Environmental Impact Assessment – Scoping Report

MarramWind Offshore Wind Farm

Appendix 1A: Figures (Chapter 6: Section 6.1 to Section 6.3)

MarramWind

A joint venture between ScottishPower and Shell UK

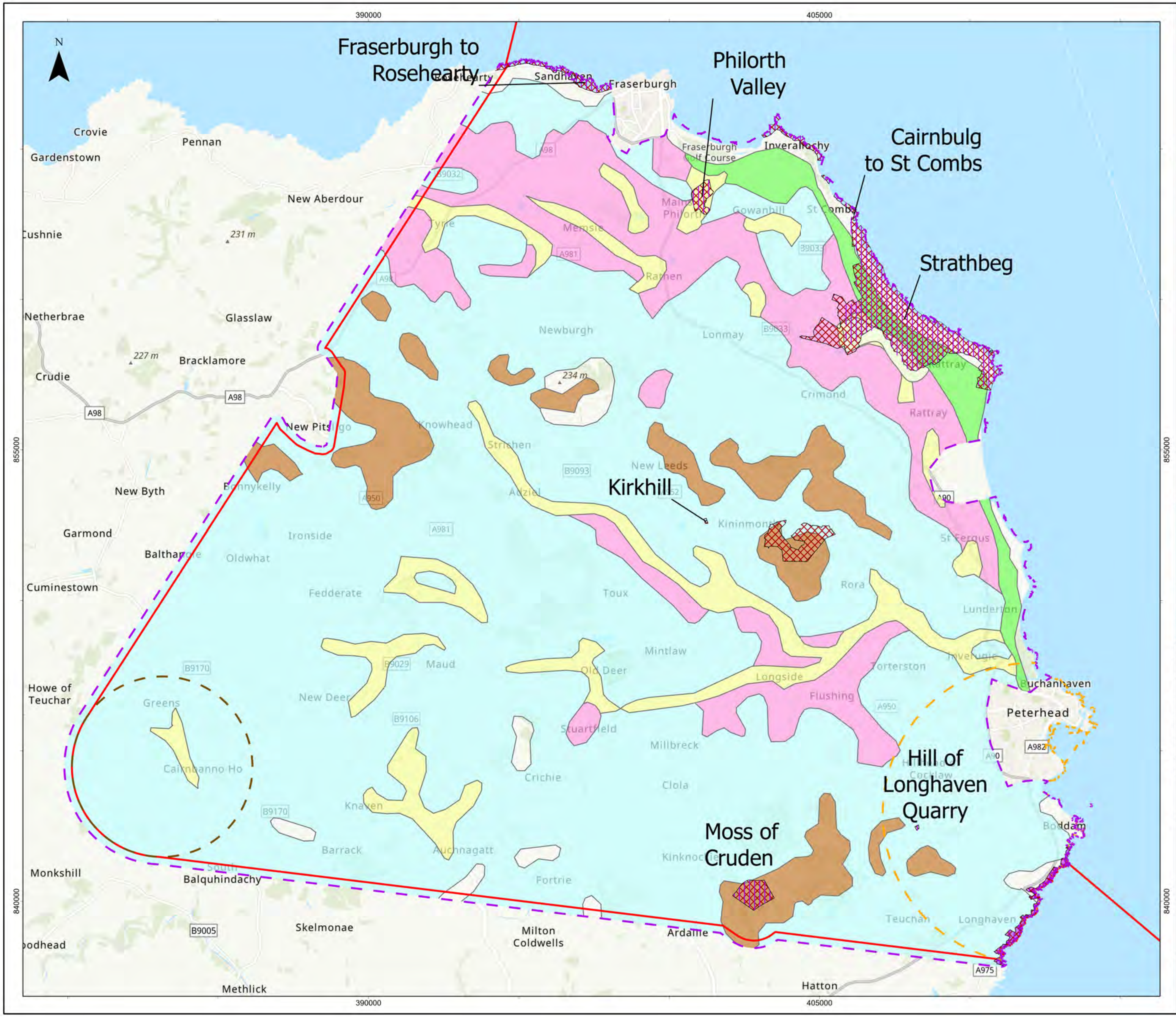
January 2023

SCOTTISHPOWER

Appendix 1A: Figures

(Chapter 6: Section 6.1 to Section 6.3)

Contents



Scoping Boundary
Ground conditions and contamination study area
New Deer onshore substation search area - contingent point of connection remaining 1.5GW
Peterhead onshore substation search area - base case point of connection for up to 3GW
Special Areas of Conservation (SACs)
Geological Conservation Review Sites
Sites of Special Scientific Interest (SSSIs)
Superficial Geology (1:625,000k)
Alluvium - clay, silt and sand
Blown sand
Glacial sand and gravel - sand and gravel
Peat
Raised marine deposits (undifferentiated) – sand and gravel
Till - diamicton
Drift geology not mapped - unknown lithology

0 5 Kilometres

REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER
5	21/12/2022	SS	AMc	MW	LO
4	16/12/2022	LT	AMc	MW	LO
3	22/11/2022	EH	AMc	MW	LO

