



APPENDIX 15-1

TRAFFIC MANAGEMEMNT PLAN

APPENDIX 15-1

TRAFFIC MANAGEMENT PLAN FOR CLONBERNE WIND FARM

REVISION A – June 25th 2024

Alan Lipscombe Traffic & Transport Consultants Ltd
Claran, Headford, Co Galway

Email - Info@alipscombetraffic.ie
Tel – 093 34777
Mob – 087 9308134

Client: Clonberne Wind Farm Ltd
June 25th, 2024
AL Project No: 7310

CONTENTS

1 INTRODUCTION

- 1.1 Purpose of note

2 DELIVERY OF ABNORMALLY SIZED LOADS TRANSPORTING TURBINE COMPONENTS

- 2.1 Proposed delivery route for abnormally sized loads
- 2.2 Traffic management measures for abnormally sized loads

3 DELIVERY ROUTES FOR GENERAL CONSTRUCTION TRAFFIC

4 TRAFFIC MANAGEMENT MEASURE DURING CONSTRUCTION OF GRID CONNECTION ROUTE

5 GENERAL TRAFFIC MANAGEMENT MEASURES

APPENDICES

Appendix A Figures from the EIAR

- Figure 15.1a Site location and turbine delivery route
- Figure 15.1b Delivery routes for standard HGVs and for operational maintenance trips
- Figure 15.2a Autotrack assessment location plan
- Figure 15.2c Location of proposed access junctions

- Figure 15.5a Proposed cable grid connection route

- Figure 15.5b Proposed grid connection route – section on public road and proposed diversion route

1 INTRODUCTION

1.1 Purpose of note

The purpose of this Traffic Management Plan (TMP) is to set out traffic management measures that the Applicant will commit to provide during the construction stage of the proposed Clonberne Wind Farm Development (Proposed Project). The successful completion of the Proposed Projects will require significant coordination and planning and a comprehensive set of mitigation measures will be put in place before and during the construction stage in order to minimise the effects of the additional traffic generated on the surrounding road network. The measures are discussed under the following headings;

- Section 2 – Delivery of abnormally sized loads transporting turbine components.
- Section 3 – Delivery routes for general construction traffic.
- Section 4 – Traffic management measures during construction of the proposed Grid Connection Route.
- Section 5 – General traffic management measures that will be implemented before, during and on completion of the construction of the Proposed Project.

It is confirmed that details for the TMP for the Proposed Project will be agreed with the Road Section of all relevant Local Authorities prior to construction.

On the occasions where reference is made to figures that are included in the EIAR prepared for the Proposed Project, these figures are included as Appended A.

2 DELIVERY OF ABNORMALLY SIZED LOADS TRANSPORTING TURBINE COMPONENTS

2.1 Proposed delivery route for abnormally sized loads

The proposed port of entry for the large wind turbine components is Galway Harbour in Galway City. The proposed Turbine Delivery Route (TDR) from the port to the proposed Wind Farm site is shown in Figure 15-1a. An assessment of the turning requirements of the abnormally large loads transporting the turbine components was undertaken at the various pinch points along the TDR, as identified in Figure 15-2a. The swept path assessment undertaken for these locations is discussed in Section 15.1.9 of the EIAR.

The proposed TDR is as follows;

