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CASTLE GOGAR RIGG DEVELOPMENT, EDINBURGH

Planning enforcement works for Quarry Investments 15/01051/FUL and 17/00202/FUL

July 2017

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Headland Archaeology

CASTLE GOGAR RIGG DEVELOPMENT, EDINBURGH

PLANNING ENFORCEMENT WORKS

PROJECT SUMMARY

Headland Archaeology (UK) Ltd undertook a watching brief and excavation on a development site associated with the construction of dwellings to the south-west of Gogar Castle to the west of Edinburgh. The work was commissioned by Quarry Investments as part of mitigation for enforcement action required by the City of Edinburgh Archaeological Services (CECAS) in order to establish if any archaeology was present on site, and if so, to what extent it had been impacted by the development.

The works comprised cleaning and recording of already exposed sections at the southern limit of the site, and monitored stripping of three targeted areas across the site. The exposed sections revealed a foundation cut of a wall to the west of the two apartment blocks and a further ditch, possibly associated with a foundation cut to the east of the apartments. A ditch along with the remains of a stone wall were also recorded on the same alignment further to the east within the easternmost monitored topsoil strip areas. The monitoring at the north of the development area revealed a stone-built culvert in association with a large linear ditch, along with a small pit. All identified features are of potentially 16th to 17th century date. No other archaeological features or deposits were identified.

1 INTRODUCTION

This document presents the results of archaeological investigation undertaken by Headland Archaeology (UK) Ltd for Quarry Investments ('the client') at a development site south-west of Gogar Castle to the west of Edinburgh.

Planning Permission was granted in 2015 for the construction of two apartment blocks and a single detached house at Castle Gogar Rigg (15/01051/FUL). The development site lay to the south of Castle Gogar, a 17th-century A-listed tower house, which may have been occupied since the medieval period. As part of the planning permission, a condition was placed on the development requiring a programme of archaeological works to be carried out in accordance with a written scheme of investigation agreed with the Planning Authority.

In 2017, during the submission of a new application by the developer for the erection of a single house to the north of the three consented properties (17/00202/FUL; substituting the single detached house granted in 15/01051/FUL), it became apparent that construction works had commenced on site without any archaeological works taking place. As a consequence, a meeting was held on site between the developer, the City of Edinburgh Council Archaeology Service (CECAS), City of Edinburgh Planning Department and Headland Archaeology Ltd. It was agreed that a staged set of archaeological works would be required as part of a planning enforcement action. These works were undertaken between February and June 2017 in order to establish if any archaeology was present on the site, and if so, to what extent it had been impacted upon by the development of the two houses, and also to mitigate the impact of the proposed single house.

The works were outlined within a Method Statement (MS) prepared by Headland Archaeology (UK) Ltd (Dingwall 2017), which was approved by the Planning Authority.

2 SITE LOCATION AND DESCRIPTION

The site is located to the south-west of Castle Gogar (Illus 1) to the west of Edinburgh (NGR: NT 1646 7292). The Gogar Burn runs a few hundred meters to the east. The area comprises approximately 9100m².

The site overlies bedrock geology of sandstone, siltstones of Chadian to Brigantian Age. The superficial geology is glacial Devensian till; sands and gravels, which may be attractive for human settlement (British Geological Survey website <u>http://www.bgs.ac.uk</u>).

3 ARCHAEOLOGICAL BACKGROUND

The development site lies within an area of rich archaeological resources. The A-listed tower-house at Gogar (SNRHE: NT17SE 9; HES: LB27092) was built in 1625, but it is possible that the site has been occupied since the medieval period. To the south lies the medieval village of Gogar, which excavation (Rennie & Will 2013) has shown to be occupied as early as the late-12th century. In the same area, the Gogar Parish Church is thought to incorporate the foundations of an earlier medieval structure. To the south, there are a number of cropmark enclosures and linear features, which may be prehistoric in date. Prehistoric activity in the wider area is further attested from excavations (James 2008) carried out as part of the construction of the trams network with Neolithic to Iron Age activity recorded.

The area between the current development and Castle Gogar was subject to a programme of archaeological work by Headland Archaeology (Clapperton 2005, Geddes 2006) that included Historic Building Record of the Castle and walled garden, an evaluation and a watching brief within the castle grounds prior to the construction of houses. The evaluation identified sporadic evidence of relatively recent short-lived structures (sheds and animal enclosures), along with a small number of features cut into the subsoil; these were thought to be of 19th century date and relate to the gardens of the Castle.

4 AIMS & OBJECTIVES

In line with the MS, the main objectives of archaeological works were to establish the presence, absence, location, extent, nature and date of any archaeological features and deposits present within the development area and to provide information to the Planning Authority to allow decisions to be made regarding planning enforcement, and to mitigate the impact of the proposed single house (17/00202/FUL), should it be consented.

Specific objectives of the archaeological works were to:

- Identify any archaeological features and deposits of interest;
- Excavate and record the identified archaeological features and deposits in order to characterise their form, character, survival and significance;
- Report the results of the archaeological work and undertake necessary post-excavation assessment and place them within their local and regional context;

The resulting archive (finds and records) will be organised and deposited in the Scottish National Records of the Historic Environment to facilitate access for future research and interpretation for public benefit.

5 METHODOLOGY

All aspects of work were undertaken in line with the MS and in accordance with the standards set by the Chartered Institute for Archaeologists (CIfA) in their 'Standards and Guidance for Archaeological Watching Brief' and 'Archaeological Excavation' (2014).

The works comprised four stages:

Stage 1: Cleaning back and recording the exposed section to the west, south and east of the two existing new buildings;

Stage 2: A monitored topsoil strip between the present buildings;

Stage 3: A monitored topsoil strip on the proposed new house site;

Stage 4: A monitored topsoil strip on previous proposed house location.

Initially, the works were comprised of two main elements:

- Completion of works associated with Stages 1 and 2 and submission of an interim report summarizing the results
- According to the decisions made based on the first interim report, completion of works associated with Stages 3 and 4 and the submission of a second interim report.

However, after Stage 2 was completed a site meeting was held on site between the developer, the CECAS Archaeology Officer and Headland Archaeology. It was agreed that an interim report was not required, that further works were required to complete Stage 1, and that works for Stage 3 and 4 could commence.

5.1 Site Works

Hand excavation and cleaning followed Headland Archaeology standard Safety, Health, Environment and Quality (SHEQ) guidance. Trenches were machine excavated and all stripping was undertaken under direct archaeological supervision. A flat bladed ditching bucket was used to remove deposits in spits. Archaeological features encountered during the monitoring stages were appropriately excavated and recorded according to normal excavation methodology and as outlined in the MS.

5.2 Recording

All contexts and environmental samples were given unique numbers. The context numbers were issued to correspond to the Stage in which they were recorded. All recording was undertaken on pro-forma record cards and digital photography was used to record any archaeological features with a graduated metric scale clearly visible.

A site plan including all identified features, areas of excavation and any other relevant information was recorded digitally by a Trimble R8S network GPS connected to the VRS network correction. All sections and stratigraphic sequences were recorded digitally. If additional information was necessary then plans and sections were hand-drawn on permatrace at an appropriate scale (normally 1:20 or 1:50 for plans and 1:10 for sections).

5.3 Reporting and Archive

The results of the works are presented below. Full descriptions of individual contexts are presented in Appendix 1. A summary report has been prepared for submission to Discovery & Excavation in Scotland (Appendix 2) and the OASIS database (headland1-289058).

The complete project archive will be deposited with Historic Environment Scotland (HES) within six months of the completion of the project. The records (paper and digital) will be archived according to best practice guidelines set out by the Archaeological Archiving Forum (2011).

6 RESULTS

For each stage of work, contexts were assigned consecutive numbers. The results are described according to stage order.

6.1 Stage 1

The construction of the two houses that formed part of the initial planning application involved cutting into an existing bank to the south side of the houses. The initial stage of archaeological works comprised cleaning back and recording the exposed section formed by the cut for the construction of the two existing new buildings (Illus 2). Upon commencing the site works, it was apparent that parts of the exposed section were not safe to access. It was agreed with the CECAS Archaeology Officer that only the sections safe to access would be cleaned and inspected. These comprised the cut faces to the east and west of the two buildings and a short section to the south. These were cleaned by hand down to the geological subsoil and inspected along their length to identify any archaeological features and deposits. Two large cuts were identified in the east and west facing sections respectively, both of which had been truncated by the development works.

The general profile across the area consisted of a dark brown sandy-clay topsoil (1003) with an average depth of 0.6m. The geological subsoil (1004) was a light brown sandy-clay with abundant small and medium size angular stones. Both deposits had been heavily disturbed in areas by the current and previous development works; for example at the north-western side of Stage 1 the area had been backfilled with ceramic building material (CBM) deriving from the construction of the dwellings to the north of the site.

On the eastern side, a concave cut was identified on the west facing slope of the section. Topsoil was removed from an area 3.3m x 2m by hand in order to further expose the feature, and revealed it to be a linear ditch. Ditch [1005] was aligned east/west and was 1.8m wide and 0.7m deep. It contained two fills, (1006) and (1012), both of which probably represented silting up episodes after the ditch was abandoned (Illus 3). It is likely that this ditch was the same feature that was recorded to the western side of the exposed section of Stage 1 (Ditch [1005]) and also Ditch [4016] to the east in Stage 4 (see below), although the fills were not identical and no evidence of a parallel wall was seen in the west-facing section.

On the western section and in alignment with Ditch [1005], a concave cut [1007] containing a number of large sized stones was identified (Illus 4). An area 6m x 4m stripped of topsoil by machine to expose the feature in plan. The cut was interpreted as a linear foundation cut for a stone-built wall. This feature cut through a naturally formed palaeochannel (not illustrated) that was following the slope of the terrain.

Foundation Cut [1007] had an east/west orientation and was up to 1.3m wide and 0.65m deep. It contained a poorly sorted mix of small and large stones (1009) measuring up to $0.4m \times 0.3m \times 0.2m$ in a loam soil matrix (1008). Many of the bigger stones were laid against the sides of the cut to form a rudimentary solid foundation with a number of flattish stones laid on top packed with smaller stones to form a relatively flat surface.

The structure as a whole represents the remnants of the foundations of a large stone-built wall. The size of the foundations seem to indicate it was likely to be part of a land-division wall rather than anything more substantial. The cut [1007] appeared to be on the same alignment as Ditch [1005] but no physical relation was established due to truncation from the original construction works.

6.2 Stage 2

Stage 2 comprised the monitored topsoil strip of an area c18m x 10m between the two built houses, in order to identify any potential archaeology and also define the level that the development works had undercut the geological subsoils.

It was apparent that the original ground level comprised a gentle slope from south to north. Construction of the two properties involved terracing of this slope below the upper geological horizon and the area had been levelled with hard-core.

The upper excavated deposit consisted solely of hard-core and other building material between 0.1m to 0.4m deep. The geological subsoil was very firm and stony orange-brown sandy-clay. Once the area had been stripped to the geological subsoil the only feature identified was a east-west aligned field drain. No features or artefacts of archaeological significance were identified in this area.

6.3 Stage 3

Stage 3 involved the monitored strip across the footprint of the proposed new house build to the northwest of the development site. An area c20m by 20m was stripped of topsoil exposing three features; a linear ditch running parallel to and cut by a stone-built culvert (Illus 5) and a circular pit.

The general profile of the area consisted of a medium brown sandy-silt topsoil (3001) with frequent CBM inclusions up to 0.55m deep. This overlaid the geological subsoil (3002) that comprised yellowish-orange mottled grey mixed sand and gravels with frequent root bioturbation.

Two slots were excavated through both the ditch and the culvert with the resulting cuts and fills given separate context numbers within each slot (Illus 6 &7); in the slot to the north they were recorded as Ditch [3003] and Foundation Cut [3007] for the culvert and in the slot to the south as Ditch [3012] and Foundation Cut [3015]. For the purpose of this report the ditch will be referred to as [3003] and the culvert as [3007], unless otherwise specified.

Ditch [3003] ran roughly NW-SE and extended for 19m within the stripped area. The cut was 1.42m wide and 0.48m deep with three fills, (3004), (3005) and (3006) present. These were mixed silty deposits that were likely to represent silting episodes, possibly after the ditch was abandoned.

At a later stage, Ditch [3003] was cut along its ENE side by a stone-built Culvert [3007]. This followed the course of Ditch [3003] and was 0.7m wide and 0.45m deep. The structure comprised Foundation Cut [3007], Stones (3008) that made up the culvert and a loose loamy fill (3009) surrounding the stones (Illus 6). The stones were of various sizes with the biggest measuring $0.64m \times 0.46m \times 0.2m$. The culvert had been constructed with stones placed against the sides of the foundation cut in order to form side walls, then occasional slates laid on top to form a flat surface with larger stones laid across the top to form the cover. No stones were found for a base. The void of the culvert channel was approximately 0.2m wide and 0.25m deep.

The full extent of both the ditch and the culvert are unknown, but they did not appear in the strip of Stage 2 or the north facing section of Stage 1. However, the ditch may have been associated with features [1005], [1007] and [4016] although no physical relation could be established.

It seems likely that the two separate features (ditch and culvert) both functioned as drains. The nature of the fills of Ditch [3003] suggest that the ditch gradually silted up prior to being replaced by the stonelined culvert. No dating evidence was identified for either of the features but based on the style of construction the culvert it very likely predates the 18th century and may relate to the construction of Castle Gogar in the 17th century. The third feature identified in Stage 3 was a large sub-circular Pit [3010] extending beyond the eastern limit of excavation (Illus 8). The pit had steep sides with a flat base and measured 2.46m long, 1.25m wide and 0.5m deep. Its fill, (3010), was homogenous throughout and contained a large number of tree roots. No dating evidence was recovered from the fill of this cut but the large number of tree roots identified suggest it may represents a landscaping episode associated with the gardens of the castle.

6.4 Stage 4

The final stage involved the investigation of an area measuring c32m by 18m located to the east of the new apartment buildings. The machine excavation of the area revealed 0.38m of topsoil (4001) overlying a shallow layer of silty sand subsoil (4002) up to 0.2m thick. The removal of these layers revealed two linear ditches and two field drains, cutting through light yellow/orange silty sand geological subsoil (4003).

Ditches [4008] was aligned approximately N-S (Illus 8), had gradually sloping sides and a concave base with a single homogeneous fill (4009) (Illus 9). The ditch extended beyond the north-west extent of the excavation area and terminated just north of the second ditch [4016] to the south. The feature became increasing shallow to the southern end rather than forming a terminal end. The date and function of this feature was unknown but may represent the remains of a drainage ditch or field boundary.

The second ditch [4016] was aligned approximately E-W running along the southern extent of the excavation area (Illus 2). The ditch had a steep southern edge with a slightly stepped and gradual slope to the north side. The two main fills (4018) and (4019) were indicative of silting up. It was not clear if the upper of these fills (4019) abutted or overlay the third rubble stone fill (4017) (Illus 10). This was recorded along the north side of the ditch cut and may form the remains of a rubble stone boundary wall (Illus 11). Ditch cut [1005], recorded in section in Stage 1, is likely to be a continuation of this cut as it is on the same alignment, although no stone fill was recorded in this section. Further similar stone was recorded in the section of Ditch [1007] at the western extent of Stage 1, and here the stone fill of this ditch was interpreted as the foundation of a wall. The feature as a whole was also not dissimilar to the Ditch [3003] and Culvert [3007] recorded in Stage 3 (compare general photos of the arrangement in Stage 3 in Illus 5 with the view of Ditch [4016] in Illus 13). Despite the similarity, one clearly represents a culvert and one a wall foundation.

7 ENVIRONMENTAL ASSESSMENT

Samples were taken from three features – two ditches and a foundation cut (Appendix 1.4). These were processed and analysed and the results are provided in Appendices 2.1 and 2.2. Cereal grains were present in two contexts; (1006) in Ditch [1005] and (3013) in Ditch [3012]. Species present included barley (Hordeum sp.) and a fragmented cereal indeterminate grain. The material was very poorly preserved and as such is insufficient for AMS radiocarbon dating.

Low numbers of rectilinear wood charcoal fragments were recovered from all sampled contexts. The charcoal was mineralised and is therefore unsuitable for AMS radiocarbon dating.

The presence of three cereal grains does not offer any significant information relating to site economy other than possible crop choices. Once incorporated into negative features charred remains tend to survive well but, as in this case, their inclusion is often incidental and the materials have no direct relationship to the features themselves. The paucity of remains precludes further analysis.

8 FINDS ASSESSMENT

The finds assemblage numbered one sherd (1g) of pottery and 16g of industrial waste. These were found in three separate features. The only datable find in the assemblage is the small sherd of whiteware pottery from ditch [1005], which is modern in date. The industrial waste in Ditch [1005], Ditch [3012] and Foundation Cut [1007] consists of cinder-like slag and magnetic residues which probably indicate burning activity on site. The finds are summarised by feature in Table 1 and a complete catalogue is given at the end.

Feature	Pottery (Mod)	Pottery (Mod)	Industrial Waste	Spot date
	Count	Wgt	Wgt	
Ditch [1005]	1	1	12	1750+
Ditch [3012]			<0.5g	
Foundation Cut [1007]			4	
Total	1	1g	16g	

Table 1 – Summary of finds assemblage by feature with spot dating

The assessment includes finds from sample retents. The finds were processed and packaged for long term storage in accordance with professional guidelines (CIfA 2014; Watkinson & Neal 2001). The finds were each assessed and recorded by appropriate specialists. The resultant data was then drawn together into a database and is provided in Appendix 2.3.

The assemblage is of little value and no further work needs to be undertaken. The finds should be declared to Treasure Trove, though are of no further archaeological value and are recommended for discard. The archive has been prepared in accordance with professional standards (AAF 2011).

9 DISCUSSION

The ditches and features identified across the site are in keeping with the types of features that are to be expected in close proximity to a 16th/17th century castle. Although the fills of the three lengths of ditch recorded in Stage 1 and 4 were not consistent, their alignment suggests they represent a single linear feature. Whether this was a ditch with a wall to one side, as indicated by the Stage 4 evidence, or a foundation trench for a wall, as evidenced in the Stage 1 west section was difficult to determine. Either way, it is likely that these represent land-divisions associated with the gardens of the castle rather than more substantial structural features.

The ditch and the culvert recorded in Stage 3 were likely to represent two phases of drainage, again associated with the castle. The ditch clearly represents an initial open drain cut which was replaced at a later stage by the culvert.

The archaeological investigation undertaken at the development site south of Castle Gogar confirmed that a limited number of archaeological features relating to the historic castle were present on site. In large part, these had not been substantially impacted on by the works to date, other than the roughly east-west running ditch which was identified in Stages 1 and 4. It seems highly likely that a c60m long section of the ditch was removed construction of the two apartment buildings. It is also possible that the houses impacted on the ditch and culvert recorded in Stage 3 to the north-west, although this is less certain.

Although the features had been impacted upon by the development the significance of this archaeology is limited. Sufficient proportions of each feature were investigated to be able to characterise the resource and understand their significance. The work carried out to date is considered adequate mitigation for the impacts of the construction works already undertaken and for the new house plot at the north.

10 REFERENCES

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APPENDICES

Appendix 1: Registers

1.1 Context Register

Context	Area	Description	Dimensions
1001	Stage 1	Limits of excavation. Number used in survey as the W, N and E facing section	
1002	Stage 1	Modern infill	11m, unknown, 0.40m
1003	Stage 1	Topsoil	65, 42, c.0.70m
1004	Stage 1	Natural	65m, 42mm, 4m
1005	Stage 1 - east	Cut of ditch	2m, 1.80m, 0.70m
1006	Stage 1 - east	Fill of Ditch [1005]	2m, 1.80m, 0.44m
1007	Stage 1 - west	Foundation cut for wall	4m, 1.30m, 0.65m
1008	Stage 1 - west	Fill of foundation cut [1007]	4m, 1.30m, 0.65m
1009	Stage 1 - west	Stones forming wall in [1007]	4m, 1.30m, 0.65m
1010	Stage 1 - east	Void	0.60m, 0.30m, 0.15m
1011	Stage 1 - east	Void	0.60m, 0.30m, 0.15m
1012	Stage 1 - east	Basal fill of Ditch [1005]	2m, 0.58m, 0.26m
3001	Stage 3	Topsoil	20m, 20m, 0.55m
3002	Stage 3	Subsoil/Natural	20m, 20m, unknown
3003	Stage 3	Cut of ditch	19m, 1.42m, 0.48m
3004	Stage 3	Primary fill of Ditch [3003]	19m, 1.48m, 0.21m
3005	Stage 3	Secondary fill of Ditch [3003]	1m, 0.74m, 0.05m
3006	Stage 3	Upper fill of Ditch [3003]	1m, 1.48m, 0.24m
3007	Stage 3	Cut of culvert	19m, 0.70m, 0.45m
3008	Stage 3	Stones forming culvert in [3007]	various sizes
3009	Stage 3	Fill of [3007]	19m, 0.10m, 0.45m
3010	Stage 3	Cut of pit	2.46m, 1.25m, 0.50m
3011	Stage 3	Fill of Pit [3010]	2.46m, 1.25m, 0.50m
3012	Stage 3	Cut of ditch (same as [3003])	19m, 1.44m, 0.51m
3013	Stage 3	Basal fill of Ditch [3012]	1.41m, 1m, 0.26m
3014	Stage 3	Upper fill of Ditch [3012]	1m, 1.44m, 0.22m
3015	Stage 3	Cut of culvert (same as [3007])	19m, 0.58m, 0.46m
3016	Stage 3	Stones forming culvert in [3015]	various sizes
3017	Stage 3	Fill of [3015]	19m, 0.58m, 0.46m
4001	Stage 4	Topsoil - Mid-orange brown sandy silt with occasional poorly sorted sub-angular stone inclusions	0.38m deep
4002	Stage 4	Subsoil - Mid -pinkinsh brown silty sand with occasional poorly sorted sub-angular stone inclusions	0.05m - 0.2m
4003	Stage 4	Geological subsoil - Light yellowish orange silty sand with very occasional poorly sorted stone inclusions and areas of manganese	

4004	Stage 4	Linear Cut - NE-SW aligned cut with v steep sides and a flat base. Filled with 4005. Possible field drain	< 18m x 0.42m x 0.28m
4005	Stage 4	Fill of 4004 - Mid greyish brown silty sand with occasional small to medium sub- angular stone inclusions	
4006	Stage 4	Linear Cut - NW-SE aligned cut with v steep sides and a flat base. Filled with 4007. Possible field drain	<12m x 0.55m x 0.13m
4007	Stage 4	Fill of 4006 - Mid greyish brown silty sand with occasional small to medium sub- angular stone inclusions	
4008	Stage 4	Linear cut - Shallow ditch cut aligned NW- SE with gentle sloping sides leading to a flat base. Filled with 4009	26.4m x 0.78m x 0.36m
4009	Stage 4	Fill of ditch 4008 - Mid-orange grey moderately loose silty sand with occasional poorly sorted stones	
4010	Stage 4	Void	
4011	Stage 4	Void	
4012	Stage 4	Ditch cut - Linear cut aligned NW-SE with gentle sloping sides and a concave base - same as 4008	<1.95m x 0.78m
4013	Stage 4	Fill of 4012 - basal alluvial fill of ditch with mid-blue grey clay silt with occasional rounded pebble inclusions	0.15m deep
4014	Stage 4	Middle fill of 4012 - A dark orange brown firm sandy loam with occasional angular and rounded stone inclusions	0.3m deep
4015	Stage 4	Upper fill of 4012 - A firm dark orange silty sand with moderate charcoal flecks and occasional small stone inclusions	0.4m deep
4016	Stage 4	Linear cut - Boundary ditch cut with steep east side and gradual west side with uneven base. Aligned E-W - Filled with 4017, 4018, 4019	<20m x 2m x 0.45m
4017	Stage 4	Angular and rounded stone fill possibly forming the remains of a stone boundary wall or a rubble drain. Recorded to the N side of ditch cut 4016	0.15m deep
4018	Stage 4	Basal Fill of 4016 - A firm mid-brownish grey silty sand with v rare charcoal flecks and occasional small stone inclusions	0.3m deep
4019	Stage 4	Upper fill if cut 4016 - A soft mid-grey brown loam with moderate charcoal fleck inclusions. Overlies 4018 and 4017	0.35m

1.2 Photo Register

Photo	Direction	Description
001	S	General view of W facing side
002	E	W facing section
003	Е	W facing section
004	E	W facing section
005	E	W facing section
006	E	W facing section
007	S	General view of W facing side with corner of N facing side
008	E	W facing section
009	Е	W facing section
010	Е	W facing section of Ditch [1005]
011	E	W facing section of Ditch [1005]
012	W	General view of N facing side
013	Е	General view of N facing side
014	S	N facing section with construction site's spoil to the right
015	W	General view of N facing side
016	N	General view of E facing side
017	S	Corner of N and E facing sides
018	E	General view of N facing side
019	Ν	General view of E facing side
020	W	E facing section
021	W	E facing section of Ditch [1007]
022	W	E facing section
023	SW	General view of E facing side
024	S	N facing section at the E facing side
025	S	N facing section at the E facing side
026	W	E facing section
027	W	E facing section
028	W	E facing section
029	W	E facing section
030	W	E facing section with modern infill
031	W	E facing section with modern infill
032	S	General view of E facing side
033	S	General view of area around Stage 2 trench - pre excavation
034	N	General view of area around Stage 2 trench - pre excavation
035	NE	General view of area around Stage 2 trench - pre excavation
036	N	General view of area around Stage 2 trench - pre excavation
037	W	E facing section of Foundation Cut [1007]
038	W	E facing section of Foundation Cut [1007]
039	W	E facing section of Foundation Cut [1007]
040	NW	E facing section of Foundation Cut [1007]
041	S	General view of Stage 2 - pre excavation
042	Ν	Working shot during excavation of Stage 2

043	N	Working shot during excavation of Stage 2
043	N	Working shot during excavation of Stage 2 Working shot during excavation of Stage 2
045	W	Sondage at the SW corner of trench of Stage 2
046	N	Stone-hole
047	N	Stone-hole
048	W	E facing of trench of Stage 2
049	W	E facing of trench of Stage 2
050	E	W facing of trench of Stage 2
051	N	Post excavation shot of trench of Stage 1
052	N	Post excavation shot of trench of Stage 1
053	SE	Post excavation shot of trench of Stage 1
054	S	Post excavation shot of trench of Stage 1
055	SW	Post excavation shot of trench of Stage 1
056	N	Pre excavation of Stage 3
057	SW	Pre excavation of Stage 3
058	E	Working shot during excavation of Stage 3
059	NW	Shot of Culvert running NW-SE
060	E	Working shot during excavation of Stage 3
061	W	Extent of strip at the end of 03/03/17
062	W	Extent of strip at the end of 03/03/17
063	W	Extent of strip at the end of 03/03/17
064	SE	Pre excavation of Culvert
065	W	General view of Stage 3 - post excavation
066	W	General view of Stage 3 - post excavation
067	N	General view of Stage 3 - post excavation
068	E	View of Culvert and Drain - pre excavation
069	SE	View of Culvert and Drain - pre excavation
070	SE	View of Culvert and Drain - pre excavation
070	NW	View of Culvert and Drain - pre excavation
	NW	View of Culvert and Drain - pre excavation
072		
073	NW	View of Culvert and Drain - pre excavation
074 075	NW	SE facing section of Ditch [3003] and Culvert [3007] - mid excavation W facing section of Culvert [3007] - mid excavation
075	N	Oblique of Culvert [3015] and Ditch [3012] - mid excavation
078	W	View of western side of Culvert [3007] prior to removal
078	W	View of western side of Culvert [3007] prior to removal
079	N	View of S facing section of Ditch [3003]
080	N	View of S facing section of Ditch [3003] and Culvert [3007]
081	N	View of S facing section of Ditch [3003] and Culvert [3007]
082	N	View of S facing section of Ditch [3012] and Culvert [3015]
083	N	View of S facing section of Ditch [3012] and Culvert [3015]
084 085	N N	View of S facing section of Ditch [3012] and Culvert [3015] Shot of Tree Bole [3010]
085	NW	Oblique of Ditch [3012] and Tree Bole [3010]
080	NW	Oblique of Ditch [3012] and Tree Bole [3010] Oblique of Ditch [3012] and Tree Bole [3010]
088	N	S facing section of Ditch [3012] and Culvert [3015]

000	NI	We dive she the set side Office of
089	N	Working shot in west side - Stage 1
090	W	General shot of Foundation Cut [1007]
091 092	W	General shot of Foundation Cut [1007] with E facing section General shot of Foundation Cut [1007]
092	NW	Working shot in [1007]
093	SW	Working shot in [1007]
094	NW	General shot of [1007] with S facing section
095	S	N facing section in trench at the west side
098	W	E facing section of trench at the west side
097	W	E facing section of trench at the west side
098	NW	
		Working shot in [1007]
100	W	E facing section of trench at the west side with [1007]
101	W	E facing section of trench at the west side with [1007]
102	W	E facing section of trench at the west side with [1007]
103	E	W facing section of Foundation Cut [1007] in slot
104	E	W facing section of Foundation Cut [1007] in slot
105 106	EW	General shot of W facing section of Foundation Cut [1007] in slotE facing section of Foundation Cut [1007] in slot
107	W	E facing section of Foundation Cut [1007] in slot
107	W	
108	W	General shot of [1007] with slot General shot of [1007] with slot
110	E	General shot of [1007] with slot
111	E	W facing section of Foundation Cut [1007] in slot
112	E	W facing section of Foundation Cut [1007] in slot
113	W	General shot of [1007]
114	W	General shot of [1007]
115	W	General shot of [1007]
116	E	General shot of cleaned N facing - south side
117	E	General shot of cleaned N facing - south side
118	S	N facing section - south side (eastern part)
119	S	N facing section - south side (middle part)
120	S	N facing section - south side (western part)
121	S	N facing section - south side
122	N	Post excavation shot of slot at the east side with Ditch [1005]
123 124	E	Post excavation shot of slot at the east side with Ditch [1005] Post excavation shot of slot at the east side with Ditch [1005]
125	E	Post excavation shot of slot at the east side with Ditch [1005]
126	E	W facing section of Ditch [1005]
127		Slot excavated in drain cut [4004]
128	SW	NE facing section through cut [4004]
129	SW	NE facing section through cut [4004]
130	NE	General shot of cut [4004]
131	NE	General shot of cut [4004]
132	N	View of slot excavated through the junction of cuts [4004] and [4006]
133	NE	View of slot excavated through the junction of cuts [4004] and [4006]
134	SE	General shot of cuts [4004] and [4006]

135	E	Section through drain cut [4006]
136	NW	View of ditch cut [4008]
137	NW	View of ditch cut [4008]
138	E	View of ditch cut [4008]
139	E	Shot of slot excavated through ditch cut [4008]
140	SE	General view of ditch cut [4008]
141	SE	North East facing section of cut [4008]
142	E	West facing section through ditch cut [4012]
143	E	West facing section through ditch cut [4012]
144	W	Ditch [4016 and wall [4017]
145	E	Ditch [4016 and wall [4017]
146	E	West facing section through ditch [4016] W slot
147	NE	Oblique shot of ditch cut [4016]
148	W	East facing section through ditch cut [4016] W slot
149	S	Wall 4017 pre-ex shot
150	E	Wall 4017 pre-ex shot
151	W	East facing section through ditch [4016]
152	S	View of east slot of ditch cut [4016]
153	W	East facing slot of ditch cut [4016] east slot
154	W	East facing slot of ditch cut [4016] east slot

1.3 Drawing Register

Dwg No	Plan	Section	Description
1001		S	W facing section of Foundation Cut [1007]; scale 1:10
1002		S	W facing section of Ditch [1005]; scale 1:10
3001		S	S facing section of Ditch [3003] and Culvert [3007]; scale 1:10
3002		S	S facing section of Ditch [3012] and Culvert [3015]; scale 1:10
3003	P		Photogrammetry of Culvert; Digital Photo#3095-3278

1.4 Sample Register

Sample	Context	Description
1001	1006	Fill of Ditch [1005]
1002	1008	Fill of Foundation Cut [1007]
3001	3013	Primary fill of Ditch [3012]

Appendix 2: Specialist Assessments

2.1 Retent Table

Context Number	Sample Number	Feature	Sample Vol (I)	it Vol (I)	Ceramic		Industrial Waste		Coal	Burnt bone	cereal grain	Material sufficient for	Comments	
Conte	Sampl	Ë	Samp	Retent	Pottery	Fe slag	Mag res	Other		Mammal	Charred	AMS Dating		
1006	1001	Ditch [1005]	20	2.4	+	+ +	++	+	+			Ν	Coal not retained	
1008	1002	Foundation cut [1007]	20	1.4			+	+	+	+		N	Coal and burnt bone not retained	
3013	3001	Ditch [3012]	20	4.2		+			+		+	Ν	Barley grain, very poor preservation Coal not retained	
comm NB	<pre>Key: + = rare (0-5), ++ = occasional (6-15), +++ = common (15-50) and ++++ = abundant (>50) NB charcoal over 10mm is sufficient for identification and AMS dating</pre>													

2.2 Flot table

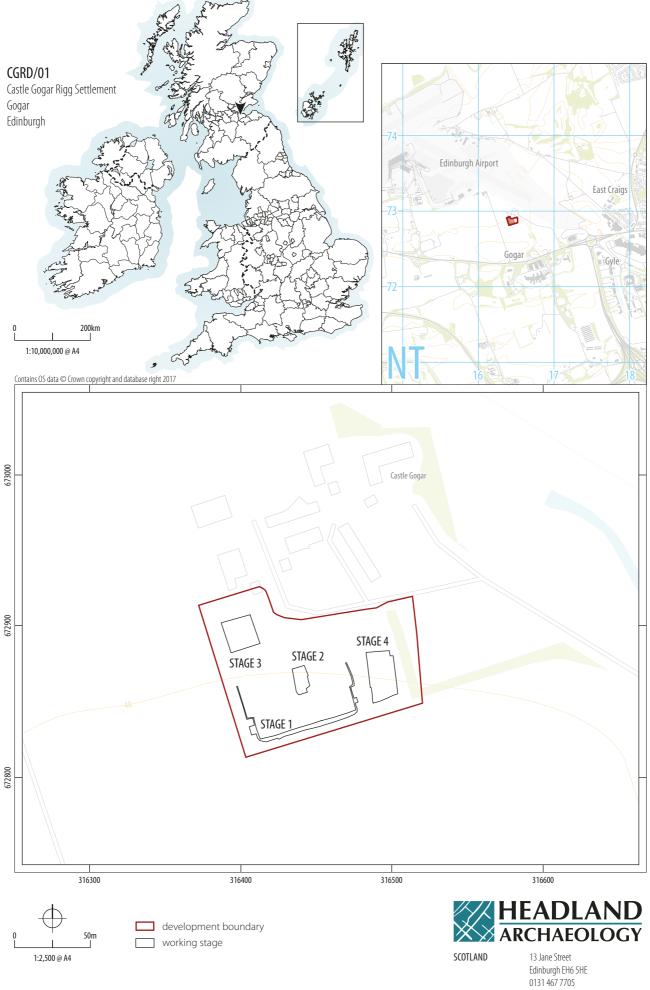
Context Number	Sample Number	Feature	Total flot Vol (ml)	Cereal grain	Charcoal Quantity	Charcoal Max size (mm)	Material sufficient for AMS	Comments
1006	1001	Ditch [1005]	250	+	++	6	Ν	barley grain, very poor preservation, cereal indet grain, embryo end, sediment coated, mineralised charcoal, worm egg capsules +, insect remains +, root material
1008	1002	Foundation cut [1007]	100		+	10	N	mineralised charcoal, worm egg capsules +, root material
3013	3001	Ditch [3012]	10		+	2	N	mineralised charcoal, root material
<pre>Key: + = rare (1-5), ++ = occasional (6-15), +++ = common (16-50) and ++++ = abundant (>50) NB charcoal over 10mm is sufficient for identification and AMS dating</pre>								

2.3 Finds Catalogue

Context	Feature	Sample	Quantity	Weight (g)	Material	Object	Description	Spot Date
1006	Ditch [1005]	1001	1	1	Pottery (Mod)	Whiteware	No decoration	1750+
1006	Ditch [1005]	1001		11	Industrial Waste	Slag	Cinders	
1006	Ditch [1005]	1001		1	Industrial Waste	Mag Res	Possible hammerscale and prill	
1008	Foundation cut [1007]	1002		2	Industrial Waste	Slag	Cinders	
1008	Foundation cut [1007]	1002		2	Industrial Waste	Mag Res	Possible hammerscale and prill	
3013	Ditch [3012]	3001		0	Industrial Waste	Slag	Cinders	

Appendix 3: DES Entry

LOCAL AUTHORITY:	City of Edinburgh Council							
PROJECT TITLE/SITE NAME:	Castle Gogar Rigg Development, Edinburgh							
PROJECT CODE:	CGRD17-001							
PARISH:	Edinburgh							
NAME OF CONTRIBUTOR:	Wilson, D							
NAME OF ORGANISATION:	Headland Archaeology Ltd							
TYPE(S) OF PROJECT:	Excavation							
NMRS NO(S):	None							
SITE/MONUMENT TYPE(S):	N/A							
SIGNIFICANT FINDS:	N/A							
NGR (2 letters, 8 or 10 figures)	NT							
START DATE (this season)	28.02.2017							
END DATE (this season)	15.06.2017							
PREVIOUS WORK (incl. DES ref.)	No							
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	Headland Archaeology (UK) Ltd undertook a watching brief and excavation to the south-west of Gogar Castle to the west of Edinburgh. This work was conducted as archaeological mitigation in relation to a planning enforcement order raised by CECAS. The works comprised cleaning and recording the exposed sections at the southern limit of the site and monitoring stripping of three targeted areas across the site. The exposed sections revealed a foundation cut of a wall to the west of the site and a further ditch, possibly associated with a foundation cut, to the east of the dwellings. A ditch with the remains of a stone wall were also recorded on the same alignment further to the east within one of the monitored topsoil strip areas. The monitoring of the footprint for the proposed new build revealed a stone-built culvert in association with a large linear ditch both of which were in close proximity to a small pit. All identified feature are of potentially 16th to 17th century date. No other archaeological features or deposits were identified.							
PROPOSED FUTURE WORK:	None							
CAPTION(S) FOR ILLUSTRS:	N/A							
SPONSOR OR FUNDING BODY:	Quarry Investments							
ADDRESS OF MAIN CONTRIBUTOR:	13 Jane Street, Edinburgh. EH6 5HE							
EMAIL ADDRESS:	office@headlandarchaeology.com							
ARCHIVE LOCATION (intended/deposited)	HES							



0131 467 7705 www.headlandarchaeology.com

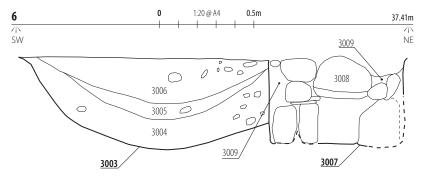






ILLUS 3 View of the west facing section of ditch cut [1005] ILLUS 4 View of the east facing section of foundation cut [1007]





ILLUS 5 Looking north-east at the plan of ditch [3003] and culvert [3007] **ILLUS 6** South-east facing section through ditch cuts [3003] and [3007] **ILLUS 7** View of the south-east facing section of the ditch [3003] and culvert [3007]



ILLUS 8 General view of pit [3010] ILLUS 9 Looking north-west at ditch [4008]



ILLUS 10 East facing section drawing of ditch [4016]ILLUS 11 East facing section of ditch [4016]ILLUS 12 North facing section though ditch [4008]ILLUS 13 General view of ditch [4016]