

Centre for Archaeological Fieldwork

School of Archaeology and Palaeoecology
Queen's University Belfast



Data Structure Report: No. 022.

**Excavations within the former
Woolworth's Building, Belfast, County Antrim**

AE/03/95



Data Structure Report: Former Woolworth's Building, Belfast, Co. Antrim

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1. Summary

- 1.1 An excavation was carried out by the Centre for Archaeological Fieldwork, (sub-contracted by Margaret Gowen & Co. Ltd), on behalf of Dunne's Stores at the former Woolworth's Department Store, bounded by High Street, Ann Street, Cornmarket and Crown Entry within the historic core of Belfast (Figure 1). The excavation was directed by Peter Moore of the Centre for Archaeological Fieldwork, School of Archaeology and Palaeoecology, Queen's University, Belfast, and took place from the 1st September and 20th October 2003.
- 1.2 The proposed refurbishment of the building's interior required service trenches to be excavated within this archaeological sensitive area of the city centre. The developer, therefore, agreed to a programme of archaeological investigation within these areas, and three trenches were subsequently opened. Trench One was situated on the north side of Ann Street at the rear of the Woolworth's building, in close proximity to where Ann Street and Cornmarket meet, and measured 4.9 m (north – south) by 3.2 m (east – west). Trench Two was located on the south side of High Street at the front of the Woolworth's building, and measured 5.2 m (north – south) by 2.3 m (east – west). Trench Three was situated within the building's interior and measured 5.7 m (east – west) by 3.4 m (north – south).
- 1.3 Trench One was opened by the developer prior to the identification of the need for archaeological mitigation of the proposed development. Mechanical excavation had cut through recent shop floor levels, including a mortar-rich layer. However, these deposits were late 19th or early 20th century in date, and the majority of the earlier archaeological strata, therefore, survived intact. A brick-lined trench that constituted the foundation for the standing east wall of the Woolworth's building had disturbed an area extending 1 m west to a depth of around 0.70 m.
- 1.4 When the remaining modern rubble material had been removed, a dark, slightly gritty, loam deposit of some 0.35 m in depth was uncovered, containing a large quantity of Post-Medieval artifacts, including clay pipe-stems and bowls, and North Devon, Brown and Slip Wares. Beneath this deposit was a dark humic layer, mottled with a greyish blue '*sleetch*' or clay; a similar artifact assemblage was recovered from this layer. On removal of this deposit, a clean greyish blue clay was identified. Excavation of this deposit at the south (Ann Street) end of

the trench revealed an east – west aligned horizontal timber that was set on two other timbers, one of which was positioned vertically into the clay. A dendrochronological sample obtained for the horizontal timber dated to A.D 1619 +/- 9 (Sample Q10480, Appendix Seven).

- 1.5 The initial removal of the residual hardcore material in Trench Two revealed two contemporary brick walls running inside the western and northern edges of the trench. A mortar/clay deposit was present to the south and east of the walls. This deposit contained a large quantity of glass fragments together with (less frequent) clay-pipe stems and overlay a small layer of stones and bricks, itself covered by a thin lens of dark clay which appears to represent the original floor level associated with the brick walls. On their removal, a layer of relatively sterile clay, similar in nature to the clean clay recorded in Trench One, was identified as pre-dating the brick walls. The excavation of this deposit revealed a cut feature in clean sand, filled by a further clay deposit. Excavation of this feature produced several sherds of Medieval Everted Rim Ware. A series of deposits were recorded lining the base of the feature towards its north end. Initial analysis by Prof Mike Ballie, Prof Valerie Hall and Mr David Brown (School of Archaeology and Palaeoecology, Queen's University Belfast), demonstrated that these deposits consisted largely of decayed plant and organic matter.
- 1.6 Trench Three was in the building's interior. The archaeological sequence was similar to that recorded in Trench One, although the west end of the trench had been badly disturbed from the insertion of a steel support pillar and concrete foundations during the mid 20th century. This area produced tile 'wasters' of probable 17th century date, suggesting that tile manufacture was taking place on or close to the site, and a double-sided bone comb of possible Medieval date. The archaeological stratigraphy towards the east end of the trench survived intact. The removal of modern deposits revealed a dark humic layer and a light gritty loam that contained Post-Medieval artifacts, similar to those recorded in Trench One. Two large stone walls, each approximately 1 metre in width, were also recorded. Although the join of the walls was truncated by the insertion of a modern lift-shaft, it is likely that these walls once formed part of a substantial structure. From the clay deposit situated within the area between the two walls, a single timber covering a drain (running north – south) was retrieved for dendrochronological dating; it is likely that the timber dates from the mid 1600's (Sample Q10481, Appendix Seven).

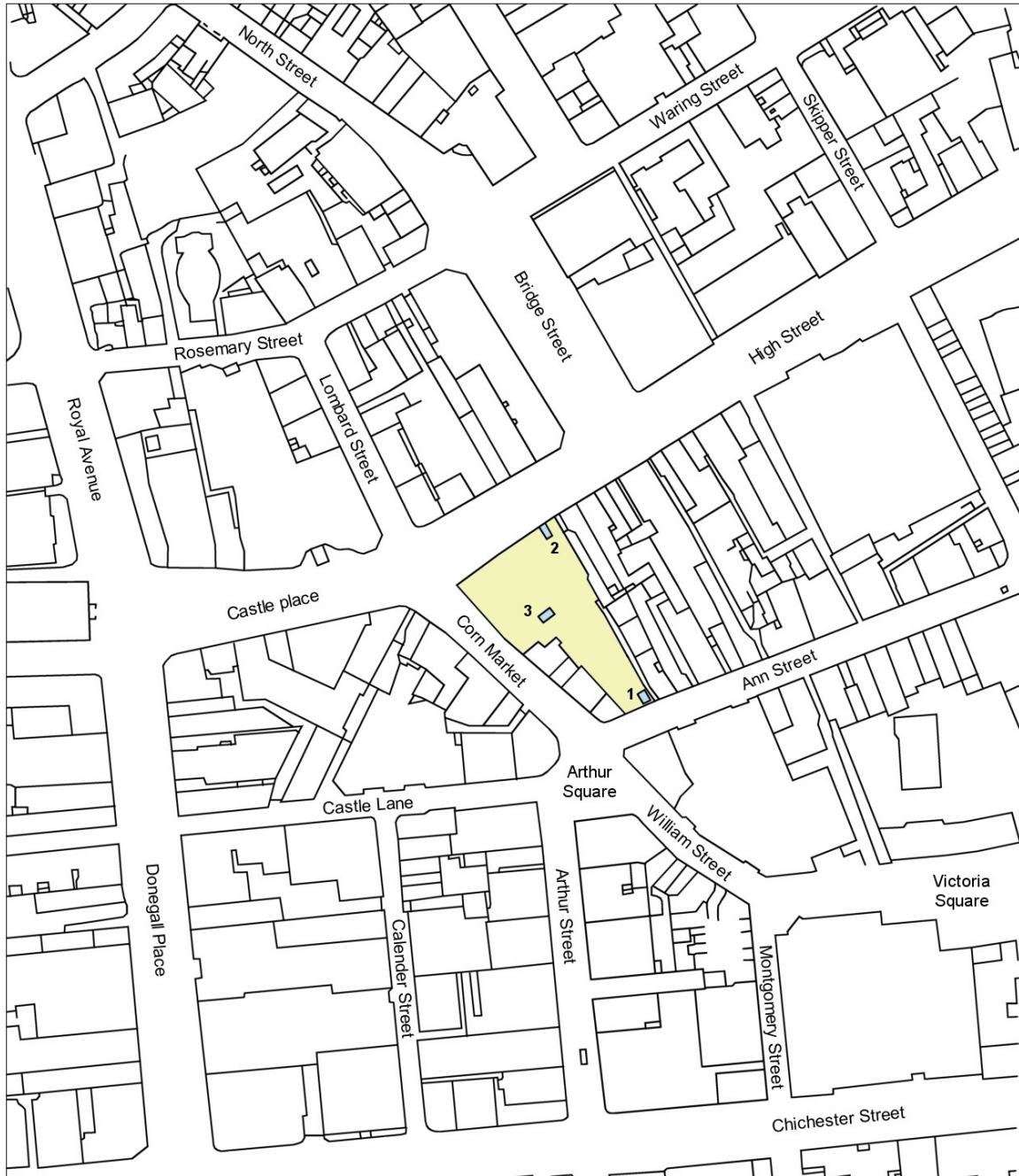
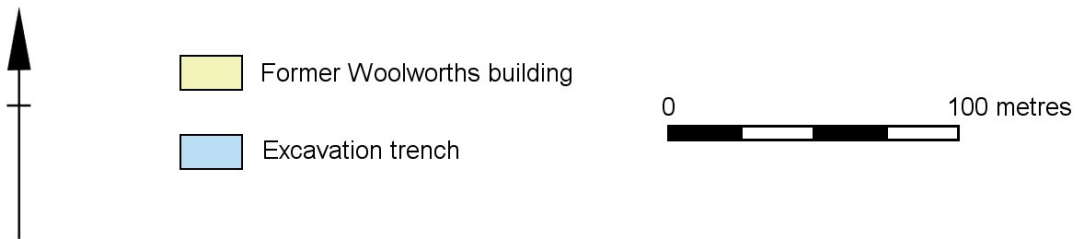


Figure One: Woolworths 2003 excavations location map



2. Introduction

2.1 General

2.1.1 The following report details the results of the archaeological excavations within the former Woolworth's building in Belfast's city centre, which is bounded by High Street, Ann Street, Crown Entry and Cornmarket. The excavation was undertaken by the Centre for Archaeological Fieldwork, School of Archaeology and Palaeoecology, Queen's University Belfast – sub-contracted by Margaret Gowen & Co. Ltd – on behalf of Dunne's Stores. The excavation took place from the 1st September to 20th October 2003.

2.2 Background

2.2.1 Most of Belfast is constructed on top of estuarine clays, commonly referred to as *sleetch*, that was laid down during the last glaciation. Much of the city is low-lying, with the 17th and 18th century phases of urban development almost at sea level. As a result the city was prone to periodic flooding during this period; indeed in a map of the city drawn in 1696 areas of High Street that were susceptible to flooding are marked (Figure 2.2).

2.2.2 The earliest historical references to the area date to the 660's; the *Annals of the Four Masters* state that a battle of the *Fearsat* took place in A.D 665 between the *Ulltu* and *Cruithne* in which *Cathasach*, son of *Laircine* was slain (O'Donovan, 1856, 127), while the *Annals of Ulster* note that *Cathassach* son of *Luirgéné* fell in the battle of *Fertas* in A.D 668 (Hennessy, 1887, 186). It would appear that a sandbar was utilised to create a fording point between the Rivers Farset and Blackstaff (*Owenvarra*) at the place where they met the River Lagan (Gillespie and Royle, 2003, 1). The location of the fording point, however, is a matter of conjecture, with north of where the Farset entered the Lagan, (roughly where Waring Street is now located) and near the Long Bridge or Long Cross both suggested (Gillespie and Royle, 2003, 1). A bridge of twenty-one arches (probably the Long Bridge), stood where Queen's Bridge is currently located, which is the point Vinycomb suggests is on or near the ancient ford (Vinycomb, 1902, 27: Plate 2.1). A map from 1696 (Figure 2.3), marks the position of the Long Cross and it is here that seems the most likely location for the ford. The Lagan and Farset Rivers met at the foot of modern High Street which formed a small narrow promontory, on which, at its extreme point was built the Chapel of the Ford (O'Byrne, 1946, 41). Most sources seem to agree that this chapel would

have constituted the first structure in this part of the Belfast area. However, whether the site of this chapel is today occupied by St George's Church (O'Byrne, 1946, 41) is open to debate. The first historical reference to a castle at Belfast dates to 1177 (Vinycomb, 1902, 31; O'Byrne, 1946, 45) with both sources referring to John de Courcy's arrival in the area, although these particular sources differ on the nature of this presence. O'Byrne (1946, 45) states that de Courcy destroyed the original fort, noting that there was no record of a town at the time. Vinycomb (1902, 31) is less specific, stating that de Courcy held possession of Antrim and Down together with the castle, which was probably situated on the ancient site commanding the ford. More detailed references for a castle at Belfast date to 1210 when King John marched through the area, with a castle erected to protect the ford in 1226 (Benn, 1877, 19).

2.2.3 There can be little doubt that the presence of a castle at Belfast would have been of strategic significance since it would have controlled access to the ford crossing the Lagan. In the early 1300's Edward the Bruce is reported to have sacked a settlement on the site of the ford; "...he fell with the fury of a devouring tempest upon the English settlements, and the town and Castle of Belfast were destroyed" (Vinycomb, 1902, 8). In 1333 William de Burgh, the Earl of Ulster, was killed by his barons at the "Castle of the Ford" (McNeill, 1980, 32). The lands of the former earldom were seized by the Clondeboy line of the O'Neills, with a small area in the south-east remaining part of the English polity (McNeill, 1997, 172). It was also in 1333 that the small settlement at Belfast is described as a borough in an *inquisition post mortem* (Gillespie and Royle, 2003, 1). However, the value of the borough of Belfast was overshadowed by the value of the agricultural lands of the manors attached to it (McNeill, 1980, 121). In 1512 the 8th Earl of Kildare marched into Ulster and captured the castles of Belfast and Larne (Kerrigan, 1995, 52). In 1556 Sir Thomas Radcliffe advocated proposals for a settlement in east Ulster, with settlers to be established at Belfast and other fortified towns (Kerrigan, 1995, 53).

2.2.4 By the 16th century the castle at Belfast is likely to have been a tower house, with a small associated settlement focused around it; "...there was but an old square castle, with a court or bawn, as the Irish call it, with some few cottages or cabins near it" (Paterson, 1939, 110). A plan by Sir Thomas Smith to establish the area as the place for a corporate town failed. However, by 1594 the Earl of Essex began to "...intrench a large town here at Belfast." (Gillespie and Royle, 2003, 1).

2.2.5 A period of instability saw the castle being seized by the O'Neills and subsequently taken back by Sir John Chichester in 1597. Sir Arthur Chichester offered to rebuild the then ruinous castle in 1603, in return for a grant of the castle and surrounding lands. Thus he came to own the lands on which the town would be built. Although there was probably only a small Medieval settlement on the site of Belfast, it was therefore in the early 17th century that significant urban development occurred. Chichester's planned development, however, shifted the emphasis away from the old ford, where human activity had previously been concentrated, to the north bank of the River Farset; indeed this could explain the curving appearance of the early development. The earliest map of the town, by Philips, dates to 1685 (Figure 2.1), and contains some suggestion as to the earlier pre-1685 layout. A number of property boundaries, fronting onto Cornmarket and perpendicular to the castle frontage, seem to have been truncated by the insertion of a new street - Ann Street. The original extent of these properties has been highlighted in red.