- From Galway Harbour the route travels northeast on Lough Atalia Road and the R339 for approximately 2.4km to the signalised junction adjacent to Thermo King (Location 1).
- The route continues left at this junction to travel north for approximately 0.3 km to the junction with the R336 Tuam Road (Location 2).
- At this point the route turns right onto the R336 to travel approximately 0.3 km to the junction between the R336 / the N6 Bothar na dTreabh / N83 (Location 3).
- From this point the route travels straight through the R336 / the N6 Bothar na dTreabh / N83 junction onto the N83 and continues for approximately 28 km through the village of Claregalway to the roundabout with the M17 and N17 Tuam bypass to the southwest of Tuam (Location 4).
- The route then travels north on the N17 Tuam Bypass for approximately 4.2 km to meet the roundabout with the N83 directly north of Tuam (Location 5).
- From this point the route travels south for approximately 0.4km on the N83 to the roundabout with Milltown Road (Location 6) before travelling east on the N83 for approximately 1 km to the priority junction formed with the Dunmore Road (Location 7).
- From this point located on the northeast of Tuam the route heads northeast on the N83 for approximately 9.6 km to the local L-6466 (Location 9).
- At this point the Turbine Delivery Route turns right onto the L-6466 heading east for approximately 2.5 km to the junction with the R328 located approximately 2.0km south of Dunmore (Location 10).

- The route then turns right onto the R328 and heads in a southeastern direction for approximately 3.9 km to the location of a new junction on the south side of the R328 that will provide access for all construction traffic to the Site, shown as Junction A in Figure 15-2c.

The total length of the Turbine Delivery Route from Galway Harbour to the access junction off the R328 is approximately 54 kms. All deliveries of abnormally sized loads will be made using Garda Síochána escorts and local transient traffic management measures put in place by the haulage company.

2.2 Traffic management measures for abnormally sized loads

The transportation of large components is challenging and can only be done following extensive route selection, route proofing and consultation with An Garda Síochána, the relevant local authorities and their road sections and roads authorities. Turbine components are usually transported in convoys of 3 to 5 vehicles at night when traffic is lightest. This will be undertaken in consultation with the road authorities, An Garda Síochána Traffic Corp and special permits are generally required.

A swept path analysis was undertaken at all potential pinch points using Autotrack in order to establish the locations where the wind turbine transporter vehicles will be accommodated, and the locations where some form of remedial measure may be required. While transient traffic management measures will be implemented by An Garda Síochána as each convoy travels along the delivery route, it is not anticipated that any sections of the local road network will be closed.

A dry run involving a vehicle adapted to replicate the geometry of the extended transport vehicles will be undertaken over the entire turbine delivery route prior to the delivery of turbine components.

3 DELIVERY ROUTES FOR GENERAL CONSTRUCTION TRAFFIC

The smaller turbine components that will be delivered to the site by standard HGVs will also arrive at the port in Galway City and will also use the main part of the TDR discussed above. The one section of the delivery route for standard HGVs that differs from the TDR is the section between Tuam, Dunmore and the approach to the site, where standard HGV deliveries will continue north on the N83 to Dunmore, where they will then turn right onto The Green, and then turn right again onto the R328 before travelling southeast on the R328 towards the site. The northern part of the delivery route for standard HGVs is compared to the TDR in Figure 15-1b.

All concrete and road surfacing materials will be sourced from local, appropriately authorised quarries, while rock and hardcore material will be sourced from the borrow adjacent to the site located off the L-2232. See Junction G in Figure 15-2c for location of borrow pit. Materials from the borrow pit will access the site at Junction F on the L-2232.

Stone, sand and cement required for the construction of the Proposed Project infrastructure will be sourced from the neighbouring borrow pit and appropriately authorised quarries. All quarries are located to the southwest of the site and all materials provided by these quarries will approach the site via the direction of Tuam and will use the northern section of the TDR.

As discussed above it is proposed that the temporary access junction on the R328 will be closed on the completion of the construction of the Proposed Project. It is proposed that the modest volumes of maintenance traffic that will be generated once the Wind Farm Site is operational will access the site using the existing local road network, as also indicated in Figure 15-1b.

4 TRAFFIC MANAGEMENT MEASURES DURING CONSTRUCTION OF PROPOSED GRID CONNECTION ROUTE

Traffic impacts and diversion routes identified for the proposed Grid Connection Route works are included in Section 15.1.7 of the EIAR.

