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‘Grimes Dyke’, Whinmoor West Yorkshire

Archaeological Evaluation and Metal Detection Survey

Report No. Y094/13

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‘Grimes Dyke’, Whinmoor West Yorkshire

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Summary

An archaeological evaluation consisting of trial trenching and a metal detection survey was undertaken by CFA Archaeology Ltd on land in Whinmoor, West Yorkshire during April and May of 2013. Twenty eight trenches were excavated with a number of undated field boundaries and field systems recorded. No finds were recovered either from the trenching or the metal detection survey with modern truncation and debris related to modern farm buildings recorded across the site.

1. INTRODUCTION

This report presents the results of an archaeological evaluation and metal detection survey undertaken by CFA Archaeology Ltd (CFA) on behalf of Prospect Archaeology Ltd during April and May of 2013, ahead of a proposed development on land known as ‘Grimes Dyke’, Whinmoor, West Yorkshire. The proposed development plan is for residential development and associated infrastructure, with part of the site dedicated to open space (Planning Application reference 09/03238/OT/E). All work was undertaken in accordance with a specification issued by the West Yorkshire Archaeology Advisory Service (WYAAS, Appendix 5). The CFA code and number for the project is WINM/2099.

1.1 Site Location and Description

The development site is on the outskirts of an eastern suburb of Leeds (Fig.1, NGR SE 3633 3725). The site is an irregular parcel of land bounded to the south by the A64 York Road, the north and west by residential housing and to the east by agricultural fields. The site consists of scrubland and overgrown vegetation, with areas of small woodland in places. The ground is undulating at up to 112m above the Ordnance Datum around the western and northern boundary and slumping to around 97m (AOD) towards the middle and eastern boundary of the site. The land use of the site has historically been agricultural with periods of cattle farming. During the field work the site was overgrown in some areas, with brambles and immature woodland present particularly in the east.

The site was traversed by a number of overhead power lines which were fenced off to form safe clearance zones, within which no archaeological activity was to take place.

The soils of the area are variable and are described as ‘glacio-fluvial deposits of silt and sand, loam to silty loam and clay’ (NERC 2013). The geology of the area consists of ‘Pennine Lower Coal Measures Formation- mudstone, siltstone and sandstone, with superficial deposits of Till from the Mid Pleistocene - Diamicton period (BGS 2013).

1.2 Archaeological and Historical Background

The background information listed is an extract from work originally compiled for a desk-based assessment of the site (Rosenberg 2008).

Later prehistoric

The archaeological interest in the site is derived from the possibility that Grimes Dike runs through it. ‘Grimes Dike’ (also known as Grymisdyk, Grimsdike, Grim’s Dike, Grim’s Ditch

and Grimes Dyke) is a linear earthwork (bank and ditch) believed to have delineated a territorial boundary. Grimes Dike has been excavated near Temple Newsam and found to have Iron Age origins. The line of this feature has been traced from Whinmoor in the north (SE 358 380), through Manston, Austhorpe and Temple Newsam to the point at which Wakefield Road crosses the River Aire, south of Swillington (SE 374 295).

The earthwork appears to “face” eastwards, in that the ditch is on the eastern side of the bank. The earthwork has been scheduled as an archaeological monument of national importance where it can be seen to survive as an upstanding earthwork.

Archaeological work at Whinmoor (SE 363 377) in 1979 established that an existing natural scarp had been utilised as an earthwork and it was suggested that this was as part of the Grimes Dike system. The scarp was 2m in height with a steep slope. The ditch, at the base of the slope, was 1.0m in depth and had a maximum width of 4.5m.

Work on Grimes Dike further south (SE 376 328) in 1997 revealed a rock-cut ditch with a V-shaped profile, steep sides and a flat base. The ditch was 6m wide at the top and 2.7m wide at its base. The bank was approximately 12m high. Where radiocarbon dates have been obtained for the monument, these suggest that it was constructed sometime during the Early to Middle Iron Age, with a possible redefinition of it in the later Roman period.

Roman period (71BC – 410AD)

A fort was established at York (Eboracum) by the Romans in AD71 and grew to become the regional capital. A Roman camp described by Ralph Thoresby at Quarry Hill in Leeds in the 18th century, was postulated to be the Roman settlement of *Cambodunum*, although its existence remains unproven. The A64 Leeds-York road is believed to represent the approximate line of the Roman route from York, through Leeds and across the Pennines to Manchester (*Mamucium*).

The West Yorkshire Historic Environment Record (HER) lists a group of Roman burials found before 1855 at a limestone quarry in Whinmoor. Although the grid reference places this site to the north-east of the proposed development site, the HER recognises that this is an unlikely location not least because there is no recorded limestone quarry there. A more likely location is in Ash Bank Quarry to the west, where the 1st edition Ordnance Survey map notes Roman coins as found. The group of burials comprises six inhumations and probable cremations, accompanied by 4th century coins and suggests a settlement existed nearby.

Early medieval (5th – 10th centuries)

The 7th century Battle of *Winwaed* is may have taken place on Whinmoor. The battle, between the forces of the Northumbrian King Oswy, and the Mercian King Penda was fought over two days in November 655 AD and is recorded by the 8th-century historian Bede. The battle saw Penda’s Mercian forces reduced by the desertion of a number of his allies. Penda was then killed in battle and many of his soldiers drowned in the River Winwaed whilst retreating, the river being swollen from heavy rains. The precise position of this decisive battle is unknown as the position of the River Winwaed has never been conclusively proven. However, Whinmoor has been suggested as a possible location for the following reasons:

- Bede records the battle as taking place ‘in region *Loidis*’ – in the territory of the people of *Loidis*, roughly equivalent with the parish of Ledston or the greater Leeds area;
- The battle is likely to have occurred between York, where Oswy had a stronghold, and Leeds, where Pendas crossed the River Aire. The Roman road would have been the obvious route for both armies to take, and;
- The Cock Beck (and Grimes Dike), Rake Beck and Carr Beck cross Whinmoor making the area between Seacroft and Barwick marshy in times of heavy rain.

Although the site exhibits some features which could place the battle of Winwaed nearby, it is still based on a speculative association with Whinmoor, and other locations to the south of Leeds have also been suggested. A further problem is that battlefields in the era before projectiles were widely used (e.g. long bows) are difficult to locate.

Medieval (11th – 16th centuries)

Whinmoor falls within the parish of Ledston and the township of Barwick. Although no record exists of Whinmoor in the Domesday Book, both Barwick and Ledston are mentioned and owned by Ilbert de Lacy (Williams & Martin 2003). Ilbert de Lacy fought with William the Conqueror at the Battle of Hastings and received large parcels of land in Yorkshire as payment.

There are no specific records of activity within the site during this period. The site lay near a boundary between Seacroft and Barwick-in-Elmet and later disputes indicate that there may have been some confusion and disagreement over ownership of parts of Whinmoor. As moorland Whinmoor would have been uncultivated but still important for the seasonal grazing of livestock, collecting fire wood and other materials and extractive industries (Aston 1985: 114).

Post-medieval (1600 - 1850)

The first record that explicitly mentions ‘Whin Moor’ records King James I conferring the right to mine coal on Charles Earl of Devon in 1603/4 (West Yorkshire Archive Ref.WYL203/20). It is likely that access to coal and other mineral or natural resources fuelled the land disputes that follow throughout the 17th and 18th centuries. In c.1630 a dispute was resolved to confirm ‘Winmoor’ as the common land of Barwick-in-Elmet, Scholes and Roundhay but not of Seacroft. Owens records ‘gang warfare’ on Seacroft Moor, with opposing township’s pits being flooded, paths blockaded and miners threatened. Eventually the two land owners, James Nelthorpe of Seacroft Hall and William Gascoigne of Barwick in-Elmet, agreed to work the coal together (Owens 2001, 54).

An article in the Barwick-in-Elmet local history journal, the Barwicker, claims that Thomas Gascoigne had fishponds at Grimes dike. This may explain the earthwork remains of a large pond surviving on the eastern side of the site. It is not clear from the article which of the several Thomas Gascoignes this relates to, although a 17th-century date would best fit the earthwork on the site. Its location is suggested by a late 18-century map and is apparently abandoned by the mid 19th century. The Battle of Seacroft Moor took place in the area in 1643, when the Royalist forces of General Lord Goring decimated the Parliamentary forces of Sir Thomas Fairfax. Sir Thomas was providing cover over the York Road from Whinmoor whilst further troops, led by his father, were brought up to strengthen the garrison of the recently captured Leeds.

Fairfax's troops were attacked by General Lord Goring's men and in excess of 800 Roundheads were allegedly captured (Owens 2001: 53). Seacroft Moor is believed to be a misnaming of Whinmoor. Later 18th-century maps and plans show the site to have been, at least partially, within a clearing on the moor, with up to four buildings occupying the space. A settlement called 'Grimes Dike' (later Willow Garth Farm) and a farm in the position of Grimes Dike Farm are both shown at this date.

The recent Geoenvironmental Appraisal undertaken by Encia concludes that there is evidence for made ground in two areas of the site but does not identify any quarrying or deep mining (Encia 2008). As no extractive industries are shown on the historic maps, it is likely that any such industry would have been shallow workings, pre-dating 1850. Jeffrey's map of 1771 shows two small enclosures to the south of the site either side of the York Road; these may be quarries. Although no such features are shown within the site, it is possible that extraction of the Elland Flags, or potentially coal mining, was taking place in the 18th century or earlier. A walkover survey identified a possible quarry pit against the western boundary of the site. This lay immediately adjacent to an area of made ground (Encia 2008, Area B) at the northern end of a possible track or hollow-way.

Cartographic evidence shows Whinmoor to have been partly enclosed by the later 18th century (e.g. Teal and Jeffery's maps and plans). The remaining common lands in Barwick in-Elmet were enclosed by Act of Parliament in 1797 and a map drawn up in 1804 recording the transfers of land.

1.3 Previous Archaeological work

In 2008 and 2009 a series of archaeological investigations were carried out on the site as part of pre-application discussions. These investigations included trial trenching, geophysical survey and earthwork survey. During the limited trial trenching that was focussed on the earthwork during this investigation, discrete features which are believed to be Roman in date were found. These features consist of a ditch which may have been part of a more extensive Romano British field system, a post hole and a pit.

Following these investigations it became apparent that the earthwork feature which stretches across the site does not represent 'Grimes Dyke', and it has been suggested that it may have been part of a system of drainage channels associated with agricultural activity on Whinmoor in the 18th and 19th centuries, although the findings from the trenches did not, however, preclude the possibility of an Anglo-Saxon origin for the extant earthwork (ASWYAS 2009).

1.4 Project Aims and Objectives

In accordance with the specification produced by Rebecca Remmer of the West Yorkshire Archaeology Advisory Service (Appendix 5) the general objective was 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 proposed development area, and to record at an appropriate level, archaeological features encountered in the excavation trenches'.

The specific aims of the project as listed in the specification were:

- to preserve by record the archaeological remains that will be impacted by the proposed development;
- to confirm and enhance the results of the earlier evaluation;
- to determine if the features related to prehistoric/ Roman agricultural field systems or settlement activity;
- to where possible determine how these features fit into the prehistoric/ Roman landscape of the area;
- if more than one period was represented on site determine whether there was continuity between these;
- to establish the evidence for continuity of Iron Age/ Roman occupation, and;
- to contribute information to key research objectives identified by the relevant research agendas (Vyner 2008 and Chadwick 2009).

