWING NUMBER: 23882 - MWP - HR - 00 - DR - C - 0014	REV: P01				



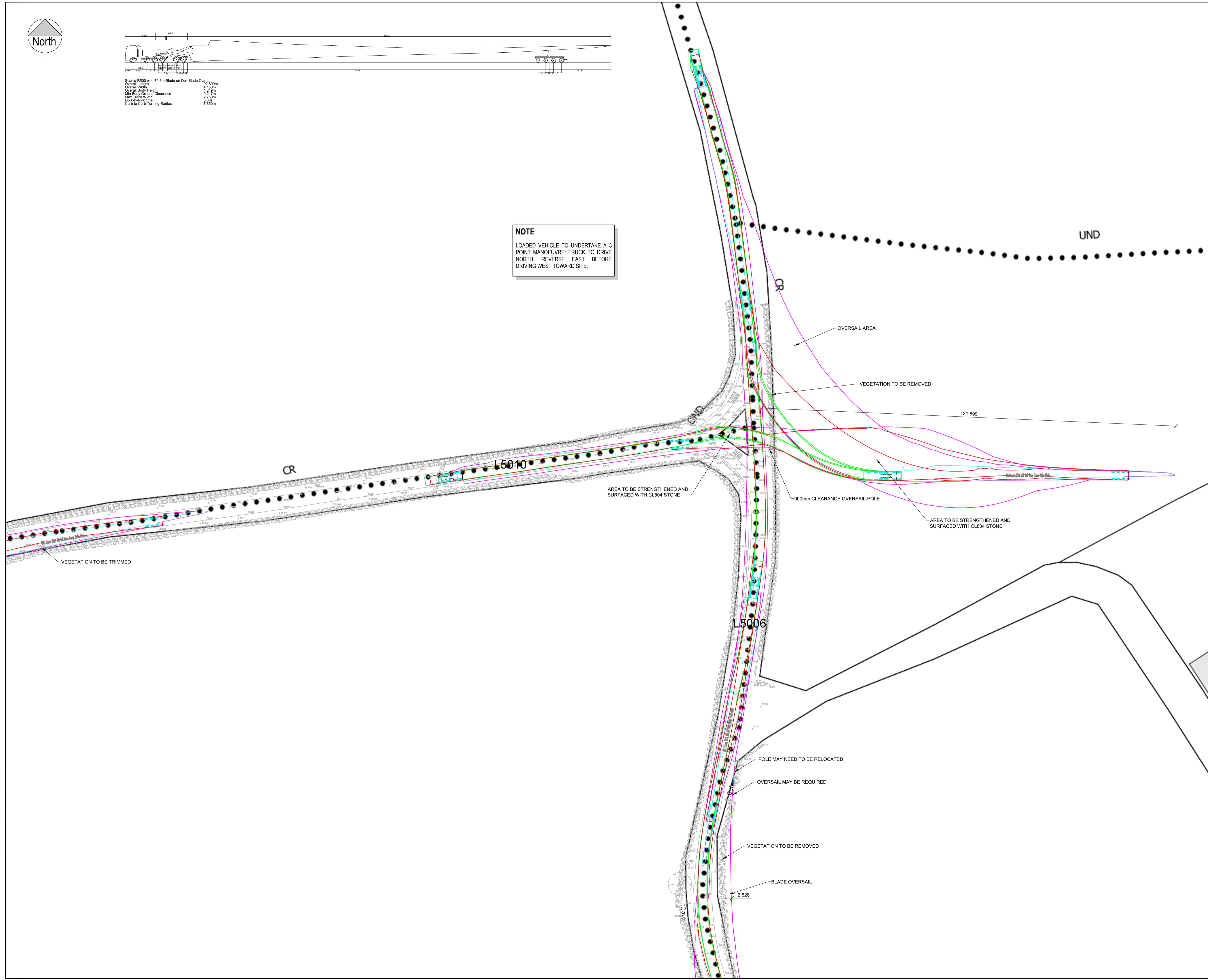






**NOTE**

LOADED VEHICLE TO UNDERTAKE A 3 POINT MANOEUVRE: TRUCK TO DRIVE NORTH, REVERSE EAST BEFORE DRIVING WEST TOWARD SITE.



