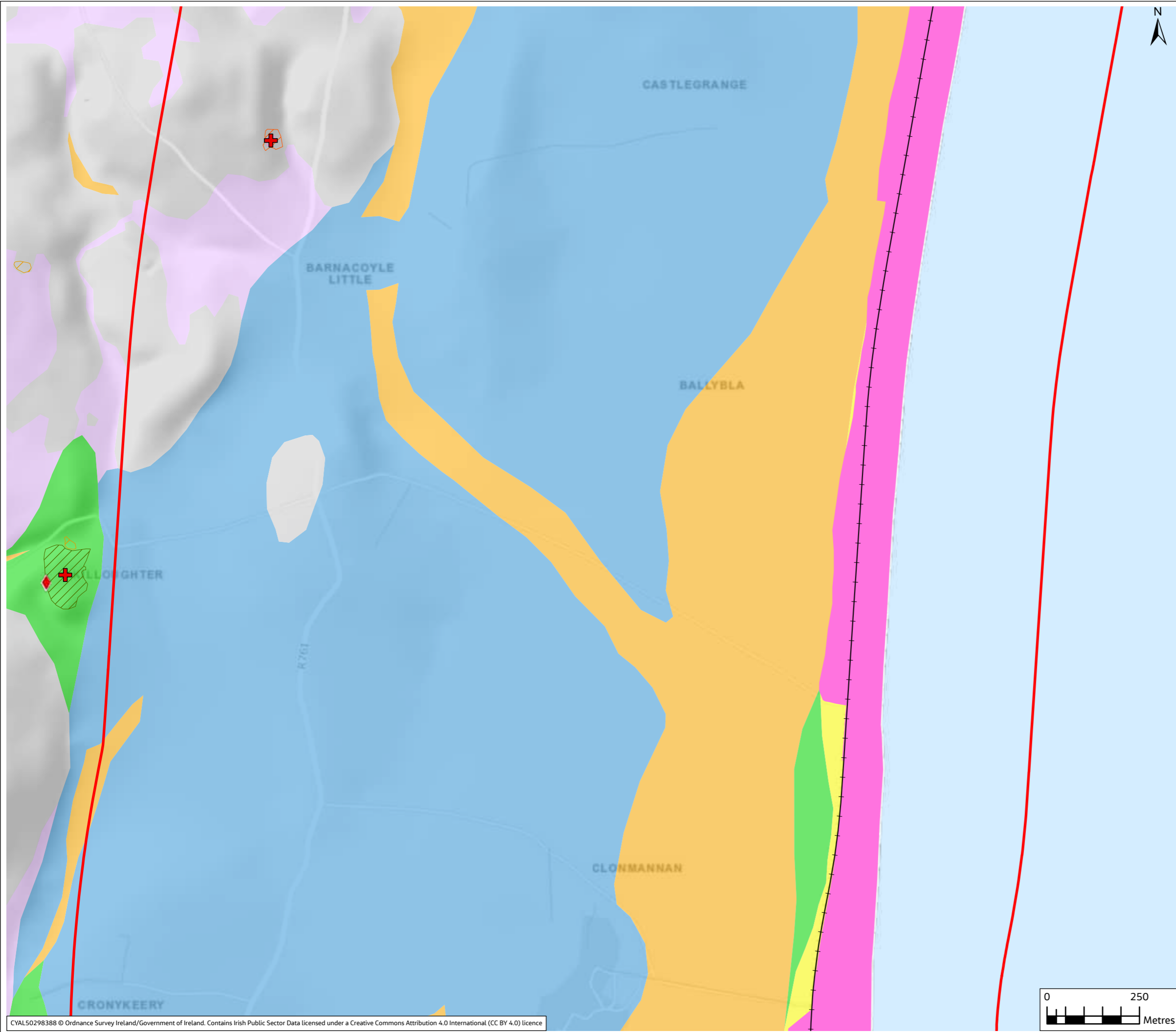
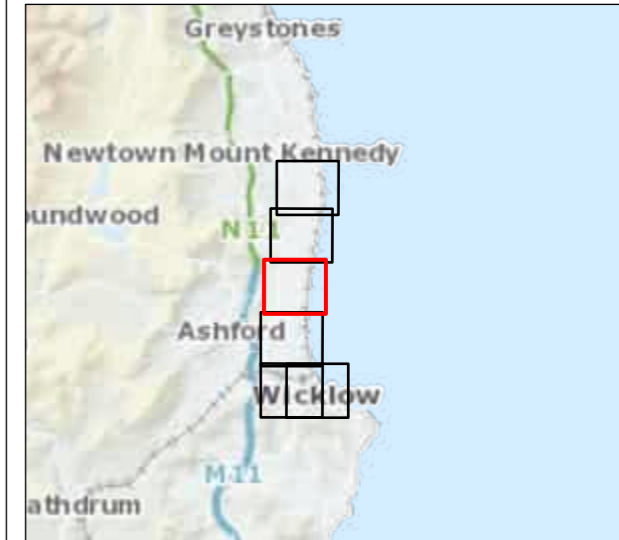


FIGURE 7.1



- Legend**
- CCA6.2 Study Area
 - Railway Network Centreline
 - Geological Heritage Audited Sites
- Contaminated Land**
- Mineral Localities**
- Non-metallic
- Pits & Quarries**
- Activity Period**
- Documented c. 1970: Quarries
 - Early to Mid-20thC: Pits
 - Early to Mid-20thC: Quarries
 - Late 20thC: Pits
 - Pits & Quarries
- Quaternary Sediments**
- A, Alluvium
 - GCSsS, Gravels derived from Cambrian sandstones and shales
 - GLs, Gravels derived from Limestones
 - IrSTCSsS, Irish Sea Till derived from Cambrian sandstones and shales
 - Mbs, Marine beach sands
 - Rck, Bedrock outcrop or subcrop
 - TLPSSsS, Till derived from Lower Palaeozoic sandstones and shales



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.1
CCA6.2- Environmental Constraints - Geology & Subsoils
(Page 3 of 6)**

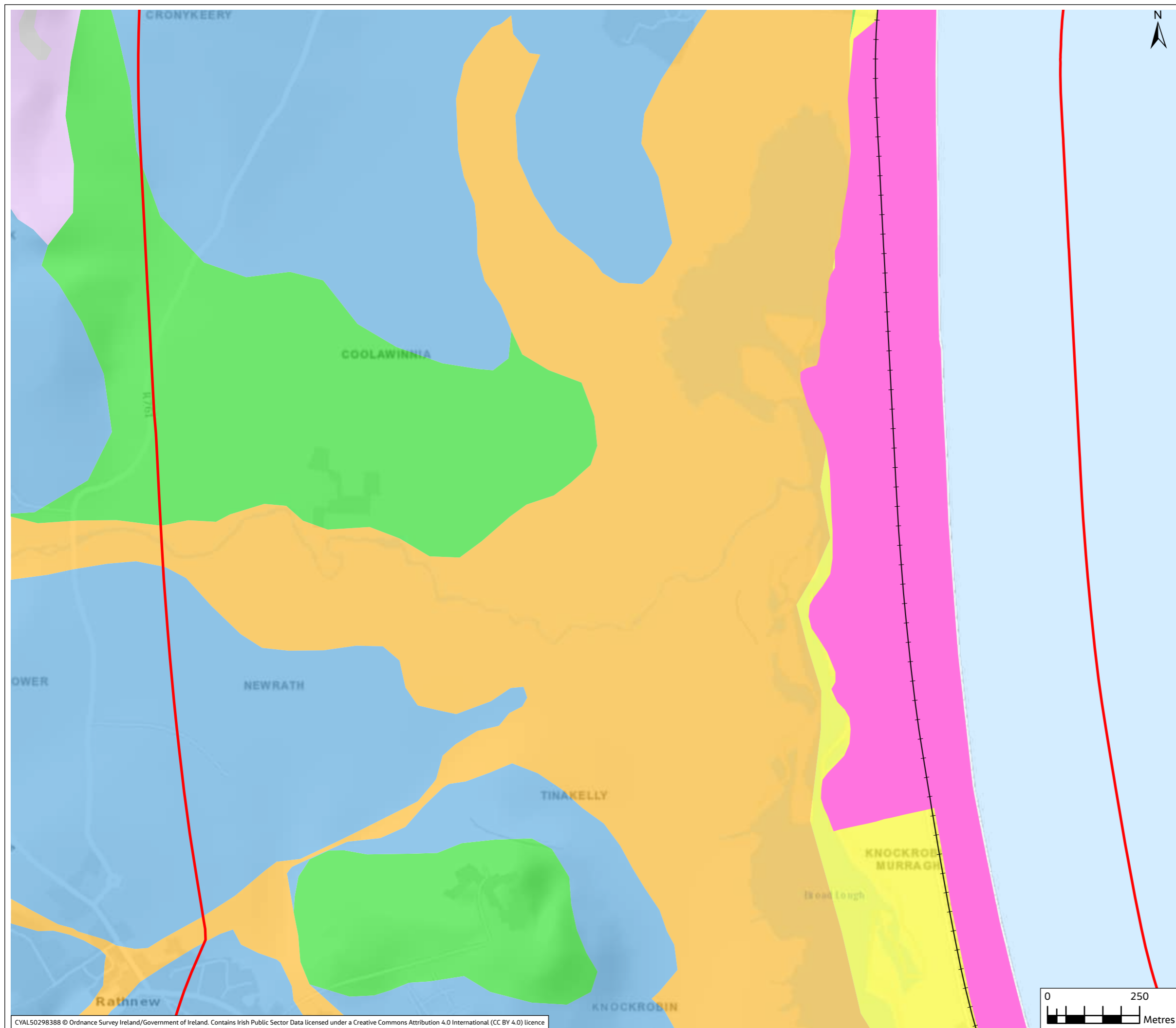
Drawing Status

ISSUE FOR ACCEPTANCE

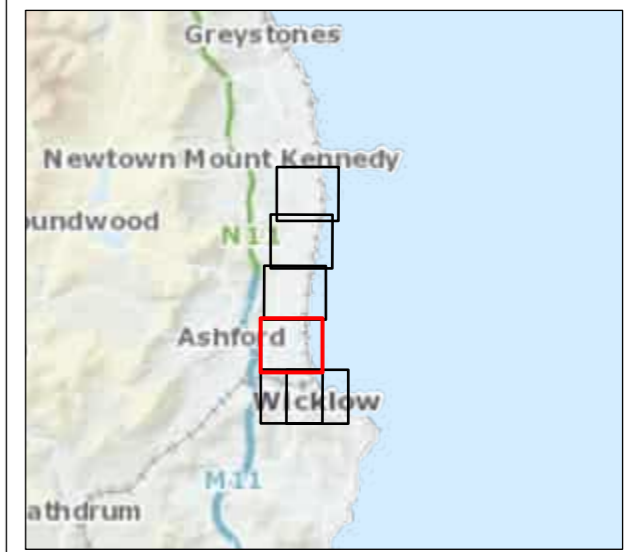
State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7004	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

FIGURE 7.1



- Legend**
- CCA6.2 Study Area
 - Railway Network Centreline
 - Geological Heritage Audited Sites
- Quaternary Sediments**
- A, Alluvium
 - GCSs, Gravels derived from Cambrian sandstones and shales
 - GLs, Gravels derived from Limestones
 - IrSTCSs, Irish Sea Till derived from Cambrian sandstones and shales
 - Mbs, Marine beach sands
 - Rck, Bedrock outcrop or subcrop
 - TLPSSs, Till derived from Lower Palaeozoic sandstones and shales



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Jacobs
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.1
CCA6.2- Environmental Constraints - Geology & Subsoils
(Page 4 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7005	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

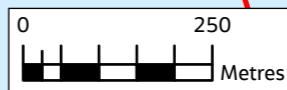
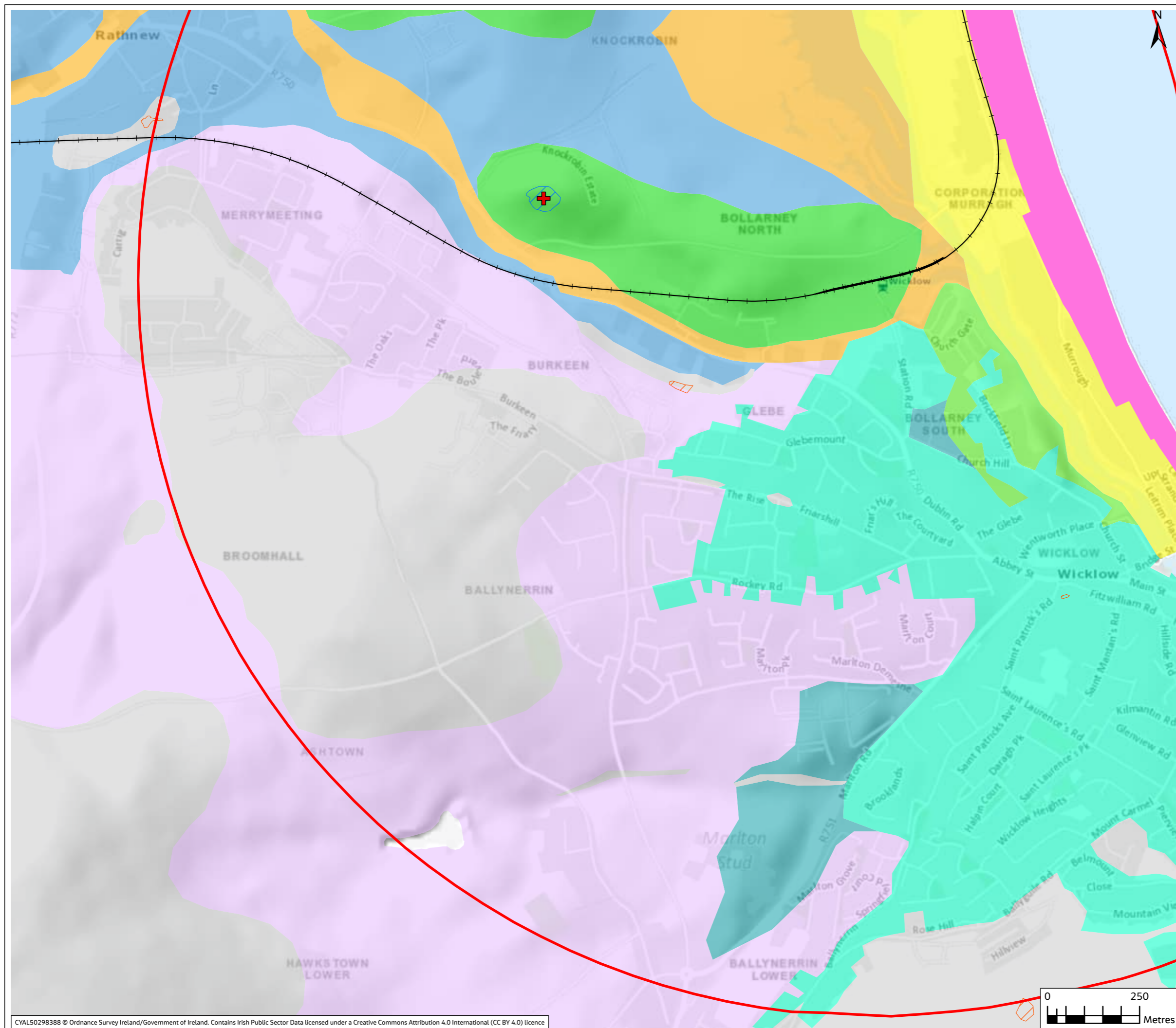
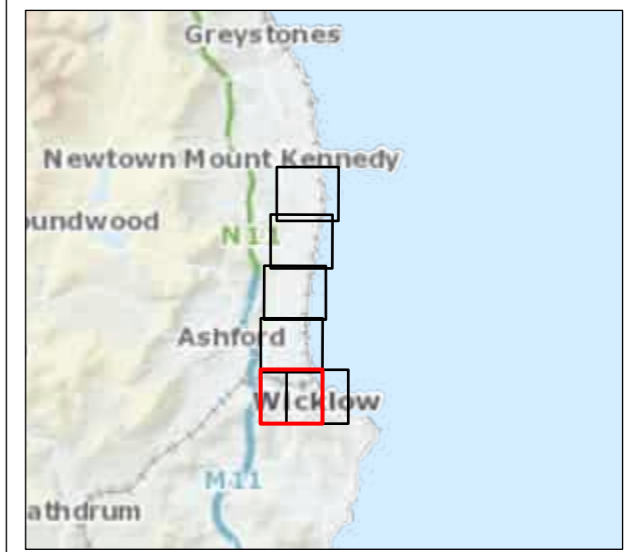


FIGURE 7.1



- Legend**
- CCA6.2 Study Area
 - Railway Network Centreline
 - Geological Heritage Audited Sites
- Pits & Quarries**
- Activity Period**
- Early to Mid-20thC: Quarries
 - Mid-Late 20thC: Pits
 - + Pits & Quarries
- Quaternary Sediments**
- A, Alluvium
 - GLPSsS, Gravels derived from Lower Palaeozoic sandstones and shales
 - GLs, Gravels derived from Limestones
 - IrSTCSsS, Irish Sea Till derived from Cambrian sandstones and shales
 - IrSTLPSsS, Irish Sea Till derived from Lower Palaeozoic sandstones and shales
 - Mbs, Marine beach sands
 - Rck, Bedrock outcrop or subcrop
 - TLPSsS, Till derived from Lower Palaeozoic sandstones and shales
 - Urban
 - Water



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

larnród Éireann
Infrastructure

Designer

Jacobs
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.1
CCA6.2- Environmental Constraints - Geology & Subsoils
(Page 5 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7006	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

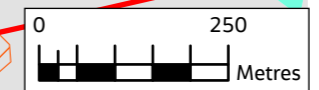
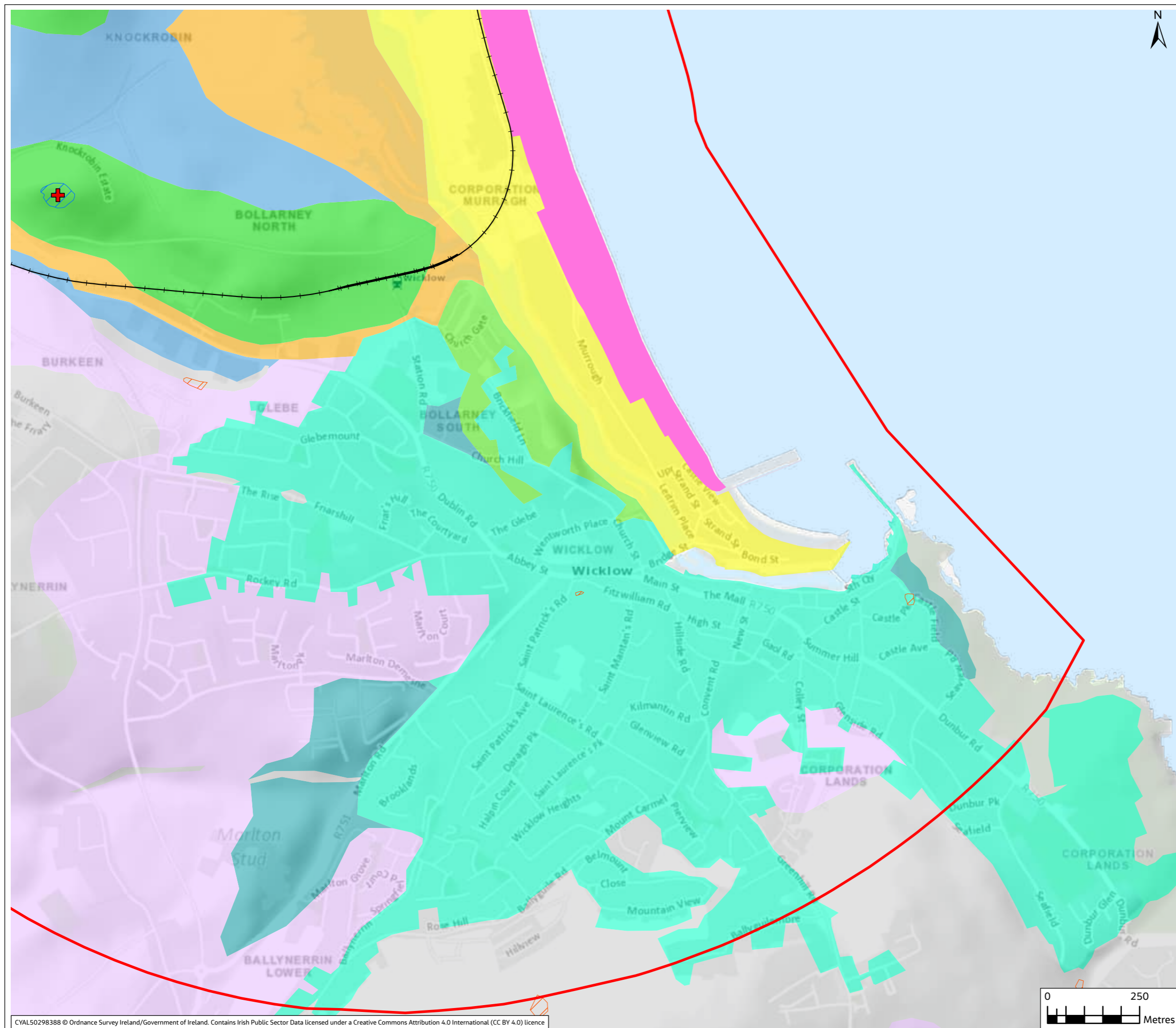
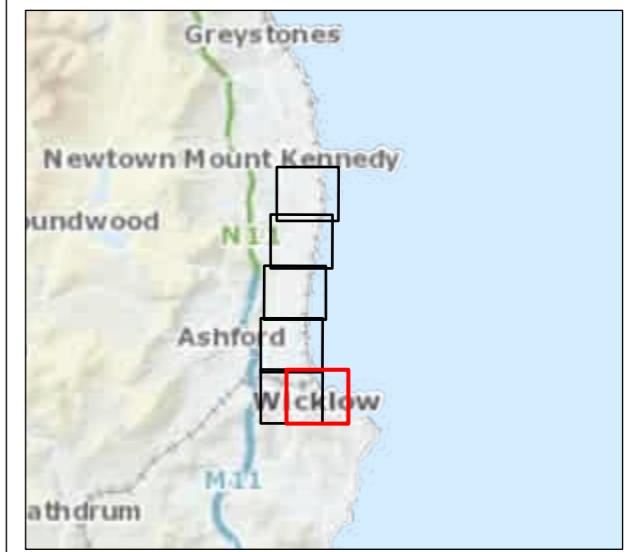


FIGURE 7.1



- Legend
- CCA6.2 Study Area
 - Railway Network Centreline
 - Geological Heritage Audited Sites
- Pits & Quarries
- Activity Period
- Early to Mid-20thC: Quarries
 - Mid-Late 20thC: Pits
 - Pits & Quarries
- Quaternary Sediments
- A, Alluvium
 - GLPSsS, Gravels derived from Lower Palaeozoic sandstones and shales
 - GLs, Gravels derived from Limestones
 - IrSTCSsS, Irish Sea Till derived from Cambrian sandstones and shales
 - IrSTLPSsS, Irish Sea Till derived from Lower Palaeozoic sandstones and shales
 - Mbs, Marine beach sands
 - Pier
 - Rck, Bedrock outcrop or subcrop
 - TLPSsS, Till derived from Lower Palaeozoic sandstones and shales
 - Urban



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Iarnród Éireann
Infrastructure

Designer

Jacobs
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.1
CCA6.2- Environmental Constraints - Geology & Subsoils
(Page 6 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7007	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

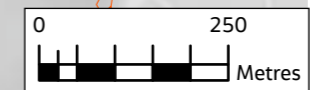
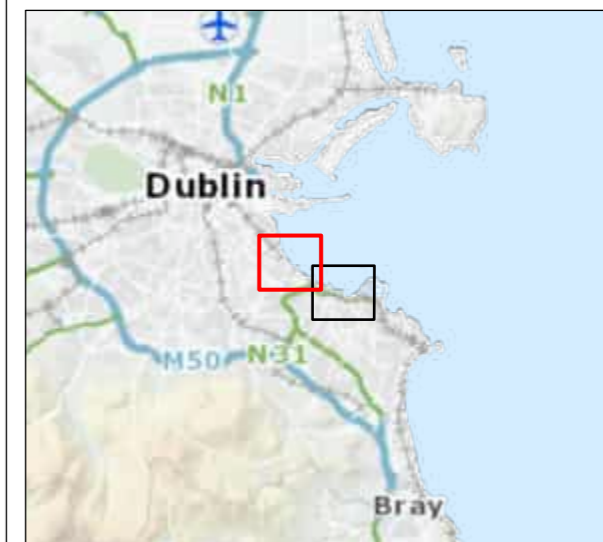


FIGURE 7.2

- Legend**
- CCA1 Study Area
 - Railway Network Centreline
- Bedrock Aquifers**
- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
 - PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project

**7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.2
 CCA1- Environmental Constraints - Bedrock Aquifers
 (Page 1 of 2)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA1-P2-DWG-EV-JAC-7005	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

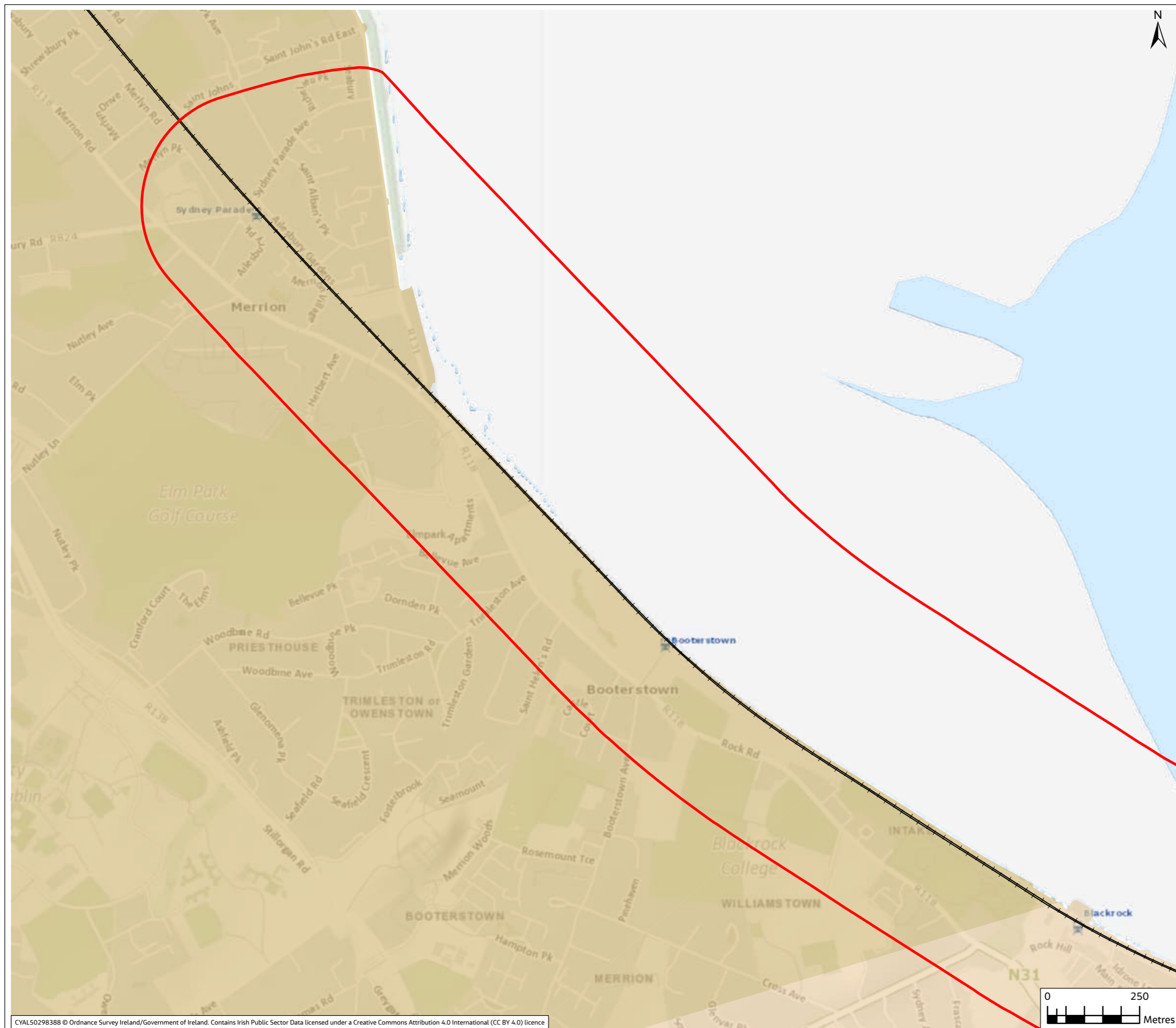
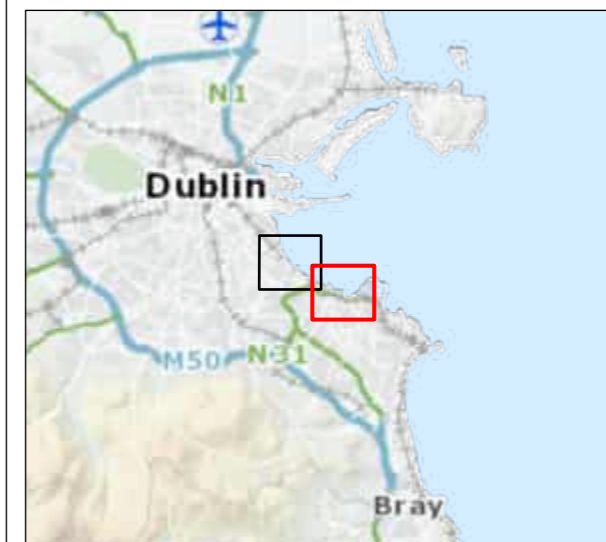
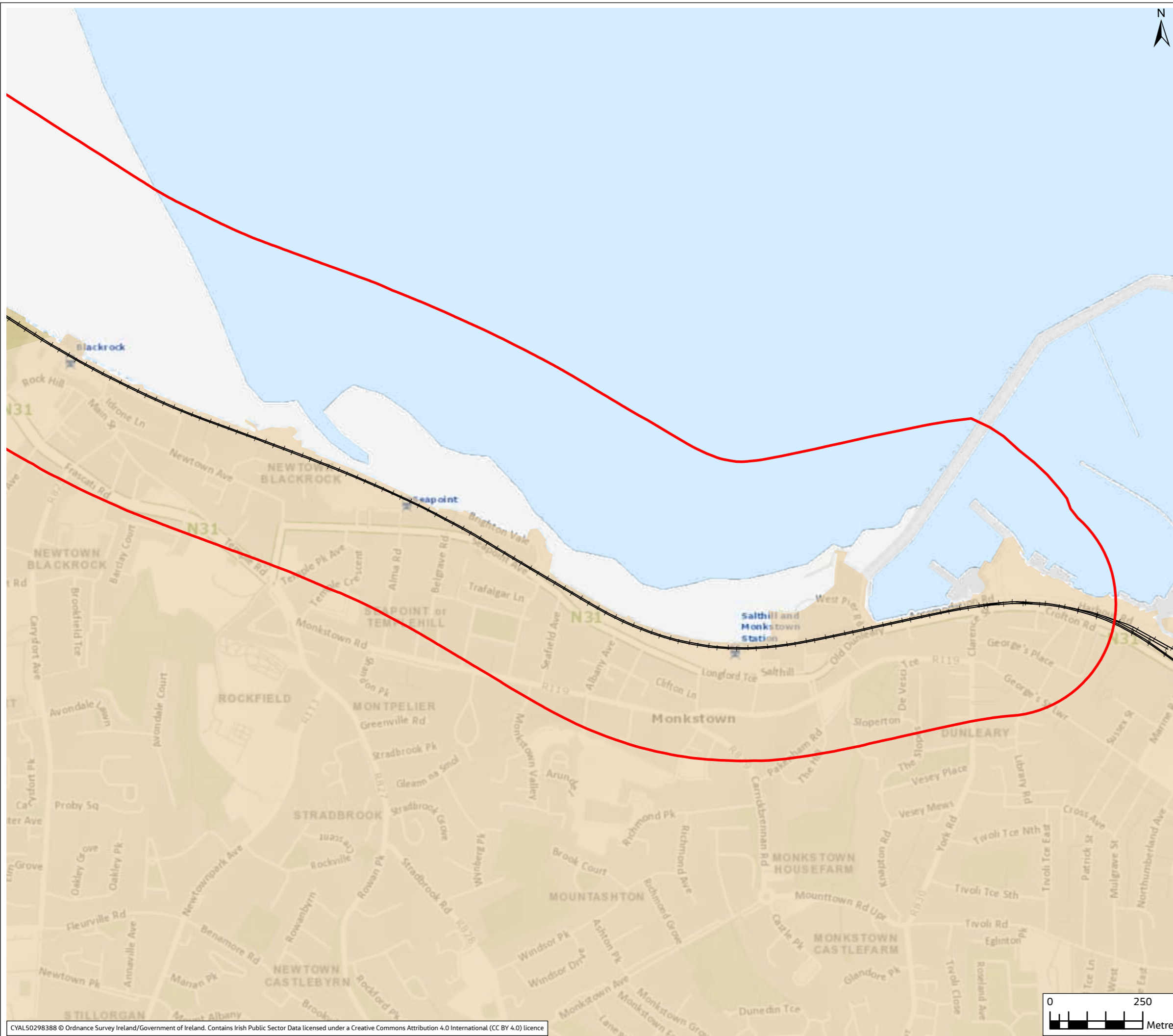


FIGURE 7.2

- Legend
- CCA1 Study Area
 - Railway Network Centreline
- Bedrock Aquifers
- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
 - PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones
 - Unclassified



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666 www.jacobs.com

Project

7694 EAST COAST RAILWAY INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.2
CCA1- Environmental Constraints - Bedrock Aquifers
(Page 2 of 2)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA1-P2-DWG-EV-JAC-7006	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

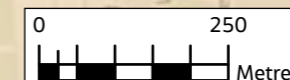


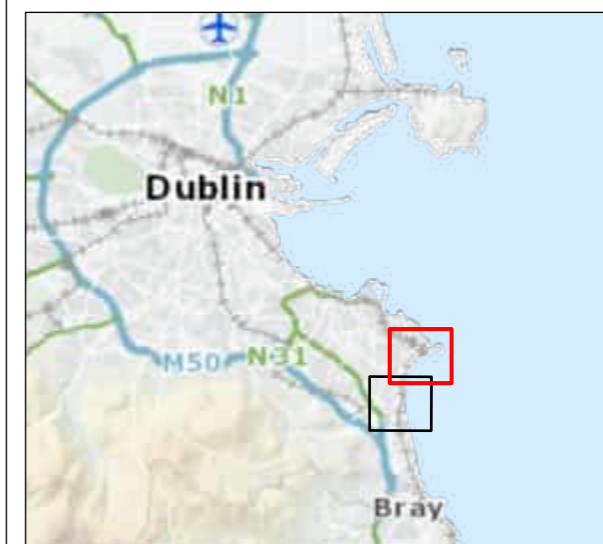
FIGURE 7.2

Legend

- CCA2-3 Study Area
- Railway Network Centreline

Bedrock Aquifers

- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
- PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones
- Unclassified



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.2
CCA2-3- Environmental Constraints - Bedrock Aquifers
(Page 1 of 2)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

Client No.

8093

Drawing No.

7964-CCA2_3-P2-DWG-EV-JAC-7005

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

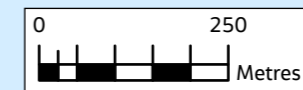
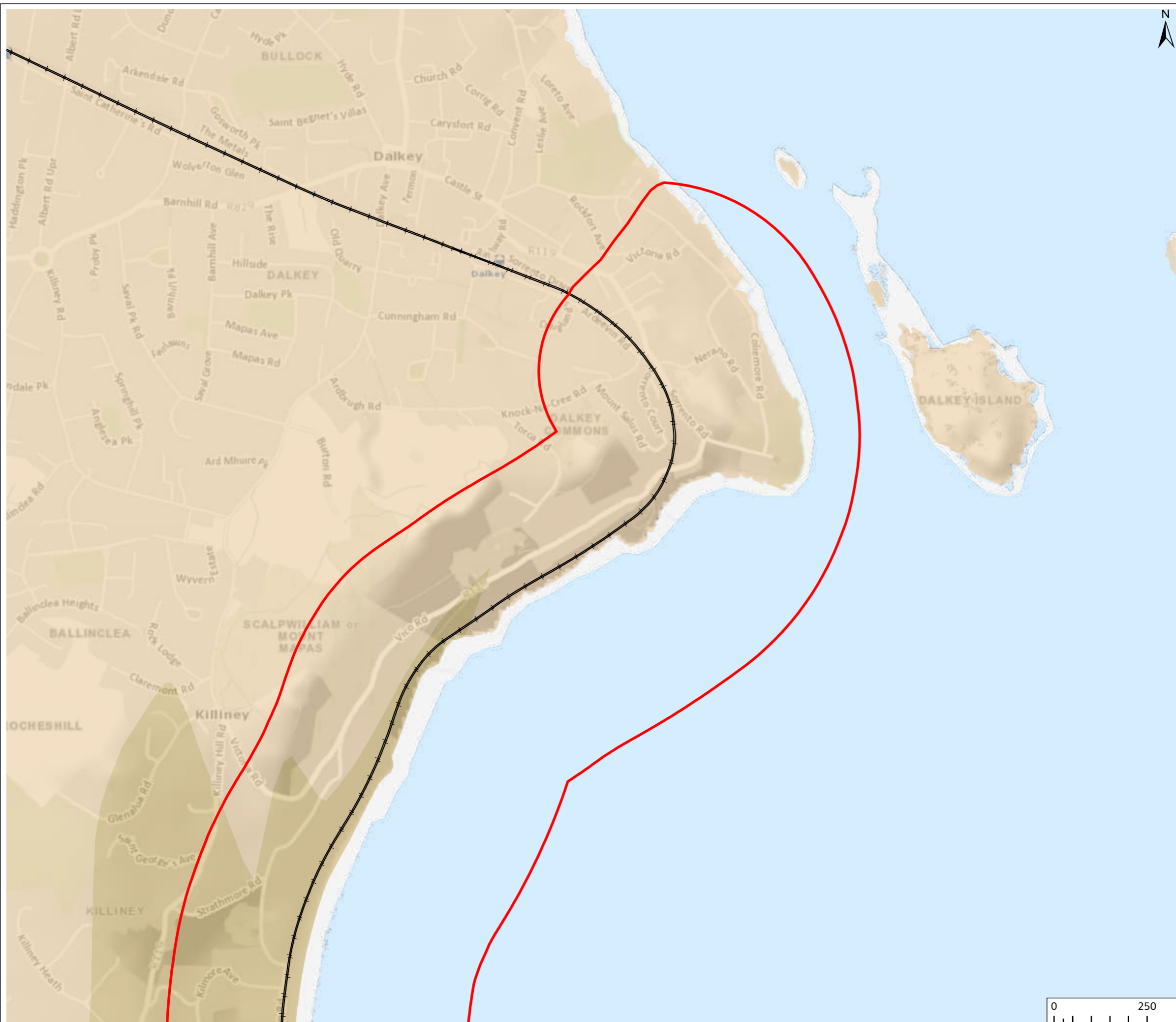


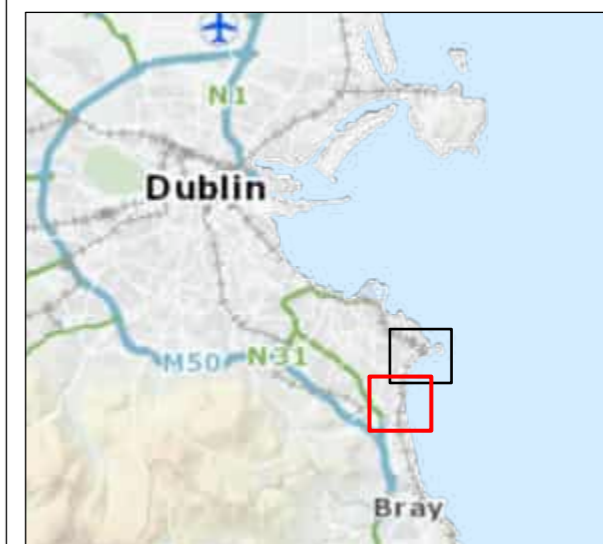
FIGURE 7.2

Legend

- CCA2-3 Study Area
- Railway Network Centreline

Bedrock Aquifers

- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
- PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.2
CCA2-3- Environmental Constraints - Bedrock Aquifers
(Page 2 of 2)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

Client No.

8093

Drawing No.

7964-CCA2_3-P2-DWG-EV-JAC-7006

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

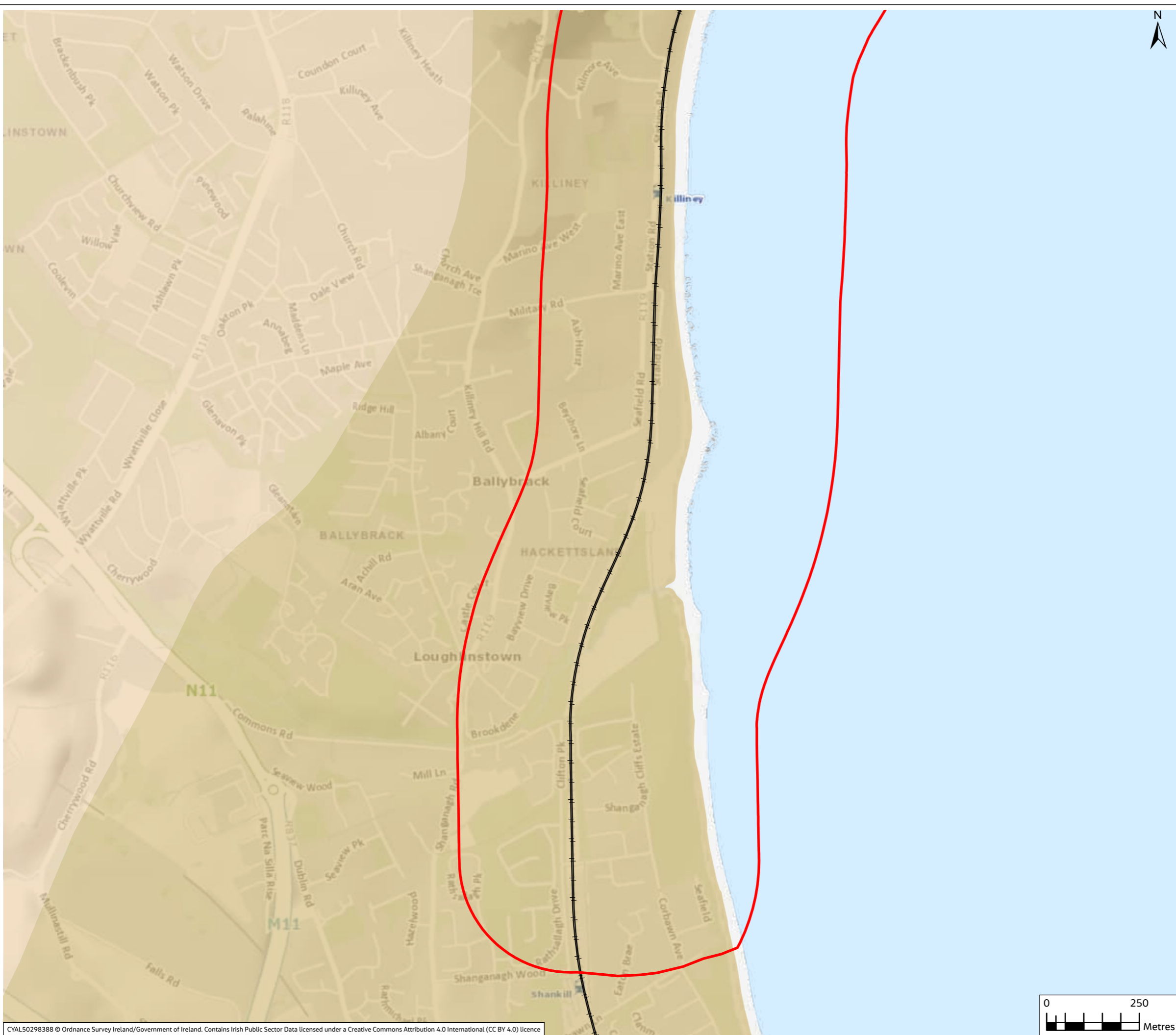
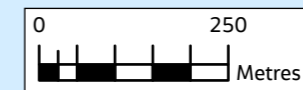


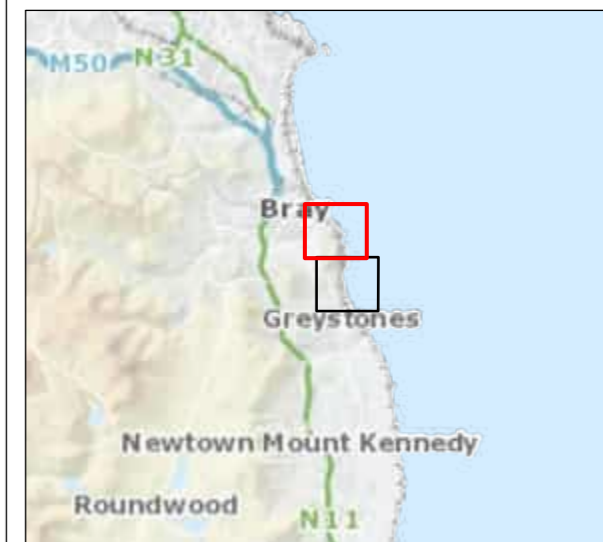
FIGURE 7.2

Legend

- CCA5 Study Area
- Railway Network Centreline

Bedrock Aquifers

- P1 - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.2
CCA5- Environmental Constraints - Bedrock Aquifers
(Page 1 of 2)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA5-P2-DWG-EV-JAC-7005	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

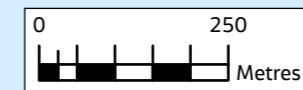
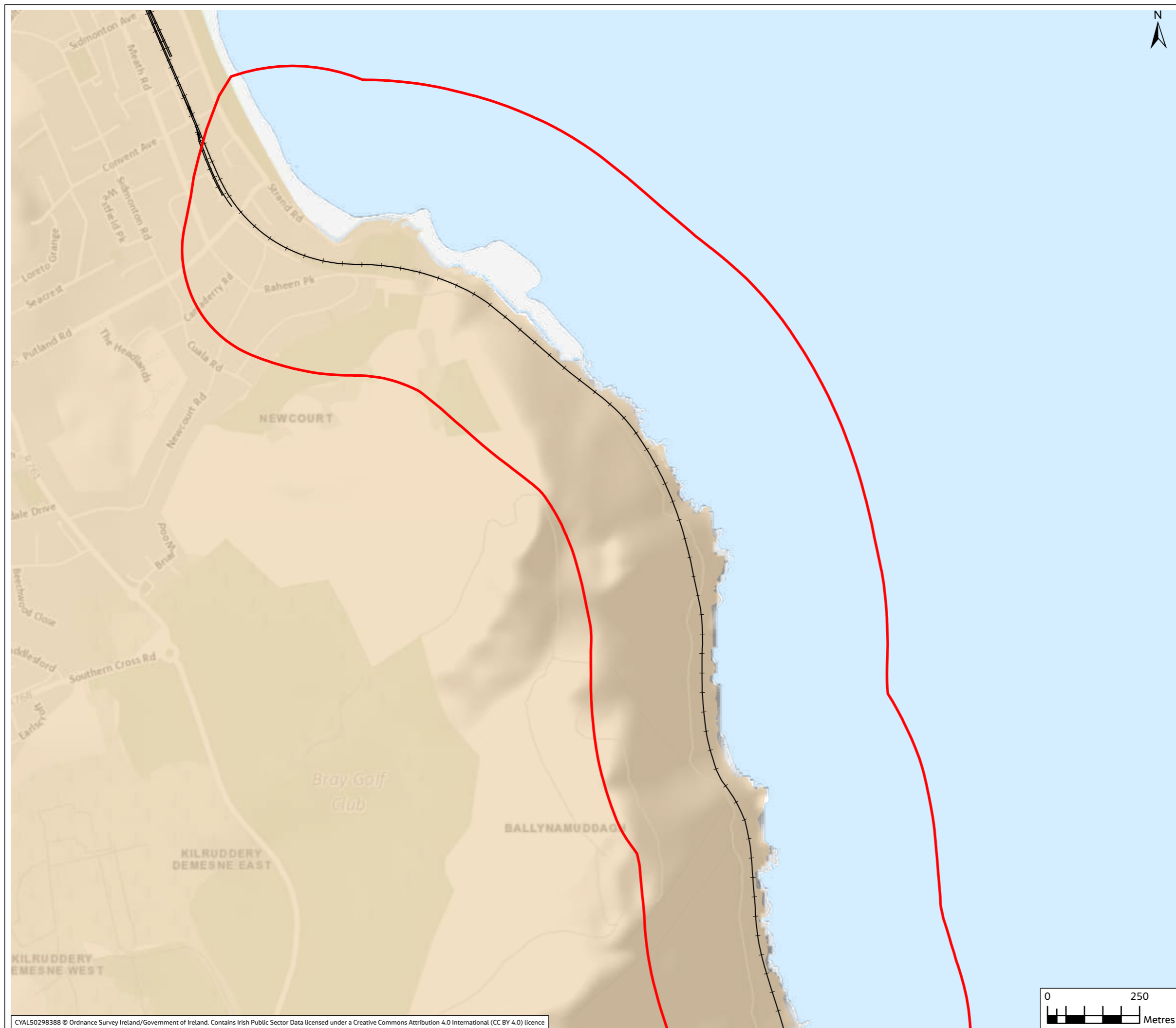
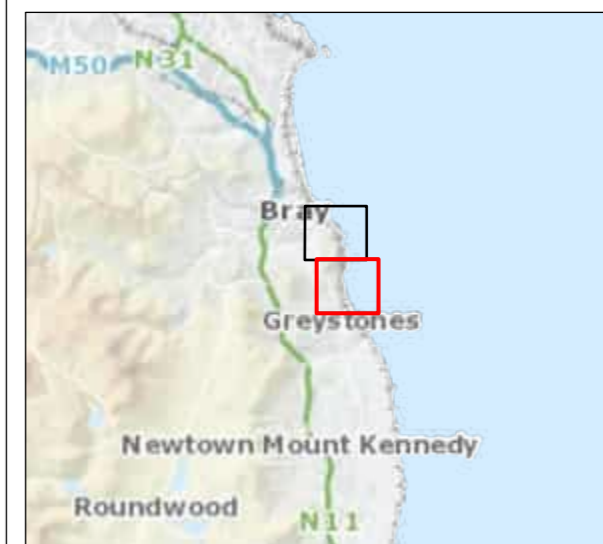


