# ALAN LIPSCOMBE TRAFFIC & TRANSPORT CONSULTANTS

### APPENDIX 15-2 COOLOO WIND FARM

### REVISION A - September 24th 2025

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#### 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 Cooloo Wind Farm (Proposed Project). The successful completion of the Proposed Project 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 Proposed Project access junctions
- Section 5 Traffic management measures during construction of the Proposed Grid Connection Route.
- Section 6 General traffic management measures that will be implemented before, during and on completion of the construction of the Proposed Development.

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.

All figures that are referenced in the EIAR prepared for the Proposed Project are included as Appended A of this TMP.

### 2 DELVERY 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 the Port of Galway 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 15-1b. The swept path assessment undertaken for these locations is discussed in Section 15.1.9 of the EIAR.

From the Port of Galway the turbine delivery route is as follows;

- Galway Harbour through Galway city on the L5048 Lough Atalia Road, the L5034 and the R336 Tuam Road to the N6 (3.3km).
- From the junction with the R336 Tuam Road in Galway City the turbine delivery route heads eastbound on the N6 passing through junctions with the R865 at Ballybrit and the R339 Monivea Road at Briarhill, before heading southeast to the Coonagh Roundabout (3.2km).
- From the Coonagh Roundabout the route heads east on the N6 and M6 (11.6 km), to Junction 18 of the M6 with the M18.
- The route then travels north on the M17 (12.6km) before turning off at Junction 19 onto the N63.
- The turbine delivery route then travels east on the N63 for 12.7kms passing the through Abbeyknockmoy and Dereen to the junction with the R332.
- The turbine then turns left off the N63 to travel northwest on the R332 for approximately 2.1km before turning right into the Proposed Wind Farm site entrance.

The total length of the proposed TDR route is approximately 45.5km. All deliveries of abnormally sized loads will be made using Garda Siochana escorts and local transient traffic management measures provided 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 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

A total of 4 quarries within a 20 km radius of the Proposed Wind Farm site are identified as potential suppliers of concrete, crushed stone and internal road surfacing materials, with the locations of these quarries and potential delivery routes to the Proposed Project, shown in Figure 15-2a. It is noted that these additional routes converge on the M17 junction 19 with the N63, so from this location to the Proposed Wind Farm site access on the R332 is the section of the delivery route that will be under most pressure and is the focus of the traffic impact assessment as discussed in Section 15.1.9 of this EIAR.

#### 4 PROPOSED PROJECT ACCESS JUNCTIONS

The location of the site access junctions 1 to 5 are shown in Figure 15-3 and are described below.

## Access junction 1 – Construction access junction on R332 – Proposed temporary access for abnormally sized loads and general construction traffic

The proposed temporary access junction on the R332 for the abnormally sized loads, which will be accompanied by a Garda escort, standard HGVs and construction staff, is shown in Figure 15-17. The access is in the townland of Lissavally, Co Galway is situated on the northern side of the R332 at a location where an 80 kph speed limit applies. The proposed junction radii are 13m with 1:10 tapers provided for standard HGV access in accordance with TII DN-GEO-03060. STOP road markings and signs are as per Figure 7.35 of the Traffic Signs Manual.

The proposed junction includes a run-over area at the northeastern corner in order to facilitate the delivery of the abnormally sized turbine loads. On completion of the delivery of the abnormally sized loads the temporary run-over areas will be closed off to traffic with the layout resorting to the standard junction layout described above.

The required visibility splays for an 80 kph speed limit, 160m along the nearside carriageway edge taken from a setback of 3.0m, are available along the R332 to the west and east, as shown in Figure 15-18. The figure also shows the full forward 160m forward visibility for traffic approaching from the east to observe a vehicle waiting to turn right into the Proposed Wind Farm site. It is noted that there are existing shrubs and bushes that partially constrain the forward visibility splay. In mitigation it is proposed that the following measures are implemented;

- The bush / shrubs on the south side of the R332 are trimmed in order to maximise forward visibility. It is estimated that a forward visibility of approximately 140m may be achieved by trimming the roadside bushes alone.
- An application to Galway County Council for a temporary reduction of the speed limit on this section of the R328 to 60 km/h during the 18 month construction phase of the Proposed Project,
- The introduction of 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 County Council's Roads section for agreement prior to the construction phase.

- The provision of a flagman at all times that the proposed access junction is in use during the construction phase.
- The closure of the site access by means of temporary fencing and gates during periods when the access is not in use, including evenings during the construction phase.
- The permanent closure of the site access junction on completion of the construction phase.
   This junction will only be opened for the purpose of the replacement of large component parts.

