An Archaeological Evaluation Along the Route of the Proposed Isle of Grain Gas Transmission Pipeline (Stage 1)

(NGR 586088 175486 to 569261 174604 via 568800 173000)

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By Clive Meaton

with contributions by Anna Doherty, Elke Raemen, Chris Butler, Gemma Driver and Lucy Allott

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Archaeology South-East Units 1 & 2 2 Chapel Place Portslade East Sussex BN41 1DR

Tel: 01273 4266830 Fax: 01273 420866 email : fau-ucl@btconnect.com website: www.archaeologyse.co.uk

Abstract

Between October and November 2007 an archaeological evaluation was undertaken along the route of the proposed Isle of Grain Gas Transmission Pipeline. The route corridor was 21km long, and located on the Hoo Peninsula, linking Shorne in the west, with the Isle of Grain in the east. A total of 67 evaluation trenches, 13 contingency trenches, 15 test pits and 34 Palaeoenvironmental test pits (reported on separately) were excavated, all within a 36m wide pipeline easement. Significant truncation of the underlying archaeological deposits was generally noted, however a number of discrete archaeologically sensitive areas were revealed, including evidence for Neolithic/Mesolithic, Late Bronze Age, Romano-British, Iron Age, and Anglo-Saxon activity. Most notably a Romano-British industrial site with a probable pottery kiln was recorded, a Late Bronze Age settlement, or possibly funerary site, and what may have been a small scale industrial site, also of Late Bronze Age date. The results of the evaluation have been used in conjunction with preliminary Stage 1 archaeological research (Field Walking and Geophysical Surveys and a Desk Based Assessment), to highlight those areas with the highest potential for significant surviving archaeological deposits.

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1.0 INTRODUCTION

- 1.1 Archaeology South-East (ASE), part of the Centre for Applied Archaeology, UCL, were commissioned by Amec and partners National Grid and A B Rhead Associates (hereafter Partnership) to undertake an archaeological evaluation along the route of the proposed Isle of Grain Gas Transmission pipeline (Figure 1).
- 1.2 The proposed route is 21km long, linking the Grain Terminal site (NGR 586088 175486) to the Gravesend Thames South AGI (NGR 569261 174604), with an intermediate connection to the Shorne AGI (NGR 568800 173000). For the majority of the route, the 900mm diameter, high pressure steel pipeline will be laid in trenching across open agricultural and horticultural land. The associated groundworks will consist of top soil reduction within a working area some 36m wide. This linear corridor, or easement, allows the construction machinery to safely operate, and thereby excavate the centrally orientated pipe trench and to lay the pipework. A maximum excavation depth of 2.5m and width of 2m is required for the gas pipes. However, as the pipe passes beneath major road, rail and river crossings, or ecologically sensitive areas, a trenchless drilling technique will be used, reducing the impact on the surrounding environment.
- 1.3 The archaeological work comprised the excavation of 67 Evaluation Trenches, 13 Contingency Trenches, 15 Test Pits and 34 Palaeoenvironmental test pits (reported on separately), all located within the pipeline corridor. The cumulative length of the trenching was c.2.5km by 2m wide within the 36m wide and 21km long route corridor (Figures 2-10).
- 1.4 A range of preliminary archaeological was work undertaken along the course of the pipeline, including a Fieldwalking Survey (CAT, 2006) as well as a Geophysical Survey, and Desk Based Assessment ((CAT 2006). These investigations were used to inform the archaeological evaluation (stage 1) which followed the recommendations for further evaluation works set out in the Environmental Statement (ES) produced by AMEC and submitted to the Department of Trade and Industry (DTI) in February 2007.
- 1.5 A Written Scheme of Investigation (hereafter WSI) was submitted and approved by Heritage Conservation Group at Kent County Council (HCG KCC). All work was then carried out in accordance with this document, as well as the standard procedures for an archaeological evaluation as set out by HCG KCC in the Manual of Specifications Part B Evaluation Trial Trenching Requirements, and also with the Standards and Guidance for archaeological field evaluation outlined by the Institute of Field Archaeologists (IFA 2001).

- All fieldwork was completed between October and November 2007, and was carried out by Greg Priestley-Bell, Clive Meaton and Mark Tibble (Senior Archaeologists), and Michelle Statton, Liane Peyre, Nicky Bettley, Paul Derwent and Ashley Jillett (Archaeological Assistants). The illustrations were produced by Sally Mortimore and Justin Russell (Senior Archaeologist), and the project managed by Neil Griffin (Project Manager) and Louise Rayner (Post Excavation Manager).
- 1.7 An Interim Report was issued in January 2008 (Appendix VI)

2.0 TOPOGRAPHICAL AND GEOLOGICAL BACKGROUND

- 2.1 The Isle of Grain is located on the north Kent coast, at the eastern end of the Hoo Peninsula, between the River Medway to the south and the Thames Estuary to the north. Much of the Isle is low lying marshland frequently less than 10m above sea level, and is linked to the Hoo Peninsula across reclaimed marshland. The higher crest of the Hoo Peninsula spinal ridge stretches from Allhallows in the west to High Halstow in the east, and in places is as high 70m OD.
- 2.2 The pipeline corridor runs from the Isle of Grain Terminal at the eastern end of the Isle, and rises up from the Marshes onto the gently undulating valleys of the Hoo Peninsula. It attains a maximum height of c.57m OD close to the top of Lodge Hill, before continuing to the west passed High Halstow, and dropping back down to lower, flatter ground at Shorne. It then returns to the north continuing over the Shorne Marshes, to Shornmead Fort. The furthest extent of the pipeline route on these marshes, roughly 50m south of the fort, was levelled to between 1m-2m above sea level.
- 2.3 The 21km stretch of pipeline crosses a variety of geological strata. For the most part the underlying solid geology is London Clay over outcrops of Woolwich Beds, both laid down during the Palaeogene Period. However, a significant part of the route is shown to cross different Quaternary drift deposits, including Head Gravels, Head Brickearth, Head, River Terrace Gravels and Alluvium, with an area of landslip also recorded, to the south of Spendiff (British Geological Survey: Chatham England and Wales Sheet 272 Drift Edition 1:50 000 Series).
- 2.4 The topographical and geological background for the route corridor has been extensively researched and reported on previously, in the *Isle of Grain Gas Pipeline Archaeological Desk Based Assessment* (Canterbury Archaeological Trust 2006a (hereafter CAT)). Reference should be made to this document for a more comprehensive discussion concerning the topography and geology of the area.

3.0 ARCHAEOLOGICAL BACKGROUND

- 3.1 All prehistoric periods are represented within the area traversed by the proposed pipeline route, ranging from the Palaeolithic through to the Iron Age (CAT 2006a). Whilst finds from the Palaeolithic and Mesolithic are often recovered from secondary depositional contexts, Neolithic and Early Bronze Age sites are frequently found *in situ*, often associated with ritual activities and ceremonial burial monuments. For the Late Bronze Age and Iron Age periods, agricultural field systems and settlements become the dominate archaeological marker, many of which have been identified either from aerial photographs as crop marks, or during archaeological fieldwork (for example see James 1999, Griffin 1999).
- 3.2 Similarly, the Hoo Peninsula was extensively occupied during the Romano-British period, and a number of sites have been identified along the pipeline corridor. Most interestingly several pottery kilns have been recorded close to the easement, whilst a major centre of pottery production has possibly been located at the western end of the route, between Shorne and Higham (CAT 2006a). Furthermore, historic and archaeological evidence clearly shows that the Hoo Peninsula was relatively densely occupied during both the Anglo-Saxon and Medieval periods. In fact, it has remained an important strategic, industrial and religious area up to and including modern times. So much so, that by the 20th century, an array of military installations and fortifications had been constructed across the Peninsula. Many of these now relate to World War I & II defences. although Shornmead Fort, located at the western extremity of the route had its origins as a Napoleonic gun battery. This Scheduled Ancient Monument was built in 1796 to defend the Thames, and converted to a full fort in 1850. It was disarmed around 1904, but had two, 5.5 inch, guns installed as part of the WWII defences.
- 3.3 As with the geological and topographical background, the archaeology of the route corridor has been extensively researched and reported on in the *Isle of Grain Gas Pipeline Archaeological Desk Based Assessment* (CAT 2006a). Reference should therefore be made to this document for a more detailed account. Likewise, recent Geophysical and Fieldwalking work in the area has highlighted a number of potential sites along the pipeline easement. Hence the attendant reports should be reviewed for further information, although elements of this work will be drawn on, where appropriate (CAT 2006a & 2006b).

4.0 RESEARCH AIMS AND OBJECTIVES

- 4.1 The aims of the archaeological investigation, stated in the WSI, were to ascertain:
 - whether or not any evidence of Palaeolithic, Mesolithic or Neolithic activity was present along the pipeline route corridor
 - whether or not any evidence of Bronze Age settlement or funerary activity was present along the pipeline route corridor
 - whether or not any evidence of Romano-British and/or Iron Age settlement or localised industrial activity was present along the pipeline route corridor
 - whether or not any evidence for Medieval activity, in particular burials, was present along the pipeline route corridor
 - whether or not any evidence of Post-Medieval activity was present along the pipeline route corridor
 - whether or not the fieldwalking and geophysical surveys results were reflected in the results of the trial trenching
 - what impact the development proposals will have on any buried archaeological remains

5.0 ARCHAEOLOGICAL METHODOLOGY

5.1 The work comprised four specific elements, the excavation of Evaluation Trenches (ETs), the excavation of Contingency Trenches CTs), the excavation of Test Pits (TPs) and the Excavation of Palaeo Test Pits (PTPs) (Figures 2-10). The latter are related to palaeoenvironmental investigations undertaken by Dr Martin Bates and are reported on separately from the archaeological component. The trench layout and sampling strategy was agreed between HCG KCC and Partnership, prior to the commencement of the work. However, during the course of the evaluation it became necessary to relocate some of the trenches. This was only done following consultation, and in agreement with Partnership. Specific reasons for moving trenches, as well as the approximate distances involved, are discussed in the text below (Section 6.0 Results).

5.2 <u>Evaluation Trenches (ETs)</u>

A total of 67 ETs were located within the pipeline easement; measuring 30m long and 2m wide. Most were orientated along the proposed course of the pipeline trench itself, although a number were aligned across the easement, or tangentially to it. The location of all ET's was checked with a CAT scanner for the presence of buried services. All trenches were then machine excavated using a JCB excavator, equipped with a 1.4m wide flat bladed ditching bucket, under constant archaeological supervision Mechanical excavation progressed to the top of the underlying natural sediment or archaeological deposits, whichever was higher, with the top soil and sub soil deposits stored separately either side of the trench. Care was taken not to damage archaeological deposits through excessive use of the machine. Trenches were given 24 hours to weather, before archaeological investigations were conducted. Archaeological features were then hand cleaned and surfaces and spoil scanned with a metal detector, prior to excavation. Reinstatement was then undertaken with plough soil cleanly backfilled over the sub-soil.

5.3 Contingency Trenches (CTs)

Pre-located CTs were included in the sampling strategy to elucidate the potential extent of archaeological remains revealed within ET's. Therefore, when a CT was in close enough proximity to an ET, which contained significant archaeological deposits, that CT was excavated. A total of 23 CT's were set out, and of these, 13 were excavated. In all other ways the CTs had identical specifications to the ETs' and were excavated in exactly the same fashion.

5.4 Test Pits

A total of 15 TPs were located along the pipeline trench route. All the TPs, excepting TP14, were dug using the JCB with its toothless ditching bucket, and measured c.2m wide by c.2m long. As with the

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline ETs and CTs, mechanical excavation progressed to the top of the underlying natural sediment or archaeological deposits, whichever was higher, with the top soil and sub soil deposits stored separately either side of the trench. A record was then made of the overburden and natural geologies, and reinstatement was immediately undertaken with plough soil backfilled over the sub-soil. TP14 was manually dug, due to the presence of overhead power cable. It measured c.500mm wide by c.500mm long.

5.5 <u>Palaeoenvironmental Test Pits</u>

PTPs and associated investigations were undertaken alongside the archaeological evaluation, but are reported on separately.

- All archaeological deposits, features and finds were recorded to accepted professional standards, and in line with the advice given in PPG16 (the Government's advice on *Archaeology and Planning*). All features were planned at 1:50 and section drawings at 1:10. Drawings were on plastic draughting film. A full stratigraphic record was made on standard ASE trial trench forms for all trenches. Features and deposits were described on standard pro-forma recording sheets used by ASE. Context numbers were allocated for each deposit and soil colours were recorded by visual inspection and not by reference to a Munsell Colour chart.
- 5.7 All trenches were surveyed and levelled using GPS based Leica equipment and were thus fully referenced to National Grid Coordinates. Pre-excavation digital surveys, including levels were also undertaken for all ETs and CTs.
- 5.8 A full photographic record (digital, colour slide and black & white) of the work was compiled and will form part of the site archive.
- 5.9 The archive is presently held at the Archaeology South-East office in Portslade and will be offered to the relevant archive depository in due course. The fieldwork was carried out under site code IOG07.

6.0 RESULTS (Figures 11-21)

6.1 Introduction

6.1.1 A total of 67 Evaluation Trenches, 13 Contingency Trenches and 15 Test Pits were excavated during the course of the archaeological excavations. Work commenced at the western end of the proposed pipeline route, near Shorne, and progressed eastwards until reaching ET1, just north of Lower Stoke. All trenches were fully located within the 36m wide pipeline easement.

6.2 <u>General Site Stratigraphy</u>

- Other than ET56, which was located on the Shorne Marsh, the vast majority of the route passed across agricultural land, and occasionally small horticultural holdings. Therefore, virtually all trenches were excavated through recently ploughed topsoils. Even those parcels of land which lay under pasture, had clearly been ploughed in recent times. The depth of the plough pan was generally between 250mm-350mm, and a consistent depth of 300mm depth was frequently recorded. Across the route, the plough soil normally comprised a clayey loam with variable silt and sand content, often containing moderate flints, chalk flecking (marling), and intermittent cultural material.
- 6.2.2 On occasion, sub-soils or interface horizons to the natural were noted. These varied in composition, depending on the underlying strata.
- 6.2.3 The substrate often comprised Quaternary Head deposits, most frequently Head Brickearth, Head Gravels, or Colluvium. No deposits of London Clay or Woolwich Beds were unequivocally identified. Many of the Head deposits were mixed or interleaved with denser patches of gravel or clay, and was often found to contain quite high levels of iron or manganese, oxidised from minerals contained in the surrounding natural.
- 6.2.4 General stratigraphic sequence the route corridor:
 - Top Soil:
 - Sub Soil:
 - Head/Colluvium:
- 6.2.5 Partnership stated at the outset that land drains should not be deliberately excavated through, and that any broken drains should be reported immediately for repair. On occasions this factor controlled excavated machine depths, and thus steps were sometimes used to

- 6.2.6 In some instances it was necessary to box features in order to define edges, and a large number of natural anomalies were also investigated. Furthermore, several shallow sondages were excavated in the ends of trenches so as to fully establish the form of natural deposits, and the overlying stratigraphy.
- 6.2.7 Each trench is discussed separately below, including a description of the trench orientation, its general stratigraphic sequence, the depth of the machined surface below the ground surface, and all archaeological features encountered in that trench. Trench and feature levels are included on the trench plans. Where alterations were made to the location of a trench these are also explained below.

6.3 Evaluation Trench 1 (Figure 10)

- 6.3.1 ET1 was orientated southeast to northwest, along the alignment of the proposed gas pipeline trench. However, further to information provided by the landowner/tenant farmer, its original position was shifted 30m to the southeast, in an attempt to avoid the course of an asbestos water pipe known to cross the field. At the northwest end of ET1, the depth of the machined surface was levelled to c.4.86m OD, and at its southeast end to c.5.8m OD. The maximum depth of the trench below the ground surface was 400mm. No archaeological features were identified in this trench, and 300mm of mid brown sandy loam plough soil (ET1/001), was found to overly c.100mm of mottled mid brownish grey sandy clay sub soil (ET1/002). Excavation to the top of the undisturbed natural was not possible, as the pea shingle backfill to a c.400mm wide curving pipe trench was exposed, cut in to the sub soil, and running the length of the trench.
- 6.3.2 Palaeo test pit 1 (PTP1) was excavated at the southeast end of ET1, clear of the pea shingle backfill.

6.4 Evaluation Trench 2 (Figure 10)

6.4.1 ET2 was orientated southeast to northwest, along the alignment of the proposed gas pipeline trench. As with ET1, its position was shifted, some 50m to the northwest, thus avoiding an asbestos water pipe thought to run across the field. The machined surface at the northwest end of ET 2 was levelled to c.12.5m OD, and at the southeast end to c.11.25m OD, with a maximum trench depth below the ground surface of 500mm. The stratigraphy in ET 2 revealed between 250-300mm of plough soil (ET2/001 same as ET1/001), over 50-100mm of sub Soil (ET2/002 same as ET1/002). The undisturbed natural (ET2/003) comprised up to 70% sub rounded flint gravels in a mid brownish grey clayey sand matrix.

- 6.4.2 No archaeological features were identified in ET2, and Palaeo test pit 2 (PTP1) was excavated at its southeastern end.
- 6.5 Evaluation Trench 3 (Figures 10 and 11)
- 6.5.1 ET3 was orientated broadly east to west, slightly offset from the alignment of the proposed gas pipeline trench. The machined surface at its east end was levelled to c.13.65m OD, and at the west end to c.14.57m OD, with a maximum trench depth below the surface of 550mm. Overlying stratigraphy in ET3 revealed c.300mm of plough soil (ET3/001 same as ET1/001) over 50mm-200mm of sub soil (ET3/002 same as ET1/002), with natural gravels (ET3/003 same as ET2/003) exposed in the base of the trench.
- 6.5.2 Two possible features were investigated in ET3. Cut context ET3/004 ran perpendicular to the trench alignment, being c.900mm wide and up to 120mm deep. It had a broad shallow base and was filled by ET3/005; a mid brownish orange silty sand containing frequent sub rounded flints. This feature was interpreted as a natural undulation in the substrate, having accumulated slightly finer grained material.
- 6.5.3 Adjacent to the west, a small sub circular feature, roughly 500mm in diameter and 280mm deep was excavated; context ET3/006. It had steep regular sides, a rounded concave base, and was filled by ET3/006; a mid brownish orange silty sand containing frequent small sub rounded flint pebbles. No cultural artefacts were recovered from this feature, and it was recorded as a possible post hole, although it was also noted that ET3/006 may also have resulted from bioturbation, or be a simple variation in the natural gravels.
- 6.5.4 Palaeo test pit 3 (PTP3) was excavated at the eastern end of ET3.
- 6.6 Contingency Trench 1 (Figure 10)
- 6.6.1 CT1 was orientated southwest to northeast, across the easement corridor. The machined surface at its northeast end was levelled to c.15.41m OD, and at its southwest end to c.15.34m OD, with a maximum trench depth of 320mm. Up to 300mm of mid grey brown silty clay plough soil (CT1/001) was recorded directly overlying a mid yellowish orange brown clayey silt natural (CT2/002). No archaeological features were recorded in this trench, although modern disturbance, probably relating to the adjacent road, was noted at its northeast end (CT1/004-007). Furthermore some variation in the natural substrate was recorded; in this instance almost certainly a result of localised areas of mafic oxidization (CT1/003)

6.7 <u>Evaluation Trench 4 (Figure 10)</u>

- 6.7.1 ET 4 was orientated broadly east to west along the gas pipe trench alignment. The machined surface was levelled to c.16.04m OD at the east end of ET4, and to c.16.80m OD at the west end, with a maximum trench depth below the ground surface of c.460mm. Between 280-300mm of plough soil, containing rare flint debitage, (ET4/001 same as CT1/001) was recorded, directly overlying a mid orange brown sandy silt natural (ET4/002) across most of the trench, although a yellowish brown natural silty clay was recorded at the eastern extent of the trench. Both natural deposits contained frequent pockets of sub rounded flint gravels.
- 6.7.2 In terms of archaeology, cut context ET4/006, filled by ET4/007, was investigated and recorded as a probable tree throw. Furthermore, at the eastern end of the trench a possible linear feature was identified, cut context ET/004 filled by ET4/005, which revealed 19th century artefactual material, and appears to have related to modern activities.
- 6.8 Evaluation Trench 5 (Figures 10 and 11)
- 6.8.1 ET 5 was orientated north to south across the easement corridor. The machined surface at the north end of the trench was levelled to c.18.12m OD and at the south to c.17.08 OD, with a maximum trench depth of c.480mm below the ground surface. Between 300-350mm of plough soil (ET5/001 same as CT1/001) was recorded, lying directly over a mid orange yellow-brown silty sandy natural (ET5/002).
- 6.8.2 Two possible features were recorded. Cut context ET5/007 was linear in plan, cutting the long trench baulks at right angles and aligned east to west. Figure 11, Section 1 reveals a steeply sided feature with a flat irregular base, measuring c.1000mm in width, and up to 300mm in depth. It was filled by ET5/008; a mid grey brown silty sand mottled with brownish orange smears, grading to a silty clay at the base of the feature.
- 6.8.3 To the north, context ET5/009 was the cut of a possible gully terminus; being up to 600mm wide, and 260mm deep, with very steep sides and a slightly rounded base. The terminal end was excavated and revealed fill context ET5/010; a very light greyish yellow sandy silt, laminated with streaks of mid orange brown, and containing infrequent sub angular flints.
- 6.8.4 No cultural material was recovered from either feature, although rare flint debitage was retrieved from the overburden. Some further disturbance was also recorded, relating directly to the presence of a modern field drain (contexts ET003-006)

6.9 Evaluation Trench 6 (Figures 10 and 11)

- 6.9.1 ET6 was orientated southwest to northeast along the alignment of the gas pipeline trench. The machined surface at the northeast end of the trench was levelled to c.18.05m OD, and at the southwest end to c.17.54m OD, with a maximum trench depth of 500mm below the ground surface. Between 320-350mm of plough soil (ET6/001 same as CT1/001) was recorded, directly overlying a mid orange yellow-brown sandy silt natural (ET6/002).
- 6.9.2 One feature was identified at the northeast end of the trench, obliquely crossing the width of the evaluation trench. This cut context, ET6/003, was linear in plan, being c.640mm wide and c.140mm deep. It had intermediately graded sides with a regular flat base and was filled by ET6/004; a mid brownish grey silty sand containing occasional sub rounded flint pebbles.
- 6.9.3 No datable artefacts were recovered from this feature, although rare flint debitage was retrieved from the overburden.
- 6.9.4 Palaeo test pit 4 (PTP) was located at the southwest end of ET6.
- 6.10 Evaluation Trench 7 (Figures 10 and 11)
- 6.10.1 ET7 was orientated southwest to northeast along the alignment of the gas pipeline trench. The machined surface at the northeast end was levelled to c.16.75m OD, and at the southwest end to c.16.31m OD, with a maximum trench depth of 420mm. Between 260mm to 310mm of plough soil (ET7/001 same as CT1/001) was found directly overlying a mid bright orange silty clay natural (ET7/002).
- 6.10.2 ET7 revealed a large number of features which were sampled in order to characterise the archaeology. At the northeast end of ET7, cut context ET7/003 was excavated; being irregular in plan, with shallow, evenly graded sides to a flat but slightly irregular base, rising gently to the northeast, It measured c.1500mm x c.1500mm and up to 160mm in depth, and was filled by ET7/004; a light brownish grey clayey silt, containing occasional sub rounded flints, and moderate levels of mafic oxidisation. Pottery recovered from this feature indicated a Late Bronze Age Date.
- 6.10.3 To the southwest, curvilinear context ET7/005 was excavated. Orientated broadly north to south it crossed the width of the trench, continuing beneath each baulk, and measuring c.2700mm in length, c.830mm in width, and c230mm in depth. It had steep sides breaking sharply to a flat base, and was filled by ET7/006; a light brownish grey clayey silt mottled with mid orange clayey silt, containing occasional sub rounded flints and very occasional oxidisation. No pottery was recovered from this feature.

- 6.10.4 Further to the southwest another linear was recorded. Cut context ET7/007 ran perpendicular across the width of the trench, and measured c.600 in width, and c.270mm in depth. It had steep sides breaking gently to a narrow rounded base, and was filled by ET7/008; a very light grey silty clay containing moderate sub rounded stone and flints. Interestingly, 2 pieces of briquetage, possibly bar fragments, were recovered from this fill, as well as pottery which indicated an Iron Age date.
- 6.10.5 The last excavated feature in ET7 was located at its southwest end. Cut context ET7/009 was approximately 5600mm wide, and at least 600mm deep, running perpendicular across the trench. It was aligned broadly southeast to northwest, and had stepped sides on both edges (see Figure 11 Section 2). The feature was not fully bottomed but its lower fill was recorded as context ET7/015; an orange mottled mid grey silty clay containing occasional flint, at least 200mm thick. Above ET7/015, along the northeast edge of the feature, fill context ET7/017 was identified, being a mottled light brownish grey and mid orange silty clay with occasional flint, and up to 300mm thick. Overlying ET7/017 was fill context ET7/010; a mid bluish grey clayey silt containing moderate flint, approximately 400mm thick. An upper fill was noted along the southwest edge of the cut feature, and was recorded as context ET7/016; an orange mottled light grey clayey silt containing moderate stones and flints, and a maximum of 200mm thick. It was noted that context ET7/010 may have represented a discrete recut episode ET7/009, although this interpretation was uncertain. Romano-British pot from fill context ET7/010 indicated a date between AD 70-150, and some industrial material was also found, in the form of fragments of a forge bottom from iron smithing.
- 6.10.6 Several unexcavated features were also recorded in ET7, including possible sub-circular/rectangular pit contexts ET7/014 and ET7/012, and probable linear features ET7/011, ET7/013 and ET7/014. Palaeo test pit 5 (PTP5) was also located at the southwest end of ET7.

6.11 Evaluation Trench 8 (Figures 10 and 12)

- 6.11.1 ET8 was orientated southwest to northeast along the alignment of the gas pipeline trench. The machined surface at the northeast end was levelled to c.15.58m OD, and at the southwest end to c.15.29m OD, with a maximum trench depth of 590mm below the ground surface. The overlying stratigraphy revealed between 330mm and 350mm of plough soil (ET8/001 same as CT1/001) over 200mm-240mm of mid brown sub soil containing rare flint (ET8/002). The natural was a bright orange silty clay (ET8/003 same as ET7/002).
- 6.11.2 Cut context ET8/010 was a large feature which encompassed virtually

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline the entire northeast half of ET8. It was a minimum of 14m long, continuing beneath the baulk to the northeast, and incorporating the width of the trench. The feature was not bottomed, and a sondage was therefore excavated into it at the northeast end of the trench. The base was still not exposed at 1200mm below the ground surface, although on its southwest edge the feature did reveal gradually stepped sides. Figure 12, Section 3 illustrates the northwest facing baulk section for cut context ET8/010. Its upper fill ET8/011 was at least 420mm thick, and comprised very compacted light grey brown sandy clay slit with moderate flint pebbles, and sub angular flint nodules. Fill context ET8/012 was revealed in the sondage beneath ET8/011, being a dark blackish orange silty clay containing moderate flint pebbles and nodules and at least 180mm thick. Notably both contexts ET8/011 and 8/012 were highly compacted and resistant to excavation. Interpretation of this feature was uncertain, its size and depth could possibly relate to quarrying activity, although the heavily indurated nature of its fill deposits could equally be associated with road building activity. Pottery was recovered from both ET8/011 and ET8/012, indicating a Romano-British date between AD120-150, with some residual Late Bronze Age material also present in ET8/012.

- 6.11.3 Two discrete features and a possible gully terminal were excavated at the southwest end of ET8. One of the discrete features, cut context ET8/04, filled by ET8/005, was interpreted as a probable tree bole. To the northeast though, a small post hole was excavated, recorded as context ET8/006. This feature was c.230mm by c.440mm and a maximum of 70mm deep. It had slightly rounded sides breaking sharply to a concave base, and was filled by context ET8/007; a light orange grey friable silty sand.
- 6.11.4 Approximately 2500mm to the north east of the post hole, a narrow gully ET8/008 was recorded and its terminal excavated. This feature was aligned broadly southeast to northwest, terminating within the trench, and measuring c.1100mm long, c.280mm wide and c.210mm deep. It had almost vertical sides breaking sharply to a slightly concave base, and was filled by ET8/009; a light grey orange silty sand.
- 6.11.5 No dating evidence was recovered from the smaller features in ET8.
- 6.12 Evaluation Trench 9 (Figures 10 and 12)
- 6.12.1 ET9 was orientated southwest to northeast along the alignment of the gas pipeline trench. The machined surface at the northeast end was levelled to c.14.68m OD, and at the southwest end to c.13.84m OD, with a maximum trench depth of 380mm. Between 280mm to 300mm of plough soil (ET9/001 same as CT1/001) was found directly overlying a mid orange brown silty clay natural (ET9/002).

- 6.12.2 A possible shallow ditch was recorded in this trench. This cut context, ET9/003, was orientated broadly southeast to northwest with an irregular edge on its north east side. It was up to 3000mm wide, a maximum of 150mm deep, and crossed the width of the trench at a slightly oblique angle. Figure 12, Section 4, shows ET9/003 with uneven sides breaking gradually to a shallow irregular base, and filled by context ET9/004; a dark orange brown clayey silt with frequent flint pebbles and sub angular nodules. No pottery was recovered from this feature.
- 6.13 Contingency Trench 2 (Figures 10 and 12)
- 6.13.1 CT2 was orientated southwest to northeast along the alignment of the gas pipeline trench. The machined surface at the northeast end was levelled to c.11.40m OD, and at the southwest end to c.9.98m OD, with a maximum trench depth of 420mm. Up to 300mm of plough soil (CT2/001 same as CT1/001) was found to overlie a mid orange brown clayey sand subsoil, containing frequent sub rounded flints (CT2/002). Beneath this, the natural geology formed a mid brownish orange clayey sand, also with frequent sub rounded flints.
- 6.13.2 Cut feature CT/004 filled by CT2/005 was investigated, and interpreted as probable bioturbation. To the southwest a linear feature was also excavated, measuring approximately 2600mm long, crossing the width of the trench obliquely, up to a maximum of 1000mm wide, and 140mm deep. This cut was recorded as CT2/006 and was aligned southwest to northeast, bulbing out slightly wider to the northeast. It revealed a broad shallow u-shaped profile, and was filled by CT2/007; a light greyish brown clayey sand with occasional mafic oxidisation present.
- 6.13.3 No artefactual material was recovered from this trench.
- 6.14 <u>Contingency Trench 3 (Figure 9)</u>
- 6.14.1 CT3 was orientated southwest to northeast, but slightly across the alignment of the gas pipeline trench. The machined surface at the northeast end of the trench was levelled to c.9.37m OD and at the southwest end to c.9.85m OD, with a maximum depth below the ground surface of 1000mm. The general stratigraphy revealed 300mm of mid brown sandy silty clay plough soil (CT3/001 same as CT4/001), over a natural deposit of mid yellowish brown silty clay, equally mixed with a greyish brown silty clay, both containing high levels of mafic oxidisation (CT3/003). The maximum depth of the trench related to an investigative sondage excavated in its northeast end.
- 6.14.2 No archaeological features were noted in this trench although CT3/003 appeared to have been heavily bioturbated by a recent crop or farming activity.

6.15 Evaluation Trench 10 (Figures 9 and 13)

- 6.15.1 ET10 was orientated southwest to northeast, parallel, but slightly off the alignment of the gas pipeline trench. The machined surface at the northeast end of the trench was levelled to c.10.38m OD and at the southwest end to c.11.13m OD, with a maximum depth below the ground surface of 520mm. Approximately 300mm of plough soil (ET10/001 same as CT4/001) was found to overlie between 50-150mm of sub soil (ET10/002). The natural was recorded as a mixed brickearth and gravel deposit (ET10/003 same as CT4/003).
- 6.15.2 Two possible features were recorded in this trench. Context 10/004 was a linear gully feature, aligned northwest to southeast, terminating within the trench, and measuring c.1500mm in length, c.500mm in width, and 120mm in depth. It had a u-shaped profile, and was filled by ET10/005; a mid greyish brown silty clay containing occasional sub rounded gravels.
- 6.15.3 A short distance to the southwest, possible posthole cut ET10/006 was excavated, measuring c.600mm in diameter and c.150mm in depth. It was sub-circular in plan with a broad u-shaped profile and was filled by ET10/007; a soft mid greyish brown silty clay.
- 6.15.4 No datable material was recovered from either feature.
- 6.16 Contingency Trench 4 (Figures 9 and 13)
- 6.16.1 CT4 was orientated southwest to northeast, along the alignment of the gas pipeline trench. The machined surface at the northeast end of the trench was levelled to c.11.61m OD and at the southwest end to 12.19m OD, with a maximum depth below the ground surface of 500mm. The general stratigraphy was recorded as c.300mm of mid brown sandy silty clay plough soil containing frequent sub rounded flints (CT4/001), over 80-100mm of mid yellowish brown silty clay subsoil, containing occasional sub rounded flints (CT4/002). The natural comprised a mid yellowish brown silty clay brick earth, involuted with dense areas of sub-rounded and sub-angular flint gravels in a silty brickearth matrix (CT4/003).
- 6.16.2 Several amorphous silty dark patches were noted against the natural (CT4/003), two of which were investigated. Contexts CT4/004, filled by CT4/005, and CT4/006 filled by CT4/007 were both found to be bioturbated natural, with undercut and intermixed edges.
- 6.16.3 As with CT3 and ET10, the natural geology in this trench was significantly bioturbated, probably relating to a recent crop or farming activity in this field.

6.17 Contingency Trench 5 (Figure 9)

6.17.1 CT5 was located approximately 100m from the nearest evaluation trench, and following advices accepted by KCC, remained unexcavated. Although it should be noted that discussions with the land owner indicated a number of Romano-British artefacts had been found by metal detectors a short distance to the east of this location.

6.18 Evaluation Trench 11 (Figures 9 and 13)

- 6.18.1 ET11 was orientated southwest to northeast along the alignment of the gas pipeline trench. The machined surface at the northeast end of the trench was levelled to c.22.81m OD, and at the southwest end to c.23.68m OD, with a maximum depth below the ground surface of 450mm. Between 280mm and 350mm of dark brown silty clay plough soil (ET11/001), containing moderate flints directly overlay a mid orange brown silty clay natural substrate, containing frequent flint pebbles and sub angular flint (ET11/002).
- 6.18.2 Two possible features were recorded in ET11. Cut context ET11/003 was a north to south aligned linear, terminating within the trench. It measured c.1600mm long, c.1000mm wide and c.190mm wide, with evenly graded sides breaking to a flattish base and was filled by ET11/004; a mid orange grey-brown silt containing rare flint and charcoal.
- 6.18.3 To the northeast a small post hole cut was recorded. Context ET11/005 was elliptical in plan, being c.900mm long by c.400mm wide and 200mm deep. It had an evenly graded side to the southwest, and an irregular stepped one to the northeast with no defined base. A single fill was identified, context ET11/005; an orange brown-grey silt, containing rare flint.
- 6.18.4 Palaeo test pit 17 (PTP17) was cut in the southwest end of ET11. No artefactual material was recovered from either feature.

6.19 Evaluation Trench 12 (Figures 9 and 13)

- 6.19.1 ET12 was orientated broadly north to south, across the gas pipeline alignment. At its northern end the machined surface was levelled to c.24.04m OD, and at its southern end to c.24.35m OD, with a maximum depth below the ground surface of 500mm. The general stratigraphy showed between 300mm-400mm of plough soil (ET12/001 same as ET11/001), over 50mm-100mm of a mid orange brown sandy silty clay sub soil, containing frequent sub rounded flint (ET12/002). The underlying natural was a mid orange brown silty clay, with up to 40% sub rounded flint gravels.
- 6.19.2 The largest feature in ET12 was a north to south aligned ditch,

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline running from the centre of ET12, before broadening slightly at its southern extent, possibly indicating a return to the west. Two slots were excavated through this ditch (see Figure 12 Sections 5 & 6). Slot cut ET12/006 provided a partial profile, revealing a surviving depth of 350mm and a marked shallow channel in the base of the feature. It was filled context ET12/007; a mid grey clayey silt mottled with an orange brown, containing occasional stones and flint. Slot cut ET12/004 was excavated to the south, measuring c.310mm in depth, with an evenly graded side to a flattish base. Interestingly, two separate fills were noted in this slot. The upper deposit, ET12/012. was a mottled greyish orange silty clay with occasional stones and flint, and formed a similar profile to that seen in slot cut ET12/006. The lower deposit ET12/005, was a mottled greyish orange silty clay with occasional stones. It is likely that the upper fill, ET12/012, represents a later recut of the ditch, also seen in ET12/006, and hence ET12/005 is indicative of an earlier feature, truncated by the ditch. Alternatively, ET12/005 may have related to a possible return in the ditch trajectory, observed at this juncture.

