# LAND NORTH OF DUNS ROAD (A6105), BERWICK-UPON-TWEED, NORTHUMBERLAND

## WATCHING BRIEF REPORT

**APRIL 2019**

PRE-CONSTRUCT ARCHAEOLOGY

# Land North of Duns Road (A6105), Berwick-upon-Tweed, Northumberland

## Archaeological Watching Brief

*Commissioning Client:*

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***DOCUMENT VERIFICATION***

**WATER PIPELINE REPLACEMENT SCHEME ON LAND NORTH OF DUNS ROAD (A6105), BERWICK-UPON-TWEED, NORTHUMBERLAND**

**WATCHING BRIEF REPORT**

| **Pre-Construct Archaeology Limited Quality Control** | |
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## CONTENTS

## 1. NON-TECHNICAL SUMMARY

1.1 An archaeological watching brief was undertaken by Pre-Construct Archaeology Limited ahead of a water pipeline replacement scheme on land north of Duns Road (A6105), Berwick-upon Tweed, Northumberland. The route of the new pipeline was approximately 387m long with an easement strip of 10m. It ran between two reservoirs starting from the western margin of the field (NT 98094 54568) extending to the southeast and terminating at the eastern reservoir (NT 98378 54330). The work was commissioned by Northumbrian Water and was carried out between 3-16 April 2019.

1.2 The site of the new pipeline ran across an open arable field within a wider landscape that had been populated from at least the Late Iron Age. The route of the new pipeline extended across a series of undated linear cropmarks that the Northumberland Historic Environment record described as an enclosure (HER 2471). The HER identified two further cropmarks to the north including Halidon Hill Iron Age fort (HER 23839) and Prehistoric or Roman sub-circular cropmark (HER 23869).

1.3 The installation of the new pipeline involved the disturbance of potential archaeological features associated with cropmarks (HER 2471) and it was the aim of this scheme of work to mitigate potential impacts to the heritage resource.

1.4 No Specification for the archaeological work was produced by Northumberland County Council Conservation Team (NCCCT), however, a Written Scheme of Investigation was produced by PCA (2019) which was approved by NCCCT prior to works commencing.

1.5 The archaeological work involved monitoring the invasive groundworks including six Test Pits to expose the line of the old water main followed by the pipeline for the new water pipe. Three linear ditches relating to crop mark HER2471 were excavated and recorded. Two sherds of post-medieval pottery and a fragment of ceramic building material were recovered from the easternmost ditch [709].

1.6 Four phases of activity were encountered during the watching brief: Phase 1: Superficial geology; Phase 2: Post-medieval field boundaries; Phase 3: Subsoil; Phase 4: Ploughsoil and modern services.

1.7 No archaeological deposits of significance were encountered during the watching brief, with cropmark HER 2471 representing post-medieval field boundaries at the site that were backfilled prior to the first edition Ordnance Survey of 1860.

# 2. INTRODUCTION

## 2.1 Project Background

2.1.1 This report details the results of an archaeological watching brief undertaken between 3-16th April 2019 on land north of Duns Road (A6105), Berwick-upon-Tyne, Northumberland (Figures 1 and 2). The archaeological investigation was commissioned by Northumbrian Water and was undertaken by Pre-Construct Archaeology Limited (PCA) in association with a scheme to replace a watermain.

2.1.2 The site was of archaeological interest because it lies within a landscape that was densely populated from at least the Iron Age. The route of the new pipe line also extended across a series of undated linear cropmarks (HER 2471) thought to be prehistoric in origin.

2.1.3 The archaeological work involved the monitoring of six test pits to identify the route of an old watermain that crossed the site as well as the monitoring of a pipeline for the new watermain.

2.1.4 The scope of works for the archaeological watching brief was set out in a Written Scheme of Investigation compiled by PCA (2019) and approved by NCCCT prior to work commencing at the site.

2.1.5 The Online Access to the Index of Archaeological Investigation (OASIS) reference number of the project is: preconst1-349739.

## 2.2 Site Location and Description

2.2.1 The site lies *c.* 2km northeast of the town of Berwick-upon-Tweed and comprises an open arable field situated north of Duns Road (A6105), Berwick-upon-Tweed, Northumberland (Figure 1). The route of the proposed new pipeline extends NW/SE across the central part of the field, downhill to the southeast, from a small reservoir located at the western margin of the field (NT 98094 54568) for a distance of *c.* 387m to a larger covered reservoir situated in the adjacent field to the east (NT 98378 54330) (Figure 2).

## 2.3 Geology and Topography

2.3.1 Within the context of the *Natural England National Character Areas,* the site lies in National Character Area 1: North Northumberland Coastal Plain (Natural England Website). The area is summarised thus:

*The North Northumberland Coastal Plain is a narrow, windswept strip that runs from the Anglo-Scottish border south to the mouth of the River Coquet, bounded by the sea to the east and the Northumberland Sandstone Hills to the west. The gently undulating inland plain is dominated by arable farming, with large, regular fields bounded by gappy hedgerows and in some places grey sandstone walls, with some pasture for beef cattle and sheep. Woodland cover is sparse and predominantly confined to the river valleys that meander across the coastal plain and the estate woodlands around Howick. The dramatic coastline is*

*exceptionally varied, with rocky headlands and cliffs contrasting with long, sweeping sandy beaches backed by dunes, and extensive intertidal mudflats and salt marsh around Lindisfarne. The nationally important Whin Sill outcrops both inland and at the coast, supporting rare Whin grassland, and forming the distinctive rocky Farne Islands offshore.*

2.3.2 The solid geology of this part of Berwick-upon-Tweed is composed of Sedimentary Bedrock of the Hawick Group- Wacke formed approximately 427 to 444 million years ago (British Geological Survey website). The superficial geological comprises Devensian till deposits formed up to two million years ago in the Quaternary period (*ibid.*). The soils are primarily freely draining slightly acidic loamy soils (Soilscapes website).

2.3.3 The site is located on the slope of Halidon Hill, sloping down from west at 119.71m AOD to east at 89.09m AOD. The nearest fresh water watercourse is the River Tweed approximately 995m to the south of the site.

## 2.3 Planning Background

2.3.1 The *National Planning Policy Framework* (NPPF) (Department for Communities and Local Government 2019) enables planning authorities to request archaeological investigations within areas of potential in order to ascertain the nature and extent of any below ground remains likely to be impacted by the work. The NPPF aims to balance the demands of development with conservation, respecting both national standards and local empowerment but carries a presumption in favour of sustainable development.

