GDG
GAVIN & DOHERTY
GEOSOLUTIONS

Fyrish BESS
Geoenvironmental and Geotechnical Desk Study

FIELD

Client	**Field Fyrish Ltd.**
Document Ref.	24093-R-001-01
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REVISION HISTORY

Rev	Date	Reason for Issue	Originator	Reviewer	Approver
[00]	28/06/2024	Draft	E Cline	R Harrison	J McGrath
01	17/02/2025	Post review and boundary change	E Cline	R Harrison	A Shepherd

DISCLAIMER

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1 INTRODUCTION

1.1 GENERAL

Gavin and Doherty Geosolutions Ltd. (GDG) was commissioned by Field Fyrish Ltd. to complete a Desk Study to establish the geoenvironmental and geotechnical ground conditions at Fyrish (the Site) located southeast of Alness, Highland, Scotland. The Site location and Site boundary are outlined in Figure 1-1.

Figure 1-1: Site Location Plan

The Desk Study review is intended to inform the proposed development of a 200MW battery energy storage system (BESS) 500m to the south of the existing Fyrish Substation. The proposed development comprises battery storage containers, transformers, substation, access tracks, grid connection powerlines, fencing, landscaping and other associated infrastructure. The proposed development is outlined in Figure 1-2 and high resolution version held in Appendix A.

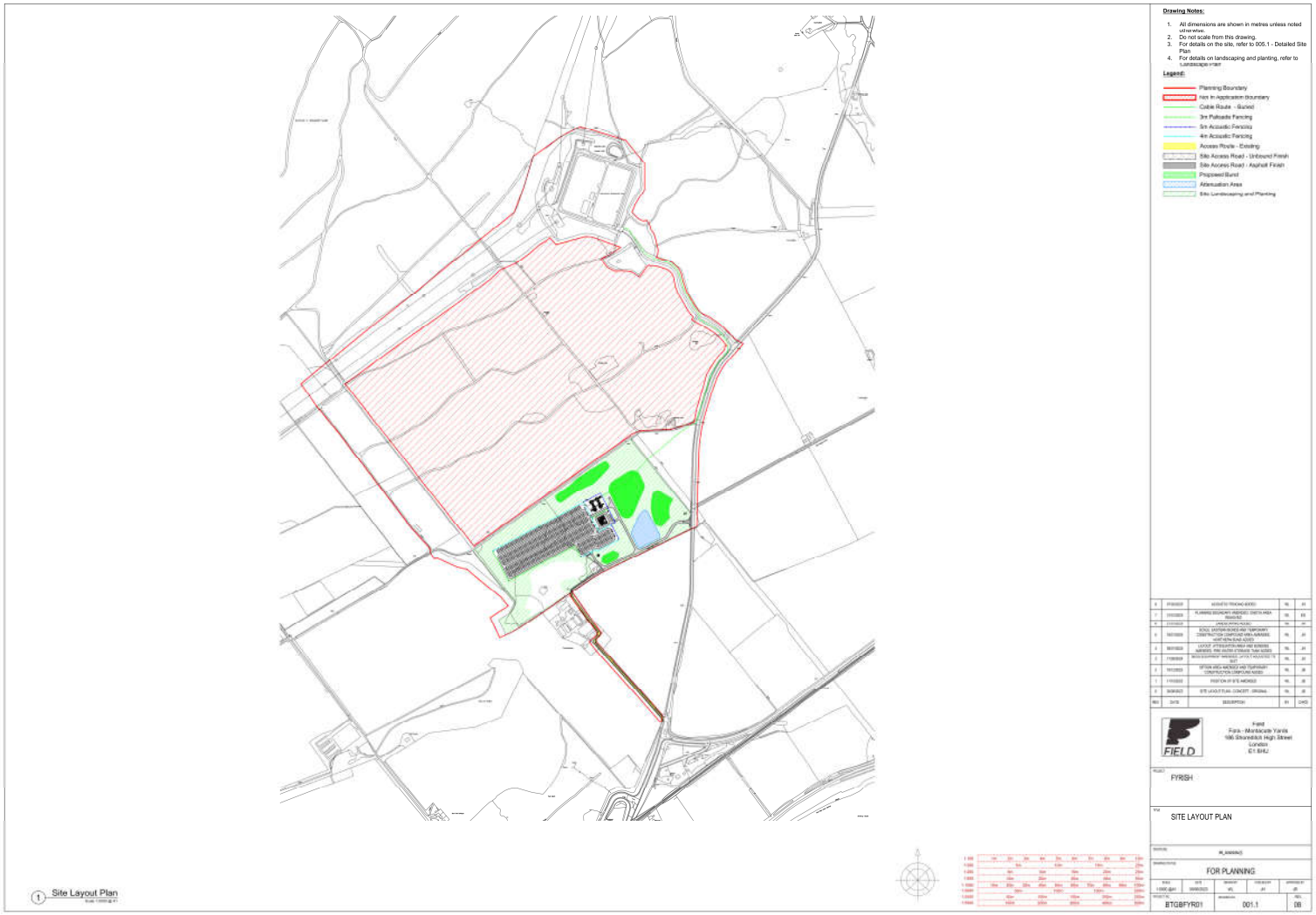


Figure 1-2: Fyrish BESS Proposed Development – Site Layout Plan (Field Energy 2025 (Rev.8))

1.2 REPORT STRUCTURE

Desk-based information contained within this report has been compiled through environmental data review and mapping research (historical, geological and hydrogeological). The preparation of this report included the following specific tasks:

- Review the development history of the Site from available historical maps to identify previous uses which may have resulted in contamination issues.
- Review the local geology from the available geological plans and memoirs, together with surface watercourse and hydrogeology classifications.
- Undertake a qualitative risk assessment of potential contamination issues at the Site. The qualitative risk assessment includes the development of an Initial Conceptual Model for the Site and the identification of any Significant Pollutant Linkages.
- Assess potential geotechnical constraints.
- Determine whether additional investigation is necessary to provide further information on the contamination and geotechnical status of the Site.

2 DESK STUDY

2.1 SITE DESCRIPTION

The Site is situated approximately 1.2km southeast of the town of Alness in the Highlands, Scotland, encompassing an area of 18.4ha. The National Grid Reference for the approximate centre of the Site is 262991, 868946 and the Site location and layout are shown in Figure 1-1.

The Site is predominantly rough pasture, it has undulating mounds running east to west and low-lying wet ground, with a roughly rectangular-shaped boundary. The Site is composed of tree plantations and wetland areas. There is a farm building located within the Site on the southeastern boundary. The Site is accessible via the B9176, along the access track to the Clashnabuiac farm buildings.

2.2 SITE WALKOVER

A Site walkover was undertaken by a GDG Engineer on 16th May 2024. A selection of representative photographs and associated comments are included in Appendix B. The following section includes observations collected from the walkover.

The Site comprises a varied landscape, featuring raised areas covered with bracken running east to west through the centre, alongside wetland areas and rough pasture. It is dotted with both mature and younger trees throughout. In the southwestern part of the Site, there is a former mill pond and lade.

In the eastern portion of the Site the ground is flat-lying and is mostly rough grassland with areas of bracken. The central and western portions were observed to comprise mounds that run across the Site, they were vegetated with bracken and nettles. The mounds were observed to be composed of sands and gravels in exposed in rabbit holes.

The Site is bounded by the following:

- The southeastern boundary largely follows a track that is the access to the Estate house. To the south of this are Estate buildings and farmland.
- The northeastern boundary is delineated by a fence line between rough grassland, and a field. The field is bound by the B9176 road.
- The northwestern boundary is marked by a forest track with woodland (plantation and deciduous trees) rising towards Fyrish Hill.
- The southeastern boundary follows a fence line between mature deciduous trees (oak etc) / immature (silver birch) with crop farmland beyond.

The Site is crossed northeast to northwest by a single wooden pylon, which appears to be associated with the Alness Substation.

2.3 SITE HISTORY

The history of the Site has been reviewed using historical 1:10,000 and 1:2,500 scale Ordnance Survey (OS) maps dating from 1875 to the present day, detailed in Appendix C.

The earliest available historical map, dated 1875, shows the Site predominantly as a rough pasture. In the southwest corner of the Site, a mill pond, sluice, and mill dam are recorded, which were mapped until 1965. The pond remains today, with some of the historical infrastructure features (lade and walls) observed during the Site walkover. The presently observed drains and watercourses were also recorded in the 1875 map. Over time, changes in on-site vegetation, primarily variations in tree cover, have been noted.

The 1875 map records the present B9176 road adjacent to the southeastern corner of the Site boundary and the Far North railway line 700m south of the Site, where it remains today.

