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Advice on Archaeology & Planning

Environmental Impact Assessment

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Historic Building Recording

Site & Landscape Survey

Interpretation, Design & Display

Land off Royds Lane, Rothwell, West Yorkshire.

Archaeological Evaluation

Report No. Y069/12

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

Land off Royds Lane, Rothwell, West Yorkshire.

Archaeological Evaluation

Report No. Y069/12

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Summary

An archaeological evaluation was undertaken by CFA Archaeology Ltd on land off Royds Lane, Rothwell, West Yorkshire during October 2012. Ten trenches were excavated with the heavily truncated remains of two, probable post-medieval or modern gullies and an undated pit or tree bole. The evaluation confirmed the site had been open cast mined in the mid 20th century, and that as a consequence no archaeological features were present central-southern part of the site. There were no finds recovered from any of the features excavated.

1. INTRODUCTION

1.1 General

This report presents the results of an archaeological evaluation undertaken by CFA Archaeology Ltd (CFA) on behalf of AECOM Design and Build, for Hallam Land Management, Trustees of the Thurcaston Park Trust and D W Wilson, between 15 and 16 October 2012. The CFA code and number for the project is ROYD/2072.

All work was undertaken in accordance with a specification (Appendix 3) requested by James Lawton of AECOM and produced by David Hunter of West Yorkshire Archaeology Advisory Service (WYAAS) on behalf of Leeds City Council in order to inform pre-application discussions and any subsequent planning applications.

1.2 Site Location and Description

The proposed development area is located on the south-eastern side of Rothwell (Fig. 1, NGR: SE 35110 27896). The site was bound to the north by residential development to the east a golf course; the south a public footpath with woodland beyond and a road to the west, recreational fields provided the remainder of the western boundary.

The site sloped from 61m above the Ordnance Datum from the south to 49m in the north, with arable the recent landuse. At the time of the fieldwork the ground cover was long grass and scrub (Fig. 2).

The underlying solid geology is Pennine Middle Coal Measures consisting of mudstone, siltstone and sandstone The superficial deposits are glacial tills comprising sandy-clays and gravels to the south with firmer boulder clays uncovered to the north and west (BGS 2012). The soils of the area are variable and consist of silt, clay, sand and loam to sandy loam (NERC 2009).

1.3 Previous Archaeological work and Historical Background

A desk based assessment was produced by AECOM (Lawton 2012) which describes the site as having been partially disturbed by opencast mining during the Second World War. The part of the site that had been disturbed ran roughly east to west across the southern-central part of the site and was about 100m wide (Fig. 1). However, the desk-base assessment also confirmed the proposed development area as

being situated in an area of known Iron Age, Roman British and medieval settlement, (Lawton 2012).

The geophysical survey confirmed the area previously disturbed by open cast mining, as well as possible archaeological features and a series of extensive cultivation furrows. No intrusive archaeological fieldwork is known to have taken place within the proposed development area.

1.4 Aims

The aims of the evaluation were:

> '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 3).'

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 1996, 2001), and the terms of the specification (Appendix 3).

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

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 (RO) with the Institute for Archaeologists (IfA). All work was conducted in accordance with relevant IfA Standards and Guidance documents (IfA 1996, 2001), English Heritage guidance (EH, 2006, 2008, and 2011), and CFA's standard methodology.

2.3 Archiving

The project archive, comprising all CFA records will be ordered according to the specification (Appendix 3) to nationally recognised standards (IfA 2001 and Brown

2011) and deposited with Leeds Museum. A summary of the results of archaeological works will be submitted for inclusion in OASIS.

2.4 Monitoring

The trial trenching was monitored by David Hunter, Senior Archaeological Officer for WYAAS who was informed in advance of the works taking place and visited the site on 16 October 2012.

3. RESULTS

Ten trenches were excavated (Fig. 1). Appendix 1 consists of a summary of contexts while figures 2 to 9 present view of excavated trenches and features.

The topsoil was friable mid-grey silty-clay (001) which contained modern detritus, coal flecks and fragments of ceramic field drain. The depth of the topsoil varied but was generally 0.25-0.4m deep. Shallower topsoil was encountered at higher levels in the south-east of the site. In the south of the site, friable subsoil comprising light orangey-grey sandy-silt, with coal flecks and sandstone gravel fragments was also recorded. The depth of the subsoil varied but was generally between 0.1 to 0.2m in depth. Both the topsoil and subsoil were heavily bio-turbated. The natural substrate (000) comprised sandy-clays and gravels to the south (Figs 2 and 3) with firmer boulder clays to the north and west. Tabular sandstone outcrops were noted in Trench 10 (Fig. 3).

