

Earlham Grid to Norwich Main Underground Diversion, Norwich, Norfolk

Archaeological Evaluation



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Earlham Grid to Norwich Main Underground Diversion, Norwich, Norfolk

An Archaeological Evaluation

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Summary

The Cambridge Archaeological Unit (CAU) undertook the archaeological evaluation in advance of the cutting of reception pits for the directional drilling sections of the Earlham Grid To Norwich Main Underground Diversion route (28th October 2010 to 11th April 2011). The reception pits were located at the crossing points of major transport infrastructure along the pipeline route. The evaluation consisted of five 25m x 2m trenches and four 20m x 2m trenches covering each drill reception pit along the route of the pipeline. Of the areas investigated only one site produced evidence for activity earlier than the Post Medieval period. The evaluation trench at the equestrian enclosures at Intwood revealed several linear features, one of which contained abraded fragments of Roman period ceramic material. The feature was considered to be a field boundary of the Roman period.

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1.1 Introduction

The Cambridge Archaeological Unit (CAU) undertook an archaeological evaluation in advance of the cutting of reception pits for the directional drilling sections of the Earlham Grid To Norwich Main Underground Diversion route (start TG 185 083; end TG 218 025) (28th October to 11th April 2011). The evaluation was commissioned by Carillion on behalf of EDF Energy with the aim of establishing and recording the presence, date, condition and significance of any archaeological remains at the proposed sites for directional drilling. The evaluation was carried out in accordance with a Written Scheme of Investigation (WSI) produced by the CAU (Beadsmoore 2010). The WSI was approved and the work monitored by Ken Hamilton for Norfolk Museums and Archaeology Service.

1.2 Location and Topography

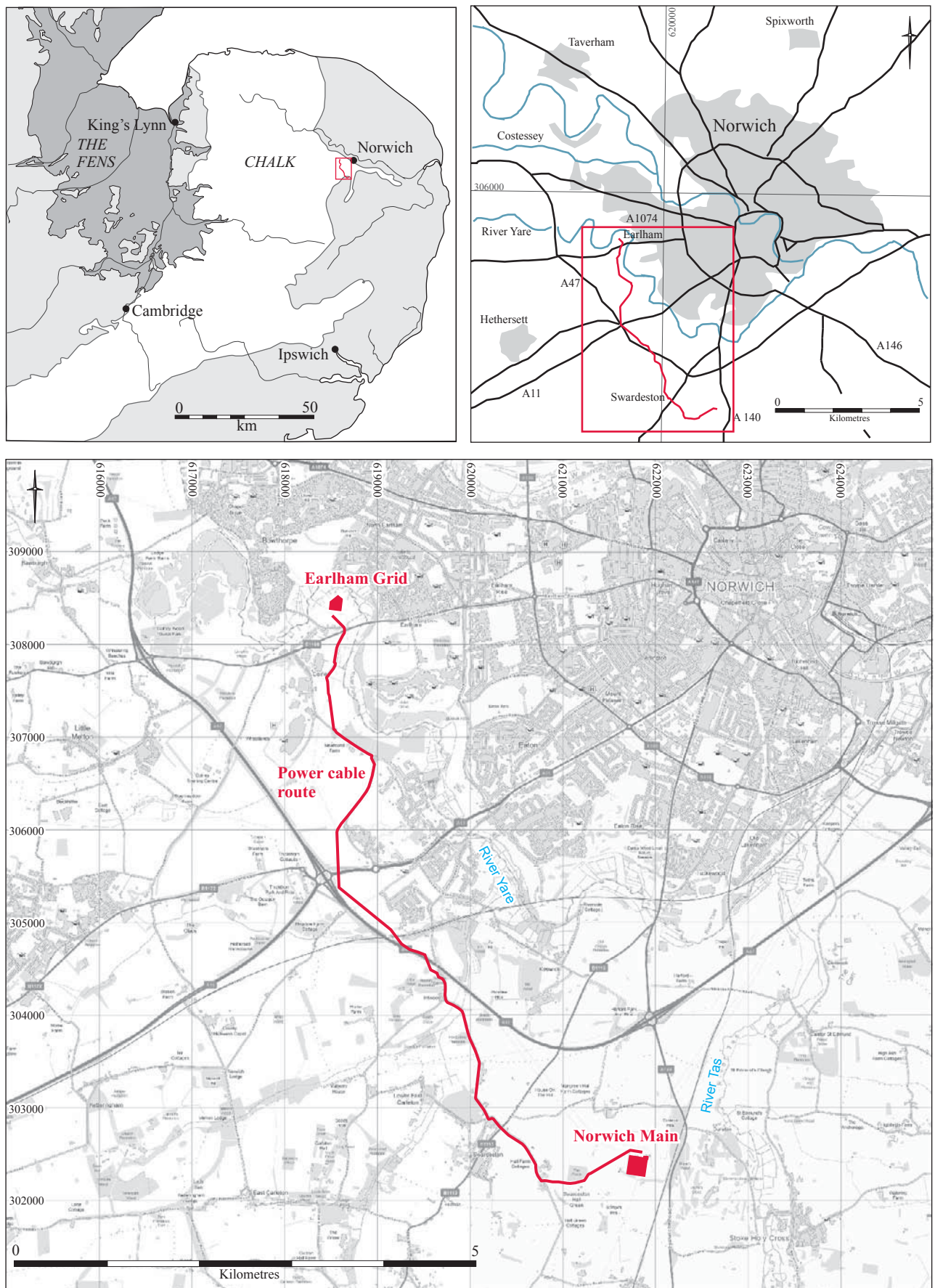
The proposed route of the underground diversion commences at Earlham, *c.* 4.6km west of Norwich city centre, bisects the open spaces to the west and south of the city, crossing both the A47 and the river Yare in a south-easterly arc before bypassing Swardeston, terminating at Norwich Main Transforming Station. The reception pits for the directional drilling were located at eight points along this route at the intersections of major transport infrastructure.

