Northwest Cambridge/University Farm - *Fieldwalking*

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This report outlines the programme of fieldwalking undertaken across the University Farm lands of northwest Cambridge. Conducted in the late autumn of 2008 (following a 'targeted' preliminary-stage trial trenching programme; Armour 2008), the work was conducted anticipating future University development within the area. As discussed below, a two-stage procedure was implemented: first, rapid 'reconnaissance-type' collection by David Hall to identified site scatters; this being following followed by intensive grid-collection by members of the Cambridge Archaeological Unit.

The underlying geology of the area is Gault Clay, which constitutes the lower ground of western and southern portions of the area (see fig. 1), and the Head /Observatory Gravels run, northwest-southeast, as a high ground ridge throughout its north half (Redfern 2001). The fieldwalking was largely confined to the area of the lighter gravel sub-soils, as much of the claylands lay under pasture.

Phase I - *Extensive Collection* (D. Hall)

An initial inspection of the Farm's land was made to record land-use, Medieval open-field boundaries, shallow quarries and acquire an appreciation of the soil types.

The second stage was to walk all the arable fields in transects collecting flints and relevant pottery; for all the fields lying on gravel soils, the transects were 30 apart. The planted clay fields next to the M11 yielded no finds (Field Plots 105-8). The bare ploughed fields next to the Park-and-Ride Car Park (Plots 126 and 128) were weathered and had excellent visibility. They only received a single walk-over as previous experience has shown that prehistoric flints are unlikely to be found on this type of terrain, and any 'settlement' of the Iron Age or later would be identified as a slightly darkened patch on alkaline clay soils, visible at a distance.

Elsewhere, the transect artefacts were grouped together for each field. The direction of walking was determined by the rows of planted corn. There was very little post-Medieval pottery or glass, *etc*. (mainly in Plots 115, 116 and 132); it was not collected.

Results

The transect-collected artefact numbers are listed in the Table 1. They were all confined to the gravel soils, with relative concentrations of flints in Plots 132 ('Site A') and 109 ('Site B'; fig. 1). In both cases the gravels were slightly sandy at these spots and, in Plot 109, the 'site' lies at the head of a slight gully from which a spring once probably emerged.

