



# Viking Wind Farm Construction Compound - Main Compound

June 2019

Volume 3: Figures

Environmental Impact Assessment Report



## **VOLUME 3 FIGURES: TABLE OF CONTENTS**

### **Chapter 1: Introduction**

Figure 1.1 Site Location

Figure 1.2 Proposed Development

Figure 1.3 Construction Compounds in relation to Viking Wind Farm

### **Chapter 2: Development Description**

Figure 2.1 Indicative Detailed Design Drawing

### **Chapter 4: Landscape and Visual Amenity**

Figure 4.1 Zone of Theoretical Visibility (ZTV) of Proposed Main Construction Compound

### **Chapter 5: Ornithology**

Figure 5.1 Breeding Bird Nominal Territory Centres

### **Chapter 6: Noise**

Figure 6.1 Noise Contour Plot (Scenario 1)

Figure 6.2 Noise Contour Plot (Scenario 2)

Figure 6.3 Noise Contour Plot (Scenario 3)

### **Chapter 8: Hydrology**

Figure 8.1 Surface Water Setting

Figure 8.2 Bedrock Geology

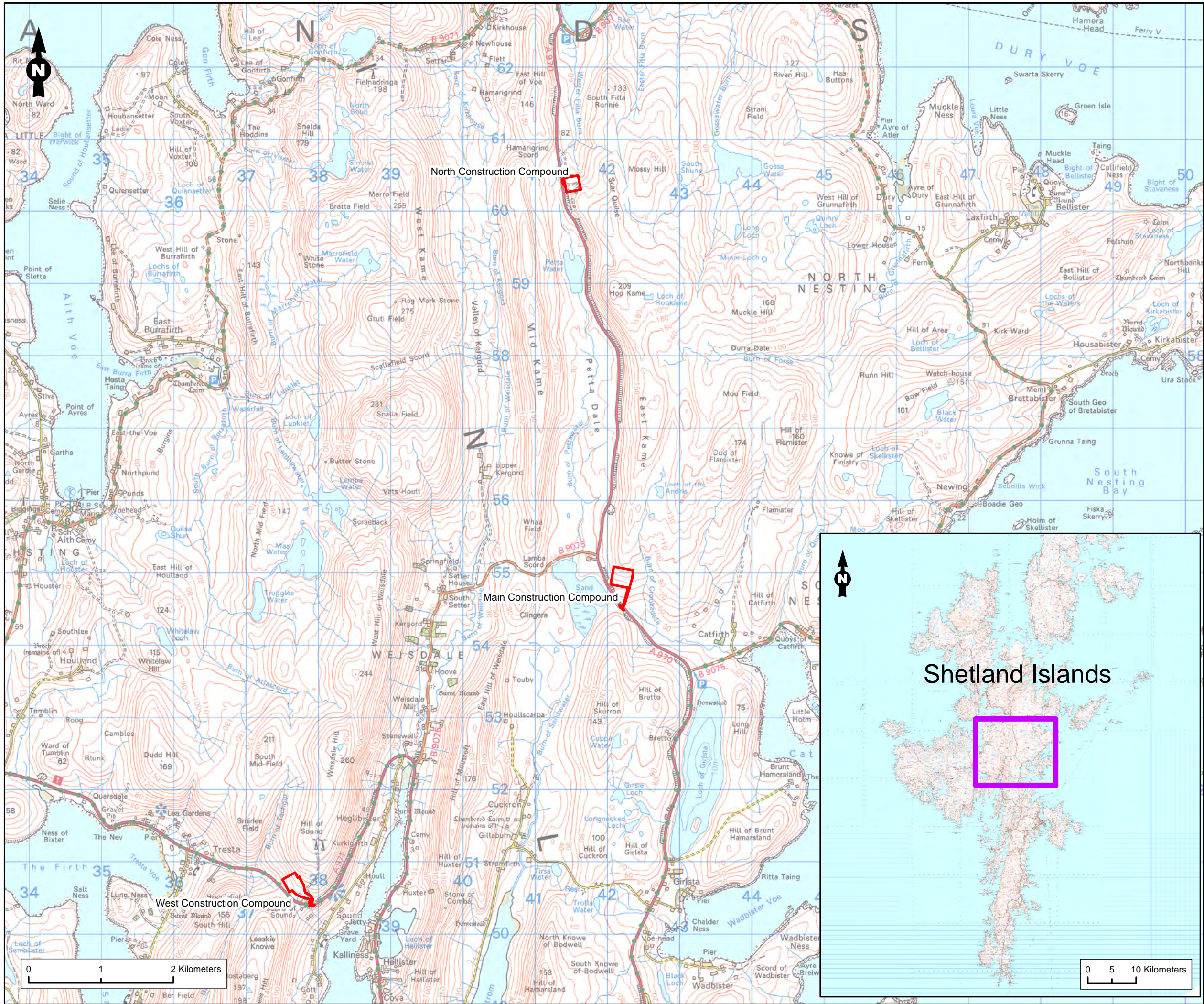
Figure 8.3 Superficial Geology

Figure 8.4 Hydrogeology

Figure 8.5 Private Water Supplies

### **Chapter 9: Cultural Heritage and Archaeology**

Figure 9.1 Cultural Heritage Assets



**Legend**



Site Boundary

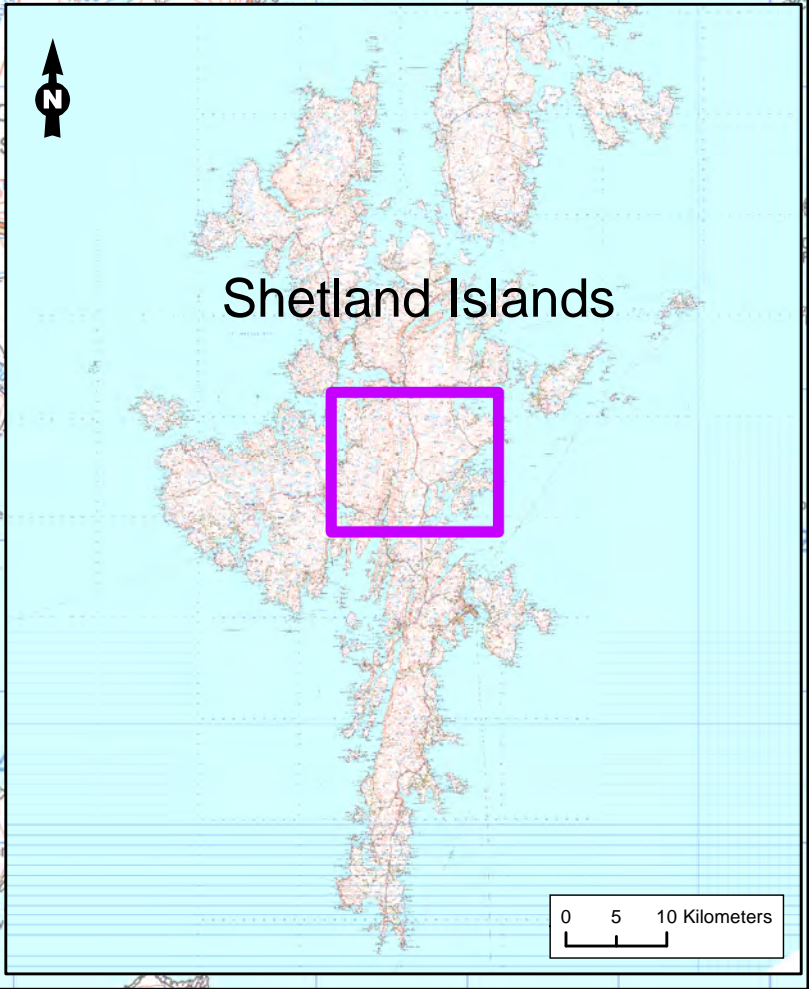
Note: The three Site Boundaries presented are separate from each other. Each shall have separate planning applications and will be assessed through separate Environmental Impact Assessment Reports.

