



Freasdail Wind Farm Traffic Management Plan for Enabling Civil Engineering Works

Author: Scott Manning

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Prepared: Scott Manning

Signed Electronically: 20-Aug-2015

Approved: Paula Batchelor

Signed Electronically: 21-Aug-2015

Checked: Harry Carey
Neil Martin

Signed Electronically: 21-Aug-2015
20-Aug-2015

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1 INTRODUCTION & SCOPE

1.1 Introduction

The principal objective of this document is to provide details of the proposed traffic management arrangements during the Enabling Civil Engineering Works associated with the Freasdale Wind Farm (Planning Application Ref: 12/02150/PP and Planning Appeal Ref: PPA-130-2036). This will in turn satisfy the requirements detailed in the **Planning Condition 7(a)** to allow the enabling works to commence on site.

This report provides details of the proposed routes for the delivery of materials for construction of the new site entrance from the A83(T) and the initial 3km of access track leading to the main wind farm development area, including associated minor watercourse crossings and SuDS drainage features.

Under the Enabling Civil Engineering Works contract, no activities are being undertaken in respect of control building or substation construction, cable laying, wind turbine foundation construction, or wind turbine delivery or erection. A further version of the Freasdale Wind Farm Traffic Management Plan will be produced and submitted for approval to Argyll and Bute Council in advance of those works commencing in February / March 2016.

1.2 Description of the Site

The Freasdale project is being developed by RES Ltd (RES) and is an 11 turbine wind farm located approximately 10km south of the village of Tarbert in Argyll & Bute.

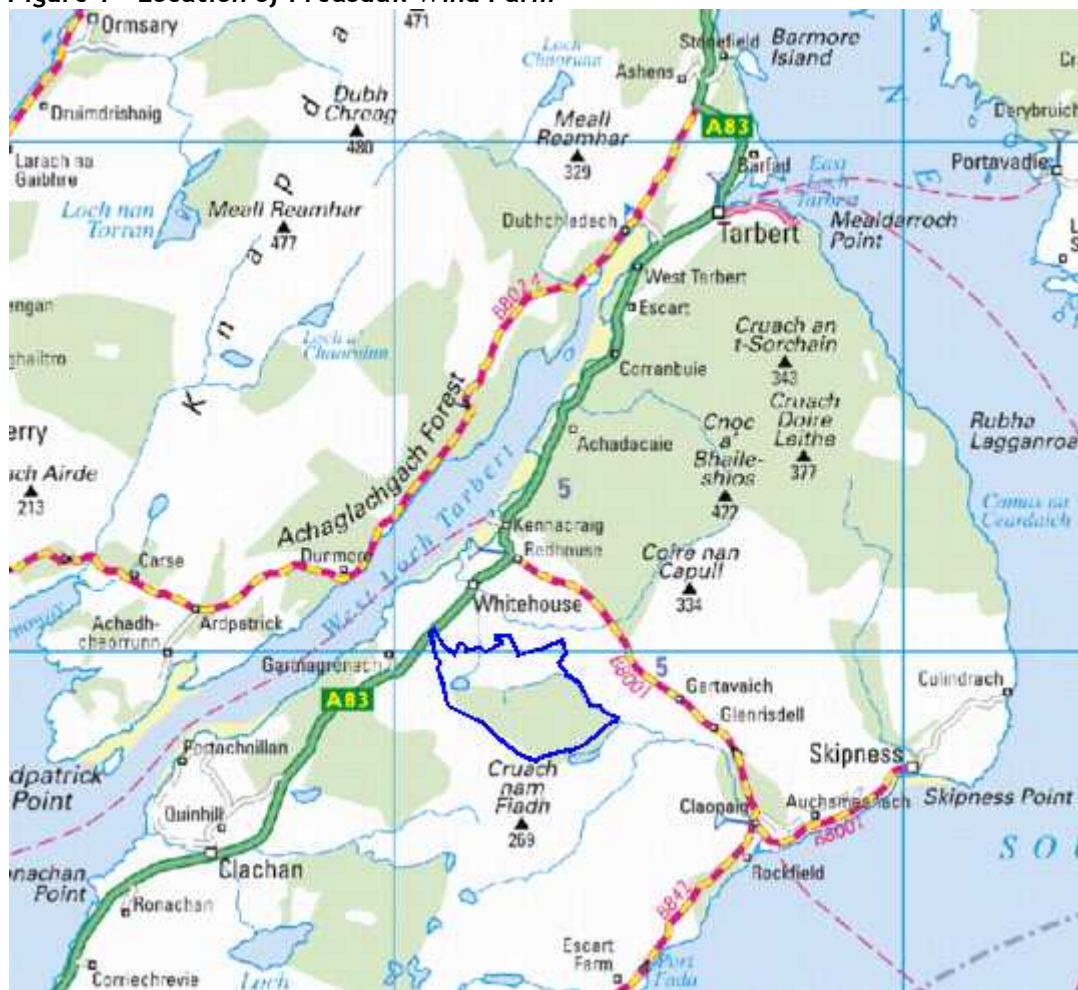
Access to the site will be provided via a new give-way priority junction from the A83 trunk road at 180795E, 660370N.

