

**AN ARCHAEOLOGICAL DESK-BASED ASSESSMENT:
A PROPOSED RECLAMATION SCHEME AT
FENWICK PIT, EAST HOLYWELL COLLIERY,
NORTH TYNESIDE, TYNE AND WEAR**

**An Archaeological Desk-Based Assessment:
A Proposed Reclamation Scheme at Fenwick Pit, East Holywell Colliery,
North Tyneside, Tyne and Wear**

Central National Grid Reference: NZ 4313 5730

Site Code: FKP 07

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1. NON-TECHNICAL SUMMARY

- 1.1 An archaeological desk-based assessment was undertaken ahead of the proposed reclamation of the site of Fenwick Pit, East Holywell Colliery, North Tyneside, Tyne and Wear. Various remediation works will be undertaken at the site and the landform of an extensive pit heap will be regraded with capping material, then reseeded with grass for recreational use.
- 1.2 As the proposed reclamation works have the potential to disturb sub-surface archaeological remains at the site, a desk-based archaeological assessment was required in order to establish the potential for archaeological remains. Research, fieldwork and report compilation were undertaken September-October 2007 by Pre-Construct Archaeology Limited and the work was commissioned by Parsons Brinkerhoff.
- 1.3 The study site is located c. 1km to the north-east of the village of Backworth and immediately adjacent to the county boundary. Its central National Grid Reference is NZ 4313 5730. Accessed from and bounded to the west by a minor road linking Backworth and Earsdon, the site is bounded on all other sides by open fields, with the Brierdene Burn delimiting the southern boundary.
- 1.4 The study site covers an area of c. 11 hectares, although this does not include all of the land occupied by the former East Holywell Colliery, which was founded c. 1840. An area occupied by a complex of pit buildings, mainly 20th century in date, is substantially enclosed by the site on its western side, but does not lie within its boundaries. The majority of the site is occupied by a substantial pit heap, this extending along the rectangular southern part of the site, with the remaining parts occupied scrubland, more heavily overgrown areas, access routes and a pond.
- 1.5 The desk-based assessment has concluded that the potential for archaeological remains of the earlier prehistoric periods at the study site is **low** but the potential for remains of the later prehistoric and Romano-British periods is **high** and the archaeological significance of any such remains would be **high**. The potential for medieval and post-medieval remains is **high** and the archaeological significance of any such remains would be **moderate**. The potential for early modern and modern remains is **high** and the historical significance of any such remains would be **high**.

2. INTRODUCTION

2.1 General

- 2.1.1 This report describes the methods and results of an archaeological desk-based assessment (DBA) undertaken ahead of the proposed reclamation of the site of Fenwick Pit, East Holywell Colliery, North Tyneside, Tyne and Wear.
- 2.1.2 The project was commissioned by Parsons Brinkerhoff and undertaken September-October 2007 by Pre-Construct Archaeology Limited (PCA), working to a Specification¹ prepared by the Tyne and Wear Archaeology Officer.
- 2.1.3 The study site, covering c. 11 hectares, does not comprise the entire area formerly occupied by Fenwick Pit, East Holywell Colliery. Much of the south-western portion of the former colliery complex, including an area currently occupied by former colliery buildings, is excluded from the study site. The extreme south-westernmost corner of the former colliery complex, currently an area of open scrubland, is to be utilised as a borrow pit for the reclamation works and is the subject of a separate DBA.
- 2.1.4 The proposal would involve various stabilising and treatment groundworks on a substantial pit heap occupying the majority of the study site. Regrading of the heap with capping wastes from the aforementioned borrow pit will then take place and the reinstated land will be reseeded with grass. As some elements of the scheme have the potential to disturb sub-surface archaeological remains, an assessment of the potential for archaeological remains of all eras at the site was necessary to inform the planning process.
- 2.1.5 The DBA comprised a visit to the study site, during which a photograph record was made, and an examination of documentary, cartographic and photographic sources. The work was carried out in order to establish the archaeological and historical background of the site, and to assess the potential for survival of sub-surface archaeological deposits.
- 2.1.6 The **Online Access** to the Index of Archaeological Investigation**S** (OASIS) reference number for the project is: preconst1-31759.

2.2 Site Location and Description

- 2.2.1 The study site is located at central National Grid Reference NZ 4313 5730 (Figure 1), within the Metropolitan Borough of North Tyneside, Tyne and Wear, but lying adjacent to the county boundary with Northumberland. In the vicinity are small settlements at Backworth, c. 1km to the south-west, Earsdon, c. 0.7km to the south-east, and Holywell, c. 1.4km to the north-east. The A19(T) road runs c. 2.5km to the west of the site, which is accessed by a minor road linking Earsdon and Backworth.

¹ Newcastle City Council 2007.

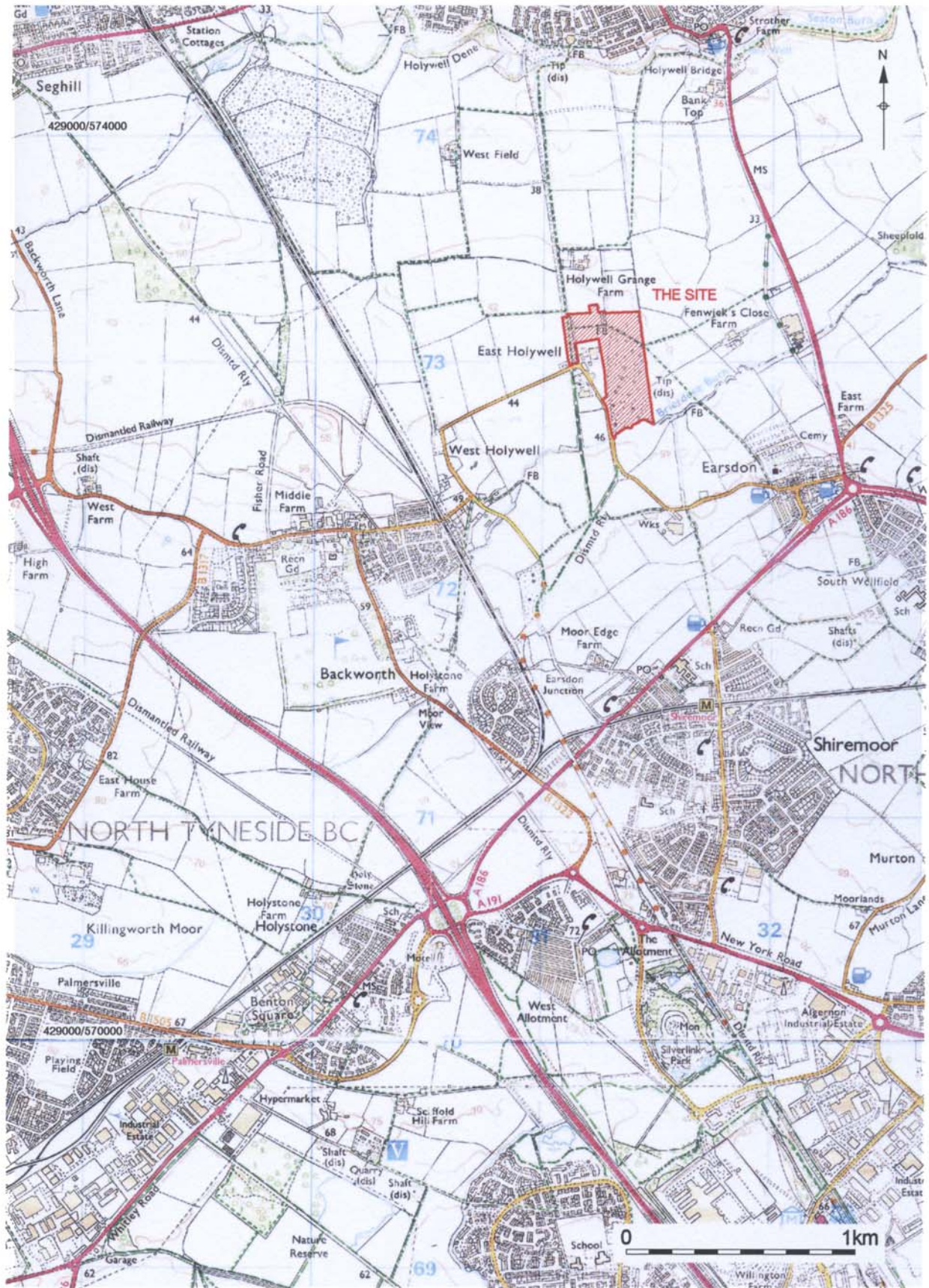


Figure 1. Site location
Scale 1:25,000



Figure 2. Site location detail
Scale 1:5,000

- 2.2.2 Lying c. 4km west of Whitley Bay on the North Sea coast and c. 6.5km north of the River Tyne, the site lies within the southern part of the South East Northumberland Coastal Plain, much of which has been extensively worked for its coal reserves in the last two hundred years. This area is notable for its varied urban and rural character, with mining towns and villages merging into a vast rural landscape further north. The area of the study site is characterised by relatively gentle topography and the site occupies a low-lying location, at c. 45m OD – 50m OD.
- 2.2.3 The study site covers c. 11 hectares and comprises land formerly occupied by Fenwick Pit, East Holywell Colliery. Details of the site layout at the time of the assessment are shown on Figure 2 and Appendix A contains a brief photographic record. The dominant feature of the site is a substantial heap of colliery spoil, up to c. 450m north-south by up to c. 180m wide and up to c. 13m high. This occupies the rectangular southern portion of the site, the southern boundary of which is delimited by Brierdene Burn, overlooking open fields to the south and east. Skirting the western side of the pit heap is a broad access track, with a small, roughly triangular area of scrubland within the site, to the west and adjacent to the road.
- 2.2.4 The northern portion of the site comprises a roughly triangular field to the north-east, this with a low outbuilding in its north-eastern corner, with smaller, heavily overgrown spoil heaps to the north-west and a pond in the northern central portion of the site. A farm track cuts north-south across the far north-western portion of the site, this giving access, from a sharp turn in the Backworth to Earsdon road, to Holywell Grange Farm. West of this track is a narrow strip of land within the site, occupied to the north by one of the aforementioned heavily overgrown areas, with an open paddock to the south.

2.3 Planning Background

- 2.3.1 From the mid 19th century onwards, the study site was occupied by buildings and infrastructure of East Holywell Colliery, which closed in 1973. No buildings from the colliery survive within the boundaries of the study site today, although former colliery buildings do survive in an area substantially enclosed by the site, at the sharp bend in the Backworth to Earsdon road.
- 2.3.2 The proposed remediation works at the site will involve stabilising slurry on the pit heap and treating burning material, most likely by excavation, cooling and re-compaction. The landform of the pit heap will be regraded with capping wastes from a nearby borrow pit, the subject of a separate archaeological DBA. The reinstated land is to be reseeded with grass for informal recreational use.
- 2.3.3 The need for early consultation in the planning process in order to determine the impact of development schemes upon the archaeological resource is identified in '*Planning Policy Guidance Note 16: Archaeology and Planning*' (PPG16).² The Tyne and Wear Archaeology Officer, part of the Tyne and Wear Specialist Conservation Team attached to the Historic Environment Section of Newcastle City Council, has responsibility for development control in relation to archaeology and the historic built environment in the Metropolitan Borough of North Tyneside and provides advice to the Local Planning Authority (LPA), in this instance North Tyneside Council.

² Department of the Environment, 1990.

- 2.3.4 In considering any proposal for development, the LPA will be mindful of the policy framework set by government guidance, in this instance PPG16, and by the current Local Development Document. In this instance, North Tyneside Council UDP,³ adopted in March 2002, contains Policies 5.76, 5.77 and 5.78 related to archaeology, relevant extracts of which are included below:

Policy 5.76

There are a number of sites of archaeological importance within the borough including 10 scheduled ancient monuments which are subject to statutory control and protection. Most notable among these are sections of Hadrian's Wall and the fort of Segedunum at Wallsend which are within the Hadrian's Wall Military Zone (HWMZ) a World Heritage Site extending from the Cumbrian coast to the Tyne. This designation reflects the outstanding international importance of the HWMZ. The HWMZ as a whole is likely to become a greater tourist attraction through increased promotion and the development of recreational routes along it.

Policy 5.77

There are many other sites of archaeological interest, including sites where Anglo-Saxon, Roman and earlier finds have been made, the sites of old villages, medieval field systems and early industrial sites including many associated with the coal industry.

Policy 5.78

Archaeological remains are a finite and nonrenewable resource. They are valuable both for their own sake and for their role in education, leisure, and tourism. Government planning policy advice is contained in PPG16. The principle on which the Local Planning Authority will operate is to protect and enhance important monuments and sites and their settings. This would of course include all scheduled ancient monuments. It would seek to preserve other sites and monuments in situ. Where a proposal is received which could affect a site of interest or potential the applicant will be required to undertake a preliminary impact assessment and where necessary an archaeological field evaluation before the application is determined. If it is shown that it is inappropriate or impossible to preserve the remains in situ the applicant will be required to arrange for investigation and recording of the remains before development starts. Where finds are made in other areas as a result of development, the developer should notify the Local Planning Authority so that an investigation can be undertaken.

- 2.3.5 Because of the archaeological sensitivity of the site of Fenwick Pit, East Holywell Colliery, the Tyne and Wear Archaeology Officer determined that a baseline consideration of the archaeological potential of the area was required to summarise the archaeological and historic interest of the site as part of the planning process. The Archaeology Officer produced the aforementioned Specification for the archaeological DBA, setting out the level of research to be undertaken for the site.

³ Available online at www.planningportal.gov.uk

3. AIMS AND OBJECTIVES

3.1 The specific aims of the DBA were:

- to identify the impact of the proposed development upon the historic environment;
- to identify parts of the proposed development site for which further archaeological work may be appropriate;
- to assist in the formulation of recommendations for any further archaeological work considered necessary to inform the planning decision.

3.2 As well as these specific aims, the project has been undertaken with reference to the 'North-East Regional Research Framework for the Historic Environment' (NERRF),⁴ which highlights the importance of research as a vital element of development-led archaeological work. By setting out key research priorities for all periods of the past, NERRF allows archaeological projects to be related to wider regional and national priorities for the study of archaeology and the historic environment. The Specification for the DBA notes the relevant key research theme for this DBA:

PM1. Early coal industry and coal use:

To ensure improved targeting of archaeological evaluation and excavation there should be a survey of documentary and cartographic evidence for early mining in order to identify precise locations.

Development-control commissioned fieldwork should also be aware of the potential for the survival of buried remains of colliery buildings on later sites.

Sub-surface mineworkings may survive. These may be revealed during modern opencast mining and other deep-ground disturbances (and therefore archaeological destruction) in advance of other surface developments. It is essential that appropriate archaeological monitoring processes be put in place to record such remains.

3.3 The results of the work will be used to make an informed decision on the necessity, or otherwise, for an archaeological mitigation strategy in relation to the proposed reclamation works.

⁴ Petts and Gerrard 2006.