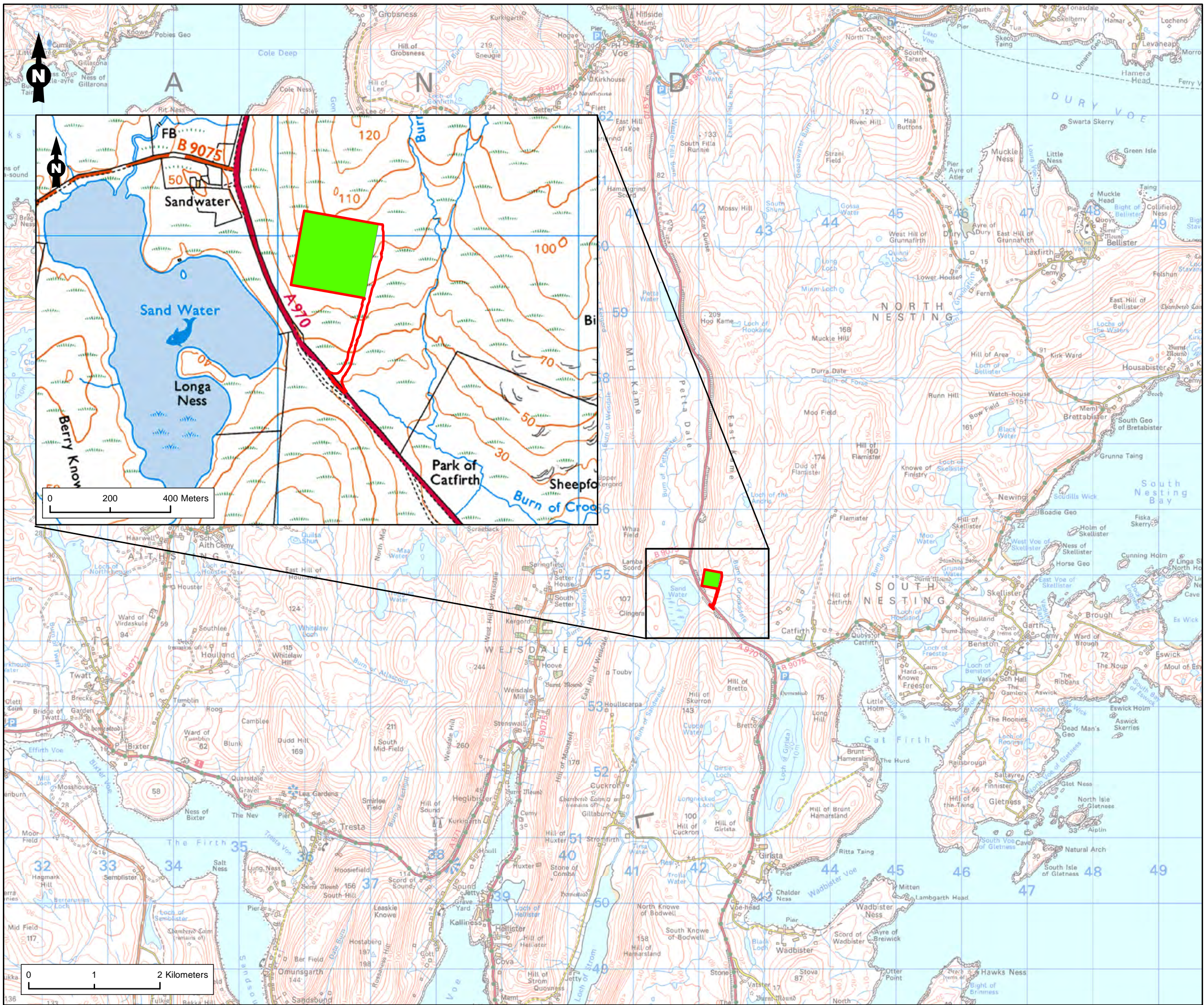
Figure Title  
Figure 1.1: Site Location

Project Name  
Viking Wind Farm Construction Compounds - EIA Report

Project Number 1700001846	Figure No. 1.1
Date September 2019	Prepared By FB
Scale 1:50,000 @A3	Issue 2

Client  
  






**Legend**

- Site Boundary
- Proposed Main Construction Compound (250m x 250m)

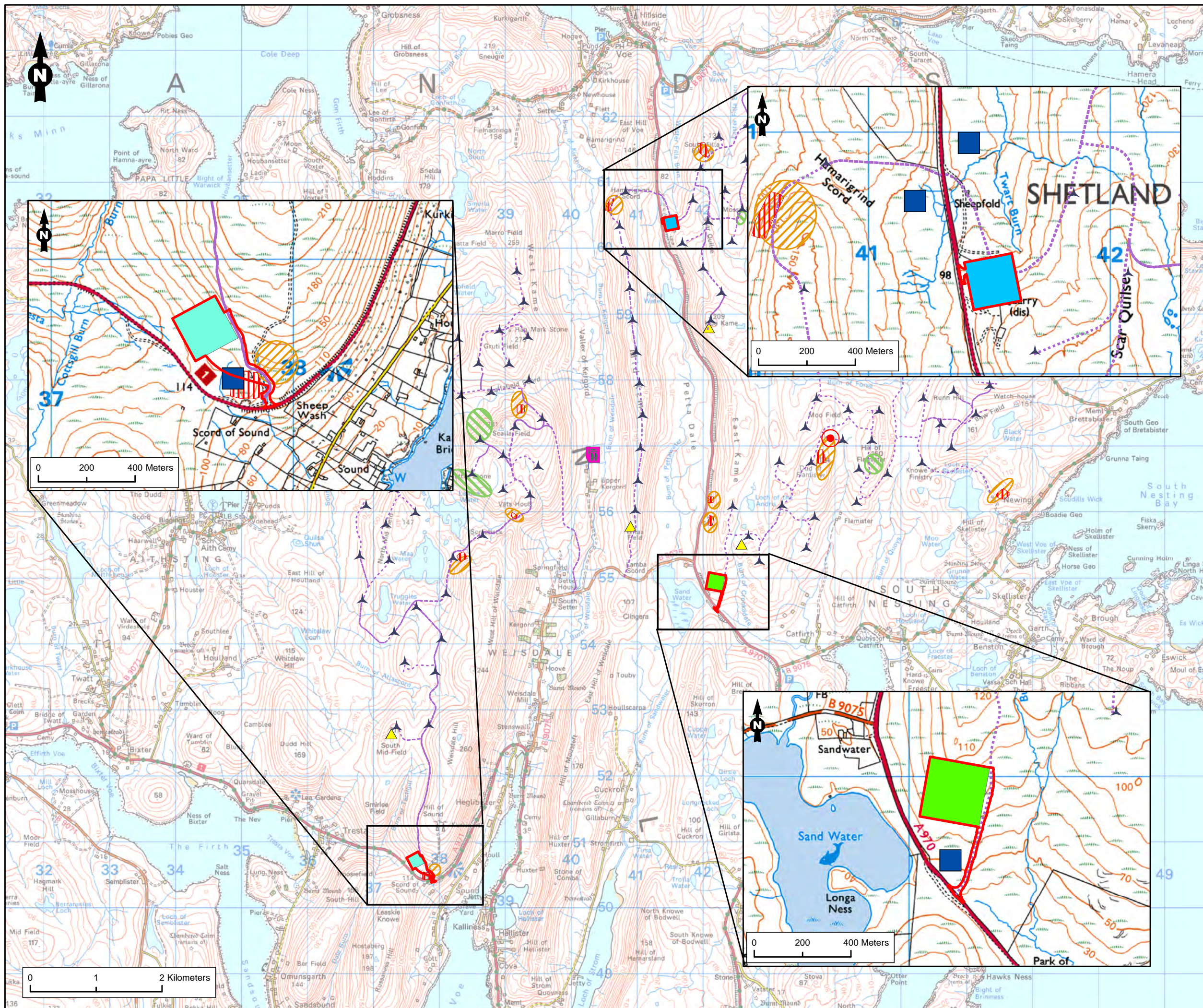
Figure Title  
Figure 1.2: Proposed Development

Project Name  
Viking Wind Farm Construction Compounds - EIA Report

Project Number 1700001846	Figure No. 1.2
Date September 2019	Prepared By FB/AC
Scale 1:55,000 @A3	Issue 2

Client



- Legend**
- Site Boundary
  - ▲ Turbines
  - - - Access Tracks
  - ▲ Permanent Met Masts
  - Substation
  - Converter Station Platform
  - Converter Station
  - Converter Station Access
  - Borrow Pit Extraction Area
  - Borrow Pit Search Area
  - Secondary Borrow Pit Search
  - Proposed Main Construction Compound (250m x 250m)
  - Proposed North Construction Compound (200m x 200m)
  - Proposed West Construction Compound (200m x 200m)

Note: The three Site Boundaries presented are separate from each other. Each shall have separate planning applications and will be assessed through separate Environmental Impact Assessment Reports.

