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**EBENEZER METHODIST CHURCH, KIRKGATE STREET, WALSOKEN,
CAMBRIDGESHIRE PE13 3QR**

AN ARCHAEOLOGICAL EVALUATION

CHER ECB 3914

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NGR: TF 4753 1042	Report No: 4246	
District: Fenland	Site Code: 1561	
Approved: Claire Halpin MifA	Project No: 5150	
Signed:	Date: January 2013 Revised: April 2013	

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OASIS SUMMARY SHEET

Project details			
Project name	<i>Ebenezer Methodist Church, Kirkgate Street, Walsoken, Cambridgeshire</i>		
<p><i>In January 2013 Archaeological Solutions Ltd (AS) carried out an archaeological evaluation at Ebenezer Methodist Church, Kirk Gate, Walsoken, Cambs (centred on NGR TL 4753 1042). The evaluation was carried out in advance of the proposed demolition of the existing church and hall and construction of three dwellings with ancillary works as a condition of planning permission (Fenland Ref. F/YR12/0819/O).</i></p> <p><i>The site is situated within the historic core of Walsoken. It lies on the line of the Sea Bank, which is a flood defence earthwork of probable medieval date (Cambridgeshire HER 19097), the further extent of which is recorded on the Norfolk Historic Environment Record beyond the Cambridgeshire border. Archaeological investigations at the Bell PH to the immediate north identified deposits of medieval and post-medieval date (HER ECB3711).</i></p> <p><i>The site thus had a potential for remains of medieval and post-medieval occupation, and for evidence associated with the construction/date of the Sea Bank earthwork.</i></p> <p><i>In the event only two sherds of medieval (13th – 15th century) pottery were found within Subsoil L1026. The features and finds were predominantly modern and associated with the construction and use of the Methodist church and hall.</i></p>			
Project dates (fieldwork)	January 2013		
Previous work (Y/N/?)	N	Future work	TBC
P. number	5150	Site code	1561
Type of project	Archaeological Evaluation		
Site status			
Current land use	Methodist church		
Planned development	Demolition of church and erection of 3 dwellings		
Main features (+dates)	Structural remains of Methodist church and hall		
Significant finds (dates)	2 sherds of medieval (13 th – 15 th century) pottery		
Project location			
County/ District/ Parish	Cambridgeshire	Fenland	Walsoken
HER/ SMR for area	Cambridgeshire HER (CHER)		
Post code (if known)	PE13 3QR		
Area of site	c.500m ²		
NGR	TF 4753 1042		
Height AOD (max/ min)	4m AOD		
Project creators			
Brief issued by	Dan McConnell (CCC HET)		
Project supervisor/s	Mariusz Gorniak		
Funded by	Fen Methodist Circuit		
Full title	<i>Ebenezer Methodist Church, Kirkgate Street, Walsoken, Cambridgeshire. An Archaeological Evaluation</i>		
Authors	<i>Gorniak, M. and Thompson P.</i>		
Report no.	4246		
Date (of report)	January 2013 (Revised April 2013)		

EBENEZER METHODIST CHURCH, KIRK GATE, WALSOKEN, CAMBRIDGESHIRE

AN ARCHAEOLOGICAL EVALUATION

SUMMARY

In January 2013 Archaeological Solutions Ltd (AS) carried out an archaeological evaluation at Ebenezer Methodist Church, Kirk Gate, Walsoken, Cambridgeshire (centred on NGR TF 4753 1042). The evaluation was carried out in advance of the proposed demolition of the existing church and hall and construction of three dwellings with ancillary works as a condition of planning permission (Fenland Ref. F/YR12/0819/O).

The site is situated within the historic core of Walsoken. It lies on the line of the Sea Bank, which is a flood defence earthwork of probable medieval date (Cambridgeshire HER 19097), the further extent of which is recorded on the Norfolk Historic Environment Record beyond the Cambridgeshire border. Archaeological investigations at the Bell PH to the immediate north identified deposits of medieval and post-medieval date (HER ECB3711).

The site thus had a potential for remains of medieval and post-medieval occupation, and for evidence associated with the construction/date of the Sea Bank earthwork.

In the event only two sherds of medieval (13th – 15th century) pottery were found within Subsoil L1026. The features and finds were predominantly modern and associated with the construction and use of the Methodist church and hall.

1 INTRODUCTION

1.1 In January 2013 Archaeological Solutions Ltd (AS) carried out an archaeological evaluation at Ebenezer Methodist Church, Kirk Gate, Walsoken, Cambs (centred on NGR TF 4753 1042). The evaluation was carried out in advance of the proposed demolition of the existing church and hall and construction of three dwellings with ancillary works as a condition of planning permission (Fenland Ref. F/YR12/0819/O).

1.2 The evaluation was carried out according to a brief issued by Cambridgeshire County Council Historic Environment Team (CCC HET) (Dan McConnell dated 19/12/2012), and a specification by AS (dated 4/01/2013), approved by CCC HET. It followed the procedures outlined in the Institute of Field Archaeologists' *Code of Conduct, Standard and Guidance for Archaeological Field Evaluation* (revised 2008). It also adhered to the relevant sections of *Standards for Field Archaeology in the East of England* (Gurney 2003).

1.3 The main aim of the archaeological evaluation was 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 is also aimed to identify buried soils and area of previous ground disturbance on the site.

Planning policy context

1.4 The National Planning Policy Framework (NPPF 2012) states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The NPPF aims to deliver sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. The NPPF requires applications to describe the significance of any heritage asset, including its setting that may be affected in proportion to the asset's importance and the potential impact of the proposal.

1.5 The NPPF aims to conserve England's heritage assets in a manner appropriate to their significance, with substantial harm to designated heritage assets (i.e. listed buildings, scheduled monuments) only permitted in exceptional circumstances when the public benefit of a proposal outweighs the conservation of the asset. The effect of proposals on non-designated heritage assets must be balanced against the scale of loss and significance of the asset, but non-designated heritage assets of demonstrably equivalent significance may be considered subject to the same policies as those that are designated. The NPPF states that opportunities to capture evidence from the historic environment, to record and advance the understanding of heritage assets and to make this publicly available is a requirement of development management. This opportunity should be taken in a manner proportionate to the significance of a heritage asset and to impact of the proposal, particularly where a heritage asset is to be lost.

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

2.1 Walsoken is a village forming a suburb on the north-eastern side of Wisbech located in the Fenland on the north-eastern edge of Cambridgeshire. Ebenezer Methodist Church fronts the west side of Kirk Gate Street. It is flanked by houses to the north and south and has a garden to the rear (west).

3 METHODOLOGY (Desk-based assessment)

3.1 Archaeological databases

The Cambridgeshire Historic Environment Record (CHER) was consulted in order to identify any local archaeological finds or remains in the area that might be affected by the development. Sites within 1km of the site are listed in Appendix 1 and those of relevance are described below (4.2).

4 THE EVIDENCE

4.1 Topography, geology and soils (Fig. 1)

4.1. The canalised River Nene borders the west side of Wisbech and the site is located 1.3 km to its east situated on tidal flat deposits at 4m AOD. The local soils are of the Blacktoft association formed from marine alluvium, and are described as deep stoneless permeable calcareous fine and coarse silty soils, and can sometimes be calcareous clayey soils. They are characteristic of flat land where groundwater is controlled by ditches and pumps. The underlying geology is Kimmeridge Clay.

4.2 Archaeological and historical background

4.2.1 A Roman defensive sea bank has been plotted, inferred by terrain model mapping and from the first edition OS map, which passes immediately to the west of the site and potentially may encroach on its westernmost edge (CHER MCB19097). In 2011 a trial trench evaluation was carried out at The Bell, 25 Kirkgate Street 70m north-west of the site, which identified a sequence of natural, undated, medieval and post-medieval deposits (CHER MCB19599). A probable late Saxon sea-bank was uncovered comprising a mound that had probably been re-modelled. On the landward side of the bank deliberate dumping had taken place which was cut by a late medieval channel. Post-medieval pits and a ditch were recorded close to the street frontage, and post-medieval pottery was the commonest find category.

