

# CFA Archaeology Ltd

*archaeological consultants*

*Advice on Archaeology & Planning*

*Environmental Impact Assessment*

*Interpretation, Design & Display*

*Finds/ Environmental Analysis*

*Field Evaluation & Excavation*

*Historic Building Recording*

*Site & Landscape Survey*

*Geophysical Survey*

**Proposed Forestry Works, Jerah, Near Menstrie,  
Stirling and Clackmannanshire**

**Cultural Heritage Assessment**

 0131 273 4380

 0131 273 4381

 [info@cfa-archaeology.co.uk](mailto:info@cfa-archaeology.co.uk)

 [www.cfa-archaeology.co.uk](http://www.cfa-archaeology.co.uk)

## **CFA ARCHAEOLOGY LTD**

The Old Engine House  
Eskmills Business Park  
Musselburgh  
East Lothian  
EH21 7PQ

Tel: 0131 273 4380

Fax: 0131 273 4381

email: [info@cfa-archaeology.co.uk](mailto:info@cfa-archaeology.co.uk)

web: [www.cfa-archaeology.co.uk](http://www.cfa-archaeology.co.uk)

Author	Mhairi Hastie BSc MSc MCIfA FSA Scot
Illustrator	Shelly Werner BA MPhil PhD MCIfA
Editor	Tim Neighbour
Commissioned by	UPM Tilhill
Date issued	July 2013
OASIS Reference	cfaarcha1-217561
Grid Ref	NS 8516 9975 centred

This document has been prepared in accordance with CFA Archaeology Ltd standard operating procedures.

**Proposed Forestry Works, Jerah, Near Menstrie,  
Stirling and Clackmannanshire**

**Cultural Heritage Assessment**

## INTRODUCTION

An archaeological desk-based assessment, reconnaissance field survey and metal detecting survey were undertaken by CFA Archaeology Ltd in May 2013. The work was commissioned by UPM Tilhill to form part of an Environmental Statement and Forestry Commission grant application for the site at Jerah, near Menstrie, Stirling and Clackmannanshire (**Figures 1a-c**).

The specific objectives of the cultural heritage study were to:

- Identify the cultural heritage baseline within the proposed development site;
- Assess the proposed development site in terms of its archaeological and historic environment potential;
- Consider the impacts of the proposed development on historic environment assets within the proposed development area and on designated heritage assets within 2km of the proposed development site boundary; and,
- Propose measures, where appropriate, to mitigate any predicted significant adverse effects.

**Figures 1a-c** shows the proposed development site boundary, the layout of proposed forestry roads and pathways and the locations of historic environment assets within the proposed development site. A gazetteer of the identified assets is provided as **Appendix 1**.

**Figure 2** shows the proposed development site boundary and the location of all historic environment assets recorded at Menstrie Glen by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) in 1997.

**Figure 3** shows the proposed development site in its wider landscape setting together with the location of key heritage assets within 2km of the development boundary. **Appendix 2** contains a list of those assets and a tabulated assessment of the impact of the proposed forestry development on their settings.

**Illustration 1** shows the location and extent of the metal detecting survey carried out by for this study, along the course of the proposed road realignment to the north of Park Cottage along the Wharry Burn valley.

## PLANNING AND LEGISLATIVE BACKGROUND

### Legislation and Policy Context

Primary planning guidance on cultural heritage comprises the National Planning Framework for Scotland 2 (NPF2); Scottish Planning Policy (SPP) (Scottish Government 2010), Scottish Historic Environment Policy (SHEP) (Scottish Government 2011) and Planning Advice Note 2/2011 (PAN2) (Scottish Government 2011), The Scottish Forestry Strategy (2006), Scotland's Woodlands and the Historic Environment (2008) and The UK Forestry Standard (2011) at national level, and the Clackmannanshire and Stirling Structure Plan (2002), the Stirling Local Plan (1999) and Clackmannanshire Local Plan (2004) at the regional and local level.

NPF2 is intended to guide Scotland's development to 2030, setting out strategic development priorities to support the Scottish Government's central purpose – sustainable economic growth (para 1). The Framework provides the strategic spatial policy context for decisions and actions by the Government and its agencies, planning authorities are required to take the Framework into

account when preparing development plans, and it is a material consideration in the determination of planning applications (para 2).

One of the main elements of the spatial strategy to 2030 set out in NPF2 is the intention to 'conserve and enhance Scotland's distinctive natural and cultural heritage, and continue to safeguard internationally protected sites, habitats and species' (para 53). The Scottish Government is committed to supporting 'the conservation and promotion of the historic environment as an irreplaceable resource, a reflection of Scotland's cultural identity and a key feature of its appeal as a tourist destination' (para 67).

SHEP sets out Scottish Minister's policies for the historic environment, and provides policy direction for Historic Scotland and a framework that informs the day-to-day work of a range of organisations that have a role and interest in managing Scotland's historic environment. Through the implementation of SHEP, Scottish Ministers wish to achieve three outcomes for Scotland's historic environment.

- That the historic environment is cared for, protected and enhanced for the benefit of our own and future generations;
- To secure greater economic benefits from the historic environment; and
- That the people of Scotland, and visitors to our country, value, understand and enjoy the historic environment.

Historic environment resources include statutory and non-statutory designations, as defined in SPP.

Sites with statutory designations relevant in the context of the proposed development are:

- Scheduled Monuments;
- Listed Buildings; and
- Conservation Areas.

Sites with non-statutory designations and relevant in the context of the proposed development are:

- Inventory status Historic Battlefields; and
- Other Historic Environment Interests.

SPP requires that planning authorities ensure that Development Plans provide a framework for the protection, conservation and enhancement of the historic environment and its setting (para 112).

PAN2/2011 advises that, in determining planning applications, planning authorities should take into account the relative importance of archaeological sites (para 5). It also notes that in determining planning applications that may effect archaeological features or their setting, planning authorities may on occasion have to balance the benefits of development against the importance of archaeological features (para 6). The desirability of preserving a monument (whether scheduled or not) is a material consideration and the objective should be to ensure the protection and enhancement of monuments by preservation in situ, in an appropriate setting. When preservation in situ is not possible, recording and / or excavation followed by analysis and publication of the results may be an acceptable alternative (para 14).



## **Sites with Statutory Designations**

### ***Scheduled Monuments***

Under the Ancient Monuments and Archaeological Areas Act 1979 (1979 Act), the Scottish Ministers are required to compile and maintain a schedule of monuments considered to be of national importance. The consent of the Scottish Ministers is required before any works are carried out which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering up a Scheduled Monument. In addition, impacts of proposed development works upon the setting of a Scheduled Monument form an important consideration in the granting or refusal of planning consent to conduct development works.

### ***Listed Buildings***

Under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 (1997 Act) (Scottish Government 1997), the Scottish Ministers are required to compile a list of buildings of special architectural or historic interest. Such buildings are classified into Categories A, B and C, in decreasing order of importance. Planning authorities and the Scottish Ministers are required to have special regard for the desirability of preserving Listed Buildings and their settings, and any features of special architectural or historic importance they possess.

### ***Conservation Areas***

Under the Planning (Listed Buildings and Conservation Areas) Scotland Act 1997 Act, areas of special architectural or historic interest can be designated by local authorities as Conservation Areas, the character or appearance of which it is desirable to preserve or enhance. Planning authorities are required to consider planning applications affecting the appearance, character or setting of Conservation Areas.

## **Sites with Non-Statutory Designations**

### ***Inventory Historic Battlefields***

A policy directive on Historic Battlefields is set out in SHEP. The policy seeks to introduce additional measures to protect Historic Battlefields through the production by Historic Scotland of an 'Inventory of Historic Battlefields', which lists nationally important sites, and provides information to help in their understanding, protection and sustainable management. The effect of proposed development on Inventory battlefields is a material consideration in the determination of a planning application

### ***Other Historic Environment Interests***

There is a range of other non-designated archaeological sites, monuments and areas of historic interest, including other (non-designated) battlefields, historic landscapes, other (non-Inventory) gardens and designed landscapes, woodlands and historic routes such as drove roads that do not have statutory protection. Sites with statutory protection are curated by the local planning authority, and SPP and PAN 2/2011 provide national planning policy guidance and advice on the treatment of such resources.

## **Forestry Commission Policy and Guidance**

### ***The UK Forestry Standard (2011) – Forests and Historic Environment***

The UK Forestry Standard sets out the approach of the UK Governments to sustainable forest management, defines stands and requirements, and provides a basis for regulation and monitoring of forests. As part of the forestry standards a series of legal and good forestry practice requirements

are set out for the protection of the Historic Environment. Those relevant to the proposed development are set out below:

*Legal requirements:*

- Scheduled Monuments must not be damaged and consent must be obtained from the relevant historic environment authority for any works that have the potential to damage the monument.
- Listed Building consent must be obtained from the local authority or relevant historic environment authority to demolish a listed building or any part of it, or to alter it in any way which would affect its character, inside or out.

*Good Forestry practice requirements:*

- Forests should be designed and managed to take account of the historic character and cultural values of the landscape.
- Forests should be designed and managed to take account of policies associated with historic landscapes, battlefield sites, historic parks and gardens, and designed landscapes of historic interest.
- Steps should be taken to ensure that historic features, which may be adversely affected by forestry, are known and evaluated on an individual site basis, taking advice from the local historic environment services.
- Forest management plans and operational plans should set out how important historic environment features are to be protected and managed.
- Plan an appropriate area of open space around features of historic significance and consider the setting as well as the individual features.
- Monitor important historic environment sites and features, including woodland features, to check they are not being damaged or degraded.
- Aim to maintain the open settings for features of historic interest; where appropriate monitor changes in vegetation and consider using grazing or mowing as part of the management plan.
- Manage public access so that open settings for historic features are not subject to erosion or damage caused by visitor pressure.
- Consider providing access to features of historic interest.
- Consider the historic environment could be interpreted for visitors as part of an integrated access strategy if that is a management objective.
- Ensure historic features and any visitors facilities associated with them are well maintained.

***Scottish Forestry Strategy (2006)***

This sets out the Scottish Government's framework for taking forestry forward through the first half of the century. In the strategy, a contributing part of the vision for achieving the outcome of a high quality, robust and adaptable environment, is the protection and promotion of the historic environment and cultural heritage of Scotland. The paper states that to deliver this outcome the long-term objectives for the historic environment are to:

- Manage the historic environment sensitively;
- Value the cultural history and historic environment; and,
- Recognise the tourism potential of the historic environment.

***Scotland's Woodlands and the Historic Environment (2008)***

The Forestry Commission Scotland recognise that they have a duty to identify and protect heritage features, and to take due account of cultural historic and designated landscapes when drawing up management plans. The paper states that Forestry Commission Scotland will:

- Promote and support continued effort to add to our knowledge base by seeking out, identifying, recording and researching to gain a better understanding of sites and areas of historic value;
- Promote and support the protection and conservation of significance evidence of the historic environment in Scotland's woodland, including historic landscapes and where relevant, surrounding environs, all in partnership with Scottish historic environment organisations and interests;
- Promote and support the preparation, consultation and implementation of holistic management plans that ensure the conservation of features and areas of the historic environment;
- Help people to appreciate and enjoy the historic environment legacy in woodlands by promoting and supporting appropriate access to and settings for historic features, where this does not prejudice their protection and conservation; and,
- Promote the development of a visitor experience to woodland historic sites to help visitors understand the history of the area they are visiting and its sensitivity to damage.

## **Regional and Local Policy**

### ***Clackmannanshire and Stirling Structure Plan (March 2002)***

The Structure Plan sets out the long term vision for sustainable development in the Clackmannanshire and Stirling area. The Plan states that it is important that the cultural heritage of the area is protected and enhanced and that new development should respect and complement the natural and built heritage to which it relates.

Policy ENV6 (The Historic and Built Environment) states that the Councils will seek to ensure that cultural heritage resources are recognised, recorded, protected and enhanced as appropriate, and that new development respects and contributes to the character and quality of the area. More particularly:

1. All development within or likely to affect a Conservation Area should preserve or enhance the special character or appearance of the Area.
2. There will be a strong presumption against development or works which would adversely affect the special architectural or historic interest of a Listed Building or its setting.
3. Development which would destroy or adversely affect Scheduled Monuments, or other importance archaeological sites or landscapes and their settings will not be permitted. In exceptional cases where developments may be approved which affect the heritage resource, developer funding will be legally tied to securing the appropriate level of advance investigation, excavation, recording and publication.

Policy ENV8 (Forestry) states that the Councils will support development of forestry activities where they further economic, social or recreational objectives and are environmentally appropriate, particularly when they can be clearly demonstrated not to have adverse archaeological impacts.