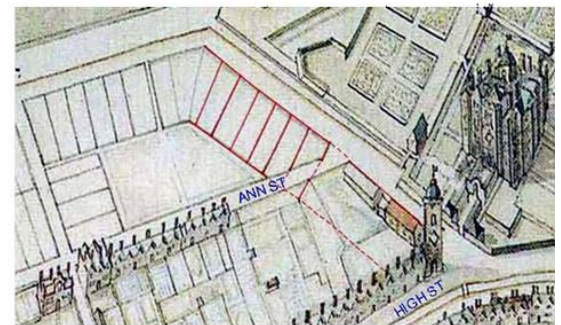
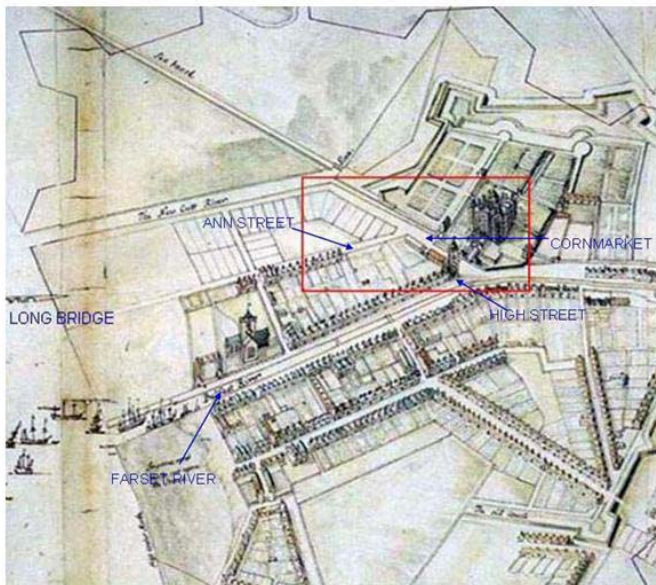


Figure 2.1 – Part of Philips' map of Belfast 1685

Ann Street also does not appear to run in alignment with the Long Bridge, which would also suggest that it does not respect any earlier layout that would have existed between the ford and the castle. The shift in emphasis from the old ford to the Farset may also have meant that the layout of the earlier settlement may have been destroyed by Chichester's planned development.

2.3 Previous Excavations

2.3.1 While there have been a number of recent excavations in Belfast, much of this work has focused on the Waring Street area (Logue, 1999, 1 and Ó Baoill, 1999, 1). Excavations within the vicinity of High Street have been fewer in number, although the area does hold the distinction of having been the location of possibly the first Post-Medieval urban excavation in Ireland. In 1861 Canon John Grainger published an account of his excavation in Belfast's High Street in the *Ulster Journal of Archaeology*. Grainger had uncovered the footings of wooden foot bridges that had crossed the Farset (which ran exposed down much of High Street) and he also recovered a quantity of clay-pipe stems and a large corpus of coins. This collection of artifacts was subsequently deposited with another contemporary antiquarian, John McGee. Perhaps the most significant discovery was a "ring-shaped brooch, with a circle of V's round its circumference. The spaces contained each a stud or knob" (ibid., 117). From his description, Grainger appears to describe a Medieval ring brooch. However, there is no accompanying drawing of the artifact. Initial research undertaken by the author and Mr. John O'Neill, however, would suggest that the brooch, together with the large quantity of coins from the excavation came to be transferred from John McGee to the Seaby Collection in the Ulster Museum. The museum has in its possession a ring brooch (catalogued as coming from an 'unknown location') in the Seaby Collection (Plate 2.2). This brooch is included in Deevy's study of these artifacts, where it is identified as a Class 8 ring brooch (Deevy, 1998, 127-128), which would date from the late 12th to 13th centuries. It can suggested, therefore, that this unprovenced ring brooch was the artifact uncovered by Grainger during the course of his excavations.

2.3.2 Nick Brannon's excavations within the High Street area in 1984 failed to find Medieval or 17th century features associated with the street frontage, since all strata had been destroyed by the insertion of later brick foundation courses. However, in close proximity to Pottinger's Entry, and situated underneath later brick layers, Brannon uncovered a 17th century midden pit containing animal bones, glazed pottery sherds and iridescent glass fragments (Brannon, 1988, 80).

2.4 *Archiving*

2.4.1 Copies of this report have been deposited with Dunne's Stores, with Margaret Gowen & Co. Ltd, and with the Environment and Heritage Service, DOE NI. All site records and finds are temporarily archived within the School of Archaeology and Palaeoecology, Queen's University Belfast. Site records, including context sheets, plans and photographs, small finds and samples, are retained by the School of Archaeology and Palaeoecology, and are listed in the appendices at the end of this report.

2.5 *Credits and Acknowledgements*

2.5.1 The excavation was directed by Mr Peter Moore, assisted by Ms Ruth Logue, Mr Nicholas Beer, Ms Janet Bell and Mr Keith Adams. Additional crew members were supplied by Margaret Gowen & Co. Ltd. These individuals were Brian Sloan, Naomi Carver, Eamon Donaghy and Bronagh McIlhone.

2.5.2 Assistance during the course of the excavation and the preparation of this report was kindly provided by: Dr Colm Donnelly, Mr John Ó'Neill, Dr Philip Macdonald, Mr Cormac McSparron, Ms Ruth Logue, Mr Nicholas Beer and Mr Keith Adams (Centre for Archaeological Fieldwork, Queen's University Belfast), Mr David Brown, Prof Mike Ballie and Prof Valerie Hall (Queen's University Belfast), Mr Declan Hurl and Mr John O'Keeffe (Environment and Heritage Service), Siobhan Deery (Margaret Gowen & Co. Ltd), Audrey Gahan (Gahan and Long Ltd).

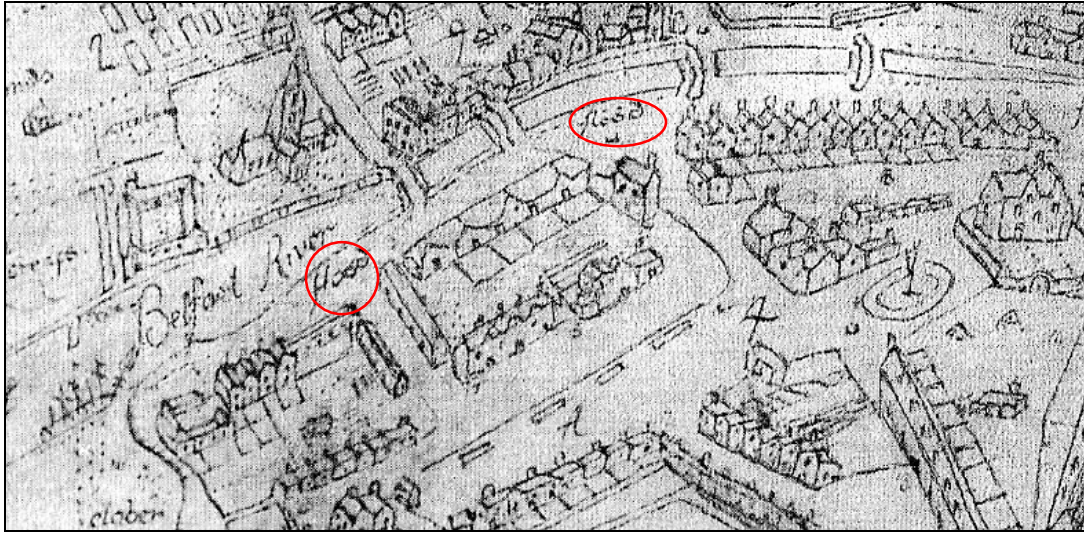


Figure 2.1 – 1696 Map of Belfast with the areas of High Street prone to flooding highlighted.
(Belfast Historic Towns Atlas)

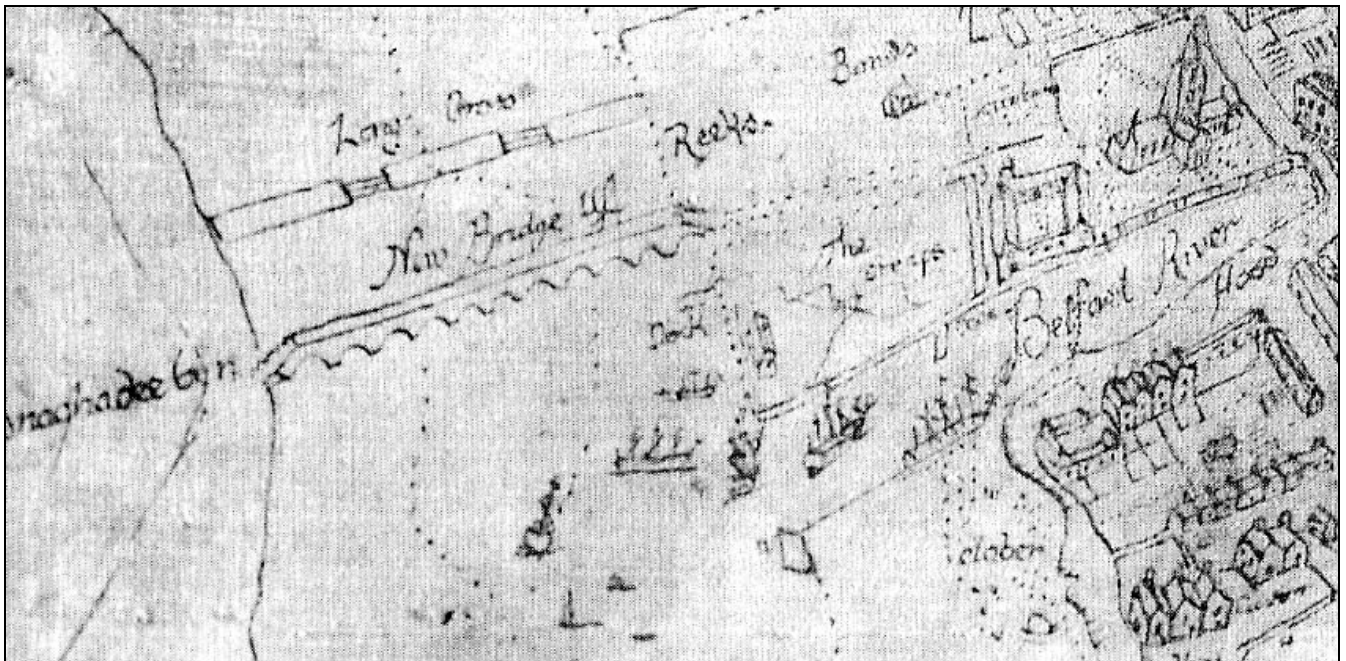


Figure 2.2 - Position of the Long Cross (1696).
(Belfast Historic Towns Atlas)

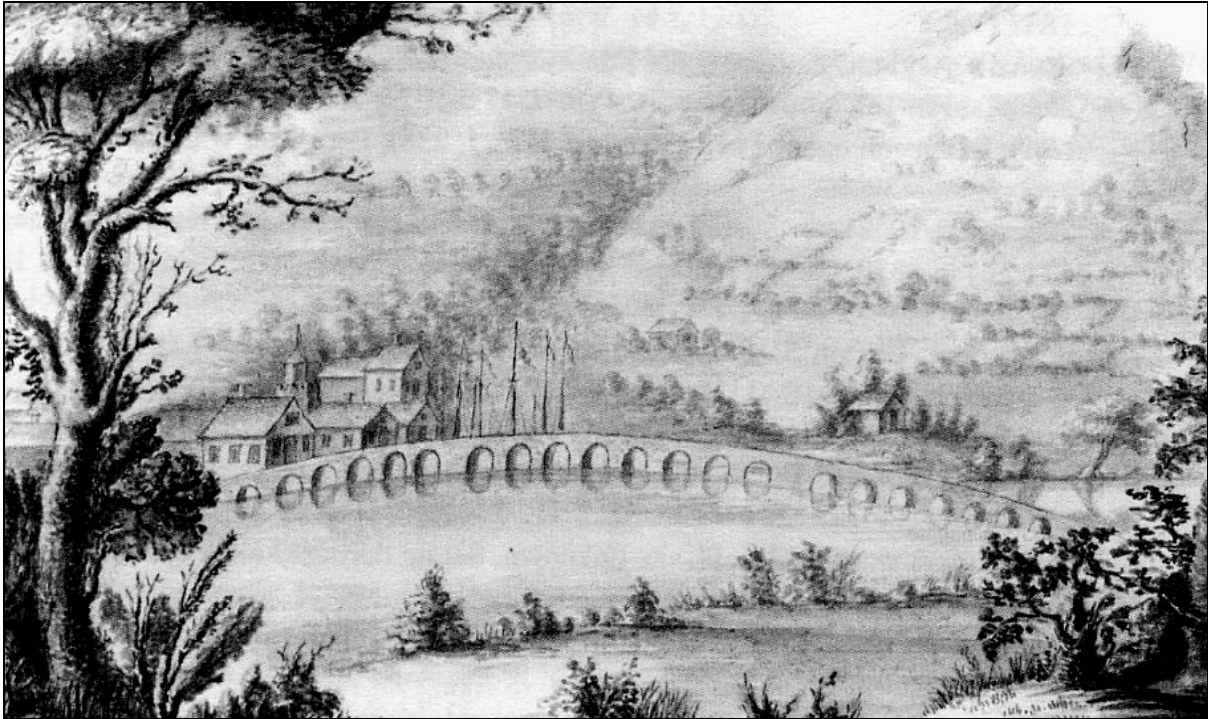


Plate 2.1 – The Long Brige or Cross by Delany, 1755 - supposedly constructed at the ancient 'Ford of the Farset' is visible. (Historic Towns Atlas)



Plate 2.2 – Belfast (looking north) c.1840 by Andrew Nicholl.
The bridge of 21 arches (supposedly constructed at the ancient 'Ford of the Farset') is visible.
(Historic Towns Atlas)

3. **Excavation**

3.1 *Methodology*

3.1.1 Three trenches were opened within the building interior (Figure 3.1) to facilitate the refurbishment programme. Trench One was located on the north side of Ann Street at the rear of the building and measured 4.9 metres (north – south) by 3.2 metres (east – west). Trench Two was located on the High Street frontage of the building and measured 5.2 metres (north – south) by 2.3 m (east – west). Trench Three was situated towards the centre of the building interior and measured 3.4 m (north – south) by 5.7 m (east – west).