Figure Title  
Figure 1.3: Construction Compounds in relation to Viking Wind Farm

Project Name  
Viking Wind Farm Construction Compounds - EIA Report

Project Number 1700001846	Figure No. 1.3
Date September 2019	Prepared By FB/AC
Scale 1:55,000 @A3	Issue 8

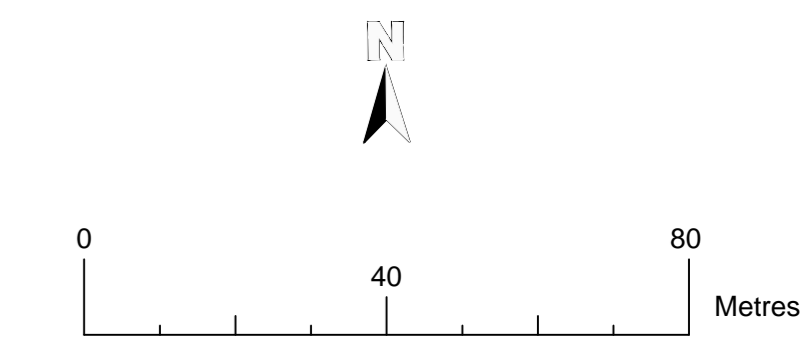




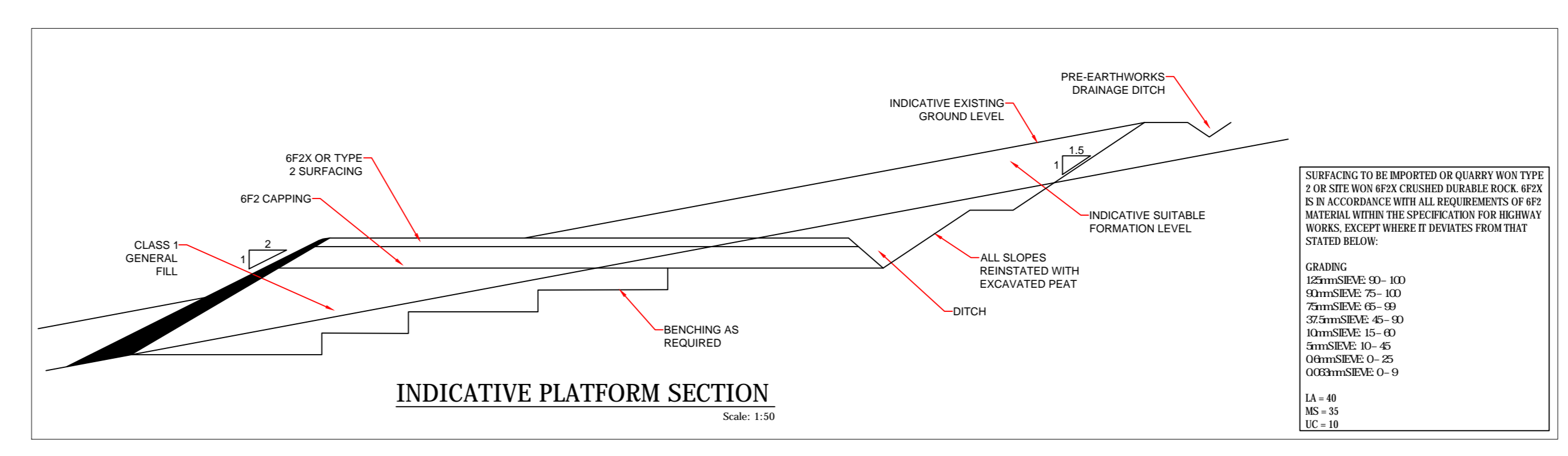
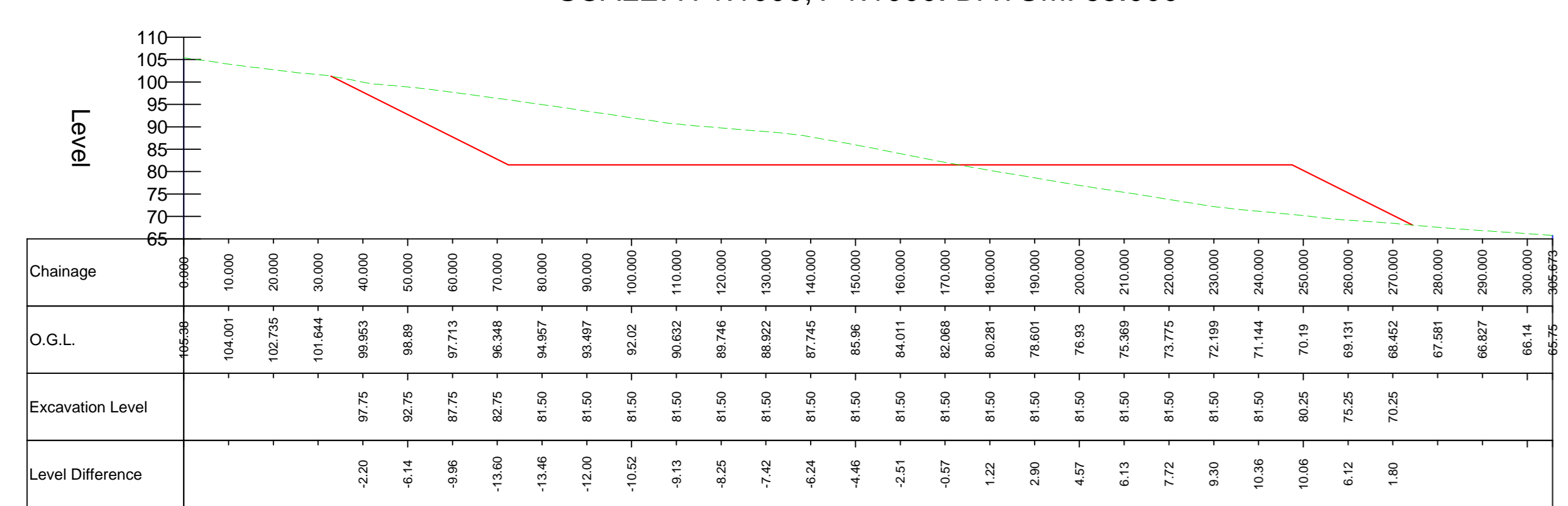
- LEGEND**
- SITE BOUNDARY
  - COMPOUND PLATFORM AREA & PROPOSED FENCING
  - CUT
  - FILL

- NOTES**
1. DIMENSIONS ARE IN METRES.
  2. PLATFORM EARTHWORKS DESIGN AND LAYOUT INDICATIVE ONLY. FINAL DESIGN BY VIKING CIVIL CONTRACTOR.
  3. FENCING TO BE PROVIDED TO SECURE COMPOUND(S) BY CIVIL CONTRACTOR (MAX 2.5m TALL).
  4. DRAINAGE DESIGN BY CIVIL CONTRACTOR AND AGREED WITH SEPA AND LOCAL AUTHORITY.
  5. ALL BUILDINGS PROPOSED (ANNOTATED AS OFFICE; TOILETS; KITCHEN; MEETING ROOM; SHOWER ROOM; FIRST AID; OPEN AREA/RECEPTION) WILL BE TEMPORARY AND MODULAR. THE MODULAR UNITS WILL BE OF TYPICAL DIMENSIONS AS SHOWN IN THIS DRAWING (INDICATIVE SIZE 6M LONG, 2.4M WIDE AND MAX 7M HIGH). EXACT MODULAR BUILDING SPECIFICATIONS WOULD VARY ACCORDING TO THE MANUFACTURER/SUPPLIER.
  6. CONNECTION FOR PRIVATE WATER SUPPLY TO BE AGREED WITH LOCAL AUTHORITY.
  7. TOWER LIGHTING TO BE PROVIDED AS REQUIRED.
  8. WHEEL-WASH FACILITIES TO BE PROVIDED.
  9. CABINS INSIDE THE COMPOUND AREA WILL BE TEMPORARY (E.G. OFFICES, TOILETS, KITCHENS ETC).
  10. COMPOUND PLATFORM SURFACED AS DESCRIBED IN INDICATIVE PLATFORM SECTION

