

Site & Landscape Survey

Interpretation, Design & Display

Land off Barrowby Lane, Garforth, West Yorkshire

**Archaeological Evaluation** 

**Report No. Y056/12** 







# **CFA ARCHAEOLOGY LTD**

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This document has been prepared in accordance with CFA Archaeology Ltd standard procedures.

Land off Barrowby Lane, Garforth, West Yorkshire.

**Archaeological Evaluation** 

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#### **Summary**

An archaeological evaluation was undertaken by CFA Archaeology Ltd on land off Barrowby Lane, Garforth, West Yorkshire between 15 and 17 April 2012. Twelve trenches were excavated; no significant archaeological features or deposits were recorded and no finds were recovered.

#### 1. INTRODUCTION

#### 1.1 General

This report presents the results of an archaeological evaluation undertaken by CFA Archaeology Ltd (CFA) on behalf of Prospect Archaeology Ltd between 15 and 17 January 2012. The CFA code and number for the project is BALG/2063.

All work was undertaken in accordance with a specification prepared by Rebecca Remmer of West Yorkshire Archaeology Advisory Service (WYAAS) on behalf of Leeds City Council (Appendix 2) in support of a planning application (11/04759/FU).

# 1.2 Site Location and Description

The proposed development area on the northern edge of Garforth (NGR: SE 4028 3366 centred). It is bound by Barrowby Lane and Barwick View to the south and east. To the north, runs a railway line and embankment, and to the west, residential housing (Fig. 1).

The site slopes to the north from approximately 77m to 71m above the Ordnance datum (AOD). The proposed development area can be divided into two halves; east and west. To the east, the site is predominantly grassed, although some areas are overgrown by saplings, trees and hedges towards the site boundaries (Fig. 2). To the west, the site is heavily overgrown, with mature trees and dense scrub. The site has been used as allotments and the remains of a number of former sheds, outbuildings and pens were visible (Fig. 3).

The underlying solid geology of the site is Pennine Lower Coal Measures consisting of mudstone, siltstone and sandstone. The superficial deposits were glacial tills comprising sandy clays to the south and east (Fig. 4) with firm boulder clay uncovered to the north and west (Figs 5 and 6).

#### 1.3 Previous Archaeological work and Historical Background

An Initial Archaeological Assessment was produced by Prospect Archaeology to support the planning application on behalf of their client Persimmon Homes (Rosenberg 2011). The assessment stated the proposed development site is located in a wider area of later prehistoric and Roman activity. A proportion of the known sites are visible as crop marks. It was assessed that crop marks, which may have indicated the presence of archaeological remains within the development area, were unlikely, as the site was used as allotment gardens throughout the 20th century. No intrusive

archaeological fieldwork is known to have taken place within the proposed development area.

#### 1.4 Aims

The aim of the evaluation as specified in the WSI was: 'to gather sufficient information to establish the extent, condition, character, condition, and date (as far as circumstances permit) of any archaeological features and deposits within the area of interest' (Appendix 2).

#### 2. WORKING METHODS

#### 2.1 General

All work was undertaken according to the Institute for Archaeologists' Code of Conduct, and relevant Standards and Guidance documents (IfA 1994, 2001), and CFA's standard procedures and the terms of the specification (Appendix 2).

All excavation and on-site recording was carried out according to CFA procedures, principally by drawing, by photography and by completing standard CFA record forms.

The excavation of the trenches was carried out using a mechanical excavator equipped with a smooth-bladed bucket under constant archaeological supervision. Prior to the removal of topsoil and the underlying deposits, the area was cleared of any vegetation. All further excavation required to fulfil the terms of the brief was carried out by hand. Trench positions had been agreed in advance between Prospect Archaeology and the Senior Archaeological Officer for West Yorkshire Archaeology Advisory Service.

The evaluation was subject to a number of on-site constraints. These were the presence of dense scrub, mature trees and former allotment buildings (Figs 2, and 3). In addition, a breeding bird survey identified a number of nesting sites to be avoided and trenches were sited to avoid disturbing the nesting birds and comply with statutory legislation (Smith 2012). These constraints required that the location of some trenches to be moved in the field.

Trench positions were surveyed using industry standard electronic surveying equipment (Fig. 1). CFA monitored the backfilling of all excavated trenches on completion of the fieldwork.

#### 2.2 Standards and Guidance

CFA Archaeology is a registered organisation with the Institute for Archaeologists (IfA). All work was conducted in accordance with relevant IfA Standards and Guidance documents (IfA 1994, 2001), English Heritage guidance (EH, 2005, 2006, 2008a, 2008b 2008c and 2011), and CFA's standard methodology.