### ***Stirling Local Plan (1999)***

Policy POL.E43 (Listed Buildings) states that the Council will ensure that in relation to any works affecting Listed Buildings or their setting, special attention is paid to design, and the sympathetic choice of materials, in order that the building's character is not eroded.

In addition, POL.E45 states that development which adversely affects the character or setting of a Listed Building will not be permitted unless strong justification is produced in support of the application.

Policy POL.E47 (Archaeology) states that there will be a presumption against any development proposal which would have an adverse impact on:

- A scheduled monument or its setting; or,
- Unscheduled remains and their settings which have been identified as particularly worthy of preservation.

Policy POL.E48 states that when considering development proposals which would adversely affect features of archaeological importance, the Council must be satisfied that the benefits of the proposed development will outweigh the disturbance of archaeological interest. Approval of any such proposals, where preservation of the archaeological interest is not possible, will be conditional upon satisfactory provision being made by the developer for the appropriate level of archaeological investigation, including publication of the results.

Policy POL.E49 states that where there is an indication that archaeological remains may exist within a development proposal but their extent and significance is unclear, the Council will require the prospective developer to arrange for an evaluation prior to the determination of the application in order to establish the importance of the site, its sensitivity to development and the most appropriate means for preserving or recording surviving archaeological features.

Policy POL.E50 states that where the presence of archaeological interest becomes apparent once a development has commenced, adequate opportunity must be afforded by the developer for an archaeological investigation. It is desirable that, where possible, important archaeological remains are preserved in situ.

#### ***Clackmannanshire Local Plan (2004)***

Policy EN6 (Listed Buildings) states that when determining planning applications that affect a listed building or its setting, the Council will seek to ensure preservation of the building, its setting, or any features of architectural or historic interest. Approval will normally be granted for uses that would secure a viable future for a listed building, provided that any alterations are sympathetic to the character of the building and its setting.

Policy EN7 (Archaeological or Historic Sites) states that development will not be permitted where it could destroy or adversely affect a Scheduled Ancient Monument or other important archaeological or historic sites or their setting unless it can be demonstrated that:

- there is a significant public interest to be gained from the proposed development that outweighs the archaeological importance of the site. In the case of scheduled monuments the significance of the development must be of a national order to outweigh the national importance which attaches to their preservation;
- there is no appropriate alternative location for the proposal; and,
- the proposal has been sited and designed to minimise damage to the archaeological resource.

Policy EN8 (Site Assessment, Evaluation and Recording) states that where any proposal could affect a known site of archaeological importance, the applicant will be required to provide an assessment of the archaeological value of the site and the likely impact of the proposal on the archaeological

resource. Such an assessment will require a field evaluation report to the reasonable satisfaction of the Council, to determine:

- the character and extent of the remains of the archaeological resource;
- the likely impact of the proposal on the features of the archaeological interest; and,
- ways in which the proposal can be designed to preserve the archaeological resource.

Where the development is considered to be acceptable and it is not possible to preserve the archaeological resource in situ, the developer may be required to make arrangements for a full archaeological investigation. This may include excavation and recording prior to the start of development, followed by analysis and publication of the field data. Planning conditions will be used and agreements sought to secure these arrangements.

## **APPROACH TO THE ASSESSMENT**

### **Study Area**

The cultural heritage study area consists of three parts:

- The proposed forestry development site: which covers approximately 900ha running from Blythe Farm in the west to Flass Farm in the east for which a full desk-based assessment and field reconnaissance survey was undertaken (**Figures 1a-c and Figure 2**).
- A road re-alignment corridor in the Wharry Burn valley: a section at the northern end of the proposed development site where a proposed new access bridge and new access road would be constructed and where a metal detecting survey was carried out (**Illustration 1**).
- A wider study area: extending to 2km from the proposed development site boundary provided the study area for the identification of sites with statutory protection (and those with national and regional non-statutory designations) whose settings may be affected by the proposed development (**Figure 3**).

### **Baseline Characterisation**

#### ***Data Collection***

The assessment has been conducted in accordance with the Institute of Field Archaeologists Code of Conduct (IfA 2012) and Standard and Guidance for Archaeological Desk-based Assessment (IfA 2012).

Up-to-date information was obtained from appropriate sources on the locations of cultural heritage assets with statutory designations both within the proposed development site and within 2km of the development site boundary.

- Details of the locations and extents of Scheduled Monuments, Listed Buildings, Inventory Garden and Designed Landscapes, and Conservation Areas were downloaded, in GIS, from the Historic Scotland Data Warehouse (Historic Scotland 2013).
- Information on known cultural heritage assets within the proposed development site was obtained from the Stirling Council Sites and Monument Record (SMR).
- Additional information on the character and condition of known archaeological sites and features within the proposed development site was obtained from the Royal Commission on

the Ancient and Historic Monuments of Scotland database (RCAHMS 2013a) and digital survey data provided by the RCAHMS in GIS (RCAHMS 2013b).

- Ordnance Survey maps (1<sup>st</sup> and 2<sup>nd</sup> Edition maps) and other historic maps held by the Map Library of Scotland were examined to provide information on sites or features of potential cultural heritage interest and on historic land use development.
- An assessment was made of vertical aerial photograph collections held by the Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS). Sorties dating from 1946 were examined. In addition, modern aerial photography imagery of the proposed development site, provided by UPM Tilhill, and that available through Google™ and Bing™ was examined.
- Historic Land-Use Assessment Data for Scotland (HLAMap) (RCAHMS 2013c) was consulted for information on the historic land use character of the site.
- The Scottish Palaeoecological Database (SPAD) (Coles et al 1998), which records the distribution of known palaeoenvironmental sites across Scotland, was consulted for information on such sites within or adjacent to the proposed development site.
- Bibliographic sources, including the published results of a detailed field survey and documentary research project conducted by the RCAHMS in 1997 at Menstrie Glen (RCAHMS 2008), were consulted to provide background and historical context.

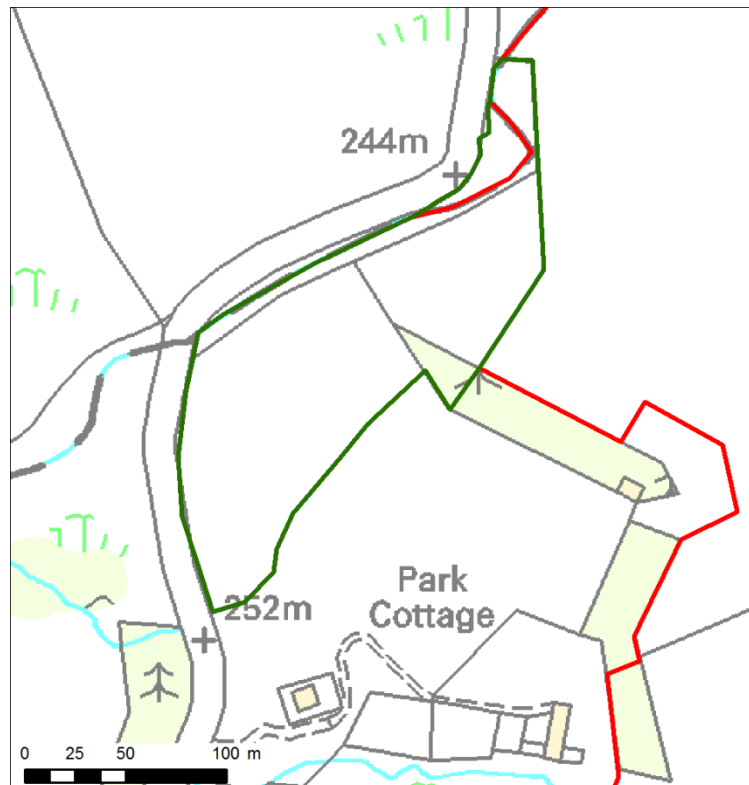
### ***Field Surveys***

#### ***Metal Detecting Survey***

A metal detecting survey was carried out across the area proposed for a new bridge and section of new access road where it lies close to the Wharry Burn and falls within the designated Sheriffmuir Historic Battlefield Site (**Illustration 1**). The survey which was carried out on the 08 May 2013 aimed to:

- Detect and recover any artefacts of archaeological or historic origin; and,
- To identify, if possible, areas of activity associated with the Sheriffmuir Battle or its aftermath.

A series of 30m by 30m grids was established over the survey area and detecting was carried out on a grid by grid basis with each grid surveyed in parallel transects each 2m wide. No metallic discrimination was set on the equipment so that any metal artefacts encountered would register and be identified. The positions of the grids and transects were recorded using industry standard surveying equipment. Any finds, other than those clearly of late 20th-century date, were to be retained for assessment and analysis by a finds specialist.



**Illustration 1. Metal detecting survey area (defined by green line)**

#### Reconnaissance Field Survey

A systematic reconnaissance walk-over field survey was undertaken between 09 and 10 May 2013 across the northern end of the proposed development site which had not previously been surveyed (**Figure 1a**). The field survey aimed to:

- Assess the baseline condition of the archaeology and heritage features identified through the desk-based assessment;
- Identify any further features of cultural heritage interest not detected from the desk-based assessment; and,
- Identify areas with the potential to contain currently unrecorded, buried archaeological remains.

The position of identified assets (and where appropriate their extents) were logged using a Global Positioning System (GPS) with an accuracy of approximately 0.6m – 1.2m. The baseline condition of identified assets was recorded on pro-forma monument recording sheets and by digital photography.

#### Field visits

In 1997 the RCAHMS carried out a programme of detailed survey and recording of the cultural heritage assets along the Menstrie Burn (RCAHMS 2008) (**Figure 1a-c** and **Figure 2**). A field visit was undertaken as part of this assessment on 14 May 2013 to those areas previously surveyed by the RCAHMS in order to:

- Provide up-to-date information on the current baseline conditions of the sites/features previously recorded; and,
- To assess their landscape settings.

### **Limitations of Assessment**

The small areas of linear woodland shelterbelts on the hillside to the south-east of Park Cottage were not included in the field survey. Areas previously covered by the RCAHMS survey were not revisited in any detail.

Weather and vegetation conditions during the survey and site visits were good and did not hinder the identification of features on the ground.

### **Impact Assessment Methodology**

The direct and indirect impact of the proposed development on cultural heritage assets is assessed. The assessment of significance of impact has been undertaken using two key criteria:

- The importance of the asset; and,
- The magnitude of the impact

The importance of cultural heritage assets reflects the relative weight given to them in SPP and SHEP. **Table 2** summarises the relative importance of cultural heritage assets (relevant in the context of this assessment).

<b>Table 2. Definition of Heritage Importance</b>	
<b>Heritage Importance</b>	<b>Definition</b>
National / International	Sites of national or international importance, including: <ul style="list-style-type: none"><li>• Scheduled Monuments and site proposed for scheduling;</li><li>• Category A Listed Buildings;</li><li>• Outstanding Conservation Areas (where designations persist);</li><li>• Inventory Historic Battlefields.</li></ul>
Regional	Sites of regional importance, including: <ul style="list-style-type: none"><li>• Archaeological sites and areas of distinctive regional importance;</li><li>• Category B Listed Buildings;</li><li>• Conservation Areas.</li></ul>
Local	Sites of local importance, including: <ul style="list-style-type: none"><li>• Archaeological sites of local importance;</li><li>• Category C Listed Buildings;</li><li>• Unlisted buildings and townscapes with local (vernacular) characteristics.</li></ul>
Lesser	Sites of little or no importance, including: <ul style="list-style-type: none"><li>• Artefact find-spots;</li><li>• Unlisted buildings or minor historic or architectural interest;</li><li>• Poorly preserved examples of particular types of features.</li></ul>

The magnitude of impact are assessed in the categories of imperceptible, low, medium or high, and are described in **Table 3**.

<b>Table 3. Definitions of Magnitude of Impact</b>	
<b>Level of magnitude</b>	<b>Definition</b>
High	Major impact fundamentally changing the baseline condition of the asset, leading to total or major alteration of character or setting.
Medium	Moderate impact changing the baseline condition of the asset materially but not fundamentally, leading to partial alteration of character or setting.
Low	Minor detectable impact which does not alter the baseline condition or setting of the asset materially.
Imperceptible	A very slight and barely distinguishable change from baseline conditions.



None	No discernible change to the baseline condition of the character or setting of the asset.
------	---

These two criteria are combined to provide an assessment of whether an impact is considered to be significant or not significant (**Table 4**). **Moderate** and **Major** impacts are considered to be ‘significant’ in EIA terms. Minor and Negligible impacts are considered to be ‘not significant’ in EIA terms.