4. METHODS OF ASSESSMENT

4.1 Research and Data Collection

4.1.1 The methodology employed during the research phase of the DBA comprised consultation of a variety of sources for data relating to the proposed development areas and surroundings, including a map regression exercise and consultation of the Historic Environment Record (HER) maintained by Newcastle City Council.

4.1.2 Listed below are the main sources consulted during the compilation of this DBA:

- Newcastle City Library, Local Studies Section, Civic Centre, Barras Bridge, Newcastle – visited 3rd September 2007;
- Tyne and Wear Archives, Blandford House, Blandford Square, Newcastle - visited 3rd September 2007;
- North Tyneside Local Studies Library, Northumberland Square, North Shields – visited 5th and 14th September 2007;
- Northumberland Archives, Woodhorn, Queen Elizabeth II Country Park, Ashington – visited 6th September 2007;
- County HER, West Chapel, Jesmond Old Cemetery, Jesmond Road, Newcastle – visited 11th September 2007.

4.1.3 Collections of aerial photographs (APs) were also consulted:

- North Tyneside Council, Station Road, Killingworth – visited 14th September 2007;
- Museum of Antiquities, University of Newcastle – the online catalogue was consulted.

4.1.4 Full details of all the material examined for the DBA are set out in Section 11.

4.2 Site Visit

4.2.1 In addition to the research described above, a site visit was undertaken on 5th September 2007, in order to carry out a visual inspection of the area to be affected by the proposed reclamation works and to compile a photographic record, included in Appendix A.

4.2.2 All but four copies of the report contain colour images on paper, derived from digital photography, showing the main characteristics of the site and a series of photographs of the pit heap, both in overview and detail. The remaining four copies of the report contain colour and monochrome prints of the pit heap photographs, these in plastic storage pages; one of these copies also contains the photographic negatives from which the prints were derived, this being the copy submitted to the Tyne and Wear Archives, as required by the project Specification. The other three copies containing prints are to be submitted to the commissioning Client, the Tyne and Wear County HER and the LPA (North Tyneside Council).

5. GEOLOGY, HYDROGEOLOGY AND TOPOGRAPHY

5.1 Geology and Hydrogeology

5.1.1 Glacial Till of Quaternary Age comprising over consolidated clays with gravel, cobbles and boulders directly underlies the site.⁵ The Glacial Till is considered a 'Non Aquifer' having low permeability.⁶ Underlying the Glacial Till are the Middle Coal Measures of Carboniferous Age. The Ryhope Little Coal is noted to sub-crop beneath the site, striking north to south and dipping to the west. The Brierdene Fault strikes south-west to north-east to the south of the site following the line of the Burn. The Middle Coal Measures are considered a 'Minor Aquifer'.⁷

5.2 Topography

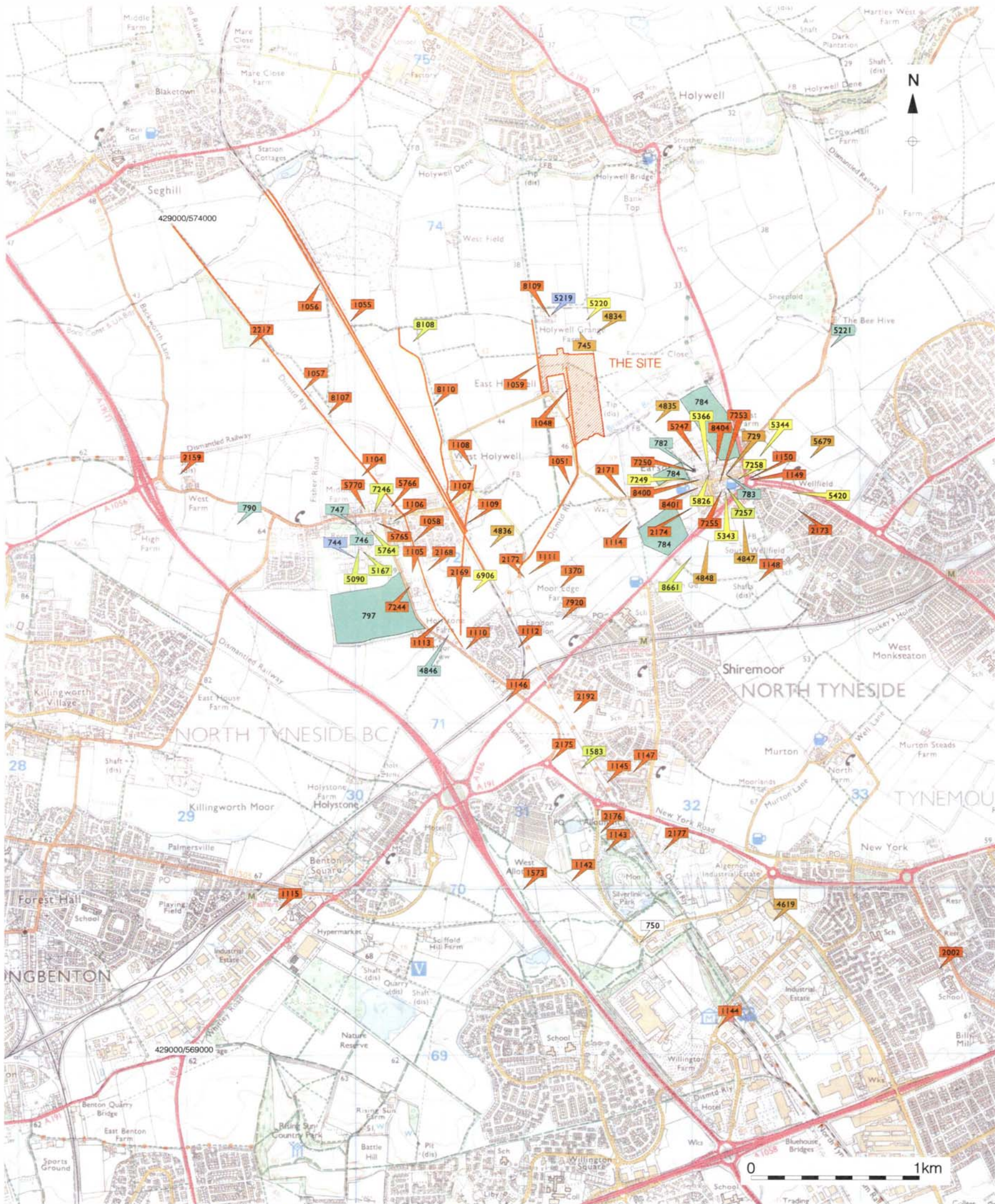
5.2.1 The site lies on the south-eastern part of the South East Northumberland Coastal Plain, the area between the north Pennines and the Northumberland coast, with the coast lying c. 4km to the east. Because of this overall topographical setting, original ground level at the study site is relatively low-lying and level, having an elevation of c. 40m OD. However, the main pit heap on the site rises to a considerable height above ground level, reaching a maximum level of over 63m OD.

5.2.2 The Brierdene Burn delimits the southern boundary of the site, outflowing c. 3.8km to the north-east, just north of Whitley Bay. A ditch flows into this stream at the south-eastern corner of the study site. On the southern end of the main pit heap at the site is a depression that reportedly fills with water; this drains to the south via a gully with French drain, into the Brierdene Burn. The Seaton Burn, a slightly larger watercourse, runs c. 1.2km to the north of the site and the River Tyne is situated c. 6.5km to the south.

⁵ British Geological Survey 1974; Taylor, *et al.* 1971.

⁶ Environment Agency 1997.

⁷ *ibid.*



| HER Ref. | Description | Grid Ref. | Period | HER Ref. | Description | Grid Ref. | Period | HER Ref. | Description | Grid Ref. | Period |
|----------|------------------------|---------------|--------------|----------|-----------------------|---------------|---------------|----------|---------------------------|---------------|---------------|
| 729 | Axe | 432200/572500 | Prehistoric | 1144 | Engine | 432160/569190 | Early modern | 5219 | Quern | 431160/573450 | Roman |
| 744 | Hoard | 430000/572000 | Roman | 1145 | Railway Station | 431500/570430 | Early modern | 5220 | Pillbox | 431370/573420 | Modern |
| 745 | Enclosure | 431330/573350 | Prehistoric | 1146 | Railway Station | 430900/571130 | Early modern | 5221 | Ford | 432820/573250 | Medieval |
| 746 | Village | 430000/572200 | Medieval | 1147 | Shiremoor Colliery | 431650/570690 | Early modern | 5247 | Commemorative Monument | 432060/572570 | Early modern |
| 747 | Manor | 430000/572200 | Medieval | 1148 | Earsdon Colliery | 432400/571860 | Early modern | 5343 | Pillbox | 432200/572400 | Modern |
| 750 | Enclosure | 431700/569700 | Undetermined | 1149 | Blacksmiths' Workshop | 432340/572460 | Early modern | 5344 | Pillbox | 432400/572600 | Modern |
| 782 | Chapel | 432020/572520 | Medieval | 1150 | Toll House | 432330/572480 | Early modern | 5366 | Weapons Pit | 432100/572500 | Modern |
| 783 | Village and Furrow | 432200/572500 | Medieval | 1370 | Common Land | 431220/571800 | Early modern | 5420 | Spigot Mortar Emplacement | 432600/572400 | Modern |
| 784 | Ridge and Furrow | 431880/571500 | Medieval | 1573 | Steam Ploughed Rig | 431000/570000 | Early modern | 5679 | Enclosure | 432700/572600 | Prehistoric |
| 790 | Settlement | 429300/572200 | Medieval | 1583 | Farmhouse | 431350/570730 | Post-medieval | 5764 | Walled Garden | 430080/572160 | Post-medieval |
| 797 | Ridge and Furrow | 430100/571660 | Medieval | 2002 | Quarry | 433450/569500 | Early modern | 5765 | Clay Pit | 430120/572200 | Early modern |
| 1048 | East Holywell Colliery | 431280/573030 | Early modern | 2159 | Mineshaft | 428960/572500 | Early modern | 5766 | Brickfield | 430210/572300 | Early modern |
| 1051 | Railway | 431310/571560 | Early modern | 2168 | Gas Works | 430430/571920 | Early modern | 5770 | Farmstead | 430060/572290 | Early modern |
| 1055 | Railway | 430100/573200 | Early modern | 2169 | Reservoir | 430610/571810 | Early modern | 5826 | WWII Road Block | 432100/572500 | Modern |
| 1056 | Railway | 430180/573000 | Early modern | 2171 | Railway | 431610/572370 | Early modern | 6906 | Backworth Colliery | 430700/571780 | Modern |
| 1057 | Backworth Colliery | 429700/573000 | Early modern | 2172 | Factory | 431010/571880 | Early modern | 7244 | House | 430320/571810 | Early modern |
| 1058 | Railway | 430340/572080 | Early modern | 2173 | Quarry | 432630/572290 | Early modern | 7246 | House | 430110/572250 | Post-medieval |
| 1059 | Railway | 431110/573140 | Early modern | 2174 | Blacksmiths' Workshop | 432000/572300 | Early modern | 7249 | Church Hall | 431960/572470 | Modern |
| 1104 | Backworth Colliery | 430040/572490 | Early modern | 2175 | Quarry | 431170/570780 | Early modern | 7250 | Church | 432020/572510 | Early modern |
| 1105 | Backworth Colliery | 430340/571910 | Early modern | 2176 | Mill | 431460/570330 | Early modern | 7253 | House | 432160/572440 | Early modern |
| 1106 | Quarry | 430230/572220 | Early modern | 2177 | Shiremoor Colliery | 431830/570740 | Early modern | 7255 | Carrage House | 432170/572390 | Early modern |
| 1107 | Railway Station | 430560/572330 | Early modern | 2192 | Shiremoor Colliery | 431300/571060 | Early modern | 7257 | Oven | 432200/572410 | Post-medieval |
| 1108 | West Holywell Colliery | 430690/572550 | Early modern | 2217 | Brickworks | 429370/573260 | Early modern | 7258 | War Memorial | 432270/572470 | Modern |
| 1109 | Wagonway | 430640/572150 | Early modern | 4619 | Axe Head | 432480/569820 | Prehistoric | 7920 | Well | 431230/571630 | Early modern |
| 1110 | Engine | 430660/571450 | Early modern | 4834 | Enclosure | 431440/573330 | Prehistoric | 8107 | Church Hall | 429850/572850 | Early modern |
| 1111 | Earsdon Colliery | 431030/571900 | Early modern | 4835 | Enclosure | 431780/572810 | Prehistoric | 8108 | Farmstead | 430340/573290 | Medieval |
| 1112 | Railway | 430970/571460 | Early modern | 4836 | Enclosure | 430800/572060 | Prehistoric | 8109 | Farmstead | 431150/573440 | Early modern |
| 1113 | Wagonway | 430410/571750 | Early modern | 4846 | Ridge and Furrow | 430560/571540 | Medieval | 8110 | Wagonway | 430460/572910 | Early modern |
| 1114 | Earsdon Colliery | 431640/572220 | Early modern | 4847 | Enclosure | 432310/572210 | Prehistoric | 8400 | Farmstead | 432040/572460 | Early modern |
| 1115 | Backworth Colliery | 429540/569890 | Early modern | 4848 | Roundhouse | 432100/572100 | Prehistoric | 8401 | Inn | 432050/572420 | Early modern |
| 1142 | Engine | 431280/570040 | Early modern | 5090 | Well | 430020/572050 | Post-medieval | 8404 | School | 432000/572560 | Early modern |
| 1143 | Engine | 431490/570220 | Early modern | 5167 | House | 430050/572040 | Post-medieval | 8661 | House | 432000/572000 | Post-medieval |

Figure 3. HER entries
Scale 1:25,000

6. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

6.1 Introduction

6.1.1 In order to assess the archaeological potential of the study site, a programme of documentary research was undertaken, as described above. Entries in the Tyne and Wear Historic Environment Record (HER) within a search radius of c. 1.5km of the study site were examined and their locations plotted relative to the site (Figure 3). The site lies immediately adjacent to the county border with Northumberland but the majority of entries on the Northumberland Sites and Monuments Record (SMR) in this area are associated with specific buildings within Holywell village. These are not considered to be of relevance to this DBA and consequently are not shown on Figure 3. HER information has been supplemented by data gathered from a variety of other sources, archaeological, documentary and cartographic, as described above, in order to compile this section of the DBA.

6.1.2 It is not the purpose of this study to set out a comprehensive history of land usage in this part of North Tyneside. The broad intention is simply to predict and extrapolate likely archaeological conditions within the study site from finds and research in the vicinity. Analysis of archaeological discoveries made nearby is important, as is a thorough examination of the historical and archaeological records relating to the site. It is recognised that finds and sites entered onto the County HER are at best a small and unrepresentative sample of the total buried heritage.