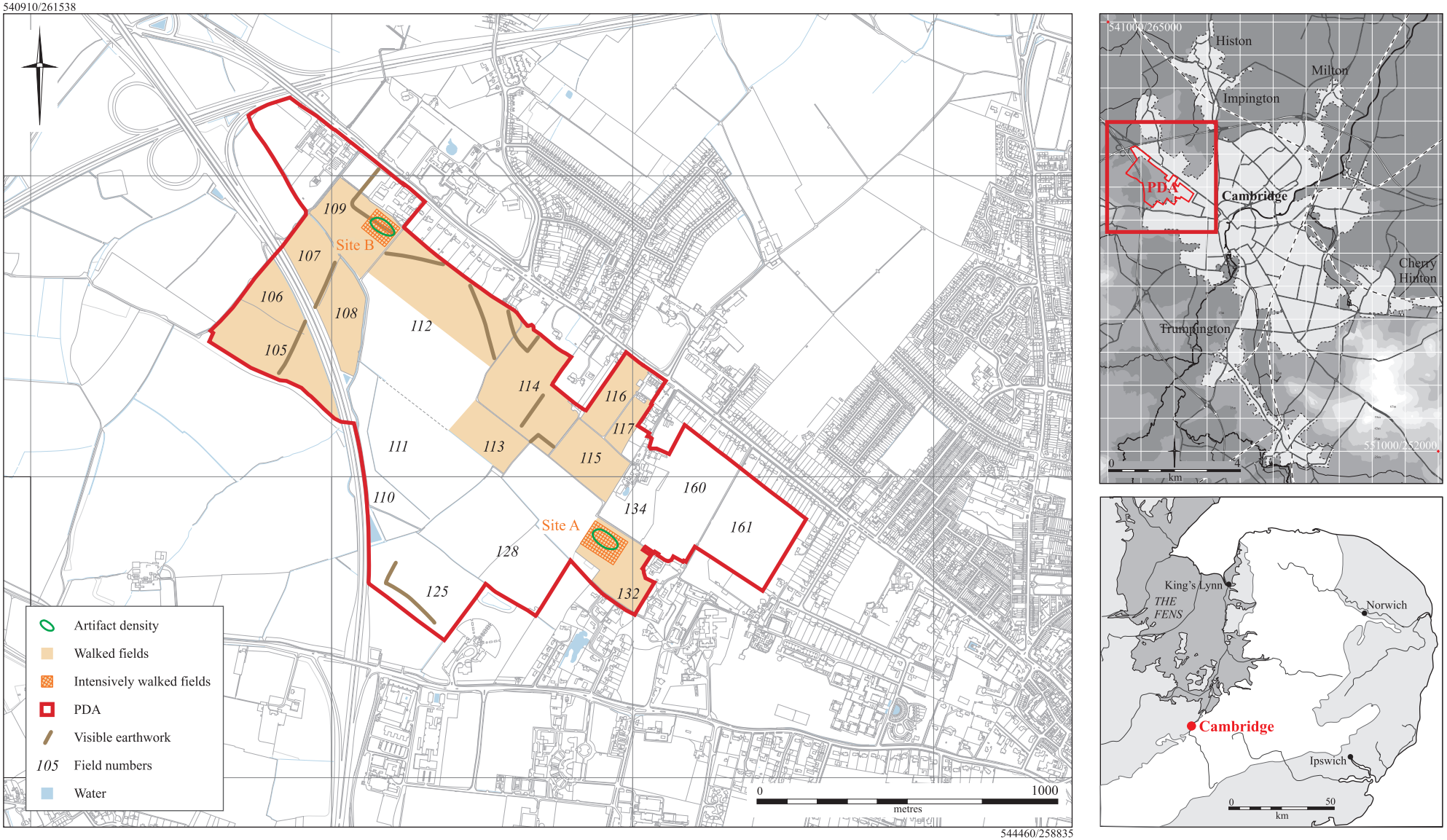

Figure 1. Location plan

The flints have a wide date-range, there being patinated Neolithic cores, blades and flakes as well as brown rough flints of Bronze Age date; a few of the later flints were reworked patinated ones.

Roman finds were at a low level - a few sherds of pottery and oyster shells of likely Roman date - and they are probably only represent agricultural activity.

The Medieval sherds are likewise related to the open-field strip cultivation. The most important Medieval remains are the soil banks at the open-field furlong boundaries. They must preserve a Late Saxon and earlier ground surface undisturbed by modern agriculture, and are worth sampling for environmental remains as well as archaeological features. Plots 127 and 131, lying immediately outside of the proposed development, are the only fields in the whole of Cambridge that preserve earthwork ridge-and-furrow. The open fields were mapped in the 18th century and are minutely documented in a detailed late 14th century survey (Hall and Ravensdale 1976).

Bag or Transect group	Flints	Roman pottery	Burt stone or flint	Oyster shell	Notes
Bag 1	13			2	Flints wide date-range, most patinated
Tran 1-8	13		2		patinated and fresh
Tran 9-15	7	1			Patinated & fresh flint; one small patin
Tran 16-23	7	2	1		No finds in Trans 19-23. Two flints, pa
Tran 24-28	6		2		Onesherd of 15th cent pot
Tran 29-34	4				Two sherds 14-15th pot, one of them G
Tran 35-39	1		1		
Tran 41-45	10	1	2	1	Roman Samian. Reworked patinated s
Totals	***61***	***4***	***8***	***3***	***3 medieval sherds***

Table 1: Phase I Fieldwalking materials **FIX!!!!!!!!!!!!!!!!!**

Phase II - *Intensive Collection*

10x10m grids were laid-out on each site. An area covering 1.17ha was laid-out across Site A (TL 542000 260500). Site B (TL 543000 29500) covered an area of 0.8ha. A 10m grid was aligned on the national grid; each square was walked starting in the southwest corner, walking north and then back south and so on, ending in the northeast corner, so that the entire square was covered. Thus, total collections of material were collected (finds were labelled according to the number in the southwest corner of the square).

The conditions were moderate to good on Site A with weathered soil and no crop, although there was a ground frost for the first part of the day. Site B had limited crop-cover over much of the area, although ploughed 'soil' *per se* was still visible across most areas; this field was also affected by a morning frost. The light conditions were good for both areas, with cloudy, but clear, conditions making visibility good.

