GARRANE GREEN ENERGY LTD.

GARRANE GREEN ENERGY PROJECT

APPENDIX 17.3 TURBINE DELIVERY HAUL ROUTE ASSESSMENT – PORT OF FOYNES

AUGUST 2025



Jennings O'Donovan & Partners Limited,

Consulting Engineers, Finisklin Business Park, Sligo.

Tel.: 071 9161416 Fax: 071 9161080

email: info@jodireland.com







ENGINEERS IRELAND

JENNINGS O'DONOVAN & PARTNERS LIMITED

Project, Civil and Structural Consulting Engineers, FINISKLIN BUSINESS PARK, SLIGO. IRELAND.

Telephone (071) 9161416 (071) 9161080 Fax

Email info@jodireland.com Web Site www.jodireland.com



DOCUMENT APPROVAL

PROJECT	Garrane Green Energy Project	
CLIENT / JOB NO	Garrane Green Energy Ltd.	6839
DOCUMENT TITLE	Turbine Delivery Haul Route Assessment – Port of Foynes	

Prepared by

Reviewed/Approved by

Document Final	Name John Doogan	Name David Kiely
Date	Signature	Signature
August 2025	Shift	Land Kiely

This document, and information or advice which it contains, is provided by JENNINGS O'DONOVAN & PARTNERS LIMITED solely for internal use and reliance by its Client in performance of JENNINGS O'DONOVAN & PARTNERS LIMITED's duties and liabilities under its contract with the Client. Any advice, opinions, or recommendations within this document should be read and relied upon only in the context of the document as a whole. The advice and opinions in this document are based upon the information made available to JENNINGS O'DONOVAN & PARTNERS LIMITED at the date of this document and on current standards, codes, technology and construction practices as at the date of this document. Following final delivery of this document to the LIMITED at the date of this document and on current standards, codes, technology and construction practices as at the date of this document. Following final delivery of this document to the Client, JENNINGS O'DONOVAN & PARTNERS LIMITED will have no further obligations or duty to advise the Client on any matters, including development affecting the information or advice provided in this document. This document has been prepared by JENNINGS O'DONOVAN & PARTNERS LIMITED in their professional capacity as Consulting Engineers. The contents of the document does not, in any way, purport to include any manner of legal advice or opinion. This document is prepared in accordance with the terms and conditions of JENNINGS O'DONOVAN & PARTNERS LIMITED contract with the Client. Regard should be had to those terms and conditions when considering and/or placing any reliance on this document. Should the Client wish to release this document to a Third Party for that party's reliance, JENNINGS O'DONOVAN & PARTNERS LIMITED may, at its discretion, agree to such release provided that:

(a) JENNINGS O'DONOVAN & PARTNERS LIMITED written agreement is obtained prior to such release, and

(a) (b)

By release of the document to the Third Party, that Third Party does not acquire any rights, contractual or otherwise, whatsoever against JENNINGS O'DONOVAN & PARTNERS LIMITED and JENNINGS O'DONOVAN & PARTNERS LIMITED, accordingly, assume no duties, liabilities or obligations to that Third Party, and JENNINGS O'DONOVAN & PARTNERS LIMITED accepts no responsibility for any loss or damage incurred by the Client or for any conflict of JENNINGS O'DONOVAN & PARTNERS LIMITED accepts no responsibility for any loss or damage incurred by the Client or for any conflict of JENNINGS O'DONOVAN & PARTNERS LIMITED's interests arising out of the Client's release of this document to the Third Party. (c)

6839/405/JD

GARRANE GREEN ENERGY PROJECT TURBINE DELIVERY HAUL ROUTE ASSESSMENT – PORT OF FOYNES

CONTENTS

1.	INTRODUCTION	. 1
	Brief	
	Objectives	
	Statement of Authority	
	Design References / Standards	
	PROPOSED DEVELOPMENT	
	Site Location	
	HAUL ROUTE ASSESSMENT	
	N69 / L6188 Junction at Foynes Port	
3.2	N69 Ferrybridge	, 4
3.3	N69 Roundabout at Clarina (Reverse View)	.5
3.4	N69 / N18 /R510 Dock Road West Roundabout	. 6
3.5	N69 / N18 /R510 Dock Road East Roundabout	.7
3.6	N18 Junction 1 – M20 Slip Road	. 8
3.7	M20 Junction 5 – N20 Exit	,9
3.8	N20 Site Entrance	10

1. INTRODUCTION

1.1 Brief

Jennings O'Donovan & Partners Limited has been appointed by Greensource, to prepare a Preliminary haul route assessment of the Turbine Delivery Route (TDR) for the proposed Garrane Wind Farm. The haul route assessment will assess the road network between the Port of Foynes and the proposed wind farm site entrance to the north of Charleville on the N20 for the transportation of turbine components using abnormal load vehicles.

1.2 Objectives

The TDR will identify locations on the haul route which will require modifications for the transportation of turbine components using abnormal load vehicles.

1.3 Statement of Authority

This report has been prepared by John Doogan of Jennings O'Donovan & Partners Limited, Finisklin Sligo. Established in Sligo in 1950 Jennings O'Donovan & Partners Limited is a Clean Tech Company providing consulting engineering services in the areas of road design, renewable energy, civil and structural engineering, water supply, wastewater collection and treatment, environmental resource management and impact assessment and in the area of industrial and commercial development.