By 1904, a building is recorded within the Site boundary, in the same location as the present farm building on the southeastern boundary edge, and Culcraggie Lodge and Cottages are identified 50m and 300m, respectively, to the northeast of the Site.

The early 1900s mapping shows a gravel pit 800m west of the Site, likely associated with the Fyrish settlement. Additionally, three wells and three cisterns were recorded within 900m of the Site boundary, with a tank present 750m to the northeast (likely to be for water, considering its location).

By 1956, the surrounding area of the Site had begun to develop. The Evanton Industrial Estate, located 800m southwest of the Site, commenced development during this period. Between 1979 and 1989, the A9 road was constructed 900m south of the Site, along the northern shore of the Cromarty Firth. An associated filling station is recorded 600m south of the Site on the 1989 map.

Between 1977 and 1978, two disused pits are recorded 300m and 750m northeast of the Site. By 1989, another disused pit is noted 490m north of the Site. By 2001, a quarry is situated 400m north of the Site, remaining until 2010. These pits and quarry are likely associated with the Culcraggie Estate.

Mapping indicates that between 2010 and 2024, the Fyrish Substation was developed. In 2024, Skiach Services are recorded 800 meters south of the Site.

Since the mid-1900s, there have been no significant changes or developments within the Site boundary.

2.4 GROUND INVESTIGATION DATA

This section provides a summary of available historical ground investigation logs relevant to the Site. There is no known ground investigation data available within the Site boundary. A review of the British Geological Society (BGS) online data found four trial pits within 500m south of the Site boundary, all undertaken in 1977 for the Highland Regional Council. The trial pits were part of a wider ground investigation for the construction of the A9 Evanton Bypass Structure, Table 2-1 summarises the available information.

Table 2-1: Summary of Available Ground Investigation Logs

BGS Ref.	Grid Reference	Strata Summary	Water Strike Summary
NH66NW1 291/154	263284, 868529	• Topsoil (0.0-0.30m) • Fine Sand (0.30-1.80m) • Silty Sand (1.80-4.00m)	2.00m Seepage
NH66NW1 291/155	263248, 868416	• Topsoil (0.0-0.20m) • Fine Sand (0.20-2.40m) • Silt with sand and gravel (2.40-3.80m)	3.20m (but soil damp from 0.80m)
NH66NW1 291/153	263203, 868319	• Topsoil (0.0-0.45m) • Fine Sand (0.45-2.35m) • Silt with sand (2.35-2.60m)	None
NH66NW1 291/152	263148, 868211	• Topsoil (0.0-0.30m) • Fine Sand (0.30-3.00m)	Ground level

2.5 ENVIRONMENTAL DESIGNATIONS

A review of the Scottish Natural Heritage data found 12 Designated Ancient Woodlands within 2km of the Site boundary, notably one Long-Established (of plantation origin) adjacent to the northern boundary of the Site.

2.6 PRIVATE WATER SUPPLIES

A review of the Highland Council Open Map data and a freedom of information request regarding Private Water Supplies (PWS) did not identify any private water supplies within 1km of the Site boundary.

2.7 ANTICIPATED GROUND CONDITIONS

2.7.1 ARTIFICIAL GEOLOGY

Available geological mapping shows no records or details of made, infilled or disturbed ground on the Site or within 500m of the Site. When considering the Site history and the observations gathered from the Site walkover, localised made ground is likely around the farm building, and within the southwestern corner associated with the former mill pond and infrastructure.

2.7.2 SUPERFICIAL GEOLOGY

The geological mapping records the Site to be underlain by glaciofluvial deposits of Pleistocene age comprising a mix of gravel, sand and silt. The BGS records the deposits to be typically coarse-grained sediments, with some finer-grained layers.

The historic trial pits, discussed in Section 2.4, encountered fine-grained silt and sand superficial deposits, which are likely to be glaciofluvial deposits. It is likely that the mounds of material recorded during the site walkover (Section 2.2) are a naturally occurring glaciofluvial feature (such as an esker), considering the geology and their presence since the first edition mapping, although this would need to be confirmed through investigation.

2.7.3 SOLID GEOLOGY

Geological mapping shows the solid geology beneath the Site to comprise the Raddery Sandstone Formation. The BGS describes the formation as mid-Devonian red sandstone largely of fluvial origin, with lenses of conglomerate units and muddy lacustrine units.

There do not appear to be any observed or inferred linear features within the bedrock.

2.7.4 GEOLOGICAL HAZARDS

The Groundsure report includes information from the BGS on potential hazards associated with ground conditions, which have been summarised for the Site, as shown in the following Table 2-2. This indicates generally very low or low risks. Full details are provided in the appended Groundsure report (Appendix C).

Table 2-2: Geological Hazard

Hazard	Highest Risk Rating	Details	Location
Shrink Swell Clays	Very Low	Ground conditions predominantly low plasticity.	Entire Site.
Natural Ground Subsidence – Running Sands	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.	Entire Site.
Natural Ground Subsidence – Compressible Deposits	Negligible	Compressible strata are not thought to occur.	Entire Site.
Natural Ground Subsidence – Collapsible Deposits	Very Low	Deposits with the potential to collapse when loaded and saturated are unlikely to be present.	Entire Site.
Natural Ground Subsidence – Landslide	Very Low	Slope instability problems are not likely to occur, but consideration to potential problems of adjacent areas impacting the Site should always be considered.	Entire Site.
Natural Ground Subsidence – Ground dissolution of soluble rocks	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.	Entire Site

2.7.5 MINING

The Site is not located within a Coal Mining Reporting Area, as outlined by the Coal Authority.

There is no evidence of mining within the Site. However, a review of the Site history identified localised gravel and undisclosed pitting and quarrying in the surrounding area from the late 1880s to 2010.

A review of the BGS and Groundsure Report identified 3 BritPit records within 500m of the Site boundary, the three pits are all associated with Culcraggie Lodge, 232m and 469m to the north and 343m to the northeast.

Additionally, a surface ground working was identified within the Site in the southwestern corner, the feature is recorded as a 'Water Body'. This is discussed in the Site History, Section 2.3, and is associated with the historical mill.

Mining is not considered to be a significant risk to the stability of the Site.

2.7.6 HYDROLOGY

A review of the OS MasterMap Water Network identified three watercourses within the Site. One watercourse follows the southwestern boundary, originating just outside the northwestern corner of the Site at an 'Issues' point. It flows southeast until it reaches the southwest corner. It turns 90° to follow the southeastern boundary towards the southeastern corner of the Site. Approximately halfway along the southeastern boundary, the watercourse is identified as Culcraggie Burn. A smaller watercourse converges to the Culcraggie Burn from the centre of the Site at an 'Issues', it passes the farm building on the east. Additionally, a drainage channel runs along the northeastern boundary to the southeastern corner of the Site, where it connects to the Culcraggie Burn. Observations during the Site walkover confirmed that these watercourses contain water.

Two surface water features, identified as Ponds, are located within the Site: one in the southwestern corner and one in the middle. The pond in the southwestern corner corresponds to the historical mill pond.

The Scottish Environment Protection Agency (SEPA) Scottish Wetland Inventory has classified areas in the southwest of the Site as Marshy Grassland wetlands. During the Site walkover, low-lying areas were noted to be wet underfoot.

Outwith the Site boundary, 11 other watercourses were identified within 500m. Additionally, the Culcraggie Burn discharges into the Cromarty Firth, approximately 1km south of the Site. A review of the SEPA Water Environment Hub found the nearest surface water body subject to SEPA monitoring is the Inner Cromarty Firth, which is a transitional water body, with its overall status in 2022 classified as Good.

2.7.7 HYDROGEOLOGY

The Hydrogeological Map of Scotland produced by the BGS, indicates that underlying the Site is a concealed aquifer within the superficial deposits. This aquifer is classified as having limited or local potential. According to the SEPA Environment Hub, the groundwater body, named the Strathconan and Muir of Ord Sand and Gravel, was rated as having an overall status of 'Good' in 2022.

The Site is also underlain by the Middle Old Red Sandstone (Undifferentiated) aquifer. The aquifer is described as moderately productive, with groundwater flow occurring through fractures. This sandstone aquifer is in places flaggy and interspersed with siltstones, mudstones, conglomerates and interbedded lavas, yielding small amounts of groundwater. The SEPA Environment Hub classifies this bedrock aquifer, also known as the Invergordon groundwater body, as having an overall status of Good in 2022.

Historical ground investigation trial pits, detailed in Section 2.4, located 500m south of the Site, encountered groundwater at three depths, at ground level, 2.0m and 3.20m below ground level. These logs suggest that groundwater in the area may be close to the surface.