DRAWING NUMBER 808368-WOOD-IA-SC-FG-G2-64603a

DATUM OSGB 1936 | PROJECTION British National Grid

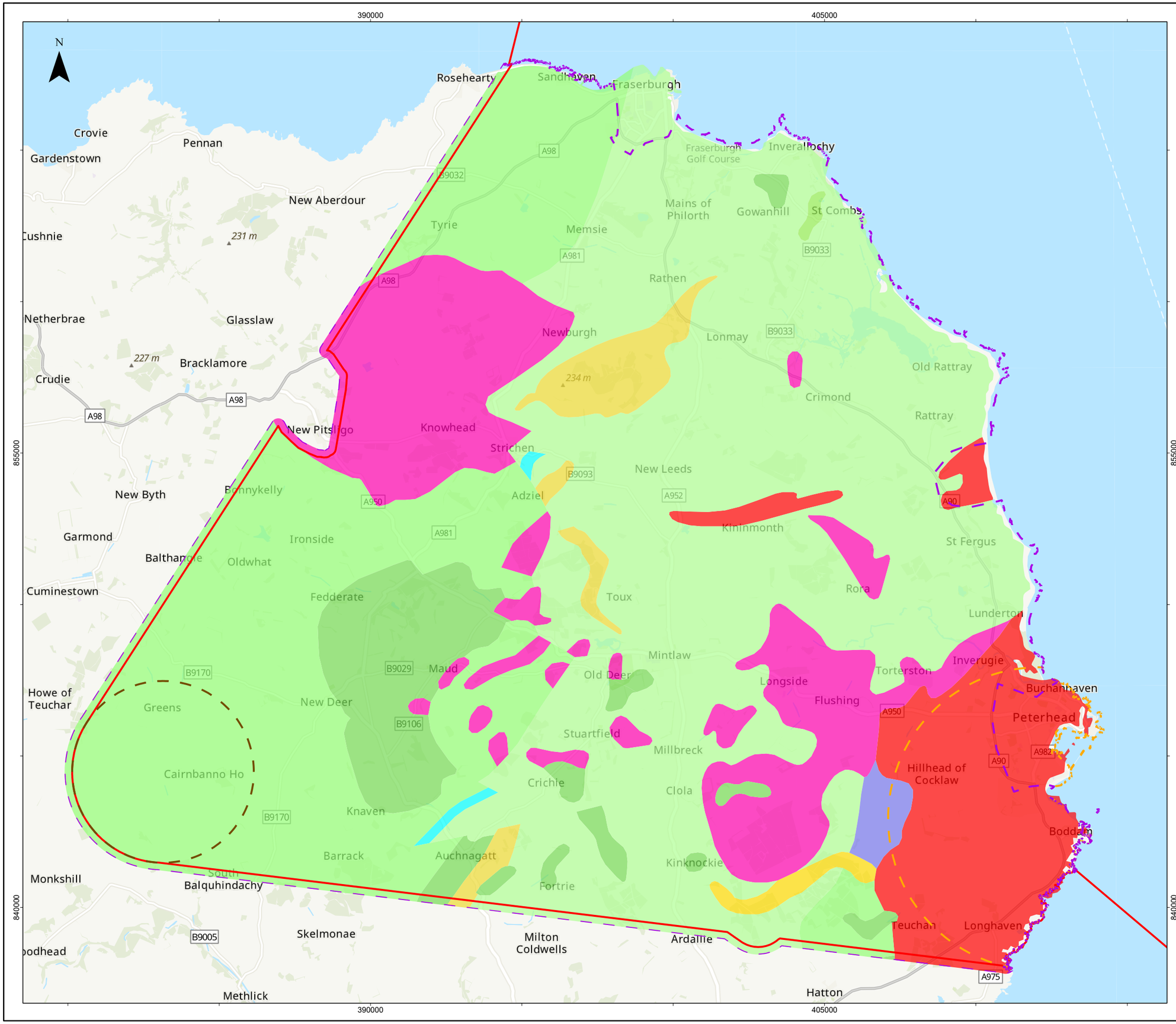
SCALE 1:120,000 | PAGE SIZE A3

PROJECT TITLE
MarramWind

DRAWING TITLE
Figure 6.1.1a Superficial geology and geological conservation sites

NOT TO BE USED FOR NAVIGATION

wsp MarramWind



- Scoping Boundary
- Ground conditions and contamination study area
- New Deer onshore substation search area – contingent point of connection for remaining 1.5GW
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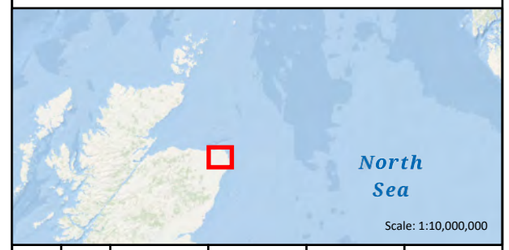
- Special Areas of Conservation (SACs)
- Sites of Special Scientific Interest (SSSIs)
- Geological Conservation Review Sites

BGS 625K Bedrock Geology

- Neogene rocks (undifferentiated) - gravel, sand, silt and clay
- Lias group - mudstone, siltstone, limestone and sandstone
- New red sandstone supergroup - sandstone, breccia and conglomerate
- Upper old red sandstone - conglomerate, sandstone, siltstone and mudstone
- Middle old red sandstone (undifferentiated) - conglomerate, sandstone, siltstone and mudstone
- Lower old red sandstone - conglomerate, sandstone, siltstone and mudstone
- Old red sandstone supergroup - conglomerate, sandstone, siltstone and mudstone
- Unnamed igneous intrusion, late silurian to early devonian - felsic-rock
- Unnamed igneous intrusion, late silurian to early devonian - mafic igneous-rock
- Unnamed igneous intrusion, ordovician to silurian - felsic-rock
- Unnamed igneous intrusion, ordovician to silurian - mafic igneous-rock
- Unnamed igneous intrusion, ordovician to silurian - ultramafitite
- Appin group - metalimestone
- Appin group - graphitic pelite, calcareous pelite, calcsilicate-rock and psammite
- Appin group - quartzite
- Argyll group - metalimestone
- Argyll group - psammite, semipelite and pelite
- Argyll group - quartzite
- Grampian group - psammite and semipelite
- Grampian group - quartzite
- Southern highland group - pelite
- Southern highland group - psammite and pelite
- Unnamed extrusive rocks, neoproterozoic - mafic lava and mafic tuff
- Unnamed igneous intrusion, neoproterozoic - felsic-rock
- Unnamed igneous intrusion, neoproterozoic - mafic igneous-rock

0 5 Kilometres



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4	16/12/2022	LT	AMc	MW	LO
3	22/11/2022	EH	AMc	MW	LO

DRAWING NUMBER	808368-WOOD-IA-SC-FG-G2-64603b		
DATUM	OSGB 1936	PROJECTION	British National Grid
SCALE	1:120,000	PAGE SIZE	A3

