

# Twechar Coal Board Site, Phase 2 (February 2014): Archaeological Evaluation Data Structure Report

AOC Project 21878  
Oasis No. aocarcha1-172170  
19<sup>th</sup> February 2014



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**National Grid Reference (NGR):** NS 6970 7560

**AOC Project No:** 21878

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**Date of Fieldwork:** 11<sup>th</sup> February 2014

**Date of Report:** 19<sup>th</sup> February 2014

This document has been prepared in accordance with AOC standard operating procedures.

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**Date:** 19<sup>th</sup> February 2014

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**Date:** 19<sup>th</sup> February 2014

**Draft/Final Report Stage:** Final

**Date:** 19<sup>th</sup> February 2014

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## Abstract

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This report presents the results of a continuation of a phased archaeological evaluation (Stage 1 Phase 2) undertaken in relation to a proposed housing development to the south of Glen Shirva Road, Twechar, East Dunbartonshire.

The overall evaluation area was 2.01 ha in size, of which a 10% (350 m<sup>2</sup>) trenching sample was required along the south-eastern strip closest to the known position of Twechar Roman Camp. A further 3% (435 m<sup>2</sup>) trenching sample was required for the remainder of the Stage 1 Phase 2 area. The area evaluated actually comprised a total of 500 m<sup>2</sup> in the 10% sample area and 650 m<sup>2</sup> in the 3% sample area.

The area had undergone significant truncation through previous housing development and landscaping. Neither significant archaeological features nor artefacts were encountered.

# 1 INTRODUCTION

## 1.1 Background

- 1.1.1 AOC Archaeology Group was commissioned by Cooper Cromar Ltd on behalf of their client, Places for People, to undertake a phased archaeological evaluation of a proposed housing development to the south of Glen Shirva Road, Twechar, East Dunbartonshire. The evaluation was undertaken in order to satisfy the requirements of the local planning authority, East Dunbartonshire Council, who are advised on archaeological matters by Rathmell Archaeology Ltd. The works were conducted according to the terms of a *Written Scheme of Investigation* (AOC 2012a) approved on behalf of East Dunbartonshire Council by Rathmell Archaeology Ltd and in accordance with the principles set out in *Scottish Planning Policy* (Scottish Government 2010) and *PAN 2/2011 Planning & Archaeology* (Scottish Government 2011).
- 1.1.2 The 2014 works represent Stage 1 Phase 2 of the evaluation and was focused on the southern portion of the site. The overall development area amounts to approximately 4.6 ha. The Phase 2 area covers some 2.01 ha.
- 1.1.3 No significant archaeology was identified during the present evaluation.

## 1.2 Location

- 1.2.1 The site, centred on NGR NS 6970 7560, lies to the south of Glen Shirva Road on land currently occupied by a partially demolished inter-war housing scheme, located on the streets of Merryflats, Burnbrae, Shirva Lea, Whitelaw Terrace, Sunnyhill, Windy Yetts and Annieston. The Phase 2 boundary encompasses the southern half of the overall site (see Figure 2).

## 1.3 Archaeological background

### 1.3.1 Introduction

A desk-based assessment of the proposed development was previously undertaken (AOC 2011). Its results are summarised below.

### 1.3.2 Prehistory

No prehistoric remains were identified either within the proposed development site or in the wider assessment area, although an undated enclosure identified as cropmarks on aerial photographs to the northwest of Twechar (desk based assessment Site 18) may be prehistoric in origin.

### 1.3.3 Roman

Scheduled remains associated with the construction and use of the Antonine Wall World Heritage Site (WHS) are located adjacent to the proposed development site (Sites 1, 2 & 3) whilst others lie further afield within the wider assessment area (Sites 4, 5, 6, 7, 23 & 24). The Antonine Wall, in reality a complex network of forts, marching camps and military roads fronted by a turf rampart wall 3-4m high, bisected Scotland from the Forth estuary at Carriden to Old Kilpatrick on the Clyde (Breeze 2006, 66-7), passing along the southern side of the Kelvin Valley within which Twechar is located. Although the wall was constructed at the behest of the Emperor Antonius Pius following military victories in AD 142, it was comparatively short-lived, being occupied for approximately 20 years before being abandoned in the AD 160s (Historic Scotland 2007, 7-8).

Over the past sixty years aerial photography has revealed many previously unknown temporary camps along the line of the Antonine Wall. One of these camps, Site 1, was identified immediately east of the proposed development site in 1977. Cropmark evidence suggests that the camp measured at least 145 m x 105 m, was aligned north-east/south-west and was protected by a single ditch as well as presumably an internal rampart. Although no record survives of any Roman

monuments or artefacts being found within the proposed development site, Roman forts and marching camps are noted for their distinctive 'playing card shaped' rectilinear layout, and as such it is highly probable that the fort originally extended westwards into the southeast corner of the proposed development site. The true extent of the marching camp is at present unknown although the RCAHMS state that the total enclosed area is unlikely to have exceeded 2.3 ha (RCAHMS 1978, 53). Only the portion of the temporary camp identified on aerial photography is Scheduled and included within the WHS.

