



## **APPENDIX 14-2**

### **TRAFFIC MANAGEMENT PLAN**

## **1.14 Construction Traffic Management Plan**

### **1.14.1 Introduction**

This Traffic Management Plan (outline TMP) will be a key construction contract document, the implementation of which will reduce possible impacts which may occur during the construction of the proposed Glenard Wind Farm development. In the event planning permission is granted for the proposed development, the final TMP will address the requirements of any relevant planning conditions, including any additional mitigation measures which are conditioned.

The Project Supervisor Construction Stage when appointed, along with the turbine supplier will also review and update of the Traffic Management Plan.

### **1.14.2 Construction Phases**

The construction phase of the proposed development will run for between 12 - 18 months. Due to the size of the site, its general layout and the total number of turbines proposed, it is unlikely that the construction phase will require phasing. Therefore, the following sequence of construction activities are proposed:

- Construction of main road access and site entrances, including the proposed link roads and site access road, as described in Chapter 4 of the EIAR.
- Initial installation of on-site tracks and drainage.
- Installation of new access tracks and upgrade of existing.
- Development of the construction compound and any other temporary works.
- Construction of substation and control building.
- Preparation of crane hard standings.
- Construction of turbine foundations.
- Installation of internal site cabling within wind farm
- Installation of the grid connection cabling
- Wind Turbine erection
- Land reinstatement.

#### **1.14.2.1 Site Access Tracks**

The internal access tracks will provide the required access to all turbines and associated infrastructure. The new and proposed upgraded access tracks have been designed to provide a minimum 5 meter running width along the straight sections of track with wider sections proposed at bends where required. Passing bays will be installed to allow a mechanism for two-way traffic. Appropriate signage at the location of these passing bays as well as instruction on priority vehicles will be installed throughout the site. The running surface on the existing and proposed new access tracks will facilitate the delivery of abnormally sized loads.

Where upgrades of or adjacent to existing public road junctions as well as the provision of the construction access, road for turbine deliveries and other construction materials are to be completed, as outlined in Chapter 4 of the EIAR, the traffic management on the public road at these locations will be provided by the appointed contractor with the approval of the appropriate road's authority.

#### **1.14.2.2 Access to the Site from the Public Road Network**

The site will be accessed via a new access junction off the L-7131-1 Crockaheeny Road in the townland of Glenard. It is proposed that this site entrance will provide access for all vehicles during the construction and operational phases.

The delivery of all abnormally sized loads to the site will be from the point of arrival in the Port of Derry via the delivery route which turns right from Haw Road onto the Maydown Road just to the east of the port, and then continues to the site via the A2, followed by the A515 over the River Foyle. The route then travels north on the A2 Culmore Road out of the city on the west bank of the river / lough onto the R238. On reaching the village of Quigley's Point the route turns left onto the R240 heading in a northern direction for approximately 7 kms. At this point the abnormally sized turbine loads will turn left onto a new temporary link road approximately 0.4 kms long that will link the R240 with the L1731. The vehicles will then travel west on the L-1731 for approximately 6 kms where there is another short new link road proposed, before turning left onto the local L-7131-1 Crockaheeny Road where a new steel bridge crosses the River Crana. The abnormal loads will then travel east on the L-7131-1 Crockaheeny Road for approximately 0.8 kms to the location of a proposed junction that provides access to the site. The entrance to the proposed development site will be secured at the end of each working day with a gate.

The public roads on the turbine haul route as well as all other potential delivery routes will be subject to a confirmatory, condition survey prior to the commencement of any works at the proposed development site. This will include a structural integrity survey at all bridges and culverts which will be traversed by the grid connection cabling as well as the turbine delivery route.

#### **1.14.2.3 Turbine Components Delivery**

The deliveries of turbine components to the site will be made in convoys of approximately three to five vehicles at a time, and mostly at night when roads are quietest. Convoys will be accompanied by escorts at the front and rear operating a transient "stop and go" system. Although the turbine delivery vehicles are large, they will not prevent other road users or emergency vehicles passing, should the need arise. The delivery escort vehicles will ensure the turbine transport is carried out in a safe and efficient manner with minimal delay or inconvenience for other road users.

It is not anticipated that any section of the local road network will be closed during the transport of turbines, although there will be some delays to local traffic at pinch points. During these periods it may be necessary to operate local diversions for through traffic. All deliveries comprising abnormally large loads will be made outside the normal peak traffic periods to avoid disruption to work and school-related traffic.