It is proposed that the 220kV onsite electrical substation is connected by means of an underground 220kV electricity cable to the existing 220kV overhead line located in the townland of Laughil. The proposed grid connection is shown in Figure 15-5a and is approximately 2.8 km in length, of which 1.4 km is located along the public road corridor (L-6501). The proposed diversion route for local traffic is shown in Figure 15-5b and is approximately 5.1km in length which will result in a 3.7 km diversion on these days. It is noted that the L-6501 local road is very lightly trafficked and the diversion will therefore be incurred by very few trips.

It is estimated that construction of the 2.8 km grid connection will commence at the western end at the connection with the proposed 220kV substation and will progress eastwards at a rate of approximately 100m / day to the connection into the existing overhead line, with the construction for this element forecast to last approximately 28 days.

With respect to the traffic volumes that will be generated during the construction of the underground electrical cabling route, it is estimated that there will be approximately 14 daily return trips made by a truck transporting materials, and additional 3 to 4 car trips made by staff travelling to and from the Site.

5 GENERAL TRAFFIC MANAGEMENT MEASURES

A detailed TMP will be finalised and confirmatory detailed provisions in respect of traffic management agreed with the Roads Authorities and An Garda Síochána prior to construction works commencing on site. The detailed TMP will include the following:

- **Traffic Management Coordinator** – a competent Traffic Management Co-ordinator will be appointed for the duration of the construction of the Proposed Project and this person will be the main point of contact for all matters relating to traffic management.
- **Delivery Programme** – a programme of deliveries will be submitted to Galway County Council and other relevant authorities in advance of deliveries of turbine components to the Proposed Project site.
- **Information to locals** – Locals in the area will be informed of any upcoming traffic related matters e.g. delivery of turbine components at night, via letter drops and posters in public places. Information will include the contact details of the Contract Project Co-ordinator, who will be the main point of contact for all queries from the public or local authority during normal working hours. An "out of hours" emergency number will also be provided.
- **A Pre and Post Construction Condition Survey** – A pre-condition survey of roads associated with the Proposed Project will be carried out prior to construction commencement to record the condition of the road. A post construction survey will be carried out after works are completed. Where required the timing of these surveys will be agreed with the local authority.
- **Liaison with the relevant local authorities** - Liaison with the relevant local authorities including the roads sections of local authorities that the delivery routes traverse, and An Garda Síochána, during the delivery phase of the large turbine vehicles, when an escort for all convoys will be required.
- **Implementation of temporary alterations to road network at critical junctions** – At locations where required highlighted in Section 15.1.9.
- **Identification of delivery routes** – These routes will be agreed and adhered to by all contractors.
- **Travel plan for construction workers to Site**– While the assessment above has assumed a robust case that construction workers will drive to the Site, the construction company will be required to provide a travel plan for construction staff, which will include the identification of a routes to / from the site and identification of an area for parking.

- **Traffic management measure for temporary construction access junction off the R328** – The traffic management measures that will be implemented at proposed temporary access junction off the R238 will include the following;
- Traffic signs in accordance with the “*Traffic Signs Manual, Section 8 – Temporary Traffic Measures and Signs for Road Works*” (DoT now DoTT&S) and “Guidance for the Control and Management of Traffic at Roadworks” (DoTT&S). The proposed traffic management measures will be submitted to Galway Councils Roads section for agreement prior to the construction phase.
- An application for a temporary reduction of the speed limit on the R328 for a short section either side of the proposed access junction for the duration of the construction phase.
- The presence of a permanent “Flagman” during the entire construction phase.
- **Temporary traffic signs** – As part of the traffic management measures temporary traffic signs will be put in place at all key junctions. All measures will be in accordance with the “*Traffic Signs Manual, Section 8 – Temporary Traffic Measures and Signs for Road Works*” (DoT now DoTT&S) and “Guidance for the Control and Management of Traffic at Roadworks” (DoTT&S). A member of construction staff (flagman) will be present at key junctions during peak delivery times.
- **Delivery times of large turbine components** - The management plan will include the delivery of large wind turbine plant components at night in order to minimise disruption to general traffic during the construction stage.
- **Additional measures** - Various additional measures will be put in place in order to minimise the effects of the development traffic on the surrounding road network including sweeping / cleaning of local roads as required.
- **Re-instatement works** - All road surfaces and boundaries will be re-instated to pre-development condition, as agreed with the local authority engineers.

