

# REPORT

## **Archaeological Desk-Based Assessment**

Proposed Battery Energy Storage System, Rigifa,

Client: Field Rigifa Ltd

Reference: PC3506-RHD-07-XX-RP-Z-0007

Status: Final

Date: 26 September 2024

## Project Related

**HASKONINGDHV UK LTD.**

Westpoint  
Peterborough Business Park  
Lynch Wood  
Peterborough  
PE2 6FZ  
United Kingdom

+44 1733 3344 55 **T**  
info@uk.rhdhv.com **E**  
royalhaskoningdhv.com **W**

Document title: Archaeological Desk-Based Assessment

Subtitle: Proposed Battery Energy Storage System, Rigifa  
Reference: PC3506-RHD-07-XX-RP-Z-0007  
Status: Final  
Date: 26 September 2024  
Project name: Rigifa BESS  
Project number: PC3506  
Author(s): DG

Drafted by: DG

Checked by: JM

Date: 27/08/2024

Approved by: EW, JP

Date: 18/09/2024

Classification

Project Related

*Unless otherwise agreed with the Client, no part of this document may be reproduced or made public or used for any purpose other than that for which the document was produced. HaskoningDHV UK Ltd. accepts no responsibility or liability whatsoever for this document other than towards the Client.*

*Please note: this document contains personal data of employees of HaskoningDHV UK Ltd.. Before publication or any other way of disclosing, this report needs to be anonymized, unless anonymisation of this document is prohibited by legislation.*

## Table of Contents

|          |  |           |
|----------|--|-----------|
| <b>1</b> | <b>Introduction</b>                                      | <b>1</b>  |
| 1.1      | Background and Document Purpose                          | 1         |
| 1.2      | Site Description and Proposed Development                | 1         |
| <b>2</b> | <b>Aims and Objectives</b>                               | <b>3</b>  |
| <b>3</b> | <b>Consultation</b>                                      | <b>3</b>  |
| <b>4</b> | <b>Methodology</b>                                       | <b>4</b>  |
| 4.1      | Introduction   | 4         |
| 4.2      | The Study Area   | 4         |
| 4.3      | Sources  | 5         |
| 4.4      | Setting Assessment                                       | 6         |
| 4.5      | Assumptions and Limitations                              | 6         |
| 4.6      | Copyright  | 6         |
| <b>5</b> | <b>Legislation, Policy and Guidance</b>                  | <b>7</b>  |
| 5.1      | Legislation  | 7         |
| 5.2      | National Planning Policy                                 | 7         |
| 5.3      | Local Planning Policy                                    | 9         |
| 5.4      | Additional Heritage Guidance                             | 9         |
| <b>6</b> | <b>Baseline Environment</b>                              | <b>9</b>  |
| 6.1      | Designated Heritage Assets                               | 9         |
| 6.2      | Non-Designated Heritage Assets                           | 11        |
| 6.3      | Previous Archaeological Investigations                   | 13        |
| 6.4      | Cultural Significance of Heritage Assets                 | 14        |
| <b>7</b> | <b>Impact assessment</b>                                 | <b>14</b> |
| 7.1      | Impact to Above Ground and Buried Archaeological Remains | 14        |
| 7.2      | Potential change to the Setting of Heritage Assets       | 15        |
| <b>8</b> | <b>Recommendations</b>                                   | <b>17</b> |
| <b>9</b> | <b>References</b>  | <b>18</b> |

## Table of Tables

|         |  |   |
|---------|--|---|
| Table 1 | Designated Heritage Assets within 3 km of the Development Area | 9 |
|---------|--|---|

## Table of Plates

|  |    |
|--|----|
| Plate 1 View from the northern corner of the Development Area, photograph taken looking south                                  | 2  |
| Plate 2 Distant view of Dunnet's Head from the centre of the Development Area, photograph taken looking northwest              | 2  |
| Plate 3 View of Hollandmey farmstead (MHG37157) from the southern aspect of the Development Area, photograph looking southwest | 12 |

## Appendix A – Figures 19

### Figure A 1 - Site Location 19

### Figure A 2 - Designated Heritage Assets 20

### Figure A 3 - Non-designated Heritage Assets 21

### Figure A 4 - Previous Investigations 22

## Appendix B – Gazetteers 23

### Table B 1 Non-designated Heritage Assets within 1 km of the Development Area 23

### Table B 2 Previous Investigations within 1 km of the Development Area 24

## Appendix C - Site Plan 25

### Figure C 1 - Detailed Site Layout Plan 25

## Appendix D - Zones of Theoretical Visibility 26

### Figure D 1 - Bare Ground ZTV up to 3 km from the Proposed Development 26

### Figure D 2 – Up to 3 km ZTV with screening effect of woodland and settlement 27

## Appendix E - Wireline Viewpoints from the Castle of Mey 28

### Figure E 1 - Viewpoint 1a: Castle of Mey - 3m AGL 28

### Figure E 2 - Viewpoints 1b: Castle of Mey - 5m AGL 29

# 1 Introduction

## 1.1 Background and Document Purpose

Royal HaskoningDHV has been commissioned by Field Rigifa Ltd (Field) to undertake an archaeological desk-based assessment and walkover survey in relation to the construction and operation of a Battery Energy Storage System (BESS) on land located to the south of the planned and consented Gills Bay Substation in Rigifa, approximately 17 kilometres (km) east of the town of Thurso in the Highland Region of Scotland (ND 29391 71058).

The purpose of this desk-based assessment is to provide an understanding of the potential effects of the Proposed Development in regard to heritage. This report constitutes a full desk-based assessment including a setting assessment and walkover survey.

## 1.2 Site Description and Proposed Development

The Proposed Development principally comprises a BESS with a capacity of up to 200 megawatts (MW) which will charge and discharge electricity from the adjacent planned and consented Gills Bay substation. It includes:

- Battery storage units arranged into rows;
- Medium-voltage (MV) skids and ancillary low-voltage (LV) equipment;
- High-voltage (HV) grid transformers;
- Air insulated switchgear;
- A substation building comprising welfare facilities, a switch room and control room;
- An interface substation and underground 132 kV grid connection cable; and
- Site-wide supporting infrastructure including cabling, access tracks, fencing, attenuation basins, and landscaping measures.

The Proposed Development's overall planning boundary (45.4 ha) is larger than the anticipated development footprint (approximately 6.4 ha). The primary reason for this has been to incorporate the entire consented Gills Bay substation site into the planning boundary to ensure appropriate flexibility is provided for the point of connection. The planning boundary also includes land to the northwest and southeast of the development footprint which accommodate the cable route, access tracks and associated works, and biodiversity enhancements. This assessment primarily considers the effects of construction works associated with groundworks and infrastructure hereby known as the 'Development Area' (**Appendix A, Figure A 1**). The Development Area comprises the BESS compound, substation compound, interface substation and underground cabling proposed in a strip of arable field c. 10 ha in size, in addition to an interface substation, cable route and internal access track, as shown in **Appendix C, Figure C 1**. Construction works proposed within the remainder of the planning boundary are limited to minor upgrades to the access route to the northeast, consisting of hedgerow removal. These works are considered to have no archaeological impact and therefore the access track has not been included within the Development Area.

The proposed BESS compound and substation compound are situated within an arable field that rises from the northwest to southeast, sitting at 54 m Above Ordnance Datum (AOD) in the northwest and rising to 71 m AOD in the southeast. Wider views from the northwestern extent of the Development Area are relatively limited due to the precluding woodland to the north and the intervening topography (Plate 1). From the higher mid-to-southeastern extent of the Development Area however, there are long-distance views when looking towards the northeast to northwest, with the skyline comprising the Pentland Firth and a view of

## Project Related

Dunnet Head (Plate 2) and Stromness in the distance. However much of this view is framed by the area of planting to the north of the Development Area. Looking southeast to southwest, views are precluded by a bordering hedgerow and modern forestry plantations.



*Plate 1 View from the northern corner of the Development Area, photograph taken looking south*



*Plate 2 Distant view of Dunnet's Head from the centre of the Development Area, photograph taken looking northwest*

The Proposed Development is located approximately 0.5 km south of the Gills Bay Substation which forms part of an upgraded transmission network to support renewable-generated electricity and is due to be completed in the first quarter of 2029. Various archaeological investigations were undertaken as part of these works and are described in **Section 6.3**.

Ground investigation works carried out at the Development Area identified topsoil ranging in thickness between 0.2 - 0.4 m below ground level consisting of dark brown organic slightly sandy clay which was peat-like in places. Glacial Till deposits were encountered beneath the topsoil in all exploratory hole locations, typically forming a soft to stiff brown and grey mottled orange slightly silty, slightly sandy, slightly gravelly clay, with frequent inclusions of flagstone. The geological bedrock of the Spittal Flagstone Formation was typically encountered at depths of 0.70 m below ground level and comprised weak dark-grey flagstone recovered as an angular to fine gravel (Curtins, 2024).



An archaeological watching brief undertaken during the excavation of 28 test pits across the Development Area did not identify any deposits of archaeological or geoarchaeological interest (AOC, 2024).

## 2 Aims and Objectives

The aim of this desk-based assessment is to outline from existing information, the nature, extent and significance of the historic environment baseline resource within the study area (**Section 6**) and, where relevant, its immediate surroundings, to provide an archaeological and historical baseline summary and context for the Proposed Development.

This report also assesses the likely level of any impact that the Proposed Development may have on known and potential heritage assets, as well as the significance on any assets affected and a consideration of the setting of any affected assets. Where there is the potential for impacts, the report highlights any mitigation necessary to enable development at the Proposed Development.

The specific aim of this assessment is further defined via the application of the following objectives:

- To outline the known and potential heritage assets within the Development Area, based on a review of existing information in order to provide an archaeological and historical baseline context within a defined study area (defined in Section 4.2);
- To assess the importance of the known and potential heritage assets through a weighted consideration of their valued components and to provide a consideration of the setting of heritage assets, where relevant; and
- Make recommendations on the likely next steps and mitigation required to enable development at the Proposed Development, in consultation with the Highland Council (THC) and Historic Environment Scotland (HES).

## 3 Consultation

Within the pre-application advice from the Highland Council (reference 24/00186/PREMAJ), Historic Environment Scotland raised concerns on the impacts of the development on Castle of Mey and Garden Walls (Lb1797) and Castle of Mey \*(Barrogill Castle) (Gdl00096).

The pre-applications responses states:

*Category A-listed Castle of Mey and its Inventory garden and designed landscape are located approximately 2km to the north of the proposed development. There are important views south in the direction of the development from both the Castle and its designed landscape.*

*The current consultation does not include a ZTV, so it is unclear how visible the proposed development would be from these assets. HES notes that the presentation included in the consultation materials has a slide on cultural heritage assessment for EIA which states that there will be no 'discernible change to setting' of any designated assets including Castle of Mey and that topography and existing vegetation will screen the development from scheduled monuments. The submitted Constraints Map shows scheduled monuments but not listed buildings or Inventory sites.*

*HES understands that a desktop assessment and walkover survey will be carried out. This should include an assessment of potential impacts on both Castle of Mey and its Inventory designed landscape, at ground level and from the principal rooms on the 1st floor level (drawing room and dining room). If a ZTV indicates*

*theoretical visibility from these assets we would also recommend a visualisation is produced demonstrating any predicted visibility in views south from the forecourt of the Castle and/or its first floor.*

*HES notes the reference to existing vegetation screening the development. HES recommends that long term proposals for the existing woodlands in the vicinity of the development are considered, as some existing forestry might be commercial crops which will be harvested, which would change this assessment.*

In response to the comments received from HES, the 2 km study area that was initially proposed has been extended to 3 km as the Castle of Mey and its associated designated gardens are situated between 2.6 km and 2.8 km north of the Proposed Development.