2. WORKING METHODS

2.1 Monitoring

The project was monitored by Rebecca Remmer of the West Yorkshire Archaeology Advisory Service (WYAAS), who was kept informed of developments on site and visited the site for the purpose of monitoring the fieldwork on 10th May 2013.

2.2 Trenching

The trenches were positioned across the site so as best to test the survival of underlying archaeology as fully as possible. Areas of known modern disturbance and deep modern stratigraphy were avoided.

Trenches were accurately surveyed using industry standard surveying equipment. All machining was undertaken using a toothless ditching bucket under constant archaeological supervision. Topsoil and other overburden was removed by machine down to the top of natural subsoil or the first significant archaeological horizon, whichever was encountered first.

The topsoil and subsoil were separated during the excavation and trenches were backfilled upon completion of necessary work. Trenches were only backfilled on completion of recording and with the consent of WYAAS.

The spoil was scanned for artefacts during machine excavation, the trenches were then cleaned as necessary and the location of all features and deposits recorded at a scale of 1:50. A representative sample of linear features was excavated (typically 1m per section). Discrete features were sampled at a minimum of 50%.

All archaeological remains were recorded by means of photographs, drawings and written records conforming to IfA standards (1994) and CFA's quality manuals. All features were planned and drawn in section at an appropriate scale (normally 1:10, 1:20 or 1:50). All plans and sections were related in height to the ordnance datum. The photographic record consists of accurately recorded digital photographs.

Environmental samples were to be taken as necessary from significant archaeological deposits in accordance with current English Heritage guidelines (EH 2011), and generally samples were to be taken from a representative sample of features and from securely stratified primary deposits along with any other deposits identified as showing palaeo-environmental potential. This was to be informed by the professional judgement of the archaeologist on site in conjunction with CFA's environmental specialists and the WYAAS advisor.

Modern finds were recorded on site but not retained unless they were from stratigraphically significant deposits or intrinsically significant, all other finds were to be retained for post-excavation assessment. The requirements of the 1996 Treasure Act (with subsequent amendments) were accorded with.

2.3 Metal Detector Survey

The metal detector survey was conducted using a Garrett ACE 150 detector, with the detector set to rule out any ferrous objects due to the nature of the ground being investigated.

To undertake the survey itself, the site area was divided into smaller areas based on topographical boundaries such as existing hedge lines and banks, with these smaller areas divided into 3m transects. These transects were then walked by the detectorist with finds excavated and recorded by use of GPS if of historical value. Any modern items were noted and then discarded from the survey.

Areas that were unsuitable for detection, for reasons such as ground cover and proximity to electricity pylons, were recorded and are shown on Figure 7.

2.4 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 1994), English Heritage Guidance (EH 2005, 2006, 2007, 2008a and 2008b), relevant regional guidance (Gurney 2003), CFA's standard methodology and the terms of the specification issued by WYAAS.

2.5 Archiving

The project archive, comprising all CFA record sheets, finds, plans and reports, will be prepared to current guidelines (Brown 2011, MGC 1994, SMA 1995, Ferguson and Murray 1997, UKIC 1990, 2001 and EH 2006) ensuring the proper transfer of ownership. The project report shall include an index to the site archive and all digitally generated data. The archive will be retained by CFA until being deposited at a suitable repository.

3. RESULTS

A full list and description of contexts comprises Appendix 1. Tables listing all photographic and drawn records form appendices 2 and 3. A table summarising all results by trench forms Appendix 4.

A total of 28 trenches were excavated. Trenches 17 and 28 were rotated from their proposed positions due to problems with the ground surfaces in these positions. Trench 18, originally positioned to sample the old pond area of the site was moved and shortened due to underlying water conditions making excavation inside the pond area unfeasible. Trench 8 was dug in two segments to avoid causing site access problems.

The site has been divided into four distinct areas signified by alphabetical suffixes. The results for each area are described below.

3.1 Area A (Fig. 2)

Nine trenches were excavated in Area A (1-8 and 28). Modern disturbance was present within trenches 8 and 28, with disturbance from the construction and demolition of former modern farm buildings causing truncation of the ground in the majority of Trench 28, and a build up of modern overburden such as bricks, concrete and other demolition materials within Trench 8.

Two shallow east-west orientated plough furrows (145 and 147) were recorded towards the northern end of Trench 1, while the southern end showed signs of modern disturbance in the form of land drains and dumps of coal/shale.

Within Trench 5, two north-west to south-east running ditches were recorded (143 and 164, Fig. 6). Ditch 164 (Plate 1), was the larger of the two, measuring 2.45m in width and 0.68m in depth, and may relate to an old field boundary or drainage ditch in this location.

Another ditch on a north-south alignment (135/137, Plate 2, Fig. 6) was excavated towards the centre of Trench 6. No dating evidence was recovered from the fills of the ditch, but due to the size and shape of the feature it may have been part of a relict field system in area of the site.

Trenches 2, 3 and 4 were excavated to the natural substrate, but were found to be devoid of archaeological remains.

3.2 Area B (Fig. 3)

Six trenches were excavated in Area B (9-14), with modern disturbance in the form of bricks, concrete and other demolition debris recorded at the southern end of Trench 9. Towards the northern end of Trench 9, was a shallow ditch possibly another field boundary (128, Plate 3), orientated north-west to south-east

Two ditches were recorded in Trench 10, (120 and 123, Fig. 6). Ditch 120 (Plate 4) was on a north-east to south-west orientation at the eastern end of the trench and had a steep-sided profile and a flat base. Ditch 123, recorded near the middle of the trench was slightly larger and on a north-south orientated towards the centre of the trench.

Towards the northern end of Trench 11, a large steep sided pit was excavated (126, Plate 5, Fig. 6) that showed evidence for in situ burning in the form of a fired clay lining (148) and a fill of burnt animal bone (125). However, it appeared that this feature was fairly modern as the pit truncated the modern subsoil, and it is probable that the pit relates to farming activity related to the previously active farm in the site area.

No significant archaeological features were recorded in trenches 12-14 although two shallow north-west to south-east aligned ditches (131 Tr.12, and 133 Tr.13) interpreted as probable geological features were identified (Fig. 3).

3.3 Area C (Fig. 4)

Six trenches were excavated in Area C (15-18, 24 and 25). Trenches 15 and 17 were excavated in the area once the location of the modern farm, and showed signs of modern disturbance and truncation of the ground. Within Trench 15 were two small, shallow north-west to south-east aligned gullies (106 and 110) that may represent plough scars associated with the farm, while towards the centre of the trench a small rectangular pit (108, Plate 6), another feature likely associated with modern farming activity, was also excavated. No finds were recovered from any of these features.

Trench 17 was heavily disturbed by modern activity, with the north-western end of the trench truncated by two plastic gas pipes, and the south-eastern end of the trench showing a built up layer of modern brick rubble and other demolition materials. Towards the centre of the trench a north-south orientated ditch (104, Plate 7) was excavated, although the proximity of this feature to the activity associated with the modern farm buildings suggests that this may be of a similar date.

There were a number of features within Trench 16 (Fig. 6), the largest of which was a north-east to south-west orientated ditch (118) excavated at the northern end of the trench. On a similar alignment and at the southern end of the trench was a smaller, shallow ditch (112) and it may be that these features represent the bases of plough furrows related to earlier farming activity. To the north of ditch 112 was a north-west to south-east aligned gully (114), and a small pit (116). No finds were recovered from any of these features during excavation.

Trench 18 was dug on the site of the old pond to the eastern end of the development area. The trench itself was moved due to difficulties excavating in the original location, with the new position testing the bank and edges of the pond (Plate 8). No archaeological features were noted once the natural substrate had been reached, with the slope of the bank showing no signs of reinforcement by man-made means, and it is likely that the pond was formed within a natural depression in the topography of this area.

Trench 24 contained one north-west to south-east aligned ditch (155, Plate 9) from which no finds were recovered, while to the east and within Trench 25, the closest trench to the area marked as Grimes Dyke on the maps, two small, shallow gullies were excavated (150 and 152, Fig. 6), although these appeared likely to be geological formations rather than evidence of earlier archaeological activity.

3.4 Area D (Fig. 5)

Seven trenches were excavated in Area D (19-23, 26 and 27). The area showed signs of large scale dumping of modern building demolition materials such as bricks, concrete, plastic and other such items. In particular the northern part of the area around trenches 23 and 26 showed upwards of 0.9m of this material overlying the natural substrate in places, with this natural not reached in trench 26 due to the excessive depth of the modern material above (Plate 10).

The northern end of Trench 27 was also affected by this dumping, with similar levels of the demolition materials also noted here. Within the centre of Trench 23, a north-south orientated ditch (157, Plate 11, Fig. 6) was excavated. This feature was similar in form to others found further to the south within area B, and is most likely another ditch associated with earlier field systems.

Within Trench 22, two ditches were excavated (159 and 161, Fig. 6). These ditches were on a north-east to south-west orientation and likely represent activity related to earlier farming. No finds were recovered from the features meaning attaching a date to their usage is difficult.

Trenches 19, 20, 21 and the southern part of Trench 27 were found to be blank of any surviving archaeological features once stripping to the natural substrate had been completed.

3.5 Metal Detection Survey

The metal detection survey was conducted across the entire site where it was possible to perform a clean sweep of an area. Some parts of the site were unsuitable for using the detector for a variety of reasons such as tree/bramble cover, and these have been shown in Fig. 7.

The results of the survey showed that there was little survival of any non-ferrous metallic objects of historical interest within the site area as a whole. Numerous modern objects such as beer cans, paint tins and various parts of cars were located during the survey, with the areas near the housing estate to the west of the site area particularly saturated with modern refuse in the ground.

Areas B and D were found to contain a large build up of modern demolition waste materials in places during evaluation of the trenches and the results of the metal detection survey reflect this, with random fragments of modern metallic waste collected from these areas. This theme continued into Area C, where the presence of the modern farm buildings had left a large amount of modern metal and metallic objects within the topsoil of the area, with pieces of car parts, farm equipment and building furniture also found.

In the areas where no modern disturbance could be seen on the surface, no metallic objects of historical interest were recovered during the metal detection survey, suggesting the site is largely devoid of any of these surviving artefacts.

4. DISCUSSION

Map evidence shows that some features identified during the evaluation may match those of pre-existing field boundaries. Ditches 139, 141 and 164 are on the rough alignment of a north-west to south-east orientated field boundary depicted on the 1849 Ordnance Survey Map. Ditches 120, 128 and 133 towards the centre of the site are also on a similar alignment, and may similarly represent the remains of pre-modern field boundaries.

The previous evaluation of the site (ASWYAS 2009) also recorded evidence of ditches orientated north-west to south-east in this area, and it may be that the ditch then excavated was also part of the same pre-modern field system.

A number of ditches were recorded during the present works as being on alignments that do match those of early maps. In particular those ditches on north-south alignments such as ditches 123, 131, 135 and 157. It is possible that these features may represent elements of earlier field systems that pre-date the post-medieval and early modern organisation of the landscape.

No evidence was recovered by the trial trenching or the metal detector survey to support the hypothesis that this was the site of either the 7th-century 'Battle of Winwaed' or the 17th-century civil war battle of 'Seacroft Moor'.

5. CONCLUSION

Overall, there were very few archaeological remains within the majority of the site; those features identified were predominantly ditches relating to former field boundaries or parts of field systems. No dating evidence was recovered though it is likely that most of the ditches relate to the post-medieval or early modern agricultural organisation, though the possibility that some of the ditches, particularly those not conforming to the more recent orientation of field boundaries may be earlier.

