

A63 Castle Street Improvements, Hull Environmental Statement

Appendix 8.1

CULTURAL HERITAGE – BASELINE REPORT

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A63 Castle Street Improvements, Hull

Environmental Statement

Appendix 8.1 Baseline report

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1. Introduction

1.1 Background

1.1.1 This baseline report supports Environmental Statement Chapter 8 Cultural Heritage for the A63 Castle Street Improvements (the Scheme). The report presents the detailed baseline for all heritage assets in the study area of the Scheme site.

1.2 Legislative, regulatory and policy background

International / European

1.2.1 The UK government has ratified and adopted the treaties listed below thus committing the UK government and its agencies to measures that balance the need for development against the requirement to protect and enhance our national cultural heritage resource as far as is practicable. These are:

- United Nations Educational, Scientific and Cultural Organisation (UNESCO) Convention Concerning the Protection of the World Cultural and Natural Heritage (1972)
- The International Council on Monuments and Sites (ICOMOS) International Charter for the Conservation and Restoration of Monuments and Sites (1964)
- The Council of Europe European Cultural Convention (1954)
- The Convention for the Protection of the Architectural Heritage of Europe (1985)
- The European Convention on the Protection of Archaeological Heritage (1992)
- The European Landscape Convention (2000)

National

1.2.2 The cultural heritage features are the subject of legislation. The overarching legislation in relation to archaeology in England, Wales and Scotland is provided by:

- The Ancient Monuments and Archaeological Areas Act (1979)

1.2.3 The Ancient Monument and Archaeological Areas Act defines sites that warrant protection due to their being of national importance as 'ancient monuments'. A monument is defined by the Act as "any building, structure or work above or below the surface of the land, any cave or excavation; any site comprising the remains of

any such building, structure or work or any cave or excavation; and any site comprising the remains of any vehicle, vessel or aircraft or other movable structure or part thereof.” Ancient monuments are now classed as scheduled monuments.

1.2.4 Listed buildings and conservation areas in England and Wales are covered by:

- The Planning (Listed Buildings and Conservation Areas) Act 1990

1.2.5 Section 66 of the Planning (Listed Building and Conservation Areas) Act places a responsibility upon the decision maker in determining applications for planning permission for a Scheme that affects a listed building or its setting to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.

1.2.6 Some resources are nationally protected for their value but are not statutorily protected. These include:

- World Heritage Sites
- Registered Historic Parks and Gardens
- Registered Battlefields

National Planning Policy Framework

1.2.7 The National Planning Policy Framework (NPPF)¹ provides a framework for the management of the historic environment. It describes policies relating to heritage assets, which are buildings, monuments; places, or landscapes identified as having a degree of significance meriting consideration in planning decisions. Of relevance to the Scheme are paragraphs 128, 132, 133, 134, 135, 136 and 141.

1.2.8 Paragraph 132 of the NPPF states that *‘significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting’*.

1.2.9 Paragraph 133 goes on to state that *‘where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss’*.

1.2.10 Paragraph 134 states: *‘Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use’*.

¹ Available online at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

National Networks National Policy Statement

- 1.2.11 The National Networks National Policy Statement² (NN NPS) sets out the need for, and government's policies to deliver, development of nationally significant infrastructure projects. Paragraphs 5.120 to 5.142 refer to the Historic Environment.
- 1.2.12 Paragraphs 5.126 and 5.127 deal specifically with the EIA process and paragraphs 5.128 to 5.138 deal with decision making process undertaken by the Secretary of State.
- 1.2.13 Paragraph 5.131 discusses the impact of a proposed development on the significance of a designated heritage asset, stating that: *'the Secretary of State should give great weight to the asset's conservation. The more important the asset, the greater the weight should be'*. It goes on to state *'Substantial harm to or loss of a Grade II Listed Building or a Grade II Registered Park or Garden should be exceptional'*.
- 1.2.14 In addition, paragraph 5.133 reiterates the policy stated in paragraph 133 of the NPPF above.
- 1.2.15 Para 5.136 states, *'Where the loss of significance of any heritage asset has been justified by the applicant based on the merits of the new development and the significance of the asset in question, the Secretary of State should consider imposing a requirement that the applicant will prevent the loss occurring until the relevant development or part of the development has commenced.'*

Regional

Saved Joint Structure Plan for Kingston Upon Hull and the East Riding of Yorkshire (Adopted June 2005)

- 1.2.16 The Joint Structure Plan (JSP)³ was adopted in 2005 and set the framework for the development and use of land up to 2016 in the combined area of Hull and the East Riding of Yorkshire. The following saved policies continue to refer to cultural heritage.
- 1.2.17 Policy ENV6: The setting, character or appearance of strategically important buildings, features and areas of historic or architectural interest should be protected and where appropriate enhanced. Such assets include:
- parks, gardens and estates of historic landscape or architectural interest
 - historic battlefields

² Available online at: <https://www.gov.uk/government/collections/national-networks-national-policy-statement>

³ Available online at: http://www.hullcc.gov.uk/portal/page_pageid=221,52714&dad=portal&schema=PORTAL

- Listed buildings
- Conservation areas

1.2.18 Where appropriate, Local Development Frameworks should also identify historic buildings and areas which are of importance to the local community.

1.2.19 Policy ENV7: Nationally important archaeological remains and their settings will be physically preserved and development that is likely to have an adverse effect should not be allowed. Scheduled Ancient Monuments and other sites of archaeological significance will be identified in Local Development Frameworks.

1.2.20 Archaeological remains will be protected unless an overriding need for the development is demonstrated. When development affecting such sites is acceptable in principle, mitigation of damage should be sought through preservation of remains in situ wherever possible and those parts destroyed or changed will be formally recorded.

Local

Hull Local Plan 2016 to 2032 (Adopted November 2017)

1.2.21 The new Hull Local Plan was adopted on the 23 November 2017⁴. Within the Plan, Strategic Priority 6 covers the protection and enhancement of the city's historic assets and states that "Hull has a wide range of heritage assets which make a substantial contribution to the amenity of the city for residents and visitors alike. Of note is the Old Town which retains medieval street patterns and many historic buildings. It is important that the Plan provides a framework which recognises this and protects the unique heritage assets while allowing change to happen."

1.2.22 Policy for heritage is set out in:

- Policy 15 Local distinctiveness. This sets out that development should promote local distinctiveness with reference to the setting character and appearance of listed buildings, conservation areas and other heritage assets; and
- Policy 16 Heritage considerations. Setting out policy where development effects heritage assets.

1.2.23 The Heritage Action Zone for Hull Old Town is in place. It is a partnership initiative involving Hull City Council (HCC) and Historic England but does not involve statutory requirements⁵.

⁴ HCC (2017), Hull Local Plan 2016 to 2032 Available online at: <http://www.hullcc.gov.uk/pls/portal/docs/PAGE/HOME/PLANNING/PLANNING%20POLICY/HULL%20DEVELOPMENT%20FRAMEWORK/SAVED%20LOCAL%20PLAN/LP07.PDF>

⁵ Available online at: <https://historicengland.org.uk/services-skills/heritage-action-zones/hull/>

1.3 Study area

- 1.3.1 The study area comprises an area of 500m extending out from the limits of the Scheme Site Boundary and has been applied for the identification of all designated and non-designated heritage assets. This has been expanded in accordance with the Scheme to include areas proposed for construction site compounds, and areas potentially impacted by wider services and utilities (SU), and streetscape work as part of the Scheme. The study area for each of the three topic areas has been considered in turn in accordance with Design Manual for Roads and Bridges (DMRB), Environmental Assessment (Volume 11, Section 3, Part 2 (HA208/07) Cultural Heritage 2007, Sections 5.4, 6.4 and 7.4).
- 1.3.2 The study area for the three aspects of the cultural heritage as defined by DMRB guidance has been refined:
- Assessment of archaeological remains within 200m of the Scheme Site Boundary in accordance with DMRB guidance. This has been further refined to include a detailed assessment of archaeological assets within the Scheme Site Boundary. See Volume 2, Figure 8.1 Overview map - Sheet extents for Historic Landscape Characterisation Units and events and monuments and Figure 8.3 Archaeological events and monuments.
 - Assessment of historic buildings within 500m of the Scheme Site Boundary including conservation areas, Grade II listed buildings, locally listed buildings and non-designated historic buildings. Historic buildings of high significance (Grade I and Grade II*) have been identified within 1km of the Scheme Site Boundary to assess for visual impact. See Volume 2, Figure 8.2 Overview map - Sheet extents for historic buildings and Figure 8.4 Historic buildings and conservation areas.
 - Assessment of the historic landscape has been undertaken within 200m of the Scheme Site Boundary. This is an updated version of the study undertaken in 2010 for the Highways Agency Environmental Assessment Report (EAR) that has been updated to take account of new data and expanded to take include the increased area of the Scheme as defined above. See Volume 2, Figure 8.1 Overview map - Sheet extents for Historic Landscape Characterisation Units and events and monuments and Figure 8.5 Historic Landscape Characterisation Units.
- 1.3.3 The study area has been divided into ten zones to enable understanding of the individual areas of the Scheme. These reflect both the Scheme and the Historic Environment. These are tabulated below.

Table 1.1: Zones of cultural heritage assessment

Zone	Name	Scheme details
Zone 1	Old Town, A63 Castle Street	Main Route
Zone 2	The Docks, A63 Castle Street	Main Route
Zone 3	West of Humber Docks, A63 Castle Street	Main Route Staples site Compound Land South East of Mytongate Junction
Zone 4	West of Mytongate Junction, A63 Castle Street	Main Route Myton Centre Development
Zone 5	Eastern Bank of the River Hull	A63 Westbound Recovery Base
Zone 6	Old Town North	Old Town Accommodation Works Service and Utility Diversions
Zone 7	Old Town South	Old Town Accommodation Works Service and Utility Diversions
Zone 8	West Hull	Service and Utility Diversions Wellington Street Island Wharf (Spencers) Compound, Neptune Street Set Down Compound
Zone 9	A63 west of Hull	A63 Eastbound Recovery Base north of St Andrews Quay
Zone 10	Hessle	Livingstone Road (South Humber Properties Ltd)

1.3.4 For the purposes of this report, the road built in the 1970s will be referred to as the A63 Castle Street. It consists of the A63 Clive Sullivan Way at its western end before the flyover above Daltry Street and Rawling Way and the A63 Hessle Road until the junction with Ferensway and Commercial Road and is Castle Street beyond this.

1.3.5 Until c. 1800 the road was known as Mytongate (associated with the Myton Gate which is the entrance to the town through the town wall), east of the town wall to the southern end of Market Place. Outside the wall it was the Hessle Road. After the construction of the docks in the 19th century, it continued to be known as Mytongate east of the junction with Princes Dock and Humber Dock Street until the 1970s. However, west of this junction the name was altered to Castle Street, up to Trinity Burial Ground at its western end. A network of 19th century roads to the west (which do not correspond with the course of the A63) then led to the original line of the Hessle Road.

1.4 Assessment methodology

1.4.1 The assessment methodology follows DMRB guidance, the work encompasses the following sub-topics:

- Archaeological remains

- Historic buildings
- Historic landscapes

1.4.2 The assessment was undertaken in accordance with the published standards and guidance set out below:

- National Planning Policy Framework
- National Policy Statement for National Networks
- National Planning Policy Guidance⁶
- Design Manual for Roads and Bridges
- Conservation Principles, Policies and Guidance⁷
- Historic Environment Good Practice Advice in Planning note 2 – Managing significance in decision taking in the historic environment⁸
- Historic Environment Good Practice Advice in Planning note 3 – The setting of heritage assets⁹
- Standard and Guidance for historic environment assessment¹⁰

1.4.3 A summary of the works undertaken to create this baseline report are as follows:

- An examination of local, regional and national planning policies in relation to the historic environment
- A search of the Historic England National Heritage List (NHL) for designated heritage assets
- A search of the Humber Sites and Monuments Record (HSMR) database
- An assessment of relevant published and unpublished archaeological sources from the Archaeological Data Service (ADS)
- A review of sources held within the archive of the Hull History Centre

⁶ DCLG, (2014) National Planning Policy Framework: Planning Policy Guidance, London. Available online at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

⁷ Historic England 2008

⁸ Historic England 2015a

⁹ Historic England 2017

¹⁰ Chartered Institute for Archaeologists (CIfA) 2014

- An examination of local, regional and national archaeological research frameworks
- A map regression exercise looking at the cartographic evidence for the land use history of the study area
- Integration of the above map regression with the unpublished Historic Landscape Characterisation (HLC) data produced by Humber Field Archaeology and held by HSMR
- An examination of topographical and geological evidence
- A site walkover survey of the Scheme Site and surrounding areas

1.4.4 Site walkovers were carried out in October and November 2016 to:

- evaluate the heritage significance of heritage assets
- identify the setting of the assets
- and identify any further visible heritage assets

1.4.5 The walkover surveys were restricted to external visual inspection from publicly accessible areas, which limited the ability to assess the effects of visual intrusion and interruption of views from within property boundaries or interiors of historic buildings.

1.4.6 Key heritage assets have been identified for the purposes of the Environmental Impact Assessment. The key assets have been identified due to their proximity to, and visibility of the Scheme, their heritage value (significance) and group value. Assets have been grouped together where they are in close proximity to, and relate to, each other. The key heritage assets in this report are assigned a Mott MacDonald Sweco (MMS) reference number.

Archaeological remains

1.4.7 Archaeological surveys have been in advance of construction. These comprise:

- watching brief on geo-technical survey (Humber Field Archaeology/ Oxford Archaeology North (HFA – OAN) 2014a A63 Castle Street Improvements, Kingston upon Hull, Assessment, mitigation and deposit modelling, see Volume 3, Appendix 8.4).
- trial trenching targeting:
 - the remains of the medieval defences (HFA – OAN 2014b A63 Castle Street Improvements, Kingston upon Hull, Advance archaeological works report: Site investigation works and the town defences, see Volume 3, Appendix 8.5)

- the Trinity Burial Ground along the line of the A63 Castle Street (Zones 1-4) (HFA – OAN 2016a A63 Castle Street Improvements, Kingston upon Hull, Holy Trinity Burial Ground, Advance archaeological works report, see Volume 3, Appendix 8.6)

1.4.8 The Sites and Monuments Record data and previous archaeological investigations have been used to assess the wider area of the scheme (Zones 5 to 10).

1.4.9 The archaeological remains associated with the Scheme have been separated into areas of potential. Potential is a subjective measure of the likelihood that buried archaeological remains of past cultures survive. The potential has been divided into the period described in the archaeological background described above. These are:

- **Negligible** – there is no historical/ archaeological evidence in the wider environment and/or modern activity has removed buried archaeological remains.
- **Low** – there is some historical evidence or archaeological evidence from the wider environment but no demonstrable evidence in the study area.
- **Medium** – there is historical and/or archaeological evidence that buried archaeological remains may exist but investigation has not demonstrated or confirmed their presence. Evidence suggests the remains may have been disturbed, truncated or removed by later activity.
- **High** – buried archaeological remains are attested to be cartographic, historical evidence and/or archaeological evidence and investigation has demonstrated their presence.

Historic buildings

1.4.10 A historic buildings and townscape assessment was undertaken along the route of the A63 Castle Street (Zones 1 to 4) (Architectural History Practice (AHP) 2014 Historic Building and Historic Townscape Appraisal, A63 Castle Street Improvements, Hull).

1.4.11 This has been reassessed and expanded to take in the entire Scheme and all historic buildings likely to be impacted by the Scheme. The SMR data and the NHL have been used to assess the historic buildings in the wider area of the scheme (Zones 5 to 10).

Historic landscapes

1.4.12 HLC was undertaken along the route of the scheme (Zones 1 to 4) with a 250m buffer zone applied as part of the non-statutory Environmental Assessment Report (EAR) in 2010. A wider programme of HLC has superseded this undertaken by Humber Field Archaeology on behalf of HCC. The full report on this work is

pending approval but the data sets have been kindly released through the Humber SMR to undertake this work.

- 1.4.13 The original areas of the HLC have been utilised as there was strong correlation between the two studies. Subsequently the original 24 areas have been expanded with a further six areas to create a total of 30 areas.

2. Baseline conditions

2.1 Geology and topography

- 2.1.1 The underlying bedrock geology of the area is Burnham Chalk Formation, a sedimentary bedrock formed 84 to 94 million years ago during the Cretaceous Period. It was overlain by superficial geology of Tidal Flat Deposits of clay and silt formed up to 2 million years ago during the Quaternary period¹¹.
- 2.1.2 Holocene deposition after the last ice age has resulted in superficial peat and alluvial formations throughout the lower reaches of the River Hull and the Humber Estuary. Localised palaeo-channels associated with the shifting course of the River Hull are believed to run across the study area.
- 2.1.3 Further superficial deposits have formed during historic land reclamation starting in the medieval period after c. 1300 AD and increasing during the 19th century. These deposits are particularly prevalent along either side of the River Hull and towards the Humber Estuary in line with Humber Street and English Street¹².
- 2.1.4 The topography of the study area slopes very gently from north-south. The old town to the north of Princes Dock sits on marginally higher ground than the area to the south towards the Humber. The original topographic slope of the land has been reduced in the land south of the A63 Castle Street.

2.2 Archaeological and historical background

Introduction

- 2.2.1 The environmental statement uses the following timescales (based on the DMRB periods list for Cultural Heritage):
- Prehistoric
 - Palaeolithic 450,000 - 12,000 BC
 - Mesolithic 12,000 - 4,000 BC
 - Neolithic 4,000 – 2,200 BC
 - Bronze Age 2,500 - 700 BC
 - Iron Age 800 - AD 43
 - Romano-British AD 43 – 410

¹¹ British Geological Survey 2016. Available online at: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

¹² Hull City Council, 2005, Old Town (Southern Part) Conservation Area Character Appraisal

- Medieval
 - Early Medieval AD 410 - 1066
 - Medieval AD 1066 - 1540
- Post Medieval and Modern
 - Post-Medieval AD 1540 - 1901
 - Modern AD 1901 – Present

Prehistoric period

Palaeolithic and Mesolithic period (450,000 – 4,000 BC)

- 2.2.2 The Humber Estuary lies on the edge of a landscape that was dramatically different in the Palaeolithic period. Our understanding of the Lower and Middle Palaeolithic period in Yorkshire is limited to naturally re-deposited artefacts, such as flint tools, in glacial tills, not in their original context¹³.
- 2.2.3 During the Upper Palaeolithic period, the last ice age in the Devonian period, the wider Humber area was predominantly under ice with the sheet covering the Hull Valley and Holderness, and the Vale of York to the west¹⁴. Meltwater formed a body of water around the edge of the ice sheet, known as Lake Humber. Globally, water locked up in the ice sheets meant that sea levels were lower during the Upper Palaeolithic period. The study area lay at the edge of a much wider lowland area that was a land bridge between the British Isles and the European continent known as Doggerland that is now the North Sea¹⁵.
- 2.2.4 As the ice sheets receded the re-colonisation of eastern and south western areas of Yorkshire and the East Midlands began around the resource-rich margins of Lake Humber and the North Sea. These tend to cluster around the edge of the wetlands in Holderness and up the Hull Valley on surviving outcrops of glacial till¹⁶.
- 2.2.5 The sedimentary environment around Lake Humber and the Humber Estuary means that Upper Palaeolithic and Mesolithic remains survive deeply buried under alluvium. The archaeological evidence within the floodplain of the River Hull amounts to buried peat deposits beneath the town. Cores taken from beneath Market Place, less than 50m north of the Scheme, demonstrate the presence of a

¹³ Halkon, P, 2003, Researching an Ancient Landscape: The Foulness Valley, East Yorkshire in T G Manby, S Moorhouse and P Ottaway The Archaeology of Yorkshire: An assessment at the beginning of the 21st century, 266

¹⁴ Van de Noort, R, 2004 The Humber Wetlands: The Archaeology of a Dynamic Landscape, Macclesfield: Windgather Press, 18-19

¹⁵ Gaffney, V, Fitch, S, and Smith, D, 2009 Europe's Lost World: The Rediscovery of Doggerland, CBA Research Reports

¹⁶ Van de Noort, R, 2004 The Humber Wetlands: The Archaeology of a Dynamic Landscape, Macclesfield: Windgather Press, 36, figure 16

c. 2.50m thick layer of peat and bog-oak between -9.15m and -11.60m OD, radio-carbon dated to c. (uncalibrated) 6930 BP (c. 5000 BC). Similar peat layers have been attested to in antiquarian reports of the excavation of the docks, including Albert Dock, south west of the Scheme in the 19th century¹⁷. Further evidence of a submerged forest, comprising a peaty soil layer with occasional tree stumps was found at a depth of c. 4.9m below present ground level during the construction of the Alexander Dock in 1884, south east of the Scheme¹⁸.

- 2.2.6 The geoarchaeological deposit model undertaken in 2014 as part of the Scheme identified Pleistocene deposits at depths of c. -5.0m to -9.0m OD in Zones 1 to 3. A notable dip in the deposits to -19.80m OD appears to represent the former channel of the River Hull, located in the central area of the Scheme (Zone 3), between Waterhouse Lane (west) and Humber Dock Street (east). Full details of this are contained in Volume 3, Appendix 8.4 Assessment, mitigation and deposit modelling.
- 2.2.7 Chance finds have been recorded in peat and alluvial deposits, either buried beneath the current ground surfaces or exposed by migrating river or stream courses. At Hessle (Zone 10) an example of this is a possible Palaeolithic flint hand axe (MHU21855). This may have been accidentally discarded or deposited as part of earth movement associated with any of the later post-medieval activities (see below).

Neolithic (4,000 – 2,200 BC) and Bronze Age (2,500 – 700 BC)

- 2.2.8 The area of Hull remained wetland on the edge of the Humber Estuary during the Neolithic period. No evidence of Neolithic or Bronze Age settlement has been found in the lower valley of the River Hull. Sites in the Holderness, north east of Hull have identified wetland settlement associated with organic layers of peat that formed marshland. Previously termed 'lake-dwellings' they have been reinterpreted as attempts to exploit the wetland environment. Settlement is instead likely to have been located on relatively higher areas of land surviving above the marshland¹⁹.
- 2.2.9 Palaeo-geographic models attest to the dynamic nature of the lower reaches of the River Hull in the Neolithic and Late Bronze Age. Subtidal and intertidal reaches of the Humber Estuary extended north along the course of the River Hull between c.

¹⁷ Evans, D H, 2000 Archaeology in the modern city of Kingston upon Hull, and recent research at Kingswood' in R Van de Noort and S Ellis (eds) Wetland Heritage of the Hull Valley, an Archaeological Survey, Hull 193-216

¹⁸ Reid 1885, 90-91

¹⁹ Van de Noort 2004, 62-66

6000 cal BC and c. 1000 cal BC²⁰. Deposition of fine silt created peats along the lower reaches of the River Hull from c. 4200 cal BC onwards²¹.

- 2.2.10 Current evidence suggest that a reduction of the river gradient resulted in a divided course in its lower reaches. This materialised as two channels, with an island of land surviving between the eastern (corresponding broadly to its current course) and western courses (identified during the current work and possibly associated with the course of the Auld Hull). As the gradient of the river reduced alluvium was deposited. The geoarchaeological work undertaken in 2014 identified alluvium layers typical of intertidal deposition like saltmarsh, tidal creeks and mudflats²². These may contain waterlogged archaeological remains associated with semi-permanent or seasonal exploitation of the inter-tidal environment. The deepest alluvial layers are 19.2m deep (associated with the former channel of the River Hull). Deposition is likely to have continued all the way up to the early medieval period, when the channel was eventually allowed to silt up (see below).
- 2.2.11 Neolithic period finds of stone and flint axes in the Humber Wetlands have been interpreted as votive deposition in wet places. However, there remains the possibility that these are chance discard of items. There is greater evidence for votive deposition of metalwork often weapons (e.g. spearheads, rapiers, dirks and shields), in the middle and late Bronze Age (c. 1500-600 BC). 138 find spots have been located on the network of rivers that made up the Humber wetlands²³. An example of a votive offering was found during the construction of the Alexander Dock when a continental style median-winged axe dated to the Bronze Age was discovered in 1884. The original report also described the presence of a boat within the warp, although this was not witnessed by the author, Reid in 1885²⁴.
- 2.2.12 Regionally, this was a lowland wetland of marshes traversed by the local inhabitants in boats. These have been found at several sites along the Humber Estuary and its tributary including at Ferriby (west of Hull on the Humber Estuary), Kilnsea (on the Holderness coast, north of Spurn point) and Brigg (south west of Hull in the Ancholme Valley). The three boats from Ferriby have calibrated radio-

²⁰ Metcalfe, S E, Ellis, S, Horton, B P, Innes, J B, MacArthur, J, Mittlehner, A, Parkes, A, Pethick, J S, Rees, J, Ridgeway, L, Rutherford, M, Shennan, I and Tooley, M J, 2000 The Holocene evolution of the Humber Estuary: reconstructing change in a dynamic environment in I Sheenan and J E Andrews (eds) Holocene Land Ocean Interaction and Environmental Change around the Western North Sea, London, 97-118.

²¹ Lillie, M and Geary, B, 1999 The palaeoenvironmental survey of the Rivers Aire, Ouse, Wharfe and Derwent in R Van de Noort and S Ellis (eds) Wetland Heritage of the Vale of York, An Archaeological Survey, Hull, 79-108

²² Referred to as Minerogenic Alluvium, Unit 4, OAN HFA 2014, 48-49, Volume 3, Appendix 8.4

²³ Van de Noort 2004, 79-92

²⁴ Evans 2000, 194

carbon dates of 1880-1680 cal BC, 1940-1750 cal BC and 2020-1780 cal BC²⁵, dating them to the late Neolithic and early Bronze Age.

Iron Age (800 BC – AD 43)

- 2.2.13 In the earliest part of the Iron Age, patterns of settlement in the wet lowlands around the Humber Estuary remained like earlier periods. The wet lowlands were utilised for transport using log boats (see above) with examples such as the Hasholme log boat excavated in 1984²⁶. The wetlands were also exploited for iron and metal-working with ‘bog iron’, which was probably processed using lowland woodland for charcoal at sites such as Kelk in the upper part of the Hull Valley²⁷.
- 2.2.14 By the middle and end of the Iron Age the first evidence of tribal groups around the Humber Estuary emerges. The Arras Culture developed from the 4th to 1st century BC in the Yorkshire Wolds and East Riding of Yorkshire²⁸. By the end of the Iron Age tribal groups north of the Humber Estuary are referred to by Roman sources to as the *Parisi* with a capital Radcliff near North Ferriby on the Humber Estuary²⁹. To the south of the Humber Estuary in Lincolnshire the group were known as the *Coritani*.
- 2.2.15 It is likely that the environment of the Scheme Site continued to be like that described above, one of saltmarsh, tidal creeks and mudflats. Settlement in the lower Hull valley is limited with only six permanently settled sites recognised, the nearest of which was Salthouse Road outside the study area in the north east part of Hull.
- 2.2.16 Within the study area find spots of an Iron Age fibula (MHU14205) and a *Corieltavian* Stater (coin find; MHU8775) are more likely to be chance finds than indications of permanent settlement.

Romano-British (AD 43 – 410)

- 2.2.17 The Humber Estuary lay on the border between two Roman administrative regions, *Flavia Caesariensis* (in the English midlands) and *Maxima Caesariensis* (in the north of England).

²⁵ Radio-carbon dating relies on the radioactive decay of Carbon 14 to carbon 12 with dates accurate to around 50,000 years. Calibrated radio-carbon dates (denoted cal) rely on comparison with dendrochronological dating of tree-rings, plant macrofossils etc... that calibrate the dates to around 50-100 years later than their current dates.

²⁶ MacGrail, S, 1987 Ancient Boats in NW Europe: the Archaeology of Water Transport to AD1500, London

²⁷ Chapman, H, Fletcher, W, Henwick, H, Lillie, M and Thomas, G, 2000 The archaeological survey of the Hull Valley, in R Van de Noort and S Ellis (eds) Wetland Heritage of the Hull Valley an Archaeological Survey, Hull, 105-173

²⁸ Van de Noort, R 1996 The Arras Culture in S Neave and S Ellis, An Historical Atlas of East Yorkshire, Hull

²⁹ Creighton, J, 1990 The Humber Frontier in the first century AD, in S Ellis and D Crowther (eds) Humber perspectives: A region through the ages, Hull; Halkon, P, 2013 The *Parisi*: Britons and Romans in East Yorkshire, Stroud

- 2.2.18 One of the principal roads in the region Ermine Street ran between *Eboracum* (York) and *Lindum* (Lincoln). There was a fort *Petuaria* (occupied AD 70-125) at Brough-on-Humber north of the crossing of the Humber Estuary, 11 miles west of Hull. It was founded in. The adjacent civitas (civil town), survived until about AD 370 and was believed to be the capital of the *Paris*³⁰. A road has been postulated to run inland from the northern shore of the Humber Estuary; leaving *Petuaria* (Brough) in a north north east direction it may have crossed the River Hull, somewhere in the northern outskirts of Hull. No site has yet been found and traces of this road have not been established³¹. Overall the wider area of East Yorkshire around Hull would have retained its Iron Age culture with some degree of Roman influence³².
- 2.2.19 Since about 100BC, the landscape has been essentially riverine and it is thought that the alluvial areas lying higher than -3.8m OD were suitable for Roman occupation which equates to around 60% of the area covered by the modern city. The main identified occupation sites are north of the study area along the River Hull and date to the 2nd century to the late 4th century AD³³. The local population are believed to have utilised the lower meadows and saltmarshes for cattle rearing and salt production. It is not clear if occupation extended down the River Hull to the study area. Geoarchaeological investigation undertaken for the Scheme has noted that the alluvium layer contained '*stabilisation horizons which might be associated with archaeological remains relating to semi-permanent or seasonal exploitation of the intertidal environment*'³⁴. The likelihood is that these are deeply buried deposits.
- 2.2.20 Excavated evidence from the site of Fish Street (MHU4690), just west of the Parish Church of the Holy Trinity has been argued to reveal evidence of Romano-British occupation in the centre of Hull. Other find spots include Roman coins, two Roman lamps and Romano-British pottery from south of Humber Street and North Walls. The material is likely to have been deposited on alluvium washed down from the River Hull from settlement north of the study area.

Medieval period

³⁰ Esmonde Cleary, A S, Talbert, R, Warner, R, Becker, J, Gillies, S, and Elliott, T, '*Petuaria*: A Pleiades place resource', Pleiades: A Gazetteer of Past Places, 2014 <https://pleiades.stoa.org/places/79639>

³¹ Evans 2000, 198

³² Roskams, S, 1999, The Hinterlands of Roman York: present patterns and Future strategies, in H Hurst (ed) The Coloniae of Roman Britain: New Studies and a Review, 45-72

³³ Didsbury, P, 1990 'Exploitation in the lower Hull valley in the Roman period' in S. Ellis and D. Crowther (eds) Humber perspectives: A Region through the ages, Hull, 199-210; Ottaway, P 2013 Roman Yorkshire, Pickering, 192-193.

³⁴ Referred to as Minerogenic Alluvium, Unit 4, OAN HFA 2014, 48-49; discussion in synthesis OAN HFA 2014, 52, Volume 3, Appendix 8.4

Early medieval (AD 410 – 1066)

- 2.2.21 The early medieval period was one of profound change after the collapse of the Roman Empire. Politically the wider region of Yorkshire fragmented into the Anglo-Saxon sub-kingdom of Deira before merging with Bernicia to form the kingdom of Northumbria, which as the name implies, broadly included the lands north of the Humber. With the establishment of the Anglo-Danish settlement in York in AD 866, the administrative area became part of the Danelaw³⁵.
- 2.2.22 Settlement appears to have been scarce. Roman sites were abandoned by the 4th or 5th centuries³⁶. An exception from the wider region is the settlement of Skerne that dated to the 7th to 11th centuries AD where timber structures survived within the River Hull³⁷. Environmental evidence suggests that the impact of the local population on the environment in the Humber wetlands had declined. There was a direct decline in herb pollen which was replaced by tree and shrub pollen, suggesting a decline in agriculture and a return to tree cover in the lowland areas. The settlement pattern of villages recorded in Domesday Book are likely to have been established from the second half of the 9th to the 11th centuries AD. Analysis has shown that settlements predominated on higher ground above 10m AOD or on the banks of rivers³⁸.
- 2.2.23 By the 10th century new settlements had been established at Drypool, Marfleet, Myton and Southcoates. The place names are Old English in origin, whilst others such as Inglemire, Sculcoates, Stoneferry and Summergangs imply a Scandinavian origin. The implication is that reoccupation of the area took place no earlier than the 9th century, and probably as late as the 10th century³⁹.
- 2.2.24 The settlement of Myton is recorded in Domesday Book as part of the holdings of Ralph de Mortimer. Myton was formerly located on the junction of Waterhouse Lane and Castle Street, west of the later medieval town of Hull (Zone 3). This would have been on the western bank of the Auld Hull. By the time of the late medieval period the River Hull is believed to have adopted two courses, the Auld Hull and Sayers Creek, with poorly drained marshland between⁴⁰. The former course of the 'Auld Hull' is believed have run to the west of its current location (between Commercial Road/ Manor House Street and Railway Street). The course

³⁵ Geake, H, and Kenny, J, (eds) 2000 Early Deira: Archaeological studies of the East Riding in the 4th to 9th centuries AD, Oxford

³⁶ Evans 2000, 199-200

³⁷ Dent, J, Loveluck, C, Fletcher, W, and East, K. 2000 'Early medieval site at Skerne' in R Van de Noort and S Ellis, 228-230

³⁸ Fenwick, H, 1997 The Wetland Potential of moated sites in the Humberland Levels in R Van de Noort and S Ellis (eds) Wetland Heritage of the Humberland Levels: An Archaeological Survey

³⁹ Evans 2000, 200

⁴⁰ Evans, D H, 1996 Medieval Hull in S Neave and S Ellis

of the Auld Hull appears to have been identified by the deposit model of the line of the A63 Castle Street undertaken as part of the current work.

- 2.2.25 It is not clear if the settlement of Wyke upon Hull had a pre-Conquest origin. It is not recorded in the Domesday book, but this does not preclude earlier settlement. The original location is unclear and the evidence is discussed below.
- 2.2.26 Hessle (Zone 10) to the east is mentioned in Domesday Book as the settlement 'Hase' and is recorded as belonging to Ralph de Mortimer and held by Gilbert de Tison⁴¹.

Late medieval (AD 1066 – 1540)

- 2.2.27 Sometime after the foundation of the Cistercian Abbey at Meaux in c. AD 1150 the land around the confluence of the River Hull passed into the hands of the monks of the abbey. This included the settlement of Wyke-upon-Hull and Myton. A monastic grange and chapel were established at Myton⁴².
- 2.2.28 The River Hull is believed to have been channelled deliberately along the course of Sayers Creek in the 12th and 13th century AD. The inter-channel island between the Auld Hull and Sayer's Creek is believed to have been settled in the mid-13th century. Although a location on the western bank of the Auld Hull around Myton Place has been suggested for the location of Wyke-upon-Hull⁴³, current theories place this in the centre of Hull close to High Street. Archaeological evidence in the old town has consistently been dated to c. 1260 for the formation of the township of Hull, with evidence for rows of buildings and plot divisions by 1280 on High Street (Zone 6)⁴⁴. Mercantile trade was encouraged by the monks and a weekly market was established in 1279, and by 1293 Hull comprised 60 households occupying 55 messuages (medieval land plots), with a further 55 undeveloped plots⁴⁵.
- 2.2.29 In 1293 King Edward I purchased Wyke and the grange of Myton from the Cistercian Abbey at Meaux. At this time Hull was a small settlement of around 60 households and it is probable that Edward founded Kingston (or King's Town) upon Hull as a 'new town' on what is now the west bank of the River Hull at its confluence with the Humber. The street plan of the old town was laid out, but the uptake of plots was initially slow until the rentals were reduced in 1317 and the town began to flourish. It rose to become one of the three most important medieval

⁴¹ Available online at: <http://www.domesdaybook.co.uk/eastriding2.html#hessle>

⁴² HCC, 2004, 3

⁴³ Frost 1827, 5-28

⁴⁴ Evans 2000, 200

⁴⁵ Evans 1996, 61-62

towns in Yorkshire (along with York and Wakefield) and the second most important port on the east coast of England after London⁴⁶.

- 2.2.30 The 'new town' (the area now referred to as the 'old town') was surrounded by a defensive circuit of a great ditch and bank, topped with a palisade, and four freestanding gates constructed between 1321-1324, after a licence to crenellate was granted in 1321. They followed the line of (from north to south) North Walls, Guildhall Road, Princes Dock Street (Zone 6), Humber Dock Street and Humber Street (Zone 7).
- 2.2.31 Between 1330 and 1406 the timber palisade was removed and ramparts were cut back. The original defences were replaced by a brick town wall, built with around thirty interval towers, four main gates (North Gate, Beverley Gate, Myton Gate, Hessle Gate) and four postern gates (Low Gate, Quay Street Gate, Postern Gate, and the Watergate) in a U-shape, the eastern side open across the River Hull. Elements of the town wall and the Beverley Gate are visible on permanent display at the western end of Whitefriargate. At the western side of the Old Town the route of the A63 follows the approach to the Myton Gate. The Myton Gate is now believed to be located beneath the northern carriageway of the A63⁴⁷.
- 2.2.32 The medieval town itself followed a street pattern which is fossilised today in the Old Town conservation area. Virtually no buildings from the medieval period survive, the exception being the Holy Trinity Church (c. 1300-1425). The earliest housing stock was built of clay or turf walls but was replaced by the latter half of the 14th century much of the housing in Hull was rebuilt in brick, linked with the North Sea Hanseatic connection. Some domestic buildings were built in brick, but the majority utilised the material for foundations, chimney stacks and for brick-infilling or 'nogging' of timber-framed construction houses⁴⁸.
- 2.2.33 The eastern area of the Old Town developed as a port with the wharves and staithes along the River Hull. This was driven by the expanding international trade across the North Sea associated with the Hanseatic League. The eastern bank of the River Hull (Zone 5) was not enclosed by fortifications but instead had revetments along the eastern riverbank. The area was sparsely occupied in the medieval period.

Post-medieval and Modern period

Post medieval (AD 1540 – 1901)

- 2.2.34 By the post-medieval period Hull was a thriving port. The lower River Hull (the 'Haven') was of considerable importance as a harbour facility, and this remained

⁴⁶ Evans, 1996, 356

⁴⁷ HCC, 2004, 20

⁴⁸ HCC, 2004, 16

the case until the late 18th and early 19th centuries. The circuit of the defences on the east bank of the River Hull (Zone 5) was enclosed in the mid-16th century. Elements of the defences date back to 1541 - 42 when Henry VIII ordered the refurbishment of the medieval defences when the city fell to the rebels during the Pilgrimage of Grace in 1536 - 37. Henry VIII's military engineer ordered the construction of defensive works to protect the town and Haven, including three brick blockhouses linked by a curtain wall built to the east of modern Tower Street, with an external moat on the eastern bank of the River Hull.

- 2.2.35 In 1627 the defences of the river mouth were further strengthened with the construction of the South End Fort or Battery. The circuit of defences on the west of the city were reinforced prior to the start of the English Civil War in 1642. This was in the form of five half-moon batteries linked by a rampart and outer ditch in front of the Water, Hessele, Myton, Beverley, Low and North Gates.
- 2.2.36 The eastern defences were strengthened along Italian designs in response to rebellion in Scotland between 1681 - 1690. This included repair, new defensive works overlooking the harbour, landward defences with a wet moat and Hull Citadel (Zone 5). The Citadel was a massive triangular 12ha artillery fort. The western part of the Citadel's outer defences comprised a broad clay rampart which incorporated the 16th century Henrician curtain wall, with a wide external moat which lies mainly below modern Tower Street and the frontages of buildings to the east. The Citadel became increasingly redundant in the 19th century and was systematically levelled in 1865. The western moat was infilled with clay from the removal of the ramparts⁴⁹. The Citadel survives as buried remains and are part of two scheduled monuments.
- 2.2.37 The defences restricted the town's physical growth until they were removed in the late 18th and early 19th centuries. The removal of the defences, the reclamation of marshland southward towards the Humber and the willingness of landowners to sell land for suburban development, facilitated the construction of new 'Town Docks' around the Old Town and the building of an adjoining Georgian New Town (north of the Old Town).
- 2.2.38 The first dock to be built was the Queen's Dock (1778, Zone 6) north of the old town, with the town's defences on the southern boundary. The construction of Humber Dock (1809, Zone 7) and Princes' Dock (1829, Zone 6) followed west of the old town along the boundary of the former town's defences. The Railway Dock (1846, Zone 7) connected to the Humber Dock towards the west (and south of the A63). It was built adjacent to the original terminus of the Hull and Selby Railway (located south west of the Dock). Land as reclaimed south of the Humber Dock using both earth recovered from the excavation and 'mud warp' or tidal silt.

⁴⁹ Foreman and Goodhand 1996, 143-185. Available online at: <https://www.historicengland.org.uk/listing/the-list/list-entry/1020426>;

- 2.2.39 Like many urban centres, rapid growth occurred in the late 18th and early 19th centuries. Port traffic through the town increased by nearly 20 times (63,795 tons in 1772 to 1,207,236 tons in 1856)⁵⁰. Increased trade resulted in an increase in population and migration from the countryside. This led to the area inside the footprint of the old town becoming increasingly overcrowded. Long thin burgage plots were converted into court housing and slums dominated the narrow streets.
- 2.2.40 The town grew beyond the confines of the former walls. Suburbs developed that contained spacious housing which accommodated Hull's growing middle-class population. Typical were villa-type residences lining the thoroughfares, examples survive as conservation areas on Hessle Road, Beverley Road and Spring Bank to the north and west of the town (Zone 8).
- 2.2.41 The up-cast from the construction of the docks was used to reclaim land south of Humber Street and create Wellington Street and Nelson Street at the very south of the town (Zone 7)⁵¹. Expansion occurred along the banks of the Humber and Hessle Road, west of the Old Town in an industrial zone along the River Hull (Zone 8). One of the earliest developments was 'English Town', built on the south side of Hessle Road by Thomas English, a local prominent shipbuilder, in the early 19th century⁵².
- 2.2.42 Burial in the town increasingly became a problem and in response the Holy Trinity burial ground was built on Castle Street to the west of the city. Trinity Burial Ground was opened in Castle Street in 1783 and continued to be used until its closure in 1861. It is discussed in greater detail below.

Modern (post AD 1901)

- 2.2.43 After Hull became a city in 1897, a new municipal centre was established around Queen Victoria Square in 1900. King Edward Street, Jameson Street and Alfred Gelder Street were laid out radiating away from the square (Zone 6/8).
- 2.2.44 The slums in the Old Town were systematically cleared between 1899 and 1939. Further damage was caused by bombing during both World Wars. The strategic importance of Hull as a port meant that it was subject to air raids from Zeppelins during World War I (1914 - 1918). The actions of the Luftwaffe during World War II (1939 - 1945) were much more severe with one of the worst hit area being the southern area of the town around Humber Street and the docks (Zone 7). The Old Town was particularly badly hit, and the effect of the bombing and earlier slum clearances mean that no examples of court housing now survive in the Old Town.

⁵⁰ Wild 1990, 254-256

⁵¹ Hull City Council, 2005, Old Town (Southern Part) Conservation Area Character Appraisal

⁵² Gill 1987, 22

- 2.2.45 The court housing in the Myton areas north of the current line of the A63 Castle Street was cleared in the 1930s and 1950s, with housing replaced with blocks of flats such as Australia House on the east side of Porter Street (Zone 8). The area south of the A63 Castle Street (Zone 8) continued to be important for the ports and fishing industries as shown by the surviving docks, fishing buildings and fish smoke houses.
- 2.2.46 The Town Docks closed in the late 1960s. The construction of the south orbital road (the A63 Castle Street) in 1976 resulted in the demolition of many old properties along the route.

2.3 Cartographic and pictorial evidence

Cartographic evidence

- 2.3.1 The following maps have been identified for the city of Hull:
- c. 1550-1600 Copy of Ancient Plan of Hull
 - c. 1640 Hollar's 'bird's eye view' of Hull
 - 1725 Woolner's map of Hull
 - 1784 Thew's map of Hull
 - 1791 Bower's map of Hull, published in John Tickell's History of Hull (1796)
 - 1800 Aitken's map of Hull
 - 1814 Woodall's map of Hull
 - 1842 Plan of Hull from Stephenson's Hull Directory
 - 1855 Ordnance Survey 1:2500
 - 1891 Ordnance Survey map
 - 1910 Ordnance Survey map
 - 1928 Ordnance Survey map
 - 1958 Ordnance Survey map
- 2.3.2 The results of the cartographic regression for Central Hull (Zones 1 to 9) and Hessle (Zone 10) are summarised in Tables 2.1 and 2.2 below.

Table 2.1 Map regression for central Hull (Zones 1 to 9)

Date	Name	Description	Relevant zone
undated c. late 16th century	Copy of Ancient Plan of Hull	<p>The plan was probably produced in the reign of Queen Elizabeth I. It is an idealised bird's eye view from the south looking north. It depicts the town surrounded by its medieval walls. The Humber abuts the southern wall of the defences on the southern side. The eastern bank of the River Hull has the three blockhouses and curtain wall.</p> <p>The line of the A63 Castle Street (Zone 1), known as Mytongate is built up towards the north, with the Holy Trinity church visible. The block of the former town gaol is visible at the bottom of Market Place. South of Mytongate the town is largely undeveloped with a single row of houses along the street. South of this are garden plots.</p>	1
c. 1640	Hollar's 'bird's eye view' of Hull	<p>Hollar's view is not a formal geographical representation of the city. Instead it is an oblique aerial representation viewed from the west. The line of the A63 Castle Street (the street was known as Mytongate) runs east from the Myton Gate (Zone 1). The street pattern was formed of a rough grid, with larger taller buildings to the eastern end and low buildings on the western end. The housing density is notably less along Mytongate than High Street and the Staithees that line the River Hull to the north. The Holy Trinity church is also visible north of the line of the Mytongate. At the southern end of Market Place, the tall buildings were the Guild Hall and the Gaol.</p> <p>In the foreground is the city defences, shown as a wide external ditch, rampart and wall with a series of interval towers (Zone 2). The gates to the city lie within this wall, Beverly Gate at the near foreground with Myton Gate to the south (right). The River Hull runs north-south at the upper side of the image with boats moored along the wharves. On the eastern bank (Zone 5) are the curtain wall and blockhouses of Henry VIII defences.</p>	1, 2, 5
1725	Woolner's map of Hull	<p>Woolner's map shows no detail of the interior of the town (Zone 1). The medieval defences are shown in plan form (Zone 2). It reveals the reinforcement acted on as part of the Civil War defences, with the distinctive hornwork around the Myton Gate. The land beyond continued to be agricultural into the 18th century (Zone 3 and 4).</p>	1, 2, 3, 4
1784	Thew's map of Hull	<p>In the old town, east of the defences (Zone 1), the dense medieval street pattern is still visible.</p> <p>By the late 18th century the town walls, civil war defences and outer ditch are depicted for the last time on maps (Zone 2). Settlement has begun along the street leading to Myton Gate (Zone 3). The 'Gaol' has been built on the corner of Tan House Lane and Castle Street. Along Tan House Lane the 'Beast Market' had been built.</p> <p>Outside the town the area continues to be agricultural fields (Zone 4).</p>	1, 2, 3, 4

Date	Name	Description	Relevant zone
1791	Bower's map of Hull	<p>Inside the town (Zone 1) is a dense pattern of streets including to the north Dagger Lane, Fish Street, Vicar Lane, and Market Place and to the south Sewer Lane and Finkle Street. These roads survive in the street pattern of the old town. In under 10 years the town walls have been reduced north of Myton Gate and the town ditch has been infilled (Zone 2). The land has been utilised for the 'New Beast Market' north of the line of what is still called Mytongate (but corresponds with the A63 Castle Street). A narrow plot of land extends north of Mytongate between the 'New Beast Market' and the former line of the town wall annotated as 'Military Works Levelled'.</p> <p>Between the Beast Market and Mytongate (Zone 3) was a complex of buildings which may have included the building that was later converted to the Earl de Grey public house. The 'Gaol' is clearly marked at the western end of the street surrounded by the 'Burying Ground' the name of the Trinity Burial Ground. North of the Burial Ground on the northern side of the street is marked a mill, adjacent to which is the narrow line of a water course.</p>	1, 2, 3
1800	Aitken's map of Hull	<p>By the time Aitken's plan is drawn in 1800 within the town (Zone 1) buildings have begun to expand west of Dagger Lane and the line of the walls had begun to be lost. The town walls (Zone 2) have been reduced and the land is now open.</p> <p>A complex of buildings lies north of Castle Street (Zone 3), Water House Lane has been straightened to accommodate the expanding Beast Market. The gaol and [Trinity] Burial Ground are clearly visible. The beginnings of the suburban streets around Myton Place (north of the Burial Ground) have begun to appear.</p>	1, 2, 3
1814	Woodall's map of Hull	<p>By 1814 the most significant change in Hull's topography since the construction of the city walls can be seen. The lines of the former city defences and the associated outer ditch defences (Zone 2) have been utilised to construct the Old Dock (later to be Queen's Dock, opened in 1778) and the New Dock (later known as the Humber Dock, opened in 1809). The area west of the Humber Dock is open ground. In the area that was to become Princes Dock the land has been infilled by development and the line of the town wall is lost in new development but survives as the line of what is now known as Princes Dock Street.</p> <p>The town has begun to expand substantially along the line of King Street to the east and in a series of roads laid out of King Street to the north in what now constitute Waterhouse Lane, Myton Street, Roper Street, Osborne Street and Carr Lane. The land to the south has begun to be laid out on reclaimed ground in a street pattern including Wellington Street.</p>	2
1842	Plan of Hull from	<p>The streets that define the old town (Zone 1) are unchanged on Stephenson's Plan for the Hull Directory. The Princes Dock (Zone 2) has been developed and is</p>	1 to 8

Date	Name	Description	Relevant zone
	Stephenson's Hull Directory	<p>visible inter-connecting with the Humber and Queen's Dock. The Railway Dock has not yet been built, but the land plot is still available. To the south of the town the waterfront has extended south of Humber Street to include Wellington and George Street (Zone 7).</p> <p>The land plot of the Trinity Burial Ground (Zone 3) is visible, but the land plot of the gaol is vacant, suggesting by this time it had been demolished. The surrounding area is now entirely developed, and the urban extent of the city has begun to spread along the Hessle Road (Zone 4). To the north and south of Castle Street and Hessle Road (now the A63) the pattern of streets as far west as Porter Street to the north (Zone 8) and the entire industrial area south of the A63 Castle Street has developed. The Citadel is still visible but the formal defences have begun to be reduced and the area east of the River Hull has been developed (Zone 5).</p>	
1855	Yorkshire 240, Ordnance Survey 6"	<p>The Old Town street layout is unchanged (Zone 1, Zone 6 and Zone 7). At the eastern end of Mytongate the Guildhall is clearly visible.</p> <p>The docks are clearly visible (Zone 2). The warehouses between the Princes Dock and Humber Dock have been built, including the surviving warehouse at the south east corner of Princes Dock. The Railway Dock is depicted for the first time (Zone 7). South of this is the new dock terminal and railway line. Along the Humber waterfront the piers have developed and land reclamation for the Albert Dock appears to have begun.</p> <p>The site of the defences on the eastern bank of the River Hull and the citadel (Zone 5) has been entirely cleared of buildings and the Victoria Docks have been built to the east.</p> <p>The area of the eastern wharf side of the River Hull has very few buildings.</p> <p>The Borough Gaol and House of Correction has been built near the Railway Dock, replacing the demolished gaol adjacent to the Trinity Burial Ground (Zone 3). The Trinity Burial Ground is unchanged.</p> <p>The line of Castle Street terminates in a block of buildings defined by Great Passage Street, Cogan Street and Kingston Street, with Nile Street, Wood's Lane and Edward's Place between. It then continues to the west as Waverley Street, which merges into Vauxhall Street, Melbourne Street and then the Hessle Road (Zone 4).</p> <p>The land to the north of the A63 Castle Street (Zone 8) has developed slowly but the street plan (still visible today) has developed entirely by this period. Porter Street continues south west to north east until it meets Osborne Street. By the Paragon Station the road is called Brook Street but terminates at the Anlaby Road. At this point there are 'Almshouses' (on the corner of Anne Street).</p>	4, 8, 9

Date	Name	Description	Relevant zone
		<p>The land to the south of A63 Castle Street has developed as far west as Ropery Street. It includes St James Church, and the English Street estate (see Historic Landscape Characterisation). To the east of Ropery Street are three detached villas Pleasant Place, John's Place and Field House.</p> <p>To the south east of the Hessle Road (Zone 8) the land is open fields along the Humber Foreshore. The only building is a farm, Dairy Cotes Grange.</p> <p>The study area in Zone 9 is open fields along the Humber foreshore, south of the North Ferriby Railway.</p>	
1888	Yorkshire CCXL.NE Ordnance Survey 6"	<p>The street plan of the old town (Zone 1, 6 and 7) remains unchanged.</p> <p>The Dock's (Zone 2) remain unchanged. The Albert Dock has developed along the southern foreshore of the Humber Estuary on reclaimed land.</p> <p>Around the Trinity Burial Ground (Zone 3) the former plot of the gaol is now occupied by a building (a sawmill – not noted on map).</p> <p>The citadel (Zone 5) has been entirely levelled and the land turned into railway sidings. The frontage to the south has been reclaimed. Buildings have begun to develop along the eastern wharf side of the River Hull.</p>	1, 2, 3, 5, 6, 7
1911	Yorkshire CCXL.NW Ordnance Survey 6"	<p>Between Cogan street and Commercial Street, Wood's Lane and Edward's Place (Zone 4) a market has developed.</p> <p>The major change in the west side of Hull by 1911 is the increase in terraced domestic houses set along narrow streets running north and south from the Hessle Road (Zone 4 and 8).</p> <p>At the very south of the area (Zone 8) the Albert Dock, William Wright Dock, St Andrew's Dock and St Andrew's Dock Extension have developed along the foreshore of the Humber Estuary on reclaimed land. Good's station has been set up down by the Albert Dock and rail lines are in a wide strip of land north of the docks. These continue to the west until Zone 9.</p> <p>The entire Humber foreshore (Zone 9) has been changed and now contains the Priory Yard sidings for the Hull and Selby Railway.</p>	4, 8, 9
1926	Yorkshire CCXL.NE Ordnance Survey 6"	There are no significant changes visible by the 1926 Ordnance Survey map.	1, 2, 3, 5, 6, 7
1929	Yorkshire CCXL.NW Ordnance Survey 6"	There are no significant changes visible on the map between 1911 and 1929 in the study area.	4, 8

Date	Name	Description	Relevant zone
1952	Yorkshire CCXL.NE Ordnance Survey 6"	<p>The Old town (Zone 1, 6 and 7) around the area of Blackfriargate has suffered the loss of houses as the result of bomb damage and subsequent clearance.</p> <p>Queen's Dock has been infilled and turned into the Queen's Gardens (Zone 2). The other docks remain.</p> <p>The area around the Trinity Burial Ground (Zone 3) is unchanged.</p> <p>On the eastern bank of the River Hull (Zone 5) the area has been extensively redeveloped and there is no physical sign of the former Citadel.</p>	1, 2, 3, 5, 6, 7
1952	Yorkshire CCXL.NW Ordnance Survey 6"	<p>There continues to be very little change in Zone 3 and 4 along the present line of the A63 Castle Street.</p> <p>The area around Porter Street (Zone 8) has been extensively cleared of buildings, presumably as part of WWII bomb damage around the dock area. To the north of the paragon Station further clearance has resulted in the Laying out of Ferensway.</p> <p>To the west of the city (Zone 8 and 9) is largely unchanged from the earlier 1911 and 1929 maps.</p>	3, 4, 8

Table 2.2 Map regression for Hessle (Zone 10)

Date	Name	Description	Relevant zone
1855	Yorkshire 239 Ordnance Survey 6"	The study area in Hessle (Zone 10) involves two sites either side of the Selby-Hull Railway, adjacent to the eastern bank of the Hessle Haven, where the Fleet Drain exits into the Humber Estuary. To the south of the railway is a Brick and Tile Works on the eastern bank, and the Ferry Inn (PH) and the ferry wharf, on the western bank. To the north of the railway is a Garden Cottage and open fields. Hessle itself forms a nucleated village around All Saints Church.	10
1911	Yorkshire CCXXXIX.SE Ordnance Survey 6"	Nothing has changed around the proposed area of the Scheme (Zone 10) north of the railway. The 1911 map shows that gas works have developed south of the railway. Several more brickworks have developed on the foreshore of the Humber Estuary. A shipbuilding firm has set up on the western bank of the Haven. Hessle has expanded towards the estuary and the Hessle Station.	10
1928	Yorkshire CCXXXIX.SE Ordnance Survey 6"	South of the railway (Zone 10) on the eastern bank the area is now noted as the Haven Shipbuilding Yard. The brickyards have all closed and are denoted as former clay pits. On the western bank the shipbuilding yard is disused. The pub is now the Ferry Boat Inn. North of the railway the land has been developed as a railway siding with the Hessle Haven junction noted on the site.	10
1946	Yorkshire CCXXXIX.SE Ordnance Survey 6"	There are no notable changes between 1926 and 1938 in Zone 10.	10

Date	Name	Description	Relevant zone
1952	Yorkshire CCXXXIX.SE Ordnance Survey 6"	The railway sidings have expanded by 1948 (Zone 10) and now take up the entire land plot north of the railway. Otherwise there are no major changes.	10

2.4 Archaeological remains

2.4.1 The assessment of the archaeological remains is based on data contained within the EAR which covered the main corridor of the scheme and a further search of the expanded area consulting information contained within the Humber SMR as well as published and unpublished reports.

2.4.2 Details all the known archaeological events (watching briefs, evaluation trial trenches and excavation but not including historic building recording which is not relevant to the understanding of the buried archaeological remains) in the 200m study area are shown on Volume 2, Figure 8.3 Archaeological events and monuments and listed in Volume 3, Appendix 8.2 Gazetteer of assets Table 1.1. This includes events recorded in the EAR, on the Humber SMR and identified during the deposit modelling. This has identified 74 separate events within 200m of the Scheme. The data has been used to assess the potential for the survival of archaeological assets in each zone.

2.4.3 A detailed list of all archaeological assets identified within the Scheme Site Boundary has been produced and is shown in Volume 3, Appendix 8.2 Gazetteer of assets Table 1.3. Full assessment of the value/ significance of the heritage assets is discussed in Volume 3, Appendix 8.2 Gazetteer of assets Table 1.2.

2.4.4 After completion of the scoping report⁵³ and the response by the planning inspectorate, further archaeological work has been agreed. Full details of these include deposit modelling (Volume 3, Appendix 8.4 Assessment, mitigation and deposit modelling), trenching in advance of the Town Defences (Volume 3, Appendix 8.5), trenching in advance of work at the Holy Trinity Burial Ground (Volume 3, Appendix 8.6).

Zone 1: A63 Castle Street, Old Town

2.4.5 The area east of the Princes Dock represents the former core of the medieval town, located within the medieval town walls. The archaeological assets in the Scheme Site Boundary of the A63 Castle Street from the Princes/Humber Dock to the end of the Scheme beyond the Market Place/Queen Street junction are discussed below.

⁵³ Highways Agency (2013) A63 Castle Street Improvements, Hull Environmental Statement Scoping Report

- 2.4.6 Within this zone six archaeological assets of high value have been identified. These are the medieval Augustine Friary (MMS101) near Market Place and structures along the former line of Mytongate now under the line of the A63 Castle Street. There remains the potential for archaeological remains of several medieval buildings including the Charity Hall (MMS104), Guildhall (MMS107), town gaol (MMS108) and 85 Queen Street (MMS111). In addition, there is the potential for other unknown buildings of medieval date along the former line of Mytongate (MMS105). The northern frontage of Mytongate follows the current northern frontage of the A63 Castle Street but the street was narrower and the southern side of the street lies beneath the centre of the A63 Castle Street.
- 2.4.7 A single medium value asset, the site of the Coach and Horses (MMS123), 13 low value assets (MMS109, MMS115, MMS116, MMS117, MMS118, MMS119, MMS120, MMS121, MMS122, MMS124, MMS125, MMS126, MMS127) and two negligible value archaeological assets (MMS113, MMS114) are potentially impacted in Zone 1.
- 2.4.8 The area (defined as Zone 1) has been subject to several decades of archaeological investigation. Excavation has been carried out at several sites in Zone 1 and immediately north and south. A summary of these investigations is presented in Volume 3, Appendix 8.2 Gazetteer of assets Table 1.1 and full details are included in the deposit model for the Scheme (Volume 3, Appendix 8.4).
- 2.4.9 The results of these excavations show the survival of buried archaeological remains along the former line of Mytongate and the Augustine Friary from the medieval and post-medieval period. These archaeological remains may be encountered at depths of 1.99m and 2.45m ordnance datum (OD), or at around 0.30-0.70m bpgl. However, the construction of the A63 Castle Street had formation layers of around 1m in depth, which may have truncated the upper horizons of archaeological remains. Deposits were encountered in fragmented parcels of land between later modern building foundations and utilities trenches. No areas of 'open ground' where surviving deposits were preserved in large areas are in the Scheme Site Boundary of the Scheme.
- 2.4.10 Deeper excavation within the area has the potential to encounter natural alluvial layers (see Table 2.3 below). The excavated evidence suggests that overburden/ made ground of modern deposits may vary between 1.05 and 2.00m in depth (Volume 3, Appendix 8.4).

Table 2.3: Archaeological depths Zone 1 A63 Castle Street Old Town

Deposit description	Upper horizon of deposits (m)	Depths bpgl (m)
Alluvial Natural	1.99-2.45	
Archaeological Deposits	2.00-4.20	0.30
Overburden/ Made Ground/	3.30-4.20	0.30-0.70
A63 Road and Road Base		1.00

Deposit description	Upper horizon of deposits (m)	Depths bpgl (m)
Modern Ground Surface	4.00-4.50	0.00

Archaeological potential

2.4.11 The potential for prehistoric, Roman and early medieval remains within this area is considered negligible. No buried archaeological deposits from this period have been encountered during previous archaeological investigations. Later medieval, post-medieval period and modern activity is likely to have truncated earlier archaeological deposits.

2.4.12 The potential for buried archaeological deposits from the medieval and post-medieval period is considered high. Medieval and post-medieval structural evidence has been recorded in most previous excavations carried out along the A63 Castle Street.

Zone 2: The Town Defences / Post-medieval Docks

2.4.13 The town defences cross the line of the A63 Castle Street in the area equivalent to Princes Dock Street (MMS129) and Humber Dock Street (MMS130) with the Myton Gate (MMS128) between. These heritage assets are considered of high value. They may include remains of:

- the original defensive circuit of a great ditch and bank, topped with a palisade, dating to the early 14th century (MMS129, Princes Dock Street, MMS130, Humber Dock Street)
- the brick town wall and outer ditch built in the late-14th and early 15th century (MMS129, MMS130)
- The Myton Gate (MMS128)

2.4.14 The medium value archaeological remains of 44 Mytongate (MMS135) may survive on the northern side of the A63 carriageway to the east of the walls.

2.4.15 The later Civil War reinforcement and ‘hornwork’ ditches (MMS131) built between 1639 and 1642, may also be present to the west. The remains were truncated by the construction of the Princes Dock, Humber Dock and inter-connecting lock in the early 19th century. Therefore, it is likely that remains only survive in a narrow parcel of land between the two docks. The extent of their survival means that they are only considered of low value.

2.4.16 Emergency archaeological recording in 1976 in advance of the construction of the A63 Castle Street revealed that the Myton Gate survives *in situ* beneath the carriageway between Princes Dock Street and Humber Dock Street. Further watching briefs and excavation have revealed the remains of the town defences,

including the wall and ditch run along the line of Princes Dock Street to the north (MMS129) and Humber Dock Street to the south (MMS130).

- 2.4.17 Evaluation of the town defences as part of this Scheme has revealed well preserved archaeological deposits within the town ditch (see Volume 3, Appendix 8.5). The OAN-HFA Deposit Model (Volume 3, Appendix 8.4) has also suggested the potential presence of the Civil War defences in the land strip between the Princes Dock and Humber Dock. A summary of these investigations is presented in Volume 3, Appendix 8.2 Gazetteer of assets Table 1.1.
- 2.4.18 Both the Princes Dock (MMS673) and Humber Dock (MMS761) are Grade II listed and are considered in the historic buildings section below. The lock and swing bridge (MMS132) between Princes and Humber Docks may survive buried beneath the highway and adjacent landscape. To the west of the lock are the remains of Warehouse No. 7 (MMS133), similar in design to the listed Warehouse No. 6 to the east which is still standing. They are considered of low value.
- 2.4.19 Two negligible value assets (MMS134, MMS136) also exist in Zone 2.

Archaeological potential

- 2.4.20 The potential for prehistoric, Roman and early medieval archaeology is negligible in this location. The later development of the medieval town walls, the outer ditch, the Civil War defences and the construction of the Princes and Humber Dock is likely to have truncated any earlier activity on the site.
- 2.4.21 The potential for medieval remains of the town wall, outer ditch and associated archaeological structures is high. They have been uncovered during previous archaeological investigations and are believed to be preserved beneath the current course of the A63 Castle Street.
- 2.4.22 The potential for post-medieval remains of the Civil War defences are low-medium. The survival of archaeological remains is likely to be only partial in the preserved island of land between the Humber and Princes Docks. The likelihood of the survival of post-medieval remains of the lock between Princes and Humber Dock and contemporary Warehouse No. 7 is high.

Zone 3: A63 Castle Street (Humber Docks to Ferensway junction)

- 2.4.23 No high value archaeological heritage assets have been identified as potentially surviving in Zone 3. Four medium value heritage assets have been identified in Zone 3.
- 2.4.24 The former western arm of the course of the River Hull has been identified as lines of streams and ditches following Waterhouse Lane and to the east of Commercial Road (MMS486). Geoarchaeological work (see Volume 3, Appendix 8.4 Assessment, mitigation and deposit modelling, Figures 32 and 33) supports the suggestion that the course bisected the A63 Castle Street in a location

approximately at the junction with Waterhouse Lane. It has demonstrated that layers of organic peat and alluvial deposits existed either side of this channel with the potential for evidence from the Mesolithic to early medieval periods. The value of this archaeological resource is regarded as medium.

2.4.25 The medieval remains of Myton Grange and Chapel (MMS400, MMS402) and the medieval and post-medieval settlement of Myton (MMS401) were probably located close to the junction of Castle Street, Myton Street and Waterhouse Lane⁵⁴. A spot find of an octagonal stone pedestal (interpreted as an altar) was found on Waterhouse Lane in 1823 (MMS506). Due to the extensive ground disturbance caused by 19th century development and the construction of the Ferensway junction these remains are unlikely to survive. Therefore, their value is low. The SMR notes two medieval moated sites (MMS138, MMS139) in the area, these are poorly geographically located and based on historical evidence and their value is regarded as negligible.

2.4.26 However, the watching brief on ground investigations (Volume 3, Appendix 8.4 Assessment, mitigation and deposit modelling) uncovered potential medieval deposits in TP18A, in an area of undisturbed ground to the west of the Trinity Burial Ground at depths of c. 2.8m bpgl (c. 1.9m OD, MMS544) and a post-medieval ground surface located in some of the test pits (see Table 2.4 below).

Table 2.4: Archaeological depths Area 3 A63 Castle Street

GI Location	Upper horizon of deposits (mOD)	Depths bpgl (m)	Period	Location
TP4	2.30	1.10	Post-medieval	Centre of Ferensway Junction
TP05A	1.81	1.50	Post-medieval	Centre of Ferensway Junction
TP11	2.71	0.60	Post-medieval	North of Trinity Burial Ground
TP14	3.00	1.80	Post-medieval	South of Princes Dock Quay
TP18A	1.90	2.80	Medieval	West of Trinity Burial Ground
BH22	1.55	1.20	Post medieval	North of Ferensway Junction

2.4.27 The post-medieval Trinity Burial Ground (MMS144) forms an area of 8,120m² of which an area of 3,507m² is impacted by the scheme. Full details of the burial ground archaeological evaluation are contained in Volume 3, Appendix 8.6. In summary the burial ground was open from 1783 until 1861. During this time 44,041 burials are recorded in the burial registers for the Holy Trinity Parish, but it

⁵⁴ Accuracy of location based on sites and monuments records is low

is unclear as to how many continued to be buried in family plots and vaults, in the original graveyard around the Holy Trinity church. 533 burial monuments were recorded in the graveyard in 1982, but by the time of the evaluation work undertaken as part of the Scheme (2015) only 303 remained. Of these, 195 monuments have now been removed in preparation for construction of the Scheme. Four archaeological trial trenches were excavated in 2015.

2.4.28 Archaeological evaluation of four trenches revealed:

- Trench A, north west side of burial ground where there were c. 5.0 burials/m²
- Trench B, north-central side of burial ground where there were c. 2.0 burials/m²
- Trench C, north east side of the burial ground, where there were 2.85 burials/m²
- Trench D revealed the remains of the mortuary building located in the north east corner of the site

2.4.29 The burial horizon exists between c. 0.7-0.8m bpgl and c. 1.85m bpgl (2.4 to 1.15m OD). This suggests that potentially between than 16,000-19,000 burials may be contained within the area impacted by the Scheme. Of these 70% were more than 25% articulated and therefore considered suitable for osteological analysis. This gives an estimated total number of exhumed articulated remains of around 11,200 to 13,300. The preservation of skeletal material was good, and the potential for analysing the material for demographic morphological and metrical data is high, with lesions for pathology frequent and varied. The Trinity Burial Ground is regarded as high value asset due to its religious and community value as a burial ground. Its value as an archaeological resource for the study of the population of Hull is also regarded as of high value due to its ability to answer locally and regionally significant questions about the population of Hull and Yorkshire.

2.4.30 A further six low value (MMS140, MMS142, MMS145, MMS146, MMS147 and MMS152) and nine negligible value (MMS137, MMS138, MMS139, MMS141, MMS143, MMS148, MMS149, MMS150 and MMS151) post-medieval, archaeological heritage assets may survive in Zone 3.

Archaeological potential

2.4.31 There is high potential for palaeo-environmental remains in buried peat, organic clay, silt and alluvial deposits associated with a former channel of the River Hull. These deposits may contain prehistoric, Roman and early medieval period buried archaeological remains. However, given the low-density occupation in this period, the potential for settlement-related archaeological remains prior to the medieval period is considered low.

2.4.32 In the medieval period the remains of the settlement of Myton were suggested during GI work. Overall there is likely to have been truncation of archaeological remains caused by the 19th century expansion of the town. The potential is therefore considered low to medium.

2.4.33 There is a high potential for post-medieval remains associated with the Trinity Burial Ground. These have been proven by both historical research and archaeological excavation.

Zone 4: A63 Hessle Road (west of the Mytongate Junction)

2.4.34 The area to the west of the Ferensway Junction was open farmland until the later post-medieval period. The area does not appear to have been intensively settled prior to the 19th century.

2.4.35 Rapid expansion of the town west of the docks in the 19th century meant that this area became dominated by villas, terraces and small-scale industrial units along the line of Melbourne Street, Vauxhall Street and Waverley Street (now the course of the A63). The route into the town centre was not direct and instead Myton Place connected with a maze of streets including Great Passage Street, Nile Street, Wood Lane, and Edward's Place which in turn connected with Cogan Street and Waverley Street.

2.4.36 No archaeological work has been conducted in this zone of the scheme and the deposit model (Volume 3, Appendix 8.4) concluded that remains were likely to date from the 19th century onwards.

Archaeological potential

2.4.37 It is likely that this zone would have low potential for archaeological remains of prehistoric, Roman, medieval and post-medieval periods before the 19th century. The archaeological remains are likely to be restricted to 19th century streetscape.

Zone 5: Eastern bank of the River Hull

2.4.38 Prehistoric, Roman and early medieval remains have not been revealed on the eastern bank of the River Hull. There is a possibility that deeply buried archaeological remains associated with prehistoric activity exist. Later archaeological deposits have been built up along the waterfront during the medieval or post-medieval periods.

2.4.39 No high value heritage assets are located within the outline of the Scheme. However, the high value scheduled monument, the 16th century Hull Castle (Middle Blockhouse), Curtain Wall and South Blockhouse and part of late 17th century Hull Citadel Fort (MMS544), lie just to the east.

2.4.40 Archaeological evaluation and a watching brief (MMS024)⁵⁵ have been conducted on the eastern bank of the River Hull in 2009. These investigations revealed a former narrow spit of land between the Citadel moat and the River Hull. Temporary sluices (MMS181) were built through the spit to regulate the levels of the moat. These assets are of medium value. The Citadel was finally levelled in 1865, and the land developed as part of the port including a series of small warehouses, workshops and boatyards (MMS168). Any associated 19th century archaeological remains are of low value. These have been left *in situ* below the level of remediation and constitute part of the site's archaeological resource together with any traces of revetments along the outer edge of the Citadel moat and the River Hull frontage.

Archaeological potential

2.4.41 The prehistoric, Roman and early medieval archaeological potential within Zone 5 is likely to be restricted to deeply buried archaeological deposits. The potential is therefore considered low.

2.4.42 The potential for medieval period remains associated with the 16th century defences is considered medium the location of the Construction site compound.

2.4.43 The potential for archaeological remains associated with the post-medieval period defences and later wharves is considered high.

Zone 6: Old Town North

2.4.44 Eight high value archaeological assets, all medieval in date, are situated within or immediately adjacent to the Scheme Site Boundary in Zone 6. There are two further medium value assets, six low value assets and 16 negligible value assets within or immediately adjacent to the Scheme Site Boundary.

2.4.45 Prehistoric and Roman and early medieval evidence in Zone 6 is confined to finds and there are no known sites recorded within the Scheme Site Boundary. The finds, including animal bones and timber, suggest prehistoric activity such as a lake dwelling (MMS514). Romano-British pottery was also uncovered during excavations on Fish Street (MMS026).

2.4.46 The Old Town includes many surviving medieval buildings including the Grade I listed Church of the Holy Trinity (MMS618) which dates in part back to c. AD 1300, the Grade I listed Holy Trinity House dates to 1753-74, but was founded in the 14th century as a religious guild (MMS628) and the Grade II* listed Old Grammar School Museum originally dated to AD1486 but rebuilt in AD1585 (MMS612)⁵⁶.

⁵⁵ Fraser, J., 2009 An Archaeological Evaluation on Land at East Riverside, Tower Street, Kingston upon Hull, Humber Archaeol Rep 271

⁵⁶ Pevsner, N, 1972 The Buildings of England: Yorkshire - York and the East Riding, 275-276

The Old Grammar school was excavated in 1985 -1986 but the report was not published (MMS034). These are discussed in historic buildings below but may have archaeological remains associated with them.

- 2.4.47 The scheduled monument of Beverley Gate (MMS494) is located at the top of Princes Dock Street and forms part of a street display. There remains the possibility that buried archaeological remains of the town wall and defences (MMS129) continue along Princes Dock Street connecting the Myton Gate (MMS128, Zone 1) to the Postern Gate (MMS221) and the Beverley Gate. All these archaeological assets are regarded as high value.
- 2.4.48 The following high value medieval archaeological assets are potentially located in or adjacent to the Scheme Site Boundary: Crouched Friary (MMS195), Selby's Hospital (MMS213), a 14th century boundary wall and later post-medieval occupation (MMS216), Greggs Hospital (MMS219) and the Glover Maison Dieu (MMS220).
- 2.4.49 The following medium value post-medieval archaeological assets may survive in or adjacent to the Scheme Site Boundary around the Holy Trinity Church: the site of Priests' Houses and other buildings in Trinity Square (MMS214), and the southern cemetery wall of Holy Trinity Church (MMS215), the enlargement of which is recorded as having taken place in the reign of Edward I⁵⁷. There remains some potential for human burials outside the current boundary of consecrated land of the Holy Trinity Church. The area has been subject to archaeological investigation at the Holy Trinity Churchyard, Hull (2008, 2016, MMS025), Fish Street, Hull (1974, MMS026), South Church Side, Hull (1974, MMS027), Market Place, Hull (1999, MMS032) and Old Grammar School, South Church Side, Hull (1986, MMS034).
- 2.4.50 A further six low value (MMS249, MMS250, MMS253, MMS259, MMS264, MMS266) and 16 negligible value (MMS197, MMS198, MMS199, MMS204, MMS212, MMS236, MMS241, MMS243, MMS251, MMS252, MMS263, MMS267, MMS268, MMS269, MMS272, MMS273) archaeological assets are in or adjacent to the Scheme Site Boundary. Most of these assets are either medieval or post-medieval in date.

Archaeological potential

- 2.4.51 There has been little substantial evidence for activity prior to the formation of the town. The evidence is restricted to occasional finds. Therefore, the potential for the prehistoric, Romano-British and early medieval period is considered low.
- 2.4.52 The area forms the core of the medieval and early post-medieval town. It has demonstrable evidence for surviving archaeological remains in some locations. In

⁵⁷ Adamson, N, and Bradley, J, 1999 Watching Brief at Market Place, Hull

other locations watching briefs have revealed only later post-medieval buried archaeological remains. The Scheme would mainly adopt existing roadways which follow the line of the medieval street plan and significant archaeological remains are less likely in these locations. The exception is the line of Princes Dock Street to Queen Victoria Square along which the line of the medieval town wall and defences run.

2.4.53 Overall the potential for medieval and post-medieval buried archaeological remains is medium. However, it is considered high in the location of:

- North Church Side, South Church Side, Market Place and Trinity Square around the churchyard of the Church of the Holy Trinity.
- Princes Dock Street and Queen Victoria Square in the location of the medieval and post-medieval fortifications.

Zone 7: Old Town South

2.4.54 Prehistoric, Roman and early medieval remains in Zone 7 are likely to be limited. The area was part of the intertidal reach and intersected by the former courses of the River Hull. South of Humber Street formed the original foreshore of the Humber Estuary and the land is unlikely to have been intensively settled prior to the post-medieval period. There remains the possibility of chance prehistoric, Roman or early medieval finds where the land was used for cattle grazing or salt production.

2.4.55 The line of the medieval defences continued south from the Myton Gate (MMS128) along Humber Dock Street (MMS130) until it reached the Hessle Gate (MMS286) which was located at the corner of Humber Street. The defences continued along the line of Humber Street to the site of the Watergate on Humber Street (MMS291). The Humber Street Excavations in 1964 (MMS037) confirmed a 17th century date for an interval tower on the wall. All these assets are regarded as high value.

2.4.56 The only other high value asset identified was the Carmelite Friary on Monkgate (MMS288). The site has been investigated twice revealing medieval and post-medieval archaeological remains (Monkgate / Blackfriargate in 1977, MMS009; Blackfriargate / Humber Street in 2008, MMS015) suggesting archaeological survival is good.

2.4.57 Inside the walls but south of the A63 Castle Street is the location of several medieval streets including Sewer Lane, Finkle Street, and Queen Street, which formed part of the medieval town. Evaluation at Green Bricks Public House in 1993 revealed medieval and post-medieval features (MMS010). Medieval and post-medieval occupation was also discovered in Queen Street in 1976 (MMS008). There remains the possibility of other unidentified medieval archaeological assets within the city wall.

2.4.58 The area south of Humber Street was reclaimed in the post-medieval period. Excavated material from the Princes Dock and Humber Dock was used to create the land to the south after 1800 and overburden of up to 2m in depth is likely in the southern part of the area. It is unlikely that there would be medieval or early post-medieval archaeological remains in this area.

Archaeological potential

2.4.59 The potential for buried archaeological remains from the prehistoric, Romano-British and early medieval period is considered low.

2.4.60 The potential for the buried archaeological remains from the medieval period is considered high inside the line of the medieval defences on Blackfriargate. It is considered low south of Humber Street.

2.4.61 The potential for buried archaeological remains from the post-medieval period is considered high.

Zone 8: West Hull

2.4.62 The Scheme includes areas north and south of the A63 Castle Street that would see temporary land-take during the Scheme. There remains the possibility that excavation work may occur for utilities diversions that may impact below-ground archaeological remains.

2.4.63 In the prehistoric, Roman and early medieval period the area was low lying marginal land on the flood plain of the River Hull. To the south on the Humber foreshore, preserved organic deposits have been identified at the Albert Dock, including a submerged forest (MMS397)⁵⁸. These remains may exist along the entire Humber foreshore but are likely to be buried at depth beneath later reclaimed land, or truncated by the construction of the Albert Dock and Humber Dock. The course of the Old River Hull (MMS486) bisected the area (discussed above in Zone 3). Its course is speculative but may have entered the Humber Estuary south of the Railway Dock.

2.4.64 This area lay outside the medieval town walls and was largely undeveloped until the post-medieval period. The cartographic evidence reveals that the area forms two parts. The northern half was agricultural land outside of the Old Town of Hull until the 19th century. The very southern half was reclaimed from the mudflats of the Humber Estuary to form the Albert Dock and industrial docklands. The area developed in the 19th century and was the location of factories and the associated social buildings including: almshouses, chapels, churches and a synagogue representing the diverse culture that surrounded the docks.

⁵⁸ Hawkswood, J, 1871 'Notes on the peat and underlying beds observed in the construction of the Albert Dock, Hull', Quarterly Journal of the Geological Society 27, 237-240. Available online at: <https://content.historicengland.org.uk/content/docs/research/peat-database-yorks.pdf>

- 2.4.65 The only archaeological buried remains from this area were a post-medieval pit and finds that were uncovered during groundworks (MMS529) on Carr Lane.
- 2.4.66 There are a further seven low value archaeological assets in Zone 4. These are listed in Volume 3, Appendix 8.2 Gazetteer of assets Table 1.2 for detail.

Archaeological potential

- 2.4.67 The archaeological potential for all periods in the is zone is considered low.

Zone 9: A63 west of Hull

- 2.4.1 This zone is located on the A63 Castle Street outside of the town of Hull. The study area was part of the Priory Yard sidings and any archaeological remains pre-dating the 19th century are likely to have been removed.

Archaeological potential

- 2.4.2 There is low potential for survival of archaeological remains from all periods in this zone.

Zone 10: Hessle

- 2.4.3 Hessle is a satellite settlement to the west of Hull. The Scheme would adopt a site for a construction site compound (Livingstone Road) west and adjacent to the inlet known as the Hessle Haven from which the Fleet Main flows into the Humber Estuary.
- 2.4.4 Records of exposed peat have been recorded on the foreshore at the Melton Brickyards in Hessle⁵⁹. Spot finds on the foreshore bank included a Palaeolithic flint hand-axe (MMS542) a Romano-British ceramic picture lamp from the 1st century AD and four Roman coins (MMS541). The finds suggest that in the prehistoric and Roman period there was some activity in the area. Alternatively, they could have been deposited by inter-tidal flow along the Humber foreshore.

The Hessle Haven was the location of a ferry to Barton on the opposite foreshore of Humber Estuary. The Barton to Hessle Ferry, noted in the Domesday book and still in operation in c. 1856 (MMS487). The Ferry Boat Inn, Hessle (MMS489) had been established by the post-medieval period. The only site within the Scheme Site Boundary was the site of a brick and tile works (MMS490). The value of the asset is negligible.

Archaeological potential

⁵⁹ Crowther, D, 1987 'sediments and archaeology of the Humber foreshore, in East Yorkshire Guide (eds) Ellis S, Cambridge Quaternary Research Association, 210-220. Available online at: <https://content.historicengland.org.uk/content/docs/research/peat-database-yorks.pdf>

- 2.4.5 The evidence of prehistoric and Roman activity along the foreshore of the Humber Estuary is restricted to spot finds and the archaeological potential is considered low.
- 2.4.6 There is no archaeological or historical evidence that permanent settlement was associated with the ferry until the post-medieval period. Therefore, the potential for the early medieval and medieval period is considered low.
- 2.4.7 The presence of the Ferry Boat Inn, Hessle Clough sluice and the brick and tile works support the fact that the area around the Hessle Clough was occupied in the post-medieval period. The potential for survival of significant remains from this period is considered low.

Summary of archaeological potential by zone

- 2.4.8 Table 2.5 below summarises the archaeological potential by zone.

Table 2.5: Archaeological potential by zone

Zone	Prehistoric/ Romano-British/	Early medieval	Medieval	Post-medieval
Zone 1	low	low	high	high
Zone 2	low	low	high	medium
Zone 3	Low	low	low-medium	high
Zone 4	low	low	low	low
Zone 5	low	low	high	high
Zone 6	low	low	medium-high	medium-high
Zone 7	low	low	medium-high	medium-high
Zone 8	low	low	low	low
Zone 9	low	low	low	low
Zone 10	low	low	low	high

2.5 Historic buildings

- 2.5.1 The following section builds upon previous assessment conducted as part of the Scheme⁶⁰ that dealt with the narrow corridor of the A63 Castle Street. These have been supplemented to include assessment of the historic buildings in the wider developments of the Scheme including temporary work areas and construction site compounds.

⁶⁰ Architectural History Practice (AHP) 2014 Historic Building and Historic Townscape Appraisal, A63 Castle Street Improvements, Hull, Unpub rep

2.5.2 Details of the historic buildings are included in Volume 3, Appendix 8.2 Gazetteer of assets Table 1.4, detailing their baseline setting and significance. The Scheme bisects the Old Town conservation area. The size of the conservation area means it has been separated into three areas, within each of which are different sub-zones identified during the character area appraisals of the Old Town conservation area, which were conducted between 1999 and 2005⁶¹ and these have been tabulated as Volume 3, Appendix 8.2, Table 1.5.

Zone 1: The Old Town, Castle Street

2.5.3 The route of the A63 Castle Street passes through the Old Town conservation area (sub-zones A1, A2, B2, B3, C5). There are two Grade II listed built heritage assets, and five non-designated heritage assets in this zone.

2.5.4 On Market Place, and to the north of the A63 Castle Street, are the Grade I listed Statue of King William III and flanking lamps (MMS600) and the Grade II listed Market Place Toilets (MMS601) north of the statute. Opposite this is the non-designated King William Hotel (MMS856). Further up Market Place, and surrounded by the medieval streetscape is the Grade I listed Parish Church of the Holy Trinity and Churchyard Wall (MMS618).

2.5.5 No. 65 was the former Hull Telephone Exchange (MMS861), built in 1911 and closed in 1964. Nos 74, 75 and 76 Castle Street form a neat row of Georgian terraced buildings that were listed but were de-listed in the 1980s due to heavy restoration and alteration (MMS857, MMS858, MMS859). No. 82-83 Castle Street, Burnett House (MMS860, formerly the Queen's Hotel), is a four-storey mid-19th century building. As a group they are the last of the buildings along this section of Castle Street to retain the medieval plot outlines, on what would have been the original street frontage.

Zone 2: The Docks

2.5.6 The route of the A63 Castle Street passes through the Old Town conservation area (sub-zones B2, C2). There are three Grade II listed built heritage assets in this zone.

2.5.7 The Grade II listed Humber Dock (MMS761; see history above for summary of its construction) is orientated north-south. It connects to the sea at its southern end via a lock entrance with a swing bridge. The walls of the dock survive as battered brick masonry with monumental capping stones. They are largely intact on the western, eastern, and southern boundaries of the dock, but have been altered and reduced on the northern side in the 1970s by the construction of the A63 Castle Street.

⁶¹ Hull City Council, 1999 Old Town (Eastern and Northern part) Conservation Area Character Appraisal, HCC 2004 and HCC 2005

2.5.8 To the north is the Grade II listed Princes Dock (MMS673). The Princes Quay Shopping Centre that dominates the north and west of the dock on an island. The Grade II listed Warehouse 6 at the south east corner of Princes Dock (MMS602) is one of the few surviving warehouse buildings for the dock complex. It is positioned directly east of the former lock between the Princes Dock and the Humber Dock.

Zone 3: A63 Castle Street West of Humber Docks

2.5.9 The route of the A63 Castle Street west of the docks has far fewer historic buildings adjacent to the road. The Old Town conservation area (sub-zones C1, C2) are located south of the road. There are two Grade II listed Castle Buildings (MMS603) and Earl de Grey public house (MMS604). There are a further four non-designated built heritage assets in this zone.

2.5.10 The Grade II listed Castle Buildings was built as two separate buildings on the corner of Castle Street and Waterhouse Lane. The eastern part, were a standard pair of late-Victorian terraces, Nos 13 and 14 Castle Street, built in 1885, but were demolished in 2018. The larger western building was constructed in 1900 as purpose-built offices for the steamship owners and brokers Messrs G R Sanderson to plans by B S Jacobs of Hull, a local architect responsible for several buildings in the city. The buildings value is derived from its architectural interest with its striking curved frontage and Free Renaissance styling maximise its prominent corner location on one of the oldest routes out of Hull. Its interior survives largely intact with numerous historic features and the building's original function as a shipping office remains clearly legible, with a clear differentiation between more formal meeting spaces and offices and the more informal general clerk's office. It has historic interest as it is located close to the docks it is an important physical reminder of Hull's maritime history and trading links, and has been occupied by a succession of maritime-related tenants throughout its history. It continues to define the corner plot of the A63 Castle Street and Waterhouse Lane.

2.5.11 The Grade II listed Earl de Grey public house faces onto Castle Street. The present building represents the remaining two-thirds of a block. The principal façades are to the south and west. The ground floor is decorated with glazed faience with a central doorway and large flanking windows with stone-moulded windows above visible on the first and second floors. It is believed to have been built in the late-18th century when the ground floor was a shop, then it was a public house after 1850 when it was known as the Junction Dock Tavern. By 1871 it was the Earl de Grey public house⁶². It has architectural interest as it is a good example of a 19th century pub altered in the early 20th century through the addition of an elaborate faience shopfront. It has historic interest due to it being one of only a few early buildings left remaining on the western half of Castle Street, one of the

⁶² AHP 2014, 26-31

oldest routes out of Hull, and is an important physical reminder of dock life in this part of the town.

- 2.5.12 The Trinity Burial Ground (MMS144) is included in the Old Town conservation area (sub-zone C1). The burial ground was opened in 1783 to ease overcrowding at Holy Trinity churchyard (closed in 1855) and remained in use until 1861. The east boundary wall of the Trinity Burial Ground appears to represent a survival of the prison yard wall of the adjacent 'New Gaol' (MM863) opened in 1785 to the north east was. two lamp posts at Trinity Burial Ground (MMS866) are also non-designated built heritage assets. The archaeological remains are discussed above and further details of the burial ground are discussed in Volume 3, Appendix 8.5.
- 2.5.13 The non-designated Whittington and Cat public house (MMS865) is located south of the Mytongate Junction on the west side of Commercial Road.

Zone 4: A63 Hessle Road

- 2.5.14 The route of the A63 Castle Street west of the Mytongate Junction passes through a built environment of fragmentary individual buildings which survive along the south side of the road. There are two Grade II listed buildings and one non-designated built heritage asset in this zone.
- 2.5.15 Frankie's Vauxhall Tavern (MMS605) on the corner of St James Street and Castle Street, is Grade II listed three-storey, brick-built public house. It is another example of the survival of former corner plot public houses within a landscape that had seen the widespread demolition of the surviving industrial buildings. At the far western end of the scheme is the Alexandra Hotel (MMS853), another street corner hotel. A single non-designated 20th century cream telephone box survives adjacent to the pedestrian area, south of the landscaped buffer to the A63 Hessle Road (MMS983).
- 2.5.16 The setting of these buildings has seen the impact of the changing landscape in this area. The construction of the A63 Castle Street in the 1970s has removed them from their original context, although some of the historic street pattern survives (see Historic Landscape below). Historic 19th century warehouses and industrial building have been largely removed and replaced with later 20th and 21st century industrial units.

Zone 5: Eastern bank of the River Hull

- 2.5.17 The Old Town conservation area (sub-zone A2, B3 and C3) is located west of this zone. There are four Grade II listed buildings and five non-designated built heritage assets in this zone. The setting of these buildings is defined by the River Hull. Otherwise the zone is defined by 20th century industrial buildings, road infrastructure and vacant land plots.

Zone 6: Old Town North

- 2.5.18 The area north of the A63 Castle Street is part of the Old Town conservation area (sub-zones A1-4, B1-10). As such it has the highest concentration of listed buildings in Hull. There are four Grade I, eleven Grade II*, 135 Grade II and 197 non-designated built heritage assets in this zone. Only the most significant buildings in the streetscape around the Scheme including all Grade I and II* buildings have been assessed individually (see Volume 3, Appendix 8.2 Gazetteer of assets Table 1.5). The Conservation Area Appraisal Areas have been utilised to assess the Grade II and locally listed historic buildings by the sub-zones listed above.
- 2.5.19 Along Market Place and Lowgate (A3) are several historic buildings including the Statue of King William III and Flanking Lamps (Grade I, MMS600), and the Grade II listed Market Place Toilets (MMS601) and locally listed King William Hotel (MMS856), discussed previously above in Zone 1.
- 2.5.20 The following Grade I and II* listed buildings are in the northern part of the Old Town conservation area: The Parish Church of the Holy Trinity and Churchyard Wall (Grade I, MMS618), the Guildhall (Grade I, MMS742), the Church of St Mary (Grade II*, MMS724), and to the west are Minerva Lodge of Freemasons (Grade II*, MMS619) and the Old Grammar School (Grade II*, MMS612).
- 2.5.21 The remainder of the Grade II listed, locally listed and non-designated historic buildings are tabulated in Volume 3, Appendix 8.2 Gazetteer of assets Table 1.5 by the individual sub-zones:
- A3 Lowgate / Market Place
 - B1 Queen Victoria Square
 - B2 Princes Dock Street and Trinity House Yard
 - B4 Trinity House Lane, King Street, Trinity Square, North and South Church Side
 - B5 Posterngate, Dagger Lane (north end), Princes Street and Robinson Row

Zone 7: Old Town South

- 2.5.22 The area south of the A63 Castle Street is part of the Old Town conservation area (sub-zones C2-5). The Old Town conservation area extends south from the A63 Castle Street until it reaches the edge of the Humber Estuary. The area forms part of the industrial buildings around the docks and contains far fewer surviving historic buildings. It contains fewer listed buildings than the north but still contains 12 Grade II listed buildings and 27 non-designated built heritage assets.
- 2.5.23 The following Grade II listed buildings have been assessed individually: The Humber Dock (MMS761, discussed above), and two associated mooring posts (MMS759, MMS763); the former Railway Dock, connecting channel and swing

bridge (MMS765); the former Shipping Line Offices now the Marina Recreation Centre, Commercial Road (MMS764); Warehouse 13 on Railway Street (MMS765), the Statue of William de la Pole (MMS910) and the Tidal Surge Barrier (MMS990).

2.5.24 The remainder of the buildings have been assessed by the individual sub-zone of the Old Town conservation area. It includes the following sub-zones:

- C2 Docklands
- C3 Riverfront
- C4 Fruit Market and 'Forelands'
- C5 Oldgates

Zone 8: West Hull

2.5.25 This zone is an extensive area in the south west and north west of the A63 Castle Street and outside of the Old Town conservation area. It contains a further seven conservation areas, one Grade I, two Grade II*, 85 Grade II and 148 non-designated built heritage assets.

2.5.26 North west of the Old Town conservation area are two conservation areas:

- Georgian New Town conservation area
- Jameson Street conservation area

2.5.27 Between these are several Grade II listed buildings located at 46, 48, 50, 58, 60, 62 King Edward Street (MMS783; MMS785; MMS787) and 19 Story Street (MMS794). The two conservation areas and group of listed buildings form part of a pattern of buildings north of Queen Victoria Square and define the setting of each other. Views radiate from the square and surrounding street along King Edward Street and across Queen Gardens to these areas. Meanwhile Jameson Street conservation area connects seamlessly with the Old Town conservation area and forms a cohesive unit of buildings and views along Carr Lane.

2.5.28 The Jameson Street conservation area extends west from Queen Victoria Square to the edge of the Paragon Station. This forms an open public space around which at the western end of the conservation area are the Grade II listed World Boer War Memorial (MMS777) and War I war memorial (MMS778). Opposite the conservation area and in the surrounding streets are several heritage assets including the Grade II* listed Paragon Station and Station Hotel (MMS776), the Grade II* listed College of Art (MMS772) and non-designated Broadway House, 105-107 Ferensway (MMS925) and Brook Chambers, Ferensway Chambers & Debenhams (MMS929).

2.5.29 South of the Jameson Street conservation area towards the A63 Castle Street and Hessle Road the area gives way to an area of 20th century residential buildings, disused buildings, and vacant or redeveloped land plots with comparatively low occupancy. The exceptions are the Grade II listed Model Dwellings (MMS768) and Punch Hotel (MMS770), and the non-designated assets of St Nicholas Danish Church (MMS917), Owbridge Court (Former Owbridge's Manufactory, MMS947), Braves Hall, Roper Street (MMS948), Former Hull & East Riding Club (MMS949), and a Quartet of K6 Telephone Kiosks, Carr Lane (MMS952). Although views are visible back towards the Jameson Street conservation area and Paragon Station, these are restricted to linear lines of sight down the grid-pattern streets. To the north east and east the mass of the Princes' Quay Shopping Centre restricts direct views into the Old Town conservation area. Overall this gives these streets, a distinctly different setting to those to the north.

2.5.30 At the north of the city are two arterial routes in to the city that define two further conservation areas:

- Spring Bank conservation area
- Beverley Road conservation area

2.5.31 To the west of the city are three further conservation areas defined by inner suburbs of Hull. These are:

- Coltman Street conservation area
- Hessle Road conservation area
- Boulevard conservation area

2.5.32 To the south and west following the Humber foreshore and outside the Old Town conservation area, the townscape consists a grid pattern of streets associate with the industrial docklands reclaimed from the Humber Estuary foreshore. There are no listed buildings in these areas. The surviving industrial and social fabric is represented in fragmentary form by a series of non-designated historic buildings. The non-designated historic buildings include: the surviving remains of pumping stations (MMS965, MMS968); several smoke houses for fish preservation (MMS975, MMS976, MMS979, MMS980); and street corner pubs include the Inkerman Tavern, Alfred Street (MMS969), the Wassand Arms, Wassand Street (MMS971), and the Strickland 'Stricky' Arms, Strickland Street (MMS973). The historic fabric has been largely replaced by 20th and 21st century warehouses and retail developments.

Zone 9: A63 west of Hull

2.5.1 The Scheme would have a layby for vehicle recovery. Zone 9 contains no conservation areas, designated on non-designated built heritage assets.

Zone 10: Hessle

2.5.2 The Scheme would have a construction site compound (Livingstone Road) at Hessle Haven. There are two conservation areas, and one Grade II listed building.

2.5.3 At the north western limits of this study area are:

- Hessle Town conservation area
- Hessle Southfield conservation areas

2.5.4 Hessle Town conservation area is focused on the Parish Church of All Saints and the north-south line of Southgate. Only one listed building in the conservation area, 11 and 13 The Square (MMS855), is within 500m of the Construction site compound. Hessle Southfield lies to the west and consists of late-Victorian and Edwardian villas associated with the development of a middle class suburb. The setting of these two conservation areas is internalised around the streets upon which they are located. Hessle Southfield has a high tree coverage restricting views across the Humber Estuary. They are located at around 450-500m distance from the Construction site compound.

2.5.5 The Grade I listed Humber Bridge (MMS989) is within 1km and there are views to it and from it to the construction site compound over the Humber Estuary.

2.6 Historic landscape

2.6.1 A total of 30 historic landscape character units (HLCU) have been recorded in the 200m buffer of the Scheme. The value of these assets is summarised below.

2.6.2 They are based on a combination of three sources, the landscape character units defined in the EAR, the individual conservation areas and sub-areas defined in the Conservation Area Appraisals, and the provisional historic landscape characterisation provided by Humber Field Archaeology in advance of the final report undertaken for HCC.

Zone 1: The Old Town, Castle Street

2.6.3 In Zone 1 the A63 Castle Street is flanked by the different sub-areas of the Old Town conservation area directly to the north and south of the road. The route of Castle Street interacts directly with the following HLCU also defined in the Old Town conservation area (see Historic buildings above).

- High Street, Lanes and Staithes (A1; HLCU19)
- Lowgate / Market Place (A3; HLCU18)
- Dagger Lane to Vicar Lane (B3; HLCU15)
- Oldgates (C5; HLCU21, HLCU22)

2.6.4 Overall the character of the A63 Castle Street is of a modern dual carriageway passing towards the docks. Although the medieval street pattern has survived north and south of the dual carriageway, it has been bisected so that physical permeability between the north and south is difficult due to traffic levels and signal controlled at-grade crossings. The route of the A63 Castle Street does not retain the historic landscape of the remainder of the Old Town conservation area.

Zone 2: The Docks

2.6.5 Three large docks define Zone 2: the Humber Dock which covers seven acres, Railway Dock which covers three acres to the south (now Hull Marina) and the Princes Dock to the north. Both the Humber and Railway Docks are currently used as marinas with boats moored in the Railway Dock and on the western side of the Humber Dock adjacent to pontoons. On the western side of the Humber Dock is a channel to the sea lock. The docks are all located in the Old Town conservation area and were appraised in the following zones:

- Princes Dock Street and Trinity House Yard (B2; HLCU14)
- Docklands (C2; HLCU11, HLCU12, HLCU13)

2.6.6 The building of the A63 in the 1970s infilled the lock. This severed the physical link and diminished the visual link between the Princes and Humber Dock. The loss of most warehouse buildings around the docks has diminished the historic landscape but it retains its original maritime aspect.

Zone 3: A63 Castle Street west of Humber Docks

2.6.7 Zone 3 includes the line of A63 Castle Street between the Ferensway Junction at the western end and the Princes and Humber Dock at the eastern end.

2.6.8 The former historic character of the area was defined by the 19th century streetscape along Castle Street that expanded away from the former town walls and docks. This developed rapidly after the removal of the town walls in the late-18th century. The street pattern included a junction between Myton Place, Waterhouse Lane and Castle Street. To the north of Castle Street and Myton Place was a dense pattern of buildings with a fine-grain of house plots, interspersed with industrial works. To the south were warehouses and works around the former town 'gaol' and the Trinity Burial Ground, that survived as an island within the surrounding industrial/ domestic landscape.

2.6.9 Survival of the historic character is relatively poor north of the A63 Castle Street (HLCU8). The character of the area survives largely in the street pattern. The corner site (including Castle Buildings and Earl de Grey public house) of Waterhouse Lane and Castle Street defines the relationship between the two historic streets. This relationship has been eroded by demolition and road widening with the two listed buildings fragmentary remnants of this relationship.

2.6.10 The Trinity Burial Ground including the 19th century boundary wall of the town 'gaol' (HLCU9 this is discussed in archaeology, and historic buildings above) survives relatively intact.

2.6.11 Other HLCUs are of poor quality in this area (HLCU1, HLCU4, HLCU5, HLCU7) and retain little of their original streetscape or historic character.

Zone 4: A63 Hessle Road

2.6.12 To the west of the Ferensway junction the A63 continues as a dual carriageway. Originally it formed part of the main route from the west into Kingston-Upon-Hull via Hessle. The historic streetscape was defined by 19th century expansion of the town, east of the docks. The historic pattern of 19th century streets survive as English Street, Lister Street and Edgar Street running east-west, and Commercial Road, James Street, Commerce Lane and Alfred Street, running north-south.

2.6.13 Along the southern side of the A63 Castle Street, the most intact HLCU is English Town (HLCU2) an area of former industrial streetscape with some survival of 19th century industrial buildings and street lines.

2.6.14 The only original street line north of the A63 Castle Street is Porter Street running to the north east. Australia House (HLCU6) a series of flats on William Street and adjacent Public House, from the same period on the corner of William Street and Porter Street survive as an excellent example of 1930s inter-war flats.

2.6.15 Elsewhere the historic landscape survives poorly and the buildings date to the second half of the 20th century (HLCU3, HLCU4, HLCU5).

Zone 5: Eastern bank of the River Hull

2.6.16 Zone 5 was not assessed for historic landscape as no impacts were anticipated.

Zone 6: Old Town North

2.6.17 The study area of the Scheme includes areas that form the best-preserved areas of the medieval and post-medieval townscape defined by the following HLCU and the northern part of the Old Town conservation area. These include:

- A1 the High Street, Lane and Staithes (HLCU19)
- A2 the Wharves and River (HLCU20)
- A3 Lowgate/ Market Place (HLCU18)
- B1 Queen Victoria Square (HLCU26)
- B2 Princes Dock Street and Trinity House Yard (HLCU14)
- B4 Trinity House Lane, King Street, Trinity Square, North and South Church Side (HLCU16, HLCU17)

- B5 Posterngate, Dagger Lane (north end), Princes Street and Robinson Row (HLCU15)

2.6.18 Zone 6 includes four urban spaces defined in the Old Town Conservation Area Appraisal. These are the Queen Victoria Square, Beverley Gate at the northern end of Princes Dock Street, the Princes Dock Side and Trinity Square (the western end of the Holy Trinity Church). The remaining zones of the Old Town conservation area north of the A63 Castle Street are located away from the Scheme.

Zone 7: Old Town South

2.6.19 The HLCUs south of the A63 Castle Street, at the eastern end of the Scheme form part of the Old Town conservation area. The historic landscape is defined by the three areas: those inside the line of the town walls that developed from the medieval period adopting the medieval street pattern (C5 Oldgates, HLCU21, HLCU22); the area of the docks and wharves including the Humber and Railway Dock (C2 'Docklands', HLCU11, HLCU12, HLCU13) and the reclaimed land towards the Humber Estuary.

2.6.20 The reclaimed land created new street patterns from the 18th and 19th century associated with the docks. The character of the HCLUs in the southern part of the Old Town conservation area are associated with the 19th-century port and industrial landscape that grew up around it. The HLCUs are focused on the docks (Humber and Railway Docks) and the waterfront and have a well-defined street pattern. This includes two further areas:

- C3 Southern Part, Riverfront (HLCU24)
- C4 Southern Part, Fruit Market and 'Forelands' (HLCU23)

Zone 8: West Hull

2.6.21 To the north of the A63 Castle Street and Hessle Road outside the Old Town conservation area, the town developed as commercial streets and inner city suburban development. Several streets developed in this area and retain distinct 18th, 19th and early 20th century characters.

2.6.22 A significant HCLU is the Jameson Street conservation area (HLCU27). Further south the HCLU are commercial districts (HCLU7 and HCLU8) between Carr Lane to the north, Waterhouse Lane to the east and Ferensway to the west. To the east of this are Australia House (HLCU6, see above). To the west are housing estates established from the 1930s but predominantly post-war (HLCU5).

2.6.23 South of the A63 Castle Street the historic landscape is characterised by an area of industrial and commercial buildings on grid pattern of streets constructed in the 19th century on the reclaimed land towards the Humber foreshore (HLCU2, HLCU3, HLCU4). The street pattern is largely retained but much of the historic

landscape elements have been lost. The exception is an area around English Street (HCLU2) which retains its character of industrial streets and former factory buildings.

2.6.24 To the west of the A63 Castle Street the former course of the Hessle Road survives intact and forms part of a cluster of conservation areas associated with the late 19th and early 20th century expansion of the suburbs of Kingston-Upon-Hull. These conservation areas are:

- Hessle Road conservation area
- Boulevard conservation area
- Coltman Street conservation area

2.6.25 The character of these conservation areas is suburban and residential and linear views up and down the streets define their setting. They lie away from the Scheme Site Boundary, and are visually separated from them by the A63 Castle Street flyover adjacent to Daltry Street.

Zone 9: A63 west of Hull

2.6.26 Zone 9 was not assessed for historic landscape as no impacts were anticipated.

Zone 10: Hessle

2.6.27 A construction site compound (Livingstone Road) location for the Scheme would be used at Hessle Haven.

2.6.28 The sites lie east of the Hessle Haven where the Fleet Drain joins the Humber Estuary. The area is predominantly industrial either side of the corridor which contains the A63 (called the Clive Sullivan Way in this location) and the Selby-Hull Railway. To the north and west the area is typified by late 20th century low density housing estates.

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A63 Castle Street Improvements, Hull Environmental Statement

Appendix 8.2

CULTURAL HERITAGE – GAZETTEER OF ASSETS

**TR010016/APP/6.3
HE514508-MMSJV-HER-S0-RP-LH-000011
4 September 2018**

A63 Castle Street Improvement, Hull

Environmental Statement

Appendix 8.2 Gazetteer of assets

Revision Record						
Rev No	Date	Originator	Checker	Approver	Status	Suitability
P01.1	29.01.18	C Hewitson	J Sugrue	J Williams	S0	Suitability
P01.2	20.03.18	C Hewitson	J Sugrue	J Williams		Updated
P02	31.07.18	C Hewitson	J Sugrue	J Williams	Shared	S4
P03	04.09.18	C Hewitson	J Sugrue	J Williams	Shared	S4

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1. Gazetteer of assets

1.1 Gazetteer of archaeological events

1.1.1 The following table lists the archaeological events within 200m of the A63 Castle Street Improvements (the Scheme). An archaeological event is defined as an archaeological investigation which includes archaeological excavation, archaeological trial trenching, archaeological watching brief and geo-archaeological investigation. It does not include historic building recording for the purposes of this study as these types of events would not inform understanding of the potential for below-ground archaeological remains.

Table 1.1: Archaeological events in the study area

MMS No	Event name	Event ID/ SMR ID	Type	Year of event	Zone	Summary description
MMS001	Site 1: Puffin Crossing on A63 Castle Street, Hull		WB	1994	1	See Site 1, Volume 3, Appendix 8.4. Undated archaeological and alluvial deposits were found at 1m depth in some pits; the current road-base was also reported to be around 1m deep. ¹
MMS002	Site 2: A63 Castle Street (Princes Dock Street/ Humber Dock Street), Hull		EVAL	1994	1, 2	See Site 2, Volume 3, Appendix 8.4. Two trenches were excavated targeting medieval/post-medieval town wall. In Princes Dock Street, the remains of the internal bank of the defences were excavated. In Humber Dock Street, the remains of the possible town ditch with preserved organic remains were excavated. Two smaller trenches south of Castle Street revealed deposits of late medieval and post medieval date. ²
MMS003	Site 3: Sewer Lane, Hull	EHU20; EHU41	EVAL	1974	1, 7	See Site 3, Volume 3, Appendix 8.4. An archaeological excavation was undertaken on land on the west side of Sewer Lane in 1974 in response to proposals for an urban relief road. An area of 130m ² was excavated. Late 13th/ 14th century medieval to post medieval features and finds were identified. ³
MMS004	Site 4: Mytongate, A63 Castle Street, Hull	EHU16; EHU17; EHU101; EHU102	EXC	1975- 1976	1	See Site 4, Volume 3, Appendix 8.4. Included three areas identified as I, II and III. The excavation of yards and gardens on the southern side of Mytongate in 1975. They were defined by a boundary wall of rendered coursed chalk rubble, later rebuilt in brick.

¹ Highways England (2010), Appendix C1, Site No. 60

² Highways England (2010), Appendix C1, Site No. 20, 24 and 28

³ Armstrong 1977; EAR 2010, Appendix C1, Site No. 67

MMS No	Event name	Event ID/ SMR ID	Type	Year of event	Zone	Summary description
						The first 14th century structure had limestone pad stones, laid directly on a platform of raised clay. Watching brief on the excavations of a sewer trench at Mytongate in 1975/1976 ⁴ .
MMS005	Site 5: Vicar Lane, Hull	EHU22	EXC	1975	1, 6	See Site 5, Volume 3, Appendix 8.4. Medieval to post medieval features and finds were identified from the early 14th to the 18th century. ⁵
MMS006	Site 6: Queen Street, Hull	EHU108	EXC	1976	1	See Site 6, Volume 3, Appendix 8.4. At the southern junction of Queen Street with Mytongate, the south-west corner of the foundations of the medieval gaol were identified. The original structure was a five-storey tower and the foundations were of coursed limestone slabs. (Ref: QU 76). The foundations of timber-framed buildings were also excavated on the Mytongate and Queen Street frontage. ⁶
MMS007 MMS008	Site 7 and 8: Queen Street; Queen Street/ Blackfriargate Excavations	EHU6; EHU35; EHU36; EHU38; EHU331	EXC	1976	1	See Site 7 and 8, Volume 3, Appendix 8.4. Excavation revealed four phases of occupation dating from the late 13th to mid-16th centuries. A substantial mortared limestone boundary wall overlay the former watercourse. Several later features cut into the elements of the later re-planned garden.
MMS009	Site 9: Monkgate/ Blackfriargate Excavations	EHU37; EHU39	EXC	1977	1	See Site 9, Volume 3, Appendix 8.4. Medieval to post medieval features and finds from the 13th to 15th centuries were identified during archaeological excavations on Monkgate / Blackfriargate. Includes four sites Area A (Friary Garden), Area B (Whytelard Property) (Ref: MGB); Monkgate A (Ref: MG 76A). ⁷
MMS010	Site 10: Green Bricks public house, Humber Dock Street, Hull	EHU2279	EVAL/ WB	1993	7	See Site 10, Volume 3, Appendix 8.4. Two evaluation trenches were excavated and several engineering pits were subject to a watching brief. Some possible medieval remains were encountered and redeposited natural clay. Otherwise deposits were post-medieval. ⁸
MMS011	Site 11: Burnett House, A63 Castle Street, Hull		EVAL	2003	1	See Site 11, Volume 3, Appendix 8.4. Two evaluation trenches were excavated. The earliest deposits dated to the early/ mid-14th century to the 18th century. In the eastern trench post-medieval cellarage reduced the survival of earlier archaeological deposits. ⁹

⁴ Highways England (2010), Appendix C1, Site No. 61, 225

⁵ Highways England (2010), Appendix C1, Site No. 70

⁶ Ayers 1993. EAR 2010, Appendix C1, Site No. 83 and 104

⁷ Highways England (2010), Appendix C1, Site No. 106, 112

⁸ Highways England (2010), Appendix C1, Site No. 70

⁹ Highways England (2010), Appendix C1, Site No. 97

MMS No	Event name	Event ID/ SMR ID	Type	Year of event	Zone	Summary description
MMS012	Site 12: Proposed Stakis Casino, A63 Castle Street, Hull		EVAL	1999	1	See Site 12, Volume 3, Appendix 8.4. Two evaluation trenches were excavated (5m x 5m). In the south-east trench 16th and 17th century pits were excavated suggesting open waste ground. In the west trench were deposits dating to the 15th and 16th century. 19th century buildings were defined by cellarage, a coal store and walls, truncated the earlier deposits. ¹⁰
MMS013	Site 13: Land Between Blanket Row and A63 Castle Street, Hull	EHU1129	WB/ EVAL	1997/ 2003/ 2004	1, 7	See Site 13, Volume 3, Appendix 8.4. Evaluation in 1997 and excavation and watching briefs in 2003. Series of 14th century domestic buildings of limestone and brick and a substantial cobbled road surface. ¹¹
MMS014	Site 14: Queen Street, Hull	EHU94	EVAL	1990	1, 7	See Site 14, Volume 3, Appendix 8.4. The earliest activity was of the late 13th to 14th century date, comprising low stone and brick walls. HQS 90. ¹²
MMS015	Site 15: Bonus Electrical Site, Blackfriargate/ Humber Street, Hull		EVAL	2008	1, 7	See Site 15, Volume 3, Appendix 8.4. 12 evaluation trenches excavated between Blackfriargate and Humber Street. Six phases of occupation from the late 12th/ 13th century to the 20th century. Timber-framed buildings, stone sill and post pad buildings and some evidence for the Humber Gate, built between 1330 to 1406. Survival of deeply stratified complex and well preserved archaeological remains. Some areas of modern disturbance. The site is not waterlogged but favours organic preservation. There was continuous occupation of the site between the 13th to 20th century. Remains survived 0.5m below present ground level. ¹³
MMS016	Site 16: High Street/ Blackfriargate, A63 Castle Street, Hull	EHU12; EHU31; EHU32; EHU33	EXC	1973/ 1976	1	See Site 16, Volume 3, Appendix 8.4. Medieval to Post-Medieval features and finds were identified during excavations at High Street and Blackfriargate (HB 73/ 76). ¹⁴
MMS017	Site 17: Myton Gate, A63		WB	1976	2	See Site 17, Volume 3, Appendix 8.4. The Myton Gate was uncovered during work in 1976 as part of

¹⁰ Highways England (2010), Appendix C1, Site No. 100

¹¹ Highways England (2010), Appendix C1, Site No. 96 and 105

¹² Highways England (2010), Appendix C1, Site No. 113

¹³ Highways England (2010), Appendix C1, Site No. 234

¹⁴ Highways England (2010), Appendix C1, Site No. 132

MMS No	Event name	Event ID/ SMR ID	Type	Year of event	Zone	Summary description
	Castle Street, Hull					the A63 Castle Street improvements. Emergency recording occurred during work. ¹⁵
MMS018	Hull Magistrate's Court (Austin Friary), Market Place, Hull	EHU331	EXC	1995	1	Excavation which revealed the earliest remains of the town of Hull dating to c. 1260. Evidence of early intensive occupation along Market Place frontage; all the buildings associated with the earliest phase were cleared to make way for the Friary constructed in 1316-1317. The excavation recovered the plan of the greater part of the friary buildings. Three of its four ranges were investigated. During the 223 years of its use, the buildings saw three successive churches, with two phases of occupation in the east and west ranges. A total of 244 burials were excavated, 44 in oak coffins and 50 covered in textile remains. The temporary timber buildings which were erected during the earliest years of the Friary's occupation. Six periods of occupation were identified: period 1 Pre-Friary (pre-1316); Period 2 Friary 1316/17 to c. 1600; Period 3 c. 1600-1700 brick buildings; Period 4 (c. 1700-1800) Cross Keys public house; Period 5 (c. 1800-1900) construction of Fetter Lane, House of Correction, and the new Market Hall. Period 6 (c. 1900-1980) the site was demolished and bombed during World War II. ¹⁶
MMS019	Castle Street, Humber Dock, Hull	EHU1869	WB	2008	2, 7	An archaeological watching brief was undertaken during groundwork associated with removal of the retaining walls in the north- west and north- east parts of Humber Dock. A series of seven visits were made to monitor the two areas. The removal of the modern brick in the north-west corner of the dock revealed a brick buttress or rebated wall and concrete supporting structure. In the north-east area of the dock a trench 46m by 1.5m and 1m deep uncovered two 19th century brick culverts and a large single block of sandstone. The structures possibly relate to the original dock structure of 1809. No other archaeological features or artefacts were identified.
MMS020	Humber Dock Street, Hull		EVAL	1986	2, 6	In 1986 as part of the resurfacing work alongside Humber Dock, four trial trenches were undertaken, with Trench 4 close to the line of Castle Street. Excavations revealed redeposited brown and grey clay to 3.5m bpgl. Given the excavated evidence during the current scheme (see below), these are

¹⁵ Highways England (2010), Appendix C1, Site No. 52

¹⁶ Highways England (2010), Appendix C1, Site No. 106

MMS No	Event name	Event ID/ SMR ID	Type	Year of event	Zone	Summary description
						possibly deposits from the town ditch, and not the Humber Dock as interpreted.
MMS021	Humber Dock Street, OAN-HFA		EVAL	2015	1, 2	See Volume 3, Appendix 8.4 The town ditch has been investigated during trial-trenching by OAN-HFA as part of the current scheme.
MMS022	Castle Street, Geo-Archaeological Deposit Modelling, OAN-HFA		WB		1, 2, 3, 4	See Volume 3, Appendix 8.4
MMS023	Trinity Burial Ground, OAN-HFA		EVAL	2016	3	See Volume 3, Appendix 8.4
MMS024	Tower Street Wharf, Hull		EVAL/ WB	2009	5	Evaluation was undertaken in advance of the construction of the adjacent footbridge and a proposed development 'The Boom'. The evaluation identified the remains of post-medieval sluice and brick culvert associated with the moat of the Scheduled Monument of the Citadel (located to the east) and a 19th century slipway. these have been left <i>in situ</i> below the level of remediation.
MMS025	Holy Trinity Churchyard, Hull		EVAL	2005	6	Evaluation in advance of refurbishment of the churchyard. Late 14th and 15th century deposits contemporary with the construction date of the church were uncovered. EAR 2010, Appendix C1, Site No. 84; Subsequent watching brief and excavation by Humber Field Archaeology during work in 2016. Excavations in 2016 by Humber Field Archaeology in Trinity Square revealed the remains of a building less than c. 1.0m bpgl.
MMS026	Fish Street, Hull	EHU11	EXC	1974	6	No summary report is available of the site. ¹⁷
MMS027	South Church Side, Hull	EHU19	EXC	1974	6	A 14th century brick wall laid on stone foundation was identified during groundworks in 1974 on the south west end of Holy Trinity Church Precinct, possibly an enclosure wall related to the Old Grammar School. ¹⁸
MMS028	Myton Gate/ Vicar Lane, Hull		WB	1989	6	Possible medieval to post medieval features and finds were identified within newly excavated building foundations on Myton Gate / Vicar Lane in 1989
MMS029	16 Princes Dock Street, Hull	EHU456	WB	1997	6	A watching brief was undertaken during the excavation of two trenches during alterations and extensions to the existing building. The site lies within

¹⁷ Highways England (2010), Appendix C1, Site No. 37

¹⁸ Highways England (2010), Appendix C1, Site No. 36

MMS No	Event name	Event ID/ SMR ID	Type	Year of event	Zone	Summary description
						the historic old town of Hull. The two L shaped trenches were approximately 1m wide and up to 0.7m deep. The remains of a N-S running brick wall were recorded extended across the southern trench and late C18th/early C19th pottery was recovered. No archaeological features earlier than the C19th were identified and no earlier finds recovered. ¹⁹
MMS030	23 Posterngate, Hull	EHU472	WB	1997	6	A watching brief was undertaken during partial demolition and associated groundworks for the reconstruction of buildings at Posterngate. The site of the development lies within the boundaries of the medieval Carmelite Friary. The trenches were aligned east-west and were 0.70m wide and excavated to a depth 1m below ground level. 19th century demolition dumps were observed and pottery of 18th to 19th century date recovered, including a sherd of marbled ware. No archaeological features were identified.
MMS031	The Waterfront Hotel, Posterngate, Hull	EHU617	WB	1997	6	A watching brief was undertaken during the refurbishment of the Waterfront Hotel, Posterngate in 1997. The hotel lies within the Old Town of Hull close to the line of the western medieval town wall and a former Postern. The site was visited on several occasions to monitor the refurbishment of structural elements and planned improvements including lift pit, cellar access and service trenches. Work in the cellars revealed a brick-lined well, 1.2m in diameter and at least 3m deep. An earlier cellar infilled with up to 2m of demolition rubble was located beneath the rear store. A large E-W running brick-built sewer (pre-1853) was exposed within the rear yard, which had destroyed earlier archaeological deposits up to a depth of 1m. No other archaeological features were identified and no finds recovered.
MMS032	Market Place, Hull	EHU580	WB	1999	6	A watching brief was undertaken during sewer repairs in the Market Place, Hull. The site lies within the core of the medieval town, west of Holy Trinity Church. One visit was made to record a brick structure exposed by the sewer repairs. The wall is suggested to be either the southern wall of the Holy Trinity Church cemetery or a later 16th or 17th century wall. No further archaeological features were identified and no finds recovered. ²⁰

¹⁹ Highways England (2010), Appendix C1, Site No. 29

²⁰ Highways England (2010), Appendix C1, Site No. 38

MMS No	Event name	Event ID/ SMR ID	Type	Year of event	Zone	Summary description
MMS033	The Bell Yard, Trinity House	EHU687	WB	2001	6	A watching brief was undertaken during the groundworks associated with the rebuilding of the south and west walls of the Bell Yard. The site of the development lies on top of the former precinct of the Carmelite monastery. The area was excavated to a depth of between 0.80m and 1.10m. No archaeological features were identified. A small unstratified finds assemblage was recovered.
MMS034	Old Grammar School, South Church Side, Hull	EHU52	EXC	1985- 1986	6	Excavation undertaken in the main hall of the Old Grammar School during renovations of the building so that it could be used as a museum, in 1985-86. Context and finds record sheets exist but are unsigned and current whereabouts unknown.
MMS035	Beverley Gate, Queen Victoria Square, Hull	EHU51; EHU62; EHU63	EXC	1986/ 1988	6	Buried and excavated remains of Beverley Gate and an adjacent section of town wall, rampart and defensive ditch, along with related archaeological features and deposits. In the 1986-89 excavations, archaeological levels were found to be covered by 0.8m-1.2m of overburden beneath the modern street surface.
MMS036	The Former Trinity House School, Trinity House, Princes Dock Street, Hull	EHU2418	BDR/ WB	2015	6	Building Recording was undertaken prior to the demolition of the former Trinity House School. An area 67m by 17m was levelled after the demolition of the school. Two drainage trenches were then excavated around 1m deep but no significant archaeological deposits were encountered.
MMS037	Watergate, Humber Street, Hull		EXC	1964	7	Excavation in 1964 identified the foreshore at a depth of c. 3m below present ground level. This was sealed by 16th and 17th century deposits and the late post-medieval brick tower, applied to the earlier medieval wall. Excavations confirmed a 17th century date for an internal tower in the town wall.
MMS038	Myton Street, Hull	EHU999	WB	2003	8	A watching brief was undertaken during the groundworks for the construction of a single-storey retail unit. The walls of a 19th century building and a cobbled surface was excavated. No further archaeological features were identified and no finds recovered. ²¹
MMS039	Hull Citadel, MCG Graphics Ltd, Citadel Trading Park, Citadel Way	EHU2461	WB	2007	5	Watching brief during groundwork associated with a new carpark adjacent to the Citadel.

²¹ Highways England (2010), Appendix C1, Site No. 23

MMS No	Event name	Event ID/ SMR ID	Type	Year of event	Zone	Summary description
MMS040	Hull Citadel, Land at MCG Graphics, Citadel Way Trading Park	EHU2462	EVAL	2008	5	Archaeological evaluation was undertaken during groundwork associated with single storey extension adjacent to the Citadel.
MMS041	Hull Citadel, Southbridge Road	EHU2389	WB	2000	5	In the 17th century Citadel. Trench 2 was 0.60m deep, within the base of the trench the Citadel Curtain Wall was identified.
MMS042	Hull Citadel, Southbridge Road	EHU1475	WB	2006	5	A loosely packed pebble surface was identified which may represent an internal surface associated with the 17th century Citadel.
MMS043	Hull Citadel, Tower Street, Hull	EHU87; EHU319; EHU338	WB	1988, 1993, 1995	5	Watching briefs at Scheduled Monument of Hull Citadel (1988, 1993, 1995)
MMS044	50-51 High Street, Hull		WB	1884	6	Possible timber and animal bones were found below the cellars of building behind 50-51 High Street in 1884, date uncertain.
MMS045	131-134 High Street, Hull	EHU96	EXC	1971	6	13th to 14th century structures were identified during excavations in 1971
MMS046	High Street/ Grimsby Lane, Hull	EHU30; EHU28; EHU83; EHU84; EHU85	EXC	1972	6	Medieval to Post Medieval features and finds were identified during archaeological excavations on land at High Street, north and south of Grimsby Lane. ²²
MMS047	Scale Lane/ High Street, Hull	EHU146	WB	1989	6	An archaeological watching brief on three engineering trenches at the junction of Scale Lane and High Street, Hull identified medieval features and finds in 1989
MMS048	Sharps, High Street, Hull	EHU34	EVAL	1986	6	An archaeological evaluation was undertaken within the shell of the building in 1986
MMS049	Chapel Lane Staithe, Hull	EHU27	WB	1978	6	Excavation identified a Medieval Water Front including timber revetment and building.
MMS050	Scale Lane, Hull	EHU100; EHU130; EHU131	EXC	1974	6	Medieval features and finds were identified during excavations along Lowgate and Scale Lane, Hull in 1974
MMS051	4-6 Bishop Lane, Hull	EHU169	WB	1992	6	Medieval features were identified during an archaeological watching brief carried out during the excavation of two inspection pits at 4-6 Bishop Lane, Hull in 1992
MMS052	36a - 40 High Street, Hull	EHU256	EVAL	1993	6	Medieval to Post Medieval Occupation was identified during an archaeological evaluation on land to the rear of 36A - 40 High Street in 1993

²² Highways England (2010), Appendix C1, Site No. 133

MMS No	Event name	Event ID/ SMR ID	Type	Year of event	Zone	Summary description
MMS053	Mandela Gardens, High Street	EHU823	WB	2001	6	A watching brief was undertaken after masonry was found during the re-landscaping of a garden. Several buildings and associated features of post-medieval date were identified.
MMS054	52 High Street, Hull	EHU2335	WB	2003	6	Archaeological watching brief and partial building recording was undertaken prior to and following the partial demolition of the south elevation of 52 High Street. Identified late 14th to 16th century brick walls.
MMS055	8-9 Whitefriargate, Hull	EHU1074	WB	2004	6	Two brick culverts were identified, probably dating prior to the mid nineteenth century.
MMS056	Oriel Chambers, 27 High St, Hull	EHU1231	WB	2005	6	Part of the medieval timber waterfront revetment was uncovered along with several other post-medieval features.
MMS057	Wilberforce House, High Street, Hull	EHU2368	WB	2006	6	An archaeological watching brief was undertaken during groundwork associated with the installation of a lift and other services within the Grade I Listed Wilberforce House
MMS058	The Rear Of 15 Whitefriargate, Hull	EHU1699	BDR/ WB	2008	6	Building recording was carried out on the building prior to its demolition. 19th century brick foundations were identified. Along with a late 18th century pit, brick culverts and medieval to post-medieval pottery, clay pipe, ceramic building material, glass, shell and animal bone.
MMS059	52 High Street, Hull	EHU1920	BDR/ WB		6	Archaeological watching brief and photographic survey was undertaken prior to and during partial demolition of walls and associated groundworks
MMS060	Central Dry Dock/ South End Battery, Hull		EXC	2004/ 2006	7	Excavation confirmed the presence of the south end battery of the defences which dates to 1627. ²³
MMS061						<i>Number not used</i>
MMS062	62-63 Queen Street, Hull,	EHU318	WB	1995	7	A watching brief was undertaken during the groundworks for alterations to the two existing properties. The site of the development lies just to the South of Hull's medieval wall. A single visit was made to the site during the excavation of the foundations for an internal wall running N-S, South of Humber Street. No archaeological features were identified and no finds recovered.
MMS063	Geotechnical Investigation, Myton Street, Hull	EHU1178	WB	2000	8	Three boreholes were sunk by cable percussive boreholes to depths of 22m and depths and descriptions of the strata encountered were taken.

²³ Highways England (2010), Appendix C1, Site No. 122 and 228

MMS No	Event name	Event ID/ SMR ID	Type	Year of event	Zone	Summary description
MMS064	Geotechnical, Investigation, Mill Street, Hull	EHU867	WB	2000-2001	8	Intrusive geotechnical investigation in the form of three light percussion boreholes and six trial pits. Ground conditions consisted of made ground, estuarine alluvium, glacial deposits comprising firm to stiff sandy clays and lastly, Burnham Chalk.
MMS065	Mill Street, Hull	EHU866	WB	2002	8	A watching brief was undertaken during the groundworks for the construction of a new building.
MMS066	Portcullis House, Queen's Dock, Hull	EHU837	WB	2002	8	The site of the development lies just outside the medieval walls adjacent to the former Queen's Dock. No further archaeological features were identified and a small finds assemblage of mostly nineteenth-century date was recovered.
MMS067	Submarine Forest, Albert Dock		WB	1884	9	Marginal site of a Submerged Forest at Albert Dock, Hull
MMS068	61-69 High Street, Hull		EVAL/ WB	2004	6	Evaluation and watching brief. Revealed medieval remains including 14th century slipway. ²⁴
MMS069						<i>Number not used</i>
MMS070	West Side of Dagger Lane, Hull		WB	1936	6	Discovery of 17th century finds during excavations on the west side of Dagger Lane. ²⁵

1.2 Gazetteer of key archaeological assets in the study area

1.2.1 The following table lists the archaeological assets within the Scheme Site Boundary. This includes both the permanent land take of the Scheme and the temporary land take. They have been assessed in greater detail to understand their value/ significance.

Table 1.2: Archaeological assets in the Scheme boundary

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
MMS100	Corieltauvian Stater	MHU8775	1	None Spot find of an Iron Age coin. Evidential value but no archaeological remains survive. No receptor.
MMS101	Site of Augustine Friary	MHU1448	1	High The Augustinian Friary was founded in 1316-17, and dissolved in 1540. It was excavated in two parts. The first was undertaken in 1976-1977 on a site immediately north of Blackfriargate, and a second east and parallel to Market Place. Further excavation was undertaken in 1995 under the site of the Hull Magistrates Court. Survival of remains

²⁴ Highways England (2010), Appendix C1, Site No. 117

²⁵ Highways England (2010), Appendix C1, Site No. 141

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
				has been suggested to exist on the peripheral of these sites. ²⁶ Its value/ significance should be considered in conjunction with the medieval settlement of Hull which are regarded as high value due to their evidential value for medieval life and the quality of their preservation. However, most of the site has been excavated and only pockets of potential survival exist of archaeological remains may exist between the Magistrates Court and the A63 Castle Street, south of the A63 Castle Street and on the land plot south of Blackfriargate.
MMS102	Archaeological features and finds	MHU4692	1	None Excavated remains of medieval to post-medieval features and finds from the Blackfriargate excavations. It is not considered that any of these remains survive after excavation.
MMS103	Archaeological features and finds	MHU4697		None Excavated remains of medieval to post-medieval features and finds from the Blackfriargate/ Monkgate excavations. It is not considered that any of these remains survive after excavation.
MMS104	Site of Charity Hall	MHU1462	1, 6	High Former site of Charity Hall, an Almshouse, built between 1307 and 1311, before its removal in 1698 to Whitefriargate. The area was subject to excavations associated with the construction of the Magistrate's Hall (see Augustine Friary). There has also been subject to extensive earth movements associated with landscaping adjacent to the Myton Bridge. The area was subject to excavation in association with the Augustinian Friary. Its value/ significance should be considered in conjunction with the medieval settlement of Hull which are regarded as high value due to their evidential value for medieval life and the preservation. However, most of the site has been excavated and only pockets of potential survival exist of archaeological remains.
MMS105	The former course of Mytongate and street frontage	MHU1446	1	High Mytongate's significance/ value lies in it being the major east-west route through the old town from the Myton Gate in the town walls. The potential for survival of medieval archaeological remains, including water-logged deposits have been demonstrated by excavation, details of this are contained in the deposit model undertaken in 2014 (Volume 3, Appendix 8.4). The value/ significance of these remains is due to their evidential value for the former lives of the people of Hull. Hull formed part of the Urban Archaeology Strategies Programme. ²⁷ The demonstrated potential for preserved waterlogged deposits is of national significance in keeping with Historic England research objectives to understand how waterlogged urban deposits survive ^{28 29} .

²⁶ Highways England (2010), Appendix C, 135-136

²⁷ <https://content.historicengland.org.uk/images-books/publications/conservation-bulletin-41/16urbanarchaeology.pdf/>

²⁸ <https://www.historicengland.org.uk/whats-new/research/waterlogged-deposits-nantwich/>

²⁹ <https://www.historicengland.org.uk/images-books/publications/preserving-archaeological-remains/>

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
				The archaeological remains of the Mytongate should be considered with other key medieval deposits including the sites of the Augustinian Friary, Charity Hall, Guildhall, Town Gaol, Butchery Meat Market, and 85 Queen Street. Its value/ significance should be considered in conjunction with the medieval settlement of Hull which are regarded as high value due to their evidential value for medieval life and the quality of their preservation. However, most of the site has been impacted by the construction of the A63 Castle Street in the 1970s and only pockets of potential survival of archaeological remains are likely to exist at depths of greater than 0.70m below present ground level.
MMS107	Site of Medieval Guildhall	MHU1456	1	High Forms part of a series of monuments contained within the former medieval town. All these have evidential and historic value for the medieval town of Hull. Its value/ significance should be considered in conjunction with the medieval settlement of Hull which are regarded as high value due to their evidential value for medieval life and the quality of their preservation. However, most of the site has been impacted by the construction of the A63 Castle Street in the 1970s and only pockets of potential survival of archaeological remains are likely to exist at depths of greater than 0.70m below present ground level.
MMS108	Site of Medieval Town Gaol	MHU1512	1	High Forms part of a series of monuments contained within the former medieval town. Its value/ significance should be considered in conjunction with the medieval settlement of Hull which are regarded as high value due to their evidential value for medieval life and the quality of their preservation. However, most of the site has been impacted by the construction of the A63 Castle Street in the 1970s and only pockets of potential survival of archaeological remains are likely to exist at depths of greater than 0.70m below present ground level.
MMS109	Site of Butchery Meat Market	MHU16525	1	Low The value of this asset should be considered within the context of the medieval town as a whole. However, the potential for surviving of archaeological remains of structures associated with the market is low as it is unlikely to have contained formal structures and is likely to have been an open space. There remains potential for buried archaeological deposits associated with the meat market, including faunal (animal bone) evidence which can elucidate details of the diet of the medieval/ post-medieval people in Hull.
MMS111	Site of 85 Queen Street	MHU7769	1	High Forms part of a series of monuments contained within the former medieval town. Its value/ significance should be considered in conjunction with the medieval settlement of Hull which are regarded as high value due to their evidential value for medieval life and the quality of their preservation. However, most of the site has been impacted by the construction of the A63 Castle Street in the 1970s and only pockets of potential survival of archaeological remains are likely to exist at depths of greater than 0.70m below present ground level.

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
MMS113	Site of Butter and Poultry Market	MHU13669	1	Negligible Post-medieval site of a market. No significant archaeological remains of the market are likely to be encountered.
MMS114	Site of Market Hall, Queen Street	MHU13670	1	Negligible Market Hall built in 1887, demolished by bombing in 1941. Cleared to allow the construction of Myton Bridge.
MMS115	Site of Malt Kiln	MHU13671	1	Low Shown on 19 th century maps. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS116	Site of public house, Castle Street	MHU17136	1	Low Public house depicted on 19 th century map evidence. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS117	Site of 84 Queen Street	MHU17181	1	Low Shop now demolished, designed by W. H. Kitchen for a firm of tea merchants in 1874. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS118	Chequers Hotel, Mytongate	MHU20116	1	Low Public house depicted on 19th century map evidence. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS119	The Black Swan, Mytongate	MHU20504	1	Low Public house depicted on 19th century map evidence. 18 th century in origin. Located on the southern side of the street and survival beneath the current road surface is unknown. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS120	The Turk's Head, Mytongate	MHU20505	1	Low Public house depicted on 19th century map evidence. Dates to c. 1800. Located on the southern side of the street and survival beneath the current road surface is unknown. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS121	Prince Blucher PH, Finkle St	MHU20507	1	Low Public house that may have dated from the 1600s, now demolished. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS122	The Golden Lion public house, Queen Street	MHU20508	1	Low Public house, damaged during Zeppelin raid of 1915. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS123	Site of Coach and Horses, Mytongate	MHU8213	1	Medium Coaching Inn depicted on 19th century map evidence. Dates to the 17 th century, and demonstrated local regional brickwork influenced by the Dutch. Located on the southern side of the street and survival beneath the current road surface is unlikely in depths up to 1.0m below

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
				present ground level. Of some regional evidential value due to its age, the importance of the late-17 th century development of Hull under the influence of William III, and the use of brick and the architectural style.
MMS124	Tivoli Hotel, Mytongate	MHU20515	1	Low Location of Hull's last cockpit and gallery. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS125	Wellington Hotel public house (site of), Castle Street	MHU17136	1	Low Public house depicted on 19th century map evidence. Located on the southern side of the street and survival beneath the current road surface is unknown. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS126	Phoenix Tavern public house (site of), south side of Castle Street		1	Low Public house depicted on 19th century map evidence. Located on the southern side of the street and survival beneath the current road surface is unknown. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS127	Smithy (site of), South side of Castle Street	HMU13730	1	Low Depicted on 19 th century maps but otherwise undated. Set back from the road on the southern side and therefore located in the current southern pavement of Castle Street. Some local evidential value of artisan industry.
MMS128	Site of Myton Gate	MHU9115	2	High Remains of the medieval defences begun in 1321-24 and rebuilt in brick in 1339. Brick built structure. Hull was one of a few towns that were fortified in the medieval period. It was unusual in its use of brick, due to the lack of good available stone and a local tradition imported from the Low Countries (Netherlands and Belgium). The deposit model (Volume 3, Appendix 8.4) has shown that survival is possible but has been impacted by the construction of the A63 Castle Street in the 1970s. Its value is both evidential and historic. It is directly connected with the Scheduled Monument of Beverley Gate to the north in Victoria Square, making it by association of the highest value.
MMS129	Section of medieval town defences (remains of), Princes Dock Street	HMU1446	2	High As with the Myton Gate its value is both evidential and historic. Structural remains of the town wall may survive. There remains the potential for archaeological evidence associated with the outer ditch of the medieval defences. The likelihood is that there are no remains in the first 0.6m below present ground level. It is directly connected with the Scheduled Monument of Beverley Gate to the north in Victoria Square, making it by association of the highest value.
MMS130	Section of medieval town defences (remains of),	HMU1446	2	High As with the Myton Gate its value is both evidential and historic. Structural remains of the town wall may survive. The likelihood is that there are no remains in the first 0.6m below present ground level. Excavation has demonstrated archaeological evidence associated with

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
	Humber Dock Street			the outer ditch of the medieval defences in 1994 and 2015 (see Volume 3, Appendix 8.4). It is directly connected with the Scheduled Monument of Beverley Gate to the north in Victoria Square, making it by association of the highest value.
MMS131	Section of Civil War defences (site of), west of Princes Dock Street and Humber Dock Street	HMU1446	2	Low The defences were improved in 1639-42 by the building of a rectangular wall or battery known as hornwork around the Myton Gate. In front of this was a wide open ditch known as the Bush Dike. The remains of the ditch were investigated and the potential for archaeological remains was demonstrated in 2014 as part of the deposit modelling (HFA OAN 2014). The value of the Civil War defences is somewhat less than the medieval wall. This form of defences were common around castles and fortified towns (e.g. Chester). Although the archaeological remains appear to survive in places, it is very likely that later development of the Docks has removed much of these defences and the ditches themselves have removed earlier medieval deposits. They have evidential value for the understanding of the English Civil War. However, their fragmentary nature means this value is reduced.
MMS132	Lock and swing bridge between Princes and Humber Docks (sites of), Castle Street	HMU13733	2	Low The lock was designed to connect the Princes and Humber Docks. The remains of the swing bridge are only likely to partially survive but, it is believed that the road was laid directly over the lock and the remains survive beneath the ground. The lock has evidential value for understanding the relationship between the two docks and is directly connected with the Grade II listed Humber Dock. However, the remains of the lock gates and much of the structures between the two surviving docks is likely to have been lost and the docksides reduced by the previous construction of the A63 Castle Street reducing the value of the archaeological remains.
MMS133	Warehouse No 7 (site of), north side of Castle Street	HMU2606	2	Low Warehouse No. 7 was one of a series of warehouses built around the Princes Dock. It was built in 1845-46, later than the surviving Grade II listed Warehouse No. 6. There is some potential for surviving archaeological remains. It has both evidential value for understanding the maritime industry in Hull, but also value by association with the Grade II listed Warehouse No. 6 and the unlisted Princes Dock. However, these are considered locally significant as no above-ground remains of this 19 th century building survives.
MMS134	Site of Corn Market	MHU16527	2	Negligible Marginal site, not clearly located. Unlikely to have any structural remains. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS135	44 Mytongate, Barber's Shop	MHU20115	2	Medium The building was built in the 17 th century, but was only a barber shop in the 20 th century. The partial archaeological remains of the building still potentially survive, beneath the footpath on the north side of Castle Street. The archaeological remains have evidential value for

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
				understanding Hull during the early post-medieval period. They are not nationally significant.
MMS136	Punch Inn (site of), east side of Princes Dock Street		2	Negligible Public house depicted on 19th century map evidence. Located on the southern side of Castle Street beneath Lisle Court and survival is unlikely. Of some local evidential value but is unlikely to elucidate further details that would contribute to regional and national research aims.
MMS137	Site of Windmills, south-west of Mytongate Junction	MHU17165	3	Negligible Depicted on Craig's Map of 1817. Not on later 1842 map. Lies beneath the A63 and the potential for survival is negligible.
MMS138	Site of Moated Site	MHU8357/ MHU8362	3	Negligible Medieval moated site. A moat is mentioned in a 1293 and 1297 grant. The accuracy of location is poor and despite the remains being of potential medium significance the likelihood of their survival is negligible.
MMS140	Site of Foundry & Engine Works	MHU13748	3	Low Shown on 19 th century maps. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS141	Site of Smithy, Castle Street	HMU13754	3	Negligible Depicted on 19 th century maps. Lies beneath the current A63 Castle Street and the potential for survival of archaeological remains is low. The evidential value of the site is low.
MMS142	Site of Humber Brass & Copper Works	MHU13755	3	Low Depicted on 19 th century maps. Lies to the south of Castle Street beneath the grassed verge. There is some potential for survival. The value of the heritage asset is considered of local evidential value and is unlikely to elucidate further details that would contribute to regional and national research aims.
MMS143	Site of Sawmill, Myton Place	MHU13756	3	Negligible 'Saw Mill' printed and shown on OS 1891 map. Lies to the south of Castle Street beneath the grassed verge. There is some potential for survival, and the north-east wall of the adjacent Trinity Burial Ground may be related to the former Sawmill. The value of the heritage asset is considered of local evidential value and is unlikely to elucidate further details that would contribute to regional and national research aims.
MMS144	Site of Holy Trinity Burial Ground	MHU16849	3	High Full discussion of value is contained below in Historic Buildings to account for setting elements.
MMS145	Site of Mortuary	MHU9420	3	Low The mortuary is associated with the Trinity Burial Ground. It is depicted on the 1891 map. It has evidential value for understanding the burial ground, and associative value with the burial ground. However, this is

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				likely to be of local interest only and would not contribute to understanding the wider regional or national significance of this site.
MMS146	Site of Chapel	MHU16046	3	Low Chapel used by non-conformists. The chapel was opened in 1827 and used until 1842. Is likely to be of local interest only and would not contribute to understanding the wider regional or national significance of this site.
MMS147	Site of Gaol	MHU17165	3	Low The gaol replaced the earlier gaol in Market place in 1785. It was demolished in the 1820s and the gaol was moved to a correction facility on Kingston Street. The surviving remains include the upstanding remains of the south and west boundary wall which adjoin the Trinity Burial Ground. They have evidential value for understanding the penal system in Hull, but this is only of local interest. The standing remains are considered as part of the Historic Landscape of the Trinity Burial Ground discussed above.
MMS148	Post Office (site of), north side of Castle Street	MHU13759	3	Negligible Post Office depicted on 19th century map evidence. Located in the landscaped area between Myton Street and Waterhouse Lane and unlikely that archaeological remains survive. Of some local evidential value but is unlikely to elucidate further details that would contribute to regional and national research aims.
MMS149	Robin Hood public house (site of), Myton Street		3	Negligible Public house depicted on 19th century map evidence. Located in the middle of Myton Street and unlikely that archaeological remains survive. Of some local evidential value but is unlikely to elucidate further details that would contribute to regional and national research aims.
MMS150	Timber Yard (site of), south side of Castle Street		3	Negligible Timber Yard depicted on 19 th century mapping east of the Trinity Burial Ground. Only partially survives with most of the archaeological remains are likely to have been destroyed by the A63 Castle Street and Holiday Inn complex.
MMS151	Commercial Hotel (site of), north side of Castle Street	HMU20502	3	Negligible Public house depicted on 19th century map evidence. Built in 1829, demolished as part of the 1970s construction of A63 Castle Street, with further loss due to the construction of the Trinity Shopping Centre multi-storey car park. It is possible that some below-ground archaeological remains survive, but they are likely to be fragmentary. The value of the heritage asset has been drastically reduced.
MMS152	Site of Chapel and Lutheran Church, Mytongate Junction	MHU16046; MHU16109	3	Low The church was originally built and opened in 1827 and was used by various denominations until its use by the Lutheran Church. It was demolished and rebuilt in 1910. It was finally demolished as part of the A63 Castle Street improvements in the 1970s. Some archaeological remains may survive beneath the A63 Castle Street, but are likely to be deeply buried. There is no evidence that the church was used for

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
				burials. It therefore has some communal value as a former church, and limited evidential value for archaeological remains.
MMS153	Site of Tower Brewery, Waverley Street	MHU16849	4	Negligible The Tower Brewery was begun in 1888. It was demolished as part of the A63 Castle Street improvements in the 1970s. The main part would lie beneath the road, with the southern third surviving in the grass verge to the south. The remains have limited evidential value and are likely to survive poorly. They are unlikely to contribute to local, regional or national research aims.
MMS154	Site of Salem Chapel, Cogan Street	MHU9420	4	Low The chapel was built in 1833. Originally non-conformist it was converted to a synagogue in 1914 before it was closed in 1940 and destroyed during World War II. A human skeleton was uncovered during its demolition in the 1950s and there remains the possibility, however slight that there may be burials associated with the chapel. It now lies beneath the A63 Castle Street. The value of the chapel is in its communal value as a former place of worship. It also has evidential value for archaeological remains with limited potential for burials.
MMS155	Albert Confectionary Works (site of), Mytongate Junction		4	Negligible Depicted on the 19 th century map evidence. The site was demolished and built over by the A63 Castle Street, Mytongate Junction. The construction of the road is likely to have destroyed most of the remains of the site although archaeological remains of the complex may survive at depth. The value of these assets was local but is greatly reduced by the truncation caused by the road.
MMS156	Timber yard and warehouse (sites of), south side of Mytongate		4	Negligible A Timber Yard depicted on 19 th century maps north of the Lutheran Church. It is likely to have been destroyed by the construction of the Mytongate Junction. The destruction means it is of negligible value.
MMS158	Stone Yard (site of) Hessle Road		4	Negligible Depicted on the 19 th century maps. Now lies beneath the A63 Castle Street. The asset is likely to have been almost entirely destroyed and therefore the value is negligible.
MMS159	Kingston Perambulator and Cabinet Works (site of) Hessle Road		4	Negligible Depicted on the 19 th century maps. Now lies north of the A63 Castle Street. The asset is likely to have been largely destroyed and therefore the value is negligible.
MMS160	Warehouse (site of) Hessle Road		4	Negligible Depicted on the 19 th century maps. Now lies south of the A63 Castle Street. The asset is likely to have been largely destroyed and therefore the value is negligible.
MMS168	Site of Boat Yard & Dry Dock	MHU13662	5	Low Evidenced by the cartographic data. By 1855 included a 'Timber Yards' and 'Bone Yards' as well as a 'Graving Dock' which had been built in a 'Ship and Boat Builder's Yard'. The original Graving Dock

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
				remained in use for a time, but it would rapidly have become too small for the larger vessels of the period and by 1910 a warehouse had been built on its site. This layout remained in place almost unchanged until World War II, when the 1959 1:2500 OS indicates that bombing had destroyed or badly damaged many of the buildings in the area. Some were replaced or rebuilt, but most of the Construction site compound locations remained as an open space until the 2000s. The two Construction site compound sites (Tower Wharf North and South) were used in the late-20th/ early 21st century as a storage depot for road materials, chiefly sand and aggregates before being cleared preparatory for the construction of the Hull footbridge, which opened in 2013. No traces of the dock were encountered during either preliminary geotechnical works on the Tower Wharf South Construction site compound in 2007 or the 2008 archaeological evaluation. The possibility remains that archaeological remains survive on the Tower Wharf North Construction site compound. The archaeological remains have evidential value for understanding 19 th century maritime trade and industry on the River Hull. However, they do not contribute to regional or national research aims.
MMS181	Site of sluice associated with post medieval defences		5	Medium Associated with the scheduled monument. Has the potential to contribute to the understanding of the scheduled monument of Hull Castle, Blockhouse, Citadel and the post medieval defences. Temporary sluices were built through the spit to regulate the levels of the moat, with a more permanent version completed between 1683–5, located below later Conduit Street at the north end of the Construction site compound area. The sluice took the form of a timber box structure which passed through a culvert in the river bank. The timber sluice was eventually replaced in brick, probably as part of a major Citadel reconstruction programme carried out between 1804–15 during the general wartime refortification of the coastline against Napoleon. Archaeological trial trenching in 2008 revealed a substantial deep 4.9m square brick sluice chamber c. 1.0m below present ground level. The archaeological remains of the sluice have evidential value through association with the remains of Hull Castle, Block house and Citadel. They have the potential to contribute to the understanding of the post medieval defences of Hull.
MMS195	Site of Crouched Friary	MHU10009	6	High Founded at the east end of Holy Trinity Church, by Geoffrey de Hotham in 1317. The potential for remains beneath Market Place is unclear. If they do exist they are likely to be buried at depths greater than 0.6m in keeping with the remainder of the areas studied by the deposit model (HFA OAN 2014). The remains would be of high significance in common with other medieval archaeological remains inside the old town of Hull if they survived.
MMS197	Site of Market Cross	MHU1463	6	Negligible Established in 1498-9. Taken down in 1761. Remains are unlikely to survive as this would not have been a substantial structure.

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MMS198	Site of Carmelite Maison Dieu	MHU16193	6	Negligible Marginal site of medieval or post-medieval Carmelite Maison Dieu (Almshouse). Location accuracy is very low. Likelihood that it exists in this location is therefore negligible.
MMS199	Site of Mint	MHU18702	6	Negligible Marginal site of a Royal Mint set up by Edward I (c. AD 1300). Location accuracy is very low. Likelihood that it exists in this location is therefore negligible.
MMS204	Site of Trinity Maison Dieu	MHU3422	6	Negligible Marginal site not clearly ascribed to this location. Location accuracy is very low. Likelihood that it exists in this location is therefore negligible.
MMS212	Site of Crookhayes Hospital	MHU9183	6	Negligible Marginal site of Crookhayes Hospital which stood in Vicar Lane, last mentioned in AD 1655. Location accuracy is very low. Likelihood that it exists in this location is therefore negligible.
MMS213	Site of Selby's Hospital	MHU10008	6	High Hospital of the Augustin order. The potential for archaeological remain of the hospital is unclear. If remains do survive they would be of high evidential value in common with other medieval remains within the Old Town of Hull.
MMS214	Site of Priests' Houses	MHU1459	6	Medium Site of Priest's Houses c. 1400. The area has been subject to excavation as part of the Trinity Square redevelopment and predominantly post-medieval evidence was uncovered during the work.
MMS215	Structure at Market Place, Hull	MHU19595	6	Medium In summary the wall is interpreted as the southern cemetery wall of Holy Trinity Church, the enlargement of which is recorded as having taken place in the reign of Edward I. However, analysis of the brick suggests a later date of the 16 th or 17 th century. The remains have evidential value associated with the Grade I listed Holy Trinity Church.
MMS216	14 th century boundary wall.	MHU4702	6	High A 14 th century brick wall laid on stone foundation was identified during groundworks in 1974 on the south west end of Holy Trinity Church Precinct. May be a boundary wall of the or churchyard. Archaeological remains of post-medieval occupation were also found. The remains have evidential value associated with the Grade I listed Holy Trinity Church and Grade II* listed Old Grammar School. The walls are fragmentary and have already been subject to previous archaeological excavation. The likelihood is that there are no remains in the first 0.6m below present ground level.
MMS217	Hermit Stone Slab	MHU8404	6	None Find Spot of the Hermit Stone Slab, found during groundworks associated with the erection of the Bony Boat Tavern, in Trinity House Lane. Engraved with an image of an archbishop on horseback. Now possibly located in the British Museum. No receptor.

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MMS219	Site of Greggs Hospital	MHU10007	6	High Gregg's Hospital, founded 1414. The potential for archaeological remain of the hospital is unclear. If remains do survive they would be of high evidential value in common with other medieval remains within the Old Town of Hull. They are, however, likely to be buried beneath the later buildings on the street and there are no remains in the first 0.6m below present ground level.
MMS220	Glover Maison Dieu	MHU16192	6	High Purported site of the Maison Dieu (medieval hospital). The potential for archaeological remain of the hospital is unclear. If remains do survive they would be of high evidential value in common with other medieval remains within the Old Town of Hull. They are, however, likely to be buried beneath the later buildings on the street and there are no remains in the first 0.6m below present ground level.
MMS221	Site of Postern Gate	MHU9114	6	High Site of Postern Gate, part of Hull's Medieval Town Ditches. Evidential value for the medieval town defences of Hull. The gate should be seen to have associative value with the remains of the scheduled monument of Beverley Gate. Some remains of the walls of the Postern Gate might survive but the likelihood is that there are no remains in the first 0.6m below present ground level.
MMS226	Archaeological Finds	MHU8409	6	None Medieval to post-medieval finds were identified during excavations at Dagger Lane. No receptor.
MMS236	Site of Bull Rings	MHU16524	6	Negligible Site of a bull ring, north of the market cross and then by the statue of William III. It is unlikely that any structural remains associated with it would survive as this would have been a temporary structure.
MMS241	Site of 21 Blackfriargate	MHU20510	7	Negligible A pre-1853 building and a rare survival on Blackfriargate, which preserves the once common merchant property arrangement of house/office on the street frontage and long warehouse to the rear. Demolished. Unlikely to survive except as footprint remains of the post-medieval building. Has evidential value of local significance.
MMS243	Monument Bridge	MHU13673	6	Negligible 'Whitefriargate Bridge' between the Princes Dock and Queen's Dock, shown on 19 th century maps. Unlikely to survive beyond the footprint foundations.
MMS249	Site of Hull and Sculcoates Dispensary	MHU16467	6	Low Shown on 19 th century maps. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS250	Site of Civil War Defences	MHU19351	6	Low This is a marginal site of Civil War defences and cannot be accurately located. The construction of further outlying defences during the Civil War may potentially survive beneath Queen Victoria Square and onto Carr Lane. There is the potential that buried remains of the ditches still exist in Queen Victoria Square, or to the west, but much of the

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
				structure is likely to have been destroyed by the construction of the Princes Dock and Queen's Dock. Examination of borehole logs at Queen's Dock in 2001 revealed stratigraphy of made-ground and alluvium suggesting considerable disturbance in the area. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS251	Hull-Beverley Turnpike	MHU9236	6	Negligible Remains of the turnpike road are likely to have been destroyed by later road surfacing. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS252	Dundee Chambers	MHU13734	6	Negligible Post-medieval 'Robinson's Hospital (Almshouse)' printed and shown on OS 1891 map. Site may survive incorporated into later buildings.
MMS253	Building and Archaeological Finds, Princes Dock St	MHU19809	6	Low The foundations of a building and associated finds of 18th century date was identified by builders during the renovation of a standing building on Princes Dock Street in 2002. Building remains may survive in situ but are beneath existing building.
MMS256	Site of Independent Chapel	MHU13731	1	Negligible Site of former Independent Chapel. Now demolished and in an area of redevelopment. Archaeological remains are likely to be fragmentary and disturbed by later development.
MMS257	Site of Sunday School	MHU13732	1	Negligible Site of a former Sunday School. Now demolished and in an area of redevelopment. Archaeological remains are likely to be fragmentary and disturbed by later development.
MMS259	Site of House	MHU17173	6	Low Site of house with double tiered Dutch gable, demolished in 1943. The house would be of evidential value for 17 th century construction techniques associated with the renewed building in Hull and its close association with William III.
MMS263	Site of Brass Works	MHU13725	6	Negligible 'Brass Works' printed and shown on OS 1891 map. Site has been redeveloped in the 20 th century and remains are unlikely to survive.
MMS264	Site of Watson's Hospital	MHU1451	6	Low Possibly medieval in origin but rebuilt in the early 18th century from ruinous almshouses. Some evidential value for the post medieval period rebuilding of an earlier monument. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS266	Site of Marine Hospital	MHU16214	6	Low Site of the Marine Hospital built in 1786. Remains may exist below the current 19 th century buildings.
MMS267	Sites of Livestock Markets	MHU16529	6	Negligible Site of post-medieval Livestock Markets. There is unlikely to be any significant archaeological remains associated with the livestock market.

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MMS268	Sites of Fruit, Flower and Vegetable Markets	MHU16530	6	Negligible Site of post-medieval Fruit, Flower and Vegetable Markets. There is unlikely to be any significant archaeological remains associated with the livestock market.
MMS269	Site of 7 North Church Side	MHU5989	6	Negligible Built in the mid-18th century. Formerly a Grade II listed building. Demolished in the mid 1970's. No formal delisting seems to have been issued, simply omitted from the 1994 list. Remains of cellars possibly still exist under later buildings but would be only of negligible evidential value.
MMS272	Site of Roman Catholic Chapel	MHU16177	6	Negligible Site of Chapel damaged during the Gordon Riots in 1780, demolished by 1964. Remains of cellars possibly still exist under later buildings but would be only of negligible evidential value.
MMS273	Assembly Room, Dagger Lane	MHU16550	6	Negligible Marginal Site of Assembly Room. Location accuracy is very low. Likelihood that it exists in this location is therefore negligible.
MMS288	Carmelite Friary on Monkgate	MHU19690	7	High Established in 1293, the Carmelite Friars are shown as having a house on the south side of Monkgate (later Blackfriargate). Evaluation (MMS015) was undertaken in 2008 on the site revealing medieval deposits dating to the 13 th and 14 th century. Remains are located at around 0.4 to 0.5m below present ground level.
MMS289	Medieval and Post-Medieval Archaeological Features and Finds	MHU22074	7	High Medieval and post-medieval features and finds were identified during an archaeological evaluation at the Green Bricks public house in Hull (see MMS010). As archaeological work revealed medieval remains survive <i>in situ</i> at depths of 0.7m below present ground level.
MMS291	Site of Watergate, Humber Street	MHU6291	7	High Site of the Watergate entrance to the medieval town walls of Hull. Archaeological remains survive buried beneath the current road surface and adjacent site and were found during evaluation in 2008 (MMS015). The remains are of high value.
MMS292	Site of Adryanson's Hospital	MHU8360	7	Negligible Marginal site of a 15 th to 16 th century Adryanson's Hospital. Location accuracy is very low. Likelihood that it exists in this location is therefore negligible.
MMS314	Site of Soda Water Works	MHU17932	7	Low Shown on 19 th century maps. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS320	Site of Public House	MHU17124	8	Negligible Site of 'PH' printed and shown on OS 25" 1893 map. Remains of cellars possibly still exist under later buildings but would be only of negligible evidential value.
MMS323	Site of Methodist Chapel	MHU13743	8	Negligible

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				'Methodist Chapel' printed and shown on OS 1891 map. Remains of cellars possibly still exist under later buildings but would be only of negligible evidential value.
MMS324	Site of Mission Room	MHU13747	8	Negligible 'Mission Room' printed and shown on OS 1891 map. Remains of cellars possibly still exist under later buildings but would be only of negligible evidential value.
MMS328	Site of Brewery	MHU16874	8	Low Shown on 19th century maps. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS329	Site of Master Mariners Almshouse	MHU9425	8	Low Shown on 19th century maps. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS331	Site of St Nicholai's Church	MHU16054	8	Low Shown on 19th century maps. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS332	Site of Bethesda Chapel	MHU16053	8	Low Shown on 19th century maps. Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims.
MMS359	Site of St James National School	MHU16263	8	Negligible 'School' printed and shown on OS 25" 1893 map. Remains of cellars possibly still exist under later buildings but would be only of negligible evidential value.
MMS377	Public House	MHU16964	8	Negligible 'P.H.' printed and shown on OS 25" 1893 map. Remains of cellars possibly still exist under later buildings but would be only of negligible evidential value.
MMS380	Hotel	MHU17122	8	Negligible 'Hotel' printed and shown on OS 25" 1893 map. Remains of cellars possibly still exist under later buildings but would be only of negligible evidential value.
MMS397	Buried organic deposits	MHU19429	3, 8	Medium Preserved organic remains described as a submarine forest was discovered during the construction of Albert Dock in the 19 th century. This highlights the potential for buried layers of organic material further supported by the deposit models. This supports regional research aims to improve understanding of waterlogged evidence associated with the Humber Wetland from the Mesolithic, Neolithic and Bronze Age (Roskams and Whyman 2007, 16-17).
MMS400 MMS401 MMS402	Site of Myton/ Wyke Med/ PM Settlement; Site of Myton	MHU11677; MHU11682; MHU18395	3	Low The settlement, grange and chapel of Myton are mentioned in the Domesday book. The Myton Grange is believed to lie west of the line of Commercial Road. The site of the chapel is mentioned on the Hull SMR the entry does not indicate the evidence source. The medieval

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
	Grange; Site of Burial Ground and Chapel;			<p>settlement of Wyke is one of several small hamlets and villages that later became the town of Hull. It is uncertain where Wyke is located and it has been suggested that it may be located close to the High Street in the Old Town or as described in the deposit model in the proximity of Mytongate. The historic information is insufficient to locate the settlements of Myton or Wyke.</p> <p>Archaeological remains prior to the current series of investigations suggests that later development has destroyed archaeological evidence of the settlement. However, trial trenching east of Commercial Road and south-west of the Trinity Burial Ground has revealed the preserved remains of stone built walls (MMS544) that have been interpreted as part of the medieval settlement. These are considered separately below. The site if it still exists is of regional importance due to its association with Meaux Abbey and its early medieval origin.</p>
MMS418	Site of Corn Mill	MHU11766	8	<p>Negligible</p> <p>Marginal Site of a Mill which stood in Cent Per Cent Street first mentioned in the 1820's. Location accuracy is very low. Likelihood that it exists in this location is therefore negligible.</p>
MMS449	Site of Brewery, Waverley Street	MHU16855	8	<p>Negligible</p> <p>The Ordnance Survey map of 1856 shows the whole of the area to be densely occupied by tenements. Those to the south on Lister Street appear to be residential, with rear plots, whilst those on Waverley Street are likely to include commercial properties, as well as the Site of the Brewery on Waverley Street (known as the Lion Brewery). Elements of these structures and associated demolition debris were identified during the ground investigation works at depths of 0.4-0.5m below ground level (2.07 - 2.33m AOD), including an intact 18th or 19th century brick wall in BH03A (see Volume 3, Appendix 8.4, 54, fig 30). Archaeological remains may survive but are incomplete and impacted by later 20th century development reducing the value of the asset.</p>
MMS486	Course of the Old Hull, River Bank, Streams and Ditches	MHU1479	3, 8	<p>Medium</p> <p>Course of Old River Hull shown on 14th century maps of Hull. Subsequently shown as streams and ditches on Woolmer's Map of 1715. Continues to be preserved as Limekiln Drain south of Trinity Burial Ground on J. Cragg's Map of 1817. There is a surviving place-name reference to the former course in Waterhouse Lane which follows the stream course.</p> <p>The presence of the former course of the River Hull has been confirmed by deposit modelling, which has shown alluvial layers and peat deposits survive below the current ground surface. These deposits have evidential value for understanding the nature of the former river course. They also have the potential for containing preserved organic deposits of prehistoric, Roman and medieval artefacts, and environmental data (seeds, pollen etc.) that can help explain the lives of people on the River Hull and Humber Estuary. This supports regional research aims to improve understanding of waterlogged evidence, associated with the Humber Wetland and urban</p>

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
				deposits. ³⁰ In addition, there is the extremely low potential for wooden boats.
MMS490	Brick and Tile Works, Hessle Haven	MHU11784	10	Negligible Of some local evidential value but unlikely to elucidate further details that would contribute to regional and national research aims. It is known that much of the eastern area of the site was used as a landfill in the 20 th century ³¹ . The area is now a lorry depot and surviving archaeological remains beneath the ground are likely to be fragmentary and of little value.
MMS493	16 th century Hull Castle (Middle Blockhouse), South Blockhouse; Part of late 17th century Hull Citadel Fort	MHU713, MHU8451, MHU8452, 1020426	5	High The scheduled monument lies in two separate areas of protection. The northern area includes the remains of Hull Castle. The southern area includes the buried remains of the South Blockhouse and the curtain wall connecting to Hull Castle. The defences were built by Henry VII in 1541-42 under his military engineer John Rogers. Constructed three blockhouses linked by a curtain wall. The middle blockhouse became known as Hull Castle. Between 1681-83 the Castle and South Blockhouse were repaired and incorporated into a new defensive work overlooking the harbour and town. The remains have evidential value for the development of Hull's late medieval and post-medieval defences. They are nationally significant due to their design.
MMS494	Beverley Gate and adjacent archaeological remains forming part of Hull's medieval and post-medieval defences	MHU9113, 1430250	6	High Scheduled Monument. Beverley Gate and the adjacent archaeological remains forming part of Hull's medieval and post-medieval defences. Has Most of the monument remains undisturbed but the unexcavated remains retain significance. Value relates to both evidential value associated with the construction of the medieval defences of Hull (described elsewhere) and historical value due to its association with the start of the English Civil War when Sir John Hotham refused entry to Charles I, making the English Civil War inevitable. Its status as a scheduled monument makes it of the highest value.
MMS495	Bank	MHU17131		Negligible 'Bank' printed and shown on OS 25" 1893 map. Remains of cellars possibly still exist under later buildings but would be only of negligible evidential value.
MMS506	Altar, Waterhouse Lane	MHU19677	3	None Find spot of an altar found whilst digging foundations of a stable in Waterhouse Lane. In digging the foundations of a stable in Waterhouse Lane, a small stone pedestal was found of octagonal form and reported in the Hull Rockingham in 1823. The altar stone has evidential value associated with the remains of the settlement of

³⁰ Roskams and Whyman 2007, 16-17

³¹ <http://apps.environment-agency.gov.uk/wiyby/default.aspx>

MMS No	Name	NHL/ SMR Ref.	Zone	Value/ significance
				Myton, Myton Grange and the Chapel (MMS400, MMS401, MMS402). However, it is now not in situ and there is therefore no receptor.
MMS507	Possible Post Medieval Axe Head	MHU8413	8	None Marginal Find Spot of a possible Post Medieval Axe Head found during excavations at Waverley Street. Receptor not now present.
MMS515	Bowling Cheeses	MHU8408	6	None Marginal find spot of a pair of bowling cheeses. Receptor not now present.
MMS516	Loving Cup	MHU8412	6	None Marginal Find Spot of a Loving Cup found during excavations for an electric main at the west end of Holy Trinity Church, near Posterngate in 1894. Evidential value for medieval and post-medieval activity. However, it is now not <i>in situ</i> and there is therefore no receptor.
MMS529	Post Medieval Pit and Finds	MHU8414	8	Negligible Marginal find spot of a post-medieval pit and finds, found during groundworks at Carr Lane. Evidential value for post-medieval activity.
MMS544	Remains of medieval wall		3	Medium Medieval remains associated with settlement. See Volume 3, Appendix 8.4 for details. These are referred to as potential evidence of the settlement of Wyke (the original settlement of Hull). They are as equally likely to be associated with the medieval settlement of Myton (see MMS400, MMS401, MMS402). These remains are regionally significant and are therefore of medium value.

1.3 Gazetteer of archaeological assets within 200m of the Scheme Site Boundary

1.2.3 The following tables list the archaeological assets within 200m of the Scheme Site Boundary (yet outside the Scheme Site Boundary). These archaeological assets are listed for information and have not been assessed in detail as it is not considered that they would be impacted by the Scheme.

