

Appendix A10.2 Vessel Management Plan



Greater Dublin Drainage

EIAR Chapter 10: Biodiversity (Marine Ornithology)

Appendix A10.2

Vessel Management Plan

23 May 2018



Project Number: SEC7909

RPS

Belford House, 3rd Floor,
59 Belford Road,
Edinburgh,
EH4 3DE

Tel: 0131 555 5011
Fax: 0131 555 4911
Email: rob.iredale@rpsgroup.com

QUALITY MANAGEMENT

Prepared by:	Name:	Dr Rob Iredale	Title:	Principal Ornithologist
	Signature:			
Authorised by:	Name:	Dr Simon Zisman	Title:	Senior Director
	Signature:			
Current Status:	Final			
Issue Date:	23 May 2018	Revision Number:	20180523_F1	
		Revision Notes:	-	
Project File Path:	W:\7909SEC - RPS Belfast, WW EIS NIS Ornithology\Technical\Reports\EIS\2017_12_05_VMP\2017_12_05_GDD_VMP_dv5.docx			

This report has been prepared within the RPS Planning and Development Quality Management System to British Standard EN ISO 9001 : 2008

COPYRIGHT © RPS

REPORT TEMPLATE

TYPE:	Planning
ISSUE DATE:	18 May 2011
REVISION NUMBER:	1
REVISION DATE:	26 April 2012

CONTENTS

1.	VESSEL REPRESENTATIVE SIGNATURE PAGE.....	1
2.	INTRODUCTION.....	2
	Background	2
	Purpose and Structure of Document.....	2
3.	VMP DETAILS	3
	What Does the VMP Entail?	3
	Who Does the VMP Apply to?	3
	When Does the VMP Apply?	3
	Where Does the VMP Apply?	3
	How is the VMP Implemented?.....	4
	Why Does the VMP Need to be Implemented?	4
	Introduction	5
	Procedure.....	5

FIGURES

Figure 1 Vessel management restrictions

Figure 2 Vessel management restrictions

2. INTRODUCTION

Background

- 2.1 Chapter 10, Marine Ornithology, of the Environmental Impact Assessment Report (EIAR) for the Greater Dublin Drainage project (GDD; “the project”) has assessed the potential for impacts on marine birds during the construction and operation of the project.
- 2.2 During the breeding season (April to August), high numbers of birds are present in the vicinity of the proposed subsea pipeline route between Velvet Strand and Ireland’s Eye, where there is a large seabird colony on the cliffs. The island and surrounding waters are designated as a Special Protection Area (SPA), which means that it is one of Ireland’s most important sites for seabirds. No activity that would result in adverse effect on site integrity can be permitted. This includes the construction and operation of the project and the operation of vessels associated with it. The “site” applies to the nests of qualifying bird species on the cliffs, and to qualifying species that are using the sea for foraging, loafing and other activities.
- 2.3 A chart showing the Ireland’s Eye SPA boundary with reference to the project is presented in Figure 1.
- 2.4 In the EIAR, it was identified that the production of a suitable vessel management plan (VMP) would serve two purposes with respect to the impact assessment for the construction of the project:
- Increase in confidence of prediction of the Negligible impact significance on the seabird colony of Ireland’s Eye during the April to August breeding season (i.e. adult birds and chicks at their nest sites), by providing clear instructions to vessels regarding the SPA location to help them avoid approaching it.
 - Reduction in the impact significance of flightless auk chicks (generally guillemot or razorbill) attempting to leave the area along with adults at the end of the breeding season, by providing an ornithological watching brief, and clear protocol applicable only at this time of year.

Purpose and Structure of Document

- 2.5 Chapter 3 of this document details the following aspects of the VMP:
- What it entails;
 - Who it applies to;
 - When it applies to them;
 - Where it applies;
 - How it is administered, and by whom; and
 - Why it needs to be implemented.
- 2.6 Annex 1 provides a version of this information which is designed to be quickly referred to by those responsible for controlling vessels operating in support of the project.
- 2.7 Whilst they should read the details of the VMP to ensure it is fully understood, it is envisaged that Annex 1 will be the ‘operational’ section of the VMP that should be referred to by vessel operators when working on the project.