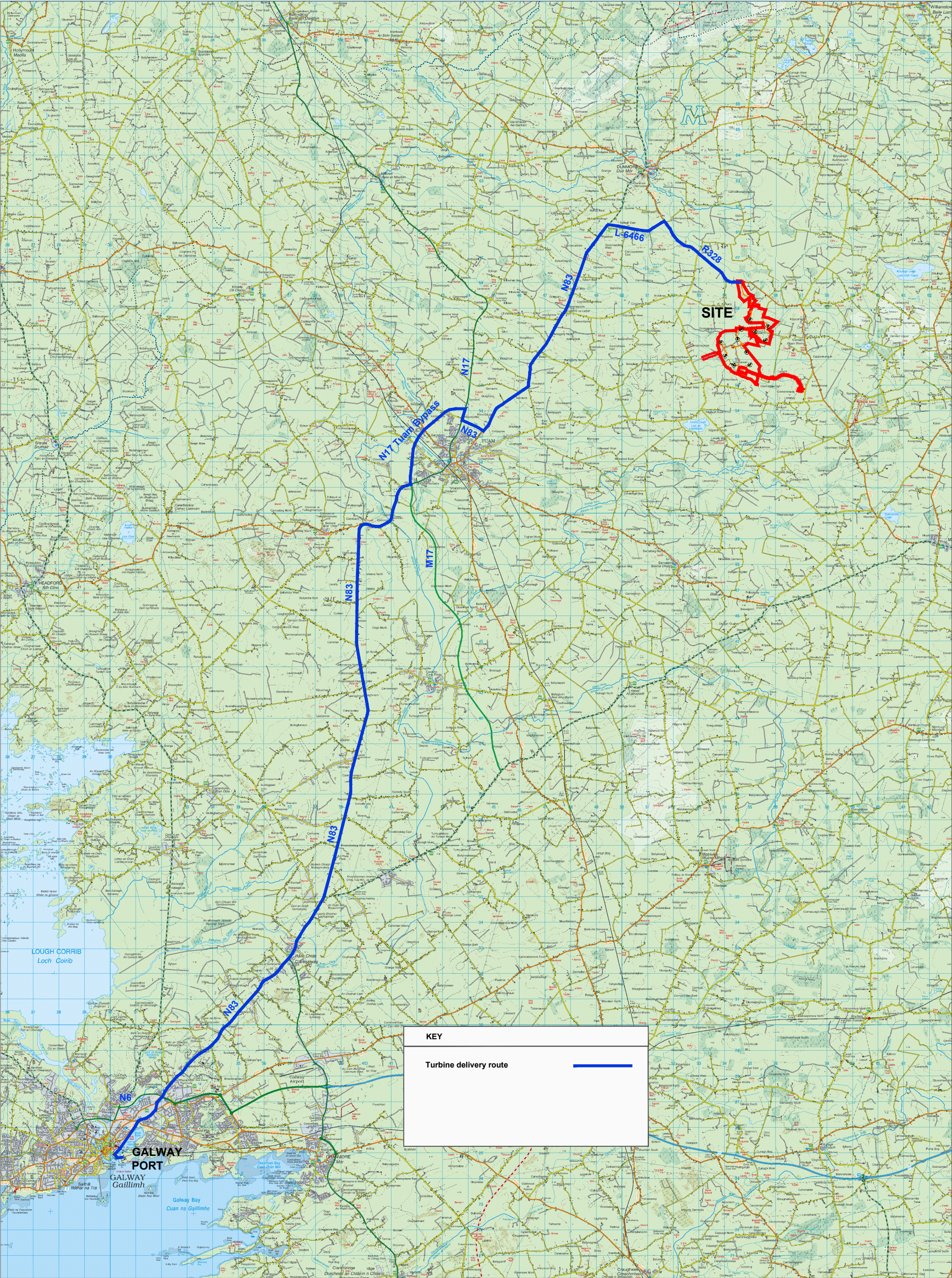
It is confirmed that details for the Traffic Management Plan for the subject development will be agreed with all relevant Local Authorities prior to construction and contact will be maintained with the Road and Traffic Sections throughout the construction phase.

