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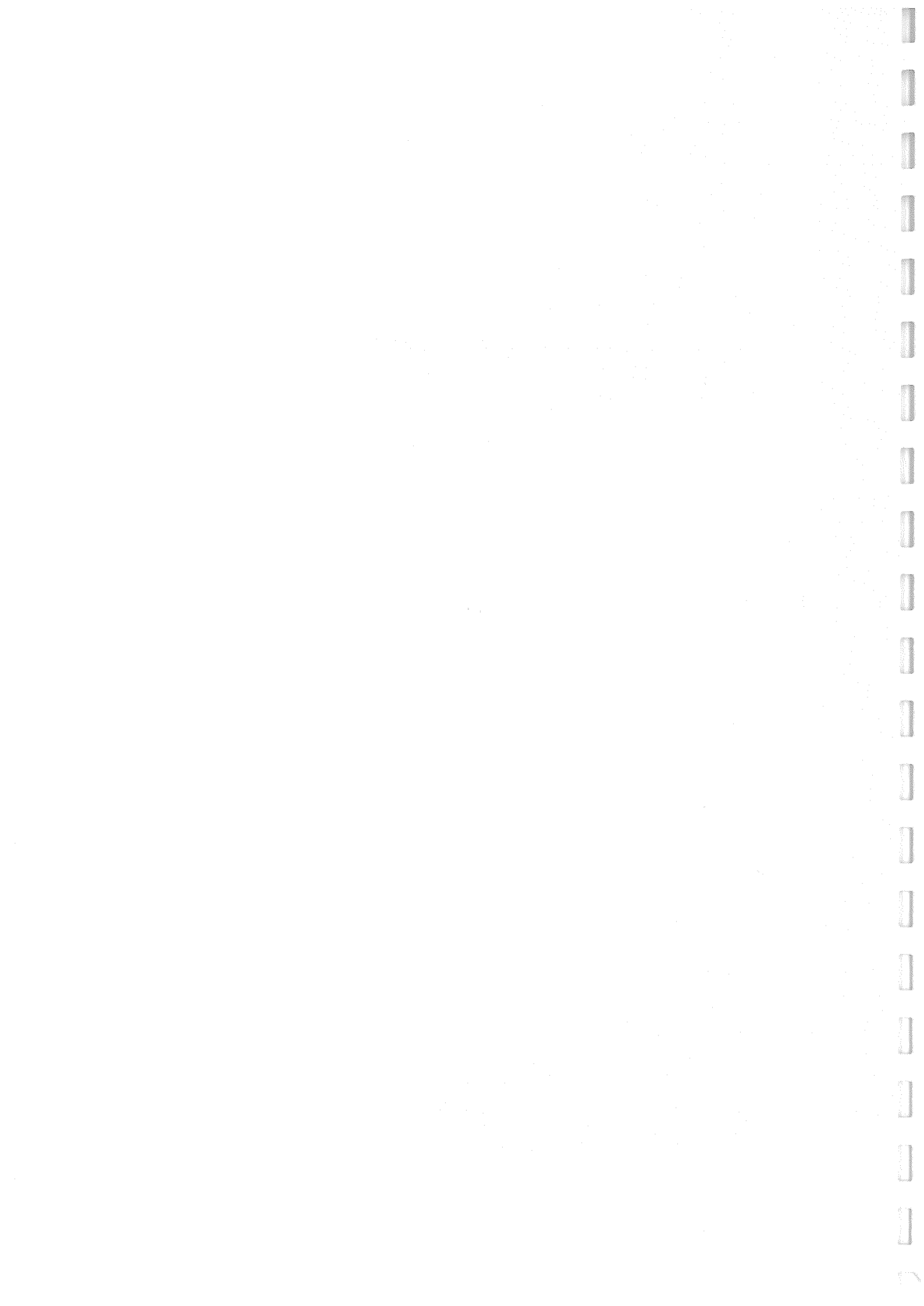
Report No. 998

**An Archaeological Evaluation on the
Upwell and Outwell Sewerage Scheme,
Norfolk and Cambridgeshire**

37156 VPW & 37156 ZVT

John Ames
August 2005

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Location: Upwell and Outwell, Norfolk
District: West Norfolk
Grid Ref: TF 4965 0110 to TF 4995 0595
HER No.: 37156 VPW and 37156 ZVT
Date of fieldwork: 5th to 8th October 2002

Summary

In total along the c. 13.5km stretch of the pipeline sixty-four ditches and two pits were recorded; many of the ditches were re-cuts. These features have been interpreted as multi-purpose drainage and boundary ditches and larger well maintained drains.

The dating of the features was problematic as little artefactual evidence was recovered although the fieldwalking did produce several abraded medieval sherds. With such a small quantity of pottery recovered it is difficult to determine whether the sherds represent settlement activity or manure scattering, however, the latter appears to be the most likely.

1.0 Introduction

(Fig. 1)

The Norfolk Archaeological Unit (NAU) was commissioned to undertake an archaeological evaluation along the route of a proposed sewerage collection system for the villages of Upwell and Outwell. The sewerage scheme involved the construction of seven pumping stations and 32.4km of pipeline of which c. 12km ran through fields and the remainder along the highways.

The route of the proposed sewerage scheme possessed considerable potential for intersecting a wide range of archaeological evidence related to the prehistoric and historic settlement of the eastern silt fens (Marshland).

The archaeological evaluation programme consisted of a geophysical survey, a fieldwalking and metal-detecting survey, and monitoring of the pumping station sites and along the easements of the open-and-cut excavations for the sewerage pipeline.

This archaeological evaluation was undertaken in accordance with a Brief issued by Norfolk Landscape Archaeology (NLA Ref: 20/12/01/DG), supplemented by a Project Design and Method Statement prepared by the Norfolk Archaeological Unit (NAU Ref: MS/Eval/JB/12/01).

The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following the guidelines set out in *Planning and Policy Guidance 16 - Archaeology and Planning* (Department of the Environment 1990). The results will enable decisions to be made by the Local Planning Authority with regard to the treatment of any archaeological remains found.

The work was in response to an invitation and commissioned by Mr T. Trask of Anglian Water Ltd. Barhale were the contractors.

The site archive is currently held by the Norfolk Museums and Archaeology Service, following the relevant policy on archiving standards.

2.0 Geology and Topography

The underlying geology of the site is Marine Alluvium of Holocene date. The overlying soils for the area are composed of stoneless calcareous alluvium and fine and silty gley soils of the Wisbech and Romney series.

The proposed sewerage route was situated in south-west Norfolk and north-east Cambridgeshire within the parishes of Upwell and Outwell, Norfolk. The route of the pipeline crosses the river Nene and a number of drainage dykes. The land-use is predominately arable, although some is under grass and an orchard to the west of Upwell was also crossed. The topographical elevation ranges between c. 3m to 5m AOD.

3.0 Archaeological and Historical Background

The route of the proposed sewerage scheme possessed considerable potential for intersecting a wide range of archaeological evidence related to the prehistoric and historic settlement of the eastern silt fens (Marshland).

Consultation of the Norfolk Historic Environment Record (NHER) revealed several sites of particular interest along its proposed route.

- NHER 36164: South of Holly Croft Field, Emneth a large array of metal detected finds mainly from the medieval period (c. 1066 AD to 1539 AD) have been retrieved. The finds include coins, buckles, pilgrim badges and a seal matrix.
- NHER 24832: At Bird's Corner, Emneth a hearth, medieval pottery, quern and animal remains were revealed during an excavation in the grounds of the house.
- NHER 36055: West of the village of Outwell, this site has produced medieval to post-medieval finds which include a pilgrim badge, hammers, book fittings, a sword belt fitting and pottery.
- NHER 25838: Located between Upwell and Outwell was a windmill, built in c. 1829.

4.0 Geophysical Survey Report

(Fig. 2)

Summary

A magnetic susceptibility survey was undertaken by Essex County Council Planning, Field Archaeological Unit in July of 2002 (FAU Ref. No. 1030) on five selected segments of the route of the sewerage pipeline in and around the villages of Upwell and Outwell. The combination of general site restrictions and unfavourable conditions resulted in the survey producing very little useful information and therefore its use as a guide to further archaeological works is limited.

The five segments totalled c. 2210m in length. It was proposed to use two methods of geophysical investigation on the selected segments. Firstly, a topsoil magnetic susceptibility would be carried out to identify zones of enhancement, which are indicative of archaeological activity. Secondly, any zones showing the potential for archaeological remains would be re-surveyed using a magnetometer in order to determine whether archaeological features were present.

In general, the aims of the survey would determine whether any subsurface archaeological features intersected the pipeline route allowing areas to be identified for the potential of archaeological excavations.

4.1 Methodology and Equipment

Magnetic susceptibility measurements were taken at 10m intervals, 5m either side of a baseline that was centred along the length of each surveyed segment.

The data was recorded in SI (*Système International*) units with a Bartington MS2 Magnetic Susceptibility Meter connected to an MS2D probe.

4.2 Results

Segment A (Fields 1, 3, 4a and 4b)

A section to the north of this segment was not surveyed because of the presence of dense cereal crops. Four magnetically enhanced zones were detected and these reflect three existing field boundaries/trackways and a backfilled boundary.

Segment B (Field 8b)

A zone of enhancement was detected at the northern end of the survey area. A different crop is located on this stretch of the segment and the results probably reflect different soil conditions.

Segment C (Field 12)

No zones of enhancement were identifiable in this small segment of the survey.

Segment D (Field 18)

A dense vegetable crop and deep furrows precluded the two northerly branches of this segment from being surveyed. The rest of the segment lay partially along the route of the trackway and this possibly explains the contrast in data between the two sides of the survey.

Segment E

This segment could not be surveyed because of the presence of a very tall and dense crop.

Conclusion

The results from the geophysical survey have proven to be negative and reflect a minimal need for further archaeological investigations.

5.0 Fieldwalking and Metal Detecting Survey

(Fig. 3)

Introduction

The field survey by systematic fieldwalking and metal detecting was carried out (where possible) in 15m corridors by 20m transects along the length of the 4.5km pipeline. The context numbering sequence started at context [01]. This part of the project has been previously described in detail and published as NAU Reports 703 and 746 (Warsop 2002 and Boghi 2002 respectively).

5.1 Results

The fieldwalking and metal detecting survey produced finds in Fields 1, 2, 3, 4a, 6 and 8b. Two concentrations were identified in Field 6s and 8b.

The artefacts recovered were all either medieval or post-medieval in date and consisted of pottery, clay tobacco pipe and metal objects.

5.2 Finds

Introduction

The finds from the site are presented in tabular form with basic quantitative information in Appendix 2: Finds by Context.

In addition to this summary, more detailed information on specific finds is included in separate reports below. Supporting tables for these contributions are included in the Appendices.

Pottery

(Appendix 3)

By Richenda Goffin

A total of thirteen sherds of medieval and post-medieval pottery sherds, weighing 0.082kg, were recovered during the field walking and metal detecting part of this project. The pottery was found in two concentrations within Fields 6 and 8b.

Seven individual fabrics were identified including medieval plain (Early medieval ware and Medieval coarse wares) and glazed (Cambridgeshire glazed wares and Grimston ware) wares. Post-medieval fabrics identified included Bourne ware (type D) and English and Frechen stonewares.

No individual vessel types were identified.

These fabrics are typical utilitarian wares found in this area during the medieval and post-medieval periods (Jennings 1981).

Clay Tobacco Pipe

The field walking produced five clay tobacco pipe fragments, weighing 0.017kg, which consist of bowl and stem pieces ([05], [09] and [23]).

Metal Detected Finds

(Appendix 4)

By Lucy Talbot

In total twenty-six objects were found by metal detection during the field walking and metal detecting survey. Eight items of iron, nine lead pieces, one copper/tin alloy object, one lead alloy object and seven copper alloy artefacts were found. The artefacts recovered include two buttons, a sheet fragment, four nails, a collar fitting and one unidentified artefact. All are late post-medieval or modern date and although their presence is noted they have not been small found.

Within this assemblage a cluster of seventeen of the objects were recovered from metal detecting in Field 18. This group consists of seven copper alloy pieces which includes a hammer shaped tobacco pipe tamper, two modern half pennies, two buttons and two plain sheet fragments. An iron strap fragment and nine pieces of lead waste were also recovered.

Flint

By Sarah Bates

A single piece of worked flint was recovered during field walking ([18]). It is a small fragment but long and parallel sided in shape, possibly from a flake. A point protrudes at one end and has been utilised as a piercer. At least one edge of the piece has also been utilised but some apparent retouch may be due to post-depositional damage. The implement probably dates broadly to the later Neolithic to Iron Age periods.

6.0 VPS 2/Terminal Pumping Station

(Fig. 4)

An archaeological watching brief was undertaken on VPS 2/Terminal Pumping Station. VPS 2/Terminal Pumping Station was situated c. 350m north-east of Pius Drove and c. 300m south-west of Robbs Chase.

The methodology adopted by the contractors was to mechanically excavate a 3m wide hole using a 360° tracked machine to a depth of c. 6m.

The method of building the pumping station meant that heavy civil engineering techniques were utilised. Consequently, difficulties with the machinery and the unloading of the concrete rings (biscuits) near to the area of excavation made monitoring precarious and also limited both visual and physical access. Therefore, after the initial excavation of the hole to a depth of c. 1.5m when natural silts were exposed and being excavated, no further monitoring was undertaken.

7.0 Open and Cut Sewerage Pipeline

(Fig. 4)

Summary

An archaeological evaluation was undertaken on the area of the open-and-cut sewerage pipeline. The sewerage pipeline was aligned c. north-west to south-east and proceeded through the parish of Outwell following existing highways and drainage ditches.

