York Archaeology

Harthill Reservoir, Harthill, South Yorkshire:
Report on an Archaeological Strip, Map and Sample

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SUMMARY

- York Archaeology was commissioned by Canal and River Trust to undertake an Archaeological Strip, Map and Sample at Harthill Reservoir, Harthill, South Yorkshire. Works were recommended due to the archaeological interest uncovered from the geophysical survey (magnitude survey, 2022).

- Excavations were in advance of the proposed engineering works, including the new spillway, in accordance with the legal requirements of the Reservoirs Act 1975.

- Excavations revealed a series of pits and linear features across the Site, dominated by east-west orientated ditches. The relative lack of dating evidence and limited numbers of relationships between features has impacted on the ability to establish a clear chronology for the development of the Site, with many of the features, including a possible drove way and a number of pits, remaining undated.

- Nonetheless, for those features that can be dated, all seem to date from the later post-medieval period onwards, although ephemeral evidence of medieval activity was also present, in the form of residual pottery, probably originally deposited when the Site would have formed part of the open fields associated with Harthill.

- Following the enclosure of the former medieval strip fields (the date of which is uncertain but had occurred by 1854, based on historic mapping), a series of east-west aligned ditches were laid out parallel to the field boundaries. These features appear to represent drainage features, running down the gradual west-east slope present on the Site. They appear to have silted up naturally, from around the later 17th to 18th centuries onwards.

- A series of linear features, generally running northeast-southwest, could be seen from relationships, to post-date the east-west aligned ditches, or were similar in form and alignment with these later ditches. They appear to represent boundaries, with entrances formed by rounded termini, around 4m apart. Their exact purpose is unclear, although they do roughly follow the contours of the slope.

- Other features on the Site, mostly in the form of pits, suggest relatively piecemeal use of the location, for quarrying materials in the case of pit [1163], or for undefined purposes in the case of the other pits. The lack of dating evidence from these features precludes their further interpretation.

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1. INTRODUCTION

1.1.1 York Archaeology was commissioned by the Canal and River Trust to undertake an archaeological strip, map and sample at Harthill Reservoir, Harthill, South Yorkshire (centred on SK 48746 80674) (Figure 1). The work was carried out between 3rd October 2022 – 17th November 2022 from here on referred to as Area One, and 12th December 2022 - 13th January 2023 here on known as Area Two. The archaeological investigations were in advance of proposed engineering works and new spillway.

1.1.2 These archaeological investigation works followed a programme of geophysical survey (Magnitude Survey 2022).

1.1.3 This document outlines the results of the archaeological strip, map, and sample, which adhered to the methodology prescribed in the approved Written Scheme of Investigation for the Site (Tarbuck 2022). Its implementation was conducted under the approval and monitoring of the South Yorkshire Archaeological Service (SYAS) for Rotherham Metropolitan Borough Council.

2. SITE LOCATION, TOPOGRAPHY AND GEOLOGY

2.1.1 The Site is located in a semi-rural area, on the eastern side of Harthill village. The farmland extends to the south, east and northwest side of the reservoir. The M1 is approximately 700m to the west.

2.1.2 The Site is situated on a gentle east-facing slope at a height ranging from 99m AOD (Above Ordnance Datum) in the east, to 104m in the west.

2.1.3 The underlying geology of the Site is recorded as Pennine Middle Coal Measures Formation – Mudstone, Siltstone and Sandstone (British Geological Survey 2022). There were boreholes recorded to have taken place on the BGS, however the records are confidential.

2.1.4 The Site is recorded as containing freely draining slightly acid loamy soils. (Soilscapes 2022).

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1.1 The following information has been compiled from data obtained from the South Yorkshire Sites and Monuments Record (SMR) by way of Heritage Gateway (Heritage Gateway 2022), based on a 1km Study Area around the Site, and the Heritage Impact Assessment (HIA) produced by the Canal & River Trust (2022) in support of the application. The numbers in brackets represent the record relating to those finds or features recorded on the SMR. However, for the final report on the archaeological works, the SMR will be consulted in order to be able to put any findings within their local context.

Palaeolithic (650,000 BC – 10,000 BC), Mesolithic Period (10,000 BC – 4,000 BC), Neolithic Period (4,000 BC – 2,400 BC) Bronze Age (2,400 – 700 BC), and Iron Age (700 BC – AD43)

3.1.2 A single record of possible prehistoric activity within the Study Area recorded by the SMR, consists of two unidentified flints found in a field some 350m to the northeast of the Site (0447/01).

Romano-British Period (AD 43 – AD 410)

3.1.3 The only a single find of a Romano-British coin (follis of Constanius I) was located by SMR within the Study Area, dated to AD 297-299 (04484/01), from a field *c* 900m to the northeast of the Site.

Early Medieval Period (AD 410 – AD 1066)

3.1.4 The name Harthill derives from the Old English 'heorot', meaning a hart or a stag and the Anglian 'hyll', referring to a hill, natural eminence or elevated piece of ground (Key to English Place Names 2022). The settlement of Harthill is recorded in the Domesday Survey of 1086, where the owner is stated to be William of Warenne, having previously, in AS 1066, been under the control of Earl Harold (also known as Harold II). At the time it contained approximately 12 households, with sufficient ploughland for 12 men's plough teams and 4 furlongs of woodland.

3.1.5 Archaeological evidence for this period within the Study Area is, however, limited to a chance find of a 10th century rectangular brooch (04484/01), found in a field approximately 300m to the northwest of the Site.

Medieval Period (AD 1066 – 1539)

3.1.6 Many of the records on the SMR for the Study Area (eight in total) relate to the medieval period, predominantly associated with the medieval village of Harthill. These include all Hallow Church, dating to the 13th century onwards (00269/01), the rectory (00763/01), which contains 14th century evidence but was rebuilt in 1720, the market cross (00271/01), and medieval houses at 70 Union Street (02128/01) and 1 Chapel Yard (02205/01) and a tithe barn (00763/02). In addition, a medieval jetton (0325/01) was found just to the east of the village and a timber-framed house (01470/01) is recorded at Woodall village, located near the M1.

Post-Medieval Period (AD1540 – AD 1899) – Modern

3.1.7 Post-medieval records on the SMR mostly take the form of standing buildings: a school east of Union Street (03869/01), Glebe Farmhouse (03868/01), Danby House (03866/01), Harthill Rectory (00763/01) and a barn (01582/01). Other records include a late 17th/early 18th century pottery assemblage found at White Horse Farm (00486/01) found within Woodall village and a bottle seal (00490/01) found to the east of Harthill village.

3.1.8 Harthill Reservoir itself is an example of an early canal reservoir. The HIA states that Harthill Reservoir was constructed between 1771 and 1796 to supply water to the Chesterfield Canal, which continues currently to be fed by water from the reservoir. There were three reservoirs,

named 'Old', 'Middle' and 'New'. The date of '1796' along with the name of the engineer 'Mr. R. Dixon' is displayed on the headwall of the lower draw-of valve house in the New Dam (the main embankment).

3.1.9 Since 1961 the reservoir has undergone modifications including the auxiliary or emergency spillway on the main embankment in 1961, and the concrete wave wall constructed along the top of the main embankment in 1982 (Canal & River Trust 2022, 16-17).

3.1.10 Undated finds in the Study Area include pottery of unknown date (00478/01), a Scottish silver coin of unknown date (04491/04), both recovered from *c* 300m to the northeast of the Site, and a cannon ball found in fields to the northwest of Woodall.

4. RELEVANT LEGISLATION AND GUIDANCE

4.1 Planning Context

4.1.1 The archaeological programme outlined herein is underpinned by the national legislation and local policies described below and has been devised in consultation with SYAS.

4.2 National Planning Policy Framework (NPPF)

4.2.1 Developments of this nature, and their impact upon the historic environment, are addressed by the revised 2021 National Planning Policy Framework (NPPF) published by the Ministry of Housing, Communities and Local Government (MHCLG), and the NPPF Planning Practice Guide Conserving and Enhancing the Historic Environment (DCLG 2014).

4.2.2 Section 16 of NPPF, paragraph 192 states:

"Local planning authorities should maintain or have access to a historic environment record. This should contain up-to-date evidence about the historic environment in their area and be used to:

a) assess the significance of heritage assets and the contribution they make to their environment; and

b) predict the likelihood that currently unidentified heritage assets, particularly sites of historic and archaeological interest, will be discovered in the future."

4.2.3 In addition, paragraph 194, states that:

"In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based

assessment and, where necessary, a field evaluation.

4.2.4 Furthermore, paragraphs 199 and 205 of the NPPF state:

"When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance."

"Local planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. However, the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted."

4.3 REGIONAL RESEARCH OBJECTIVES

4.3.1 This archaeological investigation provided an opportunity to contribute to the research themes and objectives outlined in the East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands (interactive Digital Platform available at: www.researchframeworks.org/emherf).

High-Medieval (1485 – 1750)
Can we shed further light upon the origins and development of the open-field system and its impact upon agricultural practices?
Can we establish the character and extent of the field systems of non-champion landscapes (e.g. upland Derbyshire)?
What can we deduce about changes in woodland management and animal or crop husbandry (including new crops, crop rotation, field systems, more intensive cultivation of clay soils and larger animals, particularly sheep)?

5. AIMS AND OBJECTIVES

5.1 Aims

5.1.1 The general aims of the fieldwork were stated as:

- To identify the presence of any archaeological remains to be affected by any intrusive aspects of the development.
- To characterise and record any archaeological remains present within the impacted area.
- To ensure any remains are recorded to a professional standard to ensure their preservation by record, although for remains of particular importance, discussions with the local planning authority should take place regarding possible preservation in situ.

5.2 Objectives

5.2.1 The objectives for the project were:

- To undertake archaeological monitoring during the stripping of the slipway area and the compound.
- To characterise and record any archaeological remains present within the impacted area.
- To ensure preservation by record (or in situ where appropriate) of any archaeological remains encountered during the watching brief.
- To recover any archaeological artefacts and Ecofacts present within the area.
- To recover samples for paleoenvironmental assessment and dating where appropriate.
- To present the results of the monitoring in a report.
- To prepare a project archive for deposition with a publicly accessible repository.

METHODOLOGY

5.3 Excavation

6.1.1 The monitored areas were located by using a GPS, Leica CS15/GS15 RTK Differential GNSS prior to excavation. The area was scanned with a CAT Scanner before any breaking of ground in order to locate any services not shown on the services plan supplied by the client.

6.1.2 All machining was carried out using a 360° tracked excavator fitted with a toothless ditching bucket under constant archaeological supervision so that a clean surface was exposed.

6.1.3 Topsoil and subsoil where encountered was excavated in spits no greater than 250mm and was kept separate during the removal to allow sequential backfilling of the excavations.

6.1.4 The Site was excavated to a level at which archaeological deposits were present.

6.1.5 Spoil was stored at a safe distance from the excavation edge and was checked for artefacts, including the use of a metal detector.

6.1.6 Features identified were hand-cleaned. Features were sample excavated sufficient to determine their plan and form, and any datable artefacts were recovered. All pits and other discrete features were half-sectioned (50% sample) unless otherwise advised by SYAS. Features to be prioritised for excavation were determined once the site is fully exposed following soil stripping. Emphasis was given to those features best preserved, with appropriate sampling where necessary.

6.1.8 Feature fills were removed by contextual change (the smallest usefully definable unit of stratification) and/or in spits no greater than 100mm. Substantial features were hand excavated to a maximum depth of 1.2m, or a perceived safe depth if the sides are unstable.

5.4 Recording

6.2.1 The position of each feature was located with reference to the OS grid. Excavation areas were hand cleaned where appropriate and plans of all contexts including features were surveyed using a GPS, Leica CS15/GS15 RTK Differential GNSS, and showed at least: context numbers, all colour and textural changes, principal slopes, levels expressed as O.D. values, or levelled to permanent features if a benchmark is absent, sufficient details to locate the subject in relation to OS 1:2500 mapping.

6.2.2 Sections were drawn on drafting film in pencil at a scale of 1:10/1:20/1:50 (as appropriate) and showed context numbers, all colour and textural changes, slopes and levels. Levelling information was given in the form of a datum line with O.D/arbitrary value. The locations of all sections were surveyed.

6.2.3 Digital images of each context were taken together with general views illustrating the principal features of the excavations. Photography followed Historic England's *Digital Image Capture and File Storage: Guidelines for Best Practice* (2015). In particular, a high-quality camera was used, of no less than an APS-C or DX size sensor of 10 megapixels that is capable of generating images in tiff (v.6) or unprocessed RAW format.

6.2.4 Written records were maintained as laid down in the York Archaeology recording manual.

6.2.5 The location of any artefacts including those recovered in the topsoil/subsoil was recorded by context/spit, or three-dimensionally if determined to be of exceptional archaeological significance.

6.2.6 Where appropriate features were identified, soil samples were retrieved in order to undertake palaeoenvironmental sampling. The sampling of features followed procedures set out within the English Heritage (now Historic England) guidelines in Environmental Archaeology (Campbell, Moffett & Straker 2011). Samples were generally 40 litres if possible and were processed within the York Archaeology Environmental Lab, under the supervision of Environmental Officer Stacey Adams.

5.5 Post-Excavation

6.3.4 All finds were cleaned, conserved, marked and stored as recommended in *First Aid for finds* (Watkinson and Neal 1998), and marked with the site and find codes, and relevant accession numbers.

5.6 Archive

6.4.1 The archive was fully catalogued and prepared to recognised standards (Brown 2011; Rotherham Metropolitan Council 2010). A selection strategy for the paper, digital and material archive, in line with CIfA's (2022) *Toolkit for Selecting Archaeological Archives*, can be found in Appendix 1 of the WSI (Tarbuck 2022)

6. RESULTS

6.1 Introduction

6.1.1 A number of features were present across the Site, in the form of pits, ditches and gulleys, as well as spreads of material (Figures 2, 3, 4, 8, 11, 14, 16). The dominant features were a number of east-west aligned ditches, present across the Site, a possible drove way or trackway, and possible enclosure ditches. Stratigraphic relationships were relatively few in number and artefactual evidence was sparse, but these have been used where possible in order to attempt to provide a sequence of development and chronology for the Site. Nonetheless, many of the features, particularly discrete features such as pits and some linear features, remain undated.

6.1.2 For ease of legibility, particularly where they have been sectioned a number of times, most linear features were given group numbers in the field which are used in the text. Context list sets, group numbers and cut numbers used during the recording process are set out in Appendix 1.

6.2 Overview

6.2.1 Machine stripping of the Site revealed mid-brownish yellow limestone brash within the western part of Area 1 and northern part of Area 2. Deposits of probable colluvium were also present in the eastern part of Area 1, where it was a mixed blueish-grey and brownish-yellow clay, and the southern part of Area 2, where it was reddish-brown in colour.

6.2.2 All archaeological features were observed cutting into this natural substrate, which was covered by subsoil, formed of a mid-grey brown silty sand (1002) in Area 1 and a mid-reddish-brown silty sand (2002) in Area 2. A copper-alloy buckle of 16th-17th century date (AAC) was found in (1002).

6.2.3 Across the Site, the subsoil was sealed by topsoil (1001, 2001), ranging from 0.25-0.38m in thickness.

6.3 Features and spreads pre-dating the east-west ditches

Drove way ditches 1394 and 1385

6.3.1 In the central part of the Site were two ditches, 1394 and 1395. Both ditches are aligned roughly northwest-southeast and in the south-eastern part of Area 1 were approximately 4m apart, but gradually veered away from each other, so that at the western boundary of this area, the ditches were around 7.2m apart. Both ditches contained single fills indicative of natural silting.

6.3.2 Ditch 1394 measured in excess of 52m in length and had a width of up to 0.6m and depth of up to 0.3 (Plates 1-4; Figures 12.1, 12.3, 12.4, 13.7, 13.8). It cut another ditch, 1170 which had a similar profile and orientation and may have been an earlier iteration of the ditch.

6.3.3 Ditch 1395 was generally narrower but slightly deeper than ditch 1394, measuring over 42.8m in length, 0.60m in width and 0.27m in depth (Figures 13.3, 13.4, 13.5, 13.6; Plate 5).

6.3.4 Neither ditch contained finds, but both were truncated by east-west ditch 1396, suggesting a post-medieval or earlier date for their infilling. Ditch 1394 was also cut by the terminus of modern ditch 1426=2185.

6.3.5 In form, the two ditches appear to demarcate a drove way or trackway, although both features are very shallow and to be effective for a drove way would have needed to be deeper, or to contain fences or hedges. They have probably been significantly truncated by later activity.

Spread (1219)

6.3.6 Spread (1219) comprised a mid-pinkish-brown with yellow silty sand, measuring 11.6m x 4.9m x 0.25m and appears to have formed in a natural hollow in the natural substrate. It was cut by the eastern part of ditch 1393.

Gullies [1021], 1422=1416 and 1423

6.3.7 In the northern part of Area 1, two gullies were found close together, consisting of 1423 and 1415=1422 (Plate 6; Figures 9.5, 9.6). Both were roughly north-south orientated, but 1416=1422 turned to the southeast for part of its length, before turning to the southwest, where it appeared to terminate, but was truncated by gulley [1052]. Both features were cut by east-west ditch 1404, whilst 1416=1422 was also truncated by ditch 1404. Neither contained any finds, but are post-medieval or earlier in date.

6.3.8 Ditch 1416=1422 measured at least 10m in length, with a width of 1.2m and average depth of 0.11m. It had a u-shaped profile, formed of gradually sloping sides down to a flat base, with a fill of mid-brown silty sand. It cut a short length of gulley [1021] (over 0.7m x 0.26m x 0.17m) with a similar fill.

6.3.9 Ditch 1423 was shorter, at 3.19m, but as slightly wider, at 0.76m and deeper at 0.29m. It contained a similar fill to ditch 1416=1422.

Pits [1100] and [1110]

6.3.10 Two pits were cut by the east-west ditches. Pit 1100 was circular in plan with a length of 0.26m, width of 0.48m and depth of 0.18m (Plate 8; Figure 6.1). It had gently sloping sides and a concave base. The fill comprised friable mid-brown clayey sand. It was cut by ditch 1172.

6.3.1 Circular pit [1110] was circular in plan and measured 0.70m in length, 0.90m in width and 0.46m in depth, U-shape in profile (Figure 9.2). The fill was a loose, brown, coarse, sandy silt with occasional small sandstone inclusions. This feature was cut by drainage ditch 1405.

Feature 2184

6.3.2 Feature 2184 was a small, irregular linear feature, aligned northeast-southwest and measuring 7.20m in length, 2.70m in width and 0.20m in depth. The sides were steeply sloped down to a flat base. The single fill of this feature consisted of mid grey brown silty sand with occasional charcoal. It was cut by east-west ditch 2193.

6.4 East-west orientated ditches

6.4.1 A total of 21 linear features with rounded termini, aligned approximately east-west, were present across the Site, running parallel to the existing field boundaries and the road (Plates 9—14; Figures 5.2, 5.5, 6.1, 7.3—7.5, 9.2, 9.7, 10.8, 12.1, 12.2, 13.1, 13.3, 13.4, 15.3, 15.4, 17.1—17.8). The ditches in the northern part of the site were generally larger, ranging from between 3.90m x 101.50m in length, 0.90m-2m in width and with a maximum depth of 0.16m. In contrast to those in south, which measured between 44m x 19.40m, width of 0.39m-2.30m and depths of 0.04m-0.14m. However, their shared, parallel alignments suggest that they were all related and all groups contained similar fills of mid brown silty sand with occasional small stones and rare charcoal flecks inclusions. This indicates that the fills naturally accumulated over a period of time.