#### Access junction 2 - Crossing of the L6506

This crossing point of the Proposed Wind Farm access road over the L6506 local road together with the 90m visibility splays taken from a 2.4m setback from the carriageway edge, appropriate for a 60 kph speed limit, are shown in Figure 15-22.

It is proposed that construction traffic will cross the local road at this location during the construction phase of the Proposed Wind Farm, which will be low in frequency, once the Proposed Wind Farm is operational. There will be no turning movements between the local road and the access junction at this junctions and the site accesses will be gated when not in use. All abnormally sized loads will be accompanied by a Garda escort and a Flagman will be present at these junctions on busy days during the construction period.

#### Access junction 3 – Connection with local track for access to substation

The proposed layout for this junction that connect a local track to the access proposed or the substation is shown in Figure 15.23. Visibility splays taken from a 2.4m setback from the carriageway edge, appropriate for a 60 kph speed limit, are provided. It is proposed that this access will be gated and closed at all times apart from during the construction of the substation and during maintenance visits when the Proposed Project is operational.

#### Access junctions 4 and 5 – Crossings of the L6301

Access junctions 4 and 5 are will both be used during the construction and operational phase from the L6301 local road network. The access points of the Proposed Wind Farm access road over the L6301 together with the 90m visibility splays taken from a setback of 2.4m are shown for Access junction 4 in Figure 15-24 and for Access junction 5 in Figure 15-25.

It is proposed that construction traffic will cross the local roads during the construction phase of the Proposed Project, and will also be used for maintenance trips once the Proposed Wind Farm is operational. Abnormally sized loads will be accompanied by a Garda escort and a Flagman will be present at these junctions on busy days during the construction period.

### 5 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. Sections along the Proposed Grid Connection Route where there will be road and pedestrian footpath closures and traffic diversions are identified.

It is proposed that the 110kV onsite substation is connected by 110kV underground cabling to the existing 110kV Cloon Substation located in the townland of Cloonascragh. The underground cabling route measures approximately 21km of which approximately 18.2km is located within the public road corridor.

The extent of the underground cabling route that will impact on the public road networks is considered in the 10 sections (8 on-road 2-off road) shown in Figure 15-6a and summarised in Table 15-26 of the EIAR inserted below. Based on a construction rate of 100m per day, it is estimated that the grid route will take approximately 210 working days to complete based on one construction crew operating at one location. In practice the construction duration may be significantly reduced using 2 construction crews operating at different locations on the route.

Table 15-26 Proposed Grid Connection underground cabling route link, traffic management measure, link length (km), construction duration (days)

Underground Cabling Route Section	Traffic management	Length (kms)	Construction duration (days)
Off road at Proposed Wind Farm site	Off-road	2.6	26
Section 1 – R332	Closure	2.3	23
Section 2 – N63	Closure	4.2	42
Section 3 – L6234	Closure	3.3	33
Section 4 – L2115	Closure	1.1	11
Section 5 – L2127	Closure	0.1	1
Section 6 – L2125	Closure	3.0	30
Section 7 – R347	Closure	3.9	39
Section 8 – L6141	Closure	0.3	3
Off road section at Cloon Substation site	Off road	0.2	2
Total		21.0	210

The on-road sections of the Proposed Grid Connection underground cabling route travels along 4.2km of the N63 National Secondary Road, a 2.3 km section of the R332 Regional Road, a 3.9km section of the R347 Regional Road, with the remaining 12km of the on-road route travelling along the local road network. An inspection of the route would indicate that the significant majority of the route will require a road closure at the point of construction during the construction of the underground cable route. A precautionary scenario where a road closure will be required for the entire route is assumed for the purpose of the assessment.

The potential diversion routes that may be used during the construction of the various sections of the grid route that are on the public road network are set out in Table 15-27 and shown in Figure 16-6b. For sections 3, 4, 5, 6 and 8, which comprises of 7.8 km of the total route, the diversions will result in low volumes of existing traffic on local roads being diverted onto other local roads, or onto roads of a higher standard, including the N63, R332 and the R347.