6.1.3 Time scales used in this section:

Prehistoric

| | |
|--------------|-------------------|
| Palaeolithic | 450,000–12,000 BC |
| Mesolithic | 12,000–4,000 BC |
| Neolithic | 4,000–2,300 BC |
| Bronze Age | 2,300–700 BC |
| Iron Age | 700 BC–AD 43 |

Historic

| | |
|---------------|-----------------|
| Roman | AD 43–410 |
| Anglo-Saxon | AD 410–1066 |
| Medieval | AD 1066–1485 |
| Post-medieval | AD 1486–present |

6.2 Early Prehistoric

6.2.1 The only recorded evidence for early prehistoric activity in the search radius of the study site comprises a polished stone axe (HER 729) discovered at Earsdon, c. 0.8km to the south-east. Slightly further afield, a Bronze Age axe head (HER 4619) was found c. 3km to the south-east at Shiremoor Farm. This copper alloy casting appeared to be the product of a faulty waste wax casting and further lead-bronze alloy waste pieces were found scattered in close proximity suggesting the possibility that metal working may have been undertaken in the vicinity.

- 6.2.2 A stone-lined grave was found in the churchyard at Seghill (Northumberland SMR 11471) c. 3km to the north-west of the study site. This contained a stone axe of Neolithic date, although the grave itself is likely to be of Bronze Age date. A polished stone axe of Neolithic date was also found north of Holywell (Northumberland SMR 11961), at least 2km to the north of the study site.
- 6.2.3 In summary, the potential for archaeological remains from the earlier prehistoric periods at the study site is considered **low**.

6.3 Iron Age and Romano-British

- 6.3.1 Aerial photography has demonstrated that the South East Northumberland Coastal Plain was as densely settled in the Iron Age period as any other part of the region and, by the Late Iron Age, a pattern of small farmstead enclosures had been established across the area. Recent land use, primarily comprising agricultural activities and mineral extraction, has often masked or destroyed archaeological remains in these areas.⁸ The common settlement types identified are rectilinear enclosed settlements, although the predominance of this settlement type may be due to the fact that such sites are more readily identifiable as cropmarks on aerial photographs than palisaded or unenclosed settlements.⁹ These rectilinear enclosures can be bounded by a single or double ditch, in the latter case one enclosure is situated inside the other.¹⁰ While these appear to range in date from the early first millennium to the Roman period,¹¹ without excavation it is impossible to distinguish between enclosed settlements of the Iron Age and the Roman period. On the whole there is a strong degree of consistency in the morphology of sites and site features, with one or two circular structures within the enclosure. The size of the enclosed area varies considerably, ranging from 0.1 to 0.8 hectares and the enclosures tend to be sub-circular or near square with the basic shape seemingly relating to topography or function rather than chronology.¹²
- 6.3.2 Archaeological investigations of rectilinear enclosure sites in the region have been dominated by the work of George Jobey, with a particular focus on South East Northumberland. Excavated examples in Northumberland demonstrate that structures within the enclosures tended to be timber-built in the late prehistoric period, with evidence for the development of stone buildings appearing in the 2nd century AD.¹³ These rural farmsteads comprised small communities whose subsistence economy was based on pastoralism and arable farming and in this region the same pattern of occupation continued after the Roman conquest. There is good evidence to suggest that land in the vicinity of the study site at East Holywell was occupied by numerous farmstead settlements during the Late Iron Age and Romano-British periods.

⁸ Fenton-Thomas 1992.

⁹ Petts and Gerrard 2006, 36–37.

¹⁰ Burgess 1984, 163.

¹¹ Haselgrove and Allon 1982, 44.

¹² Higham 1986, 133.

¹³ *ibid.*

- 6.3.3 A single ditched sub-rectilinear enclosure has been identified c. 100m from the northern boundary of the study site, just to the south-east of Holywell Grange Farm (HER 4834). This is visible as a cropmark with interior roundhouses on aerial photographs. A short distance to the west, and also less than 100m north of the study site, is another rectilinear enclosure (HER 745), which was incorrectly identified by Jobey as a World War II gun post. Reappraisal has indicated that it is likely to be a rectilinear ditched enclosure with an entrance on the southern side and two dark sub-circular cropmarks in the interior possibly represent sunken yards flanking a central causeway. A number of upper and lower stones of rotary querns were noted in the garden of Holywell Grange Farm (HER 5219) during a field reconnaissance survey undertaken in 1992. These presumably originated from the nearby Iron Age or Romano-British farmsteads. The owner of the farm at the time had also collected a group of stone balls from the surrounding fields. Although a similar item recovered during trenching for a gas pipeline in 1973 was interpreted as a Roman ballista ball, this type of artefact has also been found in native contexts in the region and is not now considered especially suggestive of a Roman military presence.
- 6.3.4 A single ditched oval enclosure (HER 4835), identified as a cropmark on aerial photographs, has been identified c. 200m beyond the eastern boundary of the study site. Another rectilinear enclosure with a number of internal and external features is visible as a cropmark c. 1km south-east of the study site in fields just south of Earsdon (HER 4847). A geophysical survey undertaken along the route of a pipeline for the Shiremoor off-site sewerage works detected two circular features interpreted as possible roundhouses (HER 4848), these a short distance to the west of the Earsdon ditched enclosure and c. 0.9km southeast of the study site. However, an archaeological watching brief undertaken in 2001 during the construction of this pipeline did not reveal any evidence for prehistoric activity in the vicinity of these features.¹⁴ A single ditched rectilinear enclosure with interior roundhouses is visible as a cropmark c. 0.8km to the south-west of the study site (HER 4836). To the east of Earsdon is another rectilinear enclosure (HER 5679), this lying c. 1.2km east of the study site. This is visible on aerial photographs as a cropmark with roundhouses in the interior.
- 6.3.5 A rectilinear enclosure is also visible as a cropmark to the north of Seghill (Northumberland SMR 11518) and another between Seghill and Holywell (Northumberland SMR 12033) where excavations identified a 5m wide ditch with an entrance on the south-eastern side of the enclosure.
- 6.3.6 An archaeological evaluation undertaken in 2006, in association with a planning application for an extension to a landfill site at Seghill, revealed evidence for possible prehistoric activity.¹⁵ Two ditches and a pit of possible prehistoric date were recorded in trenches located in the northern part of that application area, lying c. 1.3km north-west of the study site.

¹⁴ TWM 2001.

¹⁵ TWM 2006.

- 6.3.7 A group of three rectilinear ditched enclosures situated slightly further afield at Burradon, c. 4km to the west of the study site, include an example excavated by Jobey in 1968-9.¹⁶ The excavations revealed evidence for a group of houses belonging to an earlier phase of unenclosed settlement with the remains of 11 structures recorded. This unenclosed settlement was apparently replaced by a double banked and ditched enclosure with a single central roundhouse in the Iron Age/Romano-British period.
- 6.3.8 Excavations of such rectilinear enclosures, particularly those carried out by Jobey, have in the past concentrated on sample excavation of the perimeter ditches and interiors of the enclosures, but with no investigation of the surrounding external areas being undertaken. More recent excavations in the region, particularly those undertaken in advance of large-scale developments such as housing estates, for example, at Newcastle Great Park, and opencast mining operations, for example, at Pegswood Moor Farm, near Morpeth, have investigated much wider areas and such work has identified the presence of features associated with rectilinear enclosure settlements within the surrounding area. Excavations at the latter site¹⁷ revealed an extensive settlement of Late Iron Age and Romano-British date, with a habitation focus set within extensive field systems probably extending across an area at least 700m by 400m to encompass a watercourse. It is possible that the two rectilinear enclosures identified 100m to the north of the study site may have been set within wider field systems, quite possibly encompassing the Briedene Burn to the south which would have been a valuable resource to any settlement, particularly one involved in pastoralism.
- 6.3.9 A hoard of gold and silver objects was discovered in 1812, reportedly near Backworth (HER 744) and sold to a Newcastle silversmith who resold the objects to a Newcastle collector. The hoard was then passed to the British Museum in 1850. It consisted of a silver skiliet in which were a pair of trumpet brooches, one silver and five gold rings, one gold bracelet, two gold chains with wheel-shaped pendant and a crescent attached, three silver spoons, another silver skiliet, at least 280 Roman denarii and two first brass coins of Antoninus Pius. A white bronze mirror had been utilised as a cover for the hoard.
- 6.3.10 The study site lies c. 6.5km to the north of Hadrian's Wall and there is no recorded evidence for any military presence or activity of this period within the vicinity of the site. It is likely that many of the rectilinear enclosure settlement sites identified on aerial photographs date from the Romano-British period, or may have originated in the Late Iron Age and continued to be occupied in the Roman period. In the Northumberland lowlands, the pattern of settlement and mixed agricultural economy that was established in the pre-Roman period seems to have been unaltered by the conquest. Many researchers have concluded that the impact of Romanisation on the native population in the region was minimal.¹⁸
- 6.3.11 The dense distribution of features of probable Iron Age and Romano-British date in the vicinity of the study site, including two enclosures in the immediate vicinity, suggests that, in summary, the potential for archaeological remains from these periods at the study site is **high**.

¹⁶ Jobey 1970.

¹⁷ PCA 2002.

¹⁸ Harding 2004, 155.

6.4 Medieval

- 6.4.1 In the medieval period, Holywell was part of the Bywell barony, with the earliest record of the area dating from the 12th century.¹⁹ During the 13th century a number of holdings were granted to the Benedictine nunnery of St. Bartholomew at Newcastle. Surveys from this period contain a number of field names that survived into the late 19th and 20th century; the origins of Wolf Hill Farm (HER 8108), which is last recorded on the Ordnance Survey 1st edition of 1865, located c. 1km to the north-east of the study site, can be traced back to the 14th century as 'Wolf-Law'.
- 6.4.2 An archaeological evaluation recently undertaken in advance of the extension to the Seghill landfill site, included trenches investigated in the vicinity of Wolf Hill Farm, although no structural features dating from the medieval period were identified.²⁰ Evidence for ridge and furrow agriculture was identified across the site, which extended over 64 hectares, although this was mostly truncated by later ploughing and did not survive as earthworks. Two areas of possible medieval ridge and furrow were recorded to the south and north of the area where Wolf Hill Farm stood, c. 0.8km to the west and c. 1km to the north-west of the study site, respectively. In these areas the ridge and furrow predated the enclosure boundaries and were widely spaced, indicating a medieval date.
- 6.4.3 The earliest reference to Earsdon village (HER 783) is in the 12th century when it was listed amongst the possessions of Tynemouth Priory. The number of holdings decreased in the later medieval period and by 1538 there were only eight farms. In 1649 the common fields were enclosed. Earsdon was basically a two-row village, probably with a green, with a strong rectangular outline until expansion of the village in the 19th and 20th century along its southern edge. The village is still largely stone-built with two farms at the west end. The chapel of St. Alban in Earsdon (HER 782), located c. 0.7km to the south-east of the site, was founded before 1250 and the chapel was demolished in 1837 and replaced with the present larger church. Areas of broad ridge and furrow dating from the medieval period survive as earthworks in pasture in several fields to the east and north of Earsdon (HER 784), the closest to the study site lying c. 0.4km to the south-east. Aerial photographs show that until recently these agricultural remains were even more extensive and were present in fields now utilised for arable cultivation.
- 6.4.4 A lease of 1320 refers to 'Salterford', a ford on the Salters road (HER 5221) and this ford was found crossing the Brierdene Burn to the south of the Beehive public house, this situated c. 1.4km to the east of the study site. Evidence for salt production in the area is also recorded in 16th century documents and the common street linking Hartley and Backworth, already ancient in the late 16th century, led to the ford. A short length of hollow way on the south-eastern side of the bridge may be all that remains to mark its course.

¹⁹ Craster 1909,73.

²⁰ TWM 2006.

- 6.4.5 The earliest reference to Backworth village (HER 746) is in a grant by Henry II (1154-89) to Tynemouth Priory. In 1189, two Backworths, East and West, are mentioned and in 1241, Backworth passed to Walter, Prior of Tynemouth, forming the nucleus of the monastic demesne and this was followed by the construction of a Manor Hall.²¹ There is no evidence to locate Backworth Manor (HER 747) or to describe it. By 1650 the land to the north of the village had been divided up. The Tithe map of Backworth from 1844 shows an east-west two-row village with at least two farms on the edge of the street. The early village core still comprises stone-built houses, but beyond this the village surroundings have been drastically altered by the mining industry.
- 6.4.6 Areas of ridge and furrow agriculture survive as earthworks and cropmarks in the fields on all sides of Backworth village and in the park of Backworth Hall (HER 797), with the best-preserved lying to the south of the hall. A small field north of Moor View (HER 4846), south of the village, also contains ridge and furrow earthworks; these are recorded on the HER as being of medieval date, although an archaeological watching brief undertaken along the route of a pipeline crossing this field contradicts this assessment and suggests that the narrow straight form of the ridge and furrow is more indicative of post-medieval ploughing.²² The village of West Backworth (HER 790) was deserted by the 16th century and its site was incorporated into the field system of East Backworth, which now forms the present day village. The village is located 300m south-east of West Farm, Backworth and is a Scheduled Ancient Monument (SAM 32067).
- 6.4.7 In summary, the likelihood that archaeological features relating to agricultural use of the land during the medieval period are present at the study site is considered **high**, due to the extensive evidence of ridge and furrow ploughing known in the area around Backworth, Earsdon and Holywell.

6.5 Post-medieval

- 6.5.1 By the beginning of the 17th century, the lands of Backworth were held by several families until the Grey family became the major landowner and by 1707, when Nicholas Fenwick surrendered land to William Grey, Backworth became a single estate.²³ By 1822, the Duke of Northumberland purchased the estate due to arguments over coal extraction.
- 6.5.2 The farmstead of Wolf Hill (HER 8108) is shown on Fryer's map of 1820, the Tithe map of 1840 and is last shown on the Ordnance Survey 1st edition of 1865, placing the date of demolition some time before the 2nd edition of 1898. Archaeological evaluation trenches in this area in advance of the aforementioned extension to the Seghill landfill site uncovered wall footings from the farm and associated surfaces, but no dating evidence was recovered to determine the date of construction.²⁴ A trench excavated to the south-west of the farmstead recorded a ditch, from which a small quantity of 17th-18th century pottery was recovered.

²¹ Craster 1909, 32-33.

²² TWM, 2001.

²³ Craster 1909, 43.

²⁴ TWM 2006.

- 6.5.3 Other earlier post-medieval entries on the HER in the vicinity of the study site include: the White House, Earsdon (HER 8661), dating from the 17th century and located c. 1km to the south-east, the garden of this property contained a small fortified tower, it was demolished in 1959; a large sandstone oven and wall (HER 7257), possibly of 17th century date, in Front Street, The Garth, Earsdon, c. 0.9km to the south-east; Prospect Hill Farm, Backworth (HER 1583), c. 1.8km to the north and probably dating from the 1790s at the latest, it was demolished in the late 20th century.
- 6.5.4 Backworth Hall (HER 5167), located c. 1.4km south-west of the study site, was built in 1778-80 by William Newton for Ralph William Grey, replacing a hall built on the same site in 1675. The National Coal Board gave the building to the local community in the 1960s. The formal gardens of Backworth Hall (HER 5764) comprise a walled garden, shown on the Ordnance Survey 1st edition of 1865, with a complex of paths with trees and small buildings along the southern and eastern boundary walls. A disused well (HER 5090), located to the north-west of Backworth Hall, is assumed to be associated with the Hall and also of 18th century date. The Old Cottages and Stables, Front Street, Backworth (HER 7246) date from the late 18th century.
- 6.5.5 The Tithe map of Holywell from 1840 (Figure 4) shows that, at the time when this was surveyed, the study site comprised two large rectangular fields, located to the south of Holywell Grange Farm, bounded to the south by the Brierdene Burn, which is shown with a bridge in the western field. Traces of ridge and furrow have been noted in the western field to the immediate north of the study site, south of Holywell Grange Farm, and in the adjacent field to the west beyond the farm track.²⁵
- 6.5.6 In summary, the likelihood of archaeological remains of post-medieval date, particularly relating to agricultural use of the land, at the study site is considered **high**.