Methodology

The objective of this evaluation was to determine as far as reasonably possible the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

The Brief required that an archaeologists was to be present by constant attendance to monitor and record any archaeological features and deposits revealed during the machining of the pipeline trenches.

Machine excavation was carried out with a 360° tracked excavator using a 1.60m toothless ditching bucket. The spoil was placed directly onto the sides of the trenches and reinstated after the archaeological monitoring and pipe-work had been laid.

Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.

All archaeological features and deposits were recorded using NAU *pro forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.

The context numbering sequence started at context [35], continuing from the fieldwalking and metal detecting survey (see above).

Site conditions varied between wet and windy days-to-dry and sunny days. Access to and around the trenches was very good.

Results of Open and Cut Excavations

Descriptions of archaeological features and deposits recorded during the evaluation are presented below following a north-to-south direction.

In the areas where features were examined by excavation a topsoil layer between 0.25m to 35cm deep, consisting of a dark grey brown sand silt loam was present. This overlay a mid brown clayey sand subsoil layer c. 30cm deep.

Ditch [169]

Field 2

(Fig. 5; Section 1)

Ditch [169] was aligned east-to-west and measured c. 3.40m in width by 1.05m in depth and contained two deposits. The lower fill ([168]) measured c. 0.56m in depth and consisted of a dark greyish brown clay loam. The upper fill ([167]) measured c. 0.46m in depth and consisted of a light yellowish brown silty sand.

Ditches [175] and [177]

Field 4a

(Fig. 6; Section 2)

Ditch ([175]) was aligned east-to-west and measured c. 2.70m in width by c. 0.20m in depth and contained [176] a mottled light yellowish brown silt.

Ditch ([177]) cuts ditch [175]. It was also aligned east-to-west and measured c. 2.80m in width by c. 0.56m in depth and contained [178] a light grey brown silt.

Ditches [179] and [184]

Field 4a

(Fig. 7; Section 3)

Ditch [179] was aligned east-to-west and measured c. 2m in width by c. 0.55m in depth. Three deposit were identified ([180], [181] and [183]) which consisted of mid-to-reddish brown silts and yellowish grey silts.

Ditch [184] was aligned east-to-west and measured c. 1.35m in width by c. 0.25m in depth and contained ([185]) a mottled light yellow brown silt.

A modern pipe [186] was cut into the upper part of ditch [184].

Ditch [187]

Field 4a

(Fig. 8; Section 4)

Ditch [187] was aligned east-to-west and measured c. 2.85m in width by c. 0.95m in depth and contained a light -to-mid grey silt ([188]).

Ditch [189]

Field 4a

(Fig. 9; Section 5)

Ditch [189] was aligned east-to-west and measured c. 2m in width by c. 0.95m in depth and contained three deposits.

Primary fill ([190]) measured c. 0.10m deep and consisted of a grey silt with red mineralised sand. Secondary fill ([191]) measured c. 0.23m deep and consisted of a mottled reddish grey silt. The upper fill ([192]) measured c. 0.67m deep and consisted of a mid grey silt.

Ditches [193] and [195]

(Fig. 10; Section 6)

Field 4a

Ditch ([193]) was aligned east-to-west and measured c. 2.50m in width by c. 1.40m in depth and contained a graduating fill ([194]) which ranged from light grey at the base-to-light grey brown at the top.

Ditch ([195]) cut ditch [193]. It was aligned east-to-west measured c. 1.35m in width by c. 0.50m in depth and contained a mid brown silt ([196]).

Ditches [197], [200] and [202]

(Fig. 11; Section 7)

Field 4b

Ditch [197] was aligned north-west to south-east and measured c. 1.46m in width by c. 0.71m in depth and contained two deposits. The lower fill ([198]) measured c.

0.46m in depth and contained a light grey silt. The upper fill ([199]) measured c. 0.25m deep and consisted of a light yellowish brown silt.

Upper fill [199] was truncated by ditch [200].

Ditch [200] was aligned east-to-west and measured c. 2.90m in width by c. 1.10m in depth and contained a light grey brown silt ([201]).

Ditch [202] was aligned south-west to north-east and measured c. 1.50m in width by c. 0.40m in depth and contained a mid brown silt ([203]) with occasional shell fragments.

Ditches [204] and [205]

(Fig. 12; Section 8)

Field 4b

Ditch [204] was aligned east-to-west and measured c. 1.70m in width by c. 0.84m in depth and contained a light grey brown silt ([206]).

Ditch [205] was aligned east-to-west and measured c. 1.70m in width by c. 0.84m in depth and contained a light grey brown silt ([207]).

These ditches represent a double ditch system and are probably contemporary as their compositions are similar and no intercutting was visible in section.

Ditch [208]

(Fig. 13; Section 9)

Field 4b

Ditch [208] was aligned east-to-west and measured c. 4.70m in width by c. 1.10m in depth and contained two deposits. The lower deposit ([209]) measured c. 0.39m in depth and consisted of a mottled light grey brown-to-reddish silt. The upper fill ([210]) measured c. 0.74m and consisted of a light grey brown.

Solution Feature [146] and Ditch [148]

(Fig. 14; Section 10)

Field 5

Solution feature [146] measured (at least) 12m in width by (at least) 1.20 in depth and contained three deposits.

Deposit [145] was located to the east and measured c. 0.74m in depth and consisted of a dark brownish yellow clayey sand. Deposit [144] was located to the west and measured c. 1.19m in depth and consisted of a dark brownish yellow clayey sand. Deposit [143] was located centrally and measured c. 1.19m in depth and consisted of a dark brownish yellow clayey sand.

Shallow ditch [148] was aligned north-east to south-west and measured c. 0.92m in width by c. 0.25m deep and contained a dark brownish grey clayey sand ([147]).

Ditch [148] cut` solution feature [146].

Ditches [163], [164], and [165]

(Fig. 15; Section 11)

Field 6

Ditches [163] and [164] were cut through natural accumulation deposits [159], [158], [157] and [156].

Ditch [163] was aligned north east to-south west and measured c. 0.71m in width by 0.35m in depth and contained two deposits. The lower fill ([161]) measured c. 0.20m deep and consisted of a dark brownish grey sandy clay. The upper fill ([160]) measured c. 0.20m in depth and consisted of a light reddish brown clayey sand.

Ditch [164] was aligned north-east to south-west and measured c. 0.65m in width by c. 0.22m in depth. It contained a dark brownish grey sandy clay fill ([162]).

The western edge of ditch [165] truncated ditches [163] and [164].

Ditch [165] was aligned north-east to south-west and measured c. 13.20m in width by c. 1.80m in depth and contained seven deposits. Below primary deposit [153], lay two lenses ([153] and [155]), both were situated within the undulations of the western cut and probably represented silting.

The primary deposit ([153]) measured (at least) 0.50m in depth and consisted of a mottled dark reddish brown clayey silt with frequent patches of organic matter.

The secondary deposit ([151]) measured c. 0.50m in depth and consisted of a mottled light yellowish clayey sand and mid greyish brown clayey sand.

Between [151] and [153] lay a smaller deposit ([152]) which measured c. 0.20m deep and consisted of a mid greyish brown clayey sand.

The tertiary fill ([150]) measured c. 0.17m deep and consisted of a patchy yellowish brown clayey sand. The upper fill ([149]) measured c. 0.68m deep and consisted of a mottled light yellowish brown clayey sand and lenses of yellow sand.

The northern side of ditch [165] has been truncated by a modern ditch cut.

Solution Feature [140] and Ditch [142]

(Fig. 16; Section 12)

Field 6

Solution feature ([140]) measured c. 11.75m in width by (at least) 1.20 in depth. The profile of this feature appears ditch-like; however, the funnelling in the centre probably indicates a natural occurrence.

Ditch [142] cut the solution feature ([140]). It was aligned north-east to south-west and measured c. 0.85m in width by c. 0.20m in depth and contained a dark brownish grey clayey sand fill ([141]).

Ditches [103] and [104]

(Fig. 17; Section 13)

Field 7

Ditch [104] was aligned east-to-west and measured c. 1.05m in width by c. 1.10m in depth and contained two deposits. The lower fill ([102]) measured c. 0.31m deep and consisted of a mid brownish grey sandy clay. The upper fill ([101]) measured c. 0.50m in depth and consisted of a mid greyish brown silty sand.

Ditch [103] was aligned east-to-west and measured c. 2.94m in width by c. 0.93m in depth and contained two deposits. The lower fill ([100]) measured c. 0.40m deep and consisted of a mid brownish grey sandy clay. The upper fill ([99]) measured c. 0.58m in depth and consisted of a mid greyish brown silty sand.

Ditch [107]

(Fig. 18; Section 14)

Field 7

Ditch [107] was aligned north-east to south-west and measured c. 1.30m in width by c. 1.05m in depth and contained two deposits. The lower fill ([106]) measured c. 0.34m deep and consisted of a mid brownish grey sandy clay. The upper fill ([105]) measured c. 0.45m in depth and consisted of a mid greyish brown clayey sand.

Ditch [110]

(Fig. 19; Section 15)

Field 7

Ditch [110] was aligned north-east to south-west and measured c. 1.70m in width by 0.27m in depth. It had a primary fill of mid brownish grey clayey sand ([109]), which was overlain by a light to mid yellowish brown silty sand deposit ([108]).

Ditches [111] and [112]

(Fig. 20; Section 16)

Field 7

Ditch [(112)] was aligned north-east to south-west and measured c. 2.40m in width by c. 1.10m in depth and contained two deposits. The lower fill ([128]) measured c. 0.45m deep and consisted of a mid brownish grey sandy clay. The upper fill ([127]) measured c. 0.50m in depth and consisted of a mid greyish brown clayey sand.

Ditch [(111)] cut ditch [112]. It was aligned north-east to south-west and measured c. 2.40m in width by c. 0.80m in depth. It contained a mid reddish brown sandy silt ([126]).

Ditches [114] and [115]

(Fig. 21; Section 17)

Field 7

Ditch (115) was aligned north-east to south-west and measured c. 1.70m in width by c. 0.86m in depth and contained two deposits. The lower fill ([113]) measured c. 0.44m in depth and consisted of a mid greyish brown silty sand. The upper fill ([166]) measured c. 0.42m in depth and consisted of a light-to-mid yellowish brown silty sand.

Ditch [114] was aligned north-east to south-west and measured c. 1.20m in width by c. 0.40m in depth and contained a mid reddish brown sandy silt ([92]).

Ditch [119]

(Fig. 22; Section 18)

Field 7

Ditch [119] was aligned north-east to south-west and measured c. 3.68m in width by c. 1.34m in depth and contained three deposits. The primary fill ([118]) measured c. 0.38m in depth and consisted of a mid brownish grey sandy clay. The secondary fill ([117]) measured c. 0.66m in depth and consisted of a mid greyish brown clayey sand. The upper fill ([116]) measured c. 0.30m in depth and consisted of a light brownish yellow silty sand.

Ditch [124]

(Fig. 23; Section 19)

Field 7

Ditch [124] was aligned north-east to south-west and measured c. 4.90m in width by c. 1.22m in depth and contained four deposits.

Primary fill ([123]) measured c. 0.31m in depth and consisted of a light greenish grey silty clay. The secondary fill ([122]) measured c. 0.42m in depth and consisted of a dark reddish brown silty sand. The tertiary fill ([121]) measured c. 0.28m in depth and consisted of a mid greyish brown silty sand. The upper fill ([120]) measured c. 0.21m in depth and consisted of a mid yellowish brown silty sand.

Ditches [241], [242] and [243]

(Fig. 24; Section 20)

Field 8b

Section 20: records a triple ditch system lying below subsoil deposits [11] and [118].

Ditch [241] was aligned east-to-west and measured c. 3.55m in width by c. 0.76m in depth and contained two deposits. The lower fill [218] measured c. 0.46m in depth and consisted of a mid brownish grey sandy clay. The secondary fill ([216]) measured c. 0.31m in depth and consisted of a light yellowish brown sandy clay.

Ditch [242] was aligned east-to-west and measured c. 3.72m in width by c. 1.13m in depth and contained three deposits. The primary fill ([237]) measured c. 0.31m in depth and consisted of a mid brownish grey silty clay. The secondary fill ([236]) measured c. 0.26m in depth and consisted of a mid brownish grey sandy clay. The upper fill ([235]) measured c. 0.56m in depth and consisted of a light yellowish brown sandy clay.

Ditch [242] truncates the northern side of ditch [241].

Ditch [243] was aligned east-to-west and measured c. 3.55m in width by c. 0.75m in depth. It contained three deposits with the primary fill ([238]) measuring c. 0.56m in depth and consisting of a mid brownish grey silty clay. The secondary fill ([239]) measured c. 0.15m in depth and consisted of a mid brownish grey sandy clay. The

upper fill ([240]) measured c. 0.22m in depth and consisted of a light yellowish grey clayey sand.

Ditches [47], [48], and [61]

(Fig. 25; Section 21)

Field 8b

Ditch [48] was aligned east-to-west and measured c. 10.80m in width by 1.08m in depth and contained eight deposits ([35], [36], [37], [38], [39], [40], [41], and [42]).

Deposit [42] measured c. 0.13m in depth and consisted of light orange-to-yellow silty sand and probably represents slumping of the southern side of the ditch.

The primary deposit ([41]) measured between 0.26m-to-0.38m in depth and consisted of a light yellowish grey clayey sand. The secondary deposit ([39]) measured c. 0.28m in depth and consisted of a dark brownish grey sandy silt.

Lying between [41] and [39] was another deposit ([40]) which measured c. 0.13m in depth and consisted of a mid brownish grey sandy sand. Deposit [40] probably represents slumping of the northern side of the ditch.

The tertiary fill ([38]) measured c. 0.15m in depth and consisted of a mid brownish grey sandy clay. The fourth fill ([37]) measured c. 0.50m in depth and consisted of a mid greyish brown sandy clay and lenses of yellow sand.