### 2.3 Archiving

The project archive, comprising all CFA records will be ordered according to WYAAS instructions and to nationally recognised standards (IfA 2001 and Brown 2011) and deposited at Leeds Museum Discovery Centre. A summary of the results of archaeological works will be submitted for inclusion in OASIS.

### 2.4 Monitoring

The trial trenching was monitored by Rebecca Remmer, Senior Archaeological Officer for West Yorkshire Archaeology Advisory Service, who was informed in advance of the works taking place and visited the site on 16 April 2012.

#### 3. RESULTS

Twelve trenches were excavated; the location of each is shown on Figure 1. The topsoil was very organic, from repeated manuring and was typically soft, dark grey, silty clay. The topsoil varied in depth from 0.3m to 0.5m. In trenches 3, 9, 10, and 11 the topsoil overlay 0.1m of mid-grey, silty subsoil, which had accumulated in shallow depressions; probably from localised ponding. The natural substrate in all trenches showed evidence of root action. Bioturbation was more prevalent in overgrown locations to the west of the proposed development area and in the proximity of mature trees.

The evaluation recorded field drains filled with deposits of cinder and ash in trenches 5, 9, 10 and 11. A sandstone rubble field drain was exposed in Trench 6. The topsoil contained late 19th and 20th-century pottery and glass. No other archaeological remains were recorded.

#### 4. CONCLUSION

Although archaeological remains are present in the wider landscape, none were recorded on the site. It may be that the ground has been disturbed by the construction of the railway at the rear of the site and by the use of the site as allotments and small holding

#### 5. BIBLIOGRAPHY

BGS, 2012. http://www.bgs.ac.uk (Accessed 22 May 2012)

Brown, DH, 2011, Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation, Institute of Field Archaeologists

EH, 2005, Management of Research Projects in the Historic Environment, English Heritage

EH, 200, *Management of Research Projects in the Historic Environment* (MoRPHE): Project Managers' Guide, English Heritage

EH, 2008a, Investigating Conservation: Guidelines on how the detailed examination of artefacts from archaeological sites can shed light on their manufacture and use, English Heritage

EH, 2008b, Management of Research Projects in the Historic Environment: Archaeological Excavation, English Heritage PPN3

EH, 2008c Management of Research Projects in the Historic Environment, Development of Procedural Standards and Guidelines for the Historic Environment, English Heritage PPN 6

EH, 2011, Environmental Archaeology: A Guide to the Theory and Practice of Method, from Sampling and Recovery to Post-Excavation, English Heritage

IfA, 1994, Standard and Guidance for Field Evaluation, Institute for Archaeologists, Revised October 2008

IfA 2001 Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials, Institute for Archaeologists, Revised October 2008

Rosenberg, N., 2012, *Barrowby Lane, Garforth: Initial Archaeological Assessment*. Prospect Archaeology, August 2011

Smith, P., 2012 Breeding Bird Survey Results Summary: Barrowby Lane, Garforth. Wildbanks Conservation