The evaluation trenches confirmed cultivation furrows survived across the site in a general north-east to south-west orientation.

3.1 Gully 005

A linear gully was recorded running north-west to south-east in the northern part of the site. The feature was recorded in trenches 3, 2 and 1. The gully was concave in profiles with moderately sloping sides and a width of 0.85m and a depth of 0.25m (Fig. 5). It was filled in Trench 1 by friable, organic light-brownish grey clayey silt with coal flecks and sandstone fragment inclusions. The fill of the gully became softer at the lower level in Trench 2 and was very moist in Trench 1. In Trench 1, the feature truncated a cultivation furrow (Fig. 6) and is of very likely therefore to be post-medieval or modern in origin.

3.2 Gully 003

The truncated remains of a north-east to south-west orientated linear gully was recorded in Trench 5 (Fig.7). The gully was 0.7m wide, 0.2m deep and filled by friable clayey-silt with coal flecks (006). The feature correlated with a linear anomaly detected by geophysical survey. The vestigial remains of this gully was also recorded in Trench 6 where it was only 0.15m deep.

The fill of this gully in Trench 6 contained numerous coal flecks throughout (007) (Fig. 8). The feature was intersected by a cultivation furrow running E-W. The precise relationship could not be determined due to the homogeneity of the infilling deposits. The vestigial furrow was less than 0.05m in depth.

3.3 Pit/tree bole 008

The cut of a possible pit was partially excavated in Trench 10 (Fig. 9). The feature was only partially revealed in plan and continued into the south-west facing section of the trench. The feature had steep, uneven sides, a flatish base and was 0.24m deep. A sterile, homogenous and friable fill of reddish-brown, sandy-clay was excavated from the feature. The fill had been heavily bioturbated and may more likely be the remains of a tree bole than a pit.

3.4 Opencast Mining in Trenches 6, 7 and 8

Trenches 6, 7 and 8 all showed evidence of disturbance due to opencast mining. The location of the disturbed areas corresponded closely with the geophysical survey results, which confirmed the southern-central part of the site as been heavily disturbed with re-deposited natural and disturbed subsoil indicative of made ground.

3.5 Environmental Sampling

by Mike Cressey HND, BA, MSc, PhD, FSA Scot, MIfA

Bulk environmental soil samples were taken from all excavated features, in accordance with the specification. All features were heavily bioturbated, and/or truncated and all are undated; in no cases were any datable finds recovered. The deposits were highly disturbed, contained modern root material, but were otherwise sterile. Such deposits are unlikely to yield palaeoenvironmental material and it is recommended that the samples are not retained.

4. CONCLUSION

Ten trenches were excavated during which no deposits or features of archaeological significance were encountered. Only the remains of two gullies and a likely tree bole were recorded. The evaluation was able to confirm the limits of the open-cast mining and has tested the geophysical anomalies on the site.

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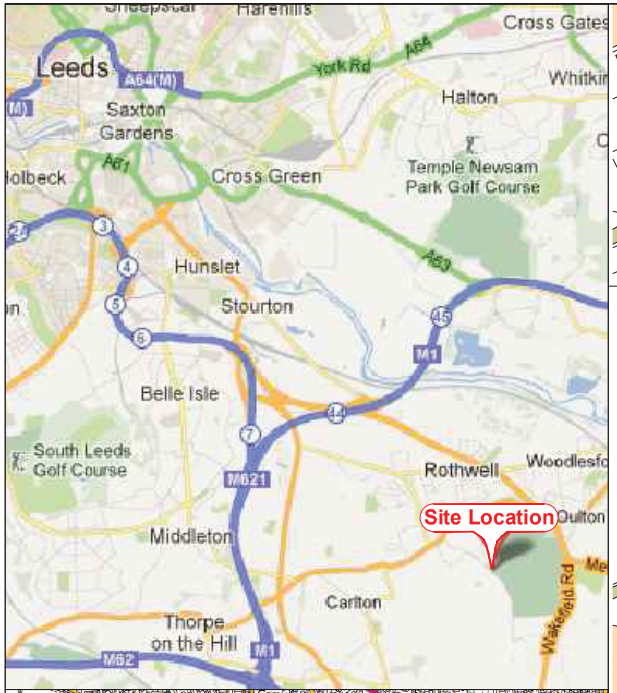

