AN ARCHAEOLOGICAL EVALUATION ON LAND OFF CHURCH BANK, BOLTON, GREATER MANCHESTER

An Archaeological Evaluation on Land off Church Bank, Bolton, Greater Manchester

Central National Grid Reference: SD 7211 0929

Site Code: CHB 09

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CONTENTS

List of Figures

List of Figures

1. NON-TECHNICAL SUMMARY

1.1 An archaeological evaluation was undertaken in November 2009 by Pre-Construct Archaeology Limited on land off Church Bank, Bolton, Greater Manchester. The work was commissioned by Bolton Metropolitan Borough Council and undertaken ahead of a proposal to re-develop the site.

1.2 The site is located on the eastern margin of the main civic and retail core of Bolton. Situated within the valley of the now largely culverted River Croal, the site lies on the south side of the lower, eastern end of Church Bank. Irregular in shape and predominantly grassed land crossed by two public footpaths, the site covers an area of *c.* 0.57 hectares, centred at National Grid Reference SD 7211 0929. It is bounded to the east by the A666, St Peter's Way, to the south by the Croal Railway Viaduct and to the west by a steep bank atop which lie the grounds of St. Peter's Church.

1.3 It is for the later post-medieval industrial era that the site is of particular archaeological interest. This potential was established in an archaeological desk-based assessment, undertaken earlier in 2009, which postulated that elements of a number of 19th century riverside properties could survive as sub-surface archaeological remains on the site. Any such properties would have occupied an area flanked by Church Bank Bridge and the River Croal to the north and east, respectively. Since the 1960s, the Croal has been culverted below ground though the eastern part of the site. The site does not lie within an Archaeological Priority Zone or Conservation Area, as defined by Bolton Council, and there are no Scheduled Ancient Monuments, Listed Buildings or archaeological findspots within its boundaries.

1.4 Three trial trenches (Trenches 1-3) were investigated during the evaluation, all sited to test the locations of riverside properties of likely industrial, commercial or residential function shown on 19th century maps, as identified by the desk-based assessment. Trenches 2 and 3 were sited in a corridor of grassed land in the western portion of the site, within the new build footprint of the proposed development, while Trench 1 was sited on a sloping grassed area in the north-eastern portion of the site, within an area proposed for tree planting.

1.5 No archaeological remains of significance were encountered within Trench 1, which was linear in form and excavated to depth of more than 1.60m through modern overburden, likely deposited during landscaping of the site in the 1960s. The trench was sited close to the underground culvert conveying the River Croal through the site.

1.6 Trench 2, linear in form and located in the north-western part of the site, exposed the well-preserved remains of a small brick building, with some sandstone elements – these probably later additions- at a depth of approximately 1.70m below existing ground level. Hand excavation within the southernmost of two rooms exposed the footing of one external wall, and established that the remains survived to a height of approximately 0.80m. Historic map evidence indicates that this building is of likely mid to late 19th century date and probably fronted onto a lane running towards the river in this period. A wall exposed to the north is likely to have been a boundary feature. Compact deposits exposed in association with the structural remains are likely to represent contemporary ground or floor surfaces. Demolition material overlying the structural remains was, in turn, overlain by approximately 1.60m of modern overburden, again the result of landscaping in the modern era.

1.7 Trench 3 was T-shaped and sited in the central western part of the site. In its eastern arm, part of a NE-SW aligned stone and brick wall was revealed approximately 1.65m below existing ground level. Historic map evidence indicates that this structure was likely related to an isolated property that occupied this location from the mid 19th century onwards, with probably several phases of re-development. Demolition material was recorded in association with the structural remains. This trench also recorded refuse deposits likely derived from both industrial and domestic activity and a small assemblage of pottery recovered from these indicates a mid to late 19th century date for these deposits. Approximately 1.50m of modern overburden, again the result of landscaping in the modern era, was recorded in Trench 3.

1.8 The structural remains and any associated floor or ground surface recorded in Trenches 2 and 3 are considered to be of archaeological significance at a local level, at least.

