



Comhairle Contae Chorcaí
Cork County Council

ARUP



N25 Little Island Pedestrian and Cyclist Bridge

Environmental Impact
Assessment Report



Volume 3
Figures

September 2023



Preface

Preface - Volume 3

The structure of this Environmental Impact Assessment Report (EIAR) for the N25 Little Island Pedestrian and Cyclist Bridge (hereafter referred to as the Proposed Development) is summarised as follows:

Volume 1: Non-Technical Summary

Volume 1 provides a non-technical summary of the information contained in Volume 2 of the EIAR.

Volume 2: Main Environmental Impact Assessment Report

Volume 2 provides a general introduction, outlines the environmental impact assessment process, describes the scope of the Proposed Development, presents the consideration of reasonable alternatives and describes the environmental impacts specific to the Proposed Development.

Volume 3: Figures

Volume 3 provides drawings and large format images (labelled as 'Figures') that illustrate the information detailed in Volume 2 of the EIAR.

Volume 4: Appendices

Volume 4 provides documentation and data that is supplemental to the information provided in Volume 2 of the EIAR.



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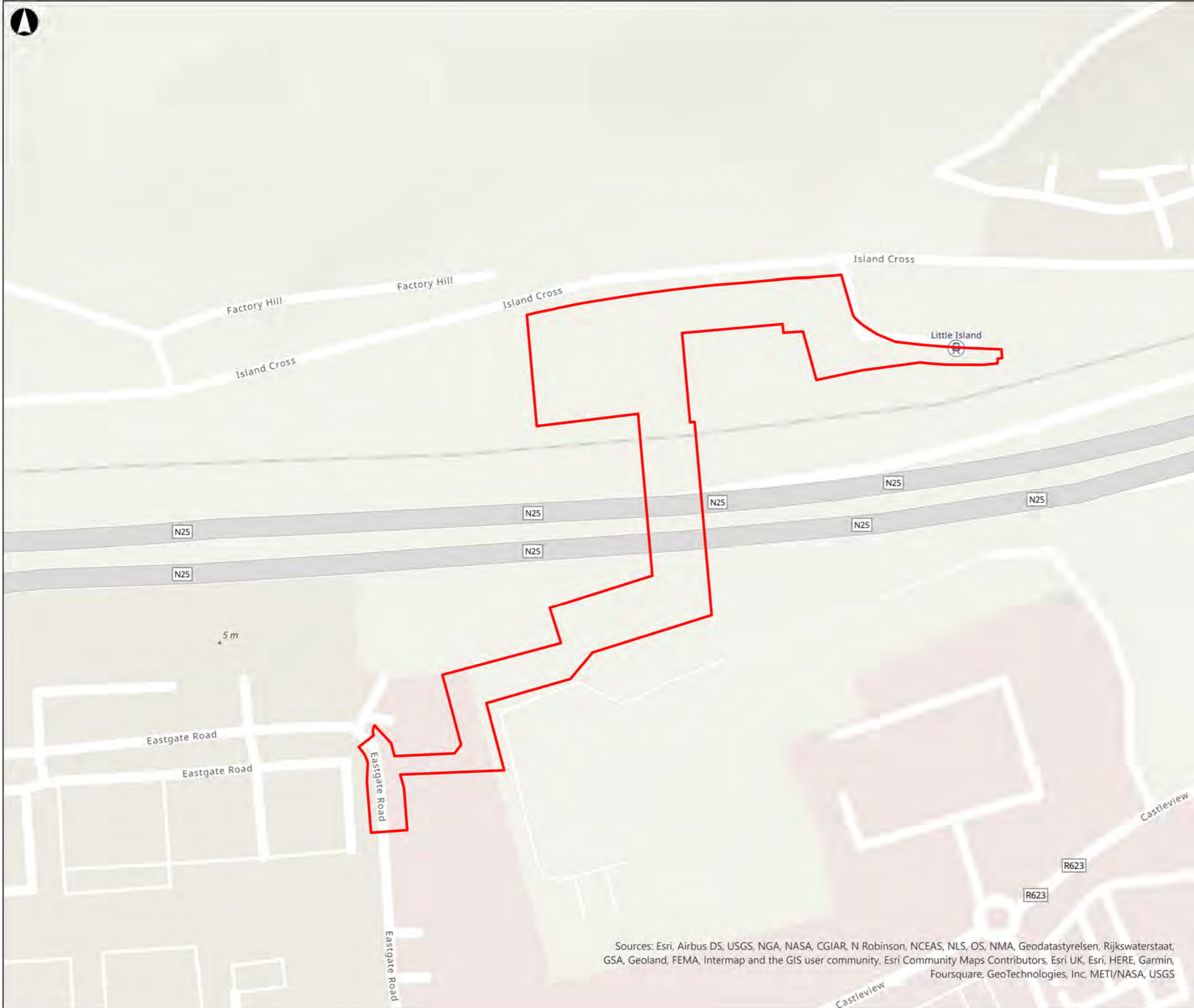
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Chapter 04

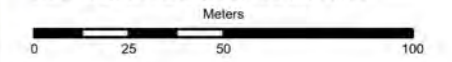
Description of the Proposed Development



Legend

Redline Boundary

Coordinate System: IRENET95 Irish Transverse Mercator



A1	26/07/2023	KF	PM	TOSG
Rev	Date	By	Chkd	Appd

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Project Title
N25 LIPCB - EIAR

Drawing Title
4. Proposed Development

4.1. Site Location

Scale at A3

1:2000

Role

Description
Issue for Planning

Anup Job No
285939-00


Rev
A1

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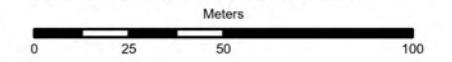
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Legend

 Redline Boundary

Coordinate System: IRENET95 Irish Transverse Mercator



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Rev	Date	By	Chkd	Appd

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Cork County Council

Project Title

N25 LIPCB - EIAR

Drawing Title

4. Proposed Development

4.2. Site Location (Aerial Imagery)

Scale at A3

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Role

Description

Issue for Planning

Arup Job No

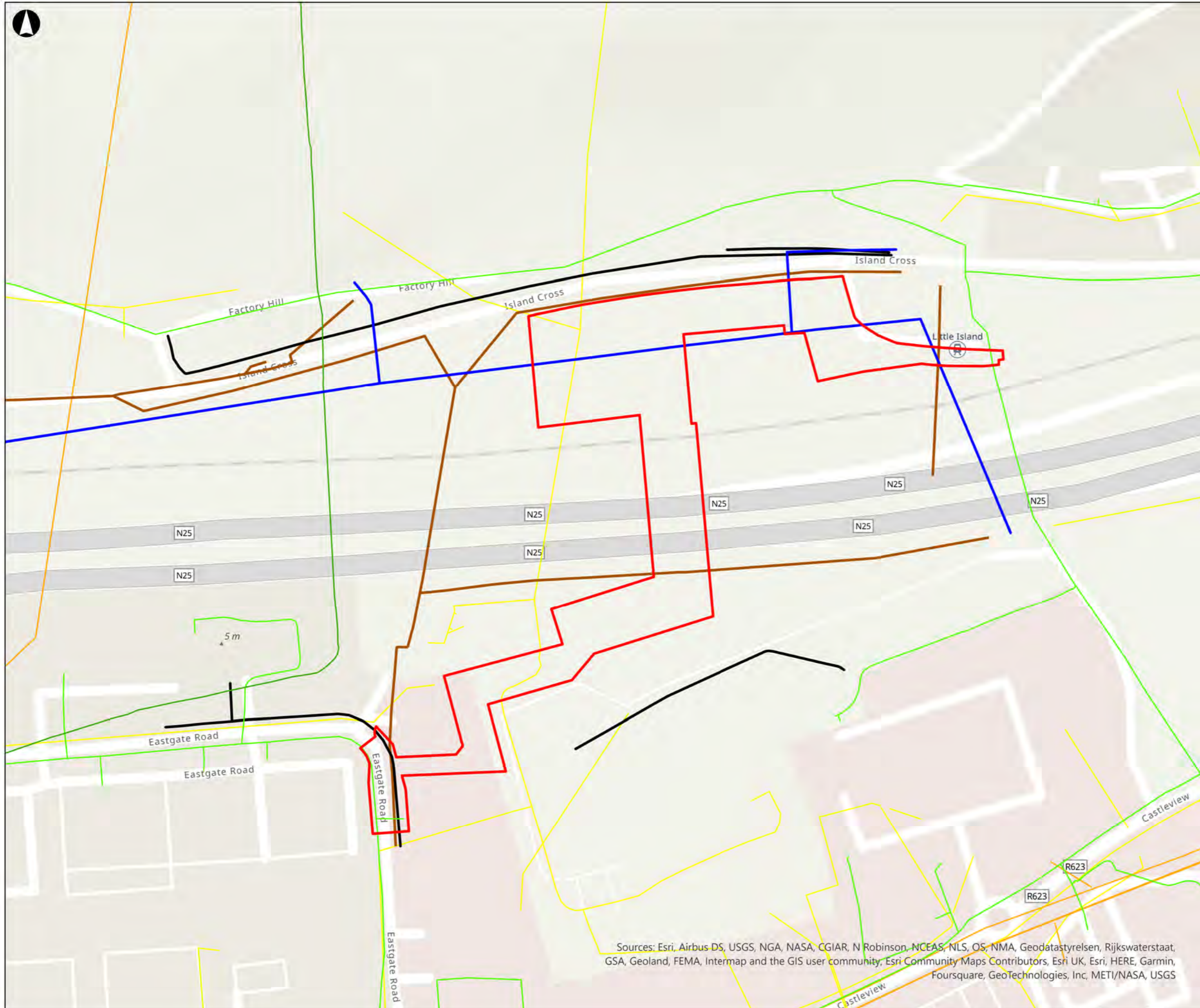
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Rev

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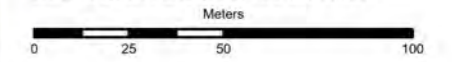
Mapbox, Microsoft



Legend

- Redline Boundary
- Water Mains
- Telecom Lines
- Foul Sewer Mains
- Gas Network Ireland
 - Gas Network High Pressure Centreline
 - Gas Network Medium Pressure Centreline
- ESB Power Lines
 - High Voltage Network
 - Medium-Low Voltage Network

Coordinate System: IRENET95 Irish Transverse Mercator



Rev	Date	By	Chkd	Appd
A1	01/08/2023	KF	PM	TOSG

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Cork County Council

Project Title
N25 LIPCB - EIAR

Drawing Title
4. Proposed Development

4.3. Combined Existing Utilities

Scale at A3

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Role

Description
Issue for Planning

Arup Job No 285939-00	Rev A1
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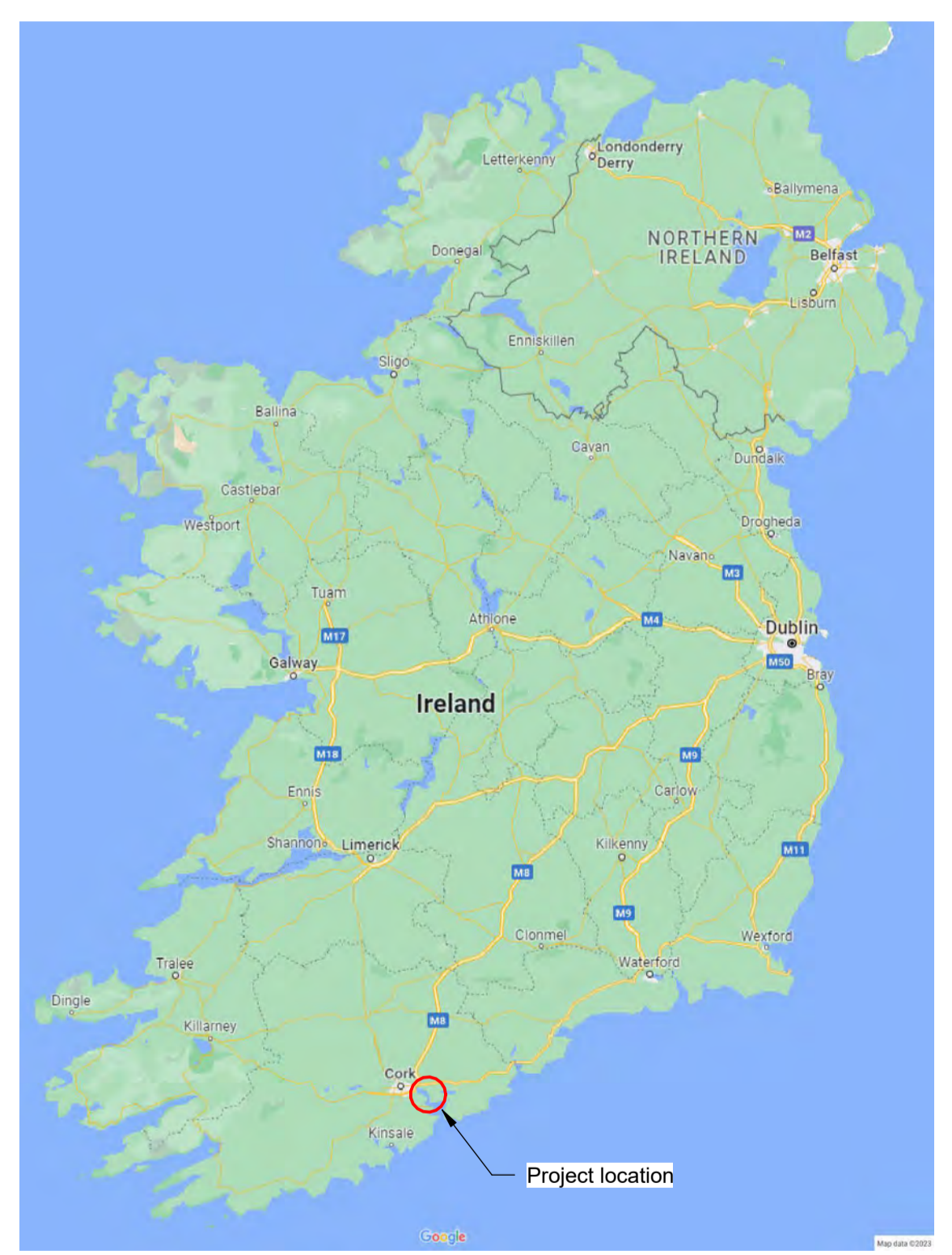
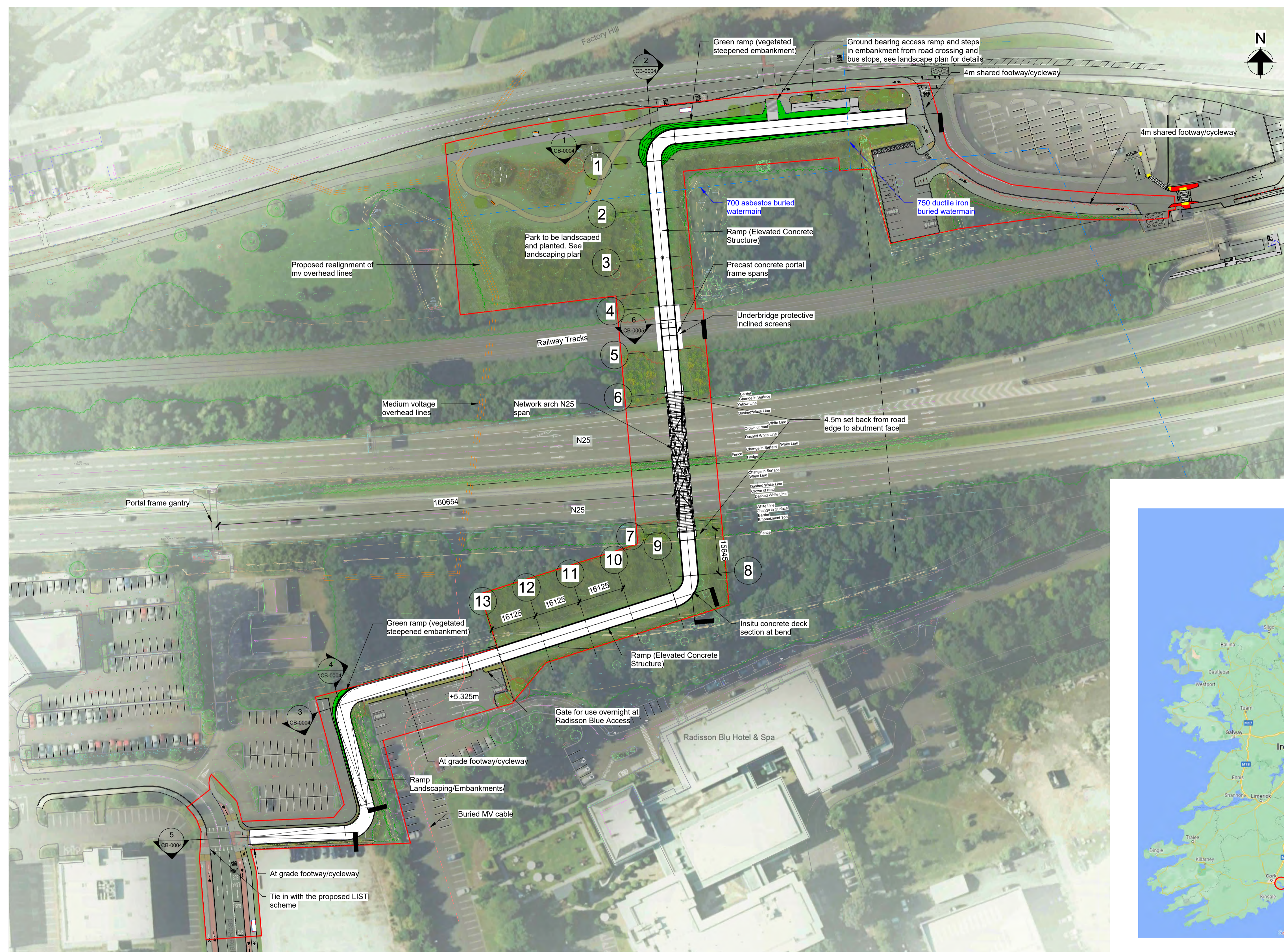
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Chapter 04

Design Drawings



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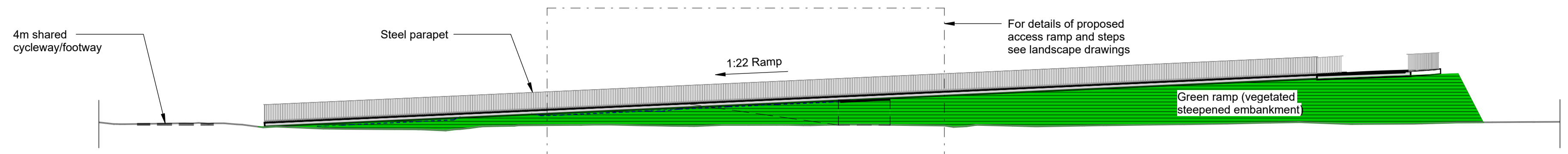
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Issue	Date



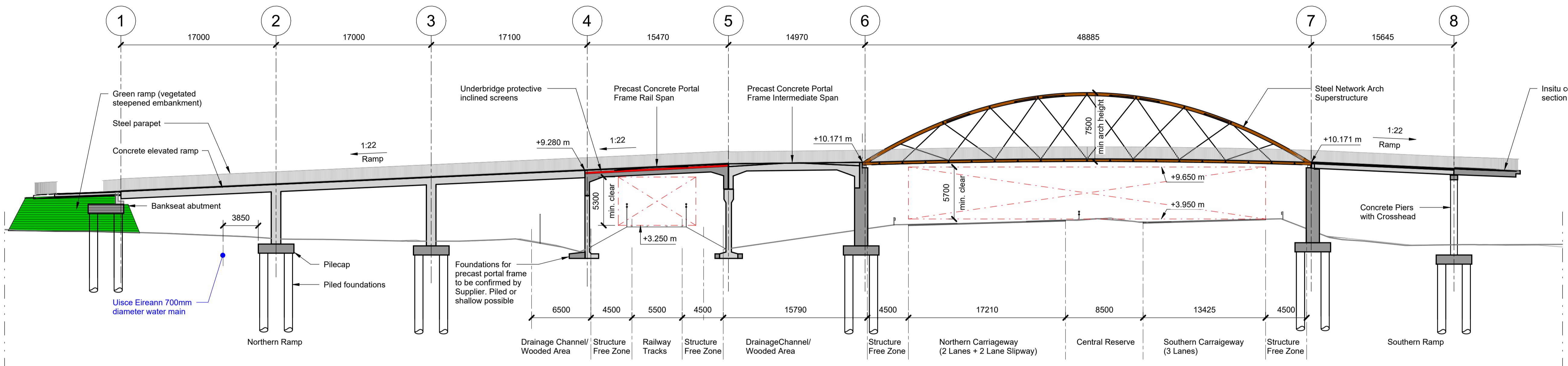
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N25 LITTLE ISLAND PEDESTRIAN & CYCLE BRIDGE

Drawing Title
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 Bridge Structures**

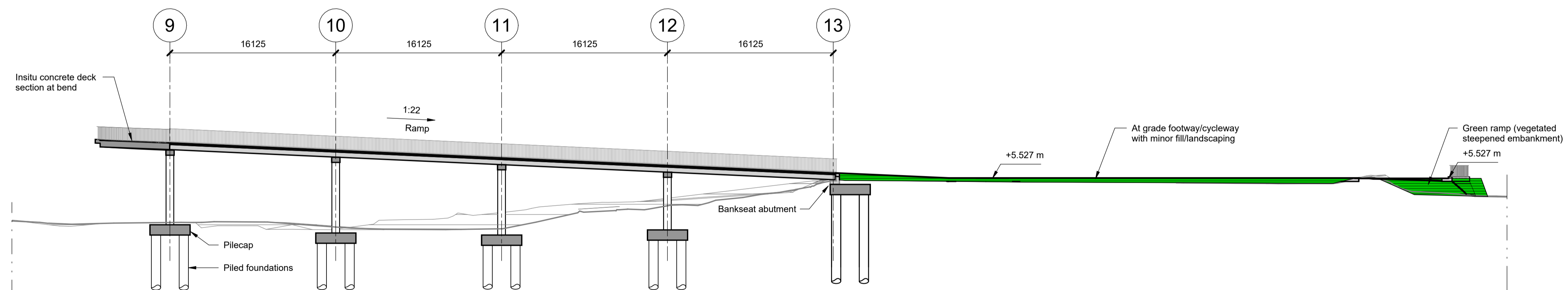
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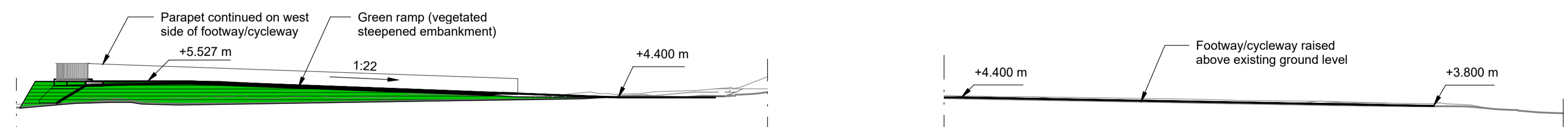
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Section 2-2
Scale 1 : 250



Section 3-3
Scale 1 : 250



Section 4-4
Scale 1 : 250

Section 5-5
Scale 1 : 250

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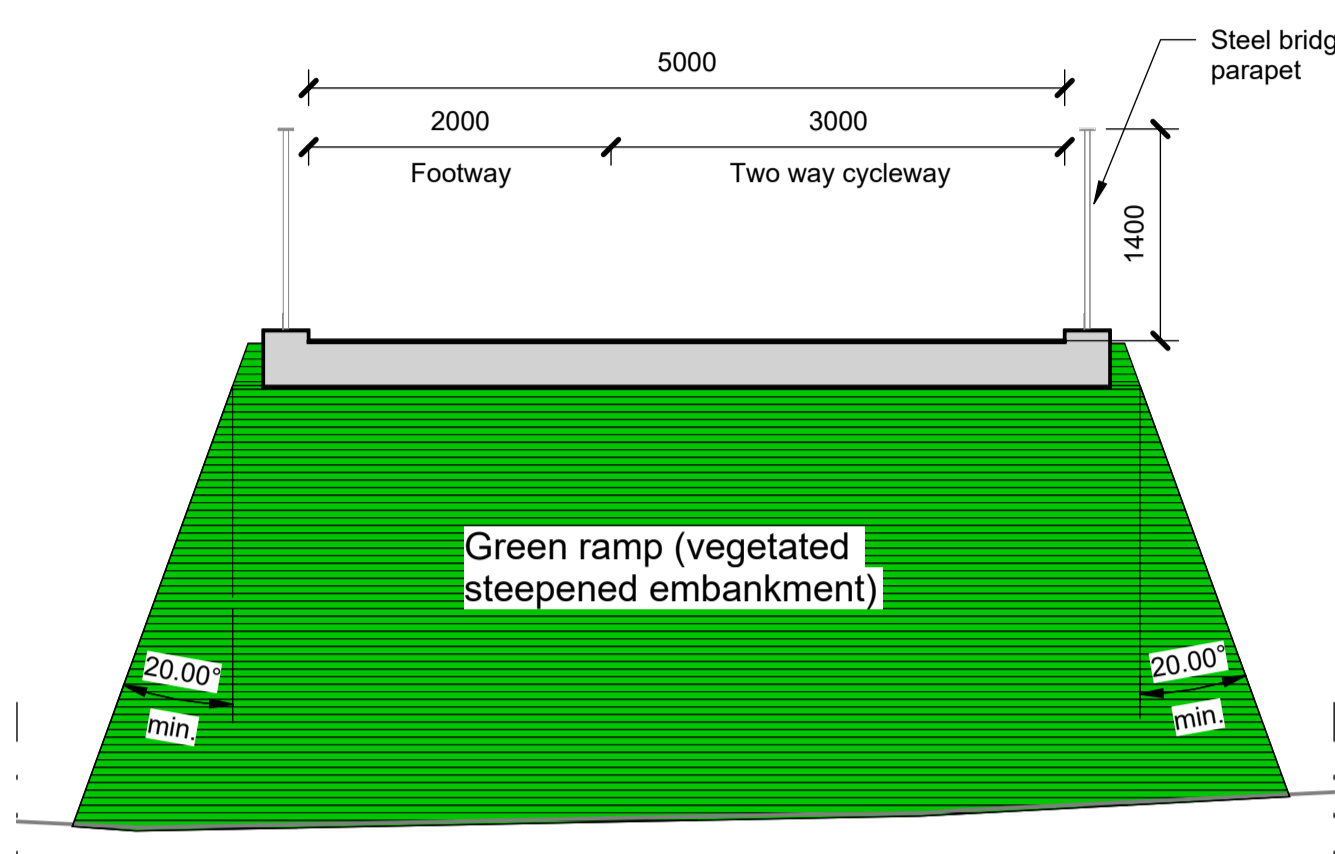
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Issue	Date