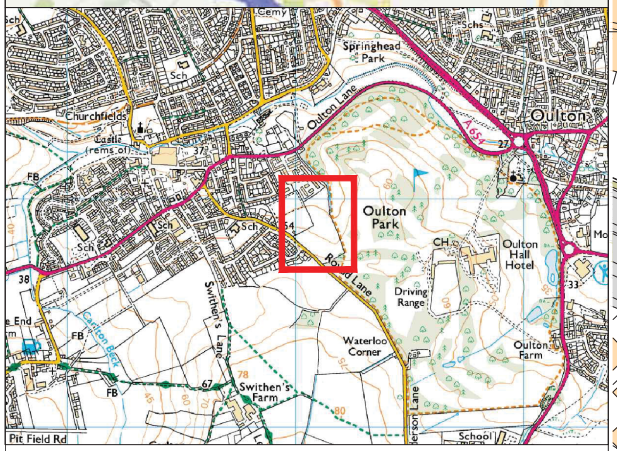

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Fig. No:	Revision:
1	A

Title:
Site location and trench plan

Project:
Land off Royds Lane,
Rothwell
Archaeological Evaluation

Client:
AECOM Design & Build

Scale at A3:
Trench plan: 1:1250

Drawn by:	Checked:	Report No:
LW	LW	Y069_12

Fig. 2 - Post-excavation shot of Trench 4

Fig. 3 - Post-excavation shot of Trench 2

Fig. 4 - Post-excavation shot of Trench 10

Fig. 5 - Post-excavation shot of gully 005 in Trench 3

Fig. No: 2-5		Revision: A	Project: Land off Royds Lane, Rothwell
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Fig. 6 - Oblique shot of gully 005 in Trench 1

Fig. 7 - Shot of south-facing section of Trench 5 showing excavated gully 003

Fig. 8 - Shot of excavated gully 003 in Trench 6

Fig. 9 - Post-excavation shot of pit/tree bole 010 in Trench 10

Fig. No: 6-9		Revision: A	Project: Land off Royds Lane, Rothwell
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APPENDICES

Appendix 1: Context Register

Context no.	Trench/Area	Fill of	Type	Description
000	Site	-	Deposit	Topsoil. Friable mid-grey silty-clay. Varied in depth but generally 0.25-0.4m. Shallower at higher datum to south-east of the site. Contained modern detritus, coal flecks and fragments of ceramic field drain. .
001	Site	-	Deposit	Friable subsoil comprising light, orangey-grey sandy-silt, with coal flecks and sandstone gravel fragments was also recorded. The depth of the subsoil varied but was between 0.1-0.2m in depth.
002	Site	-	Deposit	Natural substrate (000) comprised sandy-clays and gravels to the south with firm boulder clays to the north and west. Tabular sandstone outcrops were noted in Trench 10.
003	Trenches 5 and 6	-	Cut	Cut of linear gully. 0.7m W x 0.2m D. Visible in trenches 5 & 6. Shallow sloping sides and concave base. Horizontally truncated.
004	-	005	Deposit	Sterile fill of gully (005). Comprised of friable clayey-silt with occasional stone inclusions and coal fragments. Inclusions of coal were common in Trench 6. Deposit has been bio-turbated.
005	Trenches 3, 2 and 1	-	Cut	Cut of linear gully. 0.85m W x 0.25m D. Feature present in 3 evaluation trenches running NE-SW. Gentle sloping sides, tapering to a concave base. Horizontally truncated.
006	-	005	Deposit	Sterile fill of gully (006). Friable clayey-silt, light brownish-grey, with sandstone fragment and coal fleck inclusions. Deposit becomes moist at lower datum due to presence of stream to the east. Cut by a cultivation furrow.
007	Trench 10	-	Cut	Cut of pit/tree bole. Partially uncovered feature seen in plan as sub-circular pit. Steep, uneven sides tapering to a flatish base. Long axis 0.59m W x 0.24m D.
008	-	007	Deposit	Sterile, bioturbated, homogenous and friable fill of probable pit 007. Reddish-brown, sandy-clay.