Despite a similar lack of dating evidence, the previous evaluation undertaken by ASWYAS in 2009 concluded that the ditches excavated may have been Romano-British in date. However, the present work has shown this conclusion may be erroneous, with the majority of these features matching the former field boundaries depicted on historic maps of the area.

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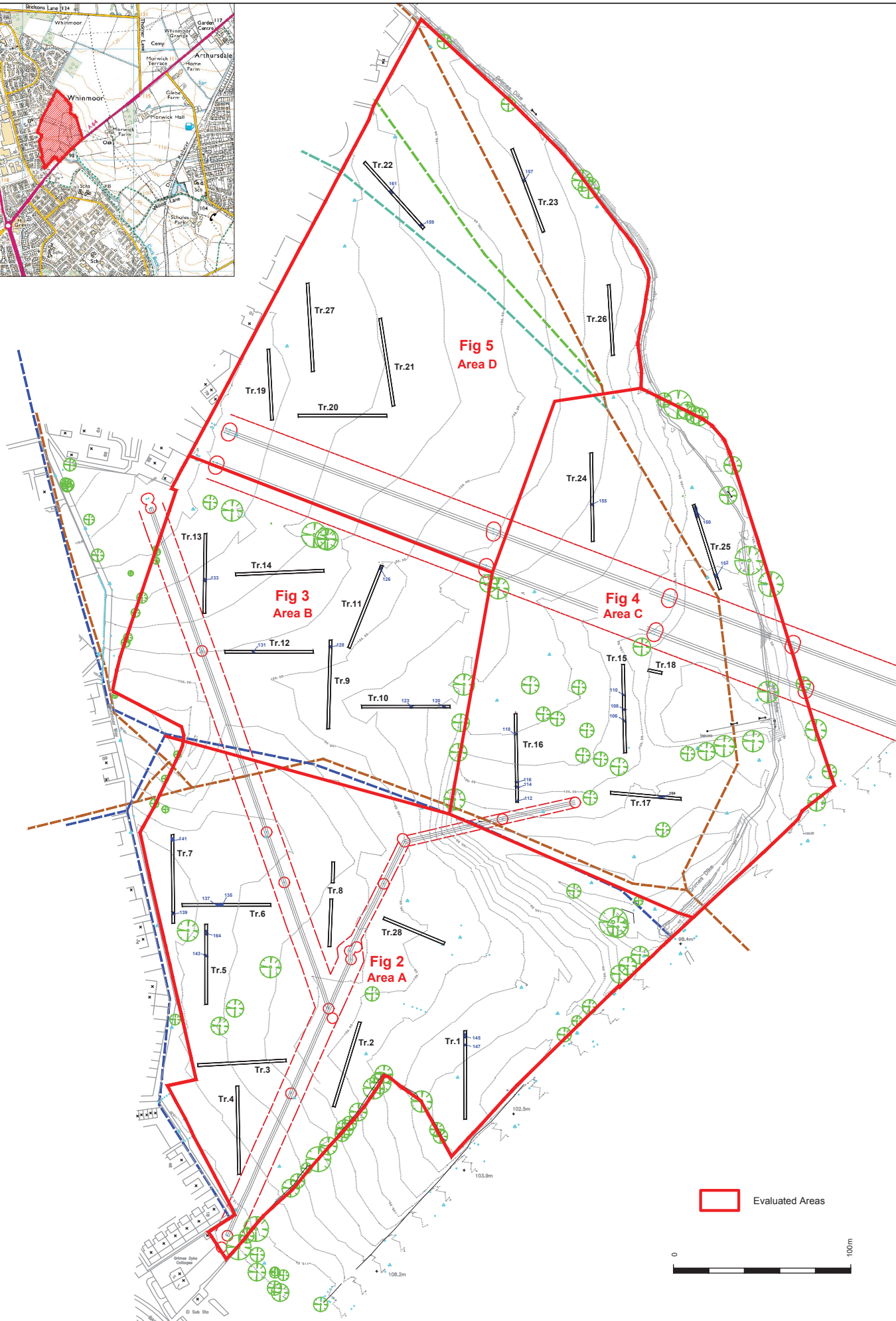
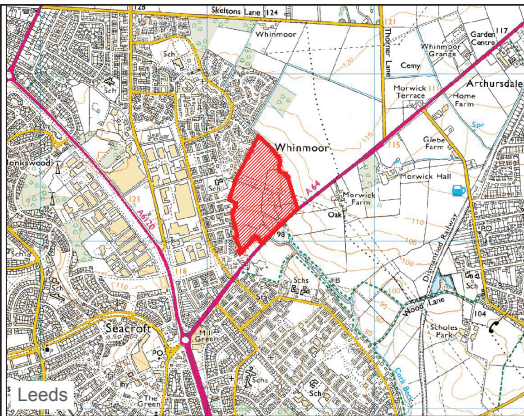
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FIGURES 1 – 7

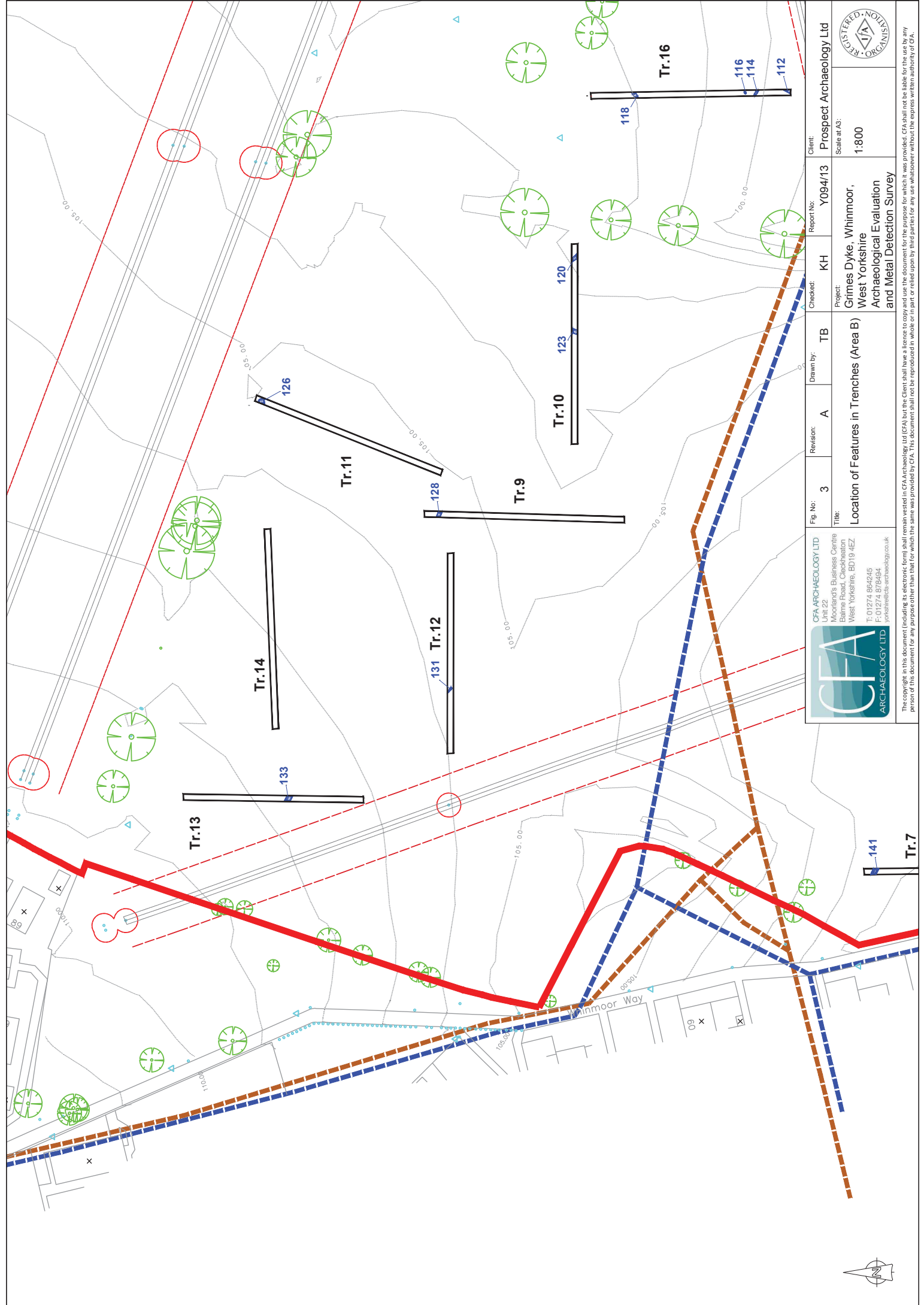


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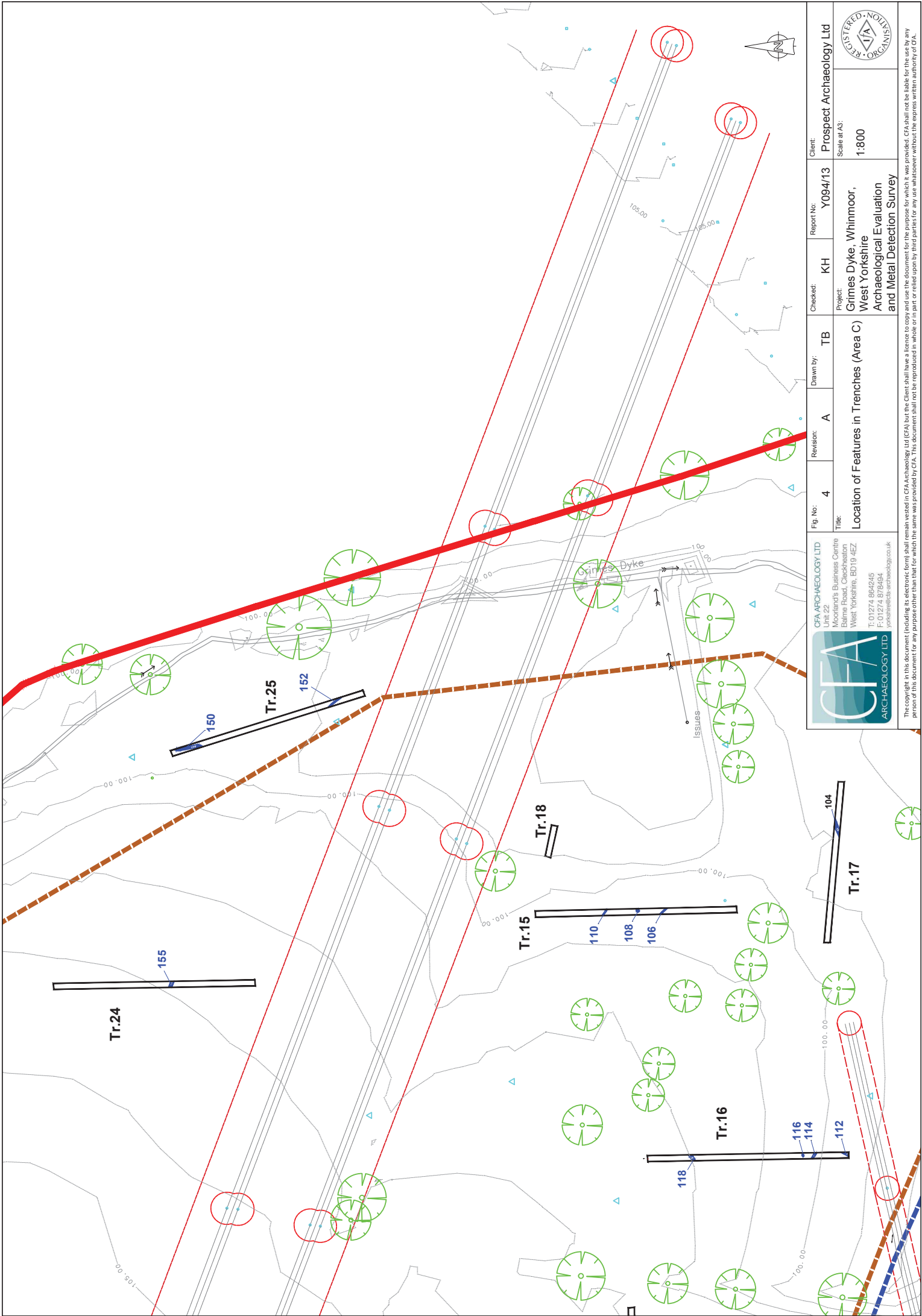
Fig. No: 1	Revision: A	Drawn by: TB	Checked: KH	Report No: Y094/13	Client: Prospect Archaeology Ltd
Title: Site location and trench plan			Project: Grimes Dyke, Whinmoor, West Yorkshire Archaeological Evaluation and Metal Detection Survey		Scale at A3: 1:2,000