RAMBOLL UPDATE TO  
SSE DRAWING  
08/07/19  
BY: AS



**MAINCOMPOUND - LONGSECTION**  
SCALE: H 1:1000, V 1:1000. DATUM: 65.000



Rev	Rev. Date	Purpose of revision	DL	Chk	Appd

**sse**

**VIKING WIND FARM**

**INDICATIVE MAIN COMPOUND**

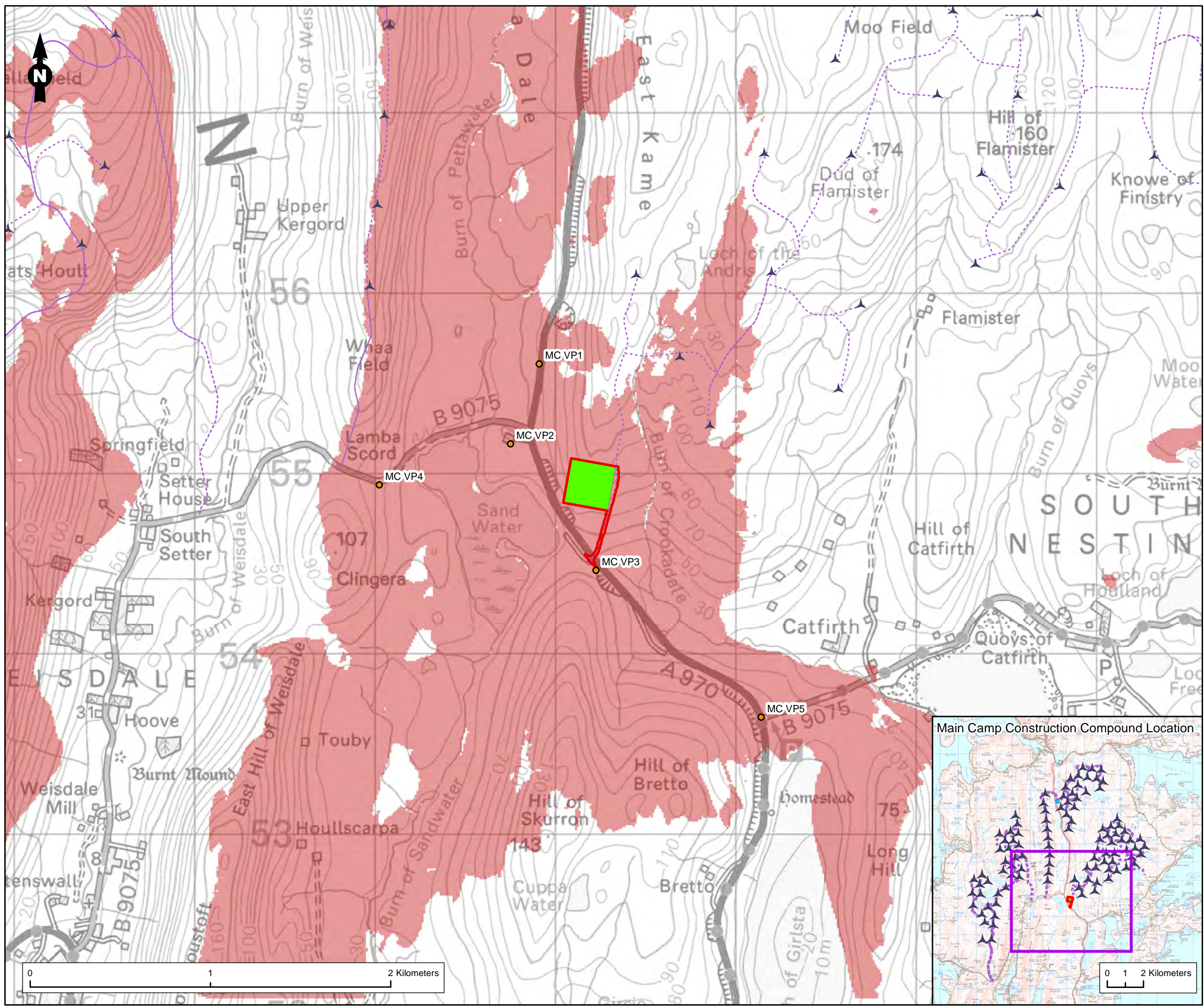
**FOR INFORMATION**

Scale: **1:1000 @ A0**

Lower Left Coord -  
Upper Right Coord -

Drawing number: **Figure 2.1 Indicative Detailed Design Drawing**

Revision: **RO**



**Legend**

- Site Boundary
- ▲ Viking Wind Farm Turbines
- LVIA Viewpoints
- AccessTracks
- Proposed Main Construction Compound (250 m x 250 m)
- Theoretical Visibility of Proposed Main Construction Compound

1. ZTV based on compound footprint of 250 m x 250 m.
2. The ZTV analysis does not take into account the screening effect of vegetation, buildings and other surface features.
3. Predicted visibility based on a viewer eye height 2m above ground.
4. Visibility calculated using Ordnance Survey Terrain 5 DTM on a 5m Grid.
5. Effect of earth curvature and light refraction is included.
6. Visibility calculated using a grid of points, 7m above the DTM surface, within the extent of the substation.

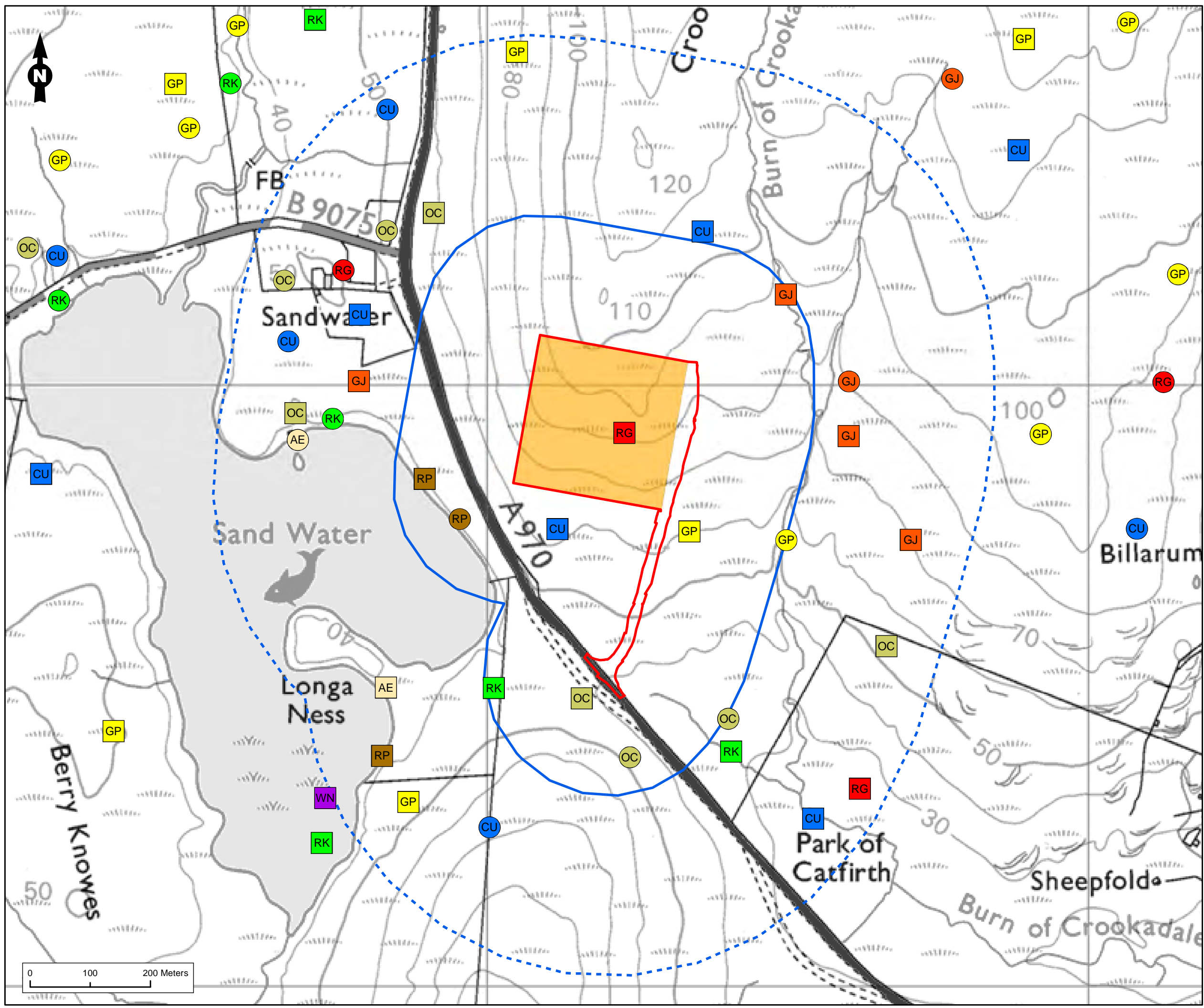
Figure Title  
**Figure 4.1: Zone of Theoretical Visibility (ZTV) of Proposed Main Construction Compound**