Above [37] and primary deposit [41] was another layer ([35]) which measured c. 11.50m in length by a maximum depth of c. 0.50m in depth and was seen to lie above deposits recorded in ditch adjacent to the south ([47]).

Ditch [47] was aligned east-to-west and measured (at least) 7.30m in length by (at least) 0.86m in depth and contained (at least) four deposits.

Deposit [46] was located to the southern side of the ditch and measured c. 0.26m in depth. It consisted of a mid orange-to-yellow silty sand and probably represents slumping of the southern side. The primary deposit ([45]) measured c. 0.15m in depth and consisted of a mid greyish brown clayey sand. The secondary deposit ([44]) measured (at least) 0.20m in depth and consisted of a brownish grey clayey sand. The upper deposit [43] was truncated by ditch [48]. Deposit [43] measured between c. 0.20m-to-0.73m in depth and consisted of a dark brown silty sand.

Ditch [61] was aligned east-to-west and measured (at least) 4.38m in length by c. 0.75m in depth and contained three deposits. The lower deposit ([51]) measured c. 0.48m in depth and consisted of light yellowish grey clayey sand. The secondary deposit ([50]) measured c. 0.26m in depth and consisted of a light greyish yellow clayey sand. The upper fill measured c. 0.25m deep and consisted of a mid greyish brown silty sand.

Deposit [59] which consisted of a very light yellow sand was truncated by ditches [48] and [61] and measured c. 0.25m in depth.

Ditches [61], [62], [63] and [64]

(Fig. 26; Sections 22)

Field 8b

Section 22: records a continuation of the northern cut for ditch [61] and also ditches [62], [63] and [64].

Ditch [61] as been described above.

Ditch [62] was aligned east-to-west and measured c. 2.80m in width by c. 0.70m in depth. It contained a mid greyish brown fill ([052]), which measured c. 0.50m in depth. This fill was overlain by deposit [49], which was also identified as the upper fill of ditches [61] and [62] suggesting that this layer ([49]) represented a later soil accumulation.

Ditch [63] was aligned east-to-west and measured (at least) 1.20m in width by c. 0.60m in depth and contained a light orange grey sandy clay fill ([057]).

Ditch [63] had truncated three naturally accumulated deposits ([58], [59] and [60]), while the northern cut for ditch [63] was partially truncated by ditch [64].

Ditch ([64]) was aligned east-to-west and measured c. 1.80m in width by c. 0.40m in depth and contained two deposits. The lower fill ([56]) measured c. 0.20m in depth and consisted of a mixed light yellowish-to-light grey sandy clay. The upper fill ([55]) measured c. 0.18m deep and consisted of a light yellowish grey sandy clay.

Ditch [66]

(Fig. 27; Section 23)

Field 8b

Ditch [66] was aligned east-to-west and measured c. 1m in width by c. 0.60m in depth. It contained a light yellowish grey sandy clay fill ([65]).

Ditches [76] and [77]

(Fig. 28; Section 24)

Field 8b

Two ([76] and [77]) of the three ditches recorded in this section cut sub-soil deposit [75], which directly overlay the natural.

Ditch [77] was aligned east-to-west and measured c. 8.60m in width by c. 1.50m in depth and contained two deposits. The lower fill ([74]) measured c. 0.31m deep and consisted of a light yellowish grey sandy clay. The upper fill ([73]) measured c. 0.55m in depth and consisted of a light yellowish grey clayey sand.

Ditch [76] was aligned east-to-west and measured c. 8.60m in width by c. 1.50m in depth and contained six deposits.

Deposit [72] was located in the southern cut and measured c. 1m in depth and consisted of a light greyish yellow clayey sand. The primary fill ([71]) measured (at least) 1.15m in depth and consisted of a mid greyish brown sandy clay. The secondary deposit ([70]) measured c. 0.18m in depth and consisted of a dark greyish brown sandy clay. The tertiary fill ([69]) consisted of a mid greyish brown sandy clay. The fourth fill ([68]) measured c. 0.45m in depth and consisted of a light greyish brown sandy clay. The upper fill ([67]) measured c. 0.50m in depth and consisted of a mid greyish brown sandy clay.

Ditches [88], [89], [90] and [91]

(Fig. 29; Section 25)

Field 8b

Ditch [88] was aligned east-to-west and measured c. 2.40m in width by c. 1.15m in depth and contained three deposits. The primary fill ([80]) measured c. 0.16m in depth and consisted of a dark greyish brown sandy silt. The secondary fill ([79]) measured c. 0.61m deep and consisted of light orange brown silty sand. The upper fill ([78]) measured c. 0.35m in depth and consisted of a mid greyish brown silty sand.

The southern side of ditch [89] has been truncated by ditch [88].

Ditch [89] was aligned east-to-west and measured c. 1.50m in width by c. 0.75m in depth and contained two deposits. The lower deposit ([86]) measured c. 0.16m in depth and consisted of a dark greyish brown sandy silt. The upper fill ([85]) measured c. 0.67m deep and consisted of mid greyish brown silty sand.

Ditch [90] was aligned east-to-west and measured c. 1.50m in width by c. 0.75m in depth and contained two deposits. The lower deposit ([83]) measured c. 0.35m in depth and consisted of a light brownish grey clayey sand. The upper fill ([82]) measured c. 0.10m deep and consisted of a light yellowish brown silty sand.

Ditches [88] and [90] both truncated ditch [91].

Ditch [91] was aligned east-to-west and measured c. 0.65m in width by c. 0.35m in depth. It contained a light brownish grey clayey sand ([84]) which measured c. 0.37m in depth.

Ditches [97] and [98]

(Fig. 30; Section 26)

Field 8b

Ditch [98] was aligned east-to-west and measured c. 2.50m in width by c. 0.85m in depth and contains two deposits. The lower fill ([96]) measured c. 0.26m deep and consisted of a mid yellowish brown clayey sand. The upper fill ([95]) measured c. 0.52m in depth and consisted of a mid yellowish grey sandy clay.

Ditch [97] was aligned east-to-west and measured c. 7.45m in width by (at least) 1.50m in depth and contained two deposits. Deposit [94] was located to the north and measured (at least) 1.20m in depth and consisted of a mid greyish brown clayey sand. Deposit [93] measured (at least) 1.50m in depth and consisted of mid greyish brown sandy silt.

Ditches [220] and [222]

(Fig. 31; Section 27)

Field 8c

Ditch [222] was aligned east-to-west and measured c. 4m in width by c. 1.20m in depth. It contained a single deposit ([221]) which consisted of a variable light yellowish grey fine sand and a very light grey sandy clay. Deposit [221] is consistent with a waterborne layer which has naturally silted-up.

Ditch [220] cut through subsoil deposit [213].

Ditch [220] was aligned east-to-west and measured c. 8.25m in width by (at least) c. 1.30m in depth and contained four deposits. The primary fill ([219]) measured c. 1.30m in depth by c. 0.28m-to-0.80m in width and consisted of a very light yellowish grey clayey sand. The secondary fill [217] measured (at least) 1.30m in depth by c. 0.90-to-1.50m in width and consisted of a mid greyish brown clayey sand. The tertiary fill [(215)] measured (at least) 1.30m in depth by c. 2.4m tapering to c. 0.60m in width and consisted of a mid greyish brown clayey sand. The upper fill ([212]) measured c. 0.55m in depth by c. 1.33m in width and consisted of mid greyish brown clayey sand.

Ditch [220] was a re-cut of ditch [222].

Ditch [228]

(Fig. 32; Section 28)

Field 8c

Ditch [228] was aligned east-to-west and measured c. 3.05m in width by c. 1.35m in depth and contains two deposits. Deposit [227] measured c. 0.36m in depth and consisted of a mid greyish brown sandy clay. The upper fill ([225]) measured c. 2.82m in width by c. 0.95m in depth and consisted of a mid greyish brown silty sand.

Ditches [226] and [232]

(Fig. 33; Section 29)

Field 8c

Ditch [226] was aligned east-to-west and measured c. 1.75m in width by c. 1.10m in depth. It contained two deposits. The lower ([234]) consisted of a light yellowish brown sandy clay and measured c. 0.43m deep. The upper deposit consisted of a very light yellowish brown sandy clay ([233]) and measured c. 0.60m in depth.

Ditch [232] was aligned east-to-west measuring c. 5.05m in width by c. 1.25m in depth and contained three deposits. The primary fill ([231]) measured c. 0.35m in depth and consisted of a light yellowish brown sandy clay. The secondary fill ([230]) measured c. 0.16m in depth consisting of a mid brownish grey sandy clay. The upper fill ([229]) measured c. 0.87m in depth and consisted of a mid greyish brown clayey sand.

Ditch [132]

(Fig. 34; Section 30)

Field 8c

Ditch [132] was aligned north-east to south-west and measured c. 9.30m in width by c. 1.40m in depth and contained three deposits.

Deposits [130] and [131] were located in the western side of the ditch. Deposit [131] measured c. 0.73m in depth and consisted of a mid orange brown clayey sand. Deposit [130] measured c. 0.28m in depth and consisted of a dark orange grey sandy clay. The main fill of the ditch ([129]) measured c. 1.40m in depth and

consisted of a dark brownish grey sandy clay with frequent lenses of mid orange brown sandy clay.

Ditch [134]

(Fig. 35; Section 31)

Field 8c

Ditch [134] was aligned north-east to south-west and measured c. 2.10m in width by 0.67m in depth. It contained a dark brownish grey sandy clay fill ([133]).

Ditch [136]

(Fig. 36; Section 32)

Field 9

Ditch [136] was aligned north-east to south-west and measured c. 2.50m in width by c. 1.51m in depth. It contained a mid greyish brown clayey sand fill ([135]).

Ditch [248]

(Fig. 37; Section 33)

Field 18

Ditch [248] was aligned north-to-south and measured c. 3.84m in width by c. 1.11m in depth and contained three deposits.

The primary fill ([247]) measured c. 0.39m in depth and consisted of a mid greyish brown sandy clay with frequent lenses of redeposited orange sand. The secondary fill ([246]) measured c. 0.19m in depth and consisted of a mid greyish brown sandy clay with frequent charcoals flecks. The upper fill ([245]) measured c. 0.43m in depth and consisted of a mid greyish brown clayey sand.

Ditch [251]

(Fig. 38; Section 34)

Field 18

Ditch [251] was aligned north-east to south-west and measured c. 2.26m in width by c. 0.55m in depth and contains two deposits. The lower fill [250] measured c. 0.24m in depth and consisted of a mid brownish grey sandy clay. The upper fill ([249]) measured c. 0.34m in depth and consisted of a mid greyish brown sandy clay.

Ditches [254] and [258]

(Fig. 39; Section 35)

Field 18

Ditch [254] was aligned north-east to south-west and measured c. 1.35m in width by c. 0.55m in depth and contained two deposits. The primary fill ([253]) measured c. 0.34m and consisted of a mid brownish grey clayey sand. The upper fill ([252]) measured c. 0.26m in depth and consisted of a mid greyish brown sandy clay.

Ditch [258] was aligned north-east to south-west and measured c. 4.35m in width by c. 0.67m in depth and contained three deposits. The primary fill ([257]) measured (at least) 0.33m and consisted of a mid greyish brown sandy clay. This was overlain by another deposit ([256]; located only in the west of the section) which consisted of a mid greyish yellow silty sand c. 0.34m deep. The upper fill ([255]; located in the eastern part of the section) consisted of a mid greyish brown sandy clay with patches of redeposited yellow sand c. 0.34m deep.

Ditch [268]

(Fig. 40; Section 36)

Field 22

Ditch [268] was aligned north-to-south and measured c. 1.80m wide by c. 1m in depth and contained a dark brown-to-black silt ([269]) with very occasional small rounded and sub-rounded flint.

Ditch [270]

(Fig. 41; Section 37)

Field 22

Ditch [270] was aligned north-to-south and measured c. 1.10m wide by c. 0.36m in depth and contained an organic dark brown-to-black silt ([271]) with very occasional small rounded and sub-rounded flint.

Ditch [272]

(Fig. 42; Section 38)

Chainage 100-200

Ditch [272] was aligned north-to-south and measured c. 5.35m wide by c. 1.35m deep and contained a dark brown-to-black silt ([273]) with very occasional small rounded and sub-rounded flint.

Pit [274]

(Fig. 43; Section 39)

Chainage 100-200

Pit [274] measured c. 3m in wide by c. 1.70m deep and contained a dark brown-to-black silt ([275]) with very occasional small rounded and sub-rounded flint.

The interpretation of this feature as a pit rather than a ditch was made as no continuation of this feature could be seen in the south facing section.

Pit [276]

(Fig. 44; Section 40)

Chainage 100-200

Pit ([276]) measured c. 2.60m in wide by c. 1.52m deep and contained three deposits.

The primary fill ([277]) measured c. 1.52m in depth and consisted of a mixed pale brown and dark brown clayey silt with very occasional small rounded and sub-rounded flint. Within this deposit was a lens ([278]) which measured c. 1.60m in width by c. 0.10m in depth and consisted of a black organic silt. Higher up within the same deposit was another lens ([279]) which measured c. 0.10m in depth and consisted of a black organic silt.

8.0 Conclusion

In total, along the c. 13.5km stretch of the pipeline sixty-four ditch cuts and two pits were recorded, with many of the ditches re-cuts of existing features.

In Field 8b, nine ditches were recorded all of which were aligned east-to-west and were almost certainly drainage channels. These drainage channels would have discharged into the north-west to south-east aligned Wisbech Canal *via* the Outwell Basin. The Outwell Basin probably represented a wide expanse of water which subsequently drained into the Wisbech Canal, which in turn discharged into the Middle Level Main Drain before flowing into the river Great Ouse.