2.7.8 RADON

A review of the Radon Map of Scotland, published by the UK Health Security Agency, indicates that the Site is not located within a Radon Affected Area, as less than 1% of properties exceed the Action Level.

2.7.9 UNEXPLODED ORDNANCE

A preliminary assessment of Unexploded Ordnance (UXO) risk has been made, based on the Site history and a review of online maps supplied by Zetica UXO. The risks associated with unexploded ordnance are considered to be Low, no further risk assessment is required.

3 INITIAL CONCEPTUAL SITE MODEL

3.1 GENERAL

Central to the assessment of potentially Contaminated Land, as defined in the 1990 Environmental Protection Act, is the concept of a Significant Pollutant Linkage, i.e. a significant connection between the source of contamination and a sensitive receptor via an appropriate environmental pathway. The degree of significance of a pollutant linkage depends on several factors including the hazardous nature of the source, the type of pathway (such as dermal contact with contaminants in soils), and the sensitivity of the receptor. The first step towards understanding potential pollutant linkages at a site is through the development of an Initial Conceptual Model.

A conceptual model is defined in BS10175 as: *"characteristics of a site that are relevant to the occurrence and potential effects of ground contamination that describe the nature and sources of contamination; the ground, groundwater, surface water, ground gases and volatile organic compounds (VOC) that could be present; the environmental setting; potential migration pathways; and potential receptors...presented in a tabular, textual and/or diagrammatic form".*

3.2 SOURCES

Having reviewed and considered relevant historical features and environmental data, their proximity to the study Site, the local topography and likely surface and groundwater flow direction, the following source(s) of potential contamination will be considered within the Initial Conceptual Site Model.

Table 3-1: Potential Historical Contamination Sources

Source	Description	Distance
1	Localised made ground, associated with the mill pond, associated infrastructure and farm buildings	**On-Site** (southwestern corner and southeastern boundary)
2	Ground gas associated with historical quarrying and pitting and any associated infilled ground.	**Off-Site** (within 500m)

3.3 POTENTIAL CONTAMINATION RECEPTORS

'Receptors' as defined in BS10175 are "persons, living organisms, ecological systems, controlled waters, atmosphere, structures and utilities that could be adversely affected by the contaminant(s)". Potential receptors at the Site are discussed below.

3.3.1 HUMAN HEALTH

The study area is predominantly comprised of a rough field, and the Site is proposed for a BESS and associated infrastructure. The proposed development is of a low sensitivity; however, construction workers and future maintenance staff are considered to be potential receptors.

3.3.2 SURFACE WATER

Within the study area, there are three watercourses identified on or in close proximity to the Site: a small stream along the southwestern boundary which turns into the Culcraggie Burn, running along the southeastern boundary; a small stream that originates from the middle of the Site and converges into the Culcraggie Burn; and a drain which runs adjacent to the northeastern boundary. Two pond surface water features have been identified within the Site boundary, one of which is the former mill pond.

The watercourse features identified on the Site and in proximity are considered to be potential surface water receptors.

3.3.3 GROUNDWATER

The study area is underlain by two aquifers: a concealed aquifer within the superficial Glaciofluvial deposits (the Strathconan and Muir of Ord Sand and Gravel aquifer), and the moderately productive Middle Old Red Sandstone (Undifferentiated) aquifer. These groundwater sources have the potential to be impacted by Site activities and are considered to be potential receptors.

3.3.4 FAUNA AND VEGETATION (ECOLOGY)

No ecological receptors of particular sensitivity likely to be affected by the Site were identified during the desk study research.

3.3.5 BUILT ENVIRONMENT

There is currently one building located within the Site boundary, and it is unknown whether it has associated services/utilities. The proposed development includes the construction of buildings and structures, and will likely require earthworks, the use of concrete and the installation of utility infrastructure. Therefore, the built environment is considered to be a potential receptor.

3.4 RISK ASSESSMENT

The following assessment is qualitative, in that professional value judgments have been applied to the available Site data to assess levels of risk. The framework for these assessments is set out in CIRIA C552, “Contaminated Land Risk Assessment, A Guide to Good Practice”. This guidance states that the assessment of risk should be based on both the likelihood of an event and the severity of its potential consequences.

One of the following six risk levels has been assigned to each potential pollutant linkage identified: Very Low, Low, Low/Moderate, Moderate, High and Very High. A risk of Low/Moderate or above indicates that further assessment, investigation or possibly remediation will be required. The following Table 3-2 summarises the potential pollutant linkages and respective qualitative risks.

Table 3-2: Initial Conceptual Site Model

Source	Receptors (with respective pathways)	Risk	
		Current Use	Future Use
1. Localised made ground, associated with the mill pond, associated infrastructure and farm buildings (On-Site)	Human Health (dermal contact, soil/dust ingestion/inhalation)	**Low**	**Low/Mod**
	Human Health (inhalation of vapours and ground gases)	**Low**	**Low/Mod**
	Groundwater (leaching and migration)	**Low/Mod**	**Low/Mod**
	Surface Water (surface runoff, leaching and migration)	**Low/Mod**	**Low/Mod**
	Buildings and Structures (migration of ground gas/vapour)	**Low**	**Low/Mod**
	Buildings and Structures (direct contact, permeation)	**Low**	**Low/Mod**
2. Ground gas associated with historical quarrying and pitting and any associated infilled ground (Off Site within 500m of the Site boundary)	Human Health (inhalation of vapours and ground gases following accumulation within buildings)	**Very Low**	**Low**
	Buildings and Structures (migration and accumulation of ground gases and vapours)	**Low**	**Low**

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

The purpose of this Geoenvironmental and Geotechnical Desk Study is to assess potential contamination and geotechnical constraints to the Site and provide outline recommendations for additional investigative works required to address any areas of uncertainty.

A review of the available data, detailed within this report, has identified a low likelihood of significant contamination associated with the historical use of the Site and the surrounding area, although there is the potential for localised contamination associated with the former mill pond in the southwest corner and the farm building midway along the southeastern boundary of the Site, which require further investigation and assessment. Potential geotechnical constraints have also been identified.

4.1.1 ENVIRONMENTAL PROTECTION ACT (1990), PART IIA

Considering the current use of the Site and the historical use of the Site, the risk associated with the Site is considered to be Low/Moderate, due to potential localised contamination and made ground associated with the former mill pond and infrastructure in the southwestern corner, and the farm building along the southeastern boundary of the Site. However, these risks would likely be reduced following investigation, and it is considered unlikely that the Site would constitute Contaminated Land, as defined in Part IIa of the Environmental Protection Act.

4.1.2 PROPOSED USE (PAN 33)

The proposed BESS development is considered to be of low sensitivity. However, due to the potential for localised contamination associated with the former mill pond in the southwestern corner, the farm building along the southeastern boundary of the Site, the risk associated with this future use has been categorised as Low/Moderate, due to risks to human health and the wider environment. Consequently, investigation and further assessment of this potential contamination source is recommended (which should include confirmatory investigation across the rest of the Site), to inform risks associated with the construction and design.

4.1.3 GEOTECHNICAL

The review of the desk study information indicates that the Site generally comprises an undulating field underlain by sandstone, natural soils of glaciofluvial origin and likely topsoil of unspecified thickness. Although details of the proposed development are not fully developed, the following potential geotechnical constraints have been identified that require further consideration and potentially intrusive Site investigation.

- Unconfirmed thickness and geotechnical properties of the superficial natural soils and bedrock, particularly of the mounds of material across the site (currently assumed to be of natural glaciofluvial origin), and the potential for soft ground associated with wet areas in the fluvioglacial deposits.
- The potential presence of shallow groundwater beneath the Site within the superficial or bedrock aquifer.

- The potential for localised made ground soils to be chemically aggressive towards buried concrete or pipework.

