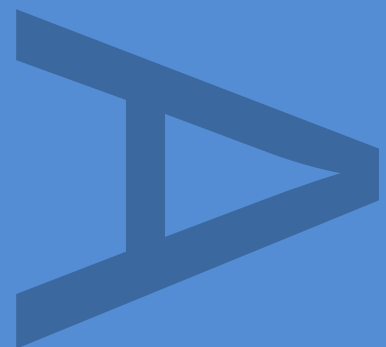


**AN ARCHAEOLOGICAL EVALUATION AT
THE JUNCTION OF WESTGATE ROAD AND THE B1600
(ELSWICK ROAD AND CORPORATION STREET),
NEWCASTLE-UPON-TYNE, TYNE AND WEAR**

MARCH 2011



PRE-CONSTRUCT ARCHAEOLOGY

**An Archaeological Evaluation at the Junction of Westgate Road and the B1600
(Elswick Road and Corporation Street), Newcastle-upon-Tyne, Tyne and Wear**

Central National Grid Reference: NZ 2380 6416

Site Code: WCE 11

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March 2011**

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1. NON-TECHNICAL SUMMARY

- 1.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Limited at the junction of Westgate Road and the B1600, Elswick Road and Corporation Street, on Westgate Hill, Newcastle, at National Grid Reference NZ 2380 6416. The fieldwork, undertaken 24-26 March 2011, was commissioned by 1NG as part of the planning process in respect of the proposed 'Science Central' re-development of the adjacent former site of the Tyne Brewery.
- 1.2 The re-development scheme will require re-organisation of existing traffic signal arrangements at the junction of Westgate Road and the B1600. A field evaluation was required to test the potential for archaeological remains beneath pedestrian footways at three locations proposed for new traffic signals. At this location, Westgate Road follows the suspected line of Hadrian's Wall, within the corridor of the UNESCO transnational World Heritage Site, 'Frontiers of the Roman Empire', thus the site had particular potential for archaeological evidence of the Roman period. There are Listed Buildings and a Registered Historic Park – Westgate Hill Cemetery - on the south-west side of the road junction and a Listed Building on its north-east side. The southernmost portion of the junction lies within a Conservation Area.
- 1.3 The evaluation comprised three small trenches (Trenches 1-3), all sited on pedestrian footways: Trench 1 was located on the southern footway of Westgate Road, on the south-east side of the road junction; Trench 2 was located on the western footway of Elswick Road, on the south-west side of the junction; Trench 3 was located on the northern footway of Westgate Road, on the north-west side of the junction.
- 1.4 The broad aim of the project was to provide information regarding the character, date, extent and degree of survival of archaeological deposits at specific locations proposed for new traffic signals at the road junction. In specific terms, the main objective was to provide archaeological evidence of any elements of the Hadrian's Wall frontier.
- 1.5 Trench 1 was excavated to a maximum depth of c. 0.65m but could not be continued further because of modern services. Deposits related to the footway construction comprised the uppermost strata in the trench. No deposits of archaeological significance were encountered.
- 1.6 Trench 2 recorded natural bedrock at a depth of c. 0.30m. Modern services and deposits related to the footway construction comprised the uppermost strata in the trench. Again no deposits of archaeological significance were encountered.
- 1.7 Trench 3 recorded natural bedrock at a depth of c. 0.60m. Modern services and deposits related to the footway construction comprised the uppermost strata in the trench. Again no deposits of archaeological significance were encountered.
- 1.8 In summary, no archaeological features, deposits or structures proven as predating the modern era were encountered during the evaluation.

2. INTRODUCTION

2.1 General Background

- 2.1.1 This report details the methodology and results of an archaeological evaluation undertaken by Pre-Construct Archaeology Limited (PCA) on 24-26 March 2011 at the junction of Westgate Road and the B1600 on Westgate Hill, Newcastle-upon-Tyne.
- 2.1.2 The work was commissioned by 1NG and was required to establish the archaeological potential of land that would be affected by the re-organisation of road traffic signals at the road junction. The results of the work will therefore inform the decision regarding a planning application for the proposed re-development of the former site of the Tyne Brewery, for which the road junction will form the main access.
- 2.1.3 In the vicinity of its junction with the B1600, Westgate Road is known to follow the line of Hadrian's Wall closely, thus the site has particular archaeological potential for remains of Roman date. A desk-based assessment (DBA) of the archaeological and historical potential of the Tyne Brewery site was undertaken in 2006.¹ Although the DBA did not consider the road junction specifically, the proximity of the overall site to the line of Hadrian's Wall was broadly discussed. An Environmental Statement for the proposed development of the site as 'Science Central' was undertaken in 2010,² and while this included an update of the findings of the earlier DBA, the road junction was again not directly considered. Further research, including historic map regression, has been undertaken as part of the project herein described, in order to assess more fully the archaeological potential of the road junction.
- 2.1.4 A Project Design for the evaluation herein described was prepared by PCA to comprise the 'written scheme of investigation' required as part of the planning process.³ The Project Design followed the format set out in *Management of Research Projects in the Historic Environment*.⁴
- 2.1.5 The evaluation comprised three hand-excavated trenches (Trenches 1-3) all sited on pedestrian footways at the proposed locations of new traffic signals for the road junction in the re-development scheme.
- 2.1.6 The Site Archive (PCA site code: WCE 11) is currently held at the Northern Office of PCA (Unit N19a Tursdale Business Park, Durham, DH6 5PG) and the retained element, comprising the written, drawn and photographic records will be deposited with Tyne and Wear Museums and Archives at Arbeia, South Shields, Tyne and Wear. The Online Access to the Index of Archaeological Investigations (OASIS) reference number for the project is: preconst1-97633.

2.2 Site Location and Description

- 2.2.1 The 10 hectare 'Science Central' re-development site (formerly occupied by Scottish and Newcastle's Tyne Brewery on Gallowgate) is centred at National Grid Reference NZ 2405 6430. The main access to the site will be from the south-west, the junction of Westgate Road, the A186, and the B1600 (or the B1311), Elswick Road to the south and Corporation Street to the north.

¹ Archaeological Services Durham University 2006.

² Arup 2010.

³ PCA 2011.

⁴ English Heritage 2006.

- 2.2.2 Therefore, the area of investigation was a portion of Westgate Road c. 65m in length at its junction with the B1600 on Westgate Hill, and with central National Grid Reference NZ 2380 6416 (Figures 1 and 2). The area of the road junction is known locally as Big Lamp, reputedly in recognition of one of the first electric street lamps in the country; the lamp supposedly stood in an arched iron structure on a pole at the junction.
- 2.2.3 The south-west side of the junction is occupied by an elevated area of ground, Westgate Hill Cemetery (Figure 2). On the south-east side of the junction are properties, Nos. 289-305 (odd numbers), on the south-side of Westgate Road as it merges with Elswick Road. On the north-west side of the junction are properties, Nos. 300-304 (even numbers), on the north side of Westgate Road as it merges with Corporation Street, with the blind south end of Cottenham Street to the west. On the north-east side of the junction as Westgate Road merges with Corporation Street are the Westgate Hall Buildings, Nos. 270-286 Westgate Road, an early 20th century building which is the home of the Prudhoe Street Mission, an Evangelical church, with various businesses occupying the ground floors.
- 2.2.4 All three evaluation trenches were sited on pedestrian footways at the road junction (Figure 2). Trench 1 was located on the south-east side of the road junction, on the southern footway of Westgate Road adjacent to 295 Westgate Road. Trench 2 was located on the south-west side of the road junction, on the north-western footway of Elswick Road adjacent to the wall of Westgate Hill Cemetery. Trench 3 was located on the north-west side of the junction, on the northern footway of Westgate Road adjacent to the blind southern end of Cottenham Street.

2.3 Geology and Topography

- 2.3.1 The site lies in the eastern sector of Hadrian's Wall where the Roman frontier crosses the Middle Coal Measures Formation of the Upper Carboniferous.⁵ Interbedded grey mudstone, siltstone, pale grey sandstone and commonly coal seams are to be expected. Elswick Road closely follows a localised outcrop of High Main Post Member Sandstone, one element of the Middle Coal Measures. The drift geology of much of the eastern sector of Hadrian's Wall is characterised by Glacial Till (Boulder Clay).
- 2.3.2 The road junction at Big Lamp is located at the top of a steep portion of Westgate Road as it climbs westwards up the eastern side of Westgate Hill from the centre of Newcastle. Ground level in the vicinity of Trench 1, on the south-east side of the road junction, was at c. 75.10m OD, while in the vicinity of Trench 3, on the north-west side of the junction, it was at c. 76.70m OD. West of the road junction Westgate Road continues to climb, less steeply than to the east, with the Arthur's Hill and Elswick areas of Newcastle to the north and south of the road, respectively.

2.4 Planning Background

- 2.4.1 Statutory protection for archaeological remains is principally enshrined in the *Ancient Monuments and Archaeological Areas Act 1979*, as amended by the *National Heritage Act 1983* and the *National Heritage Act 2002*. Nationally important sites are listed in a schedule of monuments and details of scheduling are held on the list maintained by the Department for Culture, Media and Sport (DCMS).

⁵ Geological information from Johnson 1997 and the *British Geological Survey* website.

- 2.4.2 UK legislation regarding buildings and areas of special architectural or historic interest is contained in the *Planning (Listed Building and Conservation Areas) Act 1990*.
- 2.4.3 Government guidance on archaeology and heritage conservation is set out in *Planning Policy Statement 5: Planning for the Historic Environment (PPS5)*,⁶ published in March 2010. PPS5 is supported by guidance in the *Historic Environment Planning Practice Guide (HEPPG)*, also issued in March 2010.⁷ PPS5 merges Listed Buildings, Conservation Areas, Scheduled Monuments and all designated historic assets into one category of ‘designated heritage assets’ for the purposes of national policy.
- 2.4.4 At a local level, the Local Planning Authority (LPA), Newcastle City Council, has various policies within its Unitary Development Plan (UDP) concerning archaeology and cultural heritage. Of particular relevance are:
- POLICY C04. DEVELOPMENT THAT WOULD HARM SITES OR AREAS OF ARCHAEOLOGICAL INTEREST AND THEIR SETTINGS WILL NOT BE ALLOWED.***
- and
- POLICY C04.1. THE FOLLOWING SITES AND AREAS OF ARCHAEOLOGICAL INTEREST IDENTIFIED FOR THE PURPOSE OF POLICY C04 INCLUDE:***
- Scheduled ancient monuments***
- 7. Hadrian's Wall, Vallum and associated works*
- Other sites and areas of archaeological interest, as defined on the Proposals Map***
- 18. Unscheduled areas of the known and presumed line of Hadrian's Wall, Vallum, Ditch and fortifications.*
- 2.4.5 Thus the latter UDP policy not only deals with sites, monuments and areas which have scheduled monument status, but also other important known sites, monuments and areas which have considerable potential archaeological interest.
- 2.4.6 The Hadrian's Wall Military Zone was designated a UNESCO World Heritage Site in 1987, although the urban areas of Newcastle were excluded from the World Heritage Site. A management plan, produced by English Heritage in 1996,⁸ identified three distinct areas: the ‘archaeological core’ of the Wall and Vallum (the World Heritage Site), the surrounding ‘buffer zone’ and the outer ‘visual envelope’. In 1997 the portions of the Wall afforded statutory protection as scheduled monuments in the urban areas of Newcastle were included in the World Heritage Site. In 2005 UNESCO amalgamated the Hadrian's Wall and the German Limes World Heritage Sites into the transnational World Heritage Site ‘Frontiers of the Roman Empire’.
- 2.4.7 Regarding sections of Hadrian's Wall frontier which are not scheduled, the UDP policies described above allow the planning system adequate provision for the preservation of archaeological remains associated with the Wall and its buffer zone. English Heritage provides specific archaeological advice relating to the Hadrian's Wall frontier through its Historic Environment Advisor Archaeology (Hadrian's Wall).

⁶ Department for Communities and Local Government 2010.

⁷ Department for Communities and Local Government, English Heritage and Department for Culture, Media and Sport, 2010.

⁸ English Heritage 1996.

- 2.4.8 The 10 hectare 'Science Central' re-development site (formerly occupied by Scottish and Newcastle's Tyne Brewery) is being developed by 1NG, Newcastle Gateshead's City Development Company, to create a new sustainable urban quarter mixing academia, cutting edge science, commerce and city living. The main access to the development will be from the south-west, the junction of Westgate Road and the B1600 at Big Lamp on Westgate Hill.
- 2.4.9 The re-development scheme requires re-organised signalised access at the road junction. Cross carriageway duct runs, draw pit chambers for cabling and foundations for traffic signal posts could require excavations up to c. 1.0m deep, which could potentially impact upon archaeological remains of the Hadrian's Wall frontier. A field evaluation was therefore required to test the potential for archaeological remains beneath pedestrian footways at three specific locations proposed for new traffic signals. The work was undertaken at the request of the Tyne and Wear County Archaeologist, in consultation with the Historic Environment Advisor Archaeology (Hadrian's Wall) at English Heritage, and a Project Design was compiled by PCA in advance of the work in order to comprise the required 'written scheme of investigation' (WSI).
- 2.4.10 In sum, therefore, the archaeological evaluation was required, as part of the planning process, to inform the LPA regarding the character, date, extent and degree of survival of archaeological remains, specifically those associated with the Hadrian's Wall frontier, at the junction of Westgate Road with the B1600 where revised signalised traffic access is required as part of the re-development proposals for the 'Science Central' site. The results should inform a decision by the Tyne and Wear County Archaeologist regarding further archaeological mitigation measures.