Table 1.3: Gazetteer of archaeological assets within 200m of the Scheme Site Boundary

MMS No	Name	HER entry	Period ³²	Zone	Value
MMS112	Site of House of Correction	MHU13613	PM	1	Low
MMS159	Kingston Perambulator and Cabinet Works (site of) Hessle Road		PM	4	Negligible
MMS161	<i>Number not used</i>				
MMS162	<i>Number not used</i>				
MMS163	Site of Governor's House	MHU8419	MED	5	High
MMS164	Site of the Chain House	MHU9426	MED	5	High
MMS167	Site of Bridge	MHU9435	MED to PM	5	High
MMS169	Swing Bridge and Lock, Drypool	MHU13627	PM	5	Low
MMS170	<i>Number not used</i>				
MMS171	<i>Number not used</i>				
MMS172	<i>Number not used</i>				
MMS173	Site of Citadel Hotel	MHU13692	PM	5	Low
MMS174	Boatbuilding Yard & Graving Dock	MHU13661	PM	5	Low
MMS175	Site of Ferry on River Hull	MHU16505	PM	5	Low
MMS176	Site of Humber Iron Works	MHU17151	PM	5	Low
MMS177	Engine House	MHU17933	PM	5	Low
MMS178	Site of Civil War Defences	MHU19355	PM	5	High
MMS179	Site of South Bridge	MHU3427	PM	5	High
MMS180	<i>Number not used</i>				
MMS182	<i>Number not used</i>				
MMS183	Site of Weigh House	MHU1458	MED	6	High
MMS184	Medieval Bricks, 3 Bishop Lane	MHU19613	MED	6	High
MMS185	Timber Waterfront and Associated Deposits	MHU20371	MED	6	High
MMS186	Medieval to Post Medieval Features and Finds	MHU4691	MED	6	High
MMS187	Site of 9 Bishop Lane	MHU8212	MED	6	High
MMS188	Four Keys	MHU8463	MED	6	High
MMS189	Site of Lion House	MHU8467	MED	6	High
MMS190	Tiles	MHU8474	MED	6	High
MMS191	Medieval to Post Medieval Finds	MHU9496	MED	6	High

³² P = Palaeolithic; M = Mesolithic; N = Neolithic; BA = Bronze Age; IA = Iron Age; RB = Romano-British; EM = early medieval; MED = medieval; PM = Post-medieval; MOD = modern

MMS No	Name	HER entry	Period ³²	Zone	Value
MMS192	<i>Number not used</i>				
MMS193	Medieval Features and Finds	MHU9779	MED	6	High
MMS194	Medieval Timber Revetment and Building	MHU9040	MED	6	High
MMS196	Site of Grimsby's Hospital	MHU1454	MED	6	High
MMS198	<i>Number not used</i>				
MMS199	<i>Number not used</i>				
MMS200	Bishops' Palace, Lowgate	MHU20189	MED	6	High
MMS201	Medieval Features and Finds	MHU4695	MED	6	High
MMS202	Site of Sutton Town Gates	MHU8490	MED	6	High
MMS203	<i>Number not used</i>				
MMS205	Site of Water Course and Bridge	MHU8367	MED	6	High
MMS206	Site of Quay Street Gate	MHU9112	MED	6	High
MMS208	Site of Carmelite Friary	MHU1447	MED	6	High
MMS209	Hull Med/Pm Settlement	MHU1446	MED	6	High
MMS210	Site of Riplingham's Hospital	MHU1452	MED	6	High
MMS211	Site of Holy Trinity Maison Dieu	MHU16190	MED	6	High
MMS212	Site of Crookhayes Hospital	MHU9183	MED	6	High
MMS218	<i>Number not used</i>				
MMS222	Houses on Silver Street	MHU8365	MED	6	High
MMS223	Possible Medieval Pottery	MHU8416	MED	6	High
MMS224	Site of St James' Hospital	MHU11673	MED	6	High
MMS225	Site of Tenements	MHU8403	MED	6	High
MMS227	Site of Smithy	MHU13667	PM	6	Low
MMS228	Site of Etherington House	MHU17172	PM	6	Low
MMS229	Post Medieval Buildings, High Street	MHU19804	PM	6	Low
MMS230	Site of Warehouse, 9 Chapel Lane	MHU22012	PM	6	Low
MMS231	Sharps Warehouse	MHU6999	PM	6	Low
MMS232	Site of Castle Oil Mill	MHU13807	PM	6	Low
MMS233	Site of Mansion	MHU13612	PM	6	Low
MMS234	Site of Virginian Tobacco Mills	MHU13666	PM	6	Low
MMS235	Site of Kingston Ironworks	MHU13668	PM	6	Low
MMS237	Site of Butter Markets	MHU16528	PM	6	Low
MMS238	Site of Public House	MHU17153	PM	6	Low
MMS239	Site of Hotel	MHU17209	PM	6	Low
MMS240	<i>Number not used</i>				
MMS241	<i>Number not used</i>				
MMS242	<i>Number not used</i>				
MMS244	Site of Church of St John	MHU13740	PM	6	Low
MMS245	<i>Number not used</i>				
MMS246	<i>Number not used</i>				
MMS247	Site of Waterworks	MHU1469	PM	6	Low
MMS248	Site of Chapel	MHU16163	PM	6	Low
MMS254	Site of Providence Bakery	MHU13727	PM	6	Low

MMS No	Name	HER entry	Period ³²	Zone	Value
MMS255	Site of Synagogue	MHU13729	PM	6	Low
MMS256	Site of Independent Chapel	MHU13731	PM	6	Negligible
MMS257	Site of Sunday School	MHU13732	PM	6	Negligible
MMS258	Site of Ebenezer Chapel	MHU16029	PM	6	Low
MMS260	Site of the Leicester Hotel	MHU20503	PM	6	Low
MMS261	Site of The Mariner's Church	MHU9423	PM	6	Low
MMS262	Site of Foundry	MHU13672	PM	6	Low
MMS265	Site of Lister's Hospital	MHU1455	PM	6	Low
MMS270	Weaver's Hospital	MHU13726	PM	6	Low
MMS271	Mission Hall	MHU13728	PM	6	Low
MMS274	Site of Charity Hall	MHU1461	PM	6	Low
MMS275	The Merchant Seaman's Hospital	MHU16213	PM	6	Low
MMS276	Bank	MHU17127	PM	6	Low
MMS277	Site of Hotel	MHU17129	PM	6	Low
MMS278	Bank	MHU17133	PM	6	Low
MMS279	Site of Chapel, Bowlalley Lane	MHU1464	PM	6	Low
MMS280	Former Public House	MHU17134	PM	6	Low
MMS281	Former Public House	MHU17135	PM	6	Low
MMS282	<i>Number not used</i>				
MMS283	<i>Number not used</i>				
MMS284	<i>Number not used</i>				
MMS285	Site of South End Battery	MHU13602	MED	7	High
MMS286	Site of Hessele Gate	MHU9116	MED	7	High
MMS287	Site of Dog and Duck Inn	MHU17146	MED	7	High
MMS290	Medieval to Post Medieval Features and Finds	MHU4703	MED	7	High
MMS293	Site of Stoneferry Mill	MHU7379	MED	7	High
MMS294	Site of De La Pole House	MHU14051	MED to PM	7	High
MMS295	Site of Tower	MHU18035	MED to PM	7	High
MMS296	Site of Chapel	MHU1465	PM	7	Low
MMS297	Dock Green British School	MHU16232	PM	7	Low
MMS298	Site of Hull to Lincolnshire Ferries	MHU16506	PM	7	Low
MMS299	Albert Channel, Hull	MHU20036	PM	7	Low
MMS300	Site of Theatre Royal, Humber Street	MHU16534	PM	7	Low
MMS301	Site of Adelphi Theatre	MHU16536	PM	7	Low
MMS302	Site of Theatre Royal, Humber Street	MHU16538	PM	7	Low
MMS303	Site of Victoria Hotel	MHU16804	PM	7	Low
MMS304	Site of Granby Hotel	MHU17138	PM	7	Low
MMS305	Site of Royal Hotel	MHU17150	PM	7	Low
MMS306	Site of Post Office	MHU17931	PM	7	Low
MMS307	Site of The Sykes Head, Wellington St	MHU20506	PM	7	Low
MMS308	Site of Wellington House, Wellington Street, Hull	MHU22066	PM	7	Low
MMS309	Site of Wesley Chapel	MHU9421	PM	7	Low
MMS310	Site of London Hotel	MHU17147	PM	7	Low

MMS No	Name	HER entry	Period ³²	Zone	Value
MMS311	Site of Temperance Hall	MHU17927	PM	7	Low
MMS312	Site of Kingston Chain Works	MHU17929	PM	7	Low
MMS313	Site of Smithy	MHU17930	PM	7	Low
MMS314	<i>Number not used</i>				
MMS315	6 Blanket Row, Former Refugee Lodging House	MHU20637	PM	7	Low
MMS316	Wooden Water Pipes	MHU8358	PM	8	Low
MMS317	Site of Windmill	MHU8405	PM	8	Low
MMS318	Site of East Yorkshire Carriage Works	MHU13744	PM	8	Low
MMS319	Site of Russian Mat Factory	MHU13741	PM	8	Low
MMS320	Site of Public House	MHU17124	PM	8	Low
MMS321	Site of Stables	MHU13751	PM	8	Low
MMS322	Site of Sailors Institute	MHU13742	PM	8	Low
MMS323	Site of Methodist Chapel	MHU13743	PM	8	Low
MMS324	Site of Mission Room	MHU13747	PM	8	Low
MMS325	St John's India Rubber Works	MHU13749	PM	8	Low
MMS326	Former Hull Old Hebrew Congregation	MHU16187	PM	8	Low
MMS327	Site of Synagogue	MHU16186	PM	8	Low
MMS328	Site of Brewery	MHU16874	PM	8	Low
MMS329	Site of Master Mariners Almshouse	MHU9425	PM	8	Low
MMS330	Site of Independent Chapel	MHU16099	PM	8	Low
MMS331	Site of St Nikolai's Church	MHU16054	PM	8	Low
MMS332	Site of Bethesda Chapel	MHU16053	PM	8	Low
MMS333	Site of Oil Mill	MHU16875	PM	8	Low
MMS334	Site of Mission Room	MHU13750	PM	8	Low
MMS335	Site of Kiln & Malthouse	MHU13745	PM	8	Low
MMS336	Smithy	MHU13746	PM	8	Low
MMS337	Site of Alexander Copper & Brass Works	MHU13753	PM	8	Low
MMS338	Site of Mission Room	MHU16141	PM	8	Low
MMS339	Site of Wind Pump	MHU11769	PM	8	Low
MMS340	Site of Saw Mill, Adelaide Street	MHU16878	PM	8	Low
MMS341	Boundary Stone	MHU8363	MED	8	Medium
MMS342	Site of Brickyard	MHU9890	MED	8	Medium
MMS343	Well, Albion Street	MHU13601	PM	8	Low
MMS344	Site of Statue on Jameson Street	MHU13636	PM	8	Low
MMS345	Site of Statue	MHU13637	PM	8	Low
MMS346	Lock and Swing Bridge	MHU13733	PM	8	Low
MMS347	Site of Post Office	MHU13759	PM	8	Low
MMS348	Site of Smithy	MHU13798	PM	8	Low
MMS349	Site of The Church of St Luke	MHU16001	PM	8	Low
MMS350	Site of Providence Chapel	MHU16097	PM	8	Low
MMS351	Site of Chapel	MHU16127	PM	8	Low
MMS352	<i>Number not used</i>				
MMS353	<i>Number not used</i>				

MMS No	Name	HER entry	Period ³²	Zone	Value
MMS354	<i>Number not used</i>				
MMS355	Site of Chapel & School	MHU16173	PM	8	Low
MMS356	<i>Number not used</i>				
MMS357	<i>Number not used</i>				
MMS358	<i>Number not used</i>				
MMS359	<i>Number not used</i>				
MMS360	<i>Number not used</i>				
MMS361	Site of South Myton School	MHU16283	PM	8	Low
MMS362	Site of St Luke's School	MHU16423	PM	8	Low
MMS363	<i>Number not used</i>				
MMS364	Site of Queen's Theatre, Paragon Street	MHU16537	PM	8	Low
MMS365	Site of Primitive Methodist Chapel	MHU16632	PM	8	Low
MMS366	Site of Market, Staniforth Place	MHU16844	PM	8	Low
MMS367	Site of Myton House	MHU16845	PM	8	Low
MMS368	Site of Kingston Works	MHU16850	PM	8	Low
MMS369	Malthouse, Anlaby Road (S Side)	MHU16853	PM	8	Low
MMS370	Site of Salvation Barracks	MHU16854	PM	8	Low
MMS371	<i>Number not used</i>				
MMS372	Site of Club	MHU16871	PM	8	Low
MMS373	Site of Dunallen House	MHU16872	PM	8	Low
MMS374	Site of Inn, South Street	MHU16873	PM	8	Low
MMS375	Public House, Midland Street	MHU16876	PM	8	Low
MMS376	Site of Tramway Depot	MHU16963	PM	8	Low
MMS377	<i>Number not used</i>				
MMS378	Hotel	MHU17122	PM	8	Low
MMS379	<i>Number not used</i>				
MMS380	Commercial Hotel	MHU20502	PM	8	Low
MMS381	Warehouse No. 7	MHU2606	PM	8	Low
MMS382	Site of Royal Infirmary	MHU3376	PM	8	Low
MMS383	Hull to Scarborough Railway	MHU8811	PM	8	Low
MMS384	Hull to Hornsea Railway	MHU8819	PM	8	Low
MMS385	Hull to Selby Railway	MHU8829	PM	8	Low
MMS386	Hull to Withernsea Railway	MHU8830	PM	8	Low
MMS387	<i>Number not used</i>				
MMS388	Site of Primitive Chapel	MHU16142	PM to MOD	8	Low
MMS389	<i>Number not used</i>				
MMS390	St Andrew's Church	MHU16103	MOD	8	Low
MMS391	Site of Hall	MHU16128	MOD	8	Low
MMS392	Site of Villa Place School	MHU16292	MOD	8	Low
MMS393	Site of Alexandra Theatre	MHU16546	MOD	8	Low
MMS394	Site of Cecil Cinema	MHU16554	MOD	8	Low
MMS395	Site of Theatre De Luxe	MHU16555	MOD	8	Low
MMS396	Site of Garden Cinema	MHU16556	MOD	8	Low

MMS No	Name	HER entry	Period ³²	Zone	Value
MMS397	Submarine Forest	MHU19429	PRE	9	High
MMS398	Site of Water-Mill	MHU19444	MED	9	Medium
MMS399	<i>Number not used</i>				
MMS400	<i>Number not used</i>				
MMS401	<i>Number not used</i>				
MMS402	<i>Number not used</i>				
MMS403	<i>Number not used</i>				
MMS404	<i>Number not used</i>				
MMS405	<i>Number not used</i>				
MMS406	<i>Number not used</i>				
MMS407	<i>Number not used</i>				
MMS408	<i>Number not used</i>				
MMS409	<i>Number not used</i>				
MMS410	<i>Number not used</i>				
MMS411	<i>Number not used</i>				
MMS412	<i>Number not used</i>				
MMS413	<i>Number not used</i>				
MMS414	<i>Number not used</i>				
MMS415	<i>Number not used</i>				
MMS416	Site of Limekiln, Humber Bank	MHU8366	MED to PM	9	Medium
MMS417	Site of Humber Bank Mill	MHU11765	PM	9	Negligible
MMS419	Site of Belle Vue Pottery	MHU12054	PM	9	Negligible
MMS420	<i>Number not used</i>				
MMS421	Site of Congregational Chapel	MHU16095	PM	9	Negligible
MMS422	<i>Number not used</i>				
MMS423	<i>Number not used</i>				
MMS424	<i>Number not used</i>				
MMS425	<i>Number not used</i>				
MMS426	<i>Number not used</i>				
MMS427	<i>Number not used</i>				
MMS428	<i>Number not used</i>				
MMS429	<i>Number not used</i>				
MMS430	<i>Number not used</i>				
MMS431	<i>Number not used</i>				
MMS432	<i>Number not used</i>				
MMS433	<i>Number not used</i>				
MMS434	<i>Number not used</i>				
MMS435	Site of Humber Baths, Bath Place	MHU16450	PM	9	Negligible
MMS436	Madeley Street Public Baths	MHU16451	PM	9	Negligible
MMS437	<i>Number not used</i>				
MMS438	Site of Railway Station	MHU16514	PM	9	Negligible
MMS439	<i>Number not used</i>				
MMS440	<i>Number not used</i>				

MMS No	Name	HER entry	Period ³²	Zone	Value
MMS441	<i>Number not used</i>				
MMS442	Jewish Burial Ground	MHU16540	PM	9	Negligible
MMS443	Site of Circus, Humber Street / Queen Street	MHU16548	PM	9	Negligible
MMS444	Albert Dock	MHU16599	PM	9	Negligible
MMS445	Site of Field House	MHU16626	PM	9	Negligible
MMS446	Site of Pilot Boy Tavern	MHU16627	PM	9	Negligible
MMS447	Site of Borough Gaol and House of Correction	MHU16635	PM	9	Negligible
MMS448	Site of Goods Station	MHU16835	PM	9	Negligible
MMS449	Site of Brewery, Waverley Street	MHU16855	PM	9	Negligible
MMS450	Site of Inn	MHU16877	PM	9	Negligible
MMS451	Sunday School	MHU16941	PM	9	Negligible
MMS452	Sunday School	MHU16942	PM	9	Negligible
MMS453	Kingston Cooperage	MHU16943	PM	9	Negligible
MMS454	Salvation Barracks	MHU16944	PM	9	Negligible
MMS455	Hotel	MHU16945	PM	9	Negligible
MMS456	Engineering Works	MHU16946	PM	9	Negligible
MMS457	Hull Engineering Works	MHU16947	PM	9	Negligible
MMS458	Site of Albert Saw Mills	MHU16948	PM	9	Negligible
MMS459	Site of Saw Mills	MHU16949	PM	9	Negligible
MMS460	Kingston Colour Works	MHU16950	PM	9	Negligible
MMS461	Humber Bank Oil Mills	MHU16951	PM	9	Negligible
MMS462	Site of Cyclops Foundry	MHU16952	PM	9	Negligible
MMS463	Neptune Street Goods Station	MHU16953	PM	9	Negligible
MMS464	Albert Dock Engineering Works	MHU16954	PM	9	Negligible
MMS465	Boatbuilding Yard	MHU16955	PM	9	Negligible
MMS466	Site of Rope Walk	MHU16956	PM	9	Negligible
MMS467	Site of Cattle Pens	MHU16957	PM	9	Negligible
MMS468	Site of Public House	MHU16958	PM	9	Negligible
MMS469	Post Office	MHU16959	PM	9	Negligible
MMS470	Hotel	MHU16961	PM	9	Negligible
MMS471	Site of Engine House	MHU17125	PM	9	Negligible
MMS472	<i>Number not used</i>				
MMS473	<i>Number not used</i>				
MMS474	<i>Number not used</i>				
MMS475	<i>Number not used</i>				
MMS476	<i>Number not used</i>				
MMS477	<i>Number not used</i>				
MMS478	<i>Number not used</i>				
MMS479	<i>Number not used</i>				
MMS480	Smoke House Chimneys	MHU7493	PM	9	Negligible
MMS481	Site of Church of St James	MHU8359	PM	9	Negligible
MMS482	<i>Number not used</i>				
MMS483	<i>Number not used</i>				

MMS No	Name	HER entry	Period ³²	Zone	Value
MMS484	<i>Number not used</i>				
MMS485	<i>Number not used</i>				
MMS486	Old River Bank, Streams and Ditches	MHU1479	U	9	Low
MMS487	Site of Barton to Hessle Ferry	MHU417	EM to PM	10	Low
MMS488	Site of Butt Hills	MHU875	MED	10	Negligible
MMS489	The Ferry Boat Inn, Hessle Haven	MHU11783	PM	10	Negligible
MMS490	Brick and Tile Works, Hessle Haven	MHU11784	PM	10	Negligible
MMS491	Hessle Clough	MHU11785	PM	10	Negligible
MMS492	Site of Garden Cottage, Hessle	MHU11786	PM	10	Negligible
MMS495	<i>Number not used</i>				
MMS496	Cobbled Area, High Street	MHU19803			
MMS497	Post-medieval Walls & Floors, Oriel House	MHU20372	PM		
MMS498	68-69 High Street	MHU21752			
MMS499	<i>Number not used</i>				
MMS500	Site of Baptist Chapel	MHU16048			
MMS501	<i>Number not used</i>				
MMS502	Site of Methodist Chapel	MHU16116			
MMS503	Site of Public House	MHU16870			
MMS504	Occupation, Queen Street	MHU185	Med/Pm		
MMS505	Vicar Lane Excavations	MHU4705			
MMS508	Roman Coin	MHU14599			
MMS509	Finds from Old Harbour	MHU8464			
MMS510	Log Boat, Guildhall	MHU15984			
MMS511	Medieval to Post Medieval Occupation	MHU17941			
MMS512	Coin of Edward III	MHU18665			
MMS513	Finds Assemblage, Trinity House	MHU19692			
MMS514	Site of Lake Dwelling?	MHU4312			
MMS516	Loving Cup	MHU8412			
MMS517	Possible Medieval Tiles	MHU8457			
MMS518	Marginal Finds	MHU8470			
MMS519	Marginal Pottery Finds	MHU8471			
MMS520	Romano-British Pottery, S of Humber Street	MHU1486			
MMS521	Roman Lamp	MHU8368			
MMS522	Marginal Finds	MHU8473			
MMS523	Roman Coins	MHU14710			
MMS524	Merovingian Coin	MHU14712			
MMS525	Sword	MHU8401			
MMS526	Post Medieval Finds	MHU8410			
MMS527	Post Medieval Finds	MHU8410			
MMS528	Post Medieval Finds	MHU8410			
MMS529	Post Medieval Pit and Finds	MHU8414			
MMS530	Loving Cup	MHU8415			
MMS531	Possible Medieval Tiles	MHU8417			

MMS No	Name	HER entry	Period ³²	Zone	Value
MMS532	<i>Number not used</i>				
MMS533	<i>Number not used</i>				
MMS534	<i>Number not used</i>				
MMS535	<i>Number not used</i>				
MMS536	<i>Number not used</i>				
MMS537	<i>Number not used</i>				
MMS538	<i>Number not used</i>				
MMS539	<i>Number not used</i>				
MMS540	Medieval Coin Hoard	MHU8418			
MMS541	Romano-British Lamp and Coins	MHU14119		10	
MMS542	Possible Flint Hand Axe?	MHU21855		10	
MMS543	Site of Holy Trinity School	MHU17148	PM	7	Low
MMS544	Site of Smithy	MHU13730	PM	7	Low
MMS545	Site of Crowle's Hospital	MHU1453	PM	7	Low
MMS546	Site of Chapel, Blanket Row	MHU16093	PM	7	Low
MMS547	Site of Sun Tavern	MHU16374	PM	7	Low
MMS548	Site of Police Station	MHU16439	PM	7	Low
MMS549	Site of Theatre Royal, Finkle Street	MHU16533	PM	7	Low
MMS550	Site of Theatre, Humber Street / Queen Street	MHU16535	PM	7	Low
MMS551	Victoria Rooms	MHU16552	PM	7	Low
MMS552	Site of Market	MHU17137	PM	7	Low
MMS991	Site of Nos. 13 and 14 Castle Street			3	Negligible

2. Gazetteers of historic buildings

2.1 Gazetteer of key historic buildings

2.1.1 The gazetteer, in Table 2.1 below, provides details of key historic buildings. This includes all Grade I and II* listed buildings, and key Grade II listed buildings along the route of the Scheme (Zones 1 to 4; and inside the Old Town conservation area) and Grade II listed buildings from outside the conservation areas. However, it does not list every designated or non-designated built heritage asset from within the conservation areas.

Table 2.1: Key historic buildings in the study area

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
MMS144	Trinity Burial Ground		3	<p>The current setting of the Trinity Burial Ground is an enclosed green space in the centre of the city centre. It also includes two grassed amenity spaces to its west and northeast. Planted banks and ivy clad boundary walls of varying heights also give it a strong sense of enclosure and privacy. The boundary walls are described as an "unlisted building of historic townscape value" (MMS863), and the two early gas lamp posts are locally listed buildings (MMS866). Nothing now remains of the former mausoleum and the original entrance in the north-east corner, apart from a section of plastered brick-built wall. The monuments have been largely cleared from the east part, although some headstones and memorials remain flat in the grass.</p> <p>The setting of the burial ground has been eroded by the expansion of the A63 Castle Street to the north in the 1970s, which has noise and visual impacts on the burial ground. The loss of the original historic buildings on one side including the mortuary, and gaol has also diminished the historic setting of the burial ground.</p> <p>The historic setting of the burial ground changed with time. When built in 1783 it stood alone on the southern side of the junction formed by Castle Street, Myton Place and Waterhouse Lane. A slow agglomeration of buildings followed throughout the 19th century. Some were like the gaol, Humber Copper and Brass Works and Timber Yard, large industrial compounds and buildings. But elsewhere to the north was small streets of terraced houses with a fine grain of house plots. The line of Castle Street to the west was not continuous and instead entered a maze of smaller streets before merging as the Hessele Road to the east.</p>	<p>High</p> <p>Set within a conservation area and non-designated assets. It has evidential, communal and aesthetic value.</p> <p>The Trinity Burial Ground forms part of the Old Town Conservation Area, sub-zone C1 (South). The standing structures (boundary walls MMS863) in the Trinity Burial Ground are non-designated heritage assets and the two lampposts either side of the burial ground are locally listed (MMS866).</p> <p>The burial ground has historic and evidential value due to the remains of the people buried within the graveyard and what their remains can tell of the lives of the people of Hull from 1783-1861. These are discussed in the section on archaeology above. The history of the Trinity Burial Ground is covered in greater detail in Volume 3, Appendix 8.4. It was begun in 1783 and closed in c. 1860. The evidential value to the archaeological remains of the burials for understanding the people of Hull in the 18th and 19th centuries including the demographic and pathological make-up of the expanding city. This is of regional importance and has the potential to contribute to the understanding of post-medieval populations in Yorkshire. Little research has been undertaken on funerary practices and population composition in Yorkshire (see Volume 3, Appendix 8.4, 71). The graveyard represents an opportunity to redress this imbalance and achieve national research objectives contained within Historic England guidance.</p> <p>Its value relates its communal value as former consecrated ground for burial. Evaluation of the site has revealed extensive survival of burials. There are c. 552 surviving grave markers in the burial ground, unevenly distributed, ranging in date from 1789 to 1867. The total number of burials is estimated at between 2200 and 8800, although a total of c.35,500 died in the parish while the ground was open. It has communal value not only as a burial</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				Directly south of the burial ground was the Railway Dock. Yet the burial ground like today would have been enclosed on the southern side from this environment by the high wall creating a separation between the two spaces.	<p>ground but also as a communal space of remembrance.</p> <p>The Trinity Burial Ground also has aesthetic value related to the burial monuments within the burial ground, the walls of the burial ground and its contribution to the Old Town Conservation Area of Hull. The evidence taken together has local and regional importance.</p> <p>Elements of the original buildings survive as boundary walls and contribute to the setting. To the south, and west the burial ground remains largely as built, with an enclosure of brick walls and mature trees and the setting continues to contribute to the value of this asset.</p>
MMS600	Statue of King William III and Flanking Lamps	11976 97; MHU5 036	1	<p>The current setting of the statue is dominated by the wide Market Place Road which surrounds the statue in a street island adjacent to the junction with the A63 Castle Street. The visual and audio disturbance of the busy A63 carriageway is noticeable to the south. Most of the surrounding buildings are modern in date and do not make a positive contribution to the setting of the asset.</p> <p>The 19th century additions of the flanking lamps and public toilets immediately north have aesthetic appeal. However, they do have the potential to obscure the significance of the statue itself by making its early date less obvious, instead of a similar date as the accompanying lamps and toilets. The statue faces north up along Market Place. Holy Trinity Church dominates this view and is important as one of the only remaining buildings present in the view present when the statue was installed in the early 18th century.</p> <p>The historic setting of the statue acted as a focus at the top of the surrounding Market Place which would have continued into Queen Street to the south. Much of the historic setting has been lost with the notable exception of the Church of the Holy Trinity to the north.</p>	<p>High</p> <p>Grade I listed. Equestrian statue and 4 flanking lamps. Statue 1734, by Peter Scheemakers. Lamps late C19, by King & Peach of Hull.</p> <p>The significance of the statue lies primarily in its historical and aesthetic value, although it also has communal value. The statue has limited evidential value. The statue is also historically significant as an expression of the political climate of early 18th century England and symptomatic of the popular backlash against Jacobitism. The statue is rare, has an early date and is the only one of its kind in Hull and represents an expression of Hull's support of William III as the new monarch. Its historic value is high. The aesthetic value of the statue is from its form. It has historic association with its creator the famous Flemish sculptor Scheemakers and the almost identical statue in Bristol by Rysbrack. The Hull statue was built in competition with Rysbracks. Its aesthetic value is considered high. The communal value of the statue is due to its prominence in a public space in Hull. The views towards the Church of the Holy Trinity with the statue in the foreground are representative of Hull and therefore regionally significant.</p> <p>The contribution of its setting to the assets significance is limited to its location at the head of the wide and open Market Place. However, the significance of this position and its legibility within the townscape has been eroded by the demolition of almost all contemporaneous buildings and the lack of modern markets in this location.</p>
MMS601	Market Place Toilets	MHU5 008	1	<p>The current setting of the toilets is to the north of the statue of William III. They are currently surrounded by the roadway of Market Place which is close to the toilets, detracting from them. They are closed and it is not immediately obvious what their function is.</p> <p>Historically they would have been added in the early 20th century as</p>	<p>Medium</p> <p>Grade II listed. Built in 1902 in an Art Nouveau Style. Brick with terracotta and granite dressings and partly glazed segmental arched lead roof.</p> <p>The value of the toilets is both historical, aesthetic and evidential. The evidential value of the toilets is as a good example of the former public convenience. They have historic value as they were built to serve</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				public facilities associated with the former busy Market Place.	the former location of the market place. They are also aesthetically pleasing having been built in the restrained English version of the 'Art Nouveau' style. The setting of the toilets should be considered in conjunction with the statue of William III, see above.
MMS602	Warehouse No. 6		2	<p>The current setting of Warehouse No. 6 has been diminished to the south by the proximity of the dual carriageway of the A63. This imposes on the southern façade of the building, and is already close, with traffic running past the ground floor windows. To the west is an open space, but this is not part of the buildings historic setting but instead is modern alteration of the space.</p> <p>As seen from the north its historic setting is partially retained where it defines the corner of the Princes Dock. The line of Princes Dock Street forms an attractive view looking south between the building and street frontage to the east. However, the massing of the Princes Quay Shopping Centre detracts from this view on the northern side.</p> <p>The original historic setting of the building was one of the maritime industry in hull and was closely associated with the Humber and Princes Dock (see above). To the west was the former mass of Warehouse No. 7, between which was the lock between the two docks. To the north the line of Princes Dock Street would have been largely similar to its current setting. To the south there would have been the line of Mytongate/ Castle Street, a far narrower street than the current course of the A63 Castle Street. Views to the south beyond the road would have been towards Humber Dock. It would have included low, single-storey warehouses that surrounded Humber Dock partially restricting view from the ground floor level.</p>	<p>Medium</p> <p>Grade II Listed. The Warehouse was built in c. 1830 to c. 1845. The external fabric has been altered over time with a cement facing to the plinth and evidence of rebuilding of the west gable wall. Modern glazing has replaced the original windows. The interior has been converted to offices, but retains original cast-iron columns and wooden beams.</p> <p>The value of the building is evidential, historic, but also aesthetic. Its evidential value is derived from one of the few remaining examples of warehouse architecture around the historic docks of Hull. It is one of two examples of a distinct type of warehouse architecture associated with the docks to survive, along with Warehouse No. 11, both of which are Grade II listed, and is therefore regionally significant. Its historic value is as one of the remnants of Hull's former maritime trade. Its close association with other assets in this group including the Princes Quay and Humber Dock form part of a cohesive group of Grade II listed maritime structures and is regionally significant to Hull. Its aesthetic value is more prosaic but should be acknowledged. It is a fine example of 19th century industrial architecture, in keeping with the overarching maritime feel of the area and adds to the attractive nature of the Old Town Conservation Area of Hull. The communal value of the building is limited to its association with the adjacent docks as a communal space.</p> <p>The setting of the warehouse contributes to its value, but has been reduced on the western, and southern sides considerably. This has because the adjacent Warehouse No. 7 has been demolished, the lock between the Princes and Humber Docks has been infilled and the A63 Castle Street now comes close to its southern façade. All these aspects should be considered when assessing the impact of the development on the setting. The setting as considered from the north and east retains some of the feel of the original historic setting, but the mass of the Princes Quay Shopping Centre imposes upon the warehouse.</p>
MMS603	Castle Buildings	12080 94; MHU1 8199	3	The building's current setting differs from its historic commercial and industrial context. The current setting is dominated by the busy A63 Castle Street carriageway immediately to the south. Land immediately to the north is taken up with carparks and derelict	<p>Medium</p> <p>Grade II listed. Aesthetically pleasing corner buildings designed by B. S. Jacobs having medium value as a good typical example of a late-Victorian office building designed in the Free Renaissance style. They date to 1900. The curving frontage</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				<p>land. This leaves the building isolated from its original context of enclosed streets leading to the docks. Its setting has been eroded by the decline of the western edge of the town centre (outside the Old Town Conservation Area), the construction of the adjacent A63 Castle Street in the 1970s and the subsequent loss of any surrounding buildings during an ongoing redevelopment of Princes Quay retail development.</p> <p>Its historic setting was defined by its location of the building on the corner of Castle Street and Waterhouse Lane defined, as one of the principal 19th century building on the western entrance to the city. In the 19th and early 20th centuries when the buildings were constructed Castle Street, on the north side, was a mix of residential and public houses with a fine grain of building plots. The southern side contained timber yards, the Humber Brass and Copper Works and further east the warehouses that surrounded Humber Dock. To the west was the Trinity Burial Ground a rare area of green space amongst the industrial buildings. Further west, the line of Castle Street terminated at Myton Place and smaller streets of terrace houses. To the north, Waterhouse Lane was a mix of residential terraces and timber yards. The building was and continues to be proximate to the Princes, Humber and Railway Docks where it was associated with the maritime trade of Hull.</p> <p>The relationship with the former No. 13 and 14 Castle Street is no longer significant after it was demolished in 2018.</p>	<p>and varied storey heights were exploited to good architectural effect. The building has townscape value, as a prominent building on the junction of Waterhouse Lane and Castle Street. It has landmark quality, particularly in views from the west. The significance of the asset is also derived from its historic value. The chambers were built to serve as the offices of a shipping company at a time when this part of Hull was devoted to sea trade and transport; the historic function of the building expresses Hull's maritime role. ³³ Plans of the buildings dating to 1900³⁴ and internal inspection reveal that the current layout is original and retains many original architectural features³⁵. It was continuously occupied until the 1970s by maritime industry.</p> <p>The aesthetic and architectural value of the building relates to their landmark position on the entrance to Hull, its striking curved frontage and Renaissance Revival styling. It has evidential value due to its historic interior which contains numerous features and the building's original function as a shipping office remains clearly legible, with a clear differentiation between more formal meeting spaces and offices and the more informal general clerk's office. They have historic value for relationship with the docks of Hull and the important physical reminder of Hull's maritime history and trading links, having been occupied by a succession of maritime-related tenants until the 1970s. The communal value of the building was a private shipping office and has not been used by the community during its lifespan.</p> <p>The setting of the building has been severely affected by the loss of surrounding buildings. The widening of the A63 Castle Street in the 1970s and the increased traffic levels. The current setting contributes to its significance because it's prominent location and proximity to the historic docks. This makes the building an important touchstone to the past townscape.</p>
MMS604	Earl de Grey public house	12970 37; MHU1 8200	3	The building is set on Castle Street, a principal route into the historic town, and adjacent to the former Princes, Humber and Railway Docks. The street developed within this maritime hub where, at the end of the 19th century, it was an urban mix with residences, public houses and dock	<p>Medium</p> <p>Grade II listed. The value of the asset is largely derived from its historic, architectural, aesthetic and communal value.</p> <p>The architectural and aesthetic value of the buildings relate to the historic public</p>

³³ [https://content.historicengland.org.uk/images-books/publications/dlsg-commerce-exchange-buildings/commerce and exchange final.pdf/](https://content.historicengland.org.uk/images-books/publications/dlsg-commerce-exchange-buildings/commerce%20and%20exchange%20final.pdf/)

³⁴ Hull History Centre 1894M/2643

³⁵ see AHP 2014, 23-25

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				<p>offices on the north side, surrounded by warehouses and timber yards. The public house was closely tied to the character of the area and traditionally associated with serving dock workers and seamen.</p> <p>The historic setting of the Earl de Grey public house has significantly changed in the late-20th century to present. The realigned A63 Castle Street, resulted in the demolition of the southern side of Castle Street and meant much of the original context in which the building was set has been lost. The northern street frontage is almost entirely lost, with its relationship with the Castle Buildings the only survival of this street line. Subsequent demolition since the 1990s mean that it stands as an isolated fragment of the original streetscape. The setting is currently dominated by the busy A63 dual carriageway immediately to the south. Land immediately to the north is taken up with carparks and derelict land. Buildings which once flanked the asset on both sides have now been demolished with the buildings between the Earl de Grey public house and Castle Buildings now vacant land plots. The historic context of the public house is partially retained by the proximity to the former docks which are now marinas and Princes Quay.</p>	<p>house exterior, with ornate green glazed faience-tiles and free classical detailing. The architects Samuel Jackson and Sons of Bradford, acting for Bentley's Yorkshire Brewing Company drew up plans in 1913 to convert the ground floor to a bar.³⁶ It is likely the external glazed faience-tiles also date from this phase of redevelopment. The design represents a good example of a 19th century redeveloped in the early 20th century.³⁷ The architectural and aesthetic value of the building lies principally in the early 20th century redevelopment.</p> <p>The building has some evidential value as it contains several phases of development, including those before it was a public house. It is an isolated survival in this area, dating from a period of expansion beyond the demolished city walls in the late-18th century. Over the course of its use it was subject to multiple episodes of alteration. Originally only numbers 6 and 7 Castle Street, the pub expanded in 1864 to incorporate 8 Castle Street (formerly a coffee house). The internal layout was changed to facilitate two new tap rooms, a dram shop and conversion of the rear kitchen into a parlour.³⁸ Alterations to the ground floor occurred in 1913, described above. Further alterations were undertaken in 1953 by Wheatley & Houldsworth architects and this appears to have involved, amongst other alterations, changes to the internal layout of the ground floor front room. The internal layout when inspected in 2014 showed that the ground floor had been altered in the late-20th century prior to its closure and the historic plan form was no longer legible.³⁹ The interior of the building has no surviving fittings or fixtures and is not of special architectural interest, however, the historic fabric may retain some evidential value of the former interior.</p> <p>The historic value of the building relates to the early date of the building and its commercial association with the maritime history of Hull. The Cat and Whittington to the west is the only other example in the immediate area and No 82-83 Castle Street, Burnett House (formerly the Queens or Britannia Hotel) the only other example on Castle Street.</p> <p>Communal value is derived from its long history as a public house. Historically it was linked to the maritime history of Hull, which plays a significant part in the city's</p>

³⁶ Hull History Centre 1894/ M 6845

³⁷ Brandwood *et al* 2004, 136-143

³⁸ Hull History Centre OBLM/656

³⁹ AHP 2014, 26-31

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
					<p>identity and the identity of the people of Hull.</p> <p>The Earl de Grey was historically linked to Castle Street and the commercial and maritime setting on which it was built. The character has since completely changed and most physical traces have been demolished or changed. Legibility of the former setting only survives due to the proximity of former docks (MMS761, MMS767) and Castle Buildings (MMS603). The character of the modern setting makes no contribution to the value of the asset.</p>
MMS605	Vauxhall Tavern public house	11977 45; MHU1 8242	4	<p>The townscape quality of the current setting is poor. The A63 Castle Street carriageway is immediately north and dominates. Surrounding land is currently used as a surface carpark, poor quality modern offices and commercial and light industrial premises.</p> <p>The historic setting of the public house was at the busy intersection of five large roads. Historically the character of the area was a mixture of residential and industrial with a neighbouring mill and timber yard.</p>	<p>Medium</p> <p>Grade II listed. Three-storey, late 18th century, yellow-brick building with granite faced ground floor. This building may have been built as a public house, or may have been converted when Hessle Road was turnpiked in the early 19th century.</p> <p>The significance of the asset is largely derived from its historic and aesthetic value. The building is a good example of the corner public house, serving the surrounding industrial and residential buildings. Many of these residential buildings have now been lost and the tavern is the only 18th century building to survive in the vicinity. The principal aesthetic value of the buildings lies in the exterior, in the shallow bow sash windows to the first and second floor. It also has communal value as a public house. The value is diminished by the lack of association with adjacent housing estates. However, it is recognised that historic communal value of public house, and the value is therefore considered medium.</p> <p>The setting of the asset has a minimal contribution to its value; surrounding contemporary buildings have been replaced with poor quality modern replacements. The location opposite a busy road remains but the volume of traffic and lack of pedestrian activity affects the ability to appreciate the building. It does however, sit at the corner of an original historic street.</p>
MMS607 MMS606	Tubular Crane to North East of Former Trinity House Buoy Shed Trinity House workshop and Buoy Shed	12683 83; MHU2 1900; MHU1 8324	5	<p>The current setting of the crane is sited on the quayside of the River Hull and the Trinity House Buoy Shed just south of the former entrance to Victoria Docks. The last fifty years the setting has been one of slow, piecemeal redevelopment of this area of town. The opposite bank of the river retains a lot of its historic character due to the preservation of 18th century warehouses including Pease Court. However, the west bank suffers from dereliction, and is now unused land plots with 20th and 21st century large retail units.</p> <p>The historic setting of the crane and buoy shed was one of an active wharf with important views north and south along the River Hull. It was dominated</p>	<p>Medium</p> <p>Grade II. Cast iron curved jib on circular 360 degree turning base at edge of quayside. Constructed mid- 19th century and re-sited at the beginning of the 20th century. Former buoy shed, now a workshop. Dated 1901, with late C20 alterations.</p> <p>The significance of the assets are derived from their evidential and historic value. The components of the crane survive well and feature the original gearing and later electronic motor and it is a rare example of its type. The evidential value is considered medium. Both the building and the crane form remnants of the former historic quayside of the River Hull. It presence of the quayside and its associative</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				by warehouse and timber yards which were intrinsically linked to their river side location. The crane was re-sited historically in the 20 th century.	relationship with the Trinity House Buoy Shed preserve the historic industrial character of the riverside. The historic value is considered medium. The crane's riverside setting and the surviving maritime buildings next to the crane and on the opposite bank reveal the historic function of the asset and enhance the significance of the asset. The setting is diminished by the removal of associated structures to north and south on the eastern side of the River Hull.
MMS612	Old Grammar School Museum	11976 60; MHU1 460	6	The current setting of the Old Grammar School is dominated by Trinity Church and sits within an urban context. The building fronts onto an open public square which was originally part of the churchyard. Although the area is currently a construction site it would feature reflection pools and paved surfaces. The surrounding buildings are from a range of dates, styles and materials. The majority of these are 19 th and 20 th century in date. The cobbled surfaces and listed lamp posts enhance the character of the assets setting. The historic setting of the building was as part of the surrounding medieval street pattern. Views were principally to the north onto Trinity Square and the former post-medieval markets.	High Grade II* listed. Built late-16 th century as the Hull Merchant Adventurer's Hall, later used from mid-18 th century to mid- to late 19 th century as the Grammar School. The building became the Holy Trinity Choir School before being converted into a museum in the late 20 th century. The significance of the asset is largely derived from its historic, architectural and communal value. The building is significant as a place of education for almost 250 years, with associative value arising from past pupils Andrew Marvell and William Wilberforce. Prior to this the building was the Merchant Adventurers' Hall and is therefore an important building in the city's maritime past. The building is also an important example of late medieval architecture. The only to survive in the immediate vicinity. The external brickwork compliments the brick used in Trinity Church opposite. The building was used as the church's choir school from 1878 and therefore also has a historic associative link. The surrounding setting makes as positive contribution to the significance of the asset, including historic lampposts and cobbles surfaces.
MMS618	Parish Church of the Holy Trinity and Churchyard Wall;	12922 80; MHU5 010	6	Trinity Church is enclosed by buildings on all sides in what is very much an urban context. There is an open public square at the west end of the church, towards King Street. This area was originally part of the churchyard. Although the area is currently a construction site, once complete it would feature reflection pools and paved surfaces. The current setting of the church, within the adjacent former medieval street plan, is one of traditional enclosed spaces with an open pedestrian area at the western entrance. Surrounding buildings are from a range of dates, but largely 19 th and 20 th century in date. However, the Old Grammar School building on South Church Side dates to the 16 th century and Trinity House on the north west corner dates to the 18 th century. The buildings retain their original medieval house plots. The cobbled surfaces, listed lamp posts enhance	High Grade I listed. The asset's significance originates from several elements, all are considered high. The evidential value is largely derived from the buildings archaeological potential (above and below ground) which could illustrate the building history, burial history and development. The asset has historical value as the parish church of Hull it contains numerous monuments and visual clues towards the history of the city, its continental links and is very important as the oldest surviving building in the town. The asset is aesthetically important and is a landmark within the town centre. The asset has communal value of the oldest and principal church in Hull. The setting of the asset is generally of good quality to the north, east and south, with the Old Grammar School, street surfaces and listed lampposts as significant features. The east end along

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				<p>the character of the assets setting. Associated with this asset group is the Grade II listed war memorial south of the church.</p> <p>The quality of the setting is weakest towards the church's east end, on Market Place where late 20th century buildings and a busy road are at odds with the scale and character of the church. Traffic along Castle Street already impacts upon the setting of the eastern end of the church. The church itself is a dominant mass at the eastern end of the old town and its spire forms a landmark along the adjacent streets. The bulk of the spire dominates the southern end of Market Place.</p> <p>The historic setting of the church, was as a focal point of the medieval streets. The current setting largely retains this pattern.</p>	Market Place is detrimental to the significance of the asset.
MMS619	Minerva Lodge of Freemasons Number 250	12930 46; MHU5 034	6	<p>The current setting of the lodge is made up of the narrow Prince Street and Dagger Lane, both are cobbled and paved. The buildings on Prince Street are largely contemporaneous and together they provide a uniform 18th century character. Towards Dagger Lane this character is more fragmented and damaged by modern alterations and extensions.</p> <p>The historic setting of the building was as part of the surrounding medieval street pattern.</p>	<p>High</p> <p>Grade II* listed. Minerva Lodge, Masonic Hall. Building remodelled in mid- to late 20th century.</p> <p>The significance of the asset is largely derived from its historic value. The building's interior is of historic and architectural value for the rare and well preserved early 19th century masonic hall on the first floor. The assets setting does not contribute to this significance.</p>
MMS628	Hull Trinity House	12195 63; MHU5 038	6	<p>The current setting of Trinity House is located on a corner plot on Trinity House Lane and Posterngate. The main primary façade is on Trinity House Lane, but also faces south-west onto Trinity Square and the Church of the Holy Trinity. The street surface has recently been replaced with stone paving which enhances the setting of the buildings. Historic lampposts, narrow streets and surrounding 19th century buildings contribute to the historic character and provide a contrast in building styles giving a sense of organic historic development.</p> <p>The historic setting of the building was as part of the surrounding medieval street pattern.</p>	<p>High</p> <p>Grade I listed. Trinity House dates from the 18th century and is polygonal in plan with two internal courtyards. Street frontage is stucco and ashlar dressings along both of Posterngate and Trinity House Lane.</p> <p>The significance of the asset is largely derived from its historic, architectural and aesthetic value. The building has historic significance as the headquarters for Trinity House, a religious guild founded in Hull in 1369 concerned with seamen and maritime affairs. The current site has been in use by the guild since c.1457. The building is also architecturally and aesthetically significant as an early 18th century building which provides a contrast to the large 19th century surrounding built environment.</p> <p>The setting of the building, including the varied architectural styles and periods of surrounding buildings, historic street furniture and narrow streets, enhance the significance of the asset.</p>
MMS646	10-15, Whitefriargate, Kingston Upon Hull	11976 75; MHU6 051;	6	<p>The building's current setting is commercial with ground floor shops along the length of Whitefriargate. The road has been pedestrianised and enhanced in keeping with the</p>	<p>High</p> <p>Grade II* listed. Late 18th century public house and attached houses as part of redevelopment of properties in this area,</p>

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		MHU5 039		<p>conservation area. The surrounding buildings are a mixture of late 18th and 19th century date although the contribution they make to the character of the area is lessened by the mostly modern ground floor shopfronts.</p> <p>The historic setting was on the commercial thoroughfare of Whitefriargate, which is largely retained in the current streetscape, although with many of the original buildings having been altered. Views to the west would have been towards the former city walls and later the dock both of which have now been replaced by the modern streetscape.</p>	<p>later alterations in 19th and 20th centuries, currently shops and offices.</p> <p>The significance of the asset is largely derived from its historic, aesthetic and architectural value. The building is historically linked with Hull Trinity House who constructed the building as a public house in 1795 as part of a long term redevelopment programme. It later became the Customs House and acted as a centre for maritime administration. The building has a commanding presence on Whitefriargate and its style and material compliment the surrounding buildings and brings architectural character to the street.</p> <p>The busy and commercial nature of the street contribute to the significance of the asset, although the original function of the building has been lost.</p>
MMS673	Princes Dock	11976 82	2	<p>Warehouse No 6 continues to dominate the current setting of the south-east corner of the dock. Despite the loss of individual buildings on the eastern side of the dock, the original pattern of house plots is retained with four Grade II listed buildings surviving. On the north-east corner is another surviving building, the Bridge Chambers. Overall this area retains its maritime setting. In contrast, the western side of the dock is dominated by the mass of the Princes Quay shopping centre. It is of 1980s design and does not contribute to the historic setting of the Princes Dock.</p> <p>At the southern end the massive 18 bay Warehouse No 7 was demolished in 1972 and the area is now an open space. This is adjacent to the busy line of the A63 Castle Street, although there are some inter-visual views with the Humber Dock to the south.</p> <p>The historic setting of the Princes Dock is best represented in a view by Frank Pettinger of 1888. It shows the mass of Warehouses Nos 6 and 7 between the Princes and Humber Dock with the lock between. Along the eastern and northern sides were a series of low buildings, whilst the western side was more open.</p>	<p>Medium</p> <p>Grade II. Princes Dock was constructed in 1829. To the south a lock connected to the Humber Dock, with warehouses either side. Approximately 200m (N-S) by 120m (E-W).</p> <p>The value of the dock is both evidential, historic and communal. The Princes Dock has evidential value as an example of early warehouse construction in Hull. The asset has been completely remodelled on the northern and western sides and the value is considered medium. The Princes Dock has historic value is due to its association with the other original docks of Hull and its association with Hull's maritime past. It has historic association with the adjacent Humber Dock and Railway Dock. Grade II listed buildings in close association with the dock and retaining group value are Warehouse No 6, Colonial Chambers, Commercial Chambers, Gatehouse to Trinity House, Princes Dock Chambers, Former Warehouses on Corner of Princes Dock Street and Posterngate. The Princes Quay shopping centre on the western side and massing into the centre of the dock detracts heavily from the original historic space of the dock lowering its aesthetic value considerably, but the eastern side of the dock is a valuable and attractive townscape space. The communal value is derived from its use as an open space and part of the attraction for tourists to visit the historic elements of Hull. However, this value has been diminished by the presence of the Trinity Shopping Centre.</p> <p>The setting partially contributes to the value of the warehouse due to the proximity of the associated docks, warehouses and mercantile offices. However, again the Trinity Shopping Centre detracts from the setting of the docks and thus diminishes their value.</p>
MMS720	City Hall	11976 85;	6	<p>The current setting faces east, where it fronts on to Queen Victoria Square. The square is fronted by several large</p>	<p>High</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
		MHU6 029		<p>civic and administrative buildings with the grade II listed public toilets and Queen Victoria Statue in the centre. Carr Lane to the south is a busy urban road dominated by commercial premises. Paragon Street to the north is similarly commercial with modern landscaping in the form of trees and planters.</p> <p>The historic setting was as part of the municipal buildings that surround Queen Victoria Square. This setting survives largely intact.</p>	<p>Grade II* listed. City Hall is an important civil building and a major work of the first City Architect in Baroque revival style built in the early 20th century. Ground floor has 6 late 20th century shop fronts.</p> <p>The significance of the asset is largely derived from its historic, architectural and aesthetic value. The building makes an important aesthetic contribution to the character of Queen Victoria Square and is also a major work of the first city architect. The imposing façade and historic interior act as a statement of civic pride.</p> <p>The open nature of Queen Victoria Square at the important east end of the building emphasise the importance of the building and should be part of the historic planned setting of the buildings.</p>
MMS724	Church of St Mary	12179 98; MHU6 982	6	<p>The current setting of the church is dominated by the busy Lowgate and the large late 19th and 20th civic buildings. The west end fronts directly onto Lowgate and the West Tower forms part of the streetscape as it projects over the pavement, which continues through the tower. This was made possible by alterations in the mid-19th century, removing former entrances in the tower. To the south of the church is a small churchyard, now paved with mature deciduous trees. As a result of the west tower extending into the road, the tower is a prominent landmark along Lowgate and Market Place although it is not significantly taller than the surrounding buildings.</p> <p>The historic setting of the church was at the upper end of Lowgate within the historic street pattern of the old town. With low masses of buildings along each street radiating from the church. This has been largely retained.</p>	<p>High</p> <p>Grade II* listed. A 15th century parish church. There is a small churchyard to the south.</p> <p>The significance of the church is derived from its evidential, historic, aesthetic, architectural and communal value. All are considered high. Its historic value is as a rare example of a medieval building in Hull and has evidential value for the medieval development of the church and Hull. The architectural and aesthetic value of the building is for its medieval architecture although heavily restored, from the form of the building itself and the contribution it makes to the surrounding townscape.</p> <p>The contribution of the setting to the significance of the asset is to the aesthetic contribution of its immediate surrounds, the churchyard to the south and the urban parish context. Although the churchyard appears to have been much altered it is likely to be original to the church. The urban context of the church is an important continuation of its original setting. The surrounding buildings have been altered and make little positive contribution to the churches setting.</p>
MMS725	Hull Maritime Museum and Adjoining Railings	12190 19; MHU4 656	6	<p>The current setting of the museum is at the corner of the municipal Queen Victoria Square. The square remains the municipal centre of Hull with historic buildings lining all sides. To the north-east Queen's Docks has now been infilled and replaced with Queen's Gardens. Although the open space remains as a reference to the docks which once were there, the industrial maritime setting is completely lost.</p> <p>The historic setting of the museum when built was in a very prominent position, facing on to Queen's Docks to the east. Although when the dock offices were built the west facade fronted on to Junction Street and opposite buildings, in the early 20th century these building were</p>	<p>High</p> <p>Grade II* listed. 19th century former dock offices in Italianate 15th century style with cast-iron railing surrounding the building.</p> <p>The significance of the asset is largely derived from its historic, aesthetic and architectural value. The building has a historic associative relationship with the former Queen's Dock as a municipal building associated with the maritime history of Hull. The grand scale and maritime symbols used across the building are a visual reminder of the importance of maritime trade to Hull.</p> <p>The setting of the building's prominent location, opposite the city hall lends to the importance of the building as it still retains</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				demolished to create Queen Victoria Square. City Hall was constructed at the opposite end of the square, facing the dock offices.	its important location in Queen Victoria Square.
MMS742	Guildhall	12797 08; MHU6 951	6	<p>The current setting of the Guildhall is urban in character, with the busy Alfred Gelder Street to the south and intersection with Lowgate to the east end. The east façade is the most significant and features the clock tower and pediment.</p> <p>The traffic intersection features a central island with the Grade II listed Statue of Charles Henry Wilson (Listed Entry ID 1297048).</p> <p>The former head post office to the south enhance the grand civic nature of the setting, as does to a lesser extent the neighbouring Maritime Buildings and City Hotel. Although the late 20th century Hull Combined Court Centre does not make a positive aesthetic contribution to the setting, its function is in-keeping with this civic context.</p>	<p>High</p> <p>Grade II* listed. Baroque revival style city guildhall, civic offices and law courts built in the early 20th century. Two fronts, the main entrance facing east to Lowgate, the much larger Law Courts facing south to Alfred Gelder Street.</p> <p>The significance of the Guildhall is largely derived from its aesthetic and architectural value. The building is a good example of the baroque revival style internally and externally. Its eastern façade is impressive and well balanced with the surrounding buildings in terms of mass and scale. The clock tower acts as an important landmark and symbol of civic power. The southern façade represents a stylistically unified front along Alfred Gelder Street; dominating the streetscape. Maritime symbolism is employed to emphasise the source of the city's success.</p> <p>The setting partially contributes to its significance as the grand scale of the buildings and open space to the eastern end as part of a civic urban space contributes to the significance of the asset by emphasising its importance.</p>
MMS761	Humber Dock	11977 18.	2	<p>The Humber Dock is the largest of the two docks, and covers 6.5 acres. It opened in 1809 and was designed by John Rennie and William Chapman. The swing bridge at the south end is dated 1849. The dock has rounded corners and battered ashlar retaining walls, largely rebuilt in brick above water level; the dock, the southern lock and swing bridge is a single Grade II Listed Building. The Humber Dock closed to commercial traffic in 1969, and became a marina in 1983.</p> <p>The current setting of the dock is distinctly maritime. Along its eastern side is a row of neat low-rise buildings, some 19th century, whilst others are modern and in keeping with the historic feel of the dock. To the south are sea views over the dock through the forest of masts that make up the boats in the marina. The eastern side of the dock has a more patchwork feel. The mass of Warehouse No. 11, Grade II listed, is one of the few surviving original buildings. Other modern high-rise buildings have greater mass than the warehouse including Office Building No. 1 at the southern end of the dock. The Holiday</p>	<p>Medium</p> <p>Grade II listed. The dock was built in 1809. It is a rectangular basin 250m (N-S) by 100m (E-W), with a lock at the southern end connecting to the sea, and to the west to the Railway Dock.</p> <p>Its significance is both evidential, historic, aesthetic and communal. The evidential value is as an example of Hull's Docks and the construction of docks in the 19th century. The dock walls are constructed of battered brick masonry and stone capped. However, the northern wall of the dock has been altered in the 1970s as part of expansion of the A63 Castle Street. Its historic value represents an important survival as one of the four original docks of Hull built in the late-18th and early 19th century to improve Hull as a maritime port. The value of maritime and naval buildings has been recognised by Historic England due to the function they play in our history as an island maritime nation.⁴⁰ The docks historic value due to its early date and relative completeness in comparison with the Queen's Dock (infilled) and Princes Dock (now partially built over). The aesthetic value is not necessarily in the fabric of the structure which is utilitarian with some decorative value in the</p>

⁴⁰ https://content.historicengland.org.uk/images-books/publications/dlsg-maritime-naval-buildings/maritime_and_naval_final.pdf/

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				<p>Inn at the north-west corner is of neutral value to the setting of the dock.</p> <p>The setting of the northern end of the dock is diminished by the line of the traffic-congested A63 Castle Street, which already disrupts key views north to Warehouse No. 6 and the Princes Dock. The northern dock wall was dismantled in 1976 during the widening of the A63 Castle Street. This saw the reduction in the height of the dock wall and loss of the masonry element of the wall. The north-east corner is largely intact with surviving dock furniture (e.g. bollards), the north-west corner also partially survives.</p> <p>The historical setting of the dock included far more industrial warehouses to the western side, and the area would have been a hive of activity associated with the port of Hull. To the north between the Princes Dock and Humber Dock would have been further industrial buildings of which Warehouse No. 6 is the only survival.</p>	<p>stonework. However, as an open space with vistas across the boats and water it has aesthetic value for its distinct maritime landscape. The communal value is derived from the use of the open space around the docks. The dock forms part of the attraction of the Hull as a tourist destination.</p> <p>The setting of the dock contributes to the value of the asset as it is part of a series of docks in this location, with associated dock infrastructure, including warehouses, dock fronts and the former mercantile offices. The setting has been heavily eroded on the northern side by the existing A63 Castle Street.</p>
MMS764	Shipping Line Office	12916 45; MHU1 6232	7	<p>The proximity of the Railway Dock defines the current setting of the buildings to the north and east. It is also defined by its façade which faces onto Kingston Street and Commercial road to the south and west. These buildings have seen the almost entire loss of the historic building stock which has been replaced by 20th century housing to the south and large retail units and car parks to the west.</p> <p>The historic setting of the building would have been one of several warehouses and commercial buildings around the Railway Dock and the inter-relation with the dock is important. To the south was the terminus of the railway that ran south through the docks from the main Selby to Hull line. Views of the building along Commercial and Kington Road are a last survival of the former historic landscape along these streets.</p>	<p>Medium</p> <p>Grade II Listed. 19th century offices at the corner of the Railway Dock.</p> <p>The value of the building is principally historic and aesthetic. The Shipping Line Office has historic value as the principal office associated with the Railway Dock. It is one of several buildings that surround the dock and contribute to understanding the history of Hull's former 19th century dock. It is considered of medium historic value. The building has some aesthetic value, with well-presented façades along Commercial Road and Kingston Street. These mean that the corner of the building acts as a focus for the streetscape in this location.</p> <p>The building has limited evidential and communal value.</p> <p>The setting of the building contributes to its significance as the inter-relation with the Railway Dock and other dock buildings forming a cohesive series of buildings and monuments is part of their value.</p>
MMS765	Warehouse No. 13 Former Railway Dock Warehouse	12970 62; MHU6 031	7	<p>The current setting of Warehouse No. 13 is defined as the former warehouse buildings surviving on the Railway and Humber Dock. It has prominent views north, south and west across the Railway and Humber Docks due to its height and massing.</p> <p>Its historic setting would have been as one of several warehouses around the Railway Dock, lining the southern side. To the north would have been further warehouse buildings. However, views to the north-west would have been over the Trinity Burial Ground.</p>	<p>Medium</p> <p>Grade II Listed. 19th century warehouse, located on south-east corner of Railway Dock and west side of Humber Dock. Seven stories high.</p> <p>The value of the warehouse is historic and aesthetic. The warehouse has historic value one of several buildings that surround the dock and contribute to understanding the history of Hull's former 18th and 19th century docks. The building has some aesthetic value as an imposing mass above the surrounding docks and the last of the historic warehouses to line</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
					<p>Railway Dock, on the corner with Humber Dock. Its aesthetic significance is considered medium. The warehouse has limited evidential and communal value.</p> <p>The setting of the building contributes to its significance as the inter-relation with the Railway Dock and other dock buildings forming a cohesive series of buildings and monuments is part of their value.</p>
MMS767	Former Railway Dock, Connecting Channel, Swing Bridge	11976 89; MHU5 958	7	<p>The Railway Dock was built to transfer goods from ship to rail, and vice versa, via the North Eastern Railway goods station which was located off the south-east corner, and was opened in 1846. It covers three acres and was subsequently used by the steam liners of the Wilson Line. This dock has battered ashlar enclosing walls with rounded coping. The swing bridge at the east end is dated 1846. Both the dock and the swing bridge are a Grade II Listed Building. Adjacent to the connecting lock to the Humber Dock is a modern footbridge which is designated as an "unlisted building of positive townscape value".</p> <p>The current setting of the dock is a marina and includes several pontoons with boats. Around the dock are two historic buildings the shipping line office in the south-west and Warehouse No. 13 in the south-east. To the north is the southern boundary wall of the Trinity Burial Ground, within which are mature trees which give the northern boundary of the dock a pleasant green space. Between the heritage assets are the Holiday Inn are a series of red brick 1980s/ 1990s flats and town houses to the south of neutral townscape value.</p> <p>The historic setting of the dock was surrounded by warehouses to the south, west and north, of which the two examples discussed above are survivals. The Trinity Burial Ground to the north has always formed part of its boundary.</p>	<p>Medium</p> <p>Grade II Listed. 19th century dock built in 1850s. Railway Dock lies to the east of the Humber dock and is connected to it via a channel over which is a swing bridge.</p> <p>The value of the Railway Dock is principally historic and aesthetic. The dock was the last to be built on the edge of the old town and has limited evidential value for the construction of Hull's Docks. Its historic value represents an important survival as one of the four original docks of Hull to improve access to Hull as a maritime port. It was the last to be built and its historical value is considered medium. The aesthetic value is not necessarily in the fabric of the structure which is utilitarian with some decorative value in the stonework. However, as an open space with vistas across the boats and water it has aesthetic value for its distinct maritime landscape. The dock has limited historic communal value and is a private marina.</p> <p>The setting of the asset contributes to its value as the inter-relation between the Railway Dock, Humber Dock and indirectly the Princes Dock, but also the warehouses and chambers around these docks is critical to understanding their function and history.</p>
MMS768	Model Dwellings	11976 98; MHU1 7177	8	<p>The Model Dwelling has its principal façades on the corner of Osborne Street and Midland Street. Views along Osborne Street and Midland Street define its current setting. Midland Street still retains the grain of the original 19th century expansion, with some surviving historic buildings. The buildings on Midland Street still retain this historic mass, pattern and scale. To the south later 20th and 21st century flats dominate the landscape. Much of the setting of the buildings is defined by an internal courtyard in the centre of the U-shaped block.</p> <p>The historic setting of the Model Dwellings would have been as part of the expansion of Hull in the 19th</p>	<p>Medium</p> <p>Grade II Listed. Turner Court model dwellings dating to the mid- 19th century, U-plan around a central courtyard. Each front has a three-storey central block with two storey wings.</p> <p>The value of these buildings is historic and architectural. They were built for the Society for Improving the Conditions of the Labouring Classes and have social value of the improving nature of 19th century society. They also have architectural value as a designed example of early social housing for the working classes.</p> <p>The setting contributes minimally to the value of these heritage assets as much of the original street scape south of the</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				century on the grid pattern south of the Paragon Railway Station.	heritage asset has been removed and replaced by modern buildings.
MMS776	Paragon Station and Station Hotel	12184 34; MHU5 990	8	<p>The Station Hotel forms the eastern part of the building facing Ferensway. The setting of the building is defined to the east by the façade onto Ferensway and associated plaza to the east of the station. The addition of canopies in front of the station to some extent masks the Italianate style façade. The plaza has been improved to create a modern European feel as part of the City of Culture 2017, with a new mall located to the north.</p> <p>The Paragon Station includes the platforms that extend to the west and are covered by the sheds. The original station buildings are on the southern side and subsumed by the sheds. This means that views of the original buildings are internalised and visible from the railway tracks and platforms themselves.</p> <p>The historic setting of these buildings was as part of a terminus station set on the edge of the Georgian and Victorian expansion of Hull to the west of the docks. The Jameson Street Conservation Area to the east still retains this street pattern.</p>	<p>High</p> <p>Grade II* Listed. A mid- 19th century railway station and adjoining hotel built in the Italianate style for the North-Eastern Railway Company. The station is a fine example of the terminus station. The adjoining hotel is integrated into the overall Italianate design as a north-south block on the south-west corner of the main terminus building.</p> <p>It has both historic, communal, aesthetic and architectural value. The historic value is due to its importance to Hull as a terminus station. Its external architectural and aesthetic value relates to the Italianate design of the eastern façade. But its façade has been altered extensively and the new canopies mask the original design. The internal spaces have strong aesthetic value, survive largely intact and retain the original space and many of the original features, including the booking hall, ticket office and wooden roof details. The station has some communal value as one of the principal public transport buildings in Hull.</p> <p>The setting of the station plays a smaller part in its value. The plaza to the east of the building provides key views station and looking out from the main entrance. Recent additions have masked the historic and to some extent the aesthetic value of the views and impressions of the eastern façade. The remainder of the station's value lies in the setting provided by the railway itself approaching from the west, or the value of internal fittings and layouts.</p>
MMS782	11 And 12, Savile Street, Kingston Upon Hull	12970 29; MHU1 8297	8	<p>The current setting on the corner of Saville Street and Bond Street, faces east towards the Georgian Town Conservation Area and the Queen's Gardens. To the south are the Old Town Conservation Area and to the west the Jameson Street Conservation Area. As such it survives in an isolated group.</p> <p>There historic setting would have been on the very edge of the town, they pre-date the construction of the Queen's Dock (originally called the Old Dock) and the expansion of the Georgian Town. They would have been located on the road north-west out of town from the Beverley Gate on the turnpike road to Beverley. As the town expanded it was subsumed into the expanding Georgian and Victorian Town.</p>	<p>Medium</p> <p>Grade II Listed. Two early 18th century houses, later altered in 19th and 20th centuries, currently shops.</p> <p>The value of the buildings is historic and evidential. Houses of this date are scarce in Hull and it represents some of the oldest housing stock outside of the Old Town.</p> <p>The setting of the building contributes only slightly to the value of the heritage asset as it is now removed from its historic setting.</p>
MMS853	Alexandra Hotel	MHU1 6962	4	<p>The current setting of the Alexander Hotel is on the main A63 Castle Street. It passes close to the front of the hotel on the northern side. To the west the road passes over the Daltry Road/ Rawling Way junction on a flyover and the height and mass of this structure</p>	<p>Medium</p> <p>Grade II listed. public house. Built c.1890, with late 20th century alterations. Brick with faience tile ground floor, terracotta</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				<p>dominates and detracts from the townscape value of the current setting. The surrounding land is mixed retail and light industrial use.</p> <p>The historic setting of the hotel was along the line of the Hessle Road. At the time this was the principal thoroughfare into Hull, but was much narrower than the current A63 Castle Street.</p>	<p>and ashlar dressings and hipped plain tile mansard roof with two gables.</p> <p>The significance of the asset is both as a historic example of the main road hotel along the former Hessle Road, and its aesthetic value. The evidential value of the hotel is limited, but it has a preserved historic interior that is one of the few remaining in Hull. This is listed on CAMRA's historic pub interior's register and is considered regionally significant contributing to the overall value of the asset. The historic value of the hotel is as a surviving historic hotel on the line of the former Hessle Road out of Hull. The brick and faience tile ground floor terracotta and ashlar dressing of the principal northern and western façades is a good example of the late-19th century public house. It has communal value associated with its function as a public house, although diminished due to its current isolation from adjacent housing estates north of the A63 Castle.</p> <p>The setting of the hotel contributes only partially to its value and has been diminished due to the proximity of the A63 Castle Street to the north. Much of its value is derived from the interior of the building which is not affected by setting.</p>
MMS856	King William Hotel, Market Place	MHU2 0132	1, 6	<p>The current setting is at the end of Market place, opposing the statue of William III (from which it takes its name). The building now stands just north of the busy junction with the A63 Castle Street and Market Place. Much of the historic streetscape to the south has disappeared when the A63 Castle Street was built. The land plot to the south is vacant, but to the north Market Place is occupied and a wide thoroughfare in keeping with its former use. On the opposite side of the road, the original townscape has been lost to modern multi-storey car parks and office blocks.</p> <p>Historically the setting of the building would have been located at the southern end of Market Place, with narrow building plots towards the east and the area known as the Staithes.</p>	<p>Low</p> <p>Non-designated. King William Hotel, licensed premises from 1834 but first known to have been built in 1799. Seven-bay, three-storey town house. The value of the building is both historic and communal.</p> <p>The historic value of the asset is as an example of the former townscape that lined Market place and one of the few surviving examples of the pre-20th century building stock on the street. The communal value is derived from its use as a public house, and the only surviving example along this end of Market Place.</p> <p>The setting of the asset contributes poorly to its value as it stands isolated with other heritage assets in pockets at the end of Market Place, the current course of the A63 Castle Street already making an impact on its setting.</p>
MMS857, MMS858, MMS859	Nos 74, 75 and 76 Castle Street;	MHU5 984, MHU5 985, MHU5 986	1	<p>The current setting has already been degraded to the south by the line of the A63 Castle Street, removing the southern side of Mytongate entirely. The west and eastern views are some of the poorest in the Old Town Conservation Area showing the congested line of Castle Street.</p> <p>Their historic setting is as part only of the line of buildings, along the north side of Mytongate adopting the original medieval burgrave plots within the original street pattern of the Old Town. As such they are one of the few</p>	<p>Low</p> <p>Locally Listed. Formerly 74, 75 and 76 were listed but were de-listed in the 1980s due to heavy restoration and alteration. Series of three (74, 75 and 76) houses of late form a neat row of Georgian terraced buildings.</p> <p>The buildings have aesthetic and historic value. The historic value is as a group of original 18th/ 19th century buildings along the line of Mytongate. Their aesthetic value is as an example of typical Georgian terraced houses that would have formerly lined Mytongate.</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				examples of the grain of plots surviving on the A63 Castle Street.	The setting of the buildings have been eroded by the development of the A63 Castle Street, but they retain association with the other historic buildings on the A63 Castle Street and retains some of its former historic setting. The setting contributes to their value as it maintains the former line of Mytongate on the north side of the historic street.
MMS860	No 82-83 Castle Street, Burnett House 82-83 Castle Street	MHU2 0114	1	<p>The current setting of the building stands isolated as the lone survival of the original buildings that lined the northern side of Mytongate. The building itself has been improved as part of townscape heritage improvements (THI) sponsored by the Heritage Lottery Fund (HLF) in the last few years. The A63 Castle Street runs close to the southern façade of the building, close to the Market Place junction. Either side are vacant plots due for redevelopment.</p> <p>The historic setting of the building would have been on the northern side of Mytongate, with the street terminating to the east at Market Place. Subsequently the building of the A63 Castle Street has led to the opening out of the surrounding space.</p>	<p>Low</p> <p>Locally Listed. Burnett House was built around 1875, for Evelyn Cooke, local wine merchant and inn-keeper. Formerly the Queens or Britannia Hotel.</p> <p>The building has aesthetic and historic value. The historic value is as an original hotel on the line of Mytongate. There aesthetic value is as an example of a grand Georgian hotel with classically proportioned fenestration facing south.</p> <p>The setting of the buildings contributes little to its value. It has been eroded by the development of the A63 Castle Street, but it retains association with the other historic buildings on the A63 Castle Street and retains some of its former historic setting.</p>
MMS861	No. 65 Castle Street, Hull Telephone Exchange;	MHU1 6465	1	<p>The current setting is as one of a series of locally listed buildings along the north side of Castle Street. The surrounding landscape of historic buildings has been entirely removed south of Trinity Square, but the medieval street pattern survives. To the south the line of the A63 Castle Street is entirely modern having been built in the 1970s.</p> <p>Marked change from the original historic setting of the buildings which would have been associated with the historic Mytongate, demolished on its southern side in the 1970s.</p>	<p>Low</p> <p>Locally Listed. A distinctive brick and terracotta building opened by the National Telephone Company in 1911.</p> <p>The value of the building is historic, aesthetic and architectural. Its historic value lies as a one of the few surviving buildings on the north side of Castle Street, that survives from the original line of Mytongate. It also has value as the location of the only surviving independent telephone exchange in the country. It has architectural and aesthetic value both as an example of a terracotta faced early 20th century building, but as an elaborate example of a municipal building designed in the Edwardian Baroque, with elaborate detailing.</p> <p>The setting of the building has been eroded by the development of the A63 Castle Street, but it retains association with the other historic buildings on the A63 Castle Street and retains some of its former historic setting.</p>
MMS862	Former Post Office Building	MHU2 2320	1	<p>Neo Georgian former Post Office Building built in the 1930s.</p> <p>The current setting of the building is an area of derelict land plots. It stands at the corner plot of Blanket Row and Queen Street and acts as a focus within the local streetscape. An application was received in 2003 to demolish this property and adjacent properties in Blanket Row and it is the only building to remain standing.</p>	<p>Low</p> <p>Non-designated. The building has architectural value as an example of Neo-Georgian commercial building. It also has a prominent street position and historic aesthetic within part of the Old Town Conservation Area that has limited historic building stock. It is the only building that survives from the pre-World War II townscape.</p> <p>The historic setting has almost entirely been lost and the surrounding area is</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				It historic setting would have been as a prominent building in the fine-grained streetscape that made up the southern element of the original Old Town. Opposite would have been a façade of buildings along the eastern side of Queen Street. This is all now gone and vacant plots awaiting redevelopment now stand opposite. This is partially due to World War II bombing, but is also because of latter slum clearance and redevelopment.	already subject to redevelopment. It has value due to its setting because of its street corner position which defines this medieval origin streets of Blanket Row and Queen Street.
MMS865	Whittington and Cat public house, Commercial Road	MHU20545	4	<p>The current setting of the public house is isolated from any original buildings around it. Instead it is located within the landscaped area south of the A63 Castle Street and Mytongate Junction. To the west and south are modern retail parks and car parks.</p> <p>Its historic setting would have formerly stood within a streetscape of industrial buildings and warehouses associated with the area west of the Railway Dock. To the north the entire historic streetscape of close knit terraced houses and shops on a grid pattern has been entirely lost.</p>	<p>Low</p> <p>Locally Listed. An attractive five bay, three storey, red brick building dating to the late-19th to early 20th century.</p> <p>It has historic value. Its significance is mainly historic as a surviving example of the public houses located in the 19th century industrial landscape west and north of the Humber Docks. The interior has been largely reworked and the exterior facades altered from the original and is therefore considered low. It has some aesthetic appeal due to the good ceramic ornamentation and architectural detail, including shaped gables, raised pilasters and a balustrade. It retains some communal value as a public house.</p> <p>The historic setting has been almost entirely lost and the contribution the setting makes to the value of the building is negligible.</p>
MMS910	Statue of William de la Pole		7	<p>The current statue of William de-la-Pole is located at the junction of Queen Street and Nelson Street on the Humber Foreshore within the Old Town Conservation Area. It overlooks the Humber Estuary with views out across the estuary and east towards the mouth of the River Hull. The immediate vicinity forms an area of urban landscape sympathetically designed to tie in to the Humber Foreshore and adjacent piers. The statue has visual association with the Grade II listed former Pilots Office, the former Corporation Pier Station, the Minerva Hotel and the Public conveniences on Nelson Street.</p> <p>To the north is the grid pattern of 19th century buildings that reflects the Old Town Conservation Area south of Humber Dock Street. These overlook the statue but there are clear sightlines along Queen Street. The statue faces north along Queen Street towards the Church of the Holy Trinity and the core of the historic town. This connects the statue to the town and reflects the status of William de la Pole as one of the principal people in Hull's early history. The streetscape of Queen Street has been in decline since the bombing raids which occurred during World War II and subsequent slum clearances. Although some historic</p>	<p>Medium</p> <p>Grade II listed. The statue of William de-la-Pole commissioned from William D Keyworth Jnr by Robert Jameson and unveiled 1870, is listed Grade II for the following principal reasons:</p> <p>The statue has historic value as the subject William de-la-Pole (1332-1335) was Kingston upon Hull's first Mayor and Baron of the Exchequer, was an important figure in a local and national context and erection of a life-sized statue is testimony to his significance. He was a wealthy wool merchant and royal money lender, who had provided funding for Edward II to mount a military campaign over Gascony against the French, and later lent Edward III money to mount a war against Scotland.</p> <p>It also has architectural value as the designer was William D Keyworth Jnr was a well-respected and a successful late-C19 sculptor on a national level, who has a number of listed statues to his name; The statue has artistic quality as it demonstrates Keyworth's high quality of work and craftsmanship in an expressive and detailed figure in life-like period costume; It has group value: due to its direct association with the listed Grade II* and Grade II statues of William Wilberforce and Andrew Marvell in Hull.</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				buildings survive many land plots stand vacant and are surrounded by hoarding. Despite this there is a degree of screening provided by the curve of Queen Street. This limits views of the A63 Castle Street whilst maintaining sightlines to the tower of the Church of the Holy Trinity.	The setting of the statue contributes to its significance as it forms part of a focal point at southern end of the Old Town Conservation Area and has key views north into the city and over the Humber Estuary. However, the surrounding townscape screens the statue from the A63 Castle Street.
MMS983	Cream K6 Telephone Kiosk, Waverley Street	n/a	4	<p>The current setting of the telephone box is on Waverley Street, south of the A63 Castle Street as it passes to the west of Hull's historic core. The telephone box sits isolated in a niche surrounded by steel fencing on the south side of the road.</p> <p>The historic setting of the phone box is unclear. This was originally Waverley Street prior to the construction of the A63 Castle Street in the 1970s. The phone box appears to be on this alignment but it is not clear if this is its original location or has been moved in the 1970s. None of the original buildings on Waverley Street survive and the nearest building that ties the phone box into the historic setting is Grade II listed Frankie's Vauxhall Tavern to the west.</p>	<p>Negligible.</p> <p>Non-designated. Its setting does not significantly contribute to its value. The surrounding streetscape has been eroded and it is not clear if the telephone kiosk has been repositioned as part of the A63 Castle Street improvements in the 1970s and this reduces its value as it is dislocated from its setting. The telephone box has historic value as an example of the Cream K6 telephone kiosk. The K6 telephone kiosk has associated group value with a series of telephone kiosks located in Hull. There are five list entries for Cream K6 Telephone Kiosks in Hull (with several non-designated examples around the city). They were cast-iron and follow designs by Sir Giles Gilbert Scott. Made by various contractors. Their colour reflects the Hull Corporation Telephone Department. In 1914 the then Hull Corporation purchased the city's telephone network, whereas in the rest of the country the public telephone box network was taken over by the Post Office (and then British Telecom).</p>
MMS985	Drypool Bridge	MHU1 6509	5	<p>The current setting of the bridge is within an area on the eastern edge of the Old Town Conservation Area. On the western bank the area has seen improvement south of the bridge with a wooden walkway and former listed warehouses converted to flats (MMS739, MMS745). North of the bridge the setting has seen the piecemeal survival of historic buildings with derelict plots between. The eastern bank is likewise partially developed with a series of vacant plots and occasional survival of historic buildings. The survival of former dry docks and slipways along the riverside means the bridge maintains its maritime connection. Views exist up and down the River Hull of the riverbank.</p> <p>The historic setting would have been as part of the docks along the western side of the Old Town Conservation Area. When it was built in the 1950s the area was already in decline with vacant plots already present.</p>	<p>Low.</p> <p>Distinctive Scherzer Rolling lift bridge built in 1959. The setting forms part of the bridges significance and connects it with its maritime function as a working rolling bridge. The bridge has some historic and aesthetic value. Its historic value is as one of a series of rolling lift bridges along the River Hull. These would have been used to allow passage of taller boats up the river. These are a distinct feature of the rivers on the eastern side of the UK and reflect a design imported from the lowlands of Europe. Its aesthetic value is as an industrial maritime feature of the river.</p>
MMS989	Humber Bridge	14473 21	10	The current setting of the Humber Bridge dominates the Humber Estuary. Its span from Hessle on the north bank to Barton-upon-Humber on the south bank means that it is visible along the Humber Estuary from both the east	<p>High.</p> <p>Grade I listed. It has architectural value due to its design. It forms a sublime, landmark bridge demonstrating an exemplary pairing of functional engineering with aesthetic quality to produce a bridge</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				<p>and west. It forms the focal and dominant point for views from either bank. It is a working road bridge and the constant noise of traffic is present from the bridge which forms the main arterial link between North Lincolnshire and East Yorkshire (formerly the unitary authority of Humberside). Industry continues to line the sides of the Humber Estuary on either side and it continues to be set within the environments of a working maritime estuary. Despite this there are areas of farmland along the estuary but these predominate on the southern bank of the Humber.</p> <p>Given its recent construction (1973-1981) its historic setting was almost identical to its current setting. The increase in the size of commercial shipping means that the port of Hull has increased in capacity at the expense of the port of Goole. This has seen a reduction in the quantity of maritime traffic up the Humber Estuary. Heavier industries formerly lined the Humber Estuary have declined but have been replaced by distribution centres, light industry and some alternative heavy manufacturing (e.g. wind farms) so that the overall setting remains changed but not intrinsically altered. Transport routes along the northern side of the Humber Estuary are identical to those that existed in the 1980s with road (A63) and rail located in a parallel corridor. The historic setting would have been very similar to its current setting.</p>	<p>of great sophistication and integrity; It was also at its time of building a high point marking the zenith of Freeman Fox & Partners (Engineers) bridge-building prowess as a British civil engineering firm specialising notably in large-scale suspension bridges including the Forth Road Bridge, Severn Bridge, and Bosphorus Bridge in Istanbul; It has aesthetic quality due to the inclusion of a consulting architect on the design team resulted in a taut, pared-down elegance, which from a distance almost belies the bridge's extreme size and strength, and produces a visual harmony which enables it to sit intimately within the landscape that it occupies. Suspension bridge, built 1973 to 1981 with a deck carrying a dual two-lane carriageway with footpaths and cycle tracks. Two towers, at the north, Hessle tower and the south, Barton tower. At either end of the bridge are massive, rectangular anchorages for the bridge cables. The bridge has high value due to several fundamental elements.</p> <p>The setting of the Humber Bridge contributes to its significance. But the setting is fundamentally associated with the Humber Estuary, the mix of landscapes reflect both industry, infrastructure and farming along the Humber Foreshore. It also has high historic value despite its recent construction. It represented an engineering first when completed in 1981. The Humber Bridge had the longest single bridge span in the world at 1,410 metres, a record it impressively maintained for another 16 years, and even now it remains in the top ten longest spans worldwide; It was showed technological innovation through the use of reinforced concrete to construct the towers was the first time that concrete had been used for such a long span suspension bridge, towers for such bridges having previously been made of steel as for the Forth Road Bridge and Severn Bridge.</p>
MMS990	Tidal Surge Barrier		5, 7	<p>The current setting of the Tidal Surge Barrier is at the mouth of the River Hull on the edge of the Old Town Conservation Area. It forms a tall imposing structure that dominates the local skyline at this end of the town. It is visible along the River Hull from the mouth of the River Hull and upstream to the north, although some screening is provided by the Myton Bridge.</p> <p>The river in this location is intertidal mud flats with the channel running between. The banks are of robust industrial construction and formed of pile driven metal sheets and concrete.</p> <p>On the right bank (west) the area has seen considerable improvement in recent years and the bridge now stands in an area of urban realm landscaping using brick, modern street furniture and sympathetic planting.</p>	<p>Medium</p> <p>Grade II listed. Tidal surge barrier and standby generator house. 1977-1980 for the Yorkshire Water Authority, designed by Shankland Cox Associates, with Oliver Cox as partner-in-charge, and consulting engineers Sir M MacDonald & Partners.</p> <p>The tidal surge barrier is of medium value due to its architectural interest. It has design quality as the barrier successfully combines functional engineering with aesthetic quality in a slender and dramatically sculptural arch of angular planes; The craftsmanship of the structure is clearly demonstrated in the careful attention paid to good use of materials in the crisply board-marked and jointed shuttering of the concrete towers and grid-like, curtain wall glazing of the stairwells; The partner-in-charge was Oliver Cox, a well-respected post-war architect, who</p>

MMS No	Name	NHL/ HSMR Ref	Zone	Baseline setting	Value / significance
				<p>The area beneath the Myton Bridge has not been improved to same standard and retains concrete finishes. On the left bank (east) the area forms part of the landscaping around 'The Deep' including road infrastructure, car parks, green spaces on the verges and a viewing area over the Humber Estuary. Left and right banks are now linked by a sympathetically designed pedestrian bridge located directly south of the barrier.</p> <p>The historic setting of the barrier would have been as part of the derelict docklands along the River Hull. At the time in the 1980s the area was in economic decline. It was one of a series of schemes designed to both protect Hull and revitalise this area. Its current setting has changed due to the construction of adjacent schemes such as 'The Deep', the pedestrian footbridge and the improvements to the urban landscape.</p>	<p>worked closely with the notable civil engineering firm Sir M MacDonald & Partners to ensure that the machinery could be accommodated without destroying the geometric form of the barrier; The structure has been designed to allow the raised monolithic barrier gate to turn through 90 degrees to a horizontal position, allowing sufficient room for the navigation of larger shipping whilst limiting the overall height of the barrier to prevent it unduly dominating nearby historic buildings, most notably Holy Trinity Church;</p> <p>It has historic interest due to its location standing at the confluence of the River Hull and the Humber estuary, the barrier was engineered to protect the low-lying City from the severe tidal surges it periodically experienced, most recently in 1969, when the highest recorded water level to date was reached in the Humber, resulting in heavy flooding of many hundreds of properties.</p> <p>Its setting contributes to its significance in the respect that it now acts as a prominent landmark on the River Hull at this end of the city. It is predominantly surrounded by modern buildings and the urban landscape has been improved in this area meaning the barrier provides a focal point for the south of the town which contrasts with the Old Town but reflects the maritime past of Hull.</p>

2.2 Conservation areas

2.2.1 The following gazetteer lists the conservation areas within the 500m boundary of the study area in Table 2.2 below. Each conservation area has been examined both as an entity and in the case of the Old Town conservation area due to its size and complexity as individual sub-zones. Within these individual sub-zones each historic building has been considered as a group.

Table 2.2: Conservation areas (including individual sub-areas) impacted by the Scheme

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
A1	Old Town Central and Eastern, Zone 1, the High Street, Lanes and Staithes	<p>Grade I – Wilberforce House Museum and Attached Garden Wall (MMS735); Maisters House (MMS705);</p> <p>Grade II* – Statue of William Wilberforce in Garden of Wilberforce House (MMS737);</p> <p>Grade II – Warehouse (MMS627); 5 Scale Lane (MMS635); House to Rear of Danish Buildings (Danish Buildings not included) (MMS641); Ye Olde Black Boy public house (MMS647); 42 and 43 High Street (MMS650); Crowle House (MMS652); 153 High Street (MMS659); 1 Bishop Lane (MMS662); 2 Bishop Lane (MMS663); Pacific Club (MMS664); Pillar Box Outside Number 40 (MMS667); 38a High Street (MMS677); Hull and East Riding Museum (MMS692); 35 High Street (MMS709); 161 High Street (MMS716); Oriol Chambers (MMS733); Georgian Houses, Wilberforce House Museum (MMS740);</p> <p>Non-designated – The Manchester Arms, Scale Lane (MMS891); Former Drinking Fountain and Cattle Trough, High Street (MMS897).</p>	<p>The character of this sub-zone is as one of the urban streets that form the traditional medieval street plan of Hull.</p> <p>The current setting of the historic buildings and conservation area on the High Street, with Lanes and Staithes abutting this street forms the centrepiece of the most ancient part of the Old Town. This is an urban space retaining some of its medieval and post-medieval character. The built form provides a strong sense of enclosure with closed vistas. The scale of buildings is domestic and the narrow roadway and footpaths combined with the comparatively high facades creates an intimate character.</p> <p>This reflects the historic setting of the buildings within one of the most densely packed areas of the Old Town set back from the wharves on the River Humber.</p>	<p>High</p> <p>Contains Grade I and II* buildings. The value of the area is both aesthetic and historic.</p> <p>It forms part of the original core of the Old Town of Hull. High Street, with Lanes and Staithes abutting this street forms the centrepiece of the most ancient part of the Old Town. It has some of the greatest concentration of listed buildings, including two Grade I and one Grade II* buildings and a further 18 Grade II listed buildings.</p> <p>The setting of the buildings in this area of town forms an important part of their value.</p>
A2	Old Town, Central and Eastern, Zone 2, the Wharves and River	<p>Grade II – Pacific Court/ 36a High Street (MMS655); 38b High Street (MMS668); 37a and 37b High Street (MMS672); Lister Court (MMS739); Pease Court (MMS745)</p> <p>Non-designated – Building to Rear of 52 High Street (MMS877); Drypool Bridge (MMS985).</p>	<p>The sub-zone forms part of the wharves of the River Hull that has an industrial character associated with its maritime function.</p> <p>The current setting of the historic buildings and conservation area along the western bank of the River Humber is defined by tall brick warehouse frontages, set at the back of a predominantly timber wharf. However, activity of this type is now limited. Several of the warehouses, including all the designated assets along the western bank have been renovated since the 1980s.</p> <p>The historic setting was one of a historic wharf along the River Humber. It would have been mirrored on the eastern side of the river by similar economic activity, but</p>	<p>Medium</p> <p>Grade II buildings.</p> <p>The value of the asset is largely derived from their historic association with the former maritime use of the River Hull. Some of these warehouses date back to the 18th century before the building of the docks on the western side of the Old Town, when this was the principal shipping location. Others date to the 19th century and represent the continued use of this area as wharves.</p> <p>The setting of these buildings along the western bank of the River Hull forms an important part of their value. They contribute to the setting of the</p>

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
			with a series of graving docks and wharves.	sub-zone of the conservation area.
A3	Old Town, Central and Eastern, Zone 3, Lowgate/ Market Place	<p>Grade I – Statue of King William III and Flanking Lamps (MMS600);</p> <p>Grade II* – Church of St Mary (MMS724);</p> <p>Grade II – Public Toilets to North of King William III Statue (MMS601); Hepworth’s Arcade (MMS631); 9, Market Place (MMS634); 62 and 63 Market Place (MMS636); 41 Lowgate (MMS656); Former Lloyds Bank (MMS642); 32 Silver Street; (MMS658); 11-13 Bishop Lane; (MMS676); 14 Bishop Lane (MMS679); Exchange Buildings (MMS700); War Memorial 10 Metres South of Church of St Mary (MMS712); Ocean Chambers (MMS714); St Marys Court (MMS715); Former Head Post Office (MMS726);</p> <p>Non-designated – King William Hotel, Market Place (MMS856); Former Post Office (MMS879); 151 High Street; (MMS880); 44 to 46 High Street, Danish Buildings (MMS881); 39 High Street (MMS884); Ye Olde Corn Exchange, Nos. 1-6 North Church Side (MMS888); 51 and 52 Market Place, Hull (MMS890); Suffolk Chambers, Scale Lane (MMS892); Yorkshire Insurance Buildings (MMS894) Standidge Buildings, Chapel Lane (MMS895).</p>	<p>The character of this sub-zone is as part of the urban core of the old medieval town.</p> <p>The current setting of the historic buildings and conservation area is a continuous linear north-south route through the old town terminating at the southern end at the junction with Castle Street (A63). It forms a wide thoroughfare in comparison with the adjacent streets, with individual buildings having wider and taller façades.</p> <p>The southern end of the street has a close association with the Church of the Holy Trinity Church (Grade I) around which is a complex of streets retaining their medieval layout and character. At the northern end of Lowgate the tower of St Mary’s Church (Grade II*) punctuates the closed views along the length of Lowgate.</p> <p>The historic setting of the area was as the principal streets of the Old Town around the Church of the Holy Trinity Church. The southern end would have been part of the former market of which the statue of William III would have formed a focus. The road was continuous to the south leading on to Queen Street, with Mytongate entering from the west where the A63 Castle Street now exists. Historically on the eastern side would have been the medieval buildings and complex of the former Augustinian Friary.</p>	<p>High</p> <p>The value of the building and conservation sub-zone is historic and aesthetic.</p> <p>Grade I and II* buildings are associated with the Grade II buildings and this area represents one of the best-preserved areas of the Old Town particularly along Lowgate. The value of these assets is both aesthetic and historic as they represent some of the best examples of historic buildings at the core of the Old Town.</p> <p>The setting is an important aspect of these buildings in particular those at the north end of Lowgate. The setting of the buildings at the southern area of Market Place are discussed in greater detail above in Table 2.3 (MMS600, MMS601).</p>
A4	Old Town, Central and Eastern, Zone 4, Lowgate/ Alfred Gelder Street Junction	<p>Grade II* – Guildhall (MMS742);</p> <p>Grade II – Two K6 Kiosks Flanking the Right Entrance at The Head Post Office (MMS730); K6 Telephone Kiosk at Staff Entrance to Head Post Office (MMS734); Statue of Charles Henry Wilson 20 Metres East of Guildhall (MMS741); Maritime Buildings (MMS743); City Hotel (MMS744); White Hart Hotel (MMS748); Alfred Schofield House and Attached Railings (MMS749).</p>	<p>The character of this sub-zone is as one of traditional street plans that form the old medieval town of Hull.</p> <p>The current setting of Lowgate and Alfred Gelder Street retains many of the urban medieval characteristics of the Old Town but the street and frontage dimensions are much wider. Public and civic buildings predominate around the Lowgate junction. Further east along Alfred Gelder Street there is a mixture of modern office and residential development.</p> <p>The historic setting would have been as part of the medieval street plan of the old town of Hull.</p>	<p>High</p> <p>Grade II* Guildhall and several Grade II buildings. The value of these buildings is historic and aesthetic, along with conservation sub-zones A1 and A3 form some of the most important historic areas of the town.</p> <p>Their setting contributes to their significance as it defines the former medieval street pattern of the Old Town.</p>
B1	Old Town, Western and Northern Part, Zone 1 Queen Victoria Square	<p>Grade II* – Hull Maritime Museum and Adjoining Railings (MMS725); City Hall (MMS720);</p> <p>Grade II – Retaining Walls of Princes Dock (MMS673); Ferens Art Gallery (MMS682); Monument Buildings (MMS688); The Empress</p>	<p>The townscape of this sub-zone has given way from the medieval character of the areas to the south and east and the buildings are more monumental and streets wider. This gives the area a civic character reflecting its design as the new municipal centre of Hull.</p>	<p>High</p> <p>Grade II* and II. The buildings have historic and many have aesthetic value.</p> <p>The conservation area sub-zone is associated with the northern part of the Old Town. The historic value lies in the former use and association of many of</p>

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
		<p>public house (MMS708); 2 Parliament Street (MMS727); Former Yorkshire Bank (MMS732); 41-51 Savile Street (MMS738); Town Hall Chambers (MMS736); Bond Warehouse, 8 Hull Business Centre (MMS747); 79 Lowgate (MMS750); 76, 77 and 78 Lowgate (MMS746); Public Toilets, Queen Victoria Statue (MMS718); 1 Parliament Street (MMS729); The Punch Hotel (MMS770);</p> <p>Non-designated – Former Victorian Water Offices, 100 Alfred Gelder Street (MMS896).</p>	<p>The current setting of the historic buildings and conservation area radiates away from Queen Victoria Square and forms the civic centre of the old town. Important buildings include the Hull Maritime Museum and Adjoining Railings (former the Hull Dock Company); and the City Hall are located on the square (both Grade II* listed). The Queen's Dock has been infilled to create Queen's Garden to the north. The relationship with the Princes Dock to the south is partially retained.</p> <p>The area was historically outside the Old Town and its original historic setting, was between the Queen's Dock to the north and the Princes Dock. It changed in the early 20th century to create a municipal space, but would have retained a relationship with the Queen's Dock and Princes Dock. But many of the earlier buildings survive.</p>	<p>the buildings with the maritime industry of Hull and the development of a municipal identity in the late-19th and 20th century, reflecting the importance of Hull as a port.</p> <p>The conservation sub-zone has aesthetic value as the municipal centre point of the historic town from which radiate away.</p> <p>The setting of the buildings and conservation sub-zone contribute to its value as they are directly associated with the Princes Dock to the south and the former Queen's Dock to the north (now Queen's Garden).</p>
B2	Old Town, Western and Northern Part, Zone 2 Princes Dock Street	<p>Grade II – Warehouse at South East Corner of Princes Dock (MMS602); Former Warehouses on Corner of Princes Dock Street and Posterngate (MMS625); Chapel at Hull Trinity House and Statue Outside East Front (MMS632); Princes Dock Chambers and The Quayside public house (MMS638); Gatehouse to Trinity House (MMS644); Commercial Chambers, Roland House (MMS651); Colonial Chambers (MMS665);</p> <p>Non-designated – Buoy Shed (MMS882); Trinity House Navigation School (MMS883).</p>	<p>The setting of the historic buildings and conservation area is dominated by the Princes Dock. On the eastern side of the dock there are several Grade II listed buildings. As a group these form an elegant dockside walk reflecting the maritime industrial character of the sub-zone. The western side of the adjacent Princes Dock does not form part of the conservation area. The imposing mass of the Trinity Shopping Centre diminishes the current setting of the group. It is further eroded by the perceptible noise and the visible impact of traffic from the A63.</p> <p>The southern end of Princes Dock Street forms a less cohesive historic unit. It is still within the Old Town conservation area but few historic buildings now survive.</p> <p>The historic setting of the dock included several warehouses at the southern end in including No 6 and a series of dock related chambers along the dockside on the entire eastern side.</p> <p>Some historic buildings have been lost at the southern end of the street but sufficient survive to maintain the character and feel of a late Georgian/ early Victorian dock side street.</p>	<p>Medium</p> <p>Grade II. The buildings and conservation sub-zone have historic and aesthetic value.</p> <p>The buildings are of historic value as a series of dock related offices or chambers on the east side of Princes Dock. The dock itself also forms part of the four earliest docks in Hull that followed the follows the western line of the medieval town wall. The wall was demolished to facilitate the Princes Dock.</p> <p>The aesthetic value of this group of buildings is due to the proximity of the adjacent Princes Dock, the principal façades of many of the buildings and views along the dock front. The aesthetic value of the conservation sub-area is diminished by the imposing presence of the Trinity Shopping Centre.</p> <p>The setting of many of the Grade II buildings is directly associated with the Princes Dock as they were commercial chambers of many of the merchants who used the dock. The inter-relation with the dock and these buildings forms an important part of their value.</p>
B3	Old Town, Western and Northern Part, Zone 3 Castle Street, Dagger Lane to Vicar Lane	<p>Non-designated – 74 Mytongate (MMS857); 75 Mytongate (MMS859); 76 Mytongate (MMS858), Burnett House (82-83 Castle Street, MMS860); Telephone Exchange, Mytongate (65 Castle Street, MMS861).</p>	<p>The current setting of historic buildings and conservation area is modern in character but is defined around the original medieval street pattern.</p> <p>The area developed to the north of the town on the existing medieval street pattern. During the 1970s the area was redeveloped with low-rise one and two-storey residential</p>	<p>Medium</p> <p>The conservation area sub-zone overall has medium value, but is considered one of the weakest elements of the Old Town Conservation Area.</p> <p>The value of the buildings and conservation area sub-zone is derived from its historic value as a remnant of the former line of Mytongate, and associated</p>

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
			<p>buildings retaining to lesser extent the character of the Old Town.</p> <p>The historic setting was close knit streets of the Old Town defined by Princes Dock Road at the western end, Dagger Lane, Trinity Court, Fish Street and Grammar School Yard. These terminated in the former and now lost line of Mytongate.</p>	<p>streetscape including Dagger Lane, Fish Street and Vicar Lane. These form a narrow streetscape of the former medieval town. However, the buildings that line the streetscape are predominantly 20th century in date. Therefore, the value of this sub-zone is derived from its street pattern more than its building stock.</p> <p>There are no listed buildings or scheduled monuments in this zone of the Old Town conservation area. The best architectural buildings are a row of buildings facing south onto the A63 that include 65, 74, 75, 76, 80 and 82-3 Castle Street (formerly Mytongate). The buildings (see above) individually have low evidential, aesthetic and communal value. The individual buildings only partially contribute to the significance of the conservation area sub-zone overall.</p> <p>The setting of these assets has been eroded by the construction of the A63 Castle Street in the 1970s and the road does not contribute to the value of the conservation sub-zone.</p>
B4	Old Town, Western and Northern Part, Zone 4, Trinity Square, North and South Church Side	<p>Grade I – Parish Church of The Holy Trinity and Churchyard Wall (MMS618); Hull Trinity House (MMS628);</p> <p>Grade II* – Old Grammar School Museum (MMS612);</p> <p>Grade II – Kings Market (MMS609); Building Between Kings Market and Wool Exchange (MMS610); Wool Exchange (MMS611); Former Fish Street Day Schools (MMS613); Electric Street Lamp at South West Corner of Holy Trinity Churchyard (MMS614); Statue of Andrew Marvell on North Side of South Church Side (MMS616); 9½, 10, 10½ and 11 King Street (MMS617); Electric Street Lamp at North West Corner of Holy Trinity Churchyard (MMS621); K1 Telephone Kiosk In Market Hall; (MMS623); The Kingston public house (MS624); The Market Hall and Bob Carvers Fish and Chip Restaurant (MMS626); 8 and 10 Trinity House Lane (MMS633);</p> <p>Non-designated – Blue Bell Hotel (MMS878); Water Pump, North Church Side (MMS889).</p>	<p>The character of this area is as part of the fundamental core of the historic medieval town of Hull. It represents the best preserved area in terms of medieval character, street pattern and scale of the buildings. The church and associated Trinity Square act as a focal point.</p> <p>The current setting of the historic buildings and conservation area is an area of the former historic town centred around Trinity Square, at the western end of the Grade I listed Church of the Holy Trinity. From this the medieval street plan extends from this central square along Trinity House Lane, and King Street to the west and North and South Church Side to the east.</p> <p>The historic setting of the area was the original churchyard formerly existed around three sides of the church, but originally encompassed a much larger area. The Grade II* listed Old Grammar School Museum stands on the south-west corner of Trinity Square.</p>	<p>High</p> <p>Grade I, II* and II. The Grade I and II* buildings are discussed above. There are several Grade II listed buildings on the streets radiating out from the church.</p> <p>These have historic value as buildings surviving on the street plan and adopting the plots of the medieval town. They show the development of Hull as a town. Many also have maritime associations with the port of Hull.</p> <p>The aesthetic value of the conservation area is as one of the best-preserved areas of the Old Town Conservation Area with close knit streets overlooked by the mass of the Church of the Holy Trinity.</p> <p>The Trinity Square has communal value, both historic and current as a former market place and now an open plaza.</p> <p>The setting of the historic buildings around the Church of the Holy Trinity contributes to their value, as this forms the core of the Old Town.</p>
B5	Old Town, Western and Northern	Grade II* – Minerva Lodge of Freemasons Number 250 (MMS619);	This area has an urban character that reflects two fundamental elements of the conservation area	<p>High</p> <p>Grade II* and Grade II. Minerva Lodge is discussed above.</p>

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
	Part, Zone 5 Posterngate	Grade II – Warehouse at Corner of Robinson Row (MMS615); 3 Prince Street (MMS620); 6 Posterngate; (MMS622); Carmelite House (MMS629); Former Department of Transport Marine Office (MMS630); Non-designated - 8 Dagger Lane, Hull (MMS876).	the medieval streetscape and the maritime association of the docks. The setting of the area is one of enclosed streets of medieval origin, with surviving post-medieval buildings, many of them associated with the maritime port. These include the Minerva Lodge of Freemasons Number 250 (Grade II*) and several other Grade II listed buildings associated with the docks and maritime function of Hull. The historic setting of the conservation area and heritage assets at street level includes narrow medieval streets, many of them cobbled. It is close and confined around Trinity Square with views extending along the principal streets to the west, south and to the east towards Princes Dock. However, the mass of the Holy Trinity Church and the landmark of its spire extend beyond the immediate surrounds and act as an anchor for views throughout the city.	The buildings and conservation area sub-zone have historic value due to their survival of the historic street plan of Hull. The historic buildings in this area have historic value as many have an association with the port of Hull and the docks located to the east. They are a continuation of the well-preserved sub-zone B4 to the east as part of the best-preserved elements of the Old Town Conservation Area. The setting of the historic buildings west of the Church of the Holy Trinity contributes to their value, as this forms the core of the Old Town.
B6	Old Town, Western and Northern Part, Zone 6, Whitefriargate and Silver Street	Grade II* – 10-15 Whitefriargate (MMS646); Former National Westminster Bank (MMS661); Grade II – 4, 5 and 6, Silver Street (MMS637); Conservancy Buildings (MMS639); 1 and 3 (Barclay's Bank) Trinity House Lane (MMS640); 4, 5 and 6 Whitefriargate (MMS643); 1, 2 and 3, Whitefriargate (MMS645); 16-19, Whitefriargate (MMS648); 7, 8 and 9 Whitefriargate (MMS649); 27 and 28, Silver Street (MMS653); 20 Whitefriargate (MMS654); 24-28 Whitefriargate (MMS657); 21, 22 and 23 Whitefriargate (MMS660); 30-33 Whitefriargate (MMS669); Midland Bank (MMS670); 46, 47 and 48 Whitefriargate (MMS684); 40-43 Whitefriargate (MMS686); 39 Whitefriargate (MMS689); 34 and 35 Whitefriargate (MMS699).	The character of this area is as one of the principal streets of the historic part of the Old Town of Hull that is now an important shopping area. The current setting of Whitefriargate is a pedestrianised commercial street with modern shops at ground floor level. The historic setting would have been one of the principal streets within the Old Town of Hull extending to the east from the Postern Gate.	High The buildings and conservation sub-area have high value. The value of this conservation sub-area and many of the historic buildings within it is historic and aesthetic. This represents one of the earliest streets in the Old Town and the buildings on the southern side of the street are listed for their architectural value and the historic value as they still adopt the original medieval burghage plots. The street forms one of the principal routes towards the Queen Victoria Square and views down the street contribute to the aesthetic value of the conservation sub-area. The setting of the historic buildings contributes to their value, as this forms the core of the Old Town.
B7	Old Town, Western and Northern Part, Zone 7, Parliament Street	Grade II – 15 Parliament Street/ 53 Whitefriargate (MMS674); 12 Parliament Street (MMS680); 11 Parliament Street (MMS685); 16 Parliament Street (MMS687); 10 Parliament Street (MMS690); 17 Parliament Street (MMS691); 9 Parliament Street (MMS695); 18 Parliament Street (MMS697); Parliament House (MMS701); 19 Parliament Street (MMS702); 7 Parliament Street (MMS703); 20 Parliament	The character of this area is an urban street with some municipal buildings that are predominately Georgian in age. The current setting of the historic buildings and the conservation sub-area is of a residential street in the northern part of the Old Town comprising terraces of uniform properties on both sides of the street. Despite the loss of a few properties and the presence of wall-to-wall concrete paving it still retains its Georgian character.	High The value of these buildings and conservation area sub-zone is historic, aesthetic and architectural as it represents the most complete surviving example of a Georgian Street in Hull. The character is of a residential street interspersed with municipal buildings that retains its originally designed Georgian grandeur.

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
		Street (MMS707); 6 Parliament Street (MMS710); 5 Parliament Street (MMS713); 21 Parliament Street (MMS717); 4 Parliament Street (MMS719); 22 Parliament Street (MMS721); 3 Parliament Street (MMS722); 23 Parliament Street (MMS723)	Its historic setting was as part of The Georgian expansion of the northern part of the town after the removal of the walls. Parliament Street was laid out in the late 18 th century to link Whitefriargate with Quay Street and The Dock, replacing an area of slum properties. The new street was Georgian residential in character.	
B8	Old Town, Western and Northern Part, Zone 8, Manor Street, Land of Green Ginger and Bowlalley Lane	Grade II* – The Old White Hart Inn (MMS671); Grade II – 67 Whitefriargate (MMS666); George Hotel (MMS675); Imperial Chambers (MMS678); 7 Land of Green Ginger (MMS681); Victoria Chambers (MMS683); County Buildings (MMS693); 15 and 16 Bowlalley Lane (MMS694); 12 Bowlalley Lane (MMS696); Cogan House (MMS698); 1 Manor Street (MMS704); 2 Land of Green Ginger (MMS706); 2 Manor Street (MMS711); Salop House (MMS728); Burlington Tavern (MMS731); Non-designated – Samman House, Bowlalley Lane (MMS893).	The character of the area is a continuation of the close urban streets of the medieval old town. The current setting of these buildings is within a series of narrow alleyways with subsequent redevelopment of properties in this zone continued through the 19 th and 20 th century. The setting is undermined by neighbouring modern buildings of inappropriate height which detracts from the zones character. The historic setting of the conservation area sub-zone and buildings is one of closely built grand properties, developed from the late 18 th century in narrow alleyways of medieval origin.	High The value of these buildings and the conservation area sub-zone is due to their historic survival as part of the old town of Hull. The buildings and streetscape retain the close-knit character of the medieval streets, altered by 18 th century buildings, but retaining the earlier medieval and alleyways.
B9	Old Town, Western and Northern Part, Zone 9, North Walls and Salthouse Lane	None	The character of this area reflects its former location adjacent to the Queen's Dock and has been overtaken by the modern architecture of the university. This current setting of the conservation area is associated with the modern university/college campus. Dominating the area is the Hull School of Art & Design and the Hull College Construction Workshop to the south of North Walls, with a three-storey residential block to the north of Salthouse Lane one of the few modern buildings of positive townscape value within the area. The historic setting of the area was at the eastern end of Queen's Dock.	Medium The value of the conservation area sub-zone is due to the historic vein of the area in the form of North Walls marking the old northern line of the 14 th century town walls. Any historic character has all but been lost, by modern developments and the loss of buildings leaving derelict plots, which reduce the value proportionally.
B10	Old Town, Western and Northern Part, Zone 10, 'Little' High Street, Dock Office Row and Charlotte Street (east end)	Grade II* – Blaydes House (MMS751) Grade II – Haworth House (MMS752); 1 High Street (MMS753); Former Dock Offices (MMS754); 3 Dock Office Row (MMS755); Dry Dock on the south side of Charlotte Street (MMS756); and North Bridge House (MMS757) Non-designated – Dry Dock South of Former Queen's Dock Basin, High Street (MMS885); Dry Dock (MMS886); Millstone Manufactory, Queens Dock (MMS887)	Current setting of this sub-area is a largely Georgian mercantile character, a maritime air and a strong shipbuilding resonance, with areas infilled with modern residential buildings. The historic setting of the conservation area and buildings is predominantly Georgian in date, of a maritime pedigree and domestic in nature.	High The value of the conservation area sub-zone and buildings is architectural, historic and evidential representing an area close to the River Hull associated with the development of the mercantile port of Hull. Many of the listed buildings have close associations with the maritime function of the port and the adjacent River Hull.

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
C1	Old Town Southern Part, Zone 1 Trinity Burial Ground	Non-designated – Trinity Burial Ground (MMS144) Trinity Burial Ground Boundary Wall (MMS865); Two Lamp Posts at Trinity Burial Ground (MMS866)	<p>The setting of the Trinity Burial Ground is discussed above in Table 2.4, MMS144. The key points of the setting of this sub-zone of the conservation area are:</p> <p>The character of the area is a green space within the heart of the city centre. The burial ground retains a sense of enclosure and privacy surrounded by boundary walls of varying height.</p> <p>Current setting is an enclosed green space in the centre of the city centre; includes non-designated boundary walls (MMS863), two early gas lamp posts are locally listed buildings (MMS866), survival of monuments including headstones and memorials; setting of the burial ground has been eroded by the expansion of the A63 Castle Street to the north in the 1970s; separated from the Docklands (C2) by a boundary wall towards the Railway Dock.</p> <p>Historic setting of the burial ground changed with time; when built in 1783 it stood alone on the southern side of the junction formed by Castle Street, Myton Place and Waterhouse Lane; slowly absorbed in to the industrial and residential streetscape of Castle Street.</p>	<p>High</p> <p>As a sub-zone of the conservation area it has aesthetic value due to it being a survival of green space within the Old Town. It is a grass covered space, with mature trees and enclosed by brick boundary walls. It contains individual gravestones which add to the historic character of the space. This has been severely eroded by the existing A63 Castle Street. It has communal value not only as a burial ground but also as a space of remembrance. It has historic value due to its use as a burial ground between 1783 and 1861.</p> <p>Its evidential does not contribute to the value of the Old Town Conservation Area.</p>
C2	Old Town Southern Part, Zone 2 Docklands	<p>Humber Dock (MMS761); Mooring Post to the South East of the Dock Entrance (MMS763); Marina Recreation Centre (MMS764); Former Railway Dock Warehouse No. 11 (MMS765); Former Railway Dock (MMS767);</p> <p>Non-designated – 73 Humber Street (MMS911); Former South End Brewery Stables, Queen's Alley (MMS912), 9 Humber Street (MMS913); 10 Humber Street, Formerly the Steam Packet public house (MMS914)</p>	<p>The character of this area retains the maritime feel of the former port reflected in the presence of boats in the marina that reutilises the surviving docks.</p> <p>The current setting of the historic buildings and conservation area are defined by the Humber and Railway Docks (described in more detail above in Table 2.1). The docks themselves are both used as marinas and the area around the docks to the west has been largely redeveloped with large massed offices and low 20th century housing. Occasional original warehouses and dock buildings survive. To the east and south-east the wharf side retains low terraces of buildings. The A63 Castle Street dominates the northern side of the area retains a green border along the dockside. Little of the original buildings survive at the northern area of the zone along Castle Street.</p> <p>The historic setting of the area was defined by the two docks. Large and tall warehouses lined the western side of the area. Along the eastern side were small low dock warehouses, with former tramways in what is now Humber Dock Street. Alongside were low small buildings of the dockside. At the northern end of the Humber Dock was a connecting lock to the Princes Dock and two large warehouses</p>	<p>Medium</p> <p>The value of the conservation area sub-zone is historic and aesthetic, with more limited communal value.</p> <p>The historic value of the buildings and conservation area sub-zone are as an important example of the former mercantile port of Hull. The area represents the best-preserved part of the docks built in the 18th and 19th century. The western and southern side of the Humber Dock and the Railway Dock retains its historic character.</p> <p>The aesthetic value is as an open space with vistas across the boats and water it has aesthetic value for its distinct maritime landscape. To the north this has been lost where the existing A63 Castle Street imposes on the conservation area.</p> <p>The conservation sub-area has limited historic communal value, but is currently a shared space enjoyed by the local community and visiting tourists.</p>

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
			Warehouse Nos. 6 and 7, of which only No. 6 survives.	
C3	Old Town Southern Part, Zone 3 Riverfront	Grade II - Mooring Post to North East of Dock Entrance (MMS759); Central Dry Dock/ Sand Southend Wharf (MMS766); Statue of Sir William De La Pole, Nelson Street (MMS910); Public Toilets (MMS984); Tidal Surge Barrier (MMS990); Non-designated – Former West Pier (MMS898); Minerva Pier (MMS899); Victoria Pier (MMS900); (MMS903); Two Cranes at North End of Central Dry Dock (MMS903, MMS909).	The current setting of the historic buildings and conservation area are defined by its views and public open spaces along the Humber stretching from Rotenherring Staith, near Myton Bridge (in the east) to Island Wharf at the mouth of the Humber Dock Basin. This includes the Grade II listed Central Dry Dock and Southend Wharf, Humber Street, Nelson Street, Victoria Pier, Minerva Pier, Minerva Terrace, and Island Wharf. This gives key views east towards 'The Deep', ferry terminal and Saltend, north towards the old town and Holy Trinity Church and west towards the Humber Bridge. The area developed in the late-18 th century on reclaimed land. The historic setting is not dissimilar to the current setting based on the Humber waterfront, docks and piers.	Medium The value of the historic buildings and conservation area sub-zone is historic and aesthetic. The value of the buildings and conservation area sub-zone are as an important historic example of the former mercantile port of Hull. The aesthetic value of the area is due to its historic character which is largely retained along the waterfront. The area has been altered but retains historic wharfs and dock frontages with views along the Humber east and west. The setting of the area contributes to the value of the conservation area sub-zone. Some views are retained north across the Humber Dock and up the line of Queen Street towards the remainder of the Old Town Conservation Area.
C4	Old Town Southern Part, Zone 4 Fruit Market and 'Forelands'	Grade II – Minerva Hotel (MMS758); Former Corporation Pier Station (MMS760); Former Pilot Office (MMS762); Non-designated – The Oberon public house (MMS901); Former Smoke House, Wellington Street (MMS902); Scotts Street Cottages (MMS904); Hessle Gate Buildings, Humber Dock Street (MMS905); 23 Humber Street (MMS906); 24 Humber Street (MMS907); The Green Bricks public house, Humber Dock Street (MMS908); 73 Humber Street (MMS911); Former South End Brewery Stables, Queen's Alley (MMS912); 9 Humber Street (MMS913); 10 Humber Street, Formerly the Steam Packet public house (MMS914) Non-designated and listed in Conservation Area Appraisal – 47 Queen Street; 65 Queen Street/ 54-59 Humber Street; Wellington House (former Adelphi Theatre), Wellington Street; 5-6 Humber Place; 10 Nelson Street; Former Sykes Head, 2 Wellington St	The current setting of the Fruit Market and 'Forelands' retains its character of close knit roads and alleyways, as well as several listed and unlisted heritage assets. The views are internalised along the east-west streets, with glimpses of the Humber Dock to the west. The area was reclaimed from the sea and was subsequently developed as the wholesale market for fruit. The historic setting was not dissimilar to its current form and would have been one of mercantile wholesale market interacting with the adjacent docks.	Medium The evidential value is of an area of concentrated wholesale buildings associated with the former mercantile function of this part of Hull. Most of these areas have been cleared or destroyed during bombing and the area is regionally significant. The evidential value is considered medium. The historic value is because the area represents mercantile 19 th century buildings associated with the historic docks. The scale of these buildings is low and the buildings themselves are small, as opposed to the warehouse along the River Hull or the few survivals to the west around the docklands. The aesthetic value is associated with the views of the warehouses, with key views along Humber Street. The setting of these assets contributes to their value due to the proximity to the Humber and docks and views and access associated with them.
C5	Old Town Southern Part, Zone 5 Oldgates	None	The current setting of the 'Oldgates' zone is defined by the former medieval street pattern that partially survives intact. Other streets along the southern side of Castle Street that retain their medieval grid plan form are Sewer Lane and Finkle Street.	Medium The value of the buildings and conservation area sub-zone is predominantly historic. Due to modern development and severance caused by the A63 Castle Street, this sub-area represents one of the weakest

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
			<p>The historic setting of this area prior to the Second World War was dense urban alleyways of courts and yards with little open space. In this respect it was like the old town to the north. The effects of bomb damage in the Second World War and subsequent mass urban clearance meant that virtually no buildings earlier than the mid-20th century survive. The exception is No. 21 Blackfriargate (dating to the 19th century) and the former 1930s Neo-Georgian post office. Overall the conservation area appraisal defines the buildings in this zone as negative or neutral townscape value.</p>	<p>elements of the Old Town conservation area.</p> <p>The historic value of the area is the street pattern of the medieval town of Hull. The survival of the “-gate” form of place name is Blackfriargate, named after the Augustinian or black friars whom had a friary between 1316-17 and 1539, north of Blackfriargate, shows the medieval origin of the area. Castle Street until the last century was named Mytongate. However, no pre-20th century buildings survive on the streets and the line of the A63 Castle Street has imposed upon the former layout, severing the links between the streets north and south of the road.</p> <p>The conservation area sub-zone has limited evidential, aesthetic and communal value.</p> <p>The setting of the conservation area sub-zone contributes only partially to its value.</p>
JS	Jameson Street	<p>Grade II – Regent House (MMS773); Paragon Arcade (MMS774); 88 and 90 Paragon Street (N Side, MMS775); Boer War Memorial (MMS777); WWI Memorial (MMS778); White House Hotel (MMS779); The Masters public house (MMS780); King Albert Chambers (MMS781)</p> <p>Non-designated – The Sandringham, Paragon Street (MMS919); Sainsbury’s At Jacksons, Paragon St (MMS920); Queen’s House, Paragon Street (MMS921); Hammonds Department Store, Ferensway (MMS922); Hull Cheese public house, Paragon Street (MMS954)</p>	<p>Area of commercial streets including Carr Lane, Paragon Street, Jameson Street (east-west) and Ferensway, South Street, Chariot Street, Little Queen Street, Chapel Street and King Edward Street (roughly east-west).</p> <p>The current setting is as an area of commercial shopping streets linking the Old Town conservation area with the Paragon Station and Ferensway.</p> <p>The historic setting was as a commercial area of Hull that developed north-west of Queen Victoria Square.</p>	<p>Medium</p> <p>The historic, architectural and aesthetic value of the conservation area is as an area of well-designed Victorian and Edwardian streets that have maintained their value as the commercial centre of Hull. The western side of the conservation area has added importance as a community space associated with two significant war memorials.</p>
GN	Georgian New Town	<p>Grade II* - Roman Catholic Church of St Borromeo (MMS803);</p> <p>Grade II – Dram Shop public house (MMS784); 16-20 George Street (Grade II, MMS786); 13 George Street (MMS788); 58-96 George Street (MMS789, MMS790, MMS791, MMS793, MMS795, MMS796, MMS798); 83-93 George Street (MMS799); Central Public Library (MMS800); Former Albion House (MMS801); 17-30 Albion Street (MMS802, MMS803, MMS804, MMS805, MMS806, MMS807, MMS808, MMS809, MMS811, MMS812, MMS813, MMS814, MMS815, MMS817, MMS818); The Maltings (MMS810); 1-5 Percy Street (MMS816, MMS820);</p>	<p>Late 18th century area of housing developed outside of the town city walls, including the planned open space of Kingston Square.</p> <p>Its current setting is an area of commercial streets and domestic housing on the western fringe of the main commercial district of Jameson Street. Its character is adversely affected by inappropriate new developments and areas of open space both within and adjoining the Conservation Area.</p> <p>Its historic setting would have been as an area removed from the Old Town as a planned development of higher class dwellings. To the south the Queen’s Dock would have been active bustling maritime sector acting as a barrier to the remainder of the Old Town.</p>	<p>Medium</p> <p>The conservation area has both architectural and aesthetic value as the district where terraces from the late 18th and 19th century survive in greatest numbers. It also has several public buildings of communal value.</p> <p>It has historic value as the first area of housing to develop outside of the confines of the Old Town in the 18th century.</p>

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
		<p>Victoria House (MMS819), Former Friends Meeting House (MMS821); 8 Union Street (MMS822); 11-12 Grimston Street (MMS823, MMS833); 1-9 Jarratt Street; (MMS824, MMS825, MMS826, MMS828, MMS829, MMS830, MMS831); 6 and 8-13 Baker Street (MMS827, MMS832,); Façade of Former Hull Cooperative (MMS834); Former Richard Bakers Stable (MMS835); 3-5 Kingston Square (MMS837); Hull New Theatre (MMS838); Adventist Church, Old English Gentleman public house (MMS839); 6-8 Wright Street (Grade II, MMS840);</p> <p>Non-designated – 62 - 64 George Street (MMS927), 78-80 George Street (MMS930), Livery Stables (MMS932), Former Hall (MMS933); Former Carriage Repository, Union Street, (MMS936); Baker Street Garage (MMS937); 9 Wright Street (MMS938); 10 and 11 Wright Street (MMS939); Brunswick Chambers, 16 Dock Street (MMS957); 48-50 George Street (MMS958); Albion Hall, Baker Street (MMS 959); Former Dispensary, Baker Street (MMS960); Central Fire Station, Worship Street (MMS961)</p>		
SB	Spring Bank	Grade II - Former Fire Station (MMS841); Numbers 53 and 55 and Attached Railings (MMS842).	<p>The conservation area has a feeling of grandeur generated by its width, with buildings that compromise a variety of styles with appreciable amounts of architectural detail.</p> <p>Its current setting is a wide arterial street entering the city through the inner suburbs. Many of the buildings have become run down and there is high proportion of buildings in a poor state of repair.</p> <p>Its historic setting developed for mixed residential and commercial in late-19th and early 20th century.</p>	Medium Its value lies in the architectural and aesthetic detail of the buildings that line the wide arterial route into Hull. It has historic value as one of the principal routes into the town of Hull that has been used since the medieval period.
BR	Beverley Road	Non-designated – Royal British Legion, Kingston Cottage, Beverley Road, Hull (MMS964)	<p>Its current setting is an arterial route into the city which developed in the 19th century. It contains large terraced villas with long gardens and several public and municipal buildings. It has increasingly seen derelict buildings develop since 2007 and is subject to existing traffic and pollution.</p> <p>Beverley Road has been in existence since medieval times. It developed in the early 19th century as a suburban development of villas and gardens described above.</p>	Medium The value of the conservation area lies in the architectural merit of many of the earlier houses which are combined with aesthetic value created by areas of mature gardens and trees that off-set the urban character.
BV	Boulevard	Grade II – Western Branch Library (MMS844);	Its current setting is as a wide tree-lined street of Victorian and Edwardian houses and public	Medium

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
			buildings. It provides a link between the Hessle Road and Anlaby Road with views predominantly north-south. Its character is essentially residential urban streets originating in the later 19 th century.	The value of the conservation area lies in the aesthetic and architectural value of the 19 th century buildings lining the street and the character created by the wide 'boulevard' nature of the street. This represents one of a group of conservation areas at the western side of Hull that reflect the suburban expansion of Hull.
CS	Coltman Street	Grade II – Former City Temple at Corner of Madeley Street (MMS846); K6 Telephone Kiosk outside Shop on corner of Hessle Road (Shop not included) (MMS847); Former Public Benefit Shoe Company at Corner of Coltman Street (MMS848); 102 and 103, Coltman Street (MMS849); 100 and 101, Coltman Street (MMS850); 113, Coltman Street (MMS851); 114, Coltman Street (MMS852); 117, Coltman Street (MMS854).	The current setting of the street is a long linear residential street with predominantly early and later Victorian middle-class housing interspersed with 20 th century infill. Its character is essentially residential urban streets originating in the later 19 th century. The historic setting of the street was similar to its current setting.	Medium The value of the conservation area lies in the architectural merit of the majority of the 19 th century housing stock and the aesthetic value of the streetscape. This represents one of a group of conservation areas at the western side of Hull that reflect the suburban expansion of Hull.
HR	Hessle Road	Grade II – Fishermen's Memorial at Junction with Boulevard (MMS843), Criterion public house (MMS845), War Memorial Street Shrine, Eton Street (MMS986), Yorkshire Bank at Corner of Eton Street (MMS987) Non-designated – Scoria Paving Blocks to Rear of 261-275 Hessle Road (MMS972)	Former main road between Hessle and Hull. It is a wide street with the grand circle of the Boulevard junction at its western end. Its current setting continues to be a busy shopping street, with surviving architectural merit only detracted by neglect and inappropriate alteration. It has linear east-west views along the street, but has a feeling of enclosure. Its historic setting developed as an important shopping and social centre in the late-19 th century.	Medium The value of the conservation area lies in its aesthetic and architectural quality as a suburban shopping area that developed in the 19 th century with survival of original architectural buildings, styles and features. This represents one of a group of conservation areas at the western side of Hull that reflect the suburban expansion of Hull.
AD	St Andrew's Dock	The hydraulic tower and pump house (MMS988)	Former dock area associated with Hull's deep-sea fishing area opened in 1883. Its current setting consists of the lock entrance to the former dock, and buildings either side at the eastern end of the dock and a small area of the silted-up dock. It is predominantly visible from Clive Sullivan Way. Although it has considerable potential for improvement some of the remaining buildings, and dock-side features need enhancement. Its character is one of neglected industrial dockside. The historic setting was as a busy fishing dock operating from the late 19 th century until its closure in the 1970s.	Medium It has value principally due to three elements: historic and evidential value due to its connection with the deep-sea fishing industry and previous use as a dock and aesthetic value due to the surviving industrial streetscape and building groups and its riverside location.
HT	Hessle Town	Grade II – 11 and 13, The Square (MMS855)	The remnant of Hessle village developed to include elements of a suburban town. There is a confined village character around the church with late 19 th and 20 th century houses elsewhere.	Medium The conservation area has aesthetic value due to its stock of historic buildings and historic value as the former village core of Hessle.
HS	Hessle Southfield	None	Developed over 50 years from 1860. It consists of large houses from the	Medium

MMS No	Name	Associated assets/ designation	Baseline setting	Value/ significance
			<p>late-Victorian and Edwardian periods, with large curtilages and a natural environment of tree cover and privet hedges. Its character is of an upper middle class residential suburb located on the train line away from the municipal centre of Hull.</p>	<p>The value of the conservation area lies in the architectural style of the buildings which are described as 'English Baronial Style' and reflect the affluent nature of this satellite suburb of Hull. The area has aesthetic value due to its combination of suburban houses and leafy gardens.</p>

2.3 Gazetteer of historic buildings

2.3.1 All historic buildings within 500m of the Scheme Site Boundary have been examined. This includes designated buildings (Grade I, Grade II* and Grade II listed buildings), and non-designated historic buildings (locally listed buildings, other historic buildings listed on the sites and monuments record). These are detailed in the gazetteer in Table 2.3 below

Table 2.3: Gazetteer of historic buildings

MMS No	Name	Grade ⁴¹	NHL List/ HER entry	Zone	Conservation area	Value
MMS600	Statue of King William III and Flanking Lamps	I	1197697	1	A3	High
MMS601	Public Toilets to North of King William III Statue	II	1283102	1	A3	Medium
MMS602	Warehouse at South East Corner of Princes Dock	II	1218969	2	B2	Medium
MMS603	Castle Buildings	II	1208094	3		Medium
MMS604	Earl de Grey public house	II	1297037	3		Medium
MMS605	Vauxhall Tavern public house	II	1197745	4		Medium
MMS606	Former Trinity House Buoy Shed	II	1197668	5		Medium
MMS607	Tubular Crane to North East of Former Trinity House Buoy Shed	II	1268383	5		Medium
MMS608	Robbie's public house	II	1283084	5		Medium
MMS609	Kings Market	II	1197659	6	B4	Medium
MMS610	Building Between Kings Market and Wool Exchange	II	1297015	6	B4	Medium
MMS611	Wool Exchange	II	1297016	6	B4	Medium
MMS612	Old Grammar School Museum	II*	1197660	6	B4	Medium
MMS613	Former Fish Street Day Schools	II	1197658	6	B4	Medium
MMS614	Electric Street Lamp at South West Corner of Holy Trinity Churchyard	II	1297014	6	B4	Medium
MMS615	Warehouse at Corner of Robinson Row	II	1297008	6	B5	Medium
MMS616	Statue of Andrew Marvell on North Side of South Church Side	II	1197623	6	B4	Medium
MMS617	9½, 10, 10½, and 11, King Street	II	1197725	6	B4	Medium
MMS618	Parish Church of the Holy Trinity and Churchyard Wall	I	1292280	6	B4	Medium
MMS619	Minerva Lodge of Freemasons No. 250	II*	1293046	6	B5	High
MMS620	3, Prince Street (See Details for Further Address Information)	II	1197680	6	B5	Medium
MMS621	Electric Street Lamp at North West Corner of Holy Trinity Churchyard	II	1197701	6	B4	Medium
MMS622	6, Posterngate	II	1297023	6	B5	Medium

⁴¹ Grade I, II* and II, locally listed; all other buildings are non-designated

MMS No	Name	Grade ⁴¹	NHL List/ HER entry	Zone	Conservation area	Value
MMS623	K1 Telephone Kiosk in Market Hall	II	1219597	6	B4	Medium
MMS624	The Kingston public house	II	1197669	6	B4	Medium
MMS625	Former Warehouses on Corner of Princes Dock Street and Posterngate	II	1297027	6	B2	Medium
MMS626	The Market Hall and Bob Carvers Fish and Chip Restaurant	II	1283105	6	B4	Medium
MMS627	Warehouse, Premises Currently Vacant.	II	1197750	6	A1	Medium
MMS628	Hull Trinity House	I	1219563	6	B4	Medium
MMS629	Carmelite House	II	1197679	6	B5	Medium
MMS630	Former Department of Transport Marine Office	II	1297024	6	B5	Medium
MMS631	Hepworth's Arcade	II	1283101	6	A3	Medium
MMS632	Chapel at Hull Trinity House and Statue Outside East Front	II	1297026	6	B2	Medium
MMS633	8 and 10, Trinity House Lane	II	1219560	6	B4	Medium
MMS634	9, Market Place	II	1218222	6	A3	Medium
MMS635	5, Scale Lane	II	1219131	6	A1	Medium
MMS636	62 and 63, Market Place	II	1391974	6	A3	Medium
MMS637	4, 5 and 6, Silver Street	II	1219229	6	B6	Medium
MMS638	Princes Dock Chambers and The Quayside public house	II	1218865	6	B2	Medium
MMS639	Conservancy Buildings	II	1219942	6	B6	Medium
MMS640	Former Bank	II	1291416	6	B6	Medium
MMS641	House to Rear of Danish Buildings (Danish Buildings Not Included)	II	1209769	6	A1	Medium
MMS642	Former Lloyds Bank	II	1283100	6	A3	Medium
MMS643	4, 5 and 6, Whitefriargate	II	1197674	6	B6	Medium
MMS644	Gatehouse to Trinity House	II	1197683	6	B2	Medium
MMS645	1, 2 and 3, Whitefriargate	II	1219682	6	B6	Medium
MMS646	10-15, Whitefriargate	II*	1197675	6	B6	High
MMS647	Ye Olde Black Boy public house	II	1389398	6	A1	Medium
MMS648	16-19, Whitefriargate	II	1291313	6	B6	Medium
MMS649	7, 8 and 9, Whitefriargate	II	1219705	6	B6	Medium
MMS650	42 and 43, High Street	II	1209681	6	A1	Medium
MMS651	Commercial Chambers, Roland House	II	1218956	6	B2	Medium
MMS652	Crowle House	II	1197749	6	A1	Medium
MMS653	27 and 28, Silver Street	II	1197695	6	B6	Medium
MMS654	20, Whitefriargate	II	1291327	6	B6	Medium
MMS655	Pacific Court	II	1209588	6	A2	Medium
MMS656	41, Lowgate	II	1217894	6	A3	Medium
MMS657	24-28, Whitefriargate	II	1291297	6	B6	Medium
MMS658	32, Silver Street	II	1219244	6	A3	Medium
MMS659	153, High Street	II	1209727	6	A1	Medium
MMS660	21, 22 and 23, Whitefriargate	II	1297021	6	B6	Medium

MMS No	Name	Grade ⁴¹	NHL List/ HER entry	Zone	Conservation area	Value
MMS661	Former National Westminster Bank	II*	1219232	6	B6	Medium
MMS662	1, Bishop Lane	II	1279485	6	A1	Medium
MMS663	2, Bishop Lane	II	1197624	6	A1	Medium
MMS664	Pacific Club	II	1283089	6	A1	Medium
MMS665	Colonial Chambers	II	1218901	6	B2	Medium
MMS666	67, Whitefriargate	II	1197813	6	B8	Medium
MMS667	Pillar Box Outside Number 40	II	1292536	6	A1	Medium
MMS668	38b, High Street	II	1197748	6	A2	Medium
MMS669	30-33, Whitefriargate	II	1197676	6	B6	Medium
MMS670	Midland Bank	II	1219916	6	B6	Medium
MMS671	The Old White Hart Inn	II*	1197696	6	B8	High
MMS672	37a and 37b, High Street	II	1283088	6	A2	Medium
MMS673	Princes Dock	II	1197682	6	B1	Medium
MMS674	15, Parliament Street	II	1291857	6	B7	Medium
MMS675	George Hotel	II	1217870	6	B8	Medium
MMS676	11-13, Bishop Lane	II	1279488	6	A3	Medium
MMS677	38a, High Street	II	1209596	6	A1	Medium
MMS678	Imperial Chambers	II	1197627	6	B8	Medium
MMS679	14, Bishop Lane	II	1208004	6	A3	Medium
MMS680	12, Parliament Street	II	1197708	6	B7	Medium
MMS681	7, Land of Green Ginger	II	1292254	6	B8	Medium
MMS682	Ferens Art Gallery	II	1218995	6	B1	Medium
MMS683	Victoria Chambers	II	1293326	6	B8	Medium
MMS684	46, 47 And 48, Whitefriargate	II	1291263	6	B6	Medium
MMS685	11, Parliament Street	II	1218618	6	B7	Medium
MMS686	40-43, Whitefriargate	II	1283040	6	B6	Medium
MMS687	16, Parliament Street	II	1197709	6	B7	Medium
MMS688	Monument Buildings	II	1297028	6	B1	Medium
MMS689	39, Whitefriargate	II	1297022	6	B6	Medium
MMS690	10, Parliament Street	II	1291890	6	B7	Medium
MMS691	17, Parliament Street	II	1218640	6	B7	Medium
MMS692	Hull and East Riding Museum	II	1197752	6	A1	Medium
MMS693	County Buildings	II	1197728	6	B8	Medium
MMS694	15 and 16, Bowlalley Lane	II	1197626	6	B8	Medium
MMS695	9, Parliament Street	II	1197707	6	B7	Medium
MMS696	12, Bowlalley Lane	II	1208042	6	B8	Medium
MMS697	18, Parliament Street	II	1197710	6	B7	Medium
MMS698	Cogan House	II	1293324	6	B8	Medium
MMS699	34 and 35, Whitefriargate	II	1219833	6	B6	Medium
MMS700	Exchange Buildings	II	1218076	6	A3	Medium
MMS701	Parliament House	II	1218579	6	B7	Medium
MMS702	19, Parliament Street	II	1218644	6	B7	Medium
MMS703	7, Parliament Street	II	1283107	6	B7	Medium

MMS No	Name	Grade ⁴¹	NHL List/ HER entry	Zone	Conservation area	Value
MMS704	1, Manor Street	II	1292072	6	B8	Medium
MMS705	Maisters House	I	1283090	6	A1	High
MMS706	2, Land of Green Ginger	II	1197727	6	B8	Medium
MMS707	20, Parliament Street	II	1197711	6	B7	Medium
MMS708	The Empress public house	II	1207633	6	B1	Medium
MMS709	35, High Street	II	1197747	6	A1	Medium
MMS710	6, Parliament Street	II	1218571	6	B7	Medium
MMS711	2, Manor Street	II	1197736	6	B8	Medium
MMS712	War Memorial 10m South of Church of St Mary	II	1197731	6	A3	Medium
MMS713	5, Parliament Street	II	1197706	6	B7	Medium
MMS714	Ocean Chambers	II	1197729	6	A3	Medium
MMS715	St Marys Court	II	1197733	6	A3	Medium
MMS716	161, High Street	II	1209756	6	A1	Medium
MMS717	21, Parliament Street	II	1291874	6	B7	Medium
MMS718	Public Toilets, Queen Victoria Statue	II	1197686	6	B1	Medium
MMS719	4, Parliament Street	II	1218483	6	B7	Medium
MMS720	City Hall	II*	1197685	6	B1	High
MMS721	22, Parliament Street	II	1197712	6	B7	Medium
MMS722	3, Parliament Street	II	1197705	6	B7	Medium
MMS723	23, Parliament Street	II	1218667	6	B7	Medium
MMS724	Church of St Mary	II*	1217998	6	A3	High
MMS725	Hull Maritime Museum and Adjoining Railings	II*	1219019	6	B1	High
MMS726	Former Head Post Office	II	1218045	6	A3	Medium
MMS727	2, Parliament Street	II	1218477	6	B1	Medium
MMS728	Salop House	II	1283080	6	B8	Medium
MMS729	1, Parliament Street	II	1283106	6	B1	Medium
MMS730	Two K6 Kiosks Flanking the Right Entrance at The Head Post Office	II	1197732	6	A4	Medium
MMS731	Burlington Tavern	II	1218209	6	B8	Medium
MMS732	Former Yorkshire Bank	II	1219032	6	B1	Medium
MMS733	Oriel Chambers	II	1292589	6	A1	Medium
MMS734	K6 Telephone Kiosk at Staff Entrance to Head Post Office	II	1207551	6	A4	Medium
MMS735	Wilberforce House Museum and Attached Garden Wall	I	1209831	6	A1	High
MMS736	Town Hall Chambers	II	1197684	6	B1	Medium
MMS737	Statue of William Wilberforce In Garden of Wilberforce House	II*	1197754	6	A1	High
MMS738	41-51, Savile Street	II	1219129	6	B1	Medium
MMS739	Lister Court	II	1209801	6	A2	Medium
MMS740	Georgian Houses, Wilberforce House Museum	II	1283087	6	A1	Medium
MMS741	Statue of Charles Henry Wilson 20 Metres East of Guildhall	II	1297048	6	A4	Medium

MMS No	Name	Grade ⁴¹	NHL List/ HER entry	Zone	Conservation area	Value
MMS742	Guildhall	II*	1279708	6	A4	High
MMS743	Maritime Buildings	II	1197650	6	A4	Medium
MMS744	City Hotel	II	1197649	6	A4	Medium
MMS745	Pease Court	II	1197753	6	A2	Medium
MMS746	76, 77 and 78, Lowgate	II	1292189	6	B1	Medium
MMS747	Bond Warehouse 8, Hull Business Centre	II	1197614	6	B1	Medium
MMS748	White Hart Hotel	II	1279700	6	A4	Medium
MMS749	Alfred Schofield House and Attached Railings	II	1197648	6	A4	Medium
MMS750	79, Lowgate	II	1197730	6	B1	Medium
MMS751	Blaydes House	II*	1209566	6	B10	High
MMS752	Haworth House	II	1197751	6	B10	Medium
MMS753	1, High Street	II	1197746	6	B10	Medium
MMS754	Former Dock Offices	II	1208746	6	B10	Medium
MMS755	3, Dock Office Row	II	1297068	6	B10	Medium
MMS756	Dry Dock on South Side of Charlotte Street	II	1208717	6	B10	Medium
MMS757	North Bridge House	II	1293280	6	B10	Medium
MMS758	Minerva Hotel	II	1197699	7	C4	Medium
MMS759	Mooring Post to North East of Dock Entrance	II	1246860	7	C3	Medium
MMS760	Former Corporation Pier Station	II	1197700	7	C4	Medium
MMS761	Humber Dock, Swing Bridge and Lock at South Entrance	II	1197718	7	C2	Medium
MMS762	Former Pilot Office	II	1218976	7	C4	Medium
MMS763	Mooring Post to the South East of The Dock Entrance	II	1271533	7	C2	Medium
MMS764	Marina Recreation Centre	II	1297062	7	C2	Medium
MMS765	Warehouse 13, Former Railway Dock	II	1291645	7	C2	Medium
MMS766	Central Dry Dock/ Sand Southend Wharf	II	1375866	7	C3	Medium
MMS767	Former Railway Dock, Connecting Channel, Swing Bridge	II	1197689	7	C2	Medium
MMS768	Model Dwellings	II	1197698	8		Medium
MMS769	Former Immigrant Station and Railway Platform	II	1207714	8		Medium
MMS770	Punch Hotel	II	1291699	8		Medium
MMS771	The Tower Nightclub	II	1197655	8		Medium
MMS772	Humberside University	II*	1197653	8		High
MMS773	Regent House	II	1207640	8	JS	Medium
MMS774	Paragon Arcade	II	1291960	8	JS	Medium
MMS775	88 and 90, Paragon Street	II	1197703	8	JS	Medium
MMS776	Paragon Station, Station Hotel	II*	1218434	8		High
MMS777	Boer War Memorial	II	1197702	8	JS	Medium
MMS778	First World War Memorial and Attached Railings	II	1291989	8	JS	Medium
MMS779	White House Hotel	II	1197720	8	JS	Medium
MMS780	The Masters Bar public house	II	1297004	8	JS	Medium
MMS781	King Albert Chambers	II	1197719	8	JS	Medium

MMS No	Name	Grade ⁴¹	NHL List/ HER entry	Zone	Conservation area	Value
MMS782	11 and 12, Savile Street	II	1297029	8		Medium
MMS783	46, 48 and 50, King Edward Street	II	1210124	8		Medium
MMS784	Dram Shop public house	II	1197613	8	GN	Medium
MMS785	58 and 60, King Edward Street	II	1297007	8		Medium
MMS786	16-20, George Street	II	1208774	8	GN	Medium
MMS787	62-64 King Edward Street	II	1210128	8		Medium
MMS788	13, George Street	II	1197610	8	GN	Medium
MMS789	58 and 60 George Street and Attached Railings	II	1197611	8	GN	Medium
MMS790	66, George Street	II	1208796	8	GN	Medium
MMS791	74 George Street and Attached Railings	II	1297030	8	GN	Medium
MMS792	Hull College of Further Education Park Street Annexe	II	1197704	8		Medium
MMS793	82 and 84 George Street and Attached Railings	II	1292947	8	GN	Medium
MMS794	19, Storey Street	II	1297018	8		Medium
MMS795	86 and 88, George Street	II	1208812	8	GN	Medium
MMS796	90 and 92 George Street and Attached Railings	II	1297031	8	GN	Medium
MMS797	Wilberforce Monument	II	1283041	8		Medium
MMS798	94 and 96 George Street and Attached Railings	II	1292953	8	GN	Medium
MMS799	83 to 93 George Street and Attached Railings	II	1197612	8	GN	Medium
MMS800	Central Public Library	II	1207486	8	GN	Medium
MMS801	Former Albion House	II	1197647	8	GN	Medium
MMS802	17 Albion Street and Attached Railings	II	1197639	8	GN	Medium
MMS803	Roman Catholic Church of St Charles Borromeo with Attached Presbytery and Associated Boundary Walls and Railings	I	1197723	8		High
MMS804	18 Albion Street and Attached Railings	II	1297045	8	GN	Medium
MMS805	19 Albion Street and Attached Railings	II	1197640	8	GN	Medium
MMS806	20 Albion Street and Attached Railings	II	1297046	8	GN	Medium
MMS807	21 Albion Street and Attached Railings	II	1197641	8	GN	Medium
MMS808	22 Albion Street and Attached Railings	II	1297047	8	GN	Medium
MMS809	23 Albion Street and Attached Railings	II	1197642	8	GN	Medium
MMS810	The Maltings	II	1197724	8	GN	Medium
MMS811	24 Albion Street and Attached Railings	II	1197643	8	GN	Medium
MMS812	25 Albion Street and Attached Railings	II	1197644	8	GN	Medium
MMS813	26 Albion Street and Attached Railings	II	1207464	8	GN	Medium
MMS814	27 Albion Street and Attached Railings	II	1197645	8	GN	Medium
MMS815	28 Albion Street and Attached Railings	II	1207471	8	GN	Medium
MMS816	2, Percy Street	II	1291800	8	GN	Medium
MMS817	29 Albion Street and Attached Railings	II	1197646	8	GN	Medium
MMS818	30 Albion Street and Attached Railings	II	1207480	8	GN	Medium
MMS819	Victoria House	II	1218466	8	GN	Medium
MMS820	3, Percy Street	II	1197677	8	GN	Medium
MMS821	Former Friends' Meeting House	II	1197678	8	GN	Medium

MMS No	Name	Grade ⁴¹	NHL List/ HER entry	Zone	Conservation area	Value
MMS822	8, Union Street	II	1197670	8	GN	Medium
MMS823	11 and 11½, Grimston Street	II	1297032	8	GN	Medium
MMS824	9 Jarret Street and Attached Railings	II	1210042	8	GN	Medium
MMS825	8 Jarret Street and Attached Railings	II	1297006	8	GN	Medium
MMS826	Independent Order of Oddfellows and Attached Railings	II	1292345	8	GN	Medium
MMS827	6, Baker Street	II	1207793	8	GN	Medium
MMS828	6 Jarret Street and Attached Railings	II	1197722	8	GN	Medium
MMS829	4 Jarret Street and 5 and Attached Railings	II	1210029	8	GN	Medium
MMS830	2 and 3 Jarret Street and Attached Railings	II	1297005	8	GN	Medium
MMS831	Princes House and Attached Railings	II	1197721	8	GN	Medium
MMS832	8-13, Baker Street	II	1297012	8	GN	Medium
MMS833	12 Grimston Street and Attached Railings	II	1208876	8	GN	Medium
MMS834	Facade of Former Hull Cooperative Institute within Kingston Court	II	1217821	8	GN	Medium
MMS835	Former Richard Bakers Stables	II	1291407	8	GN	Medium
MMS836	St Patricks Roman Catholic Church	II	1119748	8	GN	Medium
MMS837	3, 4 and 5 Kinston Square and Attached Railings	II	1292266	8	GN	Medium
MMS838	Hull New Theatre	II	1210061	8	GN	Medium
MMS839	Adventist Church, Old English Gentleman public house	II	1291189	8	GN	Medium
MMS840	6, 7 and 8 Wright Street and Attached Railings	II	1197816	8	GN	Medium
MMS841	Former Fire Station	II	1197737	8	SB	Medium
MMS842	53 and 55 Spring Bank and Attached Railings	II	1219347	8	SB	Medium
MMS843	Fishermen's Memorial at Junction with Boulevard	II	1197743	9	HR	Medium
MMS844	Western Branch Library	II	1197625	9	BV	Medium
MMS845	Criterion public house	II	1292884	9	HR	Medium
MMS846	Former City Temple at Corner of Madeley Street	II	1209017	9	CS	Medium
MMS847	K6 Telephone Kiosk Outside Shop on Corner of Hessle Road (Shop Not Included)	II	1197635	9	CS	Medium
MMS848	Former Public Benefit Shoe Company Shop at Corner of Coltman Street	II	1025257	9	CS	Medium
MMS849	102 and 103, Coltman Street	II	1297041	9	CS	Medium
MMS850	100 and 101, Coltman Street	II	1293193	9	CS	Medium
MMS851	113, Coltman Street	II	1208354	9	CS	Medium
MMS852	114, Coltman Street	II	1197634	9	CS	Medium
MMS853	Alexandra Hotel	II	1197742	9	CS	Medium
MMS854	117, Coltman Street	II	1208366	9	CS	Medium
MMS855	<i>Number not used</i>					
MMS856	King William Hotel			1	C5	Low
MMS857	74 Mytongate	Locally	MHU5984	1	C5	Low
MMS858	76 Mytongate	Locally	MHU5986	1	C5	Low

MMS No	Name	Grade ⁴¹	NHL List/ HER entry	Zone	Conservation area	Value
MMS859	75 Mytongate	Locally	MHU5985	1	C5	Low
MMS860	Burnett House	Locally	MHU20114	1	C5	Low
MMS861	Telephone Exchange, Mytongate	Locally	MHU16465	1	C5	Low
MMS862	Former Post Office Building		MHU22320	1	C5	Low
MMS863	Trinity Burial Ground, boundary walls		MHU13757	3	C1	Low
MMS864	Site of Osborne Street School		MHU16432	3		Low
MMS865	Cat and Whittington public house		MHU20545	3		Low
MMS866	Two Lampposts at Trinity Burial Ground		MHU21919	3	C1	Low
MMS867	<i>Number Not used</i>					Low
MMS868	Pumping Station No 3		MHU13629	5		Low
MMS869	Duke of Edinburgh public house, Great Union Street	Locally	MHU20554	5		Low
MMS870	Victoria Dock Tavern, Great Union Street	Locally	MHU20553	5		Low
MMS871	Finnish Church		MHU17794	5		Low
MMS872	Shipbuilding Yard and Union Dry Dock	Locally	MHU13676	5		Low
MMS873	55 Great Union Street		MHU4930	5		Low
MMS874	Former Winding House, South Bridge Road		MHU20910	5		Low
MMS875	62 High Street	Locally	MHU18250	6	A1	Low
MMS876	8 Dagger Lane, Hull		MHU20664	6	B5	Low
MMS877	Building to Rear of 52 High Street		MHU17171	6	A2	Low
MMS878	Blue Bell Hotel	Locally	MHU17132	6	B4	Low
MMS879	Former Post Office		MHU13665	6	A3	Low
MMS880	151 High Street		MHU10087	6	A1	Low
MMS881	44 to 46 High Street, Danish Buildings		MHU10086	6	A1	Low
MMS882	Buoy Shed		MHU13739	6	B2	Low
MMS883	Trinity House Navigation School		MHU13738	6	B2	Low
MMS884	39 High Street		MHU10088	6	A3	Low
MMS885	Dry Dock South of Former Queen's Dock Basin, High Street	Locally	MHU13657	6	B10	Low
MMS886	Dry Dock		MHU13674	6	B10	Low
MMS887	Millstone Manufactory, Queens Dock		MHU13773	6	B10	Low
MMS888	Ye Olde Corn Exchange, 1-6 North Church Side		MHU21981	6	A3	Low
MMS889	Water Pump, North Church Side		MHU21920	6	B4	Low
MMS890	51 and 52 Market Place, Hull		MHU10089	6	A3	Low
MMS891	The Manchester Arms, Scale Lane		MHU20549	6	A1	Low
MMS892	Suffolk Chambers, Scale Lane		MHU13664	6	A3	Low
MMS893	Samman House, Bowlalley Lane		MHU20635	6	B8	Low
MMS894	Yorkshire Insurance Buildings		MHU6983	6	A3	Low
MMS895	Standidge Buildings, Chapel Lane	II	1442865	6	A3	Medium
MMS896	Former Victorian Water Offices, 100 Alfred Gelder Street		MHU21908	6	B1	Low
MMS897	Former Drinking Fountain and Cattle Trough, High Street		MHU21911	6	A1	Low

MMS No	Name	Grade ⁴¹	NHL List/ HER entry	Zone	Conservation area	Value
MMS898	Former West Pier		MHU16802	7	C3	Low
MMS899	Minerva Pier		MHU16801	7	C3	Low
MMS900	Victoria Pier		MHU16803	7	C3	Low
MMS901	The Oberon public house	Locally	MHU17149	7	C4	Low
MMS902	Former Smoke House, Wellington Street	Locally	MHU20602	7	C4	Low
MMS903	Crane at South End of Central Dry Dock		MHU20648	7	C3	Low
MMS904	Scotts Street Cottages		MHU15792	7	C4	Low
MMS905	Hessle Gate Buildings, Humber Dock Street	Locally	MHU20568	7	C4	Low
MMS906	23 Humber Street	Cons area	MHU20497	7	C4	Low
MMS907	24 Humber Street	Cons area	MHU20498	7	C4	Low
MMS908	The Green Bricks public house, Humber Dock Street	Locally	MHU20567	7	C4	Low
MMS909	Crane at North End of Central Dry Dock		MHU20647	7	C3	Low
MMS910	Statue of Sir William De La Pole, Nelson Street	II	1442748	7	C3	Medium
MMS911	73 Humber Street		MHU21917	7	C4	Low
MMS912	Former South End Brewery Stables, Queen's Alley		MHU20649	7	C4	Low
MMS913	9 Humber Street		MHU20499	7	C4	Low
MMS914	10 Humber Street, Formerly the Steam Packet public house		MHU20500	7	C4	Low
MMS915	Number not used					
MMS916	Chain Cable & Anchor Works		MHU13752	8		Low
MMS917	St Nicholas Danish Church		MHU16055	8		Low
MMS918	Salvation Army Citadel		MHU16088	8		Low
MMS919	The Sandringham, Paragon Street	Locally	MHU20548	8	JS	Low
MMS920	Sainsbury's At Jacksons, Paragon St	Locally	MHU20551	8	JS	Low
MMS921	Queen's House, Paragon Street	Locally	MHU20552	8	JS	Low
MMS922	Hammonds Department Store, Ferensway	Locally	MHU20547	8	JS	Low
MMS923	Queens Garden		MHU22048	8		Low
MMS924	Hull and East Riding College		MHU16413	8		Low
MMS925	Broadway House, 105-107 Ferensway	Locally	MHU20580	8		Low
MMS926	WWII Underground Bunker		MHU19614	8		Low
MMS927	62-64 George Street, Hull		MHU20644	8	GN	Low
MMS928	70-72 George Street, Hull		MHU20645	8	GN	Low
MMS929	Brook Chambers, Ferensway Chambers & Debenhams	Locally	MHU20594	8		Low
MMS930	78-80 George Street, Hull		MHU20646	8	GN	Low
MMS931	The Yorkshireman public house, Lombard St	Locally	MHU20566	8		Low
MMS932	Livery Stables		MHU13802	8	GN	Low
MMS933	Former Hall		MHU16639	8	GN	Low
MMS934	St Patrick's Church, Spring Street		MHU16182	8		Low
MMS935	Unitarian Church, Park Street		MHU18027	8		Low
MMS936	Former Carriage Repository, Union Street		MHU13655	8	GN	Low

MMS No	Name	Grade ⁴¹	NHL List/ HER entry	Zone	Conservation area	Value
MMS937	Baker Street Garage		MHU20670	8	GN	Low
MMS938	9 Wright Street		MHU21821	8	GN	Low
MMS939	10 and 11 Wright Street		MHU21822	8	GN	Low
MMS940	Ferensway House, Ferensway	Locally	MHU20579	8		Low
MMS941	Crown House, Ferensway	Locally	MHU20578	8		Low
MMS942	Spring Bank Tavern, Spring Bank	Locally	MHU20569	8	SB	Low
MMS943	Former Crown Brewery Offices	Locally	MHU20561	8		Low
MMS944	The County and 71 Francis Street	Locally	MHU20560	8		Low
MMS945	The Wellington Inn, Russell Street	Locally	MHU20576	8		Low
MMS946	Site of Ragged and Industrial School		MHU16258	8		Low
MMS947	Owbridge Court (Former Owbridge's Manufactory), Osbourne Street		MHU20186	8		Low
MMS948	Braves Hall, Roper Street, Hull		MHU21792	8		Low
MMS949	Former Hull and East Riding Club (Now Part of Stopinn), Anlaby Road		MHU21964	8		Low
MMS950	45 Anlaby Road		MHU21963	8		Low
MMS951	Former Regent Cinema, Anlaby Road		MHU16557	8		Low
MMS952	Quartet of K6 Telephone Kiosks, Carr Lane		MHU21967	8		Low
MMS953	Central Masonic Hall, Park Street		MHU21926	8		Low
MMS954	Hull Cheese public house, Paragon Street		MHU17123	8	JS	Low
MMS955	Hull Paragon Signal Box, Park Street		MHU20237	8		Low
MMS956	'Three Ships' Mosaic Mural, BHS, Jameson Street		MHU21915	8		Low
MMS957	Brunswick Chambers, 16 Dock Street, Hull		MHU20643	8	GN	Low
MMS958	48-50 George Street		MHU21973	8	GN	Low
MMS959	Albion Hall, Baker Street		MHU13638	8	GN	Low
MMS960	Former Dispensary, Baker Street		MHU16468	8		Low
MMS961	Central Fire Station, Worship Street		MHU21916	8	GN	Low
MMS962	Institute for The Deaf		MHU16480	8	SB	Low
MMS963	<i>Number not used</i>			8		Low
MMS964	Royal British Legion, Kingston Cottage, Beverley Road, Hull		MHU21923	8	BR	Low
MMS965	Pumping Station at William Wright Dock		MHU16938	8		Low
MMS966	Alfred Street Pumping Station		MHU19795	8		Low
MMS967	Daltry Street School		MHU16230	8		Low
MMS968	Pumping Station		MHU16965	8		Low
MMS969	Inkerman Tavern, Alfred Street	Locally	MHU20526	8		Low
MMS970	Church of The Holy Apostles		MHU16005	8		Low
MMS971	Wassand Arms, Wassand Street		MHU21989	8		Low
MMS972	Scoria Paving Blocks to Rear of 261-275 Hessele Road		MHU21993	8		Low
MMS973	Strickland 'Stricky' Arms, Strickland Street		MHU21988	8		Low
MMS974	12 Kingston Industrial Estate		MHU21974	8		Low

MMS No	Name	Grade ⁴¹	NHL List/ HER entry	Zone	Conservation area	Value
MMS975	Auto Cellulosers, Formerly Two Fish-Smoking Sites		MHU21733	8		Low
MMS976	Hull Brewery Fish Smoking House, English Street		MHU21735	8		Low
MMS977	164-168 Hessle Road		MHU21976	8		Low
MMS978	<i>Number not used</i>			8		
MMS979	Fish Smokehouse, St Mark's Square		MHU21738	8		Low
MMS980	Woods Fish Curing Works		MHU21734	8		Low
MMS981	22/22a Southgate, Hessle		MHU15138	10		Low
MMS982	Pickering Home for Girls, Hessle Road		MHU16483	10		Low
MMS983	Cream K6 Telephone Kiosk, Waverley Street			4		Low
MMS984	Public Conveniences on Nelson Street	II		7	C3	Medium
MMS985	Drypool Bridge		MHU16509	5		Low
MMS986	War Memorial Street Shrine, Eton Street	II	1446791	8	HR	Medium
MMS987	Yorkshire Bank at Corner of Eton Street	II	1292577	8	HR	Medium
MMS988	Hydraulic Tower and Pump House 50m south-east of St Andrews Dock	II	1197632	9	AD	Medium
MMS989	Humber Bridge	1		n/a		High
MMS990	Tidal Surge Barrier	II		7	C4	Medium

3. Gazetteers of historic landscapes

3.1 Gazetteer of Historic Landscape Units

3.1.1 Table 3.1 shows the Historic Landscape Character Units identified within 200m of the Scheme.

Table 3.1: Historic Landscape Character Units

MM S Unit No.	HHU Nos.	HLC Broad Type	HLC Specific Type	Value
HLCU 1	HHU26777	Transport and communications	Road junction	<p>Negligible</p> <p>The Mytongate Junction acts as gateway to the city centre. It is currently dominated by a discordant network of traffic signals, signage and barriers. These visual detractors give the area a cluttered appearance. The centre of the roundabout contains evergreen shrubs with mixed mature tree species and areas of open grass. The mature trees on the traffic islands and the surrounding tall buildings create a sense of enclosure which is further emphasised in summer months. The islands prevent north and south views along Ferensway and Commercial Road, and the orientation of the junction prevents east-west views along Castle Street. A feature of the junction is the surrounding vegetation, which includes a pocket park to the north-west, adjacent to William Booth House and to the south-east around the Holy Trinity burial ground (see HLCU 9). In the north-east corner of the junction, a semi-mature strip of evergreen hedgerow planting with standard trees growing within it provides a screen between the road and the adjacent retail park (see HLCU 7). In the south-east corner of the junction, there is an area of landscaped grass adjacent to the Holy Trinity burial ground. The Mytongate Junction broadly corresponds to the area of the former Myton Place, which is depicted on 18th century plans but is probably earlier than this. Virtually no historic elements survive above ground within the specific road corridor, and there is nothing to indicate its historic origins.</p>
HLCU 2	HHU26288, HHU26289, HHU26290, HHU26292, HHU26293, HHU26297, HHU26298, HHU26299, HHU26301, HHU26303, HHU26304, HHU26305	Commercial Industrial	Business (general) Industrial works (general)	<p>Medium</p> <p>This HLCU lies to the south of the A63 Hessle Road, at the west end of the study area. The boundaries are defined by Humber Bank in the south, Ropery Street to the west, Hessle Road (A63) to the north and St James Street to the east. The area is divided into squares by Edgar Street, English Street and Alfred Street, and again into smaller squares by smaller roads such as Commerce Lane, St Mark's Square and Mechanic Lane. To the north of English Street, the HLCU is characterised by a complex of light industrial and retail premises. The industrial premises are primarily located on the street frontages, and occupy the plots (or a combination of plots) into which the area was originally divided. However, this pattern is comprised in some areas by modern larger-scale units and two modern industrial estates which cut across the historic boundaries. Interspersed amongst the industrial premises are several late 18th-early 19th century residential and related properties. To the south of English Street the HLCU was later given over to engineering and dock-related works, and many of the historic plots and structures have been lost under modern units and the Kingston Industrial Estate. The original grid-pattern of streets survives largely intact, and they provide wide straight vistas through the HLCU. The small-scale nature of the industrial premises, many contained within their original plot boundaries, creates a close-knit community atmosphere and the area is generally screened from the A63. At the south end of the HLCU, the former Humber Bank road is now an underused public footpath, with the remains of the buttressed dock-side wall on the south side.</p> <p>The grid of streets represents a planned development dating to the early 19th century. The site was developed by Thomas English (1778-1848), a prominent Hull shipbuilder who purchased the land in 1802, laid out and named the streets, and sold off small plots for building. The estate was known as "English Town".</p>

MM S Unit No.	HHU Nos.	HLC Broad Type	HLC Specific Type	Value
HLCU 3	HHU26316, HHU26319 HHU26320, HHU26321 HHU26322, HHU26323 HHU26324	Commercial Industrial	Business (general) Industrial works (general)	Low This HLCU lies on the south side of the A63 Hessle Road. It is defined by Waverley Street to the north, and St James Street to the west. The unit contains a mix of light industrial and commercial buildings (factories, works and warehouses) located either side of Lister Street and English Street. This unit differs from HLCU 2 to the west in that the buildings are less densely packed, are generally larger and more recent in date, and are associated with larger areas of car parking and service yards. The unit also includes a rectangular area of grass and shrubs on the east side of St James Street, which represents the site of St James's Church, built in 1829 and demolished in 1957. The main thoroughfares of Lister Street and English Street retain most of their historic alignments, and views are possible along and across the HLCU, due to the lower density and height of buildings. This area was developed in the mid-19th century but other than street alignments very few historic elements appear to survive in the HLCU.
HLCU 4	HHU26306, HHU26307 HHU26309, HHU26310 HHU26312, HHU26318 HHU26769	Commercial	Retail Park Entertainment complex	Negligible This HLCU lies on the south side of the A63 Hessle Road, to the west of Commercial Road and Manor House Street. It is characterised by large scale industrial shed-type units with associated car parking, representing a typical modern retail and entertainment park. The car parks are surrounded by ornamental planting which helps to screen Kingston Park from the A63. All the structures are modern, late 20th century in date, apart from the Whittington and Cat public house, located in the north-east corner of the area and which is late 19th century in date. Glimpsed views are possible to the south, between the buildings, to the cranes of the Albert Dock which illustrate the closeness of the river.
HLCU 5	HHU26644, HHU26645 HHU26695, HHU26698 HHU26700, HHU26703 HHU26736, HHU26739 HHU26740, HHU26742 HHU26743, HHU26744 HHU26745, HHU26747 HHU26749, HHU26751 HHU26752, HHU26753 HHU26754, HHU26755 HHU26756, HHU26757 HHU26761, HHU26763 HHU26765, HHU26766	Residential	Planned estate (social housing)	Low This HLCU covers a large area on the north side of the A63 Castle Street, between Walker Street and Porter Street, and north of Adelaide Street as far east as Ferensway. the housing is mixed in character and is generally confined to two or three storey buildings with an absence of mature vegetation. Several distinct development zones can be identified, all mid-late 20th century date. These social housing developments initially stem from the slum clearance works undertaken in the 1930-40s, and then the subsequent clearance and replacement of old and World War II damaged housing stock. The different styles, designs and construction methods/materials is interesting. However, the overall style of most of the blocks is representative of post-war social housing, and some estates have been improved and brightened in recent years, but generally the architecture is undistinguished. The clearance works have removed all evidence of the very dense Victorian occupation which formerly characterised the HLCU, although the main street alignments remain.
HLCU 6	HHU26750	Residential	Planned estate (social housing)	Medium This HLCU is located on the north side of the A63 Castle Street, to the west of the Mytongate roundabout. The unit comprises four large interlinked blocks of urban housing and its associated landscape between William Street and Adelaide Street, on the east side of Great Porter Street. This social housing development dates to 1938, and was a response to the 1930s-1940s slum clearances and the subsequent replacement of old and World War II damaged housing stock. The complex was designed by David Harvey, then the Hull City Architect. The blocks are named

MM S Unit No.	HHU Nos.	HLC Broad Type	HLC Specific Type	Value
				Melbourne House, Sydney House, Wellington House and Auckland House, and are collectively known as Australia Houses. They form a sub-rectangular complex of flats of immediate pre- and post-war date, of brown brick with flat roofs. The central internal court is grassed and crossed by paths, with perhaps contemporary tree planting, overlooked on all sides by the balconies of the flats. The slum clearances of the 1930's and 1940s have removed all evidence of the Victorian terraces which formerly occupied this area, although the main street alignments remain. The Australian Houses development represents an important and self-contained designed landscape unit, developed from a specific need to re-house the local population after slum and other clearance, and deserves better recognition, protection and appreciation.
HLCU 7	HHU28330, HHU28331 HHU28342, HHU28343	Commercial	Retail park Hotel complex	Negligible This HLCU lies on the north side of the A63 Castle Street, and to the east of Ferensway. Myton Street forms the east boundary and Anlaby Street is the north. The unit contains a mix of retail and commercial buildings. These buildings are of modern construction typical of many medium size retail units, with a mixture of brick and coloured steel panels lacking any locally distinctive features at this prominent location. All historic elements have been completely removed, apart from the alignment of Myton Street which is probably late 18th century in date. The area contains little of historic interest or merit.
HLCU 8	HHU28332, HHU28333 HHU28334, HHU28335 HHU28336, HHU28337 HHU28338, HHU28339 HHU28340	Commercial	Business (general)	Low This HLCU lies either side of Waterhouse Lane, on the north side of the A63 Castle Street and west of Princes Quay. It is bounded by Carr Lane to the north. This area is currently a mix of derelict and commercial land with boarded up buildings of different sizes, styles and ages. The south area of the unit, south of Osborne Street is set for regeneration as part of the major Quay West development. The whole area is characterised by dereliction and abandoned premises. However, a few historic elements survive, such as the main street alignments and the older properties at the east end of Roper Street - the latter are a well-balanced mix of 19th century properties which deserve to be renovated. Both the Listed Buildings on the A63 frontage, although in poor condition and visually unattractive at present, provide historic character to the area and are very prominent when travelling along the A63.
HLCU 9	HHU26778	Institutional	Cemetery	Medium This HLCU lies on the south side of the A63 Castle Street, in the south-east angle of the Mytongate Junction. It is located within the Old Town Conservation Area, and is considered above in Archaeology and Historic Buildings (C1).
HLCU 10	HHU26780, HHU26782 HHU26781	Commercial Recreation	Hotel complex Recreation	Negligible This HLCU lies on the south side of the A63 Castle Street, between the Railway Dock (HLCU 11) and the Holy Trinity burial ground (HLCU 9). It is located within the Old Town Conservation Area (C2). The four storey hotel is of modern construction although the materials, especially the red brick, help to integrate it into the area. To the south-west of the main building is a car park. No evidence for any historic features remains.
HLCU 11	HHU26094, HHU26770 HHU26771, HHU26776 HHU26779, HHU26784 HHU26785, HHU27657 HHU27658, HHU27659 HHU27661, HHU27663 HHU27664	Communications Commercial	Dock Business (general)	Medium This HLCU lies on the south side of the A63 Castle Street, to the west of the Old Town, and comprises the Humber and Railway Docks and their related structures and infrastructure. It is located within the Old Town Conservation Area and is considered above in Historic Buildings (C2). The A63 runs adjacent to the north wall of the Humber Dock, which is connected on its west side to the Railway Dock and to the river Humber on its south side, both via locks. Both docks are now used as marinas and contain moored boats. The movement of the wind through the masts and rigging of the boats helps to add increased visual and audible interest to the area. The dockside promenades and open views are important in this character unit. Formerly occupied by single storey transit sheds, warehouses and railway lines, the dock sides are now well used pedestrian areas with numerous seating opportunities. On the west side of the Humber Dock along Railway Street, recent improvement works have

MM S Unit No.	HHU Nos.	HLC Broad Type	HLC Specific Type	Value
				preserved dock wagon turntables and railway lines in a variety of granite setts and cobbles. Differential paving picks out the line of the medieval town wall and interval towers and the Hessle Gate along the west side of Humber Dock Street and Humber Place. The Railway Dock is enclosed by surrounding buildings and vegetation, resulting in a more secluded and quiet feel to the area. Apart from cast iron mooring bollards and some areas of original yard surfaces at the west end of Railway Dock, little historic dockside material remains – nothing can be seen of the timber yards, single storey transit sheds etc which once lined the sides of the dock, and most of the former dock sides have been repaved in modern materials.
HLCU 12	HHU26774	Commercial	Boat yard	<p>Negligible</p> <p>This HLCU lies in the angle of the Humber and Railway Docks, and represents the area occupied by the Hull Marina boat yard. It is located within the Old Town Conservation Area (C2).</p> <p>The area is largely open and flat for the dry storage of boats with a large boatshed, of modern construction, in the north-east corner being the major feature. The yard is surrounded by a large wall which prevents views of the area. Although architecturally undistinguished, the boat yard forms an important cultural link to the area's industrial past. The area was formerly occupied by the Hull and Selby Railway (H&SR) railway terminus, and its successor the North Eastern Railway (NER) central goods station.</p>
HLCU 13	HHU26772 HHU26773 HHU26775 HHU26783	Residential		<p>Negligible</p> <p>This HLCU lies in the south side of the Railway Dock and extends to the south as far as Wellington Street. The northern part, on the north side of Kingston Street, is located within the Old Town Conservation Area (C2).</p> <p>This new area of housing was constructed in the late 1980s and early 1990s and contains a network of small interlinked houses and flats constructed around small streets. There are no through roads within the estates, and so several semi-private courtyards are created with parking areas. These small scale residential developments are self-contained, with views towards the A63 screened by surrounding developments. The materials and style of the buildings link with the historic buildings in the area, although some detail is lost due to the use of lower quality materials. No obvious historic elements survive, apart from the main 19th century street alignments. The modern houses on the south side of Kingston Street are grouped around roads which reflect the area's maritime past, e.g. Halyard Croft, Boatswain Croft, Admiral's Croft and Commodore Croft.</p>
HLCU 14	HHU27654 HHU27655 HHU27656 HHU27665	Communications Commercial	Dock Business (general)	<p>Medium</p> <p>This HLCU covers Princes Dock, the central part of Princes Dock Street and the various dock-side infrastructure that remains. The area is located within the Old Town Conservation Area and is considered above in Historic Buildings (B2).</p> <p>The character is mixed between modern recreational waterfront and partly a 19th century dockside street. Princes Dock Street follows the western line of the medieval town wall and interval towers between Beverley Gate in the south and Myton Gate to the north, and the alignment has been picked out in differential brick paving. The Junction Dock, subsequently renamed Princes Dock, was opened in 1829. It was designed by James Walker and is a Grade II Listed Building. It has ashlar retaining walls with rounded copings and cast iron bollards; the entrances in the north-east and south-east corners are now blocked. The dock was linked to the Humber Dock (see HLCU 11) to the south via a lock on the south side, with a swing bridge to take the Mytongate traffic. Princes Dock closed to commercial traffic in 1967 and, although several historic buildings have been lost at the southern end of Princes Dock Street (see HLCU 15), sufficient survives to maintain the character and feel of a late Georgian/early Victorian dock-side street. The dock side retains some historic elements and character, such as the ashlar dock walls and cast iron mooring bollards. However, much has been removed (e.g. wooden setts, railway tracks and single storey transit sheds), to be replaced by an early 1990s block paved promenade with outside areas for eating and drinking. This has created a modern waterfront overlooking Princes Dock, diminished by the vast Princes Quay Shopping Centre that lies within it.</p>

MM S Unit No.	HHU Nos.	HLC Broad Type	HLC Specific Type	Value
				This large scale four storey building, which was constructed in 1987-90 over the west side of the dock, on silts to appear to float over the water, was designed by Hugh Martin and Partners, together with the large multi-storey car park attached to the south-west corner. The shopping centre dominates the dock. There are direct views south along Princes Dock Street to the A63, although longer distant views are screened by the Warehouse No 6 building.
HLCU 15	HHU28632, HHU28634 HHU28635	Residential	Private housing estate	<p>Low</p> <p>This HLCU lies on the north side of the A63 Castle Street, and is centred on Lisle Court, Trinity Court and Grammar School Yard. The unit extends from Princes Dock Street in the west to the east side of Vicar Lane. The area is located within the Old Town Conservation Area and is considered in historic buildings above (B3).</p> <p>These late 20th century residential estates are modern in character and retain a small intimate scale. The close brick-built blocks vary from two to three storeys in height and many, although not all, are roofed with traditional pantiles. The differing roof heights and angles add interest and break up the skyline. The internal or rear courtyard areas are shielded from the noise and sights of the A63 dual carriageway, and offer a sheltered environment perhaps more characteristic of the area's heritage, but the street frontage buildings are showing signs of wear and traffic pollution. The blocks of housing are divided into three zones by Dagger Lane and Fish Street, both medieval streets, and the alignment of the north side of the medieval Mytongate has been retained in the modern developments. Trinity Court is now a gated community. Apart from the small number of locally listed buildings on the Castle Street frontage, which all lie to the east of Fish Street, little evidence of the pre-19th century townscape survives above ground. However, the narrow parallel north-south medieval street pattern (both alignment and probably widths) has been retained, which means that the three large blocks into which this part of the medieval town was originally divided can still be determined. However, none of the internal property boundaries representing the subdivision of these plots remain, neither do any remnants of the Victorian courts, squares or entries. Archaeological excavations in the angle of Vicar Lane and Castle Street in 1975 revealed evidence of occupation spanning 500 years, from the early 14th century onwards.</p>
HLCU 16	HHU28650	Commercial Residential	Business (general) Town houses	<p>Medium</p> <p>This HLCU is in the Old Town, to the east of Princes Dock and north of the Lisle Court development. The north side is boarded by Posterngate and the south side by Robinson Row. The area is located within the Old Town Conservation Area and is considered in Historic Buildings (B5).</p> <p>This area has the appearance and character of an old port quarter, with Georgian overtones. Posterngate and Dagger Lane are straight narrow streets of medieval origin but the slightly curving Prince Street dates from the late 18th century (c.1770s) town improvements undertaken by Joseph Page. Many of the buildings in this quarter have maritime associations. Despite the wealth of historic buildings, there are also several modern structures. Views are restricted towards the A63 due to surrounding buildings, but glimpsed views south along Dagger Lane and Fish Street are possible towards the Humber Dock. The view east along Posterngate is also significant, with the tower of the Market Hall on the horizon. The narrow and straight medieval street alignments (Posterngate, Dagger Lane and Robinson Row) all remain, and retain an intimate feel. There are several historic cobbled road surfaces surviving, and the narrowness and straightness of Posterngate, with high sided buildings either side, creates a sense of enclosure and perhaps a reminder of what the 19th century Old Town might have been like. The restored Prince Street is particularly impressive and creates a pleasant Georgian feel. This unit has been occupied and developed since the medieval period, and dates to the later phase of the planned medieval town, between 1293 and 1347.</p>
HLCU 17	HHU28650	Commercial Institutional	Business (general) School	<p>High</p> <p>This HLCU is in the Old Town, between Posterngate in the south and Whitefrairgate to the north, and comprises the main Hull Trinity House</p>

MM S Unit No.	HHU Nos.	HLC Broad Type	HLC Specific Type	Value
				<p>complex. The area is located within the Old Town Conservation Area and is considered above in Historic Buildings (B2 and B5).</p> <p>Trinity House owned almost all the block of land bounded by Whitefrairgate, Trinity House Lane, Posterngate and Princes Dock Street, but this HLCU is confined to the inner core of buildings which still form a uniform and predominately unaltered whole - the properties along Whitefrairgate are not included. Many of the buildings were designed by William Foale, the Trinity House's architect. The buildings forming the Hull Trinity House complex comprises the most extensive group of older secular buildings in Hull. Many 18th and 19th century historic structures and elements survive in the character unit. Many are not open to the public, but there are tantalising views through the gateway from Princes Dock Street. The white painted front of Trinity House, forming the northwest corner of the church square is impressive, especially the gilded coat of arms, and is a landmark building. Many of the buildings, although slightly altered and renovated, retain their original characteristics, and many are listed buildings. This HLCU lies within the Old Town, and has been occupied and developed since the medieval period; it dates to the mid phase of occupation, i.e. 1275-85.</p>
HLCU 18	HHU28627, HHU28652	Commercial Institutional	Business (general) Religious (worship)	<p>High</p> <p>This HLCU is located to the north of the A63 Castle Street and on the north side of HLCU 15. The area is located within the Old Town Conservation Area and is considered above in Historic Buildings (A3 and B4).</p> <p>Trinity Square is centred on Holy Trinity church. Trinity Square, has been improved to give it civic character as an open urban space. It is a visually diverse area enclosed by the historic buildings which line North and South Church Sides, and they link into the square to several outdoor seating and eating areas primarily located along King Street. Overlooking and dominating the west side of the square is the medieval Holy Trinity church. The narrow and straight medieval and later street alignments (North Church Side, South Church Side and Vicar Lane) all remain, and retain an intimate feel. Many retain their 19th century cobbled surfaces. The view to the west along Posterngate with the tall buildings on both sides gives an impression of what the 19th century Old Town might have been like, and the Blue Bell Entry provides an example of the numerous 19th century narrow passages and entries which formerly occupied this densely occupied area. Trinity Square has a sense of enclosure formed by the tall buildings all around and the church dominating the centre. The Market Place is centred on the King William monument. The character unit also includes the southern part of Market Place, running north-south along the east side of Holy Trinity church. The historic context of this area has been diminished by the construction of modern structures on its east side (see HLCU 19), and the grain of the original plots has been lost but there are some earlier elements remaining. This HLCU lies within the heart of the Old Town, and the area has been occupied and developed since the later 13th century.</p>
HLCU 19	HHU28624, HHU28625	Institutional Commercial	Courts Retail (general)	<p>Negligible</p> <p>This HLCU lies on the north side of the A63, on the east side of Market Place and is bounded by Liberty Lane in the north. It is located within the Old Town Conservation Area and is considered above in Historic Buildings (A3).</p> <p>The unit is dominated by two modern buildings, the recently constructed Magistrates Courts at the south end and King William House which includes a multi-storey car park to the north. Wide ranging views are possible from the southern part of the unit over the A63, especially as it rises towards Myton Bridge and the large open Market Place junction. Virtually nothing relating to the Old Town remains in this unit, due to the scale of the modern development. This HLCU lies within the heart of the Old Town, and represents one of the earliest parts of the planned medieval town to have been occupied; it developed from the mid-13th century.</p>
HLCU 20	HHU8415, HHU8427	Residential	Private Housing Estate	<p>High</p> <p>This HLCU lies on the north side of the A63 Garrison Road and the Myton Bridge, on the west bank of the River Hull. The unit extends further to the</p>

MM S Unit No.	HHU Nos.	HLC Broad Type	HLC Specific Type	Value
	HHU8431, HHU28626 HHU28639	Commercial	Business (general)	<p>north, but only the section as far north as Scale Lane Staithe is described below. The unit is located within the Old Town Conservation Area and is considered above in Historic Buildings (A1 and A2).</p> <p>The area has an open but linear feel about it. Views are possible to the elevated Myton Bridge as it rises above the High Street and river, although views are restricted west along the A63 corridor. A footpath runs along the west bank of the river on a timber/ concrete wharf structure, in front of a mixture of new buildings and renovated and old warehouses, providing wide ranging views over the river and to the south towards Myton Bridge. The High Street continues to the south to run under the elevated section of the A63 - this is an unattractive area with a predominance of modern buildings. The flat topography of the area and the tightly packed built form means that the river is a largely hidden entity from the High Street, only visible as glimpsed framed views east along the staithe. Activity on the river can only be seen very occasionally from the High Street when boats pass at high tide. High Street was the heart of the medieval city, where the merchants had their homes, warehouses and wharfs, and short lanes run east to the river frontage - these are known locally as staithe, meaning "landing place". This character unit lies within the heart of the Old Town, and represents the earliest part of the planned medieval town to have been occupied; it developed from the mid-13th century. The medieval plots are characteristically long and thin running between High Street and the river, built on reclaimed land.</p>
HLCU 21	HHU28628, HHU28629	Commercial	Offices	<p>Negligible</p> <p>This HLCU lies on the south side of the A63 Castle Street, east of Humber Dock Street. It is bounded by Castle Street to the north, Blanket Row to the south and Finkle Street on the east. It is located within the Old Town Conservation Area and is considered above in Historic Buildings (C5).</p> <p>This late 1980s development consists of small office units built around an internal courtyard with a separate car parking area on the east side of Sewer Lane. There are several trees within the paving between the building and the A63 which help to improve the building's setting which, combined with the courtyard and car park vegetation provide some green structure in an otherwise hard urban landscape. Historically, the area contained a densely packed combination of residential and commercial properties, although nothing of this now survives above ground. Both Sewer Lane and Finkle Street retain their 19th century cobbled surfaces and widths, and medieval alignments, but otherwise all historic elements have been removed as part of the 1980s development. This HLCU lies within in the western part of the Old Town, and has been occupied and developed since the later 13th century; it was part of the later phase of development from c.1347 onwards.</p>
HLCU 22	HHU28623, HHU28630 HHU28631, HHU28620	Derelict land		<p>Negligible</p> <p>This HLCU lies on the south side of the A63 Castle Street, centred on Blanket Row and Blackfriargate. It is located within the Old Town Conservation Area and is considered in Historic Buildings above (C5).</p> <p>The unit is defined by many derelict spaces, several now used as car parks, and the whole area is designated for regeneration as part of the Fruit Market redevelopment scheme. As a result, the unit has an open derelict feel with the sense that it is waiting to be developed. Due to the open nature of the area, there are wide ranging views north to the A63 and Holy Trinity church beyond. As a result of the clearances, there are few historic features surviving above ground. Archaeological investigations have shown the below-ground archaeological deposits survive in good condition and to considerable depth - there are two notice boards explaining the recent (2008) discoveries here, and a plaque on the south wall at the east end of Humber Street commemorates the location of the Watergate. This HLCU lies within in the Old Town, and has been occupied and developed since the mid-later 13th century.</p>
HLCU 23	HHU28599, HHU28659	Commercial	Warehousing Business (general)	<p>Medium</p> <p>This HLCU is centred on Humber Street, to the south of the A63 Castle Street, and includes the properties on either side. It is located within the</p>

MM S Unit No.	HHU Nos.	HLC Broad Type	HLC Specific Type	Value
				<p>Old Town Conservation Area and is considered above in Historic Buildings (C4).</p> <p>The area contains many warehouses linked to its former late 19th century use as a central wholesale fruit and vegetable market, which developed here because of its proximity to the Humber Dock and Victoria Pier. Despite the closure of the dock in 1969, the fruit market adapted to road haulage for its delivery of fruit and vegetables. The tightly packed warehouses and service yards of various styles and ages gives the area an enclosed feel, although views are possible out to the west along the wide streets towards the Humber Dock and to the north along Queen Street to the Market Place, the A63 and the tower of Holy Trinity church beyond. The surviving buildings range in height from two to four storeys, and have a very mixed form. This is partly due to World War II bomb damage and subsequent post-war clearance and redevelopment. Humber Street represents the line of the medieval town walls, and the river previously extended up to it.</p>
HLCU 24	HHU28601, HHU28611 HHU28612, HHU28618 HHU37245	Communications	Basin	<p>Low</p> <p>This HLCU lies on the south side of the A63 Garrison Road and the Myton Bridge, on the west bank of the river Hull. It is located within the Old Town Conservation Area and is considered in Historic Buildings above (C3).</p> <p>The character of this unit is defined by its river front location. The Grade II Listed Central Dry Dock is located off Humber Street which closed in 1992 and is currently silted up, although it provides visual and historic interest to the area - it is highly visible from the new Millennium walkway leading to the east side of the river. However, the former offices and other buildings which formed part of the same complex have been demolished, prior to the area being redeveloped.</p>
HLCU 25	HHU26810 HHU26815 HHU26825	Communications Transport	Railway/Bus station Hotel Complex	<p>High</p> <p>This HLCU is located north of the A63, west of Ferensway and north of Anlaby Road. It is bounded to the east by the Jameson Conservation Area.</p> <p>The character of the unit is derived from its function as Hull's major transport hub. The major buildings within the unit are the Hull Paragon Interchange, combined railway and bus station and the original attached railway hotel. The railway station and hotel were designed and built as one, in the Italian Renaissance style in 1847. The bus station was added as a separate building to the north in the 1930s and was integrated into the railways station in 2007. It was at this time that the area in front of the station began to be redeveloped, including the construction of St Stephens Shopping Centre to the north.</p>
HLCU 26	HHU26830, HHU28428 HHU28429, HHU28431 HHU28432, HHU28433	Manufacturing Commercial	Shopping centre Commercial (general)	<p>Medium</p> <p>This HLCU is located north of the A63, immediately east of Princes Dock. It is located within the Old Town Conservation Area (C2, C4, C5, C6, C7, C8) and is bounded by Posterngate in the south, Alfred Gelder Street in the north and Trinity House Lane in the east.</p> <p>The character of the unit is largely commercial, Whitefriargate is one of the main shopping streets in Hull and is pedestrianised. The area to the south Whitefriargate was dominated by Hull Trinity House buildings. Most of the buildings within the unit are of 19th or 20th century date with modern ground floor shopfronts. The northern half of the unit previously fronted onto Queens Dock and consequently featured several warehouses. An important view can be gained west along Whitefriargate towards City Hall and the location of the now demolished Beverley Gate. Historically Whitefriargate would have been a main thoroughfare and access point to Beverley Gate which was situated at its western extent and was one of the four gates to enter the city through the old town walls. This HLCU lies within the Old Town, and has been occupied and developed since the mid-later 13th century.</p>
HLCU 27	HHU28350, HHU28351 HHU28352, HHU28353 HHU28354, HHU28355	Manufacturing Commercial Settlement	Commercial (general)	<p>Medium</p> <p>This HLCU is located north of the A63. It is bounded by West Street in the north, King Edward Street in the east, Carr Lane in the south and Ferensway in the west. The unit makes up the Jameson Street Conservation Area. This HLCU lies outside the Old Town.</p>

MM S Unit No.	HHU Nos.	HLC Broad Type	HLC Specific Type	Value
	HHU28356, HHU28357 HHU28358, HHU28359 HHU28360, HHU28361 HHU28362, HHU28363 HHU28364, HHU28365 HHU28438			Jameson Street and Paragon Street are the unit's main thoroughfares and consist largely of commercial buildings. With a mixture of late 19 th and 20 th century buildings with modern ground floor shopfronts. Historically the area was dominated by terraced housing interspersed with small scale industrial premises, public houses and non-conformist chapels. Much of the original street layout remains.
HLCU 28	HHU20660, HHU20821	Settlement	Planned residential development Terraced housing	Low This HLCU is in Hessle, a western suburb of Hull, north of the A63. The HLCU is bounded by the Hessle Southfield Conservation Area to the north and west, HLCU29 in the east and the A63 and railway line to the south. The unit is made up of a mid-20 th century planned housing estate, consisting of semidetached dwellings and short terraces. The winding streets prevents long views. There is a sense of greenery and space.
HLCU 29	HHU20807, HHU20808 HHU20810, HHU20811	Manufacturing and commercial	Industrial estate/Retail Park	Negligible This HLCU is in Hessle, a western suburb of Hull, the A63 passes through its centre. The HLCU is bounded by the Humber Estuary to the south and Fleet Drain in the north and west with residential areas of Hessle located to the north. The unit comprises a mixture of industrial buildings and large-scale retail premises with large areas of associated car parking. The A63 carriageway and railway line dominate the centre of the area. Historically the area was agricultural land, historic mapping shows the south west of the unit was occupied by a brick and tile works from at least the mid-19 th century. The area is the also the location for a historic landfill.
HLCU 30	HHU26295, HHU26282 HHU26296, HHU26287 HHU26283	Commercial Industrial	Industrial works (general) Business (general)	Low This HLCU lies to the south and east of the A63 Hessle Road, at the west end of the study area. The boundaries are defined by Humber Bank in the south, Roper Street to the east and Hessle Road (A63) to the north and west. The HLCU is dominated by large scale industrial units which have destroyed much of the original street layout. The north-east corner of the unit is all that survives of the smaller scale tight packed industrial and commercial premises which previously occupied the area. The area was developed in the 19 th century as the location for larger homes with extensive gardens in comparison to the neighbouring English Town development (HLCU2). Almost all this landscape has now been removed by the 20 th century industrial development of the area.