6.6 Early Modern and Modern (with Map Regression)

- 6.6.1 Coal mining has been undertaken in the area around Backworth on a fairly large scale since the early 1700s. However, the presence of the 90 fathom fault in this area meant that the coal measures dropped to 120 fathoms, making the coal too deep to extract.²⁶ By 1765, a wooden wagonway had been built to serve the coal mines at Flatworth, Murton and Shiremoor to the south of Backworth, taking coal to the staithes on the Tyne at Whitehill; in 1810 this was upgraded with iron rails.²⁷
- 6.6.2 All shallow workings in the area became exhausted by the early 19th century and the partners Maude, Lamb, Taylor *et al.* negotiated the lease of the Backworth Royalty with the Duke of Northumberland. Mining began in Backworth in 1813 with the sinking of 'A' Pit (HER 1105), c. 1.2km south-west of the study site. Sinking of the Backworth Colliery 'B' Pit (HER 1104) began in 1821 and 'C' Pit (HER 1057) was sunk in 1856. Adjacent to 'C' Pit on its western side were the Hotspur Brickworks (HER 2217) opened 1877 and closed 1967. Maude Pit was sunk in 1872 next to 'A' Pit and Eccles Pit (HER 6906) was opened in 1905. Around the same time, the company gained control of Prosperous Pit at Benton Square (HER 1115).

²⁵ These areas of ridge and furrow are noted in the HER, although they had not been assigned a number at the time of writing.

²⁶ Elliot and Charlton 1994, 5.

²⁷ *ibid.*

- 6.6.3 The aforementioned cast iron waggonway was extended along one of the Shiremoor Pit branches to run north-westwards to serve Backworth Colliery 'A' Pit. Backworth Waggonway (HER 1113) included Bell Engine (HER 1110) at its northern end, Shiremoor Allotment Engine (HER 1143) to the south and Murton Row Engine (HER 1172). In 1838, the waggonway was extended north to West Cramlington. It became Backworth Colliery Railway (West Cramlington Branch) (HER 1058) and was the last wholly steam-operated system in the North East, closing in 1975. In 1823, Cramlington Waggonway (HER 1056) was opened to serve pits to the north of Backworth and the line ran parallel to Backworth Waggonway a short distance to the east for most of its route. To the north, this continued as Seghill Waggonway (HER 1055), which opened in 1839 and was then superseded by the Blyth and Tyne Railway (HER 1086), this also superseding Cramlington Colliery Railway. West Holywell Station (HER 1107) on the Blyth and Tyne Railway was closed to passengers in 1879. Backworth Station (HER 1146) was built around 1864 and is the best surviving Blyth and Tyne Railway station. The southern part of the Blyth and Tyne Railway is designated HER 1112. The railway is still utilised today as a branch track running from Long Benton, through Backworth and Seghill. Conversion of the track to wooden sleepers and wrought iron rails of modern design would have been carried out to take the weight of the locomotives.²⁸ The West Cramlington Line was never re-laid with sleepers and kept its stone blocks, some of which could still be seen *in situ* until recently, until closure.²⁹ The route of the West Cramlington Line is largely preserved as a public footpath and the embankment survives to a height of 1.1m and is 8.5m wide.
- 6.6.4 In 1823, Duke Pit was sunk at Earsdon Square (HER 1111), c. 0.8km south-west of the study site, followed soon after by the sinking of Duchess Pit. These had closed by 1897 and the area was occupied by the Abbey Shot Factory (HER 2172). The Earsdon Coal Company sank Church Pit (HER 1114), c. 0.4km to the south-east of the study site, in 1838; this closed in 1933. This pit was served by the Backworth Colliery Railway (Church Pit Branch) (HER 2171) and a portion of rail is still visible within a tarmac road. Earsdon Colliery Grange Pit (HER 1148) was opened in 1874.
- 6.6.5 The Backworth partners were also involved in West Holywell Colliery (HER 1108), sunk in 1828, located c. 0.5km to the south-west of the study site. This was served by a branch waggonway, Backworth Waggonway West Holywell Branch (HER 1109). In 1853, the West Holywell Company sank a new pit at Low Steads, on the eastern side of Cramlington Waggonway, c. 1.4km north-west of the study site (Northumberland SMR 11523).
- 6.6.6 East Holywell Pit (HER 1048) is recorded in the HER as having opened in 1828, under the ownership of Taylor, Lamb and Clark. However, when the Tithe map was produced in 1840 (Figure 4), the site is still shown as being part of the fields of Holywell Grange Farm. A newspaper report from 1873 states that East Holywell Colliery 'A' Pit began working in 1839.³⁰ A record from 1842 describes the colliery as employing an average of 88 men in the year ending May 1841, demonstrating that by this time the colliery was well established.³¹

²⁸ Elliot and Charlton 1994, 9.

²⁹ *ibid.*

³⁰ *Newcastle Weekly Chronicle* 22 November 1873.

³¹ *Local Collections; or Records of Remarkable Events connected with the Borough of Gateshead 1842*, 93.

- 6.6.7 Bell's map of 1843 illustrating the Newcastle coal district (Figure 5) shows East Holywell Colliery reached by an extension to the waggonway from Duke and Duchess Pit, less than a mile (c. 1.5km) away.³² Collectively, this information suggests that the date of 1828 for the founding of the colliery is erroneous, with the 1839 date probably the more likely; the Tithe map may have been surveyed shortly before the founding of the colliery.
- 6.6.8 It was reported, in 1873, that 'A' Pit at East Holywell had few workers, 44 hewers who worked the High Seam, and a new deeper shaft was sunk to reach the Low Main Seam.³³ This eventually became known as Fenwick Pit. It was also reported at this time that there was little infrastructure on the site and that the heapstead was very poor and was uncovered, so that the winds from the sea blew across the heapstead *'to the no small discomfort of the solitary banksman who teams the coals from the tubs in which they reach the top of the shaft'*. The first coal-cutting machinery was used in the Main Seam at Fenwick Pit, East Holywell in 1918.
- 6.6.9 Although historic map evidence is discussed in detail below, worthy of note at this point, in that they demonstrate late 19th-early 20th century development of the study site, are the earliest editions of the Ordnance Survey mapping. The 1st edition of 1865 (Figure 6) shows rows of pit cottages at East Holywell Colliery; three east-west aligned rows, Burn Row, Double Row and Office Row and one north-south aligned row, North Row (these names appearing on the 2nd edition in 1896 (Figure 7)). The aforementioned 1873 newspaper article describes this as being poor accommodation with three single rows (Burn, Office and North) and one double row (Double) of cottages. North Row was the longest and had two wings or divisions. The cottages in the three single rows were all the same layout. Each house had two rooms, a large kitchen on the ground level and a *'cold and dismal garret of the same size above, which is reached by the accustomed break-neck ladder'*. Pantries projected from the back of the cottages but there were no back doors and the only ventilation was a small latticed loophole in the pantry. There were no privies or ash pits and there was a very poor state of sanitation behind the houses. Double Row was built on a larger scale with two rooms on the ground floor and a garret above. These houses also had no sanitary provisions. In 1875 the owners of East Holywell Colliery built 123 brick privies for the cottages and laid 200 yards of drain pipes with stench traps attached.³⁴ In 1876, the cottages were supplied with water from the pit, the source was boxed in underground to protect from pollution and delivered by stand pipes to the rows of cottages on the surface.
- 6.6.10 The Ordnance Survey 1st edition also shows that, by this date, East Holywell Colliery was reached by Backworth Waggonway (East Holywell Branch) (HER 1051), which terminated at the junction with Backworth Waggonway. The route is marked on the 2nd edition from 1898 as East Holywell Colliery Railway, with a remodelled junction with Backworth Waggonway and a new junction with the NER Blyth and Tyne/Backworth and Morpeth Line. East Holywell Railway was in use until the colliery closed in 1973; the route of the East Holywell line is preserved as a trackway.

³² Elliot and Charlton 1994, 5.

³³ Newcastle Weekly Chronicle 22 November 1873.

³⁴ Seeley 1973.

- 6.6.11 East Holywell Mineral Railway (HER 1059) is shown, on the Ordnance Survey 3rd edition from 1919, running along the north-western edge of East Holywell Colliery. This ran from East Holywell Colliery Railway in the central part of the colliery, northwards to carry coal to Holywell. An archaeological watching brief undertaken in 2000-2001 along the route of a pipeline from north of Shiremoor running westwards to the B1322 New York Road recorded several unstratified wooden sleepers within the topsoil in the vicinity of Earsdon Junction.³⁵ Both Backworth Waggonway (East Holywell Branch) and Cramlington Waggonway and the subsequent railways were located in this area and the sleepers could have originated from any of these structures. Several sleepers from East Holywell Colliery Railway were also recorded *in situ*, underlying deposits of colliery waste up to 0.60m thick, and these measured 2.60m by 0.26m by 0.12m. They had moderate wear on their upper surfaces and one sleeper retained a single iron fitting to which the rail track would have been attached. The track had been constructed upon a 0.70m thick deposit of colliery waste. The watching brief report concluded that the lack of *in situ* evidence for earlier waggonways in the vicinity did not necessarily mean that they do not survive; the large amounts of colliery waste in the area, combined with the form and relatively small scale of the investigation, potentially meant that earlier remains could have remained undiscovered.
- 6.6.12 The final colliery in the vicinity of the study site, Shiremoor Colliery, was opened in 1820 when Algernon Pit (HER 2177) was sunk by Backworth Collieries. Blue Bell Pit (HER 2192) was sunk in 1874 and closed 1955 and another pit, John Pit (HER 1147) is known to have been in existence by 1865. Shiremoor Colliery was served by the Blyth and Tyne Railway and Shiremoor Prospect Hill Station (HER 1145), which had sidings and a possible reservoir within the station area, was situated along this line. To the south of the colliery are Shiremoor Engine (HER 1142) and Shiremoor Middle Engine (HER 1144) along the line of Seatonburn Waggonway.
- 6.6.13 In 1932, Backworth and the East Holywell Coal Company were amalgamated and a new public company, Backworth Collieries Limited, formed. By 1930, the first face conveyors were brought in and in the 1930s a new washery was built at Backworth to replace the old Dolly washer on the site of 'B' Pit. A new washer was also built at Fenwick Pit around the same time. In 1947, following nationalisation, the pits around Backworth became one production unit within Northern Division Number 7 (Southern Northumberland). By the 1960s the pits in the area were becoming uneconomical and, in 1967, the National Coal Board closed the route to the river and all coal was sent out by British Rail. New sidings were laid out at Earsdon Junction and in 1969 the railway south of Allotment Level Crossing was closed and track lifting began. Fenwick Pit closed August 31st 1973 and the railway east of Earsdon Junction was lifted. Eccles Pit closed May 1980, which brought about the end of the Backworth Railway and the end of deep mining in Backworth.
- 6.6.14 There are many HER entries of early modern date in the vicinity of the study site which are not directly related to the collieries, although growth of the villages of Backworth, Earsdon and Shiremoor was undoubtedly closely linked to the mining economy. These are plotted on Figure 3 and are briefly summarised below.

³⁵ TWM 2001.

- 6.6.15 To the immediate north of the study site is Holywell Grange Farm (HER 8109), which is shown on maps of the area from 1820 onwards and survives today as a working farm. Within Backworth village itself, East Farm (HER 5770), located c. 1.3km to the south-west of the study site, is shown on the Tithe map of Backworth from 1844, having been rebuilt by the Duke of Northumberland in the 1840s. A quarry (HER 1106) is shown on the Ordnance Survey 1st edition in the centre of the area now occupied by Backworth village, along with a brickfield (HER 5766) and clay pit (HER 5765). To the south of Backworth is Dairy Cottage (HER 7244), an early 19th century stone-built structure. A Gas Works (HER 2168) adjacent to Backworth Colliery 'A' Pit was built between 1865 and 1898, as were reservoirs (HER 2169) on the colliery site. To the north of Backworth village is a church hall, Good Temple Hall, Havelock Place (HER 8107).
- 6.6.16 A quarry to the west of Shiremoor (HER 2175) was in use between 1865 and 1895 and the Allotment Mill at Shiremoor (HER 2176) also dates from after 1865. Upstanding ridge and furrow earthworks (HER 1573) survived until recently in the fields around Prospect Hill Farm. These are interpreted as being formed by steam ploughed rig and are thus of early modern date.
- 6.6.17 Within the village of Earsdon, to the south-east of the study site, is the site of a blacksmiths' workshop (HER 1149) and the site of Earsdon Turnpike Toll House (HER 1150). The parish church of St. Alban (HER 7250) stands on Front Street, Earsdon and was built 1836-7. The St. Alban's Church Memorial to the Hartley Colliery disaster (HER 5247) commemorates the lives of 204 miners who died in 1862. Bleak Hope House, Front Street (HER 7253) was built in the early 19th century and is of sandstone ashlar construction. Also of early 19th century date are a stone-built stable and carriage shed (HER 7255) on Front Street. West Farm, Earsdon (HER 8400) comprises a farmstead built before 1849. The Cannon Inn (HER 8401) is shown on the Ordnance Survey 1st edition, as is Earsdon School (HER 8404). A quarry (HER 2173) is shown south-east of Earsdon on the Ordnance Survey 2nd edition, as is another blacksmiths' workshop, (HER 2174), located to the south-west of Earsdon.
- 6.6.18 The common land of Shiremoor (HER 1370) located in the area around Moor Edge Farm, c. 0.7km south of the study site, was enclosed in 1790. A geophysical survey of this area suggested the presence of archaeological features such as ditches and enclosures.³⁶ A subsequent archaeological evaluation revealed evidence for post-medieval features associated with the agricultural use of the land.³⁷ A stone-lined well at Moor Edge Farm (HER 7920), which is shown on the Ordnance Survey 1st edition, was also recorded during the archaeological evaluation.
- 6.6.19 Entries on the HER of modern date within the vicinity of the study site comprise: Eccles Pit at Backworth (HER 6906), as previously discussed, Edward Eccles Church Hall at Earsdon (HER 7249), built 1910-11, and the war memorial on Front Street, Earsdon (HER 7258), built c. 1919.

³⁶ Timescape Surveys 2004.

³⁷ TWM 2005.

