



**Buckieburn Forestry Track,
Stirling,
Walkover Survey
Data Structure Report**







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Executive Summary

ARCHAS Cultural Heritage Ltd were commissioned by RTS Ltd to undertake an archaeological walkover survey associated with the formation of a forestry track on land to the west of Buckieburn located on the southern edge of the Stirling Council area. The track is required in order to facilitate the harvesting of existing forestry plantations south of the Buckieburn Reservoir.

An archaeological planning condition was placed upon the development due to the proximity of a Scheduled Monument, Dundaff Hill Prehistoric Cairn and an unenclosed settlement recorded during survey work associated with the planting of the existing trees in the early 1990s. This survey did not provide accurate co-ordinates for the settlement remains and there was a concern that these may extend into the development area.

An archaeological walkover survey was completed along the route of the roadway. This was to confirm features associated with known sites did not extend into the development area, although it also recorded any previously unknown features along the length of the development.

The walkover survey failed to reveal any significant archaeological features along the length of the development. However, due to the proximity of the Scheduled Monument on Dundaff Hill, ARCHAS Ltd recommend further archaeological mitigation in this area.

A record of the work has been deposited with the Online Access to the Index of Archaeological Investigations (OASIS) website hosted by the Archaeological Data Service (OASIS ID archascu1-235514) and with Discovery and Excavation in Scotland (DES), the annual publication of fieldwork by Archaeology Scotland.

1 Introduction

1.1 General

- 1.1.1 ARCHAS Cultural Heritage Ltd were commissioned by RTS Ltd (contact Harry Wilson) to undertake a walkover survey associated with the formation of a forestry track on land to the west of Buckieburn on the southern edge of the Stirling Council area. The track is required in order to facilitate the removal of existing forestry plantations south of the Buckieburn Reservoir.
- 1.1.2 Formation of the access track involves the removal of topsoil from a route c.8m wide running between Buckieburn Farm (NS 750 852) and an area south west of Buckieburn Reservoir (NS 732 850).
- 1.1.3 The area was identified as potentially archaeologically sensitive by the Stirling Council Archaeology Officer. Through planning application 15/00678/NPA an archaeological condition was placed upon the development. Planning Condition 2 states:
- No works shall take place within the development site until the developer has secured the implementation of a programme of archaeological works in accordance with a written scheme of investigation... agreed by the Stirling Council Planning Officer (Archaeology).... Thereafter the developer shall ensure that the programme of archaeological works is fully implemented and that all recording and recovery of archaeological resources within the development site is undertaken to the satisfaction of the...Stirling Council Planning Officer (Archaeology).¹*
- 1.1.4 The basis for the planning condition is provided by Policy 7.1 (Archaeology and Historic Building Recording) of the Stirling Local Development Plan 2014.
- 1.1.5 Detailed discussions regarding the proposed development were held between the Stirling Council Archaeology Officer and ARCHAS Ltd on 22/12/15. During these discussions, the officer indicated that he favoured a phased approach to the archaeological mitigation. The first phases of this work was to involve a walkover survey along the route of the proposed trackway in order to identify any archaeological issues. This is to be accompanied by a detailed photographic survey. It is anticipated the results of the walkover survey will inform the need for further work on the site.
- 1.1.6 Prior to commencing work, ARCHAS completed a Written Scheme of Investigation (hereafter WSI) in line with the requirements of the planning condition. This document outlined the programme of work and standards adhered to by ARCHAS. This document was accepted by the Stirling Council Archaeology Officer on 23/12/15.
- 1.1.7 The walkover survey was completed by Ross Cameron on Thursday 07/01/15 in heavy rain and intermittent winds. Although vegetation was low due to the time of year, this left much of the site under a thick carpet of grasses and moss.
- 1.1.8 ARCHAS Cultural Heritage Ltd conforms to the standards of professional conduct outlined in the Chartered Institute for Archaeologists (CIfA) Code of conduct, and relevant Standards and Guidance documents produced by the CIfA.