2.5 Archaeological and Historical Background

The DBA undertaken in 2006 and the 'Archaeology' chapter of the Environmental Statement compiled in 2010 have been used as the basis of the following summary. The research and writing of those responsible is gratefully acknowledged. Additional research, including historic map regression, has been undertaken in order to directly address the heritage potential of the Westgate Road/B1600 junction ('the site'). 'Sitelines', the online Tyne and Wear Historic Environment Record (HER), has also been used to provide information.

Designated Heritage Assets

- 2.5.1 Although on the line of Hadrian's Wall, the section of Westgate Road at its junction with the B1600 is not scheduled and, in addition, there are no scheduled monuments in the immediate vicinity of the site.
- 2.5.2 The southern portion of the site lies within the Summerhill Conservation Area, which is based around a late-Georgian residential suburb and takes in the northernmost extent of Elswick Road at its junction with Westgate Road. The Conservation Area includes Westgate Hill Cemetery, which is located on the south-west side of the road junction, and which is also a Grade II Registered Park and Garden.

2.5.3 At Westgate Hill Cemetery, the ashlar boundary wall, with piers at intervals along the wall, along with four tall gate piers, the central pair higher, forming carriage and pedestrian entrances, comprise a Grade II Listed Building. Within the cemetery, the l'Anson Gothic-style tower tomb and headstone marking the Clennell family tomb are also Grade II Listed Buildings. Incorporated into the perimeter wall at the road junction, c. 90m from the principal entrance, is a granite drinking fountain, dated 1859, and also a Grade II Listed Building. On the north-east side of the road junction, Nos. 270-286 Westgate Road, the Westgate Hall Buildings, is a Grade II Listed Building. These buildings are further discussed below in relation to the historic development of the area. There are several other Grade II Listed Buildings in the vicinity of the site, mostly along Westgate Road west of the road junction; details are set out in the 'Archaeology' chapter of the Environmental Statement compiled in 2010.

Undesignated Heritage Assets

2.5.4 There is no indication from the HER that the site was occupied during any of the various prehistoric eras.

2.5.5 The main archaeological interest of the site stems from the fact that, as mentioned above, at this location Westgate Road follows the suspected line of Hadrian's Wall and although this section is not scheduled it lies within the 'buffer zone' of the Hadrian's Wall World Heritage Site (now part of the transnational 'Frontiers of the Roman Empire' World Heritage Site), thus there is particular potential for evidence of the Roman frontier at the site.

2.5.6 In terms of its location along the Wall corridor, the site lies between *Pons Aelius* fort (1.3km to the east) and *Condercum* fort (2.2km to the west). In this part of Newcastle, the Wall consisted of a stone wall c. 5m high and c. 3m wide. To the north of the Wall was a ditch, separated from the Wall by an open flat space, the berm, usually 6m wide due to the pressure on the south lip of the ditch from the weight of the Wall. The ditch varied in width from 8m to 12m, but was generally c. 8.2m wide, and was between 2.7m and 3m deep. It was V-shaped in profile with a square-cut drainage or clearing-out channel at the base. The material excavated from the ditch was deposited on the north side and smoothed out to heighten the outer scarp of the ditch.

2.5.7 Other defensive elements of the Hadrian's Wall frontier are known. Since 2000, around ten sites along the easternmost stretch of the Wall have found evidence for obstacle pits on the berm. The pits are usually but not always arranged in three rows parallel to the Wall, although a site west of Wallsend found a somewhat different type of obstacle, an irregular pattern of post-holes indicative of posts simply being driven into the ground, a defensive feature seen elsewhere in the Empire. In general, where the pits are found they appear to have contained upright timbers, possibly forked or fire hardened sticks, possibly similar to those described as *cippi* by Caesar. However, there has been no definitive evidence to support this, and the preferred current description of these features is that they were simply obstacles.

- 2.5.8 The Vallum - a deep ditch with banks on either side - ran to the south of the Wall along much of its length, possibly to provide a physical boundary for the military zone. Although the course of the feature is depicted on historic maps at a distance of c. 80-90m from the Wall in the vicinity of the site (for example successive editions of the Ordnance Survey map, Figures 5-10), there is very limited evidence that the Vallum actually existed along the section of the Wall to the east of *Condercum* fort and on the approach to *Pons Aelius*. The local topography possibly meant that it was not necessary.
- 2.5.9 It is currently thought that Hadrian's Wall in the vicinity of the site runs to the south of Westgate Road, with the Wall ditch likely running below the southern carriageway of the modern road. This is at variance with historic mapping, for example the 25-inch scale 1st edition Ordnance Survey map from 1879 depicts the 'Supposed Site of Roman Wall' running along the centre of Westgate Road (Figure 5). The HER entry for Wall mile 4 (Dean Street to Big Lamp) sets out the very limited discoveries of the Wall between Milecastle 4 (which has never been found) and Milecastle 5 (at Quarry House). The HER entry reports that no remains were found in 1929 in 'two trenches 80 yards apart' between the south back of Westgate Road and Summerhill Grove. The HER entry also lists three sightings, in 1929, 1995 and 1997, of the southern lip of the Wall ditch on the south side of Westgate Road, which strongly indicate that the northern edge of the feature should lie under the centre of the modern road, thereby placing the Wall itself to the south of the road carriageway, presumably below the buildings and other land parcels fronting onto the road.
- 2.5.10 During the medieval and early post-medieval period, the site lay within the township of Elswick on the main western route out of Newcastle. Elswick was granted to Tynemouth Priory in 1120 and the estate was held until the Dissolution in the 16th century. Evidence of field names from medieval rentals of the manor suggests that agricultural land was being created through woodland clearance until a relatively late date. Land adjacent land to the site was likely occupied by open fields on the eastern slope of Westgate Hill with the roadway falling away on the approach to the West Gate of the town walls.
- 2.5.11 Construction of a toll road from Newcastle to Carlisle - commonly called the Military Road - on the same alignment as the ancient route westwards out of Newcastle, began after the Jacobite Rebellion of 1745. The Newcastle to Carlisle Military Road was one of the later elements of a long-running programme of road improvement works implemented by Field Marshal George Wade (1673-1748). It is recorded that, despite protests from the antiquary William Stukeley, the Newcastle to Carlisle Military Road was partly built over Hadrian's Wall. An archaeological evaluation undertaken by PCA along Westgate Road in the vicinity of Newcastle General Hospital in June 2010 exposed possible remains of the 18th century Military Road.⁹ In the easternmost trench to be investigated during that work, a stone surface, with remnants of a sandstone block surface treatment, was recorded at a depth of c. 1.05m below pavement level. A distinct silty layer above the surface produced two scraps of post-medieval pottery and two scraps of ceramic building material of uncertain date.

⁹ PCA 2010.

- 2.5.12 The earliest map to show the site in detail was that produced by Thomas Oliver in 1830 (Figure 3). Prior to this, all maps consulted, including probably the first detailed maps of Newcastle, those produced by Charles Hutton in 1772 and by Cole and Roper in 1808, do not extend as far west as the site. Oliver's map shows Westgate Hill Cemetery in place on the south-west side of the road junction and limited development on all other sides, all buildings pre-dating the existing structures. The portion of Westgate Hill immediately to the east of the junction is labelled 'Camber^d Row' on Oliver's map, with the road westwards the road 'To Carlisle', the road to the south-west 'From Elswick' and the road to the north-east named 'Back Lane' (subsequently Buckingham Street), this delimiting the extent of development north-westwards from Westgate Road at this time.
- 2.5.13 Westgate Hill Cemetery – on the Register of Historic Parks and Gardens, as previously described - was the first commercial cemetery founded in Newcastle and one of the first ten in England. The Westgate Hill Cemetery Company obtained the land for £1,500 in 1828 and the cemetery opened in 1829 in response to a lack of churchyard facilities for burial at a time when there was a cholera epidemic. Quarries are indicated to the west of the site on Oliver's map and the 1st edition Ordnance Survey map of 1864 and the cemetery was therefore possibly sited on a former quarry. Architect John Green and landscape gardener William Falla were commissioned to design and lay out the grounds. It took in a triangular area of three acres of unconsecrated ground situated opposite the earlier graveyard of St Paul's Chapel (which occupies the plot of land to the west of Cottenham Street, see Figure 5). Since the cemetery occupies gently sloping ground, rising to the west, ground level at its eastern end was likely raised to provide a more consistently level area. A contemporary plan of the cemetery shows that the finished landscaping included serpentine paths, and undulating ground planted with trees and shrubs.
- 2.5.14 The remains of the cemetery ashlar boundary wall, which was originally capped by railings, along with its piers and the associated gate piers, comprise a Grade II Listed Building, as previously described. At its north-eastern corner, at the road junction, is the aforementioned Grade II Listed drinking fountain inscribed 'Presented by Dunn & Co. 1859'. The last burial at the cemetery was reportedly in 1957.
- 2.5.15 The 1st edition Ordnance Survey maps (6-inch scale from 1879 and 25-inch scale from 1879, Figures 4 and 5) show the area of the site far more developed than on Oliver's map, reflecting the rapid urbanisation of this part of Newcastle into the Victorian era. By this time, the road junction has the main elements of its existing form, with Upper Buckingham Street running northwards from the junction (Corporation Street was essentially in place, although not named as such) and Arthur's Hill is given as the name of the section of Westgate Road to the west. Although the junction is developed on all sides, with Westgate Hill Cemetery to the south-west, none of the buildings depicted on the 1st edition Ordnance Survey maps are likely to be those in place today. On the north-east side of the junction the buildings then in place included a public house, while an inn occupied the corner building on the north-western side of the junction.

- 2.5.16 The 2nd edition Ordnance Survey maps (25-inch scale from 1898 and 6-inch scale from 1899, Figures 6 and 7) show some notable differences at the road junction since the 1st edition. The north-east side is in the process of being developed with the previous buildings having been demolished. Corporation Street still had not yet been created, although its route was effectively formed by 'Hedley Place' and a branch to the east, 'Hedley Terrace'. To the south-east, the frontage properties had certainly been developed, probably having been completely rebuilt, and these are likely the properties in place today. By this time, No. 305 Westgate Road was a bank (this is known to have been Martin's Bank in the mid 20th century and today is still named Bank House, although occupied by a firm of sawmakers in recent times). St. Matthews Church had been built on Summerhill Place, this replacing the former Elswick Parsonage depicted on the 1st edition maps. Tramlines are depicted (on the 25-inch map) along Westgate Road and Elswick Road with two sets of tracks on the latter, these diverging at the road junction to join the main Westgate Hill route.
- 2.5.17 The 25-inch scale 3rd edition Ordnance Survey maps from 1912 and 1919 (Figure 8, the site appearing on adjacent sheets surveyed at different dates) is noteworthy in that it shows the north-east side of the road junction still evidently undeveloped, although the existing plot had been created, with Corporation Street now a main eastern branch off Buckingham Street and Hedley Place simply a subsidiary western branch of that. The plot is annotated 'Church' and the Westgate Road frontage is depicted as evenly sub-divided. The existing Westgate Hall Buildings, Nos. 270-286 Westgate Road, in fact date from 1900-02; it is a Grade II Listed Building, as previously mentioned. Built by Crouch and Butler of Birmingham, as the Wesleyan Mission Hall, the Westgate Hall Buildings are in a free Art Nouveau style, with upper storeys in rock-faced sandstone, ashlar dressings and dark slate roof with lead dome. All other sides of the road junction remain as on the previous edition. The tramlines remain on Westgate Road and Elswick Road, although this is the last map to be examined on which they appear.
- 2.5.18 The 6-inch scale 3rd edition Ordnance Survey map from 1921 (Figure 9) shows the Westgate Hall Buildings in place and the road junction essentially has its current form. The precise date(s) at which the properties occupying the north-western side of the junction were re-developed from those shown on the earlier editions of the Ordnance Survey maps is uncertain, since they effectively occupy the same footprint throughout the historic map sequence.
- 2.5.19 The 6-inch scale Ordnance Survey map from 1938 (Figure 10) shows little change at the road junction since the previous edition. The only noteworthy change in the wider area is to the north of the junction where the triangular area between Buckingham Street and Corporation Street had been developed with the removal of Hedley Place, Hedley Street, Harle Street and part of Oystershell Lane, thereby creating the existing fork in the road between Buckingham Street and Corporation Street.

