



Archaeological Field Unit

Bronze Age Activity at Ely: An Archaeological Evaluation of Land off the A10 Ely Bypass

Ben Robinson and Simon Bray February 1998

Cambridgeshire County Council

Report No. A128

Commissioned By Bovis Homes Ltd

SUMMARY

Between the 5th November and 5th December 1997, the Archaeological Field Unit of Cambridgeshire County Council undertook an archaeological evaluation on 20 hectares of arable land to the north-west of Ely (Figure 1; approximate centre TL538/813). The work was commissioned by Bovis Homes Ltd in response to a brief issued by the County Archaeology Office.

An aerial photographic appraisal of the area revealed faint traces of ridge and furrow on the development area, but no other definite archaeological features. Fieldwalking produced a 'background' of worked flint (diagnostic pieces were late Neolithic or Bronze Age in date), and medieval and post-medieval pot sherds which had been deposited during the manuring of the fields. Historic maps depict lanes crossing the development area which may be medieval in origin; a short length of one still survives.

Evaluation trenches revealed 24 archaeological features mainly within two clusters, one in the centre of the area and the other at the eastern end of the development area.

In the centre of the development area an isolated, circular pit lined with shattered remains of two late Bronze-Age vessels was revealed. At the eastern end of the area twelve undated parallel linear features of uncertain origin were recorded beneath a headland.

TABLE OF CONTENTS

| 1 | INTRODUCTION | 1 |
|----------------------------|--|---|
| 2 | TOPOGRAPHY AND GEOLOGY | 1 |
| 3 | ARCHAEOLOGICAL AND HISTORICAL BACKGROUND | 1 |
| 4 | METHODOLOGY 4.1 Trenches: Strategy, Location and Coverage | 4 |
| | RESULTS 5.1 Field 1 5.2 Field 2 5.3 Field 3 5.4 Field 4 5.5 Field 5 5.6 Field 6 | 10 10 13 |
| 6 | DISCUSSION | 18 |
| | ACKNOWLEDGEMENTS | 19 |
| | REFERENCES | 19 |
| LI | ST OF FIGURES | |
| Fi Fi Fi Fi Fi | gure 1 Location plan gure 2 Location of trenches gure 3 Plan of trench 19 (Field 3), showing Bronze-Age Pit 103 gure 4 Plan of trench 25 (Field 5) gure 5 Section drawings of 129, 155, 103 and 158 gure 6 Extract from tithe Apportionment map 1846 gure 7 Extract from 1:2500 Ordnance Survey map 1888 gure 8 Plan of fieldwalking transects | 2 6 9 11 15 16 17 23 |
| LI | ST OF APPENDICES | |
| A B C D | Prehistoric Pottery by J. Last Summary of fieldwalking results by R. Heawood Context List. Assessment of Aerial Photographs by R. Palmer | 20 21 27 29 |

BRONZE AGE ACTIVITY AT ELY: AN ARCHAEOLOGICAL EVALUATION OF LAND OFF THE A10 ELY BYPASS

1 INTRODUCTION

From the 5th November to the 5th December 1997 the Archaeological Field Unit carried out an archaeological evaluation on 20 hectares of arable land divided into six fields. The development area is located 1 km to the north-west of the centre of Ely (Figures 1 and 2; TL538/813). The work was completed on behalf of Bovis Homes Ltd, following a brief prepared by the County Archaeological Office in response to a housing development proposal.

2 TOPOGRAPHY AND GEOLOGY

The subject area of c. 20 ha (approximate centre TL 538/813; Figures 1 and 2) lies on the Boulder Clay, Lower Greensand and Kimmeridge Clay of the northern part of the main highland at Ely (Institute of Geological Sciences sheet 173).

The land slopes gently to the south and west (from c.20m to 15m OD over 500m) in the central portion of the subject area. The west part of the subject area slopes more markedly towards the fen to the south-west (c. 15m to 10m OD over 150m).

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

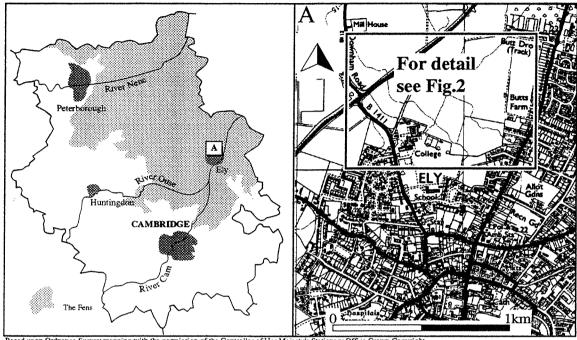
The subject area, which is situated to the north of the historic core of the City of Ely, overlooks West Fen some 500m to the west.

In marked contrast to many areas of the surrounding fen and its low islands, only sparse prehistoric activity is known on the highland in the vicinity of the subject area. Bronze Age funerary monuments have been revealed within the city, however, and a 'thin background' scatter of worked flint has been noted across sandy ground to the north of the city (Hall 1996, 30-40).

Fenland Project (Ely) Site 7, which produced a concentrated scatter of worked flint (? Bronze Age) and Iron Age pottery, lies a few hundred metres to the north of the subject area. Worked flint was also recovered during fieldwalking by the Ely and District Archaeological Society in advance of bypass construction within approximately 300m of the subject area (SMR 07263).

Iron Age and Romano-British settlements are found across the Ely highland, although soil conditions have not always assisted their detection from the air. Again, fieldwalking both in advance of bypass construction and during the Fenland Project was successful in locating such sites in the vicinity of the subject area. Site 11 (SMR 06144), which produced evidence of late Roman settlement, lies a few hundred metres to the south-west of the subject area.

Further settlement traces were picked up on the line of the bypass (SMR 07263b), although the closest of these is a few hundred metres form the boundary of the subject area. Late Iron Age settlement remains were recently revealed within a pipeline easement very close to Site 11 (Gibson 1995).



Based upon Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationary Office Crown Copyright.
Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. (Cambridgeshire County Council licence No. LA 07649X 1998)

Figure 1 Site location plan

Several authors have asserted that the Roman Road from Cambridge, known as Akeman Street, is followed by lengths of Lynn Road north of the city (Wilkes & Elrington 1978, 19-20; Margary 1967, 209; Walker 1910, 156). The approach to the city from the south has been better identified, although an opportunity for its examination close to the city was missed during recent archaeological work in advance of and during pipeline construction (Alexander 1994). The east margin of the subject site lies in close proximity to Lynn Road. No trace of the road has yet been noted in this location, but later roads often shifted slightly from their Roman alignments and remains could survive to the east or west of Lynn Road.

Two Early Anglo-Saxon cemeteries are known close to Ely, the one at High Barns located within 300m of the west margin of the subject site. Settlement, as yet known from surface scatters only (at Fenland Project Sites U1 and 15, respectively; both several kilometres from the subject site) probably occurred as small hamlets or farmsteads spread across the highland. Major nucleated settlement (true villages) here, as elsewhere in the region, were probably a Late Saxon development.

During the medieval period, and up to the extensive post medieval drainage schemes, peat fen growth achieved its maximum extent, narrowing the neck of highland which projects out towards Little Downham to the north-west and creating an island of the Littleport highland to the north. 'West Fen' lay within a few hundred metres of the west margin of the subject area. The subject area lay to the north of the nucleus of the medieval city, between two historic roads ('Dounhamstrete' and the road to 'Chetesham'; Downham Road and Lynn

Road, respectively). A routeway shown on the 1846 tithe apportionment map (Cambridgeshire Record Office) runs across the western end of the subject area, and still survives as a short length of green lane. This is the lane to Orwell Pit Farm (whose name is derived from the medieval 'pits by the muddy well'); it is probably the one first noted in the 13th century (Reaney 1943, 218).

Hall noted a concentration of medieval pottery at Site 11 off West Fen Road and at Upherds Lane, also a few hundred metres to the south of the subject area, settlement evidence dating to the 10th or 11th century was recorded (Taylor-Wilson 1992). Sparse medieval settlement may also have occurred along the other roads radiating from the city, such as those to Downham and Chettisham.

The 1846 map shows that the subject area largely lay within 'Priest Meadow Field' (noted as 'Prestesmedwe' in the 13th century; Reaney 1943, 369). The western part of the subject area lay within 'Downham Field'. Over 1000 acres of excellent pasture lay north of Ely, stretching to Chettisham, during the late eighteenth and early nineteenth centuries (Pugh 1953, 45). The name 'Priest Meadow' suggests early pastoral use of the subject area, and 13th century new woodland assarting is known at Chettisham (ibid, 35). In common with most of the highland of the Ely area, however, strip cultivation at one time or another covered the majority of the available land. Traces of ridge and furrow have been noted both within and close to the subject area (SMR 10097, Palmer 1997, 4).

Piecemeal enclosure of Ely's medieval open fields occurred until parliamentary enclosure during the 1840 s. The 1846 tithe apportionment map records closes to the north-east of the present school buildings (within the central part of the subject area) whose boundaries persisted into the post-war years (SMR 1:10,560 OS map). Another short lane, running adjacent to these closes and parallel to Downham Road and the lane to Orwell Pit Farm, is depicted by the 1846 map.

The subject area, except for a small part bordering Lynn Road, is now mostly given over to cultivation. Many of the former formal field boundaries and lengths of the lanes mentioned above no longer survive. The bypass, constructed during the 1980 s, forms the west margin of the subject area.

In summary, the subject area sits within a landscape of generally high archaeological potential but, with the exception of traces of medieval cultivation and green lanes, has yet to yield archaeological remains.