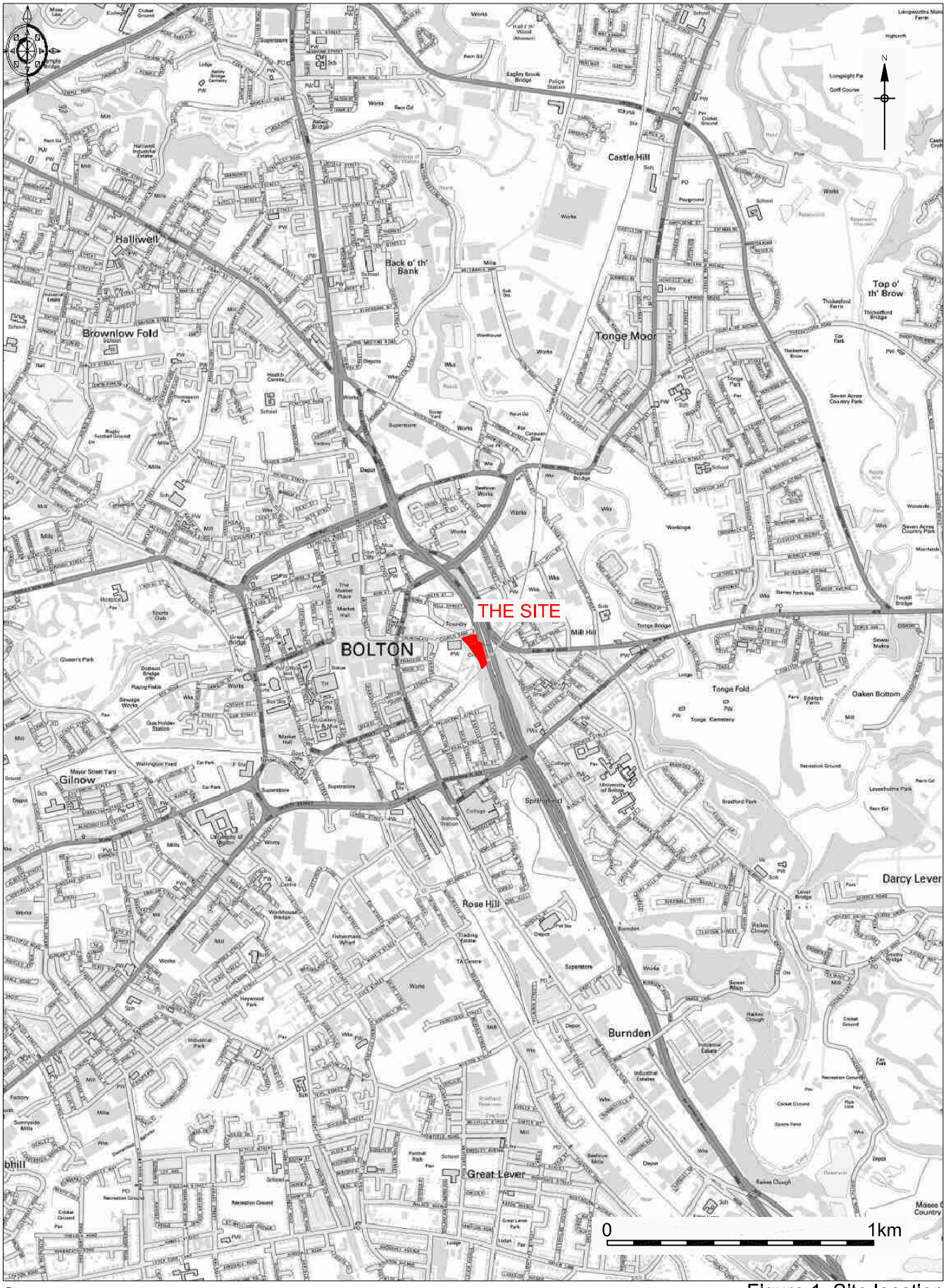


Figure 1. Site location
Scale 1:20,000

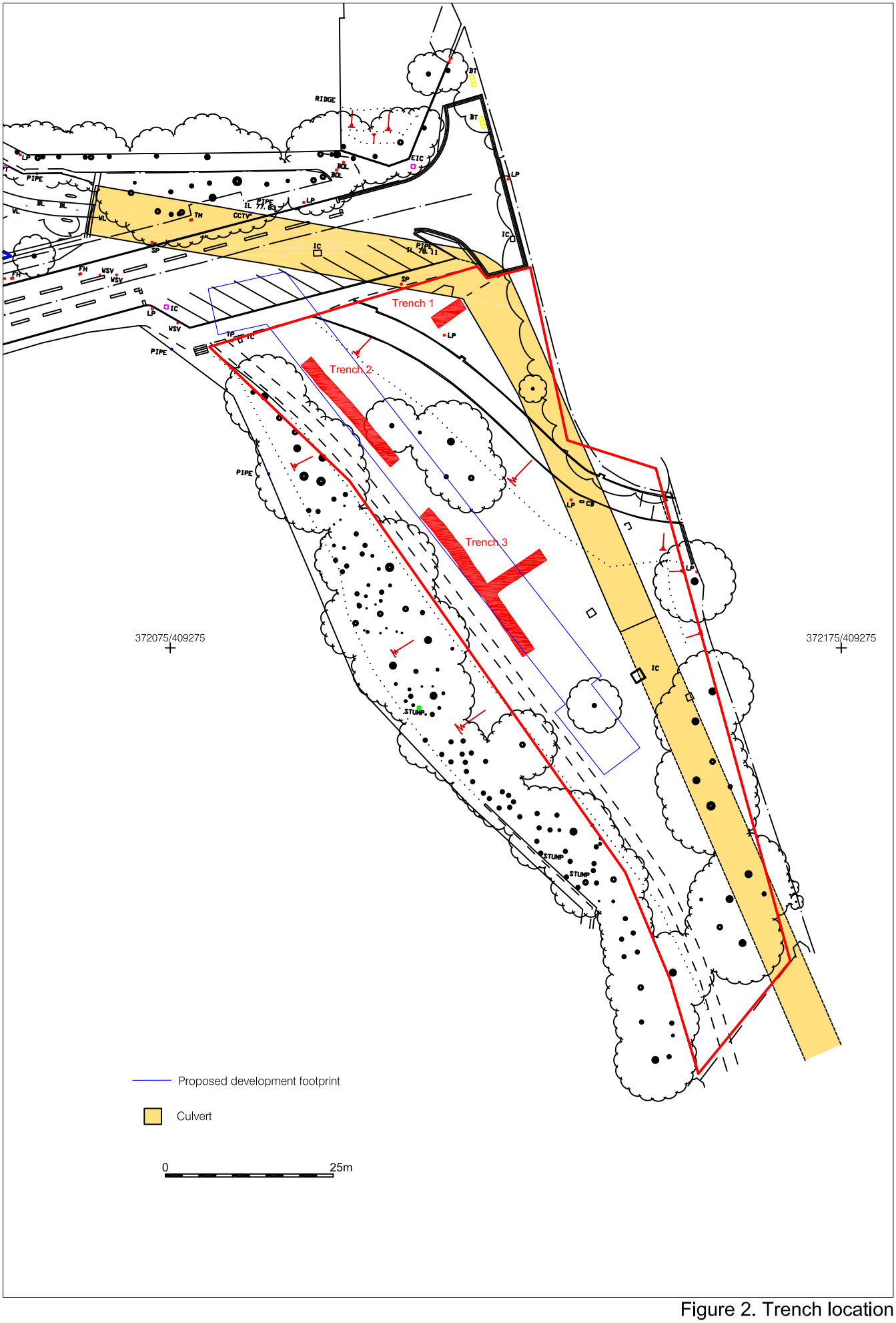


Figure 2. Trench location
Scale 1:750

2. INTRODUCTION

2.1 General Background

2.1.1 This report details the methodology and results of an archaeological trial trenching evaluation undertaken 16-27 November 2009 by Pre-Construct Archaeology Limited (PCA) on land off Church Bank, Bolton, Greater Manchester. The work was undertaken ahead of a proposed mixed-use development and was commissioned by Bolton Metropolitan Borough Council (MBC).

2.1.2 The evaluation was undertaken on the recommendation of the Greater Manchester Archaeology Unit (GMAU), the body with responsibility for archaeological development control throughout Greater Manchester. The site has particular archaeological interest for the later post-medieval industrial era, as highlighted in an earlier archaeological desk-based assessment undertaken by PCA.[1]

2.1.3 The work was undertaken according to a Brief[2] prepared by the GMAU. In response to the Brief, PCA prepared a Project Design,[3] incorporating a 'written scheme of investigation', for the work, which detailed a revised layout of trial trenches, which was discussed with and approved by the GMAU in advance of the fieldwork. The broad aim of the work was to assess the impact of the development proposals upon the archaeological resource at the site.

2.1.4 The evaluation comprised the investigation of three trenches (Trenches 1-3), all sited to test the locations of areas shown occupied by properties on 19th century maps. These buildings were most likely related to industrial and/or commercial activities undertaken on land above the western bank of the River Croal, which is now carried by an underground culvert through the eastern portion of the site. Thus the site had good potential to contain important archaeological evidence relating to the industrial, economic and social heritage of Bolton.

2.1.5 The completed Site Archive, comprising written, drawn, and photographic records and a small assemblage of artefactual material, is housed at the Northern Office of PCA, Unit N19a Tursdale Business Park, Durham, DH6 5PG. When complete, the Site Archive will be deposited at The Manchester Museum, The University of Manchester, Oxford Road, Manchester M13 9PL, under the site code CHB 09.

2.1.6 The Online Access to the Index of Archaeological Investigations (OASIS) reference number for the archaeological evaluation is: preconst1-70203.

2.2 Site Location and Description

2.2.1 The site lies on the eastern margin of the main civic and retail core of Bolton. Irregular in shape it is *c.* 0.57 hectares in size, centred at National Grid Reference SD 7211 0929 (Figure 1).

[1] PCA 2009a.
[2] GMAU 2009.
[3] PCA 2009b.

2.2.2 The site lies on the south side of the eastern end of what is now a no-through-road, Church Bank. To the west, Church Bank rises up what is, in terms of natural topography, the valley side of the River Croal. Prior to modern era development, Church Bank continued to the east, as Church Bank Bridge, crossing the River Croal, a feature that is now culverted underground through the eastern portion of the site. Thus the easternmost section of Church Bank, a car parking area immediately to the north of the site, was formerly the location of Church Bank Bridge. To the east, the site is now bounded by an important element of the modern road network, a section of the A666 known as St. Peter's Way, while to south it is bounded by the Croal Railway Viaduct. On higher ground immediately to the west of the site stands St. Peter's Church, within its extensive grounds.

2.2.3 Two public footpaths cross the site. The first runs roughly southwards from the north-western corner of the site on Church Bank, through the entire length of the site to continue below the Croal Viaduct. The second runs from midway along the northern boundary of the site on Church Bank, with a sinuous course, increasingly in-cutting as it runs south-eastwards to continue into a subway below St. Peter's Way. The area between the two footpaths is grassed, sloping away on its north-eastern side, while the north-easternmost portion of the site, a triangle of land beyond the second footpath, has similar surface treatment, this sloping away to the south-west. The westernmost portion of the site, beyond the first footpath, comprises land which rises sharply up to the west, to abut the grounds of St. Peter's Church. This sloping belt of land, with tree cover immediately prior to the work herein described, represents part of the western valley side of the River Croal.

2.3 Geology and Topography

2.3.1 The solid geology of the area of the site comprises Carboniferous Sandstone with Westphalian B (Lower) Coal Measures.[4] Quaternary glacial deposits of variable depth and composition are known to overlay the solid geology throughout Greater Manchester, with alluvium and boulder clay forming the predominant drift geology of the Bolton area. At least three coal seams are known to potentially exist below the site, at relatively shallow depth.

2.3.2 As previously mentioned, in terms of natural setting the site lies on the steep western valley side of the River Croal, with the river now conveyed below ground through the eastern portion of the site by a reinforced concrete culvert. Immediately to the east of the site the A666 was constructed in the modern era. While it is likely that the natural topography of parts of the site, particularly its easternmost margin, has been altered significantly, the overall form of the site still broadly reflects the natural valley side topography.

2.3.3 Geotechnical site investigations undertaken at the site in 2009 broadly concluded that substantial thicknesses of 'made ground' were present on the site. An upper 'made ground' deposit, between 2.90m and 4.90m thick, included brick fragments, ash and occasional concrete fragments. Such material could of course include *in situ* archaeological remains of post-medieval or early modern industrial date. An underlying 'made ground' deposit recorded by this work, comprising yellow or brown clay with sandstone inclusions, may in fact have been a naturally formed material, such as colluvial valley fill.

[4] Institute of Geological Sciences 1975.

2.3.4 A topographic survey in 2009 recorded ground level on Church Bank, at the north-west and north-east corners of the site, at 83.39m OD and 81.47m OD, respectively. Comparison with height data on Ordnance Survey maps from the early-mid 20th century indicates that there has been very little variation in ground level in the north-westernmost portion of the site since then. Similarly, in the westernmost portion of the site, where the ground falls away steeply to the east from the grounds of St. Peter's Church, there appears to have been little or no alteration in ground levels since the mid 20th century. The topographic survey recorded the retaining wall forming the western site boundary at a maximum height of 88.68m OD. The footpath running through the full length of the western part of the site was recorded at heights of 83.16 m OD and 81.38m OD at its northern and southern ends, respectively. The grassed central portion of the site was recorded at maximum heights of 83.04 m OD at its northern end, 81.27m OD at its southern end, with a general fall away to the east, down to the footpath serving the pedestrian subway along the eastern site boundary, for example to 79.32m OD at the entrance to the subway.

2.4 Planning Background

2.4.1 The re-development proposal for the site comprises residential-led mixed land use, with areas of hard landscaping for access and car parking and soft landscaping throughout. It is proposed that a NW-SE aligned range of housing will be constructed within the western portion of the site. Options under consideration for the foundations of the new structures are unknown at present, although it is considered likely that concrete piled foundations will be utilised.

2.4.2 Government guidance on archaeology and heritage conservation is set out in *Planning Policy Guidance Note 16: 'Archaeology and Planning'* (PPG16),[5] which is under review as part of a consultation paper (July-October 2009) on a new national Planning Policy Statement (PPS 15) on the historic environment.

2.4.3 At a local level, the Local Planning Authority (LPA), Bolton MBC, has various policies within its Unitary Development Plan concerning archaeology. Policies of particular relevance to the project herein described are:

- ***07.36 D14. The Council will not permit development which would adversely affect nationally important archaeological site or monuments or their setting, be they scheduled or not.***
- ***07.38 D15. The Council will only permit development which affects any known or suspected archaeological site subject to:***

  (i) submission of archaeological assessment and/or evaluation, to assess the nature, extent and significance of the remains present and the degree to which the proposed development is likely to affect them;

  (ii) a requirement that any archaeological remains are preserved in-situ by careful design, layout and siting of the new development; or

  (iii) where in-situ preservation is not justified, a legal obligation, to make provision for recording and/or excavation prior to development, with publication of the results.

[5] Department of the Environment 1990.

- ***07.39. Archaeological remains are a finite, non-renewable resource which in many cases are highly fragile and vulnerable to damage and destruction. Wherever possible, developments should be located and designed to avoid archaeological remains to ensure these are preserved in-situ. Where the Council decides that in-situ preservation is not justified, then the developer will be required to make provision for the excavation and recording of remains prior to development.***

2.4.4 The site does not lie within an Archaeological Priority Zone as defined by Bolton MBC nor does it lie within a Conservation Area. There are no Scheduled Ancient Monuments upon or within the vicinity of the site and there are no Listed Buildings within the site.