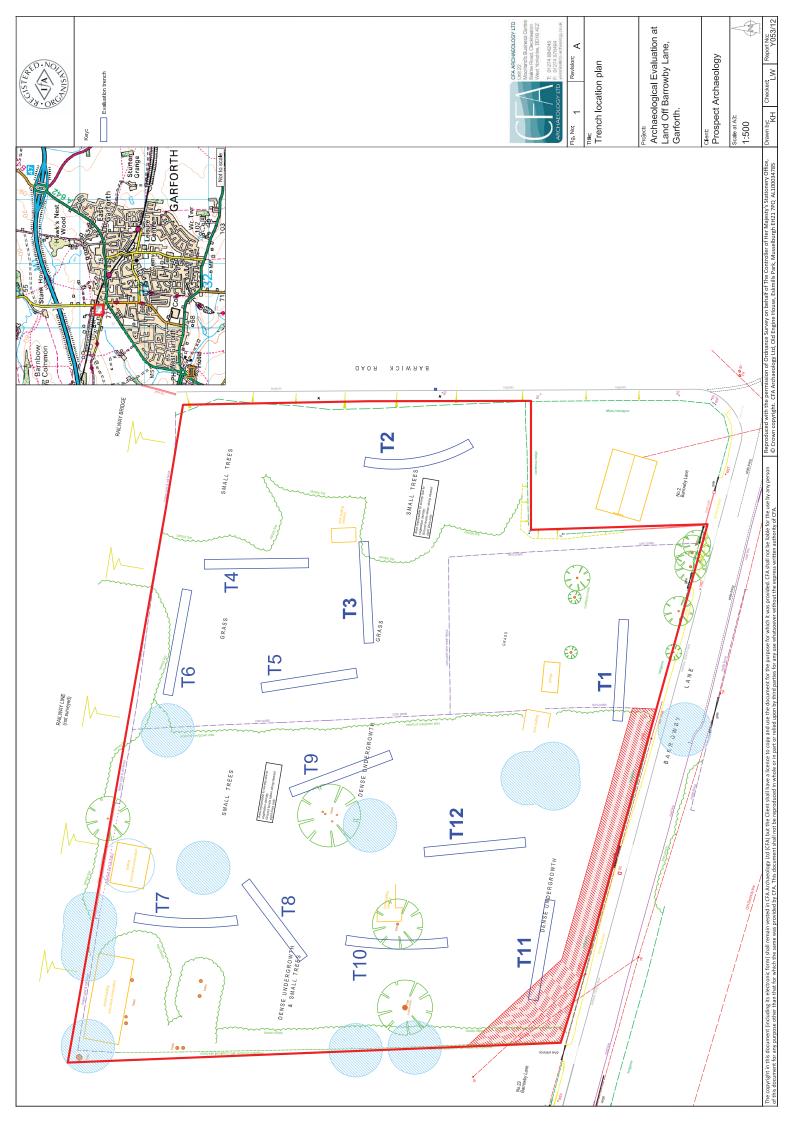




Fig. 2 - Shot of north-east part of the site after back-filling



Fig. 3 - General shot of site observing location of Trench 2.

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Fig. 4 - Post-excavation shot of Trench 1.



Fig. 5 - Post-excavation shot of Trench 5.

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Fig. 6 - Post-excavation shot of Trench 8.

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# APPENDICES

# **Appendix 1: Digital Photographic Register**

No	Contexts/description	Taken from	Conditions
1	General shot of site entrance.	North	Bright
2	General shot of Trench 1 area and plant.	West	Overcast
3	General shot of access point to Trench 2.	East	Overcast
4	Working shot of Trench 3 location.	West	Overcast
5	Working shot of Trench 3 location.	North-east	Overcast
6	Post-excavation shot of Trench 1.	West	Clear
7	Post-excavation shot of Trench 2.	South	Clear
8	Post-excavation shot of Trench 2.	North-west	Clear
9	Post-excavation shot of Trench 3.	West	Clear
10	Post-excavation shot of Trench 4.	North	Clear
11	Post-excavation shot of Trench 4.	South	Clear
12	Post-excavation shot of Trench 6.	North-west	Clear
13	Post-excavation shot of Trench 5.	South	Clear
14	Post-excavation shot of Trench 10.	South	Clear
15	Post-excavation shot of Trench 11.	North-west	Clear
16	Post-excavation shot of Trench 12.	South	Bright
17	Post-excavation shot of Trench 9.	South	Bright
18	Post-excavation shot of Trench 7.	North	Bright
19	Post-excavation shot of Trench 8.	South-west	Bright
20	Post-excavation shot of Trench 9.	South	Bright
21	Shot of area at Trench 2 after backfilling.	South	Clear
22	Shot of north-east part of site after backfilling.	North-west	Clear
23	Shot of Trench 3 after backfilling.	West	Clear
24	Shot of site after backfilling.	South-west	Clear
25	Post-excavation shot of Trench 7.	North	Bright
26	Post-excavation shot of Trench 8.	South-west	Bright
27	Shot of section at Trench 11.	South	Bright
28	Oblique shot of Trench 11.	North-east	Bright
29	Shot of section at Trench 9.	East	Bright
30	Shot of site at location of Trench 7.	East	Bright
31	Shot of site at location of Trench 12.	North	Bright
32	Shot of site at location of Trench 12.	East	Bright
33	General shot of site looking towards Trench 9.	South-east	Bright
34	General shot of site looking towards Trench 10 and Trench 11.	South	Bright



WEST YORKSHIRE ARCHAEOLOGY ADVISORY SERVICE: SPECIFICATION FOR AN ARCHAEOLOGICAL EVALUATION BY TRIAL TRENCHING AT LAND OFF BARROWBY LANE, GARFORTH.

Planning application reference 11/04759/FU.

Specification prepared on behalf of Leeds City Council at the request of Nansi Rosenberg of Prospect Archaeology.

#### 1. Summary

- 1.1 A limited amount of archaeological work consisting of pre-determination trial trenching is proposed to help establish the archaeological significance of the above site. Any work arising from the results of the evaluation will be covered by a further specification.
- 1.2 This specification has been prepared by the West Yorkshire Archaeology Advisory Service, the holders of the WY Historic Environment Record

NOTE: The requirements detailed in paragraphs 6.3, 6.4, 6.5, 6.6 and 8.1 are to be met by the archaeological contractor **prior** to the commencement of fieldwork by completing and returning the attached form to the WY Archaeology Advisory Service.