6.4.2 Ditch 1392 was seen to truncate a ditch on a similar alignment, 1424, which may represent an earlier iteration of this feature and suggests that at least one, if not more, of these ditches, were recut at some time. In addition, not all of these features need have been created at exactly the same time, with ditch 1405 being cut by a northwest-southeast aligned ditch 1152, but the latter in turn being truncated by another east-west ditch 1404.

6.4.3 Almost all of the finds from the Site were recovered from these ditches, most of which were from Area 2. Finds consisted largely of pottery, ranging in date from the later medieval period to the 19th century, in some instances with sherds from different periods being present in the same feature, suggesting that the medieval sherds were residual in these features.

6.4.4 The only feature to include finds in Area 1 was ditch 1392, which in three different interventions produced Reduced Sandy Ware (13th—14th century), Yellow-Glazed Coarse ware (late 18th-19th century) and a clay tobacco stem fragment of 17th-18th century date.

6.4.5 For Area 2, cut [2056] of ditch 2193 contained a small sherd of Cistercian or Blackware (mid-15th—17th century). Further to the west, near the boundary of the Site, cut [2176] of the same feature contained several sherds of heavily abraded Redware (17th—early 18th century).

6.4.6 Ditch 2187 to the south of this produced a flake of Whiteware (mid-late 19th century) from cut [2026] and a small fragment of clay tobacco pipe bowl (mid-18th century onwards) from its central cut [2020].

6.4.7 Medieval (Coal Measures Fineware (late 13th—late 14th century) and post-medieval pottery (Late Blackware (18th century)) were found in cuts [2010] and [2022] respectively of ditch 2198.

6.4.8 Two different interventions on ditch 2198 produced Coal Measures Fineware (late 13th—late 14th century) and Late Blackware (18th century).

6.4.9 Ditch 1404 was truncated by drainage ditch 1406, which was probably contemporary with ditches 1407 and 1410. Ditch 1392 was cut by pit, and whilst ditch 1299 was cut by spread (1389). These features/deposits are discussed further below.

6.5 Features and spreads post-dating the east-west ditches

Ditches 1406, 1407, 1408, 1410 and Spread 1338

6.5.1 A series of narrow, northeast-southwest aligned linear features, comprising 1406, 1407, 1408 and 1410 (Plate 15 and 16; Figure 10.7). The similar orientation of these features and their close proximity (with the termini of 1406 and 1407 close together but not touching) suggests that they were contemporary with each other. None contained finds, but their relationship to some of the east-west ditches suggests a post-medieval or later date.

6.5.2 Ditch 1406 is a small ditch aligned north-south measuring 11.10m in length, 0.30--0.85m in width and 0.06-0.32m in depth, with a symmetrical, u-shaped profile. It originated near the eastern terminus of east-west ditch 1405, but did not cut it, running to the southwest, where it cut ditch 1404 and terminated shortly to the south of that feature.

6.5.3 Ditch 1407 was only around 0.10m to the southwest of 1406. It was shorter and narrower, at just 3.44m x0.44m x 0.15m, and had a u-shaped profile. Approximately 0.8m to the southwest was ditch 1408, measuring 5.5m x 0.8m x 0.18m and a slightly irregular, u-shaped profile. This feature cut through spread (1338), a mid-brown silty sand natural deposit in a hollow formed by the natural substrate.

6.5.4 Ditch 1410 was slightly different in character to the other features in this group, being slightly curvilinear in form. Measuring 6.3m x 1m x 0.15m, it had steep sides and a flat base and truncated the eastern terminus of east-west ditch 1393.

Linear features 2199, 1426, 2185 and 2200

6.5.5 A further series of gulleys, on a northeast-southwest orientation, were present in the south-eastern part of Area 1 and north-eastern part of Area 2.

6.5.6 The north-eastern terminus of gulley 1426 was seen to truncate drove way ditch 1394, before continuing outside of the Site boundary (Figure 13.7). It was in excess of 2.5m in length and measured up to 0.39m wide by 0.3m in depth, with steep sides and a concave base. It is conceivable that this feature was part of the same gulley as 2185 to the southwest, in Area 2, although the features are out of alignment with each other.

6.5.7 In Area 2, there were two northwest-southeast aligned gulleys, 2185 and 2200, both with rounded termini, separated by a gap of approximately 4m, forming a possible entrance to an enclosed area. If gulley 1426 did form part of 2185, then both gulleys 2185 and 2200 were of similar length, at *c* 20m.

6.5.8 Gulley 2185, was truncated by a modern water service. With sloping sides and a flat base, it was up to 0.54m wide by 0.11m deep, with a rounded south-western terminus (Plate 19; Figure 15.2). Its single fill of loose yellow-brown silty clay had moderate amounts of charcoal and significant rooting. This feature truncated east-west ditch 2192.

6.5.9 Group 2200 was 0.93m in width and 0.33m in depth. The sides were steeply sloped, and it had a flat base (Plate 18; Figure 15.6). The fill consisted of dark greyish brown silty clay with occasional charcoal flecks. As it was heavily disturbed by modern field drains, it was difficult to see in plan. Group 2200 cuts another modern ditch 2199. This feature truncated north-south aligned ditch 2199 and appeared to be terminating near east-west ditch 2202, although the relationship was obscured by a modern field drain.

6.5.10 Linear feature 2199 was north-south aligned and measured 19.60m in length, 0.80m in width and 0.29m in depth (Figure 15.3). The ditch has steeply sloped sides and a slightly concave base. The fill of 2199 consisted of soft dark greyish brown sandy silt with occasional charcoal chunks, frequent rooting and a sherd from a Late Blackware mug/jug (18th century). The fill had significant amounts of root disturbance. It cut east-west ditch 2193.

Linear features 1401 and 1402

6.5.11 These two features showed some similarities to gulleys 1426, 2185 and 2200, in their broad northeast-southwest alignment (although 1401 tended more towards a west-south-west alignment), roughly similar profiles and with termini separated by a similar distance to those features in Area 2.

6.5.12 Gulley 1401 (length 26.40m, maximum width 0.79m, 0.25m depth) was u-shaped, with slightly sloping and a concave base (Figure 15.1; Plate 21). Two fills were present, the lower fill comprising sticky friable blue grey clay, and the upper fill formed of dark brown silty clay. It appeared to be converging with the drove way ditches, but unfortunately the location of the potential intersection was just beyond the site boundary. A large fragment of limestone, with a plough score across it, was found in this group.

6.5.13 Gulley 1402 (length 51.70m, width 0.87m, depth 0.25m) had slightly sloped sides and concave base (Plate 20; Figure 9.4). The fill consisted of sticky blue grey clay with occasional sandstone and charcoal inclusions.

Ditch 1152

6.5.14 Northwest-southeast aligned ditch 1152 truncated east-west aligned ditch 1405 but was cut at its south-eastern end by ditch 1404. It had a length of 9.8m, width of 1.8m and average depth 0.38m. It had finds of a nail of indeterminate date and had a silty sand fill.

Pits [1309] and [1373]

6.5.15 Two features, [1309] and [1373] appeared to truncate east-west ditch 1392. Initially interpreted as pits, their irregular form suggests that they instead represent modern root disturbance.

Spread 1389

6.5.16 This large spread of friable, mid-brown silt covered a large part of the eastern end of east-west ditch 1392.

6.6 Undated features

Pit/gulley cluster in Area 1, to the west of feature 1407

6.6.1 Within the north-eastern part of Area 1, a cluster of intercutting pits and short curvilinear gulleys were present (Figures 10.1—10.4; Plates 22, 23), although did not show any direct relationships with east-west ditch or later features 1406, 1407 or 1408, although did cut ditch 1404. All of the features were relatively shallow and somewhat ephemeral in nature and all had silty sand fills, some of which contained occasional small stones or charcoal.

6.6.2 Gulley 1419 measured 3.32m in length, 0.64m in width and 0.16m deep. It appeared to be linear in plan but truncation by later features obscured its overall form. To the south, gully 1420 appeared curvilinear in nature but was also cut by other features, although it measured at least 3.2m in length, 0.5m in width and 0.09-0.20 in depth. Both these features had shallow, gently undulating, u-shaped profiles.

6.6.3 Both gulleys 1419 and 1420 were cut by curvilinear gulley 1418, measuring *c* 4m in length, 0.84m in depth and 0.24m in depth. It had a u-shaped profile with gradually to steeply sloping sides and a concave base. Gulley 1418 also truncated shallow oval pit [1227], which itself cut the northern terminus of gulley 1420.

6.6.4 Further pits in this area cut gulley 1419, these comprised oval pits [1277] (measuring 0.7m x 0.62m x 0.05m) and [1305] (measuring 0.36 x 0.27m x 0.24m). Further pits, [1328] (measuring 1.8m x 0.98m x 0.14m) and [1326] (0.75m x 0.49m x 0.20m), appeared to be associated with pit [1277].

6.6.5 To the southwest of this feature cluster were further pits [1190] and [1326].and [1305] 0.36 x 0.27x 0.24, circular, oval, 0.7 x 0.62 x 0.05.

Pit/gulley cluster in Area 1, to the east of feature 1407

6.6.6 A series of short gulleys were present to the east of feature 1407, comprising 1412, 1413, 1414 (Figure 10.6), all on an east-west alignment, although 1414 turned to the southeast approximately halfway along its length, and 1415, running northwest-southeast. All had similar greyish-brown sandy sit fills.

6.6.7 Gulley 1412 was linear in plan, measuring around 8.2m in length, 0.36-0.55m in width and 0.03-0.16m in depth, with a shallow u-shaped profile. A shorter gulley 1414 ran roughly parallel to it, with a similar width, depth and profile. Gulley 1413 ran on a slightly different alignment to 1412, truncating it and then crossing over as it turned to the southeast. The south-eastern part of this feature was the broadest part, at up to 0.82m wide, although it was shallow, at just 0.17m deep.

6.6.8 Despite its different orientation, gulley 1415 had a similar profile and dimension to 1414. A circular pit, [113], was positioned near the termini of 1414 and 1415. Measuring 0.76m in length, 0.63m in width and 0.20m in depth, it had a similar fill.

6.6.9 A further large pit, group 1411, was located to the northwest of this cluster (Figure 10.5). It measured 3.25m in length, 1.18m in width and 0.31m in depth with a smaller pit in the centre measuring length 0.38m, width 0.60m, depth by 0.48m.

Other pits

6.6.10 A number of isolated pits were present across the Site, which did not have relationships with other features and lacked dating evidence. Many were similar in nature to pits already described above and generally contained single fills of sandy silty or silty clay, with a few notable exceptions.

6.6.11 Large oval pit [1163] was located in the north-western part of Area 1 (Figure 6.4; Plates 24, 25). It measured 9.20m in length, width 3.70m, depth 0.36m. It had moderately sloping sides and a flat base. The fill of the pit was a firm, mid grey brown silty sand with occasional limestone pieces and represents a possible quarrying pit.

6.6.12 Pit [1230] was situated to the west of pit [1163] and had a fill of different character to the other pits, containing burnt stones and charcoal chunks (Plate 26). The pit [1230] measured 0.64m in length, width 0.62m and depth of 0.29m. It was very steeply sloped down to concave base.

6.6.13 Further to the south, positioned between the two drove way ditches, and thus either pre- or post-dating them, were pits [1210] and [1216] (Plate 27). The latter pit was oval in plan and had a length of 1.63m, width of 0.14m and depth 0.14m. It had a single fill of mid grey brownish grey clayey silt with occasional charcoal flecks and burnt stones. It was cut by circular pit [1210], which was 0.70m in length and 0.55m in width and depth 0.10. It held a fill of friable dark brownish grey clayey silt with frequent charcoal and small stones.

7. FINDS

7.1 Pottery

by Chris Cumberpatch

Introduction

7.1.1 The pottery assemblage consisted of sixteen sherds weighing 157 grams representing a maximum of fourteen vessels. The data are summarised in Table 1.

Results

7.1.2 The earliest sherds in the assemblage were of later medieval type (contexts (1308) – ditch 1392, (2011) – ditch 2198 and (2027) – ditch 2187). Of these, two sherds (from contexts 2022 and 2027) were of a local type known as Coal Measures Fineware dating to the later 13th to later 14th century. This appears to be a finer version of the much commoner Coal Measures Whiteware, described in detail elsewhere (Cumberpatch 2004). Whether both types were made at the Firsby Hall Farm pottery or whether the finer ware was made at an as yet undiscovered site is unclear.

7.1.3 The third medieval sherd (context (1308), also ditch 1392) could not be attributed to a specific source and has been classified as Reduced Sandy ware. On the basis of the characteristics of the sherd it is suggested to date to the period between the 13th and later 14th centuries.

7.1.4 Context (2057), from ditch 2193, produced a small sherd of Cistercian ware or Blackware type. Cistercian ware (*c* 1450 – *c* 1600) was the first of the definitively 'post-medieval' wares and marks a major change from the established medieval tradition (Cumberpatch 2003). The distinction between Cistercian ware and the 17th century Blackware type is a purely typological one and small sherds such as the one discussed here are difficult to assign to one or other of the two types as the fabrics of both are very similar.

7.1.5 Contexts (2091), from ditch 2190 and (2177) from ditch 2193, both contained sherds of Redware, a later post-medieval type dating to the 17th and very early 18th century. All of these sherds were heavily abraded but appear to represent a small jar and one or more dishes or bowls.

7.1.6 Early modern wares consisted of two sherds of Late Blackware (contexts (2023) from ditch 2198, and (2051) from ditch 2099). This type, which was manufactured widely in Yorkshire as well as more widely, was a development of the earlier Blackwares and is distinguished by its bright red fabric and distinctive pattern of glazing (Cumberpatch 2014).

7.1.7 Context (1331) from ditch 1392, produced the base of a bowl or pancheon in Yellow Glazed Coarse ware. This type dates to the 18th and 19th centuries and appears to be a development of the earlier Yellow ware although both forms and fabrics differ considerably from the earlier type. The example in question is probably of later 18th or 19th century date.

7.1.8 The latest sherd from the site came from context (2027), ditch 2187, where it was associated with one of the medieval sherds mentioned above. It was a small sherd of Whiteware dating to the mid to late 19th century.

Discussion

7.1.9 The assemblage would seem to indicate activity on and around the Site from the later medieval period onwards. The small size of the assemblage precludes any assessment of the varying intensity of such activity or the significance of the absence of wares from periods not represented. The co-occurrence of medieval and recent sherds in context (2027) suggests that this context was of a late date with the medieval sherd being residual in nature.

7.1.10 The assemblage is recommended for archiving to the appropriate local museum.

7.2 Clay Tobacco Pipe

by Alison Wilson

7.2.1 Two fragments of clay tobacco pipe, weighing 5g, were recovered from two contexts.

7.2.2 Context (1354), from ditch 1392, contained an unmarked stem fragment. In the absence of any identifying features such as a makers stamp or decoration, the pipe stem has been dated using bore hole diameter (early clay pipes have a bore diameter of 3mm, decreasing over time until stems by the middle of the 18th century had a bore of less than 2mm). This stem fragment had a 3mm bore diameter placing the date of manufacture in the 17th—18th century.

7.2.3 Context (2121) from ditch 2186 contained a small fragment of bowl, weighing just 1g. This had the remains of a leaf decoration covering the seam, a decorative form popular from the mid-18th century onwards.

7.2.4 The small size of the assemblage would suggest that the pipe fragments are residual. No further work is necessary and discard is recommended.

7.3 Metalwork

by Alison Wilson

7.3.1 Subsoil (1002) contained a post-medieval copper alloy buckle. This is a double loop style with a probable 16th-17th century date.

7.3.2 A small iron nail of undetermined age was found in context (1038) from feature 1405.

8. ENVIRONMENTAL SAMPLES

by Stacey Adams

8.1 Introduction and Methods

8.1.1 Twenty-seven environmental samples were taken for the recovery of environmental remains such as plant macrofossils, wood charcoal, faunal remains and Mollusca, as well as to assist finds recovery. The bulk environmental samples, ranging from 10 to 40L in volume, were processed by flotation using a 500µm mesh for the heavy residue and a 250µm mesh for the retention of the flot before being air dried. The residues were passed through 8, 4 and 2mm sieves and each fraction sorted for environmental and artefactual remains (Table 1).

8.1.2 The flots were assessed under a stereozoom microscope at 7-45x magnifications and their contents recorded (Table 2). Identification of the charred plant remains was based on observations of gross morphology and surface cell structure and quantification was based on approximate number of individuals. Nomenclature follows Stace (1997) for wild plants and Zohary and Hopf (1994) for cereals.

8.1.3 Charcoal fragments were submitted for analysis from samples containing >3g of charcoal from the >4mm fraction of the heavy residues. One hundred fragments from each sample were submitted for identification based on the minimum number of fragments principle for temperate regions proposed by Asouti & Austin (2005). The fragments were sectioned by hand along three planes (transverse, radial and tangential) according to standardised procedures (Gale & Cutler 2000; Hather 2000). Specimens were viewed under a stereozoom microscope for initial grouping and an incident light microscope at magnifications up to 500x was used to further identify the fragments. Taxonomic identifications were assigned by comparing suites of anatomical characteristics visible with those documented in reference atlases (Schoch *et al* 2004; Hather 2000; Schweingruber 1990). Quantification and taxonomic identifications of charcoal are recorded in Table 3 and nomenclature follows Stace (1997).

8.2 Results

Post-Medieval to Modern

8.2.1 The samples from the post-medieval to modern ditches contained small quantities of charcoal and magnetic material. The flots contained abundant modern roots and uncharred seeds of fat hen (*Chenopodium album*), common fumitory (*Fumaria officinalis*), knotgrass (*Polygonum aviculare*), elder (*Sambucus nigra*), fool's parsley (*Aethusa cynapium*) and violets (*Viola* sp.). Charcoal fragments were infrequent within the flots and were accompanied by worm capsules in ditch [1311] and [2047]. Coal was recorded in ditches [2047] and [1159] with the latter also containing slag/hammerscale and charred food products.

8.2.2 Charred plant macrofossils were present in all the post-medieval to modern ditches and consisted of cereal caryopses in ditches [1159], [1315] and [1321]. Wheat (*Triticum* sp.) was identified in ditch [1159] and oat (*Avena* sp.) in ditch [1321] whilst the caryopsis in ditch [1315]

was indeterminate. Charred straw fragments were present in the flot from ditch [1311] whilst ditch [2047] contained a common hemp-nettle (*Galeopsis tetrahit*) seed.

Undated pits

8.2.3 The undated pits at Harthill contained infrequent charcoal and magnetic material. Charcoal was significantly more abundant in pits [1006], [1275] and [1324].

8.2.4 The flots from the undated pits contained abundant modern roots along with uncharred seeds of elder, common fumitory, fat hen, knotgrass, docks (*Rumex* sp.), violets and fool's parsley. Charcoal fragments were present in low quantities in the flots, excluding pit [1275] where they were abundant. Coal was recorded in the flots from pits [1273], [1309], [1214], [1212], [12320] and [1153] whilst slag/ hammerscale was present in pit [1288]. Modern insect remains and worm capsules were identified in pits [1210], [1273], [1220], [1153] and [1324].