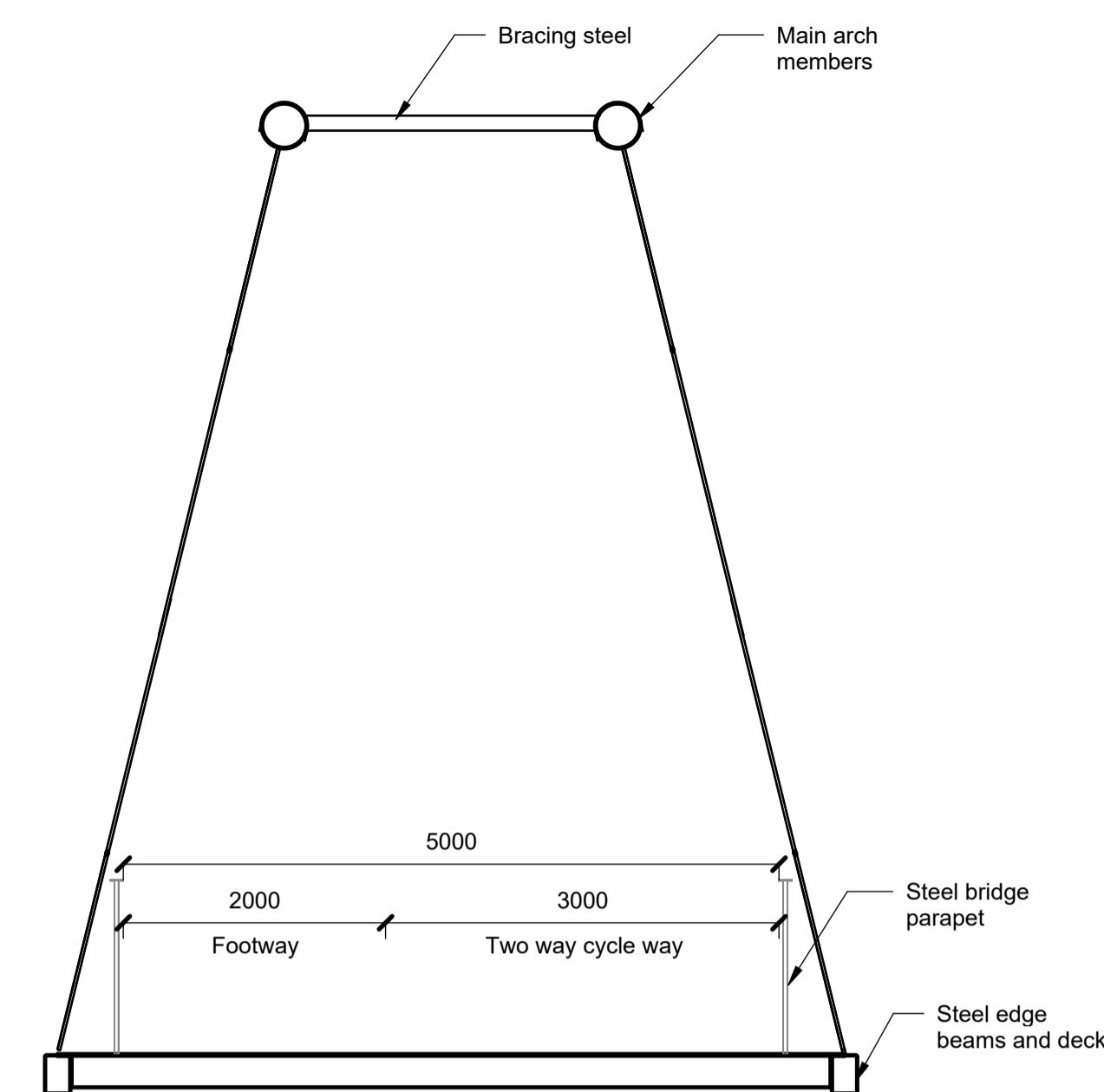
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N25 LITTLE ISLAND PEDESTRIAN & CYCLE BRIDGE

Drawing Title
Bridge Elevations & Sections
Sheet 1

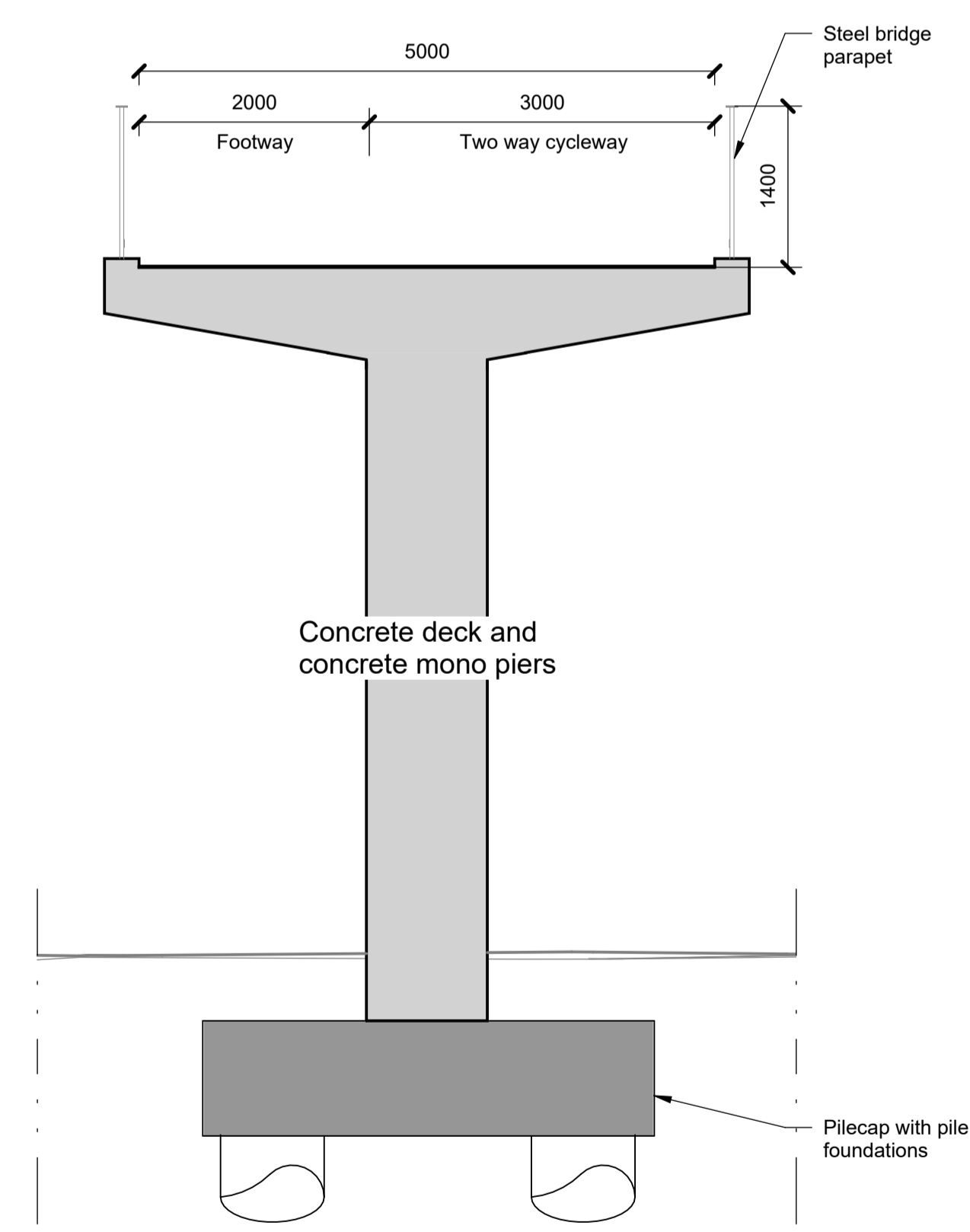
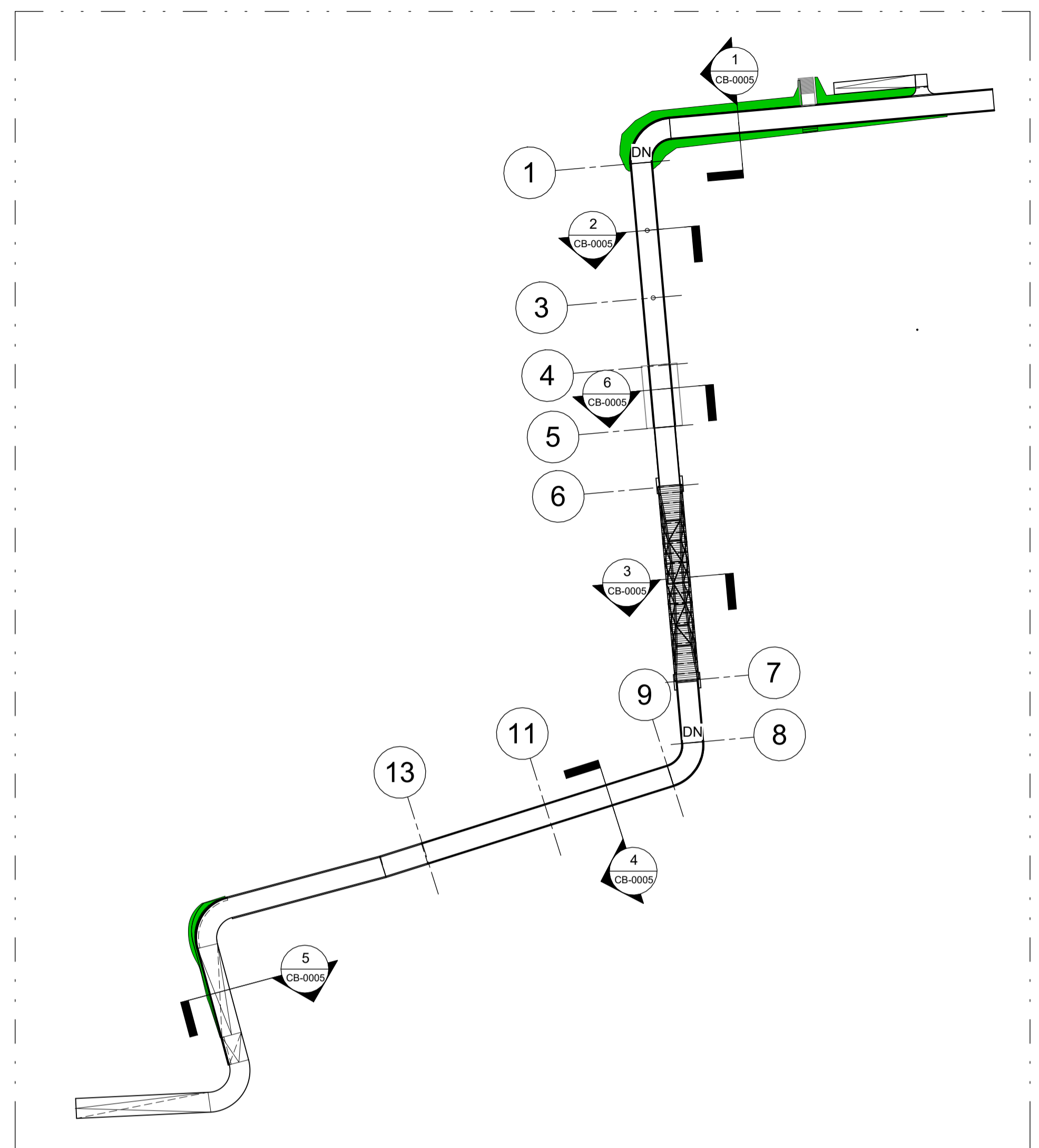
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ID	LIPB-ARUP-ZZ-XX-DR-CB-0004		



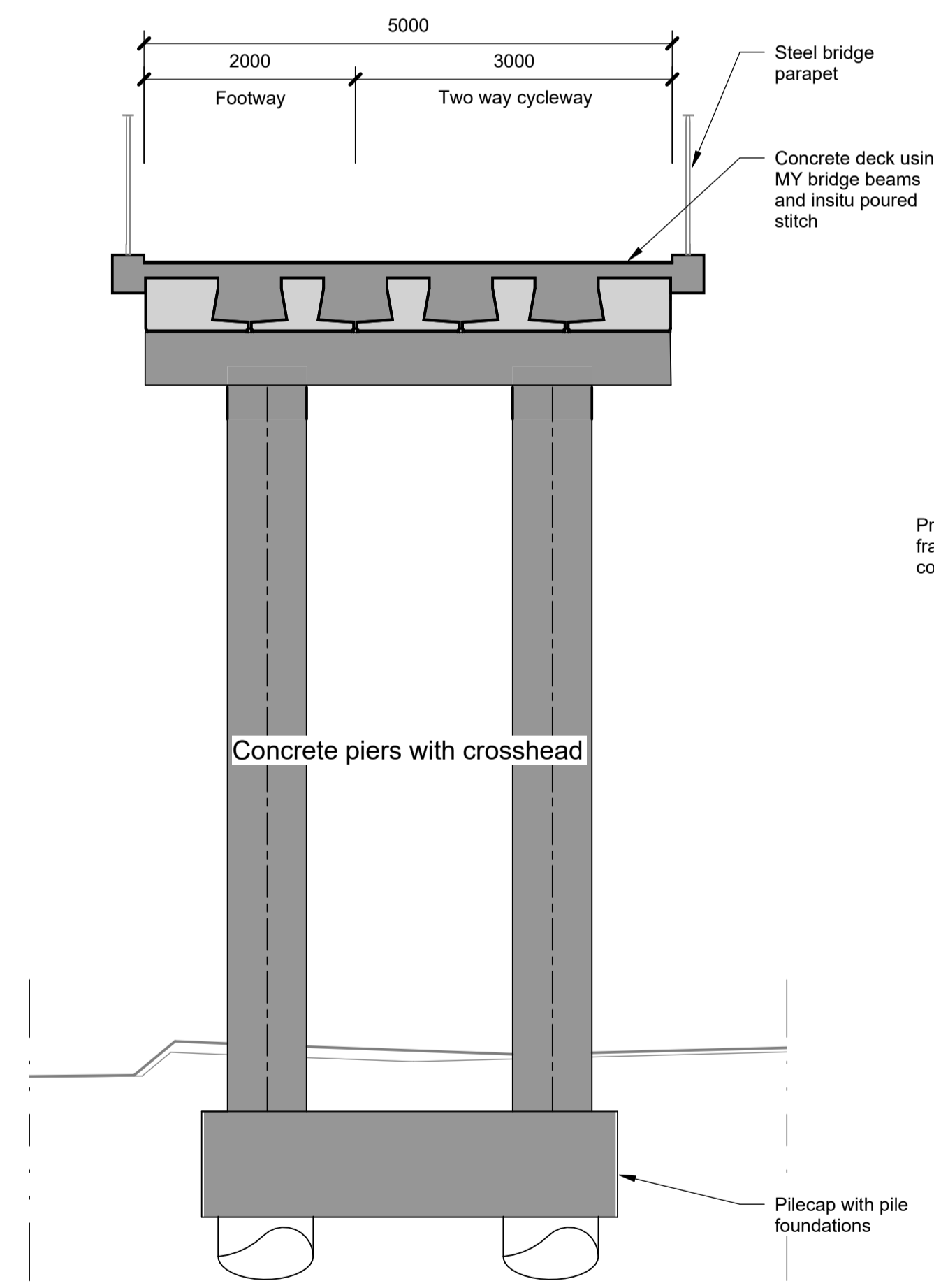
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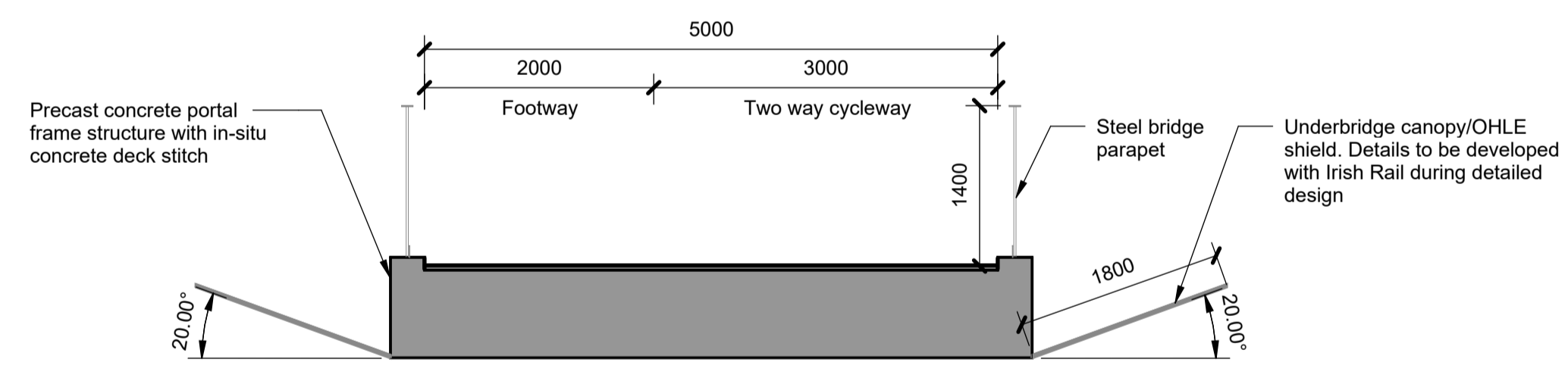
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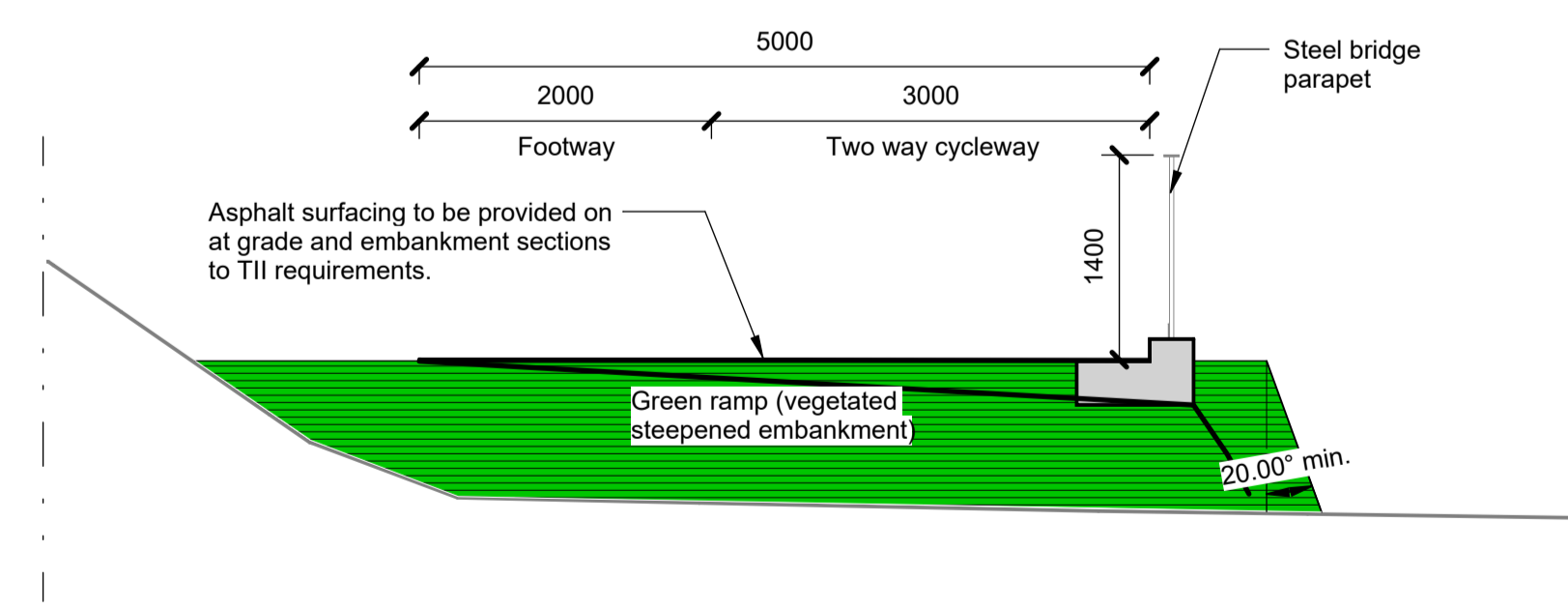
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Section 4-4
Scale 1 : 50



Section 6-6
Scale 1 : 50



Section 5-5
Scale 1 : 50

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C01 15-09-2023 Issued for planning	
Issue	Date



Project Title
N25 LITTLE ISLAND PEDESTRIAN & CYCLE BRIDGE

Drawing Title
Bridge Elevations & Sections
Sheet 2

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Role	Bridges	Status	A2 - Suitable for planning
Arup Job No	285938-00	Rev	C01
ID	LIPB-ARUP-ZZ-XX-DR-CB-0005		



Chapter 04

Landscape Drawings



- KEY**
- ① Little Island Railway Station
 - ② Proposed 4m wide shared pedestrian and cycle route
 - ③ Redesigned Local Community Recycling Area
 - ④ Proposed pedestrian and cyclist bridge
 - ⑤ Bus Stop (refer to the Proposed Dunkettle to Carrigtwohill pedestrian and cycle route)
 - ⑥ Radisson Blu Car Park redesigned

- LEGEND**
- Soft Landscape**
- Existing Trees and Vegetation to be removed (refer to Tree Clearance Plan and Tree Constraints Plan)
 - Existing Trees and Vegetation to be retained
 - Proposed Specimen Tree
 - Proposed Trees Groups
 - Native Woodland Mix planting
 - Native Low Scrub/Coppice planting
 - Clipped Hedge
 - Amenity Grass
 - All-Ireland Pollinator Plan Wildflower Mixture (Product code GF03)
 - Hedgerow Wild Flower Mixture (Product Code EC04)
 - Native Origin Irish Wildflower Seed Mix to bridge embankment / green wall (Product Code EC11)
 - Proposed Native woodland Wild Flower Mix (Product Code EC03) and Natural Regeneration Area
- Hardscape**
- Proposed Concrete Surface
 - Proposed Pedestrian and Cycle Bridge
 - Proposed Compacted Gravel Path
 - Tarmac / Bitmac Surface
 - Proposed Seating
 - Proposed Cycle Racks
 - Fence
 - Buried Water Main
 - Proposed re-routing of ESB overhead lines
 - Bollards
 - Site Boundary



- PLANTING SCHEDULE**
- Specimen Trees**
- Acer (*Acer campestre 'Elegant'*) 4.0m, Clear 2m, 16-18 Rb
 - Lime (*Tilia cordata*) 4.0m, Clear 2m, 16-18 Rb

- Tree Groups**
- Double flowering cherry (*Prunus avium 'Plena'*) 3.0m, Standard, 14-16 Br
 - Birch (*Betula pendula*) M/S3-3.5m, Rb, Multistem
- Native, deciduous woodland mix***
- | | |
|--|-----|
| Sessile oak (<i>Quercus petraea</i>) 60-90cm, Transplant, 1+2br | 40% |
| Alder (<i>Alnus glutinosa</i>) 60-90cm, Transplant, 0/1/1br | 10% |
| Downy birch (<i>Betula pubescens</i>) 60-90cm, Transplant, 0/1/1br | 10% |
| Hazel (<i>Corylus avellana</i>) 60-90cm, Transplant, 0/1/1br | 15% |
| Holly (<i>Ilex aquifolium</i>) 20-30cm, Cell grown P9, CG | 5% |
| Hawthorn (<i>Crataegus monogyna</i>) 60-90cm, Transplant, 0/1/1br | 5% |
| Scots Pine (<i>Pinus sylvestris</i>) 30-50cm, Cell grown P9, CG | 10% |
| Wild cherry (<i>Prunus padus</i>) 60-90cm, Transplant, 0/1/1br | 5% |
- *Plant spacing 1.5m centres, Plant/sq.m 0.44