4.3 Cartographic Information

4.3.1 The 1797 Faden map shows the general layout of Walsoken including Kirkgate Street with buildings in the vicinity of the site (Fig. 3). The c.1843 tithe map shows the land plot containing the site as No. 762 which has a house or building fronting Churchgate Street (Fig. 4). The plot was owned by Joseph Clinenston and occupied by James Thompson and is described as a garden in Kirgate Field. The first edition OS map points out the Methodist Chapel and Sunday School, as a rectangular building fronting Kirkgate Street with another building immediately to the rear (south-west). There is another building and structures on the land plot immediately north of the chapel (Fig 5). The 1927 OS map shows the buildings up clearer. There are two or three small structures or ancillary buildings added to the rear of the chapel (Fig. 6). The 1953 OS

map shows that the Methodist Chapel and Sunday School now comprise a single rectangular building fronting Kirkgate Street, although the land plot remains the same since the tithe map (Fig. 7). The 1967 OS map shows a square building fronting Kirkgate Street and a second building to the rear labelled 'hall' which is the same building shown on the plan in Figure 2 (Fig. 8).

5 METHODOLOGY (Trial trenching)

5.1 One trench was excavated using a mechanical 360° excavator fitted with a toothless ditching bucket (Fig. 2). The trench was located across the footprint of the proposed terrace of three new dwellings and its location was approved by CCC Historic Environment Team. The trench measured 15 x 1.6m.

5.2 Undifferentiated overburden was mechanically excavated under close archaeological supervision. Exposed surfaces were cleaned by hand and examined for archaeological features. Deposits were recorded using *pro forma* recording sheets, drawn to scale, and photographed as appropriate. Excavated spoil was searched for finds and the trenches were scanned by a metal detector.

6 DESCRIPTION OF RESULTS

Trench 1 (Fig. 2)

<i>Sample section</i> 0.00 = 4.23m AOD		
0.00 – 0.07m	L1000	Tarmac.
0.07 – 0.23m	L1001	Basal layer for Tarmac L1000.
0.23 – 0.30m	L1002	Dark greyish brown, compact, sandy silt with CBM and fragments of roof slate.
0.30 – 0.52m	L1026	Mid grey, compact, sandy silt with sparse stones. Evidence of bioturbation.
0.52 – 0.86m	L1027	Natural. Light yellowish brown, compact, sandy silt.

Description: Seven pits recorded (F1024, F1028, F1042, F1044, F1049, F1051 and F1055) and two construction cuts (F1009 and F1001) were recorded in section. In the base of the trench three pits (F1019, F1055 and F1057), six post holes (F1017, F1030, F1032, F1034, F1051 and F1059), two cuts (F1040 and F1062) and Wall M1022 were excavated.

Pit F1042 was recorded in section (? x 1.65 x 0.37m). It had moderately sloping sides and a concave base. Its fill, L1043, was a grey brown, loose, sandy silt with occasional small stones. It contained demolition debris (CBM and mortar)

Pit F1044 was recorded in section (? x 0.95 x 0.41m). It had steep sides and a flattish base. Its fill, L1045, was a dark grey brown, loose, sandy silt. It contained no finds.

Cable Service Trench F1049 was recorded in section (? x 1.65 x 0.38m+). It had steep sides. The base was not revealed. Its fill, L1050, was a light grey brown, loose, sandy silt with occasional small stones.

Pit F1051 was recorded in section (? x 0.58 x 0.07m). It had steep sides and a flattish base. Its fill, L1052, was a light yellowish brown, loose, sandy silt with occasional small stones. It contained no finds.

Pit F1055 was recorded in section (? x 0.42 x 0.15m). It had steep sides and a flattish base. Its fill, L1056, was a light grey brown, loose, sandy silt. It contained modern electrical wire

?Construction Cut F1009 was recorded in section (? x 0.45 x 0.39m). It had near vertical sides and a flattish base. Its fill, L1010, was a blackish brown, loose, sand with frequent modern CBM.

?Construction Cut F1011 was recorded in section (? x 1.05 x 0.25m). It had steep sides and a flattish base. Its fill, L1012, was a dark blackish brown, friable, sandy silt with frequent modern CBM. It was cut by F1024.

Pit F1024 was recorded in section (? x 0.40 x 0.13m). It had steep sides and a concave base. Its fill, L1025, was a light grey brown, loose, sandy silt with occasional small stones. It contained no finds. It cut F1011.

Pit F1028 was recorded in section (? x 0.43 x 0.10m). It had moderately sloping sides and a flattish base. Its fill, L1029, was a dark grey, loose, sandy silt with occasional CBM. It contained no finds.

Foundation Cut F1040 was modern (0.56 x 0.50m). Its fill, L1041, was a greyish brown, loose, silty sand with modern CBM

Five post holes were recorded:

Feature	Context	Plan/ profile (dimensions)	Fill	Spot Date
F1030	L1031	Subcircular in plan with vertical sides and a slightly concave base (0.24 x 0.22 x 0.18m)	Brown, firm, sandy silt with occasional flint	No finds
F1032	L1032	Subcircular in plan with moderately steep sides and a concave base (0.23 x 0.22 x	Mid brown, firm, sandy silt with sparse stones	18 th century pottery sherd

		0.19m)		
F1034	L1035	Subcircular in plan with vertical sides and a concave base (0.22 x 0.21 x 0.17m)	Brown, firm, sandy silt	No finds
F1051	L1052	Subcircular in plan with steep sides and a flattish base (0.58 x 0.22 x 0.07m)	Light yellowish grey, firm, sandy silt with sparse charcoal	No finds
F1059	L1060	Subcircular in plan with steep sides and a concave base (0.23 x 0.22 x 0.07m)	Medium brown, firm, sandy silt	No finds

Pit F1055 was subcircular in plan (0.49 x 0.42 x 0.15m). It had moderately sloping sides and a concave base. Its fill, L1056, was a dark grey, loose, sandy silt. It contained no finds.

Pit F1057 was rectangular (0.47 x 0.42 x 0.28m). It had moderately sloping sides and a flattish base. Its fill, L1058, was a dark grey, loose, sandy silt with occasional CBM. It contained no finds.

Construction cut F1021 contained modern brick Wall M1022 (1.65+ x 0.80 x 0.55m).

Post Hole F1017 was rectangular in plan (0.28 x 0.20 x 0.20m). It had moderately steep sides and a flattish base. Its fill, L1038, was a light yellowish brown, compact, sandy silt with sparse small stones. It contained no finds.

Adjacent Pit F1019 was rectangular in plan (0.27 x 0.11 x 0.08m). It was partially excavated. Its fill, L1020, was a grey, loose, sandy silt with frequent CBM and concrete.

Drainage Trench F1063 was modern (3m+ x 1.65 x 0.13). Its fill, L1062, was a dark brown, firm, silty sand.

7 CONFIDENCE RATING

7.1 It is not felt that any factors inhibited the recognition of archaeological features or finds within the site.

8 DEPOSIT MODEL

8.1 The site was overlain by tarmac (L1000; 0.06 – 0.08m thick) and its base (L1001; c.0.15). Below were deposits of modern made ground; CBM rubble and debris were present down to 0.85 – 1.15m below existing ground level.

8.2 Below L1001, Layer L1002 was a dark greyish brown, compact, sandy silt with modern CBM and slate. It was 0.10m thick. Subsoil L1026 was a mid grey, compact, sandy silt with sparse stones. It contained medieval (13th – 15th century) pottery (46g)

8.3 The natural clay, L1027, was present at c.90m below existing ground level and comprised a light yellowish brown, compact, sandy silt.

9 DISCUSSION

9.1 Ebenezer Methodist Church is located within the historic core of Walsoken. Based on previous archaeological findings the site was thought to have potential for deposits of medieval and post-medieval date, including evidence for the construction/date of the Sea Bank earthwork (a flood defence of probable medieval date; Cambridgeshire HER 19097), the line of which transects the site. Medieval and post-medieval remains were also encountered by archaeological investigations at the Bell PH, immediately to the north of the site (HER ECB3711).

9.2 In the event seven pits (F1024, F1028, F1042, F1044, F1049, F1051 and F1055) and two construction cuts (F1009 and F1001) were recorded in section. In the base of the trench, three pits (F1019, F1055 and F1057), six post holes (F1017, F1030, F1032, F1034, F1051 and F1059), two cuts (F1040 and F1062) and Wall M1022 were excavated.

9.3 The only pottery recovered comprises two medieval (13th – 15th century) sherds – a glazed Grimston rilled jug neck and a buff-pink body sherd with surfaces in a local calcareous coarse ware (See Thompson – *this report*). These were recovered from Subsoil L1026. The features encountered were mostly of modern date, being associated with the construction and use of the church building.