2.3.2 Northumberland County Council Conservation Team monitors all planning applications and other development proposals, in this case utility work, in Berwick-upon-Tweed and advises the LPA on a suitable response regarding the potential implications of proposed schemes regarding the historic environment.

2.3.3 All archaeological work will be undertaken in compliance with the codes and practice of the Chartered Institute for Archaeologists and the relevant CIfA standard and guidance document (CIfA 2014 a, b & c). PCA is a CIFA Registered Organisation. All fieldwork and post-excavation were carried out in accordance with the Yorkshire, the Humber & The North East: Regional Statement of Good Practice (SYAS 2011).

2.3.4 No Specification for the archaeological work was produced by NCCT however, a Written Scheme of Investigation (WSI) for the archaeological work was submitted and approved by NCCCT prior to work commencing (PCA 2019).

## 2.4 Historical Background

*Below is a summary of the archaeological and historical background. Some of this information has been obtained from the Northumberland Historic Environment Record.*

2.4.1 The route of the proposed pipeline lies within a rich prehistoric environment. The archaeological record for Iron Age settlement in south-eastern Scotland and north-eastern

England is dominated by hillforts and enclosed settlements. Large numbers of hillforts survive as upstanding earthworks in the uplands, but aerial photography has demonstrated that hillforts and defended settlements are also present in some numbers in the lowlands (Gates and Deegan 2009).

2.4.2 Several potential prehistoric sites have been identified through the examination of aerial photographs within the near vicinity of Halidon Hill which lies *c.* 1.2km to the west of the site. The defended Iron Age settlement near the summit of Halidon Hill is a Scheduled Monument (Historic England Ref. 1003657; Halidon Hill Settlement) that survives as a cropmark and in places as a low earthwork, suggesting a circular ditched enclosure. An individual find of a prehistoric mace head (HER 2459) was found on Halidon Hill in 1967 and is probably of Bronze Age origin.

2.4.3 Located *c.* 550m east of the proposed pipeline route, a further Scheduled Monument known as Camphill Settlement (Historic England Ref. 1003658; Camphill Settlement) survives as concentric circular cropmarks, possibly with an annex, situated on the crest of a ridge. Although the precise date of the monument is unknown its form suggests a Later Prehistoric date.

2.4.4 Part of a substantial Late Iron Age enclosure (HER 2401) located *c.* 1.1km northeast of the new pipeline route was initially identified by aerial photography as a cropmark at the top of the cliffs at Needles Eye. A phased programme of archaeological work was undertaken by Pre-Construct Archaeology across the western part of the enclosure in advance of commercial development including geophysical survey, archaeological evaluation and excavation (PCA 2005 & 2006). The work recorded a multi phased enclosure that was initially bounded by a palisade and subsequently replaced by a series of ditches. Although only a limited portion of the internal area was exposed during the work significant artefactual assemblages were recovered and of note was evidence of salt processing activity within the enclosure during the Late Iron Age.

2.4.5 Three cropmarks identified by aerial photography in 1992 (NT985/22TMG (13970/6) 10-July-1992) are located within the near vicinity of the route of the new pipeline (HER 2471, HER 23869 & HER 23839) (Figure 2). The pipeline extends across a group of ENE-WSW and NNW-SSE aligned linear cropmarks (HER 2471) that the HER interprets as an enclosure of unknown origin.

2.4.6 Two cropmarks identified by aerial photos are located to the north of the new pipeline route (HER 23869 & HER 23839). A sub-circular cropmark (HER 23869) thought to represent a prehistoric or Roman enclosure has dimensions of 51m by 34m and is located *c.* 130m north of the new pipeline route. Halidon Hill Iron Age fort (HER 23839) is located *c.* 280m north of the new pipeline route and survives as two curvilinear cropmarks that probably represent ditches *c.* 9m apart. Only the south-west part of the hill fort enclosure was visible with the remaining portion obscured by a small area of woodland to the northeast.

2.4.7 The route of the proposed new pipeline lies within a large agricultural field and various 19th and 20th century Ordnance Survey maps depict the site as largely unchanged from the 19th century to the present day. The Ordnance Survey map of 1962 does show that the site had been divided into two fields by this time and the NE/SW aligned boundary delimiting the two fields extends across the route of the new pipeline. The boundary is no longer present at the site and has reverted to a single large agricultural field.

# 3. PROJECT AIMS AND RESEARCH OBJECTIVES

## 3.1 Project Aims

3.1.1 The archaeological work is being undertaken following consultation with Karen Derham, County Archaeologist at NCCCT.

3.1.2 The primary aim of the programme of works is to determine the absence/presence of archaeological remains. The archaeological work will identify, investigate and record any archaeology remains observed during the stripping of the pipeline easement. The new pipeline route also extended across a series of linear cropmarks (HER 2471), therefore the work would also define the nature and date of any potential archaeological features associated with these cropmarks.

## 3.2 Research Objectives

3.2.1 Archaeological work at the site provides potential opportunities to address key research objectives as set out in *Shared Visions: The North East Regional Research Framework for the Historic Environment (NERRF*) (Petts & Gerrard 2006). The NERRF highlights the importance of research as a vital element of development-led archaeological work. It sets out key research priorities for all periods of the past so that elements of commercial archaeological work can be relate to wider regional and national priorities for the study of archaeology and the historic environment.

3.2.2 The NERRF Research Strategy for the Iron Age period has identified Key Research Themes which address a range of archaeological topics. The proposed route of the new pipeline extends across a series of linear cropmarks (HER 2471) and is within the near vicinity of two circular cropmarks of probably Iron Age origins (HER 23869 & 23839). The archaeological watching brief work has the potential to provide a contribution to all these Key research Themes:

I1. Chronology;

I2. Changing landscapes;

I3. Settlement function;

I4. Social organisation and identity;

I5. Material culture.

# 4. ARCHAEOLOGICAL METHODOLOGY

## 4.1 Fieldwork

4.1.1 The watching brief was undertaken in compliance with the codes and practice of the Chartered Institute for Archaeologists and the relevant CIfA standard and guidance document (CIfA 2014 a & b). PCA is a CIFA 'Registered Organisation'. All fieldwork and post-excavation work was carried out in accordance with the Yorkshire, the Humber & The North East: Regional Statement of Good Practice (SYAS 2011).