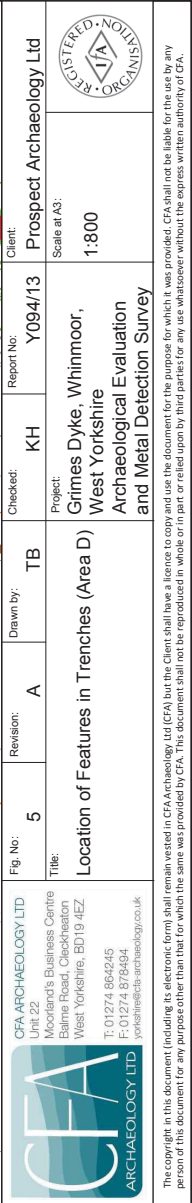
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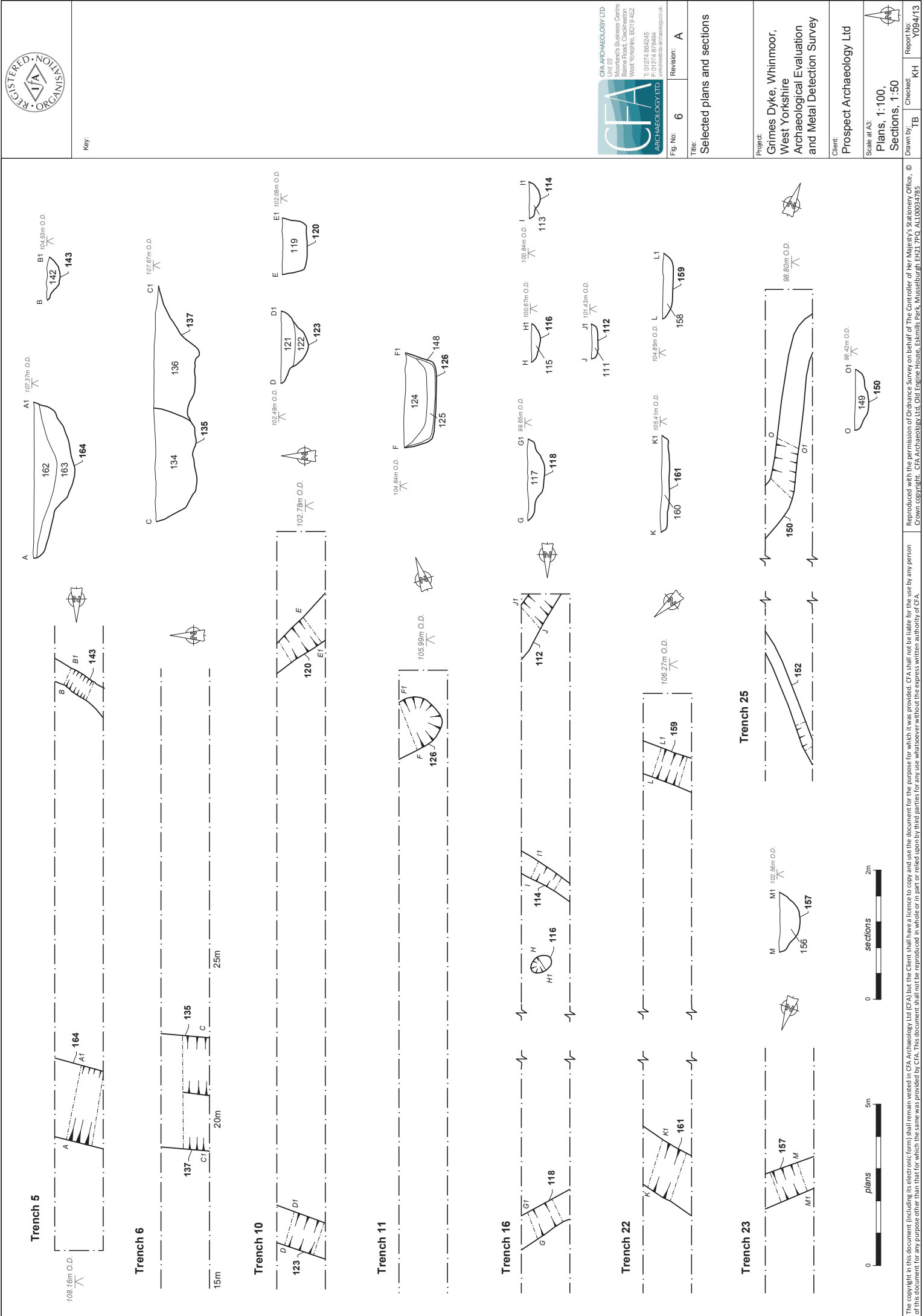
CFA ARCHAEOLOGY LTD		CFA ARCHAEOLOGY LTD Unit 22 Riverside Business Centre Riverside, Grimsby West Yorkshire, BD19 4EZ T: 01274 864245 F: 01274 878494 yorkshirelectra.archaeology.co.uk		Fig. No: 3	Revision: A	Drawn by: TB	Checked: KH	Report No: Y094/13	Client: Prospect Archaeology Ltd
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	Title:		Location of Features in Trenches (Area C)				Project:	Grimes Dyke, Whinmoor, West Yorkshire Archaeological Evaluation and Metal Detection Survey				
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Fig. No: 6

Revision: A

Title: Selected plans and sections

Project: Grimes Dyke, Whinmoor, West Yorkshire Archaeological Evaluation and Metal Detection Survey

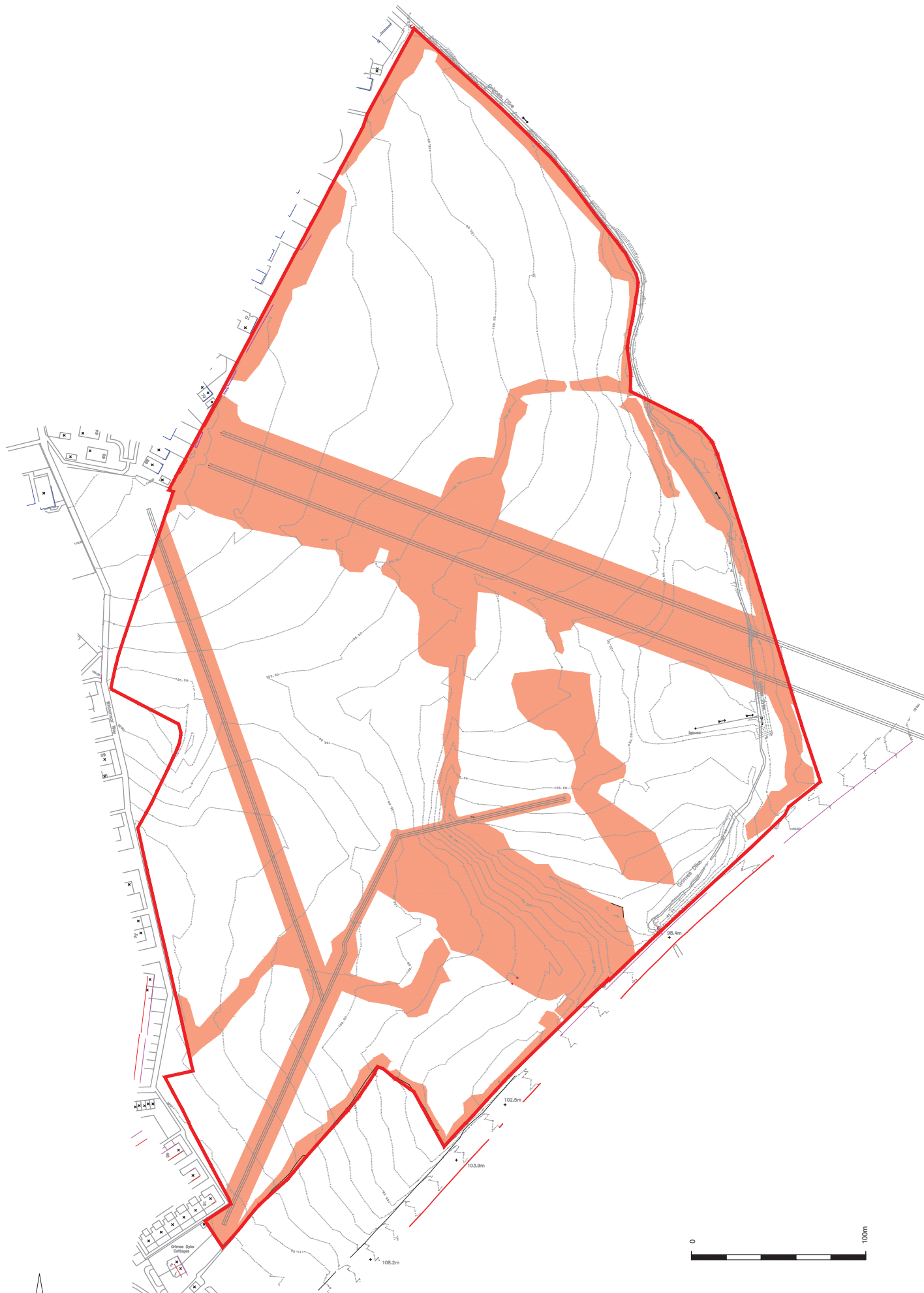
Client: Prospect Archaeology Ltd

Scale at A3: Plans, 1:100 Sections, 1:50

Drawn by: TB

Checked: KH

Report No: Y094/13



Areas excluded from
metal detector survey



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Fig. No: 7	Revision: A	Drawn by: TB	Checked: KH	Report No: Y094/13	Client: Prospect Archaeology Ltd
Title: Plan showing areas excluded from metal detector survey			Project: Grimes Dyke, Whinmoor, West Yorkshire Archaeological Evaluation and Metal Detection Survey		Scale at A3: 1:2,000



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PLATES 1–11



Plate 1. - Oblique shot of west facing section of large ditch 164 within Trench 5



Plate 2. - Oblique shot of north facing section of ditches 135 and 137 within Trench 6



Plate 3. - South-east facing section of ditch 128 within Trench 9





Plate 4. - South-east facing section of ditch 120 within Trench 10



Plate 5. - East facing section of large modern pit 126 within Trench 11, showing layers of burnt clay and bone