Although the purpose of the temporary camps is unknown, the majority probably relate to the construction of the Antonine Wall by legionary detachments (Breeze 2006, 32). Both the Twechar Camp (Site 1) and a similar temporary camp identified further to the east on Bar Hill (Site 5) are set back from the line of the wall. Unlike Site 1, the Bar Hill camp has been subject to archaeological excavation between 1982 and 1984. Although the camp was found to have been damaged by mine workings, the excavation determined that the ditch was 2 m wide and survived to depths of between 0.5 and 0.7 m.

The course of the Antonine Wall (Sites 2-4) passes in close proximity to the proposed development site on an ENE-WSW alignment. The Ordnance Survey marks its position immediately north of Glen Shirva Road. Writing in 1934 Sir George MacDonald reports the course of the Wall through Twechar thus:

*"After it [the ditch] has crossed the public road [Main Street], the line passes beneath the cottages which stand on the south bank of the waterway [The Forth Clyde Canal] a few steps west of the bridge. Beyond these, the road [Glen Shirva Road] on which they face is the best guide. It cannot be very far from the track of the rampart, for, when the canal bends to the right... the ditch can be made out in the form of a rather ill defined depression... between water-way and road. Moreover, the mineral railway, which almost immediately appears upon the south [now incorporated into the southern side of Glen Shirva Road], is partially laid upon the Military Way and at one point actually touches the rampart itself. At the west end of the field, where the canal turns southwards, the ditch can be seen disappearing beneath the water in front of the little cottage opposite Shirva Farm"* (Macdonald 1934, 149).

Based on observations made during the construction of the mineral railway, Macdonald's reference suggests that Glen Shirva Road overlies both the Military Way and elements of the rampart of the Antonine Wall. However, the National Monuments Record Scotland (NMRS) injects a note of caution about the position of the road stating that *'nowhere in this sector is the line of the Military Way evident'* (Information from Ordnance Survey 1980). Two separate archaeological investigations to the west of Twechar (Site 4), within the vicinity of Shirva Farm (Keppie 1999, 330-1) and Wester Shirva (Glendinning 1999, 27) have shown the course of the wall can vary from the position marked on Ordnance Survey mapping and that the alignment of the wall along Glen Shirva Road seems clear.

Cartographic sources offer further evidence of the course of the wall through Twechar. Although the surveyor William Roy reported the course of the wall to be invisible as it passed *'through inclosed fields towards Twacher'*, his map of 1793 depicts a road extending along the alignment of Glen Shirva Road. However, Roy's survey is to a certain extent schematic and there is, at present, no archaeological evidence for his depiction of the Military Way to the south of the wall. Glen Shirva Road is shown on its present alignment on the earliest detailed map of the area, the Ordnance Survey first edition of 1859 suggesting that the route predates the later industrialisation of Twechar and thereby lending weight to the argument that it follows the course of the Antonine Wall and Military Way.

The scheduled remains of the Roman Fort at Bar Hill (Site 6) lie a kilometre east of the proposed development site and immediately south of the Antonine Wall. One of a series of forts placed at regular intervals along the wall, the fort is in the care of Historic Scotland and has been the subject of several programmes of excavation. A Roman altar has been recorded within the fort (Site 7).

The NMRS records the discovery of a stone structure '*in the Fossa, close by the Wall*' on '*Mr Cather of Shervy's Ground*' in about 1728 (Site 23) (Gordon 1732, 6-7; Horsley 1732, 198-200). Contemporary accounts suggest that this may have been a souterrain positioned within the ditch of the Antonine Wall. Legionary tombstones found in the same area during the 1720s suggest that a military burial ground was located within the vicinity. Although '*Shervy*' presumably refers to Shirva, the precise location of these finds is unknown and the NMRS locates them only to OS grid square NS 269 675. The location of a possible Roman fortlet at Shirva is similarly unknown (Site 24).

#### 1.3.4 *Medieval and Post-Medieval*

No medieval remains have been identified either within the proposed development site or in the wider assessment area. References to Twechar in historic maps are hard to trace, perhaps because the parish within which it is situated, Kirkintilloch, historically formed a detached part of Dunbartonshire isolated from the rest of the county. It is unclear whether the absence of Twechar from Hermann Moll's 1735 map of '*The Shire of Clydesdale or Lanerk*', which covers the land within which Twechar is situated, reflects a lack of settlement or simply administrative boundaries. Twechar is first recorded as '*Twacker*' on William Roy's '*Plan shewing the course of the Roman Wall called Grime's Dyke*' of 1793, which depicts a small settlement at the western foot of Bar Hill. The course of the Antonine Wall is shown passing through enclosed fields to the west of the settlement, within which two smaller settlements '*Shervey*' and '*Bar*' are located. Although the map is to a certain extent schematic, the location of the proposed development is recorded as undeveloped at this time.

Subsequent maps document a gradual process of industrialisation as Twechar gradually evolved into a small coal mining community. John Thomson's '*Atlas of Scotland of 1832*' records the first of these changes, the excavation of the Forth and Clyde Canal (Sites 8, 15, 20, 22 & 25) which is shown cutting to the north of the proposed development site. Thomson depicts the application site as open ground. Construction of the Forth and Clyde Canal commenced in 1768 at the Forth and after delays reached the Clyde in 1790 (British Waterways website). A date stone on the aqueduct at Shirva (Site 20) suggests that the stretch through Twechar was at least under construction by 1771. Despite bisecting the Antonine Wall, the canal is omitted from Roy's map of 1793, demonstrating the schematic nature of this map. The Forth and Clyde Canal is a Scheduled Monument while the stables relating to the canal at Shirva (Site 22) are Category C Listed.