PROJECT TITLE: MarramWind

DRAWING TITLE

Figure 6.1.1b Bedrock geology and geological conservation sites

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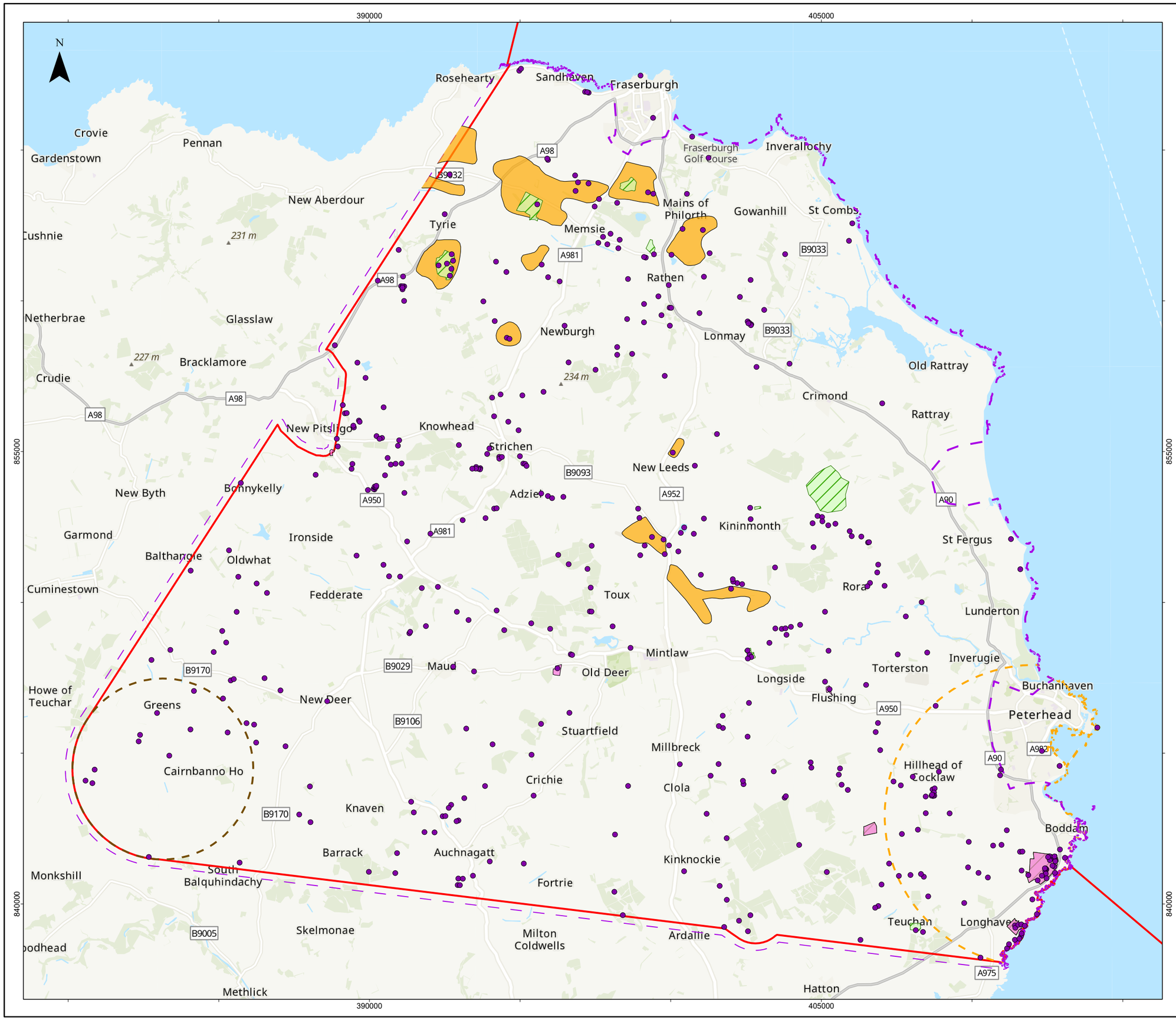
wsp

MarramWind
A joint venture between ScottishPower and Shell UK



Scoping Boundary

Ground conditions and contamination study area

New Deer onshore substation search area - contingent point of connection remaining 1.5GW

Peterhead onshore substation search area - base case point of connection for up to 3GW

Minerals safeguarding areas

Mineral search area

Active mineral sites

Disused/historical mineral sites

REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER
5	21/12/2022	SS	AMc	MW	LO
4	16/12/2022	LT	AMc	MW	LO
3	22/11/2022	EH	AMc	MW	LO

DRAWING NUMBER: 808368-WOOD-IA-SC-FG-G2-38494

DATUM: OSGB 1936 | PROJECTION: British National Grid

SCALE: 1:120,000 | PAGE SIZE: A3

PROJECT TITLE: MarramWind

DRAWING TITLE

Figure 6.1.2 Mineral Sites

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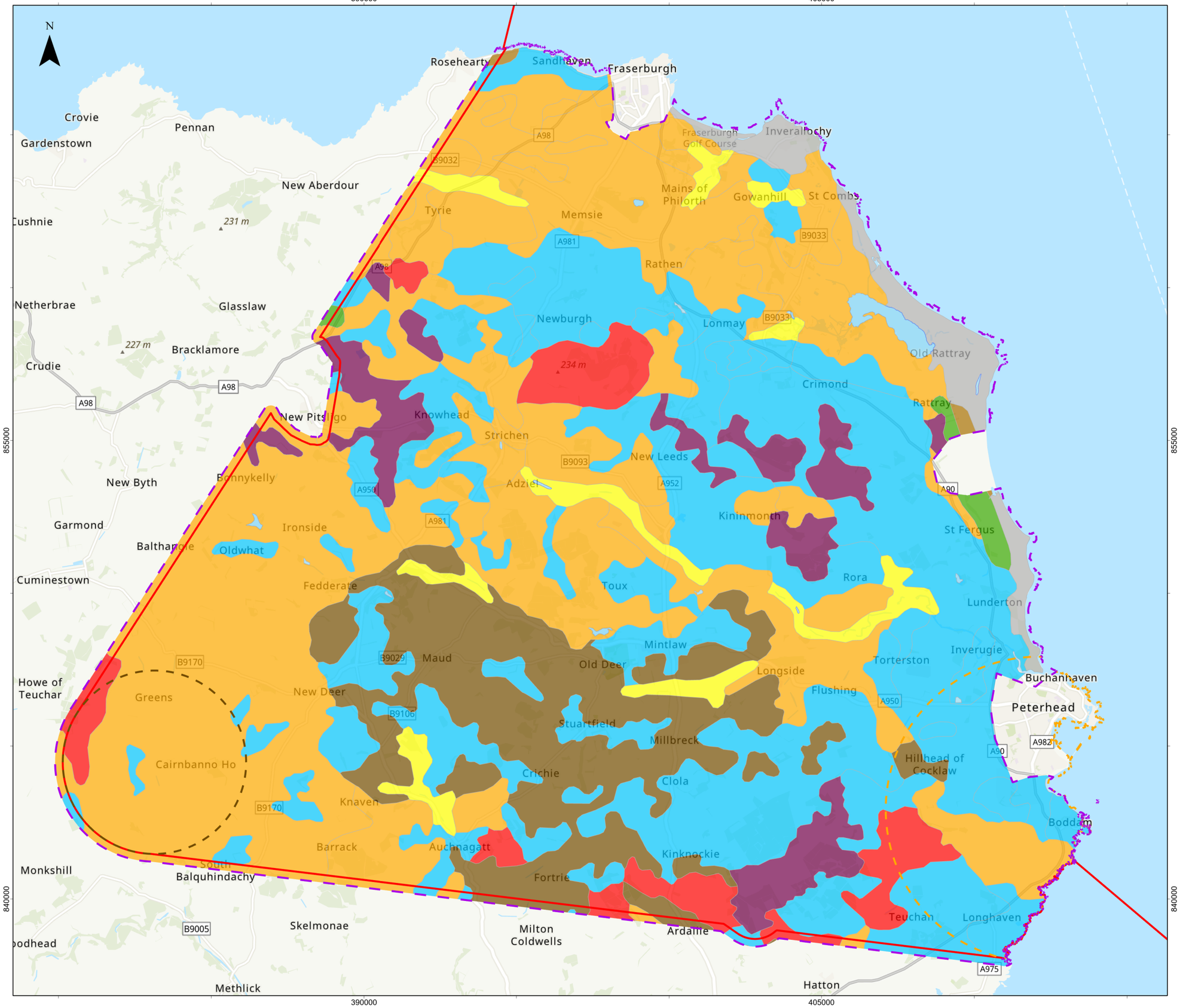


