

**PLOT 20A, BERGEN WAY,
NORTH LYNN INDUSTRIAL ESTATE,
KINGS LYNN, NORFOLK**

AN ARCHAEOLOGICAL EVALUATION

ARCHAEOLOGICAL SOLUTIONS LTD

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AN ARCHAEOLOGICAL EVALUATION

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NGR: TF 6297 2197	Report No: 3188
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OASIS SUMMARY SHEET

Project details			
Project name	<i>Plot 20A, Bergen Way, North Lynn Industrial Estate, Kings Lynn, Norfolk. An archaeological evaluation.</i>		
<i>In October 2008, Archaeological Solutions (AS) carried out an archaeological evaluation of land at Plot 20a, Bergen Way, North Lynn Industrial Estate, Kings Lynn, Norfolk (NGR TF 6297 2197). The evaluation was commissioned in advance of works for a showroom with combined office space (Planning ref: 08/00995/F).</i>			
<i>The desk-based assessment showed potential for multi-period remains. The prehistoric and Roman periods are not represented in this area of Kings Lynn which is likely to be due to the site lying within uninhabitable marshland. The town of Kings Lynn originated in the late Anglo-Saxon period although the area of the site was still likely to have been wetland. By the medieval period, the surrounding area was in use for the saltern industry and it is possible that evidence relating to that industry could be encountered on the site. Cartographic sources suggest the site was marshland throughout the post-medieval up until the 1970's when the North Lynn housing and industrial development were constructed.</i>			
<i>The evaluation comprised the excavation of three 30m trenches that ranged between 0.75m and 1.0m deep. No archaeological features were observed during the evaluation.</i>			
Project dates (fieldwork)	<i>October 20-21, 2008</i>		
Previous work (Y/N/?)	<i>N</i>	Future work (Y/N/?)	<i>N</i>
P. number	<i>3255</i>	Site code	<i>51850</i>
Type of project	<i>An archaeological evaluation</i>		
Site status	<i>Possible archaeological potential</i>		
Current land use	<i>Vacant land</i>		
Planned development	<i>Showroom with combined office space</i>		
Main features (+dates)	<i>None</i>		
Significant finds (+dates)	<i>None</i>		
Project location			
County/ District/ Parish	<i>Norfolk</i>	<i>Kings Lynn</i>	<i>North Lynn</i>
HER/ SMR for area	<i>Norfolk</i>		
Post code (if known)			
Area of site	<i>0.29ha</i>		
NGR	<i>TF 6297 2197</i>		
Height AOD (max/ min)	<i>3.35m/ 3.0m AOD</i>		
Project creators			
Brief issued by	<i>Norfolk Landscape Archaeology</i>		
Project supervisor/s (PO)	<i>Richard Greene</i>		
Funded by	<i>George Goddard Ltd</i>		
Full title	<i>Plot 20A, Bergen Way, North Lynn Industrial Estate, Kings Lynn, Norfolk. An Archaeological Evaluation.</i>		
Authors	<i>Greene, R, Unger, S,</i>		
Report no.	<i>3188</i>		
Date (of report)	<i>October 2008</i>		

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AN ARCHAEOLOGICAL EVALUATION

SUMMARY

In October 2008, Archaeological Solutions (AS) carried out an archaeological evaluation of land at Plot 20a, Bergen Way, North Lynn Industrial Estate, Kings Lynn, Norfolk (NGR TF 6297 2197). The evaluation was commissioned in advance of works for a showroom with combined office space (Planning ref: 08/00995/F).

The desk-based assessment showed potential for multi-period remains. The prehistoric and Roman periods are not represented in this area of Kings Lynn which is likely due to the site lying within uninhabitable marshland during these periods. The town of Kings Lynn originated in the late Anglo-Saxon period although the area of the site was still likely to have been wetland. By the medieval period, the surrounding area was in use for the saltern industry and it was considered possible that evidence relating to that industry could be encountered on the site. Cartographic sources suggest the site was marshland throughout the post-medieval period up until the 1970's when the North Lynn housing and industrial development were constructed.

The evaluation comprised the excavation of three 30m trenches that ranged between 0.75m and 1.0m deep. No archaeological features were observed during the evaluation.

1 INTRODUCTION

1.1 In October 2008, Archaeological Solutions Ltd (AS) conducted an archaeological evaluation at Plot 20A, Bergen Way, North Lynn Industrial Estate, Kings Lynn, Norfolk (NGR TF 6297 2197). The investigation was commissioned on behalf of the client in order to support a planning application for a proposed development (Planning ref: 08/00995/F).

1.2 The archaeological monitoring and investigation was conducted in accordance with a brief issued by Norfolk Landscape Archaeology (dated 07/08/2008) and a specification compiled by AS (dated 26/08/2008). The archaeological evaluation followed the procedures outlined in the Institute of Field Archaeologists' *Code of Conduct and Standard and Guidance for Archaeological Desk-Based Assessment* (both revised 1999), as well as those highlighted in the IFA *Standard and Guidance for Archaeological Field Evaluation* (revised 2001) and *Standards for Field Archaeology in the East of England* (Gurney 2003).

1.3 The evaluation aimed to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development. The evaluation also aimed to identify evidence of previous ground disturbance on the site.

Planning policy context

1.4 The relevant planning policies which apply to the effect of development with regard to cultural heritage are Planning Policy Guidance Note 15 'Planning and the Historic Environment' (PPG15) and Planning Policy Guidance Note 16 'Archaeology and Planning' (PPG16) (Department of the Environment).

1.5 PPG16 (1990) is the national Planning Policy Guidance Note which applies to archaeology. It states that there should always be a presumption in favour of preserving nationally important archaeological remains in situ. However, when there is no overriding case for preservation, developers are required to fund opportunities for the recording and, where necessary, the excavation of the site. This condition is widely applied by local authorities.

1.6 PPG15 (1994) is the national Planning Policy Guidance Note which applies to the conservation of the historic environment by protecting the character and appearance of Conservation Areas and protecting listed buildings (of architectural or historical interest) from demolition and unsympathetic change and safeguarding their settings as far as is possible. This condition is also widely applied by local authorities.

2 DESCRIPTION OF THE SITE (Figs. 1 - 2)

2.1 The site lies on the North Lynn Industrial Estate within the ancient port and market town of Kings Lynn. Kings Lynn is located in West Norfolk, where the River Great Ouse flows into the Wash. Kings Lynn lies *c.* 2.4km south-west of the Royal Estate of Sandringham and *c.* 70km west of the city of Norwich.

2.2 The site lies to the north of the town in close proximity to the two northern residential areas of South and North Wootton. The site lies to the north-east of the industrial estate bounded to the north by Bergen Way and the east by Lubeck Road. Commercial buildings are located to the east, west, north and south of the site.

3 METHODOLOGY (Desk-based assessment)

Information was sought from a variety of available sources in order to meet the objectives of the desk-based assessment.

3.1 Archaeological databases

3.1.1 The standard collation of all known archaeological sites and spot-finds within Norfolk comes from the Norfolk Historic Environment Record (NHER). In order to provide a representative sample, the HER database was searched for all known entries within the vicinity of the development area. Entries are listed (Appendix 1) and plotted below (Figure 3). Their significance, where relevant, is discussed in Section 4.2.

3.2 Historical and cartographic sources

3.2.1 The principal source for these types of evidence was the Norfolk Heritage Centre (NHC), Norwich. Relevant documents are listed in Appendix 2 and reproduced in Figures 4-8.

3.3 Secondary sources

3.3.1 The principal sources of secondary material were the Norfolk Heritage Centre as well as AS's own reference library. All sources, including websites, are listed in the bibliography.

3.4 Geological/geotechnical information

3.4.1 A description of the superficial and solid geology of the local and surrounding area was compiled in order to assess the likely presence and potential condition of any archaeological remains on the site. This information was drawn from appropriate maps based on the work of the Geological Survey of Great Britain.

4 THE EVIDENCE

4.1 Topography, geology and soils

4.1.1 This area of Kings Lynn lies on a surface elevation of approximately 5m AOD. The site is located in an urban area which lies on solid chalk of the Upper Jurassic close to the eastern edge of the lower cretaceous series (British Geological Survey 1991). Test pit and borehole surveys in 2007 of a site nearby revealed a well developed stratigraphic sequence (Soiltechnics 2007). A basement tillite of grey clay with various concentrations of gravel was overlain by a slightly clayey gravelly sand. This lay beneath a soft organic clay layer which was overlain by a dark brown clayey peat. Above the peat, a silty organic clay layer was recorded with two further levels of grey brown clay below soft to firm grey brown silty sand. The topsoil consisted of brown silty sandy clay which reached a maximum thickness of 0.40m. The site lies within an urban centre and thus the soils remain unsurveyed (SSEW 1983). The closest surveyed soils to the site are of the Wallasea 1 and Newport 4 association, which are located to the east. Wallasea 1 consists of deep stoneless clayey soils supporting winter cereal and some grassland (SSEW 1983). Newport 4 soils are deep well drained sandy soils which traditionally support cereal and root vegetables (SSEW 1983).

4.2 Archaeological and historical background

Prehistoric (c. 700,000 BC – AD 43) and Romano-British (AD 43 – 410)

4.2.1 A round barrow with early Bronze Age cremations was discovered in Bawsey (c.4km east of Kings Lynn). The area of South Wootton, c.2 km east of the site, yielded beaker pottery and occupation finds (Wymer 1996). Archaeological

investigations at Kings Lynn town centre have revealed little evidence of prehistoric occupation and none has been discovered in close proximity to the site. Similarly, Roman occupation is little represented in the area, despite the presence of the Roman Fen Causeway (NHER 2796) which ran through areas close to Kings Lynn.

Anglo-Saxon and Medieval (AD 411 – 1539)

4.2.2 The site lies over 2km from the probable Saxon core of the town (NHER 1241, NHER 5538) and over 1km from the possibly originally Anglo-Saxon St Mary's Church (NHER 3295) to the east. Johnson and Collcutt (2008, 30) suggest that 'as the development area lies upon deposits of post-Roman marine transgression, it is unlikely that remains of pre-medieval material will be present'.

4.2.3 The settlement was named Bishop's Lynn until the reformation, when Henry VIII renamed the town Lynn Regis, subsequently Kings Lynn. The 11th century names for areas within the settlement (West Lynn, North Lynn and South Lynn) are still in use. The Domesday Survey describes Lynn as an agricultural settlement, but also states that its occupants harvested the salt marshes producing enough to have a surplus for trade (Morris 1984). Excess sand, produced in the extraction of salt, created a layer above the marsh, suitable for a large settlement.

