

# Archaeological evaluation at the former Lexden Springs School and the Fire Station, Halstead Road, Colchester, Essex, CO3 3PZ

February 2021



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**commissioned by Rob Masefield, RPS  
on behalf of Essex Housing**

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## 1 Summary

*An archaeological evaluation (two trial-trenches) was carried out on land at the former Lexden Springs School and the adjacent Fire Station, off Halstead Road, Colchester, Essex to determine the precise location of the Shrub End Dyke/Triple Dyke which runs through the development site. The Shrub End Dyke forms part of the Late Iron Age defences around Camulodunum. Two more ditches and banks were subsequently added to the western side of the dyke during the period of the Roman conquest to form the Triple Dyke.*

*The aim of this evaluation was to identify the precise route of the Shrub End Dyke/Triple Dyke through the development site with minimal excavation of the remains. As such, the route of the inner (the original Shrub End Dyke) and central ditches of the Triple Dyke were identified and planned. Due to site constraints the route of the outer (western) ditch was not located. Comparison of the remains to an evaluation carried out across the Triple Dyke in 1961 suggests that the ditches of the dyke have a good level of survival through the development site. However, the banks of the dyke appear to have been completely levelled.*

## 2 Introduction (Fig 1)

This is the report for an archaeological evaluation carried out by Colchester Archaeological Trust (CAT) on land at the former Lexden Springs School and adjacent Fire Station, off Halstead Road, Colchester, Essex. The evaluation was commissioned by Rob Masefield of RPS on behalf of Essex Housing as part of a pre-planning investigation, and took place from 1st to 4th February 2021.

The development site is located through part of Colchester's Shrub End Dyke/Triple Dyke (see below for further details) and, although this section of the dyke is not scheduled, it is considered to be a nationally important undesignated heritage asset. In consultation with Historic England and the Colchester Borough Council Archaeological Advisor (CBCAA), it was agreed with RPS that the evaluation trenches would be designed, as far as practicable given site constraints, to confirm the survival and, thereafter, the precise alignment of the Shrub End Dyke/Triple Dyke to help inform the development design process. It was also agreed that at this stage the dyke would be identified in plan only, with only the uppermost levels investigated to confirm the extent of their respective fills and the edges of their cuts.

All archaeological work was carried out in accordance with a written scheme of investigation (WSI) prepared by RPS and agreed with CBCAA (RPS 2019).

In addition to the WSI, all fieldwork and reporting was done in accordance with the *Management of Research Projects in the Historic Environment (MoRPHE)* (Historic England 2015) and with *Standards for field archaeology in the East of England (EAA 14 and 24)*. This report mirrors standards and practices contained in the Institute for Archaeologists' *Standard and guidance for archaeological field evaluation (ClfA 2014a)* and *Standard and guidance for the collection, documentation, conservation and research of archaeological materials (ClfA 2014b)*.

## 3 Archaeological background (Fig 2)

The wider archaeological and historical background of the development site has been comprehensively explored in the WSI (RPS 2019, attached). What is outlined here is a brief summary of the background relating specifically to the Shrub End Dyke/Triple Dyke as it runs through the development site. The key publication with respect to the Shrub End Dyke/Triple Dyke is Colchester Archaeological Report 11 (CAR 11). This summary includes information taken from CAR 11, the WSI, the Colchester Archaeological Trust report archive and the Colchester Historic Environment Record (CHER) accessed via the Colchester Heritage Explorer ([www.colchesterheritage.co.uk](http://www.colchesterheritage.co.uk)).

The development site is located within the western part of the Late Iron Age *oppidum* of Camulodunum which was defined by a system of defensive dykes. One of these dykes, the north-south aligned Shrub End Dyke (MCC7467), passes through the site. The dyke was

reworked in the early Roman period as one (inner) of three defensive ditches and banks known as the Triple Dyke (MCC7041 & 7463). The Triple Dyke is extant for a c 225m length from c 375m to the south of the development site and is scheduled (NHLE 1019993, MCC7463). However, the section of dyke to the north of Lexden Road/Halstead Road is not scheduled as the banks have long since been levelled and in many areas the infilled ditches are built over. The alignment of the Triple Dyke through the development site has previously been plotted using aerial photography of cropmarks and is published in CAR 11, Fig 6.1 (see Fig 2).

A trench was cut across the Shrub End Dyke/Triple Dyke by CFC Hawkes in 1961 to the north of Lexden Road (CAR 11, 56-59). Unfortunately the location of this trench can no longer be accurately plotted. Hawkes states in CAR 11, p56, that the trench was located 227-230 yards (207-210m) north of Lexden Road. However, this would place the trench in a copse of trees that has been in existence from as far back as the late 19th century until the present day, and not in the open field it was actually located in. A separate plan in CAR 11 (Fig 6.1) produced in the 1990s, places the trench c 292m north of Lexden Road. This would seem likely as this contemporary mapping of the area does show this to be open ground before the current housing estate was built, and the trench would be located within the vicinity of Beaver Close. However, it is now considered possible that the trench was actually located within the current development site (Philip Crummy, pers comm).

Despite the difficulties in locating Hawkes' trench, it can still reveal a lot of significant information (CAR 11, 55-59). The dyke was recorded at 37.2m wide across the three ditches. The inner (eastern) ditch (the original Shrub End Dyke) was 5.5m wide by 2.1m deep, the central ditch 5.3m wide by 1.8m deep and the outer (western) ditch 5.5m wide by 2.0m deep. Nothing remained of the three earth banks, but spaces for the banks measured 10.4m across. The fills of the ditches provided Roman pottery dating evidence whilst the central ditch also produced a number of Roman hobnail.

In 2018, the central ditch of the Triple Dyke was located during an evaluation at 78 Straight Road, c 370m south of the site (ECC4162; CAT Report 1253). A subsequent watching brief on the site revealed the full extent of the ditch measuring c 5.4m wide. It was recorded to a depth of at least 1.4m below current ground level (ECC4201; CAT Report 1283).

#### 4 Aim

The aim of the archaeological evaluation was to determine the precise location and survival of the Shrub End Dyke/Triple Dyke. At this stage the dyke was to be identified in plan with only minimal excavation of the remains.

#### 5 Results (Figs 3-5)

Two trial-trenches were machine-excavated under the supervision of a CAT archaeologist with hand-excavation occurring in areas the machine could not access or where modern services/protected tree roots crossed the trench.

##### **Trench 1 (T1): 45m long by 1.8m wide (Fig 3 & 5)**

Trench 1 was located within an area of tarmac hardstanding, gravel edging and playground at the former Lexden Springs School. It was excavated in two sections on either side of a boundary fence.

##### **Trench T1 north**

Trench T1 north was excavated through the modern playground surface and sub-base (L1, c 0.13-0.22m thick), buried topsoil (L2, c 0.25-0.3m thick) and subsoil (L3, c 0.2-0.32m thick) onto natural (L4, identified at a depth of c 0.78-1.05m below current ground level (bcgl)). At the northern end of the playground a modern rubbish dump (L5, c 0.67m thick) was located between L1 and L3.

This trench was positioned over the inner bank of the Triple Dyke, but there was no evidence for the bank within this trench showing it had been completely levelled.



**Photograph 1** Trench T1 north, looking southwest

***Trench T1 south***

Trench T1 south was excavated through a layer of Type 1 (L6, 0.2-0.25m thick) and buried topsoil (L7, 0.1-0.15m thick) onto natural (L4, identified at a depth of 0.32-0.4m bcgl). Three sherds of 19th- to 20th-century pottery from L7 were the only finds recovered from Trench T1.

The trench was positioned over the inner ditch of the Triple Dyke (the original Shrub End Dyke) and the central bank, and the ditch was identified and recorded as F1. It was cut into L4, sealed by L7 and was c 6.2m wide. The ditch was slightly over-machined on its southwestern edge, and as a result the side of the ditch as plotted is slightly uneven.

A couple of glacial features were noted (but not recorded) in the natural (L4) to the west of F1, but there was no evidence for any surviving part of the central bank. The edge of the central ditch was identified at the far southwestern end of the trench (F2) and this was recorded without any further investigation. The space for the central bank between the two ditches was 8.9m wide.



**Photograph 2** Trench T1 south with the central ditch of the Triple Dyke (F2) in the foreground, looking northeast.



**Photograph 3** Shrub End Dyke/inner ditch of the Triple Dyke (F1), looking north.

**Trench 2 (T2): 48m by 1.8m (Fig 4 & 5)**

Trench 2 was located within a grassed area to the south of the Fire Station. It was excavated in three sections to avoid a series of services. The trenches were excavated through modern turf and topsoil (L8, c 0.2-0.4m thick) and modern accumulation/buried topsoil (L9, c 0.24-0.47m thick) onto natural (L4, identified at a depth of c 0.5-0.75m bcgl). All of the finds from Trench T2 came from L9 with most dating to the 19th/20th century.

The inner (eastern) ditch of the Triple Dyke was identified and recorded as F8. It was c 6.2m wide, cut into natural L4 and was sealed by L9. A probable tree-throw (F9) was located on the eastern edge of the ditch which had a similar fill, making the precise edge of the ditch difficult to determine. The western edge of the dyke was located below two ceramic drain pipes and only identified by careful hand-excavation between the services.

The central ditch of the Triple Dyke was identified and recorded as F5. It was c 5.8m wide and was also cut into natural and sealed by L9. The eastern edge of the ditch was well-defined, but the western edge was slightly obscured by modern pit F4.



**Photograph 4** Trench T2 with the central ditch of the Triple Dyke (F5) in the foreground, looking northwest

The outer (western) ditch of the triple dyke was not uncovered during the evaluation. This area of the trench could not be fully investigated as both modern services and protected tree roots passed through it.

No evidence for any of the three banks was found in this trench showing that they had all been levelled. However, the gap between the inner and central ditch (for the central bank) was c 9.5m wide.

Other features from the trench included pit F6 (which possibly continued beyond the western edge of the trench and could cut the outer ditch), ditch F7 and natural feature/tree-throw F3. Ditch F7 was aligned northeast to southwest, was 1.1m wide by 0.18m deep, and appeared to be cut from L9 suggesting a relatively modern date.



**Photograph 5** Far eastern end of Trench 2 with F3, looking west-southwest

## 6 Finds

### 6.1 Pottery and ceramic building material *by Dr. Matthew Loughton*

The evaluation uncovered 94 sherds of pottery and ceramic building material (henceforth CBM) with a weight of just over 3kg and 0.22 vessels according to the rim EVE (Table 1). The mean sherd weight is 32g.

Ceramic material	No.	Weight (g)	MSW (g)	Rim EVE
Pottery	13	221	17	0.22
CBM	81	2,799	35	-
<b>Total</b>	<b>94</b>	<b>3,020</b>	<b>32</b>	<b>0.22</b>

**Table 1** Details on the main types of ceramics and pottery

This material was recovered from two layers although most came from subsoil L9 (Table 2).

Context	Description	No.	Weight (g)	MSW (g)
L7	Topsoil	3	61	20
L9	Subsoil	91	2,959	33
<b>Total</b>		<b>94</b>	<b>3,020</b>	<b>0.22</b>

**Table 2** Quantities of pottery and CBM by features and layers

### Roman pottery

The Roman pottery was classified according to the fabric groups outlined in *CAR 10* (Symonds & Wade 1999) (Table 3). There were just two sherds of Roman coarse, principally locally-produced grey ware pottery (fabric GX) with a weight of 8g which came from the subsoil L9.

### Post-Roman pottery

Post-Roman pottery was recorded according to the fabric groups from *CAR 7* (Cotter 2000) while the number of vessels was determined by rim EVE (estimated vessel equivalent) (Table 3). There were only 11 sherds of post-Roman pottery with a weight of 213g and an EVE of 0.22. The subsoil L9 contained a sherd of medieval Colchester-type ware pottery (fabric 21), possibly from a pipkin handle, five sherds (108g) of post-medieval red earthenwares (fabric F40) including two dishes (EVE: 0.22) and two sherds (11g) of modern English stoneware (fabric 45M). The topsoil L7 produced a Staffordshire-type white earthenware (fabric 48D) plate with a willow-pattern print (EVE: 0.07) dating to the 19th-20th century.

### Ceramic building material (CBM)

CBM consists of 81 sherds with a weight of 2,799g (Table 3) which all came from the subsoil L9. The bulk of this material consists of medieval/post-medieval peg-tile with the occasional sherd of 19th-/20th-century brick. Finally, there was also a small quantity of Roman CBM.

CBM code	CBM type	No.	Weight (g)	MSW (g)
<b>Roman</b>				
RB	Roman brick	2	339	170
RT	Roman <i>tegula</i>	2	101	51
<b>Post-Roman</b>				
PT	Peg-tile	74	2,192	30
BR	Brick	3	167	56
<b>Total</b>		<b>81</b>	<b>2,799</b>	<b>35</b>

**Table 3** Building material by period and type

### Conclusion

The two layers (L7, L9) which produced ceramic and pottery finds can both be dated to the 19th/20th century.

## 6.2 Miscellaneous finds

by Laura Pooley

All of the miscellaneous finds came from L9, finds nos. 4, 6, 7 and 8, and consist of fragments of 19th- to 20th-century glass, a c 18th-century copper-alloy button, fragments of post-medieval clay tobacco pipe stem and clinker/coke, and undated iron nails and a fragment of iron object. All the finds have been recorded in Table 4 below and discarded.

Finds no.	Description	Date
4	<p><b>Glass:</b> Five fragments of bottle glass, 84.0g. Three are clear glass with a greenish tinge and two of these are embossed. The first is embossed ...OB.../60... / &amp; CASE... / BA... and the second ...EL... / ...EST... / ...ILLE... / ...N &amp; N... . Of the remaining two fragments, one is dark olive green and one is black. 19th-20th century.</p> <p><b>Clay tobacco pipe:</b> One fragment of stem, 1.7g, post-medieval.</p> <p><b>Copper-alloy button:</b> Complete but damaged copper-alloy hollow button, made in two parts (two round convex pieces) and fused together. Front is decorated with a small round raised 'pimple' in the centre, on the back is a small round blowhole used during manufacture and an alpha-type loop. 14.1mm long, 16.7mm diameter, 2.2g. Post-medieval, c 18th-century (Bailey 2016, 42 &amp; Fig 9.315).</p>	19th-20th century
6	<p><b>Glass:</b> Fragment of olive green bottle glass, 8.4g, 19th-20th century.</p> <p><b>Clinker/coke:</b> Fragment, 1.8g, post-medieval/modern.</p>	19th-20th century
7	<p><b>Clinker/coke:</b> Fragment, 10.1g, post-medieval/modern.</p>	Post-medieval/modern
8	<p><b>Glass:</b> Four fragments, 39.3g. Three are bottle glass, two with a greenish tinge and one olive green. One is a fragment of clear/colourless window glass. 19th-20th century.</p> <p><b>Clay tobacco pipe:</b> Four fragments of stem, 20.4g, post-medieval.</p> <p><b>Iron nails:</b> Two iron nails, 26.6g, undated.</p> <p><b>Iron object:</b> Fragment of iron, 53.3mm long, 24.8mm wide, 12.2mm thick, 27.6g, undated.</p>	19th-20th century

**Table 4** The miscellaneous finds from L9 listed by finds number.

## 7 Discussion (Figs 6-8)

Evaluation at the former Lexden Springs School and adjacent Fire Station successfully located the inner (eastern) ditch of the Triple Dyke (the original Shrub End Dyke) and the central ditch. The outer (western ditch) was not located within Trench 2 as the presence of a modern service and protected tree roots meant the area could not be properly investigated. There was no evidence for any of the three banks in either of the two evaluation trenches. In fact, both L7 (T1 south) and L9 (T2) of the current investigation, which directly overlay the dyke and natural ground level, produced finds of 19th/20th century date. It is likely that the bank material had been used to re-fill the ditches in antiquity as, unlike the now scheduled section of the dyke to the south, they are not extant on Chapman and André's map of Colchester made in 1777. Soils L7 and L9 are therefore likely associated with recent activity on the site such as agriculture/ploughing and subsequent modern building works.

Based on the results of the current evaluation, the alignment of the Triple Dyke through the development site has been plotted on Fig 6. This alignment includes the likely projected route of the outer ditch, which has been extrapolated using measurements taken from the inner and central ditches of the dyke in Trenches 1 and 2. The plan on Fig 6 appears to confirm previous cropmark evidence that the alignment of the Triple Dyke shifts slightly north of Lexden road from that known to the south (CAR 11, 55-56, Fig 6.1). This shift in alignment is significant as it may indicate the presence of an entrance between the two sections on what is now the junction between Lexden Road, London Road and Halstead Road (CAR 11, 56). Unfortunately though, it has not been possible to locate Hawkes' 1961 trench to include it in the projected route of the dyke.

The alignment of the Triple Dyke based on the results of the current evaluation compared to that published in CAR 11 is shown on Fig 7. The plan on Fig 7 shows that the current evaluation has allowed the route of the Triple Dyke to be more accurately plotted through the development site, and there is only a slight discrepancy between this and the previous alignment plotted from cropmarks.

Evidence from the current investigation shows that through the development site the inner ditch is 6.2m wide and the central ditch 5.8m wide, with the gap between the inner and outer ditch (for the bank) recorded at 8.9m wide in T1 and 9.5m wide in T2. Comparing these measurements to the 1961 excavation, the inner ditch was 5.5m wide, the central ditch 5.3m wide and the gap between the ditches (for the banks) 10.4m wide (CAR 11, 59). Therefore, it would seem as though the ditches are wider on the development site than compared to those excavated in 1961 and the banks narrower. However, as Hawkes' 1961 trench cannot be confidently located and as the ditches from this current evaluation were not excavated, the discrepancies cannot be fully explored and these measurements may alter with more thorough investigation. They could also be simply explained by a slight disparity in the depth at which the edges were encountered in this current investigation compared to those in 1961 or, if Hawkes' trench is located further to the north, the discrepancy could be due to the proximity of the development site to a possible entrance through the dyke to the south.

