Archaeological evaluation and geoarchaeological investigation at St Andrew's Road, Weeley, Essex, CO16 9HR

June 2016

by Laura Pooley

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1 Summary

An archaeological evaluation by trial-trenching and geoarchaeological investigation was carried out in advance of the construction of fourteen new dwellings at St Andrew's Road, Weeley.

Evaluation: *Two pieces of worked flint were identified dating from the Late Neolithic to Early Bronze Age, and a pit and residual pottery sherds indicate activity from the Mid-Late Iron Age into the early Roman period (1st century). Ditches dating from the late Roman period (late 3rd to 4th century) probably formed field boundaries, and three spreads of material may be related to the infilling of hollows or even possibly of ponds. A post-medieval field boundary was also excavated and several modern features were probably associated with a small temporary structure on the site.*

Geoarchaeological investigation: *There was no evidence of any Palaeolithic remains.*

2 Introduction (Fig 1)

This is the archive report for an archaeological evaluation by trial-trenching at St Andrew's Road, Weeley, Essex which was carried out 22nd-24th June 2016. The work was commissioned by Phil Holding of Horizon Construction in advance of the construction of fourteen new dwellings. The work was undertaken by Colchester Archaeological Trust (CAT).

In response to consultation with Essex County Council Place Services (ECCPS), Historic Environment Advisor Adrian Gascoyne advised that, in order to establish the archaeological implications of this application, the applicant should be required to commission a scheme of archaeological investigation in accordance with the *National Planning Policy Framework* (DCLG 2012).

All archaeological work was carried out in accordance with a *Brief for Archaeological Trial Trenching*, detailing the required archaeological work, written by Adrian Gascoyne (ECCPS 2016), and a Written Scheme of Investigation (WSI) prepared by CAT in response to the brief and agreed with ECCPS (CAT 2016).

In addition to the brief and WSI, all fieldwork and reporting was done in accordance with English Heritage's *Management of Research Projects in the Historic Environment* (*MoRPHE*) (English Heritage 2006), and with *Standards for field archaeology in the East of England* (EAA **14** and **24**). This report mirrors standards and practices contained in the Institute for Archaeologists' *Standard and guidance for archaeological field evaluation* (CIfA 2014a) and *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014b).

3 Archaeological background

The following archaeological background utilises the Essex Historic Environment Record (EHER) held at Essex County Council, County Hall, Chelmsford.

The site lies within an area identified by a Historic England commissioned project as having high Palaeolithic potential (O'Connor, 2015). The superficial geology of the area is mapped as Cooks Green/Wivenhoe gravel which is a deposit laid down by the ancestral Thames when it flowed across the Tendring area. This gravel body has been associated with a number of Palaeolithic flint finds, many of which came from the surrounding area and nearby Dakings Pit.

The site lies adjacent to the historic settlement of Weeley. Listed buildings survive within the historic core and along The Street which date from the 15th to 18th century.

Historically brick and tile works operated in the area and there is evidence of historic quarrying in the adjacent field.

There has been little archaeological investigation within the surrounding area. However, the potential for survival of archaeological remains is evident from the Historic Environment Character Zone assessment (HECZ 6.2) which comprises the village of Weeley and the flattish open landscape around it. There are areas of cropmarks within this zone, largely corresponding to the extent of the Kesgrave sands and gravels. A number of these represent medieval or post-medieval field boundaries, others are clearly indicative of surviving earlier archaeological features. Excavations in advance of the construction of the A133 revealed a series of sites, dating from the Bronze Age onwards. These include the medieval moated site of Gutteridge Hall, illustrating the archaeological potential of this zone. It is probable that further medieval sites relating to the historically dispersed and polyfocal nature of the settlement pattern are also present. The alluvium of the Holland and Weeley Brook valleys may contain palaeoenvironmental deposits. Surviving remains from the medieval and post-medieval periods comprise listed buildings, including the industrial complex at Thorpe Maltings, and the historic landscape of fields and trackways.

4 Results (Figs 2-6)

Six trial-trenches were mechanically excavated under archaeological supervision across the development site.

Trench 1 (T1), 30m long by 1.8m wide

Modern sandy/silty loam topsoil (L1, *c* 280-300mm thick) sealed a layer of silty-clay subsoil (L2, *c* 30-150mm thick), which sealed natural silty-sand (L3, identified at a depth of *c* 310-410mm below current ground level).

Natural feature F1 was identified at the south end of the trench. To the north, subsoil L2 had been cut by a layer of sandy-clayey silt (L4, *c* 370mm thick) sealing modern brick wall foundation F8 and brick/tile/stone packed cuts F7 and F9. Cut F9 and also pit F10 appear to be related to the demolition of this structure. All of the modern structural features at the north end of this trench cut through a layer of Roman slightly sandy, silty-clay (L5, *c* 450mm thick) which was approximately 7m long.

Photograph 1 T1, looking S

Photograph 2 T1, F7-F9 & L5, looking E

Trench 2 (T2), 30m long by 1.8m wide

Modern sandy/silty loam topsoil (L1, *c* 280mm thick) sealed a layer of silty-clay subsoil (L2, *c* 160mm thick), which sealed natural silty-sand (L3, identified at a depth of *c* 450mm bcgl).

At the east end of the trench were N-S ditch F6 and E-W ditch or elongated pit F2. Both features were dated to the early Roman period and were extremely shallow measuring approximately 0.10m deep and 0.80-0.90m wide.

In the centre of the trench, late Roman ditch F17, aligned WSW to ENE, was cut by Roman ditch F16, aligned NNW to SSE. Both ditches measured approximately 0.35m deep with F17 measuring 1m wide and F16 1.7m wide.

To the west, Roman curved gully F20 terminated against ditch F16. It was a narrow, shallow gully measuring 0.30m wide by 0.05m deep. Five postholes (F21-F25) were identified to the north of gully F20 with one (F28) to the south. The measured between 0.12-0.25m in diameter and 0.09-0.20m deep. Although undated, the postholes are probably associated with the Roman ditches and gullies.

Photograph 3 T2, looking W

Photograph 4 T2, F16-F17, F20-F25, F28, looking W

Trench 3 (T3), 30m long by 1.8m wide

In the centre of the trench, modern sandy/silty loam topsoil (L1, *c* 280mm thick) sealed a layer of silty-clay subsoil (L2, *c* 160mm thick), which sealed natural silty-sand (L3, identified at a depth of *c* 450mm bcgl). Two post-medieval/modern features, pit F26 (brick and peg-tile not retained) and ditch F27, were identified.

To the north and south, modern sandy/silty loam topsoil (L1, *c* 230mm thick) sealed a thick layer of silty subsoil (L2, *c* 540mm thick), which sealed two spreads of silty-clay containing Roman material (L6, identified at a depth of *c* 760mm bcgl). At the north end of the trench L6 was partially removed by TP2 and the layer photographed in section (it could not be drawn due to the depth of TP2). It was a fairly flat-bottomed layer approximately 200mm thick. At the south end of the trench L6 was at least 20m long. Two small spade-slots were dug into L6 to ascertain the depth of the layer. It was also fairly flat-bottomed and approximately 150mm thick. The only finds recorded from L6 were two fragments of Roman ceramic building material and a sherd of Roman pottery.

Photograph 5 TP2 showing L6 (shown by blue arrow), looking NW

Trench 4 (T4), 30m long by 1.8m wide

Modern sandy/silty loam topsoil (L1, *c* 280mm thick) sealed a layer of silty-clay subsoil (L2, *c* 160mm thick), which sealed natural silty-sand (L3, identified at a depth of *c* 440mm bcgl).

A single Roman ditch (F19) was identified at the east end of the trench. The ditch was aligned NNW by SSE, and was probably the same ditch as F16 (T2) and F18 (T6). It was U-shaped and measured approximately 1m wide by 0.29m deep.

Photograph 6 T3, looking S

Photograph 7 T4, looking W

Trench 5 (T5), 30m long by 1.8m wide
Modern sandy/silty loam topsoil (L1, *c* 250mm thick) sealed a layer of silty-clay subsoil (L2, *c* 160mm thick), which sealed natural silty-sand (L3, identified at a depth of *c* 410mm bcgl).

A single Roman ditch (F15) was identified at the south end of the trench. The ditch was early Roman in date and aligned NNW by SSE, appearing to run parallel to ditch F16/F18/F19. It was also U-shape and measured 0.90m wide by 0.35m deep. Four pits were recorded further to the north. Pit F11 was undated, F12 contained Middle-Late Iron Age pottery, F13 late Roman pottery and F14 Roman pottery.

Trench 6 (T6), 20m long by 1.8m wide
Modern sandy/silty loam topsoil (L1, *c* 200mm thick) sealed a layer of silty-clay subsoil (L2, *c* 180mm thick), which sealed natural silty-sand (L3, identified at a depth of *c* 380mm bcgl).

A single Roman ditch (F18) was identified at the west end of the trench. The ditch was aligned NNW by SSE, and was probably the same ditch as F16 (T2) and F19 (T4). It was U-shaped and measured approximately 0.95m wide by 0.31m deep.

Photograph 8 T5, looking N

Photograph 9 T6, looking E

5 Finds

by Stephen Benfield

Finds that can be closely dated to the prehistoric, Iron Age (IA), Late Iron Age (LIA), Roman, ?medieval, post-medieval and modern period were recovered. All of the finds are listed and described by context in Table 2 and a spot date for the finds from each context is also provided. The pottery fabrics referred to broadly follow Brown 1988 (prehistoric pottery), *CAR* **10** (Roman pottery) and *CAR* **7** (post-Roman pottery) with additions of specific fabrics for LIA-type grog-tempered wares and Roman Black surface wares. All of the fabric are listed in Table 1. Roman pottery forms refer to the Camulodunum (Cam) type series (Hawkes & Hull 1947; Hull 1958).

Fabric code	Fabric name
Prehistoric:	
B	Flint-tempered fabric, small-medium size flint inclusions
J	Sand-tempered with vegetable fragment voids, particularly on surfaces
M	Grog-temper (often with some sand or flint) and occasional voids
LIA & Roman:	
GTW	Grog-tempered ware of LIA-type
BACG	Central Gaulish samian
BSW	Black surface wares (general)
CH	Oxidised Hadham wares
DJ	Coarse oxidised wares (general)
GX	Other coarse wares, principally locally produced grey wares
RW	Romanising (grog-tempered) ware
RCW	Romanising coarse ware (some grog or dark organic temper) - typically post-conquest
Post-Roman:	
48D	Staffordshire-type white earthenwares

Table 1 Pottery fabrics

Trench, context and find no.	Form/ description	spot date
T1, F3, 7	**Post-medieval/modern CBM:** (SQ) brick (PMB/MB) (1) (thickness 60mm) coarse fabric with small-medium chalk and some larger slag/ferrous sand inclusions (L18-E20C); second brick piece in red sandy fabric with similar inclusions (L18-E20C); piece with rounded edge in red sandy fabric with occasional small, sandy ferrous inclusions (probably p-med-mod); small piece of orange brick wit some sandy ferrous inclusions (probably p-med-mod); Piece of fine orange tile, fine sandy fabric with finely sanded base, almost certainly machine milled fabric, non specific modern tile (MT) (19-E20C).	**Mod** (19-20C)
T1, F5, 8	**CBM:** (1) small piece of moderately thin CBM from a tile in orange-red fine sand fabric, abraded, 10mm thick (not closely dated but possibly peg-tile (PT) – med-p-med). **Flint:** (1) small natural piece (discarded). **Animal bone:** (SQ) fragments from plate bones (scapula/pelvis) and section from a long-bone sawn-through at one end (butchery/food waste)	**Med – post-med (?)**
T1, F7, 4	**Modern pottery:** (SQ) Fabric 48D White wares and transfer printed tea cup (19-E20 C). **Clay pipe:** (SQ) stem pieces (5) mderately small bore (c 2mm) (c 18-19C). **CBM:** (2) piece from a fine (milled) fabric tile, possibly a pan tile (see F3(7) – possibly part of the same tile) (19-E20C); piece of a modern brick (BR) (thickness 60 mm) (L18-E20C). **Glass:** (3) base of a stemmed drinking glass (clear glass) with pontil scar (chipped) underneath, one other sherd (18-19C); also flat piece of glass in pale green/blue colour/ heavily scratched (probably window glass) (p-med-mod). **Shell:** (1) part of a scallop shell.	**Mod** (L18/19-E20C)
T1, F8, 14	**CBM:** (1) complete Brick (BR) red sandy fabric, not frogged (232 x 107 x 64 mm) (c 19-E20 C)	**Mod** (c19-E20C)
T1, F10, 3	**Clay pipe:** (2) small stem pieces, bore dia c 2 mm (probably 18-19C). **CBM:** (1) peg-tile (PT) corner piece, small sub-rectangular fixing hole close to one corner edge (tile c 13 mm thick), underside as angled striations/bands 15-20 mm wide presumably an impression of the fabrication surface (med-p-med). **Flint:** (1) squat flake, broken from a larger piece and heavily battered along the top edge, notching with retouch along the broad end of the flint and some other use wear/edge damage (later	**Mod** (18-19 C)

