

# SAWSTON POLICE STATION, SAWSTON: An Archaeological Evaluation and Watching Brief



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**Sawston Police Station, Sawston**  
An Archaeological Evaluation and Watching Brief

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## **Non-Technical Summary**

An evaluation and watching brief at Sawston Police Station revealed the remains of two ditched enclosures, which may be Roman military camps, and a subsequent road junction, both probably dating to the 1<sup>st</sup> century AD. Additionally evidence of Neolithic and Late Bronze Age/Early Iron Age activity and a Medieval agricultural headland were identified.

## **Introduction**

An archaeological evaluation was undertaken by the Cambridge Archaeological Unit (CAU) in advance of a development by Park Hill Housing Ltd and Cambridgeshire Constabulary of 0.42 ha at Sawston Police Station (TL 548526 249840) (Figure 1). The work took place intermittently between the 24<sup>th</sup> of September and the 17<sup>th</sup> of October 2003, with some further monitoring work until the 28<sup>th</sup> of November 2003. The work was based upon a brief for archaeological evaluation prepared by Kasia Gdaniec of the Cambridgeshire County Council Archaeology Office (Gdaniec 2003) and following a project specification prepared by David Gibson of the CAU (Gibson 2003). The site is located to the northeast of the junction of Cambridge Road/High Street and New Road/Babraham Road and fronts onto Cambridge Road.

## **Geology and Topography**

The underlying geology is Cretaceous Middle Chalk (British Geological Survey sheet 205) and the soil in the parish is generally light and chalky (Rosen 1978, 246). The ground surface at the time of development lay at around 27.0m OD.

## **Methodology**

The evaluation trenches were machine excavated using a 360 with a 1.8m wide toothless ditching bucket, and an experienced archaeologist monitored all machining. The building trenches that were monitored were excavated using a mini digger. The proposed trench plan submitted with the project specification called for six trenches with a total length of 105m, to give 5% coverage of the evaluation area. Due to circumstances at the time of machining it was necessary to alter the position and length of some of the trenches, initially six trenches were machined (trenches 1 to 6) with two more judgmental trenches being added subsequently (trenches 7 and 8), this gave a total length of 139.8m and a total area of 252m<sup>2</sup> representing 6% coverage of the development area (Figure 2). In addition to these eight trenches a further three areas of ground disturbance related to a sewer trench (trench 9) and the foundations of two buildings (trenches 10 and 11) were monitored and recorded. Very little hand excavation could take place in these monitored trenches due to health and safety considerations. Trench 9 was machined to an arbitrary depth of c.0.8m while trenches 10 and 11 were generally machined to a depth of c.1.0m,

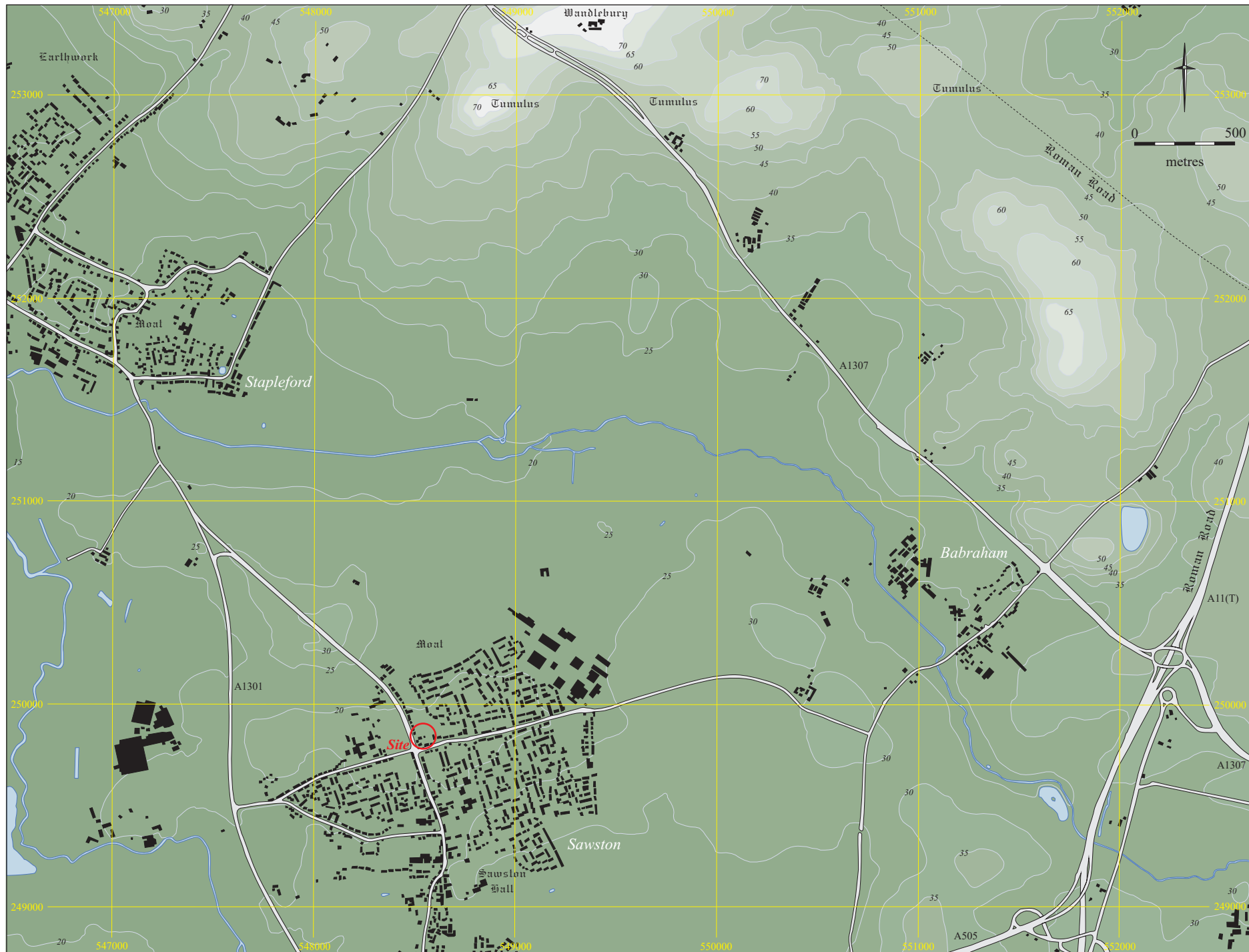




Figure 2. Trench plan

Figure 2: Trench plan.

except where this was not sufficient to reach a solid natural base for the building foundations. This meant that large archaeological features were generally removed in their entirety. Trenches 1 to 7 were open at the same time; trenches 8 and 9 were slightly later, although importantly for comparisons trench 1 was still open when trench 8 was excavated. Trench 10 and 11 were monitored later in isolation. Construction work has not been completed on site and it is likely that more foundation trenches will be dug in future.

Excavation was recorded using the unit modified version of the Museum of London single context recording system (Spence 1990). All trenches were planned at 1:50 with areas of complex archaeology planned at 1:20. Sections were recorded at a 1:20. After machining identifiable features were hand excavated. Context numbers are included in the text thus [012] and feature numbers as F.1. Specific artifacts are referred to by their catalogue number thus <123>. The site code is SPS03.

99 context numbers and 11 feature numbers were issued and 20 sheets of drawings were produced on-site (6 A4 sized and 14 larger). The photographic archive consists of 92 colour slides and 46 black and white images. 329 artifacts weighing 2249g were retrieved and catalogued. All material is in a stable condition and is being held and maintained at the CAU offices pending final deposition in an approved store.

## **Archaeological and Historical Background**

Sawston lies seven miles south of Cambridge between the rivers Cam and Granta; it is located on the north to south road from Saffron Walden to Cambridge, which may be of Prehistoric origin (Rosen 1978, 246-47). In terms of east to west routeways it lies just to the north of the well known Ickenfield Way on Ashwell Street/Street Way which ‘follows the spring line at the base of the chalk and can be identified through a string of later settlements found along its course’ and the pair form a major arterial route from the Thames Valley to East Anglia (Malim 2000a). Ashwell Street/Street Way continues into the Roman period in use as a Roman road (Browne 1978; Margary 1967; Malim 2000b).

The placename Sawston contains the Old English element *ton/tun* suggesting an 8<sup>th</sup> century origin for the village and means ‘Farm of Salse’ or ‘Farm of Salse’s people’ (Reaney 1943, 96-97). There were 38 tenants in 1086 at Sawston, but the settlement pattern within the parish may well have been quite dispersed with possible centres at Dernford Mill and Borough Hill (Rosen 1978, 247) and the eight hides were divided three different owners (ibid, 248-53). The history of Medieval village has attracted considerable attention (Rosen 1974; Teversham 1942-47), although it has been noted that this work has tended to ignore both earlier periods and the overall landscape context of the parish (Taylor 1992, 13-14). The village of Sawston probably developed along an east to west axis of Common Lane and Church Lane in the area of the church and principal manor house, with a planned development northwards by the lords of the manor and perhaps their tenants, possibly in the 12<sup>th</sup> century (Taylor 1992, 15).

Some antiquarian discoveries are known from Sawston Parish including Neolithic objects, 10+ ring ditches of Bronze Age barrows, a Late Bronze Age hoard containing socketed axes, a winged axe and spears, three other Late Bronze Age axes and an Anglo-Saxon inhumation cemetery at Huckeridge Hill (Fox 1923, 259-60 and 323; Taylor 1998, 74-77). There is also some Roman pottery and an iron key discovered in the 19<sup>th</sup> century (Cambridge University Museum of Archaeology and Anthropology 1883.608,1887.21 and Z 22513).

Relatively little archaeological work has taken place in Sawston Parish, the main focus of work has been fort at Borough Hill 1.5km to the west of the village (TL 547180 249470, SAM 24407; Bray 1994; Mortimer 2001; Samuels 2001; see also Taylor *et al* 1993). The recent work at Borough Hill has confirmed Iron Age and Romano-British use and found well-preserved buried soils containing Mesolithic and Neolithic flint artifacts plus a palaeoenvironmentally rich infilled river channel. The watching briefs and evaluations that have taken place elsewhere in the parish have revealed little of significance (Bray and Leith 1993; Gdaniec 1991; Sutherland 1995).

The development site, situated at the northwest end of Sawston, lies within c.300m of a well preserved moated Medieval site adjacent to Deal Farm (SMR 00165). Enclosure ditches, possibly from the late Prehistoric and Romano-British periods are also recorded in the SMR, c.600m to the east of the development site. Sawston Hall and the parish church, 700m from the site, evidence Medieval settlement at the south end of the village, although previous archaeological evaluation north of the hall found no evidence of archaeology (Gdaniec 1991).

## **Archaeological Results**

### ***Phasing***

Although the phasing will be considered in more detail in the discussion, the trench summaries will refer to it so it requires outlining to aid correlation between trenches. Three broad phases can be identified; with phase 2 being further subdivided into four subphases.

- Phase 1: Prehistoric activity.
- Phase 2: Early Roman
  - Subphase 2A: Large Early Roman ditched enclosure(s), possibly military camp(s).
  - Subphase 2B: Ephemeral Early Roman activity, probably relating to a trackway/road.
  - Subphase 2C: Metalled Early Roman road junction.
  - Subphase 2D: Ephemeral Early Roman activity postdating metalled roads
- Phase 3: Medieval Agriculture.

## *Trench 1*

Trench 1 (Figures 3 and 4) was initially 28.0m long and was subsequently extended to 31.6m, it was aligned roughly north to south. The modern ground surface lay at c.27.2m OD and the topsoil [001] was c.0.2 to 0.4m deep, with the greatest thickness at the southern end of the trench. Trench 1 had been disturbed by a number of modern pipe trenches running roughly east to west, in general these were only c.0.3m deep and had not disturbed archaeologically significant deposits. In one instance the modern pipe trench was as c.0.5m deep, this may potentially have removed some significant deposits, but does not appear to have done so. Beneath the topsoil was a subsoil [002] c.0.4 to 0.7m thick, this was thickest at the northern end of the trench, the reverse of the situation with the topsoil. This layer was a compact slightly reddish mid brown silty loam with a few small chalk and gravel inclusions. The deposit is slightly darker and loamier towards the top and slightly paler and siltier towards the base, there are what appear to be perhaps three or four indistinct horizons within this deposit. The lower part of this deposit, which was removed by hand in the northern extension of the trench as context [036], produced some animal bone, flint, burnt flint, small fragments of lava quern <044> that are probably Roman in date. There were also six small fragments of Roman pottery, these were generally not diagnostic but one sherd with burnished line decoration probably dates to the Early Roman period (1<sup>st</sup> century AD). There was also one sherd of Late Bronze Age/Early Iron Age pottery. Lying underneath the subsoil in the northern part of the trench was a metallated surface [035]/F.8-9 consisting of a single layer of rounded to subangular flint cobbles and interpreted as a Roman road. This will be described and discussed subsequently (see below), but as it is a key stratigraphic feature in terms of phasing the deposits in trench 1 and elsewhere it will be referred to prior to this.

Beneath [036] was a c.0.10m thick layer of pale brown beige silt, this was relatively distinct from the layer above but they may be the same deposit and the distinction could well relate to the fact that the lower part of the deposit was subject to less disturbance through later ploughing and bioturbation. In the northern extension of the trench where this was removed by hand as context [037] this deposit produced some flint, burnt clay and pottery. The pottery consisted of two sherds of Late Bronze Age or Early Iron Age material.

Cleaning of the main trench produced a number of finds from above the metallated surface [035]/F.8-9 that could come from layers equivalent to either [036] or [037] in the northern extension. An extensive area was cleaned by hand and it should be stressed that the number of finds recovered was very low. The finds included some flint and pottery, most of the pottery was Roman but there was also a single small sherd of a Late Medieval Essex redware jug [020] <015>, this came from the earliest cleaning and is probably equivalent to [036]. The Roman pottery included two sherds of coarse sandy oxidised wares with a black slip, one of which was burnished on the exterior that are likely to date to the 1<sup>st</sup> century AD. There were also three thin curved and shaped iron bar like objects [005] <023> and [006] <024> found c.1.0m apart These probably originally formed a single bow shaped item with a double curve c.88mm long, 6mm wide and 4mm thick