Scoping Boundary

Ground conditions and contamination study area

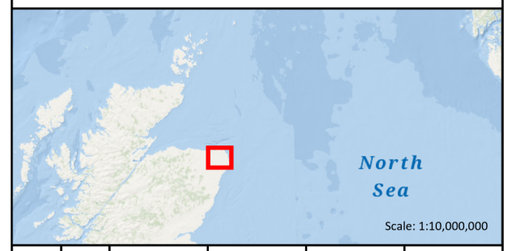
New Deer onshore substation search area - contingent point of connection remaining 1.5GW

Peterhead onshore substation search area - base case point of connection for up to 3GW

National Soil Map of Scotland

- Alluvial soils
- Brown soils
- Calcareous soils
- Immature soils
- Lochs
- Mineral gleys
- Mineral podzols
- Montane soils
- Peat
- Peaty gleys
- Peaty podzols

0 5 Kilometres



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SCALE	1:120,000	PAGE SIZE	A3

PROJECT TITLE

MarramWind

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Figure 6.1.3 Soil Map

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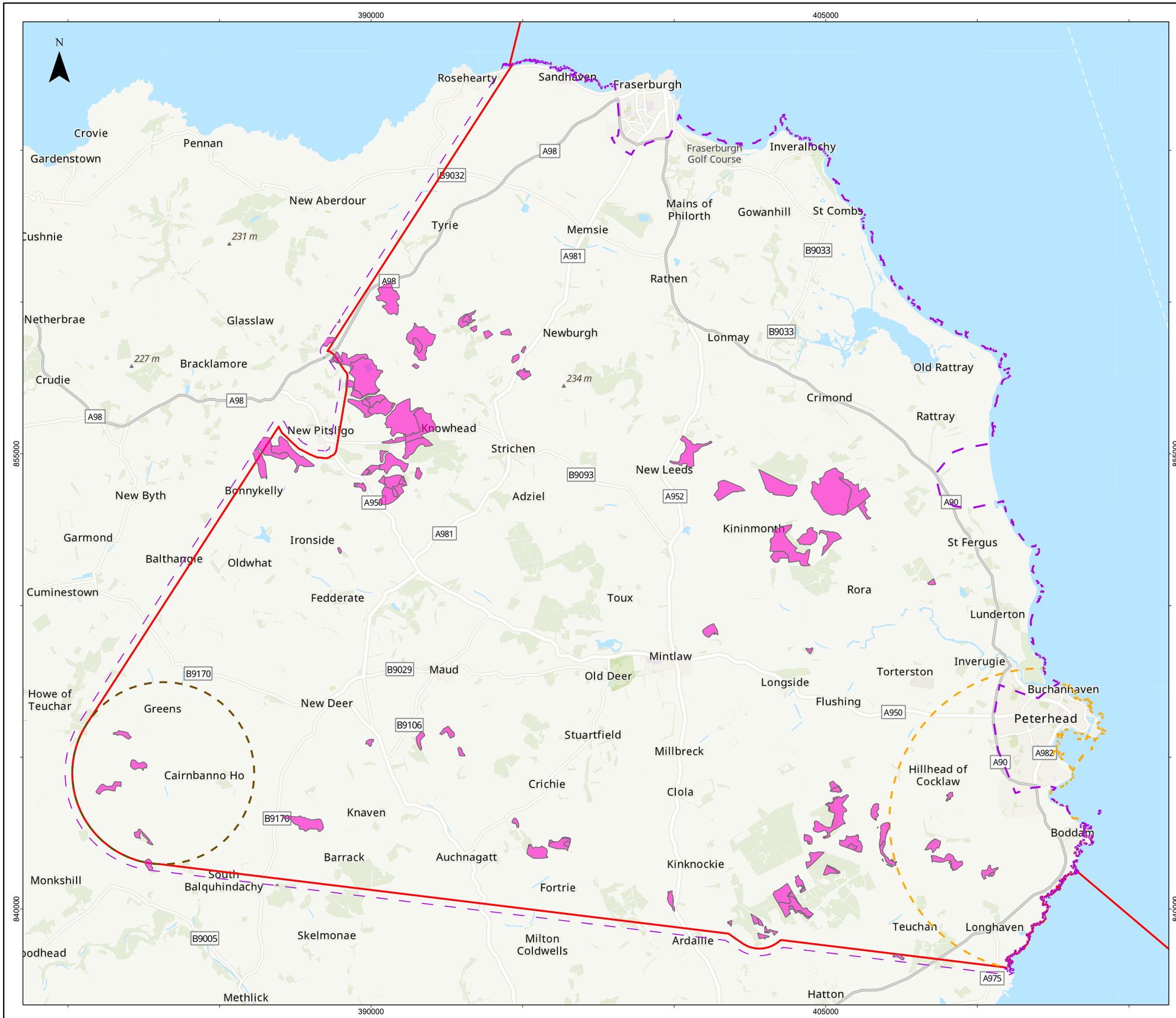

Scoping Boundary

Ground conditions and contamination study area

New Deer onshore substation search area - contingent point of connection remaining 1.5GW

Peterhead onshore substation search area - base case point of connection for up to 3GW

Carbon and peatland classes

Class 1 - Nationally important carbon-rich soils, deep peat and priority peatland habitat. Areas likely to be of high conservation value

REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER
5	21/12/2022	SS	AMc	MW	LO
4	16/12/2022	LT	AMc	MW	LO
3	22/11/2022	EH	AMc	MW	LO

DRAWING NUMBER: 808368-WOOD-IA-SC-FG-G2-70560

DATUM: OSGB 1936 | PROJECTION: British National Grid

SCALE: 1:120,000 | PAGE SIZE: A3

PROJECT TITLE: MarramWind

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Figure 6.1.4 Carbon and peatland