FIGURE 7.2

Legend

- CCA5 Study Area
 - Railway Network Centreline
- Bedrock Aquifers**
- PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.2
 CCA5- Environmental Constraints - Bedrock Aquifers
 (Page 2 of 2)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA5-P2-DWG-EV-JAC-7006	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

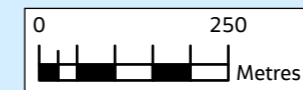
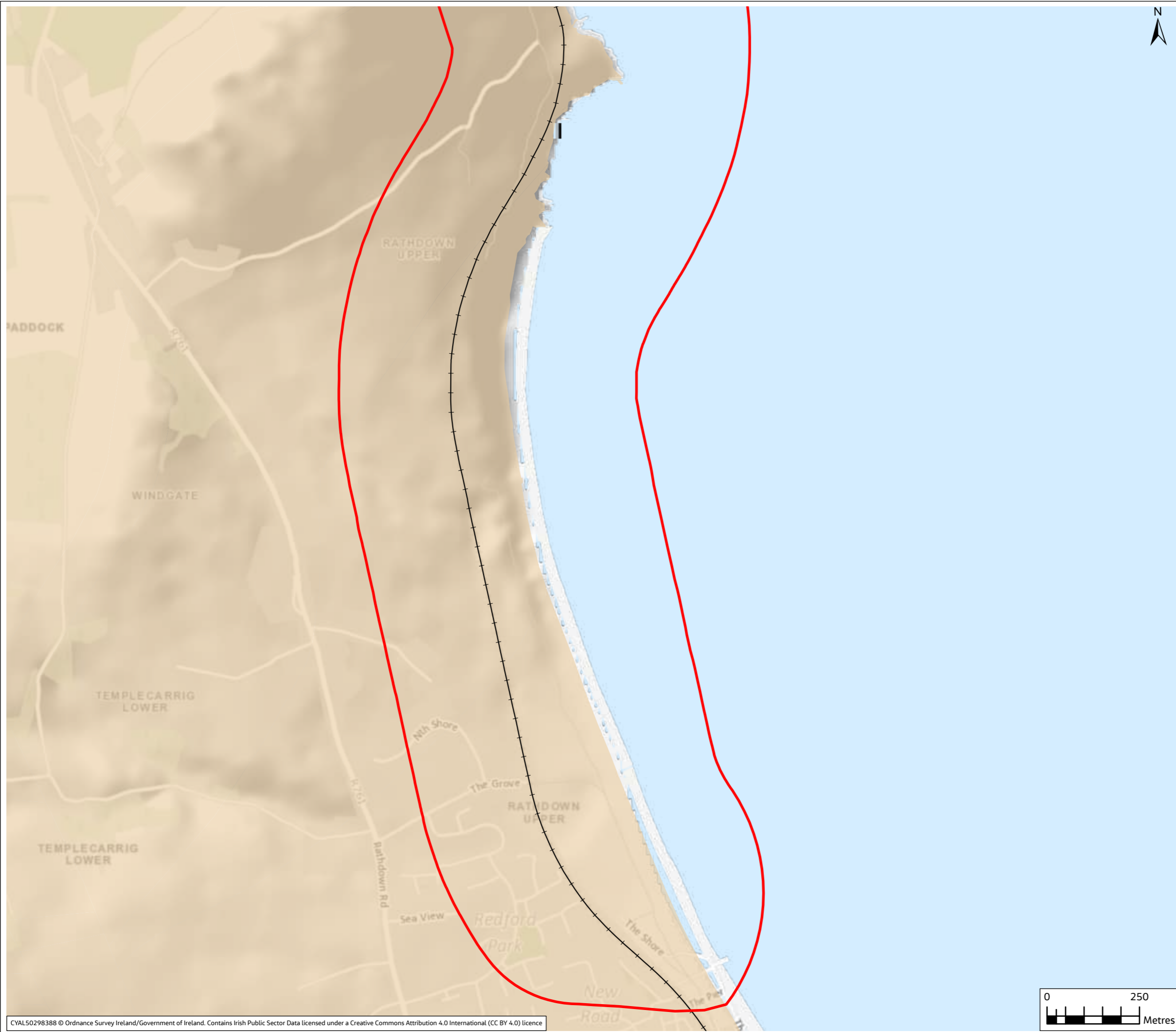


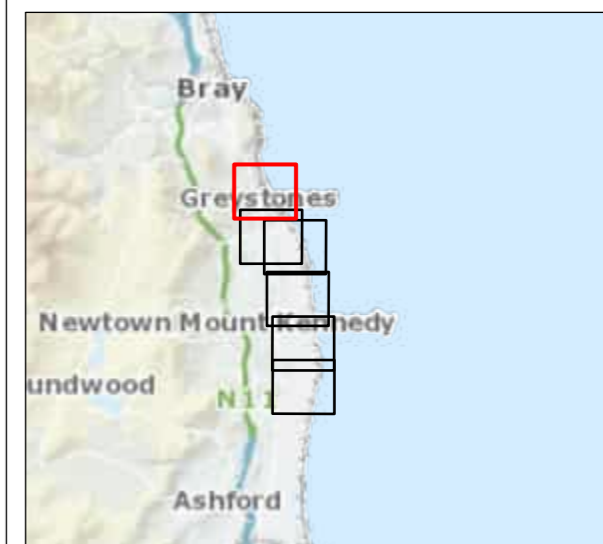
FIGURE 7.2

Legend

- CCA6.1 Study Area
- Railway Network Centreline

Bedrock Aquifers

- P1 - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones
- Unclassified



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client


Designer

 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.2
 CCA6.1- Environmental Constraints - Bedrock Aquifers
 (Page 1 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7009	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

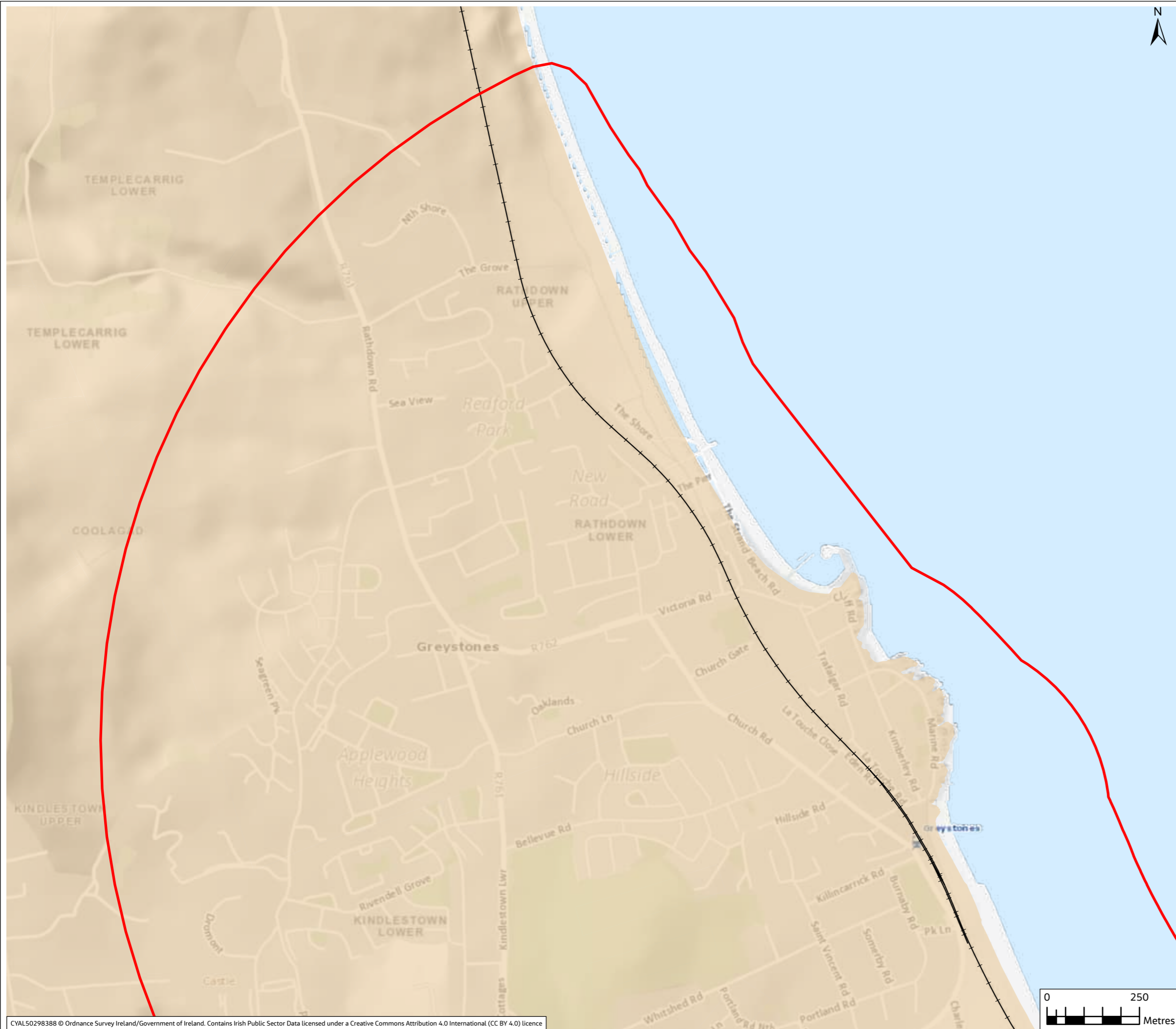


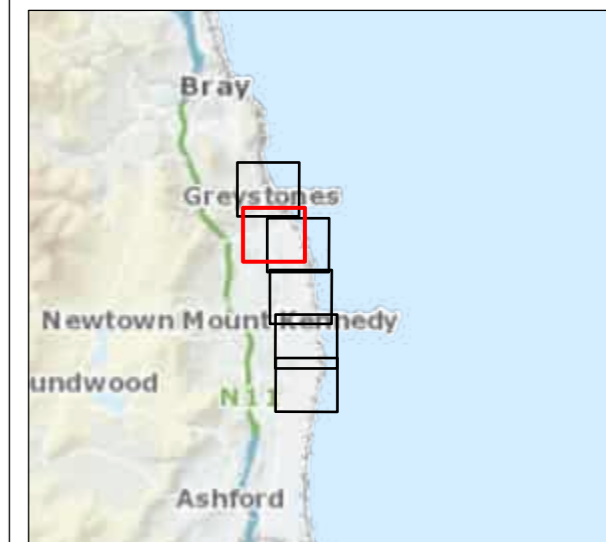
FIGURE 7.2

Legend

- CCA6.1 Study Area
- Railway Network Centreline

Bedrock Aquifers

- PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.2
CCA6.1- Environmental Constraints - Bedrock Aquifers
(Page 2 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

Client No.

8093

Drawing No.

7964-CCA6_1-P2-DWG-EV-JAC-7010

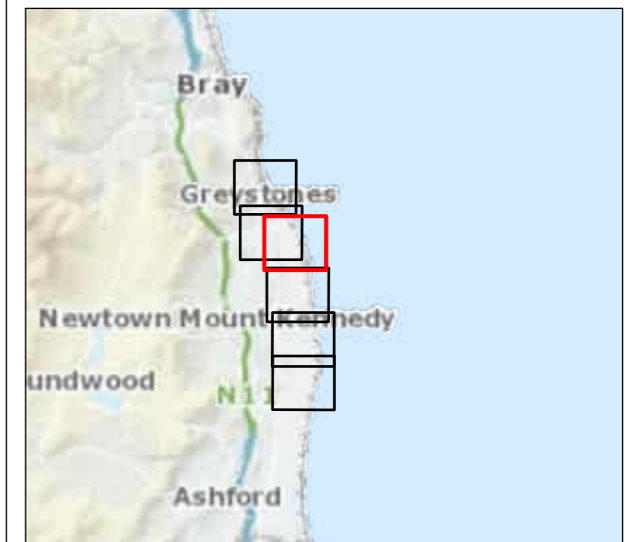
© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.



FIGURE 7.2

Legend

- CCA6.1 Study Area
 - Railway Network Centreline
- Bedrock Aquifers**
- P1 - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.2
CCA6.1- Environmental Constraints - Bedrock Aquifers
(Page 3 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7011	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

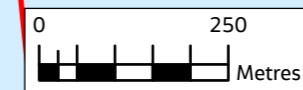
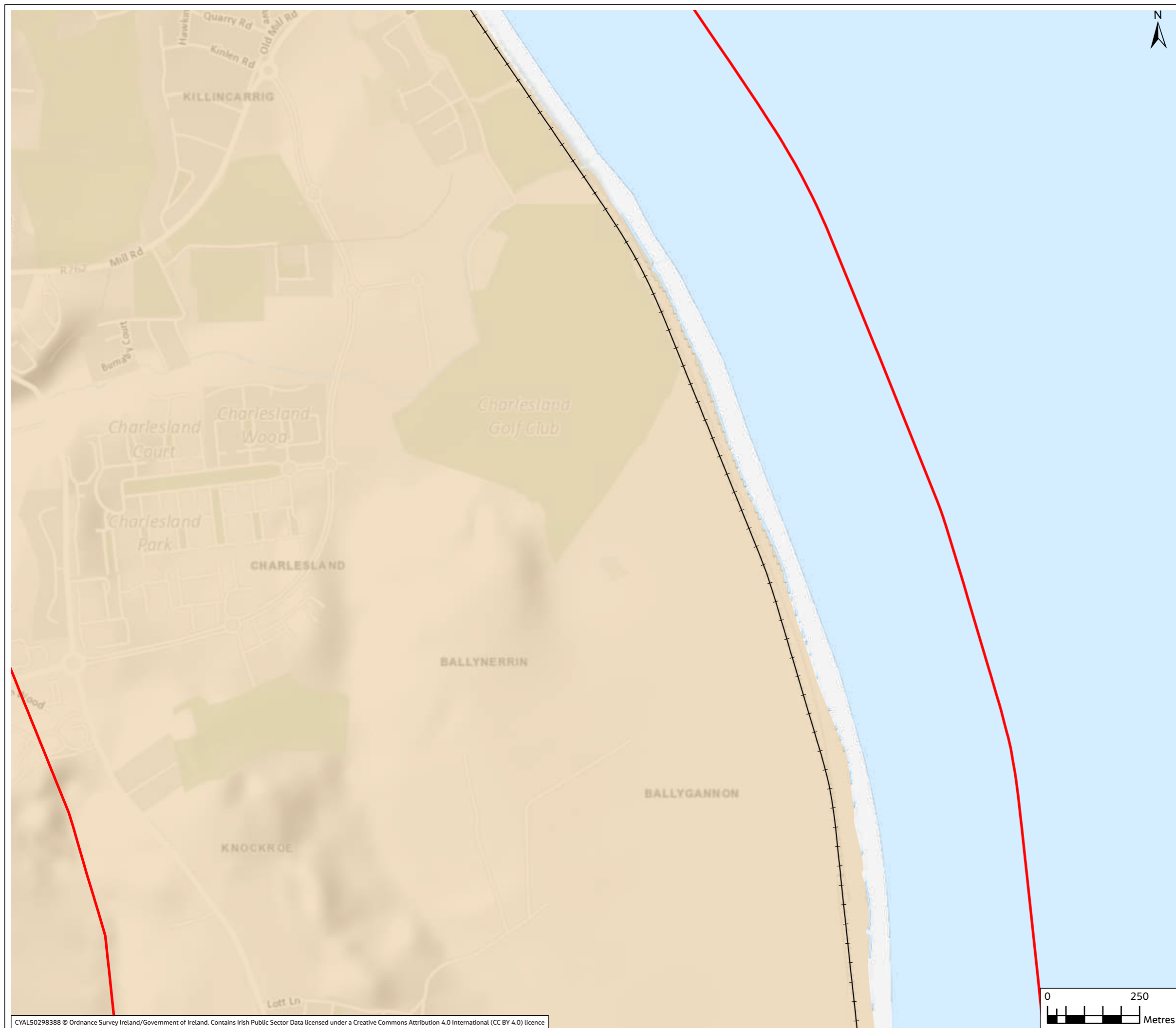
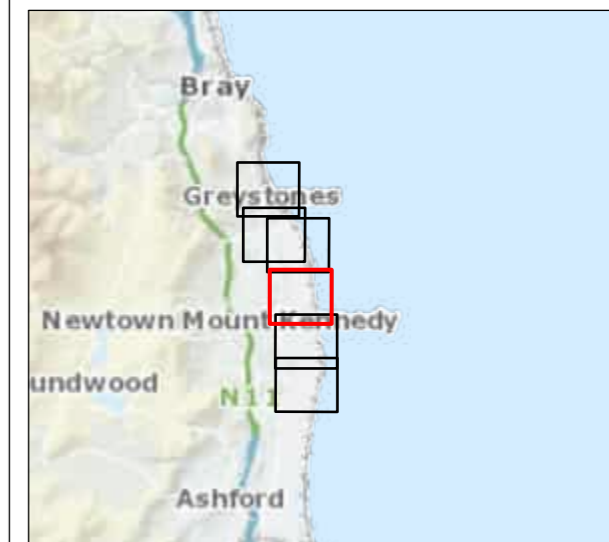


FIGURE 7.2

Legend

- CCA6.1 Study Area
 - Railway Network Centreline
- Bedrock Aquifers**
- P1 - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.2
CCA6.1- Environmental Constraints - Bedrock Aquifers
(Page 4 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7012	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.



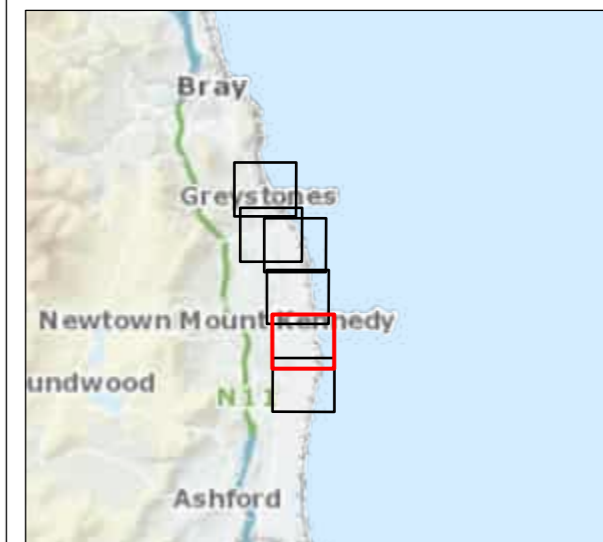
FIGURE 7.2

Legend

- CCA6.1 Study Area
- Railway Network Centreline

Bedrock Aquifers

- P1 - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.2
CCA6.1- Environmental Constraints - Bedrock Aquifers
(Page 5 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

Client No.

8093

Drawing No.

7964-CCA6_1-P2-DWG-EV-JAC-7013

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

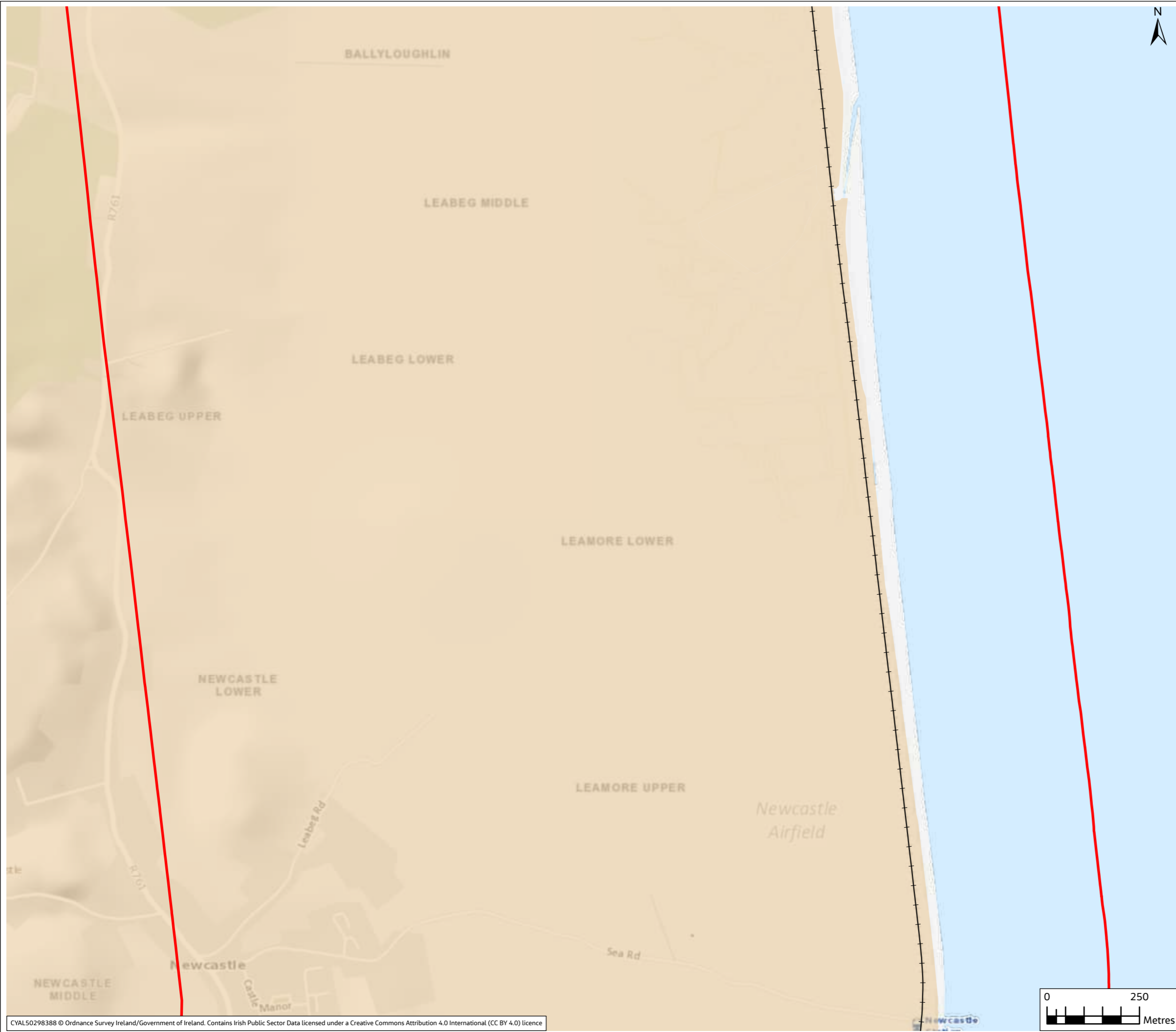


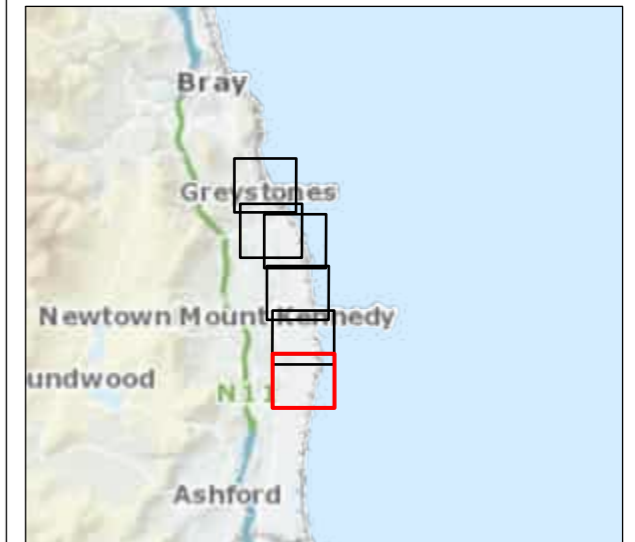
FIGURE 7.2

Legend

- CCA6.1 Study Area
- Railway Network Centreline

Bedrock Aquifers

- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
- PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.2
CCA6.1- Environmental Constraints - Bedrock Aquifers
(Page 6 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7014	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

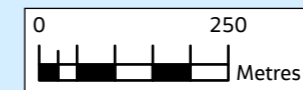


FIGURE 7.2

- Legend
- Study Area**
- CCA6.2 Study Area
 - Railway Network Centreline
- Bedrock Aquifers**
- P1 - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer

Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project

**7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.2
 CCA6.2- Environmental Constraints - Bedrock Aquifers
 (Page 1 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7009	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

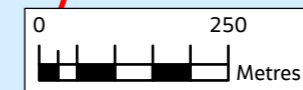
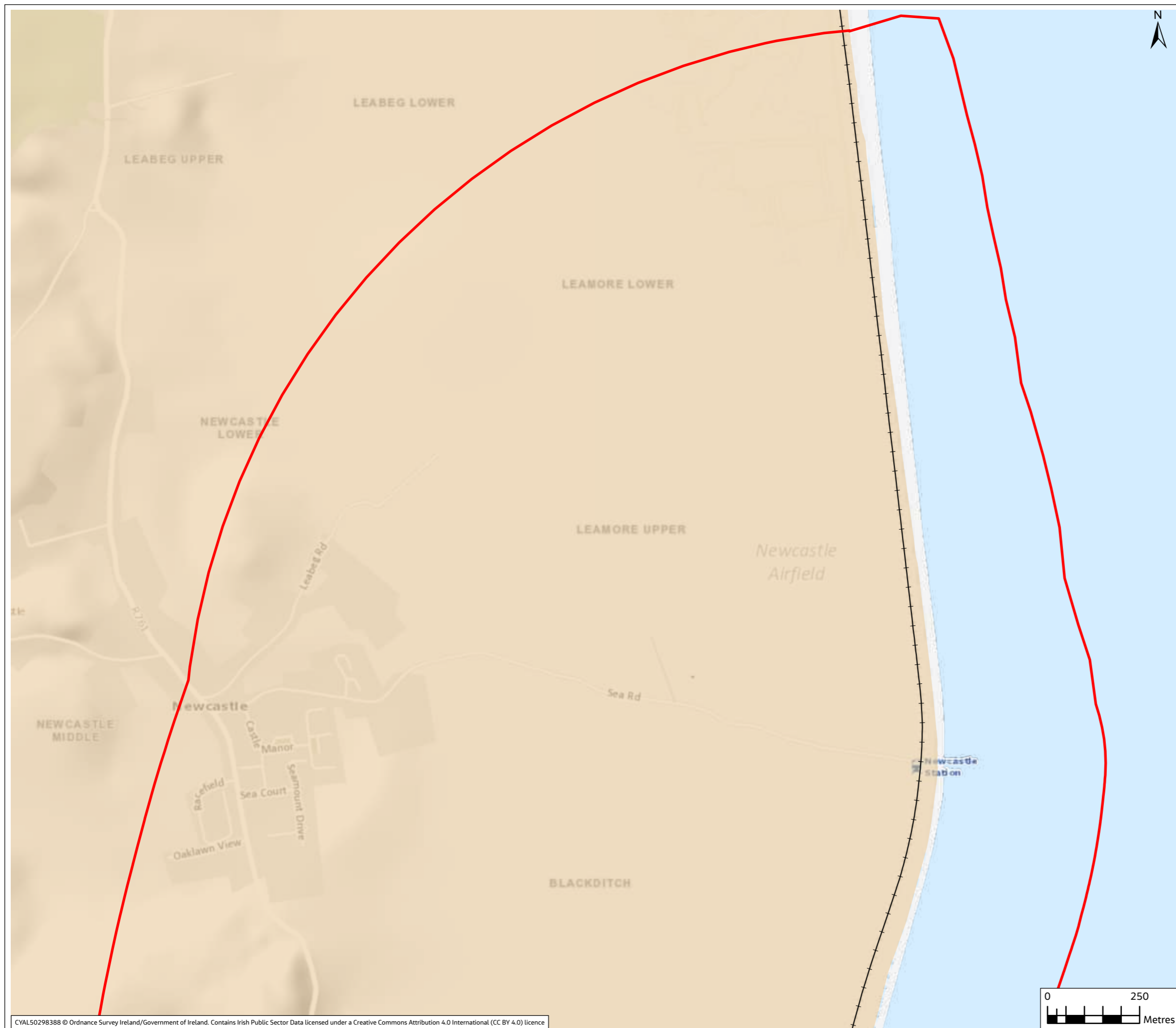


FIGURE 7.2

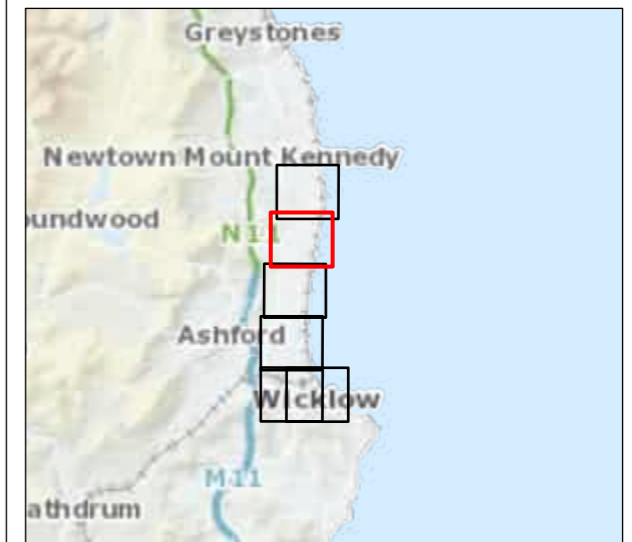
Legend

Study Area

- CCA6.2 Study Area
- Railway Network Centreline

Bedrock Aquifers

- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
- PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client


Designer

 Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.2
 CCA6.2- Environmental Constraints - Bedrock Aquifers
 (Page 2 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7010	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

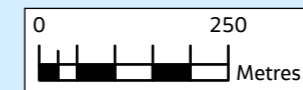
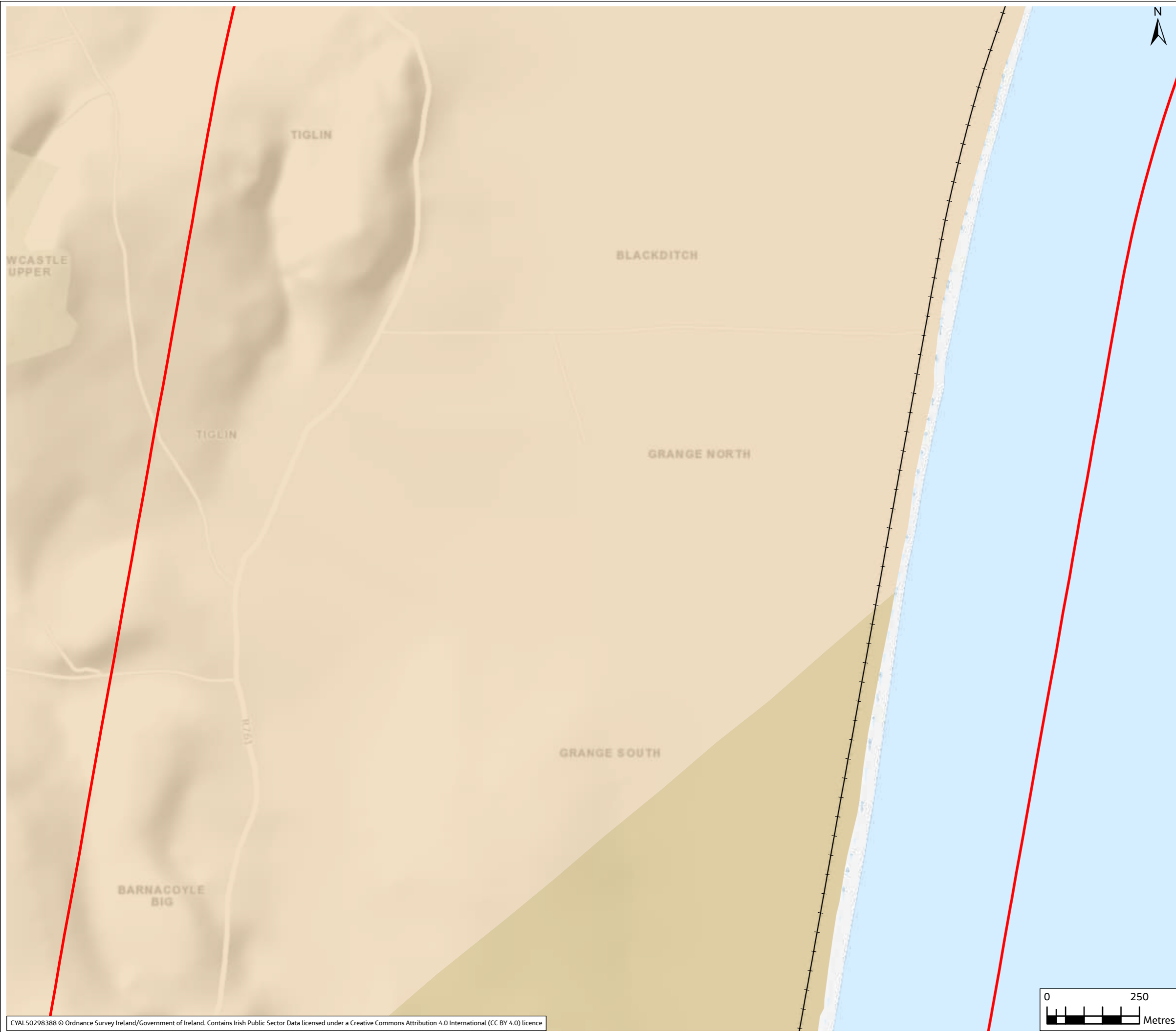


FIGURE 7.2

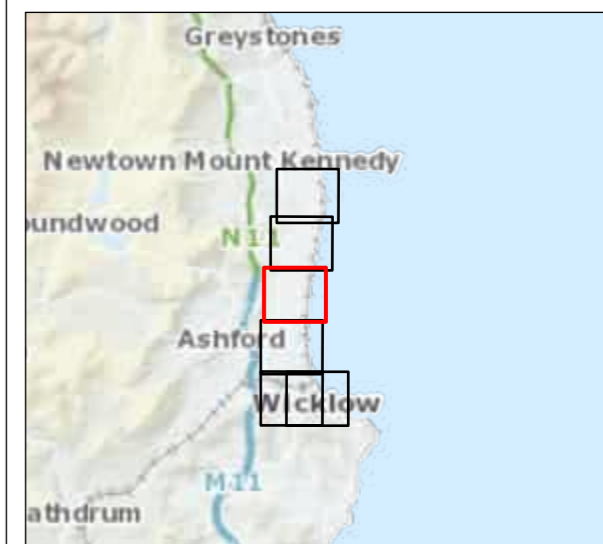
Legend

Study Area

- CCA6.2 Study Area
- Railway Network Centreline

Bedrock Aquifers

- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
- PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client


Designer

 Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

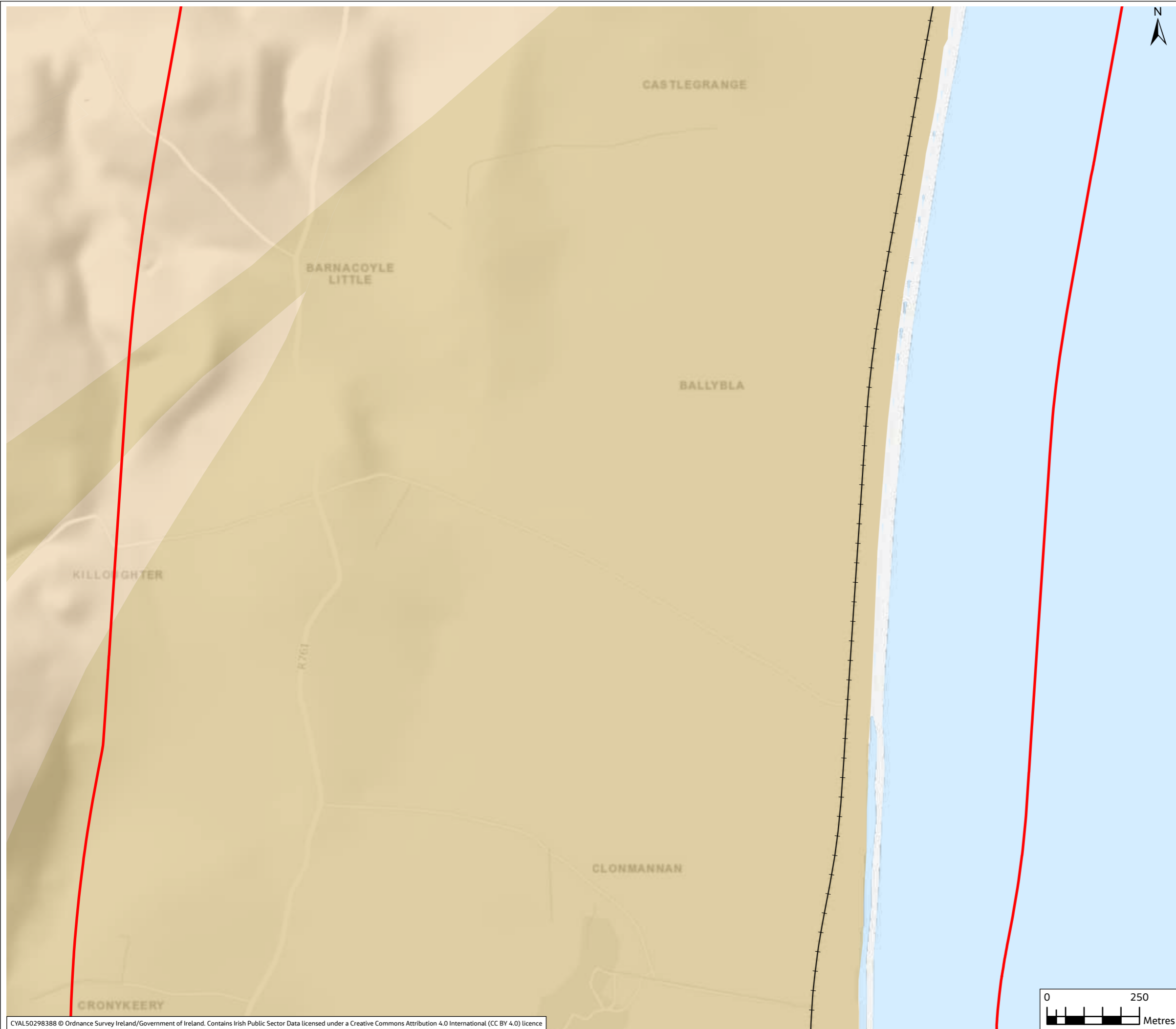
Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.2
 CCA6.2- Environmental Constraints - Bedrock Aquifers
 (Page 3 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7011	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.



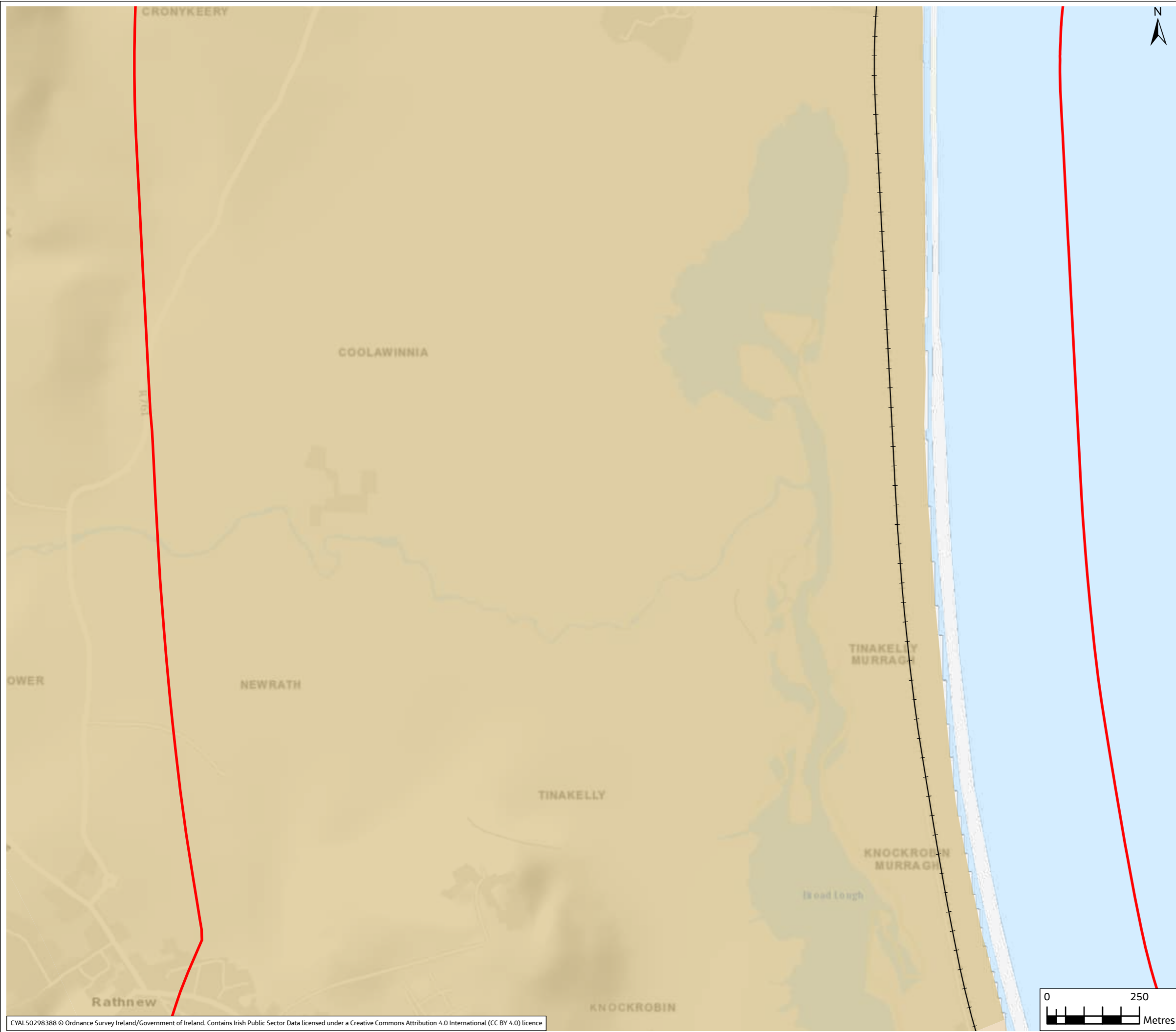
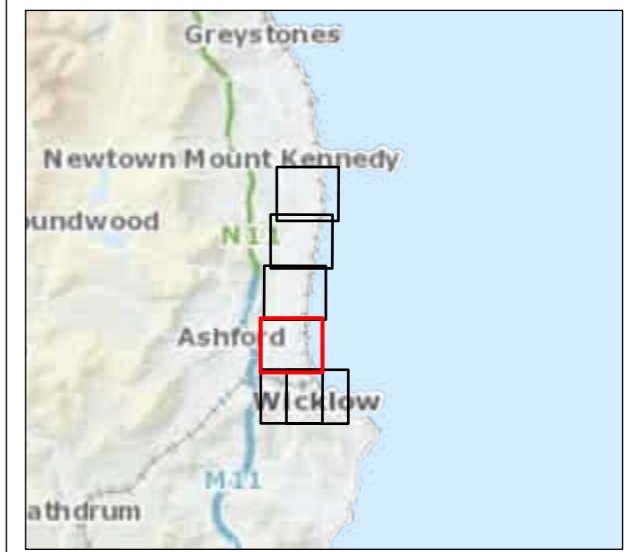
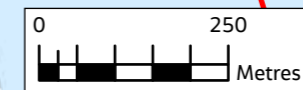


FIGURE 7.2

- Legend
- Study Area**
- CCA6.2 Study Area
 - Railway Network Centreline
- Bedrock Aquifers**
- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
 - PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Client						
Designer						
 Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666 www.jacobs.com						
Project						
7964-CCA6_2-P2-DWG-EV-JAC-7012 INFRASTRUCTURE PROTECTION PROJECTS						
Drawing Title						
Figure 7.2 CCA6.2- Environmental Constraints - Bedrock Aquifers (Page 4 of 6)						
Drawing Status						
ISSUE FOR ACCEPTANCE						
State Code	Phase 2					
Scale @ A3	1:10,000					DO NOT SCALE
Jacobs No.	D3658301					Rev
Client No.	8093					V01
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7012					



© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

FIGURE 7.2

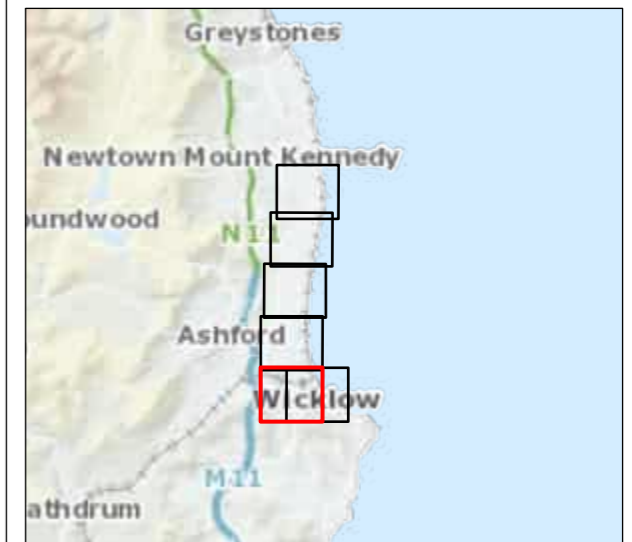
Legend

Study Area

- CCA6.2 Study Area
- Railway Network Centreline

Bedrock Aquifers

- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
- PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666 www.jacobs.com

Project

7694 EAST COAST RAILWAY INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.2
CCA6.2- Environmental Constraints - Bedrock Aquifers
(Page 5 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

Client No.

8093

Drawing No.