### 2. Site Location & Description

Grid Reference: centred on SE 4028 3366

- 2.1 The proposed development site lies to the north of Garforth. It is bounded to the south by Barrowby Lane, to the east by Barwick Road, to the north by a railway line, and to the west by residential dwellings. The site was previously allotments and is currently overgrown. There is an overhead BT line along the Barrowby Lane site boundary. Access to the site is via Barrowby Lane.
- 2.2 The underlying geology of the site comprises mudstones, siltstones and sandstones of the Pennine Lower Coal Measures. The soils consist of slightly acidic loamy clays. The site gradually slopes from 70m AOD in the northwest corner to c.73m AOD at the southeast corner.

### 3. Background

- 3.1 A planning application for a residential development of 35 houses (11/04759/FU) has been submitted to Leeds City Council.
- 3.2 The Planning Authority have been advised by the WYAAS that there is reason to believe that important archaeological remains may be affected by the proposed development and that an archaeological evaluation is required to establish the significance and the degree of archaeological recording that may be necessary.

3.3 This specification has been prepared by the WYAAS at the request of Nansi Rosenberg of Prospect Archaeology, acting on behalf of the applicants, to detail what is required for the evaluation and to allow an archaeological contractor to provide a quotation.

# 4. Archaeological Interest

4.1 The proposed development site lies in an area of archaeological interest. To the north and east of the site are extensive cropmark sites, comprising enclosures, ditches and lanes. These remains are thought to date to the Iron Age/Romano British period. There is potential for similar remains to be present on the proposed site.

#### 5. Aim of the Evaluation

5.1 The aim of the evaluation is to gather sufficient information to establish the extent, condition, character and date (as far as circumstances permit) of any archaeological features and deposits within the area of interest. The information gained will allow the Planning Authority to make a reasonable and informed decision on the planning application as to whether archaeological deposits should be preserved in-situ, or more appropriately, be recorded prior to destruction (whether this be a summary record from a salvage excavation or watching brief, or a detailed record from full open area excavation).

#### 6. General Instructions

#### 6.1 Health and Safety

6.1.1 The archaeologist on site will naturally operate with due regard for Health and Safety regulations. Where archaeological work is carried out at the same time as the work of other contractors, regard should also be taken of any reasonable additional constraints that these contractors may impose. This work may require the preparation of a Risk Assessment of the site, in accordance with the Health and Safety at Work Regulations. The West Yorkshire Archaeology Advisory Service and its officers cannot be held responsible for any accidents or injuries that may occur to outside contractors while attempting to conform to this specification.

### **6.2 Confirmation of Adherence to Specification**

6.2.1 Prior to the commencement of *any work*, the archaeological contractor must confirm adherence to this specification in writing to the WYAAS, or state (with reasons) any proposals to vary the specification. Should the contractor wish to vary the specification, then written confirmation of the agreement of the WYAAS to any variations is required prior to work commencing. Unauthorised variations are made at the sole risk of the contractor. **Modifications presented in the form of a rewritten specification/project design will not be considered by the WYAAS**. Any technical queries arising from the specification detailed below should be addressed to the WYAAS *without delay*.

#### 6.3 Confirmation of Timetable and Contractors' Qualifications

6.3.1 Prior to the commencement of *any work*, the archaeological contractor **must** provide WYAAS **in writing** with:

- a projected timetable for the site work;
- details of the staff structure and numbers;
- names and CVs of key project members (the project manager, site supervisor, any proposed specialists, sub-contractors etc.),

6.3.2 All project staff provided by the archaeological contractor must be suitably qualified and experienced for their roles. The timetable should be adequate to allow the work to be undertaken to the appropriate professional standard, subject to the ultimate judgement of WYAAS.

#### 6.4 Notification

6.4.1 The project will be monitored as necessary and practicable by the WYAAS, in its role as "curator" of the region's archaeology. The WYAAS should receive as much notice as possible, and certainly one week, of the intention to start fieldwork. This notification is to be supplied **in writing**, and copied to the relevant District Museum (see para. 9.1 below). As a courtesy, English Heritage's Science Adviser Dr Andy Hammon should also be notified of the intention to commence fieldwork (contact: tel. 01904 601983; email andy.hammon@english-heritage.org.uk). A copy of the contractor's risk assessment should accompany notification of intention to commence work.