8.2.5 Low numbers of cereal caryopses were identified in a number of the undated pits consisting of wheat in pits [1273] and [1309] and oat in pit [1220] as well as indeterminate caryopses in pits [1292] and [1309]. Charred weed seeds were recorded as knotgrass in pit [1210], a small wild grass (Poaceae) in pit [1328], meadow buttercup (*Ranunculus acris*) and vetch (*Vicia* sp.) in pit [1153] and annual meadow grass (*Poa annua*) in pit [1288].

8.2.6 Charcoal was analysed from pits [1006], [1275] and [1324] and was excellently well-preserved in the majority of the pits, excluding [1324] where it was moderate. Almost half of the fragments were affected by radial cracks and a large proportion by vitrification. Radial cracks appear as blown up ray cells causing cracks of missing or exploded tissue. They indicate the presence of moisture in the wood and thus possibly reflect the burning of fresh wood (Fiorentino and D'Oronzo 2010). Vitrification is a feature often attributed to high temperatures and prolonged burning times (Gale & Cutler 2000; Prior & Alvin 1983), although contrasting experiments claim that it is not induced by such factors and that the cause is still unknown (McParland *et al*, 2010). Similar distortions were recorded in the fragments from the other pits though on a lesser scale.

8.2.7 The charcoal from pits [1275] and [1324] was almost exclusively of oak (*Quercus* sp.) accompanied by beech (*Fagus sylvatica*) in pit [1275] and alder (*Alnus* sp.) and hazel (*Corylus avellana*) in pit [1324]. Indeterminate knotwood was also recorded in the pits along with an indeterminate distorted fragment in [1324]. Pit [1006] predominately contained charcoal of hazel accompanied by ash (*Fraxinus excelsior*) and oak fragments and a single plum-type (*Prunus* sp.) charcoal fragment.

8.2.8 Moderately well-preserved charred cereal caryopses of hulled barley (*Hordeum vulgare*) and rounded wheat were recorded in gulley [1232] along with a weed of annual meadow grass.

Undated ditches and gullies

8.2.9 The undated ditches and gulleys contained infrequent charcoal fragments along with magnetic material. The flots from the undated ditches and gulleys at Harthill Reservoir contained frequent modern roots and uncharred seeds of common fumitory, elder and knotgrass and charcoal was

sporadic within the flots. Ditches [1041] and [1119] both contained coal with the former also containing abundant charred food products and several worm capsules.

8.2.10 Moderately well-preserved charred cereal caryopses of hulled barley (*Hordeum vulgare*) and rounded wheat were recorded in gully [1232] along with a weed of annual meadow grass.

8.3 Discussion and Interpretation

8.3.1 The bulk environmental samples from Harthill contain little archaeological material and can therefore supply little data about feature functionality, phasing and the local environment. The charred cereal caryopsis may represent small-scale cereal crop processing though they are more likely to derive from crop processing occurring within the vicinity of the site. The mixed cereals of wheat, hulled barley and oat are synonymous with medieval and post-medieval assemblages in the Midlands (Carruthers & Hunter 2019). The weed seeds are indicative of the arable environment with knotgrass suggesting dry sandy soils and meadow buttercup representing possibly damp or seasonally waterlogged fields. The former would have thrived on the local sandstone whilst the latter may represent cereal cultivation along the banks of the River Rother and its tributaries.

8.3.2 The charcoal from the undated pits indicates that oak and hazel were the predominant fuel woods at Harthill. The dominance of hazel in pit [1006] and oak in pits [1275] and [1324] potentially indicates the dumping of waste from different burning events with alternate fuels exploited for varying activities. The oak and hazel would have been exploited from local scrubby woodland along with the plum-type wood. The beech and ash are light-loving species and would have thrived in open areas (Taylor 1981). The majority of the wood derived from large branch or trunk wood with roundwood only making up 7% of the assemblage. The low frequency of roundwood suggests that woodland management techniques, such as coppicing or pollarding, may not have been taking place at the site. The high frequency of radial cracks in the oak charcoal in pits [1275] and [1324] suggests that it may have been burnt when still damp. Little can be discerned from the charcoal assemblage from Harthill due to the lack of dating evidence for the pits.

8.3.3 No further work is recommended on the environmental samples from Harthill and it is recommended that the flots and charcoal from the samples be discarded and not form part of the site archive due to the lack of dating and paucity of material.

9. DISCUSSION AND CONCLUSIONS

9.1 Discussion

9.1.1 Excavations at the Site revealed a series of pits and linear features across the Site, dominated by the east-west orientated ditches. The relative lack of dating evidence and limited numbers of relationships between features has impacted on the ability to establish a clear chronology for the development of the Site, with many of the features remaining undated. Nonetheless, for those features that can be dated, all seem to date from the later post-medieval period onwards, although ephemeral evidence of medieval activity was also present.

9.1.2 Activity on the Site during the medieval period is indicated by the presence of a small assemblage of later medieval wares. These all appear to be residual in nature and probably relate to the deposition of domestic waste during that period, when the Site would have formed part of the open fields associated with Harthill.

9.1.3 It is unclear whether the drove way, gulleys and pits that were cut by the east-west aligned ditches would have pre-dated or post-dated the medieval period. However, the east-west aligned ditches are dated by the finds assemblage to the later post-medieval period to modern period. This would also fit with the orientation of these features, which run parallel to the field boundaries shown on historic mapping, which were still extant prior to commencement of the work.

9.1.4 The field boundaries are first shown on the 1854 OS map, although may date to slightly earlier. The Site is located in an area of strip enclosure, as characterised by the South Yorkshire Historic Environment Characterisation Project (SYHECP 2013). In several parts of the Rotherham district, open fields were not enclosed until the early 1820s, although enclosure in this period was the final phase of a process of gradual enclosure that took place from the 15th century onwards (SYHECP 2013, 408). Nonetheless, the overall dating of the artefacts from the east-west aligned ditches suggests an infilling date perhaps from the later 17th to 18th centuries onwards.

9.1.5 In terms of the possible function of these east-west aligned ditches, an interpretation as drainage features appears feasible. The fields in which they were created slope gradually from west to east and so these ditches appear to have been deliberately created running down the slope. That marshy ground was present nearby is shown on the 1854 OS map, where an osier bed adjoins the Site, and this area of ground is still marshy today.

9.1.6 A series of linear features, particularly those running northeast-southwest, can either be shown to post-date the east-west aligned ditches by relationships, or by similarity of form and alignment with these later ditches. They appear to represent boundaries, with entrances formed by rounded termini, around 4m apart. Their exact purpose is unclear, although they do roughly follow the contours of the slope.

9.1.7 Other features on the Site, mostly in the form of pits, suggest relatively piecemeal use of the location, for quarrying materials in the case of pit [1163], or for undefined purposes in the case of the other pits. The lack of dating evidence from these features precludes their further interpretation.

9.2 Conclusions

9.2.1 Activity ranging in date from the medieval period onwards has been indicated by the finds and features present on the Site, with all features that could be dated appearing to be of later post-medieval date onwards. There was no evidence of domestic activity on the Site, with the evidence suggesting the ongoing use of this location almost exclusively for farming purposes.

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APPENDIX 1: CONTEXT LIST

Context	Area	Group	Category	Description
1001	1		L	Topsoil
1002	1		L	Subsoil
1003	1		L	Natural
1004	1		C	Cut of pit
1005	1		F	Fill of pit [1004]
1006	1		C	Cut of pit
1007	1		F	Fill of pit [1006]
1008	1		C	Cut of ditch
1009	1		F	Fill of ditch [1008]
1010	1		C	Cut of ditch
1011	1		F	Fill of ditch [1010]
1012	1		C	Cut of ditch
1013	1		F	Fill of ditch [1012]
1014	1		C	Cut of terminus ditch
1015	1		F	Fill of terminus ditch [1014]
1016	1		C	Cut of ditch
1017	1		F	Fill of ditch [1016]
1018	1		F	Fill of ditch [1016]
1019	1		C	Cut of ditch
1020	1		F	Fill of ditch [1019]
1021	1		C	Cut of ditch
1022	1		F	Fill of ditch [1021]
1023	1		C	Cut of ditch
1024	1		F	Fill of ditch [1023]
1025	1		C	Cut of ditch
1026	1		F	Fill of ditch [1025]
1027	1		C	Cut of ditch
1028	1		F	Fill of ditch [1027]
1029	1		C	Cut of ditch
1030	1		F	Fill of ditch [1029]
1031	1		C	Cut of ditch
1032	1		F	Fill of ditch [1031]
1033	1		C	Cut of ditch
1034	1		F	Fill of ditch [1033]
1035	1		C	Cut of natural land drain
1036	1		F	Fill of natural land drain [1035]
1037	1		C	Cut of ditch
1038	1		F	Fill of ditch [1037]
1039	1		C	Cut of ditch
1040	1		F	Fill of ditch [1039]
1041	1		C	Cut of ditch
1042	1		F	Fill of ditch [1041]

Context	Area	Group	Category	Description
1043	1		C	Cut of ditch
1044	1		F	Fill of ditch [1043]
1045	1		C	Cut of ditch
1046	1		F	Fill of ditch [1045]
1047	1		L	Spread layer
1048	1		C	Cut of ditch
1049	1		F	Fill of ditch [1048]
1050	1		C	Cut of ditch
1051	1		F	Fill of ditch [1050]
1052	1		C	Cut of ditch
1053	1		F	Fill of ditch [1052]
1054	1		C	Cut of ditch
1055	1		F	Fill of ditch [1054]
1056	1		C	Cut of ditch
1057	1		F	Fill of ditch [1056]
1058	1		C	Cut of boundary ditch
1059	1		F	Fill of ditch [1058]
1060	1		C	Cut of ditch
1061	1		F	Fill of ditch [1060]
1062	1		C	Cut of ditch
1063	1		F	Fill of ditch [1062]
1064	1		C	Cut of ditch
1065	1		F	Fill of ditch [1064]
1066	1		C	Cut of ditch
1067	1		F	Fill of ditch [1066]
1068	1		C	Cut of ditch
1069	1		F	Fill of ditch [1068]
1070	1		C	Cut of ditch
1071	1		F	Fill of ditch [1070]
1072	1		C	Cut of ditch
1073	1		F	Fill of ditch [1072]
1074	1		C	Cut of ditch
1075	1		F	Fill of ditch [1074]
1076	1		G	Group of [1062], [1064]+[1066]
1077	1		C	Cut of ditch
1078	1		F	Fill of ditch [1077]
1079	1		C	Cut of ditch
1080	1		F	Fill of ditch [1079]
1081	1		C	Cut of ditch
1082	1		F	Fill of ditch [1081]
1083	1		S	Red brick field drain
1084	1		C	Cut of boundary ditch
1085	1		F	Fill of ditch [1084]

Context	Area	Group	Category	Description
1086	1		C	Cut of ditch
1087	1		F	Fill of ditch [1086]
1088	1		C	Cut of ditch
1089	1		F	Fill of ditch [1088]
1090	1		C	Cut of ditch
1091	1		F	Fill of ditch [1090]
1092	1		C	Cut of ditch
1093	1		F	Fill of ditch [1092]
1094	1		C	Cut of ditch
1095	1		F	Fill of ditch [1094]
1096	1		C	Cut of ditch
1097	1		F	Fill of ditch [1096]
1098	1		C	Cut of ditch
1099	1		F	Fill of ditch [1098]
1100	1		C	Cut of post hole
1101	1		F	Fill of post hole [1100]
1102	1		C	Cut of ditch terminus
1103	1		F	Fill of ditch terminus [1102]
1104	1		C	Cut of ditch terminus
1105	1		F	Fill of ditch terminus [1104]
1106	1		C	Cut of ditch
1107	1		F	Fill of ditch [1106]
1108	1		C	Cut of ditch
1109	1		F	Fill of ditch [1108]
1110	1		C	Cut of pit
1111	1		F	Fill of pit [1110]
1112	1		C	Cut of pit
1113	1		F	Fill of pit [1112]
1114	1		C	Cut of ditch terminus
1115	1		F	Fill of ditch terminus [1114]
1116	1		C	Cut of pit
1117	1		F	Fill of pit [1121]
1118	1		F	Fill of pit [1116]
1119	1		C	Cut of ditch terminus
1120	1		F	Fill of ditch terminus [1119]
1121	1		C	Cut of pit
1122	1		C	Cut of pit
1123	1		F	Fill of pit [1122]
1124	1		C	Cut of pit terminus
1125	1		F	Fill of pit terminus [1124]
1126	1		C	Cut of pit
1127	1		F	Fill of pit [1126]
1128	1		C	Cut of pit

Context	Area	Group	Category	Description
1129	1		F	Fill of pit [1128]
1130	1		C	Cut of pit terminus
1131	1		F	Fill of pit terminus [1130]
1132	1		C	Cut of gully
1133	1		F	Fill of gully [1132]
1134	1		C	Cut of gully
1135	1		F	Fill of gully [1134]
1136	1		C	Cut of pit
1137	1		F	Fill of pit [1136]
1138	1		C	Cut of gully
1139	1		F	Fill of gully [1138]
1140	1		C	Cut of ditch
1141	1		F	Fill of ditch [1140]
1142	1		C	Cut of ditch
1143	1		F	Fill of ditch [1142]
1144	1		C	Cut of gully terminus
1145	1		F	Fill of gully terminus [1144]
1146	1		C	Cut of gully
1147	1		F	Fill of gully [1146]
1148	1		C	Cut of gully
1149	1		F	Fill of gully [1148]
1150	1		C	Cut of gully terminus
1151	1		F	Fill of gully terminus [1150]
1152	1		G	Group of [1012], [1039], [1050],[1077]+[1142]
1153	1		C	Cut of pit
1154	1		F	Fill of pit [1153]
1155	1		C	Cut of ditch
1156	1		F	Fill of ditch [1155]
1157	1		C	Cut of pit terminus
1158	1		F	Fill of pit terminus [1157]
1159	1		C	Cut of ditch terminus
1160	1		F	Fill of ditch terminus [1159]
1161	1		C	Cut of ditch terminus
1162	1		F	Fill of ditch terminus [1161]
1163	1		G	Group of [1124], [1126] +[1157]
1164	1		C	Cut of ditch terminus
1165	1		F	Fill of ditch terminus [1164]
1166	1		C	Cut of ditch terminus
1167	1		F	Fill of ditch terminus [1166]
1168	1		C	Cut of ditch
1169	1		F	Fill of ditch [1168]
1170	1		C	Cut of gully
1171	1		F	Fill of gully [1171]

Context	Area	Group	Category	Description
1172	1		G	Group of [1090]+[1159]
1173	1		G	Group of [1161]+[1166]
1174	1		C	Cut of ditch terminus
1175	1		F	Fill of ditch terminus [1174]
1176	1		C	Cut of ditch terminus
1177	1		F	Fill of ditch terminus [1176]
1178	1		C	Cut of gully
1179	1		F	Fill of gully [1178]
1180	1		C	Cut of ditch
1181	1		F	Fill of ditch [1180]
1182	1		C	Cut of ditch
1183	1		F	Fill of ditch [1182]
1184	1		C	Cut of gully terminus
1185	1		F	Fill of gully terminus [1184]
1186	1		C	Cut of gully
1187	1		F	Fill of gully [1186]
1188	1		C	Cut of gully
1189	1		F	Fill of gully [1188]
1190	1		C	Cut of pit terminus
1191	1		F	Fill of pit terminus [1190]
1192	1		C	Cut of pit
1193	1		F	Fill of pit [1192]
1194	1		C	Cut of gully terminus
1195	1		F	Fill of gully terminus [1194]
1196	1		C	Cut of natural feature
1197	1		F	Fill of natural feature [1196]
1198	1		C	Cut of gully
1199	1		F	Fill of gully [1198]
1200	1		C	Cut of gully terminus
1201	1		F	Fill of gully terminus [1200]
1202	1		C	Cut of ditch
1203	1		F	Fill of ditch [1202]
1204	1		C	Cut of pit
1205	1		F	Fill of [1204]
1206	1		C	Cut of gully terminus
1207	1		F	Fill of gully terminus [1206]
1208	1		C	Cut of gully terminus
1209	1		F	Fill of gully terminus [1208]
1210	1		C	Cut of pit
1211	1		F	Fill of pit [1210]
1212	1		C	Cut of pit
1213	1		F	Fill of pit [1212]
1214	1		C	Cut of pit

Context	Area	Group	Category	Description
1215	1		F	Fill of pit [1214]
1216	1		C	Cut of pit
1217	1		C	Cut of ditch
1218	1		F	Fill of ditch [1217]
1219	1		L	Spread layer adjacent to [1217]
1220	1		C	Cut of pit
1221	1		F	Fill of pit [1220]
1222	1		F	Fill of pit [1216]
1223	1		C	Cut of ditch
1224	1		F	Fill of ditch [1223]
1225	1		C	Cut of ditch
1226	1		F	Fill of ditch [1225]
1227	1		C	Cut of ditch?
1228	1		F	Fill of ditch [1227]
1229	1		L	Spread layer
1230	1		C	Cut of pit
1231	1		F	Fill of pit [1230]
1232	1		C	Cut of gully
1233	1		F	Fill of gully [1232]
1234	1		C	Cut of gully terminus
1235	1		F	Fill of gully terminus [1234]
1236	1		C	Cut of ditch terminus
1237	1		F	Fill of ditch terminus [1236]
1238	1		C	Cut of gully terminus
1239	1		F	Fill of gully terminus [1238]
1240	1		C	Cut of pit
1241	1		F	Fill of pit [1240]
1242	1		C	Cut of ditch terminus
1243	1		F	Fill of ditch terminus [1242]
1244	1		C	Cut of ditch
1245	1		F	Fill of ditch [1244]
1246	1		C	Cut of pit
1247	1		F	Fill of pit [1246]
1248	1		C	Cut of ditch
1249	1		F	Fill of ditch [1248]
1250	1		C	Cut of ditch terminus
1251	1		F	Fill of ditch terminus [1250]
1252	1		C	Extra slot in [1096] with [1254]
1253	1		F	Fill of [1252]
1254	1		C	Mixed terminus merging with [1252]
1255	1		F	Fill of [1254]
1256	1		C	Cut of ditch
1257	1		F	Fill of ditch [1256]

Context	Area	Group	Category	Description
1258	1		C	Cut of ditch
1259	1		F	Fill of ditch [1258]
1260	1		C	Cont. cut of [1254]
1261	1		F	Cont. fill of [1255]
1262	1		S	Stone in [1260]
1263	1		C	Cut of ditch
1264	1		F	Fill of ditch [1263]
1265	1		C	Cut of ditch E-W
1266	1		F	Fill of ditch [1265]
1267	1		C	Cut of ditch
1268	1		F	Fill of ditch [1267]
1269	1		C	Cut of pit
1270	1		F	Fill of pit [1269]
1271	1		C	Cut of ditch (drove way)
1272	1		F	Fill of ditch [1271]
1273	1		C	Cut of pit
1274	1		F	Fill of pit [1273]
1275	1		C	Cut of charcoal pit
1276	1		F	Fill of charcoal pit [1275)
1277	1		C	Cut of pit
1278	1		F	Fill of pit [1277]
1279	1		C	Cut of ditch
1280	1		F	Fill of ditch [1279]
1281	1		C	Cut of ditch
1282	1		F	Fill of ditch [1281]
1283	1		C	Cut of ditch
1284	1		F	Fill of ditch [1283]
1285	1		F	Second fill in ditch [1260]
1286	1		C	Cut of pit
1287	1		F	Fill of pit [1286]
1288	1		C	Cut of pit
1289	1		F	Fill of pit [1288]
1290	1		C	Cut of drove way
1291	1		F	Fill of drove way [1291]
1292	1		C	Cut of pit
1293	1		F	Fill of pit [1292]
1294	1		C	Cut of small ditch
1295	1		F	Fill of small ditch [1294]
1296	1		L	Spread
1297	1		C	Cut of E-W ditch
1298	1		F	Fill of E-W ditch [1297]
1299	1		C	Cut of ditch
1300	1		F	Fill of ditch [1299]