The width of the ditches as recorded during this current investigation when compared to those in 1961 would certainly suggest that they should survive to a comparable depth, c 1.8-2.1m. If circumstances permitted, thorough excavation of these ditches in the future would not only allow their profiles to be accurately recorded and compared to those from 1961, but has the potential for finds and dating evidence to be recovered, and for the exact route, construction and form of the dyke to be better understood. However, evidence from the current works indicate that the banks have been completely levelled within the development site.

## 8 Acknowledgements

CAT thanks RPS and Essex Housing for commissioning and funding the work. The project was managed by C Lister, fieldwork was carried out by A Wightman with N Rayner, R Mathieson, S Carter, N Pryke and M Perou. Figures are by A Wightman, L Pooley and E Holloway. The project was monitored for Colchester Borough Council by Dr Richard Hoggett and for RPS by R Masefield.

## 9 References

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

- |                          |       |  |
|--------------------------|-------|--|
| Bailey, G                | 2016  | <i>Buttons and Fasteners 500BC-AD1840</i> . Greenlight Publishing.   |
| CAR 7                    | 2000  | <i>Colchester Archaeological Report 7: Post-Roman pottery from excavations in Colchester, 1971-85</i> , by J P Cotter.                                   |
| CAR 10                   | 1999  | <i>Colchester Archaeological Report 10: Roman pottery from excavations in Colchester, 1971-86</i> , by R Symonds & S Wade (eds)                          |
| CAR 11                   | 1995  | <i>Colchester Archaeological Report 11: Camulodunum 2</i> , by CFC Hawkes & P Crummy   |
| CAT                      | 2020  | <i>Health &amp; Safety Policy</i>  |
| CAT Report 1253          | 2018  | The Triple Dyke: Archaeological evaluation at 78 Straight Road, Colchester, Essex, CO3 9DB: March 2018, by L Pooley                                      |
| CAT Report 1283          | 2018  | The Triple Dyke: Archaeological monitoring at 78 Straight Road, Colchester, Essex, CO3 9DB: May 2018, by L Pooley  |
| Cotter, J P              | 2000  | <i>Colchester Archaeological Report 7: Post-Roman pottery from excavations in Colchester, 1971-85</i> . Colchester: Colchester Archaeological Trust Ltd. |
| Cifa                     | 2014a | <i>Standard and Guidance for archaeological evaluation</i>   |
| Cifa                     | 2014b | <i>Standard and guidance for the collection, documentation, conservation and research of archaeological materials</i>                                    |
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| Historic England         | 2015  | <i>Management of Research Projects in the Historic Environment (MoRPHE)</i>  |
| Medlycott, M             | 2011  | <i>Research and archaeology revisited: A revised framework for the East of England</i> . East Anglian Archaeology Occasional Papers 24 (EAA 24)          |
| MHCLG                    | 2019  | <i>National Planning Policy Framework</i> . Ministry of Housing, Communities   |

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Symonds, R & Wade, S	1999	<i>Colchester Archaeological Report 10: Roman pottery from excavations in Colchester, 1971-86</i> . Colchester: Colchester Archaeological Trust Ltd.

## 10 Abbreviations and glossary

Bronze Age	period from c 2500 – 700 BC
CAT	Colchester Archaeological Trust
CBC	Colchester Borough Council
CBCAA	Colchester Borough Council Archaeological Advisor
CHER	Colchester Historic Environment Record
CIfA	Chartered Institute for Archaeologists
context	specific location of finds on an archaeological site
EHER	Essex Historic Environment Record
feature (F)	an identifiable thing like a pit, a wall, a drain: can contain 'contexts'
Iron Age	period from 700 BC to Roman invasion of AD 43
layer (L)	distinct or distinguishable deposit (layer) of material
modern	period from c AD 1800 to the present
natural	geological deposit undisturbed by human activity
NGR	National Grid Reference
OASIS	Online Access to the Index of Archaeological Investigations, <a href="http://oasis.ac.uk/pages/wiki/Main">http://oasis.ac.uk/pages/wiki/Main</a>
post-medieval	from c AD 1500 to c 1800
prehistoric	pre-Roman
Roman	the period from AD 43 to c AD 410
section	(abbreviation sx or Sx) vertical slice through feature/s or layer/s
ws	written scheme of investigation

## 11 Contents of archive

**Finds:** none retained

### Paper record

One A4 document wallet containing:

The report (CAT Report 1635)

CBC evaluation brief, CAT written scheme of investigation

Original site record (trench sheet, sections)

Site digital photos and log

### Digital record

The report (CAT Report 1635)

CBC evaluation brief, CAT written scheme of investigation

Site digital photographs, thumbnails and log

Graphic files

Survey data

## 12 Archive deposition

The paper and digital archive is currently held by the Colchester Archaeological Trust at Roman Circus House, Roman Circus Walk, Colchester, Essex CO2 7GZ, but will be permanently deposited with Colchester Museum under project ref. ECC4451.

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## Appendix 1 Context list

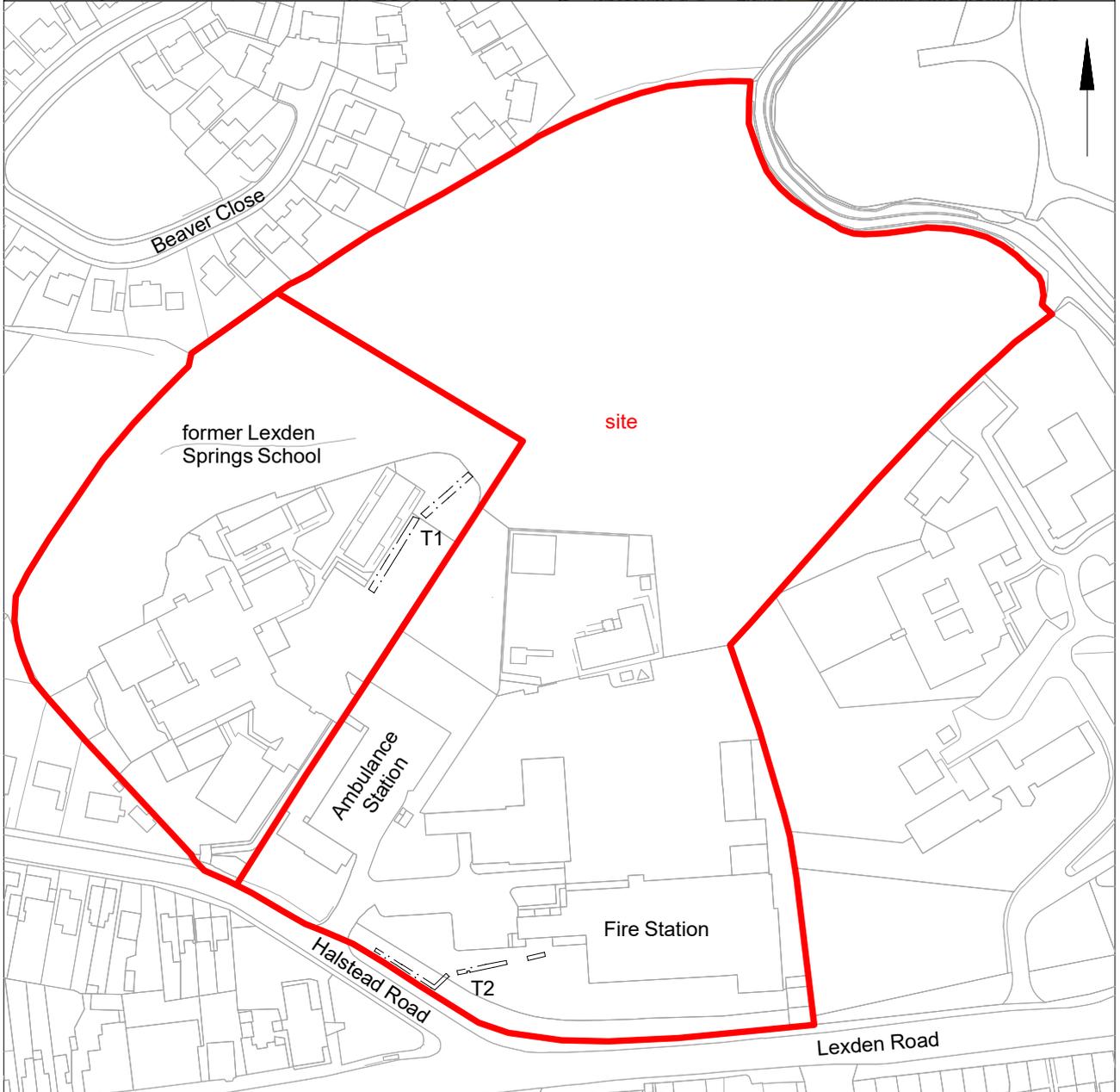
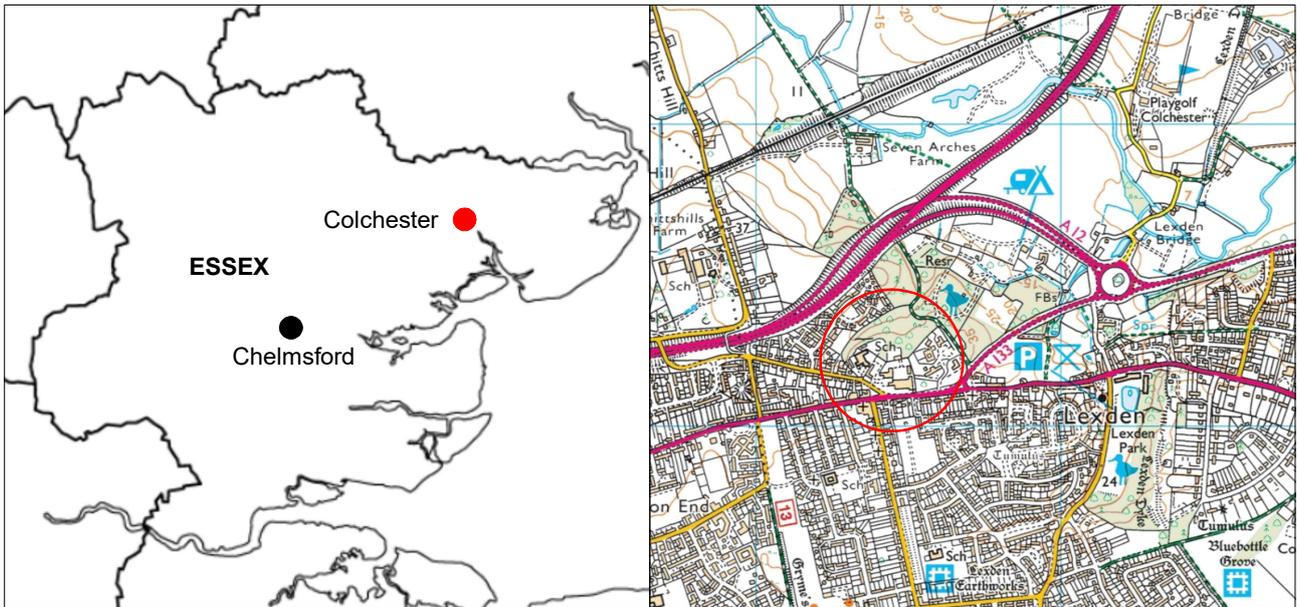
Trench	Context	Finds no.	Context type	Description	Date
T1 north	L1	-	Playground surface and sub-base	-	Modern
T1 north	L2	-	Buried topsoil	friable wet medium grey/brown silty loam and inclusions of: gravel 10%	Modern
T1 north	L3	-	Subsoil	soft moist light orange/grey/brown sandy silt and inclusions of: stone 10%	Undated
All	L4	-	Natural	soft moist medium orange/brown sand and inclusions of: gravel 20% stone 20%	Post-glacial
T1 north	L5	-	Rubbish dump	Modern rubbish dump	Modern
T1 south	L6	-	Type 1	Crushed aggregate	Modern
T1 south	L7	3	Buried topsoil	firm moist medium/dark grey/brown sandy loam with charcoal flecks, brick flecks, tile flecks	Modern, 19th/20th century
T2	L8	-	Turf and topsoil	soft moist medium/dark grey/brown sandy loam with charcoal flecks, brick flecks, tile flecks	Modern
T2	L9	1, 4, 5, 6, 7, 8	Accumulation/buried topsoil	soft moist medium yellow/brown sandy silt	Modern, 19th/20th century
T1 south	F1	-	Inner ditch of the Triple Dyke	soft wet medium/dark yellow/brown sandy silt with charcoal flecks and inclusions of: stone 30%	Roman
T1 south	F2	-	Central ditch of the Triple Dyke	soft moist medium yellow/orange/brown sandy silt	Roman
T2	F3	-	Natural feature /tree-throw	soft moist medium yellow/brown sandy silt and inclusions of: stone 1%	Undated
T2	F4	-	Modern service	-	Modern
T2	F5	-	Central ditch of the Triple Dyke	soft moist medium/dark yellow/orange/brown sandy silt and inclusions of: stone 10%	Roman
T2	F6	-	Pit	soft moist medium yellow/orange/brown sandy silt and inclusions of: stone 10%	Roman
T2	F7	-	Ditch	soft moist medium orange/brown sand silt	?Post-medieval/modern
T2	F8	-	Inner ditch of the Triple Dyke	soft dry dark grey/brown sandy silt	Roman
T2	F9	-	?Tree-throw	soft dry dark grey/brown sandy silt	Undated

Appendix 2 Pottery list

Cxt	Feature type	Find no.	NR	GR.	M SW	Discard	Rim	Handle	Base	Dec.	Stamp	Graf Pre-F	Graf Post-F	Wmd	Soot	Pitting	Burn	Overfired	Residue	Resin Lin.	Gritted	Abraded	Modif.	Mark	Repair hole	Hole	Disc	Disc diam.	Polishing	Fabric Grp	Typology	EVE	Diam.	Vessel H.	Comments	Date
L007	TOPSOIL		3	61	20		1	0	0																				F48D	PLATE	0.07	320		WILLOW PATTERN	19TH/20TH CENTURY	
L009	SUBSOIL	4	1	6	6	X																							F45M						19TH/20TH CENTURY	
L009	SUBSOIL	5	2	8	4												X					X							GX						ROMAN	
L009	SUBSOIL	6	2	60	30		1	0	1																			F40	DISH	0.06	320			c.1500-19TH/20TH CENTURY		
L009	SUBSOIL	6	1	5	5		1	0	0																			F45M	JAR?	0.03	240			19TH/20TH CENTURY		
L009	SUBSOIL	6	1	33	33		0	1	0													X						F21					PIPKIN HANDLE?	c.1200-1550		
L009	SUBSOIL	7	1	13	13		1	0	0																			F40	DISH	0.06	210			c.1500-19TH/20TH CENTURY		
L009	SUBSOIL	7	1	12	12																							F40						c.1500-19TH/20TH CENTURY		
L009	SUBSOIL	8	1	23	23		0	0	1																			F40						c.1500-19TH/20TH CENTURY		

Appendix 3 CBM list

Cxt	Feature type	Find no.	NR	GR.	M SW	Discard	Typology	FL CORN.	MINI	FL H.	FL W.	FL TH.	LCA	LCA L.	UCA	UCA L.	Stamp	Sign.	Tally	Graf PF	Animal	Shoe	Scored	Comb.	Roller	Circ. Vt.	Rect. Vt.	Bl. vt.	PH R	PH SQ	2 Phs	Blind	L.	BR.	TH.	Wall Pl. Col.	cm2	Mortar	Burnt	Overfired	Abraded	Modif.	Date
L009	SUBSOIL	4	14	568	41	X	PT		0																																	MEDIEVAL-POST MEDIEVAL	
L009	SUBSOIL	5	1	31	31	X	PT		0																																		MEDIEVAL-POST MEDIEVAL
L009	SUBSOIL	5	1	331	331	X	RB		0																														X			ROMAN	
L009	SUBSOIL	6	41	964	24	X	PT		0																				X	X												MEDIEVAL-POST MEDIEVAL	
L009	SUBSOIL	6	1	31	31	X	PT		0																																	MEDIEVAL-POST MEDIEVAL	
L009	SUBSOIL	6	1	70	70	X	RT		0																																	ROMAN	
L009	SUBSOIL	6	1	70	70	X	BR		0																																	19TH/20TH CENTURY	
L009	SUBSOIL	6	1	31	31	X	RT		0																																	ROMAN	
L009	SUBSOIL	7	8	190	24	X	PT		0																																		MEDIEVAL-POST MEDIEVAL
L009	SUBSOIL	7	1	8	8	X	RB		0																																		ROMAN
L009	SUBSOIL	8	2	97	49	X	BR		0																																		19TH/20TH CENTURY
L009	SUBSOIL	8	8	288	36	X	PT		0																																		MEDIEVAL-POST MEDIEVAL
L009	SUBSOIL	8	1	120	120	X	PT		0																																		MEDIEVAL-POST MEDIEVAL



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Fig 1 Site location.