7964-CCA6_2-P2-DWG-EV-JAC-7013

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

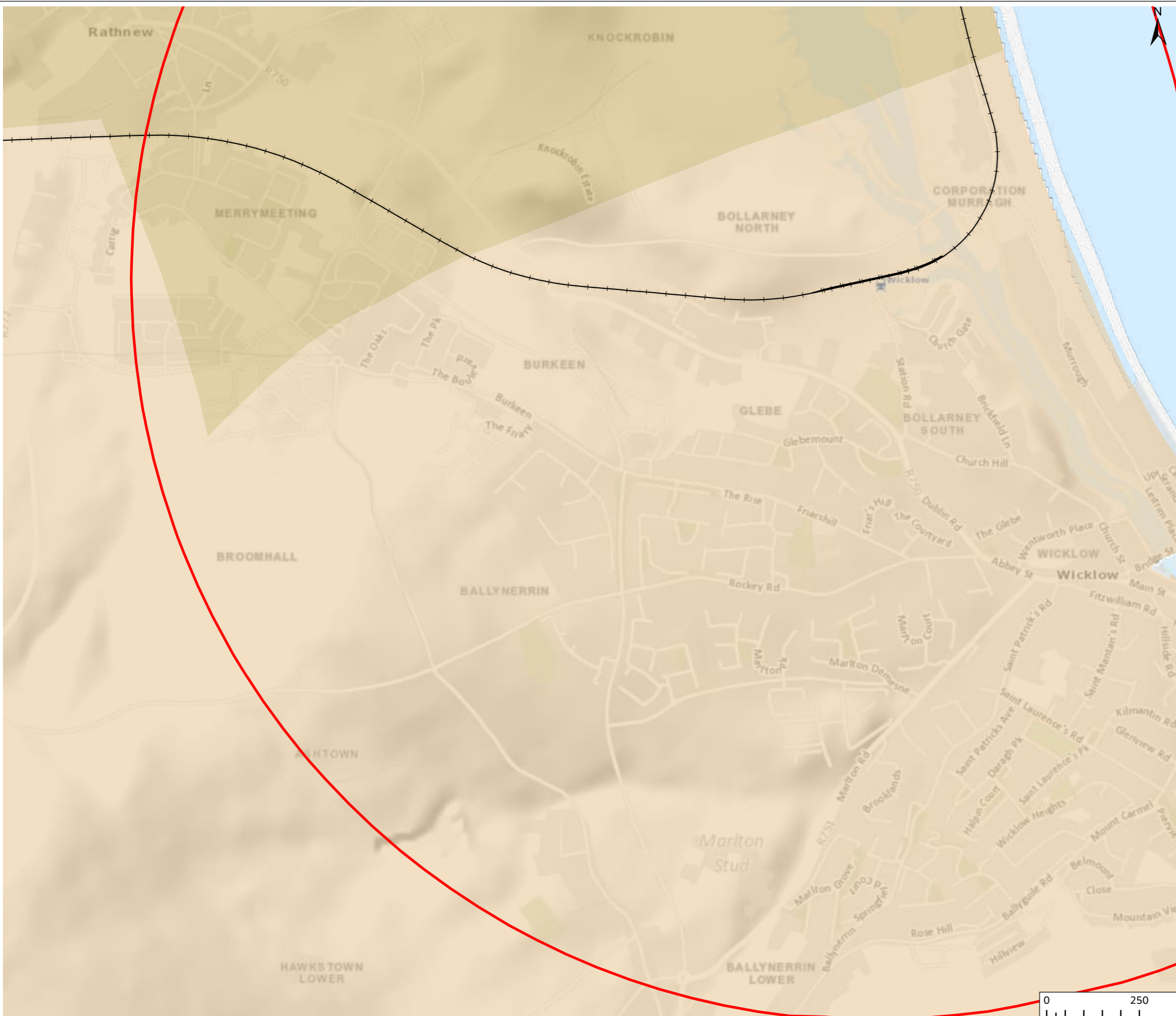


FIGURE 7.2

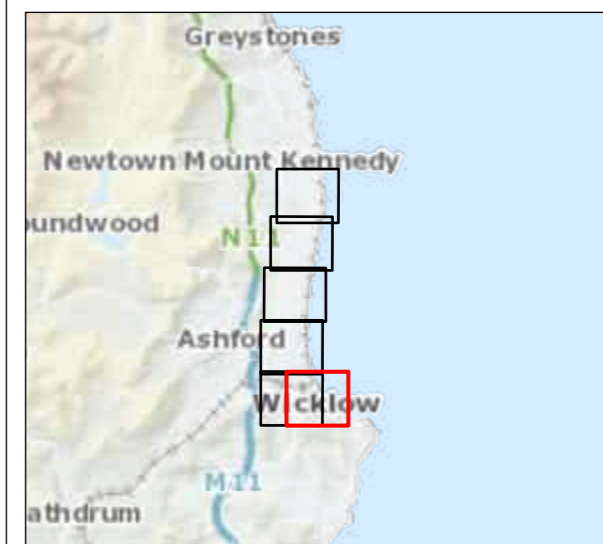
Legend

Study Area

- CCA6.2 Study Area
- Railway Network Centreline

Bedrock Aquifers

- LI - Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones
- PI - Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones
- Unclassified



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.2
CCA6.2- Environmental Constraints - Bedrock Aquifers
(Page 6 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7014	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

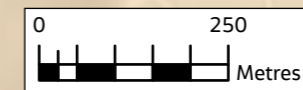
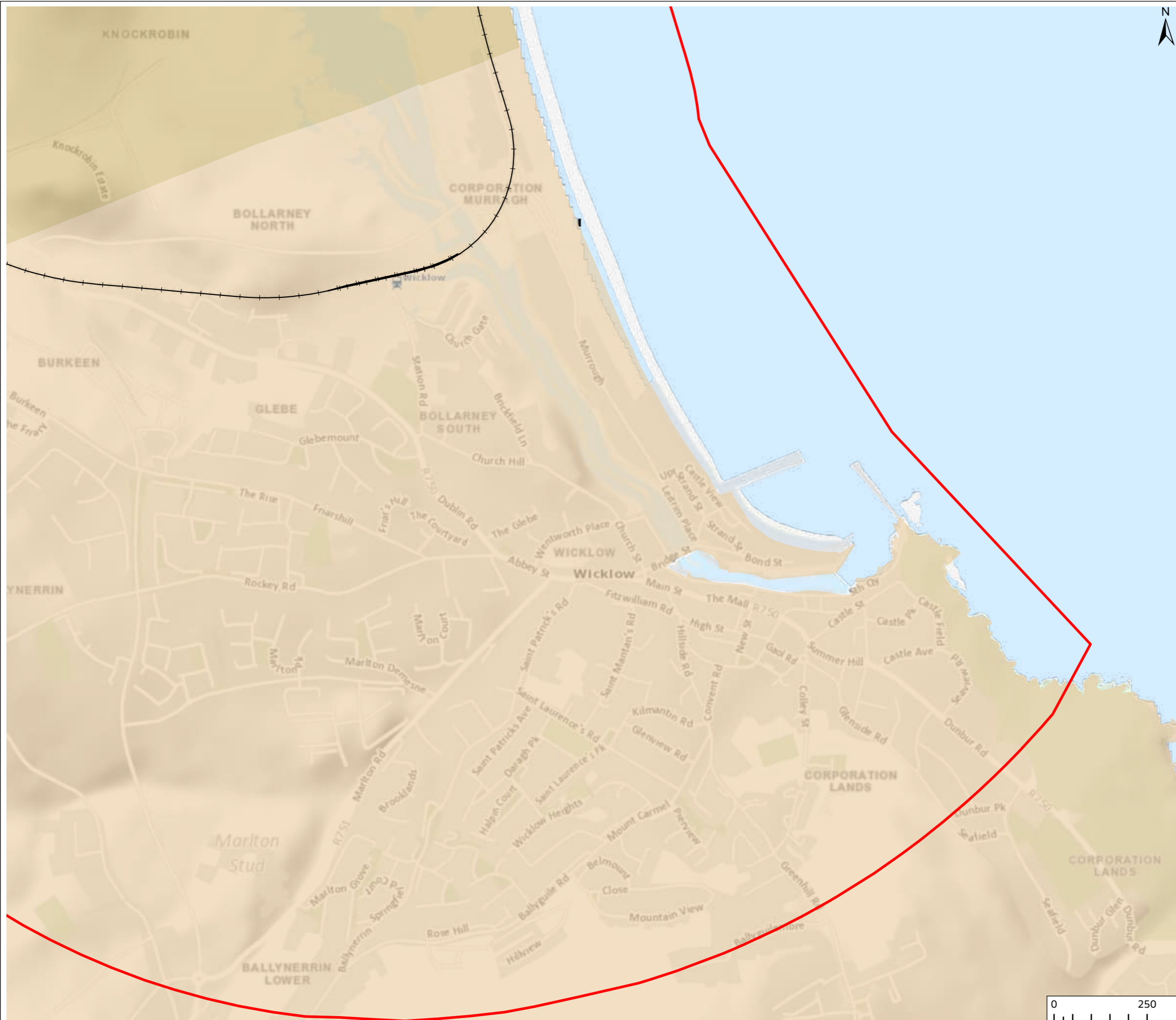
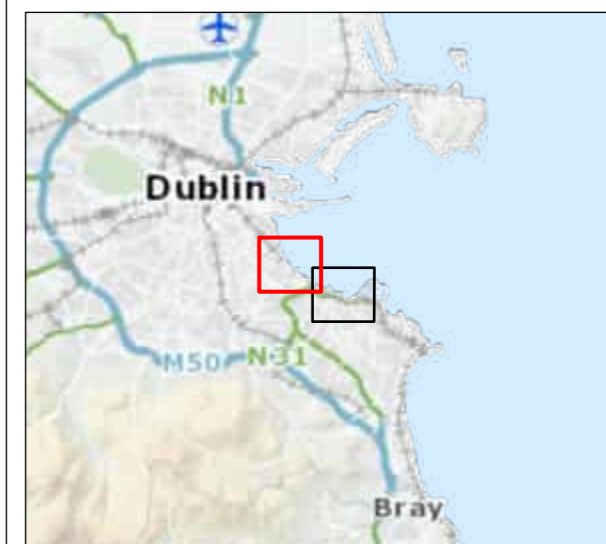


FIGURE 7.3

Legend

- CCA1 Study Area
- Railway Network Centreline
- Groundwater Wells & Springs**
- Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
- Extreme
- High
- Low
- Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client


Designer

 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.3
 CCA1- Environmental Constraints - Hydrogeology
 (Page 1 of 2)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA1-P2-DWG-EV-JAC-7008	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

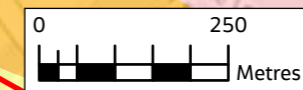
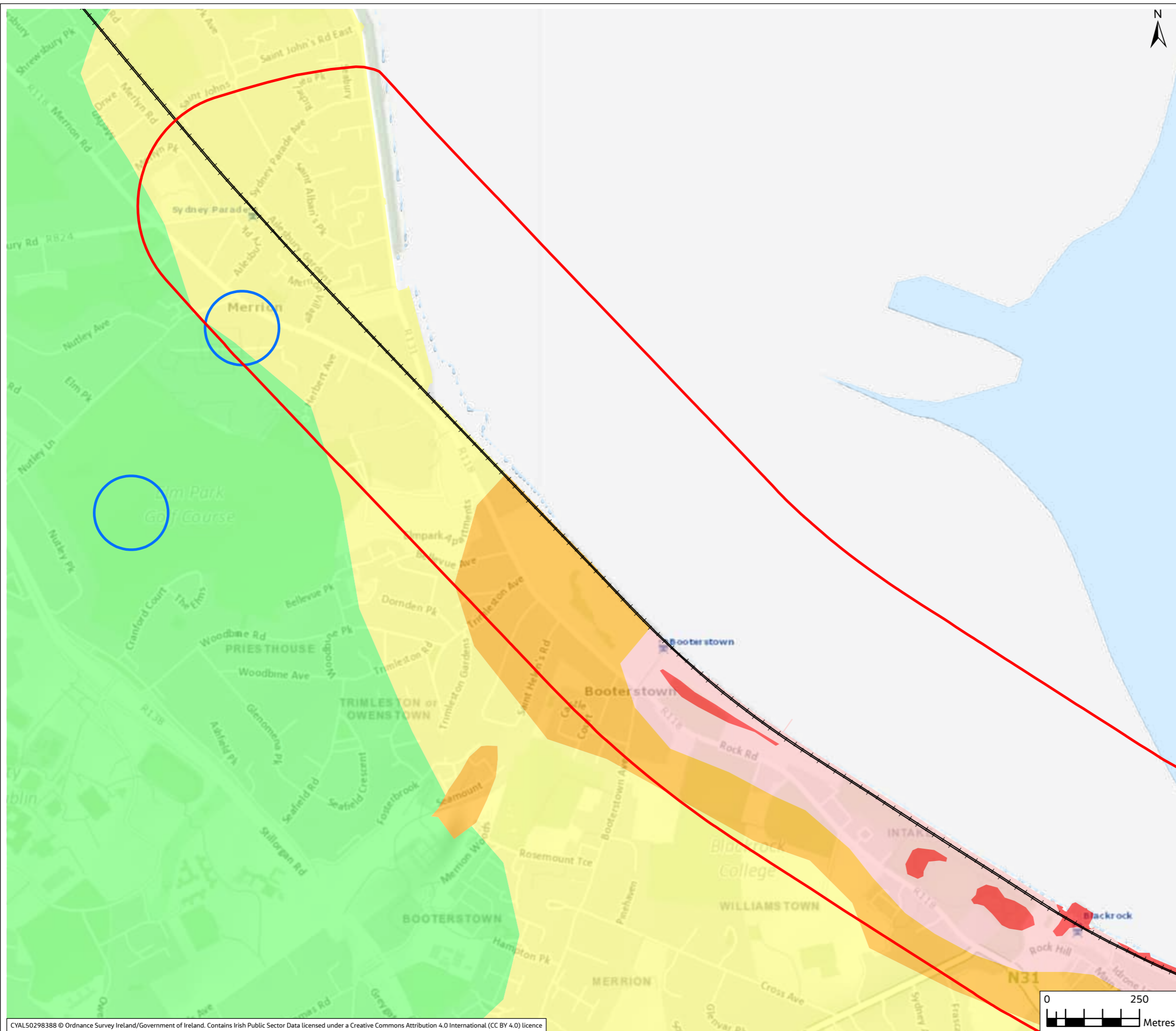
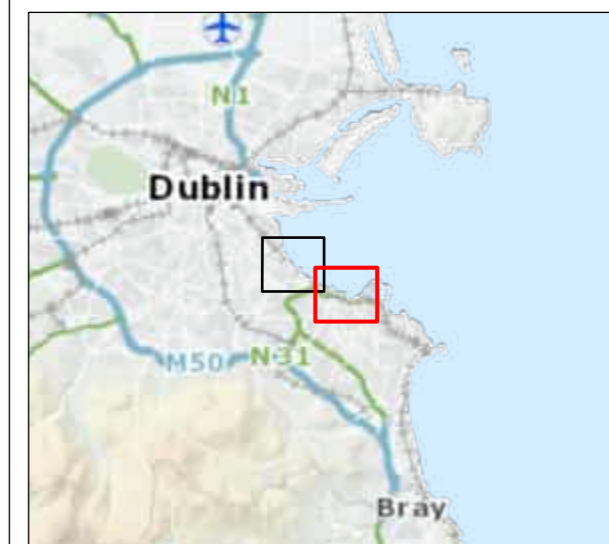


FIGURE 7.3

Legend

- CCA1 Study Area
- Railway Network Centreline
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
- Extreme
- High
- Low
- Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.3
CCA1- Environmental Constraints - Hydrogeology
(Page 2 of 2)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA1-P2-DWG-EV-JAC-7009	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

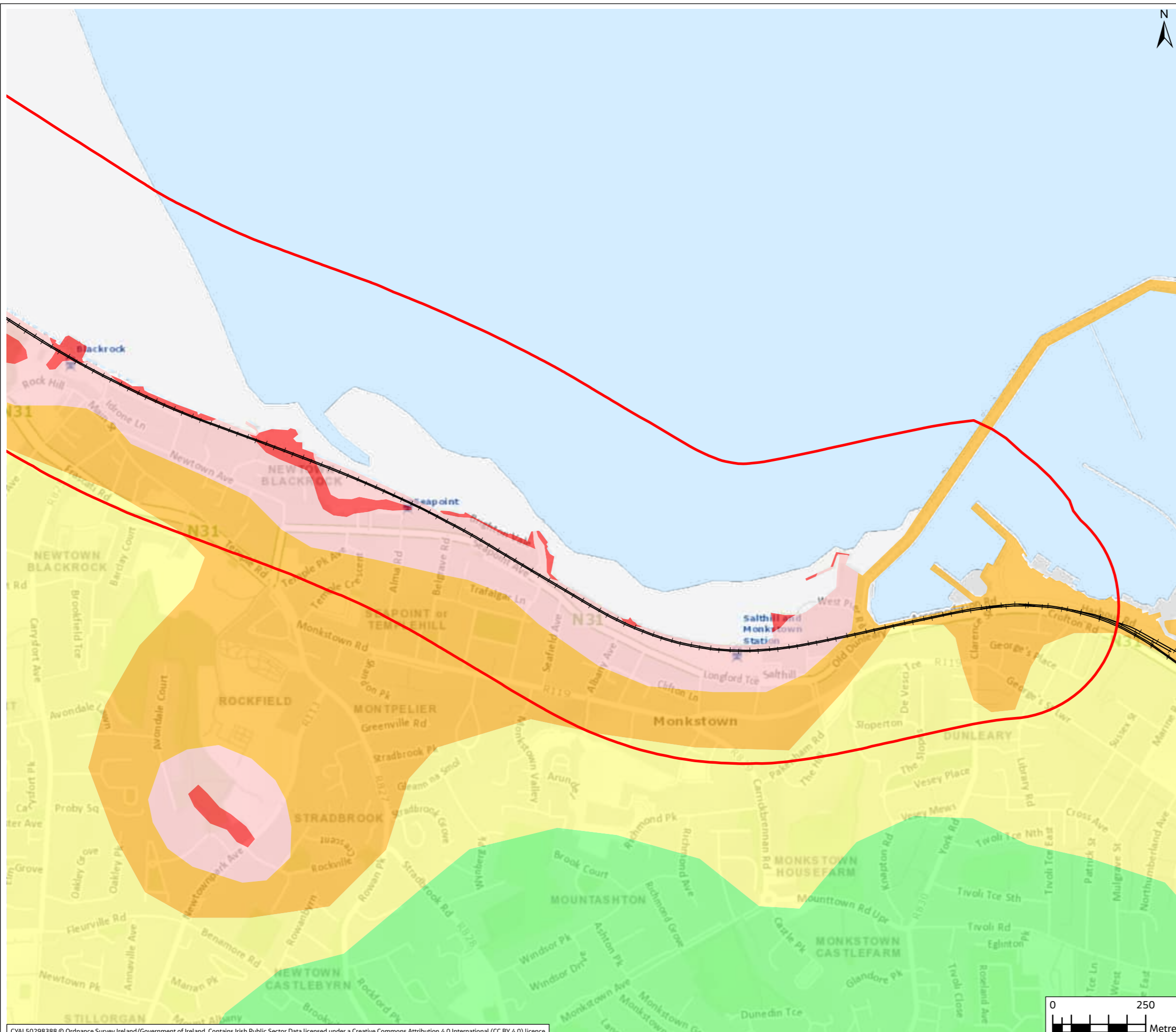
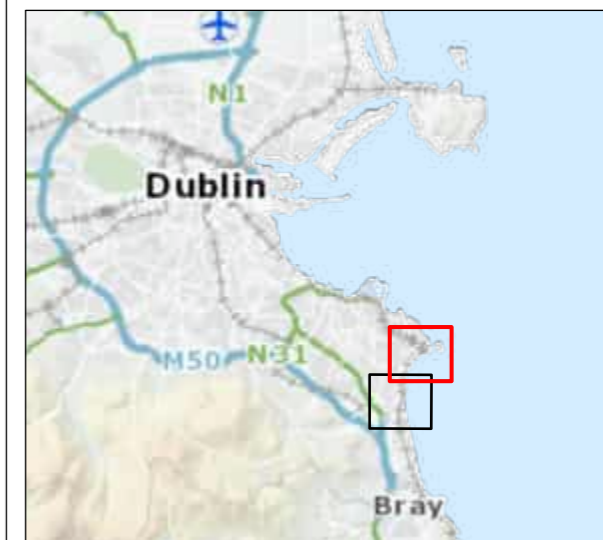


FIGURE 7.3

- Legend
- CCA2-3 Study Area
 - Railway Network Centreline
- Groundwater Vulnerability
- Rock at or near Surface or Karst
 - Extreme
 - High
 - Low
 - Moderate



Rev	Date	Purpose of revision	MS	PR	JD	DK
V01	Mar 2024	FOR REVIEW				

Client

Designer

Jacobs
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.3
CCA2-3- Environmental Constraints - Hydrogeology
(Page 1 of 2)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev
Client No.	8093	V01
Drawing No.	7964-CCA2_3-P2-DWG-EV-JAC-7008	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

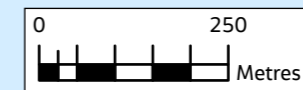
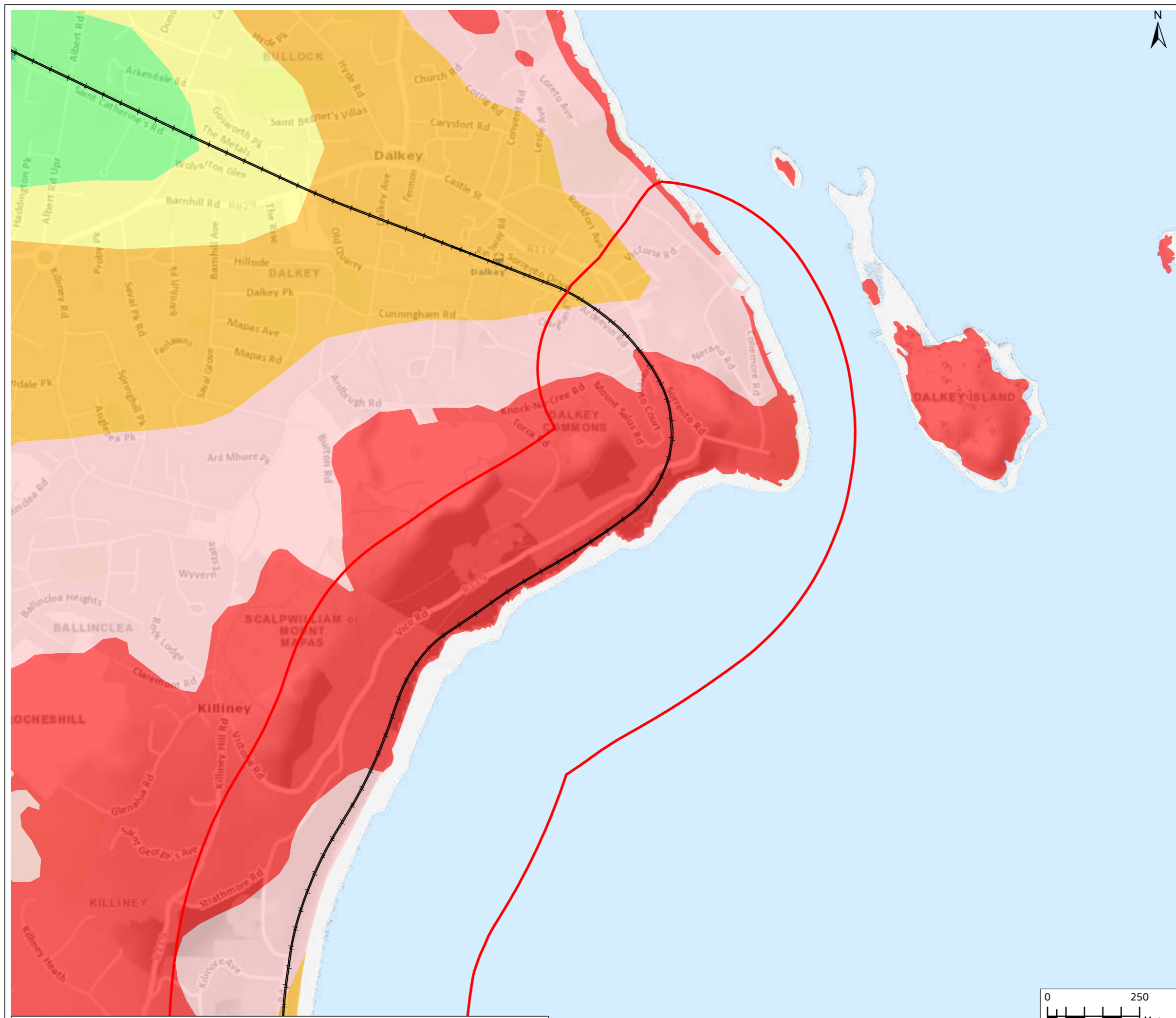
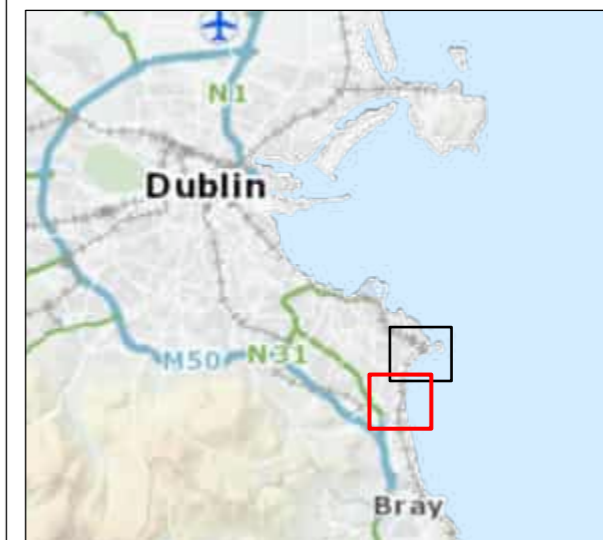


FIGURE 7.3

- Legend
- CCA2-3 Study Area
 - Railway Network Centreline
- Groundwater Vulnerability
- Rock at or near Surface or Karst
 - Extreme
 - High
 - Low
 - Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Jacobs
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.3
CCA2-3- Environmental Constraints - Hydrogeology
(Page 2 of 2)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA2_3-P2-DWG-EV-JAC-7009	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

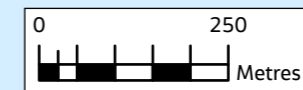
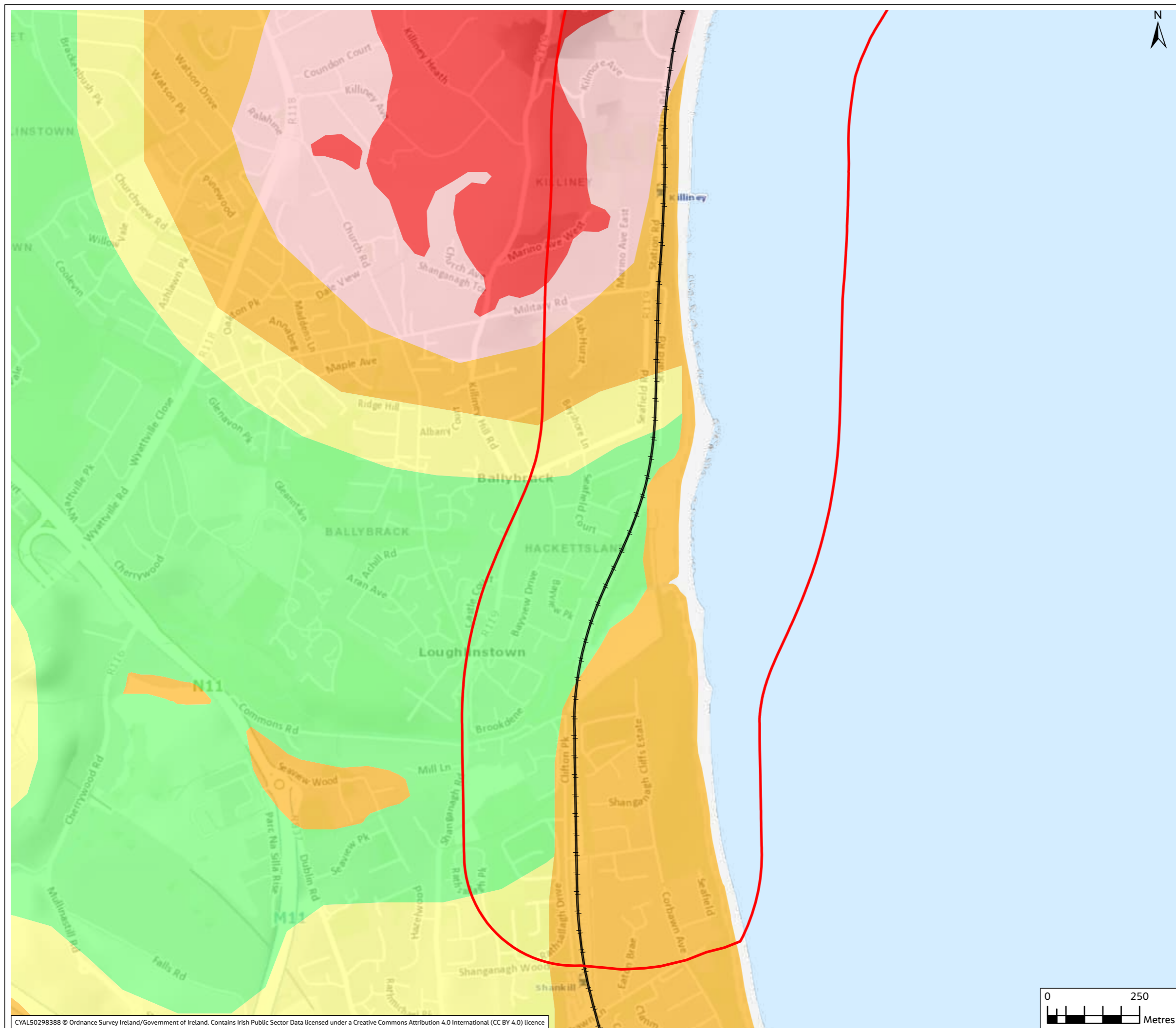
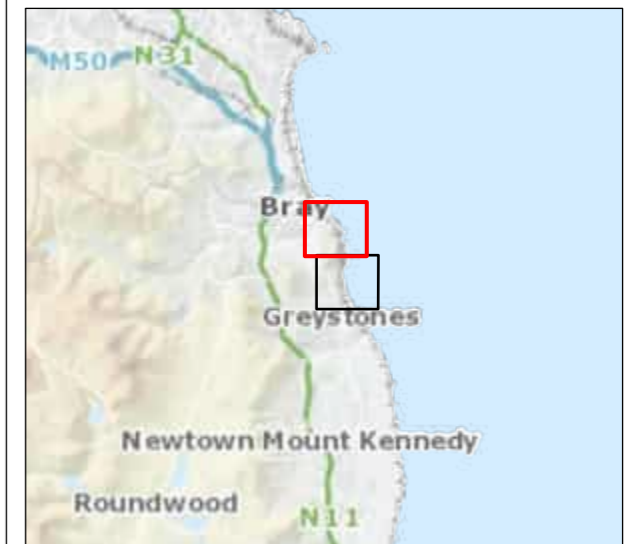


FIGURE 7.3

Legend

- CCA5 Study Area
- Railway Network Centreline
- Groundwater Wells & Springs
 - Wells & Springs
 - Wells & Springs
- Groundwater Vulnerability
 - Rock at or near Surface or Karst
 - Extreme
 - High
 - Low
 - Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.3
 CCA5- Environmental Constraints - Hydrogeology
 (Page 1 of 2)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA5-P2-DWG-EV-JAC-7008	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

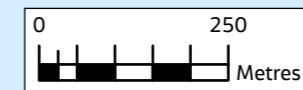
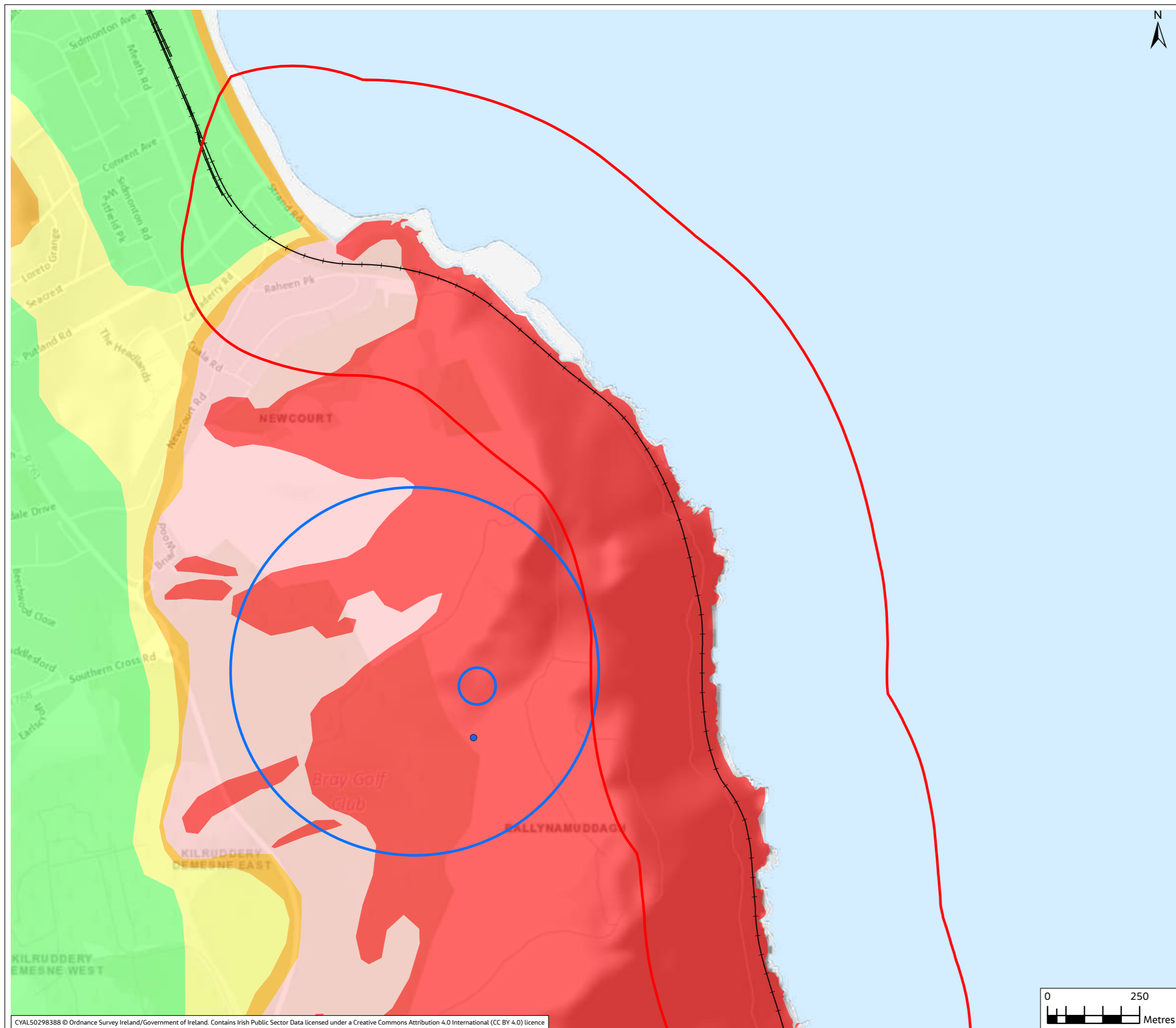
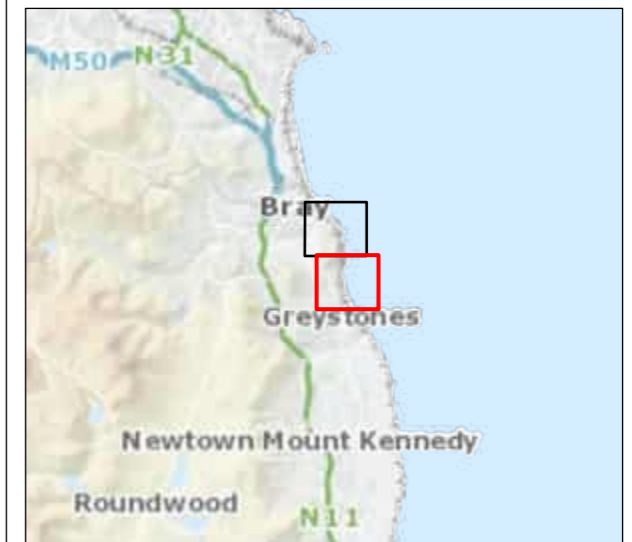


FIGURE 7.3

Legend

- CCA5 Study Area
- Railway Network Centreline
- Groundwater Wells & Springs**
- Wells & Springs
- Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
- Extreme
- High
- Low
- Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer

Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project

**7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.3
 CCA5- Environmental Constraints - Hydrogeology
 (Page 2 of 2)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA5-P2-DWG-EV-JAC-7009	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

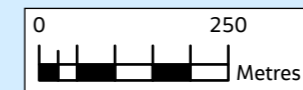
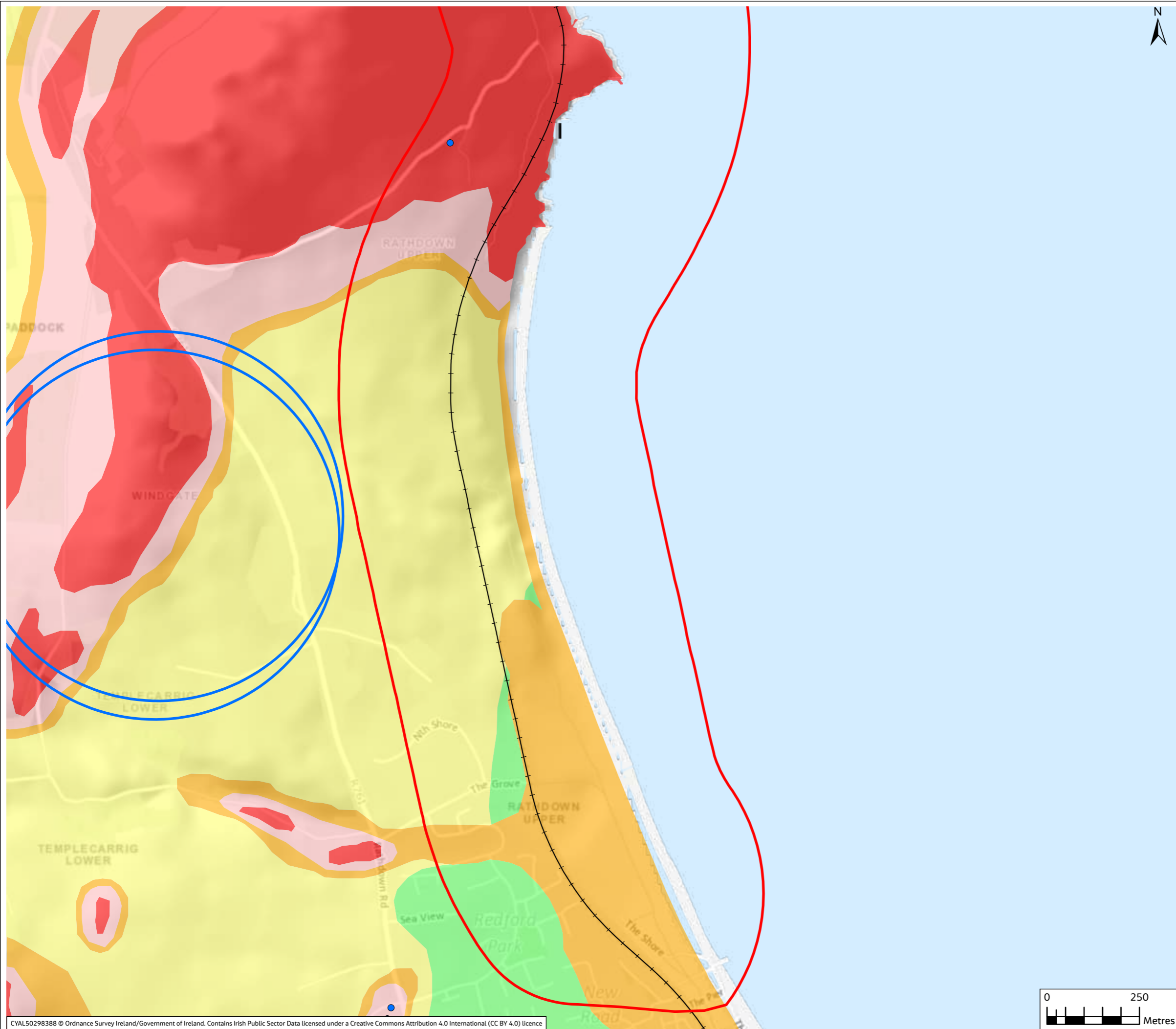
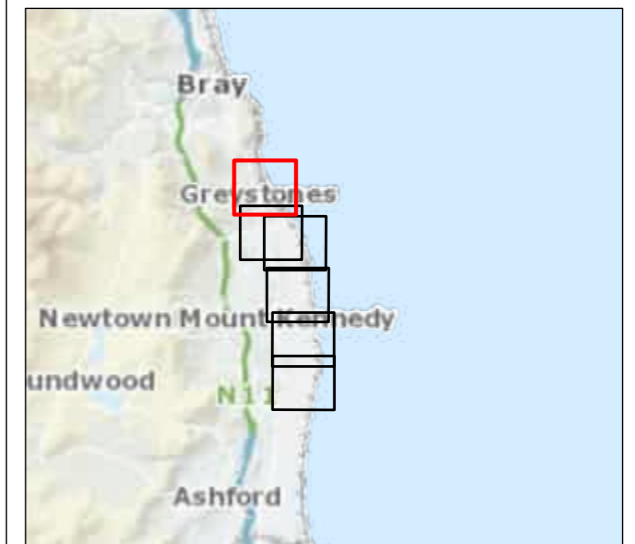


FIGURE 7.3

Legend

- CCA6.1 Study Area
- Railway Network Centreline
- Groundwater Wells & Springs**
- Wells & Springs
- Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
- Extreme
- High
- Low
- Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.3
 CCA6.1- Environmental Constraints - Hydrogeology
 (Page 1 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2		DO NOT SCALE
Scale @ A3	1:10,000	Rev	
Jacobs No.	D3658301		V01
Client No.	8093		
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7016		

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

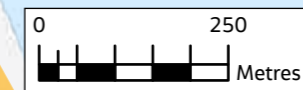
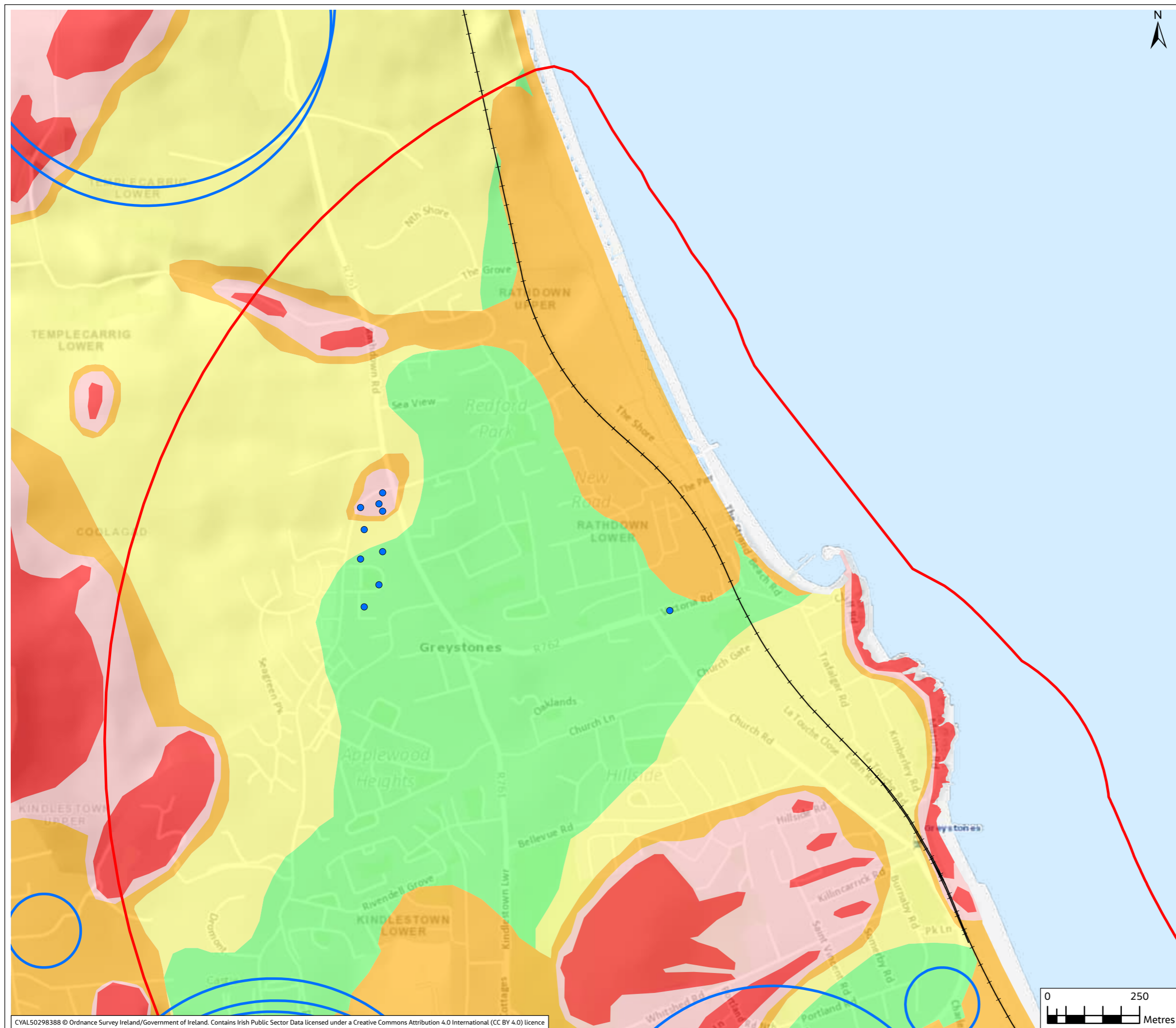
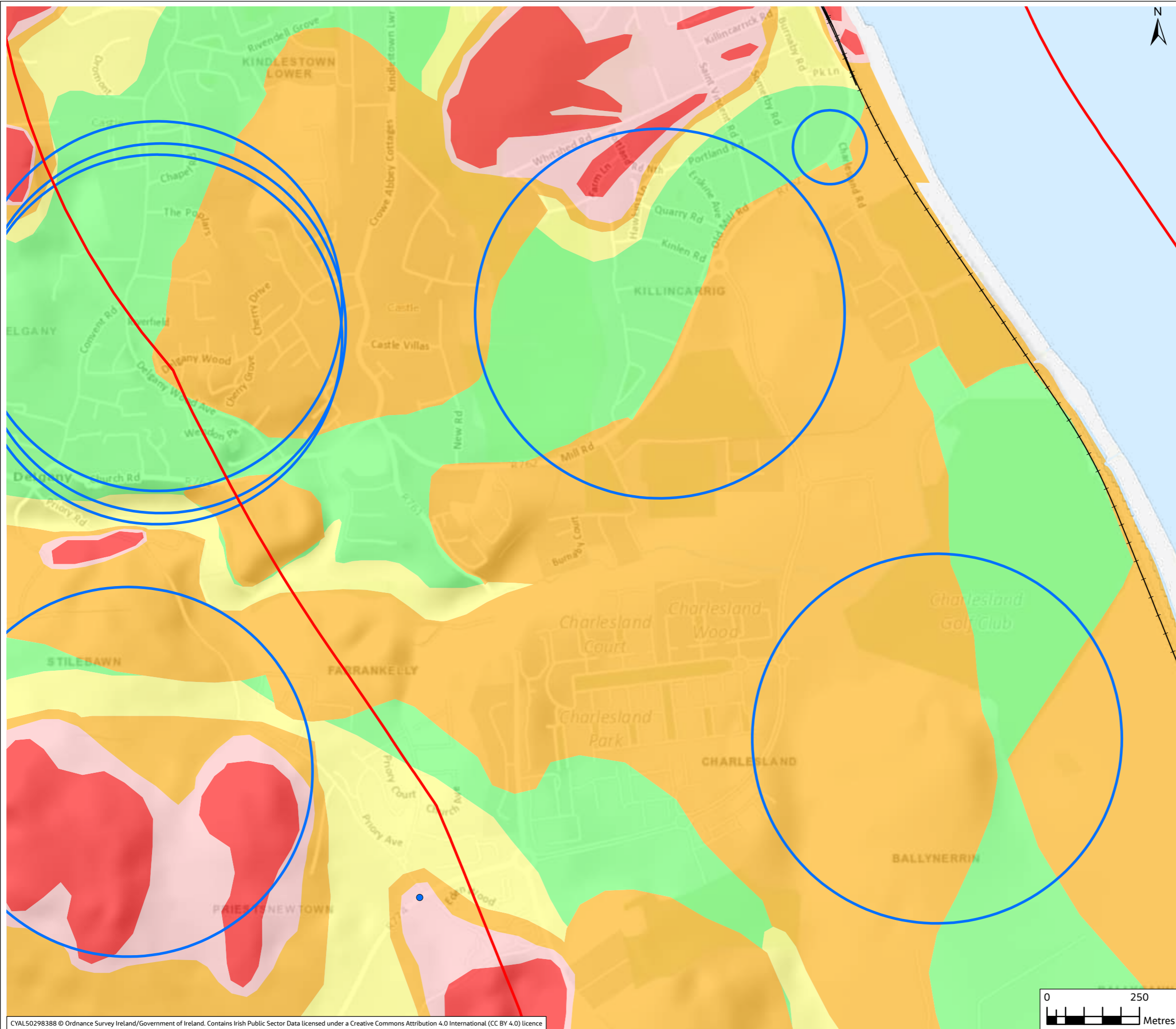
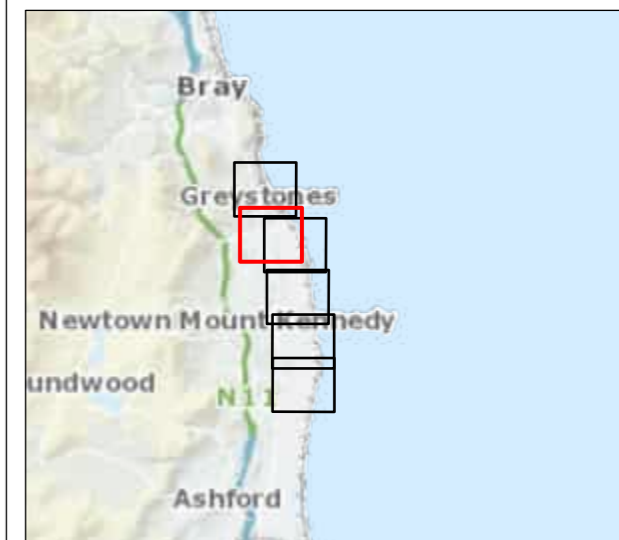