1.3 General Construction Methods

Due to limitations imposed by wind turbine suppliers with regards to track geometry, there is a requirement to carry out cut and fill operations within the site to ensure that access tracks are suitable for delivery of wind turbine components. Material extracted from within the footprint of the proposed access tracks and hardstands will, where possible, be graded and re-used as engineering fill in construction of the tracks themselves. This will reduce the volume of material imported to site and therefore reduce the impact of construction vehicles on the local road network. The final running surface of the tracks will be formed by imported Type 1 stone in accordance with the Manual of Contract Documents for Highway Works - Volume 1 - Specification for Highway Works 2014.

Any material arising from excavations which is found to be unsuitable for use as engineering fill will be used in the reinstatement of working areas, track verges, drainage swales, etc. as detailed in the Freasdale Wind Farm Construction and Environmental Management Plan (CEMP).

Figure 1 - Location of Freasdail Wind Farm



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2 ENABLING CIVIL ENGINEERING WORKS

2.1 *Environmental Statement*

Chapter 14 of the Environmental Statement (submitted to the Planning Authority in October 2012) details the estimated abnormal and normal construction traffic generation associated with the Freasdail Wind Farm development, and considers its effects on the surrounding highway network.

An assessment of the estimated construction traffic, with due consideration of baseline vehicle numbers using the A83 trunk road in the vicinity of the site, concluded that the construction of Freasdail Wind Farm would have a negligible effect on other road users and residents within the surrounding areas.

Traffic generation associated with the initial Civil Engineering Enabling Works element of the wind farm were assessed as part of the above process. However, with the opportunity to re-use some of the excavated material in the engineering fill required for the access road, the final total volume of imported materials, and hence traffic movements on the trunk and local road network will be reduced.

2.2 *Scope of Works*

Operations to be undertaken as part of the Enabling Civil Engineering Works are summarised below:

2.2.1 Site Entrance

The site entrance is off the A83 trunk road and takes the form of a simple give-way priority junction. A plan showing the proposed arrangement is contained within Appendix A.

Construction of the new site entrance will be carried out under Section 56 agreement with Transport Scotland. Discussions are already underway with BEAR Scotland who operate the trunk road on behalf of Transport Scotland and the works shall be carried out by a Contractor pre-qualified by BEAR to undertake such works.

Traffic management and signage for the construction of the site entrance will be designed and specified by the contractor undertaking the site entrance works and be in accordance with the Department of Transport Traffic Signs Manual Chapter 8 - Traffic Safety Measures and Signs for Road Works and Temporary Situations and the New Roads and Street Works Act 1991. The traffic management provision shall be approved by Transport Scotland as part of the Section 56 permitting procedure.

2.2.2 Track Construction

On-site tracks will be constructed from site won and imported stone, with the addition of geogrid or other geotechnical membranes as specified by the design. The majority of deliveries at this stage would be by HGV tipper lorries. Plant required for the works will be delivered on low loaders.

2.2.3 Forestry Extraction

Current land use in some areas within the wind farm site boundary is commercial forestry plantation. To allow the wind farm to be developed, some 187 ha of Forest will require to be cleared or kept clear where areas have already been felled.

The merchantable timber shall be felled and transported from site in accordance with general forestry industry best practice by a specialist contractor. Some of the immature forest cover that requires to be cleared will be chipped on site and removed by a specialist contractor for use as a biomass fuel.