<b>Table 4. Matrix for Assessing Significance of Impact</b>				
Magnitude of Impact ▼	Heritage Importance ►			
	<i>National International</i>	<i>Regional</i>	<i>Local</i>	<i>Lesser</i>
<b>High</b>	Major	Major	Moderate	Minor
<b>Medium</b>	Major	Moderate	Minor	Negligible
<b>Low</b>	Minor	Minor	Negligible	Negligible
<b>Imperceptible</b>	Minor	Negligible	Negligible	Negligible
<b>None</b>	None	None	None	None

## EXISTING CULTURAL HEIRTAGE BASELINE – DESCRIPTION AND EVALUATION

### General

The proposed development site covers the western side of the Menstrie Glen; one of a number of valleys running down the escarpment of the southern face of the Ochil Hills. The glen sides rise steeply from the village of Menstrie to a series of interconnecting spurs which form a broad terrace that extends around the valley sides. The area is presently primarily a mixture of improved pasture grassland and semi-improved grassland used for sheep grazing; while the upper hill slopes are predominantly unimproved moorland. In the past the broad terrace has provided the focus for cultivation and settlement; the remains of which still partly survive.

Fifty-four historic environment assets have been identified within the proposed development site (**Figures 1a-c**). **Appendix 1** provides detailed gazetteer information on the character, condition and extent of each of the assets identified by the study.

In addition, twenty designated heritage assets (Scheduled Monuments, Listed Buildings, Conservation Areas and Historic Battlefields) have been identified within 2km of the proposed development site boundary (**Figure 3**). **Appendix 2** provides detailed gazetteer information on the character and setting of each of these.

### Historic environment assets within the development site

There are no Scheduled Monuments present within the proposed development site and no part of the proposed development would lie within a Conservation Area or Historic Garden and Designed Landscape.

The northernmost part of the proposed development site would extend just inside the southern extent of the Sheriffmuir Historic Battlefield Area (**Figure 1a**); the battle was a key event in the Jacobite Rising of 1715 and the battlefield site is included in Historic Scotland’s Inventory of Historic Battlefields and is of national importance.

The SMR and RCAHMS databases contain records for forty-six other historic environment assets within the proposed development site. These consist primarily of post-medieval farming settlement

remains and associated agricultural structures which have been recorded in detail by the RCAHMS (RCAHMS 2008).

A systematic walk-over field survey of the previously un-surveyed part of the proposed development site identified and recorded a further eight historic environment assets (**Figure 1b**); in the form of fragmentary former field banks and other agrarian features.

The metal detecting survey (**Illustration 1**) carried out along the Wharry Burn and within the defined Sheriffmuir Battlefield Area did not find or recover any artefacts of archaeological interest.

### ***Previous Survey and Research***

In 1997 the RCAHMS carried out a detailed pre-afforestation survey of the Menstrie Glen, this included the recording of all upstanding buildings and earthwork remains (by EDM and Plan Table) (**Figures 1a-c** and **Figure 2**). Further, detailed information was gained on the extent of former rig and furrow cultivation remains through rectification from vertical and oblique aerial photographs (**Figures 1a-c**; former areas of rig and furrow cultivation highlighted in green). The results of this work form part of a monograph published by the RCAHMS (RCAHMS 2008) which brought together the survey data for Menstrie Glen and the results of private, historical documentary research (provided by John Harrison), and which covered historical maps, testaments, tacks and rentals, and the 'Wright of Loss' papers (principally from 1750-1769). The research indicated that the archaeological remains, as throughout much of the Ochils, are generally biased towards the later medieval and post-medieval periods with few and fragmentary earlier (prehistoric and early medieval) remains surviving.

Earlier settlement is however represented within the Ochil Hills, including remains from the Mesolithic period onwards; and two possible prehistoric features: a standing stone, on the east flank of Dumyat Hill, and a dun (1111; **Figure 1c**) on the west flank of Myreton Hill, were recorded by the RCAHMS in the immediate vicinity of the proposed development. It was concluded by the RCAHMS study that 17<sup>th</sup> and 18<sup>th</sup> century cultivation had effectively removed any trace of settlement and land-use from before 1600. From the 18<sup>th</sup> century onward there has been little modification of the landscape within the glen, the land being used primarily for sheep grazing during the 19<sup>th</sup> and 20<sup>th</sup> centuries, and this has ensured the survival of a large part of the former, 17<sup>th</sup> and 18<sup>th</sup> farming landscape.

### ***Potential Early Settlement Remains***

The remains of a possible dun (1111; **Figure 1c**), surviving on the western flank of Myreton Hill, was first recorded in 1970 by Welsh (Welsh 1970) who noted that there were the traces of a circular enclosure on a rocky boss of Myreton Hill along with the outline of a platform (or enclosure) at a slightly lower level to the north. Later survey by the RCAHMS in 1997 recorded a second terrace associated with the dun and several other features, including two small huts (or pens) (1111.02 and 1111.03), two possible clearance heaps (1111.05) and a building (1111.04) built against the face of the lower terrace; although these additional features may be later structures associated with a farmstead (3048 and 3091) present just to the north. The date of the dun is currently unknown, although it is potentially of Iron Age or early medieval date and is one of a small number of minor fortified structures present in the Forth Valley (RCAHMS 2008). The rocky boss on which the dun sits is a distinctive feature in the surrounding farming landscape; however, the dun, and the surrounding structures, survives generally only as low lying turf-covered earthworks (**Plate 1**).



**Plate 1. Location of Possible Dun (1111)**

### ***Post-medieval Farmsteads***

The remains of five former farmsteads are present within the proposed development area, 'Jerah' (1468), 'Little Jerah' (3031), 'Inchney' (NS89NE 56.01 (including 3036 and 1133.03) and two unnamed farms at Myreton Hill (3091/3048 and 4690), all of which are present on the eastern side of the Menstrie Burn (**Figures 1b-c**) and Glen Tye (1441), standing just north of the Old Wharry Burn (**Figure 1a**).

The farmsteads are primarily located within the broad terrace of the Menstrie Glen (**Figures 1a-c**) and aerial photographic evidence indicates that they were positioned at the interface between the cultivated arable fields on the lower slopes of the glen and the mosaic of grazing land and less intensively farmed arable land located on the higher slopes.

All but one of these farmsteads ('Jerah' (1468); **Figure 1b**) include remains of 18<sup>th</sup> century stone built buildings, and in most cases they can be associated with settlement names in 17<sup>th</sup> and 18<sup>th</sup> century documents (RCAHMS 2008). The farmstead at 'Jerah' continued to be occupied into the mid-20<sup>th</sup> century (RCAHMS 2008) and the remains of the mid-19<sup>th</sup> century farmhouse still survive. Detailed recording by the RCAHMS in 1997 indicates that the various farmsteads display a range of layouts, ranging from a more formal arrangement of buildings at 'Jerah' (1468) to more irregular patterns, for instance, at 'Little Jerah' (3031) (RCAHMS 2008, p37).

Today the farmsteads survive in varying condition. The farmstead at 'Jerah' (1468) is generally well-preserved with the gable ends of the 19<sup>th</sup> century farmhouse still standing to roof height (**Plate 2**) and the dry-stone remains of the former barns (steading), present immediately west of the farm house, still stand to over 1m high. Around the farm, the remains of a former kennels and other out-buildings and enclosures can also be seen, some as dry-stone footings and others as turf-covered earthworks. The farmhouse and out-buildings are clustered together in an area of improved pasture land just east of the Menstrie Burn.



**Plate 2. 19<sup>th</sup> Century Farm House and Steading Remains at Jerah (1468)**

In contrast, the farmstead at 'Little Jerah' (3031) (**Figure 1c**) survives as a variety of dry-stone footings (**Plate 3**), principally the main farmstead buildings (with walls standing 0.3m - 0.5m high), and a series of turf-covered earthworks of former enclosures associated with the farmstead. The farmstead stands on the edge of improved pasture land and immediately next to a farm access track. Although only the footings of the farm buildings and enclosures survive it is still possible to make out the general layout of the farmstead.



**Plate 3. Ruins of Little Jerah Farmstead (3031)**

The farmstead remains at 'Inchney' (NS89NE 56.01; **Figure 1c**) and two unnamed farmsteads at Myreton Hill (3091/3048 and 4690; **Figure 1c**) are more poorly preserved. The remains at 'Inchney' are overlain by a later dry-stone constructed sheepfold which has probably been constructed from stone re-used from the earlier farm buildings. The farmstead itself is visible only as low-relief turf-covered banks. Similarly the remains of the two farmsteads (3091/3048 and 4690) at Myreton Hill primarily survive as low-lying turf-covered footings, although the remains of a stone built structure (3048) do survive at the southern end of the farmstead. Even though the preservation of these remains is generally poor it is, in all cases, still possible to make out the generally layout of each farmstead and associated enclosures.

From the documentary evidence (RCAHMS 2008) it is clear that from the 1760s onwards Menstrie Glen was depopulated for the establishment of large sheepwalks (upland areas dedicated to extensive sheep farming) and most of the farmsteads in the area were abandoned around this time; although it is also possible that some elements of the abandoned farmsteads were maintained to house incoming shepherds (RCAHMS 2008, p38).

The majority of 'Glentye' farmstead (1441; **Figure 1a**) stands outside the northern boundary of the proposed development site and only small sections of field boundaries running down the northern bank of the Old Wharry Burn are present within the proposed development site. The surviving remains include turf-covered footings of several enclosures (c.0.5m -0.8m high), and associated fields, along with the remains of farm buildings and a corn-drying kiln, and the farmstead remains form a distinct cluster of features spread out along the upper slope of the northern bank of the Old Wharry Burn. The farmstead is not recorded on the Ordnance Survey 1<sup>st</sup> Edition map (1866) suggesting that it had been abandoned by the time of the survey in the mid-19<sup>th</sup> century.

#### ***Other settlement remains***

Distributed throughout Menstrie Glen are the remains of small turf buildings, two of these (1109; **Figure 1b**) and (4596; **Figure 1c**), are recorded within the proposed development site.

The remains of one of the turf buildings (1109) stand on a grassy ridge beside a modern farm access track at Myreton Hill. Only the vestigial footings of the building are visible along with the faint outline of a possible additional hut (1109.02), to the north of the building; a later dry-stone built enclosure, which has not been robbed, may be a later feature.

The remains of further turf buildings (4596) are situated on a slight terrace on the upper edge of the field system around 'Jerah'. Here the turf-covered footings of two rectangular buildings survive, although the northernmost building has been cut through by a later farm track. The RCAHMS (RCAHMS 2008) record that the southernmost building has two compartments and may be a possible byre-house suggesting that this pair of buildings constituted a small farmstead.

Such turf built structures are generally interpreted as being potentially of medieval date; however, the RCAHMS (2008) suggest that, taking into consideration the location of the byre-house structures within the poorer land around the glen, the use of turf in their construction, may be a reflection of the poverty of their occupants rather than indicative of an early date for the structures.

During the 19<sup>th</sup> century a 'shepherd's' cottage (4848; **Figure 1b**) was constructed at 'Red Brae' and the cottage is still shown as roofed on the Ordnance Survey 2<sup>nd</sup> Edition map (1901) but as unroofed by the 1924 Edition (Ordnance Survey map revised 1911) indicating that it was no longer occupied by that later date. Today the cottage survives as a ruin (**Plate 4**) standing immediately south of a modern farm access track and overlooking the Third Inchna Burn. The mortared rubble walls of the



cottage survive to a height of c. 1m along with the fragmentary remains of a turf-covered bank that once formed an enclosure surrounding the cottage.



**Plate 4. Ruins of 19<sup>th</sup> century Shepherd's Cottage (4848) at Red Brae**

### ***Shieling Huts***

Several groups of shieling huts have been recorded across the higher slopes of the Menstrie Glen (RCAHMS 2008). Five groups of sheilings (3023, 3467, 4597, 4603 and 5200; **Figure 1b**) are present within the proposed development site. Most are located in moorland above 350m and outside the head-dyke(s) surrounding the 17-18<sup>th</sup> century farmsteads. The shieling huts are clustered around or close to the main watercourses and are generally located in sheltered areas. These structures were occupied during summer months when the animals were taken from the in-fields (below the head-dyke) to the good upland grazing. Little historic evidence is available for the use of shielings huts in the Ochils and it is thought that the practice had largely died out by the end of the 16<sup>th</sup> century, although reference to shielings are made in some 18<sup>th</sup> century documents for the region (RCAHMS 2008, p 30).

