# Governor's Garden, Berwick-Upon-Tweed, Northumberland: Report on an Archaeological Watching Brief

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***Executive Summary***

*Project Name: Governor's Garden, Berwick-Upon-Tweed, Northumberland: Report on an Archaeological Watching Brief*
*Site Code: GVG14*
*Planning Authority: Northumberland County Council*
*Location: Governor's Garden, Berwick-Upon-Tweed, Northumberland*
*Geology: Scremerston Coal Member – Sandstone, Siltstone and Mudstone*
*NGR: NU 400026, 652561*
*Date: April 2015*

*In June 2014 Archaeological Research Services Ltd was commissioned by Nick Dawe of Lindisfarne Homes to undertake an archaeological watching brief at Governor's Garden, Berwick-Upon-Tweed, Northumberland. This work was required by Berwick-Upon-Tweed Borough Council as a planning condition for the construction of 60 dwellings and the additional conversion of 6 dwellings (Brief issued June 2007; Planning Application 06/B/0714; NCCCT ref: B38/53; 6458).*

*The earliest identified features were characterised by three walls which likely pre-dated the 1450's and may have been related to the Carmelite Friary probably established at the site during the 1270's.*

*A possible 16th/17th century foundation wall was identified at the north-east extent of the development site although the structure was later robbed out for recyclable building materials.*

*A post-medieval pit was found within post-medieval garden soils at the southern extent of the site. Finds from this pit included fragments of glass and 19th century brick, indicating the pit's function was as a waste pit of late 19th or early 20th century date.*

*A fragmentary flue was identified at the south-west extent of the site and was interpreted to be related to the establishment of Tweed Breweries upon the site in the mid-19th century. Similarly, a cobbled surface was identified and also interpreted to be associated with the 19th and 20th century Brewery works. It is likely that more of the surface survives to the north and south of the areas exposed during the watching brief.*

*The earliest phase of 20th century development was characterised by a reinforced concrete foundation base. The concrete foundation supported a later 20th century wall potentially related to the winery museum previously located within the development area.*

*The final phase of archaeology identified during the watching brief related to two probable pathways which were also of a probable 20th century date. The pathways were not immediately associated with any archaeological features although modern OS*

*mapping data indicated that the paths likely serviced the allotment gardens present on site prior to the current phase of development.*

**Introduction**

1.1 In June 2014 Archaeological Research Services Ltd was commissioned Lindisfarne Homes to undertake an archaeological watching brief at Governor's Garden, Berwick-Upon-Tweed, Northumberland.

1.2 This work was required by Berwick-Upon-Tweed Borough Council as a condition of planning consent for the construction of 60 new dwellings and conversion of 6 no dwellings following demolition of outbuildings and garage buildings (Brief issued June 2007; Planning Application 06/B/0714; NCCCT ref: B38/53; 6458).

1.3 An historic environment desk-based assessment (DBA) carried out by CgMs Consulting established that the site lies in an area of high potential for medieval and post-medieval remains (CgMs 2000).

1.4 A previous archaeological evaluation recorded several phases of activity dating to the medieval and post-medieval periods (PCA 2001).

*Archaeological and Historical Background*

1.5 Examination of data in the Northumberland Historic Environment Record and various published sources indicates that Berwick-Upon-Tweed as a whole is considered to be of high archaeological importance and that any development site within or immediately adjacent to the medieval and Elizabethan defences has the potential to contain locally or nationally important archaeological remains which are likely to be preserved. For an in-depth historic overview of the site, the reader is directed to the DBA (CgMs 2000).

*Method Statement*

1.6 The aim of the archaeological watching brief was to identify any archaeological features identified within the proposed development area in order to establish the extent, condition, character and date of any of these features; to assess the potential significance of buried archaeology on the site and the likely impact of proposed development upon such buried archaeological remains; and to record any features or deposits at an appropriate level as described in the Written Scheme of Investigation (CgMs 2011) and Written Scheme of Investigation Addendum (Appendix 3). Height is expressed in meters aOD and where this is not attained height it is expressed as BG (below ground level), where ground level should be interpreted as 6.46m aOD.

1.7 The watching brief work was undertaken in several phases.

- Phase 1 - removal of 20th century demolition material and topsoil from the development site (Figure 21)- Detailed in Section 2 & 3

- Phase 2- Monitoring of all piling operations- Detailed in Section 4
- Phase 3- Watching Brief on Service Trenches- Detailed in Section 5
- Phase 4- Watching Brief on Service Trenches- Detailed in Section 6

## 2 Phase 1 Watching Brief

2.1 The first phase of watching brief identified four archaeological features from three phases ranging in date from c. 16/17th century and the 20th century.

*16-17th Century*

2.2 A trench was excavated at the north-east extent of the site in order to remove the foundations of a pre-existing modern structure (Figure 14). Multiple archaeological features were identified within this trench (Figures 14 – 19).

2.3 F.108 was comprised of a vertically-sided construction cut [109] which displayed a maximum depth of 0.94m below existing ground level. Cut [109] was filled by the fragmentary remains of a stone foundation wall (108) (Figures 18 and 19). Foundation wall (108) was constructed from large sandstone blocks which appeared to have been truncated by later activity. Wall (108) was interpreted to have been footings for a post-medieval wall. Construction cut [109] also contained a brown sandy-clay backfill (107), with a maximum depth of 0.22m. Fill (107) was truncated by a robber cut [105] was identified at a maximum depth of 0.76m below existing ground level. Robber cut [105] contained a poorly sorted, yellowish-brown, sandy-clay deposit (106) which also contained three incomplete fragments of un-frogged brick (see Figure 19).

2.4 Only the width and thickness of the bricks found within (106) could be measured as no complete lengths were present. Any complete bricks were likely removed when robber trench F.106 was excavated. The largest brick measured 7¾ x 4½ x 2¼ inches and the remaining two bricks measured 4½ x 4½ x 2¼ and 2½ x 4½ x 2¼ inches. The relative thinness of the bricks is suggestive of an early date and would be consistent with brick sizes of the 16th and 17th century (Brunskill 1990, 37-38).

*19th Century*

2.5 A number of archaeological deposits were also identified in plan within the north-west of the development area (Figure 9 and 10). These deposits were (119), [122], (123), (124) and (125). A slot measuring 3.13 x 0.98m was excavated over the afore-mentioned deposits in order to characterise the sequence of layers (Figures 11 – 13). Excavation of the slot revealed a cobbled road (121) which had been cut truncated a service trench [122] containing a cast iron service pipe.

2.6 Cobbled road (121) was orientated on a north-south alignment, evidenced by kerbstones (120) at the western extent of the surface (Figure 11). The road was overlain by three separate deposits (119), (124) and (125).

2.7 The earliest deposit overlying the road was layer (119). This deposit was comprised of a loosely compacted greyish-brown, sandy clay which contained approximately occasional brick and stone inclusions and frequent fragments of mussels and oyster shell. Deposit (119) measured 0.49m x 0.19m and was found abutting kerbstones (120). Deposit (119) was overlain by deposit (125) and was interpreted to be a possible 19th century dumping event, potentially deposited in order to raise ground level.

2.8 Deposit (125) was comprised of a poorly sorted, orangey-brown, sandy-clay with a maximum depth of 0.90m. Layer (125) contained frequent sub-angular stony inclusions and occasional fragments of brick. No datable finds were recovered from deposit (125), however, the poorly sorted form of the layer was indicative of deliberate deposition.

2.9 To the west of the excavated slot, a lime mortar rich deposit (124) was found overlying the road (Figures 12 and 13). This deposit appeared in plan as a linear feature extending on a north-south alignment and may have been the remnants of a structural foundation. However, this interpretation remains speculative given the lack of ceramic building material or diagnostic finds.

2.10 Road surface (121) was also truncated by a service trench [122] which contained a cast iron pipe and a poorly sorted, yellowish-brown backfill deposit (123). Service pipe trench F.123 separated deposits (124) and (125), however, it was unclear if the distinction between the afore-mentioned deposits was caused by disturbance related to the excavation of service trench F.122 (Figures 12 and 13).

*20th century*

2.11 Following the initial stripping of the topsoil, two linear features, F.111 and F.115, were identified running on a parallel east-west alignment (Figure 3).

2.12 F.111 was comprised of comprised of a concave sided cut [110] filled by a 0.34m thick, poorly sorted, backfill deposit (111) containing brick, stone and fragments of slate (Figures 5 – 6). Similarly, F.115 displayed a concave sided cut [114] and was also filled by a 0.40m thick, poorly sorted, backfill deposit (115) containing frequent fragments of brick and slate. Frequent voids were identified within the fills of both features F.111 and F.115 and were suggestive of deliberate deposition within a single dumping event. F.111 and F.115 were tentatively interpreted to represent the foundations for early 20th century pathways.

2.13 F.111 and F.115 were sealed by levelling layers (112) and (116) which displayed maximum visible depths of 0.60m and 0.80m respectively. Both layers (112) and (116) were overlain by an additional levelling deposit of red clay (113)/(117).

2.14 A fragmentary pebbled pathway (126) with a depth of 0.30m sealed deposit (117).

2.15 Linear feature F.115 was well aligned with a modern concrete pathway which was depicted on recent Ordnance Survey mapping (Figure 21). Consequently, due to the similarity in form of both F.111 and F.115, both features were interpreted to be related to the formation of 20th century pathways.

2.16 No archaeological features were identified in the 16 x 26m area at the southern extent of the site. This area was overlain by a 0.70m thick, 20th century demolition deposit (101). Deposit (101) sealed a buried subsoil layer (104) which was visible at the base of the southern excavated area.

## 3 Phase 1 Watching Brief: Rapid Recovery Archaeological Excavation

3.1 On the 18th July 2014, an unmonitored mechanical excavator, truncated a number of in-situ archaeological deposits within the southern extents of the development site. As part of the wider watching brief being carried out upon the site, Archaeological Research Services recorded the remaining in-situ archaeological deposits in order to ascertain the extent of the damage caused to the buried archaeological remains.

3.2 The mechanical excavator truncated an area measuring 7.61m x 7.29m x 2.68m prior to a management request requiring the cessation of all groundworks within the vicinity of the impacted area.

3.3 The results of the Rapid Recovery are outlined below but presented in full within Appendix 4.

*Medieval*

3.4 The earliest identifiable feature within the excavated trench was a north, north-west to south, south-east orientated wall (204), located at the eastern most extent of the impacted area. Wall (204) measured 0.86m x 0.42m x 0.22m and was identified at a depth of 4.35m aOD (Figure 23). Wall (204) was constructed from unbonded, roughly-shaped, limestone blocks and was abutted by a moderately sorted, pinkish-brown, silty-clay (211). The full extents of deposit (211) were not excavated, therefore it was unclear as to whether the deposit existed as a layer or a fill within a cut feature.

3.5 Both wall (204) and deposit (211) were truncated by a near vertically sided construction cut [202] for a NE to SW aligned wall (201). Wall (201) was present at a maximum height of 5.75m aOD and descended the full depth of the trench to 4.0m aOD (Figures 22-24, 29 and 31). Wall (201) bisected the eastern edge of the excavation area and measured 2.5m x 0.96m x 1.75m at its maximum extents. Dressed limestone and granite facing stones were identifiable on both the Ne and SW faces of wall (201). The facing stones were irregularly coursed and bordered a 0.45m thick rubble core. The presence of dressed facing stones

may indicate that the visible element of (201) functioned as an extant wall likely set upon unexcavated foundation footings. A whitish-grey mortar containing frequent shell inclusions was identifiable within the northern and north-eastern faces of wall (201), below a height of 5.38m aOD. A yellowish-brown, sandy mortar was utilised as the principal bonding agent above 5.38m aOD. The use of two distinct bonding materials may highlight that there may have been two separate construction phases associated with wall (201).

3.6 The north-western component of wall (201) had been partially impacted by contemporary truncation event [239]. However, it was unclear if the full extent of the damage to wall (201) was caused by modern excavation or by earlier 20th century development of the site.

3.7 Walls (204) and (201) were abutted by a series of poorly sorted, silty clay deposits (210, 208, 207 & 222) containing moderate quantities of animal bone, shell and occasional fragments of 15th century, green glazed, medieval pottery (Figure 33). Deposits (207), (208) and (210) abutted the south-east face of wall (201) and deposit (222) abutted the north-western face of wall (201) (Figures 22 and 32). The composition and form of deposits (210), (208), (207) and (222) was indicative of deliberate medieval dumping events and has been interpreted as an attempt to consolidate and raise ground level. Deposit (207) was the highest, medieval, made-ground layer and was present at a maximum height of 5.14m aOD. A well sorted, blackish-grey, silty-clay deposit (209) was identified below medieval dump deposit (208) and overlying medieval made ground layer (210). Deposit (208) measured 2.35m x 0.21m x 0.15m at its greatest visible extents and was interpreted as a medieval dis-use deposit formed subsequent to the deliberate deposition of make-up layer (210). The presence of mid-15th century pottery within the deposits abutting wall (201) suggests that wall (201) may pre-date the 1450's.

3.8 A third wall (218) was identified within the northern extent of the impacted area at a depth of 5.65m aOD. The visible extents of wall (218) measured 1.30m x 1.26m x 0.10m and were partially overlain by a 20th century levelling deposit (234) (Figures 27 and 28). Wall (218) was constructed from dressed limestone facing stones and bonded with a whitish-grey mortar. The full extent of wall (218) was not revealed, however, the construction and bonding materials utilised were very similar to those identified within wall (201). Consequently, walls (201) and (218) were tentatively interpreted to have been of a broadly contemporaneous late medieval date.

*Post-Medieval*

3.9 The medieval deposits within the south-east of the impacted area were sealed by a purplish-brown, clayey-silt layer (205), which abutted and partially overlay the south-eastern aspect of wall (201) (Figure 22). Occasional fragments of brick and rare fragments of bone were recovered from layer (205) which due to its composition, form and stratigraphic location, was interpreted as a post-medieval garden soil. Layer (205) was identified at a depth of 5.89m aOD.

3.10 A near identical purplish-brown, silty-clay deposit (214) was present at the south-western extent of the impacted area. Layer (214) was present at a maximum depth of 5.76m aOD and was truncated by post-medieval pit F.230, 20th century foundation cut [216] and modern truncation event [239] (Figure 26). Layer (214) has been interpreted as a post-medieval garden soil of a broadly contemporaneous date to deposit (205).

3.11 As previously mentioned, pit F.230 truncated the south-eastern extent of garden soil layer (214). F.230 displayed a near vertically sided cut [240] and was filled by two poorly sorted, greyish-brown sandy-silt deposits (230 & 231). Deposit (230) contained occasional fragments of glass and un-frogged 19th century brick. The poorly sorted composition and moderate quantity of fragmentary building materials within deposit (230) indicate that F.230 should be interpreted as a late post-medieval or early 20th century demolition waste pit (Figure 26). F.230 was present at a depth of 5.66m aOD and was sealed by early 20th century levelling deposits (229) and (227).

3.12 Three additional made ground deposits (235, 236 & 237) were revealed within the south-east facing section of the impacted excavation area. The full extent of these deposits was unclear, however, their stratigraphic location and the presence of un-frogged 19th century brick suggests that (235), (236) and (237) should be tentatively interpreted as late post-medieval levelling deposits.

*20th Century*

3.13 There were two identifiable phases of 20th century development present within the impacted area. The earliest 20th century phase of activity was located within the south-west corner of the impacted area and was characterised by the construction of reinforced concrete foundation base (238) (Figures 25 and 30). Foundation base (238) was present at a depth of 5.94m aOD and measured 1.52m x 0.34m x 0.54m at its maximum visible extents. Concrete foundation (238) also provided structural support for an irregularly coursed limestone wall (215) and further sealed a 0.04m thick, greyish-brown, silty-clay trample deposit (233). Wall (215) was aligned east to south-east and west to north-west, was identifiable at a depth of 6.62m aOD and measured 0.62m x 0.29m x 0.78m at its maximum extents. The irregularly shaped, limestone blocks within wall (215) measured an average 0.30m x 0.20m x 0.15m and were bonded by a greyish-white, cementitious mortar (Figure 25 and 30). Wall (215), concrete foundation (238) and trample deposit (233) were all set within a vertically sided, flat-based, construction cut [216]. Cut [216] was visible principally in section and truncated post-medieval garden soil (214) and post-medieval make-up deposit (235). The full extents of foundation cut [216] were not identified and continued below the base of the excavation area. Wall (215) and reinforced foundation base (238) were interpreted as constituting a foundation wall potentially related to the early 20th century winery museum.

3.14 The south-western face of reinforced concrete foundation base (238) was abutted by a 0.04m thick, poorly sorted, silty-sand deposit (229). Layer (229)

contained moderate quantities of small-medium sized, sub-rounded, stony inclusions and measured 1.6m x 0.44m x 0.04m at its maximum visible extents. Layer (229) sealed post-medieval garden soil (214), fill (231) of post-medieval pit F.230 and was identified at a depth of 5.82m aOD. Additionally, layer (229) was sealed by a blackish-brown, silty-clay deposit (227). Deposit (227) contained occasional fragments of brick, moderate concentrations of small, sub-angular, stony inclusions and rare fragments of modern pottery. Additionally, layer (227) abutted the south-western face of limestone wall (215), overlay concrete foundation base (238) and measured 2.62m x 0.90m x 0.52m at its maximum extents. A brownish-black, clayey-silt deposit (217), measuring 0.78m x 0.14m x 0.18m was identified overlaying deposit (227) at its north-western extent. Deposit (217) had a similar poorly sorted composition to layer (227) and abutted the south-western face of early 20th century limestone wall (215). Additionally, deposit (217) was identified at a height of 6.42m aOD. Both layers (227) and (217) were truncated by an east to south-east and west to north-west aligned 20th century service pipe trench F.225.

3.15 The north-eastern face of wall (215) was abutted by a greyish-brown, clayey-silt deposit (234) which was identifiable at a depth of 6.48m aOD. Deposit (215) had been heavily disturbed by modern groundworks, contained frequent small-medium sized stony inclusions and overlay post-medieval make-up layers (235/237).

3.16 The form, composition and stratigraphic location of deposits (229), (227), (217) and (234) was indicative of levelling or foundation layers, likely contemporary with the formation of wall (215) and the construction of the early 20th winery museum.

3.17 A second region of earlier 20th century activity was also identified within the southern extent of the impacted area and was characterised by foundation cut [228] filled by a poorly sorted, make-up deposit (219). Foundation cut [228] was visible principally in section and displayed a flat, uneven base with a maximum impact depth recorded at 4.90m aOD. Cut [228] truncated medieval dump deposit (222) and a 0.04m thick, brownish-yellow, silty-sand deposit (220) of unknown formation.

3.18 As previously mentioned, foundation cut [228] was filled by a deliberately deposited, greyish-brown, sandy silt deposit (219) containing frequent fragments of brick, moderately sized stone and rare fragments of modern pottery. The brickwork recovered from fill (219) was unfrogged and although very fragmentary displayed a consistent thickness of 2". Consequently, the brick within fill (219) has been tentatively dated to the 17th/18th century. Furthermore, the moderately high concentration of post-medieval brick within fill (219) and the presence of 20th century pottery might suggest that deposit (219) was formed principally of demolition material related to the destruction of a localised post-medieval structure. Deposit (219) abutted the north-western face of medieval wall (201) and has been interpreted as an early 20th century

foundation deposit, potentially contemporary with foundation wall (215) and concrete foundation base (238).

3.19 The later 20th century phase of activity was identifiable within the south-west corner of the impacted area and was characterised by the construction of service pipe trench F.225 and concrete floor surface (223).

3.20 Service pipe trench F.225 displayed a vertically sided, flat based cut [226], orientated on a north-west to south-east alignment (Figure 26). As previously mentioned, cut [226] truncated earlier 20th century levelling deposits (227) and (217). Additionally, cut [226] and was filled by a poorly sorted, greyish-brown sandy silt deposit (225) and a fragmentary ceramic service pipe with a maximum diameter of 0.18m. The ceramic service pipe had been heavily disturbed by modern truncation event [239] but was identifiable at the base of service trench cut [226]. Deposit (225) contained frequent, small-medium sized, stony inclusions and had been deliberately deposited into service trench cut [226] in order to seal the modern service pipe.

3.21 Service trench F.225 was overlain by stony bedding deposit (224) for modern concrete floor surface (223) (Figures. 24, 25 and 26). Bedding deposit (224) was present at a depth of 6.60m aOD, measured 1.32m x 2.04m x 0.22m and abutted the south-western and north-eastern faces of wall (215). Concrete floor surface (223) physically overlay both bedding deposit (224) and earlier 20th century wall (215). Concrete surface (223) is representative of the current ground level within the vicinity of the impacted area and is present at a height of 6.76m aOD.

3.22 All of the contexts detailed above were impacted by mechanical excavator truncation event [239]. Truncation cut [239] measured 5.81m x 5.14m x 2.48m at its maximum extents and was filled by a poorly sorted, silty-clay backfill (212). Deposit (212) contained frequent fragments of brick, stone and occasional fragments of modern and late medieval pottery.

## 4 Phase 2 Watching Brief on Piling Works (Figure 44)

4.1 In order to protect sensitive archaeological remains within the site from further unintentional damage, the Assistant County Archaeologist considered it necessary to clearly state the mitigation measures that would be put in place during piling operations at Governor's Gardens, and how these measures related to the existing watching brief condition (see Appendix 4).

4.2 The added conditions included:

- The watching brief would cover all piling operations, with an archaeologist present during piling works, including the formation of foundations, drilling, concreting etc. The watching brief took note of locations where below ground obstacles are encountered and annotate them on approved piling plans, and, where possible, take note of the (approximate) depths at which obstacles are encountered, the depth at which natural geology is encountered and if waterlogging is noted (recognising that this data will not be to archaeological standards).

- If it is not possible to excavate any given pile to the required depth, it will be acceptable to insert a maximum of two additional piles (ie- either side of the original pile location) – but no more than this unless agreed in advance. This is to avoid archaeological deposits being destroyed without record. If it proves impossible to complete the piling exercise within this framework, an alternative foundation strategy, or a more robust archaeological response, potentially excavation, could be required.

- The archaeological observations made during piling works will attempt to inform, where possible, the wider understanding of deeply buried waterlogged deposits within Berwick, as described by the NCC Distribution and Significance of Urban Waterlogged Deposits, (Derham 2013), as well as the Regional Research Framework objectives contained within this survey.