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## WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND

- EXTENT OF BODY OUTLINE
- EXTENT OF WHEELBASE FOOTPRINT
- EXTENT OF LOAD OUTLINE

P01	29.04.25	ISSUED FOR PLANNING	O.R.	P.C.
REV	DATE	DESCRIPTION	BY	APP
PROJECT:				

BALLINLA WIND FARM

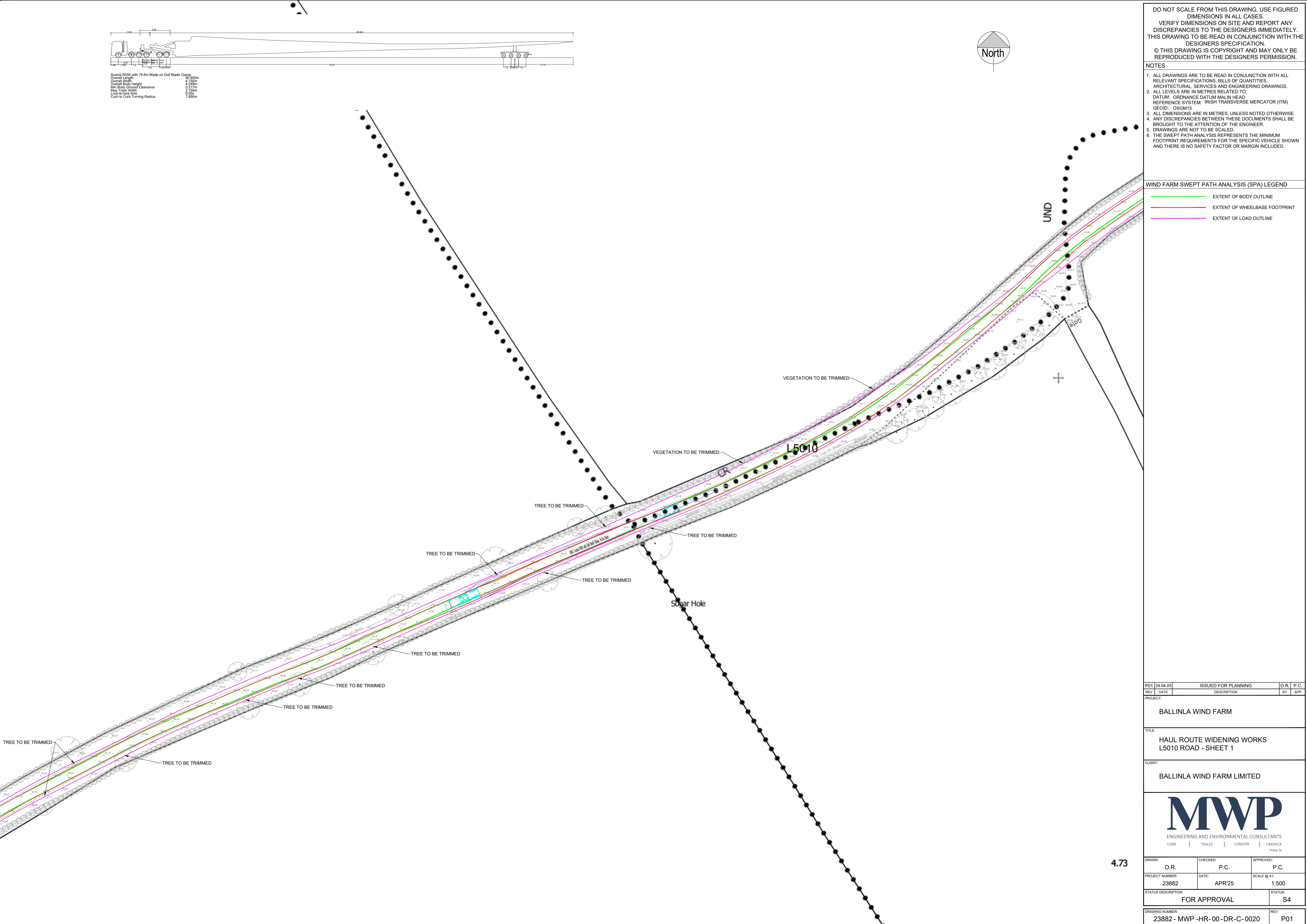
TITLE:				
HAUL ROUTE WIDENING WORKS L5006-L5010 JUNCTION				