The dating of the ditches remains problematic as no dating evidence was recovered during excavation, the only artefacts recovered were found during the field walking part of the project. Field 8b produced seven small abraded medieval pottery sherds. With such a small amount of poor condition pottery recovered it is difficult to determine whether the sherds represent settlement activity or manure scattering, however, the latter seems to be the more likely.

It is worthy of note that several features have been referred to as ditches when in fact they may represent drains. Drains are engineered to discharge water into canalised water systems; therefore, they tend to be larger than ordinary ditches and well maintained. Several ditches recorded during the evaluation measured (at least) 10m in width by (at least) 1.80m in depth. As the illustrated sections show many ditches have more than one re-cut and are generally on the same alignment.

Drainage channels are a vitally important component of the Fenland landscape and in-general serve a multitude of purposes. The primary function of a drainage ditch is to discharge run-off water but can also serve as a field boundary. However, studies have shown that drainage channels make an important contribution to the ecology of the Fenland landscape (Wade 1990).

There seems to have been a change in land-use within the area of Sayer's Field (Fields 8b and 8c) north-west of Outwell village. Whether, this is because of improved drainage engineering when more permanent drains were engineered or a reflection on the transition from poorly drained grazing land through intensive grazing to arable agriculture. The transition from grazing pasture to arable would mean that the drainage ditch systems would have to be in-filled to make way for commercially viable agriculture. An Ordnance Survey Second War Revision Map of 1940, shows the area of Sayer's Field possibly being an orchard.

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The fieldwalking and metal detector survey was undertaken by the author, Francesca Boghi and Pete Warsop. The excavation work was executed by the author, Francesca Boghi, Simon Underdown and Sarah Bates.

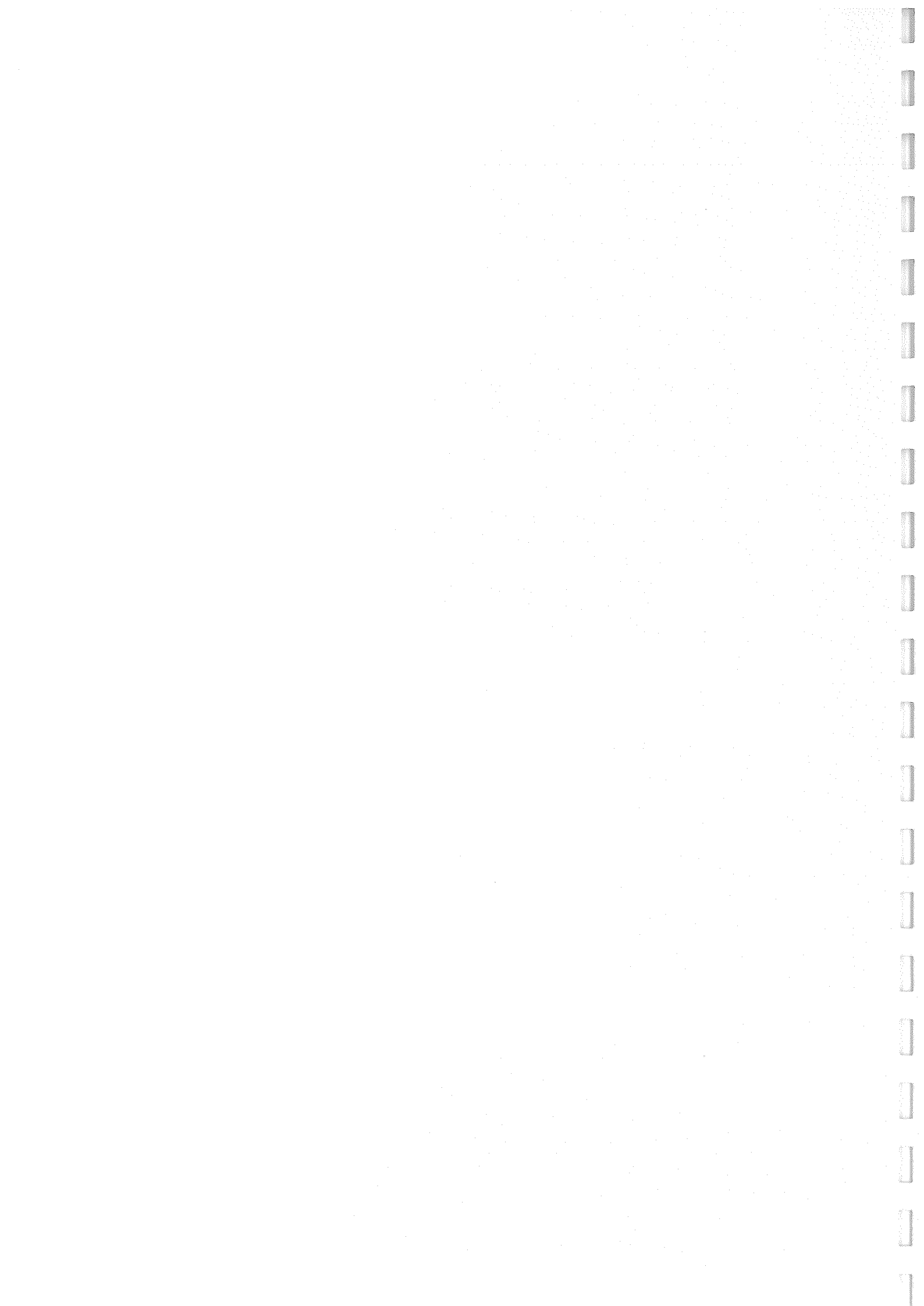
The finds were processed by Lucy Talbot, the clay tobacco pipe was described by the author, while the pottery was identified by Richenda Goffin. Sarah Bates described the worked flint.

Adrian Butler (commissioned by Essex County Council Planning Field Archaeology Unit) completed the magnetic susceptibility survey.

The report was illustrated by the author and David Dobson. The report was edited by Alice Lyons and produced by David Dobson.

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Appendix 1: Context Summary

(The features and deposits listed below have not been assigned to a specific period as few finds were found and dating remains problematic).

Context	Contained by	Category	Description/interpretation
01		Field walking and metal detecting collection Unit	Field 1
02		Field walking and metal detecting collection Unit	Field 1
03		Field walking and metal detecting collection Unit	Field 1
04		Field walking and metal detecting collection Unit	Field 1
05		Field walking and metal detecting collection Unit	Field 3
06		Field walking and metal detecting collection Unit	Field 4a
07		Field walking and metal detecting collection Unit	Field 4a
08		Field walking and metal detecting collection Unit	Field 4a
09		Field walking and metal detecting collection Unit	Field 4a
010		Field walking and metal detecting collection Unit	Field 4a
011		Field walking and metal detecting collection Unit	Field 4a
012		Field walking and metal detecting collection Unit	Field 4a
013		Field walking and metal detecting collection Unit	Field 6
014		Field walking and metal detecting collection Unit	Field 6
015		Field walking and metal detecting collection Unit	Field 6
016		Field walking and metal detecting collection Unit	Field 6
017		Field walking and metal detecting collection Unit	Field 6
018		Field walking and metal detecting collection Unit	Field 6
019		Field walking and metal detecting collection Unit	Field 6
020		Field walking and metal detecting collection Unit	Field 6
021		Field walking and metal detecting collection Unit	Field 8b
022		Field walking and metal detecting collection Unit	Field 8b
023		Field walking and metal detecting collection Unit	Field 8b
024		Field walking and metal detecting collection Unit	Field 8b
025		Field walking and metal detecting collection Unit	Field 8b
026		Field walking and metal detecting collection Unit	Field 8b

Context	Contained by	Category	Description/interpretation
027		Field walking and metal detecting collection Unit	Field 8b
028		Field walking and metal detecting collection Unit	Field 8b
029		Field walking and metal detecting collection Unit	Field 8b
030		Field walking and metal detecting collection Unit	Field 8b
031		Field walking and metal detecting collection Unit	Field 8b
032		Field walking and metal detecting collection Unit	Field 8b
033		Field walking and metal detecting collection Unit	Field 8b
034		Field walking and metal detecting collection Unit	Field 8b
035	[048]	Deposit	Dark greyish brown clayey sand
036	[048]	Deposit	Mid brownish grey clayey sand
037	[048]	Deposit	Mid greyish brown sandy clay and yellow sand
038	[048]	Deposit	Mid brownish grey sandy clay
039	[048]	Deposit	Dark brownish grey sandy clay
040	[048]	Deposit	Mid brownish grey sandy clay
041	[048]	Deposit	Light yellowish grey clayey sand
042	[048]	Deposit	Light orange/yellow sand
043	[048]	Deposit	Mid yellow grey sandy clay
044	[048]	Deposit	Mid brownish grey sandy clay
045	[048]	Deposit	Dark brownish grey sandy clay
046	[048]	Deposit	Light yellow grey sandy clay
047		Cut	Ditch
048		Cut	Ditch
049	[061]	Deposit	Mid greyish brown silty sand
050	[061]	Deposit	Light greyish yellow clayey sand
051	[061]	Deposit	Light yellowish grey clayey sand
052	[062]	Deposit	Light yellow grey clay sand
053		Deposit	Mid brownish grey sandy clay
054	[064]	Deposit	Light yellowish grey clayey sand
055	[064]	Deposit	Light yellowish grey sandy clay
056	[064]	Deposit	Light grey sandy clay
057	[063]	Deposit	Light orange grey sandy clay
058		Deposit	Mid brownish orange sandy clay
059		Deposit	Light yellow sand
060		Deposit	Light grey sandy clay/light yellow sand
061		Cut	East-to-west ditch
062		Cut	Ditch
063		Cut	East-to-west ditch
064		Cut	East-to-west ditch
065	[066]	Deposit	
066		Cut	East-to-west ditch
067	[076]	Deposit	Mid greyish brown sandy clay
068	[076]	Deposit	Light greyish brown sandy clay
069	[076]	Deposit	Mid brownish grey sandy clay
070	[076]	Deposit	Dark greyish brown sandy clay
071	[076]	Deposit	Mid greyish brown sandy clay
072	[076]	Deposit	Light greyish yellow clayey sand

Context	Contained by	Category	Description/interpretation
073	[077]	Deposit	Light yellowish grey clayey sand
074	[077]	Deposit	Light yellowish grey sandy clay
075		Deposit	Light orange brown sandy clay/light yellow sand
076		Cut	East-to-west ditch
077		Cut	East-to-west ditch
078	[088]	Deposit	Mid greyish brown silty sand
079	[088]	Deposit	Light orange brown silty sand
080	[088]	Deposit	Dark greyish brown sandy silt
081		Deposit	Light brownish grey silty sand
082	[90]	Deposit	Light yellowish grey silty sand
083	[90]	Deposit	Light brownish grey clayey sand
084	[91]	Deposit	Light brownish grey clayey sand
085	[89]	Deposit	Mid greyish brown silty sand
086	[89]	Deposit	Dark greyish brown sandy silt
087		Deposit	Mid brownish grey sandy clay
088		Cut	East-to-west ditch
089		Cut	East-to-west ditch
090		Cut	East-to-west ditch
091		Cut	East-to-west ditch
092	[114]	Deposit	Mid reddish brown clayey sand
093	[97]	Deposit	Dark greyish brown sandy silt
094	[97]	Deposit	Mid greyish brown clayey sand
095	[98]	Deposit	Mid yellowish brown clayey sand
096	[98]	Deposit	Mid yellowish grey sandy clay
097		Cut	East-to-west ditch
098		Cut	East-to-west ditch
099	[103]	Deposit	Mid greyish brown silty sand
100	[103]	Deposit	Mid brownish grey sandy clay
101	[104]	Deposit	Mid greyish brown silty sand
102	[104]	Deposit	Mid brownish grey sandy silt
103		Cut	East-to-west ditch
104		Cut	East-to-west ditch
105	[107]	Deposit	Mid greyish brown clayey sand
106	[107]	Deposit	Mid brownish grey sandy clay
107		Cut	North-east to south-west ditch
108	[110]	Deposit	Light/mid yellowish brown silty sand
109	[110]	Deposit	Mid brownish grey clayey sand
110		Cut	North-east to south-west ditch
111		Cut	North-east to south-west ditch
112		Cut	North-east to south-west ditch
113	[115]	Deposit	Mid brownish grey silty sand
114		Cut	North-east to south-west ditch
115		Cut	North-east to south-west ditch
116	[119]	Deposit	Light brownish yellow silty sand
117	[119]	Deposit	Mid greyish brown clayey sand
118	[119]	Deposit	Mid brownish grey sandy clay
119		Cut	North-east to south-west ditch
120	[124]	Deposit	Mid yellowish brown silty sand
121	[124]	Deposit	Mid greyish brown
122	[124]	Deposit	Mid reddish brown silty sand
123	[124]	Deposit	Light greenish grey silty clay
124		Cut	North-east to south-west ditch
125	[107]	Deposit	Mid yellowish brown silty sand