The underlying solid geology of the area traversed by the route is of Upper Cretaceous Chalk, this is overlain by superficial deposits of glacial formation. The topography of the area is dominated by the rivers Yare and Tas, with small streams and tributaries bisecting the higher ground forming narrow steep-sided valleys. The Tas flows in a north-northeast direction before merging with the eastward flowing Yare (for detailed description see Appleby 2010).

1.3 Archaeological and Historical Background

The pipeline route traverses an area that has been the subject of extensive archaeological investigation in recent times, notably the field walking and metal detecting in advance of the construction of the Norwich Southern Bypass (A47) and the subsequent targeted excavations (Ashwin and Bates 2000). Other recent works includes the monitoring of works at the John Innes Centre (Nokkert 2000) and work in advance of the Cringleford Park and Ride scheme (Watkins 2006). Recent reports have referred to the area covered by the route as being a rich archaeological landscape (Watkins 2006).

The earliest archaeological material recovered is confined to the northern section of the route with Palaeolithic and Mesolithic flints being found along the Yare and Tas valleys. Neolithic to Bronze Age activity including flint scatters, flint tool production sites, pits, boundary ditches and evidence of permanent settlement have been noted in the vicinity of the route, in particular during excavation at the John Innes Centre (NHER 09332) and further to the south of Intwood (NHER 17835 & 17836). Investigations prior to the construction of the Norfolk and Norwich Hospital revealed



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Figure 1. Location map

a rectangular structure, a possible cobbled surface and 28,000 flints. In 1979, an excavation was carried out, on the site of the Bronze Age Bowthorpe Barrow, located less than 2.0km northwest of the Earlham Transformer. Five further barrows were also excavated at Harford Farm ahead of construction of the Southern Bypass, c. 1.5km north of the Norwich Main Transformer.

Settlement evidence is relatively sparse within the Yare and southern Norwich environs for the Iron Age and Romano-British period despite the presence of the former Roman cantonal centre of the Iceni, *Venta Icenorum*, located less than 2km northeast of the Norwich Transformer station. Iron Age and Romano-British material was recovered during fieldwalking and metal detecting surveys prior to the construction of the Southern Bypass, largely on the higher ground, away from the Yare flood-plain. The items recovered may indicate that a structure or settlement is located nearby; however, these objects may represent chance losses or objects deposited in agricultural fields during manuring.

Anglo-Saxon and Medieval activity is also attested in close proximity to the proposed route, including the 7th century Anglo-Saxon cemetery at Harford Farm, 2km north of the eastern terminal (Penn 2000b). At Harford Farm (Penn 2000b), north of the eastern terminus of the proposed route, and at Bowthorpe, north of the Earlham Transformer, two large Anglo-Saxon cemeteries have been excavated. Considered together as a whole, and with the study area effectively 'bracketed' by two Anglo-Saxon cemeteries, the archaeological evidence shows that the proposed route traverses an area that witnessed relatively high density settlement and agricultural activity during the early Medieval period, with the largely agrarian nature of the economy remaining the dominant characteristic of the area until the mid 20th century (for a more detailed description see Appleby 2010).

1.4 Methodology

The evaluation of the sites for the drill head reception pits was carried out using a 13.5 ton 360° digger with a toothless bucket excavating a trench to dimensions specified by the WSI and to an appropriate depth. The work was conducted under the supervision of an experienced member of the CAU. Any potential archaeological features and material was investigated and treated in accordance with the WSI drawn up by the CAU (Beadsmore 2010) and the Norfolk Museums and Archaeology Service. The recording was carried out following the CAU modified MoLAS system of archaeological site recording (Spence 1990). All work was carried out in accordance with statutory Health and Safety legislation and with the recommendations of SCAUM (Allen & Holt 2005).

2.1 Results

2.1.1 Field Intwood. South west of A47 (TG 1952 0455)

Trench 3 was located to the north of Intwood village and to the south west of a cutting for the Norwich southern Bypass (A47) on a south east facing slope. The site was situated on the high ground of a ridge of land between two small tributaries flowing



Figure 2. Cable route and trench location

into the Rive Yare. The 25m x 2m evaluation trench was excavated to a depth of 0.60m revealing the underlying natural; no archaeological features or material was noted (see Appendix 1).