Fig 2 Alignment of the Triple Dyke through the development site (green) (based on CAR 11, Fig 6.1)

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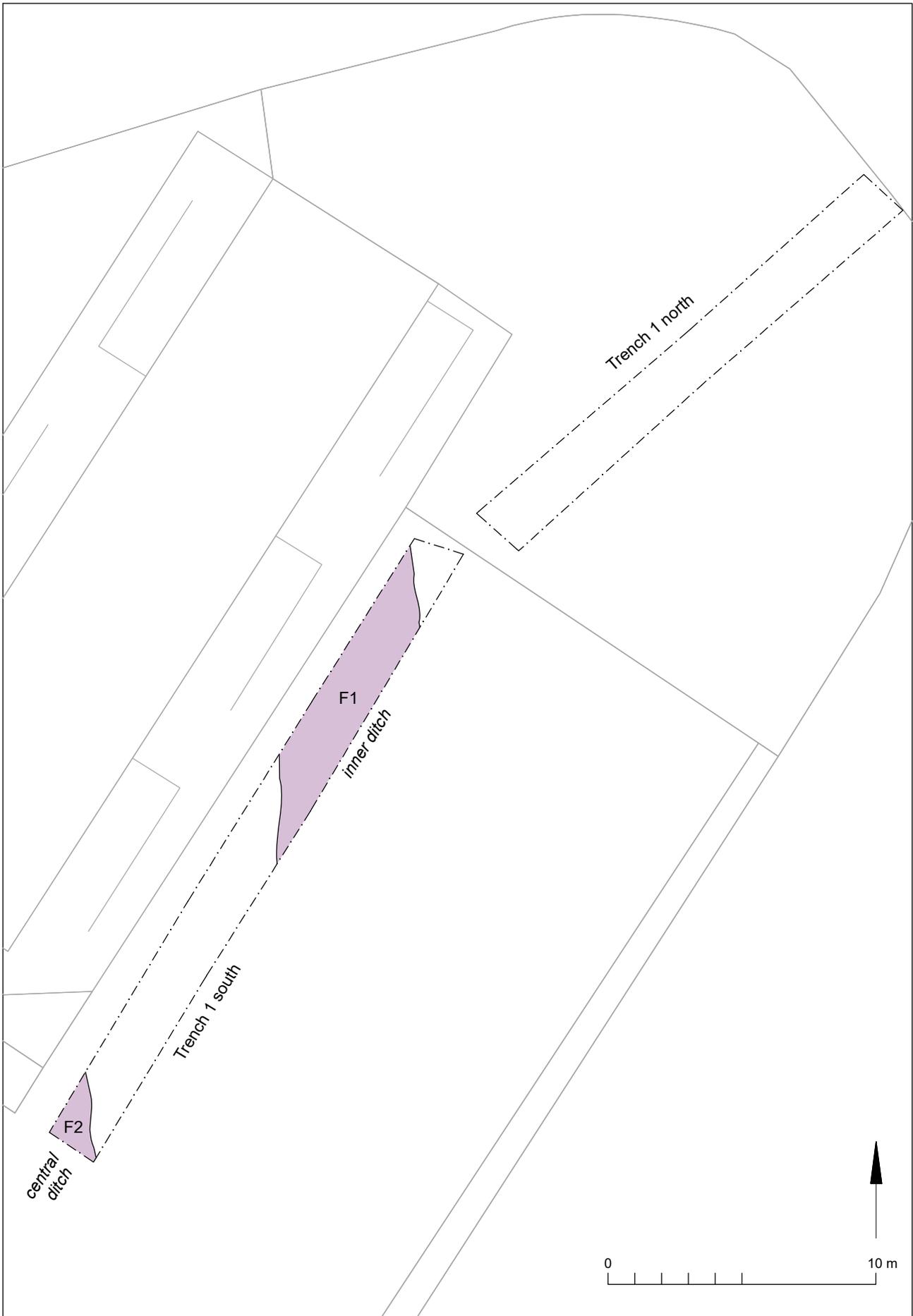


Fig 3 Trench 1 (T1) results with the ditches of the Triple Dyke highlighted in pink.

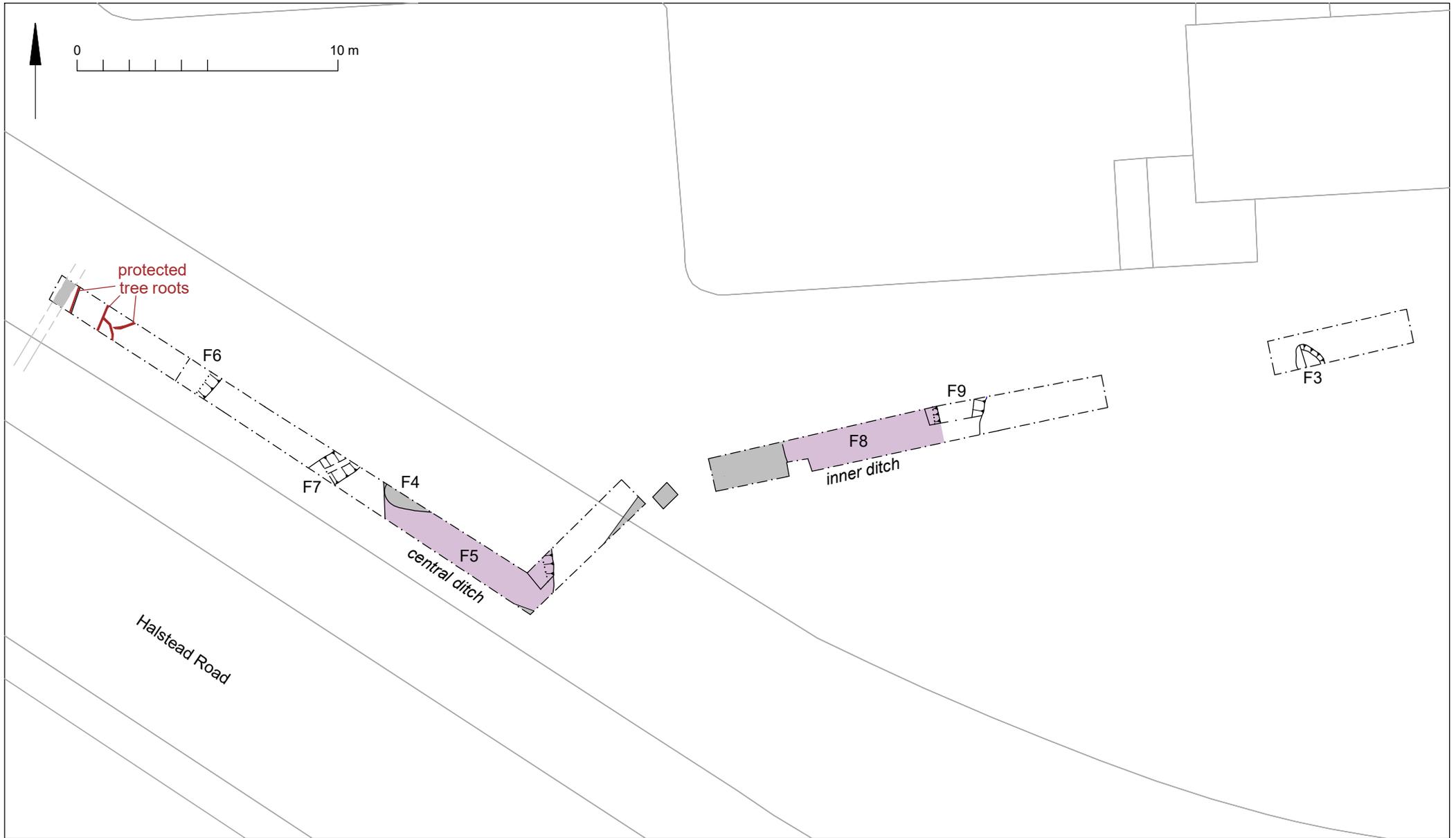


Fig 4 Trench 2 (T2) results with the ditches of the Triple Dyke highlighted in pink and modern services/features in grey

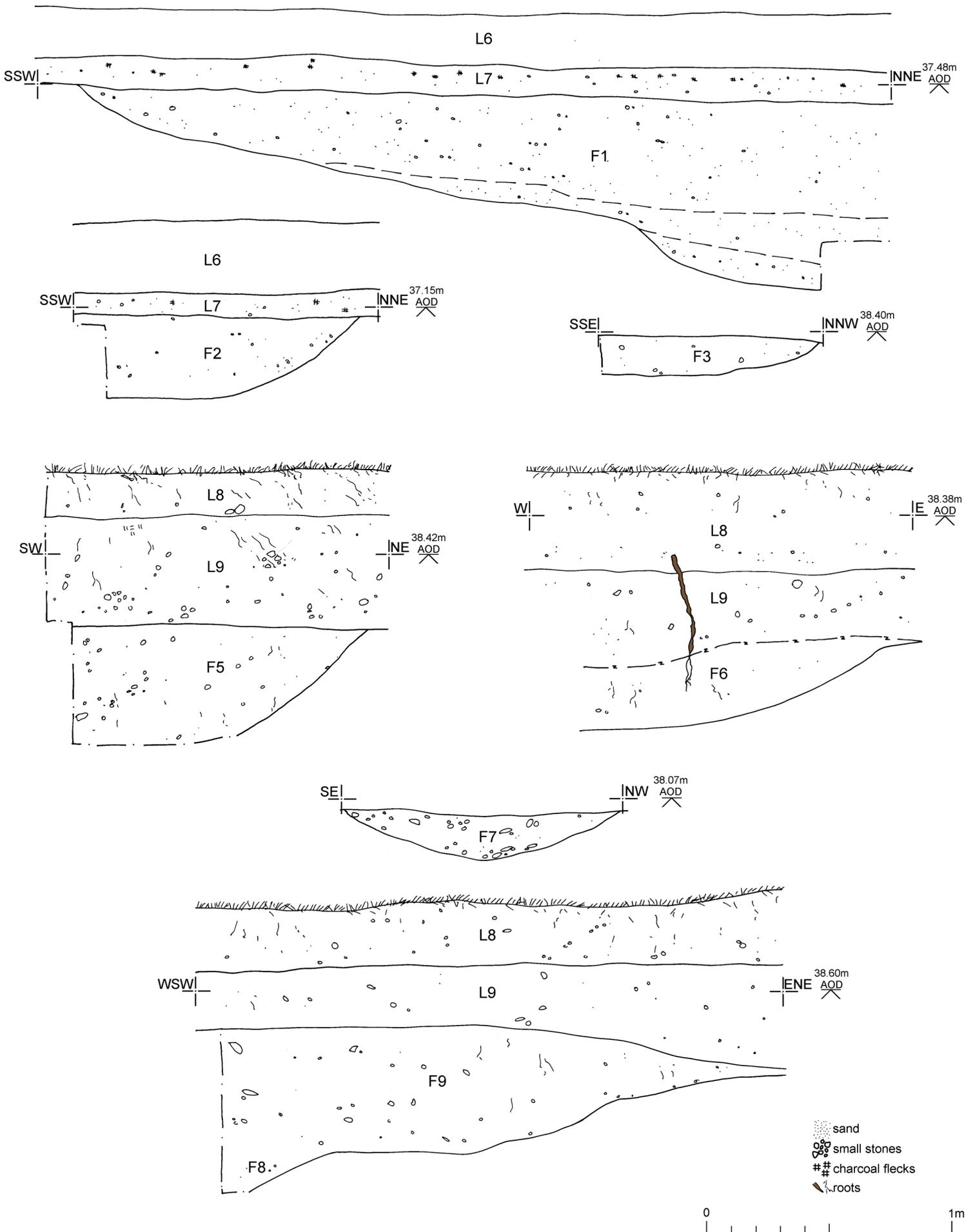
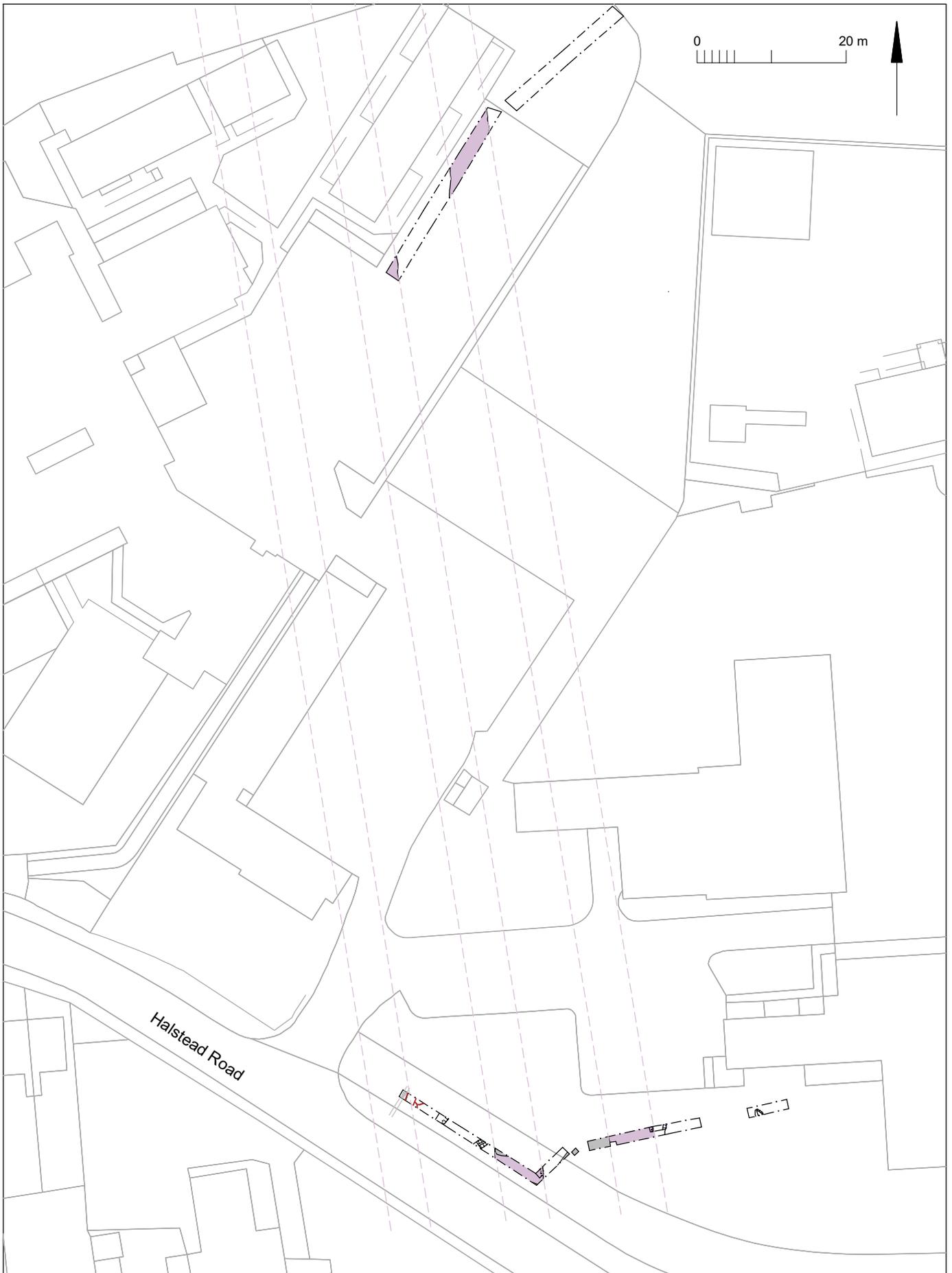


Fig 5 Sections.



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Fig 6 Projected route of the Triple Dyke based on the results of the current evaluation



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Fig 7 Projected route of the Triple Dyke based on the results of the current evaluation (pink) compared to the route of the Triple Dyke as originally plotted in CAR 11 (based on cropmarks)

# Essex Historic Environment Record/ Essex Archaeology and History

## Summary sheet

<b>Address:</b> Archaeological evaluation at the former Lexden Springs School and the Fire Station, Halstead Road, Colchester, Essex, CO3 3PZ	
<b>Parish:</b> Colchester	<b>District:</b> Colchester
<b>NGR:</b> TL 96408 25190 (centre)	<b>Site code:</b> CAT project ref.: 2021.01i CHER ref: ECC4603 OASIS ref: colchest3-416727
<b>Type of work:</b> Evaluation	<b>Site director/group:</b> Colchester Archaeological Trust
<b>Date of work:</b> 1st-4th February 2021	<b>Size of area investigated:</b> 1.17ha
<b>Location of curating museum:</b> Colchester museum	<b>Funding source:</b> Developer
<b>Further seasons anticipated?</b> Not known	<b>Related CHER/SMR number:</b> CHER MCC7041, MCC7463, MCC7467; NHLE 1019993.
<b>Final report:</b> CAT Report 1635	
<b>Periods represented:</b> Late Iron Age/Early Roman, post-medieval, modern	
<p><b>Summary of fieldwork results:</b></p> <p>An archaeological evaluation (two trial-trenches) was carried out on land at the former Lexden Springs School and the adjacent Fire Station, off Halstead Road, Colchester, Essex to determine the precise location of the Shrub End Dyke/Triple Dyke which runs through the development site. The Shrub End Dyke forms part of the Late Iron Age defences around Camulodunum. Two more ditches and banks were subsequently added to the western side of the dyke during the period of the Roman conquest to form the Triple Dyke.</p> <p>The aim of this evaluation was to identify the precise route of the Shrub End Dyke/Triple Dyke through the development site with minimal excavation of the remains. As such, the route of the inner (the original Shrub End Dyke) and central ditches of the Triple Dyke were identified and planned. Due to site constraints the route of the outer (western) ditch was not located. Comparison of the remains to an evaluation carried out across the Triple Dyke in 1961 suggests that the ditches of the dyke have a good level of survival through the development site. However, the banks of the dyke appear to have been completely levelled.</p>	
<b>Previous summaries/reports:</b> Hawkes, CFC & Crummy, P (1995) <i>Colchester Archaeological Report 11: Camulodunum 2</i> , Colchester Archaeological Trust Ltd	
<b>CBC monitor:</b> Dr Richard Hoggett	
<b>Keywords:</b> Shrub End Dyke, Triple Dyke	<b>Significance:</b> *
<b>Author of summary:</b> Laura Pooley	<b>Date of summary:</b> March 2021

# WRITTEN SCHEME OF INVESTIGATION FOR TARGETED ARCHAEOLOGICAL EVALUATION

Lexden Springs School & Fire Station, Halstead Road, Colchester

JAC25296  
Lexden Springs School & Fire Station  
V1  
July 2019  
TL 96408 25190:  
Colchester Borough Council:

## REPORT

### Quality Management

Version	Status	Authored by	Reviewed by	Approved by	Date
V1	Draft	Rob Masefield	Simon Blatherwick	Rob Masefield	2 December 2019
V2	Draft	Rob Masefield	Simon Blatherwick	Rob Masefield	10 December 2019
V3	Draft	Rob Masefield / CAT	Simon Blatherwick	Rob Masefield	16 December 2019

### Approval for issue

Rob Masefield

[Signature]

16 December 2019

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### EXECUTIVE SUMMARY

This Written Scheme of Investigation (WSI) is for two archaeological evaluation trenches on land at Lexden Springs School and adjacent Fire Station north of Halstead Road and Lexden Road, Colchester.