- 6.19.3 To the north, this ditch was truncated by the cut of a modern field drain exposed in cut clot context ET12/010 filled by ET12/011.
- 6.19.4 In between cut slots ET12/004, and ET12/006, the ditch was cut at right angles by another linear feature, cut ET12/013. This gully/ditch terminated within the trench, measuring c.1600mm long and c.600mm wide. It remained unexcavated, although it was filled by ET12/014; a mauvish grey silty clay with frequent sub-rounded flints, and occasional charcoal.
- 6.19.5 Centrally located in ET12, another linear feature was recorded. This gully was aligned south to north, with a clear terminal at its northern end, whereas the course of the feature to the south was unclear. It measured c.5m in length, up to 450mm in width and was c.100mm deep. Cut slot ET12/008 was excavated at the terminal end, demonstrating relatively steep sides to a flattish base, being filled by ET12/009; a dark blackish brown clayey silt containing frequent flint pebbles and sub angular nodules.
- 6.19.6 Iron Age pottery was recovered from the large north-south aligned ditch (ET12/007), along with several pieces of flint debitage, whilst Romano-British material was excavated from the gully running parallel, indicating a date between AD50-150 (ET12/009).
- 6.20 Evaluation Trench 13 (Figures 9 and 13)
- 6.20.1 ET13 was orientated east to west across the alignment of the gas pipeline. The machined surface at the east end was levelled to c.24.76m OD, and at the west end to c.25.16m OD. Between 370mm-380mm of plough soil (ET13/001 same as ET11/001) was recorded

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline overlying an orange yellow mottled grey brown clayey silt natural (ET13/002).
- 6.20.2 Both contexts ET13/003 and ET13/007 were interpreted as probable bioturbation, or localised geology.
- 6.20.3 Conversely ET13/005 was recorded as a possible feature, measuring c.1000mm in diameter, and up to 100mm in depth, with gently graded sides to an irregular undulating base. It was filled by ET13/006; a mid grey brown silty clay. No finds were recovered.
- 6.20.4 At the west end of the trench three further features were investigated. ET13/009 was a sub-circular pit measuring approximately 1000mm in diameter and 200m deep, filled by ET13/010; a mid brown grey silty clay with rare flint nodules.
- 6.20.5 This pit was cut by an east to west aligned linear feature. Figure 13 Section 7 shows cut slot ET13/013, and the partial profile illustrates a concave side to an undulating base, with two fills. The upper deposit in the slot was ET13/014, a dark grey brown silty clay with frequent flints. The primary fill was ET13/015; a mid greenish brown silty sandy clay, with grey striations throughout, and containing very frequent small sub angular flint nodules. This context was interpreted by the excavator as a possible cess or sludge deposit in the base of the ditch.
- 6.20.6 Opposite the ditch to the north, a shallow gully terminus was excavated (ET13/011), aligned roughly south to north, and filled by ET13/012; a mid brown silty clay containing rare flint and mafic oxidisation.
- 6.20.7 A piece of Romano-British floor tile was recovered from ditch context ET13/014.
- 6.21 Evaluation Trench 14 (Figures 9 and 13)
- 6.21.1 ET14 was orientated broadly southwest to northeast, along the alignment of the gas pipeline trench. Its machined surface was levelled to c.25.55m OD at its northeast end, and to c.26.12m OD at its southwest end, with a maximum depth below the ground surface of 800mm. Across the trench, between 270mm and 380mm of mid brown silty clay plough soil (ET14/001) was noted directly overlying a mid brownish orange-yellow sandy silt natural substrate, containing very frequent sandy flint pebbles (ET14/002).
- 6.21.2 A north to south aligned ditch (ET14/003) was excavated adjacent and parallel to a modern field drain cut (ET14/005) running obliquely across the trench. Figure 13 Section 8 reveals a broad shallow feature, measuring c.2500mm long, c.1500m wide and 120mm deep, and filled by ET14/004; a dark greyish brown silty clay with frequent

- 6.21.3 To the southwest a possible post hole was recorded, context ET14/007, measuring c.500mm long, c.300mm wide and c.100mm deep; being filled by ET14/008; a light greyish brown silty clay.
- 6.21.4 Roughly 2500mm further to the southwest a gully terminal was excavated, context ET14/009. This feature was aligned north-south, parallel with ditch cut ET14/003, and it measured c.2000mm in length, c.500mm in width and up to 180mm in depth. It had a u-shaped profile and was filled by ET14/010; a mid greyish brown silty clay with occasional flints.
- 6.21.5 At the extreme northeast end of ET14, another possible linear was revealed, continuing beneath the baulk and apparently aligned on an east-west trajectory, perpendicular to the other linear tracks recorded in the trench. This feature, ET14/011 remained unexcavated, as it was only partially revealed.
- 6.21.6 No diagnostic artefactual material was recovered from the features in ET14.
- 6.22 <u>Contingency Trench 6 (Figure 9)</u>
- 6.22.1 CT6 was aligned southwest-northeast, along the course of the gas pipeline trench. At its northeast end the machined surface was levelled to, c.26.69m OD, and at the southwest end to c.26.89m OD, with a maximum depth below the ground surface of 400mm. Approximately 300mm of plough soil (CT6/001) directly overlay an orange yellow-brown silty sand natural (CT6/002). No features were present in this trench.
- 6.23 Contingency Trench 7 (Figures 8 and 14)
- 6.23.1 CT7 was aligned southwest-northeast along the gas pipeline trench alignment. At its northeast end the machined surface was levelled to c.27.94m OD and at its southwest end to c.27.74m OD, with a maximum depth below the ground surface of 550mm. Between 390mm and 410mm of plough soil (ET7/001), overlay an orange brown sandy silt sub-soil, containing rare flints (ET7/002). The natural geology was a mid brownish orange sandy silt, interspersed with frequent patches of sub rounded, and sub angular flint. Areas of mafic oxidisation were also identified (ET7/003 and ET7/004).
- 6.23.2 One possible ditch was recoded in CT7 (CT7/005), aligned northwest-southeast and crossing the width of the trench obliquely. Figure 14 Section 9 shows CT7/005 with steep shallow sides, breaking sharply to a flat slightly irregular base, and filled by CT7/006; a mid greyish orange silt containing frequent flints.

- 6.23.3 No diagnostic artefactual evidence was recovered from CT7.
- 6.24 Evaluation Trench 15 (Figure 8)
- 6.24.1 ET15 was aligned southwest-northeast, along the course of the proposed gas pipeline trench. At its northeast end the machined surface was levelled to c.27.33m OD, and at its southwest end to c.27.75m OD, with a maximum depth below the ground surface of 700mm. The overburden comprised between 300mm-350mm of mid greyish brown silty clay plough soil (ET15/001), directly over a orange brown sandy silt natural with frequent flint pebbles, and occasional mafic oxidisation.
- 6.25.2 No archaeological features were recorded in this trench, although some disturbance was noted at its southwest end, where it cut across a modern access track, which itself ran alongside a large drainage/boundary ditch.
- 6.25 Evaluation Trench 16 (Figures 8 and 14)
- 6.25.1 ET16 was orientated southwest-northeast along the proposed alignment of the gas pipeline trench. At its northeast end the machined surface was levelled to c.26.35m OD, and at its southwest end to c.25.59m OD, with a maximum depth below the ground surface of 60mm. Between 290mm and 310mm of mid brown clayey silt plough soil (ET16/001), over a mid orange brown silty clay sub soil/interface (ET16/002). The natural substrate varied from a light grey mottled mid orange silty clay, to a blue mottled orange clay, containing occasional flints, and mafic oxidisation (ET16/003).
- 6.25.2 Several features were investigated in ET16. From the southwest end of the trench, ET16/005 was excavated and interpreted as a tree bole, whereas both contexts ET16/007 and ET16/009 were recorded as probable post holes. The former measuring c.500mm in width, a minimum of 600mm long and 200mm deep with steep sides to a flattish base, and being filled by ET16/008; a mottled dark grey with orange clayey silt, containing occasional flints. The later (ET16/009) was slightly smaller, being sub circular in shape with a diameter of c.350mm, and gently graded sides to a tapered base. It was filled by ET16/010; a friable mid grey clayey silt with moderate levels of mafic oxidisation.
- 6.25.3 Post hole cuts ET16/007 and ET16/009 were situated opposite each other across the width of the trench, whilst adjacent to the northeast a probable ditch terminal was excavated. Figure 14 Section 10 shows ET16/011 in profile, revealing a shallow truncated feature with gently rounded sides and base, filled by ET16/012; a mid grey clayey silt with occasional flints and stones. The ditch measured c.500mm in

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline width, 1000mm exposed in length, and a surviving depth of c.100mm.

- 6.25.4 Further to the northeast, 3 roughly aligned small sub circular features were investigated. Contexts ET16/013, ET16/015 and ET16/017 varied between 200mm and 350mm in diameter, and between 50mm-60mm in depth. Each revealed a similarly shallow broad u-shaped section, and filled by dark grey silty clays, containing occasional flints (ET16/014, ET16/016 and ET16/018). All three features were interpreted as probable bioturbation, or natural variations in the localised geology.
- 6.25.5 At the northeast end of the trench, a southeast-northwest aligned ditch was excavated, crossing the width of the trench obliquely, and measuring c.1300mm wide, and up to 550mm deep. Figure 14, Section 11, reveals cut ET16/019, with irregular sides to a slotted and slightly rounded base, and two fills. The primary deposit, context ET16/021 was a yellowish grey clayey silt speckled with orange flecking, containing occasional stones and flints, whilst the upper fill, context ET16/020 was a light greyish brown clayey silt containing moderate stones and flints.
- 6.25.6 Ditch cut ET16/019 produced prehistoric pottery in its lower fill ET16/012, whilst the gully terminal ET16/011 contained Late Bronze Age pot in its fill ET16/012.
- 6.25.7 Palaeo test pit 18 (PTP18) was excavated in the northeast end of ET16
- 6.26 Evaluation Trench 17 (Figures 8 and 14)
- 6.26.1 ET17 was orientated northwest-southeast, at right angles to the proposed course of the gas pipeline. The machined surface at the northwest end of the trench was levelled to c.25.58m OD and at the southeast end to c.24.28m OD. Between 290mm and 350mm of plough soil (ET17/001 same as ET16/001) was recorded overlying 70mm-210mm of mid orange brown silty clay sub-soil (ET17/002). The natural substrate was a light orange silty clay, with some lighter patches across the exposed surface of the trench (ET17/003).
- 6.26.2 Three possible sub circular features were investigated in ET17. Cut context ET17/008, filled by ET17/009, was interpreted as variation in the natural geology, whereas both ET16/004 and ET16/006 were recorded as possible small sub circular post holes between 120mm and 180mm deep. ET16/004 was 700mm long by 300mm wide and filled by ET16/005; a bright brownish orange silty clay. ET16/006 was c.500mm long by c.200mm wide, and filled by ET16/006; a light orange yellow-grey silt.
- 6.26.3 No diagnostic artefactual material was recovered from this trench.

6.27 Evaluation Trench 18 (Figures 8 and 14)

- 6.27.1 ET18 was aligned northeast-southwest, along the route of the proposed gas pipeline. The machined surface at the northwest end was levelled to c.24.72m OD, and at the southwest end to c.24.38m OD, with a maximum depth below ground surface of 550mm. Approximately 300mm of plough soil (ET18/001 same as ET16/001) was found to overlie a mid orange brown to yellow brown sandy clay, with frequent nucleated patches of sub angular and sub rounded flint gravels (ET18/002 and ET18/003).
- 6.27.2 Several potential features were investigated in this trench. Contexts ET18/004, ET18/010 and ET18/012 were interpreted as either bioturbation or localised geology, whilst context ET18/008 filled by ET18/009 proved to be modern disturbance.
- 6.27.3 Only ET18/006 was found to be of interest, being a north-south orientated ditch, measuring c.900mm in width and up to 165mm in depth. Figure 14 Section 12 illustrates a profile of ET18/006, with irregular edges and base, and filled by ET18/007; a mid brown grey silty clay. However, this feature was interpreted by the excavator as a possible ghost furrow, being aligned with the surface plough direction.
- 6.27.4 Ceramic building material recovered from the fill of ET18/006 was subsequently found to be of 18th-19th century origin.

6.28 Contingency Trench 8 (Figures 8 and 15)

- 6.28.1 CT8 was orientated broadly northeast-southwest, across the proposed route gas pipeline trench. It was situated on the southwest facing slope of a small valley, not far from the valley base. The machined surface at the northeast end of the trench was levelled to c.19.46m OD, and at the southwest end of the trench to c.17.88m OD. Between 260mm and 330mm of mid brown sandy silty clay sub soil (CT8/001) overlay 70mm-180mm of light brown silty clay sub-soil (CT8/002). Beneath this was a mottled mid yellow brown to mid grey brown silty clay, with very frequent mafic oxidisation (CT8/003). This deposit was interpreted as a relatively fine grained mixed colluvium, which had eroded down slope. Towards the southwest end of CT8, machining was undertaken to a depth of 1250mm without achieving the base of the colluvium.
- 6.28.2 Two features were identified in CT8. A north-south aligned ditch was excavated, crossing the width of the trench obliquely, and measuring almost 3000mm in length, 800mm in width and c.150mm deep. This cut context, CT8/004, revealed steep shallow regular sides, to a flat base, and was filled by CT8/005; a mid to dark greyish brown silty clay with occasional oxidisation of the mafic minerals. Below CT8/005,

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline CT8/006 was recorded, being a light greyish brown silty clay, smeared with brownish orange and containing occasional mafic oxidisation.
- 6.28.3 To the northeast a ditch/gully terminal was excavated. This feature, context ET8/007, was aligned northwest-southeast, and terminated within the trench, measuring c.1300mm long, by 600mm wide and up to 160mm deep, Figure 15 Section 13 shows the profile to have evenly graded symmetrical sides, breaking sharply to a flat base, and filled by CT8/008; a mid brown silty clay, mottled with yellow brown discolouration, and containing occasional mafic oxidisation.
- 6.28.4 No diagnostic artefactual material was recovered from CT8.
- 6.29 Evaluation Trench 19 (Figures 8 and 15)
- 6.29.1 ET19 was orientated broadly east-west across the proposed route of the gas pipeline trench. It was situated close to the bottom of the southwest facing valley side, not far from the valley base. At the east end of the trench the machined surface was levelled to 17.023, and at the west end of the trench to 18.42. Between 150mm and 310mm of plough soil (ET19/001 same as CT8/001), was found to overlie 170mm to 380mm of sub soil (ET19/002 same as CT8/002); and as with CT8, deep colluvium was identified beneath the sub-soil (ET19/003 same as CT8/003). A sondage was excavated at the east end of the trench to a depth of 1200mm but failed to locate the base of the ET19/003.
- 6.29.2 Several features of interest were excavated in ET19. A stretch of linear gully, context ET19/004, was orientated northeast-southwest, terminated within the trench, and measured 570mm wide, 1500mm long and 100mm deep. It had a broad u-shape and was filled by ET19/005; a greyish brown silty clay, containing occasional flint pebbles and sub angular nodules. A possible post hole truncated its northeast terminus, context ET19/012, which was 660mm long, 480mm wide, and 230mm deep. It's fill, ET19/013, was the same material as that of the gully, ET19/005.
- 6.29.3 A similarly aligned and terminating gully was excavated a short distance to the northwest. This feature, context ET19/008, was c.230mm wide, up to 60mm deep and roughly 3500mm long. It had a shallow u-shaped profile and was filled by ET19/009; a mid greyish brown silty clay, containing occasional pebbles and sub angular flint nodules. This gully was cut by two postholes, one located on its terminal end, context ET19/006, measuring c.550mm long, by c.290mm wide and c.110mm deep, and another mid way along its length, context ET19/010, which was c.500mm long, c.450mm wide and up to 100mm deep. The fill in both post holes (ET19/007, and ET19/011) was identical to the material in the gully, fill ET19/009.

- 6.29.4 A probable animal burrow was also identified during the excavation of the sondage in the east end of ET19, and recorded as ET19/014.
- 6.29.5 Flint debitage was recovered from both gully features in this trench.

6.30 Contingency Trench 9 (Figures 8 and 15)

- 6.30.1 CT9 was orientated northeast-southwest along the route of the proposed gas pipeline trench. This trench was shifted 5m to the northeast to avoid the course of a water pipe. The machined surface at the northeast end was levelled to c.30.94m OD, and at the southwest end to c.31.95m OD, with a maximum depth below the ground surface of 590mm. The general stratigraphy revealed 290mm-300mm of mid brown silty clay plough soil (CT9/001), directly over the natural substrate; a mixed deposit, varying from brownish orange to pale greenish yellow clayey sands, and silty clays, interspersed with nucleated patches of flint gravels (CT9/002). Some disturbance was investigated at the northeast end which related to a modern field drain cut (CT9/003-006)
- 6.30.2 No features were present in this trench.
- 6.31 Evaluation Trench 20 (Figures 8 and 15)
- 6.31.1 ET20 was aligned broadly northeast-southwest along the course of the proposed gas pipeline trench. The machined surface at the northeast end of the trench was levelled to c.33.69m OD, and at the southwest end to c.34.44m OD. The overlying stratigraphy revealed between 270mm and 310mm of plough soil (ET20/001 same as CT9/001), over 100mm-330mm of a mid grey clayey silt sub-soil, (ET20/012). The exposed natural was a mid orange clayey silt mottled with a greyish blue, containing moderate stones and flints (ET20/002).
- 6.31.2 At the northeast end of the trench a north-south aligned ditch was excavated, ET20/010, crossing the width of the trench obliquely. It measured c.2500mm long, 800mm wide and up to 210mm deep, with evenly graded regular sides breaking to a flat base, and was filled by ET20/011; a greyish brown silt containing occasional pebbles and sub-angular flints. Slag was recovered from this feature, including a hearth lining fragment with adhering fuel ash slag, as well as a piece of Romano-British floor tile. Pottery indicated a Romano-British date.
- 6.31.3 To the southwest, a possible ditch terminal was recorded. ET20/004 was at least 800mm long, c.1450mm wide, and up to 240mm deep. Figure 15 Section 14 shows ET20/004 with a steep side breaking sharply to an undulating base, and filled by ET20/005; a greyish brown silt containing occasional pebbles and sub-angular flint. The

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline eastern side of ET20/005 was overcut by the excavator in order to ascertain a very diffuse contact with the surrounding natural (ET20/006 same as ET20/002). Late Bronze Age pottery was retrieved from the fill, as well as a relatively large amount of flint debitage, including a reduced core reused as a hammer stone.
- 6.31.4 A few metres further to the southwest a small post hole was also excavated. ET20/008 was sub-circular in plan, measuring c.230mm in diameter, and up to 150mm deep. It had steep sides breaking sharply to a flat base, and was filled by ET20/009; a greyish brown silt, containing slag, including a piece of smelting slag.
- 6.31.5 Nearby a shallow spread of dark greyish brown silt was recorded as context ET20/007, being c.250mm in diameter and containing slag, burnt clay and charcoal. This spread may have represented another truncated post hole.
- 6.31.2 Material recovered from the fill of ditch cut ET20/010 indicated a Romano-British date, whilst ditch terminal ET20/004 appeared to be of Late Bronze Age origin.
- 6.31.3 Palaeo test pit 21 (PTP21) was excavated in the northeast end of ET20.
- 6.32 Evaluation Trench 21 (Figures 8 and 15)
- 6.32.1 ET21 was orientated broadly northwest-southeast perpendicular to the alignment of the proposed gas pipeline trench. The machined surface at the northwest end was levelled to c.35.08m OD and at the southeast end to c.35.50m OD, with a maximum depth below the ground surface of 680mm. Between 280mm-300mm of plough soil (ET21/001 same as CT9/001), overlay 60mm to 280mm of light brownish grey clayey silt sub-soil, containing moderate stones and flints, and very frequent mafic oxidisation (ET21/003). The natural substrate was a mid orange silty clay with moderate stones and flints (ET21/002).
- 6.32.2 One large feature was excavated in ET21. Cut context ET21/004 was almost 11m in length, and crossed the width of the trench at right angles. It was at least 420mm deep, and had steep sides to an undulating base. Figure 15 Section 15 illustrates the baulk section and a profile through ET21/004, which was filled by ET21/005; a compacted mid greyish orange silty clay, containing rare pebbles and sub angular flint. Due to its relatively shallow nature, and compacted fill, this feature was interpreted on the ground as a possible droveway.
- 6.32.3 Cultural material recovered from this feature indicated a Middle to Late Iron Age date.

- 6.32.4 Palaeo test pit 22 (PTP22) was excavated in the south east end of ET21.
- 6.33 Evaluation Trench 22 (Figures 8 and 16)
- 6.33.1 ET22 was orientated northeast-southwest, along the route of the proposed gas pipeline trench. The machined surface was levelled to c.36.45m OD at the northeast end of the trench, and to c.37.24m OD at the southwest end, with a maximum depth below ground surface of 460mm. Between 290mm and 310mm of plough soil (ET22/001 same as CT9/001) lay directly over the natural (ET22/002 same as ET21/002).
- 6.33.2 At the northeast end of the trench a tapered ditch, aligned north-south, and crossing the width of the trench at a slightly oblique angle was excavated. Cut context 22/009 measured c.1300mm in width and up to 210mm in depth with a broad u-shaped profile. It was filled by ET22/010; a mid greyish orange silty clay containing frequent flints, burnt clay and briquetage, including bar fragments and a possible vessel base.
- 6.33.3 At the opposite end of the trench two small post holes were recorded. ET22/003 was sub circular in plan with a diameter of c.350mm, and depth 150mm. In profile its southwest edge was stepped, whilst the northeast side was regular but steep leading to tapered base. This feature was filled by ET22/004; a mottled grey orange silty clay.
- 6.33.4 Adjacent, post hole ET22/005 was recorded, measuring c.200mm in diameter, and 110mm deep with a v-shaped profile. It was filled by ET22/006; a mottled grey orange silty clay.
- 6.33.5 A few metres to the northeast a shallow burnt spread was identified, measuring 1000mm by 700mm and 50mm surviving depth; context ET22/007. This feature had shallow irregular sides and base, and was filled by ET22/008; a very dark brown silty sand containing moderate sub-angular flint, and very frequent charcoal.
- 6.33.6 Small pot fragments and burnt clay was recorded in several of the features in this trench, but unfortunately no diagnostic material was recovered.
- 6.34 Contingency Trenches 10 & 11 (Figure 8)
- 6.34.1 Both trenches were set apart from the body of evaluation trenches in this area, and therefore remained unexcavated.
- 6.35 Evaluation Trench 23 (Figures 8 and 16)
- 6.35.1 ET23 was orientated northeast-southwest along the proposed gas

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline pipeline route. The machined surface at its northeast end was levelled to c.41.15m OD and at the southwest end to c. 41.00m OD, with a maximum depth below the ground surface of 550mm. Approximately 300mm of mid brown silty sandy clay plough soil (ET23/001) was found to overlie 100-200mm of mid orange brown silty sandy clay subsoil (ET23/002). The natural comprised principally sub-rounded flint gravels in a mid brownish orange silty clay matrix, with very frequent mafic oxidisation (ET23/003).
- 6.35.2 One feature was recorded in this trench. ET23/004 appeared to be sub-circular in plan, but continued beneath the northwest baulk. Its exposed extent measured c.1900mm by c.1200mm, and up 480mm in depth, although the feature was not bottomed. Figure 16 Section 16, shows a steep sided cut filled by ET23/005; a mixed mid grey and brownish orange silty clay.
- 6.35.3 No cultural material was recovered from this feature
- 6.35.4 Palaeoenvironmental test pit 25 (PTP25) was excavated in the northeast end of ET23.
- 6.36 Evaluation Trench 24 (Figures 8 and 16)
- 6.36.1 ET24 was orientated northeast-southwest, along the course of the proposed gas pipeline trench. At the northeast end the depth of its machined surface was levelled to c.40.36m OD, and at its southwest end to c.40.53m OD. Between 250mm and 310mm of plough soil (ET24/001 same as ET23/001) lay directly over a mixed natural, formed of flint gravels and a greyish white-orange sandy, interspersed with light pinkish brown clays (ET24/002 & ET24/003).
- 6.36.2 Linear feature ET24/004 was excavated at the northeast end of the trench, cutting the trench width almost at right angles and measuring c.650mm wide and 320mm deep. It had a symmetrical u-shaped profile and was filled by a compacted pale greenish white clay, context ET24/005. No datable artefacts were recovered from the fill of ET24/004.
- 6.36.3 Contexts ET24/006 through ET24/009 were all investigated and recorded as probable bioturbation or localised variation in the geology.
- 6.37 Evaluation Trench 25 (Figures 8 and 16)
- 6.37.1 ET25 was orientated northeast-southwest along the proposed gas pipeline alignment. At its northeast end the machined surface was levelled to c.39.97m OD, and at its southwest end to c.39.53m OD, with a maximum depth below the ground surface of 500mm. Between 310mm-325mm of plough soil (ET25/001 same as ET23/001) was

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline recorded directly over a 200m-3300mm mixed interface (ET25/002), which in turn overlay the natural substrate (ET25/003 same as ET24/002 and ET24/003).
- 6.37.2 Several features were recorded in this trench. At the southwest end of the trench a ditch measuring c.6m in length, by 600mm wide and 190mm deep was excavated and recorded as ET25/007. This ditch had a shallow asymmetrical u-shaped profile and was filled by ET25/008; a greyish brown silty clay. A single flint flake was recovered from the fill.
- 6.37.3 On its southeast side it cut a narrow gully, cut context ET25/009. This gully was orientated broadly north-south, and measured c1600mm long, c.290mm wide and 140mm deep. It had a consistent u-shaped profile and was filled by ET25/010; a greyish brown silty clay, containing moderate pebbles, and sub angular flints.
- 6.37.4 A short distance away, and converging with the trajectory of ditch cut ET25/007, ditch ET25/011 was recorded. This feature was aligned broadly north-south, crossing the width of the trench obliquely. It measured just over 3m long, c.1000mm wide and up to 230mm deep, with steep sides to a flat base, and was filled by ET25/011; a dark greyish black silty sand containing rare flints, and frequent charcoal.
- 6.37.5 Further to the northeast, located close to mid trench two more features were identified. Cut context ET25/005 was a sub circular posthole/pit continuing beneath the northwest trench baulk. Figure 16 Section 17 shows a broad dish shaped profile filled by ET25/006; a greyish orange clay with frequent flints, along with a piece of burnt sandstone.
- 6.37.6 Linear cut 25/013 remained unexcavated, but was clearly orientated at right angles to the trench. It measured up to 1200mm in width and was filled by ET25/014; a mid orange brown sandy silt clay containing occasional flints. At the northeast end of the trench, a very shallow sub circular spread of charcoal was recorded, context ET25/004.
- 6.37.7 No datable artefacts indicating a specific chronological period were recovered from ET25.
- 6.37.8 Palaeo test pit 26 (PTP26) was excavated in the northeast end of ET25.
- 6.38 Evaluation Trench 26 (Figures 8 and 16)
- 6.38.1 ET26 was orientated northeast-southwest along the proposed course of the gas pipeline trench. Its machined surface was levelled to c.37.98m OD at its northeast end, and to c.36.71m OD at its southwest end, with a maximum depth below the ground surface of

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline 650mm. Between 230mm and 340mm of plough soil (ET26/001 same as ET23/001) overlay the natural (ET26/002 & 003 same as ET 23/002 & 003).
- 6.38.2 A ditch was recorded at the northeast end of ET26. This cut context, ET26/004, was orientated northwest-southeast, crossing the width of the trench and measuring c.800mm wide and up to 170mm deep. It had an asymmetrical u-shape, with a stepped northeast edge, and was filled by ET26/005; an orange grey clay silt.
- 6.38.3 To the southwest context ET26/006 was recorded as a tree bole.
- 6.38.4 No period specific material was recovered from this trench.
- 6.38.5 Palaeo test pit 26 (PTP26) was excavated in the southwest end of ET26.
- 6.39 Test Pit 1 (Figure 7)
- 6.39.1 TP1 was machine excavated. It revealed c.300mm of mid brown silty loam plough soil with occasional charcoal, chalk flecking and sub angular flint nodules (TP1/0010, over c.100mm thick mid greyish brown silty clay sub-soil, containing occasional oxidisation of the mafic minerals (TP1/002). The natural substrate was a mid brownish orange silty clay 'brick earth' containing occasional sub angular flints, and frequent oxidisation (TP1/003).
- 6.40 Test Pit 2 (Figure 7)
- 6.40.1 TP2 was machine excavated. It revealed c.300mm of plough soil (TP2/001 same as TP1/001), directly overlying the natural 'brick earth' (TP2/002 same as TP1/003).
- 6.41 <u>Test Pit 3 (Figure 7)</u>
- 6.41.1 TP3 was machine excavated. It revealed c.300mm of plough soil (TP3/001 same as TP1/001), over c.150mm of sub soil (TP3/002 same as TP1/002). The natural 'brickearth' was exposed at c.450mm below the ground surface (TP3/003 same as TP1/003).
- 6.42 Test Pit 4 (Figure 7)
- 6.42.1 TP4 was hand dug due to its location below overhead power lines. It revealed 300mm of plough soil (TP4/001 same as TP1/001), over c.100mm of sub soil (TP4/02 same as TP1/002. The natural 'brick earth' was exposed at c.400mm below the ground surface (TP4/003 same as TP1/003.
- 6.43 Contingency Trench 28 (Figure 7)

- 6.43.1 CT28 remained unexcavated due to the lack of features in adjacent ET65.
- 6.44 Evaluation Trench 65 (Figure 7)
- 6.44.1 ET65 was orientated east-west, along the course of the proposed pipeline route. Its machined surface was levelled to c.39.76m OD at the east end, and to c.40.06m OD at the west end, with a maximum depth below the ground surface of 400mm. Between 280mm and 300mm of mid greyish brown clayey silt plough soil (ET65/001) directly overlay the mid-light orange sandy clay 'brick earth' natural, containing occasional gravels and mafic oxidisation (ET65/002).
- 6.44.2 No archaeological features were present in ET65.
- 6.45 Contingency Trench 29 (Figure 7)
- 6.45.1 CT29 remained unexcavated due to the lack of archaeological features in adjacent ET65.
- 6.46 Contingency Trench 12 (Figure 6)
- 6.46.1 CT12 remained unexcavated due to its distance from both ET65 and ET27.
- 6.47 Evaluation Trench 27 (Figures 6 and 26)
- 6.47.1 ET 27 was orientated east-west along the route of the proposed gas pipeline route. At its east end the machined surface was levelled to c.49.12m OD and at its west end to c.50.83m OD. Between 270mm and 370mm of mid brown clayey silt plough soil (ET27/001) overlay a mid brownish orange silty clay 'brick earth' (ET27/002).
- 6.47.2 Three possible features were recorded in ET27. ET27/005 was a small sub circular post hole, c.420mm by c.310mm and 60mm deep. it was bowl shaped and filled by ET27/006, a light greyish brown silty clay containing occasional flints. Modern ceramic fragments were recovered from this feature
- 6.47.3 A similar sized and shaped feature was recorded to the east, ET27/009, measuring c.420mm by c.540mm, and c.80mm deep it was filled by ET27/010; a mid greyish brown silty clay, containing occasional flints. Pottery from this feature indicated a Prehistoric date.
- 6.47.4 Next to ET27/009, a curvilinear feature, crossing the width of the trench was recorded. Figure 16 Section 18 shows cut context ET27/007, a shallow broad symmetrical u-shaped feature, measuring 400mm wide and 100mm deep, and filled by ET27/008; a mid greyish

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline brown silty clay, containing occasional flints. No pottery was retrieved from the fill of this gully but fire cracked flint was noted.

6.48 Evaluation Trench 28 (Figures 6 and 17)

- 6.48.1 ET28 was orientated broadly northwest-southeast, obliquely crossing the proposed route of the gas pipeline trench, but remaining within the designated easement. The machined surface at the northwest end of the trench was levelled to c.54.19m OD, and at the southeast end to c.53.36m OD. Approximately 360mm of plough soil (ET28/001 same as ET27/001), was recorded over a natural "brick earth" (ET28/002 same as ET27/002).
- 6.48.2 This trench revealed several archaeological features. Located centrally, ET28/009 appeared to be a linear feature, crossing the width of the trench at right angles, and containing a significant amount of burnt flint, and some burnt sandstone. It was as shallow feature, measuring 3000mm wide and 250mm deep, with steep sides breaking sharply to a very uneven base. A single fill was recorded, ET28/010, and was described as a compacted mid brown grey clayey silt, mottled/smeared with orange, containing very frequent fire cracked flint, and occasional lumps of iron stone. On the ground this feature was interpreted as a possible craft or cooking area.
- 6.48.3 At the northwest end of the trench an elongated ovular feature was excavated, ET28/005, which measured c.1100mm long by c.360mm wide and up to 140mm deep. It had steep sides, with an uneven base sloping down to the northwest, and was filled by ET28/006; a compacted light brownish orange clay, containing frequent flints. No datable artefacts were recovered from this feature, although both fire cracked flints, and struck flakes were recovered.
- 6.48.4 Two more features were located at the southeast end of the trench. ET28/007 was a sub ovular spread of material, measuring c.800mm by c.600mm and up to 250mm deep, and filled by ET28/008; a light-mid brownish orange clayey silt, containing frequent charcoal flecking, and rare flints.
- 6.48.5 More notably, situated a few metres to the southeast, ET28/003 was excavated. This was a tightly curving, relatively narrow feature, which continued beneath the northeast trench baulk. It measured c.500mm wide, and had steep sides to a flat base. The shallowest depth of the feature was noted as 110mm, but there was a marked vertical drop to a depth of 320mm, possible marking the presence of post hole cut through the base of this feature. It was filled by ET28/004; a compacted light brownish orange clay containing occasional flints, as well as struck flints, fire cracked flint and pottery. Fragments of clay slab were also found; artefacts thought likely to indicate cooking and the presence of an oven, or possibly of slate production. ET28/003

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline had clear morphological structure, although its full extent and form was not revealed within the evaluation trench
- 6.48.5 ET28 provided some interesting archaeological results, and pottery recovered from the fills of ET28/009, ET28/007, and ET28/003 was all of a Late Bronze Age date. It seems reasonable to expect that the other features in the trench were of a similar date.

6.49 Evaluation Trench 29 (Figure 6)

6.49.1 ET29 was orientated east-west along the path of the proposed gas pipeline trench. The machined surface at its east end was levelled to c.55.87m OD, and at its west end to c.56.80m OD, with a maximum depth below the ground surface of 810mm. This depth was attained in an investigative sondage excavated at the west end of the trench. Between 180mm and 270mm of plough soil containing flint debitage and a piece Romano-British Tegula (ET29/001 same as ET27/001), was recorded, overlying a mid reddish brown clay, with occasional stones and flints (ET20/002). No features were present in this trench.

6.50 Evaluation Trench 30 (Figures 6 and 17)

- 6.50.1 ET30 was orientated broadly east-west, but at a slight angle across the proposed pipeline trench route. The machined surface at the east end of the trench was levelled to c.56.97m OD, and the west end to c.56.13m OD. The maximum depth below ground surface was 800mm, attained in an investigative sondage excavated in the west end of the trench. The general stratigraphy across the trench comprised, between 180mm and 270mm of mid greyish brown silty clay plough soil (ET30/001) over a natural mixed grey-orange to reddish-brown clay, interspersed with patches of sandy gravel (ET30/002 & 003).
- 6.50.2 Three small post holes were located towards the west end of ET30, contexts ET30/004, 006 & 008. They ranged from c.500mm to c.350mm in diameter, and between 50mm and 100mm deep, and all had similar shallow bowl shaped profiles. The fills were also composed of similar material, ranging being a mid brown silty sand containing frequent flints (ET30/005, 006 & 007).
- 6.50.3 At the opposite end of the trench a shallow spread of material was recorded, context ET30/010, measuring c.130mm in diameter, with only 10mm surviving depth. It was filled by a compacted mid brown clay containing frequent flints, and occasional pot fragments.
- 6.50.4 Pottery recovered from the fill of ET30/006 was of prehistoric origin, whereas from ET30/008 pottery was dated to the Neolithic or Bronze Age, and from ET30/010 to the Late Bronze Age.

6.51 Evaluation Trench 31 (Figure 6, Figure 17)

- 6.51.1 ET31 was orientated east-west across the proposed pipeline trench. The machined surface at its east end was levelled to c.53.72m OD and at its west end to c.52.82m OD. The maximum depth of 770mm below the ground surface was reached in a sondage excavated at the east end of the trench. Between 260mm and 300mm of plough soil was recorded (ET31/001 same as ET30/001) lying directly on the natural; a mid greyish brown silty clay, with frequent oxidisation of the mafic minerals across the trench (ET31/002 and 003).
- 6.51.2 A large curvilinear, or possibly two intersecting ditches were located centrally in the trench. A slot was excavated through the western portion of the ditch, cut context ET31/006, which revealed a broad shallow profile, with steep short sides breaking sharply to a flat relatively level base. At this point the ditch measured c.1800mm in width and up to 250mm in depth, and was filled by ET31/007; a brownish grey silty clay containing occasional flints, and frequent charcoal and burnt clay. A section through the east part of the ditch, cut context ET31/004, revealed a dissimilar profile, being more rounded and measuring only c.1100mm in width and up to 210mm in depth. This fill was also markedly different, being a light greyish brown clayey silt with orange yellow mottling throughout, and containing occasional flints and charcoal flecking; fill context ET31/005. Figure 17 Sections 19 and 20 illustrates the differences between the two cuts. Two separate sections were placed in an attempt to understand the nature of this relationship, but a conclusive stratigraphic interpretation was not achieved (contexts ET 31/009-012). In the end it was felt that sufficient material should be left in place, so that future investigations would in principal be able to resolve the issue. Of further interest was the significantly higher oxidisation of the mafic minerals in the natural substrate, contained within the area delineated by the ditch/es, and recorded as context ET31/008.
- 6.51.3 Pottery recovered from the broader stretch of ditch was dated to the Iron Age period (ET31/007), whereas pottery from the narrow stretch (ET31/005) was of Iron Age to Romano-British origin. This was interesting, because if a tentative stratigraphic interpretation had been given, it would have suggested that the broader ditch stretch was later rather than earlier. This is somewhat at odds with the artefactual data.
- 6.51.4 Some modern disturbance was noted at the west end of the trench, where it had been partially located over, and hence excavated through, a metalled track.