A63 Castle Street Improvements, Hull Environmental Statement

Appendix 8.3

CULTURAL HERITAGE – IMPACT ASSESSMENT TABLES

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A63 Castle Street Improvement, Hull

Environmental Statement

Appendix 8.3 Impact assessment tables

Revision Record						
Rev No	Date	Originator	Checker	Approver	Status	Suitability
P01.1	29.01.18	C Hewitson	J Sugrue	J Williams	S0	Suitability
P01.2	20.03.18	C Hewitson	J Sugrue	J Williams		Updated
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P03	04.09.18	C Hewitson	J Sugrue	J Williams	Shared	S4

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1. Impact assessment tables

1.1.1 The following tables have been used to assess the impacts on key heritage assets caused by the A63 Castle Street Improvements (the Scheme). They have been separated into temporary construction effects, permanent construction effects, and operational effects.

1.1 Temporary construction effects

Table 1.1: Predicted temporary construction effects on archaeological remains

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS494	Beverley Gate and adjacent archaeological remains forming part of Hull's medieval and post-medieval defences	6	High	<p>Realignment of services and utilities (SU) in Queen Victoria Square has the potential to impact on the setting of the Beverley Gate, and the associated medieval wall.</p> <p>The setting of the Beverley Gate, visible in the public viewing area would be impacted during work. These impacts include, visual and noise impacts from machinery during the excavation and diversion of services and utilities. These impacts would be short term impacts that would not last beyond the duration of the Scheme.</p>	Negligible negative	Slight adverse

Table 1.2: Predicted temporary construction effects on key historic buildings

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS144	Trinity Burial Ground	3	High	<p>During construction work there would be a temporary impact on the setting of the remainder of the burial ground (c. 70%) not excavated as part of the Mytongate underpass and associated heritage assets (this includes two lamp posts either side of the burial ground and built structures including boundary walls) caused by noise, and visual impacts from the archaeological excavation of the burial ground, excavation and piling of the Mytongate underpass and retaining wall, increased construction traffic, temporary diversions and excavation of the A63 Castle Street, the excavation of the sewer diversion on the southern boundary and Land South East of Mytongate Junction used for a construction site compound and subsequently the Pumping House.</p> <p>The Trinity Burial Ground would be subject to temporary impacts on its setting caused by the addition of a tent across the burial site during archaeological excavation to screen the excavation from public view. This would result in the loss of trees in this area reducing the enclosed tranquil feel of the burial ground. Although some of the trees would be replanted this would remain a medium or long-term impact on the burial ground.</p> <p>The duration of the work around the Mytongate Junction from enabling to completion is 5 years, including archaeological excavations in the Trinity Burial Ground and the excavation of the underpass.</p>	Major negative	Large adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS600	Statue of King William III and Flanking Lamps	1, 6	High	<p>During construction work there would be a temporary impact on the setting of the King William III statue caused by noise and visual impacts from increased construction traffic, temporary diversions and excavation of the A63 Castle Street in the location south of Market Place and the Old Town Accommodation Works.</p> <p>Although some work would occur throughout the 5 year duration of the Scheme the main work involved with the slip road on to Market Place is expected to be six months in duration.</p>	Minor negative	Moderate adverse
MMS601	Market Place Toilets	1, 6	Medium	<p>During construction work there would be a temporary impact on the setting of the King William III statue, toilet and King William Hotel caused by increased construction traffic, temporary diversions and excavation of the A63 Castle Street in the location south of Market Place.</p> <p>Although some work would occur throughout the 5 year duration of the Scheme the main work involved with the slip road on to Market Place is expected to be six months in duration.</p>	Minor negative	Slight adverse
MMS602	Warehouse No. 6	2	Medium	<p>During construction work there would be a temporary impact on the setting of Warehouse No. 6 during work caused by noise and visual impacts from increased construction traffic, temporary diversions, the excavation of the A63 Castle Street and the construction of the Princes Quay pedestrian, cycle and disabled user bridge (known forthwith as the Princes Quay Bridge) including excavation works and piling.</p> <p>Although some work would occur throughout the 5 year duration of the Scheme the main work involved with the construction of the Princes Quay Bridge is expected to be 17 months in duration.</p>	Moderate negative	Moderate adverse
MMS603	Castle Buildings	3	Medium	<p>During construction the Castle Buildings would see a temporary impact to their setting caused by the excavation and piling of the Mytongate underpass and retaining wall; increased construction traffic, temporary diversions and excavation of the A63 Castle Street; utilities work on Waterhouse Lane, the use of the Staples construction site compound, and the dismantling of the Earl de Grey public house.</p> <p>Dewatering the underpass excavation during construction is predicted to result in a reduction of groundwater of no more than 0.5 m beyond the piled walls adjacent to Castle Buildings (Chapter 11, Road Drainage and the Water Environment). This is not considered to present a structural danger to the buildings.</p> <p>The duration of the work around the Mytongate Junction from enabling to completion is 5 years, including archaeological excavations in the Trinity Burial Ground.</p>	Major negative	Large adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS604	Earl de Grey public house	3	Medium	The built heritage asset would be demolished during work. This would result in the permanent construction impacts only and are considered below.	n/a	n/a
MMS605	Vauxhall Tavern public house	4	Medium	<p>During construction work there would be a temporary impact on the setting of the building during work caused by increased construction traffic; temporary diversions and excavation of the A63 Castle Street; the realignment of Spruce Street and excavation of deposits; the use of the Arco Compound including a Bentonite plant and ancillary equipment, jet grout mixers and cement storage silos; and the demolition of Myton Centre, its use as the Myton Centre Parking and the creation of public space. This would introduce noise and visual intrusion including 24 hour lighting into the setting of the public house. This work would be for the 5 year duration of the Scheme.</p> <p>The historic setting of the asset was as a corner street public house within an area of industrial Hull. Although the current setting has changed it still retains links with this historic setting. The introduction of additional noise and visual intrusion will represent a change from this setting but not a departure from its traditional historic context which has always been closely associated with a busy industrial area of Hull.</p>	Moderate negative	Slight adverse
MMS606 MMS607	Trinity House workshop and Buoy Shed/ Tubular Crane to North East of Former Trinity House Buoy Shed	5	Medium	There would be no impact to the asset during construction. The use of the A63 Westbound Recovery Base would not impact on these assets as their setting would remain unchanged from the baseline of mixed retail and industrial units east of the River Hull.	No change	Neutral
MMS608	Robbie's public house	5	Medium	There would be no impact to the asset during construction. The use of the A63 Westbound Recovery Base would not impact on this asset as its setting would remain unchanged from the baseline of mixed retail and industrial units east of the River Hull.	No change	Neutral
MMS612	Old Grammar School Museum	6	Medium	<p>There would be a temporary impact on the setting where assets have direct sight lines to the A63 Castle Street. However, this is diminished by the surrounding streetscape which screens most of these assets from visual impacts and lessens noise impacts.</p> <p>There would be a temporary impact on the setting of the historic buildings during work from construction traffic and excavation during the Old Town Accommodation Works. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.</p>	Negligible negative	Slight adverse
MMS618	Parish Church of the Holy Trinity and Churchyard Wall	6	High	The construction work on the A63 Castle Street would have a temporary impact on the setting of the heritage asset where a direct sight line exists to the A63 Castle Street at the eastern end. The impact on the setting is lessened elsewhere by the screening provided by the existing streetscape. However, views of the church tower, particularly from the Queen Street/	Minor negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				<p>Market Place junction with the A63 Castle Street would be impacted by the amount of construction work occurring in this location and the likely duration of the work.</p> <p>There would be a temporary impact on the setting of the historic building during work from construction traffic and excavation during the Old Town Accommodation Works. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.</p>		
MMS619	Minerva Lodge of Freemasons Number 250	6	High	<p>There would be a temporary impact on the setting where assets have direct sight lines to the A63 Castle Street. However, this is diminished by the surrounding streetscape which screens most of these assets from visual impacts and lessens noise impacts.</p> <p>There would be a temporary impact on the setting of the historic buildings during work from construction traffic and excavation during the Old Town Accommodation Works. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.</p>	Negligible negative	Slight adverse
MMS628	Hull Trinity House	6	High	<p>There would be a temporary impact on the setting of the asset during construction work during service and utility diversions. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.</p>	Negligible negative	Slight adverse
MMS646	10-15, Whitefriargate, Kingston Upon Hull	6	High	<p>There would be a temporary impact on the setting of the asset during construction work during service and utility diversions. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.</p>	Negligible negative	Slight adverse
MMS673	Princes Dock	2	Medium	<p>During construction work there would be a temporary impact on the setting of the Princes Dock during work caused by noise and visual impacts from increased construction traffic, temporary diversions, the excavation of the A63 Castle Street, archaeological excavations on Princes Dock Street and the construction of the Princes Quay Bridge including excavation works and piling.</p> <p>Although some work would occur throughout the 5 year duration of the Scheme the main work involved with the construction of the Princes Quay Bridge is expected to be 17 months in duration.</p>	Minor negative	Slight adverse
MMS720	City Hall	6	High	<p>There would be a temporary impact on the setting of the asset during construction work during service and utility diversions. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.</p>	Negligible negative	Slight adverse
MMS724	Church of St Mary	6	High	<p>There would be a temporary impact on the setting where assets have direct sight lines to the A63 Castle Street. However, this is diminished by the surrounding streetscape which screens most of these assets from visual impacts and lessens noise impacts.</p> <p>There would be a temporary impact on the setting of the historic buildings during work from construction traffic and excavation</p>	Negligible negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				during the Old Town Accommodation Works. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.		
MMS725	Hull Maritime Museum and Adjoining Railings	6	High	There would be a temporary impact on the setting of the asset during construction work during service and utility diversions. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.	Negligible negative	Slight adverse
MMS742	Guildhall	6	High	There would be a temporary impact on the setting where assets have direct sight lines to the A63 Castle Street. However, this is diminished by the surrounding streetscape which screens most of these assets from visual impacts and lessens noise impacts. There would be a temporary impact on the setting of the historic buildings during work from construction traffic and excavation during the Old Town Accommodation Works. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.	Negligible negative	Slight adverse
MMS761	Humber Dock	2	Medium	During construction work there would be a temporary impact on the setting of the Humber Dock during work caused by noise and visual impacts from increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street and the construction of the Princes Quay Bridge including excavation works piling, construction work based from barges within the dock and the relocation of the Spurn lighthouse from the north of the Humber Dock to another location within the dock. This would be most pronounced at the northern end of the dock near the A63 Castle Street, but this area is already subject to impacts from traffic, noise and dust caused by the existing traffic flow on the A63 Castle Street. The impact at the southern end would be less pronounced but there would still be visual impacts and noise impacts caused by construction work due to the open nature of the dock throughout the dock. Although some work would occur throughout the 5 year duration of the Scheme the main work involved with the construction of the Princes Quay Bridge is expected to be 17 months in duration.	Minor negative	Slight adverse
MMS764	Shipping Line Office	7	Medium	During construction work there would be a temporary impact on the setting of the building during work caused by increased construction traffic, temporary diversions and excavation of the A63 Castle Street, realignment of the entrance to the Holiday Inn Car Park and from excavation and accommodation work associated with the Trinity Burial Ground. In addition, there would be impacts to setting of the historic building associated with the raising of the level of the Commercial Road and the excavation of the construction of the outfall of rising main into the Humber Estuary. This is likely to take the form of visual and noise impacts affecting the setting of the listed	Minor negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				<p>building and lasting for the 5 year duration of the scheme.</p> <p>The historic building is set further south from the main work on the A63 Castle Street and there would be a degree of screening caused by the buildings of the Holiday Inn and the boundary wall of the Trinity Burial Ground. This would reduce the visual and noise impacts.</p>		
MMS765	Warehouse No. 13 Former Railway Dock Warehouse	7	Medium	<p>During construction work there would be a temporary impact on the setting of the building during work caused by increased construction traffic, temporary diversions and excavation of the A63 Castle Street, realignment of the entrance to the Holiday Inn car park and from excavation, accommodation work associated with the Trinity Burial Ground and the Yorkshire Water Sewer Diversion south of Trinity Burial Ground and lasting for the 5 year duration of the scheme.</p> <p>These heritage assets are set back to the south of the A63 Castle Street and the Trinity Burial Ground. The works are partially screened by the presence of the boundary wall of the Trinity Burial Ground and the buildings of the Holiday Inn. However, views would still exist from the upper stories of Warehouse No. 13.</p>	Minor negative	Slight adverse
MMS767	Former Railway Dock, Connecting Channel, Swing Bridge	7	Medium	<p>During construction work there would be a temporary impact on the setting of the building during work caused by increased construction traffic, temporary diversions and excavation of the A63 Castle Street, realignment of the entrance to the Holiday Inn car park and from excavation, accommodation work associated with the Trinity Burial Ground and the Yorkshire Water Sewer Diversion south of Trinity Burial Ground and lasting for the 5 year duration of the scheme.</p> <p>These heritage assets are set back to the south of the A63 Castle Street and the Trinity Burial Ground. The works are partially screened by the presence of the boundary wall of the Trinity Burial Ground and the buildings of the Holiday Inn.</p>	Minor negative	Slight adverse
MMS768	Model Dwellings	8	Medium	<p>There would be a temporary impact on the setting of the asset during service and utility diversions. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.</p>	Negligible negative	Slight adverse
MMS776	Paragon Station and Station Hotel	8	High	<p>There would be a temporary impact on the setting of the asset during service and utility diversions on Ferensway and NGN Utility Diversion, Ferensway, west of Paragon Station. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.</p>	Negligible negative	Slight adverse
MMS782	11 and 12, Savile Street, Kingston Upon Hull	8	Medium	<p>There would be a temporary impact on the setting of the asset during service and utility diversions. However, this would be for a shorter duration than the 5 years of the remainder of the Scheme.</p>	Negligible negative	Slight adverse
MMS853	Alexandra Hotel	4	Medium	<p>During construction work there would be a temporary impact on the setting of the building during work caused by increased</p>	Minor negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				construction traffic, temporary diversions and excavation of the A63 Castle Street.		
MMS856	King William Hotel, Market Place	1, 6	Low	<p>During construction work there would be a temporary impact on the setting of the King William III statue, toilet and King William Hotel caused by increased construction traffic, temporary diversions and excavation of the A63 Castle Street in the location south of Market Place.</p> <p>Although some work would occur throughout the 5 year duration of the Scheme the main work involved with the slip road on to Market Place is expected to be six months in duration.</p>	Minor negative	Slight adverse
MMS857, MMS858, MMS859	Nos 74, 75 and 76 Castle Street	1	Low	<p>During construction work there would be a temporary impact on the setting of the buildings during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street.</p> <p>Although some work would occur throughout the 5 year duration of the Scheme the main work involved with the slip road on to Market Place is expected to be six months in duration.</p>	Moderate negative	Slight adverse
MMS860	No 82-83 Castle Street, Burnett House	1	Low	<p>During construction work there would be a temporary impact on the setting of the buildings during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street.</p> <p>Although some work would occur throughout the 5 year duration of the Scheme the main work involved with the slip road on to Market Place is expected to be six months in duration.</p>	Moderate negative	Slight adverse
MMS861	No. 65 Castle Street, Hull Telephone Exchange	1	Low	<p>During construction work there would be a temporary impact on the setting of the buildings during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street.</p> <p>Although some work would occur throughout the 5 year duration of the Scheme the main work involved with the slip road on to Market Place is expected to be six months in duration.</p>	Moderate negative	Slight adverse
MMS865	Whittington and Cat public house, Commercial Road	4	Low	<p>During construction work there would be a temporary impact on the setting of the historic building during work. This is caused by increased construction traffic, temporary diversions and excavation of the A63 Castle Street, the excavation and piling of the Mytongate underpass and retaining wall, the construction of the Mytongate Junction, the raising of Commercial Road to the level of the Mytongate Junction, the Kingston Retail Park accommodation work, and Arco Compound which would introduce noise and visual impacts from the adjacent compound and work on the adjacent Trinity Burial Ground and lasting for the 5 year duration of the scheme..</p> <p>The historic setting of the Whittington and Cat public house was in an area of industrial buildings and the green space and Trinity</p>	Moderate negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				Burial Ground opposite represent the only element of the original setting surviving. This historic setting has been almost entirely eroded and the importance of the buildings current setting of retail parks and car parks is low. The introduction of the Scheme, will change the setting of the public house but will not impact its significance as it has already been largely removed from its historic setting.		
MMS868	Pumping Station No 3	5	Low	There would be no impact to the asset during construction. The use of the A63 Westbound Recovery Base would not impact on this asset as its setting would remain unchanged from the baseline of mixed retail and industrial units east of the River Hull.	No change	Neutral
MMS869	Duke of Edinburgh public house, Great Union Street	5	Low	There would be no impact to the asset during construction. The use of the A63 Westbound Recovery Base would not impact on this asset as its setting would remain unchanged from the baseline of mixed retail and industrial units east of the River Hull.	No change	Neutral
MMS870	Victoria Dock Tavern, Great Union Street	5	Low	There would be no impact to the asset during construction. The use of the A63 Westbound Recovery Base would not impact on this asset as its setting would remain unchanged from the baseline of mixed retail and industrial units east of the River Hull.	No change	Neutral
MMS871	Finnish Church	5	Low	There would be no impact to the asset during construction. The use of the A63 Westbound Recovery Base would not impact on this asset as its setting would remain unchanged from the baseline of mixed retail and industrial units east of the River Hull.	No change	Neutral
MMS874	Former Winding House, South Bridge Road	5	Low	There would be no impact to the asset during construction. The use of the A63 Westbound Recovery Base would not impact on this asset as its setting would remain unchanged from the baseline of modern housing in Victoria Dock Village east of the River Hull.	No change	Neutral
MMS910	Statue of William de la Pole	7	Medium	During construction there would be a temporary impact caused to the setting of the statue of William de la Pole caused by increased construction traffic, temporary diversions and excavation of the A63 Castle Street. The sightlines are limited to the north by the curve of Queen Street. The statue is located c. 250m south of towards A63 Castle Street with screening caused by the surrounding townscape.	Negligible negative	Neutral
MMS983	Cream K6 Telephone Kiosk, Waverley Street	4	Low	The built heritage asset would be demolished during work. This would result in the permanent construction impacts only and are considered below.	n/a	n/a
MMS985	Drypool Bridge	5	Low	There would be no temporary construction impacts on the asset.	No change	None
MMS989	Humber Bridge	10	High	During construction there would be a temporary impact on the setting of the Humber Bridge caused by temporary noise and visual impacts from cabins, stored materials, and 24-hour lighting associated with the Livingston Road construction site	Negligible negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				compound. The bridge is located at its closest at approximately 1,100m to the west of the construction site compound and there is no screening over the Humber Estuary. The construction site compound would not be a notable change to the surrounding landscape along the northern Humber Foreshore of light industrial units.		
MMS990	Tidal Surge Barrier	5, 7	Medium	<p>During construction there would be a temporary impact to the setting of the Tidal Barrier caused by increased construction traffic, temporary diversions and excavation of the A63 Castle Street; work associated with the realignment of the non-motorised user route at High Street Underpass; work associated with the Old Town Improvements.</p> <p>The impacts from the A63 Castle Street would be most pronounced on the raised section of ground on the approach to the western side of the Myton Bridge which is approximately 60m from the structure. Impacts from the construction site compound would be partially screened by the Myton Bridge.</p> <p>The structure has existing impacts from the traffic on the A63 Castle Street and Myton Bridge and is a modern robust industrial structure with aesthetic qualities which already exists in an urbanised landscape.</p> <p>The use of the A63 Westbound Recovery Base would not impact on this asset as its setting would remain unchanged from the baseline of mixed retail and industrial units east of the River Hull.</p>	Negligible negative	Neutral

Table 1.3: Predicted temporary construction effects on conservation areas (including historic buildings)

MMS Nos	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
A1	Old Town Central and Eastern, Zone 1, the High Street, Lanes and Staithe	1, 6	High	During construction work there would be a temporary impact on the setting of the conservation area caused by increased construction traffic, temporary diversions and excavation of the A63 Castle Street.	Minor negative	Slight adverse
A2	Old Town, Central and Eastern, Zone 2, the Wharves and River	6	Medium	During construction work there would be a temporary impact on the setting of the conservation area caused by increased construction traffic, temporary diversions and excavation of the A63 Castle Street.	Negligible negative	Neutral
A3	Old Town, Central and Eastern, Zone 3, Lowgate/ Market Place	1, 6	High	During construction work there would be a temporary impact on the setting of the conservation sub-area during work caused by noise and visual impacts from increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street. The impact would be greatest towards the southern end of the conservation area sub-zone along the line of the A63 Castle Street. It would be reduced towards the northern end of the conservation area sub-zone that lies away from the A63 Castle Street and is partially screened	Minor negative	Slight adverse

MMS Nos	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				<p>by the surrounding streetscape, although views would still exist towards the along Market Place.</p> <p>There would be a temporary impact on the setting of the asset during construction work lasting the 5 year duration of the Scheme caused by noise and visual impacts from construction traffic and excavation during the Old Town Accommodation Works. The duration required for work is not considered to cause a significant impact to the asset.</p>		
A4	Old Town, Central and Eastern, Zone 4, Lowgate/ Alfred Gelder Street Junction	6	High	<p>There would be a temporary impact on the setting of the asset during construction work from construction traffic and excavation during the Old Town Accommodation Works. Screening caused by the townscape of the northern part of the Old Town conservation area means that only partial views to the south down Lowgate would be see temporary construction impacts on the conservation area sub-zone during the Scheme. The duration required for work is not considered to cause a significant impact to the asset.</p>	Negligible negative	Slight adverse
B1	Old Town, Western and Northern Part, Zone 1 Queen Victoria Square	6	High	<p>There would be a temporary impact on the setting of the asset during service and utility diversions in Queen Victoria Square.</p>	Negligible negative	Slight adverse
B2	Old Town, Western and Northern Part, Zone 2 Princes Dock Street	2, 6	Medium	<p>There would be a temporary impact on the setting of the historic buildings and conservation sub-area during service and utility diversions, and caused by noise and visual impacts from increased construction traffic, temporary diversions and excavation of the A63 Castle Street and the construction of the Princes Quay Bridge.</p> <p>The impact would be greatest towards the southern end of the conservation area sub-zone along the line of the A63 Castle Street. It would be reduced towards the northern end of the sub-zone where the greatest concentration of historic buildings is located on the eastern side of the Princes Dock.</p>	Minor negative	Slight adverse
B3	Old Town, Western and Northern Part, Zone 3 Castle Street, Dagger Lane to Vicar Lane	1, 6	Medium	<p>During construction work there would be a temporary impact on the setting of the conservation sub-area during work caused by noise and visual impacts from increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street. The impact would be greatest towards the southern end of the conservation area sub-zone along the line of the A63 Castle Street. It would be reduced towards the northern end of the conservation area sub-zone that lies away from the A63 Castle Street and is partially screened by the surrounding streetscape.</p> <p>There would also be a temporary impact on the conservation sub-area during work caused by the Old Town Accommodation Works. The duration required for work is not considered to cause a significant impact to the asset.</p>	Minor negative	Slight adverse
B4	Old Town, Western and Northern Part, Zone 4, Trinity Square, North and South Church Side	6	High	<p>During construction work there would be a temporary impact on the setting of the conservation sub-area during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street. The area is partially screened by the streetscape to the south (see B3 above).</p>	Minor negative	Slight adverse

MMS Nos	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				There would be a temporary impact on the setting of the asset during construction work from construction traffic and excavation during the Old Town Accommodation Works. The duration required for work is not considered to cause a significant impact to the asset.		
B5	Old Town, Western and Northern Part, Zone 5 Posterngate	6	High	<p>There would be a temporary impact on the setting of the historic buildings and conservation area sub-zone during construction work from traffic and excavation during the construction of the main route of the A63 Castle Street. The area lies away from the main route of the A63 Castle Street and is partially screened by the streetscape in this location. This would reduce visual and noise impacts, except at the western end adjacent to the Princes Dock.</p> <p>There would be a temporary impact to the setting of the conservation area sub-zone during the Scheme caused by the Old Town Accommodation Works, and service and utility diversions. The duration required for work is not considered to cause a significant impact to the asset.</p>	Minor negative	Slight adverse
B6	Old Town, Western and Northern Part, Zone 6, Whitefriargate and Silver Street	6	High	There would be a temporary impact on the setting of the historic building and conservation area sub-zone during construction work from construction traffic and excavation during service and utility diversions. The duration required for service and utilities work is not considered to cause a significant impact to the asset.	Negligible negative	Slight adverse
B7	Old Town, Western and Northern Part, Zone 7, Parliament Street	6	High	Screening caused by the townscape of the northern part of the Old Town conservation area means that there would be no temporary construction impacts on the conservation area sub-zone during the Scheme.	None	No change
B8	Old Town, Western and Northern Part, Zone 8, Manor Street, Land of Green Ginger and Bowalley Lane	6	High	Screening caused by the townscape of the northern part of the Old Town conservation Area means that there would be no temporary construction impacts on the conservation area sub-zone during the Scheme.	None	No change
B9	Old Town, Western and Northern Part, Zone 9, North Walls and Salthouse Lane	6	Medium	Screening caused by the townscape of the northern part of the Old Town conservation area means that there would be no temporary construction impacts on the conservation area sub-zone during the Scheme.	None	No change
B10	Old Town, Western and Northern Part, Zone 10, 'Little' High Street, Dock Office Row and Charlotte Street (east end)	6	High	Screening caused by the townscape of the northern part of the Old Town conservation area means that there would be no temporary construction impacts on the conservation area sub-zone during the Scheme.	None	No change
C1	Old Town Southern Part, Zone 1 Trinity Burial Ground	3	High	<i>The Trinity Burial Ground is covered above in historic buildings, (including impacts on the archaeology) and is not repeated here to avoid double counting. See Table 1.2 above.</i>	n/a	n/a

MMS Nos	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				<i>It is considered for overall impacts on the conservation area in the main chapter.</i>		
C2	Old Town Southern Part, Zone 2 Docklands	2, 7	Medium	<p>There would be a temporary impact on the setting of the historic buildings and conservation area sub-zone during work caused by noise and visual impacts from increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street; the construction of the Princes Quay Bridge; excavation and piling of the Mytongate underpass and retaining wall, the realignment of the entrance to the Holiday Inn car park, excavation work associated with the Trinity Burial Ground and the Yorkshire Water Sewer Diversion south of Trinity Burial Ground; and the Wellington Street Island Wharf (Spencers) construction site compound. Visual and noise impacts would be most pronounced at the northern side of the conservation area sub-zone located adjacent to the A63 Castle Street. Impacts would still occur at the southern end of the conservation area sub-zone due to the lack of screening and open nature of the Humber Dock and streetscape. Impacts from the construction of the Mytongate Junction would be partially screened by the southern boundary wall of the Trinity Burial Ground and the buildings of the Holiday Inn.</p> <p>There may be an indirect temporary impact to the conservation sub-area caused by increased severance and disruption during work on the A63 Castle Street which would impact north-south footfall between the conservation areas. This would impact use and access to the conservation area sub-zone from the north.</p>	Medium negative	Moderate adverse
C3	Old Town Southern Part, Zone 3 Riverfront	7	Medium	<p>There would be a temporary impact on the setting of the historic buildings and conservation area sub-zone during work caused by increased construction traffic, temporary diversion of the road, excavation of the A63 Castle Street and the construction of the Princes Quay Bridge. The conservation area sub-zone lies at distance from the route of the A63 Castle Street and the majority of sub-zone would be screened by the surrounding streetscape. However, visual and noise impacts would be screened only partially adjacent to the Humber Dock due to its open nature and impacts would be most pronounced adjacent to the dock.</p> <p>There would be a temporary impact on the setting of the conservation sub-area during the construction of the outfall rising main outfall into the Humber Estuary. The historic buildings within the conservation area are screened from the work and there would be no impact to their setting during work.</p> <p>There may be an indirect temporary impact to the conservation sub-area caused by increased severance and disruption during work on the A63 Castle Street which may affect north-south footfall between the conservation areas. This may affect use and access to the conservation sub-area.</p>	Negligible negative	Slight adverse
C4	Old Town Southern Part, Zone 4 Fruit Market and 'Forelands'	7	Medium	<p>There would be a temporary impact on the setting of the historic buildings and conservation sub-area during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street and the Princes Quay Bridge. The conservation</p>	Negligible negative	Slight adverse

MMS Nos	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				<p>area sub-zone lies at distance from the route of the A63 Castle Street and the majority of sub-zone would be screened by the surrounding streetscape. However, visual and noise impacts would be screened only partially adjacent to the Humber Dock due to its open nature and impacts would be most pronounced at the western end of the conservation area sub-zone.</p> <p>There would be an indirect temporary impact to the conservation sub-area caused by increased severance and disruption during work on the A63 Castle Street which may affect north-south footfall between the conservation areas. This would affect use and access to the conservation area sub-zone.</p>		
C5	Old Town Southern Part, Zone 5 Oldgates	1, 7	Medium	<p>Historic buildings are entirely absent in this conservation area sub-zone. Therefore, impacts are on the conservation sub-zone only. The sub-zone contains several derelict and redeveloped sites and its historic character is diminished. Its setting has already been impacted by the A63 Castle Street.</p> <p>There would be a temporary impact on the setting of the conservation area sub-zone during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street. There would be increased noise and visual intrusion during the construction of the Princes Quay Bridge which would impact on the setting of the wider historic buildings in the conservation area sub-zone.</p> <p>There would be an indirect temporary impact to the conservation sub-area caused by increased severance and disruption during work on the A63 Castle Street which may affect north-south footfall between the conservation areas. This would affect use and access to the conservation area sub-zone.</p>	Minor negative	Slight adverse
JS	Jameson Street conservation area	7	Medium	<p>There would be a temporary impact on the setting of the asset during service and utility diversions on Ferensway, Carr Lane and Queen Victoria Square and NGN Utility Diversion, Ferensway, west of Paragon Station. These would be shorter in duration than the remainder of the Scheme.</p>	Negligible negative	Neutral
GN	Georgian New Town conservation area	7	Medium	<p>There may be a temporary impact on the setting of the asset during service and utility diversions on Queen Victoria Square. These would be shorter in duration than the remainder of the Scheme.</p>	Negligible negative	Neutral
SB	Spring Bank	8	Medium	<p>There is a high degree of screening caused by the townscape north of Ferensway and there would be no temporary construction impacts on the conservation area during the Scheme.</p>	None	No change
BR	Beverley Road	8	Medium	<p>There is a high degree of screening caused by the townscape north of Ferensway and there would be no temporary construction impacts on the conservation area during the Scheme.</p>	None	No change
BV	Boulevard	8	Medium	<p>There would be a temporary impact on the setting of the southern part of the conservation area during work caused by increased construction traffic, temporary diversion roads and excavation of the A63 Castle Street; and utility diversions on Daltry Street and Goulton Street. The conservation area is subject to existing visual, noise and dust impacts from the</p>	Negligible negative	Slight adverse

MMS Nos	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				A63 Castle Street and overall the change is likely to be slight.		
CS	Coltman Street	8	Medium	There would be a temporary impact on the setting of the southern part of the conservation area during work caused by increased construction traffic, temporary diversion roads and excavation of the A63 Castle Street; utility diversions on Daltry Street and Goulton Street; and the Neptune Street Set Down Compound. The conservation area is subject to existing visual, noise and dust impacts from the A63 Castle Street and overall the change is likely to be slight.	Negligible negative	Slight adverse
HR	Hessle Road	8	Medium	There would be a temporary impact on the setting of the southern part of the conservation area during work caused by increased construction traffic, temporary diversion roads and excavation of the A63 Castle Street; utility diversions on Daltry Street and Goulton Street; and the Neptune Street Set Down Compound. The conservation area is subject to existing visual, noise and dust impacts from the A63 Castle Street and overall the change is likely to be slight.	Negligible negative	Slight adverse
AD	St Andrew's Dock	8	Medium	The conservation area is screened from the utilities work occurring on Goulton Street and West Dock Street both of which are in an area of industrial estates north of the A63.	No change	Neutral
HT	Hessle Town	10	Medium	There would be no temporary construction impacts on the conservation area during the Scheme. The Livingstone Road construction site compound is 500m distance from the conservation area and is screened by the townscape of Hessle and the A63 and railway transport corridor.	No change	Neutral
HS	Hessle Southfield	10	Medium	There would be no temporary construction impacts on the conservation area during the Scheme. The Livingstone Road construction site compound is 370m distance from the conservation area and is screened by the townscape of Hessle and the A63 and railway transport corridor.	No change	Neutral

Table 1.3: Predicted temporary construction effects on Historic Landscape Character Units (HLCU)

MMS No	Name	Zone	Value	Description of Impact	Magnitude of Impact	Significance of Effect
HLCU 1	Mytongate Junction	3	Negligible	The area of the Mytongate Junction would be entirely redeveloped with the central reservation excavated to create an underpass. The junction would be entirely realigned. This would result in the permanent construction impacts only and are considered below.	n/a	n/a

MMS No	Name	Zone	Value	Description of Impact	Magnitude of Impact	Significance of Effect
HLCU 2	English Town	4, 9	Medium	<p>There would be a temporary impact on the setting of the HLCU during work caused by increased construction traffic, temporary diversion of the road, excavation of the A63 Castle Street, and service and utility diversions.</p> <p>The would be a temporary impact on the setting of the HLCU caused by the demolition of the Myton Centre and its use as the Myton Centre Parking site; and subsequent replanting as a public space. During the construction period, there would be an increase in noise and visual impacts associated with traffic temporary cabins, stored materials, and 24-hour lighting associated with the Arco compound.</p> <p>There would be a temporary impact on the setting of the HLCU during construction work for the building of the Porter Street pedestrian, cycle and disabled user bridge (known as Porter Street Bridge forthwith), the closure of James Street and the realignment of Spruce Road to create a new restricted access. There may be an indirect impact resulting from the temporary closure of road access to the area.</p> <p>There will be a neutral impact on the setting of the HLCU caused by the Neptune Street Set Down Compound which will introduce vehicle noise into an area already impacted by existing traffic.</p>	Minor negative	Slight adverse
HLCU 3	Waverley Street	9	Low	<p>There would be a temporary impact on the setting of the HLCU during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street. There would be a temporary impact on the setting of the HLCU during service and utility diversions along the line of Lister Street.</p> <p>The would be a temporary impact on the setting of the HLCU caused by the demolition of the Myton Centre, its use as the Myton Centre Parking site; and subsequent replanting as a public space. During the construction period, there would be an increase in noise and visual impacts associated with traffic temporary cabins, stored materials, and 24-hour lighting associated with the Arco compound.</p> <p>There would be a temporary impact on the setting of the HLCU during construction work for the building of the Porter Street Bridge, the closure of James Street and the realignment of Spruce Road to create a new restricted access. There may be an indirect impact resulting from the temporary closure of road access to the area.</p>	Moderate negative	Slight adverse

MMS No	Name	Zone	Value	Description of Impact	Magnitude of Impact	Significance of Effect
HLCU 4	Commercial Estates south of A63 Castle Street	9	Negligible	<p>There would be a temporary impact on the setting of the HLCU during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street.</p> <p>There would be a temporary impact on the setting of the HLCU during the water main diversion along the line of Commercial Road.</p> <p>There would be a temporary impact on the setting of the HLCU caused by the demolition of the Myton Centre; its use as the Myton Centre Parking site; and subsequent replanting as a public space. During the construction period, there would be an increase in noise and visual impacts associated with traffic temporary cabins, stored materials, and 24-hour lighting associated with the Arco compound.</p> <p>There would be a temporary impact on the setting of the HLCU during construction work for the building of the Porter Street Bridge, the closure of James Street and the realignment of Spruce Road to create a new restricted access. There may be an indirect impact resulting from the temporary closure of road access to the area.</p>	Minor negative	Neutral
HLCU 5	Walker Street to Porter Street	4, 8	Low	<p>There would be a temporary impact on the setting of the HLCU during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street.</p> <p>There would be a temporary impact on the setting of the HLCU during service and utility diversions along the line of Porter Street.</p> <p>There would be a temporary impact on the setting of the HLCU caused by the demolition of the Myton Centre; its use as the Myton Centre Parking site; and subsequent replanting as a public space. During the construction period, there would be an increase in traffic noise and 24-hour lighting associated with the car park.</p> <p>There would be a temporary impact on the setting of the HLCU during construction work for the building of the Porter Street Bridge, the closure of James Street and the realignment of Spruce Road to create a new restricted access. There may be an indirect impact resulting from the temporary closure of road access to the area.</p>	Minor negative	Slight adverse
HLCU 6	Australian Houses	4, 8	Medium	<p>There would be a temporary impact on the setting of the HLCU during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street, excavation of the Mytongate underpass, service and utility diversions along Porter Street, stopping up of Coogan Street, the demolition of the Myton Centre; its use as the Myton Centre Parking site; and subsequent replanting as a public space. During the construction period, there would be an increase in traffic noise and 24-hour lighting associated with the car park.</p>	Minor negative	Slight adverse

MMS No	Name	Zone	Value	Description of Impact	Magnitude of Impact	Significance of Effect
HLCU 7	Ferensway, Myton Street, Anlaby Street	3, 8	Negligible	<p>There would be a temporary impact on the setting of the HLCU during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street.</p> <p>There would be a temporary impact on the setting of the HLCU during service and utility diversions.</p> <p>The Staples construction site compound would result in an impact during the construction period from an increase in traffic and there would be temporary cabins, stored materials, noise and 24-hour lighting associated with the construction site compound.</p>	Moderate negative	Slight adverse
HLCU 8	Waterhouse Lane	3, 8	Low	<p>There may be a temporary impact on the setting of the HLCU during work caused by increased construction traffic, temporary diversion of the road and excavation of the A63 Castle Street.</p> <p>There may be a temporary impact on the setting of the HLCU during service and utility diversions.</p> <p>The Staples construction site compound would result in an impact during the construction period from an increase in traffic and there would be temporary cabins, stored materials, noise and 24-hour lighting associated with the construction site compound.</p>	Moderate negative	Slight adverse
HLCU 9	Trinity Burial Ground	3	High	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C1).	n/a	n/a
HLCU 10	Holiday Inn Complex	3	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 11	Docklands	2, 7	Medium	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 12	Hull Marina Boatyard	7	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 13	Kingston Street/ Wellington Street	7	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 14	Princes Dock	2, 6	Medium	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (B2).	n/a	n/a
HLCU 15	Lisle Court, Trinity Court and Grammar School Yard	1, 6	Low	The HLCU is located within the Old Town conservation area and is considered in historic buildings above (B3).	n/a	n/a
HLCU 16	Posterngate	6	Medium	The HLCU is located within the Old Town conservation area and is considered in Historic Buildings (B5).	n/a	n/a
HLCU 17	White		High	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (B2 and B5).	n/a	n/a
HLCU 18	Trinity Square	6	High	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (A3 and B4).	n/a	n/a
HLCU 19	Market Place	6	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (A3).	n/a	n/a
HLCU 20	High Street/ Staithe	6	High	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (A1 and A2).	n/a	n/a

MMS No	Name	Zone	Value	Description of Impact	Magnitude of Impact	Significance of Effect
HLCU 21	Oldgates (west)	1, 7	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C5).	n/a	n/a
HLCU 22	Oldgates (east)	1, 7	Negligible	The HLCU is located within the Old Town conservation area and is considered in Historic Buildings above (C5).	n/a	n/a
HLCU 23	Foregates and Fruit Markets	7	Medium	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C4).	n/a	n/a
HLCU 24	Riverside	7	Medium	The HLCU is located within the Old Town conservation area and is considered in Historic Buildings above (C3).	n/a	n/a
HLCU 25	Hull Paragon Interchange	8	High	There would be a temporary impact on the setting of the asset during service and utility diversions on Ferensway and NGN Utility Diversion, Ferensway, west of Paragon Station.	Negligible negative	Slight adverse
HLCU 26	Old Town North	6	Low	The HLCU is located within the Old Town conservation area (C2, C4, C5, C6, C7, C8) and is considered in Historic Buildings above.	n/a	n/a
HLCU 27	Jameson Street	8	Medium	There would be a temporary impact on the setting of the asset during service and utility diversions on Ferensway and NGN Utility Diversion, Ferensway, west of Paragon Station. There may be a temporary impact on the setting of the asset during service and utility diversions.	Negligible negative	Slight adverse
HLCU 28	Hessle Housing Estate	10	Low	The Livingston Road construction site compound would see an increase in traffic from the compound and there may be temporary cabins, stored materials, noise and 24-hour lighting associated with the compound during the construction period. This would impact upon the adjacent HLCU.	Minor negative	Slight adverse
HLCU 29	Hessle Industrial Estate	10	Negligible	During the construction period, there would be an increase in traffic and there would be temporary cabins, stored materials, noise and 24-hour lighting associated with the Livingston Road construction site compound. This would impact upon the adjacent HLCU.	Minor negative	Slight adverse
HLCU 30	Humber Bank	8	Low	There may be a temporary impact on the setting of the asset during service and utility diversions.	Negligible negative	Slight adverse

1.2 Permanent construction effects

Table 1.4: Predicted permanent construction effects on key archaeological remains

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS101	Site of Augustine Friary	1	High	<p>The construction of the A63 Castle Street, cycle path, proposed landscape area on the north side of the road, the junction at Market Place and Queen Street, accommodation works on Blackfriargate, the ramp to High Street and realignment of services, and drainage works all have the potential to impact buried archaeological remains.</p> <p>The depths of the impacts would vary:</p> <ul style="list-style-type: none"> on the verges the impact is likely to be less than 0.50m below present ground level; in the carriageway and cycleway excavation is likely to be between 0.50m and 1.50m below present ground level; localised areas of deep excavation (1.5-6.0m) situated on the north side of the A63 at the junction with High Street (east side) and to the south of the A63 and the junction with Queen Street (west side) are likely to encounter archaeological assets. <p>The course of the A63 Castle Street has been subject to previous archaeological excavation and watching briefs during its construction in the 1970s. Archaeological remains were excavated or damaged at this time, up to c. 0.70-1.0m below present ground level, with additional impacts from excavations for utilities. Post-medieval and 19th century cellars were shown to have impacted earlier deposits. The potential for survival of archaeological remains has been estimated based on these results and it has been established that they are likely to survive in fragments or at depth.</p> <p>The current baseline of the archaeological resource suggests archaeological remains are more likely to survive below 0.7m. These are likely to be in fragments. The greatest impact would therefore be from deeper excavation for utilities or services (1.5 to 6.0m in depth) and this has been accounted for in the assessment of impact.</p>	Minor negative	Slight adverse
MMS104	Site of Charity Hall	1, 6	High		Minor negative	Slight adverse
MMS105	The former course of Mytongate and street frontage	1	High		Minor negative	Slight adverse
MMS107	Site of Medieval Guildhall	1	High		Minor negative	Slight adverse
MMS108	Site of Medieval Town Gaol	1	High		Minor negative	Slight adverse
MMS109	Site of Butchery Meat Market	1	Low		Minor negative	Slight adverse
MMS111	Site of 85 Queen Street	1	High		Minor negative	Slight adverse
MMS113	Site of Butter and Poultry Market	1	Negligible		Minor negative	Slight adverse
MMS114	Site of Market Hall, Queen Street	1	Negligible		Minor negative	Slight adverse
MMS115	Site of Malt Kiln	1	Low		Minor negative	Slight adverse
MMS116	Site of public house, Castle Street	1	Low		Minor negative	Slight adverse
MMS117	Site of 84 Queen Street	1	Low		Minor negative	Slight adverse
MMS118	Chequers Hotel, Mytongate	1	Low		Minor negative	Slight adverse
MMS119	The Black Swan, Mytongate	1	Low		Minor negative	Slight adverse
MMS120	The Turk's Head, Mytongate	1	Low		Minor negative	Slight adverse
MMS121	Prince Blucher PH, Finkle St	1	Low		Minor negative	Slight adverse
MMS122	The Golden Lion PH, Queen Street	1	Low		Minor negative	Slight adverse
MMS123	Site of Coach and Horses, Mytongate	1	Medium		Minor negative	Slight adverse
MMS124	Tivoli Hotel, Mytongate	1	Low		Minor negative	Slight adverse
MMS125	Wellington Hotel public house (site of), Castle Street	1	Low		Minor negative	Slight adverse
MMS126	Phoenix Tavern public house (site of), south	1	Low		Minor negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
	side of Castle Street					
MMS127	Smithy (site of), South side of Castle Street	1	Low		Minor negative	Slight adverse
MMS128	Site of Myton Gate	2	High	<p>The construction of the A63 Castle Street, cycle path, realignment of services, drainage works; the stopping up, construction of a turning head, and improvements to the streetscape of Humber Dock Street; and utility diversions on Princes Dock Street, all have the potential to impact buried archaeological remains of Myton Gate and the attached town wall and defences.</p> <p>The depths of the impacts would vary but is likely to be between 0.50m below present ground level in the main carriageway and up to 1.50m below present ground level beside the carriageway where services and utilities would be diverted.</p> <p>The potential for survival of the remains of Myton Gate, and the medieval town wall and defences is reduced due to the previous impact of the A63 Castle Street which may have removed archaeological deposits up to 0.70-1.0m below present ground level.</p>	Minor negative	Slight adverse
MMS129	Section of medieval town defences (remains of), Princes Dock Street	2	High	<p>The utility diversions on Princes Dock Street, has the potential to impact buried archaeological remains of the town wall and defences. The depths of the excavation would vary but is likely to be between 0.50m and 1.50m below present ground level, in a trench less than 1.0m wide.</p> <p>The potential for survival of the remains of the medieval town wall and defences is not known on Princes Dock Street and has not been established by archaeological evaluation.</p>	Minor negative	Slight adverse
MMS130	Section of medieval town defences (remains of), Humber Dock Street	2	High	<p>The stopping up, construction of a turning head, and improvements to the streetscape of Humber Dock Street have the potential to impact buried archaeological remains of Myton Gate and the town wall and defences. The depths of the excavation would vary but is likely to be between 0.50m and 1.50m below present ground level.</p> <p>Evaluation has shown that there is still potential for survival of archaeological remains on Humber Dock Street.</p>	Minor negative	Slight adverse
MMS131	Section of Civil War defences (site of), west of Princes Dock Street and Humber Dock Street	2	Low	<p>The construction of the A63 Castle Street, cycle path, realignment of services, drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level. There is limited evidence for remains of the Civil War Defences at this depth and they are unlikely to exist in the carriageway.</p> <p>Whilst the Civil War defences are likely to be deep excavated ditches it can be expected that as "soft spots" within the carriageway they are likely to have been excavated and filled with material suitable for the previous highway construction. It is therefore likely that the survival of the</p>	Minor negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				resources within the area of the works combined with the expected depth of excavation required is unlikely to expose significant archaeological resources. The construction of the foundations for the Princes Quay Bridge, estimated at up to 6.0m below present ground level would impact on the deepest basal deposits of fragmentary remains of the former Civil War defences.		
MMS132	Lock and swing bridge between Princes and Humber Docks (sites of), Castle Street	2	Low	The construction of the A63 Castle Street, cycle path, realignment of services, drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level. The construction of the foundations for the Princes Quay Bridge, estimated at up to 6.0m below present ground level would impact on the fabric of the lock. It is not clear what remains of the lock from the construction of the A63 Castle Street but it is likely to be located beneath the carriageway. Whilst the lock is likely to be deeply excavated it can be expected that as "soft spots" within the carriageway it is likely to have been excavated and filled with material suitable for the previous highway construction. It is therefore likely that the survival of the resources within the area of the works combined with the expected depth of excavation required is unlikely to expose significant archaeological resources. The certainty of this assessment is based on desk-based assessment.	Moderate negative	Slight adverse
MMS133	Warehouse No 7 (site of), north side of Castle Street	2	Low	The construction of the A63 Castle Street, cycle path, realignment of services, drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level. The construction of the foundations for the Princes Quay Bridge, estimated at up to 6.0m below present ground level would impact on the surviving archaeological remains of the foundations of Warehouse No. 7. The extent of surviving archaeological remains of Warehouse No. 7 is unknown.	Moderate negative	Slight adverse
MMS134	Site of Corn Market	2	Negligible	The construction of the A63 Castle Street, cycle path, realignment of services, drainage works would impact on archaeological remains at depths of 0.5m in the carriageway and up to 1.50m below present ground level.	Minor negative	Slight adverse
MMS135	44 Mytongate, Barber's Shop	2	Medium		Minor negative	Slight adverse
MMS136	Punch Inn (site of), east side of Princes Dock Street	2	Negligible	The construction of the A63 Castle Street in the 1970s would have potentially damaged the below ground remains, between 0.70m and 1.0m below present ground level in the carriageway. The quality of the surviving archaeological remains is likely to be poor and additional impacts limited. The certainty of this assessment is based on desk-based assessment due to the limited possibility for archaeological evaluation along the course of the A63 Castle Street.	No Change	Neutral

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS137	Site of Windmills, south west of Mytongate Junction	3	Negligible	An underpass would be required to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5m wide, to accommodate the construction of the underpass side wall. This would involve excavation of up to 8m in depth below present ground level which would entirely remove any buried archaeological remains. These sites are not securely located, with evidence based on historical references. The likelihood of archaeological remains surviving is low.	Negligible negative	Neutral
MMS138	Site of Medieval Moated Site	3	Negligible		Negligible negative	Neutral
MMS140	Site of Foundry & Engine Works	3	Negligible	There will be no impacts on the buried archaeological remains.	No change	Neutral
MMS141	Site of Smithy, Castle Street	3	Negligible	The construction of the A63 Castle Street, cycle path, realignment of services, and drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level. The A63 Castle Street has been subject to previous archaeological excavation and watching briefs during its construction in the 1970s. This area is likely to have been excavated to a depth of 0.70-1.0m below present ground level and archaeological remains are likely to be fragmentary.	Negligible negative	Neutral
MMS142	Site of Humber Brass & Copper Works	3	Low	An underpass would be required to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5m wide, to accommodate the construction of the underpass side wall. This would involve excavation of up to 8m in depth below present ground level which would entirely remove any buried archaeological remains. Any surviving archaeological remains would be entirely removed.	Major negative	Slight adverse
MMS143	Site of Sawmill, Myton Place	3	Negligible	An underpass would be required to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5m wide, to accommodate the construction of the underpass side wall. This would involve excavation of up to 8m in depth below present ground level which would entirely remove any buried archaeological remains. Any surviving archaeological remains would be entirely removed.	Major negative	Slight adverse
MMS144	Trinity Burial Ground	3	High	<i>All impacts to the Trinity Burial Ground are considered below in Table 1.6</i>	n/a	n/a
MMS145	Site of Mortuary	3	Low	An underpass would be required to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5.0m wide, to accommodate the construction of the underpass side wall. The remains of the mortuary would be entirely removed.	Major negative	Slight adverse
MMS146	Site of Chapel	3	Low	An underpass would be required to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5m wide, to	Major negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				accommodate the construction of the underpass side wall. This would involve excavation of up to 8m in depth below present ground level which would entirely remove any buried archaeological remains. Any surviving archaeological remains would be entirely removed.		
MMS147	Site of Gaol	3	Low	An underpass would be required to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5m wide, to accommodate the construction of the underpass side wall. This would involve excavation of up to 8m in depth below present ground level which would entirely remove any buried archaeological remains. Any surviving archaeological remains would be entirely removed.	Major negative	Slight adverse
MMS148	Post Office (site of), north side of Castle Street	3	Negligible	Proposed utility diversions along Myton Street have the potential to impact buried archaeological remains. The site of the Post Office and Robin Hood public house are likely to have been on the street corners of Myton Street, Castle Street. Therefore, the utility diversions in the street are unlikely to impact on surviving archaeological remains.	Minor negative	Slight adverse
MMS149	Robin Hood public house (site of), Myton Street	3	Negligible		Minor negative	Slight adverse
MMS150	Timber Yard (site of), south side of Castle Street	3	Negligible	An underpass would be required to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5m wide, to accommodate the construction of the underpass side wall. This would involve excavation of up to 8m in depth below present ground level which would entirely remove any buried archaeological remains. Any surviving archaeological remains would be entirely removed. The construction of the A63 Castle Street, cycle path, realignment of services, drainage works and would impact on archaeological remains at depths of up to 1.50m below present ground level. A Yorkshire Water Sewer Diversion would excavate up to 6.0m below present ground level. The excavations are likely to remove any surviving archaeological remains.	Major negative	Slight adverse
MMS151	Commercial Hotel (site of), north side of Castle Street	3	Negligible	The construction of the A63 Castle Street, cycle path, realignment of services, and drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level.	Moderate negative	Slight adverse
MMS152	Site of Chapel and Lutheran Church, Mytongate Junction	3	Negligible	An underpass would be required to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5m wide, to accommodate the construction of the underpass side wall. This would involve excavation of up to 8m in depth below present ground level which would entirely remove any buried archaeological remains. It is not certain if any remains of the chapel survive as the building was demolished. Any	Moderate negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				surviving archaeological remains would be entirely removed.		
MMS153	Site of Tower Brewery, Waverley Street	4	Negligible	The construction of the A63 Castle Street, cycle path, realignment of services, and drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level. The A63 Castle Street has been subject to previous archaeological excavation and watching briefs during its construction in the 1970s. This area is likely to have been excavated to a depth of 0.70-1.0m below present ground level and archaeological remains are likely to be fragmentary.	Moderate negative	Slight adverse
MMS154	Site of Salem Chapel, Cogan Street	4	Low	The construction of the A63 Castle Street, cycle path, realignment of services, and drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level. The A63 Castle Street has been subject to previous archaeological excavation and watching briefs during its construction in the 1970s. This area is likely to have been excavated to a depth of 0.70-1.0m below present ground level and archaeological remains are likely to be fragmentary.	Moderate negative	Slight adverse
MMS155	Albert Confectionary Works (site of), Mytongate Junction	3	Negligible	An underpass would be required to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5m wide, to accommodate the construction of the underpass side wall. This would involve excavation of up to 6m in depth which would entirely remove any buried archaeological remains. Any surviving archaeological remains would be entirely removed.	Major negative	Slight adverse
MMS156	Timber yard and warehouse (sites of), south side of Mytongate	3	Negligible		Major negative	Slight adverse
MMS158	Stone Yard (site of) Hessle Road	4	Negligible	The construction of the A63 Castle Street, cycle path, realignment of services, and drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level. The A63 Castle Street has been subject to previous archaeological excavation and watching briefs during its construction in the 1970s. This area is likely to have been excavated to a depth of 0.70-1.0m below present ground level and archaeological remains are likely to be fragmentary.	Moderate negative	Neutral
MMS159	Kingston Perambulator and Cabinet Works (site of) Hessle Road	4	Negligible	The construction of the A63 Castle Street, cycle path, realignment of services, and drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level.	Moderate negative	Neutral
MMS160	Warehouse (site of) Hessle Road	4	Negligible	The A63 Castle Street has been subject to previous archaeological excavation and watching briefs during its construction in the 1970s. This area is likely to have been excavated to a depth of 0.70-1.0m below present ground level and archaeological remains are likely to be fragmentary.	Moderate negative	Slight adverse
MMS168	Site of Boat Yard & Dry Dock	5	Low	During construction work there would be a temporary impact on the setting of the conservation area caused by increased construction traffic, temporary diversions and excavation of the A63 Castle Street.	Negligible negative	Neutral
MMS181	Site of sluice associated with	5	Medium		Negligible negative	Neutral

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
	post medieval defences					
MMS195	Site of Crouched Friary	1, 6	High	<p>The Old Town Accommodation Works in South Church Side, North Church Side, Trinity Square, and Market Place may involve raising of the street level and associated excavation works. All excavations would be in the existing roadway or pavement. Excavations are expected to be shallow and in the region of 0.5m below present ground level.</p> <p>Archaeological remains are believed to be located at a depth of 0.60m below present ground level.</p> <p>There remains some potential for impact to archaeological remains associated with the area around the churchyard of Holy Trinity, the medieval streetscape and former medieval buildings in this area (including the Couched Friary and Market Cross).</p>	Negligible negative	Slight adverse
MMS197	Site of Market Cross	1, 6	Negligible		Negligible negative	Neutral
MMS198	Site of Carmelite Maison Dieu	6	Negligible		Negligible negative	Neutral
MMS199	Site of Mint	6	Negligible		Negligible negative	Neutral
MMS204	Site of Trinity Maison Dieu	6	Negligible	<p>The utility diversion along Princes Dock Street extending as far as the site of the Beverly Gate, would involve excavation to a depth of 1.5m below present ground level. The excavations have the potential to impact on archaeological assets including the medieval town wall and associated ditch, and the Postern Gate. Archaeological remains are believed to be present at a depth of 0.60m below present ground level.</p> <p>The location of the Trinity Maison Dieu is marginal. Therefore, archaeological remains may not exist here but if they do there remains a potential that they may still be impacted.</p>	Negligible negative	Neutral
MMS212	Site of Crookhayes Hospital	6	Negligible	<p>The Old Town Accommodation Works in South Church Side, North Church Side, Trinity Square, and Market Place may involve raising of the street level and associated excavation works. All excavations would be in the existing roadway or pavement. Excavations are expected to be shallow and in the region of 0.5m below present ground level.</p> <p>Archaeological remains are believed to be located at a depth of 0.60m below present ground level.</p> <p>There remains some potential for impact to archaeological remains associated with the area around the churchyard of Holy Trinity, the medieval streetscape and former medieval buildings in this area (including Crookhayes Hospital, Selby Hospital, Priest's Houses and Market Place, the boundary walls of the Trinity Churchyard).</p>	Negligible negative	Neutral
MMS213	Site of Selby's Hospital	6	High		Negligible negative	Slight adverse
MMS214	Site of Priests' Houses	6	Medium		Negligible negative	Slight adverse
MMS215	Structure at Market Place, Hull	6	Medium		Negligible negative	Slight adverse
MMS216	The churchyard of Holy Trinity/ 14 th century boundary wall.	6	High		Negligible negative	Slight adverse
MMS219	Site of Greggs Hospital	6	High	<p>The Old Town Accommodation Works in Posterngate may involve raising of the street level and associated excavation works. All excavations would be in the existing roadway or pavement. Excavations are expected to be shallow and in the region of 0.5m below present ground level.</p> <p>Archaeological remains are believed to be located at a depth of 0.70m below present ground level.</p> <p>There remains some potential for impact to archaeological remains associated with former medieval buildings in this area</p>	Negligible negative	Slight adverse
MMS220	Glover Maison Dieu	6	High		Negligible negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				(including Gregg's Hospital and the Glover Maison Dieu).		
MMS221	Site of Postern Gate	6	High	<p>Realignment of services and utilities (SU) in Princes Dock Street has the potential to impact on buried archaeological remains of the Postern Gate, and the associated medieval wall. The utility diversion along Princes Dock Street extending as far as the site of the Beverly Gate, would involve excavation to a depth of 1.5m below present ground level in a trench likely to be c. 1.0m wide.</p> <p>The excavations have the potential to impact on archaeological assets including the medieval town wall and associated ditch, and the Postern Gate. The extent to which archaeological assets survive would be determined by the extent and depth of later disturbance, including: truncation from the construction of Princes Dock and modern ground disturbance which if consistent with those identified for the Old Town Works indicates is 0.60m below present ground level.</p>	Minor negative	Slight adverse
MMS236	Site of Bull Rings	6	Negligible	<p>The Old Town Accommodation Works in South Church Side, North Church Side, Trinity Square, and Market Place may involve raising of the street level and associated excavation works. All excavations would be in the existing roadway or pavement. Excavations are expected to be shallow and in the region of 0.5m below present ground level. Archaeological remains are believed to be located at a depth of 0.70m below present ground level.</p> <p>There remains some negligible adverse impact to archaeological remains associated with the area around the churchyard of Holy Trinity, the medieval streetscape and former medieval buildings in this area (including the Bull Rings).</p>	Negligible negative	Neutral
MMS241	Site of 21 Blackfriargate	7	Negligible	<p>The Old Town Accommodation Works on Blackfriargate may involve raising of the street level and associated excavation works. All excavations would be in the existing roadway or pavement. Excavations are expected to be shallow and in the region of 0.5m below present ground level.</p> <p>Archaeological remains of the foundations of 21 Blackfriargate may exist below the surface but would not be impacted by the scheme.</p>	No change	Neutral
MMS243	Monument Bridge	6	Negligible	<p>The utility diversion outside of the Old Town in Queen Victoria Square and Carr Lane, would involve excavation to a depth of 1.5m below present ground level, in a trench c. 1.0m wide. The excavations have the potential to impact on archaeological asset.</p> <p>The extent to which archaeological assets survive would be determined by the extent and depth of later disturbance, including which can be estimated at 0.60m below present ground level.</p>	Minor negative	Slight adverse
MMS249	Site of Hull and Sculcoates Dispensary	6	Low		Minor negative	Slight adverse
MMS250	Site of Civil War Defences	6	Low		Negligible negative	Slight adverse
MMS251	Hull-Beverley Turnpike	6	Negligible		Negligible negative	Neutral
MMS252	Dundee Chambers	6	Negligible	Realignment of services and utilities (SU) in Princes Dock Street has the potential to	No change	Neutral

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS253	Former Building and Archaeological Finds, Princes Dock St	6	Low	<p>impact on buried archaeological remains of the Postern Gate, and the associated medieval wall.</p> <p>The utility diversion along Princes Dock Street extending as far as the site of the Beverly Gate, would involve excavation to a depth of 1.5m below present ground level, in a trench c. 1.0m wide. Both the Dundee Chambers and the former building discovered on Princes Dock Street are located to the east of the line beneath the current buildings. The work would not impact on these archaeological assets.</p>	No change	Neutral
MMS256	Site of Independent Chapel	1	Negligible	The realignment of 65 Castle Street car park and access via Grammar School Yard would involve the excavation to a depth of 0.6m below present ground level at maximum. This would disturb any surviving below ground archaeological remains.	Negligible negative	Neutral
MMS257	Site of Sunday School	1	Negligible	The realignment of 65 Castle Street car park and access via Grammar School Yard would involve the excavation to a depth of 0.6m below present ground level at maximum. This would disturb any surviving below ground archaeological remains.	Negligible negative	Neutral
MMS259	Site of House	6	Low	<p>The Old Town Accommodation Works in Dagger Lane may involve raising of the street level and associated excavation works. All excavations would be in the existing roadway or pavement. Excavations are expected to be shallow and in the region of 0.5m below present ground level. Archaeological remains are believed to be located at a depth of 0.70m below present ground level.</p> <p>There remains some negligible negative impact to archaeological remains associated with the area.</p>	Negligible negative	Slight adverse
MMS263	Site of Brass Works	6	Negligible	<p>The Old Town Accommodation Works in South Church Side, North Church Side, Trinity Square, Market Place and Trinity House Lane may involve raising of the street level and associated excavation works. All excavations would be in the existing roadway or pavement. Excavations are expected to be shallow and in the region of 0.5m below present ground level.</p> <p>Archaeological remains are believed to be located at a depth of 0.70m below present ground level.</p> <p>There remains some potential for impacts to archaeological remains associated with the area around the churchyard of Holy Trinity, the medieval streetscape and former medieval buildings in this area.</p>	Negligible negative	Neutral
MMS264	Site of Watson's Hospital	6	Low		Negligible negative	Slight adverse
MMS266	Site of Marine Hospital	6	Low		Negligible negative	Slight adverse
MMS267	Sites of Livestocks Markets	6	Negligible		Negligible negative	Neutral
MMS268	Sites of Fruit, Flower and Vegetable Markets	6	Negligible		Negligible negative	Neutral
MMS269	Site of 7 North Church Side	6	Negligible		Negligible negative	Neutral
MMS272	Site of Roman Catholic Chapel	6	Negligible		Negligible negative	Neutral
MMS273	Assembly Room, Dagger Lane	6	Negligible	<p>The Old Town Accommodation Works in Posterngate/ Dagger Lane may involve raising of the street level and associated excavation works. All excavations would be in the existing roadway or pavement. Excavations are expected to be shallow and in the region of 0.5m below present ground level. Archaeological remains are believed to be located at a depth of 0.70m below present ground level.</p>	Negligible negative	Neutral

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				There remains some potential for impacts to archaeological remains associated with the archaeological remains of former buildings in this area.		
MMS288	Carmelite Friary on Monkgate	7	High	<p>The Old Town Accommodation Works on Blackfriargate may involve raising of the street level and associated excavation works. All excavations would be in the existing roadway or pavement. Excavations are expected to be shallow and in the region of 0.5m below present ground level. Archaeological remains have been located on Blackfriargate during evaluation at depths of 0.70-1.0m below present ground level.</p> <p>There remains some potential for impacts to archaeological remains associated with the archaeological remains of the Carmelite Friary which faced onto Blackfriargate.</p>	Negligible negative	Slight adverse
MMS289	Archaeological Features and Finds, Blanket Row	7	Medium	<p>The Old Town Accommodation Works on Blanket Row may involve raising of the street level and associated excavation works. All excavations would be in the existing roadway or pavement. Excavations are expected to be shallow and in the region of 0.5m below present ground level. Archaeological remains have been located at the site of Green Bricks public house during evaluation at depths of 0.70-1.0m below present ground level.</p> <p>There remains some potential for impacts to archaeological remains associated with the archaeological remains of the former medieval and post-medieval buildings that faced on to Blanket Row.</p>	Negligible negative	Slight adverse
MMS292	Site of Adryanson's Hospital	1	Negligible	<p>The construction of the A63 Castle Street, cycle path, proposed landscape area on the north side of the road, the Humber Dock Street turning head, the ramp to High Street and realignment of services, and drainage works all have the potential to impact buried archaeological remains.</p> <p>The depths of the impacts would vary: on the verges the impact is likely to be less than 0.50m below present ground level; in the carriageway and cycleway excavation is likely to be between 0.50m and 1.50m below present ground level; beneath the Myton Bridge excavation is likely to be 1.50m to 6.00m below present ground level.</p> <p>The likelihood of survival of remains of the Adryanson's Hospital given previous work in the area is negligible and the impacts have been assessed accordingly.</p>	Negligible negative	Neutral
MMS314	Site of Soda Water Works	7	Low	<p>The Old Town Accommodation Works on Blackfriargate may involve raising of the street level and associated excavation works. All excavations would be in the existing roadway or pavement. Excavations are expected to be shallow and in the region of 0.5m below present ground level. Archaeological remains have been located on Blackfriargate during evaluation at depths of 0.70-1.0m below present ground level.</p> <p>There remains some negligible adverse impact to archaeological remains</p>	Negligible negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				associated with the archaeological remains of the Soda Water Works which faced onto Blackfriargate.		
MMS320	Site of public house	8	Negligible	The utility diversion would involve excavation to a depth of 1.5m below present ground level, in a trench c. 1.0m wide. The excavations have the potential to impact on archaeological assets. The extent to which archaeological assets survive would be determined by the extent and depth of later disturbance, including which can be estimated at 0.60m below present ground level. There is little certainty that any of these archaeological assets survive.	Negligible negative	Neutral
MMS323	Site of Methodist Chapel	8	Negligible		Negligible negative	Neutral
MMS324	Site of Mission Room	8	Negligible		Negligible negative	Neutral
MMS328	Site of Brewery	8	Low		Negligible negative	Neutral
MMS329	Site of Master Mariners Almshouse	8	Low		Negligible negative	Neutral
MMS331	Site of St Nicholai's Church	8	Low		Negligible negative	Neutral
MMS332	Site of Bethesda Chapel	8	Low		Negligible negative	Neutral
MMS339	Site of Wind Pump	8	Low	The land plot on the corner of Ferensway, the A63 Castle Street, and Myton Place would be used as a construction site compound. Excavation at the construction site compound may impact on buried archaeological remains. The site is already hard-standing and there would be only small-scale excavation required.	Negligible negative	Neutral
MMS347	Site of Post Office	8	Low		Negligible negative	Neutral
MMS359	Site of St James National School	8	Negligible	The construction of the A63 Castle Street, cycle path, realignment of services, and drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level. The A63 Castle Street has been subject to previous archaeological excavation and watching briefs during its construction in the 1970s. This area is likely to have been excavated to a depth of 1.0m below present ground level and archaeological remains are likely to be fragmentary.	Major negative	Slight adverse
MMS377	Site of Public House	8	Negligible	The construction of the A63 Castle Street, cycle path, realignment of services, and drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level. The A63 Castle Street has been subject to previous archaeological excavation and watching briefs during its construction in the 1970s. This area is likely to have been excavated to a depth of 1.0m below present ground level and archaeological remains are likely to be fragmentary.	Major negative	Slight adverse
MMS380	Site of Hotel	8	Negligible	The construction of the A63 Castle Street, cycle path, realignment of services, and drainage works would impact on archaeological remains at depths of up to 1.50m below present ground level.	Moderate negative	Slight adverse
MMS397	Buried organic deposits (Albert Dock)	3, 8	Medium	The construction of the Rising Main and outfall into Humber Estuary may impact on buried palaeo-environmental remains on the Humber Foreshore. However, currently the depth of excavation is anticipated at c. 2.0m below present ground level. The preserved organic deposits located during watching	No change	Neutral

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				briefs on ground investigations have consistently shown that deposits of organic peat layers (where the submarine forest would be located are at depths of c. 4.5m below present ground level). The ground is believed to be made-ground to a depth of c. 2.0m and the work is not believed to impact on these deposits.		
MMS400 MMS401 MMS402	Site of Myton/ Wyke Med/ PM Settlement; Site of Myton Grange; Site of Burial Ground and Chapel;	3	Low	<p>An underpass would be required to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5m wide, to accommodate the construction of the underpass side wall. This would involve excavation of up to 8m in depth below present ground level which would entirely remove any buried archaeological remains. Any surviving archaeological remains would be entirely removed.</p> <p>The construction of the A63 Castle Street, cycle path, realignment of services, drainage works and would impact on archaeological remains at depths of up to 1.50m below present ground level. A Yorkshire Water Sewer Diversion would excavate up to 6.0m below present ground level.</p> <p>The use of the Arco Compound would involve some below ground excavation. If the settlement of Myton survived in this location, it is likely to have been previously impacted by 19th century tenement and factory development. The extent of the impact to any surviving archaeological remains would be limited as the majority of infrastructure will be built at ground level. Excavation may be required to greater depth than 0.5m bpgl (for example, in the location of Bentonite plant, jet grout mixers and cement storage silos). This may impact on buried archaeological remains of the brewery, and any surviving remains would be entirely removed. The impact caused by these excavations would be limited to a small proportion of the overall footprint of the archaeological remains.</p> <p>Although these excavations are likely to remove any surviving archaeological remains. The certainty of these assets and confidence of their location is poor.</p>	Minor negative	Slight adverse
MMS418	Site of Corn Mill	8	Negligible	<p>Stopping up and realignment of utilities diversions on St James' Street may impact on buried archaeological remains. These would be excavated up to 6.0m in depth.</p> <p>The certainty of the location of the Corn Mill is poor and the likelihood of encountering significant remains is therefore less.</p>	Negligible negative	Neutral
MMS449	Site of Brewery, Waverley Street	8	Negligible	<p>The use of the Arco Compound would involve some below ground excavation. The extent of the impact to archaeological remains would be limited as the majority of infrastructure will be built at ground level. Excavation may be required to greater depth than 0.5m bpgl (for example, in the location of Bentonite plant, jet grout mixers and cement storage silos). This may impact on buried archaeological remains of the</p>	Minor negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				brewery, and any surviving remains would be entirely removed. The impact caused by these excavations would be limited to a small proportion of the overall footprint of the archaeological remains of the former brewery.		
MMS486	Course of the Old Hull, River Bank, Streams and Ditches	3, 8	Medium	<p>Construction of A63 Castle Street from Spruce Street (west) to the Holiday Inn (east) would involve an underpass to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5m wide, to accommodate the construction of the underpass side wall. The construction of the underpass would involve excavation from grade up to 8m in depth below present ground level which would entirely remove any buried archaeological remains. Works to create the underpass would be preceded by soil treatment to render the soils, particularly those at depth that are saturated, to a condition that would enable excavation to take place. This would prevent archaeological excavation of deposits.</p> <p>Where the Yorkshire Water Sewer Diversion would pass south of Trinity Burial Ground and north of Railway Dock Marina it would be excavated up to 6.0m in depth. There is the potential that it would impact evidence for the former course of the Old Hull. The deep utilities, that is those that would be excavated to a depth of up to 6m, would from the data presented in the deposit model (Volume 3, Appendix 8.4) extend through the upper archaeological horizon and penetrate the minerogenic alluvium. Waterlogging along with the associated survival of organic material can be expected within these deposits.</p>	Minor negative	Slight adverse
MMS490	Brick and Tile Works, Hessle Haven	10	Negligible	Works during construction and maintenance of the Livingstone Road South construction site compound at Hessle Haven may remove buried archaeological deposits, construction traffic may compact archaeological deposits.	Negligible negative	Neutral
MMS493	16 th century Hull Castle (Middle Blockhouse), South Blockhouse; Part of late 17 th century Hull Citadel Fort	5	High	<p>There would be no impact from the works during construction from the A63 Westbound Recovery Base to the scheduled monument. No upstanding remains of the scheduled monument exist and the recovery base would use the existing boundary of the A63 and would not involve excavation that may impact on buried archaeological remains.</p> <p>The current setting of the scheduled monument is as buried archaeological remains. There would be no change to the setting of the scheduled monument.</p>	No change	Neutral
MMS494	Beverley Gate and adjacent archaeological remains forming part of Hull's medieval and post-medieval defences	6	High	Diversion of services and utilities (SU) in Queen Victoria Square has the potential to impact on buried archaeological deposits associated with the scheduled monument of Beverley Gate and archaeological remains of the mediaeval and post-medieval defences. These services would be excavated between 0.5 and 1.5m in depth, in a trench c. 1m wide. The location, extent	Minor negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				and nature of the service or utilities diversions is not clear but is currently shown to impact upon the scheduled monument boundary. The impact is not fully understood and can only be estimated based on the current scheme information.		
MMS529	Post Medieval Pit and Finds, Carr Lane	8	Negligible	<p>Diversion of services and utilities (SU) on Carr Lane has the potential to impact on buried archaeological deposits as indicated by the archaeological remains of pits and finds of post medieval date. The service and utility diversions are likely to be 0.5m to 1.5m in depth and c. 1.0m wide.</p> <p>The preservation and quality of archaeological remains in this location is likely to have been disturbed by the expansion of the town in the 19th century and any remains are likely to be fragmentary. The likelihood of the survival of additional remains is uncertain.</p>	Minor negative	Slight adverse
MMS544	Remains of medieval wall	3	Medium	<p>The construction of the AIP Pumping Station on the land plot south of the Mytongate Junction and west of the Trinity Burial Ground is likely to impact on the buried archaeological remains discovered in TP18A during the watching brief on ground investigations (see Volume 3, Appendix 8.4).</p> <p>The excavation for the foundations of the AIP pumping station would involve a concrete shaft 11.45m in diameter which would impact on deposits to a depth of at least 2.0m below present ground level. This would remove any archaeological deposits present in this location. This represents less than 20% of the surviving land plot. The extent and survival of the wall and associated archaeological deposits are only partially understood and the likelihood is that the excavations would impact on only part of the surviving archaeological resource. However, the elements that are impacted would be destroyed.</p>	Minor negative	Slight adverse

Table 1 Error! No text of specified style in document.:5: Predicted permanent construction effects on key historic buildings

MMS No	Receptor Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS144	Trinity Burial Ground; two lamp posts either side of the burial ground.	3	High	An underpass would be required to accommodate the new grade-separated configuration of Mytongate Junction. In addition to the underpass, a further strip would be required, 5m wide, to accommodate the construction of the underpass side wall. This would involve excavation of up to 6m in depth. The remaining area of the burial ground would be protected from damage during archaeological excavation and road construction. The principal impact of this is upon the 18th and 19th century Trinity Burial Ground, and the buried archaeological remains of human remains where all burials from approximately 43% of the area would be removed during	n/a	n/a

MMS No	Receptor Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				<p>construction of the Mytongate Junction and the retaining wall for the underpass.</p> <p>Archaeological excavation of the area has been proposed and is detailed in Volume 3, Appendix 8.7. This would involve the excavation of all the burials in the northern 43% of the burial ground. Of these approximately 1,500 burials would be analysed for archaeological purposes. All burials would be reinterred by the end of the Scheme.</p> <p>The archaeological excavation would mitigate the loss of the burial ground for archaeological purposes by providing a record of the archaeology. However, this would not mitigate the loss in value of the communal resource of the burial ground.</p> <p>The Trinity Burial Ground would be subject to permanent impacts on its setting. These are caused by the encroachment of the A63 Castle Street on the burial ground. After the construction of the Mytongate junction and retaining wall for the underpass the land would be returned to amenity use. This would result in the permanent loss of the northern 30% in area, although 43% will be lost on a temporary basis. Also, the loss of trees in this area would reduce the enclosed tranquil feel of the burial ground. Although the trees would be replanted there would be a reduction in overall tree coverage. The dismantling of the Earl de Grey public house would further remove the burial ground from its historic setting but the area has already seen considerable degradation.</p>		
MMS600	Statue of King William III and Flanking Lamps	1, 6	High	<p>The course of the carriageway would be moved towards the heritage assets and the junction would be remodelled in a manner similar to the existing junction. This would not markedly change the setting of the heritage assets from the existing junction, layout.</p> <p>Widened cycle path would move towards the heritage asset and become more proximate, although this would not markedly change the setting of the heritage assets.</p> <p>The historic setting here was a north-south open area. A central reservation and parapet fence, 1.5m high would be added to the A63 Castle Street. This would impact upon the setting of the assets restricting views south towards Queen Street and north towards the Market Place and the heritage assets. Connectivity to these heritage assets would be slightly reduced, but was already restricted by the busy A63 Castle Street.</p>	Minor negative	Slight adverse
MMS601	Market Place Toilets	1, 6	Medium	<p>The course of the carriageway would be moved towards the heritage assets and the junction would be remodelled in a manner similar to the existing junction. This would not markedly change the setting of the heritage assets from the existing junction, layout.</p> <p>Widened cycle path would move towards the heritage asset and become more</p>	Minor negative	Slight adverse

MMS No	Receptor Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				<p>proximate, although this would not markedly change the setting of the heritage assets.</p> <p>The historic setting here was a north-south open area. A central reservation and parapet fence, 1.5m high would be added to the A63 Castle Street. This would impact upon the setting of the assets restricting views south towards Queen Street and north towards the Market Place and the heritage assets. Connectivity to these heritage assets would be slightly reduced, but was already restricted by the busy A63 Castle Street.</p>		
MMS602	Warehouse No. 6	2	Medium	<p>The construction of the Princes Quay Bridge would impact on the setting of Warehouse No. 6. It would create a mass that would remove current sightlines north towards the Princes Dock and Warehouse No. 6, and south towards the Humber Dock. The Princes Quay Bridge has been designed sympathetically to reflect the adjacent monuments.</p> <p>The historic setting of these monuments included Warehouse No. 7 (demolished in the 1970s), which would have formerly been a large mass adjacent to Warehouse No. 6. This means that the creation of this new mass is comparable in size but not in form to the warehouse. It does, however, revert the immediate townscape to the original enclosed space around each dock with limited views inter-connecting the docks. The Princes Quay Bridge may have a beneficial impact creating new sightlines across the building towards the south and the Humber Estuary.</p>	Minor negative	Slight adverse
MMS603	Castle Buildings	3	Medium	<p>The Castle Buildings would see impacts from the change in the layout of the adjacent Mytongate Junction, the creation of the underpass and the alteration of the slip roads and changes to Myton Place road layout. In the case of the slip road this would move the carriageway closer to the building. The dismantling of the Earl de Grey public house would impact upon the group value and association of the asset with its neighbouring building and further alter the historic street line along Castle Street. South of the carriageway, the reduction in the size of the Trinity Burial Ground would also remove the building further from its former historic setting and association with this green space.</p> <p>The building's current and historic setting is adjacent to a busy road in the A63 Castle Street and it would continue to act as a focal point on the corner of Waterhouse Lane and Castle Street. It has become increasingly isolated from its historic setting due to the loss of adjacent historic buildings and replacement with modern dominant skyline buildings including the Princes Quay Shopping Centre and Hull Venue. The setting of the Castle Buildings has limited ability to sustain further loss of adjacent buildings as it has become almost entirely isolated from its historic context.</p> <p>Changes to the layout of the Mytongate Junction, the loss of adjacent historic</p>	Moderate negative	Moderate adverse

MMS No	Receptor Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				structures, and the reduction in size of the Trinity Burial Ground would isolate the asset and leave it as the last historic building on this section of Castle Street.		
MMS604	Earl de Grey public house	3	Medium	The Earl de Grey public house would be demolished during the work. This would result in the entire loss of the building. This would result in the highest level of impact possible for this heritage asset.	Major negative	Large adverse
MMS605	Vauxhall Tavern public house	4	Medium	<p>The adjacent St James Street would be blocked up and access altered to the Arco building adjacent to run along Spruce Road. The road formed part of the original historic setting of the Vauxhall Tavern and this would represent a change to its setting.</p> <p>The construction of the Porter Street Bridge would create a mass adjacent to the public house restricting views to the north and west and views of the public house. The bridge may have an indirect beneficial impact on the public house as it may allow improved access from housing north of the A63 Castle Street, improving footfall and improving the long-term use for the building.</p> <p>It is not envisaged that there would be a noticeable change caused by traffic, including noise and visual impacts as the proximity of the road remains unchanged.</p>	Negligible negative	Slight adverse
MMS606/ MMS607	Trinity House workshop and Buoy Shed/ Tubular Crane to North East of Former Trinity House Buoy Shed	5	Medium	There would be no permanent construction impacts on the asset.	No change	Neutral
MMS608	Robbie's public house	5	Medium	There would be no permanent construction impacts on the asset.	No change	Neutral
MMS612	Old Grammar School Museum	6	Medium	The blocking up of access points from the A63 Castle Street on Dagger Lane, Fish Street and Vicar Lane would result in more traffic using the area around North and South Church Side. The roads would require alteration that would impact on the setting of the Holy Trinity Church as part of the Old Town Accommodation Work.	Negligible negative	Neutral
MMS618	Parish Church of the Holy Trinity and Churchyard Wall;	6	High	<p>The blocking up of access points from the A63 Castle Street on Dagger Lane, Fish Street and Vicar Lane would result in more traffic using the area around North and South Church Side. The roads would require alteration that would impact on the setting of the Holy Trinity Church as part of the Old Town Accommodation Work.</p> <p>Central reservation and parapet fence, 1.5m high would be added reducing sightlines north towards the church along Market Place and south towards the southern area of the Old Town conservation area. This would impact upon the setting of the church reducing these once important historic views. The current setting has already been impacted by the quantity of heavy traffic along the A63 Castle Street, much of it</p>	Negligible negative	Slight adverse

MMS No	Receptor Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				standing traffic and overall this impact would be reduced.		
MMS619	Minerva Lodge of Freemasons Number 250	6	High	There would be no permanent construction impacts on the asset.	No change	Neutral
MMS628	Hull Trinity House	6	High	There would be no permanent construction impacts on the asset.	No change	Neutral
MMS646	10-15, Whitefriargate, Kingston Upon Hull	6	High	There would be no permanent construction impacts on the asset.	No change	Neutral
MMS673	Princes Dock	2	Medium	<p>The construction of the Princes Quay Bridge would impact on the setting of the Princes Dock. It would create a mass that would remove current sightlines north towards the Princes Dock, and south towards the Humber Dock. The Princes Quay Bridge has been designed sympathetically to reflect the adjacent monuments.</p> <p>The historic setting of these monuments included Warehouse No. 7 (demolished in the 1970s), which would have formerly been a large mass adjacent to Warehouse No. 6. This means that the creation of this new mass is a comparable reversion to the original enclosed space of each dock with limited views inter-connecting the docks.</p> <p>The Princes Dock already has significant massing on the western and northern side and its southern side has already been partially eroded by the construction of the A63 Castle Street. The proposal to produce open spaces and access along this side of the dock would improve the setting despite the massing of the bridge and create an overall neutral impact. In addition, the Princes Quay Bridge may have a beneficial impact creating new sightlines across the monument towards the south and the Humber Estuary.</p> <p>The negative impacts of introducing the new mass off the Princes Quay Bridge need to be set against its historic setting and the benefits provided by the new open spaces and sightlines over the dock to give an overall lessened negative impact.</p>	Minor negative	Slight adverse
MMS720	City Hall	6	High	There would be no permanent construction impacts on the asset.	No change	None
MMS724	Church of St Mary	6	High	There would be no permanent construction impacts on the asset.	No change	None
MMS725	Hull Maritime Museum and Adjoining Railings	6	High	There would be no permanent construction impacts on the asset.	No change	None
MMS742	Guildhall	6	High	There would be no permanent construction impacts on the asset.	No change	None
MMS761	Humber Dock	2	Medium	The construction of the road and widening of the cycle path, as well as the construction of the Princes Quay Bridge would physically impact on the northern wall of the dock. This would involve its dismantling and change in the northern dock wall. The northern dock wall was dismantled in the 1970s and the	Minor negative	Slight adverse

MMS No	Receptor Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				<p>impact would involve additional impacts to this section of the Humber Dock.</p> <p>The construction of the Princes Quay Bridge would impact on the setting of the Humber Dock. It would create a mass that would remove sightlines from the dock north towards the Princes Dock and Warehouse No. 6. It has been designed sympathetically to reflect the adjacent monuments. The historic setting of these monuments included Warehouse No. 7 (demolished in the 1970s), which would have formerly been a large mass adjacent to Warehouse No. 6. This means that the creation of this new mass is a comparable reversion to the original enclosed space of each dock with limited views inter-connecting the docks. The Princes Quay Bridge may have a beneficial impact creating new sightlines across the monument towards the south and the Humber Estuary.</p>		
MMS764	Shipping Line Office	7	Medium	<p>There may be a permanent impact to the setting of the Shipping Line Office caused by the removal of the Trinity Burial Ground. Screening provided by the southern wall of the burial ground and the retained trees in this area would screen the building and lessen this impact.</p> <p>There may be a beneficial impact to the setting of the Shipping Line Office caused by improved traffic flow at the junction of Commercial Road with the A63 Castle Street. The improvement would see better traffic flow and less standing traffic.</p>	Negligible negative	Slight adverse
MMS765	Warehouse No. 13 Former Railway Dock Warehouse	7	Medium	<p>There would be a permanent impact to the setting of Warehouse No 13 caused by the alterations to the Trinity Burial Ground. The magnitude of the impact would be lessened as the southern boundary wall of the Trinity Burial Ground would not be affected by the work. However, the screening would not provide protection for the upper stories of the building where views looking north west from the building would see the full impact of the changed junction and removal of the northern 30% of the burial ground.</p> <p>The Princes Quay Bridge would provide a mass visible to the north east and restrict views of the Princes Dock. The historic setting of the Warehouse No. 13 would have been surrounded by warehouses and the current setting has seen an opening out of the area. The new mass would be larger but partially represents a reversion to the more enclosed nature of the historic dock setting.</p>	Minor negative	Slight adverse
MMS767	Former Railway Dock, Connecting Channel, Swing Bridge	7	Medium	<p>There would be a permanent impact to the setting of the Railway Dock caused by the alterations to the Trinity Burial Ground. The magnitude of the impact would be lessened as the southern boundary wall of the Trinity Burial Ground would not be affected by the work, and some of trees in this area would be retained, and replanting would occur. This would provide screening to the predicted removal of the northern 30% of the burial ground footprint.</p>	Minor negative	Slight adverse

MMS No	Receptor Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				The Princes Quay Bridge would provide a mass visible to the north east and restrict views of the Princes Dock. The historic setting of the Railway Dock would have been surrounded by warehouses and the current setting has seen an opening out of the area. The new mass would be larger but partially represents a reversion to the more enclosed nature of the historic dock setting.		
MMS768	Model Dwellings	8	Medium	There would be no permanent construction impacts on the asset.	No change	None
MMS776	Paragon Station and Station Hotel	8	High	There would be no permanent construction impacts on the asset.	No change	None
MMS782	11 and 12, Savile Street, Kingston Upon Hull	8	Medium	There would be no permanent construction impacts on the asset.	No change	None
MMS853	Alexandra Hotel	4	Medium	It is not envisaged that there would be a noticeable change caused by traffic, including noise and visual impacts as the proximity of the road remains unchanged.	No change	None
MMS856	King William Hotel, Market Place	1, 6	Low	<p>The course of the carriageway would be moved towards the heritage assets and the junction would be remodelled in a manner similar to the existing junction. This would not markedly change the setting of the heritage assets from the existing junction, layout.</p> <p>Widened cycle path would move towards the heritage asset and become more proximate, although this would not markedly change the setting of the heritage assets.</p> <p>The historic setting here was a north-south open area. A central reservation and parapet fence, 1.5m high would be added to the A63 Castle Street. This would impact upon the setting of the assets restricting views south towards Queen Street and north towards the Market Place and the heritage assets. Connectivity to these heritage assets would be slightly reduced, but was already restricted by the busy A63 Castle Street.</p>	Minor negative	Slight adverse
MMS857, MMS858, MMS859	Nos 74, 75 and 76 Castle Street;	1	Low	<p>The course of the carriageway would be moved towards the heritage assets and an additional lane added as a slip road to Market Place. This would move the road more proximate to the heritage assets and create a change in the setting of the heritage assets, the potential for increased noise and visual impacts. However, the quantity of standing traffic would be reduced.</p> <p>Widened cycle path would move towards the heritage asset and become more proximate. This would mean that occupants would be more aware of passing pedestrian/ cycle users. This would impact on the setting of the heritage assets.</p> <p>Central reservation and parapet fence, 1.5m high would be added reducing sightlines north towards the listed buildings and monuments. This would impact upon the setting of the monuments. Connectivity to these heritage assets would be slightly</p>	Minor negative	Slight adverse
MMS860	No 82-83 Castle Street, Burnett House	1	Low		Minor negative	Slight adverse
MMS861	No. 65 Castle Street, Hull Telephone Exchange;	1	Low		Minor negative	Slight adverse

MMS No	Receptor Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				reduced, but was already restricted by the busy A63 Castle Street.		
MMS865	Whittington and Cat public house, Commercial Road	4	Low	<p>The construction of the Mytongate Junction would result in the encroachment of the roadway south of its current location. This would mean the road would be closer to the Whittington and Cat and there would be a loss of the green space opposite.</p> <p>The historic setting of the Whittington and Cat public house was in an area of industrial buildings and the green space and Trinity Burial Ground opposite represent the only element of the original setting surviving. This historic setting has been almost entirely eroded and the importance of the buildings current setting of retail parks and car parks is low. The introduction of the Mytongate Junction will change the setting of the public house but will not impact its significance as it has already been largely removed from its historic setting.</p>	Minor negative	Slight adverse
MMS868	Pumping Station No 3	5	Low	There would be no permanent impact to the asset from construction.	No change	Neutral
MMS869	Duke of Edinburgh public house, Great Union Street	5	Low	There would be no permanent impact to the asset from construction.	No change	Neutral
MMS870	Victoria Dock Tavern, Great Union Street	5	Low	There would be no permanent impact to the asset from construction.	No change	Neutral
MMS871	Finnish Church	5	Low	There would be no permanent impact to the asset from construction.	No change	Neutral
MMS874	Former Winding House, South Bridge Road	5	Low	There would be no permanent impact to the asset from construction.	No change	Neutral
MMS910	Statue of William de la Pole	7	Medium	There will be no permanent construction impacts on the asset.	No change	None
MMS983	Cream K6 Telephone Kiosk, Waverley Street	4	Negligible	It is envisaged that the Kingston Retail Park Accommodation Works and the Proposed Yorkshire Water Sewer would result in the removal of the Telephone Kiosk.	Major negative	Slight adverse
MMS985	Drypool Bridge	5	Low	There would be no permanent construction impacts on the asset.	No change	None
MMS989	Humber Bridge	10	High	There would be no permanent construction impacts on the asset.	No change	None
MMS990	Tidal Surge Barrier	5, 7	Medium	<p>The setting of the tidal barrier would be altered by the Scheme.</p> <p>Changes involved with the Scheme including the alterations to Queen Street/ Market Place junction and widening of Castle Street would be inter-visible with the listed structure which is located 60-100m to the south east. However, the listed structure is already subject to noise, dust and visual impacts from the A63 Castle Street and overall very little change would be discerned.</p>	No change	None

Table 1.6: Predicted Permanent construction effects on conservation areas (including historic buildings)

Cons area No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
A1	Old Town Central and Eastern, Zone 1, the High Street, Lanes and Staithes	1, 6	High	There would be no permanent physical impact on the historic buildings or conservation area sub-zone during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation area sub-zone during the Scheme.	No change	Neutral
A2	Old Town, Central and Eastern, Zone 2, the Wharves and River	6	Medium	There would be no permanent physical impact on the historic buildings or conservation area sub-zone during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation area sub-zone during the Scheme.	No change	Neutral
A3	Old Town, Central and Eastern, Zone 3, Lowgate/ Market Place	1, 6	High	There would be no permanent physical impact on the historic buildings or conservation sub-area during the Scheme. There may be a permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme caused by the widening of the road, and the building of the central reservation and 1.5m high parapet. This would reduce sightlines looking north into the conservation sub-area and views of buildings along Market Place and Lowgate. It would also reduce views south towards the southern part of the conservation area. There may be an indirect permanent impact on the historic buildings and conservation area caused by severance between the northern and southern parts of the conservation area in this location. The removal of the Queen Street/ Market Place crossing may impact on the quantity of footfall between the northern and southern parts of the town. However, in this location the impact is considered negligible.	Minor negative	Slight adverse
A4	Old Town, Central and Eastern, Zone 4, Lowgate/ Alfred Gelder Street Junction	6	High	There would be no permanent physical impact on the historic buildings or conservation sub-area during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
B1	Old Town, Western and Northern Part, Zone 1 Queen Victoria Square	6	High	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
B2	Old Town, Western and Northern Part, Zone 2 Princes Dock Street	2, 6	Medium	There would be no permanent physical impact on the historic buildings during the Scheme. There may be a permanent impact on the setting of the historic buildings or conservation area sub-zone during the Scheme caused by the widening of the road, and the building of the central reservation and 1.5m high parapet. This would reduce sightlines looking north into the conservation sub-area and views of buildings along Humber Dock Street and Princes Dock Street. It would also reduce views south towards the southern part of the conservation area.	Minor negative	Slight adverse

Cons area No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				The building of the Princes Quay Bridge would create a new mass at the southern boundary of the Princes Dock obscuring views to the Humber Dock changing the setting of the buildings and conservation area sub-zone. However, this is in keeping with the historic setting of the southern side of the dock which was dominated by the large (and now demolished Warehouse No. 7). The former line of the connecting lock between the two docks is retained. The bridge has been designed sympathetically to reflect the maritime character of the area. It would also open up new sightlines north and south across the conservation area creating beneficial views.		
B3	Old Town, Western and Northern Part, Zone 3 Castle Street, Dagger Lane to Vicar Lane	1, 6	Medium	<p>There would be no permanent physical impact on the conservation area sub-zone during the Scheme.</p> <p>There would be a permanent impact to the setting of the conservation sub-area caused by the movement of the carriageway and cycle path north towards the buildings on the northern side of the A63 Castle Street. The setting would also be affected by the blocking up of Dagger Lane, Fish Street and Vicar Lane. There would be a redistribution of traffic through the conservation area sub-zone but would not have an overall impact on the conservation area. The addition of the central reservation and 1.5m high parapet, would reduce views north into the conservation area sub-zone and south into the southern part of the conservation area. None of these views are considered key views in the conservation area.</p> <p>The barrier would have a permanent indirect impact on the conservation area sub-zone as it would create severance with the southern part of the conservation area causing pedestrians and cycle users to have to move west to the Princes Quay Bridge or east to the High Street underpass increasing journey times. Most of the footfall is likely to be from the north and therefore the impact in this conservation sub-area is reduced.</p>	Minor negative	Slight adverse
B4	Old Town, Western and Northern Part, Zone 4, Trinity Square, North and South Church Side	6	High	<p>There would be no permanent physical impact on the historic buildings by the Scheme.</p> <p>There would be a permanent adverse impact to the setting of the conservation area caused by the Scheme due to the Old Town Accommodation Works which plan to use standard highway treatments during the work; the addition of the central reservation and 1.5m high parapet, causing changes to the views down Dagger Lane, Fish Street and Vicar Lane (although the distance from the A63 Castle Street means the impact is reduced); and the blocking up of Dagger Lane, Fish Street and Vicar Lane and subsequent increased traffic flow through the conservation area.</p>	Minor negative	Slight adverse
B5	Old Town, Western and Northern Part, Zone 5 Posterngate	6	High	<p>There would be no permanent physical impact on the historic buildings during the Scheme.</p> <p>There would be a permanent adverse impact to the setting of the conservation area caused by the Scheme due to the Old Town</p>	Minor negative	Slight adverse

Cons area No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				Accommodation Works which plan to use standard highway treatments during the work; the addition of the central reservation and 1.5m high parapet, causing changes to the views down Dagger Lane, Fish Street and Vicar Lane (although the distance from the A63 Castle Street means the impact is reduced); and the blocking up of Dagger Lane, Fish Street and Vicar Lane and subsequent increased traffic flow through the conservation area.		
B6	Old Town, Western and Northern Part, Zone 6, Whitefriargate and Silver Street	6	High	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
B7	Old Town, Western and Northern Part, Zone 7, Parliament Street	6	High	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
B8	Old Town, Western and Northern Part, Zone 8, Manor Street, Land of Green Ginger and Bowlalley Lane	6	High	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
B9	Old Town, Western and Northern Part, Zone 9, North Walls and Salthouse Lane	6	Medium	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
B10	Old Town, Western and Northern Part, Zone 10, 'Little' High Street, Dock Office Row and Charlotte Street (east end)	6	High	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
C1	Old Town Southern Part, Zone 1 Trinity Burial Ground	3	High	<i>The Trinity Burial Ground is covered above in historic buildings, (including impacts on the archaeology) and is not repeated here to avoid double counting. See Table 1.2 above.</i> <i>It is considered for overall impacts on the conservation area in the main chapter.</i>		
C2	Old Town Southern Part, Zone 2 Docklands	2, 7	Medium	There would be a permanent impact caused to conservation area sub-zone by the blocking up of Humber Dock Street. This would result in a change to the conservation area as a turning area would be required at the northern end of Humber Dock Street. However, it would reduce the quantity of direct traffic exiting from the A63 Castle Street, and may reduce traffic speeds and flow along Humber Dock Street. There would be a permanent impact on the setting of the historic buildings or conservation area sub-zone during the Scheme caused by the widening of the road, and the building of the central reservation and 1.5m high parapet. This would reduce sightlines looking north into the conservation area and views of buildings along Humber Dock Street and Princes Dock Street. It would also reduce views north	Minor negative	Slight adverse

Cons area No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				<p>towards the northern part of the conservation area.</p> <p>The building of the Princes Quay Bridge would create a new mass at the southern boundary of the Princes Dock obscuring views towards it changing the setting of the conservation area sub-zone. The mass of the canopy of the Princes Quay Bridge would be much more intrusive, impose closely on Warehouse No. 6, restrict views of the warehouse, and would reduce sightlines between the Princes and Humber Docks. The new mass in the area would partially reflect the historic setting of the southern side of the Princes Dock which was dominated by the large and now demolished Warehouse No. 7. The bridge has been designed sympathetically to reflect the maritime character of the area and the former line of the connecting lock between the two docks is retained. This would be sympathetic to the conservation area reducing its impact and potentially becoming an iconic part of the Hull skyline. This is considered a beneficial impact. The Princes Quay Bridge would also open-up new sightlines north and south across the conservation area from the top creating a beneficial impact.</p> <p>There would be an indirect permanent impact to the conservation area sub-zone caused by increased severance which may affect north-south footfall between the conservation areas. This may affect use and access to the conservation area sub-zone. However, the Princes Quay Bridge may improve access between the north and south of the conservation area creating a traffic-free route. The impact is considered minor beneficial.</p>		
C3	Old Town Southern Part, Zone 3 Riverfront	7	Medium	<p>There would be no permanent physical impact on the historic buildings or conservation area sub-zone from the Scheme.</p> <p>There would be a permanent impact on the setting of the conservation area sub-zone caused by the widening of the road, the building of the central reservation and 1.5m high parapet and the Princes Quay Bridge. Most of the conservation sub-area is screened from the road by the buildings between. The exception is the area at the entrance to Humber Dock where direct sightlines reveal views of the road looking north. However, the distance is beyond 250m and overall it is not considered that the change would be noticeable. The exception is the Princes Quay Bridge which has a substantial mass visible from the conservation area sub-zone. It has been designed to be sympathetic to the conservation area and partially adopts the footprint of the former Warehouse No. 7 reducing its impact and potentially becoming an iconic part of the Hull skyline. Overall, there would be no change to the setting of the conservation area.</p> <p>There may be an indirect permanent impact to the conservation area sub-zone caused by increased severance due to the removal of crossing points on the A63 Castle Street. The loss of the crossing point at Princes Dock Street to Humber Dock Street would be</p>	Negligible negative	Slight adverse

Cons area No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				negated by the creation of the Princes Quay Bridge. However, there is a reduction in crossing points at the eastern end of the scheme caused by the loss of the crossing point between Market Place and Queen Street which may affect north-south footfall between the conservation areas. This may affect use and access to the conservation area sub-zone. Overall, there would be a negligible adverse impact to the conservation area.		
C4	Old Town Southern Part, Zone 4 Fruit Market and 'Forelands'	7	Medium	<p>There would be no physical impact on the historic buildings or conservation sub-area from the Scheme.</p> <p>There would be a permanent impact on the setting of the historic buildings and conservation area sub-zone during work caused by increased traffic due to the blocking up of Humber Dock Street.</p> <p>There would be an indirect permanent impact to the conservation area sub-zone caused by increased severance due to the removal of crossing points on the A63 Castle Street. The loss of the crossing point at Princes Dock Street to Humber Dock Street would be negated by the creation of the Princes Quay Bridge. However, there is a reduction in crossing points at the eastern end of the scheme caused by the loss of the crossing point between Market Place and Queen Street which may impact north-south footfall between the conservation areas. This may impact use and access to the conservation area sub-zone.</p>	Negligible negative	Slight adverse
C5	Old Town Southern Part, Zone 5 Oldgates	1, 7	Medium	<p>There would be no physical impact on the historic buildings or conservation area sub-zone from the Scheme.</p> <p>There may be a permanent impact on the setting of the historic buildings and conservation area sub-zone from the Scheme caused by the increased width of the A63 Castle Street carriageway to the south. No designated or non-designated buildings are located south of the carriageway and there would be no impact on buildings of historic townscape value south of the carriageway. The impact should be considered against the current baseline of existing traffic which already imposes on the conservation area sub-zone. There would be a permanent impact on the setting of the historic buildings or conservation area sub-zone during the Scheme caused by the widening of the road, and the building of the central reservation and 1.5m high parapet. This would reduce sightlines looking north into the conservation area and views of buildings north along Vicar Lane, Fish Street and Dagger Lane.</p> <p>There would be an indirect permanent impact to the conservation area sub-zone caused by increased severance due to the removal of crossing points on the A63 Castle Street. The loss of the crossing point at Princes Dock Street to Humber Dock Street would be negated by the creation of the Princes Quay Bridge. However, there is a reduction in crossing points at the eastern end of the scheme caused by the loss of the crossing</p>	Minor negative	Slight adverse

Cons area No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				point between Market Place and Queen Street which may affect north-south footfall between the conservation areas. This may affect use and access to the conservation area sub-zone. Overall, there would be a negligible adverse impact.		
JS	Jameson Street	8	Medium	There would be no permanent physical impact on the historic buildings' during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
GN	Georgian New Town	8	Medium	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
SB	Spring Bank	8	Medium	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
BR	Beverley Road	8	Medium	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
BV	Boulevard	8	Medium	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
CS	Coltman Street	8	Medium	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
HR	Hessle Road	8	Medium	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
AD	St Andrew's Dock	8	Medium	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
HS	Hessle Town	10	Medium	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral
HS	Hessle Southfield	10	Medium	There would be no permanent physical impact on the historic buildings during the Scheme. There would be no permanent impact on the setting of the historic buildings or conservation sub-area during the Scheme.	No change	Neutral

Table 1.7: Predicted permanent construction effects on Historic Landscape Character Units (HLCU)

MMS No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
HLCU 1	Mytongate Junction	3	Negligible	The area of the Mytongate Junction would be entirely redeveloped with the central reservation excavated to create an underpass. The junction would be entirely realigned.	Major negative	Slight adverse
HLCU 2	English Town	4, 9	Medium	The construction of the Porter Street Bridge would improve access to the HLCU by foot and be a beneficial impact. The closure of James Street and the realignment of Spruce Road to create a new restricted access would reduce traffic and vehicular access to the streets. There may be an indirect impact resulting from the closure of road access to the area and reduction in passing trade to the area.	Neutral negative	No change
HLCU 3	Waverley Street	9	Low	The construction of the Porter Street Bridge would improve access to the HLCU by foot and be a beneficial impact. The closure of James Street and the realignment of Spruce Road to create a new restricted access would reduce traffic and vehicular access to the streets. There may be an indirect impact resulting from the closure of road access to the area and reduction in passing trade to the area.	Minor negative	Slight adverse
HLCU 4	Commercial Estates south of A63 Castle Street	9	Negligible	There would be a reduction in standing traffic on Commercial Road.	Negligible negative	Neutral adverse
HLCU 5	Walker Street to Porter Street	4, 8	Low	There would be little notable change to the setting of the HLCU.	No change	Neutral
HLCU 6	Australian Houses	4, 8	Medium	The Myton Centre would be replanted as a public space. Coogan Street would be stopped up improving the traffic free space around the HLCU. This would be a beneficial impact to the setting of the area.	Minor negative	Slight beneficial
HLCU 7	Ferensway/ Myton Street/ Anlaby Street	3, 8	Negligible	There would be little notable change to the setting of the HLCU	No change	Neutral
HLCU 8	Waterhouse Lane	3, 8	Low	<p>The HLCU contains very few aspects of its historic character. Exceptions include the street lines and the surviving building stock which includes the Castle Chambers, and the Earl de Grey public house.</p> <p>The street lines would not be greatly altered by the current work. The exception is the A63 Castle Street which would be moved slightly towards the north and widened to the south. These changes are set against a baseline of the already altered line of Castle Street which bears little resemblance to the historic street.</p> <p>The historic building stock is already fragmentary with none surviving north of Waterhouse Lane. The line of Castle Street would be eroded further by the dismantling of the Earl de Grey public house. However, the existing baseline is already a poor reflection of the former historic landscape character.</p> <p>The setting of the character area would be impacted by the changes to the Mytongate Junction and alteration of the layout of the A63 Castle Street but this is set against an existing low value HLCU of fragmentary building stock and already eroded street line along the A63 Castle Street.</p>	Moderate negative	Slight adverse

MMS No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
HLCU 9	Trinity Burial Ground	3	High	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C1).	n/a	n/a
HLCU 10	Holiday Inn Complex	3	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 11	Docklands	2, 7	Medium	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 12	Hull Marina Boatyard	7	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 13	Kingston Street/ Wellington Street	7	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 14	Princes Dock	2, 6	Medium	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (B2).	n/a	n/a
HLCU 15	Lisle Court, Trinity Court and Grammar School Yard	1, 6	Low	The HLCU is located within the Old Town conservation area and is considered in historic buildings above (B3).	n/a	n/a
HLCU 16	Posterngate	6	Medium	The HLCU is located within the Old Town conservation area and is considered in Historic Buildings (B5).	n/a	n/a
HLCU 17	White		High	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (B2 and B5).	n/a	n/a
HLCU 18	Trinity Square	6	High	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (A3 and B4).	n/a	n/a
HLCU 19	Market Place	6	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (A3).	n/a	n/a
HLCU 20	High Street/ Staithe	6	High	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (A1 and A2).	n/a	n/a
HLCU 21	Oldgates (west)	1, 7	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C5).	n/a	n/a
HLCU 22	Oldgates (east)	1, 7	Negligible	The HLCU is located within the Old Town conservation area and is considered in Historic Buildings above (C5).	n/a	n/a
HLCU 23	Foregates and Fruit Markets	7	Medium	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C4).	n/a	n/a
HLCU 24	Riverside	7	Medium	The HLCU is located within the Old Town conservation area and is considered in Historic Buildings above (C3).	n/a	n/a
HLCU 25	Hull Paragon Interchange	8	High	There would be no permanent impact to the HLCU.	No change	Neutral
HLCU 26	Old Town North	6	Low	The HLCU is located within the Old Town conservation area (C2, C4, C5, C6, C7, C8) and is considered in Historic Buildings above.	n/a	n/a
HLCU 27	Jameson Street	8	Medium	There would be no permanent impact to the HLCU.	No change	Neutral

MMS No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
HLCU 28	Hessle Housing Estate	10	Low	There would be no permanent impact to the HLCU.	No change	Neutral
HLCU 29	Hessle Industrial Estate	10	Negligible	There would be no permanent impact to the HLCU.	No change	Neutral
HLCU 30	Humber Bank	9	Low	There would be no permanent impact to the HLCU.	No change	Neutral

1.3 Operational effects

Table 1.8: Predicted permanent operation effects on key historic buildings

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS144	Trinity Burial Ground; two lamp posts either side of the burial ground.	3	High	The new layout of the Mytongate Junction would move south. Although 43% of the Trinity Burial Ground would be lost on a temporary basis, the area will be landscaped and returned to amenity use. This would result in only 30% of the Trinity Burial Ground being permanently lost. Mature trees would be removed from the burial ground and replaced with planting which would compensate but not fully replace the coverage and in the short term would not provide screening. This would reduce the sense of enclosure in the burial ground. It would therefore feel more exposed to the impacts from the road junction. These would include operational impacts from noise, pollution, vibration and visual impacts which would encroach further on the burial ground and sub-zone C1 of the Old Town conservation area.	Moderate negative	Moderate adverse
MMS600	Statue of King William III and Flanking Lamps	1, 6	High	The carriageway including the slip road onto Market Place will move slightly closer to the heritage assets. The change in the layout of the junction directly adjacent to the heritage asset means that traffic would be at a similar distance to the existing layout. However, the level of traffic flow onto Market Place would not markedly increase from the current levels. Overall, there would be a negligible adverse increase in impact on the heritage assets from visual intrusion, noise, pollution and vibration.	Negligible negative	Slight adverse
MMS601	Market Place Toilets	1, 6	Medium	The carriageway including the slip road onto Market Place would move slightly closer to the heritage assets. The change in the layout of the junction directly adjacent to the heritage asset means that traffic would be at a similar distance to the existing layout. However, the level of traffic flow onto Market Place would not markedly increase from the current levels. Overall, there would be a negligible adverse increase in impact on the heritage assets from visual intrusion, noise, pollution and vibration.	Negligible negative	Slight adverse
MMS602	Warehouse No. 6	2	Medium	The setting of the heritage asset is currently subject to intrusion from noise, visual impacts and pollution as it is adjacent to the A63 Castle Street (1.8m from the carriageway). The carriageway would move closer to the heritage assets meaning that there would be an increased impact on the heritage assets from visual intrusion, noise, pollution and vibration. The level of traffic flow on the A63 Castle Street would increase, but there would be an improved flow of traffic, meaning that there would be less standing traffic and associated pollution. The existing setting of the heritage asset is adjacent to the A63 Castle Street and the heritage assets are already subject to a similar level of impacts.	Negligible negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS603	Castle Buildings	3	Medium	<p>The carriageway would move closer to the heritage assets meaning that there would be an increased impact on the heritage assets from visual intrusion, noise, pollution and vibration. The level of traffic flow on the A63 Castle Street would increase, but there would be an improved flow of traffic, meaning that there would be less standing traffic and associated pollution.</p> <p>The existing setting of the heritage asset is adjacent to the A63 Castle Street and the heritage assets are already subject to a similar level of impacts.</p>	Minor negative	Slight adverse
MMS604	Earl de Grey public house	3	Medium	The buildings would be demolished during the Scheme. Operational impacts are therefore not considered.	N/A	N/A
MMS605	Vauxhall Tavern public house	4	Medium	Changes resultant from the Scheme would not move the carriageway closer to the heritage asset in this location. There might be a reduction in standing traffic in this location caused by the removal of at grade crossings and replacement by the Porter Street Bridge and because of the Mytongate Underpass. However, on balance there is likely to be no reduction on the impact to the heritage asset from visual intrusion, noise, and pollution.	No change	Neutral
MMS606/ MMS607	Trinity House workshop and Buoy Shed/ Tubular Crane to North East of Former Trinity House Buoy Shed	5	Medium	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	No change	Neutral
MMS612	Old Grammar School Museum	6	Medium	The Old Town Accommodation Works and the stopping-up of Dagger Lane, Fish Street and Vicar Lane would result in a change in the traffic flow in the Old Town area. This might result in increased traffic movements adjacent to the heritage asset and the resultant increased impacts from noise, pollution and visual intrusion. However, overall this would be a negligible increase in the impacts.	Negligible negative	Slight adverse
MMS618	Parish Church of the Holy Trinity and Churchyard Wall	6	High	The Old Town Accommodation Works and the stopping-up of Dagger Lane, Fish Street and Vicar Lane would result in a change in the traffic flow in the Old Town area. This might result in increased traffic movements adjacent to the heritage asset and the resultant increased impacts from noise, pollution and visual intrusion. However, overall this would be a negligible increase in the impacts.	Negligible negative	Slight adverse
MMS619	Minerva Lodge of Freemasons Number 250	6	High	The Old Town Accommodation Works and the stopping-up of Dagger Lane, Fish Street and Vicar Lane would result in a change in the traffic flow in the Old Town area. This might result in increased traffic movements adjacent to the heritage asset and the resultant increased impacts from noise, pollution and visual intrusion. However, overall this would be a negligible increase in the impacts.	Negligible negative	Slight adverse
MMS628	Hull Trinity House	6	High	The Old Town Accommodation Works and the stopping-up of Dagger Lane, Fish Street and Vicar Lane would result in a change in	Negligible negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				the traffic flow in the Old Town area. This might result in increased traffic movements adjacent to the heritage asset and the resultant increased impacts from noise, pollution and visual intrusion. However, overall this would be a negligible increase in the impacts.		
MMS646	10-15, Whitefriargate, Kingston Upon Hull	6	High	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	Negligible negative	Slight adverse
MMS673	Princes Dock	2	Medium	The carriageway would move closer to the heritage assets meaning that there would be an increased impact on the heritage assets from visual intrusion, noise, pollution and vibration. The level of traffic flow on the A63 Castle Street would increase, but there would be an improved flow of traffic, meaning that there would be less standing traffic and associated pollution. The existing setting of the heritage asset is adjacent to the A63 Castle Street and the heritage assets are already subject to a similar level of impacts.	Negligible negative	Slight adverse
MMS720	City Hall	6	High	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	No change	Neutral
MMS724	Church of St Mary	6	High	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	No change	Neutral
MMS725	Hull Maritime Museum and Adjoining Railings	6	High	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	No change	Neutral
MMS742	Guildhall	6	High	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	No change	Neutral
MMS761	Humber Dock	2	Medium	The carriageway would move closer to the heritage assets meaning that there would be an increased impact on the heritage assets from visual intrusion, noise, pollution and vibration. The level of traffic flow on the A63 Castle Street would increase, but there would be an improved flow of traffic, meaning that there would be less standing traffic and associated pollution. The existing setting of the heritage asset is adjacent to the A63 Castle Street and the heritage assets are already subject to a similar level of impacts.	Minor negative	Slight adverse
MMS764	Shipping Line Office	7	Medium	The improvements to the carriageway would not impact on the heritage asset directly in this location. However, there may be a reduction in the quantity of standing traffic adjacent to the asset caused by the improvements to the Mytongate Junction. There would be a negligible beneficial	Negligible positive	Neutral

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
				impact from visual intrusion, noise, and pollution.		
MMS765	Warehouse No. 13 Former Railway Dock Warehouse	7	Medium	The improvement to the carriageway might reduce standing traffic and traffic would be contained within the trench of the underpass of the Mytongate Junction north of the heritage asset. However, the reduction in the size of the Trinity Burial Ground and loss of screening from trees means that there might be a slight increase in from visual impacts.	Negligible negative	Neutral
MMS767	Former Railway Dock, Connecting Channel, Swing Bridge	7	Medium	The improvement to the carriageway might reduce standing traffic and traffic would be contained within the trench of the underpass of the Mytongate Junction north of the heritage asset. However, the reduction in the size of the Trinity Burial Ground and loss of screening from trees means that there might be a slight increase in impacts from visual intrusion and noise.	Negligible negative	Slight adverse
MMS768	Model Dwellings	8	Medium	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	No change	Neutral
MMS776	Paragon Station and Station Hotel	8	High	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	No change	Neutral
MMS782	11 And 12, Savile Street, Kingston Upon Hull	8	Medium	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	No change	Neutral
MMS853	Alexandra Hotel	4	Medium	The improvements to the carriageway would not move it closer to the heritage asset in this location. There might be a reduction in standing traffic in this location caused by the removal of at grade crossings and replacement by the Porter Street Bridge and because of the Mytongate Underpass. However, on balance there is likely to be no reduction on the impact to the heritage asset from visual intrusion, noise, and pollution.	No change	Neutral
MMS856	King William Hotel, Market Place	1, 6	Low	The carriageway including the slip road onto Market Place would move slightly closer to the heritage assets. The change in the layout of the junction directly adjacent to the heritage asset means that traffic would be at a similar distance to the existing layout. However, the level of traffic flow onto Market Place would not markedly increase from the current levels. Overall, there would be a negligible adverse increase in impact on the heritage assets from visual intrusion, noise, pollution and vibration.	Negligible negative	Slight adverse
MMS857, MMS858, MMS859	Nos 74, 75 and 76 Castle Street;	1	Low	The setting of the heritage asset is currently subject to intrusion from noise, visual impacts and pollution as it is adjacent to the A63 Castle Street (between 3.5 and 7.0m from the carriageway)	Minor negative	Slight adverse
MMS860	No 82-83 Castle Street, Burnett House	1	Low	There would be increased impacts from visual intrusion, noise, pollution and	Minor negative	Slight adverse

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS861	No. 65 Castle Street, Hull Telephone Exchange;	1	Low	vibration due to the proximity of the carriageway would move slightly closer to the heritage assets. There would be an increased level of traffic flow on the A63 Castle Street causing further impacts. However, this would be countered by an improved flow of traffic, meaning that there would be less standing traffic reducing pollution. The heritage assets are already subject to a similar level of impacts, although the impacts would become more proximate to the receptor, the level of this increase is proportional to the existing impact.	Minor negative	Slight adverse
MMS865	Whittington and Cat public house, Commercial Road	4	Low	The setting of the heritage asset is currently subject to intrusion from noise, visual impacts and pollution as it is located approximately 20m south of the Mytongate Junction. The Mytongate Junction would improve traffic flow along the A63 Castle Street and improve the junction with Commercial Road and Ferensway. This would lead to an improvement in standing traffic adjacent to the heritage asset. However, the carriageway might move slightly closer to the heritage asset. This would result in a negligible adverse impact to the heritage asset from noise, visual impacts and pollution.	Negligible negative	Slight adverse
MMS868	Pumping Station No 3	5	Low	There would be no permanent impact to the asset from operation.	No change	Neutral
MMS869	Duke of Edinburgh public house, Great Union Street	5	Low	There would be no permanent impact to the asset from operation.	No change	Neutral
MMS870	Victoria Dock Tavern, Great Union Street	5	Low	There would be no permanent impact to the asset from operation.	No change	Neutral
MMS871	Finnish Church	5	Low	There would be no permanent impact to the asset from operation.	No change	Neutral
MMS874	Former Winding House, South Bridge Road	5	Low	There would be no permanent impact to the asset from operation.	No change	Neutral
MMS910	Statue of William de la Pole	7	Medium	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	No change	Neutral
MMS983	Cream K6 Telephone Kiosk, Waverley Street	4	Low	The heritage asset would be demolished during the Scheme. Operational impacts are therefore not considered.	n/a	n/a
MMS985	Drypool Bridge	5	Low	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	No change	Neutral
MMS989	Humber Bridge	10	High	The improvements to the carriageway would not impact on the heritage assets in this location. There would be no change in the impact from visual intrusion, noise, and pollution.	No change	Neutral

MMS No	Receptor name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
MMS990	Tidal Surge Barrier	5, 7	Medium	The carriageway would not move closer to the heritage asset in this location. There might be a reduction in standing traffic because of the Scheme which would result in beneficial impacts from reduced visual intrusion. The likelihood is due to the elevated carriageway on the Myton Bridge that noise impacts might not noticeably change in this location.	No change	Neutral

Table 1.9: Predicted permanent operation effects on conservation areas (including historic buildings)

Cons area No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
A1	Old Town conservation area, Central and Eastern, Zone 1, the High Street, Lanes and Staithes	1, 6	High	The existing A63 Castle Street already impacts on the setting of the conservation area in this location including noise, dust and visual impacts. The Scheme will not alter the layout of the carriageway substantially in this location and it is considered that the noise, dust and visual impacts will be as the existing baseline.	No change	Neutral
A2	Old Town conservation area, Central and Eastern, Zone 2, the Wharves and River	6	Medium	The existing A63 Castle Street already impacts on the setting of the conservation area in this location including noise, dust and visual impacts. The Scheme will not alter the layout of the carriageway substantially in this location and it is considered that the noise, dust and visual impacts will be as the existing baseline.	No change	Neutral
A3	Old Town conservation area, Central and Eastern, Zone 3, Lowgate/ Market Place	1, 6	High	The carriageway and changes to the layout of the junction will move traffic closer to the Market Place. Despite this there will be a reduction in standing traffic. Noise, dust and visual impacts will be similar to the existing baseline.	Negligible negative	Neutral
A4	Old Town conservation area, Central and Eastern, Zone 4, Lowgate/ Alfred Gelder Street Junction	6	High	The existing A63 Castle Street already impacts on the setting of the conservation area in this location including noise, dust and visual impacts. The Scheme will not alter the layout of the carriageway substantially in this location and it is considered that the noise, pollution and visual impacts will be as the existing baseline.	No change	Neutral
B1	Old Town conservation area, Western and Northern Part, Zone 1 Savile Street, Queen's Dock Avenue, New Cross Street, Queen Victoria Square, Monument Bridge, Alfred Gelder Street, Quay Street, Guildhall Road, Hanover Square and Lowgate (north end)	6	High	Screening caused by the townscape of the northern part of the Old Town conservation area means that there will be no operational impacts on the conservation area sub-zone due to the Scheme.	No change	Neutral
B2	Old Town conservation area, Western and Northern Part, Zone 2 Princes Dock Street and Trinity House Yard	2, 6	Medium	The existing A63 Castle Street already impacts on the setting of the conservation area in this location including noise, dust, vibration and visual impacts. The Scheme will not alter the layout of the carriageway substantially in this location and it is considered that the noise, pollution and visual impacts will be as the existing baseline.	Negligible negative	Slight adverse
B3	Old Town conservation area, Western and Northern Part, Zone 3 Castle Street, Lisle Court, Dagger Lane (south end), Trinity Court, Fish Street, Grammar School	1, 6	Medium	The carriageway and changes to the layout of the junction will move traffic closer to the Market Place. Despite this there will be a reduction in standing traffic. Noise, dust, vibration and visual impacts will be similar to the existing baseline. The stopping-up of Dagger Lane, Fish Street and Vicar Lane will divert traffic onto the	Negligible negative	Slight adverse

Cons area No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
	yard and Vicar Lane (south end)			smaller streets in this sub-zone of the conservation area. This may result in a small increase in traffic and the subsequent noise, pollution and visual impacts.		
B4	Old Town conservation area, Western and Northern Part, Zone 4 Trinity House Lane, King Street, Trinity Square, North and South Church Side	6	High	The existing A63 Castle Street already impacts on the setting of the conservation area in this location including noise, dust and visual impacts. The Scheme will not alter the layout of the carriageway substantially in this location and it is considered that the noise, dust and visual impacts will be as the existing baseline. The stopping-up of Dagger Lane, Fish Street and Vicar Lane will divert traffic onto the smaller streets in this sub-zone of the conservation area. This may result in a small increase in traffic and the subsequent noise, pollution and visual impacts.	Negligible negative	Slight adverse
B5	Old Town conservation area, Western and Northern Part, Zone 5 Posterngate, Dagger Lane (north end), Princes Street and Robinson Row	6	High	The existing A63 Castle Street already impacts on the setting of the conservation area in this location including noise, dust and visual impacts. The Scheme will not alter the layout of the carriageway substantially in this location and it is considered that the noise, dust and visual impacts will be as the existing baseline. The stopping-up of Dagger Lane, Fish Street and Vicar Lane will divert traffic onto the smaller streets in this sub-zone of the conservation area. This may result in a small increase in traffic and the subsequent noise, pollution and visual impacts.	Negligible negative	Slight adverse
B6	Old Town conservation area, Western and Northern Part, Zone 6, Whitefriargate and Silver Street	6	High	Screening caused by the townscape of the northern part of the Old Town conservation area means that there will be no operational impacts on the conservation area sub-zone due to the Scheme.	No change	Neutral
B7	Old Town, Western and Northern Part, Zone 7, Parliament Street	6	High	Screening caused by the townscape of the northern part of the Old Town conservation area means that there will be no operational impacts on the conservation area sub-zone due to the Scheme.	No change	Neutral
B8	Old Town, Western and Northern Part, Zone 8, Manor Street, Land of Green Ginger and Bowlalley Lane	6	High	Screening caused by the townscape of the northern part of the Old Town conservation area means that there will be no operational impacts on the conservation area sub-zone due to the Scheme.	No change	Neutral
B9	Old Town, Western and Northern Part, Zone 9, North Walls and Salthouse Lane	6	Medium	Screening caused by the townscape of the northern part of the Old Town conservation area means that there will be no operational impacts on the conservation area sub-zone due to the Scheme.	No change	Neutral
B10	Old Town, Western and Northern Part, Zone 10, 'Little' High Street, Dock Office Row and Charlotte Street (east end)	6	High	Screening caused by the townscape of the northern part of the Old Town conservation area means that there will be no operational impacts on the conservation area sub-zone due to the Scheme.	No change	Neutral
C1	Old Town Southern Part, Zone 1 Trinity Burial Ground	3	Medium	<i>Area C1 is assessed above in MMS144 Trinity Burial Ground and is not assessed again here.</i>	<i>n/a</i>	<i>n/a</i>

Cons area No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
C2	Old Town Southern Part, Zone 2 Docklands	2, 7	Medium	<p>The existing A63 Castle Street already impacts on the setting of the conservation area in this location including noise, pollution and visual impacts. The Scheme will not alter the layout of the carriageway substantially in this location and it is considered that the noise, dust, vibration and visual impacts will be as the existing baseline.</p> <p>The removal of mature trees in the Trinity Burial Ground means that there will be a loss of screening from trees and an increase of visual impacts to the area of the Railway Dock and assets in this location.</p>	Negligible negative	Slight adverse
C3	Old Town Southern Part, Zone 3 Riverfront	7	Medium	<p>The existing A63 Castle Street already impacts on the setting of the conservation area in this location including noise, pollution and visual impacts. The Scheme will not alter the layout of the carriageway substantially in this location and it is considered that the noise, dust and visual impacts will be as the existing baseline.</p>	No change	Neutral
C4	Old Town Southern Part, Zone 4 Fruit Market and 'Forelands'	7	Medium	<p>The existing A63 Castle Street already impacts on the setting of the conservation area in this location including noise, pollution and visual impacts. The Scheme will not alter the layout of the carriageway substantially in this location and it is considered that the noise, dust and visual impacts will be as the existing baseline.</p> <p>The stopping-up of Humber Dock Street will divert traffic onto the smaller streets in this sub-zone of the conservation area. However, this is set against a baseline of low levels of existing traffic. This may result in a small increase in traffic and the subsequent noise, dust and visual impacts. Overall this will not be a change.</p>	No change	Neutral
C5	Old Town Southern Part, Zone 5 Oldgates	1, 7	Medium	<p>The existing A63 Castle Street already impacts on the setting of the conservation area in this location including noise, pollution and visual impacts. The Scheme will change the layout of the carriageway slightly but not fundamentally alter it. It is considered the noise, dust, vibration and visual impacts will be as the existing baseline.</p> <p>The stopping-up of Humber Dock Street will divert traffic onto the smaller streets in this sub-zone of the conservation area. This may result in a small increase in traffic and the subsequent noise, pollution and visual impacts.</p>	Negligible negative	Neutral
JS	Jameson Street	7	Medium	<p>There will be no permanent operational impacts on the conservation area due to the Scheme.</p>	No change	Neutral
GN	Georgian New Town	7	Medium	<p>There will be no permanent operational impacts on the conservation area due to the Scheme.</p>	No change	Neutral
SB	Spring Bank	8	Medium	<p>There will be no permanent operational impacts on the conservation area due to the Scheme.</p>	No change	Neutral
BR	Beverley Road	8	Medium	<p>There will be no permanent operational impacts on the conservation area due to the Scheme.</p>	No change	Neutral

Cons area No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
BV	Boulevard	8	Medium	There will be no permanent operational impacts on the conservation area due to the Scheme.	No change	Neutral
CS	Coltman Street	8	Medium	There will be no permanent operational impacts on the conservation area due to the Scheme.	No change	Neutral
HR	Hessle Road	8	Medium	There will be no permanent operational impacts on the conservation area due to the Scheme.	No change	Neutral
AD	St Andrew's Dock	8	Medium	There will be no permanent operational impacts on the conservation area due to the Scheme.	No change	Neutral
HT	Hessle Town	10	Medium	There will be no permanent operational impacts on the conservation area due to the Scheme.	No change	Neutral
HS	Hessle Southfield	10	Medium	There will be no permanent operational impacts on the conservation area due to the Scheme.	No change	Neutral

Table 1 Error! No text of specified style in document..10: **Predicted permanent operation effects on Historic Landscape Character Units (HLCU)**

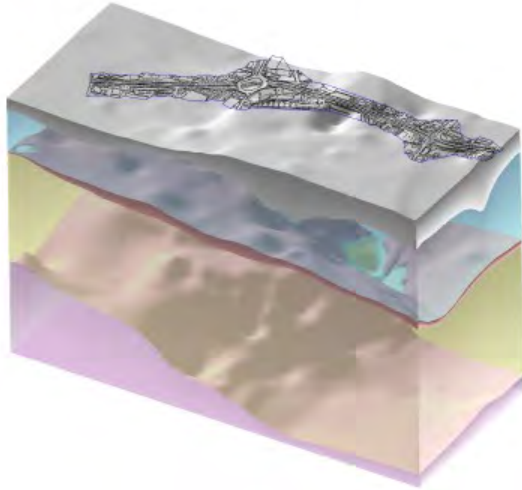
MMS No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
HLCU 1	Mytongate Junction	3	Negligible	The removal of traffic along the A63 Castle Street from at grade level into the Mytongate Underpass and a reduction in standing traffic would reduce visual, noise and pollution impacts. Overall there would be a slight beneficial impact to the setting of the HLCU.	Slight	Slight beneficial
HLCU 2	English Town	4, 9	Medium	The stopping-up and realignment of St James Street would reduce the quantity of direct traffic entering the HLCU from the A63 Castle Street. Overall there would be no change to the visual, noise and pollution impacts to the setting of the HLCU caused by traffic.	Slight	Slight beneficial
HLCU 3	Waverley Street	9	Low	The realignment of Spruce Street, Kingston Retail Park Accommodation Works and stopping up of St James Street would have a slight change to the setting of the HLCU caused by an alteration in the traffic routes adopted. However, these streets were already subject to visual, noise and pollution impacts from the A63 Castle Street and overall there would be no additional operational impacts caused to the setting of the HLCU by the Scheme.	No change	Neutral
HLCU 4	Commercial Estates south of A63 Castle Street	9	Negligible	The removal of traffic along the A63 Castle Street from at grade level into the Mytongate Underpass would reduce visual, noise and pollution impacts. At grade there would be a reduction in standing traffic reducing visual, noise and dust impacts. Overall there would be a slight beneficial impact to the setting of the HLCU.	Slight	Slight beneficial
HLCU 5	Walker Street to Porter Street	4, 8	Low	There would be little notable change to the setting of the HLCU.	No change	Neutral
HLCU 6	Australian Houses	4, 8	Medium	There would be little notable change to the setting of the HLCU.	No change	Neutral
HLCU 7	Ferensway/ Myton Street/ Anlaby Street	3, 8	Negligible	There would be little notable change to the setting of the HLCU	No change	Neutral
HLCU 8	Waterhouse Lane	3, 8	Low	The removal of traffic along the A63 Castle Street from at grade level into the Mytongate Underpass would reduce visual, noise and pollution impacts. At grade there would be a reduction in standing traffic reducing visual, noise and pollution impacts. Overall there would be a slight beneficial impact to the setting of the HLCU.	Slight	Slight beneficial
HLCU 9	Trinity Burial Ground	3	Medium	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C1).	n/a	n/a
HLCU 10	Holiday Inn Complex	3	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 11	Docklands	2, 7	Medium	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 12	Hull Marina Boatyard	7	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 13	Kingston Street/ Wellington Street	7	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C2).	n/a	n/a
HLCU 14	Princes Dock	2, 6	Medium	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (B2).	n/a	n/a

MMS No	Name	Zone	Value	Description of impact	Magnitude of impact	Significance of effect
HLCU 15	Lisle Court, Trinity Court and Grammar School Yard	1, 6	Low	The HLCU is located within the Old Town conservation area and is considered in historic buildings above (B3).	n/a	n/a
HLCU 16	Posterngate	6	Medium	The HLCU is located within the Old Town conservation area and is considered in Historic Buildings (B5).	n/a	n/a
HLCU 17	White		High	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (B2 and B5).	n/a	n/a
HLCU 18	Trinity Square	6	High	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (A3 and B4).	n/a	n/a
HLCU 19	Market Place	6	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (A3).	n/a	n/a
HLCU 20	High Street/ Staithes	6	High	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (A1 and A2).	n/a	n/a
HLCU 21	Oldgates (west)	1, 7	Negligible	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C5).	n/a	n/a
HLCU 22	Oldgates (east)	1, 7	Negligible	The HLCU is located within the Old Town conservation area and is considered in Historic Buildings above (C5).	n/a	n/a
HLCU 23	Foregates and Fruit Markets	7	Medium	The HLCU is located within the Old Town conservation area and is considered above in Historic Buildings (C4).	n/a	n/a
HLCU 24	Riverside	7	Medium	The HLCU is located within the Old Town conservation area and is considered in Historic Buildings above (C3).	n/a	n/a
HLCU 25	Hull Paragon Interchange	8	High	There would be no permanent operational impact to the HLCU.	No change	Neutral
HLCU 26	Old Town North	6	Low	The HLCU is located within the Old Town conservation area (C2, C4, C5, C6, C7, C8) and is considered in Historic Buildings above.	n/a	n/a
HLCU 27	Jameson Street	8	Medium	There would be no permanent operational impact to the HLCU.	No change	Neutral
HLCU 28	Hessle Housing Estate	10	Low	There would be no permanent operational impact to the HLCU.	No change	Neutral
HLCU 29	Hessle Industrial Estate	10	Negligible	There would be no permanent operational impact to the HLCU.	No change	Neutral
HLCU 30	Humber Bank	9	Low	There would be no permanent operational impact to the HLCU.	No change	Neutral

A63 Castle Street Improvements, Hull Environmental Statement

**Volume 3 Appendix 8.4
CULTURAL HERITAGE – ASSESSMENT MITIGATION AND DEPOSIT
MODELLING**

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31 July 2018**



A63 Castle Street Improvements

Kingston upon Hull

**Assessment, Mitigation
and Deposit Modelling**



Oxford Archaeology North

Humber Field Archaeology
Archaeological Consultants and Contractors



Humber Field Archaeology

January 2014

Mott MacDonald Grontmij Joint Venture

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SUMMARY

Oxford Archaeology (OA) and Humber Field Archaeology (HFA), in partnership, were commissioned by Mott MacDonald Grontmij Joint Venture, on behalf of the Highways Agency, to undertake archaeological assessment, mitigation, and geoarchaeological deposit modelling along the course of the proposed A63 Castle Street Improvements, Kingston upon Hull.

Within a predefined study area, the work comprised: an enhanced desk-based assessment; an assessment of the late eighteenth and mid-nineteenth-century Trinity Burial Ground, which lies directly adjacent to the current route of the A63; a watching brief, in order to monitor geotechnical work that formed part of an exploratory Site Investigation; and geoarchaeological deposit modelling, which compiled data from the earlier geotechnical and archaeological investigations, and the Site Investigation work. The overall aim was to discern, where possible, the character and depth of the archaeological resource within the study area and to mitigate the archaeological impact of the Site Investigation. Furthermore, it is anticipated that the results will feed directly into the ongoing design process for the scheme, assist in the formulation of a suitable archaeological mitigation strategy, and support the Development Consent Order (DCO) application.

In terms of the character of the archaeological resource, the assessment, mitigation, and deposit modelling suggests the study area contains below-ground archaeological and palaeoenvironmental remains, which hold a high relative significance. More specifically, those remains that are regionally significant appear to relate to the development and potential early use of the Humber Estuary and the River Hull, during the early prehistoric period, and the development of settlement, associated activities, and defence during the medieval and early post-medieval periods. More locally significant remains might date to the later post-medieval period.

The earliest identified remains lie at depth (*c* -13.5mOD to -5mOD) and form an organic horizon surviving as a *c* 4.5-0.1m-thick layer of peat, and organic clays and silts, which are positioned either side of a former channel, or branch, of the River Hull. It is possible that this horizon contains evidence for the seasonal exploitation of the Humber Estuary by early prehistoric communities, and as such may be associated with regionally significant archaeological remains. Sealing this organic horizon is a thick deposit of minerogenic alluvium, the top of which may be encountered at relatively shallow depths below present ground levels. Although this horizon was formed through natural processes, it has the potential to contain stabilisation horizons, which might again be associated with regionally significant waterlogged archaeological remains relating to semi-permanent or seasonal exploitation of the intertidal environment.

An Upper Archaeological Horizon is also present, lying above the alluvium and immediately below modern overburden/made ground. This horizon appears, in the main, to relate to historic-period activity, dating to the medieval and post-medieval periods, and, within the study area, it constitutes four distinct archaeological zones containing spatially and temporally distinct remains.

The first zone (Zone 1), covering the Old Town (Market Place to Princes Dock Street/Humber Dock), has the potential to contain regionally and locally significant medieval and post-medieval structural evidence, in the form of residential and commercial buildings, interspersed between open medieval plots. Within this zone, deposits, associated with the Upper Archaeological Horizon, have been recorded between 1.99m and 2.45mOD and may be between *c* 1m and *c* 2m thick, with waterlogged preservation at lower levels.

A second zone (Zone 2) encompasses Hull's medieval and post-medieval defences (Princes Dock Street/Humber Dock Street to the west side of Princes Dock/Humber Dock). The deposits and features associated with the Upper Archaeological Horizon in this zone range between 1.5m to at least 2.8m thick. They may be encountered at very shallow depths (0.3-1.1m below present ground levels) and they relate to the medieval and early post-medieval defence of Kingston upon Hull and as such hold regional significance.

The Upper Archaeological Horizon present within the third zone (Zone 3: west side of Princes Dock Street/Humber Dock Street to Great Passage Street/Kingston Retail Park) has the potential to contain regionally significant below-ground remains associated with the settlement of Wyke, the medieval predecessor to Kingston upon Hull, as well as the medieval hamlet of Myton, and a monastic grange and chapel. This area also contains the locally significant Trinity Burial Ground, which is estimated to contain in the region of 43,933 eighteenth-/nineteenth-century burials, and an extant late eighteenth-century gaol-yard wall. Outside of the cemetery, the Site Investigation work suggested the existence of possible late medieval and post-medieval remains, at depths of between 0.6m and 2.8m below present ground levels, the former of which might be associated with the medieval settlements at Wyke or Myton.

A final zone (Zone 4: Great Passage Street/Kingston Retail Park to Porter Street) holds low potential for medieval/post-medieval remains, and the Archaeological Horizon in this area may be predominantly associated with mid-late-nineteenth-century remains, though the presence of earlier remains cannot be entirely ruled out. As such the majority of remains in this area are probably of low archaeological significance.

With regard to archaeological survival, the Upper Archaeological Horizon's pre-nineteenth-century remains will have been affected, to varying degrees, by the construction of later cellars/basements, services, and also the passage between Humber Dock and Princes Dock. They may also have been impacted on by the construction of the carriageways and ancillary features, associated with the current A63. The locations of the majority of cellars, and other modern intrusions, are presently unknown, though it is anticipated that archaeological deposits might survive between and beneath these features. Similarly, the exact depth of the A63 road base is also unknown, though, in the eastern half of the route, it may extend to 0.3-1m below present ground level and directly seal the Upper Archaeological Horizon.

ACKNOWLEDGEMENTS

Oxford Archaeology and Humber Field Archaeology wishes to thank Mott McDonald Grontmij Joint Venture for commissioning the project and for their co-operation and support throughout its duration. Particular thanks are extended to Bryn Jones, Rhiannon Jones, Alex Rowley, Gary Haigh and Lindsey Cottrell of Grontmij, Sarah Edwards of Geotechnics Ltd, Lankelma Ltd, and all of the shelling augur/percussive drilling rig teams employed during the course of Site Investigation work. Blaise Vyner provided archaeological advice on behalf of the Highways Agency, and his support to and guidance is gratefully acknowledged.

Ken Steedman, of Humber Field Archaeology (HFA), undertook the enhanced desk-based assessment and also, along with David Rawson, the Trinity Burial Ground assessment and walkover survey. The watching brief completed during the Site Investigation work was undertaken by Doug Jobling, Pamela Cartwright, and Claire Rose, also of Humber Field Archaeology, with administrative support from Georgina Richardson and June Rooney. The watching brief report was authored by Doug Jobling, and the finds were assessed by Lisa M Wastling. Liz Stafford, of Oxford Archaeology (OA), undertook the deposit modelling and also authored relevant sections of this report. The report illustrations were produced by Mark Tidmarsh and Liz Stafford. The report was compiled and edited by Richard Gregory (OA). Fraser Brown and Ken Steedman jointly managed the project on behalf of OA-HFA.

1. INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1 **Introduction:** in August 2013, Oxford Archaeology (OA) and Humber Field Archaeology (HFA), working as partners (henceforward referred to as OA-HFA), were commissioned by Mott MacDonald Grontmij Joint Venture, on behalf of the Highways Agency, to undertake an archaeological assessment, watching brief and geoarchaeological deposit modelling along the course of the proposed A63 Castle Street Improvements, Kingston upon Hull (NGR: TA 0875 2809 to TA 1020 2845). This work, in turn, comprises several discrete elements (*Section 2*), which form a prelude to a major scheme of road improvement. Moreover, as the precise details of the improvement scheme have yet to be finalised, it is envisaged that the combined results from these archaeological studies will feed directly into the ongoing design process for the scheme, assist in the formulation of a suitable archaeological mitigation strategy, and support the Development Consent Order (DCO) application.
- 1.1.2 **Study area:** the area earmarked for improvement forms a *c* 1.5 km-long corridor which follows the present route of the A63, to the south of the Kingston upon Hull city centre (Fig 1). More specifically, the study area runs parallel with the River Humber, with its western end lying at the junction of the A63 with St James Street. From this point, the study area extends eastwards to the Mytongate roundabout, and measures approximately 35 m wide. At the roundabout the study area widens to *c* 180 m and it partly covers small sections of the A1079 and Commercial Road, which respectively run northwards and southwards from this junction. In the area immediately east of Mytongate junction the study area then narrows to *c* 75 m wide and encompasses a portion of the Trinity Burial Ground, which was in use between 1783 and 1860 (*Section 4.2.2*).
- 1.1.3 East of the Trinity Burial Ground, the study area narrows to *c* 33 m wide and continues in an easterly direction along the route of the A63 to Myton Bridge. This area holds considerable historic significance in that it traverses Kingston upon Hull's historic core and also the medieval and post-medieval town defences. In addition, the western section of this route, along Castle Street, follows the course of an eighteenth-century road, which was formerly known as Burford Street, whilst the eastern section follows the route of Myton Gate/Lisle Street that formed an important thoroughfare within the confines of the medieval and post-medieval settlement. At its far eastern end the study area widens, to *c* 100 m, at the A63, Market Place and Queen Street junction, and then narrows again to *c* 35 m, before terminating at Myton Bridge, which forms a crossing over the River Hull. This watercourse flows into the Humber, in a south-westerly direction, and originally acted as the eastern boundary of the medieval settlement.
- 1.1.4 **Previous archaeological investigations:** prior to the present study, the cultural heritage within the proposed A63 road improvement area has been the focus of

several archaeological desk-based assessments (*inter alia*; York Archaeological Trust 1994; 1995; Necropolis 1994; Acer Consultants 1995; Evans 2004). The most recent of these was completed as part of a scheme-wide Environmental Assessment and considered a 250 m-wide by 1.5 km-long area, centred on the course of the proposed road improvement (Pell Frischmann 2010). This cultural-heritage assessment conformed to those recommendations set out in Volume 11 of the *Design Manual for Roads and Bridges* (DMRB) (Highways Agency 2007), described the general archaeological and historical context for the route and identified 260 cultural heritage assets within the study area. These assets included 190 archaeological sites, 46 historic buildings, and 24 historic landscape character units (*ibid*).

- 1.1.5 In addition to the desk-based assessments, the study area and its immediate environs have witnessed numerous archaeological excavations, and these allow some insights into the character and depth of the below-ground archaeological resource across this area (*Sections 4.1.2-41*).
- 1.1.6 **Geotechnical investigations:** several geotechnical investigations have been undertaken along and adjacent to the A63 between 1961 and 1997 (*Section 3.4.2*) and this data is held by the British Geological Survey (BGS). The information derived from these studies is pertinent to both the depths and character of the geological and archaeological resource along and immediately adjacent to the proposed route.

1.2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 1.2.1 The archaeological and historical background relevant to the road-improvement scheme, and its wider environs, is rich and complex and this has been outlined in detail within the recent scheme-wide Environmental Assessment (Pell Frischmann 2010). Given this, it is not the intention to repeat this information, and hence for a full and detailed discussion reference should be made to Cultural Heritage section of the Environmental Assessment (*ibid*).
- 1.2.2 However, in summary, and in order to provide some context for the evidence presented within this study, it is clear that the road-improvement corridor traverses an area that holds high relevance for the pre-medieval, medieval and post-medieval history of Kingston upon Hull. For example, the road-improvement corridor might contain evidence for pre-medieval activity associated with the use and settlement of the Humber Estuary, and may also cross, or lie close to, Wyke, the medieval predecessor to Kingston upon Hull, which was itself founded in the late thirteenth century (*ibid*). The route covers a small portion of this late medieval town and its associated defences and may traverse the medieval hamlet of Myton, which lay to the west of Kingston upon Hull (*ibid*). This area might also have housed a medieval monastic grange and chapel (*ibid*).
- 1.2.3 Similarly, the route crosses an area that contained post-medieval settlement and activity associated with the growing town and also covers portions of the town's Civil War defences, which were erected in the seventeenth century (*ibid*).

- 1.2.4 The town then underwent a period of rapid expansion in the late eighteenth and nineteenth centuries. Within the old town, which largely retained its medieval street plan, this involved the infilling of vacant plots, whilst more dramatic expansion occurred to the west of the historic core and this includes the area crossed by the road-improvement corridor. This was partly spurred on by a scheme of dock building and land reclamation, and was also conditioned by the arrival of the railways in the early half of the nineteenth century (*ibid*; Jackson 1983, 48-51, 76-7). Within, and close to, the road-improvement corridor this expansion is amply demonstrated by reference to nineteenth-century mapping (Figs 2-4), which highlights large-scale improvements to infrastructure, through the expansion of the docks, the advent of the railways, reclamation of land along the Humber bank, and new road building, as well as dense residential development, which occurred across areas of former agricultural and horticultural land.
- 1.2.5 In the twentieth century, much of the residential development west of the City, including the area covered next to the road-improvement corridor, was then subject to slum clearance and demolition following destruction from bombing during World War II. Across this area, although the mid-nineteenth-century street pattern largely remained, the housing was replaced by industrial and commercial premises to the south of the present A63, and large residential estates to the north (Figs 5 and 6).

1.3 GEOLOGICAL BACKGROUND

- 1.3.1 The underlying solid geology of the A63 road-improvement corridor is dominated by chalk (Burnham Chalk Formation) laid down in the Late Cretaceous epoch (10.5-66 Ma) and this is sealed by superficial deposits dating to the Devensian and Holocene. The geological history of these later deposits is invariably complex, as they relate to the landscape changes associated with the ice sheets of the last glaciation (Devensian, *c* 120,000-12,000 BP) and the rapid rise in sea-level, wetland expansion, and marine inundation that occurred during the Holocene (*c* post-12,000 BP). A comprehensive geoarchaeological review of the region was carried out by the Humber Wetlands Project (*cf* Van de Noort 2004). This work characterised the key geological changes in the Hull river valley and it is summarised below, along with sequence descriptions from a recent phase of geological modelling carried out by the BGS (Burke *et al* 2010).
- 1.3.2 During the Devensian glaciation much of the region, including the Hull Valley, was buried beneath an ice sheet, resulting in the deposition of thick deposits of Glacial Till (Boulder Clay). Within the Hull area the base of the glacial sequence is marked by a deposit of glaciofluvial sand and gravel deposited from glacial meltwater streams, which may also include chalk gravel derived from weathered bedrock. Patchy clay, some of which is laminated, is present at the base and within the overlying Till, and appears to represent glaciolacustrine deposits that formed at the margins of the ice as it advanced during the Devensian cold stage. The Till was therefore deposited by glacial ice, either at the glacier base or derived from material within and on the ice. It

comprises gravelly sandy silty clay with boulders, and contains numerous lenses of sand and gravel.

- 1.3.3 Towards the end of the Devensian, sea-level was substantially lower than today, at *c* -20m, with extensive areas of lowland, termed Doggerland, in the area now occupied by the North Sea (Gaffney *et al* 2009). The rivers were freshwater, and the surface of the Late Glacial deposits, onto which soil formation occurred, formed the landscape topography at the start of the Holocene. Subsequent sea-level rise as a result of melting ice-caps submerged much of the lowland areas of the North Sea Basin, which eventually lead to the breaching of the Weald/Artois land bridge *c* 6000 cal BC. Research carried out on Holocene sea-level change for the Humber area by the Land Ocean Evolution Perspective Study (LOEPS) and the Humber Wetlands Project have indicate that initial sea-level rise in the early Holocene was extremely rapid (from -20mOD at 12,000 cal BC), though it subsequently slowed down during the middle to late Holocene (Fig 7).
- 1.3.4 The effect of rising sea-levels on the inland margin would have resulted in the backing up of freshwater systems and the expansion of wetland environments such as alder carr, fen, and reedswamp. Initially, sedimentation is likely to have been restricted to low-lying channel situations, but, with time, would have spread to higher elevations with the accumulation of a complex sequence of organic alluvium and peat deposits. Ecotonal zones (wetland/dry ground interface) would have existed and been associated with variations in the topography. For instance, slightly raised areas may have remained as dryland islands surrounded by wetland areas and/or other features such as channels. Such areas, where an abundance of natural resources could be exploited, may have provided a focus for activity for past human communities. With continued sea-level rise estuarine conditions migrating inland would have transformed the landscape into intertidal environments of saltmarsh, tidal creeks, and mudflats, resulting in the deposition of thick deposits of minerogenic clays silts and sands.

2. AIMS AND OBJECTIVES

2.1 INTRODUCTION

- 2.1.1 The aims and objectives of the project were outlined in a project scope supplied by Blaise Vynner, dating to 28th February 2013, which was developed in conjunction with English Heritage and Humber Archaeology. These aims and objectives were subsequently reiterated in a project design produced by OA in March 2013 (OA-HFA 2013).
- 2.1.2 The principal aims of this work were to determine, where possible, the character and depth of the archaeological resource directly along the route of the road improvements and to mitigate the archaeological impact of a Site Investigation (SI). In order to achieve these aims, and disseminate the results, the investigation was structured around several key elements, which are listed below.

2.2 ENHANCED DESK-BASED ASSESSMENT

- 2.2.1. A detailed desk-based assessment has been undertaken, which directly focuses on the proposed route. This work had four principal aims. First, it was designed to enhance the gazetteer of sites produced for the most recent Environmental Assessment (*Section 1.1.4*). Second, it aimed to identify any sites, within or immediately adjacent to the road improvement corridor, which might provide deposit data relevant to the compilation of a geoarchaeological deposit model (*Section 2.4*). The third aim was, if practicable, to collect any information on the depths of organic preservation by waterlogging and the depths of any areas of cellaring that might have resulted in the truncation of archaeological deposits. A final aim was, where practicable, to undertake a qualitative assessment of the relative preservation levels of archaeology and organic materials.

2.3 TRINITY BURIAL GROUND ASSESSMENT

- 2.3.1 The Trinity Burial Ground lies directly within the road-improvement corridor on the eastern side of Mytongate Junction (centred on NGR: TA 09420 28377) and has been subject of previous archaeological assessment (*cf* Pell Frischmann 2010). However, earlier assessment failed to establish the precise number of individuals contained within this post-medieval cemetery and also the potential impact of any proposed road-improvement scheme across this area.
- 2.3.2 A principal aim of the present study was to therefore establish further details regarding this burial ground. This, in turn, would assist in the formulation of a methodological design for any possible archaeological works in this part of the road-improvement scheme. The methodological design has been produced by OA-HFA and is presented as a separate document.

2.4 WATCHING BRIEF

- 2.4.1 An archaeological watching brief was undertaken during a recent scheme of SI work along the route. The aim of the watching brief was to monitor this work in order to mitigate any adverse impact that it might have on archaeological deposits and record data, which could be incorporated into the deposit model (*Section 2.5*).

2.5 GEOARCHAEOLOGICAL DEPOSIT MODEL

- 2.5.1 A geoarchaeological deposit model has been produced which compiles data derived from the earlier geotechnical and archaeological investigations, and the recent SI work. The primary aim of the model was to determine the perceived surfaces, from which relative thickness can be derived, for the top and bottom of the surviving archaeology contained along the route. It was also anticipated that additional data might be forthcoming that relates to the depths of truncation by cellarage and the depths/thickness of any organic materials located along the route. In addition, it was anticipated that geological data might exist allowing the characterisation of the underlying geology and also enable the identification of any palaeochannels, tidal deposits, and earlier Holocene land surfaces contained within the study area.

2.6 REPORTING

- 2.6.1 A final aim of the project was to produce this report, which provides details of the circumstances, methodology, results, and conclusions of the study. A major aim of this report is to present the results derived from the separate elements of the project (*Section 4*) and then combine this information in a synthesis (*Section 5*), which explicitly considers the nature, character, and depth of the archaeological resource along the road-improvement corridor.

3. METHODOLOGY

3.1 INTRODUCTION

3.1.1 Separate methodologies were employed for each of the individual elements of the project (*Section 2*), and these are set out in the following section. In general, however, all of the methodologies conformed to current archaeological best practice (Ayala *et al* 2007; Campbell *et al* 2011; IfA 2012).

3.2 ENHANCED DESK-BASED ASSESSMENT

3.2.1 In order to compile the enhanced desk-based assessment published and unpublished excavation reports for selected sites within the area affected by the road scheme and adjacent to it were examined (Fig 8). Information on deposit character, survival, depth, and date from each intervention was then entered into a database, and this information integrated into the deposit model. In addition, historic mapping pertinent to the study area was collated and consulted.

3.2.2 Following the examination of the excavation reports, brief descriptions of each intervention were reproduced as part of the enhanced desk-based assessment, by way of a commentary, to accompany the data entered in the database. However, more comprehensive gazetteer entries for each of the interventions are contained within the previous desk-based assessments that have been carried out in connection with proposals for A63 Castle Street improvements (*Section 1.1.4*). Following consideration of the interventions and historic mapping, several geographical zones with different archaeological potential were then formulated.

3.3 TRINITY BURIAL GROUND ASSESSMENT

3.3.1 This assessment consisted of a desk-based study and a walkover survey across the site of the former Trinity Burial Ground (Fig 1). The desk-based study concentrated on sources considered to hold potential for informing the number and location of burials. These sources were as follows:

- Holy Trinity Parish Burial Registers (held at the East Riding of Yorkshire Archive Office (ERYAO) in Beverley, which forms the recognised diocesan repository for parish records from the Archdeaconry of the East Riding, and covering the period 1554 to 1951);
- documents relating to the use and/or organisation of the burial ground held by the ERYAO and Hull History Centre (HHC);
- historical maps and plans of the burial ground;

- the East Yorkshire Family History Society (EYFHS) survey of the grave markers extant in 1985.
- 3.3.2 The aim of the walkover survey was to relate the findings of the desk-based study to the existing topography and land-use and to recover evidence not available from the desk-top sources.
- 3.3.3 The survey was completed in October 2013 and it considered the context, condition, layout, and boundaries, including examination of structural elements. A series of photographs were also taken as part of the survey.

3.4 WATCHING BRIEF

- 3.4.1 The SI entailed a series of interventions along the proposed route of the road-improvement corridor and of these 122 were directly monitored, between July and September, by a team of archaeologists (Fig 9). The interventions consisted of boreholes, windowless samples, and Mostap samples (sealed, stratigraphically intact samples). In addition, many of the interventions also required the excavation of test pits down to *c* 1.2 m below ground level (BGL) in order to determine the presence of modern services or unexploded ordnance. Significantly, the locations of some of these interventions was informed by the preliminary results generated by a geoarchaeological deposit model (*Section 3.5.4*).
- 3.4.2 At the start of the work it was envisaged that several other inventions would be monitored, though these were subsequently omitted. This was because: it was felt that they would duplicate the results obtained from adjacent interventions (BH15, SCPT26, SCPT 35, SCPT36, and WS15); they were abandoned due to the presence of methane gas or services (BH30, BH30A, BH31, WS03 and WS04); or they were omitted due to minor on-site miscommunications between the SI contractors and the archaeologists (BH23).
- 3.4.3 Thirteen of the intended test pits (TP06-15, TP17, TP20, and TP22) as envisaged on earlier Exploratory Hole Location Plans provided by Mott MacDonald Grontmij (Drawing No. 1168-09-01-DR-001 Rev PD2 to PD4) were also superseded by windowless samples due to various constraints such as suitability of location. In addition, the locations of several of the test pits (TP04, TP05, TP11, TP13, TP14, TP16, TP18, and TP18A) had to be moved from their envisaged positions on the original survey drawings.
- 3.4.4 As part of the SI a series of ten sites were also established along a baseline running SSW to NNE, on a strip of land to the immediate south of Princes Quay (NGR: TA 0960 2848 to TA 0964 2848; Fig 10). This has been termed the 'Detailed Survey Area' and it was anticipated that sampling in this area would provide a section across the medieval/post-medieval town ditch and Civil War defences, which lay to the west. The baseline ran for a distance of 42m and the ten sites (A01-10) were spaced relatively evenly at around 4.5m apart. Initially, test pits were excavated at each of the sites, to a depth of 1.2m, to establish the presence or absence of modern services. Each site was then examined by a Static Cone Penetration Testing rig (operated by Lankelma Ltd;

Section 3.4.8). The results of the testing then determined which site to revisit to obtain Mostap samples from pre-determined depths.

- 3.4.5 The monitored works generated a total of 220 individual log sheets, though a percentage of these were combined, particularly when a test pit continued into a borehole log. Each intervention was assigned a reference number, which followed the designations supplied by Grontmij (*ie* BH01, SCPT01, WS01, TP18 *etc*). The recording of the deposits and features were then subdivided alphabetically within each designation per intervention (*ie* BH01A, SCPT01A *etc*). Context numbers (*ie* **1002**, **1003** *etc*) were only assigned to deposits from which artefacts were noted and/or recovered. All of the recorded log sheets completed during the site work were passed to OA for inclusion within the archaeological deposit model (*Section 3.5.5*).
- 3.4.6 ***Boreholes and windowless samples***: the boreholes were made with percussive coring-/shelling-auger rigs (Pl 1), whilst the windowless samples were taken by small, tracked percussion-sampling rigs (Pl 2). All stages of drilling were monitored by an archaeologist. The sequence and depth of exposed subsoil deposits were noted according to guidance provided by an OA geoarchaeologist. OA *pro-forma* recording sheets were therefore used, which allow for the detailed descriptions of the observed deposits, alongside a 1:20 measurement chart, which enables the deposit's depth and thickness BGL to be recorded.
- 3.4.7 The locations and Ordnance Survey (OS) height levels of each borehole/windowless sample were surveyed by Geotechnics Ltd and these were then passed to HFA. Digital photographs were taken of all of the boreholes, whilst occasional digital photographs were taken of the windowless samples.
- 3.4.8 ***Mostap samples***: these were extracted from several areas along the A63 corridor. Initially, a static cone-penetration testing machine (provided by Lankelma) established the presence or absence of deposits suitable for sampling in the predefined areas. If an area was suitable, the site was revisited and a Mostap sample obtained. Each sealed sample has been retained by HFA in suitable storage conditions for potential later examination. The locations and OS height levels of each Mostap sample were surveyed by Geotechnics Ltd and passed to HFA.
- 3.4.9 ***Test pits***: the excavation of the archaeologically monitored test pits was undertaken either by hand or by a back-acting mechanical excavator, utilising a combination of toothed- and flat-bladed buckets, which varied in width between 0.6m and 1m. All test pits were excavated under the supervision of the principal on-site contractor (Geotechnics Ltd) with appropriate supervision and advice from representatives of Grontmij and HFA.
- 3.4.10 During monitoring, the sequence of deposits revealed in each test pit was recorded from outside of the pit. Recording procedures followed those used by OA/HFA on archaeological excavations and also adhered to the recommendation provided by the OA geoarchaeologist. The procedure entailed the production of written descriptions of individual deposits and

features using *pro-forma* recording sheets provided by OA, which also allowed for the recording of their sequence and depth.

- 3.4.11 Measured drawings were made of each test pit, with plans completed at a scale of 1:50 or 1:20 (as appropriate), whilst sections were drawn at a scale of 1:10 or 1:20 (as appropriate). The level of recorded features or deposits was determined relative to depth BGL and, ultimately, Ordnance Datum (OD). Where conditions permitted, digital photography was employed to record the test pits and, where warranted, 35mm format black-and-white and colour photography was also used.
- 3.4.12 **Artefacts:** during the watching brief any artefacts recovered during the drilling of the borehole/windowless samples, and during the excavation of the test pits, were retained and bagged according to their context. The finds were then recorded to professional standards using recognised procedures and numbering systems compatible with the accessioning system employed by the Hull City Council Museums Service, with recording, marking and storage materials being of archive quality. Finds of particular interest (*ie* those other than bulk finds such as animal bone, pottery, or ceramic building materials) were allocated a Recorded Find number, and information regarding their 3D location and description were noted on an appropriate *pro-forma* record sheet.

3.5 GEOARCHAEOLOGICAL DEPOSIT MODELLING

- 3.5.1 Two stages of geoarchaeological modelling of the sub-surface sediment sequences along the proposed scheme were undertaken in 2013. The preliminary stage was carried out before the SI commenced and comprised a review of existing geotechnical data along, and within the immediate vicinity, of the route. This preliminary deposit model utilised a Geographical Information System (GIS) Project and geological modelling software (Rockworks14), and the selected historical geotechnical borehole and test pit logs were downloaded from the BGS website. This lithological data was then inputted into geological modelling software.
- 3.5.2 Overall the data from 118 geotechnical locations were initially examined within a study area that was widened beyond the immediate vicinity of the scheme in order to minimise any edge effects inherent in the modelling of data from a linear route (Table 1). The historical data derived from a number of previous site investigations (Table 2), and significantly 43 of the historical data points derived from a previous investigation carried out along the A63 at Castle Street in 1994 (Fig 11).

Easting-Min	Easting-Max
NGR: TA 08650	NGR: TA 10200
Northing-Min	Northing-Max
NGR: TA 28000	NGR: TA 28650
Elevation-Min	Elevation-Max
-54	6

Table 1: Project dimensions for the Rockworks model

Historical geotechnical site investigation	Year	Total
A63 Trunk Road Improvement Castle Street	1994	43
Adelaide Street Shops	1961	1
BT 4027 Hull Marina	1987	3
Cogan Street Hull	1980	5
Commercial Road/Kingston Street	1961	1
Electricity Sub Station Osbourne Street		1
Fish Street Hull	1981	5
Hull Central Area Sewer	1971	5
Hull Posterngate	1977	1
Hull S Ring Road		7
Hull South Dock Road		1
Hull Tunnelling	1997	5
Hull Victoria Dock	1975	2
Hull Waste Water	1993	2
Humber Tidal defences	1995	2
Osbourne Street Hull	1990	3
Post House Hotel Hull Marina	1984	14
Proposed Salvation army Hall	1987	2
Rileys Dairies Campbell Street	1923	1
Thornton Area Hull	1991	5
Wellington Keyes, Humber Dock, Hull	1989	8
Total		118

Table 2: Summary of the historical geotechnical data inputted into the Rockworks model

3.5.3 It should be noted the dates of some of the geotechnical investigations were not recorded in the BGS database (Table 2). In addition where elevation data was not recorded on the logs, the ground level (mOD) was estimated from Lidar data contained in the Project GIS. The quality of the descriptive data varied greatly between the records, particularly the older records where measurements in feet and inches were converted to metric. In a number of cases some older borehole records within the study area were excluded through lack of interpretable data. The problems associated with using historical data have been previously outlined in Bates *et al* 2000.

3.5.4 The lithological data from the geotechnical logs was analysed and correlated into a series of broad lithostratigraphic units which served to characterise the sequence of subsurface sediments and buried topography. Cross-sections, elevation plots of key surfaces, along with a 3D block model of the stratigraphy were produced in order to inform the field team prior to the commencement of the SI (*Section 2.4.1*). The cross sections represent true physical data from selected data points (hole-to-hole sections), whereas the

method of interpolation for the 3D modelling utilised inverse distance weighting.

3.5.5 A second stage of modelling was undertaken once the SI was concluded. This involved updating the geoarchaeological model with the newly acquired geotechnical data (125 additional data points; Table 3) and the regeneration of various cross-sections and plots. In addition, the data derived from published and unpublished archaeological excavations, which was considered as part of the enhanced desk-based assessment was also inputted into the deposit model (*Section 3.2.1; Appendix 1*). The location data and various plots were exported from Rockworks into the GIS Project to allow comparison with other datasets. This allowed for the production of the final deposit model from which the perceived thickness and depth of below-ground archaeology and geology can be mapped.

Type	Scheme	Wider Study Area	Total
Historical BGS data	78	40	118
2013 SI			
Cable percussion borehole	52		52
Static cone penetration test	38		38
Test pit	9		9
Window sample	26		26
Total	203	40	243

Table 3: Summary of geotechnical interventions entered into the Rockworks database

4. RESULTS

4.1 ENHANCED DESK-BASED ASSESSMENT

- 4.1.1 *Archaeological interventions*: the following section describes the pertinent archaeological interventions that have been undertaken along, or immediately adjacent to, the road-improvement corridor (Fig 8). Relevant data is also reproduced, in part, in *Appendix 1*, and cross-referred to the site numbers used below. Where feasible, information from these sites has been employed within the deposit model produced for the road improvement scheme (*Section 4.4*).
- 4.1.2 *Site 1: Puffin crossings on A63 Castle Street*: in 1994 a watching brief was undertaken by York Archaeological Trust during the installation of two puffin crossings (Hunter-Mann 1994). This entailed the monitoring of six hand-dug pits.
- 4.1.3 Brick walls and a culvert were recorded between Castle Street and Princes Dock associated with a former warehouse. Undated archaeological and alluvial deposits were found at 1m depth in some pits; the current road-base was also reported to be around 1m deep. The cable mole encountered a possible wall at a depth of 1-1.5m just south of the central reservation opposite the end of Humber Dock Street.
- 4.1.4 *Site 2: Archaeological evaluation, A63 Castle Street*: in 1994 trial excavations were completed by York Archaeological Trust as part of an earlier proposed scheme of improvements to the A63 (Brinklow 1994).
- 4.1.5 Two trenches were excavated, targeting the medieval/post-medieval town wall as marked out by coloured bricks at ground level, in addition borehole logs were made and have been used in the compilation of the deposit model. The wall was not encountered where marked, though the trenches recorded a possible internal bank on the eastern side of the town wall in Princes Dock Street, to the north of the A63, and the possible town ditch (containing well-preserved organic deposits) external to the wall in Humber Dock Street, south of the A63. Two smaller trenches were also excavated in the pavement on the south side of Castle Street and stratified deposits of late medieval and post-medieval date were present less than 1m below current ground levels.
- 4.1.6 *Site 3: Sewer Lane*: in 1974 excavations were undertaken by Hull City Museums in advance of construction of the Castle Street dual carriageway, though south of the actual route itself (Armstrong 1977). A single area of 130m² was excavated by the frontage on the west side of Sewer Lane. This recorded six phases of occupation, much of it of an industrial rather than residential nature, spanning the period from the late thirteenth/fourteenth century to the present day.
- 4.1.7 Recent made ground, 0.61m thick, overlay 2.25m of archaeological deposits. These deposits essentially related to open ground with drainage features,

wooden fencing and pits in the early phases, with later brick wall boundaries, buildings, floors, and cellars dating from the fifteenth century.

