Black Boy Road and Redburn Row Chilton Moor, Houghton le Spring

Cultural Heritage Assessment



Solstice Heritage Crabtree Hall Business Centre Little Holtby Northallerton North Yorkshire DL7 9LN

www.solsticeheritage.co.uk

Black Boy Road And Redburn Row, Chilton Moor, Houghton le Spring

Cultural Heritage Assessment

Prepared for:

Jim Brightman BA (Hons), MLitt, MIfA

Solstice Heritage

Crabtree Hall Business Centre

Little Holtby

Prepared by: Northallerton

North Yorkshire

DL7 9LN

SOL1314-32

DOC1415-2

Project Ref: May 2014

Report Ref: May 2014

Dates of Fieldwork:

Date of Report:



©Solstice Heritage 2014

ACKNOWLEDGEMENTS

Solstice Heritage would like to thank Mr J. Bailey and Lee Ellison of Dixon Dawson Architects for commissioning the study. Thanks are also extended to the various repositories of guidance and information consulted for this assessment, especially to Jennifer Morrison of the Urban Design and Conservation Team at Newcastle City Council, Nick Boldrini of the Archaeology Section at Durham County Council, and also the staff of the various record offices and libraries visited for this work.



CONTENTS

	itive Su		
1.		ction	
1.1		ect Background	
1.2		Location	
1.3		s of the Study	
	-	nd Guidance Framework	
2.1		slation	
2.2	2 Poli	су	
	2.2.1	National	
	2.2.2	Local	4
2.3	Gui	dancedance	5
	2.3.1	National	5
	2.3.2	Regional	5
4.	Metho	dology and Sources	7
4.1	Met	hodology	7
4.2	2 Asse	essment of Significance	7
4.3	Sou	rces	8
	4.3.1	Nationally Designated Sites	8
	4.3.2	HER	8
	4.3.3	Cartographic Sources	8
	4.3.4	Aerial Photography	8
	4.3.5	Published and Unpublished Sources	8
4.4	- Chr	onology	8
4.5	Assı	umptions and Limitations	9
4.6	Сор	yright	9
5.	Baselin	e: Sources	10
J.			
5.1	Geo	logy and Geomorphology	10
	Geo		10
5.1 5.2	Geo	logy and Geomorphology	10 10
5.1 5.2	Geo Her	logy and Geomorphologytigge Assets within the Development Area (Fig. 2)	10 10 10
5.1 5.2	Geo Her 5.2.1 5.2.2	logy and Geomorphology itage Assets within the Development Area (Fig. 2) Designated	10 10 10
5.1 5.2 5.3	Geo Her 5.2.1 5.2.2	logy and Geomorphology	10 10 10 10
5.1 5.2 5.3	Geo Her 5.2.1 5.2.2 Her	logy and Geomorphology	10 10 10 10 10
5.1 5.2 5.3	Geo Her 5.2.1 5.2.2 Her 5.3.1 5.3.2	logy and Geomorphology	10 10 10 10 10
5.1 5.2 5.3	Geo Her 5.2.1 5.2.2 Her 5.3.1 5.3.2	logy and Geomorphology	10 10 10 10 10 10 10
5.15.25.35.4	Geo Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Cart	logy and Geomorphology	10 10 10 10 10 10 12
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geo Geo Georgia Georgi	logy and Geomorphology	10 10 10 10 10 10 10 12 12 13
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geo Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Carl Aeri Prev	logy and Geomorphology	10 10 10 10 10 10 10 12 12 13
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geod Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Cart 6 Aeri 6 Prev 7 Chro 5.7.1	logy and Geomorphology	10 10 10 10 10 10 12 12 13 13
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geo Geo Georgia Georgi	logy and Geomorphology	10 10 10 10 10 10 12 12 13 13 13
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geod Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Cart 6 Aeri 6 Prev 7 Chro 5.7.1	logy and Geomorphology	10 10 10 10 10 10 12 12 13 13 14 14
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geod Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Cart 6 Prev 7 Chro 5.7.1 5.7.2 5.7.3	logy and Geomorphology	10 10 10 10 10 10 12 13 13 14 14
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geod Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Cart Aeri Prev 7 Chro 5.7.1 5.7.2 5.7.3 5.7.4	logy and Geomorphology	10 10 10 10 10 10 12 12 13 13 14 14 14
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geod Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Aeri 6 Prev 7 Chro 5.7.1 5.7.2 5.7.3 5.7.4	logy and Geomorphology	10 10 10 10 10 10 12 13 13 14 14 14 14
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geod Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Cart 6 Prev 7 Chro 5.7.1 5.7.2 5.7.3 5.7.4 5.7.5 5.7.6	logy and Geomorphology	10 10 10 10 10 10 12 13 13 14 14 14 14 15 15
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geod Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Cart 6 Prev 7 Chro 5.7.1 5.7.2 5.7.3 5.7.4 5.7.5 5.7.6 5.7.7 5.7.8	logy and Geomorphology	10 10 10 10 10 10 12 13 13 14 14 14 15 15 15
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geod Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Cart 6 Prev 7 Chro 5.7.1 5.7.2 5.7.3 5.7.4 5.7.5 5.7.6 5.7.7 5.7.8	logy and Geomorphology	10 10 10 10 10 10 12 13 13 14 14 14 15 15 15
5.1 5.2 5.3 5.4 5.5 5.6 5.7	Geod Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Cart 6 Aer 6 Prev 7 Chro 5.7.1 5.7.2 5.7.3 5.7.4 5.7.5 5.7.6 5.7.7 8.7.9	logy and Geomorphology	10 10 10 10 10 10 12 12 13 13 14 14 14 15 15 15 16
5.1 5.2 5.3 5.4 5.5 5.7	Geod Her 5.2.1 5.2.2 Her 5.3.1 5.3.2 Cart 6 Aer 6 Prev 7 Chro 5.7.1 5.7.2 5.7.3 5.7.4 5.7.5 5.7.6 5.7.7 8.7.9	logy and Geomorphology	10 10 10 10 10 12 12 13 13 14 14 14 15 15 15 17



6.2 Setting Study	17
6.2.1 Methodology – Assessing Significance and Contribution	17
6.2.2 Methodology – Practical Assessment	18
6.2.3 Setting Assessment	19
7. Assessment of Effects	
7.1 Archaeological Potential	22
7.2 Potential Direct Effects	
7.3 Potential Indirect Effects (Setting)	22
7.4 Recommendations	
8. Sources	24
8.1 Bibliography	24
8.2 Websites	
Appendix 1 – Figures	26
Appendix 2 – Gazetteer	



LIST OF FIGURES

Fig. 1 Site location	27
Fig. 2 Location of heritage assets within study area	28
Fig. 3 Extract from Morden's map of 1722	29
Fig. 4 OS 1 st Edition 1857	30
Fig. 5 OS 1 st Revision 1895	31
Fig. 6 OS 2 nd Revision 1915	32
Fig. 7 OS 3 rd Revision 1939	33
Fig. 8 OS County Series 1958	34
Fig. 9 Archaeological sites transcribed from aerial photography	35
Fig. 10 Previous archaeological interventions and fieldwork	36
Fig. 11 General view east-south-east across Site A from near the railway and Black Boy Bridge	37
Fig. 12 View of the current Black Boy Bridge from the north-west corner of Site A	38
Fig. 13 View south down the former waggonway adjacent to Site B	39
Fig. 14 General view south-east across Site B	40
Fig. 15 Composite ZTV in relation to designated and non-designated heritage assets in the study area.	41
LIST OF TABLES	
Table 1 Legislation relating to cultural heritage in planning	3
Table 2 Key passages of NPPF in reference to cultural heritage	3
Table 3 Key passages of Sunderland City Council's Unitary Development Plan in reference to cultural h	eritage 4
Table 4 National guidance documentation consulted	5
Table 5 Key principles of the Regional Statement of Good Practice	
Table 6 Criteria for assessment of significance	7
Table 7 Development of the proposed development site on early Ordnance Survey mapping	12
Table 8 Previous archaeological interventions within the study area	13
Table 9 Additional criteria for assessment of change to setting	18
Table 10 Assessment of potential effect of the proposed development on setting of heritage assets	20
Table 11 Heritage assets recorded in County Durham and Tyne and Wear HERs	42
Table 12 Waggonways recorded in the Tyne and Wear HER	55



EXECUTIVE SUMMARY

A cultural heritage assessment was commissioned by Dixon Dawson Chartered Architects on behalf of Mr J. Bailey in order to assess the potential effects of a proposed housing development on the cultural heritage resource of the two identified plots of land, and also on any heritage assets within the wider area (effects on setting). The proposed development site is split into two separate plots labelled as Site A (0.9ha) and Site B (0.4ha) separated by a smaller plot that currently houses an agricultural building. Site A is centred at NZ 32085 49242 at a height of c.53mOD, and Site B is centred at NZ 32242 49183 at a height of c.50mOD. The proposed development includes a total of 26 plots for new housing of various sizes, with 6 on Site B and 20 on Site A. The study area for the CHA comprises a 1km buffer around the proposed development boundary in line with advice from the Tyne and Wear Archaeology Officer, though information from all sources was obtained for a buffer of 2km to allow a rapid appraisal and ensure that any particular significant heritage assets within this area were also included in the assessment.

The cartographic assessment, in particular, has demonstrated the presence, at least through the 19th century, of likely industrial buildings in both Site A and Site B. Site A contains the former line of Black Boy Road and up to two ranges of buildings which follow that line, as well as the no-longer-extant remains of post-medieval ridge and furrow agriculture towards the southern end of the plot. The buildings were removed during the first half of the 20th century with the plot empty by 1958 and it is likely that sub-surface remains survive relating to these structures. Site B contains a smithy dating to at least the early 19th century and potentially earlier, along with ancillary buildings and a spur of waggonway leading into the yard. All structures on the site were removed at some point between 1895 and 1915, and the walkover survey identified an area of disturbed ground that could potentially be the accumulated demolition material spread in the centre of the plot. It is, however, considered likely that sub-surface remains survive relating to these structures.

Of the heritage assets assessed in the wider landscape, there would be no effect on setting for the majority given the distance to the proposed development, the lack of intervisibility due to intervening obstacles and screening, and the fact that the proposed development does not disrupt the coherence of any groups of heritage assets where such spatial relationships form a component of their setting. There are minor adverse effects on the setting of two heritage assets or groups of heritage assets: the adjacent Black Boy Bridge and those sections of the former waggonways and railways that are adjacent to both Site A and B of the proposed development. Both heritage assets are non-designated monuments of local or regional significance and do not meet the criteria outlined in NPPF paragraph 139 - i.e. that non-designated heritage assets of demonstrably equivalent significance to scheduled monument should be considered subject to the same policies and weighting as designated heritage assets (CLG 2012, 32). With both heritage assets the adverse effect is considered to be in the range of low to moderate. Given, however, that the contribution that setting makes to the overall significance of both assets is low, the overall adverse effect is considered to be low and does not constitute substantial harm.

Considering the likely presence of archaeological remains within the proposed development area, and therefore the likely requirement for mitigation to offset the adverse effect of groundworks, it is recommended that a fieldwork-based evaluation be undertaken to accompany the planning application. A programme of limited and targeted evaluation trenching is recommended based upon a specification agreed with the Tyne and Wear Archaeological Officer, and with a narrow aim of establishing the level of survival and potential significance of archaeological remains in both Site A and Site B. This would satisfy the requirements of paragraph 128 of NPPF (CLG 2012, 31) and allow any required mitigation to be proportionate to the potential loss of significance, representing the "balanced judgement" as required by paragraph 135 of NPPF (CLG 2012, 31).



1. INTRODUCTION

1.1 PROJECT BACKGROUND

This report has been commissioned by Dixon Dawson Architects Ltd on behalf of Mr J. Bailey in advance of a planning application for proposed residential development on two plots of land adjacent to Black Boy Road and Redburn Road, Chilton Moor, Houghton le Spring. The purpose of this cultural heritage desk-based assessment (CHA) is to provide baseline information on the cultural heritage resource in the proposed development site and surrounding area and to assess any potential effects of the proposed development on that resource.

1.2 **SITE LOCATION**

The proposed development site is split into two separate plots labelled as Site A (0.9ha) and Site B (0.4ha) separated by a smaller plot that currently houses an agricultural building (Fig. 1). Site A is centred at NZ 32085 49242 at a height of c.53mOD, and Site B is centred at NZ 32242 49183 at a height of c.50mOD. The proposed development includes a total of 26 plots for new housing of various sizes, with 6 on Site B and 20 on Site A. The study area for the CHA comprises a 1km buffer around the proposed development boundary in line with advice from the Tyne and Wear Archaeology Officer, though information from all sources was obtained for a buffer of 2km to allow a rapid appraisal and ensure that any particular significant heritage assets within this area were also included in the assessment.

1.3 AIMS OF THE STUDY

The aims of the study are:

- To assess the known cultural heritage resource within the proposed development area and the study area
- To assess the potential effects of the proposed development upon the known and potential cultural heritage resource
- Make recommendations based upon this assessment as to any potential requirement for evaluation and/or mitigation and off-setting which may be required.



2. POLICY AND GUIDANCE FRAMEWORK

2.1 LEGISLATION

National legislation which applies to the consideration of cultural heritage within development and the wider planning process is set out in Table 1 below.

Table 1 Legislation relating to cultural heritage in planning		
Title	Key Points	
Ancient Monuments and	Scheduled Monuments, as defined under the Ancient	
Archaeological Areas Act 1979	Monuments and Archaeological Areas Act (1979), are	
(amended by the National Heritage	sites which have been selected by a set of non-statutory	
Act 1983 and 2002)	criteria to be of national significance. Where scheduled	
	sites are affected by development proposals there is a presumption in favour of their physical preservation. Any works, other than activities receiving class consent under The Ancient Monuments (Class Consents) Order 1981, as amended by The Ancient Monuments (Class Consents) Order 1984, which would have the effect of demolishing, destroying, damaging, removing, repairing, altering, adding to, flooding or covering-up a Scheduled Monument require consent from the Secretary of State for the Department of Culture, Media and Sport.	
Planning (Listed Building and	Buildings of national, regional or local historical and	
Conservation Areas) Act 1990	architectural importance are protected under the	
	Planning (Listed Buildings and Conservation Areas) Act	
	1990. Buildings designated as 'Listed' are afforded	
	protection from physical alteration or effects on their	
	historical setting.	
Hedgerows Regulations 1997	The Hedgerow Regulations (1997) include criteria by	
	which hedgerows can be regarded as historically	
	important (Schedule 1 Part III).	