The trenches are designed, as far as practicable given site constraints, to confirm the precise alignment of three parallel Iron Age and Roman defensive dykes known as Shrub End Dyke/Triple Dyke. The dykes form defensive elements within the wider territorial oppidum of Camulodunum. Definitive locational information is required to inform the design of a forthcoming planning application by Essex Housing.

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Figure 4b: The Triple Dyke Extrapolated Showing Trenches 1 and 2 and Known Services overlaid on Aerial Photograph (by CAT)

## 1 INTRODUCTION AND SCOPE OF STUDY

- 1.1 This Written Scheme of Investigation (WSI) has been prepared by Robert Masefield of RPS Heritage in association with Colchester Archaeological Trust (CAT) on behalf of Essex Housing.
- 1.2 The subject of this WSI are two proposed archaeological evaluation trenches to the north side of Halstead Road, Lexden, Colchester (TL 96408 25190) (Figs 1-4). The northern trench is situated within an area of tarmac hardstanding, gravel edging and former playground at the former Lexden Springs School and the southern trench on a grassed area in front (south side) of the adjacent Fire Station.
- 1.3 There is a requirement under the National Planning Policy Framework (NPPF, as revised 2019) to explain the significance of any designated and non-designated heritage assets identified and what, if any, impacts will arise to that significance, including through an impact on their setting, on account of the development proposals.
- 1.4 As a result an archaeological desk-based assessment (RPS 2019) was prepared to inform the archaeological potential with respect to the wider proposed development site comprising Lexden Springs School, adjacent Ambulance Station and Fire Station. The assessment concluded the following:
- “The proposal site to the north of Halstead Road is largely brownfield comprising Lexden Springs School, an Ambulance Station and a Fire Station, with woodland to the north side.*
- The study site is considered to have low potential for Palaeolithic, Mesolithic and Neolithic archaeological remains and low to moderate potential or sporadic features of Bronze Age date.*
- Significantly the study site overlays part of the northern extent of a north/south aligned Late Iron Age Dyke defensive dyke known as ‘Shrub End North Dyke’, which as part of the defences of Iron Age ‘Camulodunum’, a major territorial oppidum. The dyke was reworked as one of three earliest Roman defensive ditches known as the ‘Triple Dyke’ which probably associated with the Roman invasion of AD43. A trench across the dykes in 1961 within the study site (c.200m north of Lexden Road) has shown the dyke alignment as 37m wide with ditches around 5m wide and around 2.1m deep. The depth of the dykes suggests the probability that only the upper levels of the features will have been truncated by modern development, although the banks have been completely levelled removing part of their significance.*
- Where the associated banks survive, some 350m to the south of the proposal site, they comprise a Scheduled Monument. However, the section north of Lexden Road, including the proposal site, is not scheduled and redevelopment of the current brownfield areas, though subject to archaeological issues and constraints, is considered likely to be achievable.*
- Setting assessment has concluded that the Triple Dyke corridor within the study site comprises a key aspect of the setting of the Scheduled Monument due to direct historical association (rather than visual setting). In addition, due to the c.2m depth of the dyke’s ditches it is possible that there remains a physical below ground archaeological association beneath the modern brownfield landscape...”*
- 1.5 As a result of the known potential for the Triple Dyke both CBC’s Archaeological Officer (CBCAO) and Historic England’s Regional Advisor were consulted to establish their position in relation to a suitable

redevelopment design to reflect the existence of the dykes, and to establish a suitable evaluation and mitigation strategy as appropriate.

- 1.6 Historic England (Deborah Priddy) and the CBCAO (Jess Tipper) were provided with a copy of the DBA in an email of 20 August 2019 from Rob Masefield of RPS which stated that:

*“Essex Housing asked me to compile the attached DBA for a brownfield site north of Halstead Road and Lexden Road, through which it is thought the c.37m wide Triple Dyke alignment progresses. Following my advice they are keen to understand whether they will be able to develop the brownfield area of the site (NB the woodland would remain as green space). This is early in the feasibility stage (Essex Housing haven't engaged in any pre-application discussions with the planners) but I think there is an opportunity both to understand more about the Triple Dyke and to respect its alignment so that its readable to the public. At this early stage it would therefore be good to have feedback that could be fed into early design. Would a meeting on site be preferable - how would you like to approach this?”*

- 1.7 Historic England replied as follows:

*“A useful opportunity as you say Rob, but not one that requires my [Historic England's] direct involvement...in the present circumstances. In planning terms it [i.e. the unscheduled section of the Triple Dyke beneath the site] should be regarded as a nationally important undesignated asset, unless there is evidence that no remaining buried archaeology survives. We can comment to that effect on the planning application if you ensure we are consulted and it is flagged as such.”*

- 1.8 The CBCAO responded on the 27<sup>th</sup> August 2019:

*“I agree, this is a good opportunity to understand more about Triple Dyke, and an opportunity to enhance, present and promote the heritage asset for public benefit. A starting point would be to accurately locate the alignment and preservation of the archaeological remains (geophysics, geotechnical and trial-trenching)...”*

- 1.9 It was confirmed in a meeting with CBCAO of 12<sup>th</sup> September 2019 that two targeted pre-determination evaluation trenches across the dyke line would be most appropriate (prior to permitting development of the initial Lexdon Springs School parcel), in order to firmly establish both their survival under the proposal site, and to establish their precise position to inform the development design process. It was agreed that the dyke would be identified in plan within the trenches but only their uppermost level would be investigated at this stage, sufficient to confirm the extent of their respective fills and the edges of their cuts.

This document is specifically designed to provide a sound basis for excavation and post excavation practice for the completion of the two trial trenches. The WSI sets out proposals for the archaeological work including treatment of finds, production of a report, and deposition of the archive. The WSI mirrors standards and practices contained in Guidelines on Standards and Practices for Archaeological Fieldwork in the Borough of Colchester (Colchester Borough Council 1996. revised 1999). The Colchester Borough Council Archaeological Officer (CBCAO) requires this document in order to formally approve the scope of the evaluation and the aims and methods for archaeological recording and reporting. The WSI is prepared by RPS Heritage in association with CAT and will be adhered to by CAT.

---

## 2 PLANNING BACKGROUND AND DEVELOPMENT PLAN FRAMEWORK

- 2.1 National legislation regarding archaeology, including scheduled monuments, is contained in the Ancient Monuments and Archaeological Areas Act 1979, amended by the National Heritage Act 1983 and 2002, and updated in April 2014.
- 2.2 In March 2012, the government published the National Planning Policy Framework (NPPF), and it was last updated in July 2019. The NPPF is supported by the National Planning Practice Guidance (NPPG), which was published online 6th March 2014 and last updated in 2018 (<https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment>).
- 2.3 The NPPF and NPPG are additionally supported by three Good Practice Advice (GPA) documents published by Historic England: GPA 1: The Historic Environment in Local Plans; GPA 2: Managing Significance in Decision-Taking in the Historic Environment (both published March 2015). The second edition of GPA3: The Setting of Heritage Assets was published in December 2017.

### National Planning Policy

- 2.4 Section 16 of the NPPF, entitled Conserving and enhancing the historic environment provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets. Overall, the objectives of Section 16 of the NPPF can be summarised as seeking the:
- Delivery of sustainable development;
  - Understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment;
  - Conservation of England's heritage assets in a manner appropriate to their significance; and
  - Recognition that heritage makes to our knowledge and understanding of the past.
- 2.5 Section 16 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. Paragraph 189 states that planning decisions should be based on the significance of the heritage asset and that level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.
- 2.6 *Heritage Assets* are defined in Annex 2 of the NPPF as: a building, monument, site, place, area or landscape positively identified as having a degree of significance meriting consideration in planning decisions. They include designated heritage assets (as defined in the NPPF) and assets identified by the local planning authority during the process of decision-making or through the plan-making process.
- 2.7 Annex 2 also defines *Archaeological Interest* as a heritage asset which holds or potentially could hold evidence of past human activity worthy of expert investigation at some point.
- 2.8 A *Nationally Important Designated Heritage Asset* comprises a: World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area.

- 2.9 *Significance* is defined as: The value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.
- 2.10 *Setting* is defined as: The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
- 2.11 In short, government policy provides a framework which:
- Protects nationally important designated Heritage Assets;
  - Protects the settings of such designations;
  - In appropriate circumstances seeks adequate information (from desk based assessment and field evaluation where necessary) to enable informed decisions;
  - Provides for the excavation and investigation of sites not significant enough to merit *in-situ* preservation.
- 2.12 The NPPG reiterates that the conservation of heritage assets in a manner appropriate to their significance is a core planning principle, requiring a flexible and thoughtful approach. Furthermore, it highlights that neglect and decay of heritage assets is best addressed through ensuring they remain in active use that is consistent with their conservation. Importantly, the guidance states that if complete, or partial loss of a heritage asset is justified, the aim should then be to capture and record the evidence of the asset's significance and make the interpretation publicly available. Key elements of the guidance relate to assessing harm. An important consideration should be whether the proposed works adversely affect a key element of the heritage asset's special architectural or historic interest. Additionally, it is the degree of harm, rather than the scale of development, that is to be assessed. The level of 'substantial harm' is considered to be a high bar that may not arise in many cases. Essentially, whether a proposal causes substantial harm will be a judgment for the decision taker, having regard to the circumstances of the case and the NPPF. Importantly, harm may arise from works to the asset or from development within its setting. Setting is defined as the surroundings in which an asset is experienced and may be more extensive than the curtilage. A thorough assessment of the impact of proposals upon setting needs to take into account, and be proportionate to, the significance of the heritage asset and the degree to which proposed changes enhance or detract from that significance and the ability to appreciate it.
- 2.13 The NPPG specifically did not supersede the PPS 5: Historic Environment Planning Practice Guide, issued by the Department of Communities and Local Government in collaboration with English Heritage and DCMS in 2010. As of 27th March 2015, the PPS 5: Historic Environment Planning Practice Guide was cancelled and replaced with three Good Practice Advice documents, published by English Heritage (now Historic England). These cover 1) Local Plan Policy, 2) Managing Significance in Decision-Taking and 3) The Setting of Heritage Assets.
- 2.14 The purpose of Good Practice Advice Note 2 (Managing Significance in Decision-Taking) is to provide information on good practice to assist local authorities, planning and other consultants, owners,

applicants and other interested parties in implementing historic environment policy in the National Planning Policy Framework (NPPF) and the related guidance given in the National Planning Practice Guide (PPG). It contains useful information on assessing the significance of heritage assets, using appropriate expertise, historic environment records, recording and furthering understanding, neglect and unauthorised works, marketing, design and distinctiveness.

2.15 In particular Note 2 identifies the issues which ought be considered to achieve successful good design with new development in sensitive areas, taking into account:

- The history of the place
- The relationship of the proposal to its specific site
- The significance of nearby assets and the contribution of their setting, recognising that this is a dynamic concept
- The general character and distinctiveness of the area in its widest sense, including the general character of local buildings, spaces, public realm and the landscape, the grain of the surroundings, which includes, for example the street pattern and plot size
- The size and density of the proposal related to that of the existing and neighbouring uses
- Landmarks and other built or landscape features which are key to a sense of place
- The diversity or uniformity in style, construction, materials, colour, detailing, decoration and period of existing buildings and spaces
- The topography
- Views into, through and from the site and its surroundings
- Landscape design
- The current and historic uses in the area and the urban grain
- The quality of the materials

2.16 GPA3: The Setting of Heritage Assets (Second Edition, December 2017) focuses on the management of change within the setting of heritage assets. This document replaces GPA3: The Setting of Heritage Assets (March 2015) and the previously withdrawn Seeing History in the View (English Heritage, 2011) in order to aid practitioners with the implementation of national legislation, policies and guidance relating to the setting of heritage assets found in the 1990 Act, the NPPF and PPG. The guidance is largely a continuation of the philosophy and approach of the 2011 and 2015 documents and does not present a divergence in either the definition of setting or the way in which it should be assessed.

2.17 As with the NPPF the document defines setting as 'the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve'. Setting is also described as being a separate term to curtilage, character and context. The guidance emphasises that setting is not a heritage asset, nor a heritage designation, and that its importance lies in what it contributes to the significance of the heritage asset, or the ability to appreciate that significance. It also

states that elements of setting may make a positive, negative or neutral contribution to the significance of the heritage asset.

- 2.18 While setting is largely a visual term, with views considered to be an important consideration in any assessment of the contribution that setting makes to the significance of an asset, and thus the way in which an asset is experienced, setting also encompasses other environmental factors including noise, vibration and odour. Historical and cultural associations may also form part of the asset's setting, which can inform or enhance the significance of a heritage asset. Further clarification on this matter has been provided by the High Court in relation to *Steer v Secretary of State for Communities and Local Government and Others* [2017] which stresses the potential importance and contribution of non-visual elements of setting.
- 2.19 This document provides guidance on practical and proportionate decision making with regards to the management of change within the setting of heritage assets. It is stated that the protection of the setting of a heritage asset need not prevent change and that decisions relating to such issues need to be based on the nature, extent and level of the significance of a heritage asset, further weighing up the potential public benefits associated with the proposals. It is further stated that changes within the setting of a heritage asset may have positive or neutral effects.
- 2.20 The document also states that the contribution made to the significance of heritage assets by their settings will vary depending on the nature of the heritage asset and its setting, and that different heritage assets may have different abilities to accommodate change without harming their significance. Setting should, therefore, be assessed on a case-by-case basis.
- 2.21 Historic England recommend using a series of detailed steps in order to assess the potential effects of a proposed development on significance of a heritage asset. The 5-step process is as follows:
1. Identify which heritage assets and their settings are affected;
  2. Assess the degree to which these settings and views make a contribution to the significance of a heritage asset(s) or allow significance to be appreciated;
  3. Assess the effects of the proposed development, whether beneficial or harmful, on the significance or on the ability to appreciate it;
  4. Explore ways to maximise enhancement and avoid or minimise harm; and,
  5. Make and document the decision and monitor outcomes.
- 2.22 In considering any planning application for development, the planning authority will be mindful of the framework set by government policy, in this instance the NPPF, by current Development Plan Policy and by other material considerations.

### **Local Planning Policy**

- 2.23 The site is located within Colchester Borough Council.

2.24 The Colchester Borough Council Local Development Framework Core Strategy was adopted in 2008 and contains the following policy relating to the historic environment:

**UR 2 – BUILT DESIGN AND CHARACTER**

**THE COUNCIL IS COMMITTED TO ENHANCING COLCHESTER'S UNIQUE HISTORIC CHARACTER WHICH IS HIGHLY VALUED BY RESIDENTS AND AN IMPORTANT TOURIST ATTRACTION. BUILDINGS, CONSERVATION AREAS, ARCHAEOLOGICAL SITES, PARKLANDS, VIEWS, THE RIVER AND OTHER FEATURES THAT CONTRIBUTE POSITIVELY TO THE CHARACTER OF THE BUILT ENVIRONMENT SHALL BE PROTECTED FROM DEMOLITION OR INAPPROPRIATE DEVELOPMENT. ARCHAEOLOGICAL ASSESSMENTS WILL BE REQUIRED ON DEVELOPMENT SITES THAT POSSESS**

**KNOWN ARCHAEOLOGICAL DEPOSITS, OR WHERE IT IS CONSIDERED THAT THERE IS GOOD REASON FOR SUCH REMAINS TO EXIST. IMPORTANT ARCHAEOLOGICAL SITES AND THEIR SETTINGS WILL BE PRESERVED IN SITU.**

2.25 The Colchester Borough Council Local Development Framework Development Policies Document was adopted in October 2010 and contains the following policy relating to the historic environment:

**POLICY DP14: HISTORIC ENVIRONMENT ASSETS**

**DEVELOPMENT WILL NOT BE PERMITTED THAT WILL ADVERSELY AFFECT A LISTED BUILDING, A CONSERVATION AREA, HISTORIC PARK OR GARDEN OR IMPORTANT ARCHAEOLOGICAL REMAINS. DEVELOPMENT AFFECTING THE HISTORIC ENVIRONMENT SHOULD SEEK TO PRESERVE OR ENHANCE THE HERITAGE ASSET AND ANY FEATURES OF SPECIFIC HISTORIC, ARCHAEOLOGICAL, ARCHITECTURAL OR ARTISTIC INTEREST. IN ALL CASES THERE WILL BE AN**

**EXPECTATION THAT ANY NEW DEVELOPMENT WILL ENHANCE THE HISTORIC ENVIRONMENT IN THE FIRST INSTANCE, UNLESS THERE ARE NO IDENTIFIABLE OPPORTUNITIES AVAILABLE. IN INSTANCES WHERE EXISTING FEATURES HAVE A NEGATIVE IMPACT ON THE HISTORIC ENVIRONMENT, AS IDENTIFIED THROUGH CHARACTER APPRAISALS, THE LOCAL PLANNING AUTHORITY WILL REQUEST THE REMOVAL OF THE FEATURES THAT UNDERMINE THE HISTORIC ENVIRONMENT AS PART OF ANY PROPOSED DEVELOPMENT. SUPPORT WILL BE GIVEN TO THE PROVISION OF CREATIVE AND ACCESSIBLE INTERPRETATIONS OF HERITAGE ASSETS.**

**CONSERVATION OF THE HISTORIC ENVIRONMENT WILL ALSO BE ENSURED BY:**

- (I) IDENTIFYING, CHARACTERISING, PROTECTING AND ENHANCING CONSERVATION AREAS;**
- (II) PROTECTION AND ENHANCEMENT OF EXISTING BUILDINGS AND BUILT AREAS WHICH DO NOT HAVE LISTED BUILDING OR CONSERVATION AREA STATUS BUT HAVE A PARTICULAR LOCAL IMPORTANCE OR CHARACTER WHICH IT IS DESIRABLE TO KEEP. SUCH BUILDINGS**

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**OR GROUPS OF BUILDINGS WILL BE IDENTIFIED THROUGH A LOCAL LIST WHICH WILL BE ADOPTED BY THE COUNCIL;**

**(III) PRESERVING OR ENHANCING LISTED BUILDINGS, SCHEDULED MONUMENTS, HISTORIC PARKS AND GARDENS, INCLUDING THEIR RESPECTIVE SETTINGS, AND OTHER FEATURES WHICH CONTRIBUTE TO THE HERITAGE OF THE BOROUGH; AND**

**(IV) KNOWN SITES OF ARCHAEOLOGICAL IMPORTANCE WILL BE CLEARLY IDENTIFIED AND PROTECTED, AND SITES THAT BECOME KNOWN, WHETHER THROUGH FORMAL EVALUATION AS PART OF A PLANNING APPLICATION OR OTHERWISE, WILL SIMILARLY BE PROTECTED ACCORDING TO THEIR IMPORTANCE.**

**HERITAGE STATEMENTS AND/OR ARCHAEOLOGICAL EVALUATIONS WILL BE REQUIRED FOR PROPOSALS RELATED TO OR IMPACTING ON THE SETTING OF HERITAGE ASSETS AND/OR KNOWN OR POSSIBLE ARCHAEOLOGICAL SITES, SO THAT SUFFICIENT INFORMATION IS PROVIDED TO ASSESS THE IMPACTS OF DEVELOPMENT ON HISTORIC ENVIRONMENT ASSETS TOGETHER WITH ANY PROPOSED MITIGATION MEASURES.**

### 3 GEOLOGY AND TOPOGRAPHY

#### Geology

- 3.1 The BGS online (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>) records that the solid geology comprises London Clay overlaid in the north-western area by a finger of 'Head - Clay, Silt, Sand And Gravel. Superficial Deposits formed up to 3 million years ago in the Quaternary Period. Local environment previously dominated by subaerial slopes' and over the remainder of the Site by 'Cover Sand - Clay, Silt And Sand. Superficial Deposits formed up to 3 million years ago in the Quaternary Period. Local environment previously dominated by wind blown deposits.'