6.52 Contingency Trench 13 (Figure 6, Figure 17)

- 6.52.1 CT13 was orientated east-west, along the route of the proposed pipeline trench. At the west end of the trench the machined surface was levelled to c.53.18m OD, and at the east end to 52.68m OD, with a maximum depth below the ground surface of 380mm. Between 180mm and 230mm of mid greyish brown clayey silt plough soil (CT13/001) was recorded overlying the natural geology; a mixed reddish brown to orange brown silty clay, containing patches of flint gravel (CT13/002).
- 6.52.2 A sub-circular post was excavated and recorded as context CT13/003, measuring c.500mm in diameter and c.80mm deep. It had a wide symmetrical u-shaped profile, and was filled by CT13/004; a greyish brown silty clay containing occasional flints. Pottery recovered from this feature was of Romano-British date.
- 6.52.3 To the west a kidney shaped pit was excavated; contexts CT13/007-008. Its form would suggest that this feature was most likely a tree bole. A small sub circular post, context CT13/005, cut the tree bole. It was bowl shaped in section, with an exposed width of c.220mm, length of c.450mm and up to 50mm surviving depth. The single fill, context CT13/006, was a mid greyish brown silty clay, containing occasional flints. No dating was recovered from this feature.
- 6.53 Evaluation Trench 62 (Figure 6, Figure 17)
- 6.53.1 ET62 was orientated east-west along the route of the proposed gas pipeline trench. The machined surface at the east end of the trench was levelled to c.51.81m OD and at the west end to c.51.07m OD. The general stratigraphy was recorded as between 210mm and 260mm of plough soil (ET62/001 same as CT13/001) overlying the natural (ET62/002 same as CT13/002).
- 6.53.2 Several features were investigated in ET62. Contexts 62/008-009 were a pea shingle filled modern cut, whilst contexts 62/006-007 and 62/010-011 proved to be bioturbated natural.
- 6.53.3 At the extreme east end of the trench a shallow ditch was excavated, crossing the trench at right angles and measuring c.1300mm wide and up to 10mm deep. Figure 17 Section 21 shows ET62/004 with evenly graded sides, and a flat regular base. A single fill was identified, context ET62/005; a mottled orange/grey brown silty clay containing occasional stones and flints.
- 6.53.3 No datable material was recovered from ET62

- 6.54 Contingency Trench 25 (Figure 6)
- 6.54.1 CT remained unexcavated due to a lack of significant archaeological features in the adjacent trench ET62.
- 6.55 Contingency Trench 26 (Figure 6)
- 6.55.1 CT26 was orientated northeast-southwest along the proposed gas pipeline trench. The machined surface at its northeast end was levelled to c.23.37m OD, and at its southwest end to c.24.07m OD, with a maximum depth below the ground surface of 600mm. Between 210mm and 330mm of mid brown clayey silt plough soil (CT26/001), overlay 130mm-200mm of orange brown clayey sand mottled throughout by mid grey clayey sands, and containing frequent oxidisation of the mafic minerals present in the deposit (CT26/002). The natural comprised light brownish yellow-orange clayey sands, interleaved with mid brownish orange sandy clays (CT26/003, 006 & 007).
- 6.55.2 No archaeological deposits were present in this trench.
- 6.56 Evaluation Trench 63 (Figure 6, Figure 17)
- 6.56.1 ET63 was orientated northeast-southwest, along the proposed route of the gas pipeline. The machined surface at its northeast end was levelled at c.24.05m OD, and at its southwest end to c.23.99m OD. The general stratigraphy across the trench was recorded with between 310mm-360mm of plough soil (ET63/001 same as CT26/001), over 180mm-200mm of yellowish orange clayey sand sub soil (ET63/002). The underlying geology was predominantly light yellowish orange clayey sand, with high levels of oxidisation (ET63/003).
- 6.56.2 Several interesting features were investigated in the southwest end of the trench. Post hole cut ET63/004 measured c.650mm in diameter and c.90mm deep. It had step sides with a shallow undulating base, upon which was located the degraded remains of what may have been a deliberately placed pottery deposit. The surrounding fill, context ET63/005, was a mid brown grey sandy silt, mottled throughout with smears of yellow orange. The pottery vessel itself contained a separate fill, context ET63/006, which was a dark greyish black clayey silt, with very frequent charcoal, and rare small flints. This context was fully sampled, as the pot was too damaged to lift intact. The pottery from this feature has been identified as of Romano-British date, between AD50-150.
- 6.56.3 Another post hole was partially truncated by ET63/004. This feature, context ET63/007, was c.550mm in diameter and c.150mm deep, containing Late Iron Age or Early Romano-British pottery. It was filled

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline by ET63/008 a mid brown grey sandy silt, mottled throughout by a orange-yellow sandy silt
- 6.56.3 Immediately to the northeast of the two post holes, two linear features were excavated. The largest, cut context ET63/009, crossed the width of the trench at right angles, measuring c.1850mm wide, and up to a maximum of 180mm deep. It had relatively steep regular sides breaking sharply to a horizontal undulating base, and was filled by ET63/010; a dark grey brown silty sand, containing occasional flints. Pottery recovered from this feature indicated a Romano-British date, between AD120-150.
- 6.56.4 Running parallel to ET63/009, approximately 500mm to the north east, linear cut ET63/011 was recorded. It measured c.700mm wide and up to 100mm deep, with steep sides to a shallow horizontal undulating base, and was filled by ET63/012; a greenish brown-grey silty sand. No datable artefacts were located from this feature, but its proximity and identical orientation to ET63/009 would suggest a similar Romano-British date.
- 6.57 Evaluation Trench 64 (Figure 6, Figure 18)
- 6.57.1 ET64 was orientated northeast-southwest, along the proposed trench alignment. At its northeast end the machined surface was levelled to c.24.30m OD, and at its southwest end to c.24.90m OD, with a maximum depth below the ground surface of 570mm. Between 300mm to 370mm of plough soil ((ET64/001 same CT26/001), overlay 90mm-150mm of mid orange brown clayey silt sub-soil (ET64/002). The natural was a mid orange sandy clay with few inclusions (ET64/003).
- 6.57.2 A single feature was recorded in the extreme southwest end of ET64, which was only partially revealed in the corner of the trench, cut context ET64/004. Restricted excavation indicated a possible northeast-southwest aligned ditch, with a surviving minimum depth of c.320mm, filled by ET64/005; a mid greyish yellow clayey sand containing occasional flints. No datable material was recovered from this feature.
- 6.58 Contingency Trench 27 (Figure 6, Figure 18)
- 6.58.1 CT27 was orientated northeast-southwest, along the proposed pipeline trench route. The machined surface at its northeast end was levelled to c.25.32m OD, and at its southwest end to c.25.58m OD, with a maximum depth below the ground surface of 890mm. The overburden comprised between 340mm and 380mm of mid brown clayey silt plough soil (CT27/001) over 120mm-250mm of light orange brown clayey sand sub-soil (CT27/002). The natural was a mid orange sandy clay (CT27/004), over a mid yellowish orange clayey

- 6.58.2 A northeast-southwest aligned ditch was partially revealed in the northeast end of the trench. Recorded as cut context CT27/005, it had a surviving depth of up to 270mm and was filled by CT27/006; a greyish yellow clayey sand. No datable material was recovered from this feature.
- 6.58.3 Another linear feature was identified mid trench. Cut context CT27/007 was aligned broadly northwest-south, crossing the trench width at a slight oblique angle. It measured up to 1000mm in width and 300mm in depth, with an asymmetrical u-shaped profile and was filled by CT27/008; a orange brown silty clay, containing occasional burnt clay, charcoal flecking and flints. A small finger extended out tangentially from the ditch, and may have represented a recut, or earlier feature, although it was filled by the same material as the ditch. No datable artefacts were recovered.

6.59 Evaluation Trench 57(Figure 6)

- 6.59.1 ET57 was orientated northeast-southwest along the line of the proposed pipeline trench. At its northeast end the machined surface was levelled to c.24.02m OD, and at the southwest end to c.22.99m OD, with a maximum depth below the ground surface of 530mm. Between 290mm and 350mm of mid brown clayey silt plough soil (ET57/001) was recorded directly overlying the natural; a mid greyish orange silty clay containing moderate flints and stones throughout (ET57/002).
- 6.59.2 No archaeological features were present in this trench.

6.60 Evaluation Trench 32 (Figure 6)

- 6.60.1 ET32 was aligned broadly northeast-southwest along the line of the proposed pipe trench. The machined surface at its northeast end was levelled to c.22.47m OD, and at its southwest end to c.22.75m OD, with a maximum depth below the ground surface of 490mm. In terms of general trench stratigraphy, between 260mm-310mm of plough soil (ET32/001 same as ET57/001) lay directly on the natural (ET32/002 same as ET57/002).
- 6.60.2 No archaeological features were present in this trench.

6.61 Evaluation Trench 33 (Figure 6, Figure 18)

6.61.1 ET33 was orientated broadly northwest-south east, at right angles across the pipeline route corridor. The machined surface at its northwest end was levelled to c.22.84m OD, and at its southeast end to c.24.20m OD, with a maximum depth below the ground surface of

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline 430mm. Between 230mm-300mm of plough soil (ET33/001 same as 57/001) overlay the natural; a mixed greyish orange to brownish orange silty clay (ET33/002 & 003).
- 6.61.2 A large number of features were identified and excavated in ET33. At the southwest end of the trench a small pit or ditch terminal was excavated. Cut context ET33/020 measured c.1400mm wide and up to 220mm deep, with evenly graded sides and an undulating base sloping up slightly to the northwest. It was filled by ET33/021 a mid brownish grey clayey silt, mottled with orange yellow throughout, containing frequent flints and occasional iron stone. Pottery recovered from this feature indicated a Neolithic or Bronze Age date.
- 6.61.2 Seven discrete post holes were also recorded along the extent of the trench. These were all sub-circular to sub-ovular, and ranged from 200mm to 500mm in diameter and from 50mm to 80mm in depth. Excavation revealed a relatively consistent rounded bowl shaped morphology, and similar mid greyish brown silty clay fills, containing occasional flints and stones (ET33/004-005, 006-007, 008-009, 010-011, 012-013, 014-015, and 018-019).
- 6.61.3 Pottery recovered from post hole cuts ET33/004, 006 and 008 indicated a broad Neolithic to Bronze date, whereas post hole cut ET33/012 appears to have been of Late Bronze Age. Based on the artefactual evidence and the morphology it is likely that these post holes are of a similar Late Bronze Age date. Furthermore, post hole cuts 33/004, 006, 008, 010 and 018 appear to outline a rough circle with a 2m diameter, and may therefore have been contemporary structural features.
- 6.61.4 At the northwest end of the trench a wide northeast-southwest aligned ditch was excavated, cut context ET33/016, with its northwest edge located beyond the northwest extent of ET33. Figure 18 Section 22 illustrates steep regular sides, to a relatively flat but uneven base, measuring c.5010mm wide and up to 400mm deep. The upper fill, ET33/017 was a mid brown grey coarse sandy clay, containing frequent flints, as well as occasional pottery and fire cracked flint. A lower fill was also recorded; context ET33/022; was a very compacted light grevish vellow sandy clay. Most notably a degraded, but largely complete vessel was noted in section lying over this context, potentially indicating a placed deposit. Also, in the base of the ditch another small sub-circular cut was noted, measuring c.410mm in diameter and up to 300mm deep, with slightly rounded v-shaped profiled. ET33/023 was filled by ET33/024 a dark brownish black silty clay, containing frequent charcoal. This cut contained further degraded and fragmented pot remains. Pottery recovered from ET33/016 and ET33/022 indicated a Late Bronze Age date.
- 6.61.5 ET33 revealed a dense area of cultural activity, and based on the

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline artefactual evidence it seems reasonable to suggest that the majority of features were fairly contemporaneous and belonged to the Late Bronze Age period.

- 6.62 Evaluation Trench 34 (Figure 6, Figure 18)
- 6.62.1 ET34 was orientated northeast-southwest along the line of the proposed pipe trench. The machined surface at its northeast end was levelled to c.23.10m OD and at its southwest end to c.22.20m OD with a maximum depth below the ground surface of 450mm. The general stratigraphy revealed between 220mm-260mm of mid brown clayey silt plough soil, containing very frequent marling and occasional stones and flints (ET34/001), directly over the natural; a variable mid orange to mid greyish orange silty clay with occasional stones and flints (ET35/002).
- 6.62.2 Three linear features were identified in ET34, all aligned broadly northwest-southeast and running perpendicular to the trench. ET34/003 measured c.1000mm wide and 210mm deep, being bowl shaped, but with an irregular base and sides. It was filled by ET34/004; a mid grey brown clayey sand, mottled throughout with a yellow orange, containing occasional flints. No datable artefacts were recovered from this feature.
- 6.62.3 Ditch cut ET34/010 measured roughly 3300mm wide and up to 430mm deep. Figure 18 Section 24 shows steep sides to an uneven base, which stepped down gradually towards the north east. Two fill deposits were recorded. Fill context, ET34/011 was up to 400mm thick, being a greyish orange-brown clayey silt with occasional stones, flints, and flecks of degraded pot. Beneath this context ET34/012 was situated, composed of very frequent flint gravels contained in mid grey blue-brown sandy clay matrix. The thickness of this deposit was c.50mm and the excavator interpreted it as a probable lining to the ditch, although a natural horizon was not discounted.
- 6.62.4 The largest ditch had a partial slot excavated through it. Cut 34/008 was up to 750mm deep, and 7.5m wide. Its excavated edge was evenly graded at about 45 degrees, breaking sharply to a flat base. It was filled by ET34/007; a mid greyish brown clayey silt containing occasional flints, stones and marling. Figure 18 Section 23 shows a partial section through ET34/008 cut into the natural ET34/002, which in turn overlies ET34/009; a mixed orange brown to dark green silty clay. It is possible that ET34/009 is a natural deposit, alternatively, ET34/002 may here be a redeposited natural, and ET34/009 an organic/sludge deposit at the base of the ditch. Context ET34/007 contained a fragment of German Lava quern stone, and Romano-British tegula. Interestingly this ditch clearly demarcated a change in the composition of the plough soil, with very little marling present in the plough soil to the southwest of it. This would indicate a change in

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline land use either side of the ditch, and also that it probably marks an old field boundary, possibly open until recent times.
- 6.62.5 A single discrete feature was also half sectioned in ET34. Pit cut ET34/005 was sub circular in plan with a diameter of c.1000m and depth of up to 120mm. It had a gentle bowl shaped profile and was filled by ET34/006; a mid grey brown silty clay containing occasional flints. Pottery recovered from this feature indicated a Late Bronze Age date.
- 6.63 Evaluation Trench 35 (Figure 6, Figure 18)
- 6.63.1 ET35 was orientated northwest-southeast across the pipeline easement corridor. At its northwest end its machined surface was levelled to c.21.07m OD and at its southeast end to c.21.87m OD with a maximum depth below the ground surface of 500mm. Between 280mm-300mm of plough soil (ET35/001 same as ET34/001) was recorded lying directly over the natural (ET35/002 same as ET34/002).
- 6.63.2 Two small possible post holes were excavated at the northwest end of the trench, next to a modern field drain. Contexts ET35/003 and 35/008 measured between 200mm-250mm in diameter and 180mm-190mm in depth. They had identical sections, with almost straight sides to a flat base, and were filled with similar material; a brownish orange to reddish orange sandy clay containing occasional flints (ET35/004 &009). Prehistoric pottery was recovered from context 35/004, but it seems likely to have been residual, and that these two features related to modern field drain disturbance.
- 6.63.3 Cut context 35/006, based on the presence of rooting and bioturbated edges, was interpreted by the excavator as a probable tree bole.
- 6.64 Evaluation Trench 36 (Figure 6, Figure 19)
- 6.64.1 ET36 was orientated northeast-southwest along the line of the proposed gas pipe trench. Unfortunately, level data from this trench was corrupted, although a maximum depth below the ground surface of 500mm was recorded. The general trench stratigraphy formed between 280mm-350mm of plough soil (ET36/001 same as ET34/001) directly over the natural substrate (ET36/002 same as ET34/002).
- 6.64.2 Four small post holes were recorded in ET36, aligned in a rough semi circle. They were all sub-oval in plan, measuring between 250mm and 400mm in diameter, and between 150mm-200mm deep (contexts 36/003-004, 005-006, 007-008 and 009-010). All had similar profiles with steep edges and an uneven base, although ET36/003 had a more rounded base and sides than the others. The fill material was

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline similar for each; being mid-dark greyish brown clays with occasional silts, containing pebbles and sub angular flints. Notably fill contexts 004 and 008 were recorded as containing occasional large sub angular flint nodules, which may have been remnant post packing. Pottery recovered from ET36/003 indicated a Late Bronze Age date.

6.65 Evaluation Trench 58 (Figure 6)

- 6.65.1 ET58 was orientated northeast-southwest, standing off to the northwest, but running parallel with the line of the proposed gas pipeline trench. This trench was moved a short distance to the north to avoid an existing field boundary. At its northeast end the machined surfaced was levelled to c.18.37m OD, and at its southwest end to 18.08m OD, the maximum depth below the ground surface was 680mm. The overburden was formed of between 230mm-330mm of dark greyish brown clayey silt, containing moderate marling and occasional organic material (ET58/001). This deposit lay over a light greyish brown silty clay sub-soil (ET58/002). Beneath the sub soil, context ET58/003 was recorded, being a light yellowish brown silty clay containing very frequent chalk fragments and smears. It is likely that this context was a buried colluvial deposit. The underlying natural was a mid yellow-grey brown clay with occasional silts (ET58/004).
- 6.65.2 No significant archaeological deposits were encountered in this trench.
- 6.66 Contingency Trenches 16 & 17 (Figure 5)
- 6.66.1 CT16 and CT17 remained unexcavated due to the lack of archaeologically significant features encountered in ET37.
- 6.67 Evaluation Trench 37(Figure 5)
- 6.67.1 ET37 was orientated broadly east-west along the line of the proposed pipe trench. The machined surface at its east end was levelled to c.18.95m OD, and at its west end to c.18.22m OD, with a maximum trench depth of 500mm. Between 200mm-300mm of mid brown clayey loam plough soil containing frequent chalk flecking, flint nodules, Late Bronze Age clay slab fragments, and 1 flint artefact (ET37/001), was recorded overlying 100mm-150mm of mid yellowish brown sandy silty clay sub-soil, also containing frequent chalk flecking (ET37/002). The natural was a compacted mid brownish yellow clay with frequent chalk flecking, and rare sub-angular flints ((ET37/003)
- 6.67.2 No archaeologically significant features were encountered in ET37.
- 6.68 Contingency Trenches 18 & 19 (Figure 5)
- 6.68.1 CT18 and CT19 remained unexcavated due to the lack of

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline archaeological features in the adjacent ET38.

6.69 Evaluation Trench 38 (Figure 5)

6.69.1 ET38 was orientated across the easement corridor at an oblique angle, but broadly northwest-southeast. Its machined surface was levelled at its northwest end to c.15.98m OD and at its southeast end to c.14.96m OD, with a maximum depth below the ground surface of 500mm. The general trench stratigraphy was between 300mm-350mm of plough soil (ET38/001 same as ET37/001) over 100mm-150mm of sub soil (ET38/003 same as ET37/002), which in turn over the natural (ET38/003 same as ET37/003).

6.70 Contingency Trench 20 (Figure 5, Figure 19)

- 6.70.1 The position of CT20 was shifted c.30m to the west in order to avoid a pear orchard. It remained on a broadly east-west alignment, along the route of the proposed pipe trench. Its machined surface at the east end was levelled to c.9.29m OD, and at the west end to c.8.85m, with a maximum depth below the ground surface of 1500mm. In terms of the general stratigraphy, approximately 300mm of mid brown sandy loam plough soil (CT20/001) was recorded over 200mm-500mm of mixed light brown and yellowish brown clayey sand, containing frequent chalk and charcoal flecking throughout and occasional sub angular flint nodules to 100mm (CT20/002). Across the trench, for the most part, the sub-soil sealed cultural deposits, although where exposed the natural was a brownish orange sandy clay 'brick earth, containing occasional sub-angular flints, sandstone nodules, and oxidisation of the mafic minerals (CT20/003)
- 6.70.2 CT20 revealed some complex archaeological deposits. Starting from the east of the trench, ditch cut CT20/005 was at least 6m long, 1600mm wide and 500mm deep. It was .filled by CT20/006, a dark greyish brown sandy loam containing occasional sub angular flints, sandstone nodules and chalk flecking. Cultural material recovered from this feature indicates a Post-Medieval date, although residual Romano-British artefacts were also present.
- 6.70.3 Ditch CT20/005 was cut into deposit CT20/007; a mid brownish grey sandy clay containing occasional chalk flecking and very frequent oxidisation. No informative cut was revealed for this deposit, and no cultural material was recovered. It was interpreted as probable backfill to a quarry pit.
- 6.70.4 To the west of CT20/007, two well defined features were found cut into the natural (CT20/003). CT20/008 was elliptical in plan with an asymmetrical bowl shaped profile, and measuring c.400mm long by c.250mm wide and 100mm surviving depth. It was filled by CT20/009 mid greyish brown sandy clay, containing occasional charcoal smears

- 6.70.5 Close by to the northeast sub-circular feature CT20/010 was recorded, measuring 300mm in diameter and 200mm deep. Figure 19 Section 24 shows a slightly asymmetrical u- shaped profile, with two fills clearly visible. Context CT20/11 was a mid yellowish brown silty clay matrix, containing very frequent slag, ironstone, flint and sandstone nodules to 100mm. This deposit appeared to be post packing around post pipe context CT20/018; a mid brownish grey silty clay, containing frequent burnt clay, charcoal and oxidised minerals. Pottery recovered from this feature, indicated a Romano-British date.
- 6.70.6 A northeast-southwest aligned gully was also identified cut into the natural 'brickearth'. Cut CT20/012 was at least 1300mm long, 300mm wide and 70mm deep. Figure 19 Section 25 reveals a slightly asymmetrical bowl shaped profile, filled by CT20/013, a mid brownish sandy clay with occasional charcoal and oxidised minerals. This feature continued beneath the trench baulk to the southwest, was cut to the northeast, and also sealed by deposit CT20/004. No datable artefacts were recovered from this gully.
- 6.70.7 Deposit/cut CT20/004 was a mid greyish brown sandy silty clay with very high levels of mineral oxidisation throughout. No datable artefacts were recovered from this feature, and it was interpreted as probable quarry pit backfill.
- 6.70.8 To the west deposit/cut CT20/014 was revealed. This context was exposed at a higher level than the surrounding trench due to the presence of a shallow field drain. Context CT20/014 was a friable mid brown sandy clay containing very frequent burnt clay, and charcoal, and moderate sub-angular flints, and chalk flecking/nodules. It was noted that the burnt clay and charcoal often occurred around concentrations of chalk nodules. Dating from this deposit was of a Neolithic/Bronze Age date.
- 6.70.9 Context CT20/004 outcropped again to the west of CT20/014, and CT20/014 clearly overlay CT20/004. It is possible that they were stratigraphically adjacent fills within in a single cut feature.
- 6.70.10 Pit context CT20/015 was clearly cut into the top of CT20/014, and revealed a geometric sub-square shape in plan. It remained unexcavated but was filled by CT20/016; a mixed mid yellowish brown to greyish brown silty sand. No dating evidence was recovered, but it seems likely that this was a modern feature.
- 6.70.11 At the west end of the trench deposit CT20/017 was exposed; being a mid bluish grey silty clay mottled with very frequent orange brown silty clay, and containing occasional sub rounded flints and oxidised mafic minerals. This deposit was interpreted as either natural, or another

- 6.70.12 The dating evidence for CT20 was somewhat equivocal, although the archaeological evidence indicates probable multi period activity across the trench.
- 6.71 Evaluation Trench 39 (Figure 5, Figure 19)
- 6.71.1 ET39 was orientated broadly northeast-southwest, tangentially across the easement corridor. The machined surface at its northeast end was levelled to c.10.43m OD, and at its southwest end to c.10.28m OD, with a maximum depth below the ground surface of 1100mm. The general trench stratigraphy was 300mm of plough soil (ET39/001 same as CT20/001) over 100mm-300mm of sub-soil (ET39/002 same as CT20/002). The natural was a brownish orange sandy clay 'brickearth' (ET39/003 same as CT20/003).
- 6.71.2 A large feature of undetermined shape was revealed in the base of ET39. Cut context ET39/004 had clearly defined edges, with a minimum depth of 700mm, although the feature was not bottomed, and a width/length of 13.5m. The feature continued beneath both the southeast and northwest baulks, and is shown in Figure 19 Section 26. It was filled by ET39/005; a friable mid greyish brown clayey sand, containing very frequent burnt clay and charcoal, as well as frequent sub-angular flints, chalk flecking, and occasional sandstone fragments. The feature was interpreted as a large quarry pit, and on the ground thought to be a Romano-British feature. However, a brooch which was securely sealed in ET39/005 proved to be of Early Anglo-Saxon origin. Hence this feature, combined with the activity in CT20, may be indicative of Anglo-Saxon industrial activity in the area.
- 6.71.3 To the southwest of ET39/004 a small hearth was recorded, context ET39/007. This feature was not excavated as dating material was recovered from the surface. It measured c.700mm in diameter, and was filled by ET39/006; a mid brownish grey clayey silt, containing pottery and fire-cracked flint. Pottery recovered from the feature indicated a Late Bronze Age Date.
- 6.71.4 At the southwest end of the trench ET39/008 was excavated, measuring c.900mm wide and up to 120mm deep. It continued beneath the southeast baulk, and may have been either a pit, or a ditch terminal. The fill context, ET39/009, was a light-mid brownish grey clayey silt, containing occasional angular flint, and pottery smears. The dating evidence from this feature also indicated Late Bronze Age origin.
- 6.71.5 As with CT20, ET39 revealed an mix of archaeologically significant features, similarly indicating multi period activity in this area.

6.72 Contingency Trench 21 (Figure 5)

- 6.72.1 CT21 was orientated northwest-southeast along the line of the proposed pipe trench. The machined surface at its northwest end was levelled to c.10.46m OD, and at its southeast end to c.9.75m OD, with a maximum depth below the ground surface of 1900mm. The overburden comprised 250mm-300mm of plough soil (CT21/001 same as CT20/001), over 100mm-200mm of sub-soil (CT21/002 same as CT20/002). The natural substrate was a brownish orange silty clay 'brickearth' ((CT21/003 same as CT20/002).
- 6.72.2 Stretching for roughly 6m from the southeast end of the trench, deposit CT21/004 was recorded; being a mixed light creamy grey, to a white-grey fine sandy silt, containing patches of brownish yellow silty clay. Although the deposit was sterile of finds, it did appear to be somewhat disturbed/mixed. A sondage was excavated through the deposit but failed to achieve the bottom at 1900mm below the ground surface. It was inconclusive as to whether CT21/004 was natural geology, or the backfill to another quarry pit.

6.73 Evaluation Trench 59 (Figure 5, Figure 19)

- 6.73.1 ET59 was moved a short distance to the north to avoid dense vegetation. It remained aligned broadly east-west running parallel to the line of the proposed pipe trench. The machined surface at the east end of the trench was levelled to c.7.83m OD and at its west end to c.6.85m OD, with a maximum depth below the ground surface of 1060mm. This was reached in an investigative sondage excavated at the west end of the trench. For the general stratigraphy, between 270mm-340mm of dark brown clayey silt plough soil (ET59/001), was recorded over 150mm-220mm of mid brown clayey silt sub-soil (ET59/002). The natural was exposed in the eastern half of the trench and was a light greyish orange brown silty clay (ET59/003).
- 6.73.2 At the east end of the trench a narrow gully, aligned roughly north-south was found to terminate within the trench. Gully cut ET9/005 was c.1150mm long, c.200mm wide and 100mm deep, with a u-shape profiled, and was filled by ET59/006; a mid greyish brown silty clay. Late Bronze Age pottery was recovered from this feature.
- 6.73.3 To the west a small post hole was excavated. Context ET59/007 measured c.250m in diameter, and up to 150mm deep with a v-shaped profile, and was filled by ET59/008, a light brownish grey clayey silt, containing fire cracked flints, struck flakes, and smears of burnt clay. No datable material was recovered from this feature.
- 6.73.4 In the western half of the trench an alluvial deposited was identified, and investigated in a small hand dug sondage. This deposit, context ET59/004, was not bottomed in either the hand or machine excavated

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline sondage. Its upper level or interface to the sub-soil was a brownish grey silty clay, below which it became a bluish grey silty clay. Cultural material recovered from this deposit, included Mesolithic worked flints, Prehistoric, Iron Age and Late Bronze Age pottery as well as Romano-British floor tile.
- 6.73.5 ET59 was located close to the bottom of a topographic channel running roughly northeast-southwest, with slopes climbing gently to both the north and south. Given the variety of artefactual material it seems that a small river or stream ran through this location until at least the Romano-British period. Such a water source would fit well with the Romano-British kilns situated a short distance to the west (see below), and the multi period industrial type activity identified 50m or so to the east in trenches ET39 and CT20 (discussed above).

6.74 Evaluation Trench 40 (Figure 5)

- 6.74.1 ET40 was orientated northeast-south along the line of the proposed pipe trench. Its machined surface at the northeast end of the trench was levelled to c.7.16m OD, and at its southwest end to c.7.49m OD, with a maximum depth below the ground surface of 510mm. The overburden was formed by between 230mm-280mm of mid brown clayey silt (ET40/001) directly overlying a light brown orange silty clay 'brickearth' (ET40/002).
- 6.74.2 No significant archaeological features were identified in this trench. However a relatively large number of struck flakes and fire cracked flints were recovered from ET40/001 and its interface with the natural. This ties in well with the field walking survey (stage 1), which also recovered a selection of flint work from the area of ET40. Based on the results of this work, the associated report highlighted the likelihood of a prehistoric sight in the vicinity. This is again unsurprising given the location of ET40, close to the adjacent water supply.

6.75 Evaluation Trench 41 (Figure 5, Figure 19)

- 6.75.1 ET41 was located slightly further upslope, and orientated northeast-southwest across the pipeline easement corridor. At its northeast end the machined surface was levelled to c.7.64m OD, and at its southwest end to c.8.42m OD. The plough soil was a mid brown fine clayey silt (ET41/001), between 190mm-250mm thick and containing frequent organic material as well as moderate stones and flints. It directly overlay the natural 'brickearth'; a light brownish orange silty clay (ET41/002).
- 6.75.2 One feature was recorded in ET41. Cut context ET41/003 was suboval in plan, being c.700mm long, c.400mm wide and up to 150mm deep. It had gentle sides, with a discrete sub circular cut in its base (excavator interpreted as a possible overcut), and was filled by

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline ET41/004; a compacted light brownish orange clay, containing frequent burnt flints and burnt pieces of sandstone. Pottery recovered from this feature indicated a Late Bronze Age date, although a piece of 19th century ceramic building material was also retrieved, probably intrusive.
- 6.75.3 Of most significance in ET41 was the high recovery of struck flint from the overburden, much of which appears to have been Mesolithic in origin.
- 6.76 Evaluation Trench 60 (Figure 5, Figure 20)
- 6.76.1 ET60 was located higher up the valley side still overlooking the channel below. It was orientated broadly east-west, running parallel, and to the south of the proposed pipe trench. At the east end its machined surface was levelled to c.9.72m OD, and at its west end to c.10.61m OD, with a maximum depth below the ground surface of 560mm. The plough soil was between 270mm-300mm thick (ET60/001 same as ET41/001) and overlay the natural 'brickearth' (ET60/002 same as ET60/002).
- 6.76.2 A deposit of burnt material was excavated at the east end of the trench. Cut context ET60/004 was c.900mm long, c.500mm wide, and up to 90mm deep. It had a steep, almost vertical edge to the west, breaking sharply and then rising up gently to its eastern edge. Two fills were recorded, the upper one being context ET60/006; a black silty clay, mottled with white and dark brown smears, and containing frequent fire cracked flints, and charcoal. This overlay context ET60/005; a mid brown orange silty clay containing occasional flints and charcoal. Pottery recovered from this probable hearth indicated a Romano-British date, between AD120-150.
- 6.76.3 To the west a ditch terminus was excavated, aligned roughly north-south. This cut context, ET60/007, was c.3500m long, c.1500mm wide and up to 180mm deep. It had evenly graded sides to a shallow, horizontal and undulating base, and was filled by ET60/008; a mid brown grey silty sand containing occasional angular flints. No dating evidence was recovered from this feature.
- 6.76.4 Next to ET60/007, a sub circular feature was excavated, ET60/009, interpreted by the excavator as a probable tree bole.
- 6.76.5 At the west end of the trench another ditch was recorded, crossing the trench at an oblique angle, and running northwest-southeast. Cut context ET60/011 measured c.1300mm wide and up to 70mm deep. It had a very shallow and broad bowl shaped profile, and was filled by ET60/012; a mid brownish orange silty clay. No dating evidence was recovered from this feature.

6.77 Evaluation Trench 42 (Figure 5, Figure 20)

- 6.78.1 ET42 was located close to the top of the valley slope, less than 150m away from the known location of three Romano-British kilns. It was orientated broadly northeast-southwest along the line of the proposed pipe trench. The machined surface at the northeast end was levelled to c.12.68m OD and at the southwest end to c.13.08m OD, with a maximum depth below the ground surface of 490mm. The plough soil was a mid-dark brown clayey silt (ET42/001), between 290mm-330mm thick. It directly overlay the natural, which was a very desiccated, compacted and mixed mid brownish orange clay (ET42/002).
- 6.78.2 Both ET42 and ET61 to the southeast were contained within a small fenced field, at the time under pasture. However the area had previously been managed Conifer woodland, the roots of which had heavily impacted on the natural substrate.
- 6.78.3 Several interesting features were revealed in ET42, most notably a Romano-British kiln; allocated cut context ET42/004. This feature was at least 2600mm by 1500mm, but extended beneath the northwest baulk and remained unexcavated. However three fill deposits were noted on the surface. The outer context was recorded as ET42/005; a mid brownish orange silty clay, containing frequent charcoal flecks, and occasional fire cracked flints, pebbles, and sub angular flints. The inner area was context ET42/016; a mid brownish grey silty clay mottled throughout with yellow flecking, and containing frequent patches of burnt clay, charcoal, and flints. An arm of this context stretched out beneath the northwest baulk and may have related to the kiln flue. Within context ET42/016, deposit ET42/107 was also noted; forming areas of dark black grey silty clay contain very frequent charcoal. Pottery recovered from the surface of this feature was of Romano-British, between AD 120-150.
- 6.78.4 On its north east edge, the kiln cut a roughly east-west aligned ditch which terminated within the trench. This context, ET42/006, was a shallow dished shaped cut, measuring c.1000mm long by c.800mm wide and up to 100mm deep. It was filled by a mid brownish orange sandy clay, containing frequent flint pebbles. Pottery recovered from the fill indicated a Romano-British date.
- 6.78.5 To the southwest of the kiln several more features were located. Cut context ET42/008 was a small sub circular posthole measuring c.220mm in diameter, and up to 70mm deep with an asymmetrical v-shaped profile. It was filled by ET42/009; a mid brown silty clay. No dating evidence was recovered from this feature.
- 6.78.6 Adjacent to the northwest, cut context ET42/010 was recorded, continuing beneath the northwest baulk. Its exposed measurements

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline were 950mm by 1250mm, with 50mm surviving depth. It had a shallow dished profile and was filled by ET42/011; a mid brownish orange silty clay containing occasional flints.
- 6.78.7 Immediately to the southwest, also continuing beneath the northwest baulk cut context ET42/012 was recorded. This feature had exposed measurements of c.600mm by 800mm with a surviving depth of up to 60mm. It was filled by ET42/013; a mid brownish grey silty sand, containing occasional flints. Pottery recovered from the fill indicated a Romano-British date.
- 6.78.8 Continuing beneath the opposite baulk, cut context ET42/014 was excavated with exposed measurements of 1700mm in length, up to 1000mm in width, and a surviving depth of 230mm. It had a slightly angular u-shaped profile, and was filled by ET42/015; a mid brownish orange silty sand, containing occasional flints. Pottery recovered from this context indicated a Romano-British, between AD120-150.
- 6.78.9 To the southwest, a northwest-southeast aligned ditch was recorded crossing the trench width at a tangent. Cut context ET42/018t measured c.5000mm in length, up to 1500mm wide and had a surviving depth of 400mm. Figure 20 Section 28 shows a slightly asymmetrical v-shaped profile filled by ET42/019; a mid brownish orange silty clay containing occasional flints. Pottery recovered from this feature indicated an Iron Age date.
- 6.79 Evaluation Trench 61(Figure 5, Figure 20)
- 6.79.1 ET61 was orientated northeast-southwest, along the line of the proposed pipe trench. At its northeast end the machined surface was levelled to c.12.24m OD, and at its southwest end to c.11.15m OD, with a maximum depth below the ground surface of 470mm. The general trench stratigraphy revealed between 280mm-330mm of plough soil (ET61/001 same as ET42/002), over the natural 'brickearth' (ET61/002 same as ET42/002). Again the underlying natural brickearth was heavily impacted by tree root action.
- 6.79.2 A number of features were excavated in ET61. At the southwest end of the trench, a ditch running broadly north-south (ET61/003), with a return to the east also recorded (ET61/015). The north-south portion continued beneath the southeast end trench baulk and measured c.5500mm in length, and up to 650mm wide with a surviving depth of 240mm. It had a slightly rounded v-shaped profile and was filled by ET61/004; a mid greyish brown silty clay, containing occasional flints. The east-west stretch of ditch measured c.2700mm in length, up to 600mm in width, and had a surviving depth of 90mm. It had a shallow bowl shaped profile was filled by ET61/016, a mid greyish brown silty clay, containing occasional flints. In plan this feature clearly appeared as continuous. However, the slotted profiles were quite different, and

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline dating material from ET61/004 included a piece of 16-17th century roof tile, whereas material from ET61/016 was of Romano-British origin. The anomalous artefactual evidence may relate to bioturbation/root disturbance, or may rather indicate the presence of two discrete ditches; one being Late Medieval and the other Romano-British.
- 6.79.3 Another east-west ditch was located a short distance to the northeast, cut context ET61/005. This large feature crossed the width of the trench obliquely and measured at least 5000mm long, 1400mm wide and up to 420mm in depth. It had almost vertical sides to a slightly rounded base, and was filled by ET61/006; a mid greyish-brown silty clay containing occasional flints. Pottery recovered from the fill indicated a Romano-British date, between AD50-100.
- 6.79.4 At the northeast end of the trench another ditch was recorded, cut slot ET61/013. This feature was aligned northwest-southeast, crossing the trench width obliquely, and measuring c.2100mm long, c.1300mm wide, and up to 330mm deep. Figure 20 Section 29 shows a v-shaped profile filled by ET61/014; a mid greyish brown silty clay containing occasional flints. Pottery recovered from this ditch indicated a Romano-British date.
- 6.79.5 Several areas of bioturbation were also investigated in ET61, which proved to be root disturbance, probably relating to the conifer woodland (contexts ET61/007, 009, and 011).
- 6.80 Test Pit 7 (Figure 5)
- 6.80.1 TP7 was machine excavated. It revealed c.280mm of dark greyish brown silty clay plough soil (TP7/001) directly over a mid orange brown silty clay natural interface c.420mm thick (TP7/002).
- 6.81 Test Pit 8 (Figure 5)
- 6.81.1 TP8 was machine excavated. It revealed 300mm of mid orange brown fine sandy silt plough soil ((TP8/001) directly over c.500mm of a mid orange brown sandy clay natural interface, containing occasional gravels (TP8/002). In the west facing section a feature was revealed, cut TP8/003. Its extent was beyond the test pit, but it was filled by mid orange brown silty clay, containing rare charcoal, and pot smears (TP8/004).
- 6.82 Test Pit 9 (Figure 5)
- 6.82.1 TP9 was machine excavated. The plough soil (TP9/001 same as TP8/001) was c.320mm thick, over a mid yellowish brown sandy silt sub-soil (TP9/002). Beneath the sub soil a fill deposit was recorded across the extent of the test pit. TP9/003 was a mid-dark greyish brown sandy silt, containing pot, burnt clay, bone, worked flint, fire

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline cracked flint and burnt sandstone. Pottery recovered from this undefined feature indicated a Romano-British date.

6.83 <u>Test Pit 10 (Figure 4)</u>

6.83.1 TP10 was machine excavated. It revealed c.280mm of mid greyish brown silty clay plough soil (TP10/001), over c.3800mm of light-mid orange brown clay sub-soil/natural interface, containing occasional rounded gravels.

6.84 <u>Test Pit 11(Figure 4)</u>

6.84.1 TP11 was machine excavated. It revealed c.320mm of dark orange brown silty clay plough soil (TP11/001), over c.500mm of light-mid orange brown clay sub-soil/natural interface, containing occasional rounded gravels (TP11/002).

6.85 <u>Test Pit 12 (Figure 4)</u>

6.85.1 TP12 was machine excavated. It revealed c.240mm of mid-dark orange brown silty clay (TP12/001), over c.4000mm of light yellowish brown clay sub-soil/natural interface, containing occasional rounded gravels (TP12/002).

6.86 Evaluation Trench 66 (Figure 4, Figure 20)

- 6.86.1 ET66 was aligned northeast-southwest along the line of the proposed pipe trench. At is northeast end the machined surface was levelled to c.10m OD, and at its southwest end to c.8.38m OD, with a maximum depth below the ground surface of 550mm. The overburden formed between 150mm-280mm of dark brown clayey silt plough soil containing frequent marling (ET66/001) over c180mm-300mm of light greyish brown sub soil, also containing frequent marling (ET66/002). The natural was a mid orange brown silty clay 'brickearth' (ET66/003).
- 6.86.2 At the southwest end of the trench a small sub-circular feature was excavated. Cut context ET66/005 was approximately 480mm in diameter and up to 200mm deep. It had vertical sides to a slightly rounded base and was filled by ET66/006, a compacted dark blackish brown clay, containing frequent fire cracked flints, burnt clay and charcoal. The feature was also lined with a poorly fired clay. Hence, a hearth/kiln for small scale industrial processes seems a reasonable interpretation of this feature.