Trench, context and find no.	Form/ description	spot date
	prehistoric (L Neo-Bronze Age). Iron object (1) (rounded bar forged into a right angle tapering spike at one end) probably a window/shutter pivot (med- post-med). **Stone:** (2) small thin piece of slate (post-med – mod); small piece of red micaceous sandstone. **Animal Bone:** (VSQ) good codition, inc part of pelvic bone from a medium size mammal	
T1, L5, 6	**LIA pottery:** Fabric GTW (2) body sherds, one with small cordons (LIA - L1C BC-M1C AD) **LIA/Early Roman pottery:** (1) Fabric RCW jar with hooked rim (M1C AD). **Metal object:** (1) nail shaft (rectangular section) 105 mm long, head broken away, point missing (Roman?)	**E Rom** (M-L1C)
T2, F2, 1	**Roman pottery:** (SQ) Fabric GX (8) light grey fabric with quartz sand-temper, abraded, includes lid knob and Cam 305B flanged bowl rim (L3-4C) (prob same pot as F17 sx2 (19)); Fabric GX grey, coarse sandy fabric, abraded (Rom). **Fired clay:** (1) very abraded irregular fragment with fine silty orange-red fabric, probably fired clay rather than pottery	**L Rom** (L3-4C)
T2, F6, 5	**Quern:** (1) small piece from the edge of the upper stone of a puddingstone quern. Major (2004) suggests that the manufacture of these querns began in the early 1st century AD and probably did not extend beyond the mid 2nd century (LIA-E/M Rom)	**LIA-E/M Rom** (c M1C AD-M2C)
T2, F6, 9	**IA? pottery:** (2) moderately thick, abraded sandy sherds possibly later IA. **Roman pottery:** (SQ) Fabric BACG, base sherd, quite heavily abraded (2C), Fabric GX (6) light grey fabric with quartz sand-temper, inc beaded jar rim, abraded (Rom, possibly 2nd C+); Fabric GX (1) dark, sandy, micaceous fabric, bowl with double groove around rim, abraded (probably E2C+); Fabric GX (1) one other sight micaceous sandy sherd (Rom); Fabric DJ (1) sandy, orange-red fabric; also Roman beaker base, rough sherd edges (not obviously cut down) very abraded, a brownish sand fabric that includes black and fine silver-white speckles, possibly a Hadham product (Fabric CH) (L3-4/4c?). **CBM:** (2) Roman brick (RB) piece in hard-fired red fine sand fabric; one other small CBM brick/tile piece (Rom). **Flint:** (1) single flake, dorsal face 90% cortex with one earlier flake removal scar at edge, probably made on a rounded small stone/cobble, moderately broad platform, one area of probable use wear on one cortical edge and on the edge with the earlier flake removal (probably Late Neolithic-Bronze Age)	**Rom** (2C+ possibly L3-4C)
T2, F16 sx1, 10	**IA(?) pottery:** (1), small sherd, sandy with some burnt organic matter, abraded, possibly later IA (c 4-1 C BC). **LIA pottery:** (SQ) GTW (5) most sherds abraded (c Late 1C BC/E 1C AD-M1C AD). **Roman pottery:** (SQ) BSW (1), quite abraded; GX (4) most abraded, one sherd from a small jar/bowl or beaker with a small cordon at the base of the neck (Rom, E Rom? C M1-2C). **Fired clay:** (3) small, abraded pieces; one in a fine orange silty fabric with some chaff-like voids from organic material- this might be a briquetage fragment; another in an orange silty fabric with some pale clay inclusions; a third piece is in a moderately hard, dark sandy fabric and might possibly be pottery	**E Rom** (c M-L1C?) with residual LIA
T2, F17, 11	**LIA pottery:** Fabric GTW (3) (L1C BC-M1C AD) **Roman pottery:** (VSQ) Fabric GX (3) shoulder & neck sherd, very abraded, porridgy surface effect (M1-E2C), Fabric GX fine sandy grey fabric (2) (Rom). **Fired clay:** (SQ) two pieces in hard fine sand fabric with black fabric core, (some other very small fragments) **Fired clay object:** brownish red, sandy fabric (3 small pieces) one	**Rom/E Rom** (with residual LIA)

Trench, context and find no.	Form/ description	spot date
	rounded edge piece and one with small void at angle to edge suggesting that these are probably part of a triangular loomweight (IA-E Rom)	
T2, F17 sx2, 19	**Prehistoric pottery:** (2) Fabric B (1) abraded body sherd (prehistoric possibly later prehistoric); Fabric J (1) small sherd, hand-made fine silty fabric with surface vegetable voids (MIA?); Fabric M, small sherd, hand-made, orange fabric with some grog and vegetable voids, abraded (possibly fired clay). **LIA-Roman & Roman pottery:** (VSQ) Fabric GTW (1) shoulder sherd; Fabric GTW/RCW (1) small black surface sherd with some grog-temper (LIA-E Rom); Fabric GX (1) pale-medium grey fabric with quartz sand-temper, Cam 305B (L3-4C) (prob same as F2 (1)). **Fired clay:** (1) irregular small, oxidised sandy piece.	**L Rom** (L3-4C) (with residual prehistoric & LIA-E Rom)
T2, F20, 13	**LIA-Early Roman pottery:** (VSQ) Fabric GTW (3) sandy fabric with sparse-moderate grog-temper, abraded, possibly hand-made (LIA); GTW (1) sherd from a comb-decorated storage jar (LIA-M1C); pottery broadly dating to the late 1st century BC-mid 1st century AD	**LIA-LIA/E Rom(?)**
T3, F27, 17	**CBM:** (1) P-med/mod brick piece, slightly coarse, porous fabric with occasional dark ferrous sand inclusions (> 28 mm thick) (see F3 (7) (p-med/mod)	**P-med/mod**
T3, L6, 15	**Roman pottery:** (1) Fabric GX coarse sandy dark-grey fabric (Rom). **CBM:** (2) Roman tegula (RT) probably from the same tile red & yellowish red sandy fabric (base 24 mm thick) slightly abraded (Rom).	**Rom**
T5, F12, 21	**M-LIA pottery:** (1) small, hard, coarsely sanded greyware sherd from the edge of a base, not closely dated appears more later Iron Age than Roman	**M-LIA?**
T5, F13, 20	**Roman pottery:** (2) small sherds, Fabric GX, medium grey fabric with white quartz sand (Rom possibly late Rom – see late Rom pot in F17(19) in T2), Fabric GX small sherd, grey with red and grey banded fabric core, probably Rom but surfaces appear wiped over and might possibly be medieval (Rom/med?)	**Rom** (late Rom?) (one sherd possibly medieval)
T5, F14, 18	**Roman pottery:** (2) Fabric GX, shoulder from a bowl/jar (Rom)	**Rom**
T5, F15, 16	**Roman pottery:** (Q) Fabric DJ (14) cream/pale buff, slightly powdery, fabric – joining sherds (3) from a small beaker/jar with small, flat-topped rim (M1-E2/2C); other, similar sherds (11) but probably from a second pot as in plae buff-brown fabric (M1-2/3C); Fabric DJ (8) orange-red fabric with grey core, ovid, bead rim beaker with groups of vertical comb lines on body, similar to form Cam 92 (dated Claudio-Neronian); Fabric GTW/RW (8) grog-tempered sherds with black surface from jars (LIA-E Rom, c E-M1C AD); Fabric GX/RCW (1) greyware with black burnt organic inclusions, possibly a sherd from a pedestal base (M-L1/E2C)	**E Rom** (c M-L1C)

Table 2 Finds by context.
Key: VSQ=very small quantity (1-5 pieces/sherds), SQ=small quantity (5-10 pieces/sherds), Q=Quantity (10-20 pieces/sherds), LQ=large quantity (20-50 pieces/sherds)

6 Environmental assessment

by Val Fryer

Introduction and method statement

Excavations at Weeley, undertaken by the Colchester Archaeological Trust (CAT), recorded a limited number of features of probable Roman date. Samples for the evaluation of the content and preservation of the plant macrofossil assemblages were

taken from fills within Trench 2 ditches F2 (finds no. 2, sample 1) and F16 (finds no. 12, sample 2).

The samples were bulk floated by CAT and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed below in Table 1. Nomenclature within the table follows Stace (2010). All plant remains were charred. Modern roots, seeds, arthropod remains and fungal sclerotia were also recorded, with the latter being particular common within both assemblages.

Results
Plant remains are exceedingly scarce within both assemblages. Sample 1 includes a single charred grass (Poaceae) fruit, and although both assemblages contain small pieces of charcoal/charred wood, the density of material noted is quite low and the remains are largely highly comminuted and very rounded and abraded. Other remains are also very scarce, although small fragments of coal (coal 'dust') are present along with black tarry residues (possibly derived from the combustion of the coal) and a single fragment of burnt or fired clay.

Conclusions and recommendations for further work
In summary, the paucity of material within these assemblages almost certainly indicates that both ditches were entirely peripheral to any focus of either domestic or agricultural activity during the Roman period. The abraded and fragmented condition of the few remains which are recorded probably suggests that the material was exposed to the elements for some considerable period prior to accidental incorporation within the ditch fills.

Because of the limited nature of the current assemblages, it is difficult to suggest any strategy for future sampling, should further interventions be anticipated within the St. Andrew's Road area. It is, therefore, recommended that additional samples should only be taken at the discretion of the excavator, with especial attention being paid to any contexts which appear to contain a high density of charred plant remains or features which are of direct cultural, economic or industrial import.

Sample Number	**1**	**2**
Finds Number	**2**	**12**
Feature Number	**F2**	**F16**
Small Poaceae indet.	x	
Charcoal <2mm	x	xxx
Charcoal >2mm	x	xx
Charcoal >5mm		x
Black tarry material	x	
Burnt/fired clay	x	
Small coal fragments	x	x
Sample volume (litres)	**40**	**20**
Volume of flot (litres)	**<0.1**	**<0.1**
% flot sorted	**100%**	**100%**

Table 3 Charred plant macrofossils and other remains

Key for table
x = 1 – 10 specimens xx = 11 – 50 specimens xxx = 51 – 100 specimens

7 Geoarchaeological investigation results

See Appendix 1 for full report

8 Discussion

Archaeological evaluation at St Andrew's Road, Weeley revealed a multi-phased site. Two pieces of residual worked flint indicate activity in the Late Neolithic to Early Bronze Age. A pit (F12) and a number of residual pottery sherds also show small-scale activity in the Mid-Late Iron Age which probably continued into the early Roman period (mid-late 1st century). Ditch F15 and gully F20 may date to this early Roman phase, but are perhaps more likely to be associated with later activity.

Five features date to the later Roman period (late 3rd to the 4th century). Ditch F16/F18/F19 was recorded for a distance of 22m. Aligned NNW-SSE it appears to be parallel to ditch F15 further to the east, which might suggest that F15 is actually also of a later Roman date. Together with ditches F17 and F6, on a WSW-ENE and N-S alignment respectively, they probably formed a system of field boundaries.

Roman layers L6 in T3 are of particular interest. The size of the layers would suggest a large spread of material, possibly used to infill ground hollows or even to infill a feature like a pond. Layer L5 in T1 may be of a similar nature, but both layers would need to be further investigated before they could be positively identified.

An E-W ditch (F27) of post-medieval date may represent a field boundary and the modern features in T1 are all probably associated with a small temporary structure like a shed or barn. Two similar structures are still standing in the north-west corner of the site and no evidence of a permanent structure is apparent on any of the OS mapping.

The geoarchaeological investigation revealed no evidence of Palaeolithic remains.

9 Acknowledgements

CAT thanks Phil Holding of Horizon Construction for commissioning and funding the work. The project was managed by C Lister, fieldwork was carried out by B Holloway, R Mathieson, N Rayner, A Wade and M Baister. The geoarchaeological investigation was carried out by P Allen with assistance by A Wightman. Figures are by RM and E Holloway. The project was monitored for ECCPS by Adrian Gascoyne.

10 References

Note: all CAT reports, except for DBAs, are available online in PDF format at http://cat.essex.ac.uk

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CAR **7**	2000	*Colchester Archaeological Report **7**: Post-Roman pottery from excavations in Colchester, 1971-85,* by J Cotter
CAR **10**	1999	*Colchester Archaeological Report **10**: Roman pottery from excavations in Colchester, 1971-86,* by R Symonds and S Wade
CAT	2014	*Health and Safety Policy*
CAT	2016	*Written Scheme of Investigation (WSI) for archaeological excavation and geoarchaeological investigation at St Andrew's Road, Weeley, Essex, CO16 9HR*
CIfA	2014a	*Standard and guidance for archaeological field evaluation*
CIfA	2014b	*Standard and guidance for the collection, documentation, conservation and research of archaeological materials*
DCLG	2012	*National Planning Policy Framework*. Dept of Communities and Local Government.
EAA **14**	2003	*Standards for field archaeology in the East of England*, East Anglian

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11 Abbreviations and glossary

Bronze Age	period circa 2500- 700 BCE
CAT	Colchester Archaeological Trust
CIfA	Chartered Institute for Archaeologists
context	specific location of finds on an archaeological site
ECCPS	Essex County Council Place Services
EHER	Essex Historic Environment Record
feature (F)	an identifiable thing like a pit, a wall, a drain: can contain 'contexts'
Iron Age	period from 700 BC to Roman invasion of AD 43
layer (L)	distinct or distinguishable deposit of soil
medieval	period from AD 1066 to Henry VIII
modern	period from *c* AD 1800 to the present
natural	geological deposit undisturbed by human activity
NGR	National Grid Reference
post-medieval	from Henry VIII to *c* AD 1800
prehistoric	pre-Roman
residual	something out of its original context, eg a Roman coin in a modern pit
Roman	the period from AD 43 to *c* AD 410
Section	(abbreviation sx or Sx) vertical slice through feature/s or layer/s
WSI	Written Scheme of Investigation

12 Contents of archive

Finds: one box

Paper and digital record

One A4 document wallet containing:
The report (CAT Report 982)
ECC Evaluation Brief, CAT Written Scheme of Investigation
Original site record (Feature and layer sheets, Finds record, plans)
Site digital photos and log, Architectural plans, Attendance register, Risk assessment

13 Archive deposition

The paper and digital archive is currently held by the Colchester Archaeological Trust at Roman Circus House, Roman Circus Walk, Colchester, Essex CO2 7GZ, but will be permanently deposited with Colchester Museum under accession code COLEM: 2016.54

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REPORT ON THE QUATERNARY GEOARCHAEOLOGY OF THE SITE AT ST ANDREW'S ROAD, WEELEY, ESSEX

Site Visit 23 June 2016

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ST ANDREW'S ROAD, WEELEY, ESSEX

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ST ANDREW'S ROAD, WEELEY, ESSEX

LOCATION

The site lies approximately 15 km east of Colchester, on a gently sloping ridge at 23 – 25 mOD between two of the headwater tributaries of the Holland Brook.