ZTV figures have been produced and can be viewed in **Appendix D**. The appendices also include a bare earth and wireline ZTV (**Appendix E**) which shows the theoretical visibility from the gardens south of the castle and from the first floor to represent views from the principal rooms within the Castle of Mey. The plans are discussed in **Section 7.2**.

A formal email request was made to HES on the 23<sup>rd</sup> August 2024 to discuss the updated ZTVs. Draft wirelines were forwarded under separate cover on 6<sup>th</sup> September 2024.

HES sent a response to this consultation on 10<sup>th</sup> July 2024 (ECU Reference: ECU00004838), stating:

*We are content that this proposed development would not have an adverse impact on the Category A-listed Castle of Mey and its associated Inventory Garden and designated landscape. Given the proposed scale of the development and the surroundings we consider that there would be very limited visibility towards the proposed development from these assets.*

The response to the issues raised by HES is discussed in further detail in **Section 7.2**.

## 4 Methodology

### 4.1 Introduction

The following methodology has been designed in a manner consistent with good practice professional guidance outlined by the Chartered Institute for Archaeologists' (CIfA) Standard and guidance for historic environment desk-based assessment (CIfA, 2020). Other best-practice guidance is referenced in the text where appropriate.

### 4.2 The Study Area

As discussed in **Section 1.2**, this assessment focuses on the Development Area, as shown in **Appendix A, Figure A 1**. The archaeology and cultural heritage study areas have been established based on a centre point within the Development Area at ND 29391 71058.

For the purposes of assessing potential setting impacts for designated heritage assets (**Appendix A, Figure A 2**), data was acquired from HES based on a 3 km buffer which was established in accordance with the request in the formal pre-application response, as detailed in **Section 3**. Given the low height of the proposed BESS structures, heritage assets located greater than 3 km from the Proposed Development were not considered in this assessment as the distance from the Proposed Development is too great to materially change setting and therefore impact heritage significance.



For the purpose of assessing the potential physical impact of the Proposed Development, a 1 km study area was established from the Development Area which includes the aspects of the development that are likely to require groundworks. A Historic Environment Record (HER) Data search was completed from the Highland Council for non-designated heritage assets (**Appendix A, Figure A 3**). When this study area was agreed with THC, the eastern access road was not part of this scope. Subsequent design has prompted a need to include this access track in the Development Area, as some minor works will be required to widen the access track for construction traffic. During this process the Highland HER online and Canmore were reviewed to identify any previously recorded archaeological remains within 1km of the access track that had not been identified in the original search.

### 4.3 Sources

The following documentary, cartographic and internet-based sources were consulted in compiling this desk-based assessment:

- Highland Council HER (<https://her.hIGHLAND.gov.uk/>);
- Canmore – National Record of the Historic Environment; ([Welcome to Canmore | Canmore](#))
- Historic Environment Scotland (<https://portal.historicenvironment.scot/downloads>);
- Archival information held at the Nuclear and Caithness Archives;
- Historic Mapping held by the National Library of Scotland (<https://maps.nls.uk/>);
- The First and Second Statistical Accounts of Scotland (accessed online);
- The Caithness and Sutherland Landscape Character Assessment, commissioned by Scottish Natural Heritage (Stanton, 1998); and
- National Collection for Aerial Photography (NCAP) ( <https://ncap.org.uk/>).

A commercial search of the Highland Council HER was requested on 16<sup>th</sup> February 2024. For the purposes of this search the HER carried out data enhancement to incorporate new records resulting from recent archaeological investigations in the area. The data was also refined to remove duplicate records within the area. The HER data was received on 27<sup>th</sup> February 2024. The HER data used to compile this assessment is presented gazetteer style in **Table B 1** and **Table B 2** in **Appendix B**.

#### 4.3.1 Cartographic Sources

Pre-Ordnance Survey maps of the Development Area, held by the National Library of Scotland (NLS), were identified, and consulted on-line. Relevant maps range in date from the eighteenth to the twentieth centuries.

The Development Area appears as uncultivated moorland on the Roy Highlands map (1747-55). The Coastal and Admiralty Charts of Scotland (1693-1963) were also viewed, but none were of a sufficient scale to identify any additional features in the area. The Caithness Reay and Latheron parish Estate Maps of Scotland (1857 – 1919) similarly did not cover the Development Area.

The general location of the Development Area is referred to as ‘Hollandmey’ on the County map of Caithness Shire (1822), or ‘Hollomey’ on the Bartholomew Survey Atlas of Scotland (Thurso, Wick, 1912). On the Bartholomew Reduced Ordnance Maps of Scotland (Caithness District, sheet 8), the Site is depicted as a blank area to the northeast of Hollandmey Moss. On modern cartographic sources, the name ‘Hollandmey’ is preferred.

The Nuclear and Caithness Archives were visited as part of the walkover assessment, where additional cartographic sources were viewed, but provided no additional information for potential heritage assets at the Development Area.

First, second and subsequent editions of the Ordnance Survey maps of the area of interest, were identified and examined via NLS.

### 4.3.2 Aerial Photographic Data

No LiDAR data covering the Development Area was available via NLS or the Scottish LiDAR Remote Sensing Portal. The NCAP on-line archive holds two aerial photographs covering the Development Area dated to 1988 at a scale of 1:2400 m (Sortie: ASS/60988, All Scotland Survey) neither of which are at a sufficient resolution to identify any additional discernible archaeological features. Two other images with the title 'Hollandmey Moss' at a scale of 1:10000 are listed but are not yet digitised (Sortie: MMC/0606, May 2004).

### 4.3.3 Walkover Survey

The site visit was carried out on 21st February 2024 to determine the topography and existing land use, the nature of the existing visible heritage assets (e.g. structures or earthworks) and assess factors which may have affected the survival or condition of any known or potential heritage assets.

The visit extended beyond the Development Area boundary for the purposes of scoping designated heritage assets and their intervisibility with the Proposed Development for the settings assessment.

## 4.4 Setting Assessment

This setting assessment has been undertaken in line with the guidance within 'Managing Change in the Historic Environment: Setting' (HES, 2020b). This industry-standard guidance document recommends a stepped (stage-based) approach for assessing the implications of development proposals, as follows:

- Step 1: identify those heritage assets which have settings that might be affected;
- Step 2: define the setting of each historic asset; and
- Step 3: assess the impact of any new development on this.

The results of Steps 1 and 2 are presented in **Section 6** Baseline Environment. The Step 3 assessment can be found in **Section 7.2**.

## 4.5 Assumptions and Limitations

Data used to compile this report primarily consists of secondary, pre-existing information derived from a variety of sources. The assumption is made that the secondary data, as well as that derived from other secondary sources, is reasonably accurate.

The records held by the sources used in this assessment are not a record of all surviving heritage assets, rather a record of the discovery of a range of archaeological and historical components of the historic environment for the study area. The information held within these sources is not complete and does not preclude the subsequent discovery of further elements of the historic environment that are, at present, unknown.

## 4.6 Copyright

This report may contain material that is non-Royal HaskoningDHV copyright (e.g. Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which is for non-public

reproduction. Users remain bound by the conditions of the Copyright, Designs and Patents Act 1988 with regard to multiple copying and electronic dissemination of the report within the public realm.

## 5 Legislation, Policy and Guidance

### 5.1 Legislation

The Historic Environment Scotland Act (2014) sets out Historic Environment Scotland's role and legal status, including changes in processes for the designation of monuments and buildings (scheduling and listing) and for consents relating to scheduled monuments, listed buildings and conservation areas. The Act amended the following relevant legislation:

- Ancient Monuments and Archaeological Areas Act 1979;
- Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997; and
- Environmental Assessment (Scotland) Act 2005.

Under the Ancient Monuments and Archaeological Areas Act 1979, an archaeological site or historic building of national importance can be designated as a Scheduled Monument and is registered with Historic Environment Scotland. Any development that might physically affect a Scheduled Monument is subject to the granting of Scheduled Monument Consent. HES advises the Scottish government on individual cases for consent and offers advice on the management of Scheduled Monuments.

Under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997, statutory protection for Listed Buildings and Conservation Areas, and their settings, is provided. A Listed Building is that which is seen to be of special architectural or historic interest, and a Conservation Area comprises an area of special architectural or historic interest, the character or appearance of which is desirable to preserve or enhance.

A Listed Building may not be demolished, altered or extended in any manner which would affect its character without Listed Building Consent being granted. Listed Buildings are put into one of three listing categories according to their relative importance:

- Category A: Buildings of special architectural or historical interest which are outstanding examples of a particular period, style or building type;
- Category B: Buildings of special architectural or historic interest which are major examples of a particular period, style or building type; and
- Category C: Buildings of special architectural or historic interest which are representative examples of a period, style or building type.

### 5.2 National Planning Policy

Overarching National planning policy in Scotland is managed through National Planning Framework 4 (Scottish Government, Adopted February 2023) which subsumed the earlier two primary documents:

- Scottish Planning Policy (Scottish Government, 2014b); and
- National Planning Framework 3 (Scottish Government, 2014).

This document sets out the policy aim to '*...protect and enhance historic environment assets and places, and to enable positive change as a catalyst for the regeneration of places*' and key provisions for dealing with assessment of effects on historic assets or places (Policy 7b), scheduled monuments (Policy 7h), and non-designated heritage assets (Policy 7o).

## Project Related

Heritage-specific policy is given in the Historic Environment Policy for Scotland (HEPS: 2019), which is managed by Historic Environment Scotland. The policy supports good decision making for Scotland's unique places and outlines how the Historic Environment will be considered by Scottish Government in planning decisions. There are six main policies and principles:

### **Policy on Understanding and Recognition**

- HEP1 - Decisions affecting any part of the historic environment should be informed by an inclusive understanding of its breadth and cultural significance.

### **Policies on Managing Change**

- HEP2 - Decisions affecting the historic environment should ensure that its understanding and enjoyment as well as its benefits are secured for present and future generations.
- HEP3 - Plans, programmes, policies and strategies, and the allocation of resources, should be approached in a way that protects and promotes the historic environment. If detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be put in place.
- HEP4 - Changes to specific assets and their context should be managed in a way that protects the historic environment. Opportunities for enhancement should be identified where appropriate. If detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be put in place.
- HEP5 - Decisions affecting the historic environment should contribute to the sustainable development of communities and places.
- HEP6 - Decisions affecting the historic environment should be informed by an inclusive understanding of the potential consequences for people and communities. Decision-making processes should be collaborative, open, transparent and easy to understand.

Policy HEP1 is particularly relevant to this appraisal and states that decisions affecting any part of the historic environment should be informed by an inclusive understanding of its breadth and cultural significance. The policy gives the core principles on understanding and recognition as:

- Recognising the cultural significance of sites and places supports good decision-making.
- A place must be understood in order for its cultural significance to be identified.
- A wide range of factors contribute to cultural significance.
- Knowledge and information about the historic environment is critical to our understanding of our past, present and future.
- The historic environment changes over time, and so does how it is understood and appreciated.
- Research, discussion and exchange of ideas can all contribute to our understanding of the historic environment.
- Understanding will improve when information is made widely available, and everyone has the opportunity to contribute to knowledge of the historic environment.

National heritage policy is also managed via the following supplementary planning documents:

- Our Place In Time: The Historic Environment Strategy for Scotland (Scottish Government, 2014a);
- HES Circular 1: Processes and Procedures (Scottish Government, 2019b);
- Scotland's Archaeology Strategy (Scottish Government, 2015); and
- Planning Advice Note 2/2011: Planning and Archaeology (Scottish Government, 2011).

### 5.3 Local Planning Policy

A specific local development plan for Caithness was formally adopted in 2018, named the Caithness and Sutherland Local Development Plan (CaSPlan) which details the relevant policies in paragraphs 71 – 73 of the Environment and Heritage section (CaSPlan, 2018). The document operates alongside the Highland-wide Local Development Plan (HwLDP) which was adopted in 2012 and remains extant and relevant as part of the adopted local development plan. The policies relevant in terms of heritage and archaeology are:

- Policy 28 Sustainable Design;
- Policy 29 Design Quality and Place-making;
- Policy 57 Natural, Built and Cultural Heritage; and
- Policy 61 Landscape.