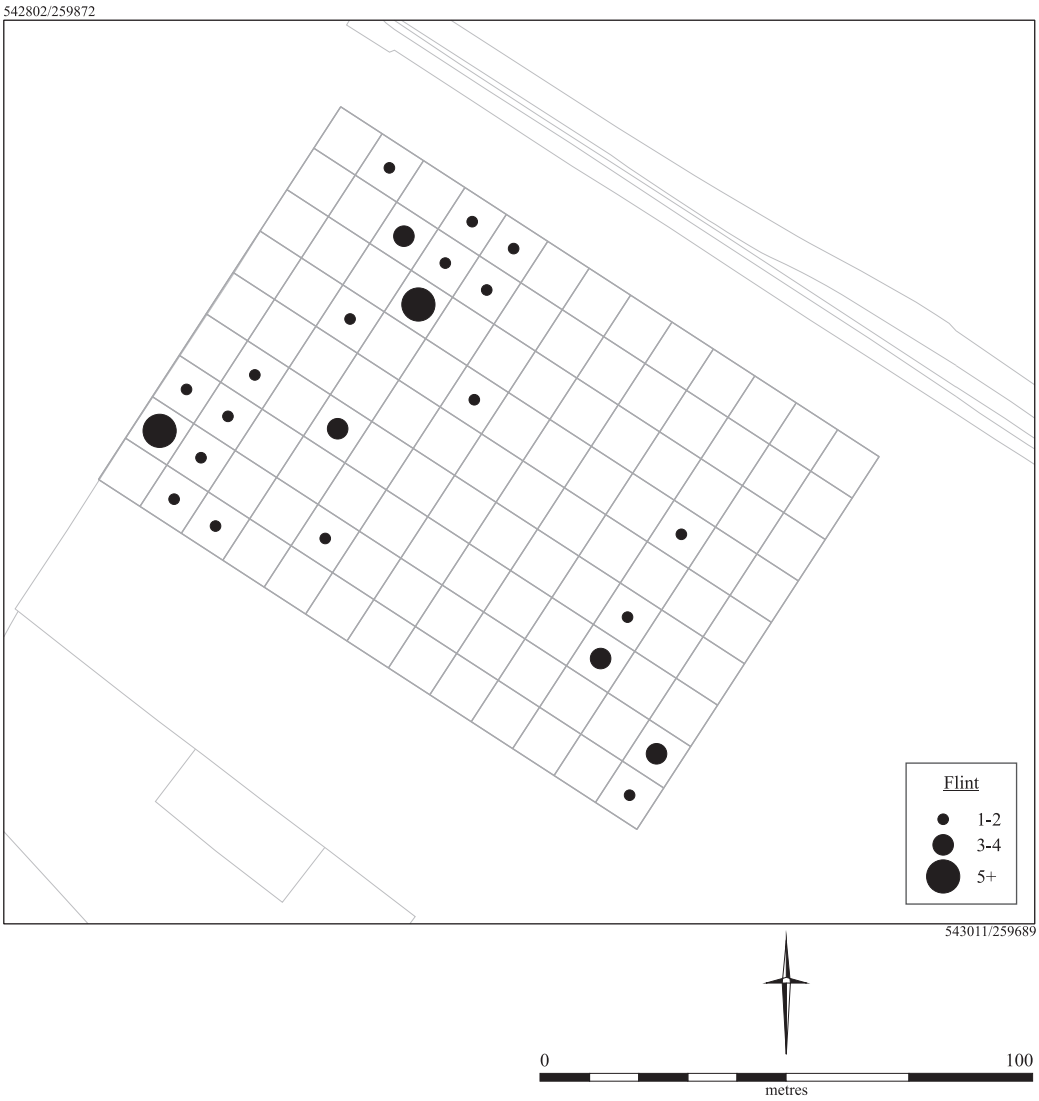

Figure 2. Pottery and flint distribution plots (Site A)