- Low scrub planting mix***
- | | |
|---|-----|
| Spindle (<i>Euonymus europaeus</i>) 60-90cm, Transplant, 1+2br | 15% |
| Elder (<i>Sambucus nigra</i>) 30-50cm, Cell grown P9, CG1 | 10% |
| Dogwood (<i>Cornus sanguinea</i>) 60-90cm, Transplant, 0/1/1br | 10% |
| Guelder Rose (<i>Viburnum opulus</i>) 60-90cm, Transplant, 0/1/1br | 20% |
| Hazel (<i>Corylus avellana</i>) 60-90cm, Transplant, 0/1/1br | 25% |
| Dog Rose (<i>Rosa canina</i>) 20-30cm, Cell grown P9, CG | 5% |
| Wild Rose (<i>Rosa rubiginosa</i>) 60-90cm, Transplant, 0/1/1br | 5% |
| Honeysuckle (<i>Lonicera periclymenum</i>) 60-90cm, Transplant, 0/1/1br | 10% |
- *Plant spacing 1.2m centres, Plant/sq.m 0.69

- Clipped Hedge Planting**
- Beech (*Fagus sylvatica*) 1.2-1.5m h., planted at 300mm centres, double row staggered 400mm, bare root
- Native Hedgerow Wild Flower Mix (Product Code EC03)** <http://www.wildflowers.ie/mixes/ec/ec03.htm>
- Bluebell, Burdock, Dog Violet, Cowslip, Devils Bit Scabious, Foxglove, Hedge Garlic, Mustard, Lesser, Knapweed, Meadowsweet, Ramson, Red Campion, Ribwort Plantain, Sorrel, Upright, Hedge Parsley, Wild Angelica, Wood Avens, Hemp Agrimony, Hoary Plantain, Primrose, Sweet Violet, Wood Sage

- Native Origin Irish Wildflower Seed Mixtures (Product Code EC11)** <http://www.wildflowers.ie/mixes/ec/ec11.htm>
- Common Bent Grass, Burnet Saxifrage, Centaury, Wild Chamomile, Corn Pansy, Cowslip, Eyebright, Lady's Bedstraw, Ox-eye Daisy, Red Bartsia, Yellow Rattle, Selfheal, Sheep's Bit Scabious, White Stonecrop, Blackstonia, Fairy Foxglove, Sea Campion, Ivy Leaved Toadflax, Quaking Grass, Wall Pennywort, Storksbill, Thyme (Wild), Sweet Violet, Dog Violet, Allium carinatum, Harebell, Cat's Ear, Corn Spurry, Fairy Flax, Lesser Yellow Clover or 'shamrock'

- Native Origin Irish Wildflower Seed Mixtures (Product Code EC04)** <http://www.wildflowers.ie/mixes/ec/ec04.htm>
- Birdsfoot trefoil, Black Meddock, Burdock, Bluebell, Corn Marigold, Corn Poppy, Corncockle, Cornflower, Cowslip, Devils Bit, Scabious, Foxglove, Hedge Garlic Mustard, Hemp Agrimony, Hoary Plantain, Cow-Parsley, Lesser Knapweed, Scented Mayweed, Meadowsweet, Mullein, Ox-eye Daisy, Purple Loosestrife, Primrose, Ragged Robin, Red Campion, Ribwort Plantain, Sorrel, St Johnswort, Teasel, Upright Hedge Parsley, Wild Angelica, Wild Carrot, Wood Avens, Sweet Violet, Dog Violet

- All-Ireland Pollinator Plan Wildflower Mixture (Product Code GF03)** <http://www.wildflowers.ie/mixes/gf/gf03.htm>
- Birdsfoot Trefoil, Black Meddock, Cowslip, Devil's Bit Scabious, Meadow Buttercup, Field Scabious, Hemp Agrimony, Kidney Vetch, Lady's Bedstraw, Lady's Ann lace, Lesser Knapweed, Meadowsweet, Mullein, Ox-eye Daisy, Purple Loosestrife, Ragged Robin, Red Campion, Red Clover, Ribwort Plantain, Rough Hawksbit, Sorrel, St Johnswort, Wild Angelica, Wild Carrot, Yarrow, Yellow Agrimony, Yellow Rattle, Teasel and more.
- Also includes 35% annuals: Corn Marigold, Corn Poppy, Corncockle, Cornflower, Scented Mayweed

OUTLINE LANDSCAPE SPECIFICATION

All existing retained trees and vegetation to be protected during construction protected in accordance with BS5853:2012 *Trees in relation to Construction*.

Landscape works will be undertaken by an approved landscape contractor and in accordance with BS 4428:1989 Code of Practice for general landscape operations and Forestry Standards Manual (DAFM, 2015).

Use of pesticides will comply with the requirements of the Sustainable Use of Pesticides Directive (SUD) 2009/128/EC.

Proposed Hedgerow and Tree Planting

New tree planting will be native, supplied and planted in accordance with in accordance with BS 3936-4:1992 *Nursery stock. Specification for forest trees, BS 8545:2014 Trees: From nursery to independence in the landscape, Irish Forestry Standards Manual and Code of Best Practice Forest Practice*. Planting stock shall be materially undamaged, sturdy, healthy and vigorous, of good shape and without elongated shoots, and free from pests and diseases, discoloration, weeds and physiological disorders. Plants shall have been grown in a suitable environment and hardened off. The root system shall be to the requirements of the National Plant Specification and balanced with branch system.

Timing of planting and Aftercare

All planting will be carried out in the dormant, tree planting season, ie October to March, preferably before January, and at a time when the soil is not waterlogged or frozen. Planting will be carried out within the first available planting season after practical completion of the development.

All planting will be maintained with a minimum 1m radius weed free area, for 3 years after planting, until trees are well established. Tree supports and rabbit guards will be inspected as required to adjust or replace them. Any loss of planting which occurs within 5 years of the original planting will be replaced in the next planting season with the same plant species.

Proposed Grassland/Meadow Areas

Restoration of any areas disturbed during the construction process (e.g. near the construction compounds or at localised excavations) will be undertaken immediately following completion of the construction period. It is important to establish some form of meadow grassland cover quickly after construction, as bare soil will be prone to colonisation by non-desirable plants such as injurious weeds. The grassland will be managed in accordance with the 'All Ireland Pollinator Plan' by cutting several times in the first year to reduce competition from annual weeds. Thereafter, the grassland meadow can be managed with one cutting per year in early Autumn.

00 Landscape Plan

Scale 1:500

Note:

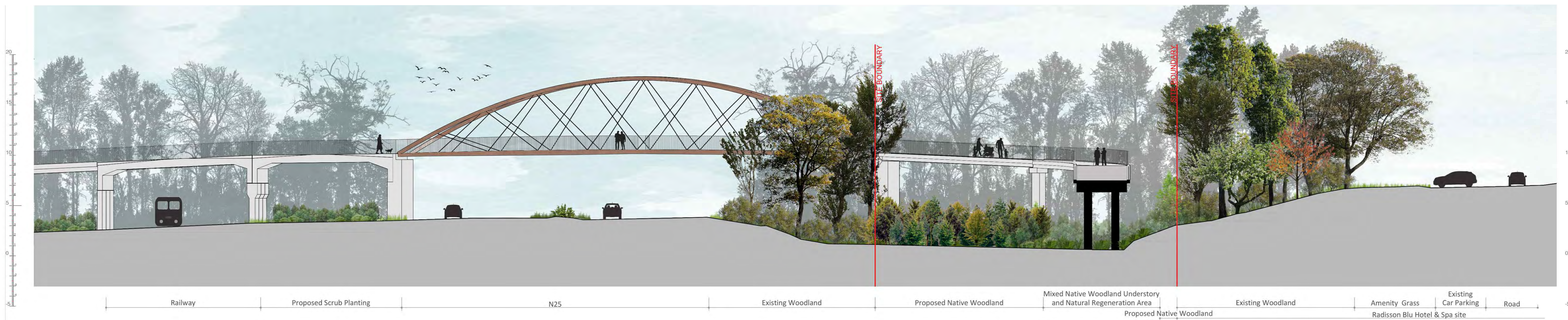
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Rev.	Date	Drawn	Checked	Description

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Author	1:500 @ A0	Date	September 2023
Check		Drawn	AV
Issue		Checked	DB
Rev.		Drawn	AV
Date		Checked	DB
Description		Drawn	AV
		Checked	DB

00 Landscape Plan

BSM

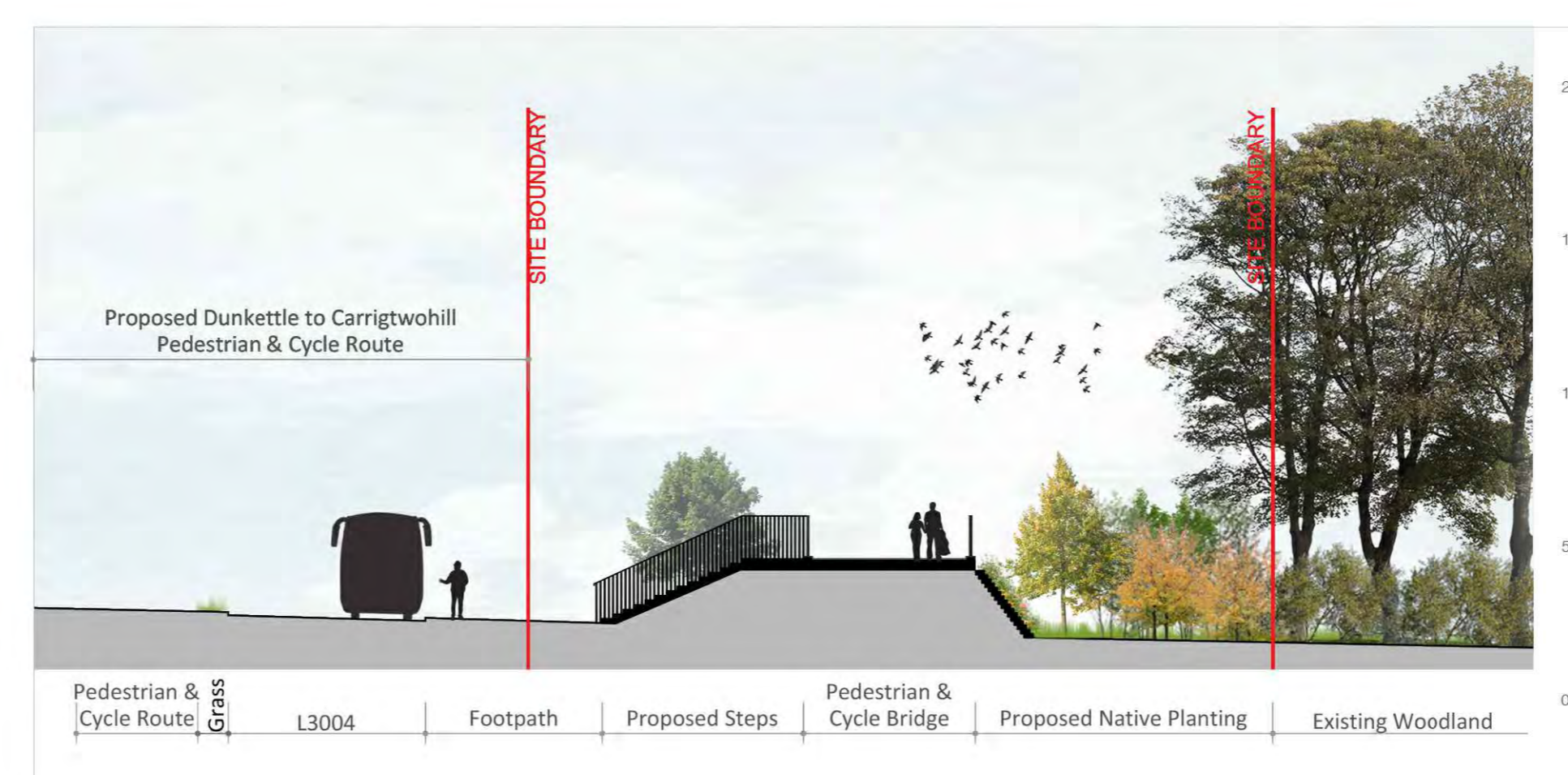
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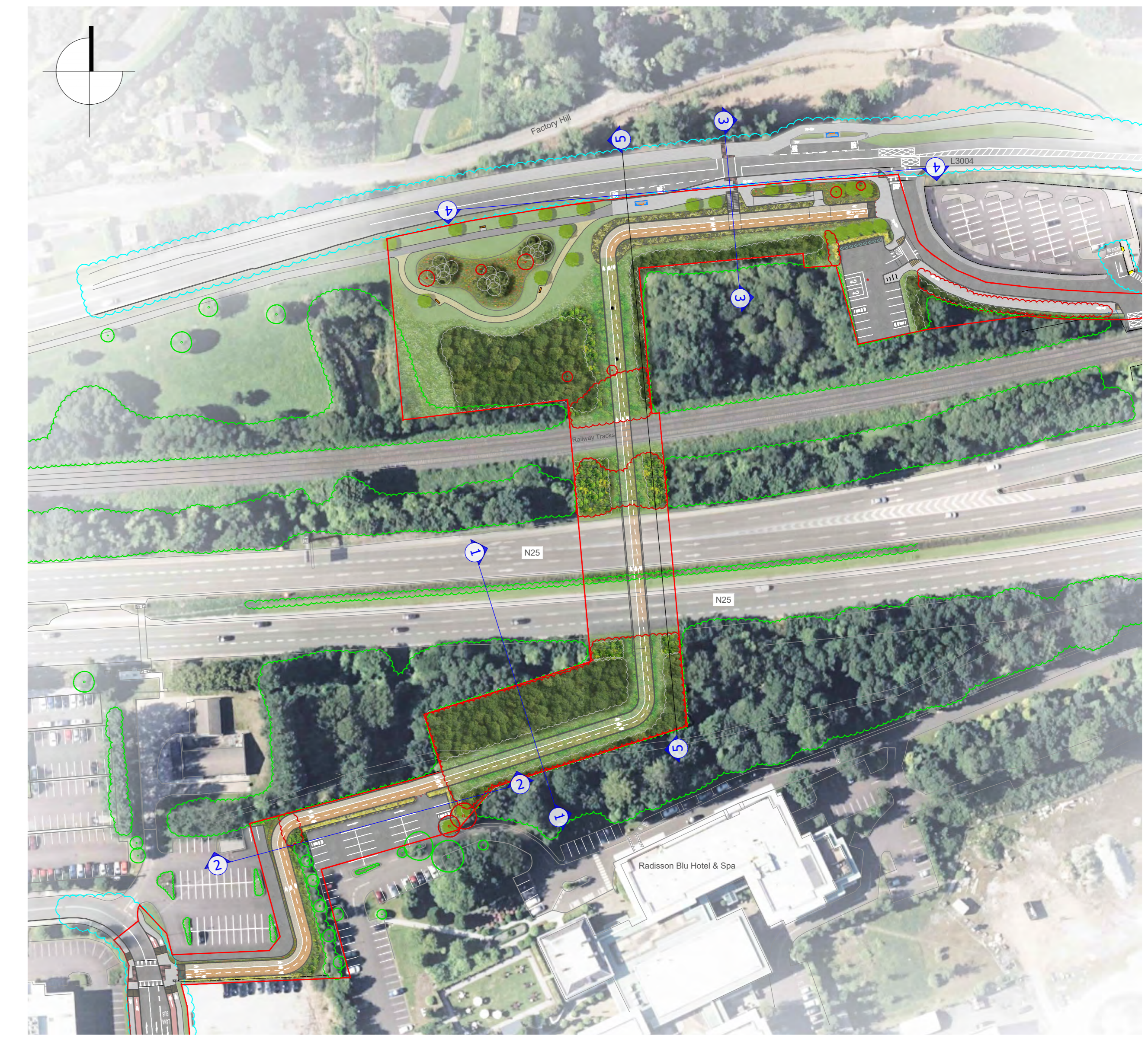
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02 Section 2-2
Scale 1:200



03 Section 3-3
Scale 1:200



00 Key Plan
NOT TO SCALE



04 Section 4-4
Scale 1:200



05 Section 5-5
Scale 1:200

Rev	Date	Drawn	Checked	Description
00	Sep. 2023	JV	DB	Issue for Planning

Notes	

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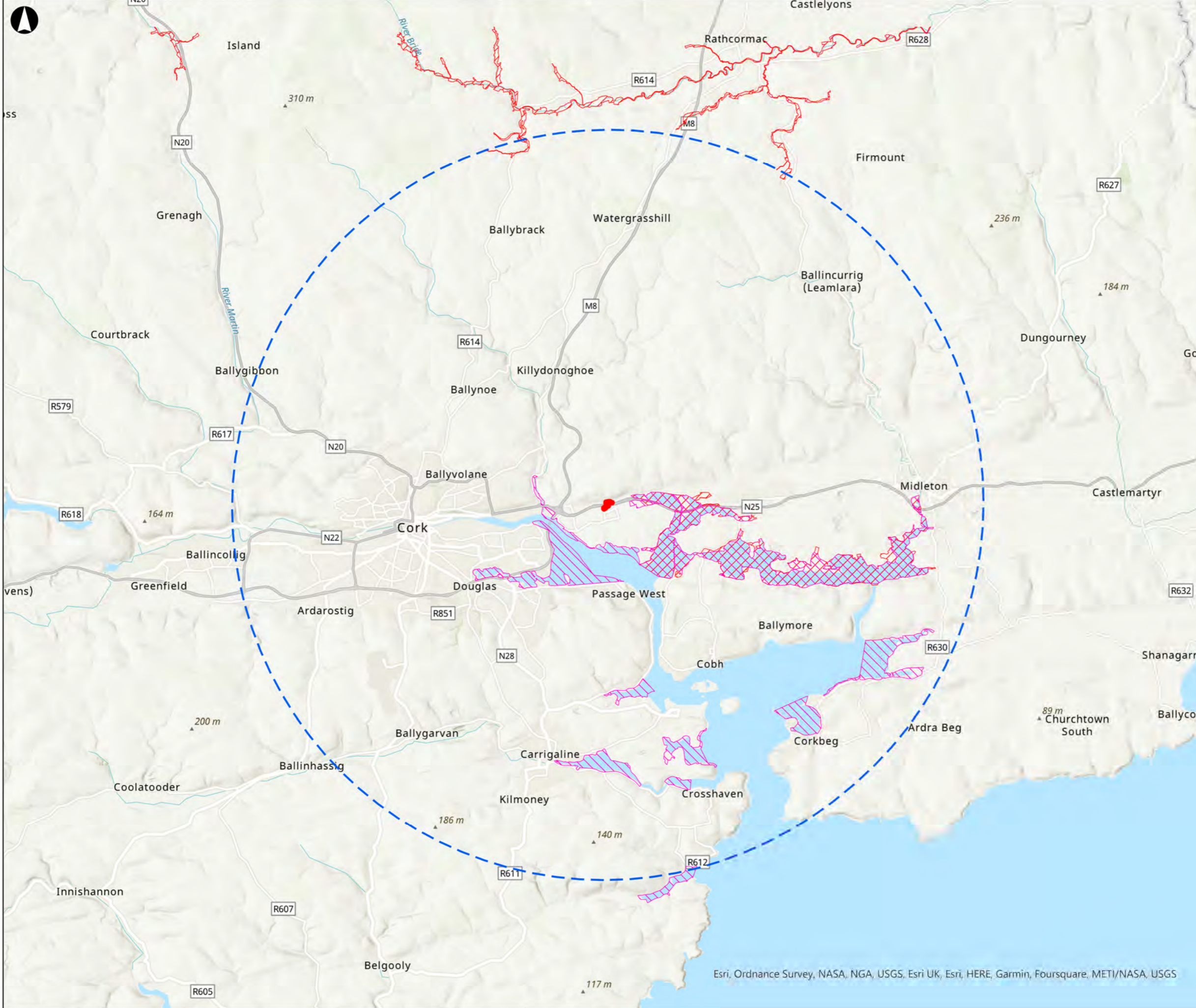
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PROJECT: N25 LITTLE ISLAND PEDESTRIAN & CYCLE BRIDGE		Project No. 6953	BSM
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Author: [Name]		Drawn: [Name]	Checked: [Name]



Chapter 09

Biodiversity



Legend

- Redline Boundary
- - - 15 km buffer
- Special Areas of Conservation
- Special Protection Areas

Coordinate System: IRENET95 Irish Transverse Mercator
Kilometers

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Project Title
N25 LIPCB - EIAR

Drawing Title
9. Biodiversity

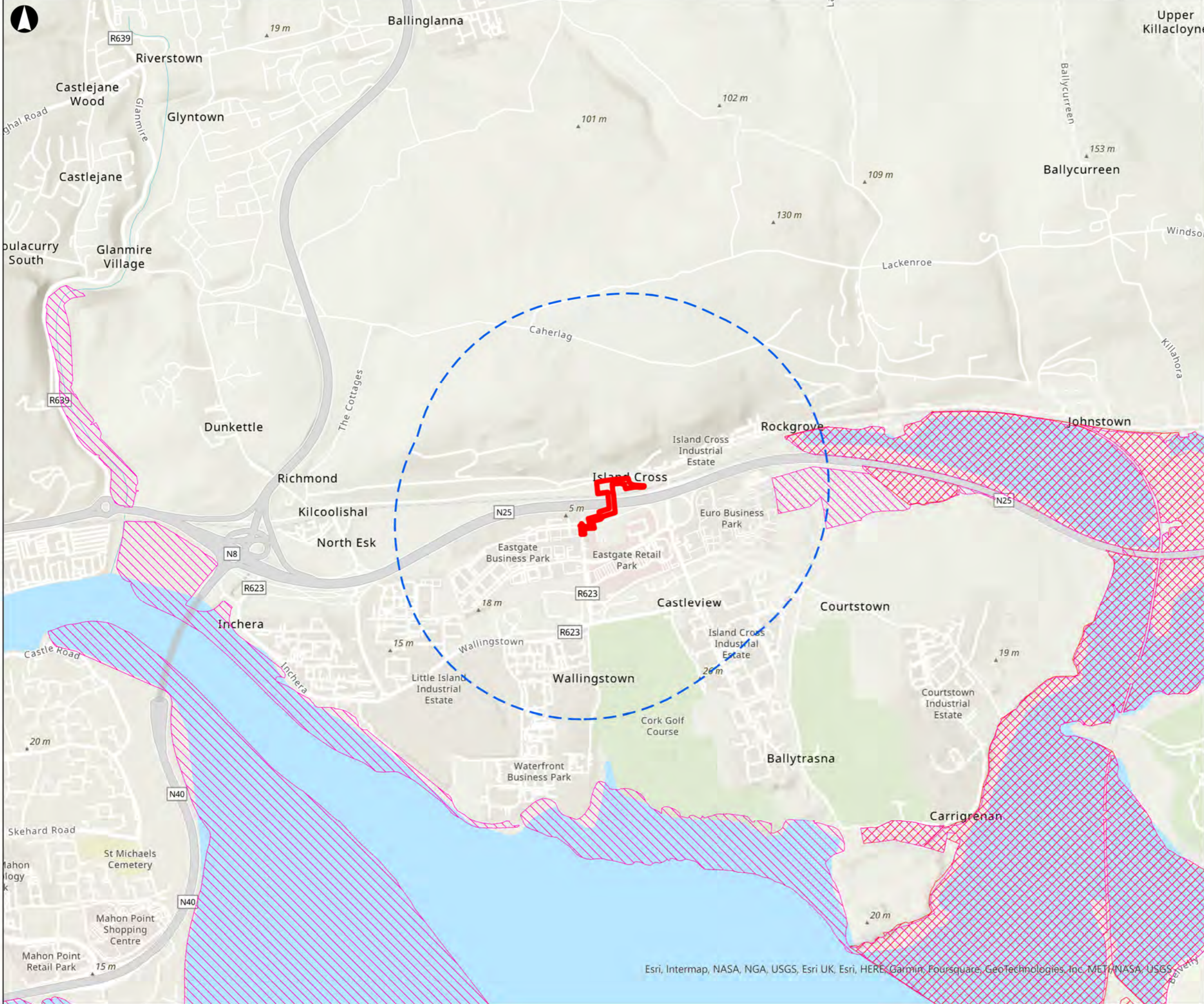
9.1. Natura 2000 sites within 15 km radius of the proposed development site

Scale at A3
1:150000

Description
Issue for Planning

Arup Job No 285939-00	Rev A1
---------------------------------	------------------

Drawing File Name



- Legend**
- Redline Boundary
 - 1 km buffer
 - Special Areas of Conservation
 - Special Protection Areas

Coordinate System: IRENET95 Irish Transverse Mercator
 Kilometers
 0 0.25 0.5 1

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Drawing Title
9. Biodiversity