### 5.4 Additional Heritage Guidance

The methodology within this assessment is based on the following professional guidance documents:

- Standards and guidance for historic environment desk-based assessment (Chartered Institute for Archaeologists', 2020); and
- Managing Change in the Historic Environment: Setting (HES, 2020b).

## 6 Baseline Environment

### 6.1 Designated Heritage Assets

There are four Designated Heritage Assets recorded within 3 km of the Site (**Figure A 2, Appendix A**), which are detailed in **Table 1**.

*Table 1 Designated Heritage Assets within 3 km of the Development Area*

| ID       | Type                                    | Name  | Easting | Northing | Distance from the Site (km) |
|----------|---|---|---------|----------|-----------------------------|
| LB1798   | Listed Building                         | Castle of Mey Gate Lodge and Gate Piers               | 328957  | 973703   | 2.6 km                      |
| LB1797   | Listed Building                         | Castle of Mey and Garden Walls                        | 329032  | 973889   | 2.8 km                      |
| GDL00096 | Inventory Garden & Designated Landscape | Castle of Mey (Barrogill Castle)                      | 329127  | 973872   | 2.6 km                      |
| SM13649  | Scheduled Monument                      | Mey Battery, battery 80m northeast of Braes of Harrow | 328533  | 974225   | 3 km                        |

The Castle of Mey (**LB1797**) is a category A listed sixteenth century castle built by the 4<sup>th</sup> Earl of Caithness for his second son William Sinclair, which later became the seat of the earls. The structure saw several redevelopments in the 17<sup>th</sup> and 18<sup>th</sup> centuries, and again in 1821 when Tudor Gothic style alterations were

## Project Related

made following designs by William Burn. In 1952, Queen Elizabeth saw what was then known as Barrogill Castle while staying on Dunnet Head and subsequently purchased the castle and its parklands, restoring the castle's original name back to the Castle of Mey. The castle has outstanding historical value due to its associations with the Earls of Caithness and as property of Her Majesty The Queen Mother, which is enhanced by its location close to the Pentland Firth shore which offers outstanding views across Dunnet Head and out to Orkney. The castle is of outstanding significance as it offers insight into 16<sup>th</sup> century construction methods, with further interest derived from the later alterations which are representative of the 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> centuries.

The Gate Lodge and Gate Piers (**LB1798**) were added to the castle grounds in the early 19<sup>th</sup> century. The lodge represents a single-storey structure with a canted west gable, constructed of harled rubble with ashlar margins. There are 3 pointed-headed windows in the canted gable, the central window of which retains the original intersecting astragals and multi-pane glazing, completed with a slate roof.

The grounds of the castle lie within the Castle of Mey (Barrogill Castle) (**GDL00096**) designated landscape which predominantly comprises parklands, with areas of woodland, formal gardens, and walled gardens. The present designated landscape was laid out around the year 1820 after the Burn addition to the castle. This layout can be seen on the 1<sup>st</sup> edition OS map of 1873 and by comparison to the later additions, appears to have remained substantially the same since this time. There are two walled gardens adjacent to the castle, the west of which is enclosed on all four sides and separated into compartments by hedges of Berberis, elder, privet and hawthorn, whilst the east walled garden is enclosed on the north and east sides. The Castle of Mey is of outstanding historical value due to its association with the Royal Family and the Earls of Caithness, and the designated landscape provides the setting for a category A listed castle and makes a major contribution to the surrounding scenery.

Mey Battery (**SM13649**) monument comprises the remains of a coastal artillery battery constructed around 1866. The wall of the battery is constructed of Caithness slabs bonded with lime mortar and incorporates two cannon embrasures and a rectilinear enclosure, with an earth bank on the seaward side. The battery is situated at around 10 m AOD overlooking the Pentland Firth and was constructed in response to the perceived threat of a French invasion. The monument is of national importance as it has the potential to contribute to our understanding of the construction and use of late 19<sup>th</sup> century artillery batteries, representing a well-preserved example of a formerly common defensive structure which can significantly expand our understanding of the history of defence and volunteer forces in Scotland during the 19<sup>th</sup> century.

There are two further Scheduled Monuments situated just beyond 3 km of the Site:

- Thomsonsfield, broch 780 m southeast of Brabstermire (**SM588**) – 3.4 km; and
- Earl's Cairn, chambered cairn north of Hollandmake, Inkstack (**SM449**) – 3.6 km.

There is one Listed Building situated just beyond 3 km of the Site:

- Barrock Free Church (**LB1887**) – 3.4 km.

The closest World Heritage Site (WHS) to the Proposed Development is The Flow Country WHS, which at its closest is located 17 km to the south of the Development Area. The Heart of Neolithic Orkney buffer zone is 40 km to the north of the Proposed Development.

No other Designated Heritage Assets are considered further in this setting assessment, predominantly due to their distance from the Proposed Development.



An assessment of the potential changes to the setting of the designated heritage assets mentioned above is detailed in Section 7.2 below.

## 6.2 Non-Designated Heritage Assets

### 6.2.1 Highland Council Historic Environment Record Data

#### 6.2.1.1 Within the Development Area

An overview of the non-designated heritage assets within the Development Area and within 1 km of the Development Area boundary is presented in **Appendix A, Figure A 3** and **Appendix B, Table B 2**.

The Highland HER records two possible structures at the southwestern extent of the Development Area which are illustrated on the first edition 6-inch OS map (Caithness 1877, Sheet VII). This includes a sheepfold (MHG56465) and a possible farmstead comprising an unroofed building and an enclosure (MHG18927). In 2004, the Development Area was visited by the Scottish Urban Archaeological Trust (SUAT) in advance of a proposed windfarm development. No extant trace of the sheepfold or farmstead were identified, although a level area which possibly represented a building platform was recorded (SUAT, 2004). At the time of the most recent walkover survey in February 2024, the field was cultivated, and no evidence of a building platform was seen.

#### 6.2.1.2 Within the 1 km Study Area

The site of a 'Picts House' is depicted on the first edition 6-inch OS map (Caithness 1877, Sheet VII) and is recorded in the Highland HER as a possible broch at Hollandmey (MHG2251), situated approximately 140 m southwest of the Development Area. The HER describes a low mound, of indefinite measurements, believed to contain the remains of a broch. Some slight excavation was done at the site by John Nicolson of Nybster and a small bone ring was recovered. The third report of the RCAHMS (1911) notes that this 'Pictish House' was entirely removed in about 1869 and a piece of silver (unidentified) was found. No evidence of the possible broch was found when the site was visited in 2004 by SUAT (SUAT, 2004), or during the recent walkover survey in February 2024.

Approximately 35 m southeast of the possible broch (MHG2251), the Highland HER describes the site of a farmstead (MHG56457). The farmstead comprises three buildings beside an old quarry depicted on the first edition OS 6-inch map (Caithness 1877, Sheet VII) and labelled 'Hollandmey'. On the second edition, only part of the larger building is shown as a roofed structure, and the name had been transferred to the farm buildings to the south. No trace of the buildings was identified when the Development Area was visited by SUAT in 2004 (SUAT, 2004), which corroborated with the results of the recent walkover survey in February 2024. The former quarry was evident as a rough area of peat and stones.

The Highland HER describes a farmstead and farmhouse at Hollandmey (MG37157) (Plate 3) approximately 370 m southwest of the Development Area, which is depicted on the first edition OS map (Caithness 1877, Sheet VII). The site was described as three ranges round the north, east and south sides of a courtyard which contained pens and abandoned feeders. Both gables of the northern building had fireplaces, with that on the east gable being a cast-iron kitchen range. The buildings still appeared to be abandoned during the site walkover survey in February 2024.



*Plate 3 View of Hollandmey farmstead (MHG37157) from the southern aspect of the Development Area, photograph looking southwest*

Roughly 480 m southwest of the Development Area, a possible farmstead (MHG18928) is recorded in the HER. An unroofed building attached to an enclosure is depicted on the first edition OS 6-inch map (Caithness 1877, Sheet VII) but is not shown on the current one inch to a mile OS map (1976). Nothing was seen of the building or enclosure when the site was visited by SUAT in 2004.

A sheepfold (MHG56461) is recorded in the HER approximately 640 m northwest of the Development Area, which is visible on the first edition OS map on Hollandmey Moss near Canisbay (Caithness 1877, Sheet VII). The feature is visible on vertical aerial photographs taken in 1999-2001 and later, but the feature could not be located in the 2004 SUAT walkover survey, as it lay in an area of rough pasture that had been ploughed for forestry and planted with seedlings or saplings.

An additional sheepfold is recorded in the HER to the northeast of the Development Area (MHG56460), which is shown on the first edition OS map (Caithness 1877, Sheet VII). The site was visited during the walkover survey conducted by SUAT in 2004 which identified the feature as a circular turf and moss-covered dry-stone wall 0.7 – 0.8 m wide and about 0.4 – 0.5 m high. The internal diameter was around 13.5 m.

Philips Mains (MHG36824) is the site of an undated cottage and farmstead, which is still inhabited at present. The buildings are situated c. 960 m northeast of the Development Area and are illustrated on the first edition OS 6-inch map (Caithness 1877, Sheet VII), labelled 'Phillips's Mains'. A well is also depicted, sitting adjacent to the farmstead to the north.

Just short of 1 km to the south of the Development Area, a small farmstead is depicted on the first edition OS map (Caithness 1877, Sheet VII) at Crackersfield (MHG56458). The farmstead is described in the HER as a single building with adjacent enclosures; however, no trace of the building was found during the 2004 walkover survey by SUAT.

The only additional feature identified within 1 km of the eastern access track is Mey, East Lodge (HER MHG37116, Canmore 187655), recorded approximately 320 m to the northwest of the access track. No HER or Canmore records were identified within the footprint of the access track.

### 6.3 Previous Archaeological Investigations

Two previous archaeological investigations have been undertaken within the Development Area in support of renewable energy developments, in addition to three others on the land adjacent. These are shown on **Figure A 4** in **Appendix A**, and listed below:

- Desk Based Assessment and walkover survey – proposed wind farm at Schoolary, Caithness (EHG1224); and
- Desk Based Assessment and walkover survey – Hollandmey Renewable Energy Development (EHG5727).

A desk-based assessment and walkover survey (EHG1224) were undertaken by SUAT in June 2004 in advance of a proposed windfarm development at Schoolary, near Gills, Caithness. In the desk-based assessment, various archaeological sites were noted in the wider area surrounding the Development Area to the north, south and west, including two possible broch sites, shielings, sheepfolds, rig and furrow, wells, former quarries, and post-medieval farmsteads. Three archaeological sites were identified within the Development Area, comprising a sheep dip, farmstead and remnants of a field boundary and rig and furrow. The walkover survey did not identify any extant remains of the features recorded in HER within the Development Area proposed at Rigifa.

Headland Archaeology carried out a desk-based assessment and walkover survey in 2020 in advance of a proposed wind farm development at Hollandmey, Caithness, to inform an environmental impact assessment (EHG5727). The features recorded in the HER within the Development Area were visited during the walkover survey, but no discernible above ground remains or earthworks were identified. The view of the Hollandmey wind farm was assessed from the upper story level and tower of the Castle of Mey looking southwards, which was considered not to be the primary aesthetic of the Castle, therefore resulting in an effect of ‘negligible significance’ on the Castle of Mey. It was concluded however that below ground upstanding archaeological remains may have survived within more densely planted and less accessible areas of plantation that surround the Development Area to the east through northwest, and subsurface remains may also survive.