### 6.5 Documentary Research

6.5.1 Prior to the commencement of *fieldwork*, the WY HER should be visited by either the project manager or the site supervisor, in order to gain an overview of the archaeological/historical background of the site and environs. In addition to providing a knowledge base for the work in hand, the results of this assessment may be incorporated into the contractor's report where they are considered to contribute to that report, but any extraneous material should be omitted. Please note that the WY HER makes a charge for consultations of a commercial nature. The results of this exercise should be used to inform the whole project. Please note, however, that a formal desk-based report is not required and the results of this stage of work should be incorporated in the final report.

# 7. Fieldwork Methodology

### 7.1 Trench Size and Placement (Fig. 1)

7.1.1 The work will involve the excavation of twelve 20m by 2m trenches, which can be machine-opened. The contractor should also allow for a contingency amount of 40 square metres. The use of the contingency will depend upon the results obtained in the initial trial trenching. The use of the contingency will be at the decision of the WYAAS, whose decision will be issued in writing, if necessary in retrospect after site discussions. Proposed trench locations are shown on Figure 1.

Total site area: 10,950m<sup>2</sup>
Total area of trenching: 480m<sup>2</sup>
Contingency trenching: 40m<sup>2</sup>

#### 7.2 Method of Excavation

- 7.2.1 The trial trenches may be opened and the topsoil and recent overburden removed down to the first significant archaeological horizon in successive level spits of a **maximum** 0.2m. thickness, by the use of an appropriate machine using a wide toothless ditching blade. **Under no circumstances should the machine be used to cut arbitrary trenches down to natural deposits.** All machine work must be carried out under direct archaeological supervision and the machine halted if significant archaeological deposits are encountered. The top of the first significant archaeological horizon may be exposed by the machine, but must then be cleaned by hand and inspected for features and then dug by hand.
- 7.2.2 No archaeological deposits should be entirely removed unless this is unavoidable in achieving the objectives of this evaluation, although **all** features identified are expected to be half-sectioned and the **full** depth of archaeological deposits must be assessed. All trenches are to be the stated dimensions at their base.
- 7.2.3 All artefacts are to be retained for processing and analysis except for unstratified 20<sup>th</sup>-century material, which may be noted and discarded. Finds will be stored in secure, appropriate conditions following the guidelines in First Aid for Finds (3<sup>rd</sup> edition).

# 7.3 Method of Recording

- 7.3.1 The trenches are to be recorded according to the normal principles of stratigraphic excavation. The stratigraphy of each trial trench is to be recorded even where no archaeological deposits have been identified.
- 7.3.2 The actual areas of trenching and any features of possible archaeological concern noted within the trenches should be accurately located on a site plan and recorded by photographs, summary scale drawings and written descriptions sufficient to permit the preparation of a report on the material. The site grid is to be accurately tied into the National Grid and located on the largest scale map available of the area (either 1:2500 or 1:1250).
- 7.3.3 Except where otherwise requested, black and white photography using orthodox monochrome chemical development should be used. Film should be no faster than ISO400. Slower films should be used where possible as their smaller grain size yields higher definition images. Technical Pan (ISO 25), Pan-F (ISO50), FP4 (ISO125) and HP5 (ISO400) are recommended. The use of dye-based films such as Ilford XP2 and Kodak T40CN is unacceptable due to poor archiving qualities. Black and white photography should be supplemented by colour photography; this should be in transparency format (i.e. slides or digital photography as an acceptable alternative, see paragraph 7.3.4 below).
- 7.3.4 Digital photography: as an alternative for colour slide photography, good quality digital photography may be supplied, using cameras with a minimum resolution of 4 megapixels. Note that conventional black and white print photography is still required and constitutes the permanent record. Digital images will only be acceptable as an alternative to colour slide photography if each image is supplied in three file formats (as a RAW data file, a DNG file and as a JPEG file). The contractor must include metadata embedded in the DNG file. The metadata must include the following: the

commonly used name for the site being photographed, the relevant centred OS grid coordinates for the site to at least six figures, the relevant township name, the date of photograph, the subject of the photograph, the direction of shot and the name of the organisation taking the photograph. Any digital images are to be supplied to WYAAS on gold CDs by the archaeological contractor accompanying the hard copy of the report.

#### 7.4 Use of Metal Detectors on Site

- 7.4.1 Spoil heaps are to be scanned for both ferrous and non-ferrous metal artefacts using a metal detector capable of making this discrimination, operated by an experienced metal detector user (if necessary, operating under the supervision of the contracting archaeologist). Modern artefacts are to be noted but not retained (19<sup>th</sup>-century material and earlier should be retained.)
- 7.4.2 If a non-professional archaeologist is to be used to carry out the metal-detecting, a formal agreement of their position as a sub-contractor working under direction must be agreed in advance of their use on site. This formal agreement will apply whether they are paid or not. To avoid financial claims under the Treasure Act a suggested wording for this formal agreement with the metal detectorist is: "In the process of working on the archaeological investigation at [location of site] between the dates of [insert dates], [name of person contributing to project] is working under direction or permission of [name of archaeological organisation] and hereby waives all rights to rewards for objects discovered that could otherwise be payable under the Treasure Act 1996."