4.1.2 The project was managed in line with principles set out in Historic England's *'Management of Research Projects in the Historic Environment'* (MoRPHE) published in 2006.

4.1.3 All archaeological staff involved in the project were suitably qualified and experienced for their project roles. The project was overseen for PCA by Aaron Goode, Project Manager at PCA Durham.

4.1.4 The scheme involved the archaeological monitoring of groundworks associated with the renewal of a water pipeline between two serve reservoirs on land north of Duns Road (A6105), Berwick-upon-Tweed, Northumberland (Figure 1 & 2). Prior to the new pipeline being excavated, the old route of the watermain had to be located. This was located by excavating test pits across its length so the new works would avoid damaging the line prior to the new main being installed. The old watermain was only observed within test pits 4, 5 and 6. The test pit dimensions are listed below with their location shown in Figure 2:

| Test Pit | Measurements (m) | | |
|---|---|---|---|
| | Length | Width | Depth |
| 1 | 1.30 | 0.60 | 1.60 |
| 2 | 1.40 | 1.10 | 1.10 |
| 3 | 1.80 | 0.76 | 1.00 |
| 4 | 1.72 | 0.62 | 0.90 |
| 5 | 9.28 | 0.60 | 1.10 |
| 6 | 1.32 | 0.60 | 0.86 |

4.1.5 The archaeological monitoring of the 387m pipeline within the 10m wide strip was undertaken until either archaeology or the upper interface of the superficial geology was encountered; whichever was reached first. The pipeline was excavated using an eight tonne 360˚ excavator fitted with a wide toothless ditching bucket. The entire length of the pipeline was taken down to superficial geological levels.

4.1.6 Any archaeological remains of possible significance exposed during groundworks were examined, cleaned, excavated and recorded, to an appropriate level and in accordance with the methodology set out in the CIfA guidelines and *Fieldwork Induction Manual: Operations Manual I* (PCA 2009). During the archaeological work, a high priority was given to dating any archaeological remains. Therefore, all relevant artefacts and finds were retained.

4.1.7 Deposits and cut features were individually recorded on the *pro-forma* 'Trench Recording Sheet' and 'Context Recording Sheet'. All site records were marked with the unique-number HHB19 (site code). All archaeological features were excavated by hand tools and recorded in plan at 1:20 or in section at 1:10 using standard 'single context recording' methods. The height of all principal strata and features was calculated in metres above Ordnance Datum (m AOD) and indicated on appropriate plans and sections. Test pits and the new pipeline were located using a Leica Viva Smart Rover Global Navigation Satellite System (GNSS) and tied into the Ordinance Survey Grid.

4.1.8 A detailed photographic record of the watching brief was prepared using SLR cameras (35mm film black and white prints for archive purposes) and by digital SLR photography. All detailed photographs included a legible graduated metric scale.

### 4.2 Post-excavation

4.2.1 The stratigraphic data for the project comprises written and photographic records. A total of 36 archaeological contexts were defined within the six test pits and the pipeline trench (Appendix 2). Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data. A written summary of the archaeological sequence was then compiled, as described in Section 5.

4.2.2 Two sherds of post-medieval pottery and a fragment of ceramic building material were recovered from the investigations.

4.2.3 The complete Site Archive, in this case comprising only the written, drawn and photographic records (including all material generated electronically during post-excavation) will be packaged for long term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document (Brown 2007) will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document (Walker, UKIC 1990) and the most recent CIfA publication relating to arching (CIfA 2014c).

4.2.4 At the time of writing, the Site Archive was housed at the Durham Office of PCA, The Rope Works, Broadwood View, Chester-le-Street, County Durham, DH3 3AF. When complete, the Site Archive will be housed internally at the Durham Office of PCA.

# 5. RESULTS: THE ARCHAEOLOGICAL SEQUENCE

*During the archaeological investigation, separate stratigraphic entities were assigned unique and individual context numbers, which are indicated in the following text as, for example [123]. The context numbers have been assigned per area therefore contexts from Test Pit 1 are in the 100s, Test Pit 3 in the 300s and the new pipeline trench in the 700s etc. The archaeological sequence is described by placing stratigraphic sequences within broad phases, assigned on a site-wide basis in this case. An attempt has been made to add interpretation to the data and correlate these phases with recognised historical and geological periods. The figures can be found in Appendix 1 with the context index and stratigraphic matrix located in Appendix 2 and 3 respectively. A selection of plates can be found within Appendix 4.*

## 5.1 Phase 1: Superficial geology

5.1.1 Phase 1 represents the superficial geology exposed within all test pits and the pipeline trench. This comprised loose mid/dark reddish-brown till [101], [201], [301], [401], [501], [601], [701].

5.1.2 The superficial geology was encountered at a depth of *c.* 0.33m below the existing ground level at the south-easternmost end of the easement strip, encountered at 91.33m AOD, and c. 0.40m below the existing ground level at the north-westernmost end of the easement strip, encountered at 117.80m AOD.

## 5.2 Phase 2: Post-medieval

5.2.1 Phase 2 represents Post-medieval field boundaries encountered within the pipeline easement strip.

5.2.2 Three linear ditches were exposed running across the trench that closely corresponded to cropmarks noted on the Northumberland HER (HER 2471). The north-westernmost ditch, [704], was aligned ENE-WSW and was exposed for a distance 6.40m (Figure 3). It was 1.76m wide by 0.60m deep and was encountered at maximum and minimum heights of 117.14m AOD and 116.48m AOD, respectively (Figure 3; Section 1; Plate 1). Ditch [704] was filled with soft mid greyish brown sandy clay [703] *c.* 0.22m thick and soft dark brownish grey sandy clay [702] *c.* 0.46m thick.

5.2.3 A shallower ditch [707] was recorded c. 20m to the south-east of ditch [704] and was similarly aligned ENE-WSW (Figure 3). This ditch was exposed for a distance of 7.20m and had dimensions of 0.72m wide by 0.10m deep, encountered at a maximum height of 115.53m AOD (Figure 3: Section 2; Plate 2). A single fill was observed comprising a soft dark greyish brown sandy clay [706] *c.* 0.10m thick.

5.2.4 The south-easternmost ditch [709] was aligned NNE-SSE and represents the return of the cropmark (Figure 4). Ditch [709] was exposed for a distance of 8.20m and had dimensions

of 2.2m wide by 0.62m deep (Figure 4: Section 3; Plate 3). This ditch was encountered at a maximum height of 98.62m AOD. Ditch [709] was backfilled by soft mid greyish brown sandy clay [708] *c.* 0.62m thick from which two sherds of post-medieval pottery were recovered along with one fragment of ceramic building material.