10 CONCLUSION

10.1 The two medieval sherds from Subsoil L1026 indicate potential local activity during the 13th to 15th centuries, in keeping with the site's location within the historic core of Walsoken. However, groundworks chiefly revealed structural remains related to the post-medieval church and church hall. If medieval deposits were originally present on the site, possibly associated with the two sherds from L1026, these appear to have been heavily truncated by post-medieval activity.

11 DEPOSITION OF THE ARCHIVE

11.1 Archive records, with an inventory, will be deposited with any donated finds from the site at Cambridgeshire County Store. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency.

ACKNOWLEDGEMENTS

Archaeological Solutions would like to thank Fen Methodist Circuit for funding the evaluation and their design & planning consultant, Grahame Seaton Design Ltd, for commissioning the project.

Archaeological Solutions Limited thanks Ms Sarah Bultz of CCC HET for providing the HER information

AS is pleased to acknowledge the advice and input of Mr Daniel McConnell of Cambridgeshire County Council Historic Environment Team.

BIBLIOGRAPHY

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

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

Institute of Field Archaeologists 1994 (revised 2008) *Standard and Guidance for Archaeological Desk-based Assessment*

SSEW 1983 *Soil Survey of England and Wales: Soils of South East England (sheet 4)*. Harpenden, Rothamsted Experimental Station/Lawes Agricultural Trust

WEB SITES

Soilsworldwide.net

APPENDIX 1: CARTOGRAPHIC INFORMATION

Fig.	Map	Date	Scale
1	Site location	Modern	
2	Detailed site location	Modern	1:1,250
3	Faden's map of Norfolk	1797	-
4	Wisbech tithe map	1843	-
5	1 st edition OS	1888	1:2,500
6	OS	1927	1:2,500
7	OS	1953	1:10,560
8	OS	1967	1:2,500

APPENDIX 2: CONCORDANCE OF FINDS**AS1561, Ebenezer Methodist church, Walsoken TT**

Concordance of finds by feature

Feature	Context	Segment	Trench	Description	Spot Date	Pottery	CBM (g)	A.Bone (g)	Other
1002				Brown Layer	19th C	(5) 129g		81	Glass - 333g
1026				Layer	13th - 15th C	(2) 46g			
1032	1033			Fill of Post hole	18h C	(1) 5g	171		
1034	1035			Fill of Post hole			130	7	

APPENDIX 3: SPECIALISTS' REPORTS

The Pottery

by Peter Thompson

The evaluation recovered 8 sherds weighing 177g from three contexts. Two sherds are medieval the remainder are post-medieval to early modern. The sherds are quantified by context in Table 1.

L1026 contained the two medieval sherds with abraded surfaces. One is a dark grey green glazed Grimston rilled jug neck, the other is a body sherd with buff-pink surfaces in a local calcareous coarse ware. It has a grey inner core and oxidised margins and contains a fine clay matrix containing moderate fine to medium white shell and calcareous material, or voids where it has leached out. The hard firing of the calcareous sherd and the glossy green glaze suggest a later medieval date of late 13th-15th centuries.

L1033 contained a sherd of tin glazed ware with purple glaze indicating a date of c.1730-1770. L1002 contained a rim of a 19th century cup or thin bowl in black transfer printing, along with four body sherds of clear glazed post-medieval red earthenware, two also containing iron speckling. These represent two different vessels, either deep bowls or jars.

KEY:

MCW: Medieval calcareous ware 13th-15th

GRIM: Glazed Grimston ware late 12th-15th

PMRE: Post-medieval red earthenware late 16th-19th

TGW: Tin glazed earthenware mid 17th-18th

TPW: Transfer Printed ware late 18th-19th

Feature	Context	Quantity	Date	Comment
	1002	1x10g TPW 4x117g PMRE	19 th	TPW: cup or small bowl rim, black decoration PMRE: minimum of two vessels
	1026	1x31g GRIM 1x14g MCW	13 th -15 th	GRIM: lustrous green glaze, rilled jug neck
	1033	1x5g TPW	18 th	TGW: Purple glaze

Table 1: Quantification of sherds by context

The Ceramic Building Materials

Andrew Peachey MIfA

Two fragments (301g) of late post-medieval brick were contained in Postholes F1032 (L1033) and F1034 (L1035) respectively. The fragments comprised 65mm thick, highly fired (near vitrified) red brick, manufactured in a sand-tempered fabric. This type of brick would have been produced in the 18th to 19th centuries, but in such limited quantity and fragmented condition is likely re-deposited as packing material.

The Environmental Samples

Dr John Summers

Introduction

Five bulk soil samples for environmental archaeological assessment were taken during trial excavations at Walsoken. Two of the samples were from spot-dated deposits (L1026 13th-15th century; L1002 19th century). This report presents the results from the assessment of the bulk sample light fractions and discusses the significance and potential of any remains identified.

Methods

Samples were processed at the Archaeological Solutions Ltd facilities in Bury St. Edmunds using a Siraf style flotation tank. The light fractions were washed onto a mesh of 250µm (microns), while the heavy fractions were sieved to 500µm. The dried light fractions were scanned under a low power stereomicroscope (x10-x30 magnification). Botanical and molluscan remains were identified and recorded using a semi-quantitative scale (X = present; XX = common; XXX = abundant). Reference literature (Cappers *et al.* 2006; Jacomet 2006) and a reference collection of modern seeds was consulted where necessary. Potential contaminants, such as modern roots, seeds and invertebrate fauna were also recorded in order to gain an insight into possible disturbance of the deposits.

Results

The assessment data from the bulk sample light fractions are presented in Table 2.

Plant macrofossils

Plant macrofossils were recorded in all five of the samples. Medieval deposit L1026 produced a range of cereals, with free-threshing type wheat grains (*Triticum aestivum/ compactum* type) being most numerous. In addition were hulled barley grains (*Hordeum* sp.) and oats (*Avena* sp.). The same range of taxa were present in L1066, while the other deposits contained only wheat and barley grains. In L1026, L1066 and L1046, free-threshing type wheat rachis fragments were present and wheat tail grains were also recorded in L1026 and L1066. These elements are likely to reflect some input from crop processing debris.

A number of wild taxa were also recorded in the deposits, many of which are likely to have grown as arable weeds and entered the deposits with crop processing debris. Such plants included meadow/ bulbous buttercup (*Ranunculus acris/ bulbosus*), dock (*Rumex* sp.), vetch/ wild pea (*Vicia/ Lathyrus* sp.), soft brome (*Bromus hordeaceus* type) and foxtail (*Alepocurus* sp.). Occasional sedge seeds (*Carex* sp.) probably reflect some wetness in arable soils, although they could also have been gathered from other wetland/ heathland habitats, as could the small number of heather (*Erica/ Calluna* sp.) leaves in L1018 and the possible common cow-wheat (cf. *Melampyrum pratense*) in L1066.

In addition to cereals, horse bean (*Vicia faba*) was recorded in L1026 and L1066. Indeterminate pea/ bean fragments (Fabaceae indet.) were also present in L1018 and L1046. Horse bean was a common crop of the medieval period in England (e.g. Ballantyne 2006; Straker *et al.* 2007).

In addition to the plant macrofossils, other remains were present, such as fish scales and spheroidal hammer scale in L1066, fish bones in L1046 and small mammal bones in L1018, L1026, L1046 and L1066. The latter could have represented a pest of houses or stored grain.

Contaminants

Modern contaminants in the deposits were quite limited, indicating that limited disturbance of the deposits had occurred.

Discussion

The ubiquity and density of cereal remains in the sampled deposits is a strong indication that the cultivation and processing of cereals was undertaken in the vicinity of the excavated features. The primary crops grown during the medieval period were free-threshing type wheat and hulled barley, along with oats and horse bean. Archaeobotanical assemblages from other medieval sites show a similar range of cultivated taxa (e.g. Ballantyne 2006; Murphy 2009; Straker *et al.* 2007).

Wheat is likely to have been the primary food grain and could also have been an important economic staple that could be widely exported. The nearby port of King's Lynn was an important medieval port and much grain was traded through it (e.g. Campbell and Overton 1993). The predominance of wheat is partly a reflection of the fertile soils around Walsoken. The site lies well within the fenland, an area characterised as having naturally wet loamy and clayey soils of coastal flats (Soilscapes 2013). Such conditions are well suited to arable production, particularly bread wheat, which prefers heavy, fertile soils (e.g. Moffett 2006). Elsewhere in Norfolk where sandy, breckland soils predominate, less valuable crops of barley and rye were more commonly grown (e.g. Campbell and Overton 1993; Summers 2012).