Detailed mapping of the area commences with the 25 inch to the mile 1<sup>st</sup> Edition Ordnance Survey map which was surveyed in 1859. This depicts the location of the proposed development site as open ground immediately south of Glen Shirva Road. The road itself is recorded though un-named and follows the alignment of the Antonine Wall. A coke works linked by mineral railways to small collieries on Bar Hill is shown immediately southwest of the site, adjacent to the Forth Clyde Canal (Sites 27, 28, 29, 30 & 31).

Industrialisation continued and by the time of the 2<sup>nd</sup> Edition Ordnance Survey map (published in 1899; surveyed 1896), a pit village community was developing to the east of the proposed development site, focused around Twechar Pit No. 1 and Twechar Pit No. 2 (Sites 9, 11, 12, 13, 14, 15, 16, 17, 19, 21 & 26). The proposed development site itself remained undeveloped.

#### 1.3.5 *Modern*

Surveyed during 1913-14, the 1922 Edition 6 inch to the mile Ordnance Survey map records a mineral railway (Site 32) running immediately north of the site, parallel to the southern side of Glen



Shirva Road. It was during the construction of this railway that Macdonald noted the discovery of traces of the Military Way and Antonine Wall rampart. Although the mineral railway continues to be depicted on the 1946 Provisional Edition Ordnance Survey map, it had been removed by 1968.

The colliery housing currently occupying the proposed development site, grouped around Merryflats, Burnbrae, Shirva Lea, Whitelaw Terrace, Sunnyside, Windy Yetts and Annieston is first recorded on the 1946 Ordnance Survey map, indicating an interwar date for the construction of these flats. This date correlates with the architectural style of the properties.

- 1.3.6 Previous archaeological evaluations were undertaken by AOC Archaeology on the northern part of the site during 2012 and 2013. The evaluations revealed a high degree of truncation and landscaping relating primarily to the previously existing housing development. No significant archaeology was revealed in either evaluation.

## 2 OBJECTIVES

- 2.1 The objectives of the archaeological evaluation were:
- i) to determine and assess the character, extent, condition, quality, date and significance of any buried archaeological remains within the proposed development area;
  - ii) to advise and implement an appropriate form of mitigation, such as excavation, post-excavation analyses and publication given the infeasibility of preserving the archaeological material *in situ*, should significant archaeological remains be encountered.

## 3 METHODOLOGY

- 3.1 The initial evaluation (Stage 1 Phase 1) required a 10% trenching sample within a 30 m wide strip to the north of the Phase 1 development area closest to the Antonine Wall (totalling 760 m<sup>2</sup>), as well as a 3% trenching sample for the remainder of the Phase 1 area (totalling 520 m<sup>2</sup>).
- 3.2 During the initial works in September 2012 (AOC 2012b) the total number of trenches had to be reduced due to a number of on-site issues including: restricted access behind upstanding houses and around small sheds; Japanese knotweed and giant hogweed in unspecified areas, and numerous unmarked services throughout the site. After consultation with Rathmell Archaeology Ltd, the area to the east of Burnbrae was written off due to obvious truncation by post-medieval industry and the total sample area was reduced (see table below).
- 3.3 Upon continuation of the evaluation in 2013 the house plot in the north-west corner of the site had been fenced off due to the presence of knotweed and was not able to be accessed. Furthermore, an overhead cable was still present on the west edge of the buffer zone and areas where houses had been recently demolished were still showing evidence of live services present when scanned with a Cable Avoidance Tool.
- 3.4 The 2014 Stage 1 Phase 2 evaluation covered a total of 2.01 ha out of a total of 4.6 ha for the overall development. The evaluation required a 10% (350 m<sup>2</sup>) trenching sample to be undertaken within the south-eastern area of the site. This would have been the most likely area for remains relating to the known Roman Camp to exist. A 3% trenching sample was required for the remainder of the Phase 2 area (totalling 435 m<sup>2</sup>). The trenches were positioned in order to avoid existing services. The location

of the required trenching was limited by the possible presence of Japanese knotweed, existing site works and previously unknown live services. A total of 575 linear metres (1150 m<sup>2</sup>) was excavated.

- 3.4 The evaluation was undertaken by a 13 tonne tracked excavator with a 2 m wide bladed ditching bucket. All trench areas were surveyed using a Cable Avoidance Tool (CAT) prior to excavation. Excavation was undertaken in shallow units/spits until the first significant archaeological horizon or natural subsoil was reached. All machine excavation was supervised by an experienced field archaeologist and according to AOC Archaeology Group's standard operating procedures, and as per the methodology within the *Written Scheme of Investigation* (AOC 2014). The trenches were backfilled on completion of the evaluation.