Context	Contained by	Category	Description/interpretation
126	[111]	Deposit	Mid reddish brown sandy silt
127	[112]	Deposit	Mid brownish grey clayey sand
128	[112]	Deposit	Mid brownish grey sandy clay
129	[132]	Deposit	Dark brownish grey sandy clay
130	[132]	Deposit	Mid orange brown clayey sand
131	[132]	Deposit	Dark orange grey sandy clay
132		Cut	North-east to south-west ditch
133	[134]	Deposit	Dark brownish grey
134		Cut	North-east to south-west ditch
135	[136]	Deposit	Mid greyish brown clayey sand
136		Cut	North-east to south-west ditch
137	[140]	Deposit	Mid yellowish brown/light yellow
138	[140]	Deposit	Mid greyish brown clayey sand
139	[140]	Deposit	Dark brownish yellow clayey sand
140		Natural	A natural solution feature
141	[142]	Deposit	Dark brownish grey clayey sand
142		Cut	North-east to south-west ditch
143	[146]	Deposit	Mid yellowish brown/light yellow sand
144	[146]	Deposit	Mid greyish brown clayey sand
145	[146]	Deposit	Dark brownish yellow clayey sand
146		Natural	Solution feature
147	[148]	Deposit	Dark brownish grey clayey sand
148		Cut	North-east to south-west ditch
149	[165]	Deposit	Light yellowish brown clayey sand
150	[165]	Deposit	Light yellowish brown clayey sand
151	[165]	Deposit	Light yellowish clayey sand
152	[165]	Deposit	Mid greyish brown clayey sand
153	[165]	Deposit	Dark reddish brown clayey silt
154	[165]	Deposit	Dark brownish grey sandy silt
155	[165]	Deposit	Light yellowish brown clayey sand
156		Deposit	Light reddish brown clayey sand
157		Deposit	Light grey silty sand
158		Deposit	Light greyish brown silty sand
159		Deposit	Light grey silty sand
160	[163]	Deposit	Light reddish brown clayey sand
161	[163]	Deposit	Dark brownish grey sandy clay
162	[164]	Deposit	Dark brownish grey sandy clay
163		Cut	North-east to south-west ditch
164		Cut	North-east to south-west ditch
165		Cut	North-east to south-west ditch
166	[115]	Deposit	Light/mid yellowish brown silty sand
167	[169]	Deposit	Light yellowish brown silty sand
168	[169]	Deposit	Dark greyish brown clay loam
169		Cut	East-to-west ditch
170		Deposit	Mid greyish brown clayey sand
171		Deposit	Light brownish grey clayey sand
172		Deposit	Light brownish grey clayey sand
173		Deposit	Light brownish grey sandy
174		Deposit	Dark brownish grey silty sand
175		Deposit	East to west linear ditch
176	[175]	Deposit	Light grey brown/yellowish brown silt
177		Cut	East-to-west ditch
178	[177]	Deposit	Light grey brown silt

Context	Contained by	Category	Description/interpretation
179		Cut	East-to-west ditch
180	[179]	Deposit	Light grey/reddish silt
181	? [179]	Deposit	Light yellowish grey brown silt
182		Cut	East-to-west ditch
183	[182]	Deposit	Light grey brown/reddish
184		Cut	Ditch
185	[184]	Deposit	Light yellow brown silt
186		Deposit	Mid brown loam/silt
187		Cut	East-to-west ditch
188	[187]	Deposit	Light/mid grey silt
189		Cut	East-to-west ditch
190	[189]	Deposit	Grey silt
191	[189]	Deposit	Grey silt
192	[189]	Deposit	Mid grey silt
193		Cut	East-to-west ditch
194	[193]	Deposit	Light grey brown silt
195		Cut	East-to-west ditch
196	[195]	Deposit	Mid brown silt
197		Cut	East-to-west ditch
198	[197]	Deposit	Light grey silt
199	[197]	Deposit	Light yellowish brown
200		Cut	East-to-west ditch
201	[200]	Deposit	Light grey brown silt
202		Cut	South-west to north-east ditch
203	[202]	Deposit	Mid brown silt
204		Cut	East-to-west ditch
205		Cut	East-to-west ditch
206	[204]	Deposit	Light grey silt
207	[205]	Deposit	Light grey brown silt
208		Cut	Ditch
209	[208]	Deposit	Light grey silt
210	[208]	Deposit	Light grey brown silt
211		Deposit	Dark brownish grey clayey sand
212	[010]	Deposit	Mid greyish brown clayey sand
213		Deposit	Mid greyish brown silty sand
214	[010]	Deposit	Mid greyish brown clayey sand
215	[220]	Deposit	Dark brownish grey clayey sand
216	[241]	Deposit	Light yellowish brown clayey sand
217	[220]	Deposit	Mid greyish brown sandy clay
218	[241]	Deposit	Mid brownish grey sandy clay
219	[220]	Deposit	Light yellowish grey clayey sand
220		Cut	East-to-west ditch
221		Deposit	Light brownish grey clayey sand
222		Cut	East-to-west ditch
223		Deposit	Light yellowish grey sand/light grey sandy clay
224		Deposit	Light greyish yellow sand
225	[228]	Deposit	Mid greyish brown silty clay
226		Cut	East-to-west ditch
227	[228]	Deposit	Mid greyish brown sandy silt
228		Cut	East-to-west ditch
229	[232]	Deposit	Mid greyish brown clayey sand
230	[232]	Deposit	Mid brownish grey sandy clay
231	[232]	Deposit	Light yellowish brown sandy clay

Context	Contained by	Category	Description/interpretation
232		Cut	East-to-west ditch
233	[226]	Deposit	Light yellowish brown sandy clay
234	[226]	Deposit	Light yellowish brown sandy clay
235		Deposit	Light yellowish brown clayey sand
236	[242]	Deposit	Mid brownish grey sandy clay
237	[242]	Deposit	Mid brownish grey sandy clay
238	[243]	Deposit	Mid brownish grey silty sand
239	[243]	Deposit	Mid brownish grey sandy clay
240	[243]	Deposit	Light yellowish grey clayey sand
241		Cut	East-to-west ditch
242		Cut	East-to-west ditch
243		Cut	East-to-west ditch
244	[48]	Deposit	Mid greyish brown clayey sand
245	[248]	Deposit	Mid greyish brown clayey sand
246	[248]	Deposit	Mid greyish brown sandy clay
247	[248]	Deposit	Light greyish brown sandy clay
248		Cut	Ditch
249	[251]	Deposit	Mid greyish brown + yellow
250	[251]	Deposit	Mid brownish grey sandy clay
251		Cut	North-east to south-west ditch
252	[254]	Deposit	Mid greyish brown sandy clay
253	[254]	Deposit	Mid brownish grey clayey sand
254		Cut	North-east to south-west ditch
255	[258]	Deposit	Mid greyish brown sandy clay
256	[258]	Deposit	Mid greyish yellow silty sand
257	[258]	Deposit	Mid greyish brown sandy clay
258		Cut	North-east to south-west ditch
259		Layer	Flood deposit
260		Metal detected find	1m east of chainage peg 334
261		Metal detected find	20m south of chainage peg 334
262		Deposit	North north-east to south south-west linear ditch
263		Deposit	Mid grey brown silt
264		Metal detected finds	
265		Metal detected find	Copper Alloy button chainage 620
266		Metal detected find	Lead weight at chainage 635
267		Deposit	Reddish orange burnt patch
268		Cut	North-to-south ditch
269	[269]	Deposit	Dark brown silt
270		Cut	North-to-south ditch
271	[270]	Deposit	Dark brown/black silt
272		Cut	North-to-south ditch
273		Deposit	Dark brown/black silt
274		Cut	Ditch
275	[274]	Deposit	Fill of ditch [274]
276		Cut	Pit
277	[276]	Deposit	Fill of pit [276]
278	[276]	Deposit	Fill of pit [276]
279	[276]	Deposit	Fill of pit [276]

Appendix 2: Finds by Context

All finds were collected during the field walking and metal detecting phase of the project.

Context	Field	Material	Quantity	Weight (kg)	Period
Unstratified	Field 18	Copper Alloy	7	-	Post-medieval to modern
Unstratified	Field 18	Iron	1	-	Post-medieval
Unstratified	Field 18	Lead	9	-	-
01	Field 1	Pottery	2	0.071	Medieval
02	Field 1	Iron	1	-	Modern
05	Field 2	Clay tobacco pipe	3	0.011	Post-medieval
06	Field 4a	Lead alloy	1	-	Modern
07	Field 4a	?Alloy	1	-	Modern
09	Field 4a	Clay tobacco pipe	1	0.005	Post-medieval
09	Field 4a	Iron	2	-	Modern
10	Field 4a	Iron	2	-	Modern
14	Field 6	Iron	2	-	Modern
18	Field 6	Flint	1	-	Prehistoric
19	Field 6	Pottery	1	0.003	Medieval
20	Field 6	Pottery	5	0.053	Medieval and post-medieval
21	Field 8b	Pottery	2	0.008	Medieval
22	Field 8b	Pottery	1	0.005	Medieval
22	Field 8b	Animal bone	-	0.005	-
23	Field 8b	Pottery	1	0.001	Medieval
23	Field 8b	Clay tobacco pipe	1	0.001	Post-medieval
25	Field 8b	Pottery	1	0.008	Post-medieval
26	Field 8b	Pottery	1	0.003	Post-medieval
29	Field 8b	Pottery	1	0.001	Medieval

Appendix 3: Pottery

All finds were collected during the field walking and metal detecting phase of the project.

Context	Field	Fabric	Quantity	Weight (kg)	Date
19	Field 6	Cambridgeshire Glazed wares	1	0.003	12th to 14th century
20	Field 6	Early medieval wares	1	0.001	11th to 12th century
20	Field 6	Grimston ware	1	0.003	Late 12th to 14th century
20	Field 6	Medieval coarse wares	1	0.005	12th to 14th century
20	Field 6	English stoneware	1	0.007	17th to 19th century
20	Field 6	English stoneware	1	0.037	17th to 19th century, probably 18th to 19th century
21	Field 8b	Cambridgeshire Glazed wares	1	0.005	12th to 14th century
21	Field 8b	Miscellaneous	1	0.003	12th to 14th century
22	Field 8b	Medieval coarse wares	1	0.005	11th to 14th century?
23	Field 8b	Miscellaneous	1	0.001	11th to 14th century?
25	Field 8b	Frechen stoneware	1	0.008	1550 to 1700
26	Field 8b	Bourne D	1	0.003	15th to 16th century
29	Field 8b	Grimston ware	1	0.001	Late 12th to 14th century

Appendix 4: Catalogue of Other Metal Objects not Small Found (either late post-medieval or undiagnostic)

All finds were collected during the field walking and metal detecting phase of the project.

Context	Field	Quantity	Material	Object Name	Description	Period/date
Unstratified	Field 18	1	Copper alloy	Pipe tamper	In the form of a hammer	Post-medieval
Unstratified	Field 18	1	Copper alloy	Coin	half penny	Modern/1917
Unstratified	Field 18	1	Copper alloy	Coin	Elizabeth II half penny	Modern/1957
Unstratified	Field 18	2	Copper alloy	Buttons		Post-medieval
Unstratified	Field 18	2	Copper alloy	Sheet	Fragments	
Unstratified	Field 18	1	Iron	Strap	Fragment with fixing bolt	Post-medieval
Unstratified	Field 18	9	Lead	Waste	Fragments	
02	Field 1	1	Iron	Artefact		Modern
06	Field 4a	1	Lead alloy	Button		Modern
07	Field 4a	1	?Alloy	Button		Modern
09	Field 4a	1	Iron	Sheet	Fragment	Modern
09	Field 4a	1	Iron	Nail		Modern
10	Field 4a	2	Iron	Nail		Modern
14	Field 6	1	Iron	Collar		Modern
14	Field 6	1	Iron	Nail		Modern