# 7.5 Environmental Sampling Strategy

- 7.5.1 Bulk samples must be taken from **all** securely stratified deposits using a strategy which combines systematic and judgement sampling, but which also follows the methodologies outlined in the English Heritage (2011) 'Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (Second Edition)' guidance.
- 7.5.2 Samples for scientific dating (radiocarbon dating, archaeomagnetic dating, dendrochrology etc.) should be taken if suitable material is encountered during the excavation. The English Heritage Science Advisor should be consulted (Dr Andy Hammon, tel.: 01904 601983, email: andy.hammon@english-heritage.org.uk) and provision should be made for an appropriate specialist(s) to visit the site, take samples and discuss the sampling strategy, if necessary.

### 7.6 Conservation Strategy

7.6.1 A conservation strategy must be developed in collaboration with a recognised laboratory. All finds must be assessed in order to recover information that will contribute to an understanding of their deterioration and hence preservation potential, as well as identifying potential for further investigation. Furthermore, all finds must be stabilised and packaged in accordance with the requirements of the receiving museum. As a guiding principle only artefacts of a "displayable" quality would warrant full conservation, but metalwork and coinage from stratified contexts would be expected to be X-rayed if necessary, and conservation costs should also be included as a contingency.

#### 7.7 Location of Services, etc.

7.7.1 The archaeological contractors will be responsible for locating any drainage pipes, service pipes, cables *etc*. which may cross any of the trench lines, and for taking the necessary measures to avoid disturbing such services.

#### 7.8 Human Remains

7.8.1 Any human remains that are discovered must initially be left *in-situ*, covered and protected. WYAAS will be notified at the earliest opportunity. If removal is necessary the remains must be excavated archaeologically in accordance with the *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England* published by English Heritage (2005), a valid Ministry of Justice licence and any local environmental health regulations.

#### 7.9 Treasure Act

7.9.1 The terms of the Treasure Act 1996, as amended, must be followed with regard to any finds that might fall within its purview. Any finds must be removed to a safe place and reported to the local coroner as required by the procedures as laid down in the "Code of Practice". Where removal cannot be effected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

### 8. Monitoring

- 8.1 The representative of the WYAAS will be afforded access to the site at any reasonable time. It is usual practice that the visit is arranged in advance, but this is not always feasible. The WYAAS' representative will be provided with a site tour and an overview of the site by the senior archaeologist present and should be afforded the opportunity to view all trenches, any finds made that are still on site, and any records not in immediate use. It is anticipated that the records of an exemplar context that has previously been fully recorded will be examined. Any observed deficiencies during the site visit are to be made good to the satisfaction of the Advisory Service's representative, by the next agreed site meeting. Access is also to be afforded at any reasonable time to English Heritage's Archaeological Science Advisor.
- 8.2 Please note that WYAAS now make a charge for site monitoring visits. An invoice will be raised on the archaeological contractor. One monitoring visit will be charged for this project. Please contact us for the current charge.

### 9. Archive Deposition

9.1 Before commencing any fieldwork, the archaeological contractor must contact the relevant District museum archaeological curator in writing (copied to WYAAS) to determine the museum's requirements for the deposition of an excavation archive. In this case the contact is: Katherine Baxter, Leeds Museum Discovery Centre, Carlisle Road, Hunslet, Leeds, LS10 1LB (Tel.:0113 2141558; email: Katherine.baxter@leeds.gov.uk).

- 9.2 It is the policy of the Leeds Museum to accept complete excavation archives, including primary site records and research archives and finds, from all excavations carried out in the District, which it serves.
- 9.3 It is the responsibility of the archaeological contractor to endeavour to obtain consent of the landowner, in writing, to the deposition of finds with the Leeds Museum.
- 9.4 It is the responsibility of the archaeological contractor to meet the Leeds Museum's requirements with regard to the preparation of fieldwork archives for deposition.

# 10. Unexpectedly Significant or Complex Discoveries

10.1 Should there be unexpectedly significant or complex discoveries made that warrant, in the professional judgement of the archaeologist on site, more detailed recording than is appropriate within the terms of this specification, then the archaeological contractor should urgently contact the WYAAS with the relevant information to enable them to resolve the matter with the developer.