2.2 Policy

2.2.1 NATIONAL

The principal instrument of national planning policy within England is the National Planning Policy Framework (NPPF) (CLG 2012) which outlines the following in relation to cultural heritage within planning and development:

Table 2 Key	Table 2 Key passages of NPPF in reference to cultural heritage		
Paragraph	Key Points		
7	Contributing to protecting and enhancing the historic environment is specifically noted as being a part of what constitutes 'sustainable development' – the "golden thread" which, when met, can trigger presumption in favour.		
17	A core planning principle is to "conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for the contribution to the quality of life of this and future generations".		
128	During the determination of applications "local planning authorities should require an applicant to describe the significance of any heritage assets affected, including		



	any contribution made by their setting". This information should be proportionate to the significance of the asset and only enough to "understand the potential impact of the proposal on their significance". The normal minimum level is expected to be a desk-based assessment of proportional size "and, where necessary, a field evaluation".
129	Paragraph 129 identifies that Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.
132	It is noted that significance – the principal measure of inherent overall heritage worth – can be harmed or lost through development within its setting. Heritage assets are an irreplaceable resource and any adverse effects require "clear and convincing justification" relative to the significance of the asset in question.
135	At paragraph 135 it states that the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.
139	At paragraph 139 it states that non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.
141	In paragraph 141 amongst other matters it states that planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.

2.2.2 LOCAL

Under planning law, the determination of an application must be made, in the first instance, with reference to the policies of the local development plan. For the proposed development this is represented by saved policies from the Sunderland City Council's Unitary Development Plan (UDP) that was adopted in 1998. The following are extracts from the saved policies relevant to cultural heritage, and in particular to this assessment:

Table 3 Key passages of Sunderland City Council's Unitary Development Plan in reference to cultural heritage	
Policy	Text
В8	There will be a presumption in favour of retaining listed buildings. Demolition in whole or substantive part will only be given consent when all other avenues for retention (including preservation in charitable or community ownership) have been explored and found not to be feasible or it is considered that redevelopment would produce substantial benefits for the community which would decisively outweigh the loss resulting from demolition. Consent will only then be given when planning permission for an acceptable replacement development has been granted, which will also be subject to conditions requiring the letting of a contract prior to demolition.
B11	The city council will promote measures to protect the archaeological heritage of sunderland and ensure that any remains discovered will be either physically preserved



or recorded.

2.3 **GUIDANCE**

2.3.1 NATIONAL

During the assessment and preparation of this document, the following guidance documents have been referred to, where relevant:

Table 4 National guidance documentation consulted	
Document	Key Points
National Planning Practice Guidance (NPPG) (CLG 2014)	The Department for Communities and Local Government (CLG) released the guidance to NPPF in March 2014 in a 'live' online format which, it is intended can be amended and responsive to comment, particular as case law develops in relation to the implementation of NPPF. In relation to cultural heritage the NPPG follows previous guidance in wording and 'keys in' with, in particular, extant English Heritage guidance documents. The NPPG references many similar terms to the previous PPS5 Practice Guidance.
Conservation Principles, Policies and Guidance (EH 2008)	This document sets out the guiding principles of conservation as seen by English Heritage and also provides a terminology for assessment of significance upon which much that has followed is based.
The Setting of Heritage Assets (EH 2011)	This document represents the latest statement by English Heritage as to best practice for the assessment of potential effects of development upon the setting of heritage assets. It provides a loose framework for this assessment, and until such time as specific guidance is released on the application of NPPF, this document is normally held to be industry best practice. It advocates a staged process of assessment outlined in the appropriate section below.
Standard and Guidance for Historic Environment Desk-Based Assessment (IfA 2012)	This document represents non-statutory industry best practice as set out by the Institute for Archaeologists. This assessment has been undertaken to these standards, as subscribed to by Solstice Heritage.

2.3.2 REGIONAL

Archaeological work within Tyne and Wear is required to comply with *Yorkshire, The Humber and The North East: A Regional Statement of Good Practice for Archaeology in the Development Process* (SYAS 2011). The key principles are summarised in the table below:

Table 5 Key principles of the Regional Statement of Good Practice		
Principle	Key Points	
2	Archaeological work should be undertaken by professionally qualified and appropriately experienced archaeologists and organisations.	
3	All archaeological work will have a scope agreed in advance with the archaeological curator, and any changes to the scope or methodology will be agreed in writing with the archaeological curator.	
4	Monitoring of archaeological work by the local archaeological curator will be the norm, and reasonable notice of commencement of fieldwork will be given by the archaeologist.	



5	Archaeological work will be undertaken in accordance with the best practice guidance of English Heritage and the IfA.
6	The local Historic Environment Record should be consulted prior to the commencement of fieldwork.
7	Archaeological work in the planning process should have regard to national and local published research agenda (see section 4.2 below)
9	Reports and required data will be submitted to the archaeological curator and local HER in a timely fashion and in accordance with the agreed WSI.
10	Any comments made by the archaeological curator on reports and outputs will be made within a reasonable timetable of receipt.
11	Where appropriate significant archaeological findings will be submitted for publication in a suitable journal or journals.
12	Any archive produced will be deposited in an ordered and acceptable fashion within a reasonable timetable, the details of which will be given in the project report.
13	During the course of archaeological work arrangements will be made, where possible, for disseminating information about the site to the general public.



4. METHODOLOGY AND SOURCES

4.1 METHODOLOGY

The following tasks were undertaken as part of this assessment:

- Consultation of both Tyne and Wear and County Durham Historic Environment Records (HER) and local archives
- Compilation of all appropriate desk-based and online resources including National Heritage
 List for England
- Creation of a bespoke geographical information system (GIS) to allow for the storage and analysis of all data
- Site visit to establish ground conditions and assessment of potential effects on setting of specific designated heritage assets within the wider study area
- Synthesis of sources consulted and preparation of an assessment of known and potential direct and indirect effects (this document).

4.2 ASSESSMENT OF SIGNIFICANCE

Significance can be defined using a number of criteria derived from varied sources, all of which can contribute useful factors to the process. Where assessment of significance is necessary, particularly in determining potential effects of the development, the following criteria have been adopted in part or in whole, depending on what can best articulate the nature of the heritage asset being described:

Table 6 Criteria for assessm	ent of significance
Source	Significance Criteria
Conservation Principles,	This document highlights four 'values' contributing to significance:
Policies and Guidance	Evidential
(English Heritage 2008)	Historic
	Aesthetic
	Communal
NPPF (CLG/DCMS/English	Based upon the changes instigated through the now-cancelled PPS5
Heritage 2012)	and its associated guidance, the assessment of significance is based
	upon four 'interests' and their relative 'importance':
	Archaeological
	Architectural
	Artistic
	Historic
Ancient Monuments and	This act gives guidance on the criteria considered during the
Archaeological Areas Act	decision to provide designated protection to a monument through
1979	scheduling. The criteria are:
	Period or category
	Rarity
	Documentation (either contemporary written records or
	records of previous investigations)
	Group value
	Survival/condition
	Fragility/vulnerability
	Diversity (importance of individual attributes of a site)
	Potential



4.3 **SOURCES**

4.3.1 NATIONALLY DESIGNATED SITES

The National Heritage List was consulted to allow an assessment of designated heritage assets, including:

- Scheduled Monuments
- Listed Buildings
- Registered Parks and Gardens
- Registered Battlefields
- Protected Wreck Sites
- Conservation Areas

A list of these assets is reproduced in the gazetteer in Appendix 2 below.

4.3.2 HER

The Tyne and Wear Historic Environment Record (TWHER) and Durham Historic Environment Record (DHER) were both consulted for the study area, given that it crossed into both local authority areas. Information relating to the proposed development site relates to the assessment of potential direct effects, whereas information relating to the study area was consulted to allow both an assessment of the general archaeological and historic character of the area, and also to feed into the assessment of setting, over and above any potential effects on designated heritage assets.

4.3.3 CARTOGRAPHIC SOURCES

Assessment of relevant mapping held in the local archives and digital mapping available online was undertaken to provide information on the archaeological potential of the proposed development site and its historic development.

4.3.4 AERIAL PHOTOGRAPHY

The proposed development site lies within the boundaries of a county-wide aerial photograph transcription focusing on aggregate-bearing geologies of County Durham and undertaken as part of the English Heritage-funded National Mapping Programme (Hewitt *et al.* 2011). This information was obtained from the DHER and has been included in discussion below. Online digital vertical aerial imagery was also consulted (e.g. Google Earth).

4.3.5 PUBLISHED AND UNPUBLISHED SOURCES

In addition, relevant published and unpublished sources were consulted, relating both to specific sites of interest, and also to the general archaeological and historic character of the study area and its environs. Unpublished reports of previous archaeological interventions (grey literature) were consulted online where relevant.

4.4 CHRONOLOGY

Where chronological and archaeological periods are referred to in the text, the relevant date ranges are broadly defined as follows:

- Palaeolithic (Old Stone Age): 1 million 12,000 BP (Before present)
- Mesolithic (Middle Stone Age): 10000 4000 BC



Neolithic (New Stone Age): 4000 – 2400 BC

Bronze Age: 2400 – 700 BC
 Iron Age: 700 BC – AD 43

• Roman/Romano-British: AD 43 – 410

• Anglo-Saxon/Anglo-Scandinavian: AD 410 – 1066

Medieval: AD 1066 – 1530
 Post-medieval: AD 1530 – 1750
 Industrial: AD 1750 – 1900
 Modern: AD 1900 – Present

4.5 ASSUMPTIONS AND LIMITATIONS

Data and information obtained and consulted in the compilation of this report has been derived from a number of secondary sources. Where it has not been practicable to verify the accuracy of secondary information, its accuracy has been assumed in good faith. The information accessed from the local authority HERs and national lists of designated heritage assets represents a record of known assets and their discovery and further investigation. Such information is not complete and does not preclude the future discovery of additional assets and the amendment of information about known assets that may affect their significance and/or sensitivity to development effects. All statements and opinions arising from the works undertaken are provided in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

4.6 **COPYRIGHT**

Solstice Heritage will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).



5. BASELINE: SOURCES

5.1 GEOLOGY AND GEOMORPHOLOGY

The topographic setting of the proposed development site is a relatively flat plateau that dips slightly to the east before ascending to the local high point of Houghton le Spring before dipping to the coast. To the west of the proposed development site, the land plateaus before dipping into the Wear Valley as it flows north past Lumley Castle and Chester le Street.

The underlying bedrock of the study area, and much of its environs, is the interbedded mudstone, siltstone and sandstone of the Pennine Middle Coal Measures, and the presence of the coal seams in this area have resulted in the dominant industry of the post-medieval and modern periods (see below). The superficial geology of the proposed development area and its immediate surroundings is dominated by glaciolacustrine clays – fine grained sediments laid down through standing water in a likely post-glacial environment. This thick clay substratum can be fertile, but can also be stiff and heavy, resulting in the preservation of upstanding remains such as the medieval and post-medieval ridge and furrow agriculture (see below), which were only levelled in the 20th century. The fine clay can also be a useful raw material in its own right, perhaps best illustrated by the known post-medieval brickworks in the area (see below).

5.2 HERITAGE ASSETS WITHIN THE DEVELOPMENT AREA (FIG. 2)

5.2.1 DESIGNATED

There are no designated heritage assets within the footprint of the proposed development.

5.2.2 Non-Designated

There is one non-designated asset entirely within Site B of the proposed development area recorded in the HER as a smithy, with no further information. A more-detailed assessment of the extent of the buildings and their associated infrastructure is possibly through the cartographic regression (see below). Immediately adjacent to both Sites A and B are extant remains of former waggonways or rail lines. To the west of Site A is the north-south Rainton Meadows Branch of the North Eastern Railway, and between the two sites is a branch of the Londonderry Railway running from the Britannia Iron Works to meet the North Eastern Railway to the south of the proposed development area.

5.3 HERITAGE ASSETS WITHIN THE STUDY AREA (FIG. 2)

5.3.1 DESIGNATED

Within the study area there are two designated heritage assets: the Grade II Listed Buildings within Morton Wood *c*.0.8km north-west of the proposed development area. The central house is of early 18th century construction and represents the rebuilding of an earlier hall on the site. This house was itself extensively rebuilt in the mid 19th century. A private chapel of the Belasyse family, owners from 1525-1678, is likely the most significant survival of the earlier house. The Listed house is closely associated with a Grade II Listed ice house of hemispherical brick construction and covered with an earth mound.

5.3.2 Non-Designated

There are a total of 38 records within the combined HERs consulted for the study area, all of which represent sites or remains dating to the post-medieval, industrial and early modern periods, broadly



from the 18th to the 20th century. Two of the records replicate information for the two Listed Buildings described above and the rest are non-designated heritage assets.

All the heritage assets dated to the 18th century refer to the Rainton Bridge area and are known from a plan of the immediate area dated to 1777. This plan shows an unnamed pit, a small group of buildings and a number of waggonways. The waggonways are a significant feature of the local area linking the network of collieries and works to the local and national rail network. Although the mapped waggonways relate to a number of different periods, their potential significance is illustrated by the section at Rainton Bridge South, which was investigated through geophysical survey, evaluation trenching and excavation in 2001-2. The HER records the wagonway:

"Two branches of this wagonway existed in 1777 (shown on a plan surveyed for the Dean and Chapter of Durham by J.C. Mowbray NRO 578/321) within land owned by a Henry Walton, Mr Maskell and Mr Rotherham. It served a pit which lay south of the later Nicholson's Pit and North Pit. The wagonway is also shown on a manuscript plan of Rainton Colliery Grounds of probable late eighteenth century date (NRO 3410 Wat 34/18) and on Greenwood's plan of 1820. With the opening of the Rainton to Seaham Railway (HER 2976) in 1831 the wagonway routes would have lapsed. Only the section south-east of North Pit remained in use, linking into the new line. Three trenches were dug across the waggonway by Pre-Construct Archaeology for Geoquest Associates in July 2001 in advance of the construction of Rainton Bridge South Business Park. The route of the waggonway was defined by two parallel ditches and rudimentary fence lines, and a posthole alignment indicated a more permanent boundary between the wagonway wayleave and the neighbouring land. In trench 2 parts of two timber sleepers survived - a section of oak tree branch pierced by holes for the dowels which would have pegged the rails to the sleepers. A timber drain was recorded. After the abandonment of the wagonway, there were a series of dumping events. A final phase of excavation was undertaken in November 2002. This proved that the wagonway was a double way, diverging to form a four track system approaching the pithead of North Pit. This may represent a marshalling area as opposed to four loading platforms. This wagonway may be the earliest example of a colliery wagonway to be excavated in the country".