- 4.1.8 *Site 4: Mytongate*: this site was excavated in 1975 by Hull City Museums/Humberside Archaeological Unit, and four phases of occupation were recorded dating between the early fourteenth to the eighteenth centuries and later (Ayers and Roney 1993). Removal of the top 0.2-0.4m of brick rubble and demolition debris from the site revealed extensive disturbance and cellaring of nineteenth- and twentieth-century date, splitting the site into two areas (Areas I and II).
- 4.1.9 The earliest structures on the Mytongate frontage (Area I) dated to the first quarter of the fourteenth century, with many plots in this part of the town having apparently stayed vacant until the early fourteenth century. Buildings utilising padstones were recorded, being replaced in later phases by buildings constructed with brick sills accompanying upright timbers, set on padstones. Yards with barrel wells were also present, whilst ovens and hearths in Area II suggested some industrial activity.
- 4.1.10 Thick dumped layers of clay were recorded between the earliest phases of activity in Area I, raising floor levels in response to a rising water table. Area I had 0.5m of overburden and 0.5m of made ground over the sequence of buildings. Area II was not as completely excavated and there are no depth measurements detailed in the published source.
- 4.1.11 *Site 5: Vicar Lane*: in 1975 the Hull City Museums/Humberside Archaeological Unit undertook excavation at this site, with nine periods of occupation being recorded from the early fourteenth to the eighteenth centuries and later (Marsh 1993). Despite serious disturbance, due to nineteenth-century cellars at the two street frontages, a deep sequence of archaeological deposits was recorded.
- 4.1.12 Early phases consisted of buildings on Mytongate and a large open pit or pond, with subsequent layers of demolition debris raising the ground for further buildings in the fourteenth and fifteenth centuries, with the Vicar Lane frontage now also being occupied. A later well was constructed following the site's reversion to open ground in the sixteenth century. Subsequently, the site remained open until the eighteenth century.
- 4.1.13 *Site 6: Queen Street*: this site was excavated in 1976 by the Humberside Archaeological Unit (Ayers 1993). Significant disturbance due to modern cellaring divided the site into three stratigraphically unrelated blocks, while a modern gas main was cut across the site during the course of the archaeological work. Four phases of occupation, dating from the late thirteenth to the seventeenth centuries, or later, were recorded in the areas of surviving deposits.
- 4.1.14 Limestone footings forming the south-west corner of a medieval gaol were revealed, as well as an associated garderobe. The foundations of medieval timber-framed buildings and sequences of floor layers were also recorded on

the Mytongate and Queen Street frontages, and there was evidence for gravel pathways of probable medieval date.

- 4.1.15 *Sites 7 and 8: Augustinian Friary Garden (land north of Blackfriargate):* excavations at this site were completed in 1976/77 by the Humberside Archaeological Unit (Ayers 1993). Four phases of occupation were recorded dating from the late thirteenth to the sixteenth centuries. The construction of the nineteenth-century market hall had removed all post-medieval deposits aside from a number of wells or cisterns.
- 4.1.16 A naturally silted north/south-aligned waterway of late thirteenth-century date was later flanked by the formal Augustinian Friary garden, established in the fourteenth century. In the late fourteenth to mid-sixteenth centuries, a substantial mortared limestone boundary wall overlay the former watercourse, accompanied by thick ground-raising dumps. Several features had been cut into these latter deposits, which may represent elements of a later re-planned garden.
- 4.1.17 *Site 9: Monkgate (Blackfriargate):* excavations in 1976/77 by the Humberside Archaeological Unit investigated an area corresponding to the medieval 'Wytelard' property (Armstrong and Ayers 1987). Six phases of structural activity were identified dating between the late thirteenth and fifteenth centuries, whilst later deposits had been removed by mechanical site clearance to a depth of 0.5m.
- 4.1.18 Alluvium, deposited by flooding, formed the earliest recorded deposit and this was cut by an north/south-aligned gully, post-1250 in date, which was sealed by a deposit of water-deposited clay. A sequence of buildings fronting Blackfriargate was also present, which were constructed between the late thirteenth and the mid-fifteenth centuries. The final phase of buildings consisted of a small industrial complex.
- 4.1.19 *Site 10: Green Bricks public house:* two evaluation trenches and a number of engineering pits were investigated in 1994 during renovation of this public house on the corner of Blanket Row and Humber Dock Street (MAP Archaeological Consultancy 1994).
- 4.1.20 Most recorded features were post-medieval in date, including pits, brick walls, and cellars that lay directly beneath nineteenth-century cellarge, though a driven wooden post and some of the brick-built walls could be medieval in date. Inspection of some of the smaller pits revealed only post-medieval and modern building demolition debris.
- 4.1.21 It should be noted that most recorded features lay over redeposited clays, though some of the clay layers were wrongly interpreted as representing natural; in fact, none of the interventions went deep enough to encounter the natural superficial geology.
- 4.1.22 *Site 11: Burnett House, Castle Street:* two evaluation trenches were excavated in 2003 either side of Burdett House, recording five phases of occupation (Northern Archaeological Associates 2004). Chronologically, this occupation

ranged between the early/mid-fourteenth to the eighteenth centuries or later, with medieval deposits found to survive up to 0.85m BGL.

- 4.1.23 The westernmost trench lay immediately north of the earlier Vicar Lane excavation (Site 5) and the earliest archaeological features in this trench lay over the natural clay. They included clay dumps, a brick-floor surface, small pits, and wooden stakes, associated with a stone wall that remained in use until the eighteenth century, forming the eastern wall of a building or buildings, the rooms of which were defined by perpendicular brick walls. Ground-raising and levelling layers had been used to raise internal floor levels, with the latest layers being truncated by an eighteenth-century cellar.
- 4.1.24 In the eastern trench, significant modern and post-medieval cellarage reduced the survival of earlier archaeological deposits. However, a substantial ditch of possible fourteenth-century date was recorded, that was sealed beneath fourteenth- to fifteenth-century clay levelling, into which were cut a brick-lined well and a wall of possible medieval date. A cellar and culvert of sixteenth- to eighteenth-century date were succeeded by nineteenth- and twentieth-century cellars and wall foundations.
- 4.1.25 *Site 12: Proposed Stakis Casino, Castle Street:* in 1999 two evaluation trenches were excavated by HFA in advance of the construction of a proposed casino, recording four phases of occupation (Tibbles and Steedman 1999).
- 4.1.26 In both trenches, the earliest recorded deposit was alluvial clay. In the southeasterly trench, a sixteenth- to seventeenth-century pit was sealed beneath layers suggestive of open waste ground, and this was truncated by nineteenth-century brick walls, wells, cellars, and culverts. In the trench to the west, a substantial east/west-aligned limestone foundation for a handmade brick wall sat directly on the alluvium. To the south of this wall, ground-raising dumps surmounted by floor surfaces, a hearth and brick sub-divisions were present, whilst to the north open ground exhibiting pitting of fifteenth- to seventeenth-century date was recorded. Construction of two adjacent nineteenth-century buildings, defined by cellarage, a coal store and walls, truncated the earlier deposits.
- 4.1.27 *Site 13: Blanket Row:* this site was subjected to archaeological excavation between 1997 and 2003 by Northern Archaeological Associates (Lee 2011). The work initially involved a single evaluation trench, though this was superseded by a larger excavation area, encompassing both sides of the street. However, a subsequent shaft collapse and subsidence resulted in further smaller-scale excavations and monitoring of several pits excavated as part of the underpinning of an affected building.
- 4.1.28 A series of fourteenth-century domestic buildings of limestone and brick were recorded that fronted the northern and southern sides of Blanket Row, though the character of occupation subsequently changed to small-scale industry by the sixteenth century. A substantial cobbled road surface was laid out in the mid-fifteenth to early sixteenth centuries. Although some activity dating to this period was evident to the south of this road, there was little activity to the north for the following two centuries. Significant reoccupation of both sides of

the road occurred between the eighteenth and twentieth centuries, followed by more recent demolition.

- 4.1.29 The excavations for remedial works exposed sill walls for further medieval buildings fronting the road, as well as more of the cobbled road surface, whilst the underpinning pits recorded additional structural features of medieval date.
- 4.1.30 *Site 14: Queen Street:* at this site two trial trenches were excavated by the Humberside Archaeology Unit and three periods of occupation were recorded (Atkinson *et al* 1990). The earliest activity was of late thirteenth- to fourteenth-century date, comprising low stone and brick sill walls, clay levelling dumps, and floors. There appeared to be no occupation in the fifteenth century, though two buildings occupied the site during the late sixteenth and seventeenth centuries, with associated boundary walls, a brick well, and garden soils.
- 4.1.31 Overlying deposits were truncated by the walls, culverts, and cellars of eighteenth- to twentieth-century buildings, which had themselves been later demolished.
- 4.1.32 *Site 15: Bonus Electrical site, Humber Street:* Archaeological evaluation was carried out at this site by HFA in 2008 (George and Brigham 2008). Twelve trenches were excavated, recording six phases of occupation dating from the late twelfth/thirteenth through to the twentieth century.
- 4.1.33 The earliest activity comprised a bank and significant dumps of imported soil, sealing the natural clay and flood deposits, which related to land management and reclamation. The earliest building remains lay towards the north-eastern edge of the site, close to the Blackfriargate frontage, and related to a timber-framed building with associated occupation deposits containing pottery of late twelfth- to thirteenth-century date.
- 4.1.34 Over much of the remainder of the site, remains of medieval stone sill and post-pad buildings of late thirteenth- to fourteenth-century date were recorded, these being constantly altered and added to throughout this period. The later fourteenth or fifteenth century saw the establishment of Little Lane, overlying the earliest timber-framed building, leading from Blackfriargate to the riverfront.
- 4.1.35 In addition, substantial limestone block foundations were present which supported a large rectangular or square brick superstructure, fronting onto, or spanning, Humber Street. Significantly, these might represent the foundations and lower walls of the northern part of the medieval Humber Gate, built sometime between 1330 and 1406, or formed structures associated with it. Brick walls and floors added to the structure mark a series of alterations, with the most extensive alterations dating to the seventeenth century.
- 4.1.36 Archaeological evidence for occupation over much of site in the later fifteenth to seventeenth centuries was scarce, though during the eighteenth and nineteenth centuries the site was densely occupied with buildings. These were subsequently cleared as part of late nineteenth- and early twentieth-century

slum clearance, or demolition following bomb damage in the Second World War. Cellarage from the eighteenth- and nineteenth-century buildings and their twentieth-century successors, had removed later medieval and early post-medieval archaeological deposits over some parts of the site.

- 4.1.37 *Site 16: High Street and Blackfriargate:* excavations by Hull Museums between 1973 and 1976 recorded four phases of occupation at this site, over what were originally two medieval properties, spanning the period from the late thirteenth to the twentieth century (Armstrong and Ayers 1987). A well-preserved sequence of medieval domestic dwellings was investigated, comprising timber-framed structures associated with stone- and brick-built sill walls and deep garderobes.
- 4.1.38 In the southernmost property, the earliest structure was a substantial timber-framed aisled building, which had been divided into three parts. The structure underwent a series of alterations and rebuilding into the sixteenth century. In the seventeenth century the property was sub-divided up into four units, the layout of which persisted into the twentieth century.
- 4.1.39 Regarding the northern property, the initial late thirteenth-century structure was replaced in the early fourteenth century by a more substantial building, consisting of two units separated by a central passageway, constructed using brick walls on chalk rubble foundations. Following alterations of the building in the sixteenth century, part of the property was converted into a bakehouse or brewhouse in the seventeenth century.
- 4.1.40 *Site 17: Myton Gate:* in 1976, parts of a substantial brick structure were exposed during construction of the northern carriageway of the A63 and a two-hour period was allowed for staff of Humberside Archaeology Unit and Hull Museums to record the remains (Ayers and Evans 2001).
- 4.1.41 The structure comprised an arched passageway flanked by brick walls with buttresses, while in front of the passage, was a brick-lined rectangular structure forming the counterweight pit for the drawbridge. Photographs show that the wall flanking the south side of the passage had survived to within 0.3m of the modern road surface, whilst the new carriageway was laid of the top of the remains.
- 4.1.42 ***Archaeological potential:*** to enable the archaeological potential of the below-ground deposits within the road corridor to be summarised, four geographical zones have been defined, running east to west (Fig 12). The chronology and spatial extent of these zones has been formulated through reference to the archaeological interventions and historic cartographic sources (*Section 3.2*), and the zones relate specifically to the Upper Archaeological Horizon, as defined within the geoarchaeological deposit model (*Section 4.4.14*). The zones of archaeological potential were formulated prior to the completion of the deposit model and SI investigation, though these latter studies confirmed their presence and character. Moreover, the formulation of these zones acted as a useful framework for discussing the results of these later studies (see *Sections 5.1.4-9*).

- 4.1.43 *Zone 1: Hull Old Town (Market Place to Princes Dock Street/Humber Dock Street):* there have been several decades of archaeological investigation within the medieval walled town, though the review of published and unpublished excavated evidence within the present assessment has focussed primarily on those sites which either lie beneath the line of the current A63 or adjacent to it. In most cases, medieval and post-medieval structural evidence was recorded, in the form of both residential and commercial buildings, though there were a few instances where areas of ‘undeveloped’ open ground were recorded. These latter areas appear to form plots that were open in the medieval period, though they were often built upon in the post-medieval era.
- 4.1.44 Within this zone, the top of the natural alluvial soils, underlying archaeological deposits, has been recorded at between 1.99mOD and 2.45mOD. The excavated data suggests that between the natural and modern overburden/made ground, archaeological deposits may vary in total thickness from as little as 1.05m to as much as 2m. The excavated deposits also indicate that preservation is generally good within this zone, with waterlogging at lower levels which, in turn, increases the degree of preservation of organic materials. Modern ground level is generally between 4-4.5mOD, and within the archaeological interventions modern overburden/made ground and intrusions (such as cellars) were, for the most part, between 0.3m and 0.7m deep. Within this zone, the A63 road and road base is reportedly around 1m deep (Site 1: *Section 4.1.2*).
- 4.1.45 *Zone 2: Hull defences (Princes Dock Street/Humber Dock Street to the west side of Princes Dock/Humber Dock):* this zone covers the area from the town wall westwards to encompass the town’s Civil War defences. There have been very few archaeological interventions in this area. Trial excavation (Site 2; *Section 4.1.4*) recorded a possible internal bank on the eastern side of the town wall (Princes Dock Street, on north of the A63) and the possible town ditch external to the wall (Humber Dock Street, south of the A63). The only other episode of archaeological recording was the brief exposure in 1976 of the brick-built Myton Gate (Site 17; *Section 4.1.40*) during construction of the northern carriageway of the current road.
- 4.1.46 Within this zone, natural alluvial soil was recorded at 2.34mOD (2.08m BGL) within one of the trial trenches (Site 2; *Section 4.1.4*), though it had not been reached by 1.28mOD (3.48m BGL) in another trench, which may have lain within the fills of the town ditch. Surviving archaeological deposits varied in total thickness from 1.5m to at least 2.8m, the latter in the town ditch. In the trial trenches, modern ground level varied from 4.4mOD to 4.76mOD, with modern overburden mostly around 700mm deep; in the case of the Myton Gate, however, brickwork apparently survived up to 300mm BGL (c 4.27mOD). From east to west, ground level drops from just over 4mOD to around 3.2mOD.
- 4.1.47 In the western part of the zone, parts of the ditches of the Civil War defences and any associated outworks may still survive in the area between Princes and Humber Docks. A building of unknown purpose is shown in this area on Phillips’ eighteenth-century plan of Hull (Sheppard 1911, 66-70), beneath the

site of a later warehouse which is depicted on nineteenth-century mapping, on the north side of the current road.

- 4.1.48 *Zone 3: Extra-mural settlement, early watercourses, possible site of Myton and Wyke (West side of Princes Dock/Humber Dock to Great Passage Street/Kingston Retail Park):* within this zone are located a number of former watercourses, and that discharging at Lime Kiln Creek probably represents the former western arm of the River Hull. The course of other watercourses and tracks, shown on Phillips' eighteenth-century plan of Hull (*ibid*), can be seen to have influenced the current layout of streets in this area (*eg* Waterhouse Lane, Great Passage Street, and Manor House Street). The possible site of the medieval hamlet of Myton may lie in this zone, its former site perhaps defined by watercourses. There are also documentary references to a grange and chapel at Myton and there are antiquarian suggestions that Wyke, the predecessor to Hull, lay in this area (Frost 1827, 5-28). In addition to any potential settlement features, drainage, or watercourses, there is a likelihood that features relating to the works associated with the Civil War siege of Hull (either attributable to attackers or defenders) may be found in this zone. This zone also contains the Trinity Burial Ground (*Section 4.2*).
- 4.1.49 There have been no archaeological interventions in this area. Modern ground level drops slightly, with local variations, from 3.2mOD to around 3.0mOD.
- 4.1.50 *Zone 4: Myton to Hessle (Great Passage Street/Kingston Retail Park to Porter Street):* this zone covers an area where, aside from records pertaining to the discovery of cannon balls that presumably related to the Civil War siege of Hull, and a few buildings of early modern date, now demolished, there are no recorded archaeological discoveries of note (*cf* Pell Frischmann 2010). Therefore, in terms of medieval and early post-medieval remains, it is currently considered be low in archaeological potential. However, buried traces of much earlier activity cannot be ruled out, and it might also contain evidence relating to mid- to late nineteenth-century activity.
- 4.1.51 There have been no archaeological interventions in this area. Modern ground level drops gradually from east to west, from 3mOD to 2.5mOD or lower.

4.2 TRINITY BURIAL GROUND ASSESSMENT

- 4.2.1 **Introduction:** this section presents the results of the desk-based study and walkover survey designed to determine the number of burials within, and the condition and layout of, the Trinity Burial Ground (*Section 3.3*). The burial ground is located on the south side of Castle Street, immediately south-east of the Mytongate roundabout (Fig 1). To the west there is a grassed-banked area that runs across to Commercial Road. The access road to the Holiday Inn is located to the south and the hotel's car park lies to the east. The principal visitors to the burial ground are now vagrants and those with drug or alcohol-related problems, as evinced by their detritus. In recent months there has been a concerted and ongoing effort by the authorities to remove rubbish from the burial ground, but it appears to accumulate very quickly.

4.2.2 **Documentary research:** this burial ground was principally used between 1783 and 1860 (*cf* Pell Frischmann 2010), though a very small number of burials took place after 1860 by permission of the Home Secretary. Accordingly late eighteenth- and nineteenth-century documentary and cartographic sources were consulted as part of the assessment (*Section 3.3.1*). Pertinent information contained within these sources is presented below.

4.2.3 **Holy Trinity Parish Burial Registers:** all the registers were examined that cover the principal period of use of the Trinity Burial Ground. In many cases microfiche facsimiles were viewed, although several of the original registers, including those dating to 1792-1812 (ERYAO: PE 158/77), 1821-8 (ERYAO: PE 158/79), and 1858-69 (ERYAO: PE 158/86), were also checked.

4.2.4 The earliest years of the burial registers are hand-ruled, though, starting in 1813, these are replaced by printed *pro forma* sheets with provision for a burial number to be entered. Curiously, the numerical sequence of burials restarts on a number of occasions, though not on any consistent date, and even within a particular register. For instance, in the 1821-8 register, the following numbers were noted: January 3rd 1821, burial number 1593; February 16th 1825, burial number 3928; February 16th 1825, burial number 1; and, December 31st 1828, burial number 2576. Details of the years covered by these number ranges are provided in the notes accompanying Table 4.

Year	Burials	Year	Burials	Year	Burials
1783	440	1810	428	1837	670
1784	360	1811	513	1838	704
1785	338	1812	414	1839	698
1786	486	1813	386	1840 ²	905 ²
1787	371	1814	427	1841	780
1788	486	1815	609	1842	683
1789	560	1816	549	1843	713
1790	383	1817	539	1844	713
1791	378	1818	516	1845	584
1792*	393	1819	520	1846 ³	943 ³
1793	383	1820	449	1847 ⁴	878 ⁴
1794	592	1821	510	1848	511
1795	438	1822	496	1849 ⁵	982 ⁵
1796	442	1823	552	1850	497
1797	449	1824	676	1851	490
1798	465	1825	688	1852	595
1799	372	1826 ¹	727 ¹	1853	513
1800	532	1827	672	1854	599
1801	525	1828	662	1855	478
1802	547	1829	604	1856	536
1803	506	1830	548	1857 ⁶	842 ⁶
1804	557	1831	678	1858	658
1805	655	1832	695	1859	693
1806	456	1833	564	1860	525
1807	445	1834	721	1861**	1
1808	400	1835	688	Total for 1783-1861	43,933
1809	509	1836	551		

Table 4: Counts of burials in Holy Trinity registers, by year

Notes:

i) Monthly breakdowns are available for the years 1783-1812 since all burials had to be added up as they were not part of a numbered sequence. In 1813 *pro forma* burial register sheets were introduced and a sequenced number given to each burial creating running totals. New numerical sequences were begun in the years 1813, 1817, 1825, 1829, 1835, 1839, 1842, 1847, 1852 and 1858

ii) 1792* – the total for this year was an estimate since damage to the burial register meant that certain entries were hard to decipher.

iii) 1861** – burial permitted by the Secretary of State though the burial ground had closed on 31st December 1860.

Annotated years:

1826¹ Excessively high temperatures nationally, also excessive rains followed by the ‘Great Drought’; general ‘fevers’ epidemic and typhus (Epidemics Timeline compiled in 2011 for the Australian Institute of Genealogical Studies, reproduced by the Keighley and District Family History Society (www.kdfhs.org.uk))

1840² Smallpox epidemic, scarlet fever (*ibid*)

1846³ Excessively hot summer with drought. ‘Famine fever’, typhus and other diseases flare up. 500,000 – 1 million die nationally between 1846 and 1848 (*ibid*)

1847⁴ Famine and typhus (*ibid*)

1849⁵ Cholera outbreak in Hull causes 1,834 deaths – at 24.1 per square mile, the highest rate of mortality in the country (Allison 1969, 215-286)

1857⁶ Diphtheria epidemic (Epidemics Timeline compiled in 2011 for the Australian Institute of Genealogical Studies, reproduced by the Keighley and District Family History Society (www.kdfhs.org.uk))

4.2.5 The figures for numbers of burials, as determined from the burial registers, can be broken down as follows: between 1783 and 1812 (hand-ruled pages; no sub-totals) the total was 13,765, whilst between 1813 and 1861 (*pro-forma* pages; sub-totals) the total was 30,168. The average numbers of burials per year (to 1860) were: overall (77 years), 570 per year; 1783-1812 (30 years), 474 per year; and 1813-1860 (47 years), 641 per year. As might be expected, given Hull’s expansion at the time (*Section 1.2.3*), there is a gradual increase in the yearly totals over the period of use of the burial ground. However, it is also apparent that there are a number of spikes in mortality. Detailed research on this subject currently lies outside the remit of this project, though a few observations can be made. For example, in Table 4, for the years labelled with superscript numerals, the diseases recorded as prevalent nationally may have been a factor in a spike in mortality in Hull. The exception to this is for 1849 when the role of cholera in the high mortality figures recorded for Hull is incontrovertible.

4.2.6 The burial registers record name, age at death, date of interment, and occupation; they do not state the place of burial of each deceased individual. For most of the period concerned (1783-1860), this burial ground is considered to have been the main repository for the burials mentioned in the register, with much fewer numbers being interred in vaults at Holy Trinity Church or in the churchyard; burials at the church eventually ceased in 1855 by order of the Diocesan Council (Allison 1969, 293).

4.2.7 There were, however, a number of eighteenth- or nineteenth-century churches (*op cit*, 293-4) within Holy Trinity parish with dates which overlapped with the period of use of the Trinity Burial Ground (Table 5). Two of these churches have their own burial registers (St James and St Stephen), while the

others (St John the Evangelist and the Mariner's Church) do not. While this may be because registers have not survived, it is also possible that burials of deceased persons from these congregations were included within Holy Trinity registers. This hypothesis could be tested through further research, though, based on present information, the numbers of burials concerned would probably be relatively small, perhaps being measured only in the hundreds.

Church and date	Notes
St John the Evangelist, consecrated in 1791 (demolished in 1920s, site beneath Ferens Art Gallery), a chapel-of-ease to Holy Trinity	No separate burial registers are held for this church in the ERYAO, though there are marriage and baptism registers. The church apparently had over 70 burial vaults, the payments for which and rental of pews helped pay for the building (Neave 1991, 17). There were reportedly: 'numerous monumental tablets to the memory of Hull's former citizens, a large number of whom were interred in the vaults beneath this church for a period of about 40 years' (Bulmer 1892). The ERYAO holds a listing of the burials between 1791 and 1855 in order of number of vault (ERYAO: PE159/T6) and details of payments (1630-1788) for burials in vaults (ERYAO: PE159/T7). There is also a 1905 letter and specification relating to the removal of 311 bodies from the vaults to the Western Cemetery (ERYAO: PE159/T8)
St James, Myton consecrated in 1831 (demolished 1957, site now a garden in St. James Square, just off A63 Hessle Road)	Burial registers for the period 1831-1861 survive in the ERYAO
St Stephen, consecrated in 1845 (demolished 1955, beneath St Stephen's Shopping Centre)	Burial registers for the period 1846-1855 survive in the ERYAO
Mariners' Church or Chapel, opened in 1834 (in use to c 1906, much altered subsequently and demolished 1978, now under housing)	No burial registers listed in the archives, though EYFHS have published transcriptions of baptisms from 1856 to 1925

Table 5: Additional eighteenth-/nineteenth-century churches within Holy Trinity parish

4.2.8 With regard to the burial register for Holy Trinity Hull for 1858-69 (ERYAO, PE 158/86), it is interesting to note that after the entry for December 31st 1860 there was an annotation that stated,

From the last date above written the Burial ground in Myton [Trinity Burial Ground], was closed for Burials by agreement with the Burial Board, after an order in Council to close on June 31 (sic) 1860, permission being granted on petition to keep it open for 6 months longer, to Dec 31 1860, pending certain negotiations about a new Burial ground on the Hessle Road beyond the toll bar.

4.2.9 Furthermore, only one burial was recorded in the register for 1861; this was of an 80-year-old woman named Elizabeth Alcock of Myton, who was interred on November 2nd 1861. This burial took place with the permission of the

Secretary of State, a fact noted in the margin of the Register (ERYAO: PE 158/86, 174) and is therefore comparable to another burial dating to 1867, recorded by the EYFHS (*Section 4.2.27*). The Hessle Road burial ground operated from 1862 onwards (Allison 1969, 293), so in 1861 all burials for Holy Trinity parish, aside from the single one mentioned, must have been interred in the other churches in the parish, or in Hull's expanding municipal or private cemeteries.

4.2.10 The inference from the almost total lack of entries for 1861 in the Holy Trinity registers is that burials in locations other than the Trinity Burial Ground were not, and hitherto had not been (with the exception of those at Holy Trinity Church), included in the registers.

4.2.11 *Documents relating to the use and/or organisation of the burial ground:* provision for a burial ground was made in a 1783 Act of Parliament, which also dealt with a number of other issues pertaining to Kingston upon Hull (Parliamentary Session 1780-2; ERYAO: DDTH/13, 1697-1836).

4.2.12 Pertinently, within the act it notes that the burial ground should not be 'less than two acres, and not exceeding three acres', whilst '..the same ground, when purchased, to inclose with a brick wall or other fence, and to build a convenient room therein for the use and accommodation of the minister and officers officiating in the burial of the dead'. Moreover, the Act indicates that, '...from and after such purchase, the same ground shall for ever be appropriated, used and employed, for the purpose of burying the bodies of such persons as shall die in the said parish, or shall be thought proper and required to be buried therein, and for no other purpose whatsoever'.

4.2.13 A file of papers relating to the burial ground was also examined at HCC (HHC: C BHH/4/6/3/2). Many of the papers refer to aspects of the maintenance and ownership of the land, though an interesting memorandum from 1905 concerns encroachment of the land due to road building in the mid-nineteenth century. The memorandum was written by a 'J R B' and is dated 9th March 1905. Relevant excerpts and commentary include a statement, which notes that in 1862 Hull's Improvement Committee considered a thoroughfare improvement that involved 'taking a considerable strip of the Castle Street Burial Ground [Trinity Burial Ground] and throwing it into the line of the road'. In addition the memorandum notes that, 'this project, however, produced a very strong feeling of dissatisfaction in the town. The dissentients addressed a memorial to the Secretary of State'.

4.2.14 The 1905 memorandum then indicates that in 1863 P H Holland of the Burial Acts office came to Hull for the purpose of holding an inquiry into the intended works, and in consequence of the inquiry the town's Board of Health backed down from their plan to take a portion of burial ground. However, notwithstanding this fact, when the street improvement came to be carried out it is clear from the memorandum that Board took a strip of land '40 yards long and up to 8 feet wide'. J R B describes this land take as 'containing in all only between 60 and 70 yards', and presumably these figures refer to square yards.

- 4.2.15 The 1905 memorandum then indicates that in May 1865, the vicar and churchwardens, through their solicitor, called upon the board to abandon the work they had already carried out and restore the portion of the burial ground with which they had interfered to its previous condition. Indeed, ‘an interview with the solicitor and the churchwardens resulted in the payment by the Local Board of 10/- per yard for the land taken, or £32 10s in all’. It is clear that the board made the payment on the basis that it did not prejudice any claim that they might have to title over the land. However, throughout this period the question of title to the fee simple of the burial ground was raised by the Burial Committee of the Local Board of Health and the Parish Authorities of Holy Trinity, without the issue being resolved.
- 4.2.16 *The boundaries of the burial ground as shown on historic mapping:* the burial ground has been illustrated on a variety of historic maps dating back to 1791. Extracts from a selection of these have been reproduced and where possible, the extracts have been reproduced at the same scale, with an outline of the current burial ground and the cut-off line for the proposed road improvements being superimposed in each case. Only in the case of the two earliest maps, where cartographic errors are more marked, are the early maps not in their correct geo-referenced position, relative to the modern OS National Grid.
- 4.2.17 *Hargraves’ 1791 map (Fig 13):* dating to only eight years after establishment of the burial ground, this map is the most inaccurate cartographically. As reproduced here, the map has been rotated to align the modern outline with the walls surrounding the jail and the southern boundary of the burial ground, though there are clearly problems with the layout of adjacent streets as a result: for instance, Castle Row, which lay to the west and is shown on later maps, does not feature, though the area is close to the western periphery of the map and detail is less here. The extract as reproduced has been scaled relative to the linear scale on the early map, and while the area of the cemetery shown is clearly much smaller than on later maps, the area occupied by the adjacent gaol is actually much closer in size suggesting that measurements may have been available for the gaol plot but not for the burial ground, the depiction of the latter therefore being more schematic. It is also possible that the burial ground had not yet expanded to its full extent at that time, though contrary to this is the observation that the earliest surviving monuments (1780s) lie close to the current western boundary.
- 4.2.18 *Craggs’ 1817 map (Fig 14):* this map shows the burial ground covering a larger area than shown on subsequent maps, or as it is presently, and as such it is depicted as running up to and alongside Castle Row. On this map, the burial ground also includes a parcel containing a square building fronting the street, with the burial ground’s southern boundary diverging from an otherwise straight course to incorporate the building. The simplest explanation for this is that an intervening boundary marking the western limit of the burial ground has been omitted, though a gross cartographic error may also have been to blame for the distorted shape and probably also for the apparently larger cemetery size. This map is the first to portray the range of buildings in the north-eastern corner of the graveyard, adjoining the wall of the gaol (depicted

as ‘Gaol’ on the map), structures which appear on all subsequent depictions until the second half of the twentieth century.

- 4.2.19 *Goodwill and Lawson’s maps of 1842 and 1869 (Figs 15 and 16)*: in terms of its position, alignment and size, the burial ground on these maps is very close to how it appears in modern surveys. There are, however, some discrepancies between the modern extent of the burial ground and its depiction on the 1842 map, namely the position of the wall surrounding the former gaol and with the northern boundary to Myton Place/Castle Row.
- 4.2.20 *Plans dating to the 1860s (Figs 17 and 18)*: a file of papers held by the HHC (HHC: C BHH/4/6/3/2) includes two plans pertaining to the sale of land connected to the widening of Castle Row (*Section 4.2.13*). One of these dates to 1862 (HHC: C BHH/4/6/3/2a), whilst another dates to 1867 (HHC: C BHH/4/6/3/2b) and in both the depicted burial ground closely concords with modern mapping.
- 4.2.21 The 1862 plan shows a proposal to take a wide strip of the burial ground, moving the carriageway southwards and permitting the lengthening of properties on the north side of Castle Row as a result. However, this scheme was not carried through, and on the 1867 plan indicates that the widening was undertaken at the expense of the properties on the north side, leading to them being shortened. The change to the northern boundary of the burial ground seems to have involved redefining it as a curve, with only a small amount of land lost as a result; this is presumably the strip of land ‘up to 8ft wide’ mentioned in the archived papers (*Section 4.2.14*). No burials were apparently disturbed during the works that took place, and a new wall was constructed along the realigned boundary.
- 4.2.22 *OS mapping 1855-6 and 1886-93 (Figs 19 and 20)*: both of these maps represent accurate depictions of the burial ground and correspond closely with modern surveys.
- 4.2.23 *The layout of the burial ground and its environs as shown on historic mapping*: the internal plan of the burial ground is portrayed to varying degrees on the maps and plans discussed above (*Sections 4.2.16-22*). No graves are marked, though paths and trees are shown, the latter sometimes forming avenues flanking the paths. A range of buildings in the north-east corner first appear on the 1817 map (Fig 14), served by a fenced or walled access track running from Myton Place to the north; hearses would probably have accessed the burial ground by this route. The buildings would have housed equipment for maintenance of the burial ground and digging of graves, but would doubtless also have contained the ‘convenient room therein for the use and accommodation of the minister and officers officiating in the burial of the dead’, as mentioned in the 1873 Act (ERYAO: DDTH/13, 1697-1836; *Section 4.2.12*).
- 4.2.24 Following disuse of the burial ground, the vehicular access to the north-eastern corner was built over, as seen on the 1886-93 OS map (Fig 20), though the buildings were not demolished until the latter half of the twentieth century. The main entrance leading onto the network of pedestrian paths within the

burial ground is not shown on the earlier plans, although it was probably always close to its current position.

- 4.2.25 With regard to the immediate environs of the burial ground, the former site of the gaol to the north-east was occupied by sawmills and timber yards in the second half of the nineteenth century, though by the early twentieth century it was the site of a copper and brass foundry and a lead works.
- 4.2.26 During the early part of the nineteenth century the area to the west of the burial ground may have remained largely open ground, being part of a parcel of land under Dock Company ownership, prior to construction of Railway Dock, which opened in 1864. However, the 1862 plan (Fig 17) does show a range of buildings fronting Castle Row and a couple of long sheds to the rear. The site is labelled as a Timber Yard on late nineteenth-century OS mapping, with buildings on the site including some set along the boundary wall of the burial ground. The ‘ghost’ of one of these buildings remains on the western face of the boundary wall as an area of distemper or rendering and it is likely that the wall in its current form and height date from this period (*Section 4.2.34*). A Goad’s insurance plan of 1886 (with later annotations) shows electric travelling cranes and railway lines connecting the yard with those running around Railway Dock to the south (Fig 21). Moreover, twentieth-century OS mapping suggests that the yard and sheds remained in use until the second half of that century.
- 4.2.27 *East Yorkshire Family History Society survey of monumental inscriptions*: a survey of surviving stone burial markers was carried out by the EYFHS in the early 1980s (EYFHS 1985). The survey comprises a sketch plan showing the approximate location of the stones and a listing of monuments, followed by an alphabetical index by surname of the deceased. These entries were checked against the Holy Trinity burial registers (*Section 4.2.3*) and there was a high degree of concordance, though a few inconsistencies were noted. The EYFHS listing is numbered from 1 to 522, though there is a gap between 430 and 449, presumably due to an error. Interestingly, this survey recorded a burial dating to 1867 (No 162), which was made by permission of the Home Secretary following the closure of the burial ground in 1860 (*Section 4.2.8*).
- 4.2.28 Figure 22 shows the EYFHS sketch plan superimposed on a modern survey. Although this plan is not to scale, it has been possible to arrive at a ‘best fit’ which, at least in the western half of the burial ground, seems to have been relatively successful, allowing the cut-off line of the road scheme to be projected onto the burial plan. On this basis, it is estimated that between 210 and 230 numbered stones could be affected by the road construction.
- 4.2.29 Only an accurate survey of existing stones, related to the EYFHS survey, would permit a more exact number of affected memorials to be obtained. The impression during the walkover survey (*Sections 4.2.48-52*) is that the number of surviving or exposed stones has dropped substantially since the 1980s survey, due largely to vandalism, the elements, and creeping vegetation.
- 4.2.30 **Walkover survey**: this section describes the results of the walkover survey at the Trinity Burial Ground, which considered its perimeter and interior.

- 4.2.31 *Burial-ground perimeter: west wall (external description)*: the west wall of the burial ground ran on a straight alignment from a modern entrance situated adjacent to the Holiday Inn access road to Castle Street (Pl 3). The southernmost 6m of the wall formed a lower modern rebuild that, on the whole, appeared to reuse nineteenth-century bricks. The rest of the wall was around 2m high and 0.3m thick, though was not all of the same build. Nominally a straight wall, structural problems had led to the introduction of several kinks and had given its central section a pronounced lean (Pl 4). The brick was predominantly of an orange or orange-red colour and mostly around 2½” (67mm) thick. There was no consistency of bond, though some courses consisted very largely of headers (Pl 5).
- 4.2.32 The general character of the wall suggested that a substantial part of it was constructed at some point in the second half of the nineteenth century. For a little over 10m a portion of the wall, just north of its mid-point, had a notably greyer tone. The reason for this was unclear, though there was some evidence for surviving distemper and/or a thin rendering. Two L-sectioned iron brackets had also been affixed to the central part of the wall (Pls 3, 4, and 6), though the function of these brackets is unclear. Much of the central portion of the wall retained its original ‘brick special’ coping (Pl 7), except where the top of the wall had been damaged and replaced with modern coping (Pl 8). Around 8m of the wall at the northern end had been rebuilt or merely re-pointed in Portland-cement-based mortar (Pl 8). These bricks had also acquired a far paler colour, though the reason for this was again uncertain. The coping in this section was of a twentieth-century terracotta type.
- 4.2.33 A series of relative levels were taken within and without the west wall (Pl 9). The level of the bank at its highest point adjacent to the outer face of the wall was 1.59m above that of the pavement to the north on Castle Street and was again 1.59m above that of the western part of the burial ground.
- 4.2.34 *Burial-ground perimeter: west wall (internal description)*: running up to the wall from the east was a bank that was up to 4.3m wide with a maximum visible height of 1.59m (Pls 10 and 11) and which formed a later feature (*Section 4.2.50*). Although the wall had structural problems (*Section 4.2.31*), there was only a single buttress on its internal side. This was constructed in brick with a single stone coping and a batter rather, than a stepped profile (Pl 12). The buttress had been positioned against the wall’s more-vulnerable section (*ie* that portion with the most pronounced inward lean; Pl 4) and it was probably built no later than the end of the nineteenth century. Some evidence for the ghost outlines of buildings were visible, which abutted the boundary and that are depicted on late nineteenth-century OS maps
- 4.2.35 *Burial-ground perimeter: north wall (external description)*: the northern wall of the burial ground consisted of two very distinct walls. One formed a low section (Pls 13-16), whilst the other comprised the substantial remnants of the yard wall of the demolished gaol that was originally positioned immediately north-east of the burial ground. This section and the preceding section (*Section 4.2.39*) describe the low section of the north wall, whilst the gaol wall is described in *Sections 4.2.40* and *4.2.41-2*.

- 4.2.36 The low section of the northern wall was bonded into a 0.6m-wide pier that marked the north-west corner of the burial ground (Pl 13). It was not possible to see how the pier related to the west wall, due to very dense vegetation coverage. The north wall ran around the burial ground at the junction of Castle Street with the Mytongate roundabout (Pl 14), and continued along the south side of Castle Street (Pls 15 and 16) until meeting the north-west corner of the goal-yard wall, which again was heavily obscured by vegetation. Later clearance of vegetation revealed that the wall butted the lower parts of a possible stone gate pier (Pl 17) at the northern end of the western gaol wall (*Section 4.2.89*).
- 4.2.37 The wall was either 0.8m high (Pls 13 and 16) or 0.40m high, and was topped with doubly chamfered gritstone copings that would originally have carried railings. The brick was, like that used in the west wall (*Section 4.2.31*), around 2½” (67mm) thick, though it was largely of a pink-red type. In contrast to the west wall, this wall had been laid in an English bond, with alternate courses of headers and stretchers. This wall was largely built during, or shortly after, 1865 once road widening had been carried out under the auspices of Hull’s Improvement Committee and Board of Health (*Section 4.1.15*).
- 4.2.38 There were two entrances to the burial ground from Castle Street. One was situated in the north wall and is shown on both the 1862 and 1867 plans of the burial ground (*Section 4.1.20*: Figs 19 and 20). Although the entrance was in a very similar position to those shown on the above plans, it had clearly been reworked in more recent times (Pls 15 and 16). The bricks in the walls flanking the entrance were of an orange-pink colour and, though they had been very largely laid in an English bond, the uppermost course in both walls had been laid predominantly as brick on edge, unlike the bulk of the north wall.
- 4.2.39 *Burial-ground perimeter: north wall (internal description)*: unlike the west wall, this had numerous buttresses (Pl 14), though these would have been built merely to allow the railings to be braced by supporting members.
- 4.2.40 *Burial ground perimeter: gaol-yard wall (external description)*: externally this wall was almost entirely obscured by vegetation (Pl 18). The eastern entrance to the burial ground from Castle Street (Pl 19) had been broken through the gaol-yard wall (Pl 21), some repair work to the wall having apparently been made with a Portland-cement-based mortar.
- 4.2.41 *Burial-ground perimeter: gaol-yard wall (internal description)*: the interior side of the gaol-yard wall could be more-fully observed than the exterior and it was essentially L-shaped, running south from a junction with the north wall before making a right-angled return to the east, and then running across to make a junction with the east wall. However, its brickwork was only visible at the return (Pl 21), as the rest of the wall was almost entirely obscured by vegetation during an earlier site visit. The west section of the wall was nearly 2.4m high, whilst the south section was a little over 2m high. Both were 0.6m thick and presumably were originally higher, as befitting a prison perimeter wall. The bricks had not been laid in any particular bond, though a minority of courses consisted predominantly of headers. Most of the bricks were 2” (50mm) thick. This is a typical thickness for Georgian brick and thus it is

likely that the walling around the west and east sides of the gaol was constructed in the late eighteenth century. A crude cement coping had been added along the south section in modern times, whilst close to the return, a major crack had almost sheared the two sections of walling apart (Pl 21).

- 4.2.42 Around its mid-point, a short length of the west gaol-yard wall could be inspected during an initial site visit. In this section, a block of much-mutilated or eroded limestone had been placed within the wall, in a niche (Pl 22). Initially, the niche appeared to have been a crude, later insertion, closer inspection indicated that its rough nature was due to the later removal of bricks from its surround. The purpose of the niche and the block is unknown. Later clearance of vegetation exposed most of the wall's western face (Pl 23), with no further niches being present. The wall was, however, seen to have a pronounced westward lean (Pl 24).
- 4.2.43 At the west wall's northern end, clearance of vegetation revealed what appeared to be the lower parts of a stone gate pier (Pl 17), modern repairs and pointing having been carried out with cement and a concrete capping added. Insufficient vegetation had been cleared to establish the relationship between the west wall and the pier, though the stonework of the pier is considered typical of the period when the gaol was in use and could be a contemporary feature.
- 4.2.44 During the initial site visits, the south wall was almost entirely obscured by vegetation meant and hence could not be inspected for evidence of buildings that formerly lay within the burial ground and which abutted this wall (Goad Insurance Plan 1934, sheet 18; HHC). However, subsequent clearance of vegetation revealed a number of architectural details relating to these buildings, consisting of areas of render, putlog holes, brick piers and wall stubs (Pls 25-7).
- 4.2.45 *Burial-ground perimeter: east wall (external description):* externally, the original wall of the burial ground was not visible. It was apparent that a late twentieth-century wall had been built on top of the original wall (Pl 28) and the ground level in the Holiday Inn car park was approximately 1m higher than that of the adjoining burial ground.
- 4.2.46 *Burial-ground perimeter: east wall (internal description):* the original east wall was only visible from within the burial ground. The northern portion of the wall was exposed to a height of a little over 1m and was around 0.45m thick (Pl 29). The top had then been levelled with a layer of cement and a modern wall of orange brick with Staffordshire blue brick, on edge copings, built above. The bricks of the earlier wall were of a pink-red colour similar to those used in the gaol-yard wall (*Section 4.4.41*), but generally a little thicker, though not of the 2½" (67mm) encountered in the west wall. They had been laid in an English Garden Wall bond that in this case consisted of three courses of stretchers to each of headers. The wall might have been built at any point between the early and mid-nineteenth century.
- 4.2.47 Towards the south-east corner of the burial ground this wall was progressively obscured by a bank that was up to 4m wide and which reached, in the south-

east corner, a height of around 1m (Plate 21). In contrast, the northernmost portion of this wall was still visible, and this is attributable to the fact that originally it was abutted by the eastern end of a building that is shown on plans dating to 1862 (Fig 19) and 1904 (Fig 23).

- 4.2.48 *Burial-ground perimeter: south wall (external description)*: externally, this wall was entirely obscured by the hedge that bounded the north side of the Holiday Inn access road (Pl 28).
- 4.2.49 *Burial-ground perimeter: south wall (internal description)*: this wall ran straight along the southern boundary of the burial ground and was no more than 0.7m high, having lost its original coping which had been replaced by a coping composed of modern Staffordshire blue bricks laid on edge. The wall was generally 0.45m thick, though in places it was rather thinner in its upper portion, there being a batter to the lower part of the wall and some short buttresses (Pl 30). Like the north wall (*Section 4.4.37*), much of the brickwork had been laid in English bond, the bricks also appearing similar in both colour and thickness. Thus, it may have been built at the same time as the north wall. As with the north and east walls, there was a bank lay against this wall, which was *c* 3.4m wide. The batter apparent in the lower part of the wall suggests that the bank predated it along this side of the burial ground.
- 4.2.50 *The interior of the burial ground*: the east and west parts of the burial ground were a little different in character, though both appeared to be quite level. The west portion contained all the visible brick and stone burial vaults (Pls 31-4) and it also contained upright headstones. In contrast, the headstone in the east portion had, with the exception of some part covered examples near the east wall, been either laid flat or removed (Pl 35). The northernmost strip of the east part of the burial ground (*ie* that area adjoining the gaol-yard wall) was apparently devoid of headstone and this was perhaps because burial never took place in this area due to the presence of the buildings shown on the 1904 plan (Fig 23).
- 4.2.51 The burial vaults visible in the west of the burial ground were of either a single-level type, consisting of brick walls and a stone capping that was often inscribed (Pl 33), or a two-level type, again almost always of unfaced brick with stone capping (Pls 32 and 34). These were often heavily overgrown. All the vaults, that it was possible to inspect, had a brick-blocked former entrance in one of their side walls (Pl 33). A straight well-laid brick path (Pl 36) ran south from the western entrance, though the path was less well-defined further south.
- 4.2.52 From an inspection of the inscriptions on various monuments it could be seen that in general the earlier the monument the closer it was to be found to the west wall. The earliest dated monument inspected was a headstone bearing the date 1795 which was found at a distance of a little over 4m from the west wall (Pl 11). An undated horizontally laid stone slab could be seen that was partly protruding from the bank, indicating that monuments of similar or earlier date may be buried beneath this feature. It is possible therefore that the bank formed as a result of the accretion of soil and other detritus since the late eighteenth century.

4.2.53 A number of the monuments had suffered from the weathering and had also been subjected to vandalism (Pl 37). Fortunately, during the survey a programme of vegetation clearance occurred which improved the exposure of some monuments and generally opened up the interior of the burial ground (Pls 36 and 38-40). The most intriguing monument observed during the survey was the headstone commemorating William Wilkinson who was interred in 1835 (Pl 41). The monument is close to the north-west corner of the burial ground. Within the headstone a copper(?) plaque had been inset inscribed with:

This Plate was inserted by the
ENGINEER and FELLOW WORKMEN
of the deceased who on the 5th day of April
1835 was unfortunately killed by the end of
a boiler falling upon him at the Work shop
of MESSrs. BROWNLOW & PEARSON.,
as a Testimony of their respect for his
Mechanical Genius and Moral Worth.

ERAL DIGNUS AMARI

4.2.54 Trees were planted in the burial ground after 1860 and mature trees are now particularly concentrated close to its perimeter (Pls 2, 10, 14, 19, 28, 42, and 43) and also quite common within its interior (Pls 31, 33, 35, and 41). The only items of street furniture present within the burial ground are a series of former gas lamp standards that had been converted to electric operation (Pl 44).

4.2.55 **Conclusion:** the following section draws on the salient points of the desk-top and walkover surveys in order to summarise the discussion of the number of burials within the Trinity Burial Ground and also to determine its boundaries.

4.2.56 *Numbers of burials:* the documentary research has arrived at a possible number of individuals (43,933; Table 4) which the Holy Trinity burial registers record as having been interred in the parish during the period when the Trinity Burial Ground was in use (1783-1860). An unknown number of these registered burials will have taken place in Holy Trinity churchyard and in the church itself during this period. However, given that the Trinity Burial Ground was opened in response to a severe lack of burial capacity at the church, it is not supposed that the numbers concerned would have been high, perhaps totalling a few hundred over the period concerned. Evidence has also been uncovered that several hundred parishioners were interred in the vaults of the former St John the Evangelist church in the 40 years or so following its consecration in 1791. Even given these additional burial sites, it is difficult not to conclude that the vast majority of the 43,933 individuals recorded as having been interred in the parish between 1783 and 1860 were buried in the Trinity Burial Ground.

4.2.57 Earlier attempts at estimating the number of burials are summarised in a 1995 assessment of the burial ground (York Archaeological Trust 1995, 3-4). These estimates ranged from: at least 2200 on the basis of the existing grave markers; upwards of 8800 based on estimates from a professional exhumation company; and, approximately 35,500 based on an average number of deaths

per year (presumably gained from a rapid review of a few sample registers) multiplied by the number of years of operation. Notwithstanding any errors in the numbers used for these calculations, it can be seen that the figure gained from exhaustive counting of the register entries exceeds all earlier estimates to a substantial degree.

- 4.2.58 The survival of burial markers cannot be used as a reliable indicator of the density and disposition of burial plots, which it is supposed would have fully utilised the entire area of the burial ground, aside from the footprints of the buildings which once lay in the north-eastern corner. An accurate assessment of the density of burials overall, or more particularly, in the area affected by the road improvements, could only be achieved through some manner of intervention.
- 4.2.59 *The boundaries of the burial ground:* aside from problematic early depictions of the plan of the burial ground, which are more than likely attributable to cartographic errors, examination of early maps and plans suggest that the present-day site covers essentially the same area as when it was first established in the late eighteenth century. Minor historic modifications included 'neatening' the northern boundary to the curved alignment it now possesses, which was a result of the widening of Castle Row and the layout of Commercial Road in the 1860s. At this time burial within the Trinity Burial Ground had effectively ceased and it is apparent that the area of land lost to the road scheme was probably small.
- 4.2.60 The western boundary of the burial ground does not appear to have moved since the site was first laid out. However, the visible brick wall is not an original and the walkover survey has concluded that a large part of the wall was probably constructed in the second half of the nineteenth century. Unfortunately, vegetation cover meant that it was not possible to examine the junction between this wall and the wall that defined much of the curved northern boundary. The western wall has a pronounced inward lean in its central section, despite a single angled buttress constructed against its eastern face, while there also are traces on its western face of buildings which were shown abutting the boundary on late nineteenth-century OS maps. The difference in level between the land outside the western boundary and the interior of the burial ground has been shown to be in the region of 1.6m, with the top of the standing wall being at around 4.2m above the surface of the level, lawned interior.
- 4.2.61 It is unlikely that the visible wall was built as high as 4.2m and it may have been constructed on top of its predecessor at the same time as the ground was raised on both sides. A broad internal bank of material, several metres wide and around 1.6m high, runs up to the eastern side of the western boundary wall, and it is likely that the original wall, if it still survives, is sealed by this bank. Externally, the higher ground against the boundary wall was probably formed at the time of the Railway Dock construction or during construction of Commercial Road. Indeed, one of the recently excavated trial pits (TP18A; *Section 4.3.19*) on the land west of the burial ground, a few metres west of the wall, recorded dumped 1.5-2m-thick layers of clay and rubble which could be associated with the raising of the ground level in this area. It is also worth

stressing that the markedly different levels between the burial ground interior and the land to the west, observed during the walkover survey, now make it highly unlikely that the rectangular feature noted in TP18 (*Section 4.3.17*) represents a grave, as its height falls above the ground surface within the burial ground. Indeed it is more likely that the feature in TP18 represents a saw-pit, inspection pit, or part of a machine base associated with a late nineteenth-century timber yard (*Section 4.3.18*).

4.2.62 At its north-easterly corner, the boundaries of the burial ground are formed by the west and south walls of the yard of the late eighteenth-century gaol which is depicted on historic mapping (Figs 13-23). Though probably originally higher, this wall therefore represents the oldest surviving structure on the site. Clearing of ivy in one area during the walkover survey exposed a niche on the side of the burial ground containing an eroded stone and the subsequent removal of ivy from much of the remainder of the wall within the burial ground exposed architectural details about the buildings which adjoined its southern side. Complete clearance of the former gaol-yard wall, including its internal faces, has the potential therefore to expose details related to the gaol and the later buildings which adjoined both sides of the wall, and that are also depicted on historic mapping (Figs 16, 20, and 23).

4.3 WATCHING BRIEF

4.3.1 **Introduction:** in total, 122 of the SI interventions formed the subject of the watching brief (Figs 9 and 10). Those interventions that contained significant results are detailed in this section. The results are subdivided between those obtained from the test pitting and sampling undertaken within the Archaeological Survey Area (see *Section 3.4.4*), and the results gained from the boreholes/windowless sampling, Mostap sampling, and test pitting completed outside of this area. This is then followed by an overview of the finds recovered during the SI work.

4.3.2 **Boreholes:** generally, it was recent deposits that appeared within the first 2m BGL of these samples, along with naturally occurring sandy silty clays that occasionally lay above organic and gravel layers. Beneath these deposits glacial till or laminated clays were then reached. Unfortunately, with many of the recorded deposits, it was not possible to determine whether these were fills within archaeological features, or were dumps or natural accumulations containing anthropogenic inclusions. However, this said, several of boreholes samples did contain salient information relating to purely archaeological material, based on the recovery of artefacts or the presence of structural remains. The borehole locations are illustrated in Figure 9 and, where pertinent, information regarding the sampled archaeological deposits has been incorporated into the deposit model (*Section 4.4*).

4.3.3 **BH01A (NGR: TA 08974.51 28161.20; Height 2.47mOD):** this intervention contained a very clear demolition-based horizon (C) from 0.4m BGL (2.07mOD), which contained finds datable to the early to mid-nineteenth century.

- 4.3.4 *BH03A* (NGR: TA 09014.97 28176.99; Height 2.66mOD): this borehole encountered a brick wall (layer D: **1006**) at 0.45m BGL (2.21mOD) dating from the eighteenth to mid-nineteenth century, indicating the presence of structural remains in this area.
- 4.3.5 *BH04* (NGR: TA 09103.15 28277.69; Height 2.83mOD): this investigation contained a deposit (layer D: **1007**), starting at 0.5m BGL (2.33mOD), with brick fragments of eighteenth- to nineteenth-century date encountered at 1.90m BGL (0.93mOD). Beneath this layer, alluvial deposits were encountered (Pl 46).
- 4.3.6 *BH14* (NGR: TA 09360.58 28391.21; Height 3.60mOD): at around 12m BGL (-8.4mOD) a thick piece of timber, possibly oak, was recovered from the borehole arisings. Due to the nature of the recovery, it was not possible to determine whether the wood had been worked. The Static Cone Penetration Testing at SCPT22 also reported the presence of timber at a similar depth.
- 4.3.7 *BH22* (NGR: TA 09300.89 28484.72; Height 2.75mOD): this borehole recovered early nineteenth-century material from layer D (**1002**). This layer is interpreted as a demolition horizon beginning at 0.65m BGL (2.10mOD) which had been built over by a probable late nineteenth-/twentieth-century brick wall (C). Below D was a further rubble layer (E; **1003**) which contained pottery, closely dated to the late eighteenth century at, or below, 1.2m BGL (1.55mOD).
- 4.3.8 *BH38* (NGR: TA 09675.59, 28487.90; Height 4.85mOD): this intervention was located in the area of the former Hull Town Wall, though much of the upper sequence of deposits appeared to relate to the construction and backfilling of the passage between Humber Dock to the south and Princes Dock (now Princes Quay) to the north. However, at 8m BGL (-3.15mOD), there was evidence for the presence of a timber (probably oak). This timber was struck during the drilling of the borehole and was originally interpreted on-site as evidence for beams (such as railway sleepers) associated with construction of the dock. However, given its depth BGL, it is possible that it relates to a significantly earlier, although still undated, period of activity.
- 4.3.9 *Test pits*: in general, the test pits often established that modern material of varying types was present in their upper levels and in a few instances nineteenth-century, or later, structural remains were exposed, such as those on the western side of Ferensway in the vicinity of BH19 or the central islands of the Mytongate junction in the area of SCPT14. In that particular area there was evidence of the former housing stock visible on historic OS maps, now cleared and replaced by William Booth House and adjacent roads and verges/paths. In addition, it was noted from the test pits excavated along the A63, further to the south-west, that there had clearly been lesser modern development, with cleaner clays appearing in the base of the pits. The test pit locations are illustrated in Figure 9.
- 4.3.10 *WS26* (NGR: TA 09445.25 28428.75; Height 3.2mOD): the test pit excavation (1.2m depth) for a windowless sample recovered late nineteenth- to twentieth-

century pottery and oyster-shell fragments in layer C (**1011**). This was a demolition-related horizon, which began at 0.4m BGL (2.8mOD).

- 4.3.11 *TP04 (NGR: TA 09314.41 28395.39; Height 3.4mOD)*: this test pit was located on the northern 'island' of the Castle Street junction (PI 47). The basal layer (F; Fig 24), which progressed deeper than the pit at 2.05m BGL, was a firm redeposited clay which, although quite clean in appearance, contained chalk fragments of varying sizes. It is interpreted as a deliberate episode of dumping which was up to 1.03m thick. This deposit is either medieval or post-medieval in origin. The deposits lying above this clay appear to be relatively recent (A-E), possibly nineteenth but more likely twentieth century in origin, with the uppermost layer (A) containing fragments of building rubble, including concrete.
- 4.3.12 *TP05A (NGR: TA 09330.86 28419.18; Height 3.5mOD)*: this test pit was located adjacent to TP04 on the northern 'island' of the Castle Street junction. Similarly, this pit was excavated to a depth of 2.05m BGL, and at its base it contained a layer of redeposited orange clay (E), more than 0.4m thick (Fig 24). Again, this may have been deposited in order to raise of level the ground in this area. Above this sat a post-medieval brick wall (D), which was aligned north to south, the dimensions of the brick being 230 x 100 x 80mm. Above this lay modern demolition horizons (A-C) and the modern ground cover.
- 4.3.13 *TP11 (NGR: TA 09444.11 28421.19; Height 3.31mOD)*: this test pit was located in the area of the former gaol to the north of the cemetery (PI 48). It was excavated to a depth of 4.15m BGL, and at its base were organic, laminated silty clays (E), which were probably natural in origin, which began at 2.8m BGL (Fig 24). Above this was a layer (D) containing organic components, relating to decaying red brown roots and rootlets, which were probably established when the area formed open ground. Deposit D was around 1.4m thick and it was sealed by a possible occupation horizon containing some demolition debris (C), which was up to 0.6m thick. This horizon was, in turn, sealed by recent demolition layer (B; **1010**) which contained finds dating from the late nineteenth to early twentieth centuries and by the modern ground cover (A).
- 4.3.14 *TP13 (NGR: TA 09435.59, 28456.19; Height 3.24mOD)*: this test pit was located on the northern side of Castle Street, on the verge adjacent to the road (PI 49). There appeared to be a significant amount of modern disturbance (A-E; Fig 24) throughout the pit down to a depth of 2.5m BGL, as concrete fragments and cinder were being encountered at this depth. Below this, down to the final depth of 3.8m BGL an archaeologically sterile deposit of fine sandy clay (F), with occasional organic flecks and staining, was encountered, which possible represents a natural horizon.
- 4.3.15 *TP14 (NGR: TA 09604.55 28486.17; Height 4.86mOD)*: this test pit was positioned to the east of the former Earl de Grey Public House and south of Princes Quay (PI 50). The test pit was excavated to a depth of 3.9m BGL and it appeared to contain at least two different horizons (G and F; Fig 24) that perhaps related to dumping or demolition, which survived up to 1.8m BGL. Moreover, dump F (**1012**) contained artefacts dating from the mid- to late

sixteenth to late eighteenth or nineteenth centuries. Above these horizons lay a further dump (E), which was also likely a product of demolition and it contained slightly more modern fragments of glass and thin clay tobacco pipe stems, which were not collected. This, in turn, lay beneath deposits (A-D) relating to modern dumping.

- 4.3.16 *TP16 (NGR: TA 09644.79 28487.23; Height 4.93mOD)*: this test pit was positioned to the south of the eastern end of the Detailed Survey Area (*Section 3.3.1*) and lay to the immediate west of the former entrance lock to Princes Dock (now infilled). It was clear from this intervention that *in situ* structural material of a post-medieval, or later, date survives at depth in this area. At a depth of 3.05m BGL there was evidence of a substantial brick wall and possibly a hardened floor. Given the depth BGL, it is likely that the floor represents a mortared (or concrete) surface that, perhaps, sealed a brick foundation. Furthermore, it probably formed the remains of a cellar that had been infilled by mixed material (aggregates, demolition debris, cinder, and stone) contained within a fine sandy clay matrix (F; Fig 24). Modern levelling horizons (A-E) sealed this infill.
- 4.3.17 *TP18 (NGR: TA 09391.09 28336.50; Height 4.70mOD)*: this test pit lay on land a short distance west of the Trinity Burial Ground. Excavation of this test pit was ceased at 0.7m BGL, when a relatively clean clay (C) was encountered into which, on a south-west to north-east alignment, was cut a rectangular feature (E). In plan, this feature measured 1.85m in length and was greater than 0.4m wide, extending outside the limits of the test pit to the south-east. The fill (D) consisted of loose, mixed silt clays with significant voids, and several fragments of metalwork were exposed around the perimeter of cut. Given the proximity of the burial ground, this feature was interpreted during the SI as a possible grave, with the metalwork relating to possible coffin furniture. Given this, during the SI, a decision was made to abandon this intervention and move the ground investigation 2m to the north (*TP18A; Section 4.3.27*).
- 4.3.18 A subsequent walkover survey of the burial ground and measurements of relative levels, as part of a recent assessment (*Section 4.2.59*), indicate that the current ground level west of the burial ground is significantly higher than that found within the cemetery, making it highly unlikely that the cut feature in *TP18* represents a grave. Instead, it is considered more likely that the feature was associated with a timber yard or later sheds, which stood at this site in the late nineteenth and twentieth centuries, and may in turn represent a saw-pit, inspection pit, or part of a machine base.
- 4.3.19 *TP18A (NGR: TA 09390.44 28337.68; Height 4.70mOD)*: this test pit was excavated to a depth of 4.2m BGL. At the base of the pit was a natural deposit of soft silty clay (F), over which lay a former, probable late medieval ground surface (E; Fig 25). This was probably grassed, as heavily decayed rootlets and organic detritus were present. Cutting into this layer was a north/south-aligned wall foundation (G), which lay between 2.6m and 3m BGL (PI 51). The foundation comprised unbonded, rough worked sandstone or limestone, with up to two courses of blocks visible. The size of the blocks ranged between 300 x 200 x 250mm and 500 x 300 x 300mm. The foundation trench

for this wall was not visible in the test pit due to depth at which the feature was encountered. However, it was determined that the width of the foundation was around 0.5m and extended outside the test pit to both the north and south (Fig 25). One of the blocks also appeared to have been burnt, as it had a patch of heat-affected clay adhering to its western side. It is possible that this wall dates to the late medieval period and, given its position in Zone 3 (*Section 4.1.48*), it might relate to the medieval settlements of Myton or Wyke.

- 4.3.20 Later post-medieval activity appeared to be absent in this test pit, and a 0.6m-thick layer of gritty silt clay (D), was located above the foundation, containing fragments of factory-produced Whiteware (noted but not collected) indicating a nineteenth-century or later date. It is possibly that later clearance in the area may have removed traces of post-medieval activity. Above this layer was a further dump of clay (C), which contained rootlets, possibly indicating a period of inactivity, upon which had been constructed a brick foundation (B) towards the south-western end of the test pit.
- 4.3.21 **Mostap samples:** in addition to those in the Archaeology Survey Area, a small number of Static Cone Penetration Testing sites were also identified as being candidates for obtaining further Mostap samples for potential environmental analysis. These sites lay along the general south-west to north-east aligned route of the road-improvement corridor, close to, or as nearby as could be determined, to the central line of the works (*Appendix 2*), and were taken in order to provide regular-interval samples of a buried peat horizon (Basal Organic complex, Unit 3: *Section 4.6.6*). Overall there was good coverage in the south-western half of the corridor, with an above-average sample rate in and around the area of Mytongate junction. However, it was not possible to obtain the Mostap samples across the former Humber Dock and in area to the east.
- 4.3.22 **The Detailed Survey Area:** all of the sites (A01-10; Fig 10) across this area were subjected to test pitting which encountered fairly recent archaeological deposits, though in some instances earlier deposits might also be present. Mostap sampling then followed the test pitting.
- 4.3.23 **Test pit results:** at site A01 a dark grey fine sandy clay with organic content was revealed at 1m BGL, whilst the same deposit was recorded in A02 at 1.1m BGL. An orange brown sandy clay was observed from 0.8m BGL in A03 (PI 45), whilst A04 encountered a probable nineteenth-century, or later, cellar base at 1m BGL.
- 4.3.24 A05 contained demolition dumps and a clay dump with minor amounts of brick rubble, and A06 contained similar material, though there was an absence of brick rubble in the lower deposit.
- 4.3.25 A07 revealed modern deposits down to 0.6m. These were then replaced by a series of three layers of sandy clay. A08 revealed modern material down to 0.8m BGL followed by a chalk dump, or consolidation, with a possible clay dump below starting at 0.8m BGL.

- 4.3.26 A09 contained a significant amount of modern material down to 0.9m BGL with plastic encountered in the lower deposit. This was replaced by orange-brown silty clay down to the base of the test excavation.
- 4.3.27 A10 showed post-medieval and later dumping down to 0.75m BGL with dumped clays below; unusually, these clays displayed vertical laminations. A sherd of pottery from deposit A (**1004**) in this intervention was dated to the first half of the nineteenth century.
- 4.3.28 *Mostap sampling*: following test pitting all of the interventions were examined by a Static Cone Penetration Testing rig and the results were used to determine which intervention to revisit to obtain Mostap samples from predetermined depths (*Appendix 2*). Analysis of the results suggested obtaining samples from A04 (HFA Sample Ref 5), A06 (HFA Sample Ref 6), A09 (HFA Sample Ref 7), and A10 (HFA Sample Ref 8).
- 4.3.29 Preliminary interpretation of the testing suggests that potential *in situ* remains of the medieval and post-medieval town ditch are located in the area between sites A06, A09, and A10.
- 4.3.30 *The finds*: a small assemblage of artefacts/ecofacts was recovered during the SI work. The assemblage consists of post-medieval pottery and clay tobacco pipe, ceramic building material, and other miscellaneous objects, as well as animal bone and oyster shell.
- 4.3.31 *Pottery*: the SI work produced a small assemblage of pottery, all of post-medieval date (*Appendix 3*; A3.1). Nineteen sherds of pottery were recovered, with a combined weight of 558g. The average sherd weight (ASW) was 29g. This relatively large sherd weight is skewed by two very large sherds of sanitary ware.
- 4.3.32 The earliest pottery represented was a sherd from a sixteenth-century green-glazed red earthenware chafing dish from context **1012** (layer F, TP14; *Section 4.3.15*). Other material recovered from this deposit included brown-glazed red earthenware, Staffordshire Slipware, Tin-glazed earthenware, Westerwald Stoneware and a sherd of a possible stoneware spirit bottle of late eighteenth- or nineteenth-century date, bearing a stamp showing the letter B in a circle. The Westerwald stoneware is part of a baluster jug dating to the seventeenth century, bearing a frieze of decoration around the neck, possibly showing grotesque faces. A similar vessel shown in Gaimster (1997, 260) bears a date of 1618, and one illustrated in Hurst *et al* (1986, 222) has a date range of 1600-50. The deposit may date to the late seventeenth or early eighteenth century if the spirit bottle sherd is intrusive. Alternatively, the bulk of the pottery may be residual.
- 4.3.33 Another notable sherd was derived from context **1003** (layer E, BH22; *Section 4.3.7*) and derives from an early Pearlware tea-bowl base, bearing fine blue-painted line decoration. A Pearlware vessel with very similar painted decoration was recovered from excavations in the grounds of Thomas Jefferson's retreat at Poplar Forest, Virginia with a date range of 1780 to 1810 (Corporation for Thomas Jefferson's Poplar Forest 2013).

- 4.3.34 Other interventions produced nineteenth-century pottery in small quantities.
- 4.3.35 *Clay tobacco pipe*: 26 fragments of clay tobacco pipe were recovered (Appendix 3; A3.1), weighing 109g in total (Appendix 3; A3.1). Those from context **1012** (layer F, TP14; Section 4.3.15) included complete bowls dating between *c* 1660 and 1680, and this date tallies with the bulk of the pottery from this deposit (Section 4.3.32).
- 4.3.36 Contexts **1002** (layer D, BH22; Section 4.3.7) and **1009** (layer C, BH01A; Section 4.3.3) both contained fluted clay pipe bowls dating to *c* 1810 to 1840. A pipe bowl dating between *c* 1640 and 1660 was recovered from context **1013** (layer E, BH43).
- 4.3.37 *Ceramic building material*: two fragments of handmade brick were recovered (Appendix 3; A3.2) from two boreholes (**1006**, layer D, BH3A and **1007**, layer D, BH4; Sections 4.3.4 and 4.3.5). Both were three inches thick and one also possessed a full width of 4 inches. This latter fragment had been burnt post-usage, possibly during the demolition process, or as a result of bombing during the Second World War. The first had been reused, and bore traces of two types of mortar. The brick from **1006** had been initially used with lime mortar and reused with a mortar containing black-bulking material, such as coal, ash, or charcoal. Black-bulking agents were not commonly added to mortar until the late eighteenth century (Locock 2010, 37). The brick from **1007** was used with the later mortar type.
- 4.3.38 *Miscellaneous objects*: three miscellaneous objects were recovered (Appendix 3; A3.3). These included a fragment of a bone handle, bearing part of an iron tang, an iron nail, and an asphalt disc.
- 4.3.39 The handle (RF 1) was recovered from SCPT15 and bears a polished surface, though little modification of the bone has been undertaken. This object could have a date range anywhere from the medieval period until the early nineteenth century.
- 4.3.40 The nail was from TP11 (layer B; Section 4.3.14) is also undateable, though it is likely to predate the introduction of the mass factory produced nail in the mid-nineteenth century. However, the solidity of the shank, coupled with the narrow T-shaped head, suggests a post-medieval date.
- 4.3.41 The disc was recovered from **1010** (layer B, TP11; Section 4.3.14) and is an unusual object formed of thick black asphalt concrete. The material appears to be asphalt/bitumen containing densely packed sand and possibly crushed rock aggregate. This object might have been formed by pouring the asphalt into a circular mould. It is 403mm in diameter and 100mm thick. It was also has indents and these may reflect the shape of the mould or they have been deliberately formed in order for the object to be lifted, although it is very heavy. Asphalt concrete began to be used in the nineteenth century and was also used to manufacture roof tiles and paving materials, as well as being laid down in blanket form for paving surfaces. This block seems far too heavy and thick to have served a paving purpose.

4.3.42 *Animal bone and oyster shell*: a small amount of animal bone was retrieved during the SI work. The assemblage consists of nine small pieces weighing 45g. These have a very good state of preservation, but constitute very small fragments (*Appendix 3*; A3.4). The assemblage was largely recovered from contexts of nineteenth-century date and it probably represents butchery or food waste. One rib fragment, for example, has a neatly sawn oblique end, which was created during a butchery process.

4.3.43 A small assemblage of oyster shell (*Appendix 3*; A3.5) was recovered from context **1011** (layer C, WS26), consisting of eleven fragments weighing 434g. These represent food refuse and were associated with late nineteenth- to early twentieth-century pottery

4.4 GEOARCHAEOLOGICAL DEPOSIT MODEL

4.4.1 **Introduction**: analysis of the geotechnical data identified a broad sequence of lithostratigraphic units extending beneath the proposed route. The units are summarized in Table 6 and illustrated as a series of block model diagrams (Figs 26-8). A series of transects (hole-to-hole sections) specific to the route are also illustrated (Figs 29-32).

Unit	Description
1	Chalk bedrock
2	Pleistocene complex
3	Basal Organic complex (Holocene)
4	Minerogenic alluvium (Holocene)
5	Upper Archaeological Horizon ('Made Ground')

Table 6: Summary of lithostratigraphic units

4.4.2 **Chalk bedrock (Unit 1)**: Cretaceous Chalk forms the bedrock underlying the entire length of the route. The Chalk was reached in 47 of the borehole records examined within the study area (Fig 28, F). Elevations were highest at the western end of the study area reaching a maximum of -15.04mOD (12.58m BGL, BH TA02NE161). Elevations dipped significantly westwards to a minimum of -29.19mOD (23.88m BGL, BH TA02NE522). In the vicinity of the route at the western end the top of the Chalk ranges from *c* -18m to -22mOD (Figs 29 and 30), in the central area *c* -20m to -24mOD (Fig 31), and at the eastern end *c* -19m to -28mOD (Figs 32 and 33).

4.4.3 **Pleistocene complex (Unit 2)**: the correlation of deposits of Pleistocene age within the sedimentary stack is currently preliminary, and in the absence of dating, based on the general description of the deposits in comparison with the overlying sequences. The deposits were highly variable comprising sub-units of clays, silts, and sands, with varying amounts of gravel clasts, notably chalk. These deposits probably accumulated as glacial till (boulder clay) and fluvio-glacial outwash during the last glacial period (the Devensian). Sub-units of stiff laminated clays and sandy clays may have been deposited in lacustrine environments. Of the 47 records which reached the base of the Pleistocene complex, the thickness of this unit ranged from 5.7m in the west (BH TA02NE163) to 22.15m (BH TA02NE522) in the east.

- 4.4.4 The inferred top of the deposits of Pleistocene age was reached in 122 of the borehole records examined (Fig 28, E). Elevations were highest at the western end of the area reaching a maximum of -3.74mOD (BH TA02NE609). Elevations dipped westwards to a minimum of -19.28mOD (BH40A) in the vicinity of a large channel feature (Figs 28, E). The profile of the channel is illustrated in Figures 32 and 33. It is likely that this channel represents a former channel or branch of the River Hull.
- 4.4.5 The surface of the Pleistocene deposits provides some indication of the topography of the area at the beginning of the Holocene, which represents the present interglacial. The interface with the overlying organic deposits (deposited in relatively low-energy environments; *Section 4.4.6*) has the potential to preserve an undisturbed dry-land surface, though its preservation could be variable depending on later levels of attrition/erosion. If present this surface could, in turn, be associated with *in situ* archaeological remains, that formed prior to expansion of wetland environments as a consequence of rising sea-level in the mid- to late Holocene. The elevation of the Pleistocene/Holocene boundary along the route is indicated in Figures 29-33. At the western end of the route elevations range from *c* -5m to -9mOD (Figs 29 and 30), in the central area *c* -7m to -13mOD (Fig 31), and at the eastern end *c* -9m to -13.5m (Figs 32 and 33, excluding the channel area).
- 4.4.6 ***Basal Organic complex (Holocene; Unit 3)***: the Pleistocene deposits are overlain by a unit of organic deposits that was distinctive and consistent enough in the borehole records to correlate it as a separate unit, distinct from the overlying alluvium. However, it should be noted that this unit was highly variable between borehole locations ranging from black humified peat to organic clays and silt clays. In several boreholes sub-units of alluvial clays were described that contained pockets of peat. This suggests erosion and redeposition in certain places, possibly as a result of channelling and alluvial processes. The high minerogenic component suggests periodic flooding occurred during peat accumulation. In some boreholes a complex sequence of peat and organic alluvium was noted, although invariably the upper parts of the unit comprised organic alluvium, often laminated with peat lenses. The organic complex appears to extend along the entire length of the route (present in 86 recorded locations), but is notably absent in the vicinity of the large channel feature at the eastern end of the route (Figs 27, C and D, 32 and 33). The maximum-recorded thickness was 4.45m (BH24) and the thinnest 0.1m (BH TA02NE633).
- 4.4.7 The variation between the boreholes may represent the range of different micro-environments that are likely to have been present, comprising areas of open water, channels, and drier carr surfaces. Preserved fragments of plant remains and woody material were frequently described within these deposits suggesting the potential for preservation of palaeoenvironmental remains (*eg* plant remains, pollen, and insects) is high along with *in situ* archaeological remains such as timber structures (*eg* trackways). The nature of the environment suggests that any activity may have been restricted to seasonal rather than permanent occupation.

- 4.4.8 It is probable the organic complex formed during a period of rising groundwater levels, as a consequence of rising sea-level, although initially this may have been in a freshwater environment such as alder carr and fen, with perhaps wetland expanding from the lower elevations at the eastern end of the route. Over time the wetland may have expanded westwards across the higher elevations. This implies the date for the base of the organic unit will differ from east to west, with the youngest deposits perhaps occurring in the west. A programme of future radiocarbon dating would help to clarify the lateral sequence of accumulation. A series of Mostap samples, targeting the basal organic deposits, were taken and retained (sealed) during the 2013 SI to allow for suitable plant material to be extracted for series of 'range finding' radiocarbon dates (*Section 4.3.21*).
- 4.4.9 Taking into account the elevations for the base of the of the organic complex, from *c* -13.5mOD in the east to -5mOD in the west, comparison with regional sea-level and archaeological data, in particular from the Humber Wetlands and LOEPS projects (Van de Noort 2004; Fig 7), prehistoric dates, perhaps within the Mesolithic period (*c* 10,000-4000 cal BC), could be expected for Unit 3. However, this said, some caution must be exercised when applying any regional models at a site scale where local factors such as topography, hydrology, and the proximity of channels may exert a significant and dynamic influence over sequence accumulation.
- 4.4.10 ***Minerogenic alluvium (Holocene; Unit 4)***: overlying the organic complex (Unit 3; *Section 4.4.6*) was an extensive unit of largely minerogenic alluvium, comprising grey to greyish brown clays, and silty and sandy clays, although some organic remains and detrital material was frequently present (Fig 26, B). These deposits are frequently heavily laminated with silts and sands. In the vicinity of the large channel, in the eastern part of the route, thick sub-units of sands, gravelly sands, and sandy silts are present.
- 4.4.11 The thickest recorded deposit was 19.2m (BH TA02NE651), mostly sands related to the infilling of the channel, whilst the thinnest was 2m (BH TA02NE488). It should be noted, however, that the thickness of deposits will to some extent reflect the depth to which truncation of the upper surface has occurred (*ie* greater truncation across dock areas and areas of cellarge). The sandier facies, particularly the gravelly sands, suggest higher-energy deposition and, as such, a degree of reworking is to be expected that was associated with in-channel activity and periods of overbank flooding.
- 4.4.12 Although it is possible that initial deposition occurred under freshwater conditions, the general character of the deposits suggests much of the sequence is likely to have occurred in an intertidal environment. The unit may therefore reflect a variety of environments such as saltmarsh, with tidal creeks and mudflats (Van de Noort 2004, 25-29). Future analysis of remains such as ostracods, foraminifera, and diatoms could clarify the depositional environments associated with these sediments.
- 4.4.13 In terms of archaeological preservation, waterlogged preservation is likely to be high within this unit. Although a degree of reworking is to be expected, associated with channel activity and flooding, localised preservation of *in situ*

remains associated with ephemeral stabilisation horizons is possible. The nature of the activity in such an environment is, however, likely to have occurred on a semi-permanent or seasonal basis and hence be associated with activities such as the grazing of livestock, wild fowling, salt production *etc*, therefore the likelihood of encountering such remains may be fairly low.

- 4.4.14 **Upper Archaeological Horizon (Unit 5):** the upper archaeological horizon represents the ‘made ground’, recorded across the entire study area by the various geotechnical investigations and more recent SI work (Fig 26, A), which was highly variable in terms of both composition and thickness. In the main, it appears that this unit relates to historic-period activity dating from the medieval to modern periods, though much of the evidence gained during the SI dates from the post-medieval period onwards. In many interventions brick and concrete rubble was recorded, but invariably mixed deposits of clays, silts and sands with varying amounts of gravel, concrete and brick fragments were also recorded. The ‘made ground’ deposits were examined more closely during the recent archaeological watching brief and fragments of ceramics and building material retained for spot dating purposes (*Section 4.3*). The test pits were monitored closely due to increased archaeological visibility in these interventions.
- 4.4.15 The thickest sequence of deposits was recorded in the eastern part of the route immediately east of the roundabout (*eg* BH38; Fig 26, A and B). The thicker deposits in this area correspond to the location of the large underlying channel feature (*Section 4.6.4*) and may be associated with deliberate infilling and levelling.
- 4.4.16 Significantly, information gathered during the enhanced desk-based assessment allows the division of the Upper Archaeological Horizon into four zones of archaeological potential (*Section 4.1.42*) and, accordingly, the positions of these zones are annotated on the transect figures (Figs 39-33). In addition, information gained from several of the previous archaeological excavations (Sites 1-4; *Sections 4.1.2-8*), whose depths of below-ground archaeology can be discerned with some confidence (*Appendix 1*), can also be added to the transects. This information has particular relevance to the eastern half of the study area (*Zones 1 and 2; Sections 4.1.43 and 4.1.45*), and in some specific areas it has been possible to predict the depths and thickness of medieval/post-medieval deposits contained within the Upper Archaeological Horizon (Figs 32 and 33). Further details regarding the character of the Upper Archaeological in Zone 3 were also generated during the SI. For instance, in TP18A the remains of a possible late medieval ground surface were encountered that been truncated by a late medieval/post-medieval wall foundation (*Section 4.3.19*), and it has also been possible to plot the depth of this latter feature on the borehole transects (Fig 31). Other deposits and features that can confidently plotted on the transects include: late medieval/post-medieval deposits recorded in TP04 (layer F; *Section 4.3.11*; Fig 29), TP05A (layer E; *Section 4.3.12*; Fig 31), TP11 (layers C and D; *Section 4.3.13*; Fig 32), and TP14 (layers E, F, and G; *Section 4.3.15*; Fig 33); eighteenth-/nineteenth-century demolition deposits encountered in BH01 (*Section 4.3.3*; Fig 30), BH04 (*Section 4.3.5*; Fig 29), and BH22 (*Section*

4.3.7; Fig 31); and an eighteenth-/nineteenth-century wall recorded in BH01A (Section 4.3.3; Fig 30).

5. SYNTHESIS

5.1 ARCHAEOLOGICAL POTENTIAL

- 5.1.1 The archaeological assessments, watching brief, and deposit model clearly indicate that the road-improvement corridor contains significant below-ground archaeological and geoarchaeological remains. More specifically, those remains that hold regional significance appear to relate to the development and potential early use of the Humber Estuary and the River Hull, during the early prehistoric period, and the development of settlement, associated activities and defence during the medieval and early post-medieval periods. More locally significant remains might date to the later post-medieval period, and these will include the extensive corporeal remains contained within an eighteenth-/nineteenth-century cemetery. In addition, the extant late eighteenth-century gaol-yard wall present at the latter site also holds local significance, as will any below-ground remains associated with the former gaol.
- 5.1.2 With regard to the spatial and vertical extent of these potential remains, the deposit model suggests that the earliest of these might be associated with an organic horizon (Basal Organic Complex, Unit 3, *Section 4.4.6*), surviving as a *c* 4.5-0.1m-thick layer of peat and organic clays and silts, which lies at a depth of *c* -13.5mOD at the eastern end of the route and *c* -5mOD at its western end. Significantly, this horizon appears to extend along much of the route, though it is absent in the vicinity of a large channel feature that is present at the route's eastern end. This latter feature is evident as a dip in the underlying Pleistocene deposits, and it probably represents a former channel or branch of the River Hull, that was perhaps active when the organic horizon was in the process of being formed. Moreover, it is likely that the organic horizon formed as a result of rising groundwater levels, due to rising sea levels, within a dynamic estuarine environment and, although presently undated, it was probably established during the early/mid-Holocene. If this was the case, it may well be associated with, at least, regionally significant Mesolithic-period (*c* 10,000-4000 cal BC) archaeology, with a high potential for waterlogged preservation, relating to the seasonal exploitation of this area, and/or contain palaeoenvironmental information relevant to this period. Indeed, it is likely that the timbers recorded in one of the SI boreholes and an adjacent Static Cone Penetration Testing site (BH14 and SCPT22; *Section 4.3.15*; Fig 31), at -8.4mOD, were derived from this horizon. Based on analogy with the recently excavated early prehistoric palaeochannel at Stainton West, Carlisle (OA North 2011), it is possible that any Mesolithic activity would be associated with both the channel and adjacent banks.
- 5.1.3 Following the formation of the organic horizon, the deposit model indicates that the study area continued to form a dynamic estuarine environment, potentially consisting of saltmarshes, tidal creeks, and mud flats, which was subjected to periodic flooding. This led to the formation of a Minerogenic alluvium horizon (Unit 4, *Section 4.4.10*), the top of which, depending on later truncation, may be encountered at relatively shallow depths BGL. This deposit has a maximum thickness of 19.2m over the earlier channel/branch of the

River Hull (*Section 5.1.2*) and a minimum thickness of 2m. However, it is likely that deposition of this alluvium was not continuous and, therefore, this deposit has the potential to contain stabilisation horizons which might be associated with archaeological remains relating to semi-permanent or seasonal exploitation of the intertidal environment. Again, this horizon has a high potential for the waterlogged preservation of archaeological remains, which if prehistoric in date may hold regional significance. Within the study area, potential evidence associated with this horizon includes a timber (probably oak) encountered at a depth of 8m BGL (-3.15mOD) during the drilling of one of the SI boreholes (BH38; *Section 4.3.8*; Fig 33). This timber was originally interpreted on-site as evidence for a timber beam (such as a railway sleeper) associated with nineteenth-century dock building. However, given its depth BGL, it is possible that it relates to a significantly earlier period of activity. It should also be stressed that any later, deeper, features, dating from the historic period, which cut into this horizon may also be associated with waterlogged remains.

- 5.1.4 Lying above the alluvium and immediately below the modern overburden/made ground is the Upper Archaeological Horizon (Unit 5; *Section 4.4.14*). This horizon appears, in the main, to relate to activity dating to the medieval and post-medieval periods, and the assessments and SI work undertaken as part of the present study allow its character and depth to be discerned.
- 5.1.5 More specifically, the enhanced desk-based assessment has enabled four distinct archaeological zones to be discerned along the course of the proposed road-improvement corridor that are specifically associated with the Upper Archaeological Horizon. Of these, Zone 1 (*Section 4.1.43*; Fig 34), which lies at the far eastern end of the study area, probably contains regionally and locally significant remains dating to the medieval and post-medieval periods, relating to residential, religious, public, and commercial buildings, and also open medieval plots. More specifically, within this zone, these sites will line the Mytongate street frontage and also include the southern end of the medieval Augustinian Friary, the fourteenth-century gaol, and the Guild and the Market Halls. Within this zone, archaeological deposits have been recorded between 1.99m and 2.45mOD and may be between *c* 1m and *c* 2m thick, with waterlogged preservation at lower levels (see *Section 5.1.3*).
- 5.1.6 Similarly, Zone 2 (*Section 4.1.45*; Fig 34), which lies in the eastern half of the study area is known to contain regionally significant medieval and early post-medieval remains. These relate specifically to the defence of the early settlement and include the medieval/post-medieval town wall and associated internal bank and external ditch, Myton Gate, and the town's Civil War defences.
- 5.1.7 Regarding the form of these remains, excavation outside of the study area indicates that the fourteenth-century town wall was constructed of hand-moulded bricks, had a lower batter, and its rear was set into the front of a clay rampart (Ayers and Evans 2001, 43). The available evidence, as discussed by Ayers and Evans (*ibid*), also suggests that the medieval town ditch ranged between 12m and 18.5m wide, had a U-shaped profile, and a maximum depth

of 6m. It was also noted that ‘the section of ditch leading southwards from the Beverley Gate to the Humber foreshore was water filled’ and that ‘rich environmental deposits and exceptionally well-preserved organic materials can be expected from the ditch fills’ (*ibid*). Previous excavation in Zone 2 indicates that archaeological deposits, above the Minerogenic alluvium horizon, range between 1.5m to at least 2.8m thick, with the deeper deposits probably lying within the town ditch. In some areas, the top of the Upper Archaeological Horizon was also encountered at very shallow depths (0.3-0.7m BGL) and at this depth the exposed remains related to the Myton Gate. This structure lies directly beneath the northern carriageway of the A63 and, when recorded over a two-hour period in 1976, it appeared to be composed of an arched brick-built passageway, flanked by brick-built walls (*ibid*), which were established in the medieval period and that were perhaps rebuilt in the seventeenth century. Furthermore, during recording a post-medieval counterweight-pit for a drawbridge was encountered and the edge of the town ditch was thought to lie east of this pit (*ibid*).

- 5.1.8 Further details relevant to this area were provided during the SI work undertaken across the Detailed Survey Area (*Section 4.3.2*). This work largely confirmed the results of the previous excavations and suggested that the Upper Archaeological Horizon, lay beneath modern overburden/made ground at a depth of between 0.8m and 1.1m BGL. Furthermore, preliminary interpretation of the Mostap samples taken across this area suggests that the *in situ* remains of the medieval/post-medieval town ditch are present.
- 5.1.9 Zone 3 (*Section 4.1.48*; Fig 34) encompasses the central portion of the study area and contains several former watercourses and may also contain regionally significant remains in the form of the settlement of Wyke, the medieval predecessor to Kingston upon Hull, as well as the medieval hamlet of Myton, and a monastic grange and chapel., This zone also contains the locally significant Trinity Burial Ground (*Section 4.2*), that was principally used between 1783 and 1860, with a very small number of burials being made in the 1860s by permission of the Home Secretary. This cemetery is estimated to contain in the region of 43,933 burials (*Section 4.2.54*). Immediately north-east of the Trinity Burial Ground is also the site of the late eighteenth-century gaol, and this area may again be associated with below-ground remains that are locally significant.
- 5.1.10 Outside of the cemetery, the watching brief undertaken during the excavation of test pits and boreholes, within Zone 3, provides some indication to the character of the deposits and remains associated with the Upper Archaeological Horizon. For instance, six of the test pits/boreholes encountered remains that might date to either the late medieval or post-medieval periods, sealed beneath modern overburden/made ground. These included: a rubble layer (layer E), at a depth of 1.2m BGL (1.55mOD) associated with late eighteenth-century pottery in BH22 (*Section 4.3.7*; Fig 31); a potential medieval or post-medieval levelling layer (layer F) in TP04 (*Section 4.3.11*; Fig 29), which lay at a depth of 1.1m BGL (2.3mOD); a post-medieval levelling layer (layer E) in TP05A (*Section 4.3.12*; Fig 31) at depth of 1.5m BGL (1.81mOD), above which was a post-medieval brick wall; a

potential post-medieval occupation horizon (layer C) in TP11 (*Section 4.3.13*; Fig 32) at a depth of 0.6m BGL (2.71mOD); post-medieval dumping/demolition horizons (Layers E, F, and G) in TP14 (*Section 4.3.15*; Fig 33); and a potential late medieval/post-medieval wall in TP18A (*Section 4.3.19*; Fig 31), at depth of *c* 2.8m BGL (*c* 1.9mOD), which cut into a possible late medieval ground surface. It is possible that this latter feature relates to the medieval settlements of Wyke or Myton and, as such, this area may contain below-ground remains that are of regional significance (Fig 34).

5.1.11 Zone 4 (*Section 4.1.50*; Fig 12) lies at the western end of the study area and the cartographic evidence suggests that the Upper Archaeological Horizon in this area is probably dominated by below-ground remains dating from the mid-nineteenth-century onwards, although the presence of earlier remains cannot be entirely ruled out. As such the majority of remains in this area are probably of low archaeological significance. The comparatively late date of the below-ground remains in this area was confirmed, in some measure, during the drilling of several of the boreholes in this zone, as part of the SI work. These encountered a probable eighteenth/nineteenth-century brick wall at 0.45m BGL (2.21mOD; BH03A; *Section 4.3.4*) and nineteenth-century horizons at 0.4m BGL (2.07mOD; BH01A; *Section 4.3.3*; Fig 30) and 0.5m BGL (2.33mOD; BH04; *Section 4.3.5*; Fig 29).

5.2 ARCHAEOLOGICAL SURVIVAL

5.2.1 It is clear from the previous archaeological excavations and the SI work, completed as part of the present study, that relatively modern phases of truncation will have had an adverse impact on any earlier archaeological remains contained within the study area. This truncation has probably been more detrimental to the shallower below-ground remains contained within the Upper Archaeological Horizon, particularly those dating to the post-medieval period which might lie within Zones 1-3 (*see above*). In addition, in these zones, medieval deposits will have suffered through both post-medieval and modern truncation.

5.2.2 In general terms, within the study area, the truncation of pre-nineteenth-century below-ground remains will be attributable to the construction of cellars/basements, the passage between Humber Dock and Princes Dock, and modern services, and they will also have been affected during the construction of the carriageways and ancillary features associated with the current A63.

5.2.3 Although no information survives concerning the depth of the A63's formation level, some estimates can be made based on the evidence obtained during several of the archaeological interventions. For instance, in the eastern half of the study area, in Zone 1 (*Section 4.1.43*; Fig 12), a watching brief undertaken during the installation of puffin crossings indicates that the base of the road lay at a depth of 1m BGL (Site 1; *Section 4.1.3*), whilst in Zone 2 (*Section 4.1.45*; Fig 12) it is reported that during the exposure of Myton Gate (Site 17; *Section 4.1.41*) the northern carriageway of the A63 was laid directly on top of the archaeological remains, which lay at depth of 0.3m BGL in 1976, although its present day survival depth is unknown.

- 5.2.4 With regard to nineteenth-/twentieth-century cellars, it is difficult to discern their presence through reference to the historic mapping consulted as part of the present assessment. However, the archaeological interventions and SI work indicate that where these are present they have variable depths. For instance, in Zone 1 (*Section 4.1.43*; Fig 12), at the eastern end of the study area, cellars exposed during archaeological excavation were up to 0.7m deep, whilst in Zone 2, one test pit (TP16) encountered the potential floor of a cellar at a depth of 3.05m BGL (*Section 4.3.24*). In the case of those shallower cellars, it is therefore possible that earlier below-ground remains, associated with deeply cut features, may survive beneath their floor levels.
- 5.2.5 In addition to truncation, it also appears that in certain areas modern dumping and the raising of the ground surface occurred and this may well have sealed and protected any earlier below-ground remains present in these respective area. On present evidence, the modern raising of the pre-nineteenth-century ground level appears to be a feature of Zone 3, particularly in the vicinity of the Trinity Burial Ground. For example, the SI work and walkover survey suggest that land adjacent to the western boundary of this burial ground was raised by *c* 2 m and that this probably occurred as part of the construction of Railway Dock or during the construction of Commercial Road.
- 5.2.6 With regard to the Trinity Burial Ground it can also be assumed that within its interior, burials dating between the late eighteenth and mid-nineteenth century will be present, which will not have been affected by later truncation.

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APPENDIX 1: ARCHAEOLOGICAL EVENT TABLE

Abbreviations:

BGL – below ground level

mOD – metres above Ordnance Datum

HFA – Humber Field Archaeology

HM – Hull Museums

HAU – Humberside Archaeology Unit/Humberside Archaeological Unit

YAT – York Archaeological Trust

NAA – Northern Archaeological Associates

MAP – MAP Archaeological Consultancy Ltd

Site no.	Site Name	Datum Number	Site Code	Event Type	Year	Organisation	Source	Easting	Northing	Top Height Modern (in mOD/BGL)	Bottom Height Modern (in mOD/BGL)	Top Height Made Ground (in mOD/BGL)	Bottom Height Made Ground (in mOD/BGL)	Top Height Cellarage (in mOD/BGL)	Bottom Height Cellarage (in mOD/BGL)	Level of Waterlogging (in mOD/BGL)	Top Height Archaeology (in mOD/BGL)	Bottom Height Archaeology (in mOD/BGL)	Top of Geological Deposits (in mOD/BGL)	Description of Geological Deposits	Depth Of Intervention in metres (BGL)	Confidence	Confidence Comments	Brief Archaeological Description
1	Puffin Crossings on Castle Street (A63)	Pit 1 TA 0946 2845	PO242	Watching Brief	1994	YAT	Hunter-Mann 1994	509476.103	428457.479	0.00mBGL	0.60mBGL								Not encountered	Not encountered	0.60mBGL	Moderate	Original report available; information within is good but with no reference to heights in mOD limiting usefulness	Only topsoil encountered
	Puffin Crossings on Castle Street (A63)	Pit 2 TA 0961 2846	PO242	Watching Brief	1994	YAT	Hunter-Mann 1994	509610.447	428467.478	0.00mBGL	1.5mBGL						1.50mBGL	2.50+BGL	Not encountered	Redeposited alluvium	2.50mBGL	Moderate	Original report available; information within is good but with no reference to heights in mOD limiting usefulness	1m topsoil/silt clays over 600mm diam culvert and wall foundations truncating 1.5m of dark grey silt clays
	Puffin Crossings on Castle Street (A63)	Pit 3 TA 0960 2844	PO242	Watching Brief	1994	YAT	Hunter-Mann 1994	509609.953	428443.614	0.00mBGL	2.00mBGL								2.00m+BGL	Redeposited alluvium	2.50mBGL	Moderate	Original report available; information within is good but with no reference to heights in mOD limiting usefulness	Road and marine wall foundations and rubble to 2m, redep alluvium below
	Puffin Crossings on Castle Street (A63)	Pit 4 TA 0974 2844	PO242	Watching Brief	1994	YAT	Hunter-Mann 1994	509745.543	428440.443	0.00mBGL	0.60mBGL								1.00m+BGL	Not encountered	0.60mBGL	Moderate	Original report available; information within is good but with no reference to heights in mOD limiting usefulness	Modern dumps and rubble only

Site no.	Site Name	Datum Number	Site Code	Event Type	Year	Organisation	Source	Easting	Northing	Top Height Modern (in mOD/BGL)	Bottom Height Modern (in mOD/BGL)	Top Height Made Ground (in mOD/BGL)	Bottom Height Made Ground (in mOD/BGL)	Top Height Cellarage (in mOD/BGL)	Bottom Height Cellarage (in mOD/BGL)	Level of Waterlogging (in mOD/BGL)	Top Height Archaeology (in mOD/BGL)	Bottom Height Archaeology (in mOD/BGL)	Top of Geological Deposits (in mOD/BGL)	Description of Geological Deposits	Depth Of Intervention in metres (BGL)	Confidence	Confidence Comments	Brief Archaeological Description
	Puffin Crossings on Castle Street (A63)	Pit 5 TA 0974 2845	PO242	Watching Brief	1994	YAT	Hunter-Mann 1994	509746.128	428450.488	0.00mBGL	1.00mBGL								Not encountered	Possible redeposited alluvium	2.00mBGL	Moderate	Original report available; information within is good but with no reference to heights in mOD limiting usefulness	1m of road foundations over mid/dark grey silt clays (poss alluvium)
	Puffin Crossings on Castle Street (A63)	Pit 6 TA 0974 2846	PO242	Watching Brief	1994	YAT	Hunter-Mann 1994	509746.802	428462.162	0.00mBGL	1.00mBGL								Not encountered	Not encountered	3.00mBGL	Moderate	Original report available; information within is good but with no reference to heights in mOD limiting usefulness	1m modern deposits over 2m of mid grey brown clays with occasional small to large stones (levelling/dumping)
2	A63 Castle Street, Hull	Trench 1 TA 0971 2848	KINCM:1994 .481	Evaluation	1994	YAT	Brinklow 1994	509715.575	428487.450	4.42mOD	3.70mOD								2.34mOD	Clay silts and natural variations	3.50mBGL	Very High	Original report available; good references within, some adaptation from nearly to scale illustrations	0.72m of modern material over 1.2m of C17th to C19th activity over up to 1.02m of possible internal town wall rampart over natural
	A63 Castle Street, Hull	Trench 2 TA 0974 2840	KINCM:1994.483	Evaluation	1994	YAT	Brinklow 1994	509749.963	428407.818	4.76mOD	4.10mOD					2.75mOD			Not encountered	Not encountered	3.48mBGL	High	Original report available; confusion in mOD heights for this trench throughout the text, some heights obtained from illustrations (NTS) rectified by HFA to be accurate	1m of modern material over 2.5 of ?medieval to post-medieval/C19th dumping and levelling, perhaps within a wide and deep hollow or ditch external to the town walls, natural geological deposits not encountered
	A63 Castle Street, Hull	Trench 3 TA 0981 2842	KINCM:1994 .484	Evaluation	1994	YAT	Brinklow 1994	509814.906	428429.588	4.19mOD	3.81mOD	3.81mOD	3.19mOD						Not encountered	Not encountered	1.18mBGL	Very High	Original report available; good references within, some heights obtained from illustrations (NTS) rectified by HFA to be accurate	0.38m of modern material over 0.62m of made ground over 0.18m of garden soils and an occupation layer, natural geological deposits not encountered
	A63 Castle Street, Hull	Trench 4 TA 0993 2841	KINCM:1994 .485	Evaluation	1994	YAT	Brinklow 1994	509931.997	428416.643	4.11mOD	3.75mOD	3.75mOD	3.59mOD						Not encountered	Not encountered	1.00mBGL	Very High	Original report available; good references within, some heights obtained from illustrations (NTS) rectified by HFA to be accurate	0.36m of modern material over 0.16m of made ground over 0.48 of late medieval and post-medieval building episodes, natural geological deposits not encountered
3	Excavations in Sewer Lane, Hull, 1974	Trench 1 TA 0981 2840	SL.74	Excavation	1974	HMs	Armstrong 1977	509818.295	428408.623	0.00mBGL		3.73mOD	3.01mOD	3.51mOD	2.86mOD	3.01mOD			2.66mOD	2 x dry land surfaces and silt intertules over sterile brown alluvium	2.55mBGL	Very High	Original report available; good references within, some heights obtained from illustrations (NTS) rectified by HFA to be accurate	0.61m of made ground over 2.25m of archaeology ranging from C13th rural, Milnecroft field boundaries turning into demarcated areas (early wooden fencing etc) later into brick wall boundaries. Also pits, C16 - C19 brick structures, floors and cellars.
4	Excavations in Hull 1975-76	Trench 1TA 0987 2843	MY75	Excavation	1975	HAU	Ayers and Roney 1993	509874.580	428431.312	4.29mOD	3.80mOD	4.00mOD	3.50mOD	4.06mOD	3.02mOD				2.79mOD	Clay silt alluvium, possible warping	2.72mBGL	Very High (for Area I)	Original report available; good references within for Area I (Very High), Area II is not so useful (Very Low), some heights obtained from illustrations (NTS) rectified by HFA to be accurate for Area I, nothing useful from Area II	Two Areas: Area II has NO depth measurements and therefore little use: little early med occupation, some industry with increasing structural material later on. Area I has 0.5m of overburden plus 0.5m of made ground over a sequence of buildings from E C14

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5	Excavations in Hull 1975-76	Trench 1 TA 0993 2846	VL75	Excavation	1975	HAU	Marsh 1993	509938.264	428460.393	0.00mBGL	1.10mBGL			0.35mBGL	1.30mBGL	0.80mBGL	0.25mBGL	2.80mBGL	Not encountered	Disturbed natural clays deposits	2.75mBGL	Very Low	Original report available; poor references within regarding height data (<i>ie</i> none), potential to attempt to correlate with NAA04/50 site data for heights	C19 cellars on 2 street fronts disturbed earlier archaeology. Enough survived to show a longstanding E C14 large pit at the north, with later buildings to the south. By C15/16 structures began to appear overlying the pit with structural confusion in L C18	
6	Excavations in Hull 1975-76	Trench 1 TA 0998 2843	QU76	Excavation	1976	HAU	Ayers 1993	509984.986	428437.365	0.00mBGL							?@3.27mOD although undoubtedly higher (see confidence comments)	?@2.40mOD	Not encountered	Natural clays		Very Low	Original report available; poor references within regarding height data - there are two direct references - Phase I Queen Street frontage surface @2.40mOD but no thickness, other is Phase IIB Mid C14 top of wall at 3.27mOD but significant archaeology above	Significant modern cellarage disturbance. SW corner of a medieval goal was revealed, inc. garderobe. Buildings and tenements on Mytongate and Queen Street frontages, poss. Evidence for ?med gravel pathways. Late C13 to C17 recorded. Modern gas pipe installed during exc.	
7	Excavations in Hull 1975-76	Trench TA 1002 2841	BF76	Excavation	1976	HAU	Ayers 1993	510024.849	428419.915	0.00mBGL (?Between 4.00mOD and 4.20mOD in 1976)	0.70mBGL						0.4mBGL	2.50mBGL	Not encountered	Natural clays	2.45+mBGL	Very Low	Original report available; poor references within regarding height data (<i>ie</i> none), only depth of intervention available from illustrations (NTS) rectified by HFA to be accurate	L C13 naturally silted N-S waterway later accompanied by C14 formal Augustinian Friary garden (NW corner of). L C14 to mid C16 walls overlay former watercourse with evidence for later structural material above	
8	Excavations in Hull 1975-76	Trench TA 1004 2839	MG76A	Excavation	1976	HAU	Ayers 1993	510043.522	428398.088	0.00mBGL (?Between 4.00mOD and 4.20mOD in 1976)	0.50mBGL					min 2.62mOD	0.50mBGL	1.31mOD	?@2.40mOD	Natural clays	2.00+mBGL	Very Low	Original report available; poor references within regarding height data, depth of intervention available from illustrations (NTS) rectified by HFA, potential xref with MG76B for extra levels, bottom of arch from Fig 32 S.2 ditch 378	C14 layout of Augustinian Friary formal gardens in typical fashion: outer boundary demarcated with ditch and bank with rectangular subdivisions within. Exists between C14 to C16 with later structural material above	
9	Excavations in High Street and Blackfriargate	Trench 1 TA 1006 2839	MG76B (MGB)	Excavation	1976	HAU	Armstrong and Ayers 1987	510063.303	428397.454	0.00mBGL (?Between 4.00mOD and 4.20mOD in 1976)		4.40mOD	3.55mOD			@3.40mOD	4.20mOD	1.55mOD	2.81mOD	Laminated clays	2.85mBGL	Moderate	Original report available; some good references for lower height data, composite depth of intervention is suggested from several figs. Bottom of arch from Fig 39C, top of natural from Fig 148. Xref Fig 148 and Fig 15 Wytelard to find other totals	Location of Wytelard property on Blackfriargate (Monkgate). Gully post-1250, buildings post-1280 through to mid C15th with focus on eastern and western sides of property boundaries. Demolished and changed into a small industrial complex (function unknown)	
10	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 1 TA 0982 2833		Evaluation	1993	MAP	MAP 1994	509823.472	428329.335	0.00mBGL				5.13mOD	3.35+mOD				3.79mOD	Natural clays	1.85mBGL	Very High	Original report available; good references in text and illustrations	C18/C19 cellarage only onto natural deposits	
	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 2 TA 0982 2831		Evaluation	1993	MAP	MAP 1994	509822.253	428319.941	0.00mBGL				5.20mOD	2.95+mOD	3.00mOD				3.26mOD	Natural clays	2.20mBGL	Very High	Original report available; good references in text and illustrations	C19 cellarage overlying earlier ?late med/p-med brick wall onto natural clays

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	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 3 TA 0982 2831		Watching Brief	1993	MAP	MAP 1994	509822.977	428312.817	5.21mOD	5.00mOD						5.00mOD	4.21mOD	4.21mOD	Very High	Original report available; good references in text and illustrations	P-med or modern deposits onto natural clays	
	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 4 TA 0982 2831		Watching Brief	1993	MAP	MAP 1994	509827.579	428312.975	5.20mOD	3.90+mOD							Not encountered	Not encountered	Very High	Original report available; good references in text and illustrations	Modern brick wall and associated ashy dumping	
	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 5 TA 0983 2831		Watching Brief	1993	MAP	MAP 1994	509830.117	428313.909	5.20mOD	5.10mOD	5.10mOD	3.93mOD					Not encountered	Not encountered	Very High	Original report available; good references in text and illustrations	Modern and ?p-med structures overlying redeposited clay dumps	
	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 6 TA 0982 2831		Watching Brief	1993	MAP	MAP 1994	509828.601	428317.222	5.20mOD	3.90mOD						3.90mOD	3.48+mOD	Not encountered	Not encountered	Very High	Original report available; good references in text and illustrations	?P-med redeposited clay-based dumps underlying modern levelling and concrete
	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 7 TA 0982 2831		Watching Brief	1993	MAP	MAP 1994	509828.213	428319.865	5.25mOD	4.90mOD	4.90mOD	3.55+mOD					Not encountered	Not encountered	Very High	Original report available; good references in text and illustrations	?P-med redeposited clay-based dumps underlying modern levelling and concrete	
	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 8 TA 0983 2832		Watching Brief	1993	MAP	MAP 1994	509831.531	428320.629	5.25mOD	5.15mOD	5.15mOD	4.30mOD				4.30mOD	3.27mOD	3.27mOD	Very High	Original report available; good references in text and illustrations	Pmed/C17 pit with tile frags and animal metapodials (localised industry) cut into earlier layers of clay silts. Above lay p-med building debris dumping under the modern surfacing	
	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 9 TA 0983 2832		Watching Brief	1993	MAP	MAP 1994	509830.685	428323.947	5.27mOD	5.12mOD			5.12mOD	3.84+mOD			Not encountered	Not encountered	Very High	Original report available; good references in text and illustrations	C19 cellarage	
	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 10 TA 0983 2832		Watching Brief	1993	MAP	MAP 1994	509831.409	428329.470	0.00mBGL								Not encountered	Not encountered	Very High	Original report available, no trench description, no depth measurements and no illustrations	Post-medieval and modern building demolition debris only	
	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 11 TA 0983 2833		Watching Brief	1993	MAP	MAP 1994	509830.986	428332.924	0.00mBGL								Not encountered	Not encountered	Very High	Original report available, no trench description, no depth measurements and no illustrations	Post-medieval and modern building demolition debris only	

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	Archaeological Investigations at the Green Bricks Public House, Hull	Trench 12 TA 0982 2833		Evaluation	1993	MAP	MAP 1994	509827.001	428335.049	4.71mOD	4.01mOD					3.04mOD	4.01mOD	3.04mOD	3.04mOD	Natural clays	Very High	Original report available; good references in text and illustrations	?Med timber post (indicative of part of some structural assembly) driven into natural clays. Overlain by later ?med and p-med brick walls. In turn, thicker dumping deposit lay above with a singular pit cut into it. Sealed by concrete and cobbles.
11	Burnett House, Castle Street, Kingston upon Hull: Archaeological Evaluation Report	Trench 1 TA 0994 2846	BHH04	Evaluation	2004	NAA	NAA 2005	509941.085	428468.763	4.56mOD	3.76mOD	4.23mOD	2.98mOD	4.26mOD	3.46mOD	2.53mOD	4.26mOD	1.63mOD	2.88mOD	Natural alluvial clays	Very High	Original report available; good references in text and illustrations	E C14 clay dumps, brick floor surface, small pits and wooden stakes. Mid C14 to C16 regular brick walls (W-E and N-S), probably internal subdivisions. C16 wall and levelling/dumping also pits. C16-C18 demolition and new cellarage/walls, post C18 levelling
	Burnett House, Castle Street, Kingston upon Hull: Archaeological Evaluation Report	Trench 2 TA 0997 2846	BHH04	Evaluation	2004	NAA	NAA 2005	509975.508	428464.240	4.95mOD	2.30mOD	4.85mOD	3.05mOD	4.20mOD	2.60mOD	3.70mOD	4.20mOD	1.98mOD	2.85mOD	Natural clays	Very High	Original report available; good references in text and illustrations	Significant Modern and P-med cellarage separates stratigraphy of earlier archaeology. ?C14 N-S aligned ditch, later C14-C15 clay levelling and a brick lined well and poss. Med brick wall. C16-C18 brick cellar in NE. C19-C20 brick cellars and walls to S
12	Proposed Stakis Casino, Castle Street, Kingston upon Hull	Trench 1 TA 0994 2837	STK98	Evaluation	1998	HFA	Tibbles and Steedman 1999	509948.893	428378.632	4.82mOD	4.00mOD	4.82mOD	3.80mOD	3.80mOD	3.08mOD		4.15mOD	1.99mOD	1.99mOD	Alluvial clays	Very High	Original report available; good references in text and illustrations	L C15 to C17 pit in central sondage. C17-C18 'waste ground' layers, later occupation layers, poss. at the rear of a building returning to open ground. C18-C20 shows open ground/domestic gardens; later significant C19 brick walls/wells/cellars/culverts etc
	Proposed Stakis Casino, Castle Street, Kingston upon Hull	Trench 2 TA 0991 2839	STK98	Evaluation	1998	HFA	Tibbles and Steedman 1999	509914.239	428398.376	4.70mOD	4.10mOD	4.35mOD	3.80mOD	4.00mOD	3.32mOD		4.10mOD	1.84mOD	2.60mOD	Alluvial clays	Very High	Original report available; good references in text and illustrations	L C15-C17 significant limestone foundation, handmade brickwork with sub-divisions, floors and poss hearth. Clay dumps and a large waste pit to N. C17-C18 construction with clay dumps and small pits to N. C18-20 cellarage/coal store and walls
13	Blanket Row, Hull	Shaft T3 TA 0990 2835	BW/H97/BWH98	Excavation	1997/1998	NAA	Lee 2011	509902.005	428352.264	4.91mOD	3.45mOD			4.67mOD	3.45mOD	2.55mOD/3.45mOD	4.48mOD	1.90mOD	2.55mOD	"Original ground surface" ppt17	Very High	Original report available; good references in text and illustrations	A series of domestic buildings fronting onto the northern and southern sides of Blanket Row from C14. @ C16 occupation changes to small scale industry then remains fallow for 200 years until significant re-occupation in C18-C20 followed by demolition.

Site no.	Site Name	Datum Number	Site Code	Event Type	Year	Organisation	Source	Easting	Northing	Top Height Modern (in mOD/BGL)	Bottom Height Modern (in mOD/BGL)	Top Height Made Ground (in mOD/BGL)	Bottom Height Made Ground (in mOD/BGL)	Top Height Cellarage (in mOD/BGL)	Bottom Height Cellarage (in mOD/BGL)	Level of Waterlogging (in mOD/BGL)	Top Height Archaeology (in mOD/BGL)	Bottom Height Archaeology (in mOD/BGL)	Description of Geological Deposits	Depth Of Intervention in metres (BGL)	Confidence	Confidence Comments	Brief Archaeological Description
	Blanket Hull Row,	Trench 1 TA 0992 2835	BW/H00	Evaluation	2000	NAA	Lee 2011	509927.778	428355.311	0.00mBGL									Not encountered	?70.84mBGL (likely deeper)	Very Low	Original report available, poor references regarding measurement data and no useful section/profile illustrations	Probable C14 sill wall (0.24m high) overlain by later C17-C20 brick wall (0.60m high) on same alignment, other residual features ie. pits noted. Dangerous trench (due to collapse) therefore only limited information available. Depth of exc. Likely deeper.
	Blanket Hull Row,	Trench 2 TA 0995 2836	BW/H00	Evaluation	2000	NAA	Lee 2011	509951.681	428360.598	4.42mOD	3.35mOD								Not encountered	2.09mBGL (2.33mOD)	Very High	Original report available; good references in text and illustrations	W-E oriented mid to L C14 building with internal floors on N side of Blanket Row. Late C15 road found to have significant contemporary clay dumping underneath.
	Blanket Hull Row,	Trench 3 TA 0997 2836	BW/H00	Evaluation	2000	NAA	Lee 2011	509976.792	428364.875	0.00mBGL									Not encountered	0.78+mBGL (likely deeper)	Very Low	Original report available, poor references regarding measurement data and no useful section/profile illustrations	W-E oriented ?Med wall (uncertain date) with dumping either side on N side of Blanket Row. Significant modern intrusions
	Blanket Hull Row,	Trench 4 TA 0987 2834	BW/H00	Evaluation	2000	NAA	Lee 2011	509878.746	428345.247	0.00mBGL									Not encountered	1.40+mBGL (likely deeper)	Low	Original report available, poor to average references regarding measurement data and no useful section/profile illustrations	?probable C14+ building wall foundations on S side of Blanket row and robber trench of probable earlier Med building on N side of Blanket row. Evidence for C15 road in centre of trench. Later C19/C20 buildings above.
	Blanket Hull Row,	Pit 1 TA 0996 2835	BW/H02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509968.13	428357.527	0.00mBGL	0.20mBGL								Not encountered	1.00mBGL	Moderate	Original report available, average to good references for deposit/structure thickness data, no useful section/profile illustrations	Possible upper part of ?Med stone wall at 0.90mBGL, sealed by 0.7m of clay, post-med building remnants and demolition above
	Blanket Hull Row,	Pit 2 TA 0996 2835	BW/H02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509968.602	428353.758	0.00mBGL									Not encountered	1.00mBGL	Low	Original report available, poor references regarding measurement data and no useful section/profile illustrations	Post-medieval clays and silt sealed by rubble layers and a post-med brick wall
	Blanket Hull Row,	Pit 3 TA 0996 2834	BW/H02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509969.281	428349.004	0.00mBGL									Not encountered	1.00mBGL	Moderate	Original report available, average to good references for deposit/structure thickness data, no useful section/profile illustrations	Post-medieval brick wall and rubble dumping
	Blanket Hull Row,	Pit 4 TA 0996 2834	BW/H02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509969.911	428344.631	0.00mBGL									Not encountered	1.00+mBGL	Moderate	Original report available, average to good references for deposit/structure thickness data, no useful section/profile illustrations	Post-medieval brick wall and rubble dumping with clay layers

Site no.	Site Name	Datum Number	Site Code	Event Type	Year	Organisation	Source	Easting	Northing	Top Height Modern (in mOD/BGL)	Bottom Height Modern (in mOD/BGL)	Top Height Made Ground (in mOD/BGL)	Bottom Height Made Ground (in mOD/BGL)	Top Height Cellarage (in mOD/BGL)	Bottom Height Cellarage (in mOD/BGL)	Level of Waterlogging (in mOD/BGL)	Top Height Archaeology (in mOD/BGL)	Bottom Height Archaeology (in mOD/BGL)	Description of Geological Deposits	Depth Of Intervention in metres (BGL)	Confidence	Confidence Comments	Brief Archaeological Description
	Blanket Hull Row,	Pit 5 TA 0997 2834	BWH02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509970.420	428341.088	0.00mBGL								0.85+mBGL	Not encountered	Not encountered	Moderate	Original report available, average to good references for deposit/structure thickness data, no useful section/profile illustrations	Post-medieval brick wall ('T'-shaped) with C18/C19 artefacts recovered
	Blanket Hull Row,	Pit 6 TA 0997 2834	BWH02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509974.226	428341.747	0.00mBGL								0.80+mBGL	Not encountered	Not encountered	Moderate	Original report available, average to good references for deposit/structure thickness data, no useful section/profile illustrations	Probable post-med demolition rubble underlies a later brick floor with further rubble (likley C20) above.
	Blanket Hull Row,	Pit 7 TA 0997 2834	BWH02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509976.953	428342.047	0.00mBGL								1.00+mBGL	Not encountered	Not encountered	High	Original report available, good references to thickness of visible deposits	A series of two clay silt-based layers encountered. Interpretation unclear, either naturally occurring deposition or deliberate levelling
	Blanket Hull Row,	Pit 8 TA 0997 2834	BWH02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509979.950	428342.526	0.00mBGL								1.00+mBGL	Not encountered	Not encountered	High	Original report available, good references to thickness of visible deposits	A series of two clay silt-based layers encountered. Interpretation unclear, either naturally occurring deposition or deliberate levelling
	Blanket Hull Row,	Pit 9 TA 0998 2834	BWH02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509981.149	428347.528	0.00mBGL								1.00+mBGL	Not encountered	Not encountered	High	Original report available, good references to thickness of visible deposits	A series of two clay silt-based layers encountered. Interpretation unclear, either naturally occurring deposition or deliberate levelling
	Blanket Hull Row,	Pit 10 TA 0998 2835	BWH02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509980.370	428350.913	0.00mBGL								1.00+mBGL	Not encountered	Not encountered	High	Original report available, good references to thickness of visible deposits	A series of two clay silt-based layers encountered. Interpretation unclear, either naturally occurring deposition or deliberate levelling
	Blanket Hull Row,	Pit 11 TA 0997 2835	BWH02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509979.321	428355.765	0.00mBGL								1.00+mBGL	Not encountered	Not encountered	High	Original report available, good references to thickness of visible deposits	A series of two clay silt-based layers encountered. Interpretation unclear, either naturally occurring deposition or deliberate levelling
	Blanket Hull Row,	Pit 12 TA 0997 2836	BWH02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509978.093	428360.272	0.00mBGL								1.40+mBGL	Not encountered	Not encountered	Moderate	Original report available, average to good references for deposit/structure thickness data, no useful section/profile illustrations	Cobbled surface and med sandstone wall remnants. Sealing clay layer contained C13/C14 pottery. Post-med rubble overlying this.
	Blanket Hull Row,	Pit 13 TA 0997 2835	BWH02/BW H03	Watching Brief	2002/2003	NAA	Lee 2011	509976.505	428359.793	0.00mBGL									Not encountered	Not encountered	Very Low	Original report available, inconclusive archaeological data	Backfilled with concrete prior to archaeological examination

Site no.	Site Name	Datum Number	Site Code	Event Type	Year	Organisation	Source	Easting	Northing	Top Height Modern (in mOD/BGL)	Bottom Height Modern (in mOD/BGL)	Top Height Made Ground (in mOD/BGL)	Bottom Height Made Ground (in mOD/BGL)	Top Height Cellarage (in mOD/BGL)	Bottom Height Cellarage (in mOD/BGL)	Level of Waterlogging (in mOD/BGL)	Top Height Archaeology (in mOD/BGL)	Bottom Height Archaeology (in mOD/BGL)	Description of Geological Deposits	Depth Of Intervention in metres (BGL)	Confidence	Confidence Comments	Brief Archaeological Description
	Blanket Hull	Pit 14 TA 0997 2835	BWH02/BWH03	Watching Brief	2002/2003	NAA	Lee 2011	509974.886	428359.403	0.00mBGL								0.95+mBGL	Not encountered	Moderate	Original report available, average to good references for deposit/structure thickness data, no useful section/profile illustrations	Clay layer overlain by cobbled surface (same as Pit 12) with same wall street frontage as found in Pit 12. Sealed by clay and later post-med rubble.	
	Blanket Hull	Pit 15 TA 0997 2835	BWH02/BWH03	Watching Brief	2002/2003	NAA	Lee 2011	509971.710	428358.535	0.00mBGL								0.90+mBGL	Not encountered	Moderate	Original report available, average to good references for deposit/structure thickness data, no useful section/profile illustrations	Clay layer overlain by cobbled surface (same as Pit 12) with same wall street frontage as found in Pit 12. Sealed by clay and later post-med rubble. The wall had been truncated by C19/C20 ceramic drain.	
14	Queen Street, Hull	Trench 1 TA 1001 2834	HQS90	Evaluation	1990	HAU	Atkinson, Tibbles and Evans 1990	510016.155	428347.259	4.49mOD	4.10mOD	4.10mOD	3.60mOD	4.10mOD	3.04mOD		3.79mOD	1.54mOD	2.66mOD	3.71mBGL (0.78mOD)	Very High	Original report available; good references in text and illustrations	L C13 to C14 timber framed low sill walls and clay dumps, gap in C15 occupation (ie. none), C16-C17 boundary walls, garden deposits, well and buildings with C18-C20 walls, culverts, cellars and demolition
	Queen Street, Hull	Trench 2 TA 1002 2834	HQS90	Evaluation	1990	HAU	Atkinson, Tibbles and Evans 1990	510028.832	428347.629	4.49mOD	4.10mOD	4.10mOD	3.60mOD	4.10mOD	2.86mOD		3.76mOD	2.65mOD	2.66mOD	1.84mBGL (2.66mOD)	Very High	Original report available; good references in text and illustrations	L C13 to C14 stone foundations at N end of trench, gap in C15 occupation (ie. none), C16-C17 boundary walls, garden deposits, well and buildings with C18-C20 walls, culverts, cellars and demolition
15	Bonus Electrical Site, Humber Street, Hull	Trench 1 TA 1013 2837	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510130.059	428378.010	4.80mOD	4.70mOD					2.95mOD	4.16mOD	2.08mOD	2.08mOD	2.72mBGL (2.08mOD)	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	C13/C14 clay dumping followed by Med walls which continue into P-Med period together with a tile on edge hearth. Later demolition with C18/C19 brick structures leading to modern demolition
	Bonus Electrical Site, Humber Street, Hull	Trench 2 TA 1012 2836	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510122.974	428367.100	4.80mOD	4.72mOD	4.72mOD	3.38mOD			2.33mOD	4.20mOD	2.33mOD	2.47mOD	3.13mBGL (1.67mOD)	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	C13/C14 dumping with followed by corner of substantial NW-Se aligned Med building (corner of). Integral garderobe present. Fell into disuse followed by further levelling and later C19/C20 buildings
	Bonus Electrical Site, Humber Street, Hull	Trench 3 TA 1011 2835	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510112.179	428357.699	4.80mOD	4.55mOD	4.55mOD	4.40mOD	4.40mOD	2.80mOD	2.90mOD	4.04mOD	2.70mOD	2.70mOD	2.10mBGL (2.70mOD)	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	C13/C14 dumping and levelling. Late med or P-Med buildng remnants and post-pads followed by demolition and levelling leading to a building sequence from C18 through C20

Site no.	Site Name	Datum Number	Site Code	Event Type	Year	Organisation	Source	Easting	Northing	Top Height Modern (in mOD/BGL)	Bottom Height Modern (in mOD/BGL)	Top Height Made Ground (in mOD/BGL)	Bottom Height Made Ground (in mOD/BGL)	Top Height Cellarage (in mOD/BGL)	Bottom Height Cellarage (in mOD/BGL)	Level of Waterlogging (in mOD/BGL)	Top Height Archaeology (in mOD/BGL)	Bottom Height Archaeology (in mOD/BGL)	Top of Geological Deposits (in mOD/BGL)	Description of Geological Deposits	Confidence	Confidence Comments	Brief Archaeological Description
	Bonus Electrical Site, Humber Street, Hull	Trench 4 TA 1010 2838	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510100.927	428383.786	4.60mOD	4.38mOD	4.38mOD	4.20mOD	4.20mOD	3.10mOD	3.04mOD	4.39mOD	2.44mOD	2.44mOD	Natural clays	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	C13/C14 levelling with timber framed building fronting onto Blackfriargate. Demolished, levelled then establishment of Little Lane (from Blackfriargate) with chalk rubble with contemp. wall foundations. C18-C20 saw culverting of Little Lane and cellars
	Bonus Electrical Site, Humber Street, Hull	Trench 5 TA 1010 2836	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510103.730	428365.669	4.80mOD	3.76mOD						4.29mOD	2.41mOD	2.41mOD	Natural clays	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	C13/C14 property division (bank) then area levelled with later med building evidence. Area fell into disuse then C18/C19 structures and modern intrusions
	Bonus Electrical Site, Humber Street, Hull	Trench 6 TA 1004 2836	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510046.850	428365.626	4.66mOD	4.28mOD						4.28mOD	2.10mOD	2.58mOD	Natural clays	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	C13/C14 levelling with a complex sequence of Medieval bulidings above running into Late Med and P-Med periods. Cellars dating from C17 and modern intrusions
	Bonus Electrical Site, Humber Street, Hull	Trench 7 TA 1008 2837	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510086.059	428375.815	4.50mOD	2.24mOD								2.24mOD	Natural clays (truncated)	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	Modern cellarage has removed any traces of earlier archaeology and truncated the underlying natural clays
	Bonus Electrical Site, Humber Street, Hull	Trench 8 TA 1008 2834	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510086.647	428341.207	4.72mOD	2.99mOD	4.41mOD	3.89mOD	4.43mOD	3.02mOD		4.43mOD	2.32mOD	2.32mOD	Natural clays	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	C13/C14 levelling with a medieval buliding and garderobe fronting onto Humber Street. Other hints of later med occupation in the trench with intrusive C18 major brick wall with alteration into C19 possibly C20.
	Bonus Electrical Site, Humber Street, Hull	Trench 9 TA 1006 2835	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510066.179	428359.447	4.80mOD	4.50mOD			4.49mOD	3.39mOD	@ 1.00mOD	4.25mOD	0.75mOD	2.46mOD	Natural clays	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	?C13/C14 levelling, robbed out wall foundations and floor surfaces present possibly contemporary or slightly later. Demolition related pits with significant amounts of med buliding material. Area levelled with C18/C19 buildings
	Bonus Electrical Site, Humber Street, Hull	Trench 10 TA 1007 2833	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510071.449	428331.899	4.92mOD	4.70mOD	3.35mOD		4.79mOD	3.55mOD		4.44mOD	2.21mOD	Not encountered	Not encountered	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	?Evidence of the medieval Humber Gate - stone and subsequent brick structure with several alterations. Also medieval building remnants, clay dumps and internal dumping and alterations.

Site no.	Site Name	Datum Number	Site Code	Event Type	Year	Organisation	Source	Easting	Northing	Top Height Modern (in mOD/BGL)	Bottom Height Modern (in mOD/BGL)	Top Height Made Ground (in mOD/BGL)	Bottom Height Made Ground (in mOD/BGL)	Top Height Cellarage (in mOD/BGL)	Bottom Height Cellarage (in mOD/BGL)	Level of Waterlogging (in mOD/BGL)	Top Height Archaeology (in mOD/BGL)	Bottom Height Archaeology (in mOD/BGL)	Top of Geological Deposits (in mOD/BGL)	Description of Geological Deposits	Confidence	Confidence Comments	Brief Archaeological Description
	Bonus Electrical Site, Humber Street, Hull	Trench 11 TA 1004 2832	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510046.495	428326.277	4.85mOD	4.35mOD			3.40mOD	2.90mOD		4.31mOD	2.31mOD	2.31mOD	Natural clays	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	Significant modern cellar intrusions. No med evidence encountered, but post-med drainage, walls and cellars were recorded.
	Bonus Electrical Site, Humber Street, Hull	Trench 12 TA 1002 2831	BSH2008	Evaluation	2008	HFA	George and Brigham 2008	510027.218	428318.239	4.50mOD	@4.25mOD			4.47mOD	2.80mOD	2.56mOD		2.00mOD	2.00mOD	?Natural clays	Very High	Interim report available, unpublished grey literature complete draft evaluation report and digital illustrations available (HFA internal only), good references in text and illustrations	Significant modern cellar intrusions. Probable med levelling/ground raising dumps with a stone wall foundation with later levelling and a horizontal timber beam remnant above (?late med). More levelling then brick walls and cellar floors of C18/C19+
16	Excavations in High Street and Blackfriargate	Trench 1 TA 1012 2842	HB73/76	Excavation	1973/1976	HAU	Armstrong and Ayers 1987	510127.798	428422.994	0.00mBGL (?Between 4.00mOD and 4.20mOD in 1976)	0.70mBGL (?@3.50mOD)					@0.50mBGL (?@3.70mOD)	?@4.00mOD in 1976	@3.20mBGL (?@1.00mOD)	1.70mBGL (?@2.50mOD)	Natural clays	Moderate	Original report available, poor references within the text, attempt to develop depths below ground level from illustration (NTS) rectified by HFA to be accurate. OD heights are notional based upon surrounding street spot heights	Records a total of three known medieval, late medieval and post-medieval series of domestic dwellings (Hotham/Celererman and Ousefleet). Significant late med structural remains incl. deep garderobes etc.
17	Myton Gate	Trench 1 TA 0971 2846	-	Excavation	1976	HAU/HMs	Ayers and Evans 2001	509707.445	428458.402	Approx. 4.57m OD	Approx. 0.3m BGL c.4.27m OD						Approx. 4.27m OD	Below 1.92m OD	Approx. 2.65m BGL (1.92m OD)	Natural clay	Moderate	Published account available, sparse references to heights within the text. OD heights are notional based upon surrounding street spot heights (1950s OS map)	Rapid recording of elements of medieval Myton Gate during two-hour window allowed by contractors. Parts of passage walls and drawbridge counterweight pit recorded, possible edge of town ditch seen cutting into natural clay.

APPENDIX 2: MOSTAP SAMPLES

The following table summarises the Mostap samples obtained from along the road-improvement corridor, with corresponding references and their depth BLG.

HFA Sample Ref No	Lankelma Ref	Site Survey Ref	Comments
1	MOS-1	SCPT 25 (3.29mOD)	13.7-14.7m BGL sealed tube
2	MOS-1	SCPT 25 (3.29mOD)	14.7-14.9m BGL disturbed tub
3	MOS-9	SCPT 07 (2.64mOD)	12.1-13.1m BGL sealed tube
4	MOS-9	SCPT 07 (2.64mOD)	13.1-13.3m BGL disturbed tub
5	MOS-A04B	SCPT 27(4.88mOD)	2.5-3.5m BGL sealed tube
6	MOS-A04B	SCPT 27(4.88mOD)	3.5-3.7m BGL disturbed tub
7	MOS-A06B	SCPT 27(4.88mOD)	3.5-4.5m BGL sealed tube
8	MOS-A06B	SCPT 27(4.88mOD)	4.5-4.7m BGL disturbed tub
9	MOS-A09B	SCPT 27(4.88mOD)	3.0-4.0m BGL sealed tube
10	MOS-A09B	SCPT 27(4.88mOD)	4.0-4.2m BGL disturbed tub
11	MOS-A09C	SCPT 27(4.88mOD)	4.2-5.2m BGL sealed tube
12	MOS-A09C	SCPT 27(4.88mOD)	5.2-5.4m BGL disturbed tub
13	MOS-A10B	SCPT 27(4.88mOD)	4.0-5.0m BGL sealed tube
14	MOS-A10B	SCPT 27(4.88mOD)	5.2-5.4m BGL disturbed tub
15	MOS-13	SCPT 22 (3.53mOD)	11.5-12.5m BGL sealed tube
16	MOS-13	SCPT 22 (3.53mOD)	12.5-12.7m BGL disturbed tub
17	MOS-14	SCPT 22 (3.53mOD)	13.5-14.5m BGL sealed tube
18	MOS-14	SCPT 22 (3.53mOD)	14.5-14.7m BGL disturbed tub
19	MOS-17	SCPT 16 (3.17mOD)	10.5-11.5m BGL sealed tube
20	MOS-3	SCPT 17 (3.07mOD)	11.0-12.0m BGL sealed tube
21	MOS-3	SCPT 17 (3.07mOD)	12.0-12.2m BGL disturbed tub
22	MOS-11	SCPT 13 (3.16mOD)	10.8-11.8m BGL sealed tube
23	MOS-11	SCPT 13 (3.16mOD)	11.8-12.0m BGL disturbed tub
24	MOS-16	SCPT 14 (3.70mOD)	10.0-11.0m BGL sealed tube
25	MOS-16	SCPT 14 (3.70mOD)	11.0-11.2m BGL disturbed tub
26	MOS-19	SCPT 10 (2.80mOD)	10.0-11.0m BGL sealed tube
27	MOS-19	SCPT 10 (2.80mOD)	11.0-11.2m BGL disturbed tub
28	MOS-15	SCPT 18 (3.27mOD)	11.0-12.0m BGL sealed tube
29	MOS-15	SCPT 18 (3.27mOD)	12.0-12.2m BGL disturbed tub
30	MOS-10	SCPT 23 (4.85mOD)	13.7-14.7m BGL sealed tube
31	MOS-17	SCPT 16 (3.17mOD)	11.5-11.7m BGL disturbed tub

APPENDIX 3: FINDS CATALOGUE

A3.1 POTTERY AND CLAY TOBACCO PIPE

Context	Intervention	Fabric*	Quantity	Wt (g)	Remarks	Date Range
1002	BH22D	PEAR	4	21	Three rim sherds (two join) of a bowl with blue TP on both sides and 'café au lait' rim edge, raised footring basal sherd with internal TP	First half nineteenth century
1002	BH22D	CPIP	7	23	Five stem fragments, two join and a fluted bowl of c 1810 to 1840	c 1810 to 1840
1003	BH22E	PEAR	1	27	Incomplete tea bowl, with blue fine painted chinoiserie décor on exterior, motif on interior base & painted marks under the base, imitating Chinese porcelain	c 1780-1815
1004	A10A	PEAR	1	7	Body sherd blue painted décor	First half nineteenth century
1009	BH01A:C	CPIP	5	7	One stem fragment and 4 fluted bowl sherds of c 1810 to 1840 (three join	c 1810 to 1840
1010	TP11B	SANIT	2	366	Toilet bowl rim, brown earthenware with white slip on inner rim	Mid- to late 19th century
1011	WS26C	FPWW	3	4	White earthenware sherds with blue slip/ paint on exterior, stops below rim	Late nineteenth to twentieth century
1012	TP14F	CPIP	13	69	Ten stem frags, three bowls, two complete one Hull type 1c and one 1d both c 1660-1680, the of the same period	c 1660-1680
1012	TP14F	UNST	1	13	? Gin bottle body sherd, with stamped 'B' in circle on shoulder, imported possibly Netherlands	Late eighteenth or nineteenth century
1012	TP14F	WEST	1	27	Baluster jug rim and neck, with frieze of décor around the neck, possibly grotesque mask	Seventeenth century
1012	TP14F	TIN2	2	44	Two plate sherds, one with floral scroll decoration, the other with line and other decoration	Late seventeenth to mid-eighteenth century
1012	TP14F	STF1	1	32	Cup, posset or jar base	Late seventeenth to early nineteenth century
1012	TP14F	GREG	1	6	Chafing dish sherd	Sixteenth-seventeenth century
1012	TP14F	GREB	2	11	Body sherds	Sixteenth to eighteenth century
1013	BH43E	CPIP	1	10	Complete bowl	c 1640-60
Total			45	667		

**Fabric codes*: the following are standard codes used to describe the fabrics of the ceramics reference collection housed within HFA. The fabric type series was initially developed by G Watkins (Watkins 1987, 53-181). Recent amendments have been made by P Didsbury and L M Wastling.

Code	Common Name	Comments
CPIP	Clay tobacco pipe	
FPWW	Factory-produced white wares	Nineteenth/twentieth century
GREB	Brown-glazed Red Earthenware	
GREG	Green-glazed Red Earthenware	
PEAR	Pearlware	
SANIT	Factory-produced sanitary wares	
STF1	Staffordshire Slipware	Yellow-bodied
TIN2	Tin-glazed Earthenware (blue)	With blue decoration
UNST	Unattributed Stoneware	
WEST	Westerwald Stoneware	German Import, Rhineland

A3.2 CERAMIC BUILDING MATERIAL

Context	Intervention	Fabric	Quantity	Wt (g)	Remarks	Date Range
1006	BF3AD	BRICK	1	549	Fragment, handmade; 3 inches thick (77mm), reused, bears two types of mortar, lime and one with black flecks and sand	Eighteenth to mid-nineteenth century
1007	BH4D	BRICK	1	854	Fragment, handmade, heavily burnt and blown post-usage; 3 inches thick x 4 inches wide (75 x 104mm), bears mortar with black flecks & sand	Eighteenth to mid-nineteenth century

A3.3 MISCELLANEOUS OBJECTS

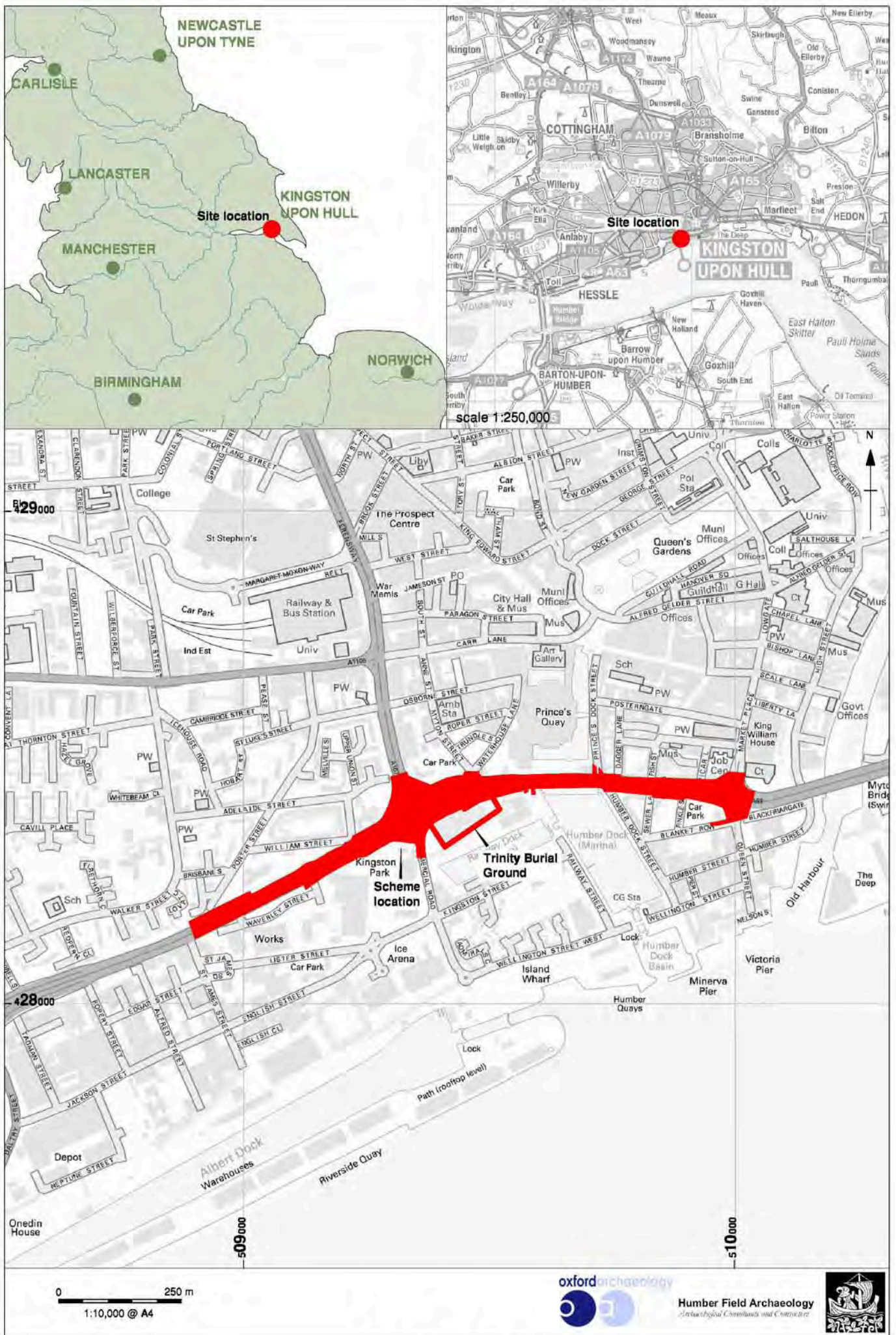
Context	Intervention	Object	Ref No	Dimensions	Remarks
1001	SCPT15A (C)	Implement handle	RF1	L 48mm W 12mm Th.12mm	Incomplete. Bone and iron. Whittle-tanged. Split down the centre to reveal part of the tang. Polished and bearing part of one flat end, undecorated
1010	TP11 B	Nail	RF32	L 80mm Shank 10 x 5mm Head 17 x 7mm	Iron. Rectangular sectioned shank, T-shaped head
1010	TP11 B	Asphalt concrete disc		Diam. 403mm Th. 100mm Depth of indent 5mm	Of bitumen/asphalt with densely packed sand and ?crushed rock aggregate filler. Bears two opposing indents at 180°, 5mm deep, which have the same shape as if the object had been cut in two and slightly offset by 5mm. Bears flow and sag lines on the upper surface due to moulded manufacture.

A3.4 ANIMAL BONE

Context	Intervention	Animal	Element	No of fragments	Weight (g)	Notes
1001	SCPT15A C	Unidentified	Juvenile small mammal ?fibula, unidentifiable small mammal jaw fragment and unidentified fragment	5	8	
1002	BH22 D	<i>Bos f. domestic</i> (cow)	Rib	1	24	Relatively young animal, unfused epiphysis, the other end obliquely sawn, butchery waste, green spots due to being deposited near copper
1008	BH13 C	Caprovid	Radius fragment	2	8	Both join
1009	BH01 A C	Caprovid	Tooth	1	5	
Total				9	45	

A3.5 OYSTER SHELL

Context	Intervention	Type	No of fragments	Notes
1011	WS26 C	<i>Ostrea edulis</i> L. (oyster)	11	Seven upper valves, four lower valves



[B] 1:105000 "MAY" Jan 2014

Figure 1: Site location

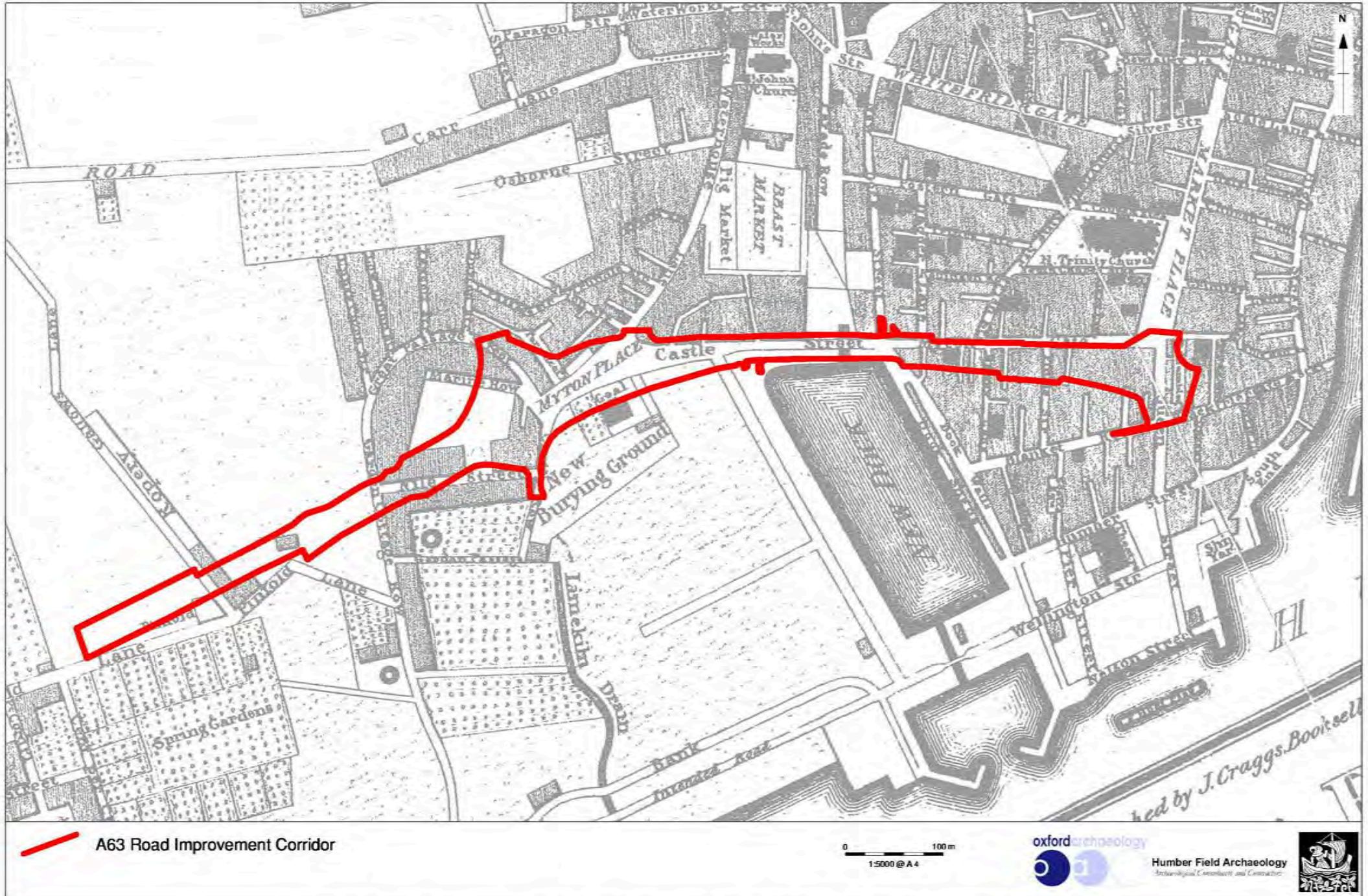


Figure 2: Road improvement corridor superimposed on J.Craggs' map of Kingston Upon Hull, 1817

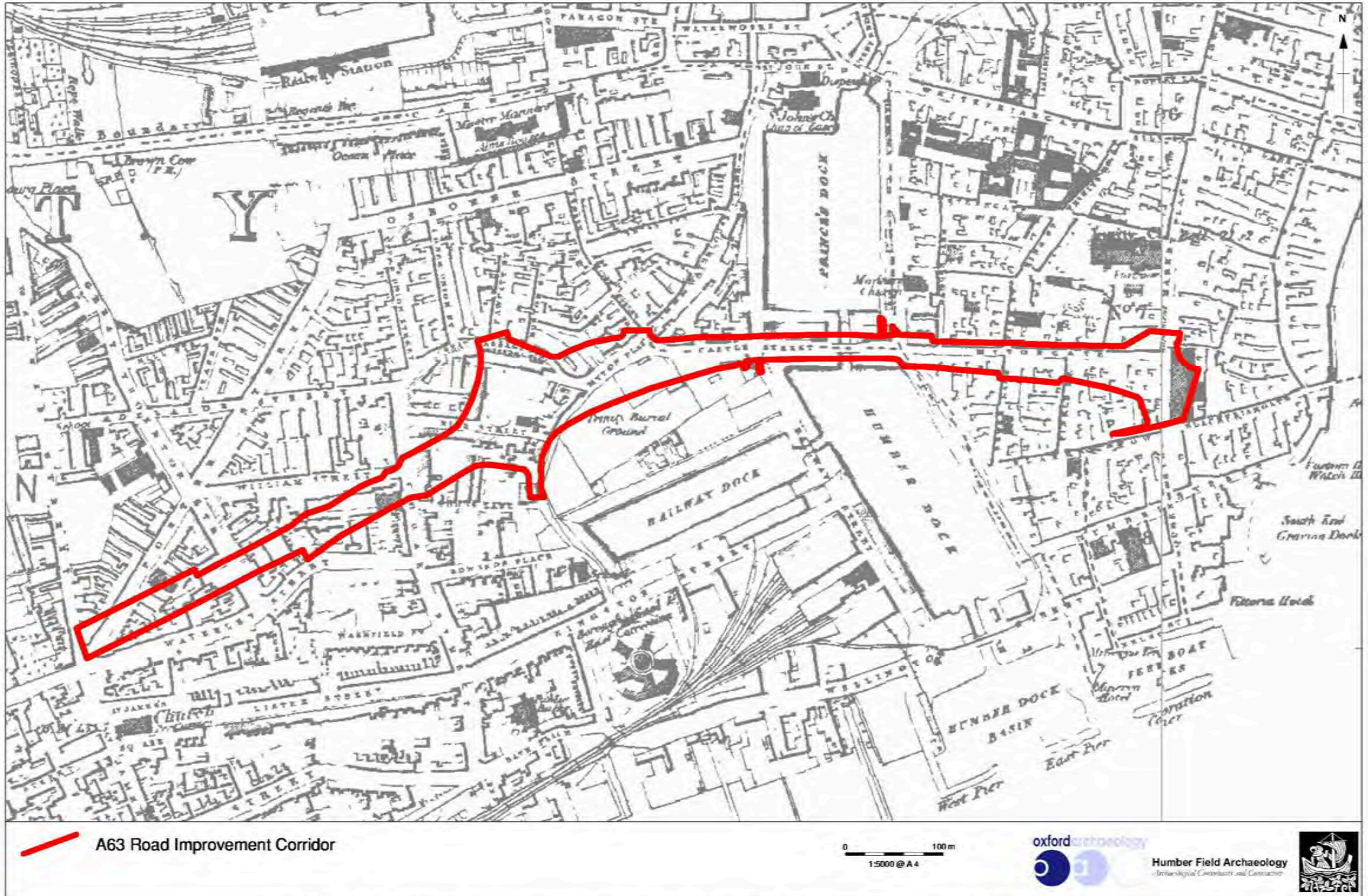


Figure 3: Road improvement corridor superimposed on the Ordnance Survey 6":1 mile map, 1855-6

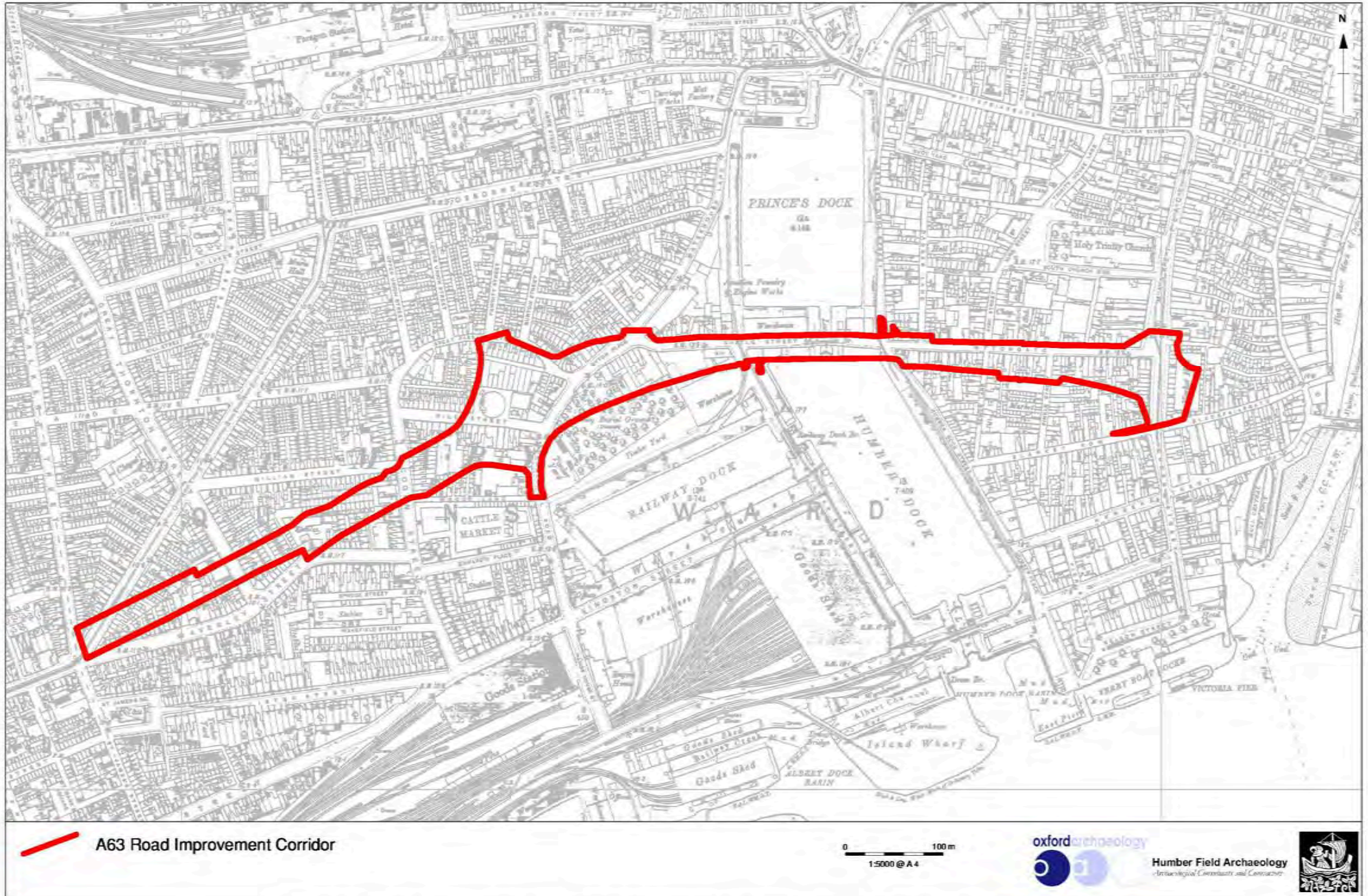


Figure 4: Road improvement corridor superimposed on the Ordnance Survey 6":1 mile map, 1886-93

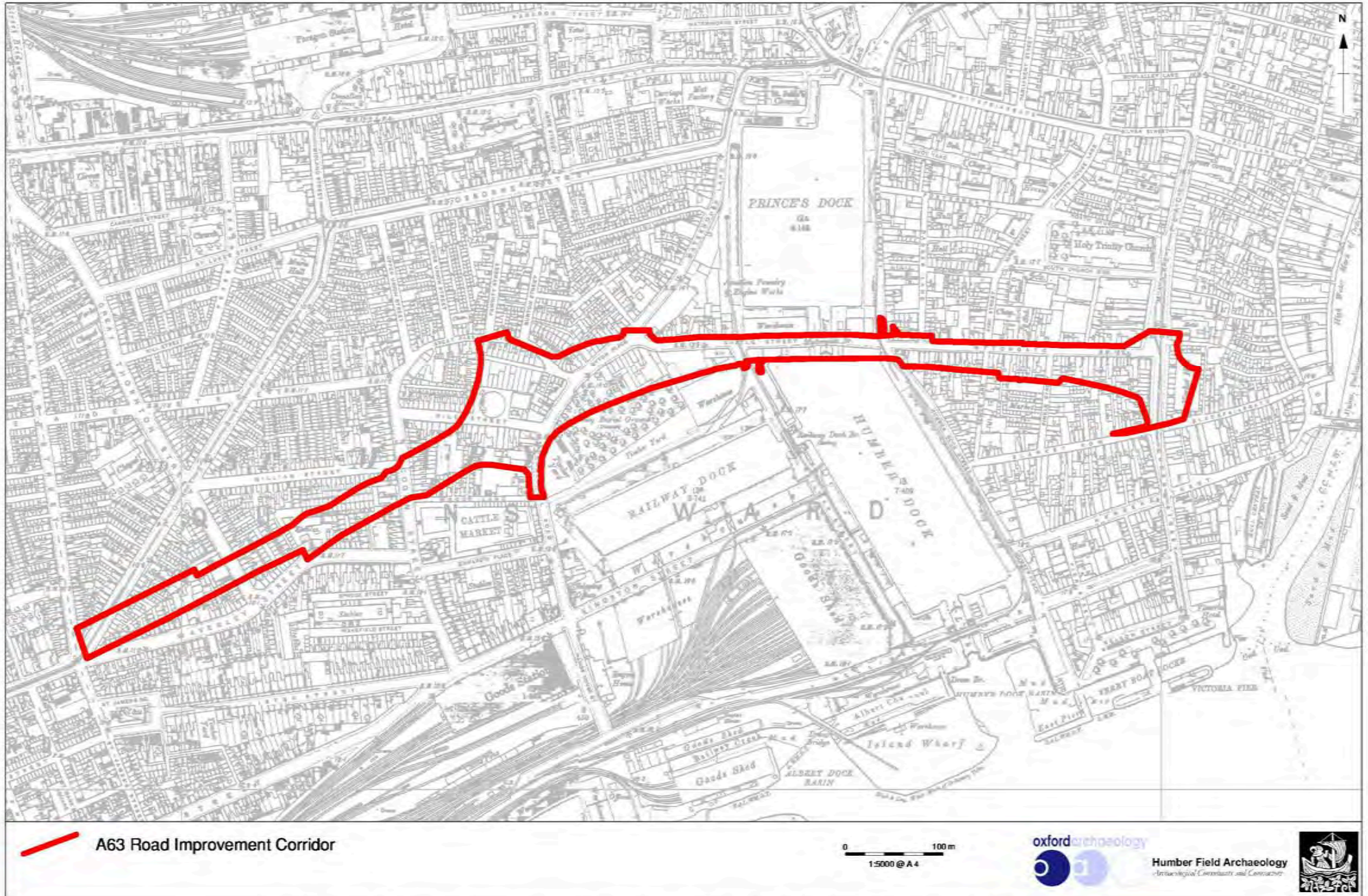


Figure 5: Road improvement corridor superimposed on the Ordnance Survey 6":1 mile map, 1927-8

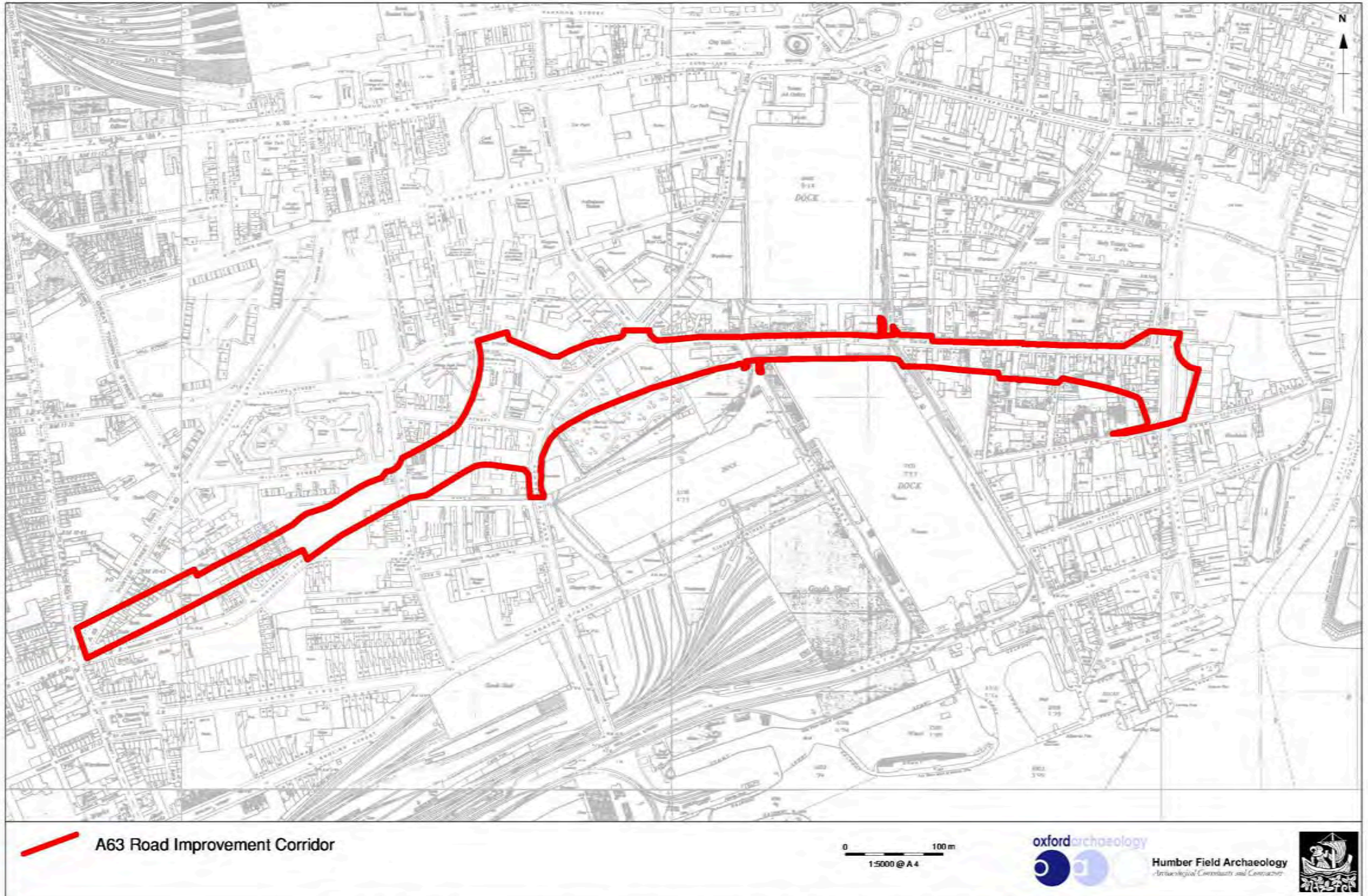


Figure 6: Road improvement corridor superimposed on the Ordnance Survey map, 1950-79

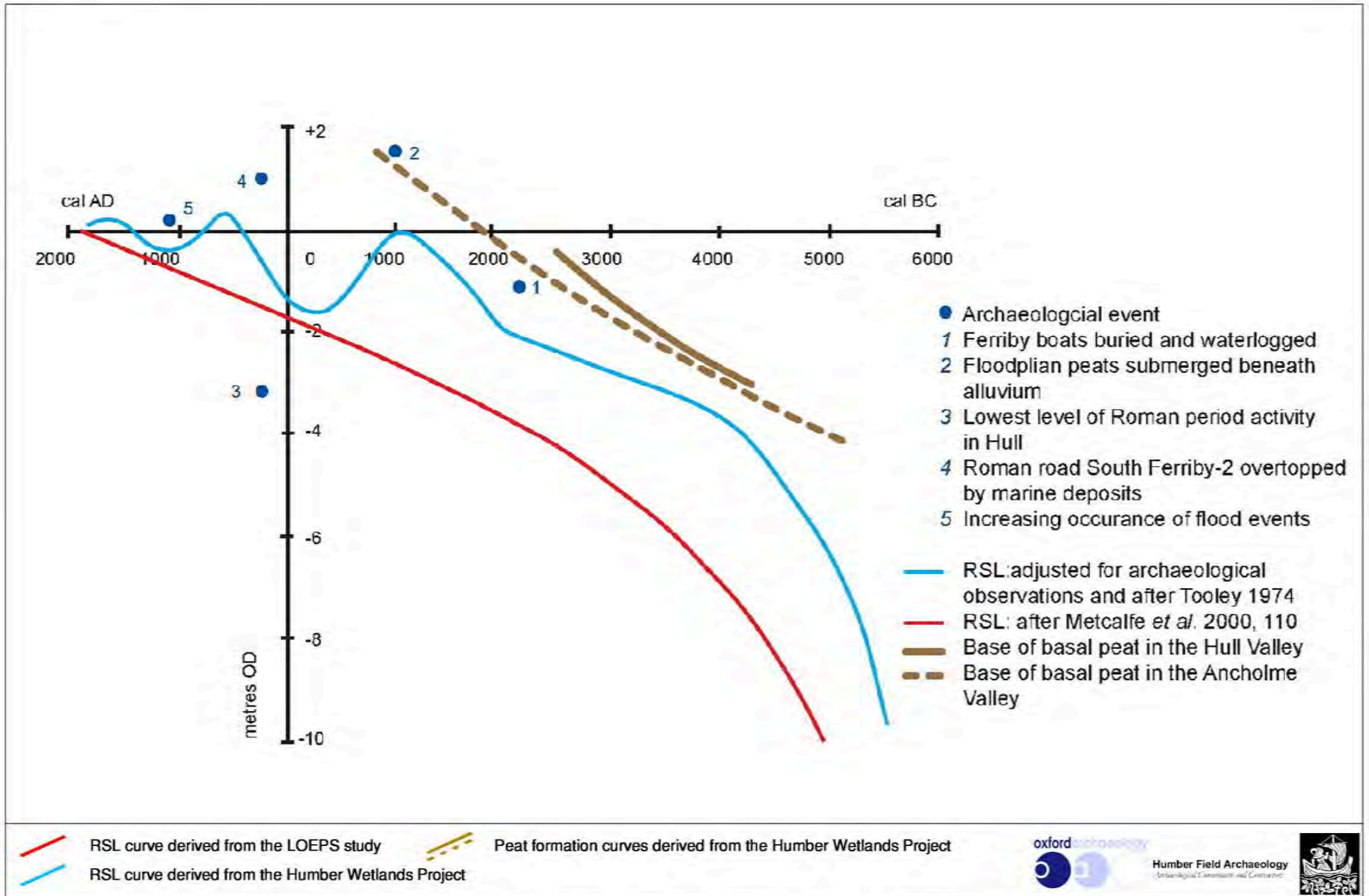


Figure 7: Age-altitude models of relative sea-level (RSL) change and the growth of floodplain peat in the Humber

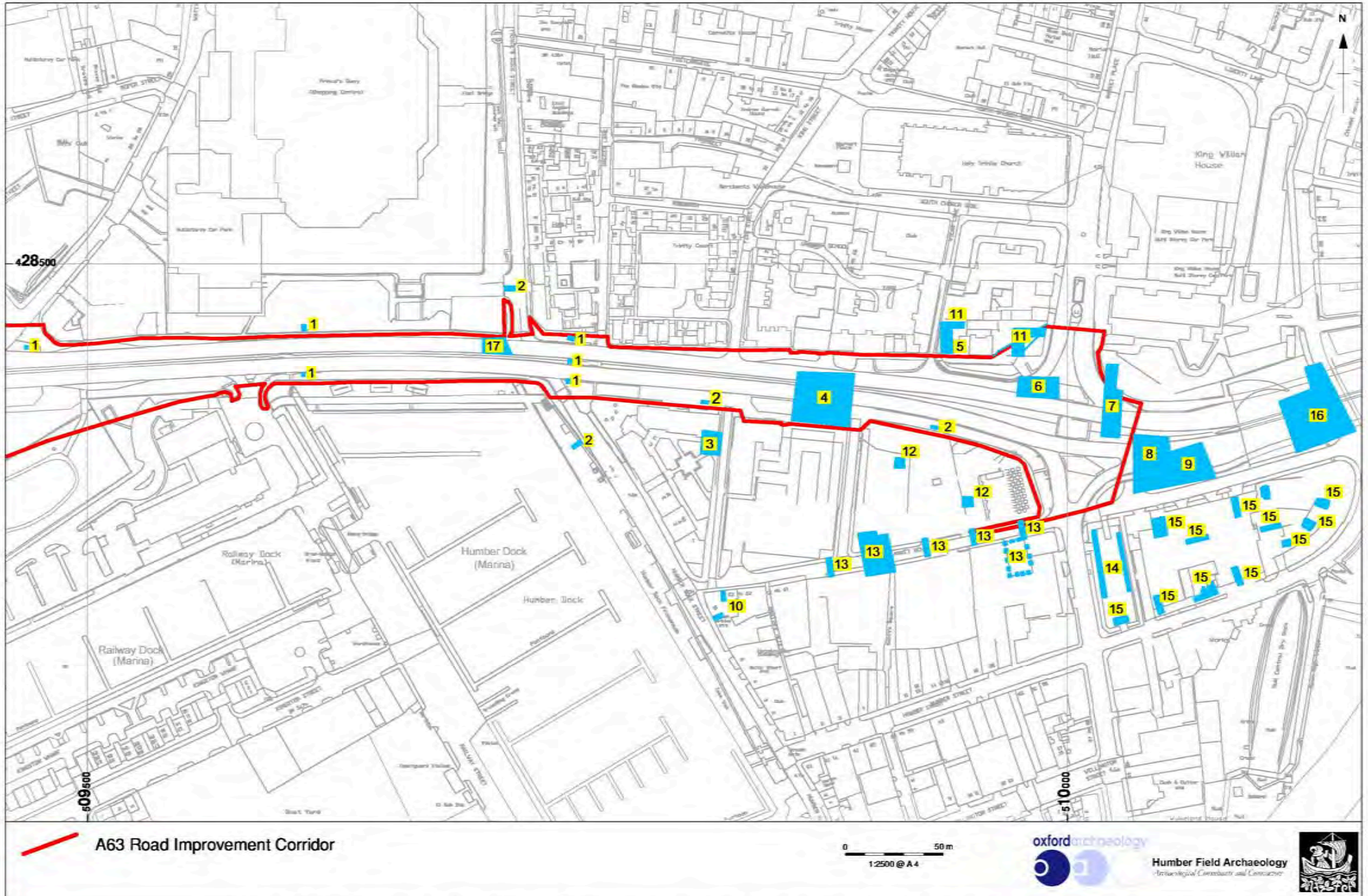


Figure 8: Locations of the archaeological excavations considered by the enhanced desk-based assessment

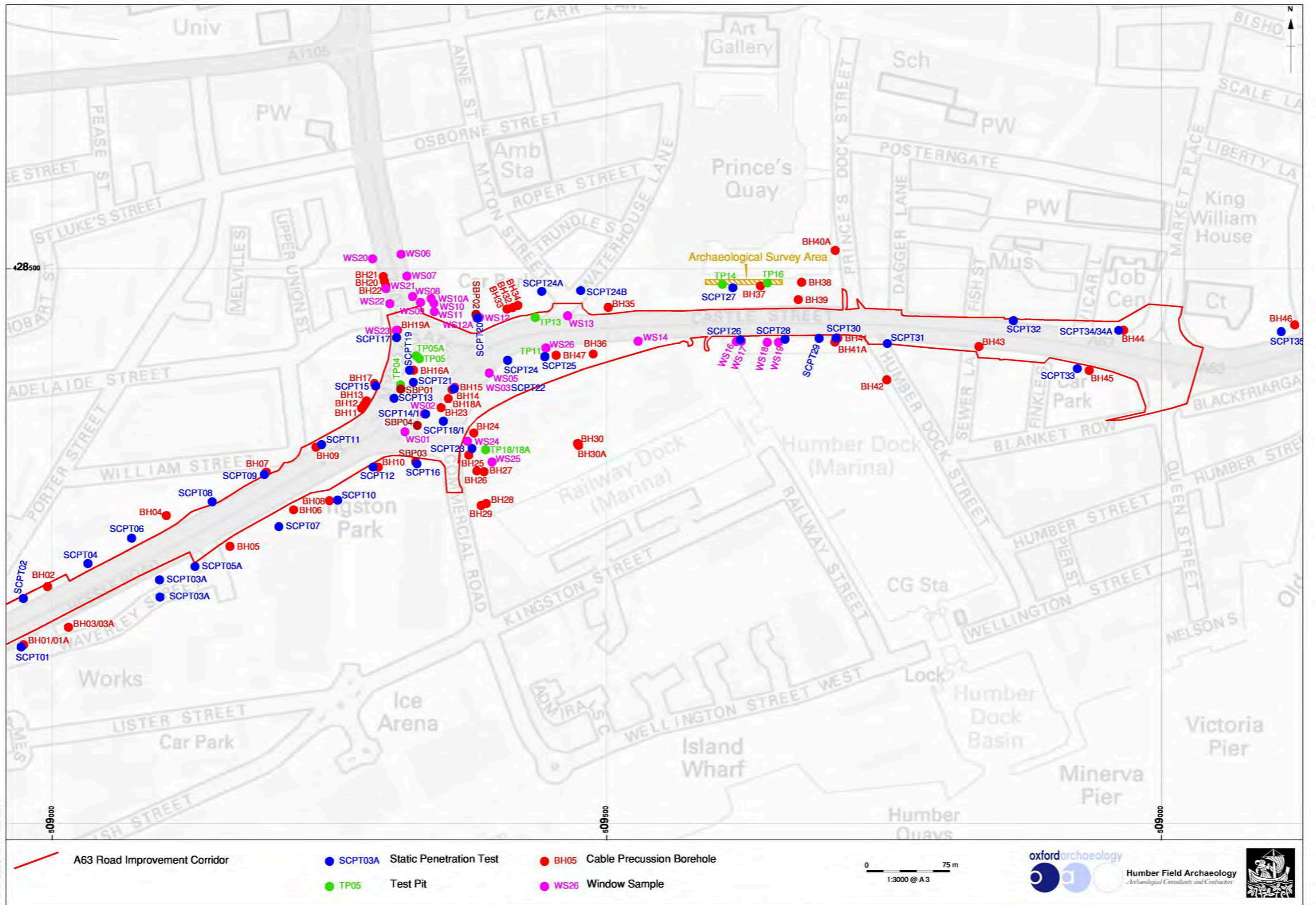


Figure 9: The locations of the archaeologically monitored SI interventions

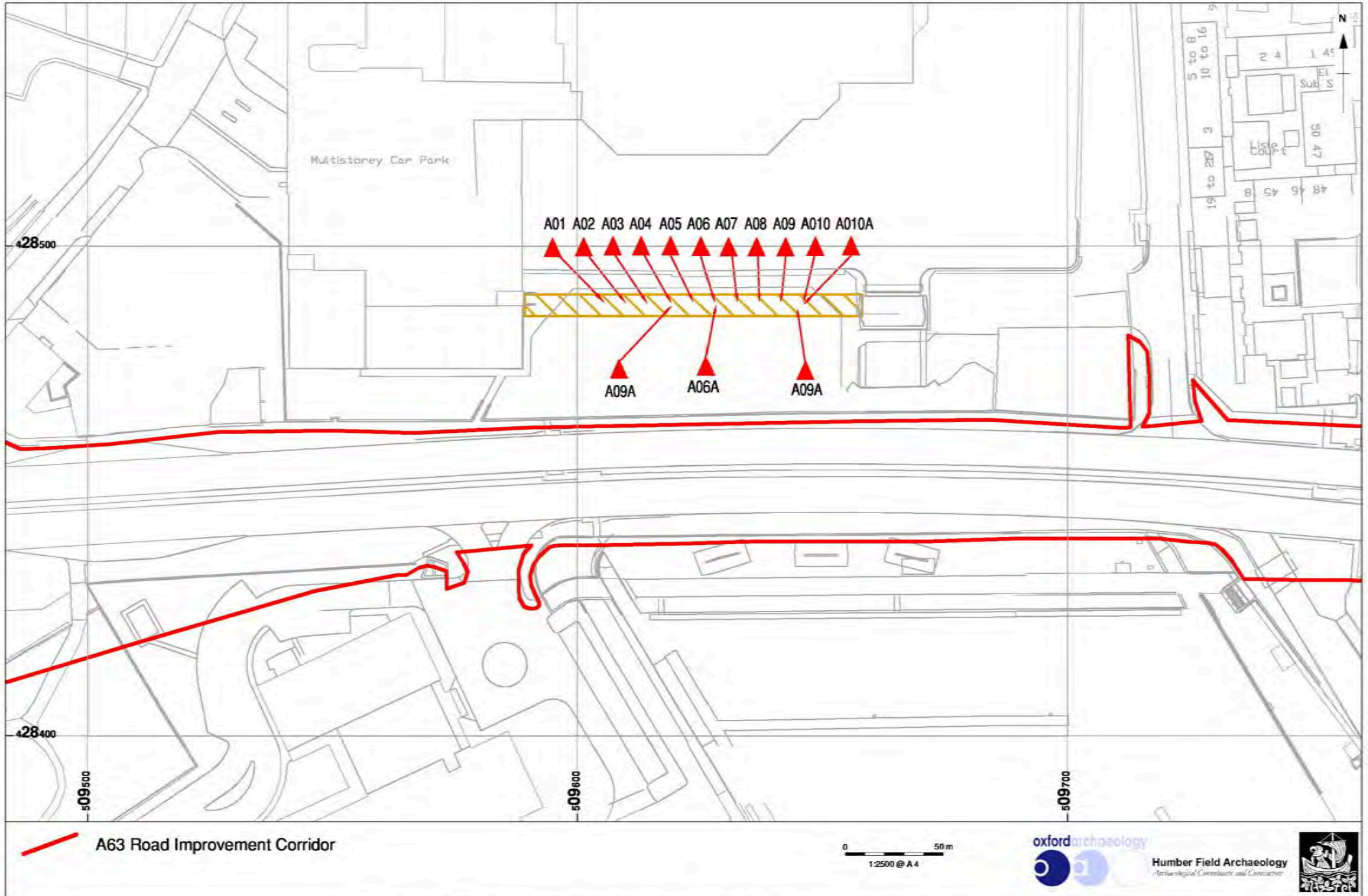


Figure 10: The monitored interventions within the Archaeological Survey Area

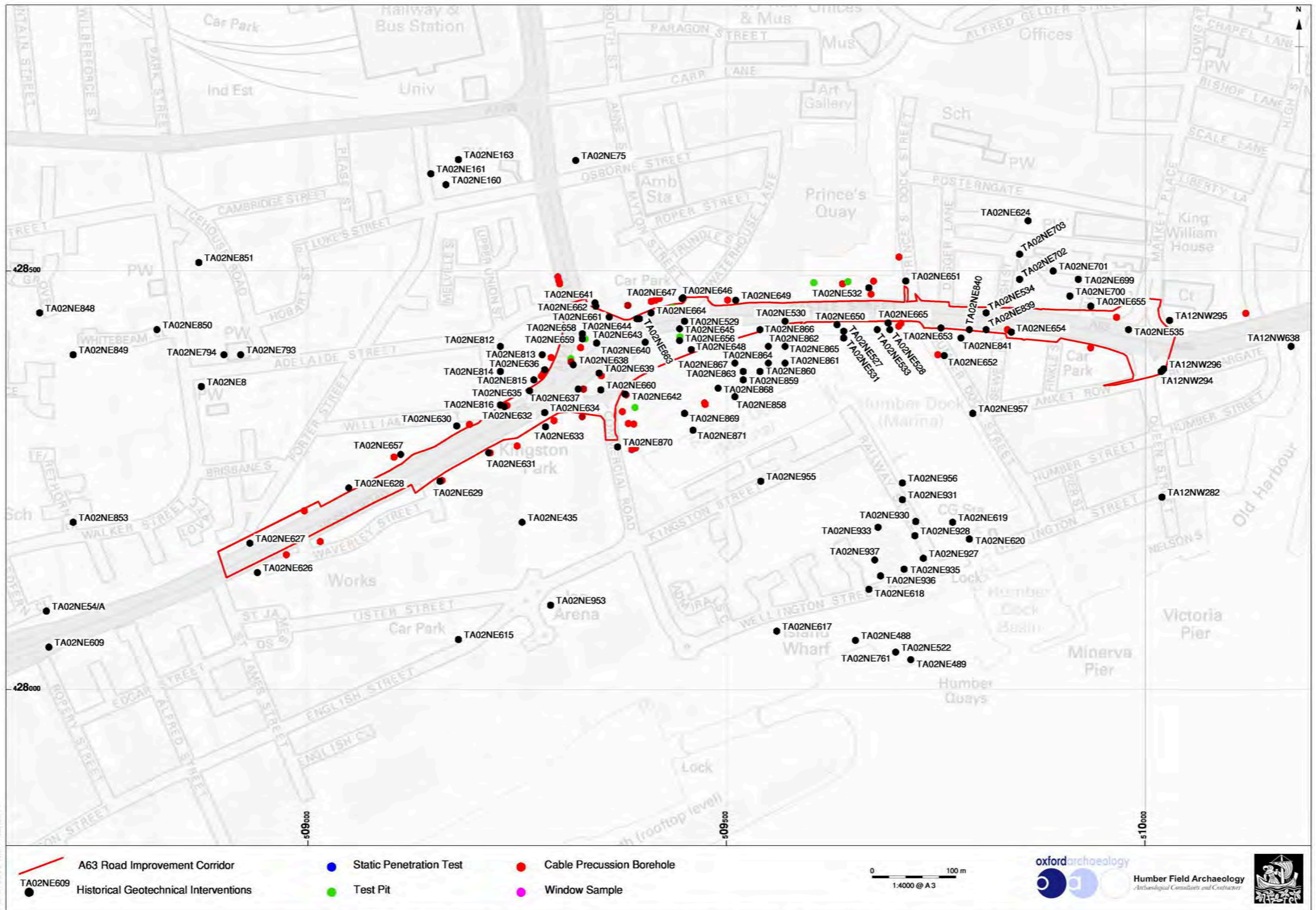


Figure 11: The locations of the historical geotechnical interventions used within the geotechnological deposit model