3. VMP DETAILS

What Does the VMP Entail?

- 3.1 The VMP contains two conditions, both of which must be met.
- 3.2 Condition A requires that all vessels associated with the project do not unnecessarily approach, and never cross the boundary of the Ireland's Eye SPA when working on the project, unless there is a risk to human safety in not doing so. The SPA boundary is shown on Figure 2 along with a box. The outline of this box represents the boundary of the exclusion area.
- 3.3 Condition B requires that between July and August, a bird observer will be positioned either on Ireland's Eye or a vessel to observe the distribution of flightless, rafting auks on the water that are attempting to leave the colony at the end of the breeding season. The direction that these birds travel in when on the water is heavily influenced by local weather conditions. The observer will be in communication with all of the vessels onsite and possesses the authority to instruct them. If it is judged that flightless birds are drifting towards vessels working on the project, the observer has the authority to request via the Marine Co-ordinator that boats leave the area as soon as it is safe for them to do so. Vessels will be expected to move in a north-westerly direction unless otherwise instructed. Vessels can return to their previous work areas when an "all clear" has been given by the bird observer (via the Marine Co-ordinator).

Who Does the VMP Apply to?

- 3.4 The VMP applies to any vessel conducting any operations concerned with the construction of the project. Vessels working closer to Ireland's Eye are more likely to have to consider the VMP in their day to day activities.
- 3.5 A nominated representative for each project vessel must sign the table in Section 1 once they have read and understood the VMP, and agreed to the conditions above the table. A copy of the VMP must be carried by each vessel.

When Does the VMP Apply?

- 3.6 Condition A of the VMP applies throughout the construction phase of the project, at all times of day, and all times of year.
- 3.7 Condition B of the VMP applies at all times of day between the dates 8th to 31st July inclusive.

Where Does the VMP Apply?

- 3.8 Condition A of the VMP relates specifically to the boundary of the Ireland's Eye SPA. This location in relation to the subsea section of the project is provided in Figure 1. Regardless of where vessels are working, all vessels associated with the project should be given a copy of this VMP.
- 3.9 Condition B of the VMP does not refer to any specific boundaries, but is more likely to apply to vessels working on the marine diffuser section of the project where the subsea pipeline terminates. The likelihood of flightless auks encountering vessels will generally decrease the further towards the coast of the mainland a vessel is. Nevertheless, as with Condition A, all vessels associated with the project should be given a copy of this plan.

How is the VMP Implemented?

- 3.10 The contractor will be responsible for ensuring that the conditions of the VMP are met. Any site induction for vessels will include information on the VMP, and a copy of the plan must be read and signed by a representative from each vessel. A copy of the VMP must be carried by each vessel.
- 3.11 Where possible, the position of vessels undertaking work will be routinely reviewed to ensure that vessels working under the VMP are compliant.

Why Does the VMP Need to be Implemented?

- 3.12 Ireland's Eye, and the area of sea which surrounds it, is an SPA. This means that it is one of Ireland's most important sites for seabirds and is subject to high levels of environmental protection.
- 3.13 No activity that would result in adverse effect on site integrity can be permitted. This includes the construction and operation of the project and the operation of vessels associated with it. Measures are required to ensure the vessels operating as part of the construction of the project are aware of the SPA boundary location, and do not cross it, or approach it unnecessarily. This is the first objective of the VMP.
- 3.14 The protection afforded by SPA status applies to the nests of qualifying bird species on the cliffs, the waters around Ireland's Eye which form part of the SPA, and to qualifying species that are using the sea (both inside and outside the SPA boundary) for foraging, loafing and other activities.
- 3.15 Most of the birds that are part of the SPA population use areas of sea beyond the SPA boundary. However, they will not be substantially impacted by the construction of the project, as they are mobile and can use areas of sea not occupied by vessels associated with the project. However, certain elements of the bird assemblage are more sensitive. This is because their offspring, which are hatched on rock ledges on the cliffs of Ireland's Eye, are flightless when leaving the nest. When they drop into the sea and try to leave the area at the end of the breeding season, they and the adult that accompanies them are especially sensitive to vessel disturbance. The second objective of the VMP is to reduce the risk of such issues occurring. This only occurs in a period of several weeks from 8th to 31st July each year, so this is the only time at which this part of the VMP will apply.