FIGURE 7.3



- Legend**
- CCA6.1 Study Area
 - Railway Network Centreline
 - Wells & Springs
 - Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
 - Extreme
 - High
 - Low
 - Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

larnród Éireann
Infrastructure

Designer

Jacobs
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.3
CCA6.1- Environmental Constraints - Hydrogeology
(Page 2 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2		DO NOT SCALE
Scale @ A3	1:10,000		
Jacobs No.	D3658301		Rev V01
Client No.	8093		
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7017		

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

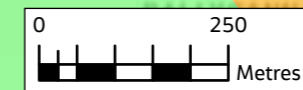
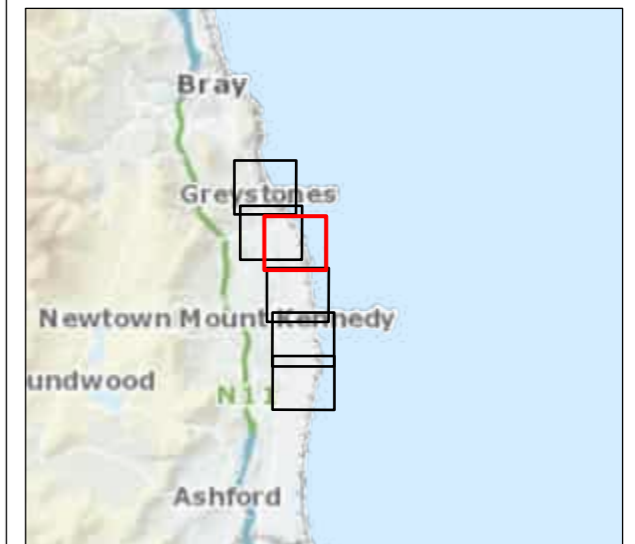


FIGURE 7.3

Legend

- CCA6.1 Study Area
- Railway Network Centreline
- Groundwater Wells & Springs**
- Wells & Springs
- Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
- Extreme
- High
- Low
- Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Iarnród Éireann
Infrastructure

Designer

Jacobs
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.3
CCA6.1- Environmental Constraints - Hydrogeology
(Page 3 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7018	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

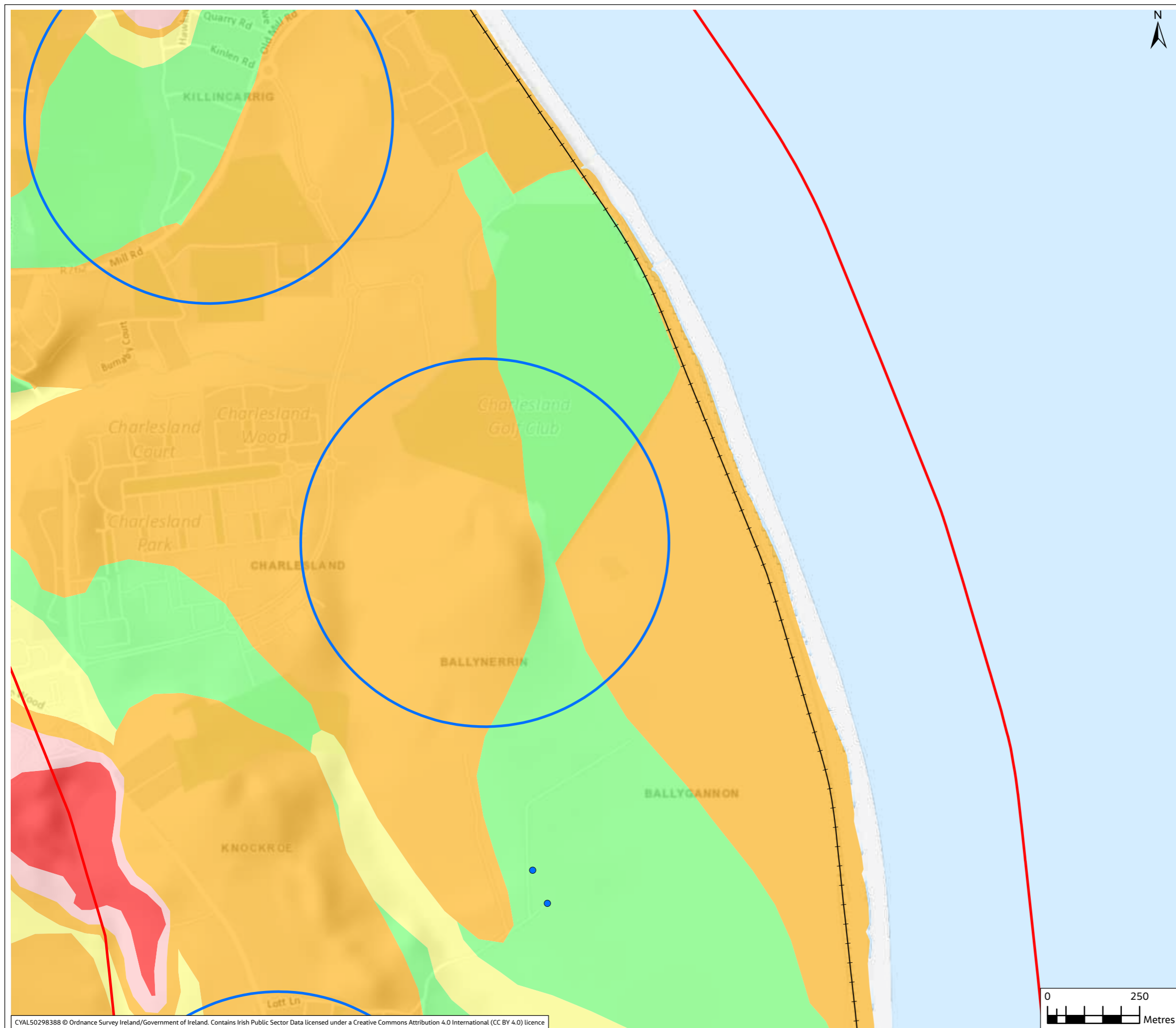
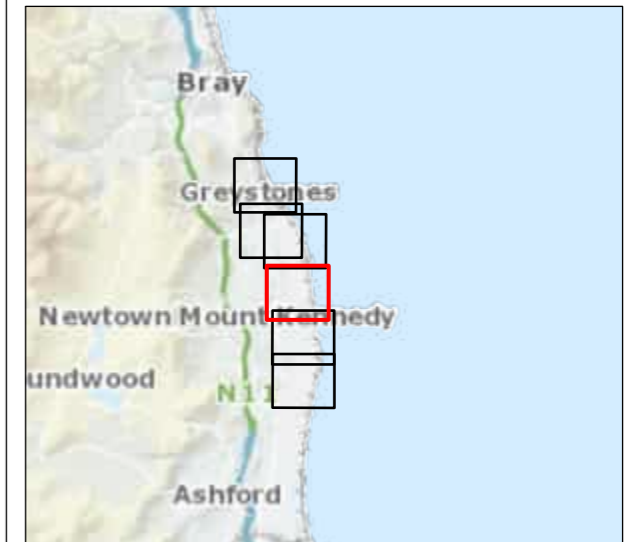


FIGURE 7.3

Legend

- CCA6.1 Study Area
- Railway Network Centreline
- Groundwater Wells & Springs**
- Wells & Springs
- Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
- Extreme
- High
- Low
- Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.3
CCA6.1- Environmental Constraints - Hydrogeology
(Page 4 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7019	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

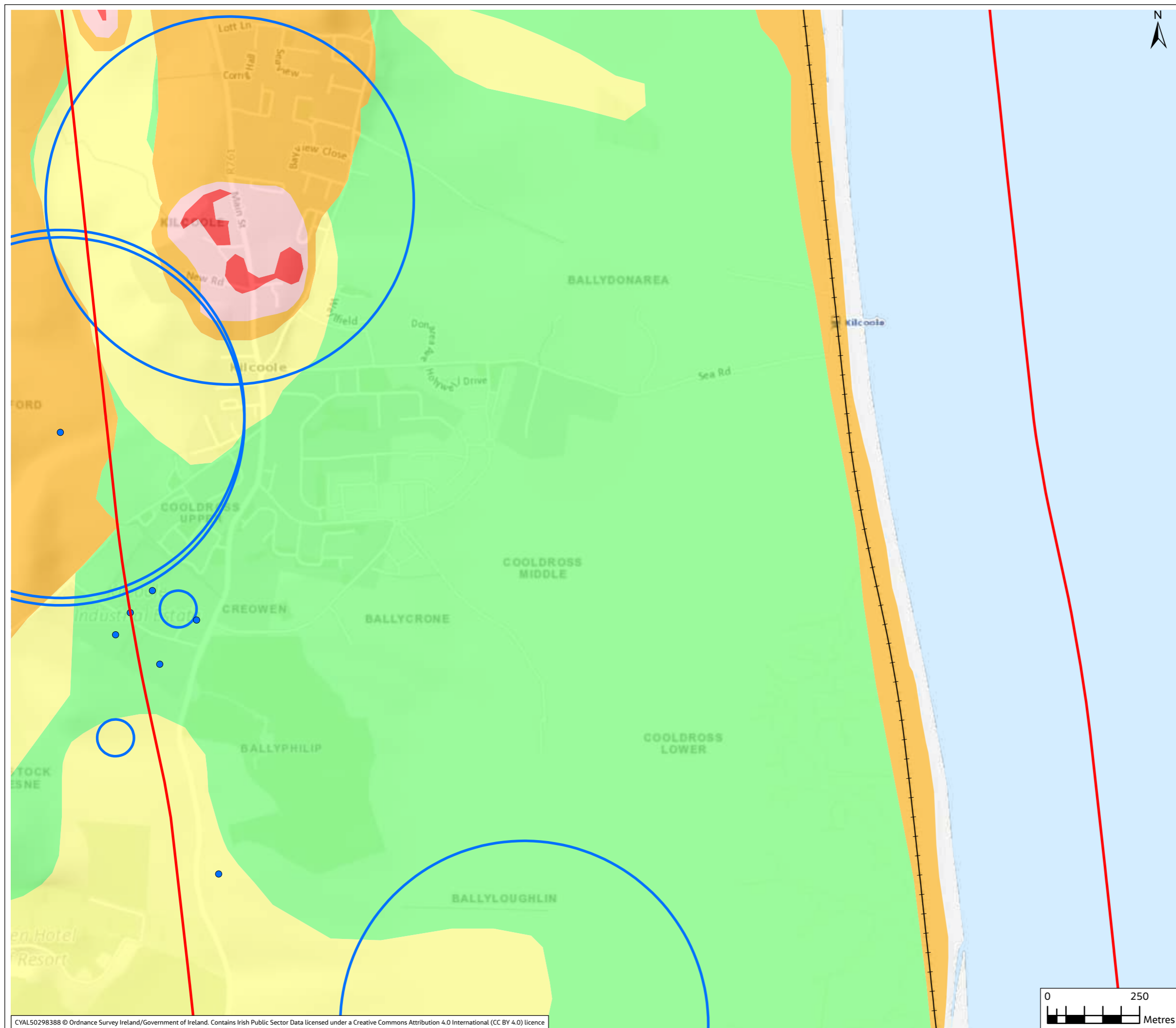
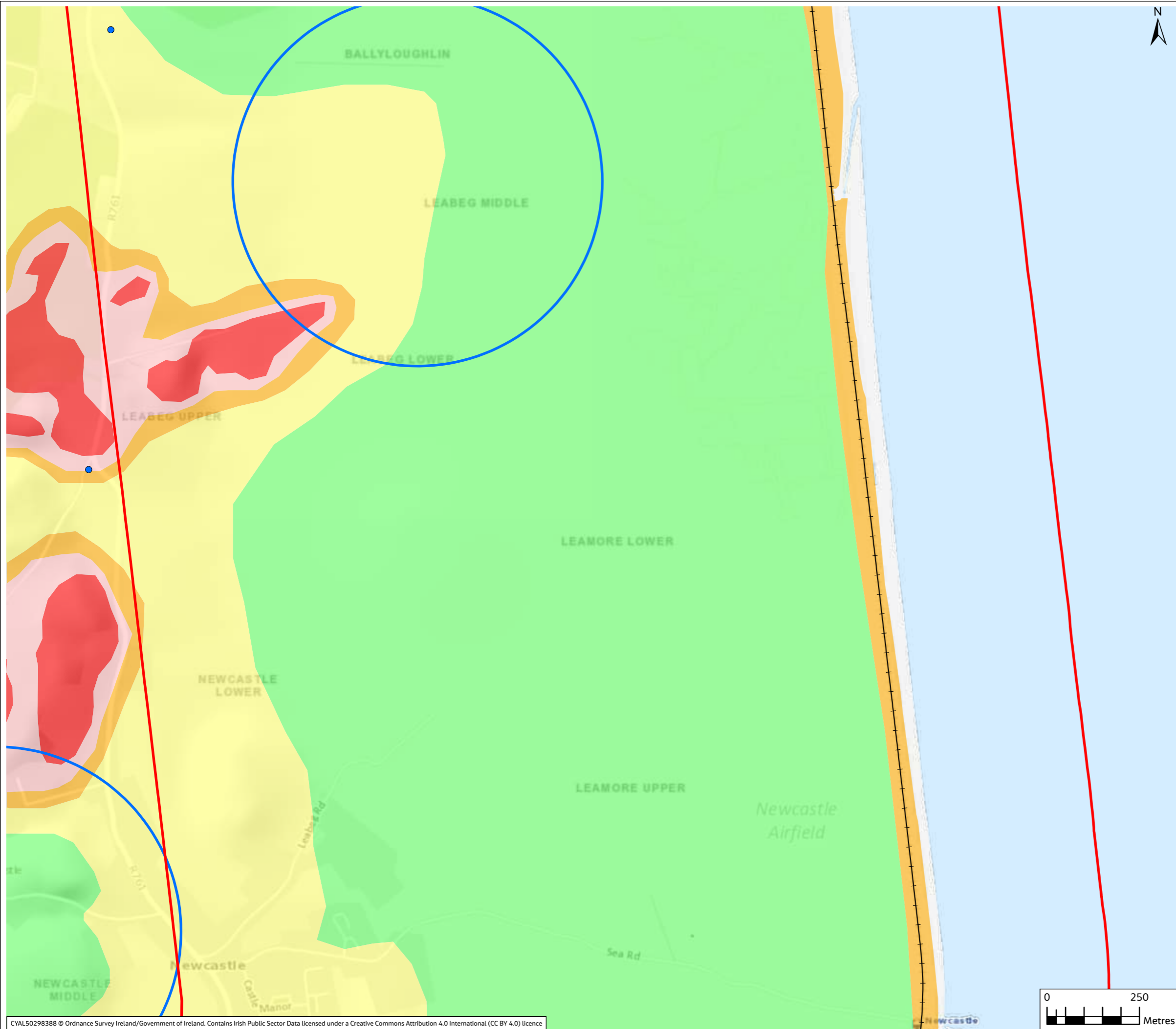
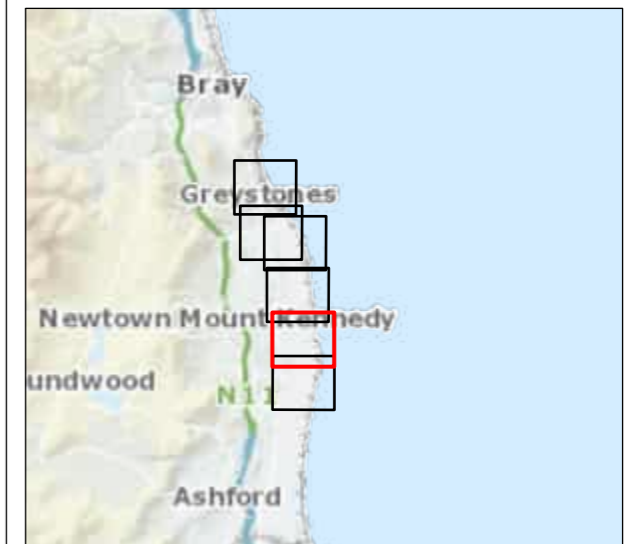


FIGURE 7.3



Legend

- CCA6.1 Study Area
- Railway Network Centreline
- Wells & Springs
- Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
- Extreme
- High
- Low
- Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Iarnród Éireann
Infrastructure

Designer

Jacobs
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.3
CCA6.1- Environmental Constraints - Hydrogeology
(Page 5 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7020	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

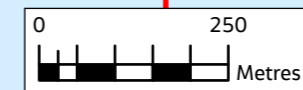
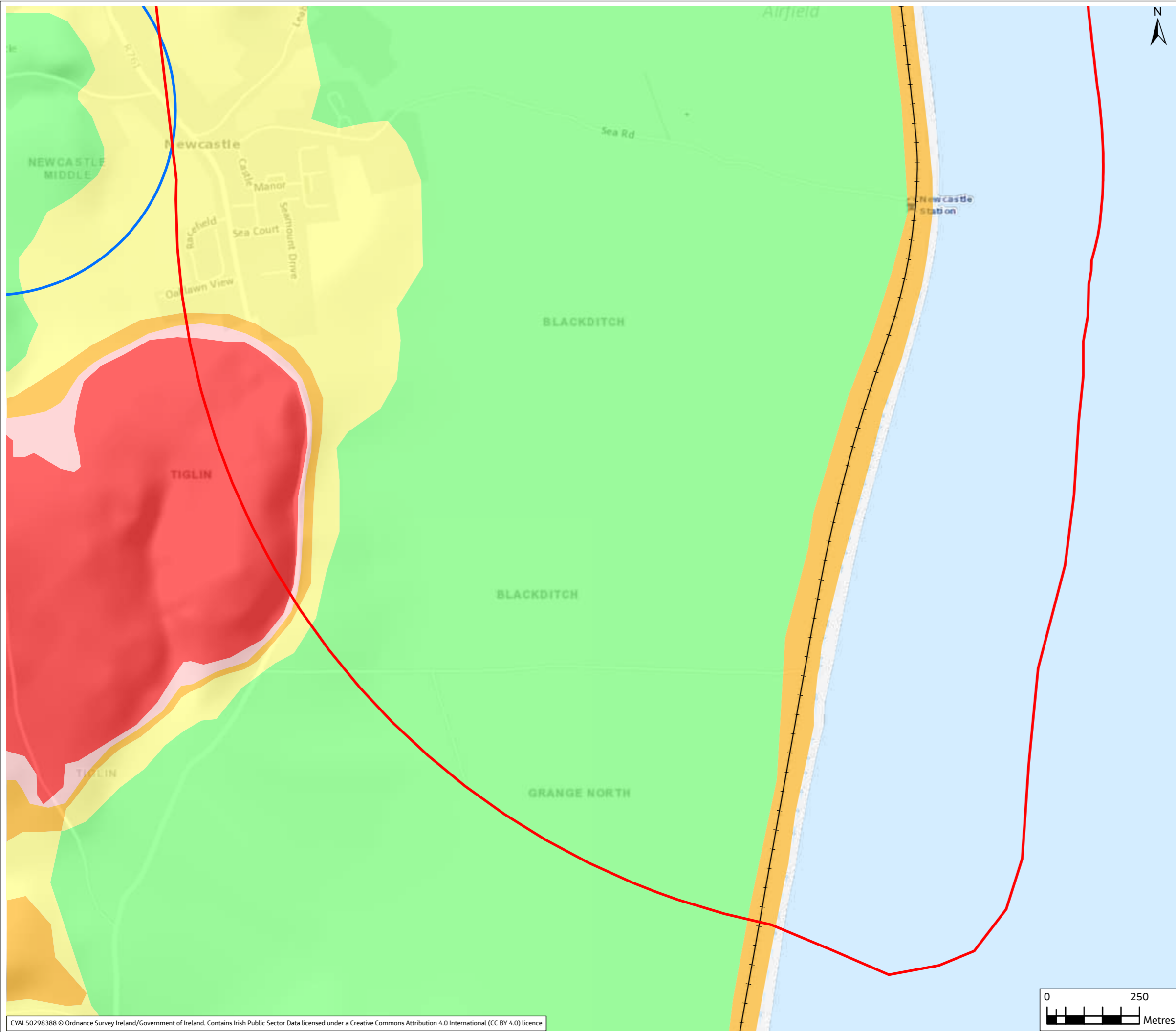
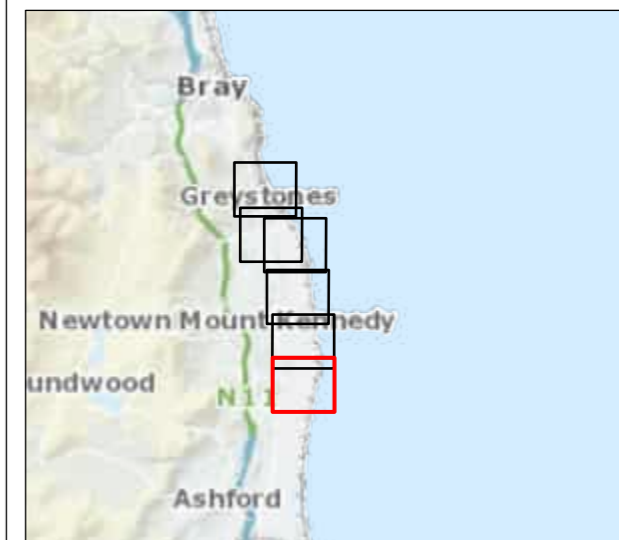


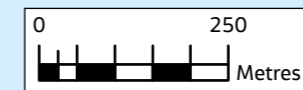
FIGURE 7.3



- Legend**
- CCA6.1 Study Area
 - Railway Network Centrelines
 - Wells & Springs
 - Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
 - Extreme
 - High
 - Low
 - Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd
Client						
Designer						
<p>Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666 www.jacobs.com</p>						
Project						
7694 EAST COAST RAILWAY INFRASTRUCTURE PROTECTION PROJECTS						
Drawing Title						
Figure 7.3 CCA6.1- Environmental Constraints - Hydrogeology (Page 6 of 6)						
Drawing Status						
ISSUE FOR ACCEPTANCE						
State Code	Phase 2					
Scale @ A3	1:10,000					DO NOT SCALE
Jacobs No.	D3658301					Rev
Client No.	8093					V01
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7021					

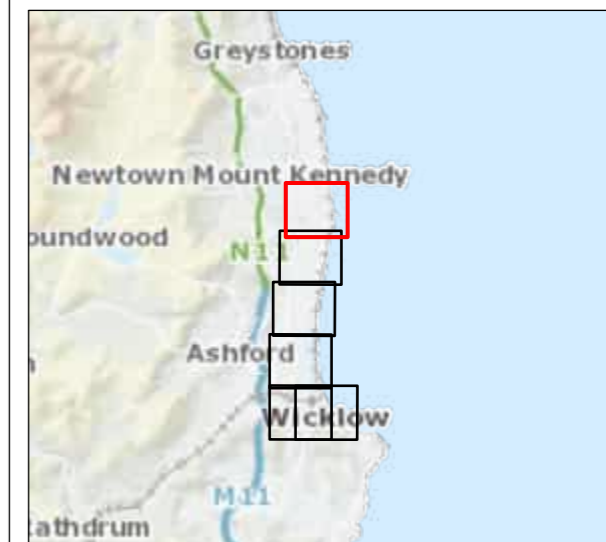


© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

FIGURE 7.3

Legend

- CCA6.1 Study Area
- Railway Network Centreline
- Groundwater Wells & Springs**
- Wells & Springs
- Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
- Extreme
- High
- Low
- Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Jacobs
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.3
CCA6.2- Environmental Constraints - Hydrogeology
(Page 1 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7016	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

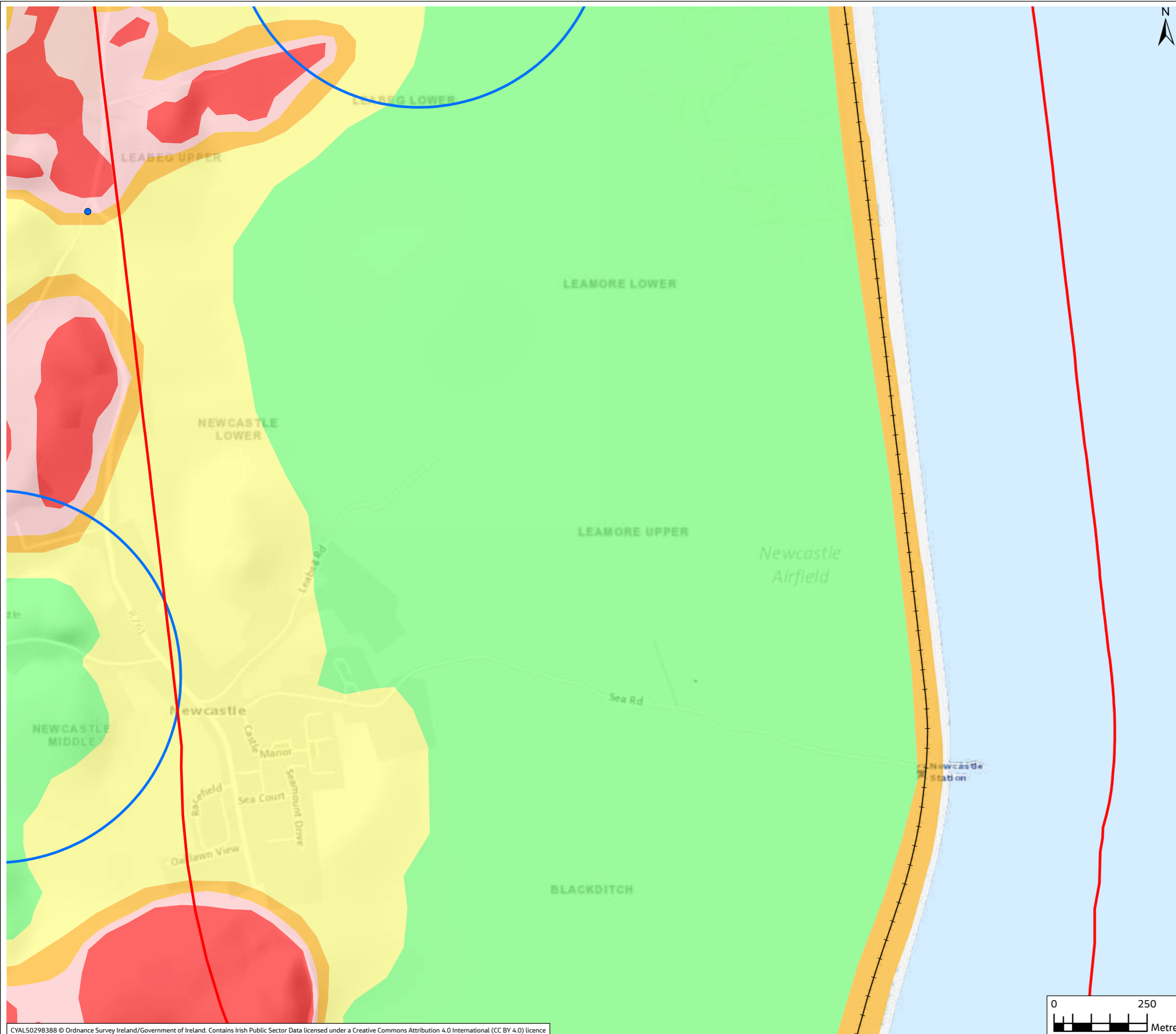
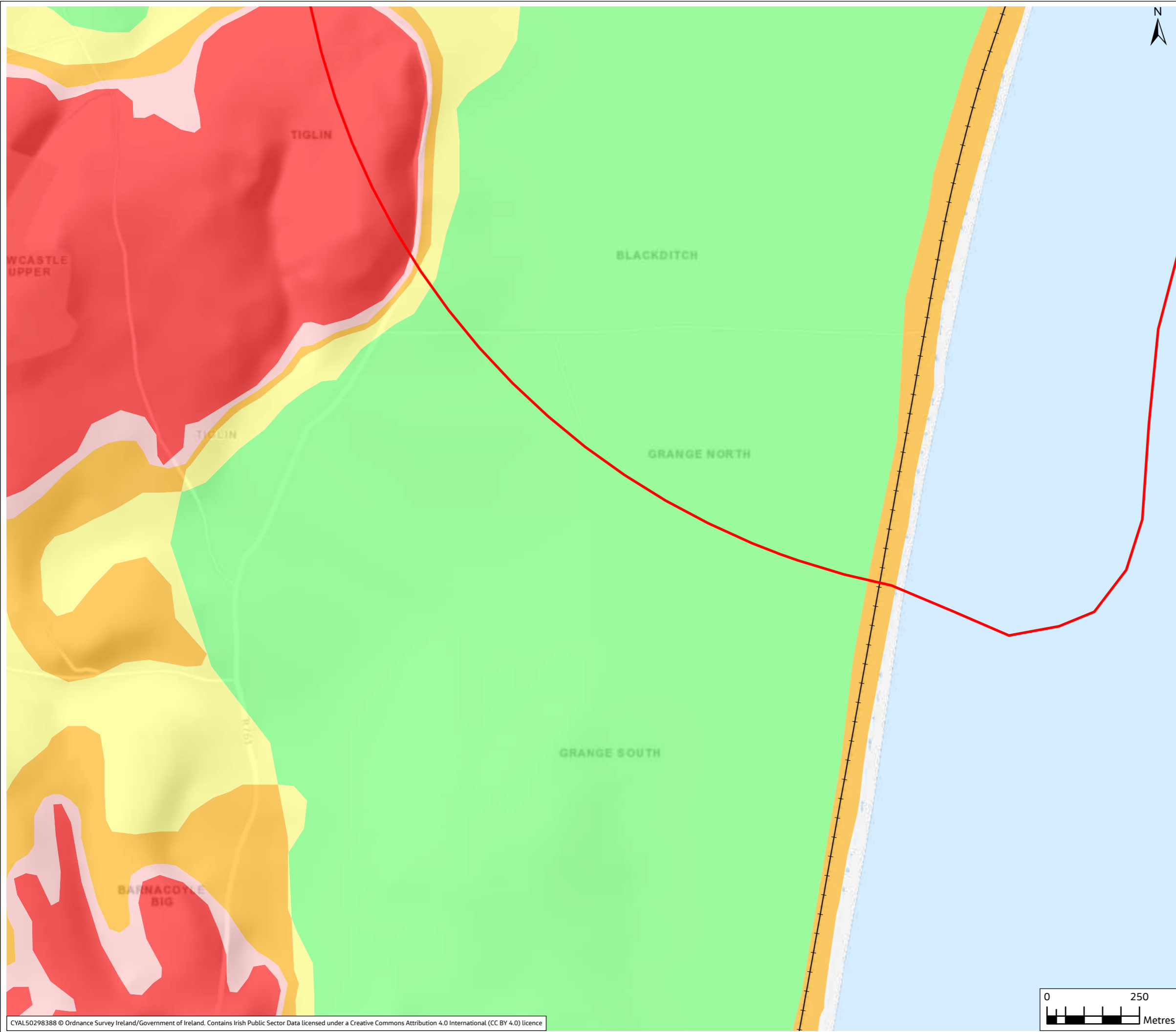
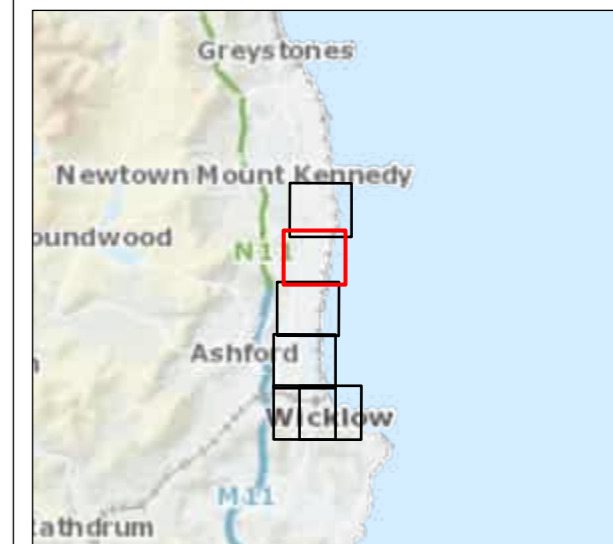


FIGURE 7.3



Legend

- CCA6.1 Study Area
- Railway Network Centreline
- Wells & Springs
- Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
- Extreme
- High
- Low
- Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Jacobs
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.3
CCA6.2- Environmental Constraints - Hydrogeology
(Page 2 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7017	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

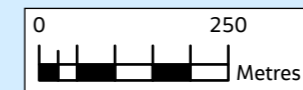
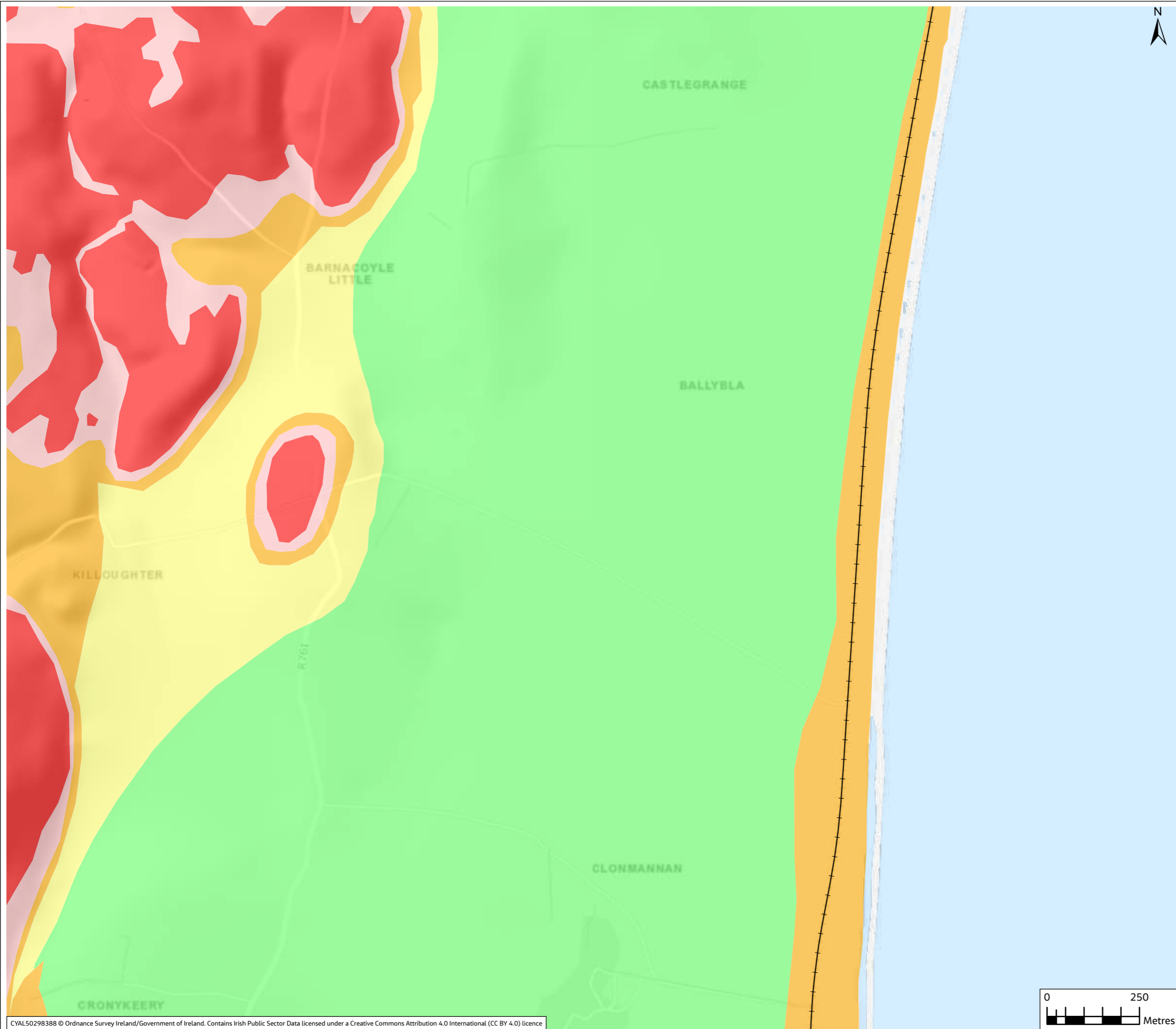
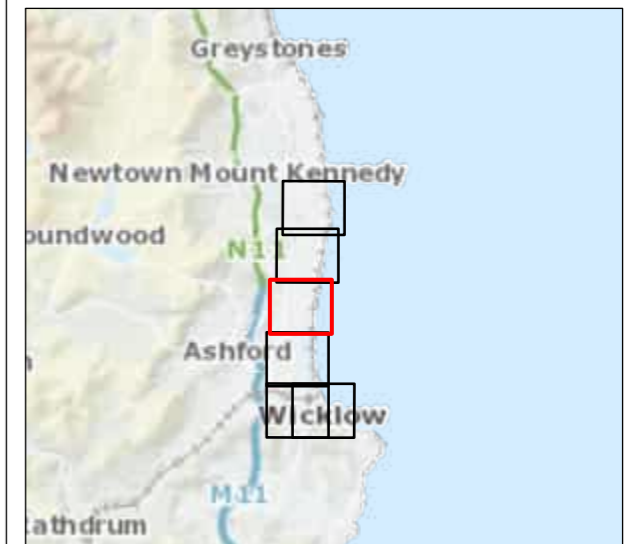


FIGURE 7.3



Legend

- +— Railway Network Centreline
- Groundwater Wells & Springs**
- Wells & Springs
- Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
- Extreme
- High
- Low
- Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

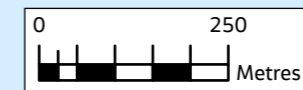
Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.3
 CCA6.2- Environmental Constraints - Hydrogeology
 (Page 3 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7018	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.



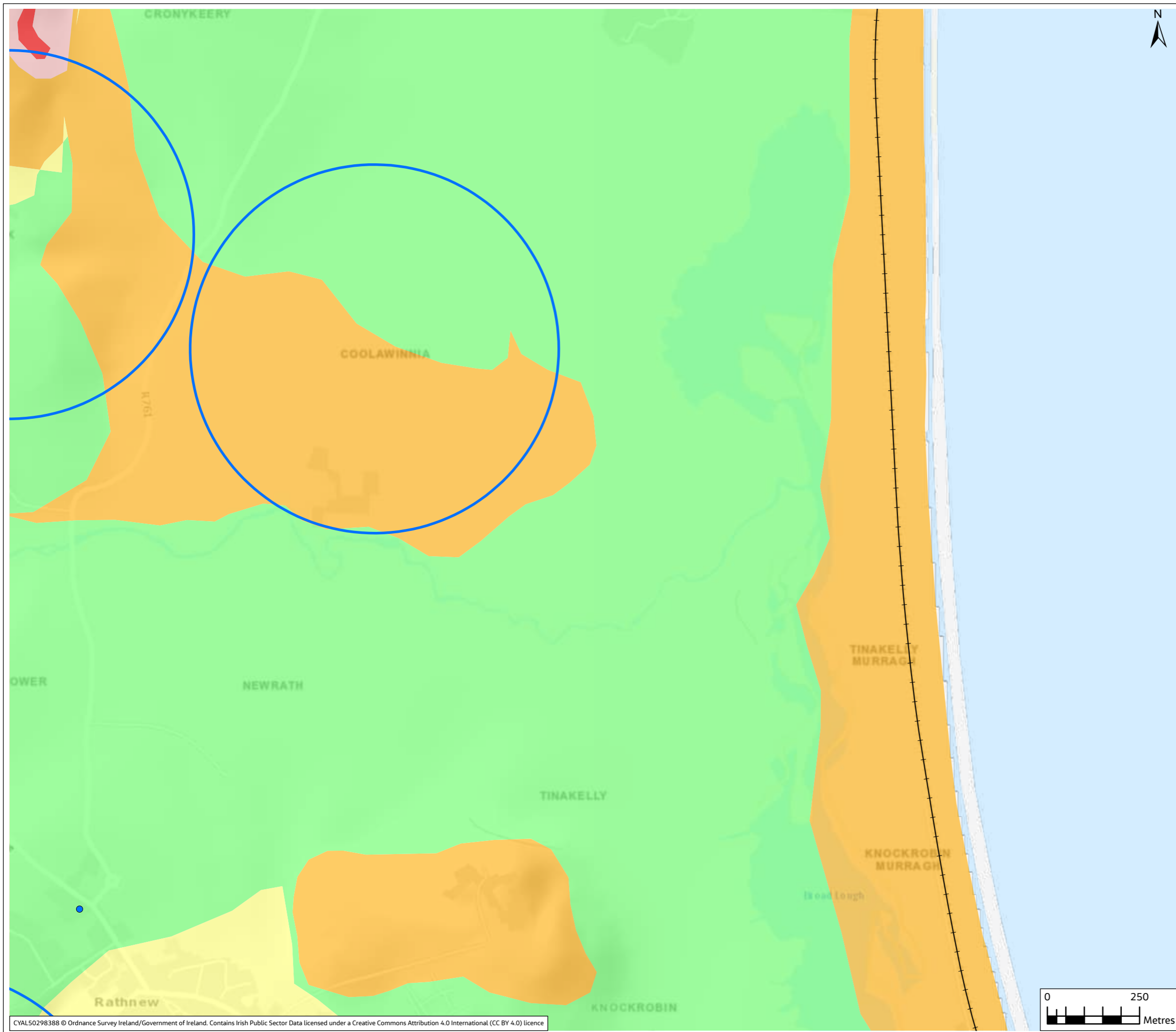
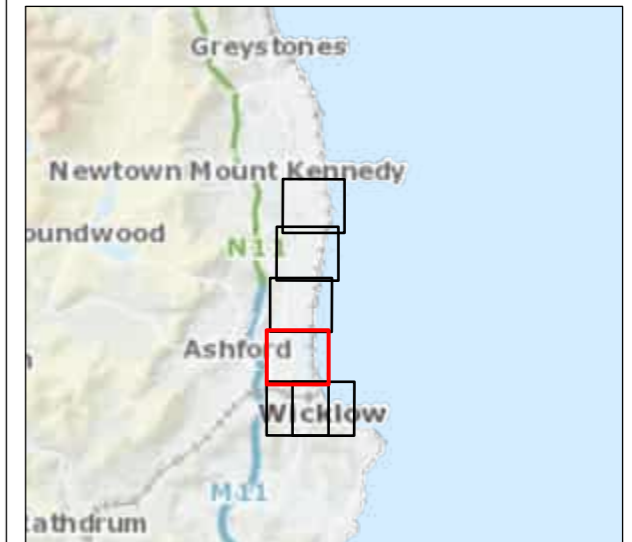


FIGURE 7.3

Legend

- +— Railway Network Centreline
- Groundwater Wells & Springs**
 - Wells & Springs
 - Wells & Springs
- Groundwater Vulnerability**
 - Rock at or near Surface or Karst
 - Extreme
 - High
 - Low
 - Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.3
 CCA6.2- Environmental Constraints - Hydrogeology
 (Page 4 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7019	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

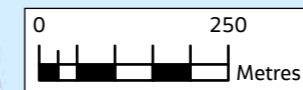
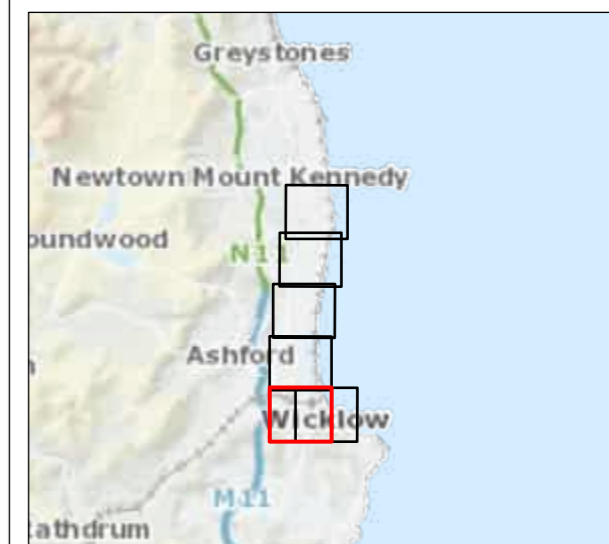


FIGURE 7.3

Legend

- +— Railway Network Centreline
- Groundwater Wells & Springs**
- Wells & Springs
- Wells & Springs
- Groundwater Vulnerability**
- Rock at or near Surface or Karst
- Extreme
- High
- Low
- Moderate
- Water



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client
 Iarnród Éireann Infrastructure

Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.3
 CCA6.2- Environmental Constraints - Hydrogeology
 (Page 5 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7020	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

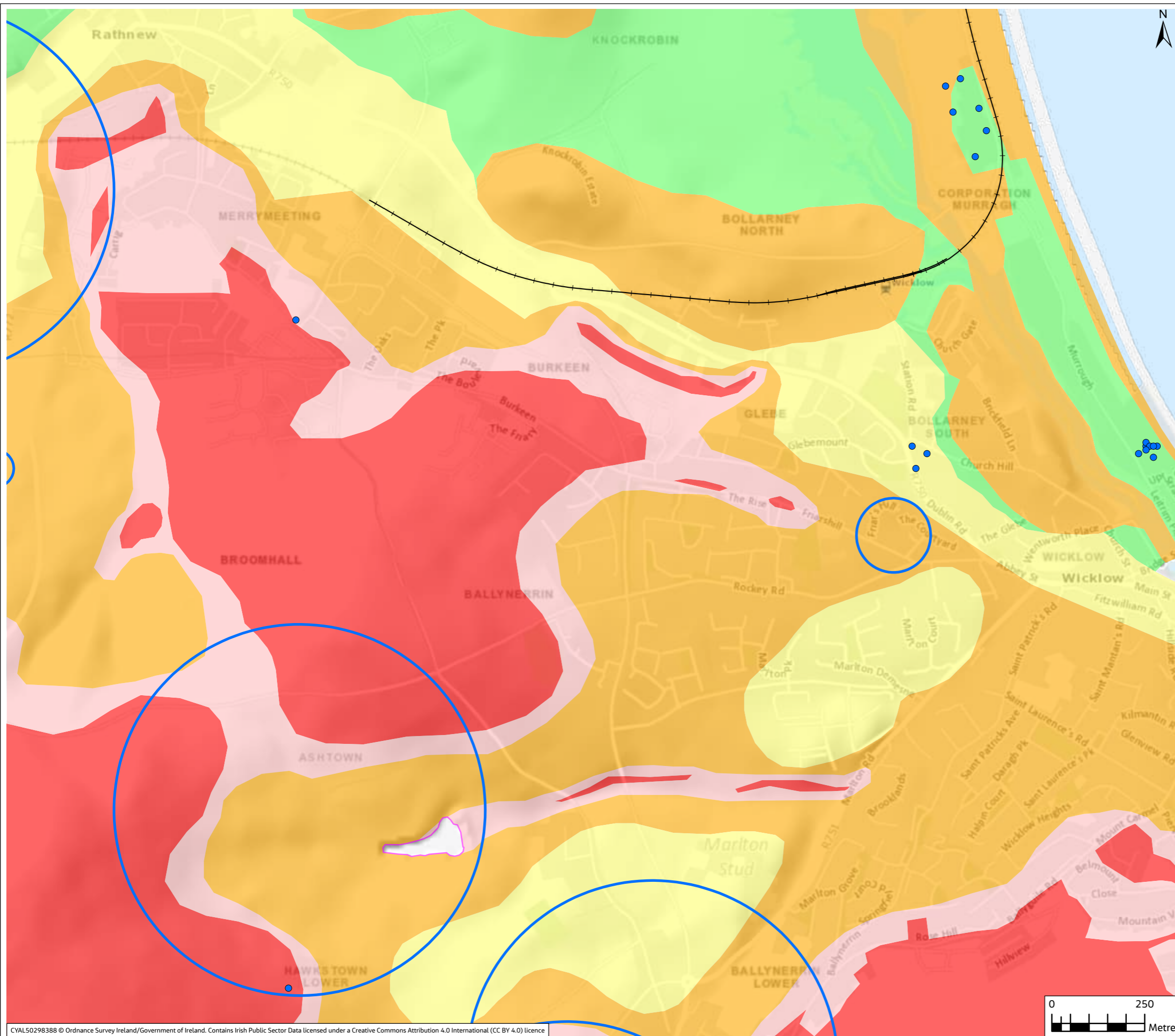


FIGURE 7.3

Legend

— Railway Network Centreline

Groundwater Wells & Springs

● Wells & Springs

□ Wells & Springs

Groundwater Vulnerability

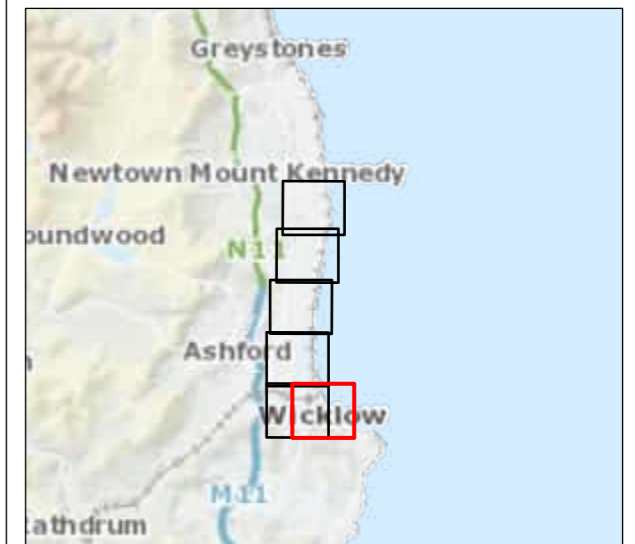
■ Rock at or near Surface or Karst

■ Extreme

■ High

■ Low

■ Moderate



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.3
CCA6.2- Environmental Constraints - Hydrogeology
(Page 6 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

Client No.