3. PROJECT AIMS AND RESEARCH OBJECTIVES

3.1 Project Aims

- 3.1.1 The project is threat-led with potential to disturb or destroy important sub-surface archaeological remains of the Roman period in particular. The broad aim of the project is to inform the LPA regarding the character, date, extent and degree of survival of archaeological deposits at the junction of Westgate Road and the B1600.
- 3.1.2 Archaeological trial trenching was chosen as the investigative tool to test the archaeological potential of areas to be affected by the revised signalised traffic arrangements required at the road junction in the proposed re-development scheme. Three trenches (Trenches 1-3) were sited in this area. Where possible, trenches were to be excavated to the maximum depths below existing ground level likely to be required for the groundworks, namely 1.0m in the pedestrian footways.
- 3.1.3 Additional aims of the project were:
- to compile a Site Archive consisting of all site and project documentary and photographic records, as well as all artefactual and palaeoenvironmental material recovered;
 - to compile a report that contains an assessment of the nature and significance of all data categories, stratigraphic, artefactual, etc.

3.2 Research Objectives

- 3.2.1 The project was considered to have good potential to make a significant contribution to existing archaeological knowledge of central Newcastle in general and of the Roman frontier in the city in particular. Specific research objectives to be addressed by the project were formulated with reference to two existing archaeological research frameworks. The first is *Shared Visions: The North-East Regional Research Framework for the Historic Environment* (NERRF),¹⁰ which highlights the importance of research as a vital element of development-led archaeological work. The second is the two-volume *Frontiers of Knowledge. A Research Framework for Hadrian's Wall*.¹¹
- 3.2.2 The NERRF identifies the following key priority within the research agenda for the Roman period which is of direct relevance to the project: 'Riii – The Roman military presence'.
- 3.2.3 The Research Strategy of *Frontiers of Knowledge* was compiled to respond to gaps in knowledge pertaining to the archaeology of the Wall as highlighted in the Research Agenda (both in Volume I of the document). A prioritised set of objectives was devised within eight main themes, one of which 'S.4 The Wall', contains the objective of 'Understanding the Wall' which underlines the necessity of '*Establishing the course and survival of the Wall and its installations on Tyneside and the West*'.

¹⁰ Petts and Gerrard 2006.

¹¹ Symonds and Mason (eds.) 2009.

3.2.4 Therefore, given the location of the site, a specific Research Objective to be addressed by the project was:

- Can any sub-surface archaeological remains in the areas of investigation at the road junction provide evidence for the position of the Wall itself, the aforementioned berm, the northern defensive ditch or any other element of the frontier?

4. ARCHAEOLOGICAL METHODOLOGY

4.1 Fieldwork

- 4.1.1 The evaluation fieldwork was undertaken 24-26 March 2011. All fieldwork was undertaken in accordance with the relevant standard and guidance document of the Institute for Archaeologists (IfA).¹² PCA is an IfA-Registered Organisation. The evaluation was undertaken according to the Project Design compiled by PCA, which should be consulted for full details of all archaeological methodologies employed.
- 4.1.2 The evaluation comprised three trenches (Trenches 1-3), all sited within pedestrian footways at the road junction.
- 4.1.3 As previously mentioned, the trenches were to be excavated as far as possible to a maximum depth below existing ground level of 1.0m, or for archaeological purposes, the clearly defined top of the natural sub-stratum, whichever was reached first.
- 4.1.4 The actual maximum dimensions at ground level and maximum depths of the trenches were:
- Trench 1 - 1.35m N-S x 1.30m E-W x 0.63m deep.
 - Trench 2 –1.32m N-S x 1.33m E-W x 0.66m deep.
 - Trench 3 – 0.92m N-S x 1.36m E-W x 0.89m deep.
- 4.1.5 The majority of the groundworks were undertaken by Technical Services, Newcastle City Council, with all work supervised by PCA. The trenches hand-excavated. All trenches were hand cleaned by PCA and then photographed and archaeologically recorded.
- 4.1.6 The trenches were located by PCA using a Leica RX1210T Global Positioning System (GPS). The instrument provides corrected Ordnance Survey co-ordinates in real time, to an accuracy of 1cm. The instrument was used to install a Temporary Bench Mark on site; this had a value of 76.14m OD. The heights of all principal strata and features were calculated relative to Ordnance Datum and indicated on the appropriate plans and sections.

4.2 Research

- 4.2.1 Various sources of data were consulted for the purposes of undertaking a map regression exercise to examine the historical development of the road junction. This included a visit to the Tyne and Wear Archives on 28 March 2011.
- 4.2.2 In addition, the online version of the Tyne and Wear Historic Environment Record (HER) was consulted for information regarding heritage assets in the vicinity of the site. Various other online and documentary sources were consulted to provide additional information. Full details of all the material examined are set out in Section 7.

¹² IfA 2008a.

4.3 Post-excavation

- 4.3.1 The stratigraphic data generated by the project is represented by the written, drawn and photographic records. A total of 45 archaeological contexts were defined in the three trenches (Appendix B). Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data (Appendix A). A written summary of the archaeological sequence was then compiled, as described below in Section 5.
- 4.3.2 During the evaluation, no artefacts of archaeological significance were observed. No material was recovered that required specialist stabilisation or an assessment of potential for conservation research. Ceramic building material noted within modern era strata during hand cleaning of exposures was not collected.
- 4.3.3 The palaeoenvironmental sampling strategy of the project was to recover bulk samples where appropriate, from well-dated (where possible), stratified deposits covering the main periods or phases of occupation and the range of feature types represented, with specific reference to the objectives of the evaluation. To this end, no appropriate deposits were encountered and therefore no bulk samples were recovered. No other biological material was recovered.
- 4.3.4 The complete Site Archive, in this case comprising only the written, drawn and photographic records (including all material generated electronically during post-excavation) will be packaged for long term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document¹³ will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document¹⁴ and a recent IfA publication.¹⁵
- 4.3.5 The depositional requirements of the body to which the Site Archive will be ultimately transferred will be met in full. At the time of writing this will be the Tyne and Wear Museums and Archives, Arbeia, South Shields.

¹³ Brown 2007.

¹⁴ Walker, UKIC 1990.

¹⁵ IfA 2008b.

5. RESULTS: THE ARCHAEOLOGICAL SEQUENCE

During the evaluation, separate stratigraphic entities were assigned unique and individual 'context' numbers, which are indicated in the following text as, for example [123]. The archaeological sequence is described by placing stratigraphic sequences within broad phases, assigned on a site-wide basis in this case. An attempt has been made to add interpretation to the data, and correlate these phases with recognised historical and geological periods.

5.1 Phase 1: Natural Sub-stratum

- 5.1.1 Phase 1 represents natural sandstone bedrock which was exposed within the bases of Trenches 2 and 3. Such material is known to outcrop within the area of Elswick Road. In Trenches 2 and 3, the upper surface of bedrock, [216] and [314], was encountered at maximum heights of 76.31m OD and 76.16m OD, respectively. Thus bedrock was recorded at minimum depths of c. 0.30m and c. 0.60m below existing pavement level in Trenches 2 and 3, respectively.
- 5.1.2 Natural sub-stratum was not encountered in Trench 1, which was excavated to a maximum depth of c. 0.65m but could not be excavated further due to the density of modern live services encountered.
- 5.1.3 No superficial geological drift material was recorded in any of the trenches.

5.2 Phase 2: Modern

- 5.2.1 Phase 2 represents activity of the modern era, comprising features and deposits associated with the installation of services and the existing ground surfaces.
- 5.2.2 A silty sandy clay deposit, [215], was recorded in Trench 2 overlying the sandstone bedrock. It was up to 0.32m thick and was encountered at a maximum height of 76.51m OD. This deposit is interpreted as a levelling deposit. A similar deposit, [316], up to 50mm thick, was recorded in Trench 3, again directly overlying sandstone bedrock, and recorded at a maximum height of 76.09m OD. These deposits are interpreted as levelling deposits of modern date.
- 5.2.3 A sand deposit, [313], up to 0.23m thick, overlay levelling deposit [316] in Trench 3. This is interpreted as a further levelling deposit probably associated with the installation of a modern service trench, [304], described in due course.
- 5.2.4 All three trenches contained modern era services of various form.
- 5.2.5 In Trench 1, a total of five services were recorded, of which four, [105]/[106], [107], [108] and [109], were orientated roughly east-west and one, [111], was orientated north-south. Contexts [105] and [108] were ceramic tiles stamped 'DANGER ELECTRICITY'. Overlying the east-west aligned services was a homogeneous sandy silt infill, [104], in which it was impossible to determine individual service trench cuts. The north-south aligned service, a blue plastic pipe, [111], was contained in a trench, [112], which was the latest of the features to be recorded in Trench 1. Service trench [112] measured at least 1.10m in length by 0.45m wide and 0.35m deep and was backfilled with coarse stony sand, [110], overlain by a small iron inspection cover, [113], incorporated into the existing footway paving.

- 5.2.6 In Trench 2, various services were recorded truncating levelling deposit [215]. A broad service trench, [214], was recorded on the eastern side of the trench. It measured at least 1.40m NNE-SSW by at least 0.45m wide and was at least 0.55m deep and housed a yellow plastic gas main, [213], recorded at a maximum height of 76.13m OD. The service trench had been backfilled with well-sorted gravel, [212], and silty sandy clay, [211], with a combined thickness of at least 0.55m. In turn, this was overlain by a concrete capping, [210], up to 0.30m thick. On the western side of the trench was a broad but shallow service trench, [209], measuring at least 1.40m NE-SW by at least 0.50m wide and 0.13m deep. It housed four green plastic pipes, [205], [206], [207] and [208], encountered at a maximum height of 76.39m OD, these containing CCTV or similar cabling. This trench had been backfilled with crushed stone and sand deposits, [203] and [204].
- 5.2.7 In Trench 3, three services were recorded, all aligned WNW-ESE. The earliest, seen on the north side of the trench, was a service trench, [304], measuring at least 1.30m WNW-ESE by at least 0.23m wide and 0.50m deep. No actual service was located within its stone backfill, [303]. Truncating its northern edge was a substantial service trench, [312], which measured 1.30m WNW-ESE by at least 0.40m wide and 0.82m deep. This contained an iron pipe, [311], encountered at a height of 76.24m OD. It had been backfilled with sandy silty clay, [310], and capped with concrete, [309], up to 0.32m thick. On the south side of the Trench 3 was another service trench, [308], measuring at least 1.30m WNW-ESE by at least 0.30m wide and 0.30m deep. This housed a grey plastic pipe, [307], encountered at a height of 76.41m OD and had been backfilled with loose crushed stone, [306].
- 5.2.8 Make-up layers for the existing footway paving were recorded in all three trenches, these comprising compact sand or crushed stone: layers [102] and [103] in Trench 1; layer [202] in Trench 2; layers [302], [305] and [315] in Trench 3. These deposits had a maximum combined thickness of 0.22m. The existing ground surface in Trenches 1, 2 and 3 comprised concrete paving slabs, 0.45m square and 60mm thick, [101], [201], [301], respectively. The paving was recorded at maximum heights of 75.08m OD in Trench 1, 76.64m OD in Trench 2 and 76.77m OD in Trench 3.

6. CONCLUSIONS

- 6.1 Geological deposits and archaeological deposits and features encountered during the evaluation have been assigned to two phases of activity:
- Phase 1. Natural bedrock recorded in Trenches 2 and 3 at depths of c. 0.30m and c. 0.60m below existing pavement level, respectively.
 - Phase 2. Modern era deposits, service trenches and existing surface treatments were recorded in all three trenches.
- 6.2 In sum, therefore, the work recorded no evidence for Roman occupation and, specifically, there was no evidence to elucidate the position of any element of the Hadrian's Wall frontier.
- 6.3 It is concluded that the results of the evaluation indicate that any groundworks associated with revisions to the signalised traffic access at the road junction are unlikely to impact upon any archaeological remains of significance in the area of Trenches 2 and 3 down to depths below existing pavement level of at least 0.65m and 0.90m, respectively. In the area of Trench 1 groundworks could safely proceed to a depth of at least 0.65m below existing ground level without impacting upon any archaeological remains of significance.

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Sources for Historic Maps

The Tyne and Wear Archives Service (maintained at The Discovery Museum, Blandford House, Newcastle) is the record office for the cities and metropolitan districts of Newcastle, Sunderland, Gateshead, South Tyneside and North Tyneside. The available historic map sequence was examined on 28 March 2011 and relevant extracts were photographed with a digital camera for inclusion herein.

In addition, PCA holds extract copies of various historic maps of Newcastle, such as Thomas Oliver's map of 1830, gathered during research for previous projects.

Online Sources

The following websites were consulted:

The *British Geological Survey* website at: www.bgs.ac.uk

The *British Listed Buildings* website, at www.britishlistedbuildings.co.uk

The *Parks and Gardens UK* website, at www.parksandgardens.ac.uk

The *Pictures in Print* website: www.dur.ac.uk/picturesinprint/

Sitelines, the Tyne and Wear Historic Environment Record, at www.twsitelines.info/

8. ACKNOWLEDGEMENTS AND CREDITS

Acknowledgements

Pre-Construct Archaeology would like to thank 1NG for commissioning and funding the archaeological evaluation herein described. The role of Clair Battersby is acknowledged.

The roles of Dave Heslop, the Tyne and Wear County Archaeologist, and Mike Collins, Historic Environment Advisor Archaeology (Hadrian's Wall), English Heritage, are acknowledged.

The roles of Phil Heslop (Principal Engineer, Newcastle City Council) and Colin McPhail (Technical Services, Newcastle City Council) are acknowledged.