GEOARCHAEOLOGICAL HISTORY

The Site lies at the former confluence of the Thames and Medway as they were c.500,000 years ago. At that time the early Thames was depositing the Wivenhoe Gravels and the conjoined Thames and Medway the Cooks Green Gravels (Figure 1). These gravels have a rich geoarchaeological history:

(a) Interglacial pollen, plant macrofossils, insect remains and two artefacts were recovered from silty clay within from the Wivenhoe Gravels at Wivenhoe Gravel Pit (Bridgland, 1994), about 9 km to the west;
(b) A rich assemblage of artefacts was recovered from Dakings Pit, about 1 km to the north-east, where artefact bearing sandy gravel was overlain by sands. Re-exposure of a 3 m wide section yielded 6 hand-axes, 21 cores and 56 flakes from the sandy gravel (Wymer, 1985);
(c) Interglacial deposits were recovered, but unfortunately not processed, from a cutting during the construction of the A133 by-pass near to Gutteridge Hall, about 1 km to the south-east of the site (Bridgland, 1999).

Thus there is a strong case for geoarchaeological investigation of the St Andrews Road site.

Inspection of the data from the 8 boreholes logs supplied by BRP Associates (2014) showed a bedrock of London Clay overlain by sands and, to a lesser extent, clay with very little gravel. This lack of gravel may be significant in that the sands and clays suggest slower river flow regimes, as at riverside locations, rather than mid-stream gravels. A riverside site has a greater archaeological potential for primary context artefacts and palaeoenvironmental information (from microfossils such as pollen or ostracods and macrofossils such as bones from small and large vertebrates, insects or plant remains). This strengthens the case for a geoarchaeological investigation.

The data from Dakings Pit in Wymer (1985) suggested that artefacts were more likely to be found in sandy gravel such as in BH1, though potential for such recoveries from silty clay could not be ruled out, as at Wivenhoe (Bridgland, 1994). The sands and clays which dominate all the borehole logs stand a good chance of revealing palaeoenvironmental information.

METHODOLOGY

AIMS AND OBJECTIVES

To carry out geoarchaeological investigations by test pitting to clarify the nature of the sub-surface stratigraphy across the site, including the nature of the sediments (i.e. colluvial or fluvial origin)

To establish the potential of the sediments at the site to contain Palaeolithic artefacts or biological remains.

FIELD INVESTIGATIONS

Five test pits were put down (Figure 2) at points chosen to provide a good spatial distribution across the site; TP1, TP2, TP3, TP5, TP6.

TP 4 was not excavated due time pressures and it was considered that the five Test Pits gave a representative cover of the area.

The test pits were put down using a mechanical excavator capable of reaching 4 m below ground surface. However none of the pits reached this depth as their sidewalls began collapsing, usually at about 3 m below ground surface (bgs), rendering the area unsafe. None reached the underlying bedrock, the London Clay. In all cases, for safety reasons, the trial pits were not entered once they reached a depth of 1.0 m. As the topmost c.0.5 m was soil or spoil, only limited amounts the terrace deposits below could be examined in situ.

The pits were excavated in spits and the surface exposed by each scrape of the machine blade was examined visually for changes in the sedimentology of the deposits and for fossil material and the contents of the bucket for worked flint, bone and other bio-environmental material. The test pit locations were recorded using GPS.

The faces were recorded by drawing a representative column 1.25 m wide at a scale of 1:25 (4 cm = 1 m). The faces were also recorded photographically.

RESULTS

The results of the test pitting are given in Tables 1 to5 below and in Figures 1 to 14.

Table 1
TP 1 Log

Ground Surface 23.80 mOD
Beds horizontal.

Unit	m bgs	mOD	Thick (m)	Description	Sample (m bgs)
1.01	0.0 – 0.3	23.8 – 23.5	0.3	Soil	
1.02	0.3 – 0.6	23.5–23.2	0.3	Clayey sand, ?Coverloam	
1.03	0.6 – 0.8	23.2 – 23.0	0.2	Gravel lenses; discontinuous	
1.04	0.8 – 1.3	23.0 – 22.5	0.5	Clayey medium sand	
1.05	1.3 – 1.4	22.5 – 22.4	0.1	Gravel, sandy, clayey	
1.06	1.4 – 2.8	22.4 – 21.0	1.4	Horizontally interbedded silt, sand and gravel, medium sand, small gravel. Fine beds often grey-coloured (reduced, ferrous, iron) and coarser beds brown-orange (oxygenated, ferric, iron). Severe sidewall collapse.	

m bgs – metres below ground surface OD – Ordnance Datum L - litres

Table 2
TP 2 Log

Ground Surface 23.49 mOD
Beds horizontal.

Unit	m bgs	mOD	Thick (m)	Description	Sample (m bgs)
2.01	0.0 – 0.55	23.5–22.95	0.55	Soil	
2.02	0.55 – 0.9	22.95–22.6	0.35	Colluvial sandy gravel, grey	
2.03	0.9 - 2.25	22.6-21.25	1.35	Clayey medium sand with gravel lenses in upper part. Evidence of channels or cryoturbation lobes	
2.04	2.25–2.35	21.25–21.15	0.1	Horizontally interbedded silt, sand and gravel, medium sand, small gravel. Fine beds often grey-coloured (reduced, ferrous, iron) and coarser beds brown-orange (oxygenated, ferric, iron). Severe sidewall collapse.	

m bgs – metres below ground surface OD – Ordnance Datum L - litre

Table 3
TP 3 Log

Ground Surface 24.49 mOD
Beds horizontal.

Unit	m bgs	mOD	Thick (m)	Description	Sample (m bgs)
3.01	0.0 – 0.25	24.5–24.25	0.25	Soil	
3.02	0.25 – 0.6 0.25–1.0	24.25–23.9 24.25-23.5	0.35 0.75	Coverloam, undulating base 10YR4/6 (dark yellowish brown) + 10YR5/3 (brown)	
3.03	0.6 – 1.12 1.0-1.12	23.9-23.38 23.5-23.38	0.52 0.12	Gravelly clay - ?colluvium	
3.04	1.12 – 1.2	23.38–23.3	0.08	Gravel	
3.05	1.2 – 2.0	23.3 – 22.5	0.8	Clay, mottled 7.5YR5/8 (strong brown) + 2.5Y7/2 (light grey) With scattered gravel and gravel lenses	
3.06	2.0 – 3.75	22.5-20.75	1.75	Horizontally interbedded silt, sand and gravel, medium sand, small gravel. Fine beds often grey-coloured (reduced, ferrous, iron) and coarser beds brown-orange (oxygenated, ferric, iron). Severe sidewall collapse.	

m bgs – metres below ground surface OD – Ordnance Datum L - litres

Table 4
TP 5 Log

Ground Surface 23.34 mOD
Beds horizontal.

Unit	m bgs	mOD	Thick (m)	Description	Sample (m bgs)
5.01	0.0 – 0.4	23.35–22.95	0.4	Soil	
5.02	0.4 – 0.75	22.95–22.60	0.35	Colluvial sandy gravel	
5.03	0.75 -1.05	22.6-22.3	0.3	Coverloam	
5.04	1.05–2.2	22.3–21.15	1.15	Clay and sandy clay with lenses of clayey gravel, becoming larger with depth Evidence of channelling or loading between 1.5 and 1.75 m bgs	
5.05	2.2 – 3.2	21.15-20.15	1.0	Medium – fine sand with clayey gravel lens at 2.4 m bgs. Sidewall collapse.	

m bgs – metres below ground surface OD – Ordnance Datum L - litres

Table 5
TP 6 Log

Ground Surface 23.20 mOD
Beds horizontal.

Unit	m bgs	mOD	Thick (m)	Description	Sample (m bgs)
6.01	0.0 – 0.55	23.2-22.65	0.55	Soil	
6.02	0.55–0.75	22.65-22.45	0.2	Humic colluvial sand and gravel Undulating base	
6.03	0.75-0.95	22.45-22.25	0.2	Clayey medium sandy gravel 10YR5/8 (yellowish brown)	
6.04	0.95–3.65	22.25-19.55	2.7	Sandy clay, mottled and veined, dominantly 2.5Y6/2 (light brownish grey) + 7.5YR5/8 (strong brown) Sand lenses at c.2.20 and c.2.40 bgs. Sidewall collapse.	

m bgs – metres below ground surface OD – Ordnance Datum L - litres

The soil present across the site varied in thickness, but was usually about 0.5 m thick. Below that there was often a silty sandy deposit, noted in TP1 (1.02), TP3 (3.02), and TP5 (5.03). This is considered to have been originally a wind-blown deposit, now known as Coverloam, which gives the Tending Peninsula its fertility. Subsequent to its aeolian deposition, it would have been reworked by rainwash, surface run-off and soil biota, so its aeolian characteristics are now muted. Often associated with the coverloam, a silty sandy gravelly deposit was noted, thought to be coarser slopewash deposits (colluvium); seen in TP2 (2.02), TP3 (3.03), TP5 (5.02) and TP6 (6.02).

Below these were fine and medium-grained sands and sandy gravels; TP1 (1.03), TP2 (2.03), TP3 (3.04, 3.05), TP5 (5.04) and TP6 (6.03). At the base were horizontally interbedded silt, sand and gravel, medium sand, small gravel. The fine-grained beds were often grey-coloured, due to the presence of reduced, ferrous, iron, and coarser beds brown-orange from the presence of oxygenated, ferric, iron. The gravelly beds were either very thin or the gravels scattered through silts or clays.

RECOMMENDATIONS

None of the gravelly beds were considered to be likely to yield humanly worked archaeological material. None of the beds yielded any macro-bioenvironmental material (shells, bones, peats) and were not thought likely to have microfossils.

There was no indication that the site would yield bio-environmental or humanly worked Palaeolithic archaeological material. No further Palaeolithic work is recommended.

REFERENCES

Bridgland, D.R. (1994) Quaternary of the Thames. Geological Conservation Review Series. Joint Nature Conservation Committee and Chapman and Hall.

Bridgland, D.R. (1999) 'Wealden Rivers' north of the Thames; a provenance study based on gravel clast analysis. Proceedings of the Geologists' Association, 110, 133 – 148.

BRP Associates (2014) Geotechnical Investigation at Land at St Andrews Road, Weeley, Essex.

Wymer, J.J. (1985) Palaeolithic Sites of East Anglia. Geobooks, Norwich.

Figure 1.