6.87 Evaluation Trench 67 (Figure 4, Figure 20)

- 6.87.1 ET67 was orientated northeast-southwest along the line of the proposed pipe trench. The machined surface at its northeast end was levelled to c.3.37m OD, and at its southwest end to c.3.15m OD, with a maximum depth below the ground surface of 1200mm. The general stratigraphy revealed between 230mm-300mm of plough soil (ET67/001) directly overlying the natural; a silty clay varying in colour from a mid brownish-orange grey at the southwest end of the trench to a more silty mid brownish orange at the northeast end (ET67/002). Bluish grey alluvial clay was revealed in a 1200m deep sondage excavated mid trench, and at its southwest end.
- 6.87.2 At the northeast of the trench a small sub-circular post hole was recorded measuring c.300mm in diameter and 120mm deep; context ET67/004. It had a v-shaped section and was filled by ET67/005; a mid brown clay containing occasional charcoal and flints. No dating was recovered from this feature.
- 6.87.3 Midway along ET67, a possible palaeochannel was investigated which measured 1800mm wide, at least 500mm deep, and crossed the width of the trench at right angles; context ET67/006. The feature was not bottomed, but Figure 20 Section 30 reveals quite steeply sloping sides and two possible fills. The lower deposit was ET67/007, a mid brownish grey silty clay containing occasional pebbles, and frequent snail and muscle shells. Above this was context ET67/008, and although it did not seem to be contained within the cut, it appeared no where else along the baulk section. It was a soft, mid reddish brown clayey silt, with a very spongy compaction and almost certainly related to ET67/006. It should be noted though, that a modern field drain ran alongside this linear, and it is possible that water leaching from the drain discoloured the surrounding soil, giving the appearance of a separate cut. However the presence of shell in ET67/007 would seem to mitigate against this interpretation.
- 6.87.4 No finds were recovered from this trench, but a Roman pottery kiln is located close by, and recent field walking highlighted the potential for archaeological sites to be present in the same direction to the northeast.

6.88 Test Pit 15 (Figure 4)

6.88.1 TP15 was machine excavated. It revealed c.400mm of mid brown sandy loam plough soil (TP15/001 same as TP17/001), over c.300mm of mid greyish brown sandy clay sub-soil (TP15/002). The natural was c.700mm below the ground surface and comprised a mid brownish orange sandy clay brickearth (TP15/003)

- 6.89 <u>Test Pit 16 (Figure 4)</u>
- 6.89.1 TP16 was machine excavated. It revealed c.330mm of plough soil (TP16/001 same as TP17/001), directly overlying the natural (TP17/002 same as TP17/003).
- 6.90 <u>Test Pit 17 (Figure 4)</u>
- 6.90.1 TP15 was machine excavated. It revealed c.300mm of mid brown sandy loam plough soil (TP17/001), over c.130mm of light brown clayey sand sub-soil (TP17/002). The natural was c.430mm below the ground surface and comprised a mid brownish orange clayey sand (TP17/003).
- 6.91 Evaluation Trench 43 (Figure 3, Figure 20)
- 6.91.1 ET43 was orientated northeast-southwest, tangentially across the pipeline easement corridor. At its northeast end the machined surface was levelled to c.14.99m OD and at its southwest end to c.15.44m, with a maximum depth below the ground surface of 460mm. Between 220mm-365mm of mid greyish brown clayey silt plough soil (ET43/001) overlay the natural substrate, which was a mid brownish orange silty clay brickearth (ET43/002) interleaved with a mid orange brown clayey sand containing frequent gravels.
- 6.91.2 A number of features were excavated across the trench. ET43/005 was an irregular shape in plan, measuring c.2000mm long by c.1400mm wide and up to 210mm deep, Figure 20 Section 31 shows a dished shape profile, filled by ET43/006; a mid greyish brown silty clay containing occasional chalk and flint. Prehistoric pottery was recovered from this fill.
- 6.91.3 Two small post holes were recorded to the northeast of ET43/005. Posthole cut context ET43/007 was c.300mm in diameter and up to 110mm deep. It had almost vertical sides to a flat base, and was filled by ET43/008; a light brownish orange sandy clay containing occasional chalk flecking. Next to this post hole, a similar cut was excavated. ET43/009 measured c.280mm in diameter, and up to 200mm deep. It had a very similar profile to ET43/007, and was filled by ET43/010; a mid greyish brown silty clay. No dating evidence was recovered from either feature.
- 6.91.4 Located roughly mid trench, a northwest-southeast aligned ditch was excavated measuring c.2000m in width, and 800mm surviving depth; context ET43/017. Figure 20 section 32 shows a steeply sided v-shaped profile with a very narrow flat base, and two fills. The upper deposit was allocated context ET43//018; a compacted light orange brown clay containing occasional chalk flecking, burnt clay and charcoal. The lower fill was ET43/014; a mid orange brown clay with

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline occasional charcoal flecking. This context was recorded as the truncated remains of a remnant ditch, cut context ET43/013, but in section appears more likely to be edge collapse into ET43/017. A possible recut was also identified in the top of this ditch. Cut context ET43/011 had a rounded dish shaped profile, being c.1400mm wide and up to 170mm deep. It was filled by ET43/012; a dark brown clayey silt with occasional flints. No dating evidence was recovered from the ditch or recut.
- 6.91.5 A concentrated patch of mafic oxidisation in the natural was investigated at the northeast end of the trench, and recorded as contexts ET43/015-016.
- 6.92 Evaluation Trench 44 (Figure 3, Figure 21)
- 6.92.1 ET44 was aligned east-west along the line of the proposed pipeline trench. The machined surface at its east end was levelled to c.16.78m OD, and at its west end to c.16.88m, with a maximum depth below the ground surface of 500mm The general stratigraphy revealed 250mm-300mm of plough soil, containing frequent chalk marling, and occasional sub-rounded to sub-angular flints (ET44/001), directly overlaying the natural; a mid reddish brown silty clay mixed with a light yellowish brown sandy clay, containing occasional spreads of sub rounded flint a gravels (ET44/002 & 003).
- 6.92.2 A single feature was recorded in this trench. Context ET44/004 contained a shallow spread of material which was only partially exposed and continued beneath the southern trench baulk. Its measurements were c.2000mm in length, .c 450mm in width, and up to 100mm in depth. Figure 21 Section 33 shows a very shallow feature, with a slightly domed fill context, ET44/005, described as a mid greyish brown silty clay containing occasional sub-angular and sub rounded flints, and frequent charcoal and mafic oxidisation.
- 6.92.3 No datable evidence was recovered from this trench.
- 6.93 Evaluation Trench 45 (Figure 3, Figure 21)
- 6.93.1 ET45 was aligned northwest-southeast across the pipeline easement corridor. Its machined surface at the northwest end was levelled to c.16.92m OD, and at its southeast end to c.17.17m OD, with a maximum depth below the ground surface of 450mm. Approximately 230mm-270mm of mid greyish brown plough soil (ET45/001 same as ET44/001), was found to overlie the natural; a mid brownish orange silty clay containing moderate sub-rounded to sub-angular flints (ET45/002).
- 6.93.2 At the southeast end of the trench a very partially revealed feature was excavated. Figure 21 Section 34 shows ET45/003 with a shallow

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline rounded profile, measuring c.750mm wide by up to 150mm deep, and filled by ET45/004; a dark greyish black silty clay, containing patches of orange material, as well as frequent charcoal and occasional burnt clay. No datable material was recovered from this feature.
- 6.93.3 At the other end of the trench, two further features were recorded. ET45/005 was a northeast-southwest aligned linear, crossing the trench width at right angles and measuring c.700mm wide and up to 150mm deep. It had a shallow rounded profile and was filled by ET45/006; a light brownish orange sandy clay, containing occasional pot smears, and moderate flints and stone. Pottery recovered from the fill of this feature indicated a Neolithic/Bronze Age date.
- 6.93.4 Adjacent to ET45/007, a very unclear feature was excavated through the use of a box section. A very shallow, rounded dished shape profile, with a probable diameter of 650mm and depth of 50mm. It was filled by ET45/008; a mid orange brown sandy clay, containing frequent chalk flecking, and occasional stones and flints. No datable material was recovered from this feature.
- 6.94 Evaluation Trench 46 (Figure 3, Figure 21)
- 6.94.1 ET46 was aligned northwest-southeast across the easement corridor. Its machined surface at the northwest end was levelled to c.16.76m OD and at its southeast end to c.15.14m OD. The maximum depth below the ground surface of 560mm was attained in an investigative sondage, excavated in the northwest end of the trench. The overburden revealed between 300-360mm of plough soil (ET46/001 same as ET44/001) directly over the natural; a yellowish orange-brown clay with occasional silts (ET46/002).
- 6.94.2 One possible feature was excavated in this trench, being cut context ET46/003; an irregular linear crossing the width of the trench obliquely. Figure 21 Section 35 shows a steep sided cut, with a slightly concave base, measuring 800mm wide and 190mm deep, and filled by ET46/004; a dark orange brown silty clay, containing frequent chalk flecking, as well as rare rounded gravels and some oxidisation of the mafic minerals. No cultural artefacts were recovered, and it was noted by the excavator that this feature may represent variation in the geology, or a bioturbated natural.

6.95 Evaluation Trench 47 (Figure 3)

6.95.1 ET47 was aligned east-west. Its machined surface at its east end was levelled to c.13.94m OD, and at its west end to c.14.05m OD, with a maximum depth below the ground surface of c.480mm. The overburden formed 340mm-380mm of plough soil, a mid brownish grey silty clay, containing frequent chalk flecking and occasional flints

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline (ET47/001), overlying the natural; a mid brownish orange silty clay brickearth containing occasional sub-angular to sub-rounded flints (ET47/002)
- 6.95.2 No features were identified in ET47
- 6.96 Evaluation Trench 48 (Figure 3, Figure 21)
- 6.96.1 ET48 was moved c.10m to the north to avoid a buried water pipe, but remained orientated broadly northeast-southwest. The machined surface at its northeast end was levelled to c.14.68m OD, and at its southwest end to c15.50m, with a maximum depth below the ground surface of 490mm. The stratigraphy revealed between 330mm-380mm of plough soil (ET48/001 same as ET47/001) over the natural brickearth (ET48/002 same as (47/002).
- 6.96.2 Two features were investigated in ET48. Cut ET48/005 was linear in plan, crossing the trench obliquely on an east-west trajectory, and appearing to terminate within the trench. It measured c.2500mm long, by c.1100mm wide and up to 130mm deep, with steep sides breaking sharply to a flat undulating base. A single fill was identified, context ET48/006; being a mid orange brown clayey silt containing occasional flints. No datable material was recovered from this feature.
- 6.96.3 ET48/005 was cut by what seemed to be a sub oval pit, context ET48/003. Figure 21 Section 36 shows a feature with gently sloping sides and a rounded undulating base, measuring c.1400 across, and up to 140mm deep. It was filled by ET48/004; a mid greyish brown clayey silt, containing frequent sub-rounded to sub-angular flints. No datable material was recovered from this feature.
- 6.97 Evaluation Trench 49 (Figure 3)
- 6.97.1 ET49 was aligned broadly northeast-south. It original position and orientation was shifted to the west in order to avoid overhead power cables. At the northeast end of ET49 the machined surface was levelled to c.16.21m OD, and at the southwest end to c.16.36m OD, with a maximum depth below the ground surface of 440mm. The overburden formed 320mm-350mm of mid grey brown silty clay plough soil, containing occasional sub rounded flints (ET49/001), overlying the natural; a mid orange brown silty clay matrix containing very frequent sub-rounded to sub-angular flint gravels (ET49/002).
- 6.97.2 No archaeological features were present in ET49.
- 6.98 Evaluation Trench 50 (Figure 3)
- 6.98.1 ET50 was aligned broadly north-south, across the pipeline easement corridor. The machined surface at its north end was levelled to

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline c.13.93m OD, and at its south end to c.14.29m OD, with a maximum depth below the ground surface of 620mm. The overburden formed 280mm-350mm of plough soil (ET50/001 same as ET49/001), over the natural substrate; a mid brownish orange silty clay brickearth containing occasional sub-angular to sub-rounded flints nodules (ET50/002).
- 6.98.2 No archaeological features were present in ET50.
- 6.99 Evaluation Trench 51(Figure 3)
- 6.99.1 ET51 was aligned roughly east-west. At its east end the machined surface was levelled to c.13.20m OD, and at its west end to c.13.78m OD, with a maximum depth below the ground surface of 720mm. The trench stratigraphy revealed 320mm-390mm of plough soil (ET51/001 same as ET49/001) over the natural brickearth (ET51/002 same ET50/002).
- 6.99.2 No archaeological features were identified in ET51.
- 6.100 Evaluation Trench 52 (Figure 3)
- 6.100.1 ET52 was aligned broadly north-south. At its north end the machined surface was levelled to c.15.18m OD, and at its south end to c.15.65m OD, with a maximum depth below the ground surface of 430mm. The overburden formed 290mm-330mm of plough soil (ET52/001 same as ET49/001), over natural gravels (ET52/002 same as ET49/002)
- 6.100.2 No archaeological features were present in ET51.
- 6.101 Evaluation Trench 53 (Figure 3)
- 6.101.1 ET53 was aligned roughly east-west. At its east end the machined surface was levelled to c.12.84m OD, and at its west end to c.11.60m OD, with a maximum depth below the ground surface of 430mm. Approximately 240mm-340mm of plough soil (ET53/001 same as ET49/001) was found overlying natural gravels (ET53/002 same as ET53/002).
- 6.101.2 No archaeological features were present in ET51.
- 4.102 <u>Evaluation Trench 54 (Figure 3)</u>
- 6.102.1 ET54 was aligned broadly north-south. At its north end the machined surface was levelled to c.11.18m OD, and at its south end to c.12.61m OD, with a maximum depth below the ground surface of 470mm. The overburden formed between 270mm-370mm of plough soil (ET54/001 same as ET49/001) directly overlying the natural brickearth (ET54/002 same as ET50/002).

- 6.102.2 No archaeological features were present in ET51.
- 6.103 Evaluation Trench 55 (Figure 3)
- 6.103.1 ET55 was aligned roughly east-west. At its east end the machined surface was levelled to c.12.71m OD, and at it west end to c.12.5m OD, with a maximum depth below the ground surface of 480mm. The overburden formed 340mm-360mm of plough soil (ET55/001 same as ET49/001) over natural gravels (ET55/002 same as ET49/002).
- 6.103.2 No archaeological features were present in ET51.
- 6.104 <u>Test Pit 18 (Figure 3)</u>
- 6.104.1 TP18 was machine excavated. It revealed 100mm of turf and top soil (TP001) over 1600mm of made ground, comprising mid brownish orange sandy gravels mixed with pockets of mid greyish brown clayey loam (TP18/002. At approximately 1700mm below the ground surface cleaner flint gravels in a mid orange brown sandy silty clay were recorded (TP18/003). This context was probably the underlying natural, but was not inspected closely due to the test pit depth.
- 6.104.2 The field which contained TP18 was clearly lower than the surrounding landscape, and its extensive undulating topography was highly indicative of post-medieval quarrying activities.
- 6.105 Test Pit 19 (Figure 3)
- 6.105.1 TP19 was machine excavated. It comprised c.300m of sandy loam top soil, containing occasional flints (TP19/001), overlying c.500mm thick flint gravels, within a light yellowish brown silt matrix (TP19/002). TP19/002 was a made ground deposit sealing TP19/003; 800m thickness of gravels contained in a mid brownish yellow silt. It was undetermined whether TP19/003 was a natural or cultural deposit, but at a depth of 1500mm, TP19/004 was recorded; a mid yellowish orange sandy clay natural. TP19 was located on the edge of the apparent quarrying activity. Hence, the ground here may have been made up from the adjacent excavations.
- 6.106 Evaluation Trench 56 (Figure 2)
- 6.106.1 ET56 was broadly aligned north-south. This trench was located close to the Thames Estuary shoreline, on the Shorne Marshes. The machined surface at its north end was levelled to c.1.34m OD, and at its south end to c.1.45m OD, with a maximum depth below the ground surface of 600mm. The stratigraphy comprised c.300mm of mid greyish brown silty loam top soil, with very frequent horizons of charcoal up to 50mm thick, as well as organic material, and rare sub-

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline rounded flints and burnt clay (ET56/001) overlying the sub-soil; a 220mm-250mm thick, compacted reddish brown clay mottled with blue greys (ET56/002). The natural substrate was a bluish grey alluvial clay, mottled with very frequent brownish reds (ET56/003). Notably its upper reaches tore badly during machining, probably due to a lack of moisture content in the top 300mm or so.

6.106.2 No archaeological features were identified in ET56.

7.0 THE FINDS AND ENVIRONMENTAL EVIDENCE

7.1 The Bulk Finds

7.1.1 All bulk finds have been washed and dried or air dried by context. Material has been quantified by count and weight and was bagged by material and context. The few pieces of ironwork were sufficiently diagnostic and do not warrant x-radiography. All finds have been fully recorded on pro forma sheets for archive. The full quantification of bulk finds by context is shown in Appendix 1.

7.2 The Prehistoric and Romano-British Pottery by Anna Doherty

7.2.1. A total of 938 sherds weighing 6.85kg, mostly of Late Bronze Age and Roman date, was recovered from the evaluation trenches. The total sherd count and weight of pottery by context and spot-date is shown in Appendix 1 but at this stage fabrics and forms have not been quantified; however, fabrics were examined using a x20 binocular microscope and any diagnostic form elements were noted to give a general characterisation of the assemblage.

7.3 Late Bronze Age pottery

- 7.3.1 Almost half of the pottery consists of fairly coarse, moderate to ill-sorted flint-tempered fabrics which contain no quartz or have slightly silty matrixes. Although there is some variability in frequency and size of inclusions, these are all likely to date from the Late Bronze Age. A few contexts contain small numbers of sherds which are slightly sandier with ill-sorted flint which appears flaked rather than crushed and there is one sherd with a very silty matrix containing burnt out organics. It is possible that these fabrics are Neolithic or earlier Bronze Age, but there are no diagnostic forms or decorative elements to confirm activity of this date.
- 7.3.2 There is relatively little diagnostic material amongst the Late Bronze Age pottery. The majority of sherds probably come from coarse ware jars although a small number may be from more finely finished jars. There are a number of bases with concentrations of flint on the

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline underside. Bases of this type are particularly common in the Late Bronze Age pottery from Highstead, where it is suggested that vessels were placed on a bed of calcined flint grits before firing (Couldrey 2007, 158). Context [33/017] contains a handle from a lughandled jar. Decorated or fine-ware vessels include a sherd with an applied cordon with impressed finger-tip decoration and two examples of very thin-walled fine-ware bowls, one of which has a carinated profile. However, there is no evidence of more elaborate decoration or very strongly carinated profiles which might suggest continuing activity into the Earlier Iron Age.
- 7.3.3 Many of the contexts dated to the Late Bronze Age contained only one or two small sherds so it is possible that some of this material appears residually in later features.

7.4 <u>Iron Age pottery</u>

7.4.1 A very small quantity of pottery is likely to be of Middle or Late Iron Age date. This includes fine, well sorted flint-tempered fabrics with sandy matrixes, sandy or sand with glauconite fabrics and fabrics with shell tempering or voids from leeched shell. However, only one context, ET [7/008], contained diagnostic Iron Age forms. They include a very well formed flint-tempered bead-rim jar, a necked bowl in a sand-tempered fabric and another flint-tempered necked bowl with a more rounded profile with fine stabbed decoration in a chevron pattern on the shoulder. This context is Late Iron Age in date although the pottery appears to be influenced more by native traditions than imported Gallo-Belgic wares and there is a notable absence of grogtempering. This would suggest that the group is not from the immediate pre-conquest period

7.5 Roman pottery

About half of the pottery is of Roman date and guite a narrow range of 7.5.1 fabrics and forms is present. The vast majority of the assemblage is made up by coarse greywares and, given the location of the site, it is likely that most were produced locally at North Kent/Thameside kilns between AD50-150. The finer North Kent fabrics are present in smaller numbers and include a few sherds of the 1st century whiteslipped flagon fabric produced at Hoo and the widely traded fine grey and oxidised wares (including a red-slipped example of the latter). There is only one import in the assemblage, a sherd of Gaul 1 amphora fabric associated with flat-based forms produced around AD 50-250 but probably not imported to north Kent until the Flavian period (Pollard 1988, 47). It is notable that grog-tempered wares are absent from the assemblage and there are only a handful of flint-tempered wares in Roman contexts which are likely to be Late Iron Age or early Roman as opposed to residual prehistoric. This would suggest that Roman activity on site began in the Flavian period as pre-Flavian

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline assemblages from Medway sites typically contain fairly significant proportions of these tempered wares (Pollard 1988, 46).
- 7.5.2 There are relatively few diagnostic forms and most imitate BB2 dishes with rounded rims and chamfered bases. A number of the Roman contexts can therefore be dated to around AD 120-150 as there was a relatively short period when local greyware industries imitated BB forms. However there are a few examples of earlier forms including a slightly reeded flange from a bowl loosely imitating samian form Dragendorff 36 or Curle 11 in the red-slipped fine oxidised ware. This is paralleled by Monaghan's type 5B, produced around AD 90-130 (Monaghan 1987, 138). A flagon with a simple out-turning rim, possibly imitating 1st century Hofheim forms is unevenly fired and appears slightly warped. This vessel may be a kiln waster as possible kiln features were identified but not excavated during the evaluation.

7.6 Significance and Potential

7.6.1 Both the prehistoric and Roman assemblages are fairly small in size and contain only a limited amount of diagnostic material. They are therefore probably only of local significance at present; however they may be integrated into larger and more important assemblages if further work produces significant quantities of pottery. Late Bronze Age context [33/017] and Late Iron Age context ET [7/008] are reasonably large groups which could be further analysed as part of a full report. Further comparison with local sites could also be undertaken, including the unpublished prehistoric and Roman assemblages from a recent ASE site at Kingsnorth power station, Hoo.

7.7 The Post-Roman Pottery by Elke Raemen

- 7.7.1 Only six pieces of pottery of medieval date were recovered from the site (ET [37/001] and [63/008]). All of these are cooking pot fragments in a sand- and shell-tempered ware, dating to the 13th century.
- 7.7.2 Later sherds include a 17th-century fragment of German stoneware (Frechen) from ET [51/01], a piece of blue transfer printed pearlware of late 18th- to early 19th- century date (ET [14/005]) and a fragment of 19th-century white china (ET [45/001]).
- 7.7.3 The assemblage is too small to hold any potential for further analysis. No further work is required on the current assemblage. However, if any further excavations take place, the finds should be studied in conjunction with the current assemblage.

7.8 The Ceramic Building Material by Elke Raemen

7.8.1 An assemblage of 42 pieces of Ceramic Building Material (CBM) was recovered from 23 different contexts.

7.8.2 The Roman Ceramic Building Material

7.8.3 Floor Tiles

The site contained five Roman floor tiles fragments from four different contexts (ET [8/012], ET [13/014], ET [20/011] and ET [59/004]). These are mostly in a sparse fine sand-tempered fabric with iron oxide inclusions to 3 mm, some with additional rare quartz inclusions to 2 mm or rare chalk inclusions to 4 mm. A fine sand-tempered fragment with rare quartz inclusions to 2 mm and rare crushed and fire-cracked flint inclusions to 2 mm was recovered from ET [20/011]. The tiles vary in thickness between 36 and 41 mm. No other dimensions are measurable.

7.8.4 Roof Tiles

Two possible Roman tegula fragments (ET [29/001] and ET [34/007]) were recovered from the site. Both are in a sparse fine sand-tempered fabric with rare crushed or fire-cracked flint inclusions to 2 mm and rare iron oxide inclusions to 9 mm. The thickness of the tiles varies between 17 and 26 mm. No other measurements could be taken.

7.8.5 Post-Roman Ceramic Building Material

7.8.6 Roof Tiles

A total of 12 roof tile fragments, mainly consisting of peg tiles, was recovered from the site. The four 16th-to 17th-century pieces are all sparse fine sand-tempered, some with rare inclusions consisting of crushed flint, clay pellets or iron oxide inclusions. A piece from TP [9/001] exhibits traces of glazing.

7.8.7 A further eight pieces date to the 18th to 19th century. These are again all sparse fine sand-tempered, some with rare inclusions such as crushed flint, quartz, chalk and iron oxides. A fragment dating to the late 19th to 20th century (ET [47/001]) shows occasional slag inclusions to 3 mm, occasional iron oxide inclusions to 2 mm and rare chalk inclusions to 3 mm.

7.8.8 *Brick*

Red brick fragments, 20 pieces in total, were only recovered from late post-medieval contexts. Most of these are sparse fine sand-tempered with occasional chalk inclusions to 3 mm, occasional crushed flint to 12 mm and rare iron oxide inclusions to 7 mm. The height of three pieces (ET [14/005] and ET [18/007]) can be measured at between 70 and 71 mm. No other dimensions are complete.

7.8.9 Miscellaneous

- A 19th-century land drain fragment was recovered from ET [18/007]. In addition, two undiagnostic chips were recovered, one of which is probably of Roman date (ET [34/004]).
- 7.8.10 The assemblage is too small to be of much potential. However, the assemblage should be studied in conjunction with finds from any second stage excavations. No further work is required for the current assemblage.

7.9 The Glass by Elke Raemen

- 7.9.1 The site produced two pieces of glass, both of mid to late 19th century date, Context ET [4/005] contained a green glass wine bottle neck fragment, while a clear glass fragment of undiagnostic form was recovered from ET [48/005]
- 7.9.2 The glass assemblage is not considered to hold any potential for further analysis. The assemblage is too small, of late post-medieval date and the sherds consist only of small, undiagnostic fragments. No further work is required.

7.10 The Fired Clay by Elke Raemen

- 7.10.1 An assemblage consisting of 205 pieces was recovered from 37 different contexts. Two of these are discussed in the Registered Finds section (RF <4> and RF <6>). Nine fabrics could be established:
 - <u>Fabric 1</u>: Sparse fine sand-tempered with rare iron oxide inclusions to 2mm and occasional to moderate organic tempering. Some pieces with rare crushed flint to 7 mm.
 - <u>Fabric 2</u>: Sparse fine sand-tempered with occasional quartz inclusions mm and rare crushed flint to 4 mm.
 - Fabric 3: Sparse fine sand-tempered.
 - <u>Fabric 4</u>: Moderate fine to medium sand-tempered with occasional iron oxide inclusions to 2 mm.
 - <u>Fabric 5</u>: Sparse fine sand-tempered with rare iron oxide inclusions to 2mm and rare to occasional crushed flint to 3 mm.
 - <u>Fabric 6</u>: Sparse fine sand-tempered with rare to occasional organic inclusions, rare iron oxide inclusions to 5 mm and moderate chalk inclusions to 4 mm.
 - <u>Fabric 7</u>: Sparse fine sand-tempered with abundant organic tempering and occasional chalk inclusions to 3 mm.

- <u>Fabric 8</u>: Sparse fine sand-tempered with moderate to abundant fire-cracked flint inclusions to 6 mm.
- <u>Fabric 9</u>: Sparse fine sand-tempered with moderate flint grit inclusions to 4 mm and rare iron oxide inclusions to 4 mm.
- 7.10.2 The majority of the pieces are in Fabric 1 and 3. Most of the pieces are from Roman dated contexts, though Late Iron Age and Late Bronze Age pieces are also well represented.
- 7.10.3 Only three pieces show possible wattle impressions (ET [7/008], ET [8/011] and CT [20/011]). These range in diameter between 8 and 22 mm. A further 26 pieces exhibit one flat face. A fragment from ET [13/014] shows a finger smoothing mark in addition to the flat face. Another piece has been heated to such an extent that the surface has been vitrified (ET 42). Context ET [66/006] contained 76 pieces with a fine clay matrix, 33 pieces of which exhibit one smooth face, with a further 21 pieces showing two roughly parallel smooth faces. The fine fabric is reminiscent of those used for moulds and mould wrap but there are no fragments that confirm such an identification for these pieces. Further identification with specialist input will be undertaken if further such fragments are identified from the next phase of fieldwork.
- 7.10.4 A total of eight pieces of possible briquetage was produced by the site. Four possible bar fragments were recovered (ET [7/008] and ET [22/010]. A further three possible briquetage vessel base fragments were contained by the same contexts. In addition, a cylindrical piece (ET [22/010]) with a diameter of 22 mm might represent a briquetage pedestal fragment or a pinch prop.
- 7.10.5 The majority of the assemblage (90 pieces) consists of undiagnostic fragments. Some of these are in a similar fabric as pieces with wattle imprints and might therefore represent daub. A few might be further undiagnostic pieces of briquetage.
- 7.10.6 The majority of pieces lack any diagnostic features. The few pieces of briquetage are of interest, and suggest salt production on or in the vicinity of the site. However, more diagnostic pieces are needed for conclusive evidence. The assemblage as it stands is of little potential for further analysis, though if any further excavations take place, the current assemblage should be studied in conjunction with any new finds.

7.11 The Metalwork by Elke Raemen

7.11.1 Only a few pieces of ironwork were recovered from the site. The fragments are all in poor condition, with heavy corrosion products. These include a sheet fragment from ET [29/001] and a further five

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline sheet fragments from ET [14/005]. A completely mineralised general purpose nail fragment was recovered from ET [59/004].
- 7.11.2 The ironwork is too small to have any potential for further analysis. No further work is required.

7.12 The Slag by Elke Raemen

- 7.12.1 A total of 26 pieces of slag was recovered from seven individual contexts. The majority consists of undiagnostic iron slag (19 pieces).
- 7.12.2 The earliest piece of undiagnostic iron slag is from ET [39/005], which is of Late Iron Age/Roman date. Two contexts of Roman date contained fragments of slag as well: three fragments of a forge bottom from iron smithing were recovered from ET [7/010]. The forge bottom measures 150 by 112+ mm and is 32 mm deep. Context ET [20/011] contained a piece of undiagnostic iron, as well as a hearth lining fragment with adhering fuel ash slag.
- 7.12.3 A number of fragments are from undated contexts. Again, these are mainly from undiagnostic iron slag. A piece of probable smithing slag was recovered from ET [20/007]. Of particular interest is a piece of smelting slag (ET [20/009]).
- 7.12.4 In addition, a piece of fuel ash slag was recovered from late 18th- to early 19th- century context ET [14/005].
- 7.12.5 The ironworking waste assemblage is only small. The pieces are indicative of secondary ironworking on a domestic scale. Unusual is the piece of iron smelting slag, as the site is not in the vicinity of the ironworking sites in the Weald, where most iron sources are located. However, only one isolated piece was recovered, which is too little evidence to allow any conclusions on this.
- 7.12.6 Though the assemblage is small, it does shed light on domestic activities on site. If any further excavation works are undertaken on the site, the slag should be studied in conjunction with this assemblage, concentrating on the Roman pieces.

7.13 The Stone by Elke Raemen

7.13.1 A relatively small assemblage of stone (other then flint) was recovered from the site: 36 pieces in total from 18 different contexts. Fragments are all from Roman or earlier dated contexts, though some were recovered from undated contexts. None of the pieces show traces of being worked. A total of seven different stone types is present. Most of these consist of Lower Greensand chert (12 pieces, i.e. from ET [8/011], ET [20/003], ET [28/010]), which was mainly recovered from Roman contexts. Other types include Tertiary sandstone, ferruginous

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline concretions and sandstone and ferruginous Wealden siltstone. A piece of German lava was produced by ET [31/001]. In addition, two pieces of laminated coal were recovered from ET [28/010] and ET 42.
- 7.13.2 The assemblage is too small and homogenous, with most of the fragments from local sources, to be of potential for further analysis. No further work is required.

7.14 The Prehistoric Flintwork by Chris Butler.

- 7.14.1 The assessment comprised a visual inspection of each bag, counting the number of pieces of each type of worked flint present, noting details of the range and variety of pieces, general condition, and the potential for further detailed analysis. A hand written archive of the assemblage was produced at this stage, together with an excel spreadsheet. Those pieces of flint that were obviously not worked were discarded.
- 7.14.2 An assemblage of 136 pieces of worked flint weighing 2.003kg was recovered and is listed in Table 1. The raw material is typical of flint obtained from local sources, and includes a few pieces of orange-stained flint and one piece of Bullhead flint. A few of the pieces have a mottled grey patination, whilst some are patinated to a lighter blue-grey colour. These two types include the diagnostically earlier pieces in the assemblage, and the patination could therefore be used as an indicator of earlier pieces that do not have any other diagnostic attributes.

Table 1: Prehistoric Flintwork

| 79 |
|-----|
| 8 |
| 3 |
| 27 |
| 7 |
| 1 |
| 1 |
| 3 |
| 4 |
| 1 |
| 1 |
| 1 |
| 136 |
| |

7.14.3 The majority of the assemblage is made up of hard hammer-struck debitage (58%), although there are a few flakes and blades that are soft hammer-struck (8%). Few of the flakes and blades had any evidence of platform preparation, and it is likely that only a small percentage of the assemblage is Mesolithic or Early Neolithic. There is only one complete core (a crude two-platform flake core on a small

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline pebble), however there is also a core fragment, together with a multiple platform flake core that has been reused as a hammerstone. There are no core rejuvenation pieces in the assemblage. A high proportion (25%) of the assemblage is made up of undiagnostic fragments and shattered pieces. The majority of the debitage is likely to date from the Later Bronze Age.
- 7.14.4 The implements comprised four end scrapers; of which two (from the upper mixed interface of 59/004) are small expedient end scrapers (one of which is probably Mesolithic), the third is on a long hard hammer-struck flake, and the fourth is manufactured on a large (possibly natural) flake with abrupt retouch and utilisation damage. The side scraper is manufactured on a hard hammer-struck flake with retouch on both convex lateral edges. The notched blade is probably soft hammer-struck, but the proximal end has been removed in antiquity. In addition to the formal tools, there were also four retouched fragments and a retouched blade.
- 7.14.5 The prehistoric flintwork was recovered in small quantities from the various sections, however two sections produced larger quantities: ET20/005 produced 19 pieces of which 16 were undiagnostic hard hammer-struck flakes of varying sizes, together with a fragment, a chunk and a core reused as a hammerstone. The group of 20 pieces collected from ET41/002 included three soft hammer-struck flakes and two soft hammer-struck blades, and four pieces had platform preparation. Furthermore one of the blades had some retouch at the distal end, and a fragment was also retouched. Many of these pieces may date from the Mesolithic or Early Neolithic periods.
- 7.14.6 The small assemblage from 59/004 also includes a number of pieces that may date to the Mesolithic period. These include the notched blade, and an expedient scraper, whilst the remaining pieces were undiagnostic. The four pieces recovered from the alluvium are possibly all natural
- 7.14.7 Overall, the majority of the assemblage is likely to date from the later Neolithic or Bronze Age, with occasional pieces from the earlier periods.
- 7.14.8 It is recommended that no further detailed work be undertaken on this assemblage, although the flintwork should be retained for possible further study in the future.

7.15 The Registered Finds by Elke Raemen

7.15.1 A total of six finds have been assigned unique registered finds numbers (Table 2: RF <00>). The finds have been washed and dried or air dried, and were bagged in line with IFA guidelines. All objects have been recorded on pro forma sheets for archive. The metalwork

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline was sufficiently diagnostic not to warrant x-radiography.
- 7.15.2 A few personal dress accessories were recovered. A copper-alloy early Anglo-Saxon brooch (RF <1>) was recovered from ET [39/005]. This brooch exhibits characteristics both of the small-long brooch and of the cruciform brooch, and is probably of later 5th to 6th century date. The same context, also produced a dark blue, short oblate glass bead (RF <5>).

Table 2: Registered Finds

| Context | RF No | Object | Material | Period | Weight (g) |
|---------|-------|--------|----------|---------|------------|
| ET | | • | | | |
| 39/005 | 1 | BROO | COPP | E SAX | 16 |
| 34/007 | 2 | QUER | STON | ROM | 210 |
| ET | | | | | |
| 65/002 | 3 | MOUN | COPP | ?PMED | 4 |
| 28/004 | 4 | PERS | CERA | LBA | 104 |
| ET | | | | ?LIA/RO | |
| 39/005 | 5 | BEAD | GLAS | M | <2 |
| ET | | | | | |
| 37/001 | 6 | PERS | CERA | LBA | 31 |

- 7.15.3 The dating of a copper-alloy decorative mount (RF <3>) is uncertain. Although the general construction of the mount points to an early post-medieval date (possibly 16th to 17th century), the style and decoration is evocative of Roman plate brooches of mid to late 1st century date (Hattat 1989, Fig 201, nos 1556 and 1016, 342).
- 7.15.4 A single German lava quern stone fragment (RF <2>) was recovered from ET [34/007].
- 7.15.5 Of interest are two peforated clay slab fragments (RF <4> and <6>) of Late Bronze Age date. The function of these is still uncertain, though identifications as oven parts or uses related to cooking or salt production have been suggested (Adkins and Needham, 38). Both fragments are in Fabric 8 (the only pieces on site in this fabric). RF <4> (ET [28/004]) consists of two conjoining pieces and exhibits two partly surviving perforations, the most complete of which has a diameter of c. 30 mm. The piece has a thickness measuring between 20 and 25 mm. The second clay slab (ET [37/001]), consisting of five fragments, only shows a partial perforation, and measures 22 mm thick. Clay slabs in similar fabrics have been recovered from Queen Mary's Hospital, Carshalton (Adkins and Needham 1985, Fig 12 nos 379-384, 34 and Fig 13, nos 381-395, 36).
- 7.15.6 The registered finds assemblage has little potential for further analysis. However, the objects should be studied in conjunction with the bulk finds, as well as with finds from any future excavations. The

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline clay slab fragments in particular should be studied together with the Late Bronze Age assemblage. No further work is required on the current registered finds.

7.15 The Shell by Elke Raemen

- 7.15.1 The site contained only one piece, consisting of a lower valve of an oyster shell. This was recovered from CT [20/006], which is of Roman date.
- 7.15.2 The shell has no potential for further analysis. No further work is required.

7.16 The Animal Bone by Gemma Driver

7.16.1 The site produced a small animal bone assemblage consisting of 20 fragments from four contexts. The majority of the bone is in poor condition and only six fragments are identifiable. Context [20/006] contains the proximal end of a right cattle radius, a sheep sized lumber vertebrae fragment and a sheep sized rib. Context [9/002] contains one cattle sized vertebrae fragment and several small, unidentifiable fragments. Context [34/007] contains a sheep sized long bone fragment and context [39/005] contains a pig incisor. The assemblage does not hold any potential for further analysis.