4.2.4 The overwhelming archaeological evidence within the surrounding area relates to the medieval saltern industry (Fig 3). A saltern or salt working site could be established where several elements were brought together: a gently shelving coast; cheap and easily worked fuel; other associated agricultural industries, such as meat production; and an affluent market to sell the product. Kings Lynn was ideal for this industry. The town was also thought to have had a sand market established before 1000 AD and the official market charter was granted in the 11th century. At the time of the Norman Conquest, Lynn had more salt pans in the Freebridge hundred than anywhere else in the county with the area of Gaywood containing the most in the hundred (Munford 1858). Religious houses were often associated with the salt industry and numerous surviving 12th century documents record the involvement of the Bishop of Norwich with salt pits or pans in Gaywood (Parkin 1762).

4.2.5 It is thought that several medieval saltern mounds lie close to the site, part of a larger medieval industry focused to the east of the town. The brief notes that aerial photographs do not locate any saltern mounds within the site boundaries although this may indicate a palaeochannel could run through the site. A series of medieval saltern sites have been identified to the north (NHER 27128 31431), south (NHER 27864, 27899) and the east of the site (NHER 27130 27897; see Fig. 8). It is impossible to tell if the collection of mounds surrounding the site would have consisted of purely discarded salt waste or would have been within the central area of salt boiling works known as a saltcote (Johnson & Collcutt 2008). An archaeological investigation on a site c. 100m east of the site revealed no remains of the salt working although some of the remains may have been truncated (Unger & Greene 2008). Despite the uncertainty of its exact use, it is possible that remains from this industrial function will be encountered during archaeological investigation of the site.

4.2.6 Several former watercourses/palaeochannels are thought to be situated close to the development area. Other archaeological investigations at Saltern sites in

Lincolnshire have recorded the remnants of streams between the saltern mounds (Johnson & Collcutt 2008). Remains of the routes of streams are significant as there is high potential for the survival of organic materials such as leather particularly if the ground has remained waterlogged at a considerable depth (Johnson & Collcutt 2008).

Post-medieval (AD 1540 – 1900)

4.2.7 The saltern industry began to decline at the end of the medieval period (Bridbury 1955). This decline was further aided by the extensive floods which immersed the east coast in 1572 destroying a majority of the saltcotes (Holinshead 1807, 255). As a result of these floods, the town saw the building of extensive sea defences to prevent further flooding including the Old West Sea Bank (NHER 5529) and the Old East Sea Bank (NHER 5528). Some of the redundant saltern mounds are thought to have been transformed into coastal fortifications, defensive measures probably due to the Spanish Armada or the Civil War (NHER 13784, 27864). Evidence also suggests that some of the previous industrial land was used for agriculture in this period with ridge and furrows reported to the south of the site (NHER 27864, 27890).

4.3 The site

A topographical map of the County of Norfolk by William Faden 1797 (Figure 4) and Bryant's map of the County of Norfolk 1826 (Figure 5)

4.3.1 One of the earliest maps of Kings Lynn is William Faden's *Topographical Map of the County of Norfolk* published in 1797. The site is depicted as being situated on part of Gaywood marsh, an expansive piece of marshland to the north-east of the town centre. To the west of the site, the Old East Sea Bank is depicted defending Gaywood marsh from the River Ouse. Settlement in the area was concentrated on higher land to the east, the modern villages of South and North Wootton. Only twenty nine years later, Bryant's map of 1826 depicted a similar picture to the previous map with the land remaining undeveloped.

Gaywood Tithe map 1838 (Figure 6)

4.3.2 The more detailed tithe map of 1838 specifies individual field plots which were irregular in shape. The site remained undeveloped in this period, probably due the frequent flooding of the land. Many of the individual plots were shown to be bound by many sinuous watercourses.

1st edition Ordnance Survey map 1888 (Figure 7)

4.3.3 This map depicts no changes to the site within the fifty years between the surveying of the two maps. The West Norfolk Railway line was first depicted in this edition passing to the east of the site.

1970's development

4.3.4 By the late 1970's, North Lynn was developed with a housing estate, bypass

and the northern and western extent of the North Lynn Industrial Estate having been constructed (Soiltechnics 2007).

5 METHODOLOGY (Trial trenching)

5.1 The trial trench evaluation was carried out between the 20th and 21st October 2008 and comprised the excavation of 3 trenches. Trenches 1-3 were excavated on the site in locations approved by Norfolk Landscape Archaeology (Fig. 2). Trench 1 measured 30.0m x 1.70m; Trench 2 measured 29.0m x 1.70m; and Trench 3 measured 27.0m x 1.70m.

5.2 The trenches were excavated using a mechanical 180° excavator fitted with a toothless ditching bucket, under the close supervision of an archaeologist. Undifferentiated overburden was mechanically excavated; thereafter all further investigation was undertaken by hand. Exposed surfaces were cleaned as appropriate and examined for archaeological features and finds. Archaeological features and deposits were recorded by means of *pro-forma* recording sheets, drawn to scale and photographed. Excavated spoil was checked for finds.

6 DESCRIPTION OF RESULTS

Individual trench descriptions are presented below:

6.1 Trench 1 (Fig. 9; DP 1 and 5)

<i>Sample Section 1: East end, North facing</i>		
<i>0.00 = 3.02m AOD</i>		
0.00 – 0.15m	1000	Topsoil. Dark grey black-brown loamy silty clay.
0.15 – 0.40m	1001	Subsoil. Medium-dark grey brown silty clay (c. 75% silt).
0.40 – 1.0m	1002	Subsoil. Medium orange-grey brown silty clay (c. 75% clay).
1.0m+	1003	Natural Drift. Medium blue-grey orange-brown clay.

<i>Sample Section 2: West end, North facing</i>		
<i>0.00 = 3.01m AOD</i>		
0.00 – 0.15m	1000	Topsoil. As above.
0.15 – 0.30m	1001	Subsoil. As above.
0.30 – 0.75m	1002	Subsoil. As above.
0.75+m	1003	Natural Drift. As above.

Description: No features were observed within Trench 1. The soil layers encountered were fairly consistent throughout the trench. There was no evidence of saltern mounds or medieval activity. There was also no evidence of post-medieval activity or modern development.

6.2 Trench 2 (Fig. 9; DP 2 and 6)

<i>Sample Section 3: South end, West facing</i> <i>0.00 = 3.21m AOD</i>		
0.00 – 0.15m	1000	Topsoil. As above.
0.15 – 0.30m	1001	Subsoil. As above.
0.30 – 0.80m	1002	Subsoil. As above.
0.80m+	1003	Natural Drift. As above.

<i>Sample Section 4: North end, West facing</i> <i>0.00 = 3.35m AOD</i>		
0.00 – 0.20m	1000	Topsoil. As above.
0.20 – 0.40m	1001	Subsoil. As above.
0.40 – 0.90m	1002	Subsoil. As above.
0.90+m	1003	Natural Drift. As above.

Description: No features were observed within Trench 2. As with Trench 1, the soil layers encountered were fairly consistent throughout the trench. There was no evidence of saltern mounds or medieval activity. There was also no evidence of post-medieval or modern development.

6.3 Trench 3 (Fig. 9; DP 3 and 7)

<i>Sample Section 5: North end, West facing</i> <i>0.00 = 3.10m AOD</i>		
0.00 – 0.15m	1000	Topsoil. As above.
0.15 – 0.37m	1001	Subsoil. As above.
0.37 – 0.90m	1002	Subsoil. As above.
0.90+m	1003	Natural Drift. As above.

<i>Sample Section 6: South end, West facing</i> <i>0.00 = 3.0m AOD</i>		
0.00 – 0.15m	1000	Topsoil. As above.
0.15 – 0.35m	1001	Subsoil. As above.
0.35 – 0.75m	1002	Subsoil. As above.
0.75+m	1003	Natural Drift. As above.

Description: No features were observed within Trench 3. As with Trenches 1 and 2, the soil layers encountered were fairly consistent throughout the trench. There was no evidence of saltern mounds or medieval activity. There was also no evidence of post-medieval or modern development.

7 CONFIDENCE RATING

7.1 It is not felt that any factors hindered the recognition of archaeological features and finds during the trial trench evaluation at Plot 20A, Bergen Way, North Lynn Industrial Estate, Kings Lynn, Norfolk.

8 DEPOSIT MODEL

8.1 The deposit model was consistent across the site.

8.2 A medium blue-grey orange-brown clay natural drift soil, L1003, was encountered at a depth of between 0.75m and 1.0m within Trench 1, and between 0.75m and 0.90m below the surface within Trenches 2 and 3. A medium orange-grey brown silty clay subsoil layer, L1002, was observed directly above L1003, and appeared to be colluvial subsoil that ranged in depth between approximately 0.30m and 1.0m within Trenches 1 to 3. L1002 was capped by L1001, a medium dark grey brown silty clay colluvial subsoil layer that ranged in depth between approximately 0.15m and 0.40m within Trenches 1 to 3. Above L1001 was a dark grey black-brown silty clay topsoil layer (L1000) that did not exceed a depth of 0.20m across the site.

9 DISCUSSION

9.1 No archaeological finds or features were observed during the evaluation.

9.2 The desk-based assessment of the site noted evidence for numerous periods in this area of Kings Lynn, specifically, medieval industrial activity. Although it was thought that evidence of similar activity would be encountered during the evaluation, no such evidence was observed. In fact, the deposit model suggests that the site has remained relatively undisturbed with the exception of the construction of a concrete rubble bund around the border of the plot.

9.3 Numerous former watercourses/palaeochannels are thought to be situated close to the site. The lack of evidence for saltern mounds suggests that one of these channels may have been located within the site area. However, the evaluation did not reveal any evidence to suggest that a channel had formed within the natural drift soil layer. If a watercourse did exist in the area, the flooding of that watercourse would have resulted in the deposition of silty clay subsoil layers similar to those observed on the site.

9.4 The site is located within former marshland on relatively low land at approximately 3m to 4m AOD. The site was relatively flat and level, with no obvious signs of previous development. The depth of the natural drift geology ranged very little across the site, as did the depths of the colluvial subsoil layers above it. The surrounding area has been inundated by numerous flooding events over a long period of time, resulting in the deposit of clays and silts. The natural drift soil and colluvial subsoils within the site appeared to be water born deposits as a result of these flooding episodes, with little evidence of disturbance. The site may have been utilized for

farming at one time, but any disturbances to the topsoil did not appear to exceed a depth of 0.20m.

DEPOSITION OF THE ARCHIVE

Archive records, with an inventory, will be deposited with any donated finds from the site at Norwich Castle Museum. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data.

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BIBLIOGRAPHY

British Geological Survey 1991 *East Anglia Sheet 52°N-00° 1:250,000 Series Quaternary Geology*. Ordnance Survey, Southampton

Brown, N. & Glazebrook, J. (eds.) 2000 *Research and Archaeology: A Framework for the Eastern Counties, 2. Research Agenda and Strategy*. East Anglian Archaeology Occasional Paper no. 8

Bridbury, A.R, 1955, *England and the Salt trade in the later Middle Ages*, Clarendon Press, Oxford.