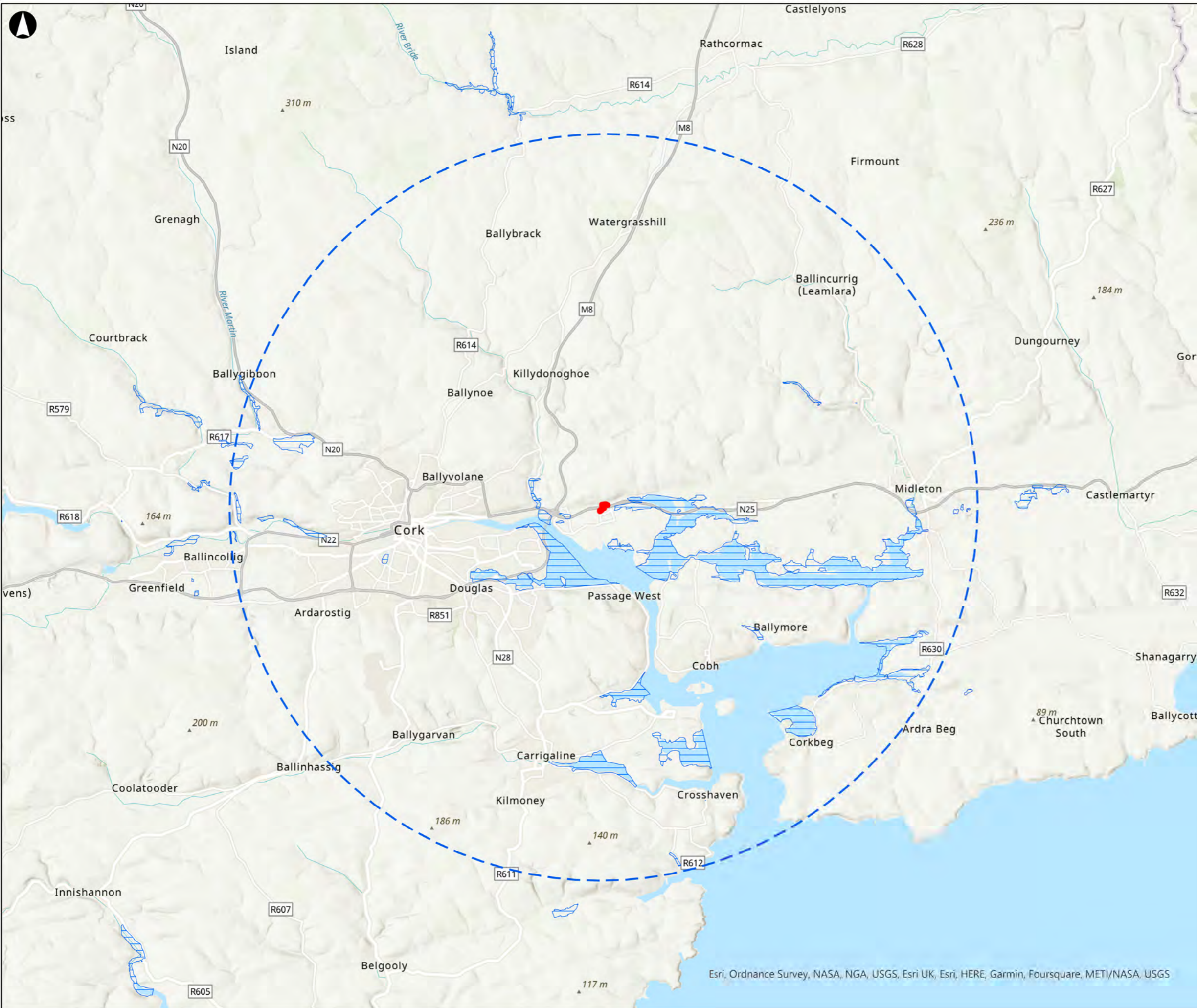
9.2. Natura 2000 sites within 1 km of the proposed development site

Scale at A3
1:20000




Description
Issue for Planning

Anup Job No 285939-00	Rev A1
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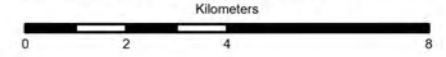
Drawing File Name



Legend

-  Redline Boundary
-  15 km buffer
-  Proposed Natural Heritage Areas

Coordinate System: IRENET95 Irish Transverse Mercator



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Drawing Title

9. Biodiversity

9.3. pNHAs within 15 km radius of the proposed development site

Scale at A3
1:150000

Description
Issue for Planning

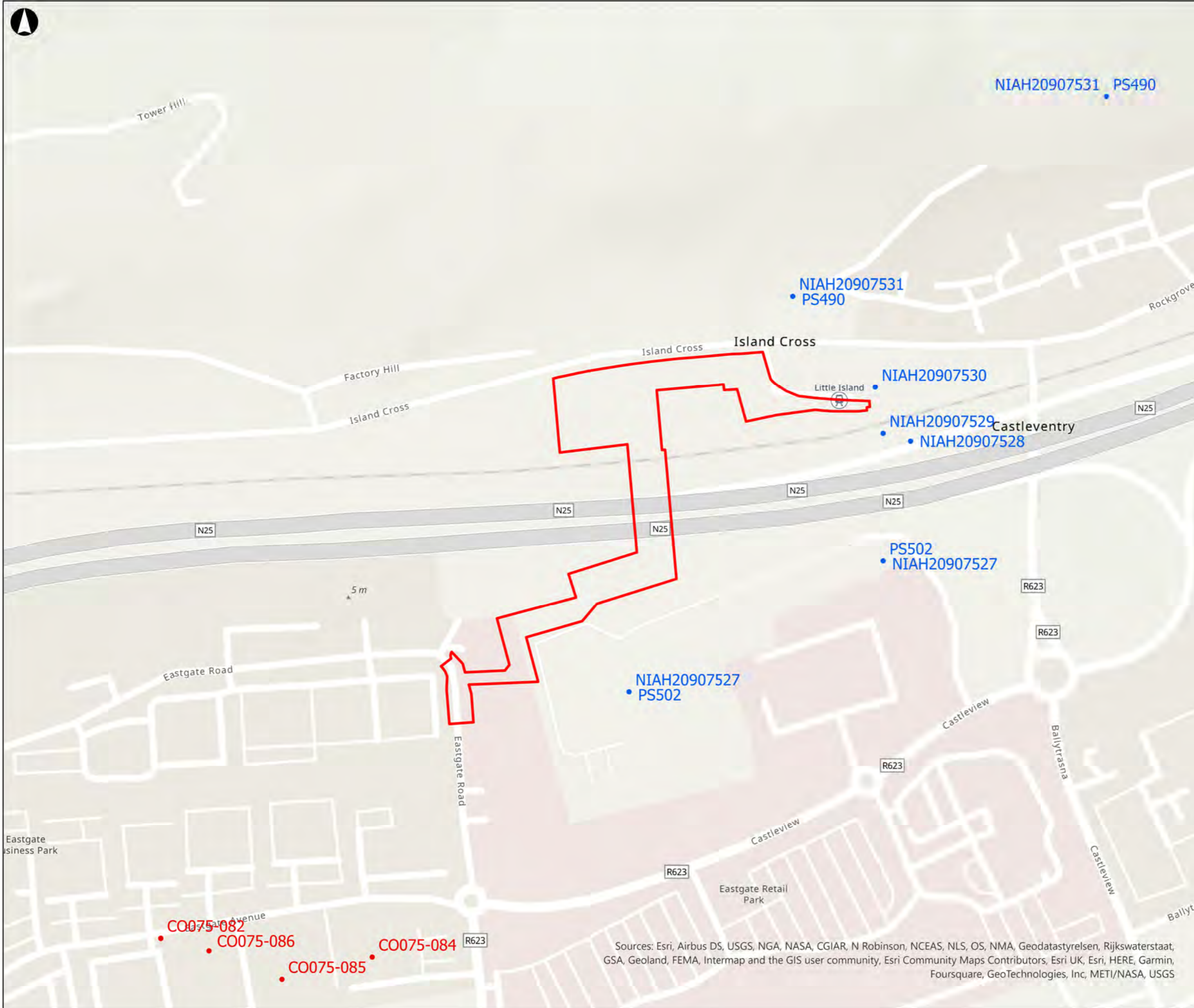
Arup Job No 285939-00	Rev A1
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Drawing File Name



Chapter 13

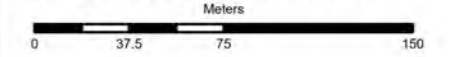
Archaeology, Architecture and Cultural Heritage



Legend

- Redline Boundary
- Protected Structures (PS) and National Inventory of Architectural Heritage (NIAH) structures
- Record of Monuments and Places (RMP) sites

Coordinate System: IRENET95 Irish Transverse Mercator



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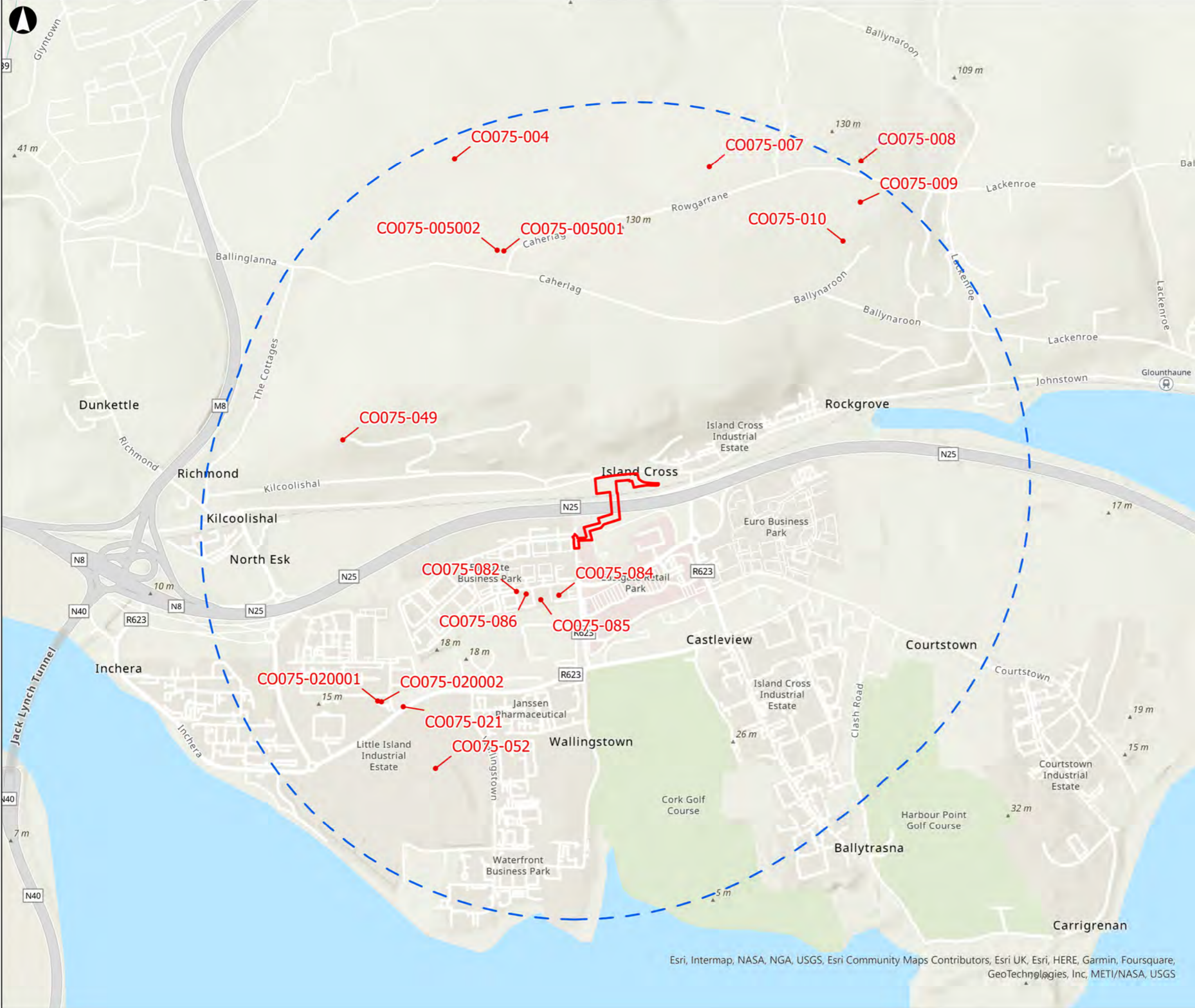
Project Title
N25 LIPCB - EIAR

Drawing Title
13. Archaeology, Architecture and Cultural Heritage
13.1. Closest Registered Archaeological Sites (Red) and Architectural Sites (Blue) to the proposed development site

Scale at A3
1:3000
Role

Description	
Issue for Planning	
Anup Job No 285939-00	Rev A1
Drawing File Name	

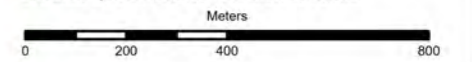
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS



Legend

- Redline Boundary
- 1.5 km buffer
- Record of Monuments and Places sites

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title

N25 LIPCB - EIA

Drawing Title

13. Archaeology, Architecture and Cultural Heritage
13.2. Registered Archaeological Sites:
RMP/SMR

Scale at A3

1:15000

Role

Description

Issue for Planning

Arup Job No

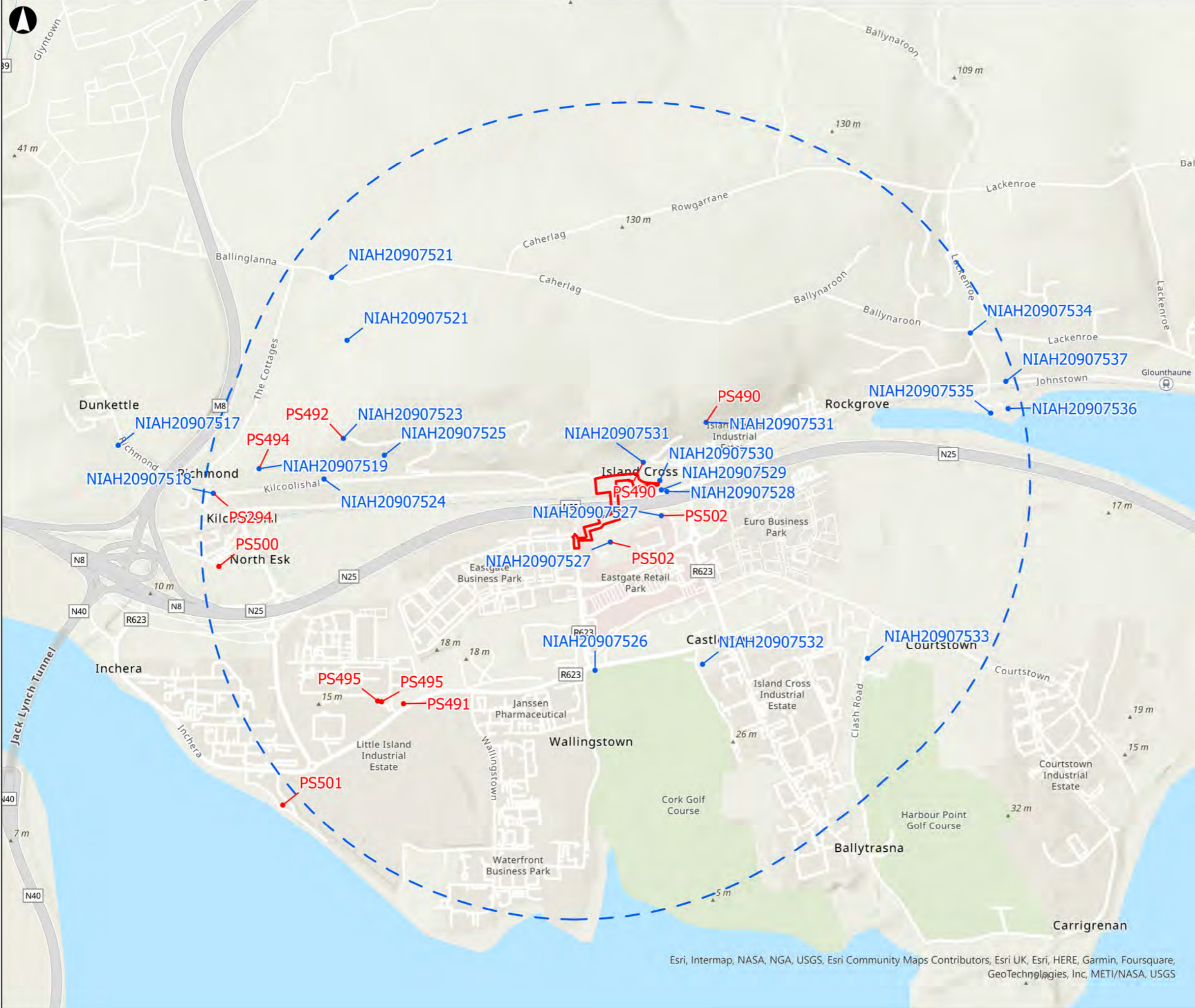
285939-00

Rev

A1

Drawing File Name

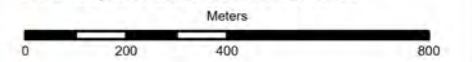
Esri, Intermap, NASA, NGA, USGS, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS



Legend

- Redline Boundary
- 1.5 km buffer
- National Inventory of Architectural Heritage (NIAH) Structures
- Protected Structures

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title
N25 LIPCB - EIA

Drawing Title
13. Archaeology, Architecture and Cultural Heritage
 13.3. Registered Architectural Sites: PS and NIAH

Scale at A3
1:15000

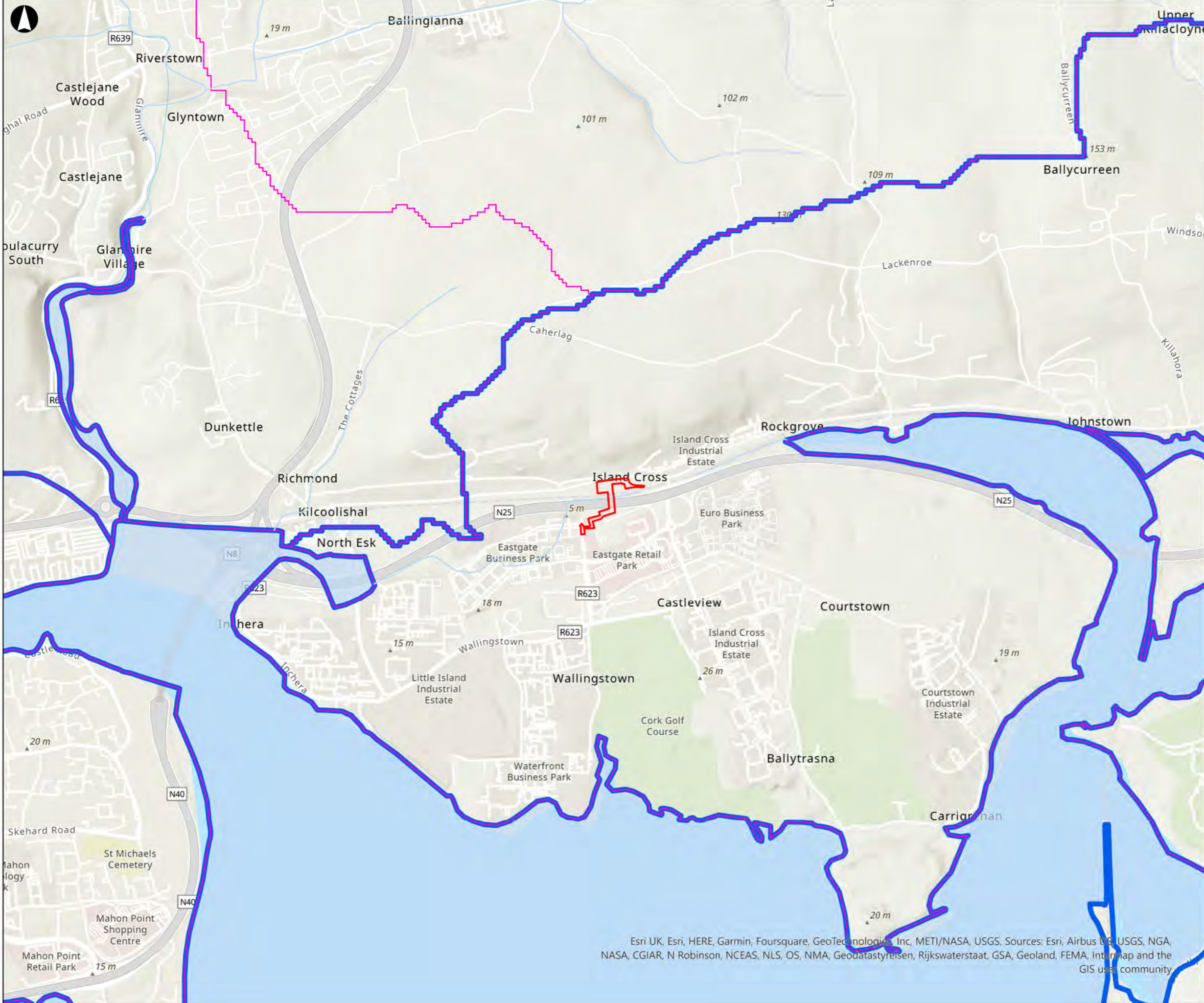
Description
Issue for Planning

Arup Job No 285939-00	Rev A1
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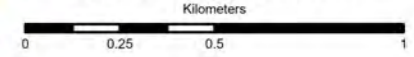
Chapter 16

Water



- Legend**
- Redline Boundary
 - River Network
 - Transitional Waterbodies
 - River Sub-Basins
 - Sub-Catchments

Coordinate System: IRENET95 Irish Transverse Mercator



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Drawing Title
16. Water
16.1. Surface Water Study Area

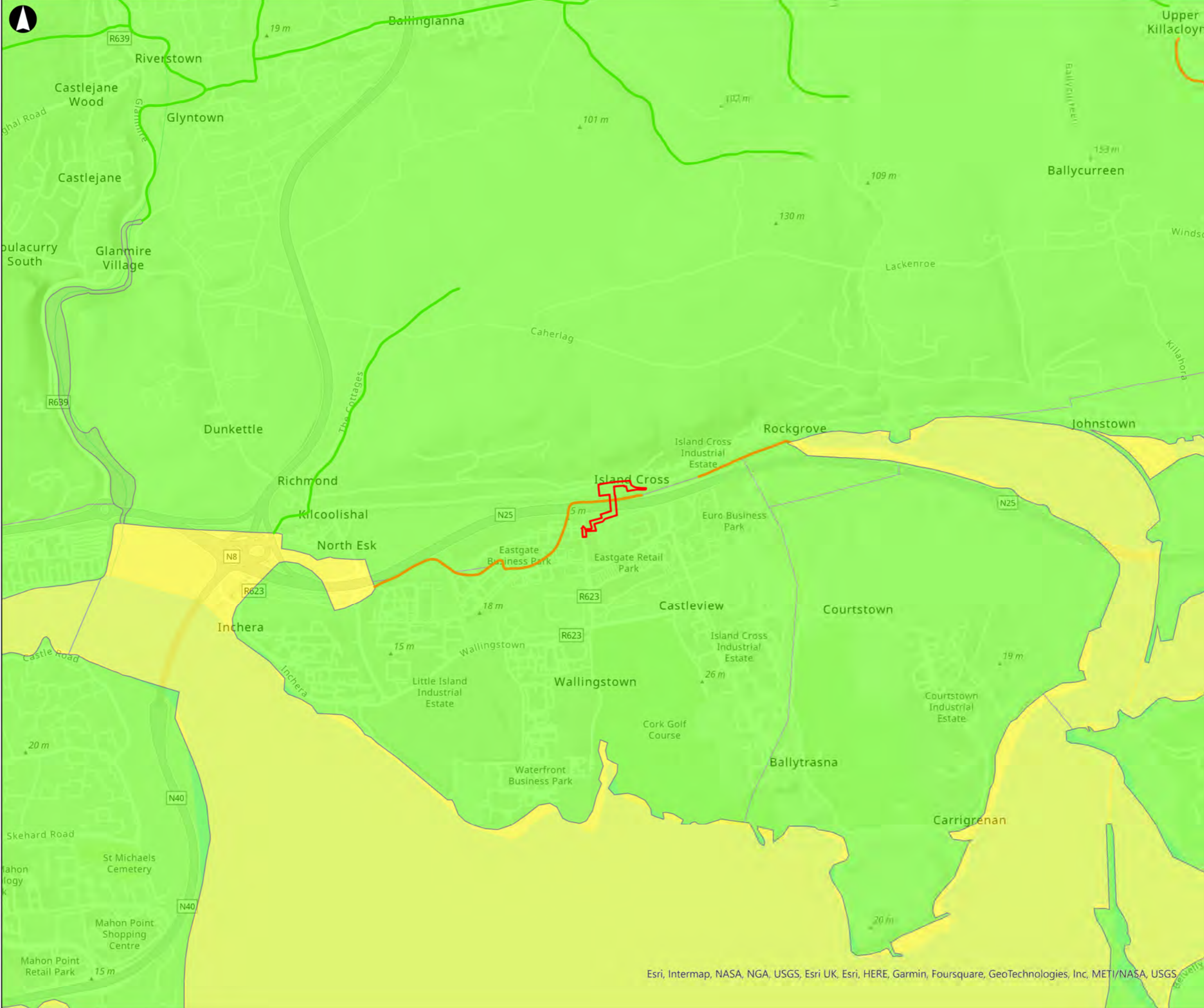
Scale at A3
1:20000
Role

Description
Issue for Planning

Arup Job No 285939-00	Rev A1
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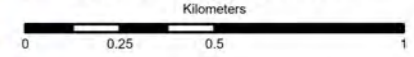
Drawing File Name

Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyreisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community



- Legend**
- Redline Boundary
 - River Waterbodies Risk**
 - Not at risk
 - Review
 - Transitional Waterbodies Status**
 - Good
 - Moderate
 - Ground Waterbodies Status**
 - Good