The Orkney Research Centre for Archaeology (ORCA) was commissioned by Xodus in 2011 to provide a baseline assessment of the onshore historic environment assets in an area of Canisbay parish including a desk-based assessment and walkover survey which may be affected by a proposed marine renewable development, the MeyGen Tidal Energy Project (EHG3158). The proposed development includes an underground cable route which passed from the fields to the east and south of Philips Mains, approximately 300 m southeast of the Development Area, to two potential converter stations at the Ness of Huna and the Ness of Quoys. It was concluded that there is a moderately high potential for further unidentified culturally significant remains to be concealed in some parts of the cable route options, and that further evaluation may be required, conducted using geophysical techniques and/or intrusive evaluations to establish whether significant remains do exist within the option areas and thus identify any constraints.

A desk-based assessment and walkover survey was carried out by CFA Archaeology in 2014 in advance of a proposed switching station near Philips Mains, Gills Bay (EHG5977). It was concluded that there was a low to medium potential for further archaeological discoveries in this locale, noting that any archaeology was likely to be disturbed or destroyed within the areas of intensive planting and drainage works, and also in the ploughed fields. Therefore, it was concluded that the potential for undisturbed archaeological remains to survive in the current forested area was negligible to low.

CFA Archaeology carried out an additional desk-based assessment and walkover survey in 2015 as part of a planning application for the Gills Bay 132 kV transmission connection between Thurso South substation

and the proposed new substation at Gills Bay (EHG4805). Twenty cultural heritage assets were identified within the cable corridor, the majority of which were associated with post-medieval settlement and agrarian activities. The assessment concluded that there was a moderate potential for further buried archaeology to survive within the underground cable elements of the development.

### 6.4 Cultural Significance of Heritage Assets

The importance of defining cultural significance is set out in HEP1 of Historic Environment Policy for Scotland (Historic Environment Scotland, 2019) – *“This involves thinking about its physical and material elements – how much of it has survived or how much of it has changed through time, as well as its wider context and setting. Elements of places which may not have a physical presence, but which contribute to cultural significance need to be recognised. These intangible qualities include the knowledge and associations people have with a particular place.”*

The possible broch at Hollandmey (MHG2251) is evidence of prehistoric activity, and suggestive of the presence of further, as yet unrecorded, remains of this date in the study area. The Iron Age period in Scotland is uniquely characterised by brochs which are prevalent in the Caithness landscape. The exact function of these stone towers is not understood; however, some researchers suggest that they had defensive purposes. What is clear, is that they are associated with topographic locations that offer extensive views from, or of, the sites themselves.

The presence of farmsteads, sheepfolds, and records of former farmhouses in the HER demonstrates the use of this area for settlement and agriculture, where some former areas of pasture have subsequently been taken up by modern forestry and planting. The upstanding remains of the farmstead and sheepfold within the Development Area itself (MHG56465; MHG18927) appear to have been lost to ploughing and other agricultural activities over time. There is a low to moderate potential for sub-surface remains associated with the recorded farmstead or its predecessors to survive at their former locations, although it is expected that any such remains would be considerably disturbed. Likewise, some features within the rougher, grassy regions of the study area still survive as above surface remains of diagnostic (dateable) morphology (MHG56460). The surviving farmsteads are generally representative of traditional rural pre-improvement dwellings in Scotland.

There is also a low to moderate potential for further previously unrecorded heritage assets to be present buried beneath the surface, although it is anticipated that any such remains would reflect earlier iterations of the former farmstead.

## 7 Impact assessment

### 7.1 Impact to Above Ground and Buried Archaeological Remains

Any groundworks within the Proposed Development have the potential to adversely impact both known and unknown heritage assets of local to regional value and of low to medium importance. Policy 7 of the NPF4 notes that this disturbance would require a schematic approach to recording any archaeological features which are encountered.

There is a low to moderate potential for archaeological remains associated with the former sheepfold (MHG56465) and farmstead (MHG18927) within the Development Area to survive below the surface. Archaeological monitoring of the groundworks within the vicinity of these heritage assets will be necessary to fully establish the archaeological potential of the Development Area.

Further monitoring of the works, such as an archaeological watching brief, would be required at the construction stage, i.e. groundworks associated with the construction of the access roads, interface substation and underground cable route, to mitigate harm to previously unknown archaeological features buried beneath the surface. This could be secured through the imposition of a suitably worded condition.

## **7.2 Potential change to the Setting of Heritage Assets**

### **7.2.1 The Flow Country World Heritage Site**

Based on distance from the Proposed Development and the absence of intervisibility, there will be no impacts to the Flow Country WHS as a result of material changes to setting. This asset has therefore not been considered further in this assessment.

### **7.2.2 Thomsonsfield broch (SM588)**

No impacts to the setting of Thomsonsfield broch (SM588) are anticipated due to intervening modern forestry plantations and the perceived distance from the Proposed Development which preclude any intervisibility or other perceptual connection. As such, this asset has not been considered further in this assessment.

### **7.2.3 Earl's Cairn (SM449)**

Due to the distance from the Proposed Development and modern forestry plantations which preclude any intervisibility or other perceptual connection, it was assessed that no impacts to Earl's Cairn (SM449) would arise as a result of changes to setting and therefore this asset has not been considered further in this assessment.

### **7.2.4 Barrock Free Church (LB1887)**

It was assessed that due to the intervening modern forestry plantations and distance from the Proposed Development, that no harm to Barrock Free Church (LB1887) would arise as a result of changes to setting and therefore this asset has not been considered further in this assessment.

### **7.2.5 Mey Battery, 80m northeast of Braes of Harrow (SM13649)**

No impacts to the setting of Mey Battery, 80 m northeast of Braes of Harrow (SM13649) would be anticipated due to the distance from the Proposed Development and the development's scale. The monument would be effectively screened by the underlying topography and modern forestry plantations which exist between the monument and the Proposed Development to the south. Therefore, this asset has not been considered further in this assessment.

### **7.2.6 Castle of Mey, Lodge and Gardens (LB1797), (LB1798) and (GDL00096)**

There is a potential for limited visibility of the Proposed Development from the Category A listed Castle of Mey and Garden Walls (LB1797), its associated designated landscape (GDL00096) and Category B lodge (LB1798), which are considered as one entity for the purposes of this assessment.

As a Category A listed building, the Castle of Mey (1797) and its lodge (LB1798) are of outstanding historical value. The designated gardens (GDL00096) provide a setting which is of considerable aesthetic value, although much of that relates to the relationship of the views out to the sea to the north and into the clump planting and stone dyke which enclose the castle to the south. The longer views to the south contribute to this value by primarily providing a sense of remoteness and place, rather than contributing to a specific



artistic composition, and the open view is framed by existing planting within the garden and on the opposite side of the A836, with a forestry plantation behind that.

Historic Environment Scotland, as noted in **Section 3**, initially raised concerns in the pre-application advice regarding the potential intervisibility of the tallest elements of the Proposed Development, particularly the infrastructure which is situated to the south at the rise of the hill, which may be visible from the southern garden and from the principal rooms on the first floor level of the Castle of Mey. The ZTVs provided (**Appendix E**) show the theoretical visibility from the gardens south of the castle which demonstrates significantly reduced visibility from this level; much of the screening comes from the planting in and at the southern end of the gardens, which is part of the designed scheme intended to provide privacy and screening of the castle in views from the outside gardens (see **Appendix D, Figure D 2**). This is considered robust, permanent screening between the Castle of Mey and the Proposed Development.

Following an analysis of the ZTVs and the result of the walkover survey, it has been assessed that at ground level the Proposed Development would be wholly screened by topography and planting within the Castle of Mey gardens. LVA Viewpoint 4, from the Castle approach road, shows how the screening planting at the southern edge of the garden would entirely screen the Proposed Development in views from the southern part of the garden. It is considered there may be limited theoretical visibility out from the first floor of the castle. This visibility would, however, also be precluded by the blocks of forestry plantation and shelter belts north of Hollandmey.

It was noted during consultation that modern forestry plantations cannot be relied on for permanent screening due to their commercial nature and likelihood to be felled for harvest. While this is acknowledged, the plantations would typically be restocked and shelter belts would be retained, as is visible in the areas of plantation adjacent to the Development Area, which contains a mix of more mature planting and new growth or recent restock. This means that even if mature forestry were felled, the restocked plantation and retained shelter belts would continue to provide screening. It is worth noting that as part of the granted Gills Bay Substation development (Application reference: 21/05536/FUL) (see 'New SSE Substation Compound (By Others)' on **Figure A 1, Appendix A**), the area of existing coniferous forestry to the north of the substation is to be felled and replanted as permanent mixed woodland, with a stocking density between 700 and 1600 trees per hectare (habitat dependant). It is considered that this forestry would provide permanent screening of any visibility of upper parts of the Proposed Development.

To understand the composition of the Proposed Development with regards to the underlying topography, ZTVs with and without planting (see **Appendix D**) and a bare earth wireframe was generated (see **Appendix E**) which illustrates the theoretical visibility of the Proposed Development in the absence of intervening forestry.

With the existing forestry plantations and shelterbelts in place, there would be no visibility of the Proposed Development from the southern garden (refer to Viewpoint 4 in **Appendix F**) and first floor of the Castle of Mey. In the absence of modern plantations and the screening planting for Gill's Bay substation, and disregarding the filtering of views afforded by the parkland planting, there would be some visibility of the proposed development, as demonstrated in the bare ground ZTV (**Figure D 1, Appendix D**) and wireframe (**Appendix E**). However, the Proposed Development includes a landscaping bund and planting in the area immediately surrounding the BESS facility which would contribute to minimising the view of the tallest elements of the BESS facility, and even in this worst case, the Proposed Development would be visible with difficulty from the first floor of the Castle of Mey to the viewer who was aware of its presence and actively searched the view.



It is assessed that the Proposed Development would have a negligible impact on the setting of the Castle of Mey, as the key elements of its setting, principally its aesthetic value, its relation to northward views out to sea, and the sense of remoteness experienced in views to the south from the ground level and first floor of the castle, would be retained. HES agreed that the Proposed Development would not have an adverse impact on the setting of the Castle of Mey and its associated Inventory Garden and designated landscape on 10<sup>th</sup> July 2024 (see **Section 3**).

Taken cumulatively with the consented Gills Bay substation, and the proposed Hollandmey and operational Mey Village Hall wind energy developments, any visibility of the Proposed Development, i.e. battery units situated on higher ground within the south of the Development Area, would be precluded by planting proposed as mitigation of the Gills Bay and Hollandmey developments, and consequently no cumulative effects would arise.

## 8 Recommendations

Any development and groundworks across the Proposed Development may have a detrimental impact on any surviving known and unknown archaeological remains. The Site Layout Plan (**Appendix C, Figure C 1**) indicates that there is the potential for impacts to post-Medieval agricultural remains within the Development Area, which are considered to be of local importance.

It is considered that there is a negligible potential for a material impact as a result of changes to setting on the cultural significance of heritage assets discussed in Section 7.2, and therefore no additional mitigation is proposed (**Appendix C, Figure C 1**).

A programme of archaeological monitoring secured via a suitably worded condition attached to any planning permission would be appropriate to mitigate impacts to surviving below ground archaeological remains in line with The Highland Council's approved 'Standards for Archaeological Work' (2012b).

Where an agreed scheme of archaeological mitigation is in place, it is considered that any loss of the informative value of those archaeological remains would be effectively mitigated to an acceptable level.

## 9 References

AOC Archaeology Group (2024). Rigifa BESS, Caithness: Archaeological Watching Brief, Data Structure Report.

Caithness and Sutherland Local Development Plan (CaSPlan) (2018). The Highland Council. Available at: [Caithness and Sutherland Local Development Plan \(CaSPlan\) | CaSPlan Adopted \(highland.gov.uk\)](#)

Chartered Institute for Archaeologists (2020). Standards and guidance for historic environment desk-based assessment.

Curtins (2024). Rigifa, Thurso: Phase 2 Ground Investigation Report.

Highland Council (2012a). The Highland Local Development Plan.