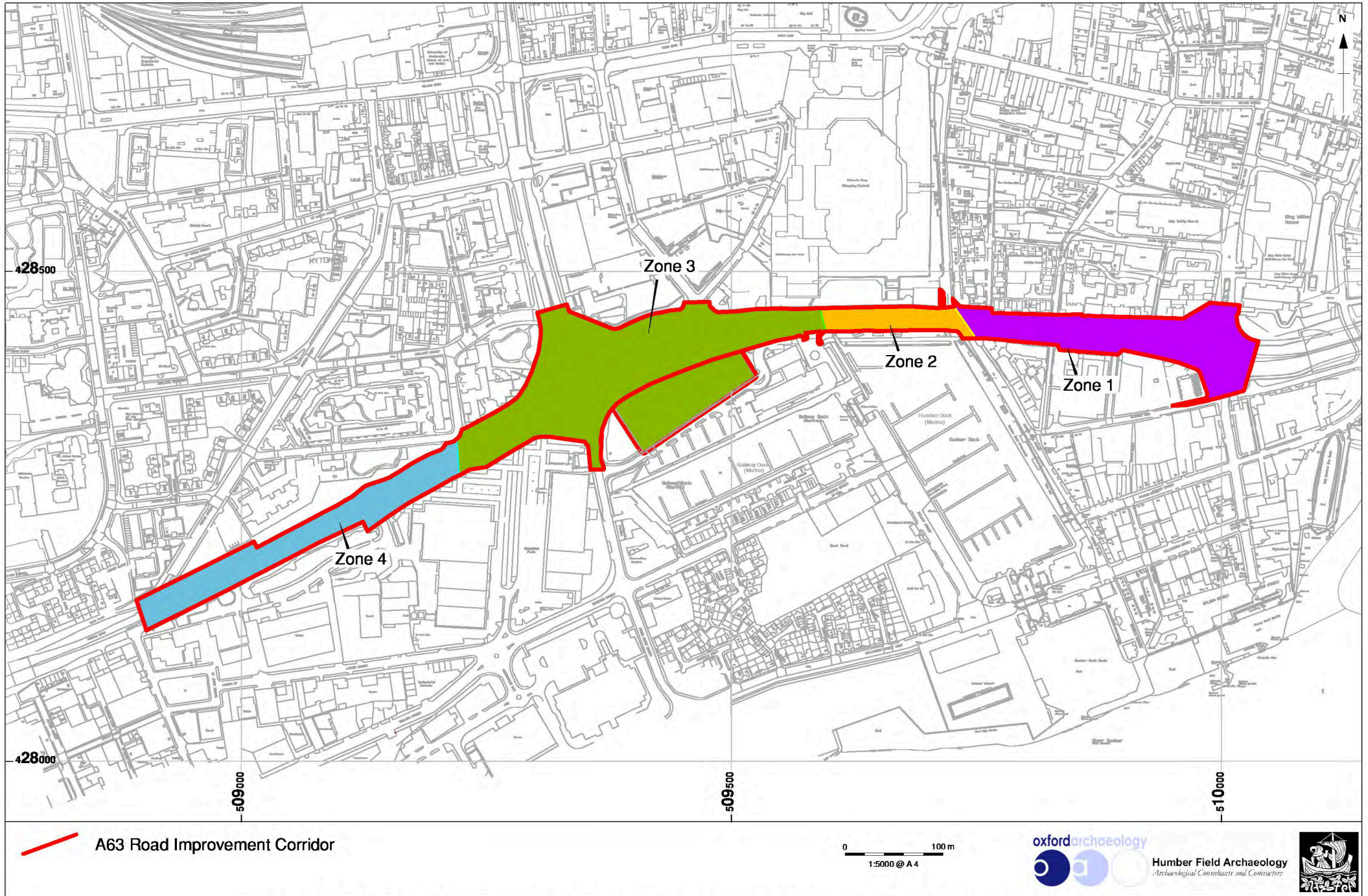


Figure 12: Archaeological zones within the study area identified by the enhanced desk-based assessment

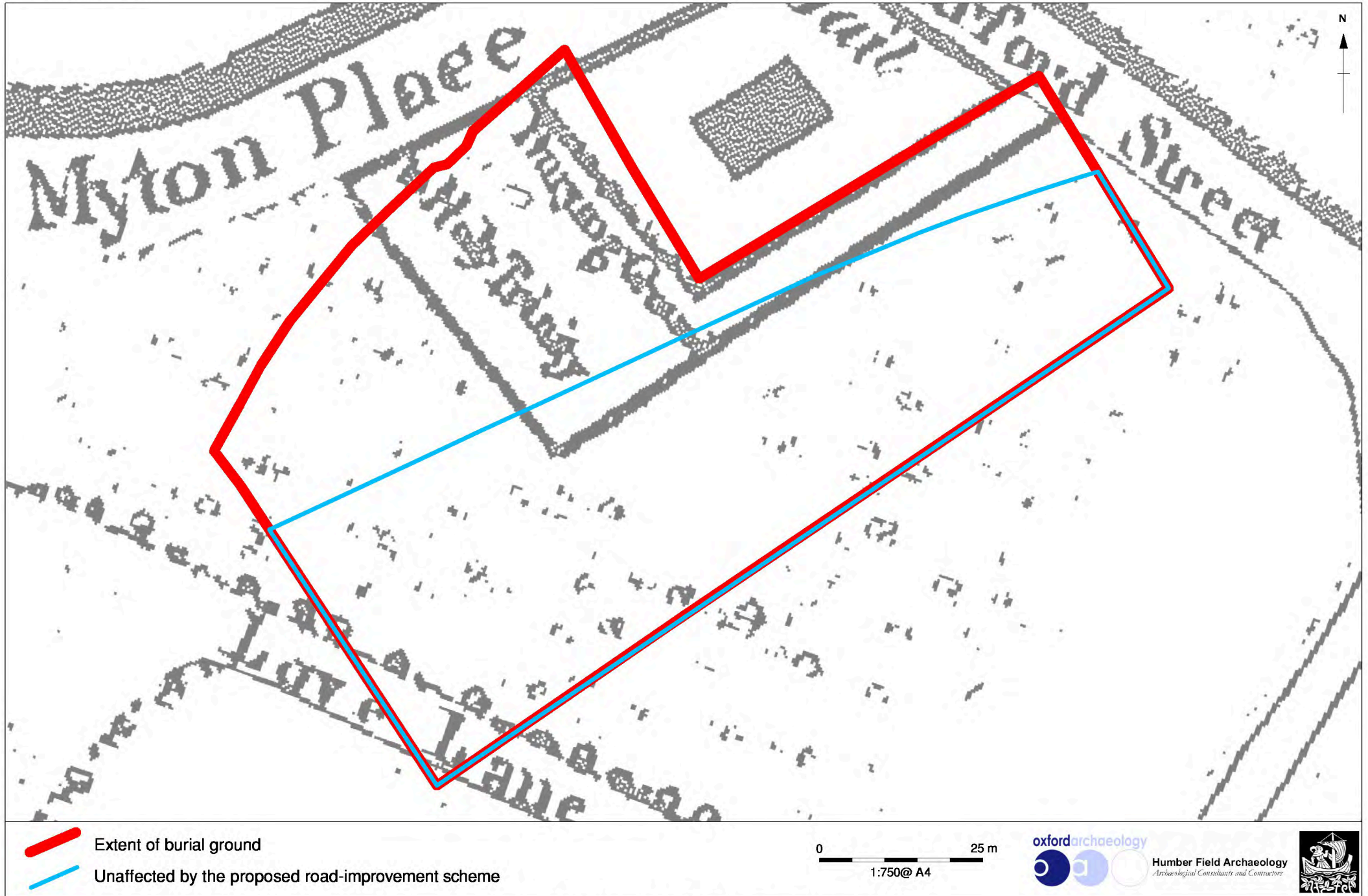


Figure 13: An extract from Hargraves' map, 1791

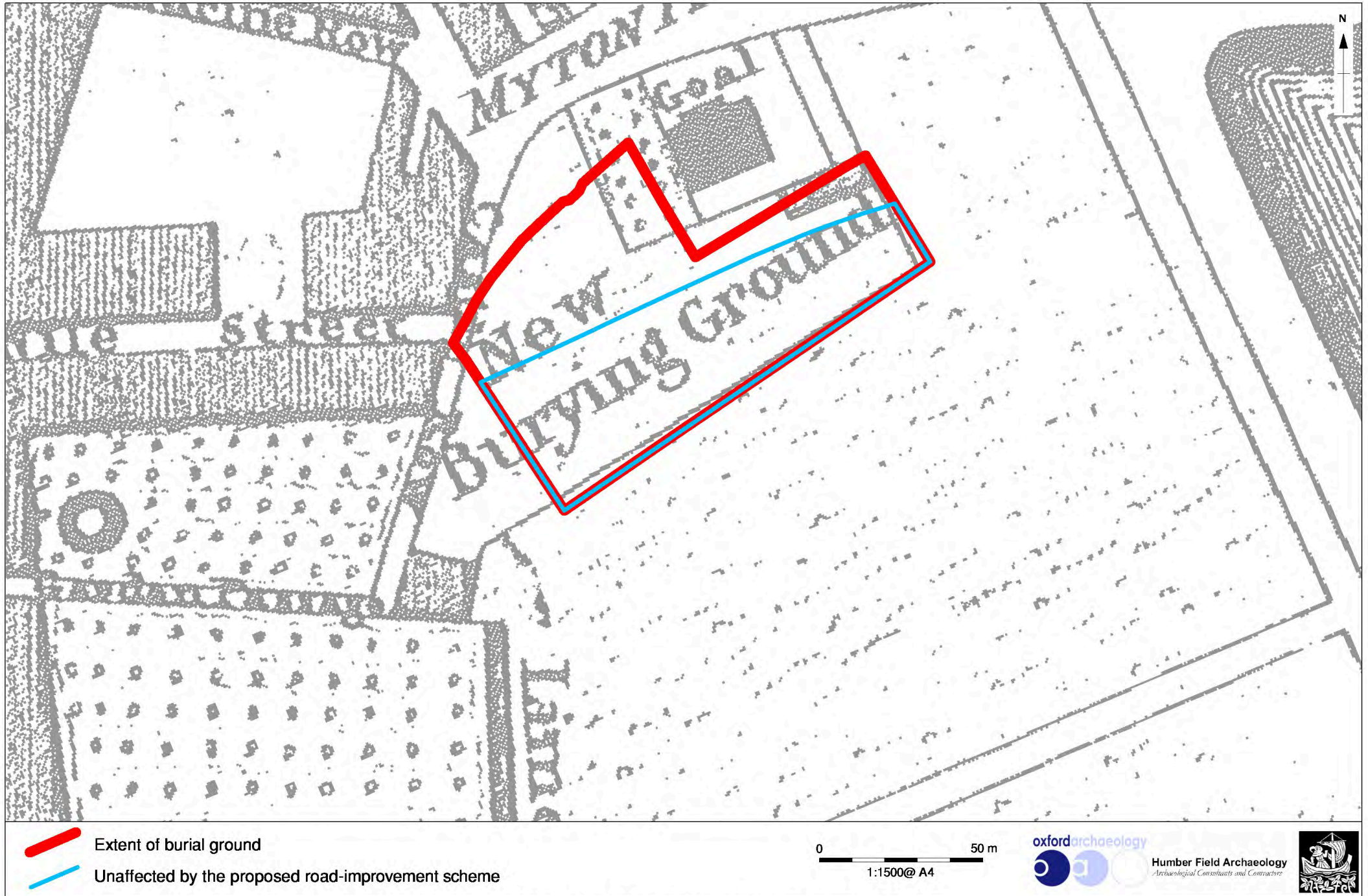


Figure 14: An extract from Craggs' map, 1817

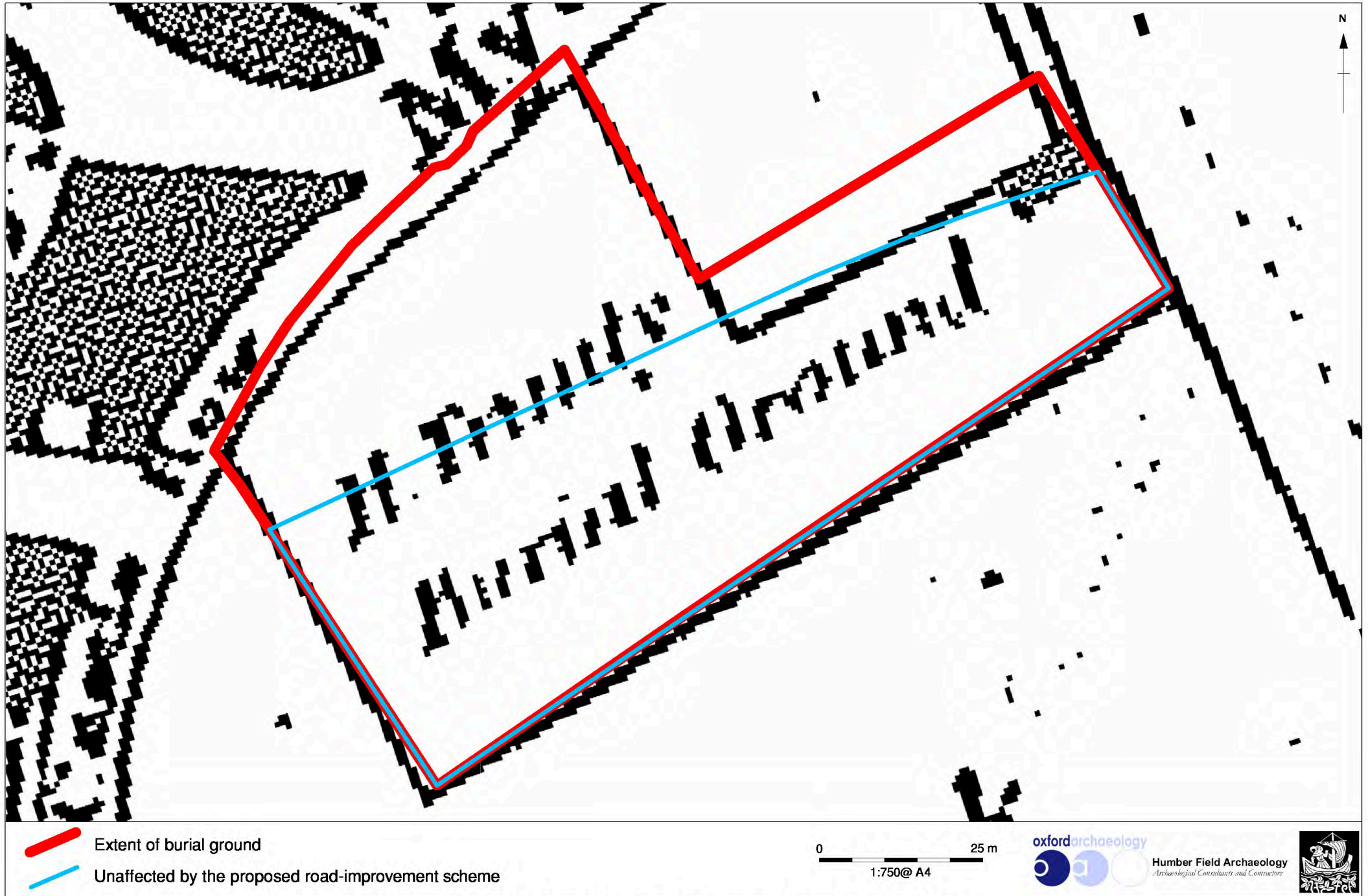


Figure 15: An extract from Goodwill and Lawson's map, 1842

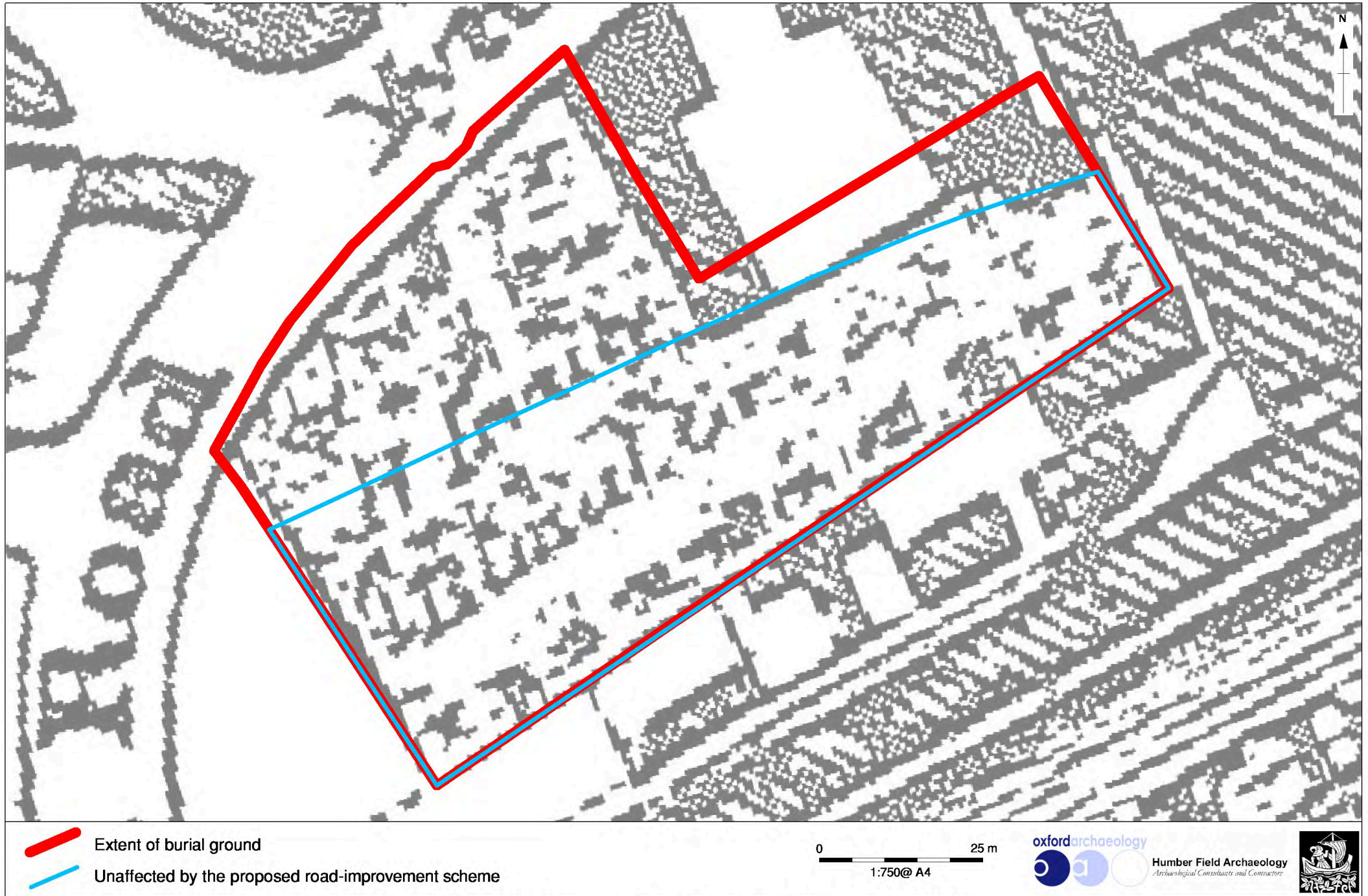


Figure 16: An extract from Goodwill and Lawson's map, 1869

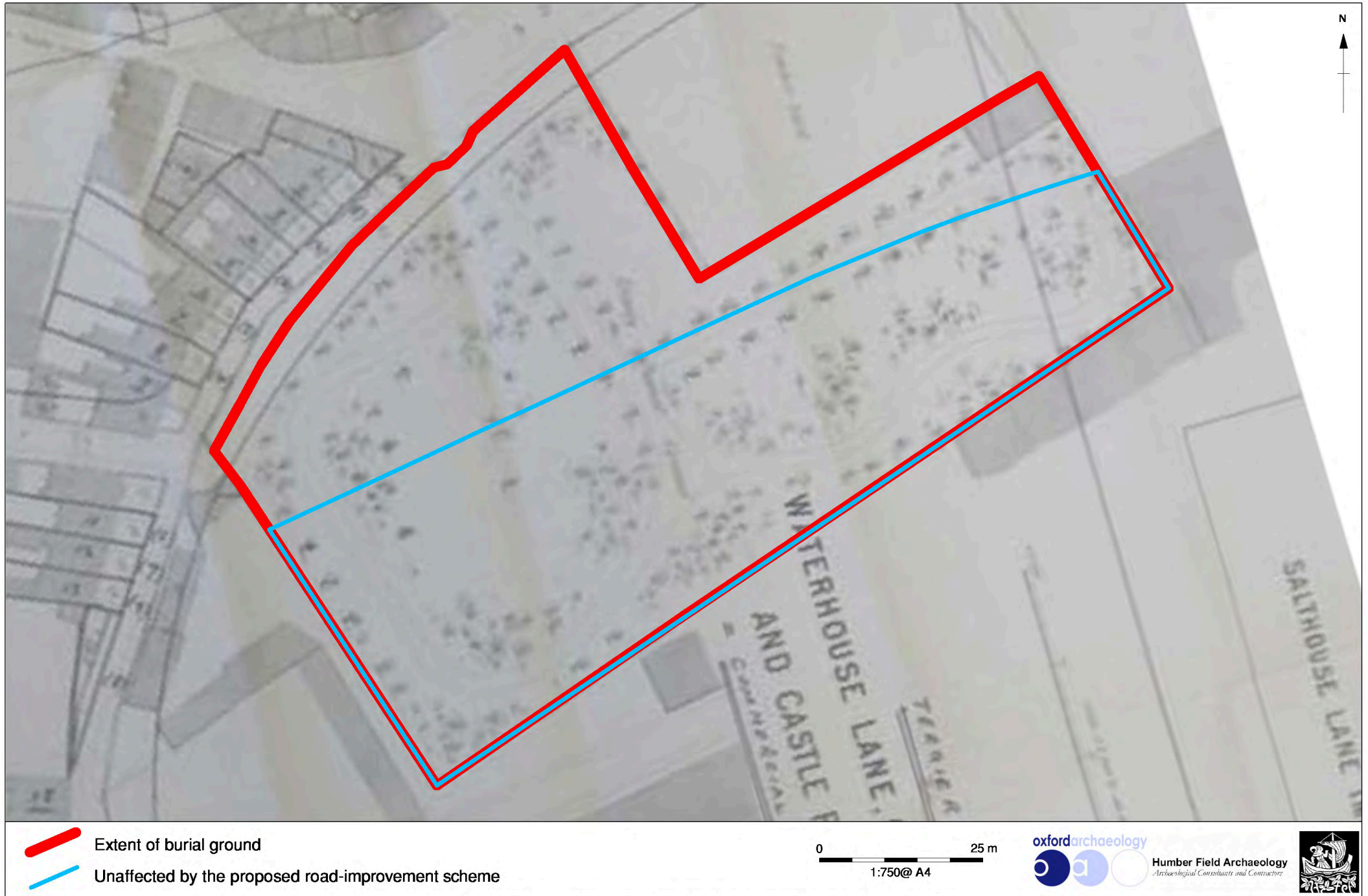


Figure 17: Local Board of Health improvement plan, 1862

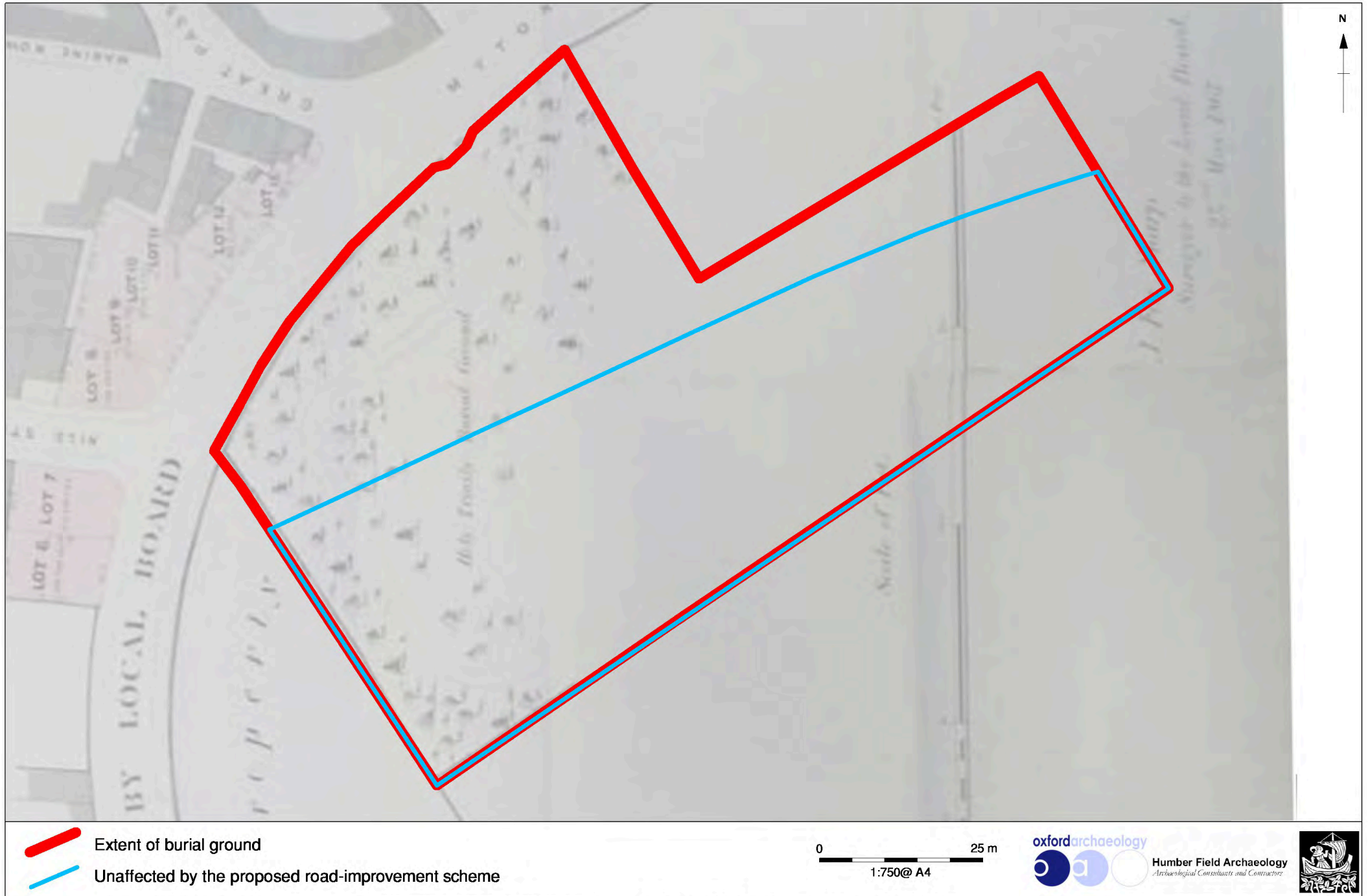


Figure 18: Improvements to Castle Row sale of land plan, 1867

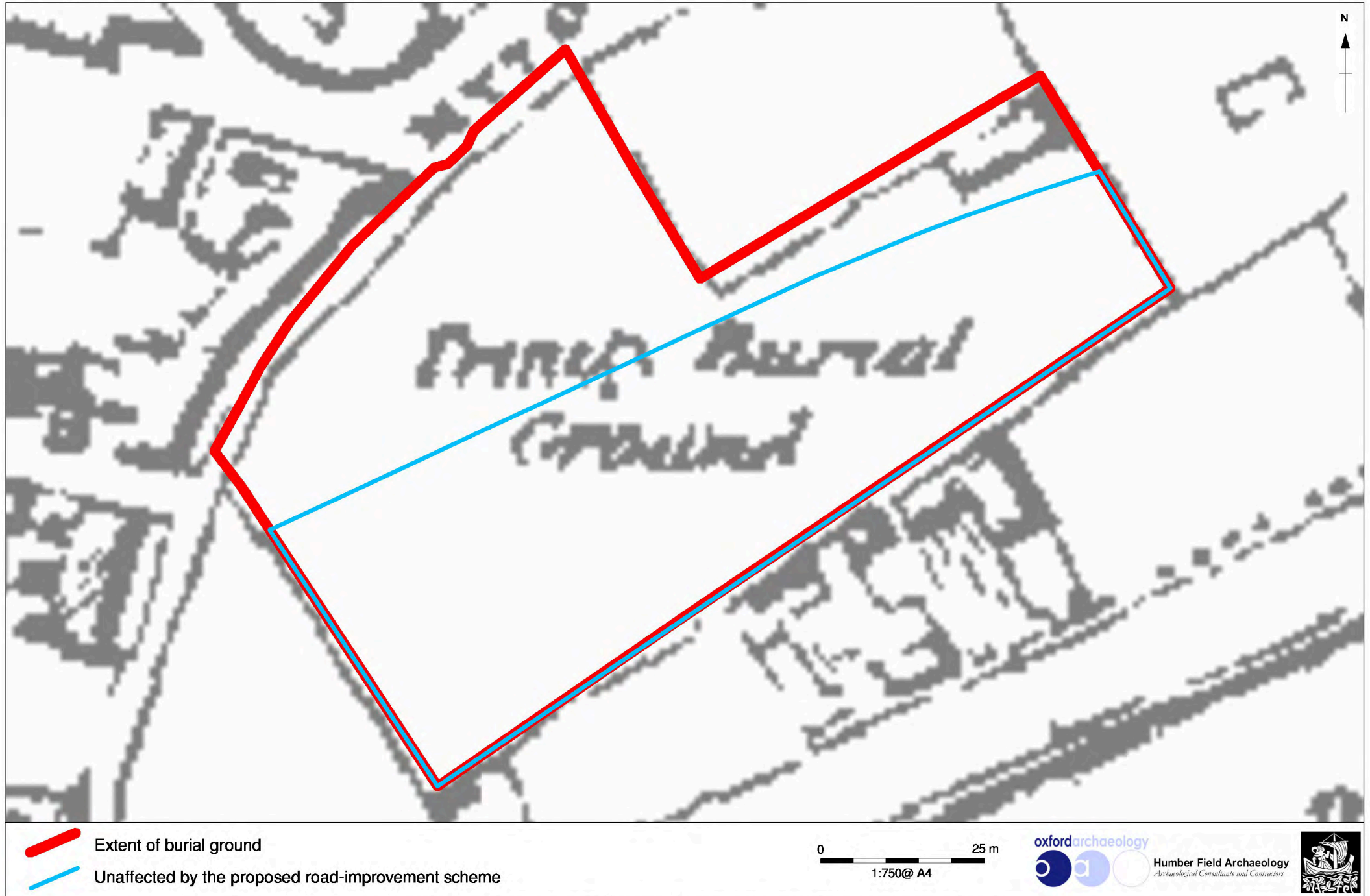


Figure 19: An extract from the Ordnance Survey 6":1 mile map, 1855-6

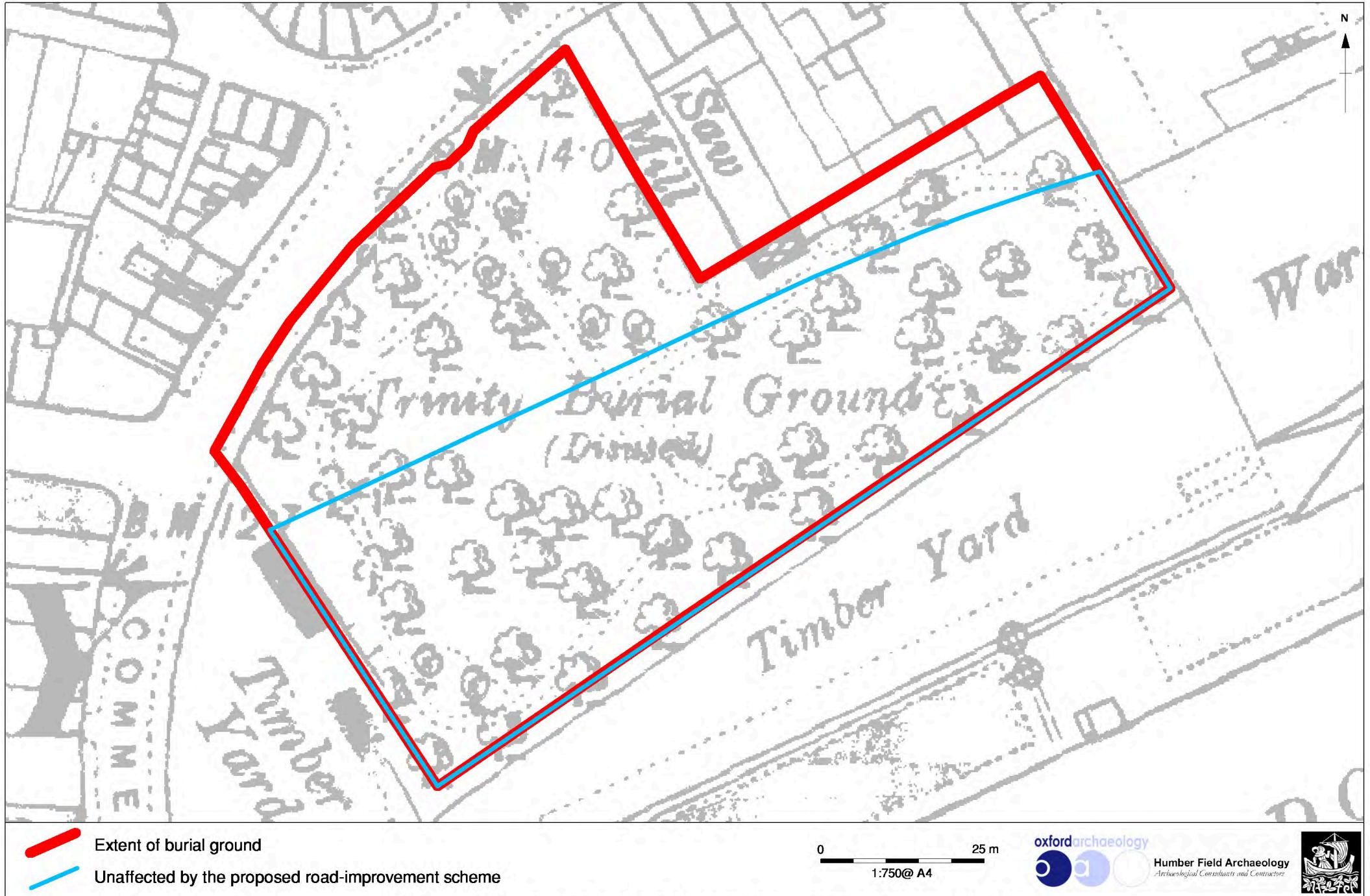




Figure 20: An extract from the Ordnance Survey 25":1 mile map, 1886-93





-  Extent of burial ground
-  Unaffected by the proposed road-improvement scheme

Not to scale



Figure 21: An extract from Goad's Insurance map, 1886



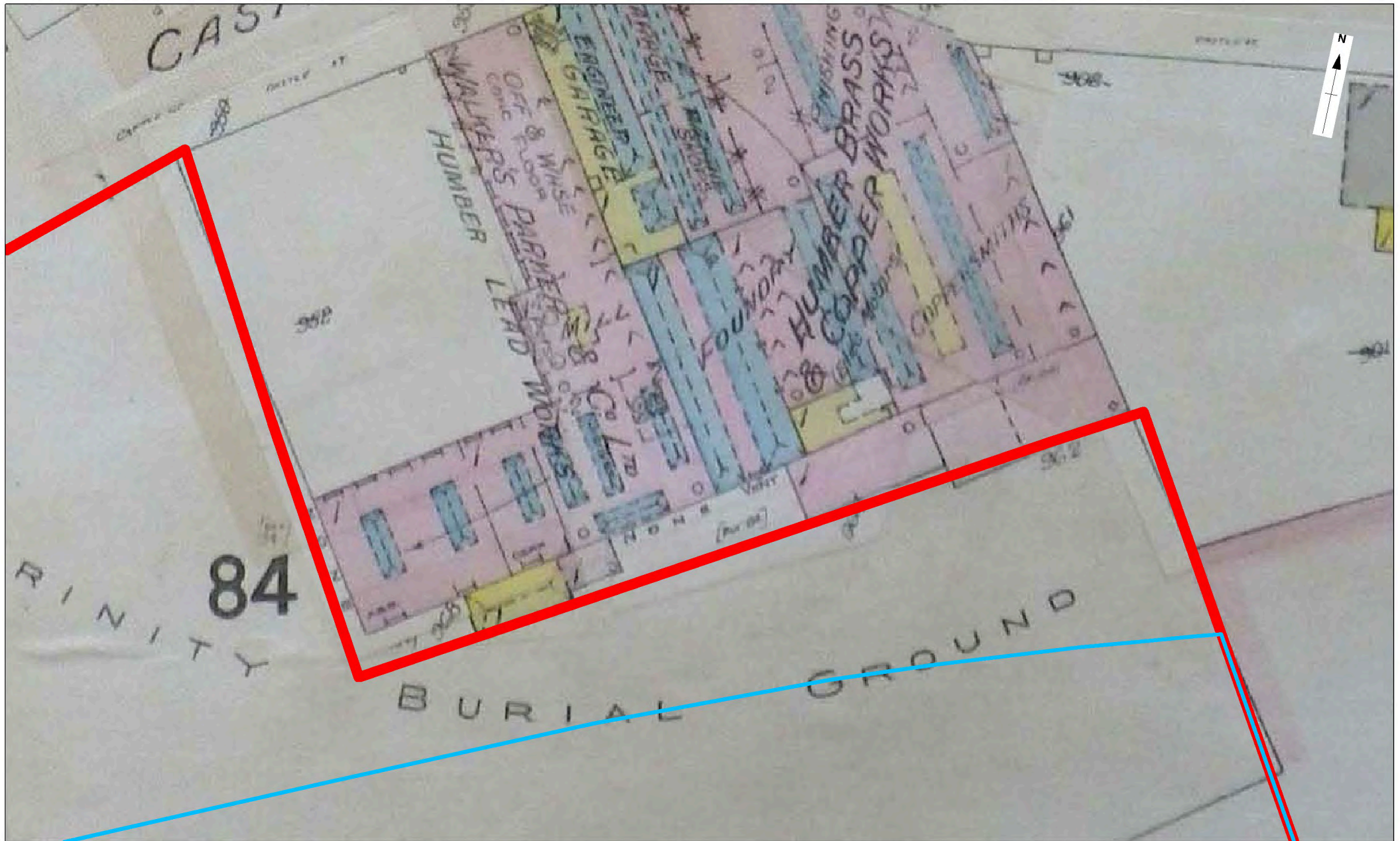
-  Extent of burial ground
-  Unaffected by the proposed road-improvement scheme





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Figure 22: EYFHS sketch plan of monumental inscriptions, 1982



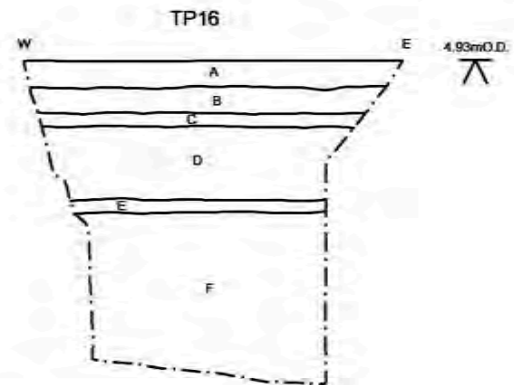
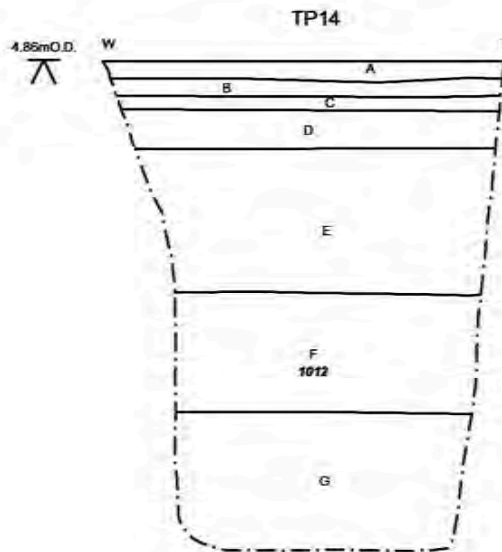
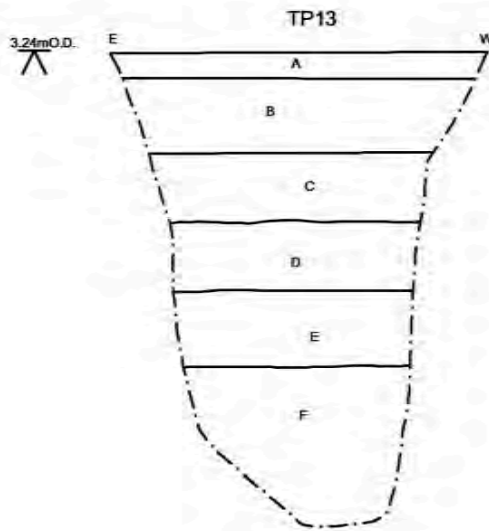
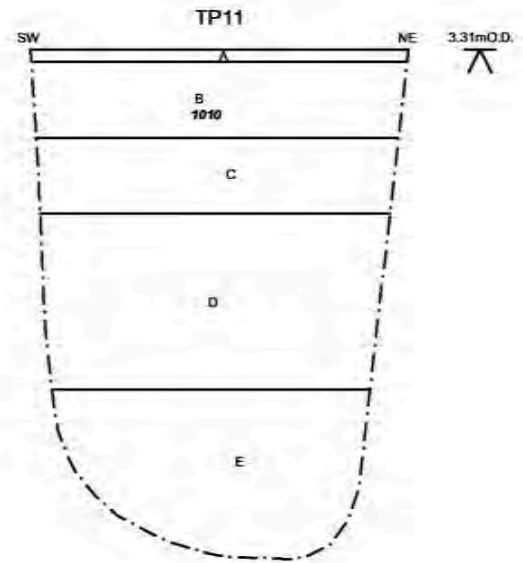
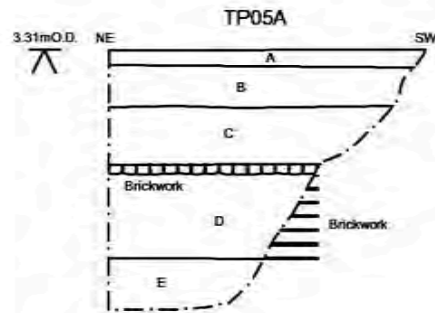
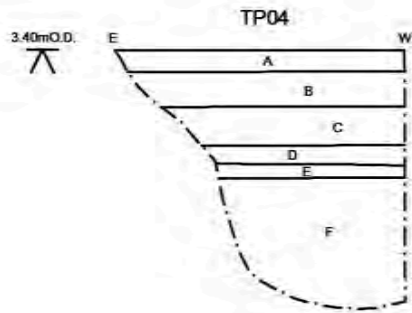
-  Extent of burial ground
-  Unaffected by the proposed road-improvement scheme

Not to scale

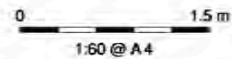
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Figure 23: An extract from Goad's Insurance map, 1904



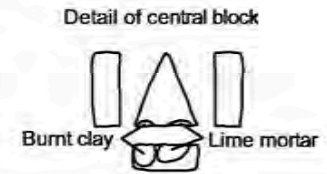
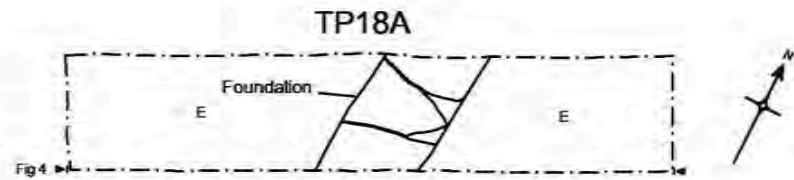
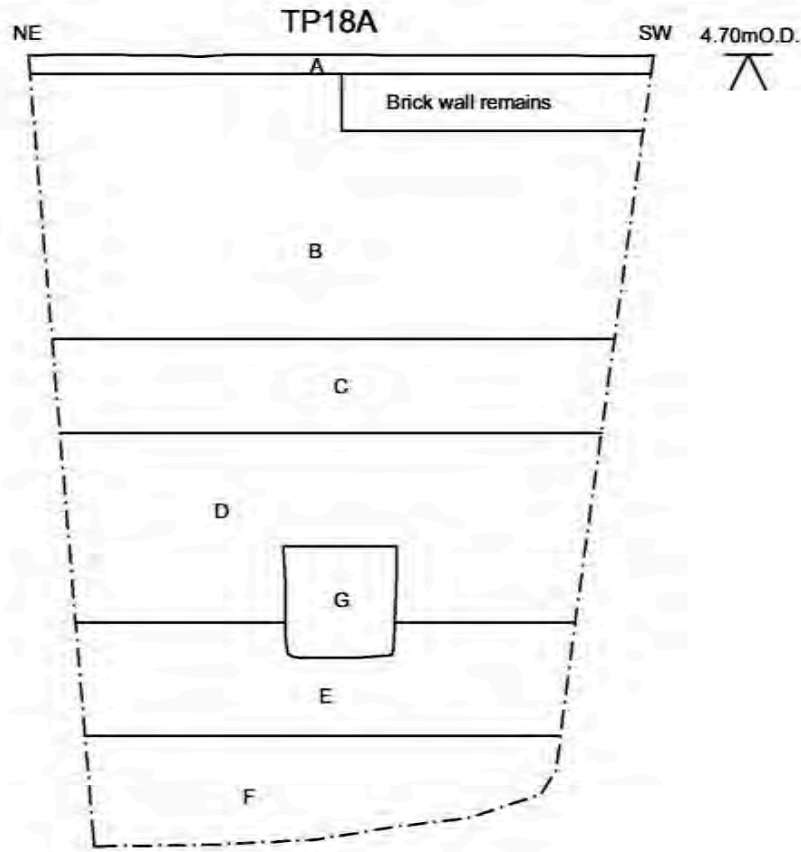
--- Limit of excavation



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Figure 24: Test pit sections



--- Limit of excavation

0 1 m
1:40 @ A4

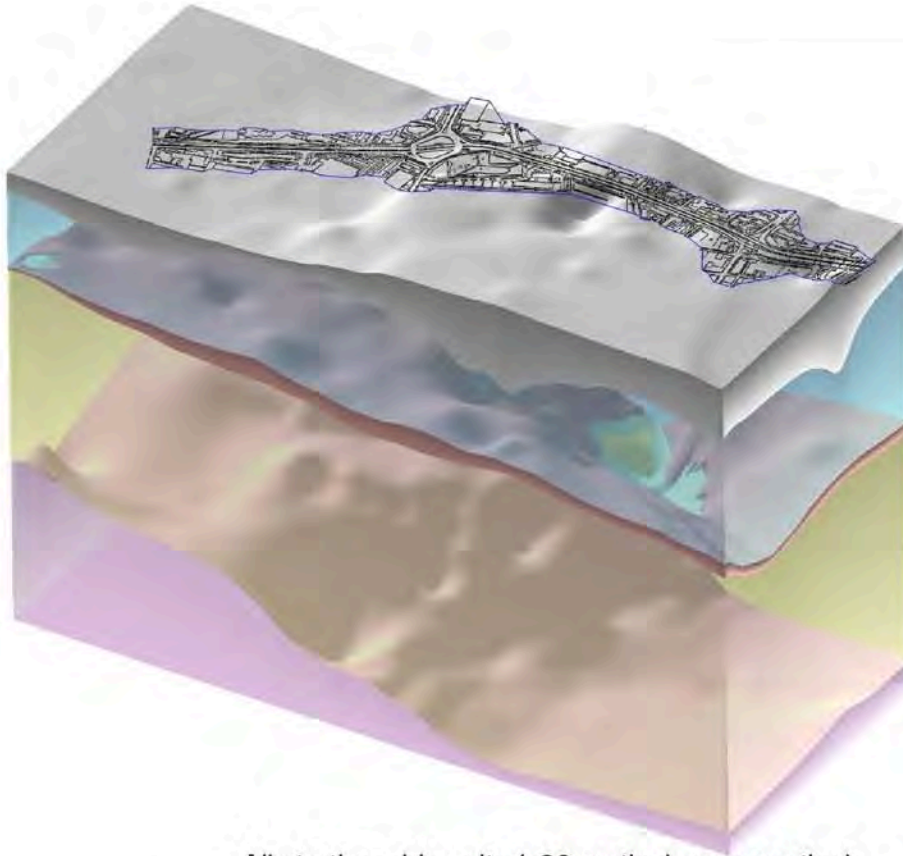


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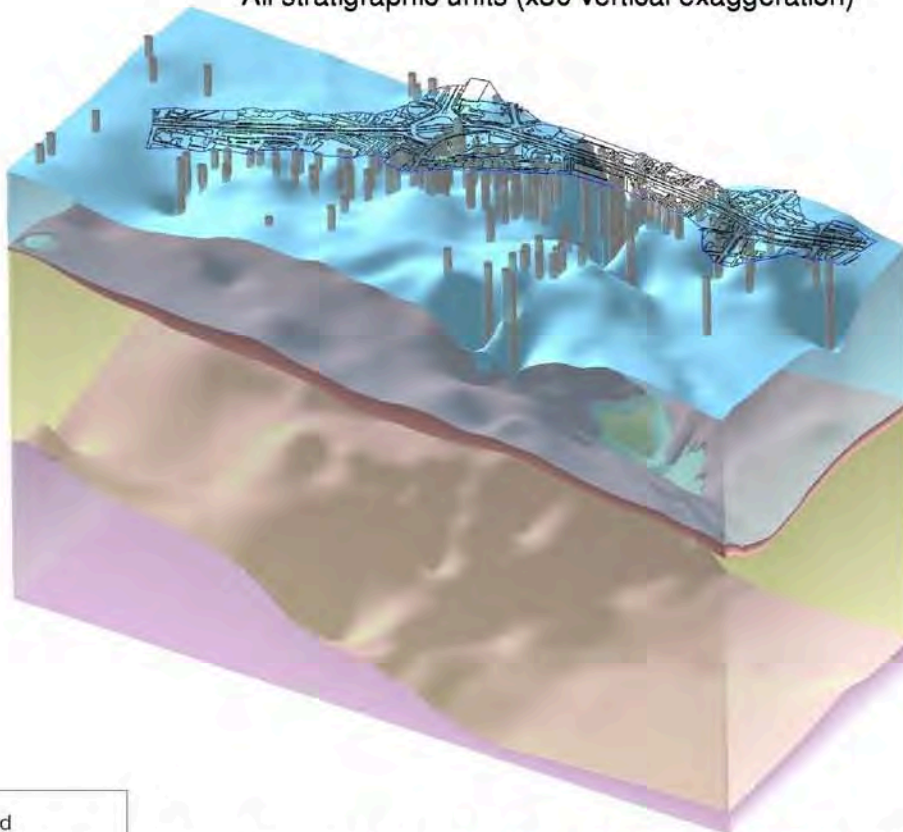
Figure 25: Plan and section of Test Pit 18A

A



All stratigraphic units (x30 vertical exaggeration)

B

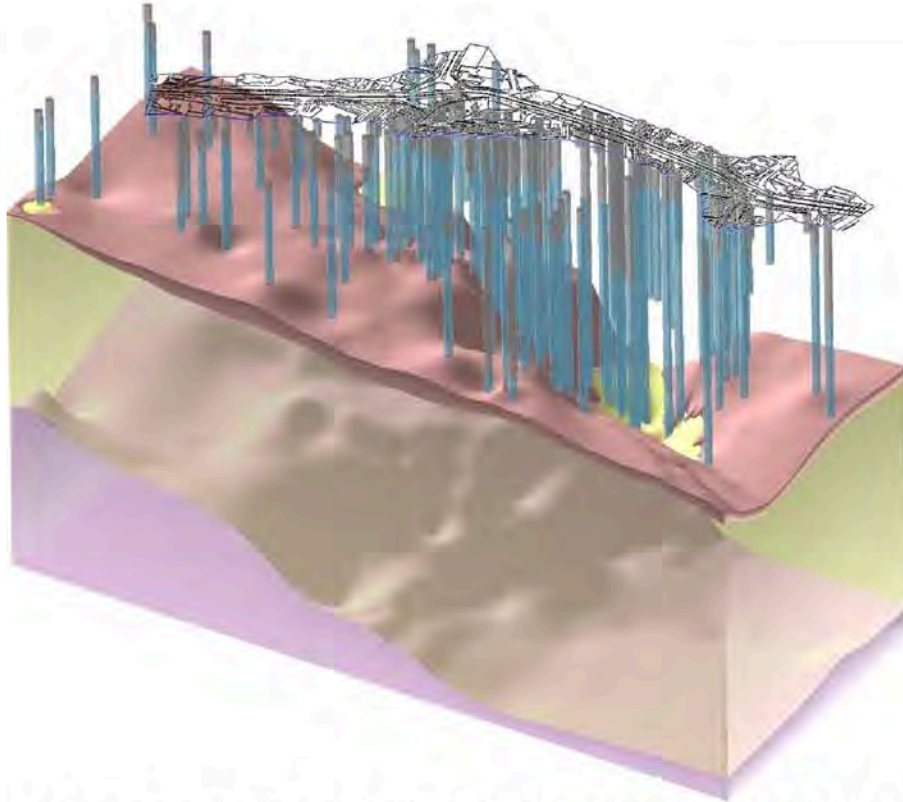


Base of made ground / surface of Holocene alluvium, with geotechnical data locations (x30 vertical exaggeration)

- Made ground
- Minerogenic alluvium
- Basal organic complex
- Pleistocene complex
- Chalk bedrock

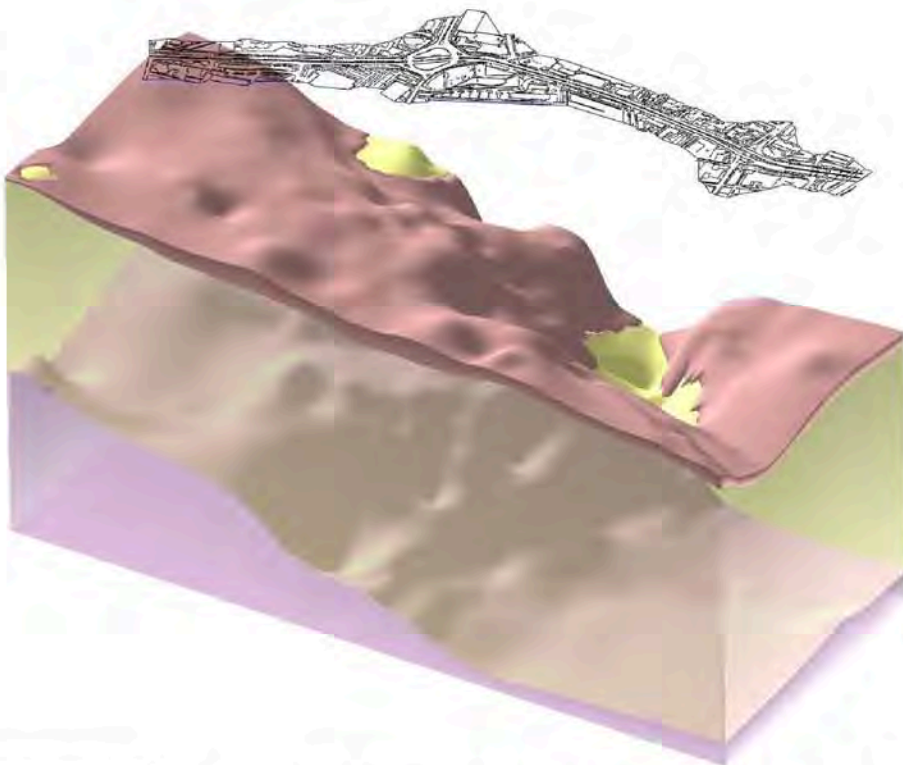
Figure 26: Three-dimensional model of lithostratigraphic units (A and B)

C



Surface of Holocene organic complex with geotechnical data locations (x30 vertical exaggeration)

D



Absence of organic and peat deposits in large channel at the eastern end of the scheme (x30 vertical exaggeration)

- Made ground
- Mineralogenic alluvium
- Basal organic complex
- Pleistocene complex
- Chalk bedrock

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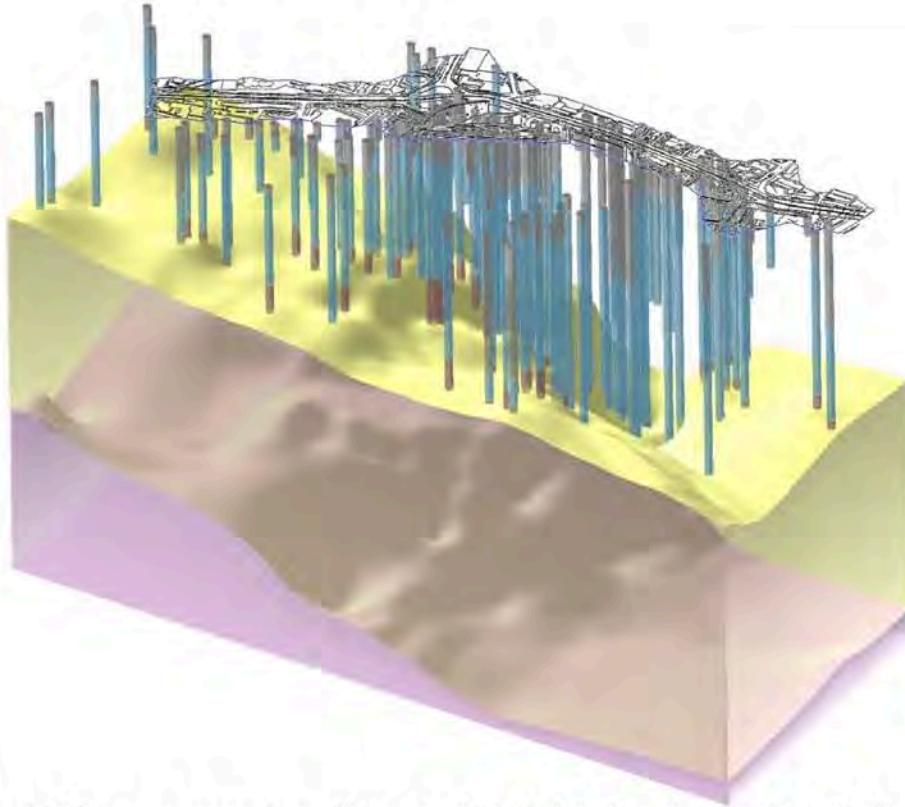


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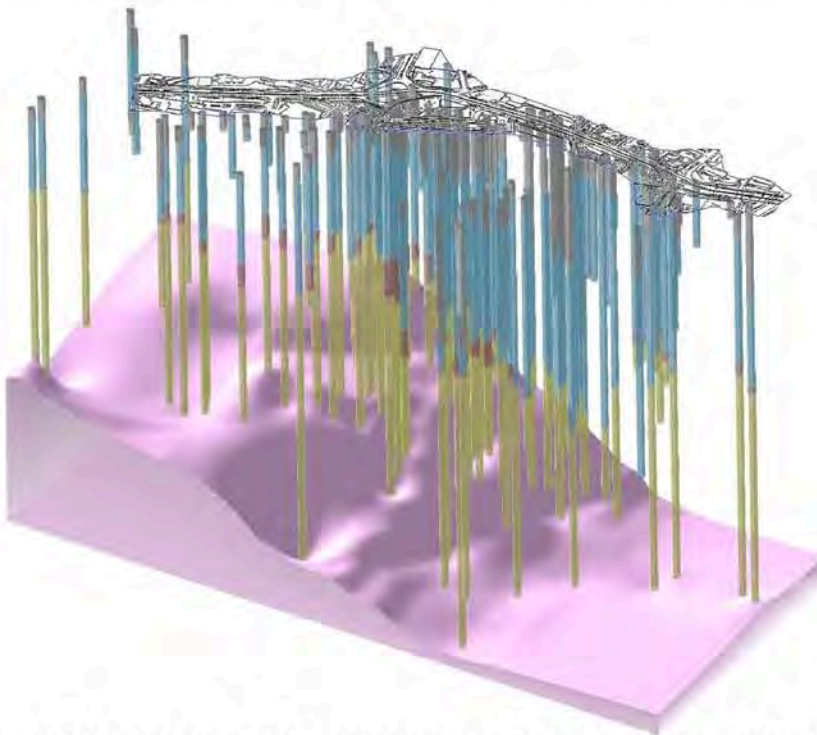
Figure 27: Three-dimensional model of lithostratigraphic units (C and D)

E








Surface of Pleistocene complex with geotechnical data locations (x30 vertical exaggeration)

F

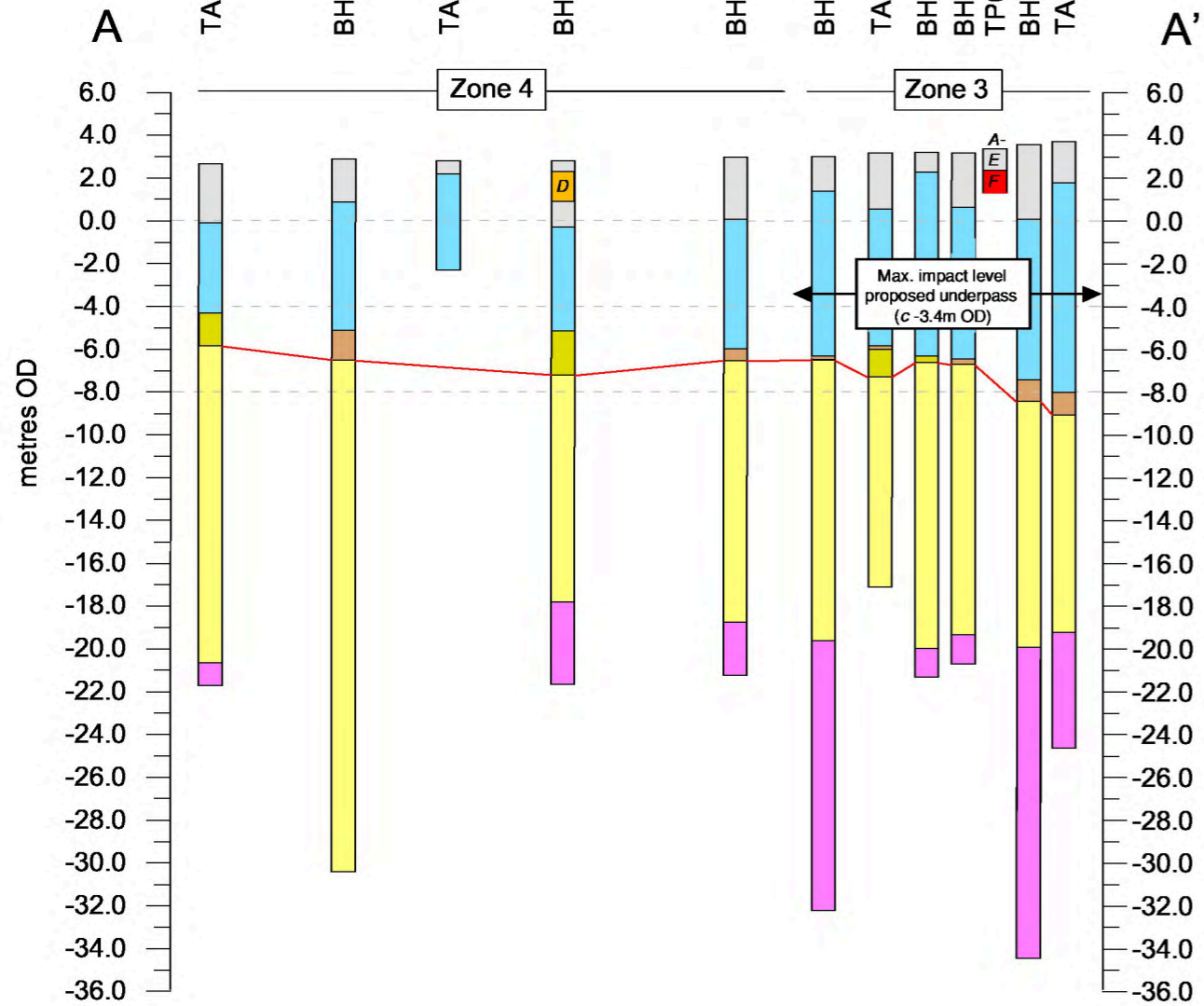


Surface of Chalk bedrock with geotechnical data locations (x30 vertical exaggeration)

-  Made ground
-  Minerogenic alluvium
-  Basal organic complex
-  Pleistocene complex
-  Chalk bedrock

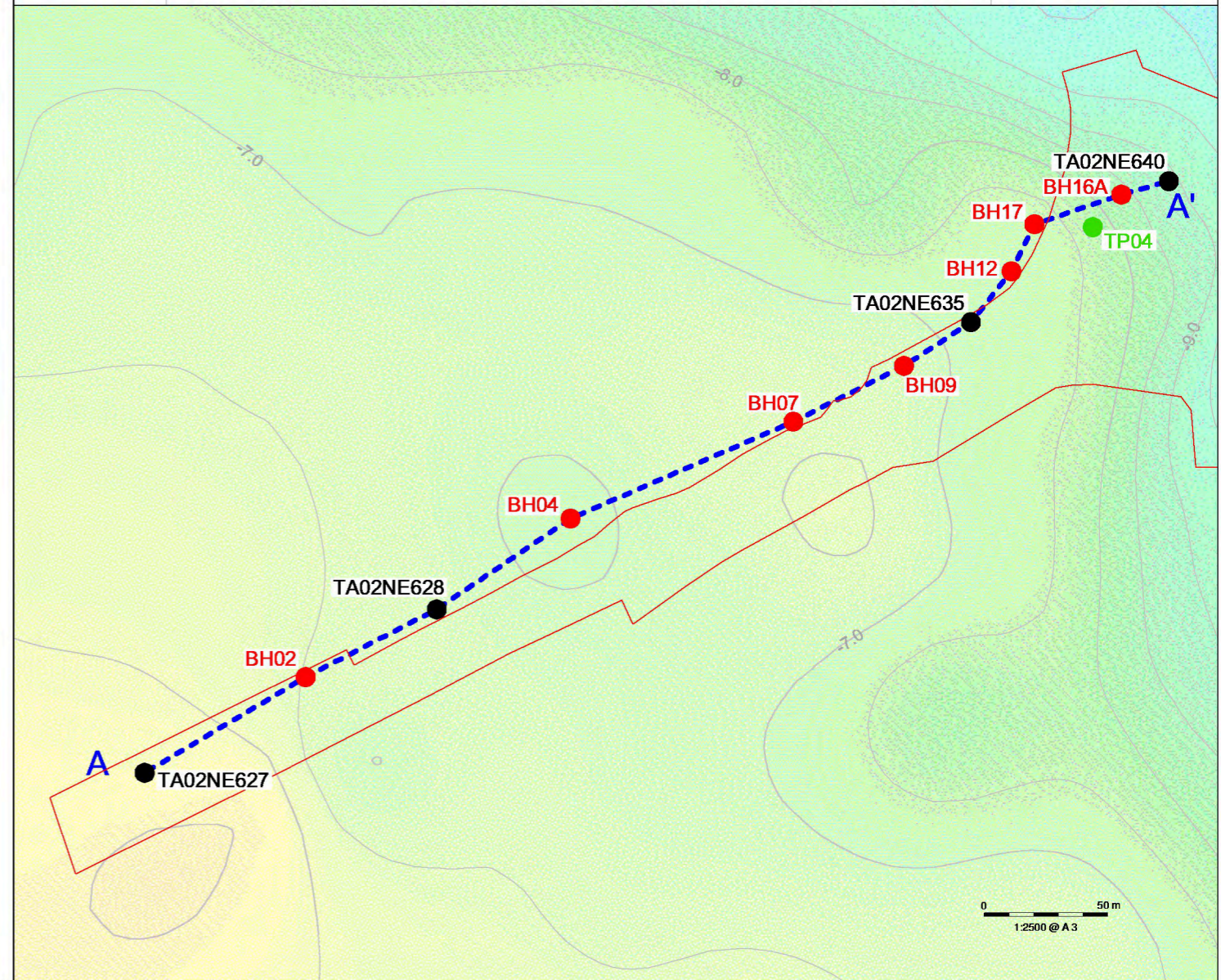
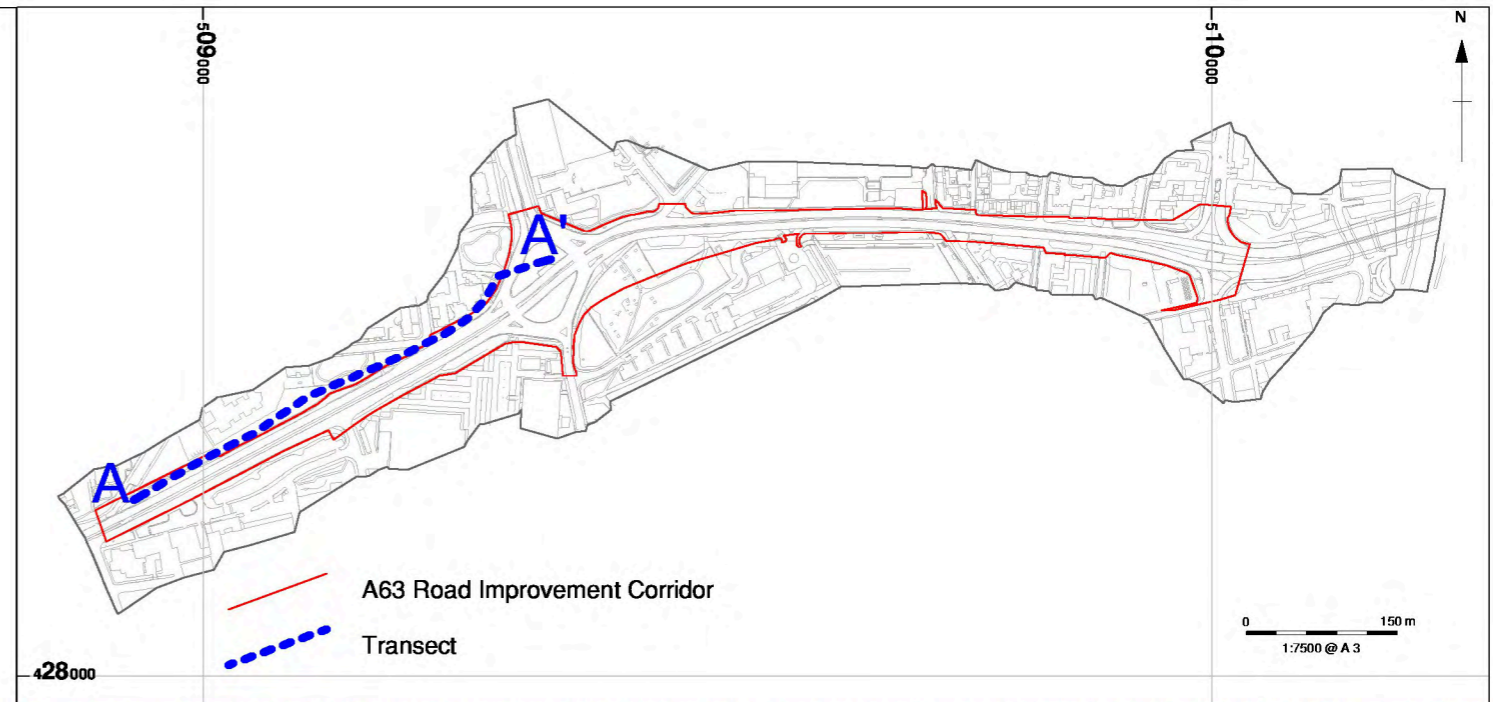
FB*L10596*MMAT*Jan2014

Figure 28: Three-dimensional model of lithostratigraphic units (E and F)



- Upper archaeological horizon
- 18th-19th century demolition deposits
- Medieval / post-medieval deposits
- Minerogenic alluvium
- Basal organic complex (organic alluvium/peat)
- Pleistocene complex
- Chalk bedrock
- Inferred Pleistocene/Holocene interface

Notes
 * Historical BGS data is prefixed by TA
 ** Italics denotes layers assigned during WB

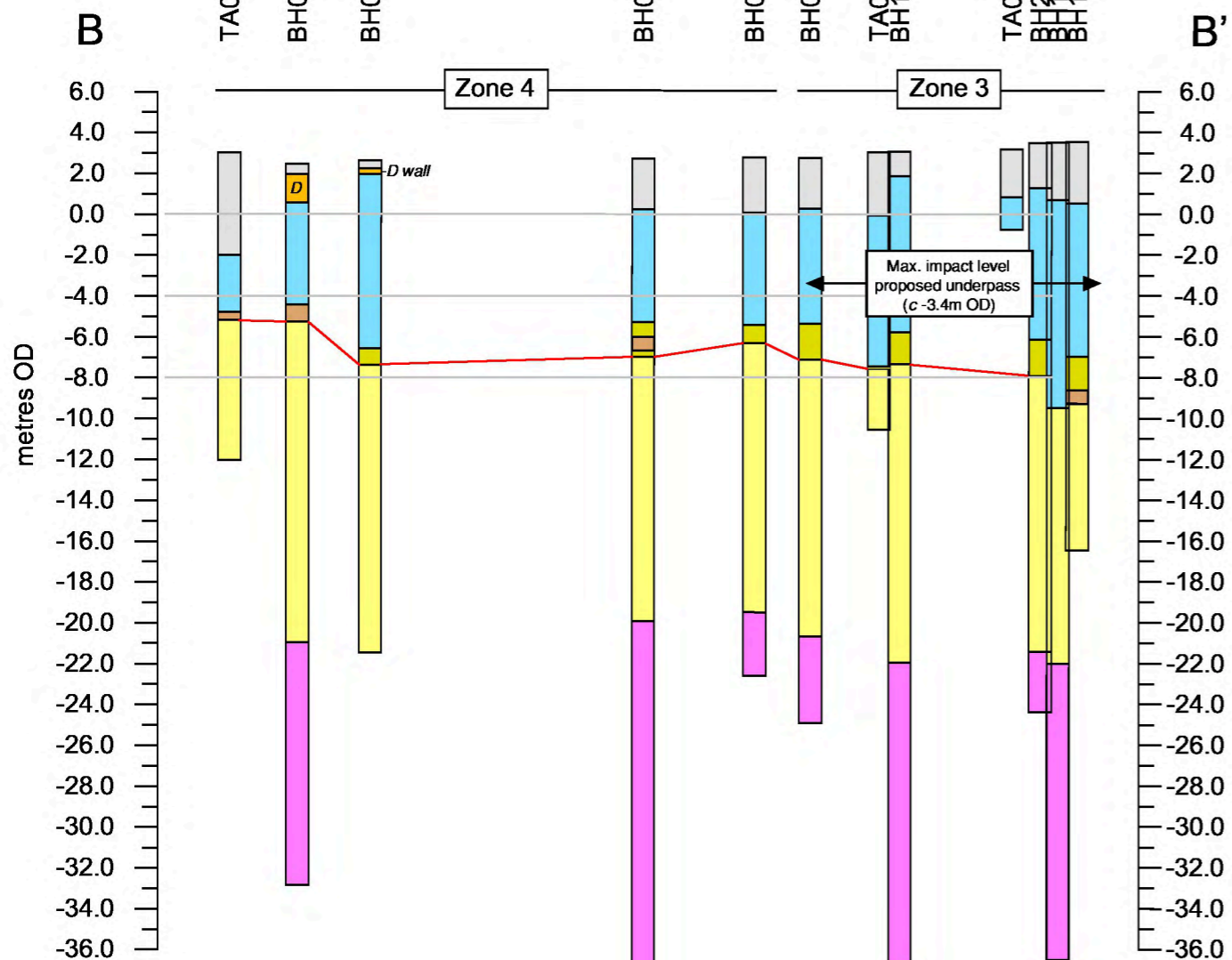


- TA02NE609 Historical Geotechnical Interventions
- BH05 Cable Percussion Boreholes
- TP04 Test Pit



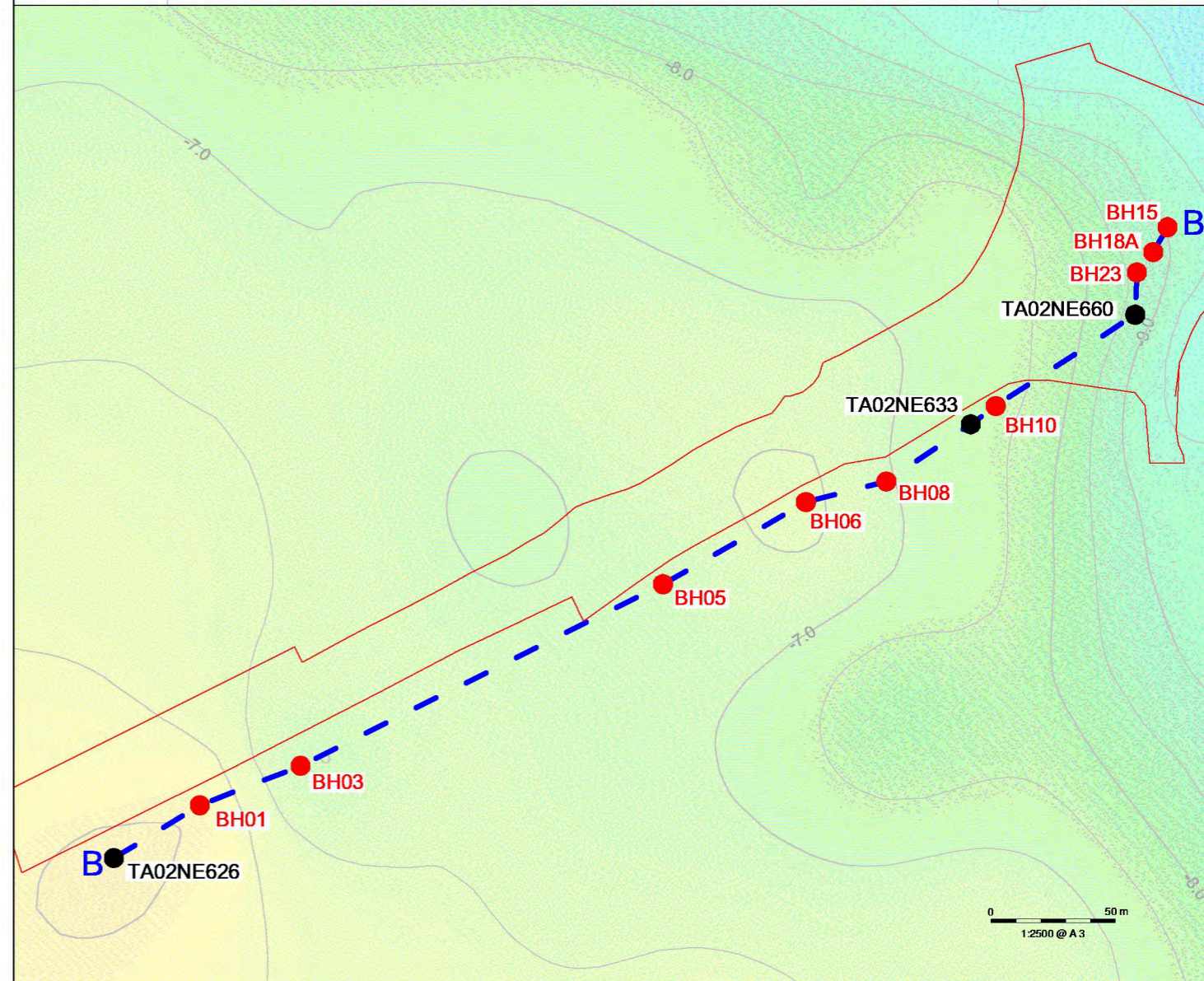
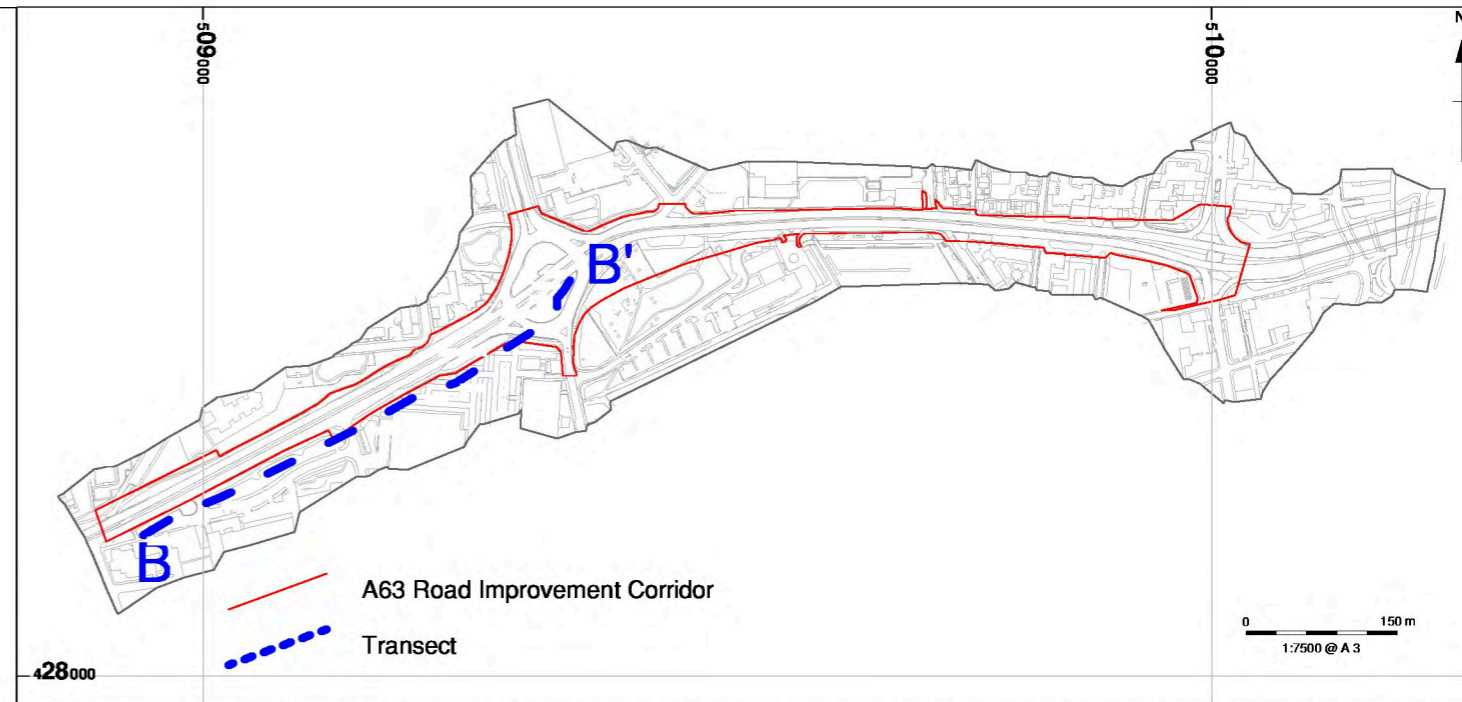
FB*L10596*MAT*Jan2014

Figure 29: West/east borehole transect A-A' , western part of the route



- Upper archaeological horizon
- 18th-19th century demolition deposits
- Minerogenic alluvium
- Basal organic complex (organic alluvium/peat)
- Pleistocene complex
- Chalk bedrock
- Inferred Pleistocene/Holocene interface

Notes
 * Historical BGS data is prefixed by TA
 ** Italics denotes layers assigned during WB



- TA02NE609 Historical Geotechnical Interventions
- BH05 Cable Percussion Boreholes



Figure 30: West/east borehole transect B-B', western part of the route

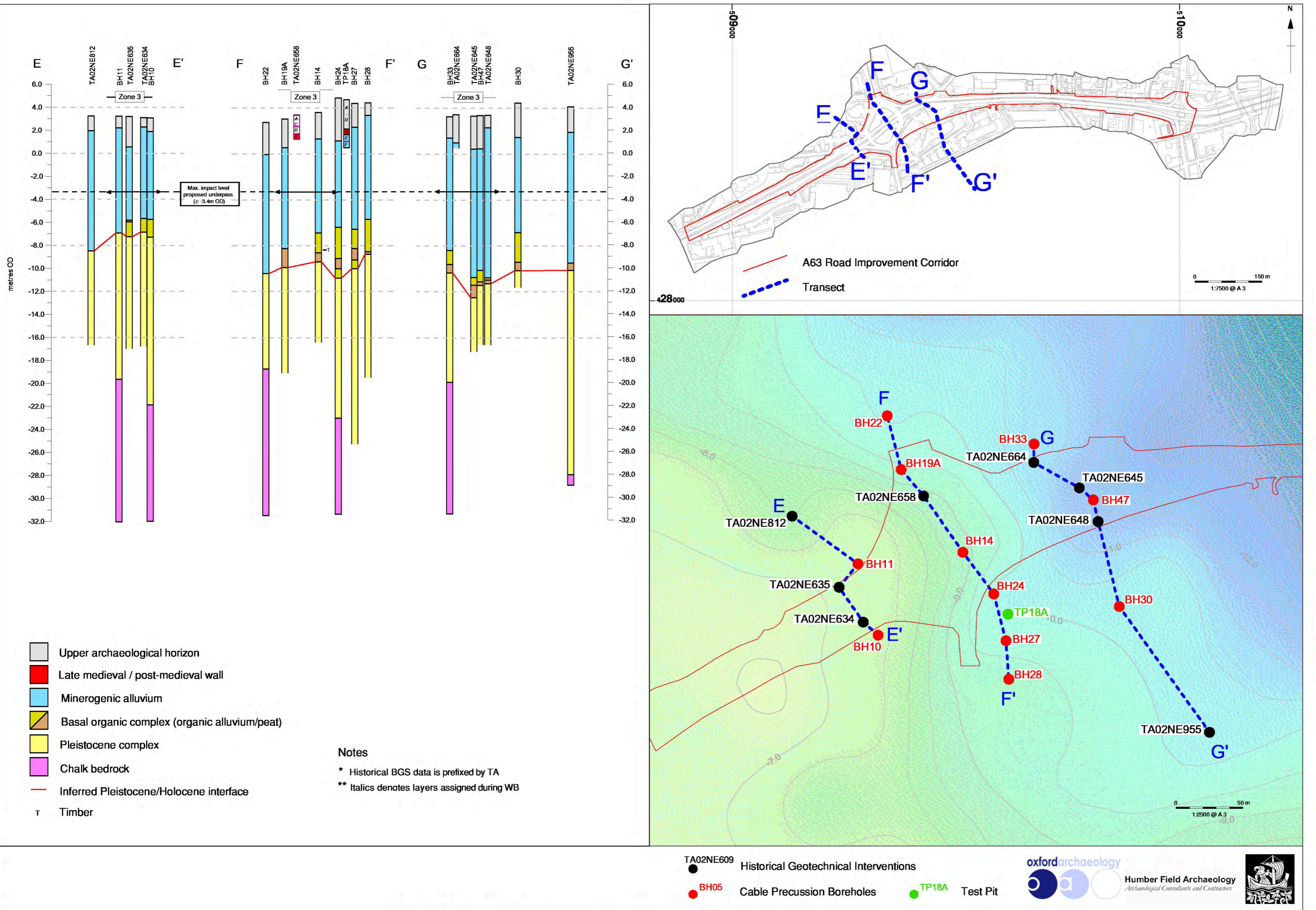


Figure 31: North-south borehole transects E-E', F-F' and G-G', central part of route

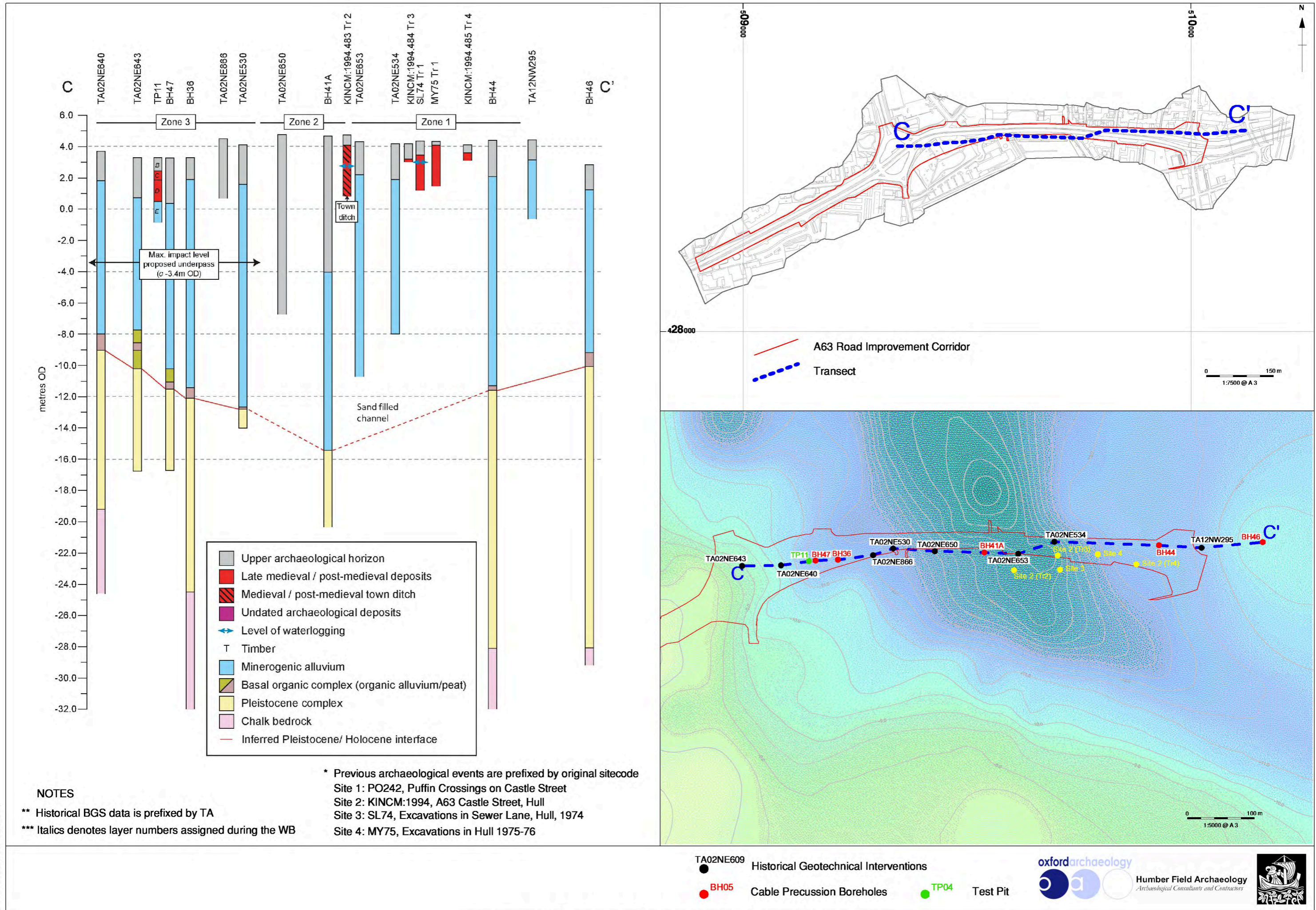


Figure 32: West/east borehole transect C-C', eastern part of the route

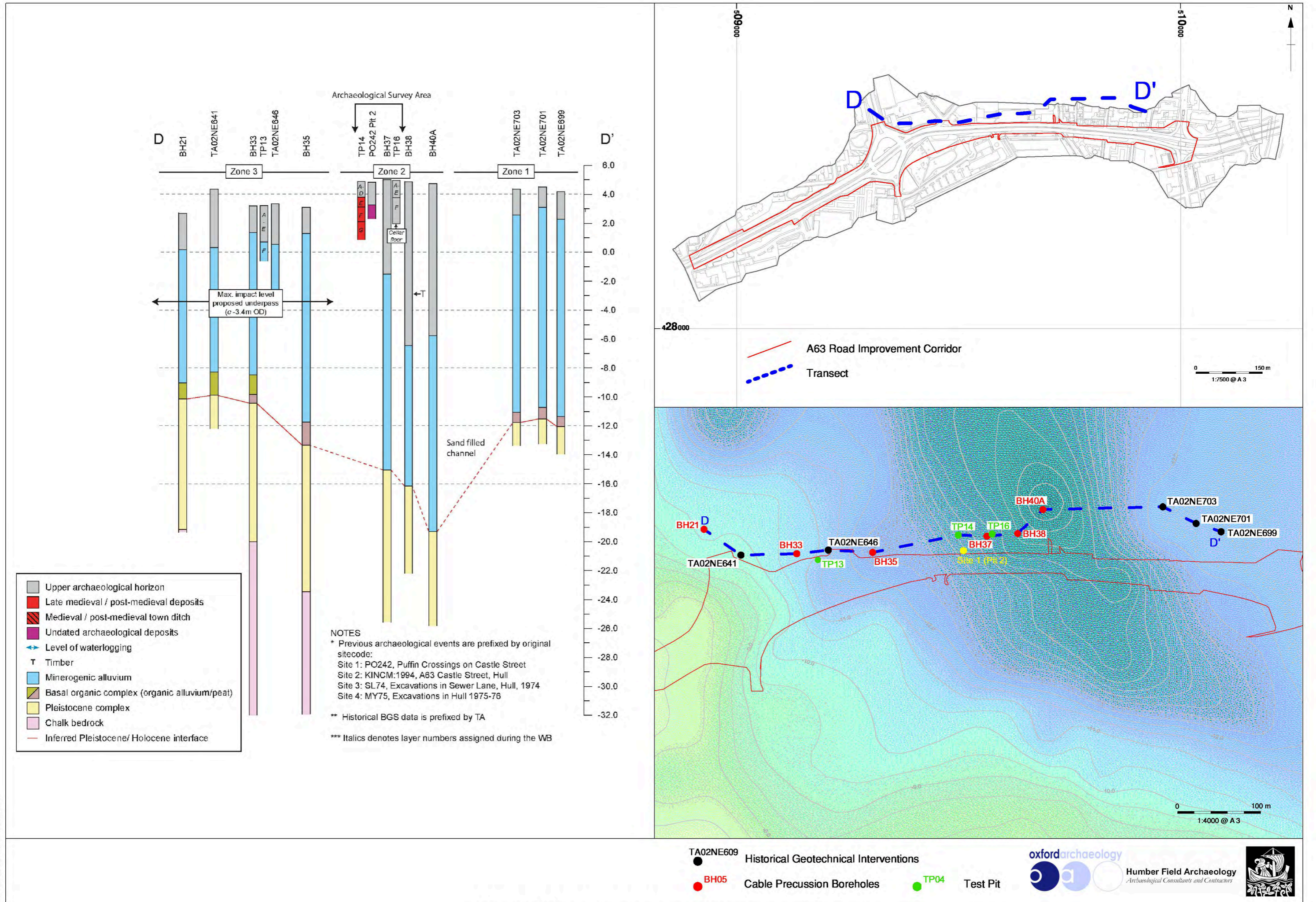
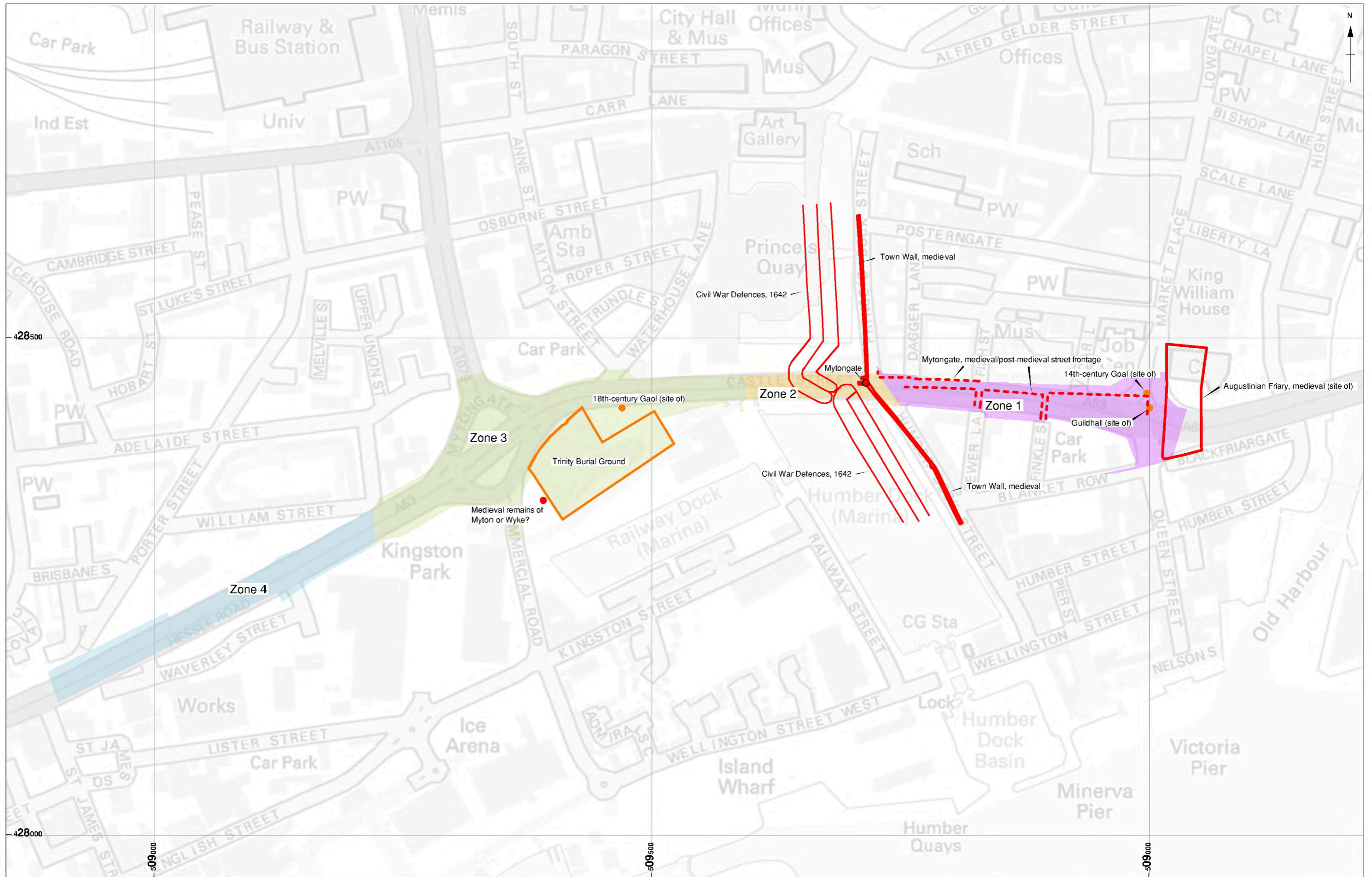


Figure 33: West/east borehole transect D-D' , eastern part of the route



- Regional Significance
- Local Significance

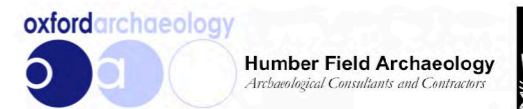
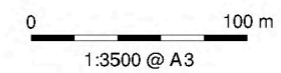


Figure 34: Significant archaeological sites within the study area in relation to the archaeological zones

PLATES



Plate 1: A working shelling augur rig in self-contained compound, drilling BH39



Plate 2: Window sample (WS16) extracted north of Humber Dock



Plate 3: The west wall of the burial ground and its south-west corner entrance



Plate 4: A view along the west wall, looking north and showing the pronounced lean to the central section of the wall



Plate 5: Detail shot of the central portion of the west wall (2m scale)



Plate 6: The distempered portion of the west wall. Two metal brackets are visible



Plate 7: Detail shot of the original coping to the west wall



Plate 8: Later rebuild of the northernmost part of the west wall with modern coping



Plate 9: Illustration of the height of the west wall above pavement level at the Castle Street/Commercial Road junction (2m scales). Ground level within the burial ground was largely at pavement level



Plate 10: The west wall and the bank to the east of it viewed from within the burial ground, looking south-west. The scale in the background is positioned against the wall's only buttress (2m scales)



Plate 11: West wall with single internal buttress, bank and headstone in the foreground bearing the date 1795



Plate 12: Detail shot of the west-wall buttress; note disturbed coping bricks on ground



Plate 13: Pier at the junction of the west and the north walls (left of photograph). The relationship between the pier and the west wall was not observed due to vegetation coverage (1m scale)



Plate 14: The north wall curving around the burial ground at the Mytongate roundabout/Castle Street junction



Plate 15: The western entrance leading from the north side (Castle Street) into the burial ground



Plate 16: Detail shot of the reworked western entrance (1m scale)



Plate 17: Stone gate pier exposed at north end of western gaol-yard wall after later clearance of vegetation, with northern wall of burial ground abutting its eastern side



Plate 18: The site of the former gaol on Castle Street viewed from the east. The former gaol-yard walls and walls of the burial ground are almost entirely obscured by vegetation



Plate 19: The eastern entrance leading from the north side (Castle Street) into the burial ground



Plate 20: Looking south through the eastern entrance into the interior of the burial ground



Plate 21: The south-west corner of the former gaol-yard wall viewed from the south



Plate 22: The piece of much-eroded or mutilated stone placed within the west face of the western wall of the former gaol-yard



Plate 23: The western face of the gaol-yard wall exposed following removal of some vegetation



Plate 24: The pronounced lean on the western face of the gaol-yard wall



Plate 25: Western part of the gaol-yard wall southern face following removal of vegetation



Plate 26: Central part of the gaol-yard wall southern face following removal of vegetation



Plate 27: Eastern part of the gaol-yard wall southern face following removal of vegetation



Plate 28: The south-east corner of the burial ground viewed from the car park of the Holiday Inn



Plate 29: Detail shot of the east wall viewed from the west



Plate 30: The south wall viewed from the west



Plate 31: General view of the burial ground from near the south-west corner, looking east



Plate 32: Overgrown monuments in the western part of the burial ground



Plate 33: Burial vault with blocked entrance



Plate 34: Two-tier burial vault



Plate 35: General view of the burial ground from near the south-east corner, looking west



Plate 36: Central path leading south into interior of burial ground following clearance of vegetation



Plate 37: One of the vandalised burial vaults



Plate 38: Western entrance, path and burial ground interior following clearance of vegetation; contrast with Plate 15



Plate 39: Looking west across the northern part of the burial ground following some clearance of vegetation



Plate 40: Looking south-west across the northern part of the burial ground following some clearance of vegetation



Plate 41: Headstone with plate insert commemorating William Wilkinson, in the north-west corner of the burial ground



Plate 42: The burial ground viewed from Castle Street, looking south



Plate 43: View of the south-east corner of the burial ground showing how the build-up of soil and litter has completely obscured the original wall



Plate 44: Former gas lamp standard converted to electric use



Plate 45: Test pit A03, prior to Static Cone Penetration Testing, looking north (1.2m scale)



Plate 46: Alluvial deposits within BH04 at 8.5m to 8.95m BGL



Plate 47: TP04 fully excavated, looking west



Plate 48: TP11, viewed from the west



Plate 49: TP13, viewed from the east

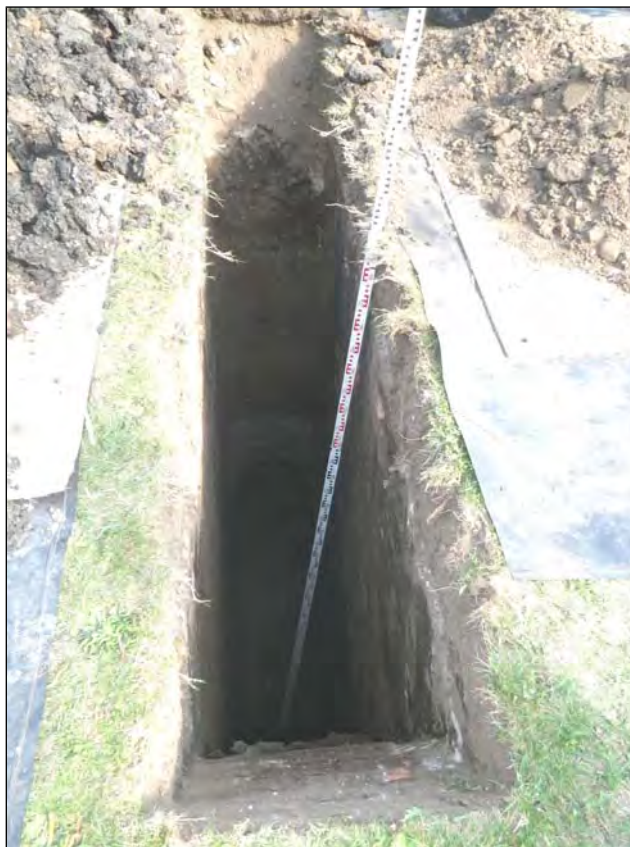


Plate 50: TP14, viewed from the east



Plate 51: TP18A showing stone foundation (G), looking south

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northnorthnorth
Oxford Archaeology North
Mill 3
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A63 Castle Street Improvements, Hull Environmental Statement

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**CULTURAL HERITAGE – ADVANCE ARCHAEOLOGICAL WORKS
REPORT: SITE INVESTIGATION WORKS AND THE TOWN DEFENCES**

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A63 CASTLE STREET IMPROVEMENT, KINGSTON UPON HULL

Advance Archaeological Works Report: Site Investigation Works and the Town Defences



Humber Field Archaeology
Archaeological Consultants and Contractors



**Oxford Archaeology North and
Humber Field Archaeology**

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SUMMARY

In March 2015, Oxford Archaeology North and Humber Field Archaeology (OA-HFA) was commissioned by Balfour Beatty, on behalf of Highways England, to undertake a programme of archaeological works in association with the A63 Castle Street Improvement. This report focuses on those archaeological works that were undertaken outside Trinity Burial Ground, which comprised a watching brief during Site Investigation works (boreholes and vacuum-excavated trial pits) in July, August and December 2015, and the excavation of a single trench across the interpolated position of the city's medieval defences on Humber Dock Street (February to March 2016). A proposed trench positioned on the defences on Prince's Dock Street remains to be excavated. In addition, a series of sealed MOSTAP samples, collected during an earlier stage of Site Investigation works in 2013 from deposits that may have represented the fills of the town's Civil War defensive ditch (excavated beyond the medieval defences), were also examined as part of the current phase of works.

The trench on Humber Dock Street (Trench 2) was excavated in two stages to a maximum width of 5.62m south-west/north-east by 8.25m south-east/north-west. Following mechanical removal of modern deposits, the trench was excavated by hand in a series of steps to the limit of safe excavation whereafter hand-drilled cores were augured into the base of the trench to a depth of some 7.7m below ground level (bgl). The investigation revealed four phases of activity. The earliest was the medieval Town Ditch, the base of which was found some 7.7m below ground level and to be filled with a sequence of mainly water-borne deposits. Radiocarbon dating indicated that the ditch had silted up substantially by the fifteenth century. Palaeoenvironmental remains from these deposits suggested that the ditch may have been linked to the Humber, and that it received dumps of human waste. Pollen from the same deposits suggested an agricultural component to the land beyond the town walls, with evidence for plants of both grazing and arable land. Two driven oak piles may have helped torevet the sides of the medieval ditch, but could not be dated by dendrochronology.

Subsequent phases of activity traced the post-medieval infilling and consolidation of the ditch and the building of at least one structure prior to the construction and remodelling of the Humber Dock in the earlier and later nineteenth century, respectively. As well as elements of the dock itself, findings included a substantial stone base which may once have supported a piece of dock-side furniture, such as a small winch or derrick.

The watching brief of the Site Investigation works also provided useful insights into the history of the docks. It revealed elements of the (subsequently backfilled) lock that originally connected the Prince's and Humber Docks, as well as portions of walls that once stood on, or close to, the edge of the Humber Dock before the northern part was infilled in the twentieth century. Boreholes through the backfilled part identified the unlined base of the dock at a depth of 10m bgl, while test pits in that area revealed a possible temporary brick surface sealing the backfill of demolition debris.

Examination of the MOSTAP samples found no artefacts, and, indeed, no clear evidence that the deposits sampled were more likely to have accumulated in the Civil War ditch than they were to represent the deposits of natural alluvium that are widespread across the development area. Given that ambiguity and no clear means of dating the deposits, more detailed geoarchaeological and palaeoenvironmental investigation, and deposit modelling of the MOSTAP samples was not undertaken.

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The fieldwork was directed by Douglas Jobling, with the assistance of Alex Batey, James Hodgson and Jon Onraet. The report was written by Douglas Jobling (stratigraphy), Lisa Wastling (Finds), Mairead Rutherford (palaeoenvironmental remains), and Elizabeth Stafford (MOSTAP samples) and illustrated by Douglas Jobling, Mark Tidmarsh and Marie Rowland. Dendrochronological dating was undertaken by Ian Tyers, and radiocarbon dating by the Scottish Universities Environmental Research Centre. The project was devised by Ken Steedman and managed by Stephen Rowland, who also edited the report, with specialist advice from Ken Steedman.

1. INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1 As part of Highways England's planned improvements to the A63, Kingston upon Hull, East Yorkshire, it is proposed that a footbridge will be built over Castle Street between Prince's Dock Street and Humber Dock Street (approximately centred on NGR TA 0968 2847; Fig. 1). The Prince's Quay footbridge has received planning permission with an archaeological condition in recognition that the bridge will affect buried archaeological remains pertaining to Hull's western medieval defences and later Civil War outworks (condition 20 on planning consent and condition 6 on LBC; Planning Application reference 15/00965/FUL and LBC ref 15/00966/LBC). As it would not be possible to investigate the exact impact zone associated with the footbridge, Humber Sites and Monuments Record (HSMR, the statutory body for advising Hull City Council and local authorities on heritage matters) agreed that the impact of the footbridge could be compensated by a targeted programme of archaeological investigation. The first element of the programme comprised the excavation of two archaeological trenches placed to investigate the medieval town defences. The trenching would help to determine the location, extent and degree of survival of these important archaeological remains, to derive the best possible understanding of them and to make a full record prior to construction commencing. The second element of the works comprised an examination of selected MOSTAP samples recovered during ground investigation undertaken in 2014 (OA-HFA 2014), seeking to gain a better understanding of the deposits and the environment within and around the Civil War defences.
- 1.1.2 The project design for the archaeological works (Oxford Archaeology-Humber Field Archaeology (OA-HFA) 2015; amended 2016) made allowance for the excavation of two trenches, Trench 1 to the north of Castle Street, next to Prince's Dock Street, and Trench 2 to the south, next to Humber Dock Street. This document presents the findings from Trench 2, which was excavated by OA-HFA on behalf of Balfour Beatty (BB; Highways England's (HE) appointed principal contractor for the A63 Castle Street Improvement) in February and March 2016. The document also reports upon the findings from the examination of the selected MOSTAP samples.
- 1.1.3 In addition, an archaeological watching brief was maintained during a programme of ground investigation works that was undertaken to inform the design of the footbridge. The watching brief was undertaken during the drilling of boreholes in July and August 2015, and during the excavation of a series of trial pits in December 2015.

1.2 ARCHAEOLOGICAL BACKGROUND

- 1.2.1 *Overview of the defences:* Hull's medieval and post-medieval defences were substantial. A paper examining the historical and archaeological evidence for the defences on the west bank of the River Hull, surrounding the Old Town, is currently in preparation (Evans, forthcoming); the following overview of the

evidence is adapted from a draft of this paper, with the permission of the author.

- 1.2.2 From 1321-4 until 1776, the town was surrounded on three sides by a substantial ditch and bank, later fronted by a circuit of brick walls incorporating numerous gates and towers; the fourth side, opening onto the River Hull and the town's waterfronts, was protected by a boom chain slung across the entrance to the river. The medieval defences were augmented in *c* 1640, shortly before the First Civil War (1641-42), by the excavation of a substantial ditch that circumvallated the medieval defences (*ie*, to the west of the Prince's Dock Street and Humber dock Street in the present area of investigation). The great bulk of the walls was systematically dismantled to a set height between 1776 and 1809, as part of the works accompanying the construction of the Town Docks; the rest was dismantled in 1829 and the last remaining gateway through the walls (a postern on Little Lane) was demolished in the mid-1960s.
- 1.2.3 Archaeological investigation of the medieval defences began in 1964, with small-scale excavations in Humber Street, followed in 1969 by the exposure of a small section of walling and a turret in North Walls, and in 1976 by a very brief exposure of the upper brickwork of part of the Myton Gate. The first major opportunity to investigate any of the town gates and the adjoining ditch in any detail arose from proposals in 1986 to pedestrianise a large area of the town centre at the west end of Whitefriargate. This prompted a programme of excavations which resulted in the exposure of the northern half of the Beverley Gate, one of five gates which led into the medieval town.
- 1.2.4 ***Previous archaeological work in the vicinity of the footbridge excavations:*** some small-scale archaeological investigations have taken place in the vicinity. The earliest was in 1976, where parts of the substantial brick structure of the Myton Gate were exposed during construction of the northern carriageway of the A63 and a two-hour period was allowed for staff of Humberside Archaeology Unit and Hull Museums to record the remains (Ayers and Evans 2001). The structure comprised an arched passageway flanked by brick walls with buttresses, while in front of the passage was recorded the brick-lined rectangular pit forming the counterweight pit for the drawbridge. Photographs show that the wall flanking the south side of the passage had survived to within 0.30m of the modern road surface, with the new carriageway having been laid on the top of the remains.
- 1.2.5 In 1986, as part of the resurfacing taking place alongside Humber Dock, four trenches were excavated to attempt to locate the Town Wall and Hesse Gate. Records of this intervention are sparse, however, and were only recently uncovered in the archive for the Beverley Gate excavations. The northernmost trench, close to Castle Street, reportedly found "nothing but brown clay over a grey clay [.....] to a total depth reached of 3.5m". This was described as being a similar situation to that seen in Trenches 1, 2 and 3, where there was re-deposited brown alluvial clay to a depth of 2.5m; in Trench 3, the re-deposited clay sealed remains of the Town Wall, close to the roadside. The presence of this thick re-deposited clay was taken to indicate that "excavation of [the] Humber Dock had entailed removal of a larger area than the water space

alone"; this could imply that construction of the dock had involved the total removal of parts of the wall.

- 1.2.6 Trial excavations (Brinklow 1994) were undertaken by York Archaeological Trust in 1994 for previous proposed A63 improvements. Two trenches were excavated, targeting the town wall as marked out by coloured bricks at ground level. The wall was not encountered where marked, though the trenches recorded a possible internal bank on the eastern side of the town wall in Prince's Dock Street, on the north of Castle Street, while in Humber Dock Street, south of the A63, they encountered what may have been the town ditch. In contrast to the relatively simple sequence recorded in the nearby 1986 trench, the YAT trench, also excavated to 3.5m depth, recorded a more complex series of layers, including layers of crushed brick and mortar, one of which at over 2m depth may have had a trampled upper surface. Though the wall was not located, evidence of its construction or demolition was perhaps present, with possible ditch deposits (containing well-preserved organics) being present at the base of the sequence.
- 1.2.7 From the failure of the YAT trenches to locate the town walls, it is clear that the wall-lines marked out in coloured pavers do not provide an accurate indication of the true positions of the walls: while the trench in Prince's Dock Street could suggest that the wall here lay further west than marked, the trench in Humber Dock Street could indicate that the course of the wall here lay further east. The 1986 trenches along Humber Dock Street suggested that in places the wall may have been removed below ground when Humber Dock was constructed. Further north, it is known that the foundations of the town wall were exposed during dock construction between the site of Beverley Gate and that of Myton Gate, though there is no reason to suppose that the foundations were actually demolished to facilitate construction of the dock.
- 1.2.8 ***The recent OA-HFA work:*** as part of the preparatory work for the A63 improvements, OA-HFA produced an archaeological assessment, mitigation, and geoarchaeological deposit model for the route of the road in central Hull (Oxford Archaeology and Humber Field Archaeology 2014). The works included the extraction of a series of geotechnical boreholes along a transect on the north side of Castle Street alongside Prince's Dock. This was carried out as part of the SI works to investigate the possible line of the Civil War defensive outworks in this area. The baseline ran for a distance of 42m and the ten borehole locations were spaced relatively evenly at around 4.5m apart. Initially, test pits were excavated at each of the sites, to a depth of 1.2m, to establish the presence or absence of modern services. Each site was then examined by a static cone penetration test, the results of the testing determining which site to revisit to obtain MOSTAP samples from pre-determined depths. Analysis of the results suggested the presence of silt deposits which could represent ditch fills in several test-locations within the eastern half of the transect (Fig 2).

2. METHODOLOGIES

2.1 METHOD STATEMENT

2.1.1 The Historic England - and HSMR-approved OA-HFA *Project Design* was adhered to as fully as possible throughout the programme of investigation, and all variations were agreed with BB, Arup, MMGJV and HSMR prior to implementation. Close liaison was maintained with all stakeholders throughout the investigation, with weekly reports provided and on-site communication maintained with BB representatives. In addition, BB, Arup, HE, MMGJV, Historic England, and HSMR representatives undertook regular monitoring visits to the site. The principal variation related to the southward extension of Trench 2, which was articulated within an amendment to the *Project Design* and approved by HSMR. All works met current CifA and Historic England standards, and generally accepted best practice (CifA 2014a; 2014b; 2014c; Historic England 2015).

2.1.2 **Key aims and objectives:** the overall aim of the investigation was to further an understanding of the position and character of any archaeological remains of Hull's medieval and Civil War defences within the immediate area of the proposed Prince's Quay Footbridge. Thus, the objectives of the trench excavation were to:

- locate the medieval city wall and within Trench 2 the associated bastion;
- determine the form and nature of construction of the defences;
- determine if there is any survival of the medieval city ditch or other features;
- determine if there is any survival of medieval settlement features within the exposed areas;
- identify and record all archaeological features and artefacts exposed during excavation of the trenches;
- establish the sequence of archaeological deposits present;
- retrieve dating evidence and palaeoenvironmental evidence from archaeological features; and
- present the results within the public domain commensurate with the significance of the findings.

2.1.3 The examination of the MOSTAP samples aimed to determine if, in view of later activity (construction of the docks and the position of a basemented warehouse that coincided with the investigation area), any indication of the Civil War outworks are present.

2.2 TRENCH EXCAVATION

2.2.1 The methodologies utilised during the works adhered to those presented in the document: *Proposed Footbridge, A63 Improvements, Castle Street, Kingston upon Hull: Project Design for Archaeological Excavation*, OA-HFA October 2015. Following the completion of investigation within the footprint of the southern trench (Trench 2) as originally proposed, it was agreed with Highways England, BB and HSMR that the trench should be expanded to the

south. Proposals and methodologies for the expansion to the trench were submitted in an amended version of the OA-HFA *Project Design*, submitted February 2016.

- 2.2.2 The uppermost modern deposits within the trench were excavated in spits not exceeding 0.1m thickness, using a vacuum excavator operating under the supervision of a suitably qualified and experienced archaeologist. All subsequent excavation of archaeological deposits was by hand. All arisings were examined for finds and any such material was retrieved, bagged, labelled and safely stored, pending examination.
- 2.2.3 **Recording:** findings were recorded stratigraphically on HFA *pro-forma* sheets, using a system adapted from that used by what was formerly the Centre for Archaeology Service of English Heritage (now Historic England), with suitable accompanying graphic documentation. An indexed photographic record of individual contexts, feature groups, and overall trench shots from standard viewpoints, was maintained using high-resolution digital photography, and the inclusion of a visible, graduated metric scale where safe to do so.

2.3 WATCHING BRIEF

- 2.3.1 An archaeological watching brief was maintained during the site investigation works undertaken in July-August and during night works in December 2015 (*Appendix 2*). Monitoring of ten boreholes was undertaken in July-August, whilst one more borehole and 11 vacuum-excavated trial pits (looking for services) were observed in December. Monitoring was undertaken by a qualified archaeologist in accordance with industry guidance and best practice (CIfA 2014c), with recording following the methodology in *Section 2.2.3*, albeit that recording was undertaken from a safe distance in cognisance of safe working methodologies.

2.4 ARTEFACT ASSESSMENT

- 2.4.1 Artefacts were cleaned, processed and stored in accordance with the *Project Design*. Assessment of the finds followed guidelines recommended by the Finds Research Group AD700-1700 (1993) and the Institute of Field Archaeologists Finds Group (1991). It aimed to meet the requirements of MAP2, Phase 3, 'Assessment of potential for analysis' (English Heritage 1991).

2.5 PALAEOENVIRONMENTAL ASSESSMENT

- 2.5.1 **Charred and waterlogged Plant Remains:** up to 10 litres of material from each of the 16 bulk samples recovered during the excavation was processed using a modified Siraf flotation machine where flots (light fractions) were retained in a 0.25mm mesh sieve, and the residue on a 0.5mm mesh. Both the flots and residue were air-dried. The flots were scanned using a Leica stereo-microscope and any plant material, including fruits, seeds, charcoal and wood fragments was quantified, provisionally identified, and assessed, following Historic England guidelines (English Heritage 2011). Other remains, such as bone, microfossils, insects, coal and heat-affected vesicular material (havm) were also quantified. Quantification is based on a score of 1 to 4 where 1=rare (1-5

- frags), 2=present (6-25 frags), 3=common (26-100 frags), 4=abundant (>100 frags). Nomenclature and classification of the plant remains followed Stace (2010).
- 2.5.2 The results, initially recorded on an assessment *pro-forma*, were entered onto a spreadsheet. Both the original hard copies and the digital spreadsheet will be kept with the site archive.
- 2.5.3 **Monolith and core samples:** the monolith and small cored samples were cleaned and the lithologies described prior to sub-sampling for pollen assessment. Volumetric samples were taken from seven sub-samples and one tablet containing a known number of *Lycopodium* spores was added so that pollen concentrations could be calculated (Stockmarr 1972). The samples were prepared using a standard chemical procedure (method B of Berglund and Ralska-Jasiewiczowa 1986), using HCl, NaOH, sieving, HF, and Erdtman's acetolysis, to remove carbonates, humic acids, particles > 170 microns, silicates, and cellulose, respectively. The samples were then stained with safranin, dehydrated in tertiary butyl alcohol, and the residues mounted in 2000cs silicone oil. Slides were examined at a magnification of 400x by ten equally-spaced traverses across at least two slides to reduce the possible effects of differential dispersal on the slides (Brooks and Thomas 1967), or until at least 100 pollen grains were counted. Pollen identification was made following the keys of Moore *et al* (1991), Faegri and Iversen (1989), and a small modern reference collection. Plant nomenclature follows Stace (2010) and that for non-pollen palynomorphs (NPP) follows van Geel 1978. The preservation of the pollen was noted and an assessment was made of the potential for further analysis.
- 2.5.4 **MOSTAP Samples:** four MOSTAP cores recovered during ground investigation works associated with the A63 Improvements, were submitted for geoarchaeological assessment. The cores were retrieved during a previous phase of investigation carried out in 2013 (OA-HFA 2014) and have been stored unopened since the completion of fieldwork. The fieldwork in 2013 comprised a watching brief on geotechnical interventions and included an 'Archaeological Survey Area' intended to investigate the potential location of the Civil War defensive ditch (*Section 1.2*). Ten test pits (A01-A10) were excavated along a baseline running south-south-west to north-north-east on a strip of land to the immediate south of Princes Quay (NGR TA 0960 2848 to TA 0964 2848). The baseline ran for a distance of 42m, with test pits spaced *c* 4.5m apart. The test pits were excavated to 1.2m BGL to check for services, all of which encountered fairly recent deposits. Following this, each location was examined by a Static Cone Penetration Testing (SCPT) rig extending to 10m BGL and the results used to determine which interventions to revisit to obtain MOSTAP samples from predetermined depths. Analysis of the SCPT results suggested a possible feature within the underlying alluvium may be located between A06, A09 and A10 (Fig 2), with higher resistance and friction ratios at 3.2m to 5.2m BGL, perhaps indicating the presence of organic sediments. The cores were transported to OA premises where they were extruded, cleaned, logged and photographed under laboratory conditions.

2.6 DENDROCHRONOLOGY

- 2.6.1 A detailed methodology is presented in the full dendrochronology report (*Appendix 5*).

2.7 RADIOCARBON DATING

- 2.7.1 Two samples of organic material recovered from palaeoenvironmental samples were sent to the Scottish Universities Environmental Research Centre for Radiocarbon Assay.

2.8 ARCHIVE

- 2.8.1 The data from the investigation has been collated to form a full archive, in accordance with Historic England guidelines (*Management of Archaeological Projects*, 2nd edition, English Heritage 1991, Appendix 3). OA North will deposit the original record archive (paper, magnetic and plastic media) with the Hull and East Riding Museum. A digital copy of the archive will be submitted to HE and BB. The complete artefact assemblage will be retained at present, but, pending future incorporation with material recovered from Trench 1, will be selectively lodged with the Hull and East Riding Museum in accordance with that body's deposition guidelines.

3. RESULTS

3.1 INTRODUCTION TO TRENCH 2

- 3.1.1 Trench 2 was initially excavated in its agreed position, measuring 5.62m south-west/north-east by 3.70m south-east/north-west. Following the initial excavation and recording, it was agreed that an extension to the trench would be feasible, with the final dimensions of the trench being between 5.62m south-west/north-east at the north-west end of the trench and 3.79m south-west/north-east at the southern extension and a total south-east/north-west length of 8.25m (Fig 2). The trench was excavated in a series of steps to the limit of safe excavation (Plate 1); thereafter, Core 1 was drilled by hand through the base of the original trench, whilst Core 2 was drilled into the base of the southern extension.



Plate 1: Trench 2 viewed from the south, with the southern extension in the foreground

- 3.1.2 Ground level was around 5.00m OD; the deepest part of the archaeological investigation, in Core 1, reached -2.71m OD. Contexts in Trench 2 have been allocated numbers starting with **300**.
- 3.1.3 Analysis of the stratigraphic sequence, along with the dating of the pottery, has enabled four broad chronological phases to be assigned to the trench, as follows:
- | | |
|----------------|---|
| Phase 1 | Medieval; |
| Phase 2 | Post-medieval; |
| Phase 3 | Late eighteenth to late nineteenth century; |
| Phase 4 | Modern (twentieth century and later). |

3.1.4 Naturally occurring riverine alluvium **328** was encountered within Core 1 at a depth of -2.71m OD (7.71m below ground level/BGL). Above this lay a series of deposits which appear to be associated with Hull's Town Ditch.

3.2 PHASE 1: MEDIEVAL

3.2.1 Although dating is problematic due to the lack of finds encountered within the trench excavation, there are reasonable grounds to be confident that a cut, **329**, into alluvium **328**, represented the medieval Town Ditch, and that several of the deposits identified therein are likely to be of medieval date. The initial silting of the ditch was marked by a sequence of thin laminated brown silts (**327**), up to 0.16m thick (-2.56m OD). Above this was thick very dark greyish-black fine sandy silts **326**, up to 3.52m thick (0.96m OD), followed by a 0.8m thickness of fill **325**, much finer, and greyer, silt, almost clay, to 1.76m OD. Samples of fill **325** were obtained during the cutting of Core 2. These contexts (**328**, **329**, **327**, **326** and **325**) were only seen within, or inferred from, the hand-cut Cores 1 and 2; deposits above them were seen in the hand-excavated parts of the trench.

3.2.2 Sealing fill **325** was a fine, probably water-lain, clay silt (**324**), which was a mid- to light blue/grey in colour. In Core 1, the deposit was encountered at 1.95m OD, whilst in the southern extension, the deposit was encountered at a higher level of 2.48m OD and seen in the base of the central sondage.



Plate 2: The tops of timber posts **335** and **336** (centre)

3.2.3 Seemingly driven through (but possibly abutted by) that water-lain material, in the southern trench extension, were two 0.3m-diameter oak piles (**335** and **336**; structure **338**, on a north-west/south-east alignment; Plate 2). Both were whole conversions, **336** still having sapwood remaining, both were split in half vertically (tangentially sawn, rather than split) and no tool marks were visible *in-situ*. Only the uppermost 0.25m of each post could be safely exposed during the investigation, but they are likely to have continued well below the safe depth of excavation. Exploratory excavation along the alignment of the posts did not reveal the remains of any further wooden structures. Both posts were sampled for dendrochronological analysis.

- 3.2.4 Sealing the posts, and elsewhere the grey clay silt **324**, was a very thick band of mid- to light orange, yellow/brown laminated silts (**309**), with the laminations approximately 5mm thick. This deposit was seen in both sondages within the trench, being up to 1.53m thick (3.48m OD; Plate 3). The depth of accumulated laminations suggests regular tidal ingress into the ditch over a fairly long period, with minimal evidence of human intervention in the form of clearing.
- 3.2.5 The wider sondage in the southerly trench extension saw an increase in the presence and visibility of deposits associated with the upper fills of the Town Ditch. Overlying the laminated silt sequence was **308/337**, a hardened deposit of heavily compacted silts with small pebble inclusions, up to 0.2m thick, found at 3.59m OD in the northern sondage and at 3.83m OD in the southern sondage, dropping to the south-east at 3.50m OD. This deposit may represent a deliberately laid surface capping the ditch fills at a point in time where the feature had silted up to such a degree that it was no longer reached by tidal inundation. A thin layer of sand (**307**), only 0.05m thick (at 3.53m OD), was found lying above **309** in the northern sondage.



Plate 3: Hand-dug sondages through the upper parts of the Town Ditch, looking north-west. The sequence of layers, from top to bottom, represents a post-medieval upper chalk consolidation layer, clay that possibly derives from the slighted rampart, below which is the darker line of an indurated surface laid on the upper medieval ditch fills, which themselves appear as fine, clean silt laminations. At the top (left) of the photo are the partial remains of a post-medieval brick wall which cuts into the upper chalk consolidation layer

3.3 PHASE 2: POST-MEDIEVAL

- 3.3.1 What appeared to be redeposited clay (**306**), perhaps from the slighted town rampart, overlay all the earlier ditch deposits described above. In both the southern and northern areas of the trench, this deposit could be seen extending throughout the trench in plan and profile; it was generally 0.4m to 0.5m thick, seen at 4.00m OD at its highest point in the south and 4.11m OD in the north, appearing to level out within the latter area (Plate 3).
- 3.3.2 In the southern sondage, there was evidence of a rubble spread (**333**), 0.05m thick at its maximum (4.16m OD), and which contained post-medieval brick and pottery. This was overlain by further clay silt dumping (**334**) up to 0.22m thick (4.07m OD).
- 3.3.3 Cutting into dump deposit **334** were the remnants of a rotted-out wooden drain (**332**). Oriented north/south across the southern sondage for a distance greater than 4.7m, and extending outside the trench in both directions. The cut was up to 0.3m wide and 0.4m deep with vertical sides and a concave base. The basal fill (**331**) consisted of what appeared to be the collapsed and heavily degraded remains of the wooden drain and its contents: a black organic silt up to 0.2m thick. Above this deposit was the sealing backfill of the drain cut, **330**, essentially consisting of redeposited clay silt from dump **334**, up to 0.3m thick, 4.20m OD at the north, ending at 4.00m OD at the south.
- 3.3.4 Sealing all of these deposits and features throughout the trench was chalk consolidation layer **305**, between 0.05m and 0.15m thick, thickening towards the north-west (4.36m OD at its highest, but generally at 4.20m OD; Plate 3). This layer appears to represent a deliberate attempt to provide a surface or working platform following the final infilling of the Town Ditch and deposition of former rampart clay.
- 3.3.5 Cutting into deposit **305**, in the northern part of the trench, were the partial remains of a brick wall (**317**; Plate 3). Construction cut **318** for the wall was oriented south-east/north-west, surviving to 0.55m long, up to 0.25m wide, and 0.4m deep (cut from 4.08m OD). Only the southern part of the wall remained, and appeared to be constructed of alternating headers and stretchers with a lime mortar bonding. Up to eight courses remained, with a total height of 0.64m (4.29m OD). The backfill between the wall and the cut edge was a dark green/grey silt (**316**).
- 3.3.6 Banked against remains of wall **317** was a further dump of material, between 0.1m and 0.25m thick, comprising a sandy gritty clay (**304**), recorded throughout the trench and the later extension. This appeared to be an attempt to raise and level the ground, the surface of which was seen to be fairly level (around 4.37m OD), deviating only a centimetre or two within the investigated area.

3.4 PHASE 3: LATE EIGHTEENTH TO NINETEENTH CENTURY

- 3.4.1 At the very north-western end of the trench were the remains of what may have been the foundation for a crane or derrick base, or for some other structure associated with the adjacent Humber Dock (Plate 4). A foundation cut (**321**) was broadly semi-circular in plan, cut from 4.35m OD, with straight, near-vertical sides leading to a flattish base at 4.09m OD. Set centrally within the

cut was a rough-hewn block of limestone or sandstone (**320**). The block measured 640mm x 620mm x 280mm, roughly squared with a series of four, off-centre, 25mm-diameter and 35mm-deep drilled holes set across the top, in a line; the top of the stone foundation was at 4.52m OD. The north-eastern hole had what appeared to be the remains of a sheared-off bolt or similar left *in-situ*. The backfill of the foundation, **319**, consisted of broken fragments of limestone, some partially faced, mixed within a dark grey/brown clay silt matrix.



Plate 4: The nineteenth-century derrick base, looking north-east

3.4.2 To the south-west, taking up around a quarter of the original trench, was evidence for the later nineteenth-century remodelling of the upper part of the adjacent Humber Dock (Plate 5). Construction cut **315**, which was noted at 4.36m OD, but had probably been truncated to this level, was oriented south-east/north-west, was greater than 1.70m wide, extending out the trench to the south-west, and greater than 1.50m deep, having not been fully emptied due to safety concerns; the eastern side of the cut was generally straight and vertical. Set within was the following sequence of deposits: **314**, a concrete foundation greater than 0.6m thick upon which was set three, rough-cut, limestone blocks (**313a-c**). These interlocking stones were oriented south-east/north-west and were exposed for a length of 1.84m, were 0.54m wide and with a maximum depth of 0.84m; the upper stones were level at 4.64m OD. The exposed dimensions of each stone were as follows: **313a**: 540mm SW/NE, 640mm NW/SE, 840mm high; **313b**: 500mm SW/NE, 1180mm NW/SE, 560mm high; and **313c**: 300mm SW/NE, 400mm NW/SE, 300mm high. Set against these stones, and constituting the backfill of the cut, was a dark silt (**312**) containing a very heavy concentration of broken, partially faced limestone and sandstone

blocks. It is likely that these broken stone fragments originate from the original masonry upper levels of the dock, and were demolished as part of the re-build.



Plate 5: Late nineteenth-century reconstruction of the dock upper stonework sat on concrete; looking south-west

3.5 PHASE 4: MODERN (TWENTIETH/TWENTY-FIRST CENTURY)

- 3.5.1 A ceramic electrical conduit and backfill (**310**), 0.3m in diameter, was set along a broadly NNW/SSE alignment within construction cut **311** (at 4.46m OD). The duct passed across the trench into a modern inspection chamber in the north-west corner. Another service, consisting of two active metal water pipes and surrounding fill (**322**), set within cut **323** (at 4.35m OD), were oriented north-west/south-east, along the north-east side of both the excavation trench and its extension, running for more than 10m in length.
- 3.5.2 Sealing both of these modern services was a 0.25m- to 0.40m-thick layer of hardcore levelling, **303** (at 4.70m OD), above which lay concrete **302**, up to 0.12m thick (4.82m OD), upon which was a 0.1m-thick layer of bedding sand (also **302**). Forming the current ground surface was brick flag paving (**301**), up to 0.10m thick and averaging 4.96m OD to 5.00m OD at ground level.

3.6 WATCHING BRIEF

- 3.6.1 The observations made during the watching briefs of the boreholes and trial pits are summarised in *Appendix 2* and will not be reiterated at length here.
- 3.6.2 **Boreholes:** the majority of the boreholes revealed a sequence that comprised deposits of modern made ground (to 1.7-2.5m bgl), sealing various types of

alluvium. Occasionally, deposits of clear or potential archaeological origin were identified. BH410, between the route of the A63 and the Holiday Inn (Fig 2) encountered the fill of a probable negative feature, 1.7-2m bgl, including fragments of brick and domestic refuse. BH413, between the A63 and Prince's Dock (Fig 2) identified layers of demolition debris and rubble 0.3-4.5m bgl, which were interpreted as the backfill of a disused cellar, although no corresponding floor was identified. Similar deposits were found to seal a brick surface at 3m bgl in BH415, some 35m to the east. This may represent the remains of a brick cellar, which appears to have been built on top of deposits containing building debris and which were identified to a depth of 10m bgl. The latter may have been used to backfill the construction cut for the lock that once connected the Prince's and Humber Docks. BH501 was drilled through the backfilled lock, encountering natural deposits at 9.9m bgl and the possible brick base of the lock at 8.5-8.8m bgl. The latter would appear to have been bedded on a layer of crushed brick and mortar (8.8-9.5m bgl) which itself seemed to have been laid on horizontal timbers (9.5-9.75m bgl).

- 3.6.3 BH414 and BH416 were drilled immediately to the north of the current edge of the Humber Dock, within an area that had lain within the extent of the original nineteenth-century dock. They revealed natural alluvium 10m bgl, sealed by a sequence of deposits that represented silts within the dock, and then backfilling materials from the modification of the dock. The deposits encountered by BH502 are best interpreted as the construction backfill relating to modifications to the adjacent Humber Dock (*Section 3.4*).
- 3.6.4 **Trial Trenches:** little of archaeological note was observed within those parts of the trial trenches that lay within the pavement, and that which was seen was often hard to interpret due to the narrow interventions. Four courses of an east/west-aligned brick wall were exposed at the northern end of Trench N6, just to the south of Warehouse 6, although it is not possible to suggest that the two structures were associated.
- 3.6.5 More consistent results were obtained from those trenches on the southern side of the road, particularly those parts that lay within the landscaped verge. An east/west-aligned wall was observed standing at the junction of the pavement and the verge within Trenches S4-S6 (Plate 6). Its location corresponds with that of the original northern edge of the Humber Dock, and it is possible that the wall seen during the watching brief could represent elements of a retaining wall associated with the dock. The southern portions of the same trenches also revealed what appeared to be a rough brick surface at their bases at depths of 1.1-1.28m bgl. The surface may have been a temporary one, perhaps laid to cap the later backfilling of the northern part of the dock.



Plate 6: Wall in southern end of the part of Trench S5 that was excavated through the pavement

3.7 ARTEFACTS

- 3.7.1 **Pottery and Clay Tobacco Pipe:** thirteen sherds of pottery and a single fragment of clay pipe stem were retrieved (Table 1). Redeposited clay **306** contained a residual sherd of medieval pottery, in a Fine Sandy fabric, unattributable to source. Fine Sandy wares are a regional tempering tradition of relatively common occurrence and widespread distribution (*sensu* Hayfield 1985, *passim* and specifically 347-55). The pottery bore a splashed glaze, suggesting a date in the late eleventh or twelfth century. The transition between splashed to suspension glazes in the region is generally considered to take place around the mid-twelfth century (cf Watkins 1991, 80 and Hayfield 1985 *passim*). Also from this deposit was the clay tobacco-pipe stem fragment. This has a narrow off-centre bore and is likely to be of eighteenth- or nineteenth-century date.
- 3.7.2 The most interesting pottery from the excavation came from Phase 3 dock reconstruction backfill **312**. This consisted of nine sherds of thick-walled wheel-thrown Glazed Red Earthenware with internal glaze. The sherds

represented fragments of nine separate vessels. The single example of a rim has a flat top, slightly undercut on the interior. On this vessel the glaze continues onto the rim and then terminates. There appear to be two slightly different forms. One is straight-walled, tapering to the base in a similar way to a standard plant pot and bearing a very smooth exterior. The other is more upright and slightly barrel-shaped with a very slight ‘pedestal’ at the base. The exterior of this type shows throwing lines, as do the interiors of all vessels. Basal sherds show a rounded internal basal profile. The vessel walls of all vessels taper towards the rim.

- 3.7.3 Similar, though not identical industrial or commercial vessels were also recovered from watching briefs in Hull at the site of the former Customs Building alongside Queen’s Dock (Didsbury 2002, 8). It is likely that these vessels were produced by the eighteenth- and nineteenth-century potteries at Sculcoates, Hull. Industrial vessels found in a waster pit at Sculcoates were referred to as ‘lead-pots’ by Gareth Watkins (1987, 115-17), though he offers no evidence for this interpretation. These vessels, and perhaps those from the Customs House, may have had a maritime function, possibly to contain substances used for the upkeep of wooden sailing vessels, such as tar or pitch.
- 3.7.4 The rim of a Staffordshire Slipware drinking cup, of late seventeenth - or eighteenth-century date, with brown slip spots, was also recovered from backfill 312. A small sherd of more common glazed red earthenware was retrieved from demolition layer 333. Glazed red earthenware was produced from the sixteenth to the nineteenth century, and is a common component in Hull’s ceramic assemblages from the seventeenth century onwards. The body sherd has no features which allow closer dating.

Context	Fabric	Quantity	Wt (g)	Remarks
306	UMED	1	3	Fine sandy jug sherd, hard & thin-walled, splash glazed
306	CPIP	1	6	Stem, narrow bore suggests eighteenth or nineteenth century date.
312	GREB	9	1297	Industrial ceramic, thick-walled with internal glaze, some sherds have patchy glaze. Flat bottomed with rounded interior base. 1 rim, 3 sherds with basal angle and five body sherds. 2 potential forms, one straight-sided, tapered & plant-pot like, the other more upright & barrel shaped with potting marks on exterior.
312	STF1	1	3	Drinking cup rim with brown slip spots
333	GREB	1	11	glazed on both sides, closed vessel
Total		13	1320	

Notes: UMED=Unclassified Medieval; CPIP= Clay tobacco pipe; GREB=Brown-glazed Red Earthenware (post-medieval)

Table 1: Pottery recovered from Trench 2

- 3.7.5 **Vessel Glass:** vessel glass from the trench consisted of the neck of a beverage bottle weighing 50 grams from Phase 3 dock reconstruction backfill 312. This was mould-blown, with an applied rim and of very dark brown glass, which appears black. The form of the applied rim suggests that the bottle is of the early to mid-nineteenth century.

3.7.6 **Animal Bone:** a small assemblage of animal bone was retrieved (Table 2). This consisted of three fragments weighing a total of 215 grams. Two fragments were recovered from Phase 3 dock reconstruction backfill **312**, and a single fragment from **326**, a Phase 1 fill of the town ditch.

Context	Animal	Element	No of Frags	Wt (g)	Notes
312	<i>Bos f.</i> domestic (cow)	Scapula	1	186	Distal end, bears transverse small knife marks resulting from butchery
312	large-sized mammal	Rib fragment	1	21	Fragment, both ends missing
326	Caprovid (sheep/goat)	Mandible	1	8	Fragment with condyle. Possible butchery mark
Total			3	215	

Table 2: Animal bones recovered from Trench 2

3.7.7 **Ceramic Building Materials, Roof Tile:** the assemblage of roof tile consisted of three fragments of pantile, weighing 241 grams in total. All three were sooted during use. These were recovered from dock reconstruction backfill **312**. Two of the fragments joined and this tile bore a nib stamped with the letter ‘M’, which is likely to be a manufacturer’s mark. Nibs stamped with an initial are a relatively common occurrence within pantile assemblages within the region. The form of the stamped nib suggests an eighteenth- to mid-nineteenth-century date.

3.7.8 The earliest documentary record of the use of pantiles in East Yorkshire refers to their importation from the Low Countries in 1663 in order to roof the new house for the master of the Charterhouse, Hull (Neave 1991, 94). They are recorded in the possession of wealthy Beverley landowner Michael Wharton in the inventory written on his death in 1688 when he was also found to possess over 40,000 ‘old English tiles’ (*ibid*) which can be safely assumed to be the locally produced flat tile. Manufacture of pantile in England has no documentary record prior to 1700 and the earliest apparent record of local manufacture (at Hull) dates to the 1730s. By the 1770s it is thought that Hull had become the major centre of both production and trade of the tiles in England (*op cit* 95).

3.7.9 **Ceramic Building Materials, Brick:** the assemblage consisted of 17 pieces weighing 23.066 kg in total (Table 3). This comprised 11 diagnostic bricks (ie, morphological elements were present to permit identification and dating) weighing 22.735kg, and six non-diagnostic fragments, weighing 0.331kg. Six complete bricks were retrieved. The material ranges in potential date from the late medieval period to the mid-nineteenth century at the latest. All were hand-produced.

3.7.10 A sample of four bricks was taken from Phase 2c wall **317**. These are all of the same type, none of which was re-used. They are of eighteenth- to mid-nineteenth-century date. These bricks were hard-fired, of mottled red-brown appearance, with occasional cinders or over-fired ‘blown’ material in the fabric, slop-moulded, and had been stacked (skintled) in a herringbone format

to dry prior to firing. The skintling marks are diagonal depressions, with a straight edge observed on the stretchers due to pressure from the bricks above (cf James and Rose 2005, 7). This form of 'skintling' occurs from the mid-sixteenth century onwards (*ibid*). Turning marks were also present, which showed they had been manufactured at a table, levered and turned on the edge of the table, in order to be carried away for drying. Mortar used was an off-white lime mortar with added sand. Occasional small fragments of charcoal were present in the mortar, indicating the use of wood as fuel for the lime-kiln. The brick from Phase 2a possible slighted rampart deposit **306** was of the same type.

3.7.11 Phase 3 dock remodelling backfill deposit **312** contained bricks of mixed type. Two were of 'red sandy' type, the complete example of which had been chipped at the lower bed, either to make the brick thinner or to remove misshapen 'squodged' lower arrises. Red sandy types appear around the mid-fifteenth century and, by at least the seventeenth century, the stickier alluvial clays used for medieval bricks within the locality seem to have been totally superseded by sandier fabrics and stone-containing fabrics manufactured using boulder clays. A further red sandy brick of the same type as the chipped example was present in Phase 1 town ditch fill **308**.

3.7.12 The earliest brick was from Phase 2a demolition rubble spread **333**. This was a late medieval or early post-medieval type, potentially of the late fourteenth to sixteenth century and 'red sandy' in nature, bearing an off-white mortar containing charcoal and occasional lime-lumps.

Context	Type	Quantity	Length (inches)	Width (inches)	Thickness (inches)	Slop-moulded	Turning marks	Skintling marks	CBM Period	Potential date
306	PLAIN	1	8 7/8	4 1/2	2 5/8		✓	✓	LPMED	1700-1850
308	PLAIN	1		4 1/2	2 1/2		✓		PMED	
312	PLAIN	1	9 3/4	4 1/2	2 1/2	✓			LPMED	Post-1550
312	PLAIN	1			2 7/8			✓	PMED	
312	PLAIN	1		4 1/4	2 3/4		✓	✓	LPMED	Post-1550
312	PLAIN	1		4 3/4	2 1/2				PMED	Eighteenth
317	PLAIN	4	9	4 1/2	2 1/2	✓	✓		PMED	1700-1850
333	PLAIN	1		5 1/2	2				LMED-PMED	Late fourteenth-sixteenth

Notes: Brick measurements in the above table are only present when the complete specific dimension is present on the brick. Blank measurement fields therefore indicate the semi-complete examples. Ticks indicate presence of various manufacturing characteristics. Weights of the complete and semi-complete bricks are recorded in the site archive.

Table 3: Summary of complete and semi-complete bricks from Trench 2

3.7.13 **Architectural Fragments:** six pieces of architectural stone were retrieved, weighing 30.225kg in total; all were from Phase 3 dock remodelling backfill deposit **312**. Two pieces were ashlar fragments in sandstone, one of which was coarse in nature, nearing gritstone in grain-size. One had been dressed on the outer surface with chevron tooling, a form of surface decoration common in Yorkshire. This piece had adhering original Portland cement mortar (hereafter

OPC) indicating a date of the late eighteenth century at the earliest, and most likely of nineteenth-century date.

- 3.7.14 The remainder were all slabs of micaceous sandstones of the Coal Measures. All are of fissile Elland Flags-type, with an origin in Upper Carboniferous sandstone of the Lower Coal Measures of Yorkshire and Derbyshire coalfields. The thicknesses of the pieces range from 23 to 74mm. The largest piece has been worn smooth, and bears a slightly curved end. This fragment may have functioned as a step. One side of this piece is covered with a grey OPC-type mortar.
- 3.7.15 **Assessment of Potential and Recommendations:** the artefactual assemblage consists mainly of structural material such as stone and brick, alongside a very small amount of domestic and food refuse, and industrial or commercial ceramics. The earliest pottery is the splash-glazed sherd, which pre-dates the founding of Kingston-upon-Hull in the late thirteenth century, adding to the small corpus of residual pre-foundation material found on sites within Hull's Old Town.
- 3.7.16 Although comparatively small, the finds assemblage provides evidence of constructional materials for the post-medieval riverside and maritime environment within this area of Hull. The dumped and redeposited material is useful in that it provides evidence in support the interpretation of the site's structural sequence. Pottery with most intrinsic interest is the group of industrial pottery vessels, which may be associated with the upkeep of wooden sailing vessels.
- 3.7.17 Taken in isolation, the assemblage has little potential for further research; however, it may need to be re-considered in the light of further work on Castle Street in the future. The industrial ceramics are recommended for retention as they are of a comparatively rare type, which is not currently represented in the Humber Field Archaeology pottery reference collection. In view of this and the possibility of further work, it is recommended that the retained material archive is stored for the present. A decision regarding the retention or discard of the material in the long term will therefore be made at a future date. Any future further work would require a report and illustrations of the industrial ceramics and possibly further research on the vessels' type and function. Further research may also indicate the manufacturer of the pantile and refine the dating of the site sequence.

3.8 CHARRED AND WATERLOGGED PLANT REMAINS

- 3.8.1 **Quantification:** 16 environmental bulk samples taken during the excavation of Trench 2 were processed for the assessment of plant remains and charcoal. Analysis of the stratigraphic sequence, along with dates assigned from pottery, has permitted four broad chronological phases to be assigned to the trench, ranging from the medieval period to the present day. Most of the samples were taken from fills of the Town Ditch, two from a post-medieval wooden drain fill, and one from a post-medieval possible demolition horizon.

- 3.8.2 **Assessment:** the results of the assessment of the waterlogged plant remains, charred plant remains and charcoal are summarised in *Appendix 3*. Poorly diverse plant remains were present in 11 of the 16 samples assessed; the best recovery was from Phase 1 Town Ditch fill **325** and included seeds of knotgrass (*Polygonum aviculare*), fat-hen (*Chenopodium album*), sedges (*Carex* sp), nettles (*Urtica* sp) and a fig seed (*Ficus*). Coal, charcoal, wood, bone, snail shells, insect debris and herbaceous plant remains were also recorded. There were no identifiable charred plant remains.
- 3.8.3 Seeds of rushes (*Juncus* sp), fat-hen and nettles, and herbaceous debris, were recorded in most of the other productive samples, with single occurrences of cinquefoils (*Potentilla* sp) in Phase 1 Town Ditch fill **308**, chickweed (*Stellaria media*) in Phase 2a clay (possibly slighted rampart) deposit **306** and crowfoots (*Ranunculus* subsp *Batrachium*) in Phase 2a clay dump **334**. Microfossils of foraminifera and ostracoda, and shell debris including snail shells, were present in low numbers in several of the samples from the ditch fills. Wood was present in low quantities in nearly all of the samples, but was particularly abundant in the two samples from Phase 2b wooden drain fills **330** and **331**. However, the wood was so degraded that identification, other than suggesting it originated from a hardwood (oak, elm or ash), was not possible (D Druce *pers comm*). Coal and charcoal were also commonly recorded. Some examples of heat-affected vesicular matter were present in from Phase 2a putative demolition horizon **333**.
- 3.8.4 The waterlogged plant remains may have derived from several habitat types; seeds of crowfoots, rushes, and of sedges are from plants typically associated with damp, muddy conditions or present in rivers, ditches and ponds (Stace 2010, 115, 928, 951). Seeds such as fat-hen, chickweed and nettles are probably derived from waste or cultivated ground (Stace 2010, 459, 479, 285), or could be found in ditches containing possible dumped domestic deposits. The occurrence of a single fig seed, in Phase 1 Town Ditch fill **325**, may suggest some dumping of domestic or human bodily waste in the ditch. Most of the other samples also contained charcoal fragments, which may have accumulated as a result of waste associated with areas of occupation or the product of domestic dumping.
- 3.8.5 Of interest is the identification of foraminifera in several of the samples. If *in-situ*, these single-celled organisms (protists) would suggest marine or brackish marine conditions during sediment deposition (BGS 2016), which is not unexpected in this location adjacent to the Hull estuary. The occurrence of an ostracod fauna in several samples may support the presence of either freshwater or brackish-marine environments (BGS 2016).
- 3.8.6 **Recommendations:** where present, waterlogged plant remains were both poorly diverse and of low concentration, yielding rare occurrence of common seeds such as nettles and fat-hen. Although charcoal was present in many of the samples, there was no recovery of charred plant remains. The assessment data suggest that little new information would be obtained from further analysis of the samples.

3.9 ASSESSMENT OF POLLEN

- 3.9.1 **Quantification:** seven sub-samples were taken from two monoliths and two small cored samples collected from Trench 2. Naturally occurring riverine alluvium was overlain by a series of deposits which appear to be associated with Hull's Town Ditch and thought to be of medieval and post-medieval age (*Sections 3.2 and 3.3*).
- 3.9.2 **Previous work:** prior to the medieval period, low-lying areas adjacent to the Humber and the lower reaches of its tributaries were wetlands, susceptible to inundation by estuarine or riverine flooding (Metcalf *et al* 2000, 114). Artificial drainage activities, of which the earliest occurred in the lower Hull Valley during the twelfth and thirteenth centuries, as well as land reclamation and land-use changes, will have altered the natural floodplain environment and surrounding wetlands (Metcalf *et al* 2000, 114).
- 3.9.3 During the early medieval period, trees and shrubs became dominant components of palaeoenvironmental assemblages in the Hull Valley (Van de Noort and Davies 1993). This initial expansion of woodland has been correlated with a period of decline in the agricultural economy of the post-Roman period (Van de Noort and Davies 1993). Subsequent woodland clearance in the Hull Valley is linked to a phase of small-scale agricultural expansion in later medieval times (Van de Noort and Davies 1993).
- 3.9.4 **Lithology and stratigraphy:** the stratigraphic sequence for Phase 1 (medieval) and Phase 2 (post-medieval) identified a sequence of fills within the Town Ditch, comprising silts and clayey silts (contexts **327-325**; *Sections 3.2 and 3.3*; Table 4). The overlying fill, **324**, a blue/grey waterborne deposit, was cut by two driven oak posts driven. Overlying the waterborne material were deposits of brown silts and clays (fills **309-306**) above which a rubble spread **333** was deposited prior to clay/silt dumping **334**.

Feature	Sample	Context	Depth (m)	Sub-Samples	Lithology
Ditch	6	306	0-0.28	0.03-0.04	Medium brown silty clay, soft
Ditch	7	308	0.28-0.50	0.47-0.48	Medium brown silty clay, sand and chalk fragments. Soft, wet
Ditch	7	309	0.50-0.90	0.79-0.80	Medium brown variably sandy silty clay, grading to soft fine sand silt
Ditch	10	334	0-0.20	0.07-0.08	Medium brown silty clay, charcoal flecks, soft
Ditch	10	333	0.20-0.23	-	Thin band orange/brown sandy clay (?rubble-band)
Ditch	10	308	0.23-0.35	0.27-0.28	Brown silty clay, charcoal, hard; charcoal band 0.33-0.35m
Ditch	10	309	0.35-0.50	-	Medium-light brown silty sand, soft
Ditch	22	325	0-0.22	0.19-0.20	Fine black sticky silt
Ditch	23	325	0-0.22	0.11-0.12	Variable dark brown/black wet clayey silt

Table 4: Details of lithology and sub-sampling for pollen

- 3.9.5 **Results:** the raw counts for the pollen assessment are tabulated in *Appendix 4*. Although some pollen was recorded in all the sub-samples, only the deepest sub-sample from Town Ditch fill **325**, of probable medieval date, produced sufficient pollen to provide a limited palaeoenvironmental interpretation. Tree and shrub pollen accounted for approximately 20% of the pollen counted, with

herbs contributing approximately 80% of the count. Tree and shrub pollen comprised mostly pollen of alder (*Alnus*), oak (*Quercus*) and heather (*Calluna*), with fewer counts for birch (*Betula*), hazel-type (*Corylus avellana*-type), pine (*Pinus*), willow (*Salix*), ash (*Fraxinus*) and hawthorn (*Crataegus*-type). The herb assemblage was dominated by pollen of grasses (Poaceae) and larger grasses/cereal-type (Cerealia), pollen of the carrot family (Apiaceae, a large group containing plants such as pennyworts, water-dropworts and hedge-parsleys) and pollen of the goosefoot family (Amaranthaceae, formerly Chenopodiaceae, another large group containing plants such as fat-hen, glassworts and sea-blites). A range of other herbs included pollen of cornflower (*Centaurea cyanus*), common knapweed (*Centaurea nigra*), knotgrass (*Polygonum aviculare*), mugworts (*Artemisia*), meadowsweets (*Filipendula*), ribwort plantain (*Plantago lanceolata*), pollen of dandelion-type (*Taraxacum*-type), daisy-type (Asteraceae) and buttercup-type (Ranunculaceae). Single occurrences of spores of bracken (*Pteridium aquilinum*) were recorded, as well as several *Sphagnum* moss spores. Fungal spores included only single occurrences of *Sordaria* (HdV-55A/B) and *Chaetomium* (HdV-7A). Dinoflagellate cysts were present in low numbers, including *Operculodinium centrocarpum* and *Spiniferites* spp, and a single foraminifera test lining was also recorded. Microcharcoal was present in moderate amounts. There was some reworking of miospores of Carboniferous age but fewer than in any of the other sub-samples (Appendix 4).

- 3.9.6 The palynofloral data may be interpreted to suggest derivation of pollen from a largely open area dominated by grasses and herbs. Cereal-type pollen may represent cultivated grasses but, as the dimensions for these grains overlap with pollen of wild grasses, it cannot be certain that the grains represent cultivated grasses (Andersen 1979). However, the presence of pollen of cornflower may support an interpretation of arable cultivation, as this species is a common weed of cornfields (Stace 2010, 698). The diversity of herb pollen, inclusive of species such as grasses, dandelion-types, buttercup-type, daisy-type, common knapweed and ribwort plantain, suggest the presence of waste or rough ground, including possible meadow areas, which may have been suitable for grazing animals. Relatively high counts for pollen of the goosefoot family are recorded; this is a large group and includes taxa such as fat-hen, known to grow on waste and cultivated ground, as well as plants such as saltmarsh goosefoot, which grow in sparse pastures near the sea (Stace 2010, 478). The presence of rare dinoflagellate cysts and a foraminifera test lining, if *in-situ*, suggests proximity to marine influence, for example, saltmarshes subject to tidal impact, or from the ditch being linked directly to the Humber itself.
- 3.9.7 **Potential and recommendations:** the only sub-sample with potential for full analysis is from context 325, a deposit of clay silt associated with silting of the former Town Ditch, likely to be of late medieval to early post-medieval date (Sections 3.2 and 3.12). The other sub-samples did not have enough pollen at assessment to justify further work. However, analysis of just one context, 325, would only provide a snapshot of palaeoenvironments from this deposit and the resulting interpretation is unlikely to be significantly different from that proposed following assessment; therefore, no further work is recommended.

3.10 MOSTAP SAMPLES

3.10.1 **Quantification:** four MOSTAP cores recovered during ground investigation works associated with the A63 Improvements, were submitted for geoarchaeological assessment. The primary objective of this assessment was to determine whether any indication of the Civil War ditch was present and determine the potential of the deposits for dating and palaeoenvironmental work. Details of the MOSTAP cores submitted for assessment are presented in Table 5. The modern ground levels averaged 4.88m OD across the survey area.

MOSTAP core	Sample number	Easting	Northing	Depth BGL
A06b	7	509627.965	428488.539	3.5-4.5m
A09b	9	509641.458	428488.675	3.0-4.0m
A09b	11	509641.458	428488.675	4.2-5.2m
A10b	13	509646.053	428488.536	4.0-5.0m

Table 5: Details of MOSTAP cores submitted for assessment

3.10.2 **Results:** overall the sediments contained within the four cores were of very similar character, mainly comprising homogenous fine-grained, soft but dense, mid - to dark orange/brown, minerogenic slightly clayey silt with some fine sand. The sediments were generally lacking in structure, but with occasional evidence of bedding or lamination. There was some slight variation within the cores regarding the amount of clay present, but inclusions were few and restricted to occasional organic detritus and charcoal flecks. Some structural disturbance was noted in the very upper part of the cores at the interface with deposits of recent made ground (Plate 7; Table 6).

MOSTAP core	Sample number	Depth m BGL	Description
A06b	7	3.5-3.73	Loose dark greyish-brown to black mixed silty sand with frequent poorly sorted mortar and brick fragments. Irregular lower contact. MADE GROUND
		3.73-3.87	Firm mid-orang/brown fine sand and silt with sub-horizontal lenses and mixed irregular clasts of grey clay silt. DISTURBED ALLUVIUM
		3.87-3.98	Moderately firm mid-orange/brown clay silt with fine sand, occasional charcoal flecks
A09b	9	3.98-4.5	Firm mid-orange/brown fine sandy silt with lenses of silty sand c 30mm thick. Occasional charcoal flecks, plant detritus, becoming more clayey down profile
		3.0-3.13	Loose, granular, light greyish-brown fine sand with mortar and small brick fragments. Irregular lower contact. MADE GROUND
		3.13-3.55	Firm mid-orange/brown and grey mottled slightly clayey silt and fine sand. Small charcoal flecks
A09b	11	3.55-4.00	Firm mid-orange/brown silt with some sand and clay. Charcoal flecks present, becoming less sandy and more clayey down profile
		4.2-4.4	Very firm mid- to dark orange/brown clay silt, mottled. Graded lower contact
		4.4-5.2	Firm homogenous mid-orange/brown clay silt, increasingly clayey with organic detritus down profile
A10b	13	4.0-5.0	Homogenous firm mid-orange/brown clay silt, grey mottling at 4.6-4.8m

Table 6: Sediment descriptions from the MOSTAP cores



Plate 7: Representative deposits within MOSTAP samples

3.10.3 **Discussion:** the sediments recorded in the cores are fairly typical of the upper oxidised alluvial/estuarine sequence observed during various phases of fieldwork across the scheme. Organic content is quite low and restricted to occasional fragments of detritus and tiny charcoal flecks. It is likely that microfossils such as pollen and diatoms will be preserved in the sediments, but the preservation of macrofossils is likely to be quite low given the minerogenic nature of the sediments. No dateable artefacts were recovered during the core logging. The potential for radiocarbon dating is low, taking into account the waterborne nature of the sediments and the high likelihood of reworked material.

3.10.4 Overall, and taking into account the small number of cores from partial sequences, the sediments cannot be positively identified as infilling a large feature consistent with the Civil War outworks and are equally typical of alluvial/estuarine sediments extensively present across the area beneath the made ground. This, together with the absence of clearly organic-rich sediments, reduces the potential of the sequences and no further analytical work is recommended.

3.11 DENDROCHRONOLOGY

3.11.1 **Synopsis:** a full report on the dendrochronological dating (from which the following paragraph has been extracted) is presented as *Appendix 5*. The submitted material comprised two oak (*Quercus* spp) samples, both of these samples contained measurable tree-ring sequences. They were each measured successfully. These samples have relatively few rings and are fairly fast grown. These samples did not cross-match each other, nor did they match against English medieval and other reference data or other dated or undated data from Hull excavations. These sequences have also been compared with dated and undated reference series of prehistoric and historic periods from across northern and central Europe.

3.12 RADIOCARBON DATING

3.12.1 The results of the radiocarbon dating are summarised in Table 7, with the certificates presented as *Appendix 6*.

Sample	<3> A	<3> B
Context	325	325
Context type	Fill of Town ditch	Fill of Town ditch
Lab Code	SUERC-68412 (GU41502)	SUERC-68413 (GU41503)
Material	Waterlogged plant remains	Charcoal: <i>Alnus glutinosa</i>
Radiocarbon Age BP	319 ± 34	504 ± 34
Calibrated Date, 68.2% probability	1516 (53.4%) 1596 cal AD 1618 (14.8%) 1641 cal AD	1410 (68.2%) 1439 cal AD
Calibrated Date, 95.4% probability	1479 (95.4%) 1647 cal AD	1326 (5.6%) 1344 cal AD 1394 (89.8%) 1450 cal AD

Table 7: Summary of Radiocarbon dating results

4. CONCLUSION

4.1 REVIEW OF OBJECTIVES

4.1.1 Although the programme of archaeological work could not address all of the objectives set out in the project design (OA-HFA 2015; *Section 2*; Table 8), it has revealed several interesting insights into the history of the town defences and of the docks, which are discussed further in *Section 4.2*. Moreover, it is possible that several such themes could be elucidated once Trench 1, on Prince’s Dock Street, has been excavated.

Objective	Findings
Locate the medieval city wall and, within Trench 2, the associated bastion	Trench 2 located neither the wall or the bastion. These are likely to lie to the east of the trench, but, due to the position of the modern street topography, it would not have been possible to move the trench further to the east of its excavated location
Determine the form and nature of construction of the defences	Trench 2 encountered no elements of the walls. See below for ditch and timber piles
Determine if there is any survival of the medieval city ditch or other features	Trench 2 revealed parts of the medieval town ditch, providing an understanding of its depth and basal fills. It also revealed timber piles, although, being undated, it is not certain whether these represent original components of the defences
Determine if there is any survival of medieval settlement features within the exposed areas	Trench 2 revealed no evidence for medieval settlement features
Identify and record all archaeological features and artefacts exposed during excavation of the trenches	A complete record was made of the archaeological remains revealed by Trench 2, as presented in this report
Establish the sequence of archaeological deposits present	
Retrieve dating evidence and palaeoenvironmental evidence from archaeological features	A comprehensive finds recovery and palaeoenvironmental sampling strategy was enacted. The finds have enabled the stratigraphic sequence to be moderately well dated (more so for the post-medieval and industrial periods). The palaeoenvironmental data provide some information about the environmental conditions that prevailed in a wet ditch
Present the results within the public domain commensurate with the significance of the findings	It would be better to consider the format for dissemination once Trench 1 had been excavated
The examination of the MOSTAP samples aimed to determine if, in view of later activity (construction of the docks and the position of a basemented warehouse that coincided with the investigation area), any indication of the Civil War outworks are present	The work on the MOSTAP samples demonstrated that there is survival of earlier deposits between the docks and amidst the Industrial-period and modern infrastructure. In the case of the particular MOSTAP samples examined by the present study, it is not possible to ascertain that the alluvial deposits in the samples represent fills of a Civil War ditch. Rather, they are very similar to naturally occurring alluvium observed during the Site Investigation works across the scheme.

Table 8: Review of objectives relating to the investigation of the town defences

4.2 DISCUSSION

- 4.2.1 *The medieval defences*: it is apparent that the medieval town wall must have stood further to the east than could be reached with Trench 2, quite possibly beneath the current route of modern Humber Dock Street. Nonetheless, the preservation of much of the ditch itself, and the identification of the construction cut for the Humber Dock, within the western part of the trench, clearly indicates that the wall has not been removed by the dock itself, and well-preserved elements may await identification. The Town Ditch is itself an important feature and one that has received little previous archaeological attention; the current study has provided some indication of its substantial depth, with its base lying some 7.7m below the modern ground level. It was not, however, possible to determine where Trench 2 lay within the ditch, and so be certain whether the base identified lay within its deepest part, or on one of its eastern or western sloping sides. None of the later deposits that was excavated by hand within the upper few metres of the ditch exhibited any angulation suggestive of having formed against a slope, although it should be borne in mind that they overlay several metres of previous fills, most of which had apparently been deposited by water, and would thus inevitably lie horizontally.
- 4.2.2 If the ditch had been excavated with fairly gently sloping sides to promote stability, then it could be expected, from its depth, that the wall would lie as much as 7m to the east of Trench 2. However, it is possible that the timber piles identified in Trench 2 may have played a role in revetting the side of the ditch, allowing the sides to be cut at a much steeper angle (and suggesting that the wall could have then lain rather closer to the eastern edge of Trench 2). The driven timbers could be analogous to examples identified in close proximity to the remains of the wall during the Beverley Gate excavation and, whilst it was not possible to date them dendrochronologically or through radiocarbon assay, the fact that they are made of oak, rather than pine, suggests that they are more likely to be of medieval date (Evans forthcoming).
- 4.2.3 Unfortunately, no datable artefacts were recovered from the deposits considered to be medieval ditch fills, although two radiocarbon dates were obtained from organic material in fill 325, the third deposit from the base of the ditch. These suggested that the relative slow stage of silting, exemplified by the fine clay material, was taking place in the later medieval period, perhaps from the first half of the fifteenth century and into the sixteenth century. That this material overlay some 3.5m of ditch full suggests that the ditch silted up over a considerable period.
- 4.2.4 It is significant that the excavation has enabled the recovery of palaeoenvironmental evidence from stratified deposits. Those data confirm a logical supposition that the ditch was a damp environment and was sometimes used for dumping domestic and human refuse into. Moreover, the presence of micro-organisms indicative of brackish environments suggests a relationship between the ditch and the Humber. Whilst this could derive from flooding, the ditch and the river are shown as being linked on various historic images (such as Wenceslas Holler's plan, dated to around 1638), and are likely to reflect the medieval configuration of the town defences. The palynological data from the

medieval ditch fill suggests that the area beyond the defences was used for agriculture, with evidence for arable and pasture.

- 4.2.5 **Post-medieval and Industrial Period:** as indicated by Table 7, examination of the MOSTAP samples produced no definitive evidence that these cores had collected sediments that were more likely to have accumulated within a man-made feature (ie, the Civil War ditch) than they were to represent the natural alluvial deposits that have been identified across the scheme area. There was an absence of artefacts, no sign of sloping deposits that may accumulated within a ditch profile, or for any other anthropogenic inputs.
- 4.2.6 Of interest is the evidence for post-medieval use of the area following the infilling of the ditch, but pre-dating the construction of the dock (for example, brick wall 317) and the evidence for the construction, renovation, and use of the dock itself, during the nineteenth century (such as the possible winch or derrick base, 320). The Site Investigation works have also contributed to an understanding of the original workings and subsequent modifications to the docks. Perhaps the most interesting findings from the boreholes related to the basal structure of the lock, which had once connected the Prince's and Humber Docks, and to the presence of cellars from the former warehouses. Widespread evidence was also revealed for the reduction and backfilling of the northern part of the Humber Dock during the twentieth century, including the positions of walls that were likely to have bounded the northern edge of the dock, and a possible temporary brick surface following the localised dock infilling.
- 4.2.7 **Conclusion:** the excavation was a useful means of highlighting a little understood aspect of the city's history and archaeology, and the lengths that Highways England is going to investigate, promote and publicise the investigation and study of those remains (Plate 8).



Plate 8: Public Archaeology

4.3 FURTHER WORK

- 4.3.1 At present, it is recommended that the complete archive of archaeological data is retained pending the completion of investigation of both trenches across the city defences as part of the current phase of pre-construction mitigation. The data recovered from that trench will be integrated with that presented in the current report, and an updated report will be issued. If it is considered that selective analysis of that wider body of data will further an understanding of the historical development of the development site, the updated report will include a project design outlining proposals and methodologies for an appropriate scheme of analysis.
- 4.3.2 Though the exact line of the town wall at the northern end of Humber Dock Street remains unconfirmed, the current investigation has at least established that its survival is highly likely in the area east of the trench. It is, therefore recommended that groundworks associated with construction of the footbridge and associated resurfacing and landscaping works in this area take account of this fact and that allowance is made for the protection and/or proper recording of the monument in advance of, or during, construction.