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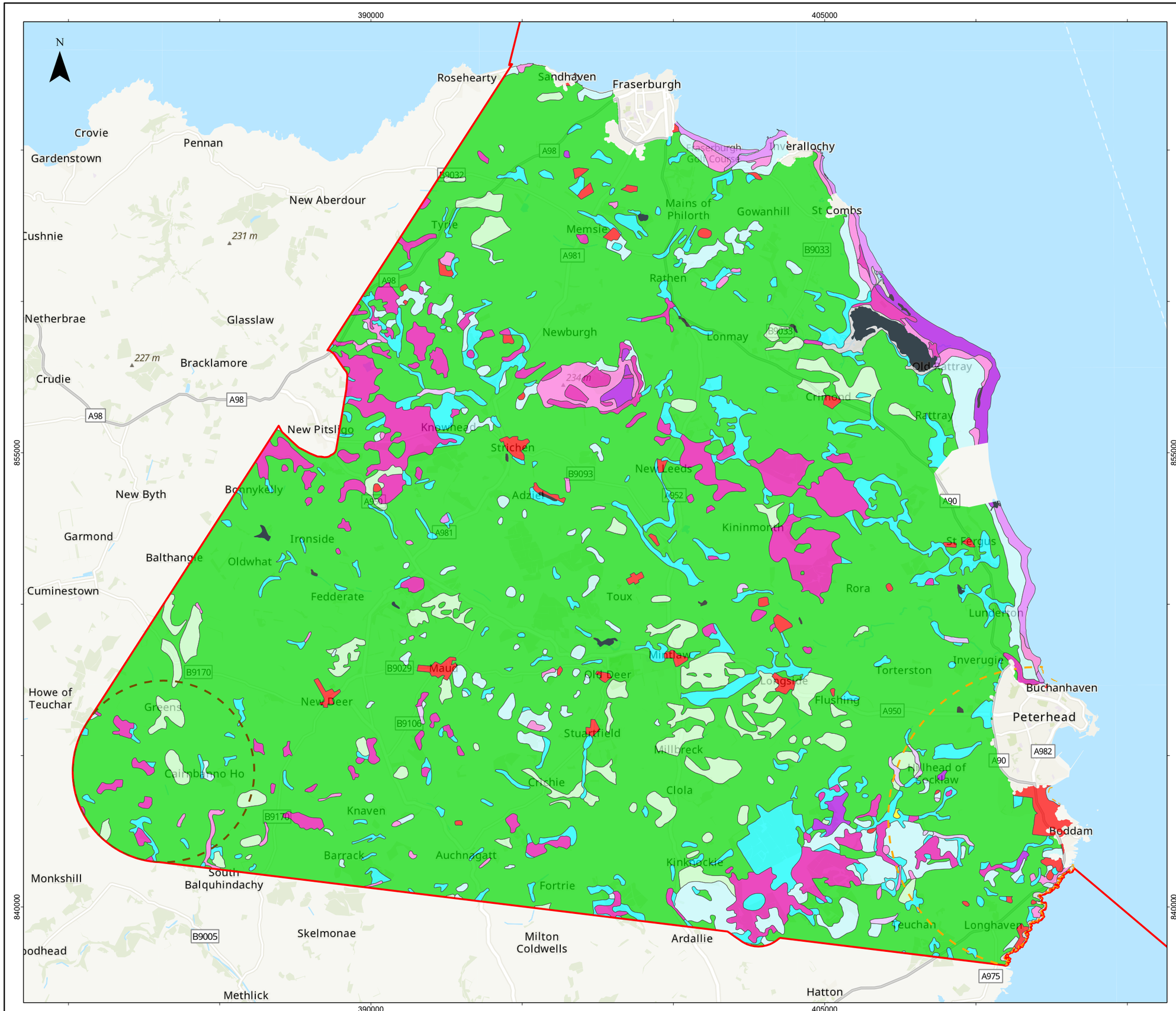


Scoping Boundary

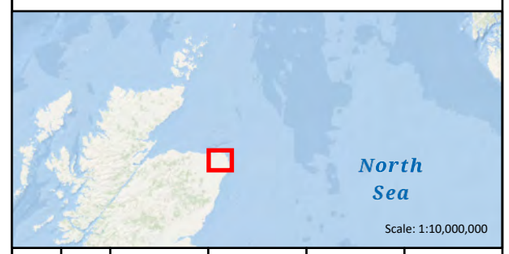
Peterhead substation search area

New Deer substation search area

Land Capability Classification for Agriculture (50K)

- Class 2 - Land capable of producing a wide range of crops
- Class 3.1 - Land capable of producing consistently high yields of a narrow range of crops and/ or moderate yields of a wider range. Short grass leys are common
- Class 3.2 - Land capable of average production though high yields of barley, oats and grass can be obtained. Grass leys are common
- Class 4.1 - Land capable of producing a narrow range of crops, primarily grassland with short arable breaks of forage crops and cereal
- Class 4.2 - Land capable of producing a narrow range of crops, primarily on grassland with short arable breaks of forage crops
- Class 5.1 - Land capable of use as improved grassland. Few problems with pasture establishment and maintenance and potential high yields
- Class 5.2 - Land capable of use as improved grassland. Few problems with pasture establishment but may be difficult to maintain
- Class 5.3 - Land capable of use as improved grassland. Pasture deteriorates quickly
- Class 6.1 - Land capable of use as rough grazings with a high proportion of palatable plants
- Class 6.2 - Land capable of use as rough grazings with moderate quality plants
- Class 6.3 - Land capable of use as rough grazings with low quality plants
- Class 7 - Land of very limited agricultural value
- Built-up area
- Inland water
- Uncoded islands

0 5 Kilometres



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3	22/11/2022	EH	AMc	MW	LO
2	25/10/2022	EH	AMc	MW	LO

DRAWING NUMBER 808368-WOOD-IA-SC-FG-G2-91307

DATUM	OSGB 1936	PROJECTION	British National Grid
SCALE	1:120,000	PAGE SIZE	A3

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Figure 6.1.5 Land Capability for Agriculture