#### Topography

- 3.2 The study site is located just under a kilometre to the south of the River Colne on higher ground above the floodplain. Ground level at the school site is around 38m OD, with a slope down to c.30m along the western edge. Ground level at Ambulance Station is c.38.7m OD in south, sloping down to 38m in north. There is a sharp drop-off into the wooded area in the north (which undulates) ranging from 36m down to 25m OD.

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## 4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 4.1 What follows comprises a summary of the desk-based assessment findings including a review of currently known archaeological assets within a 750m radius of the site based on the Colchester Historic Environment Record (HER), together with a historic map regression exercise charting the development of the study area from the 17<sup>th</sup> century onwards until the present day (see RPS 2019 Figs. 2 & 3 and tabulated in Appendix 1).

### Previous Archaeological Work within the Study Site

- 4.2 The only HER record within the study site itself is the 1961 trench that was excavated across Shrub End Dyke / Triple Dyke and is discussed in detail within the 'Iron Age and Roman Conquest' section below (MCC7041 & 7467).

### Palaeolithic & Mesolithic

- 4.3 There have been a number of Palaeolithic finds from the study area derived from the Pleistocene 'Cover Loam' or underlying sand gravels. These flint artefacts include a flint handaxes from c.75m to the south of the study site (MCC8158), c.300m to the south (MCC8117), 350m to the south-west (MCC7701) and from c.450m to the west (MCC8065). A non-specifically dated worked flint item from c.580m to the south-east may also be Palaeolithic in date (MCC7739). Such finds within gravels are rarely in situ having commonly been redeposited by fluvial/glacial freeze thaw action. There are no Mesolithic sites or finds from the study area, despite the favourable location for hunter-gathering activities close to the River Colne.

### Neolithic and Bronze Age

- 4.4 There are no Early Neolithic finds from the study area with the possible exception of a non-specifically dated flaked flint axe from the eastern extent of the study area (MCC2306). Later Neolithic finds within the study area include two polished flint axes (MCC 7448 & 7449) from Gryme's Dyke c.350m to the south-west of the study site.
- 4.5 More significantly there is evidence for a Middle Bronze Age urnfield from c.300m to the south-east of the study site with bucket urns recovered some 160m apart (MCC1315 & 7452). Fieldwalking in 1958 included the discovery of a Middle Bronze Age Deverel Rimbury Bucket urn at No.1 Shakespeare Road, Colchester (ECC1179 on RPS 2019 Fig, 3). The HER also reports that '*two urns had also been found under No's 284 opposite No 1 within the two years before 1959, but these were destroyed and lost.*' These findings suggest a local occupation of Middle Bronze Age date.

### Iron Age to Roman Conquest Period

- 4.6 Trial-trenching at Chitts Hill, Stanway, c.600m to the north-west of the study site (ECC3952) identified a pit (possibly associated with cremation) which was radiocarbon dated to the Middle or Late Iron Age date (165 Cal BC-20 Cal AD at 95% confidence) (ASE 2017). There are no other early-middle (pre Camulodunum oppidum) Iron Age sites or finds on the Her within the study area.

- 4.7 The study site falls within the western area of the pre-Roman (late Iron Age) oppidum of Camulodunum (Hawkes and Crummy 1995 CAR 11). The only above-ground traces of this oppidum are the linear banks and ditches of the defensive dyke system that surrounded it. The DBA (RPS 2019) Fig. 4 (adapted from Hawkes and Crummy 1995) shows the proposal site position in relation to the Iron Age and Roman dyke system that defended the territorial oppidum of Camulodunum.
- 4.8 The oppidum has only two main confirmed centres of activity (both of which are Scheduled Monuments): at Gosbecks Farm (c. 2.4km to the south the proposal site), which was a Late Iron Age (LIA) and Roman rural farmstead (and possibly the home of the Catuvelluani tribe's king, Cunobelin); and Sheepen (1.3km east of the proposal site), which was the industrial and trading centre and included Cunobelin's mint. Sheepen was continuously occupied from the Late Iron Age (at least the reign of Cunobelin) through the Roman period. Apart from these two large centres the Lexden Tumulus represents a kingly burial mound whilst there were a number of smaller domestic and farming sites in the oppidum.
- 4.9 Camulodunum in its developed form, when both the eastern and western defences were contemporary, incorporates a c.12 square mile area. Sheepen by Cunobelin's reign at the latest formed an inner nucleus, defended by Sheepen Dyke (Ditches 1a and 1b) whilst Gosbecks Farm appears to have formed the earlier tribal centre. The location appears to have been chosen because of the natural defences offered at the convergence of the Colne and Roman River valleys, its well-drained gravel subsoil for farming and its proximity to the estuary and the coast opposite the Roman Rhineland. It also looked inland towards the chalklands to the west (Frere 1987, 34).
- 4.10 Of relevance to the study site itself is the alignment of a section of the north-south aligned Iron Age Shrub End Dyke (MCC7467) and the probable Roman conquest period 'Triple Dyke' (MCC7041 & 7463). The Triple Dyke is extant for a c.225m length from c.375m to the south of the study site (National List 1019993; MCC7463). The section north of Lexden Road/Halstead Road is not scheduled. This is because the associated banks have long since been levelled and in many areas such as the proposal site, the buried ditches are also built over.
- 4.11 The Scheduled Monument description for the scheduled segment of surviving earthworks, to the south of the proposal site provides general background, but the key publication with respect to the Triple Dyke is Colchester Archaeological Report 11 ('CAR 11') (full ref: Hawkes CFC & Crummy P, 1995. Colchester Archaeological Report 11. Camulodnum 2).
- 4.12 In the 18th century the standing earthworks to the south of Lexden Road were thought to represent Cunobelin's royal racecourse ('Cunobelin's Agon Regis'). A series of drawings by William Stukeley in 1759 show the standing remains on Lexden Heath in plan and section form (See RPS 2019 Appendix 2 extracted from CAR11, Figs 2.5 and 2.6) whilst Chapman and Andre's map of 1777 shows the triple alignment as three 'Ancient Intrenchments' (RPS 2019 Fig. 7).
- 4.13 Where no longer upstanding (the SM section) the alignment of the dykes has been plotted via crop/soil marks on aerial photographs (CAR 11, 55-61). CAR 11 indicates that the Triple ditches are plotted from c.100m to the north of Lexden Road '*and their continuance (with three short intervals only in their showing) straight on to Mott's Farm, beside the Colne just opposite the railway viaduct...The Triple Dyke*

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*will have stretched for a distance of...1.6km from its start beside Lexden Straight Road to its end at Mott Farm.'*

- 4.14 It is stated (ibid, 56) that at just over 200m from the northern edge of Lexden Road (therefore within the proposal site just north of the school) a section was cut by Hawkes in 1961. This 4.6m wide investigation trench cut through an area of grass and encountered all three ditches. The form of the eastern ditch suggested it had been the earliest and was in fact a reworked alignment of a Late Iron Age dyke known as Shrub End North Dyke, as investigated elsewhere to the south. Therefore, the Triple Dyke 'is now thought to have been the result of adding two ditches to the west side of the Shrub End Dyke in the Roman period'.
- 4.15 The investigation recorded that the full width of the three dykes was 37.2m. The original eastern ditch was 5.5m wide and 2.1m deep, with the central and western ditches 5.3m and 5.5m wide and 1.8m and 2.0m deep respectively. The fills provided Roman pottery dating evidence whilst the central ditch also produced a number of Roman hobnails. The Roman date was suggested for several other technical reasons including that the flat base form was typical of Roman military ditches as opposed to the rounded form of Iron Age dykes at Colchester (including the most recent find of a 'new' dyke section of the Berechurch Dyke at the former Hyderabad Barracks to the east of Mersea Road).
- 4.16 The report postulates a significant potential historical association of the Triple Dyke as earthworks associated with the capture and then defence of Camulodunum (Colchester) by the Ninth and Twentieth Legions during Claudius' invasion of AD43. In this reading the dykes were cut in the late summer of AD43 as a protection for the military encampment of those legions. In particular the location of a camp to its east side would have secured access to the River Colne and also to a freshwater spring at Lexden Spring (which the present school is named after) whilst defending the tented camp from counterattack from the Britons from the west (the eastern areas of the study site may therefore overlay the camp). Hawkes and Crummy suggest prisoner labour would have been used to dig the dykes, although it is equally likely that soldiers of the Twentieth and Ninth dug the new earthworks.
- 4.17 The Scheduled Monument description indicates that a Roman road was aligned to the west side of the dykes. This may not be proven at the proposal site itself.
- 4.18 The HER for Shrub End Dyke (MC7467) similarly states:

*'Shrub End Dyke provides the outer line of the triple defensive system (Sheepen, Lexden and Shrub End Dykes) on the west side of Colchester, aligned N to S (on the east side of Straight Road) and defined for c.2.3km from the River Colne southwards as far as Heath Farm Dyke Middle (MCC2095). The south part of the Dyke was only ever a single dyke, c.900m long; N. of Heath Road, the Dyke was re-inforced with two additional ditches, to create the Triple Dyke (MCC7041).*

*The northern part of Shrub End Dyke (Shrub End Dyke North), to the north of Heath Road, was converted in the Roman period to form the Triple Dyke (MCC7041). Southward, and still beside the Straight Road, the ditch of the dyke remained single...Monitoring during the construction of the Southern Outfall Sewer Scheme, in 1979/80, sectioned a large ditch, which is probably Shrub End Dyke, near the western end of Heath Road, measuring 6.1m wide x 3.2m deep (MCC8063). Also, the same project showed that Shrub End Dyke does not exist at the junction of Shrub End Road and Gosbecks Road,*

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*and also demonstrated that the Triple Dyke (MCC7041) did not reach Heath Road..The ditch was cut (and observed) in two places during construction work at Kingsmead House (Former Royal Eastern Counties Hospital), Straight Road, in 1984 (MCC8070)..'*

4.19 The HER for the Triple Dyke (MC7041) states:

*'The Triple Dyke, c.1km to the west of Lexden Dyke and c.2.8km west of the fortress and walled town, aligned N-S and plotted for c.1.5km in length from the River Colne (north) to Clairmont Road (south) and just north of Heath Road. Once thought to be pre-Roman in origin, it is now recognised that Triple Dyke was added to the dyke system after the Roman conquest to strengthen the line of Shrub End Dyke at its northern end. The Triple Dyke is marked on Chapman & Andre's 1777 map as 'Ancient Intrenchments'.*

*Once thought to be pre-Roman in origin, it is now recognised that Triple Dyke was added to the dyke system after the Roman conquest to strengthen the line of Shrub End Dyke (MCC7467) at its northern end...A section was cut across the Triple Ditch in 1961, at Hunter's Rough c.200m N. of Lexden Road. The length of the section, measured across the width of the three ditches, was 37.2m. No evidence of the surviving banks was defined. The innermost or easternmost ditch was larger than the others, 5.5m wide x 2.1m deep. The central and western ditches were 5.3m and 5.5m wide and 1.8 and 2.0m deep respectively, leading to the suggestion that the easternmost ditch was an earlier ditch, belonging to Shrub End Dyke North with the other two ditches added later to effect the triplication...The central ditch of the Triple Dyke was defined, and shown to be 5.4m wide (the base of the ditch was not defined) by trial trenched evaluation and monitoring during the groundworks for a new dwelling at 78 Straight Road in 2018...'*

4.20 It is assumed that 'Hunter's Rough' is the area of former rough grassland that was located to the immediate north of the school site, but within the study site, in 1961.

4.21 An evaluation and watching brief at 78 Straight Road c.370m to the south of the study site encountered the central ditch of the Triple Dyke within a soakaway with no finds recovered (ECC4162; CAT 2018). A subsequent watching brief (ECC4201) of 47m of foundation trenches and a soakaway exposed the width of the central ditch which measured 5.4m wide. The fill of the was described as a medium yellow/brown slightly loamy sandy-silt, but again no finds were recorded.

4.22 The proposal site also lays to the west of the Iron Age Lexden Dyke (beyond the study area) and c.300m to the east of the Iron Age Gryme's Dyke (MCC8204 & MCC7464/67465) a section of which is extant and is a Scheduled Monument from c.350m to the south-west of the study site (National List 1019960).

4.23 Other findings from the study area include a Roman coin from c.220m to the south of the study site, which was probably minted between AD14 and AD37 so may have been deposited either prior to or following the conquest (MCC1212).

4.24 The HER reports the finds two late 1<sup>st</sup> century BC pedestalled urns from c.450m to the south-east and north-east of the study site (MCC7531) and a metal-detecting find of a late Iron Age coin from c.580m to the north-east (MCC9716).

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## Roman (post Conquest period)

- 4.25 The study site is located just to the north of the junction of Roman Stane Street, the Roman road from Colchester to Coggeshall (MCC7518; 8754), with the main Roman road which connected Colchester (via the Balkerne Gate) to Londinium (MCC1928). The broadly east-west aligned Stane Street may have been a British track straightened and metalled by Roman engineers according to the Victoria County History. The HER notes that A.F. Hall trenched the Colchester-London road line in the grounds of the Colchester Royal Grammar School (see ECC829 and ECC947) and found the road was triple tracked, with a main central roadway and subsidiary tracks including a 20ft wide 'light roadway' on the north side. Ditches were found on either side of the gravel metalled road. A Roman amphora of buff ware of cylindrical form (Loeschoke type 70) was recovered from the garden of Lexden Park House some 500m to the south-east of the study site close to the line of the road line (MCC7532).
- 4.26 Another section of Roman was identified by two sections cut across it at Iron Latch Lane, Stanway and in 1958 Hull recorded that '*...the line of this road was cut under the modern road to Halstead. Here it had been slightly sunk below the general level, and the terrain had been wet, for the road consisted of a very thin layer of gravel laid upon faggots or fascines. Upon it lay some 9 in. of dark mud.*' The recorded location (MCC7093) is some 420m to the west of the study site.
- 4.27 The most compelling evidence for Roman settlement within the study area derives from the 2016 trial-trench evaluation at Colchester Holiday Park, Colchester c.230m to the north-east of the study site (MCC10061; ECC3880; CAT 2016). Roman ditches, pits and postholes associated with agriculture or settlement produced large quantities of Roman ceramic building material indicating the presence of a Roman villa in the vicinity. In total 104 fragments of brick/tile (28.5kg) were excavated from ten features and subsoil L2) whilst 22 sherds were recovered with some closely datable to the Late Iron Age as well as the Roman period suggesting occupation may have begun prior to the conquest. In addition four fragments of probable building stone were found.
- 4.28 The Lexden Mount, located c.400m to the south-east of the study site, is a Scheduled Monument of presumed Roman date (National List 1019963; MCC1536). The in 1910 excavations (ECC649) failed to find a burial and to date it accurately although small quantities of Roman pottery and tile were recovered. The circular mound is 31.7m in diameter and 5.3m high with a flat-top.
- 4.29 A 1995 watching Brief at 166 Lexden Road (ECC1726) recovered a residual fragment of Roman tile.
- 4.30 A 2001 watching brief for a water main along Spring Lane at the eastern edge of the study area (ECC2518, see RPS 2019 Fig. 3) revealed several Roman sand quarry pits one of which contained Roman bricks from a voussoir over a door or window, which indicate that a high-status Roman building was located nearby.
- 4.31 Nearby a 1904 visual assessment for a drain excavation opposite a drinking fountain at Lexden Park (ECC1564; MCC1842) was referred to by Hull who recorded that "When excavating for a drain opposite the drinking fountain in Lexden Park were found;- a grey bowl ; a sword-handle of turned bone or ivory; a small bone knife-handle, small beaker, pottery fragments; also a burial". His associated Roman 'grave group 466' was reported to contain "Part of human wrist bone with a bronze bangle of flat band type 9/16" wide, with reeded and impressed pattern (Now in fragments)."

- 4.32 Finally, an early Roman pit reported in 1958 was identified at a residential house adjacent to Lexden Road some 120m to the south-west of the study site (MCC8475).

### **Anglo-Saxon/Early Medieval**

- 4.33 There are no Saxon period finds within the study area, although the Roman roads, whose junction lies immediately south of the study site, almost certainly remained in use throughout the period and Lexden or Lessenden was an Anglo-Saxon settlement prior to its mention in the Domesday Book in 1086.