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APPENDIX 1: TRENCH 2 CONTEXT REGISTER

Context	Phase	Trench/ Area	Context Type	Fill Of	Interpretation	Sample	Date
300	U/S	T2	Unstratified		Unstratified	0	
301	4	T2	Structure		Brick Paviments	0	MOD
302	4	T2	Deposit		Sand and concrete underpinning/foundation	0	MOD
303	4	T2	Deposit		Modern hardcore aggregate	0	MOD
304	2c	T2	Deposit		Light orange brown sandy clay	0	MOD
305	2b	T2	Deposit		Chalk Hardcore	0	PMED
306	2a	T2	Deposit		Slighted Clay rampart (maybe)	X	PMED
307	1	T2	Fill	329	Town Ditch fill	0	MED
308	1	T2	Fill	329	Town Ditch fill	X	MED
309	1	T2	Fill	329	Town Ditch fill	X	MED
310	4	T2	Fill	311	Modern service fill	0	MOD
311	4	T2	Cut		Modern service cut	0	MOD
312	3	T2	Fill	315	C19 Dock reconstruction backfill	0	MOD
313	3	T2	Structure	315	C19 Stone dock tiebacks	0	MOD
314	3	T2	Fill	315	C19 concrete underpinning	0	MOD
315	3	T2	Cut		C19 upper Dock reconstruction	0	MOD
316	2c	T2	Fill	318	Pmed wall backfill	0	PMED
317	2c	T2	Structure	318	Pmed truncated brick wall	0	PMED
318	2c	T2	Cut		Pmed construction cut	0	PMED
319	3	T2	Fill	321	C19 Derrick backfill	0	MOD
320	3	T2	Structure	321	C19 Derrick base	0	MOD
321	3	T2	Cut		C19 Derrick construction cut	0	MOD
322	4	T2	Fill	323	Modern service fill	0	MOD
323	4	T2	Cut		Modern service cut	0	MOD
324	1	T2	Fill	329	Town Ditch fill	X	MED
325	1	T2	Fill	329	Town Ditch fill	X	MED
326	1	T2	FIL	329	Town Ditch fill	X	MED
327	1	T2	Fill	329	Town Ditch fill	0	MED
328	NAT	T2	Natural		Natural Riverine Alluvium	X	PRE
329	1	T2	Cut		Town Ditch Cut (inferred, not seen)	0	MED
330	2b	T2ext	Fill	332	Pmed rotted wooden drain fill	X	PMED
331	2b	T2ext	Fill	332	Pmed organic rotted wood drain fill	X	PMED
332	2b	T2ext	Cut		Pmed wooden drain cut	0	PMED
333	2a	T2ext	Deposit		Crushed brick demolition horizon	X	PMED
334	2a	T2ext	Deposit		Clay dump	X	PMED
335	1	T2ext	Structure		Wooden pile	X	MED
336	1	T2ext	Structure		Wooden pile	X	MED
337	1	T2ext	Deposit		Thin dump in town ditch	X	MED
338	1	T2ext	Structure		Structure number for posts 335 and 336	0	MED

APPENDIX 2: SUMMARY OF WATCHING BRIEF OBSERVATIONS

Borehole: 406	Time and Date: Wednesday 2 nd December 2015, 10pm – 11:59pm Thursday 3 rd December 2015, 00:00am – 3:30am
Location: on Mytongate roundabout, Hull	Other Comments: Observed by A. Batey 06/01/2016
Depth below ground level:	Sediments:
0 – 0.2m (bgl)	Topsoil; dark brown, silty-sandy-clay
0.2 – 0.5m	Made ground; greyish-brown, silty-clay with plant fragments. Inclusions of coarse brick, gravel, chalk, and sandstone
0.5 – 1.2m	Made ground; dark greyish-brown, silty-clay, with plant fragments. Inclusions of gravel, brick fragments, chalk, and sandstone
1.2 – 2.2m	Made ground; dark greyish-brown, slightly silty-sandy-clay. Inclusions of chalk, sandstone, gravel, and occasional tarmac fragments. Plant fragments and roots throughout
2.2 – 2.5m	Made ground; orange/brown, slightly sandy-clay. Rooting throughout this layer.
2.5 – 2.95m	Transition to natural clay geology
2.95 – 5.45m	Soft, brownish-grey, slightly sandy-silty-clay
5.45 – 6.5m	Very soft, brownish-grey, slightly sandy-clay-silt
6.5 – 9.95m	Very soft, brownish-grey, sandy-clay-silt with pockets of brown clay, and rooting throughout. Silt became slightly firmer between 7.5 – 9.95m bgl
9.95 – 11.5m	Firm, greyish-brown, slightly sandy-clay with fragments of peat throughout
11.5 – 12m	Firm, light greyish-brown, very sandy clay. Slight inclusions of chalk and gravel
12 – 12.95m	Firm, mottled greyish-brown, sandy-clay, with inclusions of chalk and sandstone. An increase in the amount of gravel was observed between 12–12.95m bgl
12.95 – 14.45m	Very stiff, brown, slightly sandy-clay, with some inclusions of chalk and quartzite. Between 13.5 – 13.95m bgl the clay took on a dark yellowish-brown hue with moderate sandstone inclusions
14.45 – 15.5m	Firm, greyish-brown, sandy-clay, with occasional inclusions of chalk and quartzite. A single cobble of flint was present between 14.95–15m bgl
15.5 – 18.5m	Very firm, brown, silty-clay
18.5 – 22m	Very firm, greyish-brown silty-sandy-clay. At a depth of 19.5–22m bgl the greyish-brown clay became silty-clay, retaining the same colour. More gravel inclusions were present between 19.5 – 20m
22 – 22.5m	Dark grey, silty-sandy gravel, with occasional inclusions of coarse chalk and flint.
22.5 – 24m	Orange/brown, slightly silty-sandy-gravel. Gravel comprised coarse chalk and flint.
24 – 24.5m	Very dense, slightly silty, slightly sandy-gravel, and
End of borehole at 24.5m	

Borehole: 407	Time and Date: Thursday 3 rd December 2015, 10pm – 11:59pm Friday 4 th December 2015, 00:00am – 3:30am
Location: Mytongate roundabout, Hull	Other Comments: Observed by A. Batey
Depth:	Sediments:
0–1.7m	Made ground; brown, slightly sandy-silty-clay alluvium
1.7–5.55m	Firm, greyish-brown mottled, natural sandy-silty-clay, with rooting. Sand levels increase slightly at 2.85–5.45m. Between 5.45–5.55m the sand inclusions become much finer
5.55–6.5m	Very soft, greyish-brown, sandy-clay-silt
6.5–8.15m	Firm, brownish-grey, slightly sandy-silty-clay
Drilling stopped at 9.8m	

Borehole: 408	Time and Date: Friday 4 th December 2015 9:30pm–11:59pm Saturday 5 th December 2015 00:00am – 3:30am
Location: Mytongate roundabout, Hull	Other Comments: Observed by A. Batey
Depth:	Sediments:
0 – 2m	Made ground; slightly sandy-silty-clay
2 – 7.15m	Greyish-brown, sandy-silty-clay
7.15 – 10.55m	Greyish-brown, sandy-clay
10.55m – 12m	Soft, dark-grey, sandy-clay-silt
12 – 12.6m	Dark, greyish-brown, very sandy-silty-clay
12.6 – 13.25m	Firm, black, dark-brown peat, with wood fragments
13.25 – 14.6m	Firm, dark, greyish-brown sand
14.6 – 18.5m	Firm, greyish-brown, mottled, slightly-sandy-clay, with gravel inclusions
18.5 – 19.8m	Firm, greyish-brown, silty-clay
19.8 – 24m	Firm, greyish-brown, silty-clay
24 – 26.3m	Light, greyish-brown, chalk-gravel, with inclusions of sandy silt
End of borehole at 26.3m	

Borehole: 410	Date: Wednesday 12 th August 2015, 1.45pm – 5.0pm. Thursday 13 th August 2015, 9.15am – 10.45am
Location: North of the Holiday Inn and to the south of the A63, Hull	Other Comments: Observed by A. McGuire
Depth:	Sediments:
0 – 0.3m	Concrete forming a car park surface
0.3 – 1.5m	Firm yellow/brown clay with grey mottling. Occasional small chalk pebble and brick fleck inclusions
1.5 - 1.7m	Stiff yellow/brown clay with grey mottling. Occasional small fragments of brick, charcoal and coal along with some small pebble
1.7 - 2.0m	Dark grey/brown, crumbly, more organic, loamy-clay, which contained small to medium sized pieces of hand-made brick along with small fragments of charcoal, cinder and coal. It also contained fragments of animal bone, a piece of which, exhibited saw marks indicative of either butchery or bone working. This deposit was archaeological in nature and may have represented an occupation layer, the fill of a ditch, or perhaps more likely a pit. It lies close to the site of the former Gaol (Some brick fragments and animal bone retained)
2.0 – 2.7m	Mid-brownish-grey, friable, fine sandy, silt-clay with very few inclusions. Some laminations of fine sand and small dots of organic staining
2.7 – 3.0m	Yellow/brown to brown, fine sandy, silt-clay with no visible inclusions. Contains laminations of a very fine sand
3.0 – 5.5m	Yellow-brown, soft, moist, very fine grained sandy-silt with no visible inclusions
5.5m - ≥7.0m	Mid- to dark grey fine sandy silt

Borehole: 412	Time and Date: Tuesday 21 st July 2015, 9.30am – 4.30pm Wednesday 22 nd July 2015, 8.30am – 4.30pm Thursday 23 rd July and Friday 24 th July 2015
Location: West of Humber Dock	Other Comments: Observed by A. McGuire 24/7/15.
Depth:	Sediments:
1.2 – 1.7m	Mid-brown/grey sandy clay, with sand pockets that are orange in colour
1.7 – 2.15m	Mid-brown/grey sandy clay, with sand pockets that are orange in colour
2.15 – 2.27m	Mid brown-grey sandy clay, with sand pockets that are orange in colour
2.25 – 2.75m	Colour change to dark brownish-grey
3.2m – 3.95m	Dark brownish-grey, silty clay with occasional coal and brick inclusions <0.05m across
4.45 – 5.3m	Dark brown grey silty clay with pockets of dark grey black silt and sand
5.75 – 5.85m	Dark brown grey silty clay with pockets of dark grey black silt and sand
6.3 – 6.4m	Dark brown grey sandy clay with occasional brick fragments <0.01m and degraded stone
6.85 – 6.95m	Dark brown grey silty clay. No inclusions.
8.0 – 10.2m	Similar deposits

Borehole: 413	Time and Date: Wednesday 12 th August 2015, 1.45pm-5.00pm Thursday 13 th August 2015, 9.15am–10.45am
Location: West of Warehouse No 6, north of the A63 and south of Prince's Dock, Hull.	Other Comments: Observed by R. George
Depth:	Sediments:
0 – 0.3m	Turf and topsoil
0.3 – 1.5m	Firm, yellow/brown clay, with frequent chalk, brick and concrete rubble, interpreted as backfill within a cellar
1.5 – 2.0m	Chalk, brick and concrete rubble, little or no clay. Cellar backfill
2.0 – 4.5m	Chalk, brick and concrete rubble, becoming moist from 2m downwards. Cellar backfill. Corers suggested that no brick cellar floor was encountered
4.5m	Moist, grey, fine sandy-silt clay with no visible inclusions

Borehole: 414	Time and Date: Tuesday 11 th August 2015, 9.30am - 4.30pm
Location: North-east of Humber Dock to the south of the A63, Hull	Other Comments: Pre-drill hole for CPT scan Observed by R. George
Depth:	Sediments:
0 – 0.5m	Dry, yellow/brown clay
0.5 – 3.0m	Yellow-brown clay with patches of crushed chalk rubble which included fragments of broken brick and occasional pieces of 'granite like' rock. An obstacle was encountered at a depth of 2.1m
3.0 – 9.8m	Becomes wet coarse grained sandy brown clay with gravel. Still contains brick fragments, but has less chalk. Fragments of brick and concrete noted between 3.0-3.4m. Brick had a hard grey mortar with charcoal inclusions adhered to it. Progressively becomes gravellier, rather like a water sorted, dirty beach gravel consisting of tiny fragments of brick, chalk and pebbles. Brick and concrete pieces still in evidence at 9.0m
9.8m	Soft dark grey silt clay
Drilling stopped at 9.8m	

Borehole: 414	Time and Date: Tuesday 25 th August 2015, 2.0pm – 3.0pm. Wednesday 26 th August 2015, 10.15am – 11.00am
Location: North-east of Humber Dock to the south of the A63, Hull. Just to the west of (BH 416).	Other Comments: To be viewed in conjunction with pre-drill hole for CPT scan (see above). Observed by R. George
Depth:	Sediments:
0 – 0.5m	Dry, yellow-brown clay
0.5 – 8.5m	Loose brick, chalk and concrete rubble infill of dock. Modern machine made bricks (Brick size: width = 105mm x thickness = 75mm). A cream faience tile with a stepped angular design, reminiscent of the art deco/modern period, was recovered from a depth of 8.4m. This was presumably part of a larger decorative element belonging to an inter-war building, which has subsequently been demolished
8.5 – 10m	Dark grey silt-clay. Represents an accumulation of silt at base of dock; with some diesel contamination?
10 – 11.4m	Grey alluvial silt-clay
11.4 – 19.3m	Natural glacial brown clay
19.3 - ≥27m	Red-brown coarse-grained sand which was still present at a depth of 27m at least.

Borehole: 415	Time and Date: Wednesday 29 th – Friday 31 st July 2015
Location: A63 Princes Quay	Other Comments: Observed by R. George
Depth:	Sediments:
0.5m	Possible concrete slab
1.00 – 1.45m	Mid-grey/brown clay sand (40%-55%) with occasional silt pockets (5%). Very mixed. Interspersed with white mortar (degraded) and occasional brick and sandstone fragments <0.05m
1.50 – 1.95m	As above but contains higher percentage of crushed brick and mortar (some brick 0.15m) may suggest demolition fill
2.00 – 2.45m	Sealed sample
2.45 – 2.65m	Mid-grey/brown slightly silty (5%) clay sand. Heavy iron content in sample. Possible panning as staining from iron objects.
3.00m	Solid surface encountered
3.00 – 3.45m	Dark brown grey, clay/silt with abundant red brick and mortar fragments (50%). Demolition material
3.5 – 4.00m	Dark brown grey silty/clay with occasional bands of black silt and occasional chalk inclusions <0.02m
4.00 – 4.45m	Sealed sample
4.45 – 4.65m	As 3.5-4.0m but also contained moderate amount of crushed red brick.
4.65 – 5.65m	Sealed 1m piston sample
5.75 – 6.75m	Attempted 1m piston sample. Failed as piston empty
6.75 – 7.20m	Sealed sample
7.20 – 7.40m	Dark brown/grey sand clay mixed with occasional timber/wood and brick fragments <0.10m
7.40 – 7.85m	As above with occasional bands of black silt
8.35 – 8.55m	Similar to 7.2-7.4m but contained wood fragments, possibly burnt
8.55 – 9.00m	As above. No wood observed in sample. Single post medieval glazed pottery sherd/fragments retrieved from bulk sample <0.01m
9.00 – 10.00m	Sealed piston sample
10.00m	Large brick fragment retrieved. Roughly 0.13m x 0.13m x 0.05m
10.45 – 10.65m	Mid-brown/grey silt/clay. No inclusions. Laminations may suggest modified/disturbed natural


Borehole: 416	Time and Date: Tuesday 11 th August 2015, 9.30am–4.30pm
Location: North-east of Humber Dock to the south of the A63, Hull	Other Comments: Pre-drill hole for CPT scan
Depth:	Sediments:
0 - 8.7m	Mixed chalk, cobble and brick rubble with smaller pebble and fragments of wood. Brick fragments had lime mortar adhered to them
8.7 – 9.0m	Soft dark grey silt clay
Drilling stopped at 9.0m	

Borehole: 416	Time and Date: Tuesday 25 th August 2015, 2.0pm – 3.0pm. Wednesday 26 th August 2015, 10.15am – 11.00am
Location: North-east of Humber Dock to the south of the A63, Hull. Just to the east of (Bore Hole 414).	Other Comments: To be viewed in conjunction with pre-drill hole for CPT scan (see above). R. George 26/08/2015
Depth:	Sediments:
0 - 8.7m	Brick, concrete and chalk rubble with ash, cinder and some wood fragments, representing the partial infilling of the dock. At water table c 3.6m the material was cleaner and more sorted due to the action of the groundwater
8.7 - ≥11m	Grey alluvial silt-clay. Piston sample taken at 10.7m

Trial trench dug in advance of borehole 417	Time and Date: 15/12/2015 1:00am – 3:00am
Location: South of Hull magistrates court, north of A63, Hull.	Dimensions: 0.4m long, 0.4m wide, and 1.2m deep.
Depth:	Sediments:
0 – 0.3m	Dark, greyish-brown silty-sandy-clay topsoil
0.3 – 1.2m	Made ground; chalk, brick fragments, and other assorted rubble.
End of test pit at 1.2m.	

Borehole: 501	Time and Date: Thursday 6 th August 2015, 10.15-11am, 1.20- 4.40pm. Friday 7 th August 2015, 10-11.15am
Location: Within the backfilled lock connecting Humber Dock to Prince's Dock, Hull	Other Comments: R. George 07/08/2015
Depth:	Sediments:
0 - 8.4m	Crushed chalk rubble, chalk 'gravel' with stone pieces
8.4 - 8.5m	Soft dark grey/black silt clay with gritty pebble
8.5 - 8.8m	Presumed brick surface (brick fragments with adhering grey, sandy mortar with charcoal inclusions, fragments of possibly moulded stone and concrete recovered from bore hole at this level)
8.8 - 9.5m	Crushed brick rubble and lime mortar fragments
9.5 - 9.75m	Presumed horizontal timber (wood) and brick pieces at this level
9.75 - 9.9m	Interface between natural silt and above layers, consist of a mixed deposit of silt and brick rubble
9.9m - 12.1m	Soft dark grey/black, organic, natural silt
12.1 - 12.6m	Mixed dark grey silt with brown sand
12.6 - 14m at least	Brown sand

Borehole: 502	Time and Date: 9.30am -4.30 pm Tuesday 21/7/15
Location: East of Humber Dock	Other Comments: Monitored by Andrew McGuire
Depth:	Sediments:
0.1 - 0.6m	Mixed mot and grey sand
0.6 – 1.2m	Light brown/grey sandy clay with abundant chalk inclusions <0.01m, frequent sub-angular stone <0.04m and occasional sub rounded chalk inclusions <0.1m
1.2 – 1.7m	As above with less chalk
2.15 – 2.35m	Light brown grey, slightly silty 5%, sandy clay. Possible change in stratigraphy identified at 1.8-1.9m bgl
2.8 – 3.0m	As above with slightly higher silt content. 40% clay 30% sand and 30% silt
3.45 – 3.65m	Dark grey/black very silty/clay containing occasional fragments of organic material (plant and wood fibre) <0.02m and occasional red brick fragments <0.01m
4.00m	Silty clay defined (40%, 60%)
4.20m	Possible stone cobble observed. Not sure if natural or manmade. Confirmed as igneous rock
4.75 – 4.95m	Dark brown grey, very clay silt (40%, 50%) with light brown grey sand lenses (10%)
	1m piston sample taken, sealed not observable.
6.85m	Dark brown/grey very clay silt (40%, 50%) with light brown/grey sand lenses (10%)
7.30 – 10.55m	Similar deposits to above
10.65m	Dark brown/grey silt sand with occasional shell fragments
15.50 – 15.95m	Similar deposits occur with additional wood inclusions

N2 (OA-HFA Trial Pit 1)	Time and Date: 1/12/2015 1:30am – 2:45am
Location: Pavement to south of landscaped area to south of Prince’s Dock	Observed: A Batey Dimensions: 3m long, 0.75m wide, and 1m deep
Depth:	Sediments:
0 – 0.2m	Paving flagstones (0.05m thick), and layer of concrete
0.2 – 1m	Made ground; brick, and concrete fragments. Several service pipes were visible, but no archaeological material
End of trial pit at 1m	
Images: Trial pit fully excavated	
N3 (OA-HFA Trial Pit 2)	Time and Date: 1/12/2015 3:00am – 4:00am
Location: Pavement to south of landscaped area to south of Prince’s Dock	Observed: A Batey Dimensions: 2.2m long, 0.5m wide, and 1m deep.
Depth:	Sediments:
0 – 0.05m	Paving flagstones
0.05 – 0.25m	Concrete layer
0.25 – 1m	Made ground; mixed concrete, brick fragments, and several service pipes
End of trial pit at 1m	
N4 (OA-HFA Trial Pit 3)	Time and Date: 2/12/2015 12am – 3:30am
Location: Pavement to south of landscaped area to south of Prince’s Dock	Observed: A Batey Dimensions: 2.3m long, 0.4m wide, and 0.9m deep.
Depth:	Sediments:
0 – 0.05m	Paving flagstones
0.05 – 0.2m	Concrete layer
0.2 – 0.9m	Made ground; loose concrete, and assorted rubble
End of trial pit at 0.9m	

N5	Time and Date: 2/12/2015
Location: Pavement to south of Warehouse 6 (<i>Ask Restaurant</i>), south of Prince's Dock	Observed: A Batey
	Abandoned

N6 (OA-HFA Trial Pit 4)	Time and Date: 2/12/2015 9:30pm – 11:00pm
Location: Pavement to south of landscaped area to south of Prince's Dock	Observed: A Batey Dimensions: 2.46m long, 0.45m wide, and 0.89m deep.
Depth:	Sediments:
0 – 0.22m	Paving flagstones, and concrete layer
0.22 – 0.89m	Made ground; assorted rubble, bricks, and loose concrete. Within this layer, in the northern end of the trench, were 5 service pipes and a brick structure, likely a wall. The wall was in fairly poor condition, and only 4 courses of bricks high. The top of the brick structure was at a depth of 0.45m
End of trial pit at 0.89m	

S2: (OA-HFA Trial Pit 7)	Time and Date: 3/12/2015 9pm – 11pm
Location: east side of the Humber Dock	Observed: A Batey Dimensions: 0.8m deep, 0.65m wide, and 2.9m long
Depth:	Sediments:
0 – 0.25m	Paving flagstones, and concrete layer
0.25 – 0.8m	Made ground and rubble
End of trial pit at 0.8m.	

S3: northern part (OA-HFA Trial Trench 8)	Time and Date: 4/12/2015 12:30am – 1:30am
Location: Pavement to north of landscaped area to north of Humber Dock	Observed: A Batey Dimensions: 1.75m long, 0.75m wide, and 0.85m deep
Depth:	Sediments:
0 – 0.2m	Paving flagstones, and concrete layer
0.2 – 0.85m	Made ground; mixed rubble, heavy concentration of brick fragments, and 5 service pipes. The brick fragments appear to be modern, with a number of whole bricks being frogged
End of trial pit at 0.85m.	

S3: southern part (OA-HFA Trial Pit 11)	Time and Date: 8/12/2015 9:00pm – 11:59pm 9/12/2015 00:00am – 3:30am
Location: within landscaped area to north of Humber Dock	Observed: A Batey Dimensions: 2.6m long, 0.45m wide, and 1.2m deep. The trench was later extended 2m by an 8-ton mini digger
Depth:	Sediments:
0 – 0.2m	Light, orange-grey, silty-sandy-clay topsoil, underneath a layer of grassy turf
0.2 – 0.45m	Brownish-grey, silty-clay subsoil
0.45 – 1.2m	Layer of made ground/rubble
End of trial trench at 1.2m	

S4: northern part (OA-HFA Trial Pit 5)	Time and Date: 3/12/2015 12:30am – 2:00am
Location: Pavement to north of landscaped area to north of Humber Dock	Observed: A Batey Dimensions: 2.4m long, 0.42m wide, and 1.25m deep.
Depth:	Sediments:
0 – 0.2m	Paving flagstones, and concrete layer
0.2 – 1.25m	Made ground; rubble, concrete, and 5 service pipes
End of trial pit at 1.25m	

S4: southern part (OA-HFA Trial Pit 12)	Time and Date: 9/12/2015 8:30pm – 11:00pm
Location: within landscaped area to north of Humber Dock	Observed: A Batey Dimensions: 6m long, 0.44m wide, and 1.28m deep
Depth:	Sediments:
0 – 0.2m	5cm of turf covered a brownish-grey, sandy-silty-clay topsoil. Directly underneath the turf, at the north end of the trench, was the top of a fairly substantial wall, at least 3 courses wide.
0.2 – 0.48m	Firm, slightly silty-clay subsoil. The wall continues through this layer at the north end of the trench
0.48 – 1.28m	Made ground and demolition rubble. The substantial wall is still visible through to the bottom of the trench, and likely continues further. It is 9 courses deep and possibly part of the old dock wall. At the base of the south end of the trench, was a brick surface. It ran 2m north from the end of the trench (see S6: southern part)
End of trial trench at 1.28m	


Photo: Wall in the northern end of trial pit 12



S5: northern part (OA-HFA Trial Pit 6)	Time and Date: 3/12/2015 2:30am – 4:30am
Location: Pavement to north of landscaped area to north of Humber Dock	Observed: A Batey Dimensions: 1.1m deep, 0.5m wide and 2.4m long
Depth:	Sediments:
0 – 0.2m	Paving flagstones, and solid concrete layer
0.2 – 1.1m	Made ground; rubble, brick fragments, and loose concrete. At the southern end of the trench, concealed by made ground, were the remains of a substantial wall at a depth of 0.3m. It was 3 courses wide and 11 courses high (visible).
End of trial pit at 1.1m	

S5: southern part (OA-HFA Trial Pit 14)	Time and Date: 10/12/2015 2:00 – 4:30am
Location: within landscaped area to north of Humber Dock	Dimensions: 5m long, 0.4m wide, and 1m deep
Depth:	Sediments:
0 – 0.2m	Greyish-brown, silty-sandy-clay topsoil
0.2 – 0.45m	Greyish-brown, silty-clay subsoil layer
0.45 – 1.m	Made ground, and damaged brick surface at the base of the trench (see also S6: southern part).
End of trial pit at 1.m	

S6: northern part (OA-HFA Trial Pit 10)	Time and Date: 4/12/2015 2:40 – 4:30am
Location: Pavement to north of landscaped area to north of Humber Dock	Observed: A Batey Dimensions: 4m long, 0.4m wide, and 0.9m deep.
Depth:	Sediments:
0 – 0.2m	Paving flagstones, and concrete
0.2 – 0.9m	Made ground; rubble and concrete fragments
End of trial pit at 0.9m	

S6: southern part (OA-HFA Trial Pit 13)	Time and Date: 9/12/2015 11:30pm – 11:59pm 10/12/2015 00:00am – 1:30am
Location: within landscaped area to north of Humber Dock	Observed: A Batey Dimensions: 6m long, 0.4m wide, and 1.2m deep
Depth:	Sediments:
0 – 0.2m	Friable, greyish-brown sandy-silty-clay topsoil. The same wall as in trial Trench 12 (S4) is visible in the north end of this trench
0.2 – 0.5m	Firm, greyish-brown, slightly silty-clay subsoil
0.5 – 1.2m	Made ground and rubble. The wall was still visible in the north end of the trench, although it was in poor condition. A brick surface was visible in the south end of the trench, and it extended for about 2m from the south end of the trench
End of trial pit at 1.2m	
Images: Plate 0: Damaged brick surface at base of Trench 13	

S7: northern part (OA-HFA Trial Pit 9)	Time and Date: 4/12/2015 2:00 – 2:25am
Location: Pavement to north of landscaped area to north of Humber Dock	Observed: A Batey Dimensions: 3m long, 0.55m wide, and 0.21m deep
Depth:	Sediments:
0 – 0.21m	Underneath the paving flagstones was around 0.15m of solid concrete, which was deemed too solid to be excavated with the vacuum excavator. Excavation of this trench was subsequently halted
End of trial pit at 0.21m.	

APPENDIX 3: PALAEOENVIRONMENTAL REMAINS

Castle Street Hull (A63) - Plant remains, microfossils and other remains																		Charcoal		Details		
Sample	Context	Phase	Trench/ Area	Sample Volume (L)	Processed Volume (L)	Feature / deposit type	Flot size (ml)	CPR	WPR	Bone	Snails	Shell debris	Foraminifera	Ostracoda	Insect debris	herb debris	Coal	Havn	Wood	<2mm	>2mm	Comments
1	309	1	T2	10	10	Ditch fill	35	1	1			1	2	1	2	2			1	3	2	<i>Juncus</i> sp. <i>Ranunculus</i> sp.
2	324	1	T2	1	1	Ditch fill	<5								1	3	2			3	2	
3	325	1	T2	3	3	Ditch fill	30		2	1	1	1			2	2	2		2	4	2	<i>Polygonum aviculare</i> , <i>Chenopodium album</i> , <i>Ficus</i> , <i>Carex</i> (trigonous), <i>Urticasp.</i>
4	326	1	T2	1	1	Ditch fill	<5									2				2	1	
5	328	NAT	T2	1	1	Natural	0												1			
8	306	2a	T2	10	10	Slighted clay rampart (?)	<5	1	1							4				3	1	<i>Juncus</i> sp., charred indet.
9	308	1	T2	10	10	Ditch fill	20		1						1	2	2		2	3	1	<i>Potentilla</i> sp.
11	324	1	T2	10	10	Ditch fill	25		1			1	1			4	1			2		<i>Chenopodium album</i> , <i>Juncus</i> sp., <i>Sphagnum</i> sp. Leaf debris.
12	309	1	T2	10	10	Ditch fill	30		1			1	1	1		3			1	4		<i>Chenopodium album</i> , <i>Juncus</i> sp.
13	337	1	T2ext	5	5	Dump in town ditch	40		1	1		1			1		2		1	4		<i>Urtica urens</i> , <i>Urtica dioica</i> , <i>Chenopodium album</i>
14	333	2a	T2ext	5	5	Demolition horizon	<5			2						1		1		2	2	
15	334	2a	T2ext	10	10	Clay dump	50		1	1			1		1					4	1	<i>Juncus</i> sp., <i>Ranunculus</i> sp. <i>Batrachium</i>
16	306	2a	T2	10	10	Slighted clay rampart (?)	25		1	1		1	2	1	1	3			1	4	2	<i>Juncus</i> sp., <i>Stellaria media</i>
17	308	1	T2	10	10	Ditch fill	20		1	1	1		1			3	2			4	1	<i>Juncus</i> sp., <i>Chenopodium album</i>
18	330	2b	T2ext	1	1	Wood drain fill	10			1					1	4	2		4	3	1	
19	331	2b	T2ext	5	5	Wood drain fill	60												4			Wood possibly hardwood oak/elm or ash.

APPENDIX 4: POLLEN DATA

Sample Number		6	7	7	10	10	22
Context		306	308	309	334	308	325
Preservation		Poor	Mixed	Mixed	Poor	Mixed	Mixed
Potential		No	No	No	No	No	No
Depth (m)		0.04	0.48	0.80	0.08	0.28	0.20
Trees/Shrubs							
<i>Betula</i>	Birch		1	1			
<i>Alnus</i>	Alder	2	10	7		4	3
<i>Calluna</i>	Heather					1	
<i>Corylus avellana</i> -type	Hazel-type	1	4			4	1
<i>Crataegus</i> -type	Hawthorn						
<i>Fraxinus</i>	Ash						1
<i>Juglans</i>	Walnut		1				
<i>Pinus</i>	Pine			1		3	2
<i>Ulmus</i>	Elm		1				
<i>Quercus</i>	Oak	1	1	1		1	1
<i>Salix</i>	Willow						
<i>Sorbus</i>	Whitebeams		1				
Crops							
Cerealìa	Cereal-type/grasses						
Herbs							
Amaranthaceae	Goosefoot family	1	1		1	1	
Apiaceae	Carrot family						2
<i>Artemisia</i>	Mugworts						
Asteraceae	Daisy family			1	1		
Brassicaceae	Cabbage family	1			1	1	
<i>Centaurea cyanus</i>	Cornflower						
<i>Centaurea nigra</i>	Common Knapweed						
Cyperaceae	Sedges		1				1
Fabaceae	Pea family						
<i>Filipendula</i>	Meadowsweet	1					
<i>Plantago lanceolata</i>	Ribwort plantain					1	
<i>Plantago</i> spp.	Plantains					1	
<i>Polygonum aviculare</i>	Knotgrass						
Poaceae	Grass Family	1	5	1		1	5
Ranunculaceae	Buttercup family			1			
<i>Taraxacum</i> -type	Dandelions		1	2	7		
<i>Vicia sylvatica</i>	Wood Vetch						
Unknown herbs							
	Total land pollen	8	27	15	10	18	16
	Number of traverses	10	10	10	10	10	10
<i>Lycopodium</i> spores	Exotic	9	20	31	7	8	13
Ferns and Mosses							
<i>Polypodium</i>	Polypodies						1
<i>Pteridium aquilinum</i>	Bracken		1				
<i>Pteropsida</i> (monolete)	Fern spores(monolete)			1			
<i>Sphagnum</i>	Moss spores	1		1			1
Algae							
<i>Botryococcus</i> HdV-766					1		
Deteriorated grains		6	4	3	3	4	4

Sample Number		6	7	7	10	10	22
Context		306	308	309	334	308	325
Preservation		Poor	Mixed	Mixed	Poor	Mixed	Mixed
Potential		No	No	No	No	No	No
Depth (m)		0.04	0.48	0.80	0.08	0.28	0.20
Microscopic charcoal		90	140	150	65	230	190
Fungal spores/NPP							
<i>Glomus</i> HdV-207			1	1		2	
<i>Chaetomium</i> HdV-7A							
<i>Sordaria</i> HdV-55A/B							
Dinoflagellate cysts							
<i>Operculodinium centrocarpum</i>		1		2		2	1
<i>Spiniferites</i> spp.							
Foram test linings			1		1		5
Reworked		35	35	37	39	35	22

APPENDIX 5: DENDROCHRONOLOGY REPORT

Tree-ring spot dates from archaeological samples:

Castle Street, Hull, East Yorkshire (sitecode CSH2016)

This is a report on the tree-ring analysis of 2 samples from oak timbers excavated from a site in Castle Street, Hull, East Yorkshire (sitecode CSH2016, NGR *c.* TA 097 284). This material comprised 2 oak samples in total, both of which were suitable for analysis, but neither of which were successfully dated. These timbers were driven oak piles which may have shored the edge of the Town Ditch.

Methodology

Each dendrochronological sample was supplied as a complete cross section; it is assumed in the absence of other information that these were obtained from the optimum location for outermost rings or sapwood survival from these timbers.

Each dendrochronological sample was assessed for the wood type, the number of rings it contained, and whether the sequence of ring widths could be reliably resolved. For dendrochronological analysis samples usually need to be oak (*Quercus* spp.), to contain 50 or more annual rings, and the sequence needs to be free of aberrant anatomical features such as those caused by physical damage to the tree whilst it was still alive. Standard dendrochronological analysis methods (see e.g. English Heritage 1998) were applied to each suitable sample. The sequence of ring widths in each sample were revealed by preparing a surface equivalent to the original horizontal plane of the parent tree with a variety of bladed tools. The width of each successive annual growth ring was revealed by this preparation method. The complete sequence of the annual growth rings in the suitable samples were then measured to an accuracy of 0.01mm using a micro-computer based travelling stage. The sequence of ring widths were then plotted onto semi-log graph paper to enable visual comparisons to be made between the sequences and reference data. In addition cross-correlation algorithms (e.g. Baillie & Pilcher 1973) were employed to search for positions where the ring sequences were highly correlated. Highly correlated positions were checked using the graphs and where these were satisfactory, these locations were used to identify the calendar dates of the measured series.

The t -values reported below were derived from the original CROS algorithm (Baillie & Pilcher 1973). A t -value of 3.5 or over is usually indicative of a good match, although this is with the proviso that high t -values at the same relative or absolute position needs to have been obtained from a range of independent sequences, and that these positions were supported by satisfactory visual matching.

The tree-ring analysis initially dates the rings present in the timber. The interpretation of these dates relies upon the nature of the final rings in the sequence. Oak timber contains 2 types of wood, heartwood and sapwood, the latter is on the outside of the tree and thus contains the most recent growth rings, this material is softer and is not always preserved under archaeological conditions. If the sample ends in the heartwood of the original tree, a *terminus post quem* (*tpq*) date for the felling of the tree is indicated by the date of the last ring plus the addition of the minimum expected number of sapwood rings which are missing. This *tpq* may be many decades prior to the actual date that a tree was felled, particularly where poor preservation or other loss of outer heartwood has occurred. Where some of the outer sapwood or the heartwood/sapwood boundary survives on the sample, a date range for the felling of a tree can be calculated by using the maximum and minimum number of sapwood rings likely to have been present. For the locally sourced material the sapwood estimates used are a minimum of 10 and maximum of 46 annual rings, where these figures indicate the 95% confidence limits of the range. If bark-edge survives then a felling date can be directly utilised from the date of the last surviving ring. The season of felling can also be determined by examining the completeness or otherwise of the terminal ring lying directly under the bark. Complete material can be divided into 3 major categories; ‘early spring’ where only the initial cells of the new growth have begun, this is equivalent to a period in March/April when the oaks begin leaf-bud formation, ‘later spring/summer’ where the early wood is complete but the late wood is evidently incomplete, is equivalent to May-through-September of a normal year, and ‘winter’ where the latewood is complete and this is roughly equivalent to September-to-March (of the following year) since the tree is dormant throughout this period and there is no additional growth put on the trunk.

Results

The submitted material comprised 2 oak (*Quercus* spp.) samples, both of these samples contained measurable tree-ring sequences. They were each measured successfully (Table 1). These samples have relatively few rings and are fairly fast grown. These samples did not cross-match each other, nor did they match against English medieval and other reference data or other dated or undated data from Hull excavations. These sequences have also been compared with dated and undated reference series of prehistoric and historic periods from across northern & central Europe.

Acknowledgements

The spot-dating of this material was funded by Oxford Archaeology North in partnership with Humber Field Archaeology, my thanks to Ken Steedman for arranging delivery of the material and providing contextual information and Stephen Rowland for administrative details.

References

Baillie, M G L & Pilcher, J R, 1973 A simple crossdating program for tree-ring research, *Tree Ring Bulletin*, 33, 7-14

English Heritage, 1998 *Dendrochronology: guidelines on producing and interpreting dendrochronological dates*, English Heritage

Table 1. 2 oak (*Quercus* spp.) samples from Castle Street, Hull (sitecode CSH2016). Interpretations using a 10-46 ring sapwood estimate. KEY; AGR average growth rate, H/S heartwood-sapwood boundary.

Timber	Size (mm)	Rings	Sap	AGR	Date of measured sequence	Interpreted result
335 20	240 x 105	48	H/S	2.21	undated	-
336 21	260 x 145	60	H/S	2.46	undated	-

APPENDIX 6: RADIOCARBON DATING CERTIFICATES



RADIOCARBON DATING CERTIFICATE

28 July 2016

Laboratory Code SUERC-68412 (GU41502)

Submitter Denise Druce
Oxford Archaeology North
Mill 3, Moor Lane Mills
Moor Lane
Lancaster LA1 1QD

Site Reference Castle Street, Hull (CSH16)
Context Reference (325)
Sample Reference <3> A

Material Waterlogged plant remains : various

$\delta^{13}\text{C}$ relative to VPDB -27.9 ‰

Radiocarbon Age BP 319 ± 34

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email Gordon.Cook@glasgow.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :-



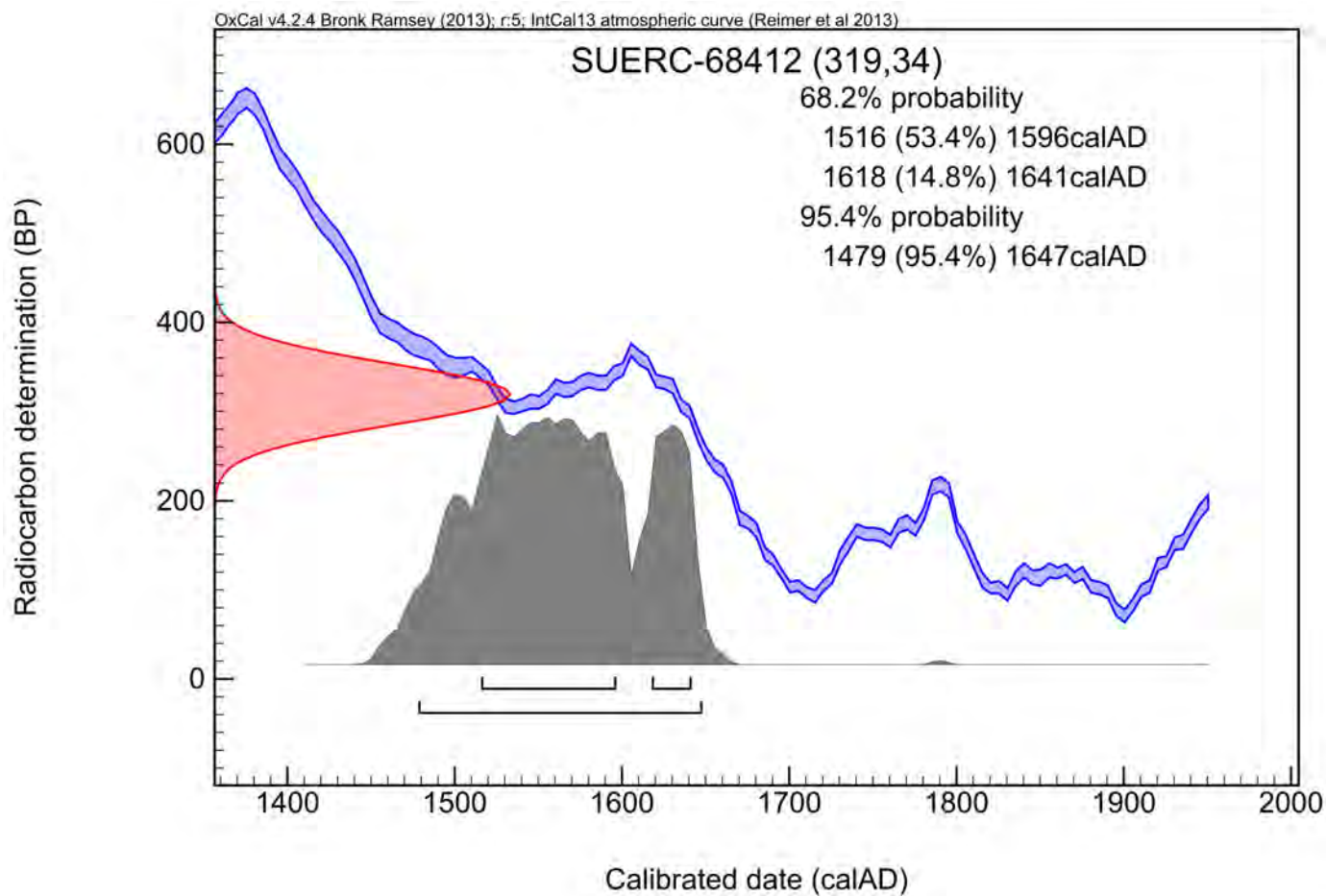
Date :- 28/07/2016

Checked and signed off by :-



Date :- 28/07/2016

Calibration Plot





RADIOCARBON DATING CERTIFICATE

28 July 2016

Laboratory Code SUERC-68413 (GU41503)

Submitter Denise Druce
Oxford Archaeology North
Mill 3, Moor Lane Mills
Moor Lane
Lancaster LA1 1QD

Site Reference Castle Street, Hull (CSH16)
Context Reference (325)
Sample Reference <3> B

Material Charcoal : Alnus glutinosa

$\delta^{13}\text{C}$ relative to VPDB -25.8 ‰

Radiocarbon Age BP 504 ± 34

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

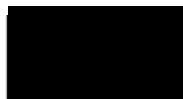
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email Gordon.Cook@glasgow.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :-



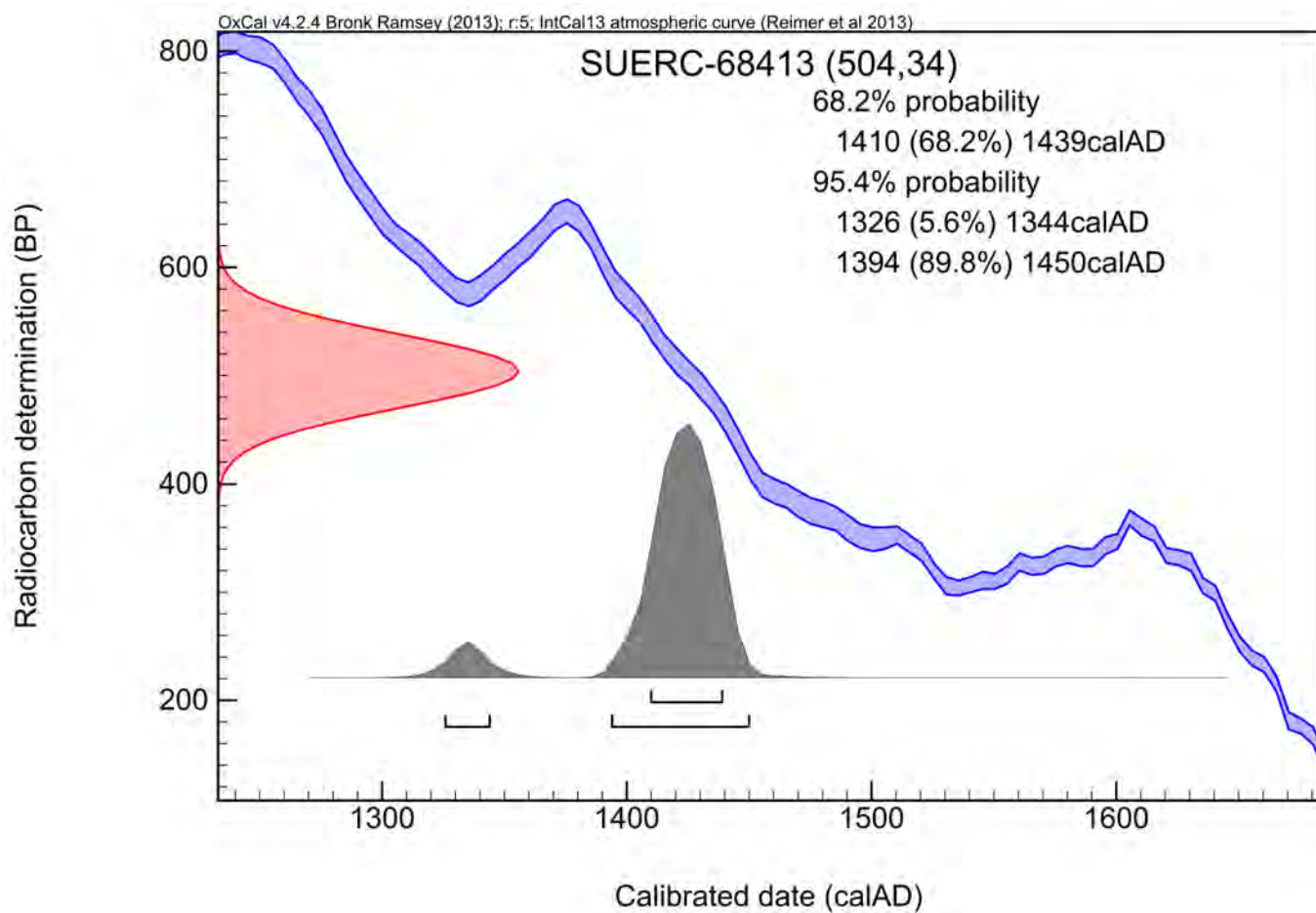
Date :- 28/07/2016

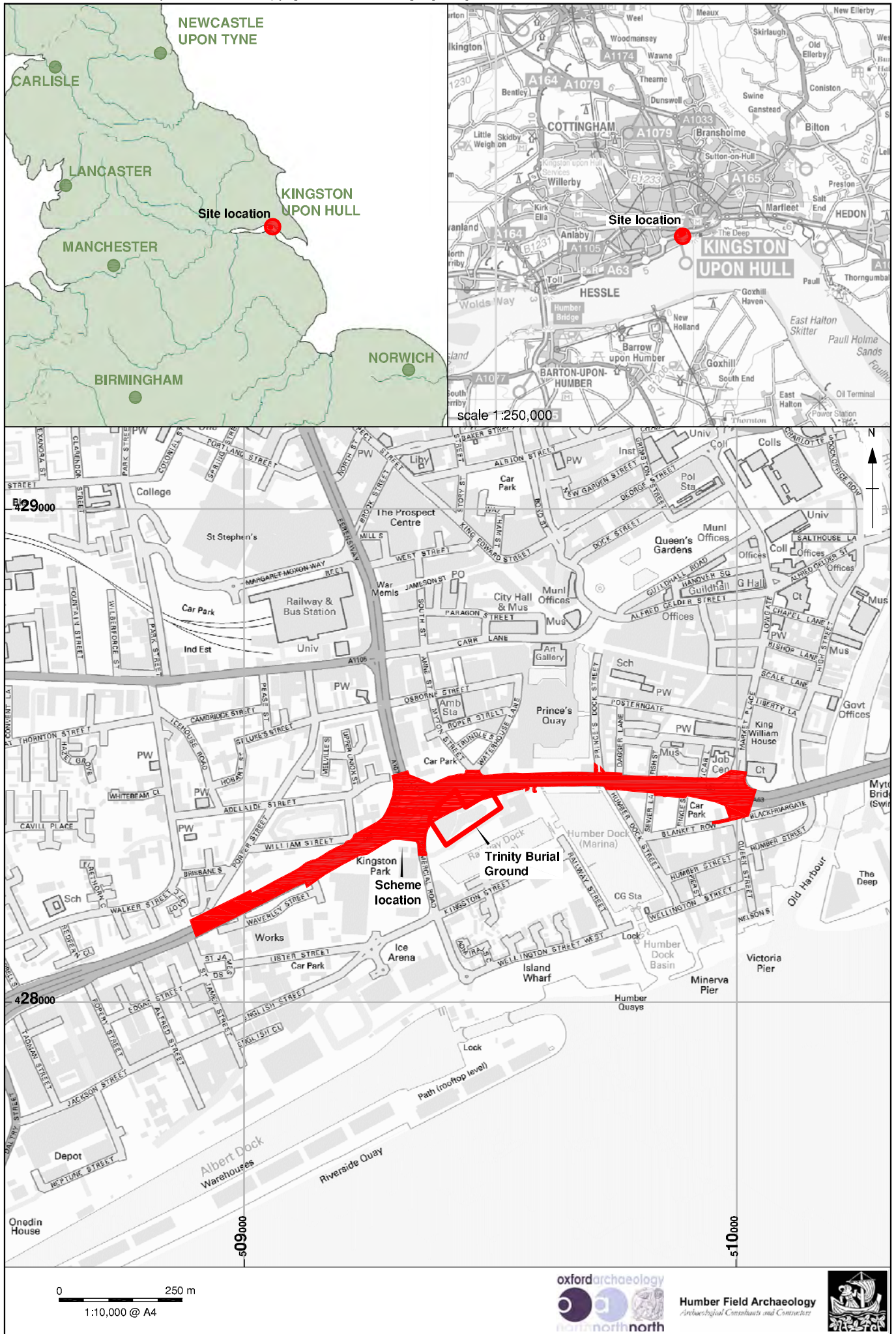
Checked and signed off by :-



Date :- 28/07/2016

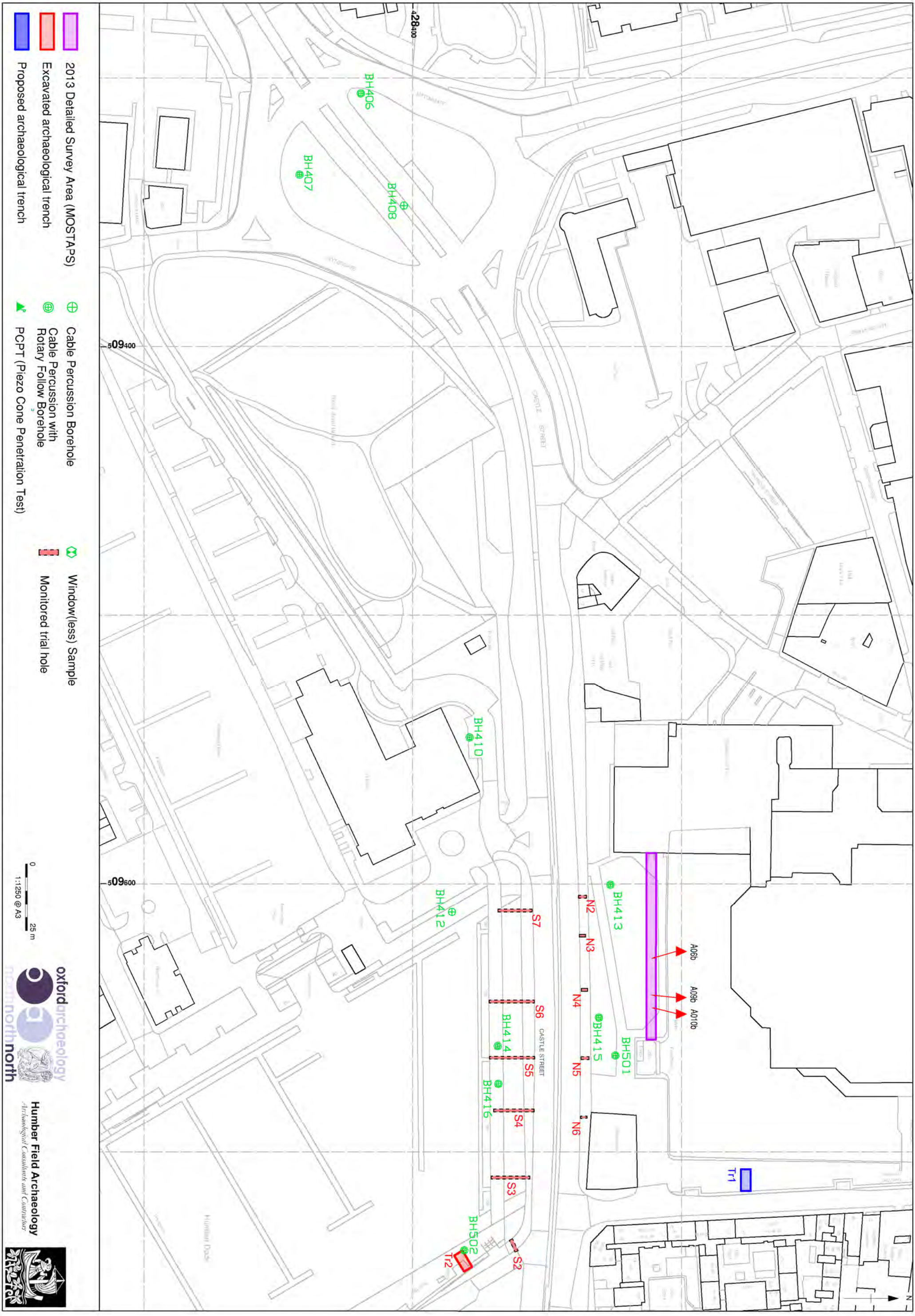
Calibration Plot





FB*L10596*MAT*Jan2014

Figure 1: Site location



- 2013 Detailed Survey Area (MOSTAPS)
- Excavated archaeological trench
- Proposed archaeological trench
- + Cable Percussion Borehole
- ⊕ Cable Percussion with Rotary Follow Borehole
- ▲ PCPT (Piezo Cone Penetration Test)
- Window(less) Sample
- Monitored trial hole

0 25 m
1:1250 @ A3

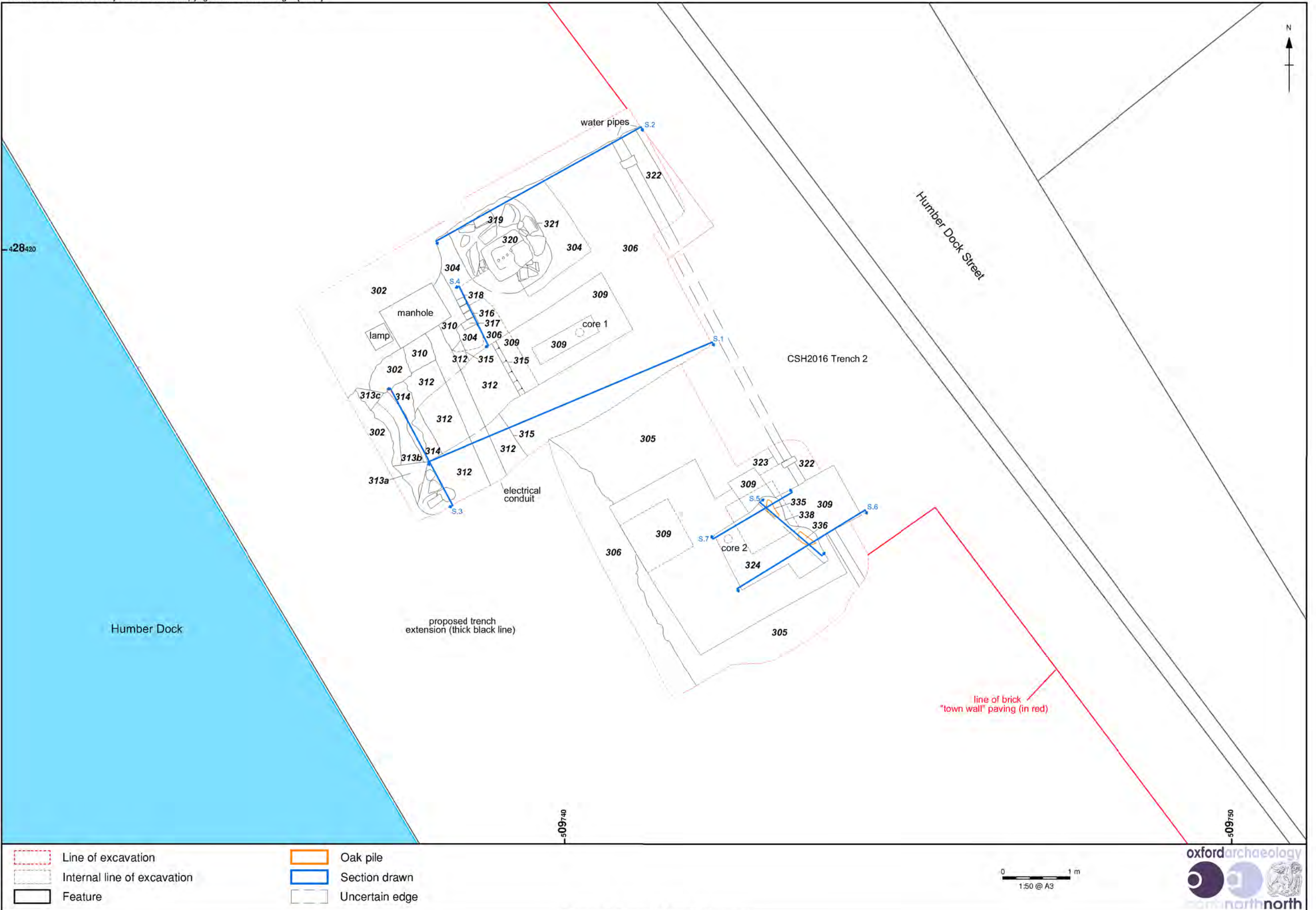




Humber Field Archaeology
Archaeological Consultants and Contractors



Figure 2: Location of archaeological investigations



SPR/L10859/04 05.16

-509740

-509750

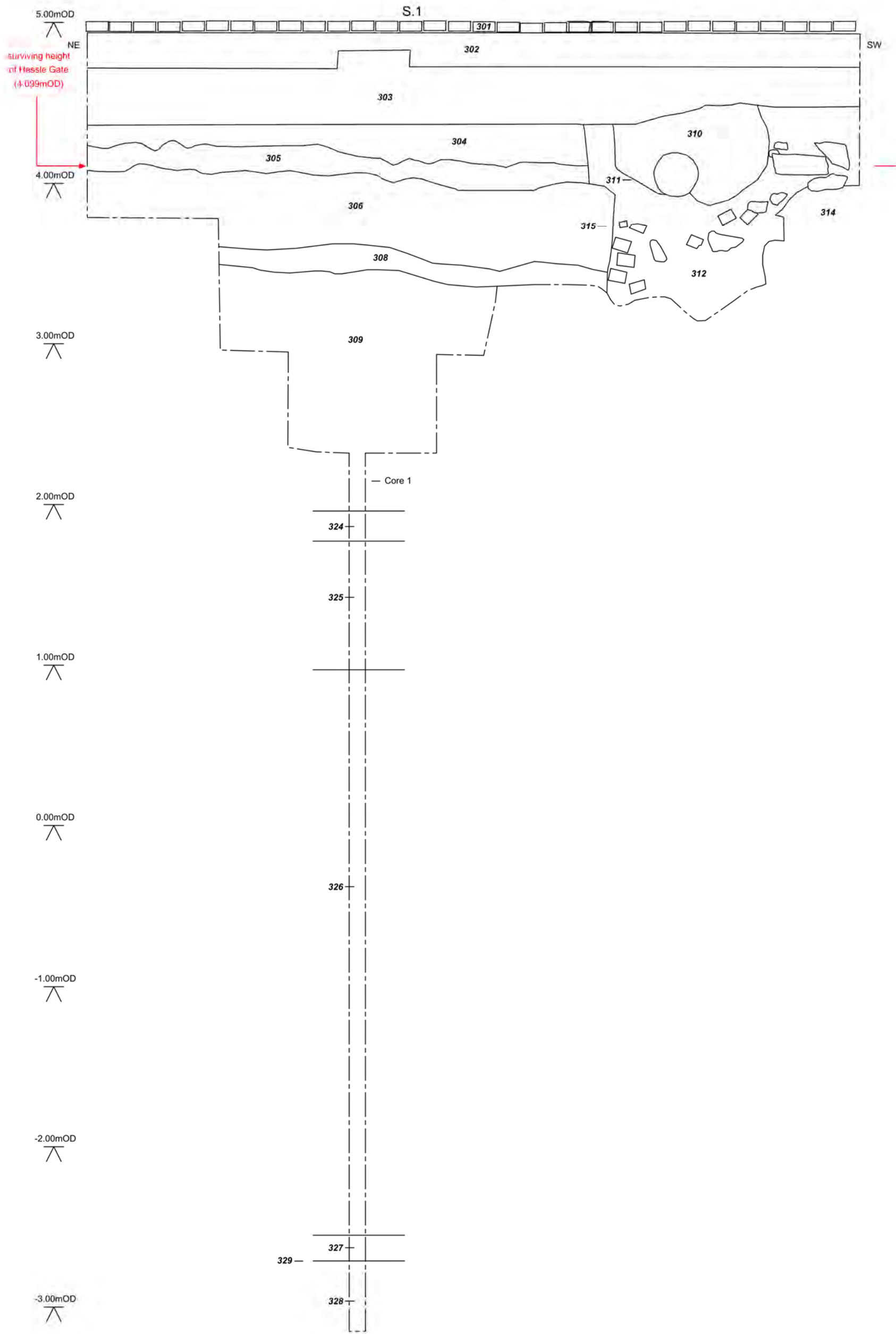
- Line of excavation
- Internal line of excavation
- Feature

- Oak pile
- Section drawn
- Uncertain edge

0 1 m
1:50 @ A3



Figure 3: Trench 2 and extension



Line of excavation
Feature

0 0.5 m
1:25 @ A3



Figure 4: Composite profile of Trench 3 (southern trench) showing dock reconstruction cut, slighted rampart deposits and town ditch sequence

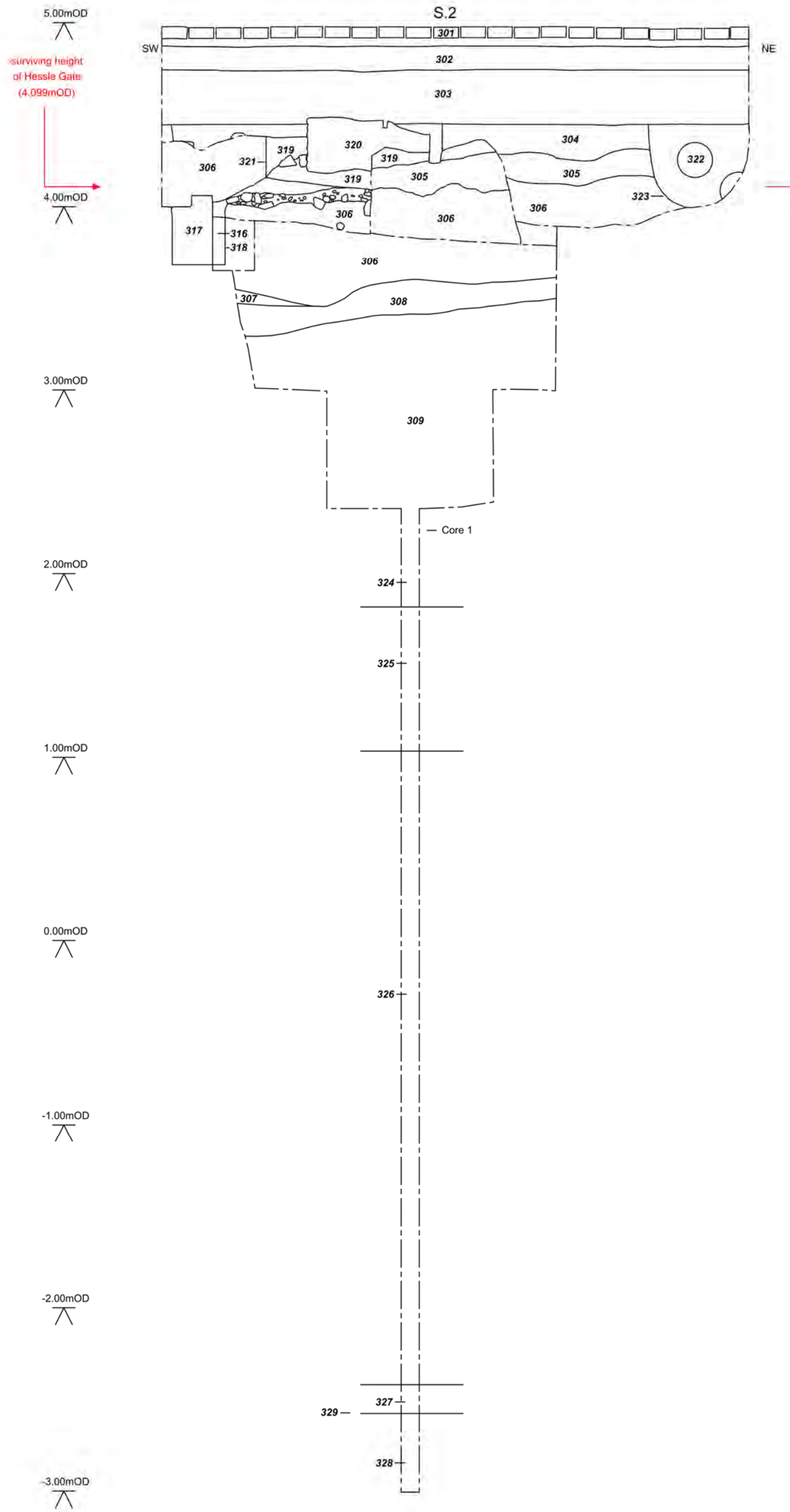
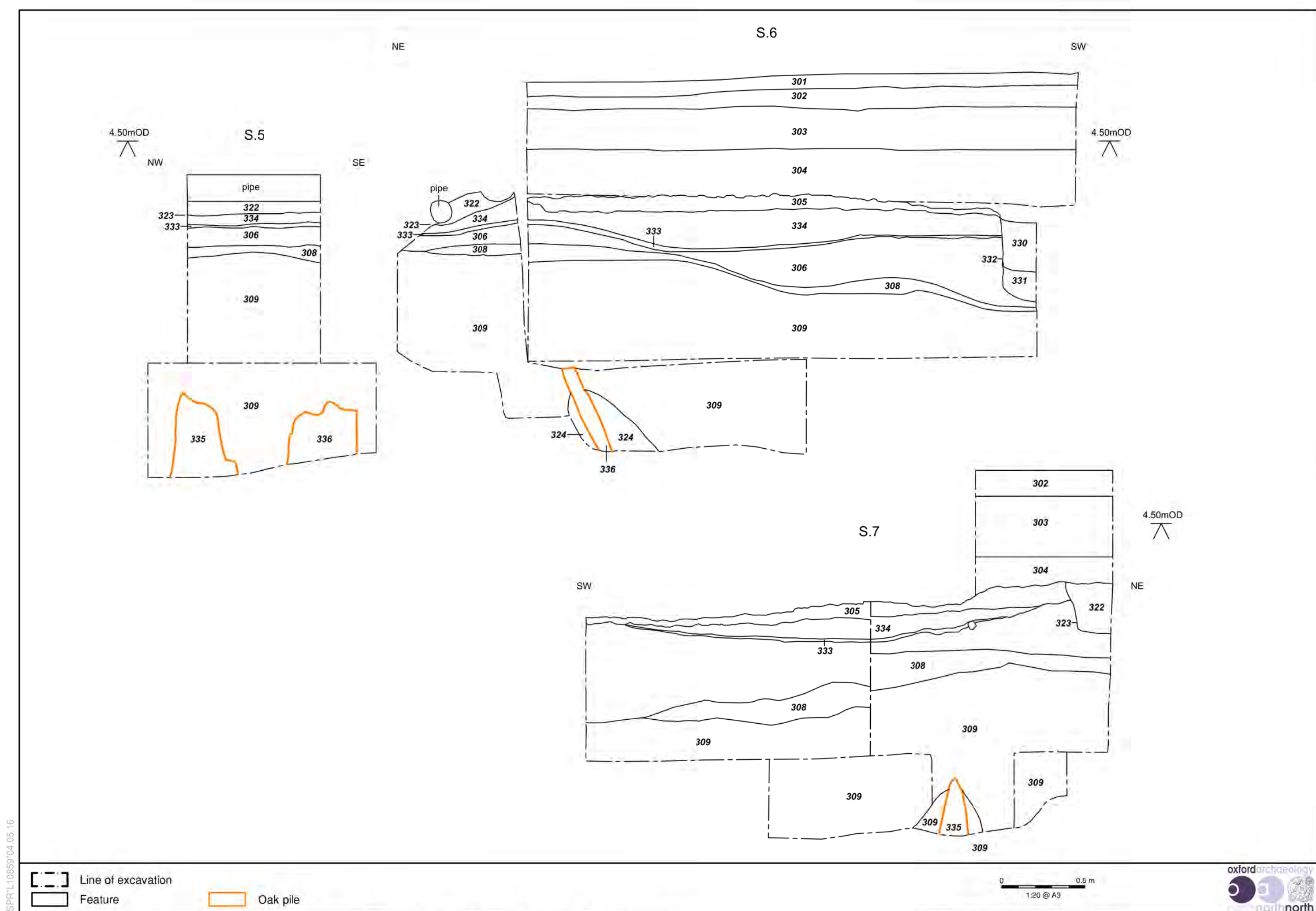
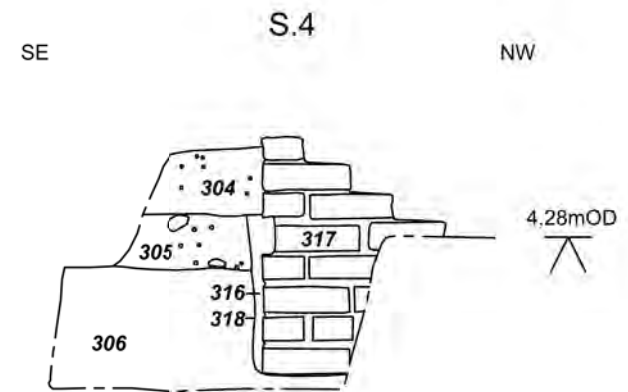
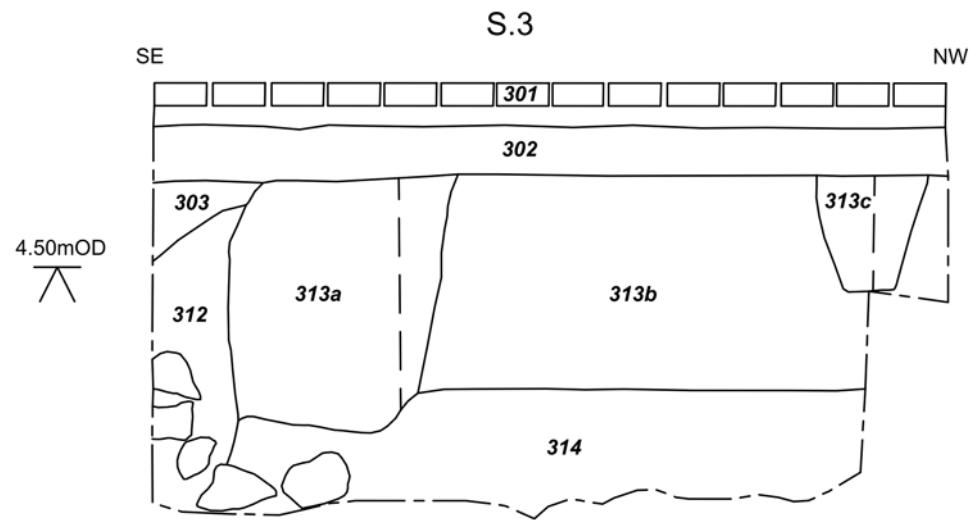




Figure 5: Composite profile of Trench 2 (southern trench) showing post-medieval and nineteenth-century features above slighted rampart deposits and town ditch sequence



SPR*L10869*04.05.16

Figure 6: Composite sections 5, 6, and 7 in the extension to Trench 2 showing wooden piles and town ditch fills lying below the modern ground makeup



-  Line of excavation
-  Feature

0 0.5 m
1:20 @ A4

Figure 7: Sections 3 and 4 showing nineteenth-century dock reconstruction and post-medieval brick wall profile

A63 Castle Street Improvements, Hull Environmental Statement

**Volume 3 Appendix 8.6
CULTURAL HERITAGE – ADVANCE ARCHAEOLOGICAL WORKS:
HOLY TRINITY BURIAL GROUND**

**TR010016/APP/6.3
HE514508-MMSJV-EHR-S0-RP-LH-000015
31 July 2018**



A63 CASTLE STREET IMPROVEMENT, HULL: HOLY TRINITY BURIAL GROUND

Draft Project Design for Main-Phase Clearance of Burial Remains and Archaeological Works



Humber Field Archaeology
Archaeological Consultants and Contractors



Oxford Archaeology North and Humber Field Archaeology

October 2016

Balfour Beatty and Highways England

OA North Ref: L10859

HA Ref: 1168-10-201-RE-002-PD2

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OVERVIEW

This document is a project design for undertaking the clearance of burial remains and a programme of archaeological works within and around Trinity Burial Ground (TBG) in association with an improvement to A63 Castle Street, Hull. It presents a research framework and methodologies for the following:

- Planning and programming the archaeological works;
- Preparatory and enabling works, including recording and databasing of the site's historic walls, gravestones and the Parish Burial Register;
- Preparing a programme of community engagement;
- Fieldwork, including:
 - archaeological recovery, on-site assessment and washing of 1500 skeletons, together with their associated coffin remains and artefacts using a zonal sampling system. Such skeletons will undergo physical osteological analysis in an on-site laboratory. A selection of these skeletons will be sub-sampled for bio-chemical analyses before they are reburied on site close to the completion of the archaeological fieldwork programme;
 - stratigraphic recording and rapid recovery of all remaining articulated burials and their associated coffin remains and artefacts, which will be immediately reburied on site;
 - recovery and immediate on-site reburial of charnel deposits and disarticulated bone;
 - processing of mechanically excavated arisings for the recovery of disarticulated remains to be immediately reburied on site;
 - production of an essentially digital primary archive, using laser scanning, digital photography and instrument survey, with site records, osteological assessment and analysis recorded into a centrally managed online database using tablet computers capable of taking photographs;
- At the completion of site works, production of an interim report presenting a collation and quantification of the data recovered, a review of the project's research questions and an updated project design for the analysis of the data. This will not be an assessment report *per se*, as recording for osteological and other forms of physical analysis will have been completed on site;
- The analysis and integration of the data recovered with documentary evidence and results from wider research;
- Preparation of a draft text for publication and deposition of the digital and documentary archive with an appropriate repository;
- Programme and Risk Register.

1. INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1 The proposed improvement to the A63, Castle Street, Kingston upon Hull, East Yorkshire (the Project; HA Ref 1168-10-201-RE-002-PD2), will impact upon part of the historic post-medieval Holy Trinity Burial Ground (TBG; NGR: TA 09420 28377; Fig 1). Under Faculty 3¹ it will be necessary to remove all funerary remains from just over a third of the area of the burial ground, within a c 3508m² zone of impact (excavation zone) across the northern part of the site. Outside of that area, development impacts will be minimised, and there will be no unnecessary removal of grave monuments. Indeed, under a separate Faculty (Faculty 4), the part of the burial ground outside of the excavation area will be improved, landscaped and made safe, as appropriate, so that it is a more welcoming public space.
- 1.1.2 This document has been produced by Oxford Archaeology North and Humber Field Archaeology (OA-HFA) on behalf of Balfour Beatty (BB; the Principal Contractor (PC) for the scheme). The document provides methodologies for a programme of archaeological works within the affected part of TBG and its immediate surroundings. Methods for post-excavation works, the production of an archive and the dissemination of publications are also provided for, and a preliminary outline programme presented in *Appendix 1*. The works are being undertaken to meet the Development Consent Order (DCO), plus the requirements of the Church of England (CoE) Faculty and the Ministry of Justice (MoJ) licence under Section 25 of the Burial Act 1857. A methodology for archaeological works associated with heritage assets within other parts of the development area are addressed separately.
- 1.1.3 The archaeological works within TBG need to satisfy a wide range of stakeholder requirements, including the practical needs of Highways England (HE) and the sensitivities of the local community. In particular, satisfaction of the archaeological planning conditions requested by Humber Archaeology Partnership (HAP; Hull City Council's curatorial body responsible for advising on and monitoring, heritage matters) and Historic England (HistE), can only be achieved by the adoption of a clear strategy. Accordingly, this document has been compiled to meet the standards and guidance of HistE (MAP2, English Heritage 1991; MoRPHE, HistE 2015), the Chartered Institute for Archaeologists (CifA 2014a-d) and the British Association for Biological Anthropology and Osteology (BBAO).
- 1.1.4 This project design draws upon several earlier pieces of work:
- an enhanced archaeological desk-based assessment and deposit model on the proposed A63 scheme, which included the results of map regression, rapid historical research into the TBG and a brief examination of the Holy Trinity Parish burial register, as well as the

¹ Faculty 1 pertained to the advance archaeological works within the burial ground; Faculty 2 permitted the erection of a fence around the leaning walls at the north-east corner of the site.

findings from a site visit and walkover survey synthesis of the historical research into TBG (OA-HFA 2014);

- a report on advance archaeological works undertaken within TBG, including a survey and record of gravestones within the proposed excavation, trial-trench evaluation and monitoring of boreholes (OA-HFA 2016a);
- the design development work undertaken by Arup and supported by BB, including production of a statistical model of the number and state of burials that are likely to lie within the excavation area (Arup 2015; 2016).

1.1.5 For the sake of brevity, this Project Design does not reproduce large amounts of data from those reports, which are referenced where appropriate and should be consulted as necessary.

1.2 EXISTING SITE CONDITIONS

1.2.1 **Situation:** TBG is a publicly accessible open space maintained by Hull City Council (HCC). The walls surrounding the burial ground are in a varying state of repair, with those that bound its north-east corner currently being fenced off due to their unsafe condition. Although the walls vary in date they are generally of significance to the history and character of the site (OA-HFA 2014). Much of the northern edge borders the A63, Castle Street, and only 50m beyond the southern edge of the investigation area, there is an active wet dock. The interior and edges of TBG contain numerous mature trees which the trial trenching has shown have extensive root systems. The interior is also occupied by burial monuments in varying conditions and densities. These include a range of styles and forms, including several tomb structures. The site is overlooked on several sides: to the north by Castle Street, to the south-east by the Holiday Inn and to the south-west, by the Kingston Retail Park.

1.2.2 **Site Access:** the only current vehicular access is through the north-east corner of the burial ground, where there is a lay-by off Castle Street and no barriers.

1.2.3 **Ground Conditions:** the completion of the advance archaeological works in 2015 provided significant information about the ground conditions within the burial ground (OA-HFA 2016a, Table 3). Full details are presented in the advance archaeological works report but, in general, a horizon of fully skeletonised burials was found to lie between 0.7m and 1.85m below ground level. The graves were found to have been cut into a silty clay in the north-eastern part of the burial ground, and into a sandy silt deposit elsewhere. Where undisturbed, the latter deposit was clearly banded, indicative of its alluvial origin. At a depth of approximately 2.3m bgl water entered the area of investigation, a little above the depth at which (c 2.6-2.8m bgl) a layer of soft silty clay alluvium was identified. The geotechnical investigation indicated that the water table was at approximately 3-3.5m bgl. The relatively high level at which soils become saturated, with the lowest extent of the burial horizon being approximately 0.5m above this, may be an indication of the knowledge of those interring burials with the aim of not cutting into saturated and therefore potentially waterlogged soils.

1.3 KEY ROLES, RESPONSIBILITIES AND INTERFACES

1.3.1 All stakeholders must understand their responsibilities and roles (Table 1).

Stakeholder	Key Responsibilities in respect of the works
Highways England (HE)	The Client: funding a programme of works that meets the requirements of the DCO, MoJ and CoE Faculty
Archaeological Advisor to HE (AAHE)	Monitor the archaeological works on behalf of HE, to ensure that they are appropriate, efficient and meet the requirements of the DCO, the Faculty and HistE, as well as any MoJ and Environmental Health directions
Diocese of York (includes vicar and PCC)	Issue of a Faculty permitting the removal of funerary remains from the zone of impact and their subsequent reburial; oversee/conduct reburial service/s; oversee that the Faculty is observed throughout the works
Ministry of Justice (MoJ)	Issue of legal documentation permitting the removal of funerary remains from the zone of impact and their subsequent reburial at an appropriate location
Hull City Council (HCC); including, Environmental Health, Bereavement Services	Monitoring of compliance with environmental controls (including site and traffic management, vegetation clearance and waste management); handling and cremation of funerary remains (where required); reburial of funerary remains
Humberside Police (HP)	Monitoring works to ensure legal compliance and that works are undertaken in a manner that does not cause undue public concern.
Balfour Beatty (BB)	Establish a safe working area and site compound, including vegetation clearance, removal of memorials under OA-HFA supervision, piling works, tent erection, site security, lighting, welfare provision, specialist support for UXO clearance, traffic and site management, groundwater management, spoil handling, removal and storage, backfilling. Ensure a safe and secure working environment is maintained. Monitor ground contamination, groundwater movement and quality, settlement, undertake environmental monitoring such as dust, noise, ground gas (as required) and site compliance with occupational hygiene/control of potential risks from pathogens
Technical Advisor to Balfour Beatty (TABB)	Forms the technical interface between all parties for BB in the undertaking the works to which this document relates. Advises BB on the delivery of the works by the AC detailed in this scope of works.
BB TBG Liaison Officer	Appointed by BB, the TBG Liaison Officer will approve and disseminate information to the public and media and will be the contact point for all enquiries from the public and the media. The officer will also form the point of contact for public liaison matter with HE
OA-HFA	Adhere to a safe system of working (under regular review including with BB) and undertake programme of Works in accordance with this Project Design and WPP
Exhumation Contractor (EC)	Work under the auspices of OA-HFA to remove all loose human remains from spoil arisings. Exhume and rebury any lead coffins, fleshed, or partially fleshed remains
Historic England (HistE) and Humber Archaeology Partnership (HAP)	Monitor compliance of the archaeological works to ensure that they are undertaken in accordance with this document and the ACs Project Design.
Other Stakeholders	These include representatives from the TBG Liaison Group, local residents, community, history and archaeology groups. The HE TBG Liaison Officer shall remain the primary contact for all other stakeholders.

Table 1: Summary of Key Stakeholders, Roles and Responsibilities

1.3.2 **Communications:** all communications will follow the protocol (Figure 2) and appropriate responses to all foreseeable circumstances (see Risk Register,

Appendix 4) will be agreed in advance. Stakeholders will be notified when responses are required in response to specific matters.

- 1.3.3 ***Liaison with the public and police:*** the BB Liaison Officer (BBLO) will liaise with HE Communication Team on matters relating to interface with the public, including descendants and special interest groups. The Liaison Officer will deal with all enquiries and will disseminate approved information as appropriate. Whilst only the Liaison Officer will provide information to the public, all site contractors have a duty to the public and to HE to ensure that public concerns are met. Accordingly, contact details for the BBLO will be placed at the site and at the on-site and off-site facilities of all site contractors, so that queries can be redirected appropriately.
- 1.3.4 Where appropriate, representatives from OA-HFA can be involved with liaison with representatives from local interest groups. Such meetings will be approved, arranged and supervised by the BBLO and will be held in a secure, controlled environment. The BBLO will also undertake all appropriate liaison with the Police.
- 1.3.5 ***Monitoring:*** monitoring of the works will be undertaken on behalf of HE and BB by the AAHE and the TABB, respectively. Monitoring of the archaeological works may also be undertaken by HAP and the HistE Regional Science Advisor, who will be afforded reasonable access to the site, if required.
- 1.3.6 Monitoring meetings will be established with the AAHE, TABB, HistE, HAP and OA-HFA as required. The following is anticipated:
 - at the beginning of the programme;
 - during the fieldwork (the frequency of such visits will be dictated to some extent by the findings on site);
 - during the design of the post-excavation programme to ensure that the proposed post-excavation works are appropriate, meet the requirements of the Faculty and any other conditions, sufficiently resourced and adequately programmed; and
 - at appropriate points during the post-excavation work (*Appendix 1*).
- 1.3.7 OA-HFA will ensure that any significant results/matters during any stage of the Works, are brought to the attention of the AAHE and TABB as soon as is practically possible and in any event within 24 hours.

2. ARCHAEOLOGICAL BACKGROUND, AIMS AND OBJECTIVES

2.1 A BRIEF BACKGROUND TO TRINITY BURIAL GROUND

- 2.1.1 The wider scheme of improvement to the A63 has been the subject of several desk-based studies and investigations (YAT 1994; 1995; Pell Frischmann 2010), the latest of which has culminated in a deposit model (HFA and OA 2014). These reviews will be consulted for a detailed background to the project and the wider archaeological resource. Information specific to the TBG has been collated during the formulation of the *Method Statement for Archaeological Removal of Burials* (OA-HFA 2014) and will not be reiterated here.
- 2.1.2 Trinity Burial Ground at Castle Street opened in 1783, following the recognition that the original graveyard associated with the medieval Holy Trinity Parish Church, in the Market Place, had reached capacity and could not be expanded. The Holy Trinity Parish burial registers record the interment of some 44,041 individuals between 1783 and 1861, the latter date indicating the point when TBG on Castle Street had also become full. These parish registers are thought to provide the most accurate information concerning the number of burials likely to have been made at TBG, although it should be considered that not every individual documented therein was actually buried at Castle Street. For example, it is likely that burials continued to be made within vaults and family plots at the original Holy Trinity graveyard in the Market Place until those facilities were full. In addition, the recent excavation of c 400 burials at the latter site, and examination of a record of the gravestones that once stood in that churchyard, clearly indicate that both burial sites operated in parallel (Ken Steedman *pers comm*). Although such individuals at Holy Trinity Church (HTC) are likely to be among the 44,041 recorded on the Parish burial register, the fact that there is no statistical model for ascertaining the relative proportions of burials at HTC and TBG means that the figure of 44,041 burials at TBG has been retained for estimating the number of burials that may need to be excavated from TBG.
- 2.1.3 The north-east corner of the site was occupied by a gaol, which was authorised by the same Act of Parliament as the burial ground, and opened in 1785. Hargraves' map of 1791, whilst somewhat schematic, shows that the gaol occupied a plot of land at the corner of Castle Street (then known as Myton Place) and the no-longer extant Burford Street. The latter street also defined the eastern edge of the burial ground, which 'wrapped around' the gaol. The Hull Conservation Area Character Appraisal records that the New Gaol was:
- '...an attractive oblong block of 3-4 storeys, divided, by 1810, into six large rooms and an attic and thirteen smaller rooms or cells. The turnkey's or gaoler's lodgings also formed an integral part of the building. This arrangement was criticized and by 1817 the lodgings had been reconstructed so as to form a forebuilding.'* (HCC 2005, 15).
- 2.1.4 The New Gaol is shown on Cragg's map of 1817, but by 1830 the institution was closed in favour of a site on Kingston Street (HCC 2005). The Goodwill and Lawson map of 1842 shows the plot as vacant, which by 1869 (Goodwill and Lawson), had been redeveloped, presumably as the sawmill annotated on

the 1893 OS map. By 1904 the site was occupied by the Humber Brass and Copper Works (to the east) and the Walker's, Parker's and Co Ltd Lead Works (to the west; Goad Insurance Map 1904). The site walkover (OA-HFA 2014) identified that the walls that formed the western and southern perimeter of the gaol-yard remain extant, are c 0.6m thick, survive to 2-2.4m high, and are built of typical Georgian bricks. Cragg's map indicates that one structure had been built against the eastern end of the southern (burial-ground side) face of the gaol wall by 1817, while the maps of Goodwill and Lawson show further structures added to the central part of that wall some time between 1842 and 1869). Within the area of the former gaol, the north face of that wall, and the east face of the western wall, had also been built against by 1869.

- 2.1.5 **Previous archaeological investigations:** a scheme of advance archaeological works was undertaken within TBG in 2015, including a survey and record of gravestones within the proposed excavation, trial-trench evaluation and monitoring of boreholes (OA-HFA 2016a). The evaluation explored the full depth of the burial horizon, through to undisturbed natural deposits, within three parts of the burial ground, and also investigated the site of a former mortuary building. That report should be consulted for further information.
- 2.1.6 Using the evaluation data and historical information (OA-HFA 2014), models have been developed to try and understand the number, nature and distribution of burials at the site, together with the resources required to excavate a sample for analysis. This information is presented as *Holy Trinity Burial Ground, Castle Street, Hull: Memorandum: Main-Phase Archaeological Works Sampling* (OA HFA 2016b) and within a mathematical model (Arup 2015).

2.2 RESEARCH FRAMEWORK FOR THE ARCHAEOLOGICAL WORKS

- 2.2.1 **Introduction:** it is neither desirable, necessary, practical, nor, indeed, likely to be possible, to analyse every set of human remains from the zone of impact. Rather, the archaeological works shall concentrate on the recovery of an appropriate sample for analysis. Following a meeting on the matter in July 2014, the Diocesan Advisory Committee (DAC) and its Archaeological Advisors issued a letter stating that they would prefer such a sample to comprise no more than 10% of the individuals within the excavation area. It is considered that this equates to a sample of 1500 skeletons (equivalent to 9-11% of articulated burials from the excavation area where it contains the remains of 18,938 interments; or 13-17% of articulated remains that are over 25% complete and thus considered suitable for analysis; Arup 2015; OA-HFA 2016b).
- 2.2.2 The basic research potential of an assemblage recovered from Trinity Burial Ground is set out in Section 6 of the Advance Archaeological Works report (OA-HFA 2016a) and will not be reiterated here. The overarching focus of the archaeological programme is to obtain an holistic understanding of the lives, identities, beliefs and funerary culture of a representative cross-section of the parishioners of Holy Trinity, that can be interpreted within a temporal, economic, geographic and social context.
- 2.2.3 The report on the trial-trenching undertaken within TBG in 2015 highlighted the importance of an integrated approach to analysis, utilising documentary,

spatial, contextual and osteological data (OA-HFA 2016a, Section 6.2). Focusing purely on the latter, the suite of analytical techniques that can be expected to be reliably employed on the assemblage includes all those that fall within nationally accepted practice (Brickley and Mckinley 2004), comprising a full macroscopic examination and recording for inventory, condition and completeness, estimation of sex and age, metrical and non-metrical analyses and pathology. This would also include on-site radiology to help diagnose pathological lesions (*c* 10% of analysed assemblage) but biochemical techniques on no more than *c* 10% of the analysed assemblage are also likely to be appropriate if used judiciously within a robust research context. This includes stable isotope analyses (diet and geographic origins); histology (to investigate pathology) and ancient DNA (ancestry, sex, genetic relationships).

2.2.4 In order to maximise efficiency, the potential of the resource, and the benefit to the public, the project necessarily has a clear strategy. Accordingly, the archaeological Works must fit within a firm and reasoned research framework that has clear aims and objectives that meet the research needs of the site, are realistic within the scope of the raw data that can be expected to be recovered from the site, and that lead the investigation to be focused and efficient, as it seeks to maximise the understanding of the sample and to benefit the public.

2.2.5 The research framework is summarised as a matrix in *Appendix 2* and comprises six elements:

- Research Needs (RN1-13); these represent ‘big’ academic themes associated with the study of industrial-period burial grounds, and TBG in particular. The integration of osteological, archaeological and documentary data is seen as particularly important in gaining a holistic understanding of life, death, society and religion;
- Research Potential (RPm-z); the key aspects of the data from TBG which, on the basis of the evaluation findings (OA-HFA 2016a), are considered most likely to have potential for analysis (**RPm-z**). The text in bold indicates which of the Research Needs could be addressed by each category of data with research potential;
- Research Questions (RQ); these are the ones considered fundamental to the project, having been selected from a wider set and modified as appropriate (Capital Value and Risk Ltd, 27 August 2014; OA-HFA 2016a, Table 19). Each RQ is referenced back to related items of Research Potential in bold;
- Research Objectives (RO), which are the practical means formulated to address the research questions (in bold);
- Public Benefits (PB) arising from the works and which are tied to particular Research Objectives.

2.2.6 The research framework will be reviewed at the completion of the preliminary works (Project Stage 1) and the interim report (Project Stage 3) to ensure that it meets the requirements of the Works and the confines of the available data. Any changes to the research framework by OA-HFA will only be made where they can be justified, and they will not be implemented until a confirmatory instruction has been received from BB.

3. PROGRAMME OUTLINE AND PROJECT TEAM

3.1 PROJECT STAGES, PRODUCTS AND REVIEW

3.1.1 The five Project Stages, together with their products and review points, are summarised in *Appendix 3*. The order and duration of the stages and, where definable, their sub-components, are presented within the project programme (*Appendix 1*). Stakeholders will be updated with the results of review stages, especially where review indicates that a continuing situation will present a potential risk to the completion of the project to time and budget. To assist with the identification of project risk a preliminary risk register is provided in *Appendix 4*.

3.2 PROJECT TEAM COMPOSITION

3.2.1 The key roles within the project team are set out in Table 2. BB, OA-HFA and the EC will provide staff at a suitable level and in appropriate proportions to complete the works within the agreed programme for the fieldwork and post fieldwork activities and in a flexible manner to meet the changing requirements of the project. All staff will be provided with laminated information sheets outlining their roles and responsibilities, chains of command and operating instructions as a series of flow charts. To maximise flexibility, many of the staff will be capable of performing a range of roles.

Title	Project Stages	Roles and Responsibilities
BB staff	All	BB shall have overall responsibility for the site (and all stages of the Works) and provide qualified representatives to deal with the various specialist attendances to OA-HFA and matters relating to H+S. They will liaise with the OA-HFA project manager, site director and other team members as appropriate; design and erect the tent, organise spoil removal, processing and storage, including traffic and pedestrians routes; organise and maintain welfare provision and associated attendances; provide, service and fuel operated plant; organise and oversee the provision, installation and if necessary, removal of piling to the southern boundary of the area of the Works; Lift grave monuments, grub tree roots; undertake ground reduction of the upper deposits and burial horizon throughout the operation; undertake laser scanning and processing of the data produced; organise and undertake backfilling of the areas of the Works; provide, lay and move (as required) adequate temporary surfaces to meet the requirements of OA-HFA.
OA-HFA Project Director	All	Provide academic advice and quality assurance for the Works during all stages
OA-HFA Project Manager (PM)	All	Overall delivery and management of the archaeological aspects of the project during all stages of the Work. Preparation of PDs and WPP. Organisation of tasks, administration, correspondence, project review, task and resource tracking, stakeholder liaison in accordance with the communications protocol, staff briefings, commissioning of sub-contractors, ensure the site operates safely and efficiently; organise training; ensure the works are adequately and appropriately staffed; establish welfare and PPE requirements and ensure that these are in place and adequately maintained/replaced as necessary
PM's Assistant	All	Assist PM in basic tasks such as organising/hiring accommodation, etc, throughout all stages of the work

Title	Project Stages	Roles and Responsibilities
OA-HFA Health and Safety Advisor	All	Advise OA-HFA PM on H+S matters to assist with the safe running of the site. Liaise with BB H+S advisors. Undertake H+S inspections and advise site staff appropriately
OA-HFA Lead Anthropologist	All	Advise OA-HFA PM and Site director on matters of osteology and funerary archaeology. Help devise recording techniques, database, instruction sheets and staff guidance; day-to-day strategic guidance on recovery, assessment and analysis; detailed photography for publication; liaison with other specialists; attend meetings with stakeholders
OA-HFA Community Archaeology Manager	All	Devise and organise the implementation of the community archaeology programme in consultation with stakeholders.
OA-HFA Site Director (SD)	All	Undertake day-to-day strategic liaison with BB and sub-contractors; Organise and coordinate archaeological teams and other contractors, Undertake inductions and briefings, ensure that a safe working environment is maintained, that the RA and H+S MS are observed and that tool box talks are done; Maintain a site diary, register of on-site personnel, visitors, as well as deliveries and collections of materials and human remains; Help to set out sampling areas on the ground to ensure that there is minimal impact to burials; Review the archaeological viability of sampling areas; Establish the number of funerary remains to be recovered from individual sampling areas and monitor the balance of remains for removal by each of the two recovery methods; Review/download and check site records and digital survey data, ensuring that these are complete and free of issues; combine data that would help to identify individuals and burials excluded from osteological analysis;
OA-HFA Assistant SD	2	With the exception of tasks relating to H+S and to direct liaison with BB and AAHE, a number of the Site Director's numerous responsibilities will be undertaken by a second directorial member of staff
OA-HFA Team/Area supervisors	2-3	Establish local sampling areas following instruction from the SD; co-ordinate archaeologists, plant and, if necessary, exhumers, within sampling areas; ensure that progress targets, standards and H+S requirements are met; monitor all aspects of the welfare of their team, undertake watching brief
OA-HFA Surveyors	2-5	Record the three-dimensional location of all remains; Download, check and merge digital data; Undertake on-site GIS/CAD; ensure information is provided to Area Supervisors and Site Director Other tasks (including machine supervision and excavation, as appropriate);
OA-HFA Plant supervisors	1-2	Direct and signal plant to ensure that ground reduction is undertaken in a careful co-ordinated manner that reveals, but does not damage, intact burials
OA-HFA Osteologists	1-5	Provide guidance on and undertake, assessment and, where appropriate, analysis of human remains. Provide advice and guidance on other funerary remains as appropriate
OA-HFA Coffin specialist	1-5	Record and analyse coffin fittings. Advise on recovery and treatment of fittings, and make selections for X-radiography
OA-HFA Archaeologists	1-2	Record gravestones/wall; monitor placement of retained memorials/bricks in safe storage; machine monitoring; characterise and record burials and other funerary remains; lift skeletonised remains and fragmented coffin fittings; undertake watching briefs
OA-HFA Skeleton Processors	2	Process skeletons in an appropriate manner so that they are clean, dry, bagged, boxed and ready for analysis
OA-HFA Store supervisor	2-3	Management of the storage and reburial facilities and collation and completion of the associated database forms
OA-HFA	2-3	Manage organisation and running of the osteology laboratory, skeleton washing and

Title	Project Stages	Roles and Responsibilities
Laboratory supervisor		the processing of any soil samples; collation and completion of the associated database forms
OA-HFA IT support	2-5	Design, maintain, integrate and update the site databases to ensure that data can be recorded, accessed and collated at all times.
OA-HFA Data processors	2-4	Process, verify and integrate survey and photographic data
Site Security	1-3	Under the auspices of BB, site security will be maintained on site and, if necessary, at any storage locations, at appropriate levels throughout the duration of the preparatory and fieldwork stages. Security officers will maintain a list of people approved to enter the site and a register of visitors; provide space for visitors awaiting verification/approval; undertake patrols and monitor access points and the site perimeter; inform the police of any incidents
EC Manager	1-2	Provide a team of exhumers. Help to devise the system for recovery of disarticulated remains
EC Supervisor	2	The EC supervisor will work closely with the OA-HFA SD to ensure that there is close co-ordination between each workforce, particularly in those cases where the EC and OA-HFA teams are working side by side. The EC supervisor will organise and monitor the removal of human remains in the spoil processing area and their subsequent reburial. The EC supervisor will be responsible for ensuring that all human remains with flesh tissue (including metal coffins) are recovered and reburied appropriately on site.
EC Operatives	2	Recover disarticulated bone from spoil. Remove remains that fall outside the archaeological sample.
Humberside Police	1-2	Monitor the site, storage areas and reburial sites, together with the vehicular movement of remains between them; ensure all works are legal and undertaken in a manner that does not cause undue public concern; undertake additional security patrols and monitoring as appropriate; monitor the traffic management plan in action

Table 2: Summary of Roles and Responsibilities for the Archaeology Project Team and Attendant Contractors

4. BASIC CONSIDERATIONS

4.1 LEGAL CONSIDERATIONS

- 4.1.1 **Faculty and MoJ Licence:** the site is consecrated according to the rites of the Church of England (CoE). Under the appropriate Faculty (Care of Churches and Ecclesiastical Jurisdiction Measure 1991; Faculty Jurisdiction Measure 1964; the Faculty Jurisdiction Rules 2000), permission is required to remove any funerary remains from the excavation zone. The Faculty is supported by a Ministry of Justice Licence issued under the Burial Act 1857 (Section 25). Copies of these documents will be forwarded to all appropriate stakeholders.
- 4.1.2 All Faculty and MoJ directions, together with any from the HCC Environmental Health Officer (EHO) and Bereavement Services Manager, will be included within the site induction for all on-site contractors. The directions, which will be displayed in an appropriate location (ie, site offices and welfare cabins), will be adhered to by all on-site contractors throughout all stages of the project. Where requested, the AC and EC will provide information (risk assessments and methodologies, as appropriate), to the relevant statutory bodies and advisors. Humberside Police will be provided with appropriate project details and time tables, as well as opportunities to monitor the site, so that they can ensure that all works are legal and undertaken in a manner that does not cause undue public concern.
- 4.1.3 **The Human Tissues Act (HTA; 2004):** under the HTA (2004) a licence is required to handle any human remains that are less than one hundred years old. The last documented burial on the TBG burial register dates to 1861. However, the EYFHS survey records two burials in 1867 (1985) and these may not be the last interments at the site. In the unlikely event that burials clearly interred within the last 100 years are identified, these will be handled only by the EC with an HTA licence in place.

4.2 ETHICAL AND RELIGIOUS CONSIDERATIONS

- 4.2.1 All staff involved in the excavation, exhumation and recording of human remains will behave with due care and attention, showing respect for the dead at all times. The AC and EC will observe the BABAO code of Ethics and will have and must adhere to, an in-house protocol for working with human remains.
- 4.2.2 The excavation and osteological analysis of human remains will be screened from the public at all times. No access will be permitted to members of the public during any works where human remains might be exposed. The media will only be admitted to specific, pre-defined, parts of the site by pre-arrangement and with the specific permission of the Client. Photography by the AC will be for archaeological purposes only. Photography by the EC will be strictly for the purposes of documenting the works.
- 4.2.3 All staff involved in the works will receive a Toolbox Talk prior to commencing works to ensure that key ethical, health and safety,

environmental and welfare issues are communicated to staff. Regular Toolbox Talk updates will also be given for the duration of the works.

4.3 HEALTH, SAFETY AND WELLBEING

- 4.3.1 Although archaeological works are not covered by CDM 2015, such is the nature of the scheme that it is expected that, throughout the Works, CDM Regulations will apply. BB will manage all aspects of the safe running of the site in accordance with CDM 2015, including the appointment of qualified personnel who will produce the site Health, Safety and Environmental Management Plan (HASEMP), and will monitor works through their H+S Officer who will work closely with the OA-HFA Project Manager and Site Director. These parties will liaise regularly before and during the works to ensure that all H+S procedures and documents are in place and appropriate to the works being undertaken. Particular care will be taken to comply with HE Raising the bar 12 document *Occupational Health* (revised May 2015), and BB documents, including *The Road to Improved Health and Wellbeing in Major Highways 2016-2019*, BB guidance documents such as *Occupational Health Surveillance-Assessment Procedures*, *HSF-PR-0035*, and all BB Health and Wellbeing Action Plans.
- 4.3.2 The core health, safety and wellbeing document to be formulated and maintained for the archaeological works will comprise a Work Package Plan (WPP; which integrates method statements and risk assessments). The WPP will be produced in sufficient time to allow for comments to be made and incorporated. All amendments will be agreed with BB and incorporated into an updated document. The themes outlined below will be treated at an appropriate level of detail in the WPP.
- 4.3.3 BB will be responsible for undertaking service clearance and for issuing permits to dig, for example within piled/shored interventions. All health and safety procedures, including those of BB, BABAO, and the policies and H+S manuals of OA-HFA and the EC, will be followed throughout the works. These will include adherence to the guidance of the FAME/SCAUM H+S Manual, the Health and Safety at Work Act (1974), the Management of Health and Safety at Work Regulations (1999), the Public Health (Control of Diseases) Act (1984), the Manual Handling Operations Regulations (1992) and lifting operations (LOLER; 1998).
- 4.3.4 The OA-HFA site director (*Section 3.2, Table 4*) will maintain a register of all staff and visitors on site and a diary that summarises the day's working areas, progress and weather, as well as significant deliveries, collections and the removal of human remains from site. An indexed photographic record in digital format will be regularly maintained to record general working shots, progress and the condition of the site.
- 4.3.5 **Staff training and PPE:** all project staff must be CSCS qualified. All project staff will wear full basic PPE whilst on site, to include safety helmets, safety boots and high-visibility jackets. Protective suits, face masks, noise defenders, gloves and eye protection will be made available to staff as necessary, as will disposable gloves and suits. Additional PPE will be dependent on site conditions, although these are expected to be mitigated by the tent structure.

- 4.3.6 **Contamination:** known or suspected ground contamination issues will be communicated by BB and to OA-HFA, with health and safety procedures adopted during the works to mitigate potential risks appropriately. Should any previously unknown contamination be encountered, works will be suspended until a risk assessment has been completed and site procedures adapted accordingly. Archaeological sampling within contaminated areas will be reviewed and, if necessary, abandoned and relocated to an uncontaminated part of the site. Contaminated human remains will be removed by the EC under special provisions.
- 4.3.7 **Unexploded Ordnance (UXO):** may be present on site. BB will undertake appropriate searches to establish the extent of risk and, if appropriate, will engage a specialist contractor to undertake investigative works, monitoring and if necessary, removal.
- 4.3.8 **Infectious diseases:** all staff must have an up to date tetanus jab and provide details of salient allergies and medical conditions to the OA-HFA site director and BB H+S Officer. It is expected that skeletonised burials in earth graves will form the vast majority of the assemblage. These should not present any particular infectious risk to health according to the BABAO (nd, 7) *Code of Practice*: ‘Human remains pose little or no risk as far as infection hazards are concerned because harmful micro-organisms do not survive beyond a few months following death’.
- 4.3.9 The BABAO *Code of Practice* attributes a greater, ‘although believed to be remote’ (*op cit*), risk of infection from smallpox and anthrax when remains (including the soft fittings for coffins) are soaked in body liquor, or where horsehair stuffing is present. No such remains were encountered during the evaluation (OA-HFA 2016). Nonetheless, the WPP will give due consideration to such risks, including, where considered appropriate, vaccinations for smallpox and anthrax (as directed by the Public Health Laboratory Service (PHLS); Tel: (+44) 020 8200 4400) for personnel directly involved with the excavation works and handling of remains.
- 4.3.10 Where remains (such as those with flesh) are identified that are considered, on the basis of the above criteria, to present a health risk, the following will be observed:
- All staff within the area of risk will wear additional protective clothing, including disposable masks, suits and gloves and will remove themselves to a safe distance; such PPE will not be removed from site other than as waste;
 - All such remains will be lifted, together with all their associated funerary furniture, by the EC (*Section 7.2.12*).
- 4.3.11 Where, despite these precautions, staff have managed to come into direct contact with such remains, or to have been splashed by their liquor, all affected clothing and PPE will be sealed in opaque plastic bags and disposed of in accordance with statutory requirements.
- 4.3.12 **Counselling:** all staff will be briefed and vetted by their employers to ensure that they are informed, willing and appropriate for their designated roles and responsibilities. During and after the fieldwork all staff will have unrestricted access to a counsellor, who will also make regular visits to site.

5. PROJECT STAGE 0: DOCUMENT PREPARATION

5.1 KEY DOCUMENTS

5.1.1 During the planning stage of the project OA-HFA will work closely with BB and the TABB to produce the following documents:

- Task-specific methodologies and operating instructions that will assist all project staff during the operation;
- Site set-up plan, showing utilities, organisation of facilities and work flow;
- Operating instructions to different types of site staff and working areas;
- Project-specific monitoring *pro-formae* and report templates;
- Tent arrangement plan;
- Plan showing locations for detailed sampling;
- Liaison and planning for outreach and community engagement;
- Programme for the Archaeological Works;
- Risk register for the Archaeological Works;
- Cost and timetable modelling;
- Cost and resource plan;
- The Work Package Plan (the safe methodologies and risk assessment for the archaeological elements of the Works);

5.1.2 The documents when approved by BB and TABB will be submitted to the AAHE for review and, where appropriate, to HistE and HAP.

5.1.3 OA-HFA will develop an integrated database that allows:

- recording of information to a level that is appropriate to the recovery method for particular burials;
- on-site digital recording of information relating to stratigraphy, coffin fittings and osteological assessment and analysis data, as well as photographs and survey data;
- individual burials to be tracked on an audited 'chain of custody basis' through the system of recovery, processing, analysis, deposition and/or reburial, as appropriate.

5.1.4 OA-HFA will develop a series of laminated job/task descriptions and operating instructions, guidance notes, crib sheets, and pro-forma for each staff role (to be provided to each member of staff) that will standardise and facilitate the completion of each task, aiding efficiency and the monitoring of progress.

5.1.5 OA-HFA will work with BB to develop laser scanning as the principal means of recovering spatial data for individual burials.

5.1.6 OA-HFA will assist BB by providing suitable specialist input during the preparation of:

- The wider project WPP;
- The integrated project-wide programme;
- Any other documents or areas where archaeological information is required.

5.2 COMMUNITY ENGAGEMENT PLAN

5.2.1 **Overview:** a separate community development plan will be produced by OA-HFA in consultation with the HE Communications Team and the BBLO (Table 3). The themes presented in this document will be developed by the OA-HFA project manager and the OA Community Archaeology Manager in consultation with relevant stakeholders to ensure that the programme of community engagement reaches a wide audience, appeals to people from a range of backgrounds, age groups, but makes a real contribution to the project, without being an end in itself. The themes are as follows:

- Historical and documentary research (*Sections 6.1.5-7*);
- Fieldwork training: recording historic structures (*Section 6.1.26*);
- Fieldwork: where feasible, a strip, map and record of the former gaol site, including industrial buildings, comprising site visits, site tours, open days, information panels, scope for hands-on involvement and training;
- Fieldwork: TBG. Although the site will not be open to the public, information panels will be posted around the hoardings. Meetings can be held with specialist interest and family groups.

Task	Staff	Person Days
Preparation, set-up, liaison for the community engagement plan	Project Manager	5
	Community Archaeology Manager	25
Quarterly meetings with stakeholders	Community Archaeology Manager	9
Fortnightly workshops over two years	Community Archaeology Manager	49
Five open days	Community Archaeology Manager	5
	Fieldwork Project Officer	5
General management, remote guidance and queries	Project Manager	4
	Community Archaeology Manager	48
Set up a website that the volunteers could contribute to	Illustrator	25
	IT Support	2
On-site community engagement for 15 days to assist with the public days on the wall recording and the strip, map and record of the former gaol	Fieldwork Project Officer	15
Total		192

Table 3: Summary of resources to be allocated to Community Engagement

5.2.2 **Programme:** the community engagement programme will be established during the planning stage of the project (*Appendix 1*) between November 2018 and January 2019. The actual programme of community engagement will relate to the fieldwork, but will be primarily focused on the early works and the period during the first six months of the off-site analysis stage of the project, representing the period during which osteological analysis and archaeologically led documentary research will be undertaken.

6. PROJECT STAGE 1: PRELIMINARY WORKS AND SITE SET-UP

6.1 PRELIMINARY WORKS

6.1.1 Various preliminary tasks are required to ensure that the archaeological works run smoothly and efficiently, and in accordance with the requirements of stakeholders (Table 4; *Appendix 1*). These have been divided between works that can be completed off-site and those that are required to prepare the site for investigation, although, as indicated on the programme, that division does not prevent works from being undertaken in parallel. Many of the tasks fall outside the expertise of OA-HFA; where such works are enacted by a specialist contractor, the contractor will provide H+S documentation as required by BB. BB will be responsible for setting up and maintaining the site and for meeting all welfare, attendance, security and support requirements (Table 6).

Task No	Task	Enacted by	Additional MS required?
1.1	Create a database of the burial register	OA-HFA working with research team and public interest groups	No
1.2	Devise Community Engagement Plan and undertake detailed research	OA-HFA working with research team and public interest groups	No
1.3	Preparation of information panels	OA-HFA, approved by stakeholders	No
1.4	Fence-off and set-up the former Gaol Area	BB	Yes
1.5	Conduct archaeological strip, map and record of former gaol area	OA-HFA, where feasible as a public excavation, potentially with some hands-on engagement	No
1.6	Close the site to the public	HCC; input from BB & PCC/Vicar	Yes
1.7	Level the grassy knoll to the south-west of TBG under archaeological watching brief	BB, with OA-HFA watching brief	Yes
1.8	Erection of hoarding and safety barriers to A63	BB	Yes
1.9	Traffic Management Plan	BB	Yes
1.10	Sharps/waste removal	BB/Specialist Contractor	Yes
1.11	Locate, make safe and redirect utilities	BB/Specialist Contractor, watching brief by OA-North	Yes
1.12	Establish site accommodation compound	BB	Yes
1.13	Initially record burial ground walls	OA-HFA	No
1.14	Clear vegetation Stage 1	BB/Specialist Contractor, monitored by OA-HFA where appropriate	Yes
1.15	Fully record burial ground walls	OA-HFA, working with public interest groups as a training exercise	No
1.16	Remove required sections of burial ground walls and stockpile	BB/Specialist Contractor. Monitored by OA-HFA	Yes
1.17	Clear vegetation Stage 2, including archaeologically investigating, reducing, making safe and stabilising the overgrown mound to the south of the excavation area	BB/Specialist Contractor, monitored by OA/HFA where appropriate, including recording and recovery of any funerary remains and parts of monuments exposed during making	Yes

		the mound safe	
1.18	Record newly exposed monuments	OA-HFA	No
1.19	Remove and stockpile grave monuments from the affected area of TBG	BB/Specialist Contractor monitored by OA-HFA	Yes
1.20	Record and Remove lampposts	Recorded by OA-HFA; Moved by BB/Specialist Contractor monitored by OA-HFA	Yes
1.21	Tree surgery	BB/Specialist Contractor, monitored by OA-HFA where safe to do so	Yes
1.22	Install piling mat and insert sheet pile wall	BB	Yes
1.23	Erect tents	BB	Yes
1.24	Establish soil processing area	BB	Yes
1.25	Lay temporary trackways	BB	Yes
1.26	Prepare emergency drainage plan	BB	Yes
1.27	Laser scanning training	BB	No

Table 4: Summary of Task 1: Preliminary Works

6.1.2 **Task 1.1; Produce and populate database of the Burial Register:** to address **ROa** information from the Holy Trinity parish burial register will be entered into a database. This information can be integrated with the database of recorded grave monuments, which will be an essential aid for assisting the BBLO with queries from the public and for liaising with people who have contacted the Project Team to identify themselves as descendants of people buried at TBG. It will also provide important contextual and comparative data for the osteological analysis and will facilitate the production of demographic profiles to assist with modelling and comparison.

6.1.3 **Task 1.2; Devise Community Engagement Plan and Undertake detailed research:** the programme of detailed research will develop an appropriate body of data that is specific to a detailed study of TBG and will address **ROb** and **ROc** as well as several of the community engagement needs of the project. Although the community aspects will be focused on the preliminary works and the early post-excavation stages of the project, the overall programme of core-funded research will be an ongoing and iterative process throughout the fieldwork, analysis and publication stages of the project that will seek to contextualise the archaeological data recovered and maximise its value within a holistic approach, but will also seek to address significant research questions that cannot be fully, or even partly, addressed by the archaeological data that is expected to be recovered during the excavation. It will comprise:

- integration of documentary and gravestone data;
- a review of readily available documents held by the ERYAS and the Hull History Centre, allowing collation of detailed information on TBG and its parishioners in particular;
- collation, review and assimilation of documentary data on the socio-economic, demographic, funerary and religious trends prevailing during the use of TBG, both in the case of Hull, and more widely;
- consideration of the principal industries and employers in the city, particularly those characteristic of Hull and Holy Trinity Parish;

- more detailed research of named individuals and/or selected case studies. Specific sources will include the databased burial register; census returns and trade directories.
- 6.1.4 The programme will be carefully planned so that research is relevant, comprehensive in the most appropriate areas, and efficient. It will largely be undertaken by the project team, including regional historians, archaeologists and experts in post-medieval burial but, wherever possible, will facilitate and encourage public engagement.
- 6.1.5 *Community engagement opportunities:* the community engagement element of the project will be presented in specific ‘Community Engagement Plan’ which will be developed as part of the detailed set-up stage of the project and will present methodologies not just for attracting and working with volunteers, the establishment of a steering group, inception and monitoring meetings, web-site management, but also user-friendly methods and guidance notes for those undertaking research. The following sections thus present an outline of what that community engagement plan might entail in the case of documentary research, rather than a definitive methodology.
- 6.1.6 The community engagement will run in parallel with, be complementary to, and will augment the main programme of research. As such, it will not duplicate tasks that would need to be undertaken or data generated as part of the core-funded works (ie, those dealing directly with physical remains such as the gravestones, coffin fittings and the human remains). Nor will it entail the historical study of identified named individuals and families unless the number of such individuals exceeds the core-funded resource for 50 such individuals/family groups. As such, although volunteers will be able to pursue research angles that interest them in order to maintain their enthusiasm, the scope of the research will necessarily have to fit within the wider research parameters. In particular, the community research will build on the City of Culture theme of ‘routes to roots’ and focus on the social-historical aspects of the project encapsulated by RQ5, RQ7 and, to a degree, RQ12 by seeking to study a cross-section of Hull’s former community.
- 6.1.7 The volunteers will be encouraged to utilise and integrate different forms of non-confidential data as they become available, but the work will be essentially documentary. The community archaeologist and project historian will work with the volunteers to produce narratives that are referenced and academically valid so that, where appropriate, the data can be used in published material. The level of detail and the scope of each narrative will depend largely on the number of volunteers, their available time, and their aptitude and dedication. The narratives would form part of the project archive, could be made available online, and excerpts could be included, where appropriate, in the monograph and popular publication formats. Four Community Research (CR) themes are suggested in Table 5, together with a series of questions and a list of ‘jumping off points’ and resources that could be utilised to address those questions.

Theme	Questions	Jumping off points and resources
CR1: Family and individual case studies	<ul style="list-style-type: none"> • Where did people originate? • Can incomers be identified? • Were incomers integrated through intermarriage? • What is in a name? • Can we trace other family members and inter-relationships? • Why are they buried at TBG rather than HTC? • Does memorialisation reflect positive and negative changes in family wealth and status? 	<ul style="list-style-type: none"> • Excavated identified individuals; • People recorded on gravestones; • People recorded on the burial register; • Known ancestors; • Death certificates; • Court and police records; • Comparison of gravestone records between TBG and HTC; • Marriage records
CR2: The port, trade and sea farers	<ul style="list-style-type: none"> • What documentary evidence is there for the causes of death and aspects of people's lives? 	
CR3: Life and Death in 1842	<ul style="list-style-type: none"> • Where did the people buried at TBG live and work? • Are there any patterns in the 1842 mortality profile according to where people live? • Are there patterns in the 1842 mortality profile according to people's professions? • Are there patterns in family size? • Are people of different ethnicities or professions spread around the city evenly, or are there patterns within the data? 	<ul style="list-style-type: none"> • 1841 census and the burial register (including the databased information) for year 1842, or period within that, dependent on number of volunteers; • gravestones as appropriate; • land deeds, documents recording installation of amenities
CR4: Local Industries	<ul style="list-style-type: none"> • What was life like in the gaol? 	<ul style="list-style-type: none"> • Case studies of particular industries within Hull that can be identified as employers of people buried at TBG
CR5: Crime and Punishment	<ul style="list-style-type: none"> • What sort of people were put in the gaol, and what were their crimes? • Can any inmates be identified on the burial register and/or on the 1841 census? 	<ul style="list-style-type: none"> • Court and police records; • Contemporary newspapers; • 1841 census; • Burial register

Table 5: Matrix for Community Research

6.1.8 **Task 1.3; Prepare information panels:** a series of information panels, covering different aspects of the project, will be devised for the works and affixed to fencing and hoardings. These will utilise information from the documentary research and the advance archaeological works (OA-HFA 2016) and will be updated as appropriate. Draft versions of the panels will be sent to HE for approval.

6.1.9 **Task 1.4; Fence off and Set-up the former Gaol Area:** the area that lies outside the north-east corner of TBG will be used to process spoil during the excavation. However, the area was occupied firstly by a late eighteenth-century gaol, and then by a series of industries. These remains are of archaeological interest in their own right, and will need to be investigated and recorded in advance of their removal by the road improvement. The best time to investigate these remains will be well in advance of the main TBG excavation because:

- No investigation has yet been undertaken at that location and the condition and extent of the archaeological remains is thus not understood. The spoil processing area is on the critical path for the TBG excavation, and anything that delays its establishment represents a considerable risk to the project programme.
- The remains of the industrial buildings and the gaol are likely to be robust, made of durable materials that are easy to define and, being fairly modern, easy to interpret within the framework of historical documentation, such as old maps. As such, and if permitted by HE, they would present a good

opportunity for an excavation that could be presented to the public, and could even involve hands on public engagement. Such work links to work undertaken for the City of Culture.

- 6.1.10 Preparation of the area will involve removal of trees and lifting of existing surfaces. Explanatory signage, to be approved by HE, can be designed by OA-HFA in consultation with the stakeholders, including those engaged with local historical research (*Appendix 3*). Provision will be made for adequate welfare facilities for a team of ten archaeologists and attendant machine drivers, as well as a site office and storage. Where the works take place as an early activity in advance of the majority of enabling works, these could be sited along the northern edge of TBG and the former gaol site. Where feasible, and in consideration of any enabling works that may be simultaneously taking place at the site, the area may be fenced in a manner that allows the archaeological works to be clearly visible. An additional site cabin could be used for the display of findings for exhibition purposes.
- 6.1.11 **Task 1.5; Conduct archaeological strip, map and record of former gaol area:** the investigation will use standard OA techniques for the investigation of industrial archaeology sites. This will involve the use of a 360⁰ mechanical excavator, fitted with a wide toothless bucket and operating under the supervision of an experienced archaeologist to remove deposits of overburden down to the uppermost archaeological horizon. Maximum use of the machine will be made to facilitate spoil removal and to clean robust remains. Final cleaning will be by hand. The structures will be recorded using a hi-view camera on a stick. The photos will be rectified using surveyed base stations, and the data will be processed on a computer package to create plans and, if appropriate, three-dimensional models, tied into Ordnance Datum. Alternatively, recording could comprise laser scanning, as a means of increasing familiarity of use for the main phase of excavation.
- 6.1.12 Recording methods for the gaol and industrial features are influenced by the fact that such remains are best treated as the buildings and structures that they once were, and are best interpreted and understood when the components are viewed holistically. Accordingly, the recording methods for building components owes as much to modern historic building survey techniques as to more conventional archaeology. Recording will generally use structure and room sheets, with individual context sheets completed for non-structural remains or for specific contexts where these show evidence of phasing or modification. A photographic record will be maintained in digital format, with detail shots and working shots taken to record elements.
- 6.1.13 *Public engagement:* the excavation can be viewed by the public at all times, and sufficient resources can be deployed so that a daily or weekly question and answer session could be held to demonstrate progress to the public and display any interesting finds. For several days during the excavation it is proposed to allow small numbers of the public to participate in the excavation, provided that this can be undertaken safely. Participants would sign up in advance and would be expected to wear stout shoes and gardening gloves. OA-HFA would provide hi-vis vests. Tools would be limited to trowels, hand shovels, brushes and buckets. Tasks, particularly for adult participants, would be seek to include an element of education and training, and could include archaeological

cleaning, photography, survey and hand planning. Finds processing could be undertaken where water is available on site and where the finds assemblage is suitable (ie, not restricted to lumps of rusty iron and bricks, as is often the case on industrial sites). An open day could be held at the end of the project, with the archaeologists taking visitors through the story of the excavation and outlining the findings. This could be further illustrated by updating the information panels displayed on the perimeter fencing.

- 6.1.14 A specific section in the WPP will be developed for such community engagement.
- 6.1.15 **Task 1.6, Close TBG:** following any appropriate advertising, TBG will be closed to the public and the entrances securely barred. Appropriate signage and security measures will be put in place by BB.
- 6.1.16 **Task 1.7; level grassed area to west of TBG:** the grassed area immediately to the west of TBG will be used as the site for the archaeology works compound. Previous archaeological watching brief identified structural remains, possibly elements of the little-understood medieval settlement of Wyke, some 2-3m below the modern ground level (and thus well below the likely extent of development impact; OA-HFA 2014). It will be fenced off, stripped of topsoil, and then levelled to a suitable horizon and to create a platform by a 360⁰ machine fitted with a toothless bucket operating under the supervision of an experienced archaeologist. Any archaeological remains revealed by that work will be investigated and recorded using standard watching brief methods (*Section 7.4*).
- 6.1.17 **Task 1.8; erect safety barriers and hoardings:** BB will erect safety barriers and hoarding to the A63 to provide protection from traffic. A complete circuit of hoardings will be erected around the TBG, the spoil processing area, and the archaeological works compound. Hoardings will be at least 3m high, will have no gaps, and will be placed at a suitable distance from the burial ground walls to allow both faces to be recorded, and to allow stepping out of the excavations so that there are no high sections that might otherwise present a hazard. Entrances and security points will be established.
- 6.1.18 **Task 1.9, Traffic management plan:** BB will be responsible for establishing a safe, rational traffic management plan that does not endanger or inconvenience members of the public, but equally minimises disruption and delays on site. The principal periods of heavy traffic associated with the site itself are likely to be at the beginning and end of the fieldwork, when materials are being brought to and taken away from site. The installation of hoardings, piling and the removal of trees/limbs will involve large wagons, plant and delivery vehicles, as will the installation of welfare and tents. On a daily or weekly basis, site traffic will include crew buses, welfare maintenance vehicles, fuel bowsers, water bowsers.
- 6.1.19 **Task 1.10, Sharps/waste removal and disposal:** parts of the site have again been used for the casual disposal of sharps and other waste by intravenous drug users and vagrants. Contractors engaged in vegetation removal will be suitably prepared; organic material containing sharps will be transported and disposed of in appropriate manner.

6.1.20 **Task 1.11, Locate, remove/redirect services within and immediately around TBG:** where services will be impacted upon by elements of the proposed scheme (including those of the preparatory works), they will need to be located through trial investigations, decommissioned/removed and/or redirected. It is possible that those sited to the immediate north of the current TBG boundary may lie within the former extent of burial ground. Works in proximity to TBG will be monitored by an archaeological watching brief, where appropriate. Works where services are present may need to be staged.

6.1.21 **Task 1.12; Set up Archaeology works compound:** the area to the west of TBG will be surfaced appropriately with durable material and a series of stacked units will be installed by BB. These will be linked to services (electricity, clean and dirty water as appropriate). The working areas and site compounds will be designated as ‘dirty’ (where staff will be wearing/removing PPE) and ‘clean’ (where staff will have removed all PPE) zones. The changing and drying rooms will be the link between the clean welfare area and the dirty working area and accordingly will have separate entrances. The areas and requirements are as summarised in Table 6 and are illustrated on Figure 3.

6.1.22 A cleaner will be employed to maintain the cabins in good order.

Unit
Clean areas
Carparking for 20 vehicles
Refuelling area: containing a large bunded fuel tank and space for vehicles and plant to pull in to
Loading area: an area for the loading and unloading of plant and other heavy materials
Lay-down/temporary storage area: for the receipt and stockpiling of materials (such as terram, fill materials and trakmats, etc)
Security office
Site office: Site directors
Site Office: data processing. Desk space for 15 staff, including 8 work stations
Meeting Room for space for 15 stakeholders
Mess Room/rest area
Dirty/Clean
Male and female shower, wash, changing and drying rooms
Dirty Areas
Work Room (for recording coffin fittings, detailed photography, etc): cabin with sink, three benches and angled lighting
Osteology Laboratory; cabin with 5 work benches, 5 computers and 2 sinks
Skeleton washing cabin; with 4 sinks; high-pressure hose over fine mesh
Skeleton drying cabin: space for 300 skeletons at any one time
Storage: skeletons to wash for analysis; 10’ store
Storage: skeletons washed ready for analysis; 10’ store
Storage: skeletons washed and ready for reburial; 20’ store
Storage: skeletons that will not be analysed as part of the current programme; 20’ store
Wheel wash areas, for plant to be cleaned before leaving site or going into clean areas

Table 6: Summary of Archaeology Works Compound Components

6.1.23 **Task 1.13, Initially record historic walls:** prior to the removal of vegetation and any damage that may cause, both faces of all burial ground walls will be rapidly recorded through photography and basic notes. Note, the inner faces of

the former gaolyard walls have already been recorded in this manner, so any recording at this stage will be limited to their outer faces. BB will undertake structural surveys of any stretches of wall to be retained.

- 6.1.24 **Task 1.14, Clear vegetation, Stage 1:** scrub vegetation and any organic build-up at the exterior margins of the works area will be removed by a specialist contractor under the direction of BB. Where such work is likely to impact upon burial monuments and involve the removal of humic deposits, an archaeological watching brief will be undertaken.
- 6.1.25 **Task 1.15, Fully record walls and historic structures:** OA-HFA will record the burial ground walls to an appropriate level in accordance with HistE (English Heritage 2006) guidelines. Walls, such as those of the former gaolyard, that are likely to be of eighteenth- or nineteenth-century date (ie, contemporary with the use of the TBG; OA-HFA 2014) will be recorded to EH Level 2 standards. Later walls will be recorded to EH Level 1. In order to gain an understanding of the whole circuit, even those sections of the walls that will not be impacted upon by the development will be recorded to provide for a record of the fully circuit of the burial ground walls.
- 6.1.26 **Community Engagement:** For a period of one week during the recording of the walls, a small number of community volunteers will accompany the building recording team, who will teach the volunteers the basics of their work, including photographic, textural and drawn records, as well as observation techniques for the identification of repairs, phasing, different materials, etc.
- 6.1.27 **Task 1.16; Remove required sections of walls and stockpile:** once recorded, the former gaol yard walls will be dismantled as carefully as health and safety considerations allow. Bricks will be retained in a designated part of TBG, outside the excavation area, for later use during the restoration of TBG. An archaeological watching brief (*Section 7.4*) will be maintained during dismantling, but must maintain a safe distance from the leaning walls until they have been made safe.
- 6.1.28 **Task 1.17; Clear vegetation, Stage 2:** under an archaeological watching brief, all remaining vegetation will be removed and disposed of appropriately. Particular attention will be paid during the clearance of vegetation and soil to reduce and make safe the overgrown mound that lies to the south of the excavation area. This will include investigating and recording the nature of the mound and leave it in a condition appropriate for the continued use of Trinity Burial Ground.
- 6.1.29 **Task 1.18; Record Grave monuments revealed by vegetation clearance survey:** a full survey and record of any grave monuments revealed by vegetation clearance will be made to current standards (*cf* Mytum 2002). Any *in-situ* memorials, whether complete or fragmentary, will be surveyed and allocated a unique number. Where possible they will be correlated with stones identified and recorded by the EYFHS survey (1982). Displaced stones, found during site preparatory works or during intrusive works, will be treated similarly, provided that they display decoration or inscriptions. The accurate surveying and numbering of monuments will be critical, particularly where they are deemed to remain *in situ* and would be used as a potential means of identifying individuals or family groups in the associated grave plot. The

stones will be recorded on *pro-forma* sheets based on and following, the guidelines set out by Mytum (2002) and will include details of:

- Shape;
- Dimensions;
- Type of stone used;
- Iconography (an illustration may best describe these features);
- Inscription (*verbatim* record of inscription; font of the lettering);
- Stylistic type.

6.1.30 Data relating to newly identified monuments will be added to the survey and database produced for the Advance Archaeological Works.

6.1.31 **Task 1.19; Remove grave monuments and stockpile:** all grave markers and monuments are technically the property of those who paid for their erection (and their descendants). As part of the Faculty application and Public Notice process, the intention to remove and relocate burial monuments will be advertised in advance of the works (DCA 2005, 12; Fairbairn 2012; ICCM 2012). OA-HFA will undertake a check on all such monuments to ensure that any revealed during the current scope of works are recorded and surveyed. Once recorded, all monuments within the affected part of TBG will be removed in a responsible manner (DCA 2005; ICCM 2012) by BB, working under the guidance of a monumental mason accredited by the British Register of Accredited Monumental Masons (BRAMM), under the auspices of the Faculty, and with the permission of the Burial Authority (ie, HCC). In the interests of facilitating the removal of the monuments, each monument destined for movement will be considered in cognisance of Sections 3.2 and 3.4 of *Management of Memorials* (ICCM 2012, 13-18). Memorials that lie outside the affected area of TBG will be left *in situ*, unless they are considered to be unstable and a direct safety risk to the Faculty 3 works.

6.1.32 The works will entail the dismantling of the above-ground components of tombs and the partial excavation around those parts of the gravestone/monuments that are below ground. Such works will be monitored by OA-HFA to make a full record of the structures and ensure that any funerary remains or archaeological materials are collected (*Section 6.4*). Individual elements of the monuments will be clearly labelled before they are lifted by BB using a mobile gantry and turntable truck, or a suitable machine under the supervision of a competent person trained in slinging operations. The monuments will be removed to a secure storage location within TBG.

6.1.33 The location and nature of subterranean features or voids will be recorded by OA-HFA. The information on these potential hazards will be provided to BB to ensure voids are covered/filled with granular material and/or fenced/demarcated.

6.1.34 Although it is expected that all of the headstones will be removed in a single phase, dismantling of the tomb structures will be more time consuming. The removal of such structures will operate in parallel with the early part of the Stage 2 excavation programme once the privacy tents have been erected, and will involve additional staff designated for that task.

6.1.35 **Task 1.20; Record and remove lamp posts:** a measured, written and digital photographic record will be made of the historic lamp posts within TBG, with

detailed photography and survey as appropriate. Particular attention will be paid to the two examples that are locally listed structures and care will be taken to ensure that all documentation is in place to permit their removal and that subsequent treatment is in accordance with listed building documentation. Where safe to do so, a watching brief (*Section 7.4*) will be undertaken during, or after, the removal of the lamp posts to ensure that all human remains are recovered.

- 6.1.36 **Task 1.21; Tree Surgery:** numerous mature trees lie wholly, or partially, within the excavation area, with others that lie close to the southern edge of the excavation zone where they would impede vehicular movement. Those trees within the excavation zone will be felled by specialist contractors and the roots removed under archaeological watching brief. Where necessary, tree branches that intrude into the excavation area will be removed or trimmed back to ensure a safe working environment. Such works will take place outside the bird nesting season (1st March to 31st July).
- 6.1.37 **Task 1.22 and 1.23; Install piling mats and insert sheet piles:** a sheet pile wall will be installed along the southern boundary of the Works area. Further, sheet piles will be installed to support the privacy tents (*Section 6.1.34*; Figs 3 and 4). Prior to the installation mats will be laid to provide protection to sub-surface elements of the burial ground and provide a suitable platform upon which the piling plant can operate. OA-HFA will maintain a watching brief (*Section 7.4*) during any excavations associated the installation of the piling mat and sheet pile wall (although the driving of the piles themselves will not be monitored due to severely limited visibility associated with that technique). Where trakmats are used as the piling mats for the privacy tent piles, these will be repositioned to form the spoil movement tracks at the completion of the piling (Fig 4).
- 6.1.38 **Task 1.24; Erect privacy tents:** a series of large (up to 30m-wide) opaque tents supported on a scaffold system will be installed on a north/south axis in accordance with the scheme shown on Fig 3, and erected in the order 5, 4, 1, 2, 3, allowing the spoil processing area to be set up early. To maximise efficiency, the tents will be supported on driven sheet piles that will be placed, as far as possible, along lines that follow the rows of, and fall between, graves. This technique has several efficiency and health and safety benefits:
- Piles do not take up physical space, and form a safe margin against which to excavate. Conversely, the concrete block kentledge takes up at least one metre of ground for each side of the tent, increasing to at least 5m as the excavations are stepped away from.
 - Due to the stepping back required for kentledge, tents would need to be taken down and re-erected around the unexcavated baulks. That would be time consuming and could lead to delays if the archaeological team is stood down while the tents are being taken down and re-erected; such an eventuality would not arise with those on driven sheet piles.
- 6.1.39 The piling routes will be set out using survey data extracted from Fig 3. This arrangement has been made in cognisance of the orientation and spacing of the burials as far as can be ascertained from the trial trench evaluation and grave memorial survey (OA HFA 2016). The majority of sheet piles will be driven

so that a proportion of the pile remains above ground, either to support the tents, or, in the case of the southern boundary to create a barrier. Piles that will anchor the tenting will be extra-long so that they can be driven to a sufficient depth that will support the tenting without kicking as the ground is reduced. Piles that lie across the spoil access tracks southern boundary (*Section 6.1.33*) will be shorter, and driven to their full length so that they don't impede access.

- 6.1.40 *Lighting*: the working area will be illuminated with artificial lighting. This is particularly salient when day light hours are limited, and a temporary superstructure has been erected. It will also provide flexibility should shift working be required (it is currently not planned to undertake the Works to a shift pattern). The scheme for the arrangement and powering of lighting will be designed by BB in advance of the works and take full cognisance of the site's logistical and environmental issues.
- 6.1.41 **Task 1.23; Establish soil processing area**: located as on Fig 3, this will occupy the former gaol area, which will have been mitigated by the Task 1.5 strip, map and record (*Section 6.1.17*). The investigated area will be reinstated, consolidated, levelled and surfaced as appropriate.
- 6.1.42 An estimated minimum volume of 6,313 m³ of material will be dug out during the site works (3,507m² dug to a depth of 1.8m below ground level), which will take up considerably more space in the form of loose arisings. All spoil will be removed to the processing area, after which it will be returned to the excavation area.
- 6.1.43 **Task 1.24; Lay internal track network**: a network of track mats will be laid in accordance with Fig 4. They will be used by dumpers for the transport of spoil to the spoil processing area, and for the return of that spoil for backfilling.
- 6.1.44 **Task 1.25; Emergency drainage and dewatering plan**: although the issues with groundwater are likely to be far less serious than originally anticipated, provision will still be required, given that the works will take place through the winter months. A groundwater management plan will be devised for TBG in consultation with BB.
- 6.1.45 **Task 1.26: Laser scanning training**: BB and OA-HFA will organise sessions to determine the practical methodologies to be used during on site and during off site activities to enable OA-HFA to utilise the digital data.

7. PROJECT STAGE 2: ARCHAEOLOGICAL EXCAVATION

7.1 INTRODUCTION

7.1.1 The following sections outline a scheme of works that aims to ensure that the needs of the Stakeholders and the planning requirements are met and that the archaeological potential (*Section 2.2*) of the burial assemblage is realised efficiently and effectively.

7.2 TASK 2.1, ARCHAEOLOGICAL EXCAVATION

7.2.1 **Fieldwork Methodology:** the full area of excavation within the burial ground will be accessible throughout the period of fieldwork and will be completely tented by an early stage of the fieldwork. Within that area, in order to ensure that the works are undertaken safely and respectfully and minimise damage to those human remains that will represent the archaeological sample, operations will take place within a series of distinct working areas (Fig 4).

7.2.2 **Basic tenets and sampling strategy:** the fieldwork methodology is influenced by consideration of the research framework for the project and of various practical constraints (*Section 2.2*):

- all human remains will be recovered from the excavation area, and a stratigraphic record will be made of all but disarticulated remains to facilitate an understanding of the density and spatial distribution of burials;
- all mechanically excavated arisings of anthropogenic deposits will be transferred to the spoil-processing area;
- disarticulated remains will be collected and reburied immediately on-site;
- charnel deposits will be reburied on-site after basic recording and lifting;
- within designated sampling areas, detailed excavation and in-ground assessment will be undertaken on a sufficient number of burials that will allow an appropriate number of skeletons and their associated coffin remains and any personal artefacts to be recovered for processing and detailed osteological analysis;
- where it is apparent during the fieldwork that there are instances where skeletons within the analysis sample are stacked within the same grave, the value of stacked remains and potential family groups is such that all such skeletons will be retained and added to the analysis sample, even where some individuals might not meet sampling criteria in terms of completeness, or potential for aging and sexing;
- for logistical reasons, skeletons that lie beneath temporary trackways will not be used to fulfil the analysis sample unless they are the only means of meeting the requisite sample size. Under such circumstances, skeletons beneath the north/south-aligned elements of the trackways will be prioritised over those from the east/west-aligned elements;
- remains that are unsuitable for archaeological recovery (fleshed or within metal coffins) will be removed by the EC and reburied on site immediately.

7.2.3 There is currently no published guidance on how an assemblage the size of that expected from the TBG should be investigated archaeologically. Published guidance (Historic England 2015b) provides a justification for sampling large post-medieval cemeteries. The sample size will be sufficiently large to:

- be statistically valid, allowing for the division of date and demographic sub-groups;
- permit the exploration of changes over time;
- permit exploration of spatial variation, including areas of higher and lower density and with and without extant gravestones;
- examine family groups;
- examine aspects of status and identity.

7.2.3 A sample of 1500 skeletons (equivalent to 9-11% of articulated burials from the excavation area where it contains the remains of 18,938 interments; or 13-17% of articulated remains that are over 25% complete and thus considered suitable for analysis; Arup 2015; OA-HFA 2016b) will be archaeologically recovered for on-site analysis. Skeletons that were over 25% complete (using a system where the most analytically significant bones are scored more highly than others, rather than gross presence/absence; OA-HFA 2016a, Section 5.6.1, Fig 14) had far more potential to have their ages and sexes estimated closely than was the case with less complete individuals. The results of the evaluation trenching and osteological assessment indicated that 70.9% of those burials that lay fully within the trenches were over 25% complete and would thus be suitable for analysis.

7.2.4 All skeletons and associated funerary remains in excess of the 1500 skeletons collected for analysis will be recorded stratigraphically, but will not be osteologically assessed and will be reburied as soon as they are lifted. It is envisaged that the reburial will be primarily on site, although as a precautionary measure, discussion will take place with the PCC to explore the possibility of using the Holy Trinity Church crypt for reburial.

7.2.5 The sample recovery strategy will be monitored by OA-HFA in consultation with the AAHE, TABB, HistE and HAP and in accordance with DAC wishes. It will:

- permit the examination of spatial variation across the affected portions of the TBG;
- allow for chronological variation, both vertically (ie, it will permit the full sequence of skeletonised burials within each grave within the sampling areas to be investigated and lifted) and horizontally (ie, to examine the development of the cemetery across each of its major axes);
- be modified in terms of sample area positioning to allow for constraints, or to permit the investigation of specific parts of the burial ground in the light of their potential;
- ensure that the programme is effective, both in terms of the appropriateness of the human remains being encountered and the gross

number of burials being removed, but also that the recovered burials represent, as far as possible, a microcosm of the buried population as established from TBG burial registers and as observed on the ground;

- be flexible to permit the recovery of sufficient remains where burial densities are lower than might be expected, or remains are unviable for archaeological sampling. Equally, sampling areas will be contracted in the event of very high densities of burials;
- have sufficient sampling areas so that those abandoned due to localised adverse conditions, or where bone preservation is so poor as to prevent project research aims to be addressed, will not impact on the size of the sample recovered. Given the need to examine spatial and chronological variation, however, minor variations in bone preservation will not affect the sampling and recovery strategy;
- have several sampling areas worked on at the same time;
- include osteological assessment concurrent with excavation to ensure that the remains recovered for analysis are at **least 25% complete and have potential for analysis by retaining characteristics that allow them to be assigned to age and (where appropriate), sex categories**;
- once 1500 skeletons have been identified for analysis, no further assessment will take place although stratigraphic information will be recorded.

7.2.6 The provisional sampling plan is shown on Fig 4 and explained in Tables 7 and 8. Areas for recovery for full osteological analysis are shown red. Areas for rapid recovery are shown in blue. Skeletons in areas shown in purple will be recovered rapidly unless the neighbouring red area fails to produce enough skeletons for analysis (ie, the purple areas represent a sampling contingency). The number of burials to be recovered from each area are summarised in *Appendix 4*.

Area	Shading	Recovery technique
Analysis	Red	Detailed
Recovery	Blue	Rapid
Overspill	Purple	Detailed where required to make up numbers for analysis, otherwise rapid
Trackways (north/south elements)	Dark green	Rapid
Trackways (east/west elements)	Dark green	Rapid recovery for immediate reburial without assessment
Exceptional burials (ie, burials that lie outside of the analysis areas but can be considered analytically important due to being identifiable as named individuals, have an unusual mode of burial, burial panoply or significant pathological condition)		Detailed

Table 7: summary of recovery techniques (see Fig 4)

Recording technique	Recovery Category				Section Reference
	Detailed	Rapid	Charnel	EC	
Excavation rate, skeletons/digger/day	2	3	5	As appropriate	
Bag colour	Red for analysis White for immediate reburial	White for immediate reburial	White for immediate reburial	White for immediate reburial	
Survey	Y	Y	Y	Y	7.2.8
Rectified Photography	Y	N	N	N	7.2.11
Record Photography	To augment rectified as appropriate	One shot/burial; minimal	One shot/burial; minimal		7.2.11
Laser Scanning	Y	Y	N	Y	7.2.11
Basic skeletal/strat record	Y	Y	Y	Y	7.2.12a-b
Osteological Assessment	Y, only as required to confirm suitability for analysis	N	N	N	7.2.12c
Washed	On-site only if part of analysis sample	N	N	N	7.5
Abdominal samples for parasites	N	N	N	N	
Osteological Analysis	Y	N	N	N	8.2.4
Biochemical Analysis	Selection	N	N	N	8.2.2
Basic Coffin Record	Y	Y	N	Y	7.2.12e
3D location of coffin fittings	Y	N	N	N	7.2.12e
Coffin Fittings and personal effects	Examined then reunited with burial	Kept together. Not examined	Kept together. Not examined	N	7.2.12e
Digital Collation and quantification of all records	Y	Y	Y	Y	8.1.2
Reburial	Following analysis, on site	Immediate on site	Immediate on site	Immediate on site	7.8

Table 8: summary of recording techniques for differing recovery levels

7.2.7 **Works Area Sequence:** archaeological investigation will commence as soon as at least one tent is in place. The initial works will focus on Tent 4, to the immediate south of the spoil-processing area, but as soon as possible staff will

be deployed to Tents 1 and 5. Excavation will continue into Tents 2 and 3 (Fig 3).

7.2.8 **Setting out and Survey:** the sampling areas defined on Figure 4 will be set out on the ground as soon as is practical. Accurate survey of all archaeological remains is critical to the success of the Works. A series of survey base stations will be established on suitable ground that will not be reduced or affected by plant or vehicle movement. A site location plan indicating the site north and aligned to OS NGR will be prepared (reproduced with permission of the Controller of HMSO). This will be supplemented by plans of the working area at appropriate scales. The location and dimensions of the investigation and sampling areas and the location, orientation and OD height of each burial, will be recorded by EDM or dGPS and a plan generated using a CAD or GIS package. Survey data generated during the fieldwork will be processed and amalgamated into a single file and plotted out in CAD/GIS format on a regular basis.

7.2.9 **Ground reduction:** topsoil will be left in place for as long as possible, in order to provide a measure of protection to the burials and maximise flexibility in terms of machining. Ground reduction will take place as follows:

- All ground reduction will be undertaken by a 360⁰ machine with a toothless ditching bucket, operating under the supervision of an experienced archaeologist;
- ground reduction will take place from south to north in Tents 4 and 5 (ie, towards the spoil-processing area); from west to east in Tent 3 (with the eastern half of Tent 3 spoiled directly into the spoil-processing area). Soil in Tents 1 and 2 will be stripped from the sheet piled edge back towards the north/south-aligned track. In each of Tents 1-3 excavations on either side of the trackways will be stepped for safety reasons (Fig 4);
- the overburden, which can be defined as the topsoil and the material between the base of the topsoil and the uppermost burials, will be removed from the full length of one edge of the excavation across a width that does not exceed the reach of the machine;
- all spoil will be kept separate (topsoil, subsoil, burial horizon, natural material) and will be removed by dumper to the spoil-processing area for removal of disarticulated bone, which will be collected for reinterment;
- excavation will proceed down to the top of the burial horizon, literally the soil that contains the funerary remains and will seek to expose as many burials as possible in plan, while also limiting any major variations in depth between adjacent graves; the outline and location of the excavation area and of all visible grave cuts and burials, irrespective of recovery technique, will be mapped using instrument survey;
- the burial horizon within each of the four cells defined by the trackways in each tent (Fig 4) will be reduced incrementally by machine and by hand, with the machine being used throughout to assist with bulk excavation between burials and to assist with spoil management. Excavations will be stepped as appropriate for safety reasons;

- *Testing the base of the burial horizon:* once it is believed that all identified funerary remains have been removed from the area of the tent, OA-HFA will undertake a process of verification. This will comprise archaeologically supervised mechanical excavation to a point where undisturbed natural deposits were observed, or to the top of any underlying pre-cemetery archaeological horizons, but certainly no deeper than permitted by BB with due consideration to SHE matters;
- *Removal of trackways and treatment of underlying burials:* following testing of the base of the burial horizon, the north/south-aligned elements of the trackways will then be mechanically reduced, with skeletons excavated using the rapid recovery technique;
- The east/west elements of the internal trackway will then be removed, commencing with Tent 1 and moving eastward in succession as each area is cleared and backfilled.

7.2.10 **Numbering and recording:** a logical numbering system will be used for all archaeological and funerary remains and which allows unique elements to be identified, as well as elements of the same feature (ie, those of individual burials and of grave plots) to be grouped. A fully integrated, indexed archive will be generated during the fieldwork, with data accurately recorded on *pro-forma* that are either specific to, or sufficiently versatile to allow the treatment of the range of archaeological remains on site. Full use will be made of instrument survey and of digital photography (minimum 10 mega pixels, with sufficient depth of field to frame both individual and groups of burials). Digital images will be regularly backed up, and saved in both TIFF and RAW formats for long-term storage. The individual files will be named so that they correlate with photographic indices. Both file formats will be backed-up on archive-quality CDs for eventual submission with the archive. Plans and sections will be drawn as and where appropriate to standard scales (ie, generally 1:20, 1:50 and 100 for plans; 1:10 and 1:20 for sections).

7.2.11 In conjunction with the archaeological works laser scanning of the entire operation will be put in place by BB, who will provide OA-HFA with training in its use and operation. The purpose of the laser scanning will be to provide a digital record of the Works and to supplement the digital record compiled by OA-HFA. The data derived from the laser scanning will enable 3D recording and reconstruction of the burials identified during the archaeological works and its use shall be maximised during the fieldwork and post-fieldwork activities to aid the interpretation and presentation of the data collected.

7.2.12 **Archaeological excavation of burials:** hand-excavation of the remains will commence in accordance with the recovery strategy for the pertinent sampling area (Fig 4), with the teams moving from one end of the sampling area to the other. The supervised machine (on the ground surface) will follow behind, reducing each grave down to the next burial, with the archaeologists eventually returning to the beginning to remove the next burial in the sequence. Table 8 summarises the different techniques that will be employed for the excavation, recording and subsequent treatment of burials within each sampling category. Funerary remains exposed by the machine will be rapidly excavated by hand by archaeologists in accordance with CIfA guidelines (Roberts and McKinley 1993; Brickley and McKinley 2004). In particular, the

archaeologists will seek to reveal forms of identification, such as coffin plates (and speedily record them where deterioration may be rapid following exposure to the air). The following approaches will be utilised, modified as appropriate in accordance with recovery strategy:

- a. Burials will be very rapidly cleaned by hand in a manner that is sufficient to determine burial position, orientation, relationship to other features and to identify associated coffin remains. Their positions and orientations will be recorded in three dimensions by instrument survey. Very detailed instrument survey is not required except in those (currently unexpected) cases where such data can be used to separate individuals from mass graves. Atypical burial positions will be recorded by rectified photography, as appropriate, but such techniques will otherwise only be applied to skeletons selected for analysis.
- b. All recording will utilise specially designed *pro-forma* indices and recording sheets for skeletons and for coffins that can be completed on tablets and linked to a central computer for checking. Each burial will be recorded in terms of position, orientation, grave goods, burial dress and fastenings. An indexed photographic record using high-quality digital imagery will be maintained of all burials.
- c. All articulated skeletons within areas that have been selected to provide skeletons for analysis will undergo some form of in-ground assessment with recognition of national standards (Mays *et al* 2002; Brickley and McKinley 2004). Outside of those areas, assessment will only be undertaken where additional remains are required to meet the analysis sample. The assessment process will be rapid, and all recording will utilise the digital interface to the database. It will seek to identify those individuals that are more than 25% complete and retain diagnostic characteristics for ageing and sexing and are thus clearly appropriate for analysis. Skeletons will be scored for completeness, condition, potential for aging, sexing and the presence of the skull and complete long bones that could be used for measurements and for the examination of non-metric traits. Skeletons will not be otherwise be systematically scored for their potential for metrical and non-metrical analysis, nor will pathology be recorded, although obvious evidence of the latter may be noted down.
- d. A record will be made of the positions and nature of personal items, other artefacts and preserved fittings from clothing (ie, buttons, *etc*) that would elucidate the mode of dress worn by the individuals selected for analysis at burial. In keeping with ethical good practice these will be kept with the individual for reburial at the completion of osteological analysis.
- e. Coffins and any associated fittings, including fixing nails, will be recorded on specific digital *pro-forma* which will include details of dimensions, materials, construction technique, decoration and fittings. All surviving coffin fittings associated with burials selected for analysis will be recorded by reference to Reeve and Adams (1993) and the unpublished master catalogue being compiled by Oxford Archaeology. Where individual types cannot be paralleled, they will be drawn and/ or photographed and assigned a style number. Attempts will be made to read less fragmentary *departum* plates (such as wet spray, and the use of a mirror and oblique light when

- looking at the reverse of the plate) in order to identify individuals who could be used as historical case studies. Biographical details obtained from legible *departum* plate inscriptions will be recorded.
- f. All coffin fittings associated with burials that fall outside of the analysis sample will be bagged and will be retained with that individual. These fittings will only be recorded where they are of intrinsic interest due to being unusual, closely datable, or extremely well preserved, such as the grips, which retain their form and decorative motifs. Given that so little timber was identified during the evaluation, it is not proposed that timber samples (for species identification) will be taken, although any reasonably preserved fabric samples will be taken where appropriate. Coffins will be reburied within the reinterment area along the southern edge of the excavation area (Fig 4).
 - g. Provided the remains are skeletal and any associated coffins have survived as remains only, these will be placed within opaque, burial sacks (colour-coded according to recovery technique; Table 8), or boxes, as appropriate, with attached identification/location tags. They will be removed to the appropriate storage unit (for analysis or for reburial).
 - h. *Textiles*: only very small amounts of textile were encountered during the trial-trench evaluation (OA-HFA 2016), and extensive remains are not expected. Should any burial garments, coffin linings or other fabrics directly associated with skeletonised burials be found within the sample selected for analysis, they will be recorded *in situ*. Fabric samples for detailed examination of material and manufacture will be taken and the remainder of the garment will be reburied in the reinterment trench.
 - i. *Bisected burials*: generally, plots that have been bisected by piling will not be used for the Samples A or B unless that is the only means of meeting sample numbers. The piled southern site limits will be strictly adhered to.
 - j. *Sealed coffins*: should any completely sealed coffins be encountered, these will not be opened, but will be assigned context numbers, recorded on *pro-forma* coffin sheets (including survey) and assigned to the EC to recover under an archaeological watching brief. The EC will not open unbreached metal coffins.
 - k. *Incomplete skeletonisation*: human remains that are mostly skeletonised (i.e., they have a bit of skin, some hair, a few toenails, a little adipocere, but no flesh) will only form part of Samples A or B where it would be impossible to meet the sampling programme without examining them.
 - l. *Skeletons with any flesh* will be excluded from Samples A and B. They will be passed over to the EC for removal and reburial (compliant with any requirements of the Burial Authority and Environmental Health).
 - m. Burials that have been disturbed prior to the investigation, either with elements *in situ*, or with the bones found as charnel deposits, will be recorded on site, as above. Bones will only be recovered for processing and analysis where they can be confidently identified as representing one or more distinct and separable individuals and there are sufficient elements

present to contribute to analysis; burials that do not meet these criteria will be passed to the EC for reburial.

- 7.2.13 **Burials to be recovered by the EC:** burials that are unsuitable for archaeological recovery will be recovered by the EC. OA-HFA will make a count of those burials that the EC recovers from otherwise archaeologically investigated plots, together with whatever basic spatial information can be safely recovered. Recovery by the EC will be by hand where safe to do so, otherwise mechanical techniques will be used where deemed appropriate. The EC's groundworks, particularly in areas/at depths where they could impact upon archaeological remains below the burial horizon, will be monitored by a watching brief (*Section 7.4*).
- 7.2.14 **Excluded burials:** some descendants may request that the remains of their ancestors should not be included within any programme of archaeological analysis. The BBLO will maintain a list of any such individuals and of the descendants concerned. The BBLO will have a database version of the Holy Trinity Parish Burial Register against which to check any enquiries. A copy of the list will be provided to OA-HFA. Where it is possible to identify excluded individuals positively during fieldwork (for example from *in-situ* grave markers or from coffin plates), those remains will be removed by OA-HFA and placed in yellow bags and transferred to a dedicated store. The BBLO will be informed of their discovery, and will make appropriate arrangements with the family and the appointed undertaker so that the remains can be placed in a coffin and removed from site to the undertakers.
- 7.2.15 **Disarticulated bones:** individual disarticulated bones found within the cemetery deposits and which cannot be immediately attributed to a more complete individual burial will be reburied. Such remains will not be recorded unless they are of high scientific interest. The latter will include examples that bear clear signs of unusual pathologies that may not be represented within the articulated remains. Such data will be used observationally, but not statistically.
- 7.2.16 **Memorials:** any memorials identified during the works, whether complete or fragmentary (and which display decoration or inscriptions) will be surveyed as appropriate and allocated a context number. Once recorded (See *Section 6.1.25*), the stones will be stockpiled. Where the position of buried memorials will impede progress (*ie*, there is a layer of damaged memorials), these will be surveyed, labelled and moved to one side by the machine so that they can be recorded without impeding the progress of the excavation. Only manageable fragments will be removed by hand: all others will be removed by on-site plant fitted with appropriate equipment and undertaken and supervised by suitably qualified BB staff.
- 7.2.17 **Burial structures:** any brick shaft or vaulted structures identified on site will be recorded by OA-HFA and be dismantled by a qualified BB operative under archaeological watching brief. Recording will comprise the three-dimensional record of the feature's location using instrument survey and an appropriate photographic and written record, including measured and annotated drawings where appropriate (*ie*, the nature and structural complexity/composition of the structure cannot be captured through other means. Brick-by-brick drawings are not expected). It may be necessary to dismantle these structures incrementally

in order to maintain a safe working environment. Where safe to do so, a measured cross section of the structure's vault may be produced. Burials within these structures will be treated in accordance with *Section 7.2.11*, dependent upon within which sampling category they fall.

- 7.2.18 **Associated personal items/artefacts:** personal items within plots but which cannot be directly associated with an individual will be surveyed where appropriate. Those, together with all items that are associated with individuals in the archaeological assemblage, will be packaged and removed for processing and an appropriate level of recording and analysis by a suitable specialist. All artefacts that can be associated with an individual burial will be placed with that individual prior to reburial. Where such items are directly associated with individual burials that fall outside the on-site analysis sample, they will be appropriately packaged and will be retained with the burial, in accordance with the directions of the Faculty. Artefacts that are not associated with funerary activity will be collected in accordance with standard ethical practice.
- 7.2.19 **On-site storage:** OA-HFA will be responsible for the individual bagging or boxing all skeletons except for any remains recovered by the EC. Funerary remains will be kept temporarily in secure lockable stores that are specific to the recovery and processing stage of the skeleton (Table 6). The stores will be well organised and tidy, with remains kept safely and respectfully.

7.3 TASK 2.2, NON-FUNERARY ARCHAEOLOGICAL REMAINS

- 7.3.5 Where non-funerary archaeological remains associated with the use of TBG are identified on site, they will be investigated and recorded in a manner that is appropriate to their significance and condition. Typically, this will involve the use of instrument survey to accurately record their three-dimensional location and the generation of a comprehensive, indexed, archive of written records, digital photographs, scale plans and sections, as well as the formulation, in consultation with HAP and the HistE Regional Science Advisor, of an appropriate finds recovery and palaeoenvironmental sampling strategy. Particular consideration will be given to the recovery of waterlogged remains should any deep negative features be identified that extend below the watertable. Where features are present, they should be excavated to an extent that allows them to be understood.
- 7.3.6 **Pre-cemetery remains:** any pre-cemetery archaeological remains identified during the clearance of TBG will be subject to archaeological investigation, as appropriate. This will be in agreement with the AAHE, TABB and HAP.

7.4 TASK 2.3, WATCHING BRIEF

- 7.4.5 Archaeological watching briefs will be undertaken at various points in the works. Whether undertaken during the movement of memorials, ground reduction, carriageway works, during stats diversions (where those in the pavement immediately to the north of the burial ground have the potential to inform an understanding of whether the northern boundary of TBG was different to its modern limit), or during exhumation, the methodology will

essentially be the same. An appropriate number of archaeologists will be deployed to directly monitor the works of BB contractors and, if necessary, will stop the activity at a point where archaeological remains are identified. As far as possible, OA-HFA will work with BB to minimise delays and additional staff will be deployed either to record, investigate and lift the remains revealed, or to continue monitoring the groundworks where they can be moved to a different location. Dependent on the nature of the remains identified, the appropriate methodologies can be found in *Section 7.2*.

7.5 TASK 2.4, ON-SITE ARCHIVE PROCESSING

7.5.1 During and at the completion of the fieldwork, as appropriate, the different components of the site archive will be checked, processed and collated within a format that can be integrated and interrogated. This will include the generation of a site database and a suitable GIS or CAD programme. Digital files will be backed up regularly. The skeletonised human remains that are to be analysed on site will be taken to the skeleton processing cabin where they will be gently cleaned over a fine mesh sieve to ensure that no material is lost and will be bagged, boxed and catalogued. Finds and those retained coffin fittings and fabric samples, will be cleaned, dried, packaged to minimise any degradation, marked where necessary and catalogued.

7.6 TASK 2.5 ON-SITE ANALYSIS

7.6.5 All skeletons that fall within the analysis sample will be physically examined for analysis in the on-site osteology laboratory. Methods for on-site analysis are presented in *Section 8.2*.

7.7 TASK 2.6, SPOIL PROCESSING

7.7.5 All mechanically excavated arisings from the topsoil and subsoil will be transported from the excavation areas in dumpers using the defined trakmat access routes, and will be placed in stockpiles within the spoil-processing area. The spoil-processing area will be managed by the exhumation supervisor, and falls outside the remit of OA-HFA. A small 360⁰ mechanical excavator will place the spoil into the spoil-processing facilities, where the exhumation operatives will utilise a combination of mechanical facilities and manual techniques to search for and recover all visible fragments of disarticulated bone which they will place in sacks for reburial. Once searched, the processed spoil will be loaded into a dumper by the small mechanical excavator and removed from the processing area.

7.7.6 All disarticulated bone recovered during hand excavation will be placed in burial sacks and taken to the processing area. A record will be made of the weight of each burial sack which will then be buried on site by the EC.

7.7.7 Spoil from this process will be returned to cleared areas of the site. Until they are ready for investigation, the areas of Tents 2 (processed arisings) and 3 (unprocessed arisings) will be used for temporary spoil storage in the event that the pace of mechanical excavation of topsoil and subsoil is

disproportionately rapid compared to that of hand excavation and the complete clearance of excavation areas.

7.8 TASK 2.7, ON-SITE REBURIAL

- 7.8.1 **Reburial:** all funerary remains will be reburied in an appropriate manner in accordance with the Faculty/MoJ directions/licence and in conjunction with the PCC, vicar and any other appropriate Burial Authorities. All human remains will be reburied during the fieldwork programme. Wherever possible, reburial will take place within TBG itself, although arrangements will be discussed with the PCC for use of the Holy Trinity Church crypt as a precautionary measure.
- 7.8.2 **Reburial cells:** A 2m-wide strip to the immediate north of the sheet pilings at the southern edge of the excavation area will be used for reburial. Within each tent, this will be the first area to be archaeologically excavated. It is not intended that the full strip, from one end of TBG to the other, will be open at once. Rather, short lengths will be opened and used for reburial at any one time. Starting from the eastern end of the site, short (full archaeologically excavated) stretches of this area will be made deeper, if appropriate, by mechanical excavation operating under BB control. BB will then install several trench boxes to create cells for reburial. These will be temporarily covered by metal road plates to prevent people falling in and to maintain access. Individual cells will be used exclusively for reburial of either disarticulated bone, coffin fragments, or for exhumed remains recovered by the EC.
- 7.8.3 The positions of the cells will be surveyed, and a plan will be produced, and updated, that shows their contents. Individual cells will be backfilled by BB with clean (processed) arisings from the site, or, if more appropriate, an engineered fill.
- 7.8.4 **Reburial of disarticulated bone:** the weighed bags of disarticulated bone will be placed within a reburial cell by the EC, or by a BB team member with confined space training with OA-HFA support as necessary. The bags will be placed in a dense layer to avoid gaps and maximise the utilisation of the available space. Sand or other cleaning arisings will be used to fill voids between bags to limit settlement. Bags will be replaced to a level 0.5m below the modern ground surface. They will be sealed with a layer of clean sand, and the cell backfilled.
- 7.8.5 **Reburial of EC exhumed remains:** sealed or lead coffins removed by the EC will be transported to a reburial cell within a dumper or on a turntable truck. They will then be lifted by machine and placed into the reburial cell under the direction of the EC supervisor and a BB slinger. At the end of each day, a 0.3m-thick layer of processed soil will be placed on top of these reinterments. Reinterments will be stacked to a level 1m below the modern ground surface. They will be sealed with a layer of clean sand. Arrangements will be made to establish provision for off-site reburial of lead coffins, should that be required.
- 7.8.6 **Reburial of coffin remains and undiagnostic monument fragments:** although it is not expected that large amounts of either material will be encountered, any such remains will be reburied within the reinterment area. These will be

placed in the cell by the EC or by BB, compacted by machine to limit gaps, with filling taking place to a level 0.5m below the modern ground surface. They will be sealed with a layer of clean sand, then the cell will be backfilled.

7.8.7 **Reburial of individuals that have been analysed on site:** individuals that have been analysed will be retained on site for as long as possible throughout the fieldwork, permitting the skeletons to be revisited for further examination, as necessary. One month prior to the programmed completion of archaeological site works the process of bagging and reburial of such remains will commence, so that, at the completion of site works, all will have been reburied on site in a manner similar to the bags of disarticulated bone (*Section 7.8.4*). Due consideration will be given to individually reintering those burials positively identified from their funerary remains.

7.8.8 **Reburial of Remains unsuitable for analysis:** individuals assessed as not meeting criteria for analysis, or exceeding sample quantities, will be reburied as soon as they are lifted, in a manner similar to the bags of disarticulated bone (*Section 7.8.4*).

8. PROJECT STAGES 3-5: POST-EXCAVATION WORKS

8.1 PROJECT STAGE 3: COLLATION AND REVIEW

8.1.1 **Task 3.1, Compile Interim Report and prepare Updated Project Design (UPD):** throughout the programme of works, the findings will be closely monitored and there will be regular liaison with stakeholders. A good understanding of the assemblage will be gained during the fieldwork, archive processing and on-site specialist assessment of each category of data. Basic data gathered during the fieldwork and on-site assessment and recording will be entered on a database throughout the programme of site works. This will be regularly collated and quantified during the works as a means of monitoring progress and sampling strategies.

8.1.2 At the completion of the fieldwork, the data will be fully processed, collated and quantified. As far as possible within the time constraints and the limitations of a predominantly digital medium, the data will be integrated and reviewed. A validation exercise will then take place on the data, with the results forming the basis of a justified, quality-assured, illustrated UPD for off-site analysis. The combined interim report and UPD will include:

- a very brief background to the project;
- a synopsis of the work completed, including a rapid overview of those parts of the site where archaeological works have been undertaken, their nature, extent and any reasons for abandoning areas or for the movement/transfer of sampling. This will enable the sample size to be confirmed;
- an overview of the findings, with observations of the character of the archaeological findings, including their density and distribution, together with any other factors that may influence the setting of the project's research questions;
- a quantitative and qualitative review of the archive according to data type, culminating in a statement of potential that is couched within a relevant research framework;
- with reference to the statement of potential, a review of the project objectives and the formulation of appropriate research questions and objectives for analysis;
- a method statement presenting the methodologies for those forms of analysis that will be used to meet the project's research questions;
- bibliography;
- plans and photographic plates;
- costs, methodology and programme for preparation and deposition of the project documentary and digital archive (assuming that the physical archive has been largely, or completely, reburied);

8.2 PROJECT STAGE 4: ANALYSIS

8.2.1 It is not possible to be completely prescriptive about the nature of the Project Stage 4 works at this stage, as there are several factors, including the directions of the MoJ burial licence, the Faculty and also any specific Environmental Health requirements that may influence exactly what, and how analyses are undertaken. Essentially, it is proposed to undertake an appropriate programme of analysis on the sample of funerary remains assessed and examined on-site (prior to on-site reburial prior to the end of the archaeological excavation) and, if identified and appropriate to do so, of pre-cemetery archaeological remains, ensuring that the techniques utilised enable comparison with other assemblages and, as far as the data allows, statistical validity. The analysis will include:

- the use of gravestone data in the identification of individuals;
- the use of non-metric traits to explore familial relationships;
- the synthesis of all relevant forms of data from the site;
- comparison with data from other contemporary sites to assist in identifying those elements of the record that are specific to TBG;
- a population-based bio-cultural study of the assemblage, including examination of the anatomical distribution of lesions of pathology potentially relating to occupation and lifestyle (particularly among those aged below 40 years old, to mitigate the effects of age-related pathologies) which will be of use when helping to understand the characteristics that make the site unique against contemporary comparanda;
- a firm grounding within a socio-economic historical context at local, regional and national levels.

8.2.2 Accordingly, the following sections must be seen as provisional and a guide to the post-excavation procedures that could be undertaken. These procedures will be formalised within the UPD (*Section 8.1.1*).

8.2.3 **Stratigraphic data:** the processed stratigraphic and survey data will be integrated and will then be interrogated in order that the findings are understood as fully as possible at a range of levels, ranging from individual burial events through plots to zones across the impacted part of the burial ground. An appropriate and illustrated explanatory text will be formulated, utilising a concise scheme of phasing where applicable. Non-funerary and or/pre-cemetery data will be analysed in a way that is appropriate to its significance and completeness.

8.2.4 **On-site osteological recording:** on-site osteological recording and off-site analysis will be undertaken in accordance with IfA (Brickley and McKinley 2004), EH (Mays 2002; CoE and EH 2005) and BABAO (nd) standards. Essentially analysis will seek to gain an appropriate understanding of the demography and epidemiology of the population and the lifeways of individuals when couched within an appropriate research framework and historical and socio-economic context. The programme of analysis for the surviving bones and teeth from each skeleton selected for analysis will involve standard processes of macroscopic examination, measurement and recording

in order to identify and digitally catalogue data, allowing an identification of sex, age (Bedford *et al* 1993), and pathological lesions (Aufderheide and Rodriguez-Martin 1998; Hillson 1996; Ortner 2003). Details of stature, general bone physiology and proportions, and non-metric traits (Saunders 1989; Tyrell 2001) will also be recorded. Detailed photography of selected osteological material will be undertaken, as will, where appropriate, on-site x-radiography and/or microscopy. The resultant information will be recorded within a database that can be used to create detailed skeletal inventories and appendices.

8.2.5 The analysis of the osteological material will seek to address a number of specific aims:

- to record and analyse basic demographic and biological information, such as sex, age and stature;
- to record and statistically examine palaeopathological information in order to learn about the health status of the TBG community (in the broadest sense);
- to gain an understanding of the origins of members of the population, both through morphological characteristics and through the selection of specific individuals for isotope analysis;
- to identify any additional specialist analysis, such as radiography, of the remains;
- to place the remains within a regional and national context.

8.2.6 In order to achieve these aims, the following information will be collated during the osteological analysis:

- quantification of the remains;
- evaluation of the overall condition and completeness of the remains, with reference to the survival of indicators of age, sex and stature, metrical and non-metrical analyses, and palaeopathological examination;
- establishment of the demographic composition of the population;
- establishment of the overall range and extent of palaeopathological conditions.

8.2.7 Each skeleton will be examined and digital analysis forms will be completed within the on-site database detailing condition, completeness and noting biological and palaeopathological information.

8.2.8 *Condition and completeness:* the general condition of the skeletal material will be recorded with reference to the scoring system set out by McKinley (2004), which grades bones according to the degree of erosion to surfaces and alteration to bony contours. The completeness of each skeleton will be estimated by recording, as a percentage, how much of the skeleton has survived.

8.2.9 *Biological sex and age:* the basic demographic composition of the population will be established through examination of extant age and sex indicators by employing the techniques described by Brickley and McKinley (2004). The

detailed demographic profile, with narrower age categories, will be explored by considering the extent and range of sex and age indicators that have survived and the reliability of these indicators. Estimation of biological sex and age is more accurate if a range of indicators is employed instead of one or two (Bedford *et al* 1993) and this will be taken into account.

- 8.2.10 Preservation and completeness permitting, age estimations can be based on observations of dental development (Moorees *et al* 1963), epiphyseal fusion and long-bone length (Scheuer and Black 2000), the morphological changes of the pubic symphysis (Brooks and Suchey 1990), the auricular surface (Lovejoy *et al* 1985; Buckberry and Chamberlain 2002) and the morphology of the sternal rib ends (Iscan and Loth 1986a; 1986b). The overall degree of cranial suture closure (Meindl and Lovejoy 1985) can also be considered alongside the aforementioned methods. Biological sex can be estimated based on observations of the sexually dimorphic traits of the skull and pelvis (Phenice 1969; Bass 1987; Buikstra and Ubelaker 1994).
- 8.2.11 *Metrical data*: metrical data will be recorded for archive where feasible. This can include, where preservation allows, 29 cranial, five mandibular and 26 post-cranial measurements. Adult stature can be calculated using complete long bone lengths of sexed individuals, and applying them to the appropriate regression formula (Waldron 1998, 75; Trotter and Gleser 1952; 1958; Trotter 1970). Metrical data may also be employed to assist in the estimation of sex (Bass 1987) and also to explore variation in skeletal anatomy in relation to environmental and hereditary influences. For example, calculation of the platymeric (degree of flattening on the femur front to back), platycnemic (degree of flattening of the tibia front to back) and cephalic (cranial shape) indices may be undertaken by employing measurements of the relevant bones.
- 8.2.12 *Non-metrical data*: non-metric traits, minor anomalies of skeletal anatomy that may be genetically or environmentally induced (Mays 1998), are another means of studying human skeletal variation in relation to the environment and inheritance (Saunders 1989; Tyrell 2001). A list of up to 23 cranial (Berry and Berry 1967) and 29 post-cranial traits (Finnegan 1978) can be scored for each skeleton where preservation allows.
- 8.2.13 *Ancestry*: ancestry may be defined as ‘...the biogeographic population to which a particular individual belongs, by virtue of their genetic heritage’ (Barker *et al* 2008, 322). Methods for examining ancestry in skeletal remains involve the visual inspection of morphological characteristics, primarily in the skull, and the use of metrical data (cranio-facial) in discriminant analysis programs, such as CRANID (Wright 2008). Such examination will be undertaken and recorded for archive where preservation and completeness permits.
- 8.2.14 *Palaeopathology*: the analysis of palaeopathology is dependent on the completeness and preservation of skeletons. Similar bony changes may be observed in many different categories of disease and they can be very subtle; incomplete and poorly preserved skeletons therefore limit palaeopathological study. Pathology or bony abnormalities will be described using standard terminology, and differential diagnoses can be explored with reference to standard texts (Aufderheide and Rodríguez-Martín 1998; Ortner 2003; Resnick 1995). Systematic examination for the presence, severity and

statistical frequency (crude and true prevalence rates (CPR and TPR)) of common conditions will be undertaken in accordance with standard scoring schemes, including cribra orbitalia (Stuart-Macadam 1991, 101-13), endocranial lesions (Lewis 2004, 90), maxillary sinusitis (Boocock *et al* 1995), extra-spinal joint disease (Rogers and Waldron 1995, 43-4) and spinal joint disease, including Schmorl's nodes, spondylosis deformans, osteoarthritis and marginal osteophytes of the bodies. Dental pathologies, including calculus (Brothwell 1981, 115), dental caries, periapical cavities, and ante-mortem tooth loss, dental enamel hypoplasia (DEH) and periodontitis (Ogden 2008, 193), will also be recorded.

8.2.15 **Biochemistry:** at the completion of osteological recording, individuals will be selected for sampling for biochemical analyses. The number of samples chosen, together with the selection criteria, will be informed by the on-site analysis results, but will take cognisance of bone preservation, physical characteristics and of any documentary evidence, as well as the location from which the burial was recovered. The findings will be discussed with the Historic England Regional Science Advisor, with such consultation enabling the formulation of any appropriate strategy for undertaking biochemical analysis.

8.2.16 Samples from selected individuals will be taken for one or more of the following analyses:

- DNA, in order to explore family groups, and the movement of populations by examining a cross section of individuals whose anatomical characteristics indicate a range of local and non-indigenous ancestry;
- Strontium and Oxygen (Sr and O) stable isotopes to explore themes of origins for those individuals;
- Carbon and Nitrogen (C and N) stable isotope analysis to explore diet, including those individuals with evidence for dietary deficiency disease and a background sample;

8.2.17 In the interests of maximising an understanding of individuals, skeletons will ideally receive multiple forms of biochemical analysis (ie, those individuals selected for DNA, SR and O, will be among those selected for C+N isotopes).

8.2.18 **Radiography:** where appropriate and agreed with the Historic England Regional Science Advisor, selected bones will be x-radiographed on site by a specialist who will visit periodically.

8.2.19 **Comparative analysis and reporting (Tasks 5.6-8):** the data generated by the analyses will be statistically examined, both in terms of reviewing patterns within the site, but also in comparison with a base-line demographic profile generated from the burial register and data from other appropriate sites, allowing patterns in demography and pathology to be considered in a wider context. The details of these analyses will be presented within an illustrated and quality-assured specialist text. Due consideration will be given to assemblages from sites that are contemporary, have been recorded to a similar standard, or potentially share geographical, cultural or geopolitical similarities. Details of appropriate sites are presented in the evaluation report (OA-HFA 2016a). Where named individuals are present, their osteological data will be

compared to information gained from coffins and documents, with more detailed statistical analysis undertaken where numbers are sufficient to support such work.

8.2.20 **Coffin remains and gravestones:** site records relating to the coffins and gravestones will be included in a database, with further written and pictorial recording undertaken as appropriate. Where possible, biographical information will be correlated with individual skeletons. Analysis of these remains will examine their physical and decorative elements in close relation to the results of the osteological analysis, seeking to explore the expression of wealth, status, age, gender and other such themes, as well as any chronological trends.

8.2.21 Where the quantity and quality of coffins remains is sufficient to enable meaningful study, it will seek to gain an understanding of the presence, absence, basic shapes, and positions of the varying forms of coffin furniture, but also to study those variations in spatial distribution that are indicated by the evaluation findings.

