



Case information

Reference/Case ID	201600931		
Scheduled Monument	Beorgs of Uyea, stone implement working site and chambered cairn		
Index no	M5369	Grid Ref	HU323899 432300.0000 1189900.0000
Date of Application	23 May 2016	Application Received	23 May 2016
Summary of proposed works	Targeted small scale archaeological excavation		

1. Summary recommendation

This report recommends approval is granted without conditions.

2. Background

The monument is an area of stony moorland, scattered with worked rock outcrops and debris associated with tool manufacture in the Neolithic period (around 3800 to 2500 BC). Also within the area are a lintelled gallery and a chambered burial cairn. Distinctive felsite stone extracted from the site was fashioned into polished axes and flat knives of a type unique to Shetland.

The gallery has been constructed by roofing over a gully created by the quarrying of a rock outcrop. In the surrounding area are a large number of working areas, scattered with flakes and possible implement rough-outs. Amongst these are the foundations of a chambered cairn.

The scheduled area is irregular and covers a large area of almost 50 hectares. The monument is of national importance as one of few positively identified stone implement working sites in Britain. It includes important evidence on the stone-working techniques of the Neolithic period. Its importance is enhanced by the artefacts surviving on the site and its association with objects in museum collections that have derived from it. The area has the potential to contain further preserved structures.

The application forms part of a wider research programme known as the North Roe Felsite Project (NRFP). The project background, rationale for work within the scheduled monument and the methodology is set out in a Project Design submitted

with the application and which as been discussed with HMD in advance. The project's background is summarised here:

- The project is a partnership model actively involving University College Dublin, Shetland Museum and Archives, National Museums of Scotland, Queen's University Belfast and the Implement Petrology Group.
- NPRF is designed with reference to key research issues identified in the Scottish Archaeological Research Framework (ScARF). Shetland is the northernmost part of Europe where farming was practiced during the Neolithic but our understanding of key developments and their chronology is very poor. NPRF seeks to address one such gap in our understanding; the role of a visually distinctive stone (felsite), which was transformed into polished axes and knives found only across the archipelago. The work has the potential to be significant in a wider Scottish and European context, as it provides a unique opportunity to trace the 'life cycle' of these important objects within an 'island world', and the results may inform our understanding of similar processes elsewhere.
- NPRF has been running since 2013 using archaeological fieldwork, experimental archaeology, digital and scientific techniques to understand the working of felsite. This has included analysis of artefacts in existing collections held by Shetland Museum and the National Museums Scotland.
- The work has produced positive results including the identification of several significant new features within the scheduled monument and the creation of a reference collection to assist in the identification of worked material in the field. Detailed petrological mapping and analysis has provided the basis for tracing artefacts back to production sites and suggested that there may have been two distinct 'production lines' (one producing tools for general use and one for 'special' objects). Excavation at an unscheduled production site has improved our understanding of extraction.
- Shetland Museum and Archives have organised an exhibition and have run two workshops in collaboration with NPRF; this outreach resulted in coverage in local press and radio. Results have been presented at academic conferences.

Scheduled Monument Consent is sought for the archaeological excavation of a 10m x 2m trench across one of the felsite dykes in the monument and for a 2m x 2m cutting around a possible standing stone feature identified during NPRF survey. The rationale for these works is set out in more detail below. A draft Project Design was submitted to HMD for comment in advance of application.

The landowner of the Beorgs of Uyea is supportive of the project. National Museums of Scotland, the Shetland Amenity Trust and Shetland Museum and Archives are also supportive and the project is stated to have wide support from local communities in Mainland Shetland.

3. Proposals

Scheduled Monument Consent is sought for the archaeological excavation of a 10m x 2m trench across one of the felsite dykes at the monument. The trench would be positioned across a quarry pit identified during previous survey in order to understand the extraction process and attempt to obtain dating evidence. Consent is also sought for the excavation of a small area around a possible standing stone in order to understand its nature. Both features would be chosen based on the results of previous NRFP survey and site conditions.

Justification

The reasons why the excavations require to be undertaken within the Scheduled Monument have been set out. It is stated that the Beorgs of Uyea are the most important part of the North Roe felsite quarry complex and that excavation within the monument is the only way to further our understanding of the method of working at the quarry, its date and whether around 40 possible standing stones identified during previous survey are linked to quarrying activity. Geochemical analysis has indicated that axes and knives in museum collections come from the site and the information that would be retrieved by excavation is stated to be critical to our understanding of the extraction and working of felsite, which is a key component of the material culture of the Neolithic in Shetland. This would allow the project to achieve its objectives, which are linked to key research issues identified in ScARF.