- 3.5 Table showing the areas available for trenching and work completed:

<b>2012 Works</b>	10% Sample Area	3% Sample area
Development Area (2012)	7600 m <sup>2</sup>	17333 m <sup>2</sup>
Initial Trenching Target	760 m <sup>2</sup>	520 m <sup>2</sup>
Trenching Achieved	257 m <sup>2</sup>	65 m <sup>2</sup>
Area Written Off	3200 m <sup>2</sup>	9480 m <sup>2</sup>
<b>2013 Works</b>		
Development Area (2013)	4400 m <sup>2</sup>	7853 m <sup>2</sup>
Restricted (Knotweed) Area	1184 m <sup>2</sup>	-
Available Area	3216 m <sup>2</sup>	7853 m <sup>2</sup>
Trenching Target	322 m <sup>2</sup>	235 m <sup>2</sup>
Trenching already undertaken in 2012	182 m <sup>2</sup>	54 m <sup>2</sup>
Trenching required	140 m <sup>2</sup>	181 m <sup>2</sup>
Trenching achieved	207 m <sup>2</sup>	77 m <sup>2</sup>
<b>2014 Works</b>		
Development Area (2014)	3500 m <sup>2</sup>	13050 m <sup>2</sup>
Initial Trenching Target	350 m <sup>2</sup>	435 m <sup>2</sup>
Trenching Achieved	500 m <sup>2</sup>	650 m <sup>2</sup>

## 4 RESULTS

- 4.1 The archaeological evaluation was undertaken between the 11<sup>th</sup> and 13<sup>th</sup> February 2014. Weather conditions were dry and archaeological visibility was good throughout the evaluation. In total 575 linear metres of trenches were opened, these varied in alignment and length (Figure 2). Certain portions of the evaluation area were inaccessible due to the presence of existing site works, live services and the possible contamination of Japanese Knotweed.

### 4.2 *Area of 10% Evaluation (Trenches 24-34)*

- 4.2.1 The trenches of the 10% evaluation area revealed a dark brown imported loam topsoil that ranged from 0.15 m to 0.60 m in depth. The topsoil was mixed with demolition material. Deposits of made ground were encountered within Trenches 27, 31 and 33. This was composed of re-deposited topsoil, cinder and demolition material. The made ground ranged between 0.30 m and 0.70 m in depth and overlay a natural subsoil of orange sandy clay.
- 4.2.2 Modern truncation was also observed in the form of several brick foundations. Occasional rubble field drains of probable 19<sup>th</sup> century date were also exposed.



**Plate 1 - General shot of Trench 28 from north**

**4.3 Area of 3% Evaluation (Trenches 35-47)**

- 4.3.1 Trenches 35-47 were excavated across the remainder of the site. The trenches revealed a thin topsoil, 0.20 m in depth, which overlay made ground 0.20 to 0.40 m in depth. Many of the trenches within this part of the site suffered from waterlogging due to a combination of burst pipes and poor natural drainage. Natural orange clay was revealed in all trenches.
- 4.3.2 Occasional rubble and ceramic field drains and modern brick foundations were revealed.



**Plate 2 - Trench 43 from south-east**

## **5 CONCLUSION AND RECOMMENDATIONS**

- 5.1 The Phase 2 evaluation augmented the findings of the previous evaluations undertaken in 2012 and 2013 in demonstrating that the development area had been severely truncated by a combination of both the former housing scheme and earlier demolition, landscaping and dumping. Neither significant archaeological remains nor artefacts were identified.
- 5.2 No further evaluation works are deemed necessary in the Stage 1 Phase 2 development area. These recommendations will have to be approved by Rathmell Archaeology Ltd on behalf of East Dunbartonshire Council.

## 6 BIBLIOGRAPHY

AOC Archaeology 2011 *Twechar Coal Board Site, Glen Shirva Road, Twechar: Desk-based Assessment*, Unpublished AOC client report

AOC Archaeology 2012a *Twechar Coal Board Site: Written Scheme of Investigation*, Unpublished AOC client report

AOC Archaeology 2012b *Twechar Coal Board Site, Phase 1: Archaeological Evaluation Data Structure Report*, Unpublished AOC Report

AOC Archaeology 2013 *Twechar Coal Board Site, Phase 1 (cont): Archaeological Evaluation Data Structure Report*, Unpublished AOC Report

Glendinning, B, 1999 'Wester Shirva (Kirkintilloch Parish) archaeological investigation', *Discovery Excav Scotland*

Gordon, A, 1732 *Additions and corrections, by way of supplement, to the Itinerarium Septentrionale*, London

Historic Scotland 2007 *Frontiers of the Roman Empire World Heritage Site Proposed Extension: The Antonine Wall Management Plan 2007-2012*

Horsley, J, 1732 *Britannia Romana or the Roman antiquities of Britain*, London

Keppie, L J F, 1999 'Roman Britain in 1998. 1 Sites explored 2. Scotland', *Britannia* Vol.30