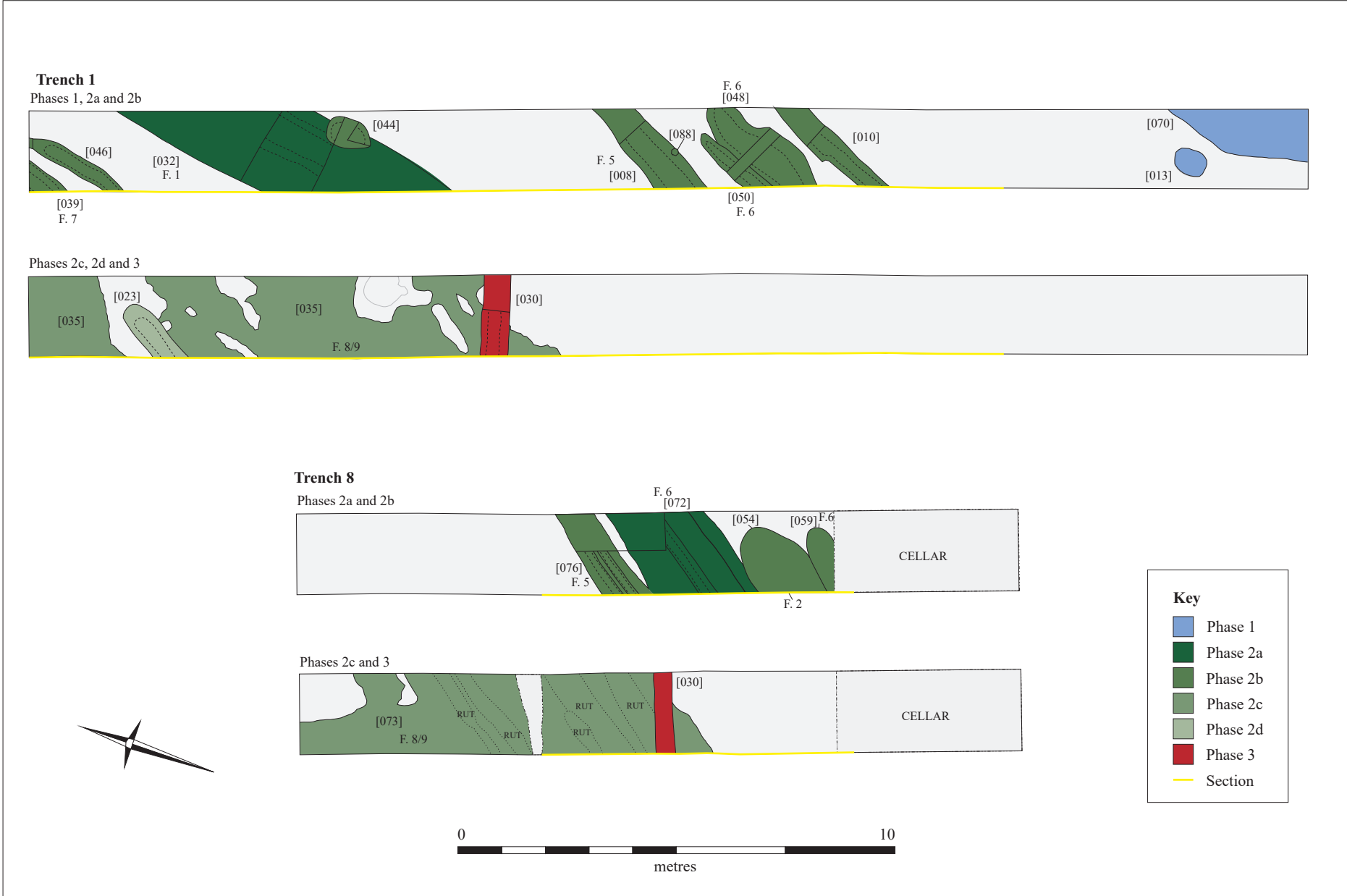


Figure 3. Plans of trenches 1 and 8

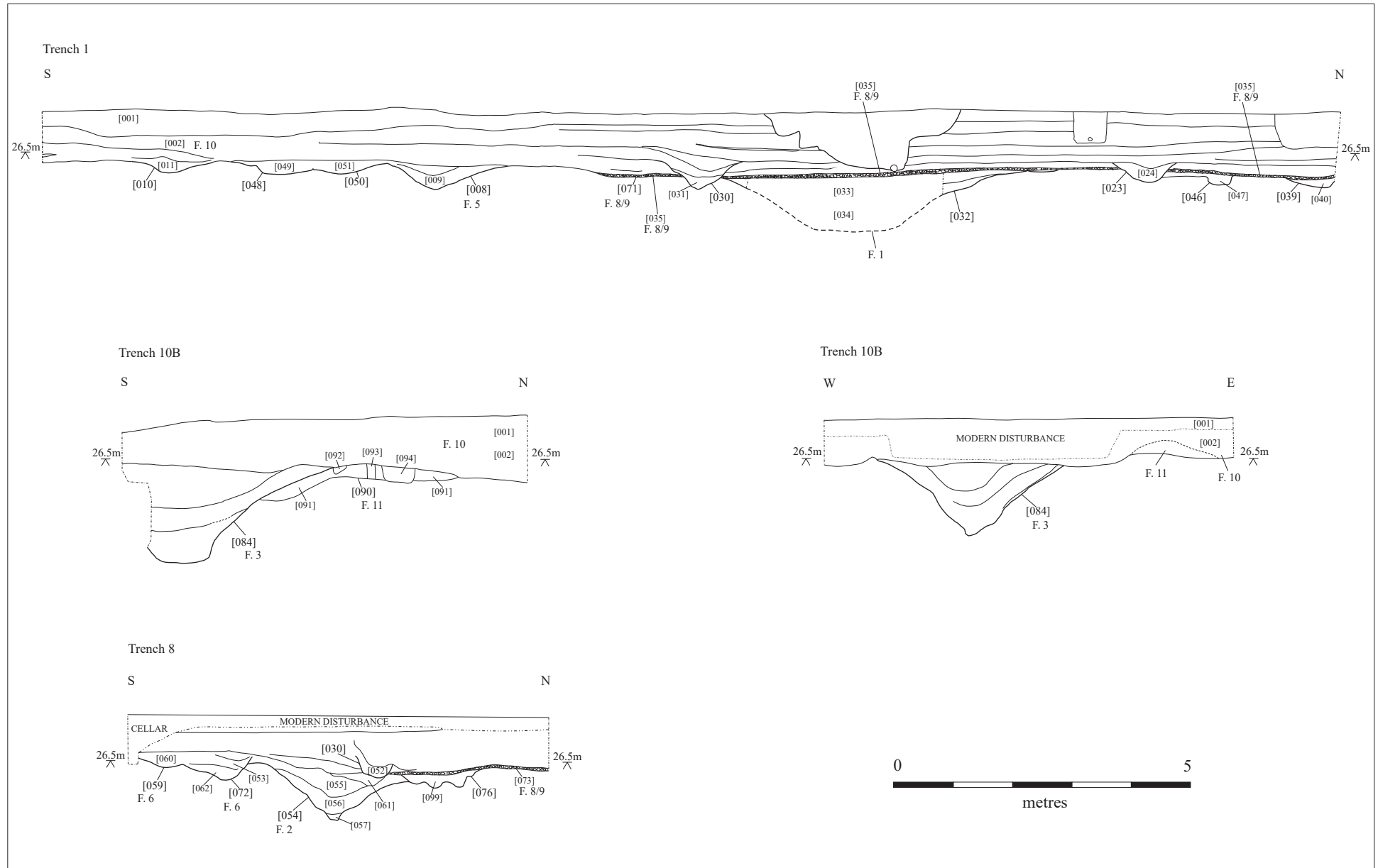


Figure 4. Sections of trenches 1, 8 and 10B

weighing 8g. Although the original item they come from cannot be identified they are probably Roman.

It appears that the upper part of the subsoil [002]/[036] and above relates to a field headland F.10, which is why the deposit is deeper at the western end of the site by c.0.2 to 0.5m. The presence of the sherd of Late Medieval Essex redware relatively low down in the headland provides dating evidence for the formation process of the headland, although it is likely that it is at least partially formed from layers that built up much earlier. The lower deposit [037] probably represents the surviving element of these layers and are likely to be Roman in date.

There were two features [030] and [023] that appear to be cut from either the lower part of [036] or the interface between [036] and [037] and which certainly cut through the metallated surface [035]/F.8-9. [030] is a west to east aligned linear feature with straight and parallel edges that in plan is c.0.6m wide and c.0.2m deep, but from the section it appears that it is c.1.2m wide and c.0.45m deep. It appears to be cut from approximately 0.1m above the interface of [036] and [037] and is certainly cut from at least their interface. It is filled with [031], a pale brown silt. Although all of this feature that was exposed within the trench was excavated it produced no finds. [030] is not on the dominant alignment of most of the features in trench 1 and is perpendicular to the current road. Although it cannot be closely dated it is probably broadly contemporary with the formation of headland F.10 and is likely to be a Medieval field ditch.

[023] is a southwest to northeast aligned linear feature with straight and parallel edges c.0.60m wide and c.0.25m wide, which butt ends within the trench. [023] appears to be cut from the interface of [036] and [037], although this is uncertain, and definitely cuts through the earlier metallated surface [035]/F.8-9. It was filled with [024], a pale brown chalky silt. All of this feature that was revealed in the trench was excavated, but only produced a single sherd of Romano-British pottery. [023] is on the same broad alignment as the majority of the other features in trench 1 and is likely to be a Roman ditch.

There are a number of linear features [008], [050], [048] and [010] lying further to the south in trench 1 that are on roughly the same alignment as [023]. As these lie beyond the southern limit of metallated surface [035]/F.8-9 there is no stratigraphic relationship between them, although it appears that at least one of them [008] is earlier than [035] based on evidence from trench 8. The northern and southern of these features ([008] and [010]) were more regular and better defined than the central pair ([050] and [048]).

[008]/F.5 is a southwest to northeast aligned linear feature with slightly irregular straight and parallel edges 0.8 to 1.0m wide and 0.4m deep, with angular sides and a pointed base. It is filled with [009], a mid grey-brown silt with a little chalk in it and there are faint traces of what may be an upper fill, tip line or recut. There are also some indications of weathering along its southwestern edge in the form of chalk chunks, perhaps suggesting that the material from the cut was originally banked up on this side. Approximately 90% of [009] that was present within the trench was excavated and contained a small amount of animal bone and flint. On the southeastern edge of [008] was

a small posthole [088], c.0.18m deep and 0.18m in diameter with a pale brown chalky silt fill. The stratigraphic relationship between [008] and [088] was unclear.

[010] runs parallel to [008] with a gap of c.2.3m between them. It is 0.5 to 0.6m wide and c.0.15m deep, with slightly irregular straight and parallel edges and gentle concave sides and a flat base. It is filled with [011], a pale brown silt containing some chalk and gravel. Approximately 80% of [011] within the area of the trench excavated and contained a small amount of animal bone, flint and burnt flint.

Lying between [008] and [010] were a pair of irregularly shaped southwest to northeast aligned features F.6 [050] and [048], which butt ended within the trench. These appear to be two distinct features rather than a single feature with an undulating base. [048] is c.0.8 to 1.1m wide and 0.22m deep with gently sloping sides and a rounded base, [050] has a similar profile but is only c.0.4m wide and 0.18m deep. The fills of the two features [049] and [051] are identical pale brown chalky silts. These features were 100% excavated within the trench, but no finds were recovered.

[008] and [010] appear to be a pair of parallel and probably contemporary ditches that are likely to be Roman in date based upon evidence from trench 8. The nature of [048] and [050] is less clear, they appear to respect and be located between [008] and [010] and are probably slight scoops or erosion ruts.

Metalled surface [035]/F.8-9 covers the northern c.15m of trench 1, apart from areas where later features have truncated it and a few small patches. The southern edge of [035] runs rather irregularly from southwest to northeast. The initial stage in the creation of the metalled surface was a broad general cut [071], c.0.15m deep that decreased the height of the chalk natural from c.26.45 to 26.3m OD. Given that there was presumably topsoil etc covering the area when this cut took place it is likely that the actual cut was c.0.3m deep. This cut would have created a level surface and provided a firm base for the metalling. In the base of cut [071] a single layer of rounded to subangular flint cobbles [035] c.0.04 to 0.06m thick and generally 0.05 to 0.10m long and wide was laid, with the surface of the cobbles at c.26.35 to 26.4m OD. There was only one course of cobbles with no traces of patching or repair. Although some worn patches and areas of linear ruts running southwest to northeast were visible the cobbles are generally in very good condition. No finds were recovered either lying directly on, between or under the cobbles in the thin bedding layer [029] which lay under it in places, this is despite the fact that the entire metalled surface was removed by hand. The sections of a small service trench some 1.6m west of trench 1 (trench 1A) were examined and the metalled surface proved to be present.

Sealed by metalled surface [035]/F.8-9 were a number of cut features [039], [046], [044] [032]. The linears [039], [046] and [032] are all on the same alignment, although this is southwest to northeast it is slightly different from the later features [023], [008] etc. [039]/F.7 in the extreme northwestern corner of the trench was c.0.55m wide and c.0.4m deep with gentle concave sides and a flattish base. It was filled with [040], a darkish mid brown clayey silt containing occasional chalk. Although this feature was 100% excavated

within the trench no finds were recovered. Running parallel to [039] with a gap of c.0.3m between them was [046], a linear that butt ends within trench 1. [046] is c.0.6m wide and c.0.4m deep with steep angular sides and a flat base. It was filled with [047], a mid brown slightly clayey silt with some chalk and flint in it. Fill [047] was identical to layer [038] lying to the south of it, which appears to be a general spread c.0.08m deep that is sealed by metallised surface [035]. [038] extends for some 0.7 m before being truncated by later cut [023] and must have been between 0.7 and 1.2m wide. Although [047] and [038] were 100% excavated within the trench they produced no finds.

When allowance is made for the general truncation caused by [071] these features must originally have been c.0.3m deeper. This would make [039] c.0.85m deep and [046] c.0.7m deep. The most likely interpretation is that [046] is a beam slot and [039] an associated drainage gully. The overlying metallised surface [035] had visibly slumped into both these features, this suggests that there had not been time for their fills to fully compact prior to [035] being laid.

[032]/F.1 was a large southwest to northeast aligned ditch with a steep sided V-shaped profile. It was c.2.2m wide 0.75m deep, its depth increasing to 1.05m when the truncation of [071] is taken into account. 40% of the feature within the trench was excavated and the basal fill [045], which is c.0.2m deep, is a greyish brown chalky silt with gravel inclusions contained a little animal bone and flint. The next fill [034], which was c.0.3m thick, was a light greyish brown chalky silt with frequent gravel. [034] contained 95 pieces of animal bone and two small sherds of pottery that are dated to the Early Roman period. The uppermost fill [033] was up to 0.3m thick and was a light brown silt containing a little chalk and gravel, but produced no finds. Metallised surface [035] did not sink into [032] in the way it did into [039] and [046]. There are no indications that [046] was deliberately backfilled and it appears to have silted up naturally with the fine nature of the sediment meaning that it compacted extremely well to provide a firm surface. If this interpretation is correct then there must be an interval of several decades between the cutting of ditch [032] and the laying of metallised surface [035], it also suggests that the [032] is earlier than gully [039] and beam slot [046].

Cutting into the eastern side of [032] was a roughly rectangular pit [044] with rounded corners, which was also sealed by metallised surface [035]. It was c.1.0m southwest to northeast by c.0.6m northwest to southeast and 0.3m deep, although allowing for truncation caused by [071] it was probably originally c.0.6m deep. It has steep angular sides and a pointed base and is filled with [043], a dark yellowish brown silt containing chalk and gravel. Although c.50% of this feature was excavated no finds were recovered. As [044] is later than [032] but earlier than [035] it may well be contemporary with [039] and [046].

The majority of the features in trench 1 lay at the northern end of the trench. Towards the southern end of the trench, and not associated with any underlying features, a piece of worked flint and a burnt stone that has a single very flat face and may have been utilised, although this is uncertain, were found. The southern end of the trench was generally devoid of archaeology, but at the very end of the trench there were two natural features, a

small oval area c.0.7m by 0.6m [013] and a more general area [070] whose extent could not be determined within the trench. [013] produced 11 fragments of bone weighing 30g and 16 fragments of pottery weighing 66g. The pottery, which comes from at least two vessels, is relatively fresh and unabraded and dates to the Late Bronze Age or Early Iron Age. The animal bone consists of two sheep/goat elements and two ribs from a sheep/goat sized animal, this could all come from a single animal.

In trench 1 phase 1 is represented by two natural hollows [013] and [070] plus a scatter of stray finds. Subphase 2A consists of the major ditch [032]/F.1 while subphase 2B includes pit [044], gully [039] and beam slot [046]. Subphase 2C is represented by the metallated surface [035]/F.8-9. Ditch [023] definitely postdates [035] and must belong in subphase 2D. The status of ditches [008]/F.5 and [010] plus scoops F.6 ([050] and [048]) is less certain, [008] probably belongs to subphase 2B given the evidence from trench 8 and it is probable that all four features belong to the same subphase. The final phase 3 is represented by ditch [030] and the gradual accumulation of the headland F.10.

Environmental samples were taken from a number of feature fills in trench 1; <001> [045] a subphase 2A ditch [032], <002> [047] a subphase 2B beam slot [046], and <003> [009] plus <004> [011], subphase 2D ditches. There were virtually no archaeological plant remains in any of the samples, the only material was two wheat grains and some indeterminate cereal grains in <001> [045]. Charcoal and molluscs were found in all of the samples. The molluscs appeared to be identical across the features, although preservation was very good many of molluscs found were catholic, and so could not indicate a local environment. Some of the others found are common in dry open places, but in general the molluscan remains were not very informative.

## ***Trench 2***

Trench 2, which was 19.7m long and aligned roughly north to south, contained no archaeological features apart from a modern linear c.0.6m wide and aligned roughly west to east.

## ***Trench 3***

Trench 3, which was 20.0m long and aligned roughly north to south, contained no archaeological features apart from two modern linears c.0.25 and 0.55m wide and aligned southwest to northeast. The topsoil [001] was c.0.2m thick and the subsoil [002] was c.0.2m thick.