2.3 Traffic Generation

2.3.1 Staff & Miscellaneous Equipment

The daily commute of workers in cars, vans and small trucks will form a proportion of the site traffic.

Efforts will be made to minimise the commuter traffic by encouraging site workers to use mini-buses or car sharing where practical. The detail of these travel plans will be dependent on the contractor(s) undertaking work at the different stages of construction and where their staff are based. As a result this information is not available at this time.

Occasional deliveries of small plant or tools may also take place with vans and other light goods vehicles.

Site offices, welfare facilities and equipment storage containers will be delivered on flat beds and low loaders, and will be maintained on an ad hoc basis.

Regular deliveries of fuel for the site plant will be made using a mini tanker.

2.3.2 Estimated Traffic Volumes

Table 1 summarises the likely traffic mix to be generated by the wind farm project during the construction phase. For each given type of vehicle, an estimate is given of the total number of trips to be made throughout the construction phase, and the number of trips that might conceivably be made in any one day by that type of vehicle. The figures are based on the current best available source, and may be therefore subject to some changes due to later modifications to design and / or construction methodology, or in order to comply with Health & Safety requirements.

Vehicle	Approximate No of trips for project duration	Estimated No of daily trips	Approximate Period of Delivery (assumes 3 month programme)
Low loader	6	6	I
Tipper trucks	600	15	I-III
Flat bed / Hiab	4	4	I
Timber transport	150	12	I-III
Skip lorry	6	1	I-III
Small tanker	6	1	I-III
TOTAL HGVs:	772		
Vans, cars	480	8	I-III
Light goods van	36	1	I-III
TOTAL VEHICLES:	1288		

Table 1: Traffic Generation Breakdown

The estimated total number of HGV movements is in the order of 772 over the enabling works construction period of 3 months. The number of daily deliveries will vary throughout the construction of the wind farm depending on the character of works that will be taking place on site.

As indicated previously, there is the potential to ‘win’ a significant volume of stone during construction of the initial length of access track covered by these enabling works and this is reflected in the numbers presented in Table 1.

3 TRANSPORT ARRANGEMENTS

3.1 General Deliveries

3.1.1 Delivery Times

Movement of heavy goods vehicles onto and off of the site itself during the Enabling Civil Engineering Works shall be restricted to between 07:00 - 19:00, Monday to Saturday in accordance with **Planning Condition 15**.

3.1.2 Pollution Control

The following measures will be implemented to minimise pollution due to construction traffic:

- all vehicles transporting soil and other dusty materials will be fully sheeted;
- adequate sheeting of vehicles carrying waste materials;
- a dry wheel washing facility will be provided at the exit from the site;

3.2 Notifications to Other Stakeholders

3.2.1 Emergency Services

The Police, Fire and Ambulance service will be given written notice of the construction works and kept fully informed throughout the delivery period.

3.2.2 Local Residents

RES will engage with the local community councils and residents prior to construction starting. RES will ensure that local residents and community representatives are kept fully informed of the all the road mitigation and traffic management requires for the development.

3.2.3 Local Services

RES will make every effort to ensure disruption caused by deliveries is avoided. Services of particular relevance include, but are not limited to;

- Local schools and nurseries.
- Local buses, including school buses.
- Local doctors, surgeries or health providers.

Information will be provided to make service providers aware of the programme of planned works.

3.2.4 Planned Engineering Works

RES will work with BEAR and the local Road Service to identify any planned engineering works on the A83(T) and local roads in and around Freasdale.

3.2.5 School run and Community Events

RES will identify any conflicts with school and nursery drop off and pick up locations and times. Construction deliveries will, where possible, be scheduled to avoid these busy periods as well as scheduled local authority bin collections or where possible be rerouted to avoid potential pinch points.

Planned and notified community events will also be considered by RES when scheduling/routing deliveries.

3.2.6 Miscellaneous

Contractor's Information Boards shall be posted at the site entrance.

3.3 Road Condition

Any damage arising that is directly attributable to these works will be reviewed with ABC and BEAR and appropriate remediation agreed.

4 DELIVERY ROUTES

Given that the site entrance is off the A83 trunk road, all vehicles approaching site will approach either from the north or south along this road.