Project Name  
 Viking Wind Farm Main Construction Compound - EIA Report

Project Number 1700001846	Figure No. 4.1
Date September 2019	Prepared By AC/FB
Scale 1:20,000 @A3	Issue 1

Client





**Legend**

- Site Boundary
- Construction Compound
- Development Site 200m Buffer
- Development Site 500m Buffer

**Territories in 2019**

- AE, Arctic Tern
- CU, Curlew
- GJ, Greylag Goose
- GP, Golden Plover
- OC, Oystercatcher
- RG, Red Grouse
- RK, Redshank
- RP, Ringed Plover
- WN, Wigeon

**Territories in 2018**

- AE, Arctic Tern
- CU, Curlew
- GJ, Greylag Goose
- GP, Golden Plover
- OC, Oystercatcher
- RG, Red Grouse
- RK, Redshank
- RP, Ringed Plover

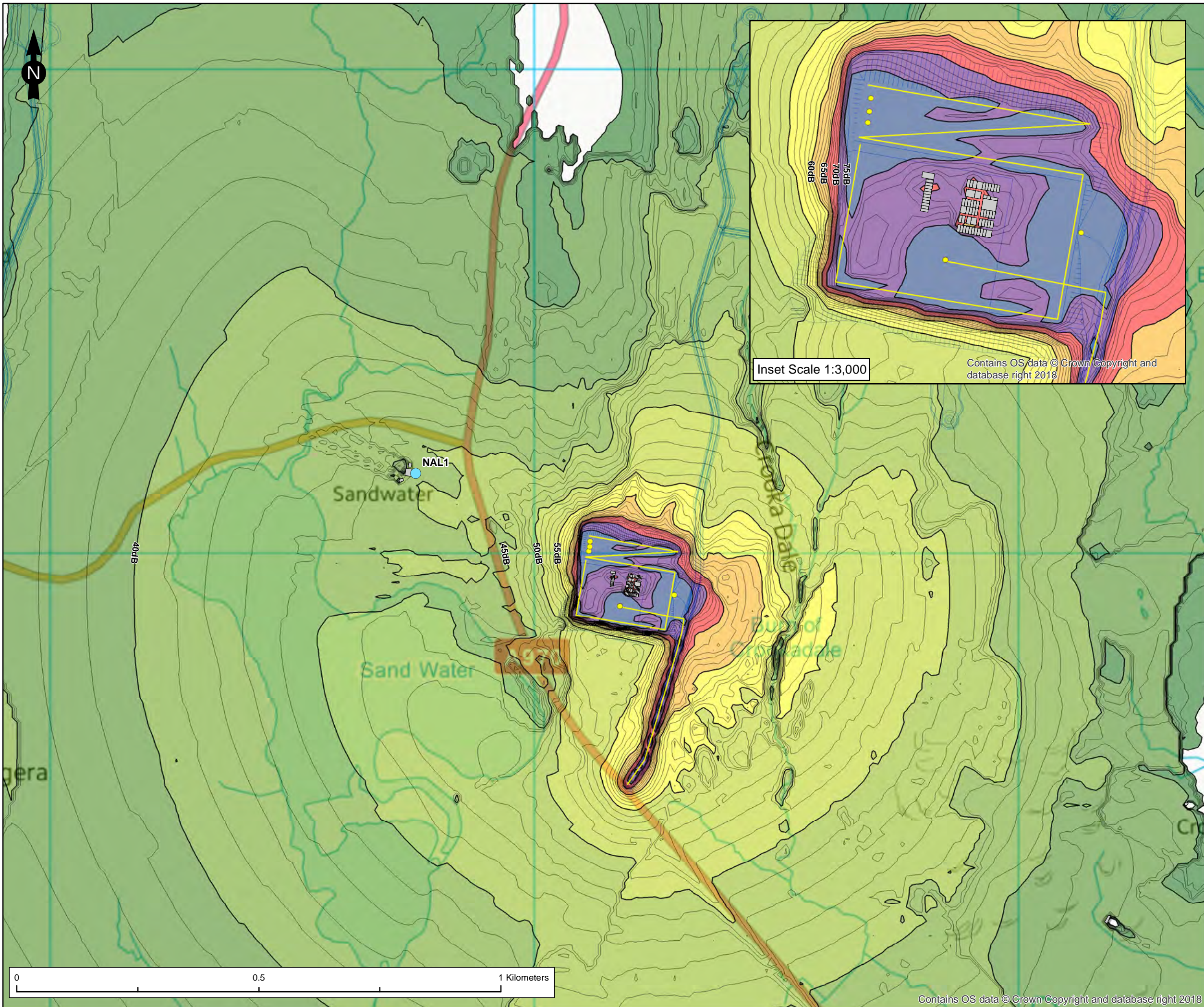
Figure Title  
**Figure 5.1: Breeding Bird Nominal Territory Centres**

Project Name  
 Viking Wind Farm Main Construction Compound

Project Number 1700001846	Figure No. 5.1
Date September 2019	Prepared By GM
Scale 1:6,000 @A3	Issue 1

Client





**Legend**

- Buildings
- Receptors
- Point Sources
- Moving Point Sources
- Noise Contours (1dB Increments)
- Noise Contours (5dB Increments)

**Predicted Noise Levels (dBA)**

- 30-35
- 35-40
- 40-45
- 45-50
- 50-55
- 55-60
- 60-65
- 65-70
- 70-75
- 75 >
- 80-85

Noise contours modelled in accordance with BS5228:2009+A1:2014 at a height of 1.5m and displayed on a 10m by 10m grid. All noise sources assumed to be operating concurrently at maximum output. All levels shown as dB L<sub>Aeq(t)</sub>.

Figure Title  
**Figure 6.1: Noise Contour Plot - Scenario 1**

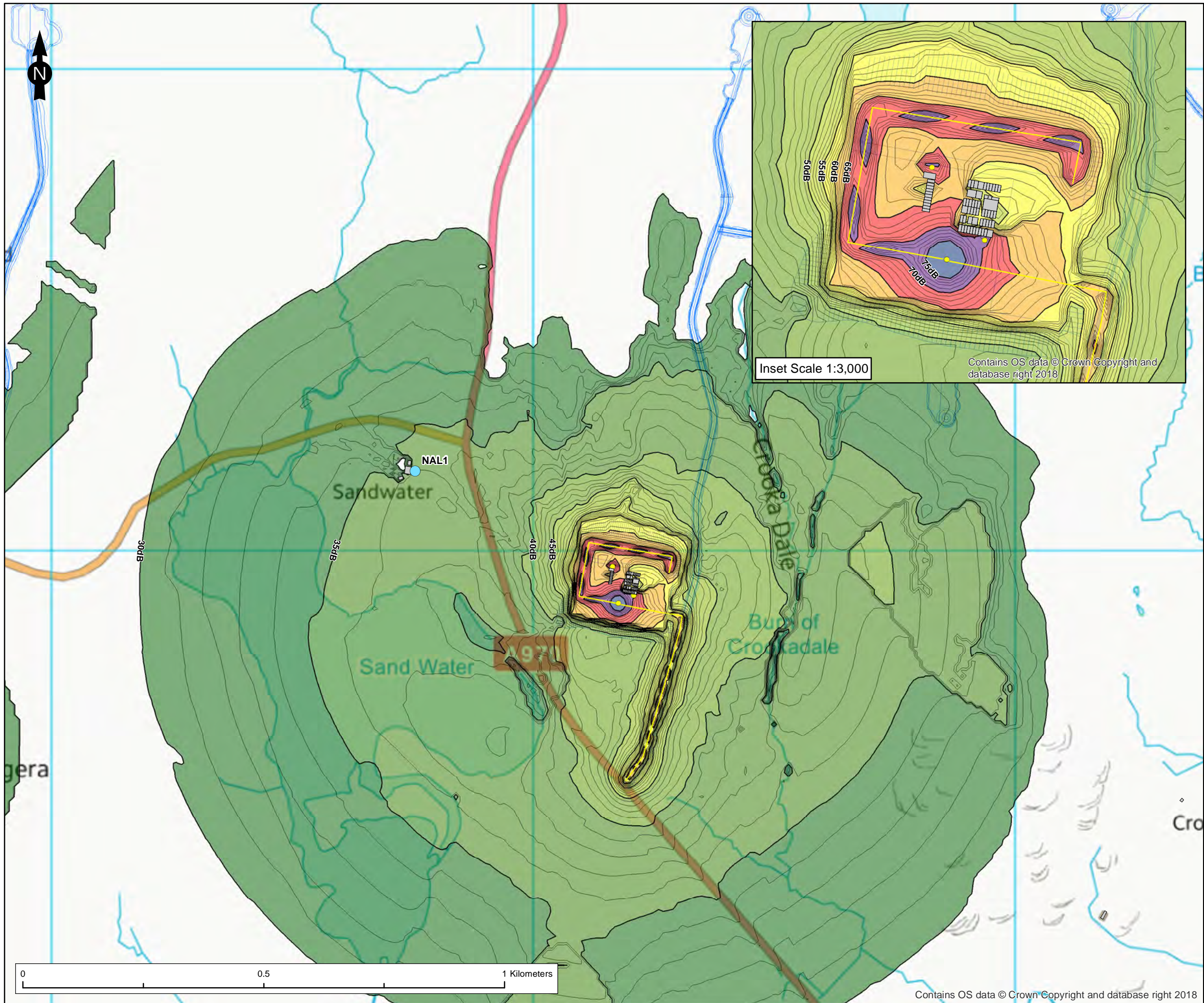
Project Name  
**Viking Wind Farm Construction Main Compound**