Plate 6. - North-west facing section of Pit 108

Plate No. 1-6	Revision: A	Project: Grimes Dyke, Whinmoor, West Yorkshire Archaeological Evaluation and Metal Detection Survey			CFA ARCHAEOLOGY LTD Unit 22 Moorland's Business Centre Balme Road, Cleckheaton West Yorkshire, BD19 4EZ T: 01274 864245 F: 01274 878494 yorkshire@cfa-archaeology.co.uk
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Plate 7. - Oblique shot of ditch 104 taken facing to the south-west within Trench 17



Plate 8. - Wide shot of south-west facing section within Trench 18 showing topsoil and subsoil layers within old pond area





Plate 10. - Plan shot of Trench 26 looking north after strip to natural subsoil



Plate 9. - South-east facing section of gully 155 within Trench 24



Plate 11. - Oblique shot of north-east facing section ditch 157 within Trench 23

Plate No. 7-11	Revision: A	Project: Grimes Dyke, Whinmoor, West Yorkshire Archaeological Evaluation and Metal Detection Survey			CFA ARCHAEOLOGY LTD Unit 22 Moorland's Business Centre Balme Road, Cleckheaton West Yorkshire, BD19 4EZ T: 01274 864245 F: 01274 878494 yorkshire@cfa-archaeology.co.uk
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Appendix 1: Context Summary

Context	Trench	Type	Width (m)	Depth (m)	Description
100	All	Layer		0.1-0.25	Dark brown organic silty clay. Topsoil for the majority of the site.
101	All	Layer		0.1-0.3	Light-mid brown silty clay subsoil layer across the site area. Overlay natural subsoil in the majority of the trenches.
102	All	Layer			Orange-grey sandy gravel natural substrate, with some patches of grey boulder clay in places. Natural substrate layer for the majority of the site.
103	17	Deposit		0.4	Fill of ditch 104. Dark brown silty clay fill of a shallow ditch, with stones throughout.
104	17	Cut		0.4	Linear, shallow sided north-west-south-east aligned ditch with a u-shaped base. Compact fill with no finds. Continued beyond trench limits.
105	15	Deposit	0.48	0.2	Fill of ditch 106. Soft, dark brown silty clay with occasional stones throughout.
106	15	Cut	0.48	0.2	Linear, shallow north-west to south-east orientated gully/plough furrow with a u-shaped profile. Continued beyond trench limits.
107	15	Deposit	0.56	0.14	Dark brown, soft, silty sandy clay fill of pit 108. Likely a modern deposit, although no finds recovered.
108	15	Cut	0.56	0.14	Rectangular pit with shallow sloping sides and a u-shaped profile. Possibly a modern test pit with a very sterile fill. No finds recovered.
109	15	Deposit	0.42	0.08	Dark brown silty clay with occasional small stones throughout. Hard compaction. Fill of gully 110. No finds
110	15	Cut	0.42	0.08	Very shallow north-west to south-east aligned gully/plough furrow within trench 15. U-shaped profile with no finds recovered. Continued beyond trench limits.
111	16	Deposit	0.56	0.1	Fill of gully/plough furrow 112. Dark brown silty clay with a soft compaction. No finds recovered.
112	16	Cut	0.56	0.1	Shallow north-east to south-west aligned gully/plough furrow with a u-shaped profile. No finds recovered from the sterile fill. Continued beyond trench limits.
113	16	Deposit	0.58	0.18	Fill of gully/ditch 114. Compact dark brown-grey clay. No finds recovered.
114	16	Cut	0.58	0.18	North-west to south-east aligned gully/ditch consisting of moderately sloping sides with a u-shaped profile. No finds recovered. Continued beyond trench limits. Possible plough furrow.
115	16	Deposit	0.62	0.15	Hard compaction. Dark brown silty clay fill of a small pit 116. Possible modern feature. No finds recovered.
116	16	Cut	0.62	0.15	Irregularly shaped, shallow sided pit with a u-shaped profile. Possible remnants of a modern test pit of some description. No finds recovered.
117	16	Deposit	1.3	0.28	Hard compaction. Fill of ditch 118 consisting of a mid brown silty clay with small stones throughout. No finds recovered.
118	16	Cut	1.3	0.28	North-east to south-west aligned large ditch with moderately sloping sides and a u-shaped

Context	Trench	Type	Width (m)	Depth (m)	Description
					profile. Contained no finds. Continued beyond trench limits.
119	10	Deposit	0.9	0.5	Fill of ditch 120. A mid brown-grey silty clay with a soft compaction. No finds recovered from a very sterile fill.
120	10	Cut	0.9	0.5	Steep sided north-west to south-east orientated ditch with a flat base. Very sterile fill with no finds recovered. Continued beyond trench limits.
121	10	Deposit	1.14	0.2	Upper fill of a shallow ditch 123. Consists of dark brown silty clay with a soft compaction. No finds recovered.
122	10	Deposit	0.72	0.24	Lower fill of a shallow ditch 123. Consists of grey silty clay with a soft compaction. No finds recovered.
123	10	Cut	1.14	0.44	North-south orientated ditch with moderately sloping sides and a u-shaped base. Two fills within although no finds were recovered. Very sterile. Continued beyond trench limits.
124	11	Deposit	1.56	0.38	Upper fill of a large modern pit 126 towards the north of trench 11. Consists of yellow-brown silty clay with a soft compaction (likely representing redeposited natural clay). No finds recovered.
125	11	Deposit	1.32	0.1	Middle fill of a large modern pit 126. Consists of black silty clay with charcoal flecking throughout, and large pieces of partially burnt animal bone. No finds recovered.
126	11	Cut	1.56	0.5	Irregularly shaped, steep sided modern pit with a u-shaped profile. Contained a burnt clay lining and evidence for burning of animal bone. No finds recovered. Continued to the north-west.
127	9	Deposit	0.96	0.4	Fill of gully/ditch 128. A dark brown silty clay with a soft compaction and small stones throughout. Very sterile and no finds recovered.
128	9	Cut	0.96	0.4	Moderately sloping sides with a u-shaped base. Gully/ditch on a north-west to south-east alignment with a very sterile fill. No finds recovered. Continued beyond trench limits.
129	12	Deposit	0.53	0.32	Fill of gully 131. Grey silty clay with a soft compaction. No finds recovered.
130	VOID	VOID	VOID	VOID	VOID
131	12	Cut	0.53	0.32	Moderate-steep sided gully with a u-shaped profile on a north-west to south-east alignment. A very sterile fill that contained no finds. Appeared to butt-end within the trench, a probable natural feature.
132	13	Deposit	1.3	0.52	Fill of ditch 133. A mid brown silty clay with a soft compaction and small stones throughout. No finds recovered.
133	13	Cut	1.3	0.52	Steep sided north-west to south-east aligned ditch with a u-shaped profile. Very sterile fill that contained no finds. Continued beyond trench limits. Probable natural feature.
134	6	Deposit	1.8	0.62	Dark brown silty clay with a soft compaction and occasional small stones throughout. Very

Context	Trench	Type	Width (m)	Depth (m)	Description
					sterile, no finds recovered. Fill of ditch 135.
135	6	Cut	1.8	0.62	Steep sided, u-shaped ditch on a north-south alignment. Cuts similarly aligned ditch 137 on its western edge. Very sterile fill with no finds recovered. Continued beyond trench limits.
136	6	Deposit	1.8	0.60	Fill of a ditch 137. Consists of a mod-dark brown silty clay with a soft compaction and small stones throughout. No finds recovered. Cut by ditch 135.
137	6	Cut	1.8	0.6	Steep sided ditch with a u-shaped profile on a north-south alignment. Cut on its western edge by a similarly aligned ditch 135. No finds recovered. Continued beyond trench limits.
138	7	Deposit	0.8	0.16	Fill of ditch 139. Consists of a compact pale brown-grey sandy silt with occasional small stones throughout. No finds recovered.
139	7	Cut	0.8	0.16	Shallow north-west to south-east aligned ditch with a flat base. Possible field boundary and likely truncated by modern farming. No finds recovered. Continued beyond trench limits.
140	7	Deposit	1.18	0.46	Fill of ditch 141. Consists of a compacted grey-brown sandy silt with stones throughout. No finds recovered.
141	7	Cut	1.18	0.46	North-west to south-east aligned ditch with moderately sloping sides and a flat base. Probable former field boundary. Very sterile, no finds recovered. Continued beyond trench limits.
142	5	Deposit	0.6	0.22	Fill of a shallow gully 143. A light orange-grey sandy silt with occasional small stones throughout. Very sterile fill, no finds recovered.
143	5	Cut	0.6	0.22	North-west to south-east orientated ditch with moderate sloping sides and a rounded-flat base. No finds within a very sterile fill. Continued beyond trench limits. Possible field boundary.
144	1	Deposit	2.3	0.18	Fill of a large, shallow ditch/plough furrow 145. A compact mid brown silty clay with small stones throughout. No finds recovered.
145	1	Cut	2.3	0.18	Large, shallow east-west orientated ditch with a flat base. No finds recovered from a sterile fill. Possible plough furrow. Continued beyond trench limits.
146	1	Deposit	0.86	0.1	Fill of a shallow ditch/plough furrow 147. Very sterile fill with no finds recovered.
147	1	Cut	0.86	0.1	Shallow sided east-west aligned ditch/plough furrow with a flat base. No finds from a very sterile fill. Possible plough furrow. Continued beyond trench limits.
148	11	Deposit	1.56	0.04-0.06	Lower fill of a large modern pit 126. Consists of a hard red-orange clay that shows evidence for burning. Lining for the large modern pit in which animal bone was burnt. No finds recovered.
149	25	Deposit	0.9	0.22	Fill of a shallow gully 150. A brown-grey silty clay with a soft compaction. No finds recovered.
150	25	Cut	0.9	0.22	Shallow gully on a north-south alignment with a u-shaped profile. Very sterile fill with no

Context	Trench	Type	Width (m)	Depth (m)	Description
					finds recovered. Continued beyond trench limits.
151	25	Deposit	0.54	0.2	Fill of a gully 152. Consists of a soft grey silty clay. Very sterile, no finds recovered.
152	25	Cut	0.54	0.2	Gully on a north-west to south-east alignment with a u-shaped profile and moderately sloping sides. Very sterile fill, no finds recovered. Continued beyond trench limits.
153		Layer		0.3-0.8	Layer of modern building demolition materials (brick, concrete, plastic etc) found in some trenches across the site. No finds and the result of systematic tipping over the years.
154	24	Deposit	0.84	0.2	Fill of gully 155. Consists of mid brown-grey silty clay with a soft compaction. No finds recovered.
155	24	Cut	0.84	0.2	North-west to south-east aligned gully with a shallow sides and a u-shaped profile. Very sterile fill, no finds recovered. Continued beyond trench limits.
156	23	Deposit	0.98	0.34	Fill of ditch 157. A light-mid brown silty clay with a soft compaction and small stones throughout. No finds recovered.
157	23	Cut	0.98	0.34	Shallow ditch on a north-south alignment. Consists of moderately sloping sides and a u-shaped base. Very sterile fill, no finds recovered. Continued beyond trench limits.
158	22	Deposit	1.06	0.18	Fill of a shallow gully/ditch 159. Consists of grey silty clay with a soft compaction. No finds recovered.
159	22	Cut	1.06	0.18	Shallow gully/ditch on a north-east to south-west alignment with a u-shaped profile. Very sterile fill with no finds recovered. Continued beyond trench limits.
160	22	Deposit	1.56	0.14	Fill of a shallow ditch 161. A grey silty clay with a soft compaction. No finds recovered from a very sterile fill.
161	22	Cut	1.56	0.14	Shallow sided north-east to south-west orientated ditch with a flat base. Very sterile fill with no finds recovered. Possibly a natural geological feature. Continued beyond trench limits.
162	5	Deposit	2.46	0.38	Upper fill of a large ditch 164. Consists of a grey silty clay with a soft compaction and orange mottling throughout. No finds recovered.
163	5	Deposit	2.46	0.3	Lower fill of a large ditch 164. A compact dark brown silty clay with small stones throughout. No finds recovered from a very sterile fill.
164	5	Cut	2.46	0.68	Large, steep sided north-west to south-east aligned ditch with a u-shaped profile containing two fills. Very sterile and no finds recovered. Continued beyond trench limits.