PCA Credits

Fieldwork: Aaron Goode (Site Supervisor), Sophie Laidler and Amy Roberts

Map Regression Research: Amy Roberts

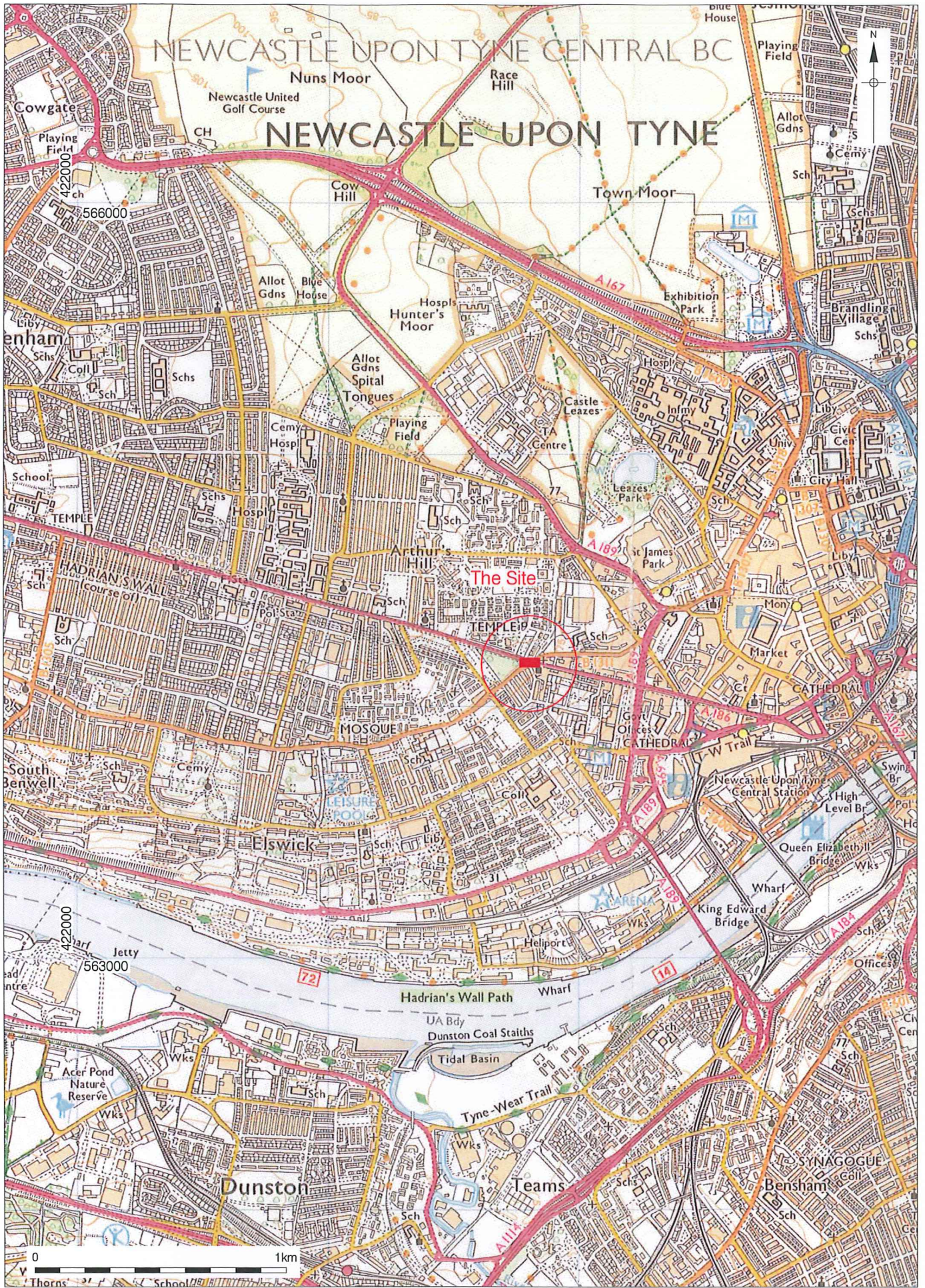
Report: Robin Taylor-Wilson and Aaron Goode (Section 5)

Project Manager: Robin Taylor-Wilson

Illustrations: Jennifer Simonson

Other Credits

Groundworks: Technical Services, Newcastle City Council



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Figure 1
 Site Location
 1:20,000 at A4

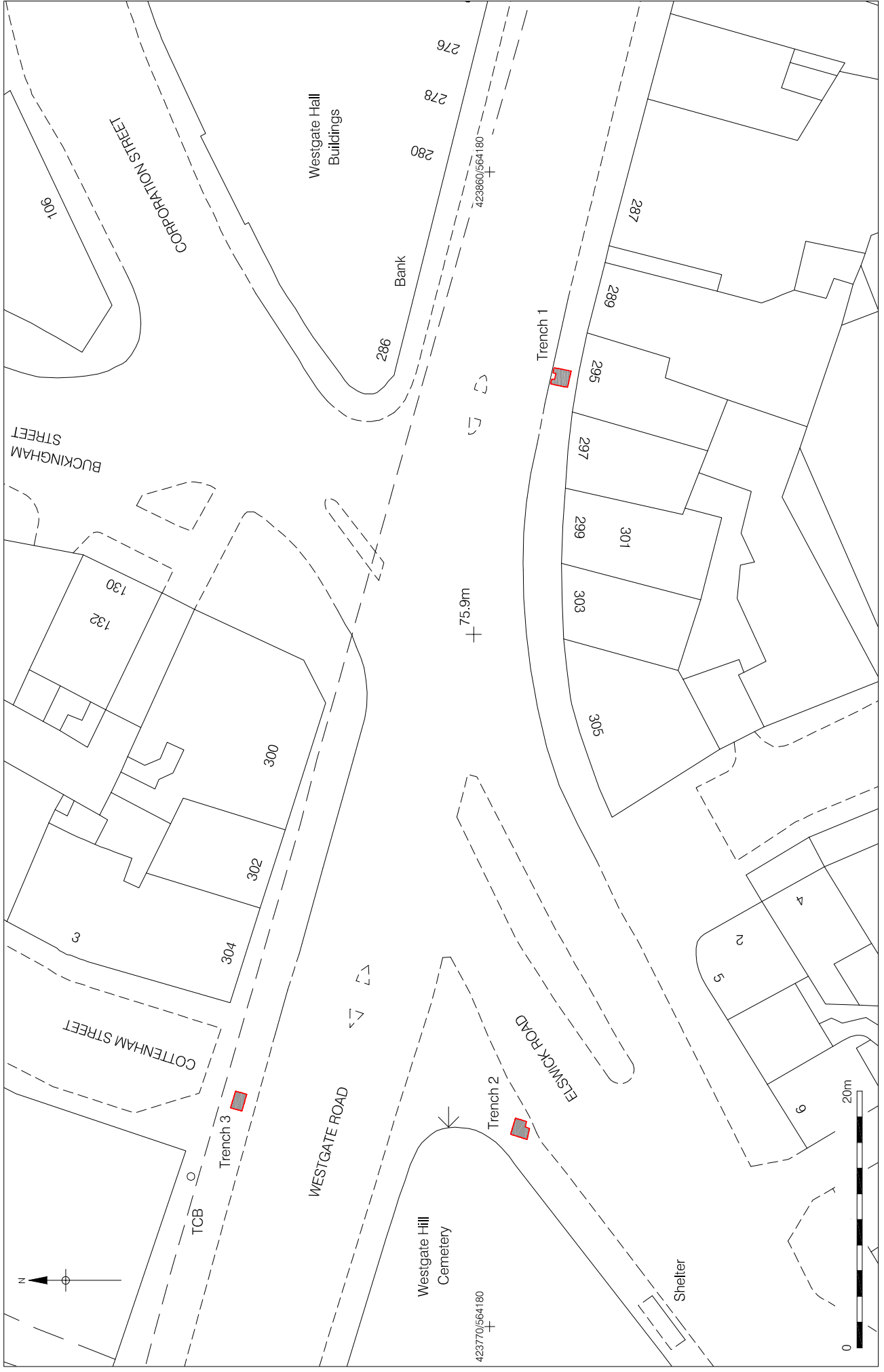


Figure 2
Trench Location
1:400 at A4

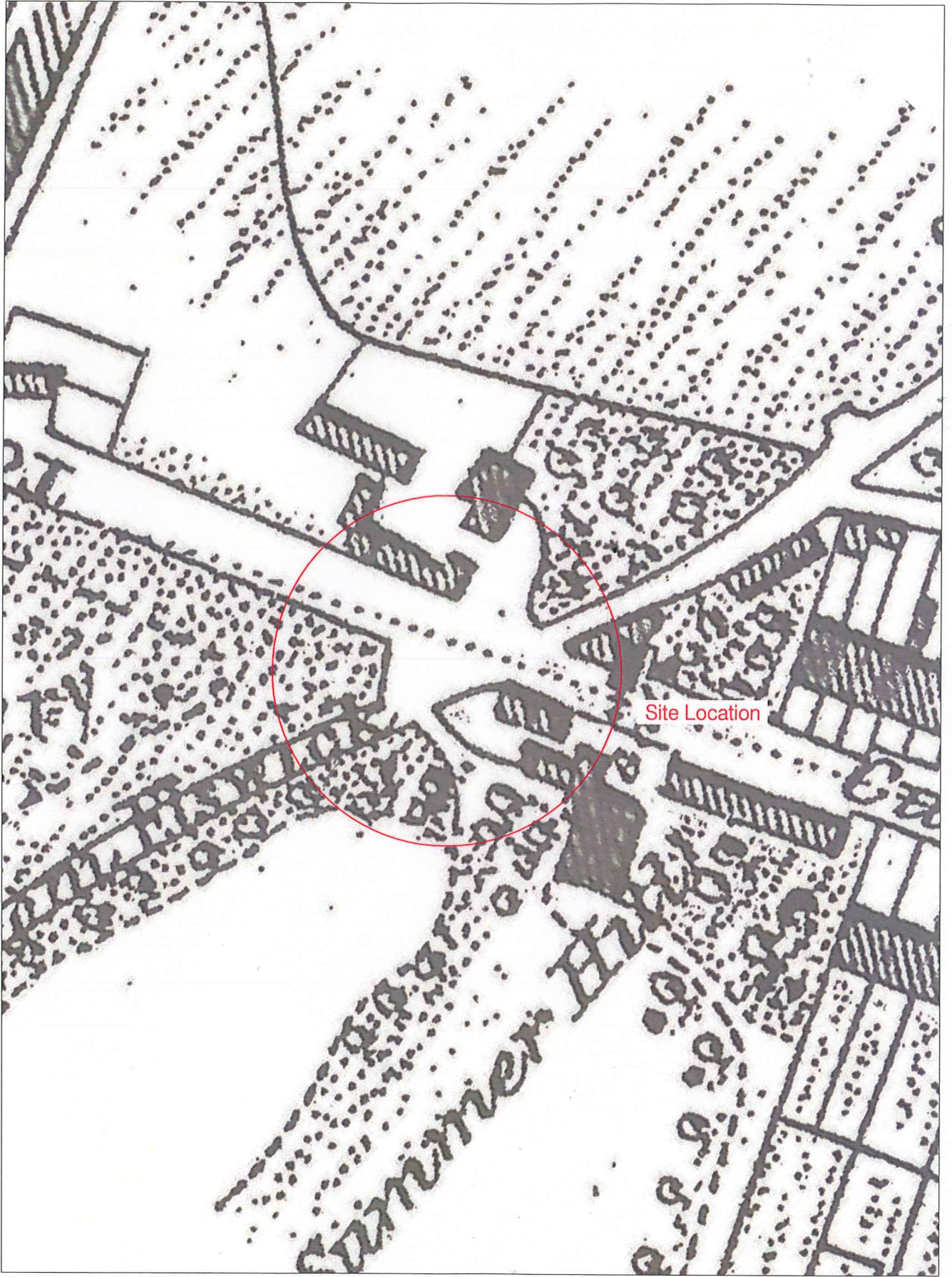
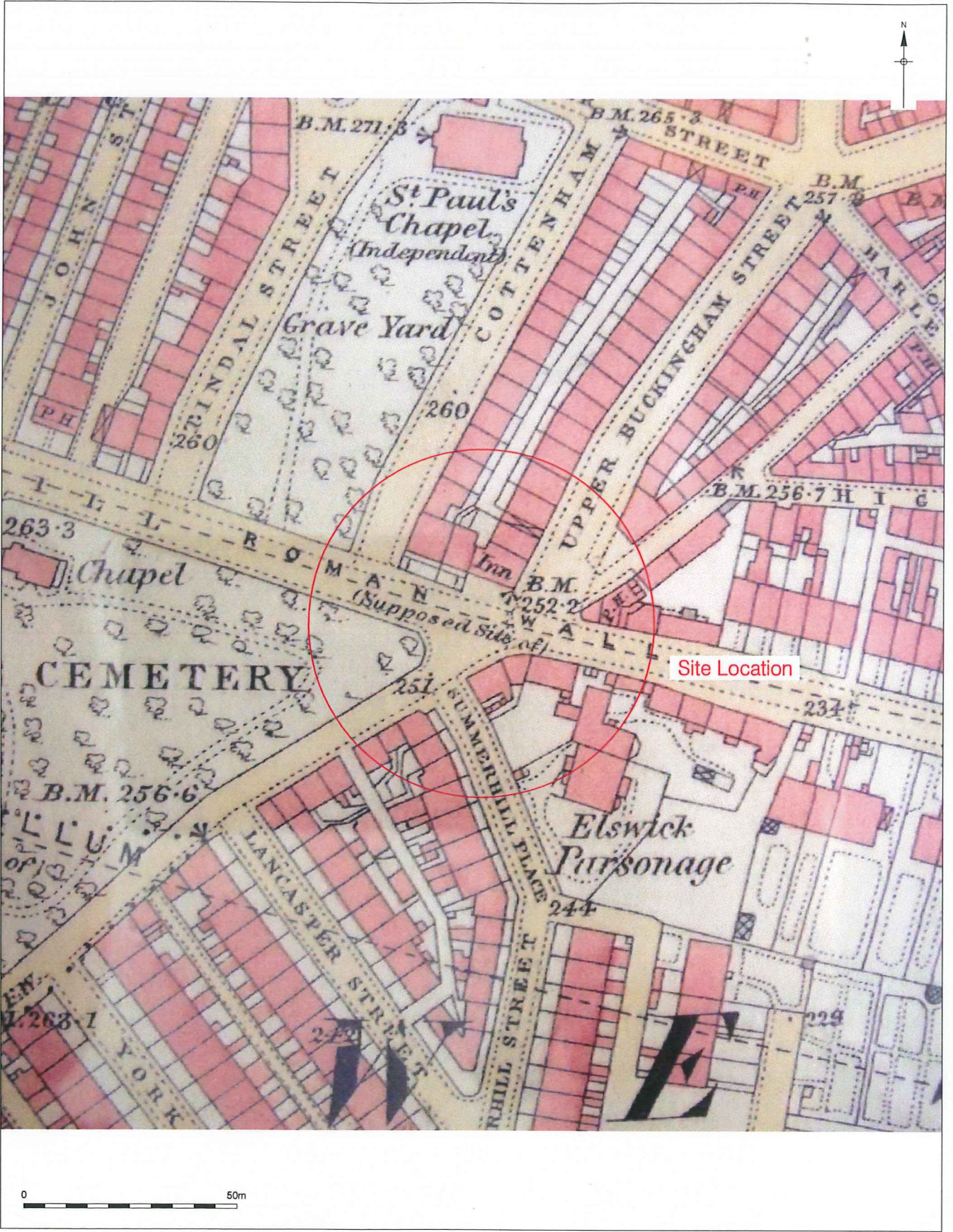