Project Number 1700001846	Figure No. 6.1
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Date May 2019	Prepared By MT
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Scale 1:7,500 @ A3	Issue 2
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Client



**Legend**

- Buildings
- Receptors
- Point Sources
- Moving Point Sources
- Noise Contours (1dB Increments)
- Noise Contours (5dB Increments)

**Predicted Noise Levels (dBA)**

- 30-35
- 35-40
- 40-45
- 45-50
- 50-55
- 55-60
- 60-65
- 65-70
- 70-75
- 75 >
- 80-85

Noise contours modelled in accordance with BS5228:2009+A1:2014 at a height of 1.5m and displayed on a 10m by 10m grid. All noise sources assumed to be operating concurrently at maximum output. All levels shown as dB L<sub>Aeq(t)</sub>.

Figure Title  
**Figure 6.2: Noise Contour Plot - Scenario 2**

Project Name  
**Viking Wind Farm Construction Main Compound**

Project Number 1700001846	Figure No. 6.2
Date May 2019	Prepared By MT
Scale 1:7,500 @ A3	Issue 2

Client

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**Legend**

- Buildings
- Receptors
- Point Source
- Noise Contours (1dB Increments)
- Noise Contours (5dB Increments)

**Predicted Noise Levels (dBA)**

- 30-35
- 35-40
- 40-45
- 45-50
- 50-55
- 55-60
- 60-65
- 65-70

Inset Scale 1:3,000  
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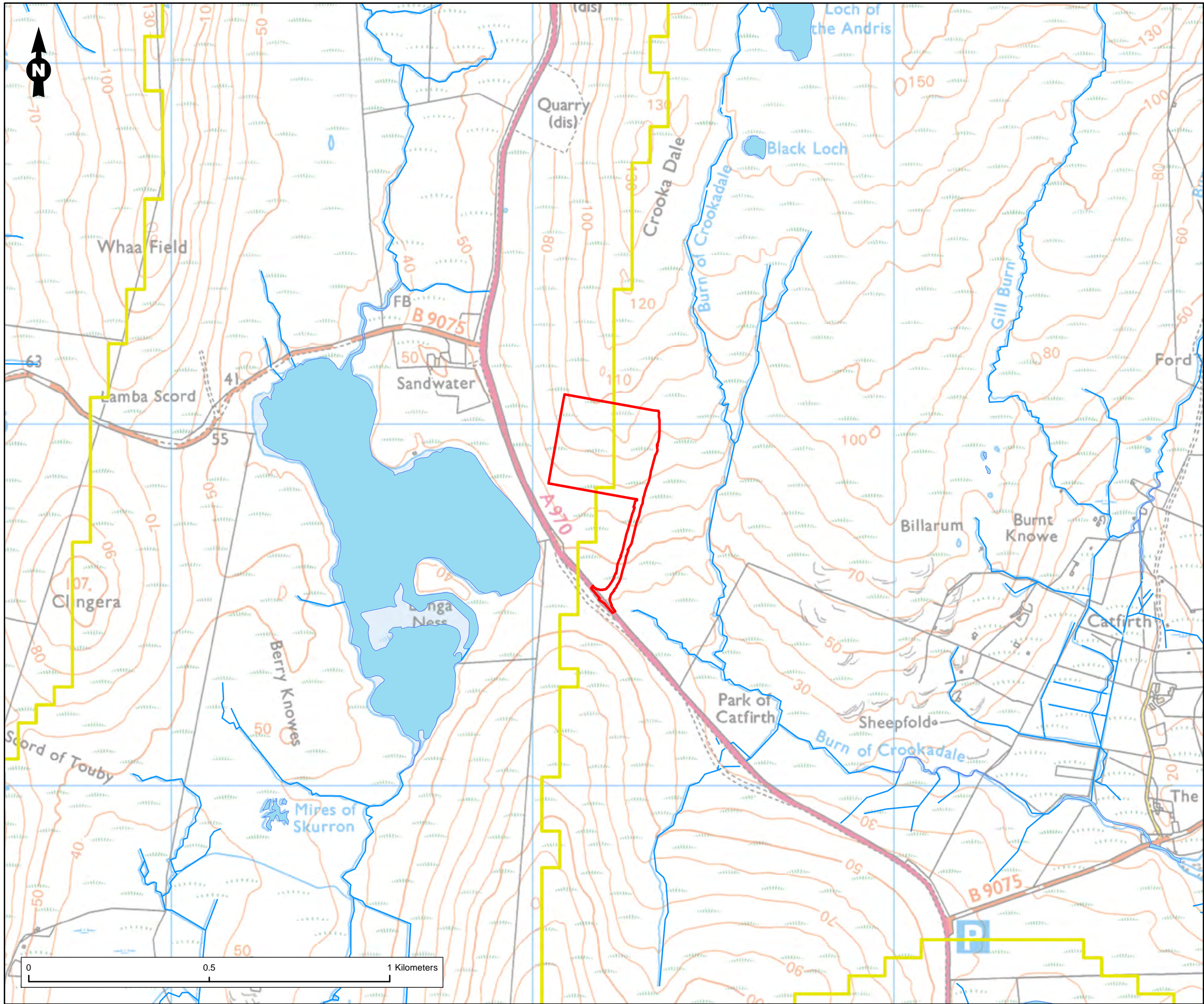
Noise contours modelled in accordance with BS5228:2009+A1:2014 at a height of 1.5m and displayed on a 10m by 10m grid. All noise sources assumed to be operating concurrently at maximum output. All levels shown as dB L<sub>Aeq(t)</sub>.

Figure Title  
**Figure 6.3: Noise Contour Plot - Scenario 3**

Project Name  
Viking Wind Farm Construction Main Compound

Project Number 1700001846	Figure No. 6.3
Date May 2019	Prepared By MT
Scale 1:7,500 @ A3	Issue 2