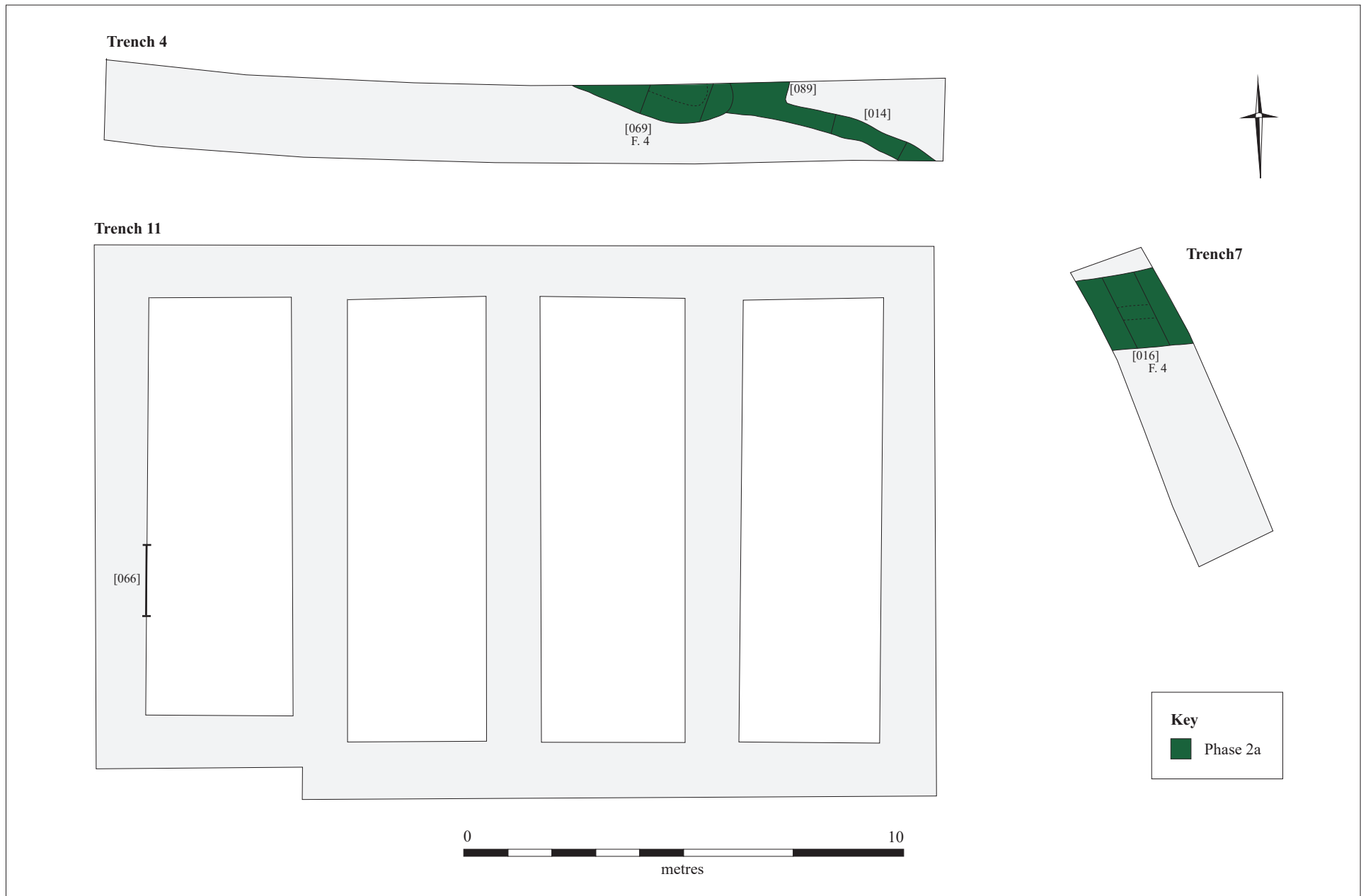


Figure 5. Plans of trenches 4, 7 and 11

#### ***Trench 4***

Trench 4 (Figure 5), which was 19.0m long and aligned roughly west to east, contained one or possibly two linear features aligned roughly southeast to northwest [069] and [014]. Topsoil [001] was c.0.25m thick and subsoil [002] was also c.0.25m thick, the subsoil produced five pieces of burnt flint weighing 319g [004] <004>.

Linear [069]/F.4 was sealed by the subsoil [002], indicating that the feature is relatively old. It was only partially revealed within the trench, but is aligned west-south-west to east-north-east and appears to butt end within the trench. [069] is c.0.78m deep, although this has probably been truncated by ploughing, its width is unclear but it is at least 1.0m wide. It is likely to have been a minimum of 1.6m wide and could have been wider still. It appears to have a U-shaped and flat bottomed profile, although this is uncertain. It contained three fills ([068], [003] and [067]). The basal fill [068], which was 0.35m thick, was a pale grey brown very compact chalky silt containing occasional flint gravel. The fill above this [003] was c.0.16m thick and was a darker less compact version of [068]. The uppermost fill [067], which was c.0.25m thick, was a relatively loose mid brown chalky silt/loam with some chalk and gravel. The only fill which contained any artifacts was [003] which produced three pieces of burnt flint weighing 16g <003> and eight pieces of animal bone. [069] is probably the same as [016] in trench 7.

Linear [014] which was on the same alignment as [069] was narrower than it and appeared to be cut by it, although this is uncertain. It appeared to be curving slightly, although this impression may be misleading, and was 0.48m wide while its surviving depth was 0.24m, although it was originally probably c.0.30m deep. It was filled with [014], a pale brown very compact chalky silt with occasional gravel that contained no finds. At the junction of [069] and [014] there was the suggestion of another possible feature on the northern side of the trench [089], this had a pale chalky silt fill and could be another linear heading roughly northwards.

The burnt flint from the subsoil in trench 4 indicates phase 1 activity, while the two or possibly three linear probably belong to subphase 2A.

#### ***Trench 5***

Trench 5, which was 14.9m long and aligned roughly west to east, contained no archaeological features.

#### ***Trench 6***

Trench 6, which was 11.0m long and aligned roughly west to east, contained no archaeological features.

### ***Trench 7***

Trench 7 (Figure 5), which was 7.2m long and aligned roughly north to south, was positioned with the aim of detecting a continuation of [069] from trench 4. Topsoil [001] was c.0.3m thick and subsoil [002] was c.0.2m deep. There was a single west-southwest to east-northeast aligned linear feature [016] within the trench, which probably is the same as [069].

[016]/F.4, which is sealed by the subsoil [002], is c.1.2 to 1.3m wide and 0.9m deep, although this has probably been truncated, with steep angular sides and a flat base c.0.4m wide. The basal fill [019], which was c.0.45m deep, consisted of compact grey brown chalky silt with gravel. Above this was [018] compact light brown chalky silty clay with frequent gravel over 0.4m thick. Within the upper part of [018] was [017], a concentration of over 63 pieces of animal bone weighing 831g. [016] probably belongs to subphase 2A.

### ***Trench 8***

Trench 8 (Figures 3 and 4), which was 16.4m long and aligned roughly north to south, was positioned with the aim of detecting continuations of various features from trench 1. The modern ground surface was at c.27.1m OD and the topsoil [001] was c.0.1 to 0.2m thick. A number of east-west aligned modern pipe trenches cut through the underlying deposits to depths of up to 0.7m, but did not appear to have affected archaeologically significant deposits. The southern part of the trench had been heavily affected by a modern cellar, which had obliterated all earlier archaeological features. This means that the effective length of trench 8 was only 12.2m. Beneath the topsoil was c.0.6 to 0.7m of subsoil [002] representing the same headland F.10 as described in trench 1 with similar characteristics.

The southernmost identifiable feature [059] had been heavily truncated by the modern cellar, but appeared to be a southwest to northeast aligned linear feature that butt ended within the trench. It was c.0.6m wide and 0.15m deep with a shallow U-shaped profile and was filled with [060] a compact mid brown silt; although this feature was 100% excavated within the trench it produced no finds. Next to [059] was [072], another southwest to northeast aligned linear c.1.4m wide and 0.3m deep with a U-shaped profile. The lowest c.0.2m of [072] was filled with [062], a compact brown chalky silt containing gravel but no finds. The upper fill [053] contained some animal bone and flint and part of a delicate copper alloy chain <047> that is probably Roman. This feature was 100% excavated within the trench. [059] and [072] are very similar to [048] and [050] in trench 1 and are probably also subphase 2B scoops or ruts, they have therefore been grouped in F.6.

The phase 3 west to east aligned ditch [030] from trench 1 continued into trench 8. Its size, form and fill were similar to those described in trench 1. In trench 8 the fill of [030] was numbered [052] and produced a small fragment of animal bone and a piece of

residual Prehistoric pottery. Ditch [030] cut through metalled surface [073]/F.8-9, which covered the northern c.8.5m of the trench. The metalled surface [073] ended at a distinct southwest to northeast aligned line, it covered the rest of the trench apart from a small area in the northeast corner of the trench c.1.4 by 1.1m in extent where the natural chalk stood higher than the cobbles. In character [073] was very similar to [035], with the same evidence for an initial general levelling cut [074] and a single course of cobbles. The area of natural chalk in the northeast corner is significant, the fact that it has not been truncated by the levelling cut [074] indicates the presence of a corner where two roads join, one running southwest to northeast and the other north to south. This is confirmed by the location of the metalled surfaces in trenches 1, 9, 10A, 10B and 10C. The southwest to northeast aligned ruts in the metalled surface were more distinctive than in trench 1, and five particularly clear examples could be identified. They had rather irregular edges with gentle U-shaped profiles and were c.0.1 to 0.4m wide, although most were c.0.25m wide, and c.0.3m deep. The width of the southwest to northeast aligned road was c.5.0m and the location of the ruts suggest that either it was wide enough for two carts c.2.0m wide to run along either side of the road, or that a single vehicle again c.2.0m wide could run along the centre of the road. The top of the metalled surface was generally at c.26.25m OD, except where it was rutted or had slumped into earlier features. There were possible faint traces of a bank on the southeast side of the metalled surface c.0.3m high and 1.6m wide, but later ploughing and bioturbation has heavily affected this. A semicircular iron disc [058] <048>, probably half of a circular object, weighing 14g and c.30mm wide by 7mm thick was found in the metalled surface. It is probably Roman in date, although it is not closely dateable. This was the only find recovered from the metalled surface despite the fact that it removed in its entirety by hand.

An *as* of Antoninus Pius (AD 138-161) minted in AD 154 to 155 [042] <025> was found in the subsoil, c.0.05 to 0.10m above the metalled surface [073]. Although it is impossible to be certain it appears from the evidence of the adjacent sections that the coin probably comes from the part of the subsoil that has not been effected by Medieval ploughing. This suggests that it could be an *in situ* artefact, but as this cannot be determined with certainty the conclusion must be treated with caution. This removal of subsoil above the metalling also produced some flint and fifteen Roman potsherds. All of the sherds were non-diagnostic and thus vessel forms cannot be determined, however the fabrics suggested an Early Roman date. As with trench 1 the quantity of finds was very low considering the amount of deposit that was removed by hand.

Sealed by the metalled surface [073] were two features, a large ditch [054]/F.2 and a smaller feature [076]/F.5, although both of these run broadly southwest to northeast they are on slightly different alignments. [076] has straight and parallel edged c.0.8m wide and up to 0.3m deep with a highly irregular profile. It was filled with [099], a pale brown silt. [073] which seals it has clearly slumped into [076] and the features cuts a large earlier ditch [054]. [076] is filled with [075] a pale brown chalky silt that contained no finds despite the feature being c.70% excavated within the trench. [076] is probably the same as [008] in trench 1.

[054] was partially sealed by metalled surface [074] which extended over some of it and was cut by feature [076]. The fills of [054] were very compacted and [074] had not slumped into the feature at all. [054] was a southwest to northeast aligned linear with straight and parallel edges c.2.1m wide and 0.9m deep, although the general truncation [074] means that it was originally probably c.1.2m deep. It had a steep V-shaped profile with an 'ankle breaker' slot in the base, that had steeper nearly vertical sides and was 0.1m deep and 0.14m wide. The basal fill [057] in the 'ankle breaker' slot was a compact mid to pale brown chalky silt. Above this was [056], a c.0.24m thick compact mid to pale brown chalky silt. Above this was [055] a very compact pale beige chalky silt containing lots of medium to large sized pieces of chalk c.0.04m thick. The final fill was [061], a mid to dark brown chalky silt. Although c.80% of this feature within the trench was excavated the only finds were two small sherds of Romano-British sandy pottery found in [057].

Ditch [054], which is sealed by the metalled surface [073], can be assigned to subphase 2A and [076], also sealed by metalled surface [073], can be assigned to subphase 2B while the metalled surface itself belongs to subphase 2C. [059] and [072] can also probably be assigned to subphase 2B based on their similarity to features in trench 1. Although it is impossible to be certain the *as* of Antoninus Pius minted in AD 154 to 155 probably comes from subphase 2D rather than phase 3. Phase 3 is represented by the ditch [030] and the headland F.10.

### ***Trench 9***

Trench 9 (Figure 6) was the cut for a sewer pipe, c.1.1m wide and approximately 60m long on a west to east alignment, plus some offshoots. This trench was monitored and recorded as it provided an opportunity to check for the continuation of linear features observed in trenches 1, 8 and 10; but its restricted width and depth meant that it was impossible to hand excavate any features. Two areas of archaeological features were observed; the first lay within the westernmost 8m of the trench whilst the second lay around 20m from the eastern end. The modern surface, consisting of a tarmac access road plus makeup, was at c.27.1m OD at the western end of the trench and sloped downwards to the east. This sealed some surviving topsoil [001] that was c.0.1m thick and subsoil [002], which was up to c.0.4m thick.

The area at the western end of the trench consisted of a disturbed area of metalled surface and several linear features. The surviving metalled surface [077]/F.9 covered a length of c.2.7m with its surface at c.26.1 to 26.15m OD. Metalled surface [077] survived in two distinct north to south aligned areas, c.0.8 and 1.4m wide respectively. It appears that these areas of [077] have survived through slumping into underlying linear features and that the rest of the metalled surface has been destroyed through later ploughing. It is possible that the eastern of these two putative linears is a continuation of [039]/F.7 from trench 1.