*Plot I*

| Pile no. | Stopped at, due to obstruction | Spoil |
|---|---|---|
| 3 | 3.5m | Dark black-brown silty clay. |
| 3a | 3.5m | Dark black-brown silty clay. |
| 3b | - | Dark black-brown silty clay. |
| 4 | 4m | Dark black-brown silty clay, mod CBM, whitish pink sandy mortar present and pinkish white stone fragments. Resistance from 3.5m. |
| 4a | 4m | Dark black-brown silty clay. |
| 4b | - | Dark black-brown silty clay, cobbles present. |
| 5 | 3.5m | Dark black-brown silty clay, occasional CBM, pinkish-white stone fragments. |
| 5a | 4m | Dark black-brown silty clay; CMB fragments, animal bone, tile fragments. |
| 5b | - | Dark black-brown silty clay, CBM, pinkish-white stone fragments. |
| 10 | 4m | Dark black-brown silty clay, CBM, fragments of white stone. Resistance from 3.5m. |
| 10a | 4m | Dark black-brown silty clay. |
| 10b | - | Dark black-brown silty clay. |
| 18 | - | Dark black-brown silty clay; oyster shell. |
| 20 | 3.5m | Dark black-brown silty clay. |
| 27 | 4m | Dark black-brown silty clay. |
| 27a | 4m | Dark black-brown silty clay. |
| 27b | 4m | Dark black-brown silty clay. |
| 27c | - | Dark black-brown silty clay. |
| 40 | - | Dark black-brown silty clay; CBM, oyster shell, charcoal. |
| 44 | - | Dark black-brown silty clay; oyster shell, limestone, tile fragments, animal bone. Slight resistance at 3m. |
| 46 | - | Dark black-brown silty clay. |
| 48 | - | Dark black-brown silty clay with tile fragments and CBM. Slight resistance at 4.5m. |
| 49 | - | Dark black-brown silty clay. |
| 50 | - | Dark black-brown silty clay; CBM, |
| 51 | - | Dark black-brown silty clay; animal bone. |
| 52 | - | Dark black-brown silty clay; oyster shell. |
| 53 | - | Dark black-brown silty clay; limestone fragments. |
| 54 | - | Dark black-brown silty clay; shell, animal bone and CBM. |
| 55 | - | Dark black-brown silty clay. |

| | | |
|---|---|---|
| 57 | - | Dark black-brown silty clay. |
| 61 | - | Dark black-brown silty clay. |
| 62 | - | Dark black-brown silty clay. |
| 63 | - | Dark black-brown silty clay. |
| 64 | 1m | Dark black-brown silty clay. |
| 64a | 1m | Dark black-brown silty clay; brick small fragments, animal bone, sandstone fragments. |
| 64b | - | Dark black-brown silty clay; brick small fragments, animal bone, sandstone fragments. |
| 65 | - | Dark black-brown silty clay. |
| 66 | - | Dark black-brown silty clay. |
| 67 | - | Dark black-brown silty clay. |
| 68 | - | Dark black-brown silty clay. |
| 69 | 4m | Dark black-brown silty clay. |
| 69a | 4m | Dark black-brown silty clay. |
| 69b | - | Dark black-brown silty clay. |
| 70 | - | Dark black-brown silty clay. |
| 71 | - | Dark black-brown silty clay. |
| 74 | - | Dark black-brown heavy silty clay; oyster shell and shell inclusions. |

Table 1 – Plot 1 piling ground works.

*Plot II*

| Pile no. | Stopped at, due to obstruction | Spoil |
|---|---|---|
| 1 | - | Dark black-brown silty clay. |
| 2 | - | Dark black-brown silty clay. |
| 3 | - | Dark black-brown silty clay. |
| 4 | - | Dark black-brown silty clay. |
| 5 | - | Dark black-brown silty clay. |
| 6 | - | Dark black-brown silty clay. |
| 7 | - | Dark black-brown silty clay. |
| 8 | - | Dark black-brown silty clay. |
| 9 | - | Dark black-brown silty clay. |
| 10 | - | Dark black-brown silty clay. |
| 11 | - | Dark black-brown silty clay. |
| 12 | - | Dark black-brown silty clay. |
| 13 | - | Dark black-brown silty clay. |
| 14 | - | Dark black-brown silty clay. |
| 15 | - | Dark black-brown silty clay. |
| 16 | - | Dark black-brown silty clay. |
| 17 | - | Dark black-brown silty clay. |
| 18 | - | Dark black-brown silty clay. |
| 19 | - | Dark black-brown silty clay. |
| 20 | - | Dark black-brown silty clay. |
| 21 | - | Dark black-brown silty clay. |
| 22 | - | Dark black-brown silty clay. |
| 23 | - | Dark black-brown silty clay. |
| 24 | - | Dark black-brown silty clay. |
| 25 | - | Dark black-brown silty clay. |
| 26 | - | Dark black-brown silty clay. |
| 27 | - | Dark black-brown silty clay. |
| 28 | - | Dark black-brown silty clay. |

| | | |
|---|---|---|
| 29 | - | Dark black-brown silty clay. |
| 30 | - | Dark black-brown silty clay. |
| 31 | - | Dark black-brown silty clay. |
| 32 | - | Dark black-brown silty clay. |
| 33 | - | Dark black-brown silty clay. |
| 34 | - | Dark black-brown silty clay. |
| 35 | - | Dark black-brown silty clay. |
| 36 | - | Dark black-brown silty clay. |
| 37 | - | Dark black-brown silty clay. |
| 38 | - | Dark black-brown silty clay. |
| 39 | - | Dark black-brown silty clay. |
| 40 | - | Dark black-brown silty clay; shell. |
| 41 | - | Dark black-brown silty clay; shell. |
| 42 | - | Dark black-brown silty clay; charcoal, CBM, oyster shell. Fragments of green glazed medieval pot. |
| 43 | - | Dark black-brown silty clay. |
| 44 | - | Dark black-brown silty clay. |

Table 2 – Plot 2 piling ground works.

4.3 All the piling ground works exceeded 7m in depth unless stated otherwise. The natural – mid orange-brown sands – was met at the depth of circa 5m, the water table at circa 6.5m.

4.4 The insertion of piles within housing Plot 1 failed at piling locations 3-5, 10, 27, 64 and 69 (Figure 44). The subterranean obstructions were identified at an average of 3.5-4m below ground level at piling locations 3, 3a, 4, 4a, 5, 5a, 10, 10a, 20, 27, 27a, 27b, 69 and 69a. Sub-surface obstructions were encountered at 1m below ground level at piling location 64 and 64a. It was unclear if the obstruction was caused by solid natural geology or resistance from buried archaeological structures.

4.5 No sub-surface obstructions were identified within housing plot 2.

4.6 The up-cast piling deposits were exclusively comprised of a dark brown, silty-clay containing fragments of animal bone, fragments of brick and occasional sherds of green glazed medieval pottery.

## 5 Phase 3 Watching Brief on Service Trenches

5.1 The third phase of watching brief identified three archaeological features of unknown date. The earliest possible origin for these features is in the medieval period, whilst they could date from as late as the 20th century. Further brick foundations and concrete and tiled surfacing were encountered to the north of properties that are being renovated as part of the present development. These extant features are clearly modern and were not recorded archaeologically as part of the watching brief.

*Medieval - 20th Century*

5.2 Three archaeological features were identified during groundworks associated with the installation of gas infrastructure within the site. The gas service trenches were excavated from the site entrance with connections to each of the newly constructed and renovated buildings on the site. The trenches were 0.5m in width and were dug from the present ground level to a depth of depth of *c*.0.6m. The present ground level includes at least 0.25m of newly imported material laid over a hessian mat, so the actual depth of new excavation was *c*.0.35m.

5.3 The first archaeological feature identified consisted of a roughly north/south aligned wall (241) located immediately to the north of the foundations for the southernmost new-build structures. The excavation area was extended to 7m x 1.9m at the request of the Assistant County Archaeologist for Northumberland in order to better understand this feature (Figure 49). This revealed a length of 1.9m of walling, comprising three large unshaped stones set in a white lime mortar (Figures 45 and 46). The wall had a maximum width of 0.84m, however, the width of the exposed stones varied averaging at a width on 0.22m. The wall was overlain by a clean pinkish-yellow sand deposit (242) which was located in amongst the stones and had a depth of 0.08m above the stones. The sand deposit (242) had the appearance of builder's sand, suggesting that this area had been exposed previously and recovered. No foundation cut was visible within the excavation area suggesting that the observed section of walling presents the upper level of a wall which exists to a greater depth beneath the surface. The deposit abutting the wall on its east and west sides comprised a greyish-black silty clay deposit (251) with frequent charcoal flecks and a moderate amount of small pieces of broken brick and pebble-sized stones. This deposit was beyond the limit of excavation and has been tentatively interpreted as an imported garden soil. The installation of the gas pipework required the removal of one stone from the walling. The remaining wall was retained *in-situ.*

5.4 At a distance of *c*.2.6m to the west of feature (241) a further L-shaped section of walling (259) was uncovered within the extended trench area, which likely represents the corner of a building. This walling (249) was of higher quality than feature (241) and consisted of two leaves of squared red and yellow sandstone blocks without a rubble infill (Figures 47 and 48). The wall appeared to be wall-faced and had a width of 0.64m. The stones were bonded with a white lime mortar which was also present over the top of the exposed stones suggesting that the wall was once higher than its present extent. The north/south aligned section of wall extended the full width of the excavation area, whilst the east/west aligned section was traced for a length of 1.9m westwards. Abutting the east side of the north/south aligned section of wall (249) there was a spread of red and yellow sandstone rubble (250) with white lime mortar adhering to the stones (Figure 47). This is interpreted as collapse or demolition material deriving from feature (249). Within the angle of the L-shaped wall (249) there was a mottled orange-brown silty clay deposit (252) with frequent charcoal flecks (Figure 48). This deposit was beyond the limit of excavation and has been tentatively interpreted as an imported garden soil. The wall (248), rubble (250) and possible garden soil (252) were all overlain by a spread of poorly sorted light

orange-brown silty sand (248) which continued beyond the limit of excavation in the area to the east of deposit (250). The spread (248) contained large unshaped sandstone blocks, frequent broken brick fragments, modern pottery sherds, clay pipe stem fragments and modern glass. This deposit (248) has been interpreted as a spread of demolition material. Structure (248) lay at the limit of excavation and was retained *in-situ*.

5.5 The third feature identified was located to the north of the buildings that are being renovated as part of the present development. This feature consisted of a north-east/south-west aligned section of sandstone walling (243). The wall was constructed of cut sandstone blocks laid in a loose sandy mortar which was also present on the top of the stones (Figure 50). No foundation cut was visible within the excavated area. The west side of the wall (243) was abutted by a blackish-brown, humic, silty clay deposit (245) which was only exposed for a length of 0.2m. The deposits on the east side of the wall (243) were truncated by the installation of an electric cable in this area. The wall was overlain by whitish-yellow silty sand containing frequent broken brick fragments and mortar (244). This deposit has been interpreted as a bedding layer for a concrete (246) and tiled (247) surface that was located in this area. The wall was encountered at a depth of 0.36m below present ground level; the service trench was therefore re-routed in order to preserve this feature *in-situ*. This section of trench was abandoned and backfilled.

5.6 The excavation of trenches for the installation of gas pipework also involved excavations around a previously identified and recorded 20th century wall (215) (see Section 3). Following the removal of concrete that previously covered the top of the wall, it was found that the walling was in fact the corner of a structure/foundation (Figures 51 and 52). The deposits excavated around the wall were all modern in character and consisted of brick foundations, a stone drain and a concrete drainage gully (Figure 53). The 20th century wall was retained *in-situ.*

## 6 Phase 4 Watching Brief on Service Trenches

*Trench 1*

6.1 Trench 1 was located within Palace Street East, 7m north-east of the main development area. Trench 1was comprised of two manhole areas measuring 2m x 2m and an additional NNW-SSE aligned service trench (Figure 55, 56, 58 & 59). The trenches were excavated in order to attach the drainage and water pipe network within the development area to existing services. The western manhole trench was designated Manhole A and the eastern trench, Manhole B.

6.2 The uppermost visible layer within Trench 1- Manhole A was a 0.04m thick, tarmac road surface (001) which overlay blackish-grey gravel sub-base (002). Sub-base deposit (002) overlay a cobbled road surface (003) of probable late 19th or early 20th century date. Cobbled road surface (003) displayed a depth of

0.10m and sealed a 0.18m thick, whitish-yellow levelling deposit (004). Levelling layer (004) was likely inserted at a broadly contemporaneous date to the construction of cobbled road surface (003). Deposit (004) sealed a poorly-sorted greyish-black, silty-clay layer (005) which contained fragments of late 19th and early 20th century brick. Consequently, layer (005) was interpreted as a coarse levelling deposit probably associated with the construction of cobbled road (003) and bedding sand (004) (Figure 58, 59 & 66).

6.3 Levelling layer (005) sealed a greyish-black, clayey-silt deposit (006) containing fragmentary brick, sub-angular, stony inclusions and occasional flecks of charcoal. Deposit (006) measured 0.80m in depth, was truncated by foundation cut [009] for brick drain (008) and sealed a brownish-black, silty-clay deposit (007). Deposit (007) was visible across the base of Trench 1-Manhole A and contained a moderate quantity of oyster shell, occasional sub-angular stony inclusions and rare fragments of post-medieval pottery. Deposit (007) had a maximum visible depth of 0.44m and was interpreted as a post-medieval dump deposit (Figure 58, 59 & 66).

6.4 As previously mentioned, deposits (006) and (007) were truncated by a near vertically sided foundation cut [009]. Foundation cut [009] contained a greyish-black, silty-clay backfill deposit (009) and a brick drain (008) measuring 0.85m x 2m at its maximum visible extents. The drain was constructed using unfrogged, redbrick bonded with a greyish-white lime mortar. Drain (008) likely dated from the early to mid-19th century and was orientated on a broadly similar NE-SW alignment to Palace Street East (Figure 59 & 66).

6.5 The uppermost depositional sequence within Trench 1- Manhole B was near identical to Trench 1- Manhole A for layers (001)-(004). However, a 0.82m thick, greyish-black, silty-clay layer (046) was sealed below levelling deposit (004) at a minimum depth of 0.41m below ground level. Deposit (046) was interpreted to be a levelling deposit for road (003) and should be interpreted as the same as layer (005) (Figure 60 & 61). Deposit (046) sealed a 0.19m thick, poorly sorted, whitish-brown demolition deposit containing frequent fragments of brick and sub-angular stony inclusions. Layer (047) sealed a moderately sorted greyish-brown, silty-clay (048) which was interpreted to be a post-medieval dump deposit similar to (007) within Manhole A (Figure 60 & 61).

6.6 Deposits (046), (047) and (048) were truncated by an E-W orientated construction cut [056]. Cut [056] measured 1.2m x 1.4m x 2m where visible and was filled by sandstone wall (045) and backfill deposit (049). Wall (045) was constructed from shaped sandstone blocks, randomly coursed and bonded with a whitish-yellow, sandy mortar. Additionally, wall (045) was aligned on a broadly E-W orientation and was interpreted as 19th century foundation footings for a wall. It was unclear during excavation if wall foundations (045) extended beyond the depth of Manhole Trench B.

*Trench 2*

6.7 Trench 2 was located at the southern intersection of Palace Street East and Palace Street (Figure 55 & 69). Trench 2 was comprised of a 3m x 3m manhole and a WNW-ESE aligned, 4m length of service pipe trench. Trench 2 was excavated to a maximum depth of 2.2m. The uppermost layers within Trench 1 were modern tarmac road surface (001) and contemporary pavement surface (013). Tarmac surface (001) immediately overlay cobbled road (003) which was identified at a depth of 0.08m below ground level. Surface (003) and pavement (013) sealed an 0.45m thick, orangey-brown, silty-clay deposit (058). Layer (058) was interpreted to be a late 19th or early 20th century levelling deposit, likely inserted during the construction of road (003). Deposit (058) sealed a 0.25m thick, yellowish-orange clay layer (059) which was interpreted as a re-deposited natural of unknown date or function. Layer (059) sealed a 0.45m thick greyish-brown, silty-clay deposit (060), containing occasional fragments of stone and moderate quantities of oyster shell. Deposit (060) extended across the base of Trench 2 and was interpreted to be a post-medieval dump deposit, probably similar to deposit (007/048) in Trench 1. Five modern service pipes bisected Trench 2 on a broadly NE-SW orientation (Figure 69). No finds or features of archaeological significance were identified within Trench 2.

*Trench 3*

6.8 Trench 3 was located at the southern extent of the development and was comprised of two 2m x 2m manhole trenches, designated Man-hole A and Manhole B (Figure 57). Four service trenches for the installation of water pipes were also excavated at the northern, eastern and southern extents of Manhole A. The upper-most deposit visible within Trench 3 was 20th century levelling layers (019) for a surface servicing the modern nursery which was present upon the site prior to the current phase of works. Deposits (019) overlay a later 19th century or early 20th century cobbled surface (022). Surface (022) had a maximum depth of 0.12m and overlay a poorly sorted, greyish-brown, silty-clay layer (023). Deposit (023) displayed a maximum depth of 0.70m and was interpreted to be a 19th century backfill layer, serving to seal structures (020/034) and (041) (Figure 62, 64, 65 & 70 – 72). Walls (020) and (034) represented the eastern and western sides of a broadly NNE-SSW aligned tunnelled structure. Both walls (020) and (034) were constructed from irregularly coursed, shaped, sandstone blocks measuring an average 0.40m x 0.30m x 0.22m at their maximum extents. A concrete slab was laid across the uppermost course of stonework (020/034) and served to create a tunnelled space measuring 1m x 1.2m (Figure 64 & 72). Greyish-black sooty staining was visible upon the interior faces of both walls (020) and (034). A greyish-brown, sandy-silt deposit (031) abutted the interior faces of walls (020) and (034) and was interpreted to be related to long term dis-use of the tunnelled structure. The structural form of tunnel (020/034) and the sooty residue present upon the interior stonework was suggestive of a possible mid-late 19th century flue. Walls (020/034) overlay a yellowish-orange redeposited natural which was interpreted to be a levelling layer inserted prior to the construction of the flue (Figure 64).

6.9 Similarly, deposit (023) also sealed a sandstone culvert (041) which measured 0.44m x 0.4m x 0.5m at its maximum visible extents. Culvert (041) was constructed from irregularly coursed, shaped sandstone blocks, aligned on a NE-SW orientation (Figure 64 & 73). Culvert (041) overlay a brownish-grey, silty-clay levelling layer (042) and was interpreted have been constructed at a broadly contemporaneous date to flue (020/034).

6.10 An E-W aligned sandstone wall foundation (037) was identified 3m east of culvert (041). Wall foundation (037) was irregularly coursed, measured 0.80m x 0.60m x 0.24m, and bonded with a whitish-grey, cementitious mortar. Wall foundations (037) were identifiable at a depth of 0.08m below present ground level. It is also worth noting that late 19th/early 20th century surface (022) abutted the western face of wall (037) and may indicate that both features were broadly contemporary.

6.11 Wall foundation (037) physically overlay an irregularly coursed sandstone structure (038) which was identified at a depth of 0.55m below current ground level. Structure (038) measured 1.4m x 0.22m x 0.81m at its maximum visible extents and was bonded with a yellow sandy mortar. Wall (038) was constructed above re-deposited natural layer (027) and was interpreted to be mid-late 19th century wall footings, potentially contemporary with structures flue (020/034) and culvert (041) 64, 65 & 74).

6.12 A highly fragmented sandstone wall foundations (021) was visible 5m SW of Trench 3-Manhole A (Figure 57 & 75). Wall (021) was identifiable at a depth of 1.17m below current ground level measured 0.62m x 0.24m x 0.34m at its maximum visible extents (Figure 75). Wall (021) was constructed above re-deposited natural layer (027) and was overlain by a greyish-brown, silty-clay (030). Deposit (030) was interpreted to be a 19th century levelling layer which was probably the same as deposit (023) in Trench 3-Manhole A (Figure 64). Consequently, wall (021) was interpreted to represent a heavily fragmented, early 19th century wall foundation.

*Trench 4*

6.13 Trench 4 was located 10m south of Trench 1 and measured 4.5m x 4m at its maximum visible extents (Figure 55). Trench 4 was excavated through modern road surface (001) and both sub-base (002), cobbled road surface (003) and sandy 20th century bedding deposit (004). Deposit (004) overlay a 0.47m thick, greyish-brown, silty-clay (061) which was identified at a depth of 0.43m below ground level. Deposit (061) was interpreted to be a 20th century levelling deposit for surface (003) and the same as (005) in Trench 1. Deposit (061) sealed a 0.82m thick, moderately sorted, dark greyish-brown, silty-clay (062). Layer (062) contained moderate quantities of sub-angular stone and occasional fragments of animal bone. Consequently (062) was interpreted to be a potential post-medieval dump deposit and probably the same as (006) within Trench 1. Deposit (006) extended to the base of Trench 4. All of the afore-mentioned deposits were truncated by a 20th century brick manhole which was located at the western

extent of Trench 4 (Figure 76). No finds or features of archaeological significance were identified within Trench 4.

## 7 Discussion

7.1 The watching brief and excavation identified a broad range of multi-phase archaeological features.

7.2 The earliest identified feature was wall (204) which was truncated by later wall (201) (Figure 22-25, 31, 37 & 41). A third wall (218) was likely to be broadly contemporary with walls (201) and (204) which were constructed of similar materials and bonding. The presence of mid-15th century pottery in deposits abutting walls (201) and (204) has led to the interpretation that these walls may pre-date the 1450's. Consequently, walls (201) and (204) may have related to the Carmelite Friary which was likely established upon the site during the 1270's.

7.3 The next earliest dated feature was a possible 16th/17th century foundation wall (108) which was later robbed out for recyclable building materials F.106. However, the narrow nature of the monitored excavation did not allow for a confident interpretation of the type of structure that may have been robbed out.

7.4 A 19th century pit [240] located within post-medieval garden soil layer (214), contained fills (230) and (231) (Figure 26 & 40). Finds from these fills included fragments of glass and 19th century brick, indicating the pit's function was as a waste pit of late 19th or early 20th century date.

7.5 The presence of flue (020/034) provided some evidence for industrial activity upon the site and may have related to the Tweed Brewery which was established upon the site in 1855 and contained a brewhouse, pottery kiln and two malt-houses. Tweed breweries later formed Berwick Breweries and then again changed hands to form the Faux Breweries in 1934 (CgMS, 2009). It was uncertain if flue (020/034) was operational throughout the operational life span of the brewery.