Geological context of site

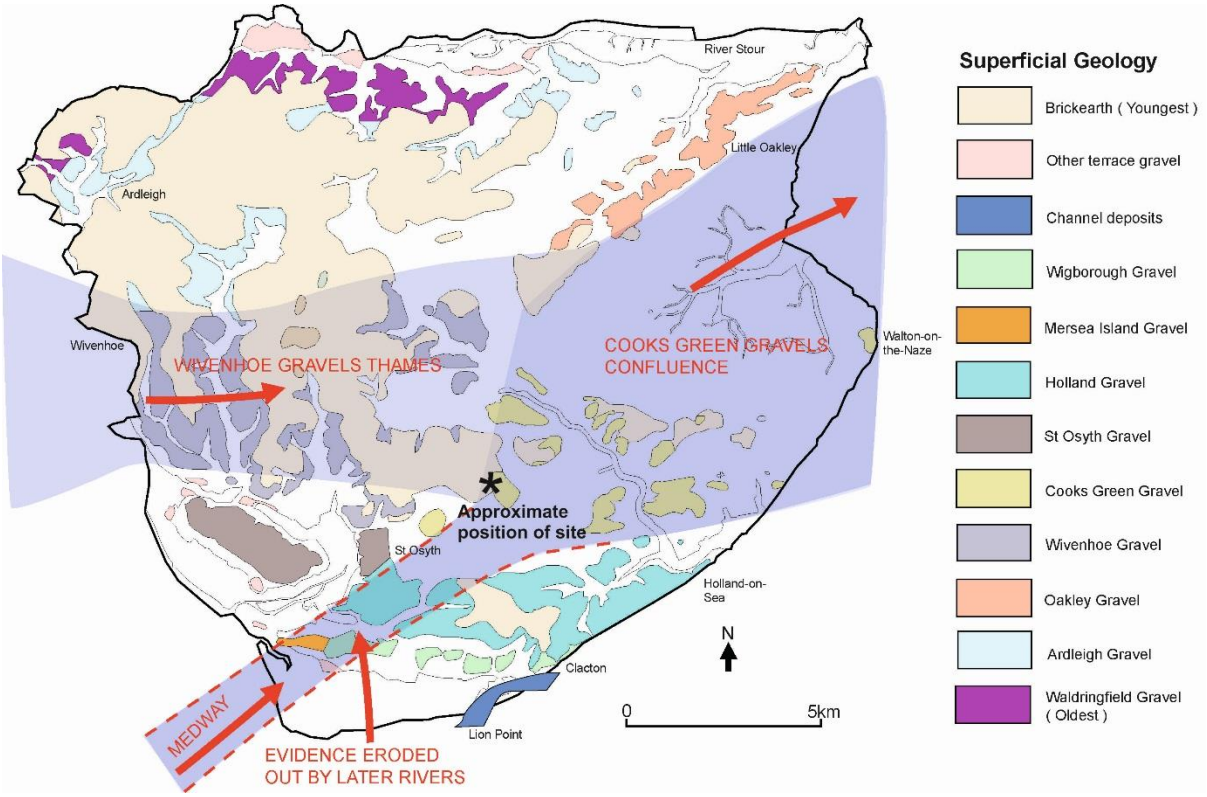


Figure 2

Location of trial pits

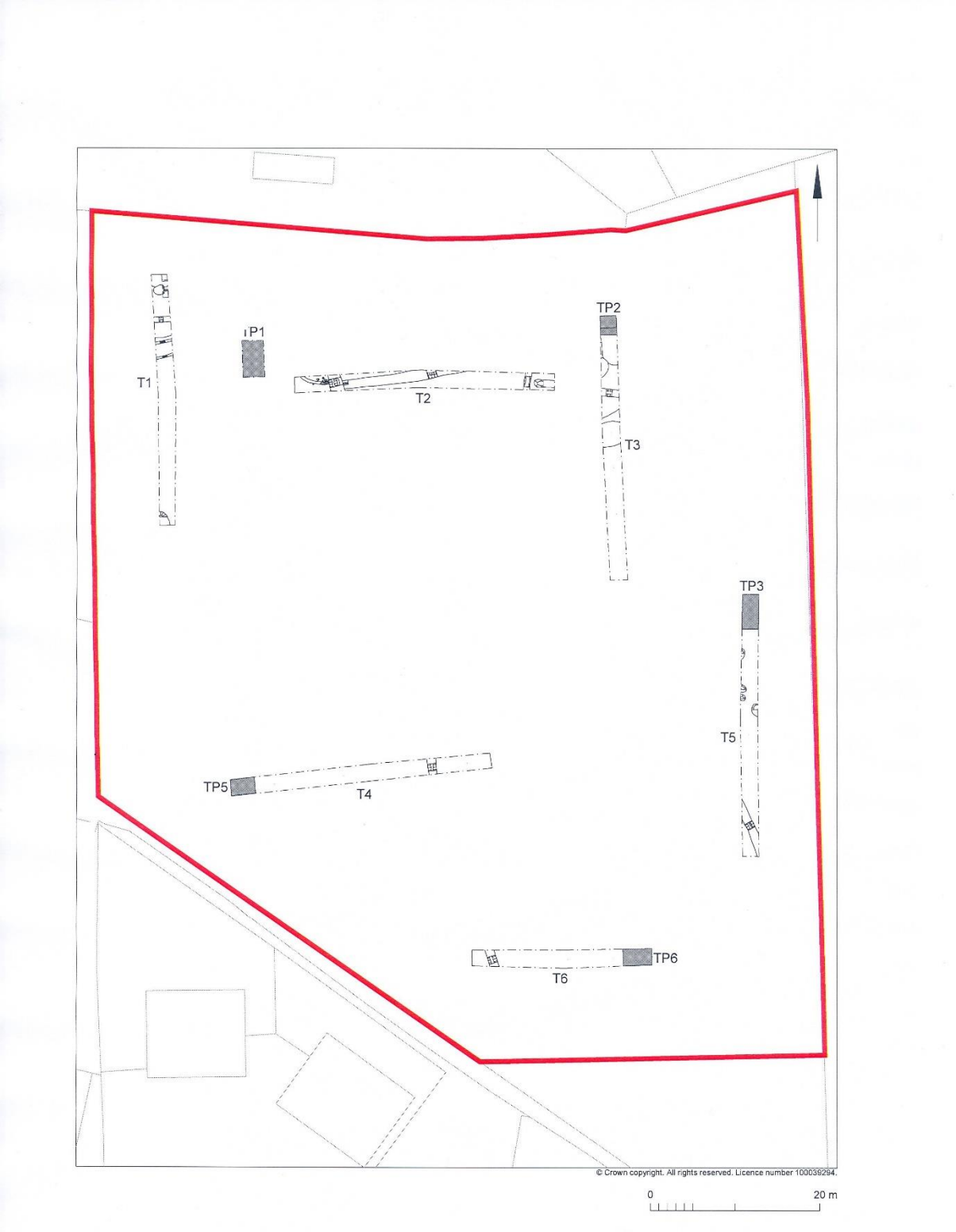


Figure 3

Test Pit 1. Descriptive Log

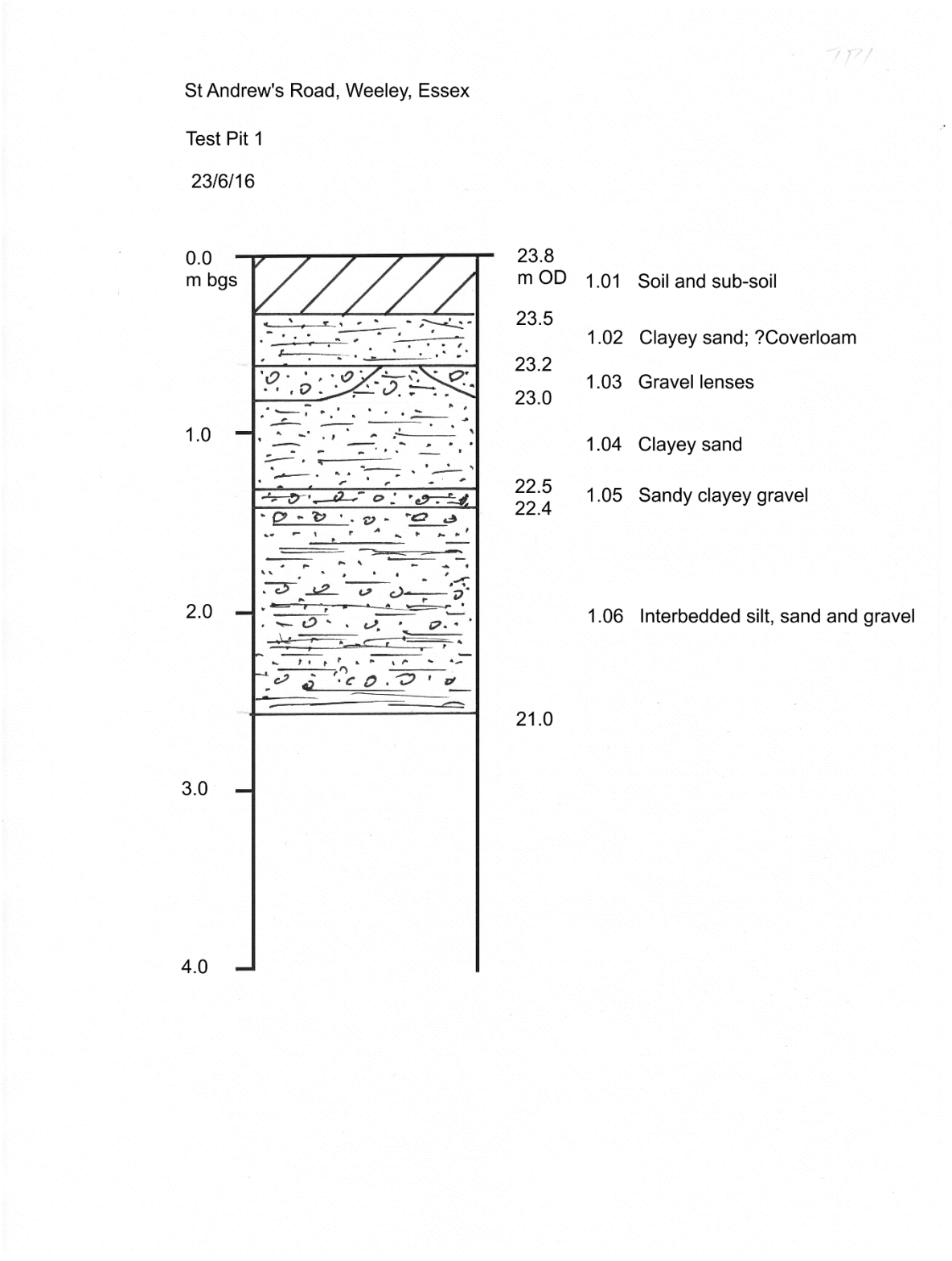


Figure 4

Test Pit 1. Photograph

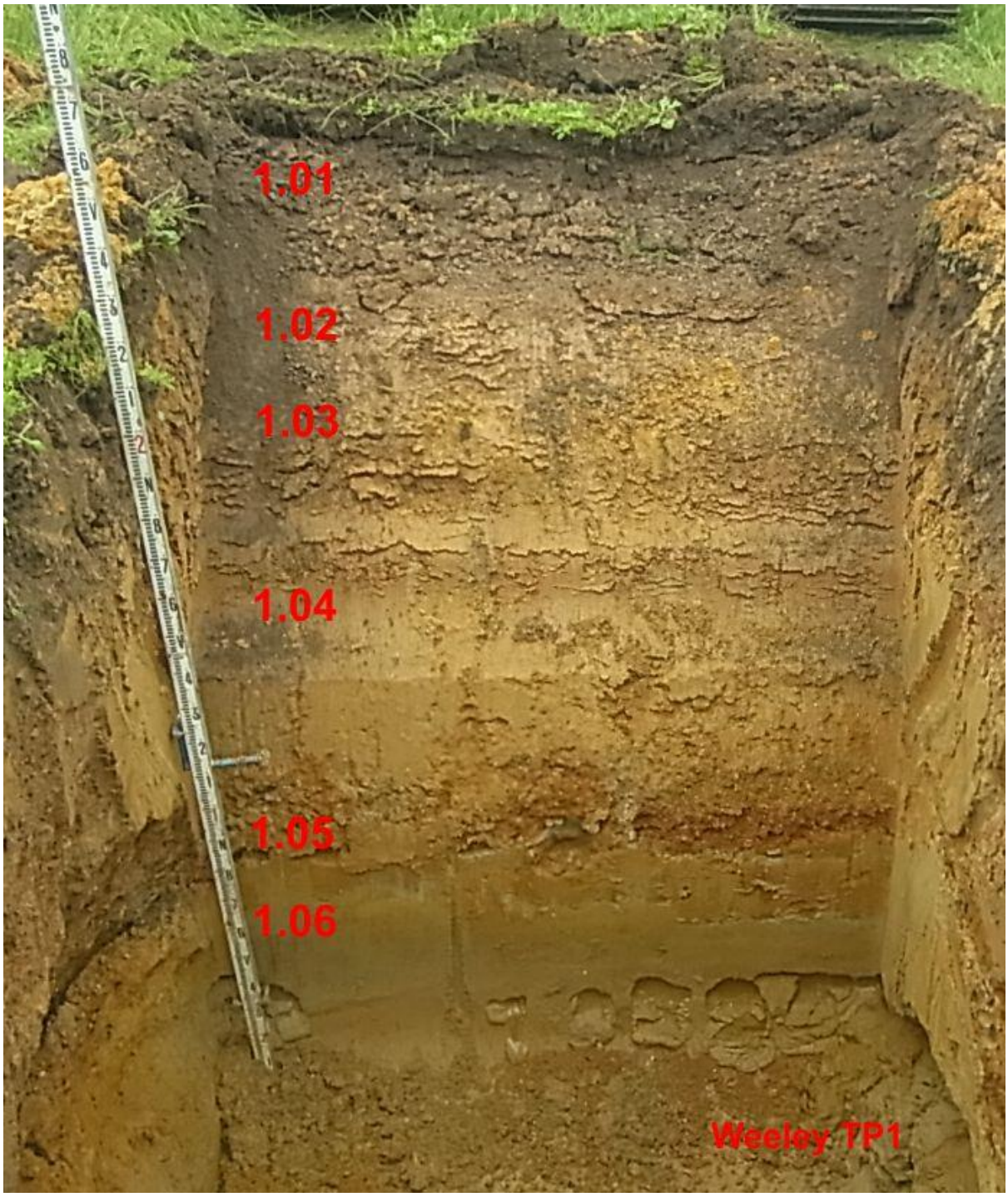


Figure 5

Test Pit 1. Photograph. Detail of Bed 1.06.