Although L1026 was the only deposit spot-dated to the medieval period, the remains from L1066 were very similar in composition and may also date to a comparable period. The presence of both hulled barley and free-threshing type wheat in 19th century deposit L1002 demonstrates the longevity of these crops in the area and

makes it difficult to confirm a medieval or post-medieval date for any of the other deposits.

Although debris from cereal processing is likely to be present, the archaeobotanical assemblage may also incorporate other domestic debris, such as hearth waste. This may account for the common occurrence of horse bean, which is not commonly destroyed during processing. Other remains also indicate that the sampled deposits were receiving debris from a range of activities. For example, L1066 contained fish scales and spheroidal hammerscale and L1046 also contained fish bone.

Conclusions and statement of potential

The high concentration and ubiquity of carbonised macrofossils from the bulk sample light fractions indicates that there would be a high potential for the further recovery of an extensive archaeobotanical assemblage should further excavation and sampling be undertaken. Further, more detailed analysis of such material and more precise phasing would allow the investigation of local cultivation regimes in this fertile landscape. The proximity of the port of King's Lynn suggests that agricultural surpluses from this area could have had significant value in the wider medieval economy.

References

Ballantyne, R. 2005, 'Plants and seeds', in Mortimer, R., Regan, R. and Lucy, S. *The Saxon and Medieval Settlement at West Fen Road, Ely: The Ashwell Site*, East Anglian Archaeology 110, Cambridge Archaeological Unit, Cambridge, 100-112

Campbell, B.M.S. and Overton, M. 1993, 'A new perspective on medieval and early modern agriculture: six centuries of Norfolk farming c.1250-c.1850', *Past and Present*, 141, 38-105

Cappers, R.T.J., Bekker R.M. and Jans J.E.A. 2006, *Digital Seed Atlas of the Netherlands. Groningen Archaeological Studies Volume 4*, Barkhuis Publishing, Eelde

Jacomet, S. 2006, *Identification of Cereal Remains from Archaeological Sites* (2nd edn), Laboratory of Palinology and Palaeoecology, Basel University

Moffett, L. 2006, 'The archaeology of medieval food plants', in Woolgar, C.M., Serjeantson, D. and Waldron, T. (eds), *Food in Medieval England: Diet and Nutrition*, Oxford University Press, Oxford, 41-55

Murphy, P. 2009, 'Plant macrofossils', in Popescu, E.S. *Norwich Castle: Excavations and Historical Survey, 1987-98. Part I: Anglo-Saxon to c.1345*, East Anglian Archaeology 132, Norfolk Museums and Archaeology Service, Norwich, 354

Soilscapes, 2013, National Soil Resource Institute, Cranfield University, <https://www.landis.org.uk/soilscapes/> (consulted 01/02/2013)

Straker, V, Campbell, G. and Smith, W. 2007, 'The charred plant macrofossils', in Gerrard, C. and Aston, M. *The Shapwick Project, Somerset. A Rural Landscape Explored*, The Society for Medieval Archaeology Monograph 25, Leeds, 869-889

Summers, J.R. 2012, 'The environmental samples', in Orzechowski, K. and Thompson, P. *Land at Sunnymeade, Whiteway Road, Burnham Market, Norfolk: An Archaeological Evaluation*, Archaeological Solutions Ltd Report 4124

Site code	Sample number	Context	Feature	Spot date	Volume (litres)	Cereals			Non-cereal taxa		Charcoal		Molluscs		Contaminants					Other remains
						Cereal grains	Cereal chaff	Notes	Seeds	Notes	Charcoal > 2mm	Notes	Molluscs	Notes	Roots	Molluscs	Modern seeds	Insects	Earthworm capsules	
AS1561	1	1018	1017	-	20	XX	-	Hord (2), FTW (4), Trit (1), NFI (6), Detached embryo (1)	XX	Large Fabaceae (1), <i>Vicia Lathyrus</i> sp. (1), Small Fabaceae (1), <i>Polygonum aviculare</i> (1), Polygonaceae (1), <i>Gallium aparine</i> (1), <i>Bromus hordeaceus</i> type (1), <i>Festuca</i> sp. (1), Large Poaceae (1), Medium Fabaceae (3)	X	-	-	-	X	-	X	-	-	Heather leaf (X), Fungal sclerotia (X), Indet carb organic (XX), Small mammal bone (X)
AS1561	2	1002	-	19th C	20	XX	X	HB (1), Hord (1), FTW (4), Trit (2), NFI (3), Culm (1)	X	Large Poaceae (1)	XX	-	-	X	-	X	-	-	Indet. carb organic (XXX)	
AS1561	3	1026	-	13th-15th C	20	XX	X	HB (2), Hord (1), FTW (16), Trit (6 + 1 tail), Oat (2), NFI (11), FTW rachis (1)	XX	<i>Vicia faba</i> (1), Large Fabaceae (1), Small Fabaceae (1), <i>Polygonum</i> sp. (1), Cyperaceae (1), Large Poaceae (1), Medium Poaceae (1)	X	-	-	X	-	X	-	-	Indet. carb organic (XX), Small mammal bone (X)	
AS1561	4	1066	1065	-	10	XX	X	HB (1), Hord (5), FTW (22 + 4 tail), Trit (5), Oat (4), NFI (19), FTW rachis (1)	XX	<i>Vicia faba</i> (1), Medium Fabaceae (1), Lamiaceae (2), cf. <i>Melampyrum pratense</i> (1), <i>Alopecurus</i> sp (1)	X	-	-	X	X	X	X	X	Indet. carb organic, Spheroidal hammerscale (X), Fish scale (X)	

AS1561	5	1046	1045	-	10	XX	X	Hord (1), FTW (3), NFI (8), FTW rachis (1)	X	Large Fabaceae (2), <i>Ranunculus acris/</i> <i>bulbosus</i> (1), <i>Rumex</i> sp. (1), <i>Vicia Lathyrus</i> sp. (1), Small Poaceae (1), Medium Poaceae (1)	X	-	X	<i>Pupilla</i> <i>muscorum</i>	X	X	XX	-	-	Indet. carb organic (XX), Fish bone (X), Small mammal bone (X)
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Table 2: Results from the assessment of bulk sample light fractions from Walsoken.

Abbreviations: HB = hulled barley (*Hordeum* sp.); Hord = barley (*Hordeum* sp.); FTW = free-threshing type wheat (*Triticum aestivum/ compactum*); Trit = wheat (*Triticum* sp.); Oat (*Avena* sp.); NFI = indeterminate cereal grains.