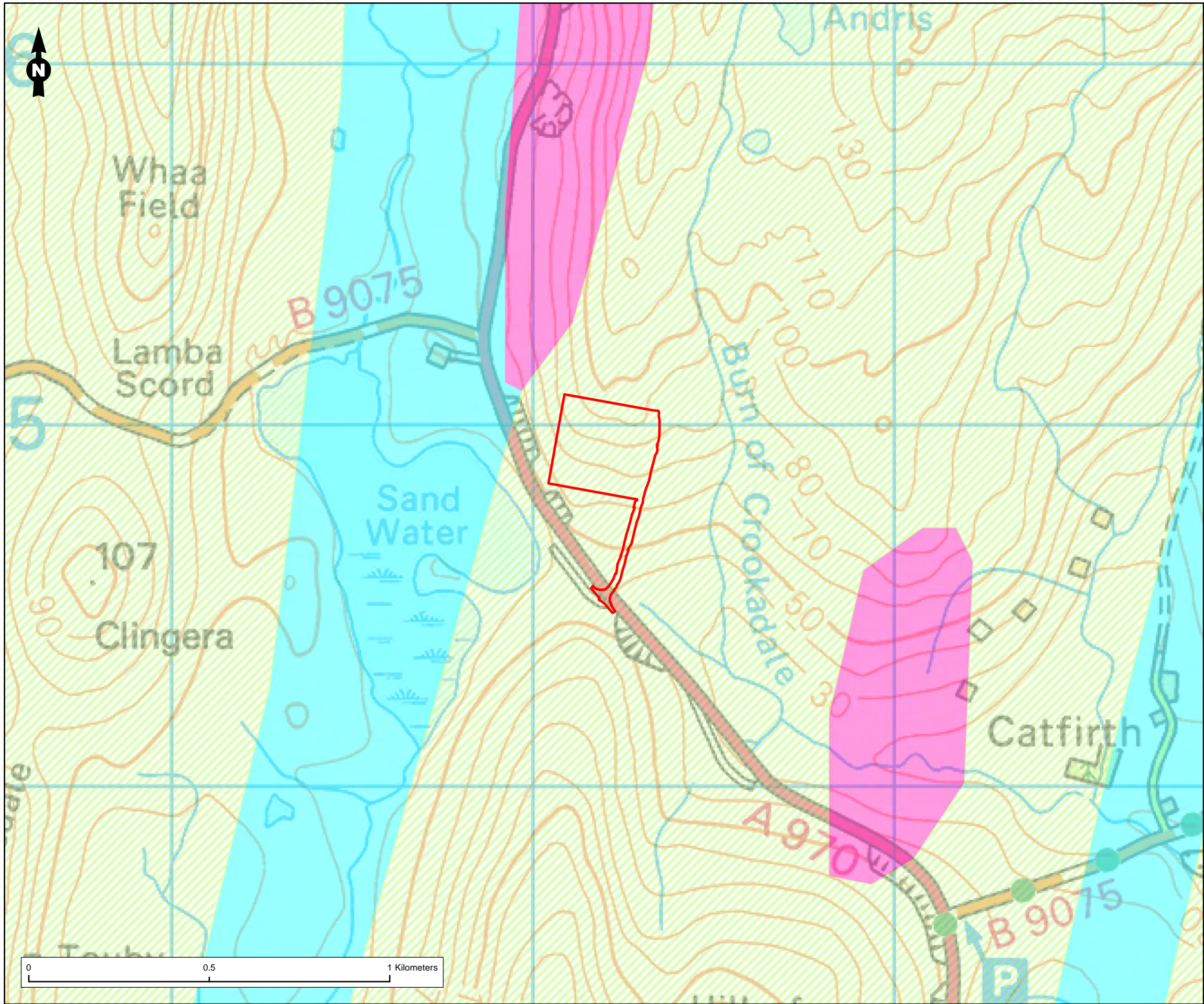
Client  
  




**Legend**

- Site Boundary
- Surface Watercourse
- Surface Water Body
- River and loch waterbody nested catchments

Figure Title	
Figure 8.1: Surface Water Setting	
Project Name	
Main Construction Compound	
Project Number	Figure No.
170001846_Compounds	8.1
Date	Prepared By
September 2019	JT
Scale	Issue
1:10,000 @A3	1
Client	
	
	



**Legend**

Site Boundary

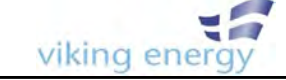
**Bedrock Geology Areas**

- UNNAMED IGNEOUS INTRUSION, ORDOVICIAN TO SILURIAN - FELSIC-ROCK
- APPIN GROUP AND ARGYLL GROUP (UNDIFFERENTIATED) - METALIMESTONE
- APPIN GROUP AND ARGYLL GROUP (UNDIFFERENTIATED) - PSAMMITE, SEMIPELITE AND PELITE

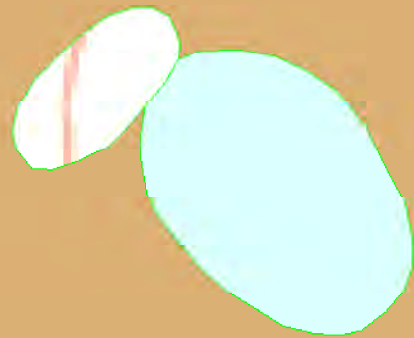
Figure Title  
**Figure 8.2: Bedrock Geology**

Project Name  
**Main Construction Compound**

Project Number 170001846_Compounds	Figure No. 8.2
Date September 2019	Prepared By JT
Scale 1:10,000 @A3	Issue 1

Client  






**Legend**



	Peat
	Devensian Till - Diamicton

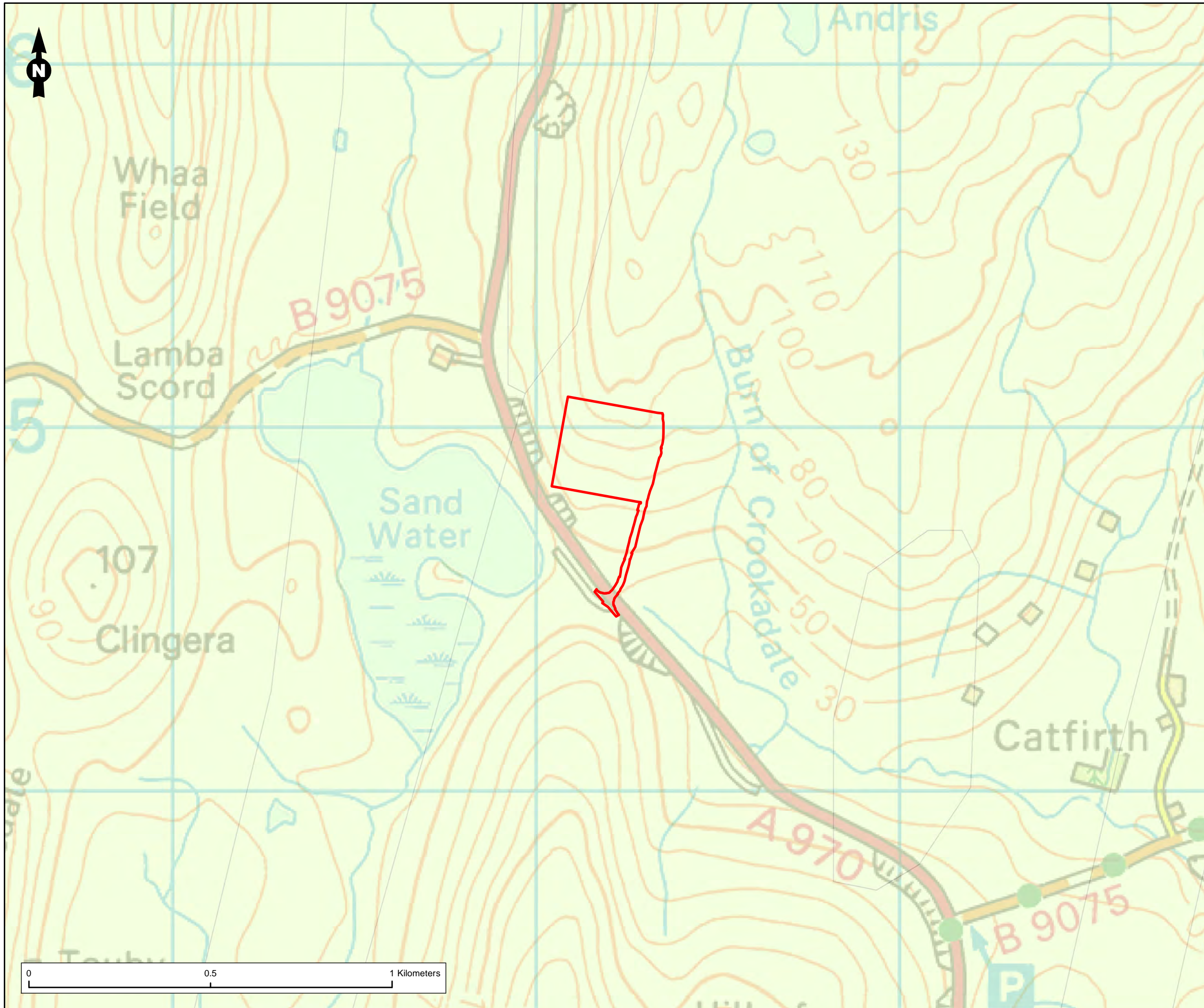
Figure Title  
**Figure 8.3: Superficial Geology**

Project Name  
**Main Construction Compound**

Project Number <b>1700001846_Compounds</b>	Figure No. <b>8.3</b>
Date <b>September 2019</b>	Prepared By <b>JT</b>
Scale <b>1:5,000 @A3</b>	Issue <b>1</b>