Coordinate System: IRENET95 Irish Transverse Mercator



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Drawing Title
16. Water

16.2. WFD Protected Areas and At Risk Status of Waterbodies

Scale at A3
1:20000

Description
Issue for Planning

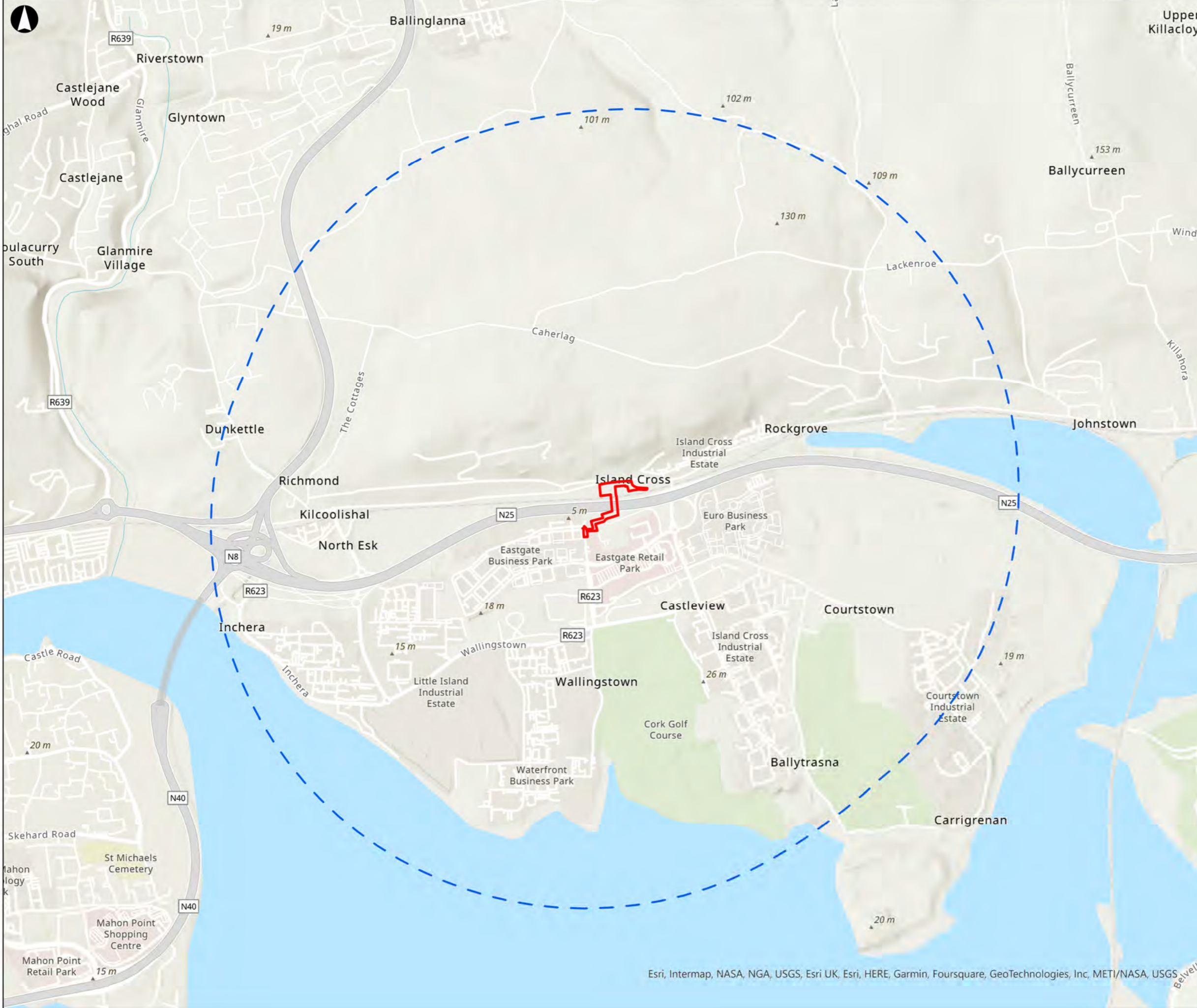
Anup Job No 285939-00	Rev A1
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Drawing File Name



Chapter 17

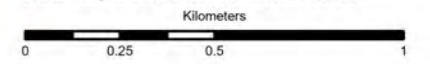
Land, Soils, Geology and Hydrogeology



Legend

- Redline Boundary
- 2 km buffer

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title

N25 LIPCB - EIAR

Drawing Title

17. Land, Soils, Geology & Hydrogeology

17.1. Land, Soils, Geology, and Hydrogeology Study Area

Scale at A3

1:20000

Role

Description

Issue for Planning

Arup Job No

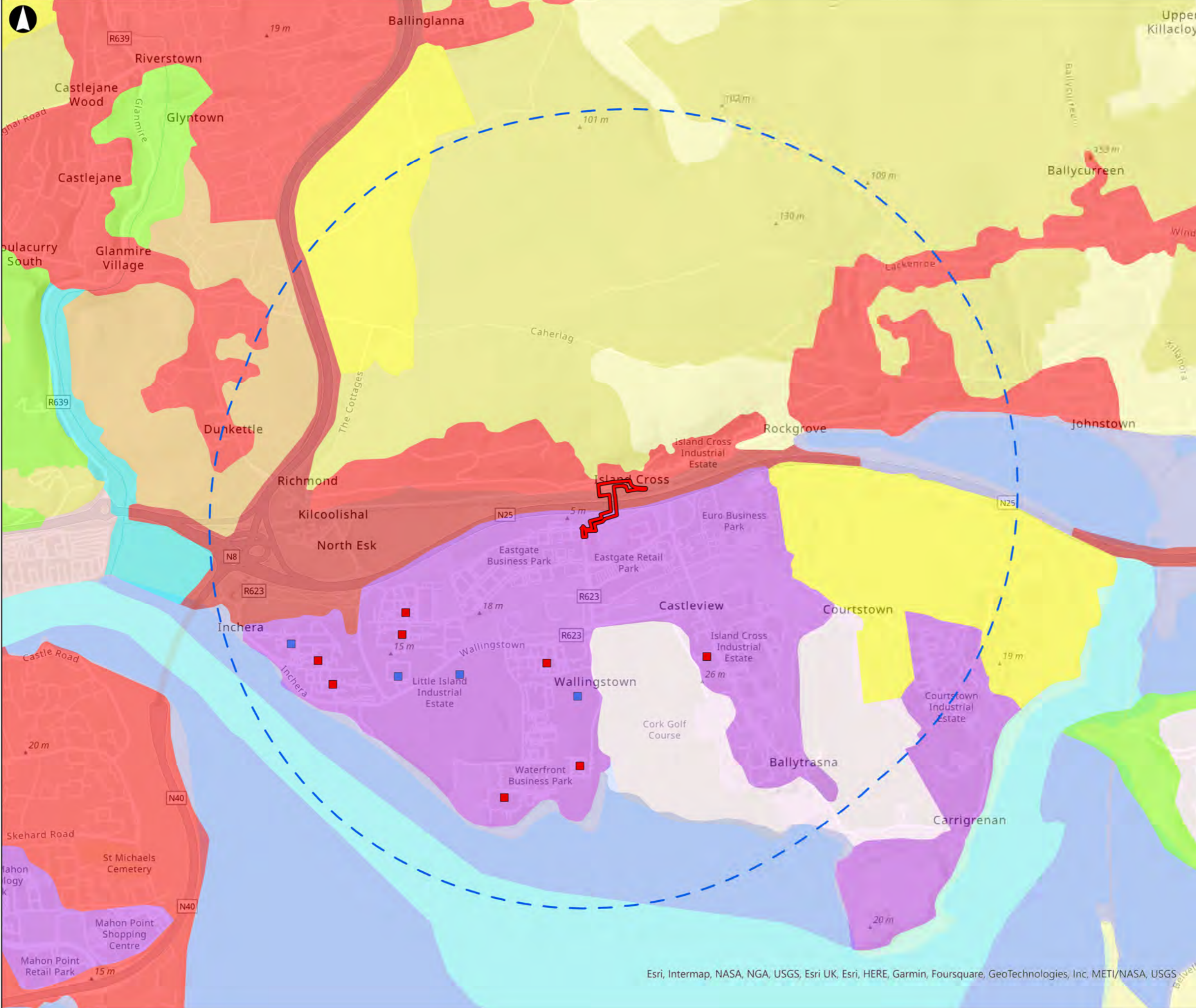
285939-00

Rev

A1

Drawing File Name

Esri, Intermap, NASA, NGA, USGS, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS



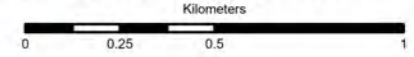
Legend

- Redline Boundary
- 2 km buffer
- Licensed Facilities Industrial Emissions (As of 17/01/23)
- Licensed Facilities Integrated Pollution Control (As of 17/01/23)

Corine Landcover (2018)

- Landcover Type
- 112 Discontinuous urban fabric
 - 121 Industrial or commercial units
 - 122 Road and rail networks
 - 123 Sea ports
 - 142 Sport and leisure facilities
 - 211 Non-irrigated land
 - 231 Pastures
 - 242 Complex cultivation patterns
 - 243 Land principally occupied by agriculture with areas of natural vegetation
 - 311 Broad-leaved forest
 - 421 Salt Marshes
 - 423 Intertidal flats
 - 522 Estuaries

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title
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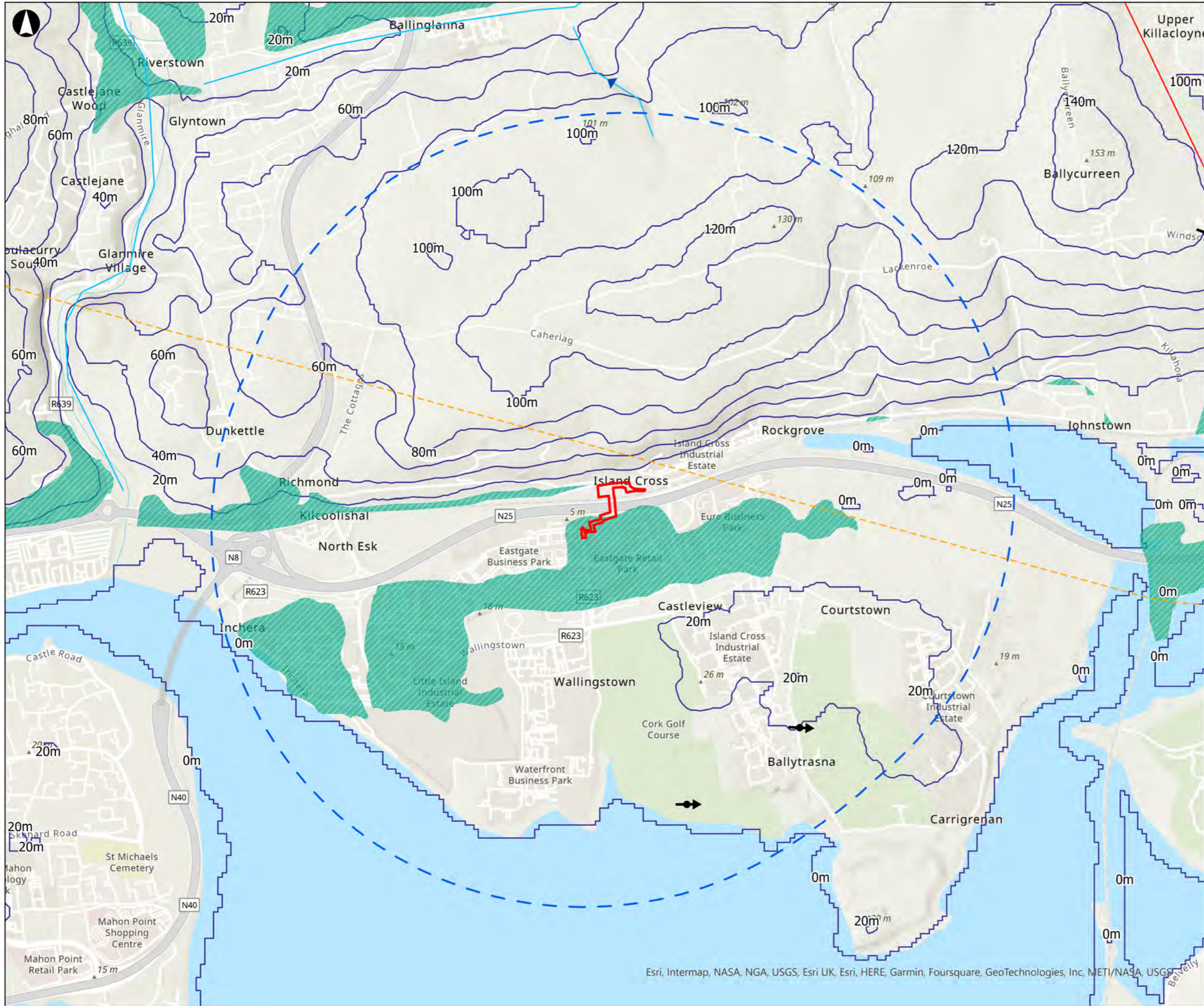
Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.2. Regional Land Use

Scale at A3
1:20000

Description
Issue for Planning

Arup Job No 285939-00	Rev A1
---------------------------------	------------------

Drawing File Name



- Legend**
- ▭ Redline Boundary
 - - - 2 km buffer
 - Contour 20m
 - ↑ Quaternary Subglacial Linear Striae
 - Quaternary Erratic Carriage Sink**
 - - - Erratic Limit
 - Inferred erratic path
 - Quaternary Meltwater Landforms**
 - Meltwater channel
 - Quaternary Deglacial Landforms**
 - Glaciofluvial Terrace

Coordinate System: IRENET95 Irish Transverse Mercator
Kilometers

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Project Title
N25 LIPCB - EIAR

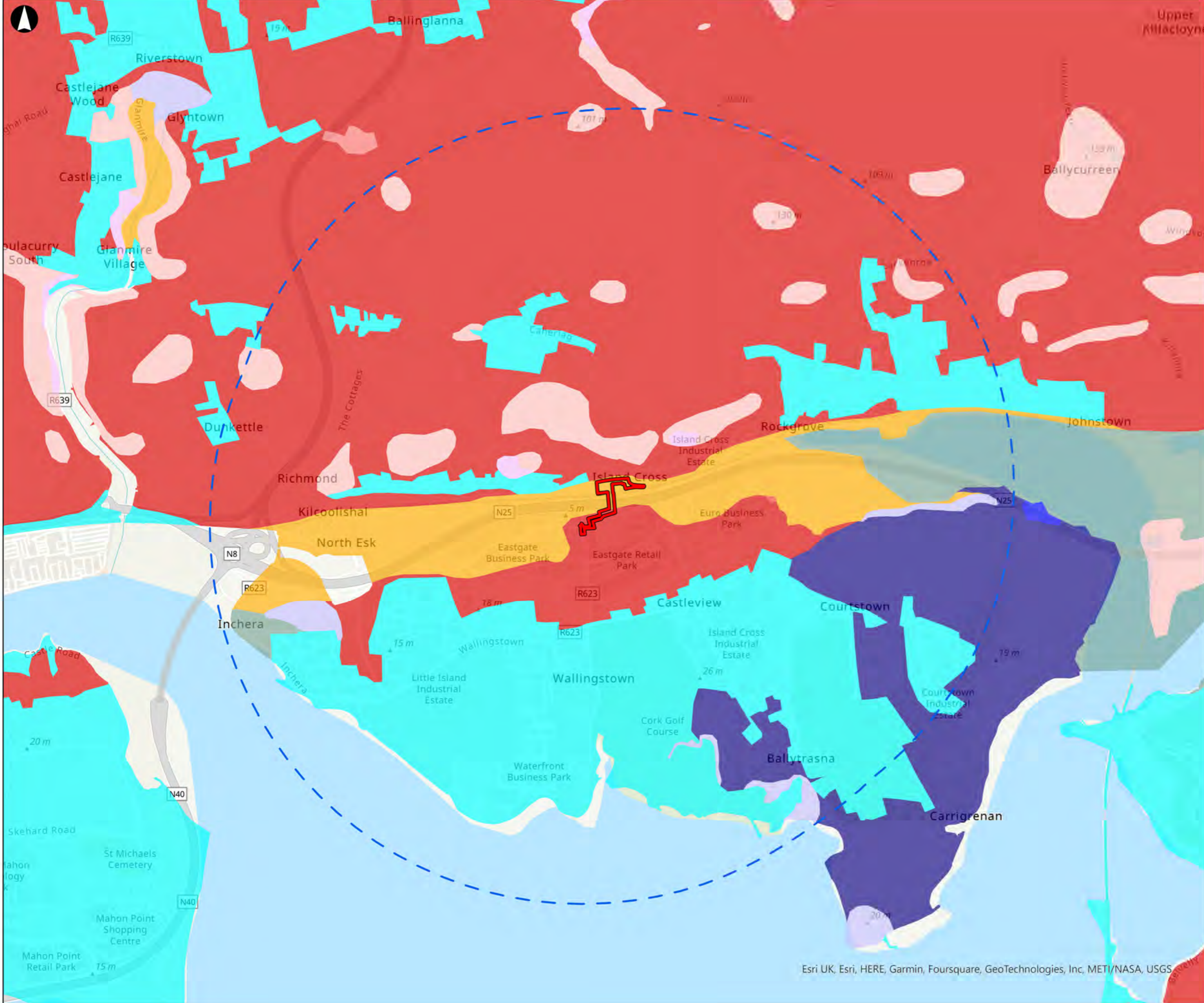
Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.3. Regional Topography and Geomorphology

Scale at A3
1:20000
Role

Description
Issue for Planning

Anup Job No 285939-00	Rev A1
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Drawing File Name



Legend

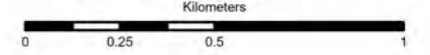
- Redline Boundary
- 2 km buffer

National Soils

Soil Type

- AlluvMIN - Mineral alluvium
- AminDW - Acid Brown Earths / Brown Podzolics
- AminPD - Surface water Gleys / Ground water Gleys Acidic
- AminPDPT - Peaty Gleys Acidic
- AminSRPT - Podzols Peaty
- AminSW - Lithosols / Regosols
- BminDW - Grey Brown Podzolics / Brown Earths Basic
- BminPD - Surface water Gleys / Ground water Gleys Basic
- BminSRPT - Lithosols Peats
- BminSW - Renzinas / Lithosols
- Made
- MarSed

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Drawing Title

17. Land, Soils, Geology & Hydrogeology
17.4. Regional Soils (Teagasc Classification)

Scale at A3

1:20000

Role

Description

Issue for Planning

Anup Job No

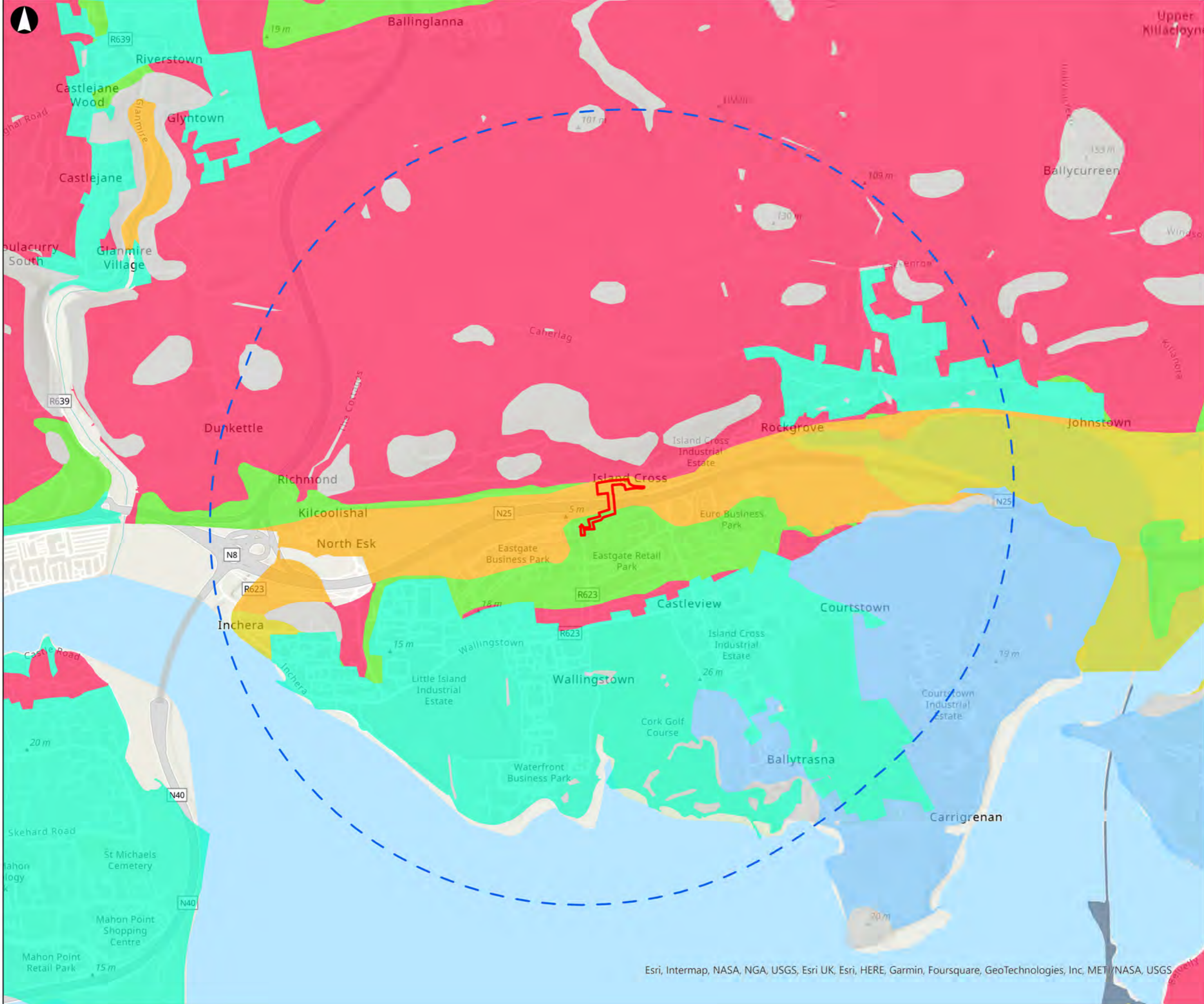
285939-00

Rev

A1

Drawing File Name

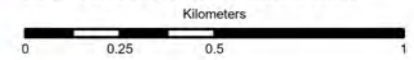
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Legend

- Redline Boundary
- 2 km buffer
- Quaternary Sediments**
- A, Alluvium
- Embankment
- GDSs, Gravels derived from Devonian sandstones
- Mesc. Esturine silts and clays
- Pier
- Rck, Bedrock outcrop or subcrop
- TDSs, Till derived from Devonian sandstones
- TLs, Till derived from limestones
- Urban

Coordinate System: IRENET95 Irish Transverse Mercator




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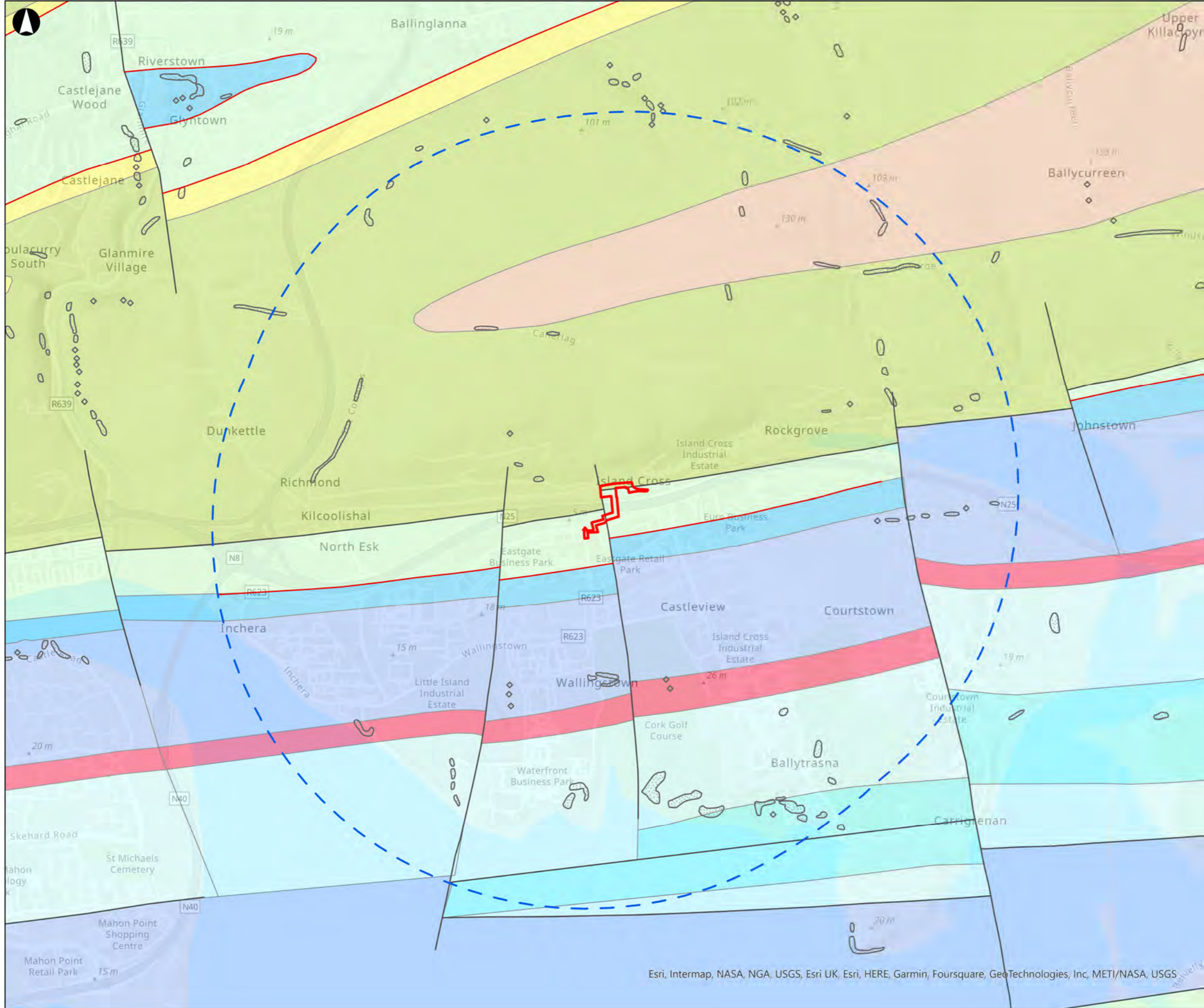
Project Title
N25 LIPCB - EIAR

Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.5. Regional Subsoils (Quaternary Sediments)

Scale at A3
1:20000
Role

Description
Issue for Planning

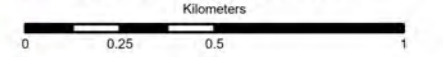
Anup Job No 285939-00	Rev A1
Drawing File Name	



Legend

- Redline Boundary
- 2 km buffer
- Bedrock Outcrop
- Bedrock Geology Linework**
- Fault
- Thin stratigraphical unit, diagrammatic
- Bedrock Geology**
- Ballysteen Formation
- Ballytrasna Formation
- Cork Red Marble Formation
- Clashavodig Formation
- Gyleen Formation
- Cuskinny Member
- Little Island Formation
- Old Head Sandstone Formation
- Waulsortian Limestones

Coordinate System: IRENET95 Irish Transverse Mercator



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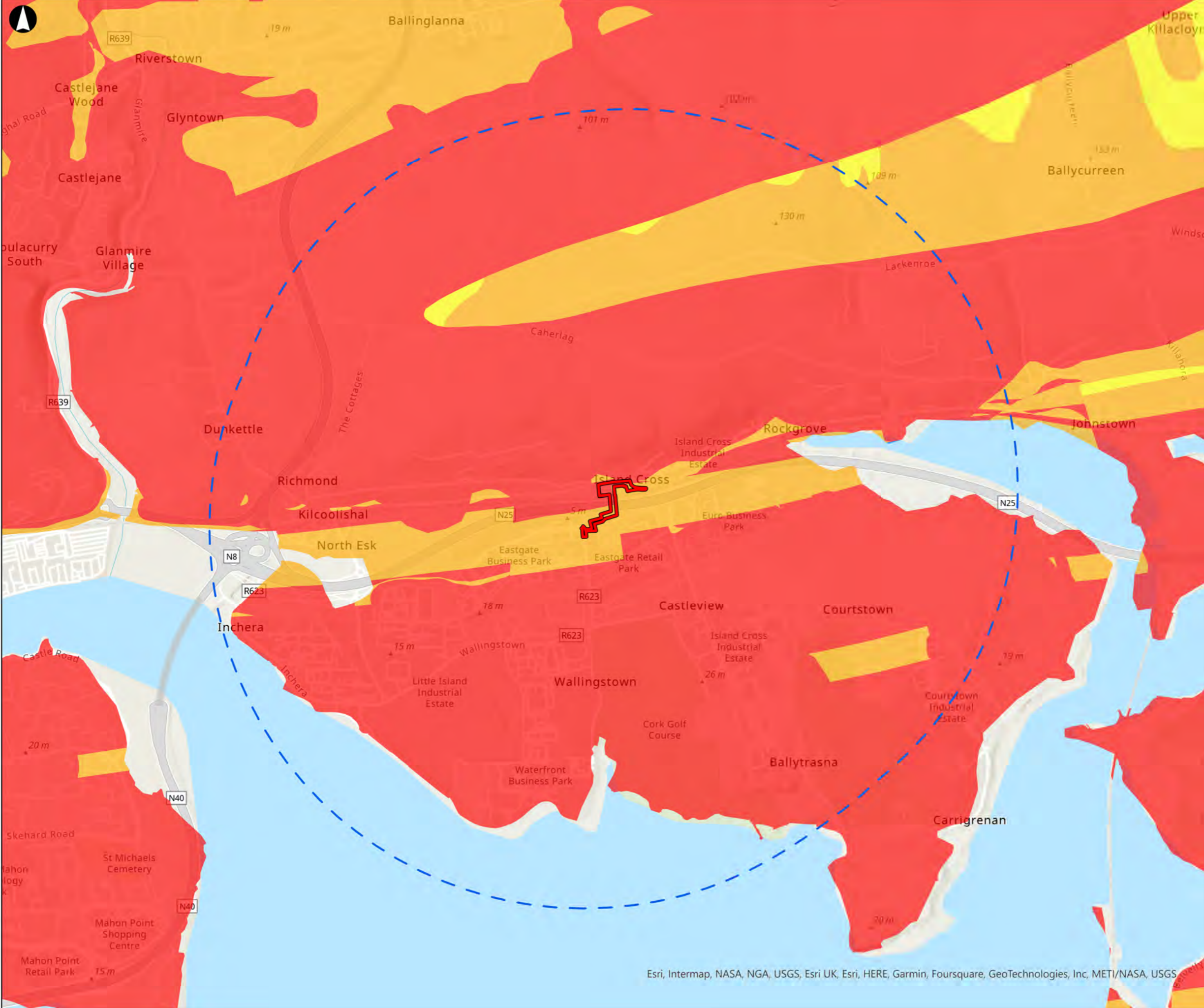
Project Title
N25 LIPCB - EIAR

Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.6. Regional Bedrock Geology (1:100K)

Scale at A3
1:20000
Role

Description
Issue for Planning

Arup Job No 285939-00	Rev A1
Drawing File Name	



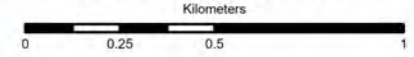
Legend

- Redline Boundary
- 2 km buffer

Crush rock agg. Potential

- Very High potential
- High potential
- Moderate potential
- Very Low potential

Coordinate System: IRENET95 Irish Transverse Mercator



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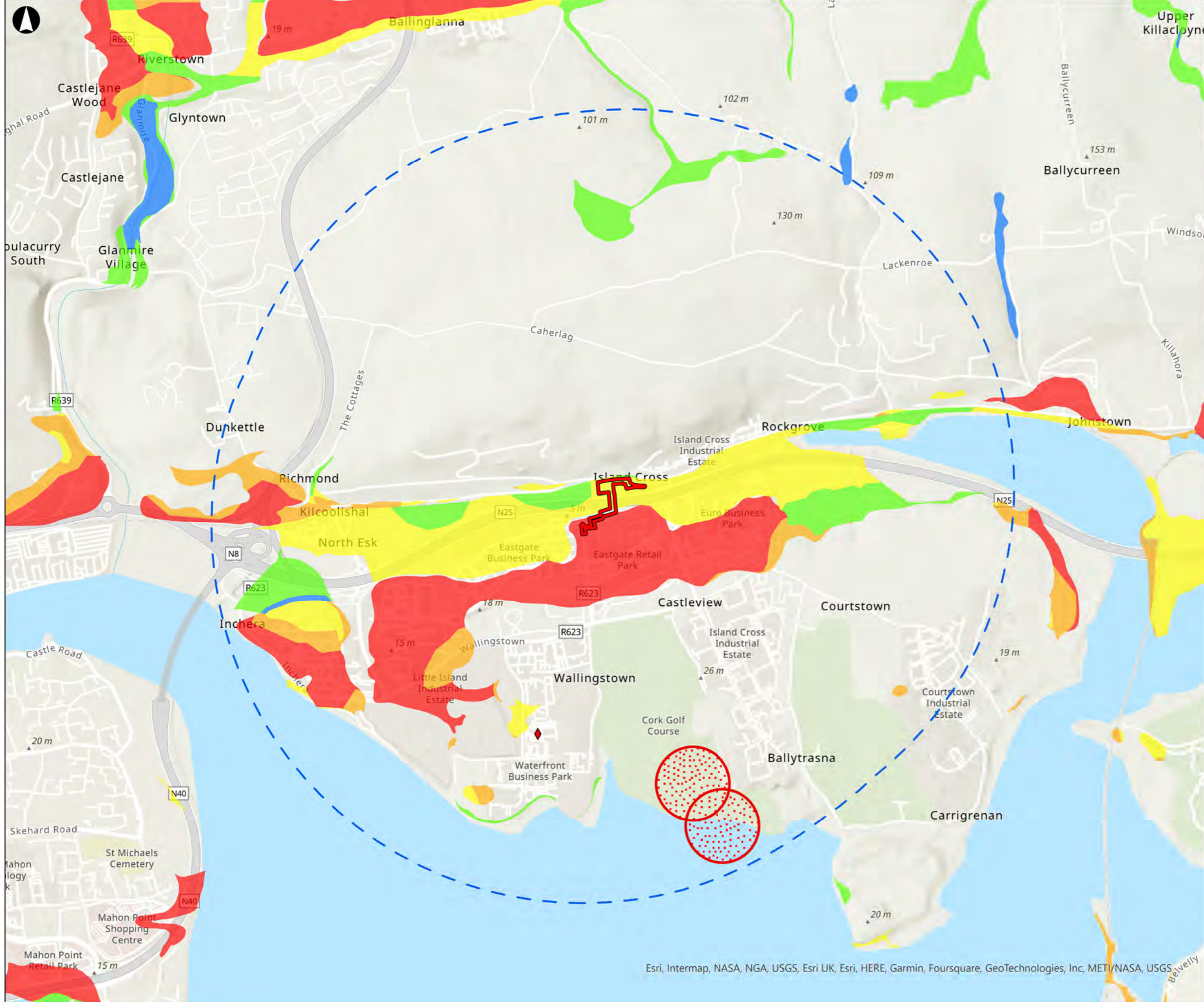
Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.7. Regional Crushed Rock Aggregate Potential

Scale at A3
1:20000

Description
Issue for Planning

Anup Job No 285939-00	Rev A1
---------------------------------	------------------

Drawing File Name



- Legend**
- Redline Boundary
 - 2 km buffer
 - Mineral Locations**
 - ◆ Non-metallic
 - Granular agg. Potential**
 - Very High potential
 - High potential
 - Moderate potential
 - Low potential
 - Very Low potential
 - Geological Heritage Sites**
 - Unaudited

Coordinate System: IRENET95 Irish Transverse Mercator

Kilometers

0 0.25 0.5 1

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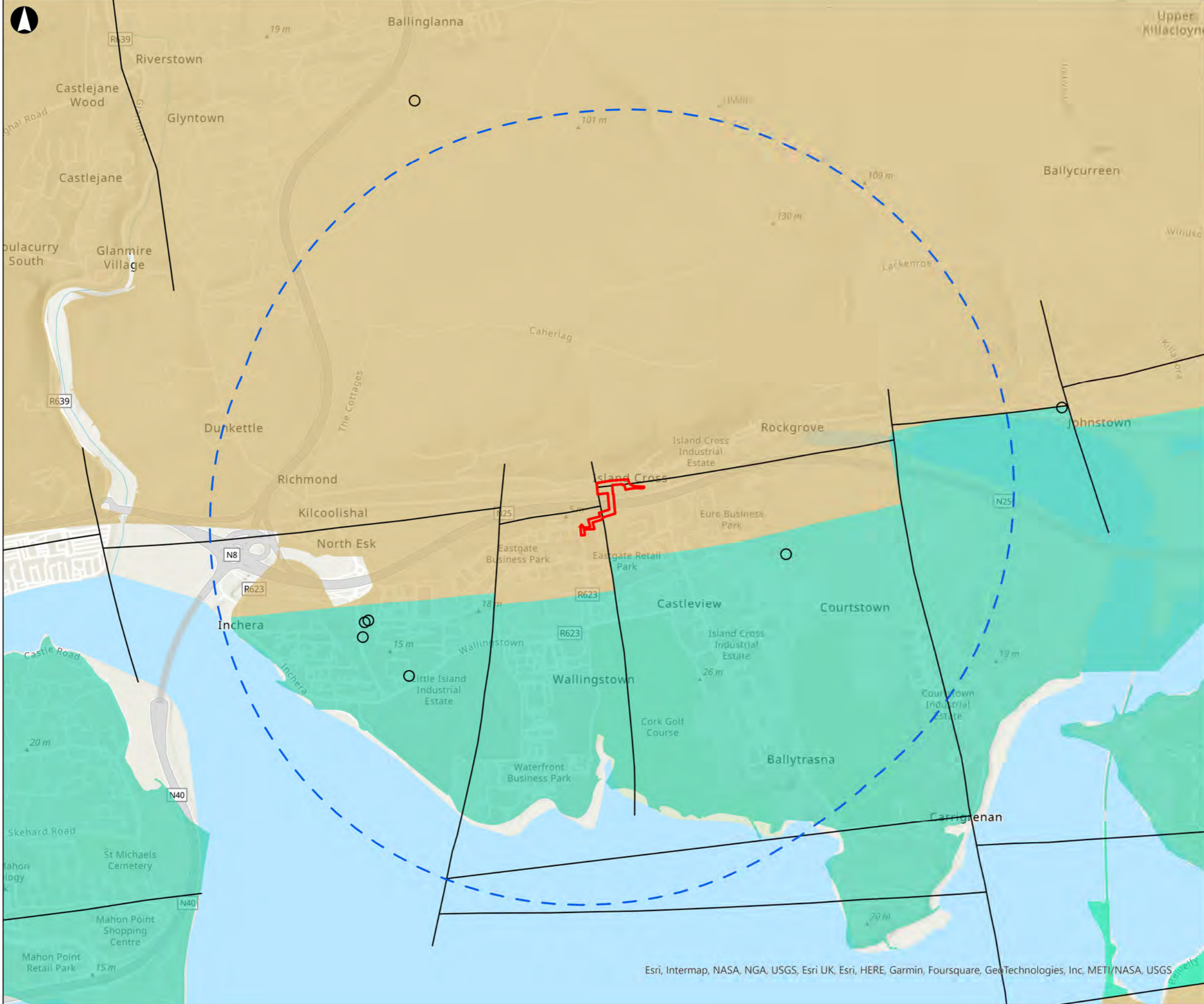
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Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.8. Regional Aggregate Resources

Scale at A3
1:20000

Description Issue for Planning	
Anup Job No 285939-00	Rev A1
Drawing File Name	



Legend

- Redline Boundary
- 2 km buffer
- Wells and Springs
- Aquifer Bedrock Faultline

Aquifer Bedrock

- Rkd - Regionally Important Aquifer - Karstified (diffuse)
- Lk - Locally Important Aquifer - Karstified
- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones

Coordinate System: IRENET95 Irish Transverse Mercator
Kilometers

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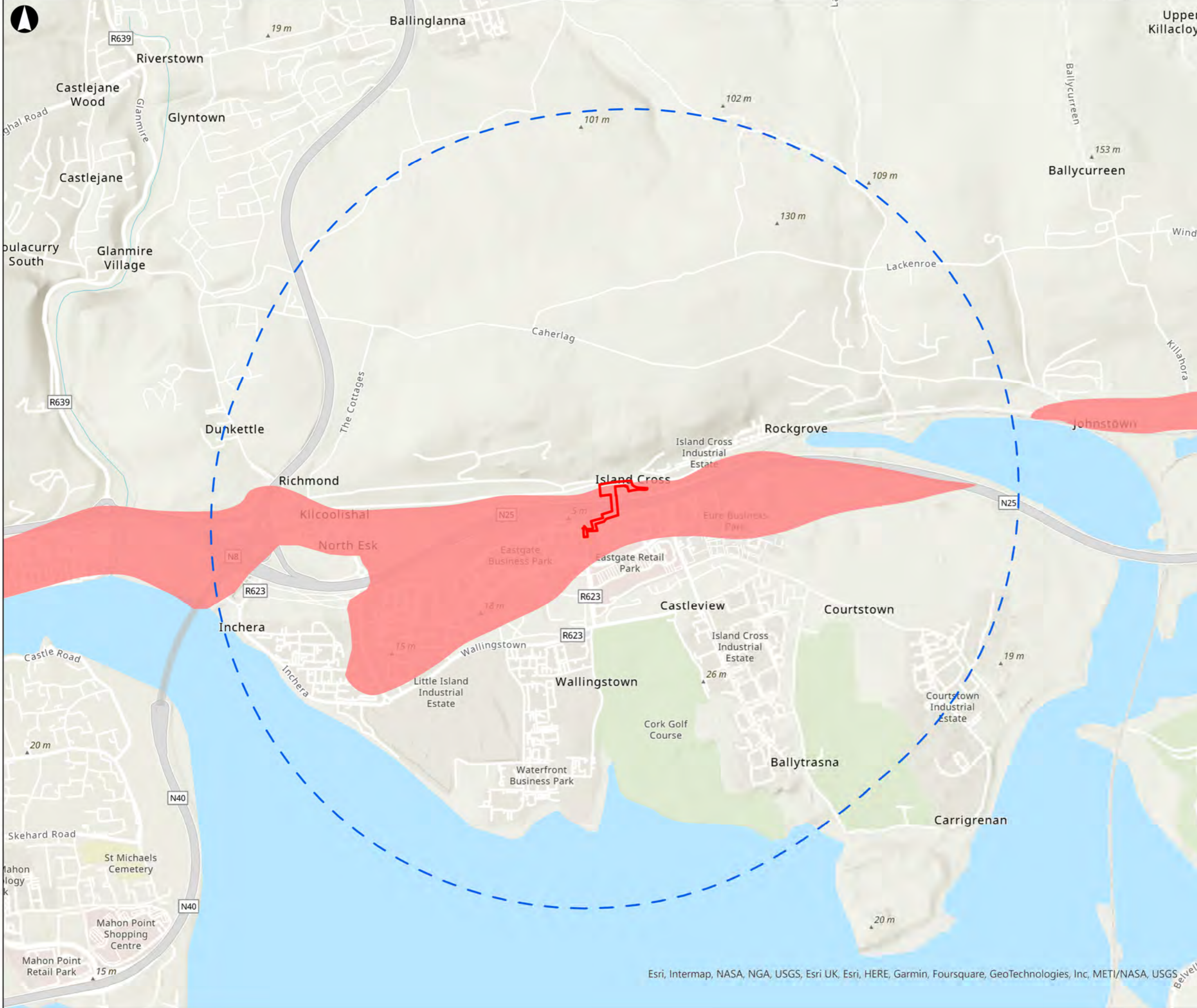
Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.9. Regional Bedrock Aquifers and Abstractions

Scale at A3
1:20000
Role

Description
Issue for Planning

Anup Job No	285939-00	Rev	A1
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Drawing File Name



Legend

- Redline Boundary
- 2 km buffer

Sand and Gravel Aquifer

- Locally important gravel aquifer

Coordinate System: IRENET95 Irish Transverse Mercator

Kilometers

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Project Title
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Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.10. Regional Gravel Aquifers

Scale at A3
1:20000

Description Issue for Planning	
Arup Job No 285939-00	Rev A1
Drawing File Name	



Legend

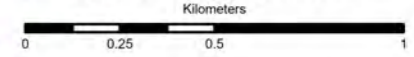
- Redline Boundary
- 2 km buffer

WFD Groundwater Bodies Status

Status

- Good

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title
N25 LIPCB - EIAR

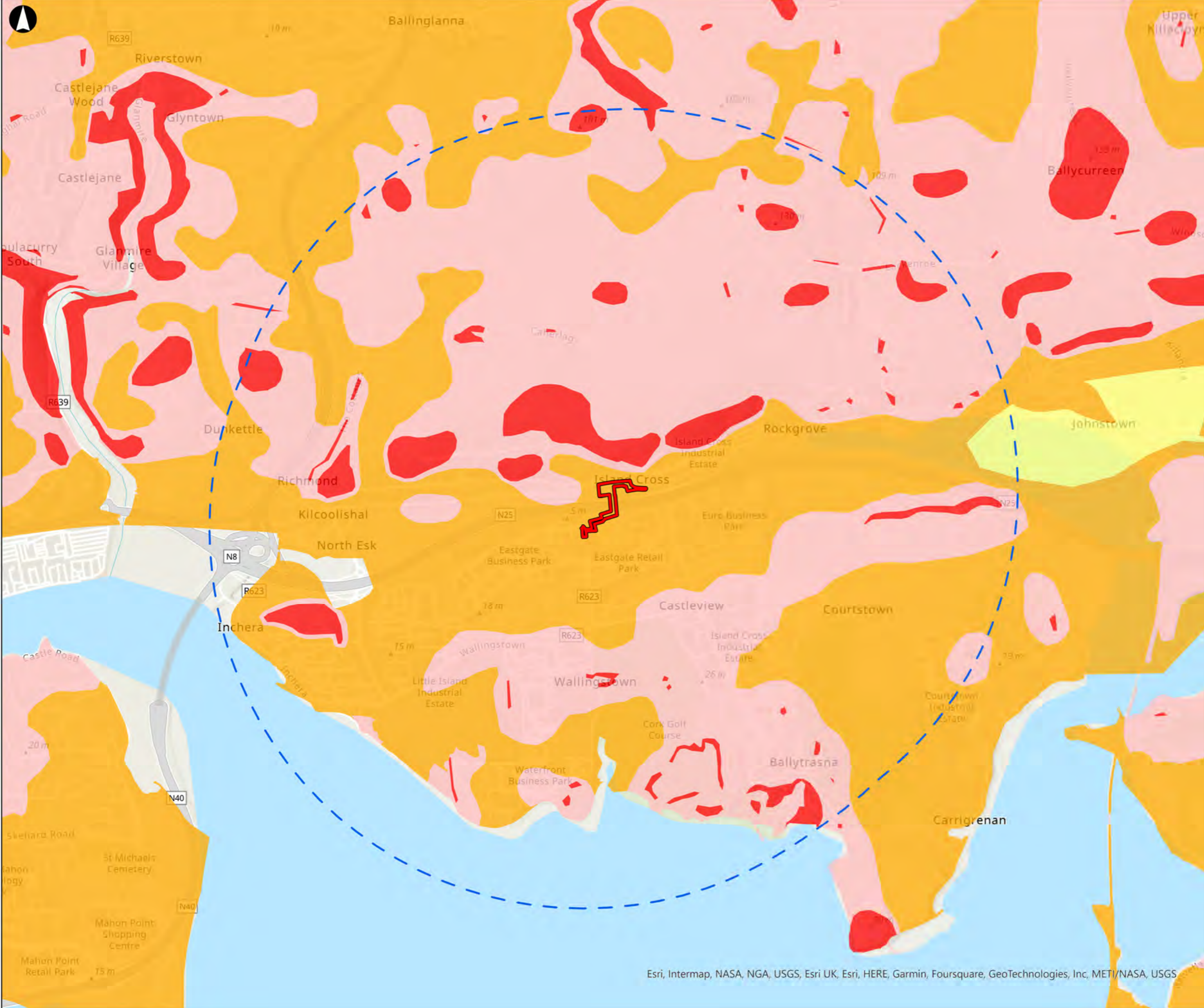
Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.11. Regional Groundwater Bodies

Scale at A3
1:20000

Description
Issue for Planning

Anup Job No 285939-00	Rev A1
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Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastystyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community
Knockadoon West



Legend

- Redline Boundary
- 2 km buffer

Groundwater Vulnerability

- Extreme
- High
- Moderate
- Rock at or near Surface or Karst

Coordinate System: IRENET95 Irish Transverse Mercator
Kilometers

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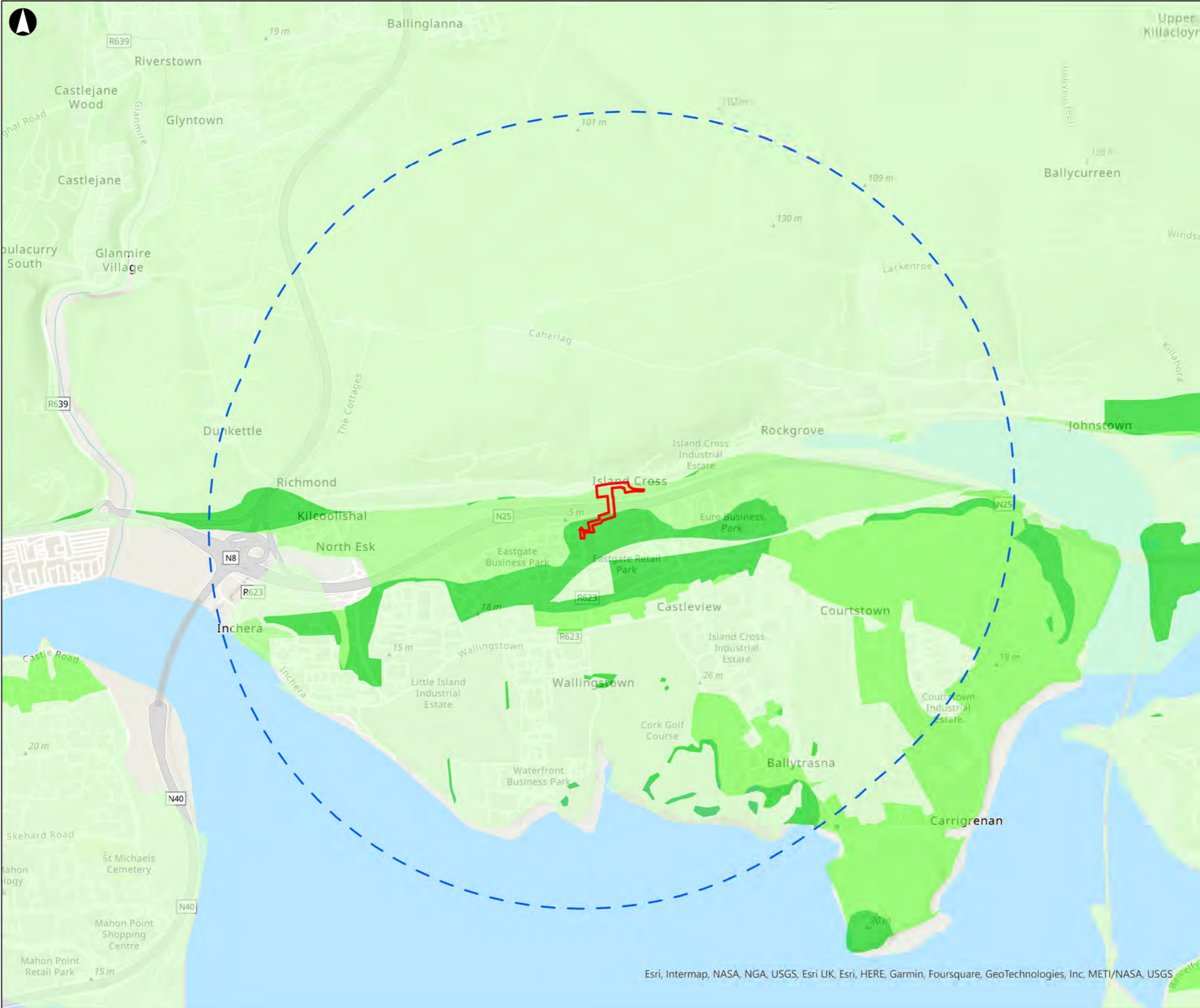
Comhairle Contae Chorcaí
Cork County Council

Project Title
N25 LIPCB - EIAR

Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.12. Regional Groundwater Vulnerability

Scale at A3
1:20000
Role

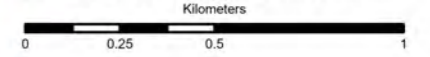
Description Issue for Planning	
Anup Job No 285939-00	Rev A1
Drawing File Name	



Legend

- Redline Boundary
- 2 km buffer
- Groundwater Recharge**
- Annual Recharge (mm)
- 551-600 mm
- 501-550 mm
- 351-400 mm
- 251-300 mm
- 151-200 mm
- 101-150 mm

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title
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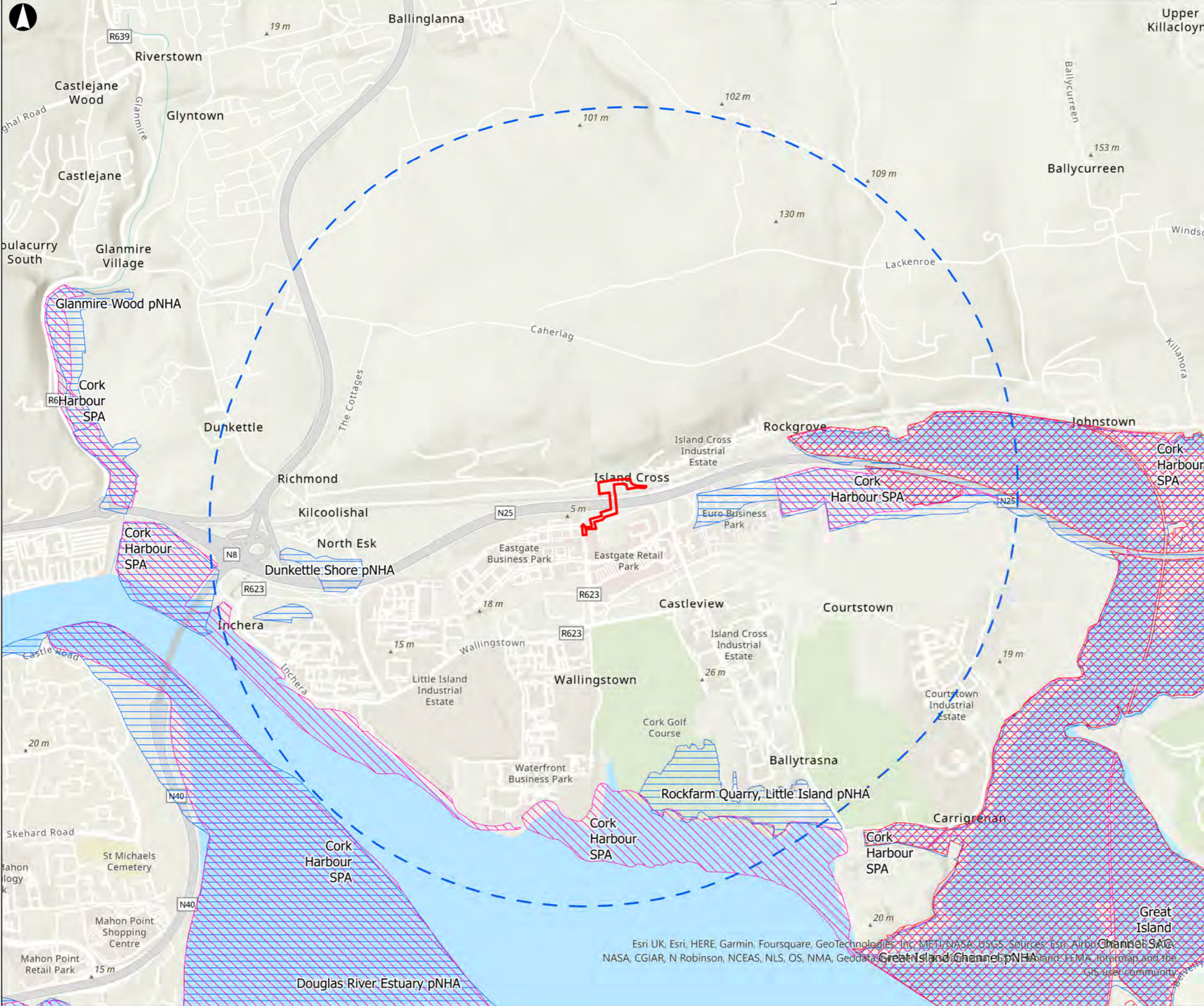
Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.13. Regional Groundwater Recharge

Scale at A3
1:20000

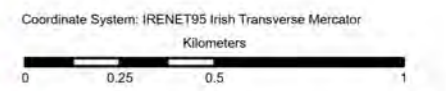
Description
Issue for Planning

Arup Job No 285939-00	Rev A1
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Drawing File Name



- Legend**
- Redline Boundary
 - 2 km buffer
 - Special Areas of Conservation
 - Proposed Natural Heritage Areas
 - Special Protection Areas



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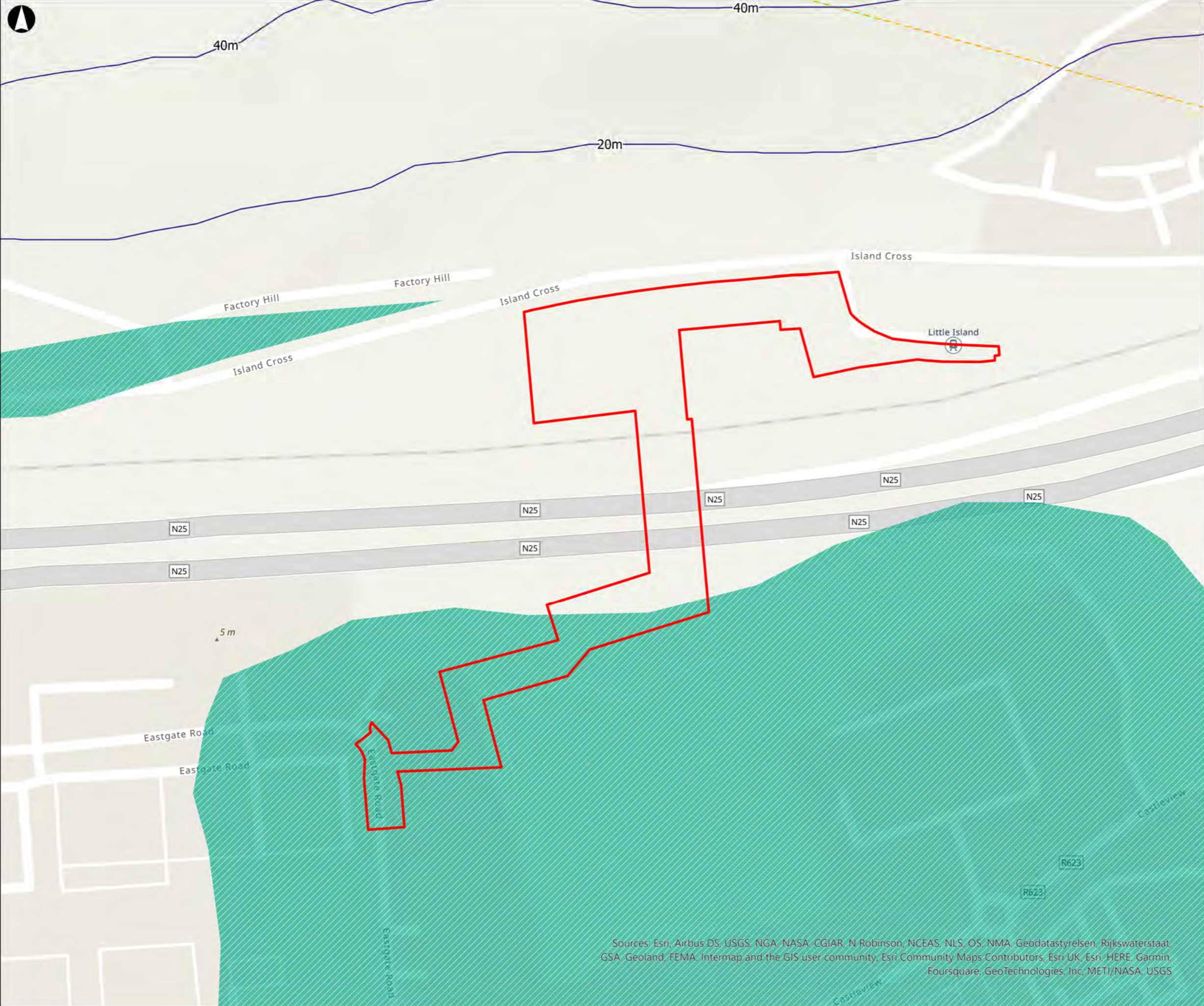
Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.14. Regional NPWS Designated Sites

Scale at A3
1:20000

Description
Issue for Planning

Anup Job No 285939-00	Rev A1
Drawing File Name	

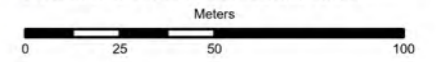
Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, Mapbox, NASA, USGS, Sources: Esri, Airbu, Bing, Google, IGN, Intermap, and the GIS user community
NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodata, Ireland, FEMA, Intermap and the GIS user community



Legend

- Redline Boundary
- Contour 20m
- Quaternary Erratic Carriage Sink**
- Erratic Limit
- Quaternary Deglacial Landforms**
- Glaciofluvial Terrace

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title

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Drawing Title

17. Land, Soils, Geology & Hydrogeology

17.15. Site-Specific Topography and Geomorphology

Scale at A3

1:2000

Role

Description

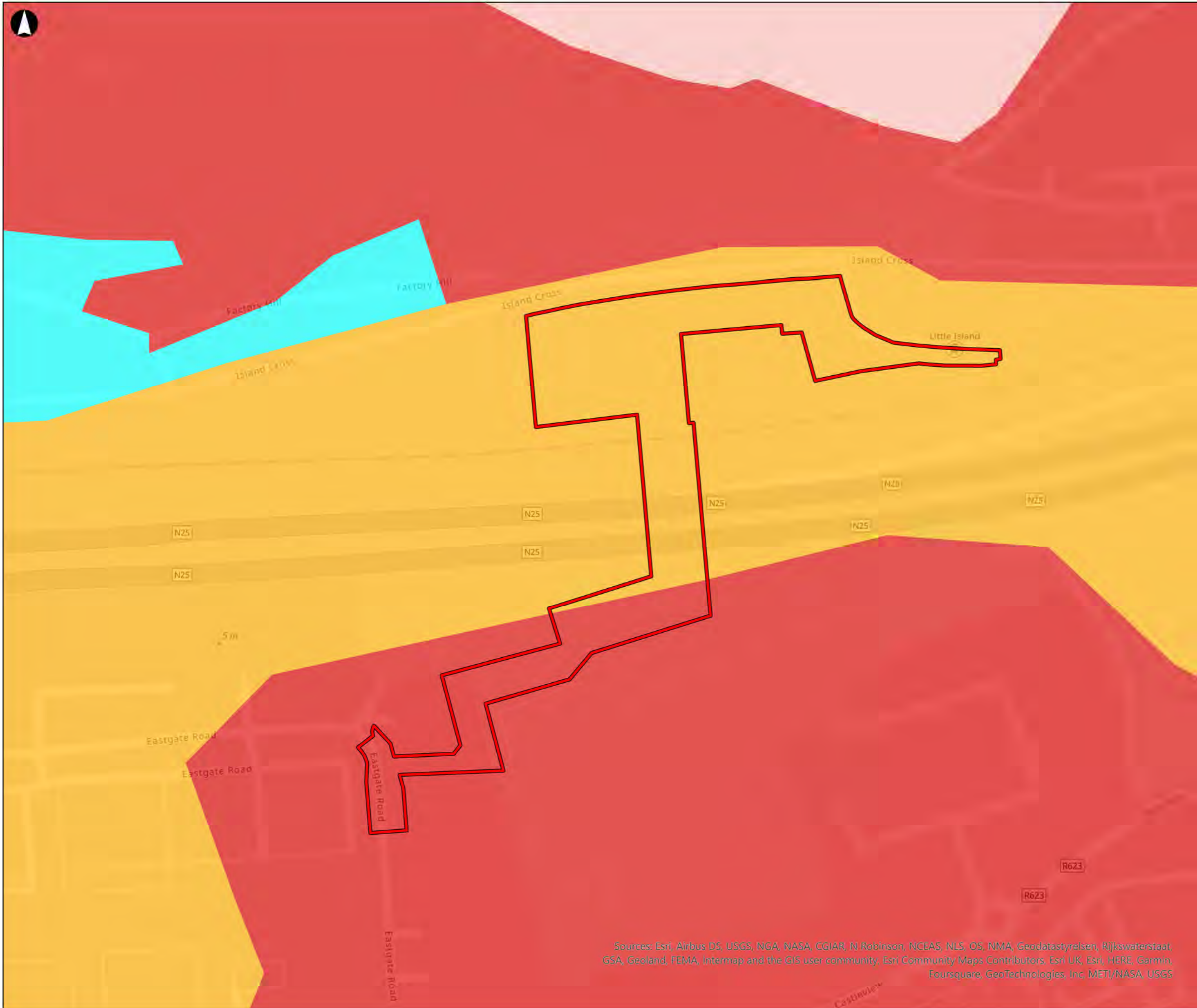
Issue for Planning

Anup Job No
285939-00

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A1

Drawing File Name

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS



Legend

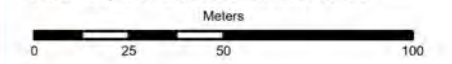
Redline Boundary

National Soils

Soil Type

- AlluvMIN - Mineral alluvium
- AminDW - Acid Brown Earths / Brown Podzolics
- AminSW - Lithosols / Regosols
- Made

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title

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Drawing Title

17. Land, Soils, Geology & Hydrogeology
17.16. Site-Specific Soil (Teagasc Classification)

Scale at A3

1:2000

Role

Description

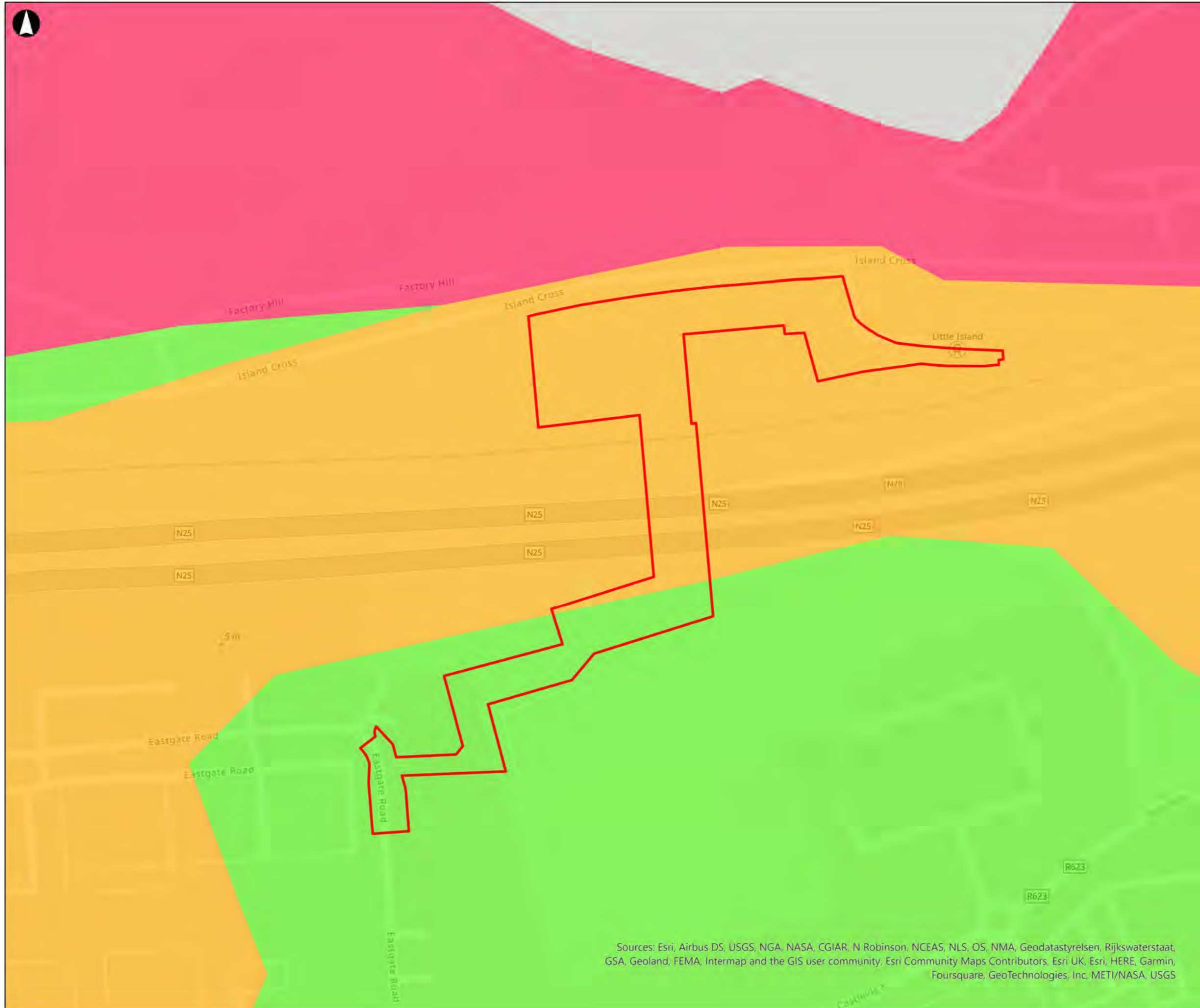
Issue for Planning

Anup Job No
285939-00

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Drawing File Name

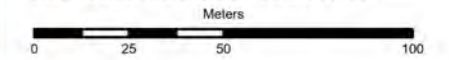
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS



Legend

- Redline Boundary
- Quaternary Sediments**
- A, Alluvium
- GDSs, Gravels derived from Devonian sandstones
- Rck, Bedrock outcrop or subcrop
- TDSs, Till derived from Devonian sandstones

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title
N25 LIPCB - EIAR

Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.17. Site-Specific Subsoil (Quaternary Sediments)

Scale at A3

1:2000

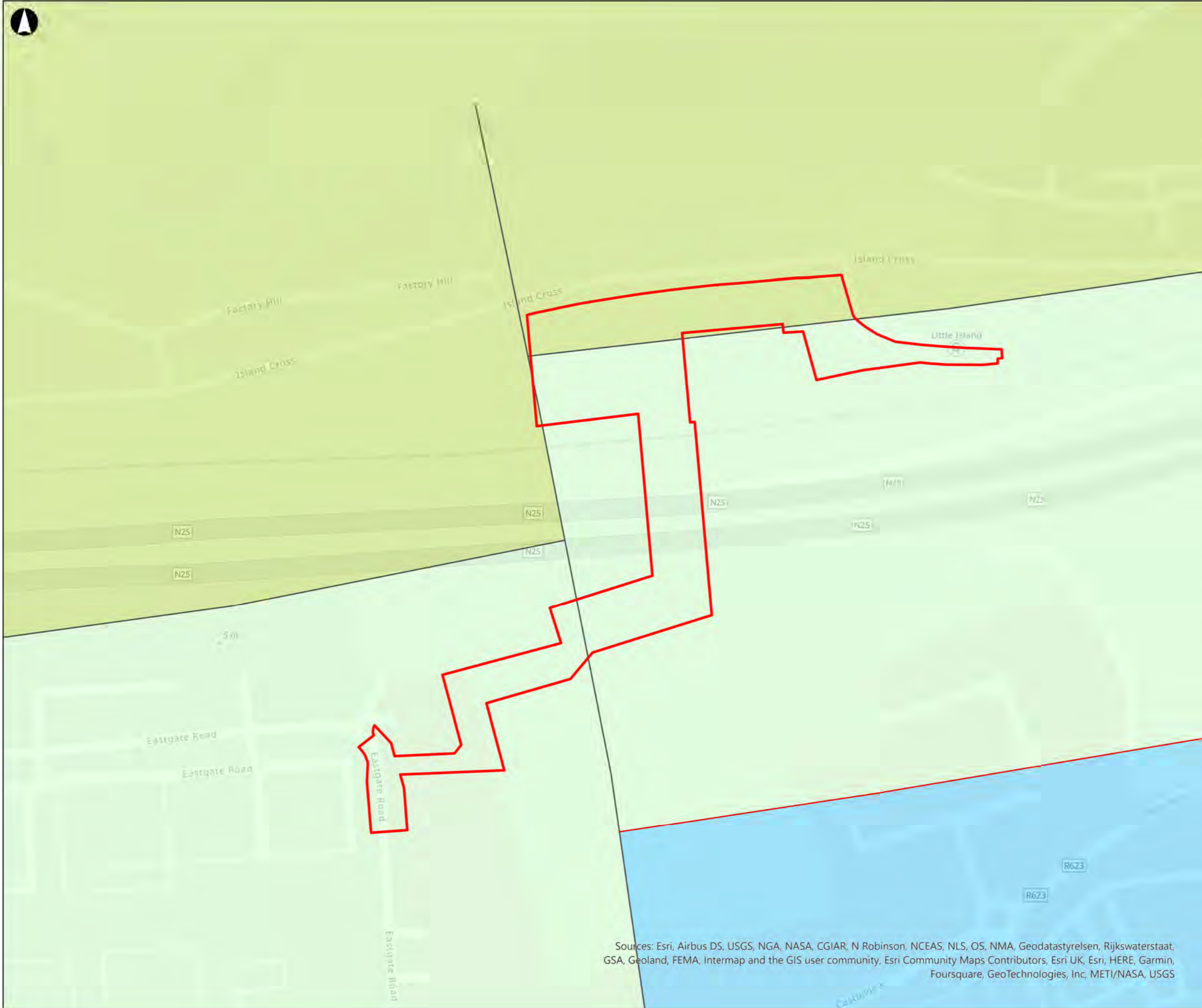
Role

Description
Issue for Planning

Anup Job No 285939-00	Rev A1
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Drawing File Name

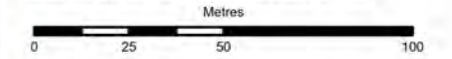
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc. METI/NASA, USGS



Legend

- Redline Boundary
- Bedrock Geology Linework**
- Fault
- Thin stratigraphical unit, diagrammatic
- Bedrock Geology**
- Ballysteen Formation
- Gyleen Formation
- Cuskinny Member