2.1.2 Equestrian enclosures, Intwood. North east of A47 (TG 1946 0470)

Trench 1 was located to the southwest of Cringleford and to the northeast of a cutting for the Norwich Southern Bypass (A47) near Intwood. The site was situated on the high ground of a ridge of land between two small tributaries flowing into the river Yare. The site at present is used as paddocks for an equestrian centre. Within Trench 1 the initial removal of topsoil (to a depth of 0.30m) revealed a regular alternating pattern of subsoil and intrusive topsoil, most likely due to agricultural activity. The further removal of the disturbed “plough” zone revealed a series of four northeast to southwest aligned linear features (**F.s 1-4**). F.no’s. 1 and 4 were approximately 3 metres apart and followed a similar alignment whilst F.2 and F.3 were located midway between F.1 and F.4, but aligned slightly more to the northeast, with F.3 cutting F.2. All the features contained similar silty fills (see Appendix 1 for details). A cluster of Roman pottery was recovered from F.2 and a further fragment of Roman pottery from F.3, totalling some 12 sherds weighing 86 grammes.

2.1.3 South of Norwich to Ely railway southwest of Cringleford (TG 1926 0479)

Trench 2 was located to the south west of Cringleford and adjacent to the Norwich to Ely railway on the south side of the line. The site was at the base of the slope on the north side of a ridge of land between two small tributaries flowing into the river Yare. Within Trench 2 no archaeological material or features were encountered. The only feature recorded was a natural ‘relic’ drainage channel probably feeding the adjacent water course (see Appendix 1 for details).

2.1.4 North of Norwich to Ely railway southwest of Cringleford (TG 1920 0490)

Trench 5 was located to the southwest of Cringleford and adjacent to the Norwich to Ely railway on the north side of the line. The site was at the base of the slope on the south side of a ridge of land between the Yare valley to the northeast and a small tributary to the south, flowing into the River Yare. The field is currently under pasture. Within Trench 5 a shallow humic topsoil overlay a spread of made up ground including modern debris; the area exposed had also been impacted by vehicular rutting. Directly beneath the made up ground was a patchy natural of yellowish brown sandy gravel overlying a gaulty chalk natural intercut by several modern field drains. No archaeological material was recovered (see Appendix 1 for details).

2.1.5 Contractor’s compound, field south of Cantley Lane, Cringleford (TG 1878 0515)

Trench 4 was located to the southwest of Cringleford and to the northeast of the Norwich southern Bypass (A47). The site was on the high ground of a ridge of land

between the Yare valley to the northeast and a small tributary to the south, flowing into the River Yare. The field is currently used for arable agriculture. Within Trench 4 the initial removal of topsoil (to a depth of 0.30 m.) revealed a series of three linear features (**F. 100- 102**) on an east to west alignment. All the linears had similar broad shallow flat bottomed profiles with a similar composition and morphology (see Appendix 1 for details). No archaeological material was recovered from the linear features. Two further discrete features (**F.103** and **F.104**) situated adjacent to F.102 were investigated. Both features were of a similar and profile forming small u-shaped pit pits, with F. 103 being circular in plan whilst F.104 was slightly extended in plan forming an oval feature (see Appendix 1 for details).

2.1.6 South of Newmarket Road (All), Cringleford (TG 1861 0517)

Trench 6 was located to the west of Cringleford and to the south of Newmarket Road (A11) adjacent to the roundabout with the A47 and A11. The site was on the high ground of a ridge of land between the Yare valley to the northeast and a small tributary to the south, flowing into the River Yare. The field is currently used for arable agriculture. Within Trench 6 no archaeological features or material was recorded (see Appendix 1 for details).

2.1.7 North of Newmarket Road (All), Cringleford (TG 1861 0523)

Trench 7 was located to the west of Cringleford and to the north of the Newmarket Road (A11) adjacent to the roundabout with the A47 and A11. The site was on the high ground of a ridge of land between the Yare valley to the North-East and a small tributary to the south, flowing into the River Yare. The field is currently used for arable agriculture. Within Trench 7 no archaeological features or material was recorded (see Appendix 1 for details).

2.1.8 South of Watton Road (B1108), Colney (TG 1861 08160)

Trench 8 was located to the south of the Watton Road at Colney and to the northeast of the Innes Centre. The site was located in the base of the Yare valley. The field is currently under pasture. Within Trench 8 no archaeological features or material was recorded (see Appendix 1 for details).

2.1.9 Junction of Watton Road B1108 and Old Watton Road, Colney (TG 1857 0808)

The site was located at the junction of the B1108 Watton Road and Old Watton Road, Colney. The site was located in the base of the Yare valley. The site was part of an area of raised ground between the old and new roads. Two test pits were excavated within the footprint of the directional drilling reception pit's compound. The excavation revealed a significant depth of made up ground including modern material overlying a buried soil. The buried soil contained a small quantity of 19th century domestic material; underlying this layer was yellowish grey sand natural. No archaeological features were recorded (see Appendix 1 for details).

