

Site & Landscape Survey

Edinburgh Drinking Water Pipeline: Site 56 Excavations (Mortonhall Army Camp), Mounthooly Loan, City of Edinburgh

> **Archaeological Excavation** Report No. 1761









CFA ARCHAEOLOGY LTD

The Old Engine House Eskmills Business Park Musselburgh East Lothian EH21 7PQ

Tel: 0131 273 4380 Fax: 0131 273 4381

email: info@cfa-archaeology.co.uk web: www.cfa-archaeology.co.uk

Author	Magnus Kirby MA FSA Scot AIfA, Stuart Mitchell MA
	AIfA & Bruce Glendinning BSc PgDip MIfA
Illustrator	Graeme Carruthers MA MAAIS
Editor	Bruce Glendinning BSc PgDip MIfA
Commissioned by	ERM on behalf of Black & Veatch Ltd
Date issued	September 2010
Version	0
OASIS Reference	cfaarcha1 - 80582
Planning Application No	08/00847/FUL
Grid Ref	NT 25746 67997 – NT 25876 68123

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1. INTRODUCTION

1.1 General

- 1.1.1 This report presents the results of an archaeological excavation and watching brief undertaken on the site of the former Mortonhall Army Camp, Mounthooly Loan, Edinburgh (NGR: NT 25746 67997 NT 25876 68123) (Fig.1). The remains of the Camp were identified from aerial photographs and field survey. A monitored topsoil strip was undertaken by CFA in February 2010 to uncover the remains and an excavation was conducted following this which finished on the 12th March 2010. A watching brief was later conducted on the excavation of the actual pipe trench which cut through a number of the buildings; this was completed in late June 2010. This work was carried out in advance of the construction of a pipeline providing a new drinking water supply for Edinburgh and was commissioned by ERM on behalf of Black & Veatch Ltd.
- 1.1.2 A Written Scheme of Investigation (WSI) dated 20 October 2008 was produced by CFA to cover this programme of works. The WSI was agreed in advance by the City of Edinburgh Council Archaeology Service (CECAS).

1.2 Background

- 1.2.1 Mortonhall Army Camp (NMRS No. NT26NE 90) (NGR: NT 2585 6808 centred) is situated within an area of pasture immediately to the north of Frogston Road West on the southern outskirts of the City of Edinburgh and appears to have covered an area in the region of c. 6 Ha. Mounthooly Loan now cuts across the western edge of the camp, although it is understood that this road post-dates the time when the camp was in use. The construction of the water pipeline affected a relatively small area of the camp measuring c. 180m north to south by 30m (0.54 Ha), running parallel with the eastern edge of Mounthooly Loan.
- 1.2.2 The camp appears to have been constructed by the Royal Engineers for the 16th Battalion of the Durham Light Infantry (DLI), who were stationed at Mortonhall in July 1940. On arrival the troops were initially billeted in tents, suggesting that the camp may still have been under construction at this time (www.16dli.net). Following the departure of the DLI the camp then appears to have been occupied by the Royal Signals Corp, who were still there at the end of the war and during the immediate post-war period. Unsubstantiated local sources suggest that at some point during the war the camp housed German and Italian prisoners of war, and in the immediate post-war period it is understood to have served as a displaced persons' camp.
- 1.2.3 An aerial photograph (Fig. 8) taken on the 24th August 1947 shows that the buildings associated with the camp were still standing, but subsequent aerial photographs indicate that only the more substantial remains of the foundations were still in situ. Where the pipeline passed through the camp, the aerial photographs indicated a concentration of buildings at the southern end and a

- further concentration of buildings at the northern end. A camp road is visible on the aerial photographs connecting the two concentrations of buildings.
- 1.2.4 The Scotsman Digital Archive for Saturday 25th February 1950 contains an advert for the sale of the 'timber buildings and Nissen type huts' from the ex-W.D. depot at Frogston Road, Fairmilehead, Edinburgh. This would indicate that the camp had fallen out of use by the late 1940s. An entry from the same archive dated Friday 5th May 1950 contained a further advert displaying the sizes of the Nissen huts and the quantity available. The largest Nissen hut advertised measured 114ft by 24ft, the smallest measured 24ft by 6ft, and the most numerous type, of which there were fifty advertised, measured 36ft by 16ft. Fifty-six were available with timber ends and six were available with brick ends. Also advertised for sale were two sectional timber huts, corrugated asbestos and iron sheet, timber and second-hand bricks.
- 1.2.5 A number of considerably earlier references to Mortonhall Camp have also been identified, indicating that there was some kind of camp in this location during the First World War. In The Scotsman Digital Archive dating to Tuesday 12th October 1915 there is a reference to Robert Reid of the Argyll and Sutherland Highlanders being amongst the first detachment to leave Mortonhall Camp for France. An article in the Colinton Newsletter for August 2009 by Lynne Arnot also has a reference to her father being posted somewhere at Mortonhall whilst carrying out training in trenches at Dreghorn. However, there is no evidence that there were any permanent or semi-permanent structures dating to this period.
- 1.2.6 No previous invasive archaeological fieldwork is known to have taken place within the proposed development area prior to this excavation.

1.3 Aims and Objectives

- 1.3.1 The objective of the excavation of Mortonhall Army Camp (Site 56) was:
 - To excavate the surviving remains of Site 56 that will be disturbed by the development and to provide a report and where necessary post-excavation analysis and publication of those excavations.

2. METHODS STATEMENT

2.1 General

2.1.1 CFA Archaeology Ltd follows the Institute for Archaeologists' Code of Conduct, Standards and Guidance.

2.2 Excavation Strategy

- 2.2.1 Topsoil and modern overburden was removed using a 360° tracked excavator equipped with a smooth bladed ditching bucket. This work was carried out under constant archaeological supervision. All further work required to fulfil the terms of the brief was carried out by hand.
- 2.2.2 The area of investigation measured c. 180m long by 30m wide.
- 2.2.3 All excavation and on-site recording was carried out according to standard CFA procedures, principally by drawing, by photography and by completing standard CFA record forms.
- 2.2.4 The location of all archaeological features was recorded using industry standard electronic surveying equipment.

2.3 Watching Brief

2.3.1 Following the excavation, the pipe trench was excavated through the site which required a number of the building bases for the camp huts to be cut through. A watching brief was undertaken during this and the sections recorded.

3. ARCHAEOLOGICAL RESULTS

3.1 General

- 3.1.1 Numbers in bold and parentheses are context numbers, a full list of which can be found in Appendix 1.
- 3.1.2 The remains of the Camp (Fig. 1) investigated during this programme of works consisted of: 3 individual hut bases; 2 sections of track or road; 2 more complex groups of buildings; and the remains of a building of which the only surviving remains were the attendant drains. Details of the features excavated are contained in Section 3.2 Section 3.8.
- 3.1.3 The excavation area had been heavily landscaped in many places and the deposits overlying the remains of the camp consisted of 0.1m 1.6m of topsoil and modern hardcore/building rubble. The deeper deposits of up to 1.6m were encountered at the southern end of the site on the eastern downslope side overlying Hut Base 3 and the eastern end of Building Complex 2, whereas those overlying Hut Base 2 and the western end of Building Complex 2 were within the region of 0.3m deep. At the northern end of the site, Building Complex 1 was overlain by 0.3m of deposits whereas Hut Base 1 was overlain by c. 0.1m of deposits. Only Hut Base 1 was visible on the surface prior to the monitored strip.

3.2 Hut Base 1

3.2.1 This hut base (Figs. 2 & 9) was rectangular with square corners and measured 11.3m north to south by 4.8m east to west. The sides of the hut base were brick built walls (102) which were 3 courses deep at the north end of the structure and 7 courses deep at the south end. The ground in this area was quite mixed but it is thought that the brick walls were built in a foundation trench enclosing the soil that was present (101). The bricks were frogged and stamped 'NIDDRIE'. The floor of the hut base was formed from a skim of concrete (104) and was laid over the soil core and the inside skin of the surrounding brick wall. At the north end of the hut base a square concrete step (105) measuring 1m by 1m led up into the hut and just inside the entrance the L-shaped impression of a brick built entrance screen (106) survived. The eastern side of the building was right on the edge of the wayleave and appeared to have been previously damaged.

3.3 Building Complex 1

- 3.3.1 This collection of structural features (Figs. 3 & 10) appears to consist of the bases of two small buildings (202 & 207) connected by a series of exterior concrete surfaces.
- 3.3.2 At the north end of the group of features was the base of a building consisting of a square room floored with concrete (202) and measuring 4.5m by 4.5m internally which was joined to two smaller rooms: one to the north floored

- with concrete (204) which measured 2.25m by 1.75m internally; and one to the south which measured 3m by 1.5m and was partially floored with concrete (219). What appears to be an external concrete surface (205) measuring 2m by 1m and 0.35m thick was set in the external angle of the rooms to the northeast.
- 3.3.3 The largest of the three rooms had brick foundations (201) around the northern, western, eastern and half of the southern sides of the room. These foundations were 0.4m deep and 0.15m wide. Corrugated asbestos sheet (221) was found along part of the southern side of this room where no brick wall foundations survived. This suggests that at least part of the structure did not require brick foundations for the superstructure and that an asbestos sheet wall was sufficient. The room had a concrete floor (202) which was laid on a bed of soil and rubble. The broken remains of an internal concrete drainage channel (223) ran along the east edge of the room. This drain measured 0.25m wide and 0.2m deep and had a 'U' shaped profile with a drain hole in the centre of its run. What appears to be a small rectangular room jutted out from this southern wall. It had brick foundations on its southern and western sides and the impressions of some kind of sheet wall were present along its eastern side. It was only partially floored with concrete (219) laid over soil and rubble. Joined to the northern side of the larger room was another smaller room: it had brick foundations (203) with a concrete floor (204) laid over soil and rubble which was 0.3m higher than the level of the floor of the adjoining room (202). A possible entrance into this room survived in its western side.
- 3.3.4 The remains of the base of a second building were present on the west side of this group of features. This building base was not fully uncovered as it continued out of the pipeline wayleave and under Mounthooly Loan. It is likely that anything outside of the wayleave has been destroyed by road construction. From the visible remains it seems to be the same type of building as identified to the north but with its alignment rotated clockwise through 90°. The main room was 5m wide internally and over 4m long. The foundation walls (206) were brick built and it had a concrete floor (207). A 0.15m wide 'U' shaped interior drainage channel (224) ran along its south edge. A square drain was present towards the east end of its run. This drained out of the building into a north-west to south-east aligned drain. Where the drain exited the building an inspection chamber (208) was present. The drain flowed from this to another inspection chamber (222) where further drains from the complex collected.
- 3.3.5 On the east side of the main room was a smaller room measuring 2.25m by 1.75m. The foundation walls were brick (209) and it had a concrete floor (210). The entrance to this room appeared to be on the northern side. What appeared to be an external concrete surface measuring 3m by 1m (212) was set in the angle between the two rooms.
- 3.3.6 Joining the two structures were a series of poured concrete slabs (213, 215, 216, 217, 218). The main slab (213) was in two sections of 0.2m thick rough concrete, rafted on a rubble and soil foundation. It measured 19m by 6m. It extended around the exterior wall of the southernmost structure and had a

concrete drainage channel (214) cast into its surface which ran along the north side of 206 and returned to the south. The channel had a 'U' shaped profile and was 0.25m wide. It terminated at a drain hole which emptied into a ceramic drainpipe running into a brick built manhole (222). This was presumably to catch rainwater from the structure's roof.

3.3.7 Three further concrete surfaces (215, 216, 217), all 3m wide, extended in a line from the south of 201 forming the eastern side of this concreted area. They had flat surfaces and cascaded downslope in drops of 0.13m from each other, the north end of each surface remaining level with the sloping surface 213. All were built of concrete c.0.15m thick and set on a foundation of rubble and soil. The northernmost surface (215) was 4.4m long and abutted the edge of the asbestos wall (221) on the south side of 201. It had been significantly damaged on its eastern edge. The central surface (216) was 3.5m long and included two rectangular notches in its south edge, each measuring 0.25m wide and 0.1m deep. These were most likely slots for upright timber posts. They were not fully excavated due to the presence of asbestos. The southernmost surface (217) was 2.5m long and had a single 0.06m by 0.06m notch in its south edge. The corners of this surface were significantly damaged.

3.4 Hut Base 2

3.4.1 Hut Base 2 (Figs. 4 & 11) consisted of a single concrete base (301) aligned north-south with rounded corners, measuring 14.5m north to south by 6m east to west. Mid-way along the eastern side of the hut base was a small outshot rectangular area measuring 1.3m north to south by 1m. The remains of a brick built structure (302) located on this may have been a chimney base. Three sondages (Sondage 1 – Sondage 3) excavated against the sides of the hut base show that it stood to a height of c. 0.5m above the level of the subsoil, and that there were two tip lines in the concrete casting. A number of loose bricks (303) were located at the base of Sondage 1 and Sondage 2. Located on the sides of the hut base c. 0.06m below its upper surface was a line of small slots (304), which extended around the periphery of the structure. The slots measured 0.03m wide by 0.05m high by 0.04m deep and were placed at random intervals of between 0.3m and 0.7m. These slots may have been used for securing the walling of the hut to the concrete base.

3.5 Hut Base 3

3.5.1 Hut Base 3 (Figs. 5 & 12) consisted of a concrete base (401) aligned north-south and of the same shape and dimensions as Hut Base 301. The more degraded nature of the concrete showed that the cast concrete sides (402) measured c. 0.2m wide. Two sondages (Fig. 5, Sondage 1 and Sondage 2) excavated against the cast concrete sides showed that they stood to a height of up to c. 0.7m above the subsoil. In Sondage 1, the cast concrete sides sat within a 0.12m deep foundation cut (408). On top of the cast concrete base there was a single course of bricks (403), which survived around three of the four rounded corners. As was the case with platform 301, there were the remains of a possible brick chimney (404), and the same randomly spaced

- slots, presumably for securing the hut walls to the base, were present around the periphery.
- 3.5.2 The remains of brick paths laid directly onto the natural subsoil were present to the north (407) and south (405) of the hut base. Both had been constructed using bricks stamped 'NIDDRIE'.

3.6 Building Complex 2

- 3.6.1 Building Complex 2 (Fig. 6, 13 & 14) apparently consisted of four buildings aligned approximately east-west. This side of the site sloped quite steeply to the east and the huts were terraced into the slope. The concrete bases of the two northernmost huts (501 and 506) were linked by a short flight of stairs (516). A further flight of stairs (515) to the south of hut 501 dropped down onto a concrete pathway (507) which linked this hut base with two further hut bases (517 and 524). These had been largely destroyed by the insertion of a modern sewer pipe. An associated drainage system comprising of gullies, pipes and inspection chambers was also identified; the pipes were all salt glazed. A discontinuous brick pathway (508) was identified running in an east to west direction between hut bases 506 and 524.
- The western end of hut base 501 was not uncovered during the excavation as it 3.6.2 lay outside of the development area and was probably destroyed when Mounthooly Loan was constructed. The exposed remains measured 16.5m east to west by 7.5m north to south. This width (24.6ft) corresponds well with the 24ft width of two of the Nissen type huts advertised in a 1950s edition of The Scotsman newspaper (Scotsman Digital Archive 05-05-1950), suggesting that it was the base for either a 114ft by 24ft or 90ft by 24ft Nissen type hut. From the upstanding remains it was possible to identify the construction technique employed in building the base of the hut. A 0.12m thick concrete surface overlay a rubble base (502) contained within a double-skinned brick wall (503). The bricks, which were of the 'NIDDRIE' Coal Board type, sat on a concrete foundation and consisted of six courses at the eastern end, but only a single course at the western end where the ground sloped upwards. Concrete blocks (526), each containing a single upright metal pin, were located opposite each other along the north-facing and south-facing lines of wall 503. They were spaced at c.2m intervals with their surface flush with the top of the uppermost course of bricks. Where the top and sides of the blocks were fully visible, they measured c.0.35m square. These features are likely to have been for securing the hut structure onto the concrete base.
- 3.6.3 The traces of two internal dividing walls (522 & 539) running north to south were identified surviving as a single course of degraded bricks. An impression of a line of bricks on the concrete surface marks a return of wall 522 to run east to west defining a separate small room within the north-east corner of the building. Within this room the foundations of a small brick-built structure (534) with two metal pipes protruding from it was identified. The structure measured 0.75m by 0.75m. This room may have been a bathroom.

- 3.6.4 Running along the north and south sides of hut base **501** were two shallow cast concrete drainage channels (**504** and **513**). The channels measured c. 0.4m wide by 0.08m deep. Channel **504** ran the full length of the northern side of the hut base and extended round the north-eastern corner of the platform and entered a drain (**527**). This drain also had a hole in the top surface suggesting that a down pipe had also drained into it. A drain inspection chamber (**510**) was located just to the east of the drain. Drainage channel **513** ran along the southern side of the hut base and continued alongside path **507**, before exiting into drain **519**.
- 3.6.5 Hut base **501 was** connected to hut base **506** via a flights of concrete steps (**516**). This consisted of three steps dropping c. 0.65m. The sides of the steps were lined with 'NIDDRIE' stamped bricks.
- 3.6.6 The eastern end of hut base 506 lay outwith the wayleave for the pipeline the part uncovered measured 9.5m west to east by 5m north to south. This width (16.4ft) corresponds well with the 16ft width of the majority of the Nissen type huts advertised in a 1950s edition of The Scotsman newspaper (Scotsman Digital Archive 05-05-1950), which ranged in length from 18ft to 60ft. The surface of this hut base was degraded and it could be seen that it consisted of several thin skims of concrete with evidence of a bitumen damp-proof course between the layers. A rectangular slot (529) through the concrete measuring 1m by 0.45m identified along the northern edge of the feature suggests that it also had a rubble core (537) contained within a cast concrete wall (532). This wall was 0.24m wide by up to 0.65m high. Small rectangular slots (536) were present along the top of the northern and southern walls directly opposite each other at irregular 1.5m - 2m intervals. Each slot contained the remains of a timber upright. These timbers would most likely have been for securing the hut structure to the concrete base. Sondages excavated to the level of the subsoil (002) to the north of 506 identified a water pipe (511) and a gas pipe (530) running parallel with the northern wall.
- 3.6.7 The fragmentary remains of hut base 517 were identified in the south-west corner of the excavated area. The western end ran out of the wayleave of the pipeline and had probably been destroyed by the construction of Mounthooly Loan whilst the majority of it had been removed by the insertion of a modern sewer to the south. Only part of the northern side of the building survived. The surviving remains measured 10m east to west by up to 1.2m north to south and consisted of a brick foundation wall (518) surrounding a concrete surface (517). A small outshot area on the northern wall was surfaced with an irregular brick-built plinth (521) laid over the concrete floor. This may have been for a hearth. Running along the side of the hut base was a cast concrete drainage channel (514) of the same type as channel 504 and 513. This channel exited into drain 519. Evidence of walling or superstructure was found in two locations. At the western end of the surviving remains the impressions of corrugated iron or asbestos sheet were identified between the external drain and the hut base; this may represent the remains of walling material. On either side of the possible hearth (521) the remains of a wooden beam (533) on the same alignment as wall 518 were recorded. This beam contained the remains

- of metal bolts protruding upwards which may have been used for anchoring the hut structure to the base.
- 3.6.8 Hut base **524** had also been largely destroyed by the service trench for the modern sewer pipe. This base measured 11.5m east to west, but the surviving remains only measured up to a maximum of c.1m north to south. The surviving remains consisted of a double-skinned brick wall (**523**) and a few remaining fragments of a concrete surface (**524**). The wall survived to a maximum height of c. 0.6m (six courses). Against the inside edge of the wall was a ceramic urinal measuring (**525**) c. 1.7m in length by 0.24m in width. A sondage excavated against the wall established that the urinal drained into a concrete pipe (**531**) to the north then went out through inspection chamber **509** before running downslope to the east.
- 3.6.9 External rainwater drainage channels were found around the outside edge of hut base 501 and 517. Drainage channel 504 drained into chamber 510 via drain 527. This water then exited the chamber parallel with the northern wall of platform 506 via pipe 511 and also to the south into inspection chamber 509 via pipe 520. Channels 513 and 514 both drained into chamber 509 via drain (519) and pipe (512), while urinal 525 drained into chamber 509 via pipe 531. The water that drained into chamber 509 drained downhill to the east in to chamber 528, which exited outwith the development area. This system suggests that toilet waste (at least urine) was disposed of with the run off rainwater.
- 3.6.10 Inspection chambers **509**, **510** and **528** would have allowed the drains to be cleared after a blockage. They were of brick and concrete construction with iron covers. The openings into them measured c. 0.6m by 0.5m and they had internal depths varying between 0.7m and 0.9m. The glazed pipes (**511**, **512** and **520**) had a diameter of c. 013m and were laid in 0.93m lengths, joined using larger collars located at one end.
- 3.6.11 A discontinuous section of brick built path (508) laid directly on to the ground had been constructed using 'NIDDRIE' Coal Board bricks. It measured c. 6m in length by up to 1m in width. The purpose of this is not clear although it appeared to run to a drainage inspection chamber (528) so it may have been constructed for access to this chamber to allow the drains to be cleared after a blockage.

3.7 Drainage System

- 3.7.1 The remains of a system of drains (Fig. 7 & 15) were identified at the northern end of the excavated area. This system consisted of four inspection chambers (601, 602, 603 and 604) and the probable remains of the waste pipes for a series of sinks or latrines (605). Only inspection chambers 602 and 603 were fully excavated. Both were of brick and concrete construction.
- 3.7.2 A building can be seen on the 1947 aerial photograph (Fig. 8) in this approximate location and, unlike the rest of the excavation area which was under pasture or out of cultivation, this part of the site had been heavily

ploughed for years and the surface is scattered with broken up building materials. It is therefore likely that the drainage system that survives here was associated with this building and is all that now remains.

3.8 Camp Roads

- 3.8.1 The intermittent remains of two camp roads (701 and 703) (Fig. 1) were identified, both of which are visible on the 1947 aerial photograph (Fig. 8). Road 701 (Fig. 16) was aligned north to south and the surviving length measured 55m by up to 3.5m in width. A slot excavated across the track showed that it was 0.2m deep and consisted of an upper layer of blaes (701) and a lower layer of grey hardcore and boulders (702). The road sat directly on top of natural subsoil (005).
- 3.8.2 Road **703** was less well preserved but was aligned east to west and the surviving remains measured 10m long by 1m in width and had a blaes surface.

3.9 Watching Brief

3.9.1 Building Complex 1, Hut Base 2, and Building Complex 2 were directly affected by the excavation of the pipe trench for the development. These structures were cut through using a mechanical excavator and the exposed sections recorded. Details of the findings for the individual units are contained below.

Building Complex 1

3.9.2 A north to south section excavated across Building Complex 1 showed that the brick retaining walls of the buildings had been built directly on top of the natural subsoil. The area inside the retaining walls had then been built up using soil and rubble (226) measuring up to c.0.2m deep and capped with a layer of concrete measuring c. 0.1m thick. Beneath the earth infill the original topsoil (227) survived as a compacted silty-sand layer with a depth of up to c. 0.2m. This silty-sand deposit sat directly on top of natural subsoil (002). The possibly external concrete surfaces were laid over the same soil and rubble mix (226) which lay over topsoil (227).

Hut Base 2

3.9.3 A north to south section excavated across Hut Base 2 indicated that the footprint of the hut base had first been stripped to the level of the subsoil. Cast concrete walls (306) measuring 0.5m high by 0.2m thick had then been constructed directly on top of the natural subsoil (002) and the area inside the walls had been filled with earth (305) consisting of brown clay/silt. This earth core had then been capped with a 0.12m thick layer of concrete (301), which also overlay the top of the cast concrete walls.

Building Complex 2

3.9.4 A north to south section excavated across hut base **501** indicated that the footprint of this hut base had first been stripped to the level of the subsoil. A double-skinned brick wall measuring up to 0.5m high by 0.25m wide had then been constructed directly on the natural subsoil (**002**) and the area inside the walls had been filled with an earth (**538**) and rubble (**502**) core. The infill material had then been capped with a 0.12m thick layer of concrete, which overlay the innermost skin of the double-skinned brick wall.

3.10 Finds, by Sue Anderson

3.10.1 Finds were collected from around Hut Base 1, Building Complex 1, Hut Base 3 and Building Complex 2. Unlike a standard archaeological excavation there were not any secure contexts and all finds were recovered during cleaning around the upstanding hut bases after the monitored strip. Therefore, none of the finds are in context. Table 1 shows the quantities by find type and a full catalogue is included as Appendix 4.

Find type	No.	Wt (g)
Pottery	91	2255
CBM	5	4818
Glass	18	2240
Other ceramic	1	10
Iron	3	232

Table 1. Finds quantities.

Pottery

- 3.10.2 The pottery assemblage comprised largely refined factory-made white earthenwares (84 sherds, 1832g), with small quantities of late slipped redware (4 sherds, 212g), English stonewares (2 sherds, 206g) and porcelain (1 sherd, 5g).
- 3.10.3 The whitewares were generally plain tablewares including plates, tea cups and large mugs. This is typical of the 'utility' wares which were produced during World War II. Some vessels had makers' marks either stamped or transfer-printed onto the bases, most of which incorporated the initials of the King (G IV R) and the date, ranging from 1942 to 1944. Identifiable makers included Wood's, Myott Son & Co, J & G Meakin, Royal Albert and John Maddock & Sons, all based in the Stoke-on-Trent area. Other whitewares included a few sherds of brown-glazed teapots and other vessels. Two stoneware base sherds included one with a maker's transfer print for Lovatts Potteries in Nottinghamshire; this was dated 1946.
- 3.10.4 Some of the pottery is likely to predate the use of the site as an army camp. The few decorated whitewares included a 'flow blue' plate rim and two sherds of plates with black transfer prints from Building Complex 2 and a cup with a lilac applied 'prunt' from Hut Base 3. The late slipped redwares included a bowl rim, two base sherds and a body sherd, all from different vessels, in Hut Base 3 and Building Complex 2; again these are more likely to represent

earlier activity. A fragment of porcelain base from Building Complex 2, with overglaze painted decoration, is almost certainly older than the use of the camp.

Building material

- 3.10.5 All samples of ceramic building material (CBM) were recovered from Building Complex 2 and comprised a fragment of shale brick, two pieces of brown-glazed drainpipe and two pieces of a toilet base. All are likely to be contemporary with the army camp.
- 3.10.6 Three fragments of thick window glass, including two pieces with wire reinforcement, were collected from Hut Base 1/Building Complex 1.

Glass vessels

3.10.7 With the exception of a pale green glass stopper from Hut Base 1/Building Complex 1, all glass vessel fragments were pieces of bottles. The majority were in uncoloured glass and several complete examples were recovered from Hut Base 3 and Building Complex 2. These included milk bottles, and small bottles which may have held ink and medicines. Fragments of two green bottles were also recovered. A thick dark green/brown bottle base from Hut Base 3 may predate the army base. Two melted fragments of glass from Building Complex 2 were blue in colour, although originally they may have been green.

Miscellaneous

- 3.10.8 A pipeclay marble was collected from Building Complex 2.
- 3.10.9 A fragment of a large horseshoe (heel end with large right-angled calkin) was from Hut Base 3, and there were two iron objects from Building Complex 2, a wire ?handle and a Sheffield steel knife blade.

4. CONCLUSION

- 4.1 The history of the use of the site still needs some clarification but so far it suggests that the camp was constructed by the Royal Engineers for the 16th Battalion of the Durham Light Infantry, who were stationed there in July 1940 until sometime in 1941 (www.16dli.net). After this it seems to have been used by the Royal Signal Corps who were stationed there until after the end of the war, possibly until after 1947. The camp was then dismantled around 1950 and the building materials sold off. There is also a suggestion that the camp housed prisoners of war and that in the immediate post-war period it is understood to have served as a displaced persons' camp.
- 4.2 The remains of three individual hut bases were excavated. Two of these were identical (Hut Bases 2 and 3) and had sub-rounded ends, the other was a smaller square-ended structure. Two further complexes of structures were excavated. In Complex 1 two small buildings, each consisting of what appeared to be two rooms, were uncovered. The largest of the rooms in each structure had an internal drain suggesting that these may have been urinals or shower blocks. However, it is more likely that they were shower blocks as porcelain urinals have been found elsewhere on site, suggesting that this was the preferred material for such items. In Complex 2 the remains of four individual structures were uncovered. Two were very badly damaged by the insertion of an earlier sewer so little information about these could be recovered although one of them certainly had an internal toilet with a urinal and either a sink or WC. The other two structures in this complex were not fully exposed as they continued out of the pipeline wayleave but they were rectangular in form. The westernmost was significantly larger than the easternmost and there were traces of an internal WC or sink in one corner. The remains of a system of drains and manholes to the north of the site is thought to be all that remains of another hut base now completely destroyed.
- 4.3 From the excavated structures two building techniques were evident. To construct Hut Bases 2 and 3 a foundation trench was dug and concrete foundation walls were cast in situ. The space in-between the walls was then infilled with rubble and soil which was simply dumped over the original topsoil which had been left in situ. A thin concrete floor was then laid over the top of this. The hut superstructure would then be built on top of the base. It is thought that the complete easternmost structure in Building Complex 2 was of a similar construction type. The other buildings had brick foundation walls but all other aspects of the construction were the same. The bricks used were all NIDDRIE bricks from the Coal Board brick works.
- 4.4 The limited dateable finds that were recovered were largely War Department issue ceramics and fit with the known date range of the use of the camp.
- 4.5 A summary statement of the results of this excavation will be submitted for publication in *Discovery and Excavation in* Scotland and the site will also be reported on through the OASIS protocol.

- 4.6 The project archive, comprising all CFA record sheets, maps and reports, will be deposited with the National Monuments Record of Scotland (NMRS) and copies of the report will be lodged with the CECAS Sites and Monuments Record.
- 4.7 It is recommended that post-excavation should be limited to some further historical studies to try and provide more background to the use of the camp. A short publication should also be prepared for either History Scotland or the Journal for Conflict Archaeology. However, the decision regarding any further post-excavation analysis and publication lies with CECAS.

5. ACKNOWLEDGEMENTS

5.1 CFA would like to thank John Jamieson, Duncan Wilson and Kim Denholm for their input into providing background information relating to the use of Mortonhall Army Camp. Thanks also to all those who attended the open day and provided further information and recollections. The machine work during initial soil stripping was carried out to a high standard by John Hogarth. Thanks are also extended to Black and Veatch Ltd, Scottish Water and ERM Ltd without whom the work would not have taken place.

APPENDIX 1: Context Register

No.	Area	Description
001	N/A	Topsoil
002	N/A	Subsoil
003	N/A	Made-ground
004	N/A	Fill of modern sewer
005	N/A	Buried soil
101	Hut Base 1	Soil core of hut base
102	Hut Base 1	Brick wall of hut base
103	Hut Base 1	Not used
104	Hut Base 1	Concrete floor of hut base
105	Hut Base 1	Concrete step in to hut
106	Hut Base 1	Trace of wall to create vestibule inside building
201	Building Complex 1	Brick foundation wall
202	Building Complex 1	Concrete surface (interior floor of building)
203	Building Complex 1	Brick foundation wall
204	Building Complex 1	Concrete surface (interior floor of building)
205	Building Complex 1	Concrete surface
206	Building Complex 1	Brick foundation wall
207	Building Complex 1	Concrete surface (interior floor of building)
208	Building Complex 1	Brick manhole
209	Building Complex 1	Brick foundation wall
210	Building Complex 1	Concrete surface (interior floor of building)
211	Building Complex 1	Brick foundation wall
212	Building Complex 1	Concrete surface
213	Building Complex 1	Concrete surface
214	Building Complex 1	Drainage channel
215	Building Complex 1	Concrete surface
216	Building Complex 1	Concrete surface
217	Building Complex 1	Concrete surface
218	Building Complex 1	Concrete surface
219	Building Complex 1	Concrete surface
220	Building Complex 1	Brick lined void
221	Building Complex 1	Corrugated asbestos wall
222	Building Complex 1	Manhole
223	Building Complex 1	Drainage Channel
224	Building Complex 1	Drainage Channel
225	Building Complex 1	Ceramic drainage pipes
226	Building Complex 1	Soil and rubble make up deposit for concrete floors and
225	D IIII G	surfaces
227	Building Complex 1	Original topsoil below 226
301	Hut Base 2	Concrete floor of hut base
302	Hut Base 2	Base of brick chimney or hearth
303	Hut Base 2	Loose bricks
304	Hut Base 2	Slots around periphery of platform
305	Hut Base 2	Earth core of hut base
306	Hut Base 2	Cast concrete walls of hut base
401	Hut Base 3	Concrete floor of hut base
402	Hut Base 3	Cast concrete walls of hut base
403	Hut Base 3	Remains of brick end walls
404	Hut Base 3	Bricks forming brick chimney or hearth
405	Hut Base 3	Brick path
406	Hut Base 3	Rubble core of hut base
407	Hut Base 3	Brick path
408	Hut Base 3	Possible foundation cut for hut base

No.	Area	Description	
409	Hut Base 3	Slots around periphery of hut base	
501	Building Complex 2	Concrete floor of hut base	
502	Building Complex 2	Rubble core of hut base 501	
503	Building Complex 2	Double skinned brick wall of hut base 501	
504	Building Complex 2	Cast concrete drainage channel around northern edge of hut	
		base 501	
505	Building Complex 2	Possible foundation cut for hut base 501	
506	Building Complex 2	Concrete floor of hut base	
507	Building Complex 2	Concrete path and brick edged path	
508	Building Complex 2	Rough brick path	
509	Building Complex 2	Concrete floor of hut base	
510	Building Complex 2	Concrete floor of hut base	
511	Building Complex 2	Ceramic pipe drain	
512	Building Complex 2	Ceramic pipe drain	
513	Building Complex 2	Cast concrete drainage channel around southern edge of hut base 501	
514	Building Complex 2	Cast concrete drainage channel along northern edge of hut base 517	
515	Building Complex 2	Concrete steps to south of hut base 501	
516	Building Complex 2	Concrete steps to east of hut base 501	
517	Building Complex 2	concrete floor of hut base	
518	Building Complex 2	Brick wall of hut base 517	
519	Building Complex 2	Drain with metal cover	
520	Building Complex 2	Ceramic pipe drain	
521	Building Complex 2	Possible chimney or hearth base on hut base 517	
522	Building Complex 2	Internal brick wall on hut base 501	
523	Building Complex 2	Double skinned brick wall of hut base 524	
524	Building Complex 2	Concrete floor of hut base	
525	Building Complex 2	Ceramic urinal in hut base 524	
526	Building Complex 2	Concrete blocks with upright metal pin protruding	
527	Building Complex 2	Concrete drain	
528	Building Complex 2	Drain inspection chamber	
529	Building Complex 2	Rectangular slot	
530	Building Complex 2	Gas pipe	
531	Building Complex 2	Concrete encased drain	
532	Building Complex 2	Cast concrete foundation wall	
533	Building Complex 2	Remains of wooden beam possibly forming upper wall of hut base 51)	
534	Building Complex 2	Internal feature in hut base 501	
535	Building Complex 2	Concrete foundation underlying the brick wall forming the sides of hut base 501	
536	Building Complex 2	Slots within wall 532 of hut base 506	
537	Building Complex 2	Rubble core under platform 506	
538	Building Complex 2	Made-ground underlying rubble 502	
539	Building Complex 2	Internal brick wall on hut base 501	
601	Drainage System 601- 605	Drain inspection chamber	
602	Drainage System 601- 605	Drain inspection chamber	
603	Drainage System 601- 605	Drain inspection chamber	
604	Drainage System 601- 605	Drain inspection chamber	
605	Drainage System 601- 605	Remains of concrete surface with drainage pipes	
701	Camp Road 701	Blaes forming the upper surface of road	
702	Camp Road 701	Road bottoming beneath 701	

No.	Area	Description	
703	Camp Road 703	Blaes forming the upper surface of road	

APPENDIX 2: Photographic Register

Film 1: Colour slides

No	Description	From	Conditions
1-2	Registration		
3-4	General site shots, Hut Base 1 and Building Complex 1	SW	Snow
5-6	General site shots, Hut Base 1 and Building Complex 1	S	Snow
7-8	General site shots, Hut Base 1 and Building Complex 1	S	Snow
9-10	General site shots, Hut Base 1 and Building Complex 1	Е	Snow
11-12	Working shots	W	Snow
13-14	Hut bases in woods, Mounthooly Loan	S	Shade
15-16	Hut bases in woods, Mounthooly Loan	S	Shade
17-18	Hut bases in woods, Mounthooly Loan	S	Shade
19-20	Hut bases in woods, Mounthooly Loan	SE	Shade
21-22	105 detail	N	Bright
23-24	106 detail	N	Bright
25-26	105 and 106 detail	S	Bright
27-28	203 detail	N	Bright
29-30	201 detail	N	Bright
31-32	102 detail	W	Bright
33-34	Building Complex 1 general shot	S	Bright
35-36	Building Complex 1 general shot	S	Bright

Film 2: Colour slides

No	Description	From	Conditions
1-2	Registration		
3-4	Track 701 general shot	S	Bright
5-6	Track 701 general shot	S	Bright
7-10	Track 701 surface detail	Е	Bright
11-12	Track 701 surface detail	W	Bright
13-14	General view of Hut Base 1	N	Dull
15-16	General view of Hut Base 1	N	Dull
17-18	General view of Hut Base 1 and Building Complex 1	W	Dull
19-20	General view of Hut Base 1	N	Dull
21-22	General view of Building Complex 1	S	Bright
23-24	208 detail	S	Dull
25-26	Cover and drainage channel within 207	S	Dull
27-28	208, cover and drainage channel within 207	Е	Dull
29-30	212 with 206/207 in background	Е	Dull
31-32	209/210	S	Dull
33-34	General view of 206,207,208,209,210 and 214	E	Dull
35-37	Detail of 214 within 213	N	Dull

Film 3: Colour slides

No	Description	From	Conditions
1-2	Registration		
3-4	General view of 213 with 218, 219 and 220	S	Dull
5-6	Detail of 220	S	Dull
7-10	Detail of 204 and 205	S	Dull
11-12	Detail of 223	N	Dull
13-14	Detail of 215	S	Dull

15-16	Detail of 218 and 219	S	Dull
17-18	Detail of notches in 216	S	Dull
19-20	Manhole 222 with south edge of 213 in background	S	Dull
21-22	Section of 215	Е	Dull
23-24	Section of 217	Е	Dull
25-26	Elevation of 102	W	Dull
27-28	General view of Hut Base 1 and Building Complex 1	NW	Dull
29-30	General view of Hut Base 1 and Building Complex 1	NW	Dull
31-32	General view of Hut Base 1 and Building Complex 1	NW	Dull
33-34	General view of Hut Base 1 and Building Complex 1	NW	Dull
35-37	General view of Hut Base 1	N	Dull

Film 4: Colour slides

No	Description	From	Conditions
1-2	Unit 7, road 701 general pre-ex shot	South	Sun
3-4	Unit 7, road 701 south-facing section	South	Sun
5-6	Hut Base 2, general shot	South	Overcast
7-8	Hut Base 2, general shot	North	Overcast
9-10	Hut Base 2, Sondage 1	West	Overcast
11-12	Hut Base 2, Sondage 2	East	Overcast
13-14	Hut Base 2, Sondage 2	North	Overcast
15-16	Hut Base 2, Sondage 2	East	Overcast
17-18	Hut Base 3, general shot	North	Overcast
19-20	Hut Base 3, general shot	South	Overcast
21-22	Hut Base 3, Sondage 1	West	Overcast
23-24	Hut Base 3, Sondage 2	East	Overcast
25-26	Hut Base 3, detail of probable chimney (404)	East	Overcast
27-28	Hut Base 3, brick path 405	East	Overcast
29-30	Building Complex 2, general shot	East	Sun
31-32	Building Complex 2, general shot	West	Sun
33-34	Building Complex 2 showing urinal 525	West	Sun
35-36	Building Complex 2, pipe 512	West	Sun

Film 5: Colour slides

No	Description	From	Conditions
1-2	Building Complex 2, inspection chamber 509	West	Sun
3-4	Building Complex 2, path 508	West	Sun
5-6	Building Complex 2, path 508	East	Sun
7-8	Building Complex 2, drain cover 519	Above	Sun
9-10	Building Complex 2, steps 515	South	Overcast
11-12	Building Complex 2, brickwork 521 on concrete 517	North	Overcast
13-14	Building Complex 2, concrete 517	East	Overcast
15-16	Building Complex 2, Concrete block 526 (SE most	SW	Sun
	block)		
17-18	Building Complex 2, drainage channel 513	East	Sun
19-20	Building Complex 2, steps 516	East	Sun
21-22	Building Complex 2, steps 516	South	Sun
23-24	Building Complex 2, inspection chamber 510	East	Sun
25-26	Building Complex 2, inspection chamber 510 close up	East	Sun
27-28	Building Complex 2, concrete platform 506	North	Sun
29-30	Building Complex 2, concrete platform 506	West	Sun
31-32	Building Complex 2, concrete platform 506, slot for	Above	Sun
	wooden upright		
33-34	Building Complex 2, drain 527	East	Sun
35-36	Building Complex 2, inspection chamber 528	West	Sun

Film 6: Colour slides

No	Description	From	Conditions		
1-2	Building Complex 2, Sondage 1, north-facing section	North	Sun		
3-4	Building Complex 2, view along drainage channel 504	East	Sun		
5-8	Building Complex 2, general shots	South	Sun		
9-10	Pathway 703	West	Overcast		
11-12	Hut Base 2 showing rectangular slots within concrete	NE	Overcast		
13-14	Building Complex 2 general shot	NE	Overcast		
15-16	Building Complex 2, pipe 513	North	Overcast		
17-18	Building Complex 2 general	SE	Overcast		
19-20	Hut Base 3 general	SE	Overcast		
21-22	Building Complex 2 general	SW	Overcast		
23-24	Building Complex 2 general	NW	Overcast		
25-26	Building Complex 2 general	NE	Overcast		
27-28	Hut Base 2/ Building Complex 2, general	NE	Overcast		
29-30	Drainage System 601-605, inspection chamber 602	North	Sun		
31-32	Drainage System 601-605, inspection chamber 603 South Sun				
33-36	Drainage System 601-605, general	Various	Sun		

Film 7: Colour slides

No	Description	From	Conditions
1-2	Registration shots	-	-
3-10	East facing section through Building Complex 2	East	Rain
11-12	General shot of east facing section through Building	East	Rain
	Complex 2		
13-22	North-west facing section through Hut Base 2	NW	Rain
23-24	Post-excavation shot of Hut Base 2	South	Rain

Digital Photos: Hut Base 1– Unit 2

No	Description	From	Conditions
1	General site shots, Hut Base 1 and Building Complex 1	SW	Snow
2	General site shots, Hut Base 1 and Building Complex 1	S	Snow
3	General site shots, Hut Base 1 and Building Complex 1	S	Snow
4	General site shots, Hut Base 1 and Building Complex 1	E	Snow
5	Working shots	W	Snow
6	Hut bases in woods, Mounthooly Loan	S	Shade
7	Hut bases in woods, Mounthooly Loan	S	Shade
8	Hut bases in woods, Mounthooly Loan	S	Shade
9	Hut bases in woods, Mounthooly Loan	SE	Shade
10	103 detail	N	Bright
11	104 detail	N	Bright
12	103 and 104 detail	S	Bright
13	203 detail	N	Bright
14	201 detail	N	Bright
15	101 detail	W	Bright
16	Building Complex 1, general shot	S	Bright
17	Building Complex 1, general shot	S	Bright
18	Track 701 general shot	S	Bright
19	Track 701 general shot	S	Bright
20	Track 701 surface detail	Е	Bright
21	Track 701 surface detail	W	Bright

22	General view of Hut Base 1	N	Dull
23	General view of Hut Base 1	N	Dull
24	General view of Hut Base 1	N	Dull
25	General view of Hut Base 1 and Building Complex 1	W	Dull
26	General view of Hut Base 1	N	Dull
27	208 detail	S	Dull
28	Cover and drainage channel within 207	S	Dull
29	208, cover and drainage channel within 207	Е	Dull
30	212 with 206/207 in background	Е	Dull
31	209/210	S	Dull
32	General view of 206,207,208,209,210 and 214	Е	Dull
33	Detail of 214 within 213	N	Dull
34	General view of 213 with 218, 219 and 220	S	Dull
35	Detail of 220	S	Dull
36	Detail of 204 and 205	S	Dull
37	Detail of 223	N	Dull
38	Detail of 215	S	Dull
39	Detail of 218 and 219	S	Dull
40	Detail of notches in 216	S	Dull
41	Manhole 222 with south edge of 213 in background	S	Dull
42	Section of 215	Е	Dull
43	Section of 217	Е	Dull
44	Elevation of 102	W	Dull
45	General view of Hut Base 1 and Building Complex 1	NW	Dull
46	General view of Hut Base 1 and Building Complex 1	NW	Dull
47	General view of Hut Base 1 and Building Complex 1	NW	Dull
48	General view of Hut Base 1 and Building Complex 1	NW	Dull

Digital: Hut Base 2– Unit 7

No	Description	From	Conditions	
1-2	Camp Road 701 general pre-ex shot	South	Sun	
3-4	Camp Road 701 south-facing section	South	Sun	
5-6	Hut Base 2, general shot	South	Overcast	
7-8	Hut Base 2, general shot	North	Overcast	
9-10	Hut Base 2, Sondage 1	West	Overcast	
11-12	Hut Base 2, Sondage 2	East	Overcast	
13-14	Hut Base 2, Sondage 2	North	Overcast	
15-16	Hut Base 2, Sondage 2	East	Overcast	
17-18	Hut Base 3, general shot	North	Overcast	
19-20	Hut Base 3, general shot	South	Overcast	
21-22	Hut Base 3, Slot 1	West	Overcast	
23-24	Hut Base 3, Slot 2	East	Overcast	
25-26	Hut Base 3, detail of probable chimney (404)	East	Overcast	
27-28	Hut Base 3, brick path 405	East	Overcast	
29-30	Building Complex 2, general shot	East	Sun	
31-32	Building Complex 2, general shot	West	Sun	
33-34	Building Complex 2 showing urinal 525	West	Sun	
35-36	Building Complex 2, pipe 512	West	Sun	
37-38	Building Complex 2, inspection chamber 509	West	Sun	
39-40	Building Complex 2, path 508	West	Sun	
41-42	Building Complex 2, path 508	East	Sun	
43-44	Building Complex 2, drain cover 519 Above Sun			
45-46	Building Complex 2, steps 515 South Overca			
47-48	Building Complex 2, brickwork 521 on concrete 517	North	Overcast	
49-50	Building Complex 2, Concrete block 526 (SE most	SW	Sun	
	block)			

51-52	Building Complex 2, drainage channel 513	East	Sun		
53-54	Building Complex 2, steps 516	East	Sun		
55-56	Building Complex 2, steps 516	South	Sun		
57-58	Building Complex 2, inspection chamber 510	East	Sun		
59-60	Building Complex 2, inspection chamber 510 close up	East	Sun		
61-62	Building Complex 2, concrete platform 506	North	Sun		
63-64	Building Complex 2, concrete platform 506	West	Sun		
65-66	Building Complex 2, concrete platform 506, slot for	Above	Sun		
	wooden upright				
67-68	Building Complex 2, drain 527	East	Sun		
69-70	Building Complex 2, inspection chamber 528	West	Sun		
72-72	Building Complex 2, Slot 1, north-facing section	North	Sun		
73-74	Building Complex 2, view along drainage channel 504	East	Sun		
75-78	Building Complex 2, general shots	South	Sun		
79-80	Camp Road 703	West	Overcast		
81-82	Hut Base 2 showing rectangular slots within concrete	NE	Overcast		
83-84	Building Complex 2 general shot	NE	Overcast		
85-86	Building Complex 2, pipe 513	North	Overcast		
87-88	Building Complex 2, general	SE	Overcast		
89-90	Hut Base 3 general	SE	Overcast		
91-92	Building Complex 2, general	SW	Overcast		
93-94	Building Complex 2, general	Overcast			
95-96	Building Complex 2, general NE Ove				
97-98	Hut Base 2/Building Complex 2, general NE Overcast				
99-100	Drainage System 601-605, inspection chamber 602	North	Sun		
101-102	Drainage System 601-605, inspection chamber 603	South	Sun		
103-108	Drainage System 601-605, general	Various	Sun		

Digital: Unit 3 & Unit 5 watching Brief

No	Description	From	Conditions
1	Pre-excavation shot of Building Complex 2,	NE	Rain
2	Pre-excavation shot of Building Complex 2,	Е	Rain
3	Pre-excavation shot of Building Complex 2,	SE	Rain
4	Pre-excavation shot of Building Complex 2,	NW	Rain
5	Pre-excavation shot of Building Complex 2,	SW	Rain
6	General shot of Hut Base 2	SW	Rain
7	Pre-excavation shot of Hut Base 2	W	Rain
8	Pre-excavation shot of Hut Base 2	Е	Rain
9	General shot of Hut Base 2	Е	Rain
10-13	General working shots	Е	Rain
14-15	North-east facing section through Building Complex 2, (already truncated)	NE	Rain
16-17	Section through Building Complex 2, (already truncated)	SW	Rain
18-19	Section through Building Complex 2, (already truncated)	W	Rain
20-22	General working shots	Е	Rain
23-28	General working shots	Е	Rain
29-32	East facing section through Building Complex 2,	Е	Rain
33-34	East facing section through Building Complex 2,	Е	Rain
35-36	General working shots	W	Rain
37-39	General working shots	NW	Rain
40	General working shots	SW	Rain
41-44	General working shots	SE	Rain
45-49	North-west facing section through Hut Base 2	NW	Rain
50	Post-excavation shot of Unit 3	S	Rain

APPENDIX 3: Drawings Register

No	Description	Plan/Section	Scale
1A	Building Complex 2, plan	Plan	1:50
1B	Building Complex 2, plan	Plan	1:50
2	Hut Base 3, plan	Plan	1:50
3	Hut Base 2, plan	Plan	1:50
4	Hut Base 2, Sondage 2, east facing section	Section	1:20
5	Drainage System 601-605, plan	Plan	1:50
6	Building Complex 1, plan	Plan	1:50
7	Hut Base 1, plan	Plan	1:50
8	Trackway 005/006, south-facing section	Section	1:10
9	Building Complex 2, profile across 501, 516 and 506	Profile	1:10
10	Building Complex 2, profile across 504, 501, 515 and 507	Profile	1:20
11	Hut Base 3, Slot 1, west-facing section	Section	1;10
12	Hut Base 3, Slot 2, east-facing section	Section	1:10
13	Hut Base 2, Sondage 2, east-facing section	Section	1:10
14	Hut Base 2, Sondage 1, west-facing section	Section	1:10
15	Hut Base 2, Sondage 3, south-facing section	Section	1:10
16	Hut Base 1	Plan	1:50
17	Building Complex 1	Plan	1:50
18	Hut Base 1, Section 1	Elevation	1:10
19	Hut Base 1, Section 2	Elevation	1:10
20	Hut Base 1, Section 1	Section	1:10
21	Hut Base 1, Section 2	Section	1:10
22	Building Complex 2,, east facing section	Section	1:20
23	Hut Base 2, north-west facing section	Section	1:50

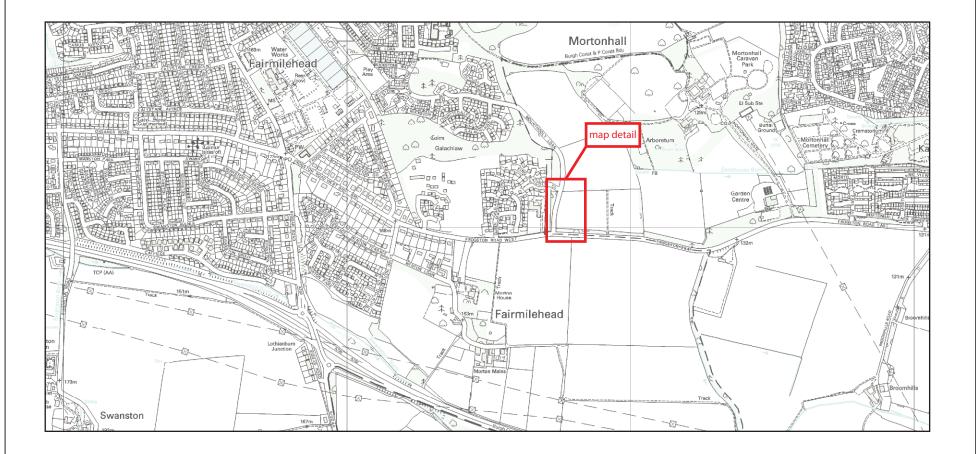
APPENDIX 4: Finds Register

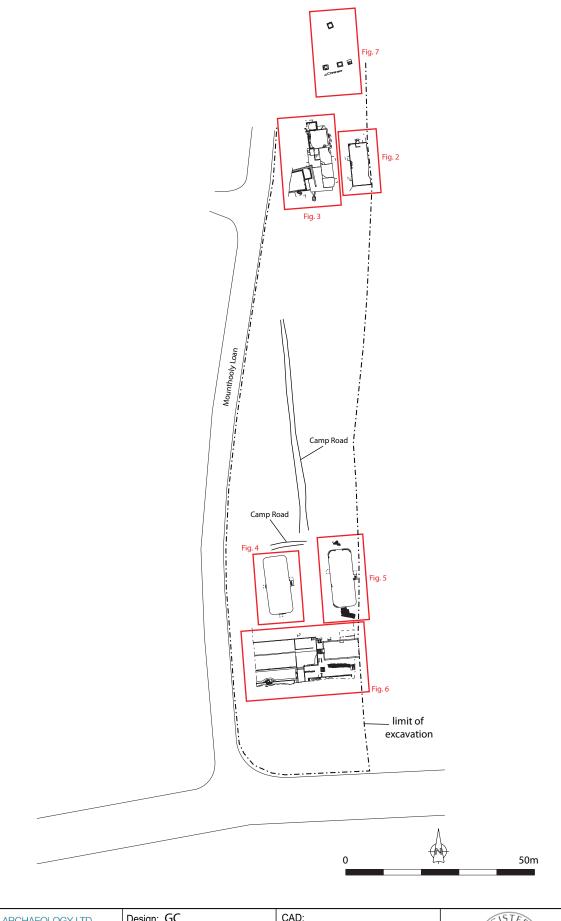
Feature	Find	No.	Wt (g)	Fabric	Notes	Spotdate
	type					
Hut Base 1	Pot	43	932	REFW	plates, plain white, including bases with stamped and/or transfer-printed maker's marks ('G IV R' on two; Vitresol, Myott Son & Co, Wood's, etc, dated 1942).	1942
Hut Base 1/ Building Complex 1	Pot	12	434	REFW	large plain white mugs, including Vitresol (J & G Mea[kin] 1942), Royal Ivory (John Maddock & Sons, 1943), and another (G IV Rworth & Bros Ltd)	1943
Hut Base 1/ Building Complex 1	Glass	3	57		thick window glass frags, including 2 with reinforcing wire	20th c.
Hut Base 1 / Building Complex 1	Glass	2	23		uncoloured octagonal bottle base(s), BRAD & Co LTD	20th c.
Hut Base 1 / Building Complex 1	Glass	1	14		pale green glass stopper	20th c.
Hut Base 3	Pot	1	9	REFW	cup with pale lilac prunt	19th/20th c.
Hut Base 3	Pot	3	169	LSRW	2 bases and body from 3 vessels	L18th-

Feature	Find type	No.	Wt (g)	Fabric	Notes	Spotdate
						20th c.
Hut Base 3	Glass	1	186		thick brown bottle base	19th/20th c.
Hut Base 3	Glass	3	149		2 complete small uncoloured round bottles	20th c.
Hut Base 3	Glass	1	19		green bottle neck	20th c.
Hut Base 3	Fe	1	130		frag of large horseshoe?	Pmed/mo dern
Building Complex 2	Pot	9	101	REFW	brown-glazed teapots etc	19th/20th c.
Building Complex 2	Pot	1	43	LSRW	bowl rim	L18th- 20th c.
Building Complex 2	Pot	2	206	ESW	bottle/jar bases, one with TP mark G IV R / LOVATTS / [PO]TTERIES LTD / 1946	1946
Building Complex 2	Pot	1	93	REFW	large plain white mug	20th c.
Building Complex 2	Pot	9	164	REFW	cups, 2 with base marks: 1 incomplete, illeg; other 1944 / G IV R / ROYAL ALBERT / BONE CHINA (in green)	1944
Building Complex 2	Pot	5	64	REFW	misc plain sherds	20th c.
Building Complex 2	Pot	3	33	REFW	flow blue plate rim and two black transfer-printed plate sherds	19th/20th c.
Building Complex 2	Pot	1	5	PORC	base with hand-painted overglaze decoration	19th/20th c.
Building Complex 2	Pot	1	2	REFW	burnt, greenish glaze	19th/20th c.
Building Complex 2	CBM	2	376		stoneware drainpipes, brown glaze ext, clear glaze int	19th/20th c.
Building Complex 2	CBM	2	4172		toilet base and fragment	20th c.
Building Complex 2	CBM	21	270		shale brick, stampedM BL /GAL	20th c.
Building Complex 2	Cera mic	1	10		pipeclay marble	19th/20th c.
Building Complex 2	Glass	4	1632		complete uncoloured bottles, 1 small, 1 large with moulded label (SMITHS MILTON BRIDGE LTD), 1 old-style milk bottle, 1 recent shape milk bottle with moulded label (CWS MILK GROUP / RINSE AND RETURN)	20th c.
Building Complex 2	Glass	1	146		green bottle base, octagonal, moulded label on side: ESTA, boar's head on base	20th c.
Building Complex 2	Glass	2	14		melted frags, blueish, may have been green originally	20th c.?
Building Complex 2	Fe	1	77		wire ?handle	20th c.
Building Complex 2	Fe	1	25		knife blade 'MADE IN SHEFFIELD / STAINLESS STEEL X-S5'	20th c.

NOTES

Pottery fabrics: REFW – refined factory-made white earthenwares; LSRW – late slipped redwares; ESW – English stonewares; PORC – porcelain.





Client:	ERM on behalf of Black & Veatch Ltd	Drawing No.: 1	Rev:
Project:	Edinburgh Drinking Water Pipeline Site 56 Excavations Mortonhall Army Camp	Title: Location map and site plan	



CFA ARCHAEOLOGY LTD The Old Engine House Eskmills Park Musselburgh East Lothian, EH21 7PQ

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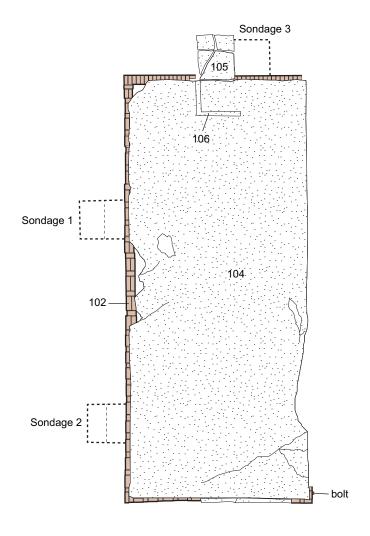
Design: GC	CAD:
Chk'd:	Report No; 1761
Scale: 1:1000 @ A3	
Revision:	Date:



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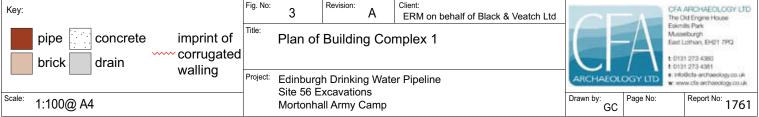




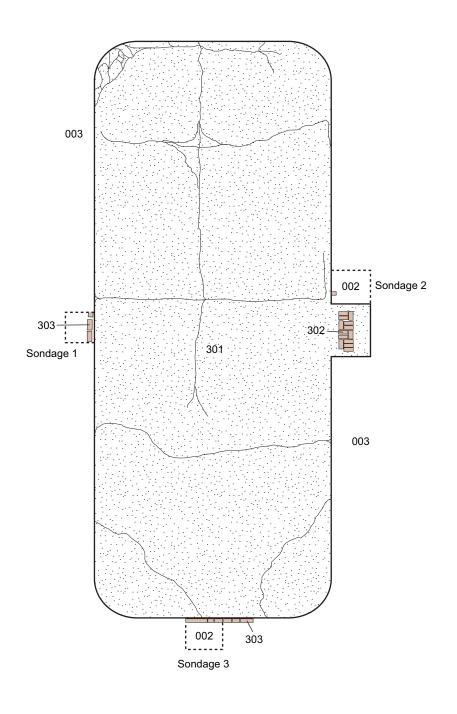


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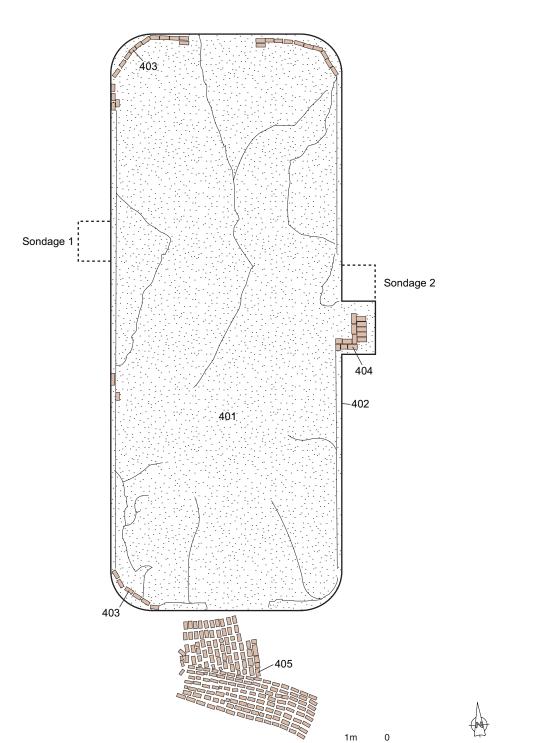


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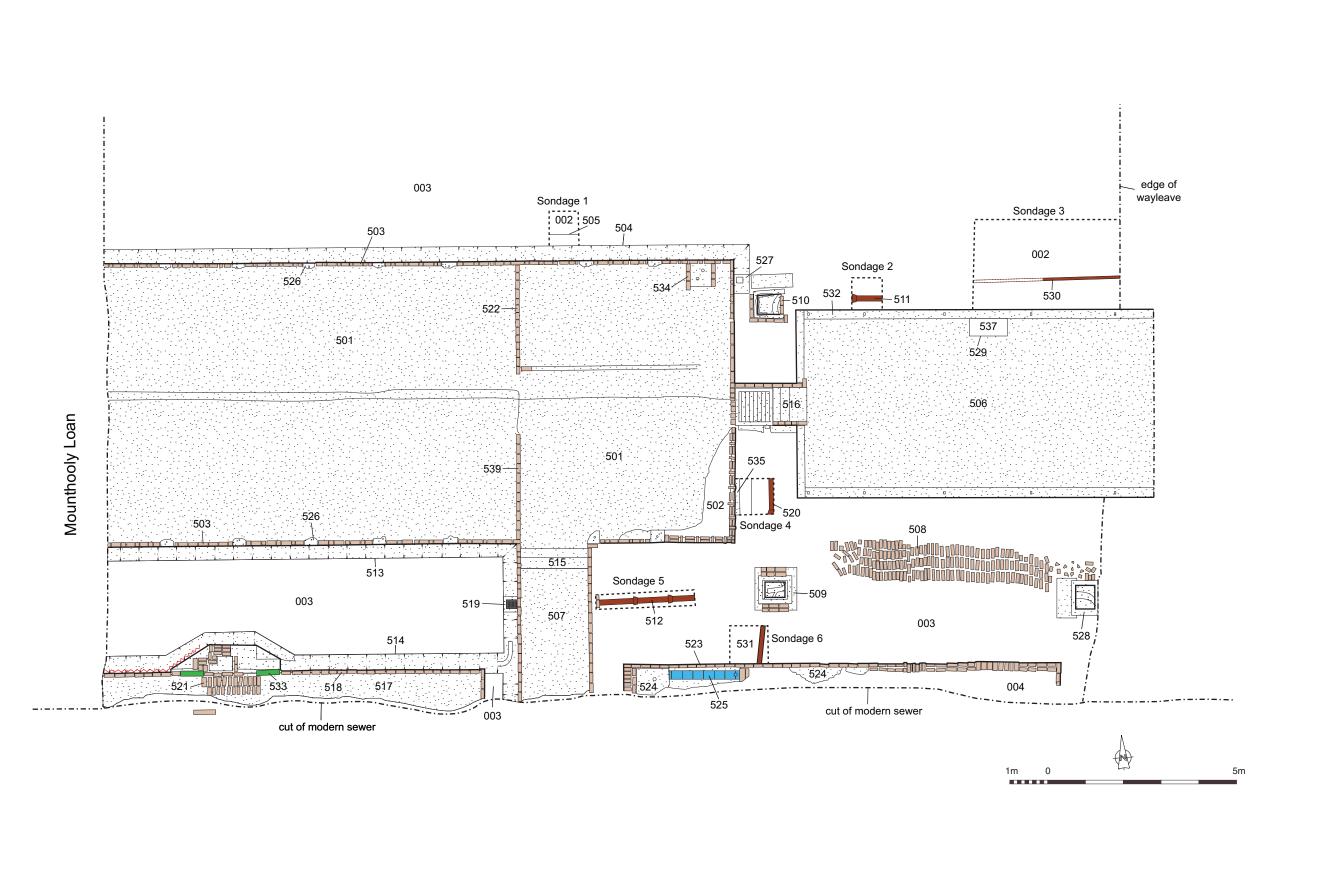








Fig. No:

Revision:

6

Plan of Building Complex 2

Edinburgh Drinking Water Pipeline Site 56 Excavations Mortonhall Army Camp

1:100 @ A3

ERM on behalf of Black & Veatch Ltd

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Revision: CFA ARCHAEOLOGY LTD The Old Engine House Eskmills Park Musselburgh East Lothian, EH21 7PQ Fig. No: Key: Α ERM on behalf of Black & Veatch Ltd Title: concrete iron fitting Plan of Drainage System 601-605 t: 0131 273 4380 f: 0131 273 4381 e: info@cfa-archaeology.co.uk w: www.cfa-archaeology.co.uk brick void Edinburgh Drinking Water Pipeline Drawn by: Report No: 1761 Site 56 Excavations Scale: Page No: 1:100@ A4 Mortonhall Army Camp







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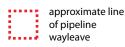


Fig. No:

Title:

Revision:

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Aerial photograph from 1947

Project: Edinburgh Drinking Water Pipeline Site 56 Excavations Mortonhall Army Camp



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Fig. 9 Hut Base 1 from the north



Fig. 10 Building Complex 1 from the south

Key:	Fig. No:	9-10	Revision:	Client: ERM on behalf of Black & Veatch Ltd		Th	FA ARCHAEOLOGY LTD e Old Engine House	
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Fig. 11 Hut Base 2 from the south



Fig. 12 Hut Base 3 from the south

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Fig. 13 Building Complex 2 from the east



Fig. 14 Building Complex 2 from the south east

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Fig. 15 Drainage System 601-605 from the west



Fig. 16 Camp road 701 from the south

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