8.2.22 Analysis of the grave monuments will include:

- formatting the database to allow study of individuals, family groups, demographics, to identify named individuals, select case studies;
- examining spatial and temporal distribution of monument types, designs and iconography to explore social traits and, with available data from other sites, to assist with identification of regional, national and temporal trends;
- integrating, where appropriate, the EYFHS and other appropriate data from Holy Trinity Church (HTC) to facilitate the identification of individuals buried at each site, to focus case studies and assist with modern family liaison where relatives approach the Project Team, as it may be possible to demonstrate that relatives actually lie at HTC (where OA-HFA have recently undertaken the excavation of over 400 burials). It would also further the exploration of any social or temporal trends in the use of each site for burial. The latter may assist a greater appreciation of the social dynamics that influence the choice of burial location (TBG vs HTC) and an improved understanding of TBG, and Hull, society;
- following a pilot study and, where feasible, an integration of the OA-HFA plan and the EYFHS (1985) TBG plan to establish the original location of laid-down or now broken monuments; and
- update plans showing the possible locations of relatives of modern descendants who have made themselves known to the project, as these will be used to inform any recovery and special treatment of those individuals.

8.2.23 **Artefacts:** each of the artefactual and ecofactual categories will be identified, recorded and catalogued in accordance with CifA guidelines (2014c). Where suitable, metalwork will be x-rayed on site and the interpretation of these artefacts will be reviewed with the aid of the x-ray plates. As far as the programme and ethical practicalities of reburial permit, subsequent analysis of personal items with individuals selected for osteological analysis, particularly where these would aid an examination of status, occupation, dating, *etc*). The

results of the finds analysis will be presented within a report and a catalogue for inclusion in the project archive and integration into the publication text as appropriate. It will provide details of the quantity and quality of the artefactual data, spot-dating where possible and any other significant observations. The catalogue will be added to the site database, so that they can be integrated fully with the stratigraphy and provide suitable information and spot dating for general analysis.

8.2.24 **Documentary Research:** See Section 6.1.3.

8.2.25 **Preparation of draft text for publication:** the results of the work will be compiled within a draft text for publication (with specialist appendices as appropriate) that will be a fully quality-assured, illustrated and internally consistent document prepared for submission to BB, the TABB, the AAHE, HistE and HAP. It will present:

- a non-technical summary;
- an introduction, detailing the contract background, site location and historical context;
- a section dealing with the methodologies employed on site, as well as those of the specialist analyses;
- the results of all analyses, including an examination of the spatial and temporal patterning of data;
- detailed discussion of the results of the work within a local, regional and national framework, to include:
- comparative analysis of all appropriate forms of data, including, where appropriate, statistical analyses that will permit an exploration of the degree to which TBG data differ from those of comparative sites and the factors particular to the Trinity congregation that might influence such patterns.
- synthesis of the different analyses and of the historical research in order to present a coherent, holistic interpretation of the archaeological remains, the people and the society that produced them, within wider historical, economic and social contexts. Data will be examined at a range of levels, from selected individual burials, family groups within graveplots and, thirdly, the congregation and the burial ground as a whole.
- bibliography;
- appendices of raw data, together with key documents (such as project designs);
- selected illustrative plates and plans;
- a programme for publication, archiving and reburial of the funerary remains.

8.3 PROJECT STAGE 5: PUBLICATION AND ARCHIVING

8.3.2 **Publication (Task 5.1):** it is envisaged that the results of the archaeological programme will be worthy of publication. The scale of this publication will be dependent upon a range of factors, but it is likely that there will be sufficient

information for a monograph. Texts for publication will be prepared for approval by the AAHE, TABB, HAP and HistE.

- 8.3.3 **Archive (Task 5.2):** the site archive (digital, paper and photographic record), together with all reports, will be prepared for long-term storage with the Hull Museum and/or the Hull History Centre at the project's completion. Hard and digital copies of all reports will be deposited with the Humber SMR. All personal artefacts directly or indirectly associated with burials will be reburied, with, where possible, their original owner. Non-funerary artefacts, where they meet retention criteria and agreed by the landowner, will also be deposited within a Hull Museum in accordance with standard guidelines (Walker 1990; MGC 1992). Due consideration will be given to lodging selected elements of the archive with the Archaeological Data Service (ADS) or some other form of publicly accessible online format.

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APPENDIX 1: PROGRAMME

27 Watching brief to facilities/compound area

Watching brief during ground reduction to a level commensurate with impact from the slip road. CT to provide suitable info

120 Compilation of Interim Report

this should be merged with the assessment

APPENDIX 2: RESEARCH MATRIX

Appendix 2: Research Matrix

Research Needs	Research Potential	Research Questions	Research Objectives	Public benefits
<p>RN1: There has been no work to date on industrial-period assemblages of funerary remains from Hull, and little on those from Yorkshire and the north in general.</p> <p>RN2: To examine the impact of industrialisation upon the population of Hull, particularly in terms of health but also the rise of the Middle Class.</p> <p>RN3: To examine the effect of international contacts on the health and genetic heritage of a port town, and how that may have affected funerary activity.</p> <p>RN4: to examine, as far as possible, a cross-section of the Holy Trinity Parish community.</p> <p>RN5: to gain an understanding of the ways that funerary activity was undertaken, and beliefs expressed, for members of Hull's different social strata.</p> <p>RN6: to understand the degree to which TBG is reflective of Hull's population and their funerary activity as a whole.</p> <p>RN7: to understand the organisation of the burial ground and the use of the mortuary buildings.</p> <p>RN8: to identify and explain characteristics in data that are unique to Hull.</p> <p>RN9: To interpret the archaeological findings within a documentary context.</p> <p>RN10: To produce a holistic narrative social history of Hull and of Holy Trinity</p>	<p>RPm: Burial activity at TBG is closely dated and spans just 80 years during a period of rapid industrialisation, urbanisation and population growth and, significantly for a port such as Hull, trade and migration. The goal was authorised at the same time as the burial ground, and its construction reflects many of the issues associated with the process of industrialisation, and the planned expansion of the city (Addresses: RN1-4, 7, 9, 13).</p> <p>RPn: Throughout the industrial period, Hull was the principal urban settlement in East Yorkshire, being a significant international port and the commercial centre for a wide rural hinterland; it was thus the epicentre for the introduction and interaction of people, ideas and forms of expression from a range of cultural backgrounds and localities, both near and far (Addresses: RN1-3, 5, 8, 10).</p> <p>RPo: TBG was the final resting place of a significant proportion of Hull's population, rich and poor alike, and the site is likely to contain a cross-section of the parish community (Addresses RN2-8, 10);</p> <p>RPp: Aspects of the data that are unique to, or characteristic of, Trinity Burial Ground, can be established by comparing them with studies of contemporary assemblages from other industrial-period sites from a range of locations and settings, many of which share commonalities with TBG, albeit that there is currently no direct comparator to TBG as a CoE, largely working-class assemblage from a northern port town (OA-HFA 2016a, Section 5.6.41) (Addresses: RN1, 3, 5, 8, 10-11).</p> <p>RPq: Good historical data and contemporary documents specific to Hull to provide a context to the archaeological data, comprising a complete burial register, parish records, Commissioners' Reports, Trade Directories, etc, relating to trades, industries, health and sanitation (Addresses RN2-11).</p> <p>RPr: An increasing body of archaeological and synthesised historical literature relating to the socio-economic, demographic, funerary and religious trends prevailing during the use of TBG, which can be used to contextualise the archaeological data (Addresses RN2-5, 7-11).</p> <p>RPs: The burial register can be used to create a demographic model against which the excavated data can be tested (Addresses RN1, 2, 4, 6-9).</p> <p>RPt: there are variations in the spatial and temporal distribution of grave monuments and burial structures that are likely to relate to the socio-economic organisation of the burial ground (OA-HFA 2016a, Section 5.2-5.4); (Addresses RN2-7, 11).</p> <p>RPu: the gravestones can be studied in terms of shape, iconography and text, as well as spatially and through family associations. (Addresses RN2-8, 10-11).</p> <p>RPv: although coffin fittings were less well preserved, their type and distribution varied spatially, and are likely to be important interpretive tools. Whilst there is a growing understanding of the burial accoutrements of the wealthy, many questions remain unanswered regarding changing burial fashions and practices</p>	<p>RQ5: How can aspects of the demography, social composition, status and lifestyles of those buried be understood, particularly with reference to the historical documentation for the site and for Hull? (develops RPm, n, o, q, s, u-y).</p> <p>RQ6: Where graves contain family members, how can the osteological data be used to explore, test, and explain patterns in non-metric traits and other genetically influenced characteristics? (develops RPm, o, q, s, w, x, y).</p> <p>RQ7: What is the documentary evidence for physiological and demographic change associated with urban intensification and industrialisation of Hull? Can such evidence explain patterns in the osteological data?</p> <p><i>This question has been modified since the evaluation findings to better reflect the limitations of TBG data, particularly in terms of establishing chronological sequences. Develops RPm, p, q, r, x, y.</i></p> <p>RQ9: How can the results of the fieldwork and post-excavation programme be made available to the wider public in an accessible form, whilst undertaking appropriate reburial of the human remains and associated artefacts (including all coffin fittings and personal adornments)? Develops RPm-z.</p> <p>RQ12: Is it possible to identify patterns of occupation-related pathology amongst the buried population, both with reference to the known occupations of the buried population as a whole, but</p>	<p>ROa. <i>Digitise TBG Burial Register</i> by incorporating the information into a database that can be used to integrate with the database of recorded monuments at TBG, produce demographic profiles to assist with modelling and comparison and liaise with people who have contacted the Project Team to identify themselves as descendants of people buried at TBG (RQ5-6).</p> <p>ROb. <i>Undertake Research:</i> including establishing and enacting a research framework, and involving members of the public where appropriate, undertaking an iterative programme of targeted desk-based research; formulating demographic and socio-economic models against which the TBG historical and archaeological data can be tested; identifying the principal industries and employers in the city, particularly those characteristic of Hull and Holy Trinity Parish; facilitating all RQs, but RQ5 in particular; identifying and analysing documentation relating to named individuals and selected case studies (RQ7).</p> <p>ROc. <i>Record and study grave monuments,</i> including consideration of selected information from those recorded at Holy Trinity Church, then process and format the data presented on them to facilitate the study of individuals, family groups, demographics; identification of named individuals (including those where modern relatives have identified themselves to the project team), and selection of case studies; spatial and temporal analysis of physical and design characteristics, exploration of social traits and the social dynamics of burial location, identification of regional, national and temporal trends (RQ5 and RQ6).</p> <p>ROd. <i>Site Preparation Investigation, monitoring and Recording,</i> comprising detailed recording of the former gaolyard and historic boundary walls, involving where feasible, training members of the public in archaeological skills; undertake, with appropriate public involvement, an archaeological strip, map and sample on the site of the former gaol (subsequently industrial buildings) which will be used as the spoil-processing area to the north-east of TBG; maintain watching briefs during site preparation works where these may reveal archaeological remains, including any evidence of the former burial ground boundaries and any elements of the little-understood medieval settlement of Wyke (RQ9).</p> <p>ROe. <i>Establish a zonal sampling strategy</i> for the recovery of appropriate samples of burials that allows for spatial variations in the distribution of different forms of data, for correlation of individuals and family groups with gravestones and for recovering individuals from complete grave sequences to maximise recovery of family groups and complete temporal spans (RQ5 and RQ6).</p> <p>ROf. <i>Undertake an appropriate level of intrusive archaeological investigation</i> that will permit:</p> <ol style="list-style-type: none"> processing topsoil and subsoil arisings for recovery and subsequent reburial of disarticulated remains by EC; recovery, processing, assessment, and cataloguing of a sample of 1500 skeletons (c 10% of remains expected within the excavation area) along with their associated coffin remains and personal items for immediate detailed analysis (where the quantity and quality of remains is sufficient to enable meaningful study in the case of the latter forms of data); collection of samples from a selection of skeletons to be submitted for off-site biochemical analyses; on-site radiography of a selection of pathological remains and of funerary fittings and artefacts where this may reveal significant information relating to dates, stylistic details and biographical information; stratigraphic and locational recording then recovery of all other human remains from the site, on-site reburial of all funerary remains with all their appurtenances throughout the fieldwork programme; appropriate stratigraphic excavation and palaeoenvironmental sampling of non-funerary archaeological remains within TBG, including features and structures contemporary with the use of the burial ground; recovery and processing of associated non-funerary artefacts (all RQ). 	<p>Unless otherwise stated, the public benefits stem most directly from ROb, ROd and ROJ, but will gain from all of the Research Objectives</p> <p>PB1: Involvement with the archaeological process.</p> <p>PB2: Learning new skills, including archaeological recording and research.</p> <p>PB3: a greater understanding of Hull's heritage and how the people of the city fit into that heritage.</p> <p>PB4: An appreciation of Hull's archaeological resource, but also of the documentary resources that are free to access within the city.</p> <p>PB5: Expanding people's perception of archaeology to include the relatively recent past, rather than just very ancient things.</p> <p>PB6: Potentially identification and recovery of family members where relatives have come forward to the Project Team (ROa).</p> <p>PB7: A continuation of the legacy of City of Culture themes, feeding a more enduring interest in the heritage of the city.</p> <p>PB8: Employment of local people.</p> <p>PB9: An appreciation of the diversity of the past and of previous generations.</p> <p>PB10: A greater appreciation of the similarities and differences in the lives of modern people and those in the past, who are separated from the modern population by just a few generations.</p>

<p>parish within the wider context of the UK.</p> <p>RN11: to undertake a multi-disciplinary approach, integrating examination of historical records, osteology, funerary remains, monumentalisation, burial locus and personal artefacts.</p> <p>RN12: to gain an understanding of pre-cemetery activity on the site, such as the medieval settlement of Wyke.</p> <p>RN13: to gain an understanding of the former gaol, which is an important component of the industrial-period planned expansion of the city.</p>	<p>amongst the less affluent, and particularly how that would be manifest at Trinity Burial Ground; (Addresses RN2-8, 10-11).</p> <p>RPw: the evaluation identified several instances where the remains of gravestones could be correlated with plots: given the paucity of legible coffin plates, this may represent the only means of identifying family groups and individuals. Although representing less than 2% of the burial population, there is potential to identify several scores of individuals who could be used for historical case studies; (Addresses RN2-8, 10-11).</p> <p>RPx: the evaluation identified spatial variations in the density of burial activity; (Addresses RN4, 7, 10-11).</p> <p>RPy: osteological assessment during the evaluation indicated that skeletal remains were generally in a good state of preservation, with the vast majority of those that were over 25% complete suitable for osteological analysis; pathological conditions were well represented (Addresses RN1-4, 6, 8-11).</p> <p>RPz: very little is known about the medieval settlement of Wyke, the area of which encompassed TBG. Although post-medieval disturbance will be extensive, surviving isolated pockets of medieval remains may be informative (Addresses RN13).</p>	<p>with particular regard to named individuals of known occupation?</p> <p><i>Poor for examining specific cohorts;</i></p> <p><i>Moderate for case studies of individuals;</i></p> <p><i>Moderate for the general buried population and unique characteristics of the site.</i></p> <p>Develops RPq, v, w, y.</p>	<p>ROg. Produce a complete, collated and interrogatable archive of documentary, photographic and digital data (all RQ).</p> <p>ROh. Undertake (on-site for funerary remains, off-site for other remains or specialist materials, as agreed under the CoE Faculty conditions) an appropriate programme of collation and quantification of all data recovered from the site, together with a validation and review of the research questions. This will be presented in a very basic summary document including an updated project design for off-site analysis and dissemination (all RQ);</p> <p>ROi. Undertake an appropriate programme of analysis on the sample of funerary remains assessed and examined on-site and, if identified and appropriate to do so, of pre-cemetery archaeological remains, ensuring that the techniques utilised enable comparison with other assemblages and, as far as the data allows, statistical validity. The analysis will include an appropriate programme of biochemical analysis, the synthesis of all relevant forms of data from the site and comparison with data from other contemporary sites in the undertaking of a population-based bio-cultural study that is firmly grounded within a socio-economic historical context at local, regional and national levels (all RQ);</p> <p>ROj. Prepare for public dissemination the results of the fieldwork and post-excavation programme (RQ9);</p> <p>ROk. Prepare the assemblage of non-funerary material recovered from the Works for appropriate deposition and the original records and non-funerary finds for archiving (RQ9).</p>	<p>PB11: A better understanding of why Hull is the city it is now, and the huge changes in society, welfare and economics that the city and its people have been through.</p> <p>PB12: Encouraging interaction between different interest groups.</p> <p>PB13: Challenging perceptions and breaking down barriers between different social groups: everyone has a heritage of equal value, irrespective of their ancestry, economic background and their qualifications.</p>
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APPENDIX 3: PROJECT STAGES, PRODUCTS AND REVIEW POINTS

Project Stage	Products and Originator	Review Points	Receivers/ sign-off
<p>0: Document Preparation, comprising: Compilation of documentation providing details of technical approach, health and safety, risks, resourcing and programme for the Works to be implemented by OA-HFA; Compile documents relating to outreach</p>	<p>OA-HFA to produce: Draft and final documentation comprising:</p> <ul style="list-style-type: none"> • Project Design • Work Package Plan • Programme • Risk Register • Cost Plan • Resource Plan • Documentation relating to public outreach 	<p>BB and TABB to review draft of all documents and iteration as appropriate</p>	<p>HistE, HAP, HE, AAHE</p>
<p>1: Preliminary works, comprising: Documentary research; Compile burial database; Outreach works, including physical recording and investigation where appropriate; On-site set up and preparation to provide Stage 2 works by BB; Watching brief and recording during vegetation clearance, grave monument removal as appropriate</p>	<p>OA-HFA to co-ordinate production of research framework document OA-HFA to produce: Record of burial ground wall in advance of removal; Updated grave monument survey and database as required during removal of monuments from the Works area; BB to: Stockpile materials and wall monuments safely and carefully</p>	<p>OA-HFA and BB to review documents and procedures prior to start of each piece of work and at completion</p>	<p>HAP, HE, AAHE</p>
<p>2: Main Fieldwork Phase, comprising: BB to maintain attendances throughout the fieldwork programme OA-HFA to undertake controlled archaeological excavation within the affected areas of the burial ground, including the stratigraphic recording and recovery of funerary remains; A watching brief during BB's excavations for stats diversions outside the modern bounds of the burial ground, particularly within the area between the north wall of TBG and the current A63 carriageway; Processing of the fieldwork archive, including the funerary remains and creating a database of the records</p>	<p>OA-HFA to produce an archaeologically recovered and processed assemblage of funerary remains and supporting data; Appropriate information on funerary remains that fall outside the samples for full analysis; A site that has been completely cleared of human remains as certified by AAHE</p>	<p>Regular reviews, presented as highlight reports, of findings, progress in terms of area and depth of investigation, projected programme</p>	<p>AAHE, TABB, BB, HistE, HAP</p>

Project Stage	Products and Originator	Review Points	Receivers/ sign-off
3: Interim Reporting and UPD, comprising: collation and summary of the findings and site archive, interim reporting and Updated Project Design (UPD) for Project Stages 4 and 5;	OA-HFA to produce a full interim review of the fieldwork results in the form of a short, illustrated report presenting a summary of the archive, statement of potential, and UPD with methodologies and resources for Project Stages 4 (off-site analysis) and 5; information for interpretative panels	Submission of the interim report and UPD	AAHE, TABB, BB, HistE, HAP
4: Analysis Activities presented in the UPD	OA-HFA to produce client report, incorporating draft text for publication	Reviewed by OA-HFA and TABB at completion of analysis	AAHE, TABB, BB, HistE, HAP
5: Dissemination and Closure, comprising: Publication, archiving by OA-HFA	Archive for submission to the Hull Museum and/or the Hull History Centre; published report for dissemination; funerary remains appropriately deposited	OA-HFA, HAP, HistE, AAHE and TABB to undertake review of draft publication	AAHE, TABB, BB, HistE, HAP

APPENDIX 4: SUMMARY OF BURIALS EXPECTED WITHIN EACH WORKS AREA

Note: Summary of expected number of burials in each sampling area where 1500 burials are to be recovered for osteological analysis

Tent	1	2	2	3	3	4	5	5	Totals
Skeleton area	A	A	B	B	C	C	C	D	
Excavation Area (m2)	822	877	215	909	45	298	148	192	3506
Evaluation trench Area (m2; at surface)	50	50	50	50	40	40	40	0	
Evaluation trench Area (m2 at burial horizon)	18	18	16.5	16.5	13	13	13	0	
No of articulated skeletons within evaluation trench	82	82	32	32	37	37	37	0	
No of charnel deposits within evaluation trench	7	7	1	1	0	0	0	0	
Disarticulated bone: Minimum no of Individuals within evaluation trench	29	29	4	4	9	9	9	0	
Proportion of burials with coffin remains (from evaluation)	0.54	0.54	0.79	0.79	0.83	0.83	0.83	0.00	
Proportion of burials with metal coffin fittings (from evaluation)	0.30	0.30	0.64	0.64	0.40	0.40	0.40	0.00	
Articulated skeletons; evaluation density	4.56	4.56	1.94	1.94	2.85	2.85	2.85	0	
Number of articulated skeletons expected	3745	3995	417	1763	128	848	421	0	11317
Charnel density (m2)	0.39	0.39	0.06	0.06	0.00	0.00	0.00		
Expected Charnel	320	341	13	55	0	0	0	0	728.84
Disartic density (m2)	0.58	0.58	0.08	0.08	0.23	0.23	0.23		
Expected disartic (MNI)	477	509	17	73	10	67	33	0	1186
Total number of burials	4541	4845	447	1891	138	915	455	0	13232
Proportion of excavation area (3506m2)	23%	25%	6%	26%	1%	8%	4%	5%	100%
Articulated Skeletons as percentage of the assemblage	28.3%	30.2%	3.2%	13.3%	1.0%	6.4%	3.2%	0.0%	85.5%
Charnel as a percentage of the assemblage	2.4%	2.6%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	5.5%
Disartic as a percentage of assemblage	3.6%	3.8%	0.1%	0.5%	0.1%	0.5%	0.3%	0.0%	9.0%
Expected articulated 18938 with eval proportions	5359	5718	597	2523	183	1214	603	0	16198
expected charnel 18938 with eval proportions	458	488	19	79	0	0	0	0	1043
expected disartic 18938 with eval proportions	682	728	25	104	14	96	48	0	1697
total of above	6499	6934	640	2706	198	1310	651	0	18938
Percentage >25% complete	0.667	0.667	0.786	0.786	0.733	0.733	0.733	0	
Expected no >25% complete articulated	3573	3812	469	1982	134	890	442	0	11303
Expected no <25% complete, articulated	1786	1906	128	541	49	324	161	0	4894

Tent	1	2	2	3	3	4	5	5	Totals
Skeleton area	A	A	B	B	C	C	C	D	
Sample of 1500 remains >25%, assuming even sampling	474	506	62	263	18	118	59	0	1500
co-efficient between those that are <25 and >25% complete	0.50	0.50	0.27	0.27	0.36	0.36	0.36	0.0	
number within the sampling area <25% proportionate to 25%	237	253	17	72	6	43	21	0	650
number within the sampling area <25% proportionate to 25%	237	253	17	72	6	43	21	0	650
amount to be carefully dug to get that number over 25% complete	711	759	79	335	24	161	80	0	2150
Person days at 2/day	356	379	40	167	12	81	40	0	1075
Osteologist to assess analysis sample at 40/day	18	19	2	8	1	4	2	0	54
Person days at 5/day: charnel	92	98	4	16	0	0	0	0	209
Remainder (artic) for speedy removal	4648	4959	518	2188	159	1053	523	0	14048
Digger days at 3/day	1549	1653	173	729	53	351	174	0	4683
Coffin remains to analyse	256	273	49	208	15	98	49	0	948
sets of metal fittings to analyse	142	152	40	168	7	47	23	0	580
Total Digger days asuming osteo assess on all but charnel	1997	2130	216	913	65	431	214	0	5966
Skeletons washers @ 3/day	158	169	21	88	6	39	20	0	500
More appropriate digging team to individual area sizes	36	36	36	36	12	12	12	6	
Revised duration (days)	55	59	6	25	5	36	18	0	176
revised people days (diggers only)	1997	2130	216	913	65	431	214	0	5966
skeletons excavated/day (excluding charnel)	97	97	0	100	34	34	34		

APPENDIX 5: RISK REGISTER

Risk Register													
ID	Description	Category	Impact on		Unmitigated Risk			Control Measures	Mitigated Risk			Owner	Monitors
			Programme Task Number/s	Linked risks	Probability	Impact	Risk Rating		Probability	Impact	Risk Rating		
1	More burials than indicated from trial trenching and models	Programme & Cost	2		3	5	15	Provide for programme and resource flexibility to enable such an occurrence to be accommodated within the programme for the Works.	3	5	15	HE/BB	HE/BB
2	Insufficient storage space for human remains	Programme & Cost	2		2	5	10	Review storage capacity of the locations identified for reburials to determine capacity of each. Identify alternative locations initially within the confines of the site (removal of burials from site should be avoided as far as possible) and, secondarily, in consultation with the PCC and appropriate stakeholders, off-site	1	5	5	HE/BB	HE/BB
3	Trespass to the area of the Works	Reputational	2	4,5	3	5	15	Provide 24 hour security to the Works with patrols of the site boundary.	1	2	3	BB	BB
4	Media interest / sensationalism	Reputational	All	3,5	5	5	25	HE and BB plan for inevitable press coverage continue and extend to the Works to be undertaken the media approach adopted to date. Plan for the likelihood of adverse or media coverage	2	5	10	HE/BB	HE/BB
5	Adverse community reaction	Reputational	All	3,4	5	5	25	HE and BB engage with the relatives, the community and other stakeholders in a sensitive and open manner. Manage information flow from the project team.	2	5	10	HE/BB	HE/BB

Risk Register													
ID	Description	Category	Impact on		Unmitigated Risk			Control Measures	Mitigated Risk			Owner	Monitors
			Programme Task Number/s	Linked risks	Probability	Impact	Risk Rating		Probability	Impact	Risk Rating		
6	Insufficient archaeological/ specialist contractor resources available (Competition from other major projects being undertaken simultaneously, regionally and nationally will compete for available resources)	Technical & programme	All		5	5	25	Engage AC early in order to provide for sufficient time to plan for, recruit and train appropriate staff and, as appropriate, appoint subcontractors.	1	5	5	OA-HFA	BB
7	Specialist - scientific analysis (Capacity of contractors to undertake the scientific analysis within the project programme)	Technical	3		5	5	25	Identify analysts during the planning stages of the project; analysts encouraged to employ adequate technical support; book laboratory time; ensure that the scale of specialist analyses is not only academically valid but also viable within the project budget and programme	2	5	10	OA-HFA	BB
8	Collapse into voids from graves/vaults	Technical	1, 2		2	5	10	Identify and as appropriate fill with granular material. Where practical, prioritise investigation and clearance to facilitate fillings	1	3	3	BB/OA-HFA	BB
9	Low staff morale could have an effect on progress and staffing numbers.	Reputational	All		5	5	25	AC shall devise and enact systems to monitor and actively manage site conditions and staff morale through all stages of the works and devise appropriate measures to maintain moral	2	5	10	OA-HFA	BB

Risk Register													
ID	Description	Category	Impact on		Unmitigated Risk			Control Measures	Mitigated Risk			Owner	Monitors
			Programme Task Number/s	Linked risks	Probability	Impact	Risk Rating		Probability	Impact	Risk Rating		
								levels, guarding against wastage throughout the project.					
10	Administrative error resulting data loss or confusion	Technical	All		2	5	10	AC to implements a robust quality assurance systems to ensure that all data is effectively and accurately tracked from exhumation through to reburial. AC to formulate an approach and detail as part of the PD.	1	4	4	OA-HFA	BB
11	Ground contamination by past industrial land use	Programme, Cost & Technical	1,2		5	5	25	Potential for ground contamination to be present particularly in the area of the former gaol. AC to provide staff with appropriate PPE and approaches to be detailed in their WPP. BB to review and if located to make provision made for the safe removal and disposal of contaminants and the containment of any effluents.	3	3	9	BB	OA-HFA/BB
12	Cemetery more extensive than current grounds – particular concern to the northern boundary	Programme & Cost	1,2		3	5	15	The stepping out of the areas the Works will assist with the identification the presence or otherwise of burials beyond the current boundaries of the TBG	2	5	10	BB	BB
13	Spoil build up within the area of archaeological investigation or soil process area	Programme	2		5	5	25	AC and BB as part of the detailed planning for the Works to develop process to avoid or contingency measures.	4	3	12	OA-HFA/BB	OA-HFA/BB
14	Critical failure of AC computer	Programme &	2-5		1	5	5	AC to implement robust and demonstrable systems for the	1	3	3	OA-HFA	BB

Risk Register													
ID	Description	Category	Impact on		Unmitigated Risk			Control Measures	Mitigated Risk			Owner	Monitors
			Programme Task Number/s	Linked risks	Probability	Impact	Risk Rating		Probability	Impact	Risk Rating		
	systems resulting on loss of digital data or extended timescales to recover	Reputational						protection of digital data. Details to be provided as part of the AC PD.					
15	Loss of AC critical resource/s due to extended illness	Programme	0-5		4	5	20	AC to review resourcing and identify alternatives for those resources critical to the successful delivery of the Works and formulate a contingency plan for submission to BB.	2	4	8	OA-HFA	BB
16	Infestation of project digital files through viral attack	Programme	0-5		2	5	10	AC to ensure provision of network wide antivirus systems that include real-time email scanning are in place and are updated regularly.	1	3	3	OA-HFA	BB
17	Loss of physical archive in transit	Programme & Reputational	0-5		2	5	10	The AC shall for those materials requiring transit either in person or where not feasible, material to be transmitted by courier rather than unaccompanied. Regular archive stock-take during the project will identify the location of all items.	1	5	5	OA-HFA	BB
18	Unavailability of preferred external specialists.	Programme	0-5		4	5	20	AC to implement early consultation with preferred specialists, either internal or external to provide for capture of the necessary resources.	2	5	10	OA-HFA	BB
19	Delay while awaiting external reviewer feedback.	Programme	0-5		3	5	15	Programme requirements and constraints to be clearly articulated to all reviewers as part of the preparation of the review process for each document issued by the AC.	2	5	10	OA-HFA	BB

Risk Register													
ID	Description	Category	Impact on		Unmitigated Risk			Control Measures	Mitigated Risk			Owner	Monitors
			Programme Task Number/s	Linked risks	Probability	Impact	Risk Rating		Probability	Impact	Risk Rating		
20	Delays due to insufficient AC internal resource allocation.	Programme	0-5		3	5	15	AC to implement internal procedures to ensure that the Works are fully resources during all stages to ensure programme and technical compliance.	2	4	8	OA-HFA	BB

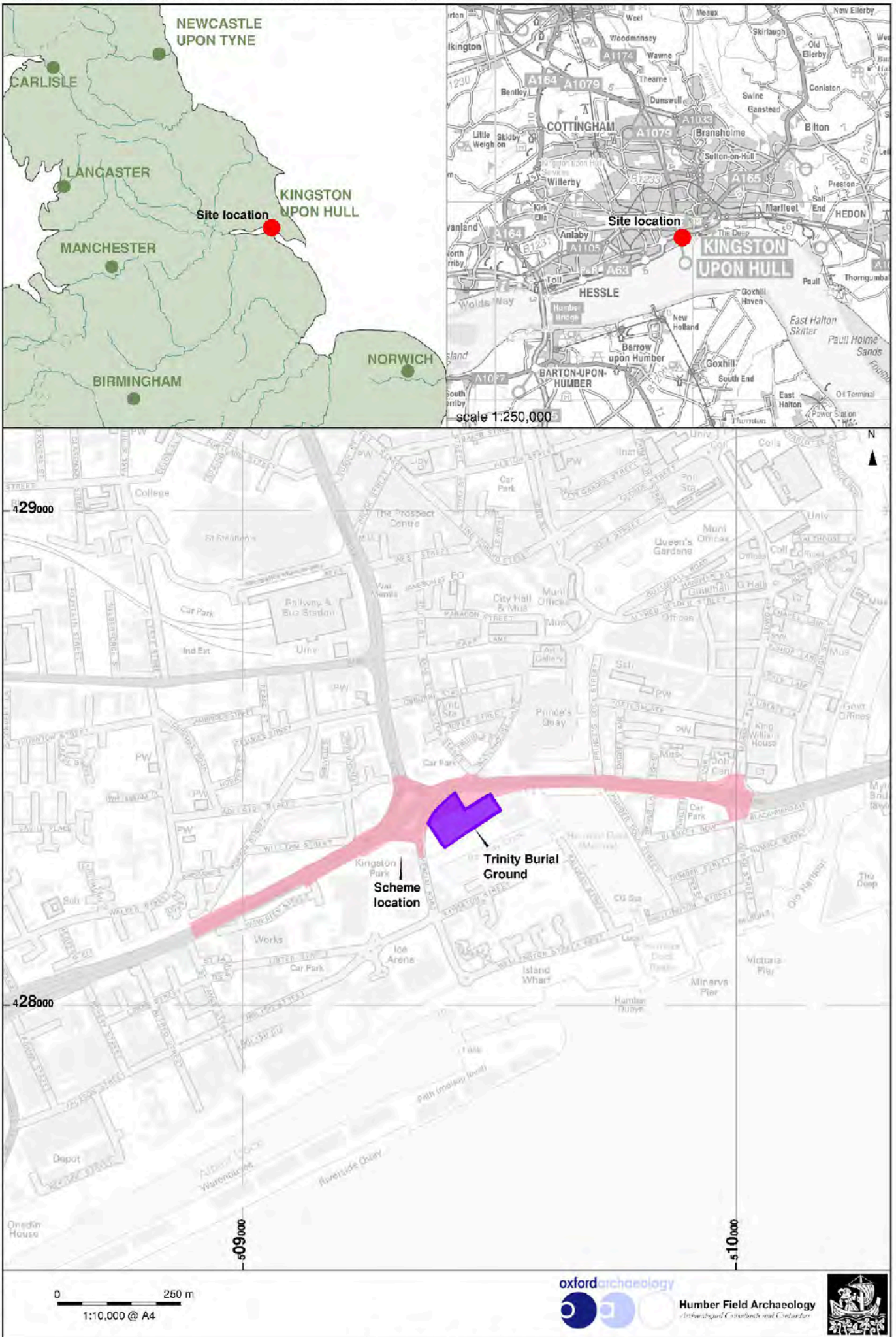
FIGURES

Figure 1: Location plan

Figure 2: Organogram for communications, roles and responsibilities

Figure 3: Site plan showing tents and burial characterisation areas

Figure 4: Site plan showing proposed sampling areas



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oxford archaeology

Humber Field Archaeology
Archaeological Excavations and Consultancy



Figure 1: Site location

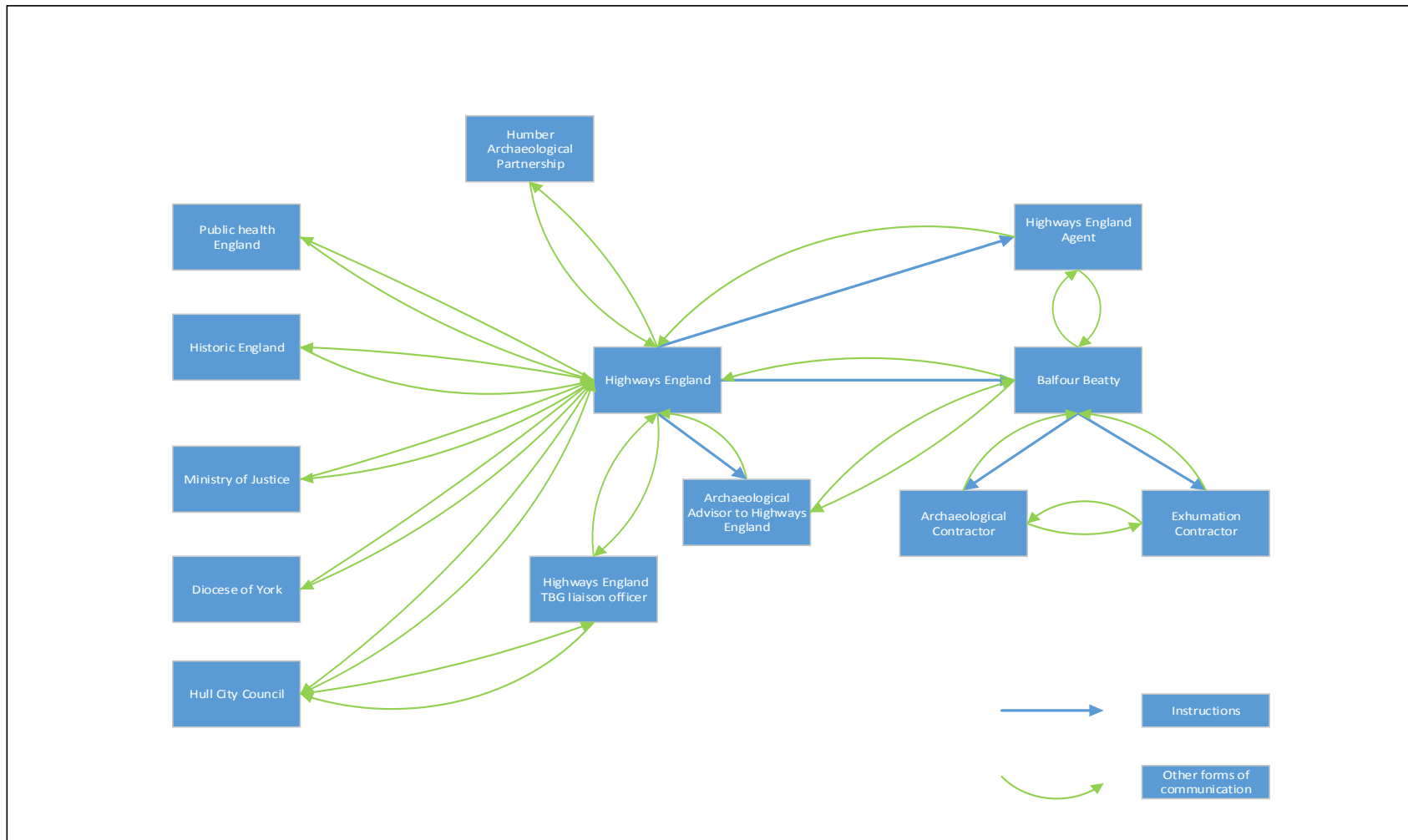
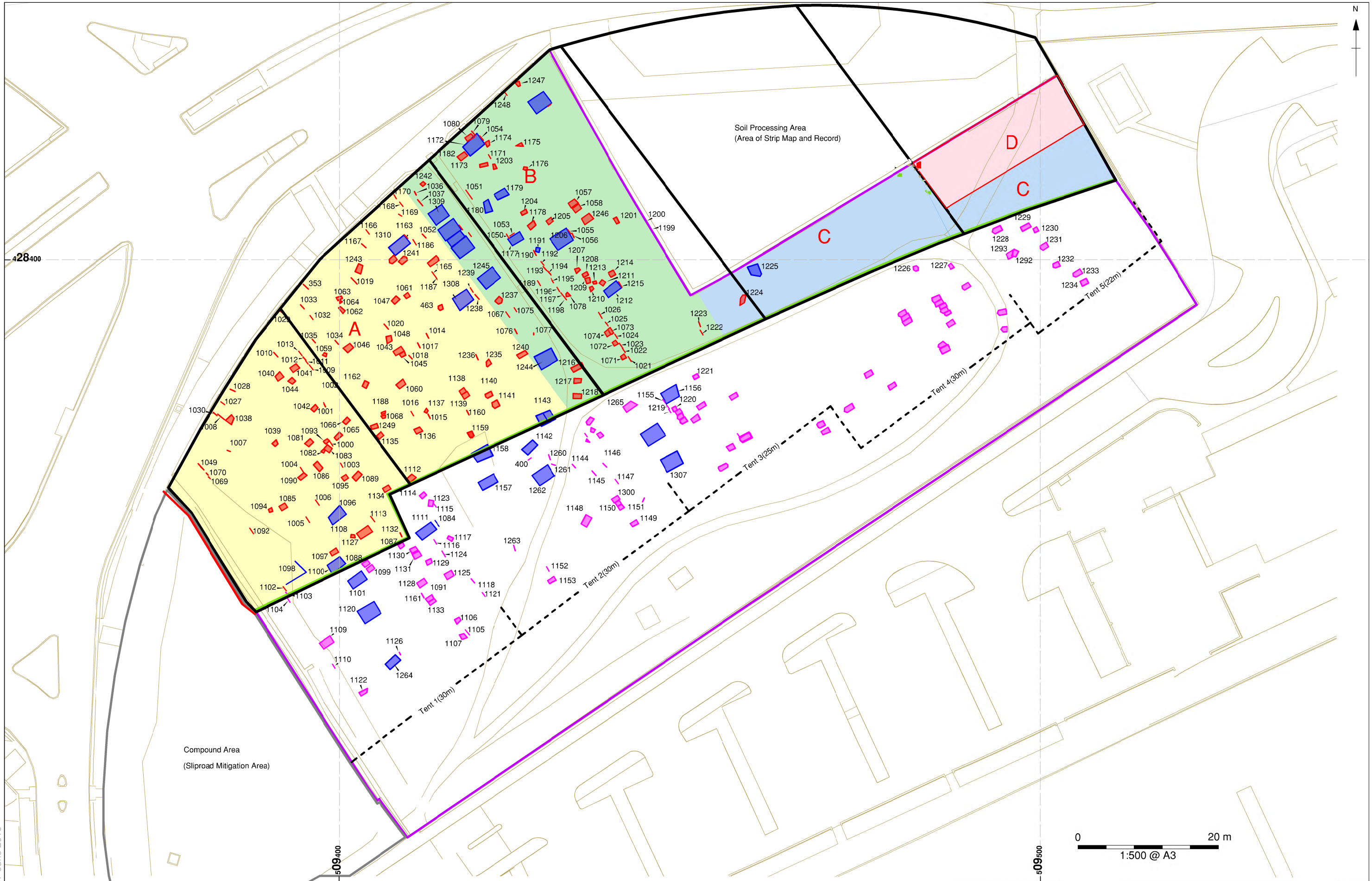


Figure 2: Organogram



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- Burial Ground Boundary
- Impact Zone (North of Line)
- Proposed screening tents
- Extent of walls to be removed




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Figure 3: Plan showing proposed screening tent layout



Figure 4: Plan showing proposed access tracks, piling and sampling areas for the recovery of 1500 skeletons for analysis

SR'L10859'MAT'June 2016

A63 Castle Street Improvements, Hull Environmental Statement

**Volume 3 Appendix 8.7
CULTURAL HERITAGE – HOLY TRINITY BURIAL GROUND:
PROJECT DESIGN FOR MAIN PHASE CLEARANCE**

**TR010016/APP/6.3
HE514508-MMSJV-EHR-S0-RP-LH-000016
31 July 2018**



A63 CASTLE STREET IMPROVEMENT, KINGSTON UPON HULL: HOLY TRINITY BURIAL GROUND

Advance Archaeological Works Report



Humber Field Archaeology
Archaeological Consultants and Contractors



**Oxford Archaeology North and
Humber Field Archaeology**



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NON-TECHNICAL SUMMARY

In March 2015, Oxford Archaeology North and Humber Field Archaeology (OA-HFA) was commissioned by Balfour Beatty, on behalf of Highways England, to undertake a programme of archaeological works within Trinity Burial Ground, Kingston upon Hull, East Yorkshire. The site (in use 1783-1861) lies on the southern side of the A63, Castle Street, and 3507m² (43.2%) of the 8,120m² burial ground will be affected by a proposed improvement scheme to that significant arterial route.

In April 2015 303 grave monuments were surveyed and recorded, before 195 monuments were removed under the oversight of a member of the British Register Accredited Monumental Masons. A ground-penetrating radar survey was undertaken in April 2015 by GSB Prospection, but the results were largely uninformative. Geotechnical ground investigation (GI) works were monitored throughout May and June. These revealed disarticulated human bones as shallow as 0.3m below ground level (bgl), articulated human remains *c* 1m bgl, and natural silt at *c* 2m bgl.

Four archaeological trial trenches were excavated between July and September 2015. One (Trench D) successfully identified the remains of the former mortuary building shown occupying the north-east corner of the site on historic maps. Three trenches revealed funerary remains of differing character within discrete areas of the burial ground. Each trench was excavated vertically until no more burials were encountered and undisturbed natural silts were identified continuing several metres below the deepest burials. The trenches measured 4-5m wide by 10m long at the ground surface, but to allow safe access were stepped-in to measure 2-3m wide by 6m long once topsoil and subsoil had been removed to reveal articulated burials. All detailed investigation and assessment took place in the central 2-3m by 6m part of the trench. The total area investigated to natural deposits covered 47.5m², representing 1.35% of the 3507m² excavation area, and 0.58% of the 8,120m² burial ground as a whole.

The burial horizon was encountered at *c* 0.7-0.8m bgl (2.11-2.42m OD) and extended to *c* 1.85m bgl (1.14-1.4m OD). At most it was 1.1m thick, and was often thinner. The shallow depth of burial is likely to relate to the high water table, with the underlying undisturbed deposits of river sand and silt becoming saturated at depths of 2-2.2m bgl.

Overall, 151 articulated skeletons (83 juveniles and 68 adults) were revealed and assessed. Burial rows and plots were defined in all trenches and, on occasion, these related to the position of headstones, although only in Trench C could grave cuts be defined. The graves contained multiple interments (up to seven individuals). In addition, there were eight charnel deposits and 32 burials (24 adults, eight juveniles) that were identified in the steps of the trenches, but not fully revealed or assessed. A large quantity of disarticulated bone was recovered from the subsoil and burial horizon in all three trenches (including from the outer steps) and represented bones that had been disturbed from a minimum of 24 adults and 18 juveniles.

The greatest density of burial (4.94 burials/m²) was identified in Trench A, where 89 burials lay within narrow plots across the 18m² central investigation area (ie, excluding the surrounding step). The trench also produced most of the charnel deposits and disarticulated bone. Plots were more spacious, and densities lower, in the central investigation areas of Trenches B and C (Trench B: 2.0 burials/m², with 33 burials/16.5m²; Trench C: 2.85 burials/m², with 37 burials/13m²). There was widespread evidence for coffins, albeit often only as a stain in the soil, although coniferous coffin timbers were preserved in the heavier clay soil found in Trench C,

and there were occasional pieces of cloth from linings. Several of the burials had evidence of clothing and shrouds, and, more rarely, personal effects.

Metal coffin furniture was generally better represented and more ornate in Trench B, where several buried brick vaults were revealed (but not opened). Although some of the coffin furniture bore legible script, none was complete enough to identify the associated individual. As such, no named individuals were identified during the evaluation. Thus, identification of individuals will rely on integrating the data from aging and sexing and the sequence of burials in those graves that can be directly associated with the 112 *in-situ* monuments that lie within the excavation area. The use of this technique elsewhere has been successful, and it is very likely that burials at TBG will be identified using that methodology. However, there are only 236 individuals recorded on *in-situ* monuments at TBG (around 1.4% of the number of burials expected within the excavation area).

Preservation of skeletal material across the site was generally found to be good, and the overall potential for the recovery and analysis of demographic, morphological, and metrical data is high, and lesions of pathology are frequent and varied. Skeletons that were over 25% complete (using a system where the most analytically significant bones are scored more highly than others, rather than gross presence/absence) had far more potential to have their ages and sexes estimated closely than was the case with less complete individuals. An extrapolation of those figures suggests that 70.9% of those burials that lay fully within the trenches would be suitable for analysis. With adequate provision of water, drainage, space and drying facilities, it will be feasible to process the skeletons for analysis on site. On-site osteological analysis to accepted standards will also be possible with the provision of appropriate facilities.

The findings indicate that there is good potential to address the primary research question (RQ5) *How can aspects of the demography, social composition, status and lifestyles of those buried be understood, particularly with reference to the historical documentation for the site and for Hull?*, as well as RQ6: *Where graves contain family members, how can the osteological data be used to explore, test, and explain patterns in non-metric traits and other genetically influenced characteristics?* and also **RQ9**, relating to the dissemination of the findings. Because of the difficulties with establishing a refined chronology and the probability that only a small proportion of individuals will be named, it is considered that the viability of using archaeological data to address **RQ7** and **RQ14** is poor (respectively: *Is there any evidence for physiological and demographic change, both in terms of the osteological and documentary evidence, associated with urban intensification and industrialisation of Hull?* and, *How can the data generated, especially that relating to named individuals, contribute to the development of osteological methodologies and interpretation, particularly with regard to demography and epidemiology?*

The ability of the data to address **RQ12** (*Is it possible to identify patterns of occupation-related pathology amongst the buried population, both with reference to the known occupations of the buried population as a whole, but with particular regard to named individuals of known occupation?*) was considered to be more variable. Thus there is poor potential to identify and study large cohorts of named individuals in particular occupations, but there is moderate potential to develop narrative historical case studies for a small number of named individuals, and also produce a 'pathology signature' for TBG in comparison with data from other sites.

The research question will be addressed through the following osteological analyses: examination of condition and completeness, ageing, sexing, metrics (measurements), non-metric traits, size and shape analysis of crania, pathology, biomolecular and biochemical studies such as DNA, and various isotopes; and radiology. In addition, there is scope for the analysis of coffin furniture, particularly the more robust elements such as grips, and for the personal effects buried within individuals. Analysis of the gravestones and targeted documentary research will also be vital, both in terms of providing a context for the works and to facilitate interpretation, but to provide information where the evaluation indicates archaeological data will be lacking.

Recovery techniques were found not to be enhanced by sieving for small bones, while samples taken for intestinal parasite eggs yielded negative results. Expensive techniques such as radiocarbon dating are unlikely to enhance an understanding of chronology at the site.

Glossary:

Articulated: skeletons where the bones are in the correct anatomical position.

Assessment (osteological): a rapid examination of remains to gain an understanding of their condition and potential for analysis.

Burial horizon: the distinct soil layer containing articulated skeletons.

Charnel deposits: the remains of burials that were disturbed during historic gravedigging and replaced within the grave as discrete collections of bones.

Coffin furniture: the (often decorated) metal fittings attached to coffins to help carry them and to identify the person inside.

Completeness: how much of an individual skeleton is present. Some bones are more informative about the dead person than others, and the method utilised for TBG scored such bones more highly than others, rather than simply recording the gross proportion of a skeleton that was present.

Disarticulated bone: loose bones disturbed by grave digging and completely disassociated from other parts of their original skeleton.

Funerary remains: a covering term for all remains associated with a human burial, including the bones, coffin, grave monument and grave itself.

Natural deposits: alluvial silts that are undisturbed by human activity. They effectively represent the lower limit of archaeological remains.

Osteologist: a specialist in the study of human bones.

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We are grateful to the guidance provided by Keith Emerick and Andy Hammon at Historic England, and by Ruth Atkinson of the Humber Sites and Monuments Record, and are thankful for the support of Chris Fenwick and Dave Allen, representatives of Holy Trinity Church. Thanks are also due to John Ball for his work and advice during the removal and subsequent reinstatement of the memorial stones, in his capacity as the BRAMM-certified mason, and to Peter Mitchell and Tony McHale for advising on exhumation matters and monitoring the ground investigation works.

The fieldwork was directed by Adam Tinsley, Paul Dunn and Vickie Jamieson, with the assistance of Chloe Brown, Andrew Edwards, Dan Firth, Emma Fishwick, Richard George, Mark Gibson, Marta Golebiewska, Nicola Herring, Shanice Jackson, Debbie Lewis, Adele Lord, Meaghan Mackie, Cath Mackley, Andy Maguire, Aidan Parker, Mike Tennant and Vaughan Wastling. Adam Tinsley and Stephen Rowland compiled the report, with the GI works watching brief written up and illustrated by Richard George and the rest of the drawings produced by Mark Tidmarsh. The project osteologist was Vickie Jamieson, who assessed and reported on the human remains, coffin furniture and gravestones. Further contributions relating to the finds were provided by Chris Howard-Davis. The parasites were assessed by John Carrot at Palaeoecology Research Services. The project was managed by Stephen Rowland, who also edited the report, with specialist advice and quality assurance on the human remains provided by Dr Louise Loe and documentary information and advice provided by Ken Steedman.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 The proposed improvement to the A63, Castle Street, Kingston upon Hull, East Yorkshire, will impact upon part of the historic industrial-period Trinity Burial Ground (TBG; NGR: TA 09420 28377; Fig 1). It will be necessary to remove all funerary remains from just over a third of the area of the burial ground, within a *c* 3,507m² zone of impact (excavation zone) across the northern part of the site. This represents 43.2% of the current, *c* 8,120m², area of the site. Trinity Burial Ground is associated with Holy Trinity Church and is consecrated under the rites of the Church of England. Accordingly, a Faculty was required from the Diocese of York in order to undertake works within the site. To facilitate an application for a Faculty, Mott McDonald Grontmij Joint Venture (MMGJV), on behalf of Highways England (HE), commissioned Oxford Archaeology North-Humber Field Archaeology (OA-HFA) to prepare method statements for works within the burial ground, including one for exhumation and archaeological excavation (OA-HFA and PMA 2014) and another for archaeological evaluation (OA-HFA 2014).
- 1.1.2 Subsequently, HE appointed Balfour Beatty (BB) to undertake the A63 Castle Street Improvement. On behalf of BB, Arup designed a programme of intrusive investigation at the site, including a limited scheme of archaeological works (presented in the document *Highways Agency A63 Castle Street Improvements, Scope of Works for Archaeological Evaluation: Trinity Burial Ground*; March 2015; *Appendix 1*). The investigation adhered to the Scope of Works (Arup 2015) and followed the OA-HFA (2014) method statement and falls within a wider programme of archaeological and exhumation works for TBG (OA-HFA and PMA 2014). These form part of the works required to improve site access and undertake investigative works that would permit a better understanding of the depth of the water table and sequence of the deposits at TBG (Arup 2015).
- 1.1.3 In March 2015 BB commissioned OA-HFA to undertake a programme of advance archaeological works within and around Trinity Burial Ground. Elements of that programme that are reported on in this document comprise:
- surveying, recording and, where feasible, removing and temporarily stockpiling those funerary monuments that lay within the proposed impact zone (undertaken April 2015);
 - monitoring by an archaeologist and an exhumation specialist of geotechnical ground investigation (GI) works within the burial ground (undertaken May and June 2015);
 - a trial-trench evaluation (undertaken July to September 2015); and
 - reinstatement of those grave monuments that had been removed (undertaken September to October 2015).
- 1.1.4 The advance works also included a ground-penetrating radar survey, completed May 2015 and reported upon elsewhere (GSB Prospection 2015).

1.2 SITE LOCATION, TOPOGRAPHY, AND GEOLOGY

- 1.2.1 **Location and Topography:** Trinity Burial Ground is a publicly accessible open space maintained by Hull City Council (HCC) and lies within a Conservation Area. Much of the northern edge borders an extremely busy road (A63, Castle Street), whilst, only 50m beyond the southern edge of the investigation area, there is an active wet dock (the Railway Dock). The interior and the over-grown edges of Trinity Burial Ground contain numerous mature trees that are likely to have extensive root systems. The interior is also occupied by burial monuments in varying conditions and densities. These include a range of styles and forms, including numerous tomb structures. The site is overlooked from several sides: to the north by Castle Street, to the south-east by the Holiday Inn and to the south-west, by the Kingston Retail Park.
- 1.2.2 **Geology and Soils:** the underlying solid geology comprises sedimentary bedrock of the Burnham Chalk Formation (BGS 2015). The overlying drift geology of the area is characterised as alluvial deposits of clay, silt and sand (Cranfield University 2015).
- 1.2.3 **Ground Conditions:** previous GI results (completed prior to December 2013, outside the burial ground; OA-HFA 2014b) indicate that the upper deposits around the burial ground perimeter comprise over a metre of made ground and it is likely that such material has contributed to the raised level of the surrounding streets. This reversal of a common situation, whereby intensive burial and importation of soil into the graveyard increases the height of the burial ground surface, implies that there is rather less made ground within Trinity Burial Ground itself. Indeed, the programme of GI works undertaken within TBG (*Section 4*) identified only relatively (up to 0.4m thick) deposits of made ground beneath the topsoil within localised parts of the site. Below these deposits, the GI works identified a horizon of disturbed clay, up to 2m thick, which in turn sealed various alluvial deposits. These were up to 12m thick, and become increasingly saturated and unstable at depth. Groundwater within TBG was encountered at a depth of *c* 2.2m below the modern ground level.

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 1.3.1 The wider scheme of improvement to the A63 has been the subject of several desk-based studies and investigations (YAT 1994; 1995; Pell Frischmann 2010), the latest of which has culminated in a deposit model (OA-HFA 2014b). A detailed background to the Trinity Burial Ground, including a limited programme of documentary research and a review of the Holy Trinity Parish Burial Register, is presented in *Method Statement for Exhumation and Archaeological Removal of Burials* (OA-HFA and PMA 2014). These reviews should be consulted for a detailed background to the project and the wider archaeological resource. A synopsis of the most pertinent information has been collated from those documents and is presented in the following sections.
- 1.3.2 Trinity Burial Ground at Castle Street opened in 1783, following the recognition that the original graveyard at the medieval Holy Trinity Parish Church, in the Market Place, had reached capacity and could not be expanded. The Holy Trinity Parish burial registers record the interment of 44,041 individuals between 1783 and 1861, the latter date indicating the point when

Trinity Burial Ground on Castle Street had also become full (indeed, the sole burial to take place in 1861 was undertaken with the permission of the Secretary of State after the burial ground was officially closed on 31st December 1860). These parish registers are thought to provide the most accurate information concerning the number of burials likely to have been made at the site, although it should be considered that not every individual documented therein was actually buried at Castle Street. For example, it is likely that burials continued to be made within vaults and family plots at the original Holy Trinity graveyard in the Market Place until those facilities were full. It is not possible to provide an estimate of such numbers, as the registers are not annotated with the location of individual burials.

- 1.3.3 The interment of 44,041 individuals across a period of around 80 years is neither unexpected nor unprecedented, given the exponential increase in the town's population (from 22,161 in 1801, to 65,670 in 1841; Allison 1969) and a mortality rate that was about 2% (on the basis of 732 burials among a population of 36,293 in 1831; Gawtress 1834, 376). Whilst Holy Trinity was only one of Hull's two urban parishes, it would appear to have been the larger (at 900 acres) and to have comprised both the southern part of the densely populated Old Town and much of the area to the west, including areas of rapid urban expansion. Conversely, the 60 acres of St Mary's parish were restricted to the northern part of the Old Town.
- 1.3.4 With the exception of desk-based studies, the only work that is known to have been undertaken in Trinity Burial Ground is a record of the grave monuments, undertaken by the East Yorkshire Family History Society in 1982 (EYFHS 1985). This included a sketch plan of the 533 monuments then extant at the site, and recorded their inscriptions. It is generally considered that those recorded on the extant gravestones represent only a proportion of those interred at Trinity Burial Ground, and that many areas that were devoid of gravestones in 1982 were still likely to contain burials. The inscriptions frequently record multiple individuals, and it is likely that many, if not most of the graves at the site contain several interments stacked one above the other, as was common practice, and frequently observed at contemporary sites. There was no prior information relating to the depth to which burial may have taken place, but it is not uncommon for burial activity at contemporary sites to reach four or five metres below the modern ground surface.

2. METHODOLOGY

2.1 METHOD STATEMENT

- 2.1.1 The Historic England- and HSMR-approved Arup *Scope of Works* was adhered to as fully as possible throughout the programme of investigation, and all variations were agreed with BB, Arup and MMGJV prior to implementation. Close liaison was maintained with all stakeholders throughout the investigation, with weekly reports provided and on-site communication maintained with BB representatives. In addition, BB, Arup, HE, MMGJV, Historic England, and HSMR representatives undertook regular monitoring visits to the site. The principal variations related to the dimensions and depths of the trenches, as outlined in *Section 2.2*. All works met current CifA and Historic England standards, and generally accepted best practice (CifA 2014a; 2014b; 2014c; English Heritage 2006).
- 2.1.2 **Key aims and objectives:** the overall aim of the investigation was to further an understanding of the character of the archaeological remains within the burial ground so that the scope, scale, costs and programme for the main archaeological works and exhumation can be worked into the overall scheme programme.
- 2.1.3 The survey and record of the extant grave memorial structures aimed to:
- 1 record accurately their current positions and physical characteristics, including decorations and inscriptions;
 - 2 remove and stockpile the monuments in accordance with the standards and guidance of the British Register of Accredited Monumental Masons (BRAMM); and
 - 3 return structurally sound monuments to their original locations at the completion of the works.
- 2.1.4 The archaeological and exhumation watching brief was maintained during GI work in order to:
- 4 record and recover (as appropriate or lawful) archaeological and funerary remains disturbed during the excavation of inspection pits;
 - 5 record information that would assist with the finer strategy of the trial-trench evaluation, including exact placement and depth of investigation;
 - 6 identify broadly any funerary remains (including soft tissue) recovered in borehole samples and ensure that these are accurately recorded on the borehole logs;
 - 7 provide appropriate advice to GI workers and other attendant staff during the works, particularly where human soft tissue is recovered/identified; and
 - 8 Dispose of any such material in an appropriate manner during the programme of GI works.

- 2.1.5 Within the safe and practical limits of investigation, the trial-trench evaluation sought to address the following aims:
- 9 the depth below the modern ground surface of the uppermost burials;
 - 10 the horizontal distribution and density of the burials;
 - 11 the condition and completeness of skeletons, and the preservation of key indicators for basic osteological analysis;
 - 12 the extent of waterlogging, and its influence on the preservation of organic materials;
 - 13 the presence and condition of funerary fixtures and fittings (ie, coffin remains, personal items, clothing, *etc*) within the depth of investigation, particularly with regard to items such as coffin plates, which could be used for positive identification of human remains;
 - 14 the presence and condition of buried gravemarkers; and
 - 15 the position of any fleshed, or part-fleshed remains that could not be dealt with archaeologically.

2.2 MEMORIAL SURVEY, REMOVAL AND REINSTATEMENT

- 2.2.1 ***Removal and survey of burial monuments:*** the location of all visible memorial stones and other forms of grave markers, such as crypts or tombs, within the hoarded works area (which included the impact zone and a substantial margin; Fig 2), was initially surveyed and fixed relative to OS grid coordinates using a total station (Leica TST1200). A high-resolution digital photographic record was taken of each monument *in situ*, and a detailed appraisal of its type, form, condition, and surface detail was recorded on *pro-forma* sheets following Council for British Archaeology guidance (CBA; Mytum 2000). Each monument, or fragment thereof, was distinguished by the attachment of a label displaying its unique number, in order to facilitate identification during reinstatement.
- 2.2.2 Upon completion of the survey, designated monuments, directly within the area of the trenches and spoil areas, as well as potentially impeding lines of access across the site, were removed to a place of temporary storage for the duration of the works. Removal of monuments was undertaken by a BRAMM-accredited mason, assisted and monitored by an archaeologist and additional ground staff provided by Balfour Beatty. This involved the manual excavation and exposure of the footings of each monument, after which the stone was lifted using a fixed gantry system to safely support the weight. The monument was then transferred to a storage point using a wheeled trolley, where it was stacked in an orderly fashion, each supported and raised using wooden spacer blocks.
- 2.2.3 ***Grave monument spreadsheet:*** the results of the survey were entered onto a spreadsheet (*Annex A*) which also included a transcription of the information recorded by the EYFHS survey (1985). Where possible, monuments recorded during the two phases of work were equated.
- 2.2.4 ***Reinstatement of the monuments:*** the original location of individual monuments was marked out using a total station and facilitated by the data

generated during the initial survey. In a limited number of cases individual monuments could not be returned to their original position due to the presence of geotechnical monitoring stations and the need to maintain a 2m exclusion zone in their vicinity. A new position was therefore selected for each monument, as close to their original position as possible, and the subsequent location was re-surveyed.

- 2.2.5 Reinstatement involved the excavation of a trench or wider shallow recess, depending whether the monument originally stood upright or lay flat. This was cut to a suitable depth with the aid of a mechanical excavator monitored at all times by an archaeologist. Where the use of a machine was not possible or prudent, excavations were undertaken by hand. Individual monuments were then retrieved from the storage area and returned to the recipient locations under the direction of the BRAMM-accredited mason. Where monuments above a certain height were returned to an upright position, they were secured with the use of a purpose-cast concrete shoe, the design of which was certified as suitable by the BRAMM mason. In a limited number of instances, where the monument possessed its own stone footing, which negated the use of the concrete shoes, the footing was drilled and fitted with steel rods before being set within a sufficiently thick base of quick drying concrete. Monuments returned to a flat position were bedded so that the edges of the stone did not protrude above the excavated recess, in order to minimise the risk of creating potential trip hazards. All such excavations were then backfilled and compacted around individual monuments.

2.3 GEOTECHNICAL INVESTIGATION: WATCHING BRIEF

- 2.3.1 In total, ten GI test pits and boreholes were excavated within the burial ground (Fig 2). Wherever possible, these were placed to minimise impact to burials by considering above-ground evidence and by placing the pits to the rear of extant headstones (ie, to the west of where a burial might be expected). A watching brief was maintained by an archaeologist and by an exhumation supervisor during the initial stages of invasive ground investigation. This included the excavation of test pits and of more shallow borehole extraction (down to the depth at which the Arup geologist was confident that natural geological deposits were consistently being reached, or once closed cores (ie, those that could not be examined in the field) were being extracted). Monitoring was undertaken by a suitably experienced exhumation supervisor and a qualified archaeologist in accordance with industry guidance and best practice (CIfA 2014c).
- 2.3.2 Borehole test pits were initially excavated under direct archaeological supervision, to a depth of 0.3m below ground level (bgl) using a mechanical excavator with a toothless ditching bucket. A 0.45m toothless bucket was then used to dig a pit, large enough for the borehole sleeve, down to a depth of 1.2m bgl. The resultant spoil was examined and any funerary remains, human or artefactual, along with other archaeological finds, such as pottery, were recovered, bagged and labelled accordingly. If *in-situ* human remains were visible in the base of the pit, the sleeve was positioned to cause as little damage as possible. Through this methodology, and by the careful placement of the test pits themselves (*Section 2.3.1*), the vast majority of the boreholes

avoided impacting upon any *in-situ* remains. The test pits were then backfilled securing the borehole sleeves in position.

2.3.3 During the borehole excavation, loose core material was collected for examination for funerary remains by the exhumation supervisor and archaeologist. Any such materials were removed prior to passing the soil to the GI team. All human remains from the watching brief were placed in opaque bags and retained on site in a dedicated container awaiting reinterment following completion of the fieldwork.

2.4 TRIAL-TRENCH EVALUATION

2.4.1 **Trench configuration:** in all, four trenches were excavated during the programme (Fig 2):

- Trench A: placed at the heart of the impact zone within an area that, according to the EYFHS survey (1985) was occupied by headstones in 1982. As such, it is an area that, on the basis of the EYFHS survey, appears fairly typical of the western half of the impact zone;
- Trench B: placed close to the north corner of the impact zone, close to a historic path and an area where table tombs and other such high-status burial monuments remain extant;
- Trench C: placed in the south-eastern part of the impact zone, within an area that appears to have contained no memorials in 1982. Given the proximity of this area to the former gaol and to industrial buildings, as well as to structures that some cartographic sources seem to place within the area of the burial ground, this trench has the potential to reveal funerary remains that might be of a different character from those that might be found in Trenches A and B;
- Trench D: placed just to the west of the far north-eastern corner of the impact zone within the area thought to have been occupied by a mortuary. The primary aim of this trench was to establish whether or not that part of the site had been used for burial.

2.4.2 Trenches A-C were placed to develop a better understanding of the overarching burial regime. Each trench was aligned on the same general north-east/south-west axis of the burial ground, as reflected by the alignment of the extant grave monuments, and as presumed to be adhered to by the constituent burial plots. Each trench was originally intended to be excavated to an initial depth of no more than 1m bgl over an area of 10m north-east/south-west by 5m. Below this point it was then intended that each trench would be stepped in on all sides by the dimensions of up to one complete grave plot (assuming that such a plot would measure 2m north-east/south-west by 1m). Further excavation to a maximum depth of 2m bgl would then take place across an area 6m north-east/south-west by 3m. If necessary, the trench would then be stepped a second time so that it focussed on a single grave plot measuring 2m north-east/south-west by 1m. However, the position, depth and dimensions of individual trenches varied slightly as a result of prevailing ground conditions, as well as ongoing assessment of the evaluation results relative to the goals of the project. These variations were communicated to the stakeholders at the

time of implementation and are presented in relation to the individual trench results below.

- 2.4.3 The fourth trench was positioned within the north-east corner of the burial ground, parallel with and 2m from the northern boundary. It was to measure 15m north-east/south-west by 2m, with a maximum depth of no more than 1m. In the event, the need to maintain the principal entrance and site access, as well as the findings from the trench itself (*Section 5.5*), meant that the trench was excavated to a length of 12m.
- 2.4.4 **Methodology:** the positions for Trenches A-C were set out by BB, and a scaffold tent was erected by specialists at each location. These structures were intended to visually screen the trenches and associated exposure of human remains from outside access, both from the casual onlooker, but also from any intentional potential photographic incursion using devices such as remote-controlled drones. They also provided shelter from the elements, allowing excavations to be unhindered by adverse weather conditions.
- 2.4.5 The uppermost deposits within each trench were excavated in spits not exceeding 0.1m thickness, using a hydraulically powered mechanical excavator, fitted with a toothless ditching bucket and operating under the supervision of a suitably qualified and experienced archaeologist. In the interests of preserving the condition of the site, an 8-ton 360° excavator with rubber tracks was used. Topsoil and subsoil were removed and banded separately as mechanical excavation continued to the top of the burial horizon, at which point all subsequent excavation of archaeological deposits was by hand. All arisings were examined for disarticulated human remains and any such material was retrieved, bagged, labelled and safely stored, pending examination and ultimately, reburial.
- 2.4.6 Mechanical reduction of Trenches A-C exposed buried fragments of several memorials, including *in-situ* examples. In addition, substantial brick-built vaults were revealed within Trench B. These features were surveyed, recorded and, in the case of the memorial stones, removed to storage areas before excavations could progress. The vaults were left *in situ* and carefully exposed as the excavation developed.
- 2.4.7 **Recording:** findings were recorded stratigraphically on OA North *pro-forma* sheets, using a system adapted from that used by what was formerly the Centre for Archaeology Service of English Heritage (now Historic England), with suitable accompanying graphic documentation. An indexed photographic record of individual contexts, feature groups, and overall trench shots from standard viewpoints, was maintained using high-resolution digital photography, and the inclusion of a visible, graduated metric scale where safe to do so.

2.5 HUMAN REMAINS ASSESSMENT

- 2.5.1 For various reasons, including efficiencies on site, human remains were not removed from site. Full use was made of the on-site osteology laboratory, but there were practical limitations to the extent that funerary remains could be cleaned on site. All anthropological and palaeopathological observations were made by rapidly scanning each skeleton. While these observations provide adequate guidance to the potential of the material for further work, by their

very nature they do not represent, in themselves, an adequate platform for detailed analysis.

2.5.2 The aim of the on-site examination of the skeletal remains was to assess the potential for data to examine the following:

- Condition and completeness (McKinley 2004);
- Biological sex and age (Brickley and McKinley 2004; Bedford *et al* 1993);
- Metrical and conformation analysis (Trotter 1970; Bass 1987);
- Non-metric traits (Saunders 1989; Tyrell 2011);
- Palaeopathology (Aufderheide and Rodriguez-Martin 1998; Hillson 1996 and Ortner 2003); and
- The significance of the assemblage, considering the results of the above in the context of other populations that are similar in date and type (Roberts and Cox 2003).

2.5.3 All skeletons were examined in accordance with national guidelines for producing assessment reports (Mays *et al* 2002). This involved assessing the completeness and condition of the skeletons with particular reference to certain landmarks that may be used to establish biological parameters and explore health status.

2.5.4 Completeness was estimated by recording, as a percentage, how much of the skeleton had survived, with the percentages weighted in favour the most analytically significant elements (such as the skull and pelvis) and assigning it to one of the following categories:

- 1 = <25% complete
- 2 = 25-50% complete
- 3 = 50-75% complete
- 4 = >75% complete

2.5.5 Where the percentage values are weighted towards the more analytically significant elements (rather than just skeleton representation as a whole), it is considered that individuals that are assessed to be more than 25% complete should be suitable for analysis during the enacting of a selective sampling strategy. There will of course be variations, and selection for analysis should also consider the full suite of assessment data for each individual skeleton.

2.5.6 The condition of the bone was assessed according to the degree of erosion of the bone surface and how much of the epiphyses (the ends of the bones) and cancellous bone (the spongy bone that is beneath the dense outer layer) had survived. Based on these factors, skeletons were assigned to one of the following categories used by Brickley and Mckinley (2004):

Grade 0: Surface morphology clearly visible with fresh appearance to bone and no modifications;

Grade 1: Slight and patchy surface erosion;

Grade 2: More extensive surface erosion than grade 1 with deeper surface penetration;

Grade 3: Most of the bone surface affected by some degree of erosion; general morphology maintained but detail of parts of surface masked by erosive action;

Grade 4: All of the bone surface affected by erosive action; general profile maintained and depth of modification not uniform across whole surface;

Grade 5: Heave erosion across whole surface, completely masking normal surface morphology, with some modification of profile; and

Grade 5+: As grade 5 but with extensive penetrating erosion resulting in modification of profile.

- 2.5.7 The potential of the skeletons to yield information relating to age and sex was estimated by determining if the appropriate skeletal elements were present to employ standard methods (Brickley and McKinley 2004).
- 2.5.8 The skeletons were also assessed for their potential to yield metrical data, in particular that which would allow stature estimation and that which would facilitate age estimation for sub-adults and sex-estimation for adults. Stature may be estimated from human skeletal remains by applying the maximum length of complete long limb bones to the regression equations set out by Trotter and Gleser (1952; 1958 and revised by Trotter 1970). Bones that were used for stature, in order of preference (ie starting with the bone with lowest error margin) were femur, fibula, humerus/radius (humerus over radius in males, vice versa for females), and ulna, with the left side used in preference over the right.
- 2.5.9 Other observations pertaining to metrical assessment involved noting which skeletons had sufficiently preserved bones, in particular crania that will facilitate comparisons between individuals and groups. This may indicate factors such as ethnic affinities, regional micro-evolution, and biological distance, particularly when combined with the chemical analysis of the bones and teeth.
- 2.5.10 An assessment of the potential for the skeleton to yield non-metrical data was undertaken, with observations recorded of all standard cranial and post-cranial sites.

2.6 COFFIN REMAINS

- 2.6.1 The study of post-medieval funerary furniture is relatively recent and the majority of the material relating to this study has been generated through mass exhumation of cemetery sites. These have been undertaken by archaeologists or cemetery clearance companies within the last twenty years and, while information generated by the clearance companies adds a useful perspective to the study, the work itself is generally carried out in a much less meticulous and accurate manner, providing little scope for assessing the material remains in a stratigraphic context.
- 2.6.2 Reeve and Adams (1993) generated the principal reference work for post-medieval coffin furniture as a result of their work conducted at Christ Church Spitalfields. In more recent years, Oxford Archaeology has systematically recorded various assemblages of coffins and their associated furniture from many post-medieval sites, including those from St George's Church, Bloomsbury (Boston *et al* 2009); St Luke's Church, Islington (Boyle *et al* 2005); St Nicholas' Church, Sevenoaks (Boyle 1995); St Bartholomew's, Penn, Wolverhampton (Boyle 2002); and The Quaker Burial Ground, Hemingford Greys, Cambridgeshire (Clough 2007). In the North of England,

these include Coronation Street, South Shields (Boston forthcoming), Redearth Road, Darwen (OA North 2011) and Swinton Unitarian Burial Ground (Raynor forthcoming). Other sites that should be drawn into consideration include the St Pancras burial ground, where a suite of well-preserved coffin furniture was recovered (Emery and Woolridge 2011).

- 2.6.3 Using the taxonomy compiled from both the Spitalfields and available Oxford Archaeology data, a typology was generated through the recording of the coffins and fixtures retrieved from Trinity Burial Ground. All coffins and associated furniture were recorded using *pro-forma* record sheets and then compared to the existing catalogues.

2.7 PARASITES

- 2.7.1 At the request of Historic England, soil samples were taken from the abdominal areas of a selection of burials from each of evaluation Trenches A-C. The samples were examined for the eggs of intestinal parasites and other microfossils using the ‘squash’ technique of Dainton (1992); although primarily for the detection of parasite eggs, the ‘squash’ technique routinely reveals other microfossil remains, such as diatoms and pollen grains/spores, and, if present, these were also noted. Slides were scanned at x150 magnification, with x600 employed where necessary.

2.8 ARCHIVE

- 2.8.1 The data from the investigation has been collated to form a full archive, in accordance with Historic England guidelines (*Management of Archaeological Projects*, 2nd edition, English Heritage 1991, Appendix 3). OA North will deposit the original record archive (paper, magnetic and plastic media) with the East Riding of Yorkshire Archive Service. A digital copy of the archive will be submitted to HE and BB. The small number of non-funerary artefacts recorded during the works were re-interred with the human remains from each trench, as per the requirements of the Faculty.

3. MEMORIAL STONE SURVEY, REMOVAL AND REINSTATEMENT

3.1 OVERVIEW

- 3.1.1 In total, 303 memorials (or fragments thereof) were recorded and surveyed during the works (*Section 2.2*; Table 1; Fig 2). The predominant monument type comprised headstones (253 examples recorded), of which 110 were still upright (the remainder had been laid flat). In addition, 30 tombs/vaults, five ledgers (large flat stones), one hog-back memorial (**1229**; Plate 1), and one grave marker were also recorded. A full summary of the monuments is presented in digital *Annex A*.
- 3.1.2 The EYFHS survey (1985) recorded 542 memorials within the burial ground, of which perhaps 279 lay within the proposed excavation area (an exact figure is difficult to reach due to the nature of the hand-drawn plan that accompanies the 1982 survey). Up to 101 of those 279 monuments are no longer visible/extant, although that figure must include many, if not all, of the 20 monuments within the proposed excavation area that were recorded in the current survey but which could not be directly equated with monuments recorded in 1982. A further nine unequated monuments were recorded outside the proposed excavation area in 2015, while it is likely that many of the 167 monuments recorded in 1982 and which were not found in 2015 lie to the south of the hoarded area of the current works site.

Memorial Type	Within Impact Zone		Outside	Total of monuments
	Monuments	Individuals commemorated	Monuments	
Upright headstone	91	172	19	110
Lying down headstones	73	86	71	144
Tomb/vault	21	66	9	30
Flat ledgers	1	0	4	5
Grave marker	1	1	0	1
Hog-back memorial	0	0	1	1
Fragments	11		0	11
Unidentified/incompletely exposed			1	1
<i>Total recorded 2015</i>	<i>198</i>	<i>325</i>	<i>105</i>	<i>303</i>
Recorded in 1982, but no longer visible/extant	101	175	167*	268
Grand total	299	499	272	571

Note: the 167 gravestones recorded in 1982 that lies outside of the excavation area include stones to the south of the current hoarded works area

Table 1: Memorial types



Plate 1: Memorial 1229, hog back-style gravestone

3.2 CHARACTER OF THE MEMORIALS

- 3.2.1 **Form and materials:** the memorials, while differing in size, primarily comprised headstones and horizontal ledgers, with sandstone being the predominant material, although memorial *1077* appeared to have been of a concrete-like material (Plate 2). The tombs/vaults were constructed of red bricks bonded with a lime mortar and had a large sandstone capstone on the top inscribed with the deceased individual's details. Occasionally the tombs had an additional structure on the top, providing a more elaborate memorial such as tomb *1245* (Plate 3).



Plate 2: Memorial stone 1077



Plate 3: Tomb 1245

- 3.2.2 Of the 254 headstones recorded within the burial ground, a total of 16 different shapes/forms were observed. Out of these, 12 could be assigned a classification shape according to the work of Mytum (2000). The remaining four were of a differing form not assigned to a particular classification. The most common shape, with 74 examples recorded, was of a flat top headstone with semicircular central feature and concave shoulders (Plate 4), Mytum's (2000, 112, fig 81) classification 5107, which is an extremely widespread form across the British Isles. The next most common form was of a headstone with a concave pointed top with convex shoulders, classification 4806 (Mytum 2000, 111, fig 80). Fifteen headstones could be equated with two contemporary forms identified at St Pancras, London (12 examples of SP3699 and three examples of SP3672; Emery and Wooldridge 2011, 160, fig 124). There were also 20 headstones in 12 styles (TBG1-12) that could not be classified according to Mytum or St Pancras comperanda (although further research may indicate that they are not necessary unique to TBG; *Section 6.4*).



Plate 4: Memorial 1194, form classification 5107



Plate 5: Memorial stone 1060 with a carving of a dove

- 3.2.3 ***Inscriptions and motifs:*** several of the memorials had symbols inscribed on them. These included a dove, often symbolising innocence or purity (Yorke 2014, 44; Plate 5), and an anchor, generally a symbol of hope and unsurprisingly often found on the gravestones of mariners. This provides the individuals buried with a link to the shipping industry in Hull. One of the memorial stones (**1012**) had hand with a heart in the centre carved at the top of the grave stone (Plate 6). This symbol is often associated a group known as The Shakers, a religious sect branching away from the Quaker community. Other trades and occupations are also evident within Trinity Burial Ground, such as that of William Watkinson (memorial **1007**) who was an engineer with shipping builders Messrs Brownlow & Pearson. William died when a boiler he was working on slipped and killed him. Part of the boiler can be seen used as an inscribed plaque embedded in his actual memorial stone (Plate 7).



Plate 6: Memorial stone 1012 with a carving of a heart in a hand



Plate 7: Memorial stone 1007 with a copper plate derived from a boiler

- 3.2.4 Stonemason's marks were recorded on a total of 12 memorial stones. One of the most clear was on grave stone **1028**; carved down the south-east edge of the stone was 'J. LEGCOTT, HULL.' (Plate 8), this can give an insight into local craftsmanship at the time the burial ground was in use. This particular stone was carved in 1860, the year the burial ground was officially closed.



Plate 8: Memorial stone 1028 with stonemason's mark

3.3 DEMOGRAPHIC DATA

- 3.3.1 The inscriptions on the memorials recorded indicate that the marked plots are generally family plots. A small number of headstones recorded only single individuals, for example memorial **1005**, commemorating 25-year-old Thomas Watson (died 1793), and memorial **1041**, commemorating 75-year-old Margaret Hill (died 1832), but on the majority there were multiple entries. One memorial (**1001**) recorded 16 individuals, the maximum number observed during the survey, strongly suggesting that most plots may have been filled to capacity, with 'stacks' of coffins within each grave cut. It is particularly telling that a handful of memorials are dedicated solely to children, including those of the Cart family (memorial **1244**), of which the eldest was 16 years and the youngest three weeks at the time of death.
- 3.3.2 Although it is difficult to establish what proportion of the original memorials the extant sample represents, they provide a valuable insight into the population demographic and mortality rates in Hull between 1784-1861. Variations in memorial style may be linked to ethnicity, religion, social structures, cultural norms, and practical factors such as geology. These local variations are important and are worthy of further study (Mytum 2006, 103). To date, post medieval mortuary archaeology has usually focused on gravestones across single sites or single excavated cemeteries, so comparative studies are still reasonably uncommon.

4. GI WORKS WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 In total, ten boreholes (BH301-310) were observed within the boundary of the burial ground (Fig 2). The basic results are summarised in Table 2 and illustrated on Figure 3, with more detailed observations presented in *Section 4.2*. No soft tissue remains were identified during the works.

Test pit	Human remains	Natural deposits	Notes
301	0.7-2.5m	2.5m+	
302	0.3-1.4m	2.2m+	Articulated remains at 1.15m bgl
303	1.2-1.8m	2.0m+	
304	1.15m	1.8m+	Articulated remains at 1.15m bgl
305	None	1.2m+	
306	1.2m	2.04m+	Redeposited disarticulated bone at more shallow depth in service trench
307	1.05-2m	2.1m+	Articulated remains at 1.05m bgl
308	0.98m	2.15m+	Articulated remains at 1.1m bgl. Demolition debris 1.3-1.7m bgl
309	None	0.6m+	
310	1.2-1.3m	2m+	Brick structural remains at 1.7-2m bgl

Note: Measurements are depths below the modern ground surface

Table 2: Summary of depths at which human remains and natural deposits were observed during the GI works watching brief

4.2 RESULTS

- 4.2.1 **Borehole 301:** was located towards the north-western corner of the burial ground. It was moved approximately 3.3m to the east of the original borehole location and was positioned directly to the rear (west) of a previously removed headstone to minimise disturbance to the existing burials. The test pit was aligned east/west and measured 1.9m by 1.3m. The uppermost deposit encountered was a 0.2m-thick layer of black, loamy topsoil. This overlay a compact, mixed brown clay with fragments of brick and mortar inclusions. A 1.2m by 0.7m pit was then excavated in the south-west corner to a depth of 1.2m bgl for the insertion of the borehole sleeve. The mixed brown clay discussed above, was seen in the base of the 1.2m-deep pit. Displaced fragments of human bone were recovered from a depth of 0.7m bgl to 1.2m bgl.
- 4.2.2 During borehole drilling further fragments of human bone were recovered to a depth of 2.5m bgl, where the mixed brown clay changed to a more compact, laminated clay, which may have been the natural geology. A single iron coffin nail was recovered. Due to the methodology of the geosonic drilling, which produces sealed cores, none of the lower deposits were observed.
- 4.2.3 Several fragments of bone were recovered from closed cores from this sample at a depth of *c* 4m bgl. Examination of the bone indicated that it was freshly broken, and the condition and colour was consistent with bones from higher in the stratigraphic sequence, rather than what might be expected of bone

deposited within the anaerobic fine grey alluvial deposits. Consequently, it is considered to have entered the sample as a result of vibration, and not to derive from *in-situ* remains at 4m bgl.

- 4.2.4 **Borehole 302:** was located towards the western part of the burial ground. It was moved approximately 1.8m to the north of the original borehole location and was positioned directly to the rear (west) of previously removed headstone **1006**, to minimise disturbance to the existing burials. The test pit was aligned north-south and measured 1.9m by 1.4m. The uppermost deposit encountered was a 0.26m-thick layer of black, loamy topsoil. This overlay a compact, mixed brown clay with fragments of brick and mortar inclusions. A 1.1m by 0.75m pit was then excavated in the south-east corner to a depth of 1.2m bgl for the insertion of the borehole sleeve. The mixed brown clay discussed above was seen in the base of the 1.2m-deep pit. Disarticulated fragments of human bone, including baby ribs, were recovered from a depth of 0.3m bgl and the articulated feet of the extant burial to the west were encountered at a depth of 1.15m bgl. Some decayed wood fragments were probably coffin remains. The distance between the rows of burials was 0.7m.
- 4.2.5 During borehole drilling human bone was still visible at a depth of 1.2m bgl and a fragment of human bone was recovered down to a depth of 1.4m bgl. Natural laminated sandy clay was encountered at 2.2m bgl and grey alluvial silt lay at 2.6-2.7m bgl.
- 4.2.6 **Borehole 303:** was located towards the northern edge of the burial ground. It was moved approximately 5m to the west-south-west of the original borehole location and was positioned directly to the rear (west) of previously removed headstone **1019** to minimise disturbance to the existing burials. The test pit was aligned north/south and measured 2.25m by 1.9m. The uppermost deposit encountered was a 0.28-0.3m-thick layer of black, loamy topsoil. This overlay a compact, mixed brown clay with fragments of brick and mortar inclusions. A 1.4m by 0.8m pit was then excavated towards the north-east corner down to a depth of 1.2m bgl for the insertion of the borehole sleeve. A brown clay was seen in the base of the 1.2m-deep pit. Some disarticulated human bone was recovered.
- 4.2.7 During borehole drilling a small number of fragments of human bone were encountered between a depth of 1.2-1.8m bgl and the hard dry, clean, brown laminated sandy clay was seen at 2m bgl. This changed to grey alluvial silt at a depth of between 2.7-3.1m bgl.
- 4.2.8 **Borehole 304:** was located towards the centre of the northern half of the burial ground. It was moved slightly to lie directly to the east of the original borehole location. The test pit was aligned approximately north/south and measured 2m by 1.3m. The uppermost deposit encountered was a 0.2m-thick layer of black, loamy topsoil. This overlay a compacted clay, gravel and brick rubble layer that was on average 0.3m thick. In the north-east corner the brick rubble infilled a hollow to a depth of 0.65m. Underlying the gravel and brick rubble layer was a mixed brown clay with small fragments of brick inclusions. A 1.5m by 0.65m pit was then excavated in the north-east corner to a depth of 1.2m for the insertion of the borehole sleeve. The mixed brown clay discussed above was seen in the base of the 1.2m-deep pit. *In-situ* articulated human bones and coffin furniture were encountered at a depth of 1.15m bgl.

- 4.2.9 During borehole drilling, no further human bones were recovered down to a depth of 1.8m bgl, where the clean brown clay and sand was encountered. The grey alluvial silt was encountered at c 3.05m bgl.
- 4.2.10 **Borehole 305:** was located towards the northern part of the burial ground, to the south of the main entrance. It was moved approximately 2.2m to the east of the original borehole location, which had been placed above the entrance path and a number of services, including a drain and electric cable. The new position lay 0.63m to the east of the eastern kerb of the pathway and was adjacent to the rear (west) of an extant headstone stump to minimise disturbance to the existing burials. The test pit was aligned east/west and measured 1.6m by 0.6m. The uppermost deposit encountered was a 0.3m-thick layer of black, loamy topsoil. This overlay a compact brown clay. Excavations progressed to a depth of 1.2m bgl for the insertion of the borehole sleeve. An undisturbed, clean, brown clay, was seen in the base of the 1.2m-deep pit. No human bone was recovered.
- 4.2.11 During the geosonic borehole drilling the clean, brown laminated clay was seen to change to grey alluvial silt at a depth of between 3.5-4m. A clean cut-off point was difficult to see due to the cores being viewed in plastic sleeves. The grey alluvial silt was still present at 6m down. Again no human remains were encountered.
- 4.2.12 **Borehole 306:** was located towards the centre of the eastern part of the burial ground. It was moved approximately 2.5m to the south-east of the original borehole location. The test pit was aligned north/south and measured 2.7m by 2.6m. The uppermost deposit encountered was a layer of black, loamy topsoil with some black cinder. This was 0.3m thick over the southern half of the trench where it overlay a mixed brown clay, but was only 0.15m thick over the northern part of the trench where it sealed what appeared to be a 0.2m-thick layer of brick and concrete demolition rubble. This may have formed the foundation for a path. The southern part of the trench was then reduced to a depth of 0.55m. A central east/west slot, 0.7m across, was then excavated across the trench to a depth of 0.84m bgl. Two roughly parallel, backfilled service trenches were noted running in a west-north-west/east-south-east direction across the trench. The northernmost was 0.75m wide and was thought to be a sewer pipe or drain, whilst the southernmost was 0.3m wide and was considered to be a disused gas pipe. Both these services were encountered to the east in BH309 (*Section 4.2.18*). An electric cable seen in the north-west corner of the trench appeared to loop round and continue in a northerly direction. A 1.3m by 0.8m pit was then excavated in the north-west corner to a depth of 1.2m bgl for the insertion of the borehole sleeve. The mixed brown clay discussed above was seen in the base of the 1.2m-deep pit. Disarticulated fragments of human bone were recovered from backfills of the service trenches.
- 4.2.13 During borehole drilling a small amount of human bone was recovered at a depth of 1.2m bgl, as were a number of fragments of ceramic services pipe. The clean laminated clay and sand was encountered at a depth of 2.04m bgl and the grey alluvial silt lay a depth of 3.2m bgl.
- 4.2.14 **Borehole 307:** was located towards the eastern edge of the northern part of the burial ground. It was moved approximately 3m to the west of the original

borehole location to avoid the unstable northern boundary wall. It lay directly to the east of removed headstone **1246**. The test pit was aligned east/west and measured 2.6m by 2.4m. The uppermost deposit encountered was a 0.25m-thick layer of black, loamy topsoil. This overlay a mixed brown clay with brick fragment inclusions. A 1.6m by 1.4m pit was then excavated through this clay in the south-west corner for the insertion of the borehole sleeve. This was halted at a depth of 1.05m bgl when the *in-situ* remains of two burials lying side by side were encountered. Some fragments of bone and an iron coffin nail were recovered from these burials. The borehole sleeve was positioned in the north-west corner of this pit, partially overlying the northernmost burial.

- 4.2.15 During borehole drilling human bone was encountered at both 1.5m and 2m down. The natural laminated sandy brown clay lay at 2.1m and the grey alluvial silt at 2.6m.
- 4.2.16 **Borehole 308**: was located towards the north-eastern corner of the burial ground. It was moved approximately 9.4m to the west-south-west of the original inaccessible borehole location and was positioned directly behind (to the west of) an extant headstone stump to minimise disturbance to the existing burials. The test pit was aligned north/south and measured 2.4m by 2.3m. The uppermost deposit encountered was a 0.25m-thick layer of black, loamy topsoil. The eastern part of the test pit was only excavated to a depth of 0.15m bgl, which did not remove all the topsoil. The western part of the test pit was excavated to 0.25m bgl to reveal the underlying mixed brown clay with brick fragment inclusions. A 1.6m by 1.4m pit was then excavated through this clay in the north-west corner for the insertion of the borehole sleeve. Infant bones, which were probably *in situ*, were encountered at a depth of 0.98m bgl, and articulated adult feet bones were encountered down to a depth of at least 1.1m bgl. The borehole sleeve was positioned to the north of these remains.
- 4.2.17 During boring a deposit of mixed brown clay, containing small fragments of brick and tile, was seen between depths of 1.3-1.7m bgl. This was not the natural underlying clay and may have been a grave fill. However, no human bones were recovered from the cores through this deposit. A mottled brown and grey clay with fine sand laminations and some root disturbance was encountered at a depth of between 2.15-2.6m bgl. This lay above the grey alluvial silt which was encountered at a depth of 3.2m bgl.
- 4.2.18 **Borehole 309**: was located towards the northern edge of the eastern part of the burial ground, near to the site of the former mortuary. The test pit was aligned east/west and measured 2.2m by 2.1m. The uppermost deposit encountered was a 0.25m-thick layer of black, loamy topsoil. This overlay a 0.35m-thick layer of crushed brick rubble. An electricity cable was seen orientated east/west along the southern edge of the test pit at a depth of 0.3m bgl. The full extents of the test pit were reduced by machine down to a firm, clean brown clay encountered at a depth of 0.6m bgl. A fractured and disused gas pipe was seen lying across the trench in a west-north-west/east-south-east direction at a depth of 0.65m bgl. Approximately 1m to the north, and on the same alignment, was a backfilled trench for a sewer or drain. Hand digging revealed the top of the salt-glazed ceramic pipe at a depth of 1.1m bgl. The backfilled utility trenches containing both the gas pipe and the sewer/drain pipe were seen to the west in BH306 (*Section 4.2.12*). The clean clay was

reduced to a depth of 1.2m to the south of the pipe and the borehole sleeve was positioned accordingly. No human remains, either displaced, or, *in situ*, were recovered from this test pit and the underlying brown clay looked clean and undisturbed. This part of the burial ground may not have been used for interments.

- 4.2.19 During borehole drilling the clean brown clay was seen to change to grey alluvial silt at a depth of 2.8m bgl.
- 4.2.20 **Borehole 310:** was located towards the eastern edge of the burial ground. The test pit was aligned north/south and measured 2m by 1.25m. The uppermost deposit encountered was a 0.3m-thick layer of black, loamy topsoil. This overlay a 0.3m-thick layer of compacted, crushed, brick rubble and gravel. This in turn overlay a deposit of mixed brown clay with brick and stone fragment inclusions, the surface of which was encountered at a depth of 0.6m bgl. A 1.25m by 0.7m pit was then excavated through this clay in the northern part of the trench, to a depth of 1.2m bgl, for the insertion of the borehole sleeve. No human remains, either displaced, or, *in situ*, were recovered from this test pit.
- 4.2.21 During borehole drilling *in-situ* human bone was encountered between depths of 1.2-1.3m bgl. At 1.7m bgl the drill hit a brick structure or surface which may have been the base of a brick-lined burial vault. Brick fragments recovered indicated that the bricks were 90mm wide and 75mm thick with white lime mortar adhering to them. These were presumably of late eighteenth- or nineteenth-century in date. The brick structure continued to a depth of 2m bgl and was, therefore, 0.3m thick. Underlying the brick structure was a laminated brown clay with sand down to a depth of 3.05m bgl, where the grey alluvial silt was encountered.

5. TRIAL-TRENCH EVALUATION

5.1 INTRODUCTION

5.1.1 The following sections present an overview of the findings from each of the trenches, with a catalogue of the deposits recorded provided in *Appendix 2*. All of the trenches were aligned north-east/south-west, at various positions within the burial ground, in order to sample different areas within the impact zone. For the sake of simplicity, the north-west boundary of the burial ground has been taken as 'site north', with all results described accordingly. All of the burials that were investigated shared the same general north-east/south-west alignment, and all were fully skeletonised. A basic summary of the key findings is presented in Table 3.

5.2 TRENCH A

- 5.2.1 Trench A was excavated in the north-western part of the burial ground in an area occupied by several extant memorial stones. At ground level (3.01m OD) the trench measured 10m east/west by 5m north/south and was excavated to an initial depth of 0.7-0.8m bgl (2.11-2.19m OD), at which point the top of the burial horizon was encountered (Fig 4). The upper deposits to that point consisted of topsoil **2009**, up to 0.4m thick, overlying a heavily disturbed sandy clay overburden (**2010**), which contained large quantities of disarticulated human bone. This disarticulated material represented parts of at least 16 adults and 13 juveniles (*Section 5.6.37*).
- 5.2.2 At the interface between the topsoil and the overburden deposit the *in-situ* bases of eight headstones (**2000-2007**) were recorded. Only one of the eight *in-situ* buried gravestone stubs (**2002**) co-incided with the central area of deeper excavation, with the remainder identified within the surrounding step. In addition, the upper half of an inscribed headstone (**2008**) was also identified, lying flat and at a depth just above the burial horizon. The stone was most likely incorporated into a grave backfill, although no clear evidence of this was identified. These monuments were recorded in the same manner to those that had previously been identified on the surface (*Sections 2.2 and 3*).
- 5.2.3 In general, the top of the burial horizon was very difficult to identify, partially because of the large quantities of disarticulated skeletal material within the overburden deposit, but also due to the lack of identifiable grave cuts, almost certainly a result of the intense burial activity. From 2.11-2.19m OD (0.7-0.8m bgl), excavation carefully progressed by hand, exposing, recording and removing *in-situ* burials within a central area, which measured 6m east/west by 3m north/south (Plate 9). Ten *in-situ* articulated burials were at least partially exposed at the top of the burial horizon within the surrounding stepped area; they were recorded, but they were not fully excavated.



Plate 9: Excavation of the central area in Trench A. Viewed facing north-east

5.2.4 For the most part, the sandy clay burial horizon was only 0.5m-0.7m thick, and contained numerous burials. This profusion of burials did not immediately appear to adhere to any particular pattern of formal plots. Rather, burials were found stacked on top of each other with varying degrees of overlap to the north and east, and occasional intercutting and disturbance that had no doubt contributed to the quantity of disarticulated bones in the overburden deposit (*Section 5.2.1*; Plate 10). However, once the data was plotted out (Fig 5), it was apparent that the burials, and the gravestone stubs, did adhere to a broad pattern of rows, albeit that juvenile burials had been placed in a range of positions within the head and foot of the row. Although several stacks of burials almost certainly occupied the same grave, in general, the lateral spread of many of the burials made it hard to define individual grave plots. Nonetheless, gravestone stub **2002** almost certainly marked a plot occupied by juvenile burials **2065**, **2068** and **2070**, although these had been buried closer to the foot of the grave. Recorded within the shallow burial horizon within the central excavation area were approximately 79 individuals and seven discrete charnel deposits (likely to represent the redeposited remains of individuals disturbed by grave digging; Fig 6).



Plate 10: Progression of the central excavation area within Trench A, showing the density of intercutting burials. Viewed facing east.

5.2.5 Below the intensely utilised horizon was largely undisturbed banded natural sandy silt deposits (Fig 4; Plate 11). This material was cut by deeper, earlier graves in only a few localised areas. A total of three burials was recorded stacked within these deeper graves, with the lowest lying some 0.4m below the base of the upper burial horizon (ie, *c* 1.8m bgl; 1.14m OD). However, it is likely that these individuals shared the same grave plot with several more shallow burials higher up the sequence (Figs 5 and 6). Below this point hand- and machine-excavated sondages (controlled deeper exploratory holes excavated within the base of the wider trench) to *c* 0.14m OD, and hand auguring, to *c* -0.86m OD, revealed only undisturbed natural deposits.



Plate 11: The central hand-excavated sondage through natural deposits and examples of the lower burials within Trench A. Viewed facing south

5.3 TRENCH B

- 5.3.1 Trench B was excavated within the northern part of the burial ground, to the west of the former gaol. The immediate area of the trench was characterised by the presence of several red-brick and sandstone tombs, as well as numerous memorial headstones. The trench measured 10m east/west by 5m north/south at ground level (3.02-3.13m OD). A single red-brick tomb (**3000**) was immediately evident in the south-west corner of the trench, but, unlike the majority of tombs in the area, had been partially levelled and did not project far beyond ground level (Plate 12). Immediately to the east of the brick tomb a substantial sandstone ledger (**1179**), commemorating William Holmes, his three wives and their five children, was also visible at ground level. Removal of the Holmes ledger revealed a substantial and relatively ornate sandstone and red-brick box support (elements **3001**, **3002**, **3003**, **3014**, and **3017**), surmounting a sandstone slab base (**3015** and **3016**; Plate 13). Despite the ostentation of the Holmes family memorial, the sandstone box sat directly over an earth-cut grave, which lay to the south and just outside the central area of detailed investigation. The remains of a substantial tree stump, as well as several smaller bushes, were also contained within the trench. The root system of the stump was evident throughout large parts of the first 1m depth of the trench, and continued in places below that depth. The removal of tree roots caused disturbance during initial excavations, but this did not affect the results of the evaluation.
- 5.3.2 Overburden deposits consisted of a dark grey silty clay topsoil (**3053**), up to 0.4m thick, overlying a medium brown silty clay subsoil (**3061**), up to 1.2m thick (Fig 7). The latter layer was identical to deposit **2010** in Trench A, but contained markedly less disarticulated human skeletal remains and displayed fewer signs of having been as intensively disturbed by grave digging activity. The disarticulated remains were found to represent at least two adults and two juveniles. These deposits were removed to a depth of approximately 1m, at which point the top of the burial horizon was encountered.
- 5.3.3 During the course of removing the topsoil, two further brick-built vaults were revealed; tomb **3007**, within the south-eastern half of the trench and at a slight angle to its neighbours and tomb **3006**, partially revealed extending from the northern limit of excavation (Plate 12). In addition, an array of memorial furniture, including kerb stones (**3005**, **3013**, and **3011**) and the substantial footing of a headstone (**3012**), were revealed within the north-western corner of the trench, while several basal fragments of headstones were recorded towards the centre (**3004**), and protruding from the southern limit of excavation (**3009** and **3010**). Collectively, these burial monuments displayed evidence of the rows that had been set out within this part of the burial ground. Gravestone stubs **3004** and **3009** were in the same row, and aligned with the western (head) end of the Holme family ledger, but also with the eastern (probable foot) end of kerbstone **3005**. Headstone **3012** shared the alignment of the western end of vault **3006**.



Plate 12: Trench B with the various red brick-built tombs exposed at or just below ground level, and the sandstone box support for ledger 1179 visible to the centre right. Viewed facing east

- 5.3.4 As with Trench A, Trench B was stepped in at the top of the burial horizon, with deeper investigation encompassing an area of 5.5m east/west by 3m north/south (Plate 13). The burial horizon extended to a depth of between 0.7m and 1.8m bgl (2.3m-1.2m OD; Fig 7). Overall, the burial horizon was rather more 'orderly', with individual graves placed far less intensively than those in Trench A. Nonetheless, there was a degree of overlapping, particularly from east to west (Fig 8).



Plate 13: Excavation of the burial horizon within the central area of Trench B. Viewed facing east

- 5.3.5 Within the outer stepped area, ten burials were identified. A total of 32 articulated burials (with the remains of 11 adults and 21 juveniles) and one (adult) charnel deposit was recovered within the central area of detailed investigation, the majority recovered from within the main horizon (Fig 8).
- 5.3.6 The burials lay in two distinct rows (with limited parts of a third in the north-east corner of the trench), with each row being approximately 2.4-2.5m wide. Although no grave cuts could be discerned during the excavation, the spacing of the burials within each row suggested that there were two distinct graves in the westernmost row, and three in the easternmost. From the positions of the burials, each grave was likely to have been just under 1m wide and to have contained between four and seven individuals. This was most apparent in the case of the seven burials within a *c* 0.93m-wide plot that was clearly associated with gravestone **3004**. Although the burials must have been stacked, only rarely did succeeding burials immediately overlie their predecessor. One notable female individual (skeleton **3049.3**) had a blob of mercury in the pelvic region (*Section 5.6.36*). Coffin remains were better represented in Trench B than in Trench A, with more metal furniture, as well as a few examples of decorative furnishings (such as decorative coffin lace), and also some fragmentary fabric (*Section 5.7.13*).
- 5.3.7 Excavation of the central area exposed at least one outer face, from top to base, of two of the three brick-built tombs within the trench (**3000** and **3007**; Plates 13 and 14). This revealed various aspects of their construction and practical usage, including potential bricked-up entranceways in the short side walls. In each case the tomb extended to a depth of approximately 1.5m bgl. While the tombs were not excavated and, therefore, no detailed record of their contents was undertaken, judicious use of endoscopy demonstrated that they contained collapsed wooden coffins. Well-preserved metal coffin furniture was apparent, but there were no obvious signs of metal coffins. Within the central part of the trench, hand-excavated sondages and hand auguring revealed only undisturbed natural deposits (**3054** and **3055**) below 1.8m bgl (1.2m OD; Fig 8; Plate 14).



*Plate 14: Excavation of the central hand-excavated sondage within Trench B.
Viewed facing south-east*

5.4 TRENCH C

- 5.4.1 Trench C was excavated within the eastern part of the burial ground, parallel with and approximately 3m south of the southern gaol wall, within an area that had few signs of extant memorial stones or other grave furniture (Fig 2). The trench measured 10m east/west at the surface (3.25m OD) but was only 4m wide, due to the presence of a geotechnical monitoring station and proximity to the boundary wall.
- 5.4.2 Removal of poor-quality topsoil **4055**, up to 0.3m deep, revealed a large, but now defunct, service channel extending on an east/west axis along the southern limit of excavation and backfilled with demolition-rich material. Several structural features were also identified, including two segments of path. The first, **4003**, was formed by a line of sandstone slabs extending south from the centre of the northern limit of excavation, while path **4004**, a mixed sandstone and slate surface, extended west from the centre of the eastern limit of excavation (Plate 15). Another sandstone slab surface (**4056**), bedded on levelling deposit **4057**, sealed a series of structural features at the northern edge of the trench. These included red brick walls (**4059** and **4061**), with sandstone foundations (**4060** and **4062** respectively), and a probable demolition deposit (**4058**; Fig 10). These structures, together with a tiled surface that was partially exposed just below the turf line, between the trench and the boundary wall when setting out, may relate to a range of buildings shown on historic maps against the southern face of the gaol wall (OS 1893; Plate 16). The presence of the levelling deposit and separation of potential surfaces may suggest the presence of several phases of construction.



*Plate 15: Trench C with the topsoil removed to expose the flagstone surfaces **4004** (foreground) and **4003** (centre right) with the kerb-lined grave **4000-4003** (rear right). Viewed facing west*



Plate 16: Quarry-tile floor and possible brick footings revealed to the north of Trench C when setting out

- 5.4.3 In addition, just below the topsoil, several kerbstones (**4000**, **4001**, and **4002**) as well as the footings of a headstone (**4005**), marked the presence of a grave (Fig 11; Plate 15). The grave was aligned east/west and was located immediately south of the remains of the building, with its foot abutting the section of path (**4003**). A quantity of disarticulated human bone was recovered from just behind the headstone footing, but much of the grave was otherwise located outside the focus of investigation.

- 5.4.4 The above structures cut, or were bedded upon a highly compact, predominantly dark brown, sandy clay subsoil (**4064**; Fig 10). This contained abundant demolition debris, including red brick and sandstone fragments, mortar and various metallic objects. Subsoil **4064** was up to 1.2m thick but was also identified in the backfill of numerous grave cuts. A modest amount of disarticulated human bone, representing the remains of six adults and three juveniles, was recovered from the deposit. Among the cultural material deriving from this deposit, was a medieval floor tile and fragments of an early post-medieval jug (*Sections 5.8.8-9*).
- 5.4.5 The trench was initially excavated by machine to a depth of between 0.75m and 1m bgl (2.42m OD) at which point the burial horizon was encountered. After this point the trench was stepped in and further reduced by hand within a central excavation area measuring 6m east/west by 2m north/south. Twelve skeletons were observed at the surface of the burial horizon within the surrounding step. The central area of the trench (Plate 17) contained approximately 37 burial events, between depths of 0.8m and 1.85m bgl (2.42-1.4m OD; Figs 11 and 12). The majority were concentrated within a 0.5m-thick band towards the top of this horizon. The overall impression was that individual grave plots were better observed than in the case of Trench A, with burials more clearly stacked on top of one another. Indeed, a number had collapsed and become intermixed with lower burials as the wooden coffins had degraded. In some cases graves at the top of the horizon were only identified by the poorly preserved remains of a seemingly empty coffin. Despite this, the more clayey soil (**4066**) conditions prevalent in the trench, below the demolition-rich deposit, had led to some preservation of organic remains, so that several poorly preserved coffin timbers (including complete, if rather friable, timbers from lids, sides and bases) were observed, particularly with increasing depth (*Section 5.7*; Plate 25). Other organic remains deriving from the cloth lining of various coffins were also observed, and a number of pieces of coffin furniture was recorded.



Plate 17: Excavation of the burial horizon in Trench C. Viewed facing south-east

5.4.6 Other features of note included a woman who had undergone a partial and crudely executed craniotomy (*Section 5.6.35*), and a deposit of burnt material that included fragments of calcined bone. Below the burial horizon (1.85m bgl, 1.2m OD), natural sandy clay deposits were observed. Hand auguring and a machine-excavated sondage confirmed the undisturbed nature of these deposits.

	Trench A		Trench B		Trench C	
Height at ground level	3.01m OD		3.1m OD		3.25m OD	
Area of Trench at ground level	50m ²		50m ²		40m ²	
Total volume of Trench as excavated to base of burial horizon	62.1m ³		67.35m ³		52m ³	
Top of burial horizon	0.8m bgl; 2.11-2.19m OD		0.7m bgl; 2.3m OD		0.8m bgl; 2.42m OD	
Base of burial horizon	1.85m bgl; 1.14m OD		1.8m bgl; 1.2m OD		1.85m bgl; 1.4m OD	
Average thickness of burial horizon	0.95m thick		0.9m thick		0.9m thick	
Area of trench at the burial horizon	18m ²		16.5m ²		13m ²	
Volume of material excavated from the burial horizon	17.3 m ³		15 m ³		12m ³	
Burial density per square metre (based on all partial and complete articulated burials and charnel deposits that lie within the central detailed area of investigation within each trench)	4.94 burials/m ² (89 articulated burials and charnel deposits/18m ² area of detailed investigation)		2 burials/m ² (32 articulated burials and charnel deposits/16.5m ² area of detailed investigation)		2.85 burials/m ² (37 articulated burials/13m ² area of detailed investigation)	
	Adults	Juveniles	Adults	Juveniles	Adults	Juveniles
Disarticulated remains (MNI) from volume of excavated deposits (including steps)	16/62.1m ³	13/62.1m ³	2/67.35m ³	2/67.35m ³	6/52m ³	3/52m ³
Number of articulated burials assessed within trench (includes burials partially and completely within the area of detailed investigation in each trench)	41/18m ²	41/18m ²	11/16.5m ²	21/16.5m ²	15/13m ²	22/13m ²
Number of articulated burials assessed within trench >25% complete	25/41 burials 61%	26/41 burials 63%	10/11 burials 91%	14/21 burials 67%	12/15 burials 80%	12/22 burials 55%
Articulated burials fully within detailed investigation area of each trench	33	36	10	18	12	18
Articulated burials fully within trench; >25% complete	22/33 burials 67%	24/36 burials 67%	9/10 burials 90%	13/18 burials 72%	11/12 burials 92%	11/18 burials 61%
Articulated burials partially within trench	8	5	1	3	3	4
Charnel deposits	6	1	1	0	0	0
Burials within step (not assessed)	8	2	8	2	8	4
Total number of burials excluding disarticulated bones	54	45	21	22	23	26
	99		43		49	

Note: MNI= minimum number of individuals. Only burials within the central part of the trench were assessed (ie, this does not include burials from the surrounding step)

Table 3: Summary of depths, densities and completeness of burials in Trenches A-C

5.5 TRENCH D

5.5.1 Trench D was excavated in the north-eastern corner of the burial ground, immediately west of the main entrance. It measured 13m east/west by 2m north/south and was excavated to a maximum depth of 1m. Overburden deposits comprised a variable, but relatively thick topsoil, between 0.1m and 0.6m deep, directly overlying structural features or demolition and backfill deposits within the western end of the trench (Fig 13; Plate 18). In the eastern half of the trench the topsoil overlay levelling and consolidation deposits associated with the modern path, giving access to the burial ground from the main entrance, but otherwise directly overlay a clean medium brown sandy clay natural layer (5028). Within this area there were no signs of burial activity and the only human skeletal remains to be recovered from the trench amounted to a single finger bone incorporated within demolition layer 5009.



Plate 18: General view of Trench D. Viewed facing east with floor 5001 in the foreground

- 5.5.2 The structural features within the western end of the trench mainly consisted of handmade red brick bonded with a white lime mortar and formed a southern boundary wall (5004, 5005, and 5015), bounded to the east by buttressed wall (5021) and its foundation deposit (5022), as well as an evident construction cut (5024) and backfill deposit (5023). Internal to these walls was a red-brick floor surface (5001), situated at the very end of the trench and just below the current ground surface at a depth of 0.1m bgl. The floor lay upon a bedding layer (5002) over a probable redeposited clay (5003).
- 5.5.3 Immediately to the east of this surface, removal of a demolition deposit (5009) revealed a second, more limited surface, comprising sandstone flags (5008), set directly over the redeposited clay (5003). This occurred at a depth of 0.43m bgl and, therefore, at a lower level than the first. Given the slight remove of the two surfaces, their relationship is uncertain. The two surfaces may relate to distinct areas within the same building, or, potentially different phases of construction.

- 5.5.4 To the east of the sandstone flag surface, a series of internal red-brick walls (**5007**, **5011** and a differently aligned section of wall **5005**), extended north at right-angles to the southern boundary wall (Plate 19). Wall **5007** contained several well-dressed sandstone blocks towards its northern extremity, one of which contained a single square-shaped cut recess in its upper surface, presumably to hold a metal or wooden upright. The walls all appeared to be supported by, or else keyed into, a foundation deposit comprising a very rough concrete mix (**5006**), and collectively defined a series of rectangular recesses. Each recess was filled, below the level of the walls, by a distinct mortar-rich deposit (**5009**, **5010**, and **5012**) up to 0.2m thick. Below these deposits there was a layer of apparent made ground, although investigation did not progress below this depth.



*Plate 19: The internal wall, **5007** (left), the north/south-aligned aspect of **5005** (centre), and **5011** (centre right) forming the recesses infilled by mortar-rich deposits. Also featuring the southern external wall **5004/5005** (foreground) and mortared floor **5013** (right). Viewed facing north*

- 5.5.5 To the east of the internal walls, a principal mortar-rich demolition deposit (**5013**) and an additional deposit containing an abundance of red brick fragments (**5016**), overlay a very compact and potentially mortared surface (**5014**). This surface extended to the eastern boundary wall (**5021**), and appeared to have been cut by a linear feature (**5020**), containing an equally compact backfill deposit (**5019**). Investigation did not continue below these structures.
- 5.5.6 A final structural feature was recorded abutting the southern face of wall **5015**, at its eastern end, between it and wall **5021**. The feature was a square ceramic drain head (**5018**), with an additional backfill deposit (**5017**). While displacement to wall **5015** may indicate the drain head was inserted after the building was demolished, it is more likely that the feature provided external drainage for guttering along the southern edge of the building, thus suggesting that wall **5015** represents the southern limit of the structure.

5.6 HUMAN REMAINS

5.6.1 **Preservation and Completeness:** the condition and completeness of bone has considerable influence on the amount of information that can be retrieved from skeletons. Completeness was calculated depending on the presence of various elements as outlined on Figure 14. The vast majority of the TBG skeletons exhibited varying degrees of completeness, whilst the nature of the evaluation meant that it was often necessary to leave parts of skeletons unexcavated where they continued beyond the limits of excavation. When such partial skeletons are removed from consideration, over three-quarters of the articulated skeletons that lay within the detailed investigation areas were over 25% complete (Table 4). The whole assemblage was assessed for fragmentation, with generally low to moderate levels predominating (Table 5).

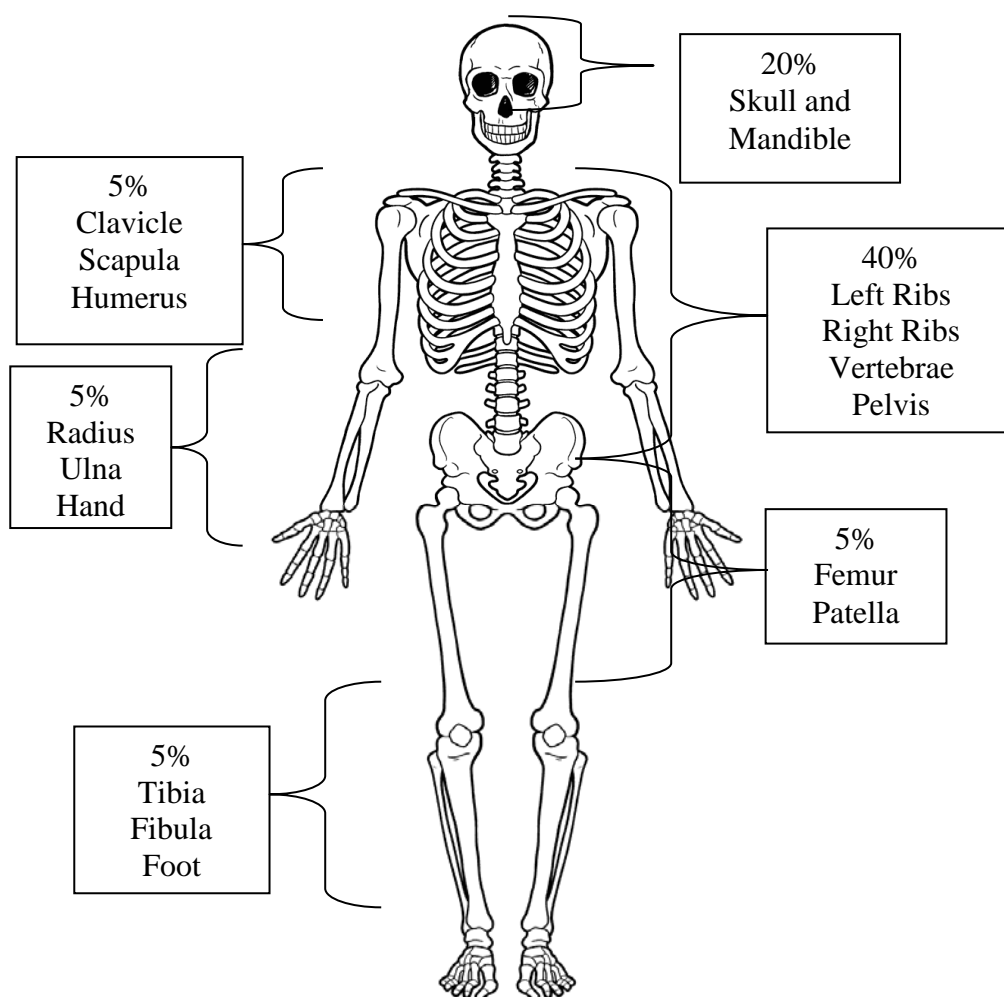


Figure 14: Scheme for calculating the completeness of articulated skeletons

Completeness	Adults	Juveniles	Total No of Skeletons	Total % of skeletons
0-25%	13	24	37	29.1
26-50%	4	13	17	13.4
51-75%	9	11	20	15.8
76-100%	29	24	53	41.7
TOTAL	55	72	127	100

Note: only those skeletons that lay fully within the area of investigation are included here, as that is likely to be more indicative of the situation during open-area excavation (*ie* 24 skeletons that lie only partially within trench have been excluded from these figures)

Table 4 Completeness of skeletons

Fragmentation	Adults	Juveniles	Total No of skeletons	Total % of skeletons
Low	28	40	68	45.0
Medium	28	30	58	38.4
High	11	14	25	16.6
TOTAL	67	84	151	100

Table 5: Fragmentation of the skeletons

5.6.2 The majority of the assemblage was assigned to McKinley's condition Grade 1, meaning that the bone surfaces displayed only slight and patchy surface erosion (McKinley 2004, 16; Table 6). Only a small proportion was affected by more extensive erosion across much of the bone surface, and none had deep-penetrating damage.

Condition	Adults	Juveniles	No of Skeletons	Total % of skeletons
Grade 0	0	0	0	0.0
Grade 1	38	49	87	57.6
Grade 2	23	33	56	37.1
Grade 3	6	2	8	5.3
Grade 4	0	0	0	0.0
Grade 5	0	0	0	0.0
Grade 5+	0	0	0	0.0
TOTAL	67	84	151	100

Table 6: Bone surface condition; after McKinley 2004

5.6.3 In order to calculate an overall preservation grade for each skeleton (Excellent, Good, Fair, Poor, Destroyed), OA has devised a method in which each fragmentation level is given a value of one, two or three. These values are then added to McKinley's surface condition grades to give an overall preservation score (Table 7). The majority of the skeletons (62.3%) were scored as having 'Good' preservation (Table 8; Fig 15).

Surface condition	Fragmentation level/value		
	Low (1)	Medium (2)	High (3)
0	1	2	3
1	2	3	4
2	3	4	5
3	4	5	6
4	5	6	7
5/5+	6	7	8

Table 7: Method for establishing preservation grade from fragmentation and surface condition scores (after Mckinley 2004)

Preservation Score	Overall preservation Grade	No. of Skeletons	Percentage of skeletons
1	Excellent	0	0.0
2-3	Good	94	62.3
4-5	Fair	54	35.8
6-7	Poor	3	1.9
8	Destroyed	0	0.0
TOTAL		151	100

Table 8: Overall preservation of the skeletons

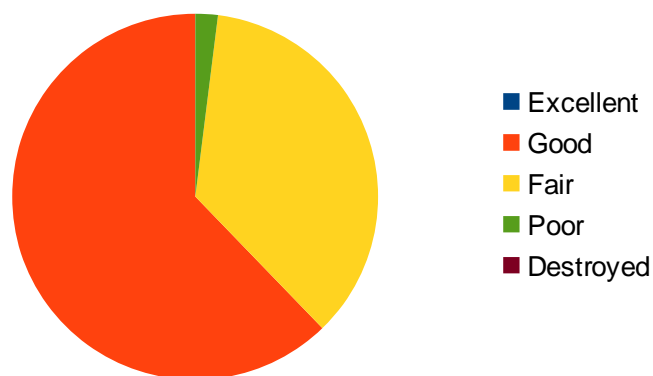


Figure 15: Overall preservation of the skeletons (N=151)

5.6.4 **Demography:** the vast majority of the articulated skeletons retained a range of physical attributes that would permit them to be assigned to the standard age ranges used during analysis. Of 151 skeletons assessed, 67 were adults (44.4%) and 84 were juveniles (55.6%). The juvenile group included individuals across a wide age range from a pre-term and possibly still-born baby (<37 weeks gestation; skeleton **2041.3**; Trench A) to adolescents (13-17 years old). Neonates (birth-1 month; 9/84), and infants (1-12 months; 12/84) were well represented, and many juveniles fell within the young child category (1-5 years; 33/84; 39.3%).

- 5.6.5 Again, the majority of adult articulated skeletons retained morphological traits that would permit them to be sexed (53/67; 79.1%). In addition, sex estimation was possible in the case of one adolescent (skeleton **3049.3**; Trench B), and was considered reliable because the innominate bones had fused which, with the skull, exhibited strongly female features.
- 5.6.6 **Stature and other metrical analyses:** stature could be estimated for a total of 26 adults or 38.8% (26/67) of the adult sample (Table 9). Female skeleton **4029.3** (Trench C) was remarkably short, with a stature of 144.25cm, equating to approximately 4ft, 8¾in. To provide some perspective, clinically a stature of 147cm (4ft, 10in), would be defined as dwarfism (Medline Plus 2015).

	Average stature	Stature range
Males (N=12)	169.50 (c.5ft, 6¾ in)	162.85 (c.5ft, 4in) – 180.41 (c.5ft, 11in)
Females (N=14)	160.25 (c.5ft, 3 in)	144.25 (c.4ft, 8¾in) – 180.07 (c.5ft, 10¾in)

Table 9: Stature estimates

- 5.6.7 To assess the potential of the remains for metrical data, it was noted for each skeleton whether the skull and mandible were complete for cranial indices and metrical analysis, and whether the femora and/or tibiae were intact for calculation of the platymeric and platycnemic indices. These skeletal indices allow for variation in the physical attributes of a population to be explored. These measurements were possible for a high proportion of the assemblage, with 41 adults having measurable femora and tibiae, and 22 adults having complete mandibles for metrical analysis. A total of eight (12%) of the 67 adult skeletons had complete, intact skulls that could be assessed using metrical and morphological techniques.
- 5.6.8 **Physical attributes:** ancestry may be estimated in skeletal remains through visually assessing the morphology of the skull, in particular the facial region (Gill 1986; Gill and Rhine 1990), and by various metrical analysis, including the formula and associated software programme CRANID (Wright 2008). As indicated above (*Section 5.6.7*), 12% adults had skulls that were sufficiently complete to permit the undertaking of such analyses.
- 5.6.9 Non-metric traits are minor anomalies and variations in the morphology of the skeleton and are generally of no pathological significance. They may be present as localised deficiencies of bone (for example, as extra blood vessel openings or foramina), or as extra bones (for example, as wormian bones in the cranial sutures). Traits which involve the variation of the joint surface tend to be more environmentally influenced, probably a reflection of mechanical factors operating on the bones (Mays 1998, 110). Those traits involving the skull, for example, retention of the metopic suture into adulthood, and the presence of lambdoid ossicles, tend to have a more genetic basis (Torgersen 1951a; 1951b; 1954; Sjøvold 1984) and have thus been used to explore familial ties within cemetery populations.
- 5.6.10 Where observed, all traits, based on those described by Berry and Berry (1967) and Finnegan (1978), were noted. Some 47.8% (32/67) of adults exhibited non-metric traits, 13 with cranial and 19 with post-cranial traits, indicating that there is a high potential for non-metrical analysis in the assemblage. Extra-sutural mastoid foramina was the most common cranial

trait observed, whilst double atlas and double calcaneal facets were the most frequently recorded post-cranial traits. Non-metric traits were also noted in a small number of juveniles (three with cranial traits and one with post-cranial traits).

- 5.6.11 **Dental health status:** dental pathology was noted in a total of 57 skeletons, giving a crude prevalence rate (CPR) of 37.7% (57/151). Almost half of adults and just under one third of juveniles exhibited some form of dental pathology (Table 9). The pathological conditions observed include calculus, caries, dental enamel hypoplasia (DEH), periapical cavities, periodontal disease and ante-mortem tooth loss.
- 5.6.12 Ante-mortem tooth loss (those lost prior to death) was the most frequently observed condition affecting 25.4% of adult and 21.4% of juvenile dentitions. This was followed closely by caries (the breakdown of the tooth by bacteria resulting in cavities) in both the adult (23.9%) and juvenile (16.7%) samples. Calculus (mineralised dental plaque) was the third most common dental pathology with 20.1% of adults and 13.1% of juveniles affected. No evidence of dental enamel hypoplasia (defects on the tooth crown laid down during the production of enamel) was observed within the juvenile skeletons. Only two cases of dental anomalies were observed within the sample. Adult skeleton **3029.3** (Trench B) had a partially erupted and displaced upper left canine, while adult **2038.3** (Trench A) had a supernumerary tooth.

Dental Pathology	Adults (N=67)	Juveniles (N=84)	Total (N=151)
Calculus	14	11	25
Caries	16	14	30
Dental enamel hypoplasia (DEH)	3	0	3
Periapical cavities	1	1	2
Periodontal disease	5	4	9
Ante-mortem tooth loss	17	18	35

Table 10: Occurrence of dental pathology

- 5.6.13 **Skeletal pathology:** a wide range of skeletal pathological conditions was observed. 58.2% (39/67) of adults, 20.2% (17/84) of juveniles, and 37.1% (56/151) of the total number of skeletons assessed exhibited lesions of pathology. The pathological conditions were divided into 10 broad categories: Spinal joint disease; Extra-spinal joint disease; Inflammation/infection; Metabolic disease; Congenital/developmental disease; Neoplastic disease; Circulatory disorders; Trauma; Miscellaneous conditions (ie those that do not fit within any of the aforementioned categories) and Undiagnosed conditions (ie lesions of pathology for which the diagnosis was unclear (Table 11).

Pathology category	Adults (N=67)	Juveniles (N=84)	Total (N=151)
Spinal joint disease	20	0	20
Extra-spinal joint disease	18	0	18
Inflammation/infection	19	9	28
Metabolic	3	10	13
Congenital/developmental	5	1	6
Neoplastic	1	0	1
Circulatory	0	0	0
Trauma	8	0	8
Miscellaneous	4	0	4
Undiagnosed	4	2	6

Table 11: Occurrence of skeletal pathology by category

- 5.6.14 *Inflammation/infection*: was the most common type of pathology observed in adults and juveniles combined, affecting 18.5% of the total assemblage. This category includes maxillary sinusitis, which was observed in 2.0% (3/151) of the skeletons, and endocranial lesions, which were observed in two skeletons. In most cases, the lesions could not be assigned to a specific infection and are thus classified as 'non-specific'. Non-specific inflammation, or periostitis, was by far the most commonly observed condition in this category, having been observed in 23.9% (16/67) of adults and 9.5% (8/84) of juveniles. While the prevalence rates have not been calculated, the tibia appears to have been the most frequently affected element, with tibial periostitis observed in 5.9% of juveniles and 14.9% of adults. The other long bones of the leg (femur and fibula) were also affected in the sample.
- 5.6.15 Of all the skeletons exhibiting periostitis, a number of them were affected on multiple bones (ie on two or more bones, counting left and right bones separately but counting multiple bones such as 'left ribs' as single elements). Diffuse periostitis may indicate the presence of a systematic infection, although in the current assemblage, none of the lesions could be attributed to a specific infection. Young child (**2012.3**; Trench A) had notably diffuse periostitis across both legs; however, further analysis of this individual once the remains had been cleaned, would be required to confirm a diagnosis.
- 5.6.16 Two skeletons (**2098.3** and **4030.3**; Trenches A and C respectively) exhibiting periostitis, also had bones that were swollen in appearance and exhibited cloaca, indicative of bone infection (osteomyelitis). Adult skeleton **4030.3** (Trench C) exhibited extensive periostitis and a cloaca on the right humerus. Further examination through x-ray analysis would be required to determine if the infection was secondary to trauma.
- 5.6.17 *Spinal and extra-spinal joint disease*: Spinal joint disease (including Schmorl's nodes, osteoarthritis (OA) and vertebral body osteophytes), and extra-spinal joint disease (including osteoarthritis, diffuse idiopathic skeletal hyperostosis (DISH) and hallux valgus) were common in the adult sample, respectively affecting 29.9% and 26.9% of adult skeletons respectively.
- 5.6.18 Vertebral body osteophytes was the most frequently noted condition, observed in 22.4% of the adult skeletons. Osteophytes, growths of new bone which arise around the margins of a joint, are common in skeletal assemblages and their prevalence increases with age of the individual (Rogers and Waldron 1995,

- 20). Marginal osteophytes on the vertebral bodies are almost invariably seen alongside spondylosis deformans (degenerative disc disease; *op cit*, 27), although they can often appear in the absence of any other changes relating to intervertebral disc degeneration as was the case with this sample.
- 5.6.19 Spinal OA was observed in only three adults within the sample. Osteoarthritis is the most common joint disease in both modern-day and archaeological populations. It is a chronic, progressive and non-inflammatory disease that can affect any synovial joint of the skeleton (Rogers and Waldron 1995, 32; Aufderheide and Rodríguez-Martín 1998, 93; Ortner 2003, 545).
- 5.6.20 Osteoarthritis was the most common condition observed in the extra-spinal joint disease category, affecting 7.5% of the adult skeletons. Of the cases of OA observed, the acromio-clavicular, elbow, wrist, hand, hip and toe joints were all involved.
- 5.6.21 One skeleton (adult male **2025.3**; Trench A), exhibited bony changes in the spine in which four vertebrae were beginning to fuse together down the right side of the vertebral bodies, along the anterior longitudinal spinal ligament. This could be indicative of early onset DISH (diffuse idiopathic skeletal hyperostosis; Rogers and Waldron 1995, 48-9). Further extra-spinal enthesophytes were also observed within this skeleton, which is another feature of this disease (*op cit*, 52).
- 5.6.22 Hallux valgus, which is more commonly known as a bunion, was observed in adult female **2074.3** (Trench A). This condition is defined as lateral deviation of the first (or big) toe, and can be recognised in skeletons by a number of bony changes, including lateral deviation of the metatarsophalangeal joint, lateral subluxation of the first phalanx, degenerative changes of the sesamoid articular facets, and exostosis or remodelling of the medial tuberosity (Mays 2005, 139-40).
- 5.6.23 *Metabolic disease*: was the most frequent type of pathology observed in the juvenile assemblage, affecting 11.9% (10/84) of the juvenile skeletons. Only three adult skeletons (4.5%) exhibited some kind of metabolic condition. The most frequent metabolic condition observed was cribra orbitalia, affecting a total of 7.9% of all assessed skeletons. Cribra orbitalia is identified on dry bone as surface pitting on the orbital roof, which is accompanied with the thinning of the compact bone (Ponec and Resnick 1984, 313-7). Traditionally, these lesions have been attributed to iron-deficiency anaemia (Walker *et al* 2009, 110). However, in recent years vitamin B12 and/or folic acid deficiency has been suggested as a possible cause of cribra orbitalia (Walker *et al* 2009, 119), and Mays (2012, 292-3) highlights that porosity on the orbital roofs may also occur in a variety of other conditions, such as rickets or scurvy. Regardless of the aetiology, cribra orbitalia is a useful skeletal indicator of non-specific health stress, and can be used to evaluate the overall health in archaeological populations.
- 5.6.24 Two adults (**3027.3** and **4045.3**; Trenches B and C respectively) exhibited evidence of possible rickets. They showed signs of bowing of the long bones, which may represent residual rickets deformity (Brickley and Ives 2008, 102).
- 5.6.25 *Trauma*: a small number of individuals had evidence of trauma, mostly healed, including fractures and subluxation. In the adult assemblage 12.0% of the

skeletons exhibited traumatic lesions, whilst no juveniles were observed to have trauma. Fractures were the most commonly observed traumatic lesion. Overall, 4.0% (6/151) of the total assessed sample, or 9.0% (6/67) of adults had one or more fractures, for example, prime adult female **4020.3** (Trench C) exhibited well-healed fractures to the nasal bones and maxilla. This particular individual also underwent a partial craniotomy (*Section 5.6.35*).

- 5.6.26 The most frequently fractured element was the tibia with 4.5% of all adults exhibiting fractures of this bone. In all but one of the cases, the fractures observed were healed, although in two cases the fracture was misaligned. In adult male **3045.3** (Trench B) the left humerus had not united, while for adult male **3027.3** (Trench B) it was the left tibia and fibula (*Plate 20*).



Plate 20: Left tibia and fibula of skeleton 3027.3 showing misaligned healed fractures

- 5.6.27 Only one example of a peri-mortem injury was observed. This involved the sternum of prime adult female **4029.3** (Trench C; and very short, *Section 5.6.6*). Evidence of sharp-force trauma in the form of a knife/blade mark was recorded to the left anterior side below the clavicular notch. The absence of healing suggests that trauma occurred just before, or at the time of, death.
- 5.6.28 One skeleton exhibited evidence for subluxation (partial dislocation). In adult male **4022.3** (Trench C), the left first proximal phalanx was fixed at an approximately 90° angle to the first metatarsal, having ankylosed at the toe joint.
- 5.6.29 *Congenital and developmental disease*: affected 3.9% (6/151) of assessed skeletons, 7.5% (5/67) of adults and 1.2% (1/84) of juveniles. Conditions in this category identified at TBG include:

- vertebral border shifting (lumbarisation and sacralisation);
 - spina bifida atlanta/occulta;
 - bifid neural arch of vertebra;
- 5.6.30 The examples of abnormal bone morphology observed within this sample were relatively minor, and were probably of no consequence in life.
- 5.6.31 *Neoplastic*: only a single case of neoplastic disease was observed amongst the assessed skeletons. Prime adult female **2065.3** (Trench A) exhibited lesions in the form of a benign neoplasm, the button, or ivory, osteoma. As its name suggests, a button osteoma is a small, round, smooth projection of dense bony tissue which is well circumscribed and is most frequently found on the outer table of the cranial vault (Roberts and Manchester 1995, 188), as was the case with this individual, where the osteoma was located on the right side of the occipital bone.
- 5.6.32 *Miscellaneous*: small pits of unknown aetiology were observed on the lateral epicondyle of the right humerus of adult **2073.3** (Trench A), the left patella of adult **2052.3** (Trench A), left first metatarsal of adult **4041.3** (Trench C), and on the auricular surface of the right innominate bone of mature male **3027.3** (Trench B). The lesions have been termed osteochondritis non-dissecans (Rogers and Waldron 1995, 30) and are frequently observed in archaeological skeletal assemblages.
- 5.6.33 In adult male **2082.3** (Trench A), the left temporal styloid process measured 52mm in length (Plate 21). Styloid process elongation (SPE, where the length exceeds 30mm) may be asymptomatic (Gokce *et al* 2008, 224-8), or it may cause a condition known as Eagle's syndrome, whereby the styloid/s impinge upon the surrounding neural and vascular structures (*ibid*; Shagoon and Kianbakht 2008, 105). Whether the case observed here caused Eagle syndrome in the affected individual cannot be ascertained, but SPE is, in itself, an abnormality.



Plate 21: Elongated styloid process of skeleton **2082.3**

5.6.34 *Undiagnosed conditions*: six skeletons (4.0%; 6/151) exhibited lesions of pathology which could not be diagnosed (Table 12).

Skeleton	Age	Sex	Undiagnosed pathology
2034.3	Infant	?	Both orbits are set far back into the skull and have a 'droopy' appearance. No other pathology observed
2066.3	Older child	?	Small round drilled hole in the right ilium. No evidence of healing. Possible post-mortem damage
2052.3	Adult (unspec)	?	Osteophytic growth across all aspects of the right fibula. Possibly secondary to trauma. No evidence of fracture
2058.3	Prime adult	?Male	T3-T7 mis-shaped on the right edge. Have a flattened/straight edge to them as though something has pressed against them
3048.3	Prime adult	Female	Lesion into the bone on the dens
4045.3	Mature adult	Male	Round bony spur on the left mandible on the lateral portion of the ascending ramus causing a 'mushroom' effect measuring 5mm in diameter

Table 12: *Undiagnosed bone abnormalities*

5.6.35 *Evidence of autopsy and medical practices*: prime adult female skeleton **4020.3** (Trench C), had circumferential post-mortem cut marks on the cranial vault across the frontal bone, indicating that a post-mortem partial craniotomy was performed, this procedure is not uncommon for post-medieval sites. Several skip marks and repeated sawing attempts were observed on the frontal bone, along with several finer cut marks representing the removal of outer soft tissue prior to sawing. An attempt was then made to remove a triangular section of bone by sawing superior to the orbits on the frontal bone, but not extending across the whole cranium, which caused radiating fractures on both sides of the frontal bone, stopping when they reached the coronal suture. Then, further saw marks were made superior to inferior, crossing at the top of the frontal bone to form the triangle, which was not completed, causing the segment to be removed to break in half and leaving a third segment still attached (Plate 22). The reason behind this case of post-mortem examination remains ambiguous. As it was only a partial craniotomy it is possible that it was part of a dissection procedure for teaching purposes rather than to establish cause of death.



Plate 22: *Partial craniotomy; skeleton 4020.3*

5.6.36 Adolescent female **3049.3** (Trench B; Plate 23) had traces of mercury found within the pelvic cavity on the base of the coffin. How it came to be there is debatable. It may have been ingested by the individual prior to death for medical purposes. Mercury is well known as an amalgam for dental fillings, but in the eighteenth and nineteenth centuries mercury was commonly used in medication, most notoriously as a treatment for syphilis and typhoid fever (Lane 2001,152).



Plate 23: Adolescent female 3049.3, viewed facing south-west

5.6.37 **Disarticulated Remains:** a significant quantity of disarticulated remains was recovered during the evaluation and GI watching brief. These were rapidly quantified to give the minimum number of adult and juvenile individuals (MNI) that they represent (Table 13). Trench A had a significantly high number; however, this also includes very small fragments. From the identifiable fragments it was possible to determine a MNI of 16 adults and 13 juveniles from Trench A, two adult and two juveniles from Trench B, and six adults and three juveniles from Trench C.

Trench	No of adult frags	No of juvenile frags	Total
Trench A	2295	546	2841
Trench B	84	23	107
Trench C	516	78	594
Subtotal	2895	647	3542
BH 301	144	17	161
BH 302	25	25	50
BH 303	37	1	38
BH 304	25	29	54
BH 306	9	1	10
BH 307	147	0	147
BH 308	76	4	80
BH 310	19	1	20
Subtotal	482	78	560
GRAND TOTAL	3377	725	4102

Table 13: Summary of disarticulated bone

- 5.6.38 **Biochemistry and other laboratory analyses:** analysis of carbon and nitrogen (C/N) stable isotope ratios may indicate whether a diet was high or low in marine, meat or vegetable protein. Such information can be particularly valuable when combined with documentary information and biological and palaeopathological data from the skeletons (Budd *et al* 2004, 139; Roberts *et al* 2012, 1). Other isotopes (for example, oxygen and strontium (Sr/O)) may indicate the location of the drinking water that was ingested when the individual was a child and, by inference, where they grew up, which has implications for movement of people over time. This is particularly important for Hull as it has a thriving port industry. Teeth are the preferred sample for Sr/O analysis whilst C/N analysis can generally utilise any bone. The condition of the bones and teeth from the evaluation suggests that there would be a wide range of tooth and bone samples to select from should a targeted programme of Sr/O analysis be undertaken.
- 5.6.39 Analysis of different sources of DNA has a wide range of applications that would be relevant to the present assemblage, including being used to identify the sex of non-sexually dimorphic younger individuals, exploring ancestry, and also identifying pathogens (Brown 2000, 453-5). Teeth are often used, although long bone samples have also been analysed successfully (Parton *et al* 2013, 707). Given the high number of juveniles so far with dentition surviving at Trinity Burial Ground, together with the generally good preservation of the bone, there could be potential to undertake DNA analysis within a tightly defined research programme.
- 5.6.40 Radiography is an important component of osteological analysis because it facilitates the diagnosis of diseases and allows inferences to be made about certain conditions that cannot be made through the examination of dry bone alone. For example, it can be used to confirm the presence of a fracture, to help establish if it was a direct or indirect force and the mechanism that caused the fracture. Also, by assessing the healing, it can indicate whether or not the affected individual received adequate treatment (eg Grauer and Roberts 1996). On the basis of the current assessment, a significant amount of trauma may be expected on a larger assemblage from the site, for which radiography will be a valuable source of data.

5.6.41 **Comparative analysis:** a full understanding of the unique characteristics and the value of any osteological data from Trinity Burial Ground can only be achieved through comparison with other contemporary populations from a range of locations and environments (Table 14). As such, all of the sites have some relevance to the comparative analysis of the results from Trinity Burial Ground. Sites that are considered to have the highest potential for comparative analysis in terms of establishing characteristics that are specific to Hull are those that represent mixed-class assemblages from northern towns and cities, and from other port towns. Sites from London and the South East are of some relevance where they can be related to one or more aspects of the characteristics that might be expected to be encountered at Trinity Burial Ground (for example, the comparison of crypt assemblages with individuals from vaults at Trinity Burial Ground). Sites of lower relevance are those that are geographically further afield, or do not match one or more of the religious, social or urban characteristics of Trinity Burial Ground.

Site	Date range	Site type	Adult skeletons	Juvenile skeletons	Reference	Relevance to TBG
Bow Baptist Chapel, London	Early-mid-19 th century	Non-conformist, working class, urban	182	169	Powers 2011	Moderate
Carver Street Methodist Chapel, Sheffield	Early – mid-19 th century	Non-conformist, mixed class, urban	37	99	McIntyre and Willmott 2003	Moderate: small assemblage
Chelsea Old Church	18 th – mid-19 th century	Upper-working to upper class, London suburb	165	33	Bekvalac and Kausmally 2008	Low
Christchurch, Spitalfields	18 th – mid-19 th century	Upper – middle class, crypt burials	623	251	Molleson and Cox 1993	To any vault burials
Cross Bones, Southwark	Mid-19 th century	Paupers, urban	45	251	Brickley <i>et al</i> 1999	Moderate
Kingston-upon-Thames Quaker BG, Surrey	Late 17 th – early 19 th century	Non-conformist, middle class, urban	360 (total)		Sibun and Start 2007	Low
Littlemore Baptist Chapel, Oxford	Late 19 th century	Non-conformist, working and middle class, rural	15	15	McCarthy <i>et al</i> 2010	Low
Newcastle Infirmary	Mid-18 th – 19 th century	Infirmary, urban	191	19	Boulter <i>et al</i> 1998	Moderate: specialist assemblage
Redearth Primitive Methodist Chapel, Darwen	Mid-19 th century	Working class, urban	56	86	Webb forthcoming	Moderate: small assemblage
St Benet Sherehog, London	17 th – mid-19 th century	Upper-working class, urban	165	65	White 2008	Moderate; more so for wealthier burials
St George's, Bloomsbury (named sample)	19 th century	Upper-middle class, crypt burials	67	5	Boston <i>et al</i> 2009	To any vault burials
St Hilda's, South Shields	Late 18 th – mid-19 th century	Working class, industrial, port town	114	87	McCarthy and Clough forthcoming	High
St John's School, Bethnal Green, London	Mid-19 th century	Middle class, urban	298	735	Ives and Hogg 2012	Moderate
St Luke's, Islington (named sample)	Late 18 th – mid-19 th century	Largely middle to upper classes, crypt/vault burials, London suburb	218	23	Boston <i>et al</i> 2005	To any vault burials

Site	Date range	Site type	Adult skeletons	Juvenile skeletons	Reference	Relevance to TBG
St Martin's-in-the-Bull Ring, Birmingham	18 th - 19 th century	Working and middle class, industrial	352	153	Brickley <i>et al</i> 2006	High
St Marylebone, London	Late 18 th – mid-19 th century	Upper class, London suburb	233	78	Miles <i>et al</i> 2008	Low
Swinton Unitarian Free Church Cemetery, Manchester	Mid- to late 19 th century	Non-conformist, working class, urban	71	41	Jamieson forthcoming	Moderate
West Butts Street Baptist BG, Poole	18 th century	Non-conformist, upper-working class, port town	72	28	McKinley 2008	Moderate
Whitefriars Anabaptist Cemetery, Norwich	18 th – 19 th century	Non-conformist, mostly urban working class	39	24	Caffell and Holst 2007	Low (small assemblage)
New Bunhill Fields BG Southwark	1821-1853	Non-Conformist, mixed class, urban	157	357	Miles and Connell 2012	Moderate, reasonable-sized urban assemblage
City Bunhill BG, London	1833-1853	Non-Conformist, mixed class, urban	117	122	Connell and Miles 2010	Low, small-sized urban assemblage
Kings Cross St Pancras	Late 18 th century – 1854	CoE, urban	715		Emery and Wooldridge 2011	Moderate, reasonable-sized urban assemblage
St Peter's, Barton on Humber	Phase a; 1700-1855	CoE, rural, mixed class, within and outside the church	427		Waldron 2007	Moderate (small assemblage, but geographically close)
Quaker BG, Coach Lane, North Shields	1711-1857	Quakers, urban, port town	236		PCA unpubl	Moderate: small assemblage, northern port town
Royal Naval Hospital, Greenwich	1749-1856	Hospital for retired and injured sailors	105	2	Boston <i>et al</i> 2008	Low: small specialist assemblage, but nautical
St James, Bowling Green Lane, Islington	1660-1853	Urban churchyard; mixed class?	700		AOC Archaeology	Moderate; reasonable assemblage, but not yet published
Holy Trinity Church, Coventry	1776-1850s	Urban, CoE, mixed class	1706		Andrews and Oakley 1998	High: good-sized urban assemblage
Bishop Challinor School, Tower Hamlets	1843-1854	Catholic burial ground, urban	742		Miles and Powers 2006	Moderate: reasonable assemblage, different sect

Table 14: Comparative assemblages

5.6.41 **Summary of potential:** the assessment indicates that more extensive investigation of Trinity Burial Ground will yield a large assemblage of articulated remains. The majority of the skeletons will be over 25% complete using the weighted criteria set out in *Section 5.6.1* (Fig 14) and are thus likely to be appropriate for analysis (the increased analytical potential of skeletons that are over 25% complete is demonstrated in Table 15, although final selection for analysis should be based on the assessment of a range of criteria). Overall, 70.9% of the 127 burials that lay fully within the trenches (and thus more likely to reflect the situation encountered in an open-area excavation) were over 25% complete, with adults tending to be more complete than

juveniles. Nonetheless, there are variations between the findings from each trench and, whilst some differences may reflect the intensity of burial activity, others may relate to the small sample size when the figures are broken down by trench and age of the individuals.

	Trench A	Trench B	Trench C	Total
Agable juveniles <25% complete	8/15 skeletons 53.3%	4/7 skeletons 57.1%	7/10 skeletons 70.0%	19/32 skeletons 59.4%
Agable juveniles >25% complete	25/26 96.2%	14/14 100%	12/12 100%	51/52 98.1%
Agable adults <25% complete	3/16 18.8%	0/1 0.0%	0/3 0.0%	3/20 15.0%
Agable adults >25% complete	18/25 72.0%	8/10 80.0%	8/12 66.7%	34/47 72.3%
Sexable Adults <25% complete	6/16 38.0%	0/1 0.0%	1/3 33.3%	7/20 35.0%
Sexable adults >25% complete	24/25 96.0%	10/10 100%	12/12 100%	46/47 97.9%

Notes: Agable refers to the allocation of skeletons to a scheme of close aging that would be used during analysis, which includes six juvenile age brackets, and five adult age brackets. Figures include skeletons that lie partially within the central area of investigation, but exclude those within the stepped area

Table 15: Comparison of basic demographic data according to completeness

5.6.42 *Viable Techniques:* On the basis of the assessment, the following osteological analytical techniques can be expected to be viable as part of macroscopic examination and recording:

- Inventory;
- Condition and completeness;
- Aging;
- Sexing;
- Metrical analysis;
- Examination of non-metric traits;
- Size and shape analysis of crania (although approximately 12% of adult crania were found to be suitable, this could equate to several hundred individuals in the final sample);
- Pathology;
- Biomolecular and biochemical studies, including DNA, and various isotopes;
- Radiology.

5.6.43 *Non-viable Techniques:* several recovery and analytical techniques are not considered to be viable, they comprise:

- Sieving for small bones: the excavation methods utilised during the evaluation indicated that sieving in the field will not enhance recovery. This will be especially so when a rigorous processing programme is enacted during the main excavation;

- Sampling for parasites: the assessment (*Section 5.9*) indicates that parasite eggs were not present in the samples taken during the evaluation, and that this will be the case during the main excavation;
- Radiocarbon dating: is unlikely to be a useful analytical tool for several reasons. Due to the nature of the calibration curve at the time that TBG was in use, it is very difficult to obtain accurate dates (Bowman 1996, 46, fig 18), and it is likely that the date ranges calculated would exceed the site's known period of use. Technically, it would be possible to use stratigraphic relationships to assist with the formulation of a Bayesian model to refine the dates allocated to individual skeletons, but it is still probable that the calculated dates will fall within a wide range. It is very unlikely that such dating could be used to identify specific individuals. Moreover, such a model would require the dating of large numbers of skeletons, which would be a very expensive process.

5.7 COFFINS AND THEIR FURNITURE

- 5.7.1 **Introduction:** the study of post-medieval funerary archaeology in the North of England has a much more limited dataset than that of London and its surrounding areas. Larger-scale studies made necessary by major redevelopment, such as the work carried out at Christ Church Spitalfields (Reeve and Adam 1993), St Pancras (Miles 2011), and Bunhill burial ground (Miles and Connell 2010; 2012) have generated a large number of coffins and coffin furniture for analysis. Similarly, archaeologically monitored clearances, where work has been carried out by a professional exhumation team with monitoring by archaeologists, have also generated new information; however, only a limited number of these have been published for use as comparison.
- 5.7.2 The standard late eighteenth- to nineteenth-century wooden coffin was of the flat single-break type and made from elm (Litten 2002, 90). Elm was used as it was less likely to split, being cross-grained, and was to some extent water resistant. Those coffins that were of the cheap variety tended to be made from deal, which is timber from softwood, such as spruce, larch or pine.
- 5.7.3 Coffins were normally constructed from six pieces of wood, consisting of two sides, two ends, a lid and a base. They were frequently nailed together, although some undertakers also employed the use of screws. Once formed, the joints and base were internally sealed with pitch or resin to prevent the escape of any noxious gases or liquids. The base was then covered with bran or sawdust that not only provided a soft base to lay the body on, but also acted to absorb the body fluids (Litten 1991, 92). The curve on the shoulders of a single break coffin was achieved by cutting a series of lateral grooves with a saw, called kerfs, on the inside of the side pieces, about halfway through the thickness of the wood, and then bending it to shape.
- 5.7.4 **Results:** in total, evidence of 104 coffins in various states of preservation was recorded at TBG. In most cases the coffins were represented merely by dark-brown organic stains in the ground (Plate 24) or through fragments of wood adhering to surviving metal furniture. Their method of construction was not usually discernible beyond the presence of decayed iron nails, furniture and occasional decorative features observed in the stain. The outline of the coffins

at TBG suggests that they were all of the single-break type. Trenches B and C had slightly better preserved coffins, with more substantial fragments of wood surviving (Plate 25). In total, 150 iron coffin nails were recovered. The vast majority of them were in a fair condition allowing them to be identified as the square-cut, flat-head type that was in widespread use from the late eighteenth century and throughout the nineteenth century (the introduction of wire-cut nails in the 1880s post-dates the use of the site for burial). Although there are subtle morphological differences that reflect the different manufacturing techniques that were adopted during the nineteenth century, corrosion precluded these from being observed on the excavated examples.



Plate 24: Trench A showing coffin stain outlines; facing north-west



Plate 25: Coffin 4045.2 with fair preservation. Trench C, facing south-west

5.7.5 *Wood*: Samples of wood were taken from a total of seven coffins from Trenches A and C (Table 16). None was in good condition, but six were determined to be of a coniferous wood and likely to be of the same species.

Coffin number	Trench	Taxon
2093.2	A	Coniferous wood
2098.2	A	Coniferous wood
4023.2	C	Indeterminate
4030.2	C	Coniferous wood
4033.2	C	Coniferous wood
4039.2	C	Coniferous wood
4040.2	C	Coniferous wood

Table 16: Wood taxa identification of coffin samples

5.7.6 *Coffin furniture*: the term coffin furniture denotes the metal fixtures and fittings attached to the exterior of the coffin. Multiple terminology is often applied to certain elements, for example the name plate on the coffin lid bearing the deceased's biographical information may be referred to as either a coffin plate, breast plate (so named because of the location on the coffin), depositum plate, or departum plate.

5.7.7 Due to the potential complexity of terminology, this report will use definitions outlined by Julian Litten in *Post-Medieval Burial Vaults: Their construction and contents* (1985) and repeated in *The English Way of Death* (2002) in

which he states that coffin furniture has its own terminology where ‘handles are known as grips, back-plates as grip plates, coffin plates as breast plates or depositum plates, upholstery nails as pins, lid decorations as motifs and side decorations as escutcheons’ (Litten 2002, 107). To this terminology coffin lace has been added. The term coffin lace covers strips of metal, often elaborately decorated or perforated, which are placed around the upper edges of the coffin and serve the same function as multiple upholstery nails or pins, ie holding exterior fabric coverings in place. Evidence of coffin lace was found on coffin **3048.2** (Trench B). It appeared to be constructed of two rows of studs decorating the sides of the coffin (Plate 26).



Plate 26: Coffin **3048.2** (Trench B) showing coffin lace on the south-east edge

5.7.8 A small quantity of coffin furniture was recovered during the evaluation at TBG (Table 17). The majority was in a poor state of preservation and highly corroded. All of the coffin furniture appeared to be iron, with tin dipping used to gain a silvery finish. This was the most commonly used material for the production of coffin furniture for the general populace, with lead and brass generally the preserve of the more wealthy (Litten 2002, 109).

Coffin Furniture	Function	Trench Total			
		Trench A	Trench B	Trench C	Totals
Depositum plate	Formal identification including name, date of birth and date of death	3	8	8	19
Grip	Outer handle to facilitate lifting and carrying the coffin	28	29	25	82
Grip plate	Decorative plate behind the grip to hide bolts or screw attachments	11	2	17	30
Coffin lace	Punch patterned metal strips usually placed around upper edge or around the perimeter of the lid for decorative purposes	0	1	0	1

Table 17: Coffin furniture identified at TBG, by trench

5.7.9 In total, 19 depositum plates were observed during the works. Their very corroded state, however, meant that no complete examples were recorded, and it was impossible to determine any details of design. The majority disintegrated upon touch, with the exception of **2055.2** (Trench A) where a fragment retained several letters painted in white on a black background (Plate 27).



Plate 27: Depositum plate fragment from coffin 2055.2 showing surviving inscription

5.7.10 Iron grips accounted for 82 of the pieces of coffin furniture excavated during the evaluation. No single coffin provided the full suite of grips that would be expected from a post-medieval cemetery. Each coffin would originally have had either six or eight handles. The vast majority of the grips were corroded, making it difficult to determine type and style. Those that could be identified (with the exception of two) conformed to the Christ Church Spitalfields (CCS) 2a and 2b style with no embellishments (Plate 28), which is prevalent throughout the eighteenth and nineteenth centuries. Coffins **3020.2** and **3045.2** (Trench B) produced grips of a type not observed in either the Christ Church Spitalfields catalogue or the Oxford Archaeology data set (Plates 29 and 30).



Plate 28: Grip from coffin 3044.2, CCS style 2b, date 1763-1837 (Trench B)



Plate 29: Newly identified type of grip from coffin 3020.2 (Trench B)



Plate 30: Newly identified type of grip from coffin 3045.2 (Trench B)

- 5.7.11 In total, 30 grip plates were observed. All of them were made of tin-dipped iron, but generally so highly corroded that it was not possible to determine typology from most of them. A single, scallop-shaped example associated with infant burial **2026.2** (Trench A) bore a motif with two cherubs above palm fronds arranged around a central cartouche and surrounded by a wreath.
- 5.7.12 *Other furniture*: coffin **2054.2** (Trench A) produced evidence for the presence of a glass viewing pane, set into the coffin lid. Viewing panes were introduced in the mid-nineteenth century (Quigley 1996, 85) allowing the body to be displayed in a closed coffin, and the practice continues to the present day.
- 5.7.13 A small number of textile samples were recovered from coffins. A fragment associated with skeleton **3040.3** in Trench B is probably a velvet damask, with a complex floral design, which appears to have been used as a lining. Fragments from coffin **4045.2** (Trench C) are selvedged ribbon or tape, again seemingly used in the coffin lining. A large fragment from coffin **4039.3** (Trench C) comprises more than one fabric-type, with a coarse open-weave fabric covered in places by a much finer weave, the two presumably again used in lining the coffin.
- 5.7.14 *Discussion*: preservation of the coffins varied between the trenches, suggesting that areas of the burial ground may produce a higher concentration of surviving wood than others. The small fragments of coffin wood that were analysed came from a species of coniferous wood. In general, this not only includes native taxa such as yew (*Taxus baccata*) and pine (*Pinus sp.*), but imported European varieties such as larch (*Larix decidua*) and spruce (*Picea abies*; Hather 2000, 30-40). Documentary research may help to address questions relating to the source, import and trade of those materials into Hull (*Section 6.4*).
- 5.7.15 Only a limited amount of coffin furniture was observed during the works. Whilst the majority is comparable with typologies from the south of England, the form of other pieces may be more regionally specific. In general, breast plates were poorly preserved, and the proportion of coffins equipped with such items, let alone readable ones, appears low. Nonetheless, the vaults on site will not have been subjected to the same soil conditions as the earth-cut burials, and from endoscopic examination of two of them in Trench B, preservation of coffins and furniture in those structures might be better.

5.8 ARTEFACTS

- 5.8.1 *Introduction*: a small group of finds recovered from individual burials, as well as from unstratified contexts, was assessed. In accordance with the requirements of the Faculty, the finds have been reburied.
- 5.8.2 *Grave goods*: small copper-alloy 'brass' pins were used in a number of ways within a burial, either to secure a shroud (by the nineteenth century this was generally an open-backed gown resembling a night-gown), and to hold in place folds and other sartorial details, for instance a cap, bonnet, or veil. Small copper-alloy pins were noted in association with a number of burials from Trenches A and B (burials **2018.2**, **2045.2**, **2048.2**, **2066.2**, **3019.2**, **3020.2**, **3028.2**, and **3043.2**). Skeleton **3043.2** had pins located at the base of the skull,

and lying amidst remnants of hair, perhaps implying that they were also used to secure hairstyling

- 5.8.3 Buttons appear to be the most frequently encountered item within the graves, with a total of 44 recovered from 13 burials. In several cases the buttons have been identified as being turned bone and, although now all are dark brown to black in colour, they are originally likely to have been cream-white in colour. As most of the buttons appear to be bone, it might be suggested that they date relatively early in the nineteenth century, especially as the ceramic 'prosser' button, patented in 1840 (Sprague 2002, 113) and soon used extensively, is absent from the group.
- 5.8.4 All of the buttons are most likely to have come from the shroud, or from undergarments. It might be the case, in those burials from which only one button was recovered, that they were from conventional nineteenth-century shrouds, which would have been fastened only at the neck, or, in the case of those with two to four buttons, a shroud that was fastened at neck and wrists. In two cases there were considerably more buttons recovered, strongly suggesting that the deceased was more fully dressed, presumably in clothes worn in daily life. Perhaps the most interesting was skeleton **4039.2** (Trench C), which produced three Mother-of-pearl buttons, and seven others, all probably bone, but of different sizes, and different numbers of perforations, presumably indicating a range of different garments. The presence, within the grave, of what has been tentatively identified as a 'quizzing glass' (Section 5.8.5), a single mounted lens within a metal frame, might well suggest that the occupant of the grave was dressed as in life.
- 5.8.5 A small metallic fastener and a copper-alloy eyelet, from skeletons **2018.2** and **3020.2** respectively (Trenches A and B), probably served, in the same manner as the buttons, to close the shroud. A small lens and parts of a folding metal frame were found in association with skeleton **4039.2** (Trench C). The object has been identified as the last remnant of a lorgnette, or, possibly more likely, a quizzing glass. Whilst a monocle would be one obvious identification, these lack a handle of any sort, being wedged directly into the eye-socket when in use (www.college-optometrists.org/en/college/museyeum/online_exhibitions). The lorgnette was patented *c* 1770, and folding eyeglasses, a later adaptation, were patented in 1825 (*ibid*). The quizzing glass came into vogue in the eighteenth century, remaining common until the 1850s, when it fell out of popularity, but they continued to be made well into the twentieth century (*ibid*; Plate 31).



Plate 31: Remains of a quizzing glass from skeleton **4039.2** (Trench C)

- 5.8.6 A single pair of gold earrings, small hoops or sleepers with the join masked by a small spherical bead, came from skeleton **4033.2** (Trench C). As earrings were rarely worn by males in the nineteenth century, it can be assumed with relative confidence that the occupant was female.
- 5.8.7 Five of the graves also produced small (presumably low-denomination) copper-alloy coins. Sadly all five were badly corroded and thus illegible. Coins were sometimes used to cover the eyes of the deceased, weighting down the eyelids to keep them shut, and one (from skeleton **2072.2**; Trench A) was actually found within the left orbit of the occupant's skull. Others were found with skeletons **2031.2**, **2082.2** (Trench A), **4033.2** and **4039.2** (Trench C). It is not clear whether their absence from burials in Trench B is of relevance.
- 5.8.8 **Ceramics:** although only a small amount of pottery was recovered from Trench C (six fragments, all unstratified), it is of significance, probably pre-dating the burials by some time. Five of the fragments derive from the neck of a single stoneware Bartmann-type jug in the distinctive 'orange peel' fabric associated with the Frechen production centre in Germany. The sixth fragment, in a whitish stoneware, seems likely to be a Siegburg product (Hurst *et al* 1986, 176), with both vessels broadly contemporary, dating from the late sixteenth or early seventeenth century (*ibid*).
- 5.8.9 The same trench also produced a single fragment of medieval tile, the inlaid decoration suggesting a late thirteenth- to fourteenth-century date (Plate 32), although the production of such tiles continued to the sixteenth century. It would undoubtedly come from a tile pavement laid within a church or other important ecclesiastical establishment.



Plate 32: Medieval floor tile recovered from Trench C

- 5.8.10 Trench D also produced small amounts of pottery, with four fragments, representing three separate vessels, from demolition deposit **5013**, and three (possibly two vessels) from demolition deposit **5031**. The vessels from **5013** are all transfer-printed refined white earthenwares, the transfer colours (blue, brown, and green) all indicating a date after *c* 1840, when colours other than blue were introduced. The vessels from deposit **5031** are brown stonewares, probably of early nineteenth-century date, but possibly a little earlier. None merit further consideration.
- 5.8.11 **Ironwork**: three ironwork items were recovered, all heavily corroded. Only one was stratified, possibly being a small chisel, perhaps lost inside the coffin (**2027.3**; Trench A) by the coffin-maker or upholsterer, or if it is from the grave fill, by the grave-digger. The other two items were recovered unstratified in Trench C, both are heavily corroded, but bear a strong resemblance to dental implements. Their presence cannot be accounted for, unless placed in a subsequently disturbed grave. None merit further consideration.

5.9 PARASITES

- 5.9.1 **Results**: the submitted samples gave no records of eggs of intestinal parasites (*Appendix 3*). Other microfossils noted in the 'squash' subsamples comprised a single *Polypodium* (fern) spore from Sample 2003 (skeleton **2083.3**), another indeterminate pollen grain/spore from Sample 2002 (skeleton **2070.3**), a soil-dwelling nematode from Sample 3001 (skeleton **3027.3**), small numbers of fragments of fungal hyphae (present in 12 of the samples – all bar Samples

2003, 4000 and 4003) and occasionally some fungal spores (from Samples 3002 and 3003, skeletons **3041.3** and **3045.3**, respectively). There were, however, no concentrations of interpretatively valuable microfossil remains present.

- 5.9.2 On the evidence from the samples included in this assessment, the likelihood that similar samples from other burials encountered would provide records of intestinal parasite eggs, or concentrations of other interpretatively valuable microfossils, is negligible. Accordingly, it is not considered that parasite analysis should form part of the analytical techniques during the main works.

6. CONCLUSION

6.1 DISCUSSION

6.1.1 The programme of works has gathered an important body of data relating to the surface structures at Trinity Burial Ground, but has also provided an important glimpse of the below-ground deposits within several different parts of the site. The key findings, as they relate the advance works objectives, are outlined below:

<p>Grave Monuments (<i>Section 2.1.3, Objectives 1-3</i>)</p> <p>There has been a significant degree of damage, displacement and numerical reduction to the grave monuments since the EYFHS (1985) survey in 1982;</p> <p>OA-HFA instrument survey allows monuments and burials to be tied together with a high level of confidence as demonstrated by the evaluation results (<i>Sections 5.2.2, 5.3.3, 5.4.3</i>), but will also be a useful tool in keeping any relatives informed about the location of their ancestors within the site.</p> <p>The more detailed record will permit a greater range of analyses, particularly in terms of the examination of chronological, spatial, social and demographic trends in monument form and iconography.</p>
<p>GI Works Watching brief (<i>Section 2.1.4, Objectives 4-8</i>)</p> <p>Disarticulated human remains found from 0.3m bgl;</p> <p>Articulated human remains found from 1.05m bgl;</p> <p>Deepest potentially <i>in situ</i> human remains found at 2.5m bgl;</p> <p>Human remains recovered from boreholes at 4m bgl likely to have been displaced from higher in the sequence;</p> <p>No fleshed remains identified;</p> <p>Buried brick structure 1.7-2m bgl at eastern edge of site (BH310) may be a vault with no surviving surface components;</p> <p>Natural deposits generally at <i>c</i> 2m bgl, but vary from 0.6m (BH309) to 2.5m (BH301) bgl;</p> <p>Findings compliment those from the trial-trench evaluation.</p>
<p>Trial-Trench Evaluation (<i>Section 2.1.5, Objectives 9-15</i>)</p> <p>9. Generally, the top of the burial horizon was identified between 0.7m and 1m bgl, and extended to 1.9m bgl at its deepest (Table 3; <i>Section 5.4</i>). This is considerably more shallow than has been identified at many other contemporary sites, and than was envisaged at the outset of the project (OA-HFA and PMA 2014). Within the evaluation trenches, the base of the burial horizon appeared to correspond roughly with the level of the water table, which largely occurred at the interface between the natural upper sandy clay layer and underlying grey alluvial deposits.</p> <p>Results from BH305 and the undisturbed eastern end of Trench D suggest that the original, undisturbed surface of the natural geology may have lain at about 0.6m bgl.</p> <p>10. Some variation occurs in the burial regime across the impact zone; this may be influenced by socio-economic factors, with the areas of least dense burial in areas close to public paths and in areas with expensive vaulted tombs.</p> <p>Burials appear to have been initially, set out in a fairly orderly manner, on a roughly south-west/north-east axis, mirroring that of the burial ground in general. In each of Trenches A-C there is clear evidence that the graves were laid out in rows, that on occasions graves coincide with extant elements of <i>in-situ</i> grave markers, and that multiple interments were made within each grave. Burials within each grave did not always lie directly above their predecessors.</p> <p>Evidence for post-depositional movement and slumping, with some skeletons at angles and dipping at the pelvis; also evidence for disturbance.</p> <p>Clear differences in the density of burial at each of the three locations: 2 burials/m² in Trench B, 2.85 burials/m² in Trench C, 4.94 burials/m² in Trench A. The difference in density between Trenches A and B is further magnified when it is considered that the vast majority of the burials in Trench A occupied the uppermost 0.4m of the burial horizon, whilst those in Trench B were mostly within the uppermost 0.7m of an analogous deposit.</p> <p>Instances of seven or eight burials in individual graves in each of Trenches A-C. High density in Trench A relates to narrow (and sometimes hard to define) plots compared to increasingly apparent and more spacious examples in Trenches C and B.</p> <p>Intense burial activity in Trench A led to disturbance of numerous burials, which is reflected by large numbers of charnel deposits (including some that were articulated, and must have still been held together with soft tissue</p>

when disturbed), and mass of disarticulated and often fragmented bone from this trench

No burials were identified within Trench D, where the structural remains identified are likely to be those of the former mortuary building, albeit that they do not exactly align with the position depicted on the 1842, 1869 and 1893 OS maps. Evidence for other, probably later buildings, was revealed in the northern section of Trench C, and just below the turf between that trench and the gaolyard wall. These may represent the remains of a range of buildings constructed against the southern face of the gaolyard (by then a sawmill) wall as shown on the 1893 OS map. The position of nearby monuments and the findings from Trench C suggest that burial activity took place everywhere except within the building footprints.

11. The preservation of skeletal material across the site was generally found to be good, with a significant proportion of *in-situ* burials being over 25% complete and in good condition. The overall potential for the recovery and analysis of demographic, morphological, and metrical data is high, and lesions of pathology are frequent and varied.

12. No waterlogging within the burial horizon;

Limited and variable organic preservation, including very small amounts of coffin wood and fabric. Better preservation of coffin wood in Trench C where there are heavier clay soil conditions and several coffin planks survive.

13: Majority of skeletons are associated with coffin remains, but a higher proportion of burials in Trench B were associated with metal coffin furniture, particularly depositum plates.

No depositum plates were sufficiently complete or legible to identify the associated individual. At present it seems unlikely that a significant proportion of any assemblage could be identified as named individuals from their coffin plates.

Evidence of clothing and personal adornment was identified in several cases, with metal items generally quite corroded (*Section 5.8.2-4*). The five coins recovered were too corroded to be legible (*Section 5.8.7*), although it might be possible to date coins from the main excavation if they can be cleaned by a conservator. The earliest items recovered from the works, comprising a medieval floor tile and a post-medieval jug (*Section 5.8.8-9*) from Trench C, may not originally have been deposited within the burial ground. Rather, they, and the rubble deposit from which they were recovered, may have derived from mid-nineteenth-century works associated with the crypt at Holy Trinity Church, the spoil from which is recorded as having been dumped within the burial ground (K Steedman pers comm).

14. Confirmed presence of buried displaced headstones, *in-situ* gravestone bases and kerbs, and vaulted tombs that have had the tops removed down to ground level, so that they are no longer visible. There are thus likely to be rather more monuments, including tombs, present than those that are currently visible.

15. No fleshed or part-fleshed remains were identified

Other comments

Status: Whilst it is very tempting to suggest that those in Trench A represent working-class parishioners buried in public graves, it is far from certain that these correlate with the lowest social tier accommodated at Trinity Burial Ground. True, the trench occupies one of the less publicly accessible parts of the site, but not only are there many extant memorials in the area, but the remains of *in-situ* gravestone bases were found within the trench area itself. Moreover, several of the burials did have coffins with depositum plates, and the trench also produced one of the most decorative grip plates, as well as the possible glass viewing pane. It is entirely possible, then, that another part of the burial ground may be occupied by even lower, and quite possibly more densely packed, burials.

Number of burials: Historical evidence (Milner 1847, ix) and the current work being undertaken at Holy Trinity Church by HFA (Ken Steedman pers comm) indicate that quite intensive burial activity continued at the parish church in parallel with the use of TBG. It is uncertain what proportion of the 44,041 burials recorded on the parish register that this represents, but the recent modelling of the evaluation findings does provide some indications. For example, in considering the lowest estimate of numbers established by the PERT model and extrapolating that across the whole burial ground, the model could be interpreted as suggesting that as many as 7368 of the burials recorded on the register could have been made at the parish church itself (Arup 2015b).

Suitability for on-site analysis: during the course of the evaluation it was possible to utilise the on-site laboratory facilities to record detailed osteological information (this is particularly demonstrated by the comprehensive assessment of the pathological lesions; *Sections 5.6.11-36*). The Historic England and Advisory Panel on the Archaeology of Burials in England (APABE) guidance document on *Large Burial Grounds* advocates that skeletons should be processed on site wherever possible (2015, 9, Fig 1). The nature of the burial substrates encountered during the evaluation suggest that the skeletons will require no more than standard washing

procedures (ie, they are not encrusted or covered by indurated or sticky clay). A carefully managed and well-orchestrated programme of on-site processing (cleaning, drying, boxing, cataloguing and secure storage) of articulated skeletal remains will be feasible at TBG provided that sufficient space, water supply and drainage/sediment management facilities can be installed, as well as optimised racking and appropriate amounts of space within well-ventilated secure cabins that can be used for drying the remains.

Oxford Archaeology's work on the First World War mass grave at Fromelle has also demonstrated that full osteological analysis and an appropriate suite of biochemical sampling can be undertaken very successfully within an on-site laboratory (Loe *et al* 2014). As with the processing, it would be possible to undertake a comprehensive programme of osteological analysis to accepted standards (Brickley and McKinley 2004) and sampling using on-site facilities, provided that there are sufficient facilities, and that skeletons are stored in a manner where they are accessible for review throughout the programme of fieldwork.

For maximum efficiency, the washing, drying, storage and analysis facilities should be placed in sequence within the same part of the site. The washing facilities would need to be placed appropriately to feed into existing water and drainage infrastructure; the position of the analysis laboratories will also require careful consideration to maximise efficiency in the carrying of remains. Space should be maximised through the use of stacked or multi-storey cabins and storage units where possible. Although the undertaking of the works is feasible, the scale of the operation and the constraints of physical space available at the site and the development programme, will necessitate careful and detailed programming and consideration of logistics as part of the planning for the Works as part of the Main Phase.

6.2 SIGNIFICANCE

- 6.2.1 Whilst there is a clear recognition of the value of data from post-medieval and industrial-period burials grounds (Mays 1999; EH 2011; ADCA 2010, 7-10), further work is required with regional historians, archaeologists and experts in post-medieval burial to develop an appropriate research framework that is specific to a detailed study of Trinity Burial Ground. In the formulation of the framework there is a need to collate, review and assimilate data on the socio-economic, demographic, funerary and religious trends prevailing during the use of TBG, both in the case of Hull, and more widely. In particular, models can be generated against which the historical and archaeological data from Hull and TBG can be tested. The research should give some consideration to the principal industries and employers in the city, but also any forms of employment and other characteristics that are unique to Hull and Holy Trinity Parish.
- 6.2.2 Overall, there is a basic understanding that, through the integrated examination of historical records, osteology, funerary remains, monumentalisation, burial locus and personal artefacts, the multi-disciplinary investigation will facilitate the production of an holistic narrative social history of Hull and of Holy Trinity parish within the wider context of Yorkshire and the UK.
- 6.2.3 *Historical trends:* it is apparent that a sample of funerary remains from Trinity Burial Ground could make a very strong contribution to understanding the social history of Hull. Whilst there has been some study of the medieval and early post-medieval human remains from the Magistrates Court (Evans 2000), there has been no similar treatment of later post-medieval/industrial-period remains from the city. The situation reflects a wider dearth of basic research on human populations in Yorkshire, and it is likely that the region's post-medieval and industrial-period funerary practices and population composition are as poorly understood as in many other parts of the North (Knight, Vyner and Alan 2012; Brennand 2006; 2007; Petts and Gerrard 2006). From a historical perspective, there is thus an opportunity to contrast the findings from Trinity Burial Ground with those from the investigations of earlier burial grounds in the city, and to examine local change over a greater period of time.