APPENDIX A FIGURES FROM THE EIAR

- Figure 15.1a Site location and turbine delivery route
- Figure 15.1b Delivery routes for standard HGVs and for operational maintenance trips
- Figure 15.2a Autotrack assessment location plan
- Figure 15.2c Location of proposed access junctions

- Figure 15.5a Proposed cable grid connection route

- Figure 15.5b Proposed grid connection route – section on public road and proposed diversion route

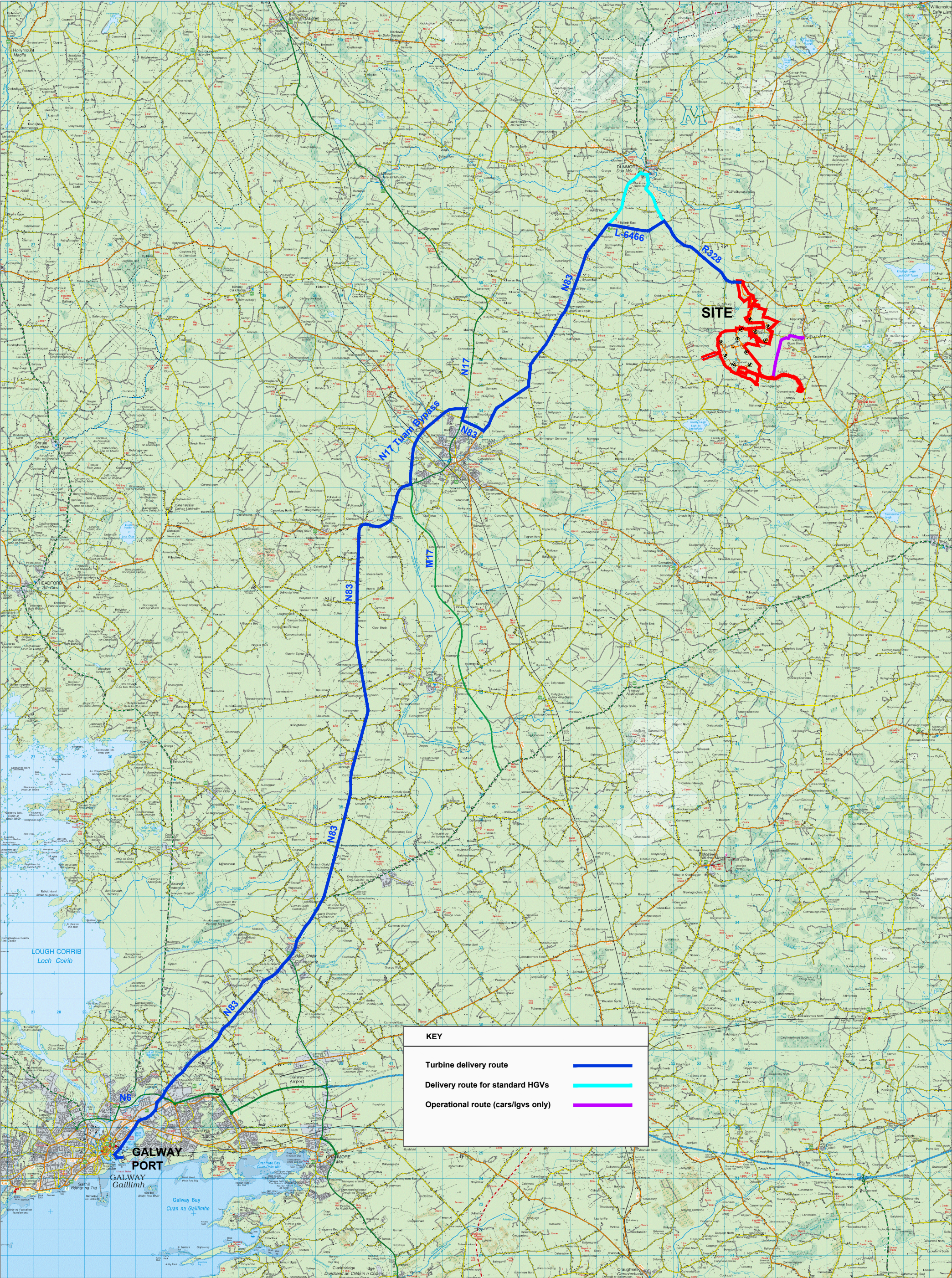


NOTES:

PLANNING DRAWING ONLY - NOT FOR CONSTRUCTION PURPOSES

Figure 15-1a Site location and turbine delivery route

PROJECT: Clonberne Wind Farm			ALAN LIPSCOMBE TRAFFIC & TRANSPORT CONSULTANTS
CLIENT: Clonberne Wind Farm Ltd		SCALE: NTS	
PROJECT NO: 7310	DATE: 08.05.24	DRAWN BY: AL	