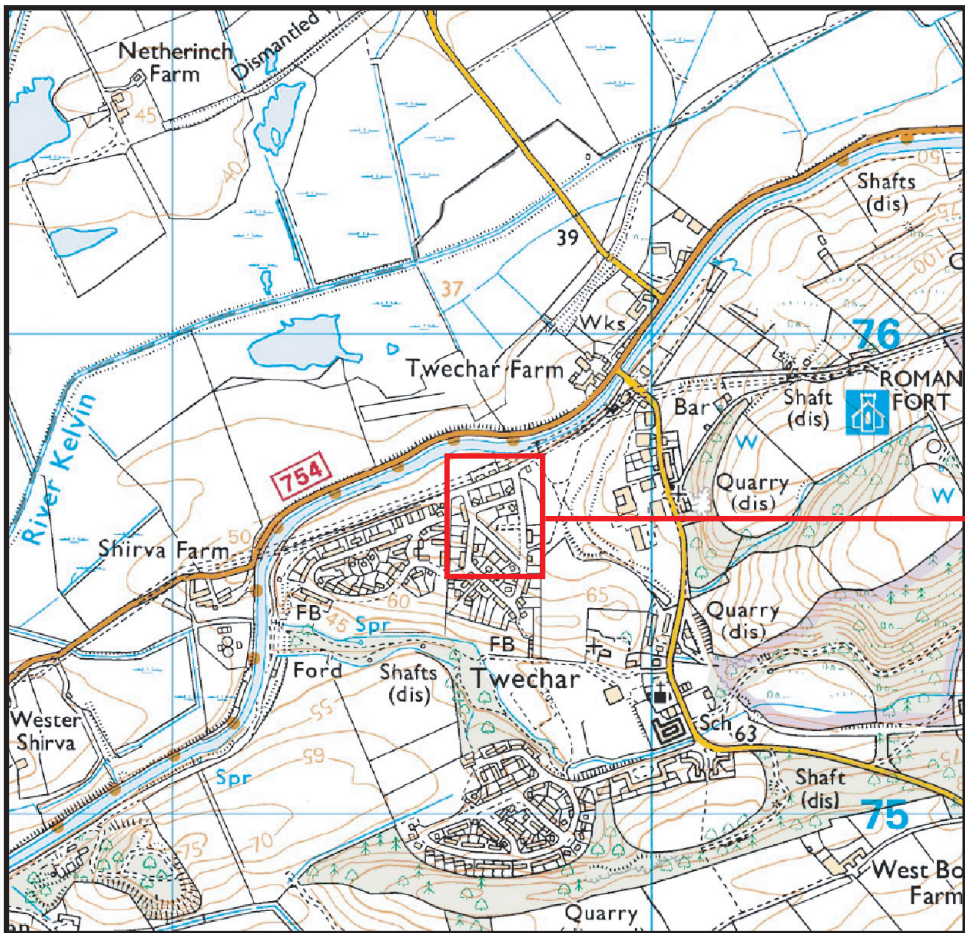
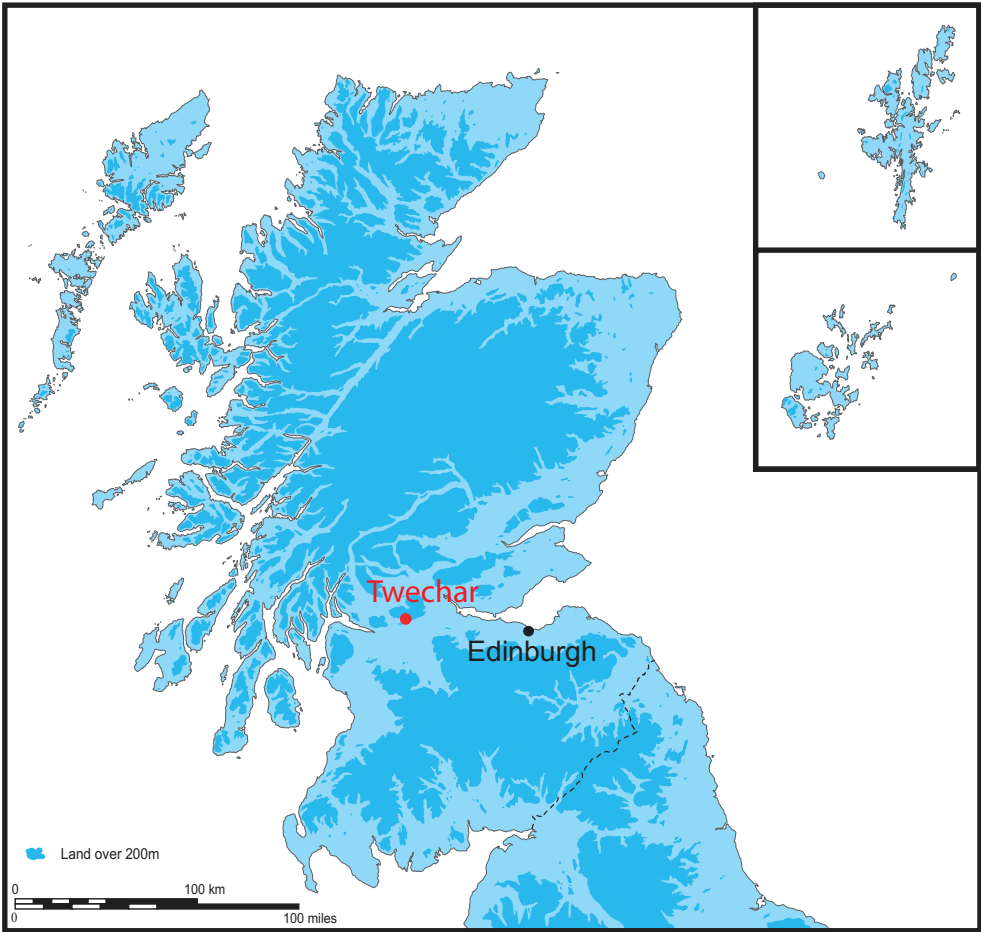
Macdonald, Sir George 1934 *The Roman Wall in Scotland*, 2<sup>nd</sup> Edition, Oxford Clarendon Press