¹ Stirling Council Decision Notice 15/00678/NPA – 03/12/15

1.2 Site Location and Setting

General

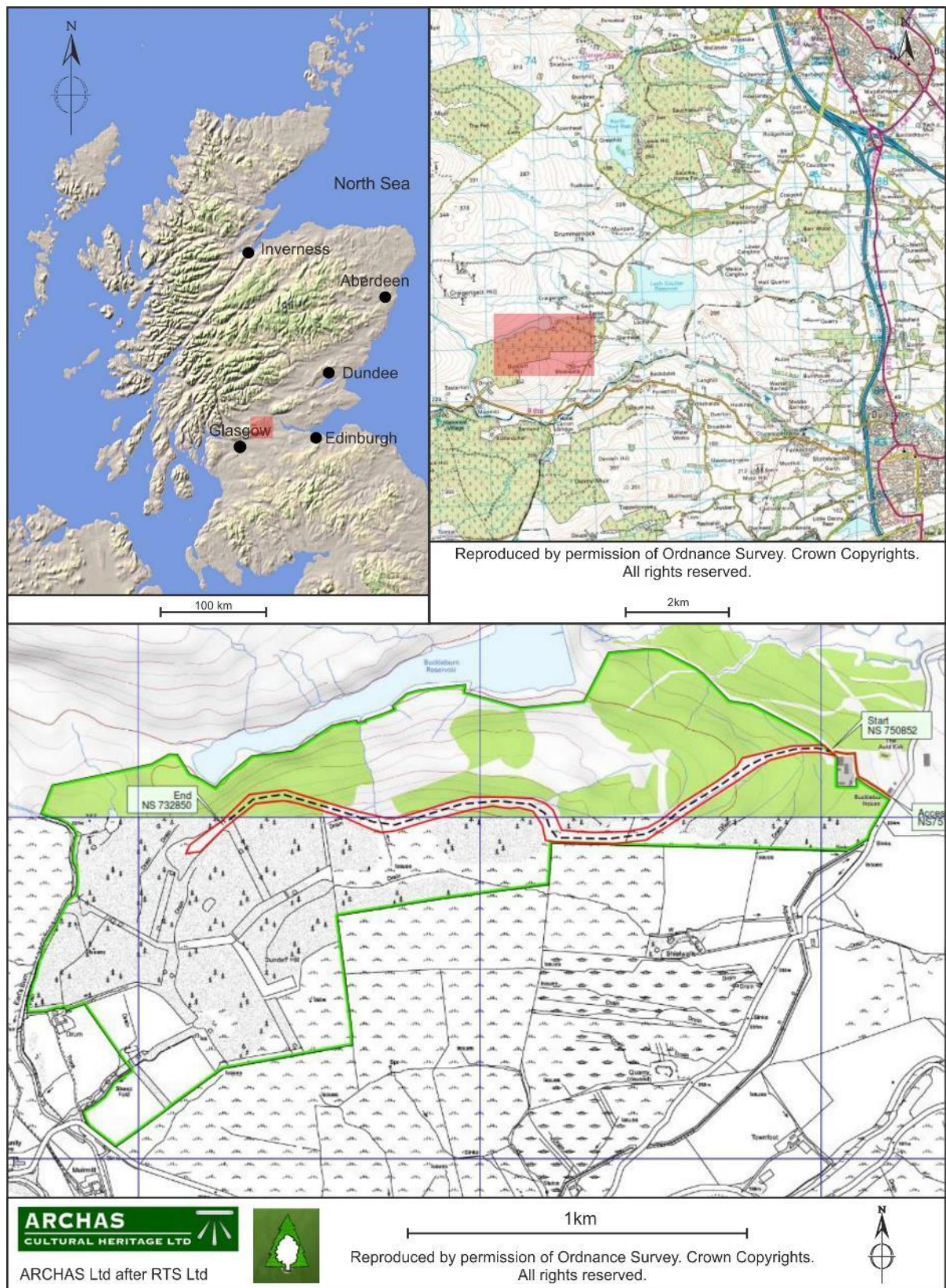


Figure 1: Site location with the route of the roadway marked red (map courtesy of RTS Ltd)