7.17 The Environmental Samples by Lucy Allott

- 7.17.1 Twenty-eight bulk soil samples were taken during archaeological works to establish evidence for environmental remains such as wood charcoal, charred macro plant remains, marine and land molluscs and bone. As this evaluation cross-cuts a large region, differing deposition environments, phases of occupation and land use, it is anticipated that preservation and diversity of environmental remains will vary significantly from one evaluation trench to the next. This report is intended to identify any areas or occupation periods with well preserved environmental remains that might help inform future sampling strategies during archaeological works in the region.
- 7.17.2 Samples were processed in a flotation tank and the flots and residues were captured on 250µm and 500µm meshes respectively and air dried. The residues were sieved, sorted for archaeological and environmental remains and their contents quantified in appendix II. The flots were scanned under a stereozoom microscope at magnifications of x7-45. An overview of their contents are documented in Appendices 2 and 3.
- 7.17.3 Several samples produced uncharred vegetation such as small roots and weed seeds. These indicate a small degree of modern disturbance and possible contamination. Land snail shells were

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline present in samples <2> and <13> and these are also likely to represent modern disturbance. Samples with larger quantities of charred plant remains tended to contain only small amounts of uncharred vegetation or land snails and therefore these should form the focus of any further identification work undertaken.
- 7.17.4 Charcoal fragments were common in many of the samples although only a few samples such as <1>, <10>, <14>, <15> and <20> contained fragments >4mm.
- 7.17.5 Charred macroplant remains were noted in samples <3>, <4>, <7>, <8>, <10>, <13>, <15>, <16>, <17>, <23> and <25>. The crop seed assemblage is made up of *Triticum* sp. (wheat), *Triticum aestivum* (bread wheat), *Avena* sp. (oat) and *Pisum sativum* (pea) in varying quantities. Chaff and stem fragments were also present in samples <3>, <4>, <8> and <10>. Charred weed seeds were not common in these samples although occasional taxa including *Rubus* sp. (bramble), *Galium* sp. (bedstraws), and *Polygonum/Rumex* sp. (knotweed/docks) were noted.
- 7.17.6 Trench ET63 contained two samples, <10> and <15>, from Romano-British contexts that were rich in charred botanicals. Sample <10>, context [63/005], was taken from the fill of a vessel. Although it is possible that these remains represent food residue within the vessel they do not appear to have been processed (beyond separation from chaff) prior to charring. Evidence for food plant remains being deliberately placed with vessels associated with cremations or other rituals (Davis 2000; Kreuz 2000) has been noted on Roman sites and this potential interpretation may need to be considered. The charred botanicals in sample <15> are similar to those noted in sample <10> and it is possible that they derive from the same original source. Full analysis would help determine this.
- 7.17.7 Samples <1> and <14>, contexts [ET45/004] and [ET29/004] were particularly rich in wood charcoal fragments >4mm and have potential for charcoal analysis and identification. On their own they will not provide a detailed representation of the vegetation environment however context [ET45/004] is currently undated and charcoal analysis could be used to identify taxa suitable for C14 dating.
- 7.17.8 On the whole it appears that charcoal and macroplant remains were better preserved in Iron Age and Romano-British contexts than in the older Neolithic and Late Bronze Age deposits (such as in trench [ET33]) or the younger medieval deposits. The botanical remains recovered during this evaluation work provide localised data points across a broad area. Several samples hold some potential for further analysis (see Appendices 2 and 3) and their potential could be augmented if incorporated with samples from larger scale excavations in the future and if compared with contemporary samples from other

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8.0 DISCUSSION

- 8.1 The Isle of Grain and the Hoo Peninsula are an ideal location for prehistoric agriculture and settlement, with highly fertile soils and good access to estuarine resources. However, the extent of available marshland during prehistory is somewhat debatable given that the present marshes are thought to have only developed since the Romano-British period (Devoy 1980). On the other hand, by the medieval period, the marshes were being intensively utilised, especially for salt production (Everitt 1986). From the Romano-British period onwards, the strategic, economic, and industrial importance of the area appears to have remained highly significant, with a continuous cultural presence evident in both the archaeological and historic records.
- 8.2 The archaeological evaluation carried out between October and November 2007 proved to be highly productive, with a range of evidence identified from the Mesolithic through to post-medieval periods. That said, a large portion of the archaeological features and associated artefactual evidence can be placed in either the Late Bronze Age, or Romano-British period. The following discussions are based on spatially discrete areas, which revealed evidence for concentrated episodes of cultural activity, or relatively rare or unusual ones.

8.3 Area A (Trenches 5-9, Figure 10)

- 8.3.1 Area A incorporates ET5-9, and revealed a range of archaeological features. Although there was a marked concentration of activity in ET7 and ET8, probable boundary ditches were also recorded in ET5, ET6 and possibly in ET9. The evidence in ET7 and ET8 was somewhat eclectic, and included discrete postholes, pits, as well as large linear features. The broad deep feature partially excavated in ET8 (ET8/010) was enigmatic, and its restricted exposure in the trial trench makes interpretation a problem. Most likely it was a backfilled quarry pit, although the very compacted and desiccated fills in this cut were somewhat unusual.
- 8.3.2 Much of the dating from these trenches indicates a Romano-British area of activity, occupied from AD70 onwards, with very probable Late Iron Age antecedents. Moreover, it seems likely that some of the activity on this site was industrial in nature, as briquetage was recovered from ET7/007, whilst pieces of slag from ET7/009 proved to be fragments of a forge bottom from iron smithing. Structures are also hinted at, as fired clay with possible wattle impressions were recovered from both ET7/008 and ET8/011.
- 8.3.3 Both fieldwalking and geophysical surveys were undertaken on an

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline alternative route a 100m or so to the northwest, and are therefore of little direct relevance here. Nevertheless, the geophysics did reveal a large number of anomalies there, and it may be that Site A, extends for some distance in this direction. This would be unsurprising given the evidence, and the known extent of many Romano-British sites.

8.4 Site B (Trenches 11-14, Figure 9)

- 8.4.1 Site B incorporates ET11-14. Several clear linear and discrete features were excavated and recorded in this area, possibly part of a network of field boundary or settlement ditches. The recut identified in the relatively deep linear in ET12, would seem to suggest ongoing maintenance, and hence a reasonable level of importance, and reuse. The parallel running gully, context ET12/008, was quite unusual in revealing clear and distinctive edges, with a well defined fill containing frequent charcoal. There is the slight possibility that this cut was a horizontal beam slot, or other truncated structural feature, with the high charcoal context pointing to *in situ* burning. A reasonably large amount of pottery was also recovered from this cut, dating to the Romano-British period, between AD50-150.
- 8.4.2 ET13 was heavily waterlogged at the time of excavation, and a number of features were inconclusively investigated. However, several were clearly cultural in origin, having provided dating evidence, especially at the western end of the trench. Overall, the evidence suggests a Late Iron Age through to Romano-British date for the site, with activity areas concentrated around ETs 12 and 13. Features were also present in ETs 11 and 14, and the DBA highlighted a number of Bronze Age, Iron Age and Romano-British sites in the area (CAT 2006; Site Nos. 55, 56, 75-76, 89 and 185). For example, a large linear ditch and post hole, of Late Bronze Age date were revealed a short distance to the northeast of ET11 (Griffin 1999), and an Iron Age Settlement, along with Roman finds was excavated about 1km to the north, near Malmaynes Farm (James 1999).
- 8.4.3 Geophysical results were relatively unproductive, and fieldwalking was not possible in this area.

8.5 Site C (Trenches 16-18, Figure 8)

8.5.1 This site incorporates ET16-18. Several discrete features were recorded, especially in ET16. In ET16, linear cut ET16/019 was excavated, being quite substantial given the heavy degree of truncation elsewhere across the pipeline route. It measured 1300mm wide, with a surviving depth of 550mm deep, and contained prehistoric pottery. Late Bronze Age pottery was recovered from gully terminal ET16/015. Three possible postholes were recorded in ET17, which seem to mark the southern extent of the site. Of the several features investigated in ET 18 only one was archaeological and has

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline been interpreted as a possible ghost furrow, being aligned with a surface plough furrow.
- 8.5.2 This area was slightly false crested with views to the south, overlooking a well defined valley, with a small stream running along its east-west course.
- 8.5.3 The geophysics survey had been undertaken 50m to the northwest, offset from the present pipeline corridor, and is therefore of limited value to this discussion. Conversely, the DBA, located two sites nearby (Cat 2006: Site Nos. 159/174 and 186); an undated enclosure very close to ET16, and a Bronze Age settlement, along with Iron Age and Roman finds a short distance to the west.
- 8.5.4 A Late Bronze Age area of occupation seems highly likely.
- 8.6 Site D (ET19 and CT8, Figure 8)
- 8.6.1 This site incorporates ET19 and CT8. It is located close to the base of a south facing slope, which forms part of the valley overlooked by Site C. A significant depth of colluvium was recorded in both trenches, and two 1200mm deep sondages failed to reach the base of this deposit in either trench. However, features which produced struck flints were found cut into the colluvium, notably in ET19. In addition, a few meters upslope to the northwest, a flattened topographic feature was visible on the landscape. It may be that this was a terraced area, concomitant or subsequent to the activity identified in ET19 and CT8, and in part causing the significant depth of colluvium located close to the valley base.
- 8.6.2 Flint debitage was retrieved from ET19, but no diagnostic dating evidence was recovered from these trenches, but the location would surely have been attractive to broad spectrum subsistence strategies. Alternatively, it remains a possibility that these features were animal burrows, with the cultural material drawn down. In fact, at least one burrow was recorded sealed in the colluvium when the sondage was excavated
- 8.6.3 Geophysical results were offset to the northwest, but did provide some potential, whereas fieldwalking across the area resulted in relatively sparse finds recovery, with no artefact concentrations recorded. Otherwise, the DBA recorded a medieval sailing craft located a couple of hundred metres to the northwest (CAT 2006: Site Nos. 1 & 2). It may be that this is an SMR data entry input error. Alternatively, it may also indicate that a far more substantial water course once ran through this valley. This would be a reasonable expectation, given the probable higher sea levels in both the Romano-British and medieval period. If so, it is possible that the colluvium identified in ET19 and CT8, was a coarse grained material derived

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline from comparatively high energy fluvial processes, rather than down slope erosion.

8.7 <u>Site E (Trenches 20-22, Figure 8)</u>

- 8.7.1 This area incorporates ET20, 21 and 22, and is situated on top of the north facing slope, overlooking the valley discussed above. A number of interesting features were excavated in this location. A probable boundary ditch, along with a ditch terminal and some discrete cuts were excavated in ET20. Several of which contained iron slag, including a hearth lining fragment with adhering fuel ash, and a piece of smithing slag. Based of the recovery of similar industrial material from most of the features, and the pottery recovered from ET20/011, a Romano-British date is most likely in this trench. However, ditch terminal ET20/004 produced quite a large amount of struck flint, as well as pottery from the Late Bronze Age, and would therefore seem to belong to an earlier period.
- 8.8.2 A large shallow feature was recorded in ET21, and dated from the Mid-Late Iron Age. It was interpreted as a probable prehistoric droveway leading down into the valley. Industrial material was also recovered from ET20 in the form of briquetage, with some bar fragments and a possible vessel base identified. If the droveway was an already established communication route during the Iron Age, then it would make sense for Romano-British industrial activity to be located along it, close to a water source in the valley just below.
- 8.8.3 To the north, along an earlier proposed course for the pipeline, both the geophysics and the fieldwalking survey indicated potential archaeological remains. As with Area A, it would therefore seem likely that the activity recorded in ET20-22 may extend for some distance. Contrastingly, the DBA did not highlight the potential for archaeologically significant deposits to be located in this area.

8.9 Site F (Trenches 23-26, Figure 8)

- 8.9.1 This area incorporates ET23-26. Only limited activity was noted in this area, with a few possible linear cuts, or boundary ditches. Whilst a number of features were recorded, most commonly in ET25, very little cultural material was recovered; the only exception being ET26/004, from which prehistoric pottery sherds were retrieved.
- 8.9.2 Neither the geophysics survey, the fieldwalking survey, nor the DBA revealed a high potential for significant archaeological deposits in this area.

8.10 Site G (Trenches 27-31, Figure 6)

- 8.10.1 This area incorporated ET27-31. It was located near to the summit of Lodge Hill, which attains a maximum height of c.70m OD at its highest point. The site appeared to comprise two distinct phases of activity. Trenches 27 to 29 were slightly false crested with excellent views to the west, and although ET29 was blank, ET27 and ET28 revealed several archaeologically important features. The area of activity seemed to be concentrated in ET28, where one feature revealed a very dense concentration of burnt flint and sandstone (ET28/09), and another had an unusual morphology, being a very tightly curving gully (ET28/003). Other archaeological features were recorded in both trenches, and artefacts recovered from ET28 clearly indicated Late Bronze Age Activity.
- 8.10.2 The interpretation of features in these trenches was uncertain, however the recovery of clay slab fragments from the fill of ET28/003, possibly associated with cooking or heating, would seem to suggest an occupation site, or even small scale industry.
- 8.10.3 Further up slope, closer to the top of Lodge Hill, ET31 was excavated. This trench revealed what may have been a large curving boundary ditch, or possibly two intersecting ditches with an uncertain relationship. Investigations at the possible junction between the ditches were tempered by the need to leave sufficient material in place for future excavation. Regardless, this was a significant feature/s in a location with expansive visibility, most especially over the Thames Estuary to the north. Pottery recovered from the eastern extent of the ditch was Late Iron Age to Romano-British, with the latter giving a date range between AD120-150, thereby pointing to the final stages of use for this feature. Pottery from the other end of the curvilinear indicated an Iron Age date. Cultural activity appeared to peter out down slope to the west in CT13 and ET62.
- 8.10 Both the geophysics survey and the fieldwalking highlighted the potential for archaeological significant deposits to survive on top of Lodge Hill (CAT 2006a & b). In fact the fieldwalking revealed dense concentrations of burnt flint, and a small assemblage of worked flints. Furthermore, the DBA recorded two undated sites within the immediate vicinity, interpreted as possible ring ditches or burial mounds (CAT 2006a; Site Nos. 194 and 195.)

8.11 Site H (Trench 63, Figure 6)

8.11.1 Site H only includes ET63, which revealed two parallel linear cuts, and two small discrete cuts, all within a concentrated spatial area. Both the larger linear and small pit/post hole provided good pottery assemblages, indicating a Romano-British date between AD50-150.

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 The posthole, or small pit, also contained a degraded, but probably complete vessel. No burnt bone was found inside, but a large number of charred botanical remains have been retrieved. The pot was almost certainly a placed deposit, in what appears to have been a ritual or ceremonial context.
- 8.11.2 No significant remains were found in adjacent trenches, and neither the DBA nor the fieldwalking provided any indicators for archaeological remains. However, the geophysics survey did pick up a relatively large number of strong readings in the immediate area, suggesting a concentration of activity in and around ET63.
- 8.12 <u>Site I (Trenches 33-36, Figure 6)</u>
- 8.12.1 This site incorporates ET33-36. A number of finds- rich features were located in these trenches, including pits, ditches and post holes, although more spatially clustered activity was recorded in ET 33 and 34. A number of small post holes were noted in ET33, as well as a large feature, possibly a boundary/ring ditch, extending beyond the trench baulks to the northeast (ET33/016). This feature also produced seemingly deliberately placed deposits. Both were somewhat degraded, and no evidence of burnt bone, or cremation material was recovered from either vessel. Three linear cuts and a small pit were also recorded in ET34, and whilst activity continued into ET 35 and 36 there was a marked decrease in the artefactual recovery.
- 8.12.2 The evidence from Site I is strongly indicative of an intensive phase of cultural activity, very probably domestic, and/or socio-religious in nature. The pottery from this area was predominantly Late Bronze Age in origins, although it seems likely that ditch cut ET34/008 in evaluation trench 38, was Romano-British. This is because a fragment of German lava quern stone was excavated from the fill of the cut, along with a piece of Romano-British tile. Also, the deep and broad nature of the feature was inconsistent with the morphology of the other Late Bronze Age deposits. Hence, it is likely that ET34/008 was a large agricultural boundary ditch, possibly open in recent times, as it appeared to demarcate a clear change in the amount of chalk flecking (marling), present in the top soil.
- 8.12.3 All three phases of pre-evaluation research corroborated the potential for archaeological deposits to be present in this area (CAT 2006a & b).
- 8.13 Site J (Contingency Trench 20 Evaluation Trench 61, Figure 5)
- 8.13.1 This area incorporates ET39, 59, 40, 41 60 and 61, as well as CT20 and 21. In fact Site J covers a comparatively large area, with significant multi-period archaeological deposits likely to be present across its extent. In the eastern part of the area quarrying pits, as well

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline as several discrete features, were recorded, in both ET39 and CT20. The fill of one of the quarry pits, ET39/004, revealed an Early Saxon Brooch and its good condition would seem to indicate primary deposition, so an early Saxon Date seems likely for this feature. This is interesting given the Romano-British feature in the adjacent trench CT20 (CT20/010), which demonstrates a potential degree of continuity between the Romano-British and early Saxon periods in this area. Two discrete Late Bronze Age features were also identified at the southwest end of ET39. Importantly the depth of archaeological deposits in this area was variable, with many features in CT20 being revealed at a depth of 900mm below the ground surface, whereas the Late Bronze Age features in ET39 were 500mm below the ground surface.

- 8.13.2 Site J is dissected by a northwest-southeast aligned valley, with a small watercourse running along its base, and valley slopes rising to both the northeast and southwest. Evaluation trench 39 and contingency trenches CT20 and CT21 lie on the valley slopes to the northeast of the valley, whereas evaluation trenches 59, 41 and 42 were located on and close to the valley bottom. In fact ET59 revealed a deep alluvial deposit in its southwest end; a sondage was excavated to 1250mm but failed to achieve the base. Even so, multi-period finds were excavated from the alluvium, including Late Bronze Age, Iron Age and Romano-British material, as well as a small number of possible Early Neolithic or Mesolithic flint flakes. The likelihood of Early Neolithic or Mesolithic features in this area was reinforced by a further assemblage of similarly dated flints recovered from the overburden of ET41, located a short distance to the southwest. In fact, the fieldwalking in this field had previously highlighted a noticeable concentration of burnt and worked flint, strongly suggestive of nearby prehistoric activity (CAT 2006b; Fieldwalking Site No. 31). Indeed, the location of these trenches close to a water source would have made an attractive site for Early Neolithic or Mesolithic hunter gatherers. Importantly, if Early Neolithic or Mesolithic features survive in this area, then they will be extremely ephemeral, being set against the pale silty clay substrate in the area.
- 8.13.3 Overlooking the valley from the top of its northeast facing slope, a significant number of Romano-British features were recorded. In ET42 a Romano-British kiln was identified, with an array of archaeological deposits dating from the Iron Age also found in ET61, 42 and 62. Pottery from several of the features indicated a Romano-British date between AD120-150, but the presence of Iron Age material in close association to the kiln would indicate some level of continuity from the pre-invasion into the Romano-British phase. The industrial activity in this area was not wholly unexpected, as four Romano-British kilns have already been identified less than a hundred metres to the northeast. Excavation in 1978 exposed two of the kilns, with large quantities of pottery recovered. These kilns were provisionally dated

- An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline to the late 2nd and early 3rd centuries (Thornhill & Payne 1980), and their description bears close resemblance to the one exposed in ET41, with oval outlines of red fired clay. No excavation was undertaken on the kiln found in ET41, and it should be noted that this feature was exposed at a shallow depth, c.300mm below the ground surface. Some care should therefore be taken during future top soil reduction.
- 8.13.4 The fieldwalking certainly emphasised the probability of archaeological deposits in the area, whilst some geophysical anomalies were picked up close to ET39 and CTs 20 and 21. The DBA also highlighted known sites in the vicinity, including a Bronze Age settlement, undated cropmarks, as well as the Romano-British kilns (CAT 2006a; Sites 63, 64, 151, 154 & 201)
- 8.13.5 In summary then Site J is an extensive area with important multiperiod archaeological remains, including Romano-British industrial activity with some evidence of continuity into the Early Anglo-Saxon period; an important and poorly understood transition. Furthermore, there is some indication of a possible Mesolithic or Early Neolithic site close to the stream bed. Several Late Bronze Age features were also located in this area.

8.14 Site K (Trench 66, Figure 4)

- 8.14.1 This area incorporates ET66. A single feature was recorded and excavated in this trench, being a small sub circular pit dating to the Late Bronze Age. However, the base of the feature was lined with some type of clay, possibly relating to metal work and it seems unlikely that such an unusual feature would remain isolated without other associated activity. Only a single trench was excavated in this field, and it seems reasonable to suggest that further archaeological deposits survive here.
- 8.14.2 No geophysical or fieldwalking indicators were noted, but the DBA did reveal that a Palaeolithic handaxe, and a Roman brooch had been found in the same field.

8.15 Site L (Trenches 43-45, Figure 3)

8.15.1 This site incorporates ET43-45. Given the level of truncation across the pipeline corridor, the excavation of a large recut linear in ET43, some 2000mm wide and 800mm deep, was significant (ET43/013 & 017). Especially as in the same trench several small cuts were excavated, with ET43/005 providing prehistoric pottery sherds. Cultural activity was also noted in ETs 44 and 45, with pottery recovered from a ditch in ET45 indicating a Neolithic/Bronze Age date. The extent of this site is unclear, and it should be emphasised that feature recognition was extremely difficult with pale fill deposits

8.15.2 Both the geophysics and the fieldwalking pointed to the possible survival of archaeological deposits in this area, whilst the DBA also noted cropmark sites close by (CAT 2006a: Site Nos. 28 and 83).

9.0 SUMMARY OF RESULTS AND POTENTIAL

- 9.1 This evaluation has largely answered the research aims and objectives outlined in section 4.0. Hence, the following responses can be made:
 - No Palaeolithic material was revealed along the pipeline route corridor
 - Some potential for Mesolithic deposits was recorded in evaluation trenches 59 and 40, but nowhere else along the route corridor (Site J)
 - Some possible Neolithic material was recovered along the pipeline route corridor, but the abraded nature of the pottery sherds made identification problematic, and they were grouped as Neolithic/Bronze Age (Site G, I, J, L).
 - No Early Bronze Age activity was defined. But evidence for Late Bronze Age occupation sites, as well as possible funerary activity was frequently present along the pipeline route corridor (Sites A, C, E, G,I, J, K, & L)
 - Iron Age to Romano-British settlement and/or localised industrial activity was revealed in a number of locations along the pipeline route corridor (Sites A,B,E,G,H, I & J)
 - No archaeological evidence of significant Medieval activity was found along the pipeline route corridor
 - No archaeological evidence of significant post-medieval activity was revealed along the pipeline route corridor
 - In a number of instances, interpretation drawn from the fieldwalking and geophysical surveys was substantiated by the archaeological evaluation (Sites G, H, I, J and L). Although, it should be noted that for a large part of the evaluated corridor, geophysics and fieldwalking data were not available, having been undertaken on an earlier, alternative route.
- 9.2 The archaeological evaluation was generally productive, identifying a

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline number of previously unrecorded sites along the route corridor.

9.3 Although a high level of surface truncation has impacted the sub surface archaeological deposits across the route corridor, significant and varied remains do survive. Therefore, to conclude, and based on the archaeological evaluation in combination with other Stage 1 work, most notably the DBA (CAT 2006a), the following comments can be made regarding the archaeological potential along the pipeline route corridor.

Site A

High Potential Iron Age to Romano-British

Moderate Potential Late Bronze Age

Site B

High Potential Iron Age to Romano-British

Moderate Potential Late Bronze Age

Site C

High Potential Late Bronze Age

Site D

Moderate Potential Prehistoric-Medieval

Site E

High Potential Iron Age to Romano-British

Moderate Potential Late Bronze Age

Site F

Low Potential Prehistoric

Site G

High Potential Late Bronze Age

High Potential Iron Age to Romano-British

Site H

High Potential Iron Age to Romano-British

Site I

High Potential Late Bronze Age

Moderate Potential Iron Age to Romano-British

Site J

High Potential Iron Age to Romano-British

High Potential Late Bronze Age

Moderate Potential Early Neolithic – Mesolithic

Moderate Potential Early Anglo-Saxon

Site K

Moderate Potential Late Bronze Age

Site L

Moderate Potential Prehistoric

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Appendix 1: Bulk Finds Quantification Table

| Context | Pot | Wt (g) | СВМ | Wt (g) | Bone | Wt (q) | Shell | Wt (g) | Flint | Wt (g) | FCF | Wt (g) | Stone | Wt (g) | Fe | Wt (g) | Bt Clay | Wt (g) | Slag | Wt (g) | Glass | Wt (g) | Spot Date |
|-----------|---------|--------|-------|-----------|-------|-----------|--------|-----------|--------|-----------|-----|-------------------|-------|-----------|----|-----------|---------|-----------|------|-----------|-------|-----------|------------------------------------|
| CT 2/005 | FOL | wi (g) | CDIVI | (9) | Bolle | (9) | Sileii | (9) | FIIIIL | (9) | 1 | (9) 8 | Stone | (9) | ге | (9) | Bt Clay | (9) | Siay | (9) | Giass | (9) | Spot Date |
| ET 4/001 | | | | | | | | | 1 | 4 | ' | 0 | | | | | | | | | | | |
| ET 4/005 | | | | | | | | | | - | | | | | | | | | | | 1 | 4 | Mid to Late C19th |
| ET 5/002 | | | | | | | | | 2 | 26 | | | | | | | | | | | | <u> </u> | 01011 |
| ET 6/002 | | | | | | | | | 1 | 22 | | | | | | | | | | | | | |
| ET 7/004 | 1 | 4 | | | | | | | | | | | | | | | | | | | | | LBA |
| ET 7/008 | 59 | 476 | | | | | | | | | | | | | | | 22 | 300 | | | | | LIA |
| ET 7/010 | 69 | 458 | | | | | | | | | 8 | 118 | | | | | 2 | 28 | 3 | 706 | | | AD 70-150 |
| ET 8/011 | 31 | 186 | | | | | | | 1 | 12 | | | 4 | 34 | | | 2 | 92 | | | | | AD 120-150 |
| ET 8/012 | 7 | 28 | 1 | 36 | | | | | | | | | | | | | | | | | | | LBA + Roman (x 1 floor tile) |
| TP 9/001 | | | 1 | 26 | | | | | | | | | | | | | | | | | | | ?C16th-17 th |
| TP 9/002 | 6 | 22 | | | 19 | 12 | | | | | 7 | 288 | | | | | 2 | 12 | | | | | MIA |
| TP 10/01 | 1 | 4 | | | | | | | | | | | | | | | | | | | | | Roman |
| TP10/007 | | | | | | | | | | | 5 | 50 | | | | | | | | | | | |
| TP 11/01 | | | | | | | | | | | | | | | | | | | | | | | |
| ET 12/007 | 13 | 20 | | | | | | | 4 | 22 | | | | | | | 3 | 36 | | | | | ?IA |
| ET 12/00 | 6 and 1 | 12/012 | | | | | | | | | 5 | 246 | | | | | | | 1 | 32 | | | |
| ET 12/009 | 21 | 180 | | | | | | | | | | | | | | | 2 | 8 | | | | | AD 50-150 |
| CT 13/004 | 1 | <2 | | | | | | | 1 | 6 | 2 | 90 | | | | | | | | | | | Roman |
| CT 13/006 | | | | | | | | | 1 | 16 | | | | | | | | | | | | | |
| CT 13/008 | | | | | | | | | | | 1 | 4 | | | | | | | | | | | |
| ET 13/014 | 2 | 6 | 1 | 74 | | | | | | | 3 | 236 | | | | | 2 | 18 | | | | | Roman (x 1 floor tile) |
| ET 14/003 | | | | | | | | | | | | | | | | | 1 | <2 | | | | | |

| Comtant | D-4 | 18/4 () | СВМ | Wt | D | Wt | Chall | Wt | Flint | Wt | FOF | Wt | C4 | Wt | | Wt | Dt Class | Wt | Class | Wt | Class | Wt | Const Data |
|-----------|----------|---------------|-----|-------------------|------|-----|-------|-----|-------|-----|-----|-----|-------|-----|-------------|-------------------|----------|-----|-----------|-----------------|-------|-----|---------------------------------------|
| ET 14/005 | Pot 1 | Wt (g) | 10 | (g) 770 | Bone | (g) | Shell | (g) | Flint | (g) | FCF | (g) | Stone | (g) | Fe 4 | (g) 140 | Bt Clay | (g) | Slag 1 | (g) 8 | Glass | (g) | Spot Date Late C18th to Early C19th |
| ET 16/012 | 1 | 2 | | | | | | | | | | | | | | | | | | | | | |
| ET 16/020 | 3 | 4 | | | | | | | | | | | | | | | | | | | | | Prehistoric |
| TP 17/001 | | | | | | | | | | | 1 | 22 | | | | | | | | | | | |
| ET 18/007 | | | 3 | 556 | | | | | | | | | | | | | | | | | | | C18th to 19 th |
| ET 19/003 | | | | | | | | | | | 3 | 134 | | | | | | | | | | | |
| ET 19/005 | | | | | | | | | 4 | 70 | 65 | 228 | | | | | | | | | | | |
| ET 19/007 | | | | | | | | | | | | | 1 | 10 | | | | | | | | | |
| ET 19/009 | | | | | | | | | 2 | 10 | 9 | 30 | | | | | 1 | <2 | | | | | |
| ET 19/011 | | | | | | | | | | | 1 | <2 | | | | | | | | | | | |
| ET 19/013 | | | | | | | | | | | 24 | 54 | | | | | 1 | <2 | | | | | |
| ET 20/003 | 2 | 20 | | | | | | | | | 1 | 82 | 1 | 8 | | | 3 | 8 | | | | | Roman |
| ET 20/005 | 34 | 360 | | | | | | | 19 | 390 | 16 | 226 | 4 | 224 | | | | | | | | | LBA |
| CT 20/006 | | | 1 | 214 | 5 | 134 | 1 | 18 | | | 2 | 36 | | | | | | | | | | | Roman (+ x1 C18th to 19th tile) |
| ET 20/007 | | | | | | | | | | | | | | | | | 1 | 12 | 1 | 278 | | | |
| ET 20/009 | | | | | | | | | | | | | 1 | 92 | | | 3 | 36 | 17 | 1092 | | | |
| ET 20/011 | 1 | 6 | 1 | 58 | | | | | | | | | | | | | 1 | 8 | 2 | 208 | | | Roman |
| CT 20/013 | | | | | | | | | 1 | 1 | 3 | 20 | | | | | | | | | | | |
| CT 20/014 | 2 | 14 | | | | | | | 10 | 82 | 3 | 60 | | | | | 4 | 20 | | | | | |
| CT 20/016 | | | | | | | | | 1 | 20 | | | | | | | | | | | | | |
| ET 21/002 | 1 | 8 | | | | | | | 1 | 8 | 4 | 138 | | | | | | | | | | | Prehistoric |
| ET 21/005 | 9 | 66 | | | | | | | 1 | 2 | 13 | 424 | | | | | | | | | | | M-LIA |
| ET 22/006 | | | | | | | | | | | | | 1 | 4 | | | | | | | | | |
| ET 22/010 | | | | | | | | | | | 5 | 146 | | | | | 13 | 58 | | | | | |
| ET 25/008 | | | | | | | | | 1 | 6 | | | | | | | | | | | | | |
| CT 26/001 | | | 1 | 18 | | | | | | | | | | | | | | | | | | | C18th-19 th |

| Context | Pot | Wt (g) | СВМ | Wt (g) | Bone | Wt (g) | Shell | Wt (g) | Flint | Wt (g) | FCF | Wt (g) | Stone | Wt (g) | Fe | Wt (g) | Bt Clay | Wt (g) | Slag | Wt (g) | Glass | Wt (g) | Spot Date |
|-----------|-----|--------|-----|-----------|------|-----------|-------|-----------|-------|-----------|-----|-----------|-------|-----------|----|-----------|---------|-----------|------|-----------|-------|-----------|--------------------------|
| CT 26/002 | 2 | 4 | | νο, | | (0) | | νο, | | (0) | 2 | 124 | | (0) | | (0) | | (0) | | (0) | | (0) | · |
| ET 26/005 | 3 | <2 | | | | | | | | | | | 1 | 18 | | | | | | | | | Prehistoric |
| CT 27/002 | | | | | | | | | | | | | | | | | 1 | 94 | | | | | |
| ET 27/006 | 1 | <2 | | | | | | | | | | | | | | | | | | | | | Modern |
| ET 27/008 | | | | | | | | | | | 2 | 144 | | | | | | | | | | | |
| CT 27/008 | | | | | | | | | 1 | 10 | 10 | 78 | | | | | | | | | | | |
| ET 27/010 | 1 | <2 | | | | | | | | | 2 | 102 | | | | | | | | | | | Prehistoric |
| ET 28/001 | 9 | 4 | | | | | | | | | | | | | | | | | | | | | Prehistoric |
| ET 28/004 | 54 | 140 | | | | | | | | | 27 | 1800 | | | | | | | | | | | LBA |
| ET 28/006 | 7 | 52 | | | | | | | | | | | 1 | 32 | | | | | | | | | LBA |
| ET 28/008 | 51 | 192 | | | | | | | | | | | | | | | 1 | <2 | | | | | |
| ET 28/010 | 22 | 58 | | | | | | | | | 344 | 10378 | 6 | 16 | | | 11 | 50 | | | | | LBA |
| ET 29/001 | | | 1 | 16 | | | | | 1 | 18 | 2 | 56 | | | 1 | 4 | | | | | | | Roman (x 1 tegula) |
| ET 30/005 | | | | | | | | | | | 4 | 42 | 2 | 10 | | | | | | | | | |
| ET 30/007 | 4 | <2 | | | | | | | | | 9 | 130 | | | | | | | | | | | Prehistoric |
| ET 30/009 | 1 | 4 | | | | | | | | | 2 | 8 | | | | | | | | | | | Neolithic/Bro nze Age |
| ET 30/010 | 10 | 26 | | | | | | | | | 1 | 26 | | | | | | | | | | | Prehistoric/L BA |
| ET 31/001 | | | | | | | | | | | 3 | 116 | 1 | 28 | | | | | | | | | |
| ET 31/005 | 12 | 36 | | | | | | | | | | | | | | | | | | | | | Iron Age/AD 120-150 |
| ET 31/007 | 16 | 64 | | | | | | | | | 6 | 100 | | | | | | | | | | | IA |
| ET 32/002 | | | | | | | | | | | 3 | 88 | | | | | | | | | | | |
| ET 33/003 | | | | | | | | | 1 | 28 | 2 | 348 | | | | | | | | | | | |
| ET 33/007 | 1 | <2 | | | | | | | | | 2 | 58 | | | | | | | | | | | Prehistoric |
| ET 33/009 | 1 | 4 | | | | | | | 2 | 4 | 1 | <2 | | | | | | | | | | | Neolithic/Bro nze Age |
| ET 33/011 | | | | | | | | | 1 | 34 | | | 3 | 18 | | | | | | | | | |

| Context | Pot | Wt (g) | СВМ | Wt (g) | Bone | Wt (g) | Shell | Wt (g) | Flint | Wt (g) | FCF | Wt (g) | Stone | Wt (g) | Fe | Wt (g) | Bt Clay | Wt (g) | Slag | Wt (g) | Glass | Wt (g) | Spot Date |
|-----------|-----|--------|-----|-----------|------|-----------|-------|-----------|-------|-----------|-----|-----------|-------|-----------|----|-----------|---------|-----------|------|-----------|-------|-----------|--|
| ET 33/013 | 5 | 16 | | νο, | | (0) | | (0) | | νο, | 1 | 64 | | Ψ, | | (0) | | (0) | | (0) | | (0) | LBA |
| ET 33/016 | 48 | 2024 | | | | | | | | | | | | | | | | | | | | | LBA |
| ET 33/017 | 97 | 350 | | | | | | | 1 | 4 | 78 | 2298 | | | | | 1 | 5 | | | | | LBA |
| ET 33/021 | 3 | 4 | | | | | | | | | | | | | | | | | | | | | Neolithic/Bro nze Age |
| ET 34/004 | 1 | 28 | | | | | | | | | | | | | | | | | | | | | |
| ET 34/006 | 1 | 8 | | | | | | | | | | | | | | | 2 | 70 | | | | | LBA |
| ET 34/007 | 1 | 22 | 1 | 102 | 1 | 6 | | | | | 4 | 34 | | | | | 1 | 30 | | | | | Roman (x 1 tegula) |
| ET 35/004 | 1 | <2 | | | | | | | | | | | | | | | | | | | | | Prehistoric |
| ET 35/005 | | | | | | | | | 1 | 42 | 4 | 86 | | | | | | | | | | | |
| ET 36/02 | | | 1 | 22 | | | | | 7 | 120 | 21 | 794 | | | | | | | | | | | ?C18th-19th |
| ET 36/004 | 13 | 32 | | | | | | | | | | | | | | | | | | | | | LBA |
| ET 36/008 | | | | | | | | | | | | | | | | | 1 | <2 | | | | | |
| ET 37/001 | 1 | 10 | | | | | | | 1 | 40 | 1 | 22 | | | | | | | | | | | C13th (x 1 pot) + LBA (x 5 clay slab frags) |
| ET 39/005 | 9 | 24 | | | 1 | <2 | | | 7 | 56 | 4 | 36 | 2 | 266 | | | | | 1 | 4 | | | Early Saxon (brooch + x1 sandy sherd) |
| ET 39/007 | 2 | 50 | | | | | | | | | | | | | | | | | | | | | LBA |
| ET 39/009 | 3 | 8 | | | | | | | 2 | 10 | | | | | | | | | | | | | LBA |
| ET 40/001 | | | | | | | | | | | | | | | | | | | | | | | |
| ET 40/002 | | | | | | | | | 1 | 8 | | | | | | | | | | | | | |
| ET 41/001 | 13 | 16 | | | | | | | | | | | | | | | | | | | | | |
| ET 41/002 | 3 | 6 | | | | | | | 20 | 252 | 15 | 132 | | | | | 1 | 6 | | | | | LBA |
| ET 41/004 | | | 1 | 78 | | | | | | | 25 | 748 | | | | | | | | | | | ?LBA + x1 C18th-19th CBM |

| | | | | Wt | | Wt | | Wt | l | Wt | | Wt | | Wt | | Wt | | Wt | | Wt | | Wt | |
|-----------|-----|--------|-----|-----|------|-----|-------|-----|-------|-----|-----|-----|-------|-----|----|-----|---------|-----|------|-----|-------|-----|--|
| Context | Pot | Wt (g) | СВМ | (g) | Bone | (g) | Shell | (g) | Flint | (g) | FCF | (g) | Stone | (g) | Fe | (g) | Bt Clay | (g) | Slag | (g) | Glass | (g) | Spot Date |
| ET 42 | 21 | 338 | | | | | | | 1 | 4 | 1 | 22 | 1 | <2 | | | 4 | 8 | 1 | | | | |
| ET 42/004 | 8 | 18 | | | | | | | | | | | | | | | 1 | <2 | | | | | M-LIA; Roman; AD120-150 |
| ET 42/006 | 1 | 4 | | | | | | | | | | | | | | | 1 | <2 | | | | | M-LIA |
| ET 42/007 | 2 | 8 | | | | | | | | | | | | | | | | | | | | | Roman |
| ET 42/013 | 1 | 28 | | | | | | | | | | | | | | | | | | | | | Roman |
| ET 42/015 | 2 | 14 | | | | | | | | | | | | | | | | | | | | | AD 120-150 |
| ET 42/019 | 6 | 14 | | | | | | | | | | | 2 | 26 | | | 4 | 6 | | | | | ?IA |
| ET 43/001 | | | | | | | | | 1 | 56 | 1 | 70 | | | | | | | | | | | |
| ET 43/006 | 5 | <2 | | | | | | | | | | | | | | | 1 | 8 | | | | | Prehistoric |
| ET 43/014 | | | | | | | | | | | 2 | 36 | | | | | | | | | | | |
| ET 44/001 | | | | | | | | | 1 | 66 | | | | | | | | | | | | | |
| ET 45/001 | 1 | 4 | 3 | 118 | | | | | 1 | 115 | 2 | 204 | | | | | | | | | | | C19th |
| ET 45/006 | 3 | 6 | | | | | | | 1 | 12 | | | | | | | | | | | | | Neolithic/Bro nze Age |
| ET 46/001 | | | | | | | | | 1 | 22 | | | | | | | | | | | | | |
| ET 47 | 3 | 6 | | | | | | | | | | | | | | | | | | | | | |
| ET 47/001 | | | 1 | 22 | | | | | | | | | | | | | | | | | | | Roman + x1 Late C19th- 20th tile |
| ET 48/001 | | | | | | | | | | | 1 | 20 | | | | | | | | | | | |
| ET 48/005 | | | | | | | | | | | | | | | | | | | | | 1 | <2 | Mid to Late C19th |
| ET 48/006 | | | | | | | | | | | 1 | 10 | | | | | | | | | | | |
| ET 51/01 | 1 | 10 | | | | | | | | | | | | | | | | | | | | | C17th |
| ET 53/001 | | | | | | | | | 1 | 14 | | | | | | | | | | | | | |
| ET 54/001 | | | | | | | | | 2 | 22 | | | | | | | | | | | | | |
| ET 54/002 | 4 | 16 | | | | | | | | | | | | | | | | | | | | | Roman |
| ET 57/001 | | | 3 | 50 | | | | | | | | | | | | | | | | | | | C18th-19 th |

| | | 100 () | 0014 | Wt | _ | Wt | | Wt | | Wt | | Wt | | Wt | | Wt | D: 01 | Wt | | Wt | | Wt | |
|-----------|-----|---------|------|-----|------|-----|-------|-----|-------|-----|-----|-----|-------|-----|----|-----|---------|-----|------|-----|-------|-----|---|
| Context | Pot | Wt (g) | CBM | (g) | Bone | (g) | Shell | (g) | Flint | (g) | FCF | (g) | Stone | (g) | Fe | (g) | Bt Clay | (g) | Slag | (g) | Glass | (g) | Spot Date |
| ET 57/002 | 1 | <2 | 2 | 120 | | | | | | | | | | | | | 1 | 12 | | | | | Roman |
| ET 59/002 | | | 3 | 100 | | | | | | | 2 | 58 | | | | | | | | | | | C18th |
| ET 59/004 | 17 | 30 | 2 | 170 | | | | | 15 | 138 | 14 | 428 | | | 1 | 2 | 1 | <2 | | | | | Prehistoric; LBA; IA + x1 Roman tile |
| ET 59/006 | 1 | 12 | | | | | | | 1 | 2 | 7 | 28 | 1 | 60 | | | 7 | 20 | | | | | LBA |
| ET 59/008 | | | 1 | <2 | | | | | 3 | 23 | 1 | 10 | | | | | | | | | | | |
| ET 60/002 | 4 | 6 | | | | | | | 3 | 94 | | | | | | | | | | | | | Roman |
| ET 60/005 | 1 | 8 | | | | | | | 1 | 17 | | | | | | | | | | | | | AD 120-150 |
| ET 60/006 | 2 | 6 | | | | | | | 3 | 24 | | | | | | | | | | | | | Roman |
| ET 60/008 | | | 2 | 52 | | | | | 2 | 27 | | | | | | | | | | | | | ?C16 th -17 th (x1 roof tile) |
| ET 61/004 | | | 1 | 90 | | | | | | | | | | | | | | | | | | | C16th-17th (x1 roof tile) |
| ET 61/006 | 10 | 50 | | | | | | | | | | | 3 | 12 | | | | | | | | | Roman |
| ET 61/014 | 3 | 4 | 1 | 2 | | | | | | | | | | | | | 1 | <2 | | | | | Roman + ?C16th-17th (x1 roof tile) |
| ET 61/016 | 2 | 4 | | | | | | | | | 1 | 6 | | | | | | | | | | | |
| ET 63 | 34 | 238 | | | | | | | | | | | 1 | 40 | | | | | | | | | |
| ET 63/02 | 5 | 26 | | | | | | | | | | | | | | | | | | | | | MIA |
| ET 63/005 | 31 | 544 | | | | | | | | | | | | | | | | | | | | | AD 50-150 |
| ET 63/008 | 5 | 20 | | | | | | | | | | | | | | | | | | | | | C13th |
| ET 63/010 | 27 | 182 | | | | | | | | | | | | | | | | | | | | | ?AD 120-150 |
| ET 64 | | | | | | | | | | | | | | | | | 2 | 208 | | | | | |
| ET 66/02 | | | | | | | | | 2 | 44 | | | | | | | | 1 | | | | | |
| ET 66/006 | | | | | | | | | | | 3 | 38 | | | | | 76 | 202 | | | | | Prehistoric |