Appendix 2: Digital Photographic Register

Digi No	Contexts/description	Taken from	Conditions
1	Post-excavation shot of Trench 5 after topsoil removal.	East	Overcast
2	Post-excavation shot of Trench 4 after topsoil removal.	North-west	Overcast
3-4	Shot of south-facing section of Trench 5 showing excavated gully 003	North	Overcast
5	Post-excavation shot of Trench 3 after topsoil removal.	North-east	Overcast
6	Post-excavation shot of gully 005 in plan	North-east	Overcast
7	Shot of south-west facing section of gully 005 in Trench 3	North-east	Overcast
8	Post-excavation shot of Trench 2 after topsoil removal	North-east	Bright
9	Post-excavation shot of Trench 1 after topsoil removal	North-east	Bright
10	Post-excavation shot of Trench 7 after topsoil removal	North-east	Bright
11	Post-excavation shot of Trench 6 after topsoil removal	North-east	Bright
12	Post-excavation shot of Trench 9 after topsoil removal	North-east	Bright
13	Post-excavation shot of Trench 9 after topsoil removal	North-west	Bright
14	Post-excavation shot of Trench 8 after topsoil removal	South	Fine
15	Post-excavation shot of Trench 8 after topsoil removal	North	Fine
16	Shot of mining overburden in Trench 8 section	West	Bright
17	Post-excavation shot of Trench 10 after topsoil removal	South-east	Bright
18	Part-excavation shot of probable pit 007 in Trench 10	North-east	Overcast
19	Part-excavation shot of probable pit 007 in plan: Trench 10	North-west	Overcast
20	Post-excavation shot of probable pit 010	North-east	Bright
21-22	Shot of sandstone capped field drain in Trench 3	North-east	Bright
23	Vertical shot of sandstone capped field drain in plan: Trench 3	-	Bright
24-25	Shot of made ground/mining overburden in Trench 7	South	Bright
26	Shot of test pit (geotech) in Trench 7	-	Bright
27	Shot of excavated gully in Trench 6	South-west	Bright
28	Vertical shot of excavated furrow in Trench 6	-	Bright
29	Shot of excavated furrow in Trench 6	North-west	Bright
30	Shot of north-east facing section of Trench 6 and gully 003	North-east	Bright
31-32	Oblique shot of furrow and gully in Trench 6 in plan	East	Bright
33-34	Post-excavation shot of gully 005 in Trench 2	North-east	Bright
35	Vertical shot of ceramic drain in Trench 2	-	Overcast
36	Shot of Trench 2 section and subsoil 002	East	Bright
37	Shot of gully 005 in Trench 1 truncating cultivation furrow	West	Bright
38	Oblique shot of gully 005 in Trench 1 truncating cultivation furrow	North-east	Bright
39	Oblique shot of gully 005 in Trench 1 truncating cultivation furrow	South-east	Bright
40	Detailed shot of west-facing section of gully 005 in Trench 1	East	Bright

Appendix 3: The Specification

WEST YORKSHIRE ARCHAEOLOGY ADVISORY SERVICE:
SPECIFICATION FOR AN ARCHAEOLOGICAL EVALUATION BY TRIAL TRENCHING AT LAND OFF ROYDS LANE ROTHWELL.

Specification prepared on behalf of Leeds City Council at the request of James Lawton of AECOM to inform pre-application discussions & any subsequent planning application for the site.

1. Summary

1.1 Following geophysical survey a limited amount of archaeological work consisting of trial trenching is proposed to help establish the archaeological significance of the above site to inform the planning process.

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 35110 27896

2.1 The proposed development site lies on the south-eastern side of Rothwell and slopes down from 60m to 50m from south to north. The northern boundary is formed by modern housing on Rona Croft. The eastern and southern boundary abuts Oulton Park golf course (a Grade II Registered Park and Garden, WY Historic Environment Record PRN 3993) while Royds Lans and a cricket and football ground forms most of the western boundary.

The site covers an area of 3.6 Ha 0f which 1.6ha was subject to geophysical survey.

2.2 The underlying geology of the site comprises glaciofluvial deposits (not confirmed) underlain by the Pennine Middle Coal Measures.

2.3 The site is located in the historic township of Rothwell.

3. Background

3.1 This specification has been prepared in response to a pre-application enquiry made by James Lawton of AECOM (5th Floor, 2 City Walk, Leeds LS11 9AR Tel.:0113 391 6800). The results of a geophysical survey by Phase Site Investigations show the site has medieval and potentially earlier archaeological potential.