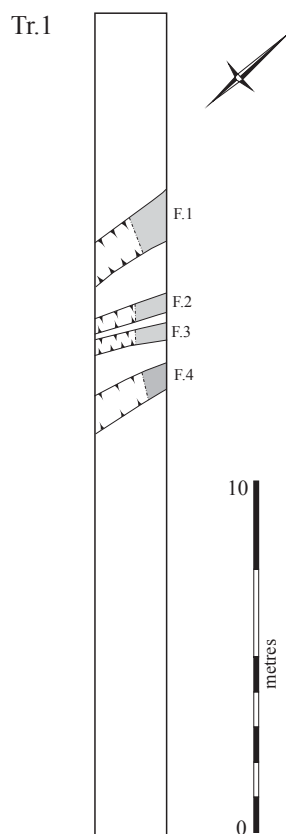
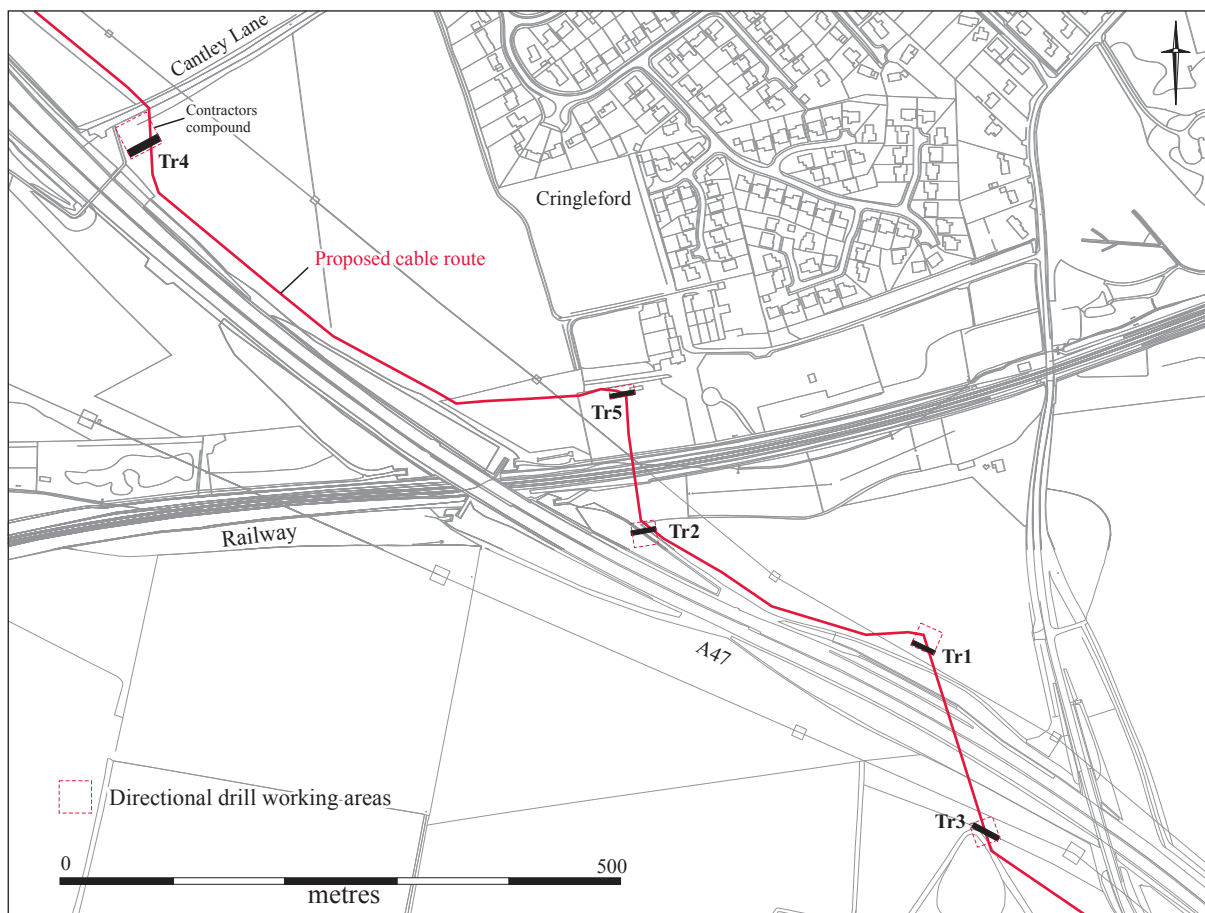
3.1 Discussion

The similarities in composition of and morphology of the linear features recorded within Trench 1 (Fig. 3) suggest a similar period of origin and function. Material culture was only recovered from F.2, and this appeared to be a distinct dump of material rather than the background residual material from a settlement; the ceramic material was dated to the Roman period and is more indicative of a single incidence of deposition rather than material spread by manuring

The shallow broad flat bottomed linears seen in Trench 4 are perhaps more indicative of agricultural activity in the form of furrows than the linears seen in Trench 1. No dating evidence was recovered for the features but a post-medieval date would seem most likely. The other features seen within Trench 4 were two discrete features in the form of small pits. Although no dating material was recovered from any of the features within this trench, the difference in composition of the fills between the linears and the discrete features suggests the material infilling the pits results from different activities and perhaps different periods.