A justification for the work is also set out with reference to the conservation and management of the Scheduled Monument. It is proposed that in combination with previous survey, the proposed excavation would provide baseline information regarding the surface and sub-surface archaeology of the monument that would assist its management. The proposal suggests producing a management plan in association with the landowner, Shetland Islands Council (Shetland Amenity Trust), and Historic Environment Scotland. This could address specific issues, such as conserving surface working areas, which in many cases are as they were left when abandoned in the Neolithic, but where there may be continuing low level impacts of walkers and visitors (including for military exercises). It is also noted that the possible standing stones are vulnerable upstanding features, which were unrecognised prior to the NRFP survey. As an initial step the Project Design includes for producing a report on the surface condition of the monument to Historic Environment Scotland.

The Project Design further justifies the proposed excavation with reference to the following:

Scottish Historic Environment Policy (now replaced by Historic Environment Scotland Policy Statement June 2016): It is stated that NRFP has added to our understanding of the intrinsic value of the Beorgs of Uyea, hence assisting in underpinning its national importance. The proposed excavation is suggested to be very limited in scope (significantly less than 0.1% of the area of the Scheduled Monument as a whole). This is stated to be a minimum level of intervention ‘that is

consistent with conserving what is culturally significant' in the monument (SHEP 3.16). It is suggested that the proposal would help achieve two of the three key outcomes identified in SHEP (1.13) by deepening our understanding to provide a better basis for the monument's care and appreciation.

Our Place in Time: The Historic Environment Strategy for Scotland: NRFP and the proposed excavations are stated to contribute to the Cross-Cutting Strategic Priorities because they would provide a sound evidence base to assess the importance of the Beorgs of Uyea and its management and conservation.

Scotland's Archaeology Strategy: NRFP is noted to contribute directly to two Strategic Aims: 'enhancing understanding' and 'caring and protecting'.

Scottish Archaeological Research Framework: It is noted that NRFP responds to the key research issues and knowledge gaps identified in the Neolithic Panel Report of ScARF.

Methodology

Trench Location and dimensions

The precise location of the two excavation areas would be established as part of the overall programme of digital survey. One trench measuring a maximum of 10m by 2m would provide an east to west transect across one quarry pit; the width has been informed by previous experience at other extraction sites and is stated to be the minimum necessary to achieve the project aims.

An assessment of ground conditions, including probing to establish depth of deposits, would identify the best location for the trench. This would consider ensuring that both east and west edges of the quarry pit would be encountered (to inform an understanding of the method of working), and also the need to minimise the intervention. It would also include consideration of the available time and resources and the need to re-instate the area as it was prior to excavation. An assessment of these considerations would be ongoing during the excavation and if necessary a restriction would be placed on the area to be excavated. It is not envisaged that the trench should extend below 1.2m in depth.

NPRF survey of the Beorgs of Uyea in 2014 identified around 40 small standing stones averaging 1m in height and about 20-25cm in thickness. They appear to be inserted into crevices in granite outcrops or are propped up. In order to understand the nature of these features better it is proposed that an area be excavated around one of them. To avoid destabilisation of the stone two opposing 1m x 1m quadrants of a square extending 2m x 2m and centred on the stone base would be excavated, leaving 50% of the basal deposits intact. The effects of the excavation upon the stone would be evaluated during excavation and its stability protected. The area would be reinstated as it was prior to excavation.

Project Team

Details of the excavation team have been supplied. The work would be directed by Professor Gabriel Cooney, and supervised by Joanne Gaffrey. Other members of the team are two PhD researchers and two specialists in GIS and survey. All proposed staff have worked on the previous two seasons of NRFP fieldwork and have considerable prior experience of excavation, post-excavation management, reporting to publication standard and a range of specialisms, including environmental analysis.

Excavation and recording

It is proposed that the work would commence on 13 June 2016 and extend for a maximum of two weeks. All excavation would be by hand. The method of fieldwork and recording has been set out fully in the Project Design. It would conform to current best archaeological practice and national standards and guidelines including:

- Chartered Institute for Archaeologists Standards and Guidance for Archaeological Field Evaluations
- Council for British Archaeology First Aid for Finds

The design includes for production of an appropriate archive of written and drawn records, photographs and survey data. It includes an appropriate sampling strategy for stone samples from debitage layers and environmental data. It sets out a robust method for recovery and recording of artefacts.

Reporting

A report would be produced in the form of a Data Structure Report, prepared in accordance with current ClfA standards, and submitted to HES by 30 September 2016. A summary of the results of the excavation would be submitted to Discovery and Excavation in Scotland (DES) and uploaded to the OASIS database.