8093

Drawing No.

7964-CCA6_2-P2-DWG-EV-JAC-7021

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

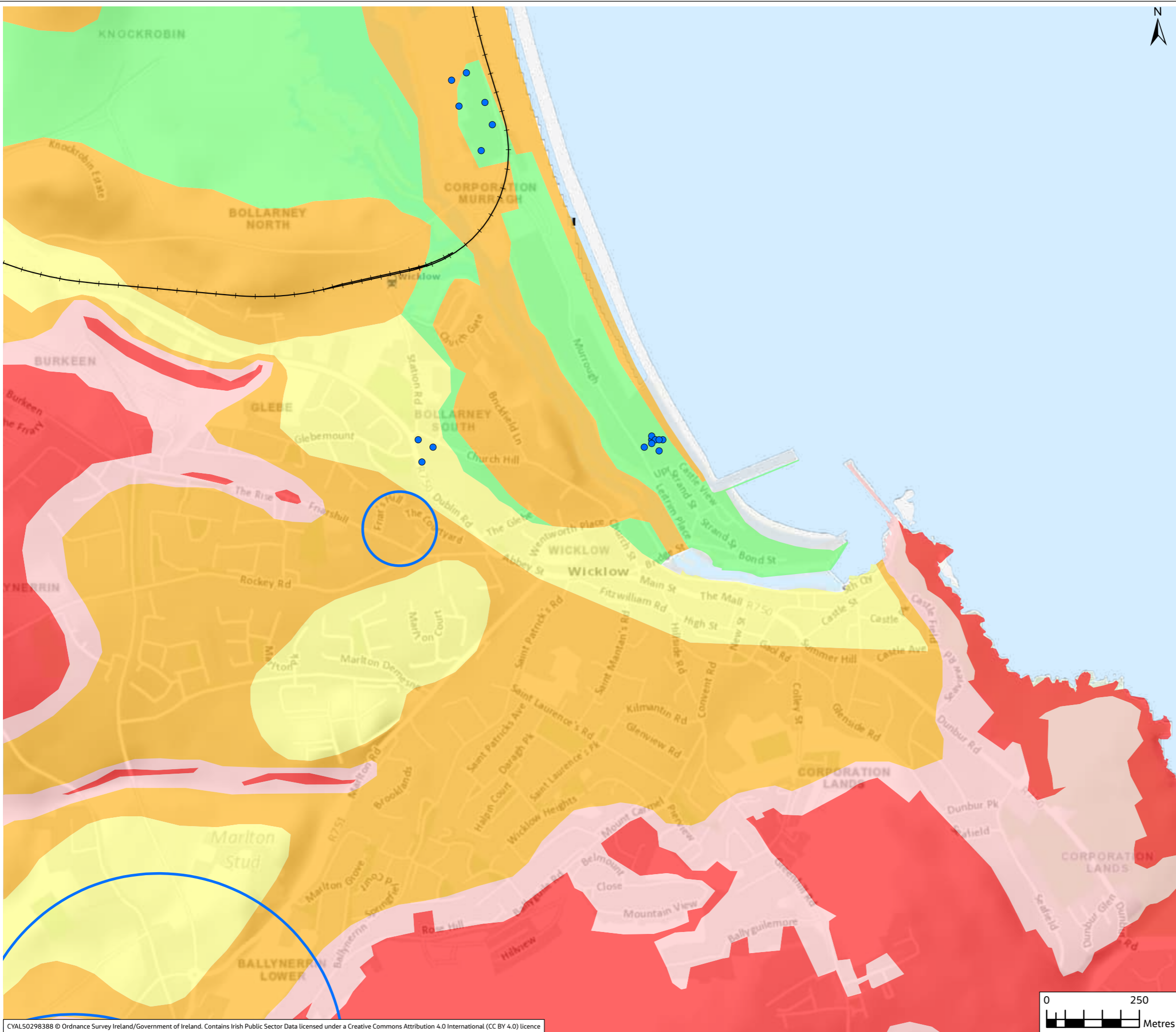
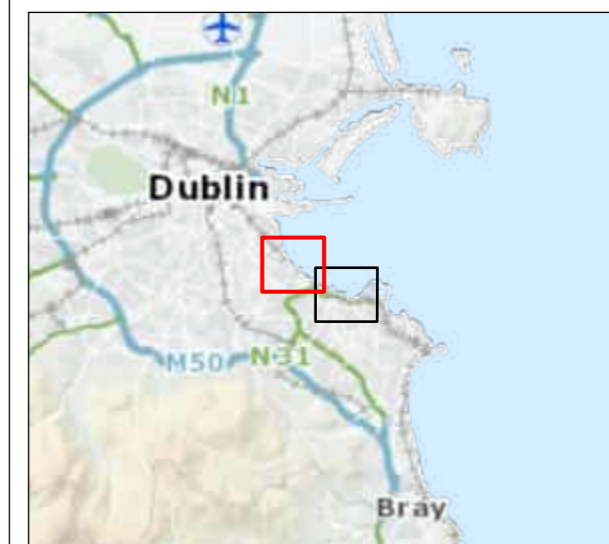


FIGURE 7.4

Legend

- CCA1 Study Area
- Railway Network Centreline
- Bedrock Geology**
- Ballysteen Formation
- Lucan Formation
- Type 2p microcline porphyritic



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer

Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project

**7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.4
 CCA1- Environmental Constraints - Bedrock Geology
 (Page 1 of 2)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

Client No.

8093

Drawing No.

7964-CCA1-P2-DWG-EV-JAC-7011

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

Path: \\glbon011\GISProj\036583001_ECRRP\AnGIS\019_Environmental_Constraints_Report\007_Geology_and_Soil\CCA1\007_Figure_7.4_CCA1_Bedrock_Geology_v1.aprx

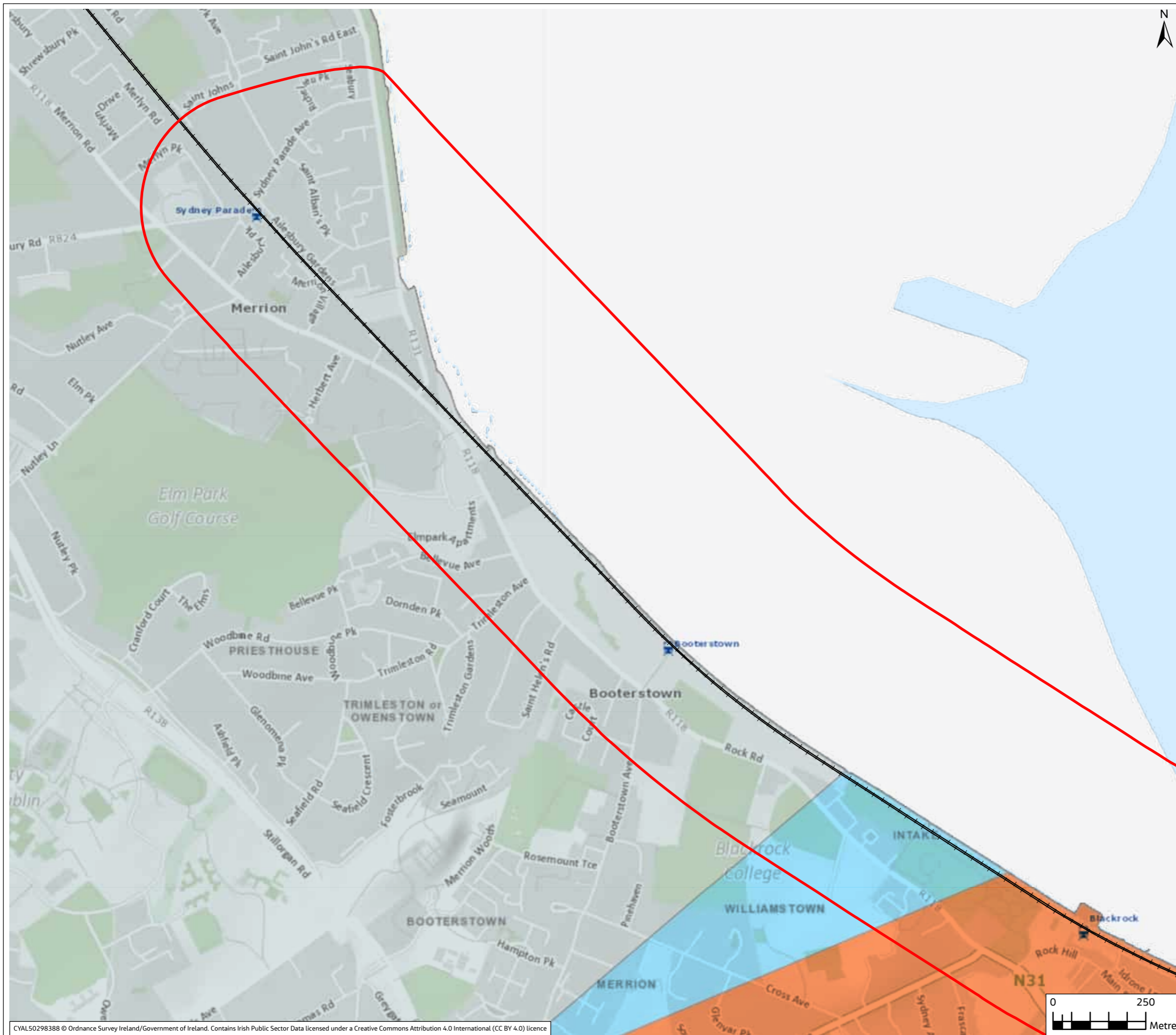
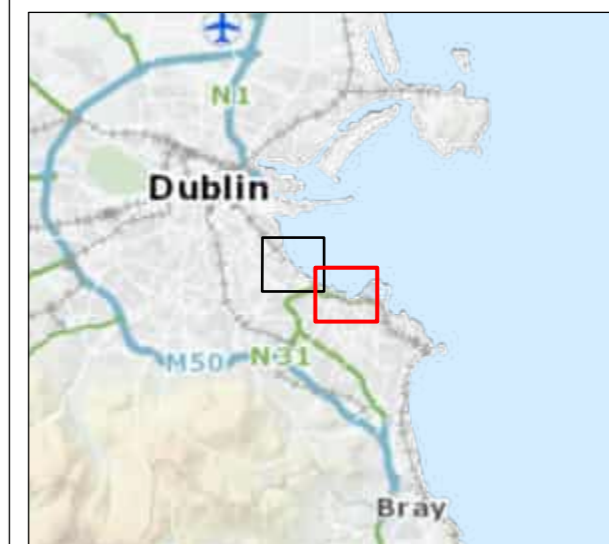


FIGURE 7.4

Legend

- CCA1 Study Area
- Railway Network Centreline
- Bedrock Geology**
- Type 2p microcline porphyritic



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.4
CCA1- Environmental Constraints - Bedrock Geology
(Page 2 of 2)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA1-P2-DWG-EV-JAC-7012	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

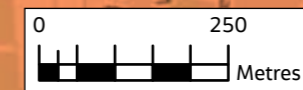
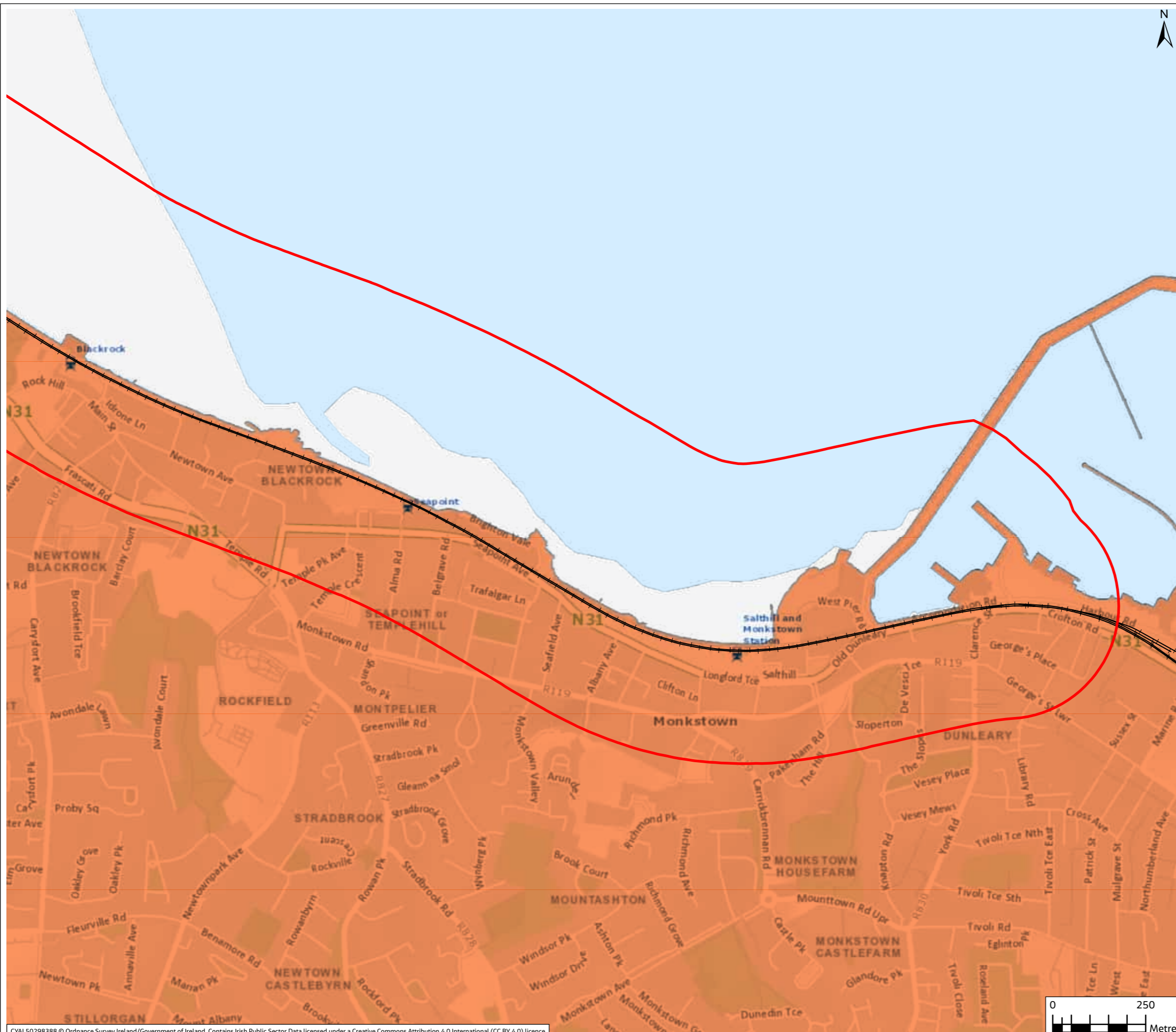
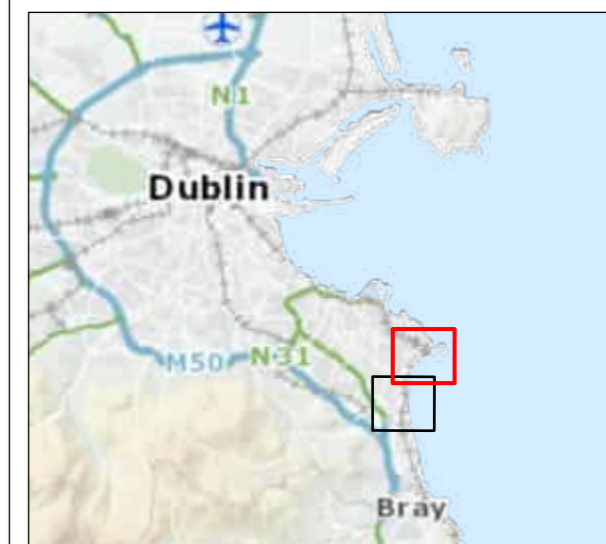


FIGURE 7.4

Legend

- CCA2-3 Study Area
- Railway Network Centreline
- Bedrock Geology**
- Type 2p microcline porphyritic
- Maulin Formation



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer

Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project

7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.4
 CCA2-3- Environmental Constraints - Bedrock Geology
 (Page 1 of 2)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

Client No.

8093

Drawing No.

7964-CCA2_3-P2-DWG-EV-JAC-7011

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

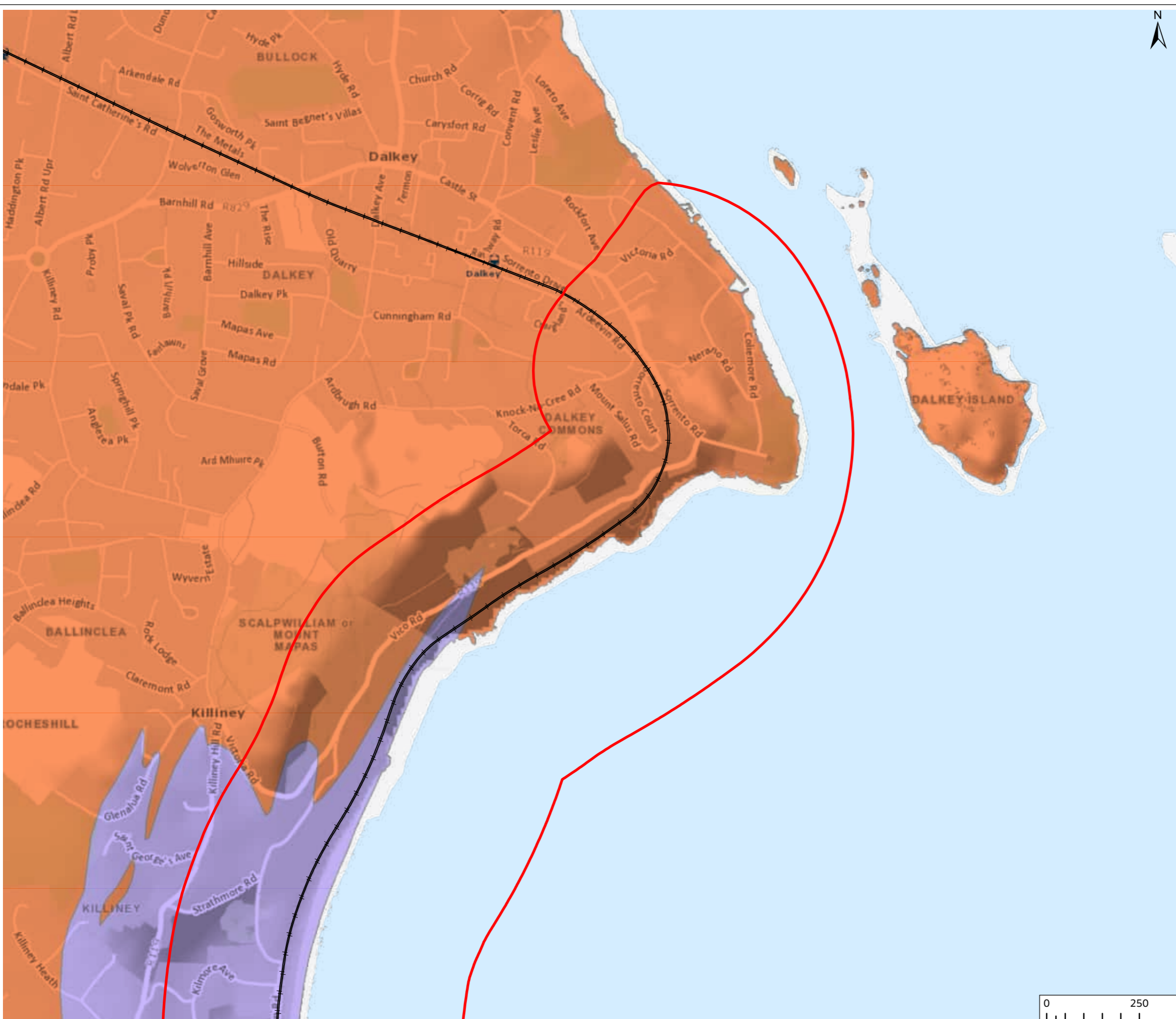
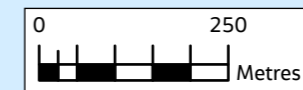
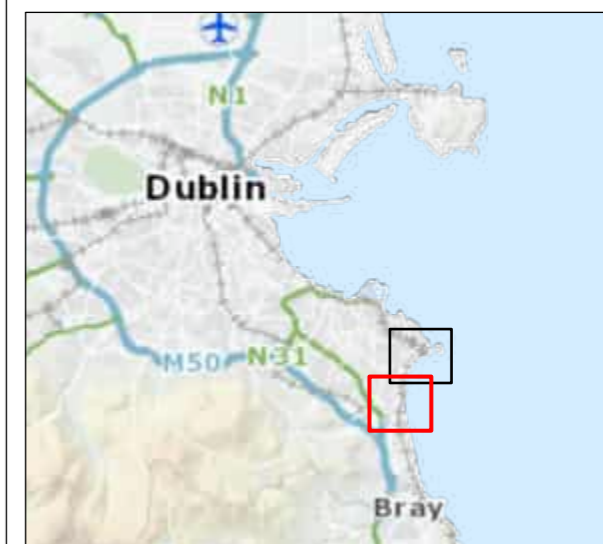


FIGURE 7.4

Legend

- CCA2-3 Study Area
- Railway Network Centreline
- Bedrock Geology**
- Type 1 granodiorite
- Type 2p microcline porphyritic
- Maulin Formation



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.4
 CCA2-3- Environmental Constraints - Bedrock Geology
 (Page 2 of 2)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	

Drawing No. 7964-CCA2_3-P2-DWG-EV-JAC-7012

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

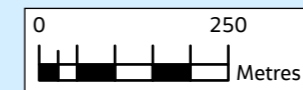
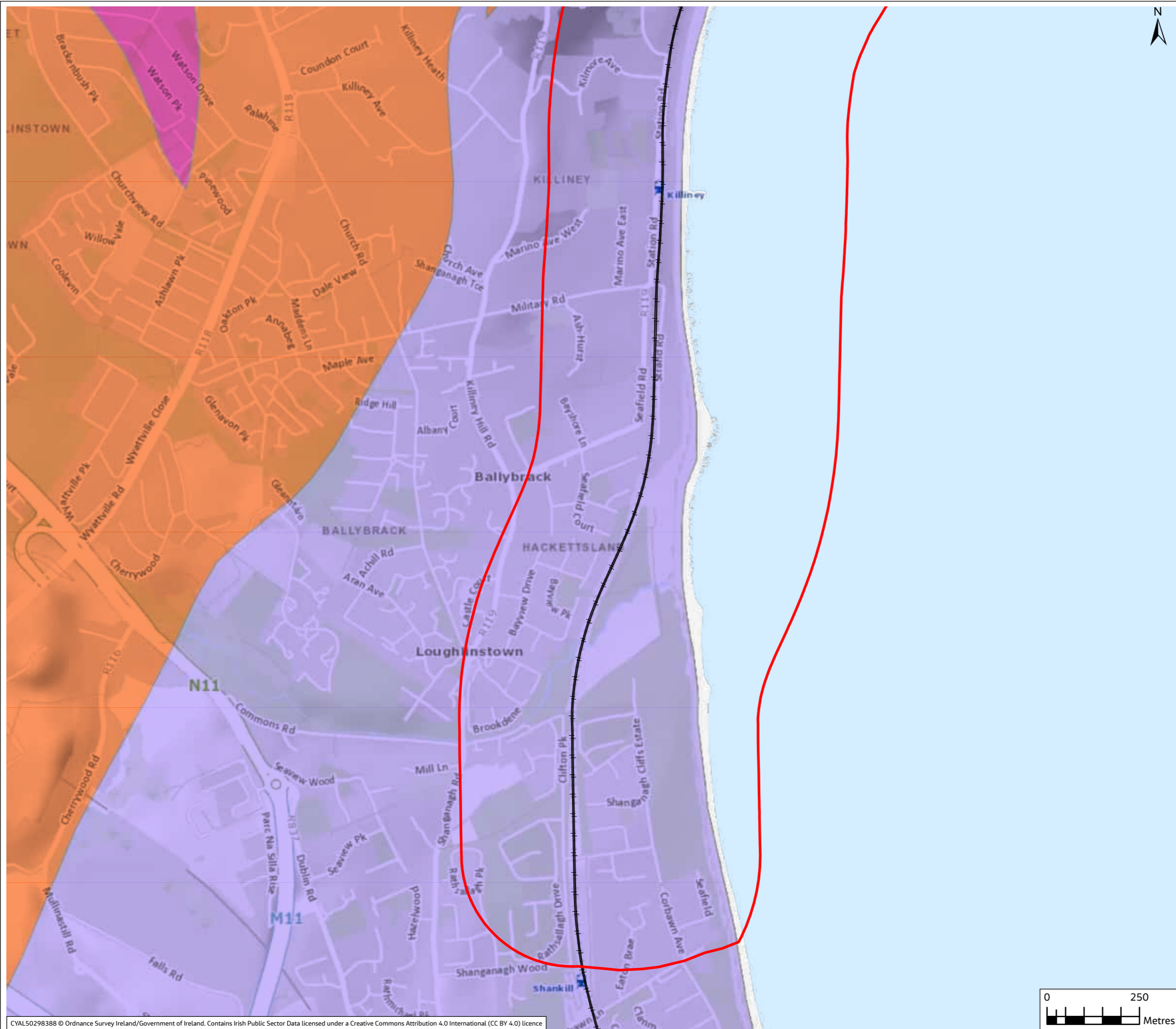
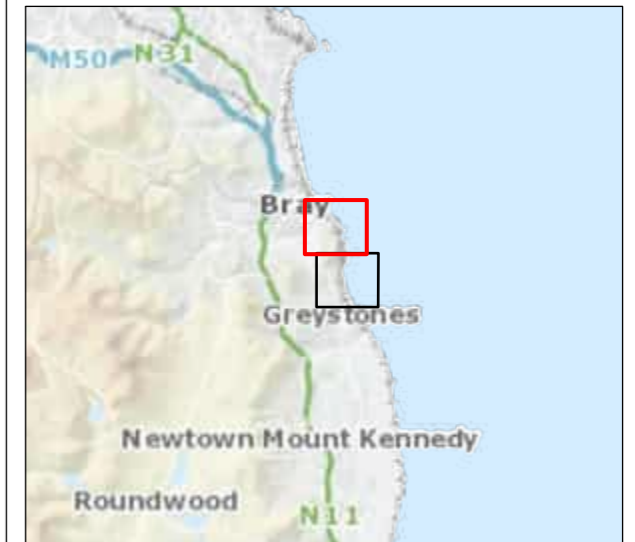


FIGURE 7.4

Legend

- CCA5 Study Area
- Railway Network Centreline
- Bedrock Geology**
- Bray Head Formation
- in Bray Head Formation



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 7.4
CCA5- Environmental Constraints - Bedrock Geology
(Page 1 of 2)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

Client No.

8093

Drawing No.

7964-CCA5-P2-DWG-EV-JAC-7011

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

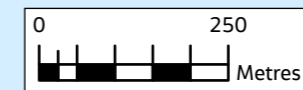
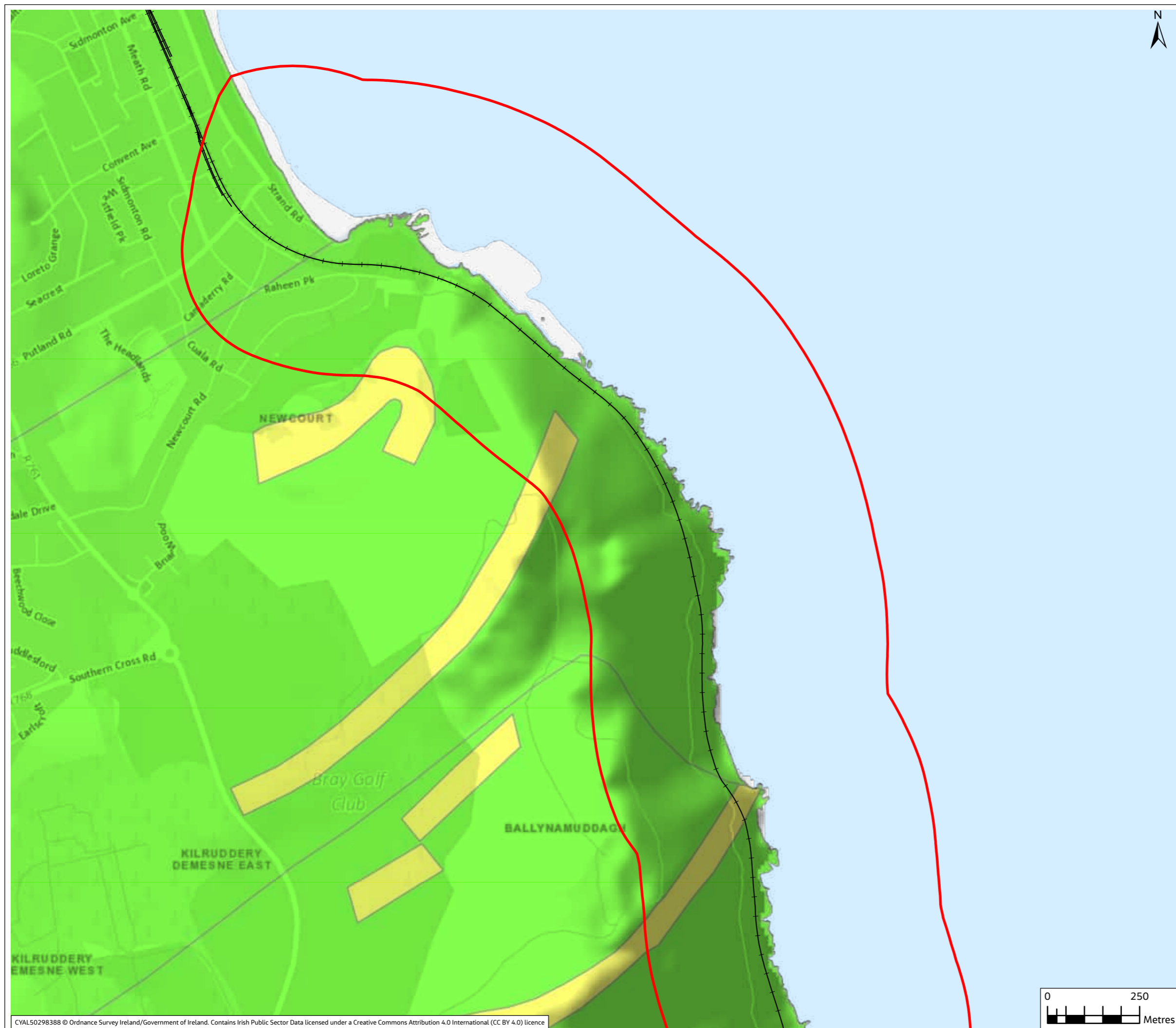


FIGURE 7.4

Legend

- CCA5 Study Area
- Railway Network Centreline
- Bedrock Geology**
- Bray Head Formation
- in Bray Head Formation
- Devils Glen Formation



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer

Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project

7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.4
 CCA5- Environmental Constraints - Bedrock Geology
 (Page 2 of 2)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA5-P2-DWG-EV-JAC-7012	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

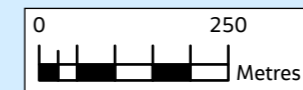
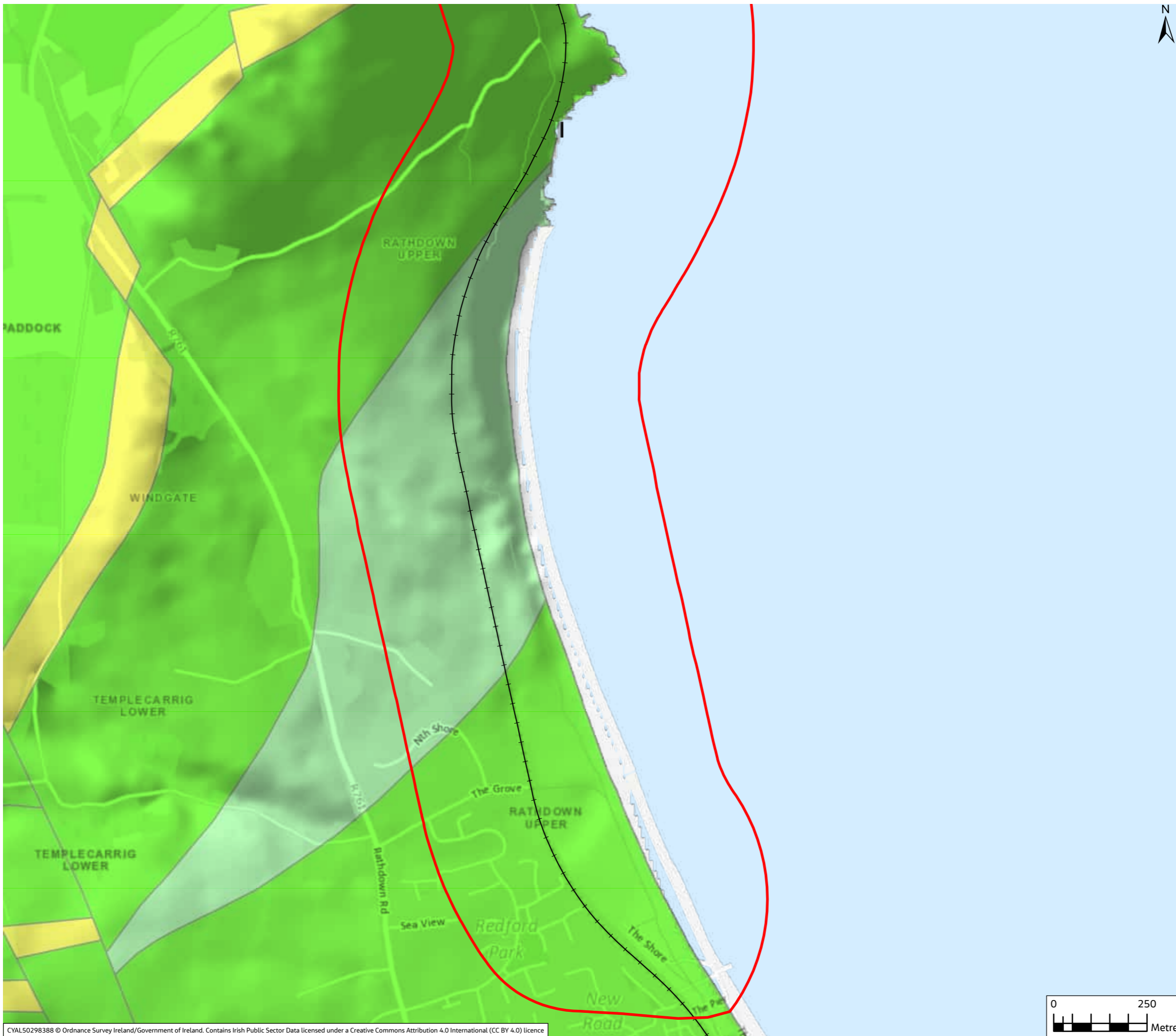
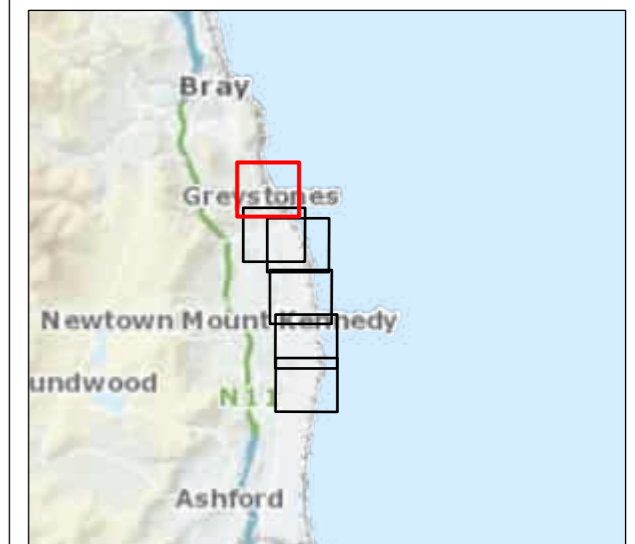


FIGURE 7.4

Legend

- CCA6.1 Study Area
- Railway Network Centreline
- Bedrock Geology**
- Bray Head Formation
- in Bray Head Formation
- Devils Glen Formation



VO1	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client


Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 1 2695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.4
 CCA6.1 - Environmental Constraints - Bedrock Geology
 (Page 1 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev
Client No.	8093	VO1

Drawing No. 7964-CCA6_1-P2-DWG-EV-JAC-7023

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

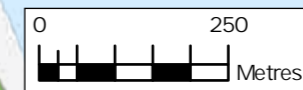
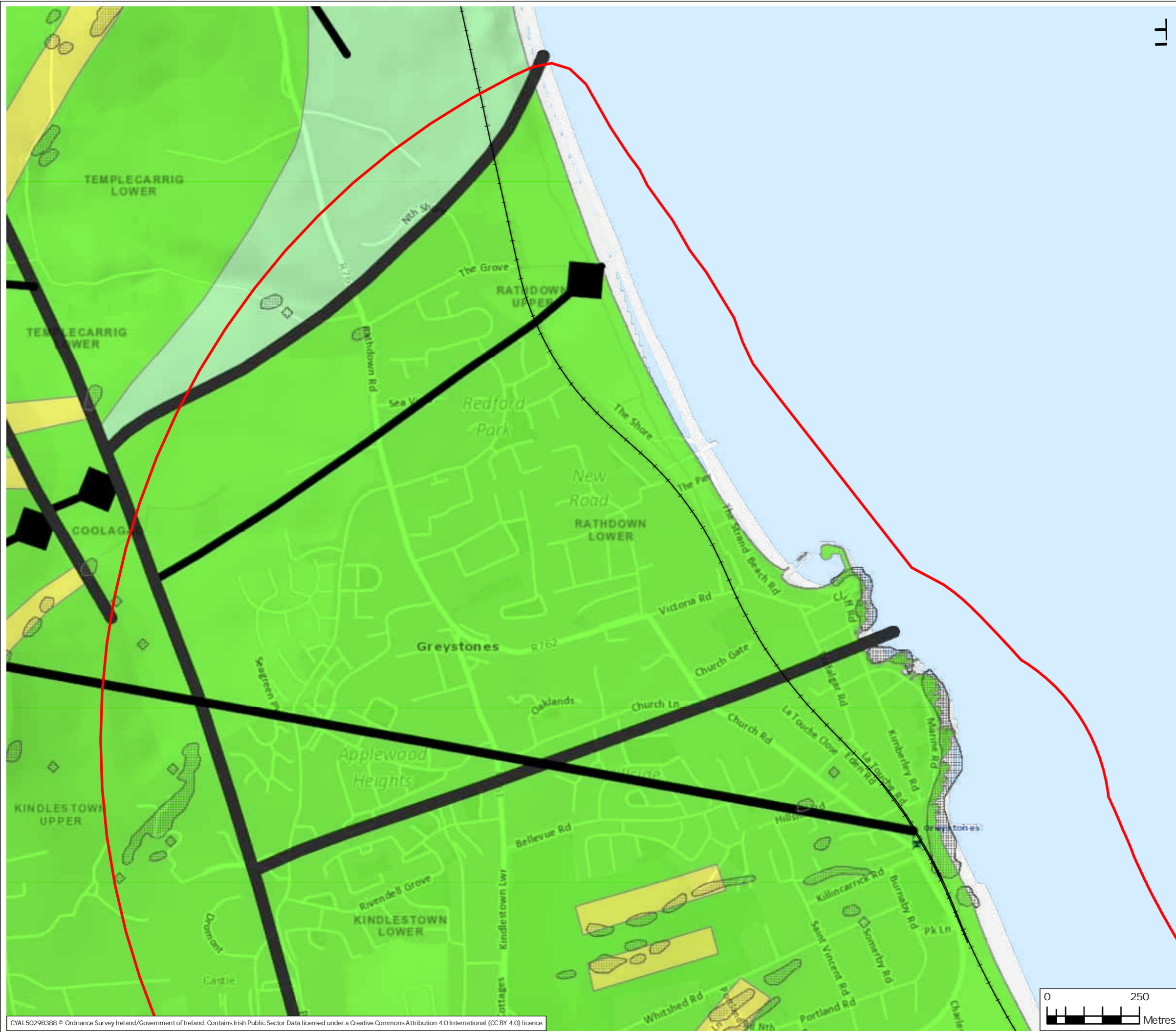


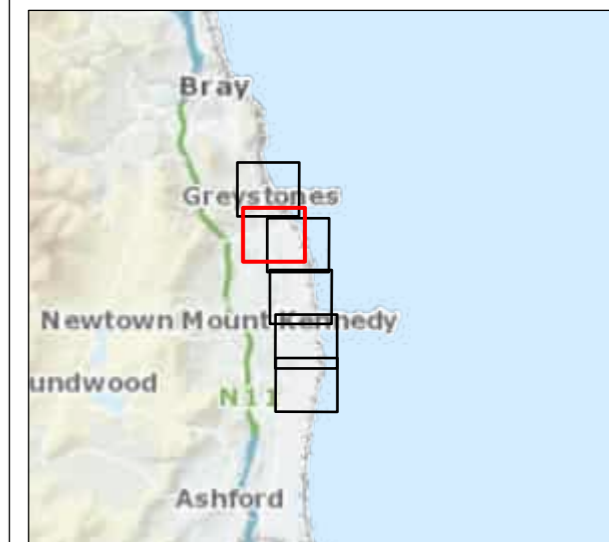
FIGURE 7.4

Legend

- CCA6.1 Study Area
- Railway Network Centreline

Bedrock Geology

- Bray Head Formation
- in Bray Head Formation



VO1	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client


Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 1 2695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.4
 CCA6.1 - Environmental Constraints - Bedrock Geology
 (Page 2 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev VO1
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7024	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

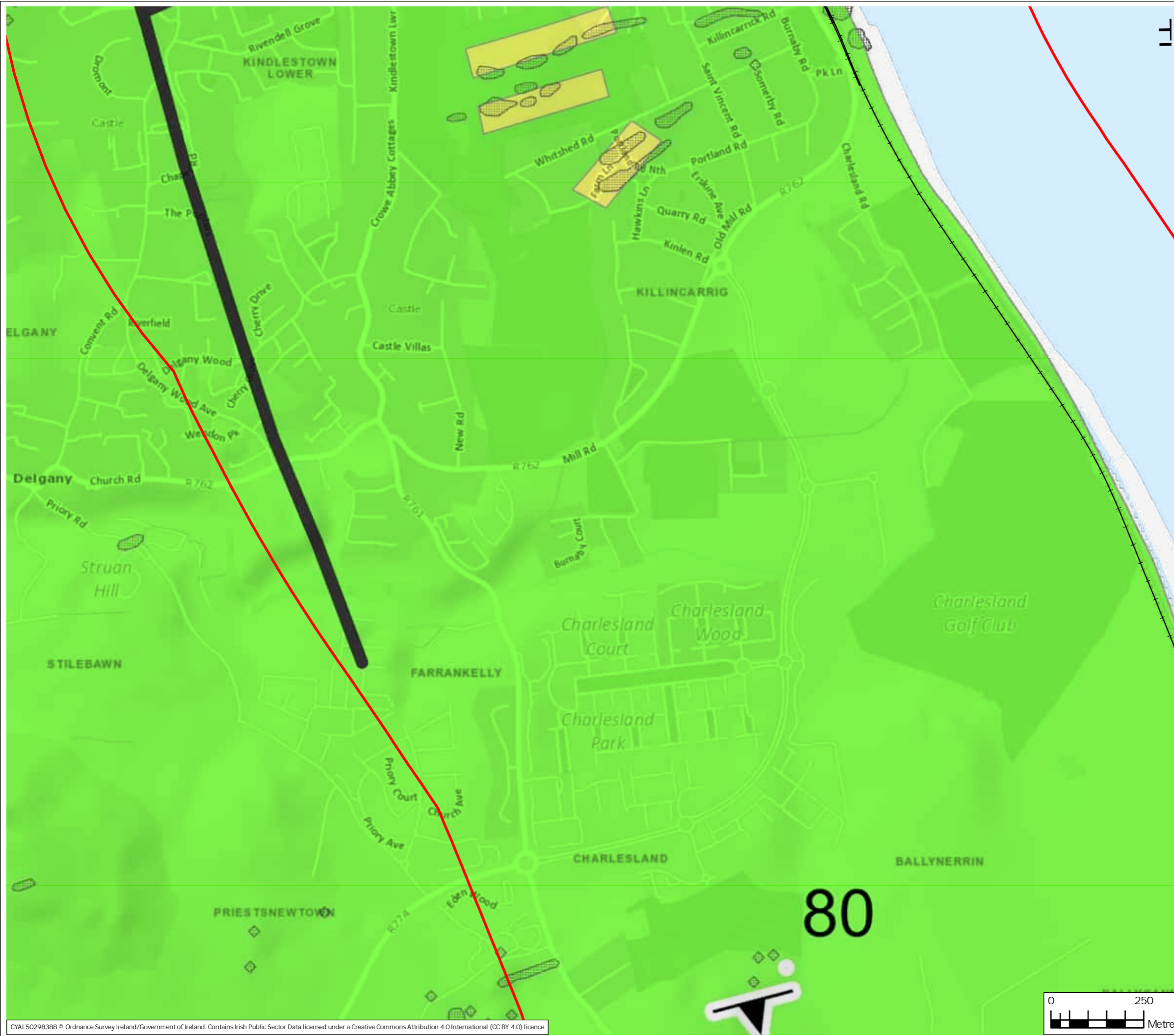
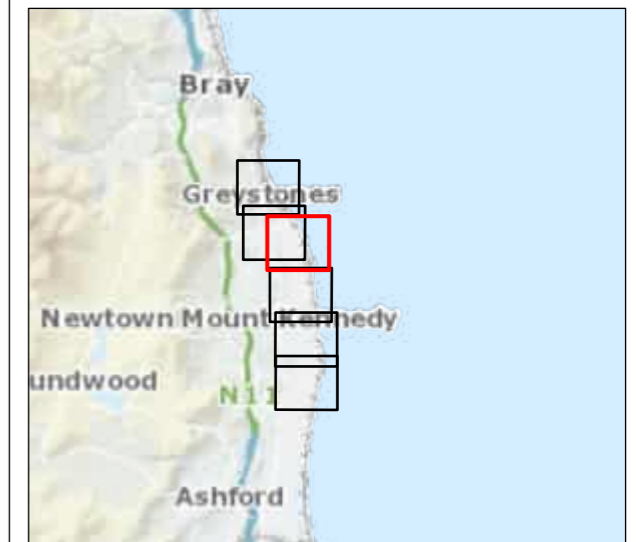


FIGURE 7.4

Legend

- CCA6.1 Study Area
 - Railway Network Centreline
- Bedrock Geology
- Bray Head Formation
 - in Bray Head Formation



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.4
CCA6.1 - Environmental Constraints - Bedrock Geology
(Page 3 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

Client No.

8093

Drawing No.