4 METHODOLOGY

4.1 Trenches: Strategy, Location and Coverage

The area under investigation comprises c. 20 hectares of arable land divided into six fields. The evaluation techniques employed during the project were: analysis of aerial photographs, fieldwalking, and the excavation of 1775m of linear trenching (representing c. 2% sample of the total available area).

A CAT 360 tracked excavator with a 2m wide toothless ditching bucket undertook the trenching. All trenches were machined to a depth of clearly defined archaeological deposits, features, or natural geological strata.

Trench 20 was located to investigate a horseshoe shaped anomaly detected in field 3 by the aerial photograph assessment (Appendix D). Trench 25 investigated a linear ridge aligned east/west in field 5. In the absence of other features or artefact concentrations to target, trenches were excavated on differing alignments, with more a less constant spacing (depending on the constraints of the available area), in order to provide a reasonable cover of the entire area.

Excluding field drains and the remains of ridge and furrow, 24 features were recorded. Selective excavation was undertaken to obtain representative dating and environmental evidence from all enigmatic or clearly ancient features. Features were recorded using the Archaeological Field Unit's standard single context recording system.

The site records and artefacts are held at the AFU offices and at the county store under the site code ELYLR97.

5 RESULTS

5.1 Field 1 (Trenches 1 to 7; Figure 2)

The fieldwalking stage of the assessment did not identify any specific artefact concentrations over the field other than a general scatter of post-medieval pottery and tile.

Seven trenches were placed in the field. Boulder Clay was found in the bases of all the trenches on the high ground, giving way to mixed Greensand in the lower trenches. No archaeological deposits were found, other than the remains of ridge and furrow agriculture in trenches 1 and 2, surviving as furrows. These were found to be 2.2m wide and spaced 10m apart.

A variety of ceramic field drains were recorded in all trenches, representing at least two phases of drainage works and reflecting the poorly draining character of the site. Ploughsoil depth varied between 0.20m and 0.25m.

Trench 1 was 50m long, 2m wide and between 0.40m and 0.45m deep and aligned NW/SE.

Trench 2 was 50m long, 2m wide and between 0.38m and 0.45m deep and aligned W/E.

Trench 3 was 50m long, 2m wide and between 0.42m and 0.45m deep and aligned NNE/SSW.

Trench 4 was 50m long, 2m wide and between 0.30m and 0.35m deep and aligned NW/SE.

Trench 5 was 50m long, 2m wide and between 0.40m and 0.45m deep and NNE/SSW.

Trench 6 was 50m long, 2m wide and between 0.40m and 0.45m and aligned W/E.

Trench 7 was 50m long, 2m wide and between 0.45m and 0.50m deep and aligned W/E.

5.2 Field 2 (Trenches 8 to 13; *Figure 2*)

The fieldwalking stage of the assessment had not identified any specific concentrations over the field other than a general scatter of post-medieval pottery.

Six trenches were placed in this field. The ploughsoil was 0.25m deep across the field. No archaeological features were found apart from frequent field drains cut into the Boulder Clay.

Although the aerial photographic assessment had not revealed any archaeological activity, evidence for ridge and furrow was identified in trench 9. This survived only as furrows, 2.2m wide, and 0.30m deep.

Trench 8 was 50m long, 2m wide and between 0.35m and 0.40m deep and aligned NNE/SSW.

Trench 9 was 50m long, 2m wide and between 0.35m and 0.40m deep and aligned W/E. The trench was extended at its west end 3m to the south to investigate a linear feature.

Ditch 112, (101), orientated NE/SW and >4.18m long, 1.02m wide and 0.10m deep with gently sloping rounded sides and base. The fill, 101, is a brown plastic clay with occasional small angular stones a few small fragments of medieval pot and animal bone.

Trench 10 was 50m long, 2m wide and machined to a depth of 0.40m, and was aligned NNE/SSW.

Trench 11 was 50m long, 2m wide and machined to a depth of 0.35m, and was aligned W/E.

Trench 12 was 50m long, 2m wide and between 0.40m and 0.48m deep and aligned W/E.

Trench 13 was 50m long, 2m wide and between 0.45m and 0.50m deep and aligned NNW/SSE.

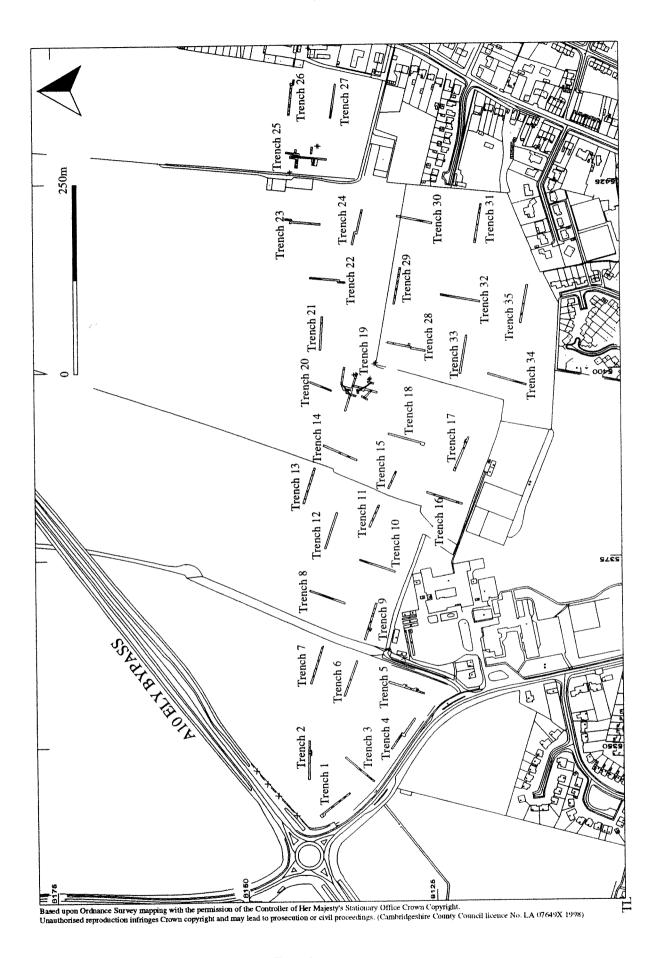


Figure 2 Location of Trenches

5.3 Field 3 (Trenches 14 to 20; *Figures 2 and 3*)

The fieldwalking stage of the assessment had not identified any specific concentrations over the field, other than a general scatter of post-medieval pottery.

The aerial photographic assessment revealed traces of ridge and furrow and a possible horseshoe-shaped enclosure. The latter had been tentatively attributed to modern agriculture (Appendix D).

Seven trenches were placed in this field. Archaeological features were identified in four trenches: 14, 16, 17 and 19. The ploughsoil was 0.25m deep across the field. In the remainder of the trenches a selection of field drains was recorded, representing at least two phases of drainage.

Trench 14 was 50m long and 2m wide, and machined to a depth of 0.45m and 0.50m. It was orientated NE/SW parallel to a modern ditch. A shallow ?pit 119 was recorded at the southern end of the trench

Pit 119, (120) was probably circular although it extended beneath the edge of the trench. It was 1.8 in length/diameter, >0.9m wide and 0.21m deep with gentle rounded sides and a rounded base. It contains 120, a brown compact clay with very occasional small angular flint and post-medieval pottery.

Trench 15 was 25m long, 2m wide and machined to a depth of 0.50m and aligned W/E. Ridge and furrow was identified in the trench, surviving only as furrows, 2.2m wide, and 0.30m deep.

Trench 16 was 50m long, 2m wide and machined to a depth of 0.48m. A single shallow linear feature, 126, aligned approximately E/W and filled by a loose clayey silt with frequent medium-sized roots, modern tile, brick and glass. It has been interpreted as a grubbed out hedge line.

Trench 17 was 50m long, 2m wide and machined to a depth of between 0.40m and 0.45m deep, and aligned W/E. It contained two shallow linear features, 124 and 125 at the eastern end of the trench.

Cut 124, (123) orientated NE/SW with steep sides and rounded base. It is greater than 3.06m long, 0.44m wide and 0.80m deep, and was found to terminate at the northern end. It contains 123, an olive brown slightly silty clay with occasional small angular stones and post-medieval pottery, tile and brick.

Linear (125), orientated NE/SW, length >2m, 0.5m wide and >0.15m deep, and filled by a brown, loose clayey silt that contained modern glass and barbed wire. Only partially excavated it has been interpreted as the backfilled remains of a grubbed out hedge line.

Trench 18 was 50m long, 2m wide, and machined to a depth of between 0.42m and 0.50m, and aligned NNE/SSW.

Trench 19 was 50m long, 2m wide, and machined to a depth of between 0.58m and 0.68m, and aligned W/E.

It was extended by opening a 25m long extension to the south, and a trench 13m long and 9m wide to the north, in order to further explore the extent of

features located in the initial trench. The remains of ridge and furrow were identified. Furrows survived which were 2.3m wide and 10m apart.

Pit 103, (102), (107), was an oval pit, 1.28m in length, 1.03m wide and 0.37, deep, with steep sides and a slightly rounded base. The primary fill, 107, is a dark olive brown compact clayey sand with moderate small angular stone inclusions and a few pottery fragments. This was overlaid by 102, a very dark greyish brown compact silty clay with frequent small, angular stone inclusions. Within this fill was a spread of late Bronze-Age pottery (Appendix A), and a single large animal bone fragment which covered the entire base. The pit was sealed by the remains of ridge and furrow, 156 and 157.