5.2.5 Although no artefactual material was recovered from ditches [704] or [707] they are likely to be contemporary with ditch [709] as the cropmark shows them to be the northeast-southwest return of Ditch [709] (Plate 4). The cropmark represents a backfilled field boundary with the ENE-WSW aligned ditches terminating at the existing entrance to the field. The field boundary would have conceivably been backfilled by the time of the Ordnance Survey of 1860-1861 as it does not appear on any later historic OS maps.

### 5.3 Phase 3: Subsoil

5.3.1 Subsoil was noted within Test Pits 1, 2, 6 and within the new pipeline trench. Subsoil was encountered extending across the easement and comprised soft dark brownish grey clayey silt [102], [202], [602] and [705]. The subsoil ranged from a minimum thickness of 0.27m at the north-western part of the easement to a maximum thickness of 0.44m at the central and south-eastern parts of the easement.

5.3.2 The subsoil was noted to overlay the backfill of ditches [704], [707] and [709] so was clearly formed relatively late after the removal of the field boundaries.

### 5.4 Phase 4: Ploughsoil and modern services

5.4.1 Phase 4 represents modern watermains at the site and also ploughsoil that formed the current ground level.

5.4.2 The old watermain that was to be replaced within this phase of works was exposed within Test Pits 4 and 5. Within Test Pit 4 two water services were uncovered. The northernmost comprised two blue plastic pipes [406] *c.* 0.12m in diameter that were placed within a service trench, [407], approximately 0.62m wide and 0.90m deep. The trench was backfilled by soft dark greyish brown sandy clay [405] *c.* 0.90m thick. The southern watermain comprised a single blue plastic pipe [403] *c.* 0.12m in diameter within a service trench, [404], approximately 0.58m wide and 0.88m deep. This was backfilled by soft dark greyish brown sandy clay [402] *c.* 0.88m thick.

5.4.3 Ploughsoil comprised soft dark greyish brown sandy silt [100], [200], [300], [400], [500], [600], and [700]. The ploughsoil at the at the north-western end of the easement was c. 0.40m thick and at the base of the slope at the south-eastern end of the easement the ploughsoil was c. 0.10m thick. The maximum and minimum heights which ploughsoil was recorded was 118.34m AOD and 91.33m AOD, respectively.

# 6. CONCLUSIONS AND RECOMMENDATIONS

## 6.1 Conclusions & Recommendations

6.1.1 The archaeological watching brief on land north of Duns Road (A6105), Berwick-upon-Tweed involved the monitoring of six test pits and a pipeline that crossed the site. The aim of the work was to determine the likely impact on potential archaeological remains related to cropmark HER 2471. Geological deposits, post-medieval field boundaries, subsoil, modern water services and ploughsoil were encountered at the site. This was assigned to four phases of activity:

- Phase 1: Superficial geological deposits comprising glacial till was encountered in all areas;
- Phase 2: Three ditches corresponded to cropmark HER 2471 on the site. Post-medieval pottery was recovered from eastern ditch [709] which suggests that the cropmark represents backfilled field boundaries. As the boundary does not appear on historic Ordnance Survey maps, the ditches would have been backfilled prior to 1860; the date of the first edition map.
- Phase 3: Subsoil was observed from the centre of the site running down the slope of Halidon Hill to the east.
- Phase 4: Modern water services and plough soil.

6.1.2 No features of archaeological significance were recorded during the watching brief, therefore no further work is required, with the Site Archive (including this report) forming the permanent record of the strata encountered.

# 7. REFERENCES

## 7.1 Bibliography

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## 7.2 Online Sources

*The British Geological Survey* website: www.bgs.ac.uk.

*MAGIC* website: http://magic.defra.gov.uk/

*Natural England* website: http://publications.naturalengland.org.uk/category/587130

*Soilscapes* website: http://www.landis.org.uk/soilscapes/

# 8. ACKNOWLEDGEMENTS AND CREDITS

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**PCA Credits**

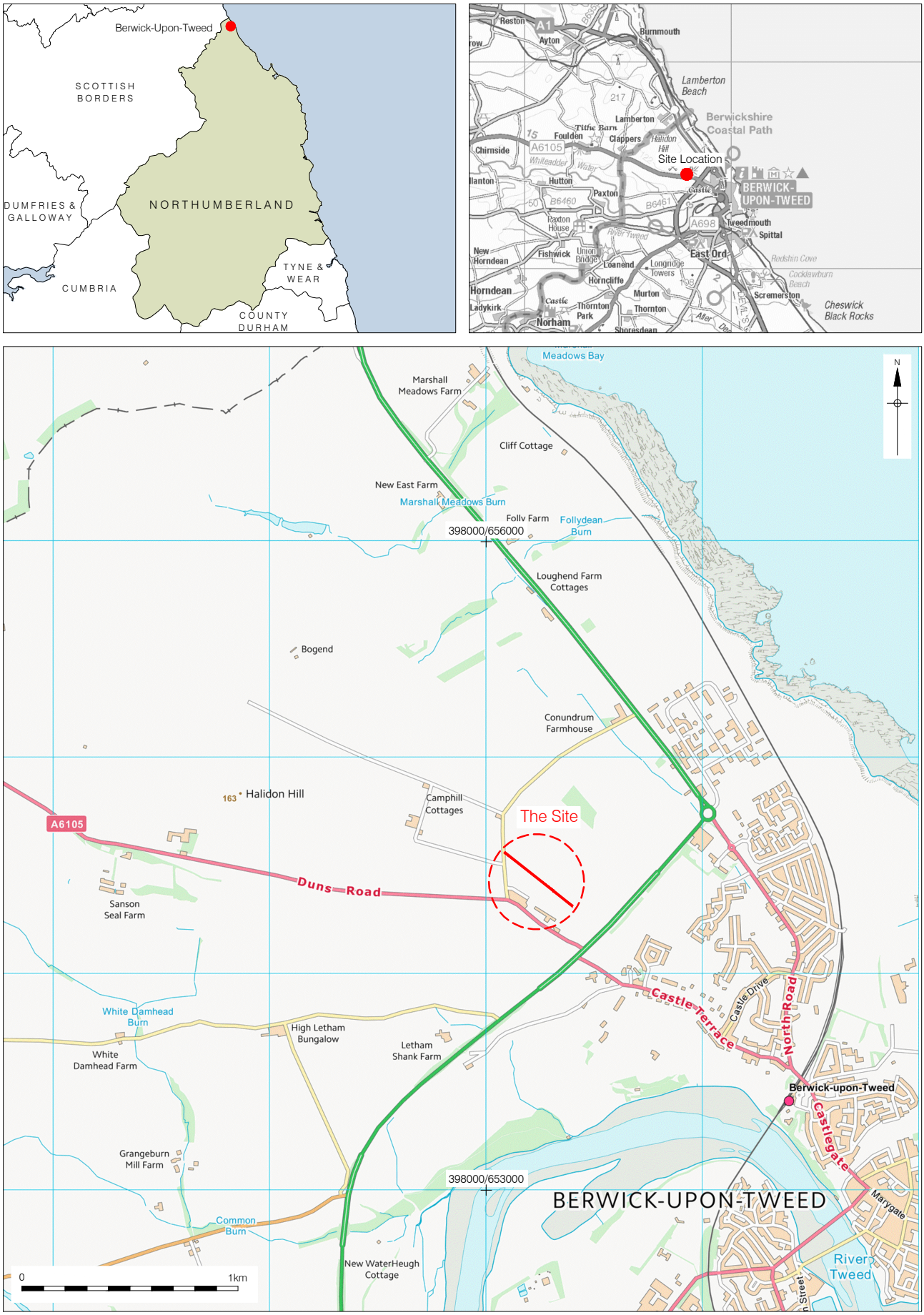
*Fieldwork:* Scott Vance (Supervisor) and Dani Floyd