7964-CCA6_1-P2-DWG-EV-JAC-7025

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

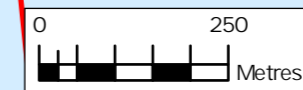
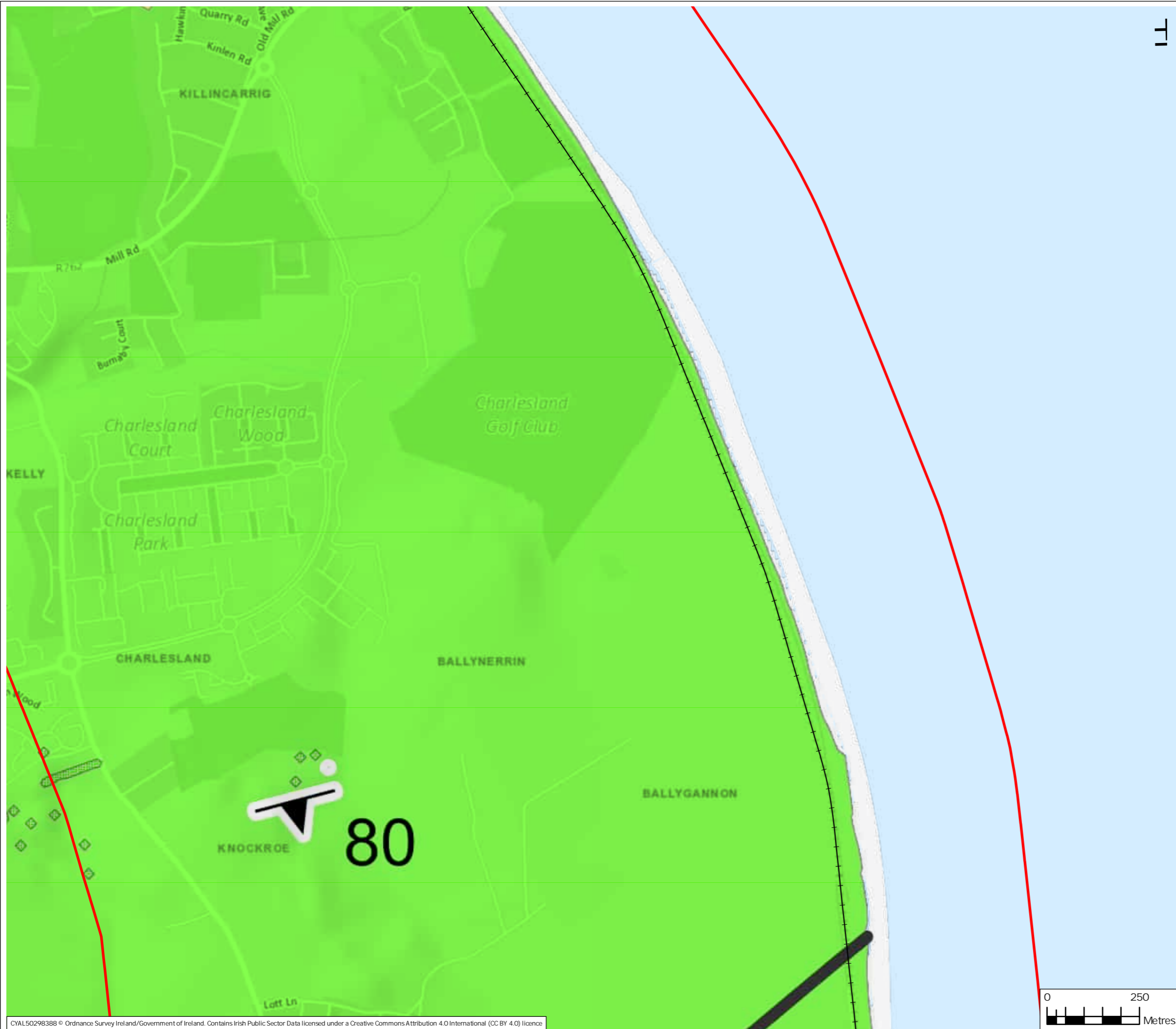
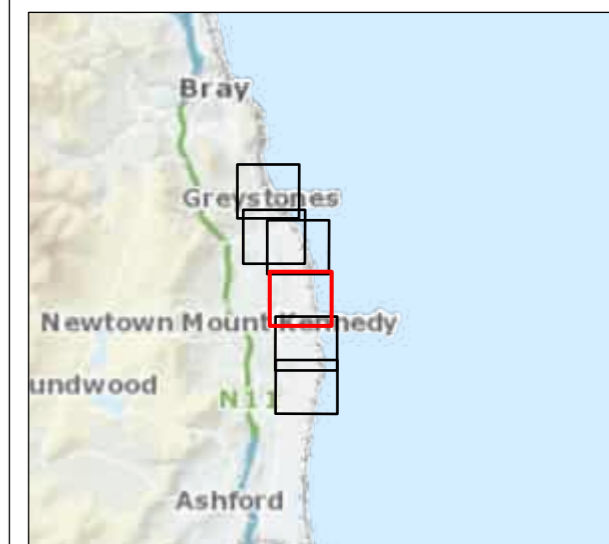


FIGURE 7.4

Legend

- CCA6.1 Study Area
 - Railway Network Centreline
- Bedrock Geology
- Bray Head Formation



VO1	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 1 2695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.4
 CCA6.1 - Environmental Constraints - Bedrock Geology
 (Page 4 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev VO1
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7026	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

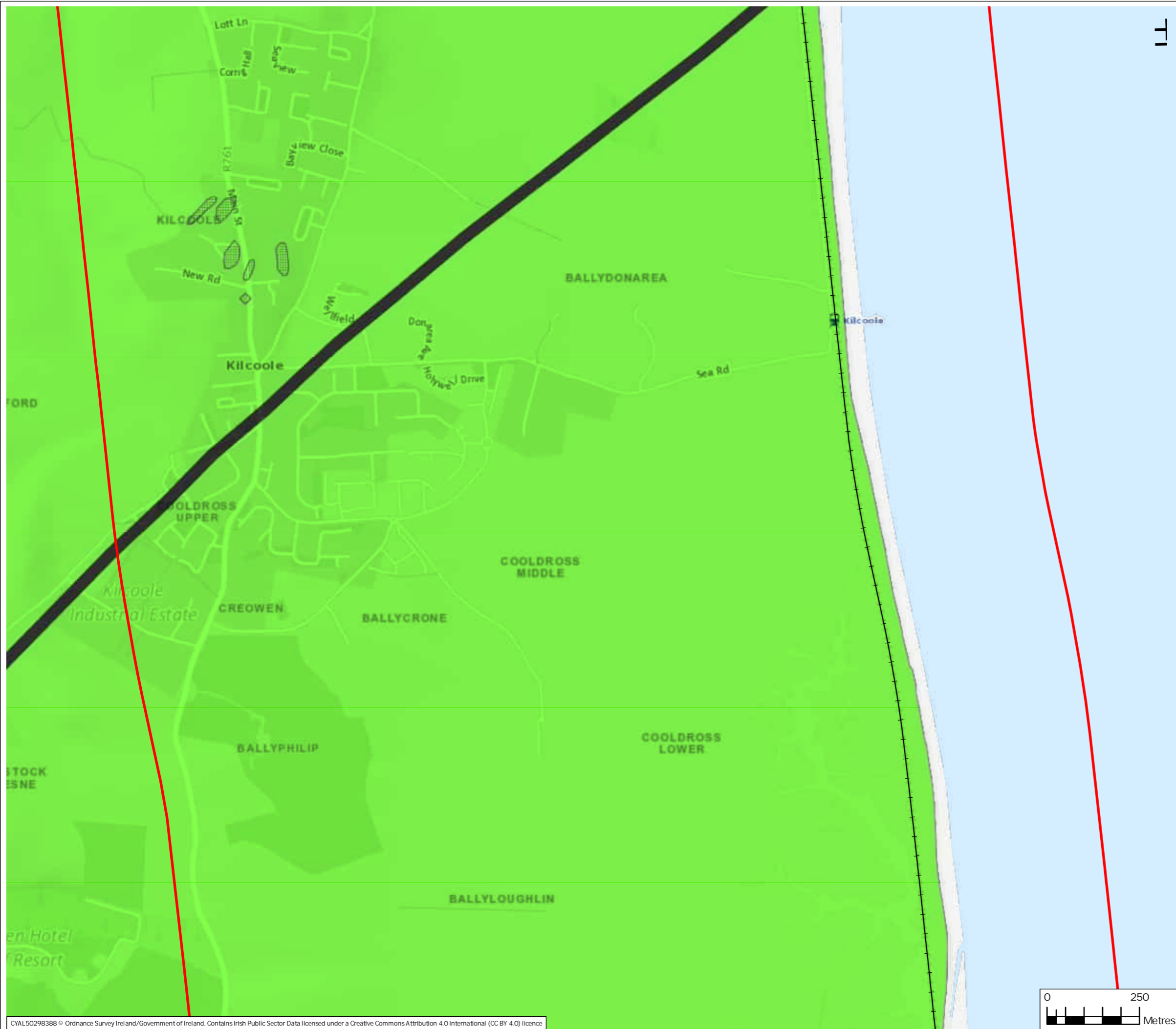
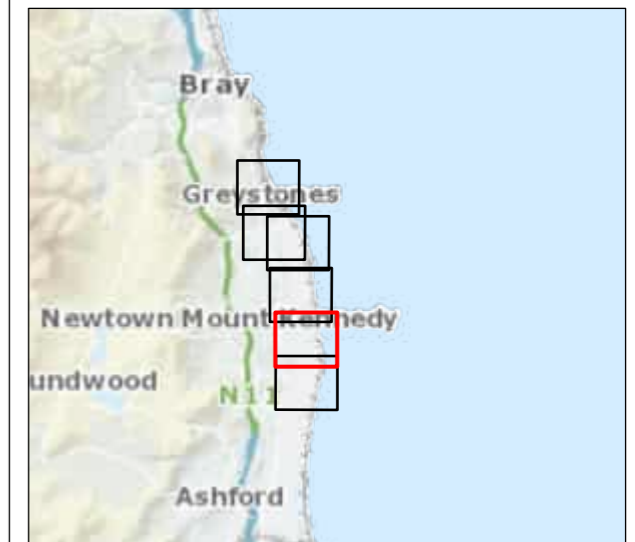


FIGURE 7.4

Legend

- CCA6.1 Study Area
 - Railway Network Centreline
- Bedrock Geology
- Bray Head Formation
 - in Bray Head Formation



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer

Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 1 2695666
 www.jacobs.com

Project

7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.4
 CCA6.1 - Environmental Constraints - Bedrock Geology
 (Page 5 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

Client No.

8093

V01

Drawing No.

7964-CCA6_1-P2-DWG-EV-JAC-7027

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

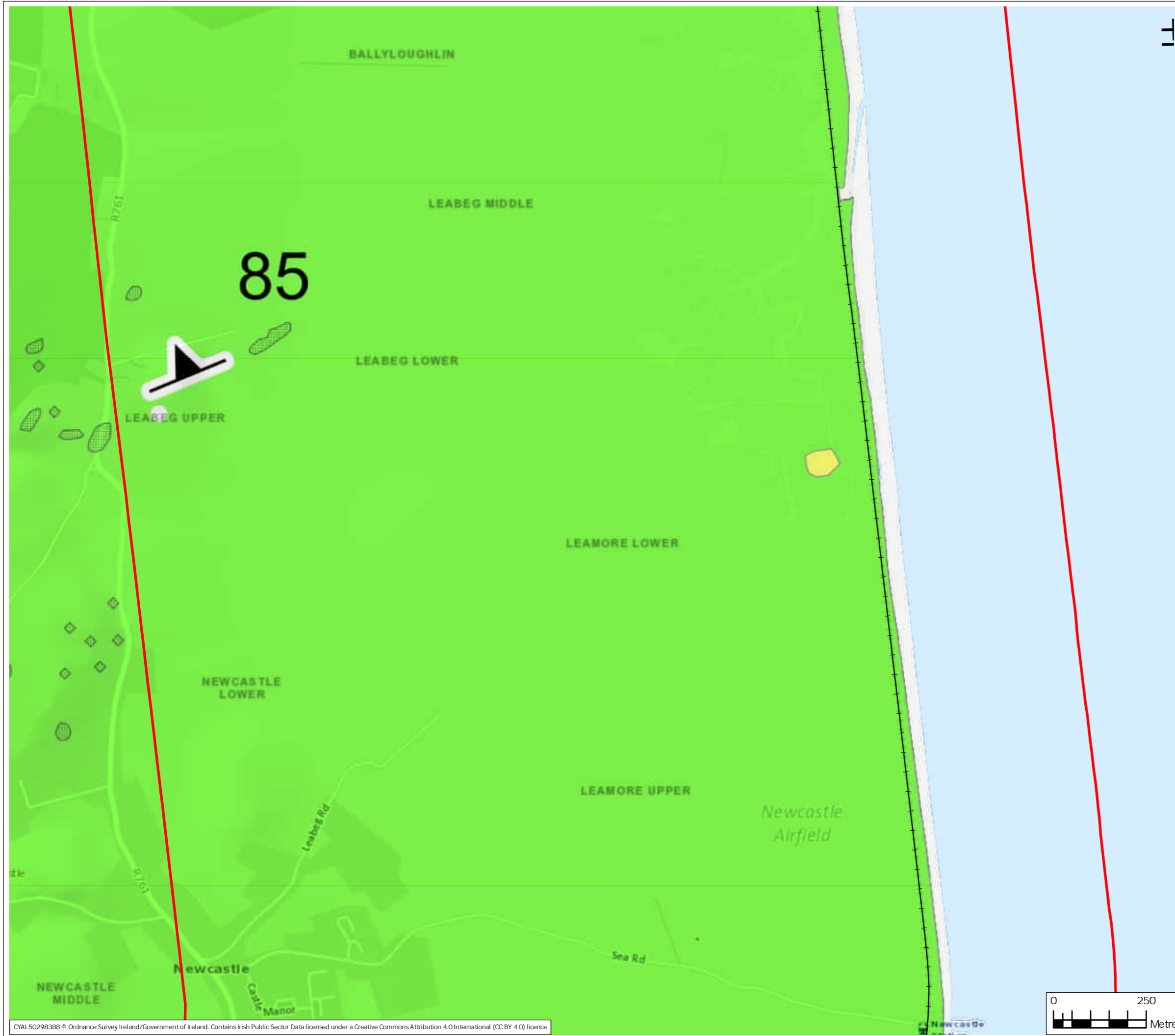
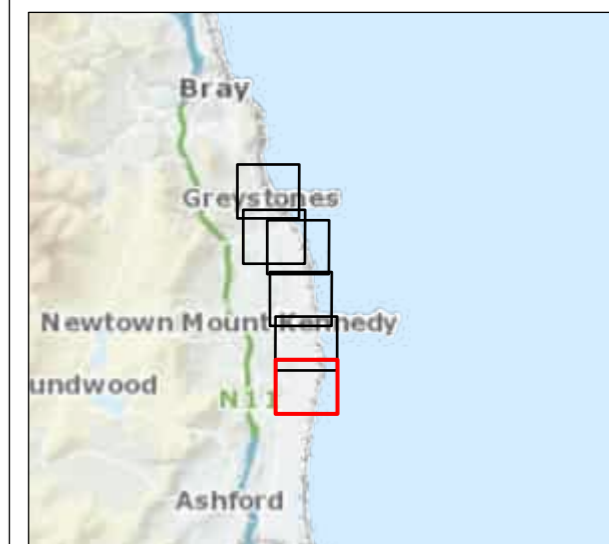


FIGURE 7.4

Legend

- CCA6.1 Study Area
 - Railway Network Centreline
- Bedrock Geology
- Bray Head Formation
 - in Bray Head Formation
 - Maulin Formation



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 1 2695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.4
 CCA6.1 - Environmental Constraints - Bedrock Geology
 (Page 6 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-7028	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

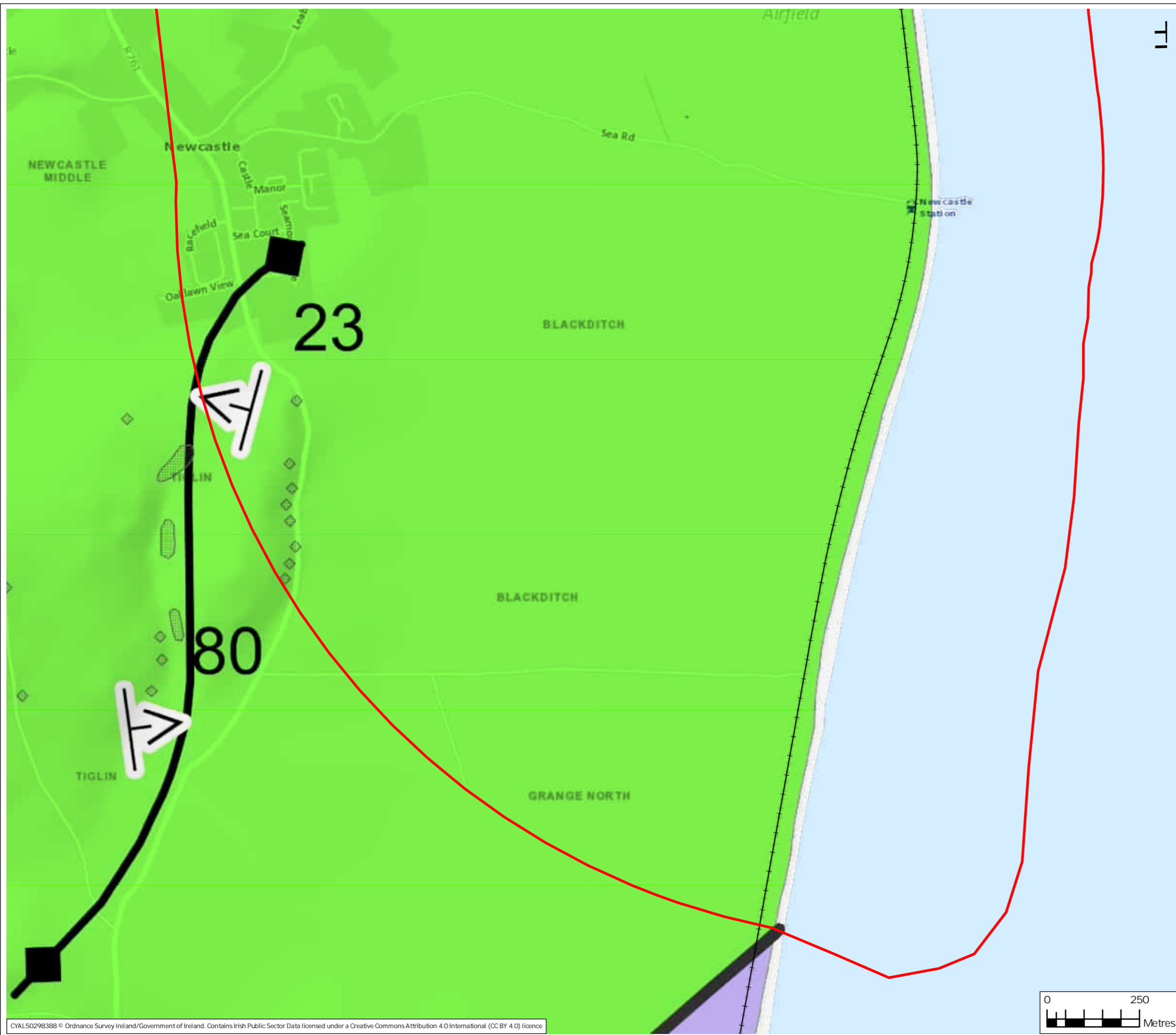


FIGURE 7.4

Legend

- CCA6.2 Study Area
- Railway Network Centreline
- Bedrock Geology**
- Strike and dip of bedding, right way up
- Strike and dip of first foliation
- Bedrock Outcrops 100 ITM 2018
- Anticlinal Axis
- Bray Head Formation
- in Bray Head Formation



Rev	Date	Purpose of revision	MS	PR	JD	DK
V01	Mar 2024	FOR REVIEW				

Client



Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 1 2695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.4
 CCA6.2- Environmental Constraints - Bedrock Geology
 (Page 1 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7023	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

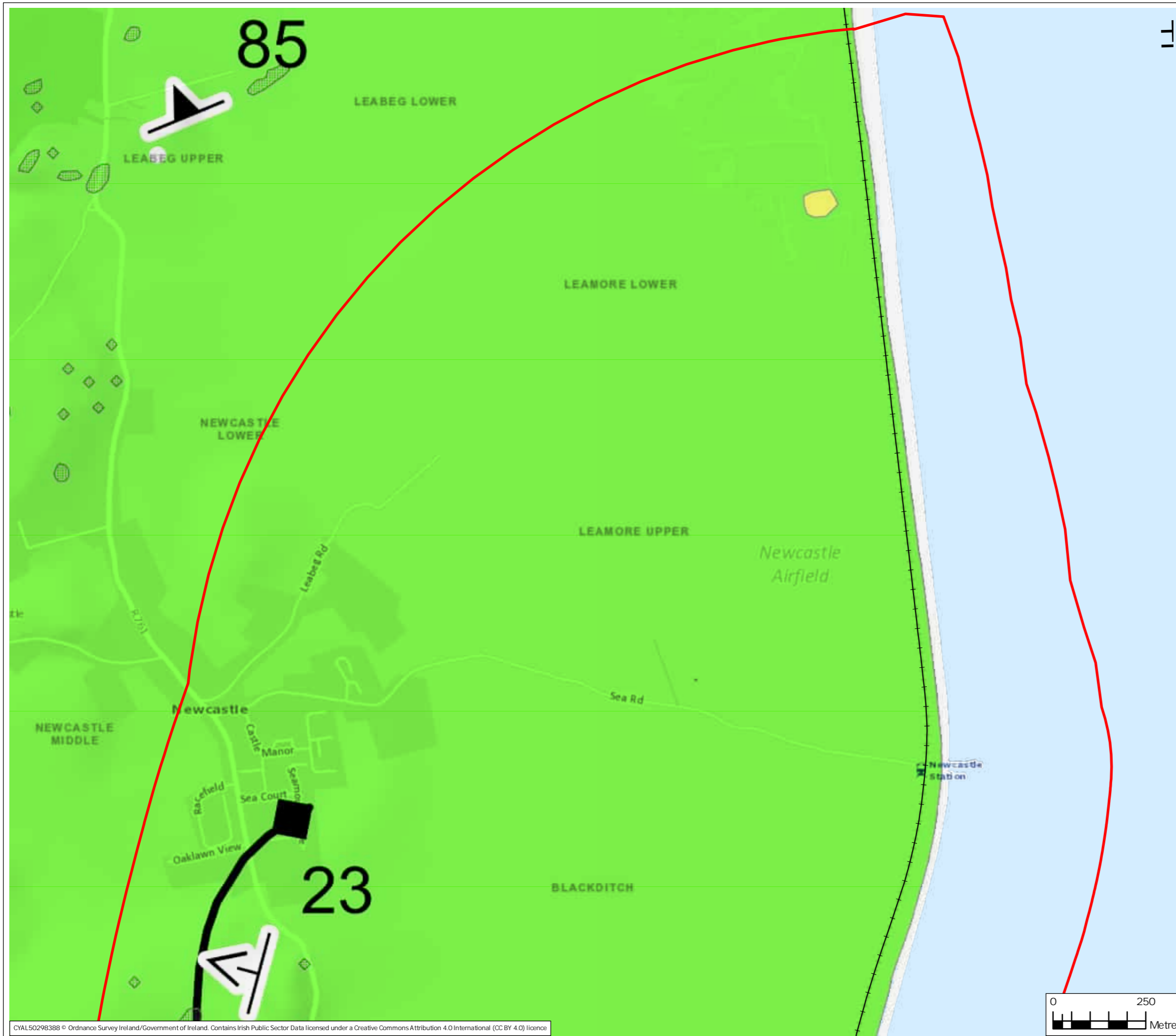
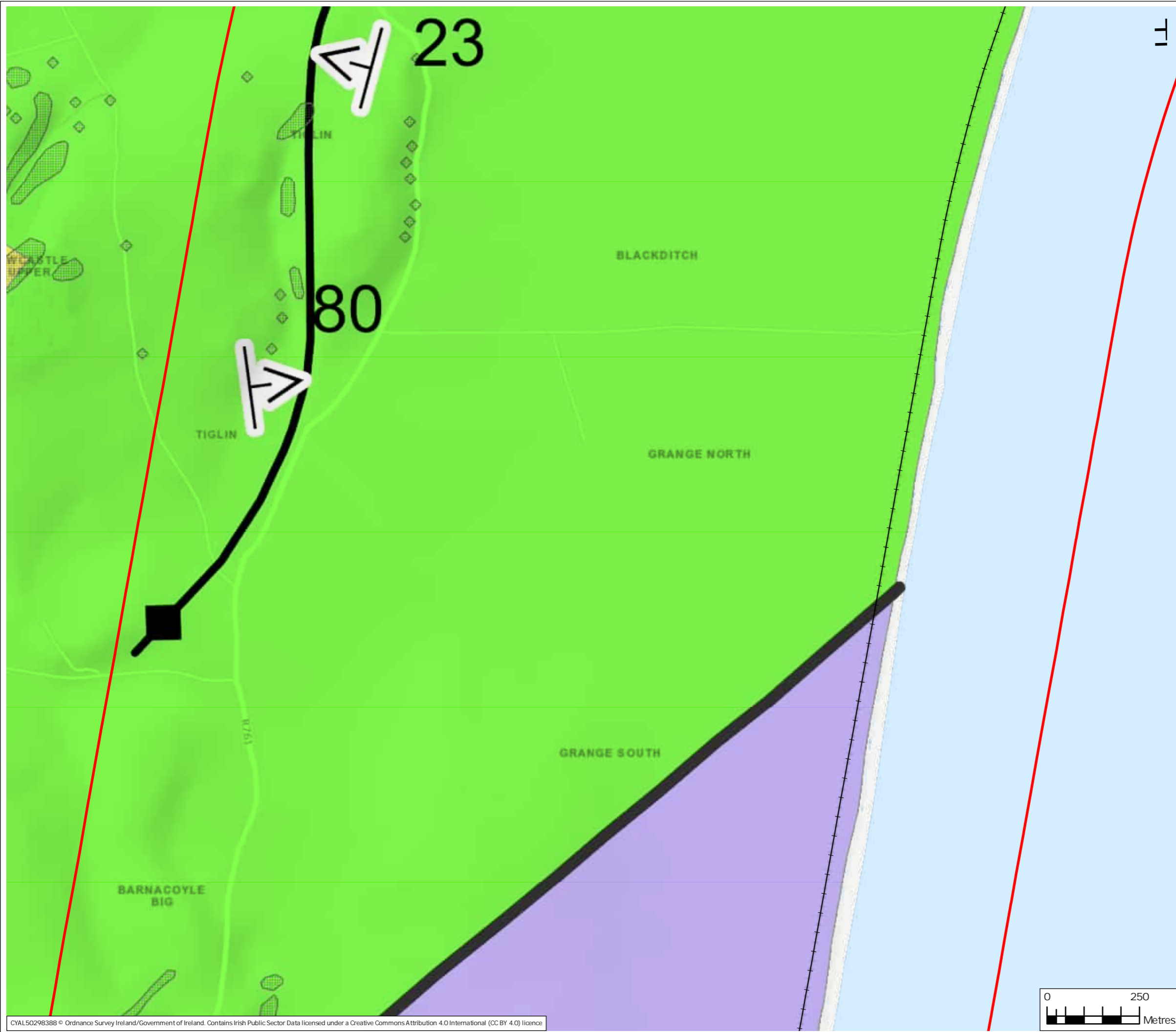
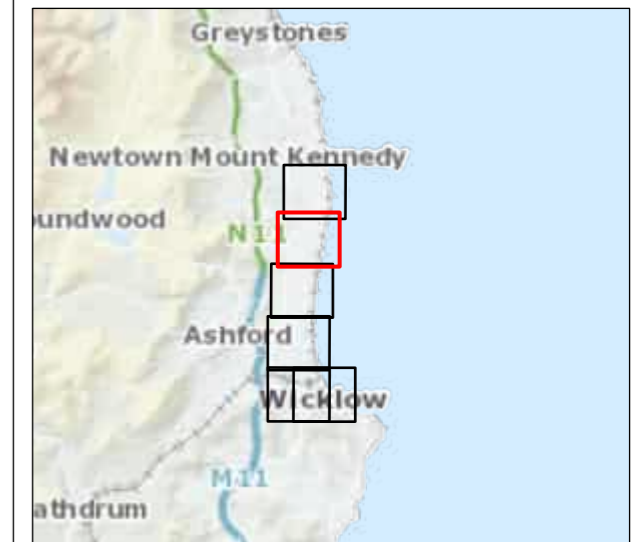


FIGURE 7.4



Legend

- CCA6.2 Study Area
- Railway Network Centreline
- Strike and dip of bedding, right way up
- Bedrock Outcrops 100 ITM 2018
- Anticlinal Axis
- Fault
- Bray Head Formation
- in Bray Head Formation
- Maulin Formation



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer

Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 1 2695666
 www.jacobs.com

Project

7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 7.4
 CCA6.2- Environmental Constraints - Bedrock Geology
 (Page 2 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

Client No.

8093

V01

Drawing No.

7964-CCA6_2-P2-DWG-EV-JAC-7024

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

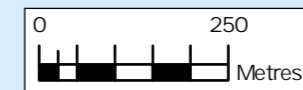
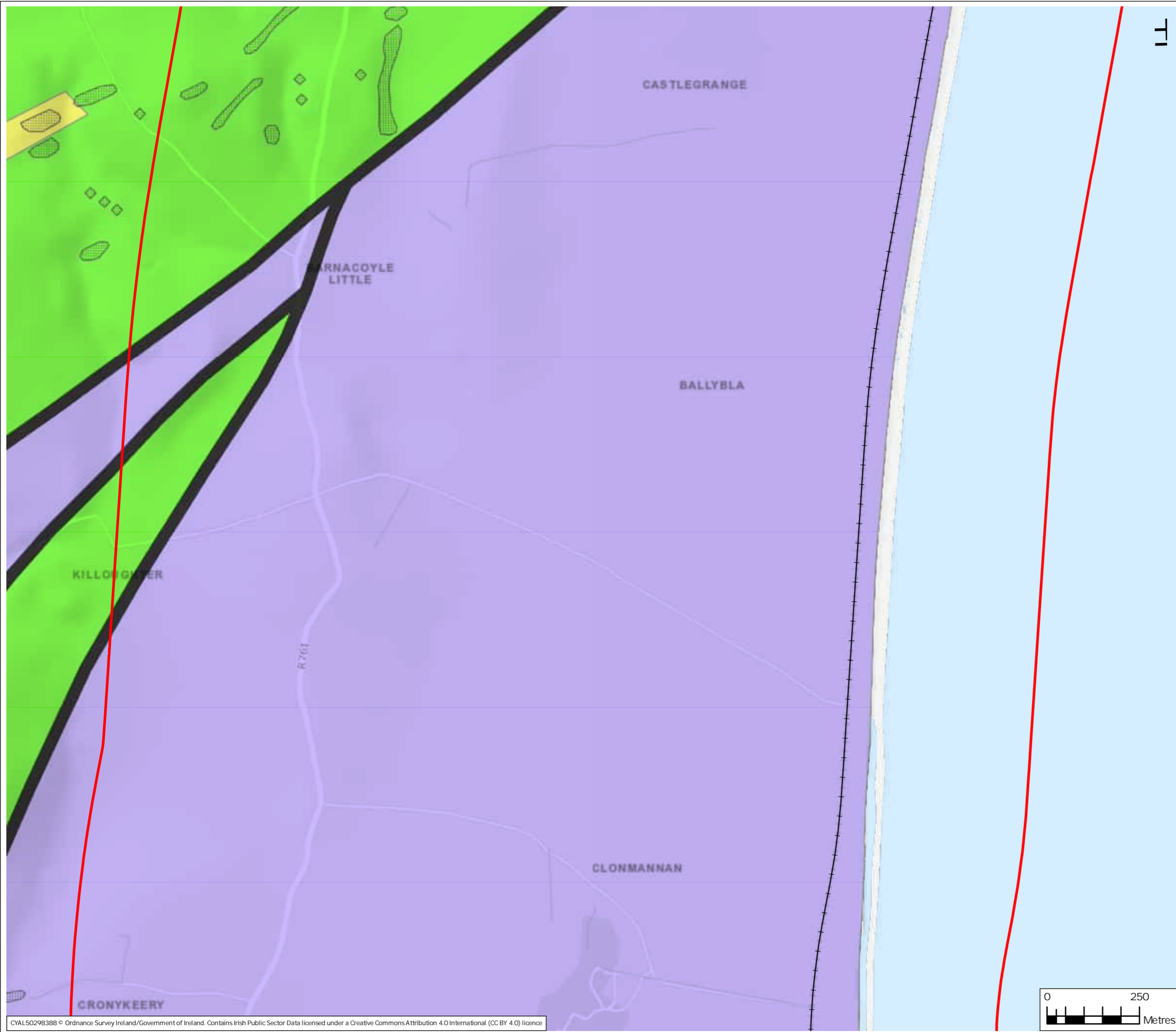
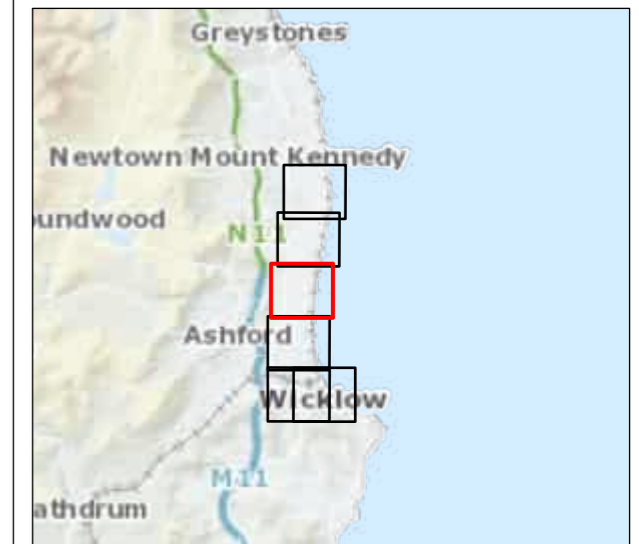


FIGURE 7.4



Legend

- CCA6.2 Study Area
- Railway Network Centreline
- Bedrock Geology**
- Bedrock Outcrops 100 ITM 2018
- Fault
- Bray Head Formation
- in Bray Head Formation
- Devils Glen Formation
- Maulin Formation



VO1	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 1 2695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.4
 CCA6.2- Environmental Constraints - Bedrock Geology
 (Page 3 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev VO1
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7025	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

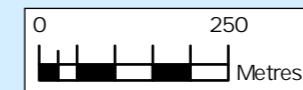


FIGURE 7.4

Legend

- CCA6.2 Study Area
 - Railway Network Centreline
- Bedrock Geology**
- Bedrock Outcrops 100 ITM 2018
 - Fault
 - Bray Head Formation
 - Ballylane Formation
 - Maulin Formation
 - Wicklow Head Formation



Rev	Date	Purpose of revision	MS	PR	JD	DK
V01	Mar 2024	FOR REVIEW				

Client


Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 1 2695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.4
 CCA6.2- Environmental Constraints - Bedrock Geology
 (Page 4 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev
Client No.	8093	V01
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7026	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

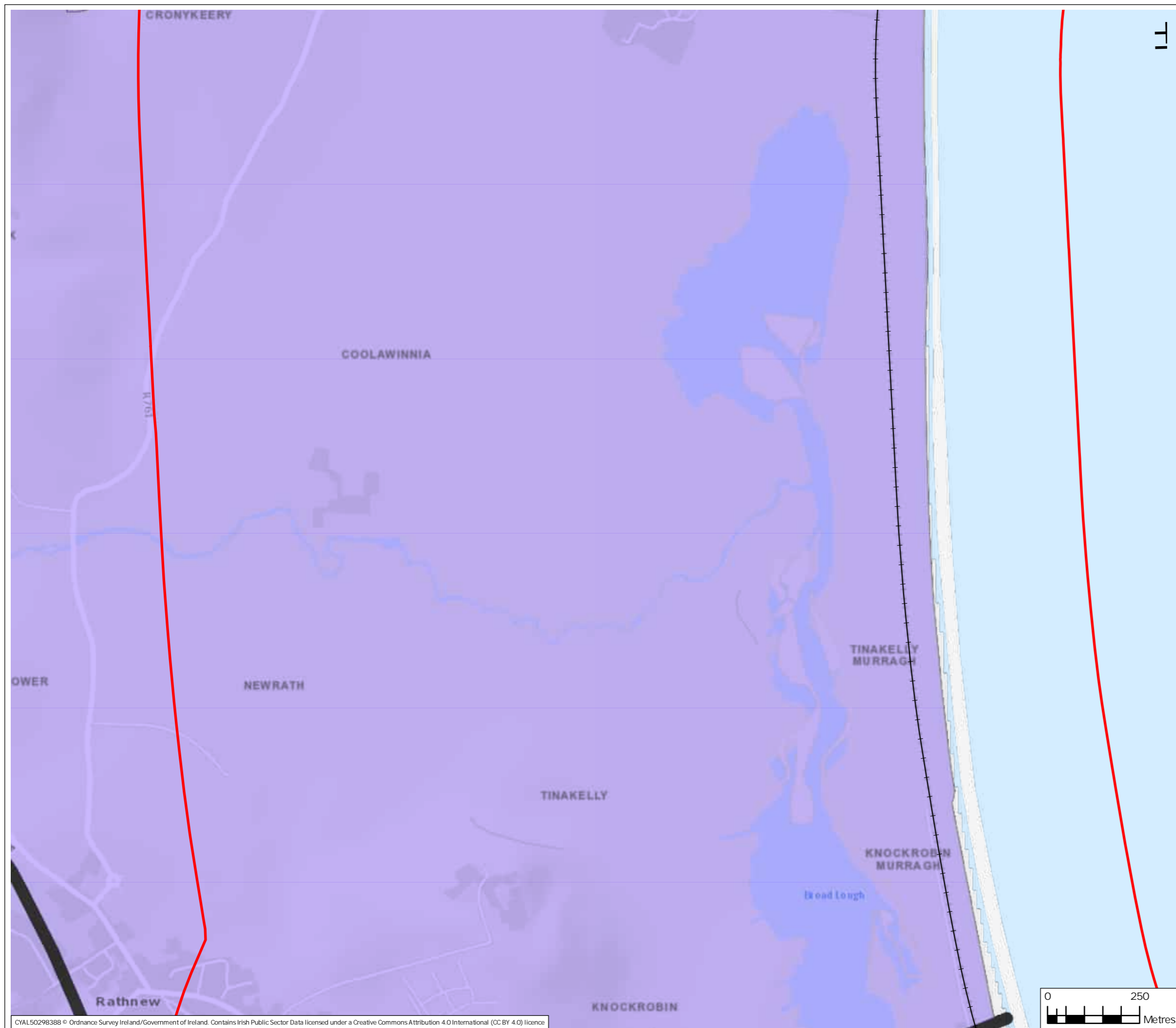
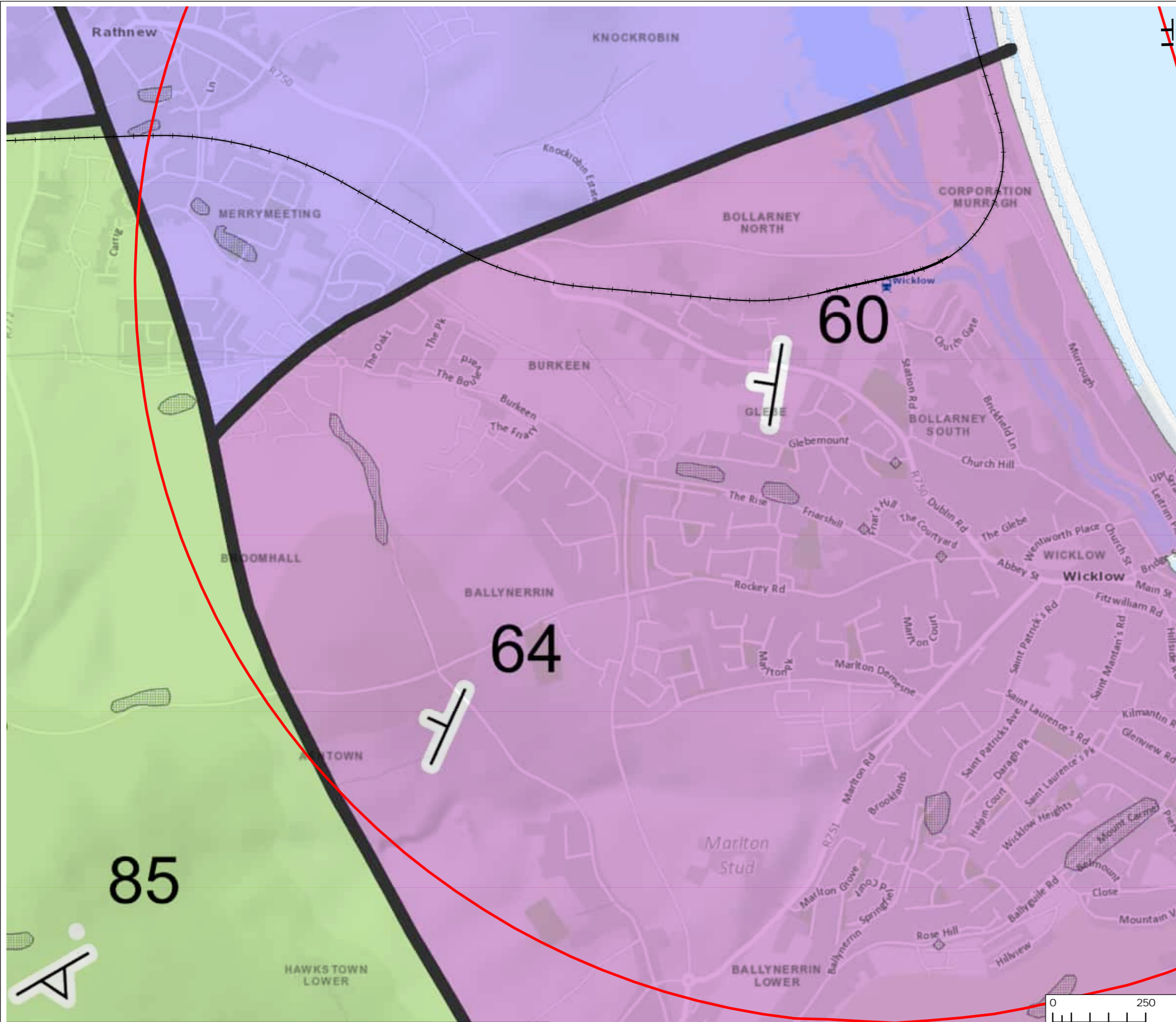
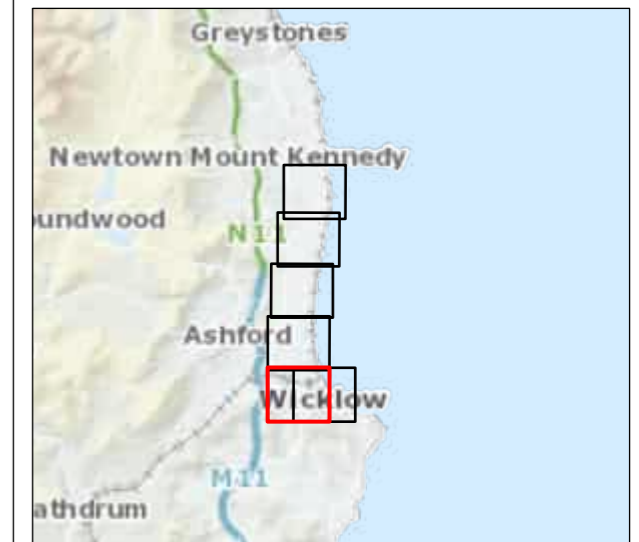


FIGURE 7.4



Legend

- CCA6.2 Study Area
- Railway Network Centreline
- Bedrock Geology**
- Strike and dip of bedding, way up unknown
- Strike and dip of second foliation
- Bedrock Outcrops 100 ITM 2018
- Fault
- Ballylane Formation
- Maulin Formation
- Wicklow Head Formation



V01	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 1 2695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.4
 CCA6.2- Environmental Constraints - Bedrock Geology
 (Page 5 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

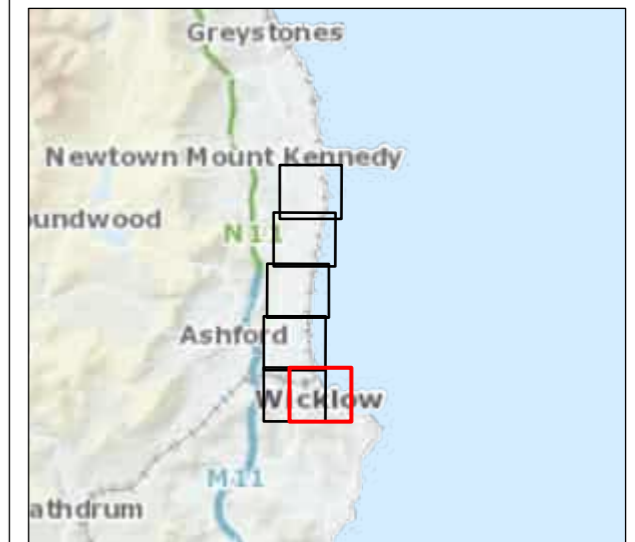
State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7027	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

FIGURE 7.4

Legend

- CCA6.2 Study Area
- Railway Network Centreline
- Bedrock Geology**
- Strike and dip of bedding, way up unknown
- Strike and dip of first foliation
- Strike and plunge of second generation fold axis
- Bedrock Outcrops 100 ITM 2018
- Fault
- Ballylane Formation
- Maulin Formation
- Wicklow Head Formation



VO1	Mar 2024	FOR REVIEW	MS	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client


Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 1 2695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 7.4
 CCA6.2- Environmental Constraints - Bedrock Geology
 (Page 6 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev VO1
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-7028	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