The dominant theme of the known heritage assets dating to the 19th century is the increase in industry, and particularly in the extraction and transport of raw materials, though sometime also representing processing. Four of the known sites relate to brickworks of varying scales, predominantly identified from early OS mapping, and one of which explicitly includes brick kilns. The footprint of the large Britannia Ironworks also lies partially inside the study area.

The majority of 19th century sites relate to mapping of the collieries and individual pits within the local area, all of which are now either fully infilled or have been reinstated as wetlands, most notably the SSSI nature reserve at Rainton Meadows. Most of the coal mining records within the HER are part of Rainton Colliery – a substantial complex of workings active through the 19th and 20th centuries and the centre of a web of local waggonways linked to the Rainton and Seaham Railway. The waggonways and railways comprise the majority of the remainder of the known 19th century heritage assets in the study area, and also include the original iron Black Boy Bridge adjacent to the proposed development site. The remainder of known 19th century heritage assets comprise examples of local historic architecture, both vernacular such as the Moors and North Hetton Farm complexes, and polite such as the late 19th century Church of St Andrew in Chilton Moor.



There are three 20th century heritage assets recorded in the HER for the study area, all related to communal structures within the surrounding villages: the Royal British Legion war memorial and junior school in Fencehouses, and the war memorial at the Church of St Andrew in Chilton Moor.

5.4 CARTOGRAPHIC SOURCES

Consultation of the historic mapping showed that whilst there are a number of early pictorial maps of the area none of these are at a sufficient scale to provide any detail of the proposed development site, for example Morden's 1722 map from Camden's *Britannia*, which shows Lumley Castle, Lumley and Lambton (Fig. 3). The development of the proposed development site is reasonably well-charted on the Ordnance Survey mapping as outlined in the table below:

Date	Fig.	Name	Description
1857	4	1 st Edition	Site A contains a number of long buildings ranged along its northern edge facing Black Boy Road, though the road is not on its current alignment, instead running at a slight angle across the northern portion of Site A to meet Redburn Row. Site B shows the smithy noted in the HER. The main smithy is an 'L'-shaped building occupying the eastern end with a number of smaller buildings around the edge of the plot, and also a small branch of waggonway running from the smithy to the adjacent track, and including a small spur in the plot itself.
1895	5	1 st Revision	By 1895 there had been a few minor alterations to both Sites. Site A still has a range of buildings shown along Black Boy Road, still not on its modern alignment. To the rear of these buildings there is a second range, which has ben modified between the two map editions with some demolition and some construction. In Site B, the smithy is still shown, as is the spur of waggonway and one other building. The smaller buildings along the western edge of the plot have been demolished, however, and the yard areas around the smithy have been formalised.
1915	6	2 nd Revision	There is no change to Site A in the 20 years between these two editions, but with Site B almost all features have been removed, including the smithy, ancillary buildings and waggonway spur. A small building is still visible in the south-east corner of the plot.
1939	7	3 rd Revision	By 1939 the route of Black Boy Road has been altered to its modern course, though the old route appears preserved in possible fence lines, as is the rear of the original range of buildings on the site, demolished at some point between the surveying of these two maps. There is no change to Site B.
1958	8	County	By 1958 all trace of earlier structures has been removed from both Site A and Site B, as they appear in the present day.

5.5 AERIAL PHOTOGRAPHY

Substantial parts of the aggregate-bearing geologies of County Durham, including areas immediately across the local authority boundaries such as proposed development site, had aerial photograph assessment and mapping undertaken as part of the English Heritage-funded National Mapping Programme (NMP) (Hewitt *et al.* 2011). The resultant mapping for the study area is reproduced as Fig.



9 below and shows that the majority of archaeological sites visible from aerial photography are medieval to post-medieval ridge and furrow, almost all of which has been subsequently levelled.

An assessment of the currently available digital vertical aerial photography (e.g. Google Earth) did not show any additional unknown features within the immediate vicinity of the proposed development.

5.6 PREVIOUS WORK (FIG. 10)

Within the study area, there have been five previous archaeological assessments or interventions:

Table 8	Previous archaeological interventi	ons within the study area
Code	Intervention	Information where relevant
42602	Wheatley Head, West Rainton	Fieldwalking survey undertaken between two phases of
		evaluation trenching after lithic scatters were noted. No
		in-situ features were noted relating to the scatters.
1940	Sunderland Central Route	Assessment in advance of proposed road scheme.
		Proposed route ran through the former Lambton
		Cokeworks. The potential significance resulted in
		recommendations for detailed mitigation strategy.
1969	Rainton Bridge South	Site once occupied by North Pit and a farm with
1970		possible pre-industrial origins. Two branches of a
		C17/C18 wagonway were identified. Geophysics was
		conducted in advance of evaluation trenching.
1962	Rainton Bridge South	Six evaluation trenches to follow geophysics survey
		noted above, investigating a wooden wagonway of 18 th
		century date, a shaft mound of North Pit, North Pit
		Farm and North Pit Cottages. Further excavation was
		recommended.
2259	Rainton Bridge South	Excavation of the 18 th century wagonway noted above.
		This proved to be a double way, diverging to form a
		four-track system approaching the pithead of North Pit.
		This may represent a marshalling area as opposed to
		four loading platforms. This wagonway may be the
		earliest example of a colliery wagonway to be
		excavated in the country.

5.7 CHRONOLOGICAL OVERVIEW

5.7.1 PALAEOLITHIC TO MESOLITHIC

Ice Age and earlier (Palaeolithic) finds and sites are extremely rare across northern Britain, due in part to the ice sheets which extended across much of the North making substantial areas uninhabitable until much later than in parts of Southern Britain. The majority of potential late glacial finds and sites within the Tyne and Wear and County Durham are known from either a coastal or off-shore context, or from the southern extremes of the County around Teesdale and the Stainmore Pass in the North Pennines (e.g. Jacobi 1976; Coggins *et al.* 1989).

Following the retreat of the glaciers, the Mesolithic period, or Middle Stone Age is characterised by a recolonisation of the tundra landscape, though still as part of a mobile hunter-gatherer-fisher subsistence lifestyle. Sites are rare, but in the North East, coastal areas in particular represent attractive settlement locales during the Mesolithic period, and many recent significant sites of the



period have been found in settings which provide a combination of freshwater, terrestrial and coastal marine resources e.g. Howick, Northumberland (Waddington 2007) or East Barns, Dunbar (Gooder 2007). The only early prehistoric remains noted in the study area are Mesolithic lithic artefacts identified in the multi-period scatters recovered during evaluation and fieldwalking at Wheatley Head, West Rainton *c*.0.9km south-west of the proposed development area (Wood 2001).

5.7.2 NEOLITHIC

The Neolithic, or New Stone Age, coincided with the introduction of agriculture and sedentism as well as the emergence of a package of diverse material culture and the long-range trade networks to support this vibrant new cultural drive. The Neolithic in the North East is perhaps best represented by the extensive monuments of the Wear Valley to the south, or rural Northumberland to the north which, as with their counterparts in other regions, suggest the emergence of a centralised society developing complex systems of ritual and social interaction. The remains of the settlements that accompanied these monuments, as in many other parts of the country, remain elusive and evidence is sparse and scattered (Harding 1970, 191). The only Neolithic remains noted in the study area are lithic artefacts identified in the multi-period scatters recovered during evaluation and fieldwalking at Wheatley Head, West Rainton c.0.9km south-west of the proposed development area (Wood 2001).

5.7.3 Bronze Age

Despite a well-researched and reasonably extensive Bronze Age upland archaeology in North East England more generally, the known remains of Bronze Age occupation and activity are more scattered within the lowlands south of the (Hewitt *et al.* 2011, 47). As with the remains of earlier periods, it has been demonstrated that where extensive Bronze Age settlement has been identified in Northern Britain, it can often comprise dispersed post-built structures and recent examples have principally been identified where it has been possible to strip topsoil from large areas, such as at Cheviot Quarry, Northumberland (Johnson and Waddington 2008), though in other places it has proved ephemeral. There are no known sites dating to the Bronze Age within the study area.

5.7.4 IRON AGE

There is a growing corpus of known sites relating to the Iron Age within the North East, ranging from the hillfort sites of the Cheviots, though also including the notable upland enclosure of Eston Nab on the coast, through to lowland enclosures and land divisions recognised principally through aerial photography, but also increasingly through excavation. Recent work to characterise the settlement archaeology of the Iron Age in the North East is providing a more nuanced picture of a populated landscape teeming with farmsteads and small hamlets or villages, though with some apparent cultural regional differences (see Sherlock 2012, 102). There are no known sites dating to the Iron Age within the study area.

5.7.5 ROMANO-BRITISH

The North East fell under Roman occupation following the advance of Petilius Cerialis in the early AD70s, a military campaign which crushed the Brigantian hegemony over much of the Pennine belt and the North. As with many areas of Britain, the native and rural population of Roman Britain remains largely invisible given the energies previously devoted to investigating the Roman military sites of note, and also the often ephemeral remains of wood-built structures. It is notable that there are a significant number of enclosure sites known from aerial photography across the lowlands south of the Tyne which may represent Romano-British settlement, and it is likely that, as demonstrated by the excavations at Thorpe Thewles among others, many of the extensive Iron Age rural settlements continued in use through the Roman occupation (Heslop 1987). Analysis of the Iron Age settlement in



the area by Sherlock (2012, 121) has concluded that the process of Romanisation of the native population was very different in the North East, with changes to the rural settlements not visible until the 2nd century AD. There are no known Roman or Romano-British sites within the study area.

5.7.6 ANGLO-SAXON

As is the case with many areas of northern England, there is relatively little known about the study area for the Anglo-Saxon and Anglo-Scandinavian periods prior to the Norman Conquest (Cramp 1970, 199). This is certainly true when compared to the extensive archaeological resource for the medieval and later periods, or indeed for the more famous and intensely researched nearby early medieval centres at Monkwearmouth and Jarrow. Following a period of dramatic instability after the Roman withdrawal, Tyne and Wear ultimately became a part of the heartland of the Anglo-Saxon Kingdom of Northumbria following the union of the Kingdoms of Bernicia (originally based at Bamburgh) and Deira (originally north and east Yorkshire). Normally, a good indication of the late Saxon settlement of an area can be gleaned from the extent of land holdings recorded in Domesday Book, but unfortunately for this area, descriptions of Northumberland, County Durham and Cumbria are largely absent from this 11th century record (Darby 1962, 419). There are no known sites dating the Anglo-Saxon or Anglo-Scandinavian periods in the study area.

5.7.7 MEDIEVAL

The development of the medieval landscape around the proposed development site is perhaps best illustrated by the ridge and furrow cultivation remains dating to the medieval and post-medieval periods and recorded through aerial photography. All extant examples appear to be post-medieval in origin, though a few scattered examples of no-longer-extant remains appear medieval, suggesting that it was once more widespread and likely to have been related to local farming settlements, now shrunken or deserted. Depopulation of rural settlements was common during certain parts of the medieval period, and many such sites are often tied to the Black Death of the mid-14th century, though the reasons for depopulation are more complex than the ravages of disease, including such factors as the gradual movement of people to the growing urban centres, or possibly pressure on agricultural land as the common fields started to be made into single larger units.

Although there are no known medieval sites recorded in the consulted sources for the study area, it is likely that many of the villages and towns in the surrounding area, where there origins are not intrinsically linked to more recent industry, date to the medieval period or earlier. The parish of Houghton le Spring, with its fine Church of St Michael, was already known as a rich seat when it was granted to Bernard Gilpin, the 'Apostle of the North' in the mid 16th century (Battiscombe 1947, 18). Equally, the Grade II Listed Morton House described above has likely medieval origins, even though the existing fabric dates to a much later rebuilding (Cooper and Berriman 1999, 48).

5.7.8 POST-MEDIEVAL

During the post-medieval period, there was a steady growth of industry in the area, though records are few, particularly in comparison to the major boom following the industrial revolution that shaped much of the modern landscape in the immediate area. The coal mining that would come to dominate the North East is already a significant economic driver in the late medieval and post-medieval period with documentary evidence revealing the granting of the 'Great Lease' to mine coal south of the Tyne being granted as early as 1458 (Leddra 2009, 10). The importance of the coal industry, and the problems of getting the raw materials to market is illustrated by the power and prestige of the post-medieval burgesses of Newcastle, known formally as the Hostmen's Corporation of Freemen, who controlled the shipment of coal along the Tyne. An inner circle of these Freemen were so synonymous



with this control that they became dominant in local politics, and were commonly known as the 'Kings of Coal' (*ibid.*, 10).

Towards the end of the post-medieval period the gradual expansion south of the coal industry in particular (away from the worked-out pits on the banks of the Tyne) precipitated the creation of the waggonways: wooden tracks allowing the transportation of raw materials from extraction to shipping site. The extensive waggonways in the study area, and their significance in a wider landscape setting, is discussed elsewhere in this document, but they were to become so synonymous with the industry of the North East that they were commonly termed 'Newcastle Roads' (Leddra 2009, 17).

In this largely pre-industrial period, however, much of the landscape south of the Tyne had not yet been subject to the large-scale exploitation of natural resources which was to come, and this is perhaps best illustrated by the extensive evidence for post-medieval agriculture visible from aerial photography. Although no-longer extant, the only known remains of post-medieval date within the study area are these extensive ridge and furrow field systems, including the southern portion of Site A. Principally recorded from RAF aerial photography dating to the mid-late 1940s, almost all the earthworks have been levelled during the later 20th century.

5.7.9 INDUSTRIAL - MODERN

The industrial and modern archaeology of the low-lying areas of the North East is dominated by the expansion of industry, and in particular the exploitation of natural resources. Due to the rich geology of the area, there have been significant extractive and processing industries which have left their archaeological imprint including iron ore, lead, zinc, sand, gravel, clay, limestone, sandstone, dolerite and most importantly for this study area, coal (Hewitt 2011, 88). The already well-established coal industry of the North East grew vastly, in line with the innovations of the industrial period both in terms of the technological advances, but also in the later geological recognition that the Coal Measures extended beneath the Magnesian Limestone to the east (Leddra 2009, 51). The output of coal through the ports of Newcastle and Sunderland effectively doubled between 1700 and 1750, by which time it accounted for half the country's total production of coal (*ibid.*, 13).