Glazebrook, J. (ed.) 1997 *Research and Archaeology: A Framework for the Eastern Counties, 1. Resource Assessment*. East Anglian Archaeology Occasional Paper no. 3

Gurney, D. 2003 *Standards for Field Archaeology in the East of England*. East Anglian Archaeology Occasional Paper no. 14

Holinshed, R, 1807-8, *The Chronicles of England, Scotland and Ireland*, Vol 4: Richard Taylor and Co. London.

Institute of Field Archaeologists 1994 (revised 2001) *Standard and Guidance for Archaeological Desk-based Assessment*

Institute of Field Archaeologists 1994 (revised 1999) *Standard and Guidance for Archaeological Evaluation*

Johnson, A.P. & Collicutt S.N, 2008, *Land off Bergen and Hamburg Ways, North Lynn Industrial Estate, Kings Lynn, Norfolk: A Desk-Based Archaeological Assessment*, Oxford Archaeological Associates.

Morris, J (ed) 1984, *Domesday Book compiled by direction of King William I 1086, Winchester*, Volume: Norfolk Part One, Chichester: Phillimore & Co. Ltd.

Munford, G, 1858, *An analysis of the Domesday Book of the County of Norfolk*, John Russell Smith, London.

Parkin, C, 1762, *The Topography of Freebridge hundred and half, in the County of Norfolk*, L Davis (Holborn) and W. Whittingham (Lynn).

Soiltechnics Ltd, 2007, *Proposed Industrial Development off Hamburg Way, North Lynn Industrial Estate, Kings Lynn, Norfolk: Ground Investigation Report*, (Ref: STD1013A-G01, 3rd July 2007).

SSEW 1983 *Soil Survey of England and Wales: Soils of Eastern England*. Harpenden, Rothamsted Experimental Station/Lawes Agricultural Trust

SSEW 1983 *Soil Survey of England and Wales: Legend for the 1:250,000 Soil Map of England and Wales* Harpenden, Rothamsted Experimental Station/Lawes Agricultural Trust

Plot 20a, Bergen Way, North Lynn Industrial Estate, Kings Lynn, Norfolk, An Archaeological Evaluation

Unger, S, 2008, *South Quay, opposite Boal Quay, Boal Street, Kings Lynn, Norfolk: An archaeological desk-based assessment*, Archaeological Solutions report no 2979, Hertford.

Unger, S & Greene, R, 2008, Land off Bergen and Hamburg Way, North Lynn Industrial Estate, Kings Lynn, Archaeological Solutions report no.3109, Hertford.

Wymer, J J, 1996, *The Excavation of a round barrow at Bawsey, near Kings Lynn 1984*, East Anglian Archaeology report 77.

APPENDIX 1 HISTORIC ENVIRONMENT RECORD DATA

The following sites are those that lie within the close vicinity of the assessment site. The table has been compiled from data held by the Norfolk Historic Environment Record (NHER). The locations of the sites are shown in Fig. 3. Their significance, where relevant, is discussed in Section 4.2.

HER No.	NGR TF	Description
Medieval (AD 410 – 1550)		
27897	6320 2197	A pair of probable medieval saltern mounds visible as cropmarks on aerial photographs from 1945. These features are likely to be medieval in date and are probably the result of sand washing and the filtering of salt from tidal sand and silt as part of the salt production process.
3295	6403 2275	St Mary's Church in North Wootton has Saxon origins with numerous fossilised quorns and blocks of conglomerate surviving as evidence of the early foundation. The chancel dates to 1300 and transept to the 1400's. The tower was a much later addition in the 18 th /19 th century.
5528	6260 2305	Old East Sea Bank. This is shown by the aerial photographs depicting the extensive sea defences. Later medieval Saltern mounds to the rear of the defences predating the defences. See post-medieval for further finds.
13784	6337 2221	A possible medieval saltern mound existed at this location. It was turned into an artillery fort in the post-medieval period.
27128	6260 2290	Aerial photographs at this location show the cropmarks of possibly five medieval salterns.
27130	6351 2222	A probable single medieval saltern mound with an undated enclosure ditch and ridge and furrow marks, visible as earthworks.
27864	6339 2151	A pair of probable medieval saltern mounds were discovered by aerial photographs. See post-medieval for further remains.
27897	6320 2197	A pair of probable medieval saltern mounds visible as cropmarks on aerial photographs.
27899	6335 2167	A single medieval saltern mound was identified from aerial photographs. NHER 16833 covers part of this site.
31431	6312 2230	Several probable medieval saltern mounds identified by aerial photographs. See post-medieval for further remains.
Post-medieval (AD 1550 – 1900)		
3294	6400 2432	All Saints Church in North Wootton was built in 1852 by Anthony Salvin. It replaced a medieval church on the same site which had fallen into disrepair. Numerous medieval finds have been discovered close to the site.
5528	6260 2305	Old East Sea Bank. This is shown by the aerial photographs depicting the extensive sea defences. Bank was probably built in the 17 th century.
5529	61566 22350	Old West Sea Bank. A post-medieval sea defence bank visible on 1945 aerial photographs.

13784	6337 2221	A possible medieval saltern mound existed at this location. It was turned into an artillery fort in the post-medieval period. Cannon has been found in this location.
27077	61396 23316	A post-medieval sea defence bank visible shown on aerial photographs.
27078	61575 24466	Aerial photographs taken in 1943 show the earthworks of a post-medieval sea bank.
27134	6247 2304	An aerial photograph of this area showed earthworks of a probable post-medieval sea defence.
27864	6339 2151	Post-medieval ridge and furrow marks were identified from aerial photographs. See medieval for further remains.
27890	6306 2106	An area of post-medieval ridge and furrow was identified from aerial photographs.
31431	6312 2230	Several probable medieval saltern mounds identified by aerial photographs were likely to have been turned into a fortification in the post-medieval period. See medieval for further remains.
38273	62158 21850	A post-medieval sea defense was identified from aerial photographs.
Undated		
27908	6289 2127	Two undated sub-rectangular mounds and an area of ridge and furrow type features identified from aerial photographs.

APPENDIX 2 CARTOGRAPHIC SOURCES

Date	Map	Scale	Location
1797	A topographical map of the County of Norfolk by William Faden	-	NHC
1826	Bryant's map of the County of Norfolk	-	NHC
1838	Gaywood Tithe Map	-	NHC
1888	1 st Edition OS map	6 inch	NHC

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DP 1. Sample Section 1, Trench 1, view S