Layer 156, >2m long, 6.7m wide and 0.10m deep, was found directly beneath the ploughsoil. It is a light olive brown compact slightly silty clay with occasional small flecks of charcoal and small sub-angular stones. It overlies 157 and has been interpreted as the result of the plough mixing topsoil with the fill of the furrow, 158.

Furrow 158, (157), is a shallow linear feature aligned NE/SW, >2m long, 2.3m wide and 0.35m deep, with gently sloping sides and rounded base. It contained 157, a compact olive slightly silty clay, with occasional tile and brick fragments, and frequent small charcoal flecks and sub-angular stones.

Ditch 115, (114), (116), (117), is a deep ditch aligned NE/SW, >22m long, 1m wide, and 0.58m deep with steep sides and a slightly rounded base. The primary fill is 117, an olive brown compact silty clay with few small, angular stones and charcoal flecks. No artefacts were noted with this fill. This was overlain by 116, a yellowish brown, slightly silty clay with a few small angular stones and charcoal flecks; again no artefacts were noted in this fill. Overlying this was 114, an olive brown slightly silty clay with occasional small angular stones and charcoal flecks, and a few sherds of flint tempered pottery and flint flakes. This ditch had been truncated by a furrow 192.

Ditch 106, (104), (105), (108), (109), is a deep slightly curvilinear ditch, >20m long, 1.5m wide and 0.8m deep, with very steep sides and a rounded base. It is orientated NW/SE. The primary fill, 109 is a light brownish grey slightly silty clay with infrequent small sub-angular stones and occasional flecks of charcoal. No artefacts were noted. This is overlaid by 108, a light olive brown slightly silty clay with occasional small inclusions. A single sherd of ?prehistoric pottery and a small fragment of animal bone was recovered from 108. This fill is sealed by 105, a light olive brown slightly silty clay with occasional small angular stones and very occasional animal bone fragments. Overlaying this was 104, an olive brown, slightly silty clay with occasional small angular stones and animal bone fragments. This was directly beneath the ploughsoil.

Ditch 110, (111), is a shallow steep sided ditch with a flat base, orientated approximately NW/SE, >2m long, 1.62 wide and 0.41m deep. It contains 111, a dark yellowish brown firm clay with occasional small, angular flint inclusions and no finds.

Trench 20 was 50m long, 2m wide and machined to a depth of between 0.50m and 0.58m, and aligned NNE/SSW. It was dug to investigate the horseshoe-shaped cropmark. The remains of ridge and furrow survived only as furrows, 2.2m wide, and 0.30m deep; there were no other features of note.

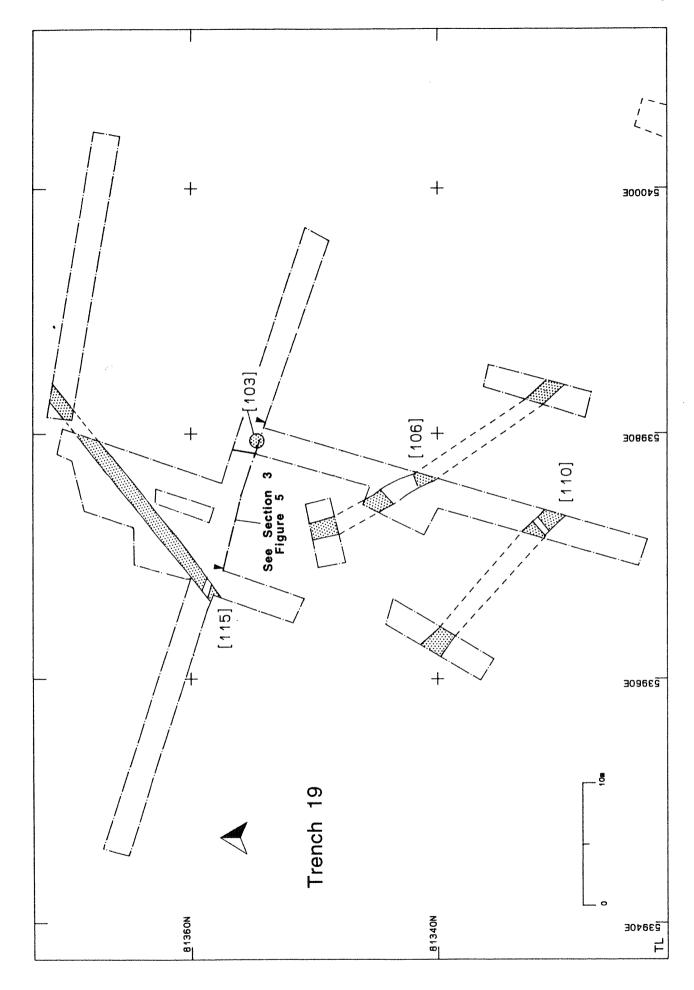


Figure 3 Plan of Trench 19 showing Bronze-Age pit 103

5.4 Field 4 (Trenches 21 to 24; Figure 2)

The fieldwalking stage of the assessment had not identified any specific concentrations over the field other than a general scatter of post-medieval pottery.

Four trenches were placed in this field. No archaeological remains were found other than the remains of ridge and furrow in trench 24. These survived only as furrows, 2.2m wide and 10m apart. The ploughsoil was 0.27m deep across the field overlying the natural Boulder Clay geology.

Trench 21 was 50m long, 2m wide and machined to a depth of between 0.48m and 0.54m, and aligned W/E. The remains of ridge and furrow were found surviving as furrows, 2.2m wide, and 0.30m deep.

Trench 22 was 50m long, 2m wide and machined to a depth of 0.40m, and aligned NNE/SSW.

Trench 23 was 50m long, 2m wide and machined to a depth of between 0.38m and 0.43m, and aligned NNE/SSW.

Trench 24 was 50m long, 2m wide and machined to a depth of 0.38m, and aligned W/E. The remains of ridge and furrow identified survived only as furrows 2.3m wide and 10m apart and aligned N/S.

5.5 Field **5** (Trenches 25 to 27; *Figures 2 and 4*)

The fieldwalking stage of the assessment had not identified any specific concentrations over the field other than a general scatter of post-medieval pottery.

Three trenches (totalling 150m in length) were placed in this field. Archaeological remains were found only in Trench 25. Field drains were recorded in all trenches, representing at least two phases of drainage. Ridge and furrow identified in trench 25 survived only as furrows, 2.2m wide and 10m apart.

A headland survived as a slight upstanding earthwork orientated east/west. The ploughsoil was 0.35m deep on the slopes of the headland, and 0.25m across the remainder of the field.

Trench 25 was 50m long, 2m wide and machined to a depth of 0.65m at the southern end and 0.75m where the trench crossed the headland. Positioned to cross the headland at right-angles the trench was aligned NNE/SSW. It was expanded with three short extensions to further investigate features located by the initial machining. All the features recorded were sealed beneath the headland deposit, 159. The trench contained ten shallow linear features, three gullies, and a single short ?re-cut beamslot, 132 and 134.

A group of ten parallel linear features, 137, 141, 143, 151, 163, 165, 167, 169, 171 and 193 were orientated N/S and spaced at irregular intervals but not exceeding 4m apart.

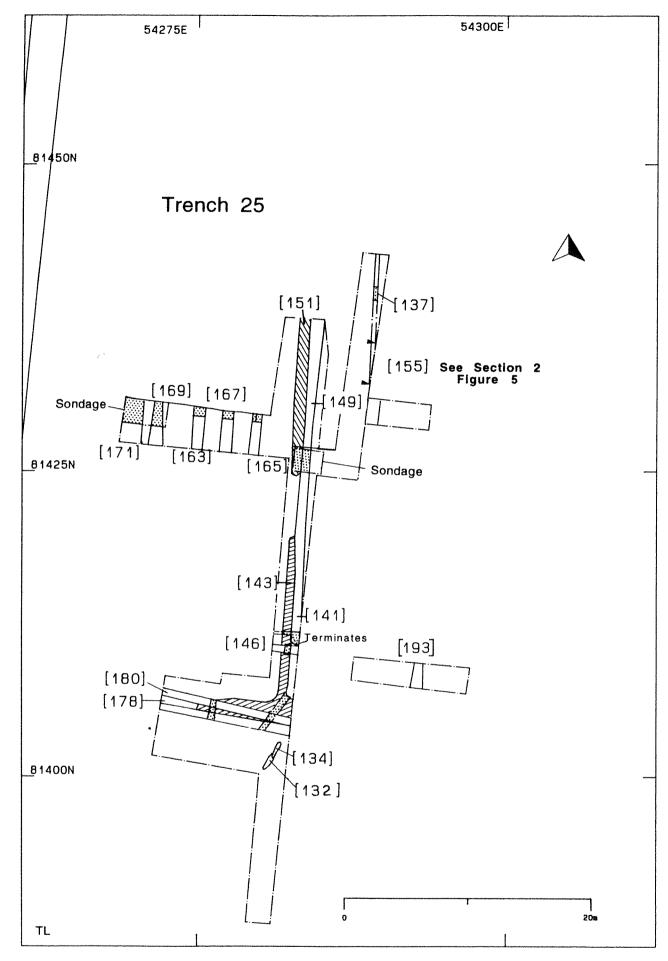


Figure 4 Plan of Trench 25

Ditch 137, (136), (138) is a linear >1m long, 0.5m and 0.25m deep with steep sides and a flat base and contains two fills, 136 and 138, and is orientated NNE/SSW. The primary fill 138, is an olive firm silty clay with infrequent small angular stones, charcoal flecks and a few small fragments of daub. The secondary fill 136, is a yellowish brown firm silty clay with occasional small angular stones, flecks of charcoal and a single small sherd of ?prehistoric pottery.