3.1.2 Following the removal of the residual hardcore material from within the trenches, each archaeological layer was subsequently excavated by hand. The principal site records consisted of context sheets, augmented by photographs and a drawn record. Individual features were photographed and a series of overall plans (Scale 1:20) were prepared. Section drawings (Scale 1:10) were made within each trench on completion of excavation. For details of site photography see Appendix Three and for details of field illustrations see Appendix Four. In addition, separate registers were kept for small finds (Appendix Five) and samples (Appendix Six). It is recommended that the Harris Matrix for each trench is consulted when reading the account of the excavation (see Appendix Two). The dendrochronological report on the wood samples submitted for dating can be found in Appendix Seven.

3.2 *Account of the Excavation*

The archaeological layers recorded during the course of the excavation can be sequenced into four phases:

- Phase One is represented by the earliest (Medieval) deposits recorded in Trench Two.
- Phase Two represents the bulk of the excavated remains, consisting of Post-Medieval deposits (17th and 18th century in date).
- Phase Three represents deposits dating from the 19th to early 20th centuries.
- Phase Four represents the modern floor levels and later 20th Century works.

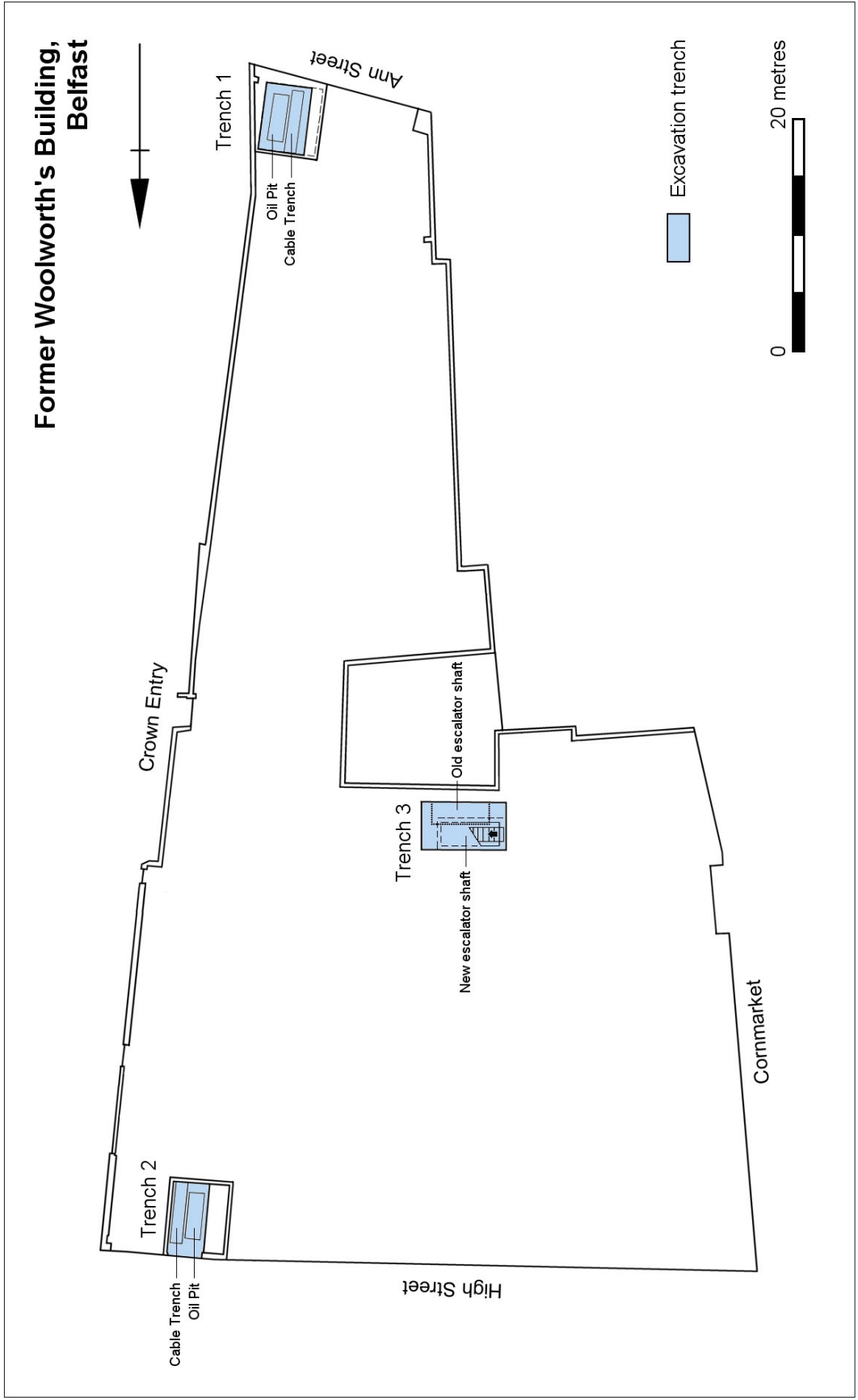


Figure 3.1: Plan of former Woolworth's building with 2003 excavation trenches

The formation depth required by the developer within each of the trenches was 1.6 metres. However, each trench was excavated beneath this level (Trenches One and Two were excavated to approximately 1.8 metres, and Trench Three was excavated, at its deepest point, to 2.4 metres) since archaeological remains that survived beneath the required formation depth would have been destroyed by the building works.

3.3 *Trench One*

3.3.1 Phase Two

Evidence for Phase Two was located towards the south end of Trench One, within the dark greyish blue silty clay *sleetch* (Context 133), which was excavated to a depth of 1.82 metres. A single horizontal timber (Context 126), was set on top of two 'pile' timbers (Contexts 131 and 132: Plate 3.1). Context 126 was subsequently dated to A.D. 1619 +/- 9 (Sample Q10480; Appendix Seven). Other wooden deposits were also located within the *sleetch*; unworked pieces of wood were recorded protruding from the west section (Context 127), and wood fragments - largely decomposed - were also recorded (Context 125). Situated above these deposits was a layer of light greyish blue silty clay (Context 124), that had similarities to *sleetch* clay (Context 133) but was notably cleaner in appearance. A dark brown – black slightly clayey loam, c. 0.20 m in depth, with infrequent charcoal inclusions (Context 120) overlay this clay layer. Fragments of decaying wood were also located within this deposit (Contexts 121, 122 and 123), together with artifacts such as clay-pipe stems and bowls and Post-Medieval pottery sherds (for example, North Devon and Slip Wares). A dark humic layer (Context 105) overlay and was similar in nature to Context 120. This layer was the largest deposit excavated and was some 0.50 m in depth. The artifacts recovered from this deposit were also similar to those found from Context 120, and all dated to the Post-Medieval period (17th and 18th Centuries). Two lenses of a buff, gritty mortar material (Contexts 106 and 114), were situated within Context 105, but were not connected with any cut features.

3.3.2 Phase Three

Situated against the south section and cutting through the dark humic layer (Context 105) was a mortar foundation layer (Context 115; 1.78m east – west, 0.96m north-south), that supported a brick feature (Context 107: Plate 3.2), running in an east – west alignment. This brick feature was contemporary with a

layer of firm gritty mortar (Context 111), also aligned east – west, across Trench One. The brick courses (Context 107) were cut by a roughly square feature (Context 112; 0.89m north – south, by 0.75m east – west), which was filled by a brown – grey loose sandy gravel (Context 113). A foundation trench (Context 109) situated against the east baulk provided the footing for the east wall of the Woolworth's building, and measured 2.14 m (north – south) by 0.71m (east – west). The trench was brick-lined and filled with loose stone and brick rubble (Context 108). This foundation trench for the wall cut through Contexts 105 and 120 (Phase Two archaeological material). Truncated by the mechanical opening of the trench, but visible in the north section face, was a u-shaped cut feature (Context 130) measuring 0.50m in diameter and 0.10m in depth. Concreted metal remains lined the base of the cut (Context 129), with the main fill consisting of a black friable sandy loam (Context 128).

3.3.4 Phase Four

Contexts 101 – 104 comprise the most recent activity over the excavated area. These contexts had been truncated by the mechanical digger during the opening of the area under investigation. Context 103 was a buff-yellow compact mortar layer c. 0.05m in depth, and probably constituted material laid to provide an even floor level, Context 104 was a lens of rubble within Context 103. Two layers were situated above the mortar; a concrete floor (Context 102) and the most recent laminate floor level (Context 101: Figure 3.2).

3.4 *Trench Two*

3.4.1 Phase One

Evidence for Phase One (Medieval) activity was located towards the north (High Street) end of Trench Two. Contexts 219, 220, 222 and 223 (all recorded as black – brown soft humic loams) were situated at the base of a curving gully (Context 218), measuring 2.74m from north to south and, at its widest point, 0.66m from east to west. The gully feature was cut into a natural compact sand (Context 216: Plate 3.3: Figure 3.3), and curved from the north-east to the south-west. Pottery sherds recovered from the clay fill of the gully (Context 221) have been identified as Medieval Everted Rim Ware (Gahan, *pers comm*: Plate 3.4). A layer of dark compact clay (Context 215) was situated above the gully, pottery sherds recovered from this context have also been identified as being Medieval

fragments, one of which does not appear to be a known Irish fabric (Gahan, *pers comm*: Plate 3.5).

3.4.2 Phase Two

A gritty, gravelly loam (Context 210) was situated above the clay (Context 215). Clay-pipe stems and sherds of Post-Medieval pottery were recovered from within this layer. A lens of dark brown humic loam (Context 217) was recorded towards the southern end of the trench, set within the gritty, gravelly loam.

3.4.3 Phase Three

Overlying the gritty, gravelly loam (Context 210), was a brown – buff loose mortar (Context 203), c. 0.33m in depth, that contained several fragments of Post-Medieval pottery, clay-pipe stems and bowls and large quantities of glass. A loose arrangement of bricks was situated within this mortar (Context 207) that was covered by a thin layer of brown – black soft clay (Context 206). Situated towards the southern end of the trench, and to the south of the latter two contexts was a rectangular layer of bricks (Context 208), 0.45m from north to south by 0.50 m from east to west. Both of these features were contemporary with each other and situated within the brown – buff loose mortar layer (Context 203). A cut feature (Context 212: Figure 3.4) was recorded in the southern section, 0.62m in width by 0.92m in depth, and was filled with a buff – yellow firm, gritty mortar (Context 213) that provided the foundation trench for a brick wall. Two separate context numbers were assigned to one feature, Context 202 constituted the western north-south aligned section of the wall, and Context 205 constituted the northern east-west aligned section. Both contexts are likely to represent building activity from the late 19th century. A lens of dark, gritty loam (Context 204), was situated against the east section.

3.4.4 Phase Four

The most recent floor levels within the building were represented by the rubble and hardcore deposits (Context 201) cleared within Trench Two.

3.5 *Trench Three*

3.5.1 Phase One

Although no archaeological features within Trench Three were identified as being Medieval, a fragment of a double-edged bone comb of probable Medieval date was recovered from the disturbed deposit towards the western end of the trench

(Context 308: Plate 3.6). Intact pan-tile 'wasters' that are probably 17th century in date were also recovered from this deposit. The insertion of a metal support pillar and foundations (Contexts 309 and 310) that probably date to the mid 20th century, together with the insertion of an elevator shaft (Context 315) had heavily truncated this part of the trench, with a single dark loam (Context 308) recorded. This deposit contained brick fragments, metal rods and other modern material. Any archaeological features that may have existed in this area had been destroyed by this recent activity.

3.5.2 Phase Two

The basal deposit over the majority of the excavated trench was a firm blue/grey clay *sleetch* (Context 332). A light brown gritty loam (Context 339), and a dark brown/black humic loamy clay (Context 345), were situated above the *sleetch*, Context 345 sealed two large stone walls c. 1m in width, running from north to south and from east to west respectively (Contexts 341 and 342). Located to the immediate east of Context 341, and also sealed by Context 345, was a north – south aligned brick edged gully (Context 344), 1m from north to south and 0.32m from east to west, which was covered by a single horizontal timber (Context 343). The timber was lifted for dendrochronological dating (Sample Q10481; Appendix Seven). However, no sapwood tree rings survived and a precise date could not be obtained, although it is likely that the timber dates to the 17th century (Figure 3.5: Plate 3.7). A further timber fragment (Context 346: Sample Q10482) was recorded to the west and sealed by the north – south aligned wall (Context 341). This timber failed to be dendrochronologically dateable. The loamy clay (Context 345) could not be fully excavated due to health and safety constraints, and the excavation of this deposit halted at a depth of 2.0 metres.

3.5.3 Phase Three

The site as a whole had been extensively redeveloped by the mid 1800's. These later deposits were situated above the dark humic layer (Context 345) and were mainly seen in section (Figure 3.6). Twentieth century works had further removed most of the walls, the surfaces and the details of the construction sequences. Phase Three deposits were typically represented by the presence of brick courses (Contexts 316, 317 and 318), rubble and tumble material (Contexts 319 and 320) and a layer of stone paving slabs (Contexts 327 and 338), laid in gravelly loam and mortar layer (Context 336). A series of fill or leveling deposits were also recorded in the north section (Contexts 319, 324 and 329). However,

most of these layers did not survive intact and Phase Four activity meant a secure archaeological sequence for these later deposits could not be established.

3.5.4 Phase Four

Contexts 301 – 304 comprise the most recent activity over the excavated area, with Contexts 301 (modern tiling) and 302 (concrete hardcore) largely truncated by the mechanical opening of the area during the refurbishment programme. Context 303 was a mortar layer containing brick rubble, while Context 304 was a layer of bricks that could possibly represent an early floor level for the building. The insertion of a lift shaft and the foundation for a support pillar (Contexts 307, 309 to 311, 315 and 321 to 323) had destroyed archaeological deposits over these areas within the trench.