The network of waggonways, and the links to the emerging rail network throughout the industrial period, continued to expand servicing the myriad pits and works. By the late 18th century it has been estimated that there were over 150 miles of waggonways in the North East, and at this time they would still have been the traditional wooden tracks. In the early 19th century the wooden tracks were replaced with now cheaply available cast iron rails (*ibid.*, 25-6). The waggonways, originally a practical by-product of the industry now were also a driving factor in its expansion, as greater distances and more coal could be transported so the areas further from the staithes on the Tyne and Wear were exploited. The most significant colliery within the study area is the Rainton Colliery, productive on a smaller scale under the Dean and Chapter of Durham since at least the 1650s its output, and therefore importance increased significantly during the 19th century under the ownership of Lord Londonderry and his daughter Frances Vane-Tempest, even running to the creation of a new easterly waggonway accessing the new harbour at Seaham (*ibid.*, 51).

The 20th century development of the study area is visible in the continuation of the extractive industries, though by the second half of the century, and contemporary with the decline of much of the North East, the increasing urbanisation of the area and the decline of traditional industry began to change its character to that visible today.



6. BASELINE: SITE AND SETTING

6.1 SITE CONDITIONS

A site visit was undertaken on the 7th May in overcast but dry conditions. A walkover of the two plots (Site A and Site B) was undertaken:

6.1.1 SITE A (FIGS 11-12)

Site A is the westerly of the two plots that together comprise the proposed development site and is composed of a single plot of scrubland of c.0.9ha. The plot is bounded to its north by the modern line of Black Boy Road (see cartographic assessment above), to the north-east by Redburn Row, to the east by a plot of land housing a 20^{th} century agricultural building and several areas of hard standing, to the west by the sunken former railway line and waggonway, and to the south by a fenceline beyond which the grass continues. The plot is not bounded on its north, west and east sides and is therefore not used as pasture, but appears currently unmanaged with tall grass and areas of broken ground. It is possible that slight earthwork remains of the buildings and the original line of Black Boy Road survive, but the tussocky and broken ground conditions were such that it was not possible to identify any.

6.1.2 SITE B (FIGS 13-14)

Site B is the smaller of the two plots of the proposed development site (*c*.0.4ha) and is currently completely enclosed by hedges. The plot is bordered to the north-east by Redburn Row, to the west by the line of the former waggonway and to the south and east by fence lines. The current outline of Site B has remained unchanged since it described the compound around the smithy and its ancillary structures, dating to at least the early 19th century and potentially earlier (see cartographic assessment above). The plot is currently rough scrub grassland and contains a central area of slightly raised or disturbed ground now covered with brambles. There are no features on the early mapping that equate to a building in this position, and it is possible that this feature represents the accumulation of demolition debris from the decommissioning and levelling of the smithy site at some point between 1895 and 1915.

6.2 **SETTING STUDY**

6.2.1 METHODOLOGY – ASSESSING SIGNIFICANCE AND CONTRIBUTION

Assessment of setting begins with identifying the significance of a heritage asset. The varied nature of heritage assets mean that there cannot be an objective 'scoring' of significance and there will always be an element of interpretation and professional judgement within such an assessment.

As outlined in *The Setting of Heritage Assets* (English Heritage 2011), setting is defined as "the surrounding in which an asset is experienced. Its extent is not fixed and may change as the asset and it surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance, or may be neutral" (English Heritage 2011, 2).

Once the significance of a heritage asset is established, and the contribution that setting makes to that significance, it is possible to assess how the proposed development may change that setting, and therefore its contribution to significance. This change can also be positive, negative or neutral. Criteria for the assessment of change to setting are given in *NPPG*, and can be linked to a number of the criteria for assessing general significance outlined in Table 4 above:



Table 9 Additiona	I criteria for assessment of change to setting
Criteria	Description
View	Views are often considered the most influential factor in change to setting, and assessment of that change can also be based on clear and repeatable evidence. Potential change relating to views can include intervisibility between a heritage asset and the proposed development (proximity/dominance/massing/visual permeability etc), a proposed development interposing between two intervisible heritage assets, and the inclusion of a proposed development within a view that also incorporates one or more heritage assets.
Environmental Factors	Change to setting through environmental factors includes those potential effects often assessed as part of Environmental Impact Assessment such as dust, vibration or noise.
Spatial Associations	Buildings or archaeological sites that are in close proximity but not visible from each other may have a historic, aesthetic or communal connection that amplifies the experience of the significance of each. They would be considered to be within one another's setting. Also, the setting of a heritage asset can enhance its significance whether or not it was designed to do so. This aspect of setting is closely related to the group value criteria.
Public Appreciation	Public appreciation of a heritage asset is an important part of how setting can contribute to significance, and public value can raise the significance of a heritage asset over and above its material worth or inherent archaeological or architectural interest. It should be noted, however, that a lack of public appreciation – for example through little knowledge of a site or lack of access – can make a negative contribution to significance; this is discussed more fully below.

The changing nature and mutability of setting is acknowledged in its definition, and therefore an assessment of setting can only consider its current contribution to significance. It is not appropriate to 'second-guess' future changes to the setting beyond the potential effects of a proposed development or associated mitigation and off-setting, as this would render an objective assessment meaningless. This axiom also helps resolve an apparent contradiction within guidance (CLG 2014) which states that "setting is the surroundings in which an asset is experienced" and also that "the contribution that setting makes to the significance does not depend on there being…an ability to… experience that setting".

With certain heritage assets, there is no requirement to access a site physically to experience it, but with the majority of archaeological sites in particular, physical and intellectual access is an important prerequisite to experiencing them, as they can be largely invisible or even completely buried. The resolution to this anomaly lies in the application of a second part of the definition of setting: "elements of a setting may make a positive or negative contribution to the significance of an asset". Acknowledging this, "the contribution that setting makes to the significance of the asset does not depend on there being...an ability to... experience that setting" (CLG 2014), it is just that the lack of access is likely to mean that the contribution will be negative.

6.2.2 METHODOLOGY – PRACTICAL ASSESSMENT

Preliminary assessment of any potential change to the setting of the chosen heritage assets was undertaken through production of a Zone of Theoretical Visibility (ZTV) within a GIS environment. A



Digital Elevation Model (DEM) was created using Ordnance Survey 10m contour data for a 20km square area centred on the proposed development site. A composite ZTV was prepared based upon a grid of hypothetical viewpoints across the proposed development site. This allows presentation of the ZTV as a colour ramp illustrating how much of the proposed development site can be seen from any given point in the surrounding landscape (Fig. 15). As it is derived from contour data alone, the ZTV produced for this assessment assumes that there are no intervening obstacles to site such as tree cover or existing buildings. Following preliminary desk-based analysis of the ZTV, those heritage assets where there were potential visual or other setting effects were identified and a ground survey of these locations was undertaken to test the potential visibility to the proposed development site. Digital photography was taken with a Fujifilm S7000 DSLR.

6.2.3 SETTING ASSESSMENT

Given the methodology employed, an assessment of potential effects on setting was undertaken for all designated and non-designated heritage assets within the study area. Where those assets fall within the ZTV an assessment of the current contribution of setting to their significance, and potential effects of the proposed development on setting are tabulated below. Note that in this assessment there are only two designated heritage assets within the 1km study area, neither of which fell within the ZTV. A rapid assessment of designated heritage assets within a wider 2km buffer of the proposed development site illustrated that 8 Grade II Listed Buildings and 1 Grade II* Listed Building lay within the ZTV and so these have been included in the assessment below.



Table 10	Assessment of potentia	Table 10 Assessment of potential effect of the proposed development on setting of heritage assets	
<u>an</u>	Site	Current contribution of setting to significance	Potential effect of proposed development on setting and significance
1184817 1025442 1025445 1355001	Group of four Listed Buildings in Houghton le Spring including Council Offices, The Villa, The Rectory and an arch associated with the church (Grade II* and Grade II)	The principal contributing factors the significance of these Listed Buildings is their historic value and intrinsic architectural interest and aesthetic value. They also represent a coherent, though not designed, group of notable historic buildings, and as such have some group value. This group value is an aspect of their setting that contributes positively to their significance. The arch associated with the church and the Grade II* Listed council building (and former 17th century rectory) in particular also have designed immediate curtilages which accent the aesthetic value and therefore this aspect of their setting also makes a positive contribution to their overall significance.	No views to and from the proposed development due to local topography and intervening obstacles. Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the public appreciation or communal value of the buildings, nor on the group value of closely associated buildings of historic interest.
1025405 1025406	Church of St Michael and associated Presbytery, Houghton le Spring (Grade II Listed)	The significance of both these monuments lies principally in their historic value, particularly given their association with their designer Ignatius Bonomi. Both buildings also have architectural interest and aesthetic value, as examples of 19 th century church construction. Setting makes a positive contribution to the significance of the monuments, principally through public appreciation of the church as a spiritual focus for the local community. Whilst there is more recent development on some sides of the church and its curtilage, the undeveloped playing field to the west provides wide vistas in this direction. This aspect of visual setting also makes a small positive contribution to the significance of the buildings.	No views to and from the proposed development due to local topography and intervening obstacles. Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the public appreciation or communal value of the buildings.
1025404	The Old Mill Public House, Rainton Bridge (Grade II Listed)	A late 19 th century maltings and public house. The significance of the monument lies in its limited historic value and architectural interest. The principal contributing factor to heritage assets such as this can often be intangible such as the communal value of and public appreciation for the building, in its position as a centre point for a local community.	No views to and from the proposed development due to local topography and intervening obstacles. Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the public appreciation or communal value of the building.
1184776	High Farm House, East Rainton (Grade II Listed)	The significance of this building lies principally in its inherent historic value and architectural interest, as well as some small aesthetic value, as an example of 17 th to 18 th century local vernacular architecture. The building is currently within a modern housing estate, largely divorced from its original setting and apparently renovated. This current setting makes a neutral or negative contribution to the overall significance of the building.	No views to and from the proposed development due to local topography and intervening obstacles. Far enough removed from the proposed development to experience no adverse environmental factors.
1120736	Road bridge over railway north of West Rainton (Grade II Listed)	A largely plain though well-constructed historic monument whose significance principally relates to architectural interest and some historic value in its relationship to the GNER and the construction of the railways in the area. The spatial association or group value of the bridge with the former railway passing beneath it is an aspect of setting which makes a positive contribution to its significance.	No views to and from the proposed development due to local topography and intervening obstacles. Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the coherence of the Listed Building with the former railway.



2625 3180	Rainton Meadows and Londonderry Railway lines (non-designated)	The significance of the rail and waggonways within the study area lies both with their inherent archaeological interest or evidential value, and also in the historic value that they represent as symbolic of the 'golden age' of local industry. They are quite often interconnected monuments and the spatial association and group value of the waggonways, where they survive, is an aspect of their setting which makes a positive contribution to their significance. The ability to access the waggonways and railways as walking routes through the local area means that there is also a public appreciation of the monuments, even where the historic value is not immediately recognised by those using them.	Parts of both branches run adjacent to Sites A and B respectively and so there will be views to and from the proposed development in those parts of the waggonways. There will be no direct effect on the historic or evidential value of the waggonways, or on the ability to access them. The proposed development is not at a point where the waggonways intersect, or are indeed intervisible, so there will be no effect on the spatial association and group value of the monuments. It is considered that the proposed development will have a low adverse effect on the visual and environmental (e.g. noise etc.) aspect of the monuments' setting and therefore a low adverse effect on the asset's overall significance.
3179	Black Boy Bridge (non-designated)	The current Black Boy Bridge has some limited historic value given its links to the railways and early modern industry of the local area. There is also a small positive contribution to significance due its spatial association with the still visible former railway track that it crosses.	Prominent views to and from Site A of the proposed development and potential additional environmental effects given the proximity. No effect on the spatial association with the former railway. It is considered that the proposed development will have a moderate adverse effect on the visual and environmental (e.g., noise etc.) aspect of the monuments' setting and therefore a low adverse effect on the asset's overall significance.
3182	Chilton Moor Brickfield (non-designated)	The principal contributing factors to the significance of these remains are their evidential value and archaeological interest, and also in limited group value when considered as part of a wider industrial landscape with other similar features in the study area. The current immediate setting of the monuments make them difficult to experience directly, and so there is little opportunity for public appreciation to make a positive contribution to their setting.	Limited views to and from the proposed development due to local topography and intervening obstacles. Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the archaeological interest or evidential value of the heritage asset and no effect on the spatial association/group value with other similar monuments in the area.
6849	Meadows Brick Field (non-designated)	The principal contributing factors to the significance of these remains are their evidential value and archaeological interest, and also in limited group value when considered as part of a wider industrial landscape with other similar features in the study area. The current immediate setting of the monuments make them difficult to experience directly, and so there is little opportunity for public appreciation to make a positive contribution to their setting.	No or limited and screened views to and from the proposed development due to local topography and intervening obstacles. Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the archaeological interest or evidential value of the heritage asset and no effect on the spatial association/group value with other similar monuments in the area.
9663	Church of St Andrew and associated war memorial, Chilton Moor (non-designated)	The significance of both these monuments lies principally in their historic value, their architectural interest and aesthetic value. Setting makes a positive contribution to the significance of the monuments, principally through public appreciation of the church as a spiritual focus for the local community, and also through the inherent commemorative value of the war memorial which serves a similar purpose, though with a more secular leaning. The immediate setting of the church and memorial, represented by the churchyard, makes a positive contribution to the monuments.	No views to and from the proposed development due to local topography and intervening obstacles. Far enough removed from the proposed development to experience no adverse environmental factors. No effect on the public appreciation or communal value of the buildings.



7. ASSESSMENT OF EFFECTS

7.1 ARCHAEOLOGICAL POTENTIAL

The cartographic assessment has demonstrated the presence, at least through the 19th century, of likely industrial buildings in both Site A and Site B of the proposed development.

Site A contains the former line of Black Boy Road and up to two ranges of buildings which follow that line, as well as the no-longer-extant remains of post-medieval ridge and furrow agriculture towards the southern end of the plot. The buildings were removed during the first half of the 20th century with the plot empty by 1958. It is likely that sub-surface remains survive relating to these structures.