A Post-Excavation Design would be prepared immediately after the excavation and submitted to HES by 31 July 2016. It is anticipated that the analysis would primarily involve lithics and provision has been made for a programme of sample processing and dating.

The results of the excavation would be incorporated into a publication covering all seasons of fieldwork and associated research. It is anticipated that this would take the form of a monograph.

Application would be made to the Queen's and Lord Treasurer's Remembrancer for permission to borrow material from the excavation for analysis in the post-excavation facilities at University College Dublin. Following completion the material would be returned and declared as Treasure Trove. A copy of the project archive would be deposited in the National Monuments Record of Scotland following completion.

4. Representations received

The following representations have been received:

Shetland Museum and Archives – A letter of support, noting that the project is an important part of fulfilling the museum’s obligations to the National Recognition Scheme. Specifically to raise awareness and appreciation of, and to inspire and deliver, new forms of access to and public engagement with collections of national significance.

National Museums Scotland – A letter of support (also signed by Implement Petrology Group), noting widespread support within Shetland and international recognition that the project is transforming our understanding of the subject matter.

5. Report

a) Policy considerations

The application should be viewed with the following legislative and policy considerations in mind:

Ancient Monuments and Archaeological Areas Act 1979

Part 1 Section 2 - Control of works affecting an ancient monument.

Historic Environment Scotland Policy Statement, June 2016 (policy statement)

3.14. A monument is included in the schedule to secure the long-term legal protection of the monument in the national interest, in situ and as far as possible in the state it has come down to us. Scheduled monuments have an intrinsic value as monuments, not related to any concept of active use. It is the value of the monument to the nation’s heritage, in terms set out in the section on Scheduling in Chapter 2 of this policy statement, that is the primary consideration in determining applications for scheduled monument consent.

3.16. Works on scheduled monuments should therefore normally be the minimum level of intervention that is consistent with conserving what is culturally significant in a monument.

3.17. As each monument will require treatment specific to its individual nature, characteristics, significance and needs, any proposed change to it must be fully and explicitly justified.

3.18. Scheduled monument consent applications must be considered in terms of the cultural significance of the monument and the impact that the proposals would have upon this cultural significance. The more important particular features of the

monument are to its cultural significance, the greater will be the case against interventions which modify these features.

3.19. Extensive intervention will only be allowed where it is clearly necessary to secure the longer-term preservation of the monument, or where it will clearly generate public benefits of national importance which outweigh the impact on the national cultural significance of the monument. Such public benefits could come from, for example, interventions which make public access to scheduled monuments easier, or assist public understanding, or will produce economic benefits once the works are completed.

3.20. Where change is proposed, it should be carefully considered, based on good authority, sensitively designed, properly planned and executed, and where appropriate in the context of an individual monument, reversible.

b) Assessment

The proposals would address a research question set out in the ScARF Neolithic Panel Report (3.3.7), which makes specific mention of the potential contribution of NRFP (5.2.2). A Key Issue in the report is noted to be the role of quarries in exchange networks and that ‘no Scottish lithic and stone quarries have been analysed and published’ (5.2.1). It is clear that the project responds to a nationally important research issue.

Survey has identified new features within the scheduled area of the Beorgs of Uyea and the proposed work would improve our understanding of them. In particular, the nature of the ‘standing stones’ and the extraction of felsite from quarry pits. The latter is a recognised part of the significance of the monument and the work has the potential to substantially increase our understanding of it, particularly its date and the site’s relationship to objects in museum collections.

The ‘standing stones’ are a newly discovered element of the monument and confirming their nature would add an entirely new dimension to our understanding of it, in particular the spiritual or ‘ritual’ aspects of the site.

The work would also have wider benefits related to enhancing appreciation of Shetland’s role as the northernmost outpost of farming in the Neolithic, which ‘remains largely a mystery’ according to ScARF (3.3.7). An increased understanding of the culture of this relatively isolated system would aid interpretation more widely in Europe.

Benefits regarding the understanding of existing museum collections has been confirmed by representation and the results of the work are likely to reach local, national and international audiences through outreach, publication and academic presentation.

A more complete understanding of the monument’s significance and the wider Neolithic period is in accordance with Aim Two of Scotland’s Archaeology Strategy

and a Strategic Priority in the Historic Environment Strategy for Scotland (B-Understand). It would also accord with the Key Principle set out in 1.9d of Historic Environment Scotland's Policy, in that research should assist understanding of the historic environment by the people of Scotland.