Appendix 2: – Residue Quantification Table (* = 0-10, ** = 11-50, *** = 51-250, **** = >250) and weight in grams

| Sample Number | Context | Context / deposit type | Sample Volume litres | sub-Sample Volume litres | Charcoal <4mm | Weight (g) | Charcoal >4mm | Weight (g) | Bone and Teeth | Weight (g) | Molluscs | Weight (g) | Other |
|---------------|------------|---------------------------|-------------------------|-----------------------------|---------------|------------|---------------|------------|----------------|------------|----------|------------|---------------------------------------|
| 1 | [ET45/004] | FILL | 10 | 10 | | 2g | ** | 2g | | | | | |
| 2 | [ET67/007] | FILL | 20 | 20 | * | 4g | * | 3g | * | 4g | *** | 14g | Metal */2g, FCF 13g |
| 3 | [ET37/005] | FILL | 40 | 40 | *** | 6g | ** | 8g | * | 8g | | | Burnt clay */4g, Flint */4g |
| 4 | [ET60/006] | FILL | 60 | 60 | ** | 1g | ** | 1g | | | | | Pot */2g |
| 5 | [ET59/006] | FILL | 5 | 5 | * | 1g | * | 1g | | | | | FCF 2g |
| 6 | [ET35/004] | FILL | 3 | 3 | | EMPTY | | | | | | | |
| 7 | [ET33/077] | FILL | 20 | 20 | *** | 5g | * | 6g | | | | | Pot */21g |
| 8 | [ET33/021] | FILL | 40 | 40 | ** | 5g | | | | | | | Pot */12g, FCF **/1199g. Flint */20g |
| 9 | [ET33/017] | FILL | 40 | 40 | | | | 4g | | | | | Pot */47g, FCF **/234g |
| 10 | [ET63/006] | FILL OF POT | 3 | 3 | | 2g | | | | | | | |
| 11 | [ET63/008] | FILL | 6 | 6 | ** | 2g | | | | | | | Pot 12g |
| 12 | [ET33/024] | FILL | 10 | 10 | * | 2g | | | | | | | Pot */8g, Burnt clay */8g |
| 13 | [ET33/016] | FILL OF POT | 10 | 10 | * | 2g | | | | | | | Pot 80g |
| 14 | [ET26/005] | FILL | 10 | 10 | | 4g | ** | 4g | | | | | |
| 15 | [ET63/010] | FILL | 40 | 40 | ** | 4g | * | 4g | ** | 2g | | | Pot **/153g, FCF 12g, Burnt Clay */4g |
| 16 | [ET31/005] | FILL | 30 | 30 | *** | 5g | ** | 6g | | | | | |
| 17 | [ET31/007] | FILL | 30 | 30 | * | 4g | ** | 6g | | | | | |
| 18 | [ET28/004] | FILL | 24 | 24 | | | | | | | | | Pot */57g, Glass */7g |
| 19 | [ET28/008] | FILL | 12 | 12 | ** | 1g | | | | | | | Pot */19g |
| 20 | [ET22/008] | FILL | 40 | 40 | **** | 22g | *** | 30g | | | | | Pot */8g |
| 21 | [ET20/005] | DEPOSIT | 40 | 40 | *** | 2g | | | | | | | Flint */14g |
| 22 | [ET21/003] | DEPOSIT | 40 | 40 | *** | 9g | * | 4g | | | | | FCF 14g |

| Sample Number | Context | Contoxt / denocit | next / depor | litres sub-Sample Volume litres | Charcoal <4mm | Weight (g) | Charcoal >4mm | Weight (g) | Bone and Teeth | Weight (g) | Molluscs | Weight (g) | Other |
|---------------|------------|-------------------|--------------|---------------------------------------|---------------|------------|---------------|------------|----------------|------------|----------|------------|-------------------------------|
| 23 | [ET12/009] | FILL | 10 | 10 | ** | 4g | ** | 6g | | | | | Pot **/68g, Lava stone **/96g |
| 24 | [ET12/012] | FILL | 40 | 40 | * | 2g | | | | | | | Pot */4g |
| 25 | [ET7/008] | FILL | 40 | 40 | ** | 2g | ** | 6g | | | | | Pot **/59g |
| 26 | [ET7/009] | FILL | 40 | 40 | ** | 6g | * | 2g | | | | 1g | Pot **/137g |
| 27 | [ET8/011] | FILL | 40 | 40 | | | | | | | | | Pot */10g, FCF */6G |

Appendix 3: Flot Quantification Table (* = 0-10, ** = 11-50, *** = 51-250, **** = >250)

| Sample Number | Context No. | Flot volume (ml) | Uncharred | Charcoal >4mm | Charcoal <4mm | Crop seeds | Weed seeds | Chaff and other | Land snail shells | Potential |
|---------------|-------------|-----------------------|-----------|---------------|---------------|---|---|------------------|-------------------|---------------|
| 1 | ET45/004 | 25 | <5% | ** | **** | | | | | B Ch analysis |
| 2 | ET67/007 | 10 | 50% | | ** | | | | *** | D |
| 3 | ET39/005 | 15 | 70% | | *** | * cereals | * grass weeds | * g.b. | | В |
| 4 | ET60/006 | <5 | 30% | * | **** | | * nut shell frag | * chaff | | В |
| 5 | ET59/006 | <5 | 90% | | ** | | | | | D |
| 6 | ET35/004 | <5 | 98% | | * | | | | | D |
| 7 | ET33/017A | 10 | 80% | * | ** | * cereals (Triticum sp.) | * to id | | | C? |
| 8 | ET33/021 | 25 | 90% | | *** | | | * 1 g.b. | | D |
| 9 | ET33/017B | 65 | 90% | * | ** | | | | | D |
| 10 | ET63/006 | 10 | 50% | ** | ** | ** Triticum aestivum, Triticum sp., * Pisum sativum | | * stem fragments | | B/A |
| 11 | ET63/008 | <5 | 80% | * | *** | | | | | D |
| 12 | ET33/024 | <5 | 98% | * | ** | | 4.5. | | ** | D |
| 13 | ET33/016 | 30 | 85% | * | ^^ | | 1 Raphanus sp. | | 1^^ | D |
| 14 | ET26/005 | 480 (100ml viewed) | <2 | *** | **** | | | | | A ch analysis |
| 15 | ET63/010 | 210 (100ml viewed) | 45% | ** | **** | ** cereals Triticum sp., Avena sp., ** pulses Pisum sativum | ** incl. Rubus sp, cf. Corylus sp. & others | | | A cpr & ch |

| Sample Number | Context No. | Flot volume (ml) | Uncharred | Charcoal >4mm | Charcoal <4mm | Crop seeds | Weed seeds | Chaff and other CPR | Land snail shells | Potential |
|------------------|-------------|---------------------|-----------|------------------|------------------|--------------------------|-------------------------|---------------------|----------------------|-----------|
| 16 | ET31/005 | 70 | 80% | ** | *** | ** cereals Triticum spp. | * incl. Galium sp. | | | В |
| 17 | ET31/007 | 50 | 80% | * | *** | ** cereals | | | | С |
| 18 | ET28/004 | 10 | 98% | | * | | | | | D |
| 19 | ET28/008 | 5 | 98% | | * | | | | | D |
| 20 | ET22/008 | 220 | 10% | ** | **** | | | | | С |
| 21 | ET20/003 | 70 | 60% | | ** | | | | | D |
| 22 | ET21/003 | 70 | 95% | | ** | | | | | D |
| 23 | ET12/009 | <5 | 5% | * | *** | ** cereal Triticum sp. | ** to id | | | С |
| 24 | ET12//012 | <5 | 30% | | ** | | | | | D |
| | | | | | | | | | | |
| 25 | ET7/008 | 25 | 95% | * | * | | * 1 Polygonum/Rumex sp. | | | D |
| 26 | ET7/010 | 25 | 95% | | ** | | | | | D |
| 27 | ET8/011 | 50 | 90% | | ** | | | | | D |

Appendix IV:SMR Summary Form

| Site Code | IOG | | | | | |
|------------------------------------|--------------------------|------------------|-------------------|-----------------------|-------------|----------|
| Identification Name and Address | Isle of Grain | Transmission | n Pipeline | | | |
| County, District &/or Borough | Kent | | | | | |
| OS Grid Refs. | NGR TQ862 | 2755 to TQ691 | 1746 via TQ68 | 8730 | | |
| Geology | London Clay | / Quaternary [| Orift (Head Gra | vel/Brickearth | and Colluvi | um) |
| Arch. South-East Project Number | 3068 | | | | | |
| Type of Fieldwork | Eval. ✓ | Excav. | Watching Brief | Standing Structure | Survey | Other |
| Type of Site | Green Field ✓ | Shallow Urban | Deep Urban | Other | | |
| Dates of Fieldwork | Eval. Sep-Nov 2007 | Excav. | WB. | Other | | |
| Sponsor/Client | Amec/Nation | nal Grid/A B R | head | ı | | |
| Project Manager | Neil Griffin | | | | | |
| Project Supervisor | Clive Meato | n | | | | |
| Period Summary | Palaeo. | Meso. ✓ | Neo. ✓ | BA ✓ | IA ✓ | RB ✓ |
| | AS | MED | PM | Other | • | . |

SUMMARY:

Between October and November 2007 an archaeological evaluation was undertaken along the route of the proposed Isle of Grain Gas Transmission Pipeline. The route corridor was 21km long, and located on the Hoo Peninsula, linking Shorne in the west, with the Isle of Grain in the east. A total of 67 evaluation trenches, 13 contingency trenches, 15 test pits and 34 Palaeoenvironmental test pits (reported on separately) were excavated, all within a 36m wide pipeline easement. Archaeological deposits were recorded along much of the pipeline route, and although heavily truncated in many instances, were often exposed between 300mm and 500mm below the ground surface. Furthermore, a number of discrete archaeologically sensitive areas were revealed, including evidence for Neolithic/Mesolithic, Late Bronze Age, Romano-British, Iron Age, and Anglo-Saxon activity. Most notably a Romano-British industrial site with a probable pottery kiln was recorded, as well as a Late Bronze Age settlement, or possibly funerary site, and what may have been a small scale industrial site, also belonging to the Late Bronze Age period. The results of the evaluation have been used in conjunction with proceeding stage 1 archaeological research (Field Walking Survey and Geophysical Surveys and a Desk Based Assessment), to highlight those areas with the highest potential for significant surviving archaeological deposits.

| Archaeology South-Eas An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipelin | t e |
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Appendix 5: Oasis Summary Form

OASIS DATA COLLECTION FORM: England

Printable version

OASIS ID: archaeol6-36963

Project details

Project name

An Archaeological Evaluation Along the Route of the Proposed Isle

of Grain Gas Tansmission Pipeline

the project

Short description of Between October and November 2007 an archaeological evaluation was undertaken along the route of the proposed Isle of Grain Gas Transmission Pipeline. The route corridor was 21km long, and located on the Hoo Peninsula, linking Shorne in the west, with the Isle of Grain in the east. A total of 67 evaluation trenches, 13 contingency trenches, 15 test pits and 34 Palaeoenvironmental test pits (reported on separately) were excavated, all within a 36m wide pipeline easement. Archaeological deposits were recorded along much of the pipeline route, and although heavily truncated in many places, were often exposed between 300mm and 500mm below the ground surface. Furthermore, a number of discrete archaeologically sensitive areas were revealed, including evidence for Neolithic/Mesolithic, Late Bronze Age, Romano-British, Iron Age, and Anglo-Saxon activity. Most notably a Romano-British industrial site with a probable pottery kiln was recorded, as well as a Late Bronze Age settlement, or possibly funerary site, and what may have been a small scale industrial site, also belonging to the Late Bronze Age. The results of the evaluation have been used in conjunction with proceeding stage 1 archaeological research (Field Walking and Geophysical Surveys and a Desk Based Assessment), to highlight those areas with the highest potential for significant surviving archaeological deposits.

Project dates

Start: 16-10-2007 End: 28-11-2007

Previous/future work

Yes / Yes

Any associated project reference codes

IOG07 - Sitecode

Any associated project reference codes

3068 - Sitecode

Type of project Field evaluation

Site status None

Current Land use Cultivated Land 3 - Operations to a depth more than 0.25m

Monument type KILN Roman

Monument type RING DITCH Late Bronze Age

Monument type HEARTH Late Bronze Age

Monument type QUARRY Early Medieval

Significant Finds POTTERY Late Bronze Age

Significant Finds POTTERY Roman

Significant Finds BROOCH Early Medieval

Methods & techniques

'Sample Trenches', 'Targeted Trenches', 'Test Pits'

Development type Pipelines/cables (e.g. gas, electric, telephone, TV cable, water,

sewage, drainage etc.)

Prompt Environmental Assessment regulations Schedule 1 projects

(Obligatory)

Position in the planning process

After full determination (eg. As a condition)

Project location

Country England

Site location KENT MEDWAY ISLE OF GRAIN Isle of Grain Gas Transmission

Pipeline

Postcode ME3 8RE

Study area 21.00 Kilometres

Site coordinates TQ 586088 175486 50.9349643109 0.257547960624 50 56 05 N

000 15 27 E Line

Site coordinates TQ 568800 173000 50.9332045156 0.232854235293 50 55 59 N

000 13 58 E Line

Site coordinates TQ 569261 174604 50.9346333742 0.233578916748 50 56 04 N

000 14 00 E Line

Height OD Min: 1.00m Max: 56.00m

Project creators

Name of Organisation

Archaeology South East

Project brief originator

AMEC/National Grid/A B Rhead Associates

Project design originator

The Heritage Conservation Group Kent County Council

Project

aaar

director/manager

Type of

sponsor/funding

body

British Gas/Company

Neil Griffin

Name of sponsor/funding

body

AMEC/National Grid

Project archives

Archaeology South-East

An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline

Physical Archive

recipient

Local Museum

'Ceramics', 'Glass', 'Industrial', 'Metal', 'Worked stone/lithics' **Physical Contents**

Digital Archive recipient

Local Museum

Digital Contents 'none'

Digital Media available

'Images raster / digital photography', 'Spreadsheets', 'Text'

Paper Archive recipient

Local Museum

Paper Contents 'none'

Paper Media available

'Context sheet', 'Correspondence', 'Diary', 'Drawing', 'Notebook -

Excavation', 'Research', 'General

Notes', 'Photograph', 'Plan', 'Report', 'Section', 'Survey', 'Unpublished

Text'

Project bibliography 1

Grey literature (unpublished document/manuscript)

Publication type

Title An Archaeological Evaluation Along the Route of the Proposed Isle

of Gran Gas Transmission Pipeline

Author(s)/Editor(s) Meaton, C.

Other bibliographic 2007113

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Date 2008

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Portslade, East Sussex. BN41 1DR

Description Soft bound

Entered by Clive Meaton (c.meaton@ucl.ac.uk)

Entered on 29 January 2008

Appendix VI: Interim Summary (figures not reproduced)

AN ARCHAEOLOGICAL EVALUATION ALONG THE ROUTE OF THE PROPOSED ISLE OF GRAIN TRASNMISSION PIPELINE (Interim Summary Report)

By C.J.Meaton

Introduction

An archaeological evaluation was undertaken along the route of the proposed Isle of Grain Transmission Pipeline. This work was undertaken during October and November 2007, and comprised a total of 67 evaluation trenches, 13 contingency trenches (out of a possible total of 24), 15 test pits and 34 palaeo test pits (figures 1-9 show the location of all archaeological trenching). This document forms an interim summary of the aforementioned work. As such it should be noted that first draft presentation of site plans are included, and at this stage no interrogative textual element relating to the primary recording has been undertaken. Similarly, spot dates are based on a provisional identification of the pottery, and may thus be subject to some alteration based on associated artefactual evidence. The palaeo test pits, which were excavated by a qualified geoarchaeologist (Dr Martin Bates), will be reported on separately.

Results

The attached table provides a complete list of excavated evaluation trenches (ET's), contingency trenches (CT's), and test pits (TP's). It includes the trench designation, the associated KP number, plough depth, sub soil depth, a summary of findings drawn on the excavator interpretation, and a spot date based on provisional pottery identification. All trenches and test pits are tabulated in relation to their geographical positioning; east to west across the grain peninsula.

Figures 10-17 are colour coded to emphasise the chronological range of each feature. Modern field drains/features, along with bioturbated or culturally altered natural deposits are also illustrated.

Discussion

During the course of this evaluation a number of specific areas provided good evidence for concentrated episodes of cultural activity.

• Evaluation trenches 5 through 9 (Site 28). This area revealed a variety of features including pits, ditches, and post holes, as well as a large, deep feature with very compacted/desiccated fills. Artefactual material indicated a probable Late Iron Age to Romano British date, although Late Bronze Age material was also recovered.

- Evaluation trenches 11 through 14 (Site 26). A number of linear and discrete features
 were excavated in this area, although only ET12 provided ceramic dating evidence.
 Several features were recorded in ET13, but this trench was partially waterlogged
 during excavation, and hence finds recovery may have been hampered. The pottery
 indicated an Iron Age date.
- Evaluation trenches 16 and 17 (Site 25). Late Bronze Age and Prehistoric pot was recovered from features in ET16. Several undated features were also excavated in the adjacent trench 17, indicating likely prehistoric activity in this vicinity.
- Evaluation trench 19 and contingency trench 9 (Site 24). No ceramic material was
 recovered from either trench. However, both were located close to the bottom of a
 small valley, and features were sealed beneath thick colluvial deposits. Flint work
 recovered from these features might be indicative of a prehistoric date.
- Evaluation trenches 20 through 22 (Site 23). A large shallow depression was investigated in ET21 and seems to have had Iron Age/Romano-British antecedents. Adjacent trenches 20 and 22 also revealed a number of discrete and linear features. Pottery from ET20 was of Late Bronze Age, Iron Age and Romano British origin.
- Evaluation trenches 27 through 31, and contingency trench 13 (Site 20). These trenches were located on Lodge Hill, lying between the 60 and 70 metre contour lines, and having extensive views across the marshes and the Thames Estuary. A number of distinctive features were excavated in this area, including a possible linear or discrete pit containing a significant amount of fire cracked flint, a relatively deep and sharply rounded curvilinear (ET 29), another large curvilinear (possibly 2 intersecting ditches), as well as a number of other discrete features. Pottery indicated both Late Bronze Age and Iron Age to Romano-British activity on this hill top.
- Evaluation trench 63 (Site 19). Four distinct features were excavated in this trench, revealing a large amount of Iron Age and Romano-British pot. However surrounding trenches were relatively devoid of archaeological features, and cultural material.
- Evaluation trenches 33 through 36 (Site 18). A number of finds-rich features were located in these trenches, including pits, ditches and post holes. Pottery recovered was primarily of Late Bronze Age origin.
- Evaluation trenches 39, 40, 41, 42, 59, 60 and 61, as well as contingency trenches 20 and 21 (Sites 12, 13 & 14). This relatively extensive area revealed a large number of features, including a possible Romano-British kiln and quarry pits. The majority of pottery was of Romano-British origin, and the site appears to comprise industrial activity relating to this period. Notably, three Romano-British kilns are known to have been located a short distance to the north of ET42 and ET60. Some Late Bronze Age, and unidentified prehistoric pot was also excavated from features in this area, whilst a likely alluvial deposit recorded in ET59 (possibly the course of an old stream bed), contained ceramics of Prehistoric, Iron Age and Late Bronze Age origin.
- Evaluation trenches 43 through 45 (Site 17). Some indication of prehistoric activity in this area was noted, with several discrete and linear features recorded, two of which contained ceramic material of prehistoric derivation.

Interim Report Evaluation Summary Table Reproduced Below

| Archaeology South-East An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline |
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| Trench | | Plough | Sub Soil | | |
|--------|-------|-----------|-------------|---|--|
| No | KP | Depth | Depth | Summary of Findings/Excavator Interpretation | Context - Pottery Based Spot Date* |
| ET1 | 2+770 | 300mm | 300-400mm | No archaeological significant deposits identified | N/A |
| ET2 | 2+875 | 250-300mm | 300-450mm | No archaeological significant deposits identified | N/A |
| ET3 | 2+980 | 300mm | 300-500mm | Possible undated post hole in gravels | Undated |
| CT1 | 3+030 | 300-320mm | No Sub Soil | Modern disturbance | Modern? |
| ET4 | 3+120 | 280-300mm | No Sub Soil | Probable modern disturbance and a likely tree throw | Modern/Glass? |
| ET5 | 3+170 | 300-350mm | No Sub Soil | Shallow linear, gully terminus and modern disturbance | Undated |
| ET6 | 3+230 | 320-350mm | No Sub Soil | Single undated shallow linear | Undated |
| ET7 | 3+310 | 260-310mm | No Sub Soil | Busy trench. Several discrete and linear features identified + 1 large pit/feature | 004 - LBA; 008 - IA; 010 - RB |
| ET8 | 3+370 | 330-350mm | 330-590mm | Very large feature exceeding 1200mm depth + 2 discrete features | 011 - RB; 012 – LBA |
| ET9 | 3+485 | 280-300mm | No Sub Soil | Shallow linear | Undated |
| CT2 | 3+555 | 300mm | 300-400mm | 1 linear | Undated |
| CT3 | 3+835 | 300mm | 300-460mm | Very mixed/bioturbated natural and 1 uncertain discrete feature | Undated |
| ET10 | 3+890 | 300mm | 300-400mm | Very mixed/bioturbated geology. 1 gully terminus and a possible truncated post hole | Undated |
| CT4 | 3+930 | 300mm | 300-400mm | Very bioturbated natural. 2 unlikely discrete features | Undated |
| CT5 | 5+070 | | | UNEXCAVATED | N/A |
| ET11 | 5+218 | 280-350mm | No Sub Soil | Gully terminus + 1 discrete feature | Undated |
| ET12 | 5+260 | 300-400mm | 300-480MM | 1 large linear running half the length of the trench + 2 other linear features | 006 & 007 - IA; 009 - RB |
| ET13 | 5+300 | 340-380mm | No Sub Soil | Water logged trench, but several discrete features and a linear Modern field drain/boundary disturbance; also 2 linears, a discrete and a possible 3rd | Undated |
| ET14 | 5+360 | 270-380mm | No Sub Soil | linear | Undated |
| CT6 | 5+418 | 300mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| CT7 | 5+640 | 390-410mm | 390-550mm | 1 uncertain shallow linear | Undated |
| ET15 | 5+693 | 300-360mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| ET16 | 5+740 | 290-310mm | No Sub Soil | 2 linear features, 5 discrete features and a tree throw | 012 - LBA; 020 – Prehistoric |
| ET17 | 5+810 | 290-350mm | 290-500mm | 3 discrete features, but no cultural material recovered | Undated |
| ET18 | 5+880 | 300mm | No Sub Soil | 1 linear, 1 probable modern feature, 2 likely tree throws and a geological spread | Undated |
| CT8 | 6+178 | 260-370mm | 260-550mm | 2 linears, and 1200mm colluvium revealed (not bottomed) 2 linears, 3 associated discrete features, 1200mm of colluvium (not bottomed), & an | Undated |
| ET19 | 6+209 | 150-310mm | 170-310mm | animal burrow | Undated |
| CT9 | 6+718 | 290-300mm | No Sub Soil | 2 small modern discrete features cut into field drain backfill | Undated/Modern 003 - IA; 004/005 - LBA; 004 - IA; 003 & |
| ET20 | 6+777 | 270-310mm | 100-140mm | 2 linear and 2 discrete features | 011 – RB |
| ET21 | 6+842 | 280-300mm | 280-560mm | Cut of large feature (droveway/pit/workarea?) | 002 - Prehistoric; 005 - IA; |
| ET22 | 6+910 | 290-310mm | No Sub Soil | 1 linear, 2 discrete features and a shallow burnt spread | Undated |

Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline

| CT10 | 6+958 | | | UNEXCAVATED | N/A |
|------|--------|--------------|---------------------------|---|---|
| CT11 | 7+212 | | | UNEXCAVATED | N/A |
| ET23 | 7+280 | 300mm | 300-500mm | 1 pit | Undated |
| ET24 | 7+370 | 250-310mm | No Sub Soil | Changeable geology investigated. No clear archaeological features identified | N/A |
| ET25 | 7+438 | 310-325mm | No Sub Soil | 4 linears, 1 discrete and modern disturbance | Undated & Modern |
| ET26 | 7+525 | 270-340 | No Sub Soil | 1 linear and a modern feature | Undated & Modern |
| CT28 | 10+138 | | | UNEXCAVATED | N/A |
| ET65 | 10+220 | 280-300mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| CT29 | 10+295 | | | UNEXCAVATED | N/A |
| CT12 | 10+560 | | | UNEXCAVATED | N/A |
| ET27 | 10+640 | 270-330mm | No Sub Soil | 2 small, shallow discrete features, and a shallow curvilinear | 010 - Prehistoric; 006 - Modern |
| ET28 | 10+680 | 250-300mm | No Sub Soil | 2 discrete features, a sharply curving linear, and a pit/linear full of burnt flint | 004, 008, 006 & 010 - LBA; 001 Prehistoric |
| ET29 | 10+740 | 180-270mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| | | | | | 007 & 010 - Prehistoric; 009 - Neo/BA; 010 |
| ET30 | 10+780 | 180-270mm | No Sub Soil | 3 small discrete features | – LBA |
| ET31 | 10+870 | 260-300mm | No Sub Soil | 1 large curvilinear, or possibly 2 intersecting ditches (relationship uncertain) | 005 & 007 - IA; 005 – RB |
| CT13 | 10+920 | 190-230MM | No Sub Soil | 3 small shallow discrete features | 004 – RB |
| ET62 | 10+970 | 210-260mm | No Sub Soil | 1 shallow linear, and 1 small uncertain discrete feature | Undated |
| CT25 | 11+025 | | | UNEXCAVATED | N/A |
| CT26 | 11+310 | 210-330mm | 260-530mm | 1 tree throw | N/A |
| ET63 | 11+385 | 310-360mm | 310-550mm | 2 linears and 2 discrete features | 008 - Med; 002 - IA & RB; 005 & 010 - RB |
| ET64 | 11+440 | 300-370mm | No Sub Soil | 1 partially revealed linear | Undated |
| CT27 | 11+510 | 340-380mm | 340-590mm | 1 modern feature and 1 linear | Undated |
| ET57 | 12+030 | 290-350mm | No Sub Soil | No archaeological significant deposits identified | 002 – RB |
| ET32 | 12+090 | 260-310mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| ET33 | 12+138 | 230-300mm | No Sub Soil | Busy Trench. 2 linears and 8 discrete features | 005, 021 & 009 - Neo/BA; 013, 016 & 017 - LBA; 007 - Prehistoric |
| ET34 | 12+220 | 220-260mm | No Sub Soil | 3 linears and 1 discrete feature | 006 – LBA |
| ET35 | 12+270 | 280-300mm | No Sub Soil | 2 small discrete features and 1 tree throw | 004 – Prehistoric |
| ET36 | 12+350 | 280-350mm | No Sub Soil | 4 small discrete features | 004- LBA |
| ET58 | 12+448 | 230-300mm | 230-600mm | No archaeological significant deposits identified | N/A |
| CT16 | 13+448 | 200-00011111 | 200-00011111 | UNEXCAVATED | N/A |
| ET37 | 13+550 | 200-300mm | 300-450mm | No archaeological significant deposits identified | 001 - Medieval? |
| CT17 | 13+645 | 200-00011111 | 550- 1 5011111 | UNEXCAVATED | N/A |
| CT17 | 13+850 | | | UNEXCAVATED | N/A |
| ET38 | 13+895 | 300-350mm | 350-450mm | No archaeological significant deposits identified | N/A N/A |
| L130 | 13+093 | 300-33011111 | 330 -4 3011111 | no archaeological significant deposits identified | IN/A |

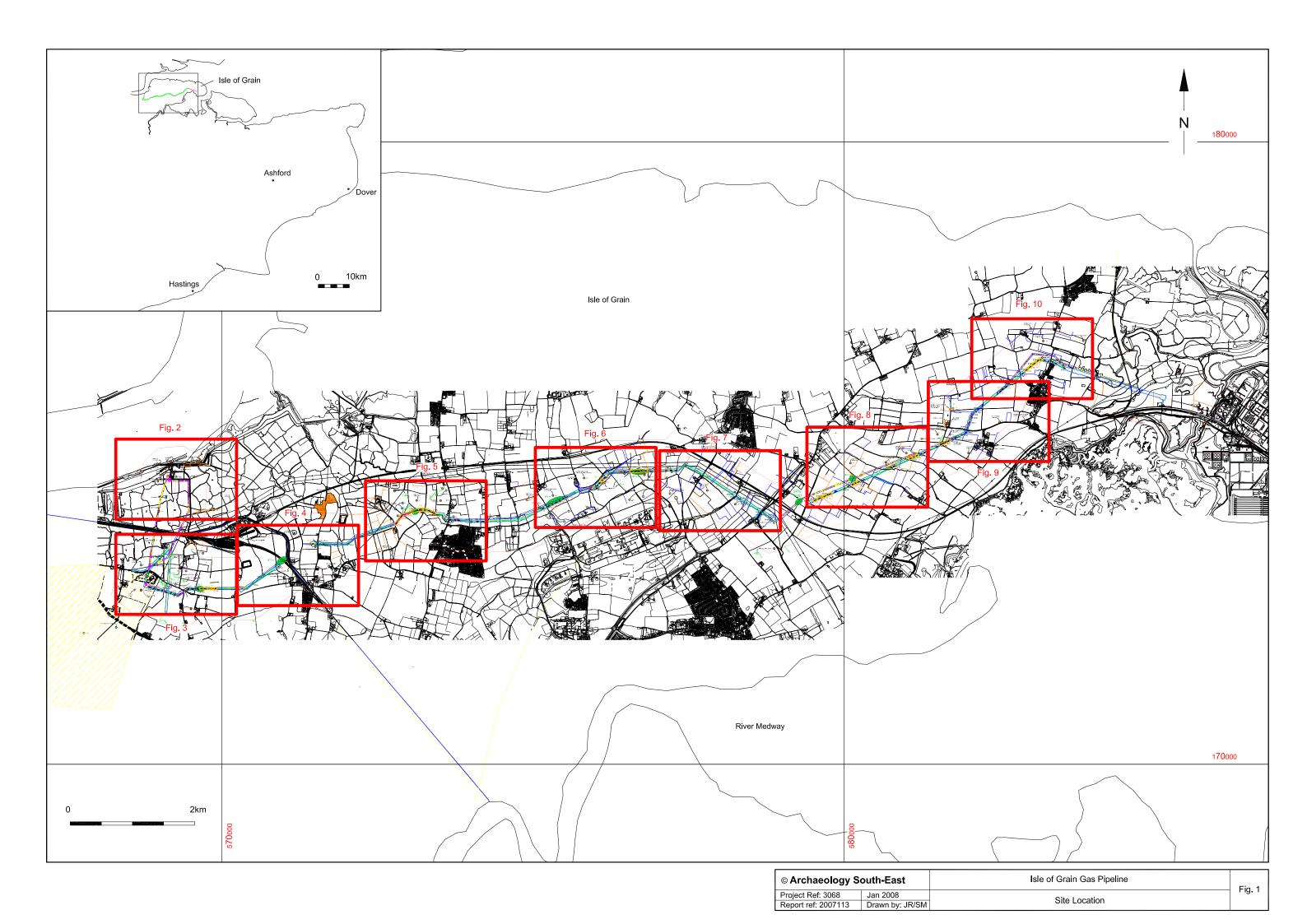
Archaeology South-East An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline

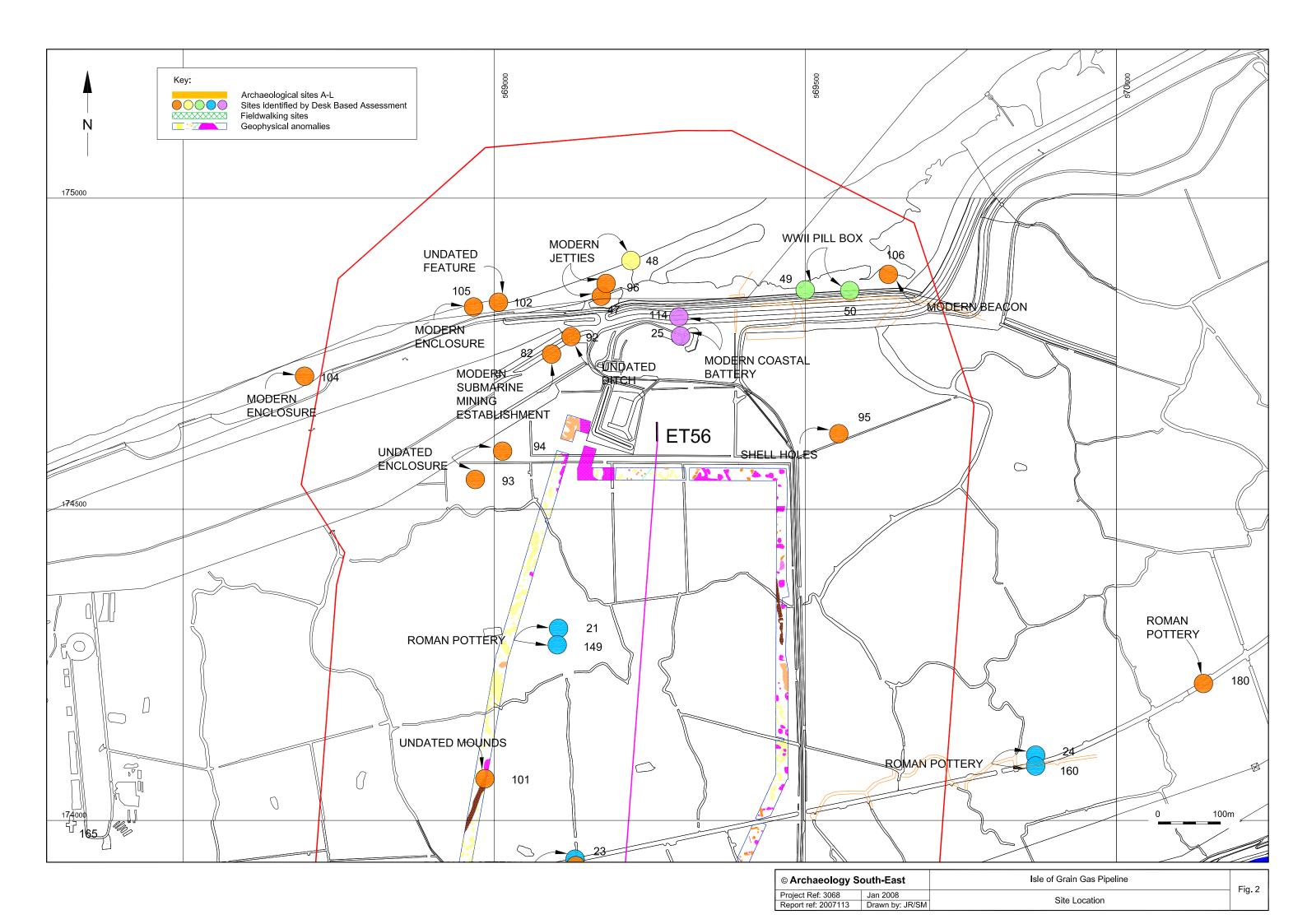
| CT19 | 13+970 | | | UNEXCAVATED | N/A |
|------|--------|-----------|-------------|---|--|
| CT20 | 14+218 | 300mm | 300-700mm | Several large features (possible quarry pits) + 2 discrete features and 1 linear gully | 006 & 011 - RB; 014 - Neo/BA |
| ET39 | 14+325 | 250-300mm | 300-600mm | Large pit (possible quarry pit, not bottomed); 2 discrete features, 1 with burnt material (probable hearth) | 000 8 007 1 DA: 005 1A |
| | | | | " , | 009 & 007 - LBA; 005 – IA N/A |
| CT21 | 14+360 | 250-300mm | 250-450mm | No archaeological significant deposits identified | 004 (Alluvium) - Prehistoric, IA & LBA; 006 |
| ET59 | 14+515 | 270-340mm | 270-490mm | 1 small discrete feature, 1 gully and an alluvial deposit | - LBA |
| ET40 | 14+595 | 230-280mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| ET41 | 14+635 | 190-250mm | No Sub Soil | 1 small discrete feature containing lots of burnt material | 002 & 004 – LBA |
| ET60 | 14+725 | 270-300mm | No Sub Soil | 1 discrete feature with in situ burnt material, 2 linears and 1 discrete/tree throw | 002, 005 & 006 - RB 002, 004, 007, 013, & 015 - RB; 006 & 019 |
| ET42 | 14+860 | 230-330mm | No Sub Soil | Busy Trench. A probable kiln, 3 possible linears, 1 discrete and a likely tree throw | – IA |
| ET61 | 14+990 | 280-330mm | No Sub Soil | 3 linears and 3 tree throws | 006, 014 & 016 – RB |
| ET66 | 16+380 | 150-280mm | 150-460mm | 1 discrete (clay lined hearth) | 005 - Prehistoric? |
| ET67 | 17+070 | 230-300mm | 300-450mm | 1 small discrete feature, and 1 linear (probable palaeochannel) | Undated |
| ET43 | 18+190 | 220-370mm | No Sub Soil | 1 linear with probable recuts and 3 discrete features | 006 – Prehistoric |
| ET44 | 18+340 | 250-300mm | No Sub Soil | 1 discrete feature | Undated |
| ET45 | 18+410 | 230-270mm | No Sub Soil | 1 linear and 2 discrete features | 006 - Neo/BA |
| ET46 | 18+475 | 300-360mm | No Sub Soil | 1 Uncertain linear | Undated |
| ET47 | 18+570 | 340-370mm | No Sub Soil | No archaeological significant deposits identified | 001 – RB |
| ET48 | 18+625 | 330-430mm | No Sub Soil | Possible linear and discrete | Undated |
| ET49 | 18+840 | 320-350mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| ET50 | 18+940 | 280-360mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| ET51 | 18+995 | 320-390mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| ET52 | 19+085 | 290-330mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| ET53 | 19+135 | 240-330mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| ET54 | 19+215 | 270-370mm | No Sub Soil | No archaeological significant deposits identified | 002 - Prehistoric & RB |
| ET55 | 19+270 | 340-380mm | No Sub Soil | No archaeological significant deposits identified | N/A |
| ET56 | 21+250 | 300mm | 300-520mm | No archaeological significant deposits identified | N/A |
| | | | | | |
| TP1 | 8+575 | 300mm | 300-400mm | Test Pit | |
| TP2 | 9+527 | 300mm | 300-420mm | Test Pit | |
| TP3 | 9+729 | 300mm | 300-450mm | Test Pit | |
| TP4 | 9+930 | 300mm | 300-400mm | Test Pit | |
| TP7 | 15+230 | 280mm | 280-420mm | Test Pit | |
| TP8 | 15+430 | 300mm | 300-550mm | Test Pit. An archaeological feature revealed in the NE corner | |

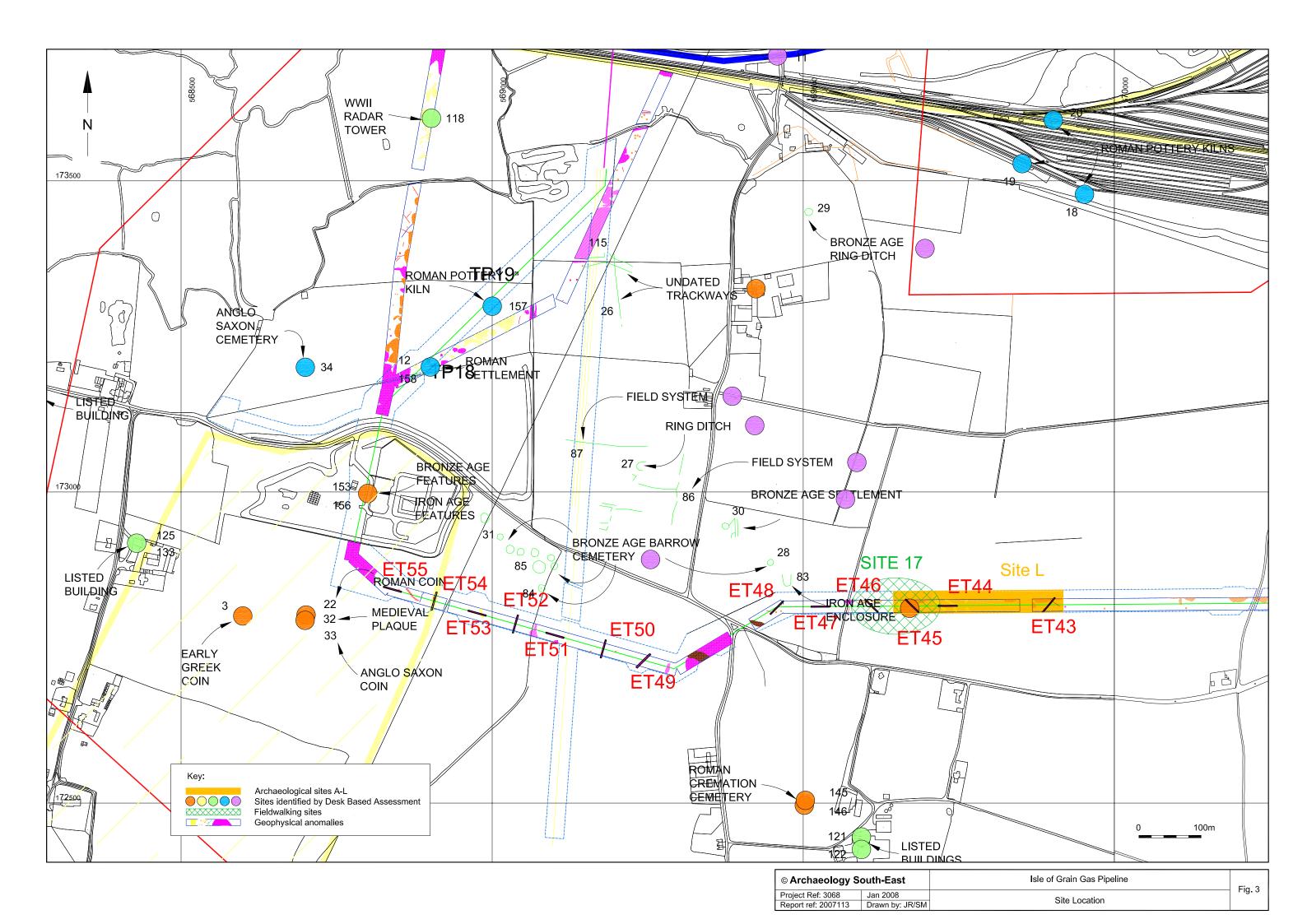
Archaeology South-East An Archaeological Evaluation Along the Route of the Isle of Grain Transmission Pipeline

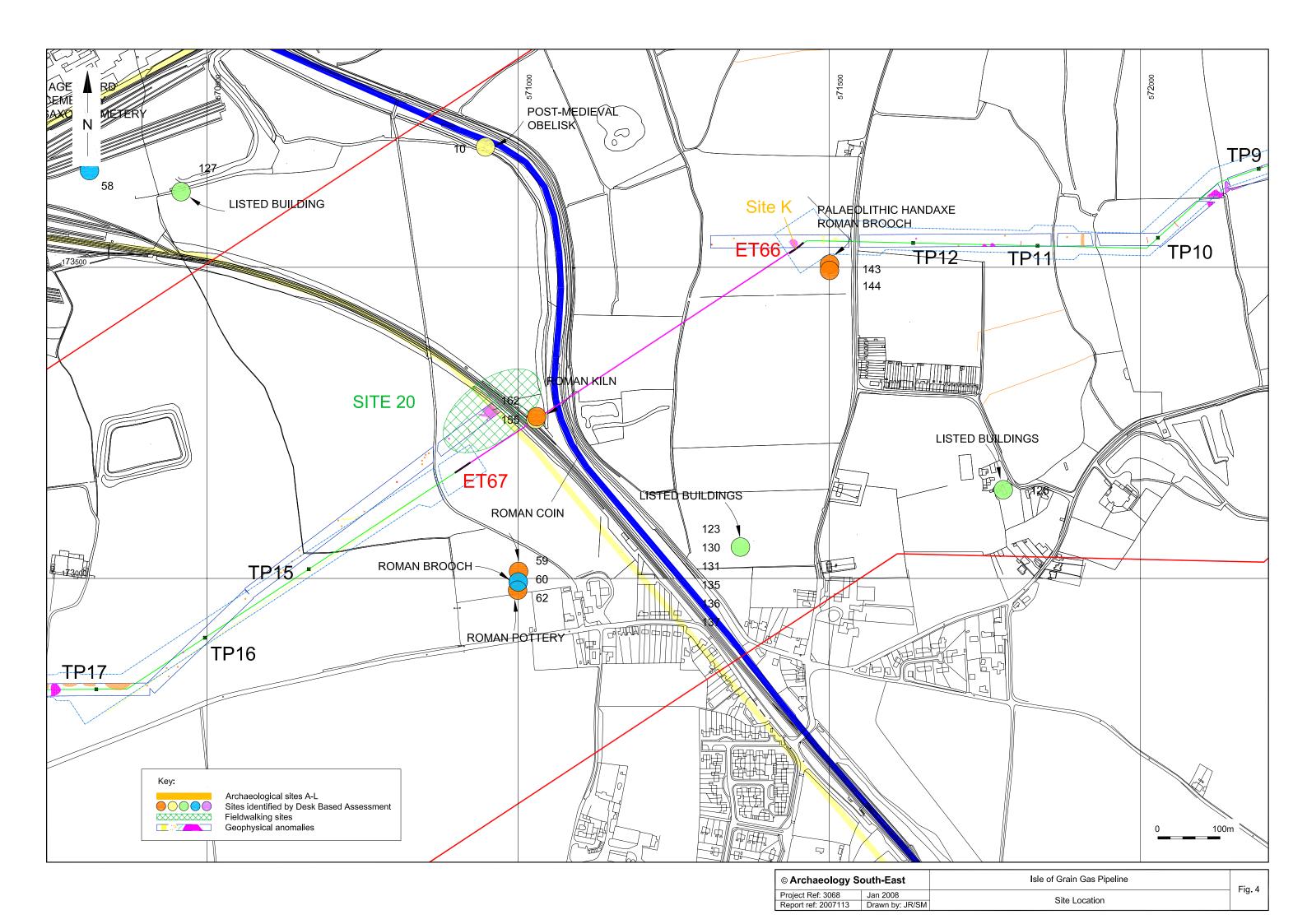
| TP9 | 15+630 | 320mm | 320-600mm | Test Pit. Revealed an archaeological feature | IA |
|------|--------|-------|-----------|--|----------------|
| TP10 | 15+830 | 280mm | 280-380mm | Test Pit | 001 – RB |
| TP11 | 16+035 | 320mm | 320-500mm | Test Pit | |
| TP12 | 16+235 | 240mm | 240-400mm | Test Pit | |
| TP15 | 17+360 | 400mm | 400-700mm | Test Pit | |
| TP16 | 17+565 | 330mm | 330-190mm | Test Pit | |
| TP17 | 17+760 | 300mm | 300-430mm | Test Pit | |
| | | | Made | | |
| TP18 | 19+730 | 100mm | Ground | Test Pit. Made ground to c.1700mm below ground surface. Quarrying pits evident in surface. | ace topography |
| | | | Made | | |
| TP19 | 19+930 | 300mm | Ground | Test Pit. Made ground to c.1100mm below ground surface, and possibly to 1600mm | |

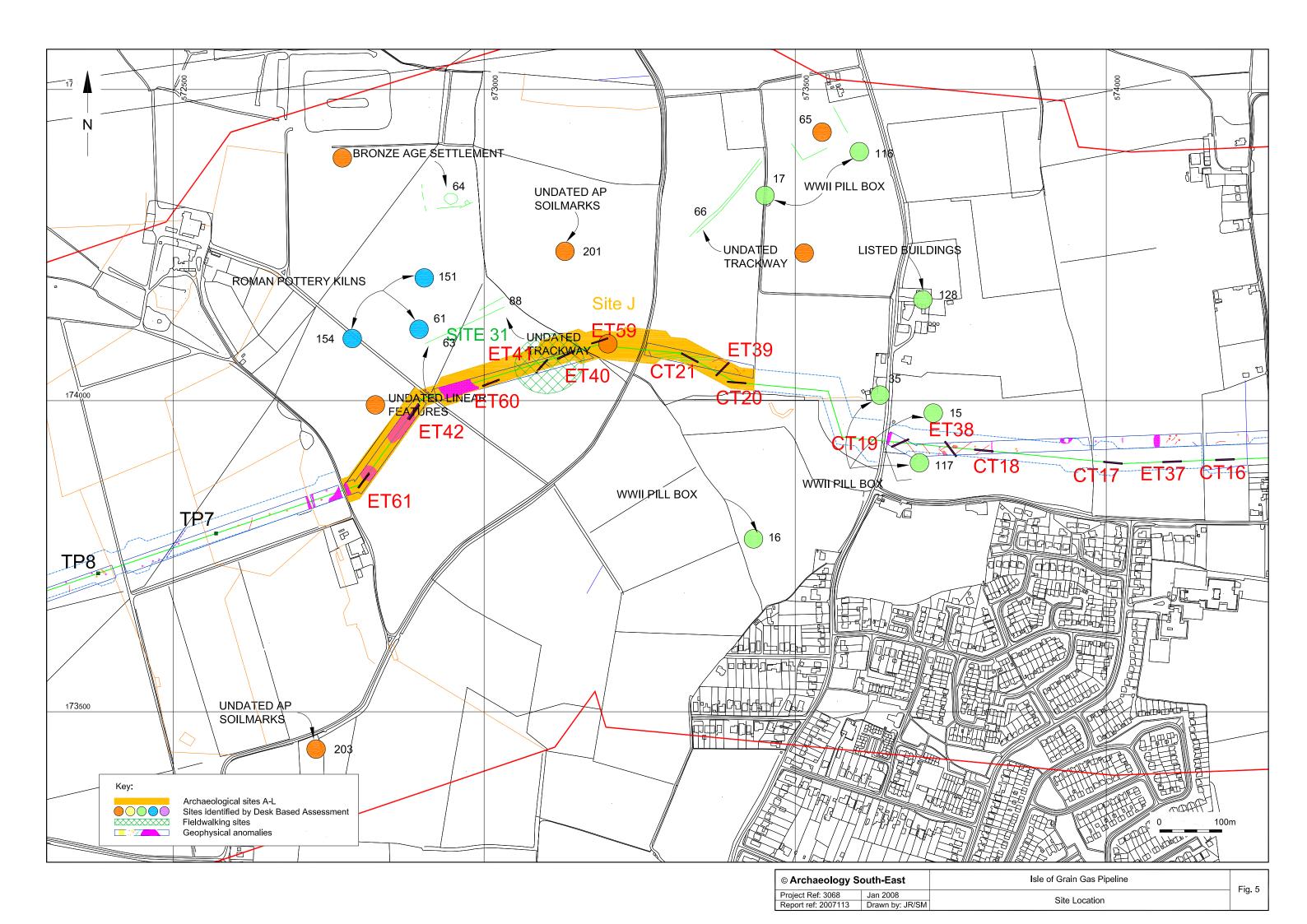
^{*} Neo = Neolithic; BA = Bronze Age; LBA = Late Bronze Age; IA = Iron Age; RB = Romano-British