CLIENT:				
BALLINLA WIND FARM LIMITED				

**MWP**  
 ENGINEERING AND ENVIRONMENTAL CONSULTANTS  
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O.R.	P.C.	P.C.
PROJECT NUMBER:	DATE:	SCALE @ A1:
23882	APR'25	1:500
STATUS DESCRIPTION:		STATUS:
FOR APPROVAL		S4

DRAWING NUMBER:	23882 - MWP - HR - 00 - DR - C - 0019	REV:	P01
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WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND

- EXTENT OF BODY OUTLINE
- EXTENT OF WHEELBASE FOOTPRINT
- EXTENT OF LOAD OUTLINE

P01	29.04.25	ISSUED FOR PLANNING	O.R.	P.C.
REV	DATE	DESCRIPTION	BY	APP
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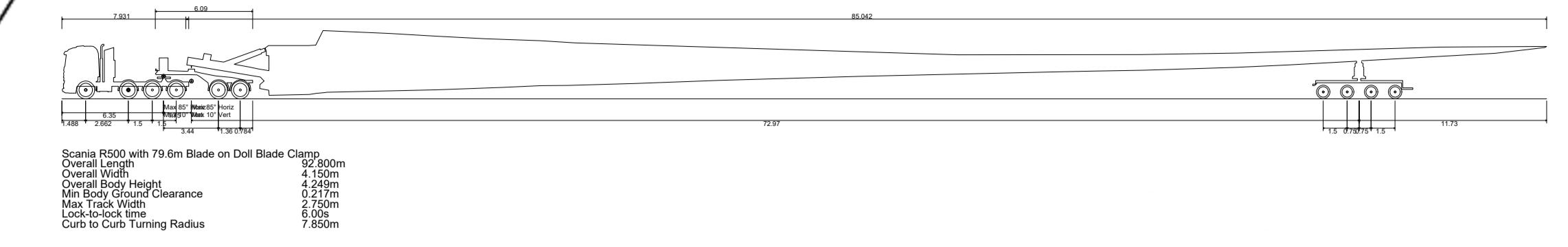
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TITLE:				
HAUL ROUTE WIDENING WORKS L5010 ROAD - SHEET 3				

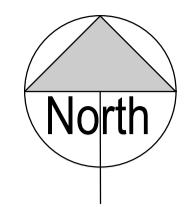
CLIENT:				
BALLINLA WIND FARM LIMITED				

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O.R.	P.C.	P.C.
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STATUS DESCRIPTION:		FOR APPROVAL
		S4
DRAWING NUMBER:		REV:
23882 - MWP - HR - 00 - DR - C - 0022		P01



0.34



TREE TO BE TRIMMED

TREE TO BE TRIMMED

ROAD SIGN TO BE REMOVED

VEGETATION TO BE TRIMMED

TREE TO BE REMOVED

OVERSAIL MAY BE REQUIRED

VEGETATION TO BE TRIMMED

POLE TO BE RELOCATED

VEGETATION TO BE TRIMMED

VEGETATION TO BE TRIMMED

TREE TO BE TRIMMED

ROAD WIDENING REQUIRED

VEGETATION TO BE TRIMMED

GATE

ROAD WIDENING REQUIRED

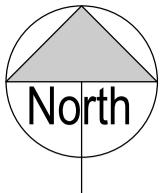
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## Baile Lum