PHOTOGRAPHIC INDEX



1
General shot of Trench 1 looking south-east



2
General shot of Trench 1 looking north-west



3
Section 2 looking south-east

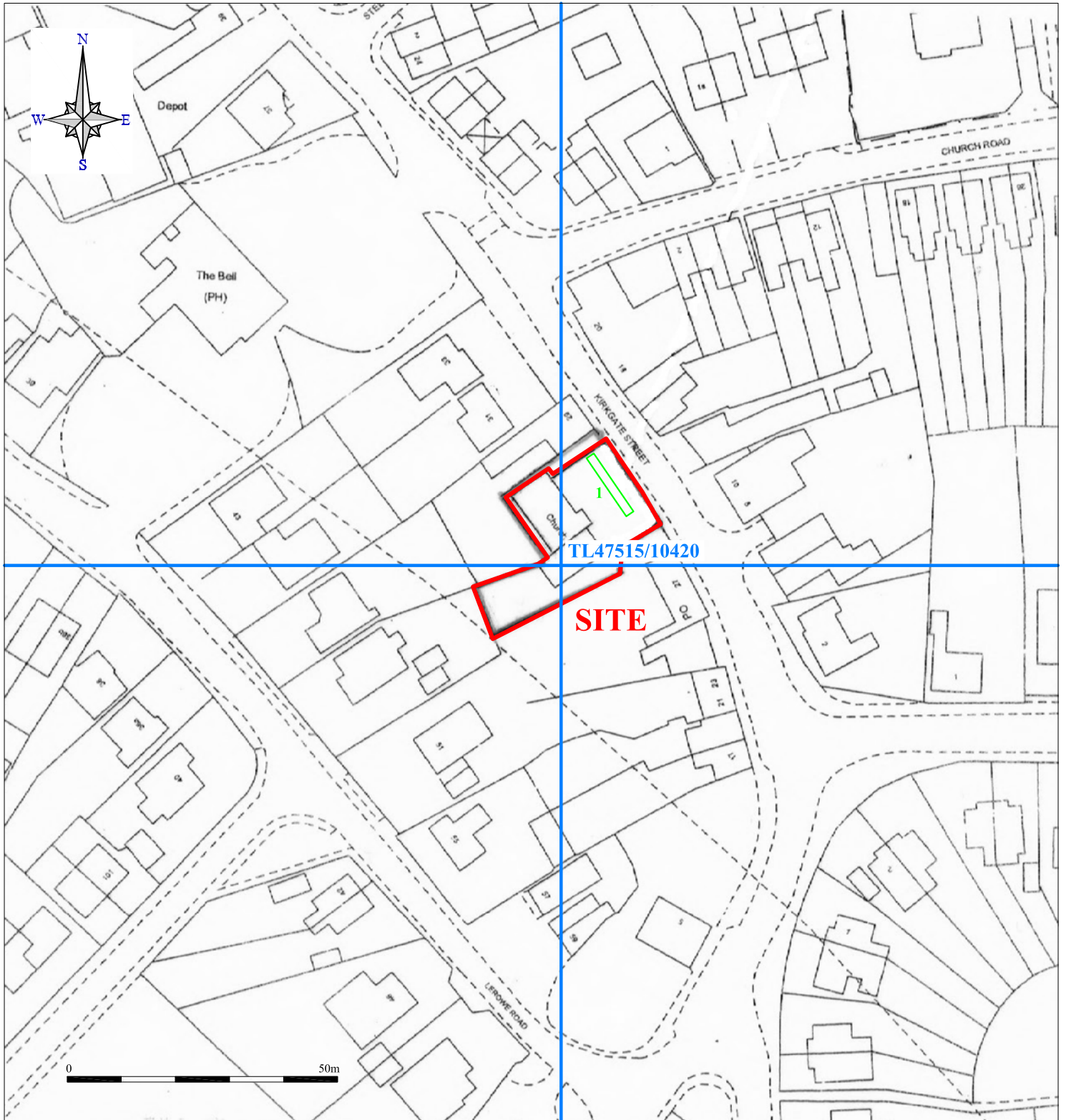


4
F1017 looking north



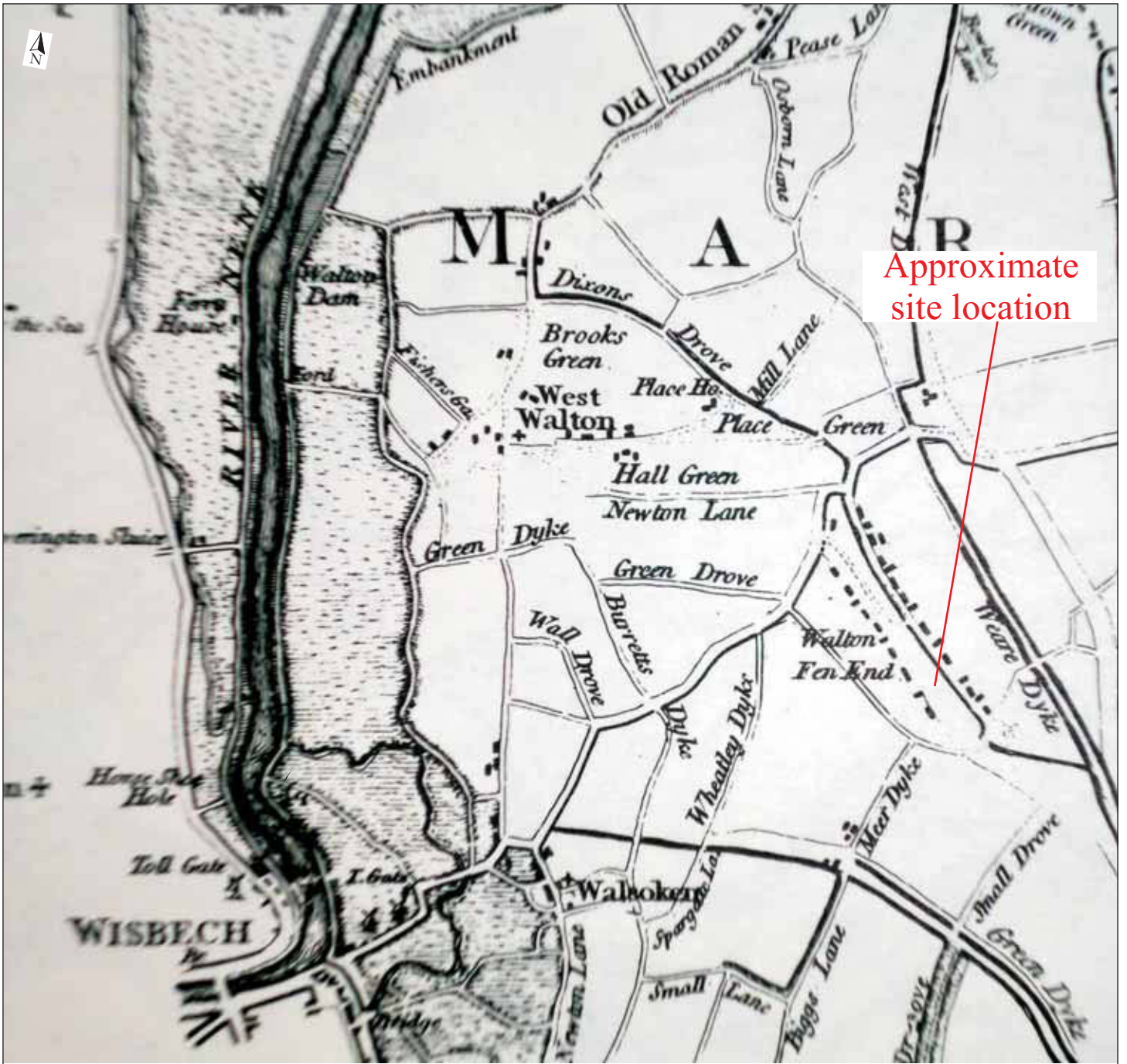
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Fig. 1 Site location plan
 Scale 1:25,000 at A4



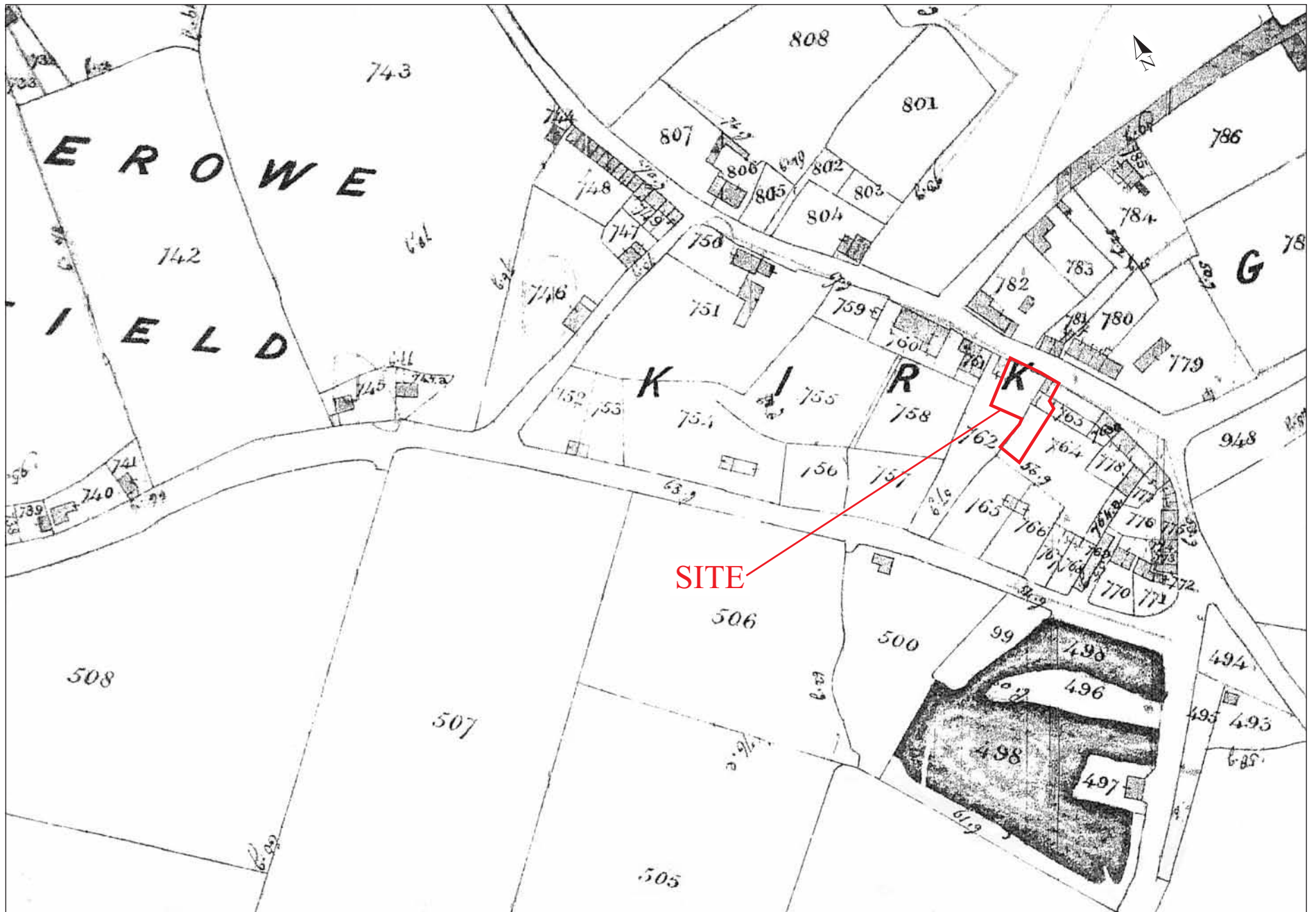
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Fig. 2 Detailed site location plan
 Scale 1:1000 at A4