Many of the shielings huts (for instance 3467, 4597 and 4603) recorded within the proposed development area survive only as small poorly preserved turf footings which are becoming increasingly inundated by grass and other vegetation growth. Others survive as low earthworks (turf and stone footings) set on small terraces (for instance 3023 and 5200). In one case, a large group of shieling huts (3467) survive on the steep western slopes overlooking the Third Inchna Burn and beyond the head-dyke above 'Little Jerah' (3031). This shieling group comprises at least nine shieling huts and two-compartment buildings, all visible as low-relief turf footings. In this case, the RCAHMS (RCAHMS 2008, p30) have suggested that it is possible that the larger buildings may indicate separate periods of occupation and construction at the same site. Indeed, evidence from the settlement site at 'Cadger Knowes' (RCAHMS database no: NS89NW 49), on the north-facing slopes of Dumyat, shows that a later farmstead was established on the site of an earlier shieling site.

### ***Field systems – Rig and furrow cultivation; Field banks and Enclosures***

Concentrated around the broad terrace of the Menstrie Burn and within the improved pasture at Park Cottage, at the northern end of the development site, are the remains of relict field systems associated with former farmsteads (including CFA001, CFA002, CFA007, 1133.01-.02 1205, 1899, 3032, 3091.5, 4594 and 4690; **Figures 1a-c**). The field systems include the remnants of irregular fields defined by turf and stone field banks, small enclosures and small areas of poorly preserved rig and furrow cultivation remains. Occasional poorly-preserved remains of probable field clearance cairns (for example CFA004 and CFA005; **Figure 1a**) also survive, albeit these are rare. Much of the remains are vestigial and difficult to see in the field; while the visible remains of the former rig and furrow cultivation have been, on the whole, removed by recent pasture improvements.

The field systems along the Menstrie Burn were recorded in detail in 1997 by the RCAHMS (**Figures 1b-c and Figure 2**). Where upstanding earthworks were visible these were accurately surveyed by EDM and Plane Table; whilst former rig and furrow cultivation remains, which generally did not survive well, were rectified from Royal Air Force (RAF) vertical aerial photographs (available from 1946) and from oblique aerial photographs taken during the RCAHMS own aerial survey programme.

Little of the field systems that may have been present to the south of 'Jerah' (1468), 'Little Jerah' (3031) and 'Inchney' (NS89NE 56.01) survive today, having been lost through intensive improvement of the grazing land in these areas; although faint evidence of rig and furrow remains, visible on 1946 aerial photographs, does indicate that these areas were also once cultivated. In the right light and at a distance the traces of some of the rigs are just visible, particularly surviving on the steeper slopes along the Inchna Burns, but the full extent of the former cultivation is best appreciated from aerial photographs.

Several clusters of irregular fields survive within the improved grassland on the higher slopes, beyond the farmstead ruins and around farmsteads (1109 and 3091/3048; **Figure 1c**) at Myreton Hill; here the outline of fields, defined by the remnants of turf-covered banks, are still visible. The extent of the cultivated land is delineated by a large head dyke(s) that separates the improved land below the head-dyke from the upland moorland and grazing beyond it. The head dykes (**Figures 1a-c**) are generally well-preserved features and survive as large turf-covered stone and earth bank (**Plate 5**), ranging from 0.8m to 1.8m high and 2.5m wide.



**Plate 5. Head-dyke located above settlement (4596)**

Examination of aerial photographs taken by the RCAHMS identified four types of rig present within the Menstrie Glen: broad rig, wide low rig, narrow low rig and straight narrow rig (RCAHMS 2008, p 52). The broad rig, which is best preserved beside the Crunie and Loss Burn and around the farmstead at Ashentrool, all to the west side of the Menstrie Burn and outwith the proposed development area, could possibly be the remnants of pre-18<sup>th</sup> century cultivation. The wide low rig and narrow low rig are considered to reflect the intensive cultivation of the glen during the 17<sup>th</sup> and 18<sup>th</sup> centuries, whilst the straight narrow rig appears to be confined to those areas which were cultivated during the late-18<sup>th</sup> and 19<sup>th</sup> centuries following the expansion of the grazing land.

In addition, to the rig and furrow remains, a small number of cultivation terraces have been identified within the proposed development site (**Plate 6**). These are recorded particularly on the slopes of Myreton Hill (3050, 3464, and 5324; **Figure 1c**), on the south-west facing slopes between the First and Second Inchna Burns (1133; **Figure 1c**), and within the lower lying ground to the south-east of 'Little Jerah' (3032; **Figure 1c**). In some cases, for instance at 'Little Jerah' and on the northern banks of the First and Second Inchna Burns, these cultivation terraces are overlain or cut at an oblique angle by the rigs, suggesting that the cultivation terraces may be a relict of an earlier field-system and cultivation pattern.





**Plate 6. Cultivation Terraces (3464) on south-facing slope of Myreton Hill**

Throughout the field system there are several small square and rectangular enclosures (for example, two small square enclosures (3036.04) or enclosure (2853); **Figure 1c**) that are probably small stock enclosures, hay rees, winter fodder storage areas, and other agrarian structures. Other larger rectangular dry-stone constructed structures have been interpreted as sheepfolds (or 'bucht's') (for example 1110.01, 3034.02, 3036.04, 4595 and 4598.01; **Figures 1b-c**) (RCAHMS 2008). The date and function of a circular enclosure (3468; **Figure 1b**), located on a spur projecting from the west flank of Colsnaur Hill, are unknown, but they are quite possibly the remnants of an additional sheepfold. Also surviving are small, turf built pens (4602; **Figure 1b**), located in moorland to the north of the field system surrounding 'Jerah' farmstead, and other small turf constructed structures, some built against field banks. These have been interpreted as huts (including 3033, 3034.01, 3090, 3051, 3469, 4667, 4668; **Figures 1b-c**) presumably used as farm workers or shepherd's shelters or for storage. Most of these features survive only as low-relief turf bank remains.

#### *Industrial*

A calcite mine (**Plate 7**) existed at one time on Myreton Hill and the four quarries (2077; **Figure 1c**) for the mine are still visible today, linked by a graded pony track, used today as a farm access track, and sitting in an area of improved pasture on the southern slope of the hill. The poorly-preserved turf-covered remains of a building probably associated with the works are visible just north of a trackway leading to the more southern quarries. A trench (4691.01; **Figure 1c**) presumably to test for minerals has also been recorded by the RCAHMS cut into the south side of the valley of the First Inchna Burn. The date of the mine is unknown, although it is thought to have been opened in the 19<sup>th</sup> century (RCAHMS 2008, p60).



**Plate 7. Calcite mine works (2077) on the southern slopes of Myreton Hill**

A sizeable quarry scoop (CFA 006; **Figure 1a**) was identified during the recent survey, cut into the northern bank of an unnamed burn south-east of Park Cottage. It is of unknown date, but has most likely been a source of stone used in the construction of field walls in the immediate area.

#### ***Miscellaneous***

The remains of what seems to be a large penannular enclosure (CFA008; **Figure 1a**) were recorded in an area of moorland on the lower slopes of Big Hunt Hill. The structure is covered in thick grass and reeds and its form was difficult to distinguish, although it appears that there are the collapsed ruins of a small cell or structure abutting the south-east side of the enclosure and the enclosure is open on the northern side. The exact function of the enclosure is unknown, but given its location within the upland moorland area it may have been an animal collection and sorting pen utilised at the end of the summer grazing.

Several intermittent sections of trackways (or holloways) (3024.03, 3466 and 4691.02; **Figures 1b-c**) have been previously recorded by the RCAHMS (RCAHMS 2008) to the north of the Second Inchna Burn (3024.03) leading to Colsnaur Hill (3466), and along the southern bank of the First Inchna Burn (4691.02). Some of these, particularly those running north (3024.03 and 4691.02) from the former farmsteads, into the upland areas, may have been used to access summer grazing areas or to local peat deposits for use as sources of domestic fuel.

The remains of a small bridge (CFA 003; **Figure 1a**) crossing an unnamed burn lie just north-east of Park Cottage. This is probably a relatively recent feature built to facilitate access to the farmland beyond the burn.

#### **Cultural heritage assets within 2km of the development.**

Within 2km of the proposed development there are three Scheduled Monuments, one Category A Listed Building, nine Category B Listed Buildings, five Category C Listed Buildings and one Conservation Area (**Figure 3**). The southern part of designated area for the Sheriffmuir Inventoried Historic Battlefield also lies within the 2km buffer.

### Archaeological Potential of the Proposed Development Site

The present land-use of the proposed development site is predominantly improved pasture grassland along the broad terrace surrounding Menstrie Burn and along the southern banks of the Wharry Burn, with open moorland in the upland areas, around Colsnaur Hill and Big Hunt Hill.

Evidence for prehistoric activity and settlement in the wider landscape surrounding the proposed development is limited but represented by several records in the SMR and RCAHMS databases (**Figure 3**). These records include: the remains of a prehistoric fort on the summit of Dumyat Hill (2182), located c.1km to the west of the proposed development; a prehistoric stone alignment (4539), known locally as 'The Wallace Stones' and present c. 0.2m from the northern boundary of the proposed development; what may be the remains of a standing stone (RCAHMS database no: NS89NW 79) located on the eastern flank of Dumyat Hill, c. 200m east of the proposed development and a polished stone axe-head find-spot at Dumyat in the 1920s (RCAHMS database no: NS89NW 1).

Documentary evidence (RCAHMS 2008) indicates that a great part of the Menstrie Glen was Crown Land during the medieval period and was largely used for sheep grazing (sheepwalks) from at least the 15<sup>th</sup> century, with this land-use continuing well into the 16<sup>th</sup> century. There is evidence to suggest that a small proportion of the glen was being cultivated during this same period and at least the farmsteads at 'Jerah' (1468) and 'Lipney' probably being of medieval origin ('Lipney' lies on the west side of the Menstrie glen, outside the western extent of the proposed development site). By the 17<sup>th</sup> century, and throughout the 18<sup>th</sup>, the glen was occupied largely by tenanted farms, with the 'sheepwalks' of the medieval period portioned into a pattern of small farms, each practising a mixed economy of arable and pastoral farming. The area of arable land initially surrounding the main farmsteads in the glen was expanded throughout the first half of the 18<sup>th</sup> century and this expansion is reflected in the development of small patches of rig in areas of higher ground outwith the land enclosed by the head-dykes (RCAHMS 2008). From the later 18<sup>th</sup> century onwards there was a reduction in the amount of arable cultivation in the glen and a steady move towards increased pasture and sheep farming, an economy that has continued up until the present day.

To the north of the proposed development site lies Sheriffmuir, famous as the location of a 1715 battle that took place here during the 1715 Jacobite Rising. The battle is significant as being the only major engagement in Scotland during that rebellion. The outermost limit of the battlefield, defined and designated by Historic Scotland, extends to lie just within the northernmost part of the proposed development site, east of Park Cottage. A metal detecting survey, carried out as part of this study (**Illustration 1**), found no artefacts that might have been associated with any aspect of the battle or troop movements and no pre-modern finds were identified. Evidence from historical documents, historical maps and an earlier metal detecting survey, carried out in 2006 (Pollard 2006), suggests that the core area of the battlefield, and the site of the main actions, lies in marshland to the north-west of where the Sheriffmuir Inn now stands and that retreating government troops, chased by the Jacobites, crossed the fields to the south and west of the present Macrae monument and along the Wharry Burn valley (Historic Scotland Inventory of Historic Battlefields). These main areas of action lie outwith the proposed development site boundary and, taking into account the results of the metal detecting survey undertaken for this study, it is considered that there is very little potential for the recovery of battle related artefacts from the outermost and peripheral extents of the designated battlefield area.

Peat probing carried out across the development area (**Chapter cross reference req'd**) indicates that peat depths are generally shallow; typically deposits being no more than 0.5m deep. There are some discrete areas of deeper peat (>0.5m deep), within the higher upland areas around the heads of the Second Inchna Burn and Third Inchna Burn. There is therefore some potential for good,



undisturbed palaeological deposits to survive on the site, in these locations and which may hold a palaeoenvironmental record of the land-use development of the Menstrie Glen.

Evidence taken from vertical aerial photographs indicates that extensive areas of rig and furrow cultivation were once present within the proposed development site (RCAHMS 2008; **Figure 1a-c**). However, much of this no longer survives as upstanding remains, the rig having been slighted or removed by later pasture improvement works; although some faint traces of small areas of former rig can still be seen on steeper slopes and along the banks of the Inchna Burns and it is possible that some may still survive as sub-surface remains. If such remains do survive, there is some potential for the buried soil deposits to contain palaeoenvironmental data that would provide information on, for instance, soil development, manuring practices and crop husbandry (for instance Carter and Simpson 2001, Carter et al 1997, and the Scottish Archaeological Research Framework Papers 2013).