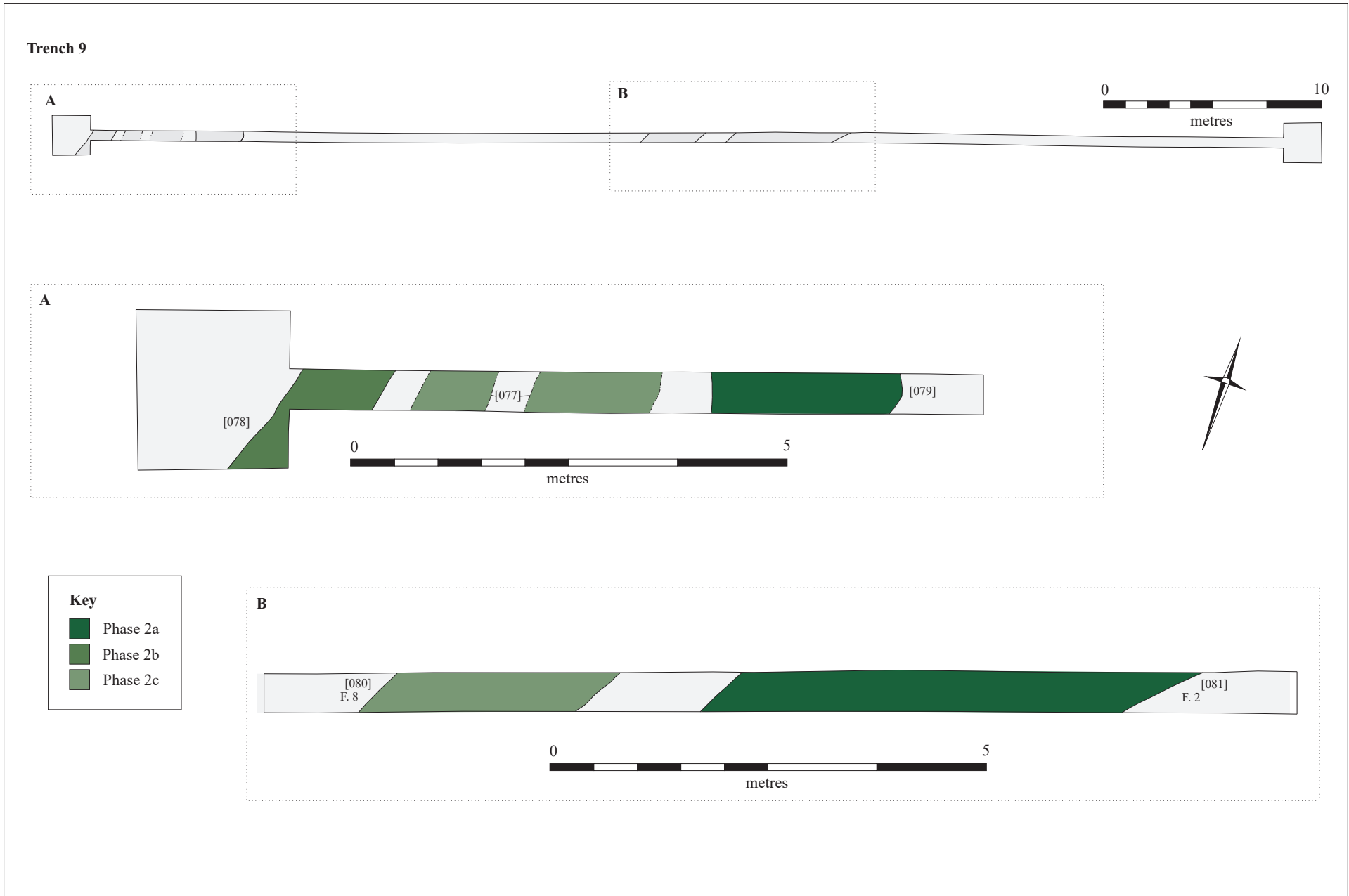


Figure 6. Plans of trench 9

To the west of the metallated surface was what appeared to be another linear on the same alignment [078], this was c.1.0m wide and possibly cut by a later pit. To the east of the metallated surface was a large linear [079]/F.1, c.2.1m wide that is probably the same as [032] in trench 1. It appears that metallated surface [077] probably originally extended over linear [079], based on the presence of disturbed cobbles in the subsoil and the higher surviving height of the chalk natural to the east of [079], although this cannot be regarded as conclusive

The second area of archaeology consisted of an area of metallated surface and a linear feature. Metallated surface [080]/F.8 was aligned southwest to northeast alignment and is c.1.9m wide, but clearly truncated. [080] is probably the same as the southwest to northeast aligned metallated surface F.8 observed in trenches 8 and 10. Around c.0.7m to the east of [080] was a large linear feature [081]/F.2 on a similar southwest to northeast alignment, c.3.0m wide. This is probably the same as the large ditch [054] in trench 8, which was also observed in trench 10.

Metallated surfaces [077] and [081] can be assigned to subphase 2C, while the putative linears under it must belong to subphases 2A or 2B. If [079] is the same as [032] in trench 1 then it belongs to subphase 2A [078] probably belong to subphase 2B. If [081] is the same as [054] in trench 1 then it can be assigned to subphase 2B.

### ***Trench 10***

Trench 10 (Figures 4, 7 and 8) was the cut for the foundations of a building that lay to the east of trench 1 and included trench 8 within its area. It consisted of three parallel trenches c.0.6m wide that were c.4.5 to 4.7m apart aligned north to south with connecting west to east aligned trenches at their northern and southern end. This was monitored and recorded as it provided an opportunity to check for the continuation of linear features observed in trenches 1 and 8, but its restricted width and depth meant that it was impossible to hand excavate most of the features. Archaeological features were observed in several parts of trench 10. Given the nature of trench 10 the observations from the three north to south aligned trenches will be discussed in order from west to east, under the designations 10A, 10B and 10C. Results from the southern connecting west to east aligned trench will be discussed under 10B as this is the most sensible grouping.

#### ***Trench 10A***

The modern ground surface in trench 10A, which is located between trenches 1 and 8, was at c.27.3m OD, with c.0.25 to 0.4m of topsoil [001] and 0.4 to 0.7m of subsoil [002]. A metallated surface [082] was observed in the northern c.9.5m of the trench at c.26.0 to 26.3m OD. There was only one course of cobbles and there was some slight evidence that they were in a general cut. The metallated surface F.8-9 sealed two large ditches ([083] and [084]) and two less substantial features ([085] and [086]).

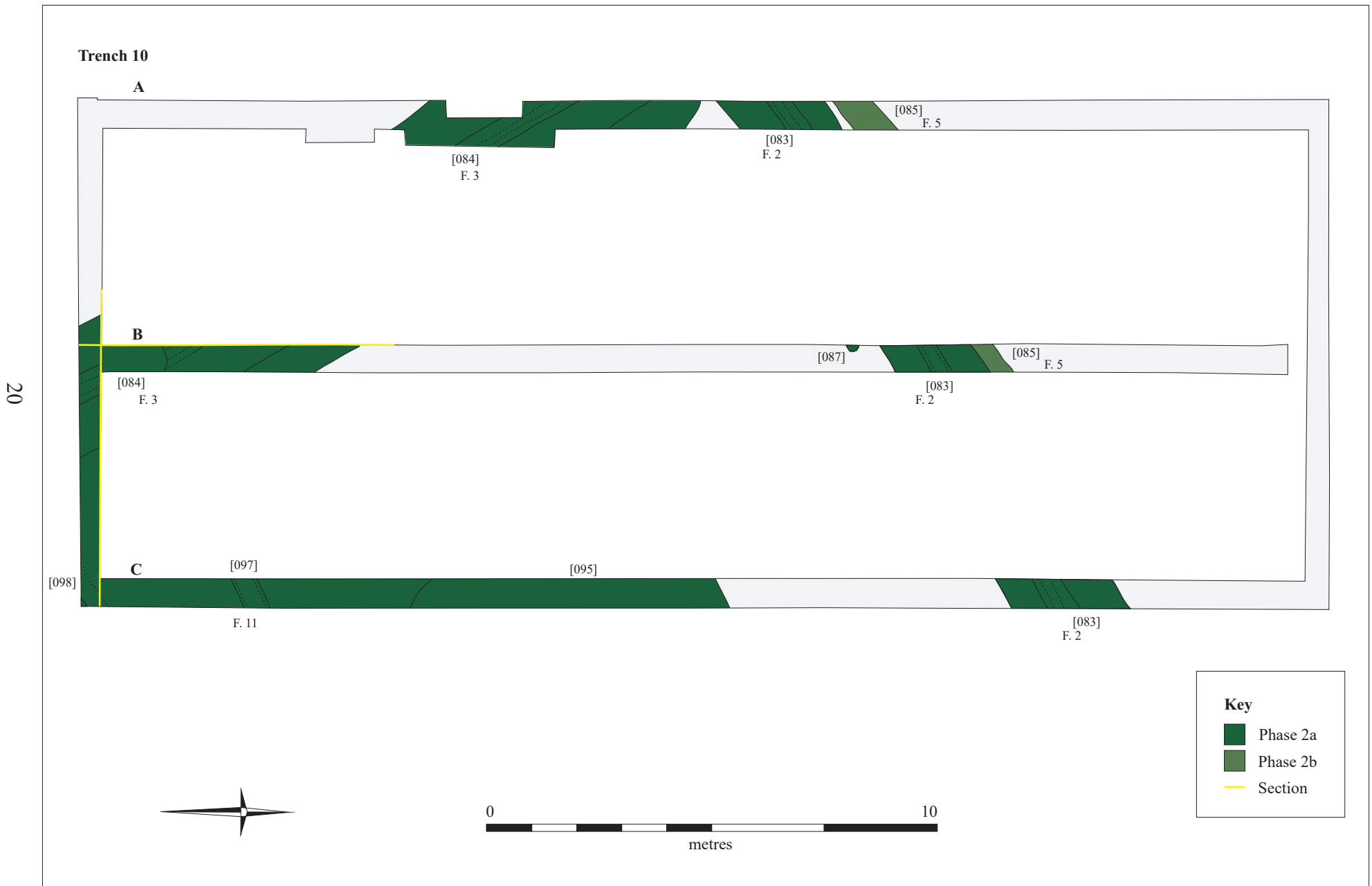


Figure 7. Plan of trench 10, subphases 2a and 2b

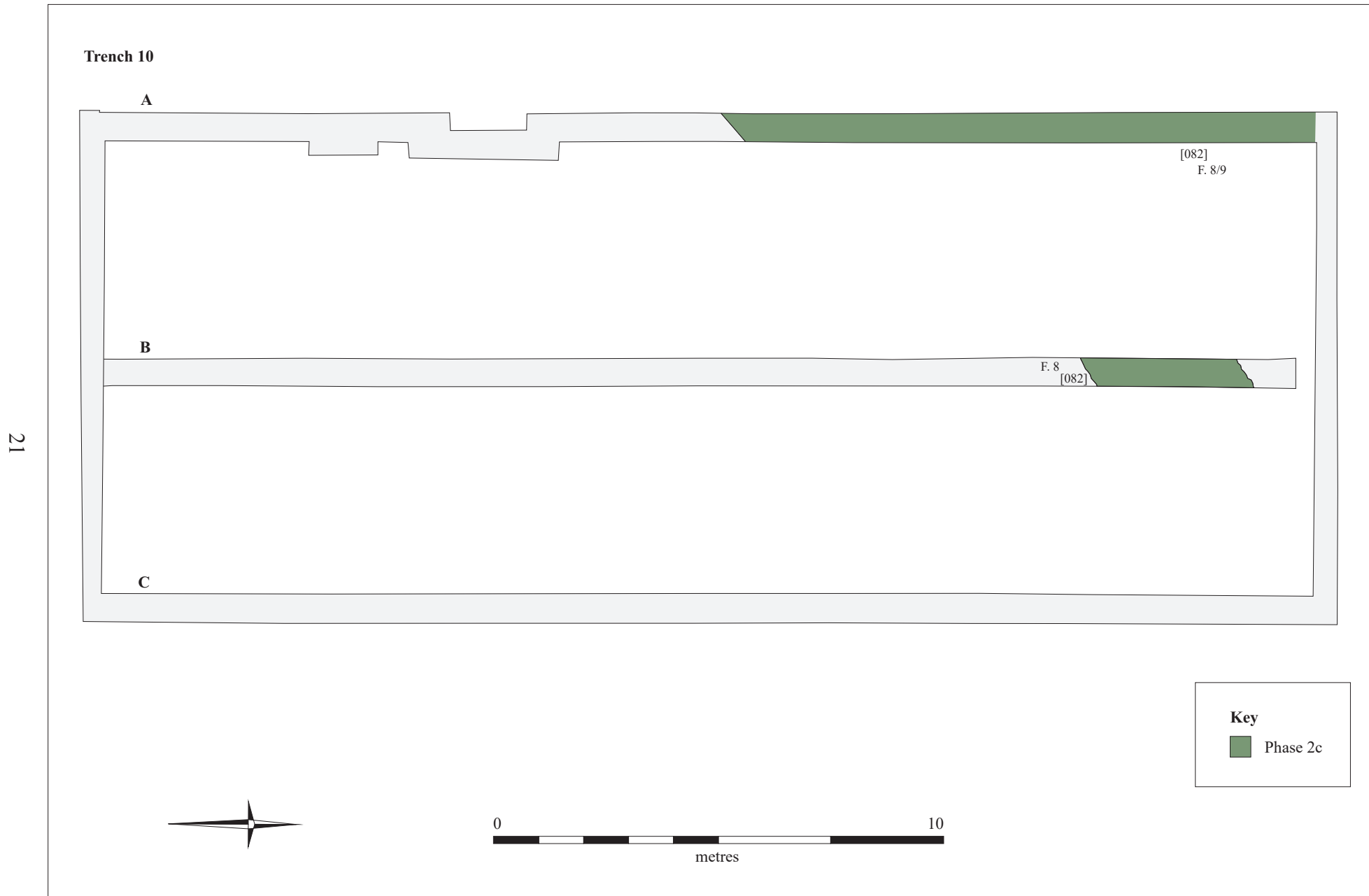


Figure 8. Plan of trench 10, subphase 2c

[083]/F.2 is a southwest to northeast aligned linear with straight and parallel edges, c.1.8m wide and 1.0m deep. It has a V-shaped profile with a c.0.3m deep and 0.18m wide 'ankle-breaker' slot in the base. It was filled with a series of pale brown chalky silts. [084]/F.3 is a northwest to southeast aligned linear with straight and parallel edges c.2.7m wide and 1.1m deep allowing for later truncation. It has a V-shaped profile with an 'ankle breaker' slot c.0.2m deep and 0.20m wide in the base. Although [083] is slightly narrower and shallower than [084] this is due to later truncation, the two large ditches which are extremely similar in size, form and fills and are at right angles to each other are almost certainly related. As they were not present in trench 1, which is located only c.1.0m to the west, they must join in the narrow intervening gap.

[085]/F.5 located just to the north of the large ditch [083] also runs southwest to northeast, although on a slightly different alignment, and is c.0.7m wide and 0.2m deep with a rather irregular U-shaped profile and is filled with a pale brown silt. [086] located just to the north of [084] is a northwest to southeast aligned linear c.0.6m wide and 0.15m deep with mixed fills. There are traces of what appears to be a decayed squared timber beam within [080], c.0.2m wide and 0.1m thick. If this is correct then it probably relates to bank F.11 associated with [084].

### *Trench 10B*

Trench 10B located to the east of trench 8 contains a number of features that can be linked to those in trench 10A. The modern ground surface is at c.26.9m OD and the topsoil [001] is c.0.2m thick, while subsoil [002] is c.0.2 to 0.6m thick. Metalled surface [082]/F.8 is present towards the northern part of the trench surviving for a length of c.3.5m, although it has probably been truncated. Disturbed cobbles in the lower part of subsoil [002] suggest that F.8 may originally have covered c.7.0m of trench 10B. The surface of F.8 was at around c.26.2 to 26.25m OD and there was only a single course of cobbles. Lying under the disturbed cobbles were the large ditch [083]/F.2 and a shallower feature [085]/F.5 which cut it. In trench 10B [083] was c.1.7m wide and 1.2m deep allowing for truncation, with a similar profile and fills to that observed in trench 10A. [085] was c.0.6m wide and 0.14m deep, again with a similar profile and fill to that observed in trench 10A. Located c.0.4m to the south of ditch [083] was a circular posthole [087], which was c.0.3m in diameter and 0.30m deep with vertical sides and a pointed base. It was filled with a pale brown chalky silt that had the impression of a decayed post within it.

At the southern end of trench 10B, and in the southern east to west connecting trench, the continuation of [084]/F.3 was also observed. In trench 10B it was c.2.6m wide and c.1.25m deep with the same profile as in trench 10A. To the north of it were faint traces of what appears to be bank F.11. There was a layer of solid chalk [091] c.2.4m wide and 0.4m high. It appears that the area was probably first levelled, removing any soil and vegetation plus an unknown amount of the chalk natural. There was then a thin dark lense [090] only a few millimetres thick, probably representing 'trample' from transient construction related activities. The bank of redeposited natural chalk [091] was then laid.

Within [091] were three areas filled with pale brown slightly chalky silt; [092] 0.16m wide by 0.08m deep, [093] 0.10m wide by 0.15m deep and [094] 0.42m deep by 0.18m deep. Although certainty is impossible, as these were only observed in section, they appear to be the traces of beams that rotted *in situ* and gradually filled with material. This suggests that bank F.11 had a timber framing.

### *Trench 10C*

In trench 10C a continuation of the southwest to northeast aligned ditch [083] was located as well as some more nebulous traces of activity. The modern ground surface is at c.26.7 to 26.75m OD with c.0.5 to 0.6m of topsoil [001] and subsoil [002], which was only intermittently present and was up to 0.3m thick. In trench 10C [083]/F.2 was c.2.2m wide and 1.1m deep, with a similar profile and fills to those observed in trenches 10A and 10B. No metallated surface was observed, probably because of later disturbance.