Ditch 141, (140), is linear, >24m long, 0.8m wide and 0.16m deep, with rounded sides and a slightly rounded base, orientated NNE/SSW. It is filled by 140, a light olive brown plastic silty clay with infrequent small angular stones and a single flint flake. Ditch 141 is recorded as 149 further to the north, and cuts 143.

Ditch 143, (142), is an interrupted linear >15m long, 0.75m wide and 0.27m deep, with steep sides and a flat base, and is orientated NNE/SSW. It contains 142, an olive brown plastic silty clay with occasional small angular stones and flint flake and a fragment of prehistoric pottery. It was found to terminate to the north, and after a 6m wide natural causeway, continues as 151. To the south the ditch turns westwards, recorded as 188, and appears to terminate. It is cut by 141, 146, 178 and 180.

Ditch 151, (152), is an interrupted linear >11m long, 0.60m wide and 0.47m deep, with steep sides and a flat base, orientated NNE/SSW. It contains 152, a dark yellowish brown, plastic silty clay with infrequent small angular stones, but no artefacts. The feature terminates to south and continues again 6m to the north as 143. 151 is cut by 149.

Ditch 146, (145), is a linear >10m long, 0.70m wide and 0.34m deep, with a slightly rounded side and base. It is orientated approximately E/W, cutting 143. It contains 145, a friable sandy clay with occasional small angular stones and a few small fragments of daub. It possibly turns northwards and continues as 165.

Ditch 165, (164), is a linear >3.6m long, 0.64m wide and 0.26m deep, vertical sides and a flat base, orientated NNE/SSW. It contains 164, a brown friable silty clay with occasional small sub-angular stones and a few small fragments of daub and a small flint flake. It possibly turns northwards and continues 146, based upon comparison of dimensions.

Ditch 167, (166), is linear >3.6m long, 0.95m wide and 0.5m deep, with steep sides and a rounded base, orientated NNE/SSW. It contains a single fill 166, a brown friable silty clay with occasional small sub-angular stones and no artefacts.

Ditch 163, (160), (161), (162), is linear >3.6m long, 0.9m wide and 0.4m deep, with steep sides and a flat base, orientated NNE/SSW. The primary fills are 160 and 161, a yellowish brown with occasional small sub-angular stones. A single small fragment of daub was recovered from 160. Overlying the primary fills is 162, a brown friable silty clay with occasional small angular stones and a small sherd of ?prehistoric pottery and a small fragment of daub.

Ditch 178, (177), is linear >0.5m, 0.88m wide and 0.18m deep with steep sides and a rounded base orientated approximately NW/SE. Filled by 177, a brown firm clayey silt with infrequent small angular stones and charcoal flecks. Two large Roman pottery sherds were recovered. The ditch possibly turns northwards and continues as 169. It cuts 180. This feature was also excavated and recorded as 184.

Ditch 180, (179), is linear >0.5m long, 0.7m wide and 0.18m deep, steep sides and a flat base, orientated approximately NW/SE. Filled by 179, a yellowish brown firm clayey silt with infrequent small angular stones, charcoal flecks and no finds. It is cut by 178. The ditch possibly turns northwards and continues as 171. This feature was also excavated and recorded as 186. Truncates 143.

Ditch 169, (168), is linear >3.6m long, 0.65m wide and 0.32m deep, steep rounded sides and flat base, orientated NNE/SSW. It is filled by 168, a dark greyish brown friable silty clay with occasional small rounded stones and no artefacts. The ditch possibly turns eastwards and continues along the line of 178.

Ditch 171, (170), is linear >3.6m, 0.63m wide and 0.34m deep, steep rounded sides and base, orientated NNE/SSW. It contains 170, a yellowish brown friable silty clay with occasional angular stone and a few small sherds of ?post-medieval pottery. The ditch possibly turns eastwards and continues as 180. The artefacts may have be a result of contamination from a modern posthole 175.

Posthole 175, (174), is circular posthole, 0.19m diameter and 0.30m deep with steep, tapering sides. It contains 174, a yellowish brown friable silty clay with small angular stones and no artefacts. It cuts 159.

Two short intercutting linears were recorded at the southern end of the trench, 132 and 134. Although only very short it is possible that these features represent a form of drainage gullies.

Linear 132 (133), (139), is a short curvilinear, 3.2m long, 0.28m wide and 0.32m deep, orientated NE/SW. The primary fill, 133, is a yellowish brown plastic clay with infrequent small angular stones and no artefacts. The secondary fill 139, is a yellowish brown plastic clay occasional small angular stones and no artefacts. It is cut by 134.

Linear 134, (135), is a short curvilinear, 3.2m long, 0.35m wide and 0.17m deep, orientated NE/SW. It contained a single fill, 135, a dark yellowish brown friable clay with infrequent small angular stones and no artefacts. Cuts 132.

Trench 26 was $50m \log$, 2m wide, and machined to a depth of between 0.58m and 0.60m, aligned W/E.

Trench 27 was 50m long, 2m wide, and machined to a depth of between 0.55m and 0.58m, and aligned W/E.

5.6 Field 6 (Trenches 28 to 35; Figure 2)

The fieldwalking stage of the evaluation had not identified any specific concentrations over the field other than a general scatter of post-medieval pottery.

Seven trenches were placed in this field. Archaeological remains were found only in trench 35, in the remainder of the trenches there were a variety of field drains belonging to three phases of drainage. Traces of ridge and furrow were located only in trench 29 surviving only as furrows, 2.2m wide and 10m apart. The ploughsoil was 0.27m deep across the field.

Trench 28 was 50m long, 2m wide and machined to a depth of 0.40m, and aligned NNE/SSW.

Trench 29 was 50m long, 2m wide and machined to a depth of between 0.38m and 0.45m. The remains of ridge and furrow survived only as furrows 2.3m wide and 10m apart and aligned N/S.

Trench 30 was 50m long, 2m wide and machined to a depth of between 0.35m and 0.40m, and aligned NNE/SSW.

Trench 31 was 50m long, 2m wide and machined to a depth of 0.40m, and aligned W/E.

Trench 32 was 50m long, 2m wide and machined to a depth of 0.42m, aligned NNE/SSW.

Trench 33 was 50m long, 2m wide and machined to a depth of 0.45m, aligned W/E.

Trench 34 was 50m long, 2m wide and machined to a depth of 0.50m, aligned NNE/SSW.

Trench 35 was 50m long and 2m wide and machined to a depth of 0.44m, and aligned W/E. Recorded at the western end of the trench was a shallow linear feature aligned NNW/SSE.

Ditch 129, (127), (128), is a shallow ditch with steep sides and a rounded base, orientated approximately NNW/SSE. It was >3.2m long, 0.69m wide and 0.27m deep. The primary fill was 128, a brownish yellow, slightly silty clay with a few small flecks of charcoal. No artefacts were recovered. This was overlain by 127, a yellowish brown, slightly silty clay with occasional small, angular stones and a few small flecks of charcoal. No artefacts were recovered from this fill. The feature was truncated by a field drain.