### **Medieval**

- 4.34 Lexden (within Lexden Hundred) was disputed between the royal manor of Stanway and Colchester borough in 1086 but was in the borough by 1296 (VCH 2001).
- 4.35 The small 12<sup>th</sup> century medieval church of St Leonard was demolished in 1820 to make way for the present church (MCC7066 & 7067). A number of houses of medieval origins survive in Lexden Road (the A1124).
- 4.36 Stanway Heath is an extensive area of former medieval (and post-medieval) common land occupying the south-western area of the study area (MCC9143; see RPS 2019 Fig. 7). The 90.22ha heath is shown on the 1777 Chapman & Andre Historic Map in the area of modern Stanway, with only pockets surviving.
- 4.37 Lexden Heath (MCC9144) was also of medieval derivation and overlaps Stanway Heath. It extends south from c.30m to the south of the study site. The 1777 Chapman & Andre Historic Map shows the heath over the land now occupied by Lexden for an area of 178.1ha. Five Iron Age/Roman dykes of Camulodunum run through the former heath (Gryme's Dyke, Prettygate Dyke, Kidman's Dyke, Triple Dyke and Heath Farm Dyke).

### **Post Medieval & Modern (including map regression exercise)**

- 4.38 The landscape setting of the study site in the later post-medieval period (18<sup>th</sup> century onwards) is traced via historic maps. The 1695 Morden Map of Essex shows the study site location in open land to the north side of the junction of Halstead Road with Lexden Road, with ribbon development of Lexden to the east and the aforementioned heathland to the south of the roads. The River Colne is depicted to the north.
- 4.39 The 1724 Mull Map of the County of Essex is similar, with Lexden labelled to the south-east of the study site and Stanway to the south-west. The earliest representation of the Triple Dyke is a plan of Morant of 1745 (see CAR Report 11 Fig 2.4). The plan does not show the alignment north of Lexden Road. It also shows the Tumulus (Lexden Mount). William Stukeley provided three more detailed three-dimensional drawings of the extant dykes within Lexden Heath in sketches of 1759 which included a section drawing (ibid Figs 2.5 & 2.6).
- 4.40 The 1777 Chapman and Andre Map has been discussed above in relation to Lexden Heath and Stanway Heath. The 'Ancient Entrenchments' of the Triple Dyke are depicted as extant from just south of Lexden Road through the heath. The study site is open with an unlabelled lane leading north-west from Lexden Road towards Seven Arches Farm (formerly Motts Farm) to the north of the study site.

- 4.41 The 1838 Tithe Map (RPS 2019 Fig. 9) provides the first detailed map showing the layout of the study site. The north-eastern extent is bordered by the sunken lane leading to Motts Farm, with the road layout bordering the southern side of the study site unchanged. The study site is divided parts of five fields. North-western plots 393 and 394 ('Chase & Bottoms' and unlabelled) were owned by John Fletcher Mills and occupied by John Nice. The latter's landuse was as a plantation. The remainder were owned by Samuel Green Cooke and farmed by Charlotte Round (395, 400, 401). These were mixed farming fields including pasture (395) and arable (400). The development of residential housing either side of Straight Road is also depicted to the south side of the study site. Lexden House is shown to the east of the study site.
- 4.42 The 1939 Ordnance Survey (RPS 2019 Fig. 14) shows the first substantial changes within the study site. This comprises the installation of a sports ground with a small pavilion on its south side within the central southern zone with hachures associated with quarrying activity in the central northern and north-eastern areas. The northern zone is shown as woodland. Further residential expansion is shown to the south side of Lexden Road. The 1952 OS is ostensibly similar (RPS 2019 Fig. 15), although a track is labelled around the perimeter of the sports field with a 'drying tower' is shown on its east side. More significantly series of workshops/sheds are built in the south-eastern area (commensurate with the current Ambulance and Fire Stations zones). Field areas to the north are retained as pasture, with marsh symbols indicating boggy ground whilst the northern area is still wooded. By 1967/8 (RPS 2019 Fig. 16) the sports field has been substantially built over by 'Colchester Training Centre' (now the school) in the western zone and the 'Ambulance Station' and 'Fire Brigade Workshops' labelled in the south and south-eastern zones. The areas of associated hardstanding are also evident.
- 4.43 By 1970/3 (RPS 2019 Fig. 17) the training centre was the site of 'Ramparts School' as a reference to the existence of the Triple Dyke investigated in 1961 to the immediate north. By 1988-91 the school was renamed as Lexden Springs School and the building was reworked and expanded (RPS 2019 Fig. 18). The area to the north of the school and the 'Depot' is shown as sparse woodland and residential development is now in place to the north-west of the study site. Some further northern expansion in terms of hard-standing and minor units is indicated to the north side of the depot area by 2018 (RPS 2019 Fig, 21).
- 4.44 In terms of historical development, it is notable that Lexden was the headquarters of Lord-General Thomas Fairfax in 1648 during the Siege of Colchester, and that his army camped on Lexden Heath. The area of the Mount (to the south-east of the study site) was the Colchester a burial ground for the Great Plague of 1665 to 1666. The large house of 'Lexden Park' was constructed in the 18<sup>th</sup> century and Lexden Road was turnpiked in 1707. Lexden Heath was inclosed by Act of Parliament in 1821 which enlarged the Reverend John Rawstorn Papillon's estate as the lord of the manor. Straight Road was created in 1821 as a route across the new inclosures to Shrub End, which became a separate parish to Lexden in 1845.

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## 5 STRATEGY AND METHODOLOGY

- 5.1 Trench 1 is to be located in the northern area of Lexden Springs School (Fig. 4). The trench has been staggered to avoid as much damage to current car parking areas as possible, whilst retaining the objective of crossing the line of the three dykes and a possible additional smaller ditch to the east (see Fig. 4). The dyke line will be crossed obliquely due to the constraints. The northern-eastern extent of the trench is within a small rubber surfaced play area with a fence to its south side. It is proposed that the trench will be broken at this point (c. 1m gap) to avoid damage to the fence. The trench then follows the line of a broadly north/east/south-west aligned wide expanse of gravel against the eastern edge of an extension school classroom block. The trench then is dog-legged north-westwards at the southern end of the classrooms through an area of tarmac car parking spaces up to another section of the school's outer perimeter fence. Subject to CAT scans of for services (including lighting) and the position of drains, it is hoped that it will be possible to extend the trench to the west side of the fence for a few more metres – should this be necessary to locate the extent of the western dyke.
- 5.2 The archaeological team will not be responsible for reinstatement of the trench following completion other than backfilling to make safe. Broken out tarmac and surface will be left stock-piled for others to dispose of.
- 5.3 Trench 2 (Fig. 4) is positioned within a wide area of grass verge between the Fire Station and Halstead Road to (as far as possible) cross the alignments of the dykes. Again, due to constraints (trees and live services) the trench is dog-legged with north-west/south-east and north-east/south-west aligned arms and also has breaks in the trench to avoid services. The western end is situated close to the entrance to the Fire and Ambulance Stations. The trench has had to be shortened slightly to avoid gas and electricity service lines as indicated on provider plans. Further unmapped services to the east are indicated by adjacent pavement scars and will also be avoided. The trench has been doglegged to avoid trees and at one point narrowed to 1m wide so avoid damage to tree roots beneath the canopy of an oak tree. The eastern end of the trench has also been shortened to avoid a known gas service.
- 5.4 The archaeological team will backfill the trench on completion to make safe but will not be responsible for the reinstatement of the grass and its subsequent maintenance.

### Aims

- 5.5 An evaluation Brief has been requested (CBC 2019) but the following general aims are anticipated:
- 5.6 'Trial Trenching is required to:
- Identify the date, approximate form and purpose of any archaeological deposit, together with its likely extent, localised depth and quality of preservation.
  - Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits.
  - Establish the potential for the survival of environmental evidence.

- Provide sufficient information to construct an archaeological conservation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.'

5.7 A further general aim is

- To recover sufficient evidence to characterise the nature, date, function and importance of the archaeological features within the affected area

5.8 Specific Aims: The specific project aims have to an extent been informed by previous investigations as follows:

- To establish the presence / absence of the Triple Dyke and associated features; and
- To identify the precise location of the three main dykes to via the two trenches in order to establish an accurate linear corridor (vis extrapolation) to enable archaeologically sensitive development design;
- A final aim is to hold discussions with the CBC Archaeological Officer following the evaluation and its reporting, to facilitate detailed understanding of any further post-determination evaluation and mitigation works.

### **Method Statement**

5.9 This method statement is in accordance with the research design developed in consultation with CBC and complies with the guidelines laid down in Planning Policy Guidance on Archaeology and Planning (NPPF) and with the Chartered Institute of Field Archaeologist's Standards and Guidance for Archaeological Evaluation (CIfA 2014). The archaeological contractor (nominally CAT) will liaise closely with RPS Heritage (the Archaeological Project Managers and advisors to Essex Housing) with respect to all important matters concerning the co-ordination and management of the project. The CBC archaeological officer (CBCAO) will be kept fully informed of all archaeological developments.

5.10 All archaeological trenches will be monitored and 'signed off' by the RPS Heritage Archaeological Project Manager and the CBCAO monitor prior to backfilling.

### **Machining**

5.11 Colchester Archaeological Trust will survey the trench positions and set out the trial trenches using spray paint. Should further significant constraints to the location of particular trenches be identified then trenches will be moved to a new location as close to the original as possible (provided that it is safe to do so).

5.12 For Trench 1 hardstanding (tarmac) will be broken out with a pecker and tarmac and made ground will be removed using a combination of toothed and toothless bucket (the latter to remove underlying topsoil / subsoil remnants to the level of the geology and/or archaeology) under the supervision of the archaeological contractor.

5.13 For Trench 2 a toothless bucket will be used to reduce the topsoil and subsoil to the top of the geological layer (likely to be c.500mm).

- 5.14 Significant archaeological deposits will not be removed by machine unless sanctioned by the CBC Archaeological Officer. In circumstances where vertical stratigraphy is found or where archaeology is vulnerable, the machining will be monitored by a senior member of staff.
- 5.15 Care will be taken to ensure that machines used do not rut, compact or otherwise damage buried or exposed archaeological features and deposits ahead of recording. No potentially significant archaeological deposits will be removed prior to recording and sampling (if necessary) to provide an adequate understanding of their character.
- 5.16 The archaeological contractor will then undertake their investigation and recording work as set out below, prior to backfilling.

### **Evaluation Trench Recording and Sampling**

- 5.17 Surveying: Following the overburden stripping temporary bench marks will be surveyed with respect to an Ordnance Survey datum and all features and deposits will be recorded relative to their OD height. The TBM's will be shown on the site location plans.
- 5.18 The exposed surface of the natural will be hand cleaned sufficiently to define any archaeological features present. This process will facilitate accurate planning and allow for metal detected finds to be correctly assigned following an initial scan of the site.
- 5.19 Complex areas (areas of intercutting features, surviving layers, where features are complex in form or where surface finds may be plotted) will be planned by hand, usually at a scale 1:20. These plans will be located via total station, scanned, vectorised and imported via CAT's CAD programme on the OS grid-based plan. Less complex areas of the site (where features are absent or rare and of simple form) will be planned using a Leica GPS system with the data input directly onto CAD and the OS tiles. There will be no site grid on the ground. All site plans will show OS grid points and spot levels and will be fully indexed and related to adjacent plans. It is not anticipated that single context recording will be appropriate. However, should particularly complex sequences of deposits or features be encountered, then single context recording will be undertaken. A uniform site plan will be produced showing all site features.
- 5.20 Sampling Strategy: Archaeological investigation will be by hand and will respect the stratigraphy of archaeological layers, features, deposits and structures. Each context will be excavated in sequence. Occasionally further use of the mechanical excavator may be required. Such techniques are only appropriate for the removal of homogenous low-grade deposits that may give a "window" into underlying levels. They will not be used on complex stratigraphy and the deposits to be removed must have been properly recorded first. If encountered horizontal deposits (e.g. layers) should be hand excavated or sample excavated in 1m grid squares and should not be removed by machine.
- 5.21 The following sampling strategy will be adopted to ascertain the nature, depth, date and state of preservation of archaeological features as well as the stratigraphical relationships of these deposits and features to one another.

(i) Normally 50% of the fills of all pits and other discrete archaeological features will be excavated. However, in the event that complex areas of pitting are encountered a representative sample will be excavated (although all will be planned). Tree throw holes will not normally be investigated.

(ii) At least 20% of the exposed lengths of minor ditches will be excavated. The segments will be placed to provide adequate coverage of the ditches and will include excavation of all terminals and intersections. A flexible approach will be adopted to the location of excavation samples such that areas of exposed ditch fill with higher artefact or ecofact content may be targeted. A lower excavation sample ratio of ditches will only be acceptable in the event that the research aims will not be further advanced. Any such reduction in sample ratio will be agreed with CBC and RPS.

(iii) For the large dykes the evaluation will comprise sufficient cleaning the of the upper fills and reduction within a c.1m wide slot into the upper fill to determine the width and edges of each exposed dyke. There will be no excavation to the base of the dykes at this stage.

(iv) In the event that stone structures, hearth or kilns are encountered, these will be cleaned in sufficiently to establish their basic plan within the trench, function and date with stratigraphic associations recorded where clear in plan. Should floor levels be encountered, these will be fully exposed within the trench confines.

(v) Human remains (if encountered) will only be excavated after obtaining the relevant Ministry of Justice Licence, as required by the Burials Act of 1857 (amended 1981). The discovery of human remains will be reported to the local coroner. Other structured or placed deposits will be recorded and retained as "small finds". Should sufficient human bone be exposed to warrant specialist examination in situ, a human bone specialist may be required to attend to examine the remains (subject to CBCAO requirements). NB the latest Historic England guidance 'The Role of the Osteologist in an Archaeological Fieldwork Project (HE 2018) indicates a preference to lift burials encountered at evaluation stage. However, the Advisory Panel on the Archaeology of Burials in England 2017 'Guidance for Best Practice of the Treatment of Human Remains Excavated from Christian Burial Grounds' (Second Edition), which also deals with non-Christian burials, indicates that retention in situ is the best option. For the purposes of the present project following discussion with the CBCAO it is considered that a case-by-case approach will be taken to the appropriate lifting of any human remains, although cremations will normally be lifted at evaluation stage due to their sensitivity to damage during subsequent mitigation.

(vi) Metal detectors will be used to scan for metallic finds on spoil heaps, vacated areas, areas of modern disturbance and during the excavation of key archaeological features or deposits.

(vii) Any 'dark earth' deposits will be subject to hand excavation and environmental sampling.

5.22 Recording: The following procedures will always be initiated:

(i) All features will be planned either by means of a total station or hand drawn plans where appropriate.

(ii) Sections: all sectioned and excavated archaeological features will be drawn at a scale of 1:20 or 1:10, or at a smaller scale (if appropriate). All sections will be levelled to ordnance datum.

(iii) All archaeological features, layers or deposits will be allocated unique context numbers prior to any hand excavation including contexts for which there is no archaeological interpretation or definition. All

archaeological features, layers or deposits will be recorded on pro-forma context sheets detailing: character, contextual relationships, a detailed description, associated finds, interpretation and cross referencing to the drawn, photographic and finds records. On-site matrices will be compiled during the excavation such that the results of the written stratigraphical records may be fully analysed and phased.

(iv) An adequate photographic record of the investigation will be made of all archaeological features and deposits. Standard record shots of contexts will be taken on a digital camera. The record will include working and promotional shots to illustrate more generally the nature of the archaeological operations. All photographic records will include information detailing: site code; date; context(s); section number; a north arrow and a scale. All photographs will be listed and indexed on context record sheets.

(v) A record of the full extent in plan of all archaeological features, deposits or layers encountered will be produced. The detailed hand drawn plans will be related to the site, and O.S. national grid and be drawn at an appropriate scale, generally 1:20. Where necessary e.g. when recording an inhumation, additional plans at 1:10 scale, or where appropriate 1:20 will be drawn. The O.D. height of all principal strata and features will be calculated and indicated on the appropriate plans and sections.

(vi) A record or index will be maintained of all site drawings and these will form part of the project archive. All site drawings will contain the following information: site name; site number and code; scale; plan or section number; orientation, date and compiler.

- 5.23 Treatment of Samples: Industrial residues will be recorded and sampled in accordance with the Society of Museum Archaeologists (SMA, 1993) guidelines. The presence of such residues will always be recorded and quantified fully, even where comprehensive retention is considered to be inappropriate. Large technological residues will be collected by hand. Separate samples (c.10ml) will be collected where appropriate for identification of hammer scale and spherical droplets. The advice provided in the Historic England/ Metallurgy Society document Archaeometallurgy in archaeological projects, will be referred to. Structural remains will be similarly recorded in accord with the SMA guidelines.
- 5.24 The environmental sampling policy is as follows. CAT is advised by the Historic England Regional Advisor in Archaeological Science. In consultation with Val Fryer/Lisa Gray, CAT will bulk sample any potentially rich environmental layers or features in addition to all reliably dated deposits. These will be assessed by VF, and future sampling policy on other excavations areas will follow her advice. If any complex or outstanding deposits are encountered, then the Historic England Regional Advisor in Archaeological Science and/or VF/LG will be asked onto site to advise. Pollen is not expected to survive within these soils, but should deep deposits with pollen preservation potential be encountered column samples will be retrieved for laboratory analysis.
- 5.25 In addition to retrieving environmental evidence (above), bulk sampling will be used to collect charcoal for potential C14 dating. A contingency for absolute dating is allowed for (should it be required). A contingency will also be set aside for archaeomagnetic dating, should appropriate in situ burnt remains be encountered.
- 5.26 The procedures set in 'A guide to sampling deposits for environmental analysis' (Murphy and Wiltshire 1994) and 'Environmental Archaeology - A guide to the theory and practice of methods, from sampling and recovery to post-excavation' (English Heritage Centre for Archaeology Guidelines 2002) will be

consulted. The following procedures will be followed unless otherwise amended following consultations between RPS, the Historic England Advisor in Archaeological Science, the bioarchaeologist and the Site Director:

(i) 40 litre bulk samples (or 100% of smaller contexts) of anthropogenic concentrations will be taken and of selected deposits where remains are not visible (but may nevertheless occur). These shall include well sealed deposits, floors, hearths etc.