7.6 A further likely 19th century/20th century phase of archaeology was a cobbled road (121) and (022), which were probably the as an extensive cobbled surface of rounded granite located in Trench 1 of the previous archaeological evaluation (PCA 2001, 17). It is likely that more of this road survives to the north and south of the slot excavated during the watching brief. The close physical relationships between levelling layers (023/030) with flue (020) and cobbled surface (022/030) might suggest that the latter also serviced the brewery site.

7.7 The earliest phase of 20th century development was a reinforced concrete base (238) (Figure 40). Foundation (238) was found to be supporting wall (215) and their positions within construction cut [216] would suggest that they are of contemporary construction, possibly part of either Faux breweries or the winery museum previously located on the development area.

7.8 The final phase of archaeology identified during the watching brief related to two probable pathways which are likely of a 20th century date. The pathways are not immediately associated with any archaeological features although it is known that the final phase of the site's use was partly as allotment gardens which were reached by an access pathway depicted on modern Ordnance Survey maps (PCA 2001, 12) (Figure 21). This may explain why the pathways are not connected with archaeological features but they may have provided access to allotment gardens.

## 8 Publicity, Confidentiality and Copyright

8.1 Any publicity will be handled by the client. Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

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## 10 Acknowledgements

10.1 Archaeological Research Services Ltd would like to thank all those who contributed to the outcome of this project, in particular Nick Dawe of Lindisfarne Homes for commissioning the work and Nick Best, Assistant County Archaeologist for Northumberland County Council for his advice.

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## Appendix 1 – Context Register

| Context No | Context Description |
|---|---|
| 001 | Tarmac Surface |
| 002 | Sub-base |
| 003 | 20th Century Cobbling |
| 004 | Bedding Sand |
| 005 | Mid Greyish-Brown Levelling Deposit – 20th Century |
| 006 | Dark Greyish-Brown Levelling Deposit – 19/20th Century |
| 007 | Potential Medieval Deposit |
| 008 | Brick Culvert |
| 009 | Cut for (008) |
| 010 | Fill of [009] |
| 011 | S. wall of Governor's Gardens |
| 012 | Foundation wall of (011) |
| 013 | Tarmac Surface (Pavement) |
| 014 | Red Brick/Sandstone Layer |
| 015 | Dark Blackish-Brown Make-Up Layer |
| 016 | Mid Brown Make-Up Layer |
| 017 | Dark Blackish-Brown Make-Up Layer |
| 018 | Light Yellowish-Brown Sand |
| 019 | Courtyard Crush/Trample |
| 020 | W. 19th/20th Century Culvert Wall |
| 021 | Loosely Assembled Stone Wall |
| 022 | Surface Bedding Sand |
| 023 | Dark Grey Silt (Cobbles) |
| 024 | Dark Red Clay Bedding |
| 025 | Dark Brownish-Orange Dump Deposit |
| 026 | Dark Charcoal/Burnt Layer |
| 027 | Redeposited Natural |
| 028 | Sandy Fill for Electricity Cable |
| 029 | Cut for (028) |
| 030 | Dark Grey Sandy Clay |
| 031 | Mid Reddish-Brown Loose Fill of 19th/20th Century Culvert |
| 032 | Plaster Channel Base |
| 033 | Concrete Slab covering (020) and (034) |
| 034 | Early 19th/20th Century Culvert Wall |
| 037 | 20th Century Pink Sandstone Wall |
| 038 | 19th/20th Century Yellow Sandstone Foundation Wall |
| 040 | Slate-topped concrete base for (038) |
| 041 | 19th/20th Century Cast-Iron based Guttering |
| 042 | Dark Clay Make-Up Layer for (041) |
| 043 | 20th Century Foundation Wall |
| 044 | Dark Reddish-Brown Packing Clay |
| 045 | Post-Medieval Wall |
| 046 | Mid Orangey-Brown Compacted Sandy Clay |
| 047 | Light Whitish-Brown Crush |
| 048 | Dark Grey Clay |
| 049 | Mid Brownish-Grey Silty Clay |
| 050 | Black Burnt/Demolition Layer |
| 051 | 19th/20th Century Surface |
| 052 | Reddish-Brown Clay Make-Up Deposit |
| 053 | Light Pinkish-Orange Clay Bedding Layer |

| | |
|---|---|
| 054 | Dark Blue-Clay Foundation |
| 055 | Mid Brownish-Yellow Clay Natural |
| 056 | Construction cut for wall (045) |
| 057 | 19th/20th century make-up layer |
| 058 | Modern levelling deposit- Trench 2 |
| 059 | Re-deposited natural- Trench 2 |
| 060 | Post-medieval dump deposit, same as (007/048) |
| 061 | Mid greyish-brown levelling deposit – Same as 005 |
| 062 | Dark greyish-brown levelling deposit- same as 006 |

| Context No. | Type | Description |
|---|---|---|
| 101 | Deposit | Demolition Layer |
| 102 | Deposit | Ground levelling beneath (101) |
| 103 | Deposit | Mortar layer beneath (102) |
| 104 | Deposit | Subsoil |
| 105 | Cut | Robber trench cut |
| 106 | Fill | Backfill of robber trench |
| 107 | Fill | Fill of construction cut |
| 108 | Structure | Disturbed foundations |
| 109 | Cut | Construction cut |
| 110 | Cut | Cut of northernmost pathway |
| 111 | Fill | Primary rubble fill of [110] |
| 112 | Fill | Cinder levelling material above (111) |
| 113 | Fill | Clay levelling material above (112) |
| 114 | Cut | Cut of southernmost pathway |
| 115 | Fill | Primary rubble fill of [114] |
| 116 | Fill | Cinder levelling material above (115) |
| 117 | Fill | Clay levelling material above (116) |
| 118 | Deposit | Pebble deposit above (117) |
| 119 | Deposit | Shell deposit, possible dumping material |
| 120 | Structure | Kerbstones |
| 121 | Surface | Cobblestone surface/road |
| 122 | Cut | Cut of service trench |
| 123 | Fill | Fill of service trench [122] |
| 124 | Deposit | Mortar-rich deposit |
| 125 | Deposit | Natural sealing deposit above (121) |
| 126 | Surface | 20th century path |

| Context No. | Type | Description | Provisional dating |
|---|---|---|---|
| 201 | Masonry | NNE-SSW aligned wall | Medieval |
| 202 | Cut | Foundation cut for wall 202 | Medieval |
| 203 | Deposit | Backfill within foundation cut 202 | Medieval |
| 204 | Masonry | WNW-ESE aligned wall | Medieval |
| 205 | Deposit | Garden soil, same as 214 | Post-medieval |
| 206 | Deposit | Mortar dump | Medieval |
| 207 | Deposit | Dump/levelling deposit | Medieval |
| 208 | Deposit | Disuse deposit | Medieval |
| 209 | Deposit | Dump/levelling deposit | Medieval |
| 210 | Deposit | Dump/levelling deposit | Medieval |

| | | | |
|---|---|---|---|
| 211 | Deposit | Re-deposited natural deposit | Medieval |
| 212 | Deposit | Fill of contemporary truncation cut 239 | Modern |
| 213 | Deposit | Concrete foundation | Modern – early C20th |
| 214 | Deposit | Garden soil, same as 205 | Post-medieval |
| 215 | Masonry | Wall | Modern |
| 216 | Cut | Foundation cut for modern wall 215 | Modern |
| 217 | Deposit | Make-up layer | Modern |
| 218 | Masonry | Wall | Medieval |
| 219 | Deposit | Make-up layer for foundation 213 | Modern |
| 220 | Deposit | Sandy layer | Medieval |
| 221 | Deposit | Disuse layer | Medieval |
| 222 | Deposit | Dump/levelling deposit | Medieval |
| 223 | Deposit | Concrete foundation | Modern |
| 224 | Deposit | Bedding for 223 | Modern |
| 225 | Deposit | Backfill in service pipe trench cut 226 | Modern |
| 226 | Cut | Cut of a pipe trench | Modern |
| 227 | Deposit | Levelling deposit | Modern |
| 228 | Cut | Same as 216 | Modern |
| 229 | Deposit | Sandy layer | Modern |
| 230 | Deposit | Fill of 240 | Post-medieval/Early C20th |
| 231 | Deposit | Fill of 240 | Post-medieval/Early C20th |
| 232 | Deposit | Re-deposited natural deposit | Post-medieval |
| 233 | Deposit | Trample layer within foundation cut 216 | Modern |
| 234 | Deposit | Make-up layer | Modern |
| 235 | Deposit | Dump/levelling deposit | Post-medieval |
| 236 | Deposit | Dump/levelling deposit | Post-medieval |
| 237 | Deposit | Demolition layer | Post-medieval |
| 238 | Deposit | Foundation for 215 | Modern |
| 239 | Cut | Modern truncation cut | Contemporary |
| 240 | Cut | Cut of pit, filled with 231 and 230 | Post-medieval/Early C20th |

## Appendix 2 – Figures


Figure 1: Site Location

Figure 2: Site Plan during Phase 1
Watching Brief
Scale 1:500 @ A3
Drawn: JT

Key:

- Topsoil Strip
- Strip to 49.325m OD
- Foundation Removal Trench
- 16 x 26m Strip Area

N

20m

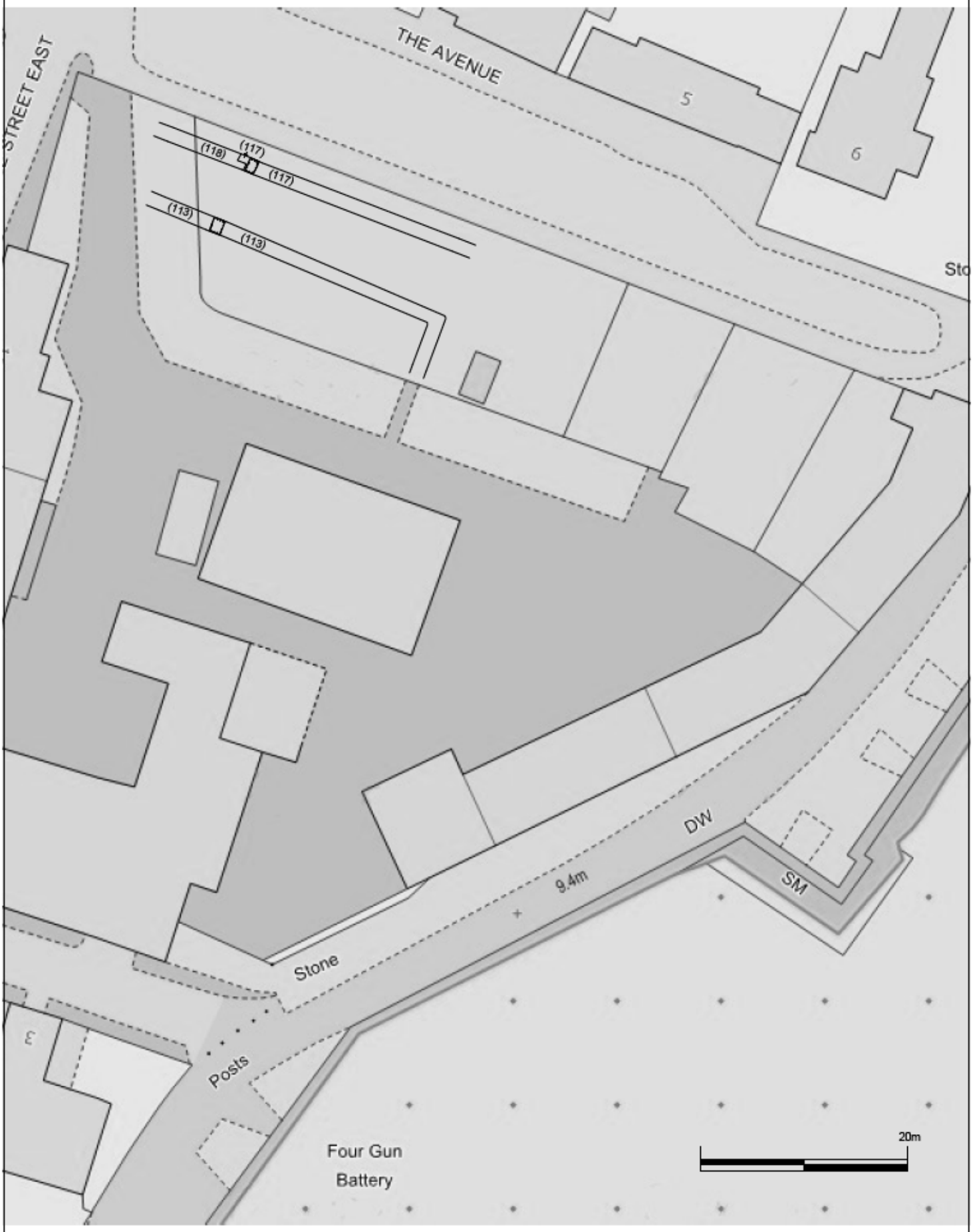



Figure 3: Site Plan following Topsoil Strip
Scale 1:500 @ A4

Key:

N

Figure 4a: Plan of F.111

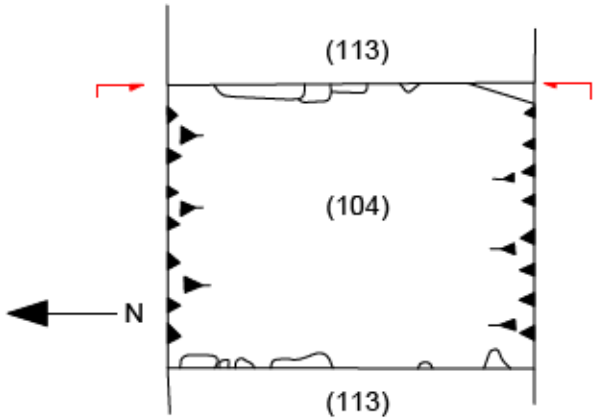



Figure 4b: West facing section through F.111

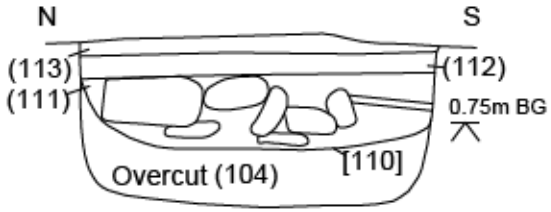



Figure 4c: Plan of F.115

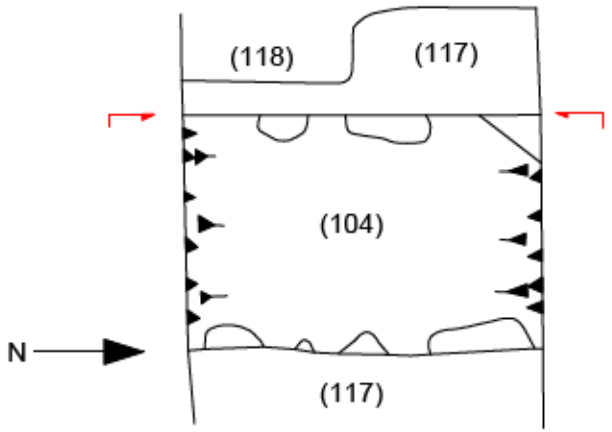
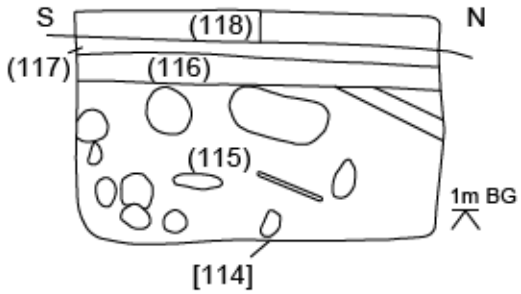



Figure 4d: East facing section through F.115





Figures 4a, 4b, 4c and 4d: Plans and Sections of Features Uncovered during Topsoil Stripping. Scale 1:20 @ A4

Key:

Drawn Section

BG = Below ground surface

Figure 5 – Linear feature [110]. See figure 4a (plan) and 4b (Section).

Figure 6 – Linear Feature [114]. See figure 4c (plan) and 4d (section).

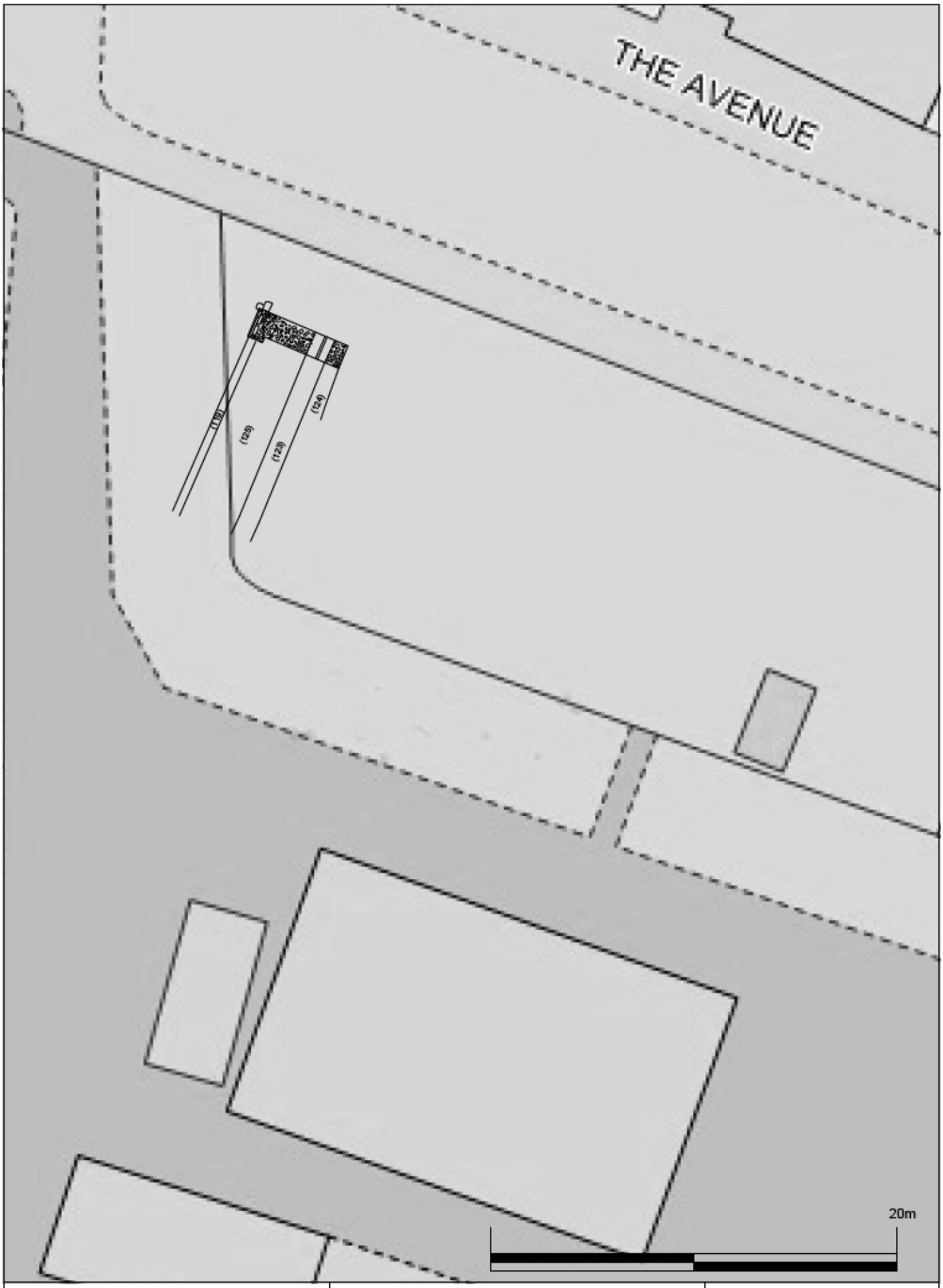



Figure 7: Site Plan after final strip
Scale 1:250 @ A4

Key:

N

Figure 8a: Plan of F.119, F120 and F.121

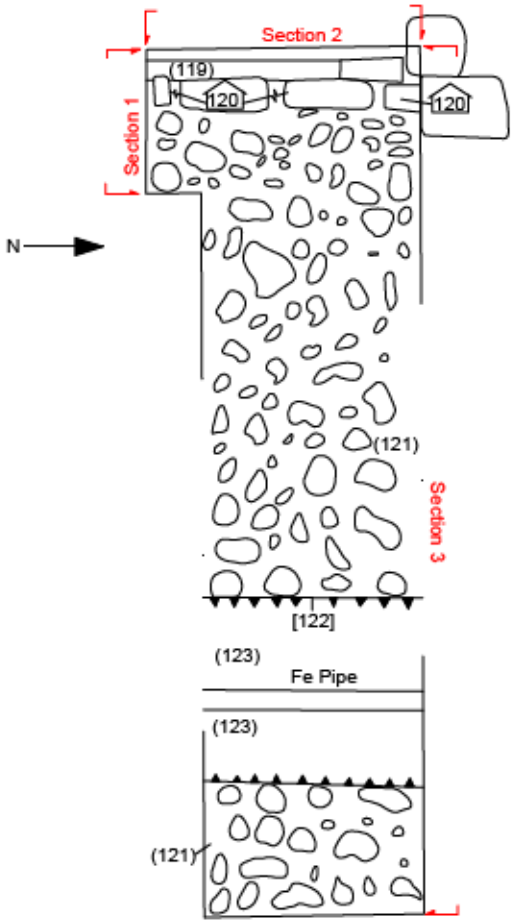
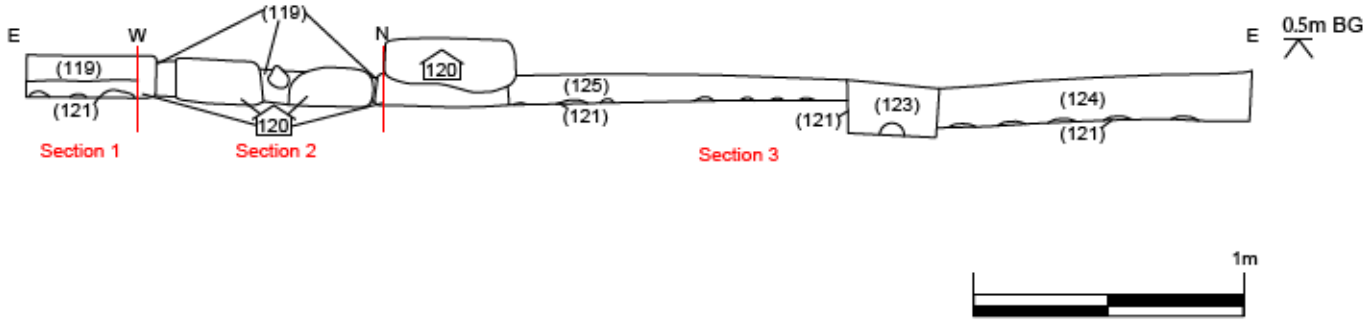



Figure 8b: North, East and South facing sections through F.119, F.120 and F.121




Figures 8a and 8b: Plan and Sections of features

Scale1:20@A3

Key:

Drawn Section

BG = Below ground surface

Figure 9 – Deposits (119), (123), (124) and (125) above road. See figure 8a (plan) and 8b (section).