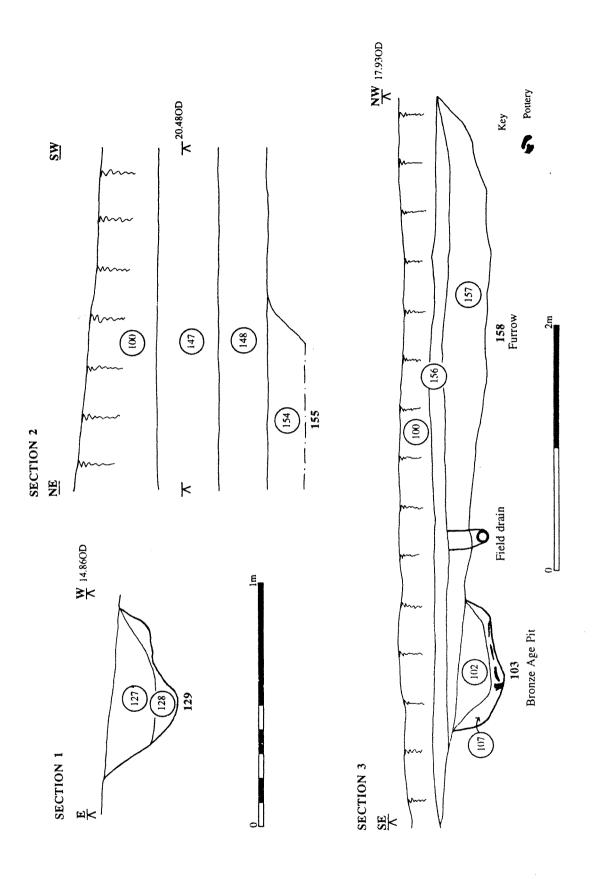


Figure 5 Sections drawings of 129, 155, 103 and 158

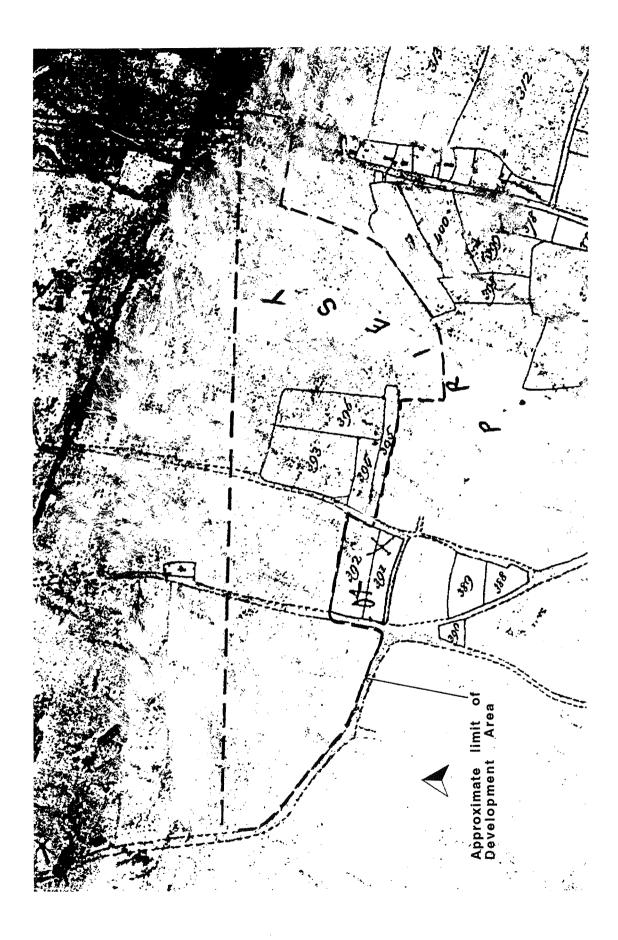


Figure 6 Extract from Tithe Apportionment map 1846 (CRO 515/0)

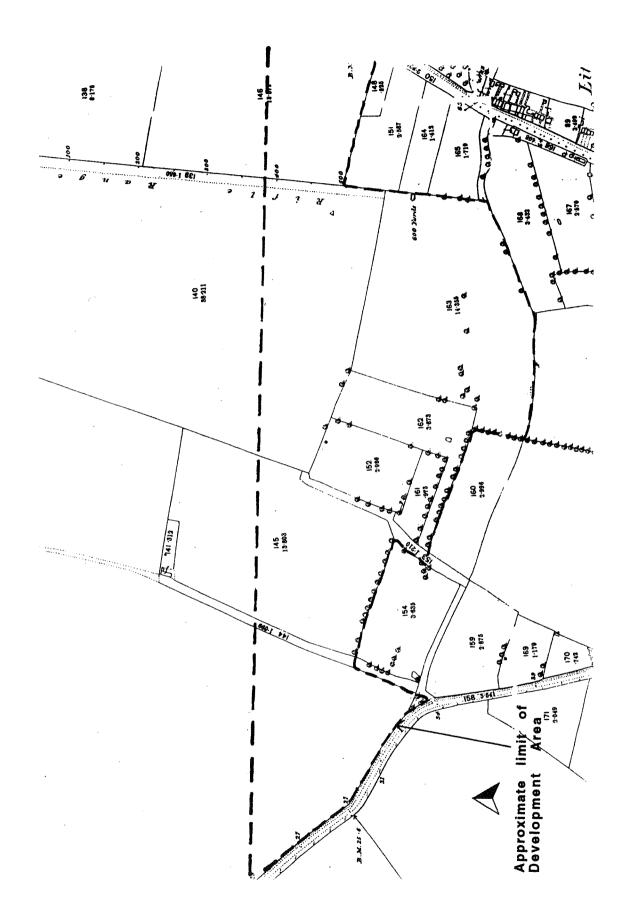


Figure 7 Extract from 1:2500 Ordnance Survey map 1888

6 DISCUSSION

The low density of worked flint recovered by fieldwalking across the subject area accords well with David Hall's (Fenland Project) results for the Ely highland. It is clear that activity was taking place in this part of the landscape, but this activity did not include permanent or semi-permanent settlement, or concentrated tool-production. The absence of burnt flint, which is usually taken to be indicative of occupation, is notable. The character of the few diagnostic lithics collected suggests that much of the activity here took place during the later Neolithic, or Bronze Age. The size of the assemblage, however, is not great and there are no discernible distribution biases to aid interpretation of this 'background' scatter. It may represent the accumulated waste of repeated visits to the area over a very long period of time. More intensive sampling might produce patterns which could assist the identification of specific activities which took place on this land, but this is by no means guaranteed given the apparent paucity of diagnostic material.

A single pit containing substantial parts of two late Bronze Age vessels was revealed in trench 19. Despite further trenching around this area no similar features were observed, but the pit may be associated with the ditches picked up nearby. These could define a contemporary field or enclosure boundary adjacent to which the pit was excavated. Where sectioned the ditches yielded a few sherds of prehistoric pot and some worked flint. Their alignment does not accord with the know medieval and post-medieval field patterns in the area, which helps to further confirm their antiquity. Relatively isolated pits of late Bronze Age date which do not appear to be clearly related to either settlement or funerary practice are not unknown (J.D.Hills pers. comm.).

Ditch 112 in Trench 9 corresponds with one of the enclosure boundaries depicted on the nineteenth century maps. The pottery recovered from this feature may indicate the medieval origins of this piece of small scale enclosure. The remains of ridge and furrow (usually just the bottom of the furrows survived) and (probably) the green lanes depicted on the historic maps (not trenched) are the other medieval features noted within the subject area.

The linear features revealed within trench 25 are problematic. A few of them produced one or two prehistoric finds, ditch 178 produced two large sherds of Romano-British pottery, and post-medieval pottery was recovered from ditch 171 (although this was thought to be possibly intrusive). None of these features corresponds to boundaries mapped during the nineteenth century or later, although they share the alignment of the nearby former rifle range boundary and the parliamentary enclosure fields. As such, they could be shifting boundaries associated with the rifle range. They are sealed by a 'headland' which again does not correspond (in anything other than alignment) with any mapped boundaries.

Even if the ditches are of questionable origin, the finds do indicate a prehistoric and Roman presence in the area of trench 25. Two slight curvilinear features 132 and 134 in the southern part of the trench are other features most likely to reflect this presence. The lack of similar features in neighbouring trenches suggests that any remains of this date are not extensive or particularly dense within the development area.

ACKNOWLEDGEMENTS

The author would like to thank Bovis Homes Ltd for commissioning the project, Jon Cane and Caroline Gait for providing the illustrations included in this report, Jon Last for providing the pottery report, Simon Kaner (of Development Control) for providing the project brief; last but not least Andrew Hatton and Wendy Wilson for working on the site.

REFERENCES

Alexander, M. 1994. West Fen to Cawdle Fen, Ely, Cambridgeshire: An Archaeological Assessment for the Anglia Water Sewage Pipeline. Cambridge Archaeological Unit Report no. 114

Cambridgeshire's Sites and Monuments Record

Cambridgeshire's Record Office

Ely Tithe Apportionment map 1846, Cambridgeshire Record Office 515/0

Gibson D. 1995. Excavations at West Fen Road, Ely, Cambridgeshire, Cambridge Archaeological Unit, Report no. 160

Hall, D. 1996. The Fenland Project No. 10: Cambridgeshire Survey, Isle of Ely and Wisbech. East Anglian Archaeology No.79

Institute of Geological Sciences 1:50,000 Solid and Drift Edition *Ely, Sheet 173*

Margary, I.D. 1967. Roman Roads in Britain

Ordnance Survey 1:2500 1888 Sheet XXVI.10

Palmer, R. 1997. Lynn Road - Downham Road, Ely: An Air Photographic Appraisal

Pugh, R.B. (Ed.), 1974. The Victoria History of the County of Cambridge and the Isle of Ely, Vol IV.

Reaney, P.H. 1943. The Place-Names of Cambridgeshire and the Isle of Ely, English Place-Name Society no. 19

Taylor-Wilson, R. 1992. Archaeological Investigations at Upherds Lane, Ely, Cambridgeshire, Cambridge Archaeological Unit

Walker, F.G. 1910. 'Roman Roads into Cambridge' Proceedings of the Cambridge Antiquarian Society Communications Vol XIV

Wilkes, J.J. & Elrington, C.R. 1978. A History of the County of Cambridge and the Isle of Ely: Roman Cambridgeshire Vol VII

APPENDIX A - PREHISTORIC POTTERY

by Jon Last

The pottery from pit fill 102 in trench 19 comprises large parts of two vessels. Preliminary study suggests all the sherds belong to one or other of these pots, but that neither are complete.

Vessel 1

Fabric grey, filled with moderate to common, poorly sorted fine to coarse (i.e. up to 1mm, rarely larger) crushed burnt flint with a little sand. Density of fine inclusions often greater on exterior surface than interior, and generally variable locally through paste. Surfaces generally unoxidised (mottled grey/dark brown) but oxidised (reddish-brown) in patches, smoothed but not burnished.

Jar with upright rim, internally bevelled; weak shoulder; flat base with simple junction. Rim thickness 4mm, body and base 5-6mm (8mm at shoulder). Rim diameter 150-160mm, base 90-100mm.

Vessel 2

Fabric grey, filled with moderate to common, poorly sorted fine to very coarse crushed burnt flint (up to 4mm, average 2mm). Interior surface unoxidised (grey-brown), exterior varies from oxidised (orange) to unoxidised (grey). Apparently rim and shoulder unoxidised and body oxidised, perhaps reflecting inverted firing position with rim buried in sand. Horizontal wiping or scraping on exterior; traces of sooty residue on part of interior.