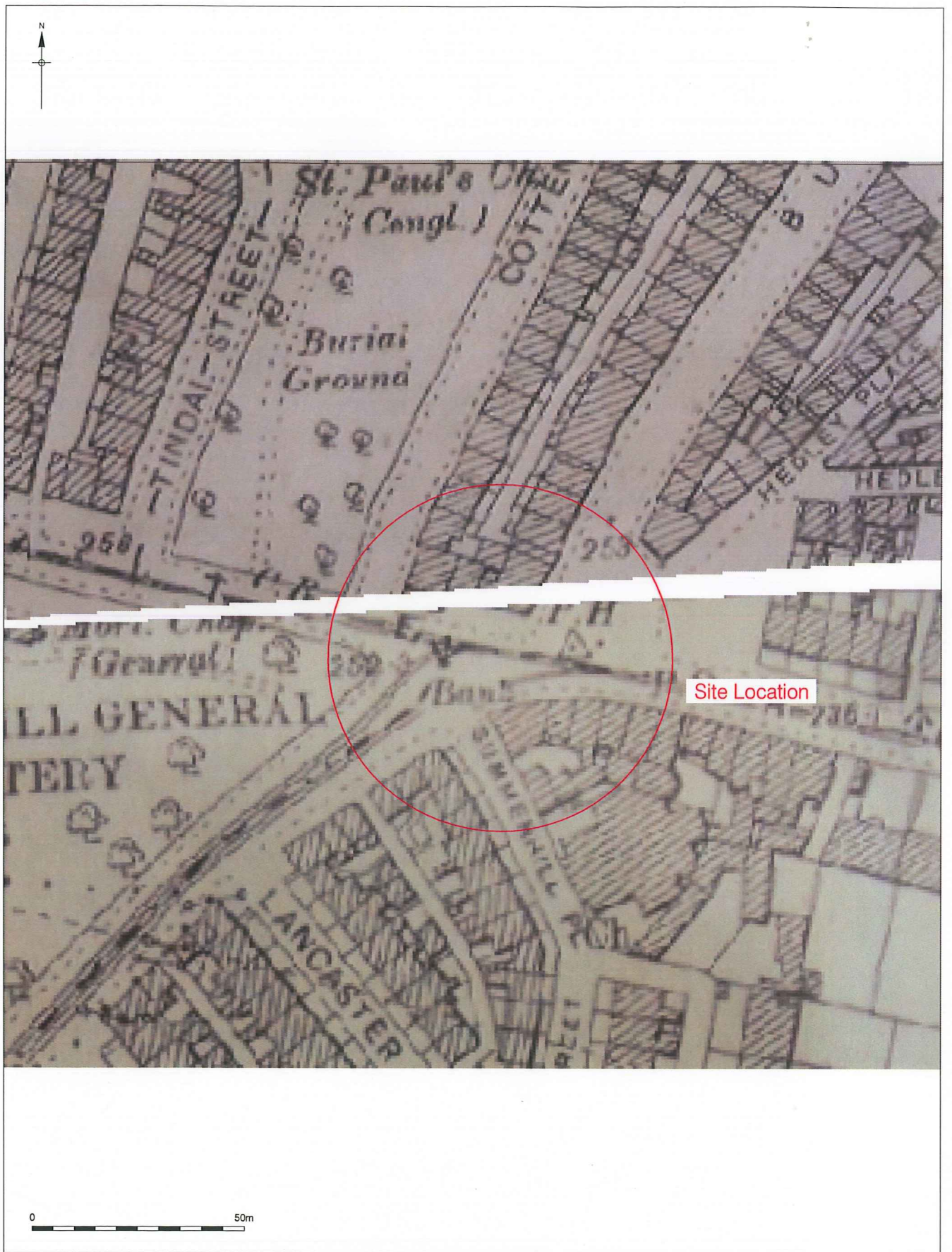
Figure 3
Oliver, 1830
Not to Scale





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Figure 5
 Ordnance Survey, 1st edition (25-inch), 1879
 1:1,250 at A4