2.4.5 The GMAU, in its capacity as archaeological advisor to the LPA, has responsibility for archaeological development control throughout Greater Manchester. Since invasive groundworks associated with the re-development scheme have potential to disturb or destroy important archaeological remains, the GMAU recommended that a phase of targeted archaeological evaluation trenching be undertaken to assess the impact of the scheme upon the archaeological resource at the site. The results of the aforementioned archaeological DBA were used to inform the design of the work.

2.5 Archaeological and Historical Background

Information contained within the desk-based assessment (DBA) has been used as the basis for this summary background. Historic Environment Record (HER) numbers are not included here and the DBA should be consulted for full details and references. The 'wider study area' referred to below was an area designated in the DBA as being of radius 0.5km around the actual site under consideration.

2.5.1 Prehistoric

2.5.1.1 There are no HER entries relating to any of the prehistoric eras upon the site and just one within the wider study area. This relates to an antiquarian account of the discovery of a group of three burial features of probable Bronze Age, *c.* 330m to the south-east of the site. The account, from 1826, describes one of these features as an earthen mound averaging 30 feet in diameter and four feet in height containing a burial within a central cist and associated finds including an incense cup and bronze dagger/knife. No evidence of these remains survives.

2.5.2 Roman

2.5.2.1 There are no HER entries relating to the Roman period upon the study site or within the wider study area.

2.5.2.2 A single sherd of Romano-British pottery was recovered during an archaeological investigation undertaken on the site of the Boar's Head Inn at 37-41 Churchgate. However, this item was residual in context and cannot be directly attributed to Roman settlement activity on Churchgate, although it does broadly suggest Roman activity within the general area.

2.5.3 Anglo-Saxon/Early Medieval

2.5.3.1 There are no HER entries relating to Anglo-Saxon or early medieval activity for the site or the wider study area. Neither is there any documentary evidence to suggest settlement or exploitation of the land in the vicinity of the study site between the end of the Roman period and the Norman Conquest.

2.5.3.2 Place name evidence does suggest an early medieval origin for Bolton, the name being a Saxon derivation of 'the tun, or farmstead of the hall'. Although the Domesday Book makes no mention of a settlement at Bolton, the manors of Great Bolton and Little Bolton, situated within the large parish of Bolton-le-Moors, had certainly been established by the end of the 11th century. The River Croal marked the boundary between the two manors, with the majority of the site occupying low-lying land above the western bank of the river.

2.5.3.3 The presumed location for any potential Saxon activity would be the Churchgate area, on the promontory to the west of the site. This is supported by a chance find of a decorated 10th century wheel-headed 'Ring of Glory' cross during the rebuilding of St. Peter's Church in 1866.

2.5.4 Medieval

2.5.4.1 There are no HER entries for the medieval period within the site and just a handful of entries within the wider study area.

2.5.4.2 As mentioned above, by the medieval period the east bank of the Croal lay within the manor of Little Bolton, while the west bank belonged to Great Bolton. The urban core of medieval Bolton developed in the latter manor, while the former remained mostly rural until the late 18th century. The medieval town formed along the principal east-west aligned roads of Churchgate and Deansgate and the intersecting roads of Windy Bank (later Bank Street) and Bradshawgate. In 1251 Henry III granted the town the right to hold a weekly market along Churchgate and Deansgate and two years later the Earl of Darby granted Great Bolton free borough status, which gave the leading citizens a degree of self-rule and *de facto* control over trade and industry in the town.

2.5.4.3 By the late medieval period Bolton was a comparatively prosperous market town, with its main commerce predominantly associated with the wool trade. Documentary evidence mentions that a market cross was erected at the intersection of Churchgate and Deansgate in 1482 and the original St. Peter's Church is thought likely to date from the 15th century. The medieval arrangement of long narrow burgage plots along Churchgate and Deansgate is clearly evident on the earliest mapping of the town centre from the 18th century. It is generally thought that the developed town centre did not extend as far eastwards as the sloping Church Bank even by the late medieval period. However, it is likely that the area of the site would have been used as riverside meadow or pasture during the medieval period.

2.5.4.4 There are two HER entries which relate to medieval structures within the wider study area, these being a sandstone wall at the Brass Cat public house on Churchgate and a brick, wood and plaster house on Windley Street, Little Bolton, which was rebuilt in 1862 and demolished in the mid 20th century.

2.5.5 Post-medieval/Industrial

2.5.5.1 The wider study area has several entries for the post-medieval period and industrial era, although none lie within the site itself.

2.5.5.2 Following the Reformation, Bolton acquired a reputation as a hotbed of Puritanism. During the English Civil War the town had a Parliamentarian garrison which repulsed two assaults by Royalists. An HER entry relates to defensive earthworks for this period at Bradshawgate, these comprising mud defensive walls erected between 1642 and 1644.

2.5.5.3 By the 17th century at least two permanent river crossings connected Great and Little Bolton, with Church Bridge being of particular relevance to the site herein described, situated as it was immediately to the north. References to the bridge appear in documentary records from as early as 1680. A mid 18th century print shows an arched stone bridge at the foot of Church Bank, with low-lying meadows flanking the shallow, meandering River Croal.

2.5.5.4 The textile industry in Bolton continued to be important throughout the 17th and 18th centuries and many warehouses were built to store raw materials and finished goods. Cotton began to supplant wool during this period and the town became known for its fustians – a mixed fabric of cotton and linen. There are four HER entries within the wider study area that relate to the textile industry, including various arrangements of mills and warehouses of 19th century and later date. In addition, there are several other HER entries within the wider study area that are associated with the industrial development of the town, including a former wash house, tram garage, brewhouse, beerhouse and buildings associated with timber yards and stables.

2.5.5.5 During the late 18th century manufacturing industry in the town rapidly expanded and demand for raw materials, particularly coal, greatly increased. Construction of the Bridgewater Navigation to convey coal from the Duke of Bridgewater's collieries to Manchester demonstrated that canals were an economical means of transport. In 1791 Royal Assent was given to begin work on the construction of a navigable canal to link Manchester, Bolton and Bury, with the terminus of the Bolton arm of the proposed canal to be located immediately to the east of the site. The overall work began in 1792, with the Bolton section of the canal largely completed by 1796, although some elements, including the terminal warehouse at 'Church Wharf', remained incomplete in 1798. Prior to the completion of the canal, a weir and sluices were built on the Croal to channel water from the river to a mill and to the canal itself at times of flood. These structures are depicted on the 1st edition Ordnance Survey map from the late 1840s and indeed remain on all subsequent mapping until the 1960s, when the stretch of the Croal underlying the site was culverted.

2.5.5.6 The Great Bolton Improvement Trust Map of 1793 depicts the site as largely undeveloped. Ranges of buildings of uncertain function are depicted along the east and west banks of the River Croal within the north-easternmost portion of the site. Also, a very small building is depicted in the southern portion of the site, skirting the western boundary and close to a school, which occupied land to the south of the church.

2.5.5.7 The 19th century saw rapid commercial and residential development of the Church Wharf area. The trade directory of 1818 listed 21 business and private occupants in the Church Wharf area, including six associated with the textile industry, three shopkeepers and two blacksmiths. A map of Bolton from 1824 depicts the 'Bury Canal' terminating at an L-shaped building on Church Wharf with extensive coal wharves skirting the east side of the canal. The site itself appeared largely undeveloped at this date, although some buildings are shown, most notably linear ranges in the central and north-eastern portions of the site. In addition, there is evidence of land division on the site and there are clearly pathways serving the riverside area, with the Croal itself depicted along the eastern margin of the site. Church Bank and Church Bridge are both depicted on this map.

2.5.5.8 The 1st edition Ordnance Survey map from the late 1840s shows the area of the site in greater detail. By this date the Croal Viaduct was in place, skirting the site to the south. It was built by the Bolton, Blackburn, Clitheroe & West Yorkshire Railway Company to carry the railway across the valley of the River Croal and over the canal. North of Church Bank, an extensive complex of buildings – the Wharf Foundry - is depicted, some elements of this being buildings shown on the 1824 map. By this date the north-easternmost portion of the site was relatively well developed, with some buildings fronting Church Bank to the north and some buildings along the western bank of the Croal. The building shown in the central portion of the site on the 1824 map is shown in developed form, with an extension eastwards towards the river and with outbuildings on its western side.

2.5.5.9 In 1860 the River Croal was dredged and paved, creating a masonry-lined channel in the vicinity of the site, this being first depicted on the Ordnance Survey 2nd edition map from the 1890s. this map shows further development of the north-eastern portion of the site, with the land there presumably a more attractive proposition for development with the risk of flooding reduced due to the canalisation of the river. East of the river, the Church Wharf area and beyond saw an intensification of development, particularly residential development, in the second half of the 19th century.

2.5.6 Modern

2.5.6.1 By the turn of the 20th century industrial activity at Church Wharf had contracted significantly, while the local retail and service economy had expanded. This process continued through the early decades of the century until the closure of the canal and its associated wharves in the 1930s. The 1910, 1927 and 1938 editions of the Ordnance Survey map show the site itself at its most developed. While the general arrangement of buildings is broadly similar to that shown on the 2nd edition, the entire Church Bank Bridge frontage to the north is shown infilled and the central portion of the site contains an expanded complex of buildings on the west bank of the Croal. By the time of the 1953 edition, there appears to have been some limited re-development of the site.

2.5.6.2 By the 1960s the majority of businesses in the Church Wharf area had either closed or relocated in advance of construction of what was then known as the Bolton Inner Relief Road. At the end of that decade the buildings on either side of the Croal were demolished, while the river itself was realigned slightly to the west of its original course and enclosed in an underground reinforced concrete culvert. A series of photos taken in the late 1960s shows the site prior to and during the demolition of the buildings either side of the river. Following the completion of the culvert, the construction of St. Peter's Way began in 1970. The site was landscaped upon completion of the associated works, including the insertion of the pedestrian subway exiting the site along its eastern boundary, and it has essentially remained unchanged since then.

