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**Dundas Dairy,
Dundas Home Farm,
City of Edinburgh
Archaeological Evaluation
Data Structure Report**







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Executive Summary

ARCHAS Cultural Heritage Ltd were contracted by Lundin Homes Ltd to undertake a programme of archaeological mitigation in advance of the proposed development of a greenfield site at Dundas Dairy, Dundas Home Farm, on the western fringe of the City of Edinburgh.

The archaeological works followed the placement of a planning condition upon the proposed development by City of Edinburgh Council Archaeology Service. The condition required that the eastern part of the site be subject to a metal detecting survey, while 10% of the proposed development area be systematically assessed for archaeological remains through a programme of archaeological evaluation. Both phases of work were to take place in advance of the proposed development.

The metal detecting survey revealed very few artefacts of any significance. A coin, impacted pistol ball, and medieval ceramic sherd with PB glaze were all notable, but the paucity of artefacts recovered suggests a lack of archaeological activity in the area.

The archaeological evaluation involved the mechanical excavation of 27 evaluation trenches across the footprint of the proposed development.

Excavation of the trenches revealed ploughsoil overlying natural subsoil deposits with the only features found to be post-medieval and modern field drains.

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 archascu1-247367) 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 was commissioned by Mr Alan Spence of Lundin Homes Ltd to undertake archaeological mitigation in advance of the proposed development of a greenfield site 190m west of the Old Dairy House, at Dundas Home Farm on the western periphery of the City of Edinburgh (centred NGR: NT 12430 77040). The client proposes to erect a two storey dwelling house, stable block, cabin and bedding store in order to form a livery stable business.
- 1.1.2 The site was identified by the City of Edinburgh Council Archaeology Service (hereafter CECAS) as being located in an area considered as having archaeological potential. CECAS provide archaeological advice to the City of Edinburgh Council and through Planning Condition 4 of Planning Application 15/04910/FUL, recommended that a programme of archaeological mitigation be undertaken at the eastern end of the site subject to new construction. The condition states:
- 'No development shall take place on the site until the applicant has secured the implementation of a programme of archaeological work (excavation, reporting and analysis, publication) in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Planning Authority.'*¹
- 1.1.3 The CECAS response outlined the need for a metal detecting survey of the eastern end of the development area, as well as the need for an archaeological evaluation prior to development.²
- 1.1.6 Following appointment, ARCHAS liaised with CECAS regarding the level of archaeological work required on site and produced a detailed Written Scheme of Investigation (hereafter WSI) outlining the methodology to be followed and standards maintained during the work. This WSI was accepted by CECAS on 20th April 2016
- 1.1.7 The metal detecting survey was completed on Friday 22nd April 2016 by Ross Cameron and Jim Knowles, with the archaeological evaluation completed over two days from Tuesday 24th to Wednesday 25th May 2016 by Ross Cameron and Jozef Doran. The weather throughout was good, occasionally overcast with periods of bright sunshine.
- 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 Edinburgh City Council, 15/04910/FUL Decision Notice – 04/12/15

² City of Edinburgh Council Archaeology Service, 15/04910/FUL Comments and Recommendations – 04/12/15

1.2 Site Geology and Setting

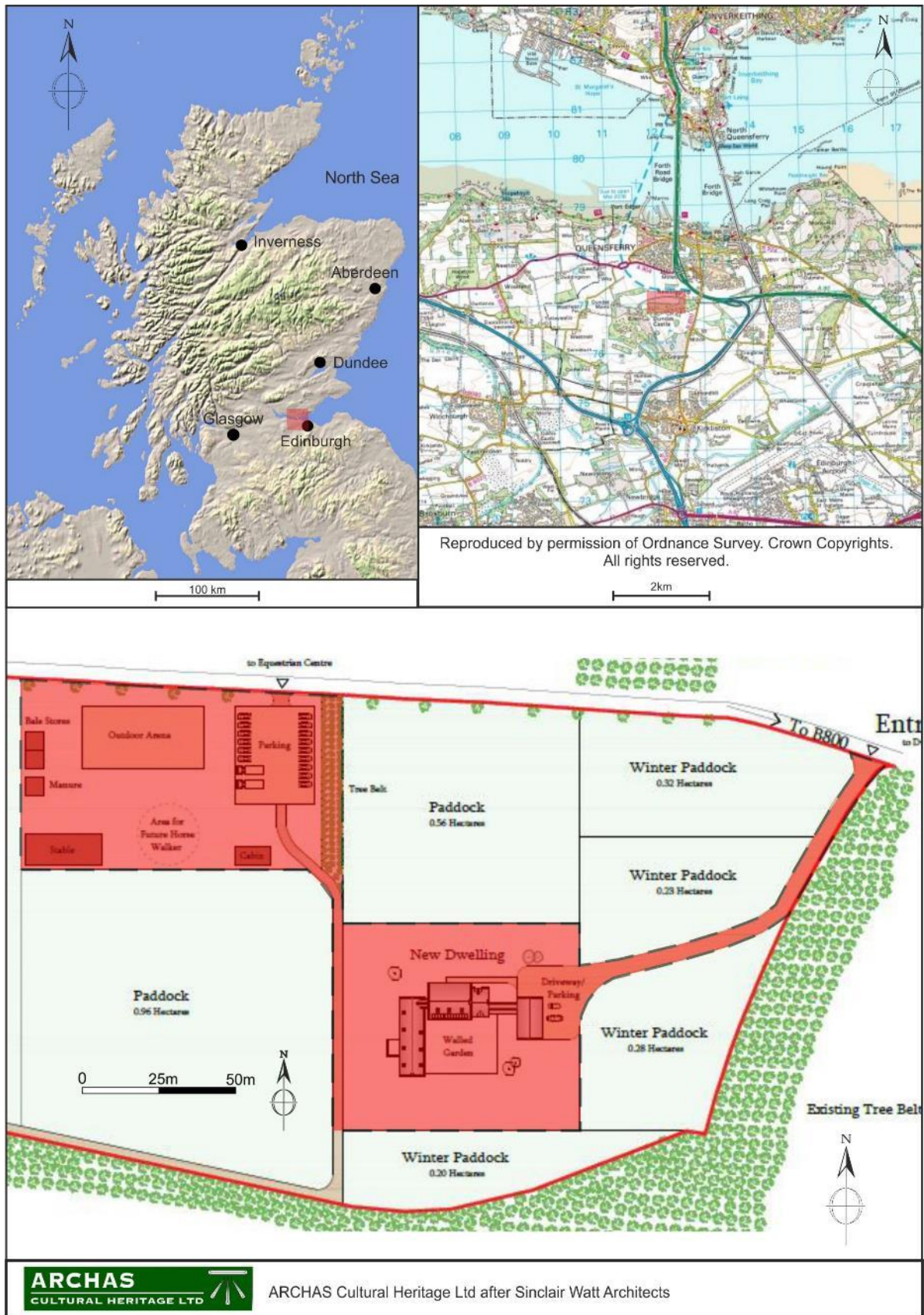


Figure 1: Site location with the area requiring archaeological investigation marked red

General

- 1.2.1 The proposed development is located to west of the City of Edinburgh, immediately south of the town of South Queensferry and the access to the new Forth Crossing (Figure 1). The proposed development area is centred on NGR: NT 12331 77040, with the area identified for archaeological assessment extending to around 10,500m².

Study Area

- 1.2.2 Overall, the study area comprises the eastern end of an irregular field aligned approximately east west. The northern periphery of the field is aligned east-west and curves slightly southwards at either end, following the route of the access road to Dundas Castle. This is lined with mature trees. The southern and eastern ends of the field are bordered by mature woodland plantations, with the southern boundary angling to the WNW, leaving a small boundary fence aligned north-south at the western end.
- 1.2.3 The development site comprises fertile agricultural land currently under cultivation with winter barley.

Geology

- 1.2.4 The drift geology of the proposed development site comprises Till, Devensian - Diamicton. These superficial deposits formed up to 2 million years ago in the Quaternary Period and are characteristic of a local environment previously dominated by ice age conditions.
- 1.2.5 The underlying bedrock geology comprises Sedimentary Rock Cycles, Strathclyde Group Type of the Hopetoun Member. These were formed 326-335 million years ago in the Carboniferous Period and are characteristic of a local environment previously dominated by lakes and lagoons.³

³ www.bgs.ac.uk – 05/04/16

2 Archaeological and Historical Background

2.1 General

- 2.1.1 Readily accessible historical and archaeological records were consulted in order to gain an understanding of the relevant history of the development area. These resources included the National Monuments Record of Scotland (NMRS), the Map Library as held by the National Library of Scotland (NLS) and the Statistical Accounts of Scotland. Consultation of these resources for the wider area allows the archaeological team to better understand the immediate archaeological landscape.

2.2 Gardens and Designed Landscape

- 2.2.1 The proposed development area sits within the Dundas Castle Designed Landscape (GDL00151). This nationally important designed landscape is well-documented from the 18th century, with significant re-modelling from the 19th century to the present day. This area is recognised as one of 'outstanding' archaeological significance in the Inventory of Gardens and Designed Landscapes maintained by Historic Environment Scotland.

2.3 Brief Historical Summary and Cartography

- 2.3.1 The Dundas family have occupied the Dundas Estate from at least the 1120s, when the family were given licence to build the tower of Dundas. The core of the present castle dates to c.1416 although this is much altered and added to subsequently.

Pre – Ordnance Survey

- 2.3.2 There is no evidence of any occupation of the development area in the historical record. William Roy's 'Military Survey of Scotland' conducted between 1747 and 1756 is the most detailed early map of Scotland, containing a lot more terrain detail than earlier maps.
- 2.3.3 Roy's map clearly shows both Dundas Castle with surrounding designed landscape, and 'Newbiggen', modern day Dundas Home Farm to the immediate east (See [Figure 2](#)). The area of the proposed development between the two identifiable sites is occupied by a series of ploughed fields and agricultural land.



Figure 2: Extract from William Roy's 'Military Survey of Scotland from c.1750 showing occupation of the development area highlighted red. © The British Library Board. All Rights Reserved (Roy Military Survey of Scotland)

Ordnance Survey Maps

2.3.4 By the production of the Ordnance Survey 1st edition 25 inch to 1 mile Linlithgow Sheet VI.4 (Dalmeny, Cramond and Queensferry) in 1856 (see Figure 3), the site is still shown as wholly unoccupied and has yet to take its modern form, with a band of trees, part of the designed landscape, forming the eastern part of the development area. These trees are still present today.

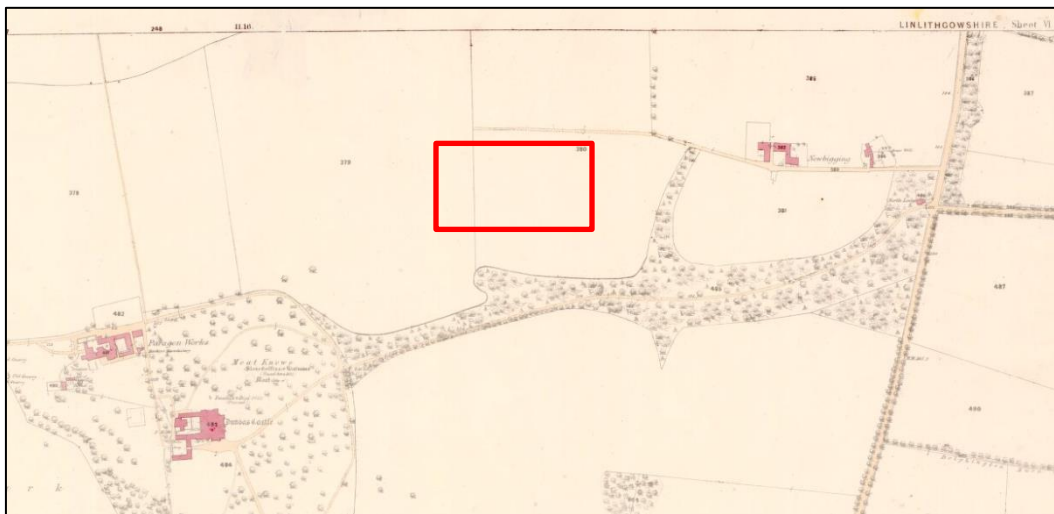


Figure 3: Extract from the first edition 25 inch to 1 mile Linlithgow Sheet VI.4 from 1856, showing the development area highlighted in red with Newbiggen to the east and Dundas Castle to the south-west. NLS

2.3.5 The first edition map also shows an area to the south west of the proposed development and immediately north east of Dundas Castle which records the site of a 'Moat', but also records that 'Stone Coffins or Cists' were 'found here 1825' (NMRS: NT 17 NW 8). Although this cannot be provenanced, this indicates the strong possibility of prehistoric occupation in the immediate area.

2.3.6 The 2nd edition 25 inch to 1 mile Linlithgowshire 006.04 (Dalmeny; Kirkliston) map from 1897 shows the site in its current form. With the northern boundary formed by the roadway and the woodland of the designed landscape snaking round the site on the south and east. The ribbon of trees to the east has been extended to the road and a field boundary to the west of the site has been removed, but otherwise the landscape is relatively unchanged from its state in 1856.

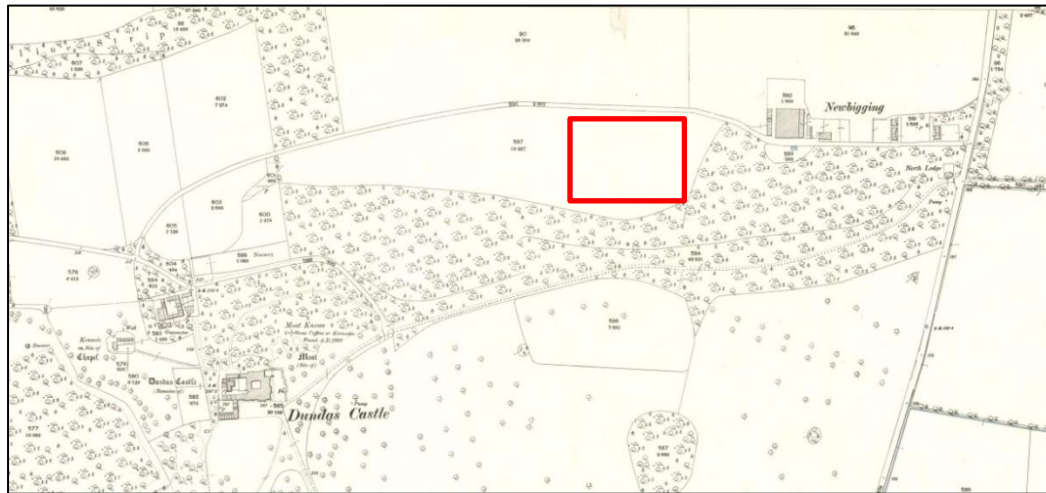


Figure 4: Extract from the second edition 25 inch to 1 m Linlithgowshire 006.04 (includes: Dalmeny; Kirkliston) from 1897, showing the development area highlighted in red. NLS

2.4 Archaeological Evidence

2.4.1 A large scale archaeological evaluation was completed by Headland Archaeology in 2011 along the route of the access to the new Forth Replacement Crossing immediately north of the proposed development area.

2.4.2 This survey along with that undertaken in advance of the M8 extension, revealed evidence for medieval rig and furrow and a possible medieval cobbled surface as well as numerous post-medieval agricultural features (Canmore ID 333443 – 333446).

2.5 Conclusions

2.5.1 Although no archaeological deposits have been located in the immediate vicinity of the proposed development, and no features have been previously recorded within the limits of the site boundary, the proposed development lies within an important historical landscape with strong evidence for historical occupation in the vicinity.

3 Methodology

3.1 Metal Detecting Survey

General

3.2.1 Metal detecting surveys will not successfully recover all metal objects across a site, but provide an indication of what can be recovered. As bioturbation and human interference such as ploughing alter the locations of objects in the soil, artefacts are brought closer to the surface and become more readily detected by survey.

Site Works

3.2.2 Prior to work commencing on site, a series of co-ordinates marking the main areas of development were provided by the client. These co-ordinates correspond with defined points on the proposed development plan (seen in Figure 1).

3.2.3 The site was surveyed by a team of two archaeologists using different metal detectors, with different capabilities. This ensured the survey gained as much coverage as possible. The team used both a Maplin N86KA Advanced Metal detector and a Teknetics Omega 8000 set to detect all metals. These detectors have a general depth sensitivity of up to 0.18m and can pinpoint metals while stationary to a depth of 0.14m.

3.2.4 Upon arrival on site the metal detectors were tested on known metal objects. The extent of coverage was also gauged by both team members walking a small stretch of field and measuring the arc covered by the detector's swing.

3.2.5 The site was then walked by the team in transects of c.2-3m, with each transect overlapping to ensure complete coverage (Plate 1).



Plate 1: Working shot looking south and showing the site being walked in transects (Photograph 015)

- 3.2.6 Each signal received was marked with a flag and only excavated once the immediate area has been scanned in order to give as much context to the find as possible. Each find-spot will be located using a hand held GPS.
- 3.2.7 Once removed from the soil, each artefact was assessed and if considered to be modern and of negligible value was discarded. Those artefacts considered worthy of retention were individually bagged, assigned a unique find number and recorded on ARCHAS Ltd *pro forma* Finds Sheets.
- 3.2.8 The metal detecting work was accompanied by a general photographic survey to document the landscape setting and the distribution of detected finds across the area.

3.2 Field Evaluation

- 3.2.1 The purpose of archaeological field evaluation is to gain information about the archaeological potential of a site by investigating a previously agreed percentage of the overall area. The results of these investigations allow the archaeological team to assess the presence, absence, potential and importance of archaeological deposits surviving across the site whilst meeting the requirements of the Planning Condition as outlined by CECAS. In practice, this requires a number of trenches to be opened across the site. These will typically be plotted in a systematic manner to ensure good spatial coverage in order to assess the survival and further potential of any archaeological deposits or remains across the site.
- 3.2.2 The results of this phase of works and subsequent recommendations by ARCHAS allow CECAS to make an informed decision as to whether the site should be investigated further. ARCHAS will make recommendations relating to any future mitigation, but the decision for any further archaeological intervention ultimately rests with City of Edinburgh Council through CECAS.
- 3.2.3 An archaeological evaluation investigates only a certain percentage of the development area through a series of carefully placed trenches. For the proposed development CECAS stipulated the evaluation was to cover 10% of the eastern part of the site subject to new construction.

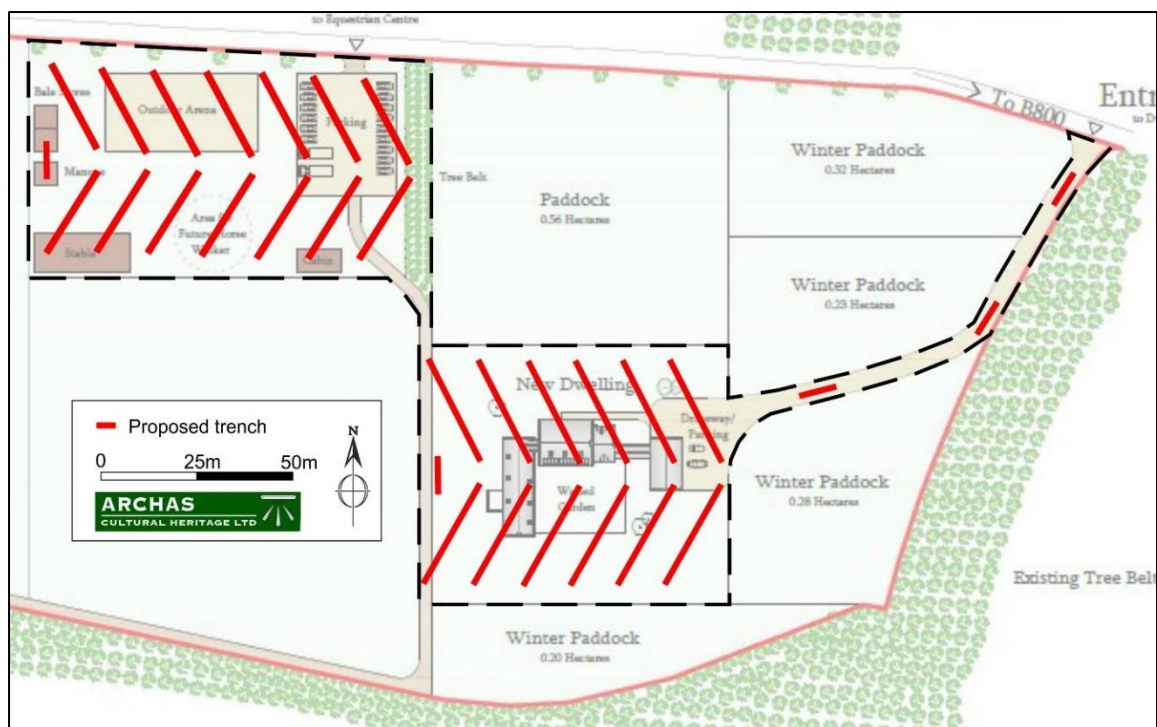


Figure 5: Proposed trench locations. ARCHAS Cultural Heritage Ltd after Lundin Homes

3.2.4 31 linear trenches were proposed in the WSI, providing good spatial coverage of the proposed development area (Figure 5) In the event, 27 trenches were excavated, varying from 10m to 30m in length, accounting for 1228.5 m² or just over 10% of the overall area. The trench plan as excavated (see Figure 6) maintained comprehensive coverage of the site, allowing for a good evaluation of the preservation, presence and distribution of any archaeological remains that might potentially be affected by the proposed development.

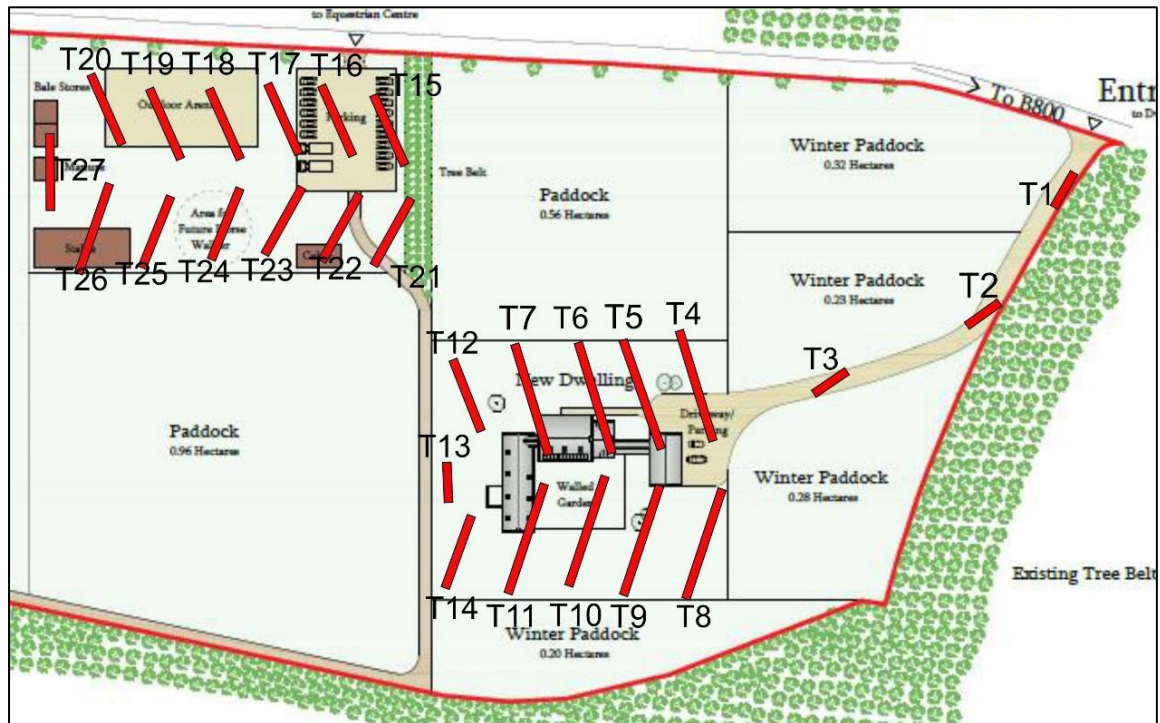


Figure 6: Location Plan of trenches as excavated. ARCHAS Cultural Heritage Ltd after Lundin Homes

3.2.5 All trenches were excavated using a mechanical excavator fitted with a 2.1m wide toothless ditching bucket under the direct supervision of a qualified archaeologist.

3.2.6 In all excavated trenches, natural subsoil was identified. Where any features of archaeological potential were encountered these were investigated by the ARCHAS on site team. Any archaeological deposits or artefacts recovered were recorded to ARCHAS Ltd and Chartered Institute for Archaeologists (*CIfA*) standards and relevant details noted down on ARCHAS *pro forma* sheets.

4 Results – Metal Detecting Survey

4.1 General

- 4.1.1 Conditions for the metal detecting survey were excellent, with the Winter Barley perhaps only slightly too long in the north western area of the site. However, it was not felt that this detracted from the results of the survey.
- 4.1.2 The two detectors complimented each other perfectly. Tests on known metallic objects on specific areas of the site showed while both detected all metals, where the signals from one detector were weaker, these tended to be stronger on the other.



Plate 2: Investigating a signal
(Photograph 009)



Plate 3: Removing metal objects (Photograph 011)

- 4.1.2 The results were notable for the paucity of artefacts recovered, including the modern Fe and agricultural detritus which was discarded by the archaeological team.

4.2 The Finds

- 4.2.1 A total of thirteen artefacts were recorded from the metal detecting survey of the proposed development site at Dundas Dairy. A few of the more notable artefacts are discussed below. A full list of the artefacts recovered can be consulted in Appendix C.

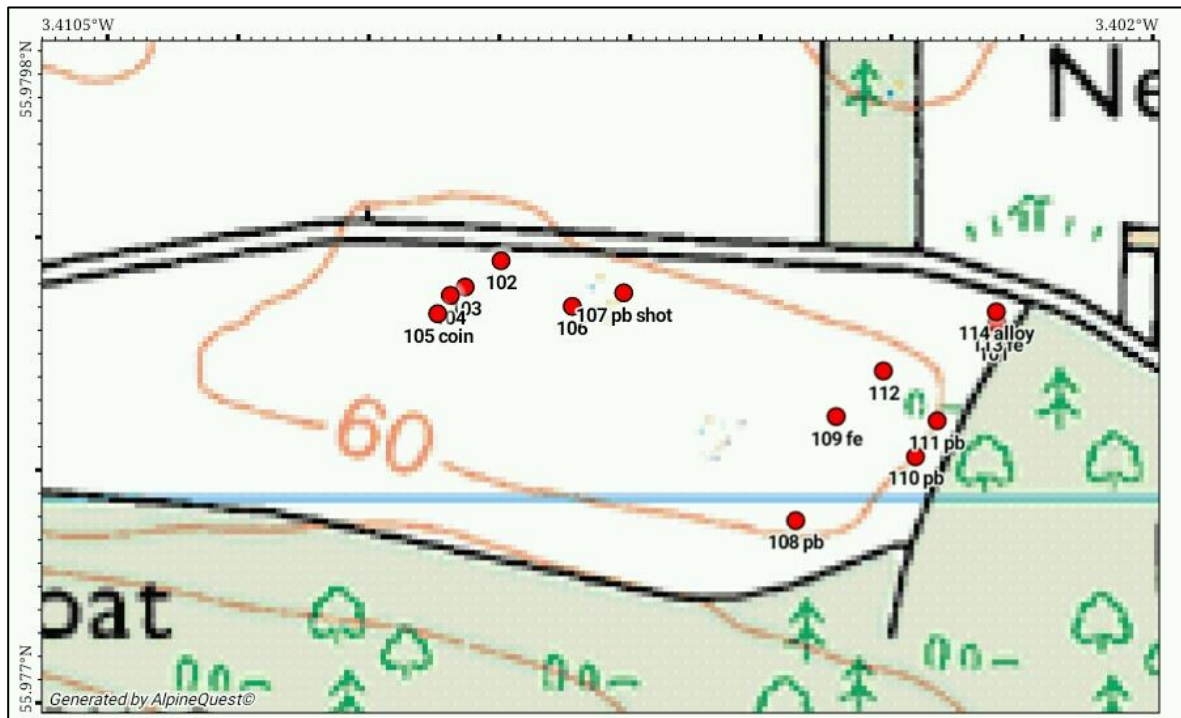


Figure 7: Location of artefacts recovered. ARCHAS and Jim Knowles after Ordnance Survey. Crown Copyrights. All Rights Reserved

Coin **SF105**

- 4.2.2 A small coin (**SF105** - Plate 4) was recovered from the western edge of the site. Careful brushing to remove the adhering soil and analysis under a magnifying glass failed to reveal any diagnostic detail. Although any interpretation must be considered very tentative, the size and nature of the coin tends to indicate a date from the 17th century or earlier.

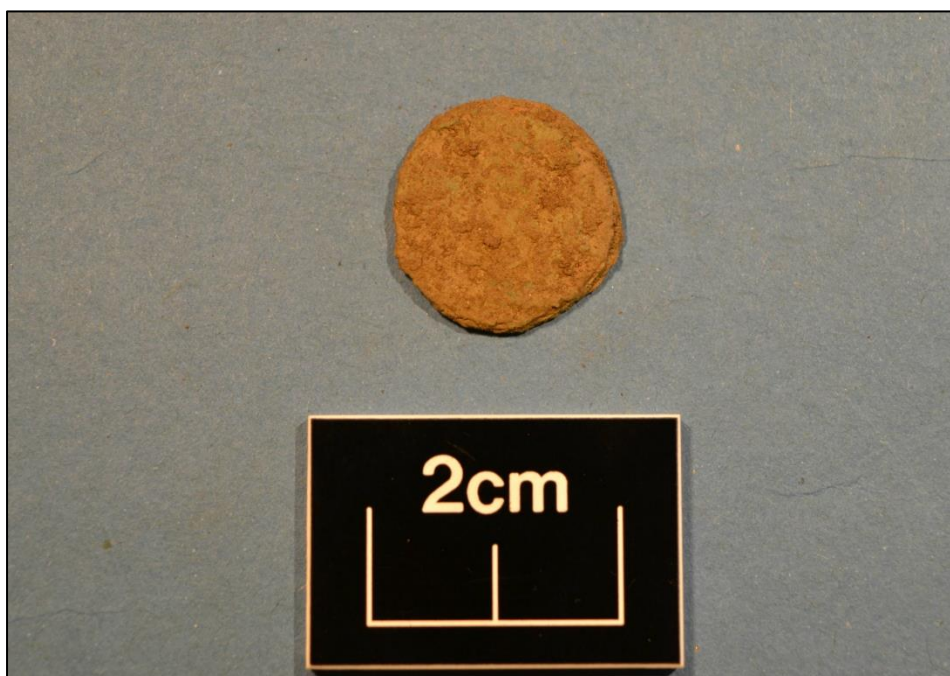


Plate 4: Detailed view of SF105 (Photograph 034)

Pistol Ball SF106

- 4.2.3 A small Pb pistol ball (**SF106** - Plate 5) was also recovered from the eastern end of the site, in proximity to coin **SF105**. This pistol ball has impact damage, but it is not possible to say whether this was used for recreational or military purposes.



Plate 5: Detailed view of pistol ball SF106
(Photograph 032)

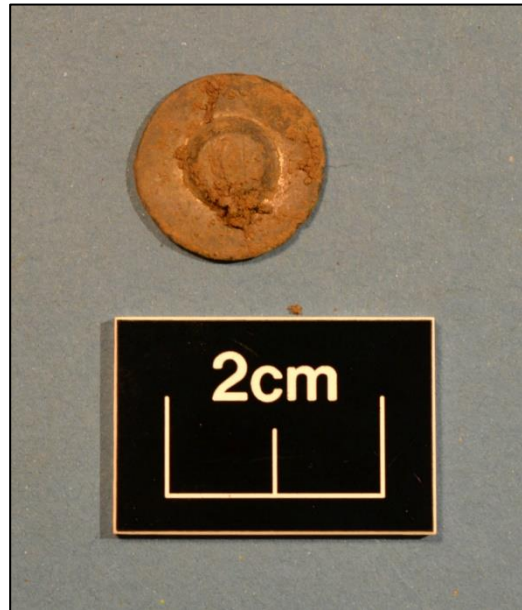


Plate 6: Detailed view of button SF103
(Photograph 040)

Medieval Ceramic sherd SF112

- 4.2.6 **SF112** was the most unexpected discovery during the metal detecting survey as it was recovered from the soil based on a signal received from the detector. This was checked once the artefact was removed by the soil with the metal detector seemingly recording the Pb glaze on the sherd.

5 Results - Evaluation

5.1 General

- 5.1.1 The archaeological evaluation at Dundas Dairy failed to reveal any archaeological remains of any significance. The only features noted relate to post-medieval agricultural use of the proposed development site.
- 5.1.2 The area proposed for development comprises 12,100m². In the WSI, ARCHAS committed to investigating at least 10% of this area, while maintaining good spatial coverage. In total 27 trenches were opened (Plate 7) during the evaluation covering a total of 1228.5m² or just over 10% of the overall area.
- 5.1.3 All trenches were located in areas that are due to be impacted by the proposed area for development. Trenches 1-3 were located along the path of the driveway, Trenches 4-14 were located on the site of the proposed new dwelling and immediate surrounding area, whilst Trenches 15-27 were located to the north-west of the dwelling, on the site of the stable block and associated buildings.



Plate 7: Working shot showing Trench 4 being opened

- 5.1.4 A description of all trenches and the key deposits and features identified in each trench is provided below. In each case the initial letter applied to a context define the trench in which it was located. For example **(101)** would be the first deposit recorded in Trench 1. All context numbers are recorded in **bold**.
- 5.1.5 Details and dimensions of trenches excavated can be viewed in Appendix D.

5.2 Trenches

Archaeologically Sterile Trenches

- 5.2.1 Trenches 3, 8, 9, 10, 15, 17, 22 and 23 were found to be devoid of any archaeological features. In general, ploughsoil (a moderately compact mid to dark brown silty loam with a thickness of 0.30m to 0.40m) was removed by mechanical excavator to reveal subsoil in all trenches. The subsoil varied from a yellow orange silty clay to a mid brown-grey silty clay. In several trenches, particularly towards the southern part of the site, an interface deposit with a thickness of c.0.10m was noted.

Trenches with Features

- Trench 1

- 5.2.2 Trench 1 was located towards the north-east of the site, at the northern extent of the proposed driveway for the new development. It was situated towards the bottom of the north facing slope that runs down towards the road.
- 5.2.3 The ploughsoil, comprising a dark grey brown silty loam (**101**) was removed by mechanical excavator, to reveal a deposit of mid brown clay loam with occasional sub-angular stones, (**102**) – the interface between the ploughsoil and the subsoil. This interface deposit was noticeably deeper than at other parts of the site, probably due to Trench 1's location at the bottom of a slope.
- 5.2.4 Below (**102**), the natural subsoil (**103**) was revealed and shown to be a firmly compact mottled light yellow brown silty clay – (**103**).
- 5.2.5 Within the natural subsoil (**103**), three features were recorded. A NW-SE aligned drain (**104**) at the northern end of the trench was filled with mid brown silty loam and a cast iron pipe, a N-S drain (**105**) filled with mid brown silty loam and a NW-SE aligned drain (**106**) filled with tightly packed angular rubble

- Trench 2

- 5.2.6 Trench 2 was located approximately 30m south-east of Trench 1, situated midway along the proposed driveway.
- 5.2.7 Removal of the ploughsoil (**201**) revealed the ploughsoil/subsoil interface deposit (**202**), shown to be the same as (**102**) in Trench 1. Subsoil (**203**) was reached under (**202**) and was the same as (**103**) in Trench 1.
- 5.2.8 A NW-SE aligned drain (**203**) with a red ceramic pipe ran across Trench 2.

- Trench 4

- 5.2.9 Trench 4 was excavated c.25m east of Trench 3, within the footprint of the area around the proposed new dwelling. It was situated on flat ground away from the slight slope to the north and south.
- 5.2.10 The ploughsoil (**401**) was removed and was found to overlie an interface deposit of mid grey brown silt (**402**). This lay above the subsoil (**403**), a well compacted mottled mid yellow grey silty clay with a moderate amount of sub-rounded stones.
- 5.2.11 Four rubble-filled field drains were present, cut into subsoil (**403**). Three ((**404**), (**405**) and (**406**)) had WNW-ESE alignments, and all three were filled with well compacted sub-angular

to angular stones. The fourth (**407**) ran on a N-S alignment, with a perfectly straight cut, well-defined edges and a dark grey-brown silty loam fill.

- Trench 5

5.2.12 Trench 5 was located 15m west of Trench 4, and was also situated on flat ground.

5.2.13 Ploughsoil (**501**) was removed and shown to overlie the subsoil/ploughsoil interface deposit (**502**), a mid brown silty loam. (**502**) overlay the natural subsoil (**503**), which in this trench was found to be a mid yellow-brown silty clay with frequent sub angular to sub-rounded stones (Plate 8).

5.2.14 Two field drains, (**504**) and (**505**), were found running through the centre of this trench, both with a WNW-ESE orientation. Both were filled with well compacted sub-angular rubble and align with (**404**) and (**405**) in Trench 4.



Plate 8: Post-excavation view of Trench 5



Plate 9: Post-excavation view of Trench 15. Note variation in subsoil with Trench 5 (left)

- Trench 6

5.2.12 Trench 6 was located 15m west of Trench 5 and occupied the same area of flat ground.

5.2.13 Ploughsoil (**601**) was removed by the excavator and found to overlie interface deposit (**602**), the same deposit as (**502**) in Trench 5. (**602**) lay between the ploughsoil and the natural subsoil (**603**), a mid yellow-brown silty clay with frequent sub-angular stones.

5.2.14 Two field drains were recorded in Trench 6, (**604**) and (**605**). Both were rubble-filled, had WNW-ESE orientations and were aligned with those revealed in Trenches 4 and 5.

- Trench 7

- 5.2.15 Trench 7 was located approximately 15m west of Trench 6, on the same plateau of flat ground as Trenches 4 to 6.
- 5.2.16 As elsewhere, ploughsoil (**701**) overlay a thin interface deposit (**703**) which in turn overlay the natural subsoil (**703**), which was found to be the same as (**603**) in Trench 6.
- 5.2.17 Two well-compacted rubble-filled field drains (**704**) and (**705**) were noted, running on the same WNW-ESE alignment as those found in Trenches 5 and 6. A N-S field drain was also noted in this trench at its SSE end, with very well defined perfectly straight edges and filled with a mixed dark grey loam.

- Trench 11

- 5.2.18 Trench 11 was located to the south of Trench 7, situated partially at the edge of the low plateau of flat ground and partly on ground that begins to slope to the south.
- 5.2.19 The first deposit reached was, as elsewhere, a dark grey brown loamy ploughsoil (**1101**). Beneath this deposit was the ploughsoil/subsoil interface (**1102**), a mid yellow-grey loam, which overlay the natural subsoil (**1103**) which varied from a light brown yellow silty clay to a mid brown grey silty clay. The changeable nature of the subsoil in this trench is likely due to its position on sloping ground, as similar variation was also noted in Trenches 8 to 10, which are situated on the same south-facing slope.
- 5.2.20 A single N-S field drain (**1104**) was noted, cut into the subsoil (**1103**). This is the continuation of (**706**), the N-S field drain noted in Trench 7.

- Trench 12

- 5.2.21 Trench 12 was located 15m west of Trench 7, and was situated on the same plateau of flat ground.
- 5.2.22 Ploughsoil (**1201**) was removed and shown to overlie the subsoil/ploughsoil interface deposit (**1202**), a mid brown silty loam. (**1202**) overlay the natural subsoil (**1203**), which in this trench was found to be a mid yellow-brown silty clay with frequent sub angular to sub-rounded stones.
- 5.2.23 A single E-W field drain (**1204**) was revealed running across the NNW end of the trench. It was filled with well compacted angular to sub-angular stones.

- Trench 13

- 5.2.24 Trench 13 was located approximately 10m south west of the southern end of Trench 12, on generally flat ground.
- 5.2.25 Ploughsoil (**1301**) overlay a thin interface deposit (**603**) which in turn overlay the natural subsoil (**703**), which was found to be a well compacted mid yellow brown silty clay with frequent sub-angular to sub-rounded stones.
- 5.2.26 An arrangement of large stones (**1304**) was investigated but were found to be a natural deposit, likely the result of glacial activity.

- Trench 14

- 5.2.27 Trench 14 was located 15m west of Trench 11, and was situated on the same south-facing slope as Trenches 8 to 11.

5.2.28 The first deposit removed was ploughsoil (**1401**), which was removed and shown to overlie the subsoil/ploughsoil interface deposit (**1402**), a mid brown silty loam. (**1402**) overlay the natural subsoil (**1403**), which in this trench was found to be a light yellow-brown to mottled mid brown silty clay with frequent sub angular to sub-rounded stones (Plate 9).

5.2.29 A single N-S field drain (**1404**) was noted in this trench, filled with well compacted sub-angular stones.

- Trench 16

5.2.30 Trench 16 was located just south of the road to the north of the site, and was situated on ground that is generally level, though with a slight slope to the north in places.

5.2.31 Ploughsoil (**1601**) was the first deposit removed in this trench. It consisted of a moderately compact mid to dark brown loam and was found to overlie subsoil (**1602**), a mixed and mottled mid brown and grey boulder clay with frequent angular stones. This subsoil was notably clean and mid brown at the NW end of the trench. Trenches 15-27 did not exhibit the same defined mixed interface deposit between the ploughsoil and subsoil that was seen elsewhere on the site.

5.2.32 This trench contained two field drains, (**1603**), a N-S orientated rubble-filled drain running obliquely across the centre of the trench, and (**1604**), a E-W cut filled with mixed dark brown silty loam and containing a red ceramic drain.

- Trench 17

5.2.33 Trench 17 was located c.15m west of Trench 16 and was situated on ground that is generally level, though with a slight slope to the north in places.

5.2.34 Ploughsoil (**1701**) was removed and was found to be the same as (**1601**) in Trench 16. It overlay subsoil (**1702**), a mottled mid brown and grey boulder clay with frequent angular stones, cleaner than in other parts of the north-west of the site except for at the south-east end of the trench.

5.2.35 A single sub-oval feature (**1703**) was noted, but after investigation was found to be a shallow natural depression filled with silted-up topsoil (Plate 11).

- Trench 18

5.2.36 Trench 18 was located approximately 15m west of Trench 17, on generally flat ground.

5.2.37 Ploughsoil (**1801**) overlay natural subsoil (**1803**) which was found to be the same as (**1602**).

5.2.38 Three field drains were recorded in this trench, (**1803**), (**1804**) and (**1805**). All were orientated E-W and all were located in the north-western half of the trench.

- Trench 19

5.2.39 Trench 19 was located 15m west of Trench 18, and was similarly situated on mostly flat ground.

5.2.40 Ploughsoil (**1901**) was removed and shown to overlie the subsoil (**1902**), which here consisted of a well compacted light orange brown silty clay (Plate 10).

5.2.41 A single E-W field drain (**1903**) was revealed running across the NW end of the trench. It was filled with well compacted angular to sub-angular stones.



Plate 10: ENE-facing sample section of Trench 19, shows character of ploughsoil noted across site

- Trench 20

5.2.42 Trench 20 was located c. 15m to the west of Trench 19, situated on ground that sloped very slightly to the north.

5.2.43 The first deposit reached was, as elsewhere, a dark grey brown loamy ploughsoil (**2001**). Beneath this deposit was natural subsoil (**2002**) which was found to be the same as (**1902**) in Trench 19, though slightly cleaner clay to the south-east end of the trench.

5.2.44 A single E-W field drain (**2003**) was noted. This is the continuation of (**1903**), the E-W field drain noted in Trench 19.

- Trench 21

5.2.45 Trench 21 was located to the south of Trench 15, on ground that sloped slightly to the north.

5.2.46 Ploughsoil (**2101**) was removed and overlay the subsoil (**2102**), a very well compacted mottled orange-brown to grey-brown silty clay.

5.2.47 One field drain (**2103**) was recorded in this trench. It was located towards the south-western part of the trench, had a N-S orientation and was filled with a mixture of compact angular to sub-angular rubble and mixed dark brown loam.

- Trench 24

5.2.48 Trench 24 was located c. 15m west of Trench 23, on ground that had a slight slope to the north.

5.2.49 Ploughsoil (**2401**) was removed and found to be the same as elsewhere on site. It overlay the subsoil (**2402**), a very well compacted mottled orange-brown to grey-brown silty clay.

5.2.50 A single E-W field drain (**2403**) was recorded in this trench. It was located towards the south-western part of the trench and was filled with compact angular to sub-angular rubble.

- Trench 25

- 5.2.51 Trench 25 was located c. 15m west of Trench 24 and was situated on ground that is generally level, though with a slight slope to the north in places.
- 5.2.52 Ploughsoil (**2501**) was removed and overlay subsoil (**2502**), a well compacted mottled orange-brown to grey-brown silty clay.
- 5.2.53 A single E-W rubble-filled field drain (**2503**) (Plate 12) was noted, and is almost certainly the continuation of drain (**2403**) in Trench 24, as it lies on the same orientation and has the same compacted rubble fill. This drain was also noted as (**2603**) in Trench 26.

- Trench 26

- 5.2.30 Trench 26 was located c. 15m west of Trench 25 and similarly situated on mostly flat ground with a slight north-facing slope in parts.
- 5.2.31 Ploughsoil (**2601**) was the first deposit removed in this trench. It consisted of a moderately compact mid to dark brown loam and was found to overlie subsoil (**1602**), a well compacted mottled brown-orange to grey-brown silty clay.
- 5.2.32 This trench contained two rubble-filled E-W field drains, (**2603**), a E-W orientated rubble-filled drain running across the north-eastern end of the trench and aligning with (**2403**) and (**2503**) in Trenches 24 and 25 and (**2604**), running across the centre of the trench.

- Trench 27

- 5.2.30 Trench 27 was located at the western end of the north-west part of the site, and was situated on ground that is generally level.
- 5.2.31 Ploughsoil (**2701**) was the first deposit removed in this trench, and was found to be the same as elsewhere across the site. It overlay subsoil (**1602**), a well compacted mottled mid grey-brown silty clay with a moderate amount of sub-rounded stones.
- 5.2.32 This trench contained a single field drain, (**2703**), a E-W orientated rubble-filled drain running across the centre of the trench.



Plate 11: Pre-excavation shot of natural geological stone arrangement (1703)



Plate 12: Field drain (2503) in Trench 25, typical of the drain found across the site

6 Summary and Discussion

6.1 General

6.1.1 Although located in close proximity to Dundas Castle and its surrounding designed landscape, the site at Dundas Dairy was shown to be devoid of any identified significant buried or above ground archaeology.

6.2 Metal Detecting Survey

6.2.1 The metal detecting survey failed to reveal artefacts of any significance. Of the artefacts recorded only the unidentifiable coin **SF105**, the pistol ball **SF106** and the button **SF103** are notable. These were retained along with the small alloy button **SF103** and the sherd of medieval ceramic **SF112**. All the other metal detecting finds were discarded following discussion with CECAS.

6.2.2 Although unidentifiable, the coin **SF105** may be tentatively attributed to the 17th-18th centuries based on size, style and composition. It is tentative to tie the pistol ball **SF106** to military use, especially due to the proximity of Dundas Castle, but a solitary impacted pistol ball may equally have had a recreational or hunting usage.

6.2.3 Although a quantity of modern farming and agricultural detritus was recovered and subsequently discarded, the metal detecting survey was notable for the overall lack of artefacts detected.

6.2.4 The location of the site is secluded, in proximity to a historic site (Dundas Castle) and easily accessible from a major population centre. The topography is good for a metal detecting survey and the paucity of artefacts recovered created the feeling that the site may have been subject to comprehensive metal detecting in the past.

6.2.5 All of the artefacts recovered can either be attributed to casual loss or deposition, or agricultural activity. Nothing in the number or concentration of artefacts indicates the presence of significant archaeological activity.

6.3 Evaluation Trenches

6.3.1 The only features noted in the evaluation trenches were field drains, all of which appear to date from the post-medieval to modern periods.

6.3.2 As indicated by the presence of such a comprehensive drainage system together with the fertile character of the topsoil noted across the site, the area under investigation is likely to have been used for agricultural purposes for many years.

6.3.3 It is possible that very shallow ephemeral archaeological features may have been ploughed away over centuries of intensive agricultural use, but there was no evidence for any pre- 19th to 20th century human activity from either the local topography or any *ex-situ* artefactual material.

6.3.6 The lack of any *ex situ* artefactual material pre-dating the 19th century, is also indicative of an absence of earlier significant archaeology on this site.

7 Conclusions and Recommendations

7.1 General

- 7.1.1 The results of both the metal detecting survey and the archaeological evaluation revealed no evidence of deposits or features pre-dating the 19th century.
- 7.1.2 Of the artefacts recovered by the metal detecting survey, only five are retained for submission to the Treasure Trove process. Following discussions with CECAS the unidentifiable coin **SF105** will be submitted to the Scottish Conservation Studio to ensure this does not degrade further.
- 7.1.3 The only features noted during the evaluation were field drains related to post-medieval and modern agriculture, while any artefacts recovered during the metal detecting survey can be attributed to casual loss or (in the case of the pistol ball) recreational usage.
- 7.1.4 ARCHAS Cultural Heritage Ltd recommend that the proposed development be allowed to proceed and the planning condition be accepted as having been met.
- 7.1.5 While ARCHAS can provide recommendations as to any future work on site, the final decision for any further archaeological mitigation rests with City of Edinburgh Council as advised by CECAS.

8 Conservation Summary for Coin SF105

8.1 General

- 8.1.1 The unidentified coin **SF105** was submitted to the Scottish Conservation Studio on 22nd August 2016 as recommended by CECAS and outlined in the original draft of the Data Structure Report (see Section 7 above).
- 8.1.2 The conservation process was completed by Will Murray by 26th September 2016.

8.2 Process and Results

- 8.2.1 Following discussion with Mr Murray, it was agreed that the coin would be surface cleaned as far as is helpful, stabilised with BTA and consolidated with acrylic resin to provide surface strength and allow handling.
- 8.2.2 Cleaning of the coin confirmed it to be very badly preserved with deep corrosion dominating the external surfaces. The condition of the coin was such that the cleaning process failed to reveal any detail to assist in identification of the artefact and confirmed that further cleaning would not provide such detail.
- 8.2.3 Interestingly, analysis of the coin under a microscope indicates it may in actually be two coins stuck together, one of which may have been a silvered coin. However, the condition of the artefact(s) is such, that it would not be possible to separate the two.⁴

8.3 Conclusion and Discussion

- 8.3.1 Unfortunately the cleaning and conservation of the coin **SF105** from Dundas Dairy failed to reveal any indication as to the date and type of coin. However, it did raise the possibility that the artefact is actually two coins. While it is not possible to confirm this one way or another, if two coins degrade in close proximity to one another in this manner, it is likely that they were originally deposited in a container or perhaps a purse which held them together long enough for them to become fused, before the container itself became degraded and lost.
- 8.3.2 The conservation of the coin **SF105** means that the archaeological involvement at Dundas Dairy is complete and the planning condition can be discharged. The coin will be submitted as part of the wider assemblage for curation through the Treasure Trove process.

⁴ Will Murray, Scottish Conservation Studio *pers. comm.* – 26/09/16

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We must also note the assistance and understanding provided by John Lawson of City of Edinburgh Council Archaeology Unit in the planning phase of the project.

Bibliography

Electronic References

www.bgs.ac.uk
www.dundycastle.co.uk
www.pastmap.org.uk
www.rcahms.gov.uk

Cartographic References

Maps consulted during the cartographic regression include:

Robert Gordon (1580-1661)

- 'A map of Eastern Scotland, including basins of Rivers Don, Dee, Tay, Forth and Tweed'. Imprint c.1636-52

Joan Blaeu (1596-1673) and Cornelius Blaeu (d.1644)

- 'Lothian and Linlithgo / Joh. Et Cornelius Blaeu exc.'. Published 1654

William Roy (1726-1790)

- 'Military Survey of Scotland'. Published 1747-1755

John Thomson (1777 – ca.1840) and William Johnson (fl. 1806 – 1840)

- 'Linlithgowshire. Imprint: Edinburgh: J. Thompson & Co., 1820

Ordnance Survey (1854-present)

- 25 inch to 1 mile Linlithgow Sheet VI.4 (Dalmeny, Cramond & Queensferry). Surveyed 1854. Published 1856
- 25 inch to 1 mile Linlithgowshire 006.04. Surveyed 1895. Published 1897
- 6 inch to 1 mile Edinburghshire, Sheet 1. Surveyed 1852. Published 1853
- 6 inch to 1 mile Linlithgowshire Sheet VI.NE. Surveyed 1895. Published 1898

Documentary References

Cameron, R. 2016 "Dundas Dairy, Dundas Home Farm, City of Edinburgh Written Scheme of Investigation." ARCHAS Cultural Heritage Ltd unpublished grey literature report

Appendix A Context Register

Context No.	Trench	Type	Description	Dimension	Comments	Date	Initial
101	1	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: c. 0.35m	Topsoil/ploughsoil - present in all trenches	25/05/16	JD
102	1	Deposit	Mid brown-grey clay loam with occasional sub-angular stones	D: 0.35 - 0.60m	Topsoil/subsoil interface deposit - thicker in this trench than at other parts of site, likely due to Trench 1's position at the bottom of a slope	25/05/16	JD
103	1	Deposit	Mottled light yellow-brown silty clay	-	Natural subsoil - present in all trenches, though with slight variations across site	25/05/16	JD
104	1	Feature	NW-SE linear field drain	-	Excavated	25/05/16	JD
105	1	Feature	N-S linear field drain	-	Excavated	25/05/16	JD
106	1	Feature	NW-SE linear field drain	-	Rubble-filled	25/05/16	JD
201	2	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: c. 0.30m	Topsoil/ploughsoil	25/05/16	JD
202	2	Deposit	Mid brown-grey clay loam with occasional sub-angular stones	D: 0.30-0.50m	Topsoil/subsoil interface	25/05/16	JD
203	2	Deposit	Mottled light yellow-brown silty clay	-	Natural subsoil	25/05/16	JD
204	2	Feature	NW-SE linear field drain with red ceramic pipe	-		25/05/16	JD
301	3	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0.30-0.50m	Topsoil/ploughsoil	25/05/16	JD
302	3	Deposit	Mid brown-grey clay loam with occasional sub-angular stones	D: 0.30-0.50m	Topsoil/subsoil interface	25/05/16	JD
303	3	Deposit	Mottled light yellow-brown silty clay	-	Natural subsoil	25/05/16	JD
401	4	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.35m	Topsoil/ploughsoil	25/05/16	JD
402	4	Deposit	Mid grey-brown silty loam	D: 0.35-0.45m	Topsoil/subsoil interface	25/05/16	JD
403	4	Deposit	Well compacted mottled yellow-grey silty clay with a moderate amount of sub-rounded stones	-	Natural subsoil	25/05/16	JD
404	4	Feature	WNW-ESE field drain	-	Rubble-filled	25/05/16	JD
405	4	Feature	WNW-ESE field drain	-	Rubble-filled	25/05/16	JD
406	4	Feature	WNW-ESE field drain	-	Rubble-filled	25/05/16	JD
407	4	Feature	N-S linear field drain	-		25/05/16	JD
501	5	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.35m	Topsoil/ploughsoil	25/05/16	JD
502	5	Deposit	Mid brown silty loam	D: 0.35-0.45m	Topsoil/subsoil interface	25/05/16	JD
503	5	Deposit	Well compacted mid yellow-brown silty clay with frequent sub-angular stones	-	Natural subsoil	25/05/16	JD

Context No.	Trench	Type	Description	Dimension	Comments	Date	Initial
504	5	Feature	WNW-ESE field drain	-	Rubble-filled	25/05/16	JD
505	5	Feature	WNW-ESE field drain	-	Rubble-filled	25/05/16	JD
601	6	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.35m	Topsoil/ploughsoil	25/05/16	JD
602	6	Deposit	Mid brown silty loam	D: 0.35-0.45m	Topsoil/subsoil interface	25/05/16	JD
603	6	Deposit	Well compacted mid yellow-brown silty clay with frequent sub-angular stones	-	Natural subsoil	25/05/16	JD
604	6	Feature	WNW-ESE field drain	-	Rubble-filled	25/05/16	JD
605	6	Feature	WNW-ESE field drain	-	Rubble-filled	25/05/16	JD
701	7	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.35m	Topsoil/subsoil	25/05/16	JD
702	7	Deposit	Mid brown silty loam	D: 0.35-0.45m	Topsoil/subsoil interface	25/05/16	JD
703	7	Deposit	Well compacted mid yellow-brown silty clay with frequent sub-angular stones	-	Natural subsoil. Trenches 8 - 11 are on land that slopes to the south, hence the subsoil in these is more variable than on flatter parts of the site	25/05/16	JD
704	7	Feature	WNW-ESE field drain	-	Rubble-filled	25/05/16	JD
705	7	Feature	WNW-ESE field drain	-	Rubble-filled	25/05/16	JD
706	7	Feature	N-S linear field drain	-	Same as (1104)	25/05/16	JD
801	8	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	25/05/16	JD
802	8	Deposit	Mid yellow grey loam	0D: .30-0.40m	Topsoil/subsoil interface	25/05/16	JD
803	8	Deposit	Well compacted mid yellow-brown to mid yellow-grey silty clay with frequent sub-rounded stones	-	Natural subsoil	25/05/16	JD
901	9	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	25/05/16	JD
902	9	Deposit	Mid yellow grey loam	D: 0.30-0.45m	Topsoil/subsoil interface	25/05/16	JD
903	9	Deposit	Well compacted mid yellow-brown to mid yellow-grey silty clay with frequent sub-rounded stones	-	Natural subsoil.	25/05/16	JD
1001	10	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	25/05/16	JD
1002	10	Deposit	Mid yellow grey loam	D: 0.30-0.40m	Topsoil/subsoil interface	25/05/16	JD
1003	10	Deposit	Well compacted mid yellow-brown to mid yellow-grey silty clay with frequent sub-rounded stones	-	Natural subsoil	25/05/16	JD

Context No.	Trench	Type	Description	Dimension	Comments	Date	Initial
1101	11	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	25/05/16	JD
1102	11	Deposit	Mid yellow grey loam	D: 0.30-0.40m	Topsoil/subsoil interface	25/05/16	JD
1103	11	Deposit	Well compacted light brown-yellow to mottled mid brown-greysilty clay with frequent sub-rounded stones, some of which are very large	-	Natural subsoil	25/05/16	JD
1104	11	Feature	N-S linear field drain	-	Same as (706)	25/05/16	JD
1201	12	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.35m	Topsoil/ploughsoil	25/05/16	JD
1202	12	Deposit	Mid brown silty loam	D: 0.35-0.45m	Topsoil/subsoil interface	25/05/16	JD
1203	12	Deposit	Well compacted mid yellow-brown silty clay with frequent sub-angular stones	-	Natural subsoil	25/05/16	JD
1204	12	Feature	E-W linear field drain	-	Rubble-filled	25/05/16	JD
1301	13	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	25/05/16	JD
1302	13	Deposit	Mid yellow grey loam	D: 0.30-0.40m	Topsoil/subsoil interface	25/05/16	JD
1303	13	Deposit	Well compacted light brown-yellow to mottled mid brown-greysilty clay with frequent sub-rounded stones, some of which are very large	-	Natural subsoil	25/05/16	JD
1304	13	Feature	Arrangement of large sub-rounded stones within (1303)	D: 0.30m +	Natural geological formation - likely the result of glaciation	25/05/16	JD
1401	14	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	25/05/16	JD
1402	14	Deposit	Mid yellow grey loam	D: 0.30-0.40m	Topsoil/subsoil interface	25/05/16	JD
1403	14	Deposit	Well compacted light brown-yellow to mottled mid brown-greysilty clay with frequent sub-rounded stones, some of which are very large	-	Natural subsoil	25/05/16	JD
1404	14	Feature	N-S linear field drain	-	Rubble-filled	25/05/16	JD
1501	15	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D:0-0.30m	Topsoil/ploughsoil	25/05/16	RC
1502	15	Deposit	Mixed and mottled mid brown and grey boulder clay with frequent angular stones	-	Natural subsoil	25/05/16	RC
1601	16	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	25/05/16	RC

Context No.	Trench	Type	Description	Dimension	Comments	Date	Initial
1602	16	Deposit	Mixed and mottled mid brown and grey boulder clay with frequent angular stones	-	Natural subsoil. Very clean and brown at NW end of trench	25/05/16	RC
1603	16	Feature	N-S linear field drain	-	Rubble-filled	25/05/16	RC
1604	16	Feature	E-W linear field drain	-	Contains red ceramic pipe	25/05/16	RC
1701	17	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	25/05/16	RC
1702	17	Deposit	Mixed and mottled mid brown and grey boulder clay with frequent angular stones	-	Natural subsoil	25/05/16	RC
1703	17	Feature	Shallow irregular cut with dark grey-brown fill	L: 0.51m, W: 0.38m, D: 0.06m	Shallow natural depression	25/05/16	RC
1801	18	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	25/05/16	RC
1802	18	Deposit	Mixed and mottled mid brown and grey boulder clay with frequent angular stones	-	Natural subsoil	25/05/16	RC
1803	18	Feature	E-W linear field drain	-		25/05/16	RC
1804	18	Feature	E-W linear field drain	-	Rubble-filled	25/05/16	RC
1805	18	Feature	E-W linear field drain	-		25/05/16	RC
1901	19	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.35m	Topsoil/ploughsoil	25/05/16	RC
1902	19	Deposit	Well compacted light orange-brown silty clay	-	Natural subsoil	25/05/16	RC
1903	19	Feature	E-W linear field drain	-	Rubble-filled. Same as (2003)	25/05/16	RC
2001	20	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.35m	Topsoil/ploughsoil	25/05/16	RC
2002	20	Deposit	Well compacted light orange-brown silty clay	-	Natural subsoil. Cleaner clay at SE end of trench	25/05/16	RC
2003	20	Feature	E-W linear field drain	-	Rubble-filled. Same as (1903)	25/05/16	RC
2101	21	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	25/05/16	RC
2102	21	Deposit	Very well compacted mottled orange-brown and grey silty clay	-	Natural subsoil	25/05/16	RC
2103	21	Feature	N-S linear field drain	-	Partially rubble-filled	25/05/16	RC
2201	22	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	25/05/16	RC
2202	22	Deposit	Very well compacted mottled orange-brown and grey silty clay	-	Natural subsoil. Has a slightly more mixed interface with (2201) at SW end of trench	25/05/16	RC
2301	23	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	26/05/16	JD

Context No.	Trench	Type	Description	Dimension	Comments	Date	Initial
2302	23	Deposit	Very well compacted mottled orange-brown and grey silty clay	-	Natural subsoil	26/05/16	JD
2401	24	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	26/05/16	JD
2402	24	Deposit	Very well compacted mottled orange-brown and grey silty clay	-	Natural subsoil	26/05/16	JD
2403	24	Feature	E-W linear field drain	-	Rubble-filled. Same as (2503) and (2603)	26/05/16	JD
2501	25	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	26/05/16	JD
2502	25	Deposit	Very well compacted mottled orange-brown and grey silty clay	-	Natural subsoil	26/05/16	JD
2503	25	Feature	E-W linear field drain	-	Rubble-filled. Same as (2403) and (2603)	26/05/16	JD
2601	26	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	D: 0-0.30m	Topsoil/ploughsoil	26/05/16	JD
2602	26	Deposit	Well compacted mottled grey-brown to brown-orange silty clay with frequent sub-angular to sub-rounded stones	-	Natural subsoil	26/05/16	JD
2603	26	Feature	E-W linear field drain	-	Rubble-filled. Same as (2403) and (2503)	26/05/16	JD
2604	26	Feature	E-W linear field drain	-	Rubble-filled	26/05/16	JD
2701	27	Deposit	Dark grey-brown silty loam - topsoil/ploughsoil	0-0.30m	Topsoil/ploughsoil	26/05/16	JD
2702	27	Deposit	Well compacted mid grey-brown silty clay with a moderate amount of sub-rounded stones	-	Natural subsoil	26/05/16	JD
2703	27	Feature	E-W linear field drain	-	Rubble-filled	26/05/16	JD

Appendix B Photographic Register

Metal Detecting

Image No.	Direction facing	Find Number	Description	Date	Initials
001	S	-	Pre-excavation view	07/04/16	RC
002	W	-	Pre-excavation view	07/04/16	RC
003	SW	-	Pre-excavation view	07/04/16	RC
004	W	-	Pre-excavation view	07/04/16	RC
005	NW	-	Pre-excavation view	07/04/16	RC
006	N	-	Pre-excavation view	07/04/16	RC
007	SW/ V	-	Pre-excavation view - length of crop	07/04/16	RC
008	N	-	Working shot - investigating signals	22/04/16	RC
009	SE	-	Working shot - investigating signals	22/04/16	RC
010	E	-	Working shot - investigating signals	22/04/16	RC
011	E	-	Working shot - investigating signals	22/04/16	RC
012	SE	-	Working shot - investigating signals	22/04/16	RC
013	S	-	Working shot - detecting in transects	22/04/16	AR
014	S	-	Working shot - detecting in transects	22/04/16	AR
015	S	-	Working shot - detecting in transects	22/04/16	AR
016	S	-	Working shot - detecting in transects	22/04/16	AR
017	S	-	Working shot - detecting in transects	22/04/16	AR
018	E	-	Working shot - investigating signals	22/04/16	RC
019	V	-	Working shot - discarded modern Fe	22/04/16	RC
020	S	-	Working shot - detecting in transects	22/04/16	RC
021	V	-	Working shot - discarded modern Fe	22/04/16	RC
022	V	-	Working shot - discarded modern Fe	22/04/16	RC
023	NE	-	Working shot - detecting in transects	22/04/16	RC
024	NE	-	Working shot - detecting in transects	22/04/16	RC
025	NE	-	Working shot - detecting in transects	22/04/16	RC
026	NE	-	Working shot - detecting in transects	22/04/16	RC
027	NE	-	Working shot - detecting in transects	22/04/16	RC
028	NE	-	Working shot - detecting in transects	22/04/16	RC
029	W	-	Working shot - Metal detectors	22/04/16	RC
030	-	SF106	Detailed view of SF106	04/05/16	RC
031	-	SF106	Detailed view of SF106	04/05/16	RC
032	-	SF106	Detailed view of SF106	04/05/16	RC
033	-	SF106	Detailed view of SF106	04/05/16	RC
034	-	SF105	Detailed view of SF105	04/05/16	RC
035	-	SF105	Detailed view of SF105	04/05/16	RC
036	-	SF105	Detailed view of SF105	04/05/16	RC
037	-	SF105	Detailed view of SF105	04/05/16	RC
038	-	SF105	Detailed view of SF105	04/05/16	RC
039	-	SF103	Detailed view of SF103	04/05/16	RC
040	-	SF103	Detailed view of SF103	04/05/16	RC

Evaluation

Image No.	Direction facing	Trench	Contexts No.	Description	Date	Initials
001	S			Working Shot	24/05/2016	RC
002	SW			Working Shot	24/05/2016	RC
003	SSW	Trench 1		Trench 1 - Plan	24/05/2016	RC

Image No.	Direction facing	Trench	Contexts No.	Description	Date	Initials
004	S	Trench 1		Trench 1 - Location	24/05/2016	RC
005	WNW	Trench 1		Trench 1 - Section	24/05/2016	RC
006	SW	Trench 2		Trench 2 - Location	24/05/2016	RC
007	SSW	Trench 2		Trench 2 - Plan	24/05/2016	RC
008	ESE	Trench 2		Trench 2 - Section	24/05/2016	RC
009	ESE	Trench 3		Trench 3 - Location	24/05/2016	RC
010	ESE	Trench 3		Trench 3 - Plan	24/05/2016	RC
011	SSW	Trench 3		Trench 3 - Section	24/05/2016	RC
012	S	Trench 4		Trench 4 - Location	24/05/2016	RC
013	SSE	Trench 4		Trench 4 - Plan	24/05/2016	RC
014	ENE	Trench 4		Trench 4 - Section	24/05/2016	RC
015	S	Trench 5		Trench 5 - Location	24/05/2016	RC
016	SSE	Trench 5		Trench 5 - Plan	24/05/2016	RC
017	ENE	Trench 5		Trench 5 - Section	24/05/2016	RC
018	S	Trench 6		Trench 6 - Location	24/05/2016	RC
019	SSE	Trench 6		Trench 6 - Plan	24/05/2016	RC
020	ENE	Trench 6		Trench 6 - Section	24/05/2016	RC
021	SE	Trench 7		Trench 7 - Location	24/05/2016	RC
022	SSE	Trench 7		Trench 7 - Plan	24/05/2016	RC
023	ENE	Trench 7		Trench 7 - Section	24/05/2016	RC
024	S	Trench 8		Trench 8 - Location	24/05/2016	RC
025	SSW	Trench 8		Trench 8 - Plan	24/05/2016	RC
026	ESE	Trench 8		Trench 8 - Section	24/05/2016	RC
027	SW	Trench 9		Trench 9 - Location	24/05/2016	RC
028	SSW	Trench 9		Trench 9 - Plan	24/05/2016	RC
029	ESE	Trench 9		Trench 9 - Section	24/05/2016	RC
030	SW	Trench 10		Trench10 - Location	24/05/2016	RC
031	SSW	Trench 10		Trench10 - Plan	24/05/2016	RC
032	ESE	Trench 10		Trench10 - Section	24/05/2016	RC
033	S	Trench 11		Trench 11 - Location	24/05/2016	RC
034	SSW	Trench 11		Trench 11 - Plan	24/05/2016	RC
035	ESE	Trench 11		Trench 11 - Section	24/05/2016	RC
036	S	Trench 12		Trench 12 - Location	24/05/2016	RC
037	SSW	Trench 12		Trench 12 - Plan	24/05/2016	RC
038	ESE	Trench 12		Trench 12 - Section	24/05/2016	RC
039	S			Working Shot	24/05/2016	RC
040	SE	Trench 13		Trench 13 - Location	24/05/2016	JD
041	S	Trench 13		Trench 13 - Plan	24/05/2016	JD
042	WNW	Trench 13		Trench 13 - Section	24/05/2016	JD
043	S	Trench 14		Trench 14 - Location	24/05/2016	JD
044	SSW	Trench 14		Trench 14 - Plan	24/05/2016	JD
045	WNW	Trench 14		Trench 14 - Section	24/05/2016	JD
046	NW	Trench 1		Pre-ex of (104) - Drain	24/05/2016	JD
047	N	Trench 1		Pre-ex of (105) - Drain	24/05/2016	JD
048	NW	Trench 1		Post-ex of (104) - Drain	24/05/2016	JD
049	N	Trench 1		Post-ex of (105) - Drain	24/05/2016	JD
050	NW	Trench 13		Pre-ex of (1304) - Glacial Activity	24/05/2016	JD
051	SE	Trench 13		Pre-ex of (1304) - Glacial Activity	24/05/2016	JD
052	SE	Trench 13		Post-ex of slotthrough (1304) - shows stones within subsoil - Glacial Activity	24/05/2016	JD
053	NW			Working Shot	24/05/2016	JD
054	NW			Working Shot - sondage for surveyor	24/05/2016	RC
055	NW			Working Shot - sondage for surveyor	24/05/2016	RC
056	NW			Sondage for surveyor	24/05/2016	RC
057	W			Working Shot	24/05/2016	RC

<i>Image No.</i>	<i>Direction facing</i>	<i>Trench</i>	<i>Contexts No.</i>	<i>Description</i>	<i>Date</i>	<i>Initials</i>
058	S			Working Shot	24/05/2016	RC
059	S			Working Shot	24/05/2016	RC
060	S			Working Shot	24/05/2016	RC
061	S	Trench 15		Trench 15 - Location	24/05/2016	RC
062	SSE	Trench 15		Trench 15 - Plan	24/05/2016	RC
063	WSW	Trench 15		Trench 15 - Section	24/05/2016	RC
064	S	Trench 16		Trench 16 - Location	24/05/2016	RC
065	SSE	Trench 16		Trench 16 - Plan	24/05/2016	RC
066	WSW	Trench 16		Trench 16 - Section	24/05/2016	RC
067	S	Trench 17		Trench 17 - Location	24/05/2016	RC
068	SSE	Trench 17		Trench 17 - Plan	24/05/2016	RC
069	WSW	Trench 17		Trench 17 - Section	24/05/2016	RC
070	S	Trench 18		Trench 18 - Location	24/05/2016	RC
071	SSE	Trench 18		Trench 18 - Plan	24/05/2016	RC
072	WSW	Trench 18		Trench 18 - Section	24/05/2016	RC
073	S	Trench 19		Trench 19 - Location	24/05/2016	RC
074	SSE	Trench 19		Trench 19 - Plan	24/05/2016	RC
075	WSW	Trench 19		Trench 19 - Section	24/05/2016	RC
076	S	Trench 20		Trench 20 - Location	24/05/2016	RC
077	SSE	Trench 20		Trench 20 - Plan	24/05/2016	RC
078	WSW	Trench 20		Trench 20 - Section	24/05/2016	RC
079	SSW			Working Shot	25/05/2016	JD
080	S	Trench 21		Trench 21 - Location	25/05/2016	JD
081	SW	Trench 21		Trench 21 - Plan	25/05/2016	JD
082	NE	Trench 21		Trench 21 - Section	25/05/2016	JD
083	S	Trench 22		Trench 22 - Location	25/05/2016	JD
084	SW	Trench 22		Trench 22 - Plan	25/05/2016	JD
085	NE	Trench 22		Trench 22 - Section	25/05/2016	JD
086	S	Trench 23		Trench 23 - Location	25/05/2016	JD
087	SW	Trench 23		Trench 23 - Plan	25/05/2016	JD
088	NE	Trench 23		Trench 23 - Section	25/05/2016	JD
089	S	Trench 24		Trench 24 - Location	25/05/2016	JD
090	SW	Trench 24		Trench 24 - Plan	25/05/2016	JD
091	NE	Trench 24		Trench 24 - Section	25/05/2016	JD
092	S	Trench 25		Trench 25 - Location	25/05/2016	JD
093	SW	Trench 25		Trench 25 - Plan	25/05/2016	JD
094	NE	Trench 25		Trench 25 - Section	25/05/2016	JD
095	S	Trench 26		Trench 26 - Location	25/05/2016	JD
096	SW	Trench 26		Trench 26 - Plan	25/05/2016	JD
097	NE	Trench 26		Trench 26 - Section	25/05/2016	JD
098	NW	Trench 27		Trench 27 - Location	25/05/2016	JD
099	S	Trench 27		Trench 27 - Plan	25/05/2016	JD
100	W	Trench 27		Trench 27 - Section	25/05/2016	JD
101	W	Trench 25		Field Drain (2503) in Trench 25	25/05/2016	JD
102	E	Trench 25		Field Drain (2503) in Trench 25	25/05/2016	JD
103	NE	Trench 17		Pre-ex of (1703) - Natural	25/05/2016	JD
104	E			Working Shot - Backfilling	25/05/2016	JD
105	ESE			Trenches after backfilling	25/05/2016	JD
106	ENE	Trench 17		Post-ex of (1703) - variation in natural subsoil	25/05/2016	JD
107	W			Trenches after backfilling	25/05/2016	JD
108	E			Trenches after backfilling	25/05/2016	JD

Appendix C

Finds Register

Metal Detecting

<i>Find No.</i>	<i>Co-ordinates (Latitude & Longitude)</i>	<i>Grid Reference</i>	<i>Material</i>	<i>Description</i>	<i>Date</i>	<i>Initial</i>
102	55.97894, -3.40696	NT 12302 77111	Alloy	Teardrop shaped metal object measuring less than 300mm in length. Not retained.	22/04/16	JK
103	55.97882, -3.40723	NT 12285 77098	Alloy	Small button of 157mm diameter.	22/04/16	JK
104	55.97879, -3.40734	NT 12278 77095	Pb	Pb seal. Blob of Pb. Not retained.	22/04/16	JK
105	55.97871, -3.40744	NT 12272 77086	Cu alloy	Unidentifiable coin. Diameter of 270mm. Submitted for conservation.	22/04/16	JK
106	55.97875, -3.40641	NT 12336 77089	Pb	Impacted pistol shot ball	22/04/16	JK
107	55.97881, -3.40601	NT 12361 77095	Pb	Amorphous Pb blob. Not retained.	22/04/16	JK
108	55.97785, -3.40466	NT 12443 76987	Pb	Amorphous Pb blob. Not retained.	22/04/16	RC
109	55.97830, -3.40436	NT 12463 77036	Fe	Corroded Fe 'L' shaped 'nail'. Not retained.	22/04/16	RC
110	55.97813, -3.40375	NT 12501 77017	Pb	Pb bullet cartridge	22/04/16	JK
111	55.97829, -3.40359	NT 12511 77034	Pb	Amorphous Pb fragment. Not retained.	22/04/16	JK
112	55.97850, -3.40401	NT 12485 77058	Ceramic (Pb glaze)	Pb glazed medieval ceramic sherd	22/04/16	JK
113	55.97872, -3.40315	NT 12540 77082	Fe	Large Fe nail. Not retained.	22/04/16	RC
114	55.97876, -3.40315	NT 12540 77086	Brass alloy	Broken, semi-circular brass fitting. Not retained.	22/04/16	JK

Appendix D Trench Register

Trench No.	Length (m)	Width (m)	Orientation
1	10	2.1	NNE-SSW
2	10	2.1	NE-SW
3	10	2.1	NE-SW
4	30	2.1	NNW-SSE
5	30.2	2.1	NNW-SSE
6	30	2.1	NNW-SSE
7	31	2.1	NNW-SSE
8	30.3	2.1	NNE-SSW
9	30	2.1	NNE-SSW
10	30.7	2.1	NNE-SSW
11	30	2.1	NNE-SSW
12	20	2.1	NNW-SSE
13	10	2.1	N-S
14	20.1	2.1	NNE-SSW
15	20	2.1	NW-SE
16	21.5	2.1	NW-SE
17	19.9	2.1	NW-SE
18	19.9	2.1	NW-SE
19	20.4	2.1	NW-SE
20	19.6	2.1	NW-SE
21	20.5	2.1	NE-SW
22	20	2.1	NE-SW
23	20.2	2.1	NE-SW
24	20	2.1	NE-SW
25	20.4	2.1	NE-SW
26	25.1	2.1	NE-SW
27	20.1	2.1	N-S

Appendix F Provisional Discovery and Excavation Scotland Entry

LOCAL AUTHORITY:	City of Edinburgh Council
PROJECT TITLE/SITE NAME:	Dundas Dairy, Dundas Home Farm, City of Edinburgh
PROJECT CODE:	234
PARISH:	South Queensferry
NAME OF CONTRIBUTOR:	Ross Cameron, Joe Doran
NAME OF ORGANISATION:	ARCHAS Cultural Heritage Ltd
TYPE(S) OF PROJECT:	Archaeological Evaluation and Metal Detecting Survey
NMRS NO(S):	n/a
SITE/MONUMENT TYPE(S):	n/a
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NT 12331 77040
START DATE (this season)	22/04/16
END DATE (this season)	25/05/16
PREVIOUS WORK (incl. <i>DES</i> ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	<p>ARCHAS Cultural Heritage Ltd were contracted by Lundin Homes Ltd to undertake a programme of archaeological mitigation in advance of a proposed development of a greenfield site at Dundas Dairy, Dundas Home Farm, on the western fringe of the City of Edinburgh.</p> <p>The archaeological works followed the placement of a planning condition upon the proposed development by City of Edinburgh Council Archaeology Service. The condition required that the eastern part of the site be subject to a metal detecting survey, while 10% of the proposed development area be systematically assessed for archaeological remains through a programme of archaeological evaluation. Both phases of work were to take place in advance of the proposed development.</p> <p>The metal detecting survey revealed very few artefacts of any significance. A coin, impacted pistol ball, and medieval ceramic sherd with PB glaze were all notable, but the paucity of artefacts recovered may indicate a lack of archaeological activity in the area.</p> <p>The archaeological evaluation involved the mechanical excavation of 27 evaluation trenches across the footprint of the proposed development.</p> <p>Excavation of the trenches revealed ploughsoil overlying natural subsoil deposits with the only features found to be post-medieval and modern field drains.</p>
PROPOSED FUTURE WORK:	n/a
CAPTION(S) FOR ILLUSTRS:	n/a
SPONSOR OR FUNDING BODY:	Lundin Homes Ltd
ADDRESS OF MAIN CONTRIBUTOR:	ARCHAS Cultural Heritage Ltd Suite B2 Law s Close 339-343 High Street Kirkcaldy KY1 1JN
EMAIL ADDRESS:	ross.cameron@archas.co.uk, jo.doran@archas.co.uk
ARCHIVE LOCATION	NMRS and City of Edinburgh Council Archaeology Unit (intended)