# 11. Post-Excavation Analysis and Reporting

# 11.1 Finds and Samples

- 11.1.1 On completion of the fieldwork, any samples taken shall be processed and any finds shall be cleaned, identified, assessed/analysed, dated (if possible), marked (if appropriate) and properly packed and stored in accordance with the requirements of national guidelines.
- 11.1.2 Samples should be processed for the recovery of artefactual material, animal/fish/human bones, industrial residues, shell, molluscs, charcoal and mineralised plant remains as a minimum. 'Specialist' samples (e.g. monoliths, cores, plant/invertebrate macrofossils) should be processed separately as appropriate.
- 11.1.3 Material suitable for scientific dating (e.g. charcoal) should be identified to species and assessed for suitability by an environmental specialist prior to submission to a dating laboratory. Any human remains submitted for C14 dating should also have carbon (delta 13C) and nitrogen isotope analysis carried out by the radiocarbon laboratory.
- 11.1.4 All finds and biological material must be analysed by a qualified and experienced specialist.
- 11.1.5 Following identification, finds of 20<sup>th</sup>-century date should be noted, quantified and summarily described, but can then be discarded if appropriate. All finds which are of 19<sup>th</sup> century or earlier date should be retained and archived.

### 11.2 Field Archive

11.2.1 A fully indexed field archive shall be compiled consisting of all primary written documents, plans, sections, photographic negatives and a complete set of labelled photographic prints/slides. Standards for archive compilation and transfer should conform to those outlined in Archaeological Archives – a guide to best practice in

creation, compilation, transfer and curation (Archaeological Archives Forum, 2007). An index to the field archive is to be deposited with the West Yorkshire Archaeology Advisory Service (preferably as an appendix in the report).

- 11.2.2 Prints may be executed digitally from scanned versions of the film negatives, and may be manipulated to improve print quality (but not in a manner which alters detail or perspective). All digital prints, including those presented in the report, must be made on paper and with inks which are certified against fading or other deterioration for a period of 75 years or more when used in combination. If digital printing is employed, the contractor must supply details of the paper/inks used in writing to the WY Archaeology Advisory Service, with supporting documentation indicating their archival stability/durability. Written confirmation that the materials are acceptable must have been received from the WYAAS prior to the commencement of work on site.
- 11.2.3 The original archive is to accompany the deposition of any finds, providing the landowner agrees to the deposition of finds in a publicly accessible archive (see para. 8.4 above). In the absence of this agreement the field archive (less finds) is to be deposited with the West Yorkshire Archaeology Advisory Service.

# 11.3 Report Format and Content

- 11.3.1 A report should be produced, which should include background information on the need for the project, a description of the methodology employed, and a full description and interpretation of results produced. It is not envisaged that the report is likely to be published, but it should be produced with sufficient care and attention to detail to be of academic use to future researchers.
- 11.3.2 Location plans should be produced at a scale which enables easy site identification and which depicts the full extent of the site investigated (a scale of 1:50,000 is not regarded as appropriate unless accompanied by a more detailed plan or plans). Site plans should be at an appropriate scale showing trench layout (as dug), features located and, where possible, predicted archaeological deposits. Upon completion of each evaluation trench all sections containing archaeological features will be drawn. Section drawings (at a minimum scale of 1:20) must include heights O.D. Plans (at a minimum scale of 1:50) must include O.D. spot heights for all principal strata and any features. Where no archaeological deposits are encountered at least one long section of each trench will be drawn.
- 11.3.3 Artefact analysis is to include the production of a descriptive catalogue, quantification by context and discussion/interpretation if warranted, with finds critical for dating and interpretation illustrated.
- 11.3.4 Environmental analysis is to include identification of the remains, quantification by context, discussion/interpretation if warranted, and a description of the processing methodology. Radiocarbon results must be presented in full (laboratory sample number, conventional radiocarbon age, delta C13 value, calibration programme). Copies of the laboratory-issued dating certificates must be included as an appendix to the report.

11.3.5 Details of the style and format of the report are to be determined by the archaeological contractor, but should include a full bibliography, a quantified index to the site archive, and as an appendix, a copy of this specification.

### 11.4 Summary for Publication

11.4.1 The attached summary sheet should be completed and submitted to the WYAAS for inclusion in the summary of archaeological work in West Yorkshire published on WYAAS' website.

### 11.5 Publicity

11.5.1 If the project is to be publicised in any way (including media releases, publications etc.), then it is expected that the WYAAS will be given the opportunity to consider whether it wishes its collaborative role to be acknowledged, and if so, the form of words used will be at the WYAAS' discretion.