*Report:* Scott Vance

*Project Manager:* Aaron Goode

*CAD:* Diana Valk

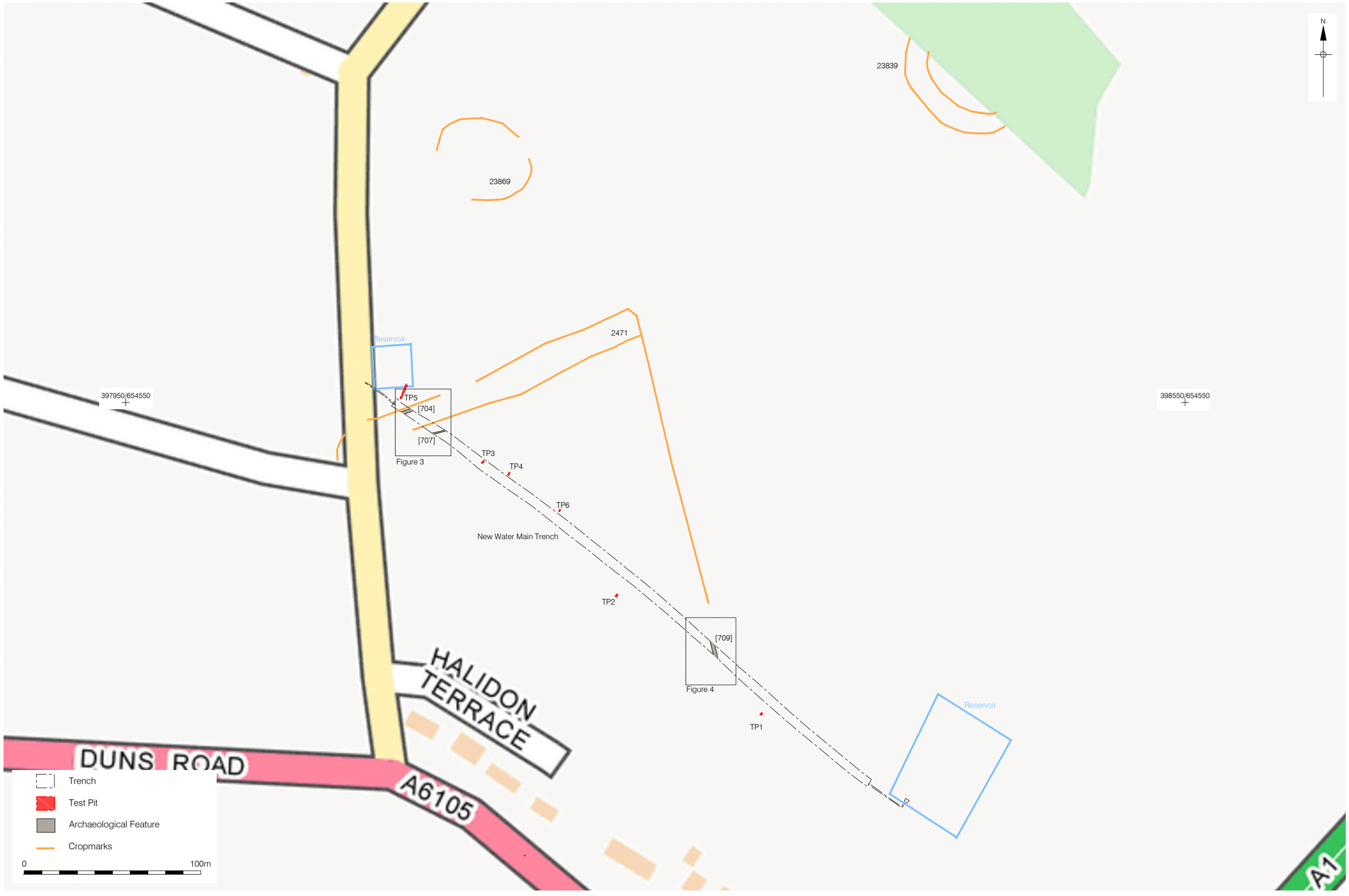
# APPENDIX 1: FIGURES





25/04/19 DV

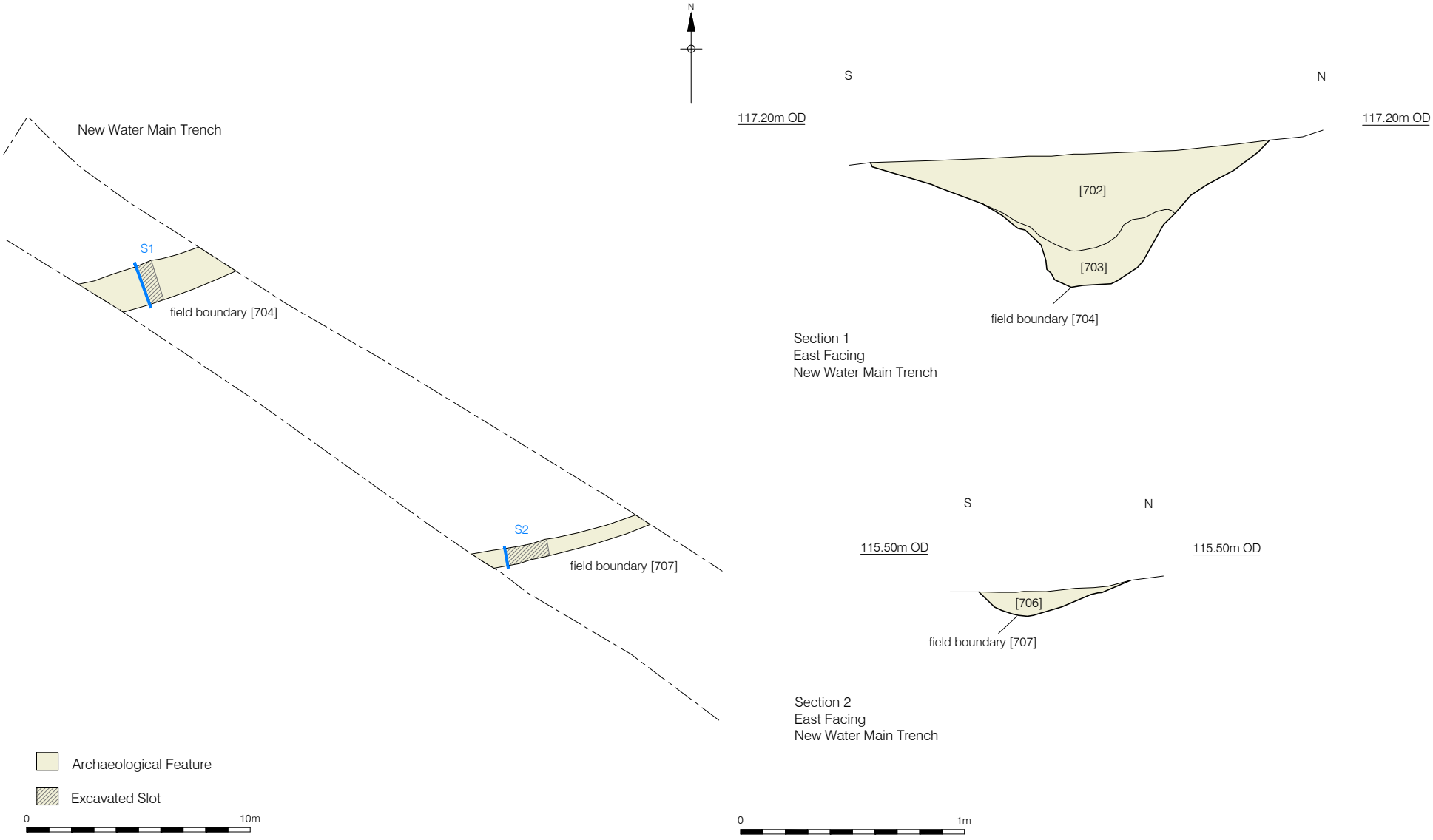