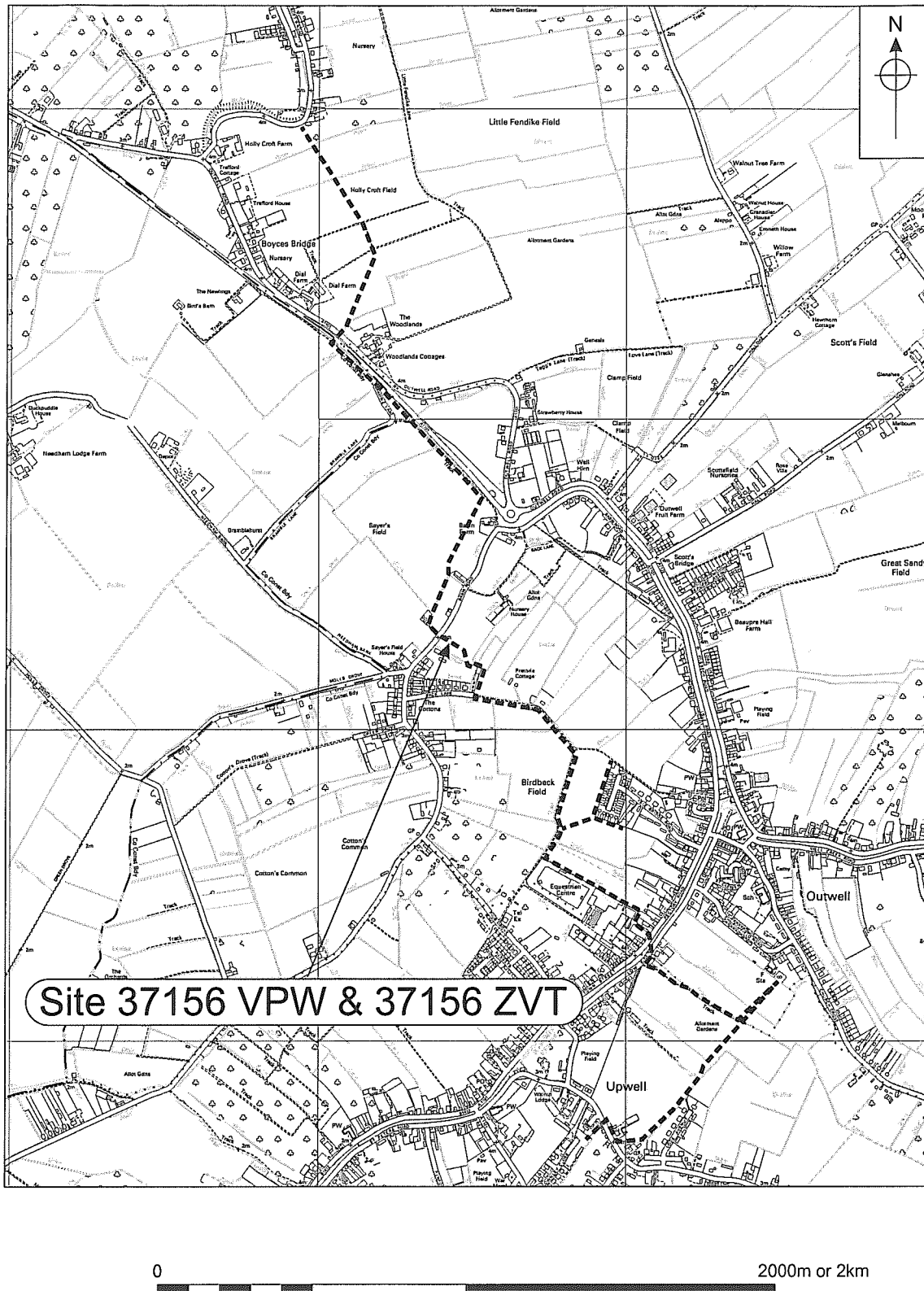


Figure 1. Site location. Scale 1:20,000

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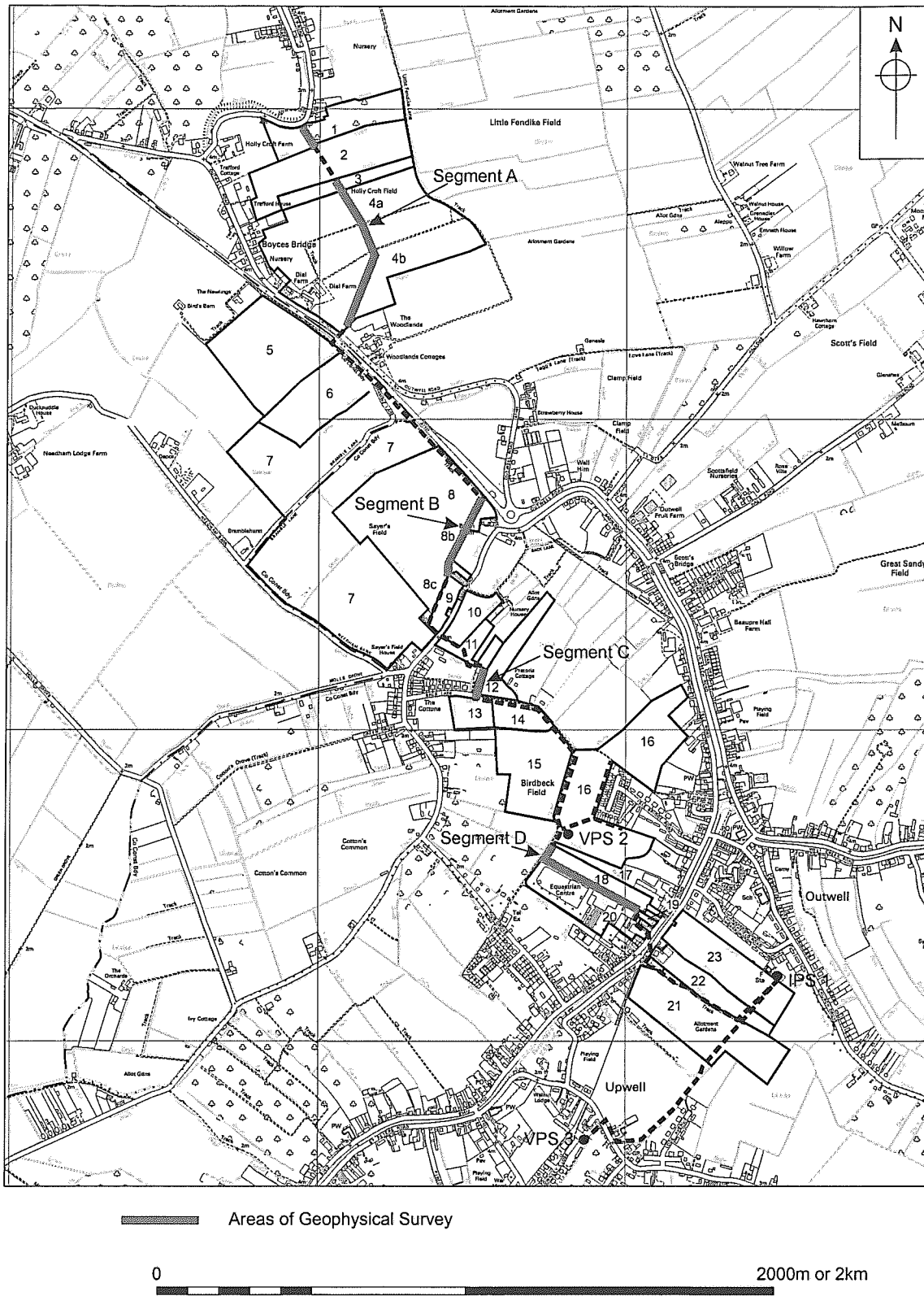


Figure 2. Pipeline showing areas of Geophysical Survey. Scale 1:20,000

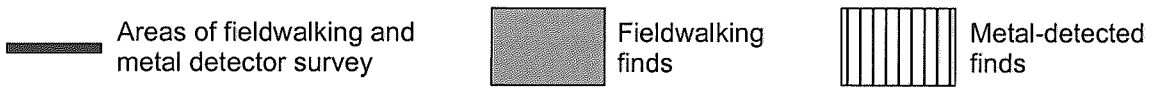
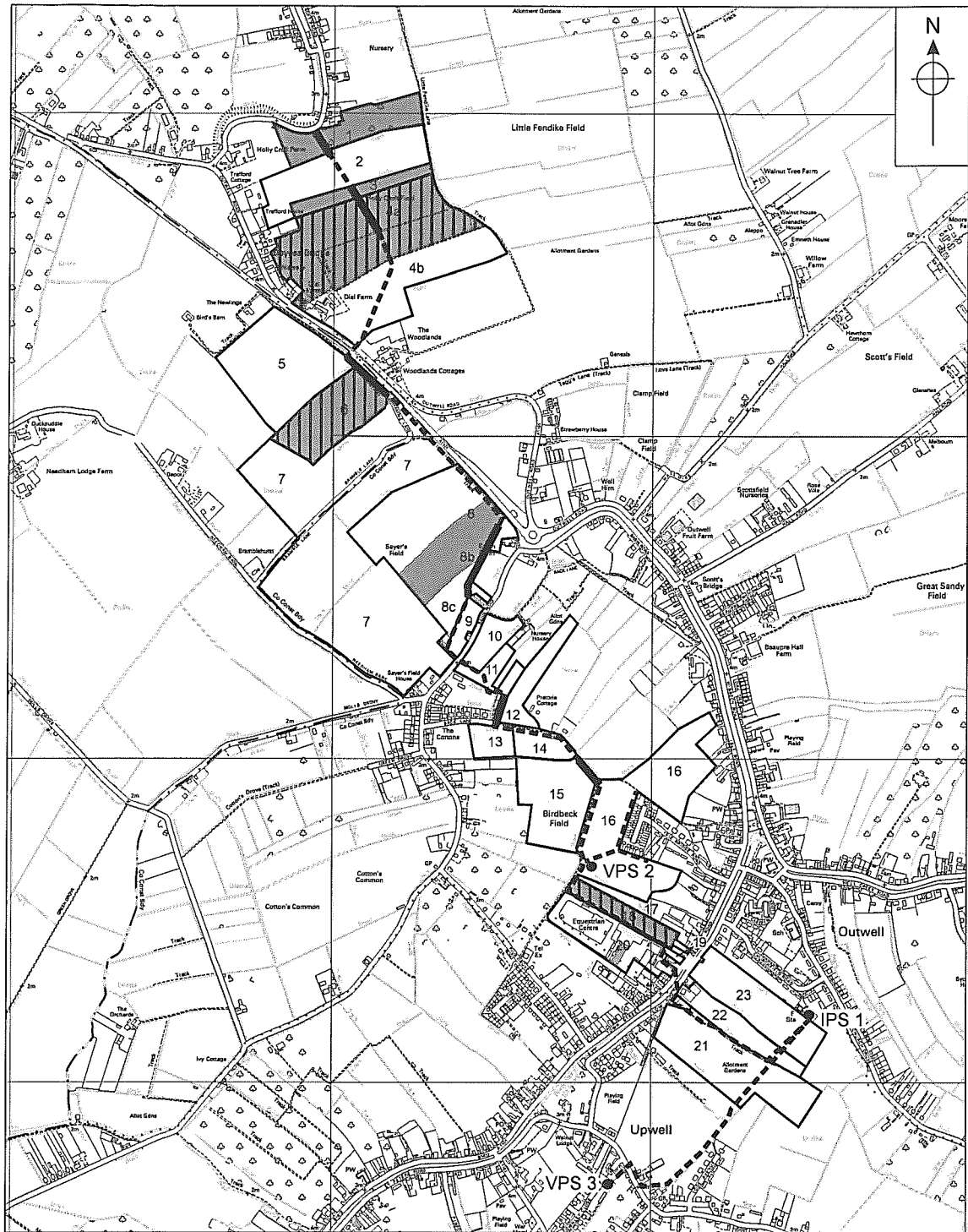


Figure 3. Pipeline showing areas of fieldwalking and metal detector survey. Scale 1:20,000