Figure 6

Test Pit 2. Descriptive Log.

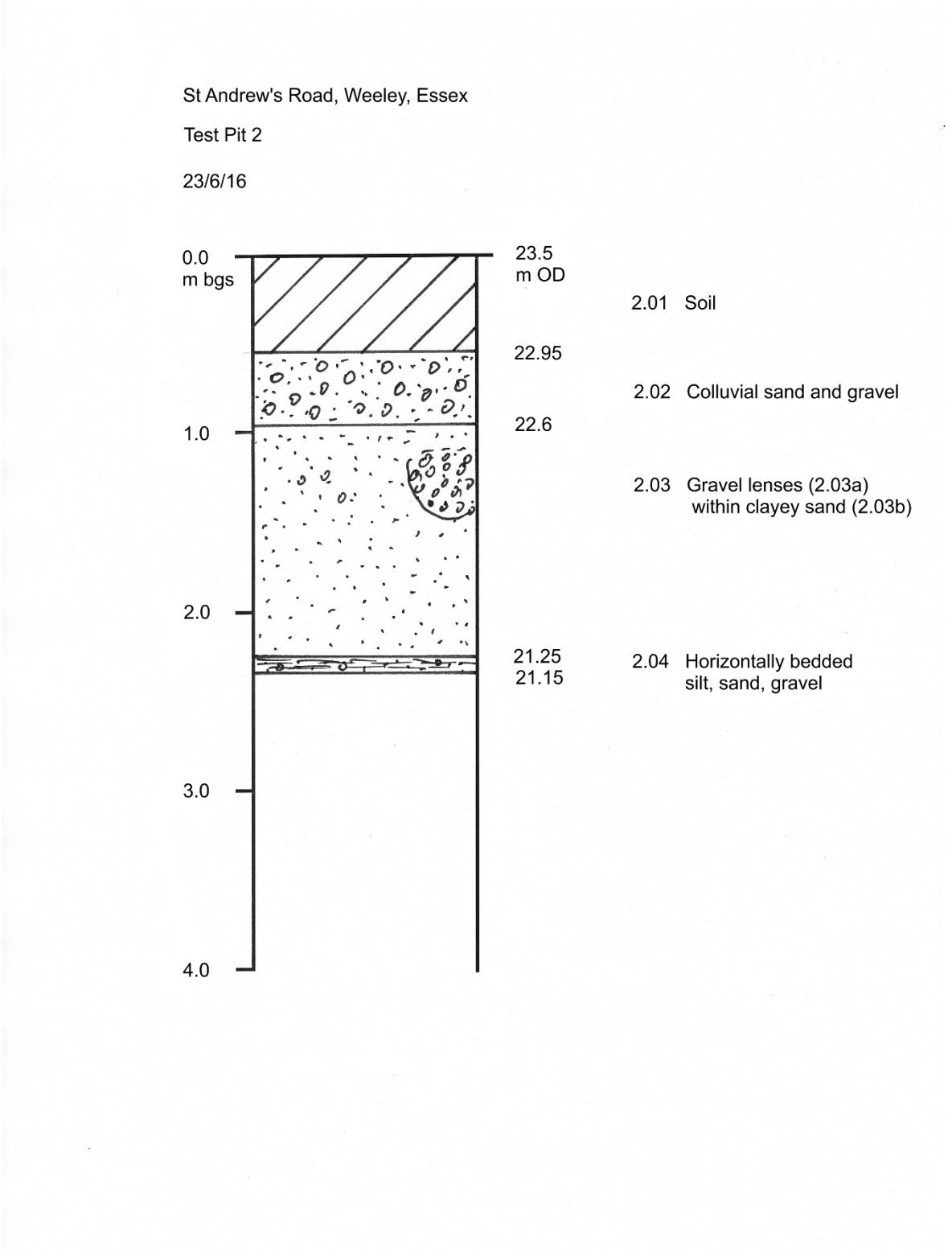


Figure 7.

Test Pit 2. Photograph

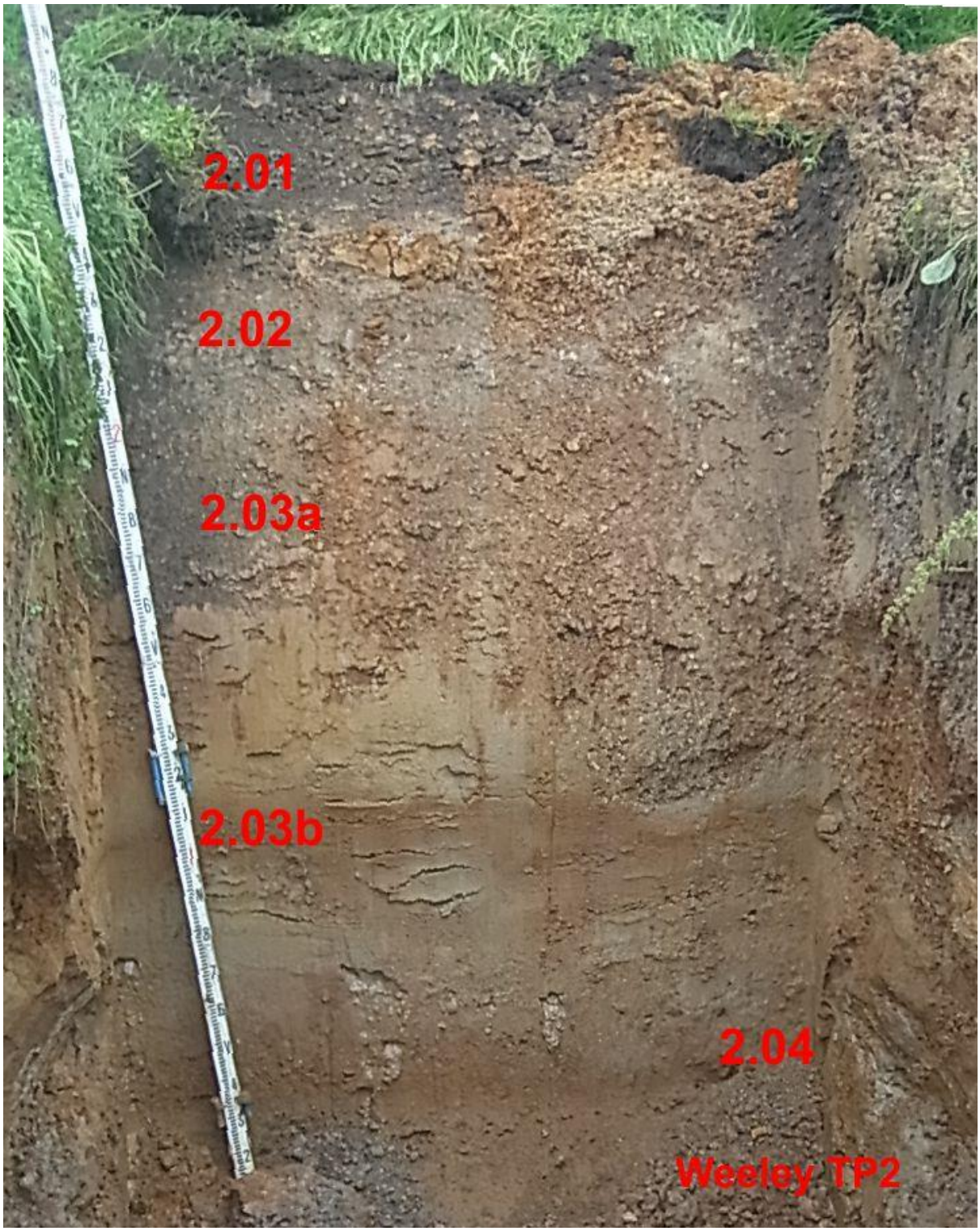


Figure 8.

Test Pit 3. Descriptive Log.

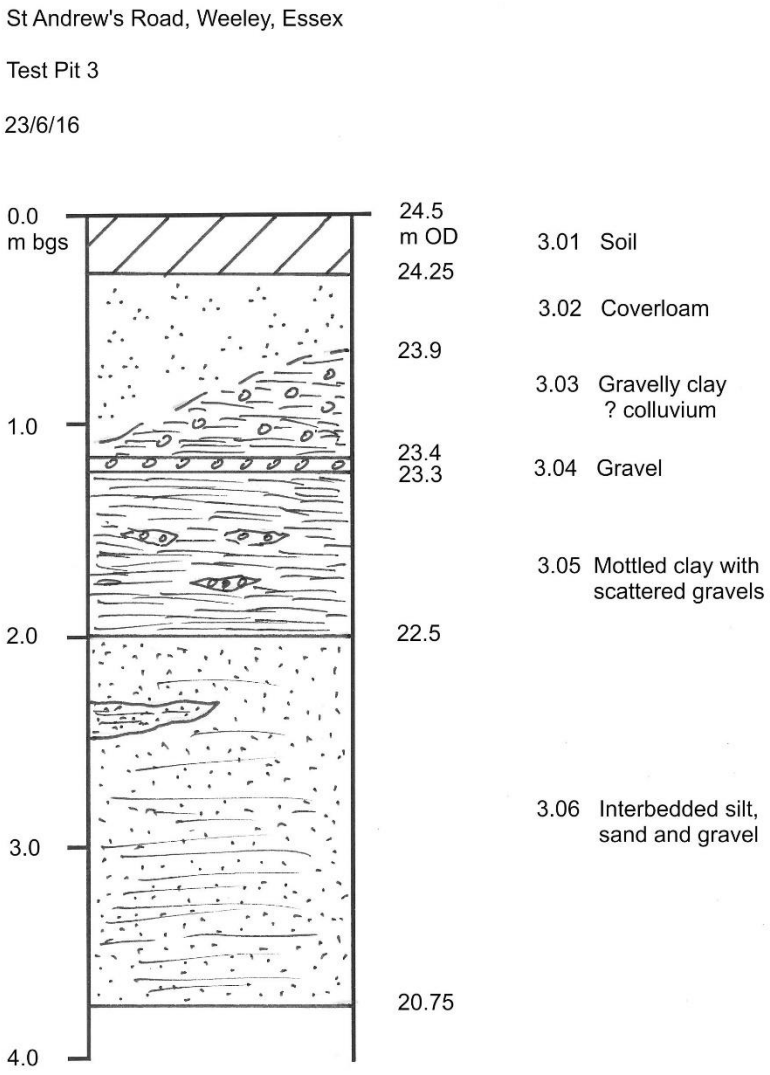


Figure 9.

Test Pit 3. Photograph.

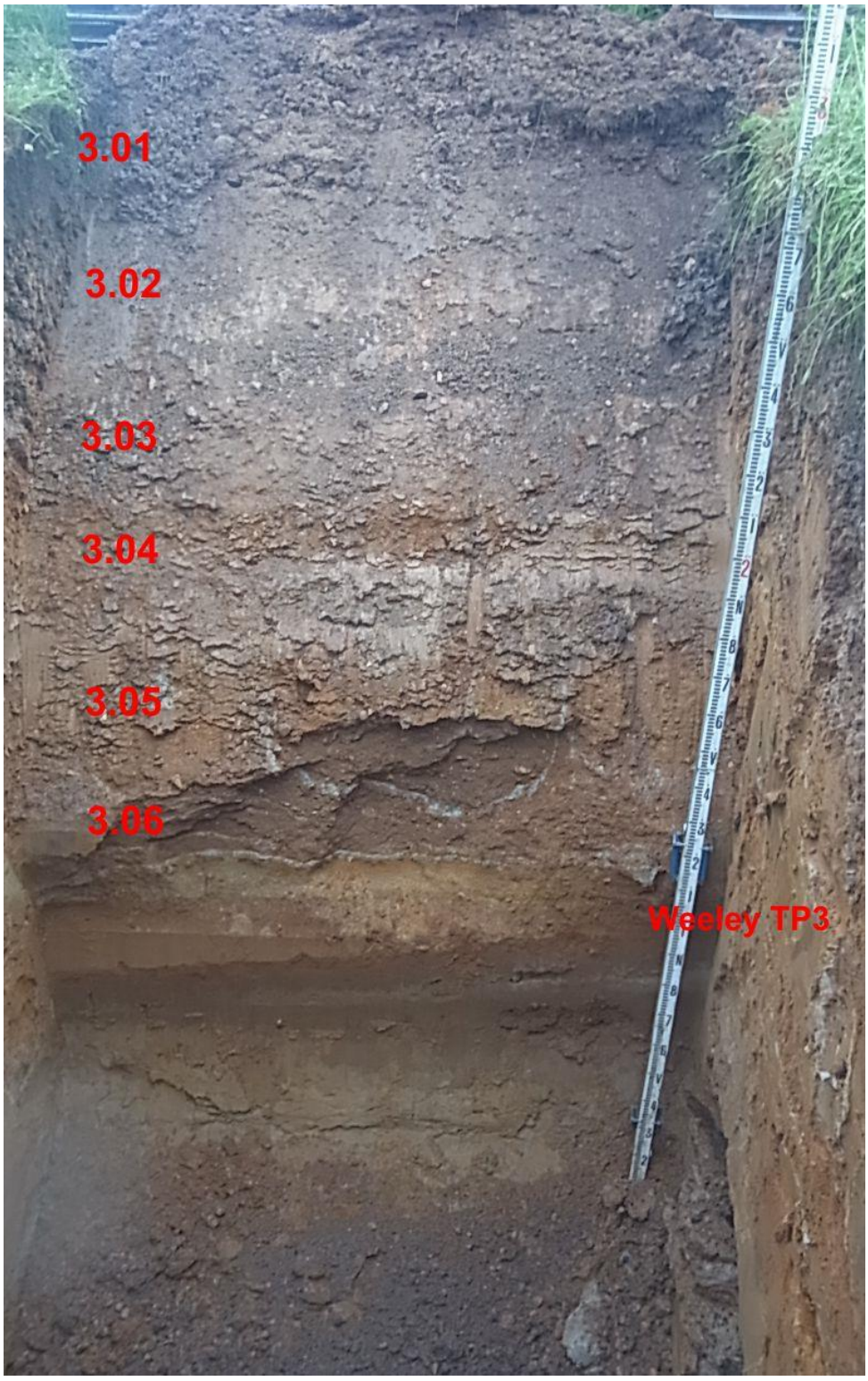


Figure 10

Test 5. Descriptive Log.