Table 15-27 Proposed Grid Connection underground cabling route link, link length (km), potential diversion route, length of diversion route (km), additional trip length (km)

Underground Cabling Route Section	Length (kms)	Potential diversion route	Length of diversion route (kms)	Additional trip length (kms)
Off road at Proposed Wind Farm site	2.6	N/A	N/A	N/A
Section 1 – R332	2.3	N63, L6234, L2115, R332	13.2	10.9
Section 2 – N63	4.2	L6234, L2115, R332	11.3	7.1
Section 3 – L6234	3.3	L2115, R332, N63	12.2	8.9
Section 4 – L2115	1.1	L2127, L2118	2	0.9
Section 5 – L2127	0.1	L2127, L2118, L2115	3	2.9
Section 6 – L2125	3.0	L2127, L2115, L6234, N63, R347	16.7	13.7
Section 7 – R347	3.9	R347, R332, L2114, L2127, L2125	14.5	10.6
Section 8 – L6141	0.3	L6141, L2113, L2135, R332, R347	7	6.7
Off road section at Cloon Substation site	0.2	NA	NA	NA
Total	21.0			

For Sections 1 on the R332, 2 on the N63, and 7 on the R347, this will either result in traffic volumes on these roads being diverted onto some sections of lower standard local roads (shown in orange in Figure 15-6b), or via longer diversions onto roads of a similar standard (shown in red in Figure 15-6b). Prior to the construction of the Proposed Grid Connection, the final diversion routes that will be

used during the construction of the various sections of the cabling route will be discussed and agreed with Galway County Council.

For the diversion routes shown in Figure 15-6b, the temporary additional trip length incurred by drivers during the construction of the Proposed Grid Connection will range from a minimum of 0.9km to a maximum of 13.7km. It should also be noted that the length of the diversion routes shown for the various sections of the Proposed Grid Connection are the longest that may be incurred, measured from either end of the section being constructed, and that in practice, many drivers undertaking longer trips will divert onto other parallel routes further afield to avoid the closure, incurring shorter actual diversions.

It is estimated that the Proposed Grid Connection Route will take approximately 210 days, or approximately 10 months to construct.

With respect to the traffic volumes that will be generated during the construction of the Proposed Grid Connection Route, it is estimated that there will be approximately 14 daily return trips made by a truck transporting materials, and a further trip made by minibus to transport construction staff to and from the point of construction.

#### 6 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
  Wind Farm site. Liaison with the relevant local authorities including the roads sections of local
  authorities that the delivery routes traverse and An Garda Siochana, during the delivery phase
  of the large turbine vehicles, when an escort for all convoys will be required.
- Information to locals Locals in the area will be informed of any upcoming traffic related matters e.g. delivery of turbine components at night, or traffic diversions during the construction of the grid connection, 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 roads. A post construction survey will be carried out after works are completed. Where required the extent and timing of these surveys will be agreed with the local authority. This will include the implementation of temporary alterations to road network at critical junctions, as highlighted in Section 15.1.9 of the EIAR.
- Identification of delivery routes These routes will be agreed and adhered to by all contractors.
- Travel plan for construction workers to Proposed Wind Farm site— While the assessment
  above has assumed the worst case that construction workers will drive to the Proposed Wind
  Farm 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.
- Travel plan for construction workers to underground electric cabling route Due to the
  transient nature of the underground grid connection construction site which will generally be
  on a section of the public road, construction workers will be transported to and from the site
  by the construction company at the beginning and end of each shift.

- **Drivers conduct** All drivers will follow normal rules of the road and will receive toolbox talk regarding the delivery route and planned holding points prior to any deliveries.
- Standard permitted axial loads Will not be exceeded.
- Temporary traffic signs As part of the traffic management measures temporary traffic signs will be put in place at all key junctions, including the access junction on the R332 during the 18 month construction period. 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 the access junction on the R332 during the 9 days on which the concrete turbine foundations are poured and at the site access crossing locations on the L6506 and L6301 during all delivery days during the construction phase.
- 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.
- Re-instatement works All road surfaces and boundaries will be re-instated to predevelopment condition, as agreed with the local authority engineers. All works will be done in accordance with the Guidelines for the Opening, Backfilling and Reinstatement of Openings in Public Roads, DTToS, September 2015.
- 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 wheel washing
  facilities on Site and sweeping / cleaning of local roads as required.

It is confirmed that details for the Traffic Management Plan for the Proposed Project will be agreed with the Road Section of Galway County Council prior to construction and contact will be maintained with the Road and Traffic Section throughout the construction phase.

### APPENDIX A FIGURES FROM THE EIAR

Figure 15.1a	Site location and turbine delivery route
Figure 15.1b	Autotrack assessment location plan
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