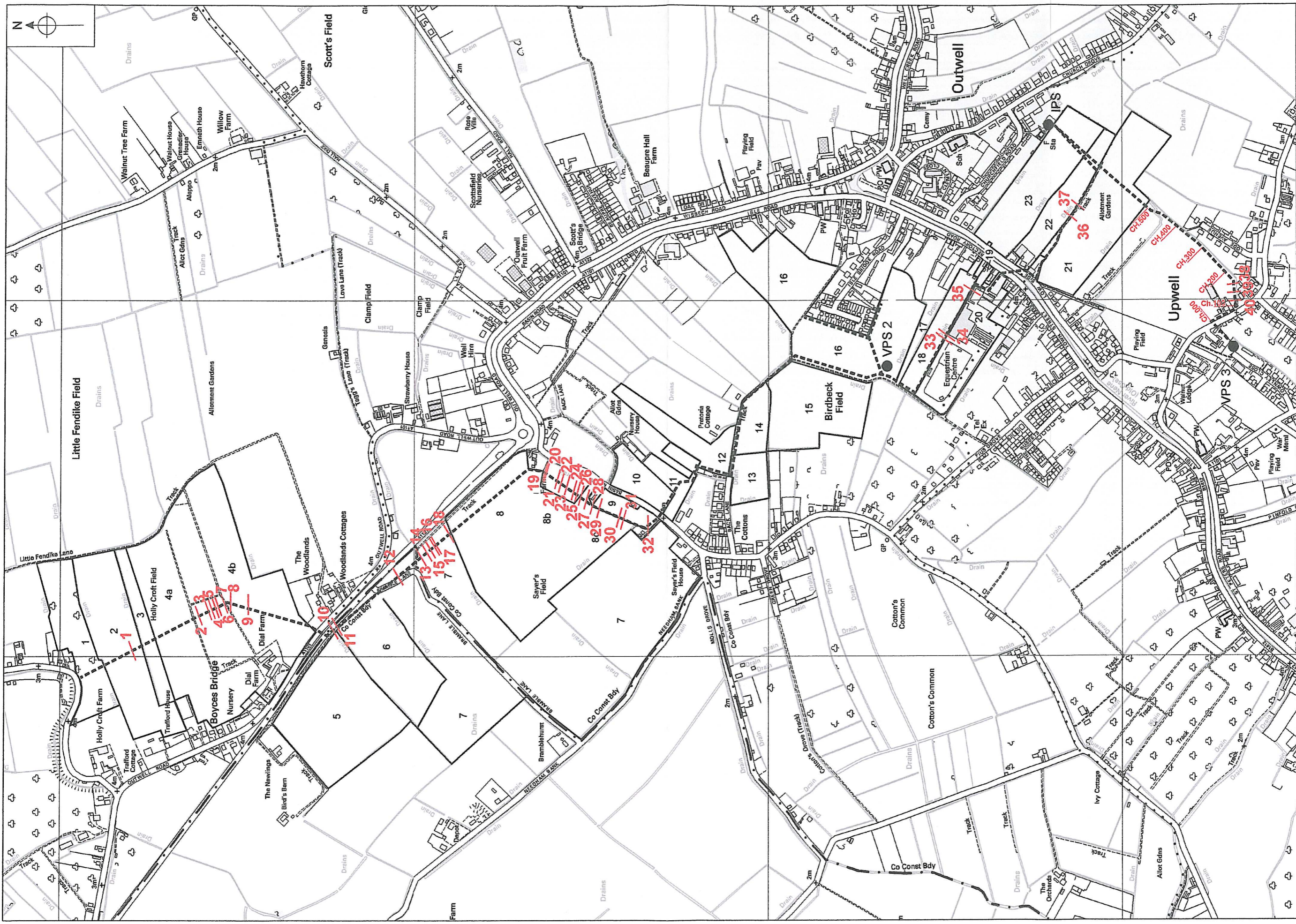


Figure 4. Pipeline showing position of sections. Scale 1:10,000

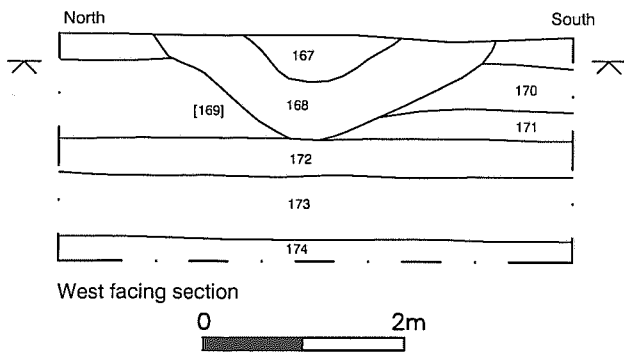


Figure 5. Section 1. Field 2. Ditch [169].
Scale 1:75

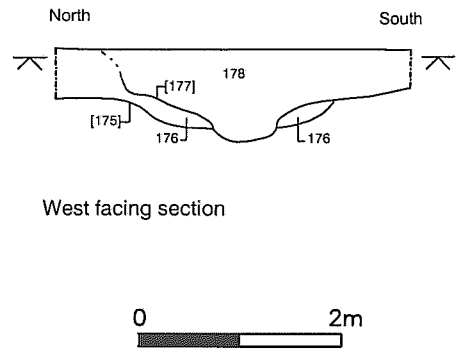


Figure 6. Section 2. Field 4a. Ditches [175] and [177].
Scale 1:75

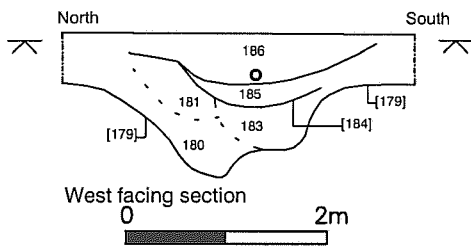


Figure 7. Section 3. Field 4a. Ditches [179], [182] and [184].
Scale 1:75

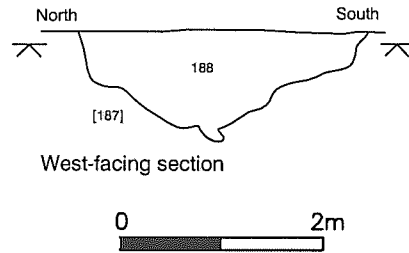


Figure 8. West-facing section 4. Field 4a. Ditch [187].
Scale 1:75

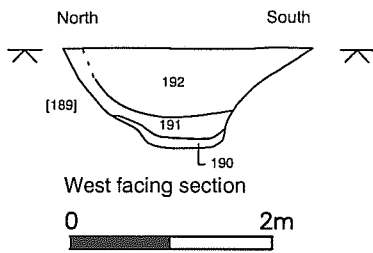


Figure 9. Section 5. Field 4a. Ditch [189].
Scale 1:75

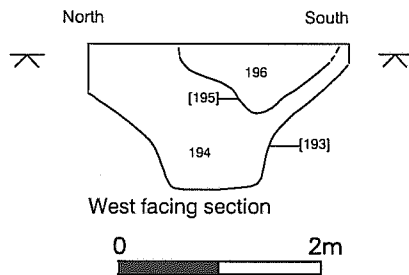


Figure 10. Section 6. Field 4a. Ditches [193] and [195].
Scale 1:75

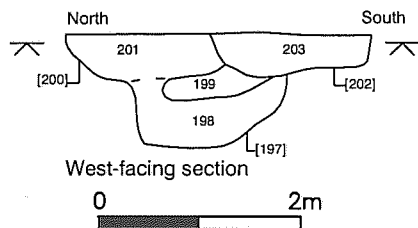


Figure 11. Section 7. Field 4b. Ditches [197], [200] and [202].
Scale 1:75

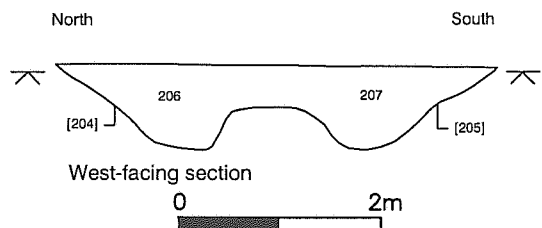


Figure 12. Section 8. Field 4b. Ditches [204] and [205].
Scale 1:75

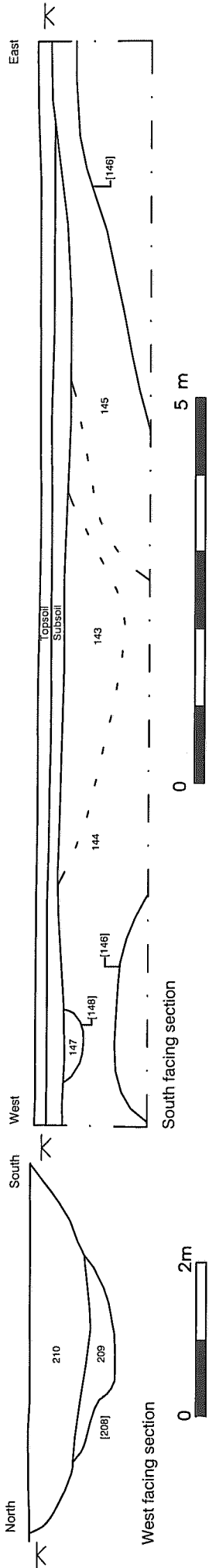


Figure 13. Section 9. Field 4b. Ditch [208].
Scale 1:75

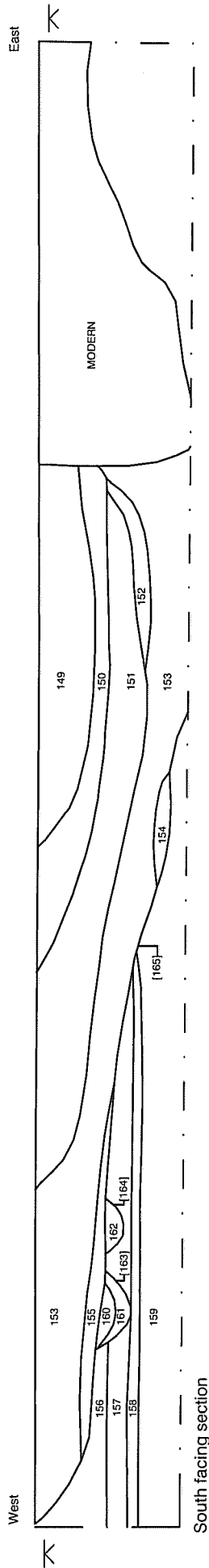


Figure 14. Section 10. Field 5. Solution feature [146] and ditch [148].
Scale 1:75

Figure 15. Section 11. Field 6. Ditches [163], [164] and [165].
Scale 1:75

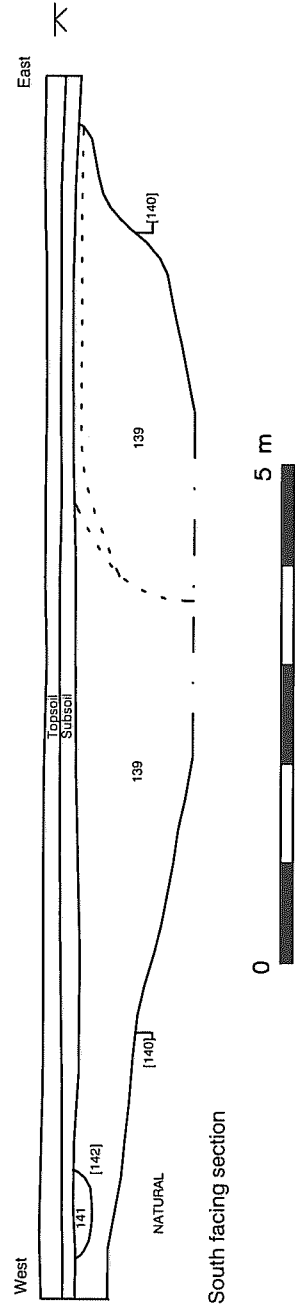


Figure 16. Section 12. Field 6. Solution feature [140] and ditch [142].
Scale 1:75

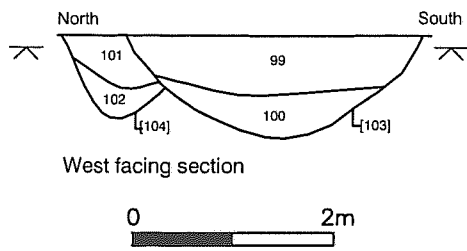


Figure 17. Section 13. Field 7. Ditches [103] and [104].
Scale 1:75

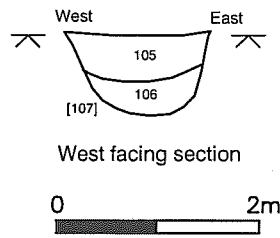


Figure 18. West-facing section 14. Field 7. Ditch [107].
Scale 1:75

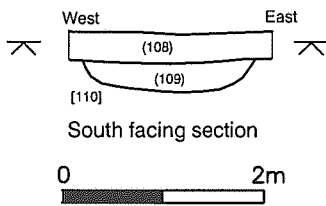


Figure 19. Section 15. Field 7. Ditch [110].
Scale 1:75

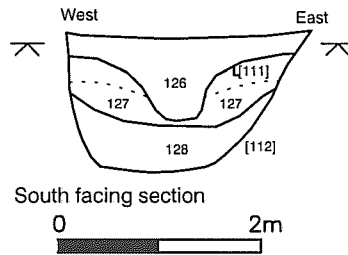


Figure 20. South-facing section 16. Field 7. Ditches [114] and [115].
Scale 1:75

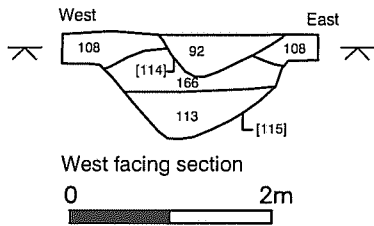


Figure 21. West-facing section 17. Field 7.
Ditches [114] and [115]. Scale 1:75

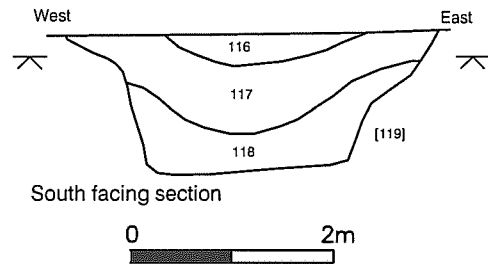


Figure 22. South-facing section 18. Field 7.
Ditch [119]. Scale 1:75

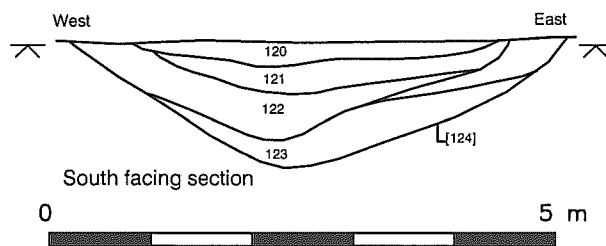


Figure 23. South-facing section 19. Field 7. Ditch [124].
Scale 1:75

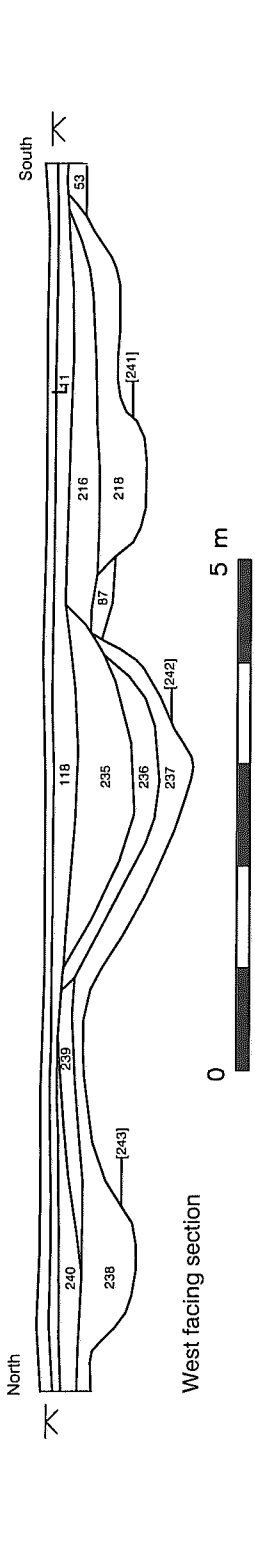


Figure 24. Section 20. Field 8b. Ditches [241], [242] and [243]. Scale 1:75.

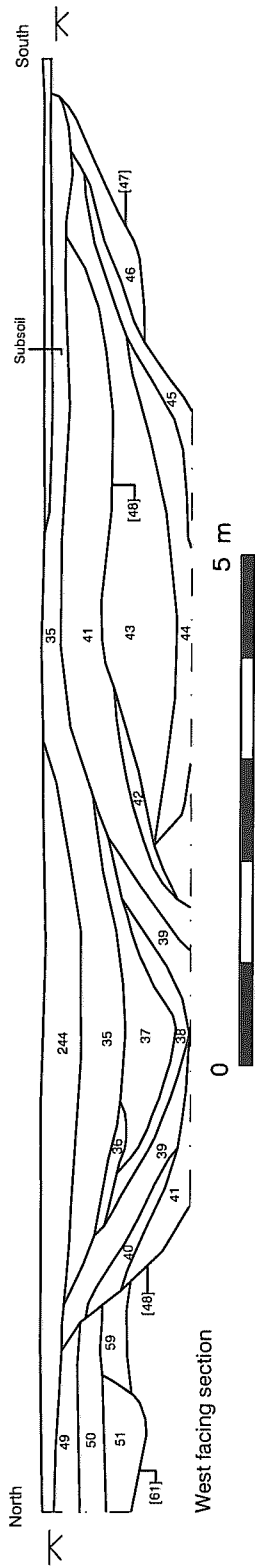


Figure 25. Section 21. Field 8b. Ditches [47], [48] and [61]. Scale 1:75.