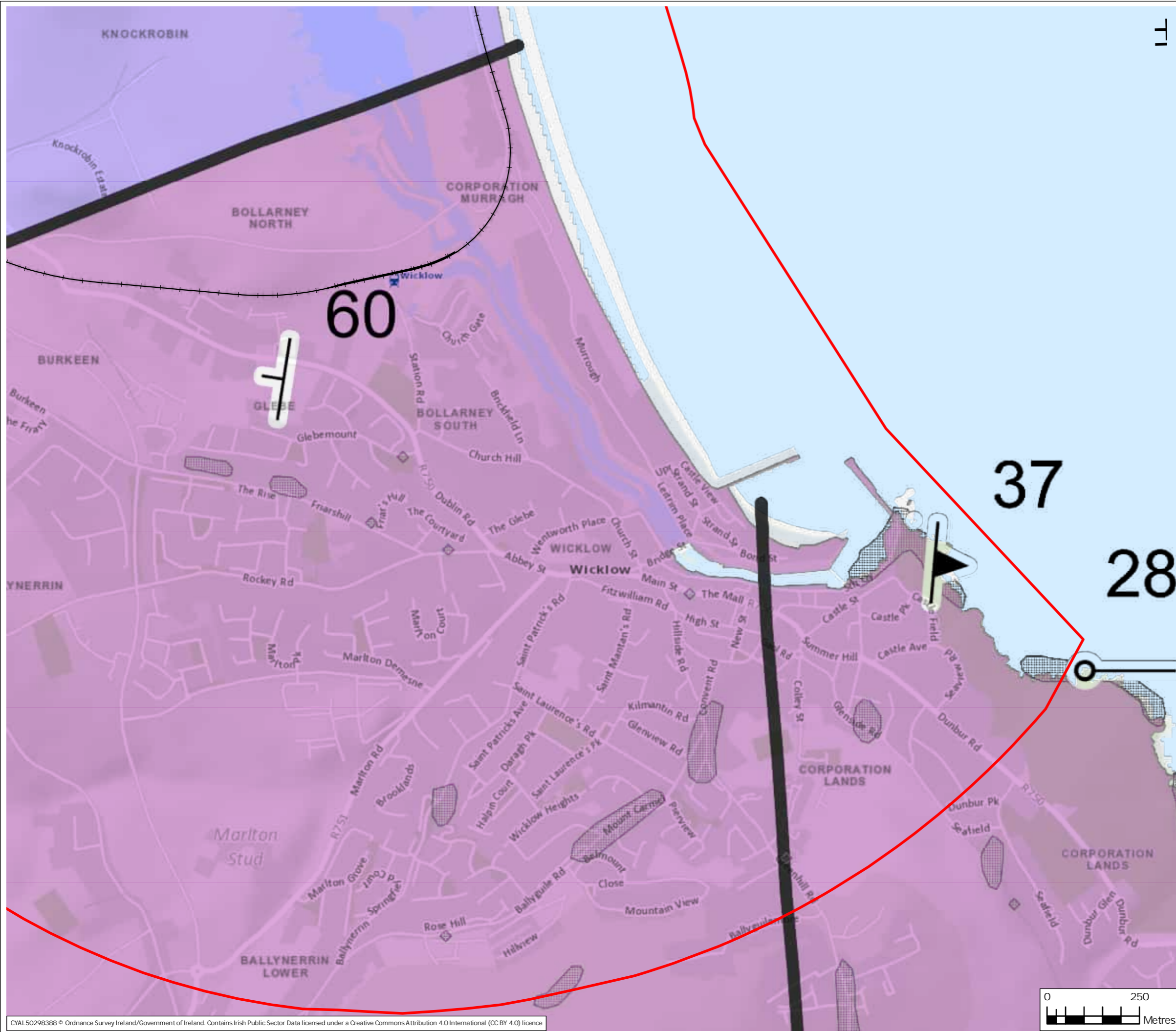
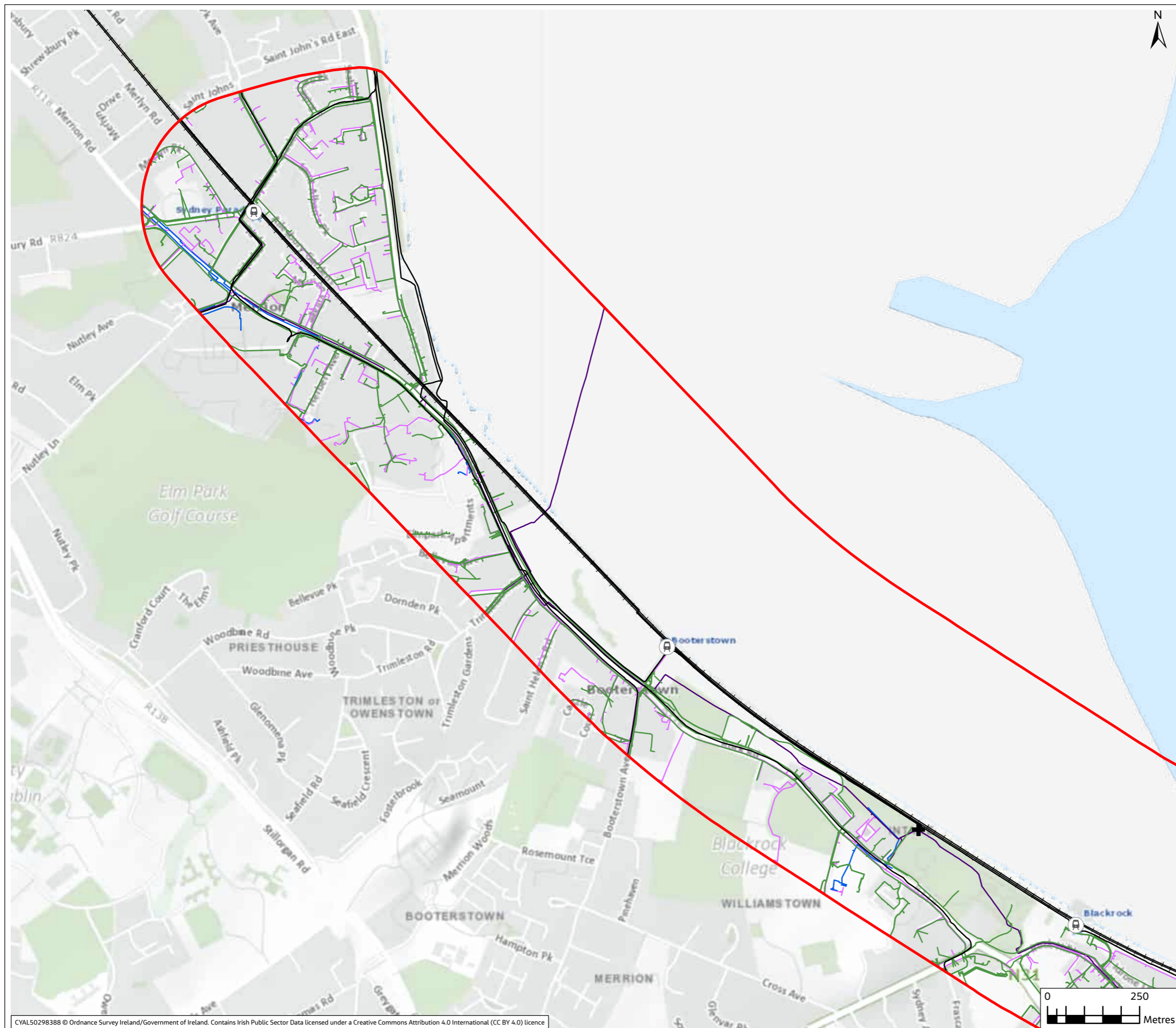
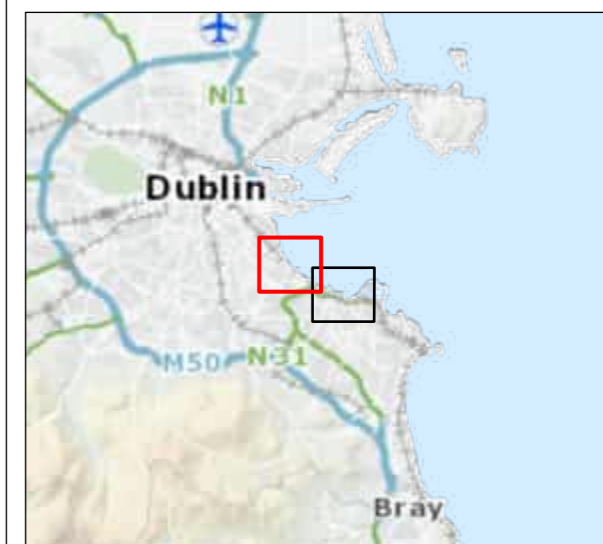


FIGURE 8.1



Legend

- CCA1 Study Area
- Railway Station
- Railway Network Centreline
- ESB Network**
- High Voltage Station
- High Voltage
- Medium Voltage
- GNI Network**
- HP
- MP
- LP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 8.1
CCA1- Environmental Constraints - Material Assets
(Page 1 of 2)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA1-P2-DWG-EV-JAC-8002	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

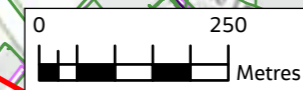
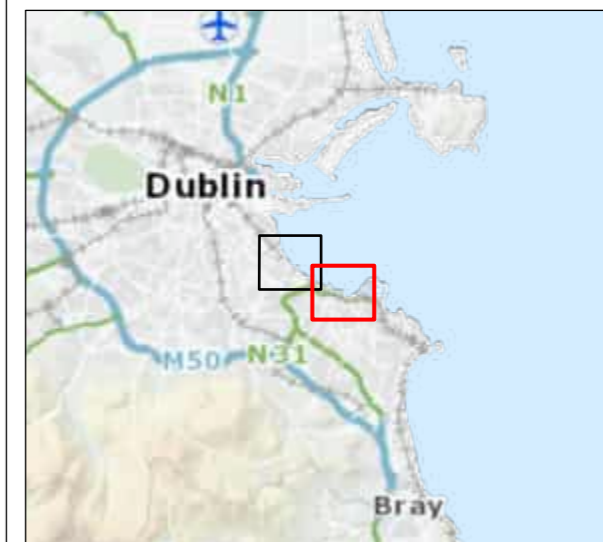


FIGURE 8.1

Legend

- CCA1 Study Area
- Railway Station
- Railway Network Centreline
- West Pier Pumping Station
- ESB Network**
- High Voltage Station
- High Voltage
- Medium Voltage
- GNI Network**
- HP
- MP
- LP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 8.1
 CCA1- Environmental Constraints - Material Assets
 (Page 2 of 2)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev
Client No.	8093	V01

Drawing No. 7964-CCA1-P2-DWG-EV-JAC-8003

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

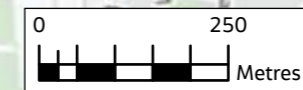
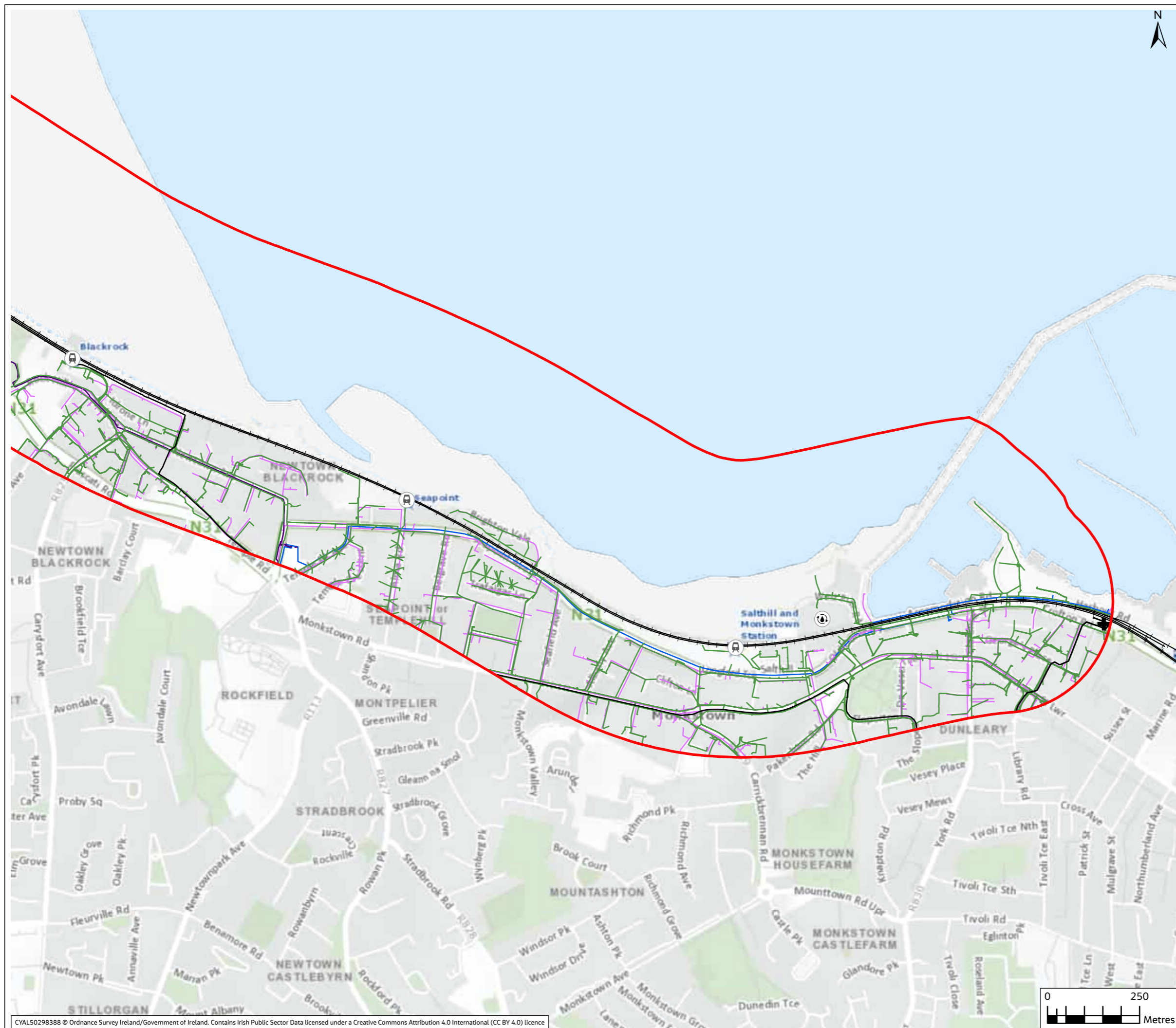
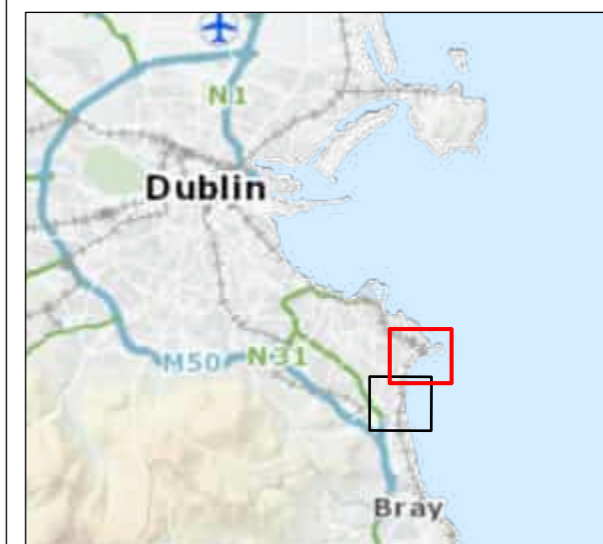


FIGURE 8.1

- Legend
- CCA2-3 Study Area
 - Railway Network Centreline
- ESB Network**
- Medium Voltage
- GNI Network**
- MP
 - LP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 8.1
CCA2-3- Environmental Constraints - Material Assets
(Page 1 of 2)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev
Client No.	8093	V01
Drawing No.	7964-CCA2_3-P2-DWG-EV-JAC-8002	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

Path: \\glbon001\GISProj\03658300_ECRRP\Ar\GIS\01_Environmental_Constraints_Report\008_Material_Assets\008_Figure_8.1_CCA2_3_Material_Assets_v1.aprx

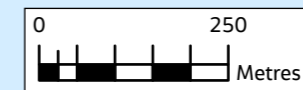
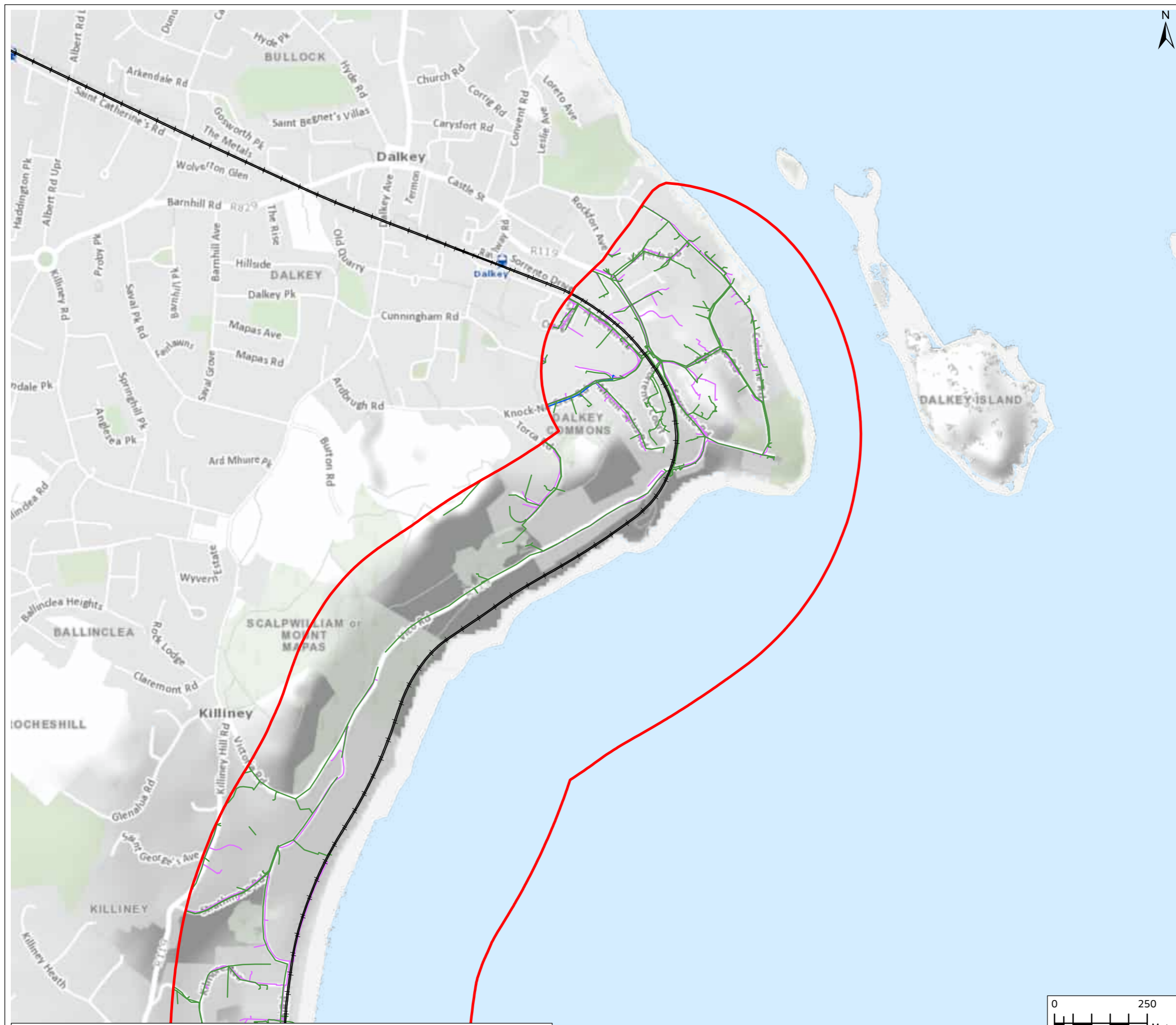
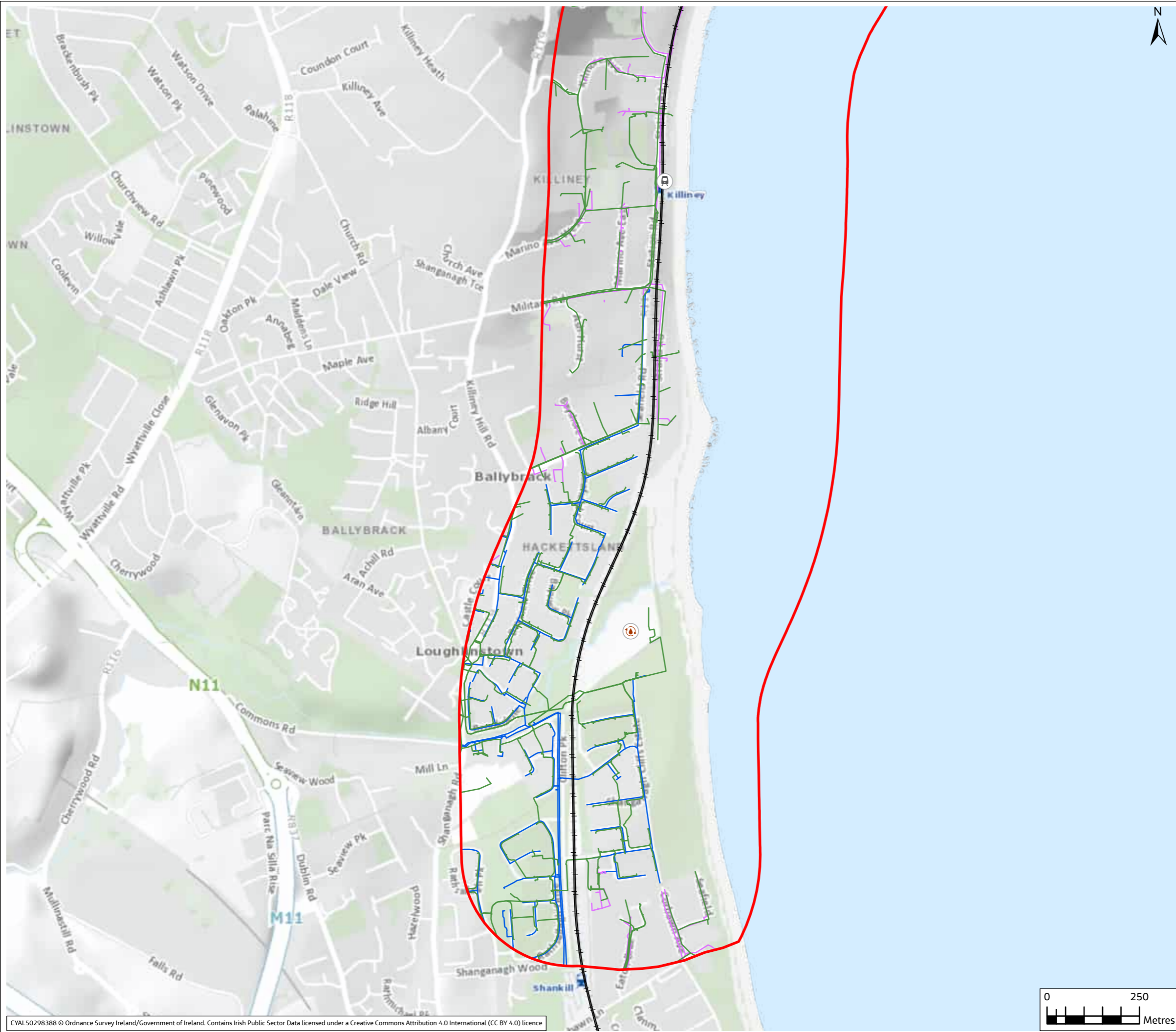
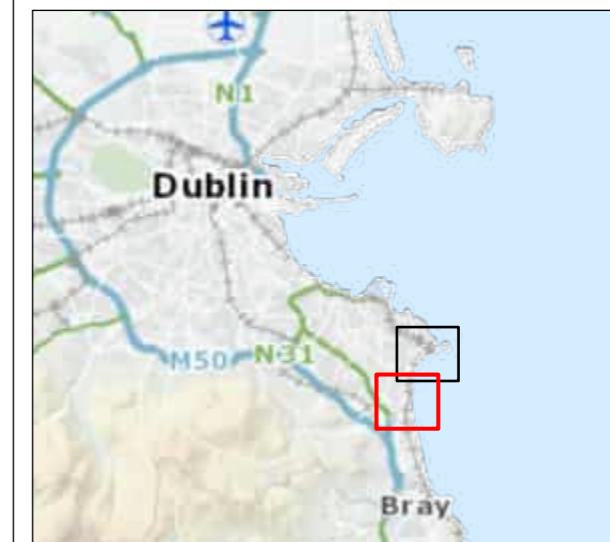


FIGURE 8.1



Legend

- CCA2-3 Study Area
- Railway Station
- Railway Network Centreline
- Wastewater Plant
- ESB Network**
- Medium Voltage
- MP
- LP
- GNI Network**
- MP
- LP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 8.1
CCA2-3- Environmental Constraints - Material Assets
(Page 2 of 2)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

Client No.

8093

Drawing No.

7964-CCA2_3-P2-DWG-EV-JAC-8003

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

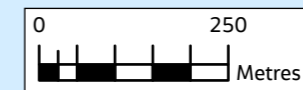
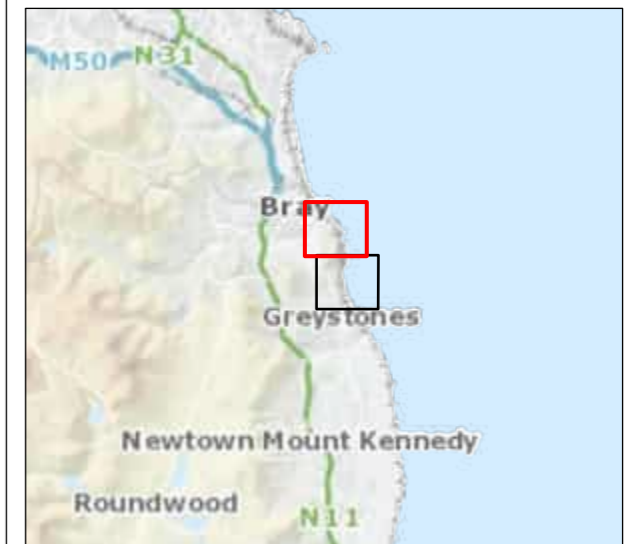


FIGURE 8.1

Legend

- CCA5 Study Area
- Railway Network Centreline
- ESB Network**
- Medium Voltage
- GNI Network**
- LP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 8.1
CCA5- Environmental Constraints - Material Assets
(Page 1 of 2)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code

Phase 2

Scale @ A3

1:10,000

DO NOT SCALE

Jacobs No.

D3658301

Rev

V01

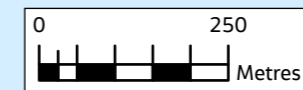
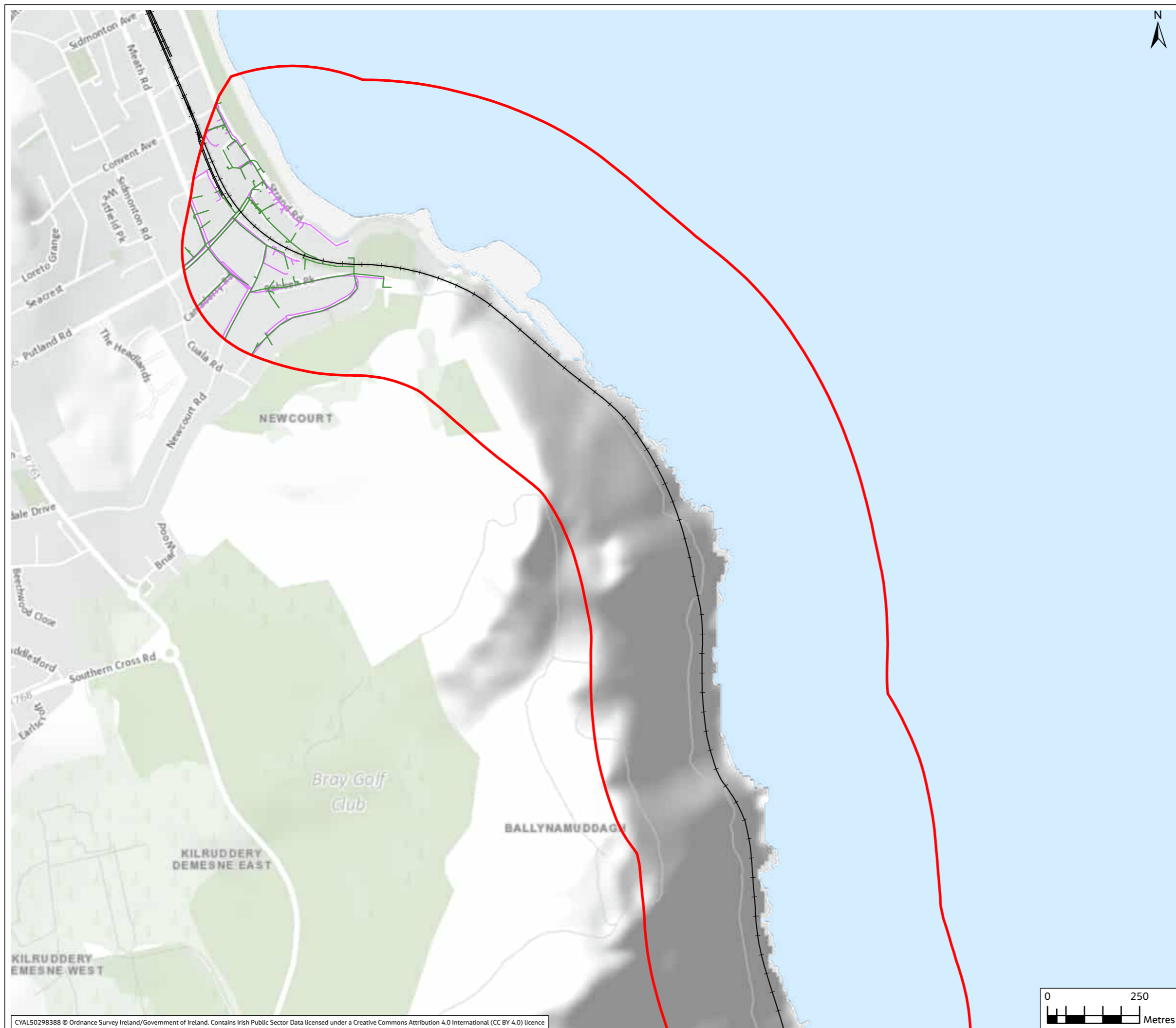
Client No.

8093

Drawing No.

7964-CCA5-P2-DWG-EV-JAC-8002

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.



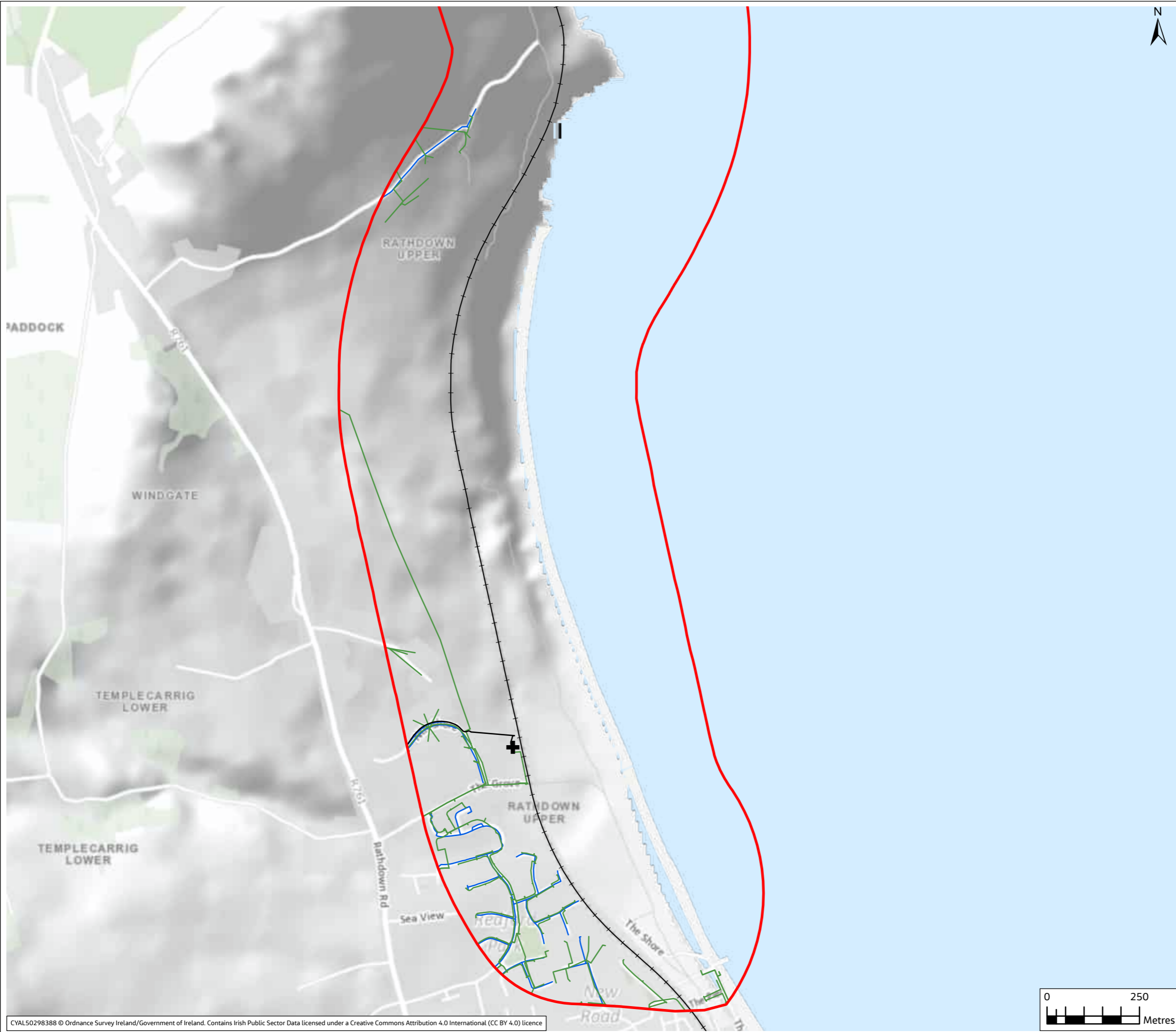
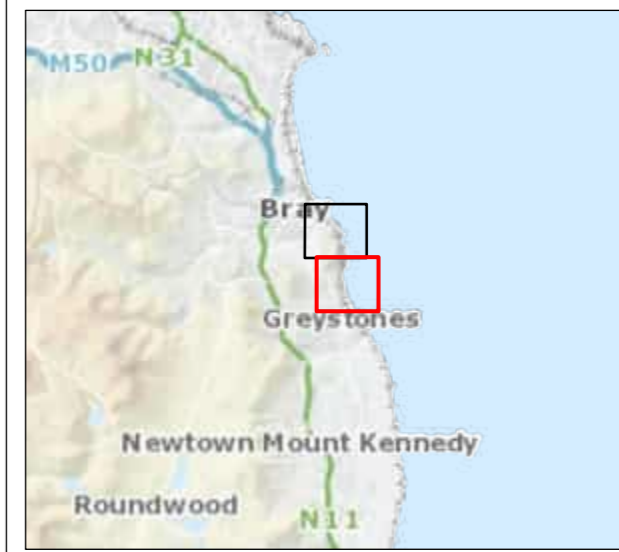


FIGURE 8.1

- Legend
- CCA5 Study Area
 - Railway Network Centreline
 - ESB Network**
 - + High Voltage Station
 - High Voltage
 - Medium Voltage
 - GNI Network**
 - MP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 8.1
CCA5- Environmental Constraints - Material Assets
(Page 2 of 2)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA5-P2-DWG-EV-JAC-8003	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

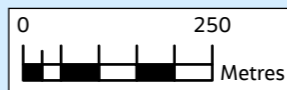
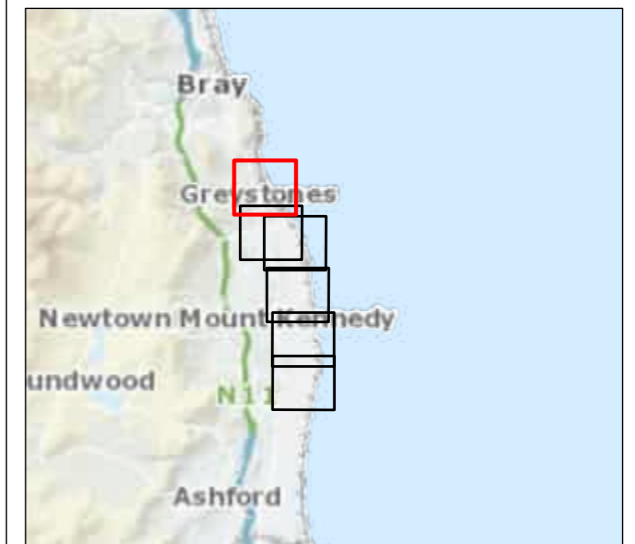


FIGURE 8.1

Legend

- CCA6.1 Study Area
- Railway Station
- Railway Network Centreline
- Greystones Harbour
- ESB Network**
- High Voltage Station
- High Voltage
- Medium Voltage
- GNI Network**
- MP
- LP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 8.1
CCA6.1- Environmental Constraints - Material Assets
(Page 1 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev
Client No.	8093	V01
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-8002	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

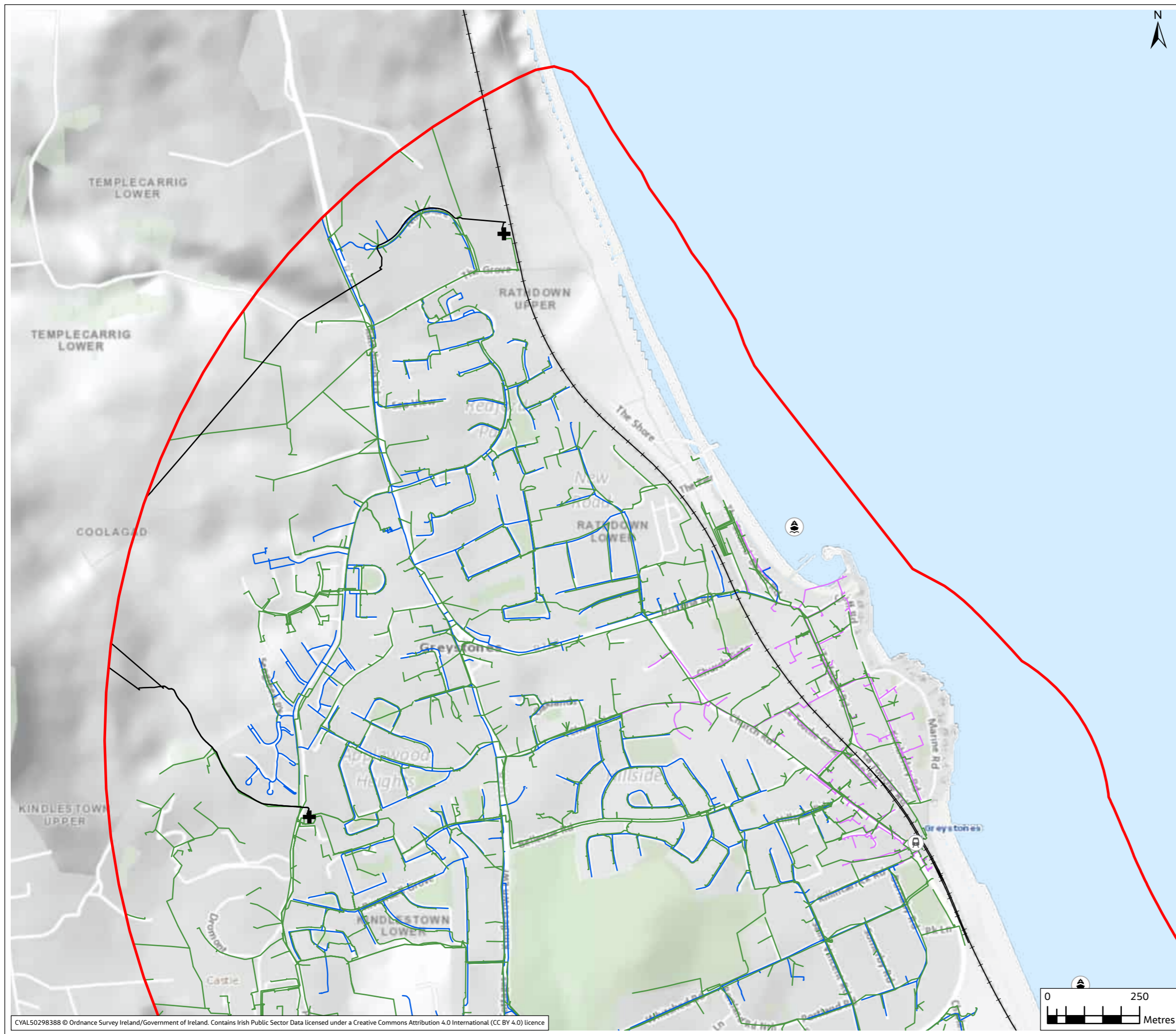
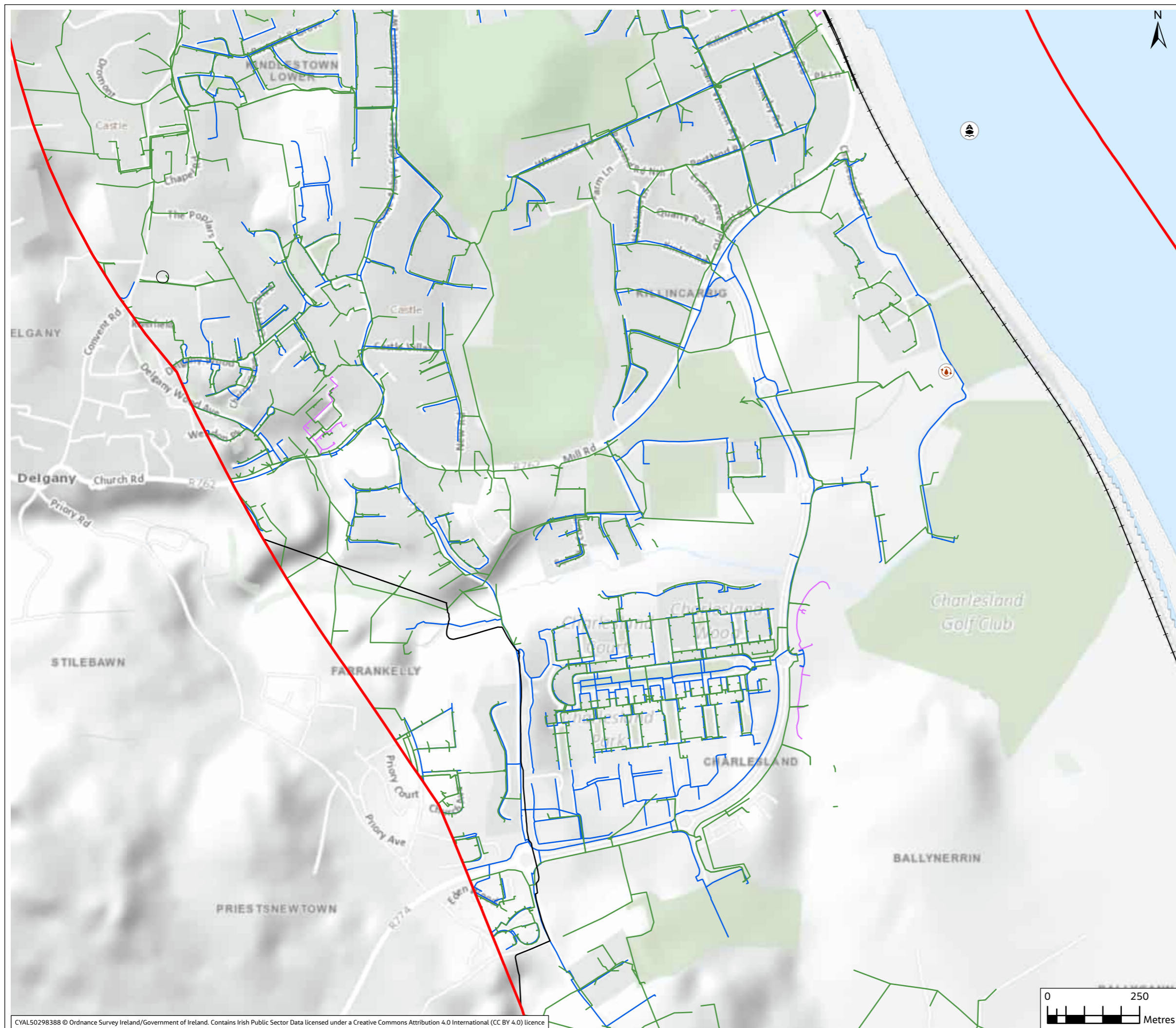
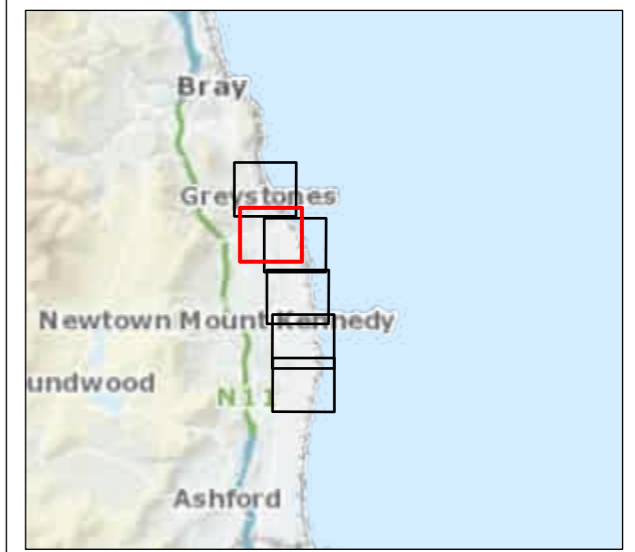


FIGURE 8.1



- Legend**
- CCA6.1 Study Area
 - Railway Network Centreline
 - Wastewater Plant
 - Greystones Harbour
 - WFD Section 4 Discharges
- ESB Network**
- High Voltage Station
 - High Voltage
 - Medium Voltage
- GNI Network**
- MP
 - LP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Merrion House, Merrion Rd, Dublin 4, Ireland, D04 R2C5. Tel: +353 12695666 www.jacobs.com

Project

7694 EAST COAST RAILWAY INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 8.1 CCA6.1- Environmental Constraints - Material Assets (Page 2 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-8003	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

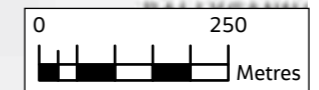
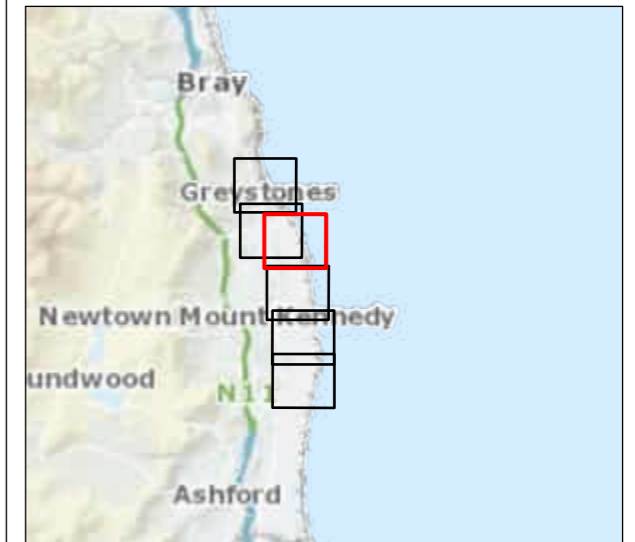


FIGURE 8.1

Legend

- CCA6.1 Study Area
- Railway Network Centreline
- Wastewater Plant
- ESB Network**
- High Voltage Station
- High Voltage
- Medium Voltage
- GNI Network**
- MP
- LP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer

Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project

7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 8.1
 CCA6.1- Environmental Constraints - Material Assets
 (Page 3 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-8004	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

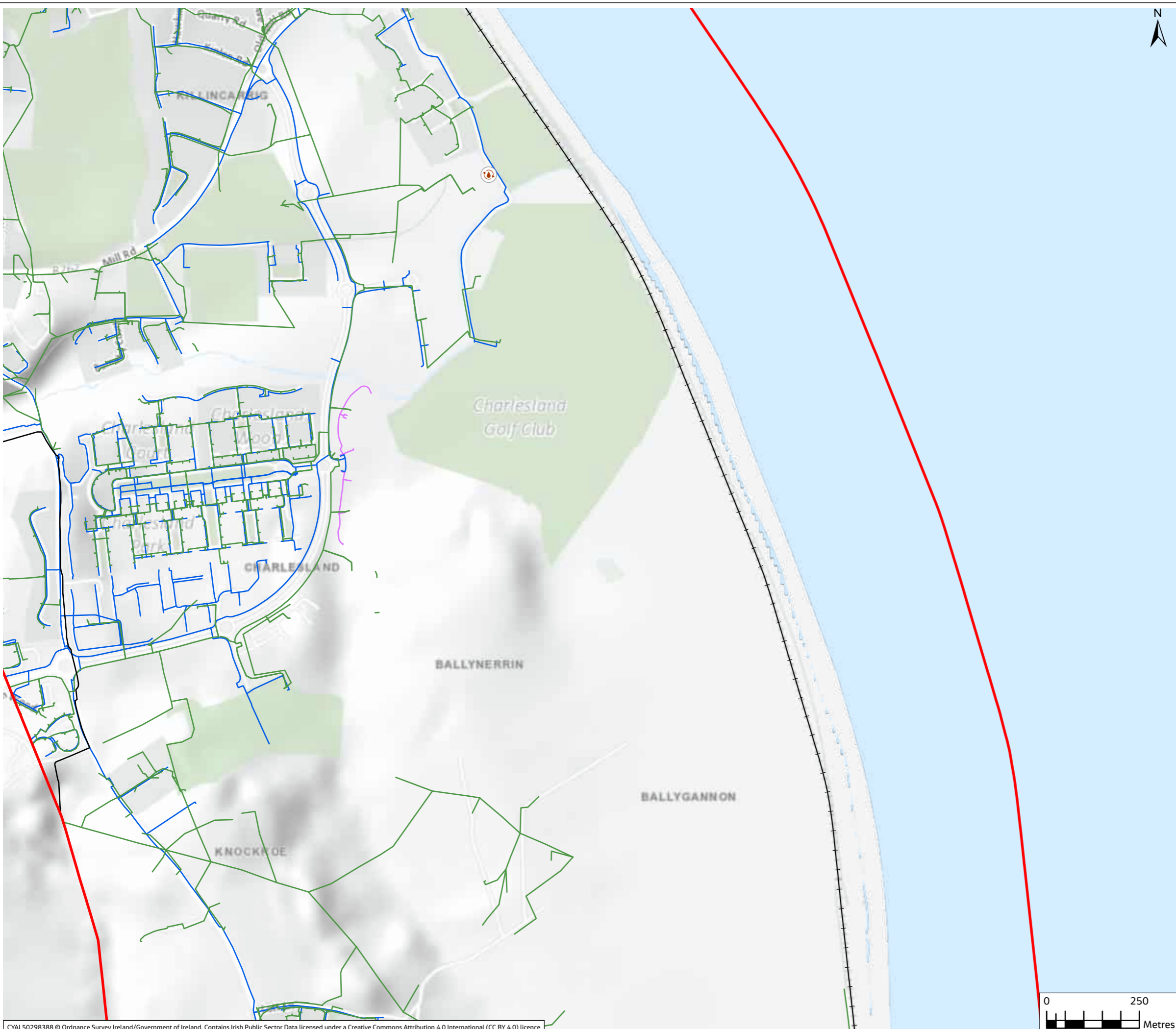
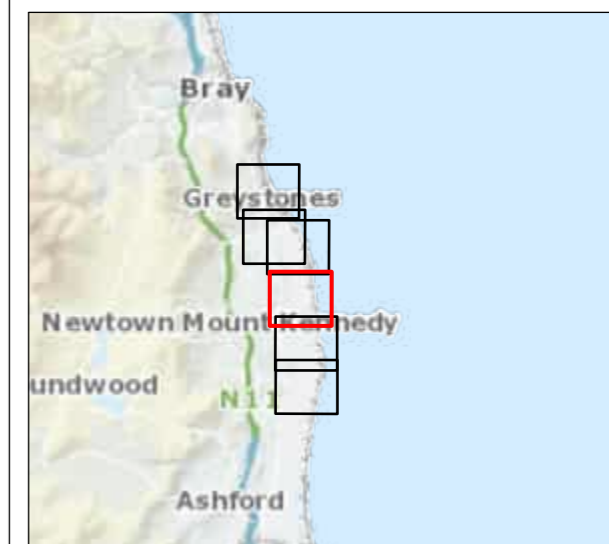