Coordinate System: IRENET95 Irish Transverse Mercator



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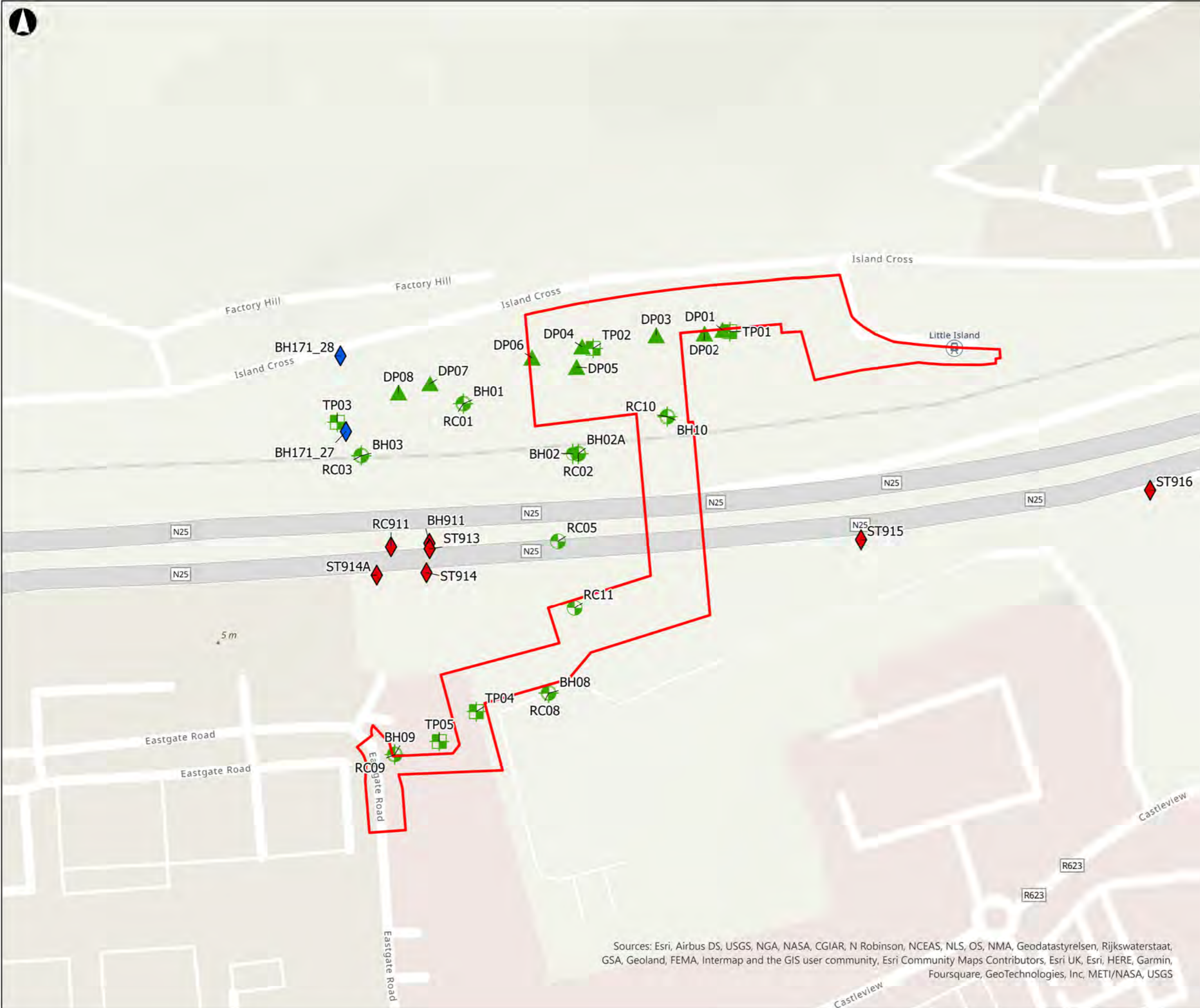
Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.18. Site-Specific Bedrock Geology (1:100K)

Scale at A3
1:2000
Role

Description
Issue for Planning

Anup Job No 285939-00	Rev A1
Drawing File Name	

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

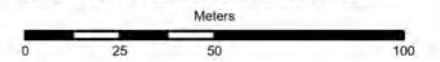


Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

Legend

- Redline Boundary
- Previous Ground Investigations**
 - ◆ GSI Boreholes (SIL, 1976)
 - ◆ Dunkettle Advance ITS (PGL, 2020)
- Project-Specific Ground Investigation (PGL, 2023)**
 - ⊕ Trial Pits
 - ⊕ Cable Percussive with Rotary Coring follow-on
 - ⊕ Rotary Coring
 - ▲ Dynamic Probing

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title

N25 LIPCB - EIAR

Drawing Title

17. Land, Soils, Geology & Hydrogeology
17.19. Site-Specific Historic and Project Specific Ground Investigations

Scale at A3

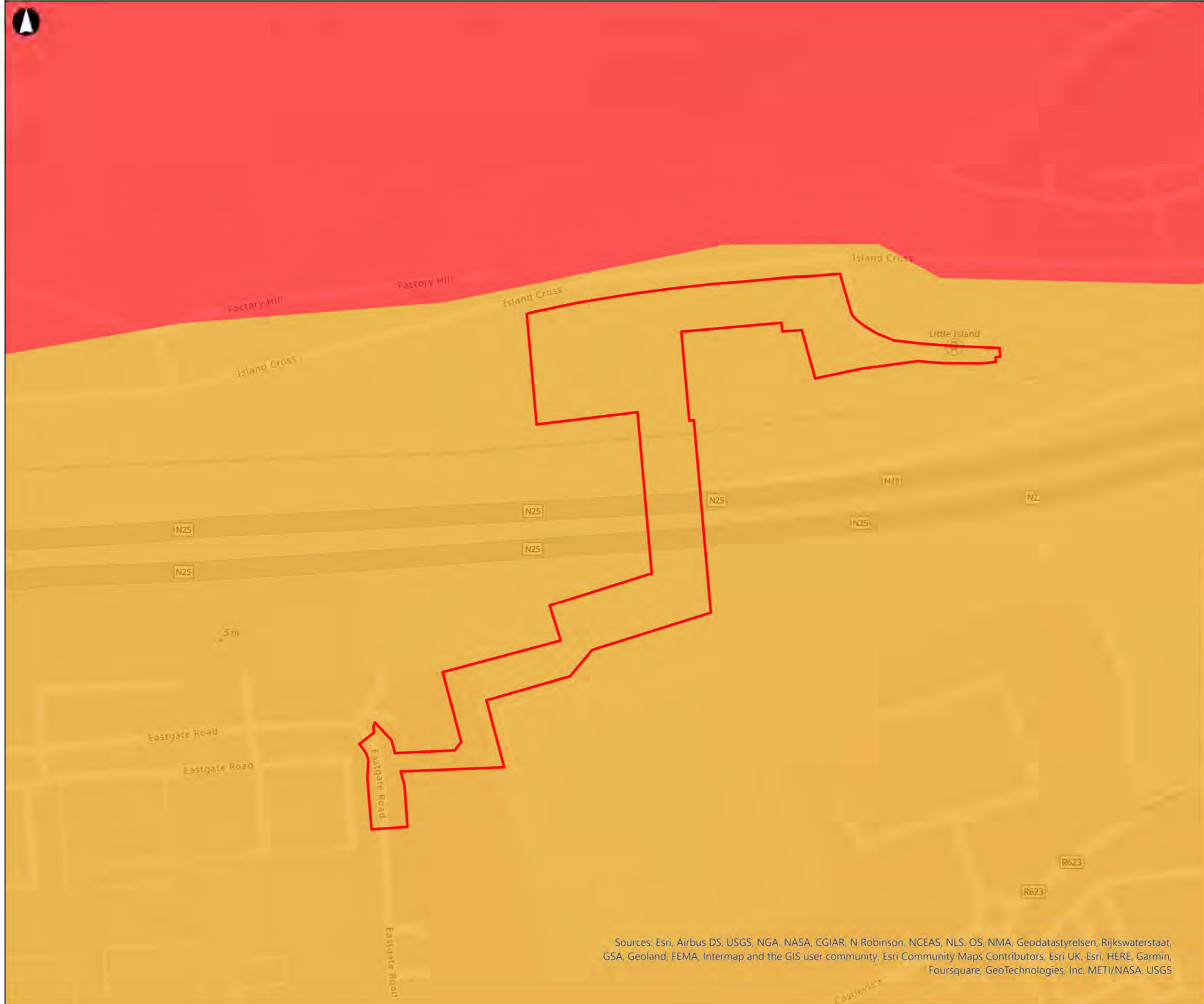
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Role

Description

Issue for Planning

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Drawing File Name	



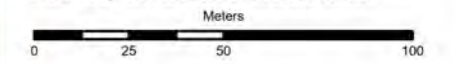
Legend

Redline Boundary

Radon Risk

- About 1 in 5 homes in this area is likely to have high radon levels
- About 1 in 10 homes in this area is likely to have high radon levels

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Project Title
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Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.20. Site-Specific Radon Risk

Scale at A3

1:2000

Role

Description

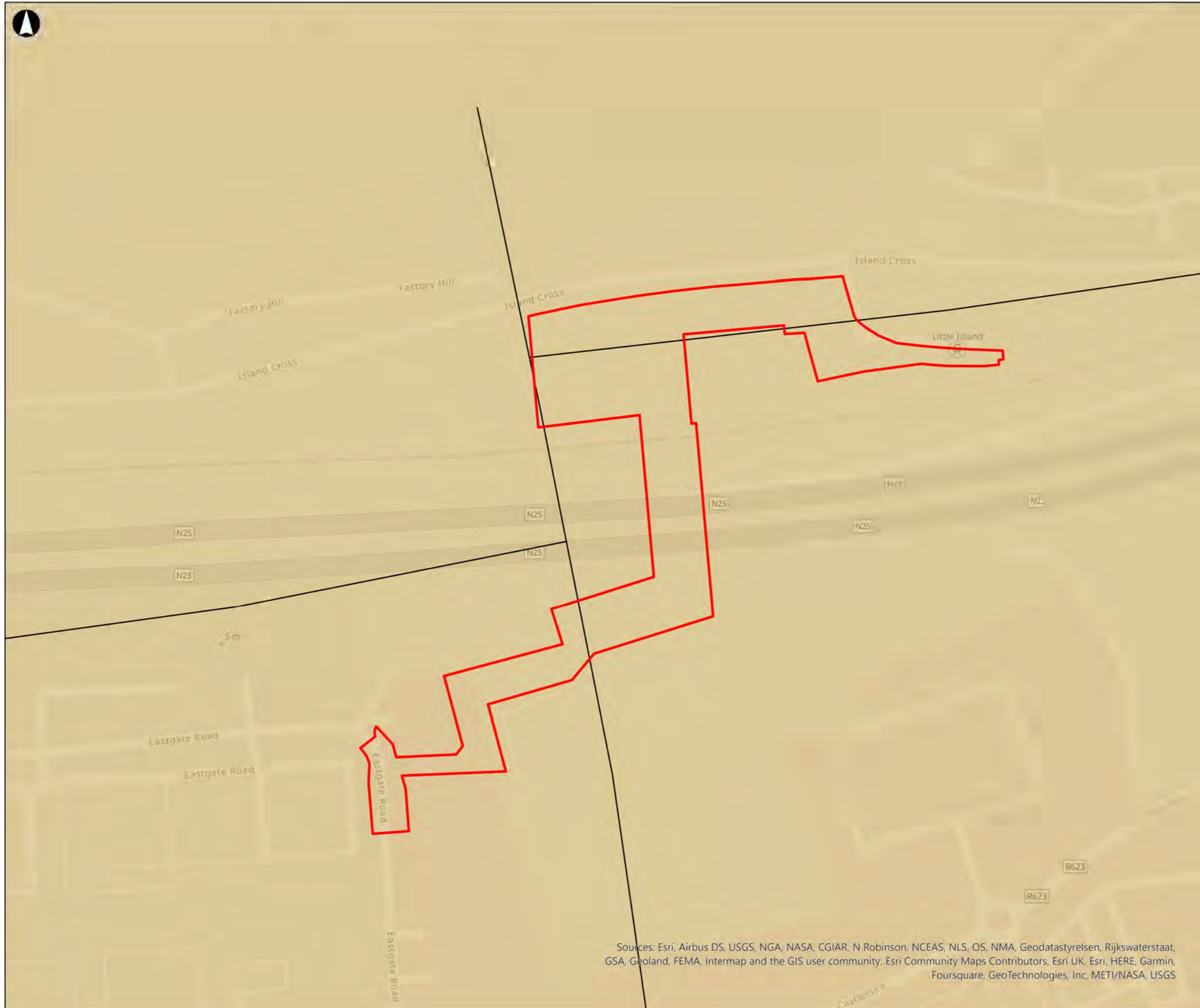
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A1

Drawing File Name

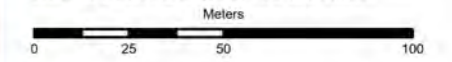
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc. METI/NASA, USGS



Legend

- Redline Boundary
- Aquifer Bedrock Faultline
- Aquifer Bedrock**
- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones

Coordinate System: IRENET95 Irish Transverse Mercator



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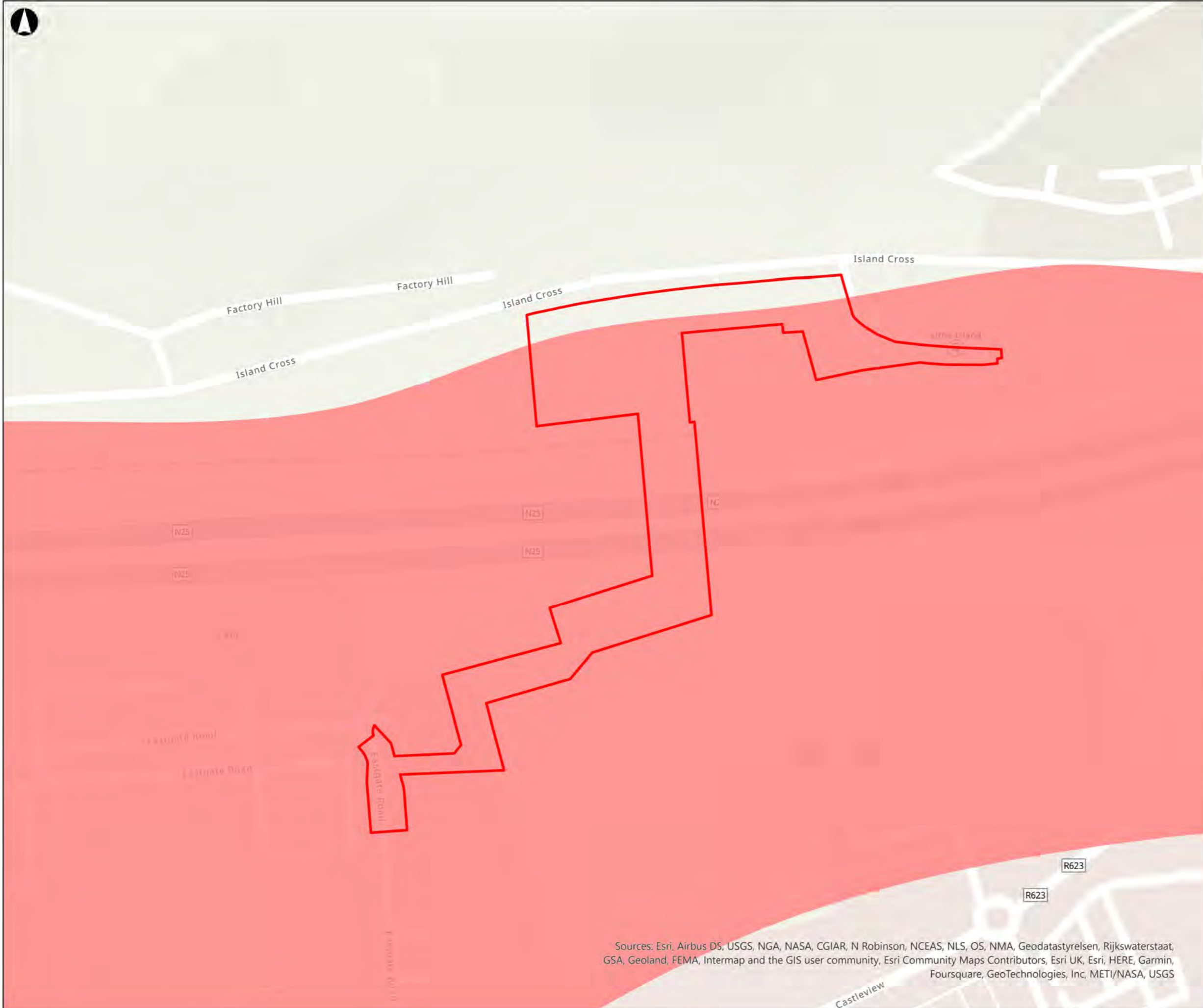
Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.21. Site-Specific Bedrock Aquifers and Abstractions

Scale at A3
1:2000

Description
Issue for Planning

Anup Job No 285939-00	Rev A1
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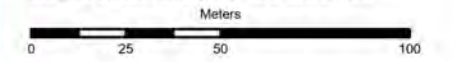
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS



Legend

- Redline Boundary
- Sand and Gravel Aquifer**
- Locally important gravel aquifer

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title

N25 LIPCB - EIAR

Drawing Title

17. Land, Soils, Geology & Hydrogeology
17.22. Site-Specific Gravel Aquifers

Scale at A3

1:2000

Role

Description

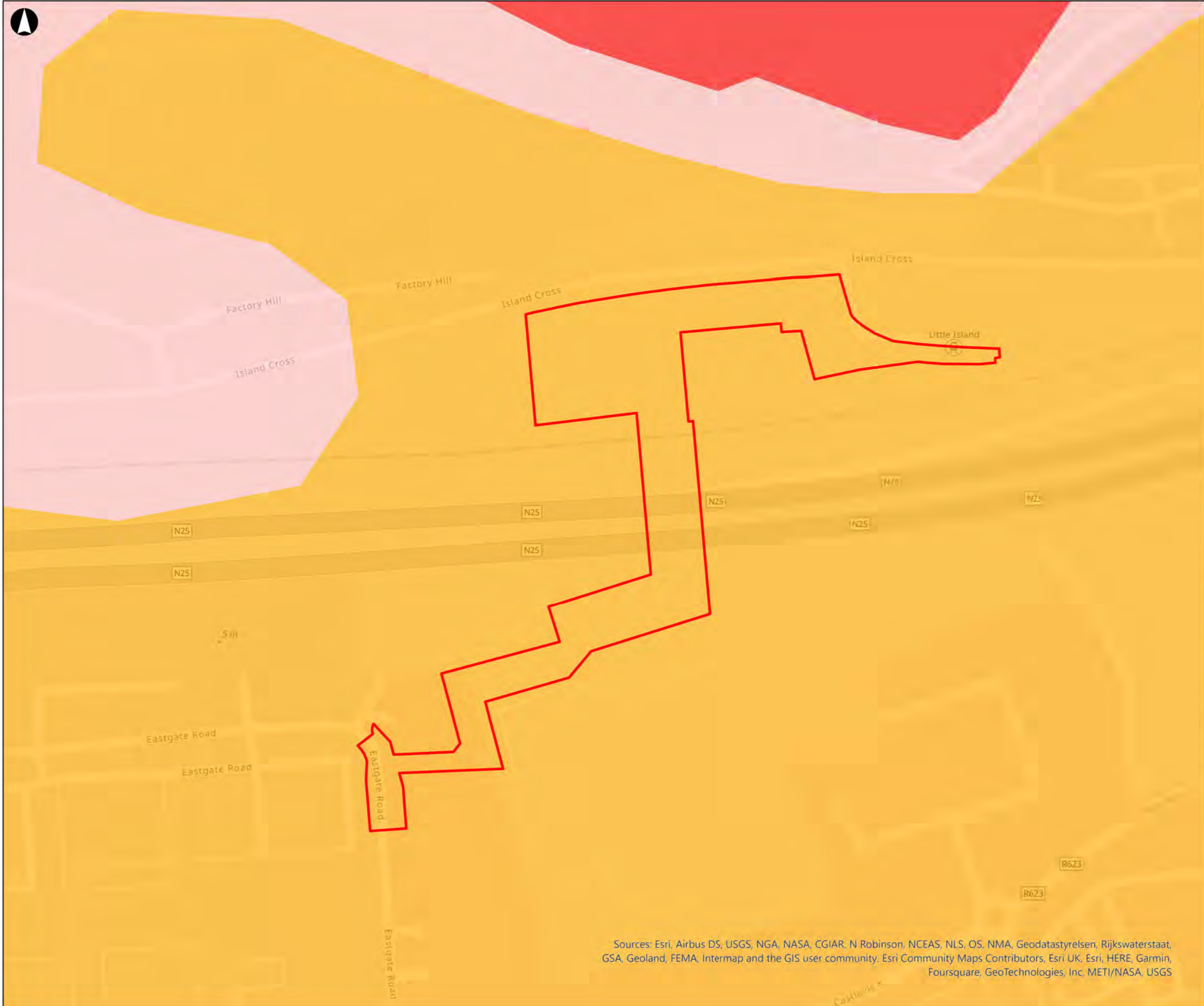
Issue for Planning

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Drawing File Name

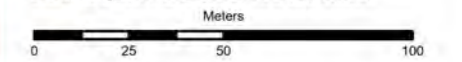
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS



Legend

- Redline Boundary
- Groundwater Vulnerability**
- Extreme
- High
- Rock at or near Surface or Karst

Coordinate System: IRENET95 Irish Transverse Mercator



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Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.23. Site-Specific Groundwater Vulnerability

Scale at A3

1:2000

Role

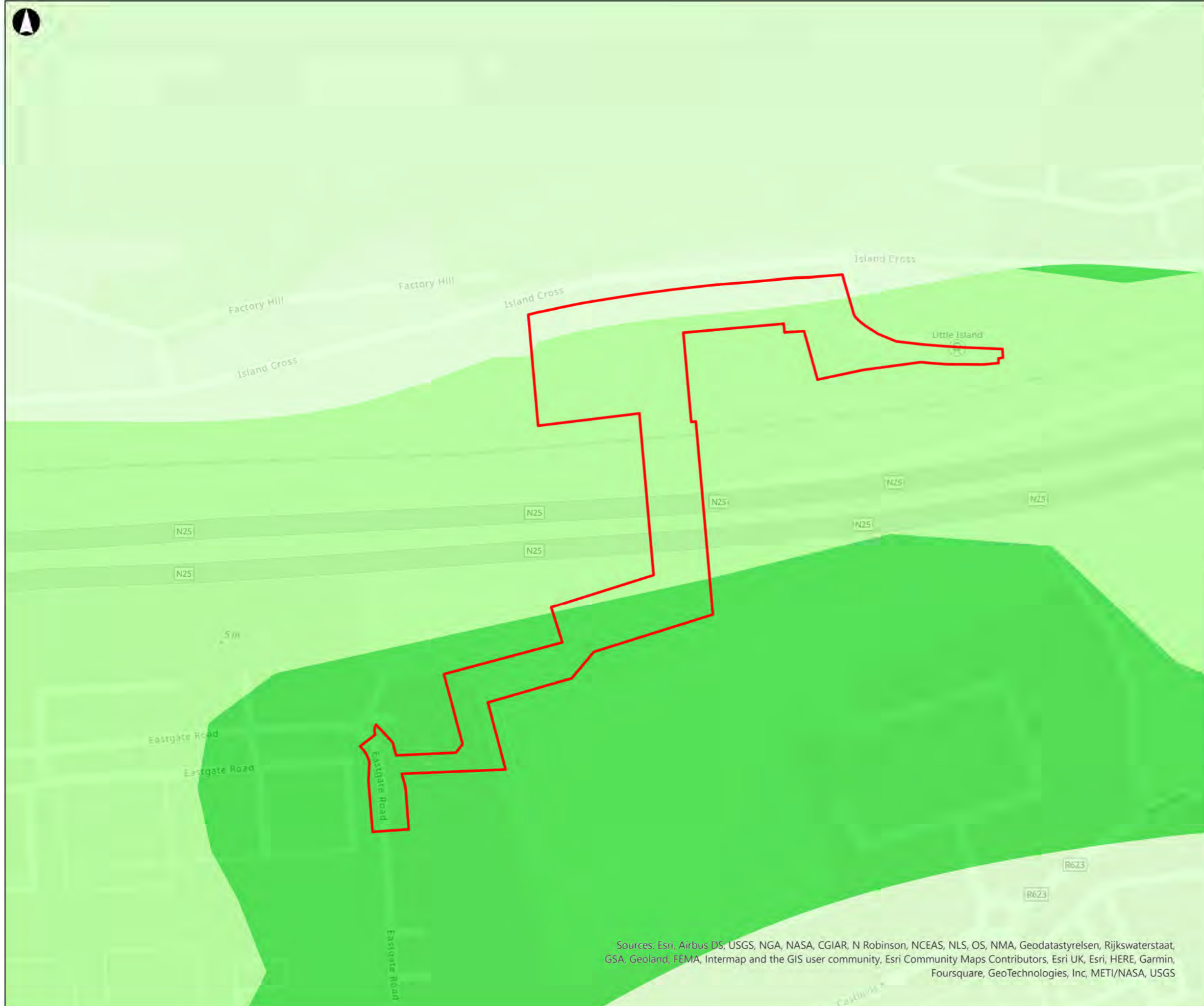
Description

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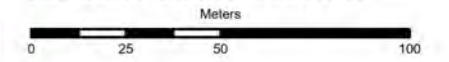
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc. METI/NASA, USGS



Legend

- Redline Boundary
- Groundwater recharge**
- Annual Recharge (mm)
- 501-550 mm
- 251-300 mm
- 151-200 mm
- 101-150 mm

Coordinate System: IRENET95 Irish Transverse Mercator



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Project Title
N25 LIPCB - EIAR

Drawing Title
17. Land, Soils, Geology & Hydrogeology
17.24. Site-Specific Groundwater Recharge

Scale at A3

1:2000

Role

Description
Issue for Planning

Anup Job No
285939-00

Rev
A1

Drawing File Name

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Esri Community Maps Contributors, Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS



N25 Little Island Pedestrian and Cyclist Bridge
Environmental Impact Assessment Report