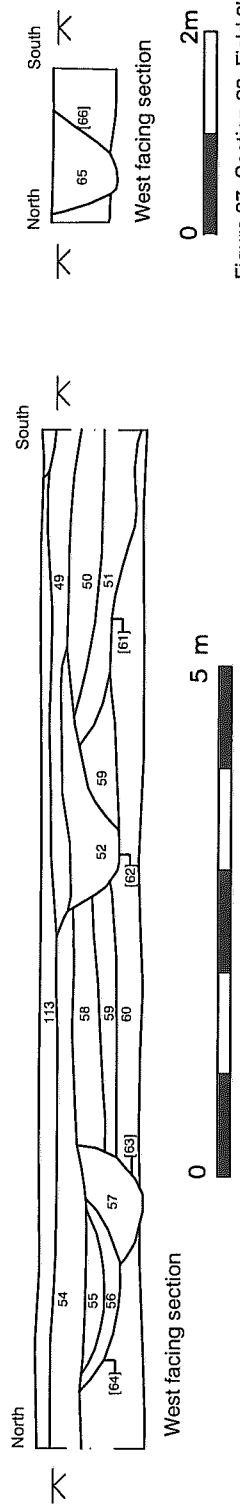


Figure 26. Section 22. Field 8b. Ditches [61], [62], [63] and [64]. Scale 1:75.

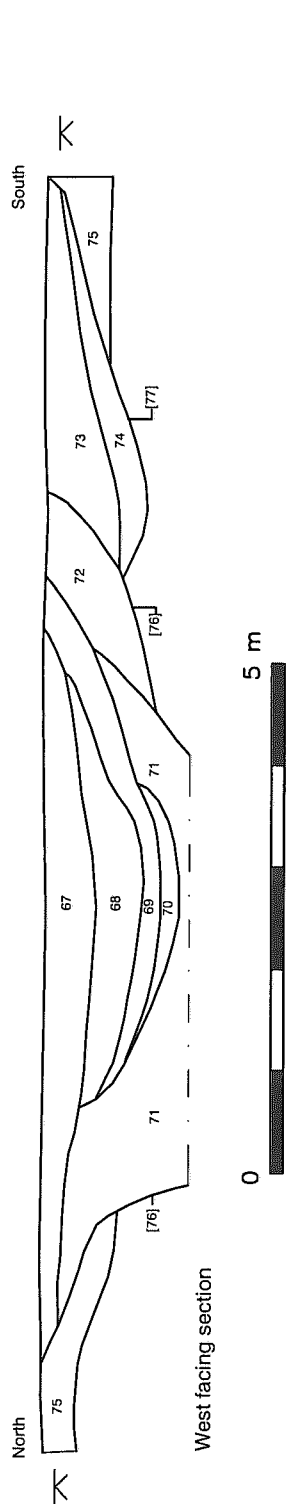


Figure 27. Section 23. Field 8b. Ditch [66]. Scale 1:75.

Figure 28. Section 24. Field 8b. Ditches [76] and [77]. Scale 1:75.

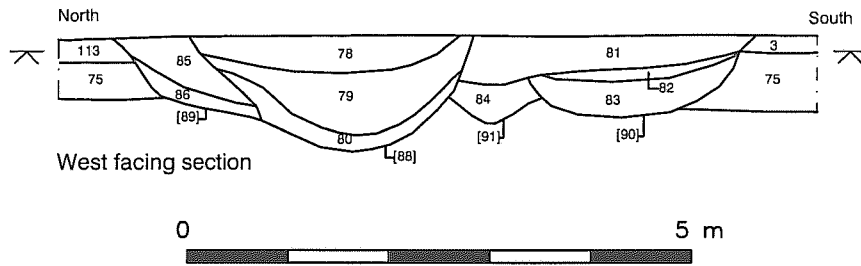


Figure 29. Section 25. Field 8b. Ditches [88], [89], [90] and [91].
Scale 1:75.

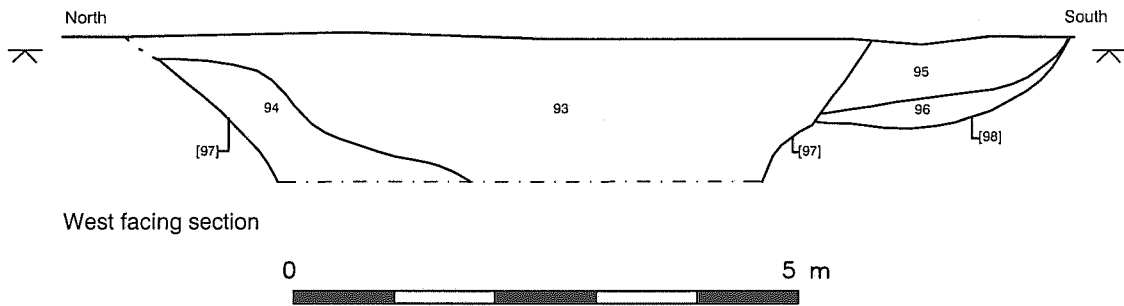


Figure 30. Section 26. Field 8b. Ditches [97] and [98].
Scale 1:75.

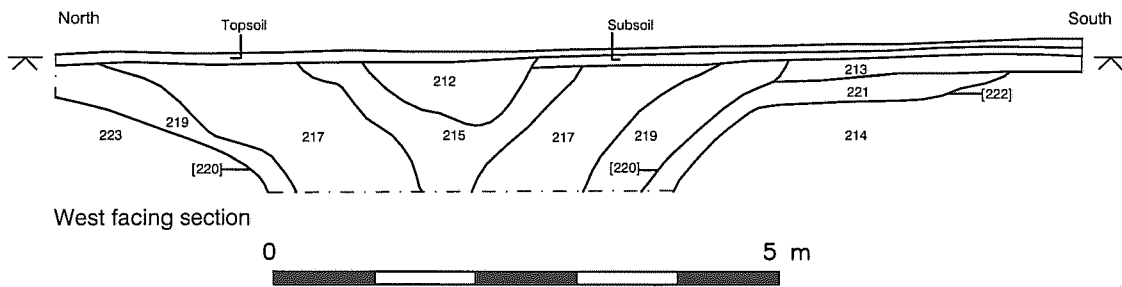


Figure 31. Section 27. Field 8c. Ditches [220] and [222].
Scale 1:75.

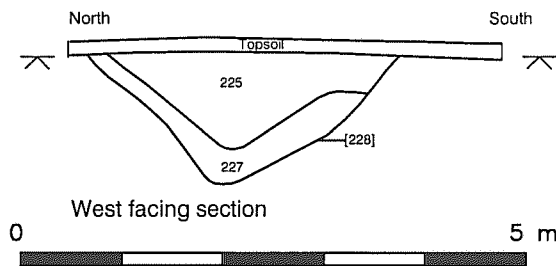


Figure 32. West facing section 28. Field 8c. Ditch [228].
Scale 1:75.

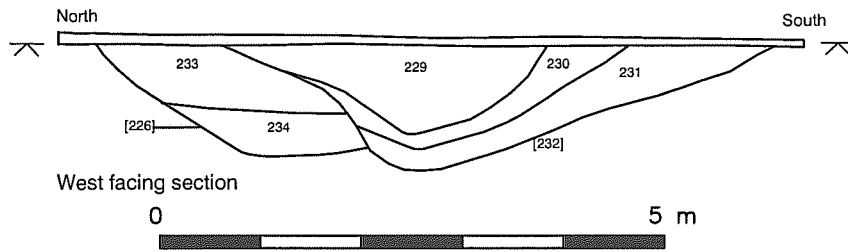


Figure 33. Section 29. Field 8c. Ditches [226] and [232].
Scale 1:75

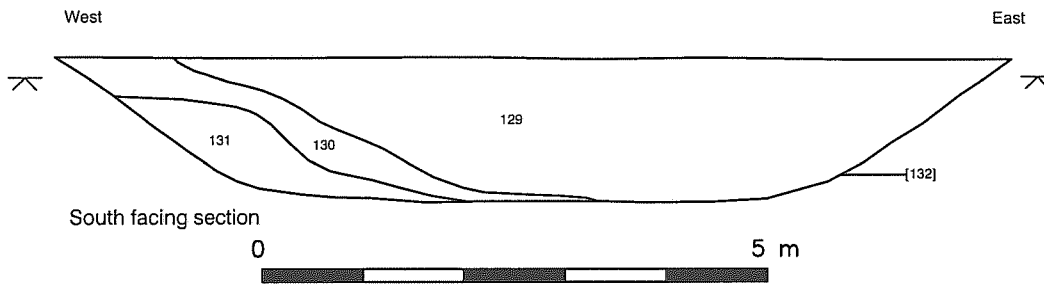


Figure 34. Section 30. Field 8c. Ditch [132].
Scale 1:75

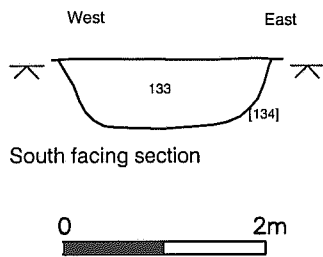


Figure 35. Section 31. Field 8c. Ditch [134].
Scale 1:75

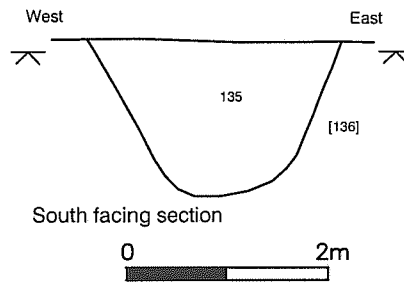


Figure 36. Section 32. Field 9. Ditch [136].
Scale 1:75

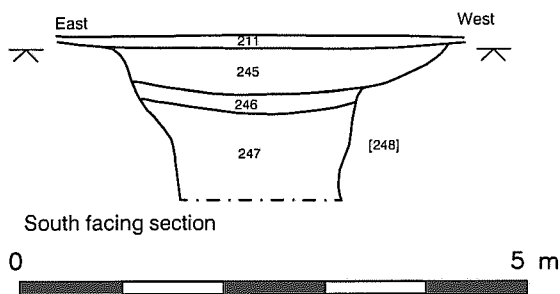


Figure 37. Section 33. Field 18. Ditch [248].
Scale 1:75

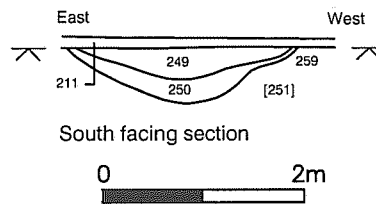


Figure 38. Section 34. Field 18. Ditch [251].
Scale 1:75

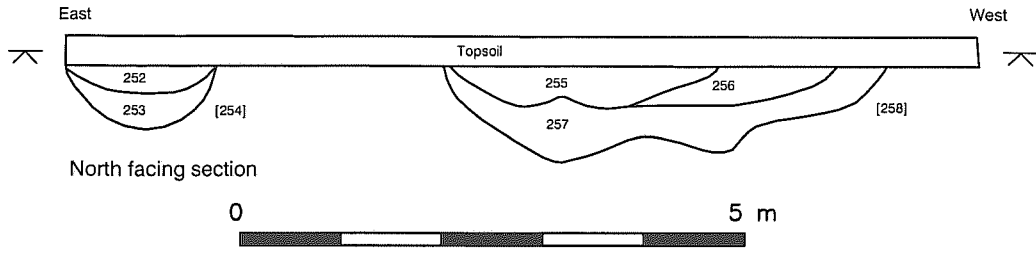


Figure 39. Section 35. Field 18. Ditches [254] and [258].
Scale 1:75

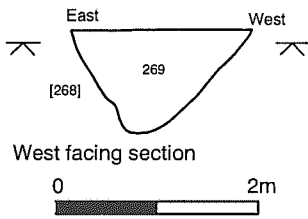


Figure 40. Section 36. Field 22. Ditch [268].
Scale 1:75

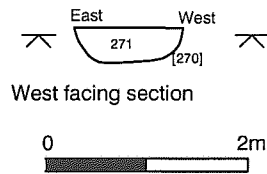


Figure 41. Section 37. Field 22. Ditch [270].
Scale 1:75

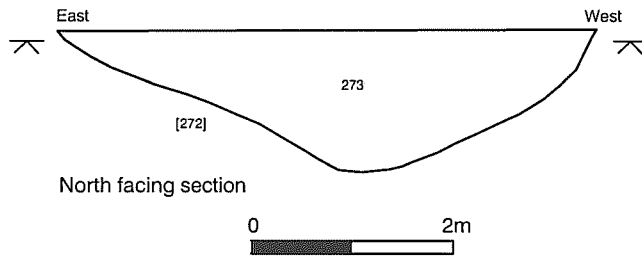


Figure 42. Section 38. Chainage 100-200. Ditch [272].
Scale 1:75

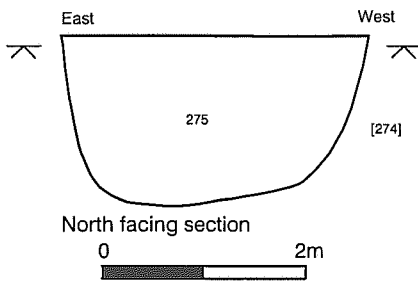


Figure 43. Section 39. Chainage 100-200. Pit [274].
Scale 1:75

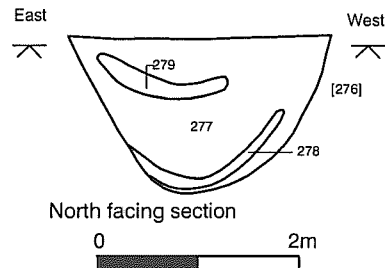


Figure 44. Section 40. Chainage 100-200. Pit [276].
Scale 1:75