DP 2. Sample Section3, Trench 2, view E



DP 3. Sample Section 5, Trench 3, view W



DP 4. Overview of site, view NW



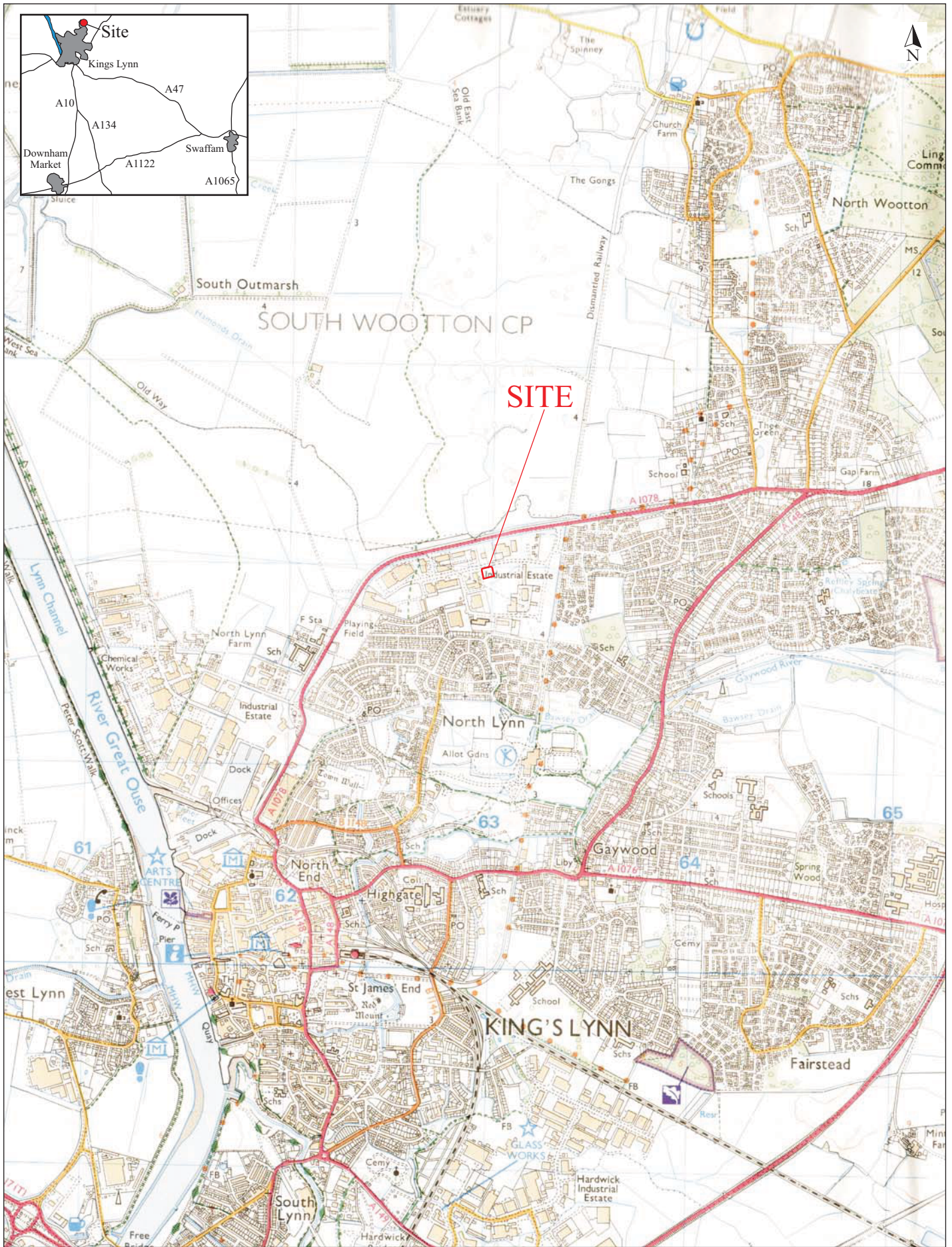
DP 5. Post excavation, Trench 1, view W



DP 6. Post excavation, Trench 2, view S

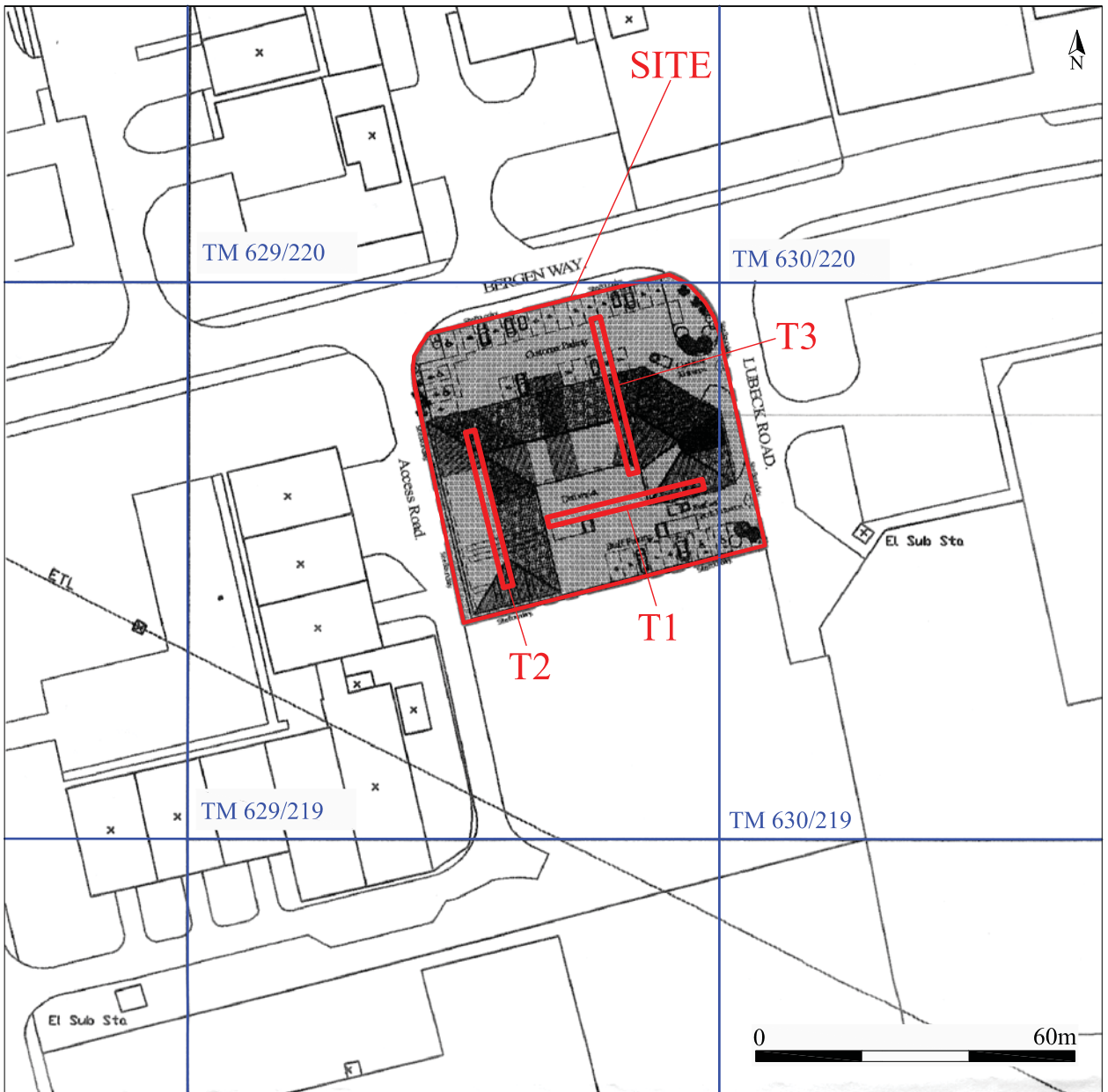


DP 7. Post excavation, Trench 3, view S



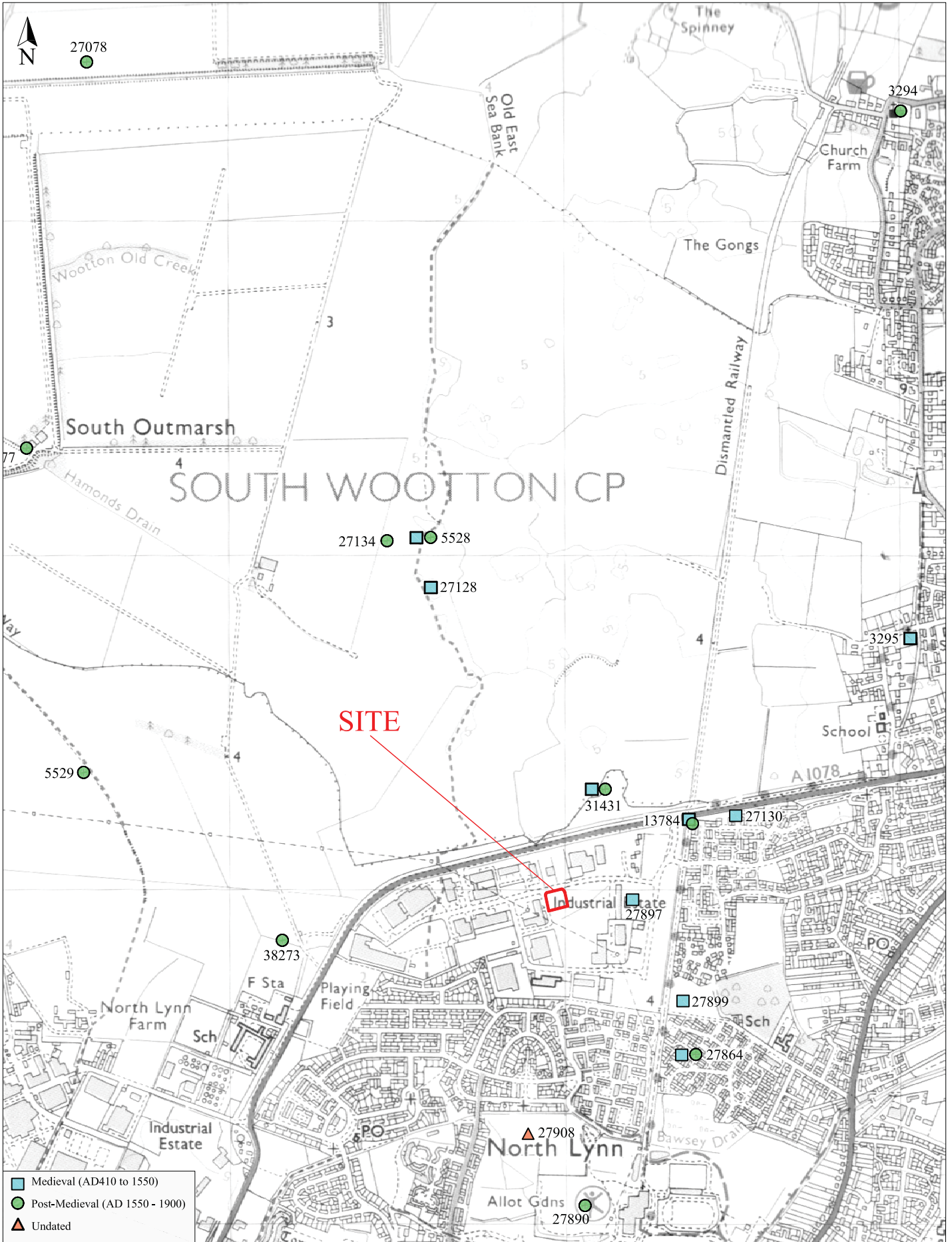
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Fig. 1 Site location plan
 Scale 1: 25,000 at A4



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Fig. 2 Trench location plan
 Scale 1:1250 at A4



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Fig. 3 HER data
 Scale: 1: 15,000 at A4