1.2.1 The proposed development lies to the south west of Stirling and the west of the town of Denny (Figure 1). The area contains a number of reservoirs, the most prominent of which is the Carron Valley Reservoir. The Buckieburn Reservoir lies a short distance to the east of this, with the proposed development taking place on the north facing slopes of Dundaff Hill above the reservoir.

1.2.2 The proposed route of the road runs between NS 750 852 at Buckieburn Farm at the eastern end, terminating at NS 732 850 at the western end.

Study Area

1.2.3 The proposed route of the road follows the natural and planned breaks in the existing forestry plantation (Figure 1).

1.2.4 Much of the route has already been affected by the forestry plantation of the 1990s, with deep ploughing and disruption during planting. The road predominantly follows the contours of the southern slopes of Dundaff Hill. The vegetation in this area consists of long grasses and mosses. Much of the route is very wet and boggy underfoot.

Geology

1.2.4 The drift geology across the proposed development area is mixed, comprising various glacial deposits such as Till, Devensian – Diamicton, Hummocky Glacial Deposits, Diamicton and Sands and Gravels. These deposits can be dated to the Quarternary Period 2-3 million years ago.

1.2.5 The route also contains quantities of peat dated to the Quarternary Period.

1.2.6 The underlying bedrock geology is from the Gargunnock Hills Lava Member and is a Basaltic-rock, Plagioclase-macrophyric. This igneous bedrock formed around 331-343 million years ago in the Carboniferous Period.²

² www.bgs.ac.uk –16/11/15

2 Methodology

2.1 General

- 2.1.1 The methodology for the archaeological assessment at Buckieburn was compiled following detailed discussions with the Stirling Council Archaeology Officer.
- 2.1.3 ARCHAS Cultural Heritage Ltd adhere to the standards of professional conduct outlined in the Chartered Institute for Archaeologists (hereafter ClfA) Code of conduct, and relevant Standards and Guidance documents produced by the ClfA. This includes the Standard and Guidance for Historic Environment Desk Based Assessment,³ used for both the compilation of the WSI and this DSR.

2.2 Site plans

- 2.2.1 ARCHAS Cultural Heritage Ltd are working to the site plans displayed in this WSI. These have been supplied by the client and the assessment will cover the route identified. Should the limits of the site change, it may be necessary to revisit the assessment.

2.3 Walkover Survey

- 2.3.1 The walkover survey as requested by the Stirling Council Archaeology Officer requested the route of the roadway be visually assessed for archaeological features. Particular attention is to be paid to the area to the south of the Scheduled Monument on Dundaff Hill, and the environs of the unenclosed settlement identified during the archaeological assessment in 1993 (see Section 3).
- 2.3.2 It is anticipated that the walkover survey will define the extent of the village remains, should these be visible along the route of the roadway.
- 2.3.3 As the route of the roadway is 8m wide, it is not proposed to walk the site in transects. Instead the entire route will be walked along the southern perimeter of the road, before the archaeologist returns along the northern side. The grass has been cleared along much of the length of the proposed roadway, making identifying this easier.
- 2.3.4 In the vicinity of the unenclosed village and the Scheduled Monument, a series of short transects will be maintained away from the route of the road in order to assess the extent of any archaeological remains.
- 2.3.5 This methodology will ensure no unrecorded archaeological remains are present.

2.4 Standards

- 2.4.1 All sites encountered are recorded on ARCHAS Ltd. *pro forma* record sheets to accepted standards established by the Chartered Institute for Archaeologists (ClfA). These will include sketches of the monument, detailed notes, measurements and the location of the site.
- 2.4.2 A full photographic record is maintained during all site visits.
- 2.4.3 ARCHAS maintain a site diary during all fieldwork.