RCAHMS 1978 'Publications, inventories, aerial survey, etc', *Discovery Excav Scot*

Scottish Government 2010 *Scottish Planning Policy*, February 2010

Scottish Government 2011 *PAN 2/2011 Planning and Archaeology*

[http://www.britishwaterways.co.uk/scotland/about-us/canals#forth\\_clyde](http://www.britishwaterways.co.uk/scotland/about-us/canals#forth_clyde)



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Figure 1: Location of the site at Twechar

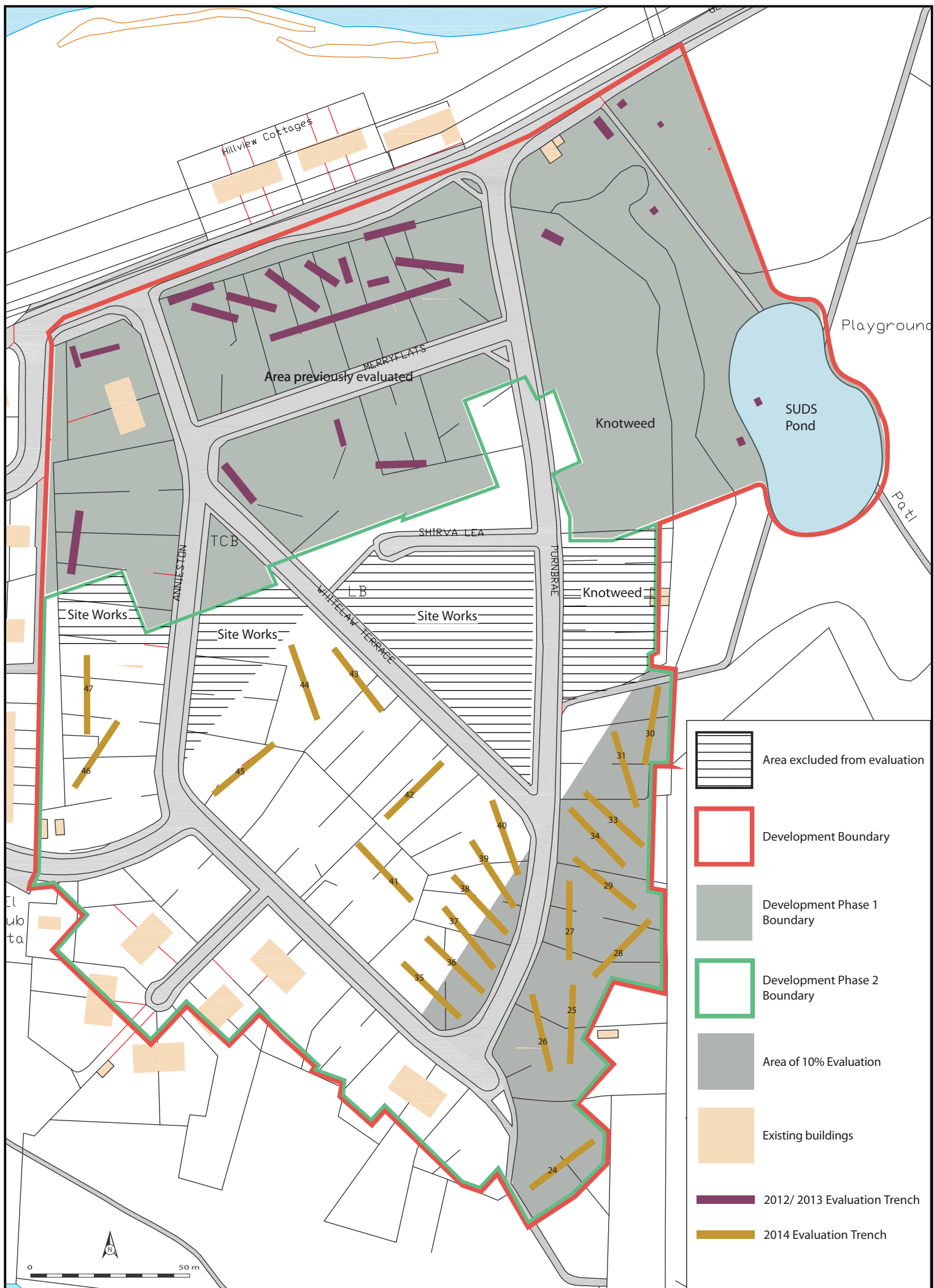


Figure 2: Location of evaluation trenches

# **Twechar Coal Board Site, Phase 2 (Feb 2014): Archaeological Evaluation Data Structure Report**

## **Section 2: Appendices**



## APPENDIX 1: Trench Descriptions

### Trench 24

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	NE to SW
<i>Soil Make-up</i>	Topsoil – 0.20 m to 0.40 m
<i>Depth of Excavation</i>	0.40 m
<i>Significant Features</i>	None
<i>Other Features</i>	Modern disturbance from 16.0 m to 20.0 m
<i>Natural Subsoil</i>	Orange sandy clay
<i> Finds</i>	None