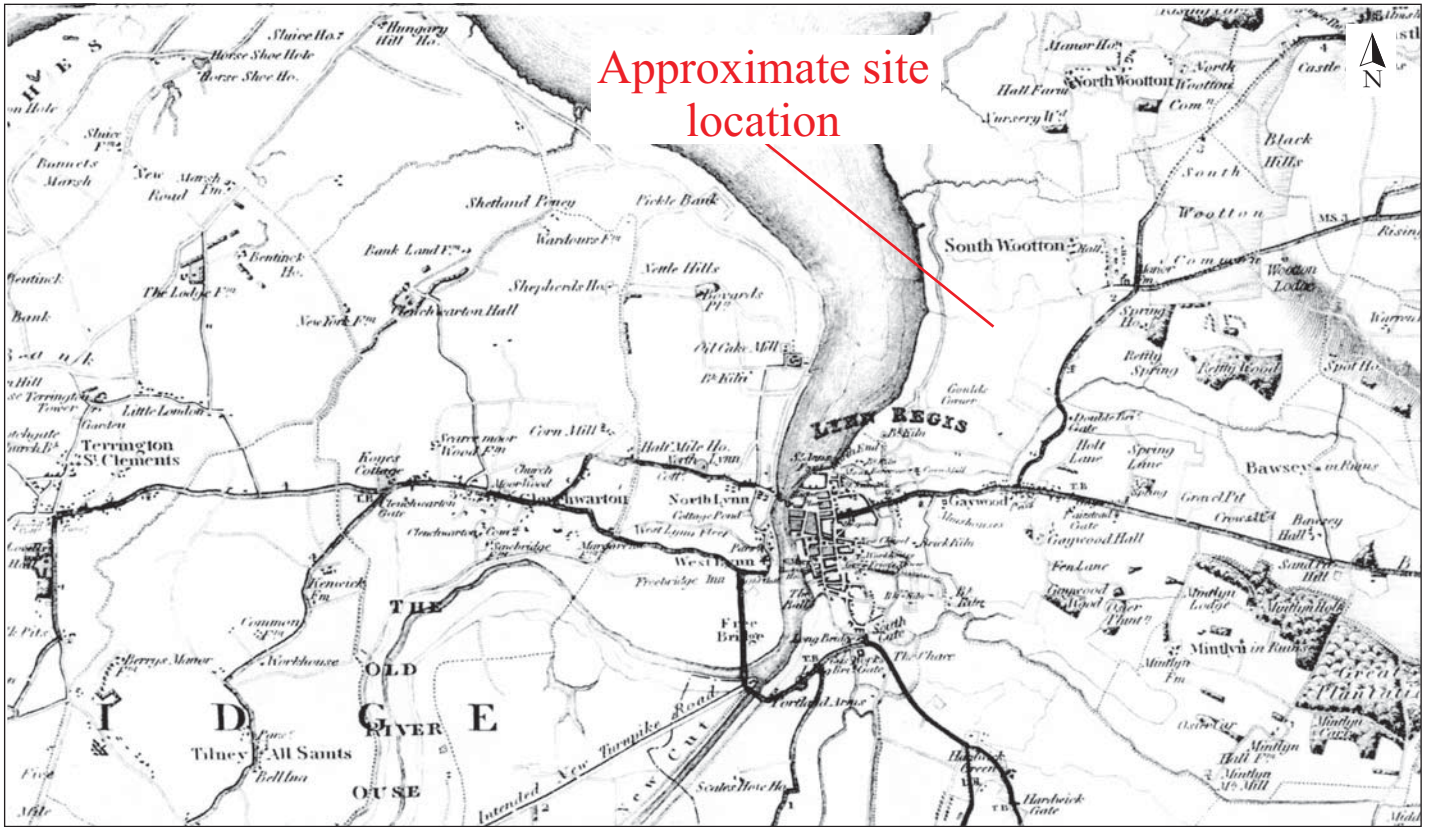


Approximate site
location

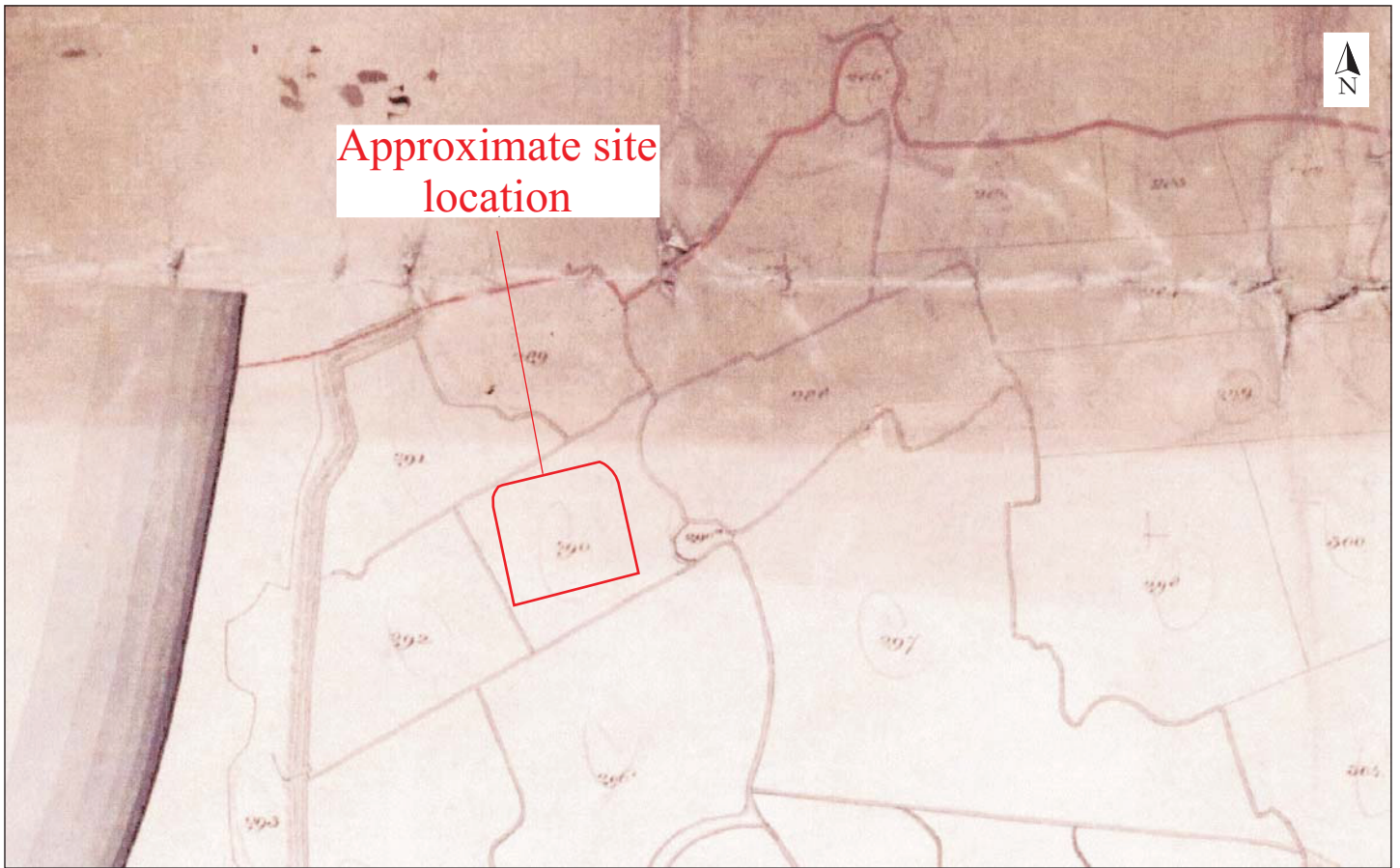
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Fig. 4 A topographical map of the county of Norfolk by William Faden, 1797

Not to scale

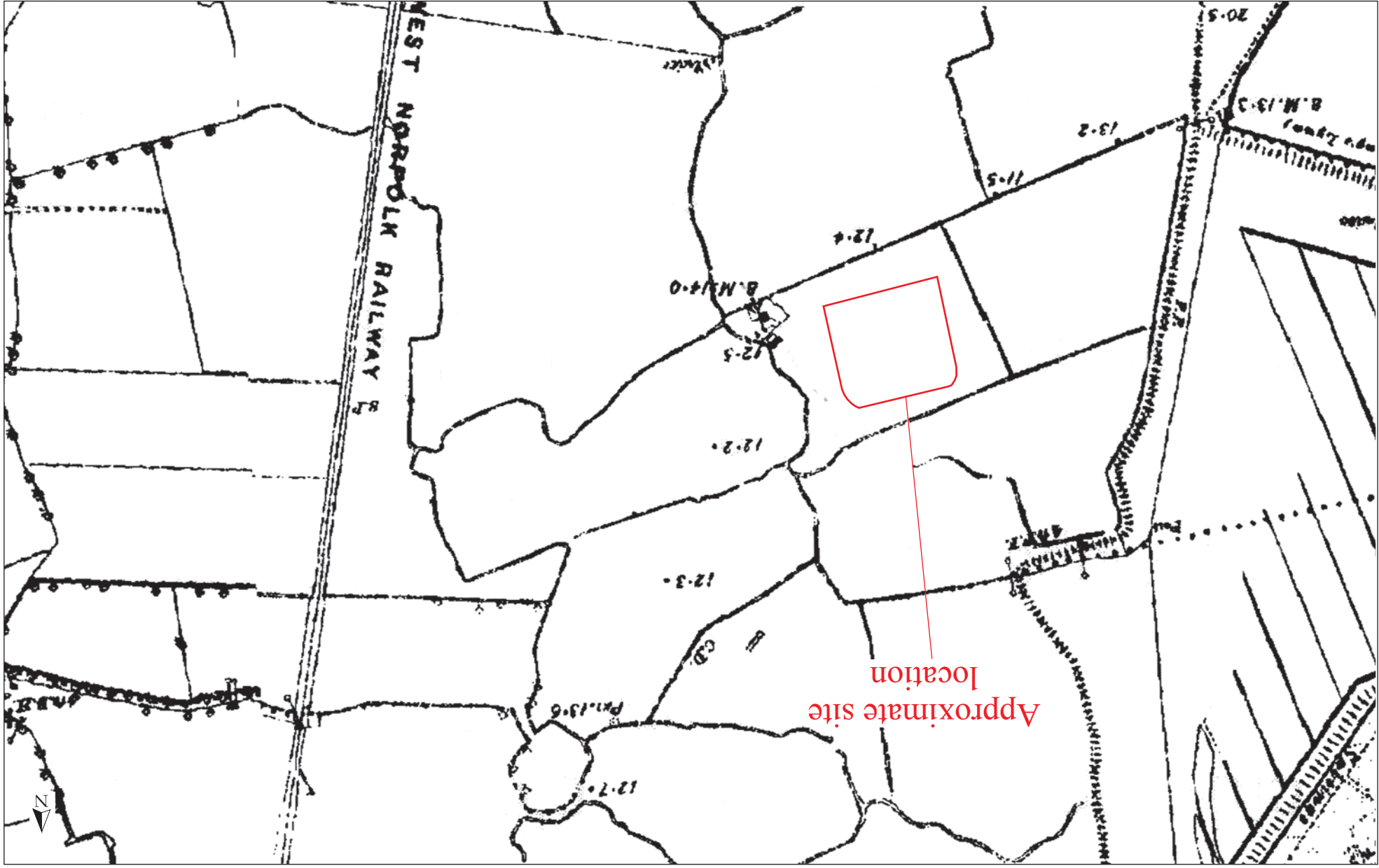


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Fig. 5 Bryant's map of the county of Norfolk, 1826
Not to scale

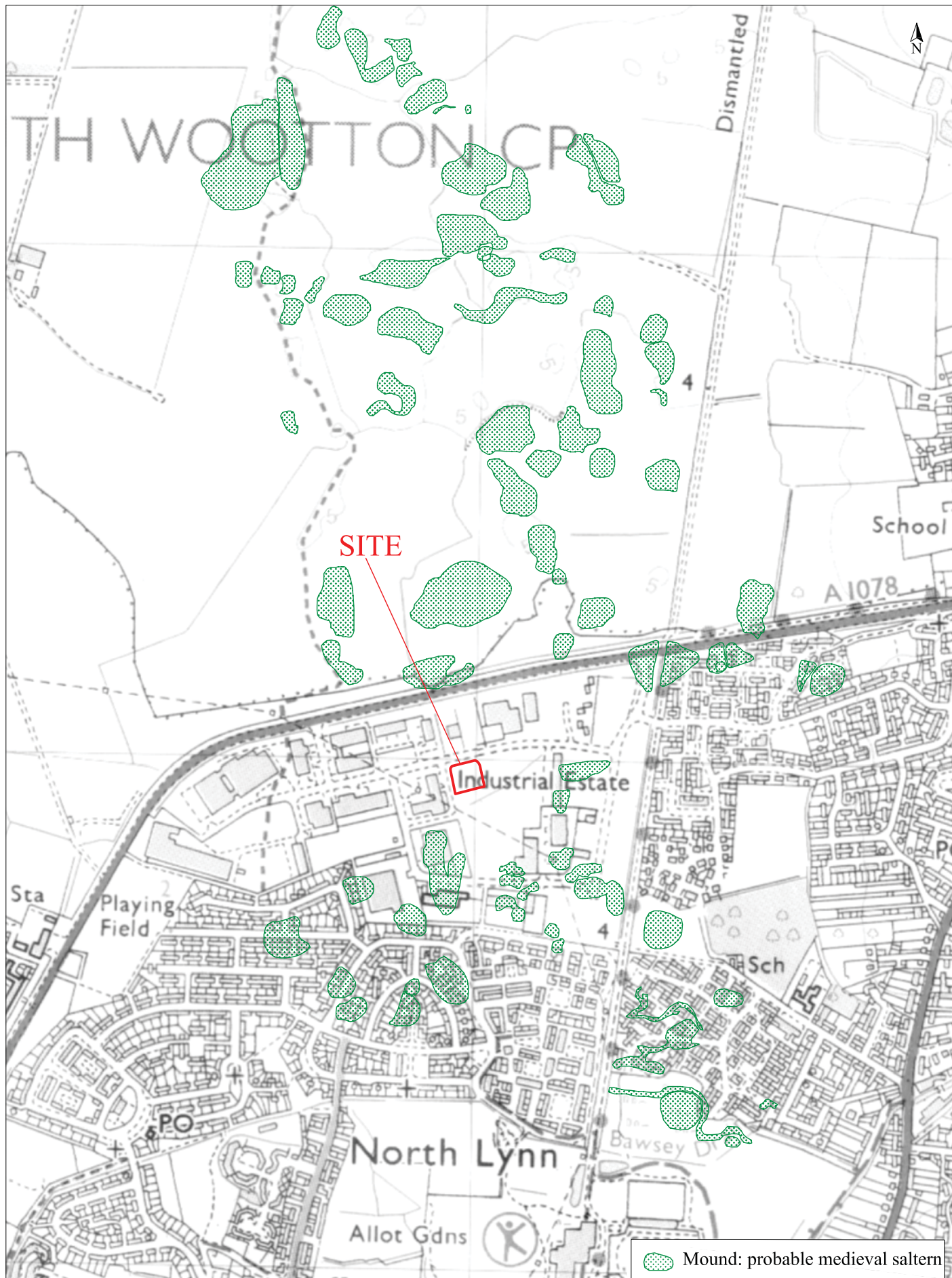



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Fig. 6 Gaywood tithe map, 1838
Not to scale