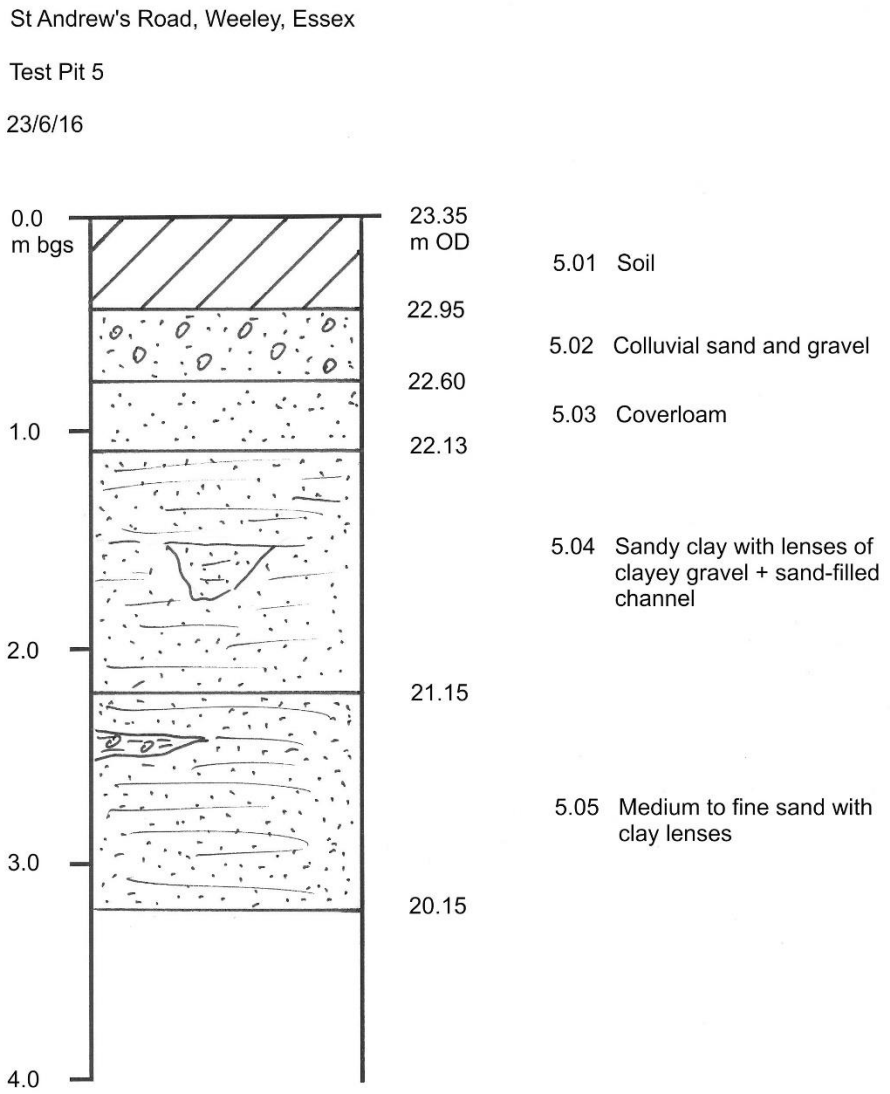


Figure 11.

Test Pit 5. Phorograph.

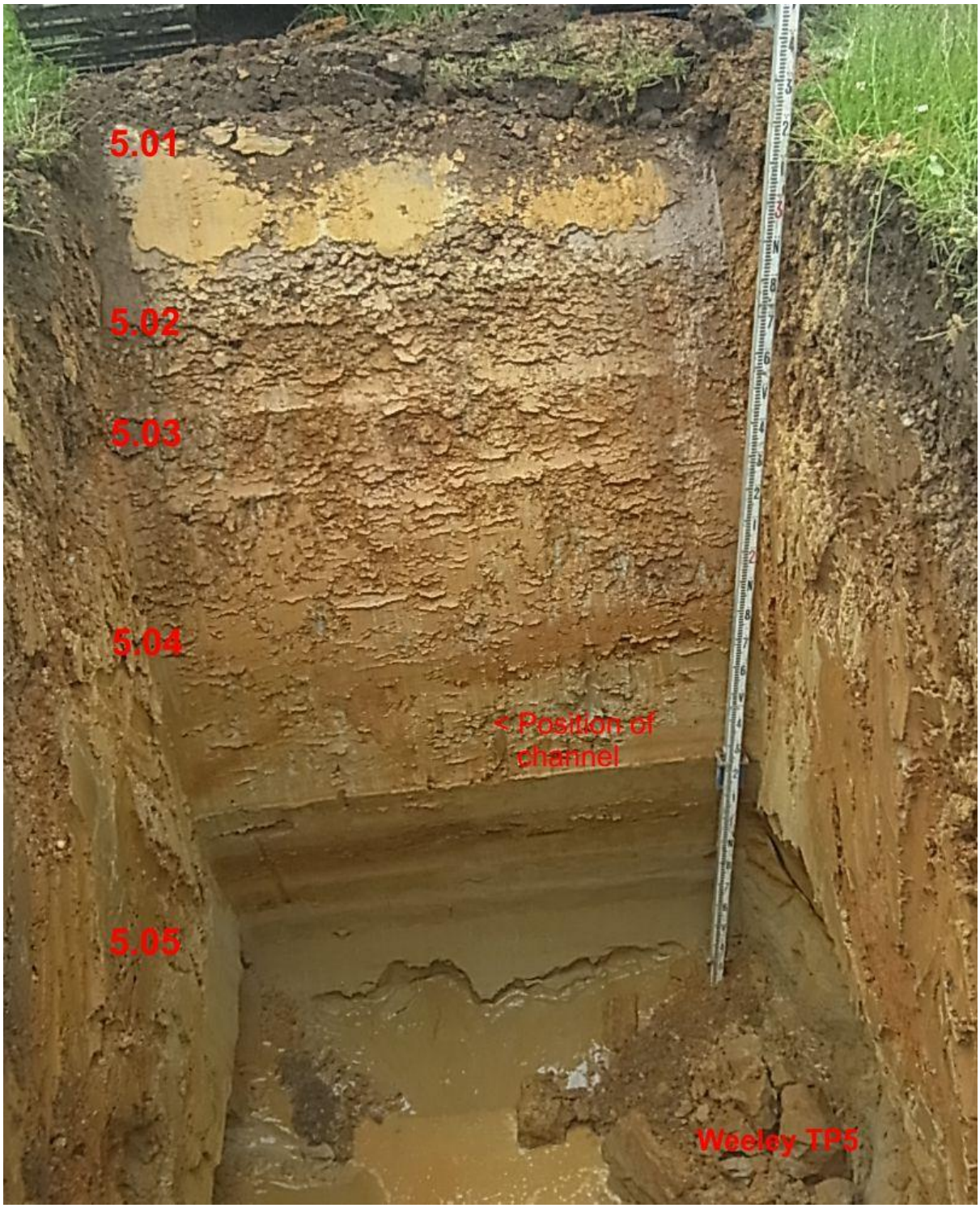


Figure 12.

Test Pit 5. Detail of channelling.

Figure 13.

Test Pit 6. Descriptive Log.

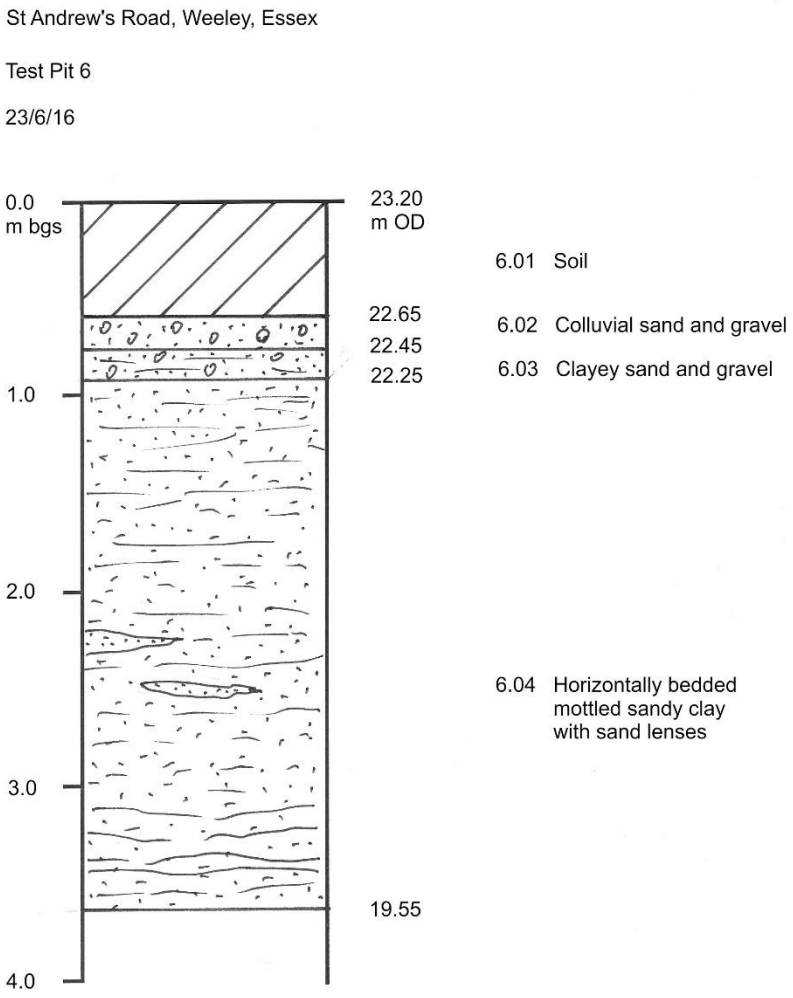
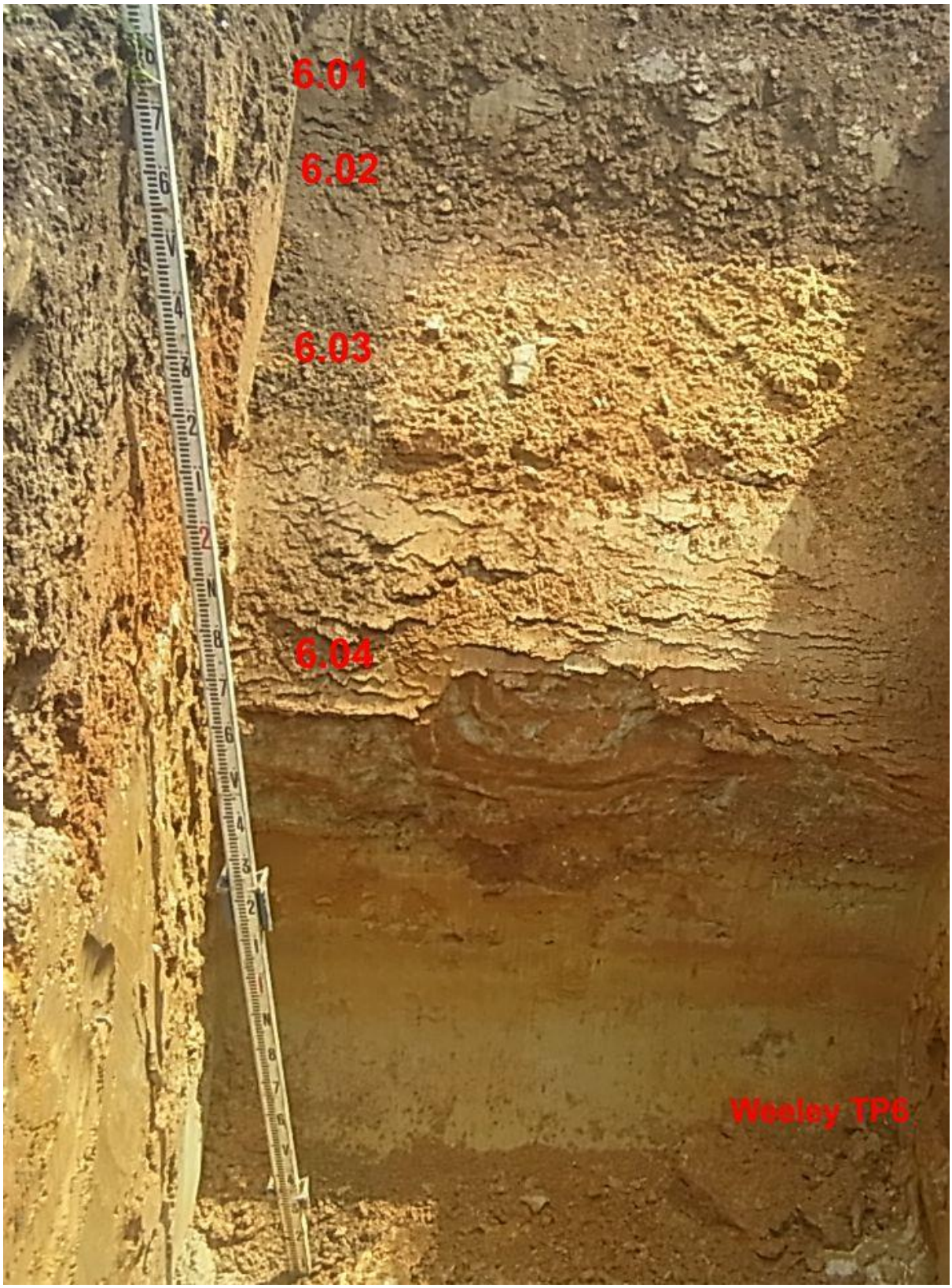


Figure 14.