3.2 The WYAAS believes 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 should the site be developed.

3.3 This specification has been prepared by the WYAAS at the request of Mr. James Lawton of the AECOM, acting on behalf of the applicants, to detail the archaeological work required for the evaluation and to allow an archaeological contractor to provide a quotation.

4. Archaeological Interest

4.1 The site lies in a area of known Iron Age, Romano British and medieval settlement. Part of the site has been disturbed by a Second World War era open cast mining operation. A geophysical survey by Phase Site Investigations has established that the mining is orientated east to west and runs in a strip c. 100m wide across the southern-central part of the of the site. The geophysical survey indicates the presence of medieval ridge and furrow cultivation in the undisturbed northern and southern parts of the site. The ridge and furrow is slightly unusual in that it is on a number of differing alignments. Areas of enhanced magnetic response and areas of linear/curvi-linear trends may point to earlier archaeological features which the ridge and furrow cultivation may partly mask.

Further details of the site's archaeological setting can be found in the desk based assessment prepared by AECOM.

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 re-written 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
AECOM have prepared a desk based assessment of the site and the archaeological contractor's project manager or the site supervisor should consult this in order to gain an overview of the archaeological/historical background of the site and environs.

7. Fieldwork Methodology

7.1 Trench Size and Placement (Fig. 1)
7.1.1 The work will involve the excavation of 9 30m x 2m trenches and one 40m x 2m trenches, which can be machine-opened. The contractor should also allow for a contingency amount of 160m 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.

Trench No	Dimensions (m)	Area (m^2)
1	30 x 2	60
2	30 x 2	60
3	30 x 2	60
4	30 x 2	60
5	30 x 2	60
6	30 x 2	60
7	30 x 2	60
8	30 x 2	60
9	40 x 2	80
10	30 x 2	60
Total		620

Total site area: **16000m^2**
Total area of trenching: **620m^2**
Contingency trenching: 1**60m^2**

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 20th-century material, which may be noted and discarded. Finds will be stored in secure, appropriate conditions following the guidelines in First Aid for Finds (3rd 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 (19th-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 must 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 to determine the museum's requirements for the deposition of an excavation archive. In this case the contact is Katherine Baxter of Leeds Museum and Galleries [Leeds Museum Discovery Centre, Carlisle Road, Leeds LS10 1LB (tel.: 0113 214 1548 email: katherine.baxter@leeds.gov.uk.).]. Deposition should be confirmed in writing by the archaeological contractor; this correspondence is to be copied to the WYAAS.

9.2 It is the policy of Leeds Museum and Galleries to accept complete excavation archives, including primary site records and research archives and finds, from all excavations carried out in the District that 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 Leeds Museum and Galleries.

9.4 It is the responsibility of the archaeological contractor to meet Leeds Museum and Galleries' requirements with regard to the preparation of excavation 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 20th-century date should be noted, quantified and summarily described, but can then be discarded if appropriate. All finds which are of 19th 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).

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 http://ads.ahds.ac.uk/project/oasis/. 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.

David Hunter **September 2012**
West Yorkshire Archaeology Advisory Service

WY Historic Environment Record
West Yorkshire Archaeology Advisory Service
Registry of Deeds
Newstead Road
Wakefield
WF1 2DE