ANNEX 1: GREATER DUBLIN DRAINAGE: VMP

Introduction

During construction of the Greater Dublin Drainage (GDD), a Vessel Management Plan (VMP) must be adhered to.

The purpose of the VMP is twofold:

1. To avoid all vessels associated with the project unnecessarily approaching or crossing the boundary of the Ireland's Eye Special Protection Area (SPA) at all times.
2. To protect flightless rafting auks originating from the SPA in July and August. Particular winds and currents can cause these flightless auks to drift towards GDD working areas. A procedure is required to ensure their safety, and to avoid disturbance and collision with employed vessels.

The Ireland's Eye SPA is located in close proximity to the GDD subsea section and diffuser, and the accompanying chart shows the location. This memo outlines the protocol and its implementation at GDD.

Procedure

Marine Coordination

The Marine Co-ordinator will ensure that every vessel associated with the project is acquainted with the VMP. This is ensured by incorporating the below procedure in the Masters' induction and in the Marine Coordination Procedure which is handed to every vessel working on the project.

The Marine Co-ordinator will periodically ensure that vessels continue to understand and adhere to the VMP. Point 1 of the VMP is relevant at all times.

During July and August, the Marine Co-ordinator will ensure added awareness of the VMP procedure, particularly point 2, by incorporating a general reminder of the rafting Auk procedures in the coordination meetings held at site.

In addition, a bird observer will be appointed by the contractor. They will be on site providing a watching brief during this time. These observations will occur from Ireland's Eye at all times of operation between the following dates: 8th July to 31st July. Should the surveyor identify groups of auks drifting towards the vessel working area the Marine Co-ordinator would be informed and vessels may be requested to stand down from the working area until such time that the birds have left.

If currents or winds for several days have come from a south-easterly direction, extra attention to the possibility of rafting auks must be highlighted on the daily coordination meetings.

Upon receipt of a rafting auk sighting (from either vessels or the dedicated observer) the Marine Co-ordinator must inform all vessels on site immediately and remind vessels to follow the procedure for such an event.

The Marine Co-ordinator will keep all vessels up to date with sightings of rafting auks.