Test Pit 6. Photograph



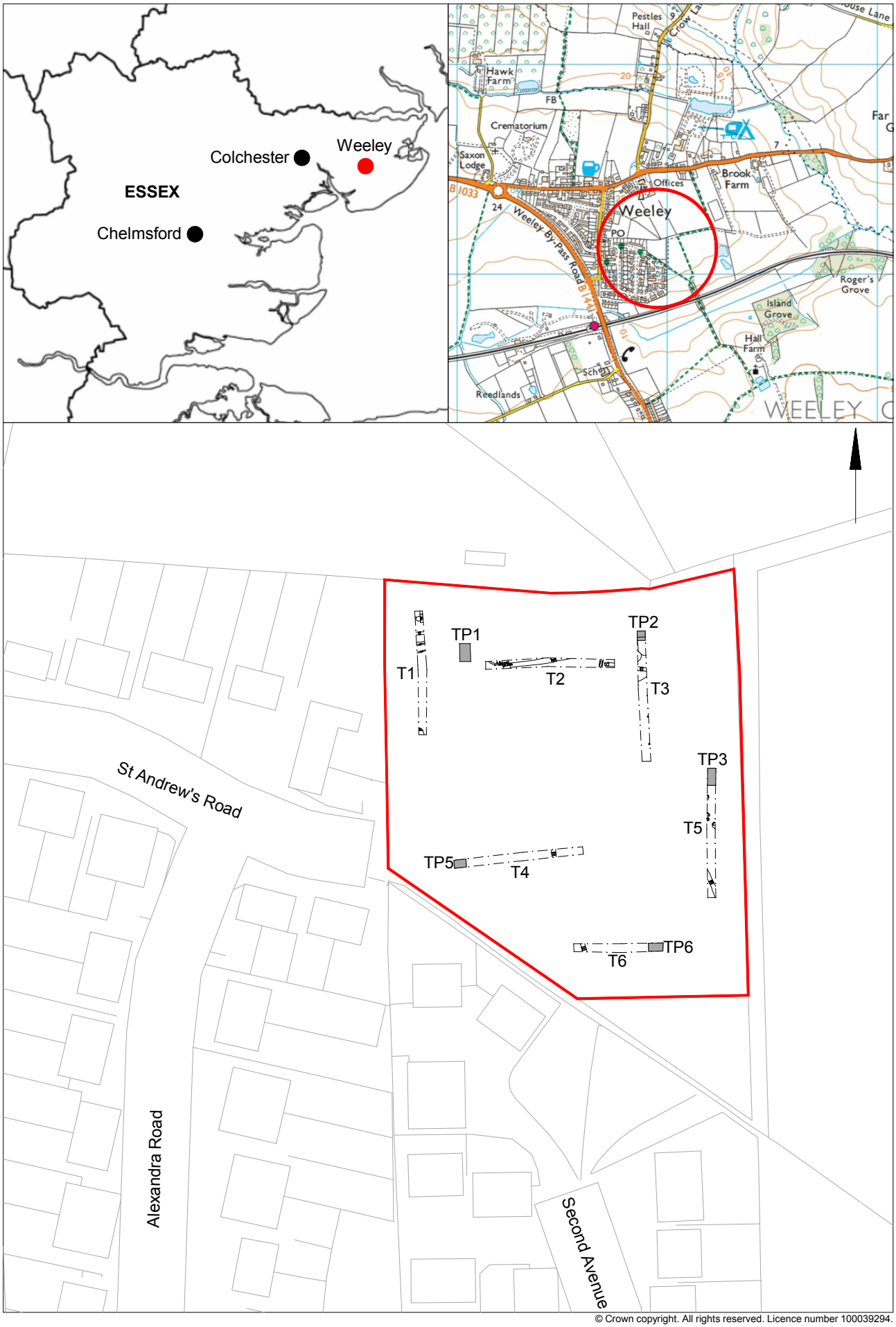


Fig 1 Site location.

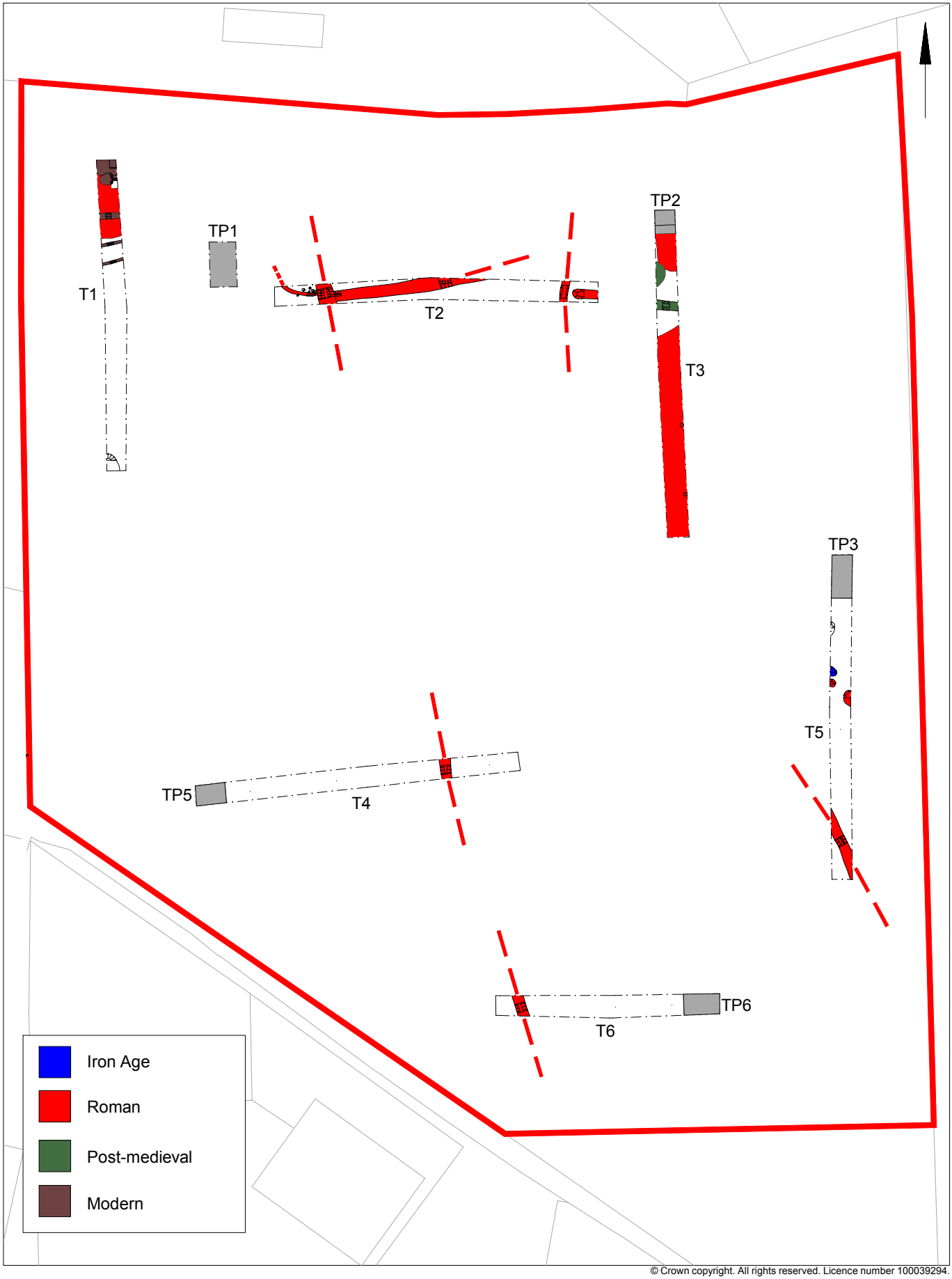


Fig 2 Results with phasing

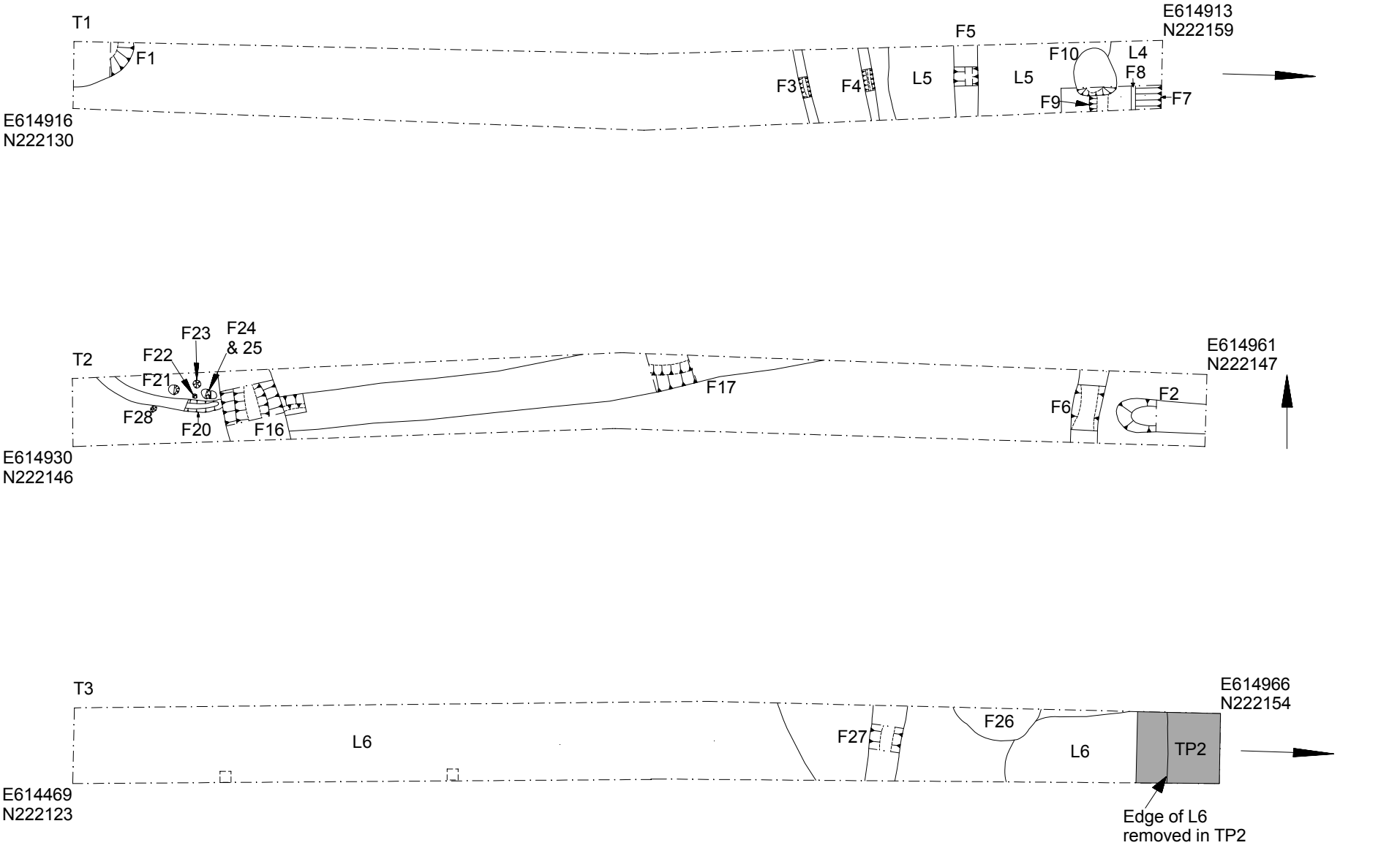


Fig 3 Trench plans.