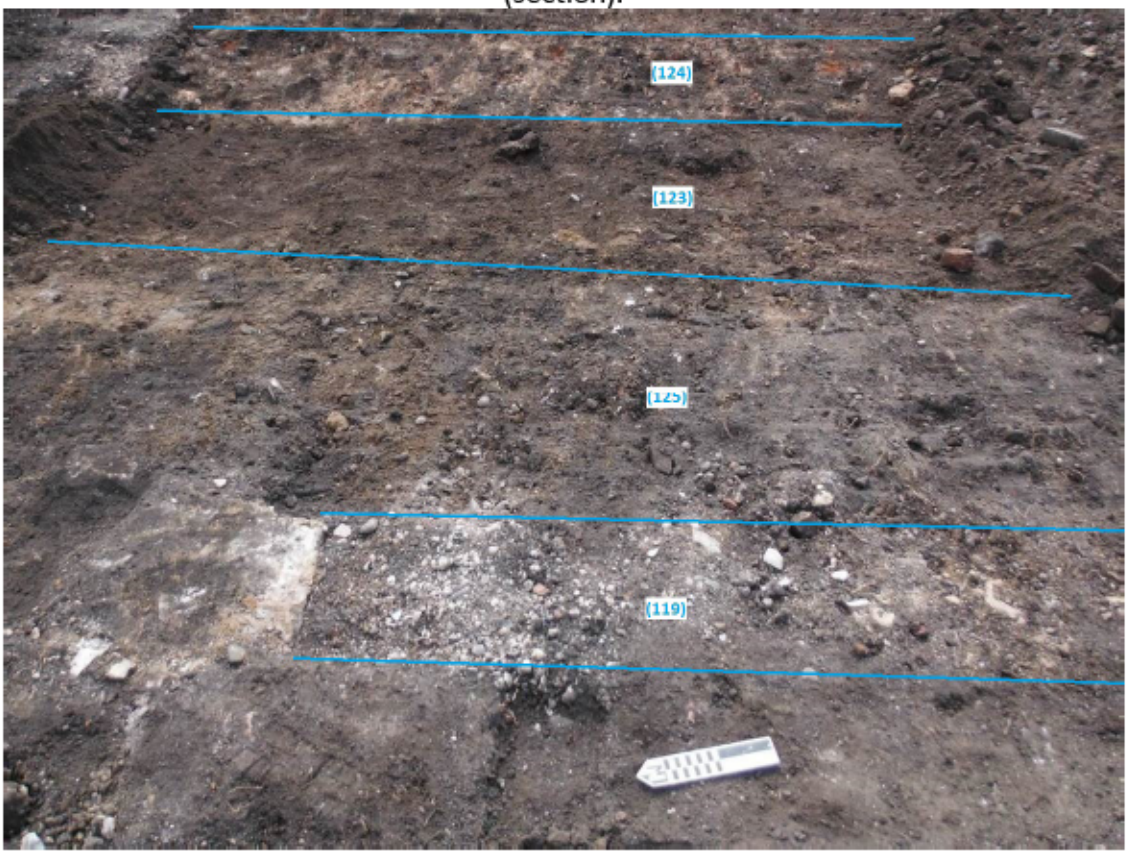



Figure 10 – Deposits (119), (123), (124) and (125) shown in blue.

Figure 11 – Cobbled road feature (121), kerbstones (120) and service trench [122]. See figure 8a (plan) and 8b (section).

Figure 12 – Section of slot over cobbled road feature (121). See figure 8a (plan) and 8b (section).


Figure 13 – Section of slot with contexts depicted in blue.

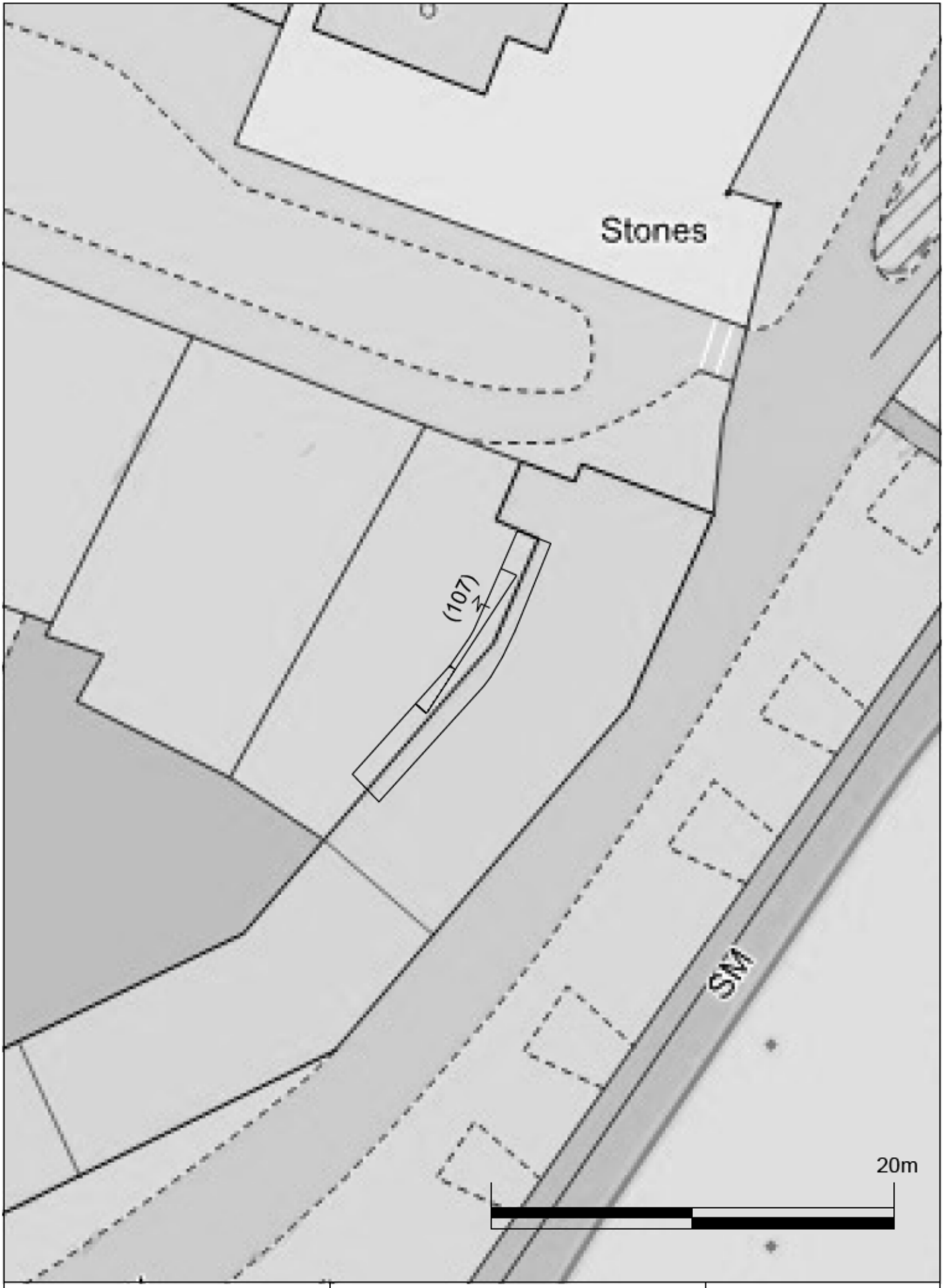



Figure 14: Plan of Foundation Removal Trench
Scale 1:250 @ A4

Key:

N

Figures 18a, 18b and 18c: Plans and Sections of Features Uncovered in Foundation Removal Trench Scale1:20@A3

Figure 18a: Plan of F.107

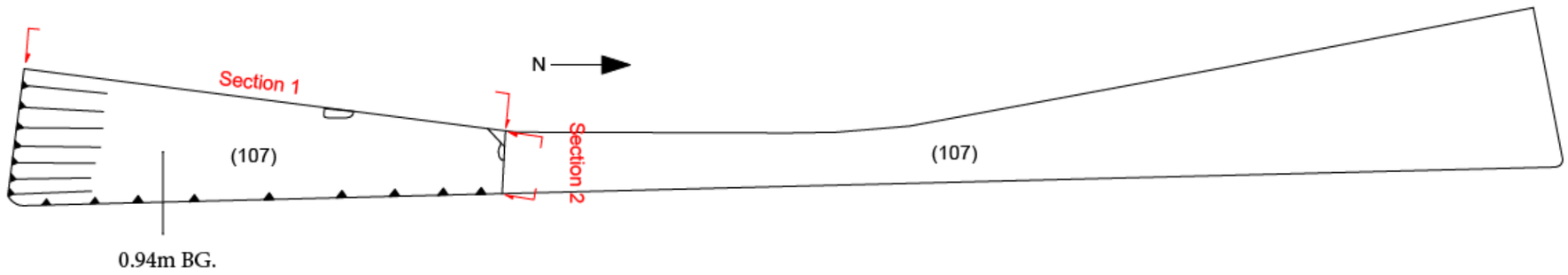



Figure 18b: East facing section through F.107

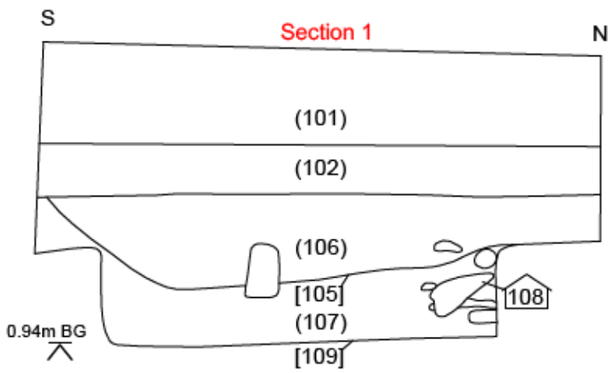
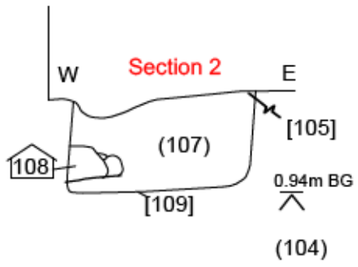



Figure 18c: South facing section through F.107





Key:

Drawn Section

BG = Below ground surface

Figure 16 – Robber trench [105]. See 18a (plan), 18b and 18c (sections).

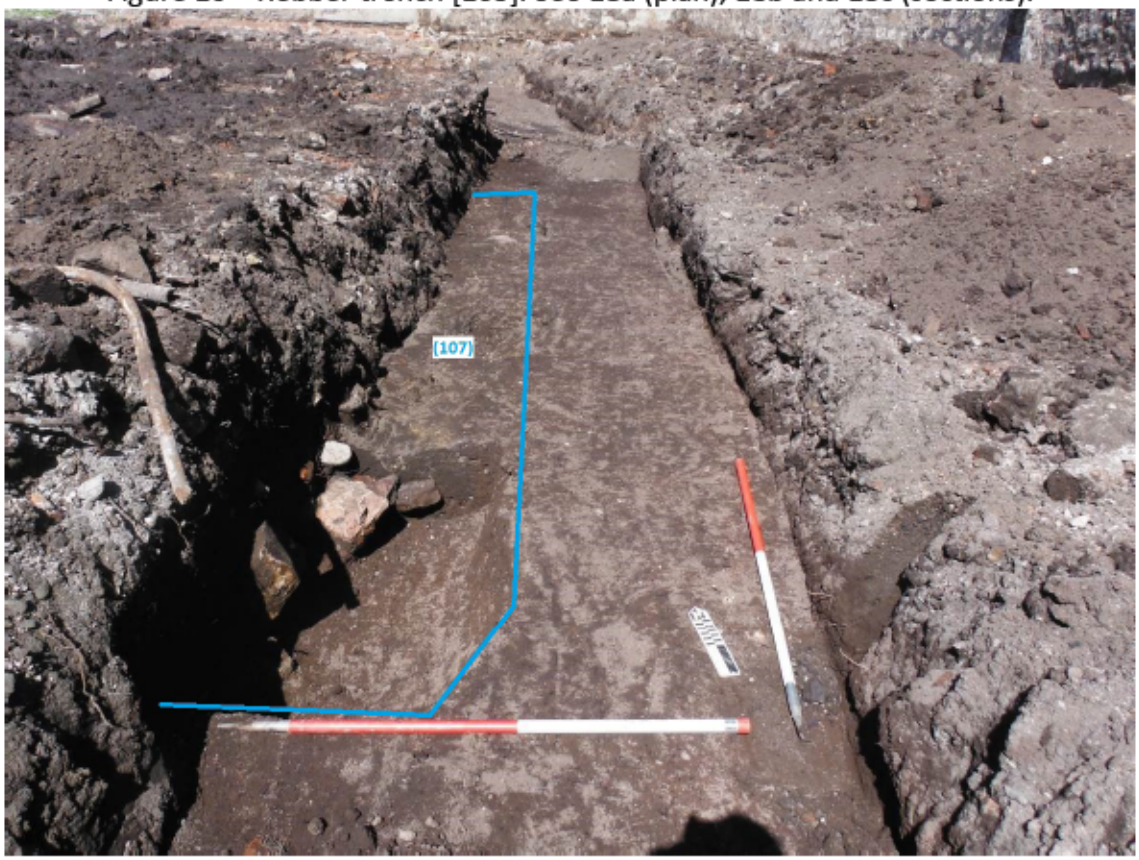



Figure 17 – Robber trench depicted in blue.

Figure 18 – Detail of foundation, Section 1 (108). See figure 18a (plan) and 18b (section).

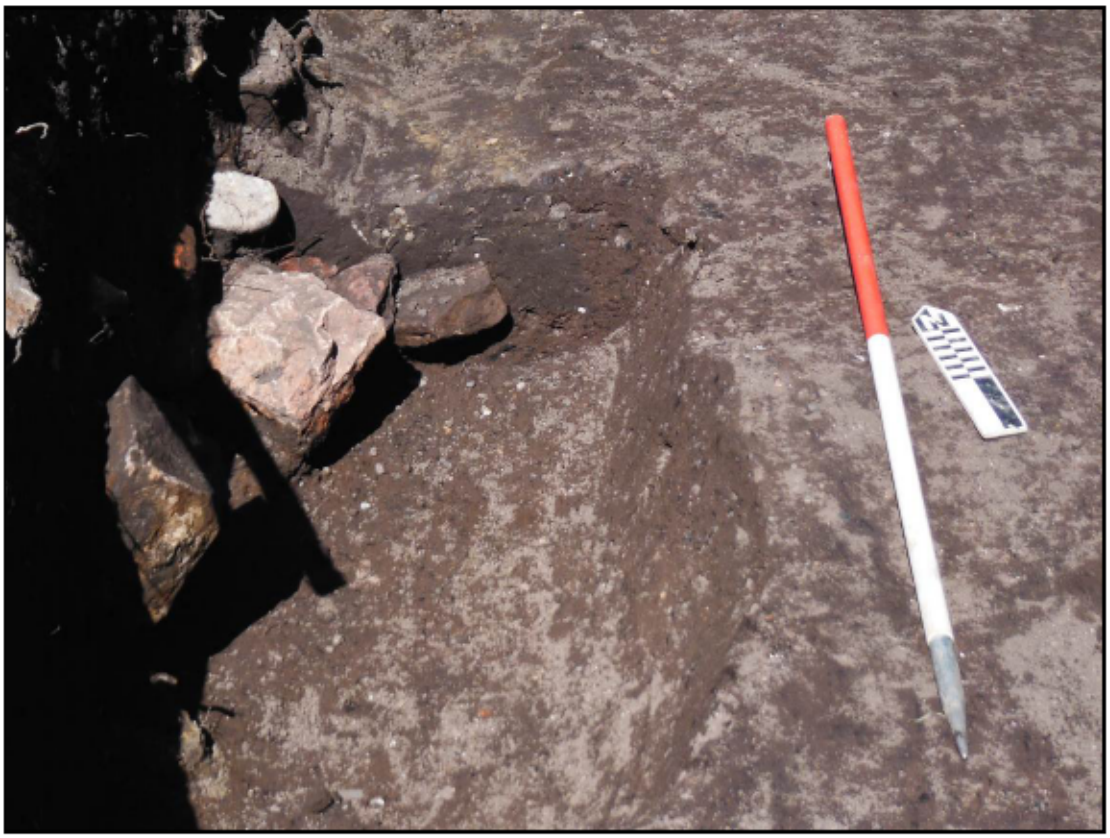


Figure 19 – Section 2 of robber trench [105]. See figure 18a (plan) and 18c (section).

Figure 20 – Final stripped area to 49.325m OD.

Figure 21 – 16x26m Stripped Area to South of Site.

Figure 22 –South to south-east facing view of medieval wall (201). See figures 39 (section points) and 41 (section).

Figure 23 – North to north-west facing view of medieval wall (204) with medieval levelling deposit (210). See figures 39 (section points) and 41 (section).

Figure 24 – South-west facing view displaying 20th century concrete foundation base (238), wall (215) and service trench F.225. See figures 39 (section points) and 40 (section).

Figure 25 – North-west facing view of wall (215), concrete foundation (238) and 20th century make-up deposits (217), (227) & (234). See figures 39 (section points) and 40 (section).

Figure 26 – South to south-west facing view of 20th century service pipe trench F.225, post-medieval demolition waste pit F. 230 and post-medieval garden soil deposit (214). See figure 39 (section points).

Figure 27 – North north-west facing view of backfill deposit (212) with wall (218) visible in the background. See figure 39 (section points).

Figure 28 – East to south-east facing view of wall (218) with 20th century levelling deposit (234) visible in the foreground. See figure 39 (section points).

Figure 29 – South-east facing view of medieval walls (201) and (204) with medieval levelling deposits (210), (208) and (207) visible in the background. See figures 39 (section points) and 41 (section).

Figure 30 – West north-west facing view of contemporary backfill deposit (212) with concrete foundation base (238). See figure 39 (section points).

Figure 31- South-east facing view of impact area with wall (218) visible in the foreground and wall (201) present in the background. See figure 39 (section points).

Figure 32 – South-east facing view of medieval dump/levelling deposits (210), (208), (209). See figures 39 (section points) and 41 (section).


Figure 33 – 15th Century pottery recovered from medieval dump deposit (210).


Figure 34 – 15-17th pottery recovered from contemporary backfill deposit (212).

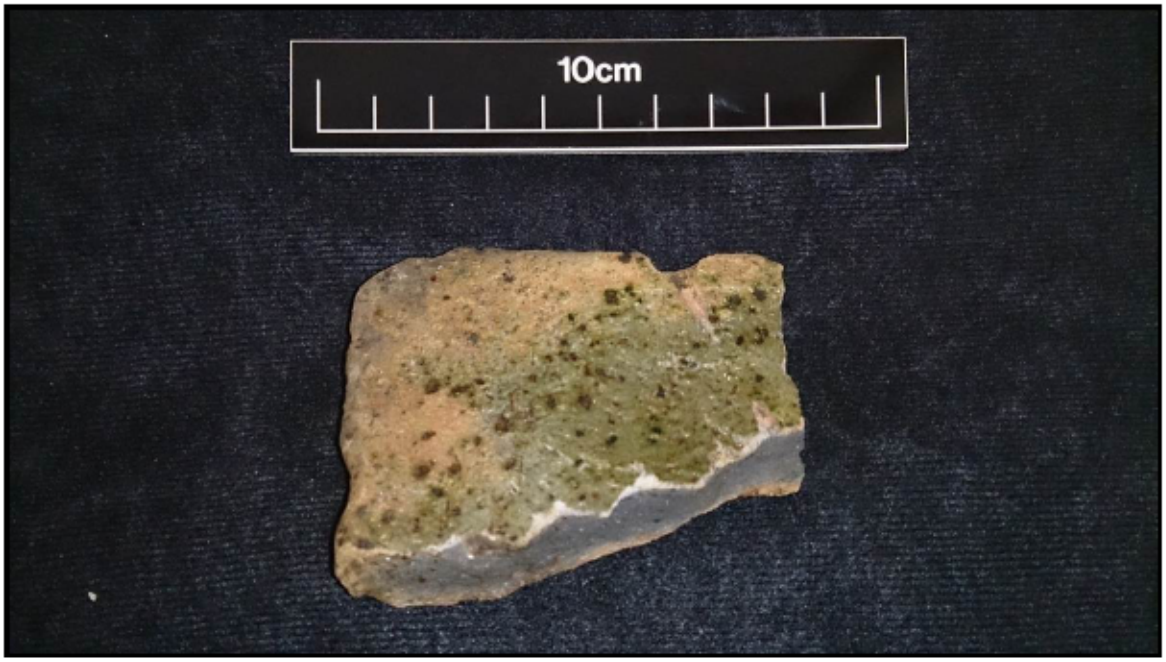



Figure 35 – Glazed Medieval tile recovered from backfill deposit (212).