Site B contains a smithy dating to at least the early 19th century and potentially earlier, along with ancillary buildings and a spur of waggonway leading into the yard. All structures on the site were removed at some point between 1895 and 1915, and the walkover survey identified an area of disturbed ground that could potentially be the accumulated demolition material spread in the centre of the plot. It is, however, considered likely that sub-surface remains survives relating to these structures.

Compilation of available sources has suggested limited potential for earlier archaeological remains to survive. Given both the scarcity of medieval and earlier heritage assets in the study area, and the presence of post-medieval agricultural remains and later industrial structures, it is considered the potential for the proposed development area to host additional unknown heritage assets to those outlined above is low to negligible.

7.2 POTENTIAL DIRECT EFFECTS

Where heritage assets with archaeological interest are adversely affected by groundworks, this is considered to be a major adverse effect, as the usual outcome will be destruction of the resource that such assets represent. In such an instance a scheme of mitigation would be agreed with the Tyne and Wear Archaeological Officer to ensure the recording of archaeological remains in a manner proportionate to their significance.

7.3 POTENTIAL INDIRECT EFFECTS (SETTING)

As is outlined above in the site-by-site assessment of potential change to setting and the contribution to significance, the constituent factors of setting can make both positive and negative contributions to the significance of a given heritage asset.

Of the sites assessed, there would be no effect on setting for the majority given the distance to the proposed development, the lack of intervisibility due to intervening obstacles and screening, and the fact that the proposed development does not disrupt the coherence of any groups of heritage assets where such spatial relationships form a component of their setting.

There are adverse effects on the setting of two heritage assets or groups of heritage assets: the adjacent Black Boy Bridge and those sections of the former waggonways and railways that are adjacent to both Site A and B of the proposed development. Both heritage assets are non-designated monuments of local or regional significance and do not meet the criteria outlined in *NPPF* paragraph 139 - i.e. that non-designated heritage assets of demonstrably equivalent significance to scheduled



monument should be considered subject to the same policies and weighting as designated heritage assets (CLG 2012, 32). With both heritage assets the adverse effect is considered to be in the range of low to moderate. Given, however, that the contribution that setting makes to the overall significance of both assets is low, the overall adverse effect is also considered to be low.

7.4 RECOMMENDATIONS

Given that there is a known potential for the presence of archaeological remains within the proposed development area, and therefore a strong potential for an adverse effect requiring mitigation, it is recommended that a fieldwork-based evaluation be undertaken to accompany the planning application. A programme of limited and targeted evaluation trenching is recommended based upon a specification agreed with the Tyne and Wear Archaeological Officer, and with a narrow aim of establishing the level of survival and potential significance of archaeological remains in both Site A and Site B. This would satisfy the requirements of paragraph 128 of NPPF (CLG 2012, 31) and allow the agreement of any mitigation to be proportionate to the potential loss of significance, representing the "balanced judgement" as required by paragraph 135 of NPPF (CLG 2012, 31).

As potential indirect effects are considered to be less than substantial no additional evaluation or mitigation in relation to the setting of heritage assets is recommended.



8. **SOURCES**

8.1 BIBLIOGRAPHY

Battiscombe, G. 1947. Bernard Gilpin 1517-1584. Parish Priest of Houghton-le-Spring in the County of Durham. Houghton-le-Spring, The Gilpin Press.

Coggins, D., Laurie, T. and Young, R. 1989. The Late Upper Palaeolithic and Mesolithic of the Northern Pennine Dales in the Light of Recent Fieldwork. In Bonsall, C. (ed.) *The Mesolithic in Europe. Papers Presented at the Third International Symposium*. Edinburgh, John Donald Publications Ltd: 164-174.

Cooper, L. and Berriman, G. 1999. Fence Houses, Lambton, Burnmoor and Chilton Moor. Seaham, The People's History Limited.

Cramp, R.J. 1970. The Anglo-Saxon Period. In Dewdney, J.C. (ed.) *Durham County and City with Teeside*. Durham, Durham Local Executive Committee of the British Association: 199-206.

Darby, H.C. 1962. The Northern Counties. In Darby, H.C. and Maxwell, I.S. (eds) *The Domesday Geography of Northern England*. Cambridge, Cambridge University Press.

Department for Communities and Local Government (CLG). 2012. *National Planning Policy Framework*. London, The Stationery Office.

Department for Communities and Local Government (CLG). 2014. *National Planning Practice Guidance*. London, The Stationery Office.

English Heritage (EH). 2008. Conservation Principles, Policies and Guidance. London, English Heritage.

English Heritage (EH). 2011. The Setting of Heritage Assets. London, English Heritage.

Gooder, J. 2007. Excavation of a Mesolithic house at East Barns, East Lothian, Scotland: An Interim Report. In Waddington, C. and Pedersen, K.L.R. (eds) *Mesolithic Studies in the North Sea Basin and Beyond. Proceedings of a Conference held at Newcastle in 2003*. Oxford, Oxbow Books: 49-59.

Harding, D.W. 1970. The Prehistoric Period. In Dewdney, J.C. (ed.) *Durham County and City with Teeside*. Durham, Durham Local Executive Committee of the British Association: 191-4.

Heslop, D.H. 1987. The Excavation of an Iron Age Settlement at Thorpe Thewles, Cleveland, 1980-1982. York, Council for British Archaeology Research Report 65.

Hewitt, R., Brightman, J., Mason, D., Petts, D., Radford, S., Vyner, B. and Waddington, C. 2011. *An Archaeological Assessment of County Durham. The Aggregate-Producing Areas*. Durham and Bakewell, Durham County Council and Archaeological Research Services Ltd.

Institute for Archaeologists. 2012. *Standard and Guidance for Archaeological Desk-Based Assessments*. Reading, Institute for Archaeologists.

Jacobi, R. 1976. Britain inside and outside Mesolithic Europe. *Proceedings of the Prehistoric Society* 42: 67-84.



Johnson, B. and Waddington, C. 2008. Excavation of Prehistoric and Dark Age Settlement Remains from Cheviot Quarry, Milfield Basin, Northumberland. *Archaeological Journal* 165: 107-264.

Leddra, M. 2009. *Turn and Burn. The Development of Coal Mining and the Railways in the North East of England*. SUnderland, University of Sunderland Press.

Petts, D. and Gerrard, C. 2006. *Shared Visions: The North East Regional Research Framework for the Historic Environment*. Durham, Durham County Council.

Sherlock, S. 2012. *Late Prehistoric Settlement in the Tees Valley and North-East England*. Hartlepool, Tees Archaeology Monograph Series Vol. 5.

Waddington, C. (ed.) 2007. *Mesolithic Settlement in the North Sea Basin. A Case Study from Howick, North-East England*. Oxford, Oxbow Books.

Wood, P.N. 2001. *Wheatley Head, West Rainton, County Durham. Archaeological Evaluation Report*. Unpublished report prepared by Northern Archaeological Associates.

8.2 WEBSITES

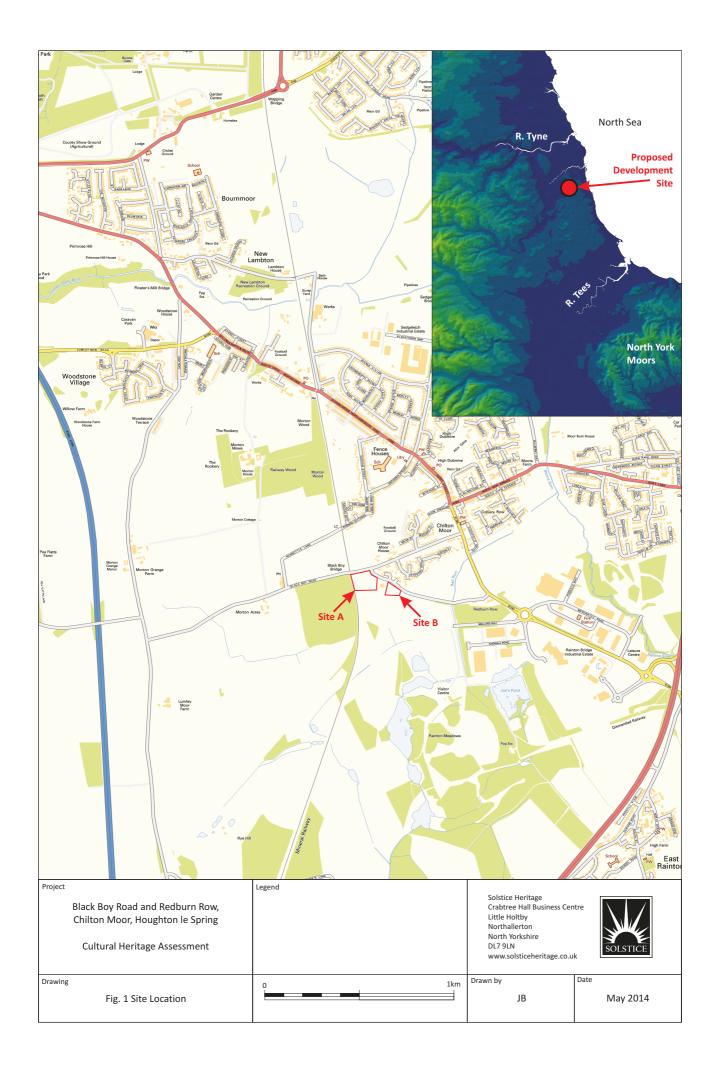
BGS (British Geological Survey). 2013. *Geology of Britain Viewer*. Online resource accessed May 2014 at: http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html

Heritage Gateway. Online resource accessed May 2014 at: http://heritagegateway.org.uk



APPENDIX 1 – FIGURES





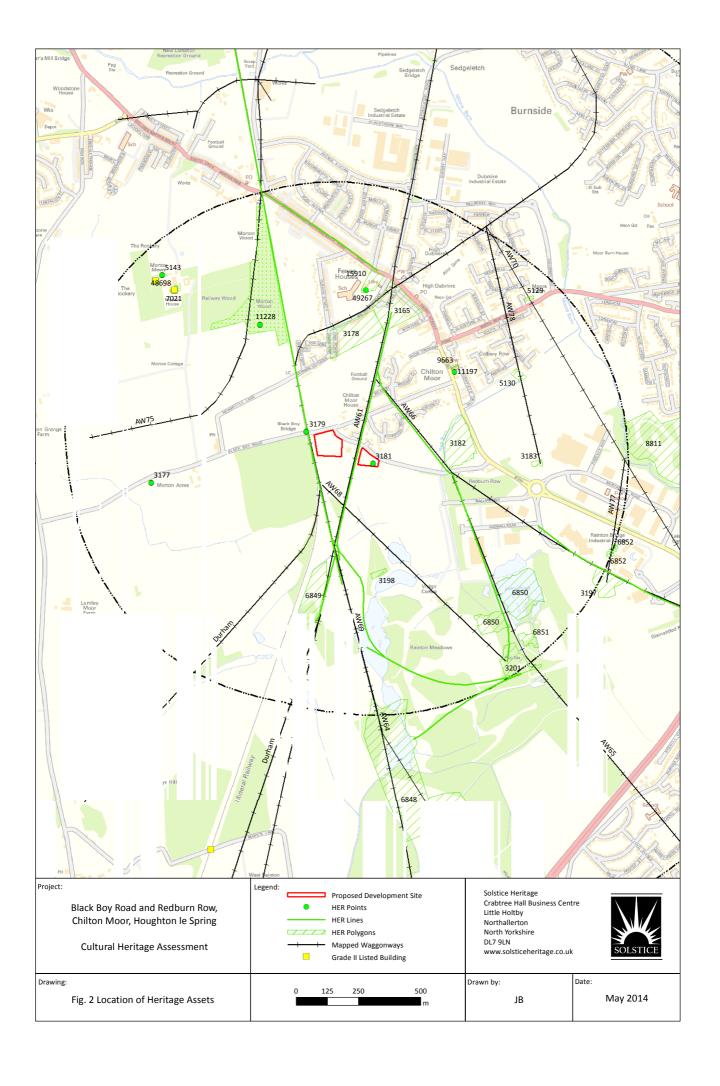
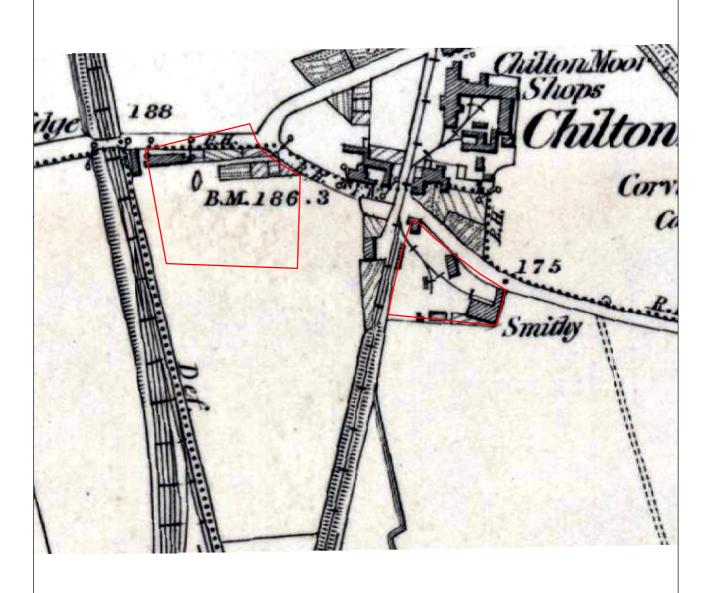