Telephone: (01924) 306798
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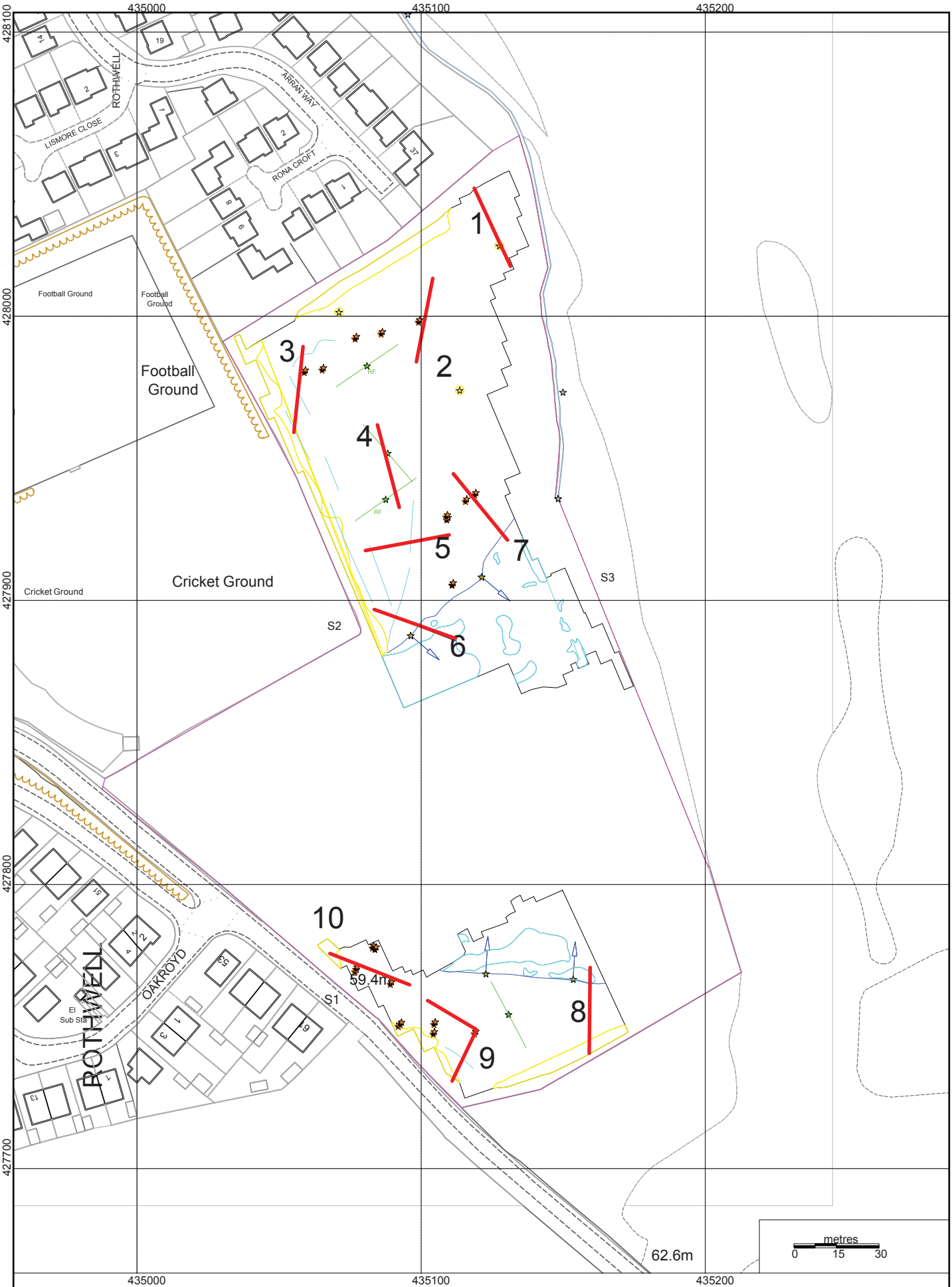

WYAAS **County Historic Environment Record** **Registry of Deeds, Newstead Road** **Wakefield WF1 2DE** **Tel. 01924 306797 Fax. 01924 306810**	Trench Locations Ref	DJH Royds Lane Rothwell	Date Plotted: 19/09/2012 Sheet No.: SE3527NW Scale 1: 1250
			Licence No WMDC 100019574 © WYAAS

WEST YORKSHIRE ARCHAEOLOGY ADVISORY SERVICE SUMMARY SHEET
ARCHAEOLOGICAL FIELDWORK IN WEST YORKSHIRE

Site name/ Address Land off Royds Lane, Rothwell, West Yorkshire	
Township Rothwell	**District** Leeds
National Grid Reference (to six or eight figures *depending on the archaeological sensitivity of the site*) SE35110 27896	
Contractor CFA Archaeology	
Date of Work October 2012	
Title of Report (in full) Land off Royds Lane, Rothwell, West Yorkshire: Archaeological Evaluation	
Date of Report November 2012	
SUMMARY OF FIELDWORK RESULTS (100 WORDS OR LESS) *An archaeological evaluation was undertaken by CFA Archaeology Ltd on land off Royds Lane, Rothwell, West Yorkshire during October 2012. Ten trenches were excavated with the heavily truncated remains of two, probable post-medieval or modern gullies and an undated pit or tree bole. The evaluation confirmed the site had been open cast mined in the mid 20th century, and that as a consequence no archaeological features were present central-southern part of the site. There were no finds recovered from any of the features excavated.*	
Author of summary Philip Moore	**Date of summary 2 November 2012**