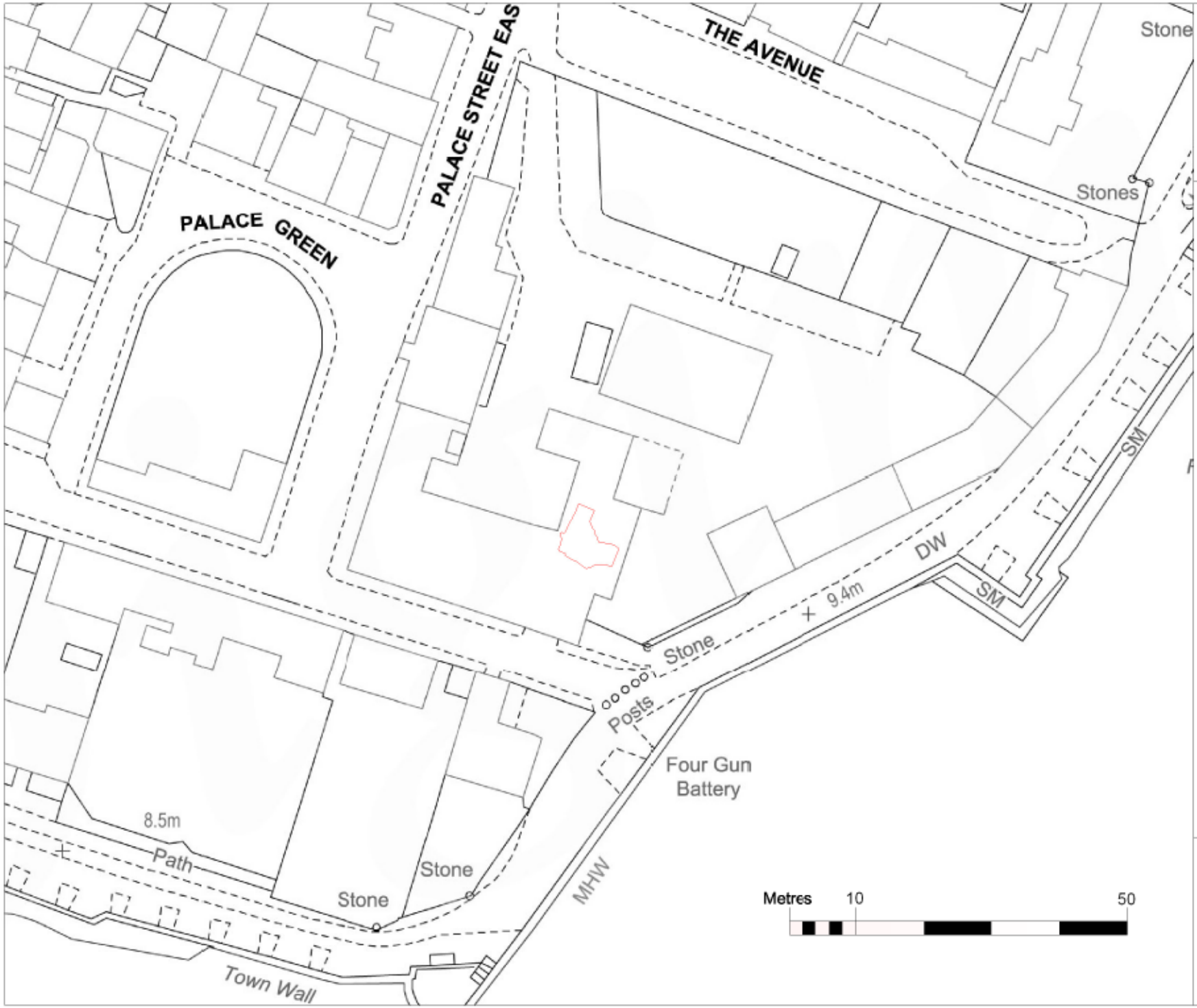
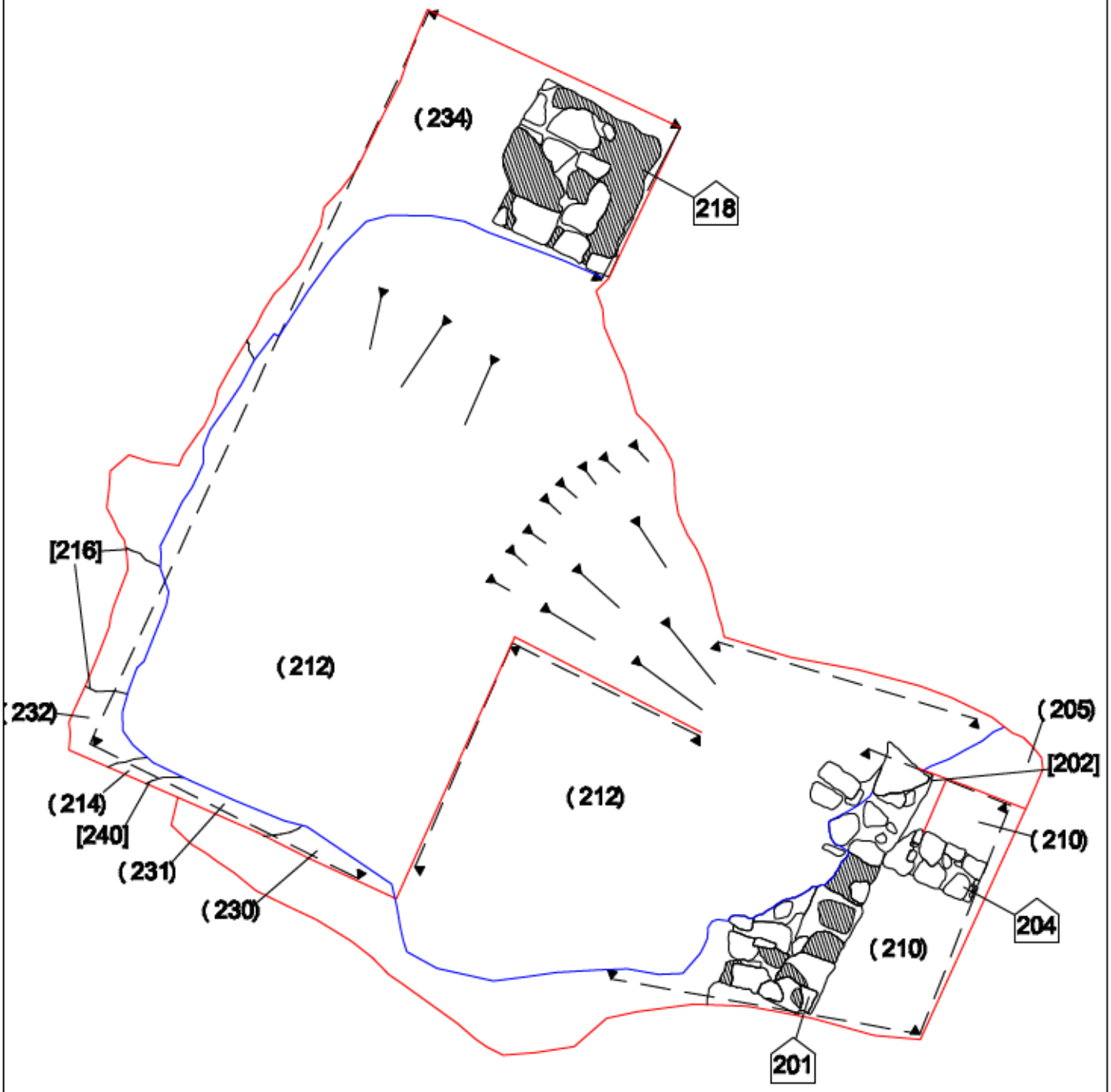



Figure 36: Location of Impacted Area
Scale:1:750 @ A4
Drawn: RL

Key: - Impacted Area




Metres 1 5

Figure 37: Walls (201), (204) & (218)
Scale: 1:50 @ A4
Drawn: RL

Key: Line of Contemporary Truncation- [239]
Limit of Excavation

N

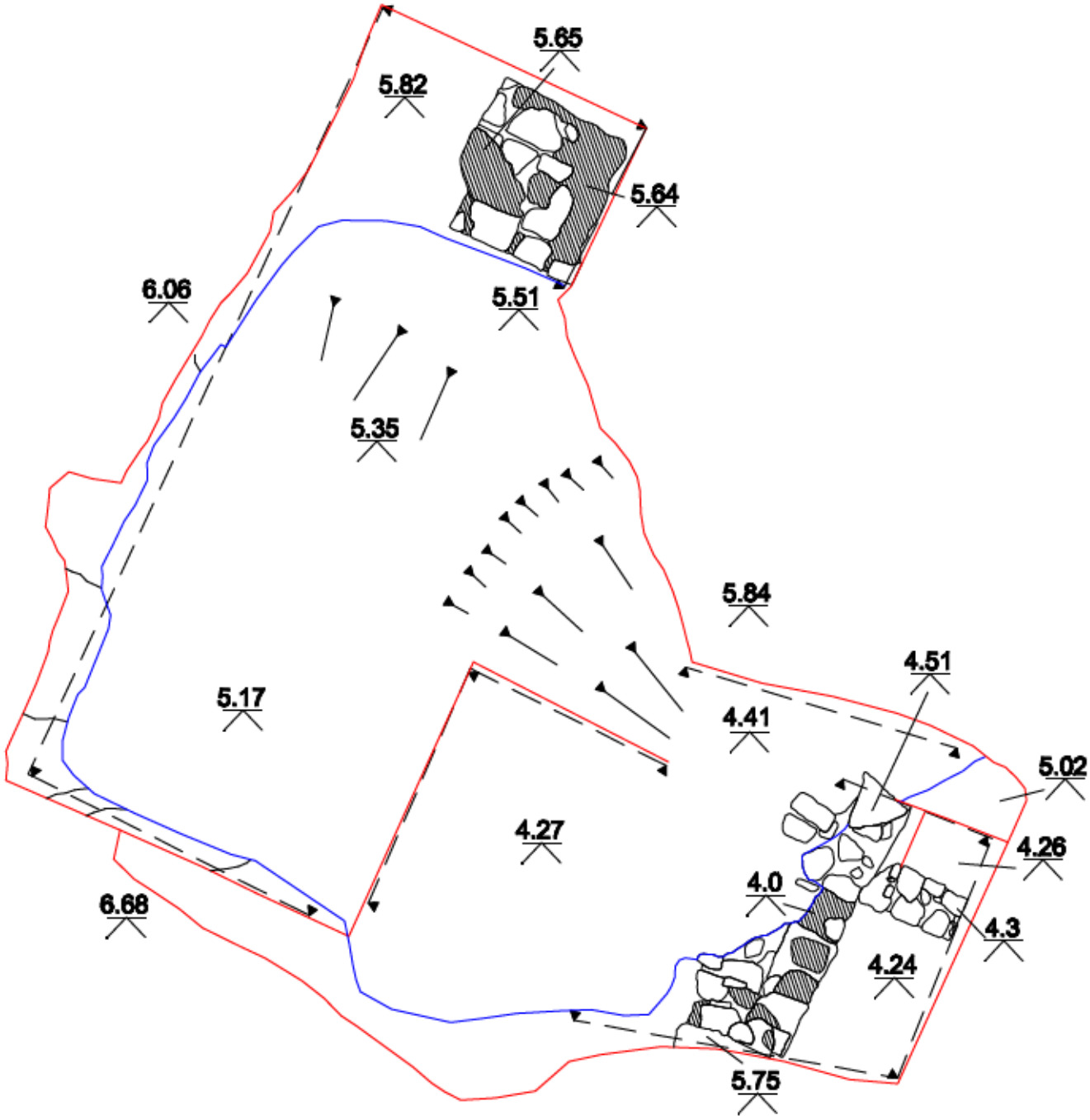
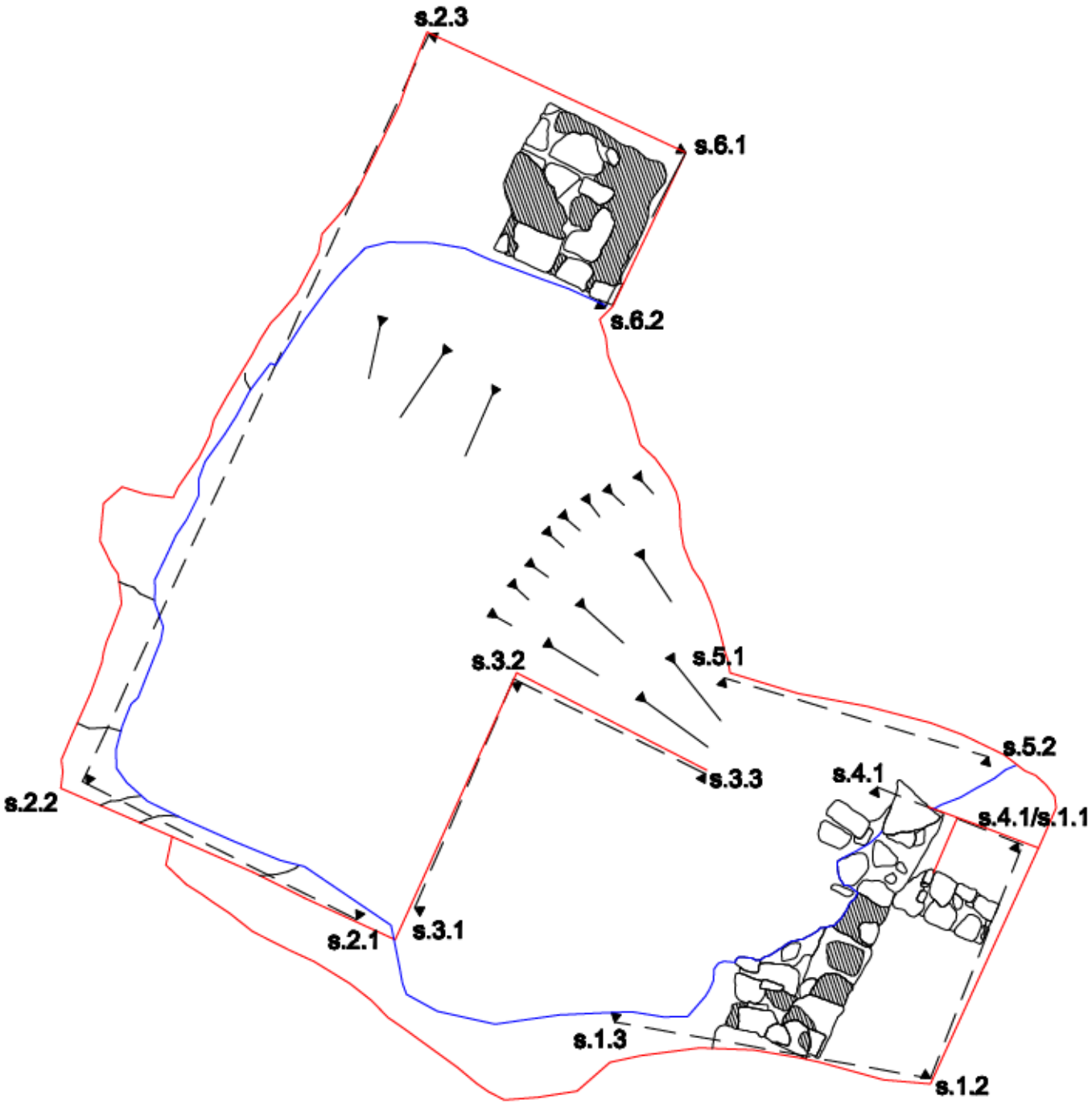




Figure 38: Level Locations
Scale:1:50 @ A4
Drawn: RL

Key: Line of Contemporary Truncation- [239]
Limit of Excavation

N




Metres 1 5

Figure 39: Section Locations
Scale:1:50 @ A4
Drawn: RL

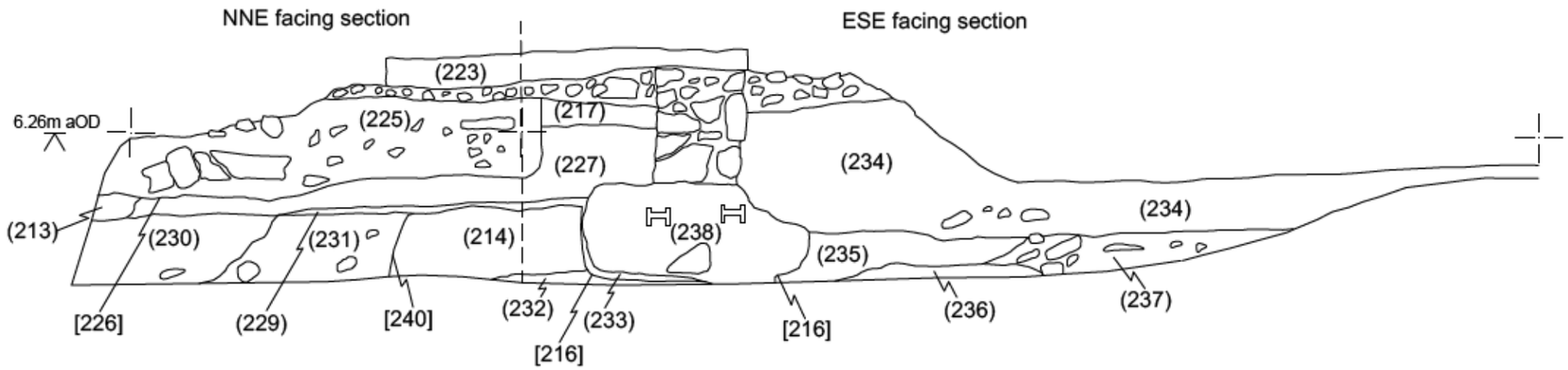
Key: Line of Contemporary Truncation- [239]
Limit of Excavation

N

Figure 40- NNE and ESE facing section through (223) and wall (215)
Scale: 1:40 @ A3
Drawn: RL

Key:

NNE and SES facing section through concrete foundation (233) and wall (215)




0 2m

Figure 41- West and North facing section through walls (201) and (204)
Scale:1:40 @ A3
Drawn: RL

Key:

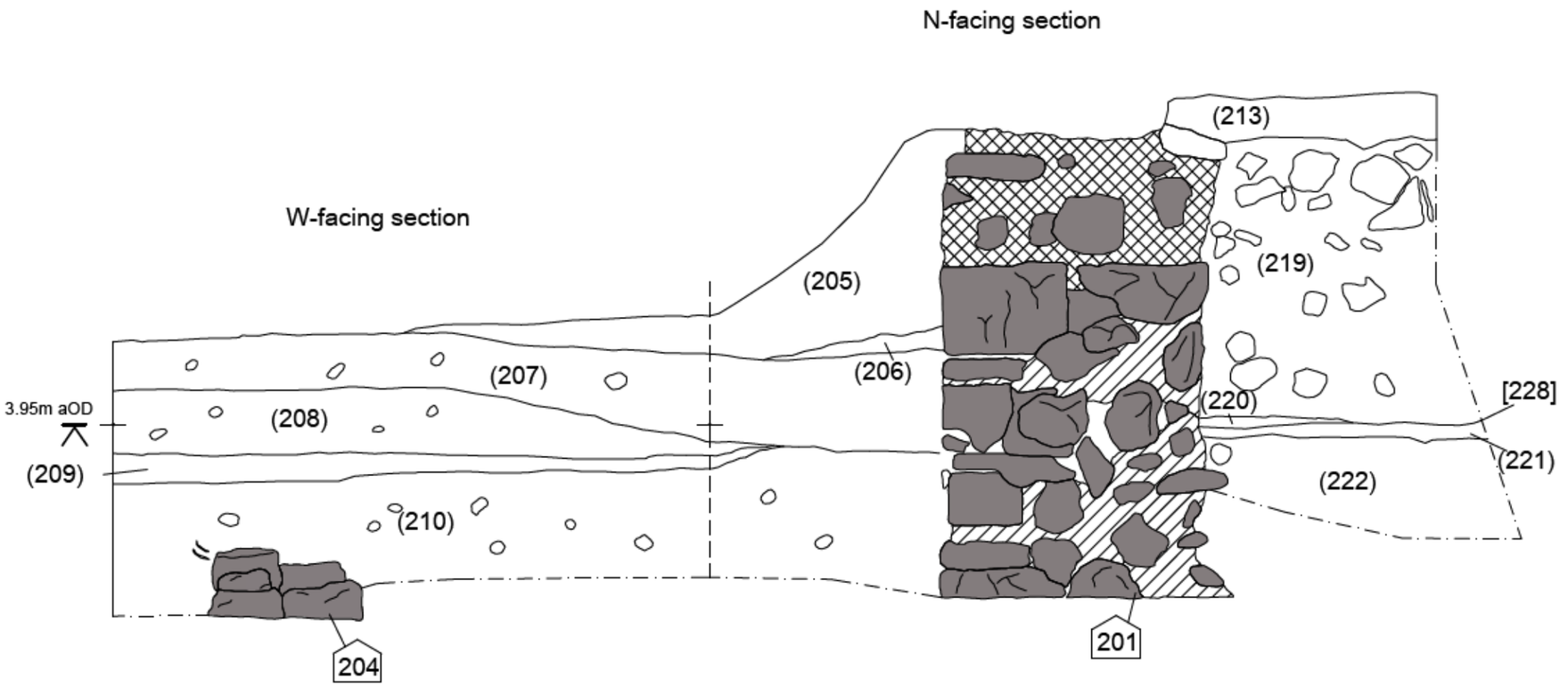
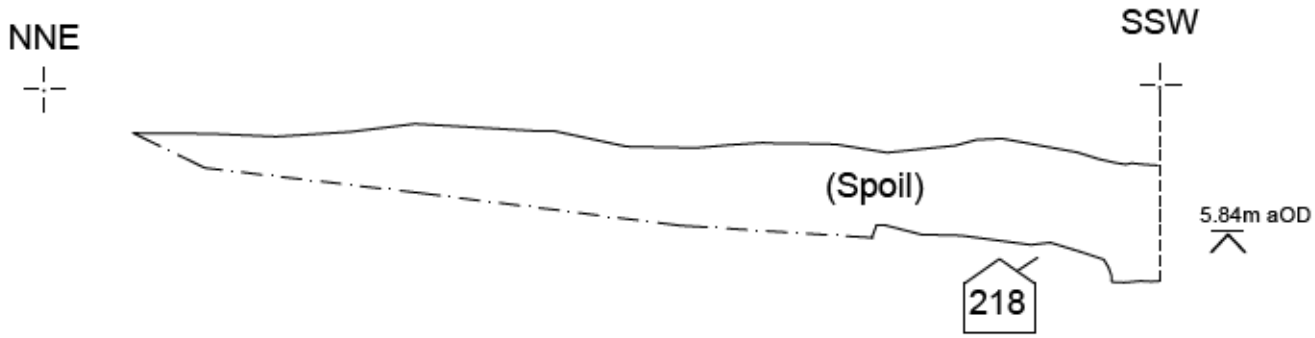



Figure 42- SE and SW facing section through deposit (212)
Scale:1:20 @ A4
Drawn: RL

Key:




0 0.5m

Figure 43- WNW facing section of wall (218)
Scale: 1:10 @ A4
Drawn: RL

Key:


Figure 44- Plan of Piling Locations within Housing Plot 1
Scale:1:150 @ A4
Drawn: RL

Key:

1 - Pile Location and Number

1 - Failed Pile Location and Number (due to below ground obstruction)

Figure 45 – Wall (241) looking south-south-west. (Scale = 2 x 1m).

Figure 46 - Wall (241) looking west-north-west, also showing pinkish-yellow sand deposit (242) on the right of the photograph (Scale = 2 x 1m). Note wall (249) in the background.

Figure 47 - Wall (249) looking west-north-west, also showing rubble (250) in the foreground. (Scale = 2 x 1m).