Survey to the northwest of the Thickthorn Interchange recovered prehistoric flint, medieval and post-medieval ceramic material, metalworking debris, ceramic building material and assorted metal finds. Excavation at the Cringle ford Park and ride site to the west of the Thickthorn Interchange revealed features and traces of activity during the Neolithic, Bronze age and Iron age periods this included enclosures and a fragment of trackway tentatively dated to the Middle Iron Age. In addition to several small pits attributed to the periods mentioned numerous other poorly dated or undated pits and postholes were also identified as potentially prehistoric. The location of Trench 4 on the east side of the Thickthorn Interchange and its proximity to an area of dense prehistoric activity could suggest that the discrete features are peripheral to the ones seen on the west side and strengthen the argument for a prehistoric date for the features. Without more conclusive evidence, however, this inference should only remain tentative.

During the monitoring of most trenches in an agricultural setting residual late post-medieval and modern material is encountered in the topsoil; however, in trenches 3, 4, 6 and 7 only a very small quantity of late post-medieval ceramic material and no metalwork was encountered. The close proximity of these sites to the recently constructed Norwich Bypass (A47) may suggest that these areas have been the subject of previous fieldwalking and metal detecting survey and that a degree of depletion of the archaeological resource is evident. The absence of any early evidence for settlement or agriculture in Trenches 2 and 5 is likely to be explained by their situation in low lying ground adjacent to a water course.



Tr.1 looking south-east

Figure 3. Location of Trenches 1-5 with detail of Trench 1 and features

4.1 Conclusion

The composition and morphology of the features within Trench 1 are suggestive of field boundary ditches rather than features adjacent to settlement. Features F.2 and F.3 can be dated to the Roman period. The similarities of the remaining linear features within Trench 1 could suggest a similar date; however, without any further positive dating evidence this conclusion remains only a distinct possibility.

The absence of archaeological material and features within Trench 2 most likely reflects the unsuitability of the low lying land at that point for settlement use or arable use, being located at the base of the ridge slope and situated immediately adjacent to a water course. The landscape formation at Watton Road appears to be that of recent construction works overlying an earlier causeway across a low lying valley floor. The location again may have been unsuitable for settlement use or arable production resulting in an absence of archaeological features or material at this point.

Despite the remaining sites being located on more favourable ground, only Trench 1 near Intwood produced any evidence for the exploitation of the landscape earlier than the late post-medieval period. The impression given by the results of the evaluation would suggest a low level of exploitation of the land along the ridge between the two tributaries of the Yare; however, as the sample area is relatively small, the conclusion should be treated with caution. During work on the southern bypass no significant archaeological features were recorded within the area during construction of the bypass, although other investigations have resulted in the discovery of significant sites at the Innes centre (Nokkert 2000) and Cringleford Park and Ride (Watkins 2006), giving the impression of an archaeologically richer landscape. The almost entirely negative results from this evaluation should perhaps be considered atypical for the area. The positive evidence in the form of the deposit of Roman material in Trench 1 should add further evidence to the corpus of material suggesting Roman settlement of the higher ground away from the Yare flood-plain.

Acknowledgements

The work was commissioned by Carillion on behalf of EDF Energy and the site was monitored by Ken Hamilton for Norfolk Museums and Archaeology Service. Emma Beadsmoore was the project manager. Illustrations are by Vicki Herring and Bryan Crossan. Co-ordination with Carillion was provided by Chris Smith and David O'Brien.

References

- Ashwin, T. and Bates, S. 2000. *Excavations on the Norwich Southern Bypass, 1989-91 Part I: Excavations at Bixley, Caistor St Edmund, Trowse, Cringleford and Little Melton*. EAA Report No. 91.
- Appleby, G. 2010. *Earlham Grid to Norwich Main Underground Diversion Cable Route. An Archaeological Desk Top Assessment*. CAU Report No. 909
- Beadsmoore, E, 2010. *A Specification for the Archaeological Evaluation of the reception pits for the directional drill sections of the Earlham Grid To Norwich Main Underground Diversion, Norwich, Norfolk*. Cambridge Archaeological Unit
- British Geological Survey. 1989. *Map Sheet No. 161 – Solid and Drift Geology*. Geological Memoir of the County around Norwich. London: HMSO
- Nokkert, M. 2000. *Report on an Archaeological Watching Brief at The John Innes Centre, Colney Lane, Colney*. Norwich NAU Report No. 489
- Penn, K. 2000. *Excavations on the Norwich Southern Bypass, 1989-91. Part II, The Anglo-Saxon cemetery at Harford Farm, Caistor St Edmund, Norfolk*. Dereham: Archaeology and Environment Division, Norfolk Museum Service
- Percival, S. 2004. The Prehistoric pottery. In D. Whitmore, Excavations at a Neolithic Site at the John Innes Centre, Colney 2000. *Norfolk Archaeology* 44, 422-426
- Watkins, P. 2006. *An Archaeological Strip and Record Excavation at Cringleford Park and Ride*. NAU Report No. 1077

Abbreviations

CAU Cambridge Archaeological Unit
EAA East Anglia Archaeology
NAU Norfolk Archaeological Unit
NHER Norfolk Historic Environment Records

Appendix 1 Feature descriptions.