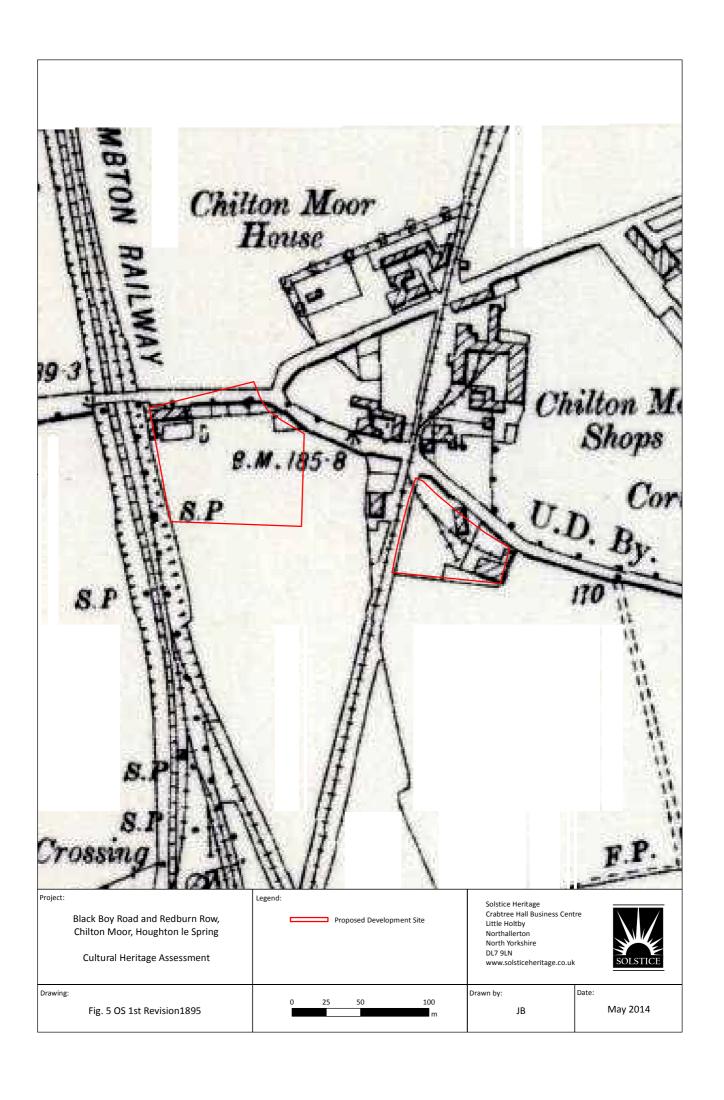


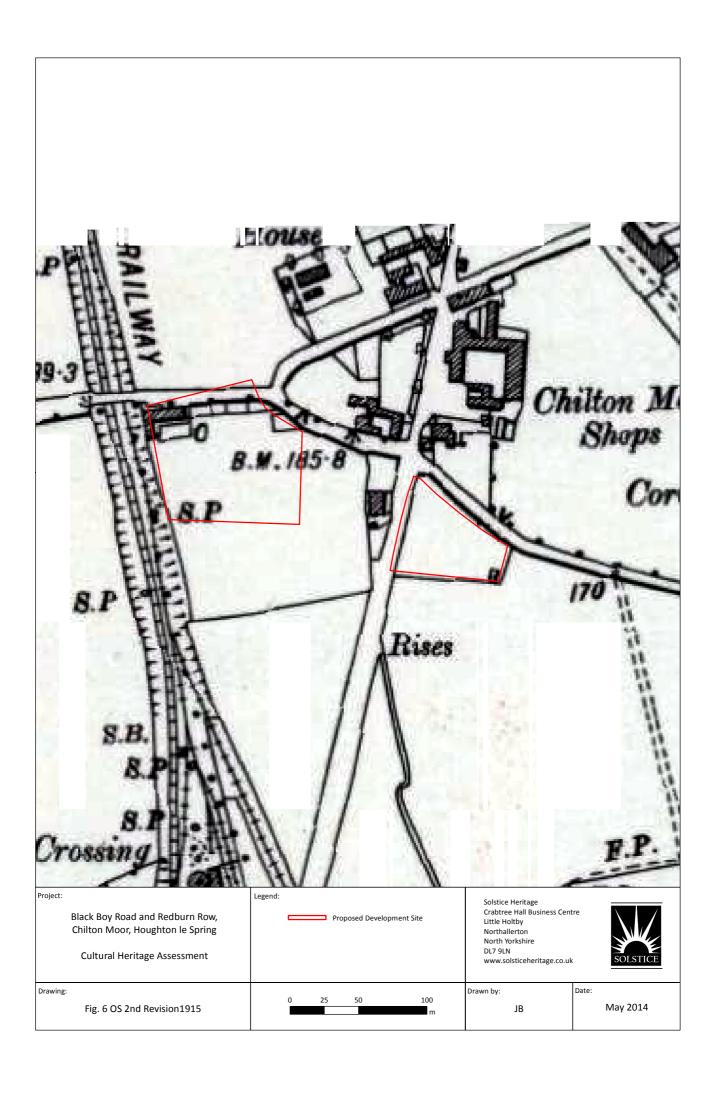
Fig. 3 Extract from Morden's map of 1722

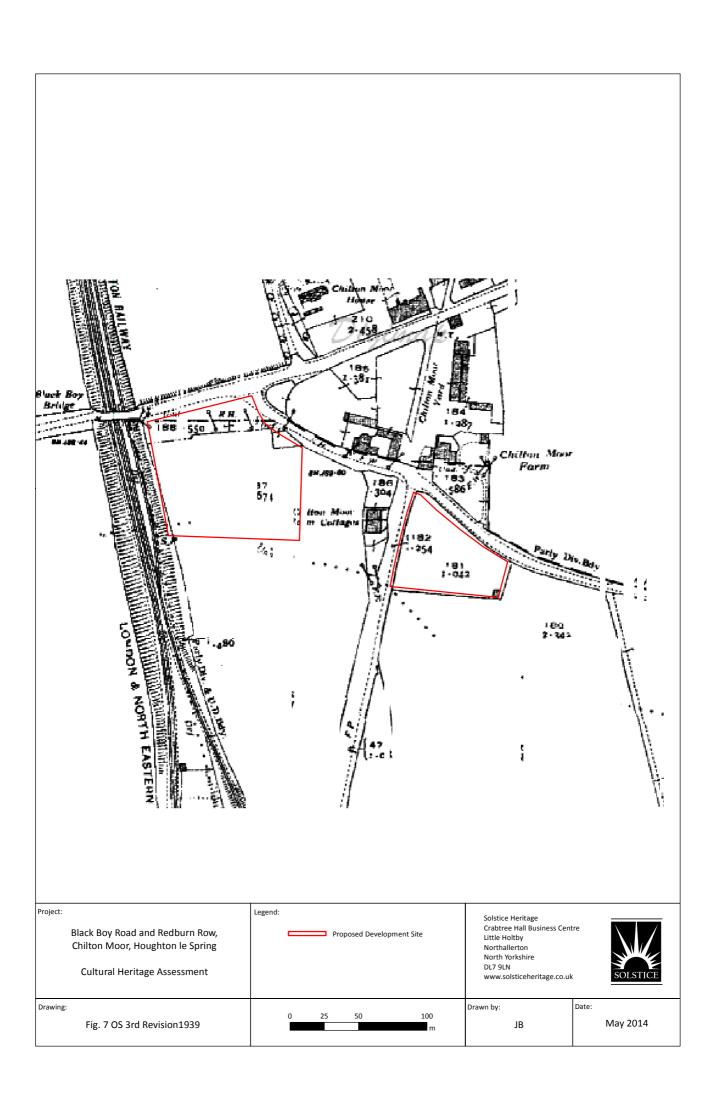


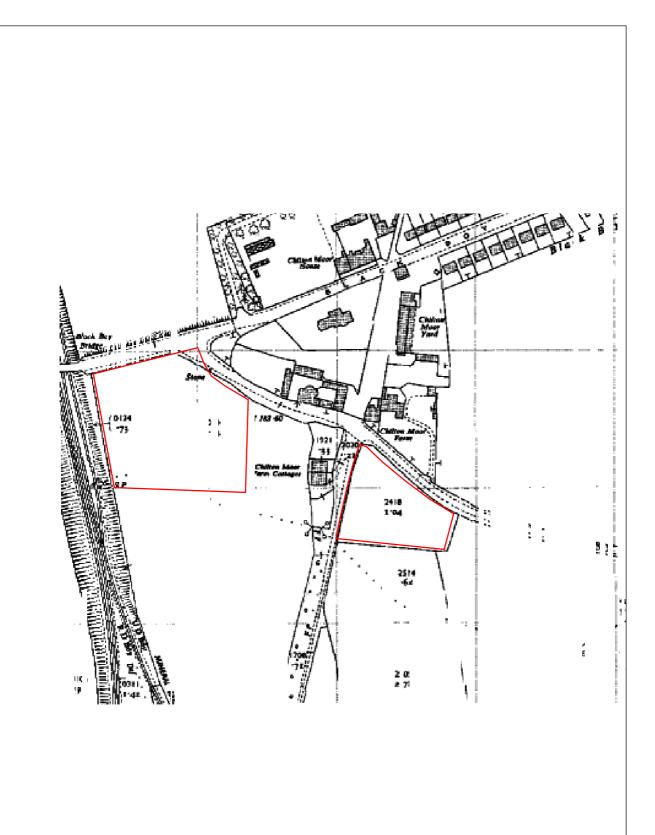


Project: Legend: Solstice Heritage Crabtree Hall Business Centre Little Holtby Black Boy Road and Redburn Row, Proposed Development Site Chilton Moor, Houghton le Spring Northallerton North Yorkshire DL7 9LN www.solsticeheritage.co.uk Cultural Heritage Assessment Date: Drawing: Drawn by: 100 Fig. 4 OS 1st Edition 1857 May 2014 JB

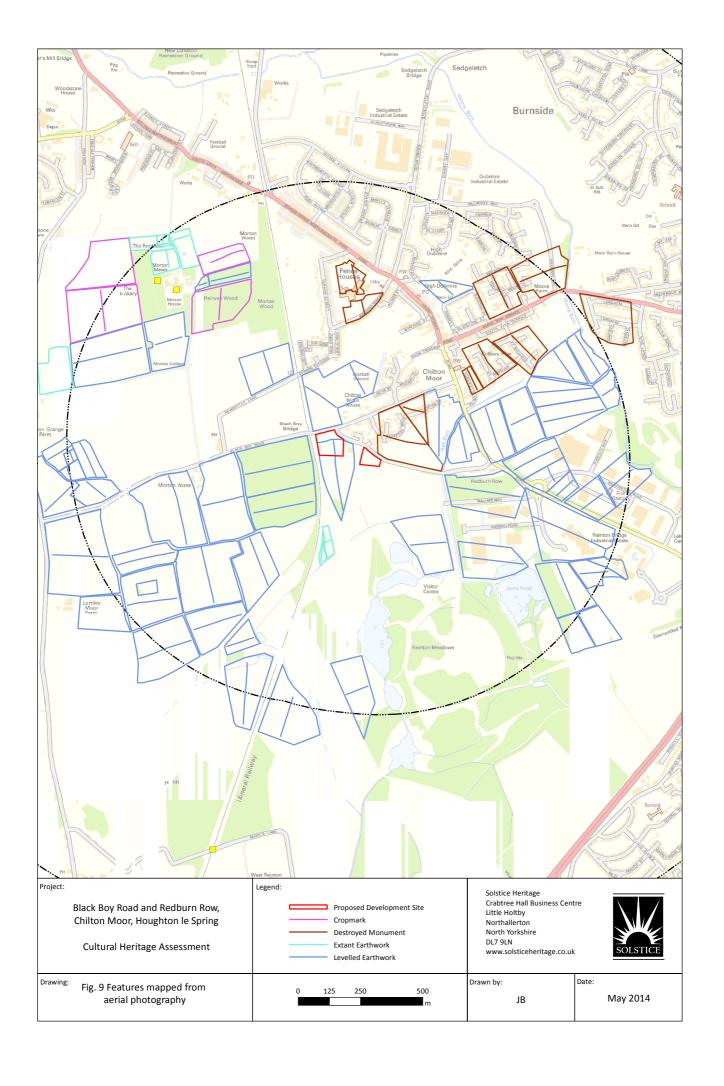








Project: Black Boy Road and Redburn Row, Chilton Moor, Houghton le Spring Cultural Heritage Assessment	Legend: Proposed Development Site	Solstice Heritage Crabtree Hall Business Cent Little Holtby Northallerton North Yorkshire DL7 9LN www.solsticeheritage.co.uk	
Drawing:	0 25 50 100	Drawn by:	Date: May 2014
Fig. 8 OS County Series1958	m	JB	



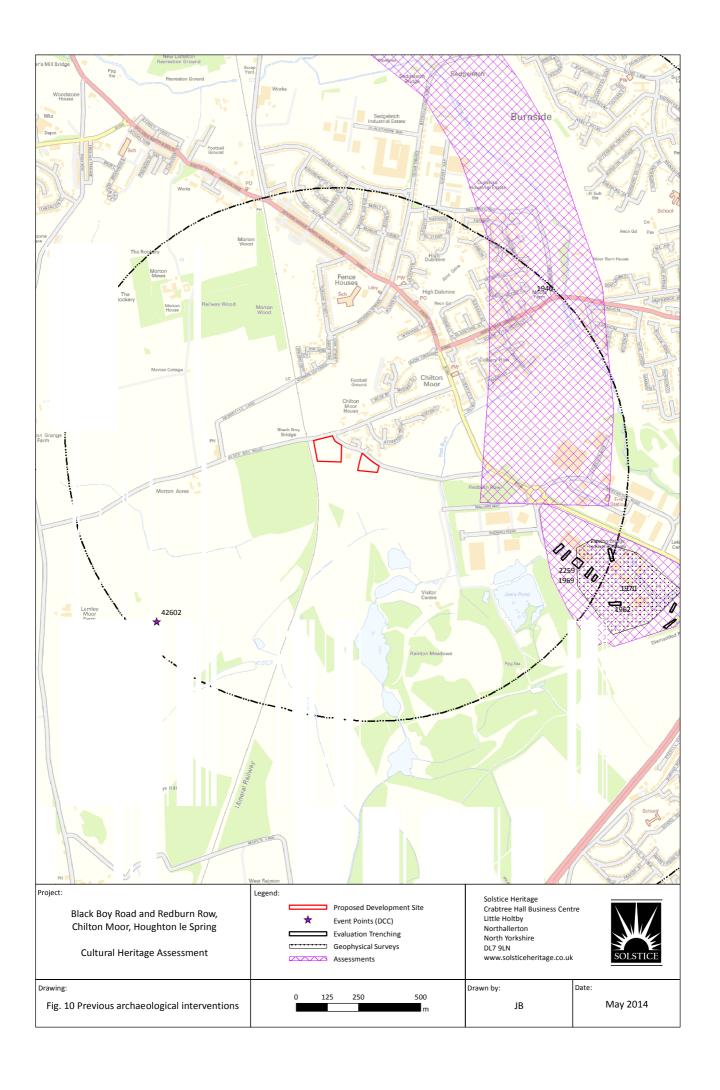




Fig. 11 General view east-south-east across Site A from near the railway and Black Boy Bridge and looking towards the plot of land between the two sites and the hedge which follow the line of the second nearby waggonway.