Around 6.0m south of ditch [083] and extending for c.7.0m was an area of very flat truncated chalk natural, which was clearly different from the more irregular surface of the chalk natural to the north and south of it and to the surface of the chalk natural observed in trenches 10A and 10B. The impression from the section is that this area had been subject to a careful general truncation event [095], which had produced a level surface at c.26.3m OD. As there was c.0.15m of compacted subsoil above this, which showed no signs of Medieval plough disturbance, this surface appear to represent a relatively old event that should probably be assigned to phase 2.

Around 2.0m the south of truncation event [095] was a deposit of mixed chalk and chalky silt with thin dark lenses within it [096], c.0.25m high and 5.0m wide. This could potentially be an area of heavily bioturbated and disturbed natural, but it is more likely that it is the remains of bank F.11 and has suffered from plough disturbance. Within [096] was a quite distinctive rectangular area of chalky silt [097] c.0.6m wide by 0.2 deep, interpreted as where a timber beam has rotted *in situ*. There was also what appeared to be an upstanding linear piece of chalk natural [098] c.0.3m wide and 0.2m high. It appears that the area under [096] had been truncated to a general level, although not nearly as carefully as [095], and that [098] had been deliberately left upstanding.

### *Trench 10 summary*

Trench 10 provided further evidence of the southwest to northeast aligned metallated surface [082]/F.8 of subphase 2C also identified in trenches 1, 8 and 9. The large southwest to northeast aligned V-shaped ditch with 'ankle breaker' [083]/F.2 that had been excavated in trench 8 and identified in trench 9 was also located, and a similar perpendicular ditch [084]/F.3 was also located indicating two sides of an enclosed area. Within this enclosed area there were traces of an apparent timber framed chalk bank F.11 c.5.4 to 6.0m wide, whilst inside the bank was a levelled area. This activity falls within

subphase 2A and there was then evidence of a slightly later shallow southwest to northeast aligned linear [085] of subphase 2B.

### ***Trench 11***

Trench 11 (Figure 5) was the cut for the foundations of a building that lay in the area of trench 3. It consisted of five north to south aligned trenches with two connecting east to west trenches at their ends. Topsoil [001] was c.0.2m thick and subsoil [002] was c.0.20m thick. A single feature [066] was observed, this was a small cut c.0.25m wide and 0.1m deep, filled with [065] a mid brown chalky silty sand containing gravel inclusions. The feature was probably sealed by subsoil [002] and is most likely to be a posthole. It contained two pieces of worked flint. This feature could belong to any phase of activity at the site.

### **Discussion**

The results from the archaeological evaluation and watching brief at Sawston Police Station were totally unanticipated and out of all proportion to the scale of the fieldwork. It is important to remember that the full implications of the results only became apparent during the course of the fieldwork as more trenches were excavated or observed. The growing realisation of the importance of the site occurred in a number of stages:

- Pre-Evaluation: no specific archaeological remains known from the development area, but possibility of some being present recognised, given the central village/crossroads location and proximity to Dernford Manor.
- Initial Evaluation (trenches 1 to 7): recognition of metalled road surface, believed to probably be Medieval and possibly relating to Dernford manor, perhaps as a private road leading from the crossroads, plus some linear features.
- Additional Evaluation (trench 8): metalled road surface reinterpreted as Roman, based on relative dating evidence, and large ditches underlying it recognised.
- Watching Brief (trenches 9 to 11): extent of metalled road surface and large ditches becomes more apparent in the service trenches.

With the benefit of hindsight it is apparent that the archaeological remains identified at Sawston Police Station merited a much more intensive and extensive investigation, but the parameters of the fieldwork cannot be faulted given the actual circumstances of the project. Curatorial decisions were made during the evaluation to limit the destruction of the Roman road by excavating large portions of it and, due to a lack of associated settlement evidence, it was considered that further excavation of it would not yield further information but, rather, more of the same. The most significant archaeological remains were found within trenches 1, 8, 9 and 10A-C, with other potentially important features in trenches 4 and 7. Trench 11 produced a single feature, while trenches 2, 3 5 and 6 were devoid of archaeological features. The archaeological activity at Sawston Police Station falls into three broad phases:

- Phase 1: Prehistoric activity.
- Phase 2: Early Roman
  - Subphase 2A: Large Early Roman enclosure(s), possibly military camp(s).
  - Subphase 2B: Ephemeral Early Roman activity, probably relating to trackway/road.
  - Subphase 2C: Metalled Early Roman road junction.
  - Subphase 2D: Ephemeral Early Roman activity postdating metalled roads
- Phase 3: Medieval Agriculture.

Of the phases identified phase 2 is clearly the most interesting, particularly subphases 2A and 2C. Phase 3 is important inasmuch as it has implications for the dating of the earlier phases and phase 1 is of moderate interest in terms of Prehistoric landscape use. It must be stressed, particularly with regard to the interpretation of subphase 2A as possibly the remains of military camp(s) that the nature and scale of the investigations combined with the small quantities of dateable material recovered make all interpretations tentative.

### ***Phase 1: Neolithic to Iron Age***

The evidence of Neolithic to Iron Age activity is slight, consisting of a relatively small amount of pottery, burnt clay, animal bone, flint, burnt flint and burnt stone found in the subsoil, topsoil, later features and natural hollows. Although the quantity of material covered was not great the site had been affected by later ploughing etc, the one context where material was protected from this, the small natural hollow [013] produced a relatively substantial quantity of material considering its size (16 pieces of pottery weighing 66g and 11 pieces of animal bone weighing 30g). As this material was probably not deliberately placed in the feature (cf Evans *et al* 1999), this suggests that there was probably a relatively substantial amount of material in the vicinity. As no cut features of this period were located it is likely that this locally high point in the landscape was a minor foci for transitory activities, with [013] representing an event where one sheep was killed and consumed and two pots broken.

The pottery is generally Late Bronze Age/Early Iron Age, with a slight preference for the Early Iron Age. The flint, although not clearly chronologically diagnostic, suggests that some of the material is Late Bronze Age/Iron Age with a few Neolithic pieces. The stone used is all of a pale brown opaque flint obtained locally that was then worked on site into tools such as a retouched secondary flake, an end scraper and a miscellaneous scraper. It appears from later reuse that Neolithic material was lying around on the surface and reused in the Late Bronze Age/Iron Age. The raised area at Sawston Police Station at c.26.5m OD was probably a relatively dry place within a locally quite wet environment between the rivers Cam and Granta, explaining why it was attractive for occasional activities.

Phase 1 material was recovered in trenches 1, 4 and 8 and the distribution is probably not significant, as it reflects the presence of later features that attracted archaeological

attention rather than any Prehistoric pattern. Although the Prehistoric activity might be regarded as relatively insignificant it helps add another element to the archaeology of the period in Sawston parish, which previously consisted largely of barrows and metalwork.

Evaluations at Borough Hill produced flint dating to the Mesolithic/Early Neolithic, Late Neolithic/Early Bronze Age and Late Bronze Age/Iron Age (Conneller 2001), whilst there was Late Bronze Age through to Late Iron Age pottery (Hill *et al* 2001). This indicates that Borough Hill was a focus of activity during all the Prehistoric periods when there was activity at Sawston Police Station. There are also periods for which there is evidence of activity at Borough Hill but not at Sawston Police Station, although this may just be a reflection of the limited scale of work at Sawston Police Station it is quite likely to reflect a genuine absence as it is likely that evidence would have been found redeposited in later features which were intensively excavated.

### ***Phase 2: Early Roman***

The major phase of activity at Sawston Police Station is the Early Roman period (1<sup>st</sup> century AD). Based upon differences in feature type and stratigraphic relationships this has been subdivided into four subphases:

#### *Subphase 2A: Ditched enclosures, possibly Roman camp(s)*

Subphase 2A (Figure 9) consists of a series of large V-shaped ditches F.1-4, that are stratigraphically earlier than both some rather ephemeral features (subphase 2B) and metalled surfaces (subphase 2C). In many cases a direct stratigraphic relationship can be demonstrated between the earlier features and the more ephemeral features and metalled surface, in other cases where this does not exist the strong similarity between features provides good evidence for assigning them to subphase 2A. The large V-shaped ditches were found in trenches 1, 4, 7, 8, 9 10A, 10B and 10C, given the similarities of alignment between different trenches it appears that four ditches are represented.

These four ditches are all very similar in terms of width and depth (allowing for Medieval ploughing truncation in trenches 4 and 7), profile, basal height, fill material and the general lack of finds. Most of the animal bone comes from the uppermost part of the features and probably collected later in hollows above the features, rather than having anything to do with the ditches themselves. Given these similarities it seems likely that the ditches are all related. Ditches F.2 and F.3 are at right angles to each other and must meet in the narrow gap between trenches 1 and 10A, forming an abrupt right angled corner. Although ditch F.4 is not exactly parallel to ditch F.3 it is likely that it is the other side of the enclosed area. These three ditches create an enclosed area of c.80m southwest to northeast by 45m+ northwest to southeast. The little dating evidence that they produced is Early Roman (1<sup>st</sup> century AD), although this evidence is scanty it is well stratified from the base of some of the ditches and is supported by the evidence of the later subphases 2C and 2D. The evidence therefore indicates a substantial polygonal

enclosure surrounded by large V-shaped ditches that are remarkably devoid of any evidence of occupation or activities.

Ditch	Cut no.	Trench	Alignment	Profile	Width (m)	Depth (m)	Sealed by road	Findings
F.1	032	1	SW-NE	V-shaped	2.2	1.05	Yes	Early Roman pottery, animal bone
F.1	079	9	N-S ?turning	-	2.1	-	Probably	-
F.2	083	10A	SW-NE	V-shaped with ankle breaker	1.8	1.0	Yes	-
F.2	054	8	SW-NE	V-shaped with ankle breaker	2.1	0.9	Yes	Romano-British pottery
F.2	083	10B	SW-NE	V-shaped with ankle breaker	1.7	1.2	Yes	-
F.2	083	10C	SW-NE	V-shaped with ankle breaker	2.2	1.1	No	-
F.2	081	9	SW-NE	-	3.0	-	No	-
F.3	084	10A	NW-SE	V-shaped with ankle breaker	2.7	1.1	No	-
F.3	084	10B	NW-SE	V-shaped with ankle breaker	2.6	1.25	No	-
F.4	069	4	NW-SE	Uncertain, probably V-shaped	1.6 +	0.8+	No	Burnt flint, animal bone
F.4	016	7	NW-SE	V-shaped with ankle breaker	1.2-1.3 +	0.9+	No	Animal bone

Table 1: Subphase 2A features.

Trench	Ditch	Basal height
1	F.1	25.3m OD
4	F.4	25.4m OD
7	F.4	25.8m OD (butt end)
8	F.2	25.4m OD
10A	F.2	25.3m OD
10A	F.3	25.3m OD
10B	F.2	25.2m OD
10B	F.3	25.2m OD
10C	F.2	25.15m OD

Table 2: Basal heights of subphase 2A ditches.

Inside the ditches were banks made from the upcast chalk natural. Although these had been damaged by ploughing and generally only survive in restricted areas to a height of c.0.2m the evidence from trench 10C in particular suggests that they were c.5.4 to 6.0m wide. Although observations in section cannot be conclusive there is evidence from a number of trenches that the banks had a timber framing of beams and posts. The area



Figure 9. Plan of subphase 2a

within the banks appears to have been levelled to a flat surface, this probably relates both to the removal of topsoil etc to form the bank and to a desire to create a flat surface. The evidence from trench 4 with the butt ending ditch although inconclusive could be interpreted as indicating a gateway, with [014] being some insubstantial form of blocking and [089], if genuine, some form of outworks.

Trench	Ground surface	Surviving top of bank F.11
10A	26.3-26.4m OD	26.45m OD
10B	26.2m OD	26.4m OD
10C	26.2m OD	26.4m OD

Table 3: Heights of cleared ground surface and surviving top of bank within area enclosed by F.2-4.

The main issue concerning the ditched and banked enclosure F.2-F.4 is its date, which must be either Iron Age or Early Roman. For a number of reasons it appears to be Early Roman, if this is accepted then it is probably a temporary military camp. The possibility that it is an Iron Age enclosed site cannot be entirely dismissed, but thanks to a growing body of recent fieldwork on Iron Age sites in the region this appears less likely. Locally there is the evidence from Borough Hill (Bray 1994; Mortimer 2001; Samuels 2001) and Wandelbury (French 2003), whilst further afield there are Arbury (Evans and Knight 2002), Marion Close (Mortimer and Evans 1997), and Wardy Hill (Evans 2003). The factors that argue against the Sawston Police Station ditches being Late Iron Age are:

- 1) The pottery from them is Early Roman and no Middle or Late Iron Age pottery was recovered at the site. Although it could be argued that there is only a small amount of material and that the ditches might predate the material found in them some of this pottery was recovered from basal fills.
- 2) The V-shaped profile of the ditches with ‘ankle breaker’ slots at the base. Although V-shaped profiles are known from Iron Age enclosure ditches, being known for instance at Wardy Hill, Wandelbury and Marion Close, the dominant form of Iron Age ditch is U-shaped and the ‘ankle breaker’ slots appear unparalleled at Iron Age sites. Large V-shaped ditches c.2.0m wide and 1.2m deep are also known locally from the Early to Middle Bronze Age at Babraham Road (Hinman 1998). This raises the possibility that the subphase 2A ditches could be Bronze Age, however, this is highly unlikely as evidence from the site indicates that there was no a long time interval between subphase 2A and subphases 2B and 2C.
- 3) The shape of the enclosure with straight lines and an abrupt right-angled corner. The other Iron Age sites are generally circular or oval with curving ditches, which is discernible even in narrow evaluation trenches, and have much less abrupt corners where they exist at all.
- 3) The paucity of finds from the ditches. Again this is not unparalleled at Iron Age sites, for instance at Arbury where a substantial amount of fieldwork has revealed a relatively small amount of material, it is again atypical of Iron Age sites.

4) The evidence for timber framing of the bank, which again is atypical for the Iron Age. Although most southern British hillforts probably had timber bracing locally identifiable evidence for this is scarce.

5) The proximity of the known large Iron Age site of Borough Hill, only 1.5km to the west, makes the existence of another substantial enclosed Iron Age site unlikely.

Individually none of these factors is conclusive, but taken as a whole they make a strong case for the Sawston Police Station enclosure not being Iron Age. The possibility cannot, however, be entirely ruled out on the available evidence. Given the lack of any identifiable Middle or Late Iron Age material the possibility that it is Iron Age will not be pursued further.

If it is accepted that the subphase 2A enclosure is Early Roman and dates to the 1<sup>st</sup> century AD, then the size and profile of the ditches with their distinctly martial profiles argues strongly for either direct military associations or at least army participation in their creation (cf Evans 1996). The overall size of the potential enclosed area and the size and profile of the ditches do not necessarily rule out a non-military interpretation for the site. These would all potentially fit with a 1<sup>st</sup> century rural Roman settlement of some kind. If it is a non-military rural settlement the lack of finds in the ditches suggests either that the site was only occupied for a very short period of time, that the focus of activity was some distance away from the evaluation trenches or that the nature of the activity within the enclosure was such that it did not generate large quantities of material. Given the scale and nature of the investigations it would be largely fruitless to speculate further on the possible nature and function of the enclosure.

Alternatively it is possible that the enclosure represents a Roman military site, if this is correct then the lack of finds suggests a very short lived occupation, implying that this is a temporary camp rather than a more permanent fort (the simple term camp is preferred over other terms such as 'marching camp' following Welfare and Swan 1995, 2). The possibility that the enclosure may be a Roman military camp will be considered in some detail. This does not necessarily imply that this is the favoured interpretation, but given the potential significance of such a discovery it warrants this treatment, even if it is only a possibility. Due to the nature and scale of the investigations, combined with the small quantities of dateable material recovered, interpretative certainty is impossible. Although the hypothesis that the enclosure represents a Roman military camp is consistent with the features and material from the site, the evidence by its very nature falls well short of making a conclusive case.