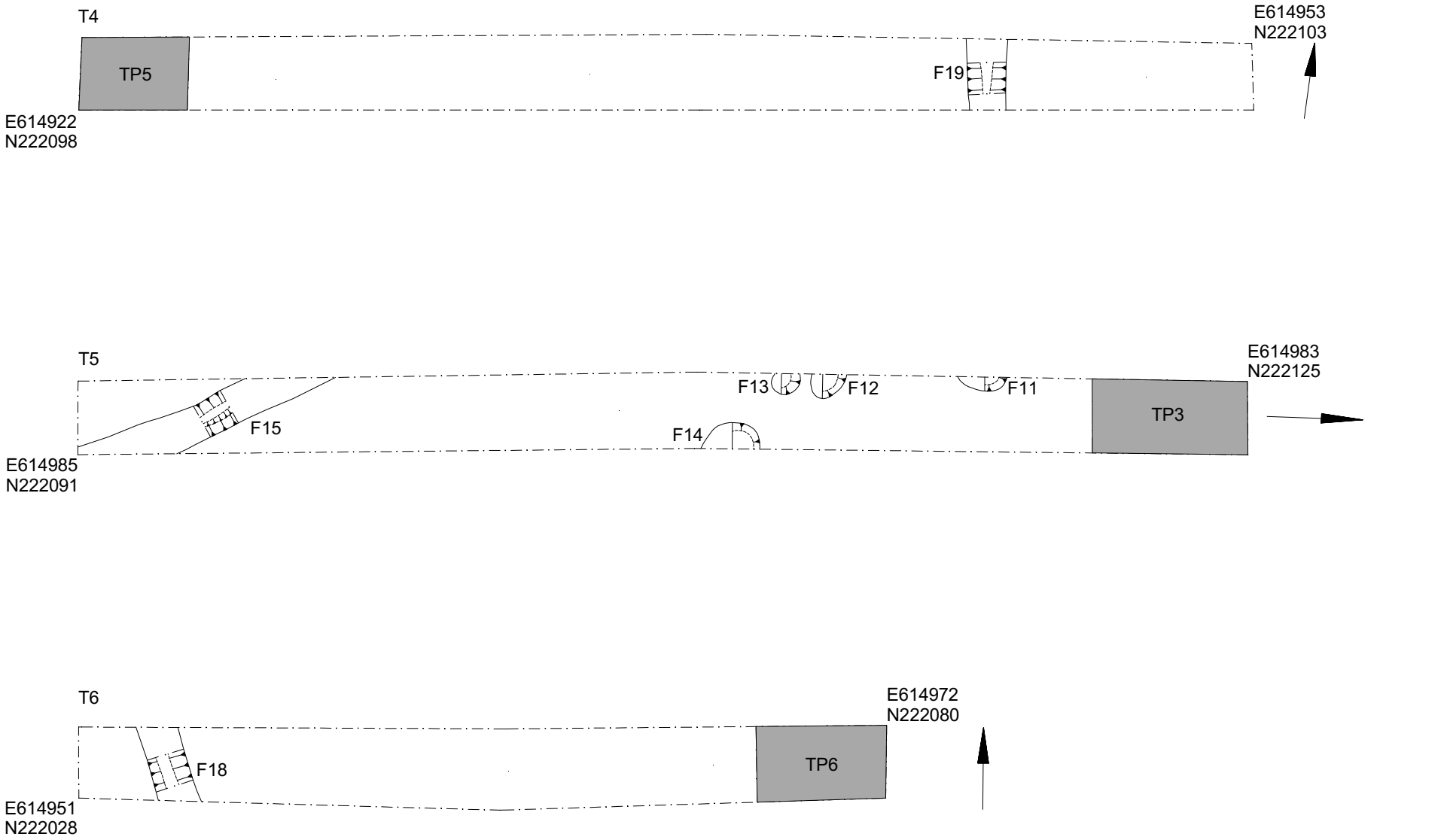


Fig 4 Trench plans.

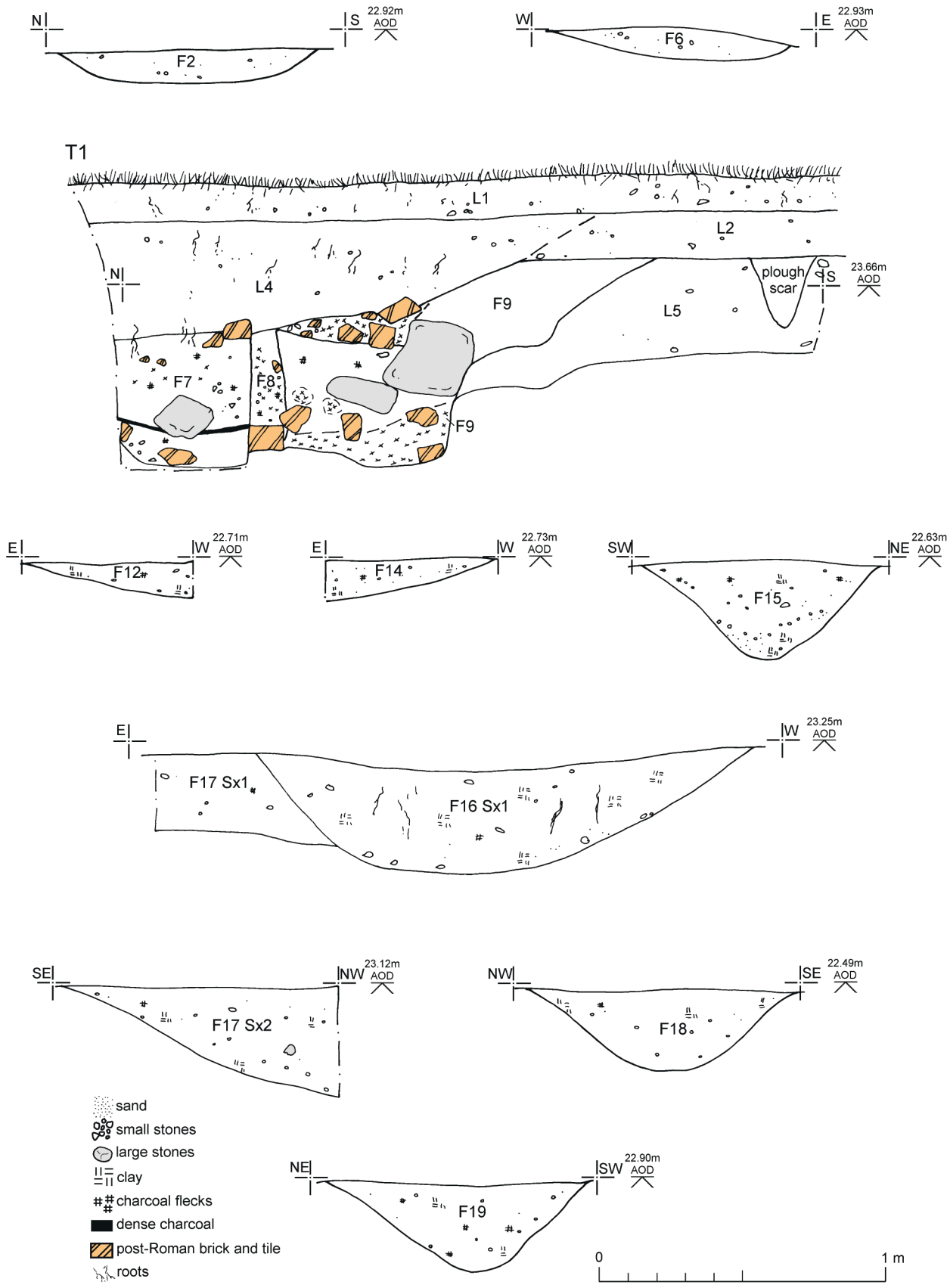


Fig 5 Feature sections.

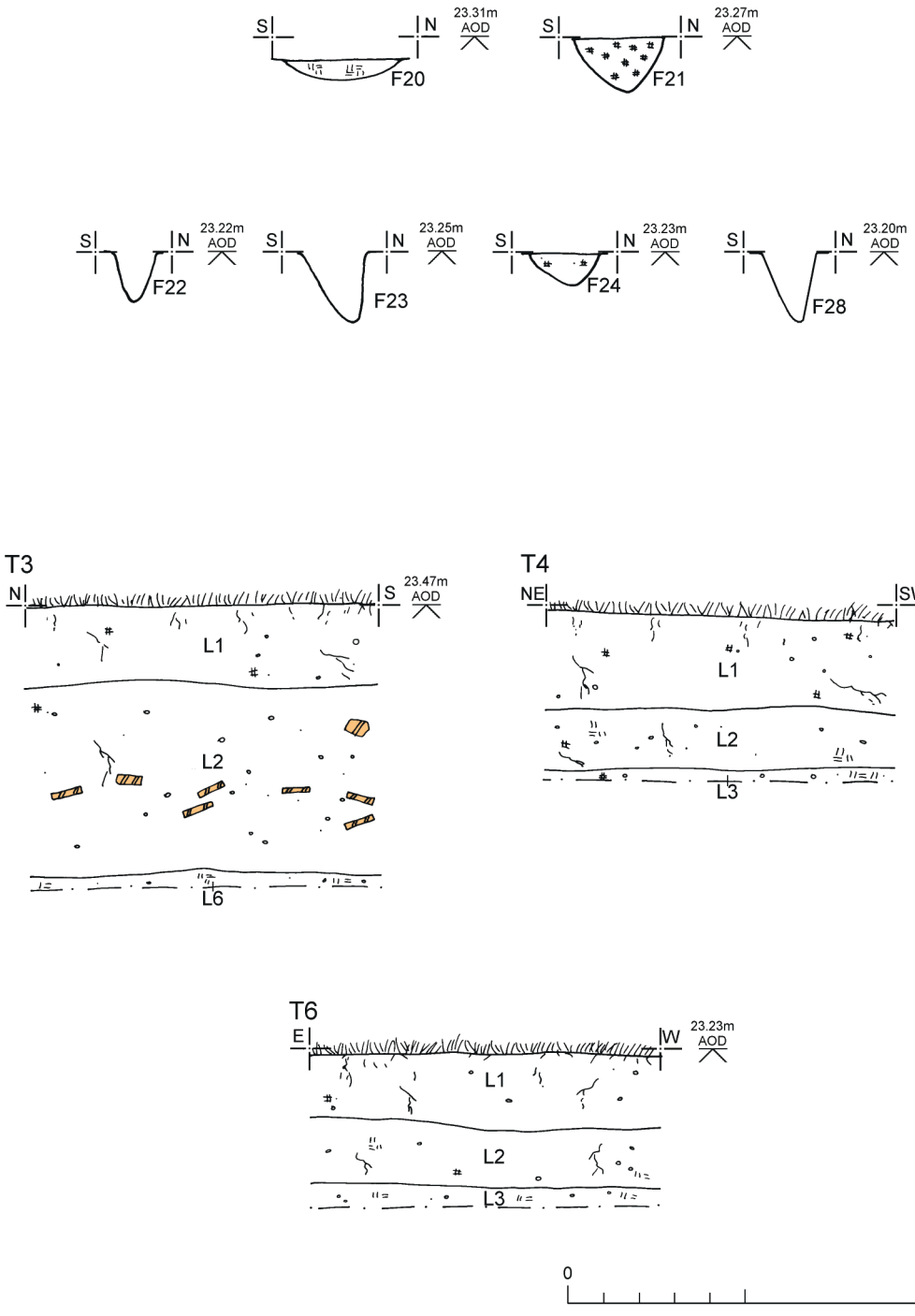


Fig 6 Feature sections (F20-F24 and F28) and representative trench sections (T3, T4 and T6).

Essex Historic Environment Record/
Essex Archaeology and History

Summary sheet

Address: St Andrew's Road, Weeley, Essex, CO16 9HR	
Parish: Weeley	***District:*** Tendring
NGR: TM 14930 22120 (centre)	***Site code:*** CAT project code: 16/05n ECC project code: WESA16 OASIS project ID: colchest3-252243
Type of work: Evaluation and geoarchaeological investigation	***Site director/group:*** Colchester Archaeological Trust
Date of work: 22nd-24th July 2016	***Size of area investigated:*** Evaluation: Six trenches totalling 170m linear at 1.8m wide (or 306m²) Geoarchaeological investigation: Five test pits
Location of curating museum: Colchester Museum accession code COLEM: 2016.54	**Funding source:** Developer
Further seasons anticipated? Not known	***Related EHER number:***
Final report: CAT Report 982	
Periods represented: Late Neolithic-Early Bronze Age, Middle-Late Iron Age to early Roman (1st century), late Roman (late 3rd to 4th century), post-medieval, modern	
Summary of fieldwork results: An archaeological evaluation by trial-trenching and geoarchaeological investigation was carried out in advance of the construction of fourteen new dwellings at St Andrew's Road, Weeley. **Evaluation:** Two pieces of worked flint were identified dating from the Late Neolithic to Early Bronze Age, and a pit and residual pottery sherds indicate activity from the Mid-Late Iron Age into the early Roman period (1st century). Ditches dating from the late Roman period (late 3rd to 4th century) probably formed field boundaries, and three spreads of material may be related to the infilling of hollows or even possibly of ponds. A post-medieval field boundary was also excavated and several modern features were probably associated with a small temporary structure on the site. **Geoarchaeological investigation:** There was no evidence of any Palaeolithic remains.	
Previous summaries/reports: -	
Keywords: -	***Significance:*** *
Author of summary: Laura Pooley	***Date of summary:*** August 2016