³ http://www.archaeologists.net/sites/default/files/ClfAS&GDBA_2.pdf

3 Historical Analysis

3.1 General Historical Background

- 3.1.1 The primary archaeological concerns raised by the development are the existence of a Scheduled Monument on Dundaff Hill (SM 6553, NMRS: NS 78 SW 10, HER 2568) to the south of the road, and an unenclosed settlement (NMRS: NS 78 NW 10, HER 2565.01) lying to the north.
- 3.1.2 These sites were identified during a pre-afforestation survey undertaken in 1993. However, the extent of the unenclosed settlement was not appropriately defined and it is possible that archaeological features associated with this extend into the development area. This settlement is not depicted on the earliest Ordnance Survey maps or William Roy's map of 1747. As such, it is possible that this settlement represents the remains of a medieval village, unrecorded on maps.
- 3.1.3 The Scheduled Monument on Dundaff Hill is interpreted as a prehistoric burial mound or cairn with a diameter of c.40m and a height of c.2m. It is surrounded on three sides by a bank and is thought to be of Neolithic or Bronze Age date. The site was given statutory protection protected as a Scheduled Monument under the Ancient Monuments and Archaeological Areas Act 1979 in 1996.

4 Results

4.1. General

4.1.1 The walkover survey along the route of the proposed new forestry track at Buckieburn located a number of previously unidentified sites, but also focussed on the archaeologically sensitive areas as identified by the Stirling Council Archaeology Officer.

4.2. The Unenclosed Settlement

4.2.1 The Buckieburn Reservoir Unenclosed Settlement (NMRS No: NS 78 NW 10; HER 2565.01) was identified during an archaeological survey in advance of tree planting undertaken in December 1992.

4.2.2 The report from 1992⁴ was accessed and studied in advance of the walkover and the descriptions provided in that report indicated that the unenclosed settlement lay to the south, between the existing band of trees and the Buckieburn Reservoir itself. However, the methodology for a report of this age meant that this could not be said with absolute certainty due to the lack of accuracy in the grid references taken in the field.

4.2.3 The present walkover survey showed the proposed forestry track to be absent of archaeological features associated with this settlement. The plantation boundary runs along the top of the high ground before sloping to the south towards a fast flowing drainage channel or burn. The surviving parcel of land upon which the road is to be sited comprises marginal land (Plate 1 and Plate 2) less likely to have contained human occupation than the flatter, partially forested areas to the north where the presence of settlement was indicated in 1992.



Plate 1: Looking west across the route of the proposed forestry track in the vicinity of the unenclosed settlement (Photograph 009)

⁴ CFA, 1992 Archaeological Survey at Nicolswall, Stirling District, Central region



Plate 2: Looking east across the route of the proposed forestry track in the vicinity of the unenclosed settlement (Photograph 009)

4.2.4 Once it had been ascertained that no archaeological features associated with the unenclosed settlement lay along the route of the proposed forestry track, a brief visual inspection of the area to the north seemed to confirm that it is this area the remains are concentrated. The vegetation and terrain in this area was difficult, with a thick carpet of dead grasses and moss alongside areas of low lying bog. However, a series of possible features were identified, three of which were plotted on GPS (Figure 2). The location of these features may explain the lack of planting in this part of Buckieside.