Context	Area	Group	Category	Description
1301	1		C	Cut of ditch
1302	1		F	Fill of ditch [1301]
1303	1		C	Cut of ditch
1304	1		F	Fill of ditch [1303
1305	1		C	Cut of pit
1306	1		F	Fill of pit [1305]
1307	1		C	Cut of ditch
1308	1		F	Fill of ditch [1307]
1309	1		C	Cut of pit
1310	1		F	Fill of pit [1309]
1311	1		C	Cut of ditch
1312	1		F	Fill of ditch [1311]
1313	1		C	Cut of ditch
1314	1		F	Fill of ditch [1313]
1315	1		C	Cut of ditch
1316	1		F	Fill of ditch [1315]
1317	1		C	Cut of ditch
1318	1		F	Fill of ditch [1317]
1319	1		C	Cut of E-W running ditch
1320	1		F	Fill of E-W running ditch [1319]
1321	1		C	Cut of NE-SW ditch
1322	1		F	Fill of NE-SW ditch [1321]
1323	1			
1324	1		C	Cut of pit
1325	1		F	Fill of pit [1324]
1326	1		C	Cut of pit
1327	1		F	Fill of pit [1326]
1328	1		C	Cut of pit]
1329	1		F	Fill of pit [1328]
1330	1		C	Cut of ditch
1331	1		F	Fill of ditch [1330]
1332	1		C	Cut of N-S ditch
1333	1		F	Fill of N-S ditch [1332
1334	1		C	Cut of ditch terminus
1335	1		F	Fill of ditch terminus [1334]
1336	1		C	Cut of ditch
1337	1		F	Fill of ditch [1336]
1338	1		L	Spread of ruddy silty sand
1339	1		C	Cut of ditch terminus
1340	1		F	Fill of ditch terminus [1339]
1341	1		C	Cut of ditch
1342	1		F	Fill of ditch [1341]
1343	1		C	Cut of ditch

Context	Area	Group	Category	Description
1344	1		F	Fill of ditch [1343]
1345	1		C	Cut of ditch
1346	1		F	Fill of [1345]
1347	1		C	Cut of ditch terminus
1348	1		F	Fill of ditch terminus [1347]
1349	1		C	Cut of narrow ditch/field drain
1350	1		F	Fill of [1349]
1351	1		C	Cut of drainage ditch
1352	1		F	Fill of drainage ditch [1351]
1353	1		C	Cut of ditch E-W
1354	1		F	Fill of ditch E-W [1353]
1355	1		L	Geological spread
1356	1		C	Cut of ditch
1357	1		F	Fill of ditch [1356]
1358	1		C	Cut of ditch
1359	1		F	Fill of ditch [1358]
1360	1		C	Cut of ditch
1361	1		F	Fill of ditch [1360]
1362	1		C	Cut of ditch
1363	1		F	Fill of ditch [1362]
1364	1		L	Overflow from ditch [1362]
1365	1		C	Cut of ditch terminus
1366	1		F	Fill of ditch terminus [1365]
1367	1		C	Cut of ditch
1368	1		F	Fill of ditch [1367]
1369	1		C	Cut of ditch
1370	1		F	Fill of ditch [1369]
1371	1		C	Cut of ditch
1372	1		F	Fill of ditch [1371]
1373	1		C	Cut of pit
1374	1		F	Fill of pit [1373]
1375	1		C	Cut of ditch terminus
1376	1		F	Fill of ditch terminus [1375]
1377	1		C	Terminus of ditch
1378	1		F	Fill of terminus [1377]
1379	1		C	Cut of ditch
1380	1		F	Fill of ditch [1379]
1381	1		C	Cut of ditch terminus
1382	1		F	Fill of ditch terminus [1381]
1383	1		C	Cut of ditch
1384	1		F	Fill of ditch [1383]
1385	1		C	Cut of ditch
1386	1		F	Fill of ditch [1385]

Context	Area	Group	Category	Description
1387	1		C	Terminus of [1362]
1388	1		F	Fill of ditch terminus [1387]
1389	1		L	Spread over [1387]
1390	1		C	Cut of E-W running ditch
1391	1		F	Fill of E-W running ditch [1390]
1392	1		G	Group of [1242], [1244],[1356], [1309],[1307], [1330],1341],[1371],[1353],[1332],[1351]+[1297]
1393	1		G	Group of [1250], [1256],[1155],1258]+[1086]
1394	1		G	Group of [1108],[1168],[1170],[1182],[1319],[1311],[1271]+[1290]
1395	1		G	Group of [1202], [1048], [1317], [1385]+[1390]
1396	1		G	Group of [1313], [1383] + [1377]
1397	1		G	Group of [1339] +[1343]
1398	1		G	Group of [1375]+[1369]
1399	1		G	Group of [1387], [1362],[1358]+1365]
1400	1		G	Group of [1360] +[1381]
1401	1		G	Group of [1315], [1260], [1094] + [1252]
1402	1		G	Group of [1092],[1079],[1060],[1045],[1025]+[1023]
1403	1		G	Group of [1210] + [1216]
1404	1		G	Group of [1058], [1068],[1106],[1225],[1031],[1143]+[1164]
1405	1		G	Group of [1083], [1033], [1027] + [1037]
1406	1		G	Group of [1074],[1088],[1072],[1070]+[1104]
1407	1		G	Group of [1102], [1056], [1237] +[1234]
1408	1		G	Group of [1238], [1321] + [1334]
1409	1		G	Group of [1286] + [1288]
1410	1		G	Group of [1174], [1263] + [1176]
1411	1		G	Group of [1119],[1116]+[1114]
1412	1		G	Group of [1144],[1148],[1132],[1186]+[1208]
1413	1		G	Group of [1206],[1188],[1128]+[1130]
1414	1		G	Group of [1134],[1146]+[1150]
1415	1		G	Group of [1138]+[1194]
1416	1		G	Group of [1127]+[1267]
1417	1		G	Group of [1326],[1328]+[1277]
1418	1		G	Group of [1052],[1223],[1281]+[1301]
1419	1		G	Group of [1283],[1336]+[1303]
1420	1		G	Group of [1279]+[1299]
1421	1		G	Group of [1200]+[1178]
1422	1		G	Group of [1048]+[1019]

Context	Area	Group	Category	Description
1423	1		G	Group of [1029]+[1054]
1424	1		G	Group of [1349],[1294]+[1367]
1425	1		G	Group of [1347]+[1345]
1426	1		G	Group of [1198]+[1184]
1427	1		G	Group of [1008]+[1014]
2001	2		L	Topsoil
2002	2		L	Subsoil
2003	2		L	Natural
2004	2		C	Cut of ditch
2005	2		F	Fill of ditch [2004]
2006	2		C	Cut of ditch
2007	2		F	Fill of ditch [2006]
2008	2		C	Cut of ditch
2009	2		F	Fill of ditch [2009]
2010	2		C	Cut of ditch
2011	2		F	Fill of ditch [2010]
2012	2		C	Cut of ditch
2013	2		F	Fill of ditch [2012]
2014	2		C	Cut of ditch
2015	2		F	Fill of ditch [2014]
2016	2		C	Cut of pit
2017	2		F	Fill of pit [2016]
2018	2		C	Cut of ditch
2019	2		C	Cut of ditch [2018]
2020	2		C	Cut of ditch
2021	2		F	Fill of ditch [2020]
2022	2		C	Cut of ditch
2023	2		F	Fill of ditch [2022]
2024	2		C	Geological scarring
2025	2		F	Fill of [2024]
2026	2		C	Cut of terminus
2027	2		F	Fill of terminus [2026]
2028	2		C	Cut of terminus
2029	2		F	Fill of terminus [2028]
2030	2		C	Cut of ditch
2031	2		F	Fill of ditch [2030]
2032	2		C	Cut of pit
2033	2		F	Fill of pit [2032]
2034	2		C	Cut of ditch
2035	2		C	Cut of ditch
2036	2		F	Fill of ditch [2035]
2037	2		C	Cut of ditch terminus
2038	2		F	Fill of [2037]

Context	Area	Group	Category	Description
2039	2		C	Cut of terminus
2040	2		F	Fill of terminus [2039]
2041	2		C	Cut of E-W Ditch
2042	2		F	Fill of [2041]
2043	2		C	Cut of terminus
2044	2		F	Fill of [2043]
2045	2		C	Cut of gully
2046	2		F	Fill of [2045]
2047	2		C	Cut of ditch
2048	2		F	Fill of ditch [2047]
2049	2		F	Fill of ditch [2034]
2050	2		C	Cut of ditch
2051	2		F	Fill of [2050]
2052	2		C	Cut of N-S ditch
2053	2		F	Full of ditch [2052]
2054	2		C	Cut of ditch
2055	2		F	Fill of [2054]
2056	2		C	Cut of ditch
2057	2		F	Fill of ditch [2056]
2058	2		C	Cut of ditch
2059	2		F	Fill of ditch [2058]
2060	2		C	Cut of ditch
2061	2		F	Fill of [2060]
2062	2		C	Cut of ditch
2063	2		F	Fill of [2063]
2064	2		C	Cut of ditch
2065	2		F	Fill of [2064]
2066	2		C	Cut of ditch terminus
2067	2		F	Fill of [2066]
2068	2		C	Cut of ditch terminus
2069	2		F	Fill of [2068]
2070	2		C	Cut of ditch terminus
2071	2		F	Fill of [2070]
2072	2		C	Cut of ditch terminus
2073	2		F	Fill of [2072]
2074	2		C	Cut of ditch
2075	2		F	Fill of [2074]
2076	2		C	Cut of land drain
2077	2		F	Fill of [2076]
2078	2		C	Cut of ditch
2079	2		F	Fill of [2078]
2080	2		C	Cut of ditch
2081	2		F	Fill of [2080]

Context	Area	Group	Category	Description
2082	2		C	Cut of ditch
2083	2		F	Fill of [2082]
2084	2		C	Cut of
2085	2		F	Fill of [2084]
2086	2		C	Cut of ditch
2087	2		F	Fill of [2086]
2088	2		C	Cut of ditch terminus
2089	2		F	Fill of [2088]
2090	2		C	Cut of ditch
2091	2		F	Fill of [2090]
2092	2		C	Cut of ditch terminus
2093	2		F	Fill of [2092]
2094	2		C	Cut of ditch terminus
2095	2		F	Fill of [2094]
2096	2		C	Cut of ditch
2097	2		F	Fill of [2096]
2098	2		C	Cut of ditch
2099	2		F	Fill of [2098]
2100	2		C	Cut of ditch
2101	2		F	Fill of [2101]
2102	2		C	Cut of pit
2103	2		F	Fill of [2102]
2104	2		C	Cut of ditch
2105	2		F	Fill of [2105]
2106	2		C	Cut of ditch
2107	2		F	Fill of [2107]
2108	2		C	Cut of ditch terminus
2109	2		F	Fill of [2109]
2110	2		C	Cut of pit
2111	2		F	Fill of [2110]
2112	2		C	Cut of ditch
2113	2		F	Fill of [2112]
2114	2		C	Cut of ditch
2115	2		F	Fill of [2114]
2116	2		C	Cut of ditch
2117	2		F	Fill of [2116]
2118	2		C	Cut of ditch terminus
2119	2		F	Fill of [2118]
2120	2		C	Cut of ditch
2121	2		F	Fill of [2120]
2122	2		C	Cut of ditch
2123	2		F	Fill of [2122]
2124	2		C	Cut of ditch

Context	Area	Group	Category	Description
2125	2		F	Fill of [2124]
2126	2		C	Cut of ditch
2127	2		F	Fill of [2126]
2128	2		C	Cut of ditch
2129	2		F	Fill of [2128]
2130	2		C	Cut of terminus
2131	2		F	Fill of [2130]
2132	2		C	Cut of ditch
2133	2		F	Fill of [2132]
2134	2		C	Cut of pit
2135	2		F	Fill of [2134]
2136	2		C	Cut of ditch
2137	2		F	Fill of [2136]
2138	2		C	Cut of ditch
2139	2		F	Fill of [2138]
2140	2		C	Cut of terminus
2141	2		F	Fill of [2140]
2142	2		C	Cut of E-W ditch
2143	2		F	Fill of [2142]
2144	2		C	Cut of terminus
2145	2		F	Fill of [2144]
2146	2		C	Cut of terminus
2147	2		F	Fill of [2146]
2148	2		C	Cut of terminus
2149	2		F	Fill of [2148]
2150	2		C	Cut of ditch
2151	2		F	Fill of [2150]
2152	2		C	Cut of ditch
2153	2		F	Fill of [2152]
2154	2		C	Cut of ditch
2155	2		F	Fill of [2154]
2156	2		C	Ditch terminus
2157	2		F	Fill of [2156]
2158	2		C	Cut of terminus
2159	2		F	Fill of [2159]
2160	2		C	Cut of ditch
2161	2		F	Fill of [2160]
2162	2		C	Cut of ditch
2163	2		F	Fill of [2162]
2164	2		C	Cut of pit
2165	2		F	Fill of [2164]
2166	2		C	Cut of ditch
2167	2		F	Fill of [2166]

Context	Area	Group	Category	Description
2168	2		C	Cut of ditch
2169	2		F	Fill of [2168]
2170	2		C	Cut of ditch
2171	2		F	Fill of [2170]
2172	2		C	Cut of ditch
2173	2		F	Fill of [2172]
2174	2		C	Cut of terminus
2175	2		F	Fill of [2174]
2176	2		C	Cut of ditch E-W
2177	2		F	Fill of [2176]
2178	2		C	Cut of ditch
2179	2		F	Fill of [2178]
2180	2		C	Cut of ditch
2181	2		F	Fill of [2180]
2182	2		C	Cut of ditch
2183	2		F	Fill of [2182]
2184	2		G	[2066] [2086] [2070]
2185	2		G	[2168] [2166] [2178]
2186	2		G	[2188] 2120]
2187	2		G	[2020] [2026] [2028]
2188	2		G	[2090] [2122] [2130] [2030] [2036] [2006]
2189	2		G	[2100] [2104] [2116] [2004] [2014] [2039]
2190	2		G	[2092] [2096] [2128] [2144]
2191	2		G	[2072] [2084] [2078]
2192	2		G	[2082] [2034] [2064] [2054] [2143] [2156]
2193	2		G	[2365] [2056] [2058] [2172] [2176]
2194	2		G	[2140] [2150]
2195	2		G	[2094] [2098] [2138] [2162]
2196	2		G	[2088] [2024] [2080]
2197	2		G	[2112] [2124] [2138] [2152]
2198	2		G	[2008] [2010] [2012] [2022] [2041] [3114] [2126] [2132] [2154]
2199	2		G	[2050] [2052] [2068] [3168] [2182]
2200	2		G	[2160] [2170] [2174] [2180]
2201	2		G	[2146] [2148]
2202	2		G	[2045] [2043]
2203	2		G	[2106] [2108]

APPENDIX 2: OASIS DATA COLLECTION FORM

OASIS ID (UID)	yorkarch3-513474
Project Name	Harthill Reservoir, Harthill, South Yorkshire: Report on an Archaeological Strip, Map and Sample
Sitename	Harthill Reservoir, Harthill, South Yorkshire
Activity type	Strip Map and Sample
Project Identifier(s)	3363
Planning Id	RB2022/0541
Reason For Investigation	Planning requirement
Organisation Responsible for work	York Archaeology
Project Dates	03-Oct-2022 - 13-Jan-2023
Location	Harthill Reservoir, Harthill, South Yorkshire NGR: SK 48740 80670 LL: 53.3207202736511, -1.26977783070225 12 Fig: 448740,380670
Administrative Areas	Country: England County: South Yorkshire District : Rotherham Parish: Harthill with Woodall
Project Methodology	The monitored areas were located by using a GPS, Leica CS15/GS15 RTK Differential GNSS prior to excavation. The area was scanned with a CAT Scanner before any breaking of ground in order to locate any services not shown on the services plan supplied by the client. All machining was carried out using a 360° tracked excavator fitted with a toothless ditching bucket under constant archaeological supervision so that a clean surface was exposed. Topsoil and subsoil where encountered was excavated in spits no greater than 250mm and was kept separate during the removal to allow sequential backfilling of the excavations. The Site was excavated to a level at which archaeological deposits were present.