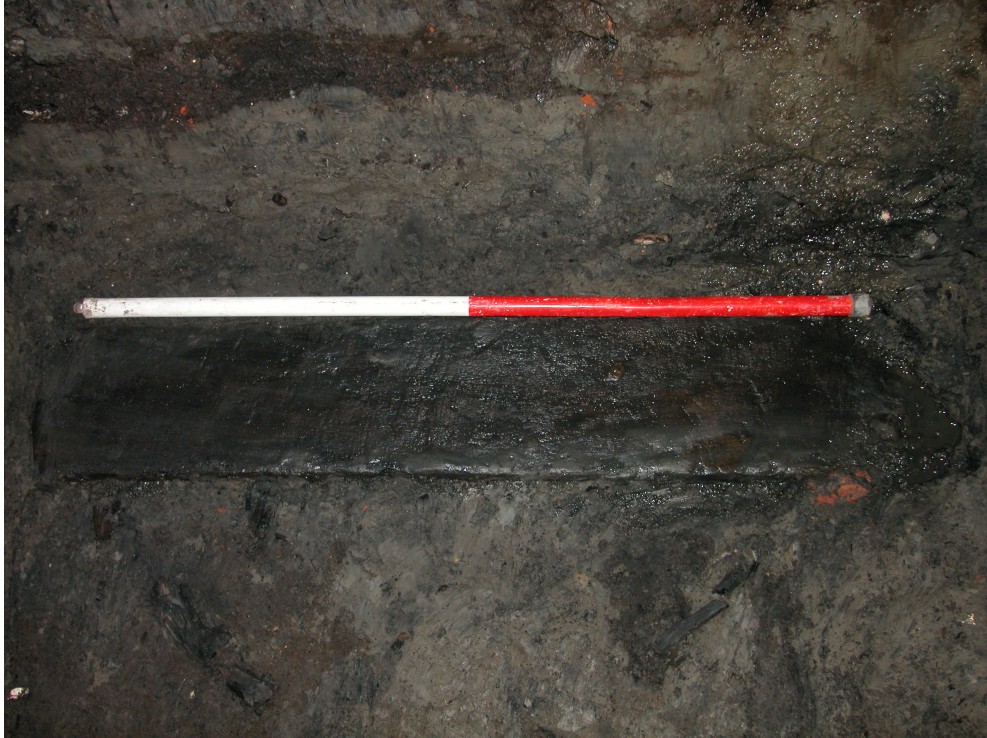


Plate 3.1: Horizontal timber (Context 126: Trench One) *in situ*. (Author)



Plate 3.2: Brick feature (Context 107) at the south (Ann Street) end of Trench One. (Author)

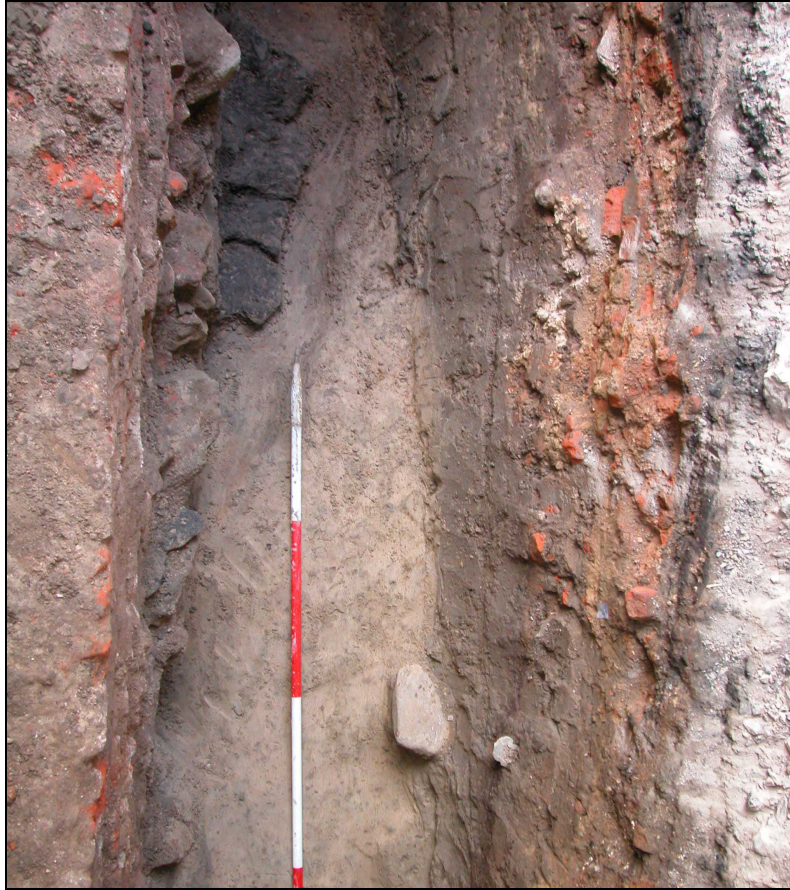


Plate 3.3: Gully (Context 218), and organic base deposits (Contexts 219, 220, 222 and 223) in Trench Two. (Author)



Plate 3.4: Everted Rim Ware recovered from the clay fill (Context 221) of the gully (Context 218) in Trench Two. (Author)



Plate 3.5: Foreign Medieval Ware recovered from Context 215 in Trench Two.
(Author)



Plate 3.6: Bone comb fragment recovered from Context 308 in Trench Three.
(Author)

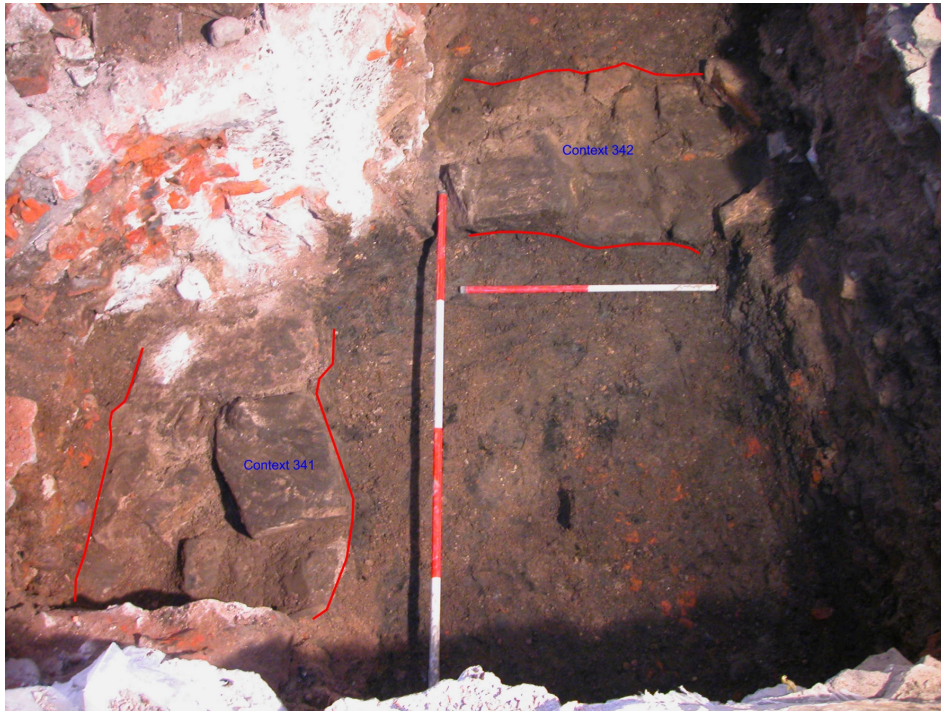


Plate 3.7: Large stone walls (Contexts 341 and 342) from Phase Two in Trench Three.
The red lines have been added to highlight the wall positions.
(Author)



Plate 3.8: Horizontal timber (Context 343) recorded in Trench Three *in situ*.

(Author)