Trench 1 Equestrian enclosures, Intwood. North east of A47 (TG 1946 0470) (OD 20.3m).

[1] A very dark greyish brown sandy silt with a moderately sorted, sparse frequency of small to medium sized sub rounded to sub angular gravel inclusions. The Interface with the lower strata [2] was poorly defined and undulating. Top-soil. Dimensions: depth 0.00 - 0.30 m.

[2] A dark brown sandy silt with poorly sorted, moderate frequency of medium sized sub angular gravel inclusions. The interface with the lower strata was poorly defined and undulating. Sub-soil. Dimensions; depth 0.30 - 0.60 m.

F.1

[3] A dark yellowish brown sandy silt with a poorly sorted, moderate frequency of small to medium sized sub angular gravel inclusions. At the interface with the base of the cut [4] were occasional lenses of pale yellowish clay. Dimensions; depth 0.60 - 1.05 m. width 1.50 m.

[4] A well defined north-east to south-west aligned linear feature, the cut of the feature had moderate sloping, and straight sides with a concave base. The upper edges of the cut are poorly defined whilst the lower sides and base of the cut are well defined. Dimensions; depth 1.05 m. width 1.50 m.

F.2

[7] A dark reddish brown sandy silt with a moderately sorted, moderate frequency of small to medium sized sub angular gravel inclusions. Pea gritting was visible in the base of the cut. Dimensions; depth 0.60 - 0.80 m. width 0.70 m.

A fragment of Roman pottery was recovered from the base of fill [7].

[8] A well defined north-east to south-west aligned linear feature, the cut of the feature had moderate sloping, straight sides with a concave base. The feature was cut by F.no. 3 to the west. The upper edges of the cut are poorly defined whilst the lower sides and base of the cut are moderately defined. Dimensions; depth 0.80 m. width 0.70 m.

F. 3

[5] A dark yellowish brown sandy silt with a moderately sorted, moderate frequency of small to medium sized sub angular gravel inclusions. Dimensions; depth 0.60 - 0.85 m. width 0.90 m.

[6] A well defined north-east to south-west aligned linear feature, the cut of the feature had moderate sloping, straight sides with a concave base. The feature cuts F.no 2 to the east. The upper edges of the cut are poorly defined whilst the lower sides and base of the cut are well defined. Dimensions; depth 0.85 m. width 0.90 m.

A cluster of Roman pottery was recovered from the base of fill [5].

F. 4

[9] A dark brownish grey sandy silt with a moderately sorted, moderate frequency of medium sized sub angular gravel inclusions. Within the fill the inclusions are more frequent at the base of the cut, slight pea gritting is also visible at the base of the cut along with occasional lenses of yellowish grey clay. The fill is slightly more "silty" than the adjacent features (F.no's 1,2 &4).Dimensions; depth 0.6 - 0.9 m. width 2.0 m.

[10] A well defined north-east to south-west aligned linear feature, the cut of the feature had moderate sloping, straight sides with a concave base. The upper edges of the cut are poorly defined whilst the lower sides and base of the cut are well defined. Dimensions; depth 0.9 m. width 2.0 m.

[11] A yellowish brown clayey sand gravel with a moderately sorted, moderate frequency of small to medium sub angular gravel inclusions. Within the layer were occasional patches of reddish brown clayey sand and yellow sand. Occasional large flint nodules also occur throughout the layer. Natural. Dimensions; depth 0.60 m +.

Trench 2 South of Norwich to Ely railway south west of Cringleford (TG 1926 0479) (OD 11.8m).

[12] A very dark greyish brown sandy silt with a moderately sorted, sparse frequency of small to medium sized sub rounded to sub angular gravel inclusions. The interface with the lower strata [2] was poorly defined and undulating. Top-soil. Dimensions: depth 0.00 - 0.30 m.

[13] A dark yellowish brown sandy silt with a moderately sorted, moderate frequency of medium sized sub angular gravel inclusions. Sub soil. Dimensions: depth 0.30 - 0.00 m.

F.5

[14] A reddish grey sandy silt with orange brown mottling, a moderately sorted, sparse frequency of small to medium sized rounded gravel inclusions. Dimensions: depth 0.00 - 0.30 m.

[15] A pale yellowish grey sandy silt with pale orange brown mottling, a moderately sorted, rare frequency of small to medium sized rounded gravel inclusions. Dimensions: depth 0.00 - 0.30 m.

[16] A poorly defined irregular "relic" natural drainage channel.

[17] A pale yellowish grey sandy silt with orange brown mottling, a moderately sorted, sparse frequency of small to medium sized sub rounded gravel inclusions. Within the layer were frequent patches of reddish brown clayey sand and yellow sand. Occasional large flint nodules also occur throughout the layer. Natural.