Within the proposed development site there is little evidence for prehistoric or early-medieval settlement and activity. The remains of a probable dun (1111; **Figure 1c**) at Myreton Hill could relate to occupation during the later Iron Age or early historic period. However, later intensive arable cultivation and land improvements carried out during the 17<sup>th</sup> and 18<sup>th</sup> century, and to some extent continued improvement of the pasture land in the 19<sup>th</sup>/20<sup>th</sup> centuries, is likely to have effectively removed, earlier settlement remains (RCAHMS 2008). Taking this into consideration it is judged that the potential of, as yet undetected, buried remains of prehistoric and early historic sites surviving within the proposed development site should be considered as low.

### **Assessment of importance of cultural heritage features within the development area**

Using the thresholds described above in **Table 2, Appendix 1** contains a final column indicating the assessment of importance of each cultural heritage asset identified by the study.

Forty-seven assets are considered to be individually of local importance on the basis that they are historical features contributing to the present character of the landscape. These include former farmsteads and other settlement remains, such as pens and huts; field banks; field systems and cultivation terraces; sheepfolds and other enclosures; a calcite mine; and groups of shieling huts.

Seven assets are considered to be of lesser heritage importance on the basis that they are either in no way distinctive or make little contribution to the character of the historic environment. These include a bridge (CFA003), two clearance cairns (CFA004 and CFA005), a quarry scoop (CFA006), several fragmentary trackways (or holloways) (3024.03, 3466) and a mineral exploration trench (4691).

Whilst individually the separate sites and features surviving within the proposed development site are not unusual for the periods that they represent and are individually judged to be of no more than local importance, collectively they constitute part of a more extensive relict post-medieval farming landscape which survives within Menstrie Glen (**Figure 2**). Such farming remains are not unique to the Menstrie Glen and are found throughout the Scottish landscape in varying degrees of preservation. Nearby examples include a similar farming landscape recorded in 1998 by the RCAHMS at Glen Devon, near to Auchterader, around 10km to the north-east of the proposed development site, and a well-preserved 18<sup>th</sup> century farming landscape at Outh Muir (RCAHMS database no: NT09NE 19) just north of Knock Hill (Fife) around 20km to the south-east of the proposed development. Nevertheless, taking into consideration the extent and overall good preservation of the relict farming remains present at Menstrie, coupled with the surviving post-medieval (principally 17<sup>th</sup>-18<sup>th</sup> century) historic documentation that can be directly linked to the

settlement in the glen, it is considered that collectively the sites and features throughout the glen are of regional importance.

## ASSESSMENT OF PREDICTED IMPACTS

### Direct Impacts

Any ground-breaking activities associated with forestry works (such as pre-forestry ploughing, excavation of drainage ditches and construction of forestry access roads) have the potential to disturb or destroy historic environment assets causing direct, permanent and irreversible impacts.

The majority of the historic environment assets surviving within the proposed development site would be preserved either within open areas or as upstanding remains within the woodland and there would be no direct impact predicted on these sites. The remains to be protected include the possible prehistoric/early medieval dun, core elements of former farmsteads, shieling huts, well-preserved head-dyke(s) and field banks, enclosures and other agrarian structures and a calcite mine.

The nature of the proposed forestry works means that there would be a direct impact on areas of former cultivation, including areas of former rig and furrow cultivation, cultivation terraces and poorly-preserved fragments of field banks which would be lost through pre-forestry ploughing and planting activity. The former cultivation remains form part of a well-preserved 17-18<sup>th</sup> century agrarian landscape that survives along the Menstrie Glen (**Figure 2**). Much of the rig and furrow on the east side of the Menstrie Burn, within the proposed development site, is no longer prominently visible as upstanding remains and much of the former cultivation pattern is best appreciated through examination of post-war vertical aerial photographs; although, some small sections of rig are visible on the ground, these principally being along steep slopes around the Inchna Burns. It is also recognised that there is some potential that buried remains of rigs and furrows still survive in areas of former cultivation. These cultivation remains are not however unique in the Scottish landscape and are considered to be of local heritage importance.

*Magnitude of impact:* The cultivation remains that survive on the eastern side of the Menstrie Burn would be removed during pre-forestry ploughing and drainage works. However, only a small proportion of the overall pattern of former cultivation remains would be directly affected, with those cultivation remains (and field systems) which survive on the western side of the Menstrie Burn and around Lossburn Reservoir and Loss Hill (**Figure 2**) outwith the proposed development site boundary being un-affected by the development. There would though be an affect on the integrity of the surviving historical farming landscape pattern as a whole from the proposed development. Taking this into consideration the impact on the cultivation remains is considered to be of high magnitude, through the loss of that part of the relict farming landscape.

*Significance of impact:* The predicted direct impact on the relict farming landscape as a result of the loss the rig and furrow remains would be of **moderate** significance. Mitigation to off-set the impact on the cultivation remains is set out below.

The Sheriffmuir Battlefield site (**Figure 3**) lies outside of the proposed development site boundary and would not be affected by pre-forestry ploughing or planting activity. The boundary of the designated battlefield site area (Inventory entry) does not follow any topographically defined features (roads, fences, watercourses) in the area where it intersects with the proposed development site and is a somewhat arbitrary limit. The recorded location of the core elements of the battle (troop dispositions, troop movements and core action areas) lies to the north-west of the

development site boundary, around Sheriffmuir Inn and the main route of the Government troops retreat appears to have been focussed on the fields to the south and west of the Macrae monument and along the valley of the Wharry Burn, to the north-west of the proposed development site. There is no surviving surface evidence (or memorial) associated with the battlefield within the proposed development site and it is unlikely that there were ever any substantial features, such as earthworks or embattlements, which would have left any physical trace of their presence. A metal detecting survey along the Wharry Burn, where a new access bridge and section of new access track would be constructed (**Illustration 1**), did not recover any artefacts that could have been associated with the battle. It is therefore considered that there is very little potential for buried features and/or artefacts associated with the battle to survive within the proposed development site and no potential direct impacts on remains associated with the battlefield. It is considered that no further mitigation is required.

### **Uncertain Impacts**

Other than the identified impacts described above, ground-disturbing activities associated with the proposed development, such as pre-forestry ploughing and drainage works or road construction, could have an adverse impact on any unrecorded, buried archaeological remains that may be present in affected areas. Both documentary sources and field survey of the Menstrie Glen have indicated that the settlement and agricultural remains preserved within the proposed development date principally to the 17<sup>th</sup> and 18<sup>th</sup> centuries and that intensive cultivation and land improvements throughout this period have largely removed any earlier settlement remains. It is therefore considered that the likelihood of encountering hitherto unknown remains is low.

### **Indirect Impacts**

Using the criteria set out in 'Impact Assessment Methodology' and **Tables 2 - 4** (above) the potential indirect impacts of the proposed development on the setting of designated cultural heritage assets, within 2km of the proposed development boundary, have been assessed and a tabulated assessment of the predicted impact on a site-by-site basis is provided in **Appendix 2**.

No significant impacts on the settings of cultural heritage assets within the wider landscape are predicted as a consequence of the proposed forestry proposal.

## **MITIGATION**

When determining a planning application, the desirability of preserving a monument (whether scheduled or not) and its setting is a material consideration (PAN 2/2011 para 14).

The guidelines for new woodland planting proposals, presented in 'The UK Forestry Standard' (see above 'Planning and Legislative Background') would be followed. All mitigation measures would require with the approval of Stirling and Clackmannanshire Council and the Forestry Commission of Scotland. All mitigation works would take place prior to planting and the scope and detail of the proposals would be set out in a Written Scheme of Investigation (WSI) to be approved by the planning authority in advance of development works commencing on site.

The following specific mitigation measures are proposed:

## Preservation in situ

Key upstanding elements of former farmsteads and other settlement remains, along with the majority of upstanding remains of associated relict field systems would be preserved in situ (**Figure 1**):

- The remains of a possible prehistoric or early medieval Dun (1111) would be retained, along with the remains of a 19<sup>th</sup> century Calcite Mine (2077) that survive immediately south-east of the Dun at Myreton Hill. These features would be preserved in situ in open areas in the woodland.
- The former farmstead ruins and earthworks at 'Jerah' (1468), 'Red Brae' (4848), 'Little Jerah' (3031), 'Inchney' (NS89NE56.01) and two unnamed farmsteads at Myreton Hill (3048/3091, and 4690) would be retained in open woodland areas, along with all surviving shieling groups (3023, 3467, 4603, 4597 and 5200), and other earthwork structures including huts (1109, 1111.02, 3033, 3034.01, 3051, 3090, 3469.01, 4596, 4598.02, 4667.01 and 4668,) and examples of sheepfolds (buchs) (3034.02, 3036.01, 3036.04, 4595 and 4598.01), other animal pens (111.03 and 4602) and enclosures (CFA 008, 2853, 3036.02, 3468, 3469.02 and 4667.02).
- Discrete and well-preserved examples of farmland remains, including earthwork remains of field banks and enclosures surrounding farmstead remains, would be retained in open spaces: at 'Jerah' (1468), at Myreton Hill (3948/3091), and around a shieling group (4597) at the Third Inchna Burn.
- The well-preserved remains of the former head-dyke(s) and other field system remains, including field banks, small turf enclosures would be avoided during pre-forestry ploughing and preserved in-situ within woodland rides.
- Proposed new access tracks and pathways will be routed so as to avoid the upstanding remains, including the large penannular enclosure (CFA008) at Big Hunt Hill.
- Peat deposits over 0.5m deep would be excluded from the woodland planting scheme and will be preserved in-situ.

Where appropriate, sites would be fenced-off or otherwise demarcated to prevent avoidable, accidental damage occurring to the remains during forestry activities in their vicinity. Fencing would be hi-visibility temporary fencing and a buffer of 20m devoid of planted trees around areas/features to be retained in open areas would be maintained beyond the outmost recognised feature of each site to avoid damage from tree throw and root networks. A 2m - 3m stand-off buffer would be preserved around other field system remains (field banks, small enclosures, etc) which would be preserved in-situ within the woodland.

## Archaeological Trail and Interpretation

Those elements of the surviving historic landscape that would be preserved in situ within the new woodland environment, including the dun (1111), the former farmsteads (1468, 4848, 3031, NS89NE 56.01, 3091/3048 and 4690), the shieling huts (3023, 3467, 4603, 4597 and 5200) and the calcite mine (2077), would be linked by a network of footpaths and access tracks (**Figures 1a-c**). The trail would be designed to promote awareness of the former farming landscape along the Menstrie Burn and to provide information on the preserved archaeological remains.

Interpretation media, such as interpretation panels at key locations, downloadable apps for smart phones and publicly available leaflets/booklets, would be designed for and integrated with the trail, providing information on the remains to be found preserved within the woodland and linking these

remains with the results of the detailed historical and survey research that has been carried out for the Menstrie Glen and local area.

The aim of the 'archaeological trail' would be to facilitate public access to and increase public awareness and knowledge of the Menstrie Glen landscape, linking the past land-use of the glen with the present development, disseminating the detailed historical research to a wider public audience and to enhance the public experience. The 'archaeological trail' would be linked with other public footpaths running from Lossburn Reservoir, to the east of the development site, and Sheriffmuir Battlefield, to the north, allowing greater access to and from the local area.

### **Archaeological Landscape Viewpoints**

Viewpoints at strategic locations within the proposed woodland, for example at 'Jerah' (1468) and 'Little Jerah' (3031) and 'Inchney' (NS89NE 56.01), would be created to provide open views out to the well-preserved farming remains visible on the western side of the Menstrie Burn and to wider landscapes; including a viewpoint looking north-westwards across the Sheriffmuir Battlefield site with a specific interpretation panel providing information on the context and main actions of the battle.

### **Targeted Evaluation/Excavation**

Where the remains of field systems (primarily fragmentary field banks and areas of former cultivation) cannot be preserved in situ, targeted archaeological evaluation trenches would be excavated across a selection of these remains with the following aims:

- to provide information on cultivation techniques and development of soils across the site;
- to recover any surviving palaeoenvironmental and palaeoecological evidence; and,
- to identify, if possible, any specific evidence to date the establishment of the field systems.

The targeted evaluation work would be carried out in advance of pre-forestry ploughing. Details of the work would be agreed with the Stirling and Clackmannanshire Council Archaeologist and Forestry Commission Scotland and set out in a WSI for the approval of the Council. The WSI would make provision for appropriate post-excavation analyses and dissemination of the results of the mitigation works, as well as for archiving of the project materials and records following completion of the project.

If significant discoveries are made during archaeological monitoring and preservation in situ of any sites or features is not possible, provision would be made for excavation, where necessary, of any important archaeological remains. This provision would include the consequent production of written reports on the findings, with post-excavation analyses and publication of the results of the work where appropriate.