FIGURE 8.1

Legend

- CCA6.1 Study Area
- Railway Station
- Railway Network Centreline
- Wastewater Plant
- ESB Network**
- High Voltage Station
- High Voltage
- Medium Voltage
- GNI Network**
- MP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client

Designer

Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 8.1
CCA6.1- Environmental Constraints - Material Assets
(Page 4 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev
Client No.	8093	V01
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-8005	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

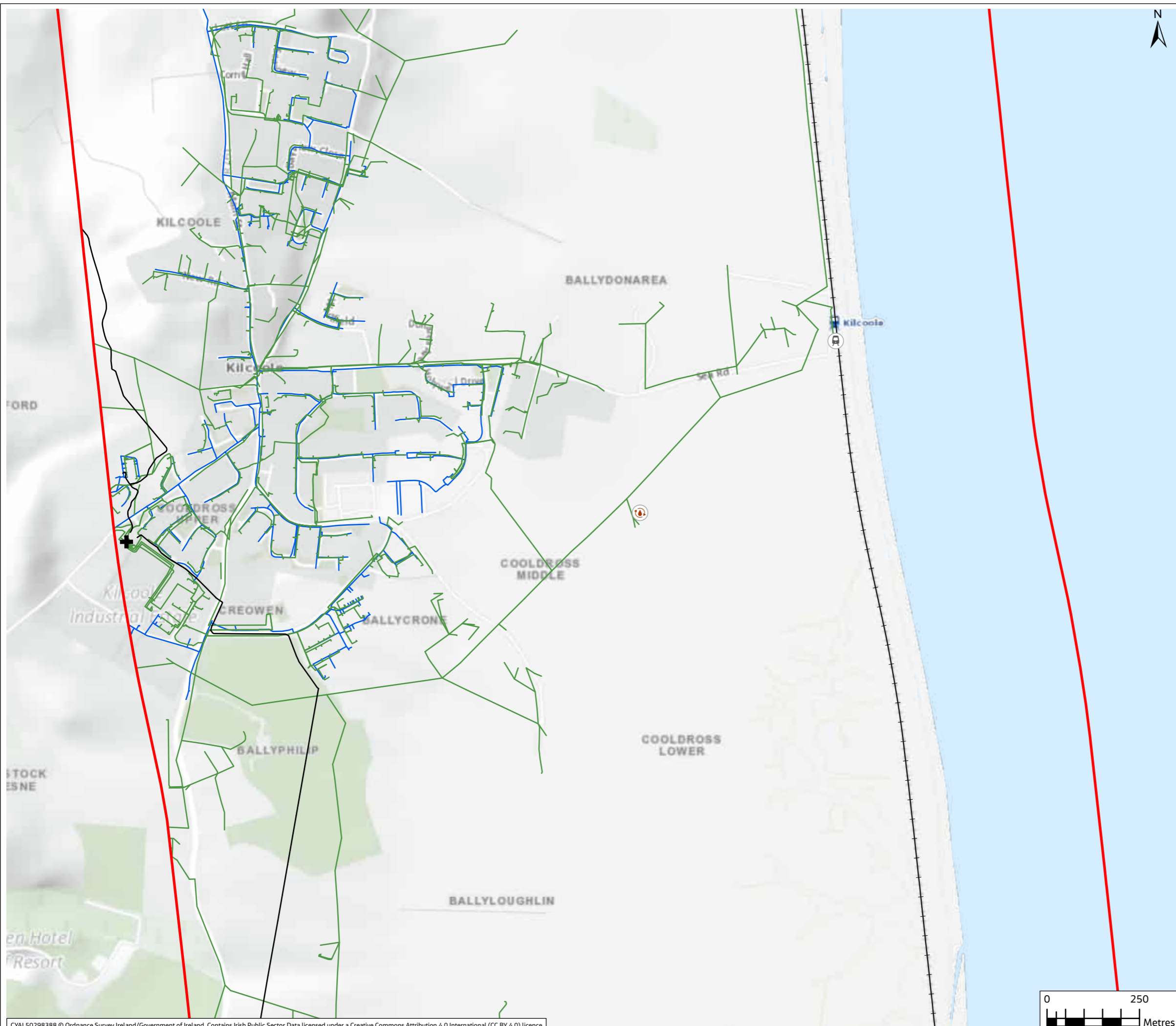
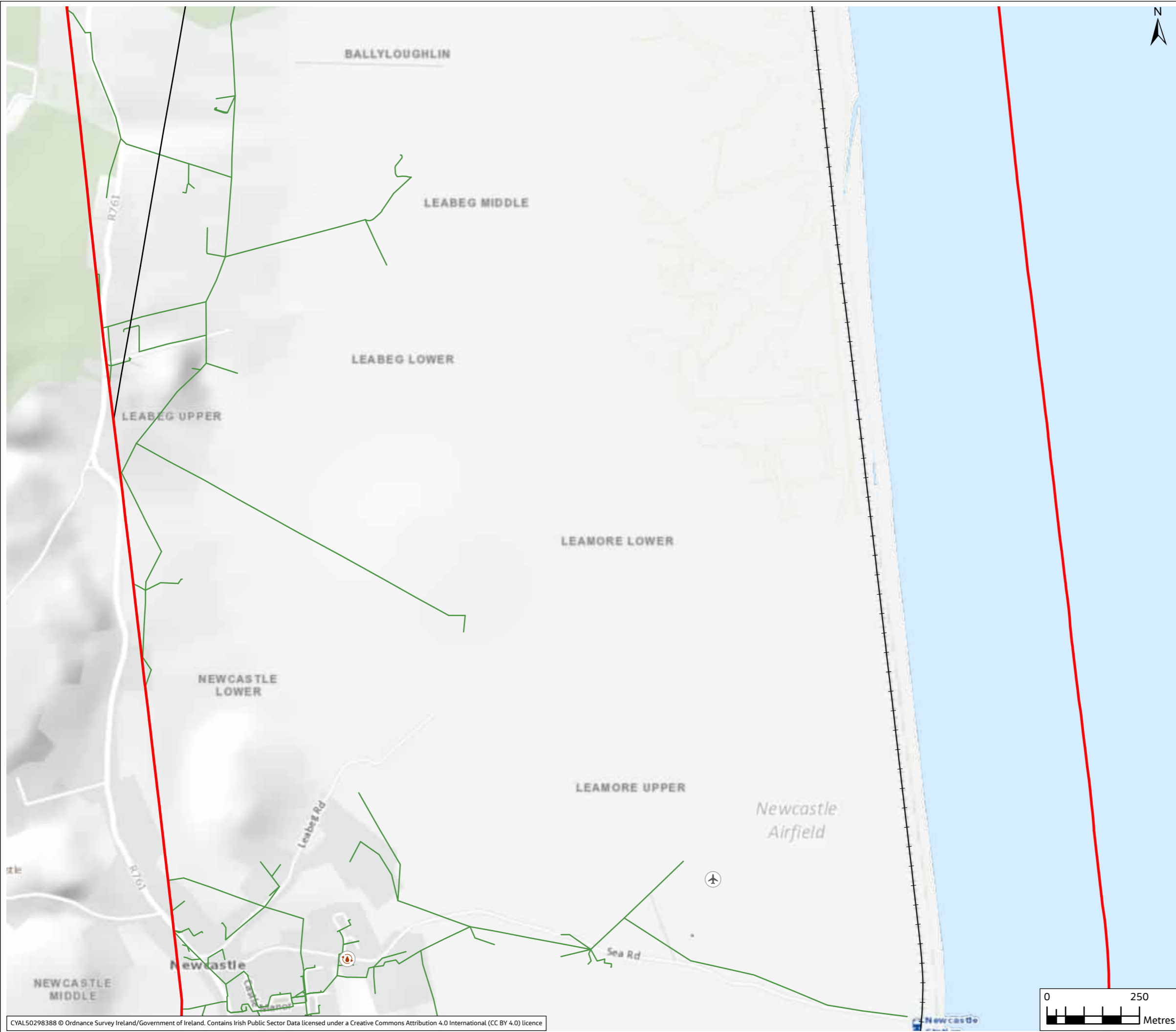
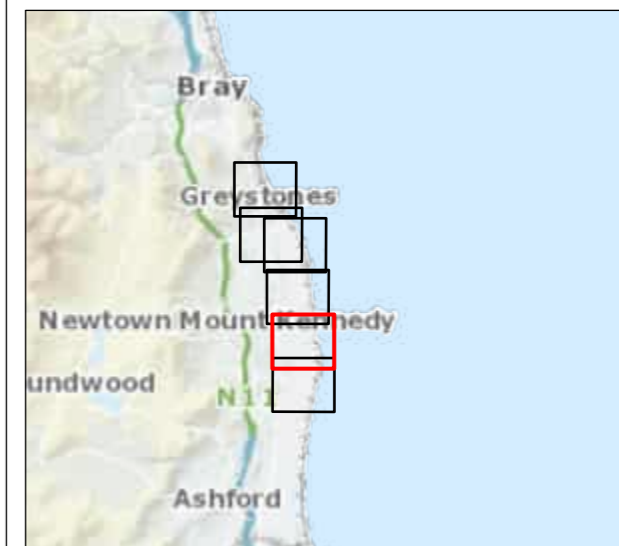


FIGURE 8.1



Legend

- CCA6.1 Study Area
- Railway Network Centreline
- ⊙ Wastewater Plant
- ✈ Newcastle Aerodrome
- ESB Network**
- High Voltage Station
- High Voltage
- Medium Voltage



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client


Designer
Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project
 7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title
 Figure 8.1
 CCA6.1- Environmental Constraints - Material Assets
 (Page 5 of 6)

Drawing Status
 ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-8006	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

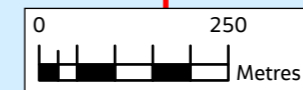
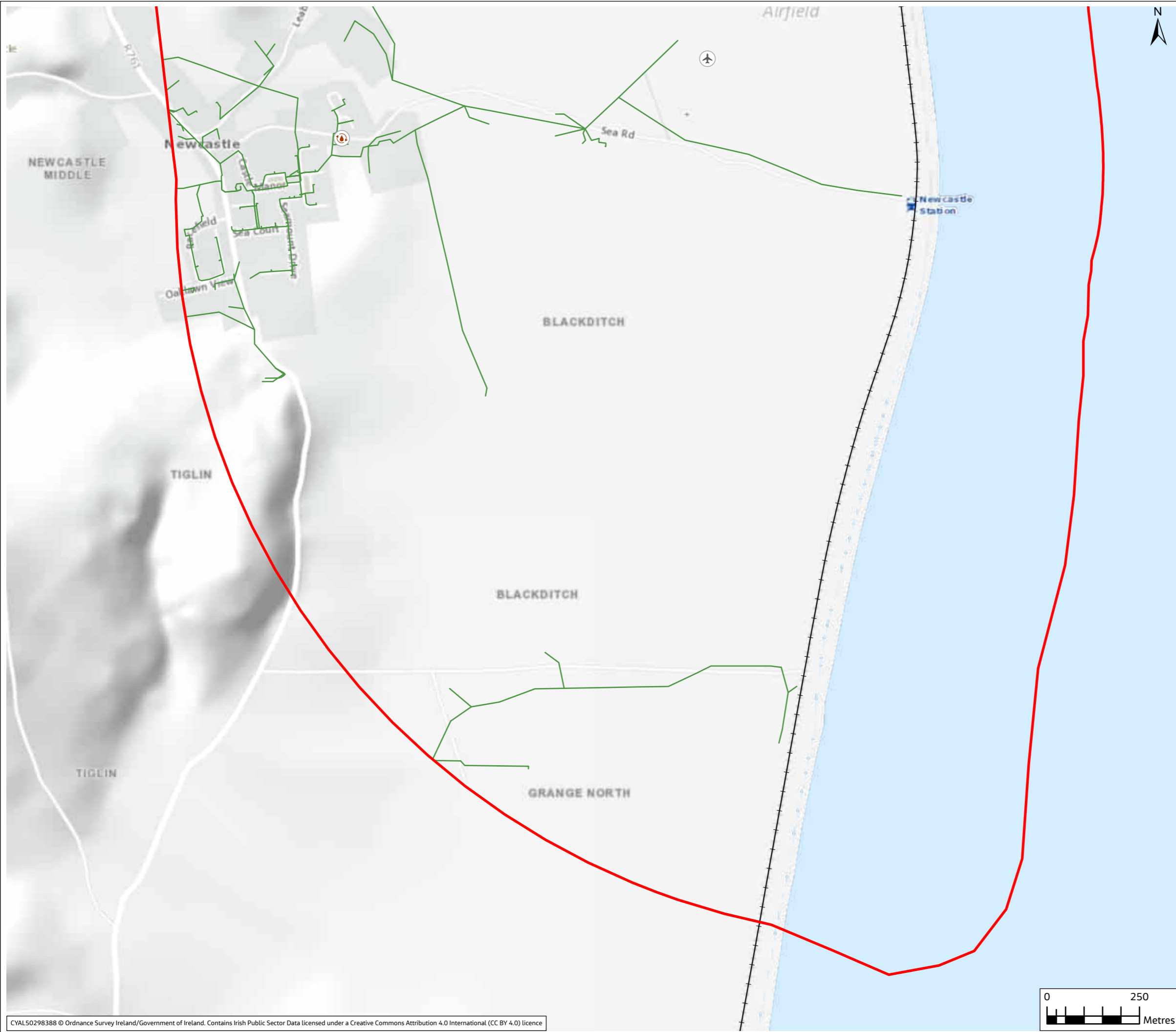
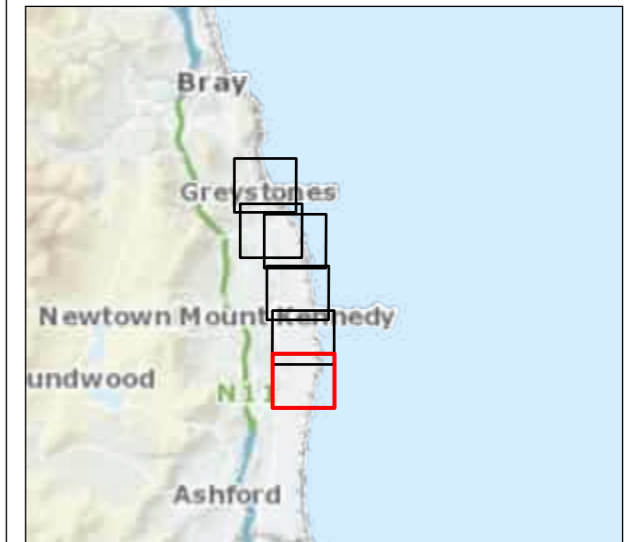


FIGURE 8.1



Legend

- CCA6.1 Study Area
- Railway Network Centreline
- ⊙ Wastewater Plant
- ✈ Newcastle Aerodrome
- ESB Network**
- + High Voltage Station
- High Voltage
- Medium Voltage



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 8.1
CCA6.1- Environmental Constraints - Material Assets
(Page 6 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_1-P2-DWG-EV-JAC-8007	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

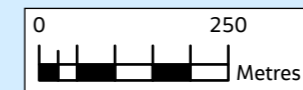


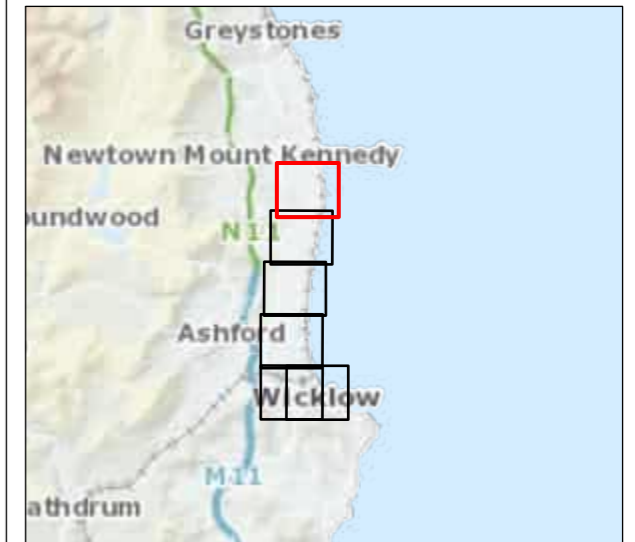
FIGURE 8.1

Legend

- CCA6.2 Study Area
- Railway Network Centreline
- Wastewater Plant
- Newcastle Aerodrome
- +** High Voltage Station
- High Voltage
- Medium Voltage

ESB Network

- +** High Voltage Station
- High Voltage
- Medium Voltage



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 8.1
CCA6.2- Environmental Constraints - Material Assets
(Page 1 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-8002	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

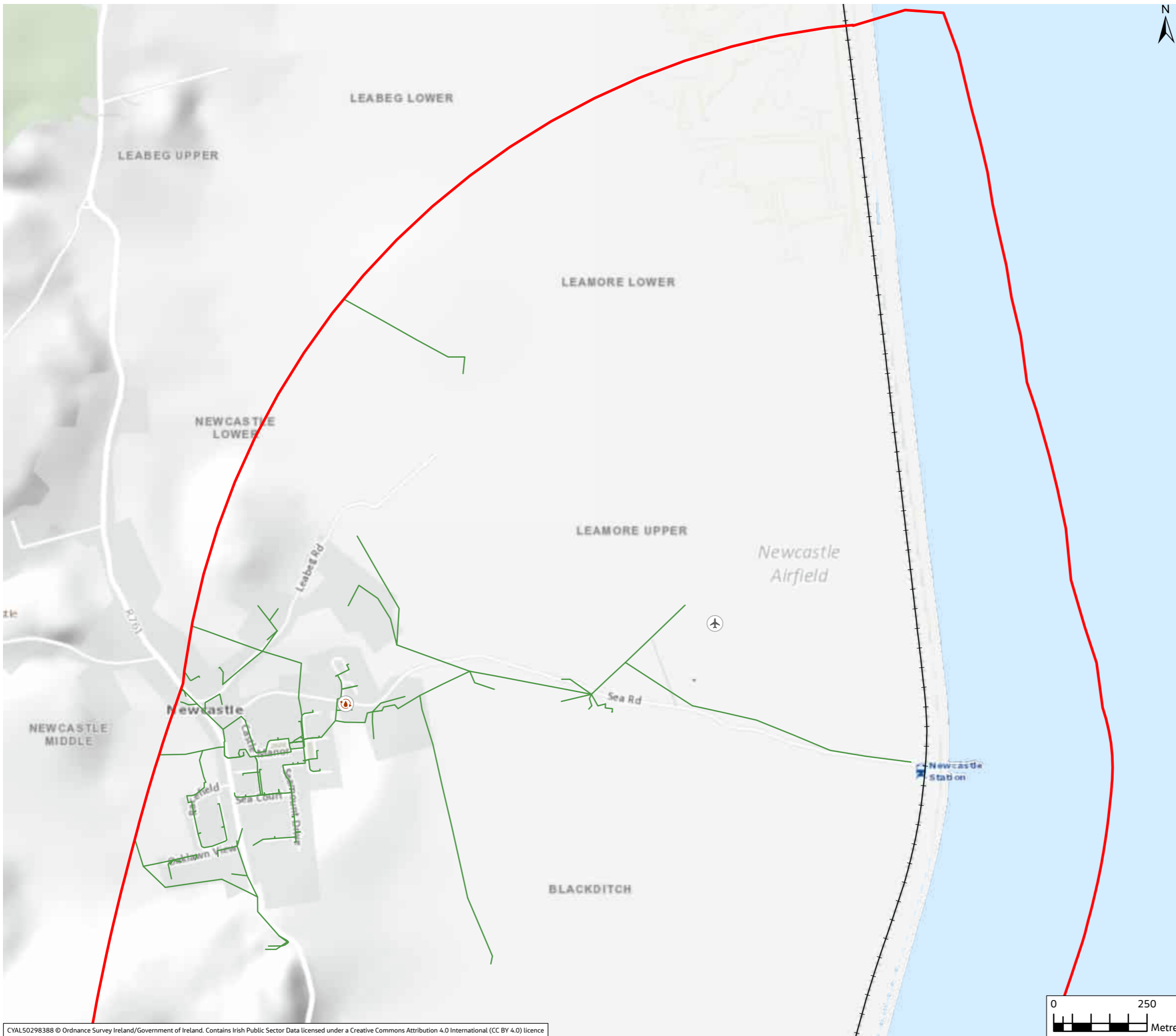
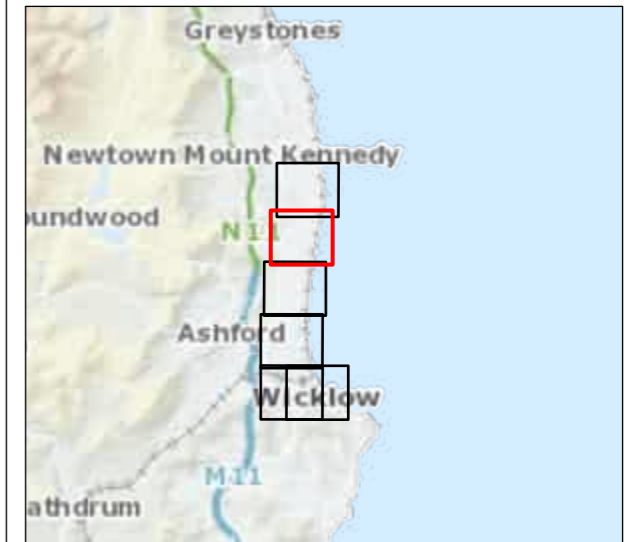


FIGURE 8.1

Legend

- CCA6.2 Study Area
- Railway Network Centreline
- ESB Network**
- High Voltage Station
- High Voltage
- Medium Voltage
- GNI Network**
- HP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer

Jacobs
 Merrion House, Merrion Rd, Dublin 4,
 Ireland, D04 R2C5. Tel: +353 12695666
 www.jacobs.com

Project

**7694 EAST COAST RAILWAY
 INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 8.1
 CCA6.2- Environmental Constraints - Material Assets
 (Page 2 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-8003	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

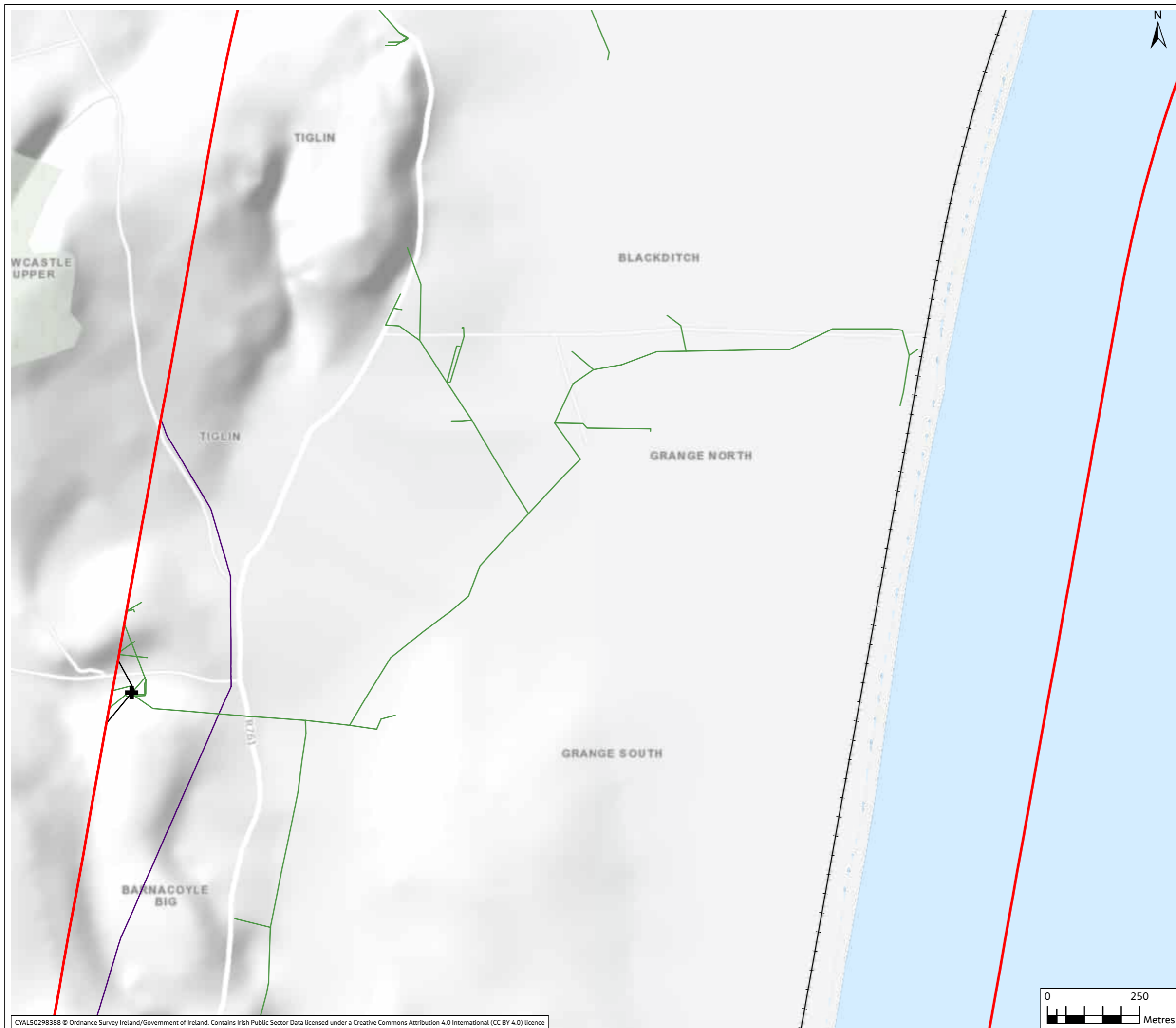
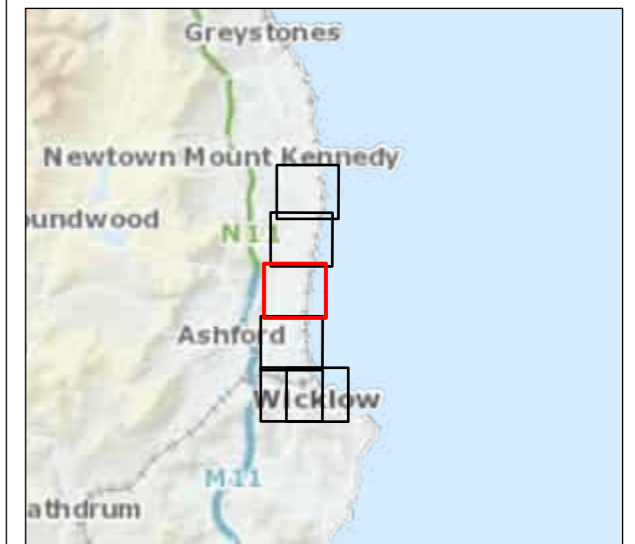


FIGURE 8.1

Legend

- CCA6.2 Study Area
- Railway Network Centreline
- WFD Section 4 Discharges
- ESB Network**
- + High Voltage Station
- High Voltage
- Medium Voltage
- GNI Network**
- HP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 8.1
CCA6.2- Environmental Constraints - Material Assets
(Page 3 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-8004	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

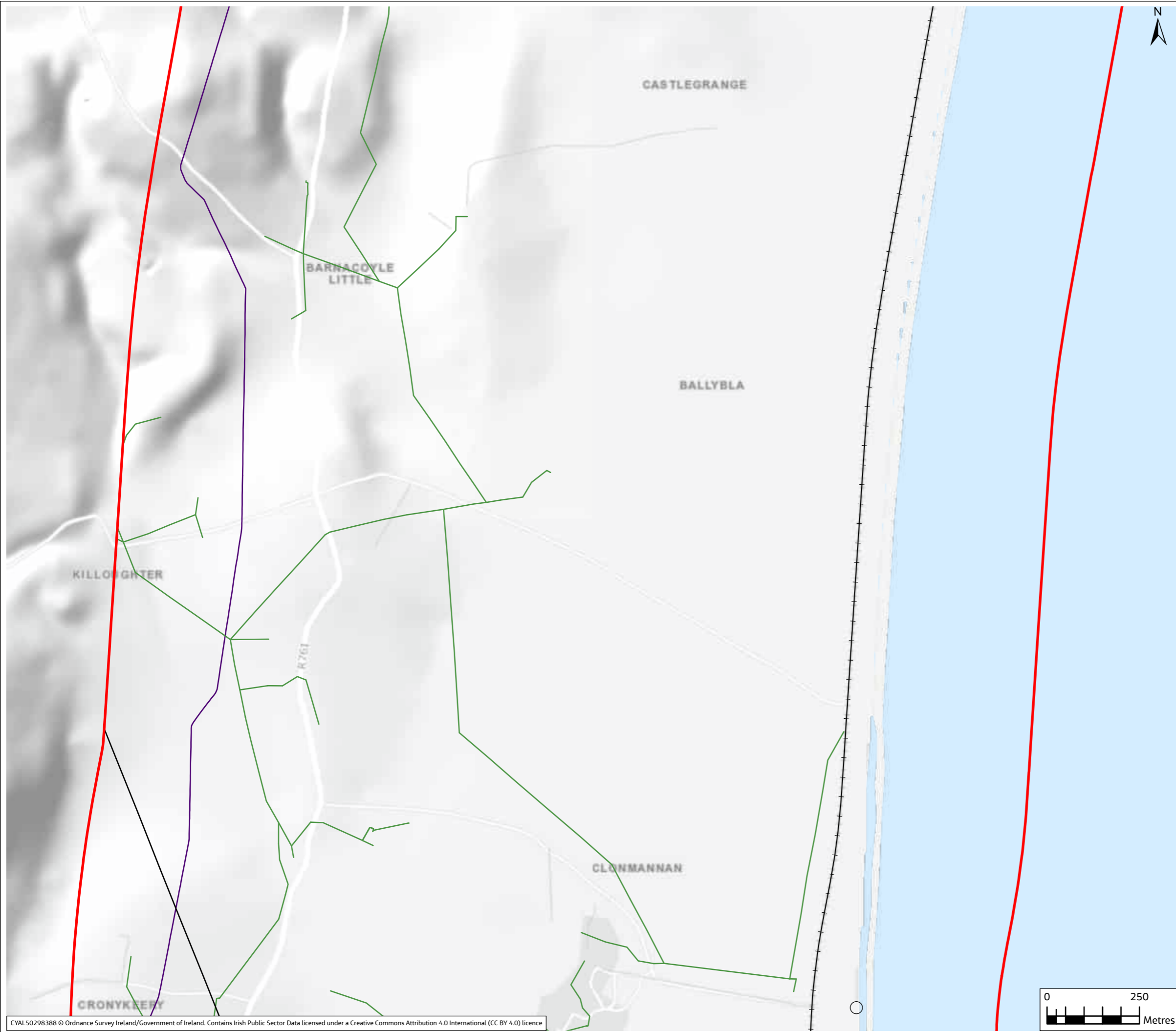
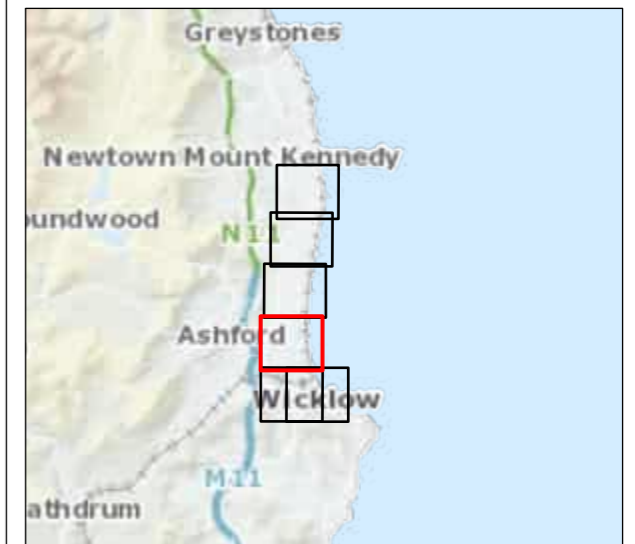


FIGURE 8.1

Legend

- CCA6.2 Study Area
- Railway Network Centreline
- WFD Section 4 Discharges
- ESB Network**
- High Voltage Station
- High Voltage
- Medium Voltage
- GNI Network**
- HP
- MP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 8.1
CCA6.2- Environmental Constraints - Material Assets
(Page 4 of 6)**

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	
Scale @ A3	1:10,000	DO NOT SCALE
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-8005	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

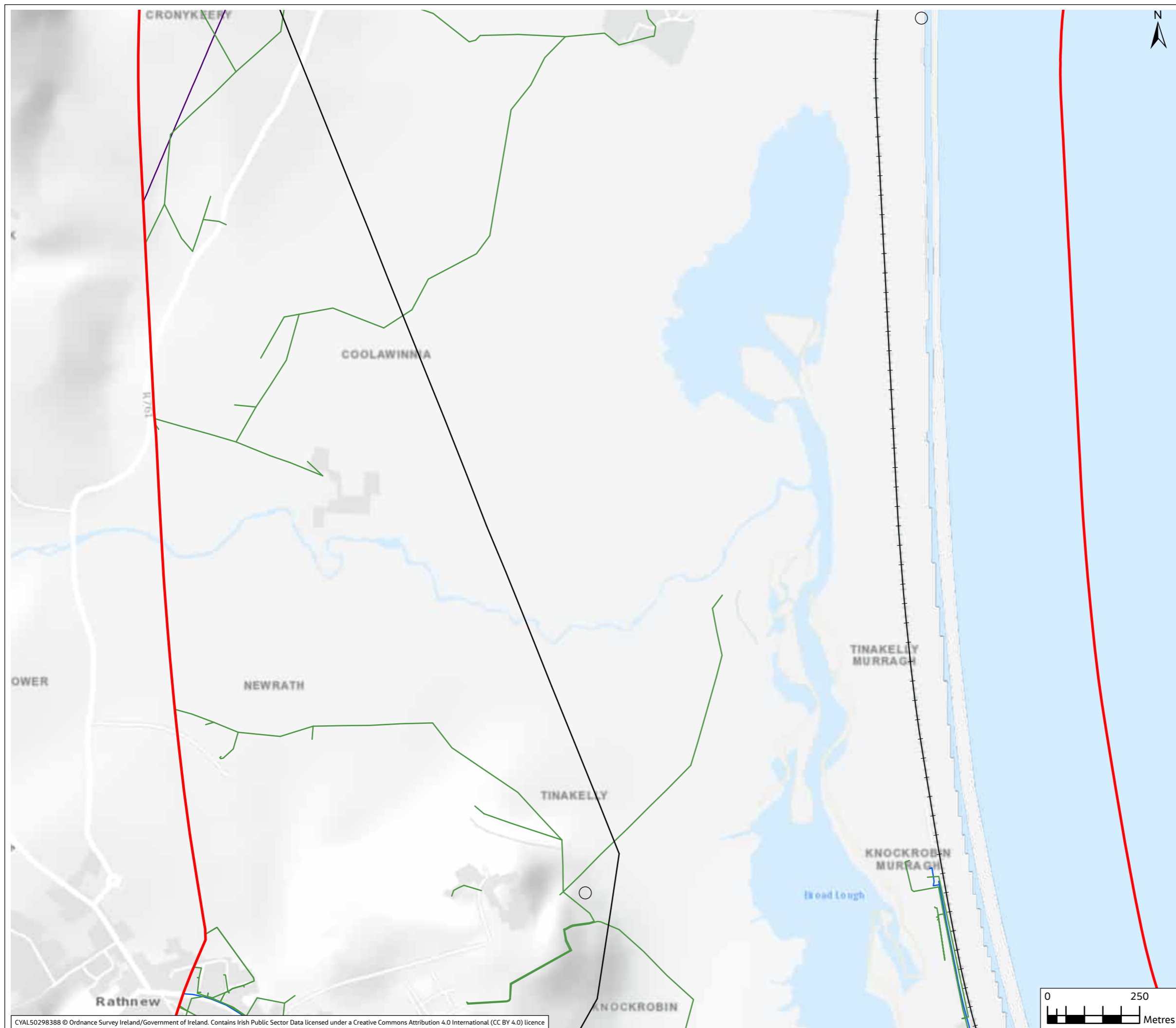
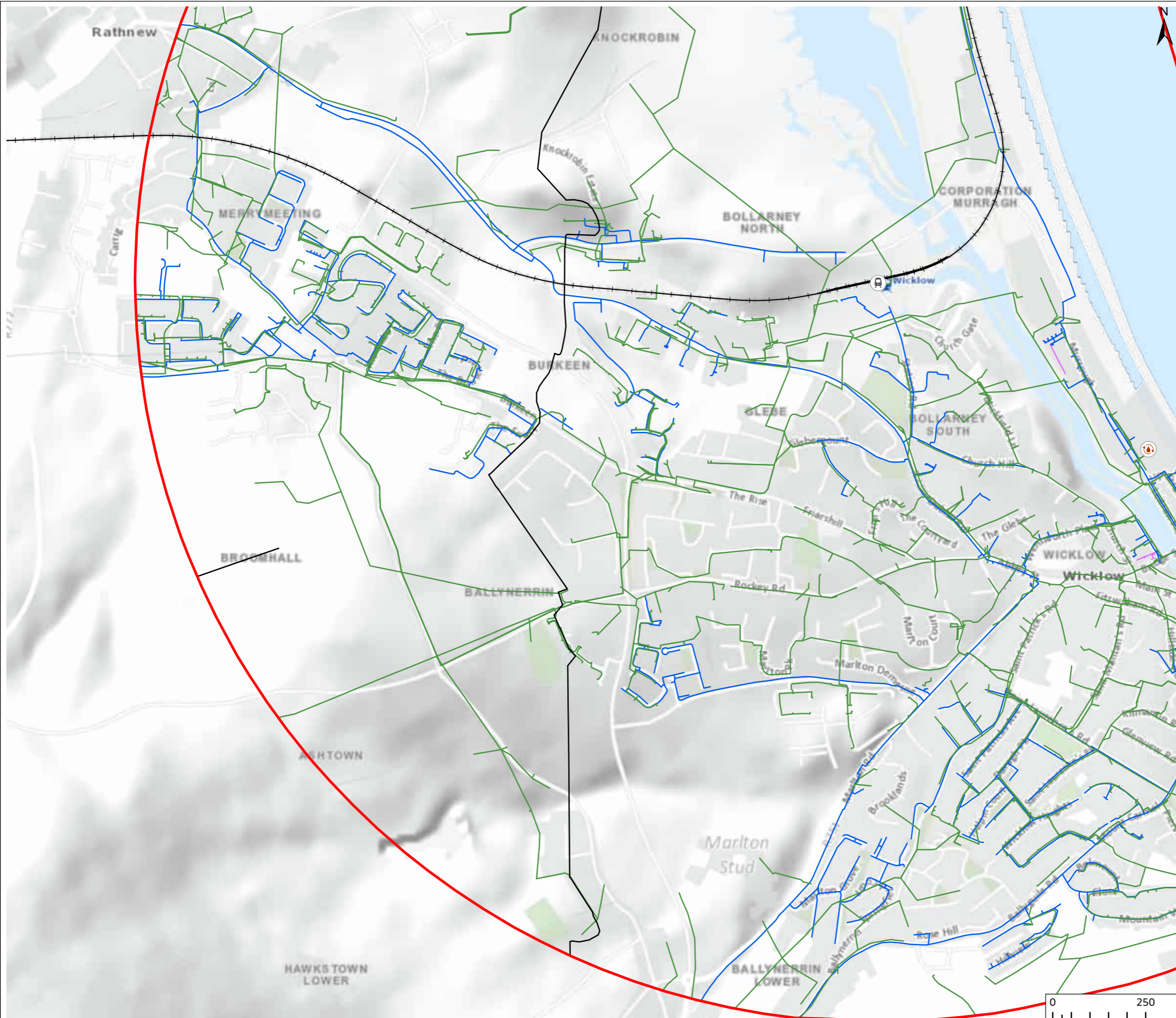
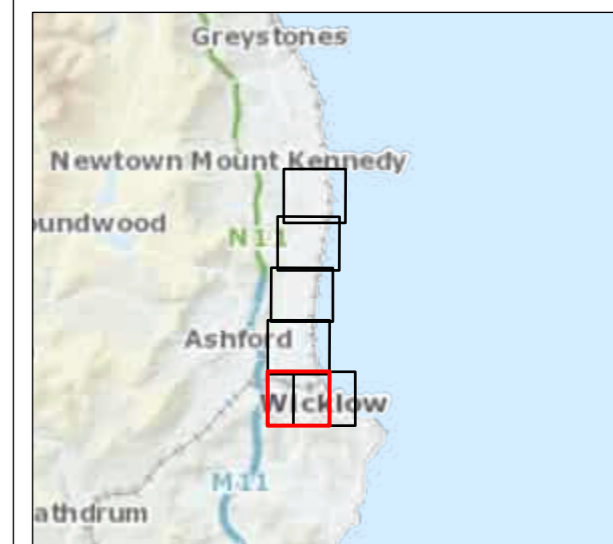


FIGURE 8.1



Legend

- CCA6.2 Study Area
- Railway Station
- Railway Network Centreline
- Wastewater Plant
- ESB Network**
- High Voltage Station
- High Voltage
- Medium Voltage
- GNI Network**
- MP
- LP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

**7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS**

Drawing Title

**Figure 8.1
CCA6.2- Environmental Constraints - Material Assets
(Page 5 of 6)**

Drawing Status

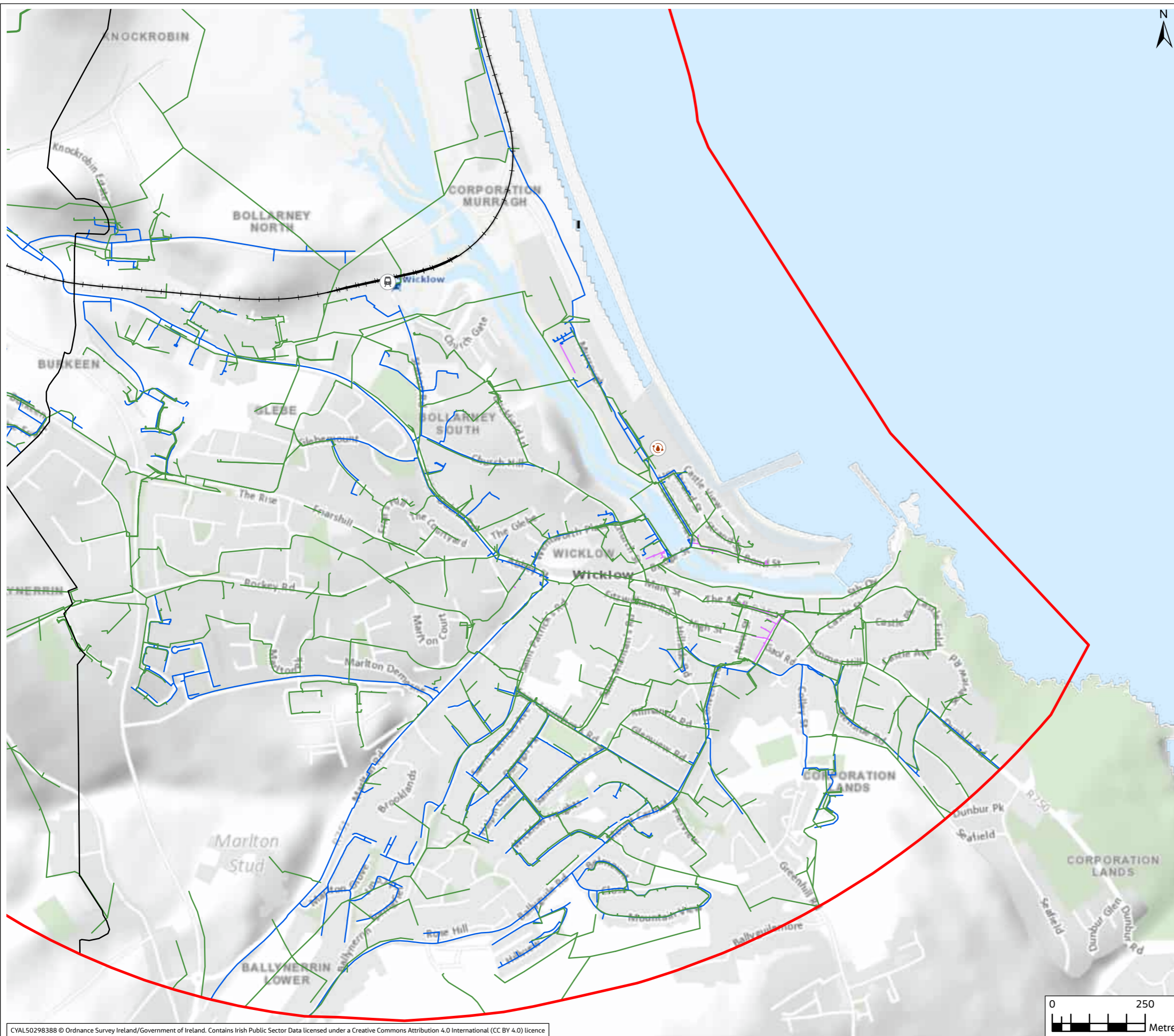
ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-8006	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

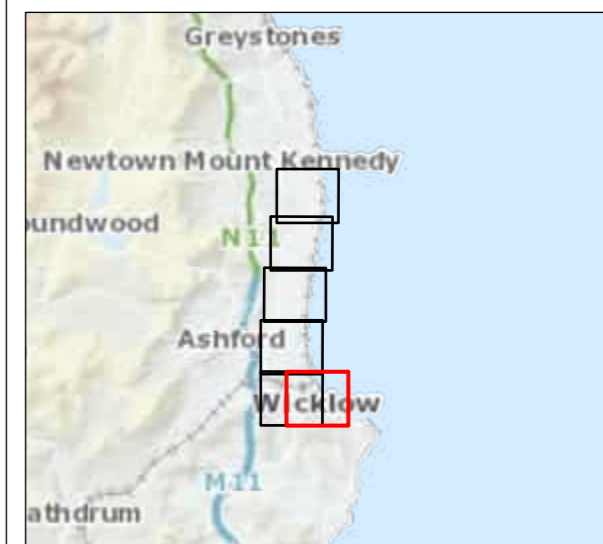


FIGURE 8.1



Legend

- CCA6.2 Study Area
- Railway Station
- Railway Network Centreline
- Wastewater Plant
- ESB Network**
- High Voltage Station
- High Voltage
- Medium Voltage
- GNI Network**
- MP
- LP



V01	Mar 2024	FOR REVIEW	TC	PR	JD	DK
Rev	Date	Purpose of revision	Drawn	Check'd	Rev'd	Appr'd

Client



Designer



Merrion House, Merrion Rd, Dublin 4,
Ireland, D04 R2C5. Tel: +353 12695666
www.jacobs.com

Project

7694 EAST COAST RAILWAY
INFRASTRUCTURE PROTECTION PROJECTS

Drawing Title

Figure 8.1
CCA6.2- Environmental Constraints - Material Assets
(Page 6 of 6)

Drawing Status

ISSUE FOR ACCEPTANCE

State Code	Phase 2	DO NOT SCALE
Scale @ A3	1:10,000	
Jacobs No.	D3658301	Rev V01
Client No.	8093	
Drawing No.	7964-CCA6_2-P2-DWG-EV-JAC-8007	

© Copyright 2023 Jacobs Engineering Ireland Limited. The concepts and information contained in this document are the property of Jacobs. Use or copying of this document in whole or in part without the written permission of Jacobs constitutes an infringement of copyright. Limitation: This drawing has been prepared on behalf of, and for the exclusive use of Jacobs' Client, and is subject to, and issued in accordance with, the provisions of the contract between Jacobs and the Client. Jacobs accepts no liability or responsibility whatsoever for, or in respect of, any use of, or reliance upon, this drawing by any third party.

Path: \\gblon001\GISProj\03658300_ECRPP\Ar\GIS\019_Environmental_Constraints_Report\008_Material_Assets\008_Figure_8.1_CCA6.2_Material_Assets_v1.aprx