(ii) Monoliths for pollen analysis will be taken as appropriate to answer specific research questions.

(iii) 40 litre bulk samples will be taken (if possible) from a selected sample of closely dated pits and from undated features. These deposits will be sampled regardless of whether or not there are visible macrofossils or molluscs.

(iv) Whole fill samples from a selection of post-holes of definable structures will taken for assessment.

(v) Cremations and other "special deposits" will be 100% sampled and sieved for the retrieval of remains.

(viii) 100% recovery of animal bones will be undertaken from the soil samples. It is possible that 100 litre samples for bone may also be necessary in some circumstances.

### **General Methodology**

- 5.27 All works will be undertaken by a team of professional archaeologists. The proposed team structure is given in the appendix (end of document).
- 5.28 All work will be according to CAT Policies and Procedures (2000), and will be informed by Management of Archaeological Projects (English Heritage 1991), the MoRPHE Project Managers Guide (English Heritage, 2006) and Guidelines on Standards and Practices for Archaeological Fieldwork in the Borough of Colchester (Colchester Borough Council 1996, revised 1999).
- 5.29 Animal and human burials, including cremations, will only be excavated should they have been damaged by their exposure. A Ministry of Justice (MOJ) licence is required for the excavation of human remains. Where a licence for their excavation is issued by the MOJ, the requirements of that licence will be followed.
- 5.30 All finds of potential treasure will be removed to a safe place, and the coroner informed immediately, in accordance with the rules of the Treasure Act 1996. The definition of treasure is given in pages 3-5 of the Code of Practice of the above act. This refers primarily to gold or silver objects.
- 5.31 For purposes of deposition of the archive, a museum accession code will be obtained through Colchester Museum. This will be used this as the site code.
- 5.32 The Code of Conduct of the Chartered Institute for Archaeologists (CIfA) will be followed.
- 5.33 Following completion of the manual excavation and recording the trenches will be backfilled flush with ground level. There are no proposals to reinstate the surfaces with simple backfilling of trenches the agreed method.

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## 6 HEALTH & SAFETY

- 6.1 The archaeological contractor (CAT) will provide a Risk Assessment for the project for the agreement of Essex Housing prior to the commencement of the works.
- 6.2 All the latest Health and Safety guidelines will be followed on site. CAT has a standard safety policy (CAT 2019), which will be adhered to.
- 6.3 No personnel will work in deep or unsupported excavations. The sides of all excavations or trenches deeper than 1.2 metres will be stepped or battered. Due to the difficulty of working in shored trenches, shoring will be avoided wherever possible. Safety helmets will worn by personnel in deep trenches or other potentially unsafe positions. All deep trenches shall be fenced off and will be clearly indicated by “deep excavation” signs.
- 6.4 The archaeologist(s) will not enter an area under machine excavation without alerting the machine driver to his/her intention.
- 6.5 The archaeologist(s) shall remain alert and take due care not to impede the progress of moving machinery. He/she shall stand well back from the turning circle of an excavator’ buckets and cabs.
- 6.6 Spoil will be stored at a safe distance away from trench edges.
- 6.7 Suitable accommodation will be provided for staff to shelter from inclement weather and during breaks. Hand washing facilities will be provided.
- 6.8 CAT will provide any necessary protective footwear, high-visibility jackets, and safety helmets. All staff and visitors to the site will be expected to wear full PPE at all times.
- 6.9 The RPS project manager will be provided with a list of all personnel working on site each day by the CAT Supervisor.
- 6.10 Service plans have been provided by Essex Housing. In addition CAT have identified potential further services based on surface scars on the pavement adjacent to Trench 2. These alignments will also be avoided.
- 6.11 CAT scanning will be undertaken prior to and during machine excavation to identify unknown live services and trench reduction will be undertaken in no more than 50mm spits as a further precaution.

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## 7 FINDS

- 7.1 Unstratified finds will only be collected where they contribute significantly to the research aims or are of intrinsic interest. All finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed according to the United Kingdom Institute for Conservation's Conservation Guidelines No.2, the Council for British Archaeology's First Aid for Finds (Third Edition, 1998) and the Institute of Field Archaeologist's Guidelines for Finds Work (1992). Iron finds may require X-rays prior to conservation and similarly residues on pottery may require study ahead of any conservation which may be appropriate.
- 7.2 All finds and bones will be recorded, collected and labelled according to their individual stratigraphical context. Finds from each archaeological context will be allocated an individual finds tray and waterproof labels will be used for each tray to identify unique individual contexts. Each label will be marked with the appropriate context number in waterproof ink and will be securely attached to each tray.
- 7.3 A policy of marking for pottery and other finds will be agreed with Colchester Museum. Marking will include the site code and context number.
- 7.4 All lifting, conservation or other on-site treatment of delicate finds will be done by Colchester Museums' staff. It is anticipated that robust items such as intact cremations will be lifted by site staff.
- 7.5 The site archive will be presented to Colchester Museums in accordance with the requirements for conservation and storage as outlined in Guidelines on the Preparation and Transfer of Archaeological Archives to Colchester Museums (Colchester Borough Council 1996).
- 7.6 All finds of potential treasure will be removed to a safe place, and the coroner informed immediately, in accordance with the rules of the Treasure Act 1996. The definition of treasure is given in pages 3-5 of the Code of Practice of the above act. This refers primarily to gold or silver objects. Any other finds remain for the landowner to assess and dispose of.
- 7.7 Finds work will be to accepted professional standards and adhere to the Chartered Institute for Archaeologists' published booklet Guidelines for Finds Work.
- 7.8 Agreement with the landowner will be sought for deposition of the finds and paper archive. Arrangements for the finds to be viewed by the landowner will be made if he/she wishes.
- 7.9 The following specialists have been approached for artefact and environmental analysis:
- Julie Curl (Sylvanus) - Human Bone
  - Alec Wade / Adam Wightman – animal bone (small groups)
  - Julie Curl (Sylvanus) – animal bone (large groups)
  - Dr Matthew Loughton or Stephen Benfield / Paul Sealey / Nigel Brown - prehistoric pottery
  - Dr Matthew Loughton - late Iron Age and Roman pottery;
  - Joanna Bird - Samian
  - Ernest Black / Ian Betts (MOLA) - Roman Brick/tile
  - Dr Hilary Cool - Roman glass

- Dr John A Davies - Roman coins
- Nina Crummy - Small finds
- Sue Tyler- Saxon Pottery
- Helen Walker - Medieval and Post-Medieval pottery
- Adam Wightman - Lithics
- David Dungworth - Metalworking residues;
- Pat Wiltshire- pollen analysis
- Peter Murphy - Environmental
- Val Fryer/ Lisa Gray - Archaeo-botanist
- Jackie Makinley- Cremations.
- See separate attachment for CAT standard WSI section on finds

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## 8 REPORTING

- 8.1 At the start of work an OASIS online record <http://ads.ahds.ac.uk/project/oasis/> must be initiated and key fields completed on Details, Location and Creators forms. When the project is completed, all parts of the OASIS online form must be completed and a .pdf version of the entire report should be uploaded to the OASIS website. A copy of the OASIS online form should be included as an appendix to the report. A copy of the WSI should be included as an appendix to the report.
- 8.2 A Colchester Historic Environment Record (CHER) Event number must be obtained the CBCAO; this will be the unique reference number for the work in the CHER.
- 8.3 Following completion of fieldwork an evaluation report will be completed within 4 weeks and submitted to RPS for distribution to the CBCAO for his approval. The report will be marked DRAFT until agreed. Following acceptance, a single digital and hard copy of the report should be presented to both the CHER and Essex HER. A hard copy of the report should be deposited with the archive at Colchester and Ipswich Museum.
- 8.4 Copies of the final report will also be issued to RPS and Essex Housing.
- 8.5 Expert advice and reporting (in relation to cultural artefacts and ecofacts) will be provided by individual Specialists appointed as appropriate.
- 8.6 All records and materials will be compiled in a structured archive in accordance with the guidelines of Appendix 3 in the Historic England procedural document, Management of Archaeological Projects (1991).
- 8.7 The MoRPHE Project Managers Guide (EH 2006) will be adhered to with regard to post-excavation management in relation to this and any subsequent mitigation that may be required.
- 8.8 The report should include relevant background context information.
- 8.9 At the end of the project, a copy of the digital vector plan, which must be compatible with MapInfo GIS software, will be sent by CAT to CBC for integration in the CHER. AutoCAD files should be exported and saved into a format that can be imported into MapInfo (for example, as a .dxf or .TAB files).
- 8.10 Publication: Minimum publication will consist of a note in a suitable archaeological journal. The evaluation stage reporting will be summarised in an overall publication for the Site should mitigation result.

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## 9 ARCHIVE AND FINDS DEPOSITION

- 9.1 All retained artefacts will be cleaned, conserved and packaged in accordance with the requirements and guidelines of the United Kingdom Institute for Conservation's' Conservation Guidelines No. 2, the Council for British Archaeology's First Aid for Finds (Second Edition, 1987), the Chartered Institute for Archaeologist's Guidelines Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives Published December 2014. Small finds will be boxed separately from the bulk finds. Plans will be presented on hanging strips to fit Colchester Museum storage systems. A full archive will be prepared to standards outlined in Management of Archaeological Projects: 2 (English Heritage 1991).
- 9.2 The full archive will be deposited at Colchester Museums, subject to Essex Housing consent and subject to the guidelines and requirements of MAP 2, as soon as is practicable, and within six months of completion of publication text on the project. All requirements for archive storage as given in Colchester Borough Council's Guidelines for the standards and practice of archaeological fieldwork in the Borough of Colchester, will be followed.
- 9.3 Finds (and other retained materials) will be bagged and boxed in the manner recommended by Colchester Museums.
- 9.4 Photographic archive is to be presented as follows: original digital data on CD Roms, hard copies of digital photos on high quality paper, or as otherwise requested by Colchester Museums.
- 9.5 CD Roms of material held on computers will be presented to Colchester Museums, along with bound copies of printouts.
- 9.6 Deposition of the archive will be confirmed in writing to CBCAO, and a summary of the contents of the archive shall be supplied to CBCAO.
- 9.7 The digital archive will be deposited with the Archaeological Data Service, or similar digital archive repository (<http://ads.ac.uk/project/policy.html>).
- 9.8 All artefacts recovered from the archaeological excavation shall be deposited at the Colchester Museums. All recovered artefacts shall be fully catalogued, shall constitute one single deposit and shall be deposited within two years of the completion of the archaeological evaluation.

## **10 STAFFING, TIMETABLE AND INSURANCE**

- 10.1 The overall archaeological project will be managed by Robert Masefield MCIfA (RPS Heritage). The archaeological contractor CAT will be managed by Chris Lister. The evaluation will be directed in the field by Adam Wightman, Nigel Rayner and/or Chris Lister. The experience of the project team is included in the Appendix of this method statement.
- 10.2 The timing of the demolition, and hence the archaeological trenching, is yet to be confirmed but will be provided to the CBCAO, with an associated programme, in due course.
- 10.3 Insurance: The archaeological contractor (CAT) shall hold Employers Liability Insurance, Public Liability Insurance and Professional Indemnity Insurance. Details will be supplied on request.
- 10.4 RPS and the archaeological contractor shall not be liable to indemnify the Client against any compensation or damages for or with respect to the use or occupation of land (which has been provided by the Client) by the Project or for the purposes of completing the Project. Interference whether temporary or permanent with any right of way, light, air or water or other easement or quasi easement which are unavoidable result of the Project in accordance with the Agreement;

## 11 MONITORING

- 11.1 A programme of monitoring of the project in the field shall be agreed in advance between CAT, RPS Heritage, Essex Housing and CBCAO.
- 11.2 Any variation or modification to the project programme in terms of working or recording either on site or off will be fully discussed and agreed with RPS Heritage, Essex Housing and CBC in advance.
- 11.3 Jess Tipper (CBCAO) and Rob Masefield will meet with CAT to review and sign off trenches as appropriate.
- 11.4 Any variations of the WSI shall be agreed between RPS Heritage, Essex Housing, CBCAO and CAT prior to their being carried out.
- 11.5 The involvement of CBCAO shall be acknowledged in any report or publication generated by this project.

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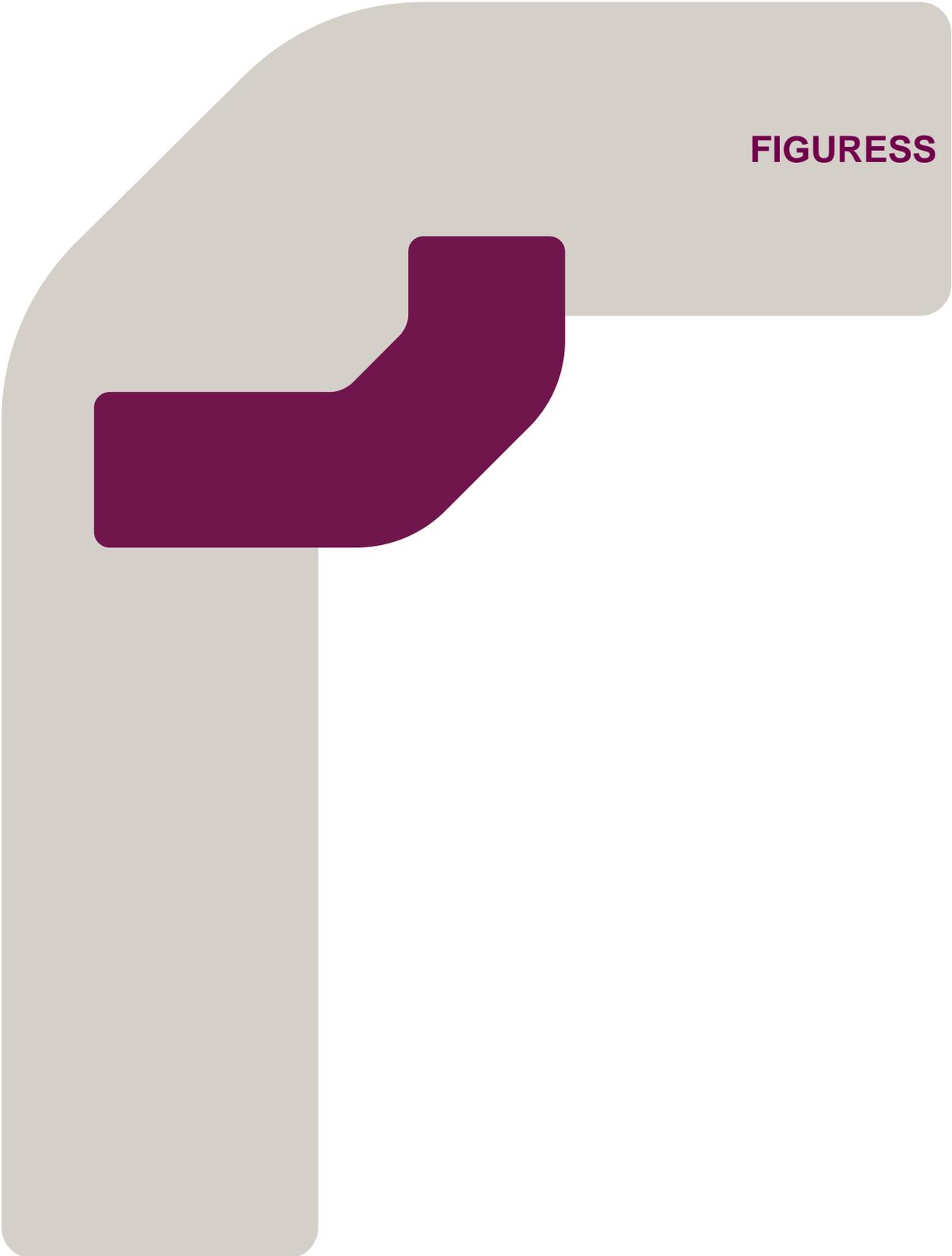
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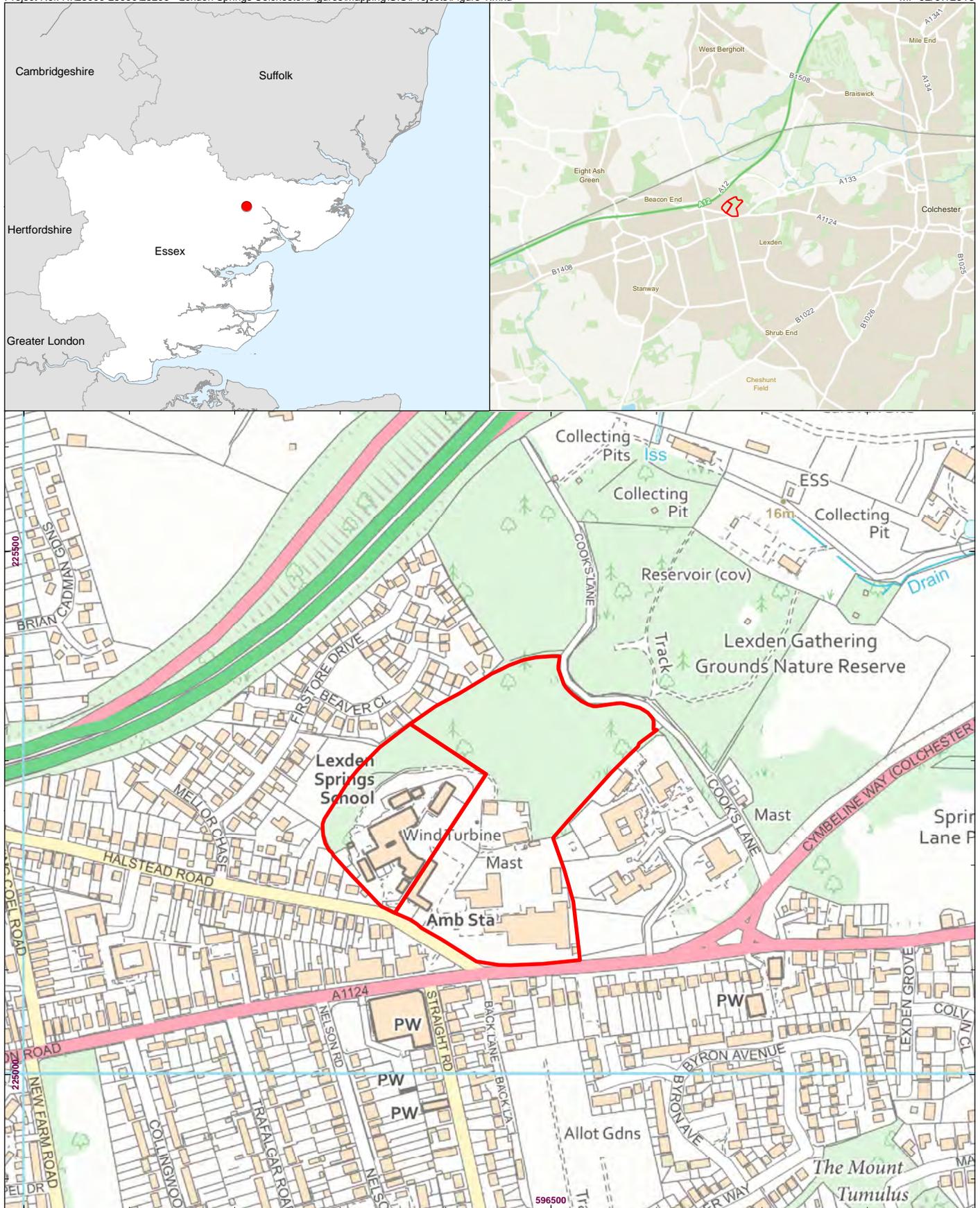
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**FIGURESS**