### **Building Consolidation and Maintenance of Open Areas**

Upstanding remains of buildings at 'Jerah' (1468) and at 'Red Brae' (4884) would be consolidated and open areas around the farmsteads and other structural remains would be preserved and maintained. A consolidation and maintenance plan would be produced, to outline essential maintenance works required, and this would be agreed with the Forestry Commission of Scotland and Stirling and Clackmannanshire Council.



## **Community Research Projects**

An agreement would be put in place by UPM Tilhill to allow the possibility of future community-based research projects to be carried out in the woodland area.

## **Working Guidelines**

Written Guidelines would be issued and delivered in the form of toolbox talks on behalf of the applicant, for use by all contractors, outlining the need to avoid causing unnecessary damage to known historic environment assets. That document would contain arrangements for calling upon retained professional support in the event that buried remains of potential archaeological interest (such as building remains, human remains, artefacts etc) should be discovered in areas not subject to archaeological monitoring. The guidance will make clear the legal responsibilities placed upon those who disturb, in particular, historic artefacts or human remains.

## **RESIDUAL IMPACTS**

The core elements of the farmsteads, shieling huts and other settlement remains surviving on the site, including the remains of a possible dun, would be preserved in open areas within the proposed woodland and these would be linked throughout by an archaeological trail along with interpretation boards, or other available media such as pamphlets and/or mobile phone apps. This would safeguard the main settlement foci along the western side of the Menstrie Glen, including the farmsteads and their immediate associated buildings, and more peripheral elements such as shieling huts, preserving information on the layout of the farms and any surviving significant assemblages of artefacts and ecofacts that may exist as buried remains for future research. The link between these settlement remains, and with other preserved farmsteads/field systems surviving outwith the proposed development, around 'Loss' and on the slopes of Dumyat, would also be preserved via the archaeological trail. Other elements, such as well-preserved field boundaries and enclosures/sheepfolds would be preserved, where practicable, as upstanding remains within the woodland. The archaeological remains surviving in the Menstrie Glen have already been recorded through detailed field survey and vertical photographic record by the RCAHMS, and although there would be some physical loss of the connectivity between the settlement remains and their surrounding field systems, along the western side of the glen, the existing detailed records of the landscape are sufficient that the loss of archaeological information would be minimal.

There would be a loss through pre-forestry ploughing of former cultivation remains, including rig and furrow remains, cultivation terraces and some fragments of poorly preserved field banks. The preservation of former cultivation remains on the site is currently limited, with much of the former rig and furrow having been slighted or removed by later pasture improvement. It is though, recognised that there is some potential for buried remains relating to cultivation practices to survive. The layout and pattern of the cultivation remains has been recorded in detail from post-war (1946) vertical aerial photographs; the rig and furrow cultivation along with the pattern of field banks and enclosures is clearly visible on these photographs and has been rectified, transcribed and documented by the RCAHMS survey (RCAHMS 2008). Other cultivation remains surviving on the western side of the Menstrie Glen would be unaffected by the proposed development. Other remains such as palaeoenvironmental and palaeoecological evidence which may survive on the site and which could provide information on, for instance, the development of cultivation soil across the site, the local environment and land cover, manuring techniques and what the occupants may have been growing, would be lost through pre-forestry ploughing. Targeted trial trench evaluations across the site to record any surviving deposits prior to forestry ploughing would off-set this impact.

Taking the proposed mitigation into account, it is considered that there would be minimal residual impacts in relation to direct impacts on the cultural heritage assets within the proposed development site. There would be a moderately significant impact on the integrity of the field systems that would be off-set by the proposed mitigation to investigate, record and analyse the current deposits prior to their loss.

The impacts of the proposed development on the setting of various cultural heritage assets within 2km of the development boundary will be as identified in **Appendix 2**. None of the predicted residual impacts significant in EIA terms.

## **SUMMARY AND CONCLUSIONS**

Fifty-four historic environment assets have been identified within the proposed development site (**Figures 1a-c**). These comprise principally of 17<sup>th</sup>-18<sup>th</sup> century farmstead remains with associated field systems and other agrarian features. Forty-seven of these assets, including former farmstead remains, shieling huts, field systems, a dun and former mining remains, are considered to be individually of local importance as they are historical features that contribute to the present character of the landscape; while seven further assets, including a bridge, two clearance cairns, a quarry scoop, several fragmentary trackways (or holloways) and a mineral exploration trench are all considered to be of lesser heritage importance. Whilst individually the separate sites and features are not unusual for the periods that they represent, collectively they constitute part of a more extensive relict post-medieval farming landscape which survives within Menstrie Glen (**Figure 2**) and taking into consideration the extent and overall good preservation of the relict farming remains coupled with the surviving post-medieval (principally 17<sup>th</sup>-18<sup>th</sup> century) historic documentation that can be directly linked to the settlement in the glen, it is considered that collectively the sites and features are of regional importance.

The northernmost part of the proposed development site would extend just inside the southern extent of the Sheriffmuir Historic Battlefield Area (**Figure 1a**); the battle was a key event in the Jacobite Rising of 1715 and the battlefield site is included in Historic Scotland's Inventory of Historic Battlefields and is of national importance.

The remains of a probable dun (1111; **Figure 1c**) survive at Myreton Hill and this could relate to occupation during the later Iron Age or early historic period. However, later intensive arable cultivation and land improvements carried out during the 17th and 18th century, and to some extent continued improvement of the pasture land in the 19th/20th centuries, is likely to have effectively removed, earlier settlement remains (RCAHMS 2008). It is therefore considered that the potential of, as yet undetected, buried remains of prehistoric and early historic sites surviving within the proposed development site is low.

The majority of the historic environment assets surviving within the proposed development site would be preserved either within open areas or as upstanding remains within the woodland and there would be no direct impact predicted on these sites.

The nature of the proposed forestry works means that there would be a direct impact on areas of former cultivation, including areas of former rig and furrow cultivation, cultivation terraces and poorly-preserved fragments of field banks which would be lost through pre-forestry ploughing and planting activity. Only a small proportion of the overall pattern of former cultivation remains would be directly affected, with those cultivation remains (and field systems) which survive on the western

side of the Menstrie Burn and around Lossburn Reservoir and Loss Hill (**Figure 2**) being un-affected by the development. There would nevertheless be an effect of moderate significance on the integrity of the surviving historical farming landscape pattern as a whole. Mitigation measures are proposed to offset the loss of the archaeological resource that could occur as a result of the proposed development.

Indirect, but not significant, effects are identified in respect of three Scheduled Monuments, one Category A Listed Building, nine Category B Listed Buildings, five Category C Listed Buildings, one Conservation Area and one Inventory Historic Battlefield (**Figure 3**).

## REFERENCES

### Historical maps

- Roy, W (1747-55) Military Survey of Scotland  
Ordnance Survey (1866) Perthshire, Sheet CXXXIII, 6 inch to 1 mile  
Ordnance Survey (1866) Perthshire, Sheet CXXVI, 6 inch to 1 mile  
Ordnance Survey (1901) Perth and Clackmannan, Sheet CXXXIII.NW, 6 inch to 1 mile  
Ordnance Survey (1901) Perth and Clackmannan, Sheet CXXVI.SW, 6 inch to 1 mile  
Ordnance Survey (1924) Perth and Clackmannan, Sheet CXXXIII, 6 inch to 1 mile

### Aerial Photographs

Sortie	Date	Frame Run	Library Ref
106G/UK/0120	20.06.1946	4191-4195 4043-4047	B_0039
541/A/0522	12.05.1950	4082-4076 3082-3076	B_0313
58/3813	10.12.1960	0091-0101 (F41 & F42)	B_0551
ASS/512/88	10.06.1988	086-089	C_0272

### Bibliographic References

- Carter, S and Simpson, I (2001) 'Appendix 3: Analysis of Cultivated Soils in Fossilised Rig and Furrow', in J Barber (ed) Guidelines for the Preservation of Areas of Rig and Furrow in Scotland, STAR Monograph.
- Carter, S, Tipping, R, Davidson, D, Long D, and Tyler, A (1997) A multiproxy approach to the function of postmedieval ridge-and-furrow cultivation in upland northern Britain, *The Holocene*, vol 7, no 4, p447-456.
- Dickie, D M and Forster, C W (eds) (1974) 'Mines and minerals in the Ochils', Forth Naturalist & Historian, p 29.
- IfA (20120) 'By-Laws: Code of Conduct', Institute for Archaeologists.
- IfA (2012) 'Standard and guidance for archaeological desk-based assessment', Institute for Archaeologists.
- RCAHMS (2008) 'Well Sheltered and Watered: Menstrie Glen, a farming landscape near Stirling', Royal Commission on the Ancient and Historical Monuments of Scotland Monograph, 2<sup>nd</sup> Edition.
- Welsh, T C (1970) 'Alva Menstrie Glen, dwelling: boundary, structure', *Discovery Excav Scot*, p20-1.

### Website Sources and Digital Data References

- Historic Scotland (2013) GIS downloaded, available at <http://hsewsf.sedsh.gov.uk/gisd.html> (accessed May 2013).
- Scottish Archaeological Research Framework (2013), available at <http://www.scottishheritagehub.com/content/scarf-documentation>.
- Stirling Council Sites and Monuments Record (SMR) (2013), available at <http://www.stirling.gov.uk/services/business-and-trade/planning-and-building-standards/archaeology/smr-search> (accessed May 2013).
- RCAHMS (2013a) Royal Commission of Ancient and Historic Monuments Database (PASTMAP) available from: <http://jura.rcahms.gov.uk/PASTMAP/start.jsp> (accessed May 2013).
- RCAHMS (2013b) Menstrie Glen field survey EDM/GPS linework, provided by the RCAHMS in GIS shapefiles (May 2013).
- RCAHMS (2013c) Historic Land-use Assessment for Scotland (HLAMap) available from: <http://rcahms.gov.uk> (accessed May 2013).
- Coles, G.M., Gittings, B.M., Milburn, P. and Newton, A.J. (1998) Scottish Palaeoecological Archive Database available from: <http://www.geo.ed.ac.uk/spad> (accessed May 2013).

## **CULTURAL HERITAGE NON-TECHINICAL SUMMARY**

The Cultural Heritage Chapter considers the likely impacts on the archaeology and built heritage (historic environment assets) of the proposed woodland scheme. The assessment has been carried out by CFA Archaeology Ltd (CFA), informed by comments and information provided by Historic Scotland and Stirling and Clackmannanshire Council Archaeologist.

The assessment was designed to identify and evaluate any historic environment assets within the proposed development site through examination of desk-based sources, detailed field reconnaissance, a targeted metal detecting survey, and to identify historic environment assets within 2km of the proposed development site boundary that could have their settings affected.

Fifty-four historic environment assets have been identified within the proposed development site. The majority of these are associated with 17-18<sup>th</sup> century agrarian (farming) activity. Whilst individually the separate assets surviving within the proposed development site are not unusual for the periods that they represent and are individually judged to be of no more than local importance, collectively they constitute part of a more extensive relict post-medieval farming landscape which survives within Menstrie Glen. Such farming remains are not unique to the Menstrie Glen and are found throughout the Scottish landscape in varying degrees of preservation, nevertheless, taking into consideration the extent and overall good preservation of the relict farming remains, coupled with the surviving post-medieval historic documentation that can be directly linked to the settlement in the glen, it is considered that collectively the assets are of regional historic importance.

There is little evidence for prehistoric or early-medieval settlement and activity within the proposed development site, although the remains of a dun at Myreton Hill could relate to occupation during the later Iron Age or early historic period. A study by the Royal Commissions on Ancient and Historical Monuments in 1997 concluded that post-medieval cultivation had effectively removed any trace of settlement and land-use from before 1600. It is therefore considered that the potential of as yet undetected buried remains of prehistoric and early historic sites surviving within the proposed development site is low.

The majority of the historic environment assets surviving within the proposed development site would be preserved either within open areas or as upstanding remains within the woodland, but due to the nature of the proposed forestry works there would be a direct impact on areas of former cultivation remains which would be lost through pre-forestry ploughing and drainage works. Much of the rig and furrow within the proposed development site is no longer prominently visible as upstanding remains and much of the former cultivation pattern is best appreciated through examination of post-war vertical aerial photographs. Only a small proportion of the overall pattern of former cultivation remains would be directly affected, with those cultivation remains which survive on the western side of the Menstrie Burn and outwith the proposed development site boundary being un-affected by the development. There would though be an affect on the integrity of the surviving historical farming landscape pattern as a whole and taking this into consideration the impact on the cultivation remains is considered to be of moderate significance. Mitigation measures are proposed to offset the loss of the archaeological resource that could occur as a result of the proposed development.