Highland Council (2012b). Standards for archaeological work - *inbhean chomhairle na gàidhealtachd airson obair àrceolasach*

Historic Environment Scotland (2020a) Designation Policy and Selection Guidance. Available at: [Designation Policy and Selection Guidance | Hist Env Scotland \(historicenvironment.scot\)](#)

Historic Environment Scotland (2020b). Managing Change in the Historic Environment: Setting.

Historic Environment Scotland (2021) Scotland's Listed Buildings. Available at: [Scotland's Listed Buildings | Historic Environment Scotland | HES](#)

Scottish Government (2011). Planning Advice Note 2/2011: Planning and Archaeology

Scottish Government (2014a). Our Place In Time: The Historic Environment Strategy for Scotland

Scottish Government (2014b). Scottish Planning Policy.

Scottish Government (2015). Scotland's Archaeology Strategy

Scottish Government (2019a). Historic Environment Policy for Scotland.

Scottish Government (2019b). Historic Environment Scotland Circular 1: Processes and Procedures

Scottish Government (2023). National Planning Policy Framework 4.

Scottish Power Renewables (2021). Hollandmey Renewable Energy Development: Chapter 11 Archaeology and Cultural Heritage. Available at: [Volume 2 - Chapter 11 - Archaeology and Cultural Heritage.pdf \(scottishpowerrenewables.com\)](#)

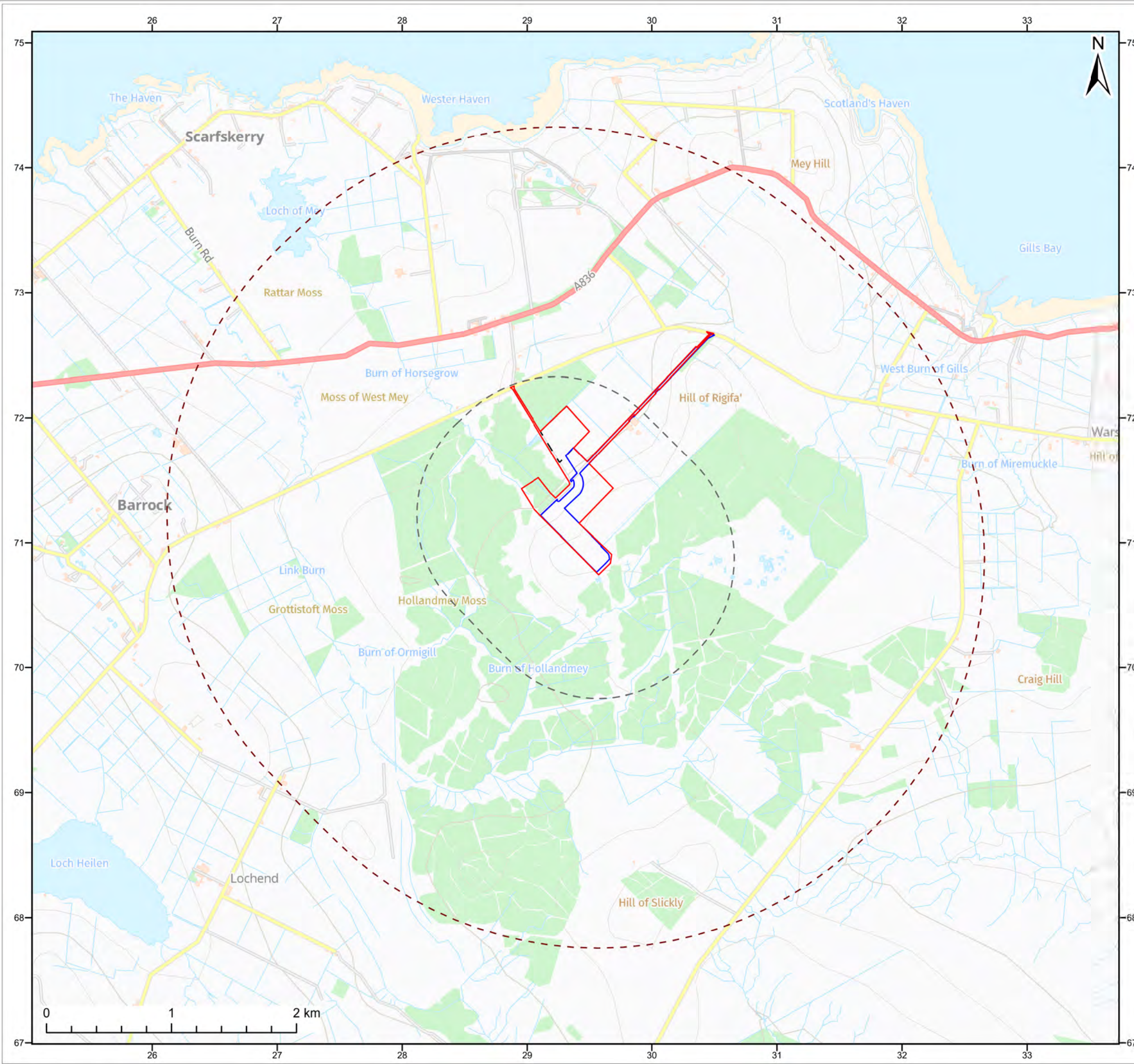
SSE Scottish and Southern Electricity Networks (2021). Gills Bay 132 kV Switching Station. Available at: [ssen-gills-bay-12pp-booklet-24583-artwork-digital.pdf \(ssen-transmission.co.uk\)](#)

SUAT Ltd (2004). Archaeological Component Proposed Wind Farm at Schoolary, Caithness, Highland. [fieldwork report]

## Appendix A – Figures

### Figure A 1 - Site Location





**Legend:**

- Planning Boundary
- Consented SSE Gills Bay Substation (By others)
- 1km Study Area
- 3km Study Area
- Development Area

Esri UK, Esri, TomTom, Garmin, FAO, NOAA, USGS, Contains OS data © Crown Copyright and database right 2023  
Contains data from OS Zoomstack, Esri, USGS  
© Haskoning DHV UK Ltd, 2024

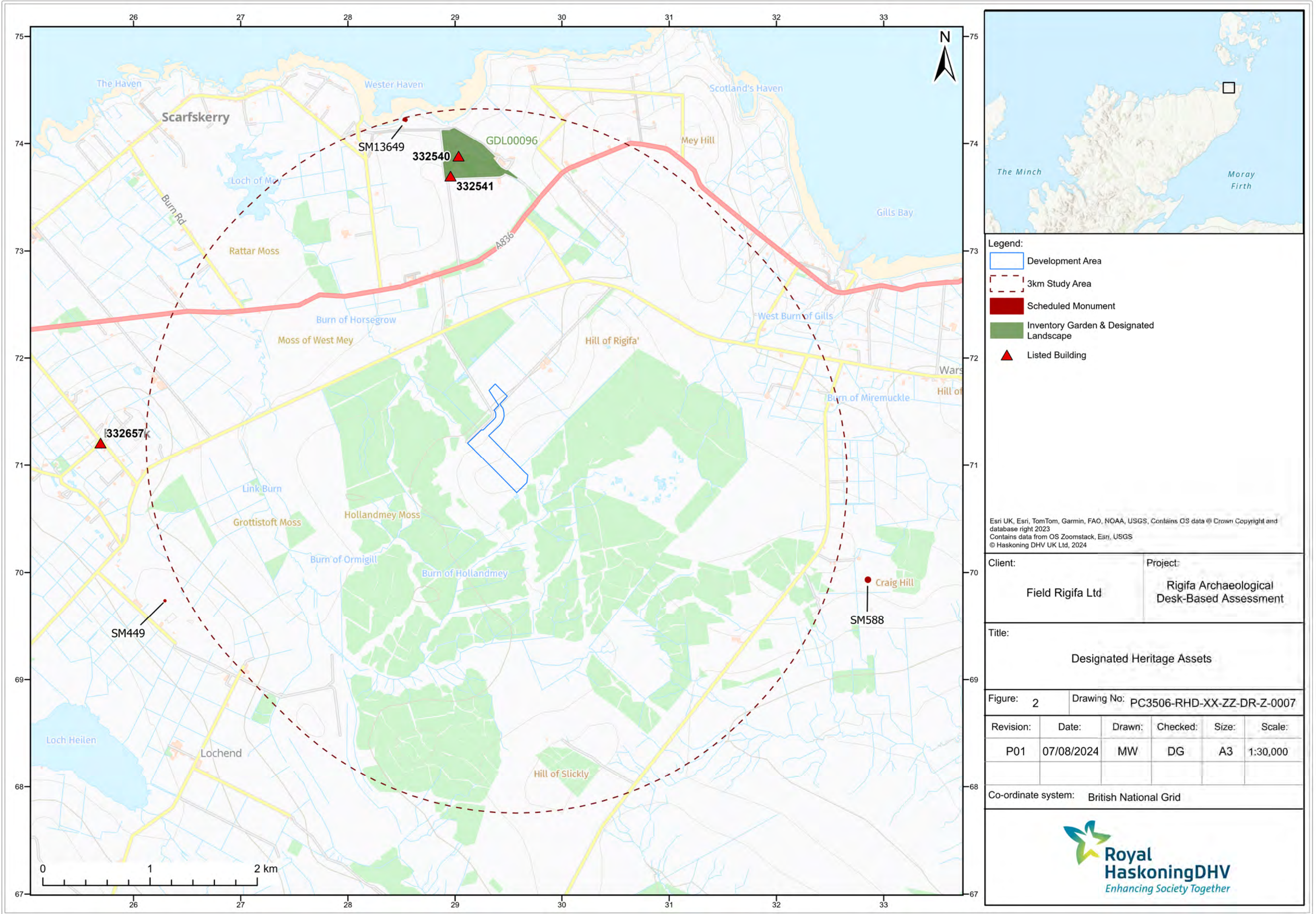
|   |            |   |          |       |          |
|---|------------|---|----------|-------|----------|
| Client:                                   |            | Project:                                    |          |       |          |
| Field Rigifa Ltd                          |            | Rigifa Archaeological Desk-Based Assessment |          |       |          |
| Title:                                    |            |   |          |       |          |
| Site Location                             |            |   |          |       |          |
| Figure: 1                                 |            | Drawing No: PC3506-RHD-XX-ZZ-DR-Z-0006      |          |       |          |
| Revision:                                 | Date:      | Drawn:                                      | Checked: | Size: | Scale:   |
| P02                                       | 27/09/2024 | JH  | DG       | A3    | 1:30,000 |
| P01                                       | 18/09/2024 | MW  | DG       | A3    | 1:30,000 |
| Co-ordinate system: British National Grid |            |   |          |       |          |