3. PROJECT AIMS AND RESEARCH OBJECTIVES

3.1 Project Aims

3.1.1 The project was 'threat-led' with potential to disturb or destroy important sub-surface archaeological remains of the later post-medieval industrial era in particular. The main element of the development proposal is extensive new build along the western part of the site and associated landscaping (Figure 2). The broad aim of the evaluation was therefore to provide information regarding the character, date, extent and degree of survival of archaeological remains in the proposed development area, with particular emphasis on evidence of structural remains associated with riverside properties depicted on 19th century maps.

3.1.2 Investigation of a series of evaluation trenches was considered the most appropriate methodology to assess the impact of the proposed development upon the archaeological resource at the site. In the event that the site did contain archaeological remains of significance the work would therefore allow recommendations to be formulated regarding further mitigation measures necessary either to preserve archaeological remains *in situ* or to preserve archaeological remains by record through detailed excavation and then post-excavation reporting, including analysis and publication of the results, as appropriate.

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 artefactual and palaeoenvironmental material recovered;
- to compile an Evaluation Report that contains an assessment of the nature and significance of the stratigraphic, artefactual, and palaeoenvironmental data recovered.

3.2 Research Objectives

3.2.1 Archaeological remains from the later post-medieval industrial era were particularly anticipated at the site. Therefore, archaeological evidence from the site had the potential to add considerably to existing knowledge of Bolton's industrial, economic and social heritage. Any such archaeological evidence would be of local importance, at least.

3.2.2 The two volume document setting out the archaeological research framework for the North West region[6] highlights the importance of research as a vital element of development-led archaeological work. North West England was at the epicentre of the social and environmental transformation brought about the world's first Industrial Revolution. The site at Church Bank, Bolton is representative of the marginal areas of many long-established settlements in the region, in that it was transformed in a relatively short space of time as a direct result of the Industrial Revolution, from open ground in an essentially rural setting, into occupied land, part of a rapidly expanding urban community with industry and commerce at its heart.

[6] Brennand (ed.) 2006 and 2007.

4. ARCHAEOLOGICAL METHODOLOGY

4.1 Evaluation Fieldwork

4.1.1 The evaluation was undertaken in accordance with the GMAU Brief, the approved Project Design and the relevant standard and guidance document of the Institute for Archaeologists (IfA).[7] The fieldwork was undertaken 16-27 November 2009.

4.1.2 The GMAU Brief proposed two roughly NW-SE aligned trenches, the first *c.* 70m in length within the western part of the site, the second *c.* 40m in length, within the north-eastern part of the site. Following discussions with the GMAU, this layout was revised in the PCA Project Design and approved prior to commencement of the work. Three evaluation trenches (Trenches 1–3) were investigated, all sited at available locations to maximise the potential of the site to provide the most productive archaeological information and, for the most part, in areas proposed for development.

4.1.3 Trench 1 was sited on a sloping area of grass in the north-eastern corner of the site. It was linear in form and aligned SW-NE, measuring *c.* 5m x 2m at ground level, this being the maximum possible size due the presence of underground services. The trench lay immediately to the west of the corridor occupied by the culvert carrying the River Croal beneath the site and was designed to test the potential of this area – proposed for landscaping within the re-development scheme - for archaeological remains.

4.1.4 Trench 2 was sited on a roughly level area of grass in the north-western corner of the site. It was linear in form and aligned roughly NW-SE, measuring *c.* 20m x 2m at ground level. It was located immediately to the east of the public footpath running the full length of the site and was sited to test the potential of the north-westernmost portion of the new build footprint for archaeological remains.

4.1.5 Trench 3 was a T-shaped trench sited on a roughly level area of grass in the western central part of the site. Its main NW-SE aligned element measured *c.* 24m x 2m at ground level and its NE-SW aligned element measured *c.* 9m x 2m at ground level. It lay immediately to the east of the public footpath running the full length of the site and was designed to test the potential of the central and southern portions of the new build footprint for archaeological remains.

4.1.6 A 14-tonne Daewoo 360^{o} excavator with a wide blade ditching bucket was used to open the trenches. Subsequent excavation and recording was undertaken in accordance with recognised archaeological practice and following the methodology set out in PCA's *Field Recording Manual*.[8] Following machine clearance, the sections and the base of each trench were cleaned using appropriate hand tools. Sections were drawn at a scale of 1:10 and the base of each trench was planned at a scale of 1:20 relative to a baseline established along the trench, which was then located relative to the Ordnance Survey grid.

4.1.7 Archaeological deposits were recorded using a 'single context recording' system. Features and deposits were recorded on the PCA *pro forma* 'Context Recording Sheet'. A 'Harris Matrix' stratification diagram to record stratigraphic relationships was compiled for each trench and checked during the fieldwork.

[7] IfA (then IFA) 2001.
[8] PCA 1999.

4.1.8 Within appropriate archaeological horizons, partial excavation, the recovery of dating evidence or cleaning and recording of deposits was preferred to full excavation, and was practised wherever possible.

4.1.9 A photographic record of the investigations was compiled using SLR cameras. This comprised black and white prints and colour transparencies (on 35mm film), illustrating in both detail and general context the principal features and finds discovered. All photographs included a graduated metric scale. Digital photographs were taken to supplement the photographic record and a selection of the digital photographs is included within this report (Figures 7-12).

4.1.10 Control points from a previous topographic survey of the site were used as Temporary Bench Marks (TBMs). All trenches were levelled and the heights of all principal strata and features were calculated in metres above Ordnance Datum (m OD) with the values indicated on the appropriate paperwork.

4.2 Post-Excavation

4.2.1 The stratigraphic data for the project is represented by the written, drawn and photographic records. In total, 50 archaeological contexts were defined during the evaluation (Appendix B). Post-excavation work involved checking and collating site records and phasing the stratigraphic data (Appendix A). A written summary of the site data was then compiled, as set out below in Section 5.

4.2.2 The artefactual assemblage from the site comprised a total of 10 sherds of ceramic material. Specialist assessment was undertaken (Appendix C) and the results incorporated into Section 5, below. No other categories of inorganic artefactual material were represented.

4.2.3 The palaeoenvironmental sampling strategy for the site 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 no bulk samples were collected.

4.2.4 The complete Site Archive, in this case comprising written, drawn and photographic records (including all material generated electronically during post-excavation) and the small artefactual assemblage, will be packaged for long-term curation. No material was recovered that required specialist stabilisation or an assessment of potential for conservation research. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document[9] will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document[10] and a forthcoming IfA publication.[11] The depositional requirements of the receiving body, in this case The Manchester Museum, will be met in full.

[9] Brown 2007.
[10] Walker 1990.
[11] IfA forthcoming.

5. RESULTS: THE ARCHAEOLOGICAL SEQUENCE

5.1 Phase 1: 19th Century, Structures and Deposits

Trench 2 (Figures 4, 8 and 9)

5.1.1 The well-preserved remains of a masonry building (allocated overall structure number [225]) were exposed within the south-eastern portion of Trench 2, lying *c.* 1.70m below existing ground level at this location. Structure [225] measured *c.* 5.0m NW-SE, probably continuing beyond the limit of excavation to the north-west, by up to 2.0m SW-NE continuing beyond the limits of excavation formed by both long sections of the trench (Figure 4). The maximum recorded height of any surviving element of the structure was *c.* 0.80m and the structure was recorded at a maximum height of 81.69m OD

5.1.2 The south (simplified for the purposes of the following description) wall [220], of structure [225], of which a length of only *c.* 0.90m was exposed, was two bricks - *c.* 0.25m - wide, and was constructed with unfrogged red bricks (240mm x 120mm x 110mm) probably laid in English bond using slobbered light grey lime mortar – this being the same bonding material used throughout structure [225]. To the west, wall [220] returned to the north-west, continuing as wall [215], to form the south-western corner of structure [225].

5.1.3 A length of *c.* 5.0m of wall [215], the west wall (again simplified) of structure [225] was exposed. It was constructed with bricks (230mm x 110mm x 80mm) laid in English bond, with the same lime mortar used. The wall was of variable width, *c.* 0.25m at its southern end but widening to the north and attaining a maximum width of *c.* 0.40m. Excavation by hand of a sondage to the east of the wall established that the wall survived to a height of five brick courses, with the two lowermost courses stepped out and likely representing the footing. To the north-west, wall [215] likely continued beyond the limit of excavation.

5.1.4 Structure [225] was sub-divided by an internal wall, [216], to create two rooms. Wall [216] extended north-eastwards from wall [215] for distance of 1.20m and was two bricks - *c.* 0.25m - wide. It was exposed for a maximum height of *c.* 0.35m and comprised three courses of unfrogged red bricks (230mm x 110mm x 80mm), laid in English bond. Excavation on the north side of the wall revealed that the lowermost course stepped out, thus being a footing course. At its south-western end, wall [216] appeared to be keyed-in to wall [215].

5.1.5 The southern room in structure [225] measured *c.* 2.30m NW-SE by at least *c.* 1.20m SW-NE. In its north-western corner, a roughly square brick structure measuring *c.* 0.50m x *c.* 0.50m was closely associated with the east side of wall [215]. Adjoining and seemingly an integral part of the wall, it was constructed with identical unfrogged red bricks and likely represents a contemporary internal buttress. Immediately to the south was a less substantial structural element, [226], measuring *c.* 0.25m by *c.* 0.25m and built with unfrogged red bricks (240mm x 120mm x 110mm). Also probably an internal support, this was evidently a later element, possibly added at a later date to provide further internal support to wall [215].