Figure 1
Site Location
1:2,000,000, 1:250,000, 1:25,000 at A4





25/04/19 DV

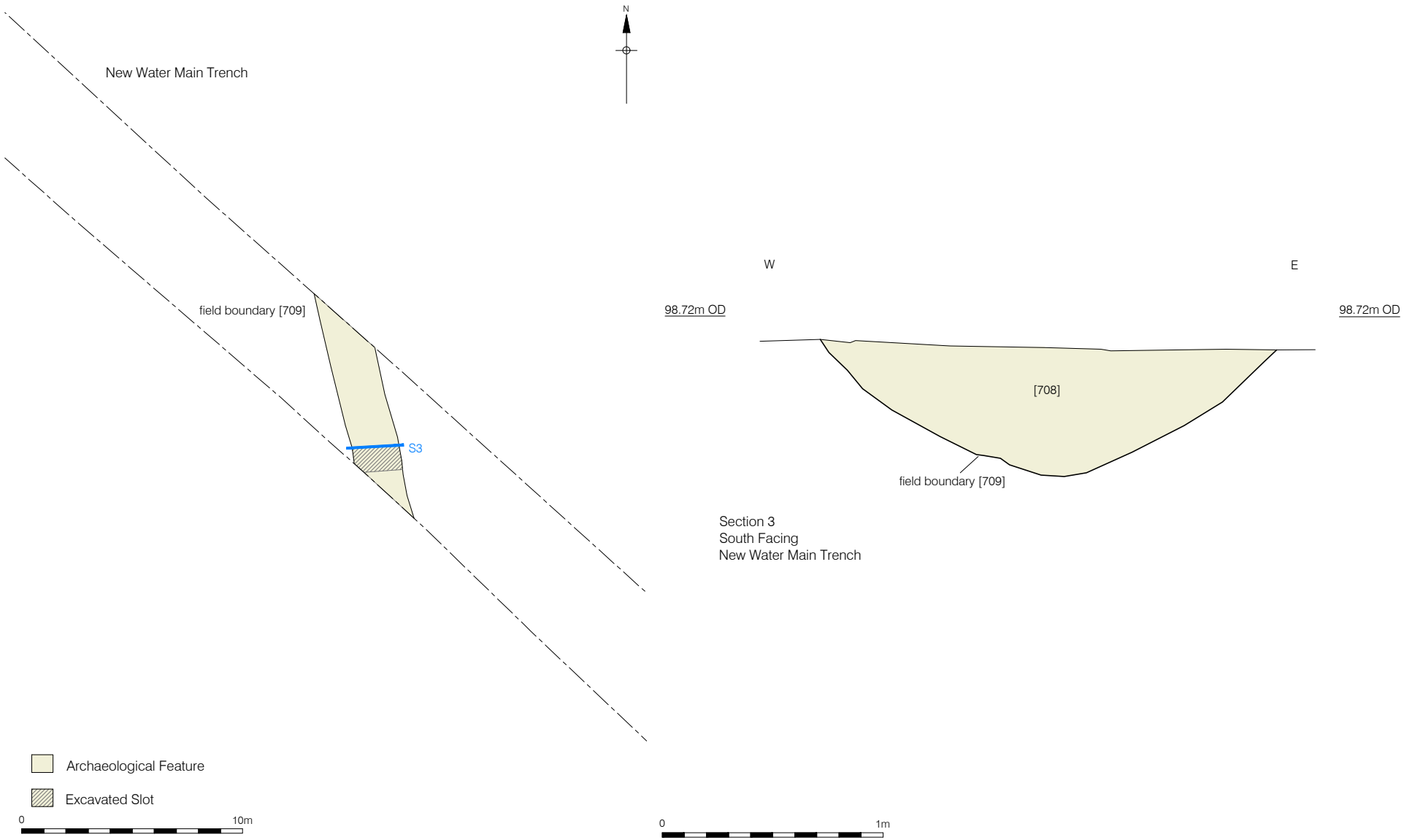
Figure 2
Watching Brief Area and Cropmarks
1:2,000 at A3