4.2 RECOMMENDATIONS

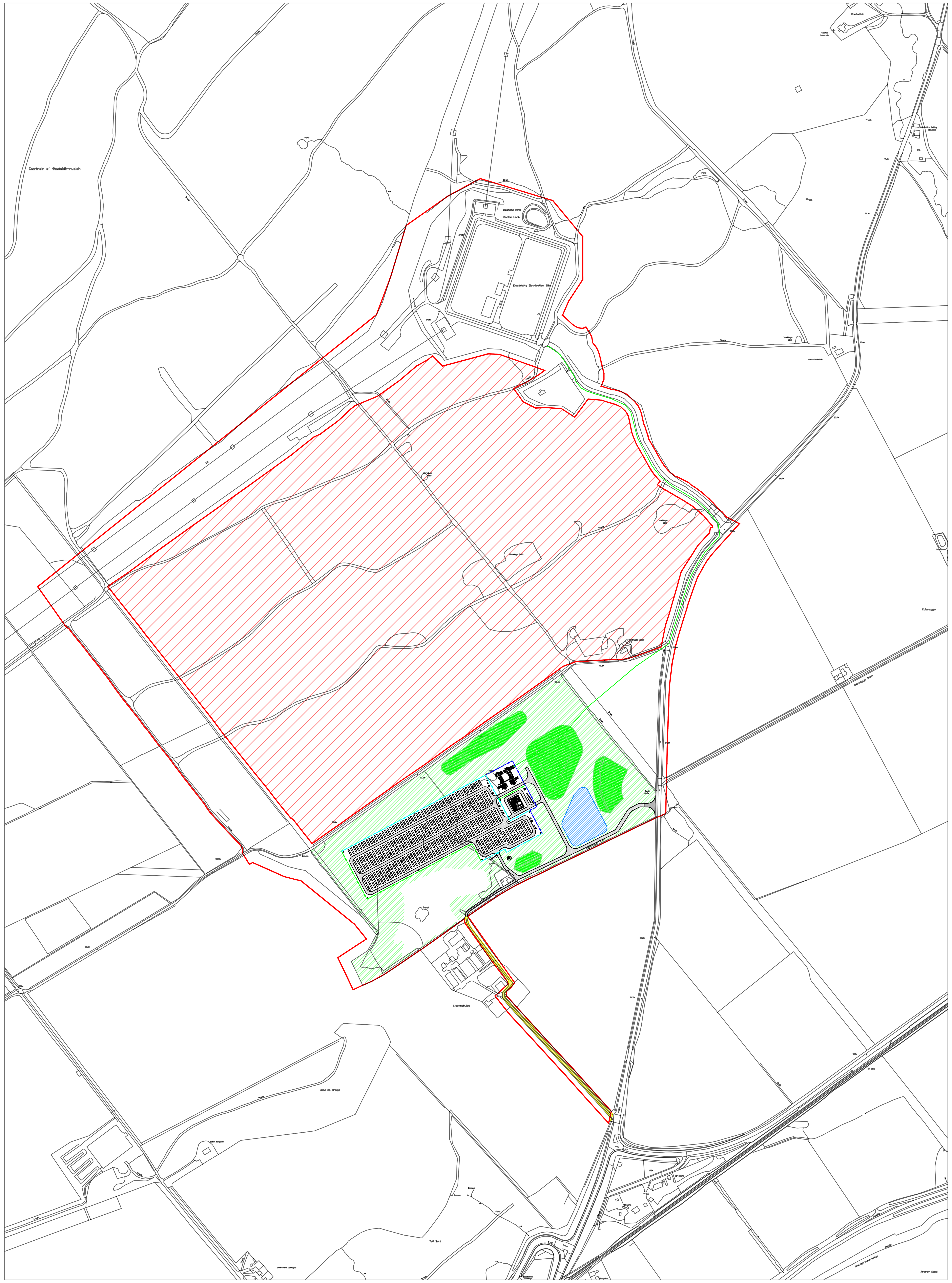
No ground investigation is understood to have been undertaken at the Site. It is considered that the risks associated with the Site are sufficiently understood for the current use, however, to inform the design and development of the Site for the proposed BESS site, it is recommended that intrusive works are undertaken to characterise the ground conditions for the following key purposes:

- To investigate the depth, nature, and extent of superficial soils, bedrock and made ground.
- To establish the depth of competent stratum across the Site.
- To assess the groundwater conditions beneath the Site.
- To confirm the chemical nature of the soils and groundwater across the Site (particularly in the vicinity of the former mill pond and associated infrastructure in the southwestern corner and the farm building along the southeastern boundary of the Site), with respect to potential human health and the water environment risks.
- To assess the potential risk from ground gases.

Subject to the design of a detailed Site investigation, it is considered that the following works will be required:

- ***Trial pitting*** across the Site to characterise any made ground and underlying superficial deposits and permit recovery of soil samples for subsequent chemical and geotechnical analysis.
- Drilling of ***boreholes*** across the Site targeting locations associated with infrastructure, to characterise the underlying superficial deposits and depth to a suitable founding stratum, permit recovery of soil samples for geoenvironmental and geotechnical analysis and allow installation of combined gas/groundwater monitoring wells.
- ***Percolation/infiltration tests*** in areas proposed for attenuation/infiltration drainage features to characterise the drainage capabilities of the superficial soils.
- ***Chemical analysis*** of the soils and groundwater to assess the potential risk to human health, water environment, and buildings/structures.
- ***Geotechnical testing*** of the soils to obtain geotechnical design parameters (including the aggressivity of the underlying deposits toward buried concrete) for foundation/piling design, and for earthworks design.
- ***Gas and groundwater level monitoring*** of borehole installations and possibly collection of groundwater samples, if present, for subsequent chemical analysis.

APPENDIX A – CLIENT LAYOUT PLAN



Drawing Notes:

1. All dimensions are shown in metres unless noted otherwise.
2. Do not scale from this drawing.
3. For details on the site, refer to 005.1 - Detailed Site Plan
4. For details on landscaping and planting, refer to 'Landscape Plan'

Legend:

- Planning Boundary
- Not In Application Boundary
- Cable Route - Buried
- 3m Palisade Fencing
- 5m Acoustic Fencing
- 4m Acoustic Fencing
- Access Route - Existing
- Site Access Road - Unbound Finish
- Site Access Road - Asphalt Finish
- Proposed Bund
- Attenuation Area
- Site Landscaping and Planting

REV	DATE	DESCRIPTION	BY	CHK'D
9	18/02/2025	PROJECT NAME AND CABLE ROUTE AMENDED	WL	ED
8	07/02/2025	ACOUSTIC FENCING ADDED	WL	JH
7	31/01/2025	PLANNING BOUNDARY AMENDED. GWDTA AREA REMOVED	WL	ED
6	21/01/2025	LANDSCAPING ADDED	WL	JH
5	16/01/2025	SCALE, EASTERN BUNDS AND TEMPORARY CONSTRUCTION COMPOUND AREA AMENDED. NORTHERN BUND ADDED	WL	JH
4	09/01/2025	LAYOUT, ATTENUATION AREA AND BUNDING AMENDED. FIRE WATER STORAGE TANK ADDED	WL	JH
3	17/09/2024	BESS EQUIPMENT AMENDED, LAYOUT ADJUSTED TO SUIT	WL	JH
2	19/12/2023	OPTION AREA AMENDED AND TEMPORARY CONSTRUCTION COMPOUND ADDED	WL	JB
1	11/10/2023	POSITION OF SITE AMENDED	WL	JB
0	30/08/2023	SITE LAYOUT PLAN - CONCEPT - ORIGINAL	WL	JB

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

PROJECT
FYRISH BESS

TITLE
SITE LAYOUT PLAN

DISCIPLINE
PLANNING

DRAWING STATUS
FOR PLANNING

SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY
1:5000 @A1	30/08/2023	WL	JH	JB

PROJECT NO.	DRAWING NO.	REV.
BTGBFYR01	001.1	09

Scale										
1:100	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m
1:200	5m	10m	15m	20m						
1:250	5m	10m	15m	20m	25m					
1:500	10m	20m	30m	40m	50m					
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1:2000	50m	100m	150m	200m						
1:2500	50m	100m	150m	200m	250m					
1:5000	100m	200m	300m	400m	500m					