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Fig. 7 First edition OS map, 1888
Scale 25" to 1 mile at A4



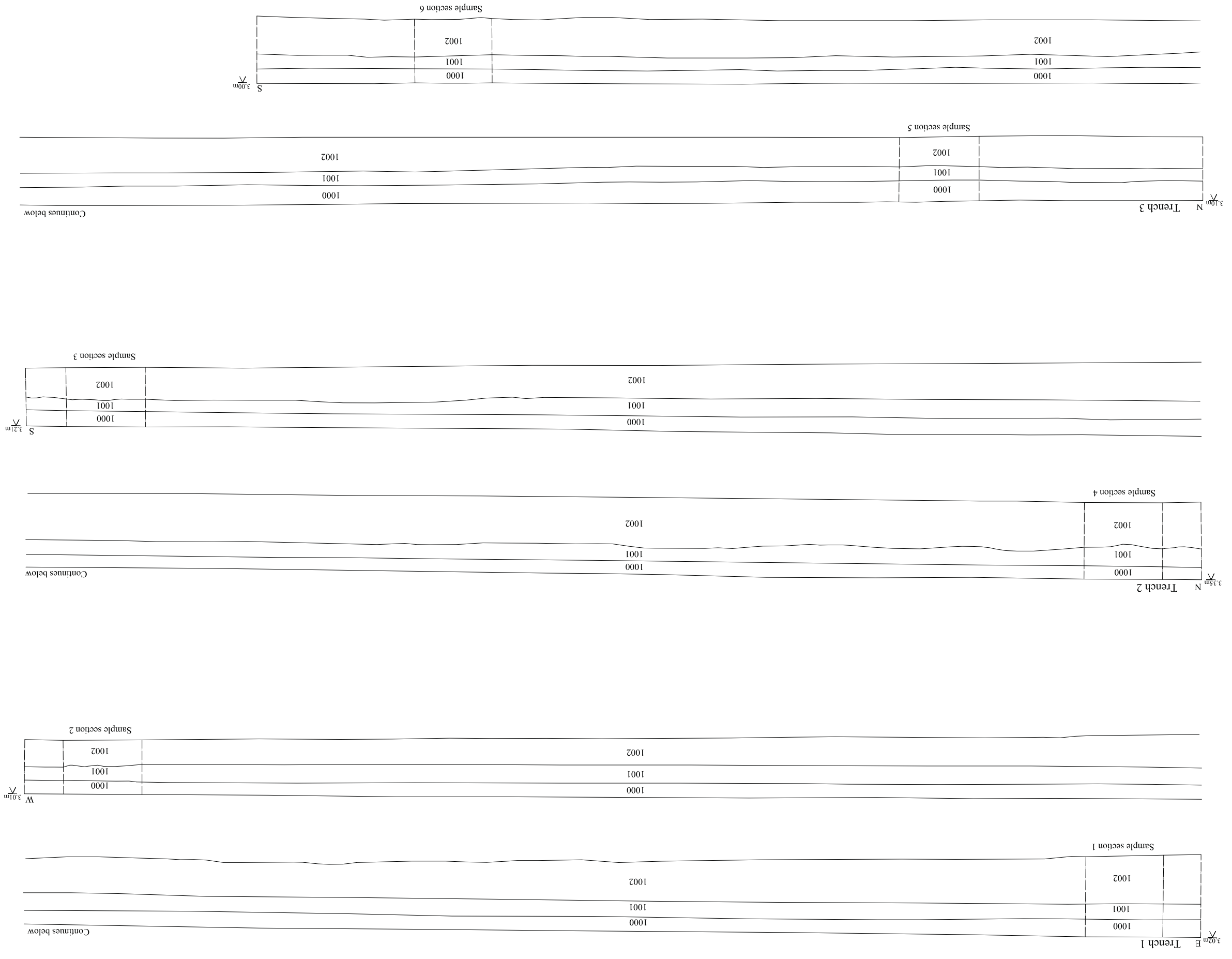
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 Mound: probable medieval saltern

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Fig. 8 Plot of salterns near to site
 Scale 1:10,000 at A4



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DP 1. Sample Section 1, Trench 1, view S