- 6.2.4 Unlike so many cemeteries where burials span several centuries, or can only be vaguely dated, the documented inhumation at Trinity Burial Ground spans less than a century. Moreover, those 80 years relate to a period of rapid industrialisation, urbanisation and population growth and, significantly for a port such as Hull, trade and migration. The intensification of settlement, inadequate public health amenities, poor air and water quality, potentially contaminated food and dangerous working conditions in local industries during the burial ground's period of use, may have increased the prevalence of infectious diseases and work-related injuries (Roberts and Cox 2003). The working classes (who must have represented a significant proportion of those interred at Trinity Burial Ground, in stark contrast to many of the middling to upper-class crypt assemblages published to date) and their children, in particular, could have been subject to high rates of mortality and morbidity. Such conditions may have reached their nadir, before seeing some improvement, during the use of the burial ground. The fact that there is a complete burial register, various other parish records and contemporary documents, such as Commissioners' Reports, means that there is good scope to develop a strong historical context for the site, as well as demographic models. A carefully selected sample of human remains thus offers an opportunity to trace physical anthropological evidence for such changes. From a methodological perspective, it will be important to recover as many individuals as possible from the same grave, as this will add to the chronological dimension of the study, but also, permit the study of family groups where such individuals are contained therein.
- 6.2.5 Whilst Trinity Burial Ground was not the only burial ground in Hull (or indeed, Holy Trinity Parish) between 1783 and 1861, it certainly appears to have been the largest and the most intensively used. As such, it seems probable that it was the final resting place of a significant proportion of Hull's population, rich and poor alike. It is reasonable, then, to suggest that the burial ground contains a cross-section of the parish community. However, it is more difficult at this juncture (and possibly at any time) to be certain that the part of the burial ground to be excavated as part of the scheme is equally representative, notwithstanding that the evaluation identified evidence of perhaps three different social groups in different parts of the burial ground (*Section 5.2-5.4*).
- 6.2.6 Nonetheless, it may be possible to explore themes that would contribute to the development of a narrative socio-economic history. For instance, the works have highlighted clear variations in the spatial use of the site. These are most likely to relate to socio-economic factors. Indeed, it seems probable, as at contemporary burial grounds, that the social status of those buried at Trinity Burial Ground was reflected in the location of their graves. What constituted more, or less, desirable locations will vary from site to site, but, where competitive display and formalisation of social structure were a concern, issues such as accessibility, prominence, and placement among one's peers, are likely to have been a consideration. Further, the distribution of grave markers, both now and in 1982 (EYFHS 1985), is not uniform across the site. In particular, there appear to be slight concentrations of tombs/vaults and ledgers within the western half of the cemetery, whilst there is none at the north-eastern end of the site. The presence of buildings in the north-east corner

is likely to have affected a very limited area around those structures and, whilst it is possible that gravestones in that area had been selected for removal as a result of later management, there is an equal or greater possibility that the north-east end of the burial ground hosted public graves for poorer parishioners who could not have afforded durable monuments.

- 6.2.7 Temporal aspects are harder to define. A basic examination of the EYFHS study of the grave monuments at TBG indicates that many of the earliest extant gravestones with eighteenth-century dates are at the western, particularly the south-western, end of the site, whilst there are greater numbers of stones dating to the 1850s, in particular, to the south of the former gaol, suggesting that burial activity gradually moved eastwards. However, the same basic examination indicates that the pattern is far from uniform, with gravestones from several different decades lying in close proximity and even neighbouring one another. This implies that any system for utilising the graveyard was not based simply on filling each successive plot from one end of the site to the other. Since only tentative patterns can be observed among the gravestones, it would not be possible to extend such trends to unmarked graves encountered during excavation. The evaluation evidence would suggest that several other forms of dating are unlikely to greatly aid chronological refinement. No coffin plates with legible dates were recovered and, although several burials were found in association with coins (*Section 5.8.7*), all were too corroded to be dated by macroscopic examination during the evaluation. Nonetheless, the possibility remains that coins could be legible once cleaned by a conservator. Some of the coffin fittings can be broadly dated, but many forms span the full the use of the burial ground (and beyond), while others have not yet been correlated with known, dated examples (*Section 5.7.10*).
- 6.2.8 Grave markers are the most obvious relics of post-medieval funerary activity and work by Mytum (2002) and Tarlow (1999) has traced changing traditions in the shapes, iconography and text inscribed on these memorials. Several studies have been undertaken on Yorkshire churchyards, potentially producing information that could be invaluable for comparison with that from Trinity Burial Ground, particularly in terms of establishing where the Trinity Burial Ground data are unique, or form part of wider inter and intra-regional fashions. Moreover, the fact that monuments can be tallied with specific families, who might be traceable in terms of their occupations, places of residence and social positions, means that it may be possible to closely contextualise aspects of monument style and decoration.
- 6.2.9 A more detailed examination of the data is required (*Section 6.4*), but the spatial and temporal distribution of different forms of grave monument, coupled with an appreciation of the burial ground's original internal infrastructure (ie, paths, entrances, buildings, areas of planting, *etc*), the nature of its contemporary surroundings (ie, positions of major routes, less salubrious industries, *etc*), together with the clearly differentiated evaluation findings, provide a good basis for gaining a preliminary understanding of the temporal and social organisation of the burial ground prior to more extensive intrusive works.
- 6.2.10 The evaluation has recovered a reasonable suite of data relating to coffins, with 66% of burials that lay fully within the area of detailed investigation

within each trench being associated with evidence of such containers (Table 18). Many of those coffins were represented merely by stains (*Section 5.7.4*), but 40% of burials were associated with furniture in a range of states, while timbers and fabric were occasionally preserved, albeit in poor condition (*Sections 5.7.5* and *5.7.13*). The inconsistent preservation state of the coffin timbers means that these have little potential to inform the project's research questions. The research value of the coffin furniture depends on its state of preservation and, although this is generally quite poor, the more robust pieces such as grips can be identified and typologised (*Section 5.7.10*). Moreover, the variations in the presence of coffin furniture between Trenches A-C are as much likely to reflect socio-economic factors as taphonomic (ie, post-depositional) ones. For example, it is likely that the greater preponderance of coffin furniture in Trench B is a reflection of the quantity and quality of such items that could be afforded by the more wealthy individuals buried in that part of the site when compared to those less affluent individuals encountered in Trench A (Table 18). Nonetheless, it is important to consider burials associated with poorly preserved coffin remains, or seemingly lacking such containers: particularly where ground conditions are similar, such variations are likely to reflect coffin quality, and, by inference, their cost to the original buyer. Overall, the form, materials, motifs and decoration of coffins and their furniture are important indicators of social status, identity and beliefs: during the excavation they will be important factors in assisting with the archaeological investigation strategy, as it seeks to recover a broad social and temporal sample. Whilst there is a growing understanding of the burial accoutrements of the wealthy, many questions remain unanswered regarding changing burial fashions and practices amongst the less affluent, and particularly how that would be manifest at Trinity Burial Ground.

	Trench			
	A	B	C	Total
Burials fully within trench	69	28	30	127
Burials fully within trench with evidence of coffins (including stains and nails)	37	22	25	84
	54%	79%	83%	66%
Burials fully in trench with coffin furniture (excluding coffin nails)	21	18	12	51
	30%	64%	40%	40%

Table 18: Summary of coffin remains associated with burials that lay within the detailed investigation area of each trench

6.2.11 No named individuals were encountered during the evaluation. There were no completely legible coffin plates (and only a few that were partially legible; *Section 5.7.9*). This is a common situation where burials are made within a well-drained substrate such as was observed in the burial horizon at TBG: no legible plates were present among over 130 mid-nineteenth-century burials at Redearth, Darwen (OA North 2011), and there were just three among some 240 similarly dated burials from Coronation Street, South Shields (Rowland and Loe in prep). None of the detailed investigation areas within the trenches coincided with the positions of intact *in-situ* memorials, but the evaluation identified several instances where there is a physical correlation between buried gravestones footings and graves, with examples in each of Trenches A-C (*Sections 5.2.2, 5.3.3, 5.4.3*). This would indicate that the best possibility of identifying particular individuals resides with the correlation of inscriptions on

in-situ monuments with the stratigraphic sequence and osteological demographic information of those interred in the associated grave. Such a method was carried out very successfully at Swinton Unitarian Burial Ground, Greater Manchester, where it was possible to identify virtually all of the 174 individuals that were buried prior to 1900, despite the fact that only 20 had legible depositum plates (OA North forthcoming). The possibility of expanding the corpus of named individuals through judicious integration of the 1982 survey results requires testing, although it should be feasible to identify which plots some of the 1982 records relate to (particularly those stones that were upright at that time but have since been laid down), even if the monuments were no longer extant during the current survey.

- 6.2.12 There are 112 *in-situ* monuments extant within the impact area (ie, not including stones that have been laid down), although this number could be increased through careful use of the data from the 1982 survey, particularly those stones that were *in situ* in 1982 but have since been laid down (EYFHS 1985). There are at least 236 individuals recorded on the 112 extant stones and it is therefore possible that some or many of those individuals could be identified. This is not a high proportion of the assemblage that is likely to be excavated from the site (at most 1.4%, with 236 named individuals/17,202 burials on the basis of the average of all the predictive models; Arup 2015b). This is not a statistically valid sample for the purposes of scientific analyses, particularly those that seek to use information from named individuals in the testing and formulation of osteological techniques (*Section 6.3*). Conversely, from a historical perspective, and for examining specific case studies within a narrative history, these named individuals would represent a significant body of data where they can be associated with, and the osteological information integrated with, documentary data. The fact that these individuals were from families with the resources to procure family plots and erect gravestones (the data indicates that all those recorded on gravestones were likely to be family members; *Annex 1*) means that such individuals are more likely to appear in trade directories, land registries, and other such historical documents. Additional work that would improve an understanding of the historical record is outlined in *Section 6.4*, and the extent to which these data could potentially contribute to analysis is covered in *Section 6.3*.
- 6.2.13 Inevitably, the majority of the archaeological sample will comprise individuals with little or no material evidence of wealth. Those less affluent individuals are likely to remain anonymous: the evaluation identified no legible coffin plates and could not associate any particular gravestone footings with those individuals that were most densely buried in Trench A (*Section 5.2*). The mode of their burial, and their human remains, can tell us a lot about these people, however, and indeed, it is potentially the only document that these people have left behind for us to study and to gain an understanding of their social history. The study of such remains is integral to gaining the best possible understanding of Trinity Burial Ground's contemporary social order, particularly when it is considered that there has been very little study of working-class populations from sites outside of London.
- 6.2.14 Overall, the site does have the potential to provide an opportunity to explore a temporal 'snapshot' of the former lives of Georgian and Victorian Hull's population in terms of its composition, social demography, health and

mortality, as well as evidence for a more diverse population that might be expected in a port town. These data can be used in several ways and may be couched within the demographic framework provided by the complete Holy Trinity Parish burial register and the rather less complete information from the surviving funerary monuments. In order to determine aspects of the data that are unique to, or characteristic of, Trinity Burial Ground, they can be compared with studies of contemporary assemblages from other areas. Examples, including an assessment of their relevance, are presented in Table 14 (*Section 5.6.41*). It is clear that there are currently no published datasets that are directly comparable to TBG in all aspects of assemblage size, being a major northern port town, or the relatively short period of use. Nonetheless, there are numerous sites that are comparable in several key areas. Many of the larger assemblages have been recovered from sites in London (itself a major port) and there are several significant mixed-class assemblages that would bear comparison with that from TBG. These include St John's School, Bethnal Green (Ives and Hogg 2012), New Bunhill Fields (Miles and Connell 2012), Kings Cross St Pancras (Emery and Woolridge 2011), Bishop Challinor School, Tower Hamlets (Miles and Powers 2006) and Bow Baptist Chapel (Powers 2011). All of those sites have produced larger assemblages and represent a range of religious sects that would usefully bear comparison with TBG. If used specifically for comparison with vault burials at TBG, then the assemblages from the crypts at Christchurch Spitalfields (Molleson and Cox 1993) and St Lukes, Islington (Boston *et al* 2005) could be of value.

- 6.2.15 Outside of London, the majority of 'provincial' assemblages tend to be smaller. Nonetheless, two of the largest derive from West Midlands industrial cities, including St Martin's-in-the-Bull Ring, Birmingham (Brickley *et al* 2006) and, in particular, Holy Trinity Church, Coventry (Andrews and Oakley 1998). St Hilda's, South Shields (Rowland and Loe in prep) is not an especially large assemblage, but it does derive from a working-class assemblage from the parish church of a northern port town. The Quaker Burial Ground at Coach Lane, North Shields (PCA unpubl) provides a useful Non-Conformist comparator from a port town, whilst that from St Peter's Barton on Humber is geographically close, and provides a rural comparison (Waldron 2007).

6.3 RESEARCH POTENTIAL

- 6.3.1 The *Method Statement for Exhumation and Archaeological Removal of Burials* (OA-HFA and PMA 2014) presented 16 research questions (RQs) that were considered relevant to the investigation of the burial ground. These were reviewed during the August 2014 Workshop, and five RQs were selected as being particularly relevant (*A63 Castle Street Improvement, Trinity Burial Ground - English Heritage Stakeholder Workshop – Final Report*, Capital Value and Risk Ltd, 27 August 2014). Those five questions represent the primary aims (*Section 6.3.5*) and each is reviewed with a brief commentary in Table 19. RQ5 is considered to be particularly important. The other 11 research questions are briefly revisited in Table 20 (*Section 6.3.6*).

- 6.3.2 It is important to note that the area of investigation represented by the evaluation (47.5m²) is small when compared to that of the proposed excavation area (3,507m²), and of the wider burial ground (8,120m²). It is thus difficult to be certain to what extent the excavated osteological sample is representative of the wider buried assemblage. For example, over half of the burials that were excavated fully (84/155 burials; 55.6%) were juveniles, but there were significant variations between the trenches. Indeed, it is entirely possible that trenches placed within a few metres of those that were excavated could reveal a different demographic profile. Moreover, adults were better represented among skeletons that lay within the step around the area of deeper investigation, in the charnel deposits, and among the disarticulated material. Factors contributing to this distribution are likely to include the greater survivability of more robust adult bones relative to those of juveniles and the fact that adult skeletons take up more room than juveniles, and thus are more likely to have been partially disturbed as a result of grave-digging activity. Overall, it does not seem appropriate to modify the research questions on the basis of the demographic profile identified to date, suffice it to note that the excavation is highly likely to recover the remains of individuals of every age and of both sexes.
- 6.3.3 The statement of significance (*Section 6.2*) highlights the importance of an integrated approach to analysis, utilising documentary, spatial, contextual and osteological data. Focusing purely on the latter, the suite of analytical techniques that can be expected to be reliably employed on the assemblage is presented in *Section 5.6.43*, but includes all those that fall within nationally accepted practice (Brickley and Mckinley 2004), comprising a full macroscopic examination and recording for inventory, condition and completeness, estimation of sex and age, metrical and non-metrical analyses and pathology. This would also include radiology to help diagnose pathological lesions (usually *c* 10% of analysed assemblage) but biochemical techniques are also likely to be appropriate if used judiciously within a robust research context. This includes stable isotope analyses (diet and geographic origins); histology (to investigate pathology) and ancient DNA (pathogens; sex of juveniles; genetic relationships).
- 6.3.4 The number of burials that could lie within the excavation zone has been modelled in a variety of ways; the average of the models suggests that there could be 17,202 burials, of which 12,755 could be in articulation (Arup 2015b). Table 15 (*Section 5.6*) clearly demonstrates that basic demographic data was recoverable from the vast majority of skeletons from the evaluation that were over 25% complete when utilising the system outlined in *Section 5.6* and on Fig 14 (for example, 98.1% of such juveniles and 72.3% of such adults could be attributed to refined age brackets, and 97.9% of such adults retained characteristics for sex estimation). It can be argued that 70.9% of the assemblage (90/127 skeletons that lay fully within the areas of investigation within the trenches; Table 4; *Section 5.6*) will be over 25% complete and will thus have potential for analysis. Moreover, it is apparent that some skeletons that are less than 25% complete retain the potential for analysis, whilst there is a small proportion of those that are over 25% complete that are likely to have a lower potential. Not only should allowance be made for the possibility of a

rather higher proportion of burials being over 25% complete, but it also highlights the value of employing some form of basic assessment during the main works if any sampling strategy is to be implemented effectively while still allowing research questions to be addressed. Nonetheless, the average of the models suggests that 8371 articulated burials could be over 25% complete, and thus analysable (Arup 2015b).

6.3.5 **Primary aims:** the *English Heritage Stakeholder Workshop* (Capital Value and Risk Ltd, 27 August 2014) considered that the following aims were most fundamental to an understanding of TBG (Table 19).

	Question	Commentary	Viability
RQ5	How can aspects of the demography, social composition, status and lifestyles of those buried be understood, particularly with reference to the historical documentation for the site and for Hull?	<p>The osteological assessment has demonstrated that a high proportion of the skeletons (especially those that are over 25% complete) could be aged and sexed, and that there is a wide range of lesions of pathology within the assemblage.</p> <p>The graveyard survey indicates that there are spatial variations in the distribution of monument types, and the evaluation indicates that these variations are reflected in the density, and burial panoply of those interred in the corresponding areas.</p> <p>Although much of the coffin furniture is in a poor state of preservation, sufficient material is preserved to examine the presence, absence, basic shapes, and positions of the varying forms of such remains, but also to study those variations in spatial distribution that are indicated by the evaluation findings. Moreover, many of the more robust elements, such as the grips, retain their form and decorative motifs.</p> <p>The observed survival of buttons from clothing and items of personal adornment should also provide indications about the status of individuals.</p> <p>Although none of the burials from the evaluation had legible <i>depositum</i> plates that would allow individuals to be identified, the fact that several evaluated graves coincide with gravestone stubs indicates that there is potential to identify a small proportion (less than 2%) of the individuals associated with more complete, <i>in-situ</i> monuments.</p> <p>There is a clear need to undertake a programme of targeted documentary research to provide a historical baseline, to help contextualise the archaeological data, and to provide a framework for interpretation.</p> <p>Comparison with data from other contemporary sites will assist in identifying those elements of the record that are specific to TBG.</p> <p>Through the integration of the osteological, spatial, funerary monument, coffin furniture and personal item data, as well as documentary information (beyond the scope of the present report: see <i>Section 6.4</i>), there is clear scope to address RQ5 in detail.</p>	Good
RQ6	Where graves contain family members, how can the osteological data be used to explore, test, and explain patterns in non-metric	<p>Osteological assessment indicated the preservation of a range of non-metric traits among the skeletons.</p> <p>All of the gravestones recorded commemorate family groups (<i>Annex 1</i>), and thus such plots will include burials made within vaults and beneath ledgers, and those associated with <i>in-situ</i> headstones. It will also include all graves that are associated with</p>	Good

	Question	Commentary	Viability
	traits and other genetically influenced characteristics?	gravestone stubs. In addition, the study of non-metric traits from graves in other parts of the site that are no longer (or perhaps may never have been) associated with memorials will help to identify the use of these areas by family groups.	
RQ7	Is there any evidence for physiological and demographic change, both in terms of the osteological and documentary evidence, associated with urban intensification and industrialisation of Hull?	<p>The identification of such change is contingent on establishing a scheme of dating within the burial ground. Moreover, the burial ground's relatively short period of use means that any dating scheme will need to be very tightly defined. There are several factors that will make this difficult:</p> <p>No legible depositum plates were recovered, and their absence will preclude the widespread dating of individual skeletons within plots.</p> <p>40% of the burials were found in association with coffin furniture (Table 18). However, the majority of the coffin furniture recovered during the evaluation is either fairly broadly dated or not yet defined in terms of date.</p> <p>112 monuments are known to remain <i>in situ</i> within the excavation area, and record the presence of at least 236 people. However, a rapid review of the disposition of the dated gravestones suggests that the graveyard was not filled up in a chronologically coherent pattern, so that areas can only be very broadly defined in terms of the date of their use.</p> <p>Few datable artefacts were recovered, with items such as coins being so corroded that they defied macroscopic identification and dating without recourse to cleaning by a conservator.</p> <p>Documentary research is required to provide a suitable context for this question. It seems likely, however, that more detailed documentary research will also be the only means of addressing the question with any coherency.</p>	Poor based on archaeological data; Undefined for documentary
RQ9	How can the results of the fieldwork and post-excavation programme be made available to the wider public in an accessible form, whilst undertaking appropriate reburial of the human remains and associated artefacts (including all coffin fittings and personal adornments)?	The evaluation findings support the original aims to disseminate the data through a range of media. The reburial of the remains will be affected in an appropriate manner in accordance with the Faculty.	Good
RQ12	Is it possible to identify patterns of occupation-related pathology amongst the buried population, both with reference to the known occupations of the buried population as a whole, but with particular regard to named individuals of known occupation?	<p>Given that few of the depositum plates identified during the evaluation preserved legible script (and none of them had any substantive biographical information surviving) the identification of named individuals will be largely dependent on using associated burial monument inscriptions and the stratigraphic sequence and the ageing and sexing of individuals within the associated grave. The 112 <i>in-situ</i> monuments within the excavation zone account for at least 236 individuals, although not all of these will have died at an age where they were employable, or where their occupation is likely to have left skeletal evidence.</p> <p>This proportionately small number of individuals does not represent a statistically valid dataset, although there is potential</p>	Poor for examining specific cohorts Moderate for case studies of individuals Moderate for the general buried population and unique

	Question	Commentary	Viability
		<p>for case studies of particular examples during the formulation of a narrative social history.</p> <p>Reliance on monuments to identify individuals will potentially skew the data away from many of the working-class burials.</p> <p>Without supporting material or contextual evidence, it will be very difficult to identify particular cohorts among the burials (for example, sailors, dockworkers, fishermen). From an osteological perspective; the aetiology of joint disease is complex, and can relate to genetic factors and age, as well as to physical lifestyle.</p> <p>Nonetheless, the assessment indicates that there is a wide range of lesions of pathology and, when conducting a population-based bio-cultural study of the assemblage, examination of the anatomical distribution of such lesions potentially relating to occupation and lifestyle (particularly among those aged below 40 years old, to mitigate the effects of age-related pathologies) will be of use when helping to understand the characteristics that make the site unique against contemporary comparanda.</p>	characteristic s of the site
RQ14	How can the data generated, especially that relating to named individuals, contribute to the development of osteological methodologies and interpretation, particularly with regard to demography and epidemiology?	<p>The limited potential for identifying individuals has been addressed in the commentaries for RQ5, 7 and 12. The evaluation suggests that only about 236 individuals will be identified. Although these will make a limited contribution to testing methodologies, their number is too small to be statistically valid in terms of establishing models.</p> <p>It is considered that this question is no longer valid</p>	Poor

Table 19: Matrix chart for primary research questions

6.3.6 **Secondary Aims:** the following aims were set out in the original project design (OA-HFA and PMA 2014), but it was subsequently considered that they were either of a too generic nature, covered by the primary research questions (Section 6.3.5), would have the potential to make only a limited contribution to the understanding of TBG, or would only be addressed to a lesser degree by the data that is expected to be recovered from the site.

Question	Viability
RQ1 a) What is the nature, date, density, extent, and state of preservation of the archaeological remains within the archaeological sampling areas?; b) based on the answer to RQ1a, how can those remains be understood in terms of their sequence, relationships, and their functions?	Good
RQ2 Is it possible to attribute the archaeological remains to meaningful, dated, activity phases and spatial groups, and through them, trace the development and spatial organisation of the site?	Good for spatial groups, poor for dated activity phases
RQ3 How can we characterise the practices and material culture of burial as a rare 'snapshot' of the specific and relatively narrow time span represented by the Trinity Burial Ground and identify temporal, or other, differences within that short period?	Good
RQ4 What better understanding of the physical expression of attitudes to death, religion, and to people's role, and place in society, can be gained from the treatment of the	Moderate

Question	Viability
burials, including their burial panoply and funerary fixtures and fittings?	
RQ8 To what degree are data considered under RQ3-7 specific to Hull, and to what extent are they representative of the history of the city during the industrial-period?	Good
RQ10 What understanding can be gained of the epidemiology of the population, and how can this integrated and contrasted with documentary information?	Good
RQ11 Can any members of the assemblage be identified as named individuals, either through direct evidence (<i>ie</i> , depositum plates), or by integration of other forms of data?	Poor
RQ13 Can the coffin furniture from Trinity Burial Ground be used to expand and refine the growing body of data on these artefacts and so contribute to a typological resource for future fieldworkers?	Moderate
RQ15 Is it possible to identify the sex of non-dimorphic younger individuals and use that information to reach meaningful conclusions on the treatment of male and female children relative to those of adults?	Poor
RQ16 What is the evidence for activity on the site that pre-dates the documented Trinity Burial Ground, and how can it be interpreted?	Poor

Table 20: Matrix chart for secondary research questions

6.4 FUTURE SUPPORTING WORKS

6.4.1 **Introduction:** there are several pieces of supporting work that would build on the data captured by the advance works, and which could be used to enhance both the research context for the project and any future investigation strategies.

6.4.2 **Grave Monuments:** due to the presence of vegetation, some parts of the excavation area were not accessible at the time of the survey, so it is likely that further monuments will be revealed during the main phase of works. Similarly, if the working area expands beyond that which is currently hoarded, more monuments will need to be recorded and equated with those recorded by the EYFHS (1985). There are several pieces of supporting work that may be undertaken in association with the gravestone data:

- Formatting of the gravestone records by the individuals (and their demographic details) commemorated on the stones. This will facilitate the identification of individuals where monuments remain *in situ*, but will also help to address other questions relating to the demographic profile of the population recorded on the monuments;
- An examination of the demography presented on the monuments, particularly in comparison with the demographic profile presented by the burial register and, subsequently recovered by excavation;
- A collation of the families and individuals mentioned on those monuments that lie within the impact zone, selection of appropriate examples, and a review of the historical data relating to them. This will establish the extent to which significant case studies could be formulated;
- Research into monumental masons responsible for erecting the stones, with particular regard to the costs of different types of monument and aspects of design;
- A spatial examination of the distribution of monuments, including their date, form and iconography;

- A comparison of the basic characteristics of form and iconography of the monuments with available data from other sites, to assist with identification of regional, national and temporal trends;
- In consideration of the above, a study of the EYFHS record of the gravestones at Holy Trinity Church (HTC) itself, and a transcription of those commemorated, which might potentially be integrated with the Holy Trinity Burial Register; and
- Where feasible, an integration of the OA-HFA plan and the EYFHS plan to establish the original location of laid-down or now broken monuments.

6.4.3 ***Historical Documentation and Research:*** a programme of historical research is required to help provide a secure socio-economic context to the site, to the archaeological findings, and to address significant research questions that cannot be fully or even partly addressed by the archaeological data (such as the trade in timber used for coffins). The programme should be carefully planned so that research is relevant, comprehensive in the most appropriate areas, and efficient. It should include:

- Establishment of a research framework, which is regularly reviewed and updated;
- Identification and review of available historical sources to identify those that are most pertinent to the project;
- More detailed research as appropriate;
- Databasing of the burial register (which also has public-relations and family outreach benefits); and
- Integration of the TBG and HTC gravestone records with the databased Holy Trinity Parish Register. This could facilitate the identification of individuals buried at each site, and also the exploration of any social or temporal trends in the use of each site for burial.

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APPENDIX 1: SCOPE OF WORKS

Highways Agency
A63 Castle Street Improvements
Scope of Works for archaeological
evaluation: Trinity Burial Ground

| 12 March 2015


This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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Figure 1 Proposed trench locations

Appendices

Appendix A

Historical Summary

Appendix B

Format of Risk Log

Appendix C

Format of cost and resource plan

Appendix D

Format of Programme

Appendix E

Legal and ethical considerations

1 Project background

The proposed improvement to the A63, Castle Street, Kingston upon Hull, East Yorkshire (the Project), will impact upon part of the historic post-medieval Holy Trinity Burial Ground (TBG) NGR: TA 09420 28377 (Fig 1). It will be necessary to remove all funerary remains from just over a third of the area of the burial ground, within a c 3000m² zone of impact (excavation zone) across the northern part of the site. To inform that process, the Highways Agency (HA) has instructed the implementation of a limited programme of investigation at the site. The investigation comprises Stage 1 of the wider programme of archaeological and exhumation works proposed for the TBG.

This scope of works is based on documentation produced Oxford Archaeology (OA) North and Humber Field Archaeology (HFA) for the Faculty Application for this stage of the works within the TBG. The document has been compiled on the basis of an understanding of the TBG and surroundings utilising data gathered up to December 2013.

The works will involve:

- Geophysical survey
- Geotechnical investigation;
- Archaeological investigation of four trial trenches;
- The compilation of an illustrated report; and
- The preparation and deposition of an archaeological archive of primary data.

Specifically this document relates the archaeological input to improving site access, geotechnical investigation and trial trenching including fieldwork and post fieldwork activities. The geophysical survey will be undertaken as a separate activity and the results used to inform the work. However to provide context to the overall scope of this stage of work details of this are provided in this document. The data derived from the GI will also be utilised to inform the likely depth of the water table and sequence of deposits within the TBG.

The archaeological works within the TBG need to satisfy a wide range of stakeholder requirements, including the practical needs of the HA and the sensitivities of the local community. Accordingly, this document has been compiled in accordance with the standards and guidance of English Heritage (EH) (MAP2, 1991; MoRPHE; 2006), the Institute for Archaeologists (IFA) (IfA 2009a-d) and the British Association for Biological Anthropology and Osteology (BABA0).

The wider scheme of improvement to the A63 has been the subject of several desk-based studies and investigations (YAT 1994; 1995; Pell Frischmann 2010), the latest of which has culminated in a deposit model (HFA and OA 2014). These documents will be reviewed by the AC for a detailed background to the project and the wider archaeological resource.

Information specific to the TBG has been collated in order to inform this methodology, which is summarised in Appendix A.

2 Existing site conditions

The TBG is a publicly accessible open space maintained by Hull City Council (HCC) and located within a Conservation Area and all mature trees on the site have a Tree Protection Order. Much of the northern edge borders the A63 Castle Street, and 50m south of the investigation area is an active wet dock. The interior and the over-grown edges of TBG contain numerous mature trees that are likely to have extensive root systems. The interior is also occupied by burial monuments in varying conditions and densities. These include a range of styles and forms, including several that appear to be tomb structures. The site is overlooked on several sides: to the north by Castle Street, to the south-east by the Holiday Inn and to the south-west, by the Kingston Retail Park.

The only current vehicular access is restricted to a single point through the north-east corner of the burial ground, where there is a little lay-by off Castle Street and no barriers.

The current Ground Investigation (GI) results (completed prior to December 2013, and outside the TBG) indicate that the upper deposits around the burial ground perimeter comprise over a metre of made ground and it is likely that such material has contributed to the raised level of the surrounding streets. This reversal of a common situation, whereby intensive burial and importation of soil into the graveyard increases the height of the burial ground surface, implies that there is rather less made ground within the TBG itself. Beneath the made ground, the local drift geology comprises up to 12m of alluvium, which becomes increasingly saturated and unstable, at depth. Even at a relatively shallow depth, the alluvium is too soft to support foot traffic, let alone plant. Groundwater was encountered at a range of depths in the boreholes around the TBG, from 2.7m to 4.5m below the modern ground level.

3 Legal and ethical consideration

As a closed burial ground, the works within the TBG carry legal and ethical consideration as to the means under which the works are undertaken. These are detailed in Appendix E.

4 Project stages, products and review

A geophysical survey will be undertaken as the first form of investigation. The geophysical survey will inform the placement of the geotechnical exploratory locations (i.e., test pits and boreholes) and the position of trial trenches, should there be a requirement to vary these locations from those planned, see figure 1, for the proposed location of trial trenches. On completion of the trial trenching reporting and the preparation and deposition of a project archive will be undertaken.

The products of the archaeological works will comprise:

- A geophysical survey report (which is not included within this scope of works);
- An integrated archaeological report; and

- A project archive.

The main review points will be:

- on production of the results of the geophysical survey; and
- submission of the trial trenching report.

Due to the complexities of the evaluation and the need to incorporate geotechnical data, regular review and liaison will be undertaken with the Balfour Beatty (BB), Technical Advisor (BBTA) and the Highways Agency's Archaeological Advisor for the Project (AAHA). Liaison with other parties may also be required and these are detailed in section 5 and elsewhere as appropriate.

5 Project team, roles, responsibilities and interfaces

Management and co-ordination of works shall be undertaken by BB, who will set-up the site and shall maintain a secure and safe working environment. The Archaeological Contractor (AC) appointed by the BB shall provide an experienced and appropriately skilled team, ensuring that the Works are undertaken to technical standards, safely and efficiently.

The Highways Agency Agent (HHA) will form the interface with the Highways Agency (HA), AAHA, Humber Archaeological Partnership (HAP), Hull City Council (HCC; including the Environmental Health Officer), TBG Liaison Officer, EH, Humberside Police and the Diocese of York. The AC shall ensure that any significant results/matters are brought to the attention of BB and HHA as soon as is practically possible, and in any event within 24 hours.

A Liaison Officer (LO) appointed by the HA will provide the interface with the public, including descendants and special interest groups. The LO will deal with all enquiries and disseminate approved information as appropriate. Whilst only the LO will provide information to the public, the AC has a duty to the public and to the HA to ensure that public concerns are met. Accordingly, contact details for the LO will be placed at the site and at the on-site and off-site facilities of all site contractors, so that queries can be redirected.

Technical monitoring of the works will be undertaken on behalf of the HA by the AAHA and for BB by BBTA. Monitoring may also be undertaken by the Humber HAP and the English Heritage (EH) Regional Science Advisor EHRSA, who shall be afforded reasonable access to the works.

The burial ground and its burials are subject to the jurisdiction of the Diocesan Advisory Council (DAC) through the Vicar (Dr Neal Barnes) and churchwardens of the parish of Holy Trinity Hull. These shall be kept aware of the progress of works and of any issues of which they should be cognisant. The vicar may well be needed as an interface with relatives.

6 Aims and objectives of the works

6.1 Geophysical survey

Geophysical survey comprising Ground Penetrating Radar (GPR) will be undertaken in advance of the GI and trial trenching. The aims of the survey, subject to successful results in view of the ground conditions within the survey area, in order of most to least achievable will be to identify:

- the location of subterranean burial structures;
- the position of lead coffins;
- the horizontal distribution of burial activity; and
- the vertical depth of burial activity.

Aims 1 and 2 should assist with the positioning of the geotechnical boreholes, where it is imperative to avoid hard obstructions, and to avoid piercing lead coffins. The GPR will also provide data, subject to its success, to inform the trial trenching. The geophysical survey does not form part of the ACs scope of works.

6.2 Watching brief on geotechnical investigations

The AC shall maintain a watching brief during the geotechnical works, the aims of the watching brief shall be to:

- record and recover (as appropriate or lawful) archaeological and funerary remains disturbed during the excavation of inspection pits or in the arising from boreholes; and
- record information that would assist with the finer strategy of the trial trenching, including exact placement and depth of investigation and to ensure no damage from machinery, access etc in TBG and elsewhere.

6.3 Trial trenching

The overall aim of the works is to further an understanding of the character of the archaeological remains within the burial ground so that the scope, scale, and timetable for the main phase archaeological and exhumation works can be provided for in the overall project programme.

Within the safe and practical limits of investigation, the trial trenching will seek to address the following aims:

- the depth below the modern ground surface of the uppermost burials;
- the horizontal distribution and density of the burials (assuming standard techniques);
- the condition and completeness of skeletons, and the preservation of key indicators for basic osteological analysis;
- the extent of waterlogging, and its influence on the preservation of organic materials;

- the presence and condition of funerary fixtures and fittings (ie, coffin remains, personal items, clothing, etc) within the depth of investigation, particularly with regard to items such as coffin plates, which could be used for positive identification of human remains (the condition of such material may improve with depth and saturation);
- the presence and condition of buried gravemarkers; and
- the position of any fleshed, or part-fleshed remains that could not be dealt with archaeologically.

Given the concentrated use of the burial ground and the potential for ‘fleshed remains’, which are excluded from the scope of works, it will not be possible to establish the full depth of the burial sequence, nor to identify any pre-cemetery remains within trenches focussed on areas of known burial activity.

6.4 Post-excavation works

The aims of the post-excavation work are to:

- compile an illustrated report summarising and integrating the findings from each element of evaluation fieldwork;
- produce a basic deposit model for the TBG;
- ensure that any human remains removed from the TBG as part of this evaluation are kept safely, privately and decently, and that their condition does not deteriorate during the works; and
- prepare and deposit an archive of the primary data from the project.

7 Health and safety

Throughout the works CDM Regulations shall apply. BB will be responsible for undertaking service clearance and for issuing any permits to dig as well as having overall responsibility for H & S during all elements of the works to which this document relates. All health and safety procedures, including those of BABAO, BB and the policies and H and S manuals of the AC, will be adhered to throughout the works. These will include, but not limited to the formulation and maintenance of method statements and risk assessments and adherence to the guidance of the FAME/SCAUM H+S Manual, the Health and Safety at Work Act (1974), the Management of Health and Safety at Work Regulations (1999), the Public Health (Control of Diseases) Act (1984), the Manual Handling Operations Regulations (1992) and lifting operations (LOLER; 1998).

The AC shall prepare and deliver to BB for review and approval a Health and Safety Plan and risk assessment for the whole of the Works within ten (10) days of award. The AC shall allow ten (10) days for BB to review and comment on the draft and shall issue the final document within five (5) days of receiving the BBs comments on the draft. The AC shall not commence any site operations until BB has provided confirmation of their acceptance of the plan and risk assessment.

The AC site director shall maintain a register of all staff and visitors to site and a diary that summarises the day’s working areas, progress and weather, as well as

significant deliveries, collections and the removal of human remains from site. An indexed photographic record in digital format shall be regularly maintained to record general working shots, progress and the condition of the site.

All project staff including subcontractors engaged by the AC shall wear full basic PPE whilst on site, to include safety helmets, safety boots, high visibility trousers and high-visibility jackets plus eye protection. Protective suits, face masks, noise defenders, gloves and task specific eye protection shall be made available to AC staff as necessary, as will disposable gloves and suits. Additional PPE will be dependent on weather conditions.

Known or suspected ground contamination issues will be communicated to BB by the HA who will inform the AC accordingly. Appropriate health and safety procedures shall be adopted during the works to mitigate potential risks appropriately.

Should during the Works any previously unknown contamination be encountered, works will be suspended until a risk assessment has been completed and a safe method of working devised. Archaeological investigation within contaminated areas will be reviewed and, if necessary, abandoned. Investigation of contaminated human remains shall be avoided and these shall not be removed.

Unexploded Ordnance (UXO) may be present on site, with an area of moderate risk (as identified from relevant studies) located in the south-western part of the burial ground. BB will engage a specialist contractor to screen all exploratory locations for the potential presence of UXO. Excavations will only proceed if considered clear of UXO.

All archaeological staff must have an up to date tetanus inoculation and provide details of salient allergies and medical conditions to the AC site director and H&S Officer prior to the commencement of any site activities. Skeletonised burials in earth graves should not present any particular infectious risk to health according to the BABAO (nd, 7) Code of Practice: *'Human remains pose little or no risk as far as infection hazards are concerned because harmful micro-organisms do not survive beyond a few months following death'*.

The BABAO Code of Practice attributes a greater, *'although believed to be remote'* (op cit), risk of infection from smallpox and anthrax when remains (including the soft fittings for coffins) are soaked in body liquor, or where horsehair stuffing is present. Nonetheless, the AC's risk assessments shall give due consideration to such risks, including, where considered appropriate, vaccinations for smallpox and anthrax (as directed by the Public Health Laboratory Service (PHLS); Tel: (+44) 020 8200 4400) for personnel directly involved with the excavation works and handling of remains.

Where remains are identified that are considered, on the basis of the above criteria, to present a health risk, they will not be investigated or handled, but will be covered over, their location noted, and their presence alerted to BB, AAHA and BBTA.

Where, despite these precautions, AC staff have come into direct contact with such remains, or to have been splashed by their liquor, all affected clothing and PPE will be sealed in opaque plastic bags and disposed of in accordance with statutory requirements. All such instances shall be communicated to BB.

The AC shall provide for all staff to be briefed and vetted to ensure that they are informed, willing and appropriate for their designated roles and responsibilities. During and after the fieldwork all staff shall have unrestricted access to a counsellor provided by the AC.

8 Scope of works

8.1 Site establishment

BB will be responsible for setting-up and maintaining the site and for providing the following attendances to the AC:

- Fencing and demarcation to the full works area, including access routes to the welfare and carparking area and areas of trial trenches including spoil heaps;
- 24-hour security for the duration of the investigation, including a security guard based in the welfare unit, who will undertake regular patrols around the site perimeter.
- Site Access will be via the north-east corner of the TBG. If required, and following recording, a section of brick wall will be dismantled to facilitate access.

Setting out of the proposed (subject to the results of the GPR survey) locations for the archaeological trenches are shown on Figure 1 and dimensions detailed in 8.2.6 below.

8.2 Sequence of works

Table 1 below provides a summary of the sequence of works and organisation responsible for the delivery of each activity to provide the AC with an understanding of the overall nature and sequence of activities. For the purposes of clarity BB includes its specialist subcontractors appointed for various activities.

Activity Nos	Task	Responsibility
1.	Initial site clearance for the establishment of the perimeter fence	BB
2.	Secure the area of the Works and install fencing	BB
3.	Sharps/waste removal	BB
4.	Main phase site clearance and removal of brash to allow access to the area	BB, monitored by AC where appropriate

5.	Record grave monuments which may be potentially impacted by the investigations works	AC
6.	Geophysical Survey	BB
7.	Initially record burial ground walls at access point	AC
8.	GPR Stats Survey	BB
9.	Fully record burial ground walls at access point if required	AC
10.	Remove grave monuments (only where unavoidable)	BB monitored by AC
11.	Ground Investigation	BB
12.	Watching Brief during ground investigation	AC
13.	Archaeological trial trenching	AC
14.	Assessment and reporting	AC
15.	Compilation and deposition of archaeological archive	AC

Table 1 Outline sequence of works and responsibilities

The following provides an expansion of the requirement for each of the activities outlined in Table 1 for those activities the AC will be undertaking. The AC shall as part of their Project design develop these utilising other section of this document as appropriate.

8.2.1 Activity Number 6: Initially record burial ground walls

Prior to any widening of the access point that may be required, and the removal of vegetation and any damage that may cause, both faces of the burial ground wall at the access point shall be rapidly recorded through photography and basic notes by the AC.

8.2.2 Activity Number 5: Clearance of vegetation

An archaeological watching brief shall be undertaken by the AC during the removal of scrub vegetation and any organic build- up in areas proposed for investigation and entrance widening.

8.2.3 Activity Number 8: Fully record walls at access point if required

If required, widening the access point at the north-east corner of the site will impact on the Georgian walls of the former gaol yard (OA/HFA and PMA 2014). The AC shall undertake a Level 2 survey of affected stretches in accordance with EH (2006b) guidelines prior to any deconstruction works to the walls.

8.2.4 Activity Number 9 and part 10: Grave monument survey

The AC shall compile a full survey and record of any extant grave monuments located within areas of investigation/plant movement to current standards (cf Mytum 2002). It is planned that the removal of monuments shall be avoided as far as possible by the relocation of exploratory positions – GI and trial trenches. In the interests of facilitating the removal of the monuments, each monument destined for movement will be considered in cognisance of Sections 3.2 and 3.4 of Management of Memorials (ICCM 2012, 13-18).

Any such in-situ memorials, whether complete or fragmentary, shall be surveyed and allocated a unique number. Where possible they shall be correlated with stones identified and recorded by the EYFHS survey (1982). Displaced stones, found during site preparatory works or during the GI or trial trenching, shall be treated similarly, provided that they display decoration or inscriptions. The accurate surveying and numbering of monuments shall be critical, particularly where they are deemed to remain in situ and would be used as a potential means of identifying individuals or family groups in the associated grave plot. The stones shall be recorded on pro-forma sheets based on and following, the guidelines set out by Mytum (2002) and will include details of:

- Shape;
- Dimensions;
- Type of stone used;
- Iconography (an illustration may best describe these features);
- Inscription (verbatim record of inscription; font of the lettering);
- Stylistic type and
- mason/manufacturer.

Grave monuments shall be retained in place unless their removal is unavoidable. All grave markers and monuments are technically the property of those who paid for their erection (and their descendants). As part of the Faculty application and Public Notice process, the intention to remove and relocate burial monuments will be advertised in advance of the works (DCA 2005, 12; Fairbairn 2012; ICCM 2012). Following recording, all gravestones and funerary monuments that are located within activity areas shall be removed in a responsible manner (DCA 2005; ICCM 2012) by BB, under the auspices of the Faculty and with the permission of the Burial Authority (ie, HCC). This shall entail partial excavation around those parts of the gravestone/monuments that are below ground. Such works shall be monitored by the AC to make a full record of the structures and ensure that any funerary remains or archaeological materials are collected in accordance with that provided for in Section 8.27. Individual elements of the monuments will be clearly labelled before they are lifted by BB to an alternative location within the secured area of investigation.

8.2.5 Activity Number 12: Watching brief to ground investigation

A specialist contractor will be appointed by BB to undertake the GI. The AC shall undertake a watching brief during this activity to record items of note and as appropriate recover artefacts and any unstratified human remains that may be encountered. Any such human remains that are recovered during the watching brief shall be bagged and reinterred within the trial trenches.

8.2.6 Activity Number 13: Evaluation - Trial trenching

In order to address the aims and objectives in a manner that is both effective and considerate to ethical issues, it is imperative that the trial trenching is undertaken in a manner that is iterative and flexible. Liaison shall be undertaken with the BBTA and AAHA, especially when reviewing the depth of investigation. Consideration shall be given at all times to minimise the number of burials to be lifted from the areas of investigation.

It is proposed that up to four trenches (shown on Figure 1) are excavated within the burial ground. Their general positions, all of which lie close to the locations proposed boreholes/windowless samples, are as follows:

- **Trench A:** placed at the heart of the impact zone within an area that, according to the EYFHS survey (1985) was occupied by headstones in 1982. As such, it is an area that, on the basis of the EYFHS survey, appears fairly typical of the western half of the scheme impact zone;
- **Trench B:** placed close to the north corner of the impact zone, close to a historic path and an area where table tombs and other such high-status burial monuments remain extant;
- **Trench C:** The area proposed for on-site reburial for the main phase of works, and within an area that appears to have contained no memorials in 1982. Given the proximity of this area to the former gaol and to industrial buildings, as well as to structures that some cartographic sources seem to place within the area of the burial ground, this trench has the potential to reveal funerary remains that are of a different character from those that might be found in Trenches A and B; and
- **Trench D:** placed just to the west of the far north-eastern corner of the impact zone within the area thought to have been occupied by a mortuary. The primary aim of this trench would be to establish whether or not that part of the site had been used for burial at all.

The exact placement of the trenches will depend on several factors, including accessibility (such as the position of structures, below ground services, trees and tree roots, and existing memorials if these cannot be relocated after being surveyed and recorded), and health and safety considerations, as well as the findings from geophysics survey and the GI works. Where there is evidence of grave rows from extant gravemarkers, the trenches are to be placed so as to encompass full plots.

Assuming that burials follow the north-east/south-west alignment suggested by the positions of the monuments recorded by the EYFHS (1985), Trenches A-C shall measure approximately 8-10m NE/SW by 5m NW/SE at the top of the burial

horizon. This may necessitate stepping or battering at the top of the trench where the uppermost burial is more than 1m below the modern ground surface, plus some expansion to ensure that plots are safely accessible (space shall be left, accordingly, when setting out the trench). Trench D shall measure 15m NE/SW by 2m NW/SE.

On completion of all fieldwork and prior to backfilling all trench locations, including the positions of any steps, shall be surveyed by the AC to provide an as excavated plan. A copy of all survey data including the setting out of the trenches prior to investigation and the final as dug plan shall be provided to BB and included as part of the archive. The AC shall as part of their design for the Works detail their survey methodologies.

All ground reduction shall be undertaken by a machine with a toothless ditching bucket, under the supervision of the AC by an archaeologist experienced in such activity. The proposed sequence of activity comprises:

- turf shall be carefully peeled off and stored separately from other spoil;
- all spoil shall be checked for disarticulated bone, which shall be collected for reinterment by the AC on completion of the works within the trench from which such material was recovered, bagging of such remains shall be in accordance with the requirements detailed below;
- mechanical excavation shall proceed down to the point at which grave cuts within the trenches are clearly visible;
- the limits and location of the evaluation area and of all grave cuts, whether to be investigated archaeologically shall be mapped using instrument survey;
- the ground shall be further reduced by machine under archaeological supervision until the coffin stain, human remains or burial structure (whichever appears first) are revealed;

Throughout all stages, topsoil and subsoils shall be kept separately, and shall be backfilled in the order in which they were excavated, with light compaction to minimise damage to any underlying archaeological remains left in situ. The turf removed shall be retained for replacement on completion of the works.

On the basis of the current understanding of the density of interments at the TBG (OA/HFA and PMA 2014), 20-30 graves could lie within the footprint of each trench. All visible graves/burials shall be surveyed in three dimensions by EDM or dGPS and a plan generated using a CAD or GIS package. Survey data generated during the fieldwork shall be processed and amalgamated into a single file and plotted out in CAD/GIS format on a regular basis.

The AC shall implement a logical numbering system for all archaeological and funerary remains that allows unique elements to be identified, as well as elements of the same feature (ie, those of individual burials and of grave plots) to be grouped. A fully integrated, indexed archive shall be generated during the fieldwork, with all data accurately recorded on pro-forma that are either specific to, or sufficiently versatile to allow the treatment of, the range of archaeological remains on site. Full use shall be made of instrument survey, whilst the use of digital photography (minimum 10 mega pixels, with sufficient depth of field to frame both individual and groups of burials) will be maximised. The use of monochrome photographs shall be deployed only for the most important record shots. Due consideration should be given to lighting within deep excavations.

Digital images will be regularly backed-up, and saved in both TIFF and RAW formats for long-term storage. The individual files will be named so that they correlate with photographic indices. Both file formats shall be backed-up on archive-quality CDs for eventual submission with the archive. Plans and sections shall be drawn as and where appropriate to standard scales (ie, generally 1:20, 1:50 and 100 for plans; 1:10 and 1:20 for sections).

A suitable proportion of the interments revealed at the upper surface of the burial horizon shall be investigated by the AC archaeologists with experience of human burials, or by an osteoarchaeologist, in accordance with the following:

- Burials shall be very rapidly cleaned by hand in a manner that is sufficient to determine burial position, orientation, relationship to other features and to identify associated coffin remains. Their positions and orientations shall be recorded in three dimensions by instrument survey. Very detailed instrument survey is not required except in those (currently unexpected) cases where such data can be used to separate individuals from mass graves. Atypical burial positions shall be planned in more detail, or recorded by rectified photography, as appropriate, but such techniques are not required for the majority of interments.
- All recording shall utilise specially designed pro-forma indices and recording sheets for skeletons and coffins. Each burial shall be recorded in terms of position, orientation, grave goods, burial dress and fastenings. An indexed photographic record using high-quality digital imagery and, where appropriate, monochrome contact prints, shall be maintained of all burials.
- An appropriate selection of articulated skeletons shall be assessed, as far as possible, to recognised national standards (Mays et al 2002; Brickley and McKinley 2004; Sections 4.3.13-14).
- Coffins and any associated fittings, including fixing nails, shall be recorded on specific pro-forma which shall include details of dimensions, materials, construction technique, decoration and fittings. All surviving coffin fittings shall be recorded by reference to Reeve and Adams (1993) and the unpublished master catalogue being compiled by Oxford Archaeology which is to be provided to the AC by BB. Biographical details obtained from legible departum plate inscriptions shall be recorded. Timber (for species identification) and fabric samples will be taken where appropriate.
- Any burial garments, coffin linings or other fabrics directly associated with skeletonised burials shall be recorded in situ. Complete garments will only be retained where they are of intrinsic research interest. Otherwise, fabric samples shall be taken and all such remains shall be reburied at the completion of the works.
- Disarticulated human bone shall be collected by the AC during the works. Unless something particularly significant is noted, however, that material shall not be studied, although its condition shall be noted generally. On completion of the works the AC shall rebury all such remains in the trench from which they were recovered.
- Sealed coffins shall not be opened, excavated or removed. They shall be assigned context numbers and recorded on pro-forma coffin sheets (including survey) before being covered over.

- Burials/skeletons with flesh shall not be investigated, excavated or removed. They will be assigned context numbers and recorded only in terms of preservation, location and stratigraphy (including survey) before being covered over (compliant with any requirements of the Burial Authority and Environmental Health).

In order to address the aims of the evaluation, it may be necessary to undertake deeper investigation below the top of the burial horizon. This shall require some human remains to be temporarily removed from the trench within which they are located.

When considering the depth of deeper investigation, it is particularly important to adopt an iterative approach, on a trench by trench basis. The decision shall be made with due consideration of the results of the GI works, and in consultation with the BBTA and AAHA. Consideration of the following is imperative:

- The maximum safe depth of investigation within the trenches is likely to be 2m below the top of the burial horizon, and could be considerably less, dependent on the substrate and in particular the level of the watertable;
- Do the GI results indicate that there are changes to the soil and/or groundwater conditions within that safe depth of investigation? Where such changes occur within the limit of safe investigation, then consideration should be given to deeper excavation. If there are no such changes, then deeper investigation shall be very limited, if required at all;
- Do the GI results indicate very similar soil and groundwater conditions within the areas of several or all trenches? If so, then any deeper excavation would not be required in all trenches;
- How many burials would need to be temporarily removed in order to achieve safe investigation to depth? Deeper investigation is not desirable where a large number of burials would need to be removed;
- Are there well-preserved organic remains that cannot be easily stored temporarily (for example, items of clothing and coffin linings), or are difficult/bulky to remove from the grave and store (ie, well-preserved coffins)?; and
- Are there well-preserved remains that could only be handled by a specialist exhumation contractor (ie, pillows and mattresses within coffins, coffin liquor/fatty scum (as opposed to groundwater) as well as skeletons with flesh, adipocere, etc)? Such remains cannot be treated archaeologically, and will curtail deeper excavation.

Any deeper excavation shall involve the temporary removal of burials to two basic depth levels (excavation to Depth 1 shall always be completed before excavation to Depth 2 is considered):

- Depth 1: removal of the burials, within a single grave towards the centre of the trench, down to a maximum safe depth of 1m below the top of the burial horizon;
- Depth 2: this shall involve stepping -, or battering of the trench to cover an internal area 6m NE/SW by 3m NW/SE, and leaving those burials on the margins within the step/batter. All burials within the area being reduced to a maximum stepped/battered depth of 1m shall be surveyed and excavated using

a mechanical assistance and a rapid recovery method and assessed by an osteologist as detailed above. Following reduction of the complete step into the burial horizon, the central grave plot shall be selected, and any burials therein shall be excavated to a maximum safe depth of 1m below the top of the surrounding step (ie, 2m below the top of the burial horizon).

Where there is a need to lift human remains, this shall be undertaken provided they are skeletal and any associated coffins survive as fragments only. Remains shall be placed in strong woven polypropylene sacks, or boxes, as appropriate, clearly marked on the outside, and containing a completed tyvec label/metal tag on the inside. Personal effects and coffin remains shall be placed within the same, or additional containers, as appropriate. The containers shall be sealed and kept in a secure on-site store.

Some descendants may request that the remains of their ancestors should not be included within any programme of archaeological investigation. The Client's Liaison Officer will maintain a list of any such individuals and of the descendants concerned. A copy of the list will be provided to the AC. Where it is possible to identify excluded individuals positively during fieldwork (for example from in-situ grave markers or from coffin plates), those remains will not be assessed or temporarily lifted by the AC.

Any memorials identified during the works, whether complete or fragmentary (and which display decoration or inscriptions) will be surveyed as appropriate and allocated a context number. Once recorded, the stones will be stockpiled. Where the position of buried memorials would impede progress (ie, there is a layer of damaged memorials), these will be surveyed, labelled and moved to one side by the machine so that they can be recorded without impeding the progress of the works.

Any brick shaft or vaulted structures identified during the works shall be appropriately recorded by the AC. Such structures shall only be investigated where safe to do so. They shall not be entered, and particular consideration shall be given to the risk of collapse if ground levels are reduced around them. Any safely accessible burials within these structures will be treated in accordance with the approach detailed above.

Personal items which cannot be directly associated with an individual shall be surveyed where appropriate. Those, together with all items that are associated with individuals in the archaeological assemblage, shall be treated in a similar manner to the skeletons and an appropriate level of recording and analysis by a suitable specialist. All artefacts that can be associated with an individual burial shall be placed with that individual prior to reburial. Artefacts that are not associated with funerary activity will be collected in accordance with standard ethical practice.

At the completion of the works the sealed sacks of funerary remains shall be placed back in the trench from which they were recovered. Where the remains from only a few graves had been lifted, individuals could be returned to the grave from which they were removed. Where more burials have been lifted, a designated part of the deeper portion of the trench shall be used for placing the remains.

At the completion of the evaluation disarticulated bone recovered during the works, shall be reburied within the trench form which it was recovered in an

appropriate container. This includes human remains that have been recovered during the GI works and relocation of headstones.

Where non-funerary archaeological remains are identified during the works, they must be sample-investigated and recorded in a manner that is appropriate to their significance and condition. Typically this shall involve the use of instrument survey to accurately record their three-dimensional location and the generation of a comprehensive, indexed, archive of written records, digital photographs, scale plans and sections, as well as the formulation, in consultation with HAP and the EH regional science advisor, of an appropriate finds recovery and palaeoenvironmental sampling strategy. Particular consideration shall be given to the recovery of waterlogged remains. Where features are present, they should be excavated to an extent that allows them to be understood, within the constraints of the trial trenches, and the limitation of the fleshed remains and sealed coffins.

8.2.7 Activity Numbers 9 and 10: Watching brief

As outlined in Table 1, archaeological watching briefs shall be undertaken at various points in the works. Whether undertaken during the movement of memorials or test-pitting, etc, the methodology shall essentially be the same. An appropriate number of archaeologists shall be deployed to directly monitor the works of the contractors and, if necessary, stop the contractor at a point where archaeological remains are identified. As far as possible, the AC shall work with the contractor to minimise delays and additional staff will be deployed either to record, investigate and lift the remains revealed, or to continue monitoring the groundworks where they can be moved to a different location.

8.2.8 Activity Numbers 13 and 14 (element of): Archive processing

During and at the completion of the fieldwork, as appropriate, the different components of the site archive will be checked, processed and collated within a format that can be integrated and interrogated. This shall include the generation of a site database and a suitable GIS or CAD programme. Digital files shall be backed-up regularly. Finds and those retained coffin fittings and fabric samples, will be cleaned, dried, packaged to minimise any degradation, marked where necessary and catalogued. Any palaeoenvironmental samples taken from appropriate non-funerary features during the evaluation will be processed using standard techniques for charred and/or waterlogged remains, as appropriate.

8.2.9 Activity Number 14: Assessment and reporting

On completion of the fieldwork the AC shall undertake an assessment of the stratigraphic and artefactual material recovered during the Works. The results of the assessments shall be presented an integrated report. This assessment and resultant report shall be in accordance with MAP2 procedures.

Further requirement for assessment and reporting are provided below 9.3 and 9.4.

8.2.10 Activity Number 15: Archive

The site archive (digital, paper and photographic record), together with all reports, shall be prepared for long-term storage with the Hull Museum and/or the Hull History Centre at completion of the Works. Hard and digital copies of all reports shall be deposited with the Humber Sites and Monument Record by the AC.

All artefacts associated with burials shall be reburied with those individuals from which they were recovered or may be deposited within a Hull Museum in accordance with standard guidelines (Walker 1990; MGC 1992). Non-funerary artefacts, where they meet retention criteria and agreed by the landowner, will also be deposited within a Hull Museum.

The AC shall ensure that during all stages of the works that all material including but not limited to artefacts, human remains, records (paper, photographic and other media) as well as digital data are stored and maintained in a safe and secure environment and as appropriate back-up copies of data where appropriate shall be undertaken. The AC shall as part of their project design detail the methodologies and procedures by which this is achieved.

9 Deliverables

9.1 Preliminaries

The AC shall compile a project design in accordance with that provide for in MoRPHE for the approval of the BB, AAHA and HAP. A draft of the document shall be provided to BB fifteen days (15) after award. The AC shall allow 10 days in their programme for BB, AAHA and HAP review. The final document incorporating comments received shall be issued to BB within ten (10) days of receiving comments.

As part of their tender the AC shall provide copies of their recording manual and of all record sheets, forms and indices that the AC proposes to use during the Works. These documents will be provided to the AAHA and HAP if requested prior to the commencement of any fieldwork.

In compiling their programme and risk log for the works the AC shall compile these in accordance with the examples provided in appendix C.

The AC shall prepare a safety plan and risk assessment for all stages of the works. These shall be issued in accordance with the delivery requirements of the project design as outlined above.

9.2 Progress recording

The AC shall prepare and issue to BB on a weekly basis a progress report. The report shall be issued by close of business of each Monday following the week being reported on. As a minimum the report shall contain the following:

- Activities undertaken during the previous week
- Activities planned for the next week
- Resources deployed

- Planned resource deployment
- Summary of finding – including particular findings of note
- Review of risk log including risk no longer relevant or risk that have arisen
- Review of programme and any variance from the planned baseline
- Copy of the site visitor log
- Health and safety information detailing accidents or near misses and any lost time

As part of the establishment of the project the AC first weekly report will be deemed to consist of a proposed format, style and level of content. BB will provide comments as appropriate on this report, to be incorporated into subsequent reporting.

Monitoring meetings will be established with the AAHA and HAP, as required. The programme for these meeting will be communicated to the AC as part of the project set-up phase. To inform progress meetings the AC shall make available to inform discussion:

- A plan showing the location of burial identified
- The results of any specialist activity undertaken
- Other material that may have been collected or generated during the works

All reports and documents issues to BB by the AC shall be in the format in which they were produced and as PDFs. All deliverable shall be accompanied by a sign-off sheet that clearly identifies:

- Document Title
- Document Number
- Document Status
- Date
- Originator
- Reviewed by
- Approved by

As part of the project initiation phase documentation the AC shall detail the personnel proposed for these roles. The AC shall note that separate personnel shall undertake each of the roles.

9.3 Assessment

9.3.1 Artefact and ecofacts

All finds work shall be carried out in accordance with the Institute for Archaeologists *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (IfA 2001). Each of the recovered material categories shall be assessed by an appropriately experienced specialists to record information fully and adequately on all pertinent aspects of

the assemblage, in accordance with current and accepted industry guidelines for the various material types.

All suitable metalwork and a selection of industrial residues shall be submitted for x-ray, and the interpretation of these artefacts shall be reviewed with the aid of the x-ray plates.

The requirements for illustration and long-term conservation and storage will be established, but should any requirement for specialist short-term conservation be identified, then selected finds shall be sent to Durham University Conservation Laboratory for stabilisation.

The results of the assessments shall be presented within a report for integration into the post-excavation report, and will provide details of the quantity and quality of the artefactual data, spot-dating where possible, and an assessment of the potential for any further analysis within the framework of the original research questions and objectives, which will be articulated through a series of recommendations.

9.3.2 Palaeoenvironmental

The palaeoenvironmental assessment methodology shall be in accordance with EH guidelines (2002). Dr Andy Hammon, EH Regional Scientific Advisor for Yorkshire, shall be consulted as appropriate, prior to the commencement of such activities and during execution as required.

9.3.3 Osteological

A proportion of in-situ skeletons (and any lifted skeletons) shall be assessed osteologically. Where skeletons are to be lifted, and can be reburied on site at the completion of the works, they will be either assessed in the ground, or in an on-site laboratory. Where burials were not removed from the ground, assessment would take place in situ.

Articulated skeletons shall be assessed in accordance with the recommendations set out by Mays et al (2002) in Guidelines for producing assessment documents and analytical reports. Each skeleton shall be rapidly scanned and a pro-forma skeleton assessment form will be completed, detailing condition, completeness and noting any potential for biological information and palaeopathological information. These observations will provide adequate guidance to the potential of the remains for further study, in accordance with recommended practice (Brickley and McKinley 2004). They will be, by their very nature, preliminary and subject to change as a result of any future recommended study of the remains. In particular, the scan will assess the potential for data to examine:

- Condition and completeness;
- Biological sex and age;
- Metrical and conformation analysis;
- Non-metric traits;
- Palaeopathology; and
- The significance of the assemblage.

9.4 Report

A draft of the report of the findings of the evaluation shall be issued by the AC within eight (8) weeks of the completion of the ACs fieldwork activities, unless an alternative milestone is agreed with BB and other project participants. The AC shall issue ten (10) hard copies of the draft report and in digital format (pdf) to BB who will issue the documentation to the AAHA for onward issue to other project participants for review and comment.

The AC shall allow ten days (10) in their programme for review and the return of comment.

The AC shall deliver 10 (ten) copies of the final in paper and electronic format of the final report to BB for issued to the AAHA with ten days (10) of receipt of the comments on the draft. The AAHA will issue final copies to HAP, EH and the Humber Sites and Monument Records, and any other appropriate stakeholders.

The report shall include, but not be limited to:

- a site location plan related to the national grid;
- a front cover to include the NGR;
- a concise, non-technical summary of the results;
- the circumstances of the project and the dates on which the fieldwork was undertaken;
- description of the methodology, including any variations from the methods outlined in this document;
- a summary of the historical background to put the results into context;
- description of the results, to include the results of any specialist work undertaken;
- description and basic quantitative and qualitative record of the funerary remains, finds, ecofacts, palaeoenvironmental remains, etc;
- interpretation of the results within what is known of the historical, archaeological and physical context of the of the TBG, and their potential archaeological significance;
- a review of the research aims and objectives for the main excavation within the TBG, in the light of the evaluation findings;
- plans showing the location and position of trenches and test pits, and the locations of funerary monuments necessarily moved;
- plans and sections of interventions, as appropriate;
- photographs as appropriate, including illustrations of unusual or important artefacts;
- the report will also include a complete bibliography of sources from which data has been derived; and
- where appropriate, tables summarising data within the archive.

Any recommendations for further work, or for modifications to this methodology shall be formulated in agreement with BB and AAHA, and incorporated into the final report as appropriate.

9.5 Archive

The AC shall during the mobilisation period make contact with the bodies identified in 8.2.10 to determine requirements for the deposition of the project archive. The outcome of all such communication shall be provided to BB for forwarding to AAHA.

9.6 Treasure Act

Should the AC during the works either in the field or during post excavation works identify items of such character that they are considered to fall within the definition of treasure as identified in the Treasure Act 1996 and Code of Practice 2nd Edition the Contractor shall inform BB immediately who will inform the AAHA, including detail of the object/s and assist the client in the preparation of all documentation and other actions as may be required to comply with the provisions of the Act and Guidance Note.

9.7 Specialists

The Contractor shall integrate specialist staff into the Works at an early stage to ensure that all sampling and investigation is appropriately informed and targeted and in accordance with current best practice and the aims and objectives of the Works.

9.8 Metal detecting

Where an area of archaeological remains is likely to include metal artefacts a metal detector shall be used to aid in the location and recovery of artefacts. The location of all artefacts recovered shall be recorded in plan or three dimensionally if the Contractor considers this to be relevant to the deposits or features being excavated and the artefacts recovered shall form part of the archive.

9.9 Personnel

The Works shall be managed, directed and staffed by appropriately qualified and experienced personnel. The Contractor's Key Person (Project Manager) shall possess at least ten years relevant experience. The excavation, sampling and recording of the Works shall be directed in the field by a Member of the Institute of Field Archaeologists (MIFA) or equivalent (The Field Director). The Field Director shall be on site throughout the fieldwork. The project team shall be staffed by technicians with a minimum of six months experience in appropriate aspects of excavation and recording relevant to the aims and objectives of the Works.

Specialist staff associated with the Works, including any post-excavation works of whatever kind, including the writing of reports, shall be suitably qualified and shall be supervised by personnel with a minimum of ten years of relevant experience in their field (this may be inclusive of post-graduate studies). Specialists shall be available at 24 hours notice for the duration of the works to provide advice on any tasks where specialist input is required so as to not have an adverse effect on the programme of works.

All AC staff working on or visiting the site shall hold suitable industry standard accreditation such as CSCS cards.

CVs shall be provided for the following AC staff:

- Project Director
- Project Manager
- Field Director
- Specialist Staff

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Figures

Figure 1 Proposed trench locations



Appendix A

Historical Summary

A1 Historical Summary

The Trinity Burial Ground (TBG) at Castle Street opened in 1783, following the recognition that the original graveyard associated with the medieval Holy Trinity Parish Church, in the Market Place, had reached capacity and could not be expanded. The Holy Trinity Parish burial registers record the interment of some 43,933 individuals between 1783 and the 1860s, the latter date indicating the point when the TBG on Castle Street had also become full. These parish registers are thought to provide the most accurate information concerning the number of burials likely to have been made at the TBG, although it should be considered that not every individual documented therein was actually buried at Castle Street. For example, it is likely that burials continued to be made within vaults and family plots at the original Holy Trinity graveyard in the Market Place until those facilities were full. It is not possible to provide an estimate of such numbers, as the registers are not annotated with the location of individual burials. Nonetheless, it is likely that burials within the medieval graveyard would represent a very small proportion of those entered on the parish burial register after 1783, both due to the very limited space that must then have been available at the church and on the basis that those that could afford private burial plots at the Market Place would represent a small proportion of the population. The vast majority of the working-class population of Trinity Parish, including the many incomers that would have helped to feed the town's population growth during the nineteenth century, would have been laid to rest at Castle Street.

Although Holy Trinity Parish hosted four other churches contemporary with the use of the TBG, it is unlikely that burials at those churches represent a significant proportion (or indeed, perhaps any) of the individuals entered on the Trinity Parish burial register. Of those churches, two, St Stephen's and St James', have surviving burial registers. In the case of the third church, there is a record of the burials known to have taken place within the 70 or more vaults of the former St John the Evangelist's Church, which was consecrated in 1791 as chapel-of-ease to Holy Trinity (Bulmers Gazetteer 1892). The vaults, including that of the former incumbent Rev Dykes, were presumably emptied in advance of demolition in 1920. No record has been identified that would indicate that the fourth church within the parish, the former Mariners' Church or Chapel (built 1834; in use to 1906), hosted burials.

It is, therefore, probable that some of those 43,933 individuals documented on the TBG registers were not buried at Castle Street, but such numbers are more likely to be reckoned in the hundreds rather than the thousands. Conversely, it is entirely possible that the TBG witnessed varying numbers of undocumented interments, particularly of very young individuals. Moreover, the interment of some 44,000 individuals across a period of around 80 years is neither unexpected nor unprecedented, given the exponential increase in the town's population (from 22,161 in 1801, to 65,670 in 1841; Allison 1969) and a mortality rate that was about 2% (on the basis of 732 burials among a population of 36,293 in 1831; Gawtress 1834, 376). Whilst Holy Trinity was only one of Hull's two urban parishes, it would appear to have been the larger (at 900 acres) and to have comprised both the southern part of the densely populated Old Town and much of the area to the west, including areas of rapid urban expansion. Conversely, the 60 acres of St Mary's parish were restricted to the northern part of the Old Town.

Character of the funerary remains

The proposed excavation zone for the main works within the TBG covers c 3000m², representing 37% of the current, c 8120m², burial ground. In the absence of any direct information that might indicate the density of burial within that zone, it has been assumed that it will contain 37% of the documented burials. This provides a figure of 16,255 individuals and a basic density of c five burials per square metre (although chronological and socio-economic factors may have led to differences in burial density across the site). Such a density does not appear to be unusual for contemporary burial grounds, particularly when it is considered that the “...*churchyard of St Martin-in-the-Fields, London, was only 200 feet (60 metres) square yet, in the early 1840s, was estimated to contain the remains of between sixty and seventy thousand persons*”, a density of 16-20 burials per square metre [taken from <http://homepage.ntlworld.com/hitch/gendocs/cem.html>].

On the basis of the extant memorials (EYFHS 1985), the graves are currently assumed to follow the slight north-east/south-west alignment of the burial ground. However, with the exception of where gravestones remain in situ, the exact position of individual graves remains uncertain. They potentially include plain earth-cut graves, brick shaft graves and vaults. These may contain single burials or multiple burials, stacked vertically and burials of double width. Brick shaft graves and vaults may be associated with bearers (bricks or plinths), capping stones and ledger stones, as well as above-ground structures; they may, or may not, have been backfilled with soil.

No information on the size of plots at TBG has been identified, and variability is likely, particularly between public and private graves. It is assumed that the graves are both closely packed and, in common with contemporary burial grounds, contain stacked burials. If, for example, all of the graves were relatively well spaced, each covering an area of 1.7m², burials would need to be stacked nine or ten deep. Such deposition would not be unprecedented, nor, indeed, particularly unusual.

Experience of contemporary sites indicates that burials can be encountered to depths of 4-5m below the modern ground level (bgl). This can be deeper where multiple stacking has taken place or where additional material was distributed to raise the ground level and allow further interments to be made within each grave. Moreover, there is a possibility that burials could have sunk into the soft alluvial deposits. Whilst a figure of 4-5m will form the basis of our estimates for the depth of burial at TBG, these estimates are not substantiated by any direct information and the depth of the basal burials could be greater, or indeed, relatively more shallow.

Preservation of funerary remains is expected to vary, depending on the type of grave and whether lead coffins are encountered, but also as a result of local variations in the natural geology and the burial substrate. If a high water table is present within the burial ground, then organic material may be preserved at a relatively shallow depth.

Appendix B

Format of Risk Log

B1 Format of Risk Log

ID	Description	Impact on		Unmitigated Risk			Control Measures	Mitigated Risk			Owner	Monitors
		Programme Task Number/s	Linked risks	Probability	Impact	Risk Rating		Probability	Impact	Risk Rating		

Probability	
Risk Occurrence	Score
A highly improbable occurrence	1
An occasional occurrence	2
A fairly frequent occurrence	3
A routine occurrence	4
Almost a certainty	5


Impact	
Risk Impact	Score
Nominal less the 1 hour	1
Less than half a day	2
Up to 1 day	3
Up to 5 days	4
Greater than 5 days	5

Risk Sensitivity Matrix						
Score - Probability	5	5	10	15	20	25
	4	4	8	12	16	20
	3	2	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
	1	2	3	4	5	
	Score - Impact					
Risk Rating Matrix (Probability x Severity)						
1	to	5	Tolerable			
6	to	10	Moderate			
11	to	16	Substantial			
17	to	25	Intolerable			


Appendix C

Format of cost and resource plan

C1 Format of Cost and Resource plan

The AC shall prepare and submit in accordance with the programme provided in  above as cost plan for the whole of the works in the format provided below. The cost plan shall be submitted in hard copy and in Excel format.

	Programme week	1	2	3	4	Totals	
Price List Ref	Programme Act ID	Date	Date	Date	Date	Price List	Task ID
1	1	100.00	100.00	100.00	100.00	700.00	
2	1	100.00	100.00	100.00	100.00	700.00	
3	1	150.00	150.00	150.00	150.00	1,050.00	2,450.00
4	3			150.00	150.00	900.00	
5	3			200.00	200.00	1,200.00	2,100.00
	Weekly Total	350.00	350.00	700.00	700.00		
	Cumulative Total	350.00	700.00	1,400.00	2,100.00		

The AC shall prepare and submit in accordance with the programme provided in  above as resource plan for the whole of the works in the format provided below. The resource plan shall be submitted in hard copy and in Excel format.

	Programme week	1	2	3	4	Totals	
Task ID	Resource	Date	Date	Date	Date	Inputs Days	Task ID
1	Project Director	0.5	0.5	0.5	0.5	2	
1	Project Manager	5	5	5	5	5	7
2	Project Manager						
2	Osteologist						
	Weekly Total						
	Cumulative Total						

Any variation to the format and presentation of the cost or resource plan shall only be implemented following the issue of an alternative means of presenting the data that has been approved by BB.

Appendix D

Format of Programme

D1 Format of programme

All programme shall be compiled in MS project. In compiling their programme for the Works the AC shall utilise the outline task sequence provided in $\diamond\diamond$ above as the basis for development.

Programme developed and issued by the AC shall as a minimum show the following:

- Task ID;
- Task Description;
- Planned Start;
- Planned Finish;
- All milestones;
- All task Linkages;
- Task successor including lag;
- Critical and non-critical tasks; and
- The programme shall be a closed network loop to ensure that the critical path is correctly identified.

It shall be the responsibility of the AC to ensure that they maintain and update their programme. Subject to the ACs delivery of the Works BB may require the contractor to resubmit their programme.

Appendix E

Legal and ethical considerations

E1 Legal and ethical considerations

E1.1 Faculty

The site is consecrated according to the rites of the Church of England (CoE). Under the appropriate Faculty (Care of Churches and Ecclesiastical Jurisdiction Measure 1991; Faculty Jurisdiction Measure 1964; the Faculty Jurisdiction Rules 2000), permission is required to remove any funerary remains. Copies will be forwarded to all appropriate stakeholders.

The burial ground and its burials are subject to the jurisdiction of the Diocesan Advisory Council (DAC) through the Vicar (Dr Neal Barnes) and churchwardens of the parish of Holy Trinity Hull. These shall be kept aware of the progress of works and of any issues of which they should be cognisant. The vicar may well be needed as an interface with relatives

All Faculty directions, together with any from the HCC Environmental Health Officer (EHO), will be included within the site induction for all on-site contractors. The directions, which should be displayed in an appropriate location (ie, site offices and welfare cabins), will be adhered to by all on-site contractors throughout all stages of the project. Where requested, the AC will provide information (risk assessments and methodologies, as appropriate), to the relevant statutory bodies and advisors. Humberside police will be provided with appropriate project details and time tables, as well as opportunities to monitor the site, so that they can ensure that all works are legal and undertaken in a manner that does not cause undue public concern.

E1.2 Closed Burial Ground

Legally, the TBG has been closed for burial. It is understood that the lifting and reburial of existing burials is permitted under Faculty directions within a closed burial ground. As part of this archaeological evaluation and trenching, the treatment of skeletons will fall into two categories:

- Skeletons that are cleaned and recorded, but left in situ; and
- Skeletons that are lifted, assessed on site, and replaced in the trench at the completion of the evaluation.

Under The Human Tissues Act (HTA; 2004) a licence is required to handle any human remains that are less than one hundred years old. The last documented burial on the TBG burial register dates to 1861. However, the EYFHS survey records two burials in 1867 (1985) and these may not be the last interments at the site. In the unlikely event that burials clearly interred within the last 100 years are identified, these will not be handled by the AC.

E1.3 Ethical and Religious Considerations

All staff involved in the excavation and recording of human remains shall behave with due care and attention, showing respect for the dead at all times. The AC will

observe the BABAO code of Ethics and must adhere to an in-house protocol for working with human remains.

The excavation and osteological examination of human remains will be screened from the public at all times. Screening to achieve this objective is required by the Faculty and to ensure that the works are at no time overlooked. No access will be permitted to members of the public during any works where human remains might be exposed. The media will only be admitted to specific, pre-defined, parts of the site by pre- arrangement and with the specific permission of the HA. Photography shall be for archaeological purposes only.

All staff involved in the works will receive a Toolbox Talk prior to commencing works to ensure that key ethical, health and safety, environmental and welfare issues are communicated to staff. Regular Toolbox Talk updates will also be given for the duration of the works. The AC shall as part of the project design detail the frequency and content of such briefings.

APPENDIX 2: CONTEXT LIST

Context	Trench	Description
2000	A	<i>In situ</i> memorial stone broken footing
2001	A	<i>In situ</i> memorial stone broken footing
2002	A	<i>In situ</i> memorial stone broken footing
2003	A	<i>In situ</i> memorial stone broken footing
2004	A	<i>In situ</i> memorial stone broken footing
2005	A	<i>In situ</i> memorial stone broken footing
2006	A	<i>In situ</i> memorial stone broken footing
2007	A	<i>In situ</i> memorial stone broken footing
2008	A	Memorial stone (upper half)
2009	A	Topsoil
2010	A	Made ground/burial soil
2011.1-2011.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2012.1-2012.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2013.1-2013.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2014.1-2014.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2015.1-2015.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2016.1-2016.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2017	A	Group of disarticulated remains
2018.1-2018.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2019.1-2019.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2020.1-2020.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2021	A	Group of disarticulated remains
2022.1-2022.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2023	A	Juvenile in same cut as 2022
2024	A	Charnel deposit above 2022
2025.1-2025.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2026.1-2026.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2027.1-2027.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2028.1-2028.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2029.1-2029.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2030	A	Charnel deposit
2031.1-2031.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2032.1-2032.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2033	A	Charnel deposit
2034.1-2034.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2035.1-2035.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2036.1-2036.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2037.1-2037.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2038.1-2038.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2039.1-2039.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2040.1-2040.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2041.1-2041.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2042.1-2042.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2043	A	Charnel deposit
2044.1-2044.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2045.1-2045.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2046.1-2046.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2047.1-2047.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2048.1-2048.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2049.1-2049.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2050.1-2050.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2051.1-2051.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2052.1-2052.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2053.1-2053.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit

Context	Trench	Description
2054.1-2054.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2055.1-2055.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2056.1-2056.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2057.1-2057.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2058.1-2058.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2059	A	Charnel deposit
2060.1-2060.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2061.1-2061.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2062.1-2062.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2063.1-2063.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2064.1-2064.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2065.1-2065.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2066.1-2066.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2067	A	Charnel deposit
2068.1-2068.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2069.1-2069.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2070.1-2070.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2071.1-2071.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2072	A	Charnel deposit
2073.1-2073.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2074.1-2074.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2075.1-2075.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2076.1-2076.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2077.1-2077.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2078.1-2078.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2079.1-2079.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2080.1-2080.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2081.1-2081.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2082.1-2082.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2083.1-2083.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2084	A	Charnel deposit
2085	A	Charnel deposit
2086.1-2086.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2087.1-2087.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2088.1-2088.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2089	A	Charnel deposit
2090	A	Charnel deposit
2091	A	Redeposited juvenile cranium and ribs
2092.1-2092.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2093.1-2093.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2094.1-2094.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2095.1-2095.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2096.1-2096.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2097.1-2097.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2098.1-2098.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2099.1-2099.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2100.1-2100.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2101.1-2101.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2102.1-2102.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2103.1-2103.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2104.1-2104.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2105.1-2105.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2106	A	Natural sandy clay
2107	A	Natural alluvial deposit
2108.1-2108.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2109.1-2109.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
2110.1-2110.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit

Context	Trench	Description
2111.1-2111.4	A	Burial event including grave cut, coffin, skeleton, and backfill deposit
3000	B	Red brick crypt structure (west)
3001	B	Sandstone end slab (east)
3002	B	Sandstone side slab (south)
3003	B	Sandstone end slab (west)
3004	B	<i>In situ</i> memorial stone broken footing
3005	B	<i>In situ</i> footing kerb stone
3006	B	Red brick crypt structure (north)
3007	B	Red brick crypt structure (east)
3008	B	<i>In situ</i> memorial stone broken footing
3009	B	<i>In situ</i> memorial stone broken footing
3010	B	<i>In situ</i> memorial stone broken footing
3011	B	<i>In situ</i> head kerb stone
3012	B	<i>In situ</i> memorial stone broken footing
3013	B	<i>In situ</i> side kerb stone
3014	B	Sandstone side slab (north)
3015	B	Sandstone base slab (east)
3016	B	Sandstone base slab (west)
3017	B	Red brick supporting wall section of ledger
3018.1-3018.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3019.1-3019.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3020.1-3020.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3021.1-3021.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3022.1-3022.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3023.1-3023.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3024.1-3024.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3025.1-3025.1	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3026.1-3026.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3027.1-3027.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3028.1-3028.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3029.1-3029.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3030.1-3030.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3031.1-3031.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3032.1-3032.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3033.1-3033.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3034	B	Charnel deposit
3035.1-3035.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3035.1-3036.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3037.1-3037.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3038.1-3038.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3039.1-3039.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3040.2	B	Coffin visible in edge of excavation
3041.1-3041.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3042.-3042.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3043,1-3043.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3044.1-3044.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3045.1-3045.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3046.2	B	Coffin visible in edge of excavation
3047.1-3047.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3048.1-3048.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3049.1-3049.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3050.1-3050.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3051.1-3051.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3052.1-3052.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3053	B	Topsoil

Context	Trench	Description
3054	B	Natural sandy clay layer
3055	B	Natural grey alluvial layer
3056.1-3056.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3057.1-3057.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3058.1-3058.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3059.1-3059.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3060.1-3060.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3061	B	Burial soil
3062.1-3062.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3063.1-3063.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3064.1-3064.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3065.1-3065.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3066.1-3066.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
3067.1-3067.4	B	Burial event including grave cut, coffin, skeleton, and backfill deposit
4000	C	<i>In situ</i> side kerb stone (south)
4001	C	<i>In situ</i> side kerb stone (north)
4002	C	<i>In situ</i> footing kerb stone
4003	C	Sandstone flag surface (north/south aligned at base of grave)
4004	C	Sandstone and slat flag surface (east/west aligned)
4005	C	<i>In situ</i> memorial stone broken footing
4006.1-4006.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4007.1-4007.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4008.1-4008.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4009.1-4009.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4010.1-4010.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4011.1-4011.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4012.1-4012.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4013.1-4013.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4014.1-4014.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4015.1-4015.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4016.1-4016.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4017.1-4017.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4018.1-4018.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4019.1-4019.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4020.1-4020.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4021.1-4021.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4022.1-4022.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4023.1-4023.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4024.1-4024.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4025.1-4025.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4026.1-4026.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4027.1-4027.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4028.1-4028.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4029.1-4029.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4030.1-4030.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4031.1-4031.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4032.1-4032.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4033.1-4033.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4034.1-4034.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4035.1-4035.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4036.1-4036.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4037.1-4037.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4038.1-4038.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4039.1-4039.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4040.1-4040.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4041.1-4041.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit

Context	Trench	Description
4042.1-4042.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4043.1-4043.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4044.1-4044.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4045.1-4045.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4046.1-4046.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4047.1-4047.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4048.1-4048.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4049.1-4049.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4050.1-4050.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4051.1-4051.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4052.1-4052.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4053.1-4053.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4054.1-4054.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4055	C	Topsoil
4056	C	Sandstone flag surface
4057	C	Levelling deposit
4058	C	Demolition deposit
4059	C	Red brick wall, single course, east/west aligned
4060	C	Sandstone foundation course, east/west aligned
4061	C	Red brick wall, multiple courses, north/south aligned
4062	C	Sandstone foundation course, north/south aligned
4063	C	Possible construction cut
4064	C	Disturbed grave soil
4065	C	Duplicate of 4003
4066	C	Disturbed grave soil/backfill
4067.1-4067.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4068.1-4068.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4069.1-4069.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4070.1-4070.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
4071.1-4071.4	C	Burial event including grave cut, coffin, skeleton, and backfill deposit
5000	D	Topsoil
5001	D	Red brick floor surface
5002	D	Bedding layer for 5001
5003	D	Redeposited clay layer
5004	D	Red brick wall. east/west aligned southern external wall
5005	D	Red brick foundation wall for 5004 , includes a north/south aligned section of internal wall
5006	D	Concrete foundation for 5005
5007	D	Red brick and sandstone internal wall
5008	D	Sandstone flag surface
5009	D	Mortar rich backfill of recess
5010	D	Mortar rich backfill of recess
5011	D	Red brick internal wall
5012	D	Mortar rich backfill of recess with red brick fragments
5013	D	Mortar rich demolition deposit
5014	D	Compact mortared floor surface
5015	D	Red brick wall forming part of the southern external wall, aspects displaced during demolition
5016	D	Compact rubble backfill
5017	D	Compact rubble backfill
5018	D	Ceramic drain head
5019	D	Compact backfill of 5020
5020	D	Linear cut truncating aspects of 5014
5021	D	Red brick wall with buttresses forming the eastern external wall
5022	D	Red brick foundation for 5021
5023	D	Backfill of cut 5024

Context	Trench	Description
<i>5024</i>	D	Construction cut for <i>5021/5022</i>
<i>5025</i>	D	Rubble deposit
<i>5026</i>	D	Sub-circular cut feature
<i>5027</i>	D	Rubble fill of <i>5026</i>
<i>5028</i>	D	Natural sandy clay layer
<i>5029</i>	D	Hard-core consolidation deposit for footpath
<i>5030</i>	D	Cut of modern footpath
<i>5031</i>	D	Mortar rich demolition deposit
<i>5032</i>	D	Rubble consolidation layer for modern footpath

APPENDIX 3: PARASITE DATA

Table 1. Holy Trinity Burial Ground, Kingston upon Hull: Results of the assessment for microfossils of samples from the abdominal areas of 15 skeletons. Semi-quantitative abundance scale: '+' – few (1 to 3 items); '++' – some (4 to 20 items); '+++' – frequent (21+ items).

Skeleton number	Sample number	Trench	Gender	General description of 'squash'	Microfossils					Notes and identifications
					Pollen/Spores	Fungal spores	Fungal hyphae fragments	Plant tissue fragments	Invertebrate remains	
2036.2	2000	1	?Female	Mostly inorganic with a little organic detritus (~10%)	-	-	+	-	-	-
2049.2	2001	1	Female	Mostly inorganic with a little organic detritus (~10%)	-	-	+	-	-	-
2070	2002	2	?Male	Mostly inorganic with some organic detritus (~20%)	+	-	+	++	-	1x indeterminate pollen grain/spore (partially obscured on slide but quite well preserved and probably identifiable to further study)
2083.3	2003	1	Male	Mostly inorganic with some organic detritus (~20%)	+	-	-	-	-	1x fern (<i>Polypodium</i>) spore
2082	2004	1	?Male	Mostly organic detritus with some inorganic content (~20%)	-	-	++	+++	-	-
2092	2005	1	?Female	Mostly inorganic with quite a lot of organic detritus (~30%)	-	-	+	++	-	-
3020	3000	2	Female	Mostly inorganic with a little organic detritus (~10%)	-	-	+	-	-	-
3027.3	3001	2	Male	Mostly inorganic with quite a lot of organic detritus (~40%)	-	-	+	++	+	1x soil-dwelling nematode (dead)
3041.3	3002	2	?Male	Mostly organic detritus with some inorganic content (~20%)	-	++	++	++	-	-
3045.3	3003	2	Male	Mostly organic detritus with some inorganic content (~20%)	-	+	+	++	-	Some of the plant tissue fragments were of rootlet

Skeleton number	Sample number	Trench	Gender	General description of 'squash'	Microfossils					Notes and identifications
					Pollen/ Spores	Fungal spores	Fungal hyphae fragments	Plant tissue fragments	Invertebrate remains	
3048.3	3004	2	?Male	Mostly inorganic with a little organic detritus (~10%)	-	-	+	-	-	-
4020.3	4000	3	Female	Mostly inorganic with some organic detritus (~20%)	-	-	-	-	-	-
4033.3	4001	3	Female	Mostly inorganic with some organic detritus (~20%)	-	-	+	+	-	-
4042.4	4002	3	?Female	Almost entirely inorganic with a trace of organic detritus (<5%)	-	-	+	-	-	-
4045.3	4003	?	Male	Mostly inorganic with a little organic detritus (~10%)	-	-	-	+	-	-

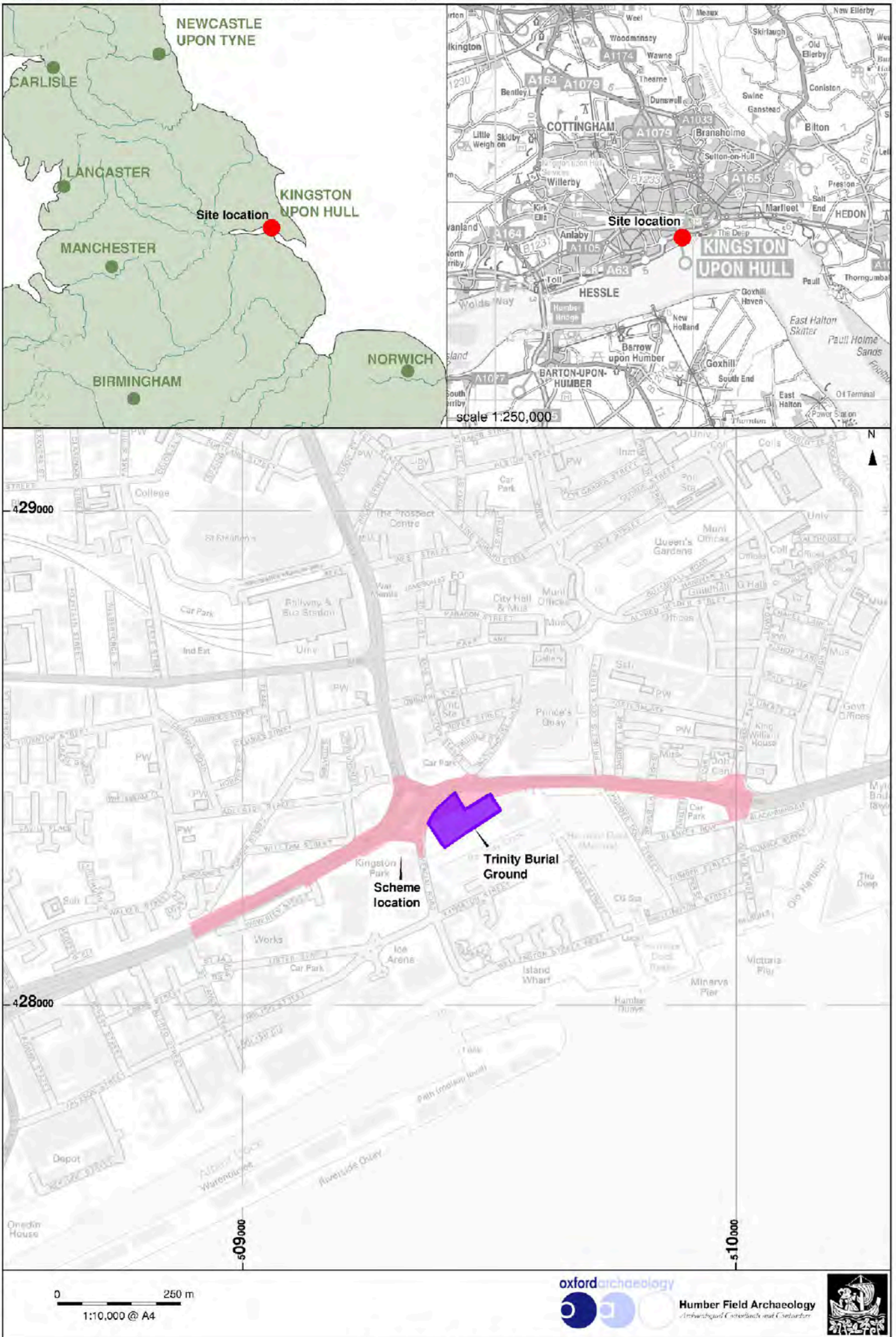
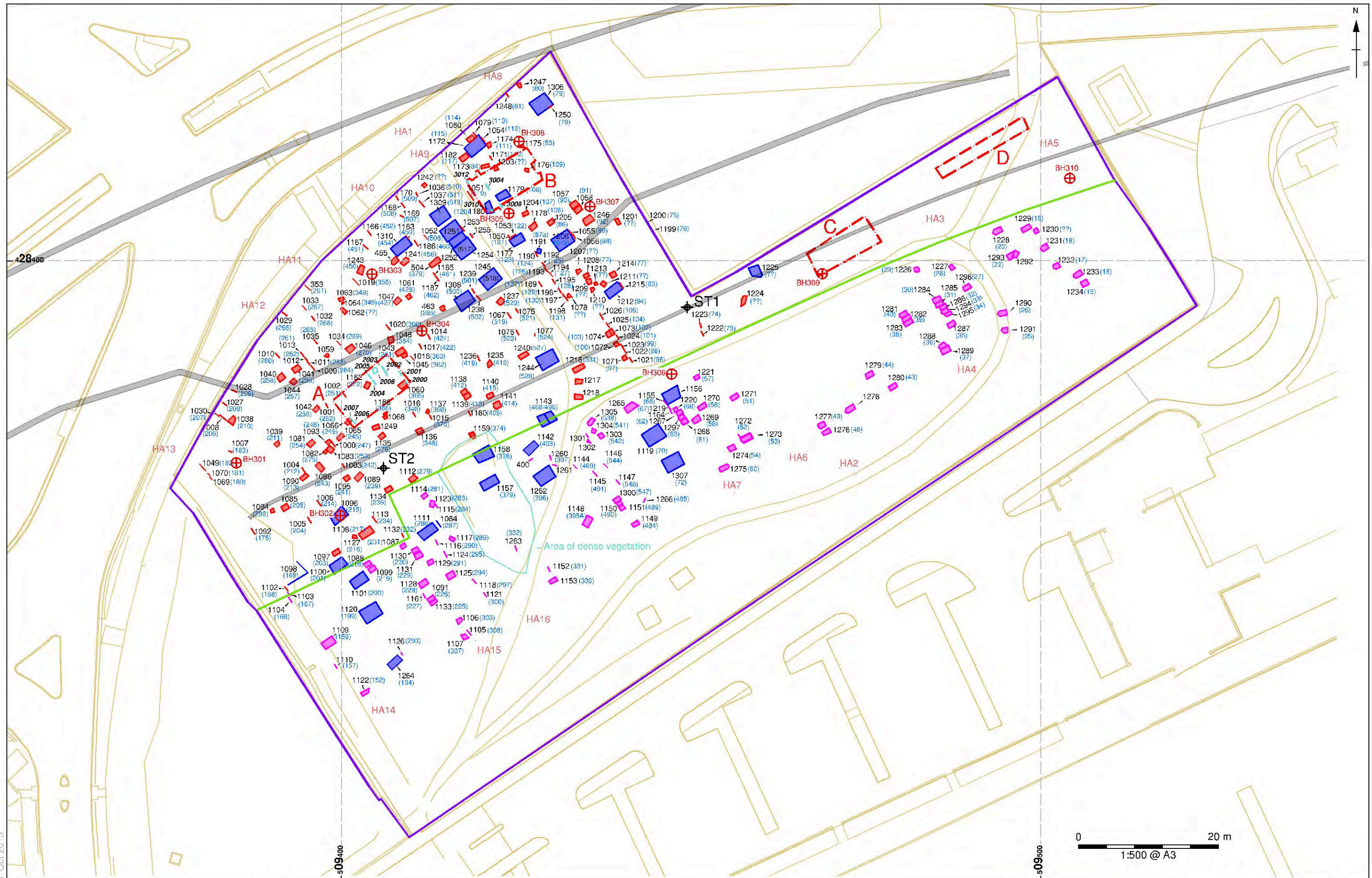


Figure 1: Site location

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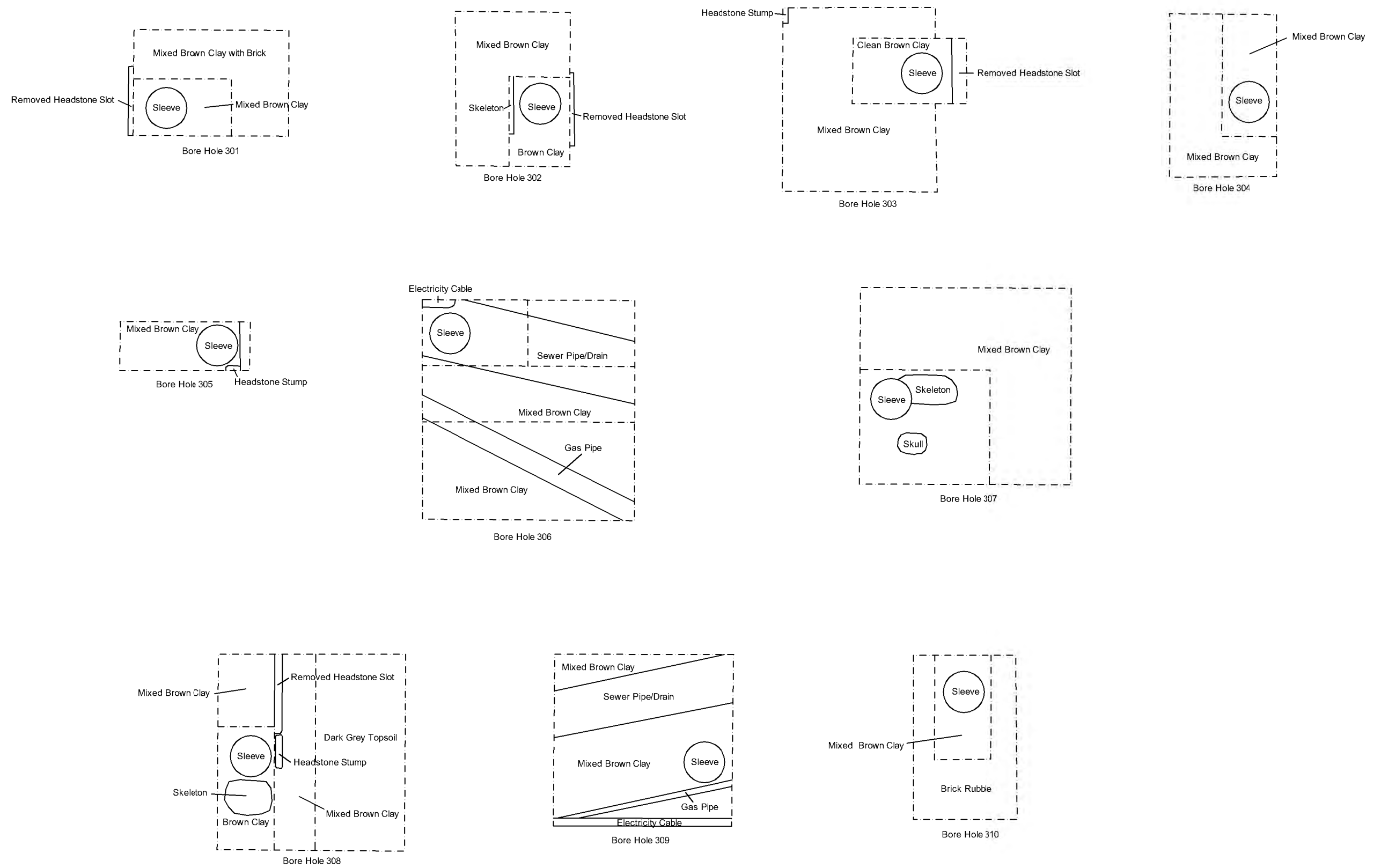
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|------------------------|--------------------------------------|--------------------------------|---------------------|----------------------------------|
| Burial Ground Boundary | Monuments Recorded | Impact Zone (North of Line) | Borehole Locations | Survey Stations (Balfour Beatty) |
| Retaining Wall | Tombs Not to be Moved | Exclusion Zone (South of Line) | Evaluation Trenches | |
| | Memorials Outside the Impact Zone | | | |
| | Memorials Within Evaluation Trenches | | | |

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Figure 2: Plan showing location of gravestones, boreholes and evaluation trenches



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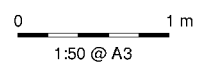
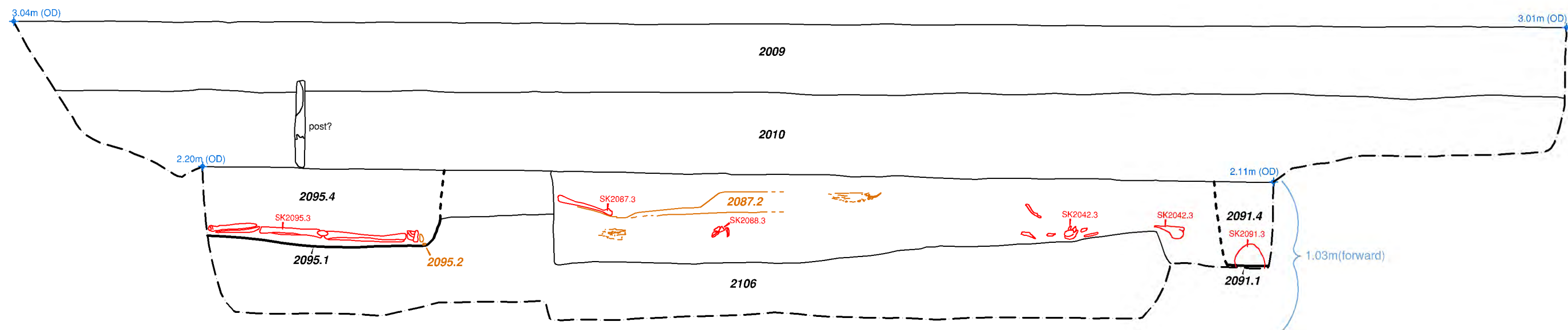







Figure 3: GI test pit plans

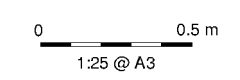


SW

NE



-  Limit of excavation
-  Cut
-  Layer/Deposit
-  Coffin
-  Skeleton



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Figure 4: South-east facing section through evaluation trench A

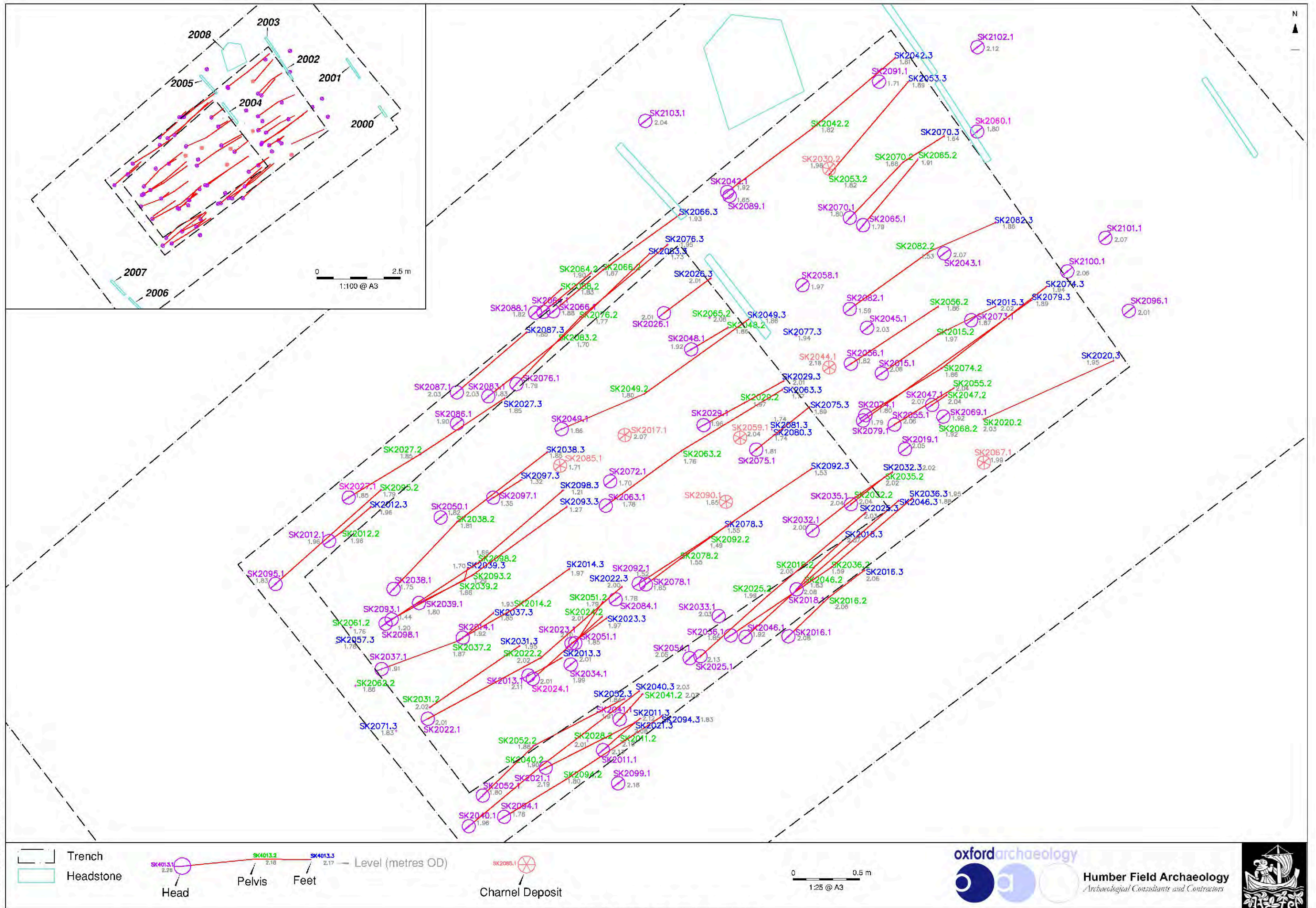


Figure 5: Plan of evaluation trench A

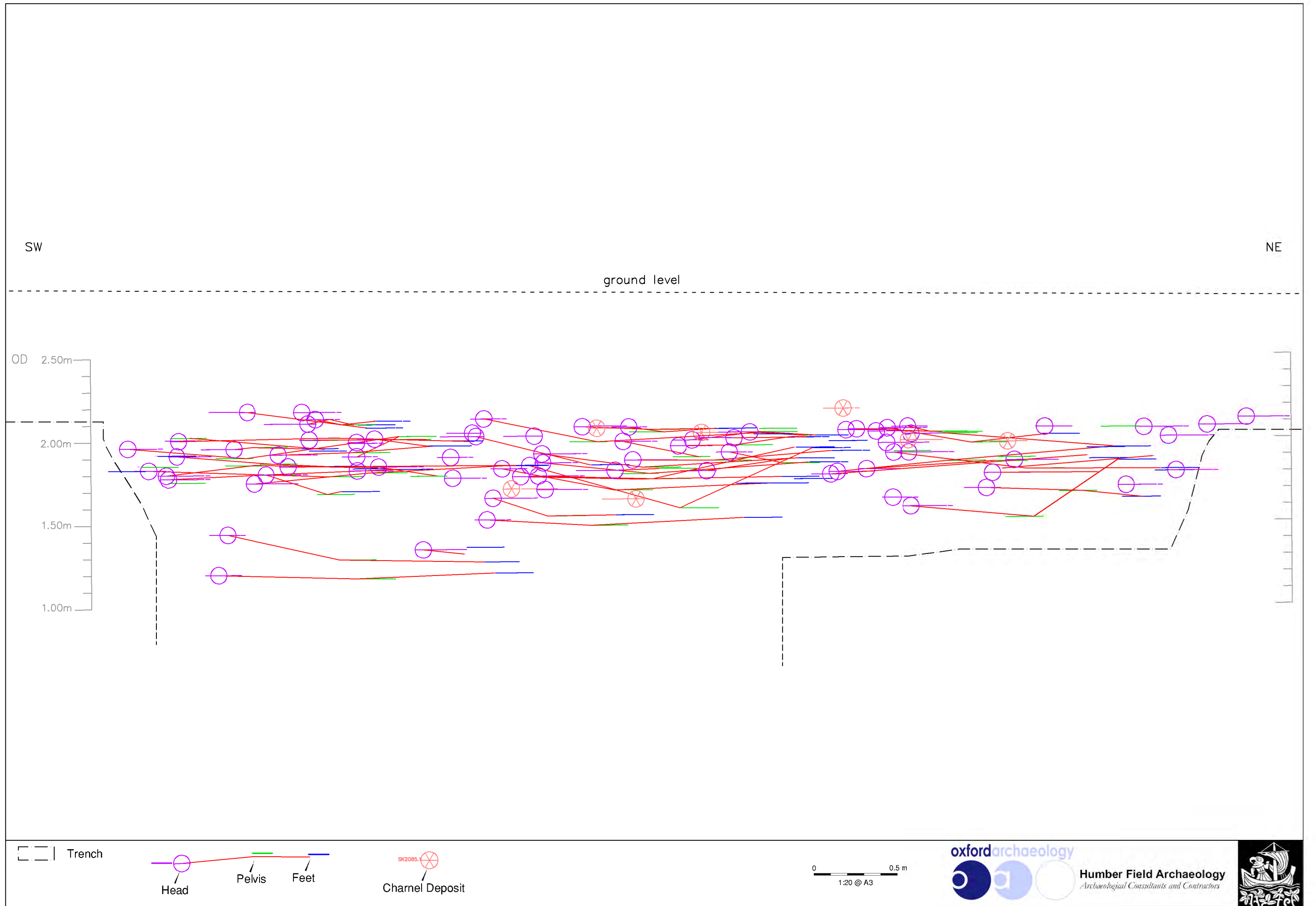
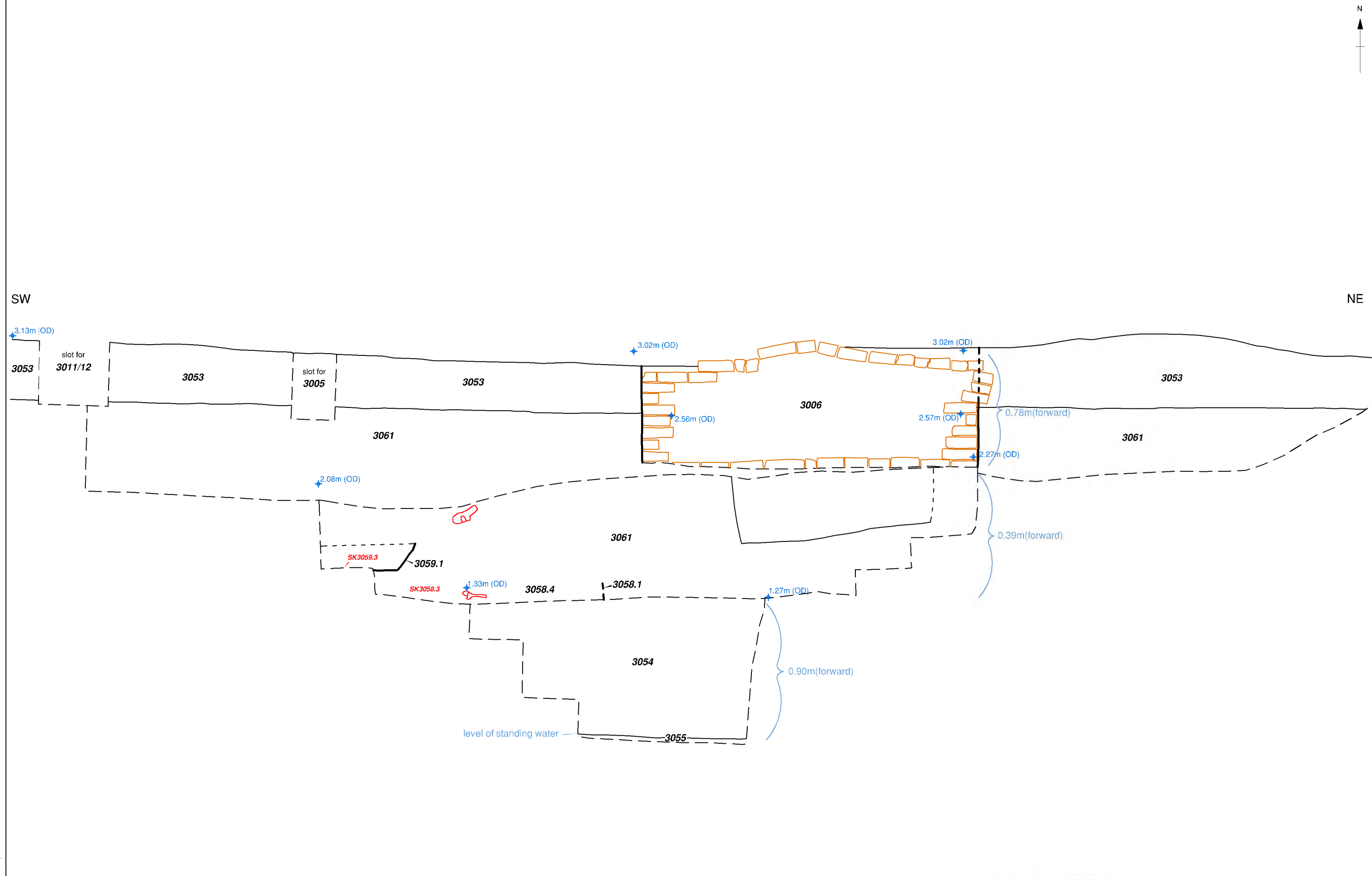


Figure 6: Sectional view of burials, evaluation trench A



- Limit of excavation
- Brick
- Skeleton
- Cut
- Layer/Deposit

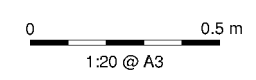
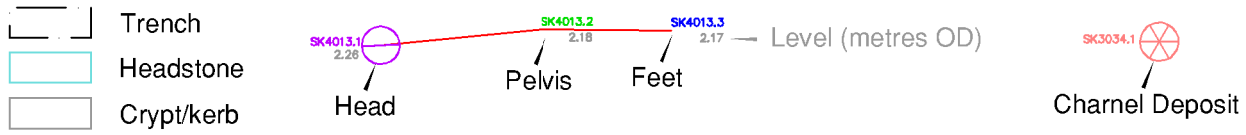
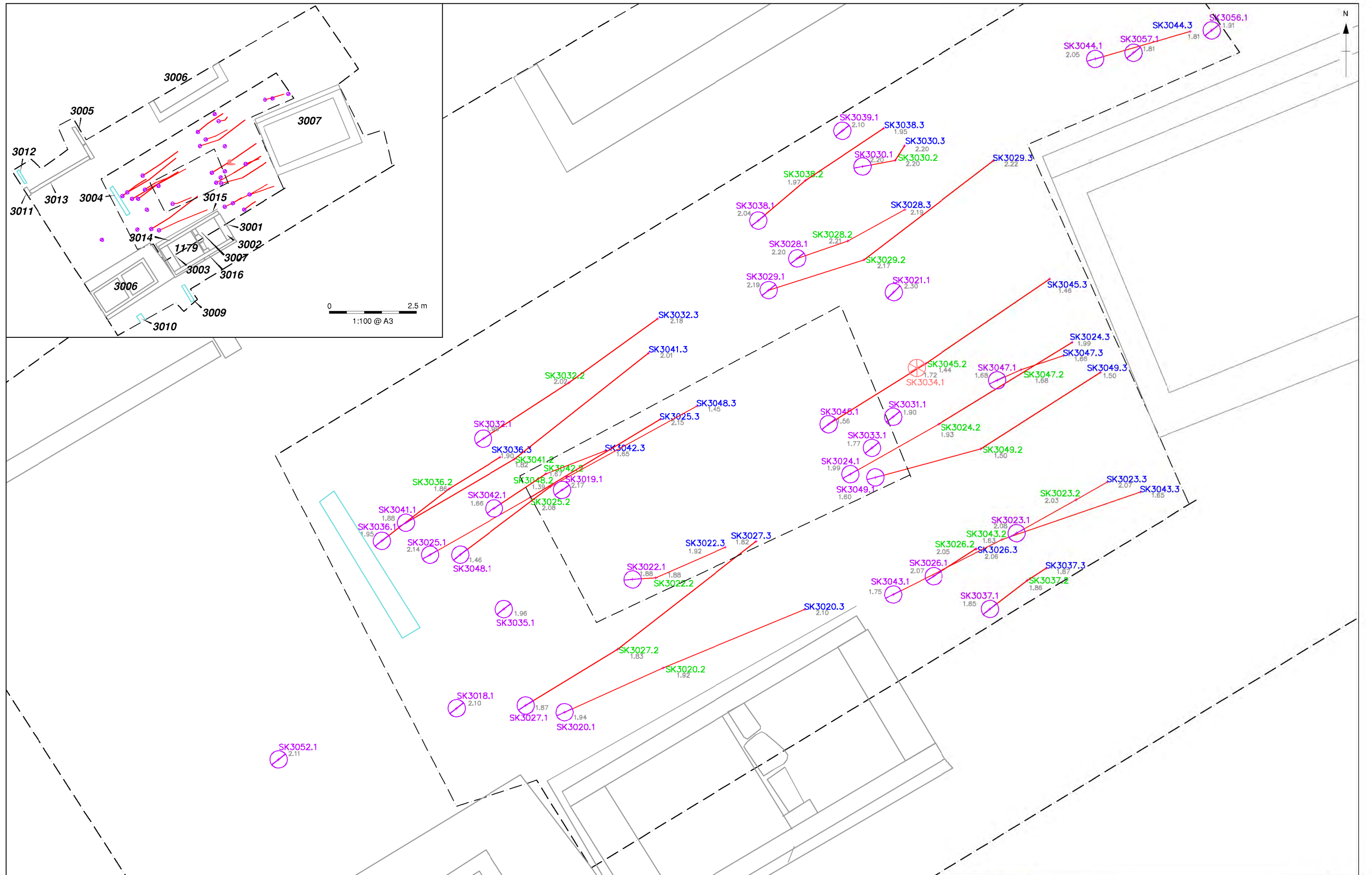
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Figure 7: South-east facing section through trench B



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Figure 8: Plan evaluation trench B

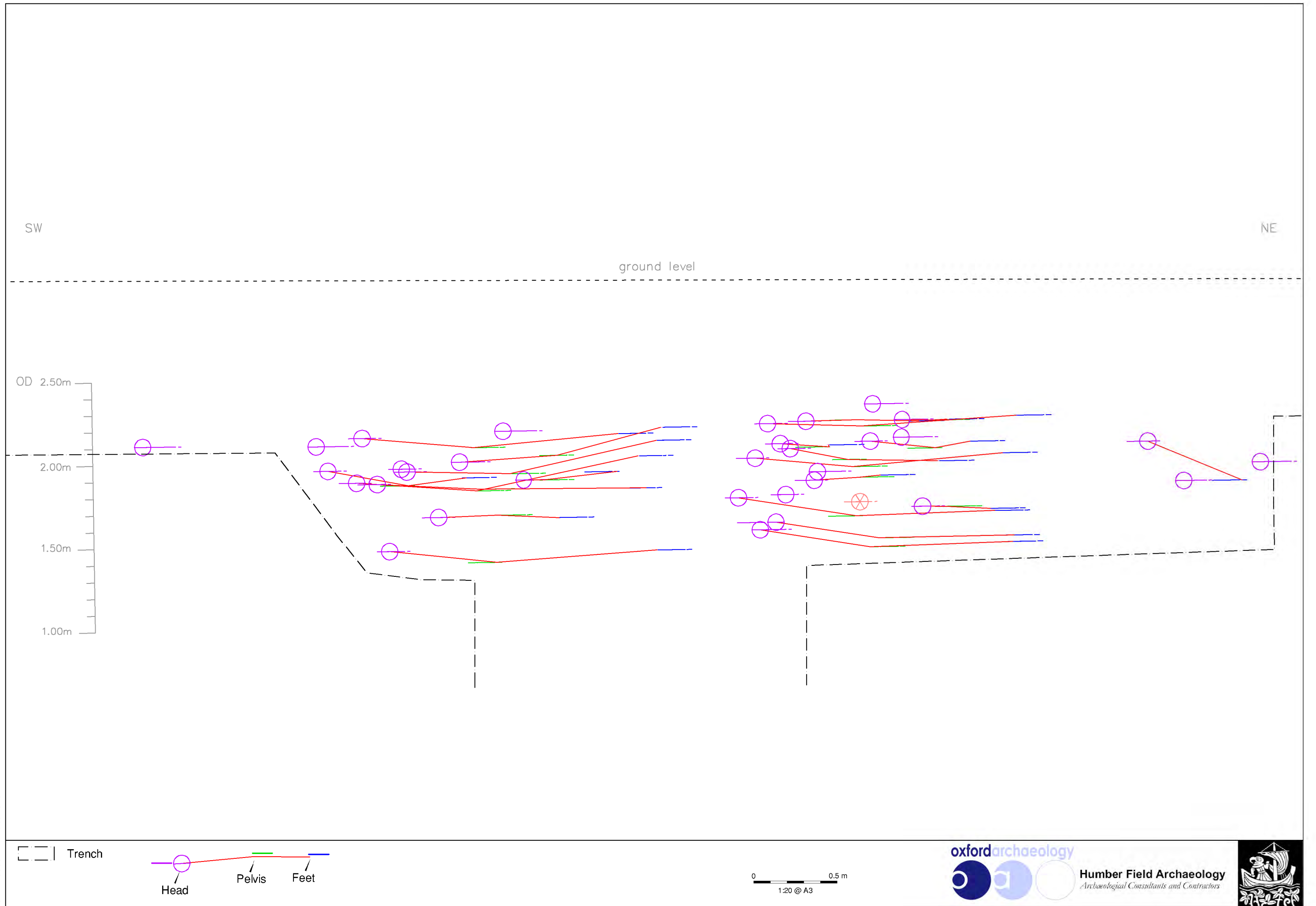
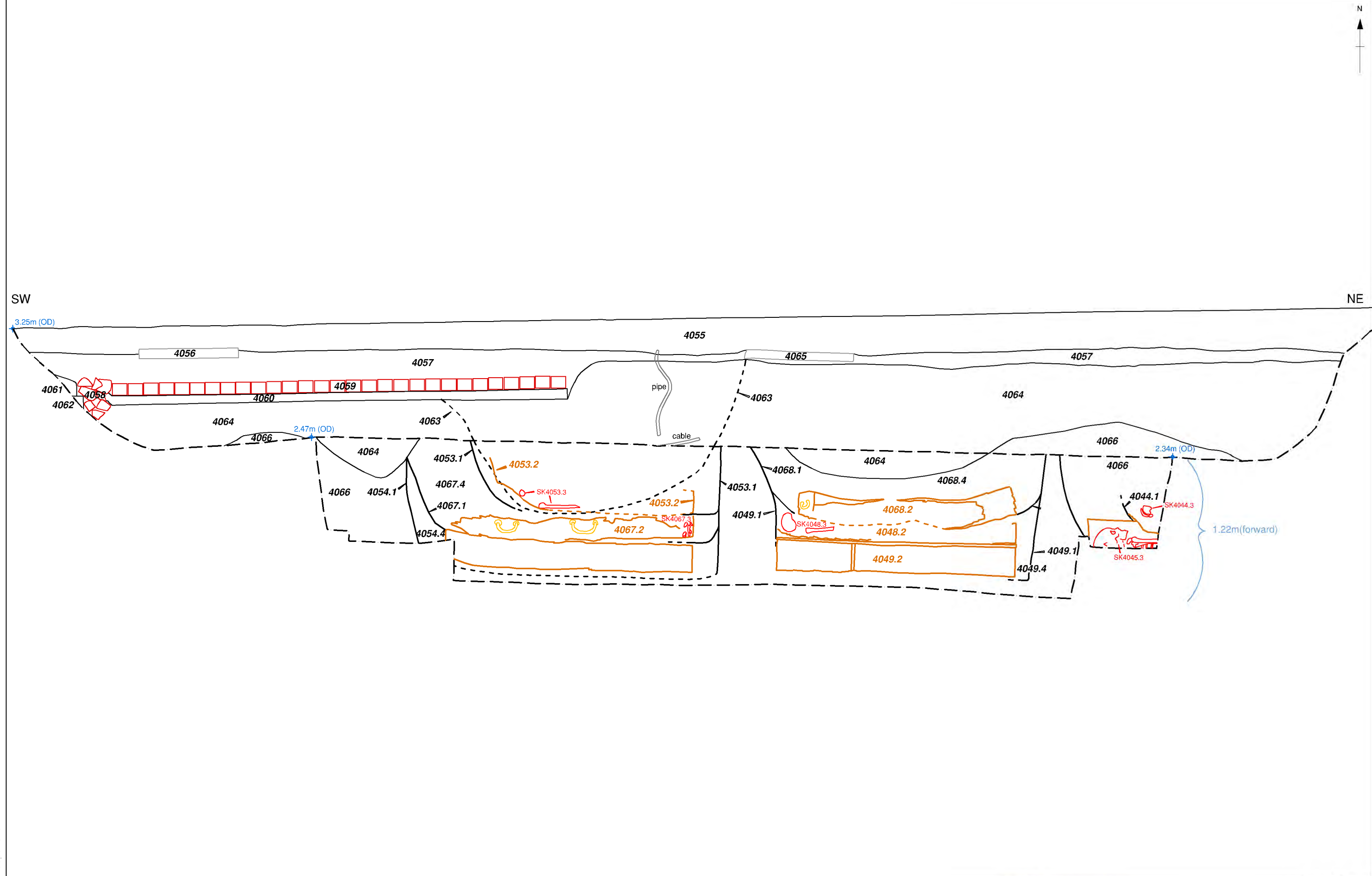


Figure 9: Sectional view of burials, evaluation trench B



- Limit of excavation
- Cut
- Layer/Deposit
- Brick
- Skeleton
- Coffin
- Coffin fittings
- Stone

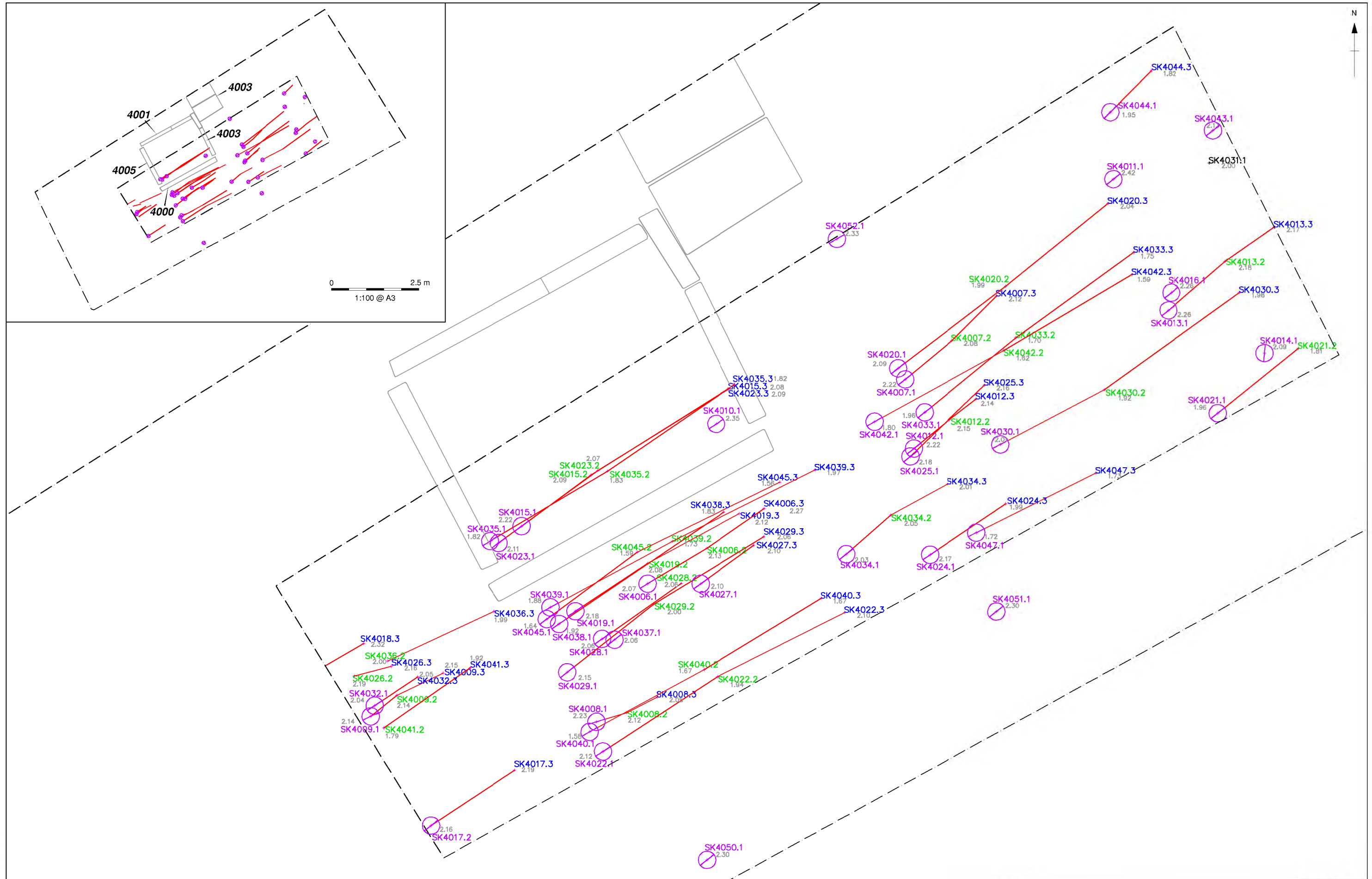
0 0.5 m
1:25 @ A3

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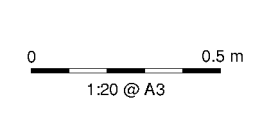


Figure 10: South-east facing section through evaluation trench C

SR/L10859/MAT/Sept 2015



Trench
 Crypt/kerb
○ Head
○ Pelvis
○ Feet
○ Level (metres OD)
○ Cremation



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Figure 11: Plan of evaluation trench C

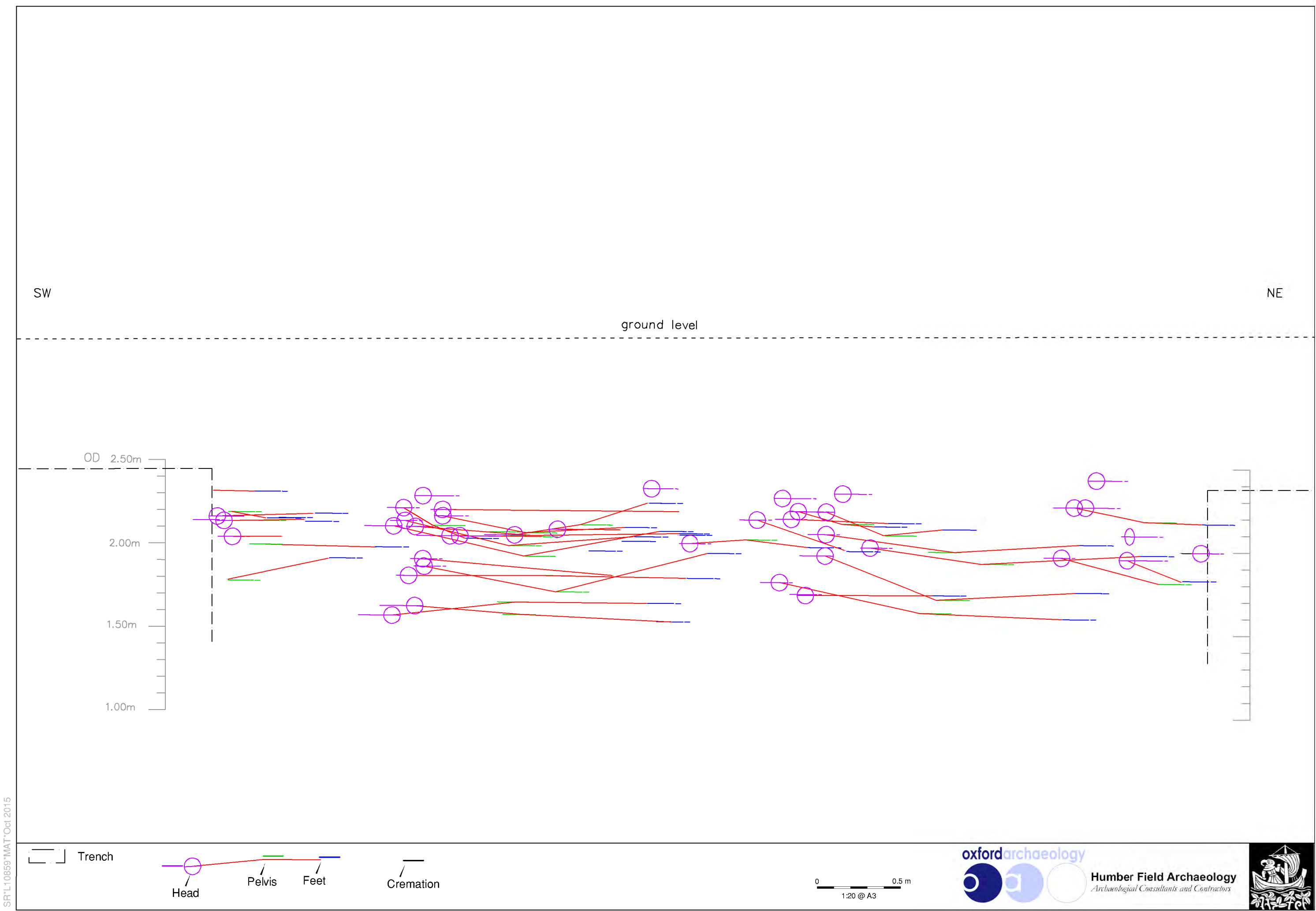
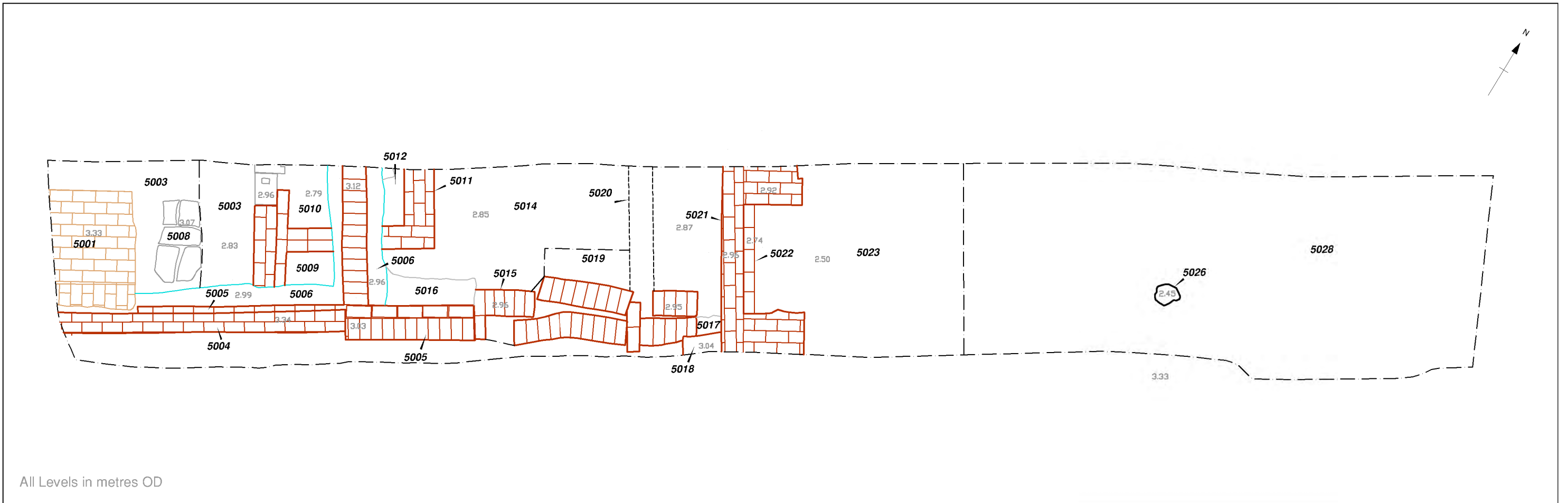
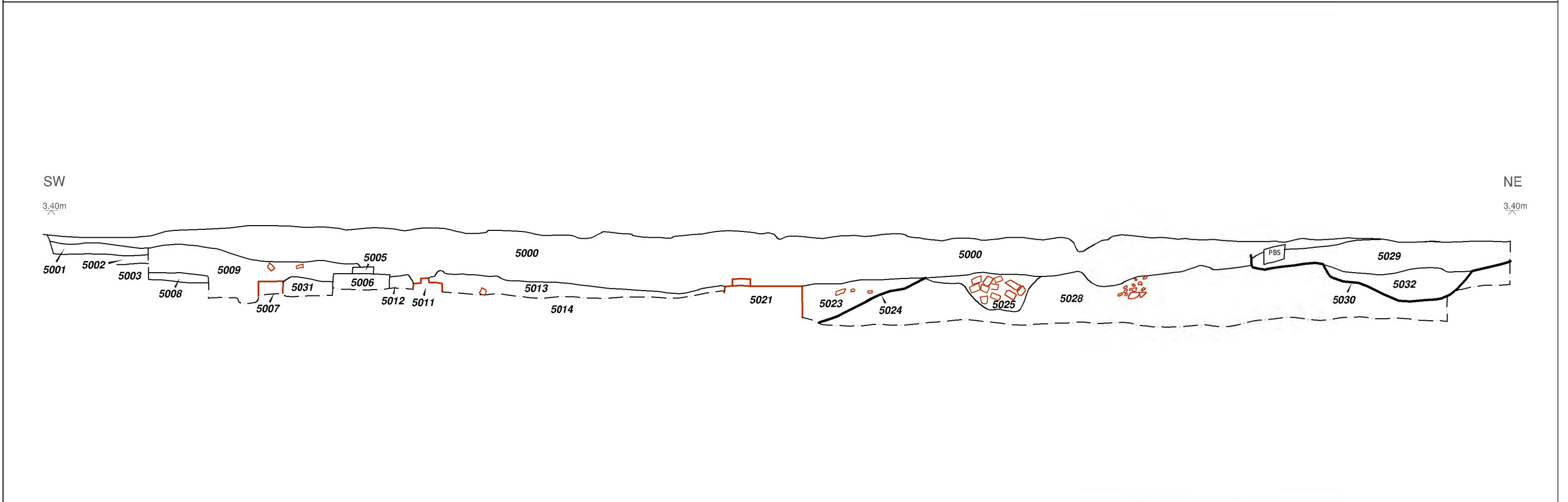


Figure 12: Sectional view of burials, evaluation trench C



All Levels in metres OD



- | | |
|-------------|------------|
| Trench | Trench |
| Concrete | Stone |
| Brick Floor | Brick Wall |

0 1 m
1:40 @ A3



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Figure 13: Plan and south-east-facing section of evaluation trench D

A63 Castle Street Improvements, Hull Environmental Statement

Volume 3 Appendix 8.8

**CULTURAL HERITAGE – PRINCES QUAY FOOTBRIDGE: PROJECT
DESIGN FOR SITE CLEARANCE ARCHAEOLOGICAL WORKS**

**TR010016/APP/6.3
HE514508-MMSJV-EHR-S0-RP-LH-000017
31 July 2018**

A63 CASTLE STREET IMPROVEMENT, HULL: PRINCE'S QUAY FOOTBRIDGE

**Interim Project Design for Site
Clearance Archaeological
Works**



Humber Field Archaeology
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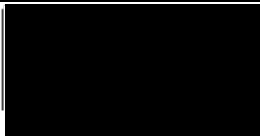

**Oxford Archaeology North and Humber Field
Archaeology**

May 2016

Balfour Beatty

OA North Ref: L10859

Client Name: Balfour Beatty
Document Title: A63 Castle Street Improvement, Hull: Prince's Quay Footbridge
Document Type: Interim Project Design for Site Clearance Archaeological Works
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Date	13 th January 2016	13 th January 2016	
2	Stephen Rowland Senior Project Manager	Alan Lupton Operations Manager	
Date	2 nd February 2016	2 nd February 2016	
3	Stephen Rowland Senior Project Manager	Alan Lupton Operations Manager	
Date	11 th February 2016	11 th February 2016	
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Date	20 th May 2016	20 th May 2016	

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1. INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 The purpose of this interim project design is to present a strategy for protecting historic features in the Humber Dock and Prince's Dock areas during the construction of a pedestrian footbridge over Castle Street, Kingston upon Hull, as part of planned improvements to the A63 (Site code CSH 2016; approximate centre excavations NGR TA 0968 2847; Fig 1). The clearance works undertaken to prepare the area for the construction of the footbridge will affect various elements of the historic Prince's and Humber Docks (to the north and south of the A63, respectively). This document presents the methodologies that will be implemented to protect and record the historic assets.

1.1.2 Improvements and renewal of parts of the A63 are proposed in central Hull by Highways England. The work will principally involve creation of an underpass and elevated interchange at the junction of Ferensway and Castle Street, though construction of two footbridges and an overbridge is also planned. The Princes Quay footbridge has received planning permission with an archaeological condition in recognition that the bridge will affect buried archaeological remains pertaining to Hull's western medieval defences and later Civil War outworks (condition 20 on planning consent and condition 6 on LBC; Planning Application reference 15/00965/FUL and LBC ref 15/00966/LBC) that states:

No development shall take place on the site until details of a programme of archaeological investigation have been submitted to and approved in writing by the Local Planning Authority. The programme shall be carried out as approved (to protect archaeological interests, and to comply with policies BE31, BE32 and BE33 of the Local Plan). A pre-commencement condition is required to ensure adequate recording and mitigation measures can be identified and incorporated into the scheme.

1.1.3 For this reason, this project design has been prepared by Oxford Archaeology and Humber Field Archaeology (OA-HFA) on behalf of Balfour Beatty (BB), Highways England's (HE) appointed principal contractor for the A63 Castle Street Improvement. It has been compiled to meet the guidance of Historic England (2015), the Chartered Institute for Archaeologists (CifA 2014), but also communications between the HE archaeologist and BB. The archaeological works to be undertaken comprise:

- an appropriate record of dock structural components and dockside features, where appropriate;
- working with BB to ensure that dockside features that can be kept in their current positions are adequately protected;
- monitoring the removal and storage of dockside features that cannot be maintained in their current positions;
- a watching brief during specific areas of ground reduction;
- compilation of a brief illustrated report; and
- preparation of an archive of primary data.

1.2 EXISTING SITE CONDITIONS

- 1.2.1 **Situation:** the works areas lie either side of the A63 Castle Street, involving land alongside Prince's Dock Street and Humber Dock Street, generally flat ground lying at around 4.50m OD. The works are planned for areas with a mixture of surfacing, including brick pavers, grass and flower beds, as well as affecting elements of the historic dock walls and dock-side features.
- 1.2.2 The proposed position for the footbridge lies just to the west of the junctions of Prince's Dock Street and Humber Dock Street with the A63 Castle Street. The north side of the bridge and its corresponding access ramp lies within an area of landscaping to the south of the Prince's Dock. The southern components occupy a broadly similar situation, with elements that impinge on the northern edge of the Humber Dock.
- 1.2.3 The underlying solid geology of the A63 road-improvement corridor is dominated by chalk (Burnham Chalk Formation) laid down in the Late Cretaceous epoch and this is sealed by superficial deposits dating to the Devensian and Holocene. The geological history of these later deposits is invariably complex, as they relate to the landscape changes associated with the ice sheets of the last glaciation (Devensian, *c* 120,000-12,000 BP) and the rapid rise in sea-level, wetland expansion, and marine inundation that occurred during the Holocene (*c* post-12,000 BP). With continued sea-level rise, estuarine conditions would have transformed the landscape at the lower end of the Hull valley into intertidal environments of saltmarsh, tidal creeks, and mudflats, resulting in the deposition of thick deposits of minerogenic clays silts and sands – it is these alluvial deposits which form the uppermost natural deposits in the area of Hull's Old Town and just outside.
- 1.2.4 **Site Access and welfare:** the BB welfare compound is accessed from west-bound Castle Street carriageway and pavement, and occupies the area to the north-east of Trinity Burial Ground, some 500m west of the works area.

1.3 PROJECT STAGES, PRODUCTS AND REVIEW

- 1.3.1 The investigative works presented in this document will take place in several stages:
- Project Stage 1: includes the preliminary site walkover, record and brief programme of research undertaken during the formulation of the current document;
 - Project Stage 2: comprises detailed recording in advance of the actual site clearance works;
 - Project Stage 3: comprises archaeological watching brief during the implementation of the clearance works;
 - Project Stage 4: comprises reporting and archiving.
- 1.3.2 The products of the archaeological works covered in this document will comprise a report and an archive which will present the integrated results from all the works associated with the Prince's Quay footbridge, including the archaeological watching brief on geotechnical works undertaken in 2015, and the compensation trenching across the medieval and English Civil War defences (OA-HFA 2015).

1.3.3 The main review points will be:

- on completion of the on-site recording;
- on completion of the watching brief; and
- at the submission of the report.

1.3.4 Regular review and liaison will be undertaken with the Balfour Beatty Technical Advisor (BBTA) and Highways England's Archaeological Advisor for the Project (AAHE). Liaison with other parties will be undertaken as appropriate, and in accordance with a communications protocol agreed with the BBTA and the AAHE.

1.3.5 **Timetable:** the timetable for the works will be established in consultation with BB and HE. At present the fieldwork is expected to take approximately five to six weeks.

1.4 PROJECT TEAM, ROLES, RESPONSIBILITIES AND INTERFACES

1.4.1 Management and co-ordination of the works will be undertaken by BB, who will set up the site and will maintain a secure and safe working environment. OA-HFA will provide an experienced and appropriately skilled team, including a buildings archaeologist, that will work closely with BB, ensuring that works are undertaken safely and efficiently.

1.4.2 The BBTA and AAHE will form the interface with HE, Humber Sites and Monuments Record (HSMR), Hull City Council (HCC; including the Conservation Officer) and Historic England. OA-HFA will ensure that any significant results/matters are brought to the attention of the BBTA and the as soon as is practically possible, and in any event within 24 hours.

1.4.3 **The Project Team:** the core members of the OA-HFA project team, are as follows:

- Project Director: Ken Steedman;
- Project Manager: Stephen Rowland;
- Buildings Archaeologist: Dave Rawson;

1.4.4 **Liaison with the public:** the BB Liaison Officer is Pam Hobson, who interfaces with the public, including special interest groups. The Liaison Officer will deal with all enquiries and will disseminate approved information as appropriate.

1.4.5 **Monitoring:** technical monitoring of the archaeological works will be undertaken by the AAHE and the BBTA on behalf of HE and BB, respectively. Monitoring may also be undertaken by HSMR and by Historic England, who will be afforded access to the site.

2. BASELINE CONDITIONS, AIMS AND OBJECTIVES

2.1 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 2.1.1 The Humber Dock and Prince's Dock (originally named Junction Dock) were constructed in the 19th century around the north and west sides of the Old Town, broadly following the line of the medieval moat and the parallel defences of Civil War date. The walls and gates were mostly removed to permit the construction of a series of new docks, the earliest of which was Queen's Dock (now beneath Queen's Gardens) opened in 1778. Construction of the Humber Dock started in 1807 and it opened to shipping in 1809. The dock closed to shipping in August 1967, but was later redeveloped in 1983 as part of Hull Marina.
- 2.1.2 Prince's Dock was opened in 1829. Originally called Junction Dock, the dock was formally re-named in honour of the royal visit by the Prince Consort in 1854. Like Humber Dock it closed to commercial traffic in 1967, though the ashlar dock walls and original mooring posts remain. Prince's Dock Street, on its east side, was originally named New Dock Street, as it led to the New Dock to the south (later known as Humber Dock), with buildings on the west side of the street being demolished to facilitate the construction of the Junction Dock.

2.2 EXISTING DOCKSIDE FEATURES

- 2.2.1 A brief programme of non-intrusive investigation was undertaken as part of the compilation of this project design. Several site visits and a walkover survey were undertaken across the area surrounding the proposed new footbridge, in December 2015 and early January 2016. This comprised land either side of the A63 Castle Street, and encompassing the southern part of Prince's Dock and the northern part of Humber Dock (Hull Marina). The survey was undertaken in order to inspect the historic dockside features, compile brief written descriptions and survey their positions using survey-grade GPS equipment. The results of these visits are reproduced in *Appendix 1* and on Figure 1. Only features that are assessed as being of historical interest are considered. They include structural elements of the listed docks and which would have been integral to their operation (such as mooring posts), together with several unlisted features which derive some significance from the fact that they are constructed from re-used historic materials. A number of record photos were taken of representative features (Plates 1-8).
- 2.2.2 In total, 18 historic assets have been identified within and immediately around the proposed development area and are likely to be directly affected by the development, or will need protecting to ensure that they are not damaged (*Appendix 1*). These include seven nineteenth-century mooring posts/bollards (six cast-iron, one stone), three winch bases and a cable guide (Prince's Dock) and elements of the Humber Dock walls and water management features. There are also three modern walls constructed from older materials, and a stone structure of unknown function. The numbering of the assets is not sequential from 1-18, but instead reflects a wider

scheme of number allocation, which has been retained to correspond with the numbering utilised on other project documents and drawings.

2.2.3 **Statement of significance:** the two early 19th-century docks in the walkover area are important and potent symbols of Hull's maritime heritage. In both cases, their architectural and historical significance has been recognised by National designations as Grade II Listed: Prince's Dock, LBS no. 387743; and, Humber Dock, LBS no. 387625. The designations include the associated cast-iron dock furniture. Humber Dock is also a key part of the Old Town (Southern Part) Conservation Area, featuring prominently in the Conservation Area Character Appraisal (Hull City Council 2005), where it is part of *Zone 2: Docklands*.

2.2.4 The mooring posts set into the coping of the dock walls of the Humber Dock are indistinguishable from those along the sides of Prince's Dock, suggesting that modifications to Humber Dock were either contemporaneous with the construction of Prince's Dock and the channel and lock-gates which linked the two waterbodies, or a phase of modification was carried out on both docks. Whatever the case, it is clear that the various pieces of surviving historic dockside furniture – the mooring posts, bollards and winch bases – contribute significantly to the streetscape of the area and help provide its maritime character, something particularly highlighted in the Conservation Area Character Appraisal; they are also included in the Grade II Listings accorded both docks. They should be retained *in situ* where at all possible, and if that is not possible they should be subject to detailed recording in relation to their surrounding masonry. Similarly, where any parts of the surviving fabric of the Listed dock masonry or brickwork are to be unavoidably disturbed or removed, they should be subject to detailed recording in advance.

2.3 AIMS AND OBJECTIVES

2.3.1 **Aims:** the aims of the works are as follows:

1. to identify historic features to be impacted by the footbridge construction;
2. to establish an appropriate mitigation programme;
3. to implement that programme.

2.3.2 **Objectives:** the objectives are the means by which the aims will be addressed. Methodologies for meeting the objectives are presented in *Section 4*. The objectives are as follows:

- a. make a detailed record of those dockside features that will or may be impacted upon by the development;
- b. work with BB to ensure that those dockside features that can be left *in situ* are adequately protected;
- c. undertake an Historic England Level 2 historic building record (English Heritage 2006) of the northern end of the Humber Dock east wall;
- d. undertake an Historic England Level 2 historic building record (English Heritage 2006) of the inlets at the north-east and north-west corners of that dock once those features are cleared of vegetation and refuse;

- e. undertake a targeted archaeological watching brief during the removal of the dockside features, during the reduction and punching through of the northern end of the Humber Dock east wall, and on the site of Warehouse 7 (just to the south of Prince's Dock) and during service diversions;
- f. monitor the storage of dock-side features;
- g. compile a brief illustrated report; and
- h. prepare an archive of the primary data from the project.

3. BASIC CONSIDERATIONS

3.1 LEGAL CONSIDERATIONS

- 3.1.1 **Listed Buildings:** the Humber and Prince's Docks are both Grade 2 Listed Buildings (387625 and 387743, respectively; British Listed Buildings 2015).
- 3.1.2 **Conservation Area:** the docks lie within the Hull Old Town (Southern Part) Conservation Area (HCC 2005).

3.2 HEALTH AND SAFETY

- 3.2.1 Throughout the works, CDM Regulations will apply. BB will appoint a CDM co-ordinator and will monitor works through their H+S Officer. BB will undertake service clearance, monitoring and ensuring a safe working environment, and for issuing any permits to work. All health and safety procedures, including those of BB and the policies and H+S manuals of OA-HFA, will be followed throughout the works. These will include formulation and maintenance of a work package plans containing method statements and risk assessments for each element of the works in adherence to the guidance of the FAME/SCAUM H+S Manual, the Health and Safety at Work Act (1974), the Management of Health and Safety at Work Regulations (1999), the Public Health (Control of Diseases) Act (1984), the Manual Handling Operations Regulations (1992) and lifting operations (LOLER; 1998). The OA North project Manager will compile and submit to BB a health and safety work package plan (WPP), including a risk assessment, for the archaeological works within ten days of appointment. Any comments will be incorporated and resubmitted to BB within five days of receiving feedback. No site works will commence without written confirmation from BB that the documents are acceptable.
- 3.2.2 The OA-HFA site director will maintain a register of all staff and visitors on site and a diary that summarises the day's working areas, progress and weather, as well as significant deliveries and collections. An indexed photographic record in digital format will be regularly maintained to record general working shots, progress and the condition of the site.
- 3.2.3 **Staff training and PPE:** all project staff must be CSCS qualified. All project staff, including OA-HFA subcontractors, will wear full basic PPE while on site, to include safety helmets, safety boots, task-appropriate gloves, eye protection, and high-visibility jackets. Additional PPE will be dependent on weather conditions.

4. METHODOLOGIES

4.1 SITE ESTABLISHMENT

- 4.1.1 **Site Set-up:** BB will be responsible for setting up and maintaining the site and for meeting all welfare, attendance, security and support requirements.
- 4.1.2 **Activity areas:** the works will take place in two areas, one between the southern edge of the Prince's Dock and Castle Street, and the other between the northern edge of the Humber Dock and Castle Street.
- 4.1.3 **Lighting:** the works will be undertaken in daylight hours, but artificial lighting may be required at times.

4.2 WORKS SEQUENCE AND METHODS

- 4.2.1 The sequence of works is summarised in Table 2.

Task No	Task	Enacted by	Duration
1	Secure the area of the Works, install fencing, remove sharps/waste; clear vegetation and waste from Humber Dock inlets	BB	10 days
2	Detailed recording of dockside features	OA-HFA	10 days
3	Historic England Level 2 survey of Humber Dock walls	OA-HFA	
4	Historic England Level 2 survey of Humber Dock inlets	OA-HFA	
5.1	Protection and removal of dockside features	BB	5 days
5.2	Watching Brief during removal of dockside features	OA-HFA	
5.3	Replacement of dockside features	BB	5 days
6	Watching Brief during reduction and localised punching through of Humber Dock walls	OA-HFA	5 days
7	Watching Brief during ground reduction on site of Warehouse 7 and during service diversions	OA-HFA	10 days
8	Reporting	OA-HFA	8 weeks
9	Compilation and deposition of archaeological archive	OA-HFA	1 week

Table 2: Summary of Work Sequence

- 4.2.2 **Task 2, Detailed recording of dockside features:** an appropriate record will be made of those *in-situ* features that will be affected by the development and which cannot be left in place and protected. These comprise sluice gate 6, mooring post 7, stone structure 12, and winch bases 19-20. Recording will comprise the generation of an indexed photographic archive in high-resolution (10 megapixels+) digital format with supporting print photography, written notes, and measurements/scale drawings. Where features are identical, detailed recording will be limited to representative examples, although brief notes and photographic records will be made. Retaining walls 10, 11 and 13 will be rapidly recorded, with a brief record of the individual stones that make up these structures. The records will include group shots, and the wider context of the features, including the structures into which they are set.
- 4.2.3 **Task 3, Historic England Level 2 Survey of Humber Dock wall:** the survey will be undertaken on the affected part of the northern end of the east wall of the Humber

Dock (Fig 1; Feature 26). The safest way to record the wall will be from the prow of the Spurn Lightship. Hull City Council has been contacted, and is able to provide access to the ship during normal working hours. This will create certain limitations in survey control and the angle of photographs (they would only be taken from a single fixed point).

- 4.2.4 *Survey Control*: as far as possible, the control for the photogrammetric survey will be surveyed by means of survey grade GPS and reflectorless total station. The GPS that will be used is a Leica 1200 differential system and uses Ordnance Survey base stations in conjunction with a roving station to correct the raw data with corrections transmitted by mobile phone. The OA North GPS system is capable of accuracies of $\pm 0.02\text{m}$ and provides for an effective means of recording the detail of the features and also establishing survey control.
- 4.2.5 *Photography*: a photographic record will be made of both faces of each of the walls. This will include wide shots and detailed shots to allow full coverage of the wall, and to record in sufficient detail any areas of interest. The survey will primarily use high-resolution digital photography, supplemented by a minimum 35mm format record in monochrome, and utilising a graduated metric scale. The photographic record will be fully indexed on *pro-forma* sheets, and will be accompanied by sketches, basic notes, and a photo-location plan, showing the angle of the photograph and the position of the photographer. The standard of photographic recording will be equivalent to Historic England Level 2 (English Heritage 2006).
- 4.2.6 *Task 4, Historic England Level 2 Survey of Humber Dock inlets*: once cleaned out, the inlets (Items 6 and 30; Fig 1) will be recorded in accordance with Historic England guidance (English Heritage 2006). Allowing for health and safety considerations (it may not be possible to physically enter the inlets), a photographic record will be made of all faces of the inlets. This will include wide shots and detailed shots to allow full coverage of the walls, and to record in sufficient detail any areas of interest. The survey will primarily use high-resolution digital photography, supplemented by a minimum 35mm format record in monochrome, and utilising a graduated metric scale. The photographic record will be fully indexed on *pro-forma* sheets, and will be accompanied by sketches, basic notes, and a photo-location plan, showing the angle of the photograph and the position of the photographer.
- 4.2.7 A photographic archive will be produced and will comprise a cross-referenced database linking the prints, negatives and digital photographs. The negatives and prints will be stored in appropriate archivally stable wallets, labelled accordingly. Contact sheets and reference prints of the digital photographs will also be included and a disc containing the images will accompany the archive.
- 4.2.8 *Task 5.1, protection and removal of dockside features*: those dockside features that can be left *in situ* will be protected by BB. This will comprise a complete circuit of localised fencing (placed at least 1m away from the feature) with applied hi-visibility materials and signage. All site operatives will be briefed with the importance of maintaining an appropriate distance from these features. **The features to be protected *in-situ* comprise:**
- Cast-iron mooring posts 5, 8, 14, 15, 16;

- Sluice gate 6;
- Cable guide 17;
- Winch base 18; and
- Large grit stone bollard 23.

4.2.9 Once recorded (*Section 4.2.2*), those dockside features that cannot be protected *in situ* will be removed by BB in ways that are appropriate and sensitive to their location, their significance, their material, and to surrounding features. Features will be packaged as appropriate, and will be transported to the A63 works compound for secure storage. An OA-HFA archaeologist will ensure that individual features are correctly labelled, and will make appropriate records during excavations for removal and at the storage location (*Section 4.2.10*). At present, it is expected that **the following items will need to be moved and replaced/relocated/disposed of as follows:**

- Cast-iron mooring post 7;
- Winch bases 19 and 20;
- Wall 10, composed of 3 reused dock masonry slabs forming short low wall on west side of pedestrian entrance to Princes Dock landscaped area;
- Wall 11, composed of 3 reused dock masonry slabs forming short low wall on east side of pedestrian entrance to Princes Dock landscaped area;
- Wall 13, composed of 52 reused dock masonry slabs that form a short low wall within the Princes Dock landscaped area; and
- Feature 12: Stone structure comprising four large stones with centrally running groove. Original function unclear but repositioned immediately to the north-west of the short low walls mentioned above.

4.2.10 **Task 5.2, Watching Brief during removal of dockside features:** an archaeologist will monitor the excavation around the dockside features, so that the below-ground elements of those features can be recorded, together with the surrounding substrate. Recording will follow general watching brief methodologies (*Section 4.2.13*). For safety reason, the archaeologist will not be present during the actual removal of the dockside features.

4.2.11 **Task 6, Watching brief during reduction and punching through of Humber Dock Wall:** parts of the northern end of the east wall of the Humber Dock (Item 26; Fig 1) will be dismantled by BB. Dismantled components will need to be carefully and safely stockpiled by BB. As permitted by health and safety considerations, the attendant archaeologist will undertake a photographic record and appropriate notes on observations made during the reduction of the wall, including aspects and variations in construction techniques, significant features, and general working shots.

4.2.12 **Task 7, Watching brief, Warehouse No7 and service diversions:** a watching brief, in accordance with ClfA guidance (2014b), will be maintained during the static diversion groundworks and the initial excavations on the site of Warehouse No7 (between the north side of the A63 and the Prince's Dock). The attendant archaeologist will be present at all times to observe the works and will make an indexed written and

graphic record throughout the works, utilising indexed *pro-forma* sheets and high-resolution digital photography. Where appropriate, the archaeologist may need to halt works for reasonable, brief periods to allow investigation and recording to take place where safe and appropriate to do so. Where feasible, a second monitoring archaeologist could be deployed to allow groundworks to take place in another location while investigation and recording was completed.

4.2.13 **Task 8, Reporting:** the results from fieldwork will be incorporated into the overall report on the Prince's Quay Footbridge archaeological works within eight weeks of the completion of the fieldwork, unless an alternative deadline is agreed with the BBTA and other appropriate participants, and not withstanding any specialist reports. Digital copies (pdf) of the draft report will be submitted, which will include:

- a site location plan related to the national grid;
- a front cover to include the NGR;
- a signoff sheet;
- a concise, non-technical summary of the results;
- the circumstances of the project and the dates on which the fieldwork was undertaken;
- description of the methodology, including any variations from the methods outlined in this document;
- a summary of the historical background to put the results into context;
- description of the results;
- interpretation of the results within what is known of the historical, archaeological and physical context of the of the site, and their potential archaeological significance;
- photographs as appropriate;
- the report will also include a complete bibliography of sources from which data has been derived;
- where appropriate, tables summarising data within the archive.

4.2.14 **Task 9, Archiving:** during all stages of the works, OA-HFA will ensure that that all records, material and digital data are stored and maintained in a safe and secure environment and as appropriate back-up copies of data where appropriate shall be undertaken. The site archive (digital, paper and photographic record), together with all reports, will be prepared for long-term storage with the Hull Museum and/or the Hull History Centre at the project's completion. Hard and digital copies of all reports will be deposited with the Humber SMR. Due consideration will be given to lodging selected elements of the archive with the ADS or some other form of publicly accessible online format.

4.3 COPYRIGHT, CONFIDENTIALITY AND PUBLICITY

4.3.1 Unless the client wishes to state otherwise, the copyright of any written, graphic or photographic records and reports rests with OA-HFA. The results of the work will remain confidential, initially being distributed only to the clients, their agents, and HSMR; it will remain so until such time as it is submitted in support of a planning

application and is then deemed to have entered the public domain. All aspects of publicity will be agreed at the outset of the project between the client and OA-HFA.

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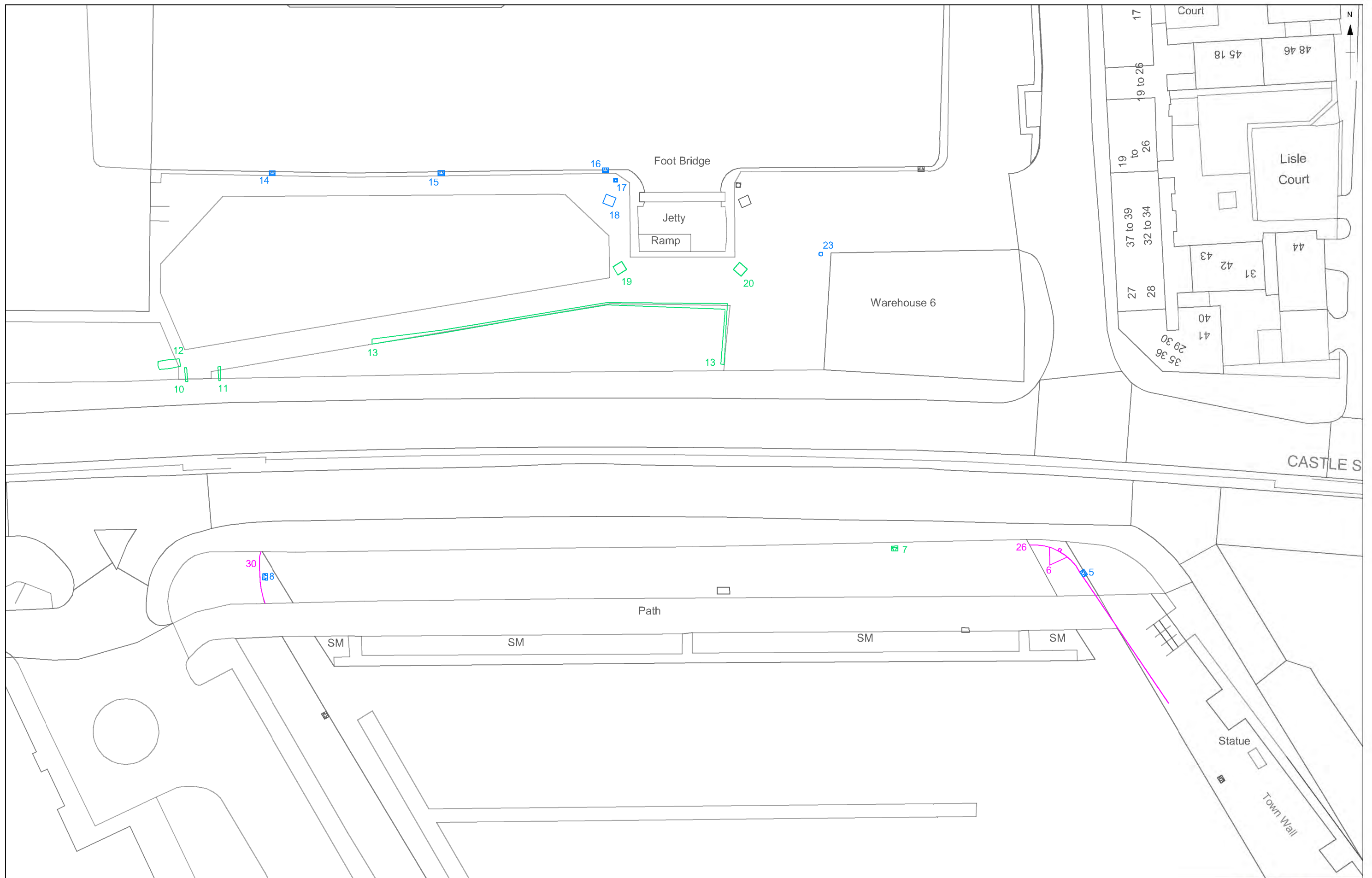
APPENDIX 1: SUMMARY OF LISTED OR HISTORICALLY SIGNIFICANT FEATURES

No.	Item	Listed?	Affected by PQFB clearance?	Description	Date	Recommendations	Other notes
5	Mooring post, Humber Dock (Plates 1 and 2)	Integral to operation of the dock and considered to be covered by the dock listing	On margin of works area; no direct impact expected	Cast iron mooring post of classic 'T'-shape type with cast iron base.	c. 1809 (or later in 19th century)	In original position. Protect and retain <i>in-situ</i>	Base plate 0.90m x 0.70m (at footpath level) with oval recesses in the corners of the plate. Overall height of post 0.56m with 'T'-shape 0.70m x 0.52m
6	Inlet containing sluice gate, north-east corner of Humber Dock (Plate 2)	Integral to operation of the dock and considered to be covered by the dock listing	Will be affected by infilling	Square section vertical iron element set in a slot within the dock wall. Another small cast iron element nearby. Presumably part of lifting apparatus for a sluice gate, the upper part of the opening for which was just visible below	Early 19th century	Retain <i>in-situ</i> . Detailed recording of ironwork and associated masonry needed as affected by new works	Probably dating to construction of Humber Dock at beginning of 19th century but possibly inserted during construction of Junction Dock (Prince's Dock after 1855)
7	Mooring post, Humber Dock (Plate 1)	Integral to operation of the dock and considered to be covered by the dock listing	Within dig area; will be affected	Cast iron mooring post of classic 'T'-shape type with cast iron base.	c. 1809 (or later in 19th century)	Detailed recording of item in relation to its surrounding masonry; packaging, removal and appropriate return to site	Base plate 0.90m x 0.70m (at footpath level) with oval recesses in the corners of the plate. Overall height of post 0.56m with 'T'-shape 0.70m x 0.52m
8	Mooring post, Humber Dock (Plate 1)	Integral to operation of the dock and considered to be covered by the dock listing	On margin of works area; no direct impact expected	Cast iron mooring post of classic 'T'-shape type with cast iron base.	c. 1809 (or later in 19th century)	In original position. Protect and retain <i>in-situ</i>	Base plate 0.90m x 0.70m (at footpath level) with oval recesses in the corners of the plate. Overall height of post 0.56m with 'T'-shape 0.70m x 0.52m
10	Low retaining wall, Prince's Dock	Not listed. Any significance related to reuse of original materials	Within dig area and will be affected	Wall consisting of re-used masonry, presumably from the docks or their environs.	c. 1988 for re-use of (?) early 19th century masonry	Individual stones to be recorded before sympathetic removal.	Three stones of roughly similar size, the centre stone measuring 0.60m x 0.49m x 0.20m and containing four holes of unknown function
11	Low retaining wall, Prince's Dock	Not listed. Any significance related to reuse of original materials	Within dig area, will be affected	Wall consisting of re-used masonry, presumably from the docks or their environs.	c. 1988 for re-use of (?) early 19th century masonry	Individual stones to be recorded before sympathetic removal.	Three stones of roughly similar size, a specimen stone measuring 0.65m x 0.46m x 0.28m
12	Stone structure of unknown function, Prince's Dock (Plate 5)	Unlikely to be covered by the dock listing	Within dig area, will be affected	Structure consisting of six stones and of size 3.20m x 1.26m x 0.60m, with a groove up to 0.40m x 0.30m deep running lengthways along the stones.	c. 1988 for re-siting of (?) early 19th century masonry	Structure to be recorded, packaged, removed and returned at completion of works	If directly associated with the dock then probably not in situ

No.	Item	Listed?	Affected by PQFB clearance?	Description	Date	Recommendations	Other notes
13	Low retaining wall, Prince's Dock (Plate 4)	Not listed. Any significance related to reuse of original materials	Within dig area; will be affected	Wall consisting of re-used masonry, presumably from the docks or their environs.	c.1988 for re-use of (?) early 19th century masonry	Individual stones to be recorded before sympathetic removal.	52 stones of average size 1.05m x 0.50m x 0.34m. Several stones of significantly larger size at the east end of the wall
14	Mooring post, Prince's Dock (Plate 1)	Integral to operation of the dock and considered to be covered by the dock listing	On margin of works area; no direct impact expected	Cast iron mooring post of classic 'T'-shape type with cast iron base.	c.1829	In original position. Protect and retain <i>in-situ</i>	Base plate 0.90m x 0.70m (at footpath level) with oval recesses in the corners of the plate. Overall height of post 0.56m with 'T'-shape 0.70m x 0.52m
15	Mooring post, Prince's Dock (Plate 1)	Integral to operation of the dock and considered to be covered by the dock listing	On margin of works area; no direct impact expected	Cast iron mooring post of classic 'T'-shape type with cast iron base.	c.1829	In original position. Protect and retain <i>in-situ</i>	Base plate 0.90m x 0.70m (at footpath level) with oval recesses in the corners of the plate. Overall height of post 0.56m with 'T'-shape 0.70m x 0.52m
16	Mooring post, Prince's Dock (Plate 1)	Integral to operation of the dock and considered to be covered by the dock listing	On margin of works area; no direct impact expected	Cast iron mooring post of classic 'T'-shape type with cast iron base.	c.1829	In original position. Protect and retain <i>in-situ</i>	Base plate 0.90m x 0.70m (at footpath level) with oval recesses in the corners of the plate. Overall height of post 0.56m with 'T'-shape 0.70m x 0.52m
17	Cable guide, Prince's Dock (Plate 6)	Integral to operation of the dock and considered to be covered by the dock listing	On margin of works area; no direct impact expected	Cast iron structure.	c.1829	In original position. Protect and retain <i>in-situ</i>	Base plate 0.55m x 0.55m. Overall height 0.22m with circular casting 0.36m in diameter
18	Winch base, Prince's Dock (Plate 7)	Integral to operation of the dock and considered to be covered by the dock listing	On margin of works area; no direct impact expected	Made of wrought and cast iron (?) and set on a modern concrete plinth.	c.1829?	Not in an absolutely original position. Protect and retain <i>in-situ</i> .	1.46m x 1.14m and up to 1.14m high. Likely to sustain damage if moved again
19	Winch base, Prince's Dock (Plate 7)	Integral to operation of the dock and considered to be covered by the dock listing	Within dig area; will be affected	Made of wrought and cast iron (?) and set on a modern concrete plinth.	c.1829?	Not in an absolutely original position. Package, remove to storage and replace on completion	1.46m x 1.14m and up to 1.14m high. Likely to sustain damage if moved again
20	Winch base, Prince's Dock (Plate 7)	Integral to operation of the dock and considered to be covered by the dock listing	Within dig area; will be affected	Made of wrought and cast iron (?) and set on a modern concrete plinth.	c.1829?	Not in an absolutely original position. Package, remove to storage and replace on completion	1.46m x 1.14m and up to 1.14m high. Likely to sustain damage if moved again

No.	Item	Listed?	Affected by PQFB clearance?	Description	Date	Recommendations	Other notes
23	Bollard, Prince's Dock (Plate 8)	Arguably covered by listing as an original feature, if not in situ	On margin of works area; no direct impact expected	Stone bollard.	Early 19th century?	Protect and retain <i>in situ</i>	Not in original position. Probably originally located flush with the wall (corner) of a nearby warehouse. Of grit stone and with flat side to east and domed top. Up to 1.15m high and having a maximum diameter of 0.50m
26	Dock wall, Humber Dock (Plate 2)	Listed	Will be affected by localised reduction and punching through	Masonry and brick wall of dock.	c.1809 (and later 19th century)	Recording of masonry in those areas to be disturbed	Upper part of wall above water line rebuilt later in 19th century
30	North-west inlet, Humber Dock (Plate 3)	Listed	Will be obscured by infilling	Masonry and brick wall of dock.	c.1809 (and later 19th century)	Detailed recording of masonry in area of infilling/to be obscured by development works	No sluice gate visible in this part. Function currently poorly understood

FIGURE 1



- Record, Remove & Store for potential reuse
- Record, Remove / Cover Over
- Protect in Situ

0 10 m
1:500 @ A3



Figure 1: Plan showing the location of historic dock furniture and other items of interest

PLATES



Plate 1: Mooring post (same as items 5, 7,8 and 14-16), looking north-west



Plate 2: Dock wall (item 26), mooring post (item 5) and sluice gate (item 6), looking north-east



Plate 3: Dock wall (item 30)



Plate 4: Low retaining wall (item 13), looking east



Plate 5: Stone structure of unknown function (item 12), looking west



Plate 6: Cable guide (item 17), looking east



Plate 7: Winch base (item 18, same as items 19, 20 and 21), looking north-east



Plate 8: Bollard (item 23), looking south