Roman military camps were intended for only one or two night's occupation by troops on the move, as ancient sources record that after three nights they would have eaten all the food in the area and fouled the water supply. Classical documentary sources such as Hyginus Gromaticus (*De munitioibus castrorum*) and Vegetius (*Epitoma Rei Militaris*) shows that such a *castra* (camp) would have a *fossa* (ditch) 1.5 and 3.0m wide and 0.9 to 1.8m deep. Excavated examples are generally 1.8m wide and 0.8m deep (Welfare and

Swan 1995, 18), the slightly greater width and depth of the ditches at Sawston Police Station is probably due to the protection provided by the Medieval headland F.10, as where this is not present they are shallower and narrower. The material from the ditches would be heaped up inside to form an *agger* (inner upcast rampart) and wooden stakes, of which each soldier carried at least two, would be used on the banks to help create a *vallum* (palisade). In general there would be few features inside the banks, as the tents that formed the accommodations would leave negligible traces, although if camps were occupied for longer periods there are sometimes rubbish pits aligned with the lines of tents. The V-shaped profile with 'ankle-breaker' or cleaning slot that the ditches possess has often been claimed as a characteristic feature of Roman camps, although these are quite rarely found they do occur at Cawthorn C (North Yorkshire), Farnshield (Nottinghamshire) and Upper Affcot (Shropshire) (cf Welfare and Swan 1995, 18). The most likely explanation is that cleaning slots are not required on sites that were going to be occupied for only a short period of time, but that this was a standard military way of digging ditches that was sometimes employed anyway. According to documentary sources Roman camp ditches were supposed to be deliberately backfilled after use, although this can be shown to have happened occasionally it appears that in general it did not (Welfare and Swan 1995, 18). The evidence from Sawston Police Station suggests that the ditches filled up slowly through natural weathering and that the ditches were not backfilled.

If the site was covered by light brush and scrub it could be cleared at a rate of around 33m<sup>2</sup> per man per hour while digging the ditches, including creating the banks at the same time, was probably at a rate of 0.4 to 0.7m<sup>2</sup> per man per hour (Peddie 1994, 151). If the internal area of the camp was c.7200m<sup>2</sup> (see below) clearing vegetation would take around 220 man hours whilst ditch digging around 340m of ditches (see below) would have taken perhaps 350 man hours. When time is allowed for the construction of a palisade on top of the bank a total figure in the region of 600 to 700 man hours is likely.

Roman military sites are rare in Cambridgeshire (Figure 10), consisting of the possible 1<sup>st</sup> century fort at Cambridge itself (Alexander and Pullinger 1999, 30-32 & 77), the Pre-Flavian forts at Godmanchester and Water Newton (Rodwell and Rowley 1975) and the Pre-Flavian fortress at Longthorpe (Dannell and Wild 1987), although the fort at Great Chesterford, Essex, is closer to Sawston than some of the Cambridgeshire sites (Rodwell 1972). Other sites such as New Hall near Cambridge probably only indicate some form of military involvement rather than being true military sites (Evans 1996) and there are a few stray finds few stray finds of metalwork that are later and from the north of the county (Browne 1978, 5-6).

Locally the ditches can be compared to other 1<sup>st</sup> century Roman military examples from the putative fort at Cambridge (V-shaped, c.3.6m wide and 1.5m deep), Godmanchester (V-shaped, c.4.1m wide and 1.2m deep), Longthorpe (V-shaped, c.3.2m wide), Great Chesterford (V-shaped with 'ankle breaker', 4.0m wide and 1.75m deep).

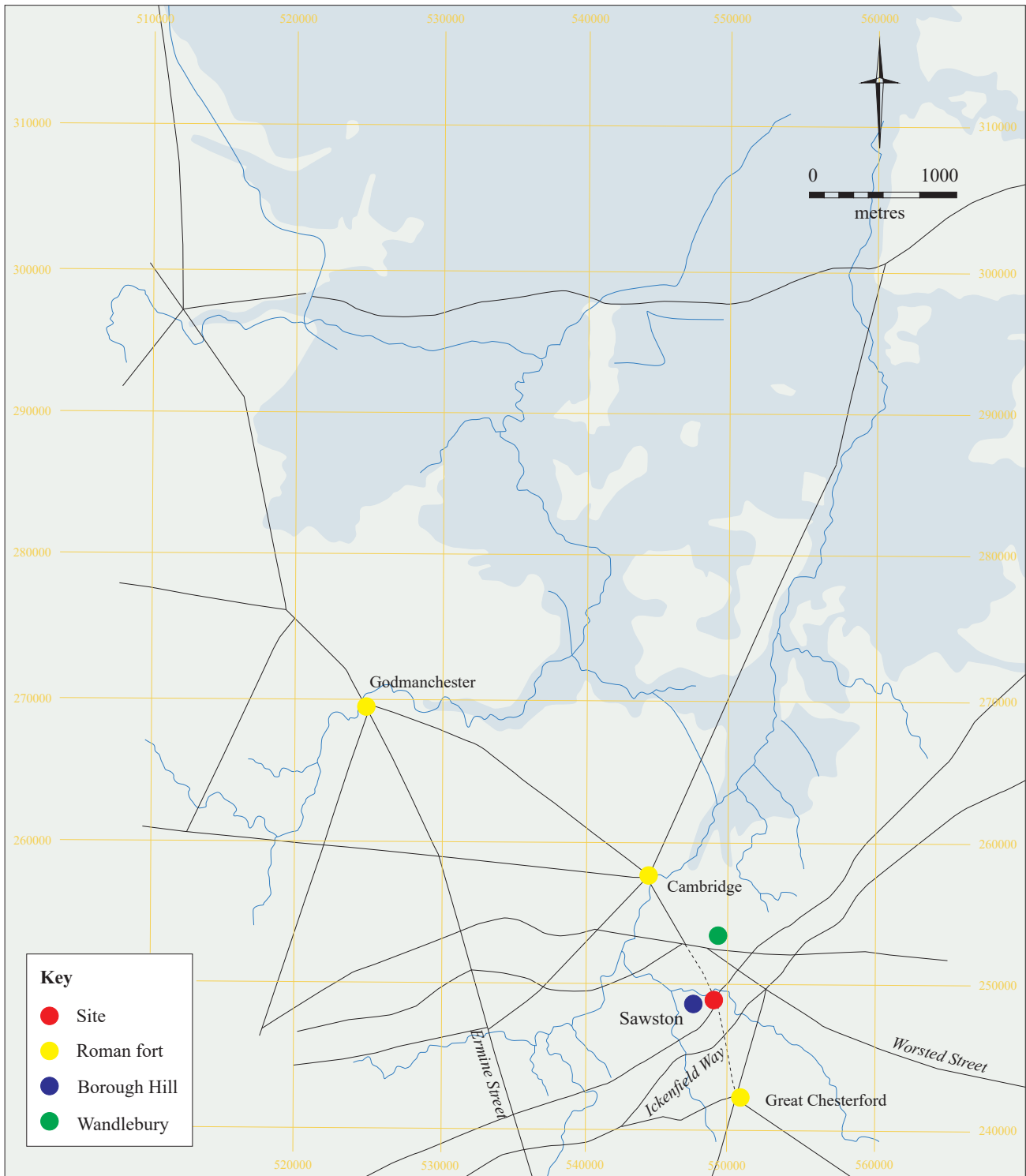


Figure 10. Roman roads and military sites

The southwest to northeast axis of the enclosed area between ditches F.2 and F.4 is c.80m. The northwest to southeast axis is at least 45m and its probable overall length is suggested by trench 4, where the main ditch [069] butt ends and there is a smaller linear feature [014] on the same alignment and a possible other large linear heading northwards [089]. This is suggestive of the presence of a gateway, as grooves or small linear features similar to [014] are frequently found in camp gateways and have been interpreted as indicating the existence of wooden hurdles that were used to protect the gateway. [089] could be the beginning of an outwork defence, again paralleled at other camps. Gateways were generally placed either centrally along the length of the side of a camp or were staggered, being located 1/3 or 2/3 of the way along the side (Welfare and Swan 1995, 18-21). This would make the northwest to southeast axis around 67.5, 90 or 135m long if the gateway was in any of these locations. As the enclosure is polygonal rather than rectangular or square its exact extent is impossible to ascertain precisely, it is however likely to be at least 3,600m<sup>2</sup> (0.36ha) and in all likelihood is c.5,400m<sup>2</sup> (0.54ha), 7,200m<sup>2</sup> (0.72ha) or 10,800m<sup>2</sup> (1.08ha). The enclosure falls within the size range of Roman camps known from England both in terms of length/width and extent, with twenty known examples in the size range of 0.5 to 1.0ha (Welfare and Swan 1995, 10-11). Camps under four hectares are relatively small and have been interpreted as construction camps for neighbouring sites, unlikely in this instance, or may have played a minor role in campaigning (Jones and Mattingly 1990, 88). Although many camps are square or rectangular Vegetius states that they could also be round, triangular or oblong according to the nature of the ground and polygonal examples are not uncommon (cf Welfare and Swan 1995, 15 and fig. 6; see also Richardson 1997). Although the plan of the camp at Sawston Police Station is only partially reconstructable it may well be of asymmetrical form, similar to Watchclose (Cumbria) or East Learmouth (Northumberland).

The camp must be orientated either southeast to northeast or northwest to southeast. Orientation generally relates to direction of travel, perceived threats or local topography (Welfare and Swan 1995, 11-14). In the case of Sawston Police Station a southwest to northeast alignment would fit with the route of the known later roads, which may have already existed nearby at this time, and possibly with Borough Hill located to the southwest. There are no obvious topographic features that might have influenced this alignment, but it is possible that they exist.

No other Roman camps are known from Cambridgeshire, but the number of camps known nationally is only a small proportion of what must have originally existed and the overall number known from southeastern England is low, despite the fact that we know campaigning took place in the region (Jones and Mattingly 1990, 77 and 79; Welfare and Swan 1995, 3). This bias is probably because most discoveries of Roman camps are through aerial photography, which is not effective if sites are located under later settlements as is probably the case in many instances in southeastern England. Whilst it is unsurprising that more camps are known from northern England and Scotland, it must be remembered that there must be a large number of unknown Early Roman camps in southeastern England given the amount the Roman army could march in a day. Although there are documented examples of troops marching up to 25 or 30 miles per day and soldiers were trained to march at rates of between 18 and 22 miles per day the evidence

from areas such as Scotland where groups of camps have been found suggests that troops generally covered around 15 or 16 miles per day, as they would begin marching at sunrise for six or seven hours and then construct the camp. Sawston is located c.6.5 miles from the possible Roman fort at Cambridge, or around 8 miles following a topographically more realistic route. It is c.4.5 miles to the Roman fort at Great Chesterford, or around 8 miles along a topographically more realistic route. The distance from Great Chesterford to Cambridge following known Roman roads is c.14.5km. There therefore appears to be no necessity for a camp at Sawston in terms of troop movements between the two Roman forts in the area. The camp could, however, relate to troops moving on a west to east axis rather than north to south, which need not involve Cambridge and Great Chesterford at all. Alternatively the location of the camps could be related to the Iron Age fort at Borough Hill, known to have been occupied during the Late Iron Age and Early Roman periods, as the river to the west and south of Borough Hill and the marshy area of Dernford Fen to the north (cf Taylor 2002, 66-67) means that a Roman camp to the east would effectively isolate the site. Borough Hill is situated on a locally prominent chalk rise at a height of c.22.50m O.D., this means that a Roman camp at Sawston Police Station would be around four metres higher giving a tactical advantage. A further possibility is that they might be practice works (cf Davies 1968), deliberately located half a days march away from either Cambridge or Great Chesterford to allow troops to march to them, construct the camp and return within a day.

In an East Anglian context Roman camps are extremely rare, there is a definite example at Horstead (Norfolk) (Welfare and Swan 1995, 70-71), with less convincing or discredited examples at a few other sites such as Saham Toney (Norfolk) (Bates 2000; Brown 1986, 42-49) and Stuston (Suffolk) (Burnham *et al* 1995, 358; Edwards 1977, 236).

Ditch F.1, which contains Early Roman pottery is extremely similar in size and profile to ditches F.2-4 and is also sealed by the metallised surface. This suggests that it is probably related to ditches F.2-4, but its alignment is different and there is no logical way in which to link it to the other ditches. One possibility is that ditch F.1 relates to a second Roman camp. It is relatively common to find groups of more than one camp close together (cf Welfare and Swan 1995), this is because the topographic and logistical factors that led to one camp being established in a location were frequently repeated, but the camps were established in slightly different locations frequently because the two military units involved were of different sizes. They therefore required different sizes of camps and it was simpler to establish a new one than modify the existing camp. If this is accepted then F.1 probably represents a second camp located mainly to the west of the evaluation area. It must be stressed that the evidence for the second possible Roman military camp is weaker than for the possible camp enclosed by ditches F.2-4.

In terms of a context for the construction of an Early Roman camp at Sawston Police Station the most likely periods for its establishment are the initial conquest of 43 AD (although there is no evidence for Roman penetration this far northwest of Colchester), the consolidation of southeastern England of 44 to 47 AD or the Boudiccan revolt of 60 to 61 AD and its immediate aftermath. It is impossible to determine which of these

options is the more likely; indeed it is quite possible that one camp belongs to one period and the second to the other. In terms of context the possible role of the fort at Borough Hill should not be overlooked, if either of the camps date to the initial conquest it is quite possible that they relate to either an attack upon or intimidation of whatever local group occupied or controlled the fort. The size of Borough Hill and the scale and complexity of its multivallate defences make it a hillfort in all but name, although given its topographic location it could perhaps better be described as a promontory fort. The immediate strategic significance of its location is clear; it lies overlooking the river Cam at the centre of a group of fords, with Shelford and Stapleford downstream to the north (the lowest fords on the river), and Whittlesford, Pampisford and Duxford upstream to the south. All these are situated in a six mile stretch of the river and at the south of this stretch lie the main west to east routes of the Icknield Way and Ashwell Street. Borough Hill with its defences would have been able to command trade, travel and transport both on the river Cam and along these routes. It appears that the river valleys of northwest Essex and southern Cambridgeshire were a regionally important power centre, in an area of contested and changing alliances (Hill *et al* 1999), within this landscape Borough Hill presumably played a significant role.

Relatively little excavation has taken place on Roman camps in England (Welfare and Swan 1995, 3), this combined with the lack of examples from southeastern England makes direct comparisons of the excavated evidence difficult. Much more excavation has taken place on Roman camps in Scotland, the form and size of the ditches found at Sawston Police Station and the general lack of artifacts closely parallels the Scottish evidence (for recent Scottish excavations see Alexander 2000; Bailey 2000; Duffy 1992; Dunwell and Keppie 1995; Glendinning and Dunwell 2000; Halpin 1992; Johnston 1994; Keppie 1988; Keppie 1996; Lowe and Moloney 2000; Neighbour 1998; Rogers 1993; Shepherd 1986).

The nature of the subphase 2A enclosure(s) at Sawston Police Station must of necessity remain unresolved given the available evidence. The case for them being Early Roman military camps, which has been considered in some detail, whilst plausible and not contradicted by the available evidence remains only a hypothesis. The alternative interpretations of the enclosures as either Iron Age or Early Roman but non-military remain possible. Given the nature of the investigations it would be premature to decide which of these possibilities is the most likely, although the potential significance of the enclosures if they are Roman military camps means that until this possibility can be either proved or disproved by further investigations the site must be considered important.

#### *Subphase 2B: Probable trackway and possible occupation*

Subphase 2B (Figure 11) consists of a number of much less substantial features, a number of which were cut into the upper fills of the earlier large V-shaped ditches of subphase 2A while some were sealed by the metallised surfaces of subphase 2C. As the earlier large V-shaped ditches appears to have silted up naturally in their entirety prior to



Figure 11. Plan of subphase 2b

these later features being cut it appears that there was a relatively substantial interval between subphases 2A and 2B, certainly years and perhaps decades.

In trench 1 there were two relatively shallow U-shaped parallel ditches ([008]/F.5 and [010]) c.2.3m apart with an area of irregular disturbance F.6 ([048] and [050]), interpreted as rutting, lying between them. Ditch F.5 continued through into trenches 10A [085], 8 [076] and 10B [085], where it could be demonstrated to cut through the earlier large V-shaped ditch and be sealed by the metalled surface. Rutting F.6 continued in trench 8, represented by [059] and [072]. These remains appear to represent a relatively insubstantial southwest to northeast aligned trackway or minor road of some kind.