Approximate site location

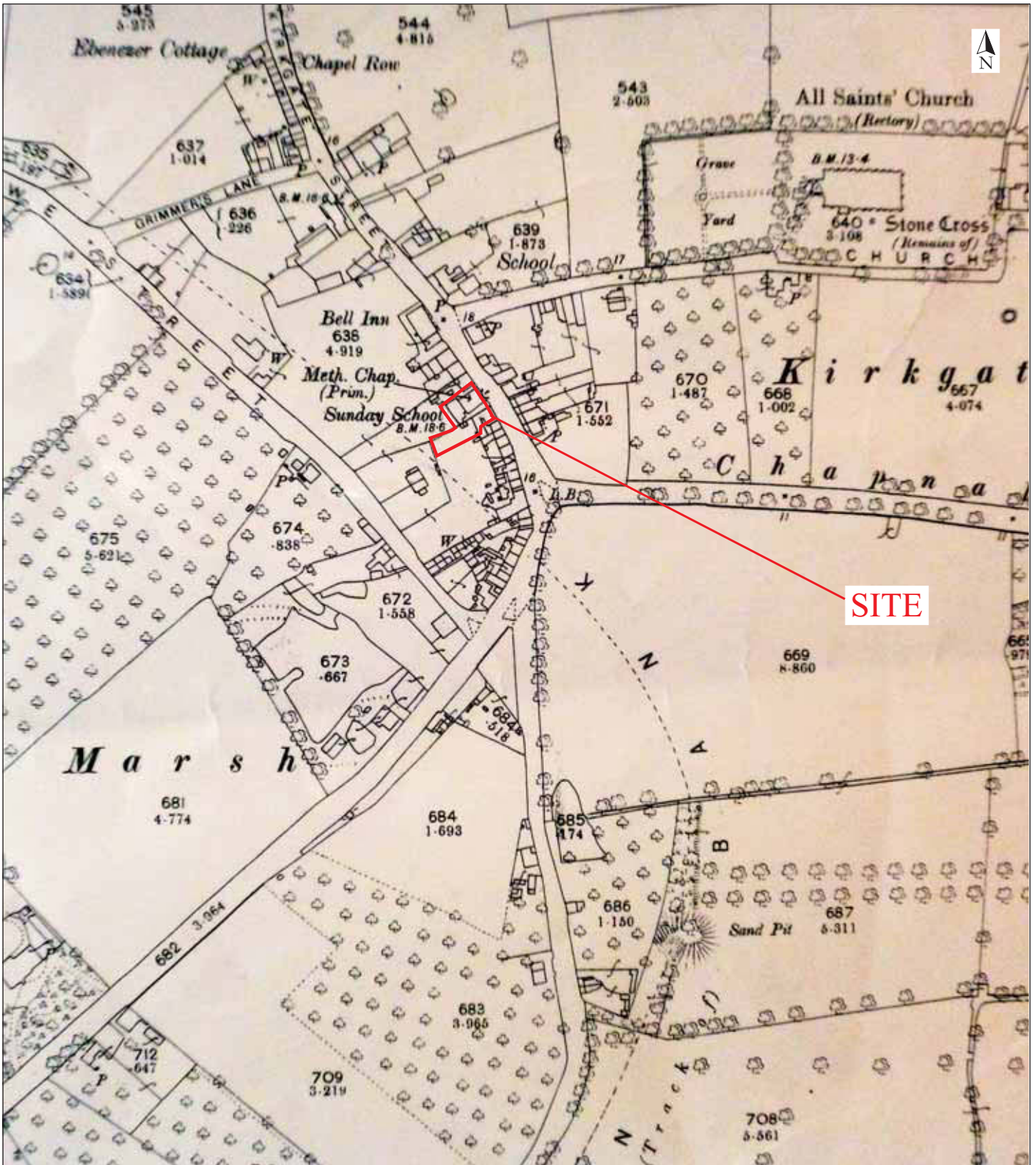
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Fig. 3 Faden's map, 1797
Not to scale



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Fig. 4 Tithe map, 1843

Not to scale



SITE

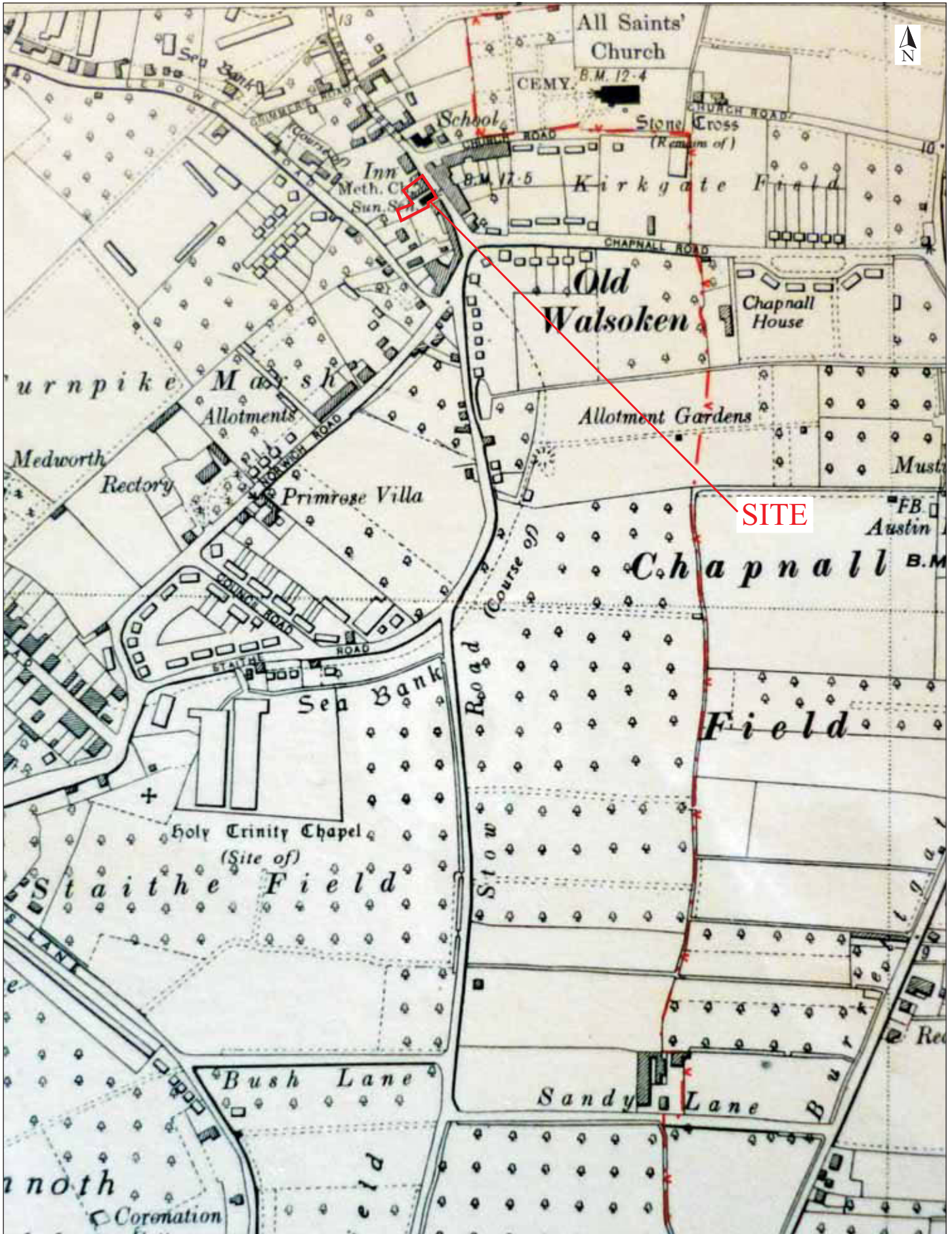
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Fig. 5 OS map, 1888
 Not to scale