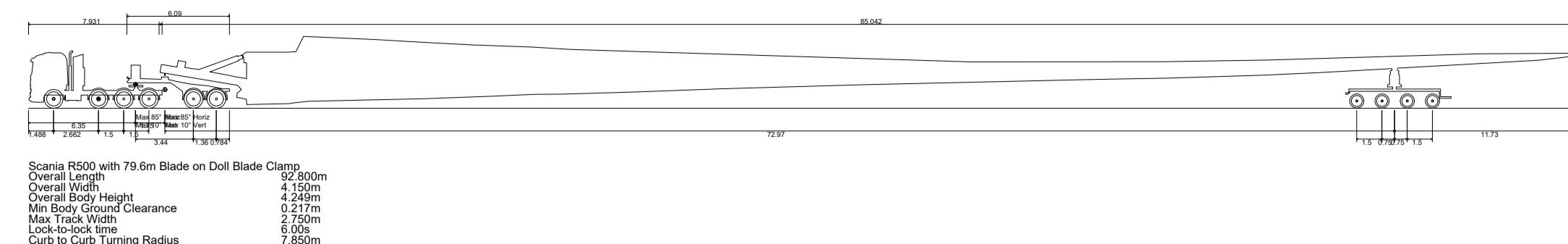
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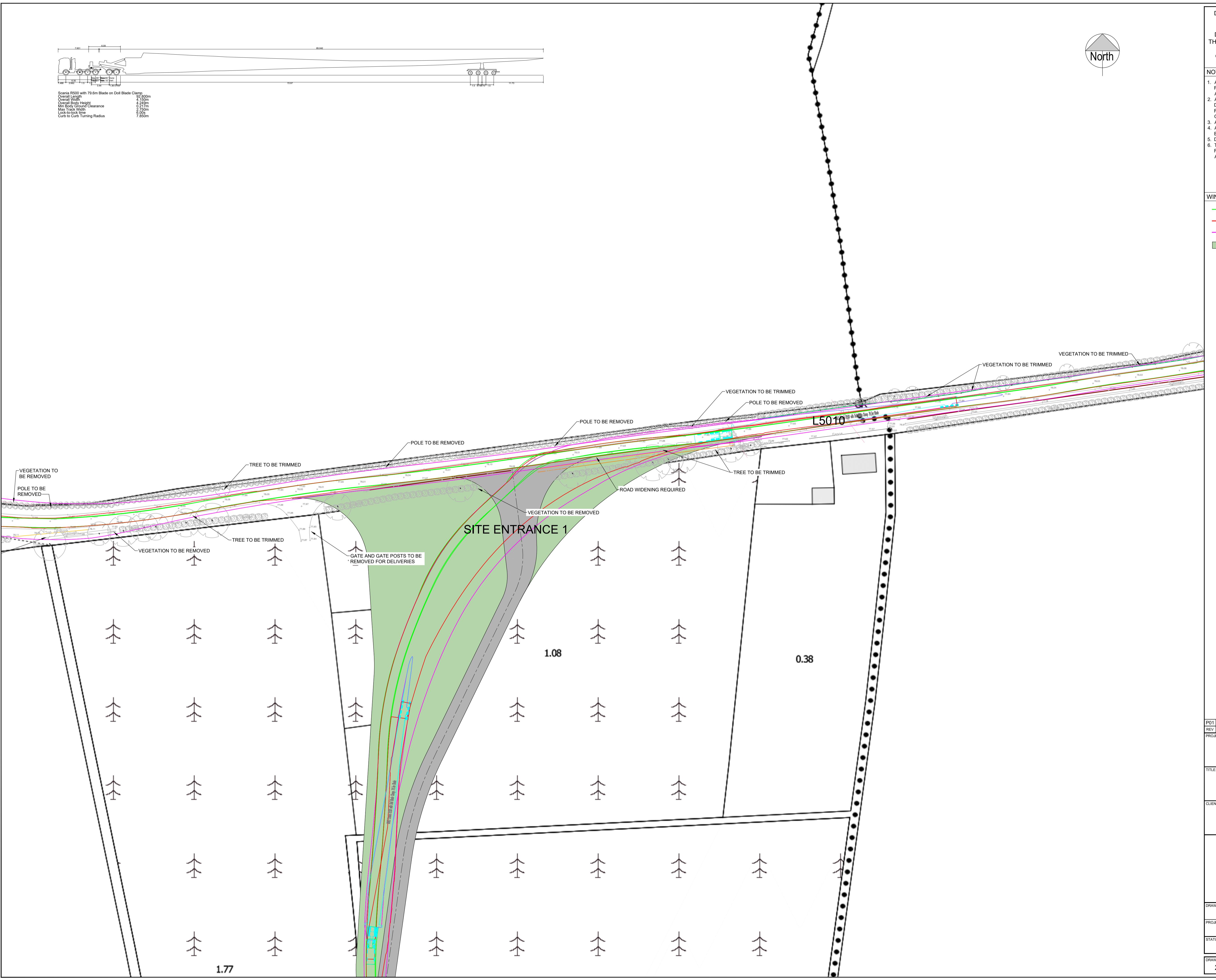
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TREE TO BE TRIMMED      WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND

- EXTENT OF BODY OUTLINE
- EXTENT OF WHEELBASE FOOTPRINT
- EXTENT OF LOAD OUTLINE





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## LAND FARM SWEPT PATH ANALYSIS (SPA) LEGEND

- EXTENT OF BODY OUTLINE
  - EXTENT OF WHEELBASE FOOTPRINT
  - EXTENT OF LOAD OUTLINE
  - CONSTRUCTION WORKS AREA / TEMPORARY ACCESS TRACK

29.04.25	ISSUED FOR PLANNING	O.R.	P.C.
DATE	DESCRIPTION	BY	APP
ECT:			

BALLINLA WIND FARM

**HAUL ROUTE WIDENING WORKS  
L5010-SITE ENTRANCE 1**

T: **BALLINLA WIND FARM LIMITED**

# MWP

ENGINEERING AND ENVIRONMENTAL CONSULTANTS

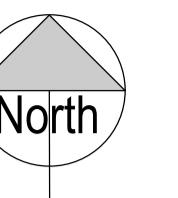
CORK      |      TRALEE      |      LONDON      |      LIMERICK

W/N: <b>O.R.</b>	CHECKED: <b>P.C.</b>	APPROVED: <b>P.C.</b>
ECT NUMBER: <b>23882</b>	DATE: <b>APR'25</b>	SCALE @ A1: <b>1:500</b>
US DESCRIPTION <b>FOR APPROVAL</b>		STATUS: <b>S4</b>