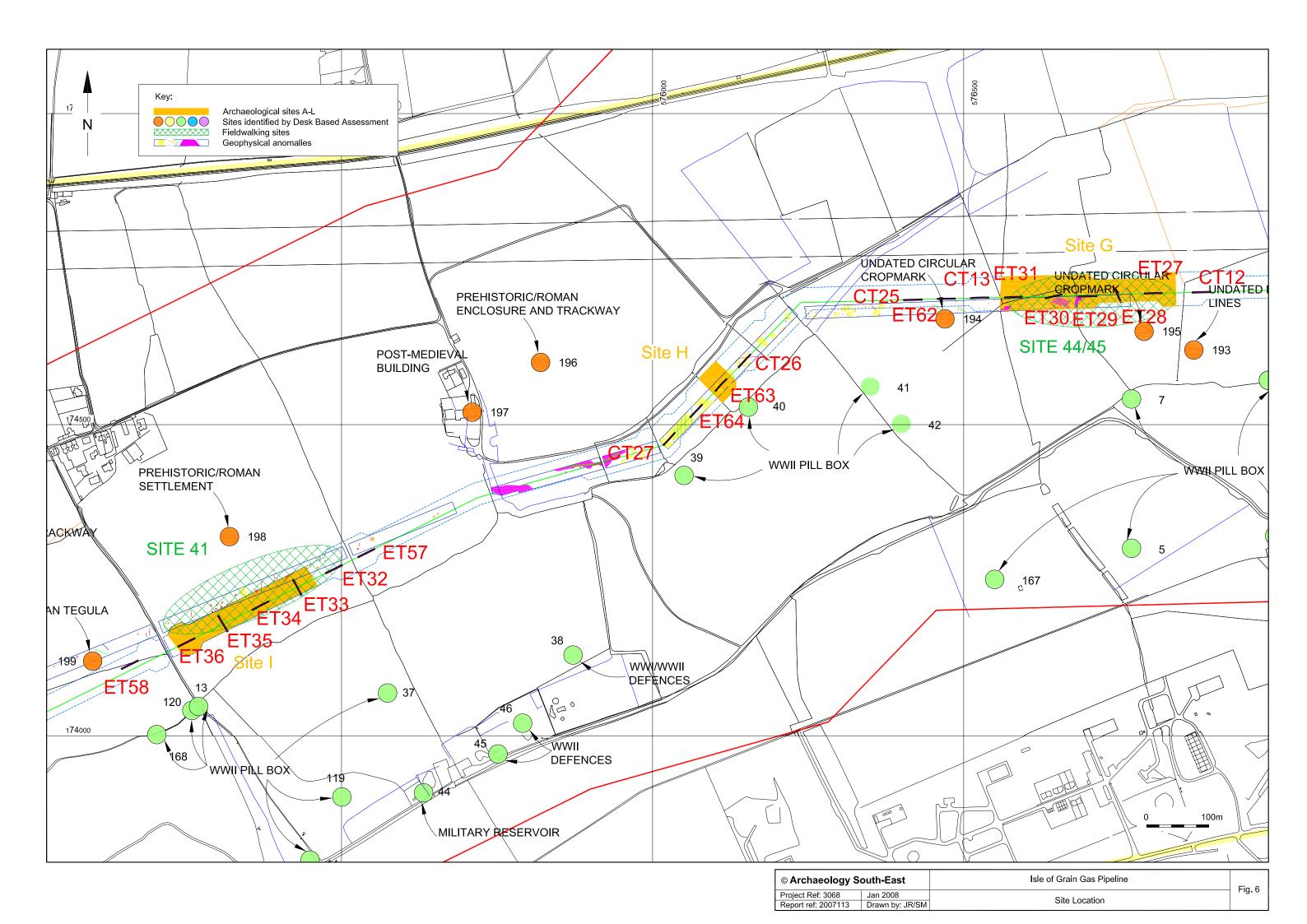


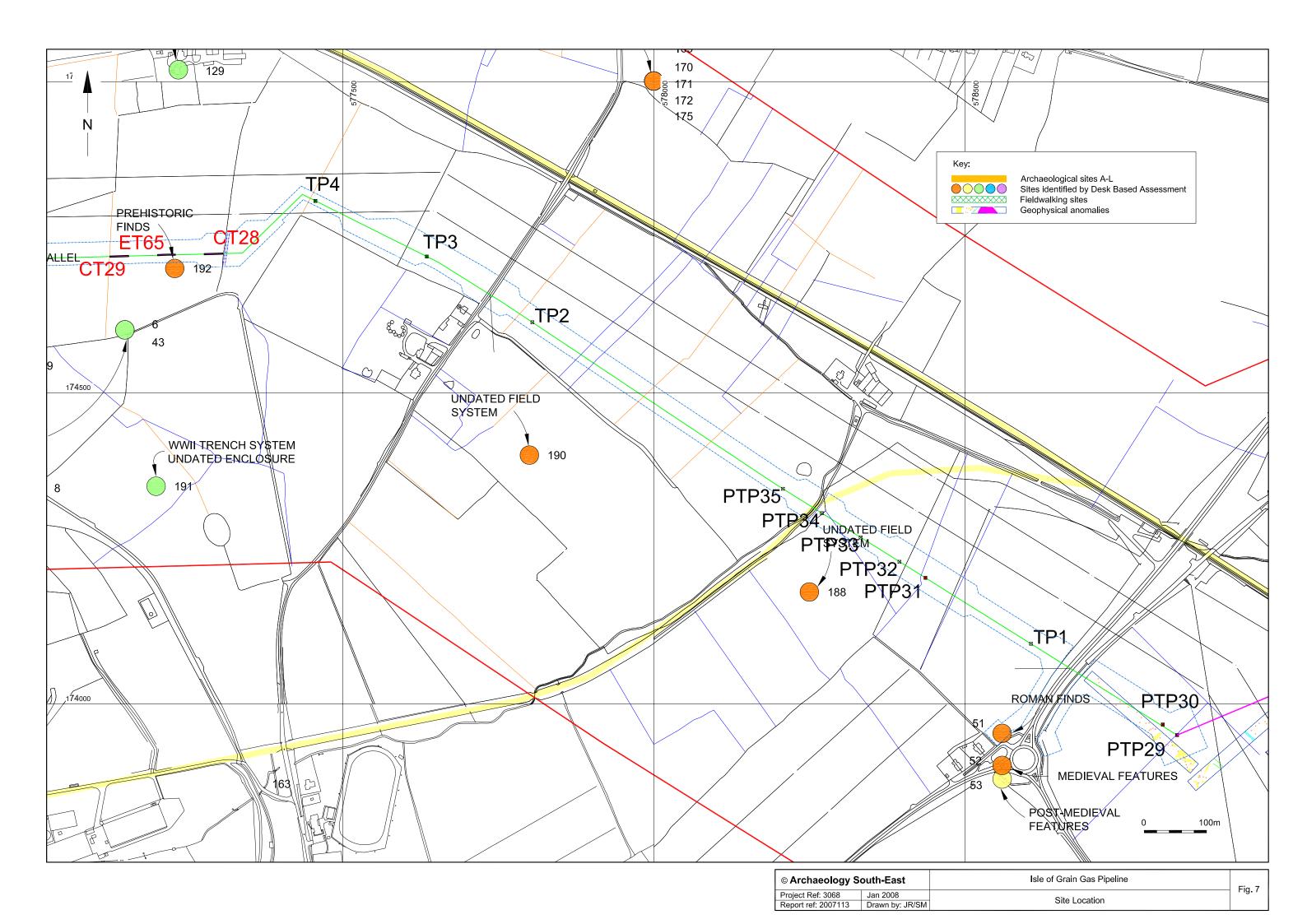


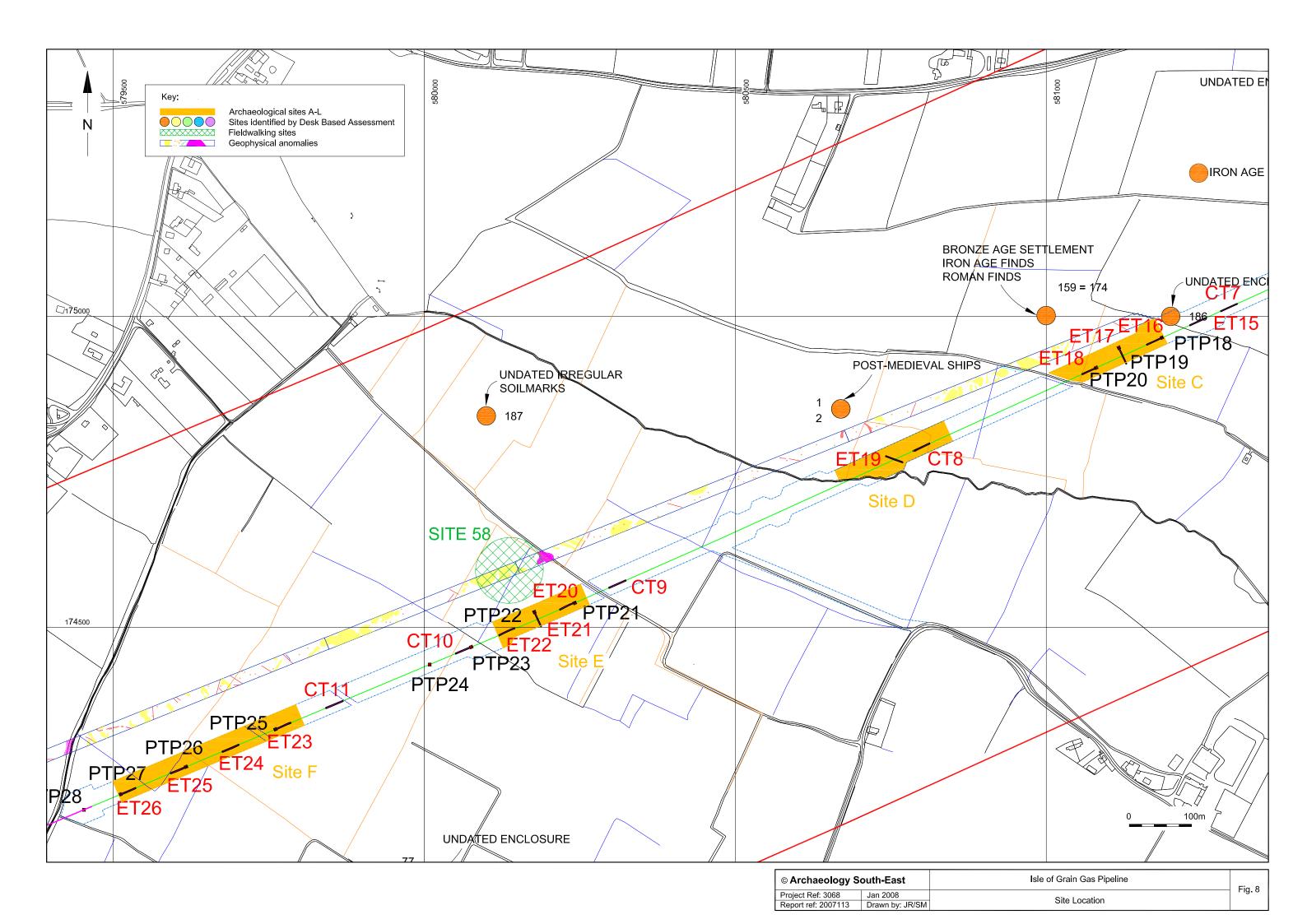


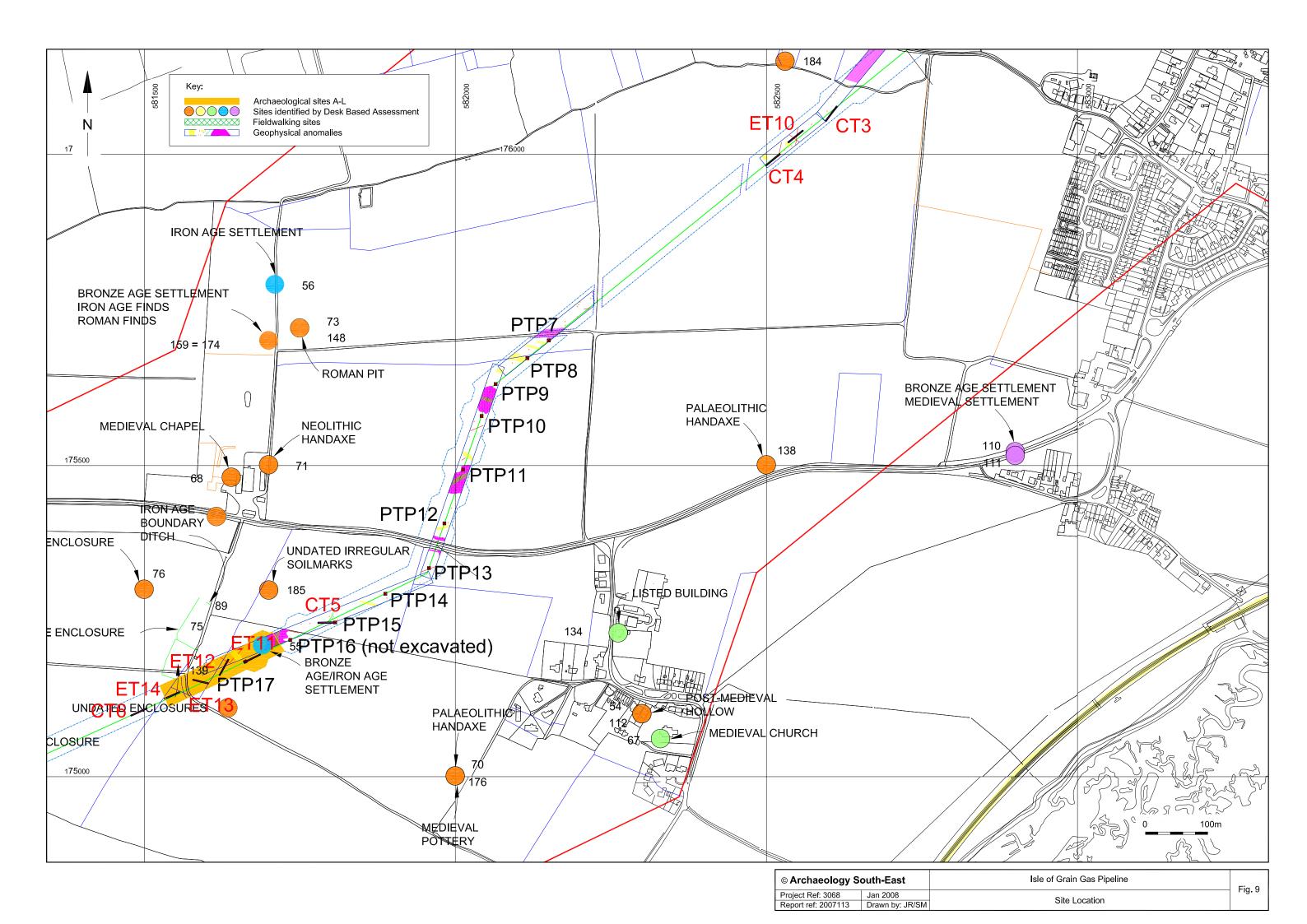


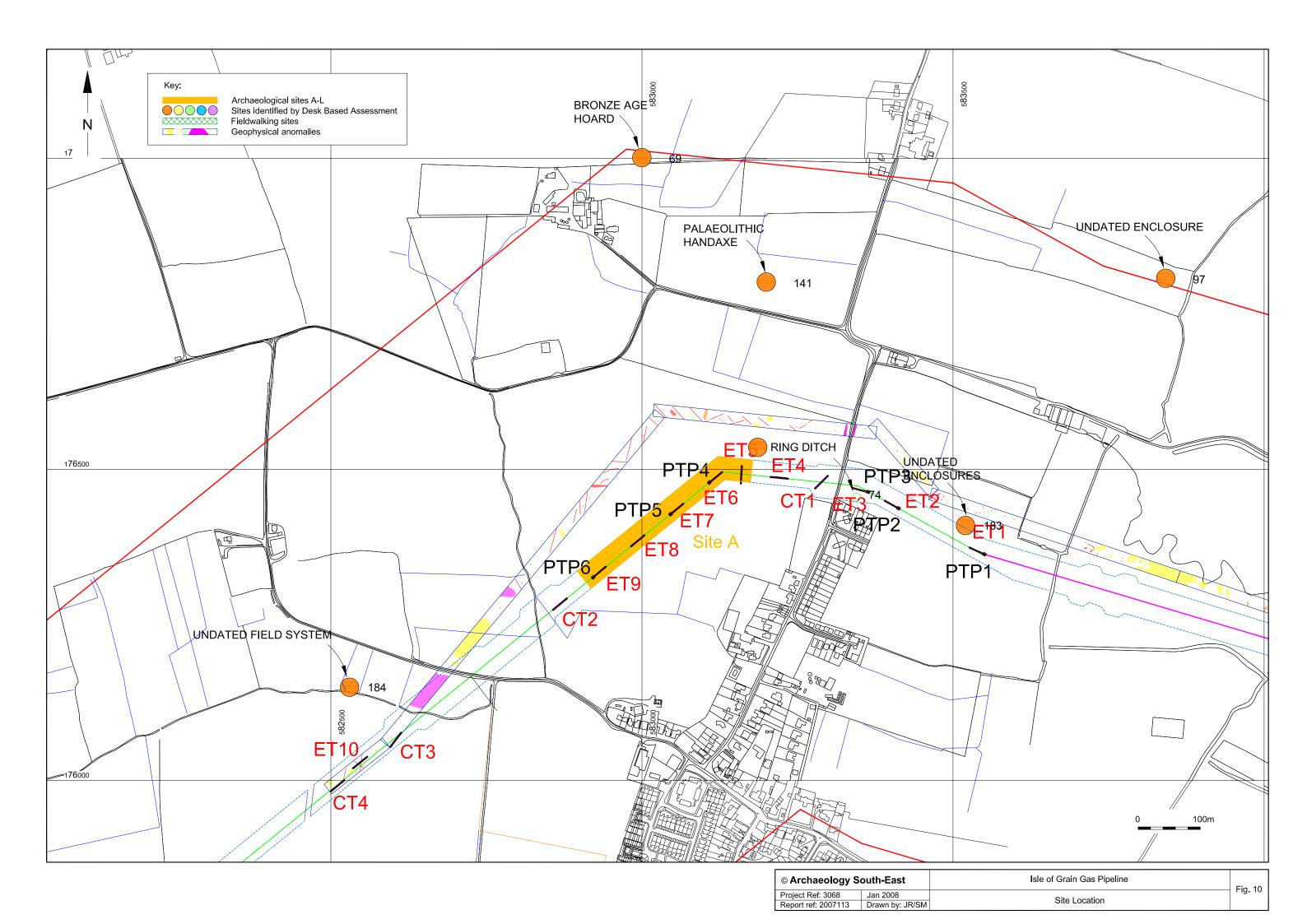


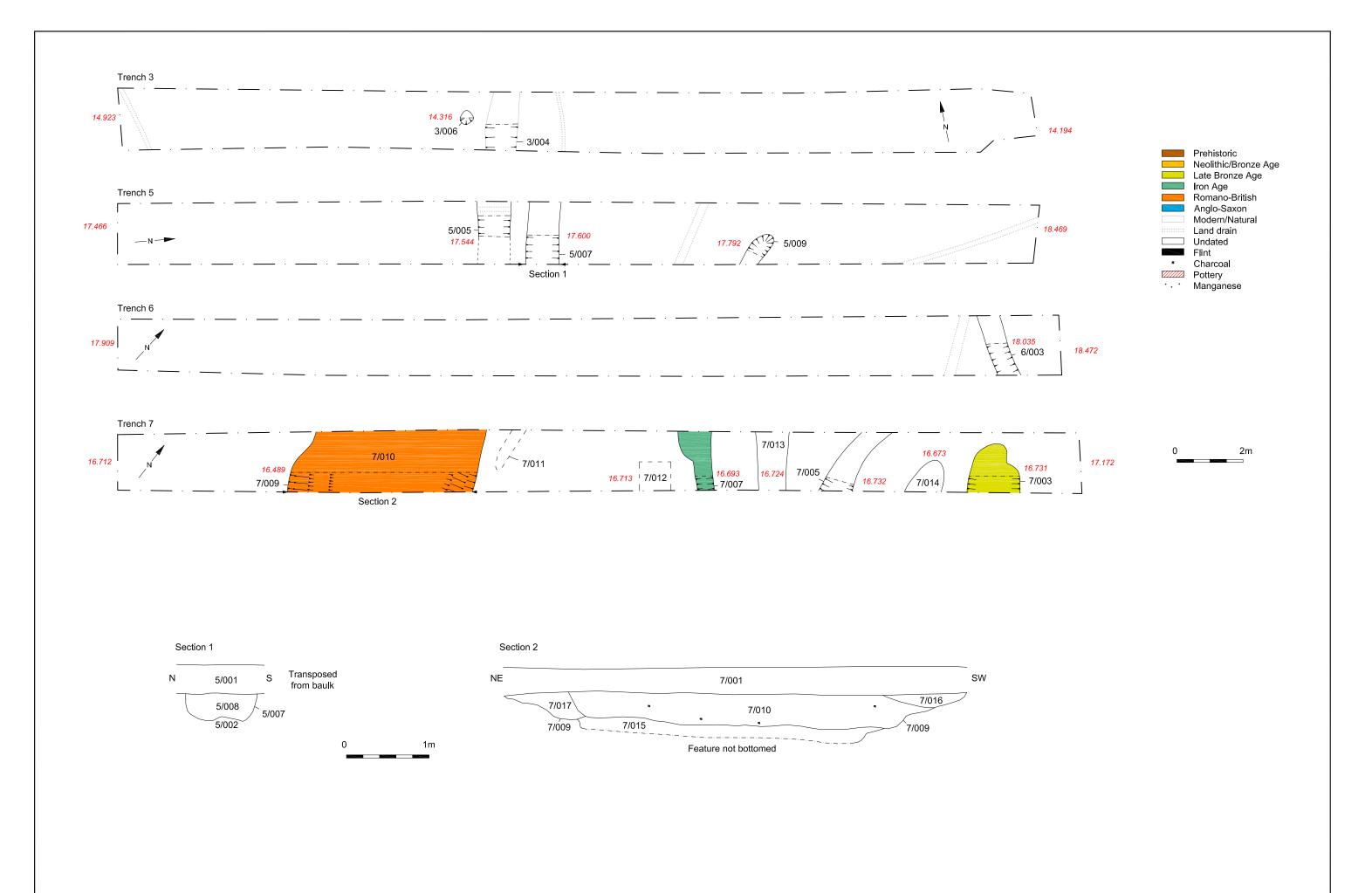




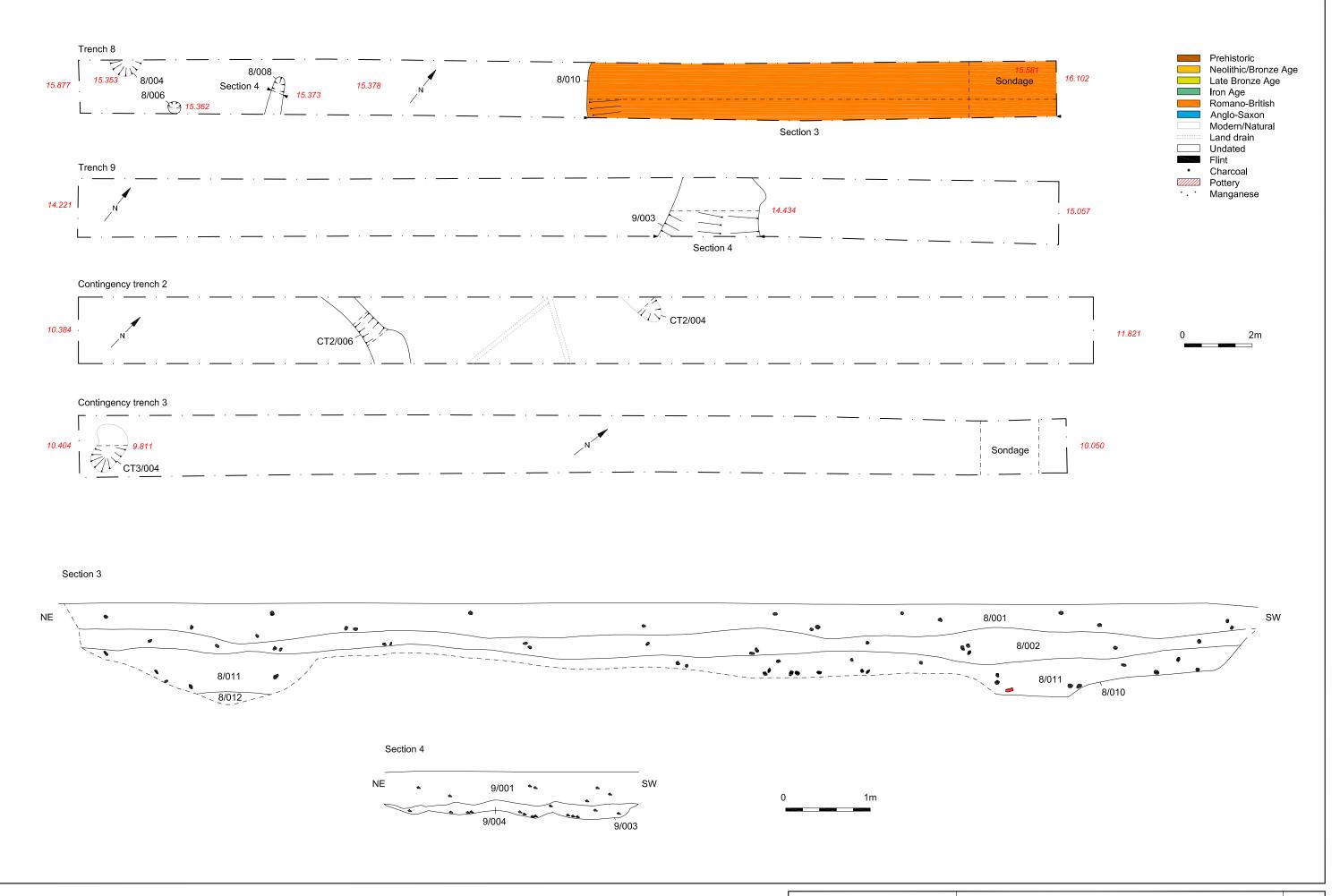




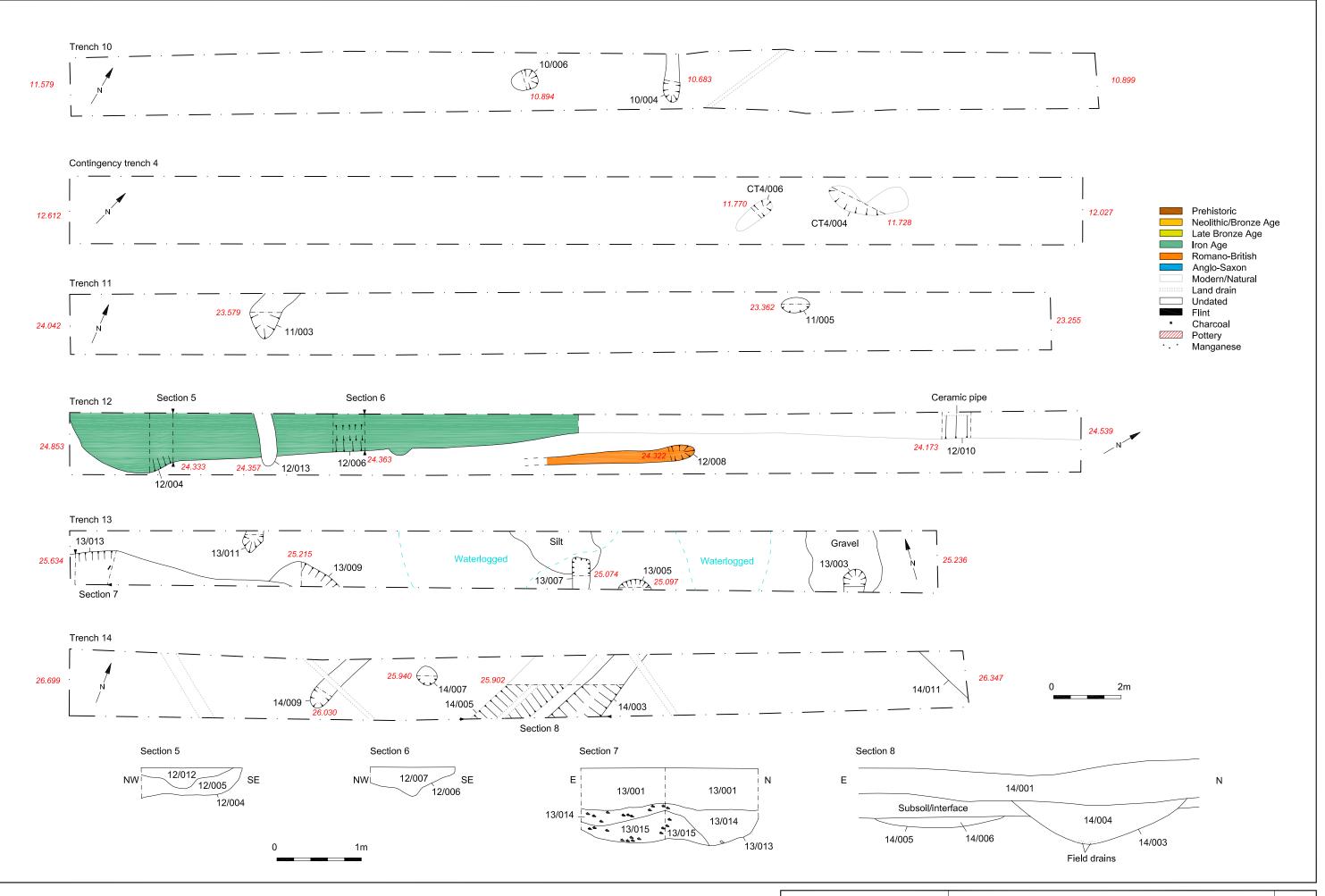




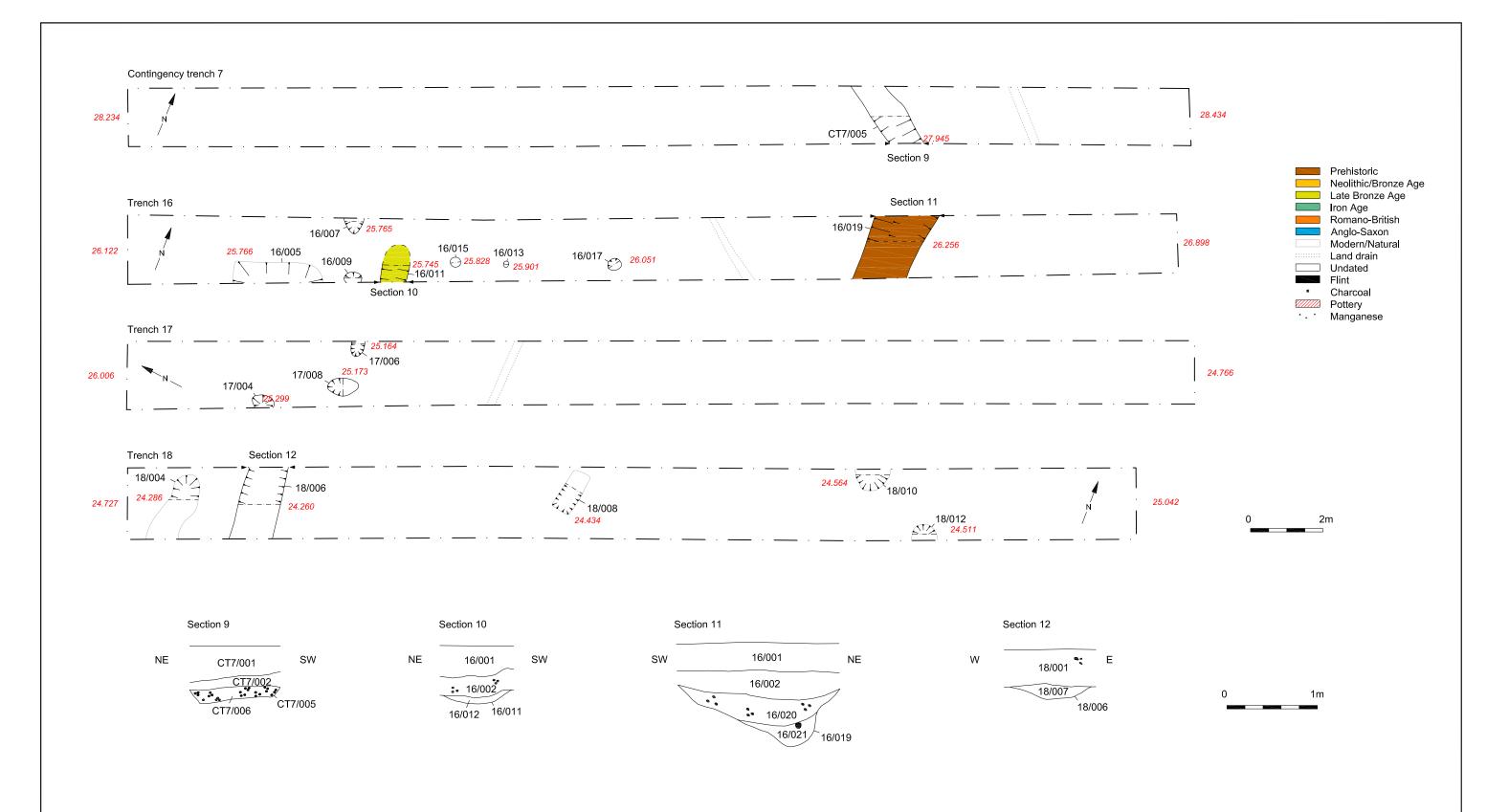
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|---------------------|-----------------|---|-------------|
| Project Ref: 3068 | Jan 2008 | Trenches 3, 5, 6 and 7; Plans and sections |] ' 'g. ' ' |
| Report ref: 2007113 | Drawn by: JR/SM | Trefiches 3, 3, 6 and 7. Flans and sections | |



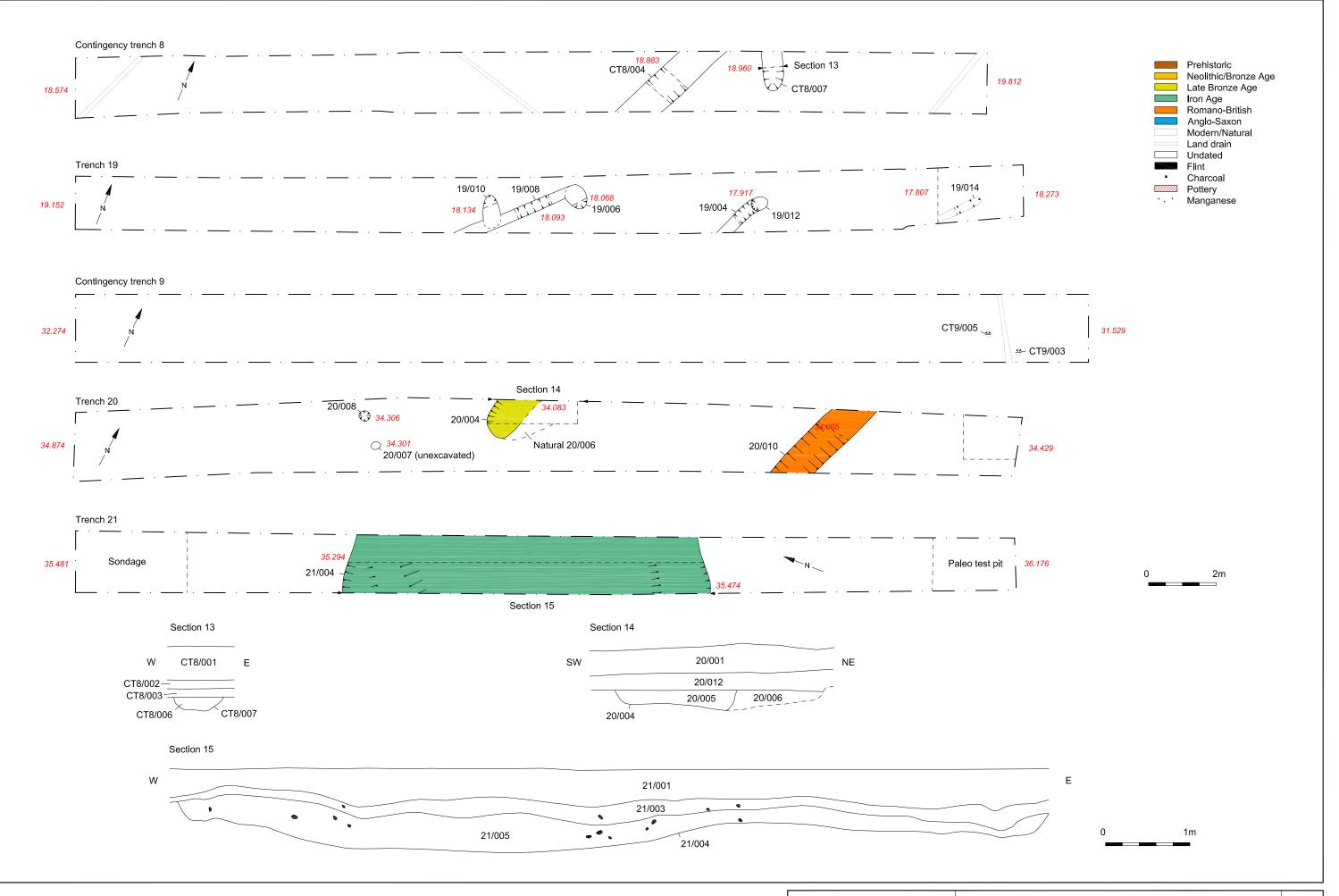
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| Project Ref. 3068 | Jan 2008 | Trenches 8, 9, CT2 and CT3; Plans and sections | 119.12 | l |
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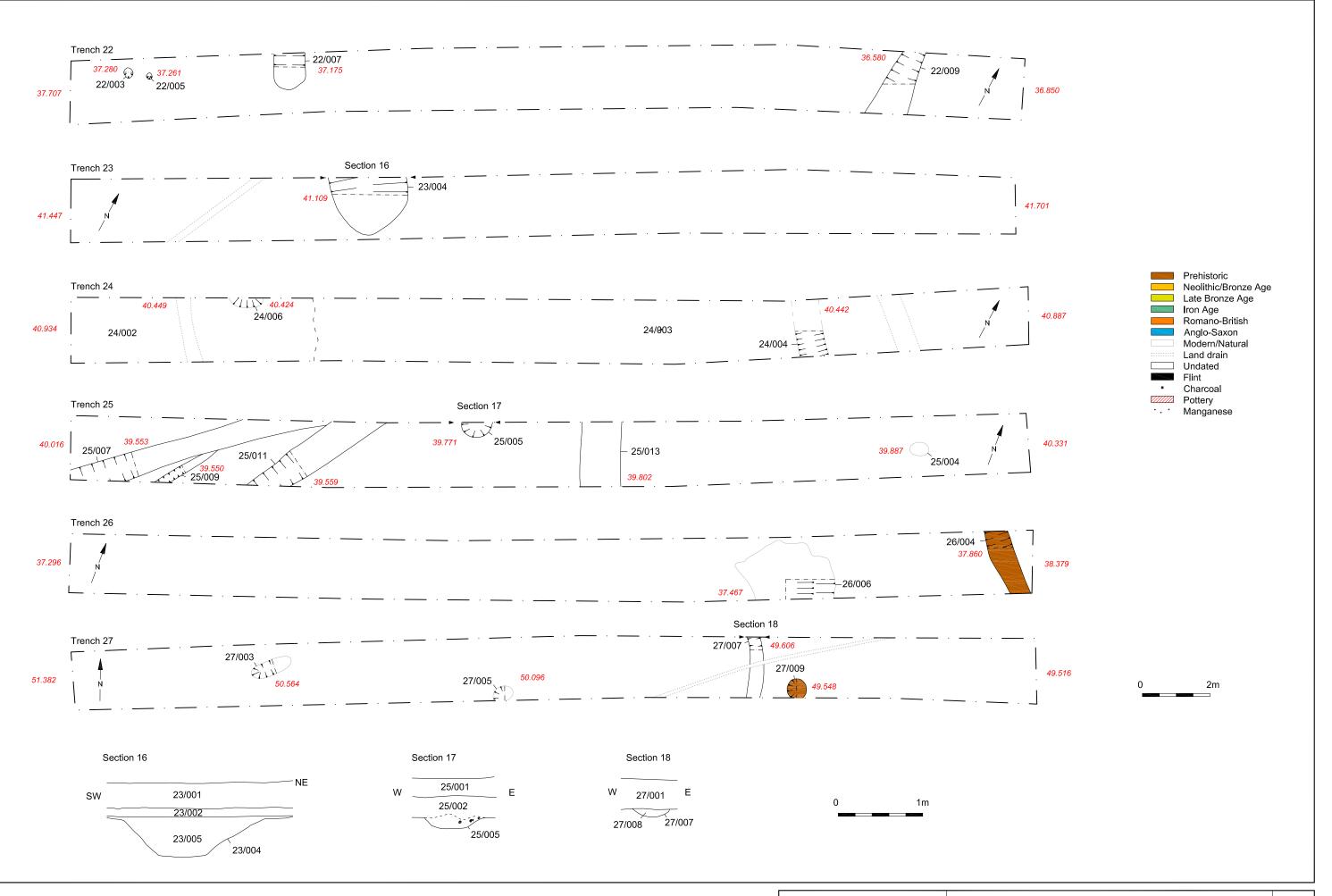
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|---------------------|-----------------|---|----------|--|
| Project Ref. 3068 | Jan 2008 | Trenches 10, CT4, 11, 12, 13 and 14; Plans and sections | 1 19. 15 | |
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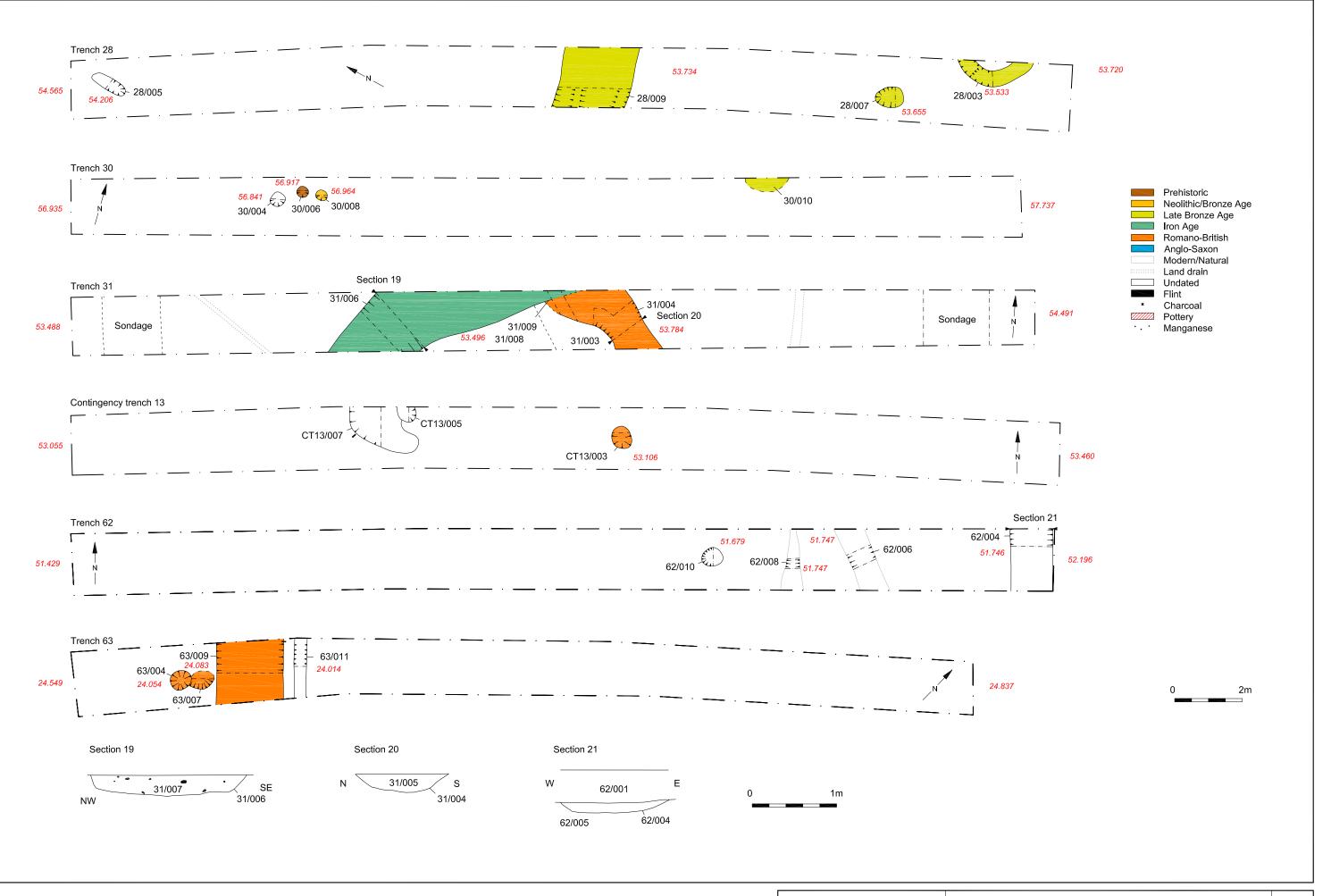
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| Project Ref: 3068 | Jan 2008 | Trenches CT7, 16, 17 and 18; Plans and sections | 1 ig. 14 | l |
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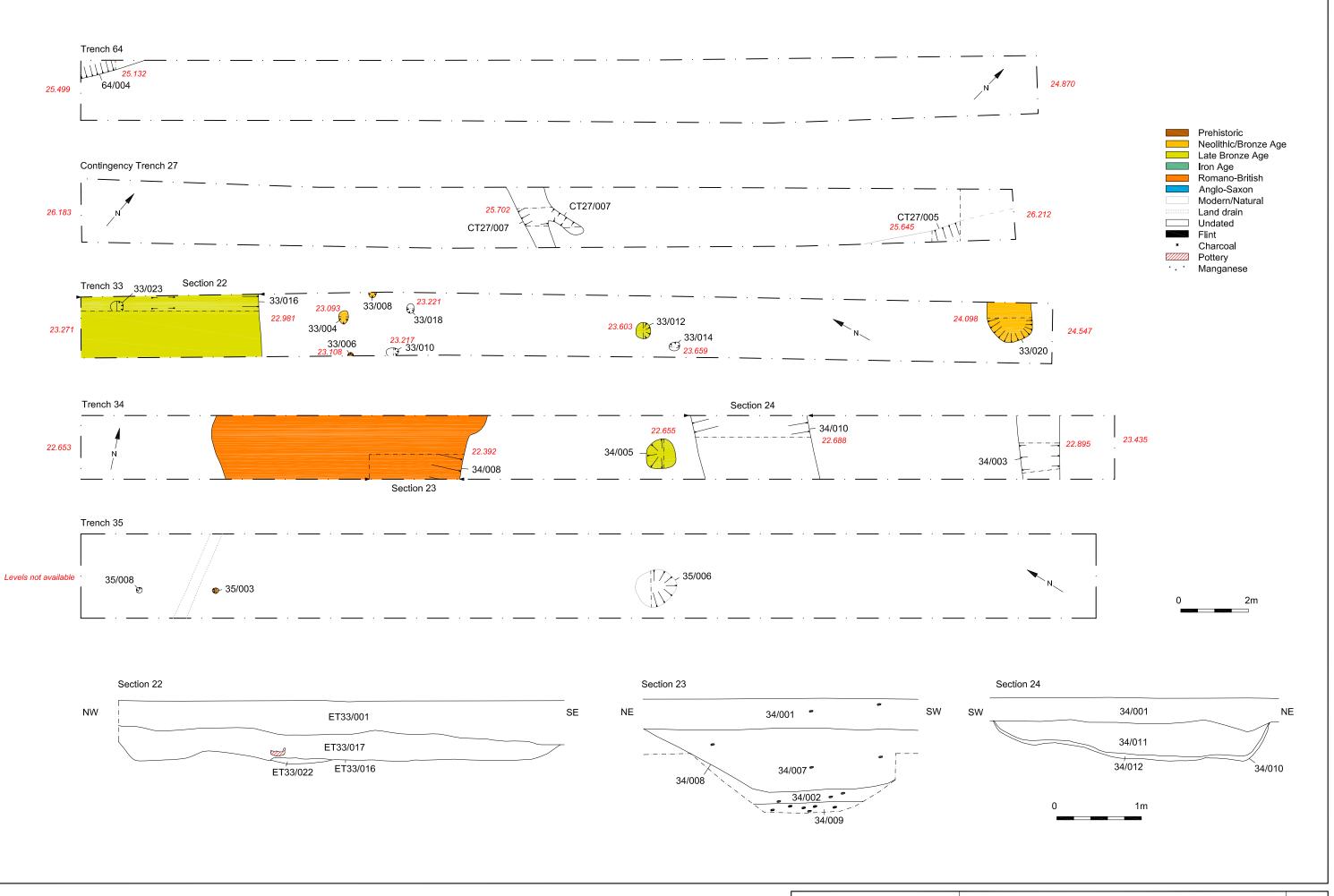
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|---------------------|-----------------|---|----------|---|
| Project Ref: 3068 | Jan 2008 | Trenches CT 8, 19, 9, 20 and 21: Plans and sections | 1 lg. 13 | l |
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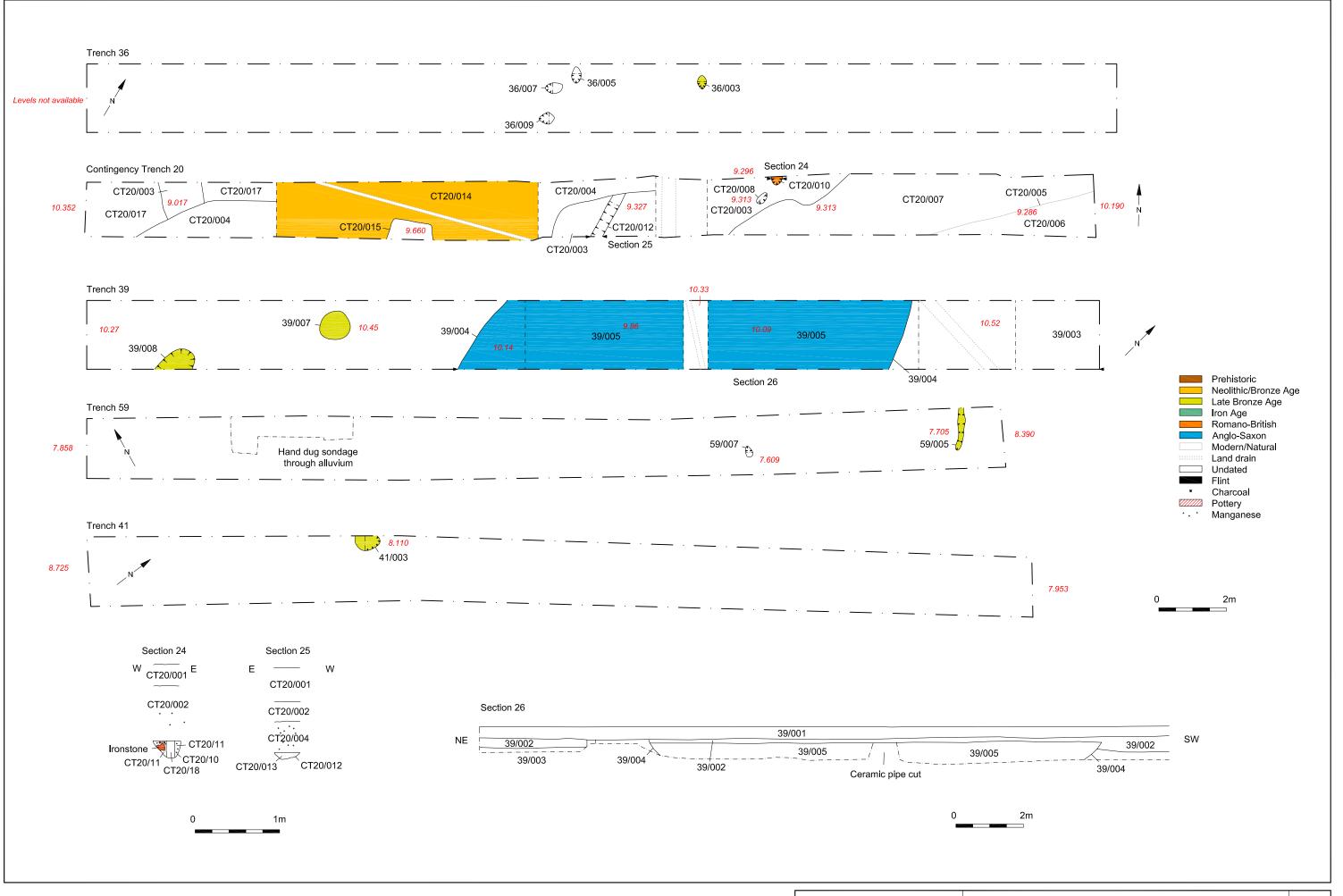
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| Project Ref. 3068 | Jan 2008 | Trenches 22-27: Plans and sections | ' 'g. '0 |
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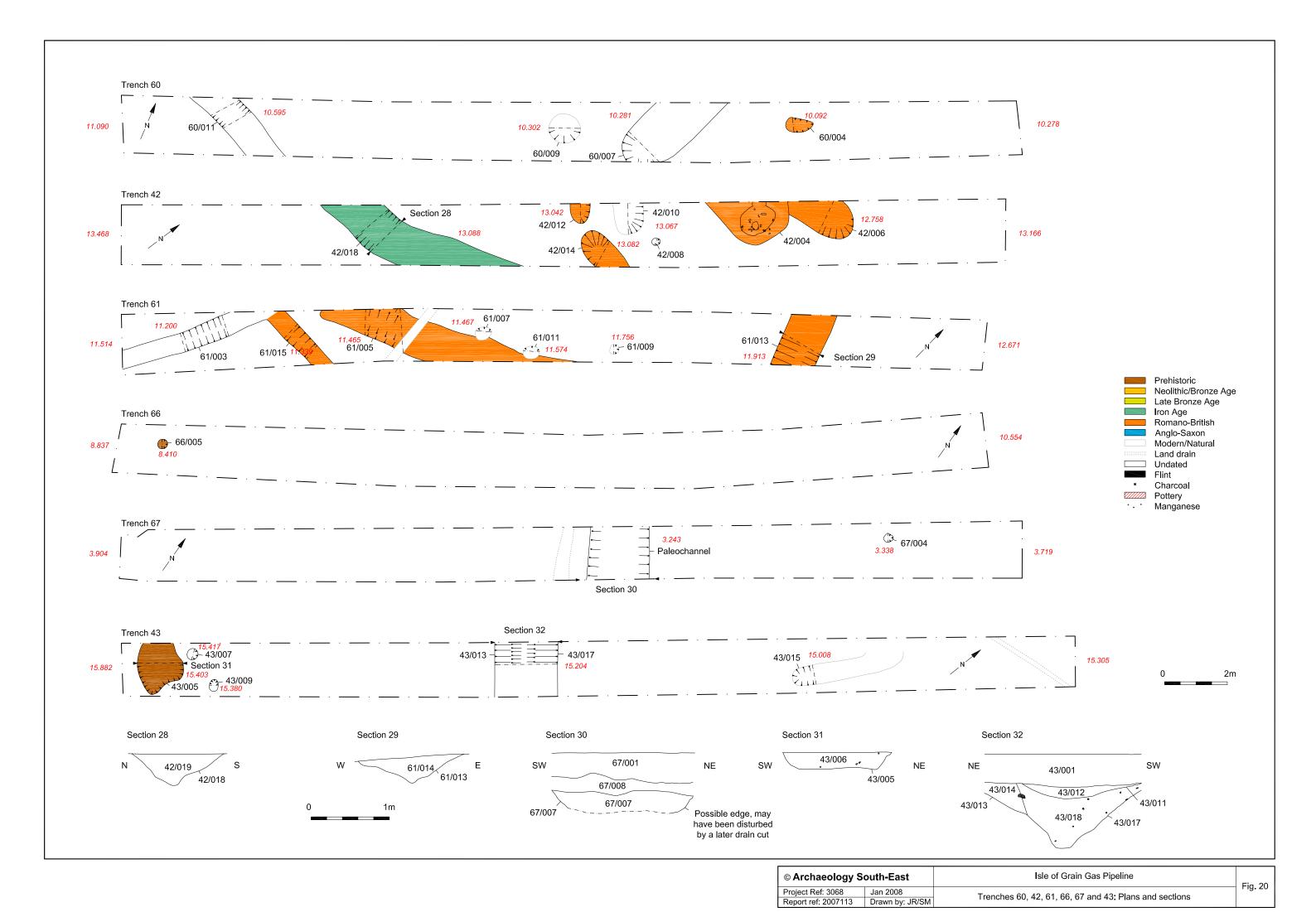
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| Project Ref: 3068 | Jan 2008 | Trenches 28, 30, 31, CT13, 62 and 63: Plans and sections | 1 19. 17 |
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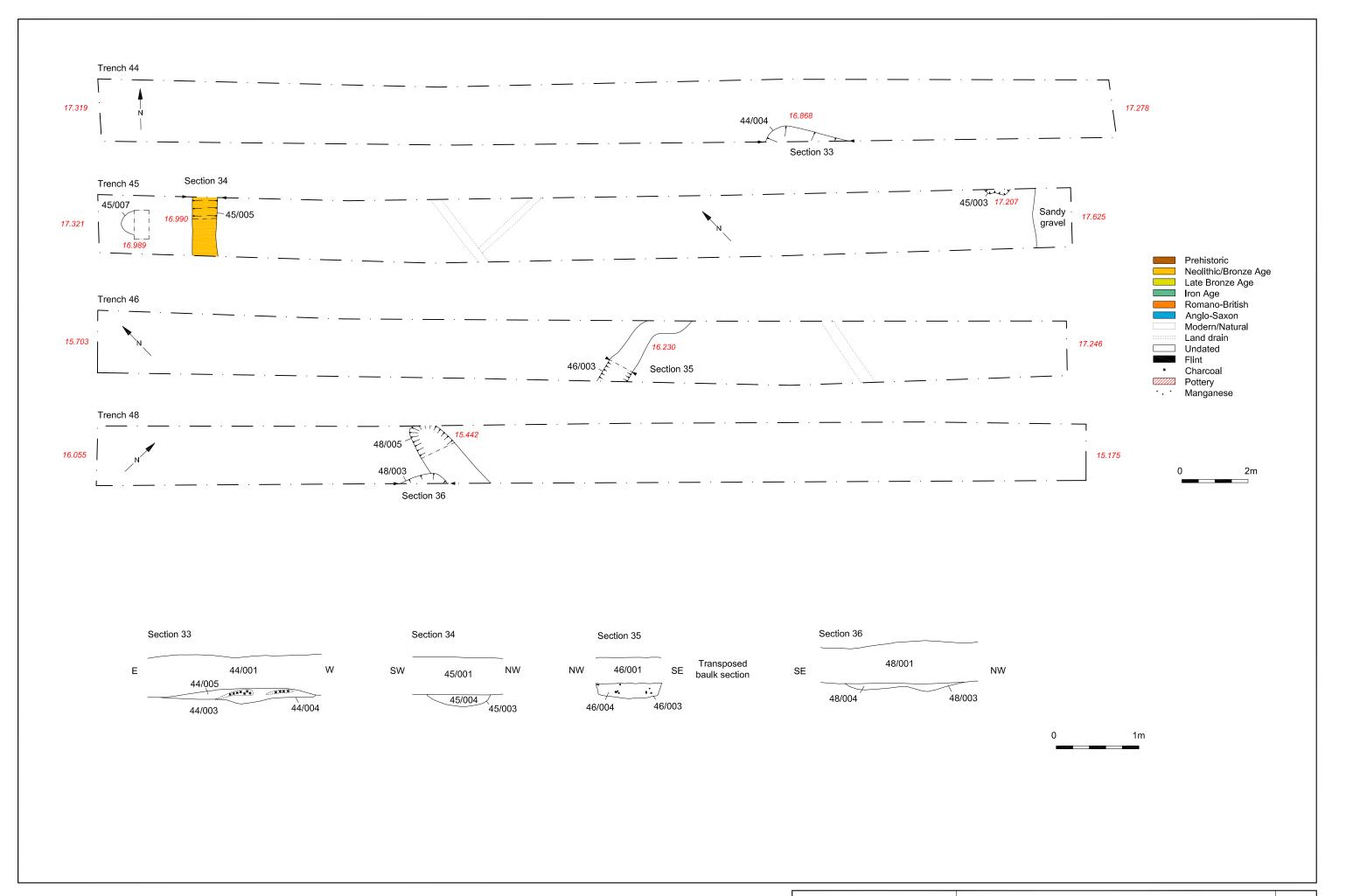


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|---------------------|-----------------|---|---------|
| Project Ref: 3068 | Jan 2008 | Trenches 36, CT20, 39, 59 and 41; Plans and sections | 119.13 |
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|---|--------------------------|-----------------|--|----------------|
| | Project Ref: 3068 | Jan 2008 | Trenches 44, 45, 46 and 48; Plans and sections | 7 119.21 |
| | Report ref: 2007113 | Drawn by: JR/SM | Trefficies 44, 45, 40 and 46. Flans and Sections | |