**Royal HaskoningDHV**  
Enhancing Society Together



**Figure A 2 - Designated Heritage Assets**

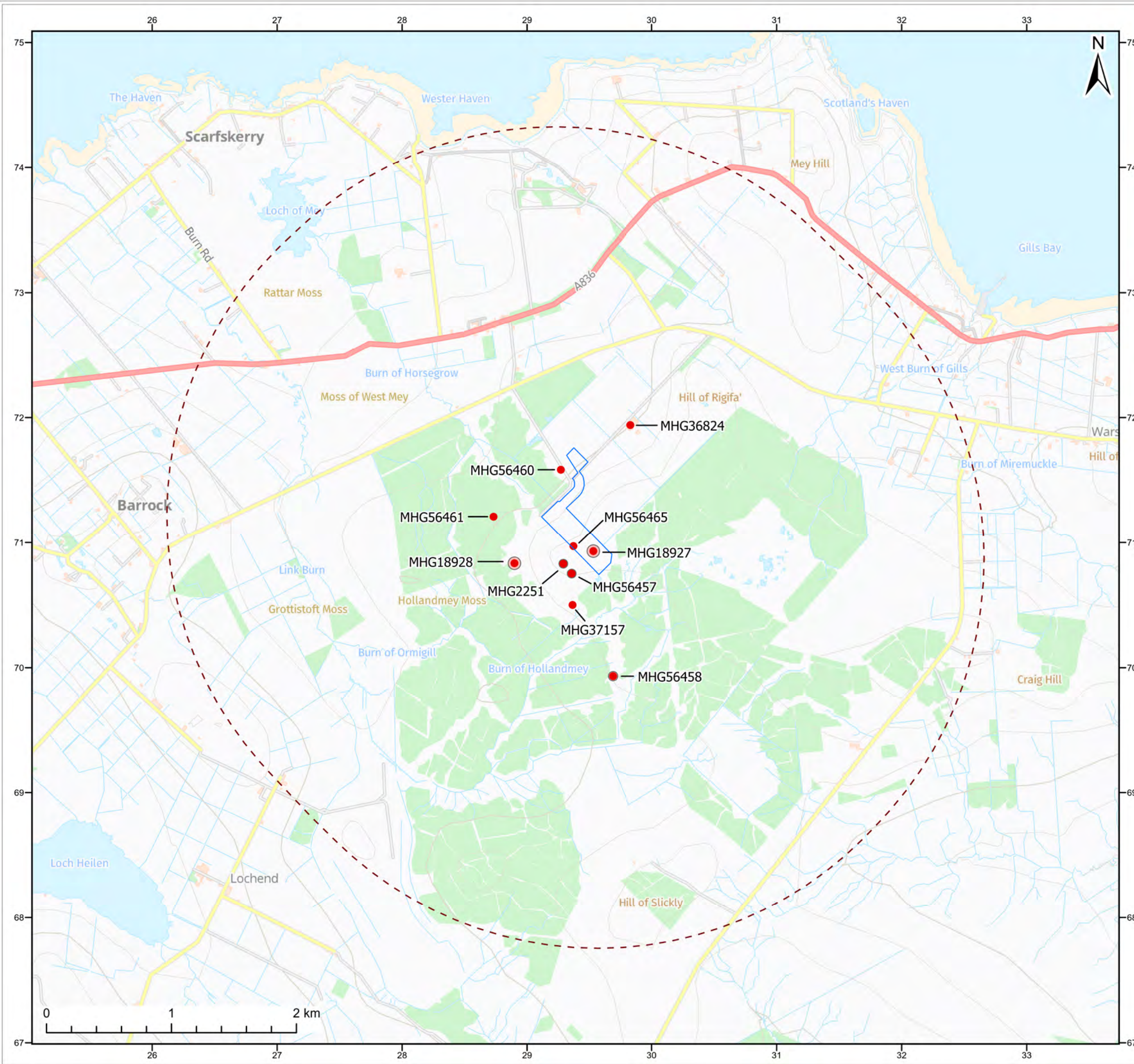






### Figure A 3 - Non-designated Heritage Assets





**Legend:**

- Development Area
- 3km Study Area
- Highland HER Mon polygon
- Highland HER Mon point

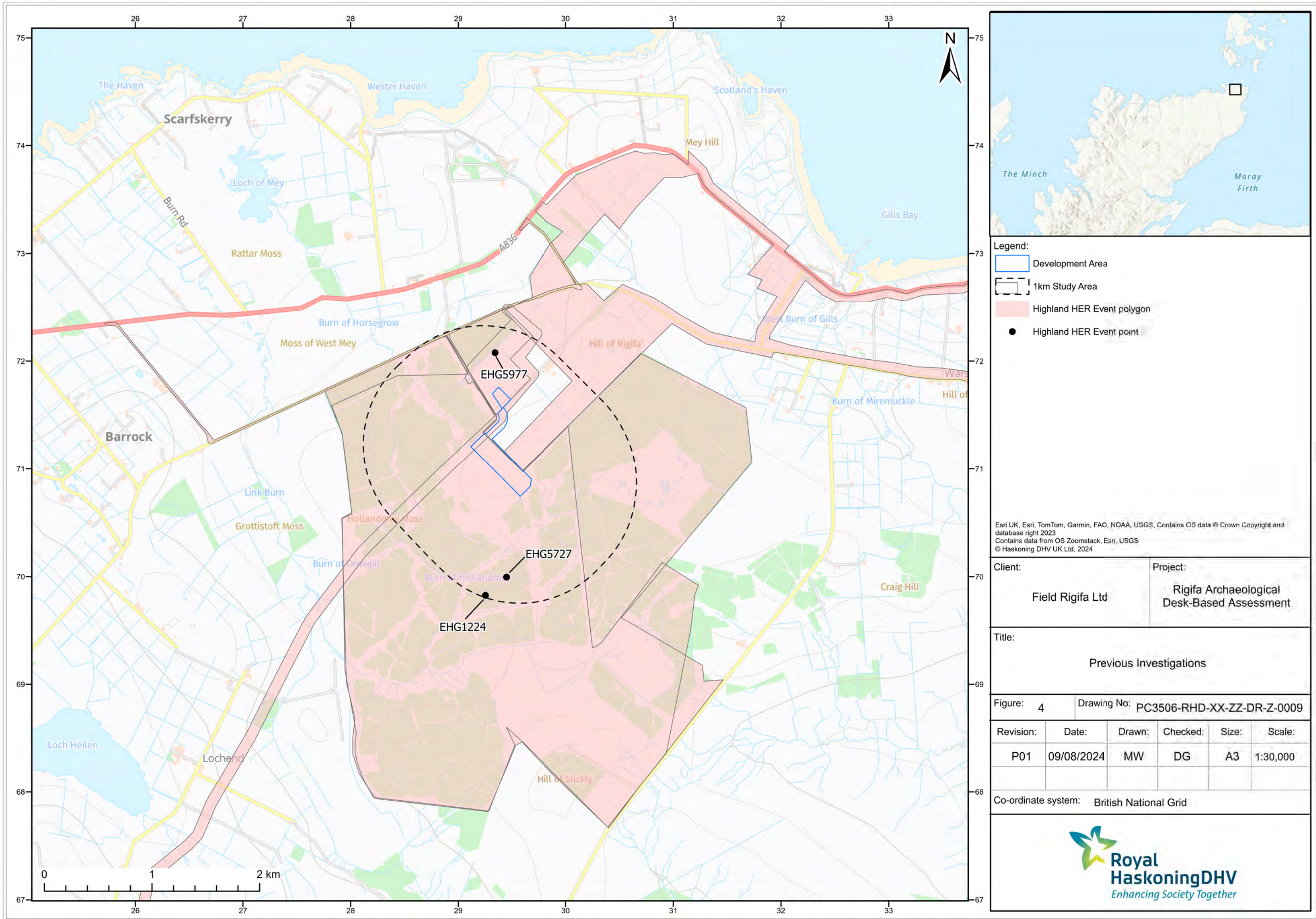
Esri UK, Esri, TomTom, Garmin, FAO, NOAA, USGS, Contains OS data © Crown Copyright and database right 2023  
Contains data from OS Zoomstack, Esri, USGS  
© Haskoning DHV UK Ltd, 2024

|   |            |   |          |       |          |
|---|------------|---|----------|-------|----------|
| Client:                                   |            | Project:                                    |          |       |          |
| Field Rigifa Ltd                          |            | Rigifa Archaeological Desk-Based Assessment |          |       |          |
| Title:                                    |            |   |          |       |          |
| Non Designated Heritage Assets            |            |   |          |       |          |
| Figure: 3                                 |            | Drawing No: PC3506-RHD-XX-ZZ-DR-Z-0008      |          |       |          |
| Revision:                                 | Date:      | Drawn:                                      | Checked: | Size: | Scale:   |
| P01                                       | 09/08/2024 | MW  | DG       | A3    | 1:30,000 |
| Co-ordinate system: British National Grid |            |   |          |       |          |
|   |            |   |          |       |          |



## Figure A 4 - Previous Investigations





- Legend:
- Development Area
  - 1km Study Area
  - Highland HER Event polygon
  - Highland HER Event point

Esri UK, Esri, TomTom, Garmin, FAO, NOAA, USGS, Contains OS data © Crown Copyright and database right 2023  
Contains data from OS Zoomstack, Esri, USGS  
© Haskoning DHV UK Ltd, 2024

|                  |   |
|------------------|---|
| Client:          | Project:                                    |
| Field Rigifa Ltd | Rigifa Archaeological Desk-Based Assessment |

|                         |
|-------------------------|
| Title:                  |
| Previous Investigations |

|           |  |
|-----------|--|
| Figure: 4 | Drawing No: PC3506-RHD-XX-ZZ-DR-Z-0009 |
|-----------|--|

| Revision: | Date:      | Drawn: | Checked: | Size: | Scale:   |
|-----------|------------|--------|----------|-------|----------|
| P01       | 09/08/2024 | MW     | DG       | A3    | 1:30,000 |
|           |            |        |          |       |          |

Co-ordinate system: British National Grid





## Appendix B – Gazetteers

**Table B 1 Non-designated Heritage Assets within 1 km of the Development Area**

| <i>HER ID</i> | <i>Name</i>                               | <i>Monument Type</i> | <i>Aberdeenshire HER Alias</i>  |
|---------------|---|----------------------|---|
| MHG18927      | Farmstead - Hollandmey                    | FARMSTEAD            | <a href="https://her.highland.gov.uk/monument/MHG18927">https://her.highland.gov.uk/monument/MHG18927</a> |
| MHG18928      | Possible farmstead - Hollandmey           | FARMSTEAD            | <a href="https://her.highland.gov.uk/monument/MHG18928">https://her.highland.gov.uk/monument/MHG18928</a> |
| MHG2251       | Possible broch, Hollandmey                | BROCH; MOUND         | <a href="https://her.highland.gov.uk/monument/MHG2251">https://her.highland.gov.uk/monument/MHG2251</a>   |
| MHG36824      | Philips Mains                             | SITE; Cottage        | <a href="https://her.highland.gov.uk/monument/MHG36824">https://her.highland.gov.uk/monument/MHG36824</a> |
| MHG37157      | Farmstead and Farmhouse - Hollandmey      | FARMSTEAD; FARMHOUSE | <a href="https://her.highland.gov.uk/monument/MHG37157">https://her.highland.gov.uk/monument/MHG37157</a> |
| MHG56457      | Farmstead - Hollandmey                    | FARMSTEAD            | <a href="https://her.highland.gov.uk/monument/MHG56457">https://her.highland.gov.uk/monument/MHG56457</a> |
| MHG56458      | Farmstead - Crackersfield                 | FARMSTEAD            | <a href="https://her.highland.gov.uk/monument/MHG56458">https://her.highland.gov.uk/monument/MHG56458</a> |
| MHG56460      | Sheepfold - near Philips Mains, Caithness | SHEEP FOLD           | <a href="https://her.highland.gov.uk/monument/MHG56460">https://her.highland.gov.uk/monument/MHG56460</a> |
| MHG56461      | Sheepfold - Hollandmey Moss, Caithness    | SHEEP FOLD           | <a href="https://her.highland.gov.uk/monument/MHG56461">https://her.highland.gov.uk/monument/MHG56461</a> |
| MHG56465      | Sheepfold - Hollandmey, Caithness         | SHEEP FOLD           | <a href="https://her.highland.gov.uk/monument/MHG56465">https://her.highland.gov.uk/monument/MHG56465</a> |