ITEM NUMBER: 23882 - MWP -HR- 00 -DR-C- 0024



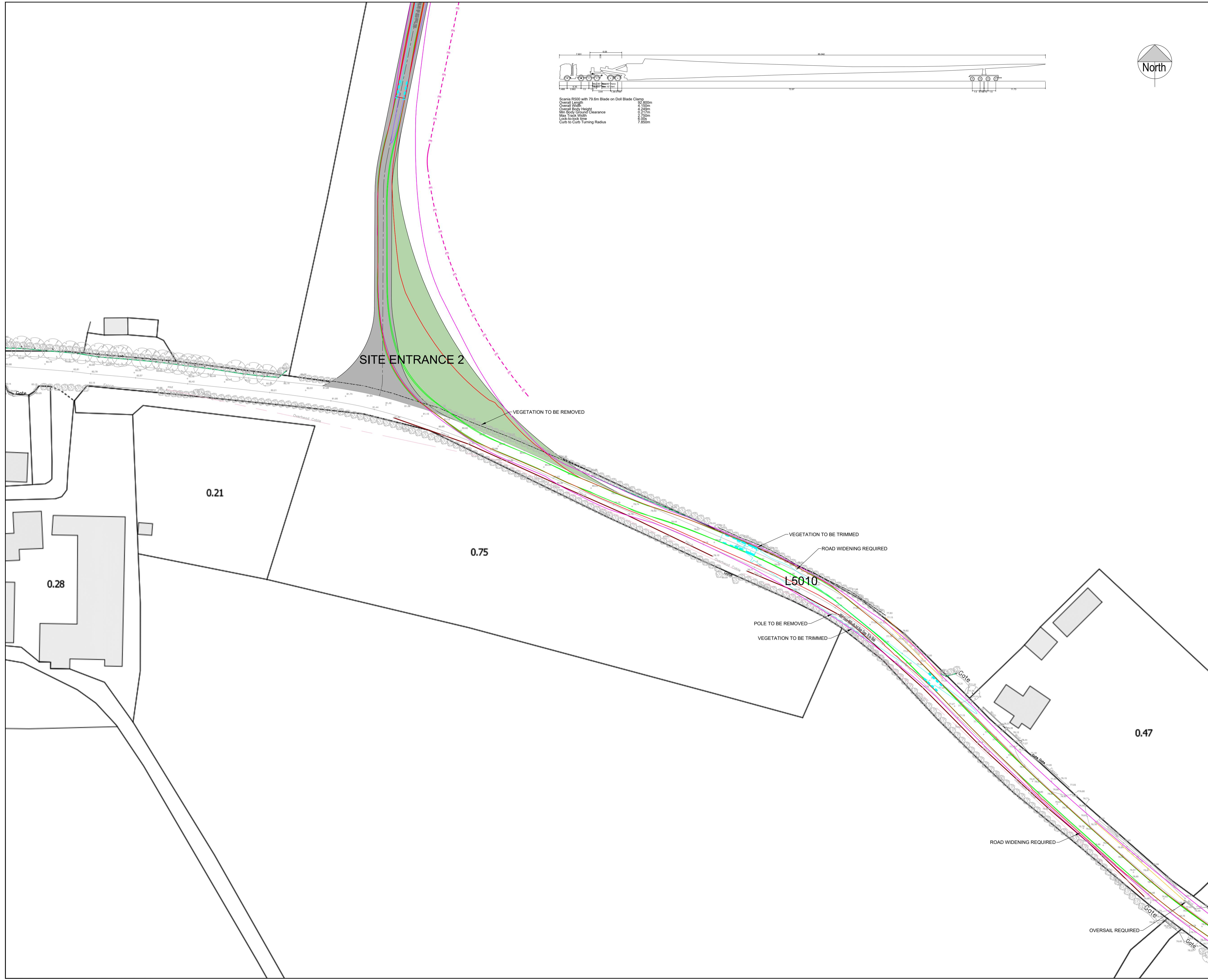
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WIND FARM SWEEP PATH ANALYSIS (SPA) LEGEND

- EXTENT OF BODY OUTLINE
- EXTENT OF WHEELBASE FOOTPRINT
- EXTENT OF LOAD OUTLINE
- CONSTRUCTION WORKS AREA / TEMPORARY ACCESS TRACK



P01 | 29.04.25 | ISSUED FOR PLANNING | O.R. | P.C.  
 REV | DATE | DESCRIPTION | BY | APP

PROJECT: BALLINLA WIND FARM

TITLE: HAUL ROUTE WIDENING WORKS  
L5010-SITE ENTRANCE 2

CLIENT: BALLINLA WIND FARM LIMITED

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PROJECT NUMBER: 23882	DATE: APR'25	SCALE @ A1: 1:500

STATUS DESCRIPTION: FOR APPROVAL	STATUS: S4
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DRAWING NUMBER: 23882 - MWP - HR - 00 - DR - C - 0026 | REV: P01