Fig. 12 View of the current Black Boy Bridge from the north-west corner of Site A, and also looking across the former railway line in its sunken embankment.





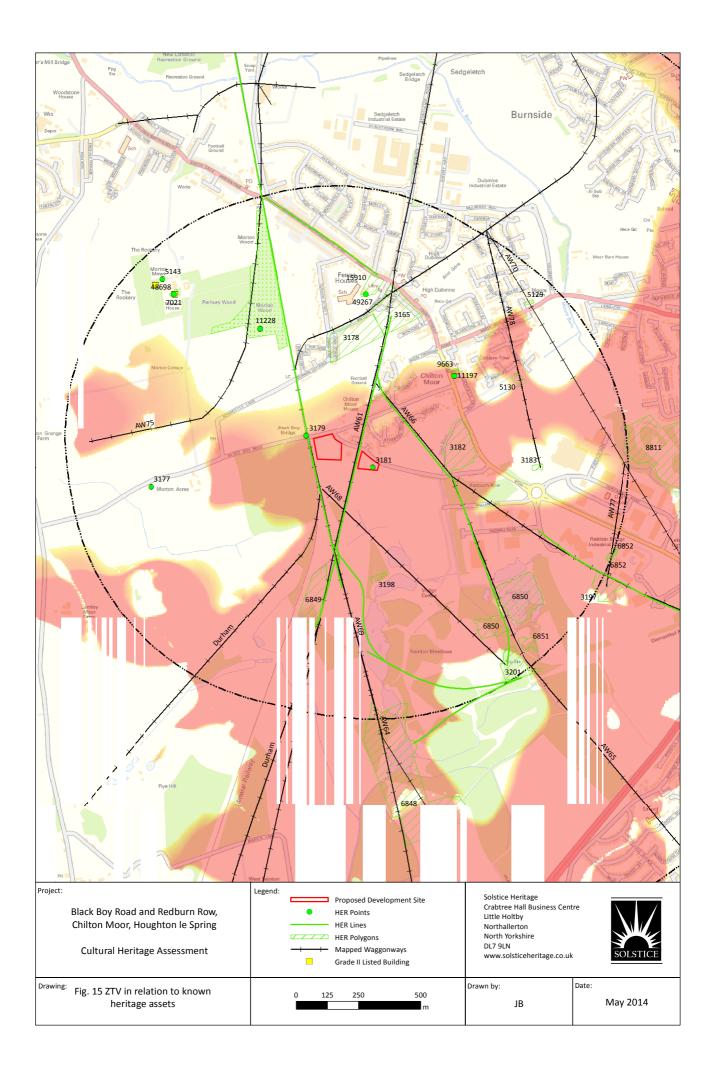
Fig. 13 View south down the former waggonway adjacent to Site B. The mature hedges to either side effectively partition the route from land to either side currently.





Fig. 14 General view south-east across Site B showing how it is currently enclosed by hedges effectively delineating the historic boundary. The slight mound of disturbed earth is prominent left of centre though it does not equate to any features on the historic mapping.





APPENDIX 2 – GAZETTEER

Table 11 He	eritage as	sets recor	Table 11 Heritage assets recorded in County Durham and Tyne and Wear HERs	nd Tyne and Wear HERs			
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
1025408	5143		Fencehouses, Morton House, icehouse	18th century hemispherical brick ice house with earth floor and earth mound over.	Post Medieval	C18	Listed Building Grade II
1025407	7021	48698	Fencehouses, Morton House	Large house dated 1709. Rebuilding of earlier house. Mid C19 rebuilding and lowering by one storey. Ashlar front, brick returns and Welsh slate roof with stone gable copings. 2 storeys. Sash windows. Central 5-panelled door under oblong fanlight in moulded doorcase. Cherub's head in rinceau frieze, Belasyse coat of arms flanked by 1709 and scrolls in pediment. Five ashlar chimneys. The Belasyse family owned the manor and grange of Morton 1525-1678 {1}. The private chapel was apparently part of the earlier building. The Belasyse family moved to Yorkshire in 1678 and Morton House was sold to the Smith family, landowners at West Herrington. After three generations, the house was sold to Major John Lambton, grandfather of the first Earl of Durham. In the second quarter of the nineteenth century, Morton House was home to Ralph Lambton, famous fox-hunter. Sports writer R.S. Surtees often visited Morton House. His name is carved into one of the oldest trees in the grounds. After Ralph Lambton, the house was occupied by Hedworth Lambton, brother of the first Lord Durham, then Nathaniel Ellison, who died there in 1861. After that it was home to the Webster family, ropemakers from Sunderland; then in 1908 R.C. Thompson, shipbuilder. In 1920 the house and land was bought by the Lambton, Hetton and Joicey Colleries Ltd.	Post Medieval	C18	Listed Building Grade II
		49267	Royal British Legion War Memorial	Royal British Legion War Memorial (Dubmire), Fence Houses	Modern	C20	



Table 11 F	Heritage as	sets reco	Table 11 Heritage assets recorded in County Durham and Tyne and Wear HERs	nd Tyne and Wear HERs			
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
			(Dubmire), Fence Houses				
	3179		Houghton-le-Spring, Black Boy Bridge	Black Boy Bridge (Iron). An iron road bridge over the North Eastern Railway.	Early Modern	C19	
	3177		Houghton-le-Spring, Chilton Moor, Shaft	A Coal Shaft marked as Old on the 1st edition OS mapping, so was probably out of use by 1857.	Early Modern	C19	
	3622		Newbottle, Morton Pit	Morton Pit (Coal).	Early Modern	C19	
	3181		Houghton-le-Spring, Chilton Moor, Smithy	Smithy.	Early Modern	C19	
	11197		Chilton Moor, Church of St. Andrew, war memorial	6ft high sandstone boulder on black plinth in a paved courtyard. Inscription: "IN REMEMBRANCE OF THOSE WHO DIED IN THE SERVICE OF THEIR COUNTRY". Set up because there are access problems at the war memorial at Fencehouses for Rembrance Day.	Modern	C20	
	2625		North Eastern Railway (Durham Junction Railway)	North Eastern Railway. The southern part of this line was originally the Durham Junction Railway, which started in 1834, it was to connect the Stanhope and Tyne Railway at Washington with Durham. On 16th June 1834 an act was passed which gave authority to the Durham Junction Railway Company to construct 7 miles of railway. They were to raise a capital of £80,000 in shares and £20,000 by loan. Tolls on cargoes were to be levied. The railway would be carried over the Wear on a bridge which had a roadway for horses, carriages, cattle and foot passengers. A board of directors was elected at the first meeting of the Durham Junction Railway Company on 8th July 1834. Thomas Elliot Harrison was appointed engineer. Works started on the embankments and cuttings between Washington and Rainton Meadows in 1835. In the mean time the idea of the "Great North of England Railway" to connect Newcastle with Leeds	Early Modern	C19	



Table 11 Heri	tage asse	sts recor	Table 11 Heritage assets recorded in County Durham and Tyne an	nd Tyne and Wear HERs			
NHL No.	TWHE R	DHER No.	Site	Description	Period	Century	Designation
				and York, and with Scotland was suggested by Joseph Pease of Darlington back in October 1835. Section of the NER from Newcastle to Berwick is HER 1063. The line opened on 24th August 1838, no longer a mere connecting link between two mineral railways, but potentially a part of the great locomotive highway between London and Edinburgh. Though only just under 5 miles in length, Tomlinson says that it possessed one of the finest engineering works in the kingdom - the Victoria Bridge (HER 2877). The line eventually reached Durham in 1844 as part of Hudson's Newcastle and Darlington Junction System.			
m	3199		Rainton and Seaham Railway, Plain Pit Branch	The Rainton and Seaham Railway, Plain Pit Branch. This linked the Framwellgate branch, (SMR 3200), to the North Eastern Railway, (SMR 2625), serving the Plain Pit, (SMR 3198). It was part of the Marquis of Londonderry's Railway which closed in 1896.	Early Modern	C19	
e e	3180		Londonderry Railway	A branch of the Londonderry Railway, from the Britannia Iron Works, (SMR 3165), to the North eastern Railway, (SMR 2625). It may originally have continued south, (SMR 3621), and to the north, (SMR 3130).	Early Modern	C19	
E	3623		North Eastern Railway, Rainton Meadows Branch	The Rainton Meadows branch of the North Eastern Railway, largely lies outside Tyne and Wear.	Early Modern	C19	
ĸ	3195		Rainton and Seaham Railway, Adventure Branch	Rainton and Seaham Railway, Adventure Branch. The western end of this line was outside the county. It was part of the Londonderry Railway, which closed in 1896.	Early Modern	C19	
ε	3200		Rainton and Seaham Railway, Framwellgate Branch	Rainton and Seaham Railway, Framwellgate Branch. This was part of the Londonderry Railway, it closed in 1896.	Early Modern	C19	
Е .	3621		East Rainton, Railway	Railway, marked as Old on the 1st edition OS mapping, so probably out of use by 1857. May have been part of an earlier line of the Londonderry	Early Modern	C19	



Table 11 H	eritage as	sets reco	Table 11 Heritage assets recorded in County Durham and Tyne an	nd Tyne and Wear HERs			
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
				Railway, (SMR 3180).			
	3196		Rainton Bridge, Timber Waggonway	Two branches of this waggonway existed in 1777 (shown on a plan surveyed for the Dean and Chapter of Durham by J.C. Mowbray NRO 578/321) within land owned by a Henry Walton, Mr Maskell and Mr Rotherham. It served a pit which lay south of the later Nicholson's Pit and North Pit. The waggonway is also shown on a manuscript plan of Rainton Colliery Grounds of probable late eighteenth century date (NRO 3410 Wat 34/18) and on Greenwood's plan of 1820. With the opening of the Rainton to Seaham Railway (HER 2976) in 1831 the waggonway routes would have lapsed. Only the section south-east of North Pit remained in use, linking into the new line. Three trenches were dug across the waggonway by Pre-Construct Archaeology for Geoquest Associates in July 2001 in advance of the construction of Rainton Bridge South Business Park. The route of the waggonway was defined by two parallel ditches and rudimentary fence lines, and a posthole alignment indicated a more permanent boundary between the waggonway wayleave and the neighbouring land. In trench 2 parts of two timber sleepers survived - a section of oak tree branch pierced by holes for the dowels which would have pegged the rails to the sleepers. A timber drain was recorded. After the abandonment of the waggonway, there were a series of dumping events. A final phase of excavation was undertaken in November 2002. This proved that the waggonway was a double way, diverging to form a four track system approaching the pithead of North Pit. This may represent a marshalling area as opposed to four loading platforms. This wagonway may be the earliest example of a colliery wagonway to be excavated in the country.	Post Medieval	C18	
	3144		Houghton-le-Spring,	A electric telegraph line running south east from the Railway Station at	Early	C19	



Table 11 H	leritage as	sets reco	Table 11 Heritage assets recorded in County Durham and Tyne and Wear HERs	nd Tyne and Wear HERs			
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
			Electric Telegraph	Fence Houses, (SMR 3143). Its complete length is unclear on the 1st edition OS map.	Modern		
	3620		Rainton Bridge, waggonway	Waggonway shown on a plan of 1777 surveyed for the Dean and Chapter of Durham by J.C. Mowbray (NRO 578/321). The land was in the ownership of Mr Maskell. Linked Nicholson's Pit (HER 3201) to the Wear. Also shown on a late eighteenth century plan of Rainton Colliery Grounds (NRO 3410 Wat 34/18) and on Greenwood's 1820 map. With the opening of the Rainton to Seaham Railway in 1831 the waggonway would have lapsed. The route is later shown as a railway spur from the Londonderry Railway (HER 3180) to Chilton Moor Brick Field (HER 3182).	Post Medieval	C18	
	3201		Rainton Bridge, Rainton Colliery, Nicholson's Pit	Nicholson's Pit. Shown on 1st edition Ordnance Survey map. Opened in 1817. Owners were the North Hetton Coal Company (Earl of Durham, Messrs Wood, Philipson, Burrell and others) and Lady FA Vane Londonderry, Marquess of Londonderry (in 1850s). Part of Rainton Colliery, which was opened before 1815 and closed in July 1978. Rainton Colliery included Adventure Pit (NZ 315 470), Dun Well Pit (HER 3206), Alexandrina Pit (HER 3219), Hazard Pit (HER 3212), Meadows Pit (HER 6848), North Pit (HER 3197), Plain Pit (HER 3198), Resolution Pit (NZ 311 476). In 1790 a boring had been put down in South Pit in East Rainton by a Mr Rawlings, to a depth of 10 fathoms. Whellan reported that in 1894 Rainton Colliery had 31 stationary engines, 38 boilers, 1185 workers and 835 workmen's houses.	Modern	C19	



Table 11 H	eritage as	sets reco	Table 11 Heritage assets recorded in County Durham and Tyne an	ld Tyne and Wear HERs			
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
	3198		Rainton Bridge, Rainton Colliery, Plain Pit	A pit named "Ducks" (probably after Sir John Duck of West Rainton, Mackenzie & Ross 1834, 367) is shown on Gibson's map of 1788, 55 fathoms deep. It is possibly on the site of the later Plain Pit. Shown on 1st edition Ordnance Survey map. Owners were the North Hetton Coal Company (Earl of Durham, Messrs Wood, Philipson, Burrell and others) and Lady FA Vane Londonderry, Marquess of Londonderry (in 1850s). Part of Rainton Colliery, which was opened before 1815 and closed in July 1978. Rainton Colliery included Adventure Pit (NZ 315 470), Dun Well Pit (HER 3206), Alexandrina Pit (HER 3219), Hazard Pit (HER 31212), Meadows Pit (HER 6848), North Pit (HER 3197), Plain Pit (HER 3198), Resolution Pit (NZ 311 476). In 1790 a boring had been put down in South Pit in East Rainton by a Mr Rawlings, to a depth of 10 fathoms. Whellan reported that in 1894 Rainton Colliery had 31 stationary engines, 38 boilers, 1185 workers and 835 workmen's houses. In 1817 many men and boys were explosion of fire-damp at Plain Pit. Altogether the loss of life numbered 79.	Modern	C19	
	3197		Rainton Bridge, Rainton Colliery, North Pit	An unnamed pit is shown at this location of a plan of 1777 (NRO 578/321) served by a waggonway (HER 3196). It is shown as a pronounced shaft mound with two long blocks of buildings aligned north-south on the westhand side, probably forerunners of the later pit cottages. There is no indication of an engine house. The collieries at East Rainton were in the possession of Sir Henry Vane Tempest and were let to Robert Blakiston & Company on 9th March 1797 (NRO Bud 5/58). High Main Seam coal was sold under the name of "Old-Ducks" and was in great demand in London (NRO Bell 18, p. 404). The name may derive from Sir John Duck who lived in West Rainton in the late C17 {Mackenzie and Ross 1834, 367}. In June 1797, the workings of North Pit were viewed by Charles Dixon, John	Post Medieval	C18	