### Trench 25

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	N to S
<i>Soil Make-up</i>	Topsoil – 0.30 m to 0.50 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	Rubble drain at 20.0 m NE-SW
<i>Natural Subsoil</i>	Orange sandy clay
<i> Finds</i>	None

### Trench 26

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	N to S
<i>Soil Make-up</i>	Topsoil – 0.30 m to 0.50 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	Ceramic drain at 10.0 m NE-SW
<i>Natural Subsoil</i>	Orange sandy clay
<i> Finds</i>	None

### Trench 27

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	N to S
<i>Soil Make-up</i>	Topsoil – 0.30 m. Made ground – 0.30 m to 0.80 m
<i>Depth of Excavation</i>	0.30 m – 0.90 m
<i>Significant Features</i>	Red brick surface at 23.0 m
<i>Other Features</i>	Rubble drain at 13.0 m NE-SW
<i>Natural Subsoil</i>	Orange sandy clay
<i> Finds</i>	None

### Trench 28

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	NE to SW
<i>Soil Make-up</i>	Topsoil – 0.10 m to 0.30 m
<i>Depth of Excavation</i>	0.30 m
<i>Significant Features</i>	None
<i>Other Features</i>	None

*Natural Subsoil* Orange sandy clay  
 *Finds* None

**Trench 29**

*Dimensions* 25 m by 2.0 m  
*Total Area* 50 m<sup>2</sup>  
*Excavated Orientation* NW to SE  
*Soil Make-up* Topsoil – 0.30 m to 0.40 m  
*Depth of Excavation* 0.40 m  
*Significant Features* None  
*Other Features* Rubble drain at 11.0 m N-S. Modern brick foundation at 11.5 m SW-NE  
*Natural Subsoil* Orange sandy clay  
 *Finds* None

**Trench 30**

*Dimensions* 25 m by 2.0 m  
*Total Area* 50 m<sup>2</sup>  
*Excavated Orientation* N to S  
*Soil Make-up* Topsoil – 0.10 m to 0.20 m  
*Depth of Excavation* 0.40 m  
*Significant Features* None  
*Other Features* None  
*Natural Subsoil* Orange sandy clay  
 *Finds* None

**Trench 31**

*Dimensions* 25 m by 2.0 m  
*Total Area* 50 m<sup>2</sup>  
*Excavated Orientation* NW to SE  
*Soil Make-up* Topsoil – 0.20 m to 0.30 m. Made ground – 0.20 m to 0.30 m  
*Depth of Excavation* 0.40 m to 0.70 m  
*Significant Features* None  
*Other Features* None  
*Natural Subsoil* Orange sandy clay  
 *Finds* None

**Trench 32** Void

**Trench 33**

*Dimensions* 25 m by 2.0 m  
*Total Area* 50 m<sup>2</sup>  
*Excavated Orientation* NW to SE  
*Soil Make-up* Top-soil – 0.30 m to 0.60 m. Made ground – 0.20 m to 0.30 m  
*Depth of Excavation* 0.60 m to 0.80 m  
*Significant Features* None  
*Other Features* Rubble field drain at 20.0 m N-S  
*Natural Subsoil* Orange sandy clay  
 *Finds* None

**Trench 34**

*Dimensions* 25 m by 2.0 m  
*Total Area* 50 m<sup>2</sup>  
*Excavated Orientation* NW to SE  
*Soil Make-up* Topsoil – 0.30 m to 0.60 m

<i>Depth of Excavation</i>	0.30 m to 0.60 m
<i>Significant Features</i>	None
<i>Other Features</i>	Rubble field drain at 6.0 m N-S
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 35**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	SE to NW
<i>Soil Make-up</i>	Topsoil – 0.20 m. Made ground – 0.20 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 36**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	SE to NW
<i>Soil Make-up</i>	Topsoil – 0.20 m. Made ground – 0.25 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 37**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	SE to NW
<i>Soil Make-up</i>	Topsoil – 0.25 m. Made ground – 0.25 m
<i>Depth of Excavation</i>	0.50 m to 0.65 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 38**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	SE to NW
<i>Soil Make-up</i>	Topsoil – 0.20 m. Made ground – 0.30 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 39**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	SE to NW

<i>Soil Make-up</i>	Topsoil – 0.25 m. Made ground – 0.30 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 40**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	SE to NW
<i>Soil Make-up</i>	Topsoil – 0.25 m. Made ground – 0.30 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 41**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	SE to NW
<i>Soil Make-up</i>	Topsoil – 0.30 m. Made ground – 0.25 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 42**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	SW to NE
<i>Soil Make-up</i>	Topsoil – 0.30 m. Made ground – 0.25 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 43**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	SW to NE
<i>Soil Make-up</i>	Topsoil – 0.25 m. Made ground – 0.30 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	Rubble drain at 15.0 m SE-NW
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 44**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	NW to SE
<i>Soil Make-up</i>	Topsoil – 0.10 m to 0.20 m. Made ground – 0.15 m to 0.25 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 45**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	SW to NE
<i>Soil Make-up</i>	Topsoil – 0.15 m to 0.30 m. Made ground – 0.20 m to 0.40 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 46**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	NE to SW
<i>Soil Make-up</i>	Topsoil – 0.15 m to 0.20 m. Made ground – 0.30 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