Trench 3 Field Intwood. South west of A47(TG 1952 0455) (OD 23.7m).

[18] A very dark greyish brown silty sand with a moderately sorted, sparse frequency of small to medium sized sub rounded gravel inclusions. Top Soil. Dimensions: depth 0.00 - 0.30 m.

[19] A dark brown silty sand with yellowish brown sandy patches, moderately sorted, moderate frequency of small to medium sized sub angular gravel inclusions. The interface with the lower strata was poorly defined due to agricultural activity. Sub-soil. Dimensions; depth 0.30 - 0.60 m.

[20] A yellowish brown sand with a moderately sorted, moderate frequency of small to medium sized sub angular gravel inclusions with occasional large flint nodules. Natural. Dimensions; depth 0.30 - 0.60 m.

Trench 4 Compound field south of Cantley Lane, Cringleford (TG 1878 0515).

[110] A very dark greyish brown sandy silt with a moderately sorted, moderate frequency of small to medium sized sub rounded to sub angular gravel inclusions. Top-soil. Dimensions; depth 0.00 - 0.35 m.

[111] A dark brown sandy silt with poorly sorted, moderate frequency of medium sized sub angular gravel inclusions. Sub-soil. Dimensions; depth 0.35-0.50m.

F.100

[100] A dark reddish brown sandy silt with an occasional frequency of medium sized sub angular to sub rounded gravel inclusions.

[101] A moderately defined east-west aligned linear feature, the cut of the feature had moderately sloping slightly concave sides with a concave base (section drawing appears flat). Dimensions; depth 0.20 m. (from machine cut) width 0.86 m.

F.101

[102] A dark reddish brown sandy silt with an occasional frequency of medium sized sub angular to sub rounded gravel inclusions.

[103] A moderately defined east-west aligned linear feature, the cut of the feature had moderate to steep sloping straight sides with a concave base (section drawing appears flat). Dimensions; depth 0.20 m. (from machine cut) width 1.00 m.

F.102

[104] A dark reddish brown sandy silt with an occasional frequency of medium sized sub angular to sub rounded gravel inclusions.

[105] A moderately defined east-west aligned linear feature, the cut of the feature had moderate to steep sloping slightly concave sides with a flattish base. Dimensions; depth 0.25 m. (from machine cut) width 1.30 m.

F.103

[106] A dark greyish brown sandy silt with an occasional frequency of small to medium sized sub angular to sub rounded gravel inclusions.

[107] A moderately defined pit feature, the cut of the feature had steep sloping slightly concave sides with a concave base. Dimensions; depth 0.22 m. (from machine cut) width 0.60 m.

F.104

[108] A dark greyish brown sandy silt with an occasional frequency of small to medium sized sub angular to sub rounded gravel inclusions.

[109] A moderately defined pit feature, the cut of the feature had steep sloping straight sides with a concave base. Dimensions; depth 0.25 m. (from machine cut) width 0.62 m.

Trench 5 North of Norwich to Ely railway south west of Cringleford (TG 1920 0490) (OD 11.7m)

[21] A very dark brown (near black) humic sandy loam with occasional small sub rounded gravel inclusions, moderately sorted. A thin organic rich top soil. Dimensions: depth 0.00 - 0.20 m.

[22] A disturbed horizon with evidence of vehicle rutting and other recent man made intrusion. Dark brown sandy loam with patches of dumped building material, tree boles patches of yellowish brown sandy clay and extensive vehicle rutting. Dimensions: depth 0.20 - 0.40 m.

[23] A gaulty chalk with patches of yellowish brown clayey sand. Natural. Dimensions: depth 0.40 - 1.00 m. Water seepage at 0.70m.

Trench 6 South A11, Cringleford (TG 1861 0517) (OD 30.0m).

[24] A dark greyish brown sandy silt loam with an occasional frequency of small to medium sized sub-angular gravel inclusions, moderately sorted. Top soil. Dimensions: depth 0.00 - 0.35 m.

[25] A mid brown sandy silt with an occasional frequency of small to medium sized sub-rounded gravel inclusions and occasional flint nodules, moderately sorted. Sub soil. Dimensions: depth 0.35 - 0.50 m.

[26] A yellowish brown silty sand with patches of grey silty clay, an occasional frequency of small sized sub-rounded gravel inclusions and occasional large flint nodules, poorly sorted. Dimensions: depth 0.50 - 1.00 m +.

Trench 7 North A11, Cringleford (TG 1860 05620) (OD 31.9m).

[27] A dark brown sandy silt loam with an occasional frequency of small to medium sized sub-angular gravel inclusions, moderately sorted. Top soil. Dimensions: depth 0.00 - 0.35 m.

[29] A dark yellowish brown silty sand with occasional medium to large flint nodules. Dimensions: depth 0.35 - 1.00 m +.

Trench 8 South of B1108 Walton Road, Colney (TG 1861 08160) (OD 10.6m).

East end of trench

[30] A very dark greyish brown sandy loam with an occasional frequency of small to medium sized sub-angular gravel inclusions, moderately sorted. Top soil. Dimensions: depth 0.00 - 0.35 m.