25/04/19 DV

Figure 3
Plan and Sections of Field Boundaries [704] and [707]
Plan at 1:250 and Sections at 1:25 at A4




Section 3
South Facing
New Water Main Trench


25/04/19 DV

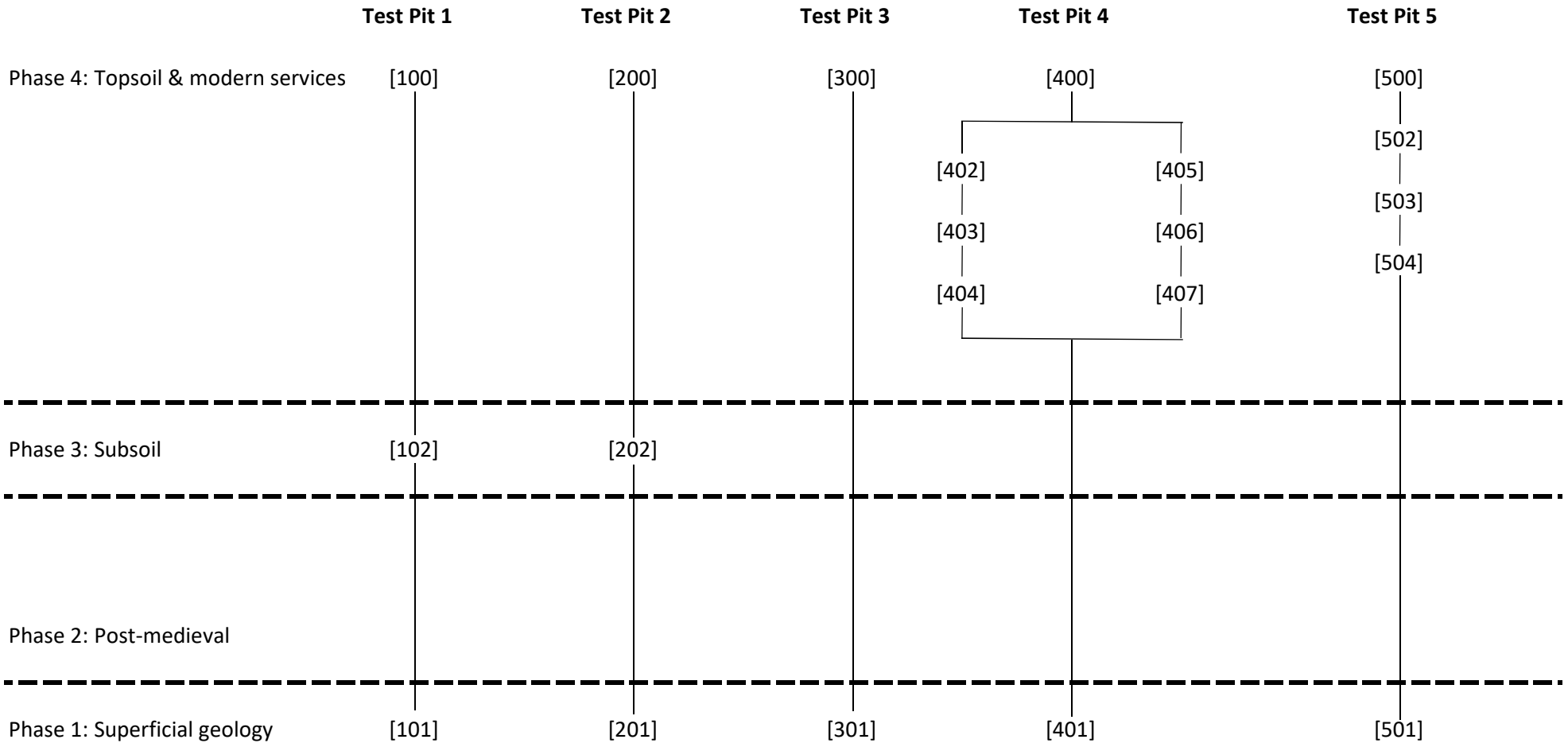
Figure 4
Plan and Section of Field Boundary [709]
Plan at 1:250 and Section at 1:25 at A4