### 11.6 Consideration of Appropriate Mitigation Strategy

11.6.1 The report should not give a judgement on whether preservation or further investigation is considered appropriate, but should provide an interpretation of results, placing them in a local and regional, and if appropriate, national context. However, a client may wish to separately commission the contractor's view as to an appropriate treatment of the resource identified.

### 11.7 Report Submission and Deposition with the WY HER

- 11.7.1 A hard copy of the report (plus a digital copy on gold disk) is to be supplied directly to the WYAAS, in a timely manner to allow further work, if necessary, to be scheduled and the planning application to be determined in an informed manner, and certainly within a period of two months following completion of fieldwork so as not to delay a planning decision to be made, unless specialist reports are awaited. In the latter case a revised date should be agreed with the WYAAS. Completion of this project and advice from WYAAS on an appropriate mitigation strategy are dependant upon receipt by WYAAS of a satisfactory report which has been prepared in accordance with this specification. Any comments made by WYAAS in response to the submission of an unsatisfactory report will be taken into account and will result in the reissue of a suitably edited report to all parties, within a timescale which has been agreed with WYAAS.
- 11.7.2 The report will be supplied on the understanding that it will be added to the West Yorkshire Historic Environment Record where it will be publicly accessible once deposited with the WYAAS unless confidentiality is explicitly requested, in which case it will become publicly accessible six months after deposition.
- 11.7.3 A copy of the final report (in .pdf format) shall also be supplied to English Heritage's Science Advisor (Andy Hammon, English Heritage, 37 Tanner Row, York Y01 6WP) and to the English Heritage Archive at Swindon (FAO Mike Evans. English Heritage, Archive Services, The Engine House, Fire Fly Avenue, Swindon, SN2 2EH).
- 11.7.4 Copyright Please note that by depositing this report, the contractor gives permission for the material presented within the document to be used by the WYAAS, in perpetuity, although The Contractor retains the right to be identified as

the author of all project documentation and reports as specified in the *Copyright*, *Designs and Patents Act* 1988 (chapter IV, section 79). The permission will allow the WYAAS to reproduce material, including for non-commercial use by third parties, with the copyright owner suitably acknowledged.

11.7.5 The West Yorkshire HER supports the Online Access to Index of Archaeological Investigations (OASIS) project. The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork. The archaeological contractor must therefore complete the online OASIS form at <a href="http://ads.ahds.ac.uk/project/oasis/">http://ads.ahds.ac.uk/project/oasis/</a>. Contractors are advised to contact the West Yorkshire HER officer prior to completing the form. Once a report has become a public document by submission to or incorporation into the HER, the West Yorkshire HER may place the information on a web-site. Please ensure that you and your client agree to this procedure in writing as part of the process of submitting the report to the case officer at the West Yorkshire HER.

#### 12. General Considerations

### 12.1 Authorised Alterations to Specification by Contractor

12.1.1 It should be noted that this specification is based upon records available in the West Yorkshire Historic Environment Record and on a brief examination of the site by the WYAAS. Archaeological contractors submitting tenders should carry out an inspection of the site prior to submission. If, on first visiting the site or at any time during the course of the recording exercise, it appears in the archaeologist's professional judgement that:

- i) a part or the whole of the site is not amenable to evaluation as detailed above, and/or
- ii) an alternative approach may be more appropriate or likely to produce more informative results.

then it is expected that the archaeologist will contact the WYAAS as a matter of urgency. If contractors have not yet been appointed, any variations which the WYAAS considers to be justifiable on archaeological grounds will be incorporated into a revised specification, which will then be re-issued to the developer for redistribution to the tendering contractors. If an appointment has already been made and site work is ongoing, the WYAAS will resolve the matter in liaison with the developer and the Local Planning Authority.

### 12. 2 Unauthorised Alterations to Specification by Contractor

12.2.1 It is the archaeological contractor's responsibility to ensure that they have obtained the WYAAS' consent in writing to any variation of the specification prior to the commencement of on-site work or (where applicable) prior to the finalisation of the tender. Unauthorised variations may result in the WYAAS being unable to recommend determination of the planning application to the Local Planning Officer based on the archaeological information available and are therefore made solely at the risk of the contractor.

#### 12.3 Technical Queries

12.3.1 Similarly, any technical queries arising from the specification detailed above, should be addressed to the WYAAS without delay.

### 12.4 Valid Period of Specification

12.4.1 This specification is valid for a period of one year from date of issue. After that time it may need to be revised to take into account new discoveries, changes in policy or the introduction of new working practices or techniques.

# Rebecca Remmer West Yorkshire Archaeology Advisory Service

May 2012

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