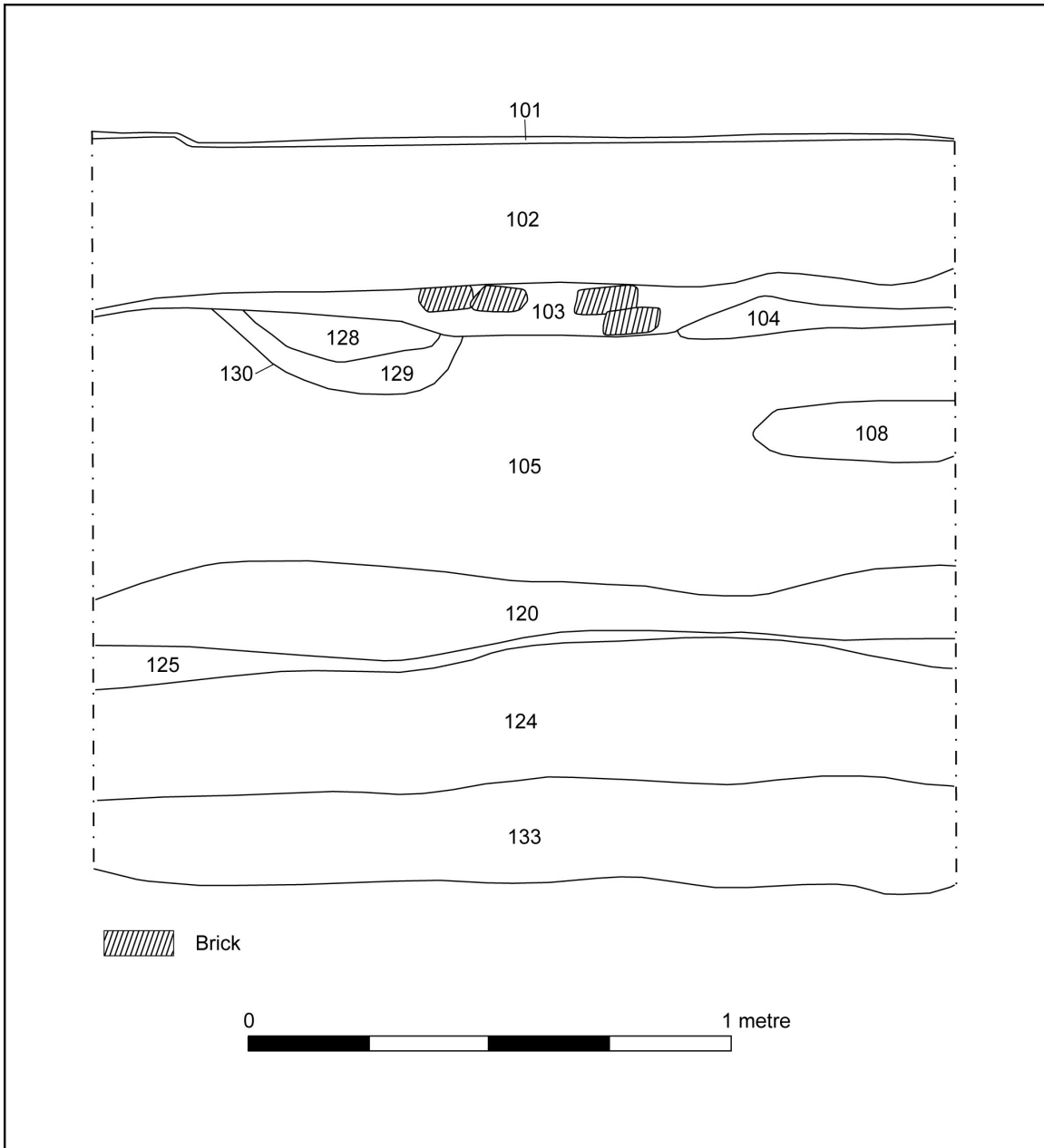


Figure 3.2: North section of Trench 1

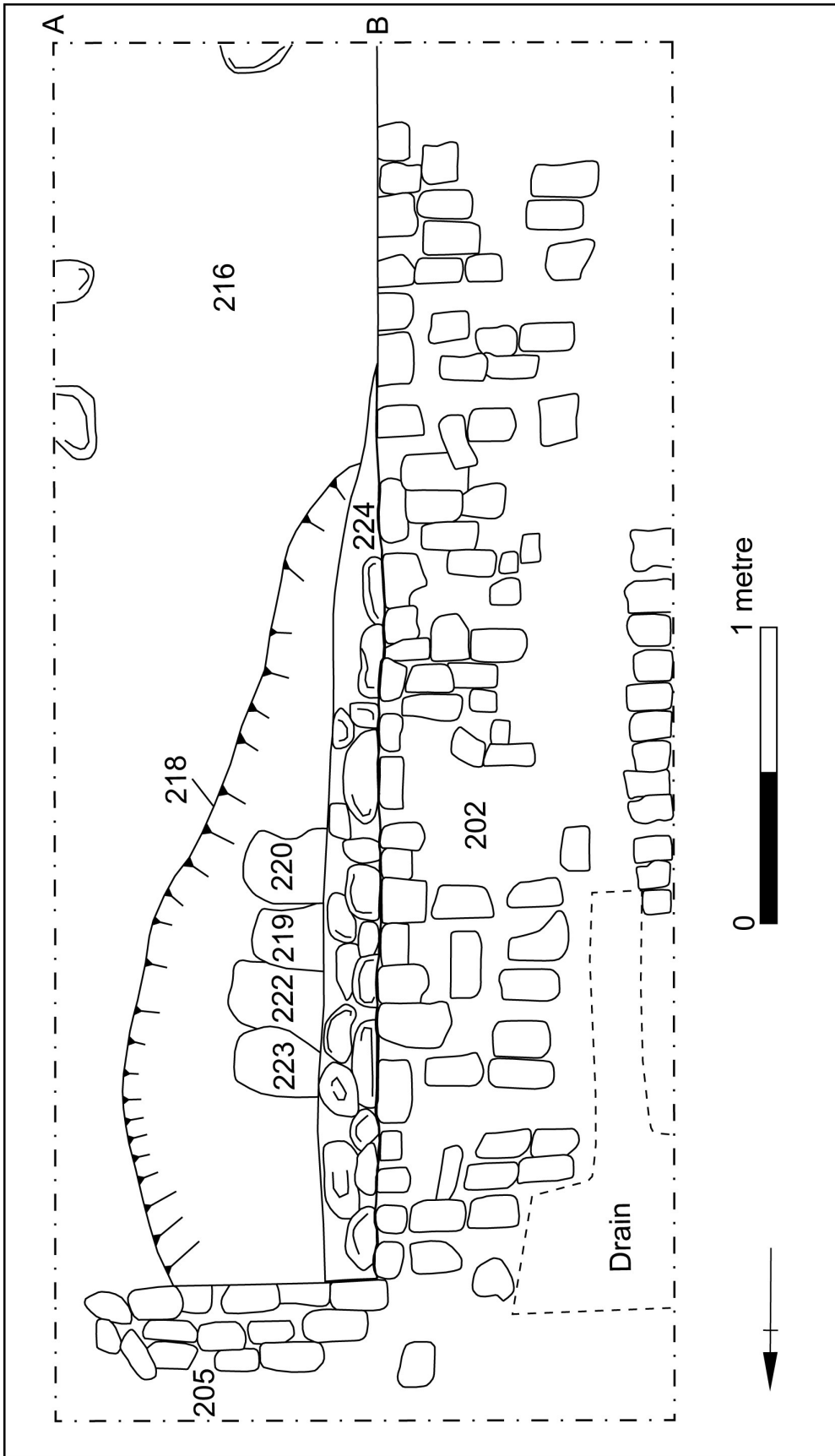


Figure 3.3: Trench 2, plan of gully feature and walls

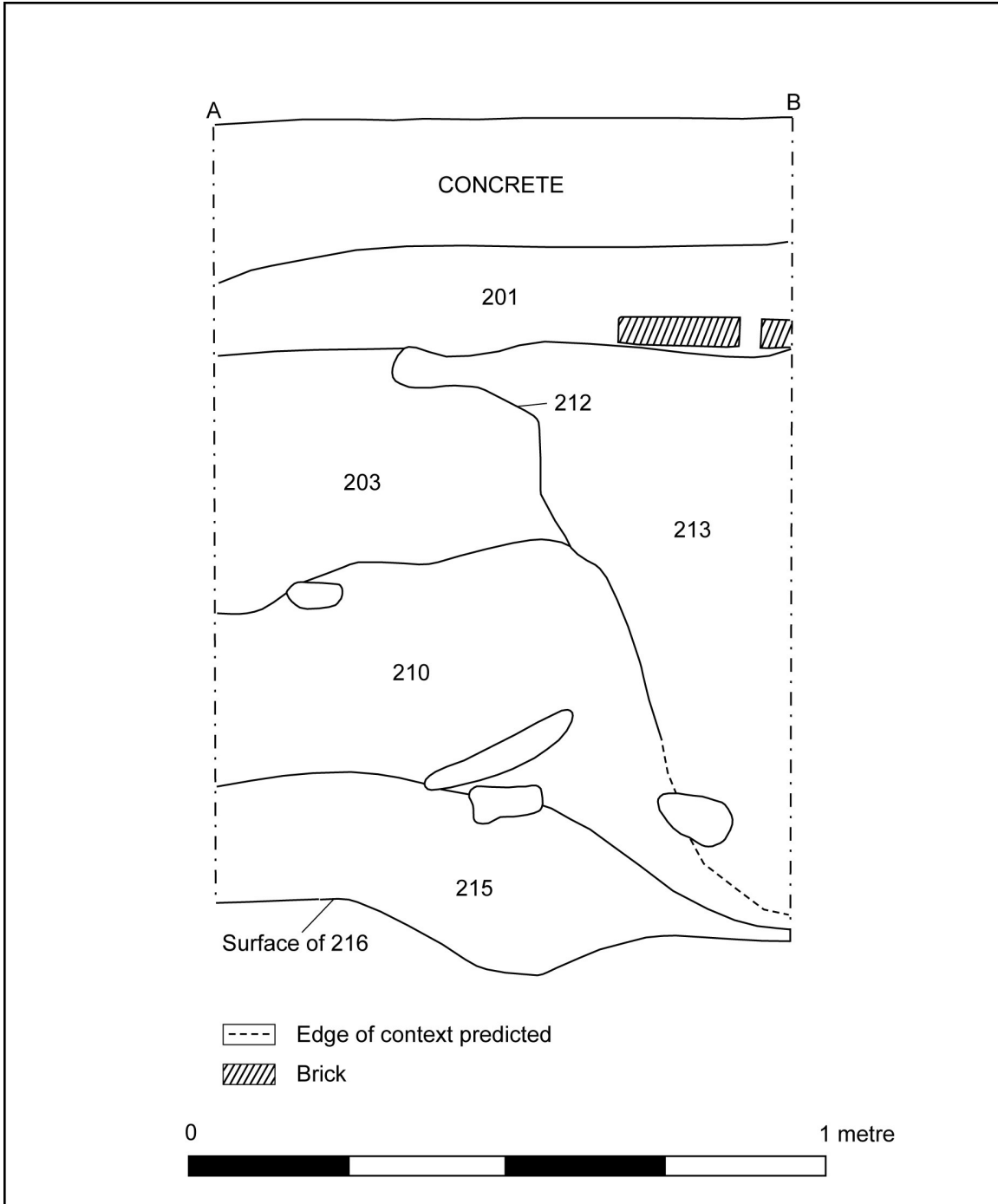


Figure 3.4: South section of Trench 2

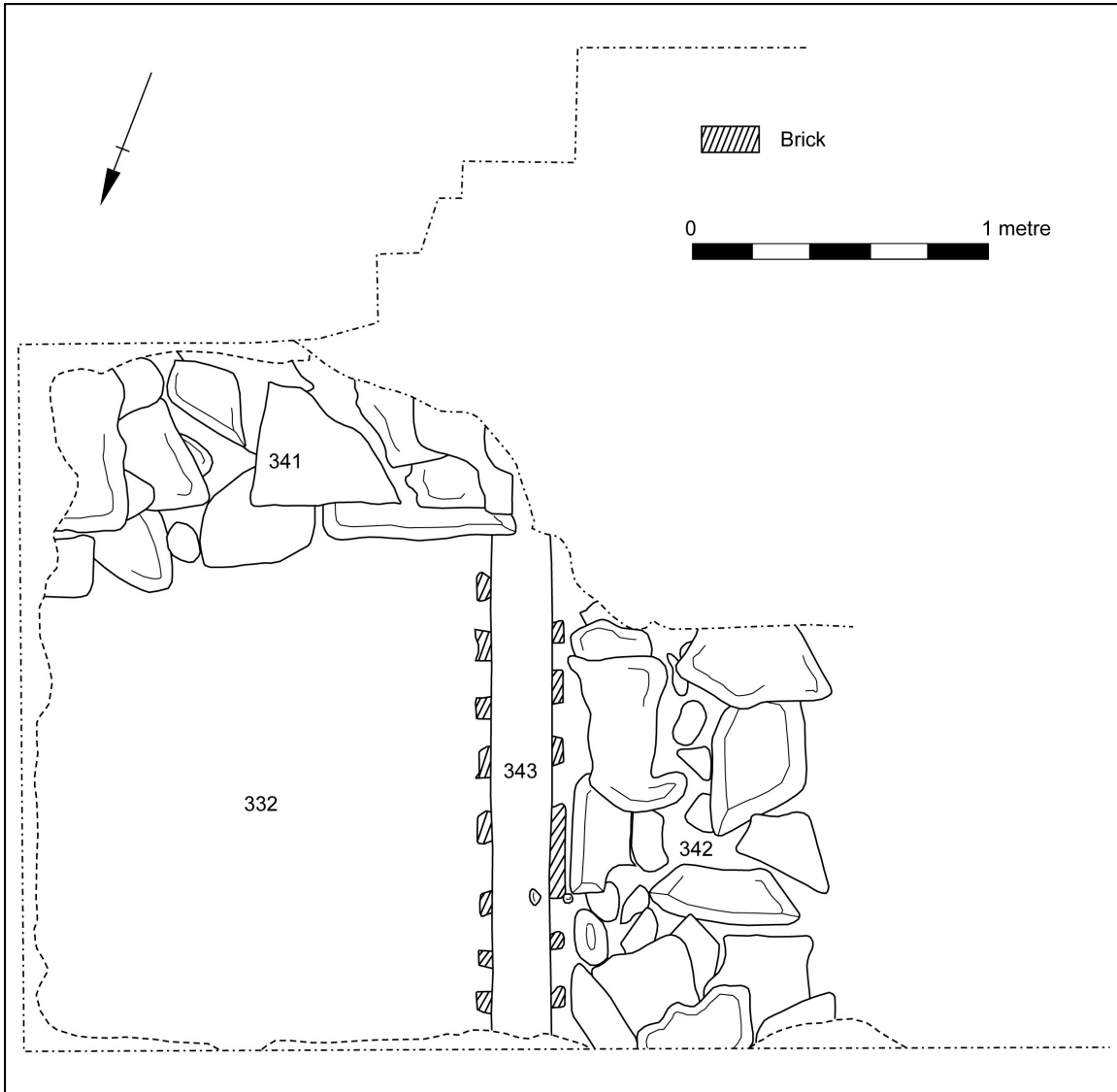


Figure 3.5: Plan of Trench 3

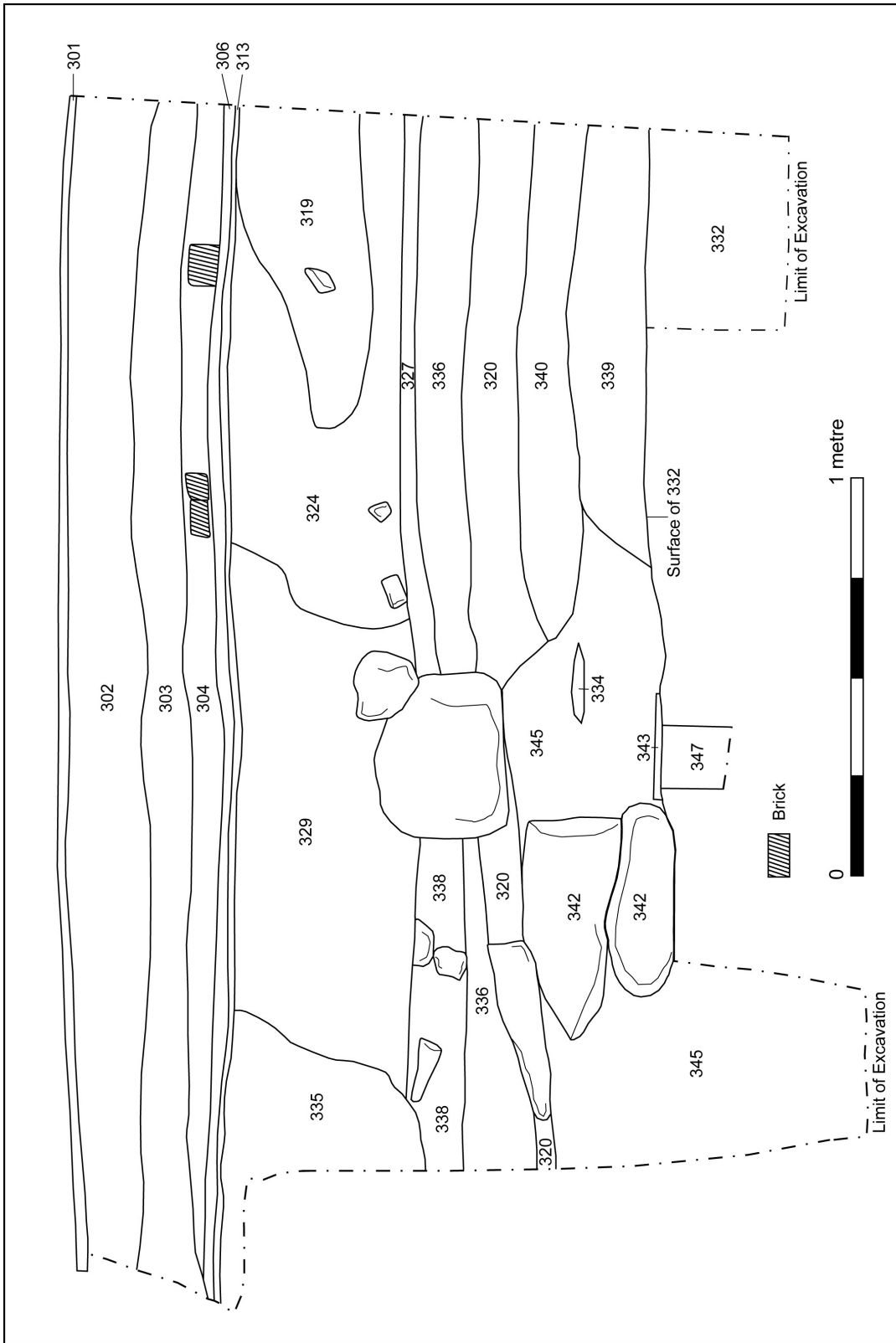


Figure 3.6: North section of Trench 3

4. Discussion

4.1 General

4.1.1 Recent excavations within Belfast's city centre have uncovered a rich collection of Post-Medieval artifacts and archaeological features. The timing of the excavation described in this report has coincided with the publication of the first volume of the Irish Historic Towns Atlas for Belfast (Gillespie and Royle, 2003) and a period of renewed interest in the origins of the city's development. Although the position of each trench within the former Woolworth's building was dictated by the needs of the refurbishment programme, the work undertaken on behalf of Dunne's Stores has been of tremendous interest. Specifically, Trenches One and Two, although relatively small in size, were located within areas of high archaeological potential. Before the excavation outlined in this report, previous archaeological investigations had failed to locate features associated with Medieval activity or settlement within the area. The results obtained in Trench Two, however, would seem to represent physical evidence of the Medieval town.

4.2 Trench One

4.2.1 The dark humic deposits (Contexts 105 and 120) were the first layers encountered beneath the modern floor levels within Trench One. Both deposits contained a large corpus of Post-Medieval artifacts, including a diverse range of pottery sherds, clay-pipe stems and bowls. No archaeological evidence was uncovered within these deposits to suggest any structures or other remains, and it is likely that they both represent dump material or garden soils associated with garden plots that may have been in the immediate vicinity.

4.2.2 The *sleetch* layers towards the base of the trench were completely sterile except for the timbers towards the Ann Street frontage (Contexts 126, 131 and 132). The horizontal beam dated to A.D 1619 +/-9 contained two bore holes (Plate 4.1), but could not have been part of a support or foundation for any substantial structure and it is not a reused ship timber (David Brown, *pers comm.*). It is likely, therefore, that the timber was part of the original early 17th century Ann Street boundary or part of the framed entrance to a plot or building.

4.3 Trench Two

- 4.3.1 Given the position of High Street on what would have been the edges of the estuary, and the use of waterways in both Medieval and Post-Medieval trade, it is likely that some of the earliest evidence of any organised Medieval or 17th century town would be located here. The two substantial walls recorded (Contexts 202 and 205), together with the foundation trench cut for one of the walls (Context 212), are probably 19th century in date, given the archaeological features and artifacts recorded further down the stratigraphic sequence. It is unfortunate, however, that these walls had destroyed much of the earlier archaeological layers in the trench. A substantial deposit of gritty loam (Context 210) contained a large corpus of Post-Medieval pottery and clay pipe stems and bowls similar to those recorded in Trench One. The interpretation made for Contexts 105 and 120 as dump levels or garden soils is also applicable when interpreting the nature of Context 210.
- 4.3.2 The subsoil deposit recorded in Trench Two differed from that excavated in the other trenches; it comprised a very compact sand (Context 216), probably derived from the position that High Street would have occupied within the estuarine environment. A gully curving from the north-east to the south-west cut through this deposit. Two of the pot sherds associated with the clay fill have been identified as Medieval Everted Rim Ware (Gahan, *pers comm.*). A further sherd has been interpreted as Medieval in date, although is unlikely to be an Irish ware (Gahan, *pers comm*). The series of organic deposits at the base of the gully are likely to represent waste or midden material, although given the proximity of the river, a single flooding event could have deposited this organic matter (Contexts 219, 220, 222 and 223). It is reasonable to state, however, that the cut feature is Medieval in date, although interpretation to its function is difficult; it could have been a structural feature or perhaps it was part of a property division.
- ### 4.4 Trench Three
- 4.4.1 A dark humic deposit (Context 345), together with a light brown gritty loam (Context 339), were the first significant deposits encountered within the undisturbed area of Trench Three. Similar in nature to Contexts 105 and 120, Context 345 is likely to represent either garden soil or dumped material. However, recovered from the heavily disturbed western end of Trench Three

(Context 308) were intact and broken pan-tile wasters, and a fragment of a double sided bone comb. The comb is probably medieval in date, with the pan-tile wasters dating to the 17th century. It is reasonable to suggest that tile manufacture was taking place on or near the site. The two large stone walls (Contexts 341 and 342) were fairly crude in construction, and coupled with the collection of Post-Medieval pot sherds, it is likely that the walls formed part of a quite substantial structure, although there were no discernible floor layers associated with the walls. The drain and covering timber are likely to be either contemporary or, more probable, slightly later than the walls.