1.4 Design References / Standards

The TDR assessment has been carried out using AutoTRACK Analysis, Bing mapping in AutoCAD, Google Maps and topographical survey information (N20 site entrance). The analysis has been carried out using a blade delivery trailer loaded with a 73.940m long blade and a 33m long tower. The assessment is based on a turbine model with a 150m rotor diameter.

2. PROPOSED DEVELOPMENT

2.1 Site Location

The location of the proposed haul route from Foynes Port to the wind farm development is shown in **Figure 1.**

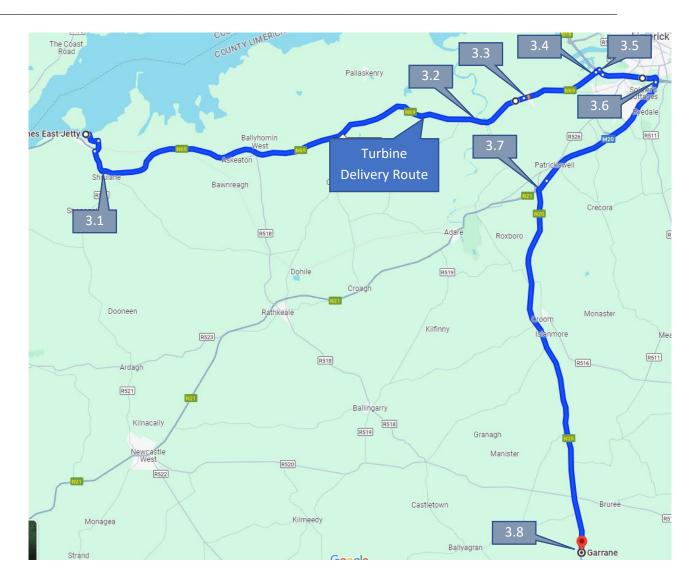


Figure 1 – Turbine Delivery Route

3. HAUL ROUTE ASSESSMENT

3.1 N69 / L6188 Junction at Foynes Port





Existing boundary to be set back / Lowered to allow load oversail.

Verge strengthening to withstand wheel loading on inside of bend.

Tree trimming for blade oversail

Temporary removal / relocation of signs, street furniture and lighting columns at junction

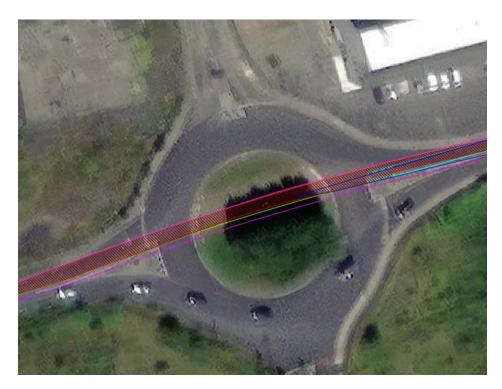
3.2 N69 Ferrybridge



Vertical alignment of bridge to be checked during trial run.

3.3 N69 Roundabout at Clarina (Reverse View)

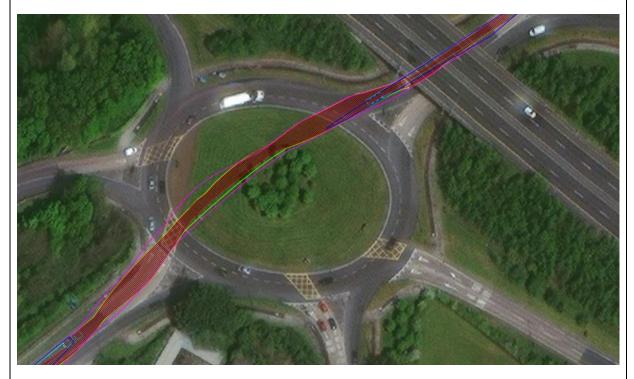




Over-run to be instated through roundabout central island to withstand wheel loading from abnormal load vehicles. This has been utilised by other renewable energy projects and is already constructed.

3.4 N69 / N18 /R510 Dock Road West Roundabout





Over-run to be constructed through roundabout central island to withstand wheel loading from abnormal load vehicles.

Tree trimming for blade oversail

Temporary removal / relocation of signs, street furniture and lighting columns at junction

3.5 N69 / N18 /R510 Dock Road East Roundabout



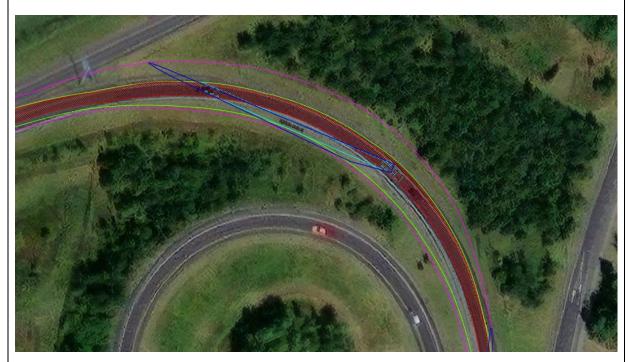


Temporary removal / relocation of signs, street furniture and lighting columns at junction. Modifications to roundabout central island for blade oversail

Tree trimming for blade oversail

3.6 N18 Junction 1 – M20 Slip Road





Temporary removal / relocation of signs, street furniture and lighting columns for blade oversail. Tree trimming for blade oversail.

3.7 **M20 Junction 5 – N20 Exit**





Temporary removal / relocation of signs and street furniture for blade oversail. Tree trimming for blade oversail.

3.8 N20 Site Entrance





New site entrance constructed to accommodate the swept path of abnormal vehicles. Removal of vegetation from N20 verges.

Tree trimming for blade oversail.