- 6.6.20 The majority of modern features recorded on the HER in the vicinity of the study site are associated with World War II defences. The remains of a hexagonal pillbox (HER 5220) are located at Holywell Grange Farm, c. 200m north of the study site. Another two pillboxes (HER 5343 and 5344) are located in Earsdon along with a weapons pit and pillbox (HER 5366) and nearby was the site of a concrete roadblock (HER 5826). A spigot mortar emplacement (HER 5420) is located in the east of Earsdon.
- 6.6.21 The following paragraphs describe the site and its immediate vicinity as shown on map evidence. The Tithe map of Holywell from 1840 (Figure 4) shows that at the time this was surveyed the study site was occupied by two large rectangular fields, located to the south of Holywell Grange Farm, bounded to the south by the Brierdene Burn which is shown with a bridge in the western field. A footpath crosses the northern end of the eastern field running north-west to meet the boundary with the western field and then runs to the north. The Tithe apportionment lists that the land is owned by G. Thomas and occupied by Taylor, Thomas and Co., forming part of Holywell Grange Farm.
- 6.6.22 Bell's plan of the Newcastle coal district from 1843 (Figure 5) shows that, by this time, East Holywell Colliery had been established and a waggonway constructed. The Ordnance Survey 1st edition of 1865 (Figure 6) shows the study site in detail. At this time, most of the eastern portion remained undeveloped, although within the colliery complex, and divided into three fields. A sub-triangular field in the north-eastern corner of the site, bounded to the south by the NW-SE aligned path shown on the earlier Tithe map, is sub-divided into smaller plots, probably representing gardens or allotments. A central triangular field has a small spoil heap shown in its south-western end and the southernmost field is undeveloped. A narrow strip of land along the south-western side of the site, between the site boundary and the aforementioned fields, has colliery buildings in its central portion and is divided into small plots, probably allotments or gardens, to the south. The north-western corner of the study site is also divided into a row of small, narrow rectangular plots, with, to the south of these, a large spoil heap, partially located within the site boundaries. A long row of cottages, divided into three blocks, aligned north-south, lies within the north-western limit of the study site. Beyond the site boundaries to the south-west are rows of east-west aligned colliery cottages, with colliery buildings located between the aforementioned two areas of housing, along with further spoil heaps. Backworth Waggonway (East Holywell Branch), running northwards, skirts the south-western boundary of the study site and then runs into the study site, stopping short of the aforementioned allotment gardens.
- 6.6.23 The Ordnance Survey 2nd edition of 1898 (Figure 8) shows further development of the colliery and study site. The eastern portion of the site remains largely undeveloped and the triangular field in the north-eastern corner is still occupied by small plots, although their layout has altered, with two north-south aligned strips in the central part of the field. A small rectangular building is shown in the extreme north-eastern corner of the triangular field. The triangular plot to the south has become incorporated into the working area of the colliery and the north-south aligned division which remained from the former field layout, as shown on the Tithe map, has been removed.

- 6.6.24 A more detailed map, the Ordnance Survey 2nd edition (25" to 1 mile) map from 1896 (Figure 7) shows three colliery buildings and a circular water tank in the south-western part of this triangular plot and a branch of the waggonway, which itself branches into two in its northerly extent, extending to a rectangular structure in the central western part of the plot. The remainder of this central triangular plot is occupied by a pit heap. The southern triangular plot has been sub-divided into irregular plots.
- 6.6.25 The former waggonway is shown on the 1898 map as 'Holywell Colliery Railway' and sidings can be seen extending south-north from the colliery buildings into the northern part of the study site, almost reaching the northern boundary. A line is shown running from the colliery buildings, into the north-western portion of the study site, through a gap in the row of north-south aligned cottages, labelled as North Row, and then running south-north parallel and to the west of these buildings. A narrow rectangular structure has been constructed alongside the railway sidings in the central northern part of the study site. The small allotment plots remain in the north-western portion of the study site and to the south of these is a large area of spoil. Other allotment plots also survive at the study site.
- 6.6.26 The Ordnance Survey 2nd edition (Figures 7 and 8), shows that, beyond the western boundary of the study site, the core of the working colliery has expanded with additional buildings having been constructed and sidings added to the East Holywell Railway. The rows of pit cottages in the south-western part of the colliery are labelled as 'Burn Row', 'Double Row' and 'Office Row', with a Wesleyan Methodist Chapel to the north of the last of those.
- 6.6.27 The Ordnance Survey map of 1919 (25 inches to 1 mile) (Figure 9) shows a similar layout to the previous edition. The north-easternmost triangular plot has a footpath running along its eastern boundary and the NW-SE aligned footpath skirting its southern boundary survives. The central triangular plot in the southern portion of the study site now has an extensive pit heap occupying the majority of it. To the west of this are extended railway sidings, with a long, narrow north-south aligned pit heap to the west of those. The southernmost triangular plot in the southern portion of the site now comprises several sub-triangular and sub-rectangular sub-plots, with three small buildings shown in the northernmost two of these. Railway lines/sidings now occupy the western side of the southern portion of the study site, which was formerly occupied by allotments and to the east is a narrow NE-SW aligned pit heap, with a small rectangular structure shown to the south-west of the heap. In the central northern portion of the study site, the railway sidings now extend even further north, continuing beyond what was the former east-west field boundary and encroaching into the field to the north. The allotment plots along the western part of the northern boundary survive, and to the south is an extensive pit heap. Beyond the boundaries of the study site, the western part of the colliery remains largely unaltered since the previous map, apart from the addition of three oval reservoirs within the complex of colliery buildings and a Mechanics' Institute between the chapel and Office Row. The Ordnance Survey map of 1921 (6 inches to 1 mile) (Figure 10) shows essentially the same layout as the 1919 edition.

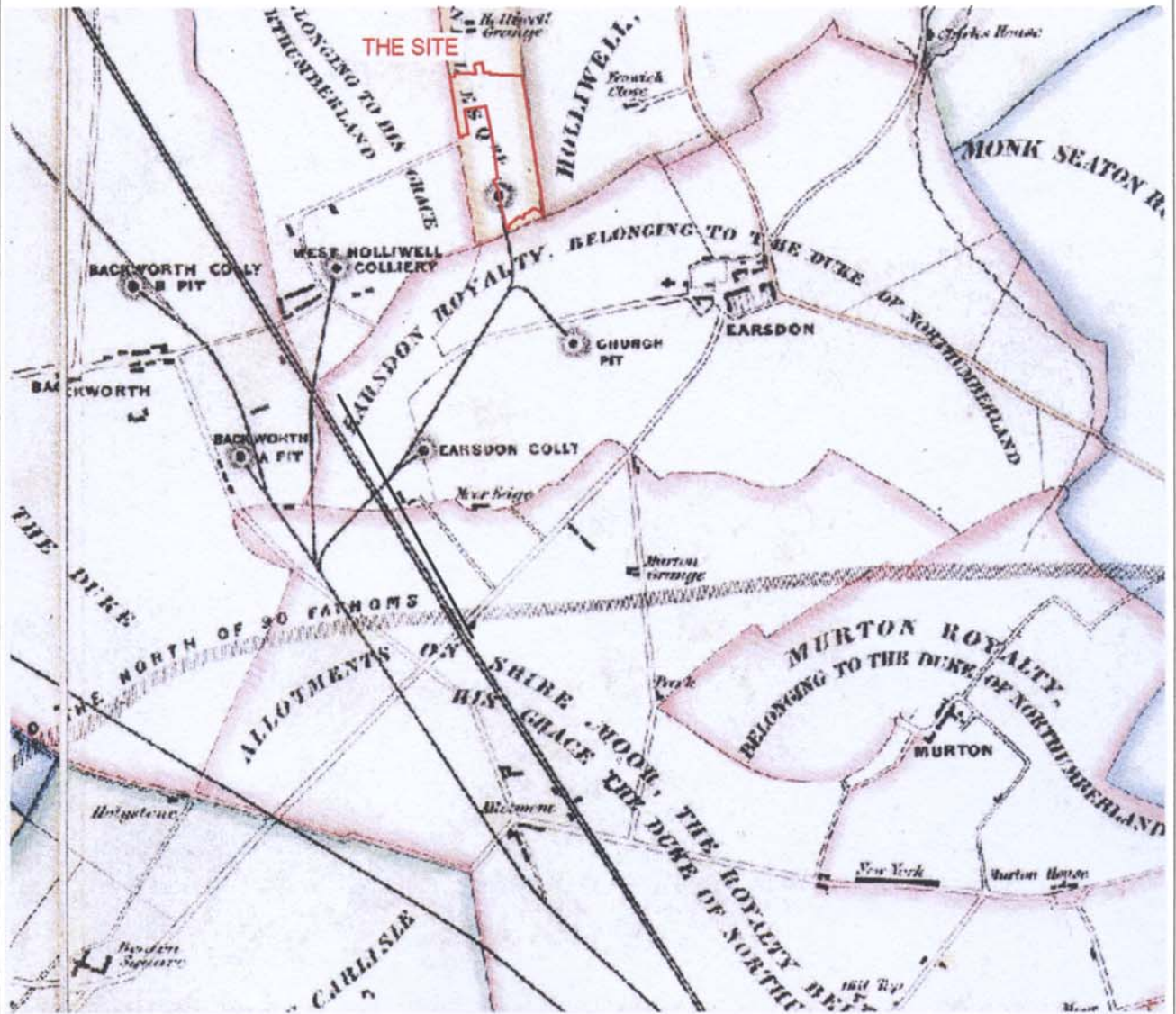
- 6.6.28 A copy of the 1938 Ordnance Survey map (Figure 11) held at Woodhorn has been annotated by East Holywell Veterans Club, usefully describing many of the colliery buildings and other features. Overall, this map shows little change within the study site itself, with the exception of the southern portion, which is now occupied by an extensive pit heap; railway lines branch from the main through line to feed this heap. The northernmost triangular field is not now subdivided. A small building (19) in the north-eastern corner of the study site is annotated as a powder magazine, located as far from the colliery buildings as possible. Situated in the central northern part of the site is a set of large water tanks (14), these used for the boilers. To the south of these is a weigh cabin (13), with railway tracks running through it, with a smithy and repair shops (17) to the south. Further south again is the colliery yard (18), which is annotated as having once been occupied by stables for the manager's horses and the ambulance shed. In the far south-western corner of the study site is the pump house (20). The pit heap in the north-western part of the study site (3) is annotated as having been the first to be developed, but was removed in the 1940s. The railway leading to Holywell (2) from the north-western corner of the study site is annotated as a waggonway to carry 'two-man riding carriages' and also to take 'concessionary coals' to Holywell. This map shows that by this date the houses in the southern portion of North Row had gardens laid out to the west. Beyond the boundaries of the study site, several of the buildings within the colliery complex are also usefully annotated on this map.
- 6.6.29 By the time of the 1960 OS map (Figure 12), most of the rectangular eastern part of the study site was covered by an extensive pit heap, with the exception of the western margin, this still with the railway line running along it, and the northernmost triangular field. The main pit heap has encroached onto the area formerly occupied by the smithy and repair shops. Several railway lines in the area occupied by the water tanks for the boilers have been removed by this date. The north-western portion of the study site remains essentially unaltered since the 1938 map, apart from the railway line to Holywell, which seems to be out of use by this date. Beyond the site boundaries, the core of the colliery workings remains much the same in layout, although the area to the south has seen much change with the removal of several office buildings on the land to the north of Office Row. The Miner's Welfare Institute building, formerly the Mechanic's Institute, remains in place. South of Office Row, the two rows of cottages, Double Row and Burn Row, had also been demolished by this date, but the two east-west roads onto which these buildings faced remain visible.
- 6.6.30 An aerial photograph taken in 1974 (Figure 13) shows that very few buildings survive in the year after the colliery closed. The weigh cabin and water tanks are visible in the central northern part of the study site, at the north-western corner of the main pit heap. Many of the railway lines appear to have been lifted by this date, including the row of sidings which had extended into the field to the north. The north-western portion of the study site appears to have reverted to scrubland. The powder magazine in the corner of the north-easternmost field appears to have been removed by this date, with a narrow rectangular building now situated just to the south of where the magazine stood – this probably the building which remains on site today. The housing of North Row had been demolished by this date. Beyond the site boundaries, the triangular plot of land north of Office Row has been redeveloped by this date, with large industrial buildings visible.

- 6.6.31 An aerial photograph taken in 2005 shows the study site essentially as it is today, with no upstanding colliery buildings and no railway lines surviving within the site boundaries. The main pit heap is flanked by strips of overgrown scrubland, with an access track along the western side, this the route of the former railway lines. In the central northern part of the site, a pond has been created and the triangular field in the north-eastern corner of the site is an overgrown grassed paddock. Much of the north-western portion of the study site is heavily overgrown scrubland with some tree cover.
- 6.6.32 In summary, the study site was continuously occupied by structures and infrastructure of Fenwick Pit, East Holywell Colliery from the first half of the 19th century until the colliery closed in 1973. Therefore, the potential for industrial archaeological remains from the early modern and modern periods is considered **high**.