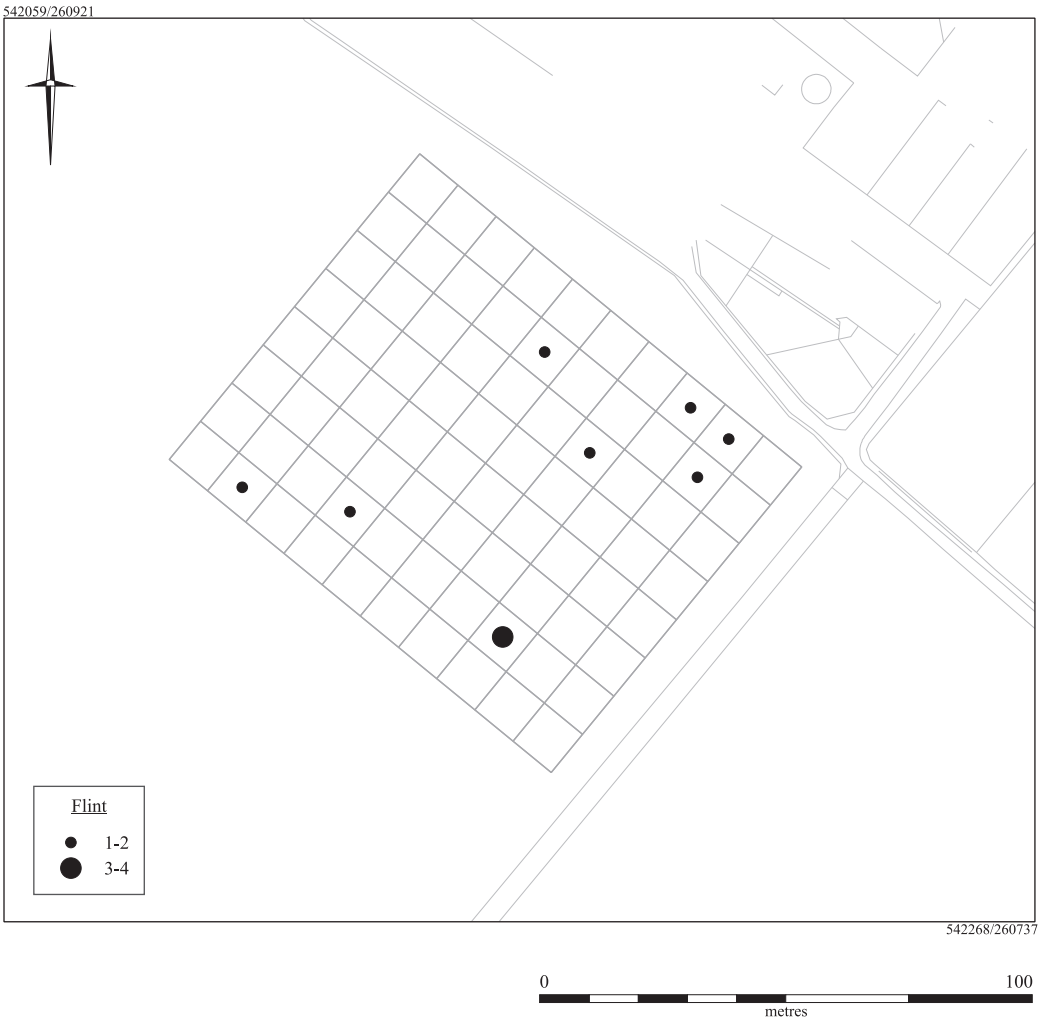

Figure 3. Flint distribution plot (Site B)

The Flint (Lawrence Billington)

A total of 44 worked flints were collected from the site, weighing a total of 485.1g. A single flake from Grid-square B3 had been burnt. The assemblage is listed by type and Grid-square in Table 2.

Grid Square	Chip	Chunk	Primary Flake	Secondary Flake	Tertiary Flake	Disc scraper	Horseshoe Scraper	Irregular Scraper	Multiple Platform Core	**Total**
A2				1	1			1		3
A3			1							1
B1					1					1
B2			1							1
B3					1					1
B4				1						1
B9					1					1
C1				1						1
C6								1		1
C8	1				1					2
D4					1			1		2
D7			1		2					3
D8				1						1
D9			1							1
E2					1					1
E8		1								1
E9									1	1
F6				1						1
F9		1								1
G2					1					1
I3				2						2
K1					1					1
K3		1		1						2
K4				1						1
K6				1						1
M1					1					1
M2				2						2
P8				1						1
P9				1						1
Q5							1			1
Q9					1					1
R7					1					1
V4					1					1
V8						1				1
W2				1						1
Totals	1	3	4	15	15	1	1	3	1	**44**

Table 2: Collected flint **where is site area divided (Katie providing) fix!!!!!**

The condition of the assemblage was varied, 19 pieces (45%) showed surface alteration in the form of light blue through to heavy white patination. Virtually all pieces have suffered

damage from the plough and abrasion with other lithics in the plough soil, generally in the form of heavy edge-damage, especially on thin pieces. This post depositional damage may have destroyed traces of utilisation and of light retouch on some pieces. The raw materials were varied, ranging from dark grey to light brown and yellowish flint, where cortex is present it appears thin and eroded. The general impression is of flint derived from secondary sources, probably nodules occurring in local deposits of gravel or other flint bearing subsoils.