Prior to the Traffic Management Plan being finalised, a full dry run of the transport operation along the proposed route will be completed using vehicles with attachments to simulate the dimensions of the wind turbine transportation vehicles. This dry run will inform the final traffic management plan. All turbine deliveries will be provided for in a transport management plan which will have to be prepared in advance of the construction stage, when the exact transport arrangements are known, delivery dates confirmed and escort proposals in place. Such a transport management plan is typically submitted to the Planning Authority for agreement in advance of any abnormal loads using the local roads, and will provide for all necessary safety measures, including a convoy and NI Police / Garda escort as required, off-peak turning/reversing movements and any necessary safety controls. The proposed turbine delivery route is shown in Figure 14.1 of the EIAR.

The delivery of the abnormally sized turbine components will be carried by a specialist haulage company who will complete a confirmatory trial run prior to delivery.

It will be the responsibility of the appointed haulage company to liaise with the relevant local authorities and PSNI / An Garda Síochána to secure the necessary permits. A system of public notification will also be required to provide residents with the intended delivery schedule of these abnormal loads. This information will be passed on by a leaflet drop, local engagement and/or the provision of the project website with updated notifications if deemed necessary at the time. This will form part of the continued community engagement effort as set out in Appendix 2-2 of the EIAR.

#### **1.14.2.4 Grid Connection Consents**

The proposed grid connection route will require a Road Opening License (ROL) prior to the commencement of any grid connection works on the public road.

#### **1.14.3 Traffic Management Plan**

A final Traffic Management Plan (TMP), incorporating all the mitigation measures set out in this TMP, will be prepared by the appointed contractor which will detail in respect of traffic management agreed with the roads authority and NI Police / 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 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 the County Council in advance of deliveries of turbine components to site. Liaison with the relevant local authorities and Transport Infrastructure Ireland (TII) will be carried out where required regarding requirements such as delivery timetabling. The programme will ensure that deliveries are scheduled in order to minimise the demand on the local network and minimise the pressure on the access to the site.

**Information to the local community** – Residents in the local area will be informed of any upcoming traffic related matters e.g. temporary lane/road closures (if required) or 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 authorities 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 development will be carried out prior to construction commencement to verify and 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 authority** - Liaison with the County Councils and NI Police / An Garda Síochána, will be carried out during the delivery phase of the abnormally sized turbine vehicles, when an escort for all convoys will be required. Once the surveys have been carried out and "prior to commencement" status of the relevant roads established, the Roads section will be informed of the relevant names and contact numbers for the Project Developer/Contractor Site Manager as well as the Site Environmental Manager.

**Implementation of temporary alterations to road network at critical locations** – At locations highlighted in Section 14.1.8. of the EIA. This includes the temporary works required on the turbine delivery from the Port of Derry, including the temporary works identified at Locations 1 to 6 identified in the EIA, the construction of the proposed link road between the R240 and the L1731 (Locations 7 to 8), the proposed link road at an existing bend on the L1731 (Location 9), and local road widening at various locations on the L1731 (Locations 10 to 13). In addition, in order to minimise the impact on the existing environment during turbine component deliveries the option of blade adaptor trailers will also be used where deemed practicable.

**Identification of delivery routes** – These routes are identified in Section 4.4 of Chapter 4 of the EIA and will be adhered to by all contractors.

**Travel plan for construction workers** – While the assessment set out in the EIAR assumes the worst case that construction workers will drive to the site, the construction company will be required to provide a travel plan for construction staff.

**Temporary traffic signs** – As part of the traffic management measures temporary traffic signs will be put in place at all key junctions, including all new junctions providing access to the site off the R280. All measures will be in accordance with the *“Traffic Signs Manual, Section 8 – Temporary Traffic Measures and Signs for Road Works”* (Department of Transport, Tourism and Sport (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 option to deliver the 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 wheel washing facilities on site and 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.

**Road Opening Licence** – Roads works associated with the grid connection cabling will be undertaken in line with the requirements of a road opening licence as agreed with Donegal County Council.

**Diversions and road closures** – reasonable access to residences, farms and businesses will be maintained at all times during any road closures associated with the cable works. The details of this will be agreed with the roads authority in advance of works taking place. The network of local roads in the area will be used for traffic diversions for local traffic in order to expedite the works and limit the duration of the impact owing to the cabling works.

**Trench Reinstatement** - Trenches on public roads, once backfilled, will be temporarily reinstated to the satisfaction of the roads authority. Following temporary reinstatement of trenches sections of public roads along which the cable route travels will receive a surface overlay subject to agreement with the roads authority.