— approximate site outline

Figure 4. Tithe map of Holywell, 1840



— approximate site outline

Figure 5. From Bell's 'Plan of Part of the Newcastle Coal District in the County of Northumberland', c. 1843
 Approximate scale 1:25,000

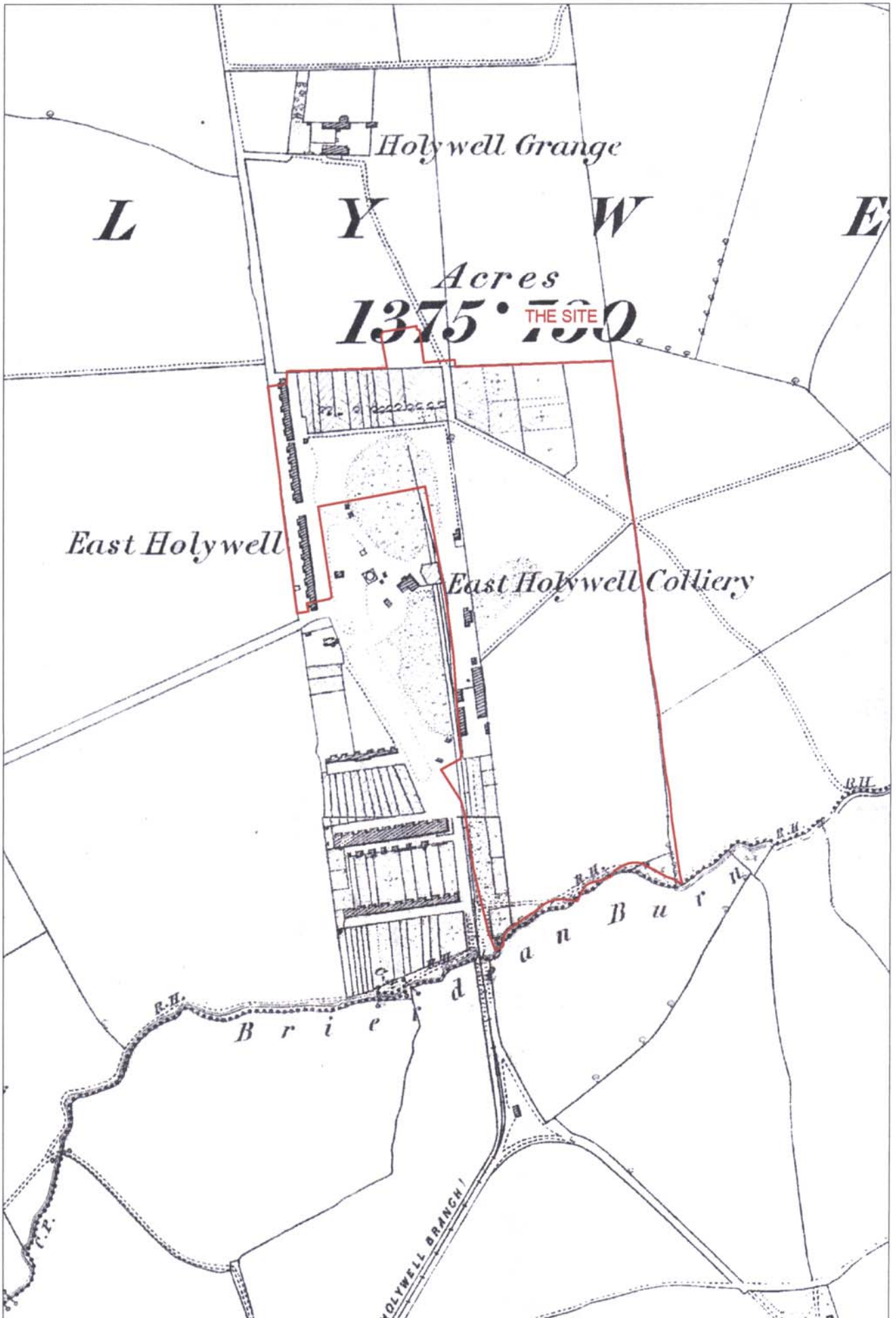


Figure 6. Ordnance Survey 1st edition, 1865
Approximate scale 1:5,000

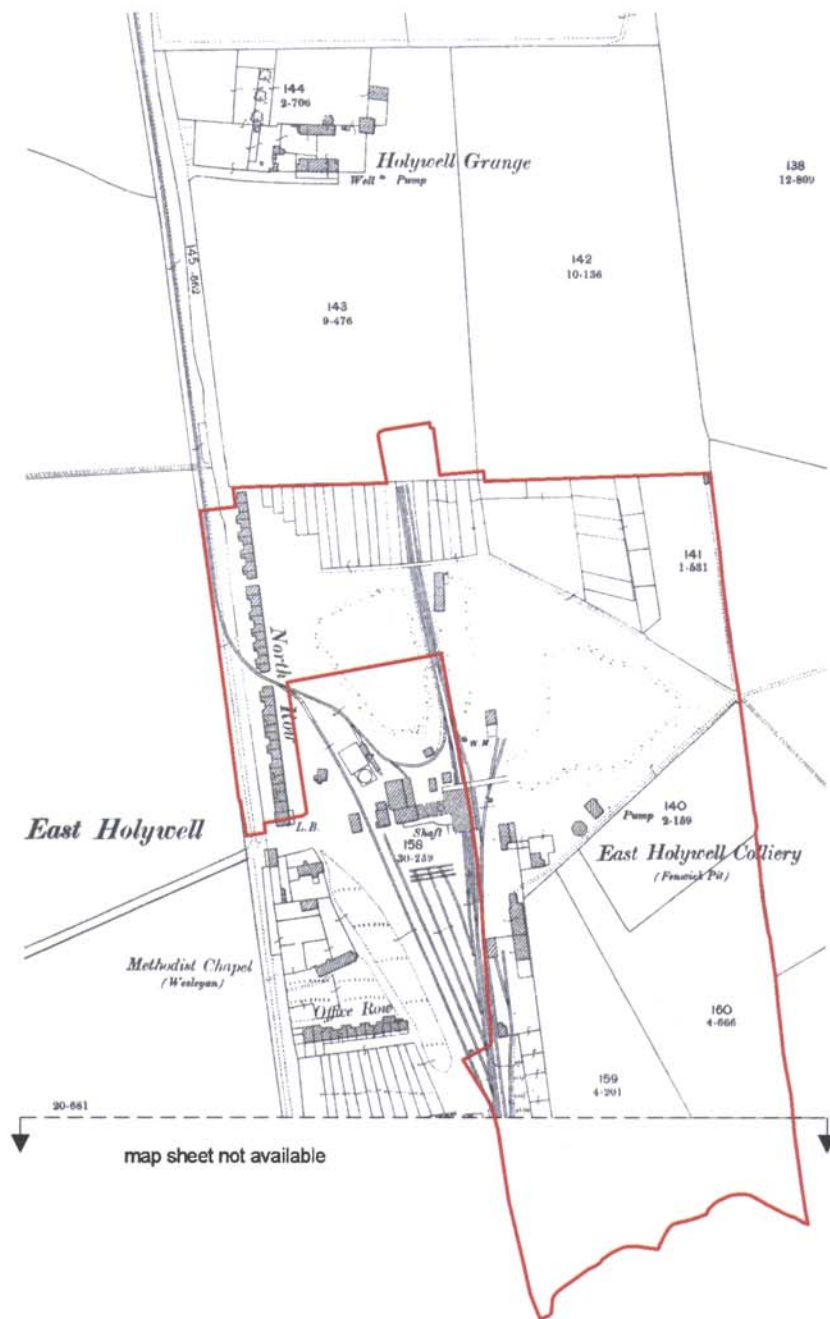


Figure 7. Ordnance Survey 2nd edition (25" to 1 mile), 1896
 Approximate scale 1:5,000

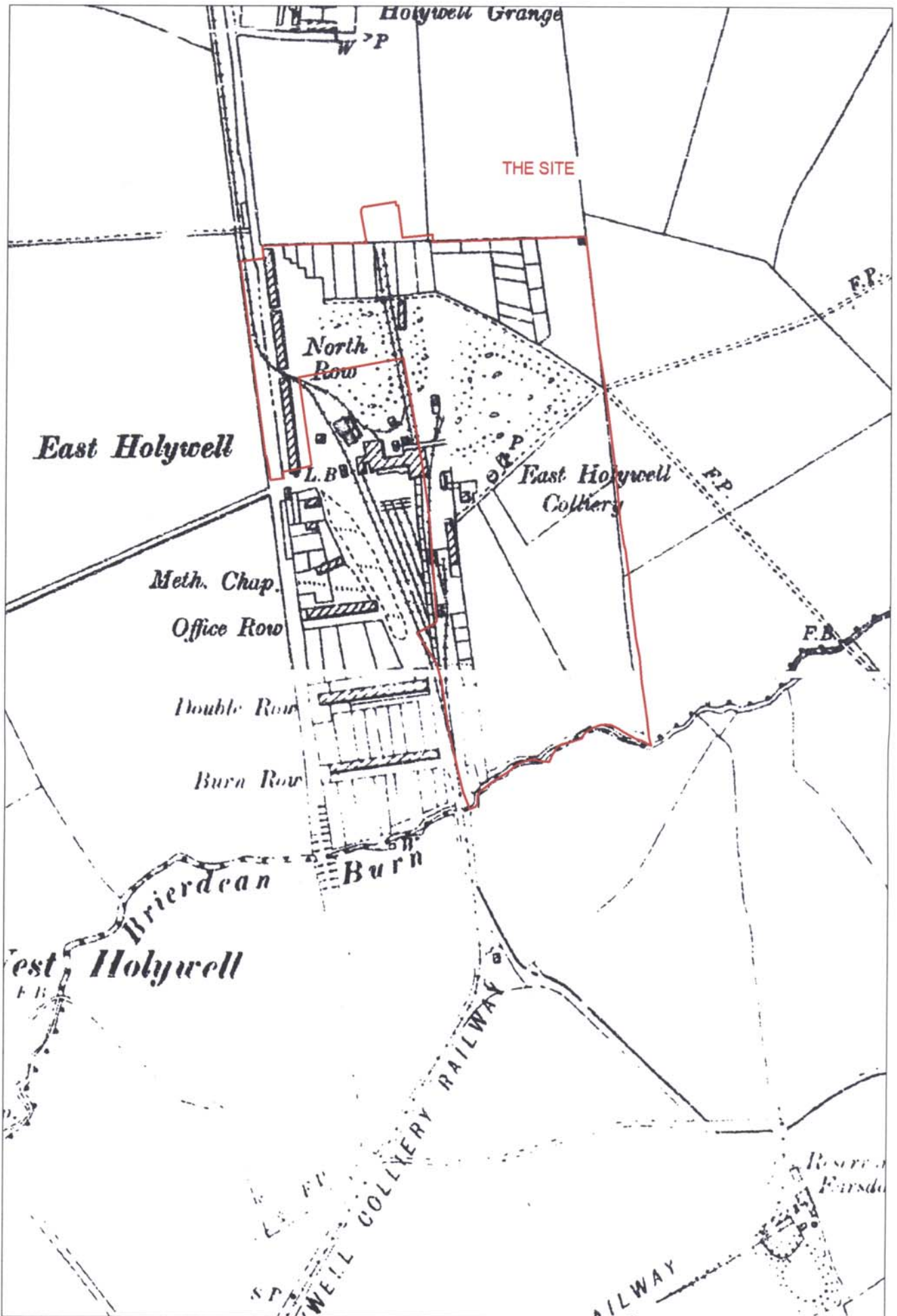


Figure 8. Ordnance Survey 2nd edition, 1898
Approximate scale 1:5,000

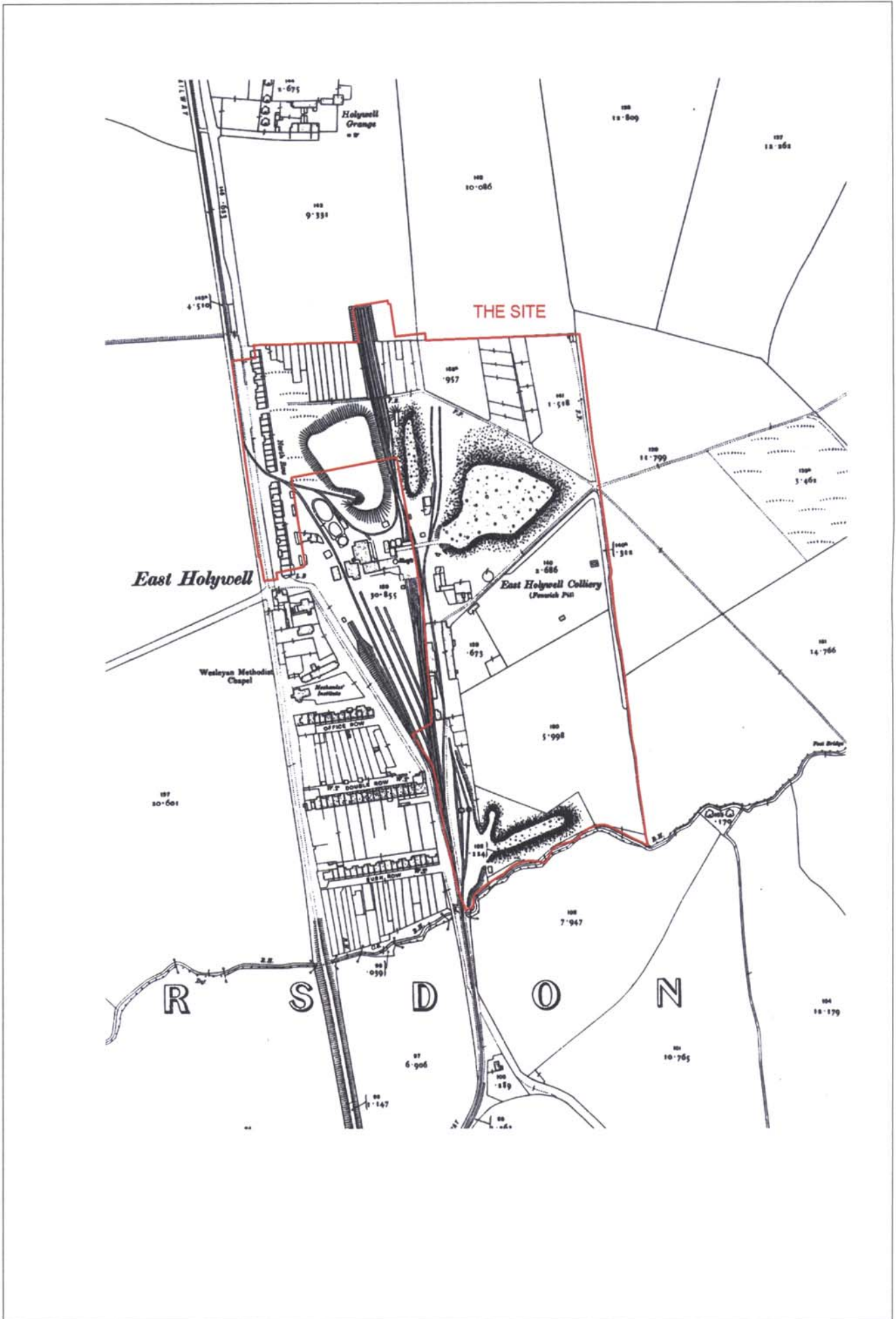


Figure 9. Ordnance Survey 3rd edition (25" to 1 mile), 1919
 Approximate scale 1:5,000