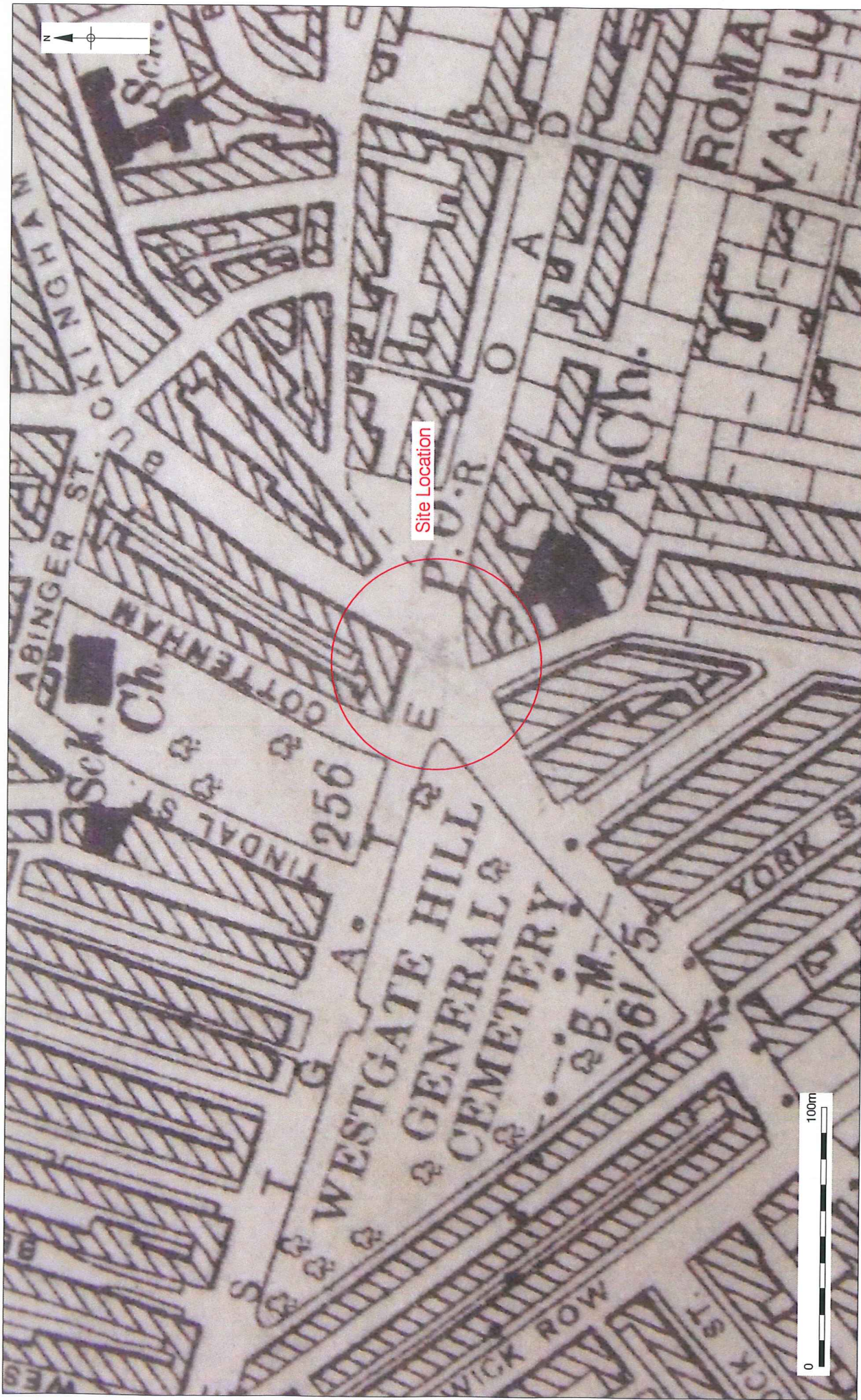


Figure 7
Ordnance Survey, 2nd edition (6-inch), 1899
1:2,000 at A4

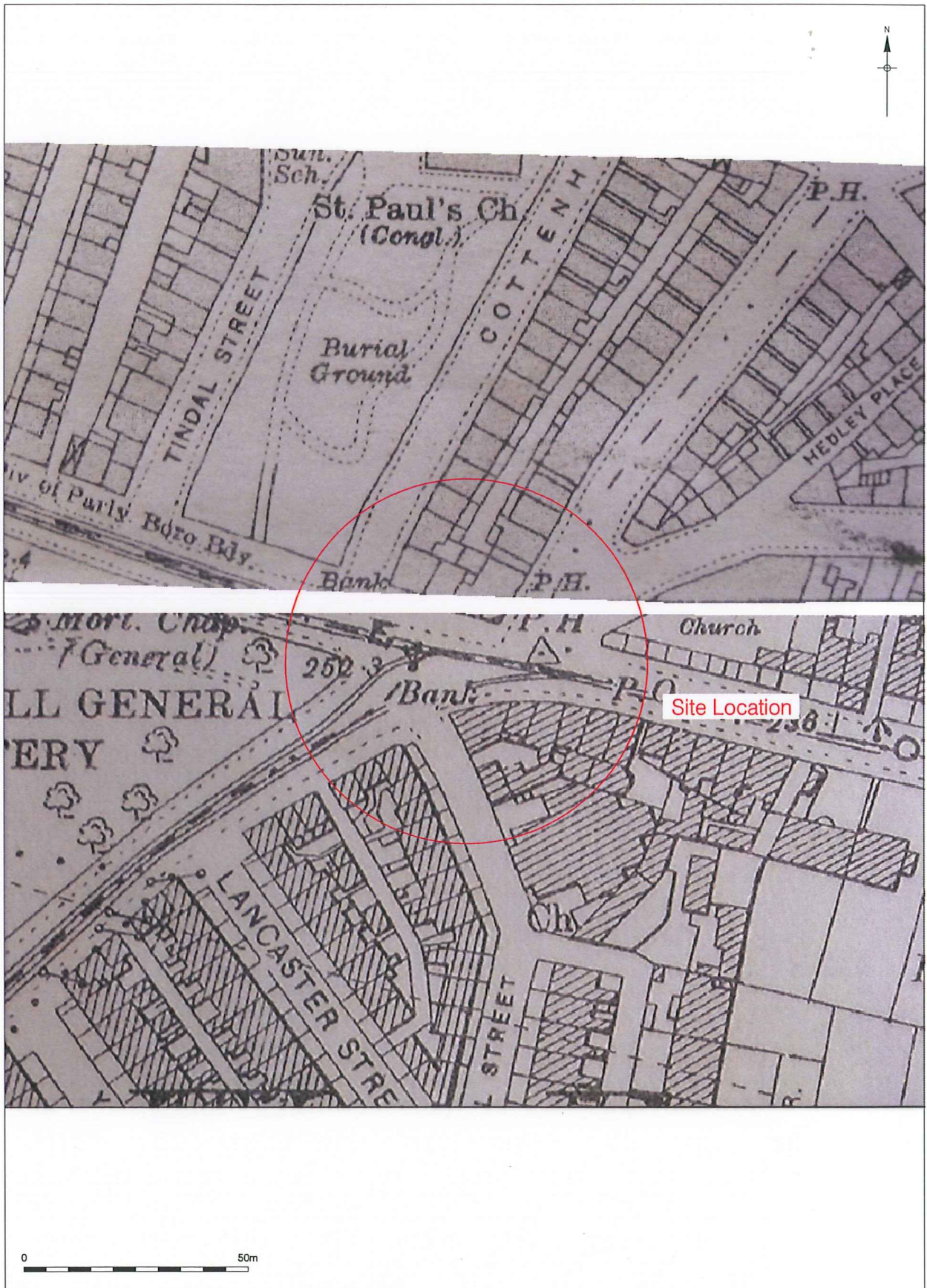
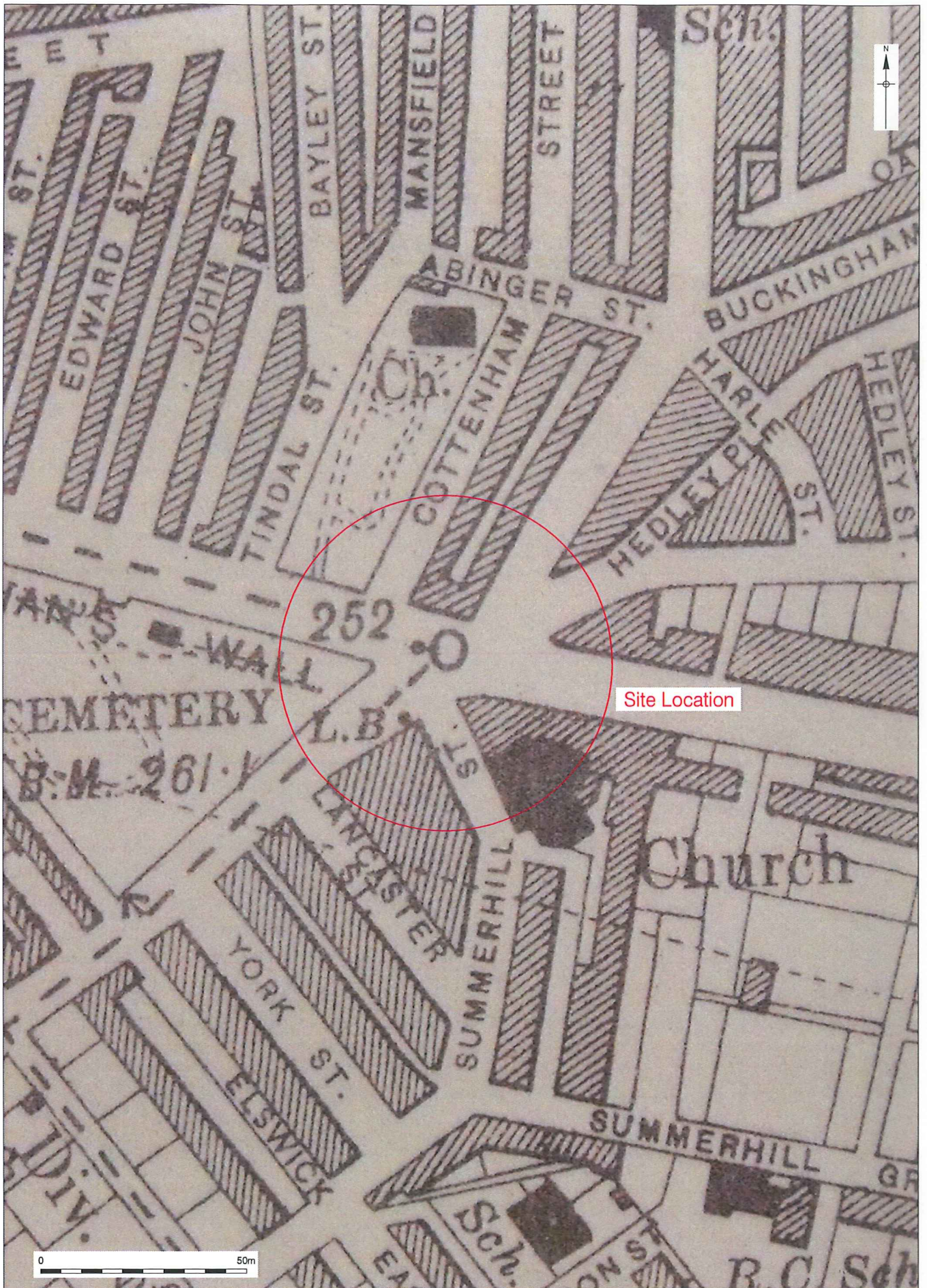
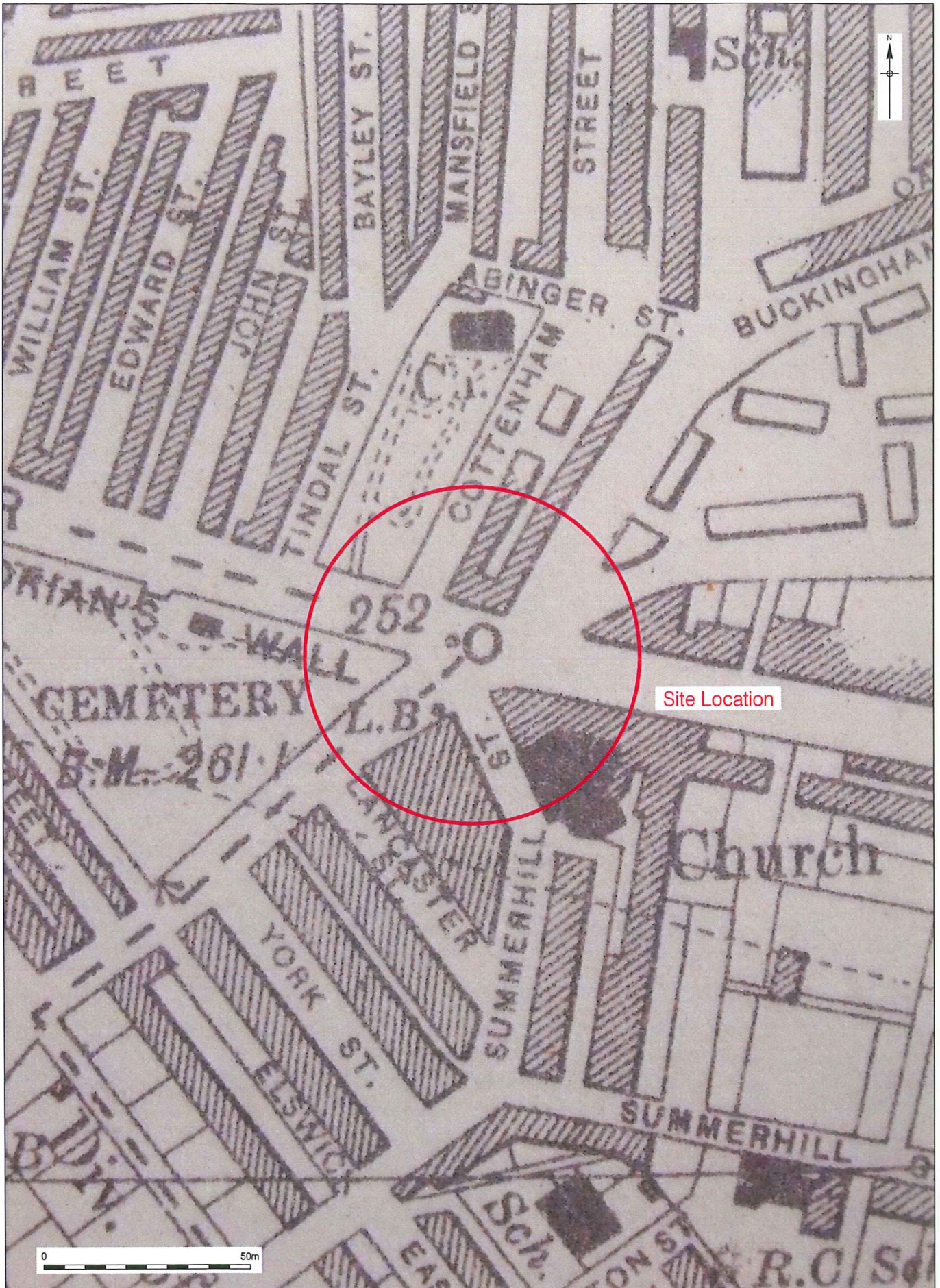


Figure 8
 Ordnance Survey, 3rd edition (25-inch), 1912/1919
 1:1,250 at A4





Site Location

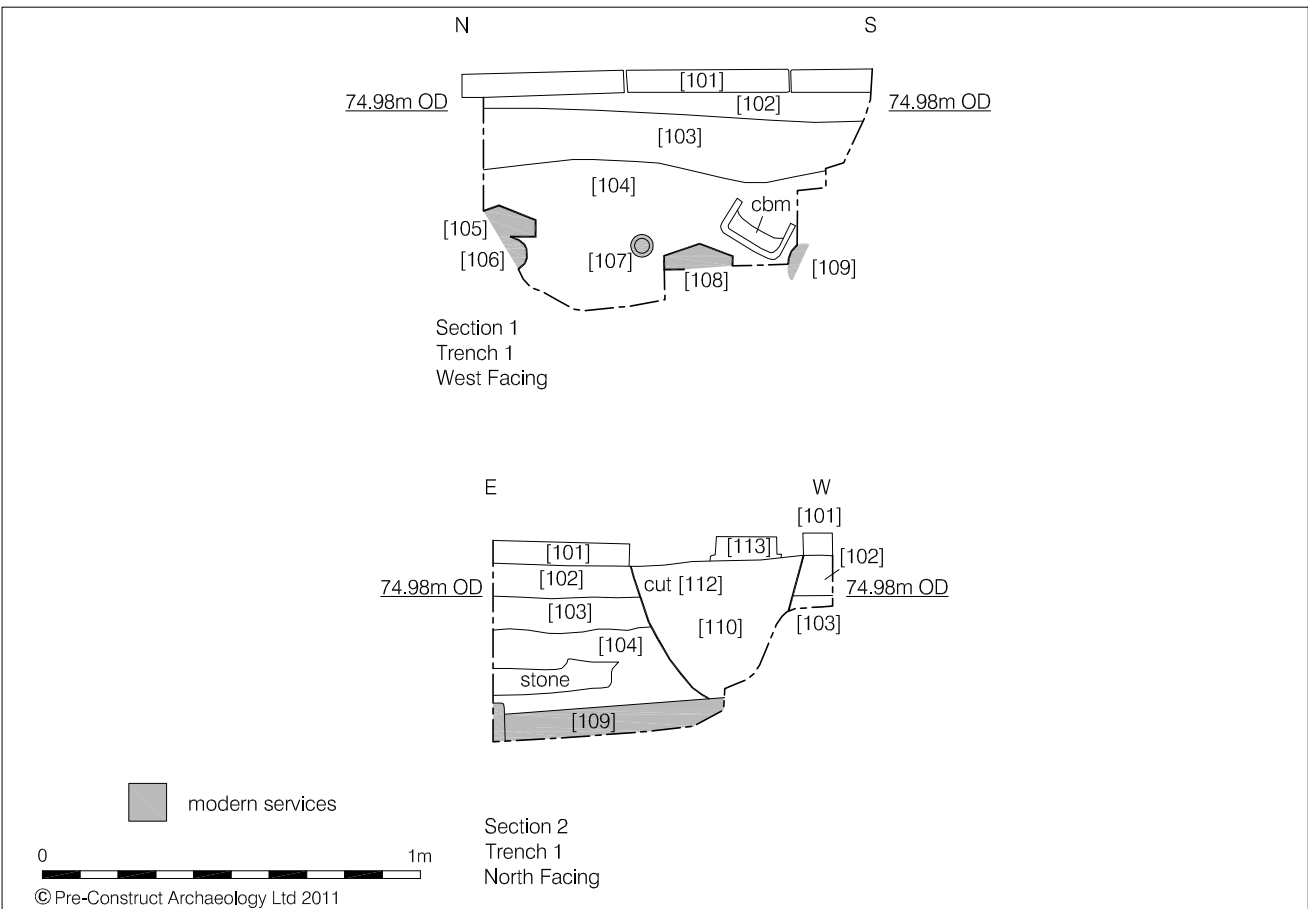
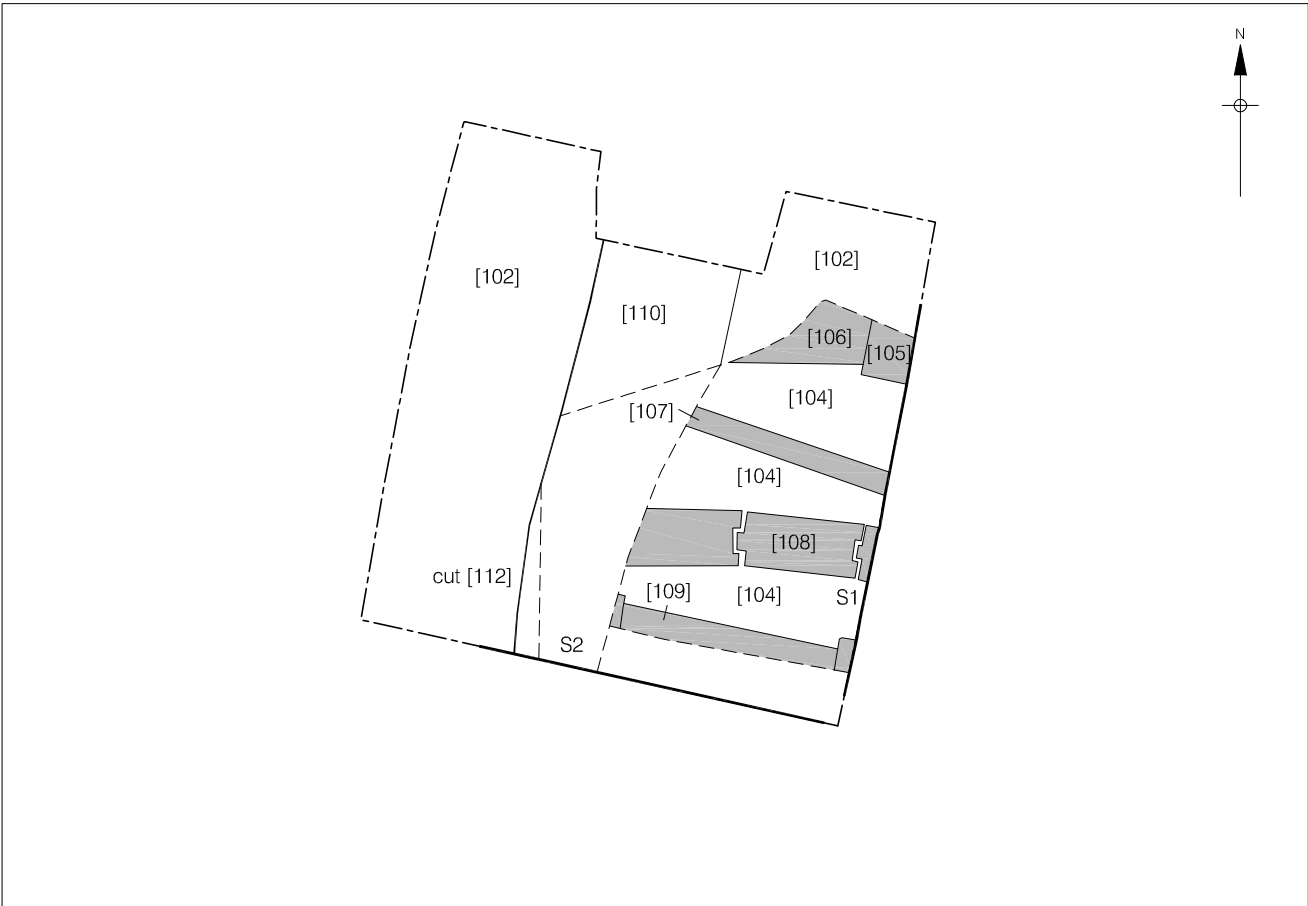