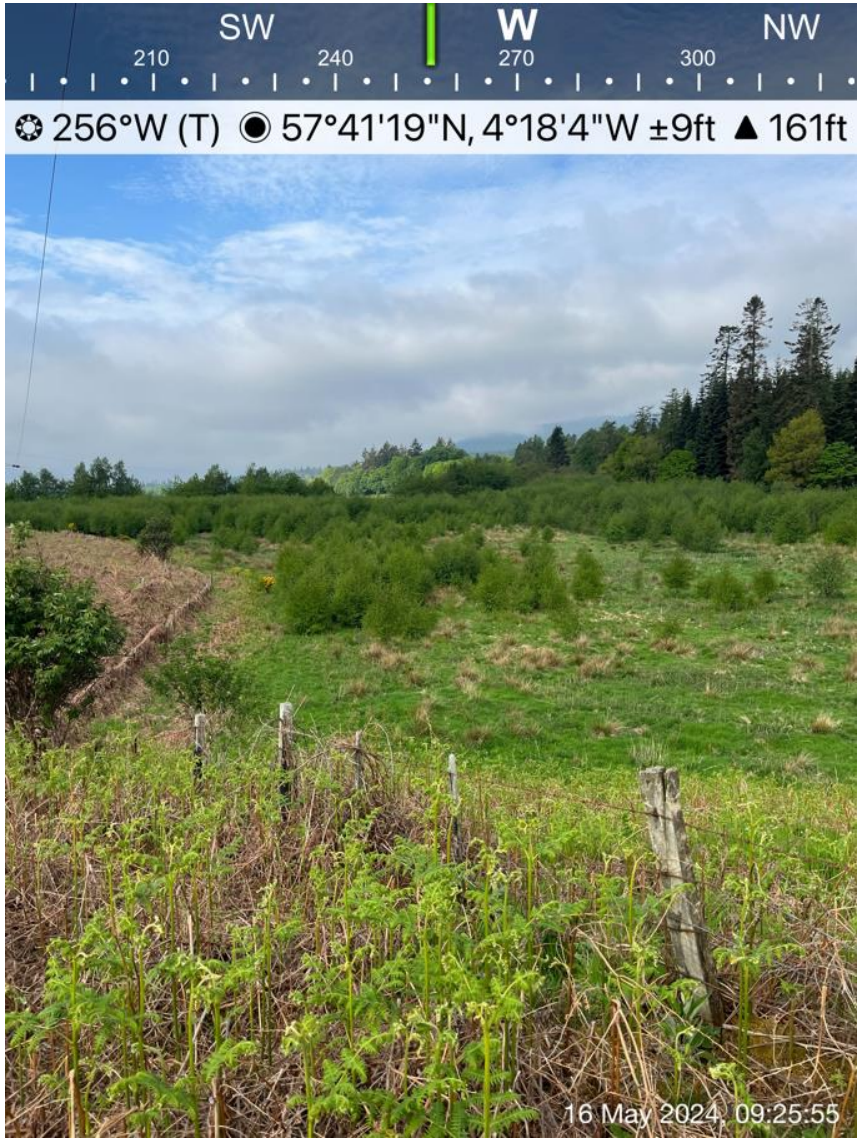
(1) Site Layout Plan
Scale 1:5000 @ A1

APPENDIX B – SITE WALKOVER 16/05/2024

Photograph 1: View northeast from the centre of the Site, towards the mound. A wet area to the east, indicated by a change in vegetation

Photograph 2: View south site looking south along the linear mound. Wet area to the east and mature trees to the south in location of the former mill pond

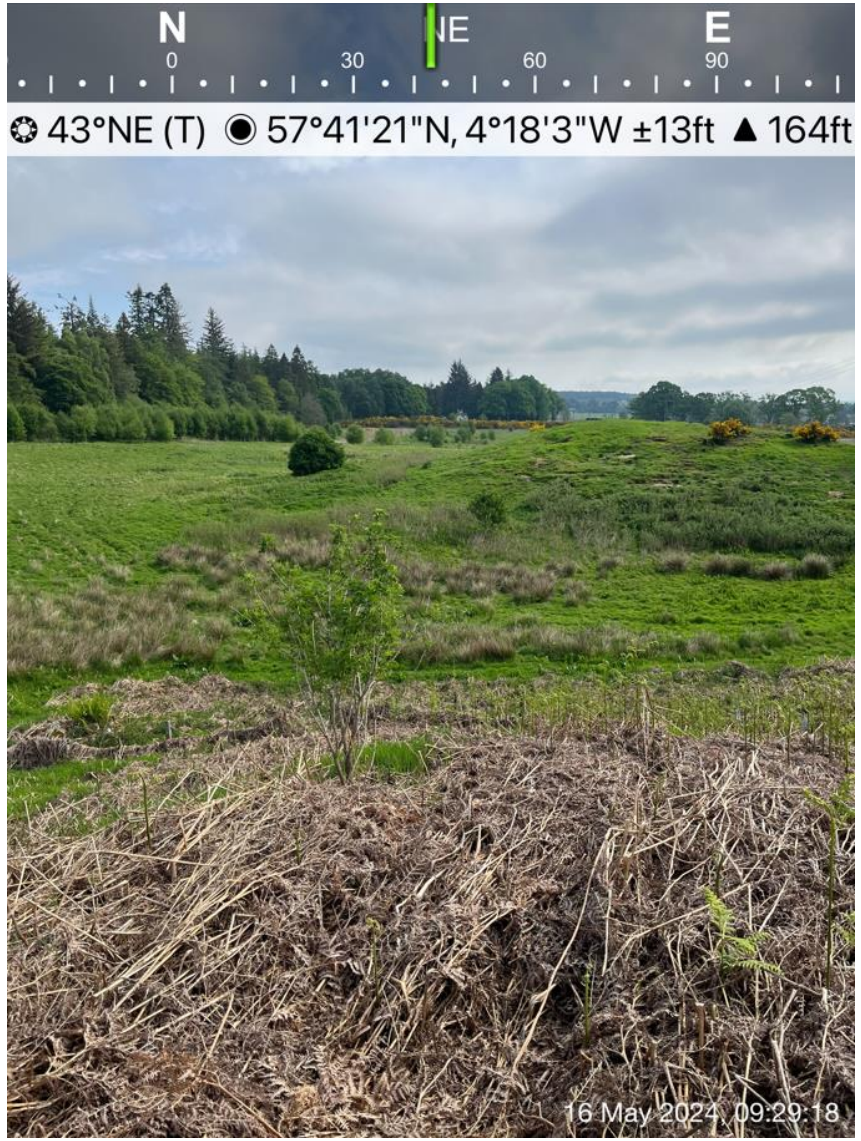
Photograph 3: View north from the centre of Site towards the flat area and immature trees



Photograph 4: View west towards the immature trees on the flat lying area of the Site

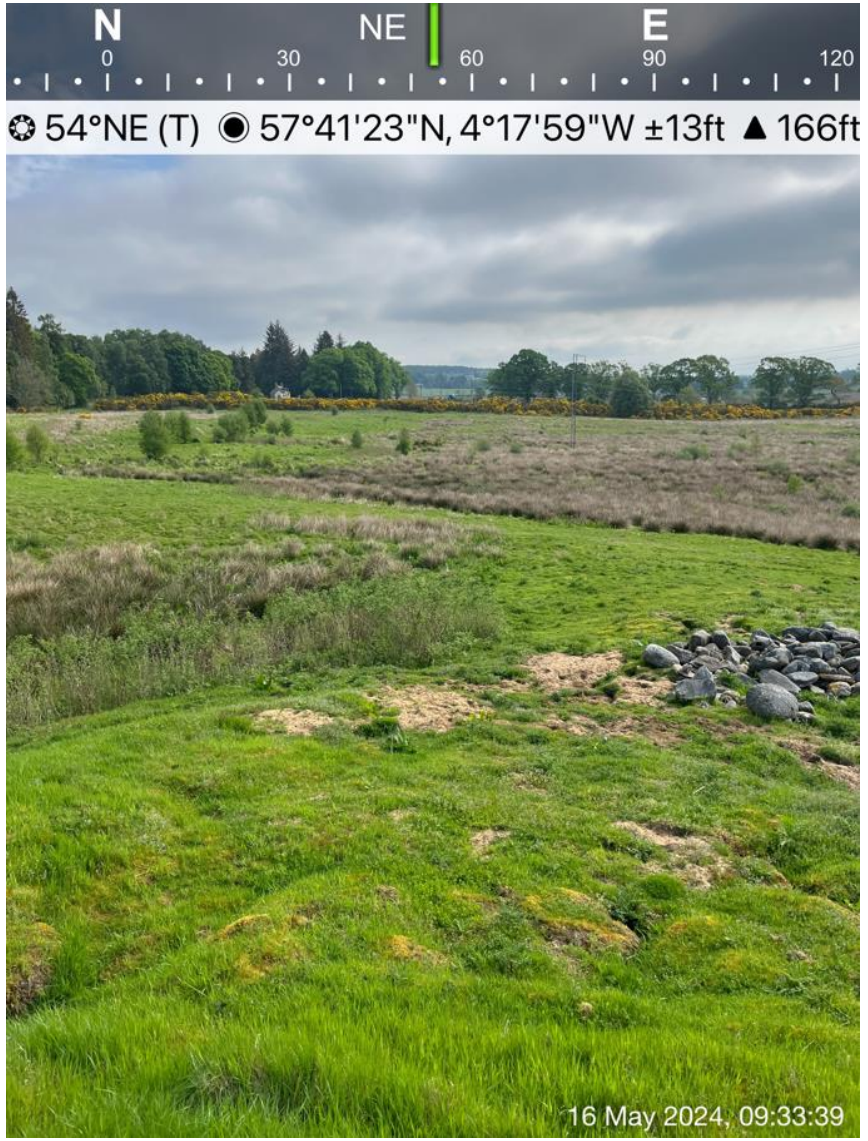
Photograph 5: View south looking across the Site under the pylons