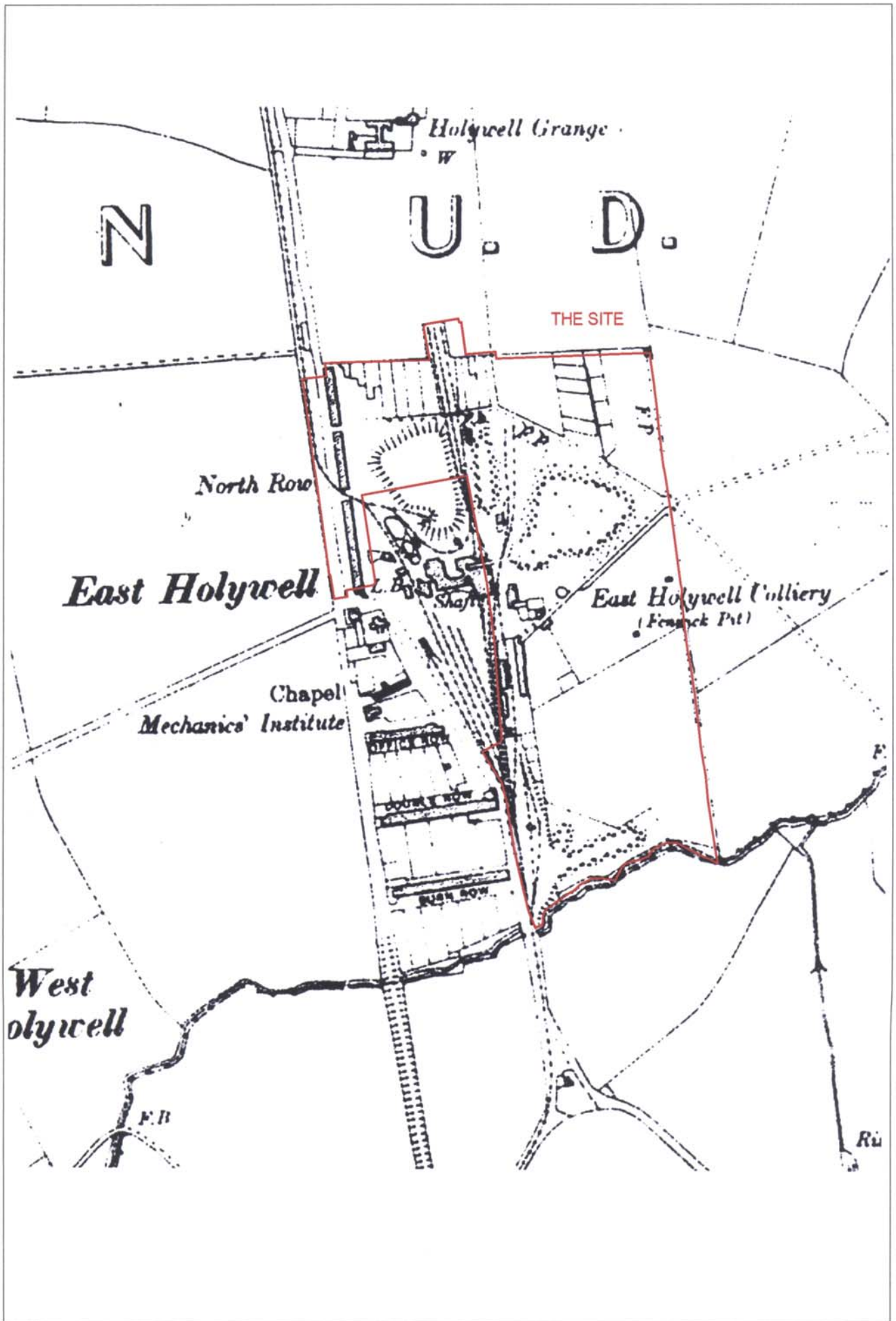
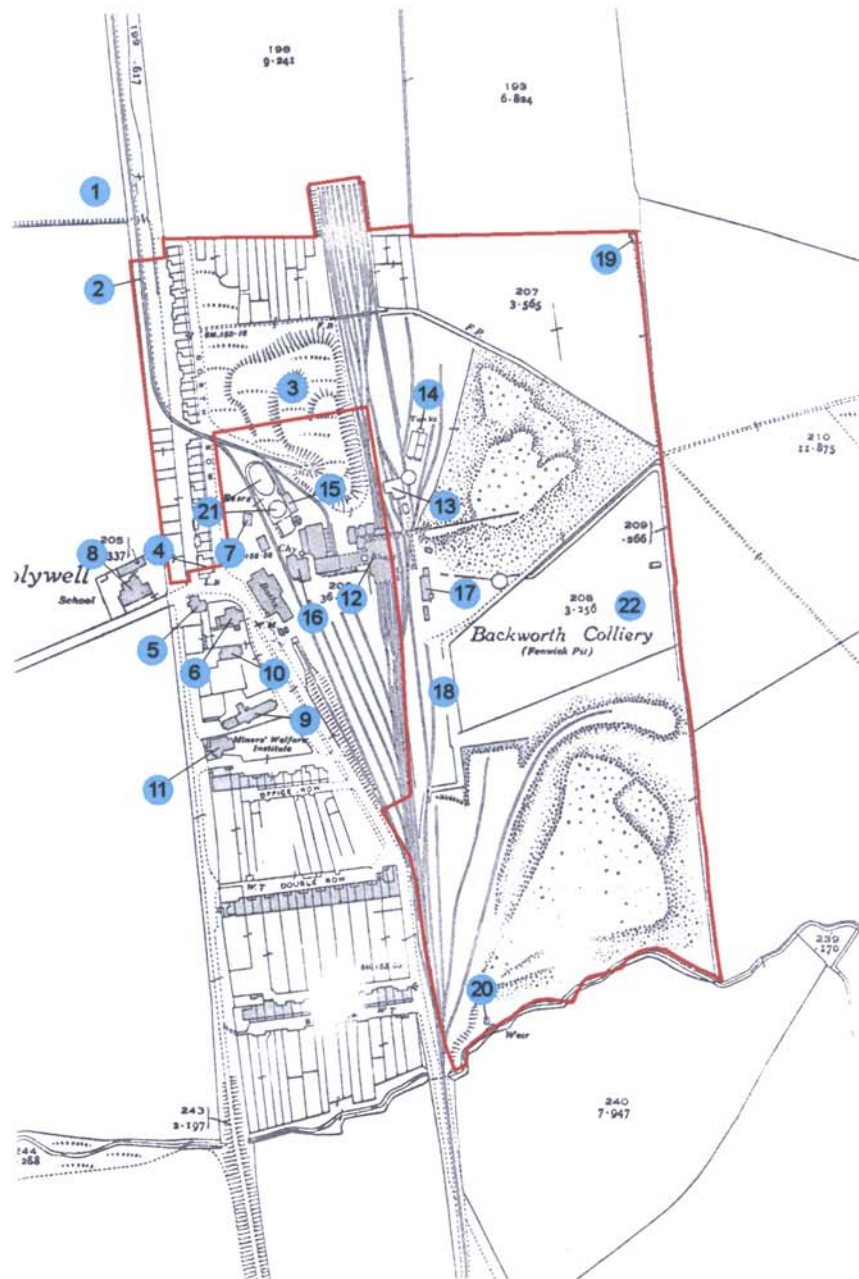


Figure 10. Ordnance Survey 3rd edition (6" to 1 mile), 1921
 Approximate scale 1:5,000



1. From Bates man-riding pit in Holywell to the shaft at Fenwick was one mile underground.
2. The waggonway carried two man-riding carriages and also took the concessionary coals to Holywell.
3. Pit heap - this, the first to be developed, was removed in the late 1940's.
4. Cashier's house.
5. Colliery office, previously it had been the school.
6. Under-manager's office.
7. This was just a house despite its position by the colliery.
8. The school. This was built by German Prisoners of War at the end of the First World War.
9. Manager's House
10. Keeper's House.
11. Usually occupied by an official - often the under-manager.
12. Fenwick Pit Winding House.
13. Weigh Cabin.
14. Tanks - were used for the boilers.
15. Engine Sheds - the colliery "tanky" was called "Perfection".
16. Lamp Cabin.
17. Smithy and Repair shops.
18. Colliery Yard - once held the stables for the manager's horse and the ambulance shed.
19. Powder Magazine.
20. Pump House.
21. Pit Ponds.
22. Fenwick Pit worked the High Main, Main, Yard, 5/4, Bensham, Low Main, Busty, 3/4, and Baeumont seams - of these the Main, 5/4 and Bensham seams were banded. The lowest was the Baeumont which ran out at 18 inches. The pit was extremely dry until it expanded into the old Church Pit workings. The first coal cutting machinery was used in the Main seam - in 1918. The pit was closed on September 30th 1973 when the final seams were worked out - these were the Bensham and the 5/4. On closing, around 650 men were employed at the pit - many of whom retired or went to either Eccles or Bates Pit.

Figure 11. Based on Ordnance Survey 1938, with information given by East Holywell Veterans Club



Figure 12. Ordnance Survey, 1960
Scale 1:5,000



Figure 13. Aerial photograph, 1974
Scale 1:5,000

8. POTENTIAL IMPACTS

The following potential impacts by the development proposals upon the archaeological resource at the site of Fenwick Pit, East Holywell Colliery are considered:

- Loss of, or damage to, archaeological sites and remains;
- Settings and views of and from upstanding remains, listed buildings, Scheduled Ancient Monuments and other archaeological sites affected;
- Changes to ground conditions as a result of changes to the drainage regime, which could affect archaeological remains;
- Loss of landscape features, structures and areas with historic and cultural associations;
- Other possible impacts, such as noise, vibration, compressions and other changed ground conditions.

8.1 Loss of, or damage to, sub-surface archaeological remains

- 8.1.1 Away from the pit heap, general groundworks and overall landscaping for the reclamation project could impact upon any buried archaeological remains at the study site, largely depending upon the nature and extent of the works. In summary, therefore, it is considered likely that the proposed reclamation project could threaten any buried archaeological remains at the site.
- 8.1.2 The potential for archaeological remains of later prehistoric and Romano-British date at the site is considered high, due to the presence of remains of these eras in the immediate vicinity. The potential for remains of medieval and post-medieval date is considered high, due to the location of the site within an area that was utilised for agricultural purposes throughout these eras. The potential for industrial era remains is high, due to the former presence of Fenwick Pit.
- 8.1.3 While evidence of colliery activities is very likely at the site, those activities themselves will have potentially impacted upon sub-surface remains from earlier archaeological eras and, in parts of the site, any such remains may not have survived because of this. However, significant areas within the northern part of the site remained largely undeveloped throughout the usage of the site as colliery. In those areas, any remains from earlier eras could survive at fairly shallow depths below present ground level and could be of a relatively ephemeral nature. Therefore, any invasive groundwork in those areas, including ancillary operations associated with the reclamation works, such as the movement of heavy machinery, could have an impact on this potential archaeological resource.
- 8.1.4 In areas of the study site that were occupied by the main colliery structures and other elements of colliery infrastructure, any sub-surface remains of these features have a far greater chance of survival, since the site has not been subsequently developed. In general, industrial era remains, particularly structural remains, are likely to be more robust in nature (and could potentially be relatively deeply stratified in parts of the site) than archaeological remains from earlier periods. Again, however, any such remains are likely to be initially encountered at relatively shallow depths below ground level, and therefore may also be impacted upon by the proposed reclamation works.

8.2 Settings and views of and from upstanding remains, listed buildings, Scheduled Monuments and other archaeological sites affected

8.2.1 There are no Scheduled Monuments within the immediate vicinity of the study site and it is considered that the scheme will not affect the overall setting of any Scheduled Monument.

8.3 Changes to ground conditions as a result of changes to the drainage regime, which could affect archaeological remains

8.3.1 The proposed reclamation works are likely to involve intrusive groundworks, including general landscaping, which could involve alterations to ground levels. Therefore, it is possible that the scheme could alter ground conditions at the site due to changes to the drainage regime. Technical details of the proposed reclamation works would have to be consulted, along with geotechnical data pertaining to the sequence of below ground deposits, to elucidate this matter further.

8.3.2 In summary, it is possible that buried archaeological remains, if present at the site, could be affected by the proposals in this respect.

8.4 Loss of landscape features, structures and areas with historic and cultural associations

8.4.1 The study site does not lie within a Conservation Area and no structures or infrastructure of Fenwick Pit, East Holywell Colliery survive within the boundaries of the area of the proposed reclamation scheme. The substantial pit heap at the site is unmistakably identifiable as a sign of the coal mining industry that dominated the area for a century and a half and, therefore, must be regarded as a landscape feature with historic and cultural associations. The current assessment has included a photographic record of the heap prior to regrading, and this is likely to suffice for the purposes of providing a permanent record of the feature as it is.

8.4.2 Several buildings from the colliery, including the pithead baths, engine house, workshops and stores, do survive beyond the boundaries of the study site, immediately to the west. It is considered that the proposed scheme will not have a detrimental effect on these structures.

8.5 Other possible impacts, such as noise, vibration, compressions and other changed ground conditions

8.5.1 Groundworks associated with the reclamation scheme will have a short-term impact, in terms of noise and vibration, on the immediate environment of the study site.

9. CONCLUSIONS AND RECOMMENDATIONS

9.1 Conclusions

- 9.1.1 The majority of the study site is buried below the pit heap of Fenwick Pit, East Holywell Colliery, founded c. 1840. Regrading of the heap is unlikely to impact directly on any archaeological remains lying buried below it. Off the heap, much of the remaining area of the site was occupied by colliery buildings and infrastructure or set aside for colliery housing or allotment gardens. Any invasive groundworks, including ancillary operations, such as the movement of heavy plant, could impact upon buried archaeological remains in these areas.
- 9.1.2 Assessment of the known archaeological resource for the area leads to the conclusion that there is **high** potential at the site for sub-surface remains from the later prehistoric and Romano-British periods. Probable settlement-related remains of these eras are known in the vicinity of Holywell Grange Farm, immediately to the north. Any similar remains at the study site would be of **high** archaeological significance. The northern portion of the site, particularly the north-easternmost field, which remained essentially undeveloped during the lifetime of the colliery, has the greatest potential for remains of these eras.
- 9.1.3 There is **high** potential for sub-surface remains of the medieval and post-medieval periods within the northern portion of the study site. Any such remains are likely to be related to agricultural activities and would likely be of **moderate** significance.
- 9.1.4 The majority of the northern portion and the western margin of the southern portion of the study site have **high** potential for sub-surface archaeological remains from the early modern and modern industrial periods, derived from the structures and infrastructure elements of Fenwick Pit, East Holywell Colliery. Any such remains are considered to be of **high** significance in terms of industrial heritage interest.

9.2 Recommendations

- 9.2.1 Where archaeological features, as identified by an archaeological DBA, are likely to be encountered, strategies should be developed to deal with them. PPG16 states that, where preliminary research suggests survival of archaeological remains,

"...it is reasonable for the planning authority to request the prospective developer to arrange for an archaeological field evaluation to be carried out before any decision on the planning application is taken. This sort of evaluation is quite distinct from full archaeological excavation. It is normally a rapid and inexpensive operation, involving ground survey and small scale trial trenching, but it should be carried out by a professionally qualified archaeological organisation or archaeologist.

Evaluations of this kind help to define the character and extent of the archaeological remains that exist in the area of a proposed development, and thus indicate the weight, which ought to be attached to their preservation. They also provide information useful for identifying potential options for minimising or avoiding damage. On this basis, an informed and reasonable planning decision can be taken.”³⁸

The same document continues,

“Local planning authorities can reasonably expect developers to provide this information as part of their application for sites where there is good reason to believe there are remains of archaeological importance. If developers are not prepared to do so, the planning authority may wish to consider whether it is appropriate to direct the applicant to supply further information under the provisions of Article 4 of the Town and Country Planning (Applications) Regulations 1988.”

- 9.2.2 Field evaluations should aim to provide information of sufficient quality and detail that reasoned and informed decisions may be made with regard to the preservation, or not, of buried archaeological material and upstanding buildings.
- 9.2.3 Some form of archaeological evaluation of the site may be considered necessary in the light of the conclusions of the assessment. Archaeological evaluation can comprise one or more of the following procedures:
- geophysical survey;
 - surface artefact collection ('fieldwalking');
 - archaeological trial trenching;
- 9.2.4 Geophysical survey would not be a suitable method for determining whether or not archaeological remains are present at the site, due to the likely presence of sub-surface deposits derived from previous use of the site as a colliery.
- 9.2.5 Surface artefact collection would not be practicable due to current land use. 'Fieldwalking' is only of use across recently ploughed, harrowed or drilled fields, preferably after a period of weathering has taken place.
- 9.2.6 The high potential for sub-surface archaeological remains of prehistoric and/or Roman date and industrial era date at the site could be justification for preliminary archaeological site investigation by trial trenching. However, the proposed extent of ground reduction off the pit heap, along with the form and extent of any ancillary operations, including the movement of heavy machinery, to be conducted in association with the scheme, should be the deciding factor in the requirement for such work.