Appendix 2: Photographic Register

No	Contexts/description	Facing	Conditions
1	Plan shot of trench 1 looking south after strip to natural subsoil	South	Overcast
2	Plan shot of trench 1 looking north after strip to natural subsoil	North	Overcast
3	Plan shot of trench 2 looking north after strip to natural subsoil	North	Overcast
4	Plan shot of trench 2 looking south after strip to natural subsoil	South	Overcast
5	Plan shot of trench 3 looking east after strip to natural subsoil	East	Overcast
6	Plan shot of trench 3 looking west after strip to natural subsoil	West	Overcast
7	Plan shot of trench 4 looking north after strip to natural subsoil	North	Overcast
8	Plan shot of trench 4 looking south after strip to natural subsoil	South	Overcast
9	Plan shot of trench 5 looking north after strip to natural subsoil	North	Overcast
10	Plan shot of trench 5 looking south after strip to natural subsoil	South	Overcast
11	Plan shot of trench 6 looking west after strip to natural subsoil	West	Overcast
12	Plan shot of trench 6 looking east after strip to natural subsoil	East	Overcast
13	Plan shot of trench 7 looking north after strip to natural subsoil	North	Overcast
14	Plan shot of trench 7 looking south after strip to natural subsoil	South	Overcast
15	Plan shot of trench 8 looking north after strip to natural subsoil	North	Overcast
16	Plan shot of trench 8 looking south after strip to natural subsoil	South	Overcast
17	Plan shot of trench 9 looking north after strip to natural subsoil	North	Overcast
18	Plan shot of trench 9 looking south after strip to natural subsoil	South	Overcast
19	Plan shot of trench 10 looking east after strip to natural subsoil	East	Overcast
20	Plan shot of trench 10 looking west after strip to natural subsoil	West	Overcast
21	Plan shot of trench 11 looking south-west after strip to natural subsoil	South-west	Sunny
22	Plan shot of trench 11 looking north-east after strip to natural subsoil	North-east	Sunny
23	Plan shot of trench 12 looking west after strip to natural subsoil	West	Sunny
24	Plan shot of trench 12 looking east after strip to natural subsoil	East	Sunny
25	Plan shot of trench 13 looking north after strip to natural subsoil	North	Sunny
26	Plan shot of trench 13 looking south after strip to natural subsoil	South	Sunny
27	Plan shot of trench 14 looking east after strip to natural subsoil	East	Overcast
28	Plan shot of trench 14 looking west after strip to natural subsoil	West	Overcast
29	Plan shot of trench 15 looking north after strip to natural subsoil	North	Overcast
30	Plan shot of trench 15 looking south after strip to natural subsoil	South	Overcast
31	Plan shot of trench 16 looking north after strip to natural subsoil	North	Sunny
32	Plan shot of trench 16 looking south after strip to natural subsoil	South	Sunny
33	Plan shot of trench 17 looking north-west after strip to natural subsoil	North-west	Sunny
34	Plan shot of trench 17 looking south-east after strip to natural subsoil	South-east	Sunny
35	Plan shot of trench 18 looking south-east after strip to natural subsoil	South-east	Sunny
36	Plan shot of trench 18 looking north-west after strip to natural subsoil	North-west	Sunny
37	Close-up shot of south-west facing section within trench 18 showing topsoil and subsoil layers within old pond area	North-east	Sunny
38	Wide shot of south-west facing section within trench 18 showing topsoil and subsoil layers within old pond area	North-east	Sunny
39	Oblique shot of ditch 104 taken facing to the south-west within trench 17	South-west	Overcast
40	South-east facing section of gully 106 within trench 15	North-west	Overcast
41	North-west facing section of pit 108 within trench 15	South-east	Overcast
42	South-east facing section of gully 110 within trench 15	North-west	Overcast

No	Contexts/description	Facing	Conditions
43	South-west facing section of ditch 112 within the northern end of trench 16	North-east	Overcast
44	North-west facing section of ditch 114 within trench 16	South-east	Overcast
45	North-east facing section of small pit 116 within trench 16	South-west	Overcast
46	North-east facing section of large ditch 118 within the southern end of trench 16	South-west	Overcast
47	South-east facing section of ditch 120 within trench 10	North-west	Overcast
48	South-east facing section of ditch 123 within trench 10	North-west	Overcast
49	East facing section of large modern pit 126 within trench 11, showing layers of burnt clay and bone	West	Overcast
50	South-east facing section of ditch 128 within trench 9	North-west	Overcast
51	South-east facing section of ditch 131 within trench 12	North-west	Overcast
52	South-east facing section of ditch 133 within trench 13	North-west	Overcast
53	Oblique shot of north facing section of ditches 135 and 137 within trench 6	South-west	Sunny
54	Oblique shot of north facing section of ditches 135 and 137 within trench 6	South-west	Sunny
55	North-west facing section of ditch 139 within trench 7	South-east	Sunny
56	North-west facing section of ditch 141 within trench 7	South-east	Sunny
57	North-west facing section of ditch 143 within trench 5	South-east	Sunny
58	Plan shot of trench 19 looking north after strip to natural subsoil	North	Sunny
59	Plan shot of trench 19 looking south after strip to natural subsoil	South	Sunny
60	Plan shot of trench 20 looking east after strip to natural subsoil	East	Sunny
61	Plan shot of trench 20 looking west after strip to natural subsoil	West	Sunny
62	Plan shot of trench 21 looking north after strip to natural subsoil	North	Sunny
63	Plan shot of trench 21 looking south after strip to natural subsoil	South	Sunny
64	Plan shot of trench 19 looking north-west after strip to natural subsoil	North-west	Sunny
65	Plan shot of trench 19 looking south-east after strip to natural subsoil	South-east	Sunny
66	Oblique shot of south-west facing section of gully 159 within trench 22	North-east	Sunny
67	South-west facing section of gully 161 within trench 22	North-east	Sunny
68	Oblique shot of north-east facing section ditch 157 within trench 23	South-west	Overcast
69	North-east facing section of ditch 157 within trench 23	South-west	Overcast
70	Plan shot of trench 23 looking south-east after strip to natural subsoil	South-east	Overcast
71	Plan shot of trench 23 looking north-west after strip to natural subsoil, and showing extent of made ground 153	North-west	Overcast
72	Plan shot of trench 24 looking south after strip to natural subsoil	South	Overcast
73	Plan shot of trench 24 looking north after strip to natural subsoil	North	Overcast
74	Plan shot of trench 25 looking north-west after strip to natural subsoil	North-west	Sunny
75	Plan shot of trench 25 looking south-east after strip to natural subsoil	South-	Sunny

No	Contexts/description	Facing	Conditions
		east	
76	Plan shot of trench 27 looking south after strip to natural subsoil	South	Overcast
77	Plan shot of trench 27 looking north after strip to natural subsoil	North	Overcast
78	Plan shot of trench 26 looking north after strip to natural subsoil	North	Overcast
79	Plan shot of trench 26 looking south after strip to natural subsoil	South	Overcast
80	South facing section of gully 150 within trench 25	North	Sunny
81	South facing section of gully 152 within trench 25	North	Sunny
82	South-east facing section of gully 155 within trench 24	North-west	Overcast
83	Oblique shot of north facing section of ditch 157 within trench 23	North-west	Sunny
84	Plan shot of trench 28 looking south-east after strip to natural subsoil, and showing extent of floor surfaces relating to modern farm buildings	South-east	Overcast
85	Plan shot of trench 28 looking north-west showing extent of concrete floor surfaces relating to modern farm buildings	North-west	Overcast
86	Plan shot of natural subsoil within trench 28, north-west facing	North-west	Overcast
87	Oblique shot of west facing section of large ditch 164 within trench 5	North	Overcast
88	Oblique shot of west facing section of large ditch 164 within trench 5	North-west	Overcast
89	East facing section of shallow ditch 145 within trench 1	West	Overcast
90	East facing section of shallow gully/ditch 147 within trench 1	West	Overcast

Appendix 3: Drawing Register

No.	Sheet	Scale	Plan / Section	Description/contexts
1	1	1:10	Section	north-west facing section of gully 143
2	1	1:20	Plan	plan of trench 5, 16-18m from northern end
3	1	1:20	Plan	plan of trench 5, 3-7m from northern end
4	1	1:10	Section	north-west facing section of ditch 141
5	1	1:20	Plan	plan of trench 7, 1.4-4m from northern end
6	1	1:10	Section	north-west facing section of ditch 139
7	1	1:20	Plan	plan of trench 7, 5-7m from southern end
8	1	1:20	Section	north facing section of ditches 135 and 137
9	1	1:50	Plan	plan of trench 6, 19-23m from western end
10	1	1:20	Section	east facing section of gully 147
11	1	1:20	Section	east facing section of furrow/gully 145
12	2	1:50	Plan	plan of trench 1, northern end of trench
13	2	1:20	Section	north-west facing section of ditch 164
14	2	1:20	Section	south facing section of gully/ditch 150
15	2	1:50	Plan	plan of trench 25, north-western end
16	2	1:10	Section	south-east facing section of gully 152
17	2	1:50	Plan	plan of trench 25, south-eastern end
18	2	1:20	Section	south-east facing section of gully 155
19	2	1:50	Plan	plan of trench 24, 19-22m from southern end
20	2	1:20	Section	north facing section of ditch 157
21	2	1:50	Plan	plan of trench 23, 31-33m from north-eastern end
22	2	1:20	Section	south-west facing section of gully 159
23	2	1:50	Plan	plan of trench 22, south-eastern end
24	2	1:50	Plan	plan of trench 22, 25-30m from south-eastern end
25	2	1:20	Section	south-east facing section of ditch 133
26	2	1:50	Plan	plan of trench 133, 16-20m from southern end
27	2	1:10	Section	south-east facing section of gully 131
28	2	1:50	Plan	plan of trench 12, 14-18m from western end
29	3	1:20	Section	south-east facing section of ditch 128
30	3	1:50	Plan	plan of trench 9, northern end
31	3	1:20	Section	east facing section pit 126
32	3	1:50	Plan	plan of trench 11, north-eastern end
33	3	1:10	Section	south facing section of ditch 123
34	3	1:50	Plan	plan of trench 10, 26-30m from western end
35	3	1:10	Section	north-west facing section of ditch 120
36	3	1:50	Plan	plan of trench 10, eastern end
37	3	1:20	Section	south-west facing section of ditch 118
38	3	1:50	Plan	plan of trench 16, 9-14m from southern end
39	3	1:50	Plan	plan of trench 16, northern end
40	3	1:10	Section	north-east facing section of ditch 112
41	3	1:10	Section	north-west facing section of ditch 114
42	3	1:10	Section	east facing section of pit 116
43	3	1:50	Plan	plan of trench 16, 10-14m from northern end
44	3	1:10	Section	north-west facing section of gully 110
45	3	1:50	Plan	plan of trench 15, 31-35m from southern end
46	3	1:10	Section	south-west facing section of pit 108
47	3	1:50	Plan	plan of trench 15, 23-26m from southern end
48	3	1:10	Section	south-east facing section of gully 106
49	4	1:50	Plan	plan of trench 15, 17-21m from southern end
50	4	1:20	Section	north-east facing section of ditch 104
51	4	1:50	Plan	plan of trench 17, 26-31m from north-western end