Figure 48 - Wall (249) looking east-south-east, also showing contact (252) within the angle of the L-shaped wall. (Scale = 2 x 1m).

Figure 49 – North facing section of extended trench containing wall (241) and wall (249). (Scale = 2 x 1m).


Figure 50 – Wall (243) facing south-west. (Scale = 1m).

Figure 51 – Works in the vicinity of a previously identified 20th century wall (215).

Figure 52 – L-shaped 20th century walling (215) on the right of the photograph with a concrete drainage gully behind feeding into a large stone drain. (Scale = 1m).

Figure 53 – 20th century walling (215) on the right of the photograph with a concrete drainage gully behind feeding into a large stone drain. (Scale = 1m).

Figure 54a: SSW facing section of walls 249 and 241

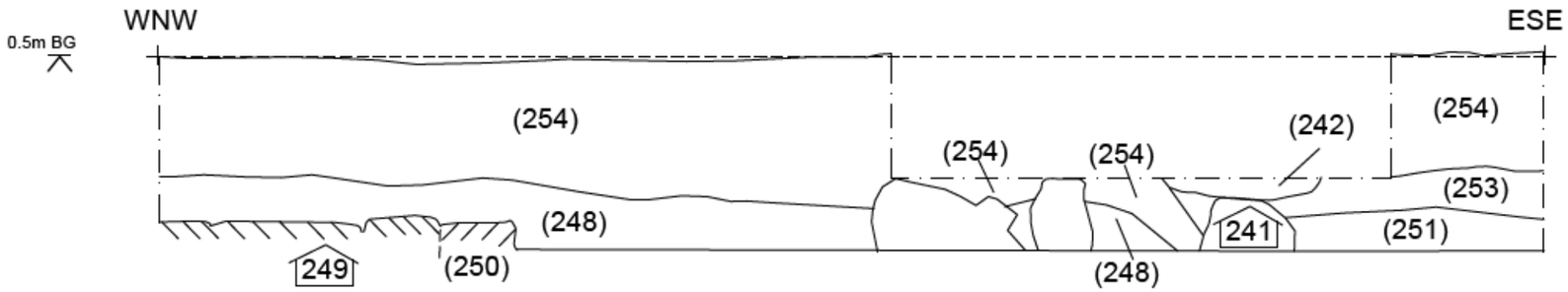
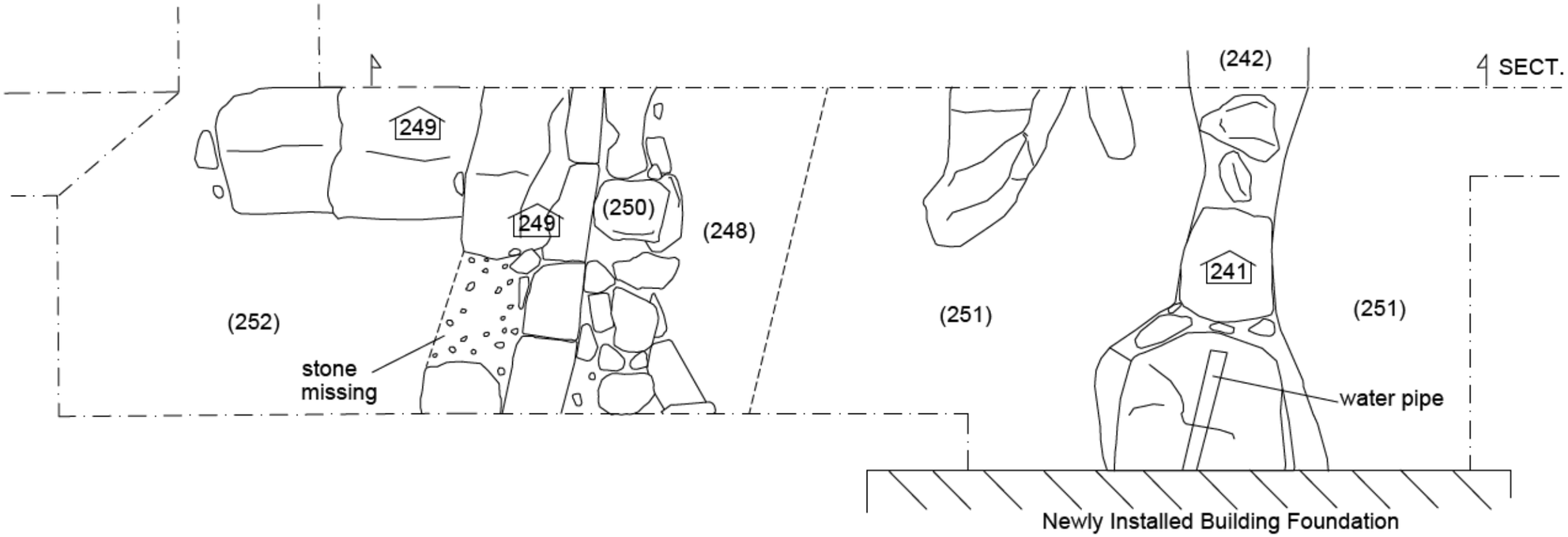



Figure 54b: plan of walls 249 and 241




Figures 54a and 54b: Plan and SSE Facing Section of Extended Excavation Area during Installation of Gas Pipework.

Scale: 1:25 @ A3

Key:

BG = Below ground surface

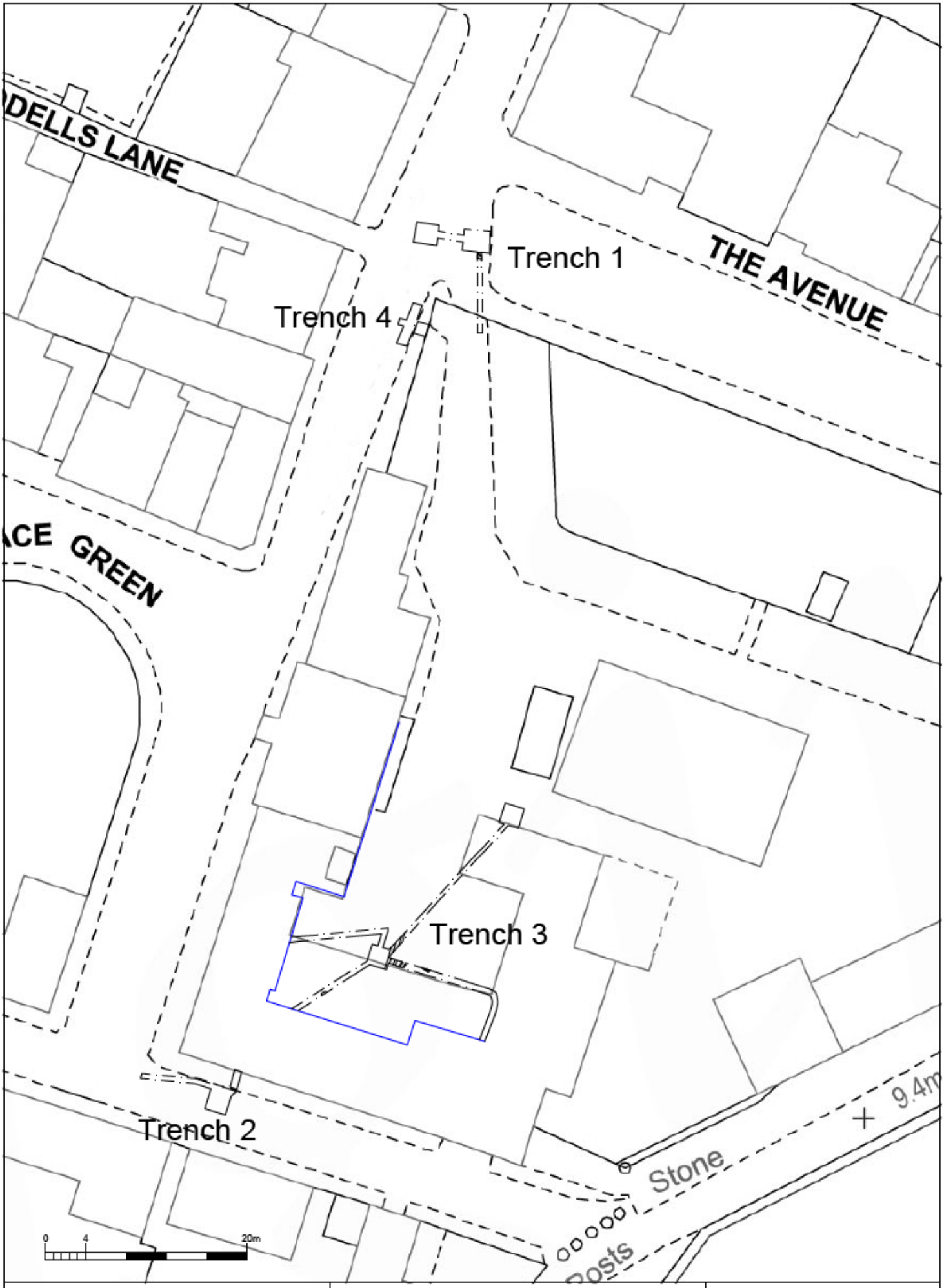
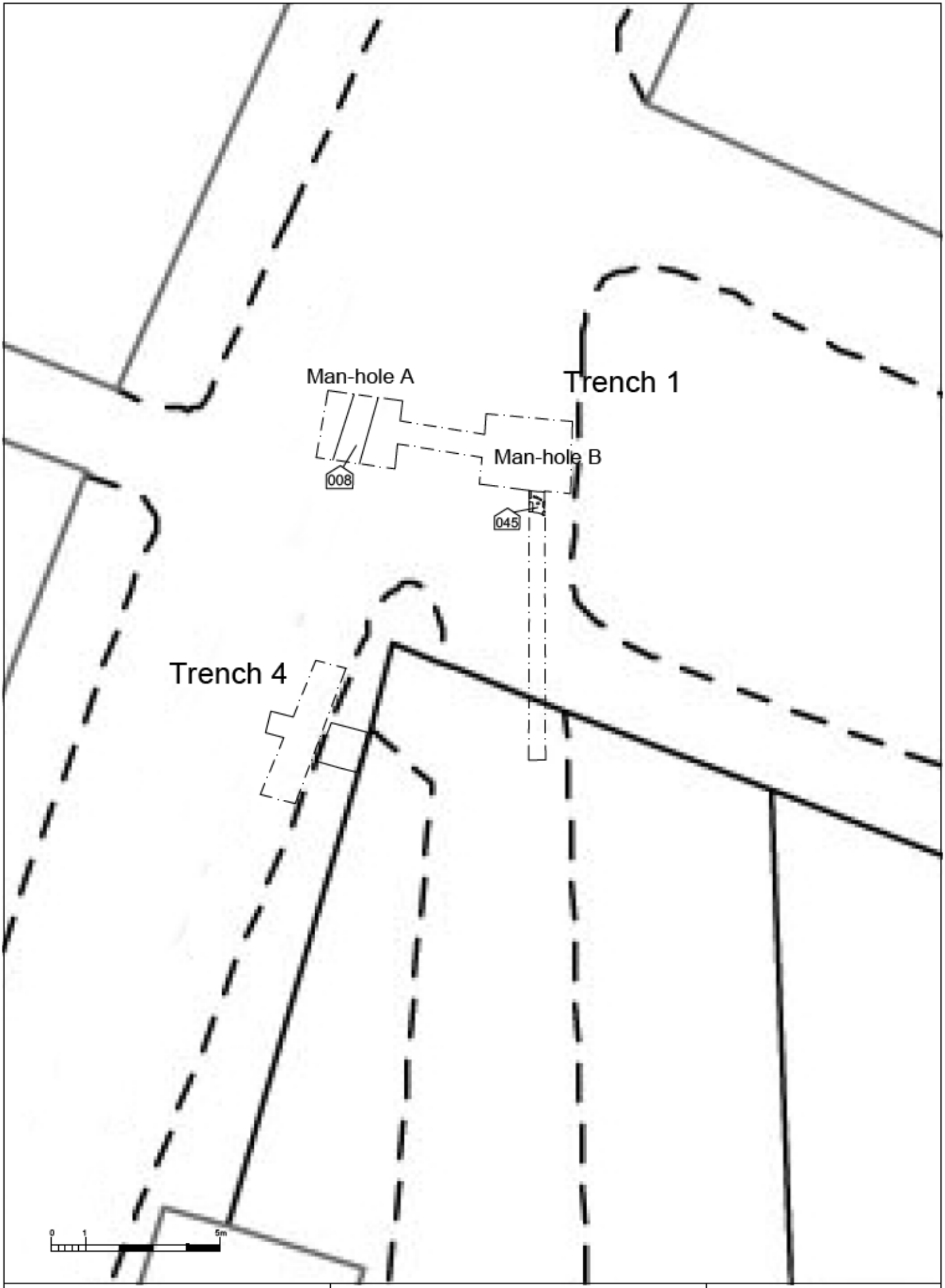



Figure 55- Plan of Service Trenches in Governor's Gardens- Phase 4 Watching Brief
Scale: 1:500@A4
Drawn: DGC

Key:
Extent of modern buildings

N




Title: Figure 56- Plan of Trenches 1 & 4- Phase 4 Watching Brief
Scale:1:150 @ A4
Drawn: DGC

Key:

N

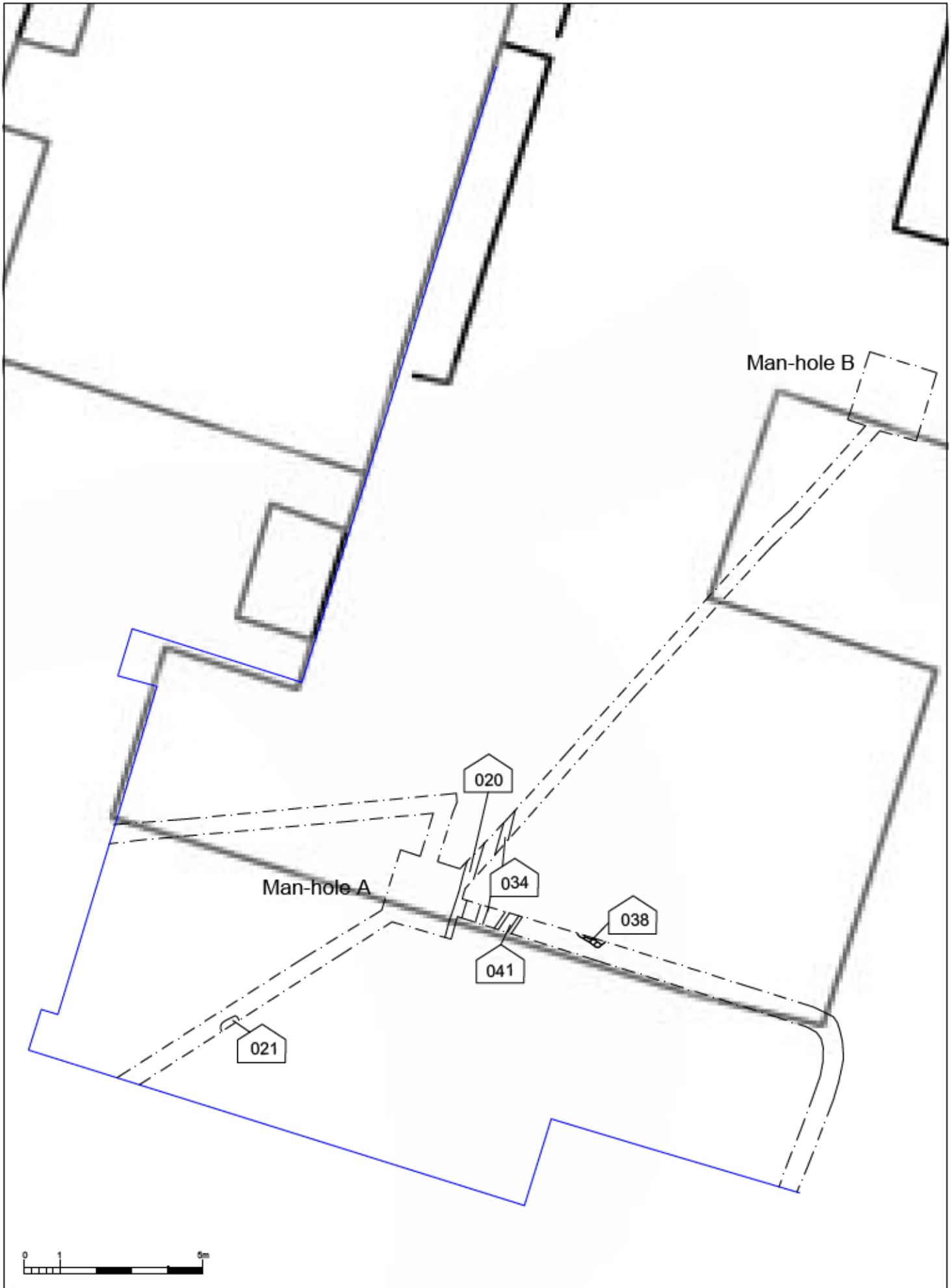



Figure 57- Plan of Trench 3- Phase 4- Watching Brief
Scale: 1:150@A4
Drawn: DGC

Key:
Extent of modern buildings

N

Figure 58: NW-facing section through Trench 1

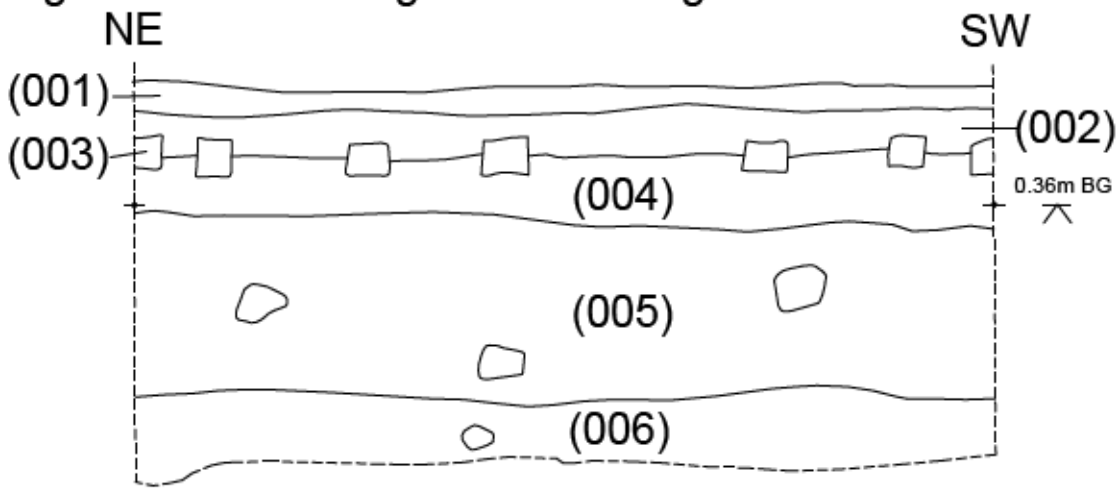



Figure 59: SW-facing section through Manhole A, Trench 1

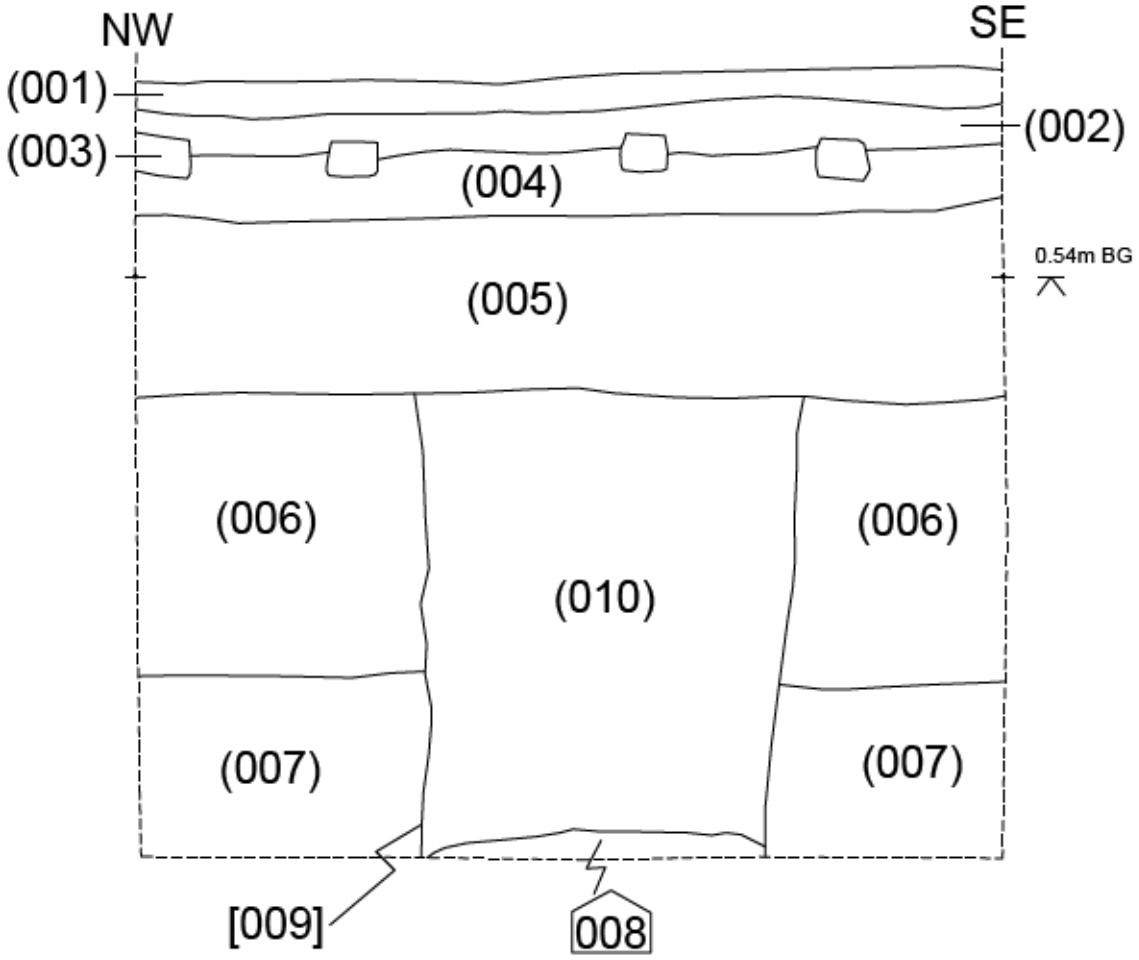




Figure 58 & 59- Sections of Trench 1-
Watching Brief Phase 4
Scale: 1:20@A4
Drawn: DGC