The primary construction material being transported to site will be stone for track construction and this will be sourced from a local quarry; most likely from Furnace which is approximately 50km to the north along the A83. Should this quarry be unable to service the project, an alternative quarry in the local area will be used.

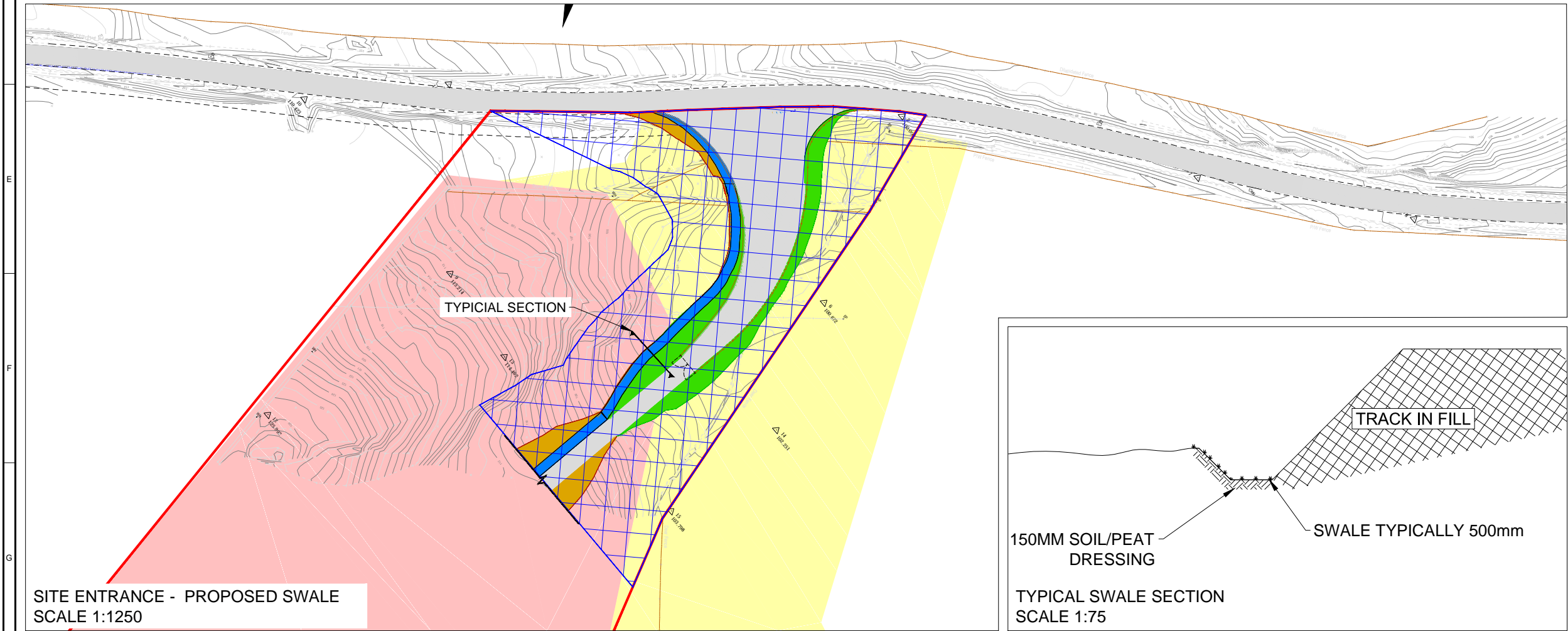
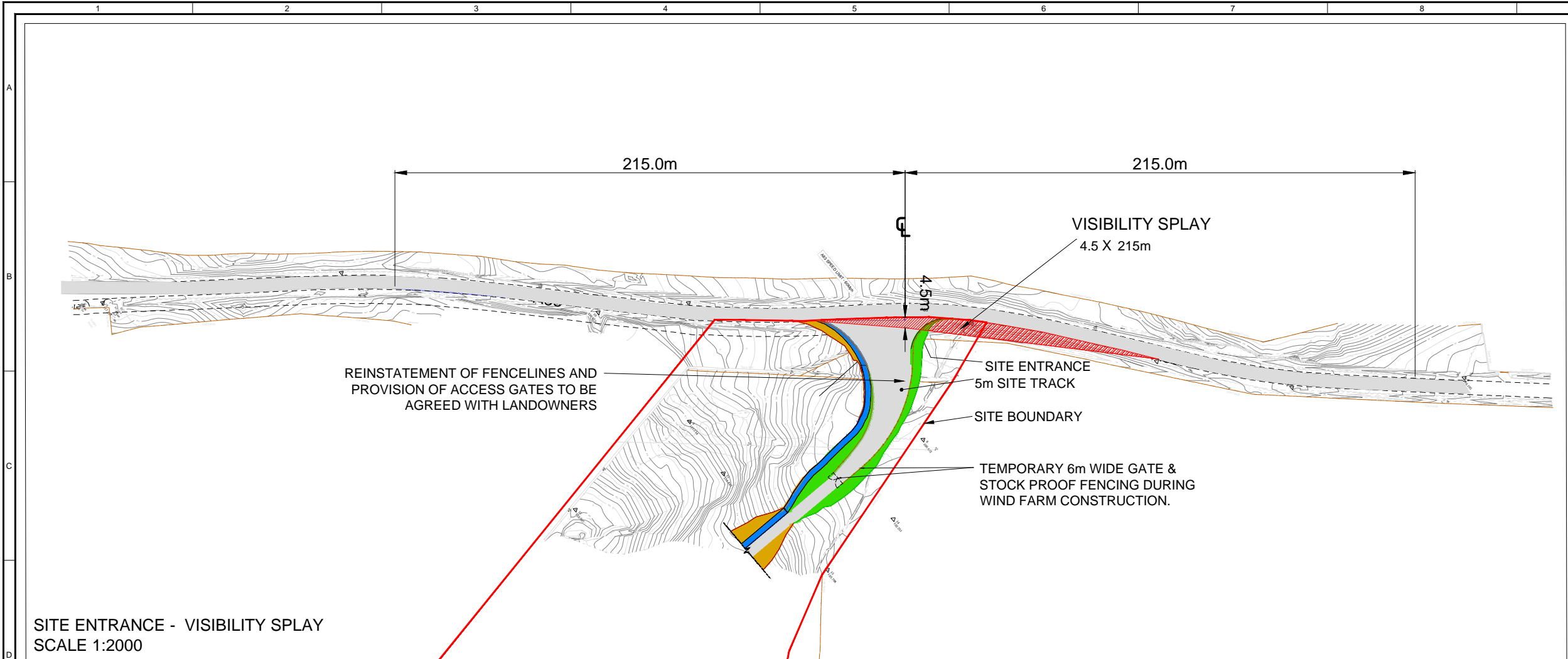
Timber being extracted from the site will, like much of the commercial product on the Kintyre peninsula, be transported to the mill by boat. There are regular shipments from both Campbeltown and Adrishig, both of which are served by the A83 trunk road. Either of these ports would likely be adopted for the Freasdale project, but this will be dictated by the contractor commissioned to carry out the forestry works and the routing / availability of ships to transport the timber.

4.1 Other Arrangements

4.1.1 Temporary Road Signing

Temporary road signing informing drivers about the ongoing construction on site, as well as routing works traffic to and from the development, will be installed in the vicinity of the site. All new signage will be in accordance with the Traffic Sign Regulations and General Direction (2002) and later amendments.

APPENDIX A - DRAWINGS



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KEY

- SITE BOUNDARY
- TRACK CONSTRUCTION
- PROPOSED FILL SECTION
- PROPOSED CUT SECTION
- PROPOSED DRAINAGE SWALE
- POTENTIAL EXTENT OF CLEARANCE FOR TRACK CONSTRUCTION (ASSUMED CONSTRUCTION CORRIDOR WITH NO ALLOWANCE FOR MICROSITING)
- DENSE SCRUB AREA
- AREA WITHIN CONSTRUCTION CORRIDOR = 1871m²
- MIXED PLANTATION AREA
- AREA WITHIN CONSTRUCTION CORRIDOR = 4098m²



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PURPOSE PLANNING

SCALE AS SHOWN @ A3 ORIGINAL PLOT SIZE A3

PROJECT TITLE
FREASDAIL WIND FARM

DRAWING TITLE
DETAILED SITE ENTRANCE LAYOUT

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