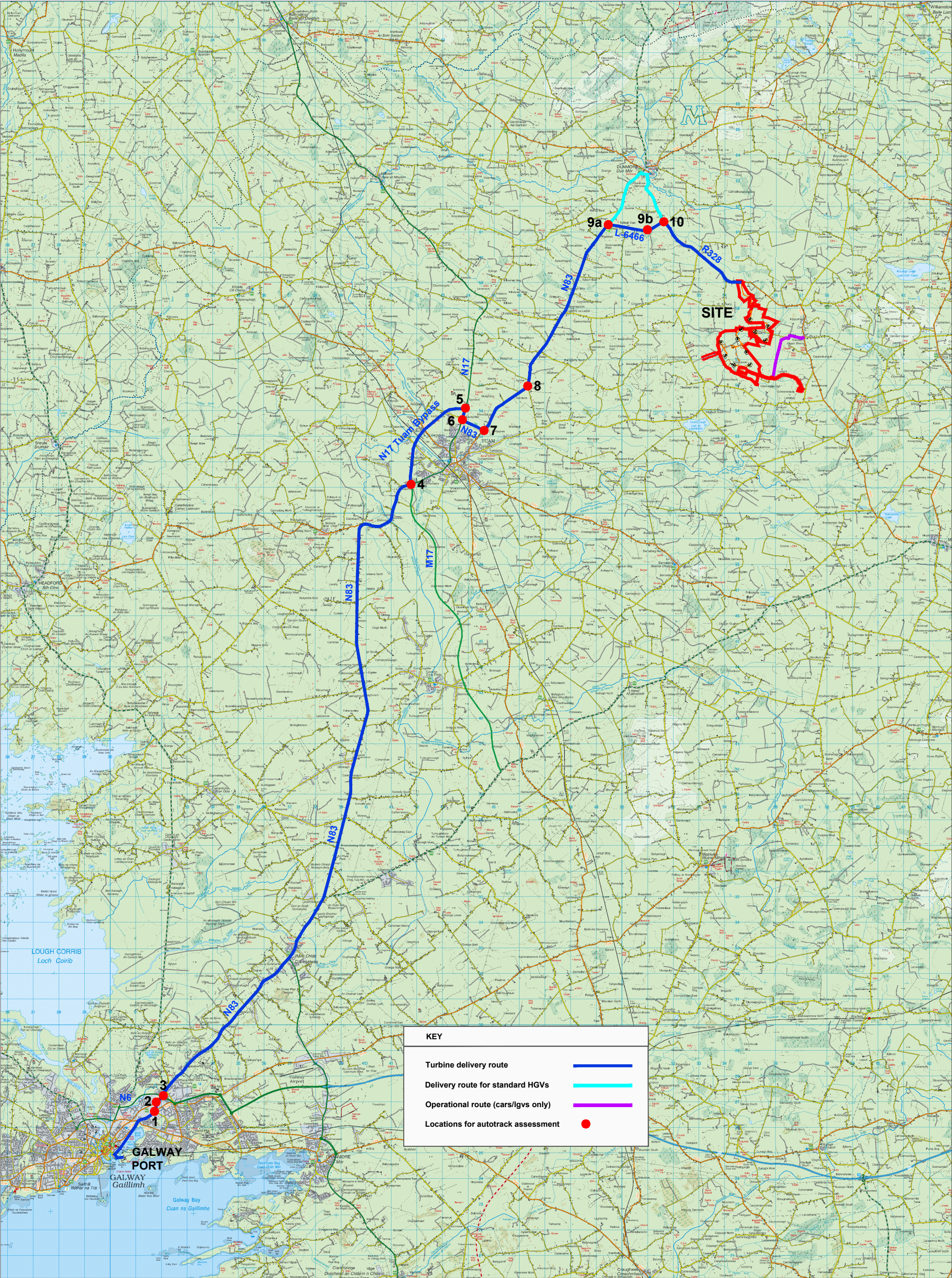


NOTES:

PLANNING DRAWING ONLY - NOT FOR CONSTRUCTION PURPOSES

Figure 15-1b Delivery routes for standard HGVs and for operational maintenance trips

PROJECT: Clonberne Wind Farm			ALAN LIPSCOMBE TRAFFIC & TRANSPORT CONSULTANTS
CLIENT: Clonberne Wind Farm Ltd		SCALE: NTS	
PROJECT NO: 7310	DATE: 08.05.24	DRAWN BY: AL	