## Project Related

**Table B 2 Previous Investigations within 1 km of the Development Area**

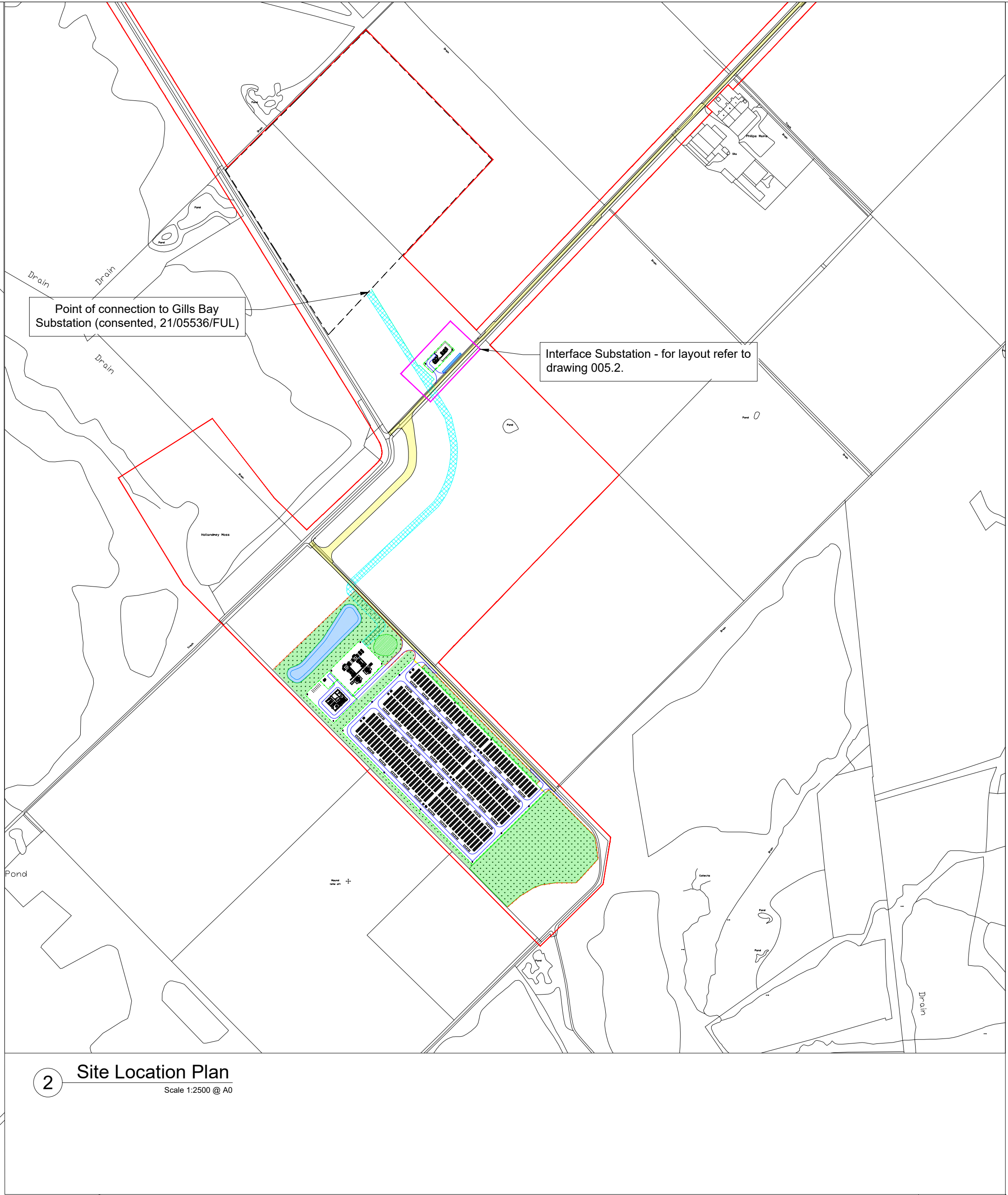
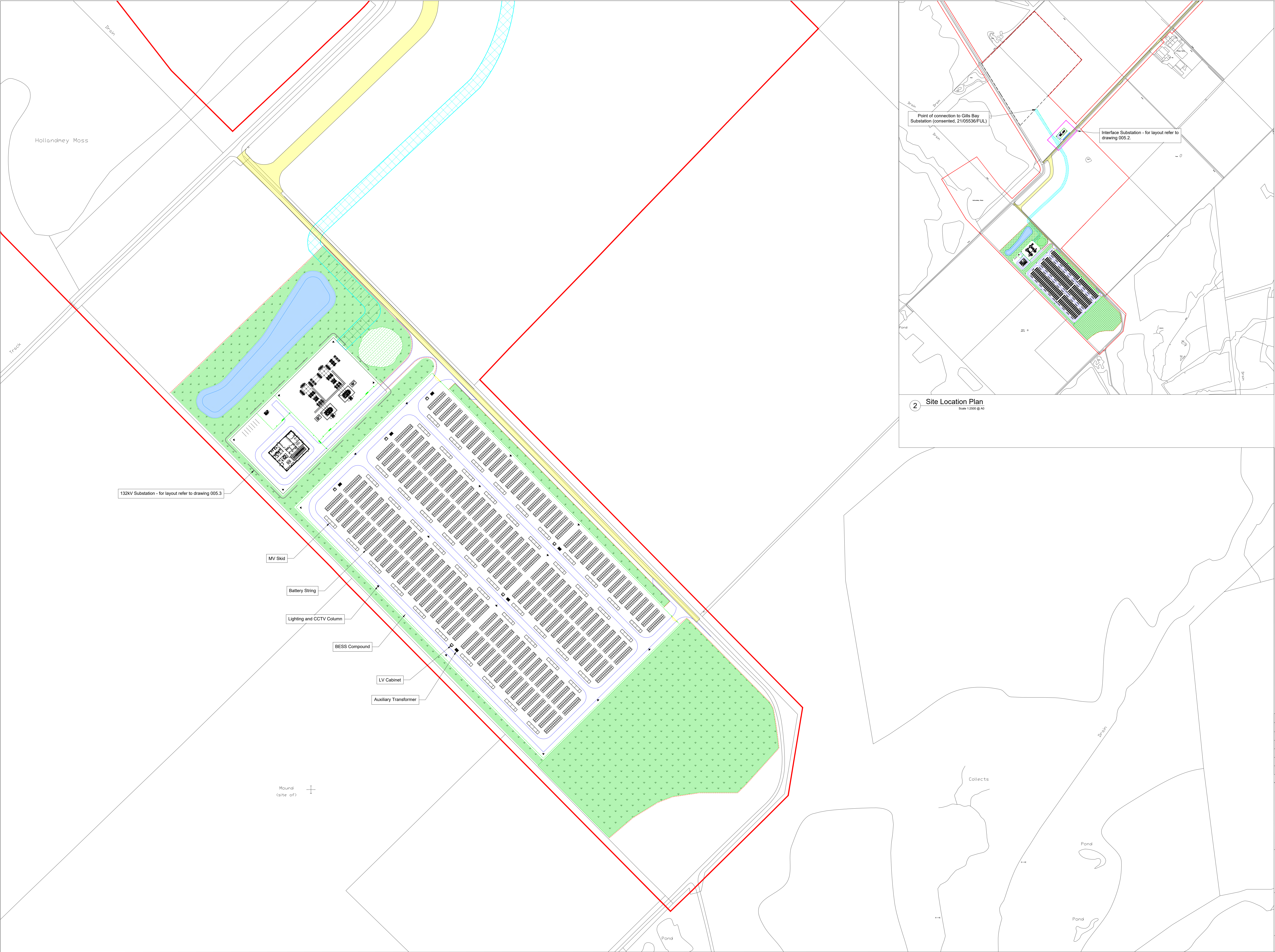
| <i>HER ID</i>  | <i>Name</i>                                       | <i>Location</i>                          | <i>Date</i>                | <i>Type</i>                                      | <i>Aberdeenshire HER Website / Online Report</i>   |
|----------------|---|--|----------------------------|--|--|
| <i>EHG1224</i> | <i>Proposed Scoolary windfarm, Caithness</i>      | <i>Scoolary</i>                          | <i>June 2004</i>           | <i>Desk based assessment and walkover survey</i> | <i><a href="https://her.highland.gov.uk/event/EHG1224">https://her.highland.gov.uk/event/EHG1224</a></i> |
| <i>EHG3158</i> | <i>Inner Sound, Canisbay</i>                      | <i>Canisbay</i>                          | <i>July 2011</i>           | <i>Desk based assessment and walkover survey</i> | <i><a href="https://her.highland.gov.uk/event/EHG3158">https://her.highland.gov.uk/event/EHG3158</a></i> |
| <i>EHG4805</i> | <i>Gills Bay 132kV</i>                            | <i>Land 500m W of Philips Mains, Mey</i> | <i>March to April 2014</i> | <i>Desk based assessment and walkover survey</i> | <i><a href="https://her.highland.gov.uk/event/EHG4805">https://her.highland.gov.uk/event/EHG4805</a></i> |
| <i>EHG5977</i> | <i>Proposed Switching Station, Gills Bay</i>      | <i>Philips Mains, Gills Bay</i>          | <i>March 2014</i>          | <i>Desk based assessment and walkover survey</i> | <i><a href="https://her.highland.gov.uk/event/EHG5977">https://her.highland.gov.uk/event/EHG5977</a></i> |
| <i>EHG5727</i> | <i>Proposed renewable development, Hollandmey</i> | <i>Hollandmey</i>                        | <i>April 2020</i>          | <i>Desk based assessment and walkover survey</i> | <i><a href="https://her.highland.gov.uk/event/EHG5727">https://her.highland.gov.uk/event/EHG5727</a></i> |



## Appendix C - Site Plan

### Figure C 1 - Detailed Site Layout Plan





- Drawing Notes:**
- All dimensions are shown in metres unless noted otherwise.
  - Do not scale from this drawing.
- Legend**
- Planning Boundary
  - Access Route
  - Indicative Cable Route
  - Consented SSE Gills Bay Substation (By Others)
  - Access Road
  - Fencing - Palisade Fence
  - Fencing - Stock Proof Fence
  - Attenuation Basin/Swale
  - Planting/Landscaping
  - 1.5m High Bund (Landscaping)

|        |   |       |       |       |       |       |       |       |       |       |    |
|--------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 1:10   | 0 | 100mm | 200mm | 300mm | 400mm | 500mm | 600mm | 700mm | 800mm | 900mm | 1m |
| 1:20   | 0 | 100mm | 200mm | 300mm | 400mm | 500mm | 600mm | 700mm | 800mm | 900mm | 1m |
| 1:25   | 0 | 100mm | 200mm | 300mm | 400mm | 500mm | 600mm | 700mm | 800mm | 900mm | 1m |
| 1:50   | 0 | 100mm | 200mm | 300mm | 400mm | 500mm | 600mm | 700mm | 800mm | 900mm | 1m |
| 1:100  | 0 | 100mm | 200mm | 300mm | 400mm | 500mm | 600mm | 700mm | 800mm | 900mm | 1m |
| 1:200  | 0 | 100mm | 200mm | 300mm | 400mm | 500mm | 600mm | 700mm | 800mm | 900mm | 1m |
| 1:250  | 0 | 100mm | 200mm | 300mm | 400mm | 500mm | 600mm | 700mm | 800mm | 900mm | 1m |
| 1:500  | 0 | 100mm | 200mm | 300mm | 400mm | 500mm | 600mm | 700mm | 800mm | 900mm | 1m |
| 1:1000 | 0 | 100mm | 200mm | 300mm | 400mm | 500mm | 600mm | 700mm | 800mm | 900mm | 1m |
| 1:2000 | 0 | 100mm | 200mm | 300mm | 400mm | 500mm | 600mm | 700mm | 800mm | 900mm | 1m |
| 1:5000 | 0 | 100mm | 200mm | 300mm | 400mm | 500mm | 600mm | 700mm | 800mm | 900mm | 1m |

| REV | DATE       | DESCRIPTION   | BY | CHKD |
|-----|------------|---|----|------|
| 6   | 24.09.2024 | Drawing amended for planning submission   | JH | AP   |
| 5   | 12.09.2024 | BESS compound amended for planting/landscaping area increased. Interface substation position amended. | JH | AP   |
| 4   | 22.07.2024 | Site layout amended with reduced number of BESS blocks  | JH | AP   |
| 3   | 12.07.2024 | Site layout amended for larger attenuation basin  | JH | AP   |
| 2   | 12.04.2024 | Temporary construction compound area amended  | JH | JM   |
| 1   | 04.04.2024 | Construction compound amended and temporary construction working area added                           | JH | RS   |
| 0   | 13.03.2024 | Detailed Location Plan - Original   | JH | JM   |