Elsewhere in trench 1 there was a pit [044], a ditch or gully [039]/F.7, which appears to continue into trench 9, and a probable beam slot [046] sealed by the metalled surface and suggesting activity or occupation of some kind, although its nature is difficult to determine within the trench. These are probably related to another linear [078] and a possible pit in trench 9.

Although these features are relatively insubstantial in comparison to the ditches and metalled surface that came before and after them they do represent a distinct period of activity at the site. The possible trackway is particularly important; as it is on broadly the same alignment of one of the later metalled roads, suggesting that the subphase 2C roads had their origins in a less substantial system. These features all had relatively loose fills into which the later metalled surfaces had slumped, suggesting that subphase 2C follows immediately after subphase 2B. These relatively insubstantial need not represent a particularly long period, perhaps a few years or a decade.

### *Subphase 2C: Metalled Roman roads*

Subphase 2C (Figures 12 and 13) consists of a substantial metalled road surface F.8 and F.9, identified in trenches 1, 8, 9, 10A, 10B and 10C plus a small slot to the west of trench 1 (trench 1A). The area of the road was cleared by creating a shallow cut c.0.3m deep removing the existing topsoil and most of the disturbance associated with subphase 2B. This created a firm and smooth surface on the underlying chalk natural. A single course of flint cobbles was then laid. The evidence of the metalled surfaces clearly shows that there are two separate roads that meet at a junction in trench 8. Aligned broadly southwest to northeast F.8 runs through trenches 1, 1A, 10A, 8, 10B, 10C and 9. Its exact width is uncertain due to later truncation and the fact that they were aligned obliquely to the evaluation trenches, it does however appear to be c.5.5m wide. The other roughly south to north road F.9 was observed in trenches 1, 10A, 8 and 9 and was probably c.6.0m wide. The difference in the probable widths of the two roads is probably not significant, it is likely to reflect either difficulties in estimating the width or more probably F.8 is slightly wider than the greatest surviving extent and is c.6.0m as well. There was no evidence of any 'join' where the two roads meet and their construction techniques are identical, so it is almost certain that they were both built at the same time. Both roads only had a single course of cobbles that had not been replaced, repaired or



Figure 12. Plan of subphase 2c

was evident, this was all on the southwest to northeast alignment of road F.8, suggesting that this saw heavier usage by wheeled vehicles than F.9. Very little dating evidence was recovered from the metalled surface itself, but the relatively undisturbed deposits above it produced only early Roman pottery (1<sup>st</sup> century AD) and a mid 2<sup>nd</sup> century AD coin.

Trench	Road	Surface height
1	F.8-9	26.35-26.45m OD
8	F.8-9	26.25m OD
9	F.9	26.1-26.15m OD
10A	F.8-9	26.0-26.3m OD
10B	F.8-9	26.2-26.25m OD

Table 4: Surface heights of subphase 2C metalled roads

Outside urban contexts in Cambridgeshire metalled roads such as F.8 and F.9 must date either to the Roman period (1<sup>st</sup> to 4<sup>th</sup> centuries AD) or the High Medieval and Post-Medieval periods (12<sup>th</sup> to 18<sup>th</sup> centuries AD). It was initially thought that the road might be Medieval and relate to a nearby moated site, with which it is approximately aligned. The evidence, however, strongly suggests that it is Roman. All the dateable material recovered from subphase 2C and the immediately succeeding subphase 2D dates to the 1<sup>st</sup> and 2<sup>nd</sup> centuries AD. Although the amount of material involved is small this is not unusual for Roman roads away from areas of settlement. The amount of effort invested in the road also seems unlikely in a Medieval context, given the relative status of the sites that it would have linked. The major factor is, however, the phase 3 headland (see below). Even though the headland F.10 cannot be dated by its rate of accumulation (cf Baker 1973), it is extremely difficult to envisage the road being created in the 12<sup>th</sup> century or later and subsequently going out of use and being covered by the depth of headland that exists.

Although Roman roads are often regarded as an unproblematic and generic archaeological entity, they in fact demonstrate a lack of standardisation and there are often variations between roads, along the same road and over time at a particular location (Davies 2001). This means that the interpretation of remains from small evaluations can only be local and particularistic. Although they were built with sufficient engineering skill and of adequate dimensions to provide all-year transport links (Davies 2001), functional interpretations should not obscure the fact that they also acted as symbols of Roman power and therefore as foci of resistance (Witcher 1997). A number of other sections of Roman roads have been excavated in Cambridgeshire, although none on this particular road. The results point to a high degree of variability (cf Malim 2000b; Malim *et al* 1997; Evans 1991; Evans 1996; Knight 2000; Macaulay 1997; Mortimer 1996; Mortimer and Regan 2001; Ozanne 1991; Regan 2003; Wait 1992; Wessex Archaeology 2001). In general terms the remains from Sawston Police Station appear to be relatively narrow in comparison to other excavated roads, although it is possible that they were wider than the estimate of c.6.0m, but the flint cobbles are a relatively substantial surface in comparison to many of the other roads. It should be noted that no roadside ditches were identified, even though these should have been detected in trenches 1, 8, 9, 10A, 10B and 10C if they were present. The lack of is probably due to a lack of settlement in the immediate vicinity.



Figure 13: Metalled road surface with ruts in trench 8.

The evidence suggests that the roads were relatively short lived, dating to the 1<sup>st</sup> or early 2<sup>nd</sup> centuries AD and probably only in use for a few decades. This probably means that they belong to the first phase of military roads, rather than the commercial network established by the end of the 1<sup>st</sup> century AD (Malim 2000b). Given their role, discussed below, it is unlikely that any of the routes they are part of went out of use. The most likely scenario is that they simply shifted slightly, probably westwards under the Medieval headland, for some unknown reason. The construction techniques involved strongly indicate military involvement in the construction of the road and it is likely that what we are seeing is an early primarily military road network that is altered once the area becomes effectively demilitarised. It therefore represents a state construction rather than being a creation of local government or smaller local communities (cf Jones and Mattingly 1990, 175-78). Therefore although the road lies within a local 'villa' landscape of Romanised buildings positioned along roads and rivers and acting as centres of agricultural estates (cf Lucas 2000) and other less Romanised rural settlements (Hanley 2000) it is unlikely that it relates particularly to these, especially as many of them probably postdate the road.

The two roadways F.8 and F.9 can be integrated into our general understanding of the Roman road network (Figure 10) (see Browne 1978, 25-29; Malim 2000b; Margary 1967). The roughly southwest to northeast aligned road F.8 can be equated with Ashwell Street/Street Way. This route probably begins as a Prehistoric trackway just to the north of the well known Ickenfield Way and 'follows the spring line at the base of the chalk and can be identified through a string of later settlements found along its course', the pair forming a major arterial route from the Thames Valley to East Anglia (Malim 2000a). In the Roman period this routeway is formalised as Ashwell Street/Street Way, which is still part of a major west to east route, and the stretch on which Sawston is located is running between Ermine Street to Worsted Street. Ashwell Street (Margary route 230) runs from Newnham to Thriplow or possibly Whittlesford and there are 'distinct traces of an agger at some points, although in general it is just a wide green lane', (Fox 1923, 147-50; Margary 1967, 207). Fox suggests that it probably ran by Sawston church (Fox 1923, 148-49), but this new evidence suggests a more northerly route. Ashwell Street probably ran east-north-east from Thriplow to Whittlesford along the trackway known as 'The Drift' running to the river at Whittlesford Mill. It would then head northeast to Sawston Police Station. How far it continued on this alignment is unclear. If it continued on the same alignment it would run just to the southeast of Wandelbury fort and northwest of Copley Hill to meet Worsted Street. Alternatively it may have swung more to the east to avoid lower marshy ground and streams meeting Worsted Street closer to or at Worsted Lodge. Margary argues that this is a 'cross route of minor importance' (1967, 207), which appears to be contradicted by the nature of the road.

The roughly north to south route F.9 represents a previously unidentified road. The most likely explanation for this is that it links Ashwell Street/Street Way and Cambridge, providing a route along the Cam valley. From cropmark and other evidence it is clear that the Cam valley was densely occupied in the Late Iron Age and Early Roman period (cf Evans 2002) and the recent excavations at Downing College Sports Field have confirmed this (Mackay in prep). It is also possible that a similar route existed running southwards

to Great Chesterford. Although it would be able to suggest the precise route this followed based upon topography and known sites this would be a highly speculative exercise.

To the west the fort of Borough Hill is known to have been occupied throughout the Late Iron Age and Early Roman period and there is evidence for a gap in the eastern part of the defensive circuits and geophysical features inside the fort suggesting that there may have been a road of some kind (Mortimer 2001), that could have linked up with F.8 and F.9 in the vicinity of Sawston Police Station, which may be the explanation for the cobbles in trench 1A. One possibility is that the relatively high quality of the roads at Sawston Police Station is related to its location on a junction, and it is possible that further away from the junction less care was taken.

The cobbles that the road is made of are similar to those that occur in the local chalk natural, but these are too infrequent and there is no evidence of seams of flint so they cannot have been obtained through quarrying. The probable source of the flint cobbles is in the river gravels of the river Cam. At its closest point the river is some 0.7 miles away and 5m lower than the height of Sawston Police Station, which gives some indication of the effort required transporting this material.

#### *Subphase 2D: Post road activity*

After F.8 and F.9 went out of use they appears to have been covered by a general layer of material, most of which was disturbed by later ploughing. The only feature that can be assigned to subphase 2D is ditch [024] in trench 1. The pottery from subphase 2D is either Early Roman (1<sup>st</sup> century AD) or only broadly dateable Romano-British, but an *as* of Antoninus Pius minted in AD 154 to 155 was found in trench 8. It is likely that the road had shifted slightly to the west and both ditch [024] are related to activities focussed upon the later road. The posture of Britannia on the coin is interpreted as one of defeat and has even been suggested that this issue was earmarked for local distribution, perhaps amongst the garrison of Britain as a commemorative gift (see below). If this is the case the occurrence of the coin on a site dominated by possible Early Roman camps and roads is particularly apposite as these are also symbols of power and dominance.

#### *Phase 2 environment*

The molluscs, although inconclusive, point towards a local environment of dry open places, as does the evidence from Borough Hill. The cereals indicate that crop cultivation, definitely wheat but possibly other species as well, must have been carried out somewhere in the area, again confirming the evidence from Borough Hill. If the interpretation of the subphase 2A remains as military camp(s) is correct then it is likely that wood, forage and water were easily available within the immediate vicinity (cf Welfare and Swan 1995, 6-10), as these were necessary prerequisites for selecting a location. Although there was a considerable amount of truncation and no buried soil survived there is no evidence for the hollows associated with the root boles of heavy

vegetation, apart from the Late Bronze Age/Early Iron Age examples [013] and [070] that did survive. Clearing light brush and shrub is much easier than clearing heavier vegetation, with progress approximately three times as rapid, so it is likely that an area with relatively light vegetation would be selected.

### *Phase 2 summary*

Phase 2 consists of one or two ditched enclosures that are probably Early Roman, although an Iron Age date cannot be ruled out, and may potentially be military camps, perhaps occupied for a few days in either AD 43 to 47 or AD 60 to 61, followed by a period of years or a few decades whilst the camp ditches silted up (subphase 2A). Alternatively the ditched enclosures may relate to an Early Roman non-military site of some kind. There was a brief period when there appears to have been a trackway of some kind and perhaps some form of occupation (subphase 2B), perhaps lasting for a few years or decades. There were then two substantial metalled roads that probably continued in use for a few decades (subphase 2C), before the focus of activity appears to have shifted leaving only minor traces of activity (subphase 2D). In general the evidence suggests a relatively short chronology for phase 2, with subphases 2A to 2C probably falling within the period AD 43 to 100 and subphase 2D immediately succeeding them, although it is unclear how long this continued for.

Subphases 2A and 2C at least appear to relate strongly to the activities of the Roman military and central government, as the profiles of the ditched enclosures of subphase 2A suggest army participation in their creation even if the site is not military in nature and the skills necessary to build the subphase 2C roads also indicate the involvement of the army. Given the existence of the nearby site of Borough Hill with its Late Iron Age and Roman occupation this means that Sawston as well having undoubtedly significant archaeological remains presents an opportunity to consider the ideology and mentality of the Roman invaders against the background of the complexity of multiple Late Iron Age polities (cf Millett 1990) and to reconsider the nature of the Roman military in a more nuanced manner (cf James 2001; 2002).

### *Phase 3: Medieval*

Phase 3 is represented by a single west to east aligned ditch [030] found in trenches 1 and 8, but not noted in trench 10A due to root disturbance, that is on a totally different alignment to the Roman features. This was cut through a Medieval agricultural headland F.10. Pre-enclosure strip fields are not straight, but have curved ends making the overall shape of the field an elongated reverse-S. This arose because of the tendency of the plough team to pull to the left in preparation for making the turn. At the end of each ridge a small amount of soil known as a 'head' accumulated, and where two furlongs abutting end to end have ridges lying in the same orientation, a double row of heads can be seen forming a humpy boundary or 'joint'. Furlongs meeting at right angles had these end-heaps smoothed out and worked into the first ridge that was called a 'headland' (Hall

1998; see also Butlin and Baker 1973 and Hall 1982). The form of headland ridges depends on local conditions such as slope, soil, plough type etc and they are not datable by such means as rate of accumulation (Baker 1973). The headland F.10 can be detected by the variation in the depths of topsoil and subsoil across the site.

Trench	Depth of topsoil (m)	Depth of subsoil (m)	Total depth (m)
1	0.2-0.4	0.4-0.7	0.8-0.9
4	0.25	0.25	0.5
7	0.3	0.2	0.5
8	0.1-0.2	0.6-0.7	0.8
10A	0.25-0.4	0.4-0.7	0.8-0.9
10B	0.2	0.2-0.6	0.4-0.8
10C	0.5-0.6	0.3	0.9
11	0.2	0.2	0.4

Table 5: Evidence for Medieval headland F.10.

From this it can be seen that the headland covered the western part of the site (trenches 1, 8, 10A, 10B and 10C), but not the eastern area (trenches 4, 7 and 11), and that it had made a difference of c.0.4 to 0.5m in the depth of deposits where it is present. The headland appears to extend westwards into the area of Cambridge Road, but not beyond this into Spicers Sports Ground. The overall width of the headland could be up to c.50m although it is impossible to be certain. The only dating evidence for the headland is the sherd of Essex redware. Such headlands relate to field systems that probably have their origins in the Late Saxon period (Hall 1998), so there is a gap of perhaps six or seven hundred years between subphase 2D and the beginning of the formation of the headland. Although there is unlikely to have been any substantial activity in the area during the intervening period, given the lack of any artifacts or cut features, it is probable that a considerable depth of soil had built up that was then mainly incorporated into the headland.

The location and alignment of the headland is rather atypical as it is on the line of the northern route out of Sawston. This route appears to develop as a major axis in the 12<sup>th</sup> century, as this is when the street running north from the church probably becomes built up (cf Taylor 1992, 15; Taylor 1998, 76-77). The most likely scenario is that the headland built up in this location because of a raised Roman road lying to the west of those detected in the evaluation and that this occurred from the Late Saxon period onwards. The headland then probably developed into a track and subsequently a road from the 13<sup>th</sup> century onwards.

This area clearly lies to the north of the Medieval village focus (Taylor 1992, 15; Taylor 1998, 74-77) and at the time of the 1<sup>st</sup> edition Ordnance Survey map in 1836 the area was occupied by fields. The built up area of Sawston in 1836 extended around 370m north of Church Lane, stopping around 95m of the crossroads that Sawston Police Station is located at. The only structure in the immediate vicinity of the site was a windmill to the southeast. By the 1891 Ordnance Survey map the only change was a mortuary chapel and cemetery to the northwest. There is no hint on any of the maps that any of the Early Roman elements had survived as discernible earthworks.