[31] A lens of yellowish brown "pea grit" sandy gravel, well sorted. Dimensions: depth 0.35 - 0.40 m.

[32] A mixed brown and yellowish brown sandy gravel with frequent small to large sub angular gravel inclusions, poorly sorted. Dimensions: depth 0.40 - 1.00 m+.

West end of trench.

[30] See above.

[33] A brownish silty sand with an occasional frequency small to medium sized sub-angular gravel inclusions and occasional flint nodules, moderately sorted. Top soil. Dimensions: depth 0.35 - 0.60 m.

[34] A yellowish brown sand with a moderate frequency of small to medium sized angular gravel inclusions with occasional flint nodules, moderately sorted. Dimensions: depth 0.60 - 1.00 m+.

Test Pits North of B1108 Walton Road, Colney (TG 1857 0808) (Junction of Walton Road B1 108 and Old Walton Road) (OD 10.0m).

TP 1

[35] A layer of aggregate. Dimensions; depth 0.00 - 0.20m.

[36] Sheet of Teram.

[37] A very dark grey sandy loam contaminated with modern material including plastics, beer cans, brick, construction rubble and tarmac. Dimensions; depth 0.20 -1.50m.

[38] A dark grey sandy loam with occasional sub rounded gravel inclusions, building rubble, late post med domestic material. The layer also has extensive old tree roots. Dimensions; depth 1.50- 1.90m.

[39] A grey sand with sparse small sub rounded gravel inclusions. Dimensions; depth 1.90-2.10m.

[40] A yellowish grey sand. Dimensions; depth 2.10 - 3.60m.+ LOE.

TP 2

[35] See above.

[36] See above.

[41] A very dark grey sandy loam contaminated with modern material including plastics, PVC clothing, brick, construction rubble and tarmac. A lens of mixed greenish grey and yellowish brown sand was seen at the north end of the trench (0.20m thick). Dimensions; depth 0.20 - 1.30m.

[42] A greyish yellow sand with sparse small sub rounded gravel inclusions. Dimensions; depth 1.30m.+ LOE.



Test pit 1



Test pit 2



Trench 2 looking west



Trench 3 looking south east



Trench 4 looking west



Trench 5 looking east



Trench 6 looking west



Trench 7 looking west



Trench 8 looking north west

Appendix 2 - Trench Photographs

OASIS DATA COLLECTION FORM: England

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OASIS ID: cambridg3-108489

Project details

Project name	Earlham Grid to Norwich Main Underground Diversion, Norwich, Norfolk An Archaeological Evaluation
Short description of the project	The Cambridge Archaeological Unit (CAU) undertook the archaeological evaluation in advance of the cutting of reception pits for the directional drilling sections of the Earlham Grid To Norwich Main Underground Diversion route (TG 6932 3038). The reception pits were located at the crossing points of major transport infrastructure along the pipeline route. The evaluation consisted of five 25m x 2m trenches and four 20m x 2m trenches covering each drill reception pit along the route of the pipeline. Of the areas investigated only one site produced evidence for activity earlier than the Post Medieval period. The evaluation trench at the equestrian enclosures at Intwood revealed several linear features, one of which contained abraded fragments of Roman period ceramic material. The feature was considered to be a field boundary of the Roman period.
Project dates	Start: 28-10-2010 End: 11-04-2011
Previous/future work	Not known / Not known
Any associated project reference codes	ENF 125358 - HER event no.
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 4 - Character Undetermined
Monument type	DITCH Roman
Significant Finds	POTTERY Roman

Project location

Country	England
Site location	NORFOLK NORWICH NORWICH Earlham Grid to Norwich Main Underground Diversion, Norwich, Norfolk
Postcode	NR4 7TN
Study area	8.80 Kilometres
Site coordinates	TG 218 025 52.5745100019 1.273711932930 52 34 28 N 001 16 25 E Point
Site coordinates	TG 185 083 52.6279169853 1.2289194421 52 37 40 N 001 13 44 E Point
Height OD / Depth	Min: 10.00m Max: 40.00m

Project creators

Name of Organisation	Cambridge Archaeological Unit
Project brief originator	Contractor (design and execute)
Project director/manager	Emma Beadsmoore
Project supervisor	Emma Beadsmoore
Type of sponsor/funding body	Electricity Authority/Company
Name of sponsor/funding body	Carillion for EDF Energy Ltd

Project archives

Physical Archive recipient	ENF125358
Physical Contents	'Ceramics'
Digital Archive recipient	ENF125358
Digital Contents	'Ceramics','Stratigraphic','Survey'
Digital Media available	'Images raster / digital photography','Spreadsheets','Text'
Paper Archive recipient	ENF125358
Paper Contents	'Ceramics','Survey'
Paper Media available	'Context sheet','Drawing','Map','Photograph','Plan','Report','Section'

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Earlham Grid to Norwich Main Underground Diversion, Norwich, Norfolk An Archaeological Evaluation
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Other bibliographic details	Cambridge Archaeological Unit Report 1037
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