Project Results	Through the first stage of investigation two drove way ditches were uncovered, likely to be late medieval in date. Five large drainage ditches to the north of the drove way suggest a temporary field system set up between Harthill and the village of Woodall. Two outlying linears suggest boundary ditches. A large pit seems likely to be a quarrying pit to extract limestone potentially to repair the drove way. Finally, several interconnecting smaller linear are perhaps part of the field drainage system. Through the second phase of investigations a continuation of one of the drove way ditches was uncovered. Two large east to west ditches were exposed perhaps used as field boundaries. Seven east to west drainage ditches suggest a continuation of the field systems present in the first stage of excavation
HER	South Yorkshire Archaeology Service - noRev - LITE

APPENDIX 3: POTTERY TABLE

Feature	Group	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
1307	1392	Reduced Sandy ware	1	11	1	Rim	Hollow ware	Decayed pale green glaze ext. only	C13th – LC14th	Clubbed 'D' profile rim; a fine pale grey fabric w/ fine quartz
1330	1392	Yellow Glazed Coarse ware	1	46	1	Base	Bowl/pancheon	Thin white slip under clear glaze int only	LC18th – C19th	Buff-orange fabric w/ sparse red & white rock frags
2010	2198	Coal Measures Fineware	1	8	1	Rim	Dish/bowl	Traces of thin pale green glaze int	LC13th – LC14th	Much finer than typical Coal Measures ware w/ fine quartz & red/black grit
2022	2198	Late Blackware	2	20	1	BS	Hollow ware	Dark brown glaze int & ext.	C18th	Hard, fine red fabric
2026	2187	Coal Measures Fineware	1	8	1	Base?	Dish/bowl	U/Dec	LC13th – LC14th	Much finer than typical Coal Measures ware w/ fine quartz & red/black grit
2026	2187	Whiteware	1	2	1	BS/flake	Flatware	U/Dec	M – LC19th	Flaked & chipped
2050	2199	Late Blackware	1	12	1	Handle	Mug/jug	Dark brown glaze all over	C18th	Fine red fabric
2090	2188	Redware	1	7	1	Rim	Jar	Clear glaze ext. over a red fabric	C17th – EC18th	A soft, bright red fabric w/ fine quartz & red grit
2056	2193	Cistercian/Blackware	1	2	1	BS	Hollow ware	Black glaze int & ext.	MC15th – LC17th	Hard fine dark red fabric
2176	2193	Redware	1	23	1	Base & BS	Dish/bowl	Spots of glaze ext.; int surface missing	C17th – EC18th	Heavily abraded
2176	2193	Redware	2	16	1	Base	Dish/bowl	Clear glaze over a red fabric int	C17th – EC18th	Heavily abraded
2176	2193	Redware	3	2	3	Flakes	U/ID	Clear (red) glaze on surviving surfaces	C17th – EC18th	Heavily abraded

APPENDIX 4: ENVIRONMENTAL SAMPLE TABLES

Table 1: *Ecofacts and artefacts from bulk environmental samples from Harthill Reservoir. Quantification: * = 1-10, ** = 11-50, *** = 51-150, **** = 151-250, ***** = >250.*

Phase	Sample Number	Context	Context / Deposit Type and Parent Context	Sample Volume (L)	Charcoal >4mm	Weight (g)	Charcoal 2-4mm	Weight (g)	Pottery	Weight (g)	Magnetic Material	Weight (g)
Post-Med	<12>	(1160)	Ditch Terminus [1159]	40	*	1	**	<1	-	-	*****	16
Post-medieval to modern	<22>	(1316)	Ditch [1315]	40	***	2	*	<1	-	-	*****	9
	<24>	(1312)	Ditch [1311]	40	**	<1	*	<1	-	-	*****	24
	<26>	(1322)	NE-SW Ditch [1321]	40	*	<1	*	<1	-	-	*****	24
	<42>	(2048)	Ditch [2047]	40	*	1	**	<1	-	-	*****	22
Undated	<2>	(1005)	Pit [1004]	10	**	3	**	<1	-	-	-	-
	<3>	(1007)	Pit [1006]	40	****	54	*****	4	-	-	*****	11
	<9>	(1117)	Pit [1121]	10	-	-	-		-	-	****	2
	<10>	(1123)	Pit [1122]	20	**	2	**	<1	-	-	****	2
	<14>	(1137)	Pit [1136]	20	-	-	-		-	-	*****	5
	<17>	(1211)	Pit [1210]	40	**	3	**	<1	-	-	*****	9
	<20>	(1274)	Pit [1273]	40	-	-	-		-	-	****	3
	<21>	(1276)	Charcoal Pit [1275]	20	***	10	****	1	-	-	*****	11
	<23>	(1293)	Pit [1292]	10	-	-	-		-	-	***	2
	<25>	(1329)	Pit [1328]	20	-	-	-		-	-	**	2
	<30>	(1310)	Pit [1309]	40	*	<1	-		-	-	-	-
	<31>	(1215)	Pit [1214]	20	*	<1	*	<1	-	-	***	4
	<32>	(1213)	Pit [1212]	40	*	<1	-		-	-	*****	8
	<33>	(1221)	Pit [1220]	30	-	-	-		-	-	****	4
	<34>	(1154)	Pit [1153]	40	*	1	*	<1	-	-	****	5
	<35>	(1289)	Pit [1288]	40	*	2	**	<1	-	-	*****	14
	<36>	(1287)	Pit [1286]	40	*	1	*	<1	-	-	*****	17
	<37>	(1325)	Pit [1324]	30	*****	37	*****	4	-	-	*****	22
	<4>	(1042)	Ditch [1041]	40	**	1	**	<1	-	-	*****	8
	<8>	(1120)	Ditch Terminus [1119]	20	-	-	*	<1	-	-	***	2
	<16>	(1209)	Gully Terminus [1208]	10	*	<1	**	<1	-	-	***	2
	<19>	(1233)	Gully [1232]	10	-	-	*	<1	-	-	****	4

Table 2: *Flot assessment of bulk environmental samples from Harthill Reservoir. Quantification: * = 1-10, ** = 11-50, *** = 51-150, **** = 151-250, ***** = >250. Preservation: + = poor, ++ = moderate, +++ = good.*

Date	Sample Number	Context	Context/ Deposit Type and Parent Context	Sample Volume (L)	Flot Weight (g)	Flot Volume (ml)	Uncharred (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Charred Cereal Remains	Preservation	Charred Weed Seeds	Preservation	Charred Food Products	Modern Insects	Worm Capsules	Slag/ Hammerscale	Coal	Modern Roots	Straw Fragments
Post-Med	<12>	(1160)	Ditch Terminus [1159]	40	7	25	95	*Chenopodium album* * *Fumaria officinalis* ** *Polygonum aviculare* ** *Sambucus nigra* * *Viola* sp. *	-	**	***	*Triticum* sp. (1)	++			**	-	-	**	*	*****	***
Post-Medieval to Modern	<22>	(1316)	Ditch [1315]	40	2	5	95	*Aethusa cynapium* * *Chenopodium album* * *Fumaria officinalis* * *Polygonum aviculare* *	-	-	**	*Cerealia* indet. (1)	+			-	-	-	-	-	****	-
	<24>	(1312)	Ditch [1311]	40	15	45	90	*Fumaria officinalis* * *Polygonum aviculare* * *Viola* sp. * *Chenopodium album* *	-	*	***	Straw frags *	++			-	-	*	-	-	*****	-
	<26>	(1322)	NE-SW Ditch [1321]	40	4	5	90	*Chenopodium album* ** *Fumaria officinalis* *	-	*	**	*Avena* sp. (1)	+++			-	-	-	-	***	****	-
	<42>	(2048)	Ditch [2047]	40	8	20	99	*Polygonum aviculare* * *Chenopodium album* *	-	*	**			*Galeopsis tetrahit* (1)	++	-	-	*	-	-	****	-
Un	<2>	(1005)	Pit [1004]	10	<1	4	75		-	**	***					-	-	-	-	-	***	-

Date	Sample Number	Context	Context/ Deposit Type and Parent Context	Sample Volume (L)	Flot Weight (g)	Flot Volume (ml)	Uncharred (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Charred Cereal Remains	Preservation	Charred Weed Seeds	Preservation	Charred Food Products	Modern Insects	Worm Capsules	Slag/ Hammerscale	Coal	Modern Roots	Straw Fragments
	<3>	(1007)	Pit [1006]	40	1	5	50	*Sambucus nigra* * *Fumaria officinalis* *	**	**	***					-	-	-	-	-	**	**
	<9>	(1117)	Pit [1121]	10	<1	1	60	*Fumaria officinalis* *	-	*	**					-	-	-	-	-	**	-
	<10>	(1123)	Pit [1122]	20	2	5	99	*Chenopodium album* * *Fumaria officinalis* * *Polygonum aviculare* *	-	*	**					-	-	-	-	-	****	-
	<14>	(1137)	Pit [1136]	20	1	3	95	*Fumaria officinalis* *	-	**	**					-	-	-	-	-	***	-
Undated	<17>	(1211)	Pit [1210]	40	5	20	80	*Fumaria officinalis* * *Polygonum aviculare* * *Chenopodium album* *	*	**	****			*Polygonum aviculare* (1)	++	-	*	-	-	-	***	-
	<20>	(1274)	Pit [1273]	40	10	20	99	*Sambucus nigra* * *Rumex* sp. * *Viola* sp. * *Polygonum aviculare* * *Aethusa cynapium* *	-	**	***	*Triticum* sp. (1)	(+++)			-	-	*	-	**	*****	*
	<21>	(1276)	Charcoal Pit [1275]	20	15	70	5	*Fumaria officinalis* * *Chenopodium album* *	****	*****	*****					-	-	-	-	-	**	-
	<23>	(1293)	Pit [1292]	10	<1	<1	99	*Fumaria officinalis* *	-	-	**	*Cerealia* indet. (1)	+			-	-	-	-	-	**	-
	<25>	(1329)	Pit [1328]	20	<1	1	99	*Chenopodium album* *	-	-	**			Poaceae small (1)	++	-	-	-	-	-	**	-
	<30>	(1310)	Pit [1309]	40	25	40	99	*Polygonum aviculare* * *Fumaria officinallis* * *Chenopodium album* *	-	*	**	*Triticum* sp. (1) *Cerealia* indet. (1)	++			-	-	-	-	**	*****	-

Date	Sample Number	Context	Context/ Deposit Type and Parent Context	Sample Volume (L)	Flot Weight (g)	Flot Volume (ml)	Uncharred (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Charred Cereal Remains	Preservation	Charred Weed Seeds	Preservation	Charred Food Products	Modern Insects	Worm Capsules	Slag/ Hammerscale	Coal	Modern Roots	Straw Fragments
	<31>	(1215)	Pit [1214]	20	1	4	95	*Polygonum aviculare* *	-	**	**					-	-	-	-	-	****	-
	<32>	(1213)	Pit [1212]	40	2	10	95	*Chenopodium album* * *Fumaria officinalis* * *Polygonum aviculare* *	-	*	**					-	-	-	-	**	****	-
	<33>	(1221)	Pit [1220]	30	3	10	99	*Fumaria officinalis* *	-	-	**	*Avena* sp. (1)	++			-	-	*	-	**	*****	-
	<34>	(1154)	Pit [1153]	40	11	35	80		**	***	****			*Ranunculus acris* (1) *Vicia* sp. (1)	++	-	*	*	-	*	*****	-
	<35>	(1289)	Pit [1288]	40	1	10	95	*Chenopodium album* ** *Polygonum aviculare* *	-	*	**			*Poa annua* (1)	++	-	-	-	*	-	****	-
	<36>	(1287)	Pit [1286]	40	3	15	95	*Chenopodium album* * *Polygonum aviculare* * *Fumaria officinalis* *	*	**	***					-	-	-	-	-	***	-
Undated	<37>	(1325)	Pit [1324]	30	12	35	90	*Chenopodium album* * *Viola* sp. *	*	***	*****					-	-	*	-	-	*****	**
	<4>	(1042)	Ditch [1041]	40	17	45	60	*Fumaria officinalis* * *Sambucus nigra* *	-	**	****					****	-	*	-	**	*****	-
	<8>	(1120)	Ditch Terminus [1119]	20	1	5	90	*Fumaria officinalis* *	-	-	**					-	-	-	-	**	***	-
	<16>	(1209)	Gully Terminus [1208]	10	<1	<1	90	*Polygonum aviculare* *	-	-	*					-	-	-	-	-	*	-

Date	Sample Number	Context	Context/ Deposit Type and Parent Context	Sample Volume (L)	Flot Weight (g)	Flot Volume (ml)	Uncharred (%)	Seeds Uncharred	Charcoal >4mm	Charcoal 2-4mm	Charcoal <2mm	Charred Cereal Remains	Preservation	Charred Weed Seeds	Preservation	Charred Food Products	Modern Insects	Worm Capsules	Slag/ Hammerscale	Coal	Modern Roots	Straw Fragments
	<19>	(1233)	Gully [1232]	10	<1	1	50		-	*	**	*Hordeum vulgare* (1) *Tritcium* sp. rounded (1)	++	*Poa annua* (1)	++	-	-	-	-	-	**	-

Table 3: *Charcoal analysis from bulk environmental samples from Harthill Reservoir. Preservation: + = poor, ++ = moderate, +++ = good. Key: rw = roundwood.*

	Fagus sylvatica L.	*Quercus* sp. L.	*Alnus* sp. L.	*Corylus avellana* L.	Prunoideae	*Fraxinus excelsior* L.	Indet.	Indet. knotwood	Indet. Bark	

Phase	Sample Number	Context Number	Context Description	Sample Volume (L)	Preservation	Average Ring Number per	Beech	Oak	Alder	Hazel	Plum-type; plums, cherries	Ash	Indeterminate	Indeterminate Knotwood	Indeterminate Bark Fragment	Radial Cracks	Post-Depositional	Vitrified	Insect Hole	Distorted
Undated	<3>	(1007)	Pit [1006]	40	+++	6	-	5	-	77 rw:10	1	13 rw:2	-	2	2	5	10	1	1	2
	<21>	(1276)	Pit [1275]	40	+++	3	1rw	97 rw:5	-	-	-	-	-	2	-	39	-	1	1	-
	<37>	(1325)	Pit [1324]	40	++	5	-	95 rw:4	1	1	-	-	1	2	-	49	9	35		6

APPENDIX 5: PLATES

Plate 1: West-facing section of drove way ditch 1394, cut [1311] (on left) and its intersection with east-west ditch 1396, cut [1313] ditch. Scale 1m.

Plate 2: North-east facing section of drove way ditch 1394, cut [1182] and later gully 1426, cut [1184], both in centre of photo. A possible earlier cut of the 1394, represented by cut [1170] can be seen in the top right of the image. Scale 1m.

Plate 3: North-east facing section of drove way ditch 1394, cut [1108]. Scale 1m.

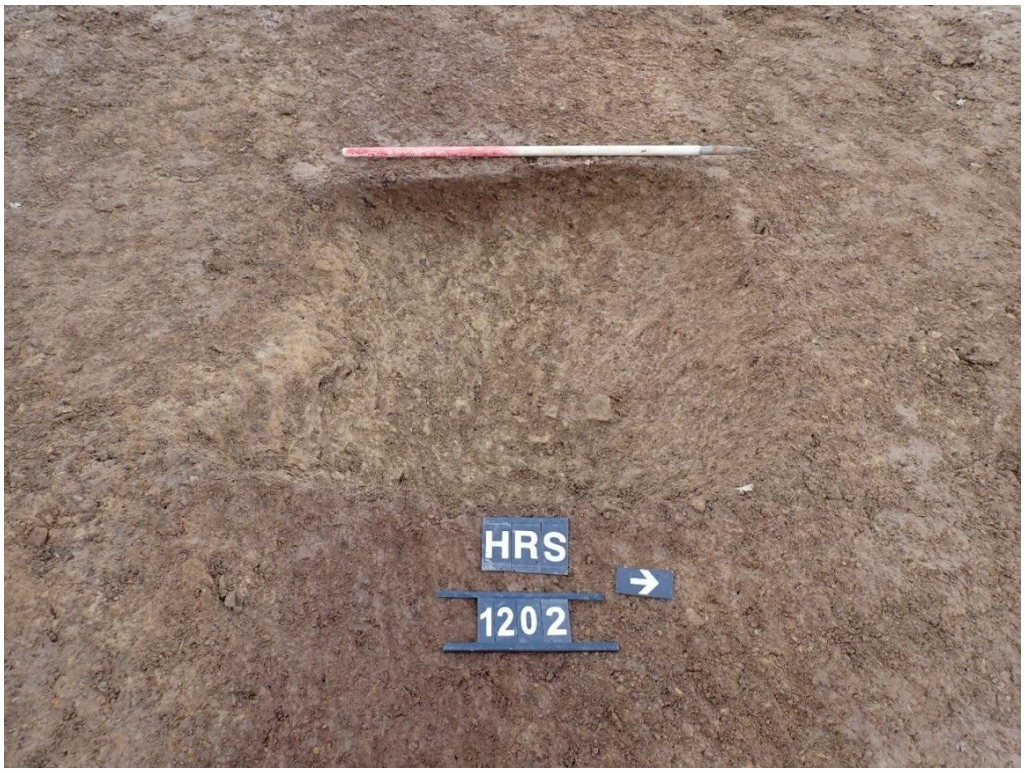


Plate 4: Northwest-facing section of drove way ditch 1394, cut [1202] and [1204]. Scale 1m.

Plate 5: West-facing section of drove way ditch 1395, cut [1317]. Scale 0.50m

Plate 6: North-facing section of gully 1423, cut [1029]. Scale 1m

Plate 7: West-facing section of pit [1100]. Scale 0.30m

Plate 8: East-facing section of ditch 1405, cut [1033], with pit [1110] on the right. Scale 1m

Plate 9: East-facing section of ditch 1393, cut [1155]. Scale 1m

Plate 10: East-facing section of ditch 1392, cut [1330]. Scale 1m

Plate 11: East-facing section of ditch 2192, cut [2064]. Scale 1m

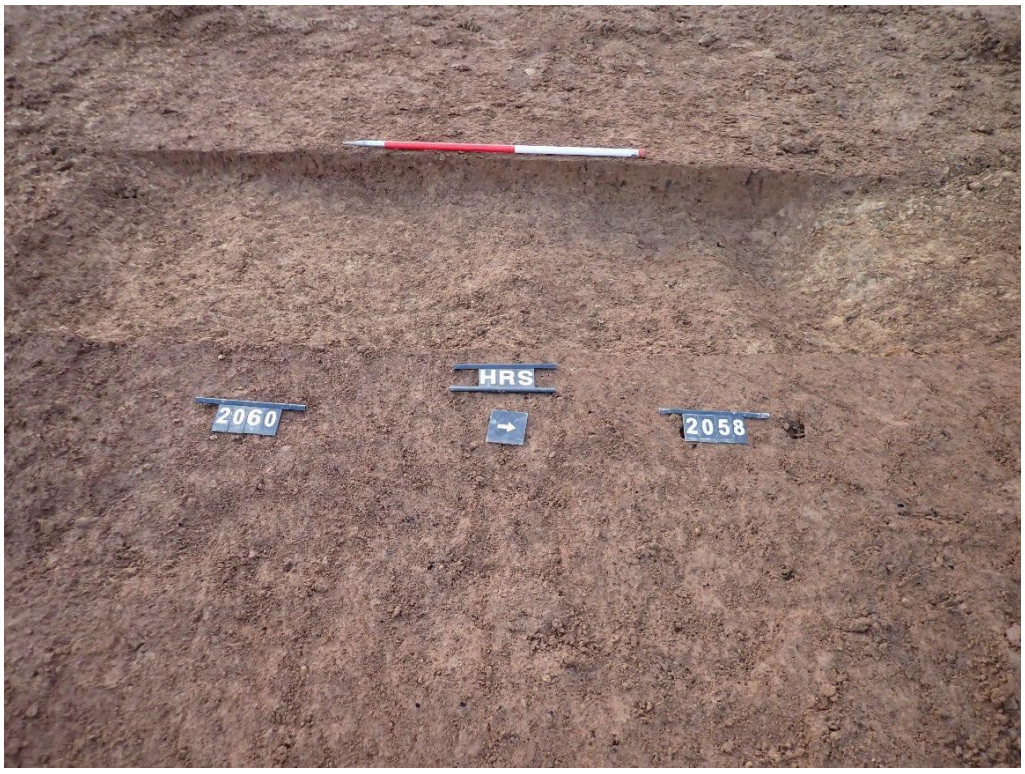


Plate 12: East-facing section of ditch 2193, cut [2058] on right, with earlier feature [2060] on left. Scale 1m

Plate 13: West-facing section of ditch 2197, cut [2124] on left, with ditch 2198, cut [2126] on left. Scale 1m

Plate 14: East-facing section of ditch 2187, cut [2020]. Scale 1m

Plate 15: South-facing section of gulley 1406, cut [1072]. Scale 0.30m

Plate 16: Northeast-facing section of gulley 1408, cut [1321]. Scale 0.30m

Plate 17: Northeast-facing section of gulley 2200, cut [2180] on left and gulley 2199, cut [2182] on right. Scale 0.30m

Plate 18: South-facing section of ditch 2200, cut [2160] on left and pit [2164] on right. Scale 1m