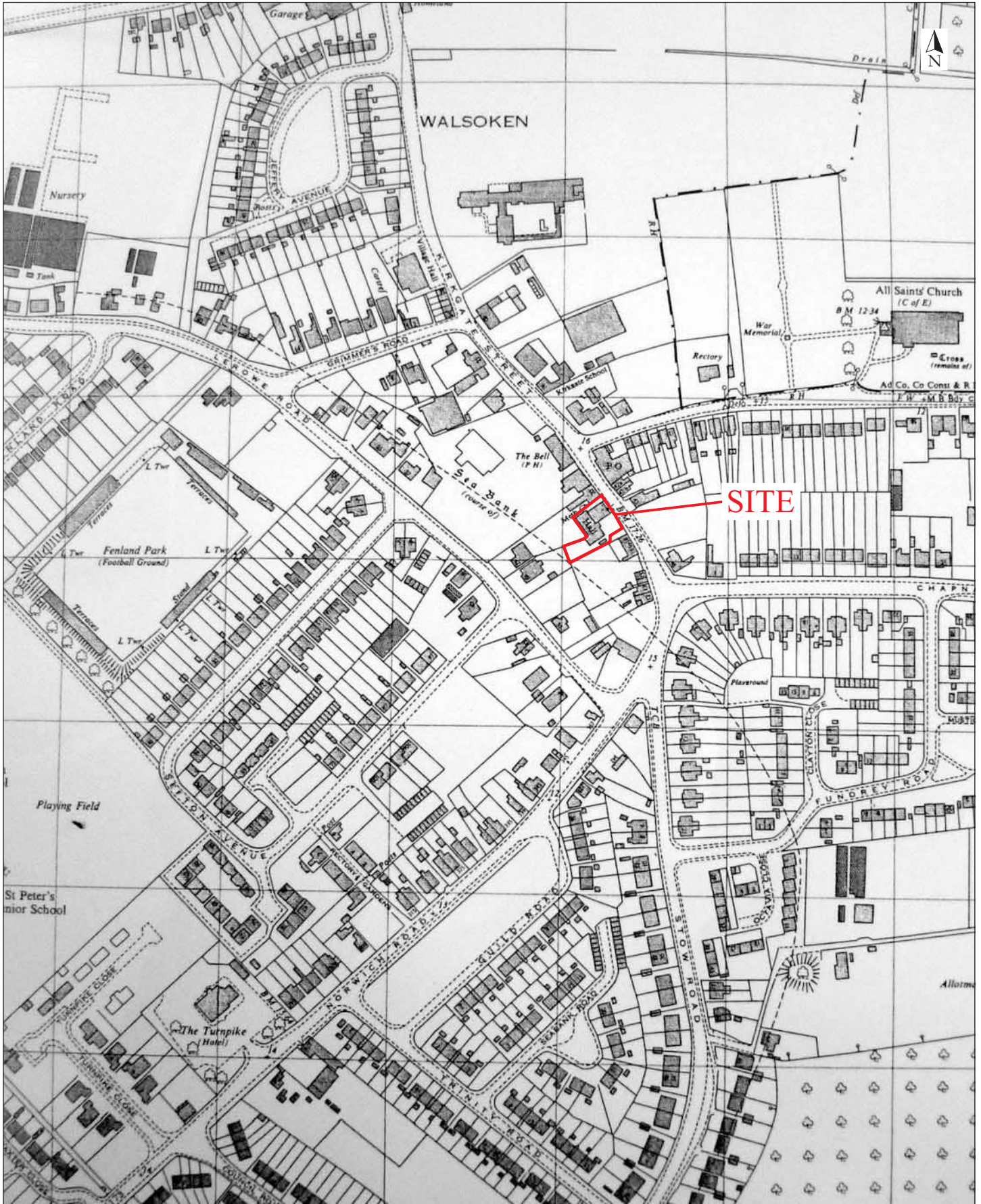
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 Fig. 6 OS map, 1927
 Not to scale