**Trench 47**

<i>Dimensions</i>	25 m by 2.0 m
<i>Total Area</i>	50 m <sup>2</sup>
<i>Excavated Orientation</i>	NE to SW
<i>Soil Make-up</i>	Topsoil – 0.15 m to 0.25 m. Made ground – 0.20 m
<i>Depth of Excavation</i>	0.50 m
<i>Significant Features</i>	None
<i>Other Features</i>	None
<i>Natural Subsoil</i>	Orange sandy clay
<i>Finds</i>	None

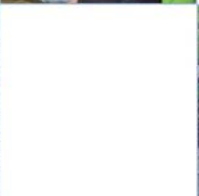
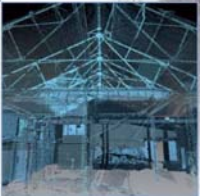
## APPENDIX 2: Photographic Record

### Digital Photographs

Frame	Description	From	Date
1	Registration shot	-	11/02/14
2	Post-excavation view of Trench 24	NE	11/02/14
3	Post-excavation view of Trench 25	N	11/02/14
4	Post-excavation view of Trench 26	N	11/02/14
5	Post-excavation view of Trench 27	N	11/02/14
6	Post-excavation view of Trench 28	N	11/02/14
7	Post-excavation view of Trench 29	NW	11/02/14
8-9	Modern brick foundation	NW	11/02/14
10	Post-excavation view of Trench 30	N	11/02/14
11	Post-excavation view of Trench 31	NW	11/02/14
12	Post-excavation view of Trench 33	SE	11/02/14
13	Southern end of site general shot	S	11/02/14
14-16	Northern end of site general shot	S	11/02/14
17	Post-excavation view of Trench 34	NW	11/02/14
18-19	General shot of eastern end of site	S	12/02/14
20-21	General shot of eastern end of site	SW	12/02/14
22-24	General shots of site	SW	12/02/14
25	Post-excavation view of Trench 35	E	12/02/14
26	Post-excavation view of Trench 36	E	12/02/14
27	Post-excavation view of Trench 37	E	12/02/14
28	Post-excavation view of Trench 38	E	12/02/14
29	Post-excavation view of Trench 39	E	12/02/14
30	Post-excavation view of Trench 40	E	12/02/14
31	Post-excavation view of Trench 41	E	12/02/14
32	Post-excavation view of Trench 42	E	12/02/14
33	Post-excavation view of Trench 44	NW	12/02/14
34	Post-excavation view of Trench 45	NE	12/02/14
35	Modern services within Trench 45	SW	12/02/14
36	Post-excavation view of Trench 47	S	12/02/14
37	Post-excavation view of Trench 46	SW	12/02/14
38-39	General shots of site	SW	12/02/14

**APPENDIX 3: 'Discovery and Excavation in Scotland' Report**

<b>LOCAL AUTHORITY:</b>	East Dunbartonshire Council
<b>PROJECT TITLE/SITE NAME</b>	Twechar Coal Board Site Phase 1
<b>PROJECT CODE:</b>	AOC 21878
<b>PARISH:</b>	Kirkintilloch
<b>NAME OF CONTRIBUTOR:</b>	R Engl & A Duffy
<b>NAME OF ORGANISATION:</b>	AOC Archaeology Group
<b>TYPE(S) OF PROJECT:</b>	Archaeological Evaluation
<b>NMRS NO(S)</b>	None
<b>SITE/MONUMENT TYPE(S):</b>	N/A
<b>SIGNIFICANT FINDS:</b>	N/A
<b>NGR (2 letters, 6 figures)</b>	NS 6970 7560
<b>START DATE</b> (this season)	11 <sup>th</sup> February 2014
<b>END DATE</b> (this season)	13 <sup>th</sup> February 2014
<b>PREVIOUS WORK</b> (incl. DES ref.)	None
<b>MAIN (NARRATIVE) DESCRIPTION:</b> (May include information from other fields)	<p>AOC Archaeology undertook the continuation of a phased archaeological evaluation (Stage 1 Phase 2) in relation to a proposed housing development to the south of Glen Shirva Road, Twechar, East Dunbartonshire.</p> <p>The overall evaluation area was 2.01 ha in size of which a 10% (350 m<sup>2</sup>) trenching sample was required along the south-eastern strip closest to the known position of Twechar Roman Camp. A further 3% (435 m<sup>2</sup>) trenching sample was required for the remainder of the Stage 1 Phase 2 area. The area evaluated actually comprised a total of 500 m<sup>2</sup> in the 10% sample area and 650 m<sup>2</sup> in the 3% sample area.</p> <p>The area was found to have undergone significant truncation through previous housing development and landscaping. Neither significant archaeological features nor artefacts were encountered.</p>
<b>PROPOSED FUTURE WORK:</b>	None
<b>CAPTION(S) FOR ILLUSTRS:</b>	---
<b>SPONSOR OR FUNDING BODY:</b>	Cooper Cromar Ltd
<b>ADDRESS OF MAIN CONTRIBUTOR:</b>	Edgefield Road Industrial Estate, Loanhead, Midlothian, EH20 9SY
<b>EMAIL ADDRESS:</b>	Rob.Engl@aocarchaeology.com
<b>ARCHIVE LOCATION</b> (intended/deposited)	Archive to be deposited in NMRS



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