Figure 11
 Trench 1
 1:20 at A4

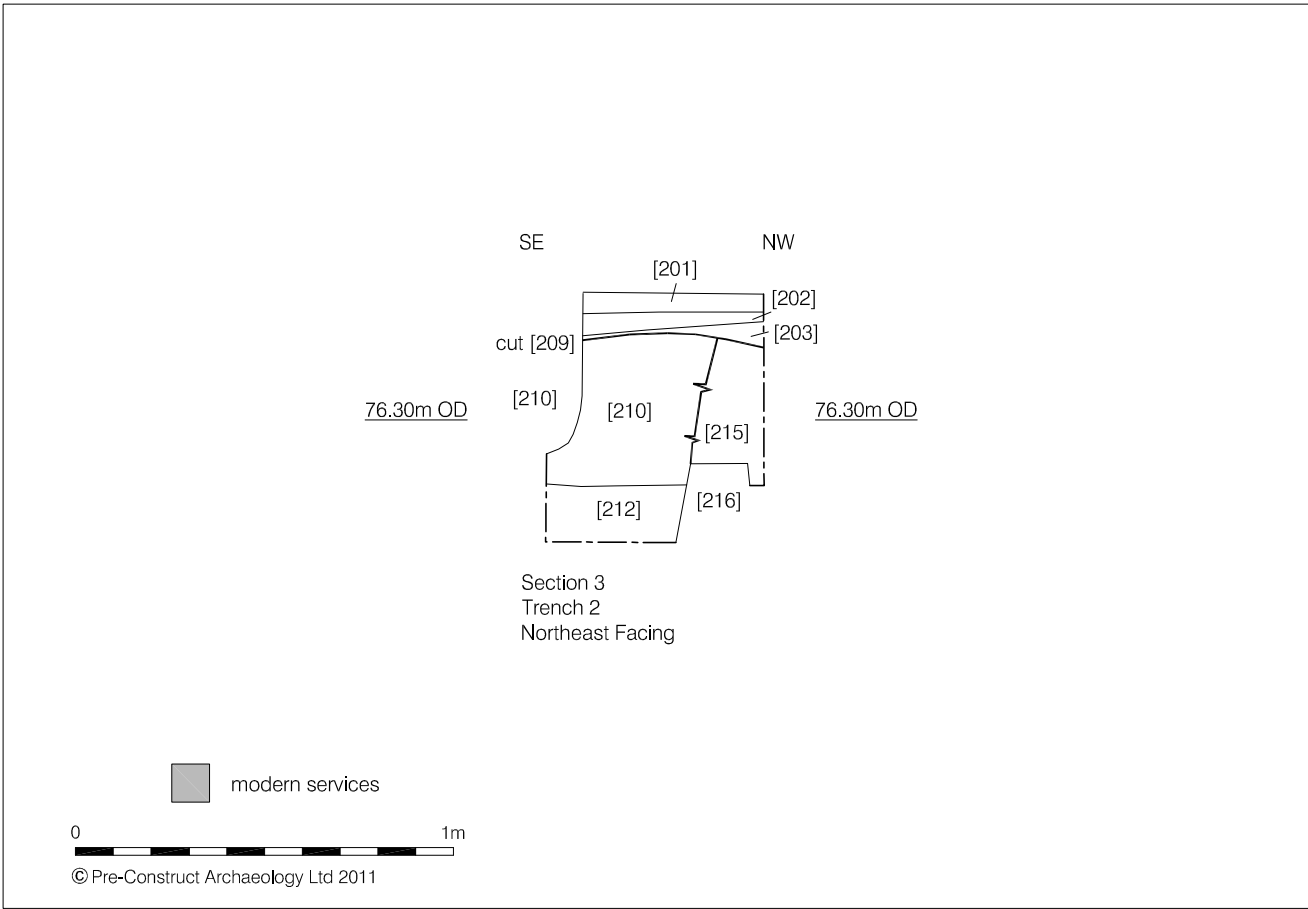
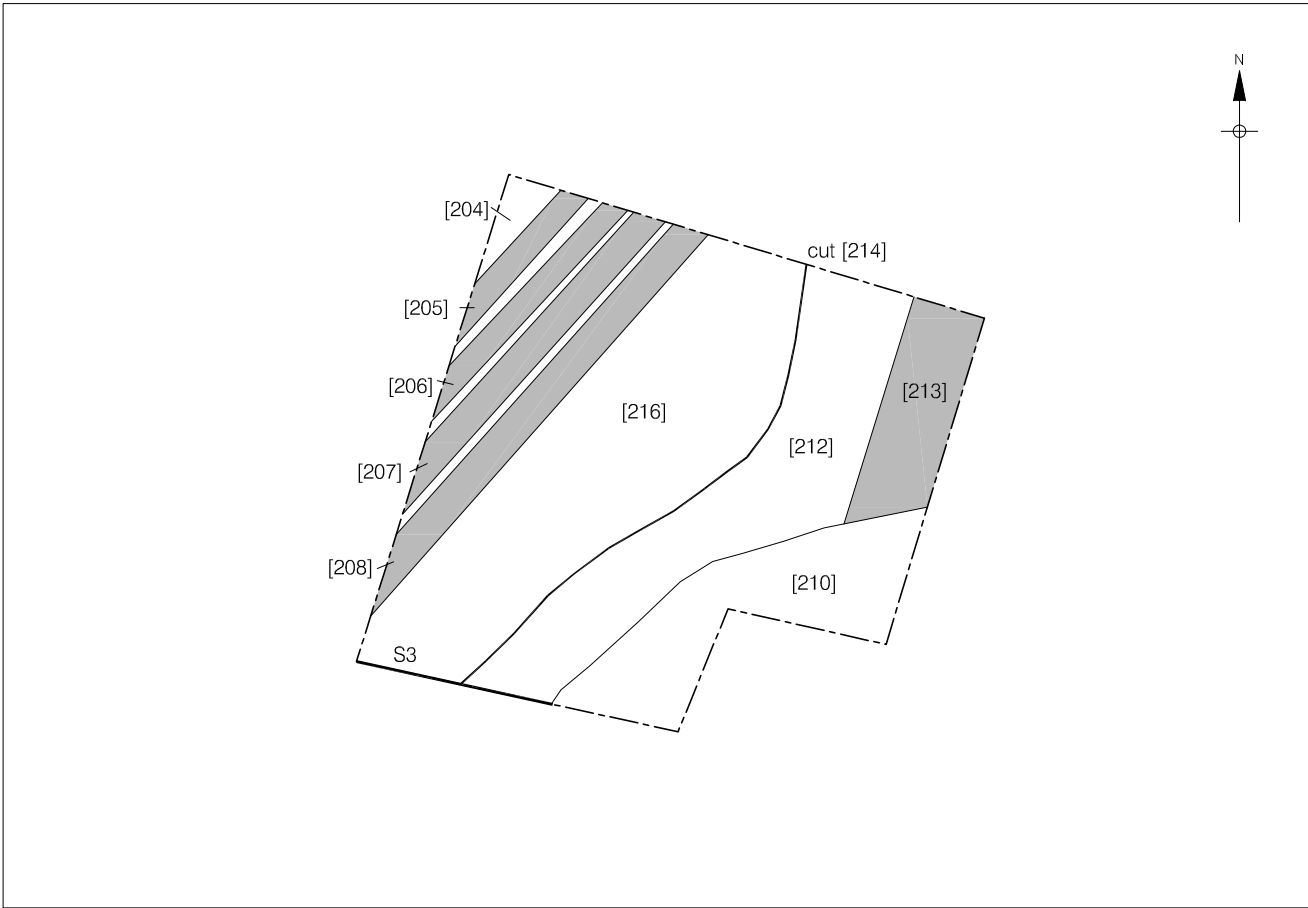