DP 2. Sample Section3, Trench 2, view E



DP 3. Sample Section 5, Trench 3, view W



DP 4. Overview of site, view NW



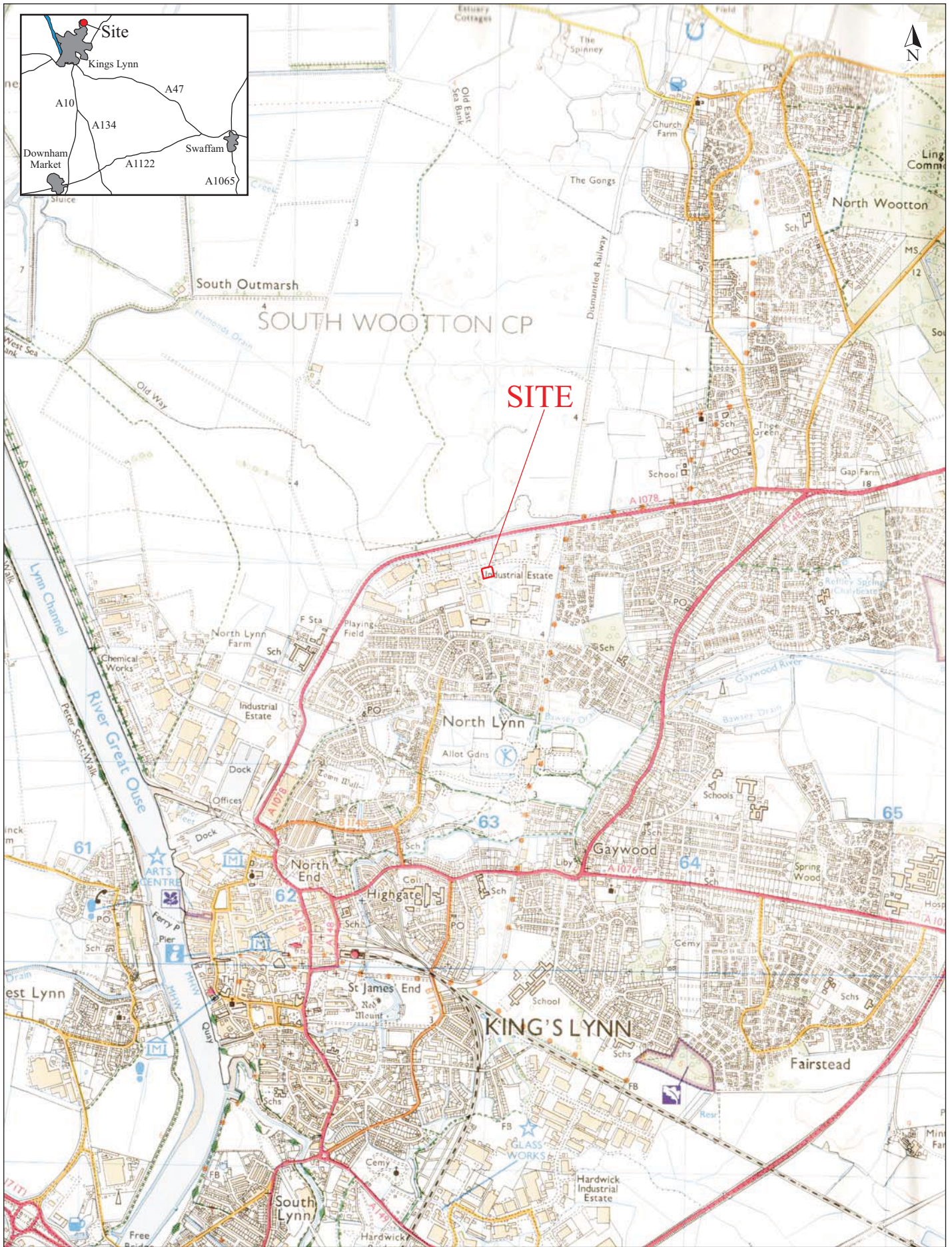
DP 5. Post excavation, Trench 1, view W



DP 6. Post excavation, Trench 2, view S

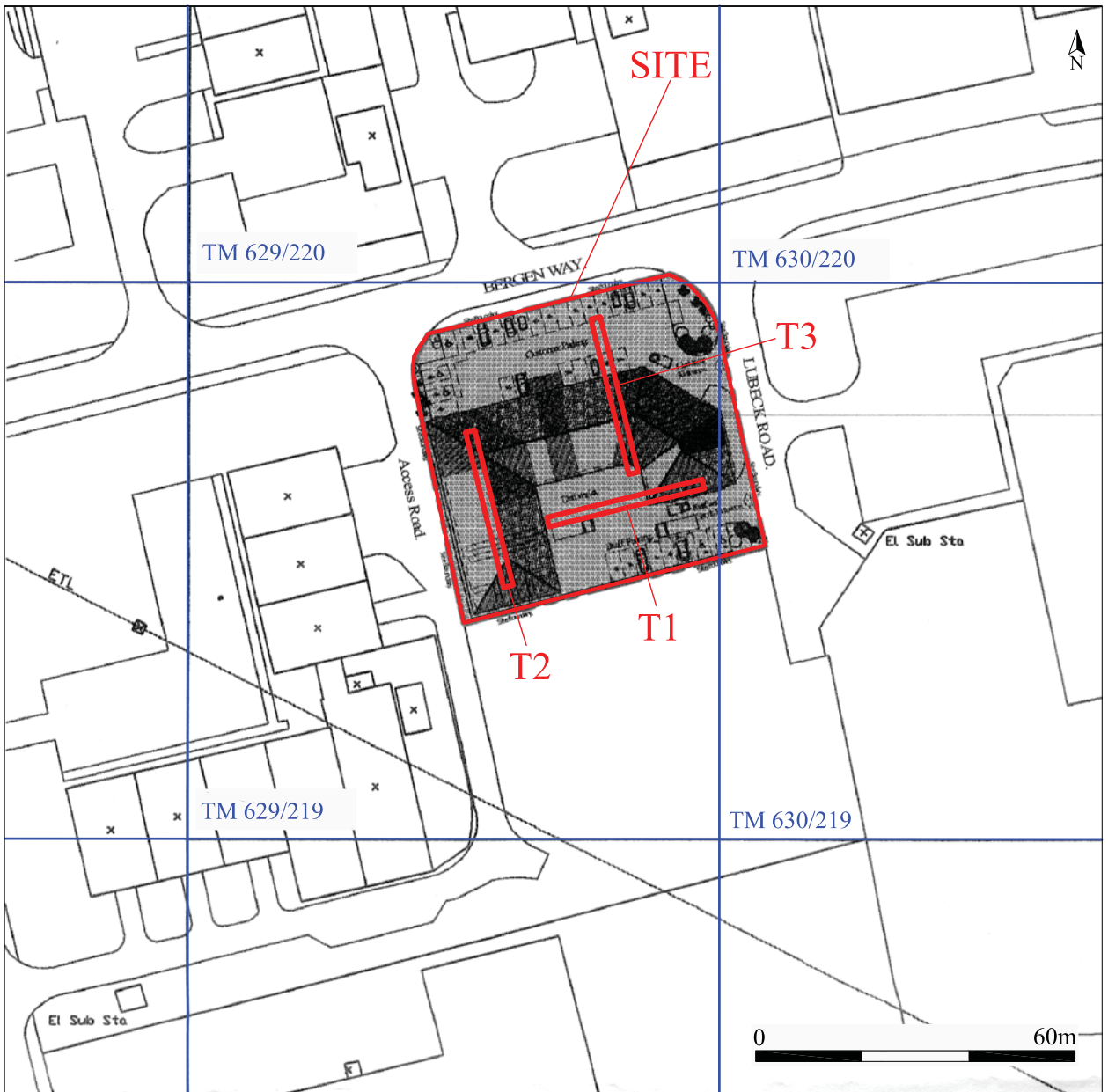


DP 7. Post excavation, Trench 3, view S



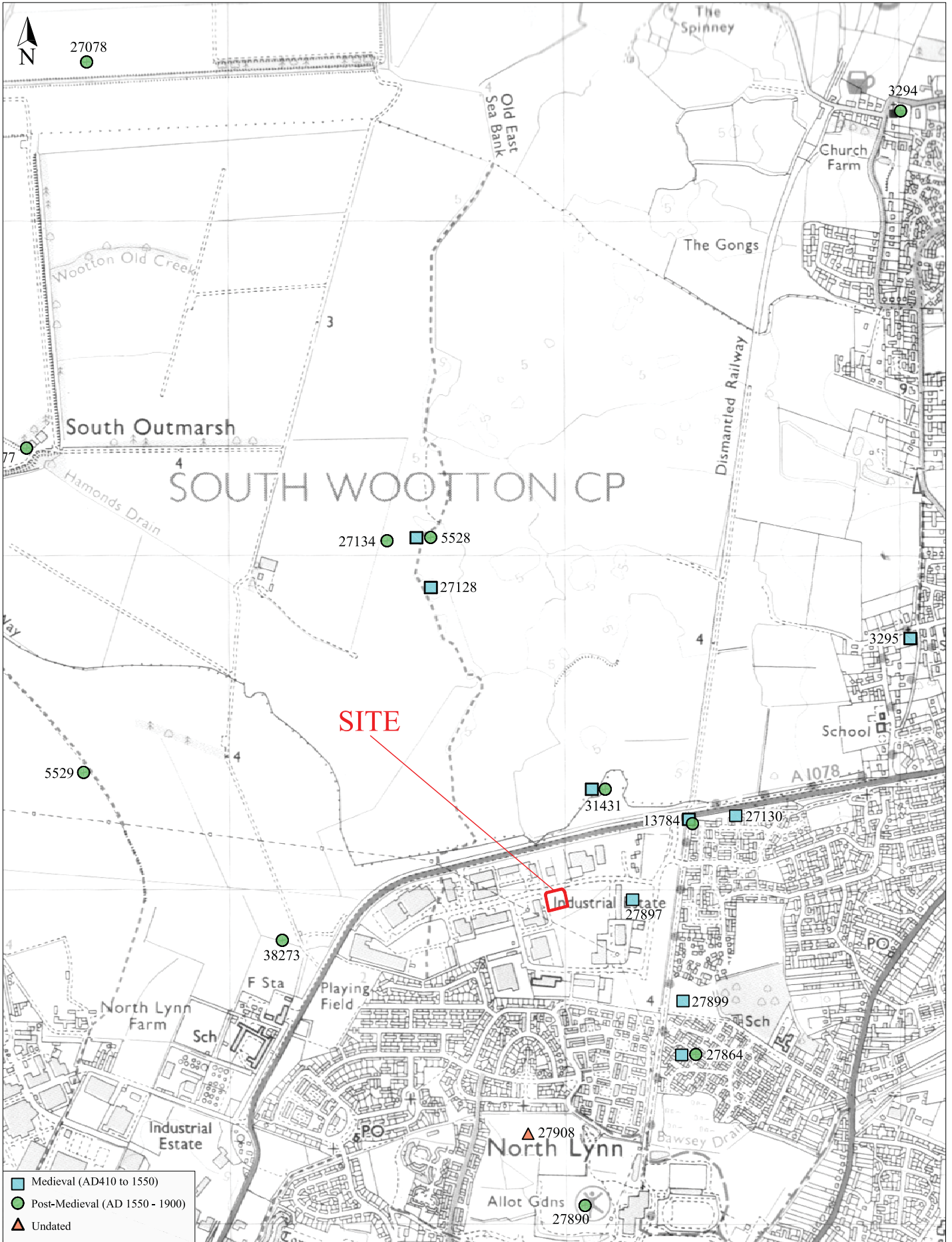
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Fig. 1 Site location plan
 Scale 1: 25,000 at A4



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Fig. 2 Trench location plan
 Scale 1:1250 at A4



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Fig. 3 HER data
 Scale: 1: 15,000 at A4