Field  
Fora - Montacute Yards  
186 Shoreditch High Street  
London  
E1 6HU

PROJECT  
RIGIFA

TITLE  
Detailed Site Layout Plan

DISCIPLINE  
PLANNING

DRAWING STATUS  
FOR PLANNING

|             |            |             |            |             |
|-------------|------------|-------------|------------|-------------|
| SCALE       | DATE       | DRAWN BY    | CHECKED BY | APPROVED BY |
| As Shown    | 13.03.2024 | JH          | JM         | RS          |
| PROJECT NO. |            | DRAWING NO. |            | REV.        |
| BTGBRIG01   |            | 005.4       |            | 06          |

1 Detailed Site Layout Plan  
Scale 1:1000 @ A0



## Appendix D - Zones of Theoretical Visibility

### Figure D 1 - Bare Ground ZTV up to 3 km from the Proposed Development



0885-ZTVs.qxd

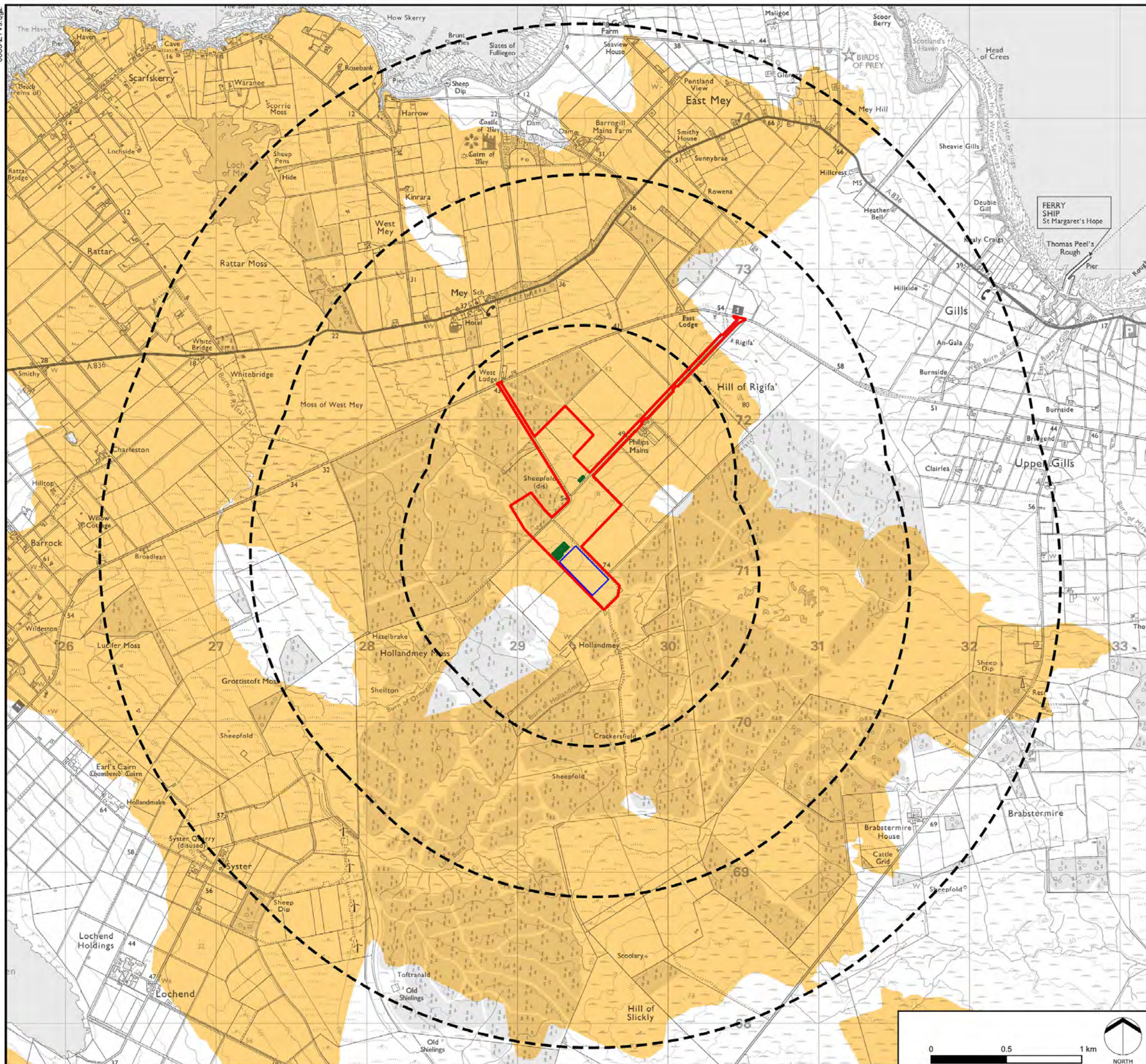
## FIELD RIGIFA BESS

**FIGURE 2**

Zone of Theoretical Visibility

### KEY

- Site Boundary
- BESS Compound
- 132kV Compounds
- Distance Radii from Proposed Site Infrastructure (1, 2, 3km)
- Zone of Theoretical Visibility**
  - Site infrastructure may be visible



### FIGURE DATA:

This figure has been based on the following data:

Layout file: D003-obvs-infrastructure-T5-3km.shp  
Terrain data: T5-DTM.asc  
Viewer's eye height: 2m above ground level  
Calculation grid size: 5m

### NOTES:

This drawing is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the Viewshed routine in the Visibility Analysis plugin for QGIS.

The areas shown are the maximum theoretical visibility, taking topography into account.

This visibility map is based on a 'bare earth' model of the landform and does not show any effects of screening from obstacles such as buildings and vegetation.

The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on a derived DTM and has a 5m<sup>2</sup> resolution.

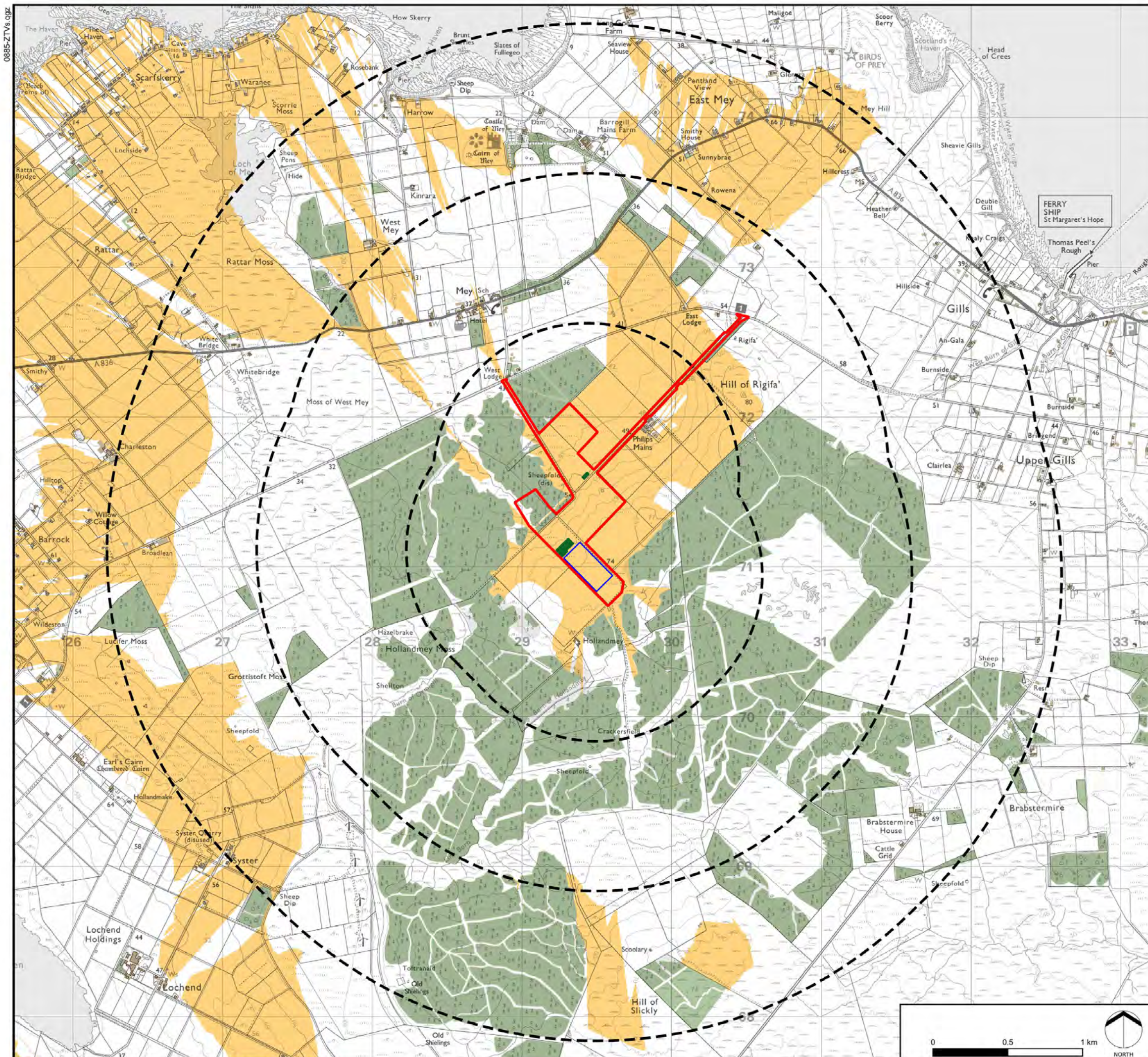
Projected Coordinate System: British National Grid

| DATE     | BY | PAPER | SCALE    | QA | REV |
|----------|----|-------|----------|----|-----|
| SEP 2024 | MP | A3    | 1:25,000 | RH | -   |



**Figure D 2 – Up to 3 km ZTV with screening effect of woodland and settlement**





Contains Ordnance Survey data © Crown copyright and database right 2024

## FIELD RIGIFA BESS

**FIGURE 3**  
Zone of Theoretical Visibility With Screening  
Effect of Woodland and Settlement

**KEY**

- Site Boundary
- BESS Compound
- 132kV Compounds
- Distance Radii from Proposed Site Infrastructure (1, 2, 3km)
- Existing Buildings (modelled at 7.5m)
- Existing Woodland (modelled at 10m)

**Zone of Theoretical Visibility**

- Site infrastructure may be visible

**FIGURE DATA:**  
This figure has been based on the following data:

Layout file: D003-obvs-infrastructure-T5-3km.shp  
Terrain data: T5-DTM.asc  
Viewer's eye height: 2m above ground level  
Calculation grid size: 5m

**NOTES:**  
This drawing is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the Viewshed routine in the Visibility Analysis plugin for QGIS.

The areas shown are the maximum theoretical visibility, taking into account topography, principal woodlands and buildings.

A digital surface model (DSM) has been derived from OS Terrain 5 height data with the locations of woodland and buildings taken from the OS Open Map Local dataset. Buildings have been modelled with an assumed height of 7.5m and woodland an assumed height of 10m, representing a conservative estimate of average heights within the study area.

The model does not take into account some localised features such as small copses, hedgerows or individual trees and therefore still gives an exaggerated impression of the extent of visibility. The actual extent of visibility on the ground will be less than that suggested by this plan.

The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on a derived DSM and has a 5m<sup>2</sup> resolution.

Projected Coordinate System: British National Grid

| DATE     | BY | PAPER | SCALE    | QA | REV |
|----------|----|-------|----------|----|-----|
| SEP 2024 | MP | A3    | 1:25,000 | RH | -   |