Key:

BG = Below ground surface

Figure 60: E-facing section of Manhole B, Trench 1

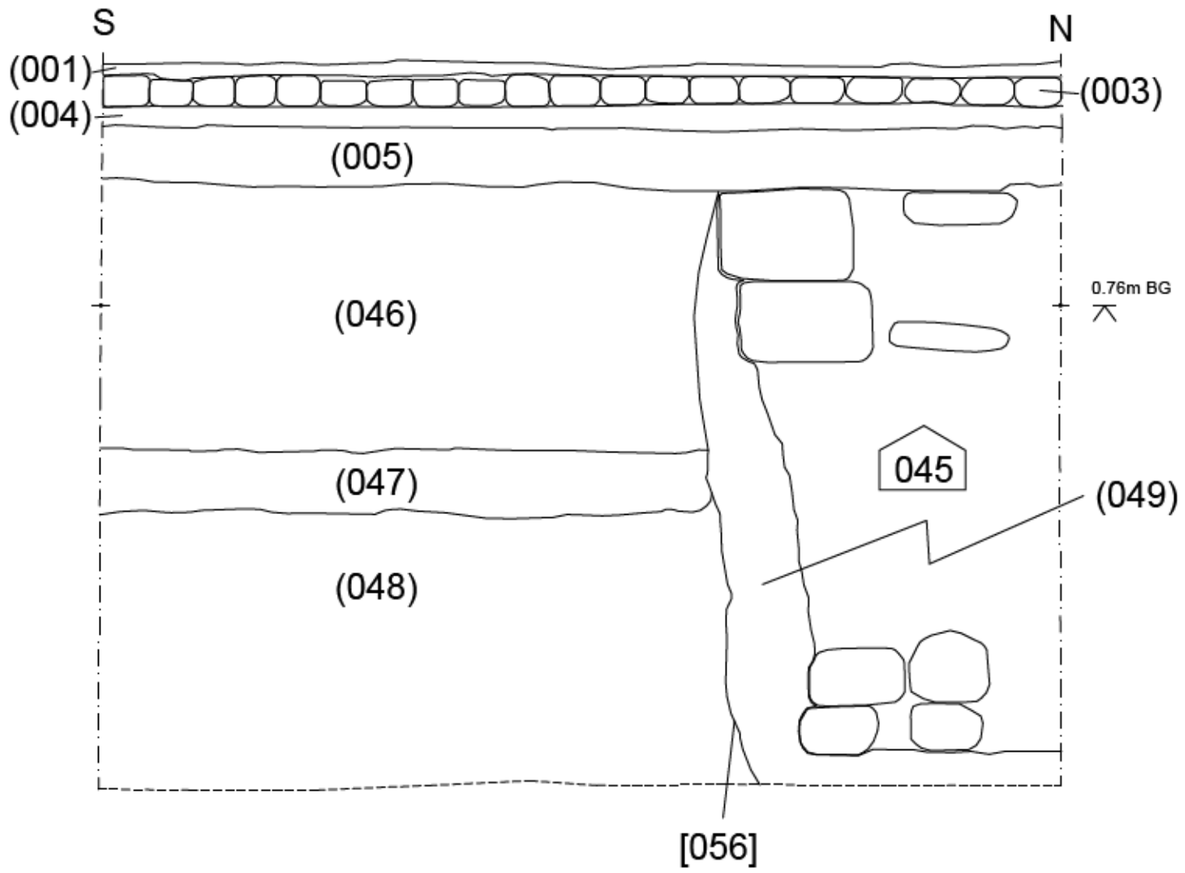



Figure 61- Plan of F.045

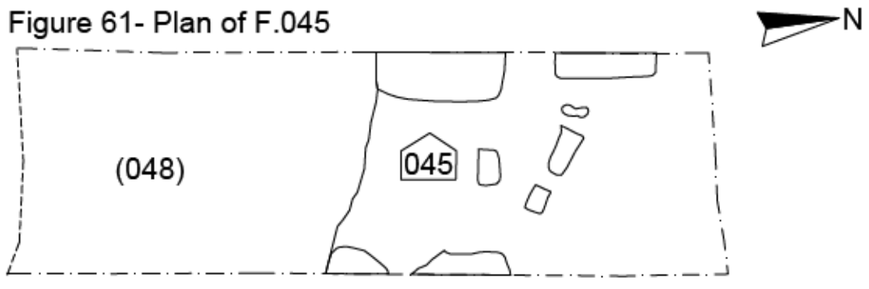




Figure 60 & 61- Section and Plan of Manhole B, Trench 1- Watching Brief
Phase 4
Scale:1:20 @ A3
Drawn: DGC

Key:

BG = Below ground surface

Figure 62: Extended W-facing section of Manhole A, Trench 3

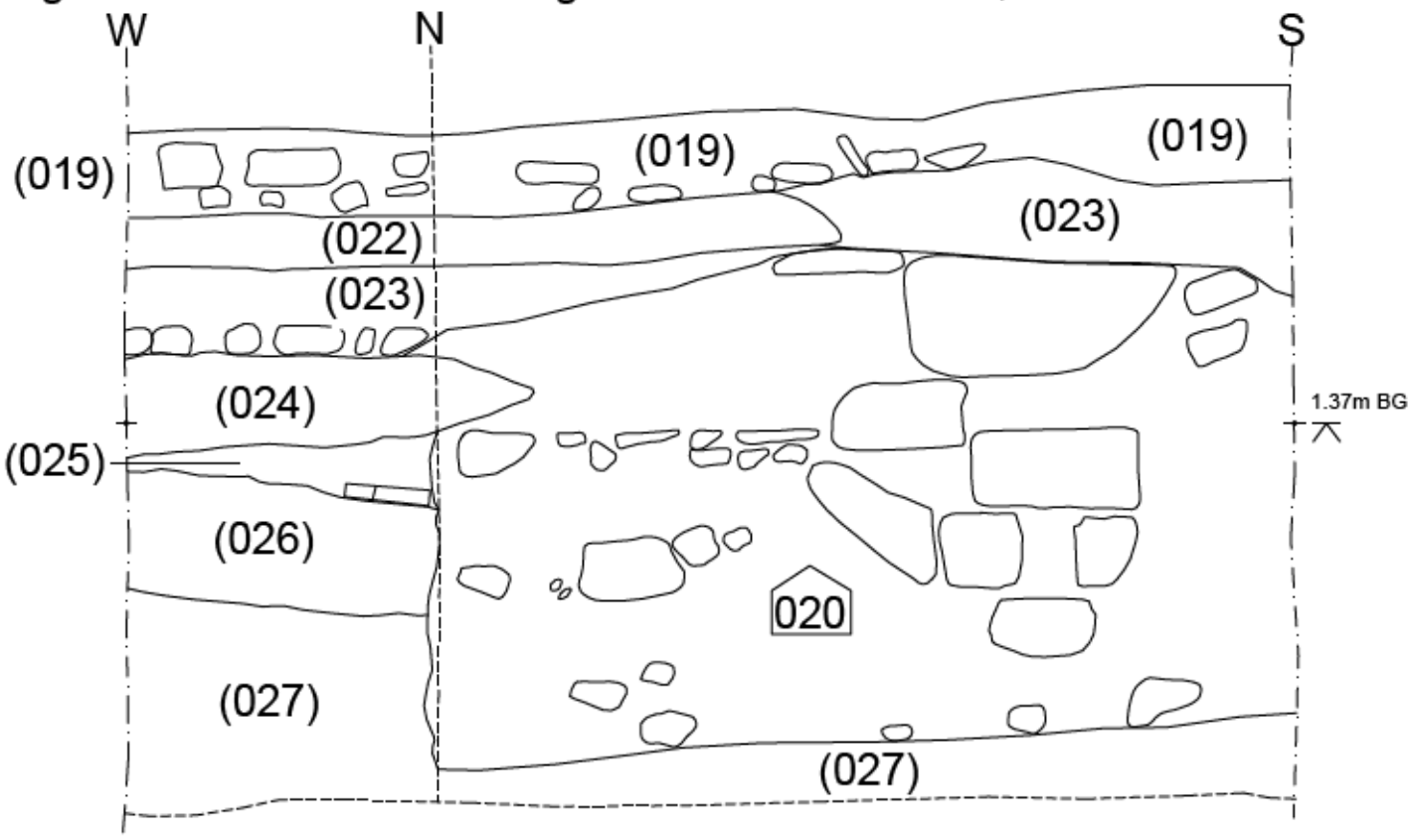
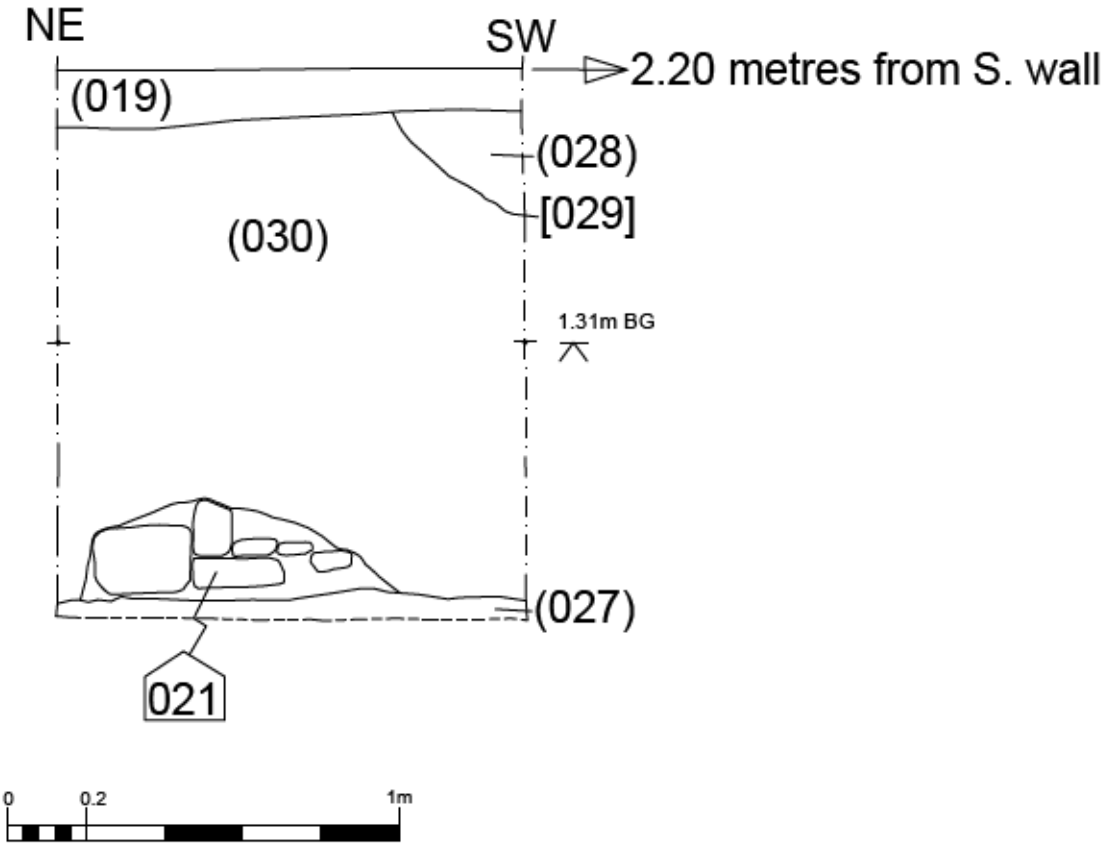



Figure 63: NW-facing section through Trench 3




| | | |
|---|---|---|
| Figure 62 & 63- Sections through Trench 3- Watching Brief Phase 4<br>Scale: 1:20@A4<br>Drawn: DGC | Key:<br><br>BG = Below ground surface | Copyright/ Licencing<br>This Drawing<br>© A.R.S. Ltd<br><br>Ordnance Survey data if applicable<br>© Crown Copyright, all rights reserved reproduction with permission.<br>Licence No. 100045420 |

Figure 64: N-facing section through Manhole A, Trench 3

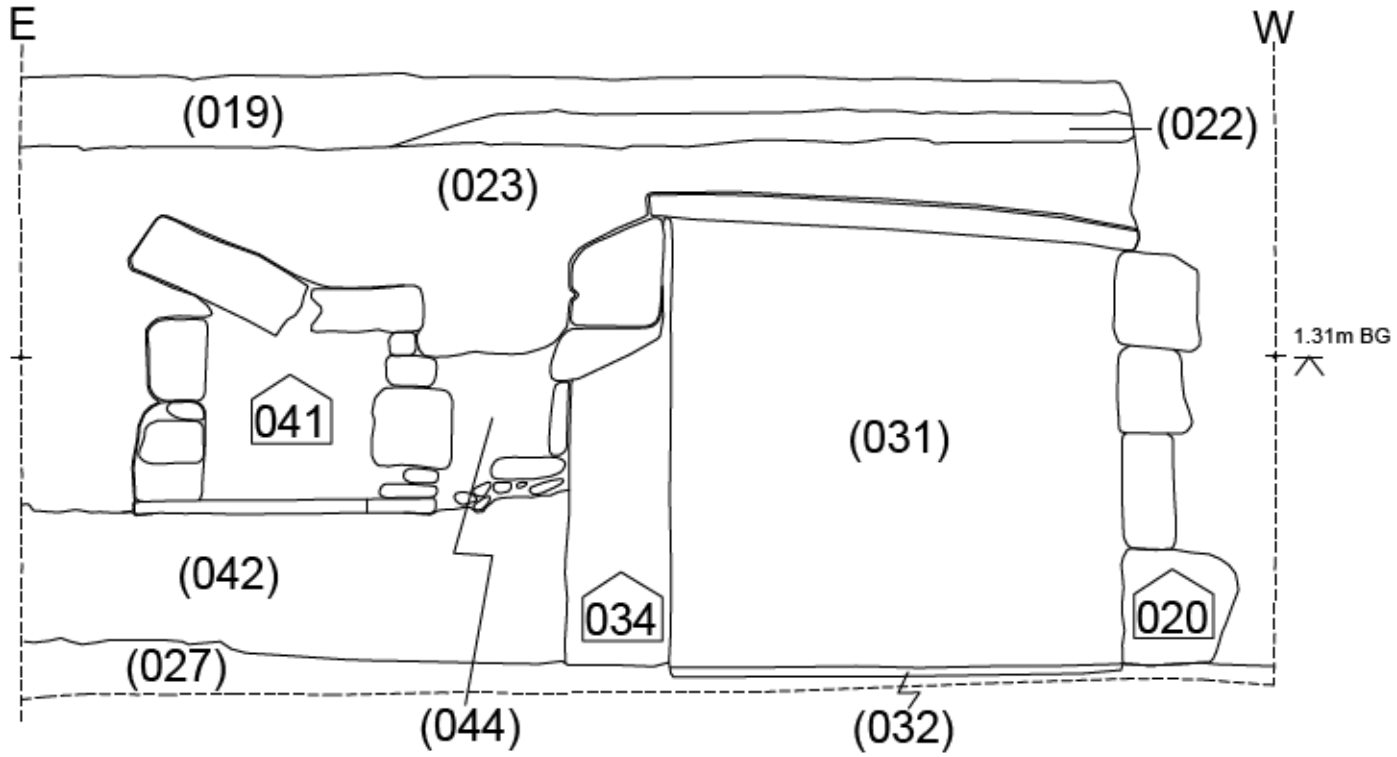



Figure 65: S-facing section through Manhole A, Trench 3

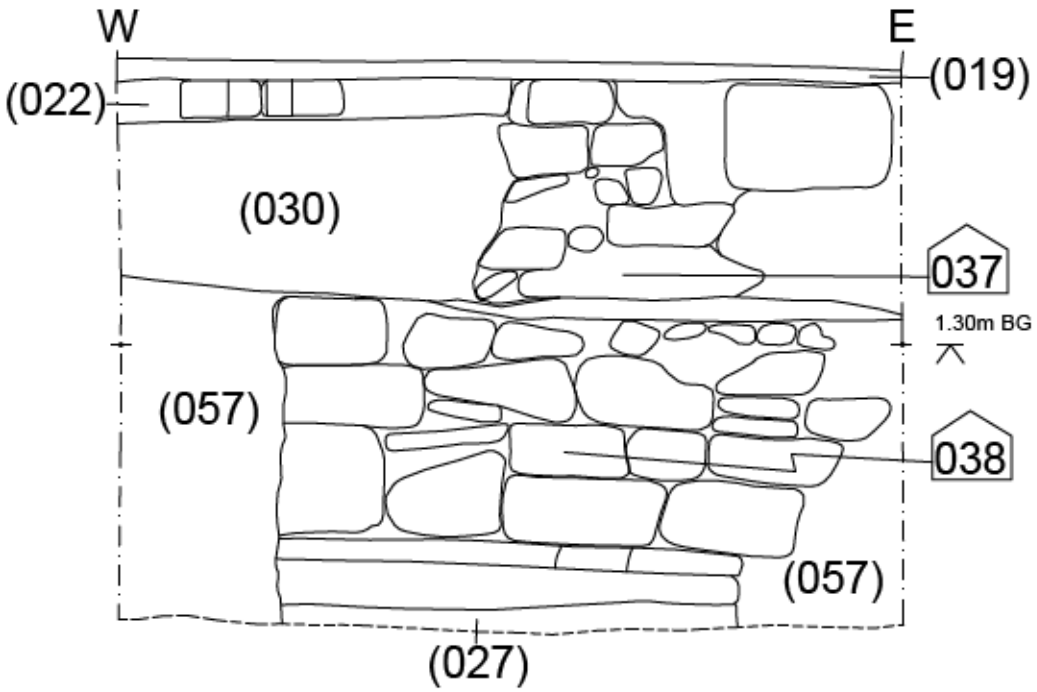




Figure 64 & 65- Sections through Manhole Trench 3- Watching Brief Phase 4
Scale: 1:20@A4
Drawn: DGC

Key:

BG = Below ground surface

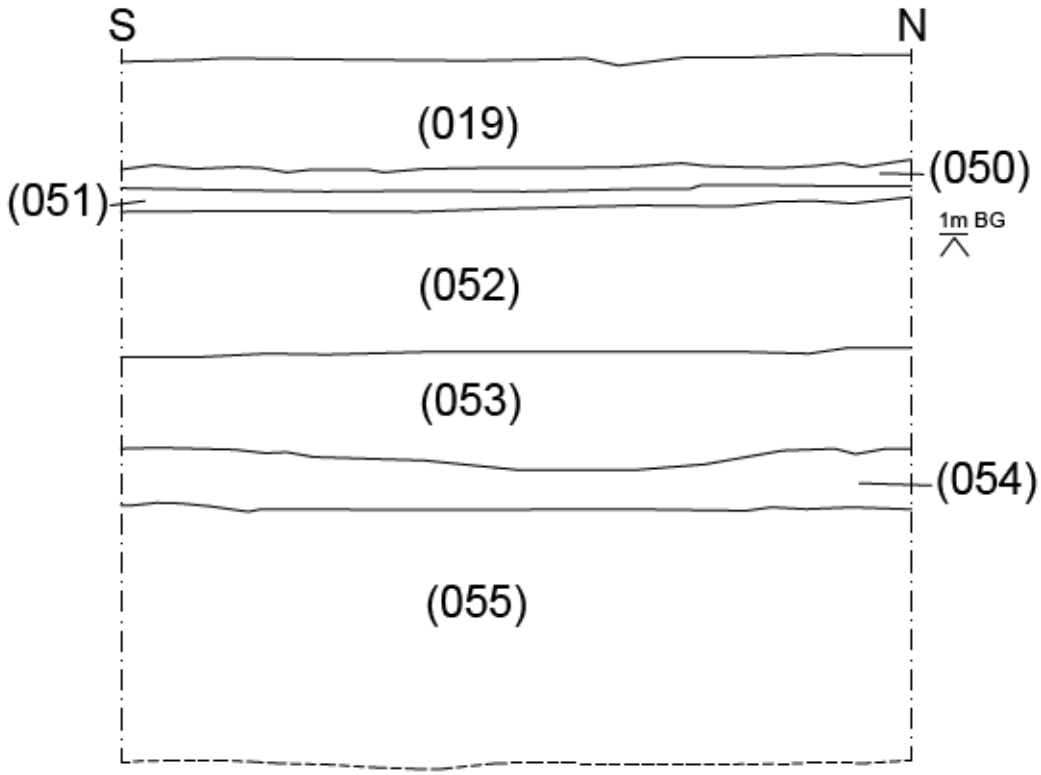




Figure 66- E-facing section through Trench 3- Manhole B- Watching Brief
Phase 4
Scale:1:20 @ A4
Drawn: RL

Key:

BG = Below ground surface

Figure 67- E-facing shot of drain (008) and associated deposits- Watching Brief Phase 4 (Scale- 1 x 1m).


Figure 68- E-facing shot of brick drain (008) - Watching Brief Phase 4 (Scale- 1 x 1m)

Figure 69- SW-facing section through Trench 2- Watching Brief Phase 4 (Scale- 1 x 1m)

Figure 70- E-facing shot of western wall of flue (020) (Scale- 1 x 1m)

Figure 71- NE-facing oblique view of western wall of flue (020) and associated deposits (022) – (027)
Scale-1 x 1m)

Figure 72- S-facing view of flue (020) and (034) (Scale- 1 x 1m)

Figure 73- SW-facing view of culvert (041) (Scale- 1 x 1m)

Figure 74- NE-facing view of walls (037) and (038) (Scale- 1 x 1m)


Figure 75- SE-facing view of fragmentary wall (021) (Scale- 1 x 1m)

Figure 76- S-facing section of Trench 4 (Scale- 1 x1m)

**Governors Garden, Berwick-Upon-Tweed, Northumberland**

**Addendum to the Written Scheme of Investigation for an Archaeological Evaluation**

Archaeological Research Services Ltd

## 1. Introduction

1.1 This document presents an addendum to a previously submitted Written Scheme of Investigation for an archaeological evaluation at Governors Garden in Berwick-Upon-Tweed. The previously submitted Written Scheme of Investigation was prepared by CgMs Ltd and detailed the archaeological works to be undertaken at this site (CgMs, 2011). This addendum document addresses specific comments from Nick Best, Assistant County Archaeologist at Northumberland County Council (NCC) regarding the responsibilities for completion of all archaeological works, including post-excavation analysis, reporting and archiving, together with publication of results (if necessary).

## 2. Addendum

2.1 The archaeological work to be undertaken at Governors Gardens will not be considered complete until all post-excavation analysis and reporting has been completed, any publications of the findings have been produced (if necessary) and any resultant site archive has been submitted to a suitable repository.