4.5 *General*

- 4.5.1 It is unfortunate that a larger area could not have been archaeologically examined during the excavation, and that the areas investigated were so heavily disturbed; a larger scale programme of work would undoubtedly have added further to our understanding of the early origins of Belfast. However, the results outlined in this report provide evidence not only of the more well documented Post-Medieval development of Belfast in the early 17th century, but – perhaps more significantly – also of deposits, features and artifacts that hint at the nature of the Medieval settlement that existed at this location prior to the Plantation.



Plate 4.1: Two holes towards the west end of the horizontal timber (Context 126: Trench One).
25 cm Scale.
(Author)

5. Recommendations for further work

5.1 There are several areas that have been identified as requiring further work in order to bring the report on the excavations within the former Woolworth's building to completion.

- Analysis of organic deposits (Contexts 219, 220, 222 and 223) that were situated at the base of the gully (Context 218) in Trench Two could reveal environmental information about the conditions of the site beside the Farset. Initial inspection of these deposits by Prof Mike Ballie, Prof Valerie Hall and Mr David Brown (Queen's University Belfast), has suggested that a C14 radiocarbon date could be obtained from these samples.
- Given the large variation in type and date for the corpus of pottery fragments recovered during the course of the excavation, analysis and cataloguing of the collection would augment the information contained within the final publication.
- A large collection of clay-pipe stems and bowls were recovered during the course of the excavation. Examination of the artifacts would produce an interesting study of date, type and manufacture of these often ignored artifacts.

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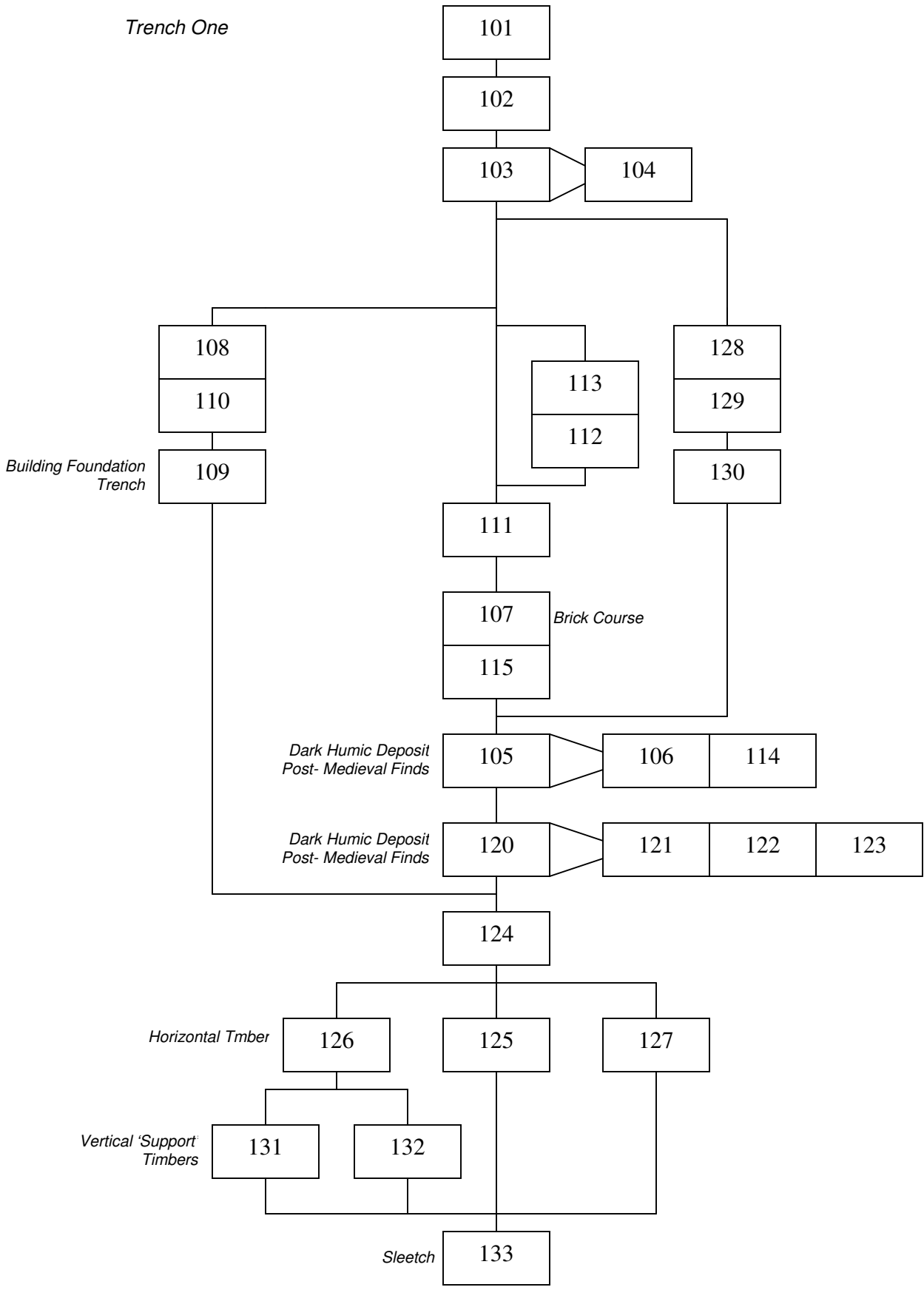
Vinycomb, J., 1902: *Belfast and adjacent Counties*. British Association. Linenhall Press, Belfast.

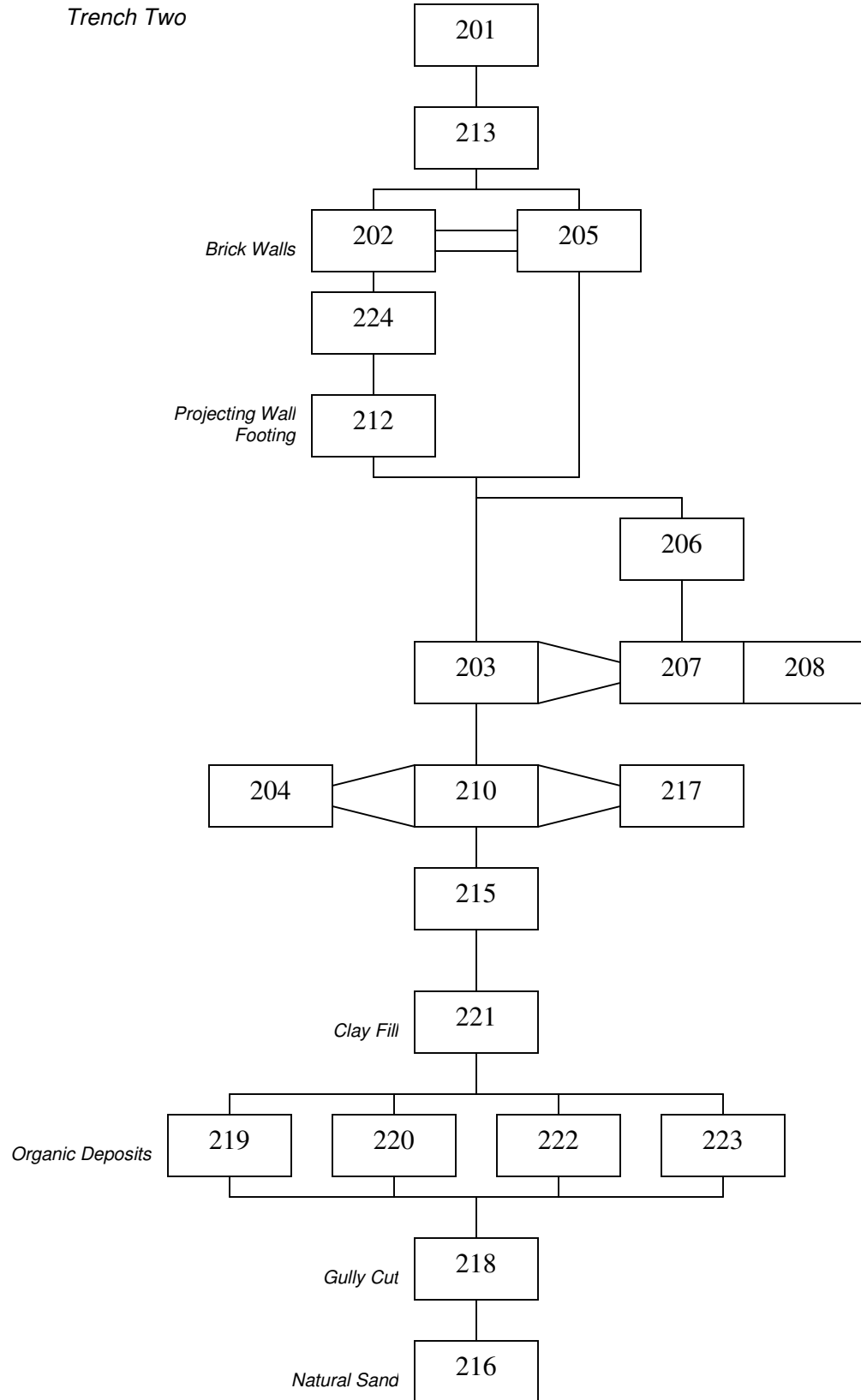
APPENDIX ONE: Context Register

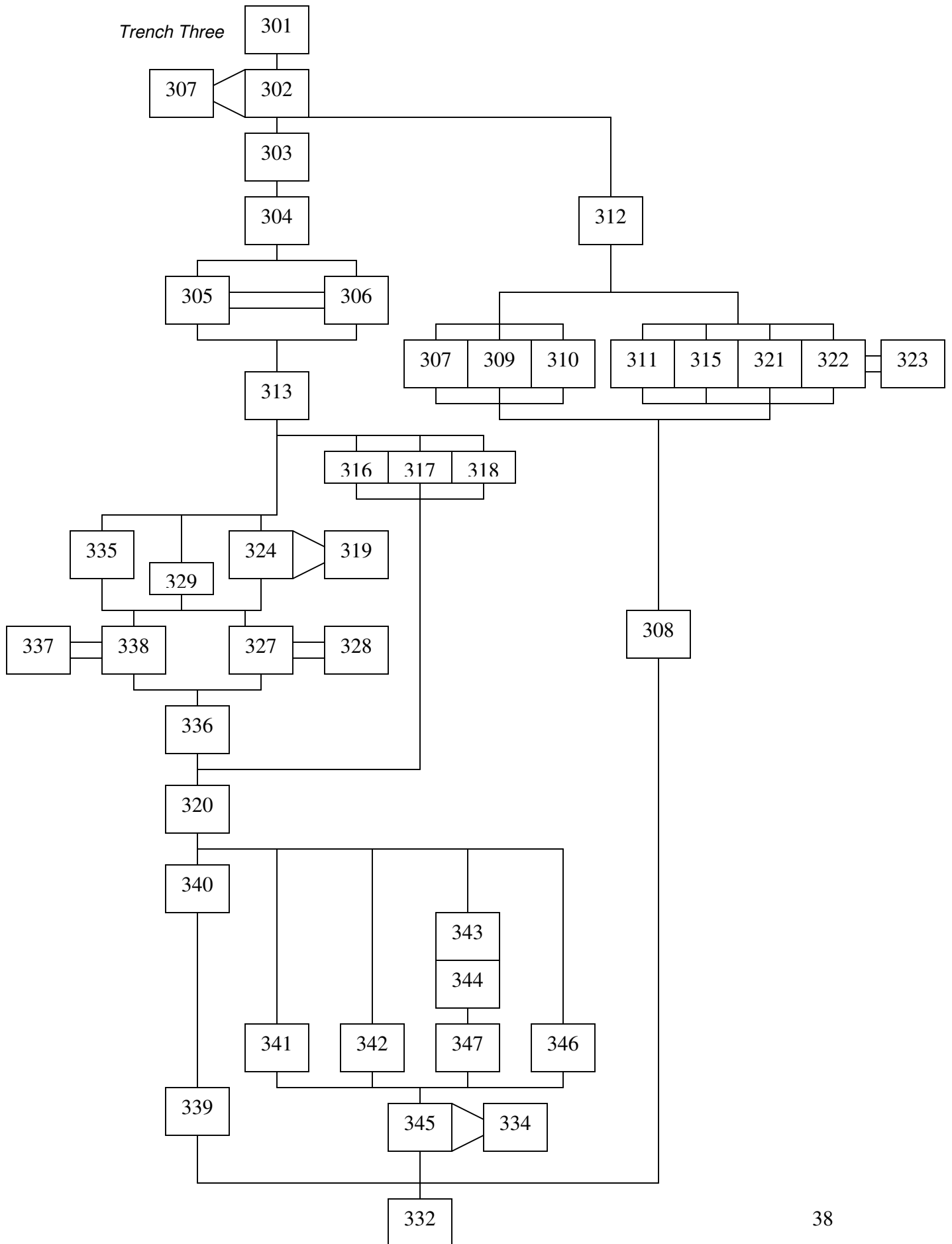
Context No.	Trench	Context Type	Description
101	1	Layer	Tiled modern floor surface
102	1	Layer	Concrete hardcore or foundation for modern floor (101)
103	1	Layer	Compact mortar, yellow buff in colour
104	1	Layer	Red brick layer in west section of trench
105	1	Layer	Dark brown to black gritty loam, appears organic
106	1	Layer	Buff to greyish brown rubbly loam
107	1	Layer	Red brick feature
108	1	Layer	Browny red crushed rubble
109	1	Cut	Cut feature foundation
110	1	Fill	Fill of cut 109
111	1	Layer	Greyish (red) mud brown gritty/ sandy loam
112	1	Cut	Roughly square cut feature towards south west corner of trench
113	1	Fill	Brown grey sandy gravel, loose
114	1	Layer	Greyish brown loamy grit
115	1	Layer	Buff brown mortar
116			<i>Deleted</i>
117			<i>Deleted</i>
118			<i>Deleted</i>
119			<i>Deleted</i>
120	1	Layer	Dark brown/ black, mottled with blue, clay loam
121	1	Layer	Browny black organic rich loam
122	1	Layer	Brown black organic rich loam with wooden fragments within
123	1	Layer	Browny black organic rich loam with wooden remains
124	1	Layer	Greyish blue, slightly gritty (?estuarine clay)
125	1	Layer	Light to mid brown decaying wood/ loam
126	1	Wood	Single timber lying E-W towards southern end of trench
127	1	Wood	Slightly black brown piece of wood, possibly driftwood
128	1	Fill	Black sandy loam
129	1	Fill	Orange to tan brown corroded metal
130	1	Cut	Bowl like cut visible in section
131	1	?Wooden pile	Dark brown to black wood or upright timber
132	1	Wooden pile	Horizontal wooden timber
133	1	Layer	Dark, slightly blackish grey, silty sandy clay
201	2	Layer	Loose rubble material- residual hardcore from initial cutting of trench
202	2	Feature	Course of bricks running N-S, possibly set into mortar layer 203
203	2	Layer	Brown-buff loose mortar
204	2	Feature	Dark brown/ black gritty spread in eastern area of trench 2
205	2	Masonry	Brick and mortar running E-W at right angles to 202
206	2	Lens	Browny/ black loamy clay
207	2	Feature	Mixture of small, roughly square bricks, towards east baulk of trench 2, partly covered by 206
208	2	Feature	Orange terracotta brick built rectangular feature
209	2		<i>Deleted</i>
210	2	Layer	Gritty, gravel loam
211			<i>Deleted</i>
212	2	Cut	Foundation cut for walls (Contexts 202 and 205)
213	2	Fill	Buff-yellow firm gritty mortar
214			<i>Deleted</i>
215	2	Layer	Dark compact clay
216	2		Natural Sand
217	2	Lens	Dark humic loam
218	2	Cut	Gully cut
219	2	Deposit	<i>Organic deposit at base of gully feature</i>
220	2	Deposit	<i>Organic deposit at base of gully feature</i>
221	2	Fill	Clay fill of gully cut (Context 218)
222	2	Deposit	<i>Organic deposit at base of gully feature</i>
223	2	Deposit	<i>Organic deposit at base of gully feature</i>
220	2	Deposit	<i>Organic deposit at base of gully feature</i>
221	2	Fill	Clay fill of gully cut (Context 218)
222	2	Deposit	<i>Organic deposit at base of gully feature</i>
223	2	Deposit	<i>Organic deposit at base of gully feature</i>
224	2	Feature	Projecting footing for C. 202