Indirect impacts rising from the proposed development on the setting of historic environment assets within the wider landscape are considered to be not significant.



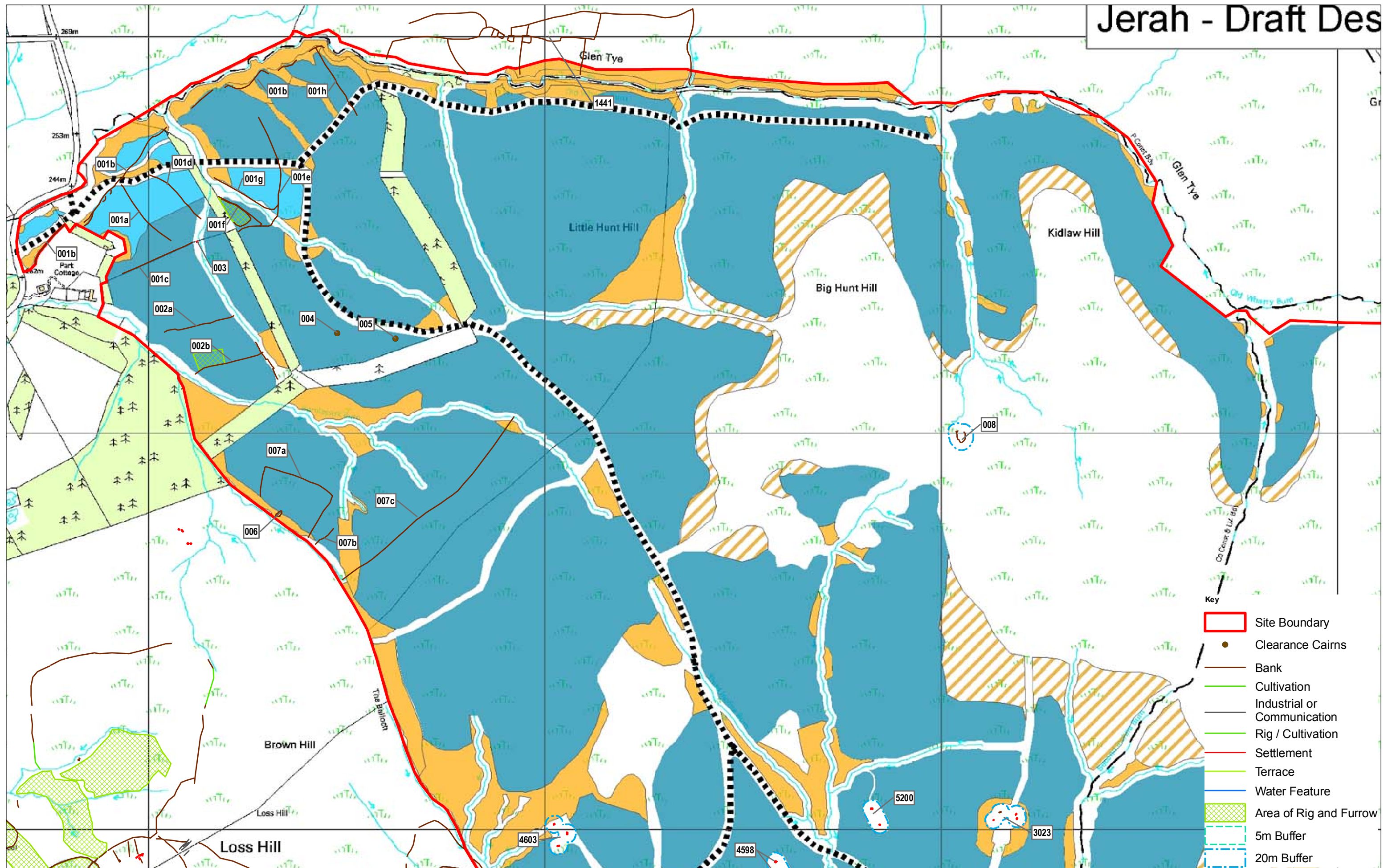


Fig. No	Revision	Checked by:	Report No:	Drawn by:	Scale at A3
1a		SW	-	MH	1:8,500

Title	Project	Client
Site Boundary and Cultural Heritage Sites within boundary	Jera Woodland Scheme	UPM Tilhill

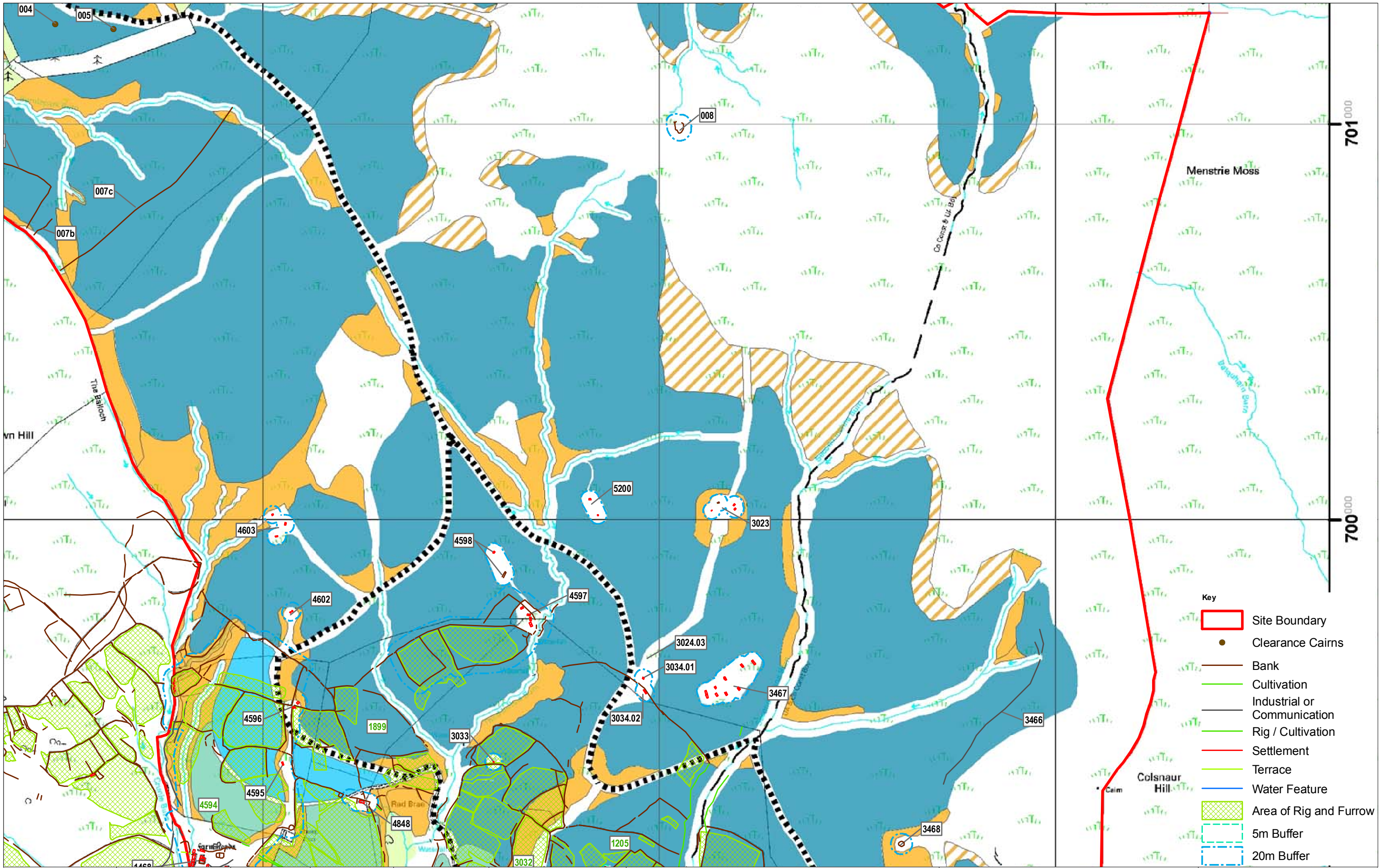
Reproduced with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office, © Crown copyright.  
 CFA Archaeology Ltd, Old Engine House, Eskmills Park, Musselburgh EH21 7PQ AL100034785

**CFA** ARCHAEOLOGY LTD  
 The Old Engine House  
 Eskmills Park, Musselburgh  
 East Lothian, EH21 7PQ  
 T: 0131 273 4380  
 F: 0131 273 4381  
 e: info@cfa-archaeology.co.uk  
 w: www.cfa-archaeology.co.uk



The copyright in this document (including its electronic form) shall remain vested in CFA Archaeology Ltd (CFA) but the Client shall have a licence to copy and use the document for the purpose for which it was provided. CFA shall not be liable for the use by any person of this document for any purpose other than that for which the same was provided by CFA. This document shall not be reproduced in whole or in part or relied upon by third parties for any use whatsoever without the express written authority of CFA.





- Key**
- Site Boundary
  - Clearance Cairns
  - Bank
  - Cultivation
  - Industrial or Communication
  - Rig / Cultivation
  - Settlement
  - Terrace
  - Water Feature
  - Area of Rig and Furrow
  - 5m Buffer
  - 20m Buffer

Fig. No <b>1b</b>	Revision	Checked by: SW	Report No: -	Drawn by: MH	Scale at A3 <b>1:8,500</b>
----------------------	----------	-------------------	-----------------	-----------------	-------------------------------

Title <b>Site Boundary and Cultural Heritage Sites within boundary</b>	Project <b>Jera Woodland Scheme</b>	Client <b>UPM Tilhill</b>
---	--	------------------------------



Reproduced with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office, © Crown copyright.  
CFA Archaeology Ltd, Old Engine House, Eskmills Park, Musselburgh EH21 7PQ AL100034785

**CFA**  
ARCHAEOLOGY LTD

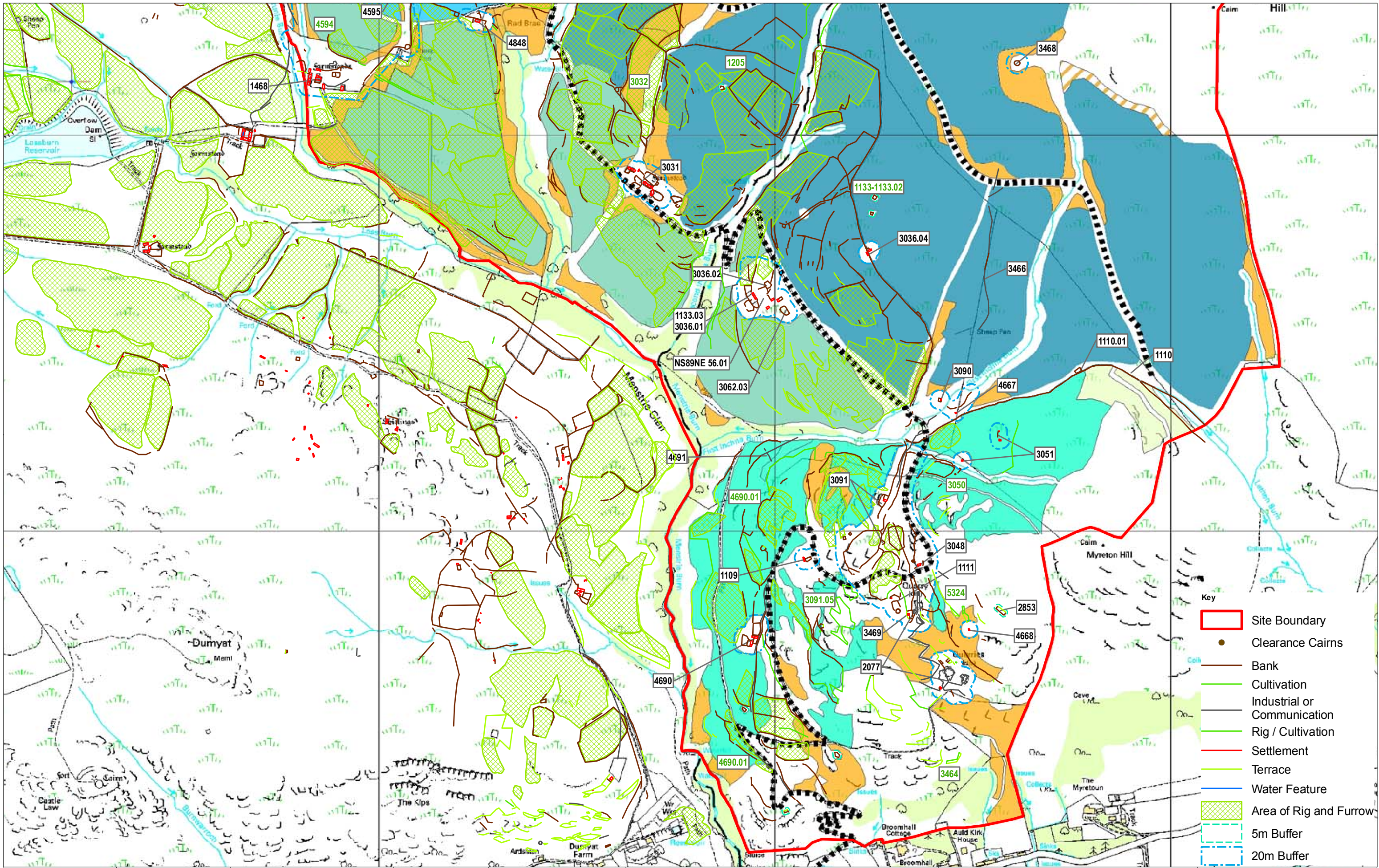
CFA ARCHAEOLOGY LTD  
The Old Engine House  
Eskmills Park, Musselburgh  
East Lothian, EH21 7PQ

T: 0131 273 4380  
F: 0131 273 4381  
e: info@cfa-archaeology.co.uk  
w: www.cfa-archaeology.co.uk



The copyright in this document (including its electronic form) shall remain vested in CFA Archaeology Ltd (CFA) but the Client shall have a licence to copy and use the document for the purpose for which it was provided. CFA shall not be liable for the use by any person of this document for any purpose other than that for which the same was provided by CFA. This document shall not be reproduced in whole or in part or relied upon by third parties for any use whatsoever without the express written authority of CFA.