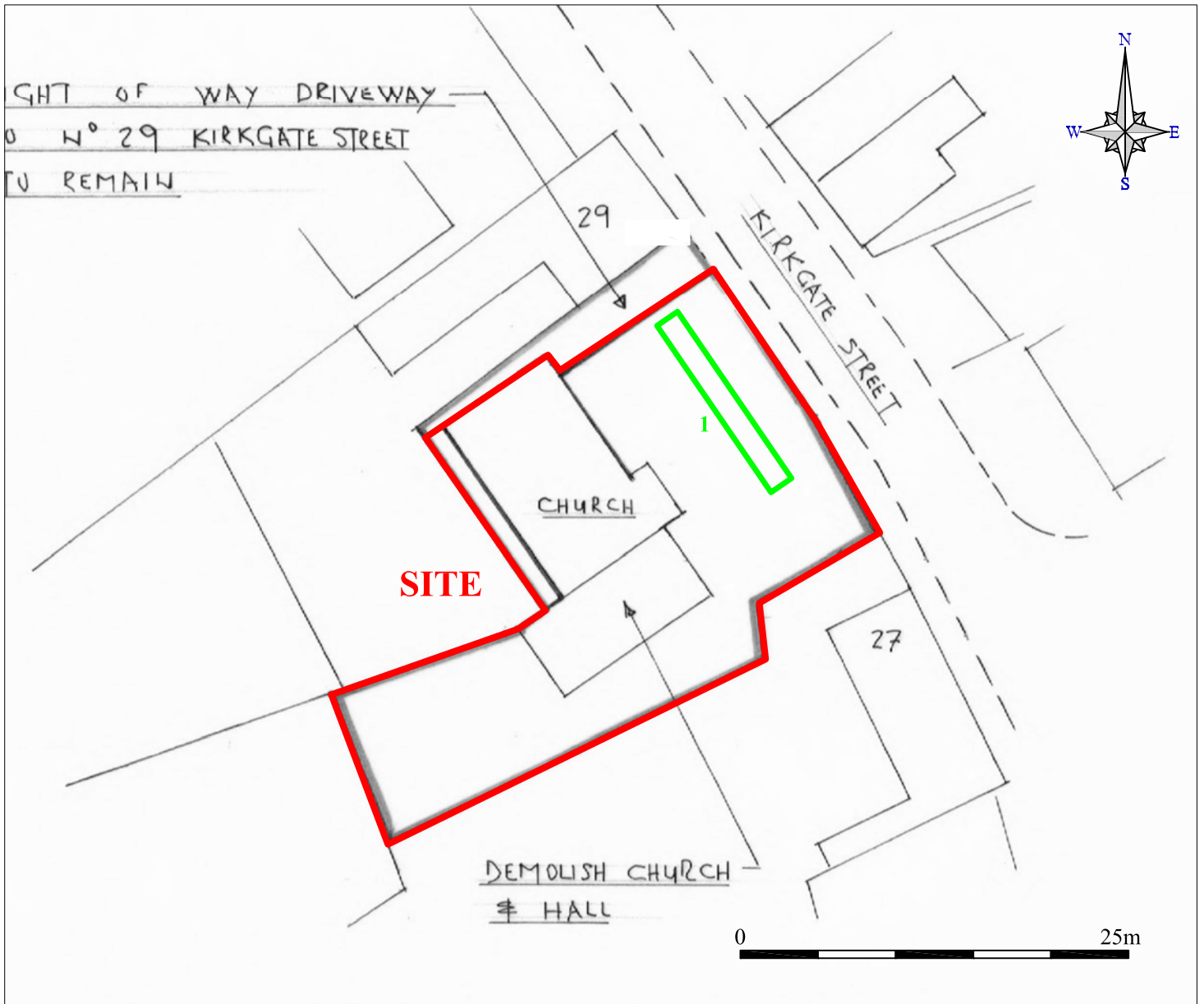
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 Fig. 7 OS map, 1953
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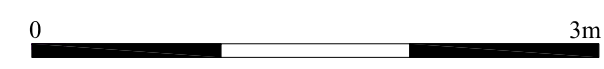
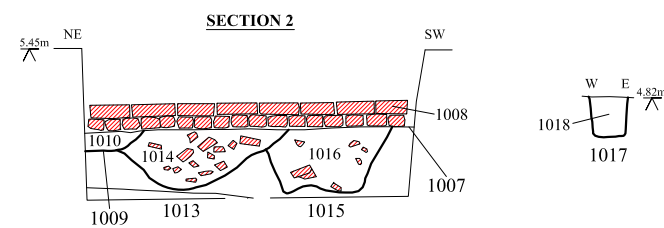
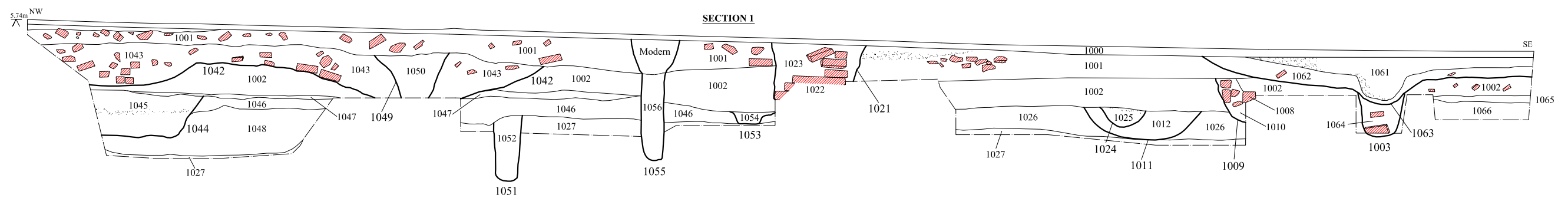
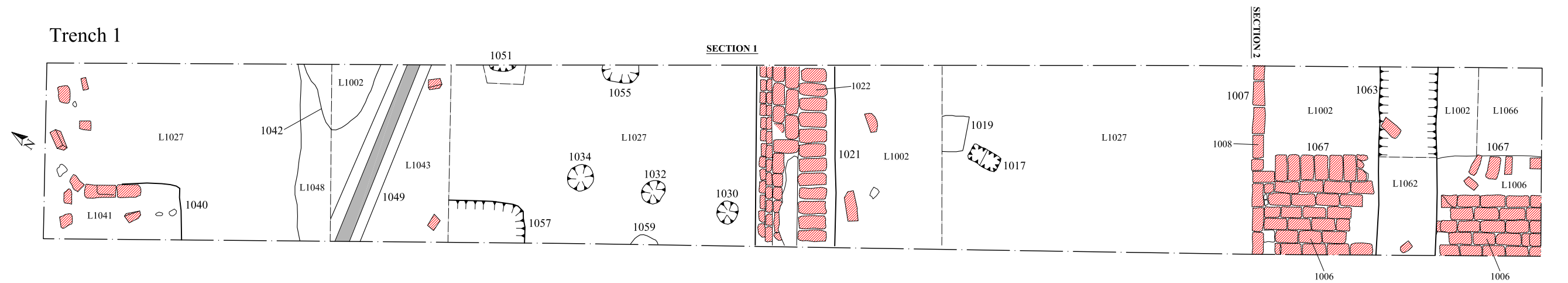


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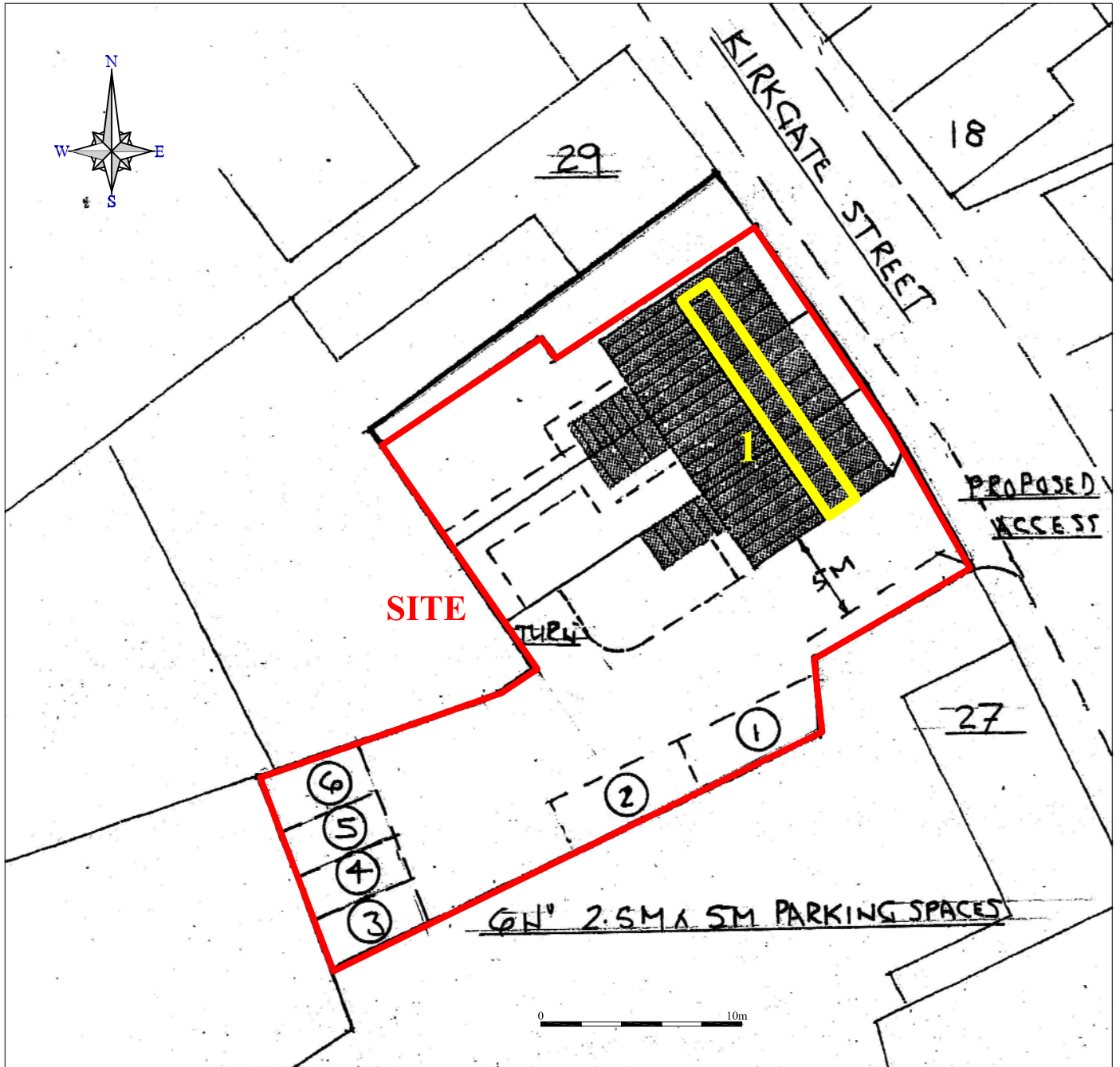
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Fig. 8 OS map, 1967
Not to scale



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Fig. 9 Trench location plan
Scale 1:400 at A4



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Fig. 10 Trench plan and sections
 Scale 1:40 at A3



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Fig. 11 Proposed development
 Scale 1:300 at A4