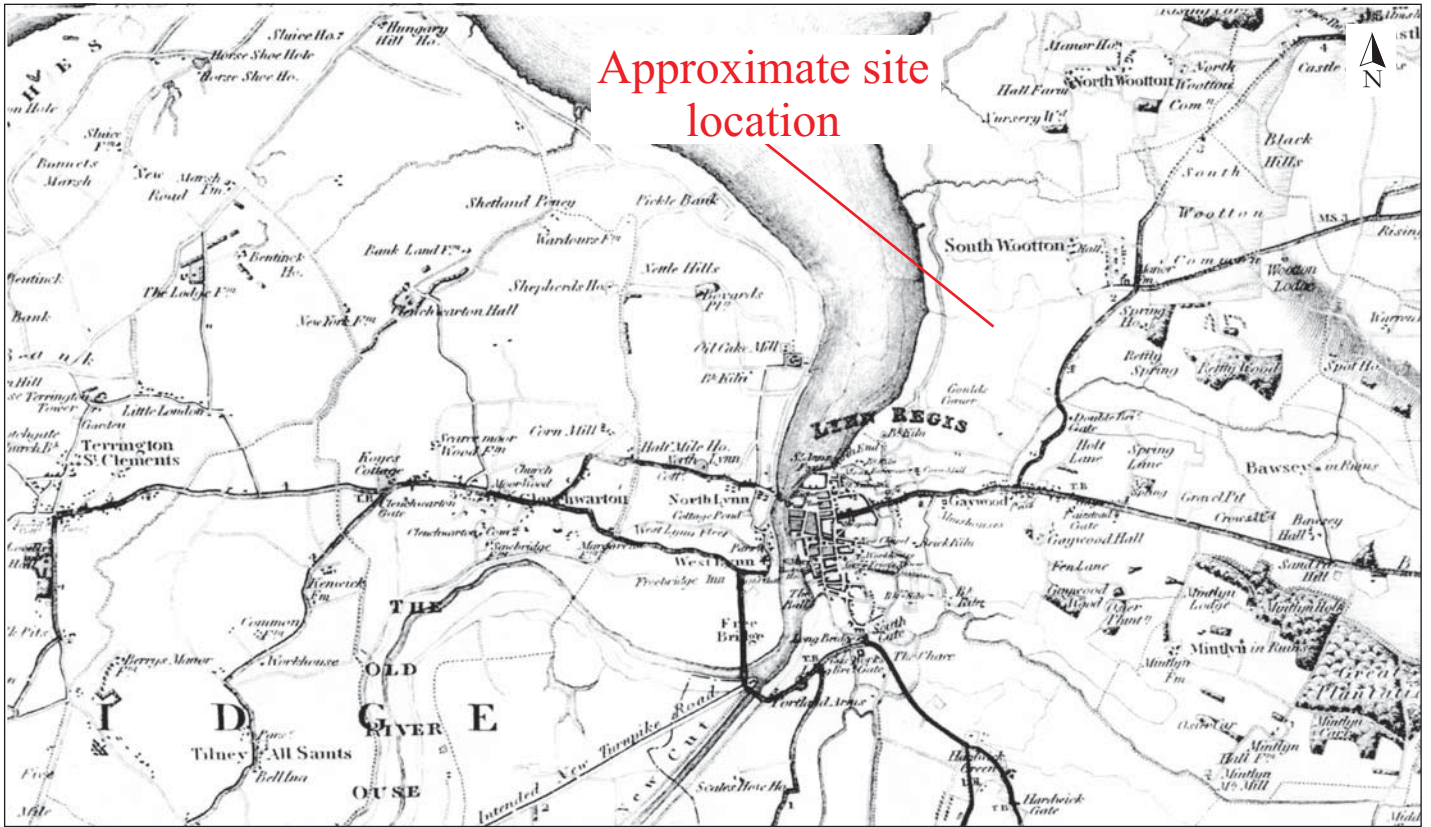


Approximate site
location

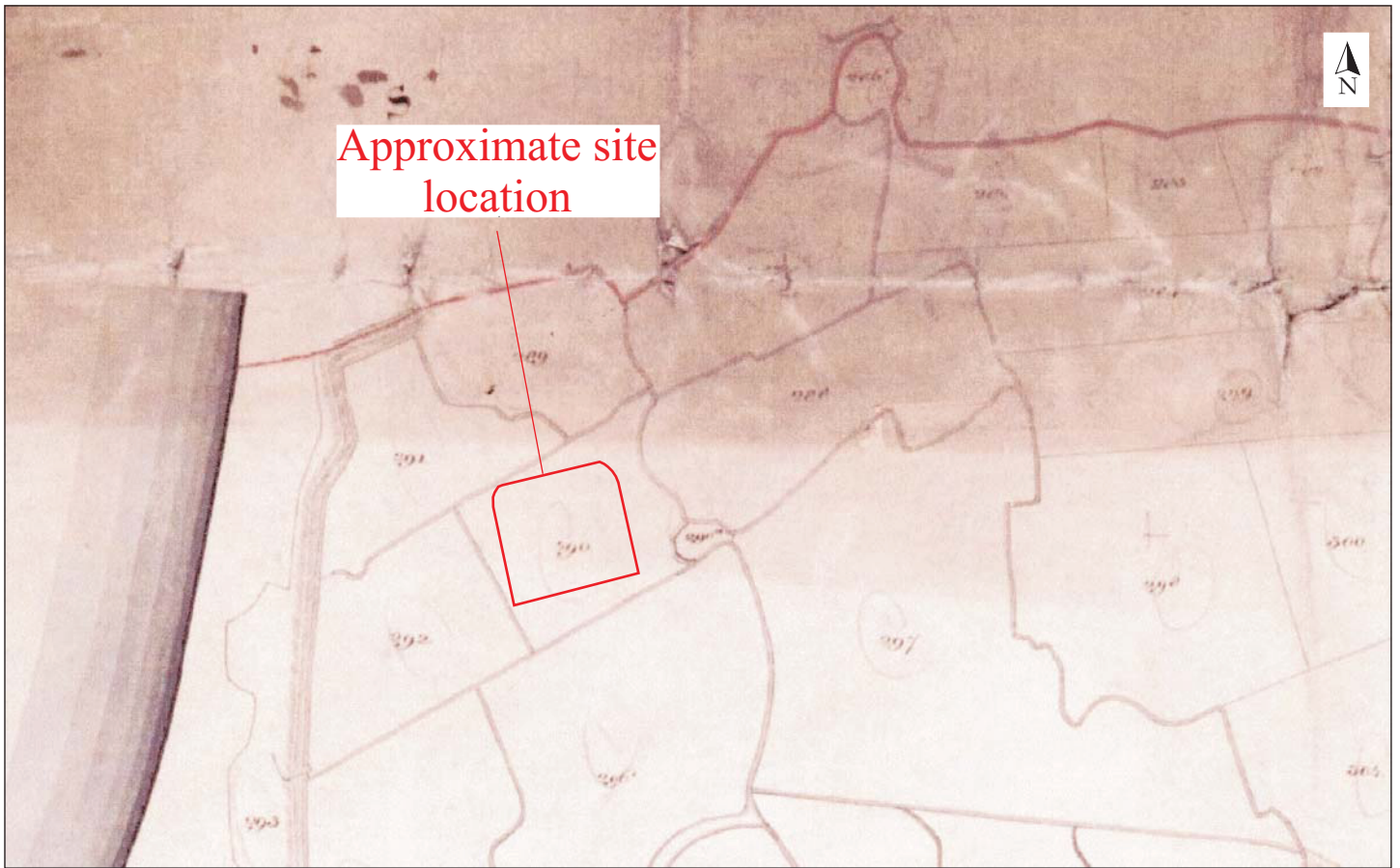
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Fig. 4 A topographical map of the county of Norfolk by William Faden, 1797

Not to scale

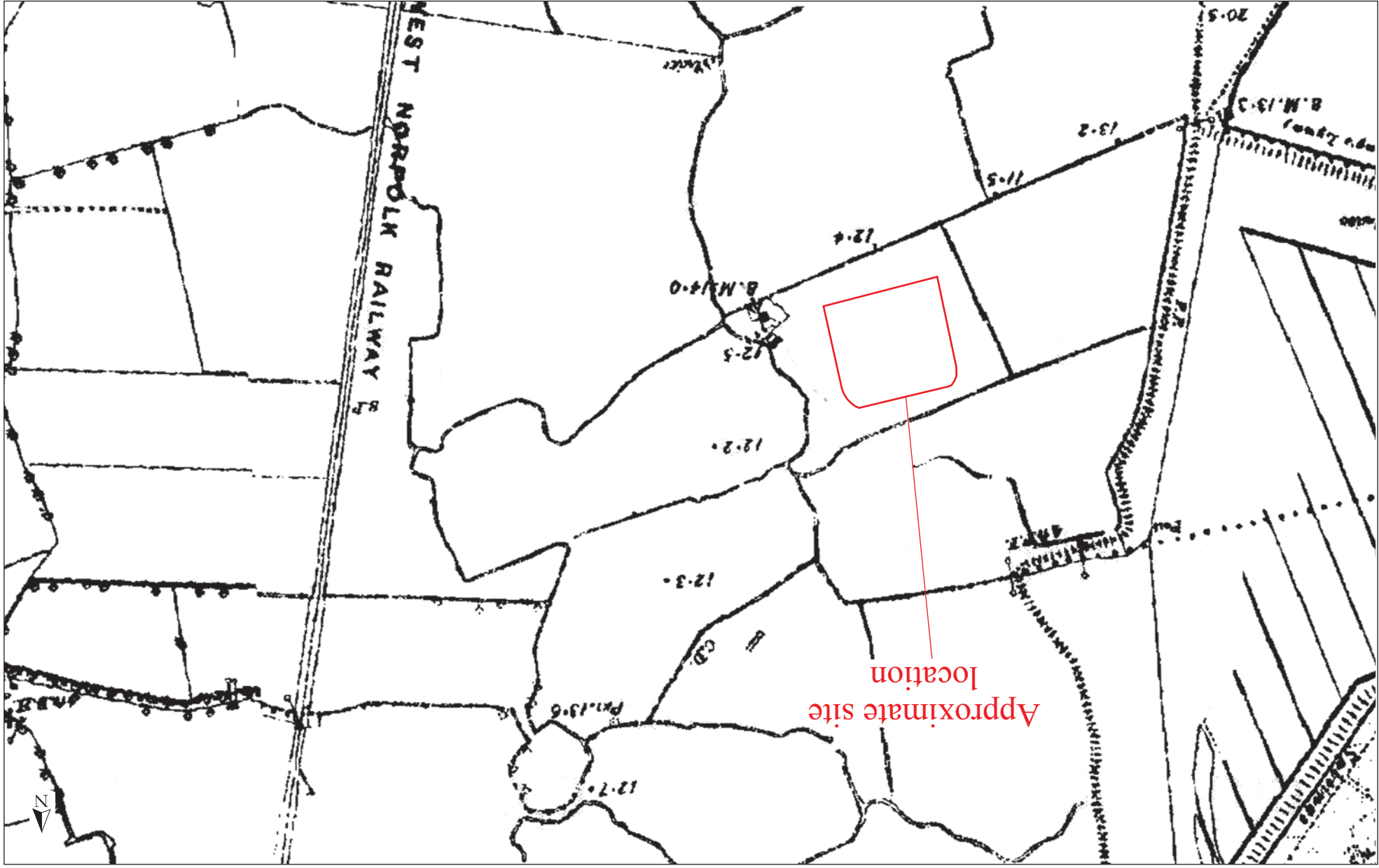


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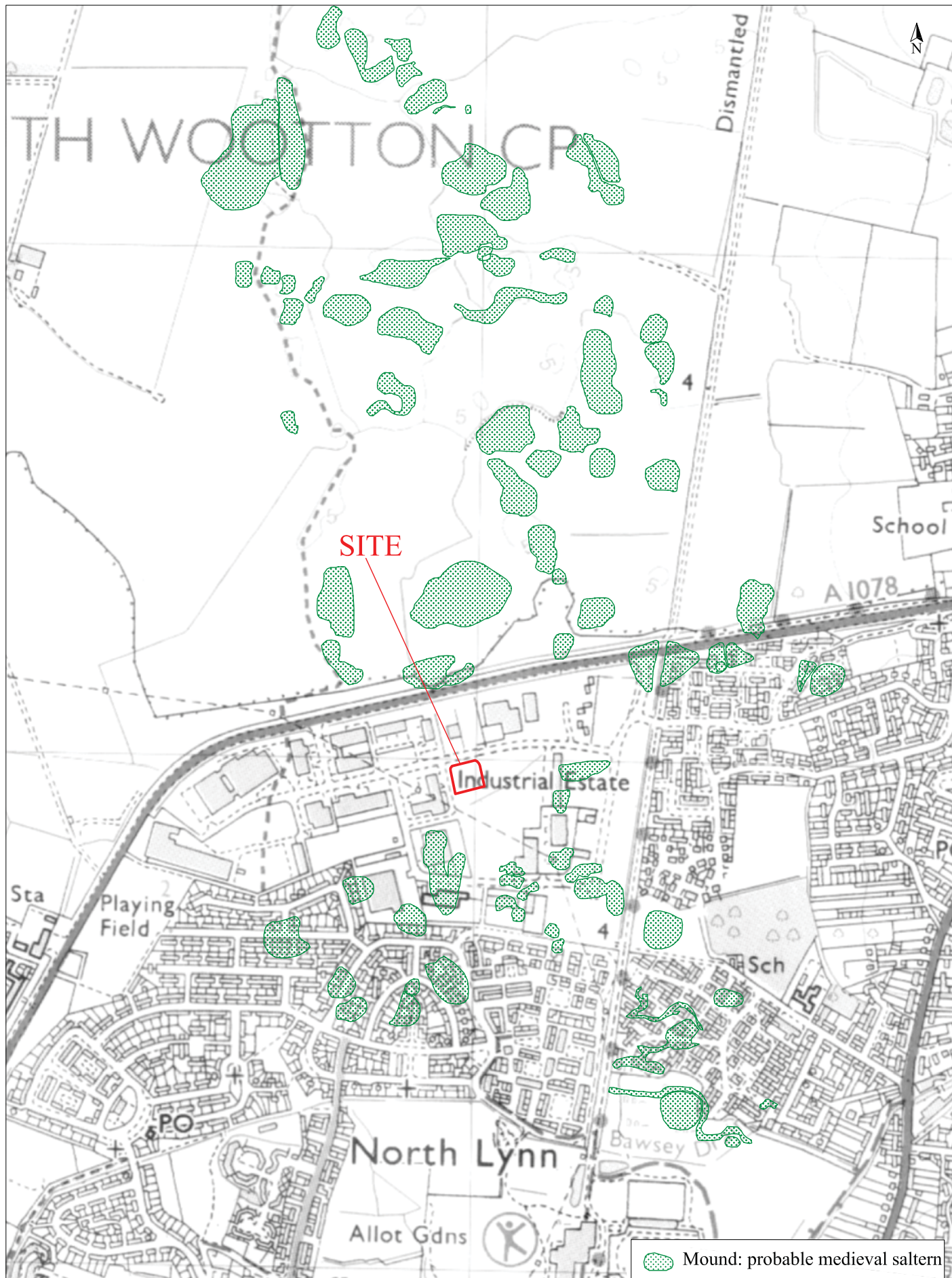



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Fig. 7 First edition OS map, 1888
Scale 25" to 1 mile at A4



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 Mound: probable medieval saltern

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