2.2 All post-excavation analysis and reporting will be completed and submitted to NCC within six months of the completion of site works. NCC will be granted copyright license to use the report for the purposes of the HER. The final submitted report will include:

- Planning application number, Northumberland Conservation reference, and archive reference (if applicable)
- Non-technical summary
- Introductory statement
- Aims and purpose of the project
- Methodology
- A location plan showing all excavated areas and any archaeological features with respect to nearby fixed structures and roads
- Illustrations of all archaeological features with appropriately scaled hachured plans and sections.
- An objective summary statement of results
- Conclusions
- Supporting data – tabulated or in appendices
- Index to archive and details of archive location
- References

- Statement of intent regarding publication
- Confirmation of archive transfer arrangements
- A copy of the NCC brief and the approved WSI
- A copy of the OASIS number

Within the report:

- All plans will be clearly related to the national grid.
- All levels will be quoted relative to ordnance datum.

If significant archaeological remains are identified the report will include:

- Detailed description and plans (at 1:50 scale) of any areas which provided significant archaeological information, all feature plans and sections (at 1:10 or 1:20 scale), select artefact illustrations, photographs and an overall site plan showing all recorded archaeological features.
- Finds quantification and assessment.
- Assessment of any palaeo-environmental samples taken.
- A summary of the extent, depth and state of preservation of archaeological deposits across the site.

2.4 If appropriate, in consultation with NCC, a summary article will be produced for *Archaeology in Northumberland*. In the event of significant remains being encountered and excavated, there may be the need for a more formal publication than in the summary form. In this instance a suitable programme and timetable for publication and dissemination will be discussed and agreed upon by all stakeholders. This may include a note or short article in an appropriate archaeological journal.

2.5 A digital, paper and artefactual archive, which will consist of all primary written documents, plans, sections, photographs and electronic data, will be submitted to the Great North Museum, if necessary, in discussion with NCC within one year of completion of site works. If archaeological remains are found, digital photographs will be supplied to ADS in uncompressed baseline TIFF format. Should the evaluation be wholly negative, no such archive may be necessary and a summary report (1x hard copy and 1 x pdf) will provide a sufficient archive.

**3. Additional Mitigation of Impacts from Piling Works (Addendum to WSI)**

*Background*

3.1 For the avoidance of doubt, and in order to protect sensitive archaeological remains within the site from further unintentional damage, the Assistant County Archaeologist considers it necessary to clearly state the mitigation measures that will be put in place during piling operations at Governor's Gardens, and how these measures relate to the existing watching brief condition.

3.2 The existing, approved mitigation WSI is based on a 'mitigation by avoidance / preservation in situ' response, with groundworks across the whole site being limited to 500mm below present ground level (specific levels aOD are noted in the WSI to provide a secure and absolute limit). This limit applies to ring beams / pile caps, all of which should be within the 500mm threshold. Any groundworks within this horizon should be subject to archaeological monitoring and recording as necessary, though the expectation (from the evaluation) is that significant archaeology will be preserved below this 500mm level. This maximum limit will be maintained throughout the remainder of works at the site, with this addendum stating clearly how this will be achieved and recorded.

*Specific Mitigation Measures*

3.3 All site staff will be reminded of the detail and reason for the archaeological condition on the site. This should take the form of a toolbox talk for current members of staff. Any new members of staff will be similarly briefed as they are employed. Updates should be periodically provided for site staff. The toolbox talk will be signed off by contractors on beginning operations at the site.

3.4 The existing watching brief will also cover all piling operations, with an archaeologist present during all piling works of whatever form, including the formation of foundations, drilling, concreting etc. The watching brief will take note of locations where below ground obstacles are encountered and annotate them on approved piling plans, and, where possible, take note of the (approximate) depths at which obstacles are encountered, the depth at which natural geology is encountered and if waterlogging is noted (recognising that this data will not be to archaeological standards).

3.5 If it is not possible to excavate any given pile to the required depth, it will be acceptable to insert a maximum of two additional piles (ie. one either side of the original pile location) – but no more than this unless agreed in advance. This is to avoid archaeological deposits being destroyed without record. If it proves impossible to complete the piling exercise within this framework, an alternative foundation strategy, or a more robust archaeological response, potentially excavation, could be required.

3.6 The archaeological observations made during piling works will attempt to inform, where possible, the wider understanding of deeply buried waterlogged deposits within Berwick, as described by the NCC Distribution and Significance of Urban Waterlogged Deposits, (Derham 2013), as well as the Regional Research Framework objectives contained within this survey.

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**Interim Excavation Report- Governors Gardens, Berwick-upon-Tweed, Northumberland**

**By Rupert Lotherington- 28/07/14**

**Introduction**

On the 18th July 2014, an unmonitored mechanical excavator, truncated a number of in-situ archaeological deposits within the southern extents of a development site at Governors Gardens, Berwick-upon-Tweed, Northumberland. As part of the wider watching brief being carried out upon the site, Archaeological Research Services recorded the remaining in-situ archaeological deposits in order to ascertain the extent of the damage caused to the buried archaeological remains. This report details the recorded in-situ archaeological remains and their potential significance within a wider heritage framework.

**Cause**

The development of the land at Governors Gardens, Berwick-upon-Tweed required the use of pre-augered piles as a means of archaeological 'mitigation by avoidance'. Communication with piling ground crews upon site indicated that standard procedure, during a piling operation, is to remove any visible areas of hard standing likely to hinder augering. The mechanical excavator operator identified an area of hard standing within a proposed pile location and began excavation in accordance with standard piling procedures. The mechanical operator was acting independently of the management protocol and was consequently unaware of the planning requirement necessitating the need for archaeological monitoring prior to the commencement of any groundwork upon the site.

The mechanical excavator truncated an area measuring 7.61m x 7.29m x 2.68m prior to a management request requiring the cessation of all groundworks within the vicinity of the impacted area.

**Stratigraphic Report**

**Phase I: Medieval**

The earliest identifiable feature within the excavated trench was a NNW-SSE orientated wall (204), located at the eastern most extent of the impacted area. Wall (204) measured 0.86m x 0.42m x 0.22m and was identified at a depth of 4.35m aOD (Figure. 2). Wall (204) was constructed from unbonded, roughly-shaped, limestone blocks and was abutted by a moderately sorted, pinkish-brown, silty-clay (211). The full extents of deposit (211) were not excavated, therefore it was unclear as to whether the deposit existed as a layer or a fill within a cut feature.

Both wall (204) and deposit (211) were truncated by a near vertically sided construction cut [202] for a NE-SW aligned wall (201). Wall (201) was present at a maximum height of 5.75m aOD and descended the full depth of the trench to 4.0m aOD (Figure. 1-3, 8 & 10). Wall (201)

bisected the eastern edge of the excavation area and measured 2.5m x 0.96m x 1.75m at its maximum extents. Dressed limestone and granite facing stones were identifiable on both the north-eastern and south-western faces of wall (201). The facing stones were irregularly coursed and bordered a 0.45m thick rubble core. The presence of dressed facing stones may indicate that the visible element of (201) functioned as an extant wall likely set upon unexcavated foundation footings. A whitish-grey mortar containing frequent shell inclusions was identifiable within the NNE facing section of wall (201). The greyish-white mortar was present within wall (201) below a height of 5.38m aOD. A yellowish-brown, sandy mortar was utilised as the principal bonding agent above 5.38m aOD. The use of two distinct bonding materials may highlight that there may have been two separate construction phases associated with wall (201).

The north-western component of wall (201) had been partially impacted by contemporary truncation event [239]. However, it was unclear if the full extent of the damage to wall (201) was caused by modern excavation or by earlier 20$^{th}$ century development of the site.

Walls (204) and (201) were later abutted by a number of poorly sorted, silty clay deposits (210, 208, 207 & 222) containing moderate quantities of animal bone, shell and occasional fragments of 15$^{th}$ century, green glazed, medieval pottery (Figure 12). Deposits (207), (208) and (210) abutted the south-east face of wall (201) and deposit (222) abutted the north-western face of wall (201) (Figures. 1 & 11). The composition and form of deposits (210), (208), (207) and (222) was indicative of deliberate medieval dumping events and has been interpreted as an attempt to consolidate and raise ground level. Deposit (207) was the highest, medieval, made-ground layer and was present at a maximum height of 5.14m aOD. A well sorted, blackish-grey, silty-clay deposit (209) was identified below medieval dump deposit (208) and overlying medieval made ground layer (210). Deposit (208) measured 2.35m x 0.21m x 0.15m at its greatest visible extents and was interpreted as a medieval dis-use deposit formed subsequent to the deliberate deposition of make-up layer (210). The presence of mid-15$^{th}$ century pottery within deposits abutting wall (201) suggests that wall (201) may pre-date the 1450's.

A third wall (218) was identified within the northern extent of the impacted area at a depth of 5.65m aOD. The visible extents of wall (218) measured 1.30m x 1.26m x 0.10m and were partially overlain by a 20$^{th}$ century levelling deposit (234) (Figures. 6 & 7). Wall (218) was constructed from dressed limestone facing stones and bonded with a whitish-grey mortar. The full extent of wall (218) was not revealed, however, the construction and bonding materials utilised were very similar to those identified within wall (201). Consequently, walls (201) and (218) were tentatively interpreted as of a broadly contemporaneous late medieval date.

**Phase II- Post-Medieval**

The medieval deposits within the south-east of the impacted area were sealed by a purplish-brown, clayey-silt layer (205), which abutted and partially overlay the south-eastern aspect of wall (201) (Figure 1). Occasional fragments of brick and rare fragments of bone were recovered from layer (205) which due to its composition, form and stratigraphic location, was interpreted as a post-medieval garden soil. Layer (205) was identified at a depth of 5.89m aOD.

A near identical purplish-brown, silty-clay deposit (214) was present at the south-western extent of the impacted area. Layer (214) was present at a maximum depth of 5.76m aOD and was truncated by post-medieval pit F.230, 20th century foundation cut [216] and modern truncation event [239] (Figure 5). Layer (214) has been interpreted as a post-medieval garden soil of a broadly contemporaneous date to deposit (205).

As previously mentioned, pit F.230 truncated the south-eastern extent of garden soil layer (214). F.230 displayed a near vertically sided cut [240] and was filled by two poorly sorted, greyish-brown sandy-silt deposits (230 & 231). Deposit (230) contained occasional fragments of glass and unfrogged 19th century brick. The poorly sorted composition and moderate quantity of fragmentary building materials within deposit (230) indicate that F.230 should be interpreted as a late post-medieval or early 20th century demolition waste pit (Figure 5). F.230 was present at a depth of 5.66m aOD and was sealed by early 20th century levelling deposits (229) and (227).

Three additional made ground deposits (235, 236 & 237) were revealed within the south-east facing section of the impacted excavation area. The full extent of these deposits was unclear, however, their stratigraphic location and the presence of unfrogged 19th century brick suggests that (235), (236) and (237) should be tentatively interpreted as late post-medieval levelling deposits.

**Phase III- 20th Century**

There were two identifiable phases of 20th century development present within the impacted area. The earliest 20th century phase of activity was located within the south-west corner of the impacted area and was characterised by the construction of reinforced concrete foundation base (238) (Figures. 4 & 9). Foundation base (238) was present at a depth of 5.94m aOD and measured 1.52m x 0.34m x 0.54m at its maximum visible extents. Concrete foundation (238) also provided structural support for an irregularly coursed limestone wall (215) and further sealed a 0.04m thick, greyish-brown, silty-clay trample deposit (233). Wall (215) was aligned ESE-WNW, was identifiable at a depth of 6.62m aOD and measured 0.62m x 0.29m x 0.78m at its maximum extents. The irregularly shaped, limestone blocks within wall (215) measured an average 0.30m x 0.20m x 0.15m and were bonded by a greyish-white, cementitious mortar (Figure 4 & 9). Wall (215), concrete foundation (238) and trample deposit (233) were all set within a vertically sided, flat-based, construction cut [216]. Cut [216] was visible principally in section and truncated post-medieval garden soil (214) and post-medieval make-up deposit (235). The full extents of foundation cut [216] were not identified and continued below the base of the excavation area. Wall (215) and reinforced foundation base (238) were interpreted as constituting a foundation wall potentially related to the early 20th century winery museum.

The south-western face of reinforced concrete foundation base (238) was abutted by a 0.04m thick, poorly sorted, silty-sand deposit (229). Layer (229) contained moderate quantities of small-medium sized, sub-rounded, stony inclusions and measured 1.6m x 0.44m x 0.04m at its maximum visible extents. Layer (229) sealed post-medieval garden soil (214), fill (231) of post-medieval pit F.230 and was identified at a depth of 5.82m aOD. Additionally, layer (229) was

sealed by a blackish-brown, silty-clay deposit (227). Deposit (227) contained occasional fragments of brick, moderate concentrations of small, sub-angular, stony inclusions and rare fragments of modern pottery. Additionally, layer (227) abutted the south-western face of limestone wall (215), overlay concrete foundation base (238) and measured 2.62m x 0.90m x 0.52m at its maximum extents. A brownish-black, clayey-silt deposit (217), measuring 0.78m x 0.14m x 0.18m was identified overlaying deposit (227) at its north-western extent. Deposit (217) had a similar poorly sorted composition to layer (227) and abutted the south-western face of early 20th century limestone wall (215). Additionally, deposit (217) was identified at a height of 6.42m aOD. Both layers (227) and (217) were truncated by ESE-WNW aligned 20th century service pipe trench F.225.

The north-eastern face of wall (215) was abutted by a greyish-brown, clayey-silt deposit (234) which was identifiable at a depth of 6.48m aOD. Deposit (215) had been heavily disturbed by modern groundworks, contained frequent small-medium sized stony inclusions and overlay post-medieval make-up layers (235/237).

The form, composition and stratigraphic location of deposits (229), (227), (217) and (234) was indicative of levelling or foundation layers, likely contemporary with the formation of wall (215) and the construction of the early 20th winery museum.

A second region of earlier 20th century activity was also identified within the southern extent of the impacted area and was characterised by foundation cut [228] filled by a poorly sorted, make-up deposit (219). Foundation cut [228] was visible principally in section and displayed a flat, uneven base with a maximum impact depth recorded at 4.90m aOD. Cut [228] truncated medieval dump deposit (222) and a 0.04m thick, brownish-yellow, silty-sand deposit (220) of unknown formation.

As previously mentioned, foundation cut [228] was filled by a deliberately deposited, greyish-brown, sandy silt deposit (219) containing frequent fragments of brick, moderately sized stone and rare fragments of modern pottery. The brickwork recovered from fill (219) was unfrogged and although very fragmentary displayed a consistent thickness of 2". Consequently, the brick within fill (219) has been tentatively dated to the 17th/18th century. Furthermore, the moderately high concentration of post-medieval brick within fill (219) and the presence of20th century pottery might suggest that deposit (219) was formed principally of demolition material related to the destruction of a localised post-medieval structure. Deposit (219) abutted the north-western face of medieval wall (201) and has been interpreted as an early 20th century foundation deposit, potentially contemporary with foundation wall (215) and concrete foundation base (238).

The later 20th century phase of activity was identifiable within the south-west corner of the impacted area and was characterised by the construction of service pipe trench F.225 and concrete floor surface (223).

Service pipe trench F.225 displayed a vertically sided, flat based cut [226], orientated on a NW-SE alignment (Figure 5). As previously mentioned, cut [226] truncated earlier 20th century levelling deposits (227) and (217). Additionally, cut [226] and was filled by a poorly sorted, greyish-brown sandy silt deposit (225) and a fragmentary ceramic service pipe with a maximum diameter of 0.18m. The ceramic service pipe had been heavily disturbed by modern truncation event [239] but was identifiable at the base of service trench cut [226]. Deposit (225) contained frequent, small-medium sized, stony inclusions and had been deliberately deposited into service trench cut [226] in order to seal the modern service pipe.

Service trench F.225 was overlain by stony bedding deposit (224) for modern concrete floor surface (223) (Figures. 3, 4 & 5). Bedding deposit (224) was present at a depth of 6.60m aOD, measured 1.32m x 2.04m x 0.22m and abutted the south-western and north-eastern faces of wall (215). Concrete floor surface (223) physically overlay both bedding deposit (224) and earlier 20th century wall (215). Concrete surface (223) is representative of the current ground level within the vicinity of the impacted area and is present at a height of 6.76m aOD.

All of the contexts detailed above were impacted by mechanical excavator truncation event [239]. Truncation cut [239] measured 5.81m x 5.14m x 2.48m at its maximum extents and was filled by a poorly sorted, silty-clay backfill (212). Deposit (212) contained frequent fragments of brick, stone and occasional fragments of modern and late medieval pottery.

**Extent of the Damage to Archaeological Remains**

All of the deposits described within the stratigraphic description remain represented within the site, and seem to retain their stratigraphic relationships. It appears unlikely that any deposits have been entirely removed without record. The approximate volume of stratified medieval and post-medieval deposits removed without archaeological monitoring is estimated as 10.38m$^3$.

**Assessment of Damage to Archaeological Remains**

In order to ascertain the potential significance of the archaeology that was damaged by contemporary truncation event [239] the magnitude of change to the buried heritage asset was measured against an assessment of the value attributed to the damaged heritage asset.

The Magnitude of Change

The methodology for assessing the magnitude of change to the heritage asset has been adopted from the guidance provided in the Highways Agency's (DfT, 2007)Design Manual for Roads and Bridges (DMRB). This methodology was designed for the assessment of impacts resulting from road construction, but it is also a useful approach for the assessment of other development schemes. The methodology was developed in consultation with the key historic environment stakeholders in the UK, including English Heritage, Historic Scotland, Cadw, The Environment and Heritage Service of Northern Ireland, and the Institute for Archaeologists (IfA). The methodology has also been adapted to take cognisance of more recent guidance concerning assessment of significance and impacts to setting, most particularly English Heritage's "*The Setting of Heritage Assets*" (English Heritage 2008; 2011).

The methodology identifies three cultural heritage 'sub-topics', each with its own assessment methodology: Archaeological Remains, Historic Buildings and Historic Landscape. The Archaeological Remains methodology has been applied within the scope of this report.

The scale and magnitude of change to the buried archaeology, within the impacted area, was assessed using the five tier grading system presented below in Table 1:

| Magnitude | Description |
|---|---|
| Major | ♦ Changes to most or all key archaeological materials, such that the resource is totally altered<br>♦ Comprehensive changes to setting |
| Moderate | ♦ Changes to many key archaeological materials, such that the resource is significantly modified<br>♦ Considerable changes to setting that affects the character of the asset |
| Minor | ♦ Changes to key archaeological materials, such that the asset is slightly altered<br>♦ Slight changes to setting |
| Negligible | ♦ Very minor changes to archaeological materials, or setting |
| No Change | ♦ No change |

Table 1: Factors in the Assessment of the Magnitude of Change for Archaeological Remains

The magnitude of change caused to the buried heritage asset within the impacted area has been classified as 'Minor'. There are changes to key archaeological materials however, as it seems unlikely that any structural remains or archaeological deposits have been entirely removed without record, a broad understanding of the archaeological deposits has been preserved.

The Value of the Heritage Asset

In order to assess the significance of the different magnitudes of change, resulting from contemporary truncation event [239], the above factors have to be weighed against the value of each cultural heritage asset. This 'value' is broadly equivalent to an asset's significance in National Planning Policy Framework (NPPF) terminology, but the term 'value' has been retained here in order that this is not confused with the significance of effects which is discussed below. In addition to the DMRB methodology, 'heritage values' were also assessed in accordance with the guidance contained within "*Conservation Principles*" (English Heritage 2008). Archaeological remains, both above and below the ground surface, are cultural heritage assets, and the criteria to be used for establishing the value for this type of asset is tabulated in Table 2:

| Value | Criteria |
|---|---|
| Very High | ♦ World Heritage Sites (including nominated sites) |

| Value | Criteria |
|---|---|
| | ♦ Assets of acknowledged international importance<br>♦ Assets that can contribute significantly to acknowledged international research objectives |
| High | ♦ Scheduled Monuments (including proposed sites)<br>♦ Undesignated assets of schedulable quality and importance<br>♦ Assets that can contribute significantly to acknowledged national research objectives |
| Medium | ♦ Designated or undesignated assets that contribute to regional research objectives |
| Low | ♦ Designated and undesignated assets of local importance<br>♦ Assets comprised by poor preservation and/or poor survival of contextual associations<br>♦ Assets of limited value, but with potential to contribute to local research objectives |
| Negligible | ♦ Assets with very little or no surviving archaeological interest |
| Unknown | ♦ The importance of the resource has not been ascertained |

Table 2: Criteria for Establishing Value of Archaeological Assets

The value of the buried heritage asset has been classified as 'Medium'. The impacted buried heritage assets were undesignated assets of local importance but had the potential to contribute to regional research objectives.

Using the *magnitude of change* as ascertained from Table 1, and the assessment of *value* as indicated by Table 2, Table 3 indicates how an assessment of the *significance of effects* of the development proposals was reached.

| VALUE/SENSITIVITY | | | | | | |
|---|---|---|---|---|---|---|
| | Very High | Neutral | Slight | Moderate or Large | Large or Very Large | Very Large |
| | High | Neutral | Slight | Moderate or Slight | Moderate or Large | Large or Very Large |
| | Medium | Neutral | Neutral or Slight | Slight | Moderate | Moderate or Large |
| | Low | Neutral | Neutral or Slight | Neutral or Slight | Slight | Slight or Moderate |
| | Negligible | Neutral | Neutral | Neutral or Slight | Neutral or Slight | Slight |
| | | No change | Negligible | Minor | Moderate | Major |
| | | MAGNITUDE OF CHANGE | | | | |

Table 3: Significance of Effects Matrix

The significance of effect to the buried heritage asset caused by contemporary truncation event [239] has been classified as 'Slight'.

**Additional Mitigation of Impacts from Piling Works (Addendum to WSI)**

*Background*

For the avoidance of doubt, and in order to protect sensitive archaeological remains within the site from further unintentional damage, the Assistant County Archaeologist considers it necessary to clearly state the mitigation measures that will be put in place during piling operations at Governor's Gardens, and how these measures relate to the existing watching brief condition.

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1. All site staff will be reminded of the detail and reason for the archaeological condition on the site. This should take the form of a toolbox talk for current members of staff. Any new members of staff will be similarly briefed as they are employed. Updates should be periodically provided for site staff. The toolbox talk will be signed off by contractors on beginning operations at the site.

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encountered, the depth at which natural geology is encountered and if waterlogging is noted (recognising that this data will not be to archaeological standards).

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