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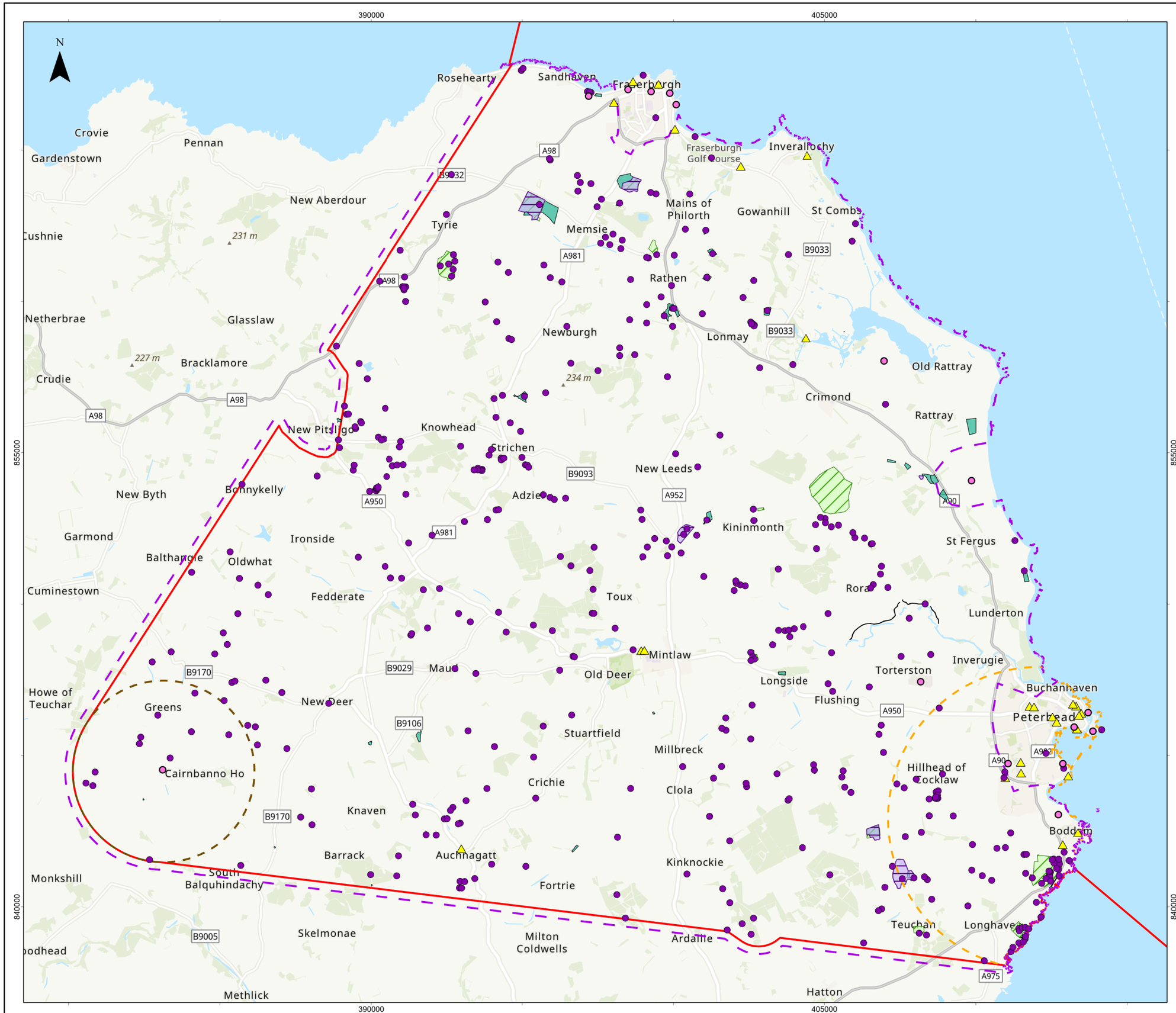


Scoping Boundary

Ground conditions and contamination study area

Peterhead onshore substation search area - base case point of connection for up to 3GW

New Deer onshore substation search area - contingent point of connection remaining 1.5GW

Infilled canal

Historic landfill

Active mineral sites

Active landfill

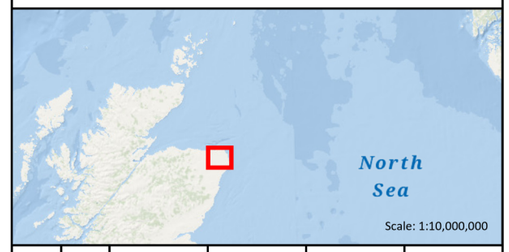
Current and historical industrial land uses

Inactive mineral quarries

Vacant and derelict land within the search area

Note: This figure does not show all potential contamination sources of land contamination within the study area, a Phase 1 Geoenvironmental Desk Study will be completed prior to submission of the EIA Report to identify potential sources based upon the latest design information and additional data review.

0 5 Kilometres



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4	16/12/2022	LT	AMc	MW	LO
3	31/10/2022	EH	AMc	MW	LO

DRAWING NUMBER: 808368-WOOD-IA-SC-FG-G2-8437

DATUM: OSGB 1936 | PROJECTION: British National Grid

SCALE: 1:120,000 | PAGE SIZE: A3

PROJECT TITLE: MarramWind

DRAWING TITLE

Figure 6.1.6 Land contamination and landfill

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REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER
10	09/11/2022	RE	AMc	MW	LO
9	21/10/2022	RE	AMc	MW	LO
8	20/10/2022	RE	AMc	MW	LO

DRAWING NUMBER	808368-WOOD-IA-SC-FG-W4-98103		
DATUM	OSGB 1936	PROJECTION	British National Grid
SCALE	1:175,000	PAGE SIZE	A3

PROJECT TITLE

MarramWind

DRAWING TITLE

Figure 6.3.1 WFD surface water bodies

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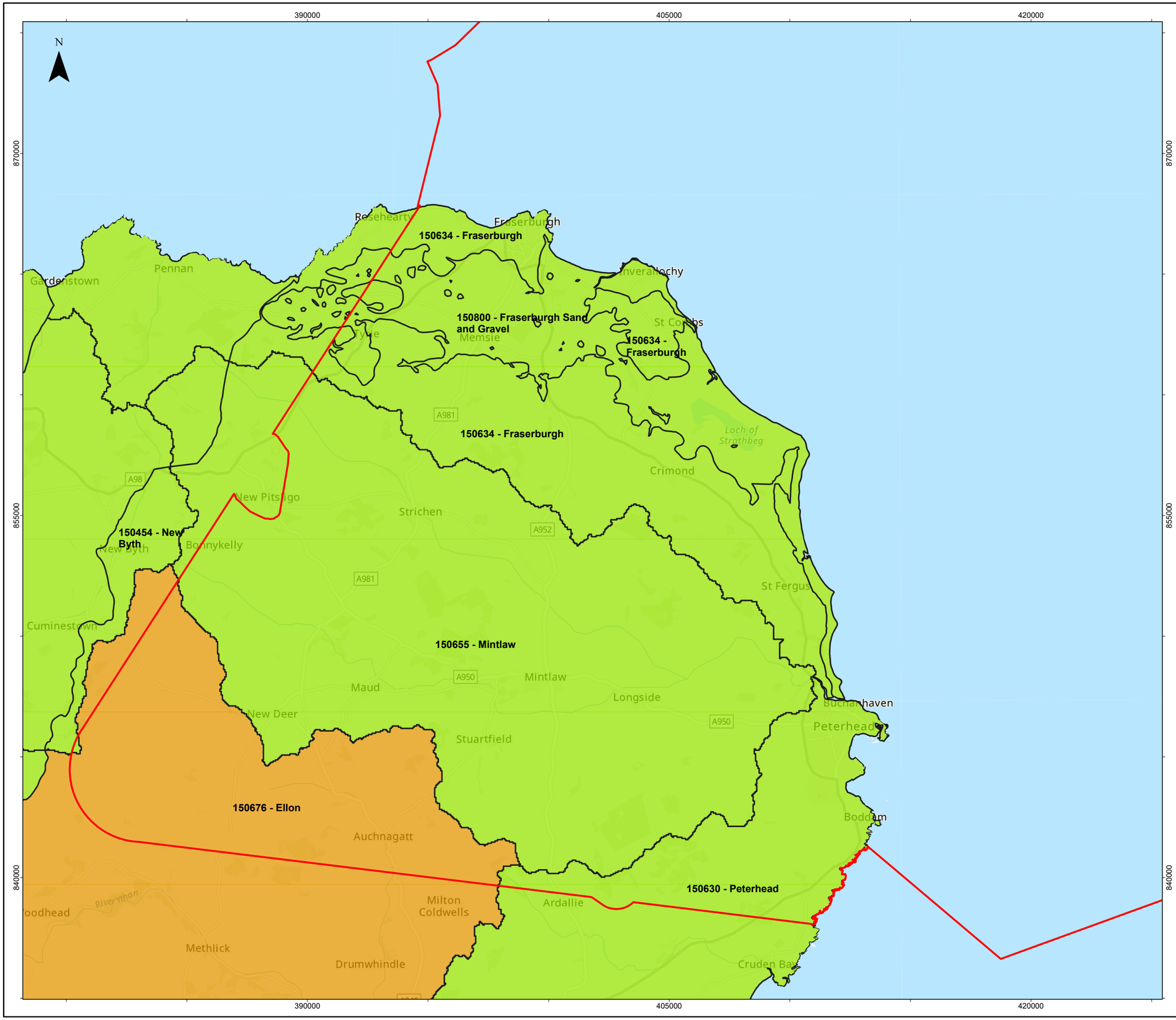


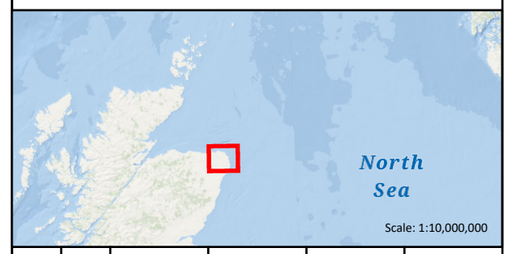
Scoping Boundary

WFD groundwater bodies

Good

Poor

0 5 Kilometres



REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER
7	09/11/2022	RE	AMc	MW	LO
6	27/10/2022	RE	AMc	MW	LO
5	07/10/2022	RE	AMc	MW	LO

DRAWING NUMBER 808368-WOOD-IA-SC-FG-W4-57156

DATUM	OSGB 1936	PROJECTION	British National Grid
SCALE	1:150,000	PAGE SIZE	A3

PROJECT TITLE

MarramWind

DRAWING TITLE

Figure 6.3.2 WFD groundwater bodies

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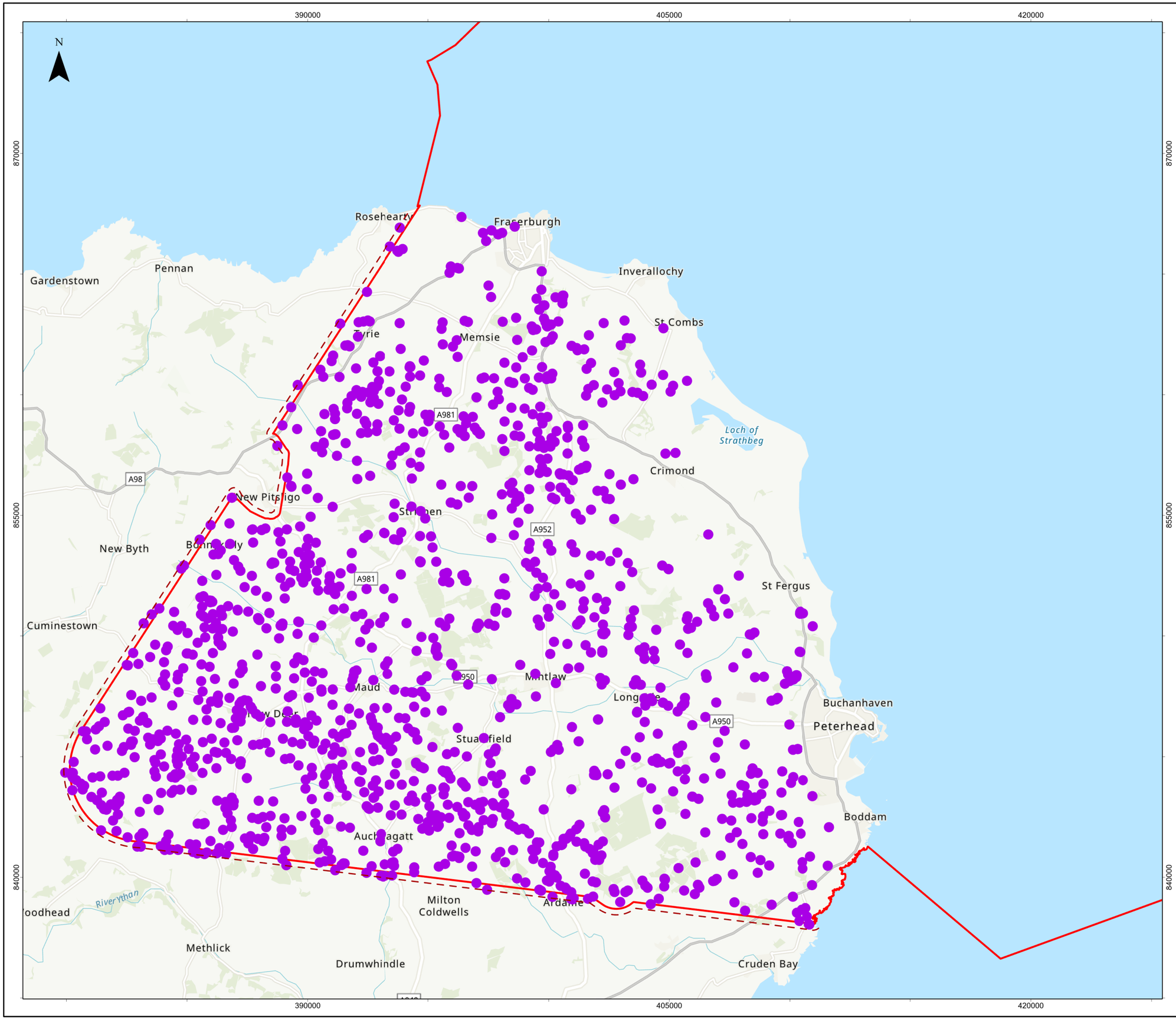
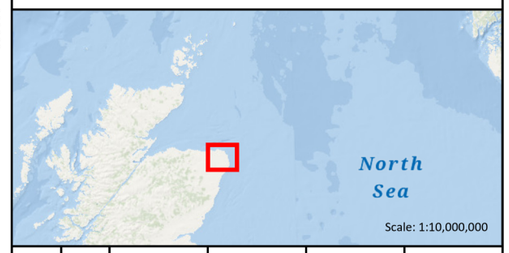


Scoping Boundary

250m Buffer Onshore Boundary

Private water supplies

0 5 Kilometres



REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER
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4	27/10/2022	RE	AMc	MW	LO
3	07/10/2022	RE	AMc	MW	LO

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DATUM OSGB 1936 | PROJECTION British National Grid

SCALE 1:150,000 | PAGE SIZE A3

PROJECT TITLE

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Figure 6.3.3 Indicative locations of private water supply locations - provided by Aberdeenshire Council

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REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER
5	09/11/2022	RE	AMc	MW	LO
4	27/09/2022	RE	AMc	MW	LO
3	23/09/2022	RE	AMc	MW	LO

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DATUM	OSGB 1936	PROJECTION	British National Grid
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PROJECT TITLE

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DRAWING TITLE

6.3.4 Scoping Boundary and fluvial risk areas

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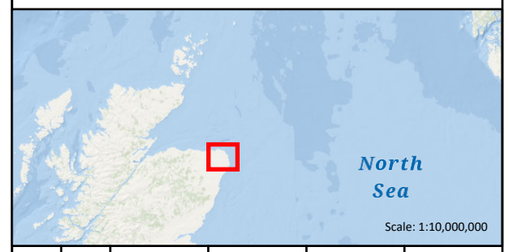
Scoping Boundary

10% annual exceedence probability

0.5% annual exceedence probability

0.1% annual exceedence probability

0 5 Kilometres



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4	27/09/2022	RE	AMc	MW	LO
3	23/09/2022	RE	AMc	MW	LO

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Figure 6.3.5 Scoping Boundary and coastal flood risk areas

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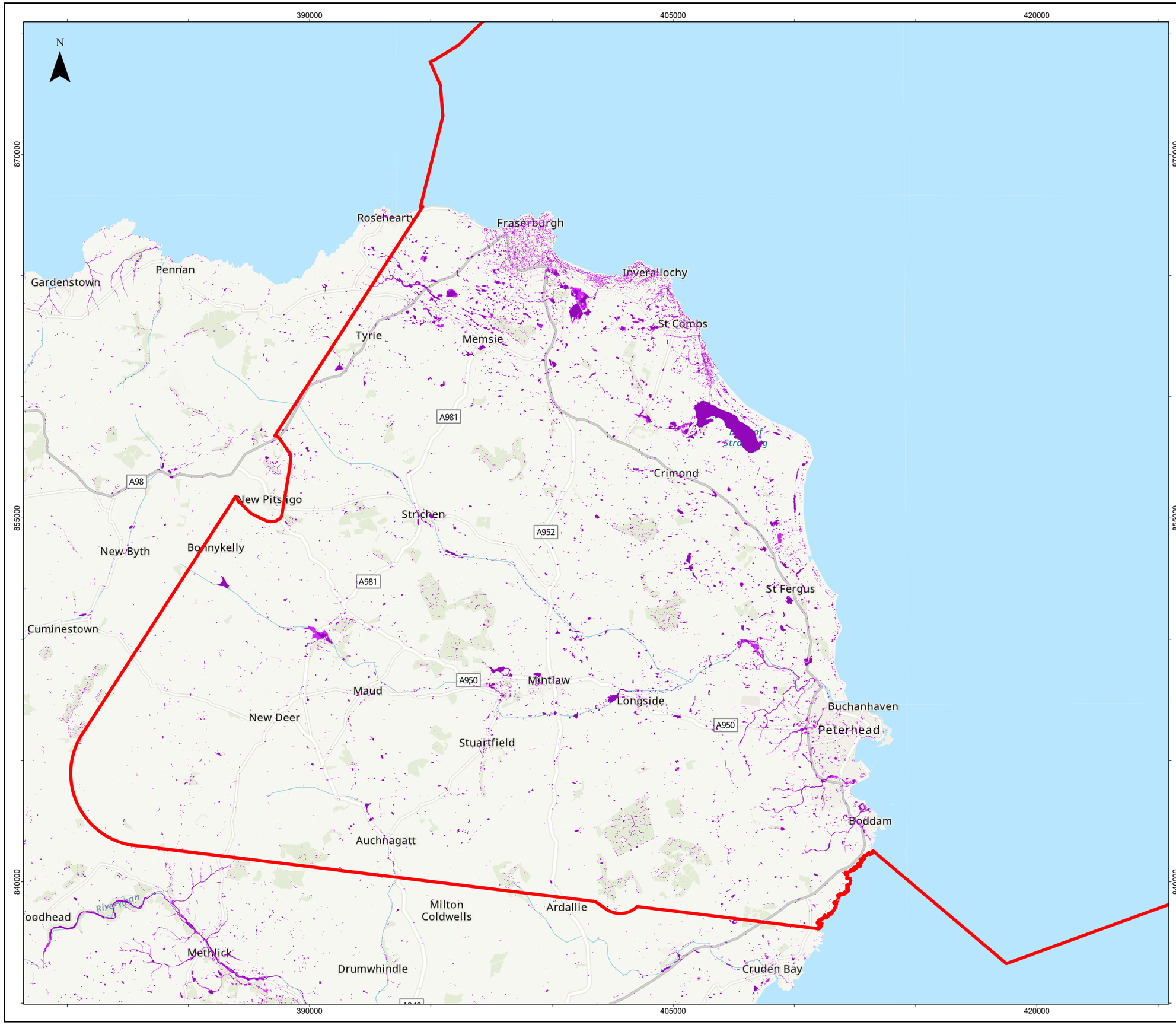

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3	23/09/2022	RE	AMc	MW	LO

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PROJECT TITLE

MarramWind

DRAWING TITLE

Figure 6.3.6 Scoping Boundary and surface water flood risk areas

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