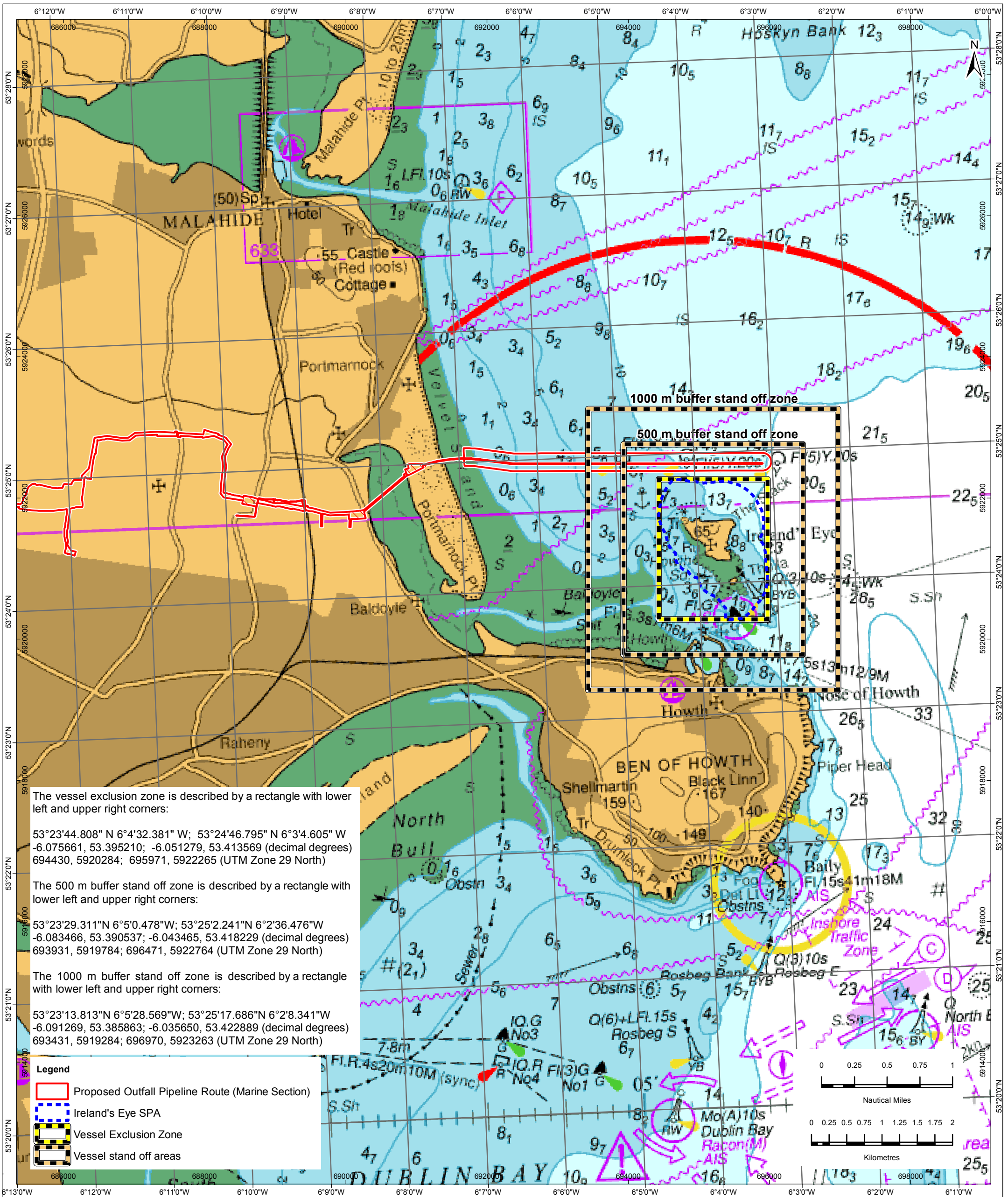
Vessels

If rafting auks are sighted within or close to the WMR wind farm area all vessels are obliged to:

- Immediately report the sighting to the Marine Coordination with exact position of sighting
- When within 1000m of Ireland's reduce speed to less 10 knots
- If working within 500m of sighting vacate this area as soon as it is safe to do so to at least 1000m. Leave the area in north-westerly direction unless other instructed by Marine Coordination
- Keep extra lookout for rafting auks and report to the Marine Coordination immediately if sighted

FIGURES

Figure 1 Vessel management restrictions
Figure 2 Vessel management restrictions



The vessel exclusion zone is described by a rectangle with lower left and upper right corners:

53°23'44.808" N 6°4'32.381" W; 53°24'46.795" N 6°3'4.605" W
 -6.075661, 53.395210; -6.051279, 53.413569 (decimal degrees)
 694430, 5920284; 695971, 5922265 (UTM Zone 29 North)

The 500 m buffer stand off zone is described by a rectangle with lower left and upper right corners:

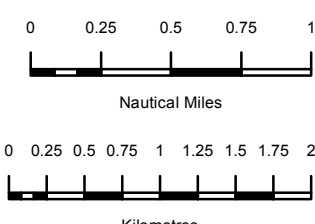
53°23'29.311" N 6°5'0.478" W; 53°25'2.241" N 6°2'36.476" W
 -6.083466, 53.390537; -6.043465, 53.418229 (decimal degrees)
 693931, 5919784; 696471, 5922764 (UTM Zone 29 North)

The 1000 m buffer stand off zone is described by a rectangle with lower left and upper right corners:

53°23'13.813" N 6°5'28.569" W; 53°25'17.686" N 6°2'8.341" W
 -6.091269, 53.385863; -6.035650, 53.422889 (decimal degrees)
 693431, 5919284; 696970, 5923263 (UTM Zone 29 North)

Legend

- Proposed Outfall Pipeline Route (Marine Section)
- Ireland's Eye SPA
- Vessel Exclusion Zone
- Vessel stand off areas



Project: Greater Dublin Drainage Project

Drawing Title: Figure 1 Vessel management restrictions



Rev.	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
a	26/02/18	Stand off zone added	CH	Draft	Draft	Draft

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, GNCC, © OpenStreetMap contributors, and the GIS User Community
 © Crown Copyright, 2017. All rights reserved. License No. EKEMS451807. Not to be used for Navigation.
 Coordinate system: UTM 29 N

Drawing Status: **Draft**

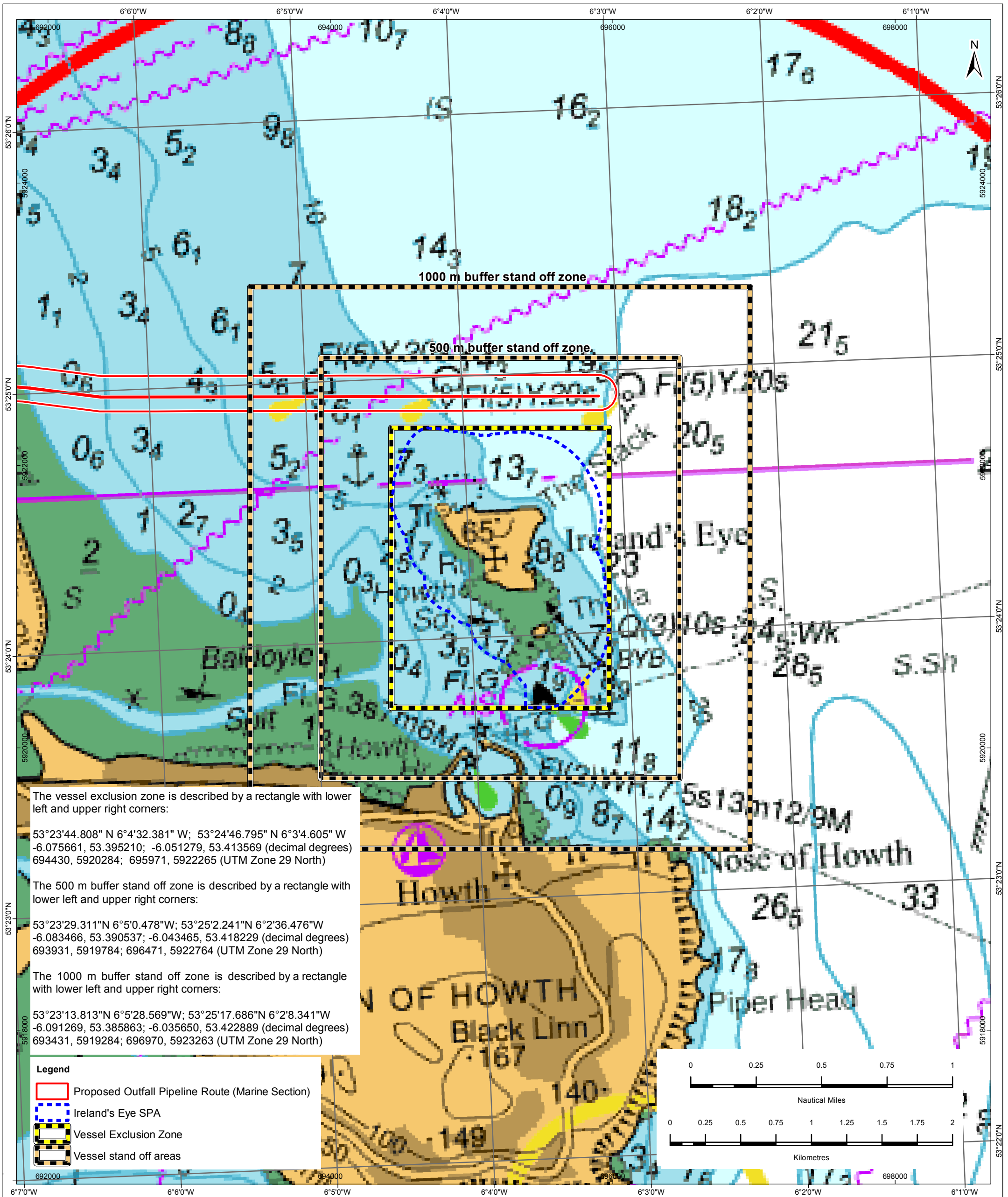
Scale @ A3: 1:50,000

Job No.: 32102902

Drawing No.: 32102902-XXXX

DO NOT SCALE

This drawing is not to be used in whole or in part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.



The vessel exclusion zone is described by a rectangle with lower left and upper right corners:

53°23'44.808" N 6°4'32.381" W; 53°24'46.795" N 6°3'4.605" W
 -6.075661, 53.395210; -6.051279, 53.413569 (decimal degrees)
 694430, 5920284; 695971, 5922265 (UTM Zone 29 North)





The 500 m buffer stand off zone is described by a rectangle with lower left and upper right corners:

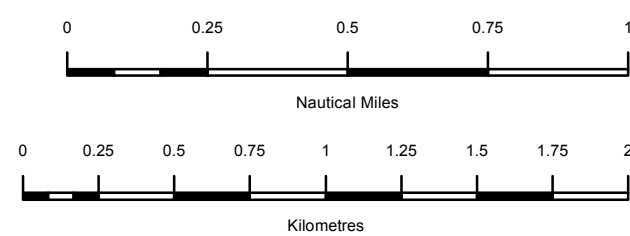

53°23'29.311" N 6°5'0.478" W; 53°25'2.241" N 6°2'36.476" W
 -6.083466, 53.390537; -6.043465, 53.418229 (decimal degrees)
 693931, 5919784; 696471, 5922764 (UTM Zone 29 North)

The 1000 m buffer stand off zone is described by a rectangle with lower left and upper right corners:

53°23'13.813" N 6°5'28.569" W; 53°25'17.686" N 6°2'8.341" W
 -6.091269, 53.385863; -6.035650, 53.422889 (decimal degrees)
 693431, 5919284; 696970, 5923263 (UTM Zone 29 North)

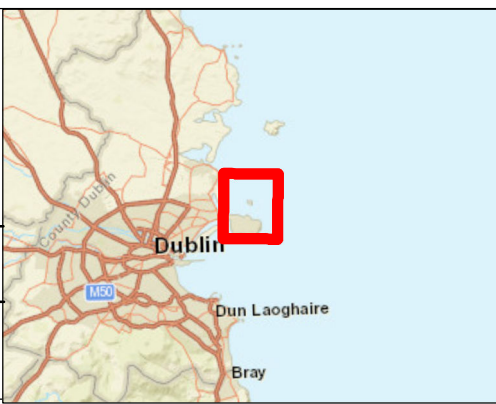
Legend

-  Proposed Outfall Pipeline Route (Marine Section)
-  Ireland's Eye SPA
-  Vessel Exclusion Zone
-  Vessel stand off areas

Project: Greater Dublin Drainage Project




Drawing Title: Figure 2 Vessel management restrictions



Rev.	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
a	26/02/18	Stand off zone added	CH	Draft	Draft	Draft

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community
 © Crown Copyright, 2017. All rights reserved. License No. EKEMS451807. Not to be used for Navigation.
 Coordinate system: UTM 29 N

This drawing is not to be used in whole or in part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.

Drawing Status: **Draft**

Scale @ A3: 1:25,000

Job No.: 32102902

Drawing No.: 32102902-XXXX

DO NOT SCALE

Page left intentionally blank