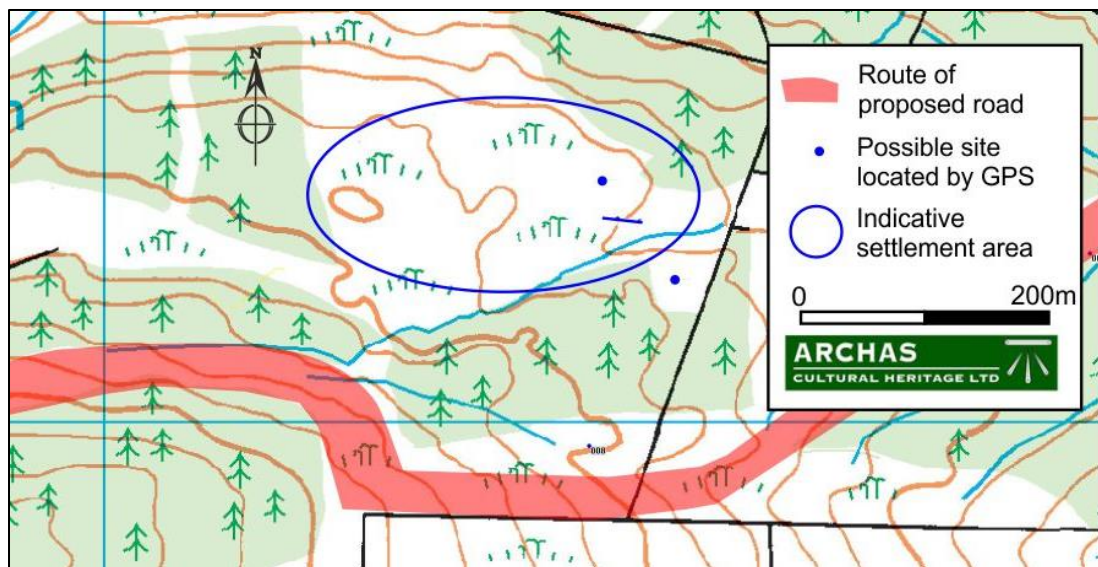


Figure 2: Indicative area of the unenclosed settlement as noted by ARCHAS during the walkover survey. ARCHAS Ltd after Ordnance Survey. Crown Copyrights. All Rights Reserved.

4.3 Dundaff Hill Scheduled Monument

4.3.1 The mound on Dundaff Hill (SM:6553; NMRS No: NS 78 SW 10; HER 2568) was identified during the walkover survey completed in 1992 as a possible prehistoric round cairn or earthen barrow. It comprises a large mound on the northwards running slope of Dundaff Hill (Plate

3) and was protected in 1996 as a Scheduled Monument under the Ancient Monuments and Archaeological Areas Act 1979.



Plate 3: Looking south east towards Dundaff Hill Scheduled Monument (Photograph 027)



Plate 4: Dundaff Hill Scheduled Monument looking west. Note the bank and ditch around the mound (Photograph 021)

- 4.3.2 The area under Scheduled Monument protection is circular and has a diameter of 70m extending from the centre of the mound. This protected area does not extend into the proposed development area, but the proposed forestry track will pass in relative proximity of the monument (Plate 5) through an area where archaeological deposits associated with the monument may expect to be found.



Plate 5: Looking south east across the route of the proposed forestry track. Note Dundaff Hill Scheduled Monument on the upper right. The road will run through the ride in the trees on the left before heading towards the photographer (Photograph 031)

4.3.3 The walkover survey failed to identify any areas, features or sites of archaeological significance. Dense vegetation in this area made survey difficult. The area was covered in dense, long grasses and boggy ground.

4.4 Previously unidentified sites

General

4.4.1 Three previously unidentified sites were identified and noted during the walkover survey. All of these were considered to be of negligible archaeological interest and are described below.

4.4.2 At the western end of the study area, several plantations of mature deciduous trees survived in bands within the coniferous plantations. These deciduous trees were surrounded by a series of drystone walls, field banks and ditches faced with stone (Plate 6). Visible on the 1865 1st edition Stirlingshire Sheet XXIII, these were also recorded in the 1992 survey and are not recorded as archaeological sites.