The 34 unretouched flakes from the assemblage are generally small waste flakes struck with hard hammers from unprepared cores. As such, they are likely to represent flint-working waste from the later Neolithic onwards. There is very little evidence for activity preceding this; one narrow flake struck may possibly be Mesolithic or earlier Neolithic in date (Square V4). The assemblage includes very few cortical flakes, suggesting only the later stages of core reduction were habitually carried out in the area. A single multiple platform core was recovered from Square ??, the product of a casual flake-based reduction scheme it echoes the technological traits of the flakes and probably reflects later Neolithic or Early Bronze Age activity.

Five scrapers are the only retouched forms present. Three of these are undiagnostic (Squares A2, C6 and D4), being small expedient examples made on irregular flakes. The two remaining scrapers, one of horseshoe form (Square Q5) and one discoidal scraper (Square V8), show different characteristics, being carefully manufactured and of formal morphology; both of these are likely to date to the later Neolithic.

This small assemblage contained very few diagnostic forms and was dominated by debitage from the later stages of flake-based core reduction. This appears to represent low levels of activity probably from the later Neolithic onwards. The lack of earlier material is interesting and it would be beneficial to consider if this is a product of the sampling strategy or genuinely represents an expansion of activity into this area in later prehistory.

Site A showed a cluster of activity on the northeast side of the field, with no apparent difference between the upper and lower parts of the slope. A small number of flints recovered from the southwest edge, while there was an absence of flints from the central corridor (fig. 2). The distribution of material from Site B was much more sporadic, with no obvious clusters evident (fig 3).

Iron Age and Roman Pottery

A total of 22 sherds of Iron Age and Roman pottery were recovered, all from Site A. The majority of sherds were dated to Late Iron Age/Early Roman times (LIA/ER), although there were a number of sherds that could only be dated 'Romano-British' due to their condition. There were several Middle/Late Iron Age handmade sherds, although all of these were non-diagnostic, thus no specific vessel forms could be identified. Three sherds had combing decoration, and dated LIA/ER. Only three Roman sherds were diagnostic: a Horningsea greyware jar, an oxidised sandy jar and a South Gaulish Samian Dr15/17 dish. All of these sherds date mid 1st-2nd century AD, with no evidence of any later Roman activity. Both the prehistoric and Roman pottery is likely to have been produced locally and the fabrics were dominated by sandy wares, including the Horningsea greyware sherd. A single sherd of South Gaulish Samian was recovered from Square G5, dating mid-late 1st century AD.

There was no real patterning in the distribution of the Iron Age and Roman pottery, although as Figure 2 shows, most of the material was clustered around the centre of the gird. This is not unusual considering the intensity of the ploughing that has taken place on this field.

That no prehistoric or Roman pottery was recovered from Site B is interesting, as some early Roman material had been collected by Hall during the first phase of fieldwalking. However, this may be explained by the crop on this field which reduced the visibility.

Overall, therefore, the prehistoric and Roman pottery suggests a background level of activity, with the Late Iron Age and Early Roman period being the best represented, which fits with an emerging pattern from this western side of Cambridge, with sites at the Kavli institute

(Newman 2008), New Hall (Evans 1993) and Vicars Farm (Lucas 2001) producing evidence of Late Iron Age and early Roman activity.

Post-Medieval

A moderate quantity of post-Medieval material was recovered, including tobacco pipes, pottery and glass. There was no pattering in the distribution of this material and it is most likely that it was a result of night-soiling/manuring.

The evidence for both prehistoric and Roman occupation across the two fields was limited and suggests a relatively low level of activity. That the fields have been intensively ploughed and that quarrying has taken place in the immediate vicinity may be in part responsible for the limited quantities of material. Indeed, the flint densities were so low at Site B that, in truth, it probably doesn't warrant a 'site' appellation, even only as a surface scatter. (No evidence of any archaeology was found within the 2008 trench nearest to this location - No. 11 - but which indicated that at least its immediate area had been subject to quarrying; Armour 2008.)

The same, however, is not true of Site A in the southeast of the area. Both its worked flint and Iron Age/Roman pottery densities are sufficiently high to suggest the existence of multi-period (three-phased) settlement complex. While only evidence of post-Medieval quarrying was found within the single trench excavated in that field during the 2008 evaluation (No. 17, extreme western side of *Osier Field*), based on fieldwork results within the area, Armour actually predicated that a major Roman settlement probably lay in that locale due to the junction of projected Roman routeways (2008, figs 7 & 8).

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