Context No.	Trench	Context Type	Description
301	3	Layer	Modern tiled floor
302	3	Layer	Concrete
303	3	Layer	Mortar layer with brick inclusions
304	3	Layer	Brick layer
305	3	Layer	Flagstones
306	3	Layer	Damaged and cracked flagstones- 'Beggar's Walk'
307	3	Layer	Concrete deposit with small stones
308	3	Layer	Dark brown sandy/ gritty loam
309	3	Layer	Concrete layer, grey in colour, with small stone inclusions
310	3	Layer	Concrete level base for pillar support
311	3	Layer	Concrete edge lining original escalator shaft
312	3	Layer	Red brick wall running E-W across western half of trench
313	3	Layer	Tan/ brown/ orange, sandy/ gritty loam with mortar inclusions
314	3	Feature	Reddish brown timber
315	3	Layer	Grey concrete
316	3	Layer	Brick layer
317	3	Feature	Red brick wall running E-W
318	3	Feature	Red brick wall running E-W parallel to 317 and 314
319	3	Feature	Red brick wall tumble (same as 320)
320	3	Feature	Red brick wall tumble (same as 319)
321	3	Feature	Brick wall, almost parallel to 317 and 318
322	3	Feature	Brick feature running N-S at west end of 318
323	3	Feature	Brick layer lying at north of 318
324	3	Layer	Mid to dark brown sandy loam
325	3	Feature	Timber
326	3	Feature	Red brick lying underneath timber 325
327	3	Layer	Dark brown/ black paving slabs
328	3	Layer	Large stones/ slabs, roughly shaped
329	3	Layer	Tan brown to greyish sandy gravel
330	3	Layer	Grey concrete
331	3	Timber	Wet, thin rectangular timber
332	3	Layer	Blue/ grey clay
333	3	Layer	White/ grey concrete
334	3	Layer	Mid brown sandy loam
335	3	Layer	Dark brown/ black silty clay loam
336	3	Layer	Grey mortar
337	3	Feature	Slates laid horizontally in mortar
338	3	Feature	Roughly paved or leveled feature
339	3	Layer	Dark brown clay loam
340	3	Layer	Blue/ grey sandy clay
341	3	Feature	Stone wall
342	3	Feature	Stone wall
343	3	Feature	Timber, bowed in center
344	3	Feature	Brick feature underlying context 343
345	3	Layer	Dark brown/ black, slightly loamy clay
346	3	Feature	Wooden timber lying roughly N-S within context 345

APPENDIX TWO: Harris Matrix







APPENDIX THREE: Photographic Log
Fuji Film Fine Pix 4700 Zoom

CD One

Photograph No.	Trench	Description
1	1	Trench One after initial cleaning, excavation had not commenced
2	1	As above – looking east
3	1	As above – looking south
4	1	South end of trench with C.107 starting to be exposed
5	1	North section showing layers truncated by mechanical machinery
6	1	As above
7	1	C.107 after initial cleaning (south end of Trench) looking east
8	1	As above – looking west
9	1	As above – looking north
10	1	As above – looking south
11	1	C.105 (view of whole trench) looking south
12	1	As above – looking north
13	1	South end of trench after removal of C.112, Contexts 107 and 115 visible
14	1	Excavation of C.109 to against east baulk
15	1	North section after excavation into C.105
16	1	Looking north after excavation of C.105 (coming down onto C.120)
17	1	As above – looking east
18	1	As above – looking west
19	1	As above – looking south
20	1	Removal of C.107 down onto mortar layer C.115
21	1	Removal of C.120
22	1	As above
23	1	Removal of C.120 down onto C.124
24	1	As above – looking south
25	1	As above
26	1	Pot sherd recovered from C.120
27	1	As above
28	1	As above – section view
29	1	Looking north C.124 – box section against north baulk
30	1	As above
31	1	As above – looking east

CD Two

Photograph No.	Trench	Description
32	1	North section (fully excavated: with box section)
33	1	As above
34	1	Looking north – showing 'T' box section
35	1	As above
36	1	West section
37	1	As above
38	1	East section
39	1	As above
40	1	C.126 <i>in situ</i> looking south
41	1	As above
42	1	C.126 <i>in situ</i> aerial view looking north
43	1	As above
44	1	View of worked west end of timber
45	1	As above
46	1	Close-up view of timber
47	1	C.217 – wood fragment jutting from east section
48	1	C.131 <i>in situ</i>
49	1	C.132 <i>in situ</i>
50	1	Fully excavated trench looking north
51	1	Fully excavated trench looking south
52	1	East section

CD Three

Photograph No.	Trench	Description
53	2	Looking south after initial trowelling (C.202 and 205 visible)
54	2	As above looking east
55	2	Looking east showing C.203, 206, 207, 208
59	2	Looking south showing C202 and 203
57	-	Mosaic tile feature underneath position of new shop front window(s)
58	-	As above
59	2	Initial cleaned surface of C.215 (also showing C.202 and C.205)
60	2	As above – looking east
61	2	Cleaned surface of C.216 also showing C.221 looking east
62	2	As above also showing C.202 and C.205 (looking east)
63	2	Initial removal of C.221 showing exposed C.218
64	2	As above also showing C.219 and C.220
65	2	As above looking east
66	2	Close-up of C.219 and 220 (25cm scale)
67	2	Complete removal of C.221 showing C.216, 218, 219, 220, 222 and 223
68	2	As above – looking east
69	2	As above – looking south
70	2	Close-up of organic deposits C.219, 220, 222 and 223
71	2	As above – looking south
72	2	As above – looking east
73	2	C.218 after removal of organic deposits
74	2	As above looking east
75	2	Completely excavated Tr.2 showing C.202, 205, 216 and 218
76	2	As above – looking east
77	2	South section showing C.201, 203, 210, 212, 213 and 215
78	2	North section showing C.205 and base of C.218
79	2	West section showing C.202 and 224
80	3	Initial view of C.306 after mechanical opening of trench
81	3	As above – looking west
82	3	Initial cleaned Tr. 3 showing C.329, 324 and disturbed W. end
83	3	As above – looking east
84	3	Initial cleaned surface of C.217 and 338
85	3	Removal of C.327 and 338
86	3	Mortar layer C.336
87	3	C.341 (looking south)
88	3	C.342 (looking west)
89	3	C.341 and 342 looking west (also showing 345)
90	3	As above – looking south
91	3	Box section at east end of trench into C.332
92	3	As above also showing east section face
93	3	Removal of first course of C.341 and 342
94	3	C.342 and 343 looking east (also showing C.345 and 332)
95	3	Close up of C.343
96	3	Removal of C.343 showing drain cut C.347 and C.344
97	3	As above with 25cm scale
98	3	Tr.3 looking west with C.341 and 342 removed
99	3	Disturbed west end of trench C.308
100	3	Excavated Tr.3 showing subsoil C.332
101	3	As above – looking west
102	3	As above – looking north
103	3	North section showing Contexts 301, 302, 303, 304, 306, 313, 319, 320, 324, 329, 332, 335, 336, 338, 339, 340, 342, 343, 345 and 347
104	3	South section showing brick courses 316 and 317
105	3	Stone that possibly has a red plaster or other surface on one side?
106	3	Close-up of timber fragment C.346

APPENDIX FOUR: Drawing Register

Drawing No.	Trench	Scale	Plan/Section	Contexts	Direction	Description
1	1	1:20	Plan	105;106;107;112;113;114;116	N/a	Plan of features 107, 112 and 113
2	1	1:20	Plan	115;125	N/a	Plan of feature 125, baulk and 115
3	1	1:20	Plan	126;127	N/a	Plan of trench 1 after removal of context 120, at south end of trench (Ann Street). Also profile
4	1	1:20	Plan	127	N/a	Plan of trench 1 after removal of context 126 (wooden timber)
5	1	1:10	Section	101;102;103;105;108;120;124;125;133	South	Section drawing of south facing north wall
6	1	1:10	Section	105;106;107;117;120;124;125;133	North	Section drawing of north facing south wall
7	1	1:10	Section	101;102;103;105;106;120;124;125;133	East	Section drawing of east facing west wall
8	1	1:10	Section	101;102;103;105;120;124;125;133	West	Section drawing of west facing east wall, part 1
9	1	1:10	Section	101;102;103;105;120;124;125;126;133	West	Section drawing of west facing east wall, part 2
10	3	1:20	Plan		N/a	Plan of entire trench
11	3	1:20	Plan		N/a	Plan of western end of trench 3
12	3	1:20	Plan		N/a	Plan of eastern end of trench 3
13	3	1:20	Plan	308;310;315;331;332;333	N/a	Plan of trench 3, showing timber 331
14	3	1:20	Plan		N/a	Plan of eastern end of trench 3
15	3	1:20	Plan		N/a	Plan of trench 3
16	3	1:20	Plan	346	N/a	Plan of trench 3 showing timber 346
17	3	1:20	Plan		N/a	Plan showing trench 3 after drain exposed
18	3	1:10	Section	301;302;303;304;306;307;308;309;313;320;323;329;332;338;339;340;342;345;347	South	Section drawing of south facing north wall
19	2	1:20	Plan	202; 203; 205	N/a	Plan showing exposed area of 206
20	2	1:20	Plan	202; 205; 208; 209; 210; 212	N/a	Plan of trench showing rectangular brick structure 208
21	2	1:20	Plan	202;205;216;218;219;220;222;223	N/a	Plan of trench post excavation
22	2	1:10	Section	Concrete; 201;203;210;212;213;215;	North	Section drawing of north facing south wall
23	2	1:10	Section		South	Section drawing of south facing north wall
24	2	1:10	Section		East	Section drawing of east facing west wall
25	2	1:10	Section	Concrete; 201;203;208;209;210;215;216;221	West	Section drawing of west facing east wall

APPENDIX FIVE: Small Finds Register
Trench One

Trench	Context	Type	No. Of Bags	No. Of Finds	Comments
1	N/a	Animal Bone	1	2	From initial monitoring of trench
1	101	Glass	1	21	From clearing of section edge
1	105	Animal Bone	7	208	
1	105	Brick	1	1	
1	105	Burnt Bone	1	2	
1	105	Ceramic	6	77	Possible Medieval sherd
1	105	Clay Pipe	5	261	
1	105	Flint	2	9	
1	105	Glass	5	82	Including bottle top and stopper
1	105	Metal	5	13	Sewing pin
1	105	Misc.	1	1	Muskett shot
1	105	Shell	2	64	
1	106	Animal Bone	2	4	
1	106	Ceramic	3	6	
1	106	Clay Pipe	2	3	
1	106	Glass	3	8	
1	106	Metal	1	1	
1	108	Ceramic	1	1	
1	108	Glass	1	1	
1	111	Animal Bone	1	3	
1	111	Ceramic	1	4	
1	111	Glass	1	1	
1	116	Glass	1	6	
1	118	Brick	2	2	
1	118	Glass	1	4	
1	118	Shell	1	1	
1	120	Animal Bone	8	104	
1	120	Burnt Bone	1	1	
1	120	Ceramic	5	18	Possible Medieval sherds
1	120	Clay Pipe	2	48	
1	120	Flint	1	1	
1	120	Glass	3	9	
1	120	Metal	3	5	Metal ring and possible slag
1	120	Shell	4	24	
1	123	Animal Bone	1	3	
1	123	Clay Pipe	1	1	
1	123	Glass	1	1	
1	123	Shell	1	1	
1	124	Animal Bone	2	13	
1	124	Brick	2	7	?Tool marks
1	124	Burnt Bone	1	1	?With decoration
1	124	Ceramic	1	2	
1	124	Clay Pipe	1	2	
1	124	Fabric	1	1	
1	124	Glass	1	1	
1	124	Shell	1	6	
1	125	Animal Bone	1	5	
1	125	Ceramic	1	2	
1	133	Animal Bone	2	4	
1	133	Shell	1	5	