5.1.6 The northern room of structure [225] was formed by external west wall [215], internal south wall [216] and what appeared to be an internal east (again simplified) wall, [217], exposed against the limit of excavation. The northern room thus measured at least *c.* 2.20m NW-SE, with no obvious north wall exposed, by *c.* 1.30m SW-NE. A length of *c.* 1.35m of east wall [217] was traced running SE-NW; it was at least 0.24m wide, continuing beyond the limit of excavation. In terms of construction, wall [217] appeared largely identical to internal south wall [216], which it likely adjoined immediately beyond the limit of excavation. In similar fashion, a lowermost footing course was exposed on the west side of the structure.

5.1.7 Overlying the fabric of external west wall [215] at its northern end was an area of crude brickwork, [214], *c.* 1.20m in length by at least 0.36m wide, one course thick and comprising mortared fragments of unfrogged red brick. The southern extent of this brickwork comprised two intact, unfrogged bricks (230mm x 110mm x 80mm) set at an angle of *c.* 40°. This has been tentatively interpreted as part of an arched structure, likely an aperture in the wall.

5.1.8 What appeared to be two internal structural elements, [212] and [213], similarly SW-NE aligned and both likely later additions, were exposed within the northern room of structure [225]. To the south was wall [213], extending between wall [215]/structure [214] in the west and wall [217] in the east. It was 1.30m long by 0.60m wide, was exposed to a maximum height of *c.* 0.55m and comprised at least three courses of roughly hewn sandstone blocks (up to 320mm x 260mm x 160mm), with no bonding material present. Approximately *c.* 0.40m to the north was wall [212], also abutting west wall [215] and measuring at least 1.10m in length – but not extending north-eastwards as far as wall [217] - by 0.50m wide. This was exposed to a maximum height of *c.* 0.25m and comprised two courses of roughly hewn sandstone blocks (up to 420mm x 240mm x 230mm), again with no bonding material present. The functions of these similar structural elements are unclear; both are assumed to be later internal additions, as previously mentioned.

5.1.9 No artefactual evidence was recovered in direct association with structure [225], therefore its precise date of origin and period of usage of uncertain. The use of unfrogged bricks broadly indicates a date – for the manufacture of the bricks at least - in the first third of the 19th century or earlier. The 1st edition Ordnance Survey map from the 1840s depicts limited development within the part of the site in which Trench 2 was located.[12] A group of buildings is certainly depicted at the northern site boundary, fronting on to Church Bank, with distinct land parcels to the south, and then other buildings further south, in the central portion of the site. A lane is shown running south-eastwards from the north-westernmost corner of the site, before turning to the north-east into an open area from which a wooden footbridge over the Croal could be accessed. 'Track of Old Course' is an interesting annotation on a dotted line running through the site, with one section of this to the south of the aforementioned frontage buildings also annotated 'Defaced'. This line thus depicts a former line of the west bank of the River Croal, prior to land reclamation and canalisation of the river, and thus indicates that the northernmost and north-easternmost portions of the site occupied reclaimed land even at that date.

[12] Figure 7 in the DBA shows the 1st edition of the Ordnance Survey map.

5.1.10 By the time of the 2nd edition Ordnance Survey map in the 1890s, the Croal had been dredged and paved in the Church Wharf area. The building fronting onto Church Bank Bridge in the north-western corner of the site had been developed within an angular plot, with its south-western side fronting onto the lane running from Church Bank, south-eastwards through the site.[13] To the south, beyond an access route to a rear yard, a small isolated building is depicted on this map, also fronting onto the same lane. Given its location, orientation and dimensions (a small rectangular structure measuring *c.* 5.0m NW-SE is indicated), this appears to be a convincing candidate for structure [225]. If this is the case, these remains most likely date from the mid to late 19th century. The building remains in place on the 1910 edition of the Ordnance Survey map, but does not appear on any editions thereafter, and in fact this specific part of the site appears not to have been subsequently re-developed.

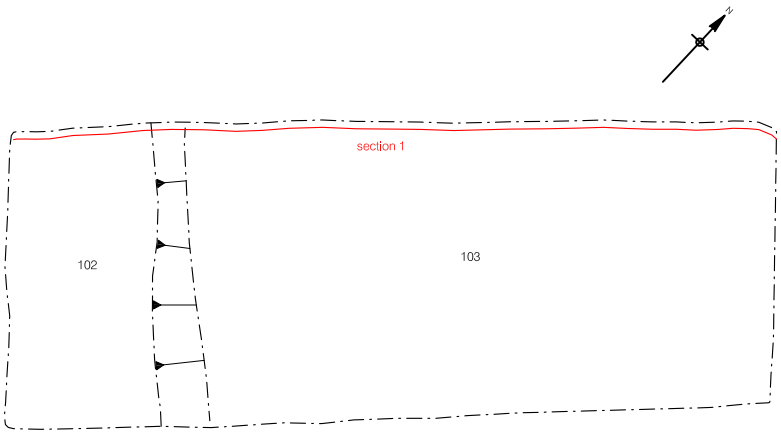
5.1.11 Part of a NE-SW aligned wall, [210], was recorded in the central portion of Trench 2. It measured at least 1.50m in length, continuing beyond the limit of excavation to the south-west and probably to the north-east, by up to 0.50m wide. It was recorded at a maximum height of 81.62m OD, *c.* 1.15m below the existing ground level at this location. Only the uppermost course was exposed, this comprising roughly hewn sandstone blocks (up to 220mm x 200mm). Definite interpretation of the structure is problematic given the limited extent to which it was possible to expose it, but it may represent a boundary wall. The excavated evidence gives no real indication of whether or not the wall was contemporary with structure [225] to the south-east. However, the similarity in alignment with the south wall of structure [225] certainly suggests some degree of contemporaneity. The 2nd edition Ordnance Survey map from the 1890s suggests that wall [210] is a boundary wall delineating the south side of a ginnel leading into a yard area to the rear of properties fronting onto Church Bank Bridge.

5.1.12 Three deposits, [209], [222] and [224], recorded in Trench 2 have been interpreted as possible ground or floor surfaces, given their similarly compact compositions, with at least one containing material likely derived from industrial activity. On the west side of wall [215], the lowermost deposit to be exposed comprised a layer, [222], of compact coarse silty sand extending at least *c.* 3.60m NW-SE by *c.* 2.0m NE-SW. It was recorded at a maximum height of 81.28m OD, but its thickness was not established.

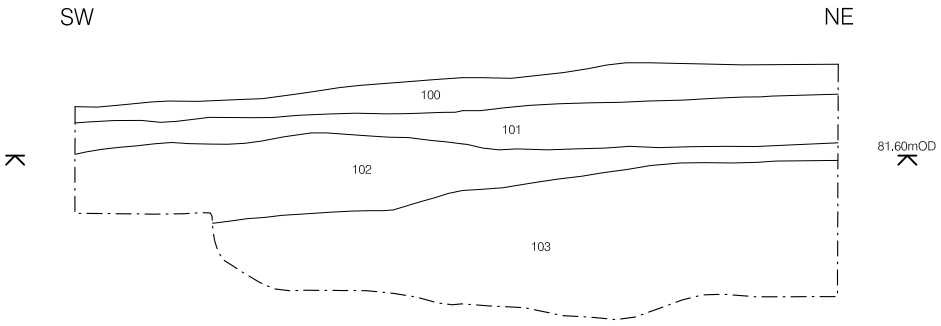
5.1.13 In the sondage hand-excavated within the southern room of structure [225] the lowermost deposit to be exposed comprised compact dark orange brown cindery ash, [224], with fragments of industrial waste material, including slag and clinker, throughout. It was at least 60mm thick, although not fully excavated, and was recorded at a maximum height of 80.72m OD, *c.* 1.95m below the existing ground level at this location.

5.1.14 The third deposit, [209], was exposed in the northern half of the trench, immediately to the north of wall [210]. Comprising compact coarse sandy gravel, this deposit extended across an area measuring at least *c.* 2.0m NW-SE by *c.* 2.0m NE-SW, and was recorded at a maximum height of 81.61m OD. *c.* 1.15m below the existing ground level at this location.

[13] Figure 8 in the DBA shows the 2nd edition of the Ordnance Survey map.

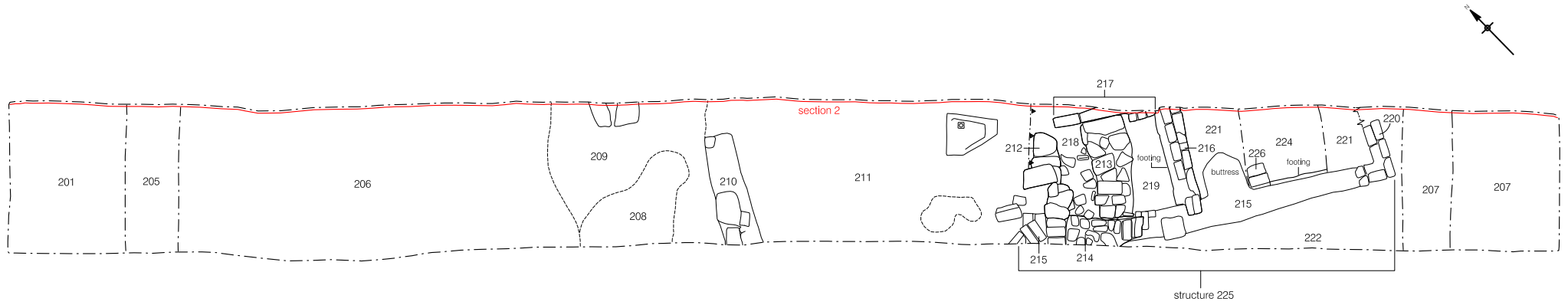


Trench 1. Plan.