The results of the work would also be used to produce a conservation plan. Surface and above ground elements of the monument may be vulnerable to change, in particular the 'standing stones' and surface debitage. A greater understanding of these features, and significance, would be beneficial to management of the site's long term preservation. This accords with Historic Environment Scotland Policy Key Principles 1.10a and b, in that conservation of any part of Scotland's historic environment should be based on sound understanding and awareness of its cultural significance. In particular, the work may establish that the 'standing stones' were a previously unrecognised, and very significant, part of the monument that are particularly vulnerable to change.

The works proposed to this monument are hand excavation of archaeological deposits within two relatively small trenches. The trench dimensions have been restricted so that they represent the minimal intervention possible to achieve the project aims. Their position would be informed by further site survey and further consultation with HES on trench position would not be likely to add any value.

The project's design allows for ongoing evaluation during the excavation to adhere to the policy of minimum intervention and to ensure that the monument can be reinstated to its original form. Therefore the excavations would not visually alter the monuments following their completion.

The method of the work is appropriate to ensure the work is undertaken to a professional standard, including post excavation, reporting and archiving.

The excavations would remove some archaeological deposits and artefacts from the monument and so must be viewed as destructive. However, they are estimated to affect less than 0.1% of the monument's area. The outcrops of felsite have been heavily worked and there are a considerable number of quarry pits and around 40 'standing stones' within the monument. The excavations would affect one of each type of feature.

The work would therefore remove a limited sample of archaeological deposits at one example of two types of feature within a large site, with many more examples of these features left intact. It is concluded that the work would leave the overwhelming majority of physical evidence in situ and have no material effect on the monument's overall archaeological value.

The results would enhance our understanding of the artefactual evidence that survives on the surface of the monument and its association with artefacts in museum collections. The excavations would not remove any preserved structures, and would confirm whether the 'standing stones' should be considered part of them.

The excavations would leave the features that are most important to the cultural significance of the monument intact and are consistent with HESP 3.18.

While the proposed works are by their nature destructive, they would improve our understanding of the monument and have been designed to have a minimal impact on its significance. The limit size of the intervention on a monument of this size means that the monument's archaeological value would remain largely unaffected. The proposed works cannot, therefore, be considered as extensive (policy statement 3.19). The results could be used to inform future management and conservation of the monument so have the potential to have benefits with regard to conserving the cultural significance of the monument (policy statement 3.16).

The Project Design includes a full and explicit justification and the work has been properly planned as set out in the policy statement 3.17 and 3.20.

c) Other material considerations, including impact of the works on Protected Species and Places

The works would be partly in the Ronas Hill – North Roe SSSI and the applicant has contacted SNH regarding the works. SNH have confirmed that the works should not impact the SSSI.

d) Conclusion

The works would involve the controlled removal and recording of archaeological deposits within a relatively small part of a large scheduled area. The area affected would be proportionately very small (less than 0.1%) and the excavations are the minimum necessary to achieve the project's objective. The proposed work would leave the vast majority of the site's archaeological deposits intact and would not materially detract from the monument's national significance.

The work should result in considerable benefits to the public's understanding of the historic environment. An improved understanding of the monument may contribute to its conservation. The project is designed to address aims of ScARF and would also improve our understanding of museum collections.

It is concluded that the works would not compromise the long term preservation of the site (policy statement 3.14). Because the monument's cultural significance would not be materially diminished the proposal is consistent with the policy statement 3.18. Although the works are to some extent destructive this has been minimised and they are potentially beneficial to the future conservation of the monument's cultural significance (3.16). The work has been fully justified (3.17) and is not assessed to be extensive intervention (3.19). The work has been properly planned and is likely to be executed appropriately (3.20).

The benefits the proposed work would bring are considered to be much greater than the limited negative effects of the removal of some archaeological deposits. The proposal is concluded to be consistent with relevant policy. It is also concluded that

the proposal is not inconsistent with the work being considered the minimum necessary consistent with conserving the cultural significance of the monument. Hence there is no requirement to notify Scottish Ministers as per The Scheduled Monument Consent (Notification of Applications) Direction 2015.

6. Recommended decision

The works proposed are considered acceptable in meeting the terms of national policy for scheduled monuments, and also accounting for other material considerations.

7. Conditions

Granted without conditions.

8. Approval

Officer	Simon Stronach	Date	02/06/2016
Approved by	John Raven	Date	02/06/2016

Annex A – list of supporting documents

Project Design

Email from SNH (11 May 2016)

NMS letter of support (20 May 2016)

Shetland Museums and Archives letter of support (18 May 2016)

Emails (x2) from Gabriel Cooney (31 May 2016)