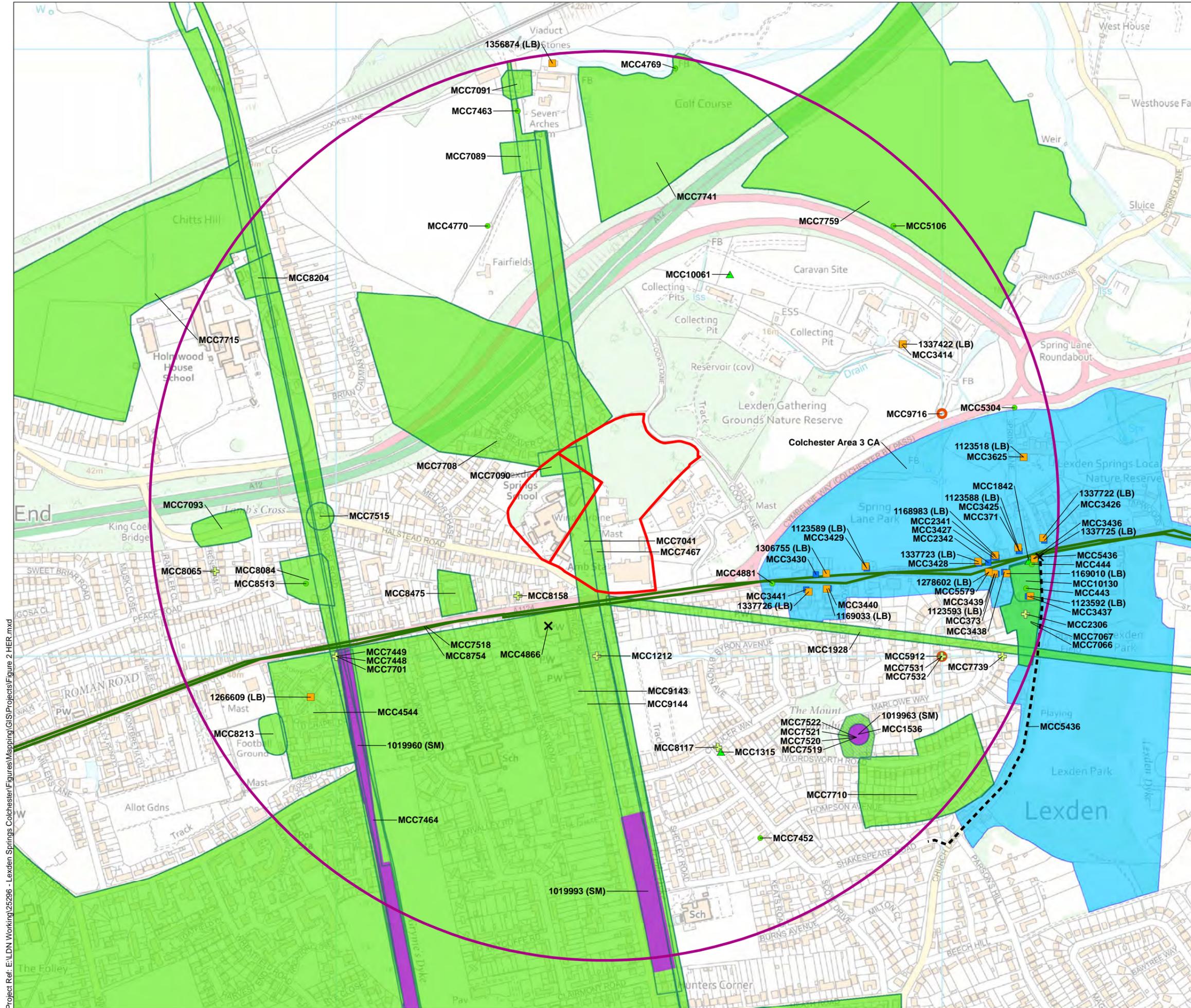
 Site Boundary



0 50 100 150m  
Scale at A4: 1:5,000



Figure 1  
Site Location



**Legend**

- Site Boundary
- Search Radius 750m
- Designated Heritage Assets:**
- Scheduled Monument
- Grade II Listed Building
- Conservation Area
- Non-designated Heritage Assets:**
- HER Record (Point)**
- Portable Antiquities Scheme
- + Find Spot
- Monument
- ▲ Element
- Building
- ✕ No finds or features
- HER Record (Line)**
- Monument
- No finds or features
- HER Record (Polygon)**
- Find Spot
- Monument

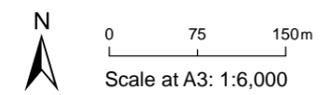
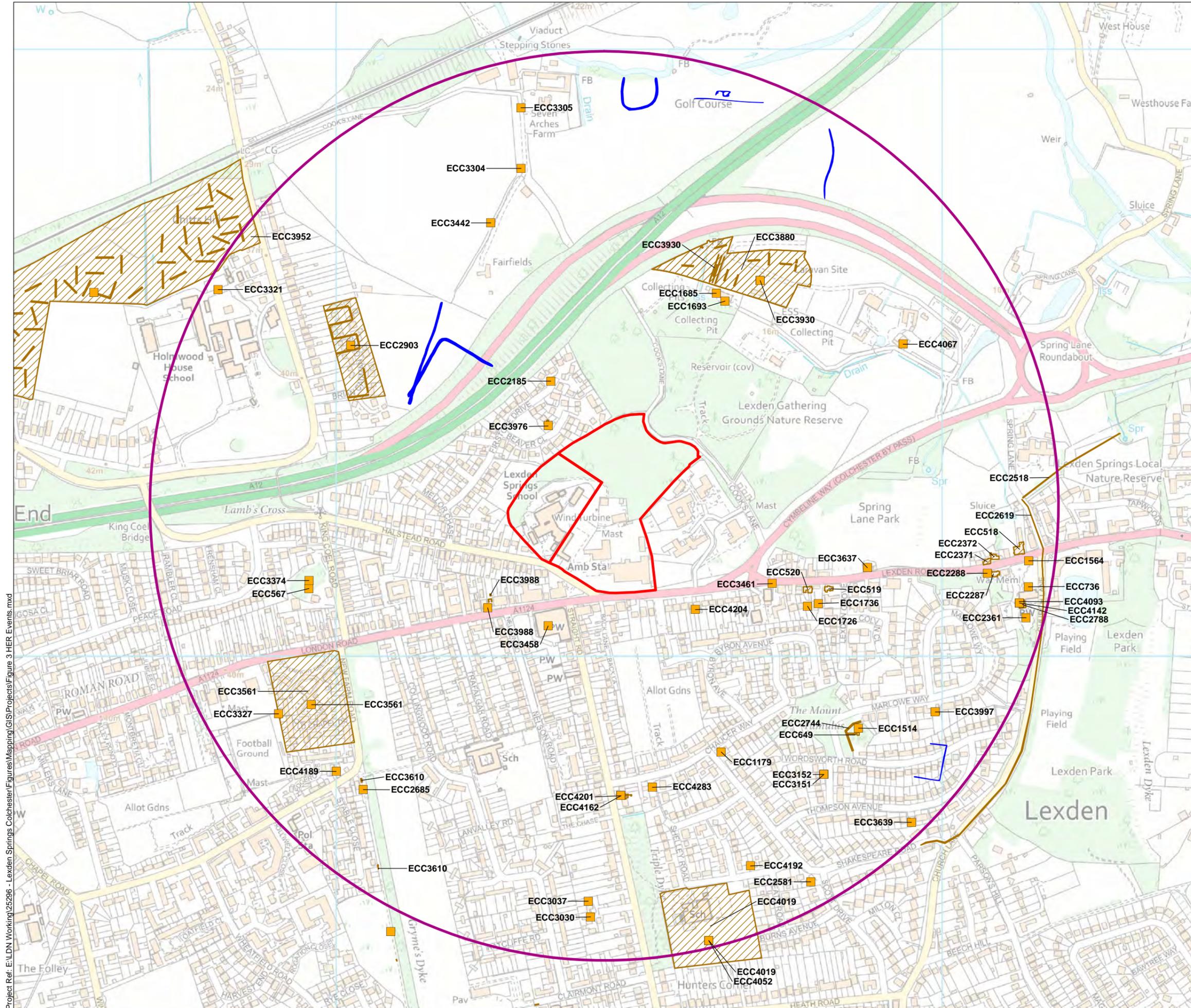


Figure 2  
HER Plot  
(Colchester Borough Council HER)

Project Ref: E:\LDN Working\25296 - Lexden Springs Colchester\GIS\Projects\Figure 2 HER.mxd

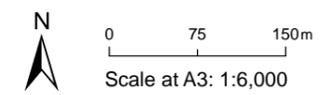


**Legend**

- Site Boundary
- Search Radius 750m

**Previous Archaeological Work:**

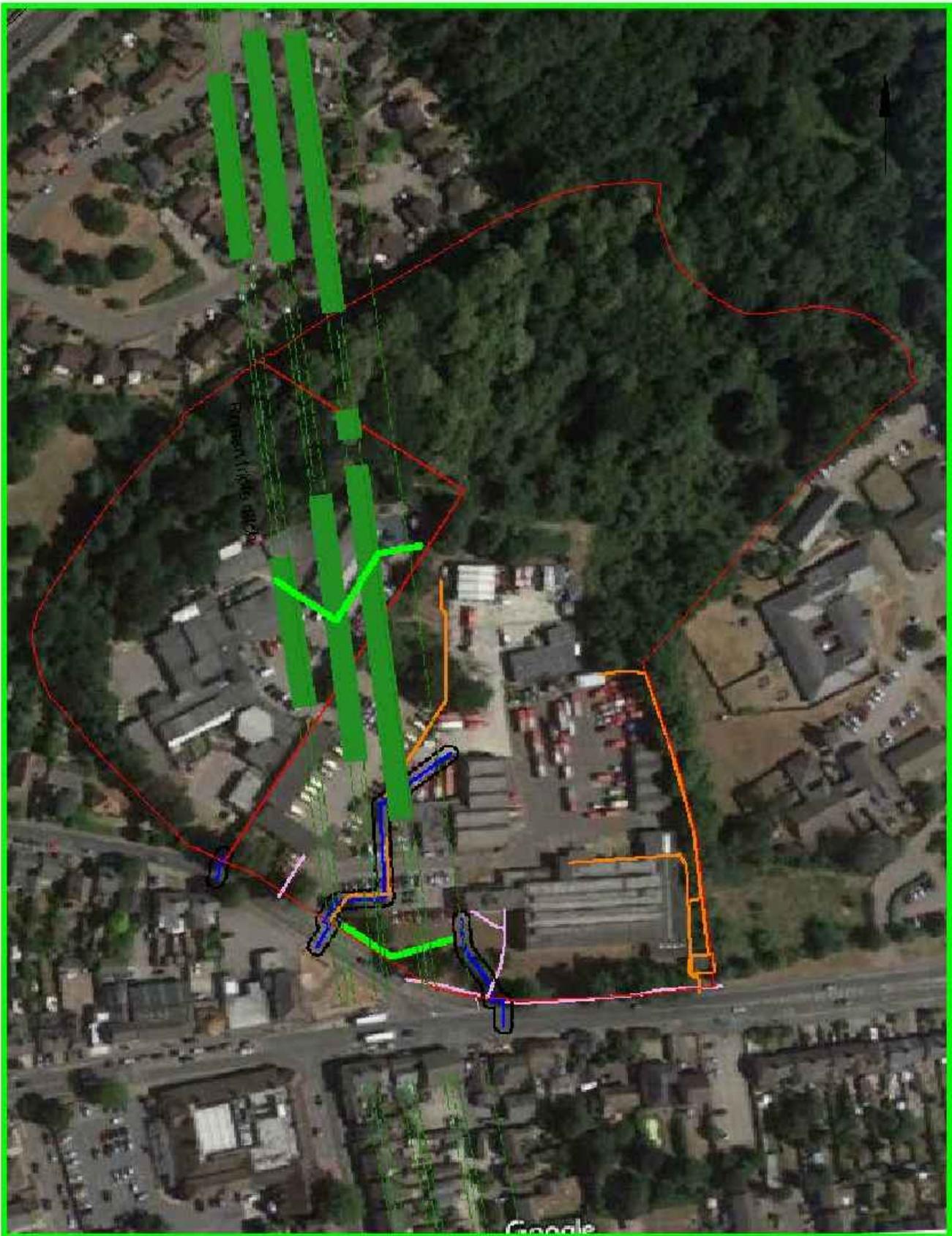
- HER Event (Point)
- HER Event (Line)
- HER Event (Polygon)
- NMP Feature



**Figure 3**  
HER Events  
(Colchester Borough Council HER)

Project Ref: E:\LDN Working\25296 - Lexden Springs Colchester\GIS\Projects\Figure 3 HER Events.mxd





-  Site Boundary
-  proposed trench location
-  gas
-  electricity
-  comms
-  3m standoff around gas mains



0 10 20 30 40 50m  
Scale at A4: 1:2,000



Figure 4b  
The Triple Dyke Extrapolated  
Showing Trenches 1 and 2 and  
Known Services overlaid on Aerial  
Photograph (by CAT)



# OASIS DATA COLLECTION FORM: England

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**OASIS ID: colchest3-416727**

## Project details

Project name	Archaeological evaluation at the former Lexden Springs School and adjacent Fire Station, Colchester, Essex, CO3 3PZ
Short description of the project	An archaeological evaluation (two trial-trenches) was carried out on land at the former Lexden Springs School and the adjacent Fire Station, off Halstead Road, Colchester, Essex to determine the precise location of the Shrub End Dyke/Triple Dyke which runs through the development site. The Shrub End Dyke forms part of the Late Iron Age defences around Camulodunum. Two more ditches and banks were subsequently added to the western side of the dyke during the period of the Roman conquest to form the Triple Dyke. The aim of this evaluation was to identify the precise route of the Shrub End Dyke/Triple Dyke through the development site with minimal excavation of the remains. As such, the route of the inner (the original Shrub End Dyke) and central ditches of the Triple Dyke were identified and planned. Due to site constraints the route of the outer (western) ditch was not located. Comparison of the remains to an evaluation carried out across the Triple Dyke in 1961 suggests that the ditches of the dyke have a good level of survival through the development site. However, the banks of the dyke appear to have been completely levelled.
Project dates	Start: 01-02-2021 End: 04-02-2021
Previous/future work	No / Not known
Any associated project reference codes	2021/01i - Contracting Unit No.
Any associated project reference codes	ECC4603 - HER event no.
Type of project	Field evaluation
Site status	Local Authority Designated Archaeological Area
Current Land use	Community Service 1 - Community Buildings
Monument type	DYKE Late Iron Age
Monument type	DYKE Roman
Monument type	DITCH Uncertain
Monument type	PIT Uncertain
Significant Finds	POTTERY Roman
Significant Finds	POTTERY Post Medieval
Significant Finds	POTTERY Modern
Significant Finds	CERAMIC BUILDING MATERIAL Post Medieval
Significant Finds	CERAMIC BUILDING MATERIAL Modern
Significant Finds	GLASS Post Medieval
Significant Finds	GLASS Modern
Significant Finds	CLAY PIPE Post Medieval
Methods & techniques	""Targeted Trenches""
Development type	Not recorded
Prompt	Planning condition
Position in the planning process	Pre-application

## Project location

Country	England
Site location	ESSEX COLCHESTER COLCHESTER former Lexden Springs School and adjacent Fire Station
Postcode	CO3 3PZ
Study area	1.17 Hectares
Site coordinates	TL 96408 25190 51.890086474804 0.854559651285 51 53 24 N 000 51 16 E Point
Height OD / Depth	Min: 37.25m Max: 38.5m

## Project creators

Name of Organisation	Colchester Archaeological Trust
Project brief originator	none
Project design originator	R. Masefield, RPS Group
Project director/manager	Chris Lister

Project supervisor Adam Wightman  
Type of sponsor/funding body Developer

#### Project archives

Physical Archive Exists? No  
Digital Archive recipient Colchester Museum  
Digital Archive ID ECC4603  
Digital Contents "other"  
Digital Media available "Images raster / digital photography", "Survey", "Text"  
Paper Archive recipient Colchester Museum  
Paper Archive ID ECC4603  
Paper Contents "other"  
Paper Media available "Miscellaneous Material", "Photograph", "Report", "Section"

#### Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)  
Title Archaeological evaluation at the former Lexden Springs School and the Fire Station, Halstead Road, Colchester, Essex, CO3 3PZ: February 2021  
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Author(s)/Editor(s) Wightman, A.  
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