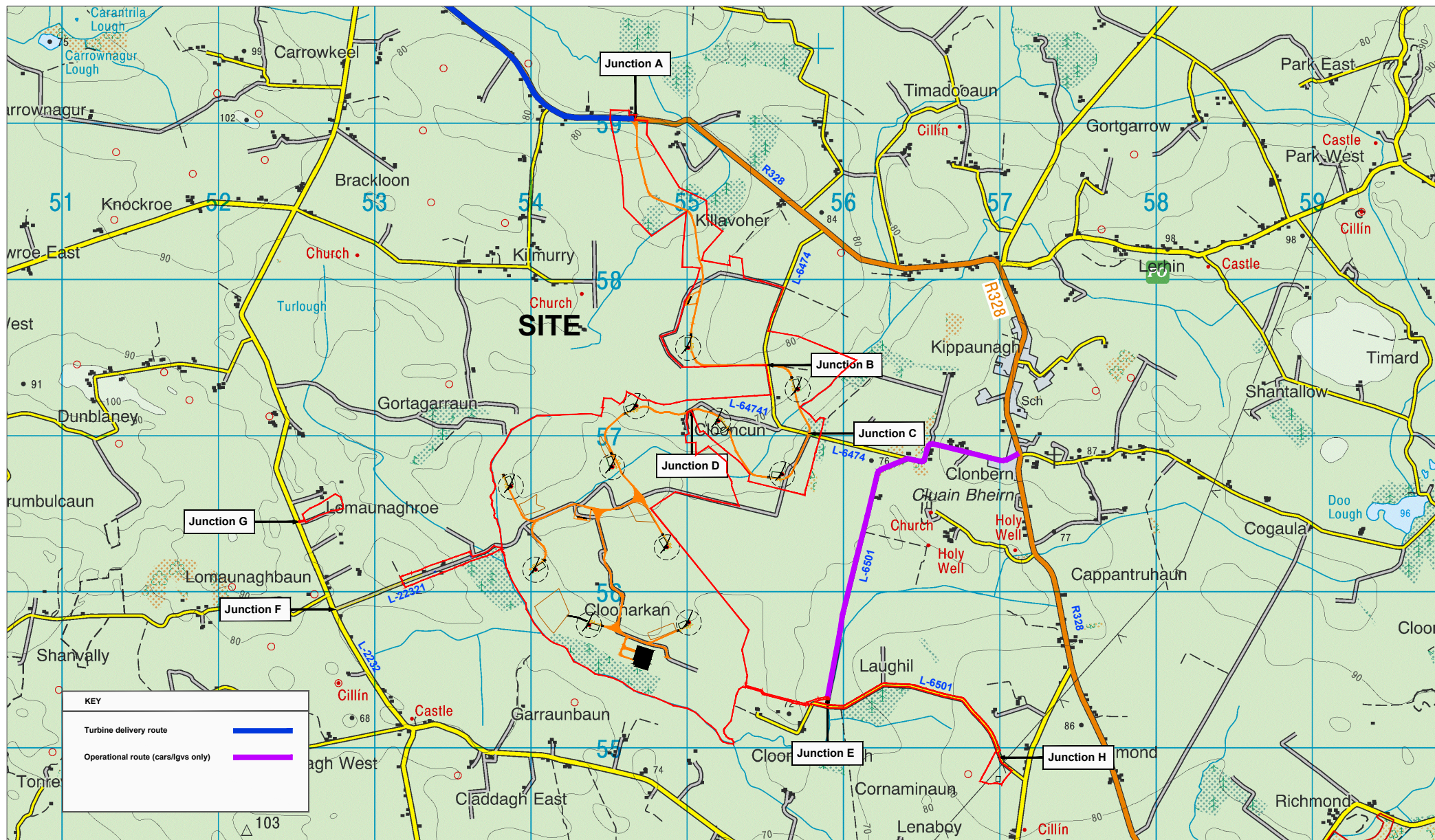


NOTES:

PLANNING DRAWING ONLY - NOT FOR CONSTRUCTION PURPOSES

Figure 15-2a Autotruck assesement location plan

PROJECT: Clonberne Wind Farm			ALAN LIPSCOMBE TRAFFIC & TRANSPORT CONSULTANTS
CLIENT: Clonberne Wind Farm Ltd		SCALE: NTS	
PROJECT NO: 7310	DATE: 08.05.24	DRAWN BY: AL	



NOTES:

PLANNING DRAWING ONLY - NOT FOR CONSTRUCTION PURPOSES

Figure 15-2c Location of proposed access junctions

PROJECT: Clonberne Wind Farm

CLIENT: Clonberne Wind Farm Ltd

PROJECT NO: 7310

DATE: 09.06.24

SCALE: NTS

DRAWN BY: AL

ALAN LIPSCOMBE
TRAFFIC & TRANSPORT CONSULTANTS



Figure 15-5a Proposed grid connection

PROJECT: Clonberne Wind Farm

CLIENT: Clonberne Wind Farm Ltd

SCALE: NTS

PROJECT NO: 7310

DATE:	15.02.24
-------	----------

DRAWN BY: AL

ALAN LIPSCOMBE
TRAFFIC & TRANSPORT CONSULTANTS

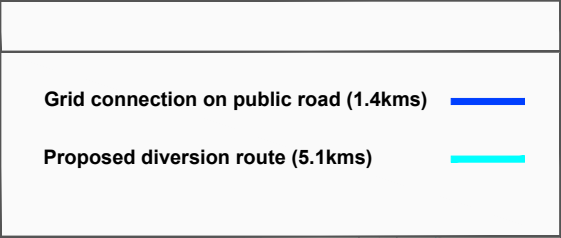


Figure 15-5b Proposed grid connection - section on public road and proposed diversion route

DRAWN BY: AL

ALAN LIPSCOMBE
TRAFFIC & TRANSPORT CONSULTANTS