Jar with everted rim; weak shoulder or carination perhaps giving rather biconical shape; slightly footed flat base, thicker at centre than edges. Rim thickness 3mm, body 7-8mm (5mm below rim), base up to 11mm. Rim diameter c 190mm, base c 110mm.

Both vessels have relatively hard (scratch-resistant) but brittle fabrics, breaking with a hackly fracture. Vessel 2 shows clear evidence of coil-building. From the relatively coarse, flint-gritted fabrics and the weakly shouldered wide-mouthed jar forms, the vessels can probably be assigned to the Late Bronze Age post-Deverel Rimbury 'plain ware' horizon (early 1st millennium BC). Reconstruction of these pots would be helpful in order to determine the height and precise shape, especially since complete profiles for vessels of this period appear to be rare.

APPENDIX B SUMMARY OF FIELDWALKING RESULTS

INTRODUCTION

A programme of field walking was undertaken as a preliminary part of the evaluation. The objective was to define areas of archaeological potential within the development area, as a guide to the placement of evaluation trenches.

METHODS

Six 'fields' were defined for the purposes of the field walking (Figure 8). They corresponded closely with field boundaries and crop divisions visible on the ground, the principle difference being that the northern limit of the development area did not follow any pre-existing landscape division.

Each field was walked using transects spaced at 20m intervals. Every transect was divided into 20m lengths for finds collection purposes.

Field 1

The field had been drilled with a winter cereal crop, but crop growth was less than 10cm. The ground had been finely harrowed or rolled before drilling and was well weathered. The weather was dry, with relatively low sunlight. Overall, conditions for field walking were very good.

Field 1 lay immediately to the west of a green lane leading to Orwell pit Farm. The lane was first noted in the thirteenth century (see accompanying Archaeological Background). The ground sloped gradually downwards from north-east to south-west).

Field 2

The field had again been drilled with a winter cereal crop, and Field walking and weather conditions were as for Field 1.

Field 2 lay immediately to the east of the medieval lane to Orwell pit lane. The ground sloped gently downwards from north-north-east to south-south-west.

Field 3

A crop of sugar beet had recently been harvested. The ground had been turned over, but not finely broken up. Little weathering had taken place, and few stones of artefacts of any period were visible on the surface of the soil. The weather was dry and dull, but overall conditions for Field walking were poor.

In Field 2, the ground sloped downwards gently from north-north-west to south-south-east.

Field 4

The field extended eastwards from Field 3 without a field boundary. Again, sugar beet had recently been harvested and field walking conditions were poor.

Field 4 had little discernible slope.

Field 5

The field had been drilled with a winter cereal crop but growth was less than 10cm. The soil was finely broken up and well weathered. The southern two transects (A and B), were walked in the evening in dry, dull, but slightly dark conditions. The northern two transects, D and E, were walked in the morning in dry, sunny weather. On both days, field walking conditions were very good.

Field 5 was flat.

Field 6

The crop and soil conditions were as for Field 5. The weather was dry with relatively low sun. Overall, Field walking conditions were again very good.

Field 6 sloped downhill gently from north to south.

Results

The recovered pottery, mostly of post-medieval and medieval date, derives from the manuring of the open fields around Ely. No particular concentrations or biases in its distribution were noted. There were only a few sherds of possible earlier date.

The worked flint too was distributed fairly evenly over the area of c. 20 hectares. The density of flint was low, and suggestive of no more than a 'background' scatter. The lack of burnt flint, often used as a settlement indicator, was notable, and suggest that only ephemeral activities took place on the subject area. The crude nature of the probable tools, and the lack of blades suggest these took place during the late Neolithic or Bronze Age.

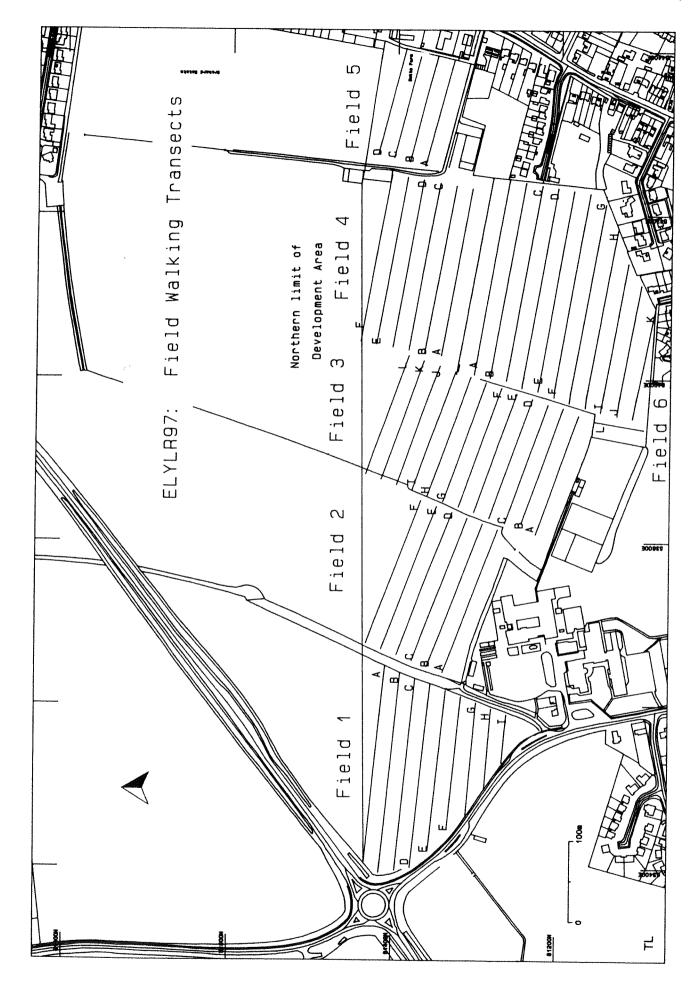


Figure 8 Plan of fieldwalking transects

FlintThe table below details the recovery of worked flint:

| Field | Transect | along (m) | Description of flint |
|-------|----------|--------------|---|
| 1 | В | 100 | fragment of dubious origin |
| | В | 120 | fragment of dubious origin |
| | В | 220 | ? broken blade |
| | D | 80 | ? unfinished arrowhead, no retouch |
| | D | 80 | ? flake |
| | D | 120 | flake |
| | F | 40 | fragment of dubious origin |
| 2 | В | 140 | fragment of dubious origin |
| | F | 40 | ? core, damaged |
| | F | 140 | fragment of dubious origin |
| 3 | A | 20 | ? flake |
| | G | 80 | flake, ?retouch, edge damage suggests a scraper |
| | J | 180 | ? core, with negative flake scarring |
| | L | 140 | flake, with secondary negative scar |
| | L | 160 | fragment of dubious origin |
| 4 | A | 200 | flake, retouched to make point |
| | В | 20 | ? struck, shows negative flake scar |
| | C | 80 | flake, broken |
| | С | 180 | flake, elongated, with notch and edge damage |
| | D | 200 | primary flake |
| | F | 40 | flake, ?retouch, edge damage suggests a scraper |
| 5 | A | 40 | flake |
| | A | 60 | ? flake, broken |
| | A | 100 | flake, with earlier negative scar |
| | A | 120 | flake |
| | D | 20 | flake |
| 6 | A | 60 | ? struck, no retouch |
| | A | 240 | struck |
| | C | 160 | ? struck, many flake scars |
| | Н | 100 | flake |

Pottery

The table below details the recovery of pottery (IA=Iron Age, LM=Late medieval, M=medieval, PM=post-med., Ro=Roman)

| Fiel | | | Description |
|------|---|-----|--------------|
| | t | (m) | |
| | | | |
| 1 | A | 20 | ? Late Saxon |
| | A | 80 | ?PM |
| | A | 140 | PM |
| | A | 160 | M |
| | A | 240 | 2 M, 1 PM |
| | A | 260 | ? PM |
| | В | 40 | ? Ro, LM, PM |
| | В | 60 | 2 M |
| | В | 120 | M |
| | В | 180 | PM |
| | В | 200 | M |
| | С | | -PM |
| | С | 80 | 2 PM |
| | С | 180 | 1 M, 2 PM |
| | С | 200 | 1 LM |
| | D | 40 | LM/PM |
| | D | 60 | M |
| | D | 80 | M |
| | D | 120 | PM |
| | D | 140 | 2 LM/PM |
| | D | 160 | M |
| | D | 180 | LM/PM |
| | Е | 20 | PM |
| | E | 60 | PM |
| | E | 80 | M |
| | E | 120 | PM |
| | F | 40 | 3 PM |
| | G | 40 | M, ? PM |
| | G | 60 | ? IA, LM |
| | G | 100 | 2 M, ? M |
| | H | 80 | PM |
| | I | 60 | M |
| 2 | A | 200 | M |
| | В | 100 | PM |
| | В | 120 | M |
| | В | 140 | M |
| | В | 180 | M |
| | В | 200 | M |
| | В | 220 | 2 M |
| | С | 120 | M |
| | D | 40 | LM/PM |
| | D | 60 | ? M |
| | D | 80 | PM |
| | D | 120 | PM |
| | D | 140 | LM/PM |

| 1 | | 1 | M |
|-------|----------|-----|-------------|
| Field | Transect | | Description |
| | | (m) | |
| 3 | A | 20 | 2 PM |
| | E | 80 | M |
| | E | 120 | PM |
| | L | 120 | LM/PM |
| | L | 180 | LM/PM |
| 4 | A | 160 | M |
| | A | 200 | PM |
| 4 | C | 40 | M |
| | E | 40 | M |
| | Е | 100 | M |
| | F | 160 | PM |
| 5 | A | 60 | ? PM |
| | Α | 100 | LM/PM |
| 2.5 | В | 20 | M |
| | В | 40 | PM |
| | В | 60 | M |
| | С | 20 | M |
| | D | 100 | M |
| 6 | В | 100 | M |
| | C | 100 | PM |
| | С | 200 | LM/PM, PM |
| | C | 220 | M |
| | D | 140 | PM |
| | E | 120 | M/PM, PM |
| | G | 20 | ? M |
| | Н | 20 | M |
| | H | 80 | PM |
| | I | 60 | M |
| | L | 40 | M, PM |

36

3

M.