Appendix 4: Trench Summary Table

Trench No.	Depth of Topsoil (m)	Description
1	0.25	Natural substrate was soft orange-grey sandy clay. Trench itself moderately sloped from north-south, and contained two shallow plough furrows 145 and 147. Three modern land drains were located to the southern end of the trench.
2	0.3-0.4	Natural substrate as per trench 1, with patches of grey boulder clay in places. Trench deepens towards the centre (c.1m) due to build up of silty clay in a natural depression in this location. No archaeology was recorded in this trench.
3	0.35-0.4	Natural substrate a grey-yellow boulder clay with occasional bands of rounded pebbles. Trench gently slopes from west-east, with the trench short at the western end due to existing fence boundary. No archaeology was recorded in this trench.
4	0.3	Natural substrate as trench 3. Trench gently slopes from south-north. No archaeology was recorded in this trench.
5	0.35	Natural substrate as trench 3. Trench shortened due to existing fence line to the south. Plough scarring evident at southern end of trench, with gully 143 and ditch 164 located to the northern end of the trench.
6	0.4	Natural substrate a light grey-orange sandy clay. Trench slopes gently from west-east. Large double ditch 135/137 located towards the centre of the trench.
7	0.3-0.4	Natural substrate as trench 6, with patches of sandstone/mudstone in places. Trench slopes from south-north, with evidence of plough scarring at the southern end. Ditches 139 and 141 located within this trench.
8	0.3-0.4	Natural substrate a grey-boulder clay with patches of orange sandy clay in places. Trench dug in two parts due to presence of access route. The northern end of the trench revealed evidence of c.0.8m of modern demolition material (brick/rubble etc) overlying the natural substrate.
9	0.35-0.4	Natural substrate an orange-grey sandy clay, with bands of grey boulder clay in places, although the natural substrate was not reached at the southern end of the trench due to the presence of a layer of demolition materials (brick/rubble etc) 0.8m+ in depth. Trench gently sloped from north-south with one modern land drain towards the southern end. Contained ditch 128 towards the northern end of the trench.
10	0.25-0.3	Natural substrate as trench 9, with bands of orange clay in places. Trench contained ditches 120 and 120.
11	0.25-0.3	Natural substrate an orange-grey sandy clay with bands of grey boulder clay in places. Trench gently sloped from north-west to south-east, and contained large modern pit 126 towards the north-eastern end.
12	0.45	Natural substrate as trench 11. Trench generally flat with a slight slope from west to east at the eastern end. Trench contained gully 131 towards the western end.
13	0.4	Natural substrate as trench 11. Trench sloped gently from north-south, and contained ditch 133 towards the centre.
14	0.35-0.4	Natural substrate a pale grey-yellow mottled boulder clay with occasional small stones throughout. Trench sloped gently from west-east. No archaeological features were recorded in this trench.
15	0.4-0.5	Natural substrate was a pale grey-orange sandy clay with patches of grey boulder clay throughout. Trench was generally flat and contained two gullies 106 and 110, and one pit 108.
16	0.4	Natural substrate as trench 15. Trench sloped from north-west to south-east, and contained three ditches 112, 114 and 118, and one small pit 116.
17	0.1-0.4	Natural substrate as trench 15. Trench gently sloped from west-east, with the depth at the eastern end 0.7m due to a layer of modern building debris (bricks/concrete etc). Two yellow gas pipes were recorded at north-western end of the trench, where disturbed ground and redeposited natural meant natural substrate was not reached. Trench contained ditch 104 towards the centre.
18	0.3	Natural substrate as trench 15. Trench sloped from north-west to south-east down the banking demarcating the boundary of a former pond. Trench was shortened due to ground water preventing machining of full length of trench. Rising ground water was recorded once trench was excavated. No archaeological features were recorded in this trench.

Trench No.	Depth of Topsoil (m)	Description
19	0.2	Natural substrate was a grey-orange boulder clay. Plough scarring was evident towards Southern end of trench. No archaeological features were recorded from this trench.
20	0.35	Natural substrate an orange-grey sandy clay. Trench contained two modern ceramic land drains on a north-west-south-east alignment. No archaeological features were recorded.
21	0.4-0.5	Natural substrate as trench 20. Natural substrate not reached to the northern end of the trench due to presence of a layer of modern building debris (bricks/concrete etc). No archaeological features were recorded in this trench.
22	0.4-0.5	Natural substrate a mix of orange sandy clay and areas of mudstone/sandstone in places. Trench sloped gently from north-south and contained ditches 159 and 161.
23	0.2-0.3	Natural substrate an orange sandy clay with small stones throughout. Natural substrate was overlain by a buried topsoil layer, and c.0.6-1m layer of modern building demolition debris (bricks, plastic, concrete etc). Trench contained ditch 157 towards the centre.
24	0.4	Natural substrate a light grey-orange sandy clay, with patches of grey boulder clay throughout. Trench contained gully 155 towards the centre.
25	0.3-0.4	Natural substrate a grey boulder clay with patches of orange sandy clay throughout. Trench contained two gullies 150 and 152.
26	0.2	Natural substrate only reached at northern end of trench and was a grey-orange sandy clay. The remainder of the trench consisted of a 0.8-1.1m+ layer of modern building demolition debris (bricks/concrete etc). No archaeological features were recorded within this trench.
27	0.4	Natural substrate only reached at southern end of trench and was as trench 26. The northern end of the trench consisted of a layer of modern building demolition debris (bricks/concrete etc) up to c.0.6m in depth. No archaeological features were recorded within this trench.
28	0.2	Natural substrate was only reached in places and was a yellow-orange sandy clay with stones throughout. Trench was dominated by modern concrete floor surfaces and walls associated with the former farm buildings in the area. No archaeological features were recorded in the places where the natural substrate was exposed.

Appendix 5: Specification

WEST YORKSHIRE ARCHAEOLOGY ADVISORY SERVICE (WYAAS): SPECIFICATION FOR TRIAL TRENCHING TO EVALUATE AND RECORD ARCHAEOLOGICAL REMAINS IN ADVANCE OF DEVELOPMENT AT GRIMES DIKE, WHINMOOR

Specification prepared on behalf of Leeds City Council at the request of Nansi Rosenberg of Prospect Archaeology (Planning Application reference 09/03238/OT/E)

1 Summary

1.1 A limited amount of archaeological work consisting of trial trenching is proposed to help establish the below ground archaeological survival at the above site and to record it if encountered. **Any significant additional work that may be necessary will be covered by a supplementary specification.** This specification has been written by the West Yorkshire Archaeology Advisory Service (WYAAS), the holders of the West Yorkshire Historic Environment Record. Depending upon the results obtained, additional archaeological work may need to be carried out. This additional work will be governed by separate specifications.

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 3633 3725

2.1 The development site is situated to the east of Leeds, and to the west of the village of Scholes. It is bounded to the south by the A64 York Road, to the north and west by housing and to the east by fields. The site is currently vacant and consists of scrubland and overgrown vegetation.

2.2 The site is located in the District of Leeds and the historic township of Barwick in Elmet.

3 Planning Background

3.1 A planning permission for a residential development at Land at Grimes Dike, Whinmoor has been granted by Leeds City Council.

3.2 The Planning Authority have attached an archaeological condition to the above planning permission as they 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 degree of archaeological recording that is necessary.

3.3 This specification has been prepared by the WYAAS at the request of Nansi Rosenberg of Prospect Archaeology (nansi@prospectarch.com 01977 681885), 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 initial archaeological interest in the site was based upon the belief that a linear earthwork known as Grim's Ditch, which forms part of a linear earthwork system runs through it. Grim's Ditch is a linear earthwork made up of a substantial bank and ditch which runs approximately north-south on the eastern side of the modern city of Leeds. Previous excavations of sections of the earthwork have demonstrated it to be an Iron Age monument, which was re-cut in the Roman period. The earthwork has been scheduled as an archaeological monument of national importance where it can be seen to survive as an upstanding earthwork (close to its southern limit). The name Grim's Ditch which is given to this feature appears to be of some antiquity. A *Grymisdyk* is mentioned in a document of 1257-85.

4.2 In 2008 and 2009 a series of archaeological investigations were carried out on the site as part of pre-application discussions. These investigations included trial trenching, geophysical survey and earthwork survey. Following this investigations we are now confident that the earthwork feature which stretches across the site does not represent Grim's Ditch, rather it is suggested that it may have been part of a system of drainage channels associated with agricultural activity on Whinmoor in the 18th and 19th centuries.

4.3 During the limited trial trenching that was focussed on the earthwork, discrete features which are believed to be Roman in date were found. These features consist of a ditch which may have been part of a more extensive Romano British field system, a post hole and a pit. Contemporary features may be present over the entire site and therefore further work is required in order to investigate the archaeological potential of the rest of the proposed development site.

5. Aim of the Specified Work

5.1 The aim of this project 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 proposed development area, and to record at an appropriate level, archaeological features encountered in the excavation trenches, with the aim of elucidating the issues discussed in section 4.

5.2 More specifically, the aims of the project would be to;

- to preserve by record the archaeological remains that will be impacted by the proposed development;
- to confirm and enhance the results of the earlier evaluation;
- to determine if the features relate to prehistoric/ Roman agricultural field systems or settlement activity;
- to where possible determine how these features fit into the prehistoric/ Roman landscape of the area;
- if more than period is represented on site determine whether there is continuity between these;
- to establish the evidence for continuity of Iron Age/ Roman occupation;

- to contribute information to key research objectives identified by the following research agendas:
 - I. The Neolithic, Bronze Age and Iron Age in West Yorkshire (Blaise Vyner 2008); and
 - II. The Iron Age & Romano-British periods in West Yorkshire (Adrian Chadwick 2009).

5.3 It is conceivable that a larger, more open area excavation may be identified as being warranted, or alternatively a wider watching brief may be required during ground-works for the development, possibly with provision for rapid salvaging recording. All possibilities will be considered depending upon the results of this exercise and it would be anticipated that if further significant fieldwork is required, then the contractor would draft the specification and agree it with the WYAAS. It is a primary aim of the specified work that all aspects should be placed in the public domain by depositing the results with the WY Historic Environment Record (Registry of Deeds, Newstead Road, Wakefield WF1 2DE)

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. This work may require the preparation of a Risk Assessment of the site, in accordance with the Health and Safety at Work Regulations. The WYAAS 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. Any Health and Safety issues which may hinder compliance with this specification should be discussed with WYAAS at the earliest possible opportunity (see section 13.2).

6.2 Location of Services, etc.

6.2.1 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.

6.3 Confirmation of Adherence to Specification

6.3.1 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 West Yorkshire Archaeology Advisory Service 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*.

6.4 Confirmation of Timetable and Contractors' Qualifications

6.4.1 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.*),

6.4.2 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.

6.5 Notification

6.5.1 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 Regional 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.