Plate 6: Looking north along the line of a deciduous plantation (Photograph 029)

Site 1

- NS 74802 85128 to NS 74814 85171

- 4.4.3 Site 1 comprises a much denuded and heavily overgrown drystone wall with a width of c.0.50m and height of <0.30m running across the clearing in the coniferous plantations (Plate 7). This land boundary is a relic of the farming landscape that existed prior to the planting of the trees.



Plate 7: View north across Site 1 (Photograph 003)

Site 2

- NS 74632 85020 to NS 74572 85031

- 4.4.4 Site 2 is essentially the same as Site 1, a drystone wall running near perpendicular across the fire break in the trees. This wall is much less apparent and significantly more overgrown, surviving as a low mound in the vegetation.



Plate 8: Looking north east across Site 2 (foreground) (Photograph 006)

Site 3

- NS 74397 84973

- 4.4.5 Site 3 comprises a shallow quarry scoop on the edge of the study area (Plate 9). This is almost certainly modern in date and is associated with a pipe placed in a nearby burn around which stones have been placed to consolidate the existing access track.



Plate 9: Quarry pit Site 3 looking south east (Photograph 011)

5 Summary and Discussion

5.1. General

- 5.1.1 The three new sites identified during the walkover are all of very limited archaeological importance. Although all three will be slightly impacted by the development, their negligible significance suggests that archaeological mitigation will not be necessary.
- 5.1.2 No features associated with the enclosed settlement were noted close to the proposed development. The descriptions provided in the 1992 report indicate that these features lay significantly to the south of the proposed trackway and the existing coniferous plantation. A brief investigation of this area showed this to be covered by a thick carpet of dead grasses. However, some features were noted, including a drystone wall which may be that identified in the previous survey as separating the settlement from the high ground to the north.
- 5.1.3 Where the proposed trackway passes in close proximity to the Dundaff Hill Scheduled Monument, no features of archaeological significance were noted. However, the terrain and vegetation in this area is difficult and although nothing can be seen on the surface, it is possible contemporaneous features will survive below the surface.

6 Recommendations

6.1. General

- 6.1.1 The walkover survey failed to reveal any significant archaeological features in the vicinity of the proposed development.
- 6.1.2 The survey demonstrated that the unenclosed settlement lay to the north of the trackway and that no associated remains will be affected by the new road.
- 6.1.3 No features were noted in the vicinity of the Dundaff Hill Scheduled Monument, but it remains possible that contemporaneous archaeological deposits may survive in the vicinity of the site. The deep carpet of grasses, mosses, tussocks and boggy conditions mean that any hand excavation in this area will be problematic and difficult.
- 6.1.4 ARCHAS Ltd recommend a watching brief be maintained during all ground breaking works in the vicinity of the Dundaff Hill Scheduled Monument. This watching brief should extend from around NGR: NS 73809 85015 to NGR: NS 73632 84998 (see Figure 3). In addition, ARCHAS Ltd recommend that the actual Scheduled Monument area and boundary be marked out and identified by a qualified archaeologist prior to work commencing in the area. This is to ensure the site remains undamaged during any groundworks associated with the excavation of the road, or the removal of the coniferous plantations.