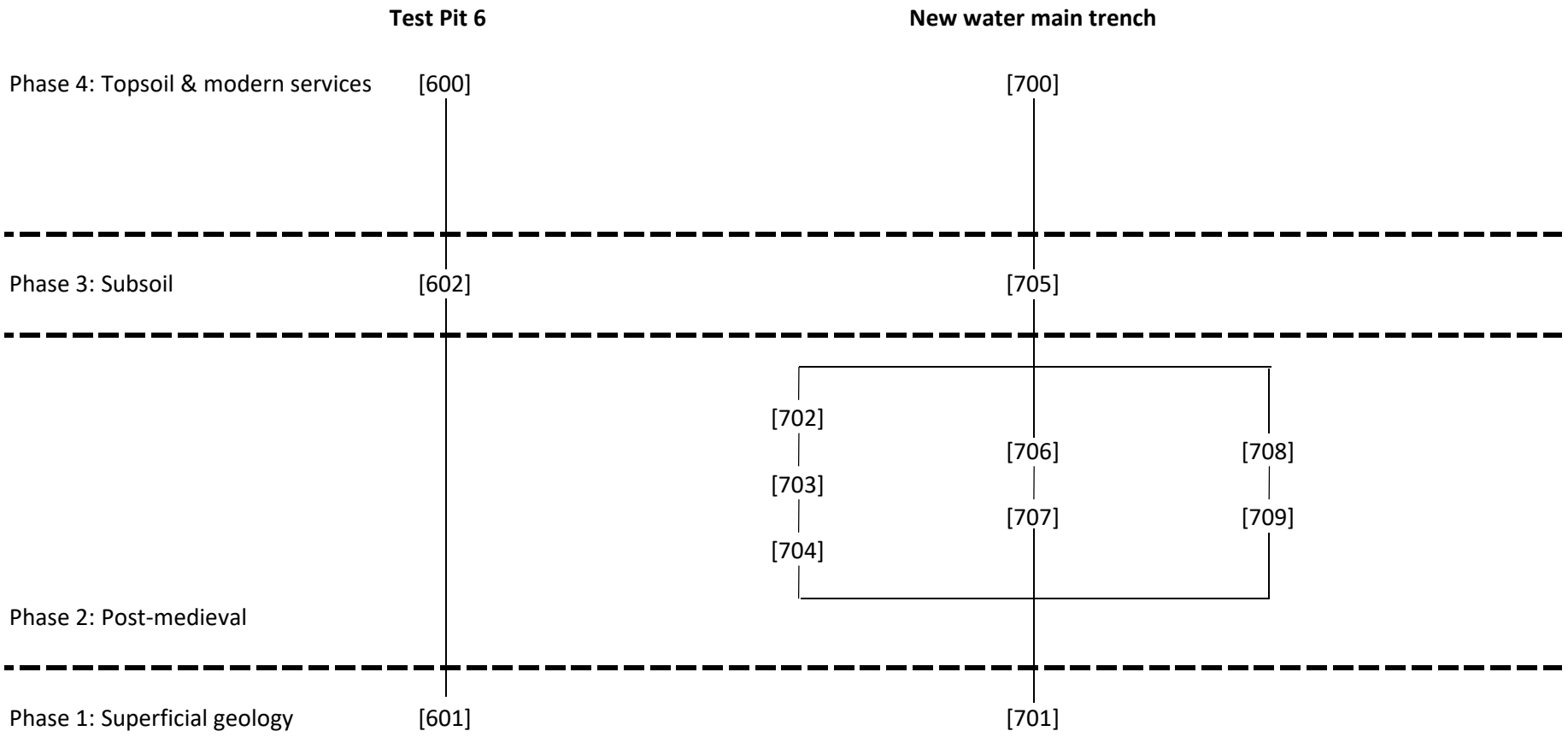
## APPENDIX 2: CONTEXT INDEX

| *Context* | *Phase* | *Type 1* | *Type 2* | *Fill of* | *Interpretation* |
|---|---|---|---|---|---|
| Test Pit 1 | | | | | |
| 100 | 4 | Deposit | Layer | | Ploughsoil |
| 101 | 1 | Deposit | Layer | | Superficial geology |
| 102 | 3 | Deposit | Layer | | Subsoil |
| Test Pit 2 | | | | | |
| 200 | 4 | Deposit | Layer | | Ploughsoil |
| 201 | 1 | Deposit | Layer | | Superficial geology |
| 202 | 3 | Deposit | Layer | | Subsoil |
| Test Pit 3 | | | | | |
| 300 | 4 | Deposit | Layer | | Ploughsoil |
| 301 | 1 | Deposit | Layer | | Superficial geology |
| Test Pit 4 | | | | | |
| 400 | 4 | Deposit | Layer | | Ploughsoil |
| 401 | 1 | Deposit | Layer | | Superficial geology |
| 402 | 4 | Deposit | Fill | [404] | Fill of watermain trench [404] |
| 403 | 4 | Other | Pipe | [404] | Blue plastic watermain |
| 404 | 4 | Cut | Linear | | Cut for old plastic watermain |
| 405 | 4 | Deposit | Layer | [407] | Fill of watermain trench [407] |
| 406 | 4 | Other | Pipe | [407] | Blue plastic watermain |
| 407 | 4 | Cut | Linear | | Cut for old plastic watermain |
| Test Pit 5 | | | | | |
| 500 | 4 | Deposit | Layer | | Ploughsoil |
| 501 | 1 | Deposit | Layer | | Superficial geology |
| 502 | 4 | Deposit | Fill | [502] | Fill of watermain trench [504] |
| 503 | 4 | Other | Pipe | [502] | Blue plastic watermain |
| 504 | 4 | Cut | Linear | | Cut for old plastic watermain |
| Test Pit 6 | | | | | |
| 600 | 4 | Deposit | Layer | | Ploughsoil |
| 601 | 1 | Deposit | Layer | | Superficial geology |
| 602 | 4 | Deposit | Fill | [604] | Fill of watermain trench [604] |
| 603 | 4 | Other | Pipe | [604] | Blue plastic watermain |
| 604 | 4 | Cut | Linear | | Cut for old plastic watermain |
| New water main trench | | | | | |
| 700 | 4 | Deposit | Layer | | Ploughsoil |
| 701 | 1 | Deposit | Layer | | Superficial geology |
| 702 | 2 | Deposit | Fill | [704] | Fill of field boundary [704] |
| 703 | 2 | Deposit | Fill | [704] | Fill of field boundary [704] |
| 704 | 2 | Cut | Linear | | Post-medieval field boundary |
| 705 | 3 | Deposit | Layer | | Subsoil |
| 706 | 2 | Deposit | Fill | [707] | Fill of field boundary [707] |
| 707 | 2 | Cut | Linear | | Post-medieval field boundary |
| 708 | 2 | Deposit | Fill | [709] | Fill of field boundary [709] |
| 709 | 2 | Cut | Linear | | Post-medieval field boundary |

# APPENDIX 3: STRATIGRAPHIC MATRIX

**Appendix 3: Stratigraphic Matrix**




Test Pit 6
New water main trench
Phase 4: Topsoil & modern services
[600]
[700]
Phase 3: Subsoil
[602]
[705]
[702]
[703]
[704]
[706]
[707]
[708]
[709]
Phase 2: Post-medieval
Phase 1: Superficial geology
[601]
[701]

## APPENDIX 4: PHOTOGRAPHIC PLATES

*Plate 1: Westernmost ditch [704]: view southwest, 1m scale*

*Plate 2: Ditch [707]: view southwest, 0.2m scale*

*Plate 3: Easternmost ditch [709]: view north, 1m scale*

*Plate 4: Cropmark HER 2471. Source: Google Earth*

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