6.6 Documentary Research

6.6.1 A Desk Based assessment has already been carried out for this project; a copy should be obtained from Propsect Archaeology who have requested this specification. In addition to providing a knowledge base for the work in hand, the results of this assessment may be incorporated into the contractor’s fieldwork report where they are considered to contribute to that report, but any extraneous material should be omitted. The results of the desk based assessment, along with the results of the earlier geophysical survey and trial trenches should be used to help inform the interpretation of the survey results.

7.0 Trenching Methodology

7.1 Trench Size and Placement (Figure 1)

7.1.1 The work will involve the excavation of twenty seven 50m by 2m trenches, which can be machine-opened. The contractor should also allow for a contingency amount of 500 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 2. A large portion of the immediate east of the site will be public open space and not developed (this includes the site of a possibly medieval fish pond). As this area is not going to be developed/landscaped then no trenches will be required here. Please contact the developers for the most up to date plan of this open space.

Total site area: **152750m²**

Total area of trenching: **2700m²**

Contingency trenching: **500m²**

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.** Any 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 All archaeological remains will be hand excavated in an archaeologically controlled and stratigraphic manner sufficient to meet the aims and objectives of the project. The **complete** stratigraphic sequence, down to naturally occurring deposits will be excavated and the work will investigate and record **all** inter-relationships between features. The contractor should make provision for the use of shoring/stepping to accomplish this if necessary. All trenches are to be the stated dimensions at their base. The following strategy will be employed:

- Linear boundary features: a minimum sample of 20% of each linear boundary feature such as ditches and trackways. Each section should be at least 1m wide and, where possible, sections will be located and recorded adjacent to the trench edge. All intersections will be investigated to determine the relationship(s) between the component features. All termini will be investigated.
- Other linear and discrete features: all stake-holes, post-holes, pits, ring ditches, kilns, and other structural/funerary/industrial features will be 50% excavated in the first instance, recorded in section, and then fully excavated. All intersections will be investigated to determine the relationship(s) between the component features. Where possible, sections will be located and recorded adjacent to the trench edge.
- Built structures: walls, floors etc will be excavated sufficient to establish their form, phasing, construction techniques. All intersections will be investigated to determine the relationship(s) between the component features.

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 area is to be recorded, even when no archaeological deposits have been identified.

7.3.2 Section drawings (at a minimum scale of 1:20) must include heights A.O.D. Plans (at a minimum scale of 1:50) must include O.D. spot heights for all principal strata and any features. At least one section of each trench edge, showing a

representative and complete sequence of deposits from the modern ground surface to the natural geology, will be drawn.

7.3.3 The actual areas of excavation and all archaeological (and possibly archaeological) features should be accurately located on a site plan and recorded by photographs, scale drawings and written descriptions sufficient to permit the preparation of a detailed archive and report on the material. The trench locations, as excavated, will be accurately surveyed, tied into the O.S. National Grid and located on an up-to-date 1:1250 O.S. map base.

7.3.4 Digital photography: as an alternative to 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. 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

7.4.1 Spoil heaps are to be scanned for 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 by English Heritage in the Centre for Archaeology Guidelines no.1 (2002), "Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation".

7.5.2 Samples for specialist environmental analysis and scientific dating (soil profiles, archaeomagnetic dating, dendrochronology etc.) should be taken if suitable

material is encountered during the excavation. The English Heritage Regional 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. The sampling strategy used must be presented in the evaluation report.

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 Human Remains

7.7.1 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, if appropriate, and any local environmental health regulations.

7.8 Treasure Act

7.8.1 The terms of the Treasure Act 1996 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.

7.9. Unexpectedly Significant or Complex Discoveries

7.9.1 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.

7.10 Access/Monitoring Arrangements

7.10.1 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

WYAAS' representative, by the next agreed site meeting. Access is also to be afforded at any reasonable time to English Heritage's Regional Archaeological Science Advisor.

7.10.2 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.

8. Excavation Archives Deposition.

8.1 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).

8.2 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.

8.3 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.

8.4 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.

9. Post-Excavation Analysis and Reporting

9.1 Requirement for Further Fieldwork

9.1.1 It is anticipated that upon (or approaching) completion of fieldwork a meeting with WYAAS will be arranged by the archaeological contractor, either at the WYAAS offices or on site, to discuss the results and agree what, if any, additional work may be warranted. The developer should also be invited to attend this meeting. The meeting may take the form of a telephone discussion at WYAAS' discretion. Following the meeting the archaeological contractor will either produce a report (if no further archaeological work is warranted), or draft a specification (if further work is required) to be submitted to WYAAS for written approval prior to the commencement of any further work.

9.1.2 If further fieldwork is required, the results of the evaluation will be integrated into an overall report encompassing all stages of work. However, if a different contractor is employed by the developer to undertake subsequent works, then a full, formal evaluation report (see paragraph 9.3 below) should be prepared and accepted by WYAAS before further fieldwork commences.

9. Post-Excavation Analysis and Reporting

9.1 Finds and Samples

9.1.1 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.

9.1.2 Samples should be processed for the recovery of artefactual material, animal/fish/human bones, industrial residues (including hammerscale), 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.

9.1.3 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.

9.1.4 All finds and biological material must be analysed by a qualified and experienced specialist.

9.1.5 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.

9.2 Field Archive

9.2.1 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). The contractor should also take account of any additional requirements imposed by the recipient museum (see section 9.1 above). An index to the field archive is to be deposited with the West Yorkshire Archaeology Advisory Service (preferably as an appendix in the report).

9.2.2 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 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.

9.2.3 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.

9.3 Report Format and Content

9.3.1 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.

9.3.2 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.

9.3.3 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.

9.3.4 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.

9.3.5 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.

9.4 Summary for Publication

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

9.5 Publicity

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.

10. Report Submission and Deposition with the HER

10.1 A copy of the report is to be supplied **directly** to the WYAAS within a period of **two months** following completion of fieldwork, 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.

10.2 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 unless confidentiality is explicitly requested, in which case it will become publicly accessible six months after deposition.

10.3 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.

10.4 A copy of the final report shall also be supplied to English Heritage's Regional Science Advisor (Dr Andy Hammon, English Heritage, 37 Tanner Row, York Y01 6WP).

10.5 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.

11. General Considerations

11.1 Authorised Alterations to Specification by Contractor

11.1.1 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 recording as detailed above, and/or
- ii) an alternative approach may be more appropriate or likely to produce more informative results, and/or

then it is expected that the archaeologist will contact 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, WYAAS will resolve the matter in liaison with the developer and the Local Planning Authority.

11. 2 Unauthorised Alterations to Specification by Contractor

11.2.1 It is the archaeological contractor's responsibility to ensure that they have obtained 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 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.

11.3 Technical Queries

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

11.4 Valid Period of Specification

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.

**West Yorkshire Archaeology Advisory Service
Rebecca Remmer**

August 2011

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West Yorkshire Archaeology Advisory Service
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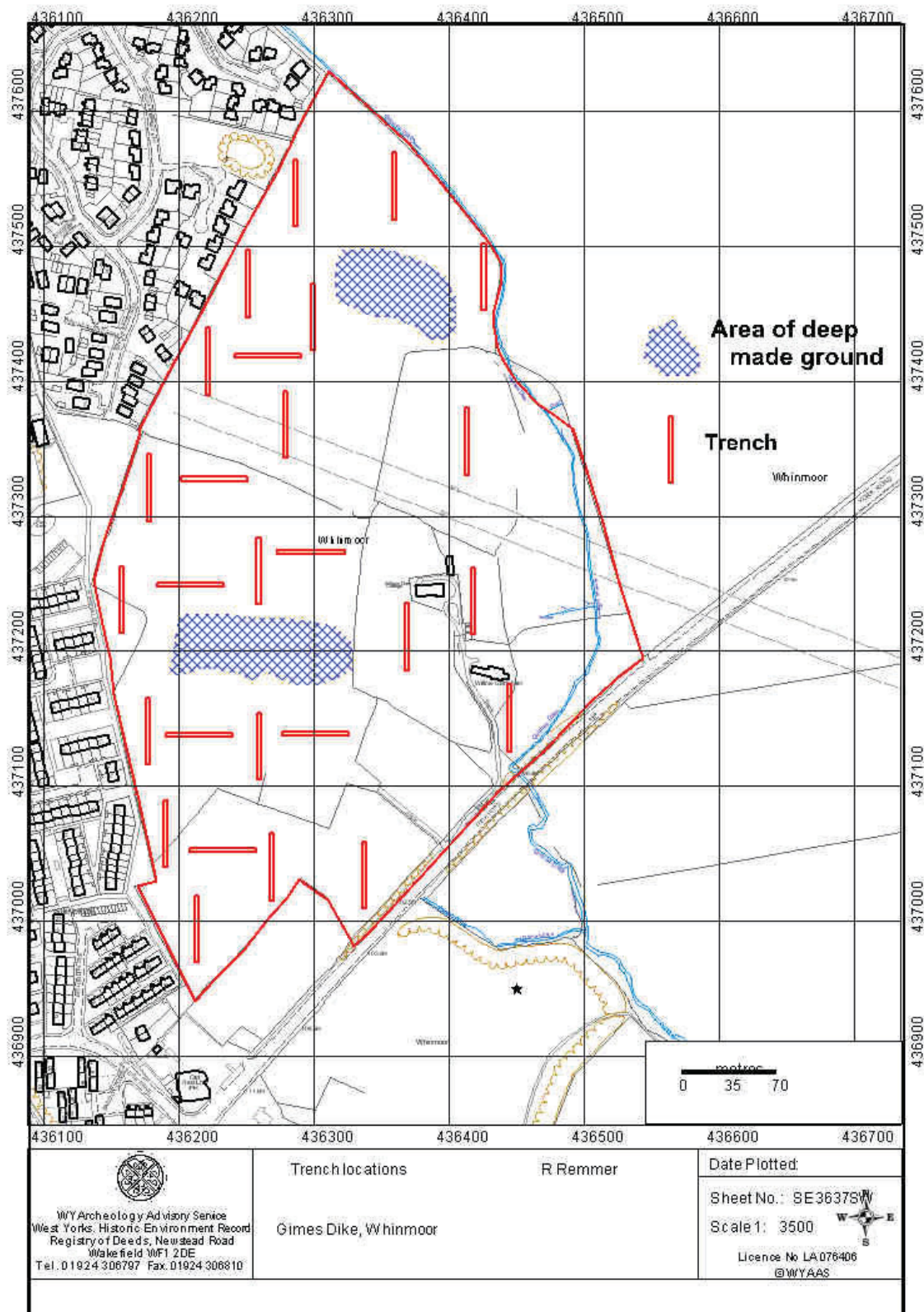


Figure 1. Trench Locations

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

Site name/ Address: Land at Whinmoor, Leeds	
Township: Whinmoor	District: Leeds
National Grid Reference: SE 3633 3725	
Contractor: CFA Archaeology	
Date of Work: April-May 2013	
Title of Report: 'Grimes Dyke', Whinmoor, West Yorkshire, Archaeological Evaluation and Metal Detection Survey	
Date of Report: 21/11/2013	
SUMMARY OF FIELDWORK RESULTS: An archaeological evaluation consisting of trial trenching and a metal detection survey was undertaken by CFA Archaeology Ltd on land in Whinmoor, West Yorkshire during April and May of 2013. Twenty eight trenches were excavated with a number of undated field boundaries and field systems recorded. No finds were recovered either from the trenching or the metal detection survey with modern truncation and debris related to modern farm buildings recorded across the site.	
Author of summary: Mark Bell	Date of summary: 21/11/2013