Plate 19: South-facing section of ditch 2185, cut [2178]. Scale 0.5m

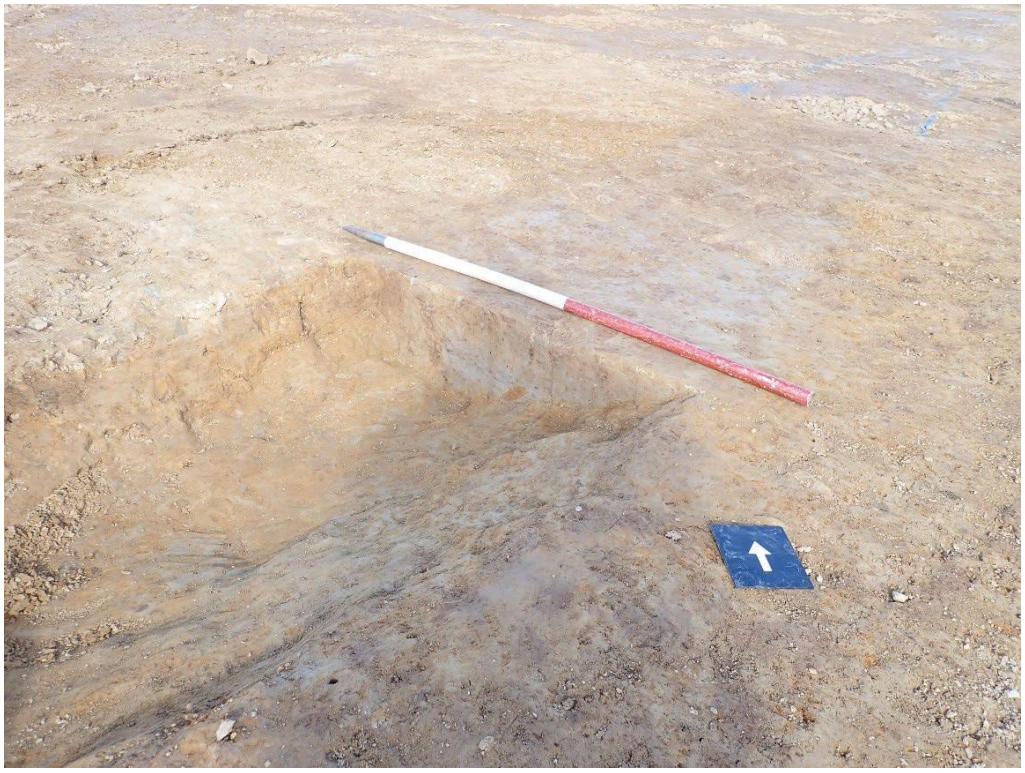


Plate 20: Oblique view of south-west-facing section of gulley 1402, cut [1060]. Scale 1m

Plate 21: South-west-facing section of gulley 1401, cut [1096]. Scale 1m

Plate 22: North facing section of gulley 1416, cut [1283] on left, gulley 1418, [cut 1223] in centre, gulley 1420 on right, cut by pit [1227]. Scale 1m

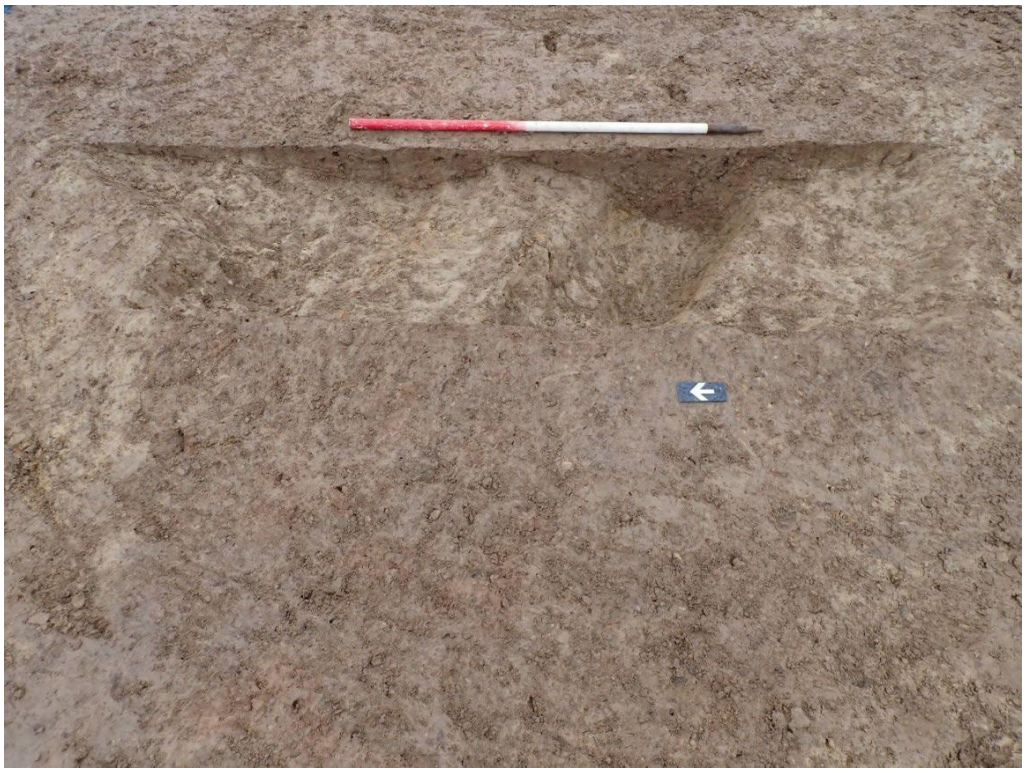


Plate 23: West-facing section of pit [1277], gulley 1419 (cut [1283]), gulley 1418 (cut [1281]) and gulley 1420 (cut [1279]. Scale 1m

Plate 24: Overview of quarrying pit 1163, cut [1157]. Scale 1m

Plate 25: South-east-facing section of central slot [1126] in quarrying pit 1163. Scale 1m

Plate 26: West-facing section of pit [1230]. Scale 0.50m

Plate 27: Southwest-facing section of pit [1210]. Scale 0.30m

Plate 28: South-facing section of pit [1212]. Scale 0.50m

APPENDIX 6: FIGURES

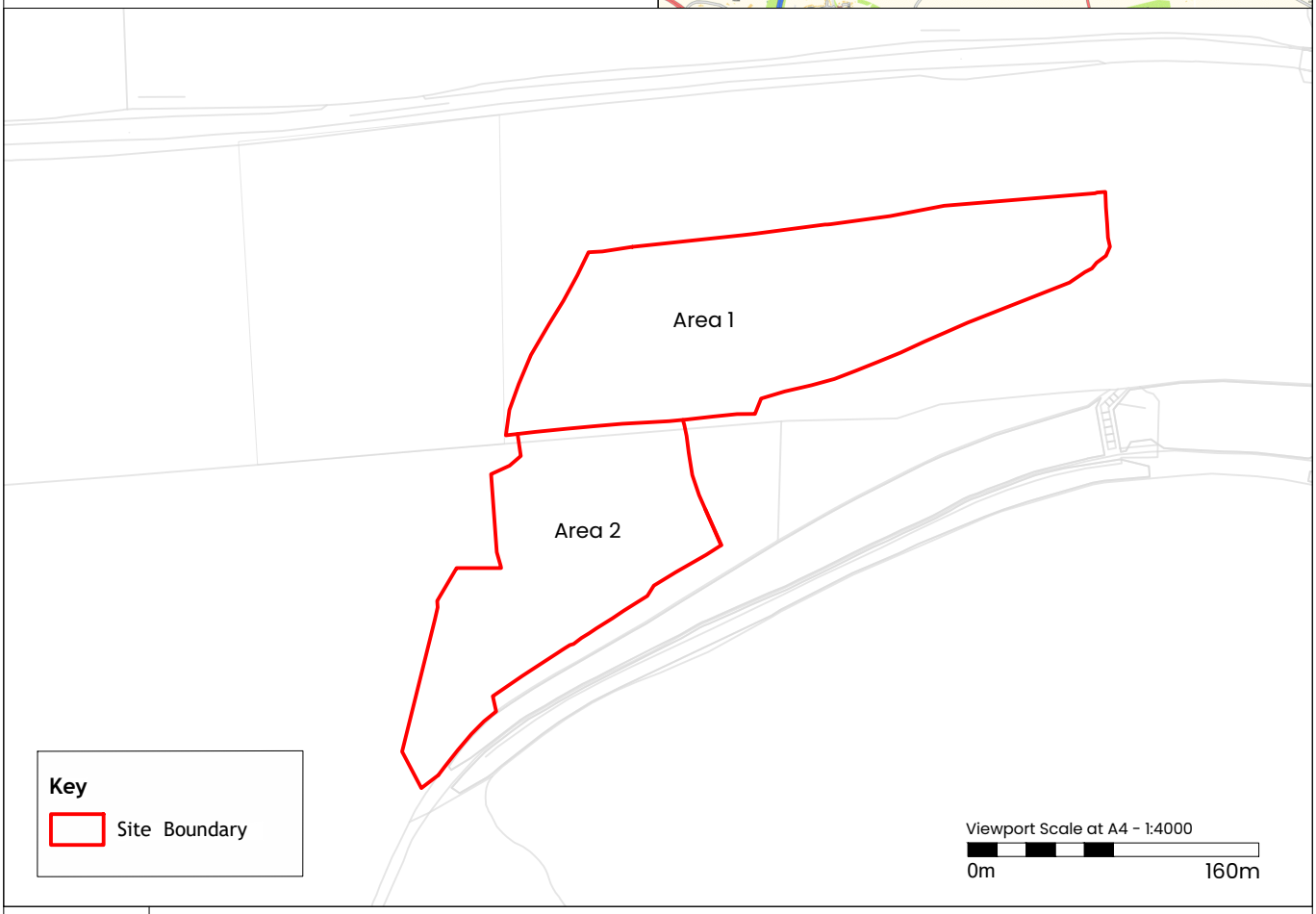


Figure 01 - Location Map
3363 - Harthill Reservoir, Harthill, South Yorkshire

Scale at A4 - varies
Drawn by MI

Figure 02 - Site Plan Showing Feature Group Numbers
HRS - Harthill Reservoir, Sheffield

Scale at A3 - 1:600
Drawn by MI

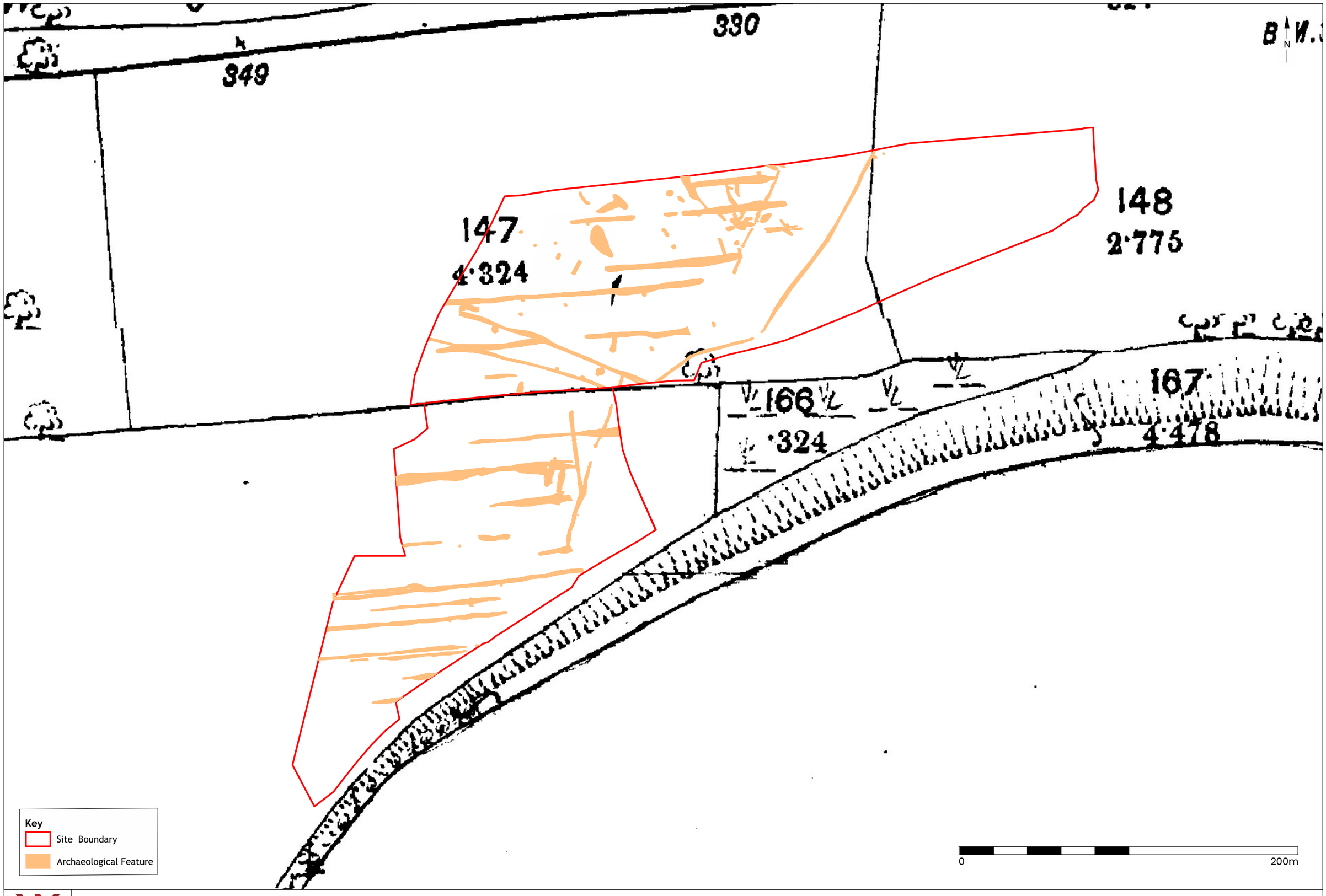


Figure 03 - Site Plan Shown On 1899 OS County Series 1:2500 Map
HRS - Harthill Reservoir, Sheffield

Scale at A3 - 1:2000
Drawn by MI

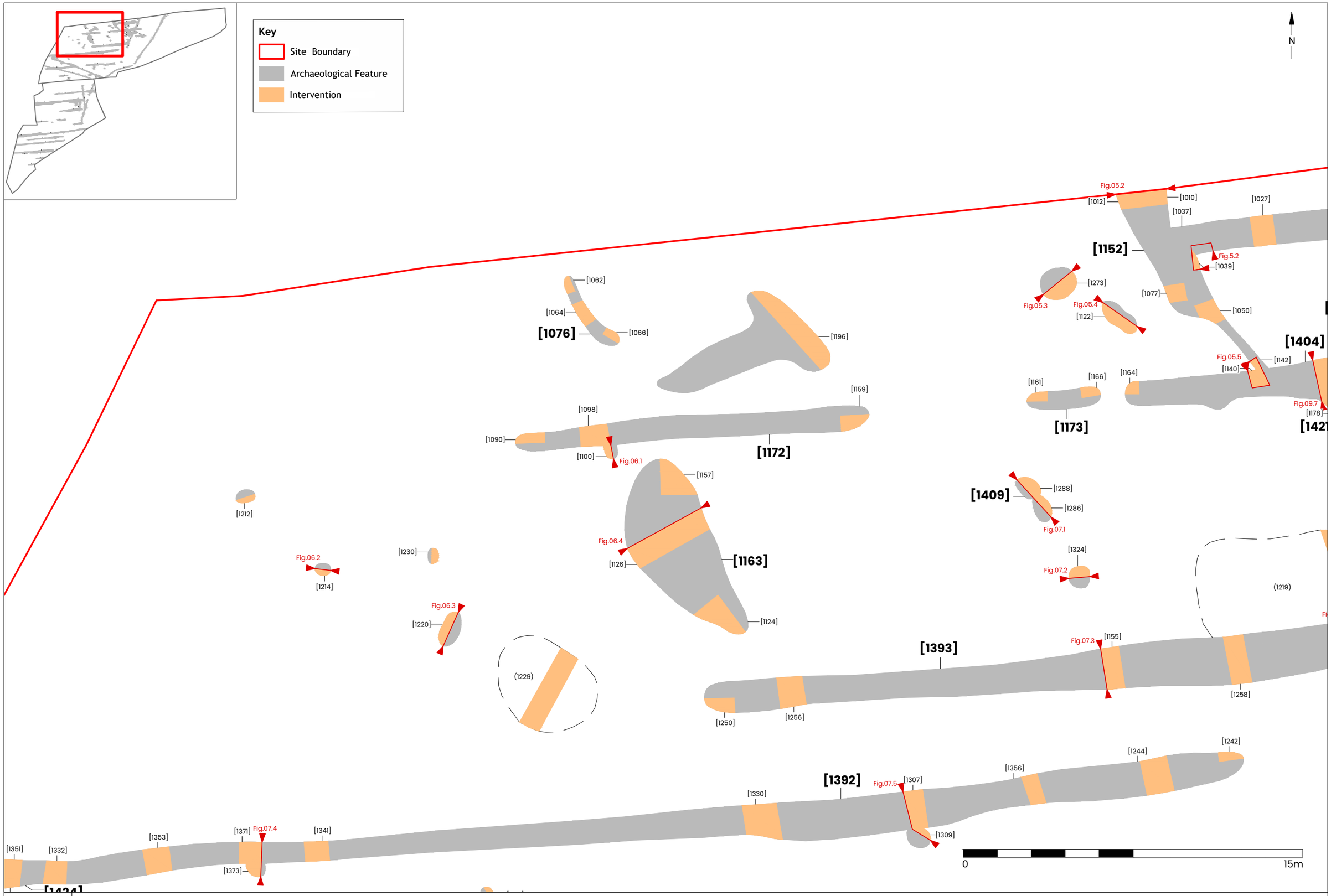


Figure 04 - Plan Of Western Area 1
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:150
Drawn by MH

Fig.05.1
South Facing Section [1010] & [1012]

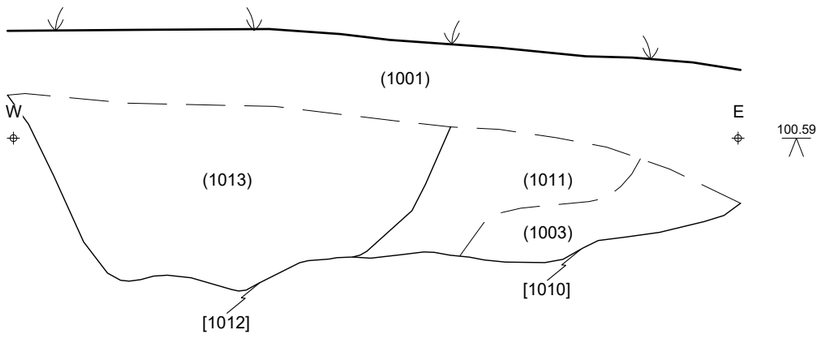


Fig.05.2
North, East, South & West Facing Section [1037] & [1039]

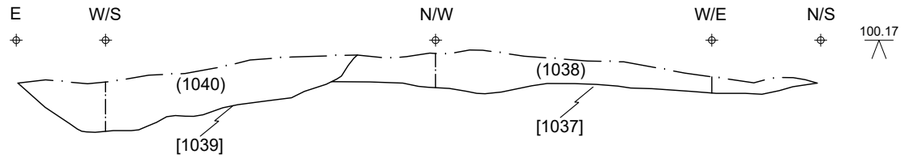


Fig.05.3
South East Facing Section [1273]

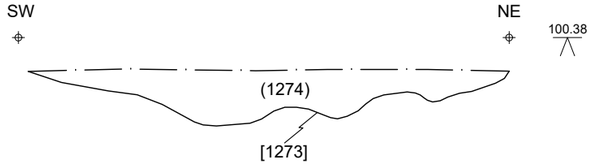


Fig.05.4
South West Facing Section [1122]