Figure 12
Trench 2
1:20 at A4

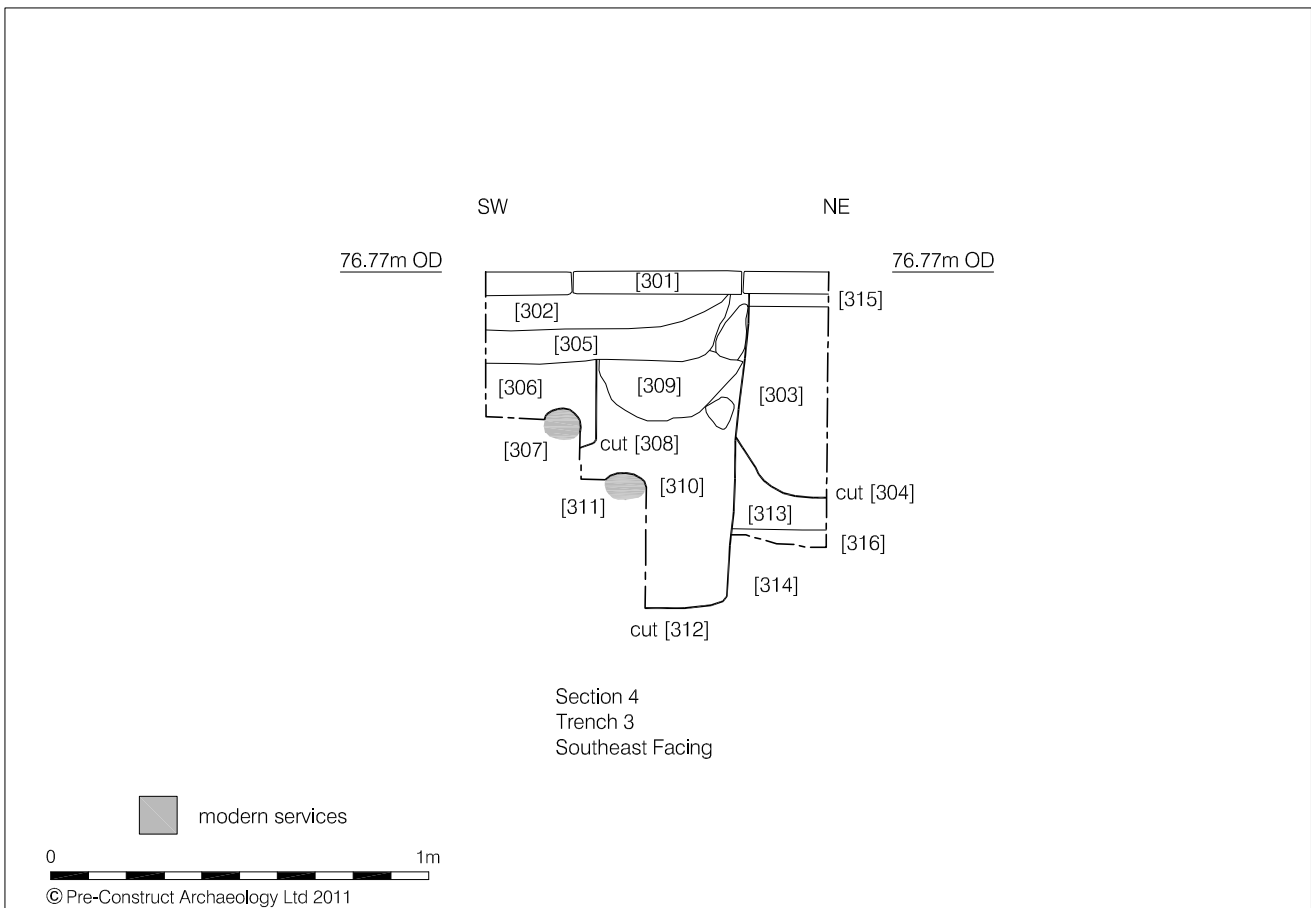
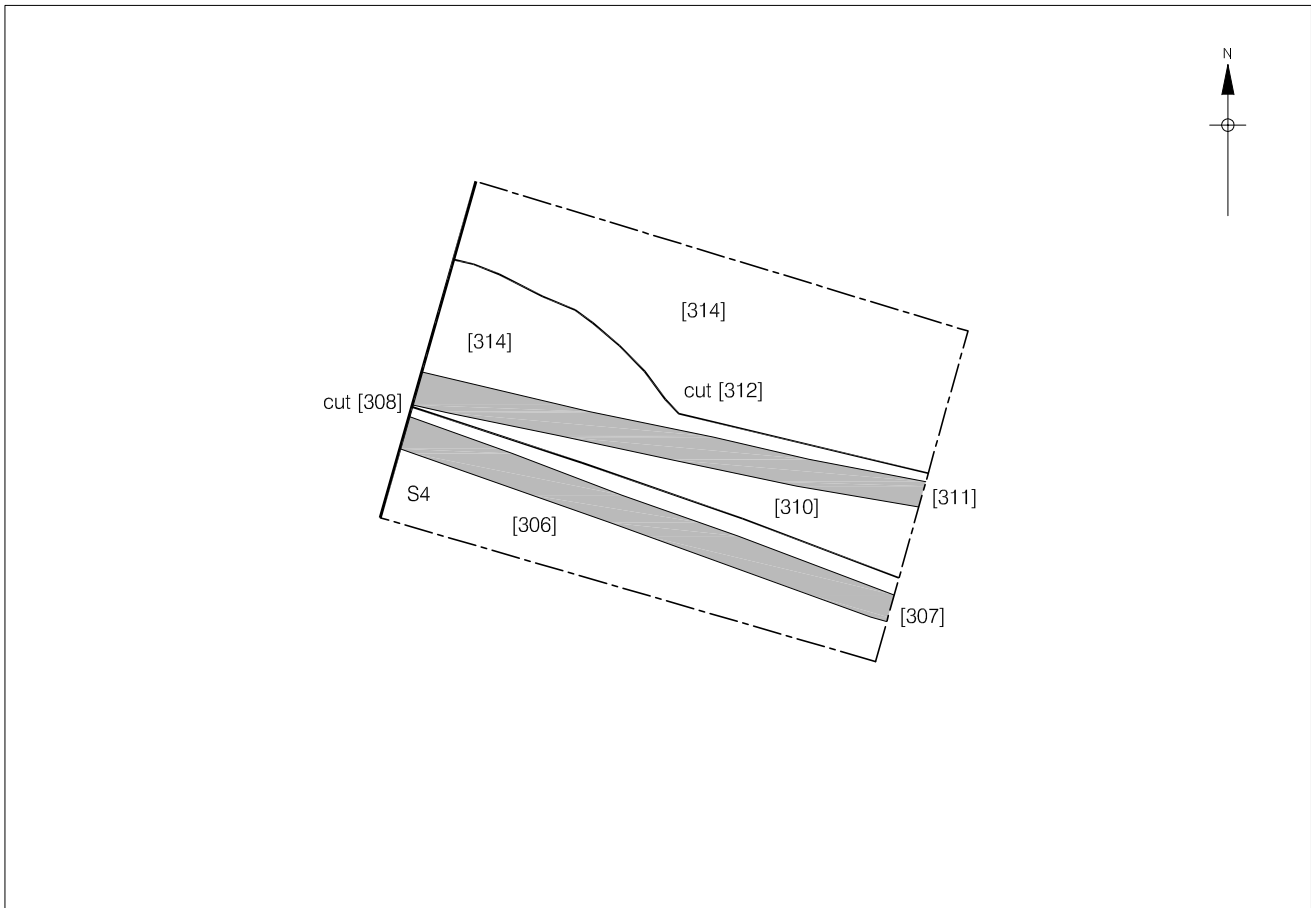


Figure 13
Trench 3
1:20 at A4



Figure 14: Trench 1, Section 1, looking east (scale 1m)



Figure 15: Overview of Trench 1, looking south (scale 1m)



Figure 16: Trench 2, Section 3, looking south-west (*scale 1m*)



Figure 17: Overview of Trench 2, looking south-west (*scale 1m*)



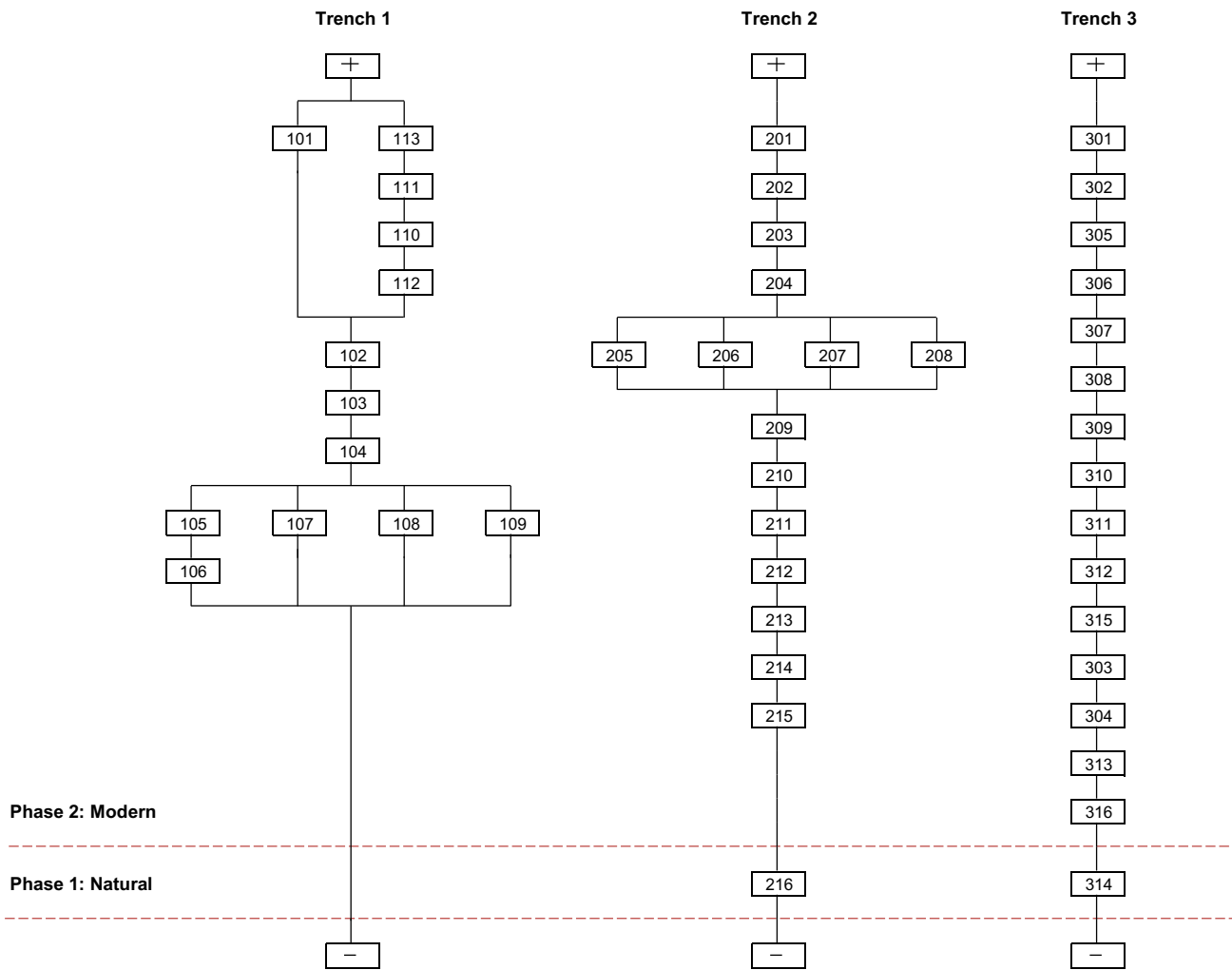
Figure 18: Trench 3, Section 4, looking north-west (*scale 1m*)



Figure 19: Overview of Trench 3, looking north-west (*scale 1m*)

APPENDIX A
STRATIGRAPHIC MATRICES

WCE 11: STRATIGRAPHIC MATRICES



APPENDIX B
CONTEXT INDEX

WCE11: CONTEXT INDEX

Context	Trench	Phase	Type 1	Type 2	Interpretation
101	1	2	masonry	surface	concrete paving
102	1	2	deposit	structure	concrete bedding for paving [101]
103	1	2	deposit	layer	stone foundation layer for paving [101]
104	1	2	deposit	fill	sandy silt backfill above services [106], [107], [108], [109]
105	1	2	masonry	structure	ceramic tile overlying iron pipe [106]
106	1	2	deposit	structure	iron pipe within service trench
107	1	2	deposit	structure	steel pipe within service trench
108	1	2	masonry	structure	ceramic tiles overlying service
109	1	2	deposit	structure	ceramic pipe within service trench
110	1	2	deposit	fill	sandy backfill of service trench [112]
111	1	2	deposit	structure	plastic pipe within service trench [112]
112	1	2	cut	linear	service trench
113	1	2	deposit	structure	iron access cover for service [111]
201	2	2	masonry	surface	concrete paving
202	2	2	deposit	layer	sand bedding layer for paving [201]
203	2	2	deposit	fill	stone and sand backfill of service trench [209]
204	2	2	deposit	fill	sand backfill of service trench [209]
205	2	2	deposit	structure	plastic pipe within service trench [209]
206	2	2	deposit	structure	plastic pipe within service trench [209]
207	2	2	deposit	structure	plastic pipe within service trench [209]
208	2	2	deposit	structure	plastic pipe within service trench [209]
209	2	2	cut	linear	service trench
210	2	2	deposit	layer	concrete capping for service trench [214]
211	2	2	deposit	fill	sand backfill of service trench [214]
212	2	2	deposit	fill	gravel backfill of service trench [214]
213	2	2	deposit	structure	plastic pipe within service trench [214]
214	2	2	cut	linear	service trench
215	2	2	deposit	layer	levelling/dump deposit
216	2	1	deposit	layer	natural sandstone bedrock
301	3	2	masonry	surface	concrete paving surface
302	3	2	deposit	layer	sand bedding layer for paving [301]
303	3	2	deposit	fill	stone and sandy silt backfill of service trench [304]
304	3	2	cut	linear	service trench
305	3	2	deposit	layer	stone foundation layer for paving [301]
306	3	2	deposit	fill	sandy silt and stone backfill of service trench [308]
307	3	2	deposit	structure	plastic pipe within service trench [308]
308	3	2	cut	linear	service trench
309	3	2	deposit	layer	concrete capping for service trench [312]
310	3	2	deposit	fill	sandy clay and silty clay backfill of service trench [312]
311	3	2	deposit	structure	iron pipe within service trench [312]
312	3	2	cut	linear	service trench
313	3	2	deposit	layer	levelling/dump deposit
314	3	1	deposit	layer	natural sandstone bedrock
315	3	2	deposit	layer	sand bedding layer for paving [301]
316	3	2	deposit	layer	levelling/dump deposit

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