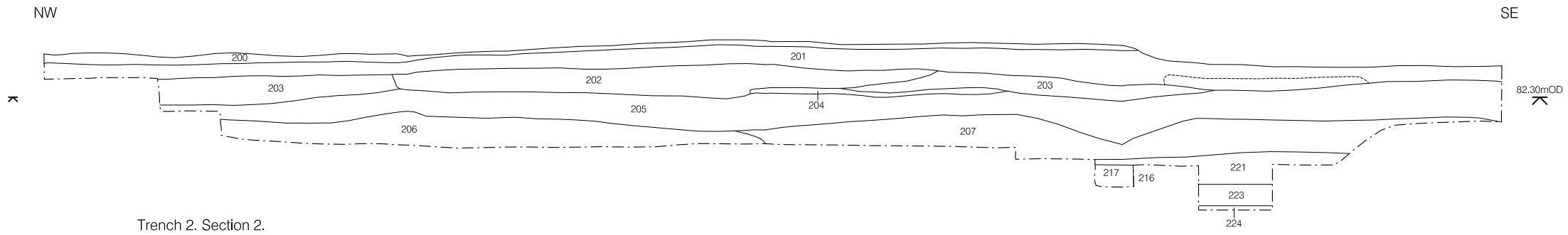


Trench 1. Section 1.

Figure 3. Trench 1, plan and section
Scale 1:50

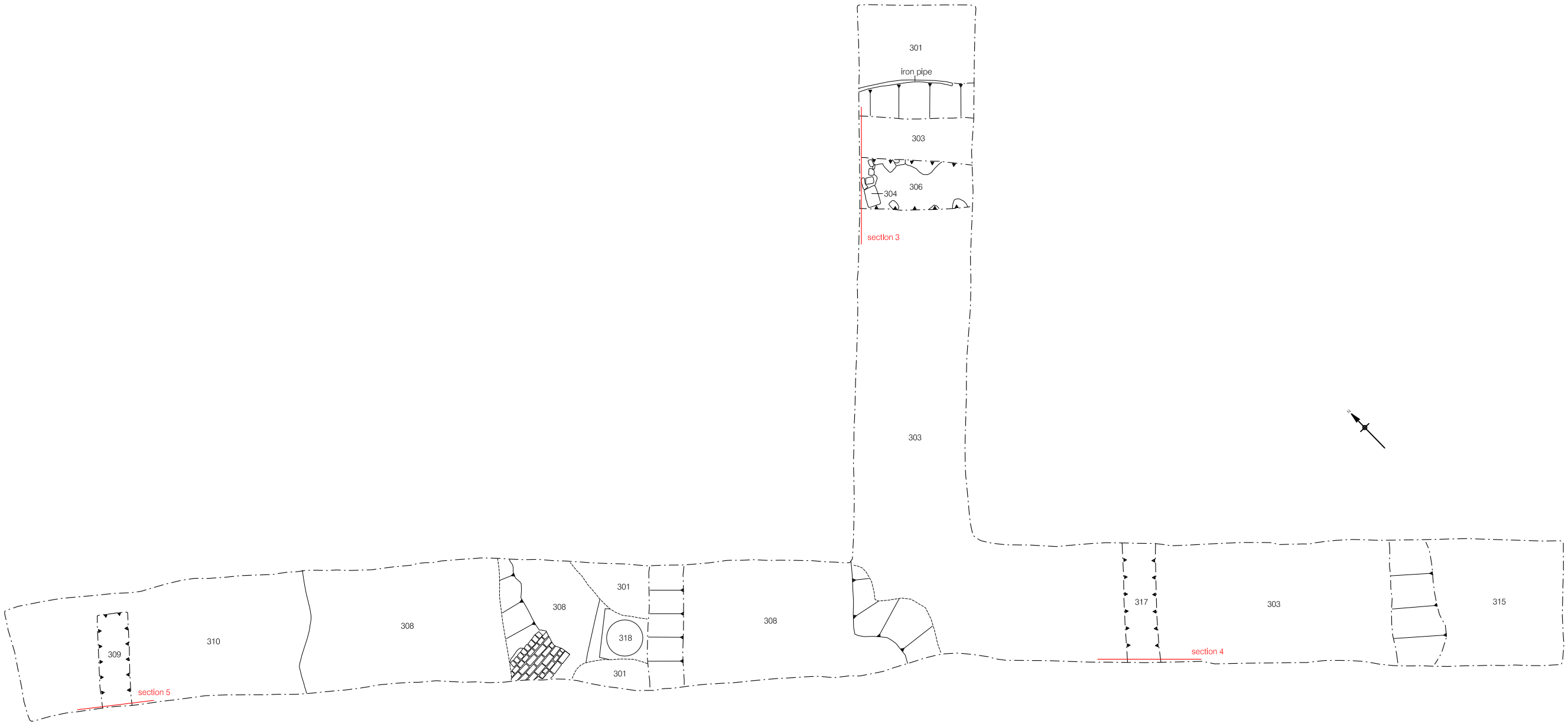


Trench 2. Plan.



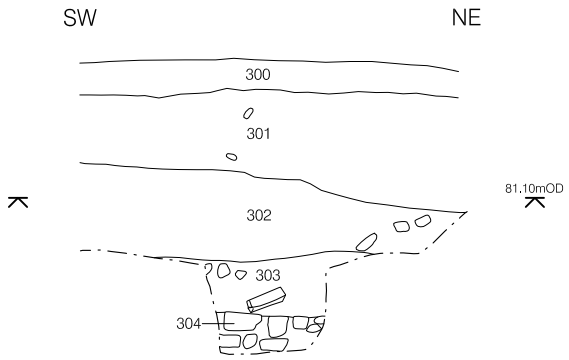
Trench 2. Section 2.

Figure 4. Trench 2, plan and section
Scale 1:75

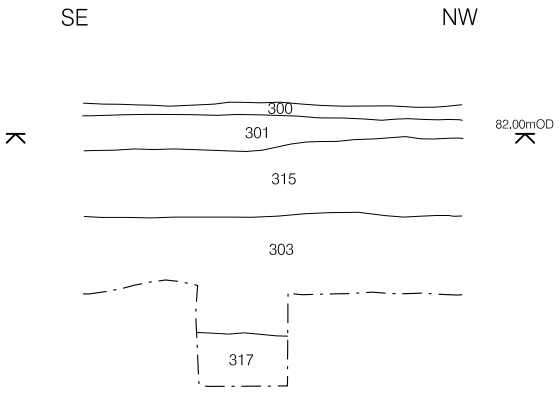


Trench 3. Plan.

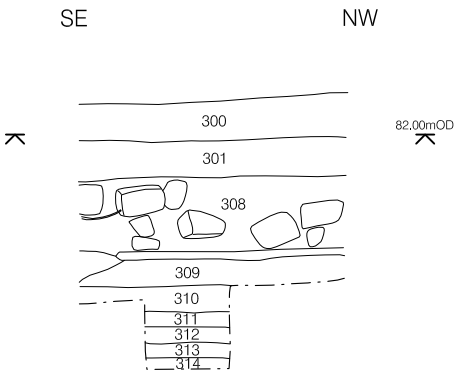
Figure 5. Trench 3, plan
Scale 1:75



Section 3. South-east facing section, Trench 3.



Section 4. North-east facing section, Trench 3.



Section 5. North-east facing section, Trench 3.

Figure 6. Trench 3, sections
Scale 1:50

Figure 7. South-east facing section (Section 1) in Trench 1 *(1m scale).*

Figure 8. Overview of structure [225] in Trench 2, looking south-east *(1m scale).*

Figure 9. Detail of structure [225] in Trench 2, looking north *(1m scale).*

Figure 10. Overview of north-westernmost portion of Trench 3, looking north-west *(1m scale).*

Figure 11. Part of south-east facing section (Section 3), Trench 3 *(1m scale).*

Figure 12. Part of north-east facing section (Section 5), Trench 3 *(1m scale).*

Trench 3 (Figures 5, 6 and 11)

5.1.15 A short length of a NE-SW aligned wall, [304], was recorded within a sondage that was hand excavated below the level of machine excavation within the NE-SW arm of Trench 3. It measured at least 0.82m NE-SW by 0.32m wide and was recorded at a maximum height of 80.34m OD, this at *c.* 1.65m below existing ground level at that location (Figure 6, Section 3). This wall was exposed to a maximum height of *c.* 0.35m and comprised two random courses of roughly hewn sandstone blocks (up to 310mm x 210mm x120mm), with some brick fragments, bonded with a dark grey sandy mortar. Only a small portion of this wall was exposed therefore its overall form and function could not be established.

5.1.16 The 1st and 2nd editions of the Ordnance Survey map from the 1840s and the 1890s, respectively, suggests that wall [304] could relate to an isolated property at the south end of the aforementioned lane that ran south-eastwards through the north-westernmost quarter of the site. Subsequent editions of the Ordnance Survey map indicate that this property was re-developed at least once in the 20th century and it is acknowledged that wall [304] could conceivably relate to one of these phases of re-development. However, the use of sandstone is considered the basis of a decision to assign a likely 19th century date of origin to the structure.

5.1.17 A group of dump deposits, [310], [311], [312], [313], [314] and [317], were recorded within two sondages that were hand excavated in the main NW-SE element of Trench 3. The first sondage, excavated at the north-western extent of the trench, recorded a group of five successive deposits, [310], [311], [312], [313] and [314], with a combined thickness of *c.* 0.55m (Figure 6, Section 5). The uppermost layer in this sequence, [310], was recorded at a maximum height of 81.15m OD, this *c.* 1.20m below existing ground level at this location.

5.1.18 The deposits encountered in the northernmost sondage in Trench 3 contained material likely derived either from domestic refuse or from industrial activity. The earliest deposit, layer [314], was at least 80mm thick and comprised firm greyish brown sandy silt with fragments of oyster shell, iron slag and small brick or tile fragments throughout. This deposit yielded two pottery sherds in transfer printed Whiteware, both with Willow design, of likely mid to late 19th century or early 20th century date (Appendix C). Layer [314] was directly overlain by layer [313], which was in turn overlain by layer [312], both similar firm or compact reddish brown silty deposits, with a combined thickness of 0.22m. Layer [312] was overlain by a 0.10m thick layer, [311], of stiff dark grey sandy silt with fragments of oyster shell and small brick or tile fragments throughout. The latest deposit encountered in this sequence was a 0.18m thick layer, [310], comprising loose dark reddish brown cinder/ash from which eight pottery sherds were recovered, the group as a whole having a mid to late 19th century or early 20th century date (Appendix C).