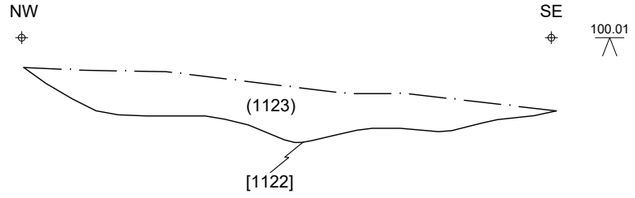


Fig.05.5
South Facing Section [1140] & [1142]

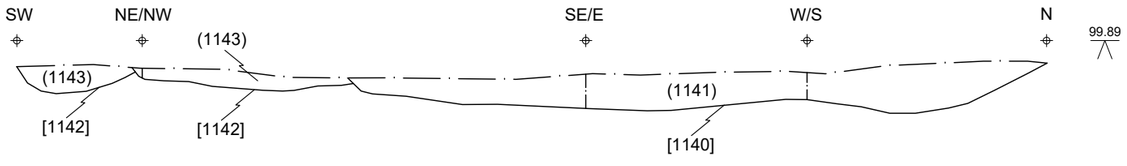


Figure 05 - Section Figures 05.1 - 05.5
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:20
Drawn by MI

Fig.06.1
West Facing Section [1110]

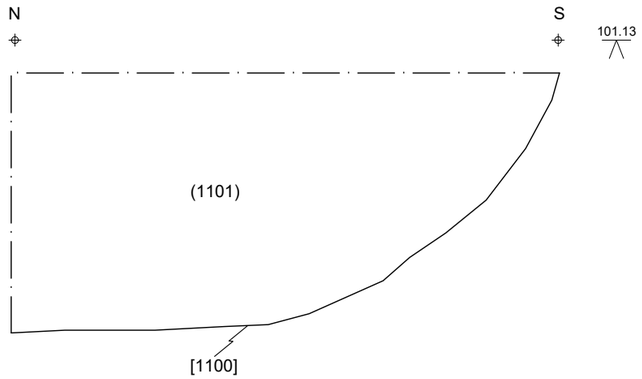


Fig.06.2
South Facing Section [1214]

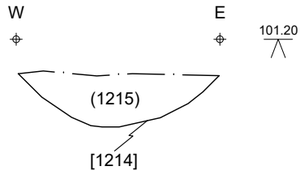


Fig.06.3
North West Facing Section [1220]

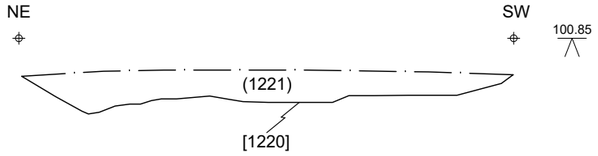


Fig.06.4
South East Facing Section [1126]

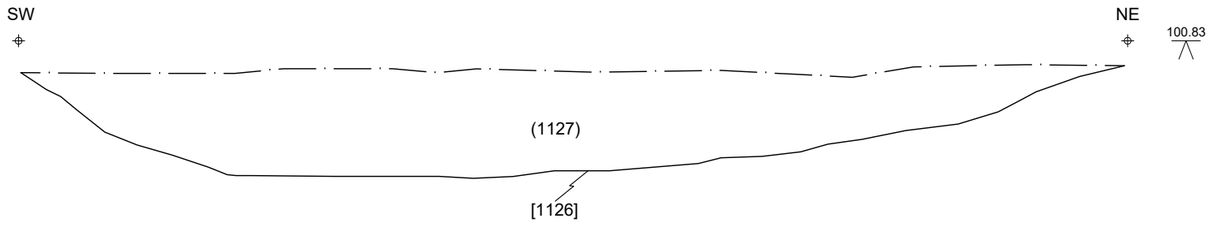


Figure 06 - Section Figures 06.1 - 06.4
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:20
Drawn by MI

Fig.07.1
North East Facing Section [1286] & [1288]

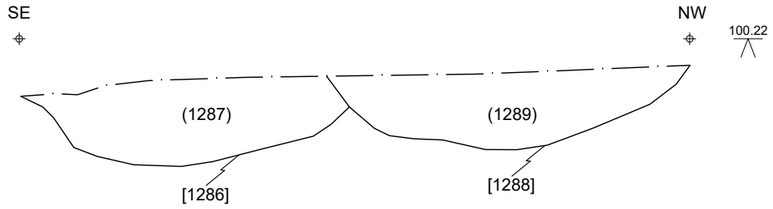


Fig.07.2
South Facing Section [1324]

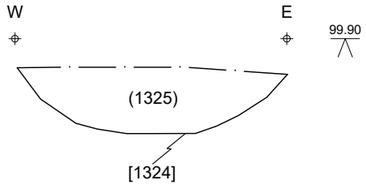


Fig.07.3
East Facing Section [1155]

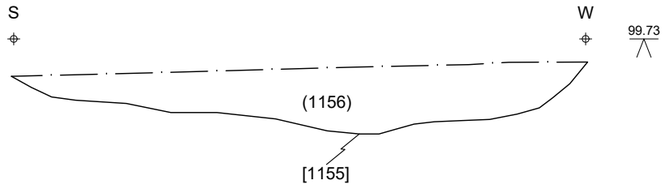


Fig.07.4
West Facing Section [1371] & [1373]

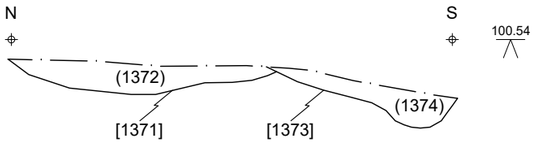


Fig.07.5
East & North East Facing Section [1307] & [1309]

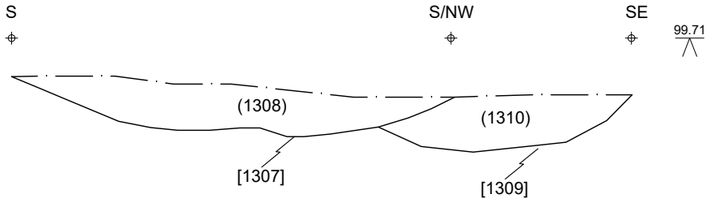
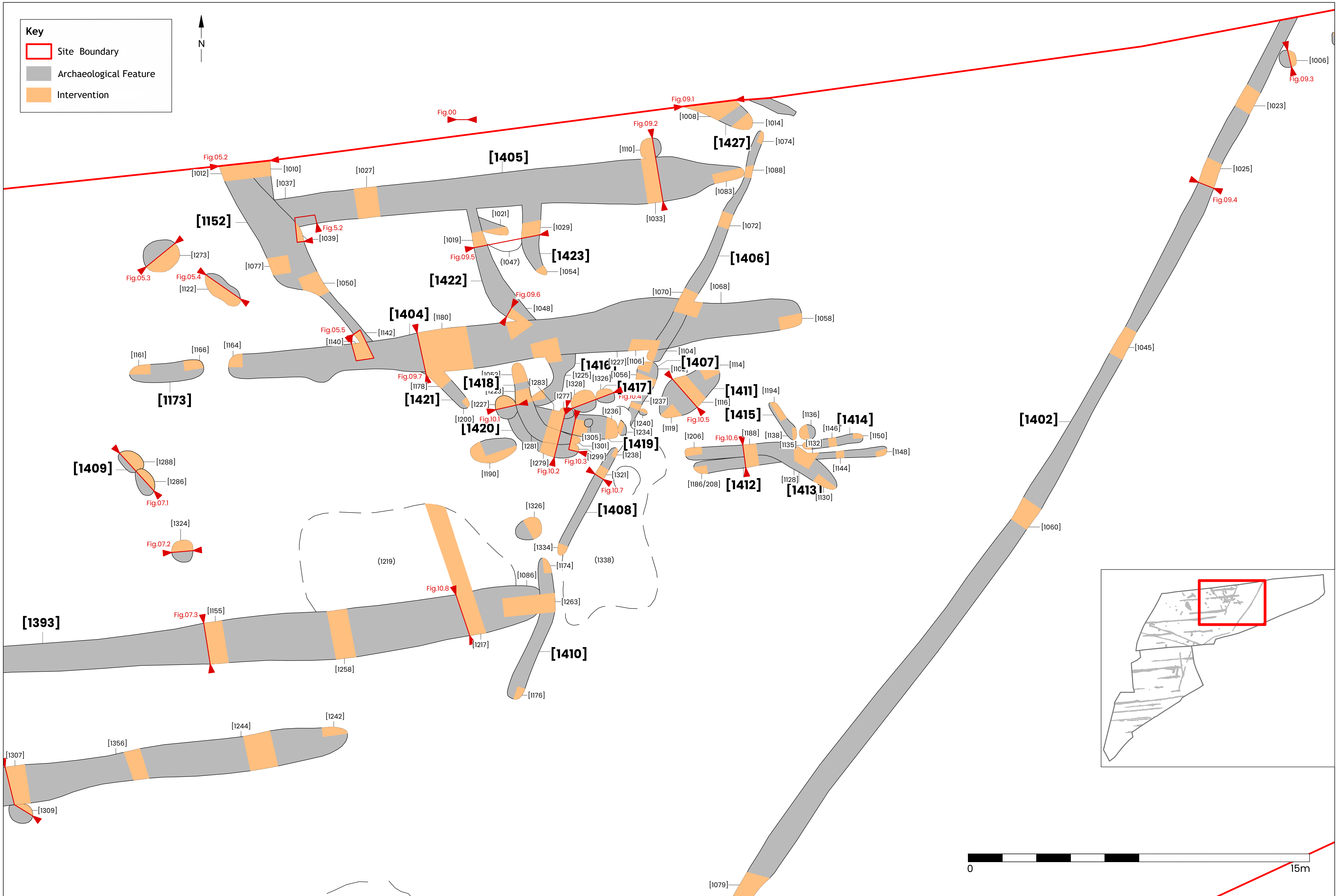


Figure 07 - Section Figures 07.1 - 07.5
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:20
Drawn by MI



Key
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Archaeological Feature
Intervention
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Fig.09.6
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Fig.5.2
Fig.07.1
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Figure 08 - Plan Of Eastern Area 1
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:150
Drawn by MH

Fig.09.1
South Facing Section [1008]

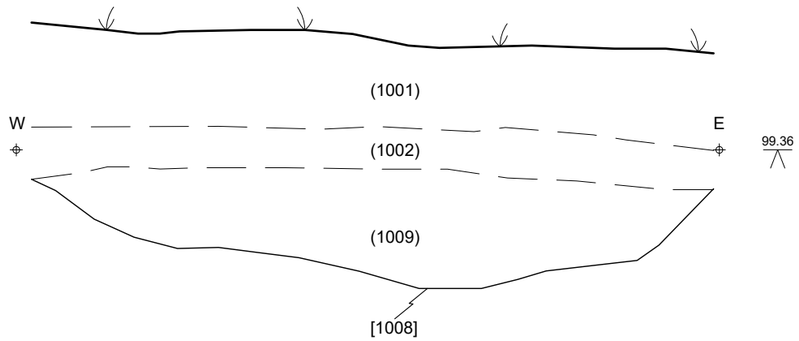

Fig.09.2
West Facing Section [1033] & [1110]

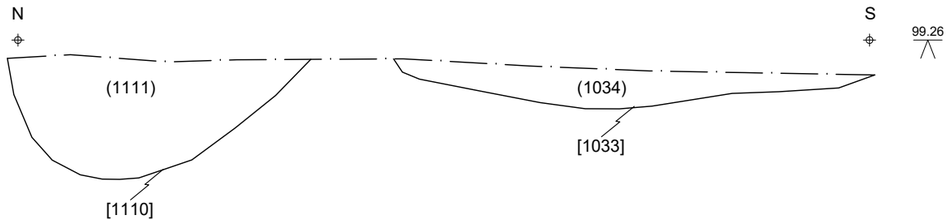

Fig.09.3
East Facing Section [1006]

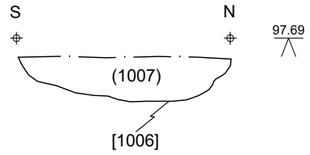

Fig.09..4
North East Facing Section [1025]

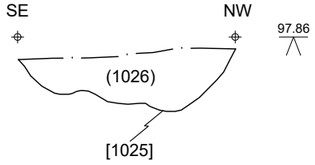

Fig.09.5
North Facing Section [1019] & [1029]

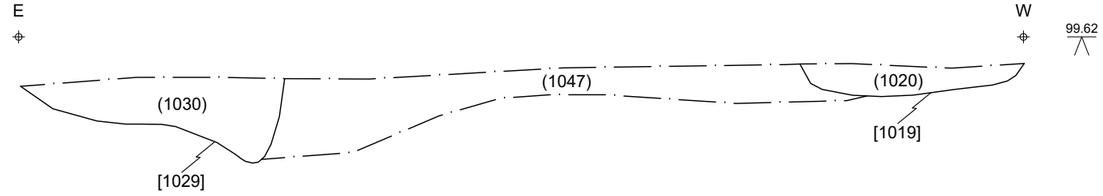

Fig.09.6
South East Facing Section [1048]

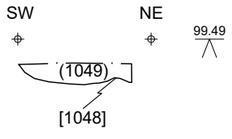

Fig.09.7
South Facing Section [1178] & [1180]

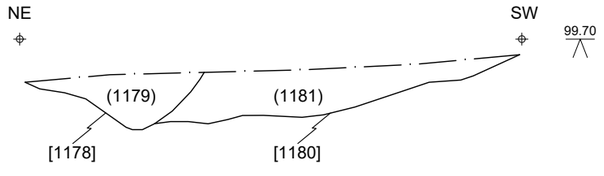

Figure 09 - Section Figures 09.1 - 09.7
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:20
Drawn by MI

Fig.10.1
North Facing Section [1223] & [1227]

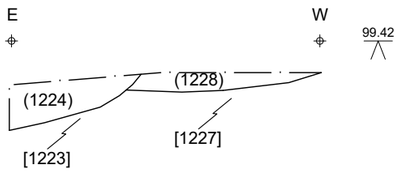

Fig.10.2
North West Facing Section [1277], [1279], [1281] & [1283]

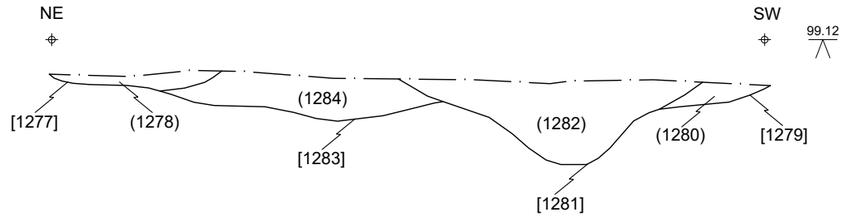

Fig.10.3
South Facing Section [1299], [1301] & [1303]

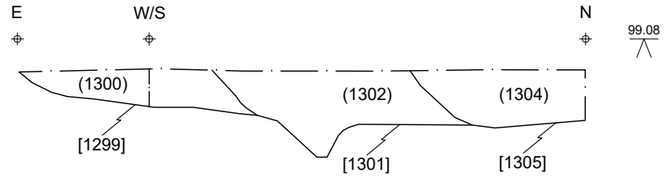

Fig.10.4
North West Facing Section [1326] & [1328]

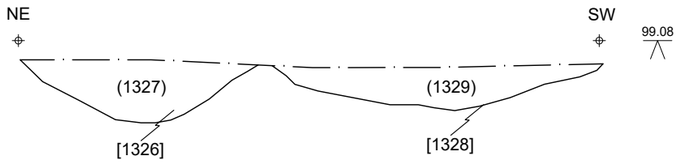

Fig.10.5
North East Facing Section [1116] & [1121]

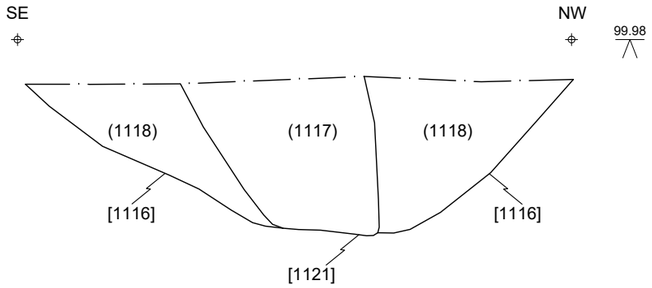

Fig.10.6
East Facing Section [1186] & [1188]

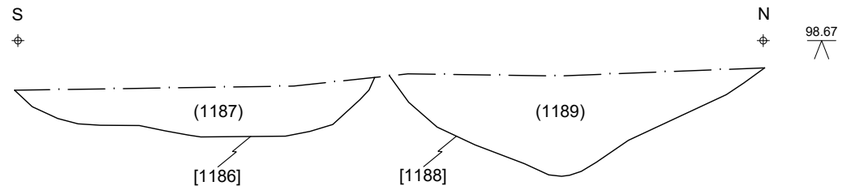

Fig.10.7
North East Facing Section [1321]

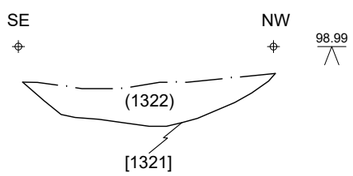

Fig.10.8
North East Facing Section [1217]

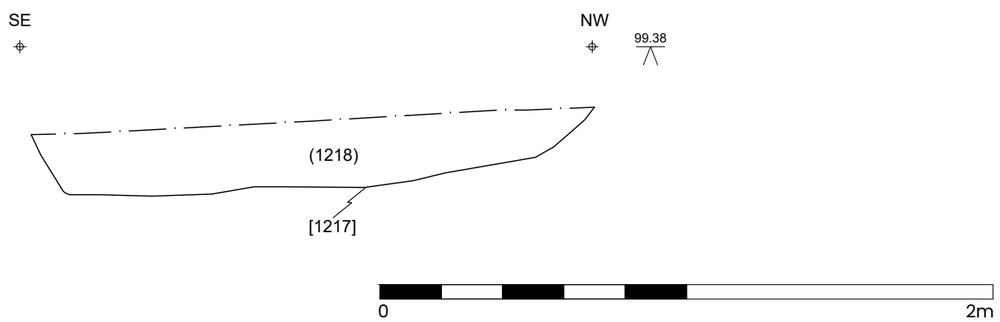

Figure 10 - Section Figures 10.1 - 10.8
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:20
Drawn by MI