Photograph 6: View east looking along the drainage ditch towards the estate house

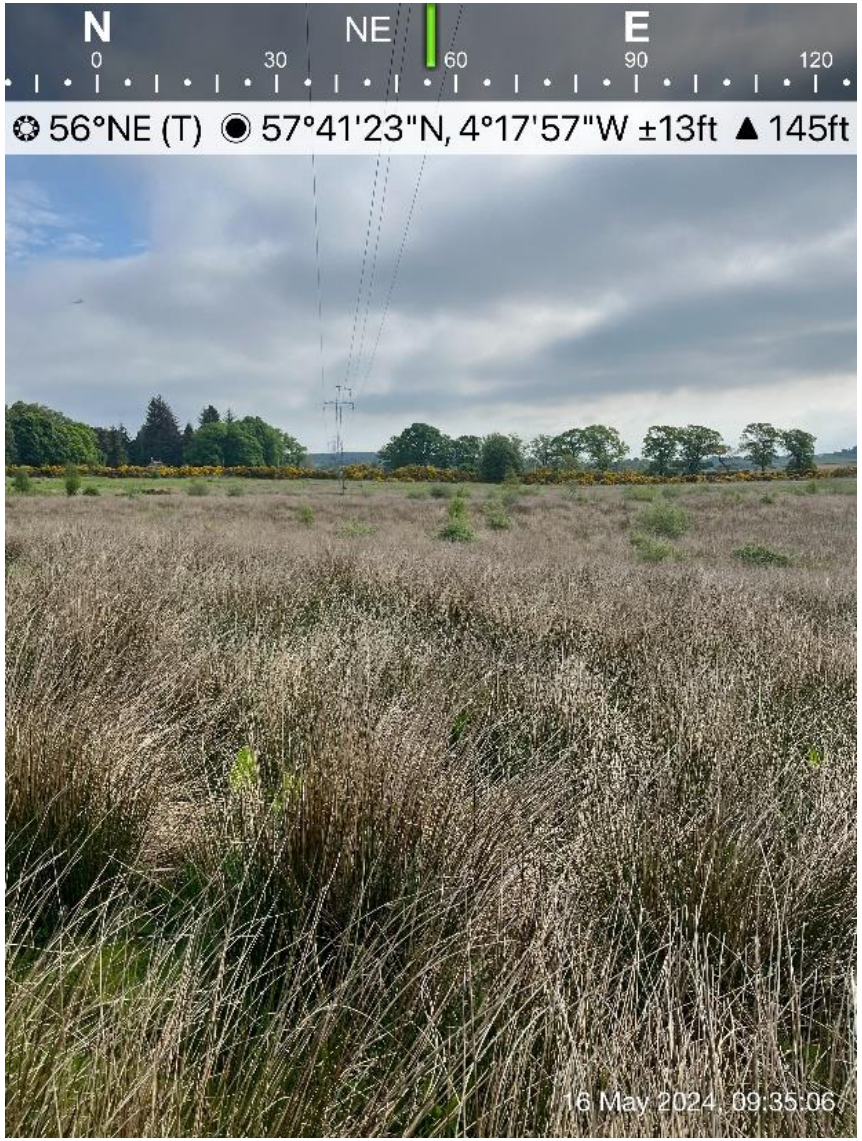


Photograph 7: View northeast across the Site

Photograph 8: Exposed sandy material on a grassy mound

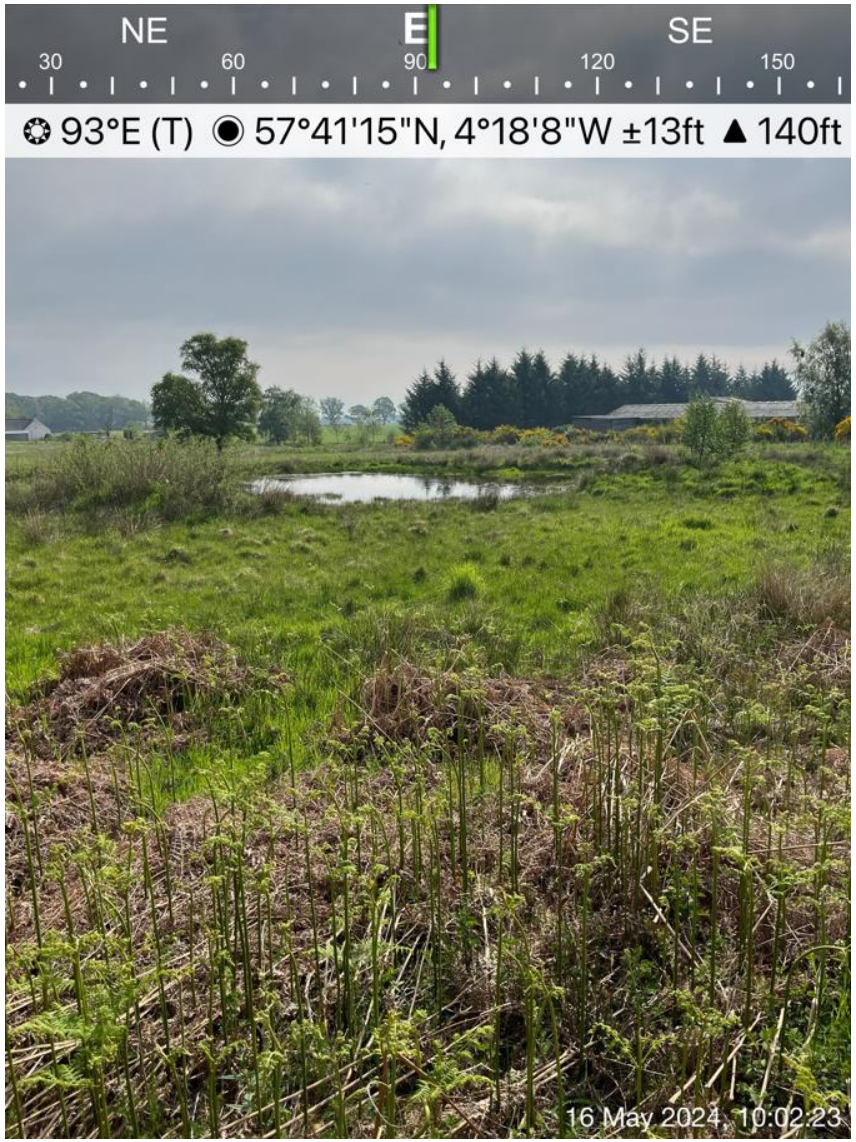


Photograph 9: View northeast of an overview of the Site



Photograph 10: View northeast towards the northern area of the Site

Photograph 11: View northeast towards a slope of a mounded area on Site



Photograph 12: View east towards a wet/pond area in the south-eastern area. Buildings of the estate (off-site) beyond

Photograph 13: View of the eastern edge of the former mill ponds

Photograph 2: View east towards a linear raised area proximal to the former mill pond

APPENDIX C – GROUNDSURE REPORT

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Fyrish BESS

Order Details

Date: 28/05/2024

Your ref: 24093/FY/01

Our Ref: GS-V5K-7I7-1PP-DTU

Site Details

Location: 263005 868942

Area: 18.43 ha

Authority: The Highland Council ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
12 >	1.1 >	Historical industrial land uses >	0	0	0	5	-
13	1.2	Historical tanks	0	0	0	0	-
13	1.3	Historical energy features	0	0	0	0	-
13	1.4	Historical petrol stations	0	0	0	0	-
14	1.5	Historical garages	0	0	0	0	-
14	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	2.1 >	Historical industrial land uses >	0	0	0	5	-
16	2.2	Historical tanks	0	0	0	0	-
16	2.3	Historical energy features	0	0	0	0	-
16	2.4	Historical petrol stations	0	0	0	0	-
16	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
17	3.1	Active or recent landfill	0	0	0	0	-
17	3.2	Historical landfill (BGS records)	0	0	0	0	-
17	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
17	3.4	Licensed waste sites	0	0	0	0	-
17	3.5	Historical waste sites	0	0	0	0	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
18 >	4.1 >	Recent industrial land uses >	0	0	1	-	-
19	4.2	Current or recent petrol stations	0	0	0	0	-
19	4.3	Electricity cables	0	0	0	0	-
19	4.4	Gas pipelines	0	0	0	0	-
19	4.5	Sites determined as Contaminated Land	0	0	0	0	-
19	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
20	4.7	Regulated explosive sites	0	0	0	0	-