5.1.19 The single refuse deposit, [317] encountered in the southernmost sondage in Trench 3 contained material likely derived from domestic refuse. It comprised firm dark grey sandy silt, at least 0.35m thick, with stone and brick fragments throughout. Although no datable artefactual material was recovered from this deposit, its broadly similar composition to the dump deposits recorded within the northernmost sondage suggests a contemporary date.

5.2 Phase 2: Early Modern – Demolition Deposits

Trench 2 (Figure 4)

5.2.1 Four dump deposits, [218], [219], [221] and [223], all likely associated with the demolition of the building represented by structure [225], were recorded within the south-eastern part of the trench. The first, layer [223], was *c.* 0.15m thick and mostly comprised brick rubble and broken roofing slates. It was hand excavated within a sondage on the east side of wall [215], that is within the southern room of the building. Directly overlying layer [223] was a similar deposit, [221], again mostly brick rubble and roofing slate. This was exposed over an area measuring *c.* 1.20m NW-SE by at least 0.60m SW-NE and was *c.* 0.20m thick. It was recorded at a maximum height of 81.32m OD.

5.2.2 Two dump deposits, [218] and [219], were recorded within the northern room of the building represented by structure [225]. To the north, deposit [218] comprised brick and sandstone rubble and was recorded across an area measuring up to *c.* 0.45m NW-SE by *c.* 1.20m NE-SW. To the south was deposit [219], similar in composition and comprising mostly brick rubble and broken roofing slate. This extended *c.* 0.65m NW-SE by *c.* 1.20m NE-SW and was at least 0.30m thick. The maximum height recorded upon these two deposits was 81.37m OD.

5.2.3 All four deposits described above are interpreted as demolition deposits derived from the demolition of the building represented by structure [225]. As described above, map evidence indicates that this occurred in the first half of the 20th century, probably prior to 1927 rather than immediately ahead of the extensive clearance of buildings in the area ahead of the construction of the River Croal Culvert in the 1960s and, subsequently, St. Peters Way.

Trench 3 (Figure 5)

5.2.4 Two dump deposits, [306] and [305], were recorded in the hand-excavated sondage within the NE-SW element of Trench 3. The earliest of these, layer [306], comprising loose black sandy silt with frequent broken roofing slate, was exposed across the base of the sondage. This was directly overlain by a *c.* 0.40m thick deposit, [305], comprising firm sandy clay with frequent building rubble, mostly brick and sandstone fragments, throughout. The maximum height encountered for these deposits was 80.29m OD. These deposits have been interpreted as being likely derived from the demolition of the structure represented by wall [304]. This is assumed to have occurred in the first half of the 20th century, although it could have been undertaken ahead of the extensive clearance of buildings in the area ahead of the construction of the River Croal Culvert in the 1960s.

5.3 Phase 3: Modern - Landscaping Deposits and Structures

Trench 1 (Figures 3 and 7)

5.3.1 Three deposits, [101], [102] and [103], were recorded in Trench 1 that have been interpreted as being derived from landscaping of the site in the modern era. These deposits generally comprised dark grey to mid brownish grey clayey sandy silt and contained frequent modern debris, including building rubble, plastic, wood, *etc*., throughout. Their combined thickness was at least 1.40m, although the earliest deposit, layer [103], was not fully excavated due to Health and Safety considerations, at a depth of *c.* 1.70m below the exiting ground surface at this location. Essentially these deposits formed the bulk of the overburden removed by machine at the onset of the work.

Trench 2 (Figures 4 and 8)

5.3.2 A total of nine deposits, [201], [202], [203], [204], [205], [206], [207], [208] and [211], were recorded in Trench 2 that have been interpreted as being derived from landscaping of the site in the modern era. With a combined maximum thickness of *c.* 1.60m, these deposits again essentially formed the bulk of the overburden removed by machine at the onset of the work. These deposits comprised various compositions of clay, silt and sand and all contained frequent modern debris, including building rubble, plastic, wood, *etc*., throughout.

Trench 3 (Figures 5, 6, 11 and 12)

5.3.3 A total of seven deposits, [301], [302], [303], [308], [309] and [315], were recorded in Trench 3 that have been interpreted as being derived from landscaping of the site in the modern era. These deposits comprised various compositions of clay, silt and sand and all contained frequent modern debris, including building rubble, plastic, wood, *etc*., throughout. With a combined maximum thickness of *c.* 1.45m these deposits again essentially formed the bulk of the overburden removed by machine at the onset of the work.

5.3.4 In the central portion of the main arm of Trench 3, a substantial square brick inspection chamber, [318], was briefly recorded but not further investigated. It measured at least *c.* 0.80m by 0.90m and was at least 3.0m deep. Access was via a round cast-iron cover measuring 0.66m in diameter, which was directly overlain by topsoil.

5.4 Phase 4: Modern - Topsoil

Trenches 1-3 (Figures 3, 4 and 5)

5.4.1 Topsoil was recorded in Trenches 1-3, layers [100], [200] and [300], respectively, and generally comprised soft dark grey clayey silt. The maximum and minimum recorded thicknesses were 0.23m (Trench 3) and 0.18m (Trench 2), respectively. The maximum height that topsoil was encountered was 83.08m OD, this at the northern end of Trench 2, while the minimum recorded height - on the upper interface of the layer - was 82.22m OD, this in Trench 1, located on the lower-lying area of land towards the north-eastern corner of the site.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

6.1.1 The archaeological evaluation at land off Church Wharf, Bolton recorded archaeological remains of significance within the proposed development area. Of note were structural remains exposed in Trenches 2 and 3, both within the footprint of the proposed new build in the western portion of the site. These remains likely represent mid to late 19th century buildings or structures occupying land above the western bank of the River Croal, prior to its culverting. Whether these buildings or structures were associated with industrial, commercial or residential domestic activity is not certain. The remains lie at depths of 1.60-1.70m below existing ground level, beneath considerable depths of modern overburden.

6.1.2 The area in which the site lies, very much within the rural eastern margin of the pre-industrial era town, witnessed rapid urbanisation following the building of the canal linking Manchester, Bolton and Bury in the 1790s. The terminus of the Bolton arm of the canal was located on the eastern side of the Croal, directly opposite the site, and the area around the terminus subsequently became known as Church Wharf. The important Wharf Foundry stood to the north of the site, beyond Church Bank Bridge. This area can therefore be considered an important component of the industrial, economic and social heritage of Bolton and any industrial era archaeological remains on the site are therefore considered to be of significance at a local level at least.

6.1.3 All modern era deposits, these essentially forming the extensive overburden at the site, are of negligible archaeological significance.

6.2 Recommendations

6.2.1 It is recommended that where the proposed development will impact upon – that is disturb or destroy - archaeological remains of interest at the site, those remains must be preserved by record through the processes of archaeological excavation and recording, conducted ahead of the development, with subsequent adequate reporting and, if necessary, publication of the findings.

6.2.2 The GMAU would seek to secure the implementation of such a programme of work through one or more planning conditions, in order to mitigate the impact of the development on the archaeological resource.

7. REFERENCES

Brennand, M. (ed.), 2006. *The Archaeology of North West England. An Archaeological Research Framework for the North West Region. Volume 1 – Resource Assessment*, Archaeology North West Volume 8, Issue 18, for 2006, the Association for Local Government Officers and English Heritage, with the Council for British Archaeology North West.

Brennand, M. (ed.), 2007. *Research and Archaeology in North West England. An Archaeological Research Framework for the North West Region. Volume 2 – Research Agenda and Strategy*, Archaeology North West Volume 9, Issue 19, for 2007, the Association for Local Government Officers and English Heritage, with the Council for British Archaeology North West.

Brown, D. H., 2007. *Archaeological Archives. A guide to best practice in creation, compilation transfer and curation*, Archaeological Archives Forum.

Department of the Environment, 1990. *Planning Policy Guidance Note 16: 'Archaeology and Planning'*, HMSO.

Greater Manchester Archaeology Unit, 2009. *Brief for a Programme of Archaeological Works. Land at Church Wharf, Bolton,* GMAU unpublished.

Institute for Archaeologists, forthcoming. *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives,* IfA.

Institute of Field Archaeologists, 2001. *Standard and guidance for archaeological field evaluation*, IFA unpublished.

Institute of Geological Sciences, 1975. *Geological Survey of Great Britain (England and Wales, 1:50,000 Series), Manchester Sheet 85. Solid and Drift Geology,* Ordnance Survey.

Pre-Construct Archaeology Limited, 1999. *Field Recording Manual*, PCA unpublished.

Pre-Construct Archaeology Limited, 2009a. *An Archaeological Desk-Based Assessment of land to the east of St Peter's Church, Church Wharf, Bolton, Greater Manchester, BL1,* PCA unpublished.

Pre-Construct Archaeology Limited, 2009b. *Project Design for an Archaeological Evaluation on land off Church Bank, Bolton, Greater Manchester,* PCA unpublished.

Walker, K., 1990. *Guidelines for the preparation of excavation archives for long-term storage,* UKIC, United Kingdom Institute for Conservation.