Table 11 H	leritage as	sets reco	Table 11 Heritage assets recorded in County Durham and Tyne an	nd Tyne and Wear HERs			
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
				Smith, William Stobbart and John Buddle Junior who reported that they were "in a Regular and fair State for the entry of an Undertaker, except on the South Side of the Pit, where there is a Quantity of Water, and several falls come on" {NRO Bud 21, p. 15}. The pit is shown on a late eighteenth century plan of Rainton Colliery Grounds (NRO 3410 Wat 34/18) and on Greenwood's map of 1820. By 1804 the High Main Seam was completely worked out. In 1807 the Rainton Collieries were let again to focus on the Hutton Seam. Borings were made at North Pit in 1817 and 1821 {TWMTL 1996 and NRO Wat 2/27, p. 118}. In 1825 the Marquis of Londonderry leased a timber-yard at North Pit to William Russell (DRO D/Lo/E 300-319}. In 1827 there were two engines at North Pit, but North Pit is not listed as working and so the engines may have been used for pumping not winding {DF/WF/28/1, p. 479-520}.On the tithe map of 1834 {DRO EP/ER/27/2} North Pit is marked as "old colliery, gardens and waste" suggesting that it had been laid in or abandoned. There are cottages to the east. The pit is still shown on 1st edition Ordnance Survey map but the workings had been abandoned. In 2001 a trench was excavated across an eastern range of buildings associated with North Pit. A sandstone wall and a brick feature of uncertain function were recorded, along with a timber drain and a timber capped brick drain. North Pit Cottages were cleared and recorded. The original form of the building had been an open, roofed storage area, before being rebuilt in brick and being converted to residential use. Four fireplaces were inserted into the partition walls. The building was divided into two			
	3182		Houghton-le-Spring, Chilton Moor Brick Field	Chilton Moor Brick Field. 1861. (Source: Davison, P J, 1986. Brickworks of the North East, 187, site 12.)	Early Modern	C19	



Table 11 H	leritage ass	ets reco	Table 11 Heritage assets recorded in County Durham and Tyne an	nd Tyne and Wear HERs			
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
	3165		Houghton-le-Spring, Britannia Iron Works	Britannia Iron Works.	Early Modern	C19	
	3178		Houghton-le-Spring, Brick Field	Brick Field with Brick Kilns.	Early Modern	C19	
	3183		Houghton-le-Spring, Annabella Pit	The Annabella Pit {1}. Presumed coal pit located between Colliery Row and Rainton Bridge. When the pit was sunk is not known, but it is presumed to be late 18th century or early19th century in date. The pit is not located on a 1777 map of the area but the field in which the pit is later mapped is described as "Pit Field" in the 1839 East Rainton tithe apportionment. It is shown on the 1856 OS map. By 1896 the pit is disused. The spoil heap to the north of the pit shaft appears to have been cut through possibly by a sewer pipe. Although part of the recorded spoil heap has been removed, the western extent still survives and currently consists of two separate grassed-over mounds. Landscaping in the area may have taken place during the construction of the adjacent industrial estate and roundabout {2}.	Modern	C19	
	5129		Houghton-le-Spring, Moors Farm	Former farmstead located on north side of the road between High Dubmire and Houghton-le-Spring. Date established not known but recorded on the 1838 Houghton-le-Spring tithe map. The building is recorded as Moors Farm by the OS from 1856 and the complex of buildings gradually increased from that date. Some of the outbuildings have been demolished since 1939 and both the farmhouse and adjoining range to the west are now in residential use {1}.	Early Modern	C19	
	5130		Fencehouses, North Hetton Farm and Stables	Site of former stables and associated buildings located to south-east of Colliery Row. Probably constructed for stabling horses used on colliery wagonways in the area. The buildings are recorded on the 1838 Houghton-le-Spring tithe map and labelled as "North Hetton Stables" on the 1856 OS map. By 1896 the complex of buildings had expanded and	Early Modern	C19	



Table 11 F	Heritage as	sets reco	Table 11 Heritage assets recorded in County Durham and Tyne an	nd Tyne and Wear HERs		-	
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
				are recorded as "North Hetton Farm". The original stable block no longer survives but the later farmhouse is still extant {1}.			
	6848		East Rainton, Rainton Colliery, Meadows Pit	Shown on 1st edition Ordnance Survey map. This large colliery was linked to the Rainton and Seaham Railway (HER 2976) by the Adventure Branch (HER 3195). It was also linked to the North Eastern Railway (HER 2625) and the Londonderry Railway (HER 3180) Opened in 1824. Owners were the North Hetton Coal Company (Earl of Durham, Messrs Wood, Philipson, Burrell and others) and Lady FA Vane Londonderry, Marquess of Londonderry (in 1850s). Part of Rainton Colliery, which was opened before 1815 and closed in July 1978. Rainton Colliery included Adventure Pit (NZ 315 470), Dun Well Pit (HER 3206), Alexandrina Pit (HER 3219), Hazard Pit (HER 3192), Nicholson's Pit (HER 3201), North Pit (HER 3197), Plain Pit (HER 3198), Resolution Pit (NZ 311 476). In 1790 a boring had been put down in South Pit in East Rainton by a Mr Rawlings, to a depth of 10 fathoms. Whellan reported that in 1894 Rainton Colliery had 31 stationary engines, 38 boilers, 1185 workers and 835 workmen's houses.In modern times Rainton Meadows was an opencast mine called Rye Hill Surface Coal Mine. Site now restored as a nature reserve ran by Durham Wildlife Trust.	Modern	C19	
	6851		Rainton Bridge,	~	Early	C19	Site of Special
			Rainton Brickworks	3201). Part of Joe's Pond SSSI. Brickworks, Nicholson's pit, East Rainton. Disused 1894.	Modern		Scientific Interest
				(Source: Davison, P J, 1986. Brickworks of the North East, 187 site 15)			



Table 11 H	leritage as	sets reco	Table 11 Heritage assets recorded in County Durham and Tyne and Wear HERs	d Tyne and Wear HERs			
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
	6850		Rainton Bridge, fishponds (Joe's Pond)	Two large fishponds shown on 2nd edition Ordnance Survey map next to Nicholson's pit (HER 3201) - presumably the water-filled former coal workings. The largest pond had a boat house. The smaller pond was filled in by Lambton, Hetton & Joicey Coal Co. after a series of deaths. It is said that several people ended their lives there by running down the steep pit heap next to it and jumping into the pond. In the winter of 1948 three boys from East Rainton were ice skating on the pond. The ice broke and all three were drowned. The larger pond survives and came to be known as Joe's Pond. Now a nature reserve. Protected as a SSSI.	Early Modern	C19	Site of Special Scientific Interest
	6850		Rainton Bridge, fishponds (Joe's Pond)	Two large fishponds shown on 2nd edition Ordnance Survey map next to Nicholson's pit (HER 3201) - presumably the water-filled former coal workings. The largest pond had a boat house. The smaller pond was filled in by Lambton, Hetton & Joicey Coal Co. after a series of deaths. It is said that several people ended their lives there by running down the steep pit heap next to it and jumping into the pond. In the winter of 1948 three boys from East Rainton were ice skating on the pond. The ice broke and all three were drowned. The larger pond survives and came to be known as Joe's Pond. Now a nature reserve. Protected as a SSSI.	Modern	C19	Site of Special Scientific Interest



Table 11 F	leritage as:	sets reco	Table 11 Heritage assets recorded in County Durham and Tyne and Wear HERs	nd Tyne and Wear HERs			
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
	6852		Rainton Bridge, North Pit Farm	A long east-west block and a smaller building are shown on a plan of 1777{NRO 578/321}. On 3rd November 1823 two victims of an explosion of fire-damp at Plains Pit (HER 3198) were "John Hann and son, hewer and putter, Mitchinson's Farm, probably North Pit Farm. The tithe map of 1839 {DRO EP/ER/27/2} describes the site as "Farm Homestead". By 1856 (OS first edition) North Pit Farm had changed little in plan. It was occupied by Thomas Mitcheson, yeoman {Whellan 1856, 774-5}. The farm continued in use, with changes of tenancy, throughout the nineteenth century. In the 1868/9 elections, two John Hutchinsons (father and son), farmers at North Pit Farm, voted for George Elliot of Houghton Hall {Poll Book of North Durham 1868/9}. Between 1856 and 1895 the farm was enlarged, with new buildings to the north and south of the earlier ranges and a pond on the east side of the track. This may have been a consequence of the decline of North Pit (HER 3197), with more land avaible for agriculture. The farm was occupied in 1906 by George Anthony Hardy {kelly 1906, 311}. By 1938 North Pit Farm was being run by Margaret, Norah and Dorothy Hardy {kelly 1938}. The farm continued in use until the 1980s and was demolished circa 2001. In June and July 2001, a trench was excavated over the farm buildings in advance of the Rainton Bridge South Business Park. The remains were found to have been rebuilt using modern materials. To the north of the main range, sandstone wall foundations and a cobbled yard were recorded. To the south, evidence of a post-built timber building, probably a lean-to.	Post Medieval	C18	



Table 11 H	eritage as	sets reco	Table 11 Heritage assets recorded in County Durham and Tyne and Wear HERs	nd Tyne and Wear HERs			
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
	6852		Rainton Bridge, North Pit Farm	A long east-west block and a smaller building are shown on a plan of 1777{NRO 578/321}. On 3rd November 1823 two victims of an explosion of fire-damp at Plains Pit (HER 3198) were "John Hann and son, hewer and putter, Mitchinson's Farm, probably North Pit Farm. The tithe map of 1839 (DRO EP/ER/27/2) describes the site as "Farm Homestead". By 1856 (OS first edition) North Pit Farm had changed little in plan. It was occupied by Thomas Mitcheson, yeoman {Whellan 1856, 774-5}. The farm continued in use, with changes of tenancy, throughout the nineteenth century. In the 1868/9 elections, two John Hutchinsons (father and son), farmers at North Pit Farm, voted for George Elliot of Houghton Hall {Poll Book of North Durham 1868/9}. Between 1856 and 1895 the farm was enlarged, with new buildings to the north and south of the earlier ranges and a pond on the east side of the track. This may have been a consequence of the decline of North Pit (HER 3197), with more land avaible for agriculture. The farm was occupied in 1906 by George Anthony Hardy {Kelly 1906, 311}. By 1938 North Pit Farm was being run by Margaret, Norah and Dorothy Hardy {Kelly 1938}. The farm and July 2001, a trench was excavated over the farm buildings in advance of the Rainton Bridge South Business Park. The remains were found to have been rebuilt using modern materials. To the north of the main range, sandstone wall foundations and a cobbled yard were recorded. To the south, evidence of a post-built timber building, probably a lean-to.	Post Medieval	C18	
	8811		Houghton-le-Spring, Rainton Bridge, Glebe Sewage Disposal Works	Shown on Ordnance Survey second edition of 1890. On the Rainton Burn.	Early Modern	C19	
	6849		Rainton Bridge, The	Shown on 1st edition Ordnance Survey map map. Linked by railway (HER	Early	C19	



Table 11 H	leritage as	sets reco	Table 11 Heritage assets recorded in County Durham and Tyne and Wear HERs	nd Tyne and Wear HERs			
NHL No.	TWHE R No.	DHER No.	Site	Description	Period	Century	Designation
			Meadows Brickfield	3621) to the North Eastern Railway (HER 2625). 1861	Modern		
	6996		Chilton Moor, Church		Early	C19	
			of St. Andrew	South aisle and north tower never completed. Late Decorated style, similar to Bodley.	Modern		
	15910		Fencehouses,	Built in 1914. Brick, one storey, slate roof with a row of air vents along	Modern	C20	
			Dubmire Junior School	the roof ridge. Also known as Dubmire Council School and Dubmire			
				Mixed School. It had a coronation clock. A new primary school was built			
				to the rear in 2003. The old school was demolished in 2004.			
	11228		Fencehouses, Morton	Only 1.2% of Great Britain is ancient semi-natural broadleaved woodland.	Post		Ancient
			Wood	An Inventory of Ancient Woodland (sites over 2 hectares in size which	Medieval		Woodland
				have been in existence and have had a continuous history of tree cover			
				since at least 1600 AD) was begun in 1981, compiled by English Nature.			
				The aim is to ensure the continuance of the woods, the preservation of			
				their wildlife and landscape value and appropriate management. Ancient			
				woods are a living record of the biological effects of practices such as			
				coppicing and wood pasture management. The natural vegetation of			
				ancient woods, the undisturbed soil and drainage patterns and their			
				contribution to the landscape comprise an irreplaceable conservation			
				asset which once destroyed can never be recreated {Cooke and The			
				Nature Conservancy Council, 1987}.			



Table 12 Waggonways recorded in the Tyne and Wear HER			
UID	Name	HER No.	
AW61	Jane Wharton's waggonway to Rainton (LT86)		
Durham	Adventure Pit waggonway (LT87B)		
Durham	Resolution Pit waggonway (LT87A)		
AW75	Railway to Riddings Colliery (LT84A)		
AW68	Rainton waggonway branch to Nicholson Pit (LT87C)		
AW69	Rainton waggonway to Alexandrina Pit (LT87D)	3216	
AW64	Rainton Meadows to Penshaw waggonway (LT86C)		
AW65	Rainton waggonway branch to Quarry Pit (LT86D)		
AW78	Branch line to The Annabella Pit (LT86?)		
AW66	Rainton waggonway to Stubley Moor Pit (LT86E)		
AW70	Rainton waggonway branch to Low Moorsley (LT87E)	3204	
AW77	Branch line to North Pit (LT86?)		