20	4.8	Hazardous substance storage/usage	0	0	0	0	-
20	4.9	Part A(1), IPPC and Historic IPC Authorisations	0	0	0	0	-
20	4.10	Part B Authorisations	0	0	0	0	-
20	4.11	Pollution inventory substances	0	0	0	0	-
21	4.12	Pollution inventory waste transfers	0	0	0	0	-
21	4.13	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	**Hydrogeology >**	On site	0-50m	50-250m	250-500m	500-2000m
22 >	**5.1 >**	**Superficial aquifer >**	Identified (within 500m)				
23 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
24 >	**6.1 >**	**Water Network (OS MasterMap) >**	7	7	0	-	-
26 >	**6.2 >**	**Surface water features >**	1	3	0	-	-
Page	Section	River flooding					
27	7.1	River flooding	Negligible (within 50m)				
Page	Section	Coastal flooding					
28	8.1	Coastal flooding	Negligible (within 50m)				
Page	Section	**Surface water flooding >**					
29 >	**9.1 >**	**Surface water flooding >**	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	**Groundwater flooding >**					
31 >	**10.1 >**	**Groundwater flooding >**	Moderate (within 50m)				
Page	Section	**Environmental designations >**	On site	0-50m	50-250m	250-500m	500-2000m
32 >	**11.1 >**	**Sites of Special Scientific Interest (SSSI) >**	0	0	0	0	1
33 >	**11.2 >**	**Conserved wetland sites (Ramsar sites) >**	0	0	0	0	1
33	11.3	Special Areas of Conservation (SAC)	0	0	0	0	0
33 >	**11.4 >**	**Special Protection Areas (SPA) >**	0	0	0	0	4
34	11.5	National Nature Reserves (NNR)	0	0	0	0	0
35	11.6	Local Nature Reserves (LNR)	0	0	0	0	0
35 >	**11.7 >**	**Designated Ancient Woodland >**	1	0	1	1	9
36	11.8	Biosphere Reserves	0	0	0	0	0

36	11.9	Forest Parks	0	0	0	0	0
36	11.10	Marine Conservation Zones	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
37	12.1	World Heritage Sites	0	0	0	-	-
37	12.2	Area of Outstanding Natural Beauty	0	0	0	-	-
37	12.3	National Parks	0	0	0	-	-
37	12.4	Listed Buildings	0	0	0	-	-
38	12.5	Conservation Areas	0	0	0	-	-
38	12.6	Scheduled Ancient Monuments	0	0	0	-	-
38	12.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations** >	On site	0-50m	50-250m	250-500m	500-2000m
39 >	**13.1** >	**Agricultural Land Classification** >	Grade 4.2 (within 250m)				
Page	Section	**Geology 1:10,000 scale** >	On site	0-50m	50-250m	250-500m	500-2000m
41 >	**14.1** >	**10k Availability** >	Identified (within 500m)				
42	14.2	Artificial and made ground (10k)	0	0	0	0	-
43	14.3	Superficial geology (10k)	0	0	0	0	-
43	14.4	Landslip (10k)	0	0	0	0	-
44	14.5	Bedrock geology (10k)	0	0	0	0	-
44	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	**Geology 1:50,000 scale** >	On site	0-50m	50-250m	250-500m	500-2000m
45 >	**15.1** >	**50k Availability** >	Identified (within 500m)				
46	15.2	Artificial and made ground (50k)	0	0	0	0	-
46	15.3	Artificial ground permeability (50k)	0	0	-	-	-
47 >	**15.4** >	**Superficial geology (50k)** >	1	0	1	1	-
48 >	**15.5** >	**Superficial permeability (50k)** >	Identified (within 50m)				
48	15.6	Landslip (50k)	0	0	0	0	-
48	15.7	Landslip permeability (50k)	None (within 50m)				
49 >	**15.8** >	**Bedrock geology (50k)** >	1	0	0	0	-
50 >	**15.9** >	**Bedrock permeability (50k)** >	Identified (within 50m)				

50	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
51	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence >					
52 >	17.1 >	Shrink swell clays >	Negligible (within 50m)				
53 >	17.2 >	Running sands >	Low (within 50m)				
54 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
55 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
56 >	17.5 >	Landslides >	Very low (within 50m)				
57 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
59 >	18.1 >	BritPits >	0	0	1	2	-
60 >	18.2 >	Surface ground workings >	4	0	0	-	-
61	18.3	Underground workings	0	0	0	0	0
61	18.4	Underground mining extents	0	0	0	0	-
61	18.5	Historical Mineral Planning Areas	0	0	0	0	-
61 >	18.6 >	Non-coal mining >	1	0	0	0	1
62	18.7	JPB mining areas	None (within 0m)				
62	18.8	The Coal Authority non-coal mining	0	0	0	0	-
62	18.9	Researched mining	0	0	0	0	-
63	18.10	Mining record office plans	0	0	0	0	-
63	18.11	BGS mine plans	0	0	0	0	-
63	18.12	Coal mining	None (within 0m)				
63	18.13	Brine areas	None (within 0m)				
63	18.14	Gypsum areas	None (within 0m)				
64	18.15	Tin mining	None (within 0m)				
64	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
65	19.1	Natural cavities	0	0	0	0	-

65	19.2	Mining cavities	0	0	0	0	0
65	19.3	Reported recent incidents	0	0	0	0	-
65	19.4	Historical incidents	0	0	0	0	-
66	19.5	National karst database	0	0	0	0	-

Page	Section	**Radon** >					
67 >	**20.1** >	**Radon** >	Less than 1% (within 0m)				
Page	Section	**Soil chemistry** >	On site	0-50m	50-250m	250-500m	500-2000m
69 >	**21.1** >	**BGS Estimated Background Soil Chemistry** >	6	0	-	-	-
69	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
70	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
71	22.1	Underground railways (London)	0	0	0	-	-
71	22.2	Underground railways (Non-London)	0	0	0	-	-
71	22.3	Railway tunnels	0	0	0	-	-
71	22.4	Historical railway and tunnel features	0	0	0	-	-
71	22.5	Royal Mail tunnels	0	0	0	-	-
72	22.6	Historical railways	0	0	0	-	-
72	22.7	Railways	0	0	0	-	-
72	22.8	Crossrail 1	0	0	0	0	-
72	22.9	Crossrail 2	0	0	0	0	-
72	22.10	HS2	0	0	0	0	-

Recent aerial photograph

Capture Date: 02/07/2021

Site Area: 18.43ha

Recent site history - 2018 aerial photograph

Capture Date: 28/05/2018

Site Area: 18.43ha

Recent site history - 2009 aerial photograph

Capture Date: 13/05/2009

Site Area: 18.43ha

Recent site history - 2004 aerial photograph

Capture Date: 07/09/2004

Site Area: 18.43ha

Recent site history - 2000 aerial photograph

Capture Date: 13/05/2000

Site Area: 18.43ha

1 Past land use

Site Outline

Search buffers in metres (m)

Historical industrial land uses

1.1 Historical industrial land uses

Records within 500m	5

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 12 >**

ID	Location	Land use	Dates present	Group ID
A	312m NE	Unspecified Disused Pit	1989	69912

ID	Location	Land use	Dates present	Group ID
A	312m NE	Unspecified Disused Pit	1976	70460
A	319m NE	Sand Pit	1956	64318
B	459m N	Unspecified Disused Pit	1976	68858
B	459m N	Unspecified Disused Pit	1989	70448

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped

Site Outline

Search buffers in metres (m)

Historical industrial land uses

2.1 Historical industrial land uses

Records within 500m	5

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 15 >**

ID	Location	Land Use	Date	Group ID
A	312m NE	Unspecified Disused Pit	1989	69912
A	312m NE	Unspecified Disused Pit	1976	70460
A	319m NE	Sand Pit	1956	64318

ID	Location	Land Use	Date	Group ID
B	459m N	Unspecified Disused Pit	1989	70448
B	459m N	Unspecified Disused Pit	1976	68858

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill

3.1 Active or recent landfill

Records within 500m	0

Active or recently closed landfill sites under Scottish Environment Protection (SEPA) regulation.

This data is sourced from the Scottish Environment Protection Agency.

3.2 Historical landfill (BGS records)

Records within 500m	0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Licensed waste sites

Records within 500m	0

Active or recently closed waste sites under Scottish Environment Protection Acency (SEPA) regulation.

This data is sourced from the Scottish Environment Protection Agency.