Client  



**Legend**

- Site Boundary

**Hydrogeology (625k)**


- Low productivity aquifer


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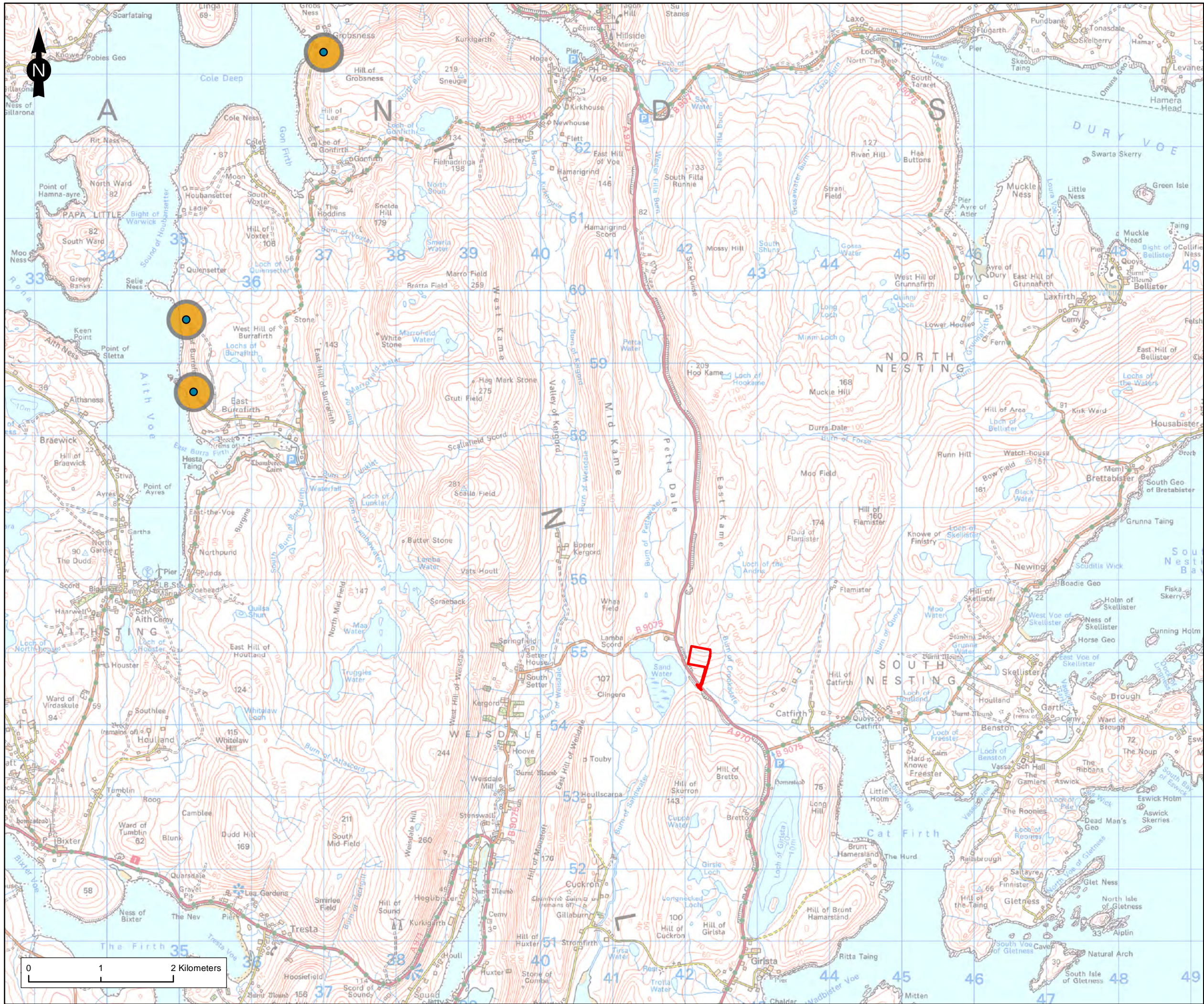
Figure Title  
Figure 8.4: Hydrogeology

Project Name  
Main Construction Compound

Project Number 1700001846_Compound	Figure No. 8.4
Date September 2019	Prepared By JT
Scale 1:10,000 @A3	Issue 1

Client  




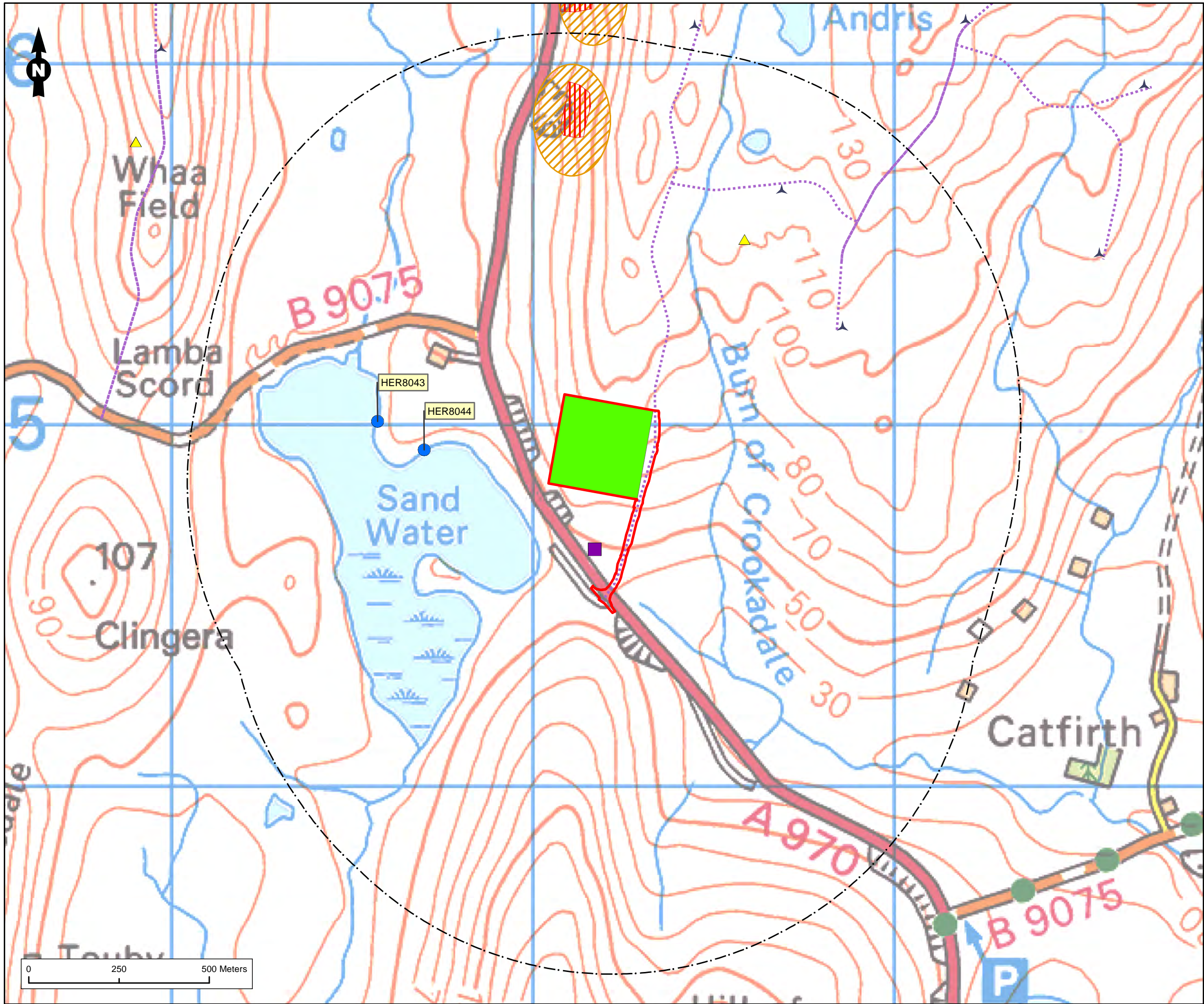


**Legend**

- Site Boundary
- Private Water Supplies
- 250m Private Water Supply Buffer

Figure Title	
Figure 8.5: Private Water Supplies	
Project Name	
Main Construction Compound	
Project Number	Figure No.
1700001846_Compounds	8.5
Date	Prepared By
September 2019	JT
Scale	Issue
1:50,000 @A3	1
Client	





**Legend**

- Cultural Heritage Asset
- Site Boundary
- Cultural Heritage Outer Study Area
- ▲ Turbines
- ⋯ Access Tracks
- ▲ Permanent Met Masts
- Borrow Pit Extraction Area
- Borrow Pit Search Area
- Consented Construction compound to be replaced by Proposed Construction Compound
- Proposed Main Camp Construction Compound

Figure Title  
**Figure 9.1: Cultural Heritage Assets**

Project Name  
**Viking Wind Farm Construction Compounds - Main Compound**

Project Number 1700001846	Figure No. 9.1
Date September 2019	Prepared By GM
Scale 1:10,000 @A3	Issue 1

Client

**RAMBOLL**