³⁸ Department of the Environment 1990, paragraph 21.

10. ACKNOWLEDGEMENTS AND CREDITS

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PCA Credits

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11. BIBLIOGRAPHY AND SOURCES CONSULTED

Bibliography

- The Archaeological Practice, 2005. *Seghill Landfill Extension, North Tyneside: Archaeological Assessment*, unpublished.
- British Geological Survey, 1974. *Geology of the Tynemouth District*, 1:50,000 map series: Sheet 15, The Stationery Office.
- Burgess, C., 1984. 'The Prehistoric Settlement of Northumberland: A Speculative Survey', in R. Miket and C. Burgess (eds.), *Between and Beyond the Walls: Essays on the Prehistory and History of North Britain in Honour of George Jobey*, John Donald.
- Craster, H.H.E., 1909. *A History of Northumberland Volume IX: The Parochial Chapelries of Earsdon and Horton*, Andrew Reid & Company.
- Department of the Environment, 1990. *Planning Policy Guidance Note 16: 'Archaeology and Planning'*, HMSO.
- Elliot, J. and Charlton, D., 1994. *Backworth: An Illustrated History of the Mines and Railways*, Chilton Iron Works.
- Environment Agency, 1997. *Policy and Practice for the Protection of Groundwater: Groundwater Vulnerability of Tyne & Tees*, 1:100,000 map series: Sheet 5, HMSO.
- Fenton-Thomas, C., 1992. 'Pollen analysis as an aid to the reconstruction of patterns of land-use and settlement in the Tyne-Tees region during the first millennia BC and AD', *Durham Archaeological Journal* 8, 51-62.
- Harding, D.H. 2004. *The Iron Age in Northern Britain*, Routledge.
- Haselgrove, C.C., and V.L. Allon 1982. 'An Iron Age Settlement at West House, Coxhoe, County Durham', *Archaeologia Aeliana*, 5th series, 10, 25-51.
- Higham, N., 1986. *The Northern Counties to AD 1000*, Longman.
- Jobey, G. 1970. 'An Iron Age settlement and homestead at Burradon, Northumberland', *Archaeologia Aeliana*, 4th series, 48, 51-95.
- Jobey, G., 1982. 'The settlement at Doubstead and Romano-British settlement on the coastal plain between Tyne and Forth', *Archaeologia Aeliana*, 5th series, 10, 1-23.
- Local Collections; or Records of Remarkable Events connected with the Borough of Gateshead. 1842*, William Douglas.
- Miket, R., 1984. *The Prehistory of Tyne and Wear*, Northumberland Archaeological Group.
- Newcastle City Council, 2007. *Specification for an Archaeological Desk-Based Assessment and Survey of Earthworks at Fenwick, West Holywell and Eccles Pits, North Tyneside, in advance of reclamation works*, Newcastle City Council, unpublished.
- Newcastle Weekly Chronicle, 22 November 1873. *Our Colliery Villages, Holywell, Northumberland*.

- Pre-Construct Archaeology, 2002. *An Archaeological Excavation at Pegswood Moor Farm, Morpeth, Northumberland. Post-Excavation Assessment Report*, unpublished.
- Petts, D. and Gerrard, C., 2006. *Shared Visions: The North East Regional Research Framework for the Historic Environment*, County Durham Books.
- Seeley, J.V.E., 1973. *Coal Mining Villages of Northumberland and Durham. A Study of Sanitary and Social Facilities 1870-1880*, University of Newcastle MA Thesis, unpublished.
- Taylor, B.J., Burgess, I.C., Land, D.H., Mills, D.A.C., Smith, D.B., and Warren, P.T., 1971. *British Regional Geology: Northern England (4th edition)*, HMSO.
- Timescape Surveys, 2004. *Geophysical Survey at Moor Edge Farm, North Tyneside, Tyne and Wear*, unpublished.
- Tyne and Wear Museums, 2001. *Shiremoor Off-Site Sewers, North Tyneside. Archaeological Watching Brief*, unpublished.
- Tyne and Wear Museums, 2005. *Moor Edge Farm, Tyne and Wear. Archaeological Evaluation*, unpublished.
- Tyne and Wear Museums, 2006. *Proposed Extension of Seghill Landfill Site, Cramlington, Northumberland and Backworth, Tyne and Wear. Archaeological Evaluation*, unpublished.
- Willis, S., 1999. 'Without and Within: aspects of culture and community in the Iron Age of north-eastern England', in B. Bevan (ed.), *Northern Exposure: interpretative devolution and the Iron Ages in Britain*, Leicester Archaeology Monographs, 4.
- Wrathmell, R.E., 1975. *Deserted Medieval Villages in South Northumberland: 2 Volumes*, unpublished PhD thesis.

Maps, Documents and Other Sources

Tyne and Wear Historic Environment Record, Newcastle City Council, West Chapel, Jesmond Old Cemetery, Jesmond Road, Newcastle

The HER takes the form of paper mapping cross-referenced with indexed files containing paper entries ordered numerically. Relevant entries were photocopied during a pre-arranged appointment. A simplified version of the HER is available on-line at <http://sine7.ncl.ac.uk> and this facility was utilised during preliminary research for the DBA.

Newcastle City Library, Local Studies, Exhibition Hall, Civic Centre, Barras Bridge, Newcastle-upon-Tyne, Tyne and Wear

The Local Studies Section of the City Library was visited (this facility was being temporarily housed at Newcastle Civic Centre, during rebuilding of the City Library). Extracts from the 1st, 2nd, 1920 and 1960 editions of the Ordnance Survey map were photocopied.

Northumberland Collections Service, Woodhorn, Queen Elizabeth II Country Park, Ashington, Northumberland

Paper copies of the following historical maps were examined during the visit to the Collections Service and digital copies (supplied on CD) of relevant extracts were ordered:

'*Plan of Halliwell Township in the Parish of Earsdon 1840*'. The apportionment tables ('*Apportionment of the Rent Charges in lieu of Tithes....*') were also examined for information relating to land use, ownership and occupancy.

'*Plan of the Township of Backworth in the Parish of Earsdon 1844*'. Again, the apportionment tables were also examined for information relating to land use, ownership and occupancy.

The 2nd edition Ordnance Survey map (25" to 1 mile) from 1898.

The collection also holds files relating to Backworth Colliery and East and West Holywell Collieries, including newspaper articles and mining records.

Tyne and Wear Archives, The Discovery Museum, Blandford House, Newcastle-upon Tyne, Tyne and Wear

Prior to visiting the Tyne and Wear Archives, its computerised on-line catalogue at www.tyneandweararchives.org.uk was searched for relevant material. The archives hold some material relating to Backworth Colliery, including records of business accounts (DX/1(1-2) and DX145/2/1-7).

North Tyneside Local Studies Centre, Central Library, North Shields

The Local Studies Library was visited on two occasions and extracts from Ordnance Survey maps from 1919 and 1921 were photocopied. The library also holds a collection of photographs and newspaper articles from Backworth and East Holywell Collieries.

Aerial Photograph Collections

The collection of APs held by North Tyneside Council was examined during a pre-arranged appointment. Black and white and colour vertical photographs from 1974, 1980 and 1982 showing the site and its environs were examined and a copy of the 1974 photograph is included in this report. Colour aerial photographs from 2005 were also examined on computer and a copy of one showing the site in detail was printed out for reference, but this cannot be reproduced due to copyright law.

The catalogue of APs held by the Museum of Antiquities, University of Newcastle, available on-line at www.museums.ncl.ac.uk/archive/index holds several photographs of the area in the vicinity of the study site. This area has been much photographed due to the high density of archaeological sites of late prehistoric and Romano-British date visible as cropmarks in the area. Likewise the AP collection held by English Heritage at the National Monuments Record, Swindon holds several APs showing the area of the study site. However, as the study site itself has been utilised as a colliery throughout most of the 20th century, it was not considered necessary to consult these APs as part of the DBA.

Other Websites

Countryside Quality Counts website: www.countryside-quality-counts.org.uk. This was consulted for geological and topographical information regarding the study area.

Durham Mining Museum website: www.dmm.org.uk. This was consulted for information about the collieries in the vicinity of the study site.

Keys to the Past website (the online Sites and Monuments Record (SMR) for County Durham and Northumberland): www.keystothepast.info. This was consulted for SMR information for sites within a c. 1.5km radius of the study site, but lying within Northumberland.

MAGIC website: www.magic.gov.uk/website/magic/. MAGIC is a partnership project involving six government organisations including English Heritage and Natural England. The website is essentially an interactive map collecting information on key environmental schemes and designations.

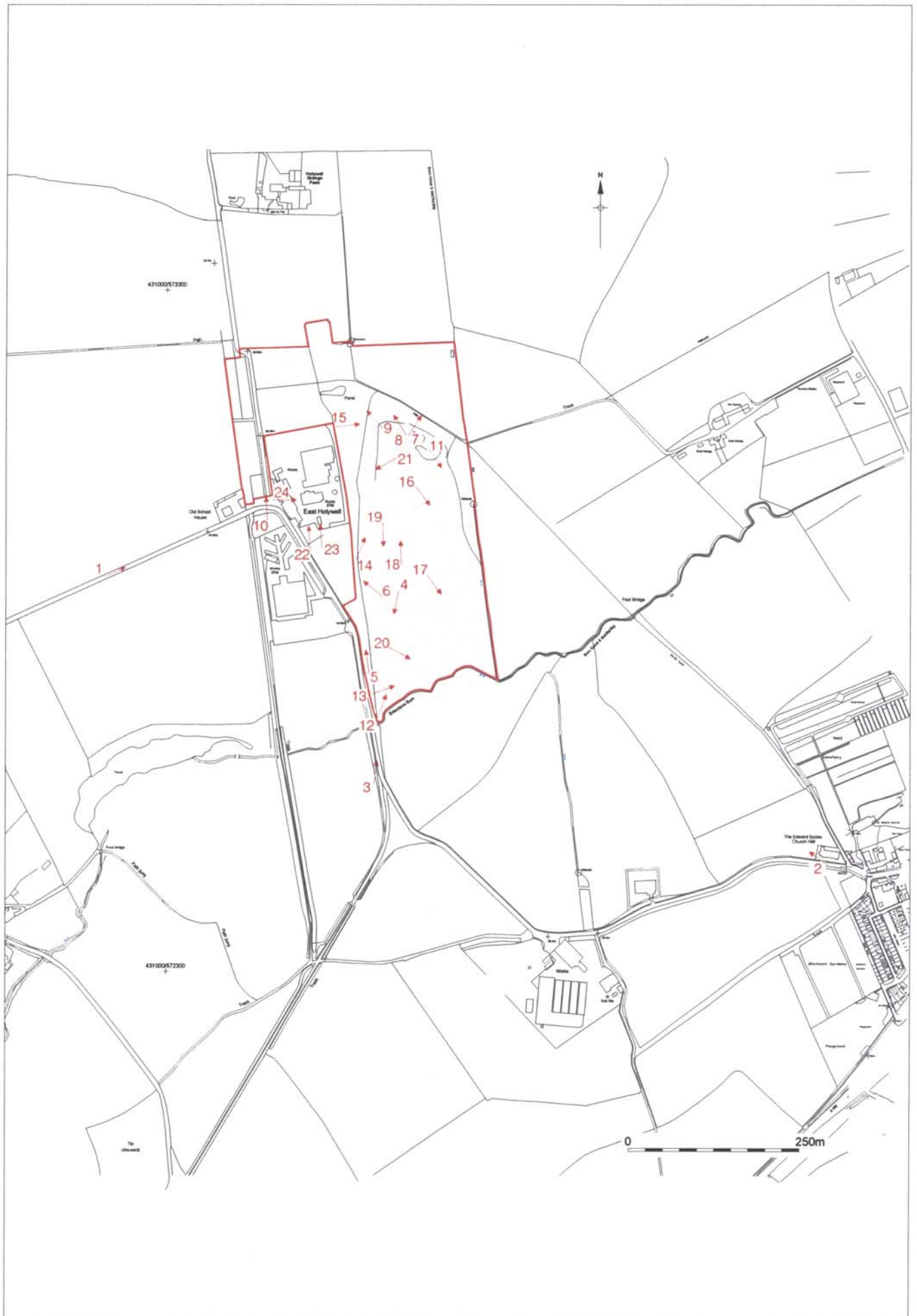
Natural England website: www.naturalengland.org.uk/. This incorporates information compiled for the 'Countryside Quality Counts' project, including information on geology, topography and landuse for the various landscape character areas in North East England.

Pictures in Print website: www.dur.ac.uk/picturesinprint/. Historic maps, including many showing the Tyne and Wear coalfields, were consulted.

Planning Portal website: www.planningportal.gov.uk. This was consulted for information regarding local planning policy relating to archaeology and the historic built environment.

Structural Images of the North East website: www.sine.ncl.ac.uk. This is a comprehensive collection of images celebrating the structural heritage of North East England.

APPENDIX A
PLATES 1- 24



Direction and location of plates
Scale 1:7,500



Plate 1. The site of Fenwick Pit, from the western approach, looking north-east.



Plate 2. The site of Fenwick Pit, from the western end of Earsdon village, looking north-west.



Plate 3. The pit heap, from the southern approach, looking NNE.



Plate 4. The southern approach to the site, from the pit heap, looking SSW.



Plate 5. View along the western access track (the former railway line), looking north.



Plate 6. South-western area of scrubland, from the pit heap, looking north-west.



Plate 7. North-easternmost field, from the pit heap, looking north-east.



Plate 8. The north-western area and pond, from the pit heap, looking north-west.



Plate 9. The northern central pond, from the pit heap, looking north-west.



Plate 10. View along the western farm road and paddock, looking north.



Plate 11. View along the top (east side) of the pit heap, looking south-east.



Plate 12. South-west side of the pit heap, from the western access track, looking NNE.



Plate 13. South side of the pit heap, from the western access track, looking ENE.



Plate 14. North-west side of the pit heap, from the western access track, looking NNE.



Plate 15. North end of the pit heap, from the western access track, looking east.



Plate 16. View along the top (south-east side) of the pit heap, looking south-east.



Plate 17. View along the top (south-east corner) of the pit heap, looking south-east.



Plate 18. View along the top (north-west side) of the pit heap, looking north.



Plate 19. View along the top (south-west side) of the pit heap, looking south.



Plate 20. View across the top (south end) of the pit heap, looking south-east.



Plate 21. Former pit buildings to the west of the study site, from the pit heap, looking south-west.



Plate 22. Former pit buildings to the west of the study site, looking north.



Plate 23. Former winding house to the west of the study site, looking north.



Plate 24. Former winding house, dated 1946, to the west of the study site, looking east.