3.5 Historical waste sites

Records within 500m	0

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

4 Current industrial land use

Site Outline

Search buffers in metres (m)

Recent industrial land uses

4.1 Recent industrial land uses

Records within 250m	1

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 18 >**

ID	Location	Company	Address	Activity	Category
1	239m N	Workings (Dis)	Ross and Cromarty, IV17	Unspecified Quarries Or Mines	Extractive Industries

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Part A(1), IPPC and Historic IPC Authorisations

Records within 500m	0

Records of Part A installations regulated for the release of substances to the environment.

This data is sourced from the Scottish Environment Protection Agency.

4.10 Part B Authorisations

Records within 500m	0

Records of Part B installations regulated for the release of substances to the environment.

This data is sourced from the Scottish Environment Protection Agency.

4.11 Pollution inventory substances

Records within 500m	0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.12 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

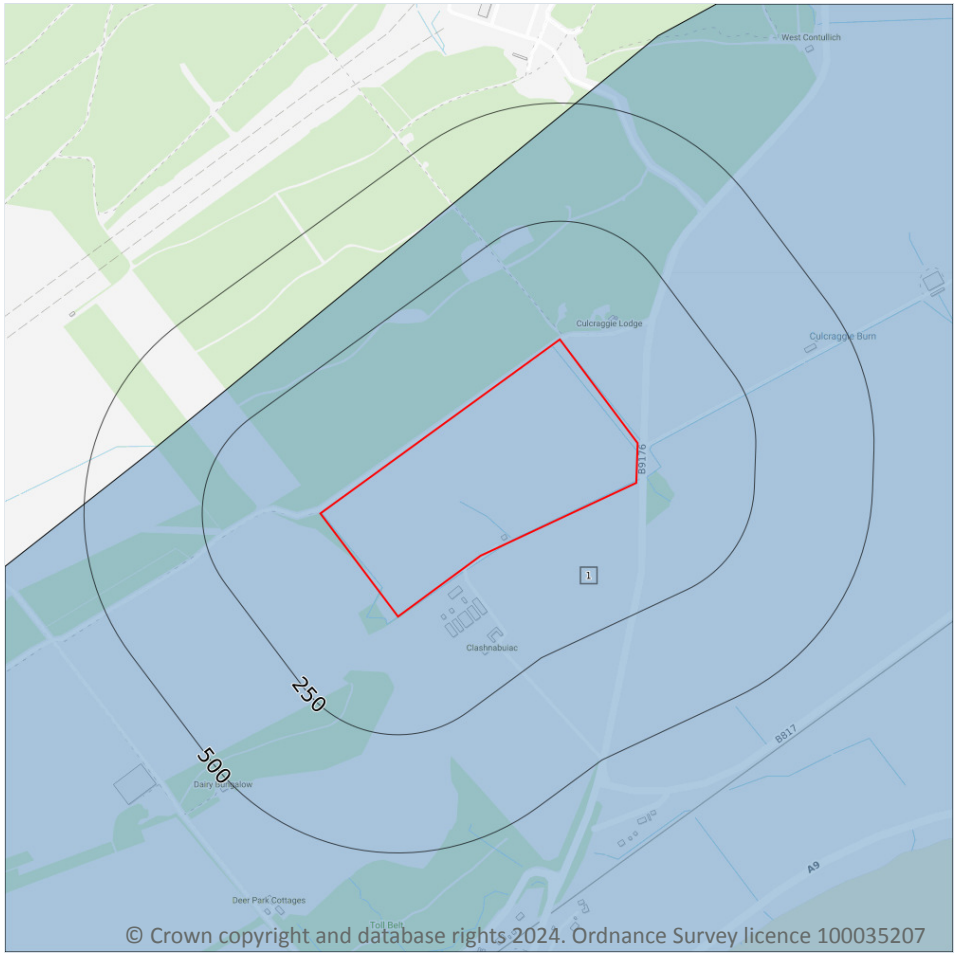
4.13 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

Limited or local potential

Locally important - intergranular

5.1 Superficial aquifer

Records within 500m	1

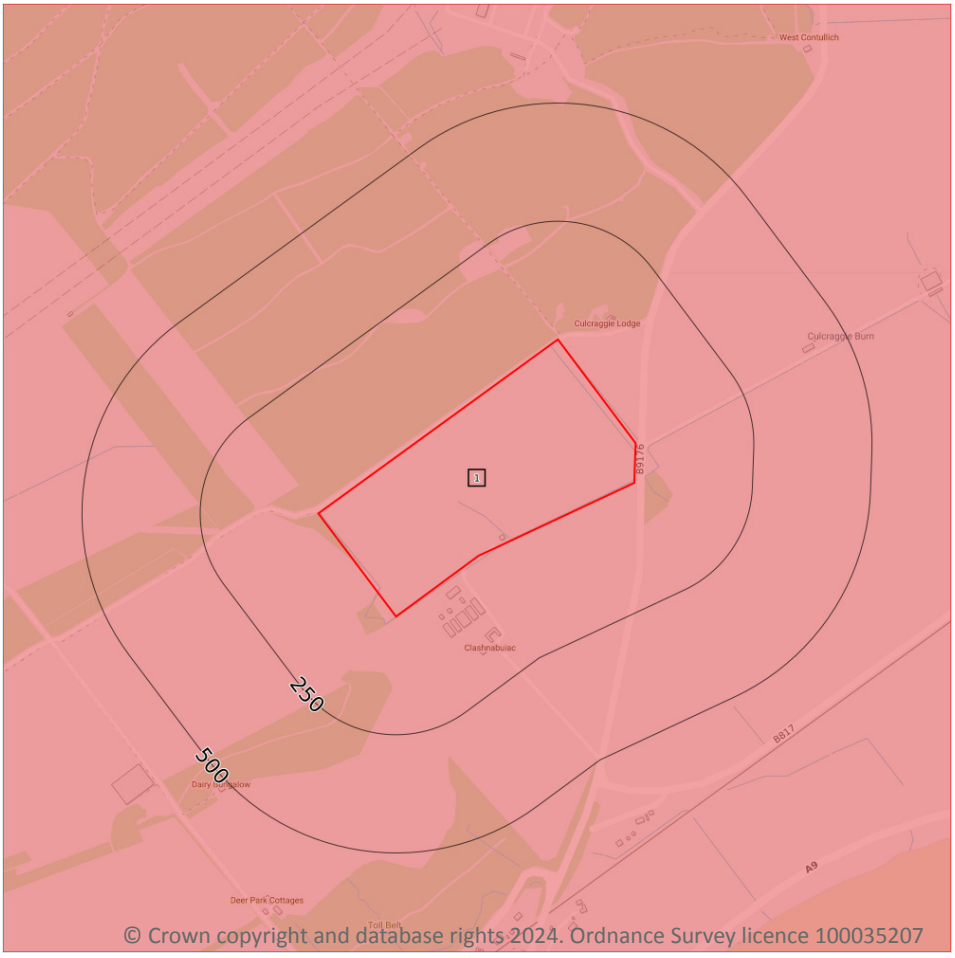
Records of groundwater classification within superficial geology.

Features are displayed on the Hydrogeology map on **page 22 >**

ID	Location	Description	Type	Rock description
1	**On site**	**Concealed aquifers, aquifers of limited potential, regions without significant groundwater**	**Concealed aquifers; aquifers with limited or local potential**	**Quaternary Coastal and Fluviatile Alluvium**

This data is sourced from the British Geological Survey.

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Highly productive - fissures/discontinuities
- Highly productive - intergranular
- Moderately productive - fissures/discontinuities
- Moderately productive - intergranular
- Low productive - fissures/discontinuities
- Low productive - intergranular
- No significant groundwater

5.2 Bedrock aquifer

Records within 500m **1**

Records of groundwater classification within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 23 >**

ID	Location	Description	Flow	Summary	Rock description
1	**On site**	**Moderately productive aquifer**	**Flow is virtually all through fractures and other discontinuities**	**Sandstones, in places flaggy, with siltstones, mudstones and conglomerates and interbedded lavas, locally yields small amounts of groundwater.**	**MIDDLE OLD RED SANDSTONE (UNDIFFERENTIATED)**

This data is sourced from the British Geological Survey.

6 Hydrology

Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

6.1 Water Network (OS MasterMap)

Records within 250m	14

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 24 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	-

ID	Location	Type of water feature	Ground level	Permanence	Name
A	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**Culcraggie Burn**
B	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
C	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
D	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
E	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
E	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
C	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
3	5m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
F	6m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
F	8m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
F	21m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Culcraggie Burn
H	21m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	26m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Culcraggie Burn

This data is sourced from the Ordnance Survey.