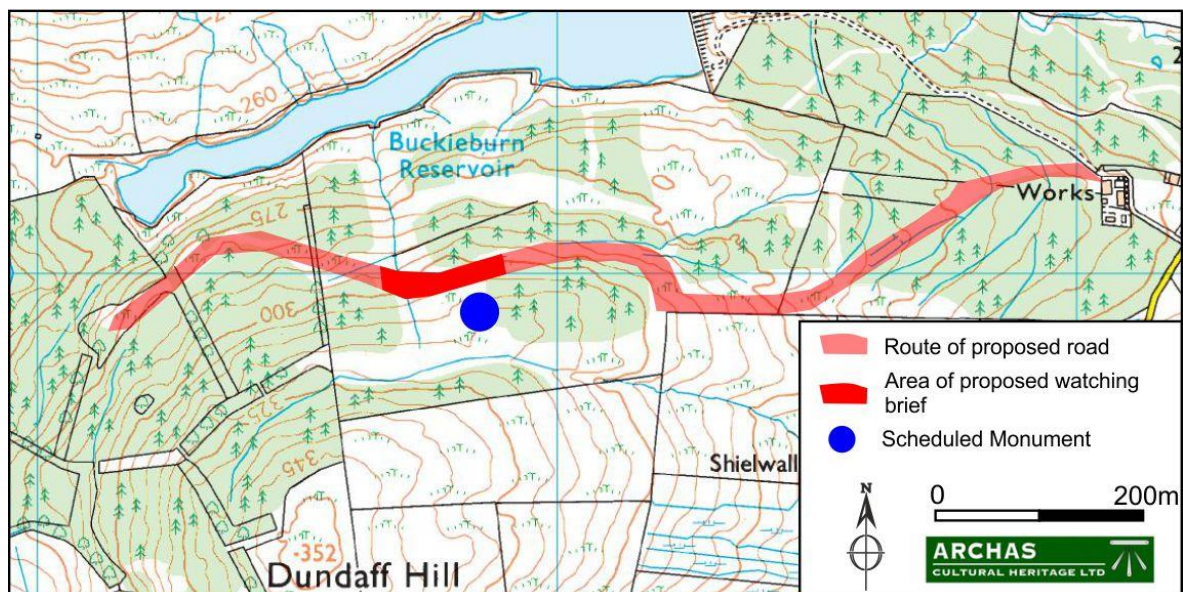


Figure 3: Area of proposed watching brief. ARCHAS Ltd after Ordnance Survey. Crown Copyrights. All Rights Reserved.

Acknowledgements

ARCHAS Cultural Heritage would like to thank Harry Wilson of RTS Ltd for commissioning us to undertake the work. Harry and RTS Ltd have our gratitude for their understanding and for their commitment to protecting the archaeological resources of Buckieburn.

Our thanks also go to Stirling Council Archaeology Officer Murray Cook. Murray was generous both with his time and his advice during the project.

Bibliography

Reports

CFA, 1992 Archaeological Survey at Nicolswall, Stirling District, Central region

Online

www.canmore.org.uk
www.nls.uk

Appendix A Provisional Discovery and Excavation Scotland Entry

LOCAL AUTHORITY:	Stirling Council
PROJECT TITLE/SITE NAME:	Buckieburn Forestry Track
PROJECT CODE:	229
PARISH:	St Ninian's
NAME OF CONTRIBUTOR:	Ross Cameron
NAME OF ORGANISATION:	ARCHAS Cultural Heritage Ltd
TYPE(S) OF PROJECT:	Walkover Survey
NMRS NO(S):	NS 78 SW 10
SITE/MONUMENT TYPE(S):	n/a
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NS 74157 84965
START DATE (this season)	07/01/16
END DATE (this season)	07/01/16
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>ARCHAS Cultural Heritage Ltd were commissioned by RTS Ltd to undertake an archaeological walkover survey associated with the formation of a forestry track on land to the west of Buckieburn on the southern edge of the Stirling Council area. The track is required in order to facilitate the removal of existing forestry plantations south of the Buckieburn Reservoir.</p> <p>An archaeological planning condition was placed upon the development due to the proximity of a Scheduled Monument of Dundaff Hill and an unenclosed settlement recorded during survey work associated with the planting of the existing trees in the early 1990s. This survey did not provide accurate coordinates for the settlement remains and there was a concern that these may extend into the development area.</p> <p>An archaeological walkover survey was completed along the route of the roadway. This was designed to confirm features associated with known sites did not extend into the development area, although it also recorded any previously unknown features along the length of the development.</p> <p>The walkover survey failed to reveal any significant archaeological features along the length of the development. However, due to the proximity of the Scheduled Monument on Dundaff Hill, ARCHAS Ltd recommend further archaeological mitigation in this area.</p>
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	n/a
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