Trench Two

Trench	Context	Type	No. Of Bags	No. Of Finds	Comments
2	203	Animal Bone	5	91	2 with green staining
2	203	Ceramic	4	27	2 pieces of same vessel
2	203	Clay Pipe	4	39	2 stems decorated with swirl pattern
2	203	Glass	10	171	
2	203	Shell	4	12	
2	203	Tile	1	2	?Roofing tile
2	206	Animal Bone	1	34	Rodent (?rat) skull
2	206	Ceramic	1	1	
2	206	Clay Pipe	1	9	
2	206	Glass	2	212	
2	207	Animal Bone	2	209	
2	207	Ceramic	1	2	
2	207	Clay Pipe	1	3	Including 1 crudely made stem
2	207	Glass	1	2	
2	207	Shell	1	4	
2	208	Animal Bone	1	21	Rodent skull and crab claw
2	208	Clay Pipe	1	1	
2	208	Shell	1	2	
2	210	Animal Bone	2	21	
2	210	Ceramic	1	5	
2	210	Clay Pipe	1	3	
2	210	Glass	2	14	
2	210	Shell	2	2	
2	210	Tile	1	1	
2	212	Animal Bone	2	57	
2	212	Ceramic	2	2	
2	212	Clay Pipe	2	5	
2	212	Glass	2	5	
2	212	Shell	1	4	Crab claw
2	213	Animal Bone	1	4	
2	213	Ceramic	1	1	
2	213	Clay Pipe	1	4	
2	213	Glass	1	14	
2	213	Shell	1	1	
2	214	Animal Bone	2	6	
2	214	Glass	2	5	
2	215	Animal Bone	2	9	
2	215	Ceramic	2	2	
2	215	Clay Pipe	1	1	
2	215	Glass	1	3	
2	216	Animal Bone	1	8	
2	216	Glass	1	3	
2	217	Animal Bone	2	5	
2	217	Ceramic	1	4	
2	217	Glass	2	2	
2	217	Shell	1	1	
2	218	Animal Bone	1	1	
2	218	Glass	1	21	
2	218	Shell	1	2	

Trench Three

Trench	Context	Type	No. Of Bags	No. Of Finds	Comments
3	307	Animal Bone	3	35	Fragment of bone comb
3	307	Ceramic	2	28	
3	307	Clay Pipe	1	9	
3	307	Glass	1	9	?Decorated sherds
3	307	Metal	2	23	
3	307	Roofing Slate	5	11	One with metal pin
3	307	Shell	1	27	
3	308	Animal Bone	3	50	
3	308	Ceramic	3	43	One bag from disturbed context
3	308	Clay Pipe	2	25	
3	308	Glass	3	24	One sherd from disturbed context
3	308	Metal	3	9	
3	308	Misc.	1	1	?Plastic
3	308	Roofing Slate	1	1	
3	308	Shell	1	31	
3	308	Tile	3	34	
3	309	Ceramic	1	1	
3	309	Glass	1	1	
3	309	Metal	1	4	
3	309	Roofing Slate	1	3	
3	313	Animal Bone	1	4	
3	313	Ceramic	1	6	
3	313	Clay Pipe	1	1	
3	313	Glass	1	5	?Decorated sherd
3	313	Metal	1	14	
3	313	Shell	1	6	
3	316	Animal Bone	1	3	
3	316	Ceramic	1	5	
3	316	Clay Pipe	1	1	
3	316	Glass	2	3	
3	316	Metal	1	2	
3	316	Roofing Slate	1	3	
3	324	Animal Bone	1	24	
3	324	Ceramic	1	13	
3	324	Clay Pipe	1	9	
3	324	Metal	1	8	
3	324	Shell	1	9	
3	324	Tile	1	6	
3	327/328*	Animal Bone	1	10	
3	327/328*	Ceramic	1	6	
3	327/328*	Clay Pipe	1	5	
3	327/328*	Glass	1	7	
3	327/328*	Metal	2	4	Possible slag
3	327/328*	Shell	1	2	
3	329	Animal Bone	1	19	
3	329	Ceramic	1	26	
3	329	Clay Pipe	1	4	
3	329	Glass	2	4	
3	329	Metal	2	4	Possible slag
3	329	Shell	2	52	
3	332	Animal Bone	2	52	
3	332	Ceramic	1	9	
3	332	Clay Pipe	2	16	
3	332	Leather	1	1	Possible shoe
3	332	Metal	1	1	
3	332	Shell	1	42	
3	332	Tile	1	1	
3	334	Animal Bone	1	20	
3	334	Ceramic	1	18	
3	334	Clay Pipe	1	7	

Trench	Context	Type	No. Of Bags	No. Of Finds	Comments
3	334	Metal	1	1	
3	334	Shell	1	12	
3	335	Animal Bone	1	12	
3	335	Ceramic	1	17	
3	335	Clay Pipe	1	15	
3	335	Glass	1	6	
3	335	Metal	1	2	
3	335	Shell	1	15	
3	336	Roofing Slate	2	4	
3	338	Ceramic	1	2	
3	338	Flint	1	4	
3	338	Shell	1	4	
3	339	Animal Bone	1	59	
3	339	Ceramic	1	33	
3	339	Clay Pipe	1	47	
3	339	Glass	1	7	
3	339	Leather	2	3	Fragment of shoe and heel
3	339	Roofing Slate	1	1	
3	339	Shell	1	43	
3	339	Tile	1	5	
3	340	Animal Bone	1	11	
3	340	Ceramic	1	8	
3	340	Clay Pipe	1	10	
3	340	Fabric	1	1	
3	340	Metal	2	2	Possible sewing pin
3	340	Shell	1	10	
3	345	Animal Bone	1	36	
3	345	Ceramic	2	7	
3	345	Clay Pipe	1	6	
3	345	Leather	1	2	Fragments of heel
3	345	Metal	1	1	Including key
3	345	Roofing Slate	1	2	
3	345	Shell	1	6	
3	345	Wood	1	1	Wooden wedge

APPENDIX SIX: Sample Register

Sample No.	Trench	Context	Type	No. Of Bags	Comments
1	3	336	Soil	1	
2	3	345	Soil	1	
3	1	120	Soil	1 of 2	
4	1	120	Soil	2 of 2	
5	3	306	Paving	1	
6	1	124	Soil	1 of 3	
7	1	124	Soil	2 of 3	
8	1	124	Soil	3 of 3	
9	1	124	Clay	1	
10	3	345	Soil	1	
11	1	108	Sand	1	
12	1	110	Brick and Mortar	1	
13	1	125	Soil	1	
14	1	124	Soil	1 of 2	Under Timber
15	1	124	Soil	2 of 2	South end of trench
16	1	125	Wood	1	
17	1	124	Wood	1	
18	1	120	Wood	1	
19	1	133	Wood	1	Possible fabric within
20	1	120	Wood	1	
21	1	125	Wood	1	
22	1	125	Wood	1	
23	1	121	Wood	1	
24	1	122	Wood	1	
25	1	125	Wood	1	
26	3	325	Wood	1	
27	1	131	Wood	1	
28	1	132	Wood	1	
29	1	105	Wood	1 of 2	
30	1	105	Wood	2 of 2	
31	1	125	Soil	1	
32	3	320	Brick	1	
33	3	304	Brick	1	
34	1	125	Soil	1	
35	3	319	Brick	1	
36	3	305	Brick and Paving	1	
37	3	314	Sandy loam	1	
38	1	121	Soil	1	
39	3	316	Stone	1	Worked stone
40	1	125	Soil	1	
41	1	133	Soil	1	
42	1	120	Wood	1	
43	1	125	Wood	1	
44	1	125	Soil	1	
45	1	125	Soil	1	
46	1	117	Soil	1	
47	1	105	Soil	1	
48	1	120	Wood	1	
49	3	345	Soil	1	
50	3	345	Wood	1	
51	3	N/a	Soil	1 of 3	Box section 0 – 21cm
52	3	N/a	Soil	2 of 3	Box section 21 – 53cm
53	3	N/a	Soil	3 of 3	Box section 53 – 72cm
54	3	314	Wood	1	Wooden timber with nail
55	1	N/a	Core	1	Core 1
56	1	N/a	Core	1	Core 2
57	1	N/a	Core	1	Core 3
58	3	308	Wood	1	Nail in situ

Sample No.	Trench	Context	Type	No. Of Bags	Comments
59	3	308	Wood	1	Nail in situ
60	1	120	Wood	1	
61	3	331	Wood	1	Plank
62	3	335	Wood	1	
63	3	339	Wood	1	
64	3	345	Wood	1	
65	3	345	Wood	1	
66	3	308	Wood	1	
67	3	340	Wood	1	
68	3	340	Wood	1	
69	3	345	Wood	1	
70	3	324	Soil	1	
71	3	Below 306	Pipe and Fill	1	
72	3	339	Wood	1	
73	3	308	Soil	1	
74	2	220	Organic	1	Environmental analysis found this material to consist of a range of organic matter, including reeds, leaves and twigs

APPENDIX SEVEN: Dendrochronological Report

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Introduction

In September 2003, the Palaeoecology Centre received samples of timbers from excavations by the CAF at the Woolworth's Building in Belfast. Our reference numbers for these samples are Q10480, Q10481 and Q10482. Table One gives reference numbers and the site identification numbers. Examination indicated that all samples would be suitable for dendrochronological dating.

QUB Number	Site Identification	Context Number	Description
Q10480	WBF '03'	C. 126	Plank
Q10481	WBF '03'	C. 343	Plank covering drain under masonry wall
Q10482	WBF '03'	-	-

Table One

Methodology

Methods used by Queen's University Belfast dendrochronology laboratory follow those described by Ballie (1982) and English Heritage (1998). The slices provided were split into sections to ease measurement. The samples were then prepared while still damp. The best-looking radii were selected and prepared for measurement. A stanley knife was used to remove rough wood on the top surface. Then, using a scalpel knife with a Number 26 blade, a finer cleaner surface was produced. Where the wood sample was soft or needed to be made clearer a razor blade was used. A mixture of finely ground chalk and water was spread onto the prepared surface. This was to define the annual tree-ring boundaries more clearly for measurement.

The sections which were selected for dating purposes were measured to an accuracy of 0.01mm using a microcomputer-based traveling stage. The tree-ring series obtained for each sample was plotted onto graph paper to facilitate visual comparisons. This method was also employed to search for positions to be made between the tree-ring patterns. In

addition, cross-correlation algorithm CROS84 (Munro 1984), and Cros73 (Ballie and Pilcher 1973) was employed to search for positions where the tree-ring series were highly correlated. These positions were then checked visually using the plotted graphs. All the measured sequences were compared with each other and any found to match would be combined to form a site master chronology. These and any remaining unmatched tree-ring series were tested against a range of regional and local chronologies using the matching criteria: high *t*-values, replicated values against a range of chronologies at the same position, and satisfactory visual matching. Where such positions are found these provide calendar dates for the tree-ring sequence.

The tree-rings dates produced by this process initially only date the measured tree-rings present in the timber. The interpretation of these dates relies on the condition of the final rings in the sequence. If the samples end in the heartwood of the tree, then a *terminus post quem* date is indicated by the date of the last ring plus an addition of the minimum expected number of sapwood rings which are missing. Where some sapwood or the heartwood-sapwood boundary is present, then a death date range can be calculated using the maximum and minimum number of sapwood rings likely to have been present. The sapwood estimates are a minimum of 10 and a maximum of 46 annual rings, where these figures indicated the 95% confidence limits of the range. These figures are applicable to oaks from Britain and Ireland. In the Belfast laboratory we use an estimated sapwood range of 32 ± 9 years. If the bark edge survives then a death date can be directly obtained from the date of the last ring.

Results

Sample Q10480 (Context 126, Trench One)

This sample yielded 178 annual growth rings when measured. Included in this total are 19 sapwood rings that are not complete. The centre or pith of the tree was not present on the sample. The measured tree-ring series obtained from this sample was compared with a suite of both regional and local Irish chronologies. Extremely significant and consistent correlation values ($t = 7.51^{***}$ cf. Belfast Index Master, $t = 5.32^{***}$ cf. Hillsborough Fort, Co. Down, $t = 5.32^{**}$ cf. Pottagh House, Co. Londonderry) were found. These and other results indicate that the measured tree-ring series dates from AD1429 to AD1606. The best estimated felling date range for the tree, from which this sample was taken, is AD1619 \pm 9 years.

Sample Q10481 (Context 343, Trench Three)

This sample yielded 146 annual growth rings when measured. This sample had been heavily truncated so there was no sapwood or heartwood-sapwood boundary present on the sample. It is likely that there were a large number of heartwood rings removed from this sample. The centre or pith of the tree was not present on the sample. The measured tree-ring series obtained from this sample was compared with a suite of both regional and local Irish chronologies. Extremely significant and consistent correlation values ($t = 6.20^{***}$ cf. Belfast Index Master, $t = 4.76^{**}$ cf. Toome, Co. Londonderry, $t = 3.89$ cf. Corban Lough, Co. Fermanagh) were found. These and other results indicate that the measured tree-ring series dates from AD1337 to AD1482. The best estimated felling date range for the tree from which this sample was cut will be AD1514 \pm 9 years or later.

Sample Q10482 (Context 346, Trench Three)

This sample yielded 85 annual growth rings when measured. There was no sapwood or heartwood-sapwood boundary present on the sample. The centre or pith of the tree was not present on the sample. The measured tree-ring series obtained from this sample was compared with a suite of regional and site chronologies from Ireland. No significant or consistent correlation values were found. The relatively short and distorted tree-ring series was the primary reason this sample failed to produce a dendrochronological date.

Conclusions

These are the first dendrochronological dated samples, to be archaeologically retrieved, from the centre of Belfast. The estimated felling date range of $AD1619 \pm 9$ years for the tree from which sample Q10480 comes from falls into the earliest phase of construction identified by dendrochronology in the north of Ireland. This period dates from about AD1610 to the late AD1630's.

Sample Q10481 has been heavily truncated by woodworking. This means that it is possible that a large number of heartwood rings have been removed. Examination of the sample (by looking at the angles of the cut across the annual growth rings), would indicate that this has happened. When this sample was compared with Sample Q10480, we see the wide rings at the start of the tree up to about 1440, followed by much narrower rings. On Sample Q10480 there are about 150 narrow rings, while on Sample Q10481 there are only about 50 narrow rings. I would suggest that there are about 100 annual growth rings removed

from Sample Q10481. The estimated felling date range for this tree is AD1514 \pm 9 years or later, but I would suggest that the tree is likely to have been felled in the first quarter of the 17th century rather than the 16th century.

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