## **Summary**

The archaeological evaluation and watching brief at Sawston Police Station revealed remains of both regional and potentially national significance, although the nature of the investigations and the paucity of artifacts recovered means that the interpretation and dating of the various features and phases is not as conclusive as might be wished. This paucity of artifacts is, however, important in terms of interpreting and dating the archaeological remains as it narrows down the range of likely possibilities. Despite the proviso concerning interpretation and dating a strong case can be made for arguing that after some form of minor Prehistoric usage the site was occupied in the 1<sup>st</sup> century AD by two ditched enclosures that may be Roman military camps, although other alternative interpretations are possible. After this there was probably some form of insubstantial trackway followed by the junction of two Roman roads, after this the area was used for agriculture in the Medieval period. Even if the two Roman camps were reinterpreted as Iron Age or Early Roman non-military enclosures the remains would still be of considerable significance. Given the paucity of Roman camps in southeastern England and the general lack of Roman military remains in Cambridgeshire the discovery of two possible military camps is of national significance, with the potential to impact upon interpretations of either of the initial conquest and consolidation of AD 43 to 47 or the Boudiccan revolt of AD 60 to 61. The discovery of the road junction enables a much better understanding of the route of Ashwell Street/Street Way in the 1<sup>st</sup> century AD and indicates the existence of a previously unknown Cam valley route, both of these are of regional significance.

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## Appendix 1: Finds Assemblage

A relatively small assemblage of material was recovered from Sawston Police Station, totalling 329 objects weighing 2,249g. In part the lack of material reflects the trench based nature of the evaluation, despite this substantial amounts of various features and deposits were carefully excavated by hand and the lack of material is also a reflection of the generally clean nature of most of the deposits encountered at the sites which were notable both for the lack of artifacts in them and other traces of nearby activity such as charcoal and general dark material within the deposits. Although the lack of material in some respects hinders interpretation of the site it is also an interpretative tool that should not be overlooked. The breakdown by period is Prehistoric 72 items weighing 828g (21.9% by count, 26.8% by weight), Roman 242 items weighing 1418g (73.6% by count, 63.1% by weight) and 1 Post-Roman item weighing 3g (0.3% by count, 0.1% by weight). Given that the Prehistoric activity at Sawston Police Station represents rather ephemeral activity, whilst the Roman period is represented by numerous large features, the relative paucity of Roman material is highlighted.

Material	Count	Weight (g)
Prehistoric Pottery	21	76
Roman Pottery	34	74
Post-Roman Pottery	1	3
Iron	4	22
Copper Alloy	2	13
Flint	25	220
Burnt Flint	11	360
Animal Bone	218	1306
Tile	1	20
Burnt Clay	2	11
Burnt Stone	1	130
Lava	9	12
Total	329	2249

Table 6: The finds assemblage from Sawston Police Station.

The specialist analyses of the Roman pottery, animal bone, flint and environmental remains are presented in separate appendices (Appendices 2 to 5).

### *Prehistoric Pottery* (based upon comments by Mark Knight and Leo Webley)

Prehistoric pottery was recovered from four contexts. The largest group was 16 sherds weighing 66 grams from context [013] <012>, dating to the Late Bronze Age or Early Iron Age. This material is relatively fresh and unabraded. Other material of the same date was recovered from [037] <045> (2 pieces, 5g) whilst other Prehistoric pottery which could not be more closely dated was recovered from contexts [063] <049> (1 piece, 5g)

and [052] <034> (1 piece, 1g). All the material could be Late Bronze Age or Early Iron Age, with a slight preference for the Early Iron Age, and mostly came from plain thin walled vessels with a flint tempered hard fabric, although one sherd was shell tempered. No Middle or Late Iron Age pottery was found although material of this date was found at Borough Hill (Hill *et al* 2001).

### ***Post-Roman Pottery***

Only a single fragment of Post-Roman Pottery was recovered, a sherd of a Late Medieval Essex redware jug [020] <015> (3g).

### ***Burnt Clay***

Two pieces of burnt clay weighing 11g were recovered from context [037] <045>, these were found in association with some Late Bronze Age or Early Iron Age pottery and the burnt clay probably belongs to the same period. The burnt clay appears to be relatively unabraded and both pieces are in a pale orangey brown sandy fabric with stone inclusions and have visible vegetable impressions on their surfaces.

### ***Burnt Stone***

A single fragment of burnt stone was recovered, [012] <011> (130g). This has a single flat face and may have been utilised although this is uncertain. It is probably Prehistoric.

### ***Tile***

A single fragment of Roman tegulae tile weighing 20g was recovered from context [028] <027>. Although it is not diagnostic it is relatively unabraded.

### ***Iron***

Four fragments of iron weighing 22g were recovered. There were three thin curved and shaped bar like objects [005] <023> and [006] <024>. These probably originally formed a single bow shaped item with a double curve c.88mm long, 6mm wide and 4mm thick weighing 8g. The other item [058] <048> was a semicircular disc, probably half of a circular object <058] <048> weighing 14g c.30mm wide and 7mm thick. Both these items are probably Roman, but cannot be closely identified.

### ***Copper Alloy*** (with comments on the coin by Adrian Challands)

Two copper alloy items were recovered, a coin and part of a chain. The coin is an *as* of Antoninus Pius (AD 138-161) minted in AD 154 to 155 [042] <025> (RIC 934; Cohen 117; BMC 1971). The obverse reads [ANTO]NIUS AV[G PIVS] PP TRP XVIII and has a laureate head facing to the right. The reverse reads BRITANN[IA COS I]III SC and has Britannia seated on a rock and facing to the left. Britannia is resting her head on her right hand and has her left hand on the rock. To the left is a round shield and standard (M&S 934). The posture of Britannia is interpreted as one of defeat and they have been found in significant quantities on Romano-British sites, notably in Coventina's Well at Carrawburgh fort on Hadrian's Wall, and it circulated mainly in Britain. This type is frequently carelessly struck on inadequate flans and they may have been issued from a temporary mint in Britain, although the style of the engraving is quite regular indicating the use of normal Roman dies brought to Britain especially for this purpose. It has been suggested that this issue was earmarked for local distribution, perhaps amongst the garrison of Britannia as a commemorative gift.

The chain [053] <047>, which although quite delicate is of relatively crude workmanship, consists of eleven links that are generally oval in shape c.5m long by 4mm wide and around 1mm thick. It is probably Roman and would have been used for suspending or attaching some relatively light object. Both of the copper alloy items are in good condition.

### ***Lava***

The lava consisted of nine very small fragments weighing only 12g in total recovered from a single context [036] <044>. These probably derive from a quern and are probably Roman.

## **Appendix 2: Roman Pottery**

Katie Anderson

A total of 34 sherds of Roman pottery weighing 74g were recovered from ten different contexts. The pottery was primarily sorted by fabric and then counted and weighed and any details of vessel form, decoration and/or use were recorded.

### *Assemblage Composition*

All of the sherds were small and abraded, with a mean weight of only 2g. Context [041] contained the largest number of sherds with fifteen weighing 36g, consisting of four different fabric types. The first fabric was a fine, oxidised sandy ware with mica and there were five sherds that had probably come from the same vessel and also had small amounts of sooting on the exterior. The second fabric was very similar except that it was coarser. The third and fourth fabrics were similar to the first two except that they were reduced, but both contained quartz and mica. All of the sherds from this context were non-diagnostic and thus vessel forms cannot be determined. Therefore it is difficult to accurately date this context, however the fabrics suggested an Early Roman date (1<sup>st</sup> century AD).

Context [036] contained six sherds of pottery weighing 10g and included one small rim from a jar/bowl, though the rest of the sherds were non-diagnostic. The fabrics consisted of reduced and oxidised sandy ware with mica and one sherd with burnished line decoration probably dates to the Early Roman period (1<sup>st</sup> century AD).

The remaining contexts contained no more than three sherds each and from a total of 13 sherds there was only one diagnostic sherd from [026], which was a small rim from a bowl or jar. The fabrics were similar to those from contexts [036] and [041] with many containing quartz and mica. There were however two fabrics which were slightly different including one fine sandy buff coloured ware from context [022] which is Early Roman in date. There were also two sherds from contexts [026] and [027] which were coarse sandy oxidised wares with a black slip, one of which was burnished on the exterior. These two sherds are also likely to be 1<sup>st</sup> century AD in date.

### *Conclusion*

Overall the quantity and quality of the pottery from this site was poor, which is a reflection of the assemblage and suggests secondary deposition. However the number of sherds does suggest some Roman activity in the immediate area and although dating such an assemblage is difficult, the majority of the sherds appear to be from the 1<sup>st</sup> century AD.

### **Appendix 3: Assessment of Faunal Remains**

Chris Swaysland

#### ***The Assemblage***

An assemblage of 218 fragments of animal bone was hand recovered from the site. A total of 41 fragments (19%) were identified to species; 97 fragments (44.5%) mainly consisting of ribs and vertebrae were identified to broad size category only. The condition of the bone was poor; the surfaces of the bones were chalky, almost all specimens exhibited root etching. These factors are likely to have obscured evidence of cut and gnaw marks.

#### ***The Methodology***

The assemblage was quickly scanned to gain an insight into the species present and to highlight any patterns in element distribution, age profiles, butchery marks and carnivore damage. The bones were identified with the aid of Schmid (1972) and the CAU reference collection. No attempt was made to distinguish between sheep and goat; bones identified as originating from these species are described as sheep/goat. Due to the small size of the assemblage, quantification is by number of individual fragments (NISP) only. Where it was clear that a group of fragments originated from a single bone they were grouped together and counted as a single element: i.e. 100 fragments from a broken skull were counted as 1 bone.

#### ***The Results***

The assemblage was analysed by phase as defined by the excavator. Context [013] was dated to the Late Bronze Age/Early Iron Age, this contained two sheep/goat elements and two ribs from a sheep/goat sized animal. All other contexts were dated to the Early Roman period. Cattle are the predominant species, sheep/goat are of lesser importance. Clearly this is a small sample, any further interpretation based upon such a small sample would be unwise. Given the limited value of small samples no further work is recommended on this assemblage.

<b>Species</b>	<b>NISP</b>	<b>NISP %</b>
Cattle	10	58.9
Sheep	5	29.4
Large sized mammal	2	11.7

Table 7: Relative species proportions, Roman contexts.

#### **Appendix 4: Worked and burnt flint**

Emma Beadsmoore

A total of 36 flints were recovered from the site; 25 unburnt and worked and 11 unworked but burnt. The material comprises 22 pieces of flint working waste and 3 tools, listed by type in Table 8. None of the material is clearly chronologically diagnostic. The technology with which several of the flakes and tools were produced, suggests that some of the material is Late Bronze Age through to Iron Age, with a few Neolithic pieces.

##### ***Raw material***

The raw material utilised is uniform in colour, quality and presumably source. It is a pale brown opaque flint from the local chalk, this was also found at Borough Hill, which produced honey-coloured to black material (Conneller 2001).

##### ***Flint working waste***

No cores were recovered. However, the morphology of seven of the secondary flakes and one tertiary flake suggests they are the products of a largely expedient and unstructured technology; the platforms are unprepared and often thick, the platform/core angle is usually small and the dorsal scars are frequently multi-directional. The cores may not even have had platforms; instead they could simply have been rotated and struck where the unmodified angles allowed flakes to be removed. This type of expedient and unstructured core reduction is associated with Late Bronze Age through to Iron Age flint working.

Another smaller group of flint working waste, comprising three secondary flakes, were the result of a slightly more structured, systematic technology; either struck from prepared platforms or removed to prepare a good striking platform. Structured and systematic core reduction is associated with Neolithic flint working. The remainder of the flint working waste comprises undiagnostic chips and flakes.

<b>Type</b>	<b>Quantity</b>
Chips	7
Secondary flakes	12
Tertiary flakes	3
End scraper	1
Miscellaneous scraper	1
Retouched flake	1

Table 8: Flint types.

### ***Tools***

The site yielded only three tools. The end scraper and a miscellaneous scraper both utilised older, patinated flint; the miscellaneous scraper is made on a patinated natural chunk, whilst the end scraper consists of a freshly retouched older, broken flake. The expedient use of older flint for tool manufacture and the lack of formal tool types is a feature of Late Bronze Age through to Iron Age flint working. Whereas the morphology of the remaining tool, a retouched secondary flake, links it to the Neolithic.

### ***Burnt***

The site also yielded 11 burnt flints. They are all unworked and could either have been burnt deliberately or caught up in fires accidentally.

### ***Context***

All of the flint recovered from the site came either from the topsoil, subsoil, or later, Early Roman features. Hence the material was residual.

### ***Conclusion***

The site yielded a small quantity of unburnt worked flint and unworked burnt flint, all of which was residual. Whilst none of the material is clearly chronologically diagnostic, the morphology of several of the flakes and tools suggests that some are Late Bronze Age to Iron Age and a few are Neolithic. Whilst it is only a small, partial collection of material, it does indicate a Prehistoric presence at the site.

## **Appendix 5: Evaluation of the Environmental Bulk Samples**

Kate E. Roberts

Four samples were submitted for analysis. All of the samples contained well preserved molluscan evidence, however there were barely any archaeological plant remains. The molluscan fauna were very generic.

### ***Methodology***

Four samples were submitted for analysis from various contexts. These were processed using an Ankara-type flotation machine (French 1972). The residues were washed over a 1mm mesh and the flots were collected in 300µm mesh. Flots were dried prior to examination under a low-power microscope. Identifications were made using the reference collection of the Department of Archaeology, University of Cambridge. Nomenclature follows Stace (1997). The results are summarised in Table 9, the environmental finds from the >4mm fraction of the heavy residue are included.

### ***Preservation***

Archaeological plant remains were extremely rare in these samples. When they did occur, preservation was by charring. In all of the samples there was heavy rooting and occasional modern plant remains, indicating a dynamic burial environment. There were large numbers of mollusca. These were all well preserved.

### ***Results***

In all four samples there were virtually no archaeological plant remains. What was present were two wheat grains (*Triticum* sp.) and some indeterminate cereal grains. This can be compared to Borough Hill where the main form of cereal was spelt wheat, with some possible emmer wheat plus evidence of six-row hulled barley from one Middle Iron Age gully, and of a free-threshing wheat from a late Roman ditch (Ballantyne 2001). The wheat grains and indeterminate cereal grains were the only archaeological plant remains present. The molluscan remains appeared to be identical across the features and so are discussed together. Unfortunately, although preservation was very good many of mollusca found were catholic, and so could not indicate a local environment. Some of the others found were common in dry open places, but in general the molluscan remains were not very informative. The mollusca from Borough Hill indicated open, dry, calcareous grassland (Ballantyne 2001) and include a number of the same species found at Sawston Police Station.

### *Conclusions and recommendations*

The absence of a large amount of plant material on this site makes it likely that the small amounts that were present were residual in the soil rather than deliberately deposited. All that can be said is that crop cultivation must have been carried out somewhere in the area. This crop definitely included wheat, as this was found, but could have included other cereals. It is impossible to consider the species of wheat, as preservation was too poor. Molluscan preservation was better, but the molluscs were too generic to be informative. The potential, if archaeological plant or molluscan remains are present, for good preservation, is high as nearby sites such as Addenbrooke's (Roberts in prep) have yielded very rich samples. However, based on these samples it is recommended that further sampling should only be carried out when there are well sealed, if possible dated, archaeological deposits which look likely to contain either rich charred or waterlogged deposits or rich molluscan deposits.

Sample no.		<001>	<002>	<003>	<004>
Context no.		045	047	009	11
Subphase		2A	2B	2D	2D
Feature type		Large ditch	Beamslot	Ditch	Ditch
sample volume (litres)		18	12	8	11
flot fraction examined		1/1	1/1	1/1	1/1
<i>Triticum</i> sp. grain	wheat grain	-			-
cereal grain indet.					-
cereal frags		+			
small charcoal (<2mm)		+++		+++	+++
med. charcoal (2-4mm)		+	+	+	++
large charcoal (>4mm)			++		
intrusive roots		+	++	+++	+++
<i>Cochlicopa lubrica/lubricella</i>	catholic				-
<i>Pupilla muscorum</i>	dry, exposed places	++	+++	++	+++
<i>Vallonia costata</i>	dry, open places	++	+	+	++
<i>Vallonia exentrica/pulchella</i>	open, damp and/or dry habitats		+	+	++
<i>Trichia</i> sp.	catholic	+	-	+	++

Table 9: Environmental samples from Sawston Police Station. ‘-’ 1 or 2 items, ‘+’ < 10 items, ‘++’ 10 – 50 items, ‘+++’ > 50 items.