- Key
- Site Boundary
  - Clearance Cairns
  - Bank
  - Cultivation
  - Industrial or Communication
  - Rig / Cultivation
  - Settlement
  - Terrace
  - Water Feature
  - Area of Rig and Furrow
  - 5m Buffer
  - 20m Buffer

Fig. No <b>1c</b>	Revision	Checked by: SW	Report No:	Drawn by: MH	Scale at A3 <b>1:8,500</b>
----------------------	----------	-------------------	------------	-----------------	-------------------------------

Title <b>Site Boundary and Cultural Heritage Sites within boundary</b>	Project <b>Jera Woodland Scheme</b>	Client <b>UPM Tilhill</b>
---	--	------------------------------



Reproduced with the permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office, © Crown copyright.  
CFA Archaeology Ltd, Old Engine House, Eskmills Park, Musselburgh EH21 7PQ AL100034785

**CFA**  
ARCHAEOLOGY LTD

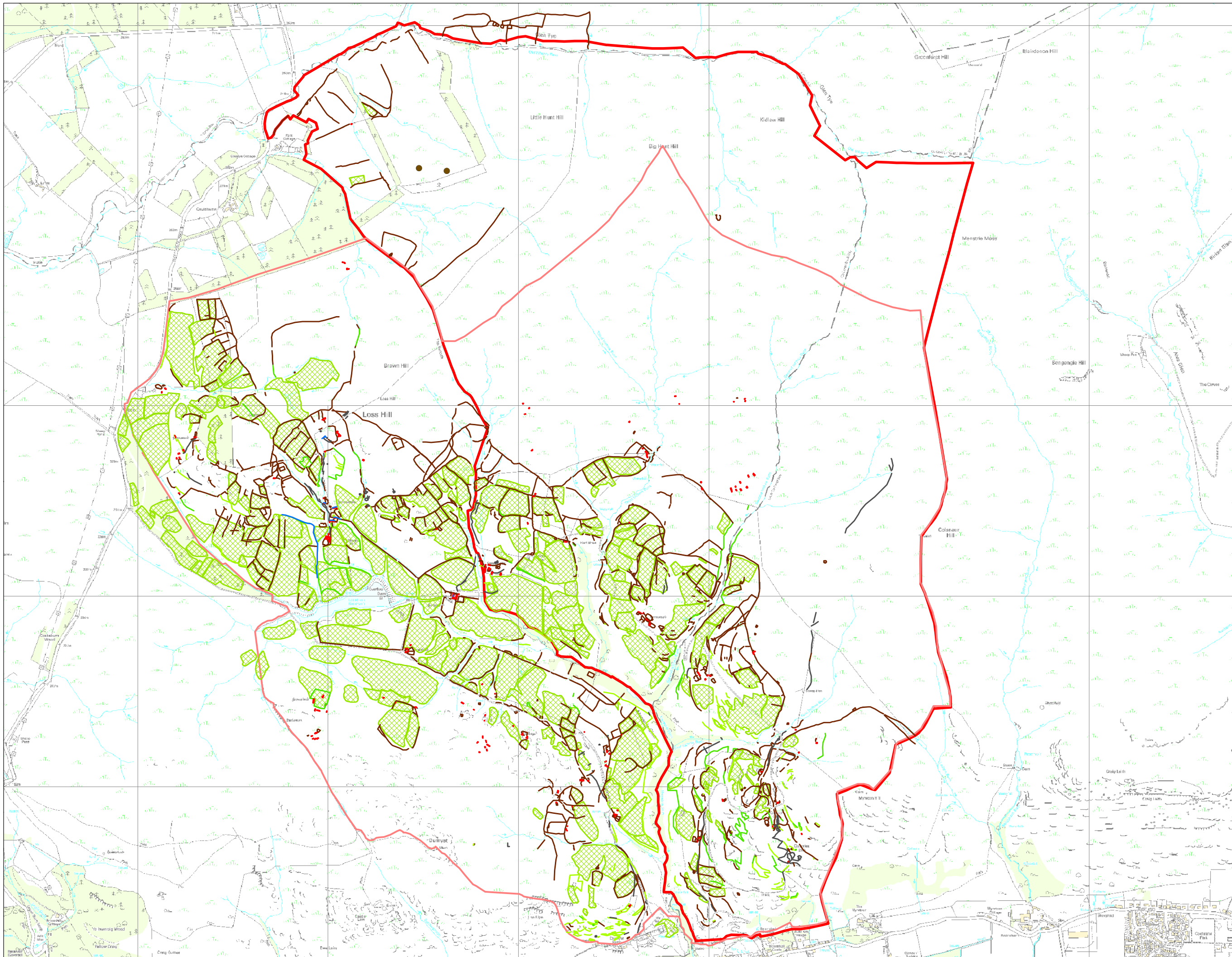
CFA ARCHAEOLOGY LTD  
The Old Engine House  
Eskmills Park, Musselburgh  
East Lothian, EH21 7PQ

T: 0131 273 4380  
F: 0131 273 4381  
e: info@cfa-archaeology.co.uk  
w: www.cfa-archaeology.co.uk



The copyright in this document (including its electronic form) shall remain vested in CFA Archaeology Ltd (CFA) but the Client shall have a licence to copy and use the document for the purpose for which it was provided. CFA shall not be liable for the use by any person of this document for any purpose other than that for which the same was provided by CFA. This document shall not be reproduced in whole or in part or relied upon by third parties for any use whatsoever without the express written authority of CFA.





**Key**

- Site Boundary
- RCAHMS Survey Boundary
- Clearance Cairn
- Bank
- Cultivation
- Industrial or Communication
- Rig / Cultivation
- Settlement
- Terrace
- Water Feature
- Rig and Furrow

**CFA** ARCHAEOLOGY LTD  
 CFA ARCHAEOLOGY LTD  
 The Old Engine House  
 Eskmills Park, Musselburgh  
 East Lothian, EH21 7PQ  
 T: 0131 273 4380  
 F: 0131 273 4381  
 e: info@cfa-archaeology.co.uk  
 w: www.cfa-archaeology.co.uk

Fig. No	Revision
2	

**Title**  
 Cultural Heritage Assets Recorded within Menstrie Glen

**Project**  
 Jera Woodland Scheme

**Scale at A3**  
 1:18,000

**Client**  
 UPM Tilhill

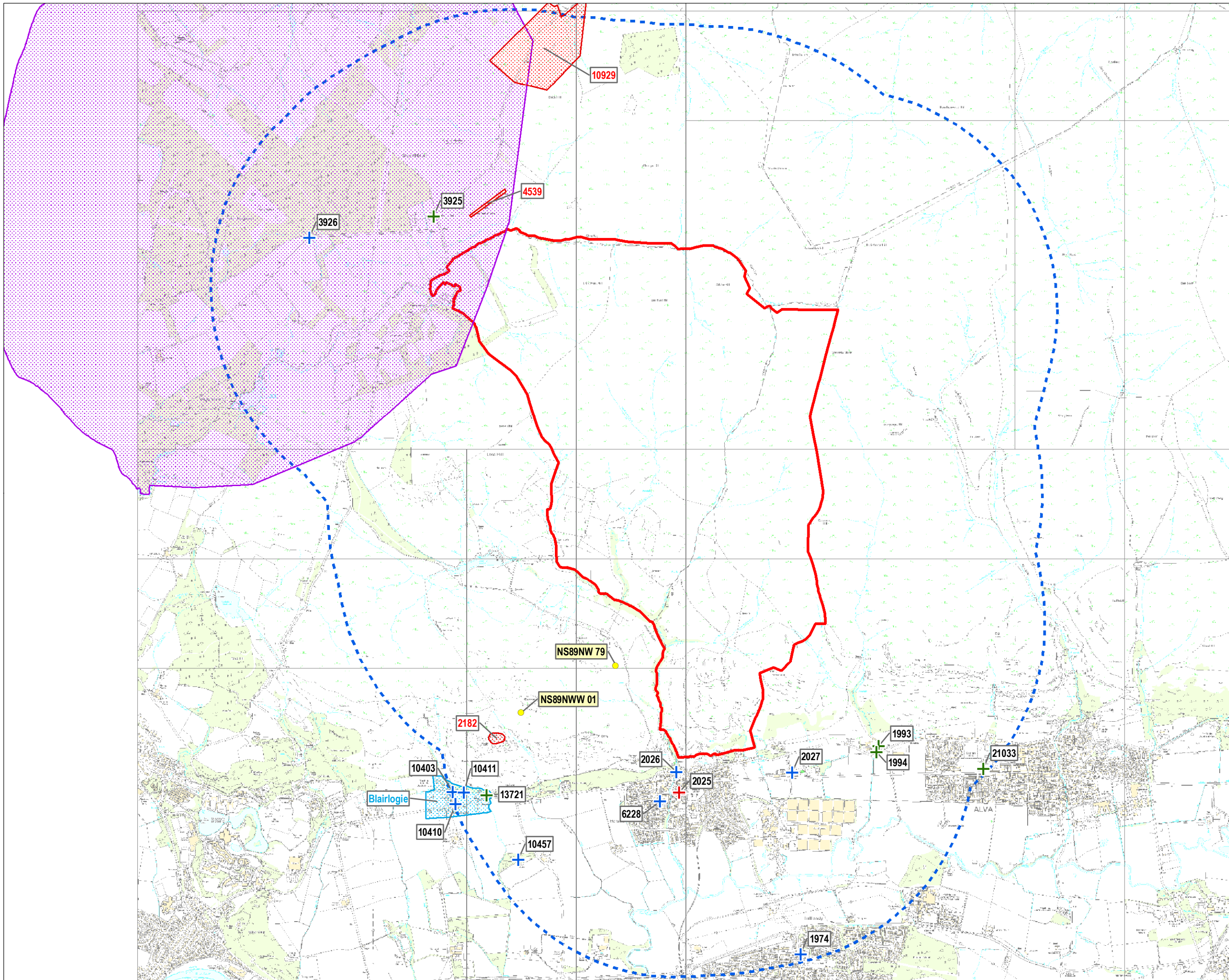
**Drawn by:** SW    **Checked by:** MH    **Report No.:** -





Key

- Site Boundary
- 2km Buffer
- Scheduled Monument
- + Listed Building Category A
- + Listed Building Category B
- + Listed Building Category C
- Conservation Area
- Sheriffmuir Battlefield Site
- RCAHMS Site



**CFA** ARCHAEOLOGY LTD  
 CFA ARCHAEOLOGY LTD  
 The Old Engine House  
 Eskmills Park, Musselburgh  
 East Lothian, EH21 7PQ  
 T: 0131 273 4380  
 F: 0131 273 4381  
 e: info@cfa-archaeology.co.uk  
 w: www.cfa-archaeology.co.uk

Fig. No	3	Revision	
---------	---	----------	--

Title  
**Cultural Heritage: External Assets**

Project  
**Jera Woodland Scheme**

Scale at A3  
**1:32,000**

Client  
**UPM Tilhill**

Drawn by: SW  
 Checked by: MH  
 Report No: