

**Cowiehall Quarry:  
Archaeological Excavation**

Data Structure Report

by Douglas Gordon

issued 31<sup>st</sup> August 2007



**Rathmell**  
Archaeology Ltd

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## Quality Assurance

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# 1 Overview

- 1.1 Rathmell Archaeology Ltd has been appointed by Patersons of Greenoakhill Ltd in connection with the proposed extension at Cowiehall Quarry, Easter Moss, Stirlingshire. The archaeological works are designed to mitigate the impact on the archaeological remains within the development area.
- 1.2 Prior to the determination of planning consent, an evaluation was undertaken to mitigate the impact on the archaeological remains by CFA Archaeology. The character of these works was agreed in conjunction with the Stirling Council archaeologist who also monitored their implementation.
- 1.3 The Data Structure Report from the evaluation works (Strachan 1998) identified the archaeology. The issued detailed planning consent specified the appropriate mitigation works that would be necessary to ensure that the development can proceed while dealing appropriately with the identified adverse impact on the known archaeological resource. Specifically:

*Archaeological Evaluation: No development shall take place within the area indicated (the area of archaeological interest) until the developer has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted to and approved in writing by the Planning Authority. Details of the scheme shall be submitted for approval at least twelve months before any operations commence on the phases within which the archaeological interest is located. (Condition 23, Permission S/98/00353/DET)*

- 1.4 This Data Structure Report presents the results of the excavation works. The on-site works were carried out in July of this year to the criteria and protocols set down in the agreed Written Scheme of Investigation (Rees 2005). The objectives of these works was:
- to test the hypothesis of a broad contemporaneity to the souterrain and pit/field oven archaeology;
  - to excavate the whole souterrain to allow the comparison of this site with those known within the broader archaeological record;
  - to recover artefactual and structural evidence to confirm the inferred character of the majority of the features;
  - to elucidate the nature of any activity undertaken within the souterrain;
  - to recover materials that can provide absolute and relative dating for the souterrain and associated features.

## 1.5 Site Description

1.5.1 The study area is situated within a green field site used for pasture (centred on NGR NS 85310 89505), which is a rise (33m OD) composed of raised marine deposits from the Devensian Age. The site is located on topographically undulating soils attributed to the Rowanhill / Giffnock / Winton Series (Soil Survey of Scotland Sheet 7).

1.5.2 The site is situated on a ridge that runs WNW to ESE, with unrestricted views to the north, west and east. To the north are the Ochils running east to west, to the west Stirling castle and the Wallace Monument are very prominent with the Trossachs visible behind and to the east you can see the hills of Fife and the Forth.

## 1.6 Previous Archaeological Works

1.6.1 The development area is depicted as open ploughed ground on Roy's Military Survey of Scotland (1747-55) with a cluster of settlements or farms named Hilltoun lying in the general vicinity. By the first edition Ordnance Survey (1865) the ground has been enclosed, with



Figure 1a: Roy's Military Map (1747-55)



Figure 1b: First Edition Ordnance Survey 1862

common boundaries mainly surviving to the present day. All immediate settlements have been abandoned and lost.

- 1.6.2 The site of Easter Moss, a probable souterrain (NMRS ref: NS88NE49) lies within the boundaries of Cowiehall Quarry at NGR: NS 8530 8950. The souterrain is recorded as a curvilinear cropmark c.18m long on aerial photographs taken in 1984 (Ref Nos. 64104-64106). The site lies in pasture, on the edge of the flat summit of a plateau. Through a Historic Scotland initiative, a geophysical survey and soil phosphate survey were conducted in 1990. There had been intent to progress to an excavation, but this proved fruitless.
- 1.6.3 The geophysical survey (Gater & Gaffney 1990) using resistivity and magnetometry techniques located an anomaly that corresponded to the position of the souterrain. However, this report noted the results were difficult to interpret especially in the area beyond the souterrain (*ibid*, 5).
- 1.6.4 A soil phosphate study was conducted in 1990 (Easter Moss Soil Phosphate Results 1990) and presented a high/medium/low phosphate distribution of the evaluation area. While no methodology of this study was ever presented, it appears to have been a phosphate spot test undertaken when the field was in pasture. As the field had been used for grazing in the recent past it was considered that these results could not be used with confidence as representative indicators of prehistoric land use.
- 1.6.5 An archaeological evaluation was carried out in November 1998 by the CFA (Strachan 1998) and dealt with archaeological evaluation area agreed with the Stirling Council. These works were in response to the proposal by Patersons of Greanoakhill Ltd to extract sand and gravel from this site.
- 1.6.6 The archaeological evaluation confirmed the presence of the Easter Moss souterrain (NMRS NS88NE49), and defined its character, nature and extent. The souterrain was revealed to consist of an arc curving east-south-west and measuring, roughly 18m in length by 2.3m wide and covering an area in plan 13m by 8m. Although the northwest terminal broadened to 2.9m while the northeast terminal narrowed to 1.3m. A 2m section was excavated into the body of the souterrain and revealed the feature to be cut some 1.2m into the sands and gravels. From the basal slot of the souterrain a sherd of samian ware, and four sherds of iron age pottery were recovered. Additional features most likely associated with it, comprising a pit and a field oven, were also located. The remaining features located represent later agricultural land use of the area.
- 1.6.7 The evaluation has shown that all features encountered are severely truncated, possibly by as much as 0.5m. The cause of this truncation was most likely by the action of ploughing in the very soft sands and gravels, evidenced by the finds of post-medieval pottery in the mixed upper deposits. This, and the lack of modern finds from the ploughsoil, suggests this truncation is not modern. As a result of the truncation, only the deepest features are likely to have survived. No evidence for structure associated with the souterrain and the other features was located; any evidence of such may have been relatively shallow features e.g. post-holes that would not have survived the plough, or have been constructed with non earth-fast components. The possibility must also remain that there were never any associated structures.
- 1.6.8 The evaluation demonstrated that archaeologically significant features have been preserved within a relatively localised area of the evaluation area. It was clear that all these features had been truncated, although the evaluation demonstrated that archaeologically significant deposits have survived beneath the zone of truncation and are of a quality suitable for post-excavation analyses.
- 1.6.9 The materials deriving from the evaluation included: the archive; soil samples; and artefacts (metalwork, samian ware, Iron Age native pottery; post-medieval wares). In preparing the Written Scheme of Investigation these materials were sought. Since 1998 CFA Archaeology have become a commercial entity independent of the University of Edinburgh, who retained all materials for this project.

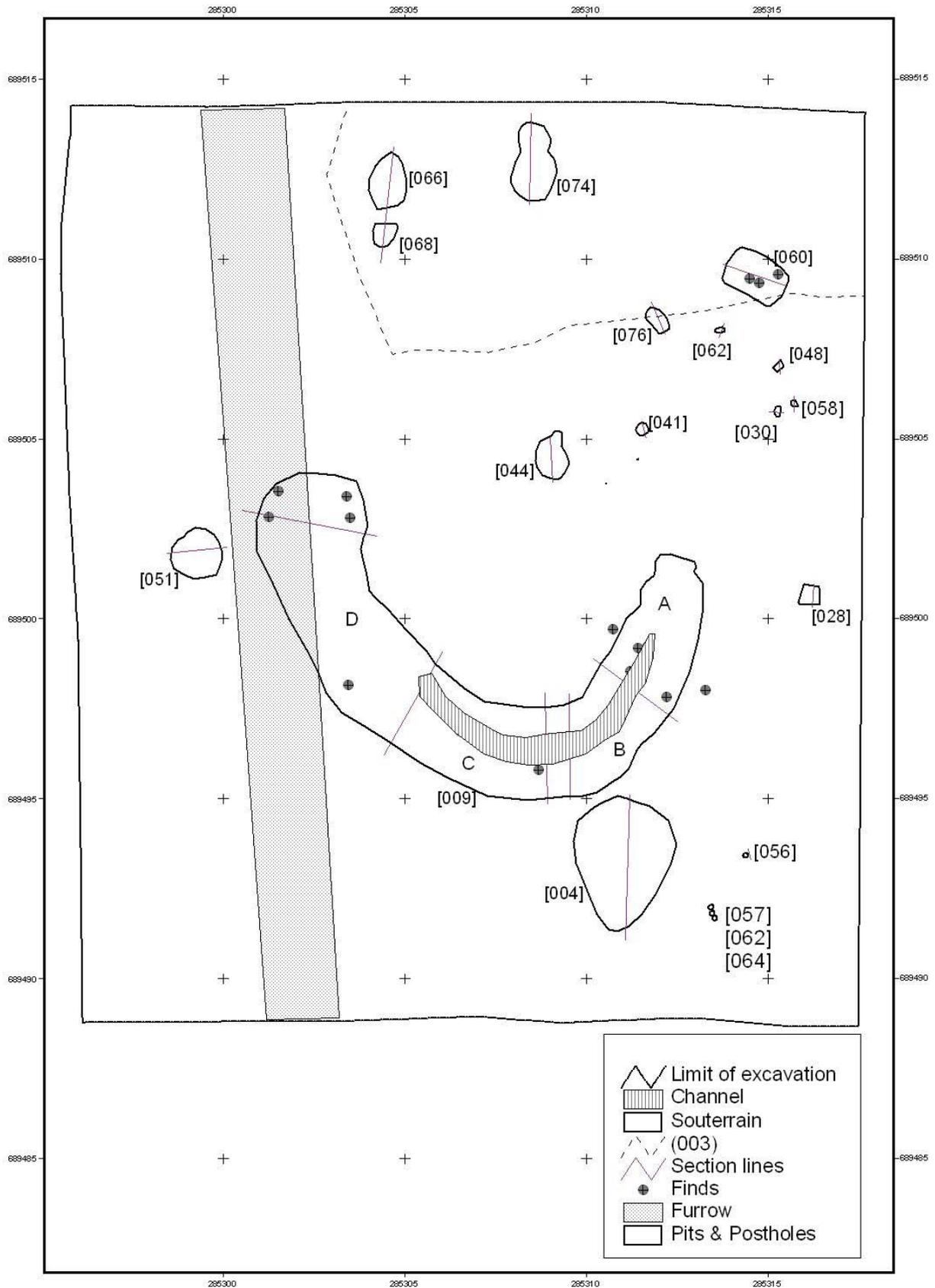


Figure 2: Site Plan

- 1.6.10 The written archive has been deposited with the National Monuments Record of Scotland and has been consulted. The artefacts from the site were declared to the Treasure Trove Advisory Panel as required by law. These artefacts were not claimed by the crown and a certificate disclaiming crown title was issued. The University of Edinburgh has to date been unable to confirm the location of either the soil samples or the artefacts (metalwork, samian ware, Iron Age native pottery; post-medieval wares).
- 1.6.11 Mr Colin Wallace has provided a description of the samian ware from his notes at the time, which have the sherd as being a rim sherd of central Gaulish samian, from an f37 bowl of Antonine date (2<sup>nd</sup> century AD). The metalwork found consisted of a bent iron nail square section nail with a thick sub-rectangular head c. 27mm square and 13 mm thick.

## 2 Project Works

- 2.1 The programme of works agreed with the Stirling Council archaeologist comprised the topsoil stripping of the souterrain and the immediate area around the souterrain extending to approximately 20m by 25m (500m<sup>2</sup>). On site works ran from 2<sup>nd</sup> of July to the 3<sup>rd</sup> of August 2007.
- 2.2 The stripped area was cleaned using hand tools to define surviving archaeology. The exposed archaeology was then excavated and recorded. The excavation was undertaken in keeping with the submitted Written Scheme of Investigation (Rees 2005).
- 2.3 All works were conducted in accordance with the Institute of Field Archaeology's Standards and Policy Statements and Code of Conduct and Historic Scotland Policy Statements.

## 3 Findings: Excavation

- 3.1 Presented below is a summary of the archaeological findings from the works within the excavation area. The findings have been subdivided by individual feature or feature groups, these are all depicted on Figure 1. Detailed context descriptions and the registers of finds, samples, drawings and images are contained within the appendices at the rear of this document.
- 3.2 The excavation area was relatively flat area with a slight slope from north to south, the topsoil (001) a black brown, sandy, silt loam overlay two subsoils: (002) was a light to mid brown sand gravel; while (003) was a light brown fine sand. Approximately forty possible features were flagged initially after the topsoil strip and clean back. However from investigation the majority of the flagged features were written off as bioturbation, mostly from burrowing animals.
- 3.3 *Souterrain [009]*
- 3.3.1 The souterrain (NMRS NS88NE49) lay in the centre of the excavation area and was a opened U shaped in plan (Figure 1), with the open side of the U facing roughly northeast. It measured approximately 19m in axial length and from 1.3m wide in the eastern terminal to 3.5m wide in the western terminal (measurements at the upper surface of the subsoil). All distances given below are taken from the end of the eastern terminal of the souterrain.
- 3.3.2 The souterrain was excavated in four sections (A to D) starting at the eastern terminal end. Area B was the sondage that had been excavated during the prior evaluation in 1998. The entirety of the souterrain [009] was excavated in keeping with the terms of the submitted Written Scheme of Investigation (Rees 2005).
- 3.3.3 The form of the souterrain can be characterised into two portions: the eastern; and the western terminals. The cut of the souterrain [009] had a U shaped profile with near vertical sides (Figure 1) and a central channel in the base. This channel ran from the eastern terminal to more than half way down the length of the souterrain, where this gully petered out. The eastern terminal, which was 1.3m wide, had a gentle slope leading from the eastern half of the terminal into the body of the souterrain. Within the body of the souterrain two large

stones were uncovered sitting on the base, adjacent to the gully.

- 3.3.4 In the western terminal dry stone walling (072) was present from about +12.5m, and followed cut of the souterrain for the entire terminal end, for a total of 12.4m of walling. On the northern side of the terminal, the wall was eight courses high while on the southern side it was between three and four courses high. The upper courses consisted of medium sized sandstone stones, measuring between 200 to 300mm long and 100 to 200mm deep, and were placed to slightly overhang the lower courses. The lower courses, in particular the basal one consisted of larger rough sandstone blocks measuring 400 to 600mm long and 200 to 300mm deep. None of the stones evidenced that they had been worked in any but the roughest of ways.
- 3.3.5 At +12.5m four upright stones were recorded that narrowed the passage from 1.2m to 0.8m (Figure 5a-b), forming a doorway that creates a compartment of the western terminal.
- 3.3.6 The stratigraphy within the souterrain in essence consisted of two cuts [017][018] which formed a rounded W, down either side of the souterrain, leaving a central core (Figure 8). The parallel cuts varied in depth along the length of the souterrain, being shallowest within the western terminal. These cuts were filled with several contexts (013)(014)(015)(016a)(016b)(021)(027)(055), which were grey to brown silty sand or silty gravel. (013) and (015) were the lower fills of both cuts with the others forming distinct strata above. These contexts also contained redware and post medieval reduced ware pottery.
- 3.3.7 The central core also consisted of several contexts (010)(011)(012)(022)(032). (010) forms the basal fill of the souterrain from which a sherd of samian ware (SF 07) dating from the 2<sup>nd</sup> century AD (*pers comm* Garcia) was recovered.
- 3.3.8 The stratigraphy within the western terminal differed from the majority of the souterrain. The cuts [017] [018] were far shallower within the western terminal, with the deepest cut on the western side. The central core of material differed, with (010) and (022) present as well as (081) an orange brown gravel sand deposit and (083) a light yellow sand. In between (081) and (083) was a pea grit layer (082), up to 0.25m deep. Also within the western terminal, four large stones (085)(086)(087)(088) were recovered (Figure 5d). They consisted of blonde sandstone blocks, which were sub-rectangular with a roughly square cross section. The stones measured up to 1.1m long, 0.45m wide and up to 0.3m in depth.
- 3.3.9 Overlying the top three courses of the stone face on the northern side was (073), a pale yellow loose sand that appears to have built up over time.
- 3.4 *Bi-partite Pits*
- 3.4.1 A bi-partite pit [066] [068] that had been uncovered during the prior evaluation to the north of the souterrain and was re-dug (Figure 4a). It was truncated and the upper fill present during the evaluation was no longer visible. The two now separate parts [066][068] measured 1.53m by 1m and 0.32m by 0.2m respectively. The northern part was oval in plan aligned north-south, with the northern side near vertical and the southern side sloping. The southern part was kidney shaped in plan, with a near vertical side to the north and steeply sloping in the south.
- 3.4.2 Both fills (067)(069) were similar dark brown, silty sand with the northern part having charcoal present. No artefacts were recovered, which is in keeping with the evaluation.
- 3.4.3 A second bi-partite [074] pit, not identified in the evaluation, was recorded in the northern area of the site. The excavation of this figure of eight shaped pit, which measured 2.55m by 1.07m and 0.3m in depth, showed it to have with gentle sloping sides and aligned north-south. The fill (075) was homogenous dark brown sandy silt.
- 3.4.4 The pits are on the northern edge of the site (Figure 1), some 2.87m apart and share a common north to south alignment.



Figure 3a: General Site shot Pre-Ex



Figure 3b: Slot C half excavated



Figure 3c: Eastern terminal



Figure 3d: Pit feature [060]



Figure 4a: Bi-partite pit [066][068]



Figure 4b: SE facing section of Slot C



Figure 4c: Lower South Facing Slot of Slot D



Figure 4d: Pit feature [004]

### 3.5 *Pit Features*

- 3.5.1 The largest pit feature [004] was located in the south-eastern area of the site, within 0.5m of the souterrain [009]. A quadrant of this feature was excavated by the preceding archaeological evaluation. This feature was a irregular oval in plan measuring 3.68m long by 2.56m wide and up to 0.56m deep (Figure 1, 4d & 6). The pit had near vertical to sloping sides and an irregular bottom which sloped from south to north.
- 3.5.2 [004] had a sequence of fills (005)(006)(008)(034)(037)(038)(039)(040). All the fills had charcoal present to some degree while (008) had large amounts of round wood charcoal present. At the bottom was a heat affected context of sand and gravel (037).
- 3.5.3 Another pit [060] lay in the north-eastern quadrant of the excavation area, some 7.5m to the North northeast of the souterrain. The pit was sub-rectangular in plan, with near vertical sides, measuring 1.6m by 1.1m and up to 0.37 m in depth and aligned ENE-WSW.
- 3.5.4 [060] contained two fills, (061)(070). The upper fill (061) was a mottled black and grey sandy silt, with very frequent charcoal pieces and occasional stone inclusions. An iron nail and several sherds of probable Iron Age pottery were recovered from this context.
- 3.5.5 The lower fill (070) was a mid brown sandy silt with angular and sub-angular stone inclusions measuring  $\leq$ 290mm by 90mm. A piece of worked stone <013> was recovered from this context.

### 3.6 *Smaller features*

- 3.6.1 Thirteen small features were distributed across the extent of the site (Figure 1). These can be subdivided into two groupings: small circular features measuring less than 500mm diameter and up to 500mm in depth, and larger sub-circular shaped features measuring up to 1.5m long, 800mm wide and 330mm deep. In general the smaller circular features had steeply sloping or near vertical sides which met in a curved base, whilst the larger sub-circular features had flatter bases.
- 3.6.2 Four larger sub-circular features were dispersed across the northern half of the site [028][044][051][076]. [028] was rectangular shape in plan measuring 640mm by 520mm and 330mm deep with a flat base, while [044] was an irregular oval in plan, measuring 1.04m by 0.8m and up to 0.26m in depth, [051] was roughly circular in plan, measuring 1.04m by 1.02m by 0.46m in depth, lastly [076] was roughly oval in plan, measuring 0.9m by 0.6m and quite shallow at 0.1m in depth. No artefacts were recovered from any of the features.
- 3.6.3 Eight smaller circular features were distributed across the eastern to northern sides of the site. Five post holes were recorded [030][041][048][058][062], measuring up to 380mm in diameter and up to 270mm deep. No pattern or association was apparent during the fieldwork. Several stakeholes [056][057][062][064] were also recorded, again no discernable pattern was identified.
- 3.6.4 The majority of these features appear to have been truncated, most likely by ploughing. The scale of this truncation could not be confidently identified.

### 3.7 *Linear Features [078]*

- 3.7.1 A linear feature was uncovered on the western side of the site, aligned approximately north to south. It measured 3.2m in width and up to 0.3m in depth, with a scooped cross section. The fill (079) was fairly homogenous mid brown sandy silt. The line of the linear slightly cut part of the western edge of [009] (Figure 1).

### 3.8 *Finds*

- 3.8.1 Stratified finds were recovered from the fills of the upper cuts [017][018] in the souterrain which were predominantly sherds of post medieval wares <03>, <04>, <014>, <015>. Comparable sherds were also recovered from topsoil (see below).
- 3.8.2 A sherd of samian ware <07> was recovered from (010) while sherds of coarse, probable Iron Age native wares <016>, <017> were recovered from (010), as well as <012> from pit [060].



Figure 5a: Doorway



Figure 5b: Western Terminal



Figure 5c: Eastern Wall



Figure 5d: Roof Stones

- 3.8.3 An amount of unstratified post medieval pottery was recovered from the topsoil. These unstratified pottery sherds were composed of body sherds <021>. There were no apparent concentrations or focus to these unstratified recoveries.
- 3.8.4 Nine iron objects were recovered during the excavation <02>, <05>, <08>, <09>, <010>, <011>, <019>, <029> and <030>. Of these four (<02><08><010><019>) were amorphous ferris objects that were impossible to discern the character of. Three of these unidentified objects (<02><08><019>) came from probable Iron Age contexts, while <010> came from the fill of the robber trench (016) in the souterrain. Four samples of iron slag were collected: two (<09><05>) were recovered from (016) and (013) respectively while the other two (<029><030>) were unstratified finds from the topsoil. The only discernable iron object was <011> an iron nail from the upper fill (061) of pit [060].
- 3.8.5 Four worked stones were recovered, during the excavation, <013> is a possible ard point recovered from the lower fill (070) of pit [060], <018> came from the (055) in the souterrain. <020> and <028> are possible whetstone that were recovered from (083) and the topsoil respectively.

## 4 Discussion

### 4.1 Souterrain [009]

- 4.1.1 The souterrain appears to have been stone lined in its entirety, as evidenced by the remaining stone lining (072) as well as the stones present upon the stepped profile of the souterrain. A corbelled roof is hinted at by the slight inclination of the upper courses of the surviving wall (072) on the eastern side, as well as the large stones (085)(086)(087)(088) found within the western terminal, that appear to be from roof collapse. This however is quite speculative and doesn't preclude the possibility of a wooden roof, as present at Newmill (Watkins 1981). The evidence is however very circumstantial and not conclusive one way or the other.
- 4.1.2 The lining appears to have been robbed out at some point during the high medieval to post medieval period, given the redware and post medieval reduced ware recovered from the fills of the robber cuts [017][018]. The robber cuts appear to have been dug down along each side of the original sides of the souterrain as there appears to be little difference between the cut of the souterrain from the western terminal and the rest of the robbed out portion, with the exception of a small flaring out at the top of the cut. This may suggest that the stone lining was just under the topsoil and therefore immediately visible when digging down.
- 4.1.3 The medieval robbers probably started at the eastern terminal end and worked their way around giving up at the western terminal end, either due to the depth of the souterrain (2.2m) or having dug up enough stones for whatever purpose they required them. Possibly for the building of Dunmore Moss windmill (NMRS NS88NE28) which is about 800m to the east of the site. By digging down on either side they left, for the most part, the original fills of the souterrain intact within the centre core. This central core consisted of deep fairly homogenous layers of grey–brown sand/gravel, which suggests a deliberate infilling. The basal fill of the souterrain (010) contained the sherd of 2<sup>nd</sup> century Samian ware (*pers comm* Garcia), giving a possible date of use/abandonment of the souterrain in the 2<sup>nd</sup> century AD.
- 4.1.4 The western terminal end contained the most intact stratigraphy for the original fill of the souterrain. The basal layer here was (083) a loose light yellow sand, which was 800mm deep and banked up the sides of the stone lining for three courses. This may have been wind blown sand indicating that the souterrain had been open to the elements for a time. Although the surrounding geology is sand and gravel I think this is unlikely. It is more likely that it is a deliberate dump of sand, possible as a floor level or as the start of infilling the souterrain prior to abandonment.
- 4.1.5 The presence of the large stones in the fill of the western terminal as well as the layer of pea grit, suggests that the roof collapsed in, either naturally or deliberately. The large stones all lay on pockets a dark brown black silt (080) which may have been topsoil that fell in during

the collapse. The void created by the collapse appears have been left open to the elements given the presence of (073) which appears to have been aeolian sand having been blown in from a westerly direction (the direction of the current prevailing wind).

- 4.1.6 The four upright stones at +12.5m appear to have formed the jambs of a doorway, essentially creating a compartment of the western third of the souterrain. This is unusual as souterrains normally have doorways leading to ancillary chambers (i.e. Newmill, Ardestie, Carlungie and Conan) however one example of a compartment terminal comes from Tealing III (Jervise 1873), in Forfarshire. Tealing III was 24m long and 2.6m wide in the terminal bulge, and like Easter Moss has a doorway approximately two thirds of the way down the passage creating a compartment in the last third of the passage.
- 4.1.7 The Souterrain fits Wainwright's classification of 'Southern Pictland' souterrains (Wainwright 1963), being a curving passage, widening from the axial entrance to the terminal bulge.
- 4.1.8 It has been noted in various souterrains of the 'southern Pictland' group that they have been partially dismantled and deliberately infilled, in a single abandonment phase and that they don't seem to continue beyond the early 3<sup>rd</sup> century AD (Wainwright 1963). This abandonment of souterrains has been linked to roman activity "to the period between the emplacement of the Antonine system, most likely in the AD140s, and the Severan wars of AD208-211" (Armit 1999). Due to the late medieval intrusion to Easter Moss souterrain it is hard to say for certain whether it was deliberately infilled. The only possible evidence of dismantling/ infilling from the western terminal end of the souterrain, where the roof appears to have collapsed, and where there is a 0.4m deep layer of loose pale yellow sand (083) which could be infilling. However it is less than certain that this is anthropic in cause.
- 4.2 *Bi-partite Pits*
- 4.2.1 Bi-partite or 'Dumb bell' shaped pits are in general considered to be field ovens or cooking pits (refs). Given the amount of charcoal found within the fill of [066] it is highly likely that this is the case for [066]. However pit [074] did not contain any visible charcoal or other evidence for a fire having been present.
- 4.2.2 Field ovens are usually in proximity to Roman activity, normally forts or temporary camps (refs). While there are no known Roman forts in the vicinity of the site, the site is adjacent to a Roman Road that ran between a fort present at Camelon (SAM1746) and Ardoch Fort (SAM1601), roughly on the line of the M9. This illustrates that the ridgelines to the south of the Forth were intensively used during the Roman occupation of Scotland, consequently it is not unreasonable for activity associated with Roman military activity to be present in association with native features.
- 4.3 *Large Pit Feature [004]*
- 4.3.1 The large pit feature [004] appears to be a fire pit, given the heat affected sand and the amount of charcoal present within the sediments. The site of the fire appears to be within the northeast quadrant of the pit given that it was the site of the only heat affected sand within the pit. This however raises the question of why the pit was so large in comparison to the actual area of fire usage.
- 4.3.2 One possibility is that the pit had been dug prior to being used for a fire, possibly as a borrow pit for the sand and gravel or perhaps, given its size and close proximity to the souterrain, was intended as a side chamber for the souterrain. Another possibility is that it may have been for an industrial process i.e. smelting, however one would expect more heat affected sand than was present if this was the case.
- 4.4 *Pit [060]*
- 4.4.1 The pit [060] was initially interpreted as a fire/cooking pit as the upper fill (061) contained large amount of charcoal along with several sherds of probable Iron Age pottery. However given the lack of heat affected subsoil, except for lenses within the fill and that the lower fill (070) contained little to no charcoal it is possibly that the upper fill was a dump of material from a fire into an existing half filled pit.

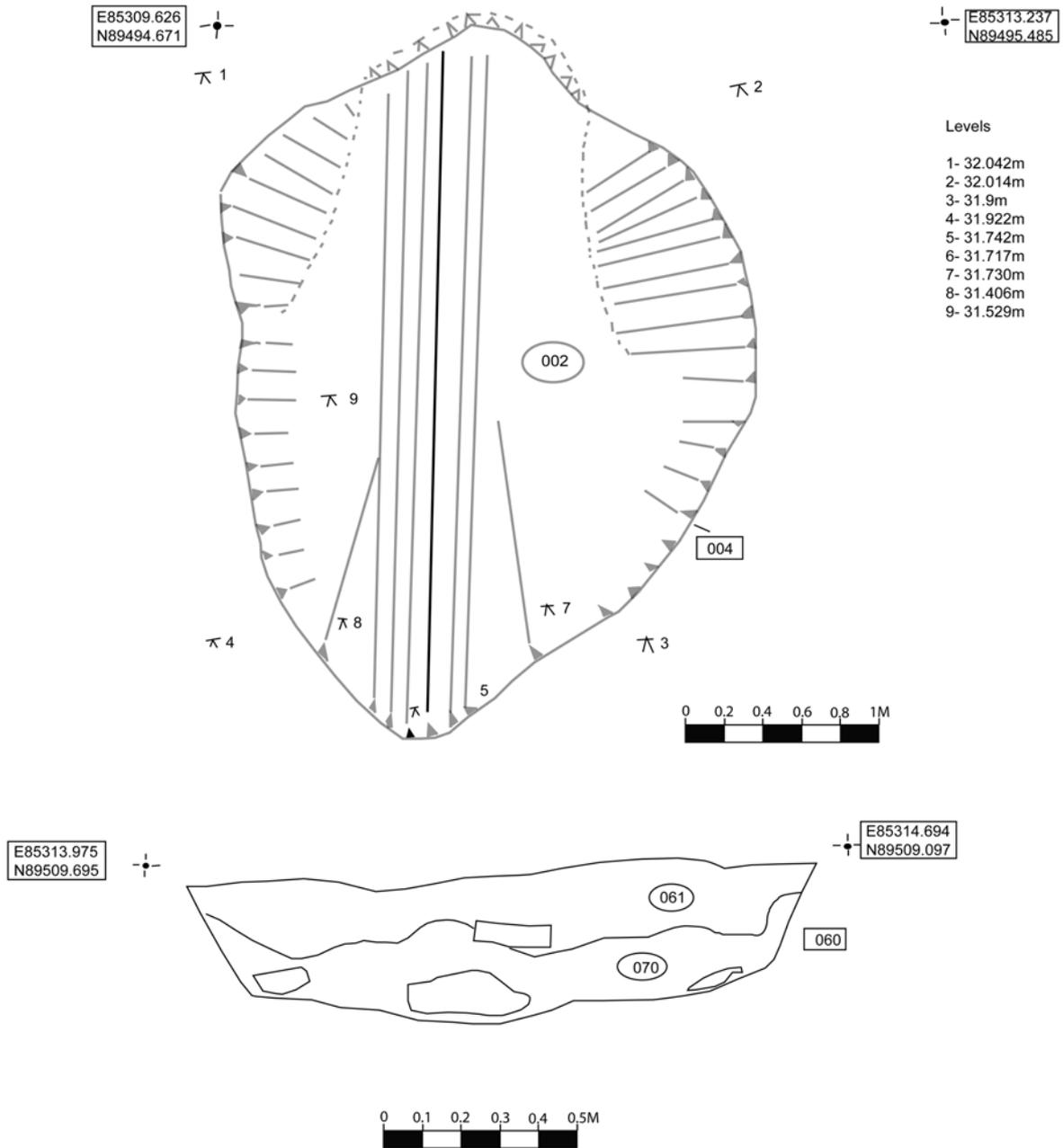


Figure 6: Post Excavation Plan of [004] and South Facing Section of [060]

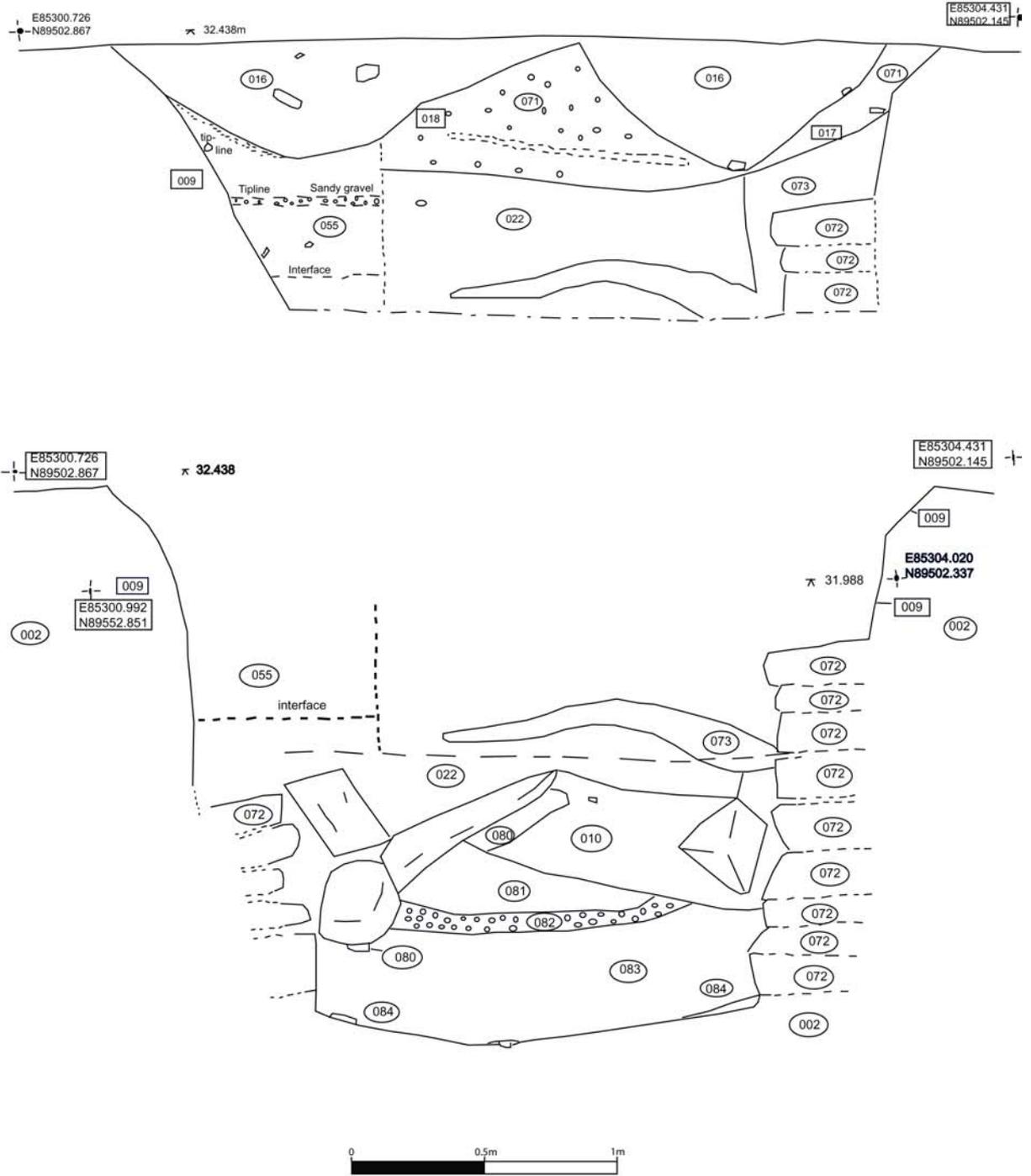


Figure 7: South Facing Section of Slot D

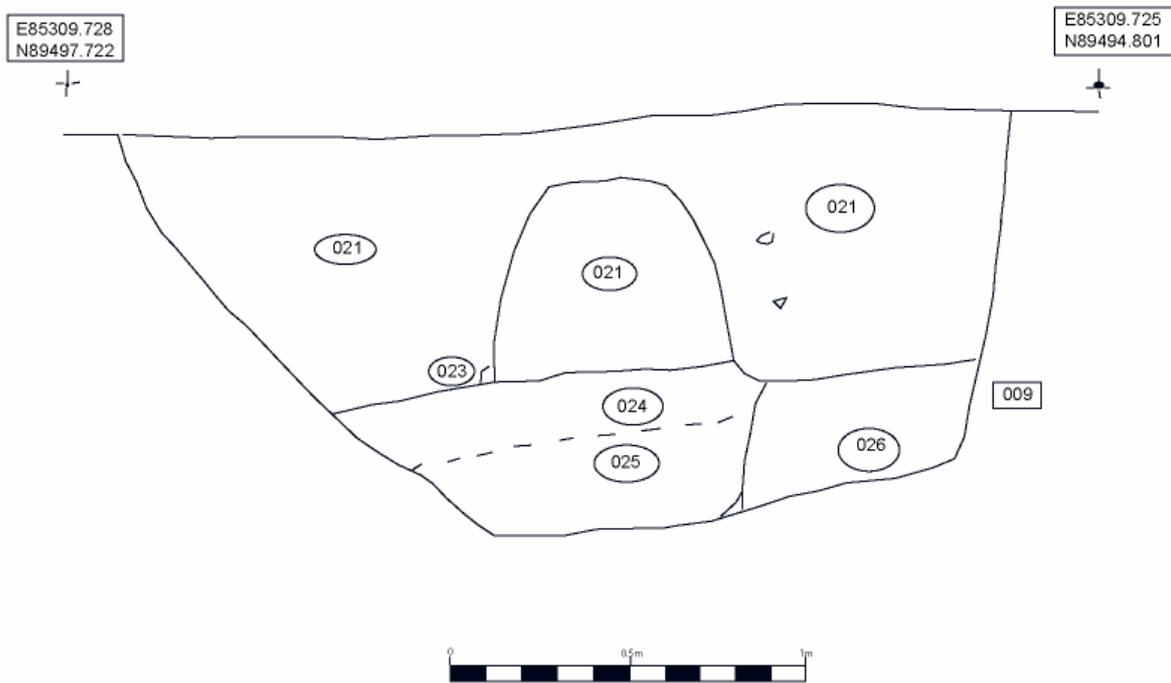


Figure 8: East Facing Section of Slot B

- 4.4.2 The interface of the two fills (061) and (070) was quite diffuse at times, as there appears to have been some bioturbation from small burrowing animals. The lower fill (070) contain several large stones, similar to those from the upper courses of the souterrain walling and may indicate that the pit is contemporary with the construction of the souterrain. This however can't be confirmed until further work is carried out.
- 4.5 *Smaller Features*
- 4.5.1 While there were an amount of postholes and stakeholes features recorded during the excavation no structural patterns was discernable however the presence of such features suggest that the may have been structures that may have been associated with the souterrain.
- 4.5.2 The typical interpretation of a souterrain is as a storage chamber associated with or attached to a round-house. The absence of a definable upstanding structure in association with the Easter Moss souterrain may bear more testament to the scale of truncation caused by prolonged agricultural use of the land rather raising the potential for the absence of associated settlement.
- 4.5.3 The scale of likely truncation was assessed by the preceding evaluation to be in the order of 0.5m. While this could not be directly observed or confirmed during the excavation, this does not appear to be an unreasonable assessment of this impact.
- 4.6 *Agricultural Features and Unstratified finds*
- 4.6.1 The linear feature [078] was recognised as an agricultural furrow during the evaluation; from our excavation this was confirmed. Given its form and nature the most likely date for the furrow is the eighteenth or nineteenth century.
- 4.6.2 The unstratified finds were for the most part post medieval reduced ware, indicating activity on and around the site within the late fifteenth to the late seventeenth centuries. Given the close proximity of the Thorsk Pottery Kiln that operated from AD1600 to 1800, it is highly likely, though not certain, that the pottery came from there. Pottery wasters, sherds and kiln furniture have been found in the fields around Thorsk (Caldwell & Dean 1986).
- 4.7 *Contemporaneity of activity*
- 4.7.1 There appear to be two distinct phases of activity on the site: Roman Iron Age and Post-Medieval.
- 4.7.2 The Roman Iron Age activity is identified on the form of features (souterrains & bi-partite pits) or the presence of characteristic pottery sherds (samian ware and coarse native wares). The complex of features associated with this phase are the souterrain [009], the bipartite pits [066][068][074] and the pit [060].
- 4.7.3 The post-medieval activity is predominantly identified through the presence of pottery sherds of redware and reduced green glaze. This phase is characterised by the robbing of the majority of the stone lining of the souterrain and the most distinct phase of agricultural work over the site.
- 4.7.4 There are a range of features such as the post-holes, stakeholes and one of the pits [060] which cannot be confidently ascribed to one of the identified phases. It is hoped that the post-excavation phases may well resolve some of these floating features, although some features may only be ascribed an association through inference.

## 5 Conclusion

- 5.1 Rathmell Archaeology was appointed by Patersons of Greenoakhill to conduct archaeological works in advance of the extension at Cowiehall Quarry, Easter Moss, Stirlingshire. The area of the study area is currently a green field site extending to 500m<sup>2</sup> (NGR NS 85310 89505). The works, carried out from 2<sup>nd</sup> July to the 3<sup>rd</sup> August 2007, involved the stripping and hand cleaning of an area 20m by 25m and the subsequent excavation of exposed archaeological features. These works proceeded on the recommendations of earlier investigations

(Strachan 1998)

- 5.2 The works revealed the remains of a souterrain and associated features. This was composed of the partial robbed out souterrain, two bi-partite pits, pits and postholes dispersed primarily over the eastern half of the site.
- 5.3 A preliminary date in the 2<sup>nd</sup> century AD, has been put forward for the occupation of the site, with activity in the late to post medieval period pending further investigation. An amount of artefacts, consisting of pottery and lithic material, and ecofacts were retrieved. From these it would be hoped that a number of questions about the site might be answered, particularly concerning issues of dating, subsistence and economy.

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## Appendix 1: Record Summaries

*Context Register*

<b>Context No.</b>	<b>Interpretation</b>	<b>Description</b>
001	Topsoil	Dark brown sandy silt, compact soil. Angular and rounded inclusions of various sizes.
002	Subsoil	
003	Subsoil	.
004	Cut of big pit	Irregular oval cut measuring 3.68m long, 2.56m wide and 0.56m deep.
005	Fill of [003]	Mid brown silty sand with occasional small stone and grit inclusions and occasional charcoal, 190mm deep
006	Fill of [003]	Dark brown silty sand with occasional grit 380mm deep
007	Fill of [003]	Mid-light brown, medium compaction sand with frequent grit or gravel
008	Fill of [003]	Black/dark brown, medium compaction sandy silt. Charcoal inclusions, 2-6cm deep
009a	Cut of souterrain	Slot a through [009], east terminal end. 29m wide, 3.2m long and 1m deep. Gradual slope from north end. Evidence of robber ditches and possible truncation from bioturbation.
009b	Cut of souterrain	Slot b through [009] CFA slot. Located on SE corner of souterrain. 2m wide, 4m long and 0.89m deep.
009c	Cut of souterrain	Central slot in [009] measures 2.7m wide, 4-5m long and 1.5m deep at east end and 0.7m deep at west end. 3 large stones found at bottom of slot.
009d	Cut of souterrain	Terminal ending of souterrain. Roughly 8m long and 3.5m at widest point . Stone lining at both sides of slot with some tumble (possible roofing?)
010	Fill of [009] souterrain	Light brown coarse stony sand with patched of grey silt, moderate compaction with stone and pebble inclusions. 30cm deep and 1.5m wide.
011	Fill of [009] slot B souterrain	Light grey loose coarse sand with a few stony inclusions. 3m long, 90cm wide and 9cm deep.
012	Fill of [009] slot B souterrain	Grey brown and blue grey silty sand with frequent stone inclusions, mixed layers with no clear interface. 1.2m wide, 60cm deep and length of souterrain.
013	Fill of [017]	Light grey sandy gravel, loosely compact with few inclusions. 60cm wide, 25cm deep and length of souterrain.
014	Fill of [017]	Grey brown silty sand, loosely compact with a few stony inclusions. 80cm wide, 30cm deep and length of souterrain.
015	Fill of [018]	Brown silty sand, loosely compact with few inclusions. 35cm wide and 23cm deep, length of souterrain.
016a	Fill of [009] slot A souterrain	Mid brown silty gravel, loosely compact. Sits in "robber ditch" [017] upper fill. 1m wide, 30cm deep and length of souterrain. Some charcoal flecks and frequent small stones (sandstone and pebbles).
016b	Fill of [009] slot A souterrain	Mid brown silty sand, loosely compact silty gravel. Sits in "robber ditch" [018] upper fill. 1m wide, 45cm deep and length of souterrain. Some charcoal flecks and frequent stones (sandstone and pebbles).
017	Cut of robber ditch	"U" shaped in section, roughly 80cm deep and 90cm wide, possibly same event as [018] truncates (012) tip layers.
018	Cut of robber ditch	"U" shaped in section, roughly 80cm deep and 90cm wide, length of souterrain. Truncates (012) tip layers.
019	Fill/deposit [009]	Dark brown sandy silt, charcoal rich. Moderately

	souterrain slot A	compacted with some stoney inclusions. 1.2m long, 40cm wide and 50cm deep.
020	Fill of [009] souterrain slot A	Dark silty charcoal deposit, medium compaction. 30cm long, 30cm wide and 10 cm deep. Located in the middle of slot A.
021	Fill of area B [009] robber cut	Mid brown, fine silty sand, medium compaction. Frequent small inclusions less than or equal to 0.5cm.
022	Fill of area B [009]	Grey brown sand and gravel, medium compaction, 680mm long and 530mm wide, possibly original fill of souterrain.
023	Void	Void
024	Void	Void
025	Void	Void
026	Void	Void
027	Upper fill of [018]	Light grey brown silty gravel, moderate compaction, frequent stone inclusions. Roughly 4m long, 18cm wide and 1.8m deep, Tip layer.
028	Cut of Pit	Rounded rectangular shape in plan. 640mm long, 520mm wide and 330mm deep. Near vertical sides with flat regular base.
029	Fill of [028]	Dark brown silty sand, medium compaction, occasional rounded and angular stone inclusions less than or equal to 1 cm.
030	Cut of posthole	Circular/square in plan. 310mm long, 310mm wide and 270mm deep. Sides near vertical with a flat/regular base.
031	Fill of [130]	Dark brown silty sand, medium compaction with sub angular and sub rounded stone and gravel inclusions less than or equal to 2cm.
032	Upper fill of [009] slot B/C	Light yellow grey sand, coarse with frequent small stone inclusions. Roughly 1m long, 30cm wide and 20cm deep. Located in bulk between slot B and C.
033	Upper fill of [017]	Mid brown coarse sandy gravel, medium compaction. 1m wide 1m long and 20cm deep.
034	Fill of [003]	Dark brown sandy silt, medium compaction, 50mm deep.
035	Fill of [003]	Light to mid brown sandy silt with frequent grit inclusions, 220mm deep.
036	Fill of [003]	Light to mid brown silty sand with occasional grit and charcoal, very occasional burnt bone, 360mm deep.
037	Fill of [003]	Mid brown sandy gravel with occasional charcoal bits throughout, 30-40mm wide.
038	Fill of [003]	Dark brown sandy silt with occasional charcoal flecks less than or equal to 100mm, medium compaction.
039	Fill of [003]	Light to mid brown sandy silt with frequent gravel inclusions less than or equal to 190mm
040	Fill of [003]	Mid reddy brown, medium compaction
041	Cut of posthole	Circular in plan. 380mm by 370mm and 130mm deep. Sides are vertical and base is regular/flat.
042	Fill of [041]	Dark brown sandy silt, medium compaction. Frequent sub angular and sub rounded inclusions less than or equal to 1cm, 130mm deep.
043	Fill of [041]	Light brown, tight compaction, no inclusions, 30mm deep.
044	Cut of pit	Oval in plan, 1040mm long, 800mm wide and 260mm deep. Sides are vertical and base is undulating. Possible bioturbation.
045	Fill of [044]	Dark brown sandy silt tight-medium compaction sub angular and sub rounded inclusions less than or equal to 2.5cm. 260mm deep.

046	Void	Void
047	Void	Void
048	Cut of posthole	Circular in plan, 120mm long 110mm wide and 80mm deep sides slightly sloping base is flat/regular. Probably truncated by plough or digger as very shallow.
049	Fill of [048]	Mid to dark brown sandy silt, tight to medium compaction, sub angular and sub rounded inclusions less than or equal to 2cm. 80mm deep
050	Fill of [003]	Dark brown slightly sandy silt, hard compaction with burnt plant material inclusions. 20mm deep.
051	Cut of pit	Circular in plan, 1038mm long by 1025mm wide, 460mm deep. Sides are slightly sloped with undulating base. Possible truncation either plough or bioturbation.
052	Fill of [051]	Dark brown sandy silt, very tightly compacted. Sub angular and sub rounded stone inclusions less than or equal to 4cm.
053	Fill of [004]	Grey brown sand gravel
054	Fill of [004]	A disc of compact dark brown silt sand within [004]
055	Fill of [018]	Grey brown gravel various thin light sandy lenses. Interface between upper and lower fills. 1m deep, 0.9m wide and length is unknown.
056	Cut and fill of stakehole	Circular in plan, 110mm by 100mm, 80mm deep. Sides almost vertical with a flat base. Slight inclination of axis facing north. Dark brown sandy silt, medium compaction. Sub angular and sub rounded inclusions less than or equal to 1mm.
057	Cut and fill of stakehole	Circular in plan, 120mm long and 110mm wide, 70mm deep. Sides almost vertical with flat base. Slight inclination of axis when facing south to the right. Mid to dark brown sandy silt, medium compaction. Sub angular and sub rounded inclusions less than or equal to 1cm.
058	Cut of posthole	Circular in plan, 220mm by 220mm, 90mm deep. Sides almost vertical with undulating base.
059	Fill of [058]	Dark brown sandy silt medium compaction, sub angular and sub rounded inclusions less than or equal to 3cm.
060	Cut of possible fire pit	Irregular rectangle in plan, 1.6m long, 1.1m wide and 0.37m deep, near vertical sides with uneven base.
061	Fill of [060]	Mottled black grey-grey black sandy silt, charcoal inclusions along with stone less than or equal to 2cm.
062	Cut of posthole	Circular/oval in plan. 220mm wide and 250mm long, 100mm deep. Regular base with near vertical sides.
063	Fill of [062]	Dark brown sandy silt, medium to tight compaction. Sub angular and sub rounded inclusions less than or equal to 3cm.
064	Cut of stakehole	Circular in plan, 100mm by 100mm, 80mm deep. Sides are almost vertical and base is regular.
065	Fill of [064]	Dark brown sandy silt, medium to tight compaction. Gravel inclusions with small stones less than or equal to 2cm.
066	Cut of Bi-partite pit	Oval in plan, 1550mm long and 1000mm wide. 170mm deep. Sides to the left slightly sloped, to the right almost vertical with an undulating base.
067	Fill of [066]	Dark brown sandy silt, tightly compact. Sub angular and sub rounded stone inclusions less than or equal to 5cm.
068	Cut of Bi-partite pit	Kidney shaped in plan, 320mm long, 260mm wide and 100mm deep. Sides slightly sloping, undulating base. Truncation by possible bioturbation.

069	Fill of [068]	Dark brown sandy silt, tight compaction. Sub angular and sub rounded inclusions less than or equal to 3cm.
070	Lower fill of [060]	Mid brown sandy silt, medium compaction, occasional angular stone inclusions less than or equal to 280mm.
071	Upper fill of [009]	Pale yellowish sand with frequent gravel inclusions, moderately compact. Measuring 2m wide, 55cm deep with an unknown length.
072	Structural [009] slot D	Stone lining of the NW end of the souterrain. Situated on both sides and around terminal in slot. 8 courses high composed of sandstone. Small angular and sub angular stones on higher courses, measuring average size of 0.3m by 0.3m and 0.17m deep. Larger stones average size 0.5-0.6m long 0.25m deep. Stones only sit 2-3 courses high along western edge, perhaps more were robbed out here.
073	Fill of [072]	Pale loose sand packed around stones with no inclusions. Possibly packing, wind blown sand or sand that had accumulated over time.
074	Cut of double pit	Figure of 8 shaped in plan. Measuring 2550mm long, 1070mm wide and 300mm deep, the sides are slightly sloped and the base is undulating. Probably evidence of rodent bioturbation.
075	Fill of [074]	Dark brown sandy silt with angular and rounded inclusions less than or equal to 5cm
076	Cut of pit	Oval in plan, measuring 900mm long, 600mm wide and 200mm deep. The sides are slightly sloping and the base is undulating.
077	Fill of [076]	Mid-dark brown sandy silt, with sub angular and sub rounded inclusions less than or equal to 3cm.
078	Cut of furrow	Linear feature measuring 3200mm wide, 300mm deep with length running along most of the site. Base is slightly curved.
079	Fill of [078]	Mid brown sandy silt, fairly compact with frequent stone and gravel inclusions less than or equal to 4cm
080	Fill of [009]	Dark brown black silty deposit located around some of the larger stones in slot D of souterrain. Measuring maximum of 0.3m wide and 0.1m thick with no inclusions. The same deposit was also found surrounding some of the stones in [072]
081	Fill of [009]	Mid orangey brown gravelly sand deposit lying about pea grit layer (082) with a maximum depth of 0.25m. Situated in lower fills of souterrain in slot D.
082	Fill of [009]	Pea grit layer composed of small gravel. Extends across whole of terminal in slot D. measures maximum depth of 0.1m. Situated in lower fills of slot D, showing area was possibly abandoned as the gravel would have built up over time.
083	Fill of [009]	Pale yellow, loose soft sand deposit, situated at bottom of slot D. Measures maximum depth of 0.4m with occasional stone inclusions.
084	Fill of [009]	Dark brown gravelly sandy layer below fill (083) at the base of slot D, measures maximum depth of 40cm.
085	Structural stone? [009]	Orange yellow large rectangular sandstone. Measures 0.6m long, 0.4m wide and 0.22m maximum depth.
086	Structural stone? [009]	Pale yellow/orange very large long rectangular sandstone. Measuring 1.1mlong, 0.4m wide and 0.18m deep. Found as tumble in slot D of souterrain, context (080) found around one end and sits in contexts (010) and (022).
087	Structural stone? [009]	Pale yellow/orange sandstone. Rectangular in shape measuring 0.73m long, 0.24m wide and 0.24m deep, found as tumble in slot D of souterrain. Appears to sit

		in contexts (010) and (022).
088	Structural stone? [009]	Yellowy/orange large rectangular sandstone. Measures 0.9m long, 0.27m wide and 0.28m deep. Found as tumble in slot D of souterrain. Appears to sit in contexts (010) and (022).

*Artefact Register*

Find No.	Context No.	Material Type	Description
01	012	Pottery	Pottery fragment
02	012	Iron	Iron object
03	021	Pottery	Cylindrical piece of ceramic, ribbed with possible glaze
04	022	Pottery	Base of cylindrical pot
05	016b	Industrial	Flag metal, industrial amorphous object
06	016	Glass	Green bubbles, hand made glass
07	010	Pottery	Samien, orange with slight decoration
08	010	Iron	Blob of iron
09	013	Slag	Three pieces of possible industrial slag
010	016	Iron	Degraded iron object
011	061	Iron	Degraded iron nail
012	061	Pottery	Pottery fragment
013	070	Stone	Possible Ard point
014	016	Pottery	Green glaze pottery rim sherd
015	016	Pottery	Green glaze pottery base
016	010	Pottery	Possible iron age pottery
017	010	Pottery	Possible iron age pottery
018	055	Stone	Possibly a worked stone
019	[072] (073)	Iron	Degraded iron object
020	083	Stone	Possible whetstone
021	U/S	Pottery	Post medieval redware 1x
022	016	Pottery	Ceramic 1x
023	U/S	Pottery	Green glaze ceramic 1x
024	014	Pottery	Green glaze ceramic 1x
025	U/S	Pottery	Field tile 2x, 12x redware, 1x burnt modern ceramic
026	U/S	Pottery	2x modern, 4x redware, 3x post medieval reduced
027	016	Pottery	3x post medieval reduced, 8x redware
028	U/S	Stone	Worked stone, unstratified
029	U/S	Slag	1x possible slag, surface find
030	U/S	Industrial waste	8x possible industrial waste
031	U/S	Pottery	2x post medieval redware
032	U/S	Pottery	1x post medieval redware

*Samples Register*

Sample No.	Context	Sample Type	Description
001	019	Bulk	Fill of [009] terminal
002	020	Bulk	Fill of [009]
003	016a/b	Bulk	Upper fill of souterrain (robber ditch 017a, 018b)
004	021	Bulk	Upper fill of souterrain
005	012	Charcoal	Charcoal in slot A [009]
006	022	Bulk	Fill of (022) in slot C [009]
007	016b	Bulk	Fill of [009]
008	014	Bulk	Fill of [017] in souterrain [009]
009	012	Bulk	Fill of [017] in souterrain [009]

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010	013	Bulk	Fill of [017] in souterrain [009]
011	015	Bulk	Fill of [017] in souterrain [009]
012	011	Bulk	Fill of [017] in souterrain [009]
013	010	Bulk	Fill of [017] in souterrain [009]
014	029	Bulk	Fill of 028
015	032	Bulk	Sandy fill in slot C of [009]
016	033	Bulk	Gravel fill in slot C of [009]
017	031	Bulk	Fill of 030
018	008	Bulk	Lower fill of [004]
019	042	Bulk	Fill of 041
020	044	Bulk	Fill of 042
021	012	Bulk	Grey/black charcoal filled tip deposit in [009]
022	040	Bulk	Red brown silt sand from [004]
023	039	Bulk	Upper fill of pit [004]
024	010	Bulk	Light brown gravel [009]
025	036	Bulk	Reddy brown silt sand upper fill of [004]
026	038	Bulk	Lower fill of [004]
027	010	Patchy deposit	Silty patches in (010)
028	050	Bulk	Dark brown trample
029	045	Bulk	Dark brown silty sand
030	010	k-tin	Basal deposit [009]
031	012	k-tin	Basal deposit [009]
032	005	Bulk	Upper fill of [004]
033	006	Bulk	Fill of [004]
034	034	Bulk	Charcoal present
035	007	Bulk	
036	054	Bulk	Charcoal present
037	052	Bulk	Dark silty sand compacted with charcoal
038	008	Charcoal	Charcoal with sand
039	Void	Void	Void
040	056	Bulk	Dark sand with charcoal
041	058	Bulk	Dark sandy fill of posthole
042	027	Bulk	Light grey brown silty gravel fill in [009] slot C/D bulk
043	062	Bulk	Dark sandy silt
044	064	Bulk	Dark sandy silt
045	061	Bulk	Black/brown with large charcoal fragments
046	016	Bulk	Dark sand from posthole
047	055	Bulk	Tip deposit in [018]/[009] slot D
048	066	Bulk	Dark sandy silt with lots of charcoal fragments
049	068	Bulk	Dark sandy silt
050	070	Bulk	Mid brown sandy silt lower fill of [060]
051	073	Bulk	Sand found around stones [072] an [009]
052	075	Bulk	Dark brown sandy silt, fill of [074]
053	014	Bulk	Sandy silt upper fill of robber cut [017]
054	013	Bulk	Sandy gravel lower fill of robber cut [017]
055	015	Bulk	Brown silty sand lower fill of robber ditch [018]
056	016	Bulk	Upper fill of robber cuts [009]
057	071	Bulk	Upper fill of [009] sandy gravel
058	001	Topsoil	Dark brown soil
059	003	Sub soil	Dark sub soil
060	002	Sub soil	Light gravely subsoil
061	022	Bulk	Upper fill of [009]
062	055	Bulk	Lower fill of [018]/[009]
063	010	Bulk	Lower sandy fill of [009]

064	080	Bulk	Dark silty deposit around stones in slot D terminal of [009]
065	081	Bulk	Sandy gravel fill in slot d [009]
066	083	Bulk	Sandy fill along bottom of slot D in [009]
067	082	Bulk	Pea grit layer in slot D terminal of [009]
068	084	Bulk	Dark gravel along base of slot D in [009]

*Drawing Register*

Drawing No.	Sheet No.	Drawing Type	Scale	Description	Drawer	Date
01	1/2	Plan	1:50	Pre-ex site plan	KS	05/7/07
02	3	Section	1:10	W facing section of ¼ section of (004)	DG	05/7/07
03	3	Section	1:10	N facing section of ¼ section of (004)	DG	05/7/07
04	4	Section	1:10	SW facing section of CFA slot through souterrain	KS	06/7/07
05	5	Section	1:10	E facing section of CFA slot through souterrain	DG	09/7/07
06	4	Section	1:10	NE facing section of slot through [009]	KS	11/7/07
07	5	Plan	1:20	Post ex plan of slot A through [009]	KS	12/7/07
08	6	Section	1:10	W facing section of area C	FW	12/7/07
09	8	Section	1:10	W facing section of {028}	FW	12/7/07
010	8	Plan	1:20	Post ex plan of [028]	FW	12/7/07
011	8	Section	1:10	N facing section of [030]	FW	12/7/07
012	8	Section	1:10	N facing section of [029]	FW	17/7/07
013	8	Plan	1:20	Post ex of [029]	FW	17/7/07
014	6	Section	1:10	W facing section of [004]	DG	17/7/07
015	8	Section	1:10	EWE facing section of [042]	FW	17/7/07
016	8	Plan	1:20	Post ex plan of [042]	FW	17/7/07
017	9	Section	1:10	E facing section of [044]	FW	18/7/07
018	9	Plan	1:20	Post ex of [044]	FW	18/7/07
019	9	Section	1:10	E facing section of [048]	FW	18/7/07
020	9	Plan	1:20	Post ex of [048]	FW	18/7/07
021	9	Section	1:10	S facing section of ¼ section of [004]	DG	19/7/07
022	10	Section	1:10	SE facing section of slot C	KS/CW	19/7/07
023	9	Section	1:10	S facing section of [051]	FW	19/7/07
024	10	Plan	1:20	Post ex plan of slot C in [009]	CW/KS	19/7/07
025	11	Plan	1:20	Post ex plan of pit [004]	FW/KS	20/7/07
026	12	Profile	1:10	Profile of [057]	FW	23/7/07
027	12	Plan	1:20	Post ex plan of [057]	FW	23/7/07
028	12	Profile	1:10	Profile of [056]	FW	23/7/07
029	12	Plan	1:20	Post ex plan of [056]	FW	23/7/07
030	12	Section	1:10	W facing section of 058	FW	23/7/07
031	12	Plan	1:20	Plan of [058]	FW	23/7/07
032	12	Section	1:10	Section of [062]	FW	23/7/07
033	12	Plan	1:20	Plan of [062]	FW	23/7/07
034	12	Profile	1:10	Profile of [064]	FW	24/7/07
035	12	Plan	1:20	Plan of [064]	FW	24/7/07
036	13	Section	1:10	W facing section of [066] and [068]	FW	24/7/07
037	11	Section	1:10	S facing section of [060]	DG	24/7/07
038	13	Plan	1:20	Plan of [066] and [068]	FW	24/7/07
039	11	Section	1:10	S facing section of slot D [009] western terminal	CW/KS	25/7/07

040	13	Section	1:10	S facing section of [074]	FW	25/7/07
041	3	Plan	1:20	Post ex plan of [060]	DG	25/7/07
042	13	Section	1:10	Section of [076]	FW	25/7/07
043	Void	Void	Void	Void	Void	Void
044	11	Section	1:10	Section of [078]	FW	25/7/07
045	14/15	Plan	1:50	Post ex plan of site	FW/KS	30/7/07
046	16	Plan	1:20	Mid ex plan of slot D [009]	FW/KS	30/7/07
047	17	Section	1:10	S facing section of slot D [009] overlay of drawing 39	CW/DG	30/7/07
048	18	Elevation	1:10	E facing elevation of stone lining (start)	DG/FW	2/8/07
049	18	Elevation	1:10	W facing elevation of stone lining (start)	FW/KS	30/7/07
050	19	Plan	1:20	Post ex plan of slot D in souterrain	CW	03/8/07

### Photographic Register

Image No.	Print		Slide		Digital	Description	From	Date
	Film No.	Neg No.	Film No.	Neg No.				
1	1	1	1	6	85	General site shot pre stripping	E	02/7/07
2	1	2	1	7	86	General site shot pre stripping	S	02/7/07
3	1	3	1	8	87	General site shot pre stripping	NW	02/7/07
4	1	4	1	9	88	General site shot pre stripping	N	02/7/07
5	1	5	1	10	89	Working shot		02/7/07
6	1	6	1	11	90	Working shot		02/7/07
7	1	7	1	12	91	General shot	E	04/7/07
8	1	8	1	13	92	General shot	E	04/7/07
9	1	9	1	14	93	General shot	E	04/7/07
10	1	10	1	15	94	General shot	W	04/7/07
11	1	11	1	16	95	General shot	W	04/7/07
12	1	12	1	17	96	General shot	W	04/7/07
13	1	13	1	18	97	¼ section (004) big pit	W	05/7/07
14					98	Close up of W facing section	W	05/7/07
15	1	14	1	19	99	(004) with CFA ¼ section	W	05/7/07
16	1	15	1	20	100	SW facing section of CFA slot (B)	SW	06/7/07
17	1	16	1	21	101	E facing section of CFA slot (B)	E	09/7/07
18	1	17	1	22	102	NE facing section of slot A [009]	NE	10/7/07
19	1	18	1	23	103	Post ex of slot A [009]	SE	12/7/07
20	1	19	1	24	104	Post ex of slot A [009]	NE	12/7/07
21	1	20	1	24	105	Post ex of slot A [009]	S	12/7/07
22	1	21	1	25	106	½ ex of area C	SE	12/7/07
23	1	22	1	25	107	General working shot	ESE	12/7/07
24	1	22	1	26	108	General working shot	E	12/7/07
25					110	W facing section of slot B/C bulk 500mm down	W	13/7/07
26					111	W facing section of slot B/C bulk 500mm down	W	13/7/07
27					112	Post ex of bulk slot A/B	S	13/7/07
28					113	Post ex slot A/B	S	13/7/07
29	1	23	1	27	114	W facing section of (004)	W	16/7/07
30	1	24	1	28	115	W facing section of [028]	W	16/7/07
31	1	25	1	29	116	N facing section of [030]	N	16/7/07
32	1	26	1	30	117	Post ex of [030]	N	16/7/07

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33	1	27	1	31	118	General shot of slot C [009]	SE	17/7/07
34	1	28	1	32	119	ENE facing section of [040]	ENE	17/7/07
35	1	29	1	33	120	Post ex of [040]	ENE	17/7/07
36	1	30	2	1	121	E facing section of [044]	E	17/7/07
37	1	31	2	2	122	W facing section of area C	W	17/7/07
38	1	32	2	3	123	Post ex of [044]	E	17/7/07
39	1	33	2	4	124	E facing section of [048]	E	17/7/07
40	1	34	2	5	125	General shot of post ex slot C [009]	SE	17/7/07
41	2	1	2	6	126	SE facing section of slot C [009]	SE	18/7/07
42	2	2	2	7	127	General post ex shot of slot C [009]	SE	18/7/07
43	2	3	2	8	128	General post ex shot of slot C [009] showing channel along the bottom	NW	18/7/07
44	2	4	2	9	129	Post ex of [048]	E	18/7/07
45	2	5	2	10	130	S facing ¼ section of [004]	S	18/7/07
46					131	K-tins in E facing section of slot C	E	19/7/07
47	2	6	2	11	132	K-tins in E facing section of slot C	S	19/7/07
48	2	7	2	12	133	S facing section of [052]	S	19/7/07
49	2	8	2	13	134	Post ex of [052]	S	19/7/07
50	2	9	2	14	135	Profile of [057]	S	23/7/07
51	2	10	2	15	136	Section of [058]	W	23/7/07
52	2	11	2	16	137	Post ex of [058]	W	23/7/07
53	2	12	2	17	138	Section of [062]	E	23/7/07
54	2	13	2	18	139	Post ex of [062]	E	23/7/07
55	2	14	2	19	140	W facing post ex of [062]	W	24/7/07
56	Void	Void	Void	Void	Void	Void	Void	Void
57	2	16	2	21	142	General working shot	SE	24/7/07
58	2	17	2	22	143	Section of [066]	E	24/7/07
59	2	18	2	23	144	S facing section of [060]	S	24/7/07
60	2	19	2	24	145	Post ex of [066] and [068]	E	24/7/07
61	2	20	2	25	146	Working shot of slot D [009] stone lining	S	25/7/07
62	2	21	2	26	147	Post ex of [004]	S	25/7/07
63	2	22	2	27	148	S facing section of slot D [009]	SW	25/7/07
64	2	23	2	28	149	E facing section of double pit [074]	E	25/7/07
65	2	24	2	29	150	Post ex of [060]	S	25/7/07
66	2	25	2	30	151	General mid ex shot of slot D [009]	SW	25/7/07
67	2	26	2	31	152	Mid ex shot of stones in slot D [009]	W	25/7/07
68	2	27	2	32	153	NE facing shot of [076] section	NE	25/7/07
69	2	28	2	33	154	Section of furrow	N	26/7/07
70	2	29	2	34	155	Tumble at terminal end [009]	W	27/7/07
71	2	30	2	35	156	General shot of slot D [009]	S	27/7/07
72	2	31	2	36	157	Close up of NE corner of slot D [009]	SW	27/7/07
73	2	32	3	1	158	S facing section slot D [009] mid ex of bottom half	S	30/7/07
74	2	33	3	2	159	General shot of site showing reduction [009]	SW	31/7/07
75	2	34	3	3	160	Working shot		31/7/07
76	2	35	3	4	161	S facing section of slot D [009] bottom half	S	31/7/07

## Data Structure Report – Cowiehall Quarry, Stirlingshire

77	2	36	3	5	162	Doorway	SE	31/7/07
78	3	1	3	6	163	Working shot	SW	01/8/07
79	3	2	3	7	164	Working shot	S	01/8/07
80	3	3	3	8	165	Shot of stones	SW	02/8/07
81	3	4	3	9	166	Shot of stones	SE	02/8/07
82	3	5	3	10	167	General shot of [009] (portrait)	SE	03/8/07
83	3	6	3	11	168	General shot of [009] (landscape)	S	03/8/07
84	3	7	3	12	169	East wall of [009] with entrance	SW	03/8/07
85	3	8	3	13	170	Terminal end of [009]	S	03/8/07
86	3	9	3	14	171	West wall of [009] with entrance	NE	03/8/07
87	3	10	3	15	172	Rear entrance of [009]	NNW	03/8/07
88	3	11	3	16	173	East wall of [009]	WNW	03/8/07
89	3	12	3	17	174	Entrance of [009]	SE	03/8/07
90	3	13	3	18	175	Close up of entrance [009]	SE	03/8/07
91	3	14	3	19	176	Souterrain terminal with stones removed		03/8/07
92	3	15	3	20	177	General working shot		04/7/07

## Appendix 2: Discovery &amp; Excavation in Scotland

<b>LOCAL AUTHORITY:</b>	Stirling
<b>PROJECT TITLE/SITE NAME:</b>	Cowiehall Quarry, Easter Moss
<b>PARISH:</b>	St. Ninans
<b>NAME OF CONTRIBUTOR:</b>	Douglas Gordon
<b>NAME OF ORGANISATION:</b>	Rathmell Archaeology Limited
<b>TYPE(S) OF PROJECT:</b>	Excavation
<b>NMRS NO(S):</b>	NS88NE49
<b>SITE/MONUMENT TYPE(S):</b>	Souterrain, Bi-partite Pits, Pits, Postholes, Stakeholes
<b>SIGNIFICANT FINDS:</b>	Prehistoric Pottery; Prehistoric Lithics, Roman Pottery Post Medieval Pottery
<b>NGR (2 letters, 6 figures)</b>	NS 85310 89505
<b>START DATE (this season)</b>	2 <sup>nd</sup> July 2007
<b>END DATE (this season)</b>	3 <sup>rd</sup> August 2007
<b>PREVIOUS WORK (incl. DES ref.)</b>	Evaluation (Strachan 1999)
<b>PROPOSED FUTURE WORK:</b>	Post-Excavation Analysis
<b>MAIN (NARRATIVE) DESCRIPTION:</b> (may include information from other fields)	<p>Rathmell Archaeology was appointed by Patersons of Greenoakhill to conduct archaeological works in advance of the extension at Cowiehall Quarry, Easter Moss, Stirlingshire. The area of the study area is currently a green field site extending to 500m<sup>2</sup> (NGR NS 85310 89505). The works, carried out from 2<sup>nd</sup> July to the 3<sup>rd</sup> August 2007, involved the stripping and hand cleaning of an area 20m by 25m and the subsequent excavation of exposed archaeological features. These works proceeded on the recommendations of earlier investigations.</p> <p>The works revealed the remains of a souterrain and associated features. This was composed of the partial robbed out souterrain, two bi-partite pits, pits and postholes dispersed primarily over the eastern half of the site.</p> <p>A preliminary date in the 2<sup>nd</sup> century AD, has been put forward for the occupation of the site, with activity in the late to post medieval period pending further investigation. An amount of artefacts, consisting of pottery and lithic material, and ecofacts were retrieved. From these it would be hoped that a number of questions about the site might be answered, particularly concerning issues of dating, subsistence and economy.</p>
<b>PROJECT CODE:</b>	05063
<b>SPONSOR OR FUNDING BODY:</b>	Paterson's of Greenoakhill Ltd
<b>ADDRESS OF MAIN CONTRIBUTOR:</b>	10 Ashgrove grove Workshops, Kilwinning, Ayrshire KA13 6PU
<b>E MAIL:</b>	contact@rathmell-arch.co.uk
<b>ARCHIVE LOCATION (intended/deposited)</b>	Report to Stirling Archaeology Service and archive to National Monuments Record of Scotland.

## Appendix 3: Contact Details

Rathmell Archaeology can be contacted at its Registered Office or through the web:

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The Stirling Archaeology Service can be contacted at their office or through the web:

**Stirling Council Archaeologist**

Environmental Services  
Stirling Council  
Viewforth  
Stirling  
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