N

羅

APPENDIX C - CONTEXT LIST

| Cxi. | Tr. | Description | Nature | Above | Below |
|------------|----------|-------------------------------------|---|-------|---------------|
| 100 | All | Ploughsoil | T T | | |
| 101 | 9 | Fill of ditch [112] | 10YR 5/3 slightly sandy clay | 113 | 100 |
| 102 | 19 | Fill of pit [103] | 2.5Y 3/2 slightly silty clay | 107 | [158] |
| [103] | 19 | Cut of pit | Oval, steep sides concave base | - | 107 |
| 104 | 19 | Fill of ditch [106] | 2.5Y 4/3 slightly silty clay | 105 | 100 |
| 105 | 19 | Fill of ditch [106] | 2.5Y 5/4 slightly silty clay | 108 | 104 |
| [106] | 19 | Cut of ditch | Steep sides, concave base, aligned NW/SE | - | 109 |
| 107 | 19 | Primary fill of [103] | 2.5Y 3/3 clayey sand | [103] | 102 |
| 108 | 19 | Fill of ditch [106] | 2.5Y 5/3 slightly silty clay | 109 | 105 |
| 109 | 19 | Primary fill of [106] | 2.5Y 6/2 slightly silty clay | [106] | 108 |
| [110] | 19 | Cut of ditch | Steep sides, concave base, aligned NW/SE | - | 111 |
| 111 | 19 | Fill of [110] | 10YR 4/4 slightly sandy silty clay | [110] | 100 |
| [112] | 9 | Cut of ditch | Slightly curvilinear ditch, aligned NE/SW | - | 113 |
| 113 | 19 | Fill of [112] | 10YR 5/4 compact clay | [112] | 100 |
| 114 | 19 | Fill of ditch [115] | 2.5Y 4/3 slightly silty clay | 116 | 100 |
| [115] | 19 | Cut of ditch | Slightly curvilinear, steep sides, aligned NE/SW | - | 117 |
| 116 | 19 | Fill of ditch [115] | 10YR 5/4 slightly silty clay | 117 | 114 |
| 117 | 15 | Fill of ditch [115] | 2.5Y slightly silty clay | 116 | 115 |
| 118 | 14 | Furrow | Not Excavated | | 100 |
| [119] | 14 | Cut of pit | ?circular, concave sides & base | - | 120 |
| 120 | 14 | Fill of [119] | 10YR 5/3 compact clay | [119] | 100 |
| 121 | 14 | Fill of [122] | 2.5Y 5/6 slightly sandy clay | [122] | 100 |
| [122] | 14 | Cut of tree bowl | ?oval, steep sides, irregular base | - | 121 |
| 123 | 17 | Fill of [124] | 2.5Y 4/4 slightly silty clay | [124] | F.D |
| [124] | 17 | Cut of beamslot? | Steep sides, concave base, aligned NE/SW | | 123 |
| 125 | 17 | Hedgeline | Recent grubbed out hedge | - | 100 |
| 126 | 17 | Hedgeline | Recent grubbed out hedge | - 100 | 100 |
| 127 128 | 35 35 | Fill of [129] Primary fill of [129] | 10YR 5/4 firm slightly silty clay | 128 | F.D |
| [129] | 35 | Cut of ditch | 10YR 6/6 firm slightly silty clay Shallow, steep-sided, aligned N/S | [129] | 127 |
| [130] | 25 | Cut of ditch | Curvilinear, steep sides, concave base, | - | 128 131 |
| | | | aligned NW/SE | | |
| 131 | 25 | Fill of [130] | 10YR 5/5 plastic clay | [130] | [132] |
| [132] | 25 | Cut of ditch | Curvilinear, v. Steep sides, flat base, aligned NW/SE | 131 | 133 |
| 133 | 25 | Fill of [132] | 10YR 5/6 compact clay | [132] | 139 |
| [134] | 25 | Cut of curvilinear ditch | Curvilinear, steep sides concave base, aligned NW/SE | 139 | 135 |
| 135 | 25 | Fill of [134] | 10YR 4/4 compact clay | [134] | 135 |
| 136 | 25 | Fill of [137] | 10YR 5/6 firm silty clay | 138 | 148 |
| [137] | 25 | Cut of linear | Gully, steep sides, flat base, aligned NW/SE | - | 138 |
| 138 | 25 | Primary fill of [137] | 5Y 5/4 firm silty clay | [137] | 136 |
| 139 | 25 | Fill of [132] | 10YR 5/4 firm clay | 133 | [134] |
| 140 | 25 | Fill of ditch | 2.5Y 5/4 firm silty clay | [141] | 140 |
| [141] | 25 | Cut of ditch | Ditch, gentle concave sides & base, aligned E/W | 140 | 142 |
| 142 | 25 | Fill of ditch | 2.5Y 4/4 firm silty clay | [143] | [141, 146] |
| [143] | 25 | Cut of ditch | Ditch, concave sides & base, aligned N/S | - | 142 |
| 144 | 25 | Fill of [146] | 2.5y 5/6 firm silty clay | 145 | 159 |
| 145 | 25 | Fill of [146] | friable sandy clay | [146] | 144 |
| [146] | 25 | Cut of ditch | | 142 | 145 |
| 147 | 25 | Ridge/Headland? | 10YR 4/6, firm silty clay | 148 | 100 |
| 148 | 25 | Plough-mixed layer | 10YR 6/6 firm slightly silty clay | 154 | 147 |
| [149] | 25 | Cut of ditch | Ditch, steep sides, flat base, aligned N/S | 153 | 150 |
| 150 | 25 | Fill of [149] | 10YR 5/4 firm slightly silty clay | [149] | 159 |

| Cxt. No. | Tr. No. | Description | Nature | Above | Below |
|-------------|------------|-----------------------|---|-------------|---------------|
| [151] | 25 | Cut of pit/ditch? | Ditch, steep sides, concave base, aligned N/S | - | 152 |
| 152 | 25 | Fill of [151] | 10YR 3/4 firm slightly silty clay | [151] | 153 |
| 153 | 25 | Fill of [151] | 10YR 4/5 firm slightly silty clay | 152 | [149] |
| 154 | 25 | Fill of [155] | 10YR 5/6 silty clay | ???? | 148 |
| [155] | 25 | Cut of ditch | Ditch, aligned NW/SE, Unexcavated | - | ???? |
| 156 | 19 | Plough-mixed layer | 2.5Y 5/4 firm slightly silty clay | F.D | 100 |
| 157 | 19 | Fill of [158] | 5Y 5/4 firm slightly silty clay | [158] | F.D |
| [158] | 19 | Cut of Furrow | Shallow, concave sides & base, aligned NE/SW | 102 | 157 |
| 159 | 25 | Ploughed out material | 10YR firm clayey silt | All | 100 |
| 160 | 25 | Fill of [163] | 10YR 5/2 firm silty clay | 161, 162 | 159 |
| 161 | 25 | Primary fill of [163] | 10YR 5/4 friable silty clay | [163] | 160 |
| 162 | 25 | Primary fill of [163] | 10YR 5/3 friable silty clay | [163] | 160 |
| [163] | 25 | Cut of ditch | Ditch, steep sides, flat base, aligned NW/SE | - | 161, 162 |
| 164 | 25 | Fill of [165] | 10YR 5/3 friable silty clay | [165] | 159 |
| [165] | 25 | Cut of ditch | Ditch, v. Steep sides, flat base, aligned N/S | | 164 |
| 166 | 25 | Fill of [167] | 10YR 5/3 friable silty clay | [167] | 159 |
| [167] | 25 | Cut of ditch | Steep sides, concave base, aligned NW/SE | - | 166 |
| 168 | 25 | Fill of [169] | 2.5Y 4/2 silty clay | [169] | 159 |
| [169] | 25 | Cut of ditch | Concave sides, flat base, aligned NW/SE | - | 168 |
| 170 | 25 | Fill of [171] | 10YR 5/4 friable silty clay | [171] | 159 |
| [171] | 25 | Cut of ditch | Steep sides, concave base, aligned NW/SE | - | 170 |
| 172 | 25 | Fill of [173] | 10YR 3/1 friable silty clay | [173] | 100 |
| [173] | 25 | Cut of Modern ditch | Vertical sides, flat base, aligned NW/SE | 159 | 172 |
| 174 | 25 | Fill of [175] | 10YR 5/6 friable silty clay | [175] | 173 |
| [175] | 25 | Cut of ?Posthole | Circular, v.steep sides 'V' base | 171 | 174 |
| 176 | 19 | Fill of ditch | Same as 104 | ???? | 100 |
| 177 | 25 | Fill of [178] | 10YR 5/3 firm clayey silt | [178] | 159 |
| [178] | 25 | Cut of ditch | Concave sides & base, aligned NW/SE | 181 | 177 |
| 179 | 25 | Fill of [180] | 10YR 5/4 firm clayey silt | [180] | 159 |
| [180] | 25 | Cut of ditch | Steep sides, flat base, aligned NW/SE | 181 | 179 |
| 181 | 25 | Fill of ditch [186] | 10YR 5/8 firm clayey silt | ???? | [178, 180] |
| 182 | 25 | Fill of [184] | 10YR 5/3 firm clayey silt | 183 | 159 |
| 183 | 25 | Primary fill of [184] | 10YR 5/6 firm clayey silt | [184] | 182 |
| [184] | 25 | Cut of ditch | same as [178]? | 185 | 183 |
| 185 | 25 | Fill of [186] | 10YR 5/4 firm clayey silt | [186] | [184] |
| [186] | 25 | Cut of ditch | Steep sides, flat base, aligned NW/SE | 187 | 185 |
| 187 | 25 | Fill of [188] | 2.5Y 4/4 firm silty clay | [188] | [186] |
| [188] | 25 | Cut of ditch | same as [143] | | 187 |
| 189 | 25 | Master No. for ditch | ditches recorded as [178 & 184] | | |
| 190 | 25 | Master No. for ditch | ditches recorded as [180 & 186] | | |