8. ACKNOWLEDGEMENTS AND CREDITS

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Report: Aaron Goode and Robin Taylor-Wilson

Project Manager: Robin Taylor-Wilson

CAD: Adrian Bailey

Other Credits

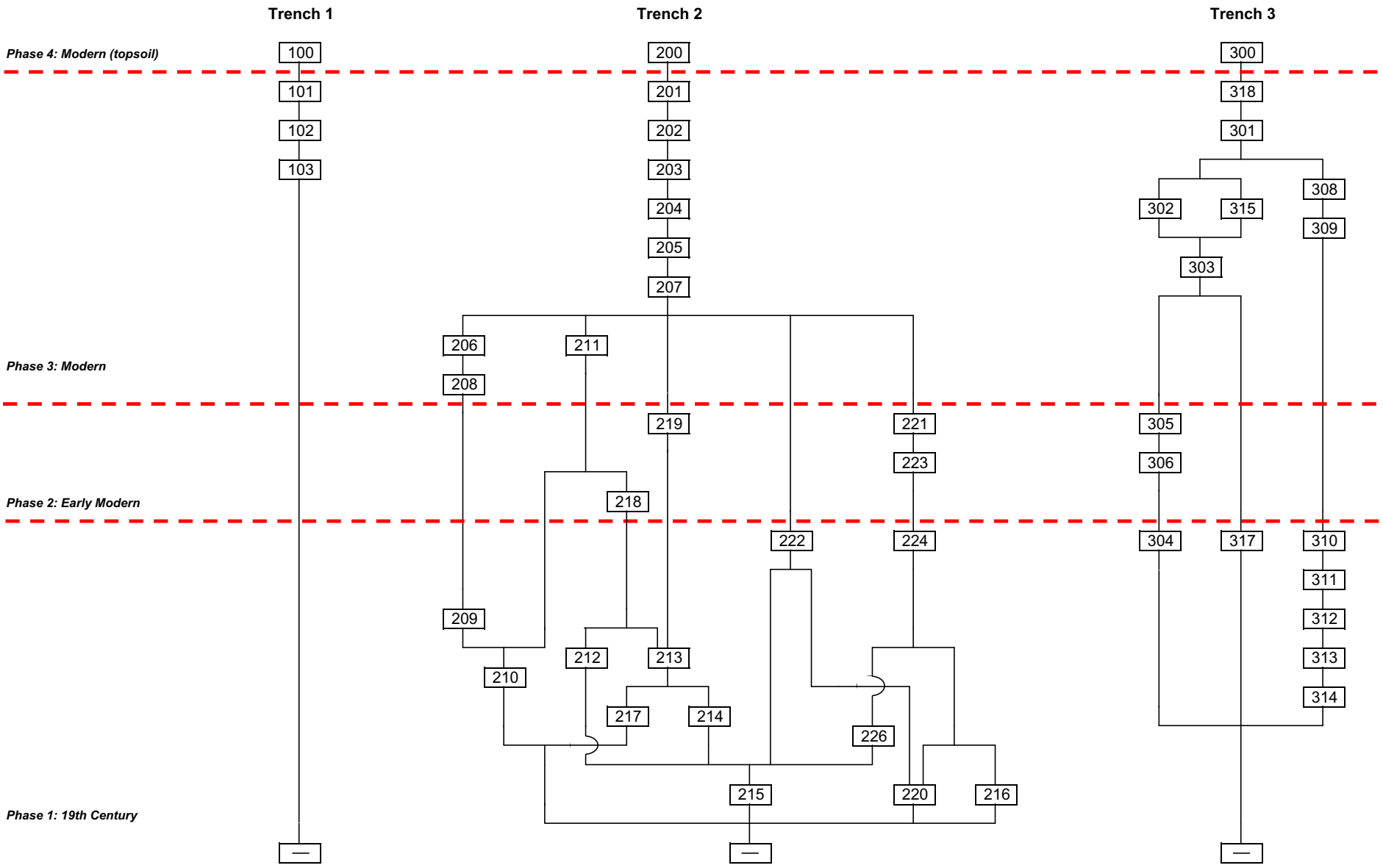
Pottery Assessment: Chris Cumberpatch

APPENDIX A
CONTEXT INDEX

CHB 09: CONTEXT INDEX

Context	Trench	Phase	Type 1	Type 2	Interpretation
100	1	4	deposit	layer	topsoil in Trench 1
101	1	3	deposit	layer	levelling deposit
102	1	3	deposit	layer	levelling deposit
103	1	3	deposit	layer	levelling deposit
200	2	4	deposit	layer	topsoil in Trench 2
201	2	3	deposit	layer	levelling deposit
202	2	3	structure	surface	concrete slab
203	2	3	deposit	layer	levelling deposit
204	2	3	deposit	layer	levelling deposit
205	2	3	deposit	layer	levelling deposit
206	2	3	deposit	layer	demolition deposit
207	2	3	deposit	layer	levelling/demolition deposit
208	2	3	deposit	layer	remnant tarmac surface
209	2	1	deposit	layer	refuse deposit
210	2	1	masonry	wall	sandstone wall
211	2	3	deposit	layer	levelling/refuse deposit
212	2	1	masonry	wall	sandstone and brick wall
213	2	1	masonry	wall	sandstone wall
214	2	1	masonry	wall	brick wall
215	2	1	masonry	wall	brick wall
216	2	1	masonry	wall	brick wall
217	2	1	masonry	wall	brick wall
218	2	2	deposit	layer	demolition deposit
219	2	2	deposit	layer	demolition deposit
220	2	1	masonry	wall	brick wall
221	2	2	deposit	layer	refuse deposit
222	2	1	deposit	layer	refuse deposit
223	2	2	deposit	layer	demolition deposit
224	2	1	deposit	layer	refuse deposit
225	2	1	masonry	structure	brick and stone building
226	2	1	masonry	buttress	brick buttress
300	3	4	deposit	layer	topsoil in Trench 3
301	3	3	deposit	layer	levelling deposit
302	3	3	deposit	layer	levelling/refuse deposit
303	3	3	deposit	layer	levelling/refuse deposit, same as [316]
304	3	1	masonry	wall	sandstone and brick wall
305	3	2	deposit	layer	demolition deposit
306	3	2	deposit	layer	demolition deposit
307	3	3	deposit	layer	levelling/refuse deposit
308	3	3	deposit	layer	levelling/refuse deposit
309	3	3	deposit	layer	levelling/refuse deposit
310	3	1	deposit	layer	refuse deposit
311	3	1	deposit	layer	refuse deposit
312	3	1	deposit	layer	refuse deposit
313	3	1	deposit	layer	refuse deposit
314	3	1	deposit	layer	refuse deposit
315	3	3	deposit	layer	levelling/refuse deposit
316	3	3	deposit	layer	levelling/refuse deposit, same as [303]
317	3	1	deposit	layer	refuse deposit
318	3	3	structure	manhole	brick inspection chamber

APPENDIX B
STRATIGRAPHIC MATRIX


Trench 1
Trench 2
Trench 3
Phase 4: Modern (topsoil)
Phase 3: Modern
Phase 2: Early Modern
Phase 1: 19th Century
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101
102
103
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APPENDIX C
POTTERY ASSESSMENT

Pottery Assessment

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Introduction

The pottery assemblage from Church Bank, Bolton (CHB 09) was examined by the author on 4 January 2010. It consisted of ten sherds of pottery from two contexts representing a maximum of nine vessels. The details are summarised in the catalogue below.

Catalogue

Context [310]

- Two sherds of Brown Salt Glazed Stoneware, joining (29g). The sherds appear to be from a flagon or bottle and are of 19th century date;
- One sherd of Brown Salt Glazed Stoneware (6g). The sherd is decorated on the outside with small stamped crosses and appears to be from a stewpot or similar item of cooking ware. Such vessels are common finds on urban sites dating to the 19th century and were manufactured widely after the introduction of the domestic kitchen range;
- One rim sherd in Colour Glazed ware (13g); shiny brown glaze internally and externally on a relief moulded body with a handle stump; probably part of a teapot dating to the mid to late 19th century;
- One sherd from a blue banded ware bowl (2g); one blue line and part of one band; 19th century;
- One profile sherd from a Whiteware saucer of late 19th or early 20th century date (27g);
- One sherd from the base of a transfer printed Whiteware plate with a Chinese landscape (probably Willow) design internally (7g). The underside bears part of a maker's mark consisting of a crown and scroll, the maker's name is missing;
- One sherd from the flat base of a transfer printed Whiteware bowl or dish (7g) bearing part of a Willow style border.

Context [314]

- One ring foot plate base in transfer printed Whiteware (14g), Willow design;
- One flat dish/soup plate base (17g) in transfer printed Whiteware, Willow design.

Discussion

The assemblage consisted entirely of material dating to the mid to late 19th or early 20th century and appeared to be domestic in character. It was not possible to identify the source of any of the vessels represented as only one damaged maker's mark was present. Staffordshire is a possibly origin for the transfer printed wares although factories producing such wares were widespread in the 19th century and a more local source is possible.

Assemblages such as this one are common from urban sites in northern England and often indicate complex and, to date, poorly understood processes of site formation. This example seems to be relatively chronologically homogeneous, which contrasts with assemblages from Sheffield where there is strong evidence for the widespread use of domestic refuse to level and raise areas of land prior to building. Such assemblages are typically composed of mixed assemblages spanning the 18th and early to mid 19th century. The source of these assemblages is believed to be the 'depots' established by the 'scavengers' who were employed to collect refuse from the streets, tenements and possibly cess pits, although as yet it has not been possible to verify this (Cumberpatch 2005). The characterisation of the 'refuse deposits' containing a mixture of industrial and domestic material at this site suggests that similar practices were in operation in the Manchester area although the absence of earlier material may suggest a different pattern of accumulation and exploitation in this particular case. Further work is required on this hitherto poorly documented aspect of municipal waste disposal although small assemblages such as this one are less than ideal for the purpose and the comparative study of a number of large assemblages will be required before it will be possible to characterise individual types of deposit.

Bibliography

Cumberpatch, C.G., 2005. *Pottery from excavations in Sheffield: a review and assessment of the resource* Paper delivered at the Theoretical Archaeology Conference, Sheffield 2005 http://independent.academia.edu/ChrisCumberpatch/attachment/563266/full/Pottery-from-excavations-in-Sheffield--a-review-and-assessment-of-the-resource