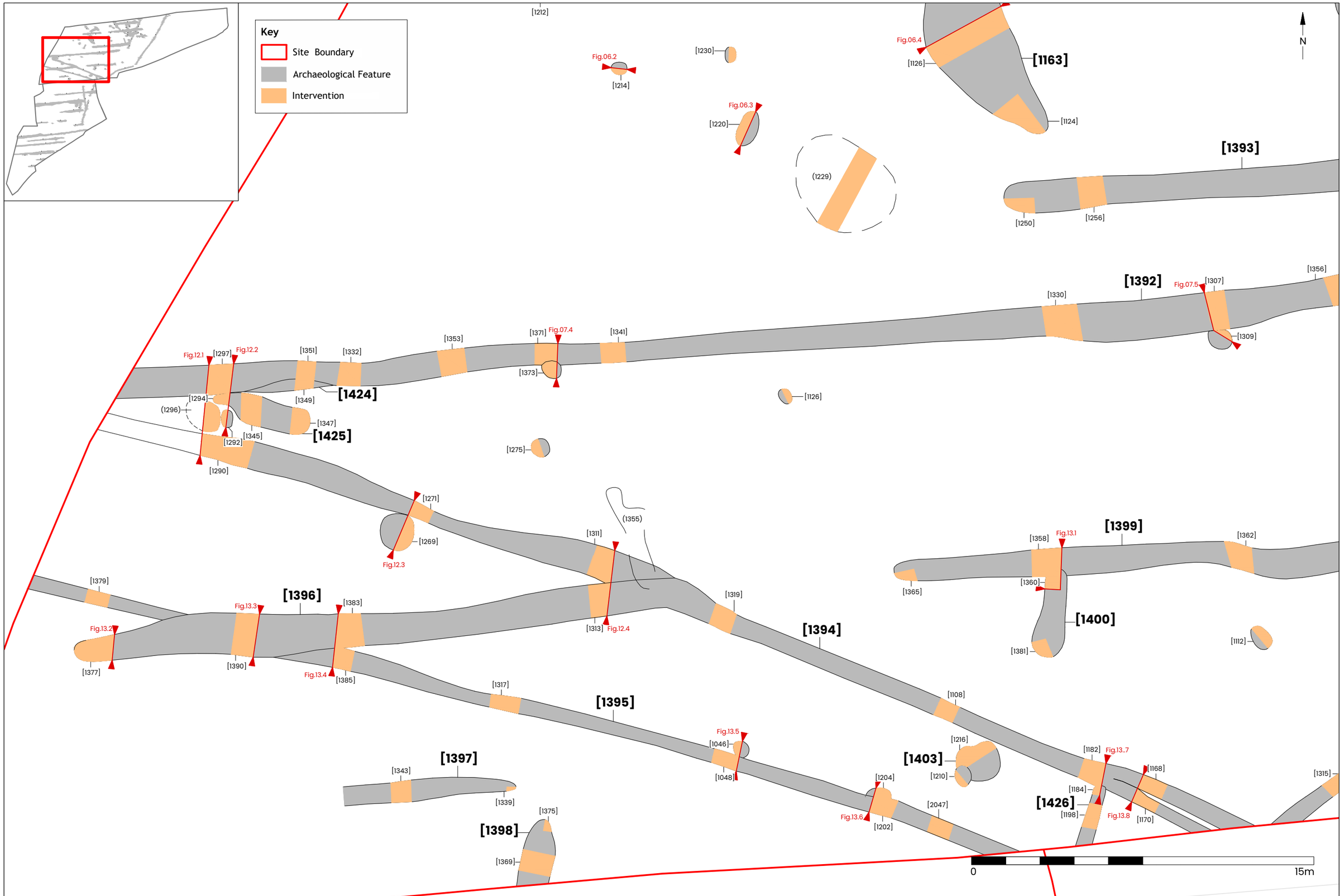

Figure 11 - Plan Of Southern Area 1
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:150
Drawn by MH

Fig.12.1
East Facing Section [1290] & [1297]

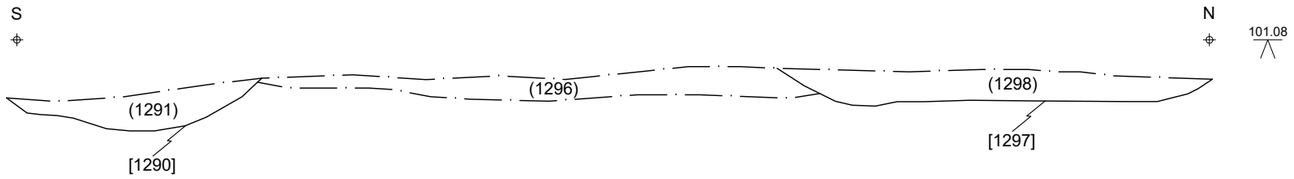

Fig.12.2
West Facing Section [1292], [1294] & [1297]

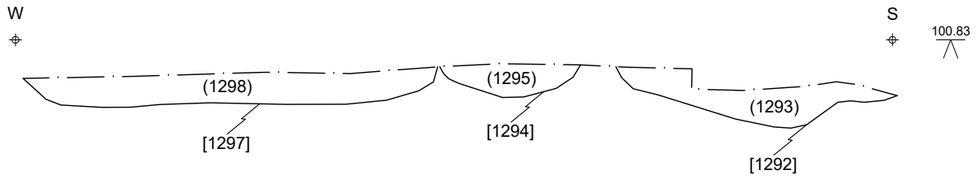

Fig.12.3
South East Facing Section [1269] & [1271]

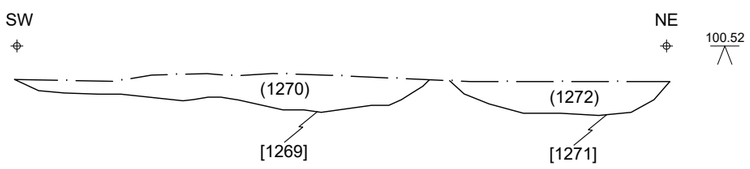

Fig.12.4
West Facing Section [1311] & [1313]

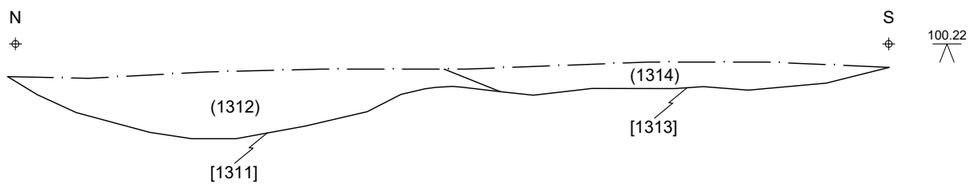

Figure 12 - Section Figures 12.1 - 12.4
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:20
Drawn by MI

Fig.13.1
West & North Facing Section [1358] & [1360]

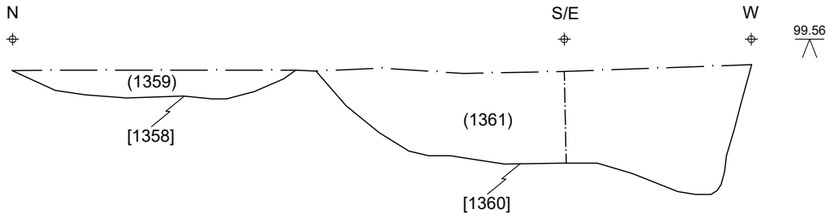

Fig.13.2
West Facing Section [1377]

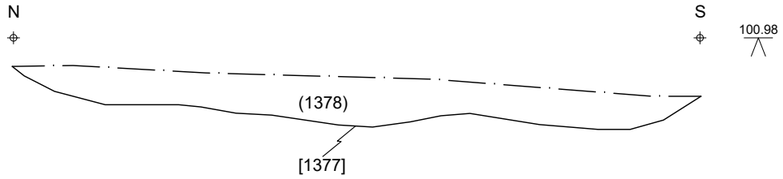

Fig.13.3
West Facing Section [1390]

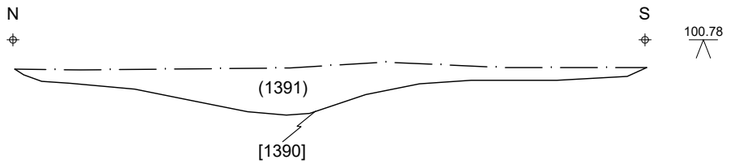

Fig.13.4
East Facing Section [1383] & [1385]

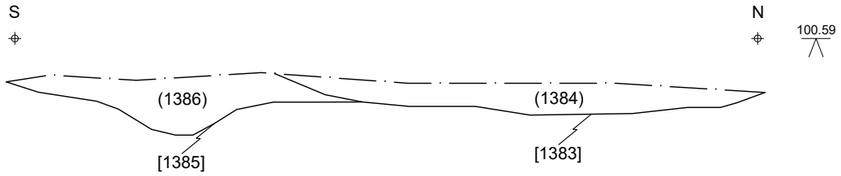

Fig.13.5
North West Facing Section [1246] & [1248]

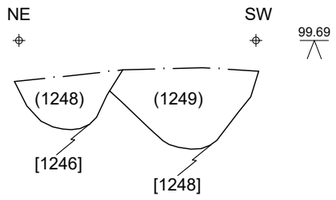

Fig.13.6
South East Facing Section [1202] & [1204]

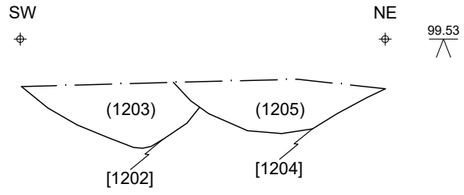

Fig.13.7
West Facing Section [1182] & [1184]

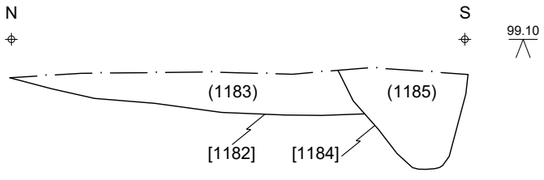

Fig.13.8
South East Facing Section [1168] & [1170]

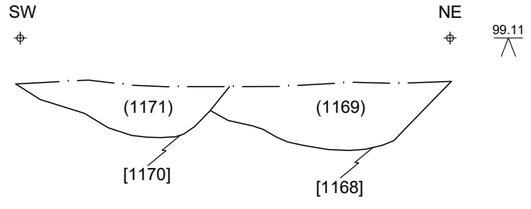

Figure 13 - Section Figures 13.1 - 13.8
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:20
Drawn by MI

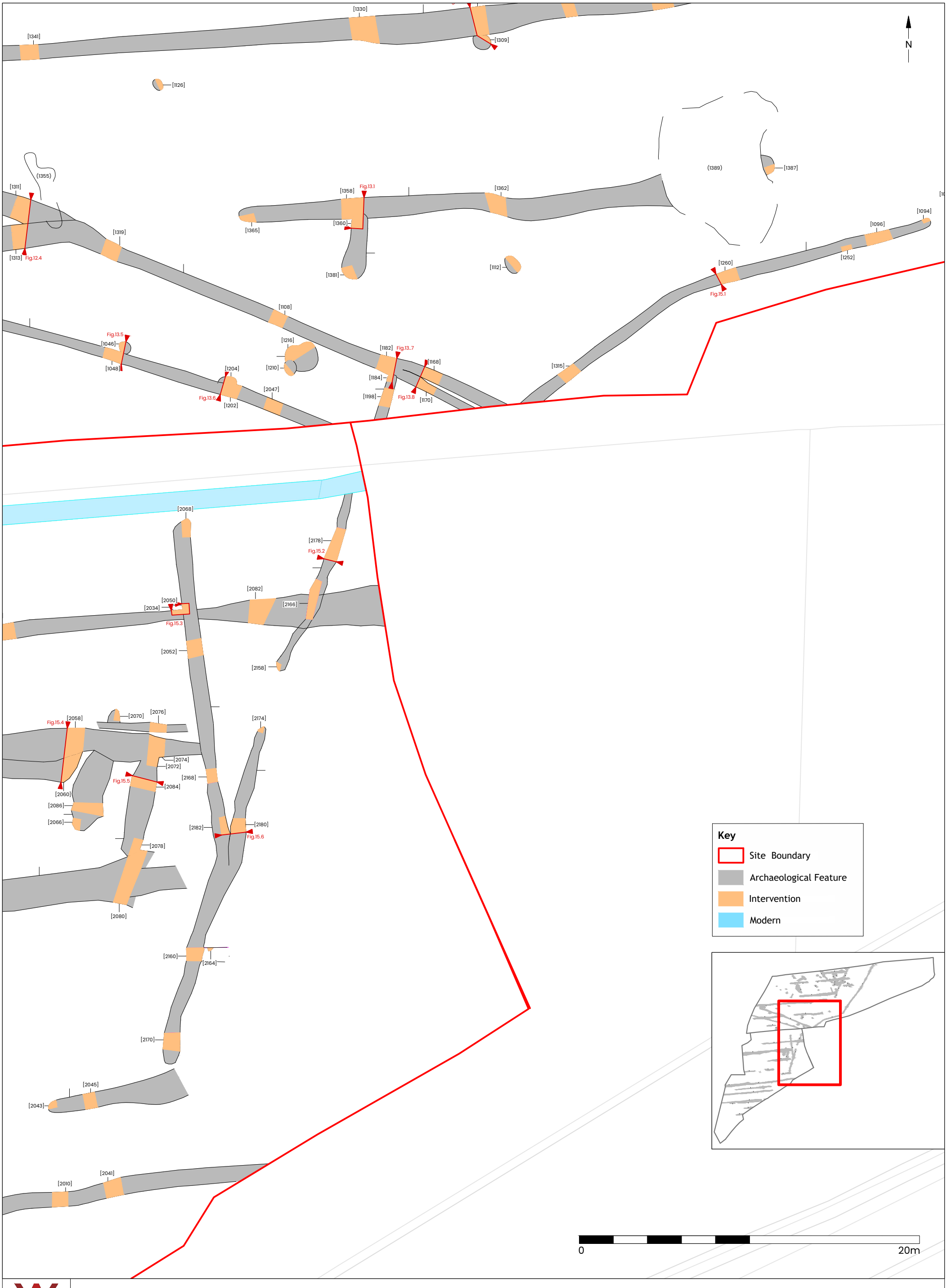

Figure 14 - Plan Of Northern Area 2
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:200
Drawn by MI

Fig.15.1
North East Facing Section [1260]

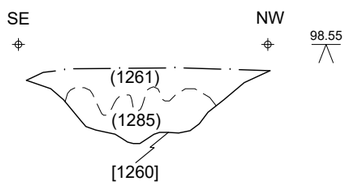

Fig.15.2
North East Facing Section [2178]

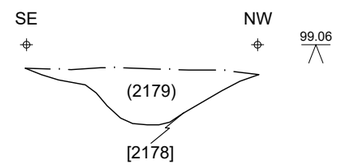

Fig.15.3
South, West, North & West Facing Section [2034] & [2050]

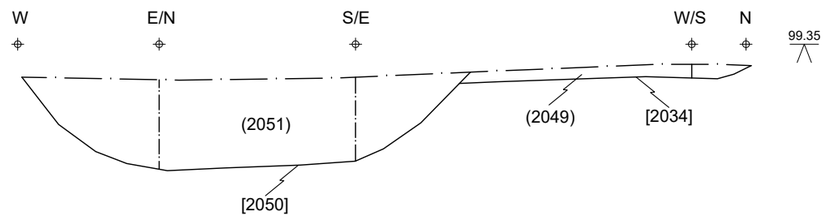

Fig.15.4
East Facing Section [2058] & [2060]

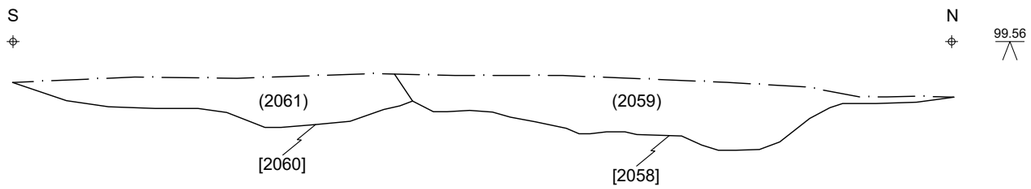

Fig.15.5
South Facing Section [2084]

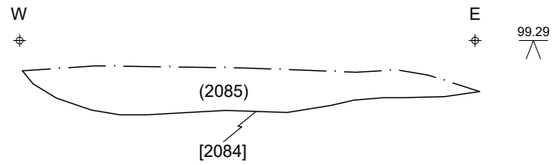

Fig.15.6
North Facing Section [2180] & [2182]

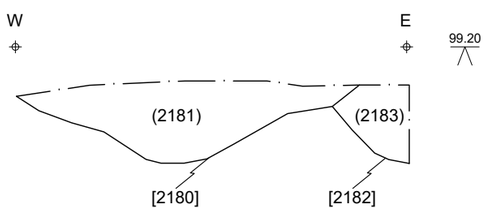

Figure 15 - Section Figures 15.1 - 15.6
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:20
Drawn by MI

Figure 16 - Plan Of Southern Area 2
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:200
Drawn by MI

Fig.17.1
East Facing Section [2020]

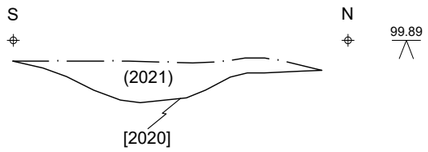

Fig.17.2
South West Facing Section [2112] & [2114]

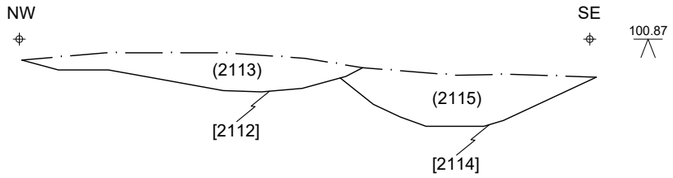

Fig.17.3
East Facing Section [2030] & [2032]

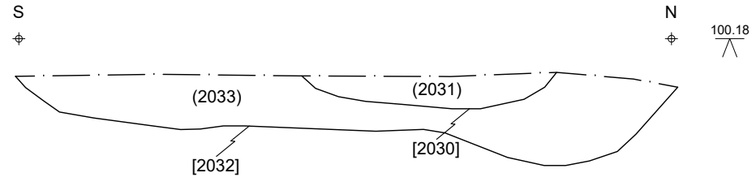

Fig.17.4
North East Facing Section [2100] & [2102]

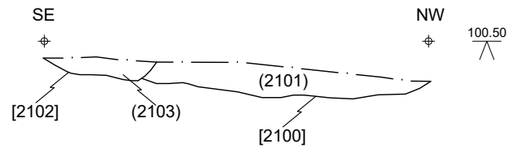

Fig.17.5
East Facing Section [2098]

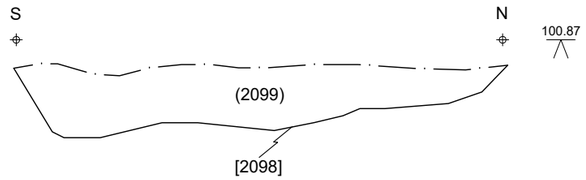

Fig.17.6
West Facing Section [1371] & [1373]

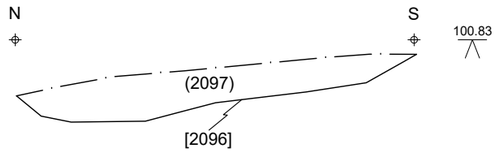

Fig.17.7
East Facing Section [2121]

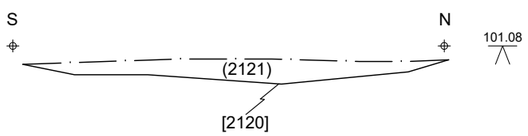

Fig.17.8
East Facing Section [2106]

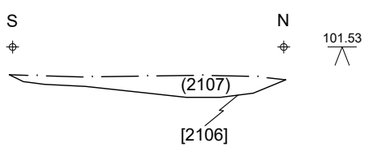

Figure 17 - Section Figures 17.1 - 17.8
HRS - Harthill Reservoir, Harthill, South Yorkshire

Scale at A3 - 1:20
Drawn by MI

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