APPENDIX D - ASSESSMENT OF AERIAL PHOTOGRAPHS

AIR PHOTO SERVICES

21 GUNHILD WAY
CAMBRIDGE
CB1 4QZ
PHONE/FAX 01223 572063

LYNN ROAD - DOWNHAM ROAD, TL540813, ELY, CAMBRIDGESHIRE:

AERIAL PHOTOGRAPHIC APPRAISAL

REPORT No: R136 OCTOBER 1997

COMMISSIONED BY

ARCHAEOLOGICAL FIELD UNIT
CAMBRIDGESHIRE COUNTY COUNCIL
FULBOURN COMMUNITY CENTRE
HAGGIS GAP
FULBOURN
CAMBRIDGE CB1 5HD

LYNN ROAD – DOWNHAM ROAD, TL540813, ELY, CAMBRIDGESHIRE:

AERIAL PHOTOGRAPHIC APPRAISAL

Rog Palmer MA MIFA

INTRODUCTION

This appraisal of aerial photographs was commissioned to examine an area of some 25 hectares (centred TL540813) in order to identify archaeological features and thus provide a guide for field evaluation. Mapping was to be at 1:2500 if relevant.

ARCHAEOLOGICAL AND NATURAL FEATURES FROM AERIAL PHOTOGRAPHS

In suitable soils, sub-surface archaeological features – including ditches, banks, pits, walls or foundations – may be recorded from the air in different ways in different seasons. In spring and summer these may show through their effect on crops growing above them. Such indications tend to be at their most visible in ripe cereal crops, in June or July in this part of Britain, although their appearance cannot accurately be predicted and their absence cannot be taken to imply evidence of archaeological absence. In winter months, when the soil is bare or crop cover is thin (when viewed from above), features may show by virtue of their different soils. Upstanding remains are also best recorded in winter months when vegetation is sparse and the low angle of the sun helps pick out slight differences of height and slope.

The most informative aerial photographs of archaeological subjects tend to be those resulting from specialist reconnaissance. This activity is usually undertaken by an experienced archaeological observer who will fly at seasons and times of day when optimum results are expected. Oblique photographs, taken using a hand-held camera, are the usual product of such investigation. Although oblique photographs are able to provide a very detailed view, they are biased in providing a record that is mainly of features noticed by the observer, understood, and thought to be of archaeological relevance. In the collections searched, no obliques were held of the assessment area.

Vertical photographs cover the whole of Britain and can provide scenes on a series of dates between (usually) 1946-7 and the present. Unfortunately these vertical surveys are not necessarily flown at times of year that are best to record the crop and soil responses that may be seen above sub-surface features. Vertical photographs are taken by a camera fixed inside an aircraft and adjusted to take a series of overlapping views that can be examined stereoscopically. They are often of relatively small scale and their interpretation requires higher perceptive powers and a more cautious approach than that necessary for examination of obliques. Use of these small-scale images can also lead to errors of location and size when they are rectified or rescaled to match a larger map scale.

Report No: R136

PHOTO EXAMINATION AND MAPPING

Photographs examined

Cover searches were made at the Cambridge University Collection of Aerial Photographs (CUCAP) and Cambridgeshire Record Office (CRO). All photographs identified were taken during routine vertical surveys.

Source: Cambridgeshire Record Office

Vertical photographs

MAL/69056: 170-171

9 June 1969

1:10000

Source: Cambridge University Collection of Aerial Photographs

Vertical photographs

| RC8-EB 144-146 | 23 March 1982 | 1:10000 |
|----------------|---------------|-----------------------|
| RC8-EB 201-202 | 23 March 1982 | 1:10000 |
| RC8-HW 83-85 | 10 June 1985 | 1:10000 [E half only] |
| RC8-KnBL 212 | 14 June 1988 | 1:10000 |

Base maps

A base map at a scale of 1:10560 was available and used for this rapid appraisal. This was enlarged to 1:10000 to provide background for Figure 1.

Photo interpretation and mapping

All vertical photographs were examined using a 1.5x magnification stereoscope. Features identified were added to the 1:10000 map either schematically (for ridge and furrow) or by controlled sketching.

COMMENTARY

Soils

The Soil Survey of England and Wales (SSEW 1983) shows the area to be chalky till (series 411d) although this is on an underlying bedrock of Kimmeridge Clay (Hall 1996, 30).

Archaeological features

The area examined for this appraisal extends work previously undertaken at High Barn (TL54958104) for Cambridgeshire Archaeological Field Unit (Palmer 1996). No new photographs have been taken in these areas since that work.

Photographs were examined in chronological order and so enabled changes in land use to be noted.

In 1969 there were several grass fields in, and south of, this assessment area which held earthwork ridge and furrow. Similar, but smaller, fields were noted well to the north suggesting that these individual fields show the remains of a more extensive field system that formerly covered the complete assessment area. By 1982 all those within the assessment area had been levelled and were in arable use.

The 1969 prints also showed a semi-circular feature, as mapped at TL53988139. This is suspect as archaeological as it was showing as a light-toned crop mark in a field of dark (ie unripe) cereal. Similar marks defined the plough envelope. The same field showed traces of ridge and furrow as crop marks of more acceptable types. The semi-circle is perhaps more likely to have been caused by a vehicle turning although its origin cannot be resolved on the photographic evidence alone. There was no trace of this feature on any other prints examined.

The area and its environs showed an overall blandness on the photographs, suggesting the soil does not readily allow differential crop growth above changes in sub-surface features of natural or archaeological origin. However, recent features, such as field drains, have been recorded either as soil marks or via differential crop growth above them. Absence of evidence in the assessment area may be due to the soil, aided by the possibility of masking by medieval agriculture, rather than an accurate reflection of an absence of past activity.

Non-archaeological features

Field drains were recorded in fields centred TL537814 (in 1982) and TL541812 (in 1985, since levelling the ridge and furrow).

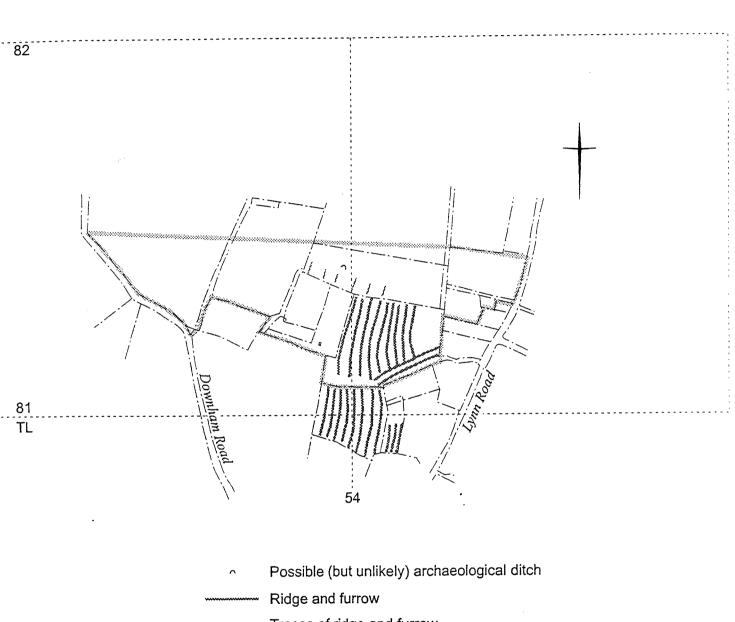
Land use

All fields were recorded in arable use on photographs taken in and after 1982.

REFERENCES

- Hall, D.N., 1996. The Fenland Project, Number 10: Cambridgeshire Survey, Isle of Ely and Wisbech. East Anglian Archaeol. 79.
- Palmer, R., 1996. High Barn, Prickwillow Road, Ely, (TL54958140), Cambridgeshire, aerial photographic appraisal. Air Photo Services Report R85.
- SSEW, 1983. Soils of England and Wales: sheet 4: Eastern England (1:250,000). Soil Survey of England and Wales, Harpenden.

Figure 1. Lynn Road - Downham Road, Ely, Cambs. Features identified on aerial photographs.



Traces of ridge and furrow

Traces of ridge and furrow

Schematic recent boundary

Assessment area

Metres

Original interpretation and mapping at 1:10560 \TL5481.pdw © Air Photo Services 1997