



LINDSEY ARCHAEOLOGICAL SERVICES

Swaton Sewerage Scheme

NGR: TF 1300 3700 - 1330 3822

Site Code: SVSS 03

LCNCC Museum Accn. No.: 2003.258

Archaeological Desk-Based Appraisal

**Report prepared for
Anglian Water Services Ltd**

**by
G. Tann**

LAS Report No. 688

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Contents

List of Figures and Plates

Summary	1
Introduction	1
Topography and Geology	2
Archaeological and Historical Background	2
Site Visit	5
Scheduled Ancient Monuments and Listed Buildings	5
Archaeological Potential of the Assessed Scheme	5
Potential Archaeological Impact of the Proposed Scheme	6
Conclusion	6
Acknowledgements	7
References and Background Sources	7
Archive Summary	7

Appendix 1: Archaeological Sites and Findspots close to the Sewerage Scheme

(sources: Lincolnshire Sites and Monuments Record; North Kesteven records held by Heritage Trust for Lincolnshire)

The Figures

The Plates

List of Figures and Plates

Figures

- Fig. 1** Location of Swaton (c based on the 1987 1:25,000 Ordnance Survey map, Explorer Sheet 836. © Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. AL 100002165).
- Fig. 2** The Pipeline route and sites of the proposed new treatment works and pumping stations (based on a reduced scale copy of WS Atkins dwg. no. AK2998/SK/141. © Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. AL 10002165).
- Fig. 3** Previously reported archaeological sites and findspots from the Swaton vicinity (Source: Lincolnshire County Sites and Monuments Record, and Heritage Trust for Lincolnshire. Based on the 1985 1:10,000 Ordnance Survey map, Sheet TF 13 NW. © Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. AL 10002165).

- Fig. 4** Extract from the 1906 Ordnance Survey 1: 10,560 map, Sheet Lincs. 116 SW.

Plates

- Pl. 1** Air photograph, showing cropmarks of archaeological occupation features on the proposed site of the sewage treatment works, west of Swaton Road. (© J. Pickering, reproduced with permission. TF 1337-2 SF 1516-36).
- Pl. 2** The proposed site of the sewage treatment works, looking SW from Swaton Road.
- Pl. 3** Proposed site of the Pumping Station No. 2, looking south towards West Street.
- Pl. 4** The proposed site of Pumping Station No. 1 is at the northern edge of Swaton village; the site is behind the tall hedge (right). Looking south along Swaton Road.

Swaton Sewerage Scheme Archaeological Desk-Based Appraisal

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Summary

The proposed village sewerage scheme is anticipated to affect archaeological remains at two locations, and further investigation may be necessary before these sites are developed. The open-cut trench has the potential to reveal new areas of archaeological interest, but ground conditions are seldom favourable for identifying features during machine trenching; an infrequent inspection of the trench face may be useful. Groundworks on the site of the proposed new treatment works and pumping stations will provide the best opportunity for recognising and recording archaeological features, and a watching brief may be appropriate during topsoil stripping and trench excavation.

Introduction

Lindsey Archaeological Services (LAS) was commissioned in July 2003 by Anglian Water Services Ltd to prepare an archaeological desk-based appraisal of a proposed sewerage scheme for Swaton, Lincs. (Figs. 1 and 2).

The purpose of the desk-based assessment is to identify the archaeological potential of the proposed route by collating available existing information, and to recommend any necessary mitigation.

The Proposed Route

The replacement sewer will be located below existing roads around the village of Swaton, and will be installed using open trenching methods. A new sewage treatment works is planned for the eastern edge of an arable field west of Swaton Road. Two pumping stations are anticipated. No. 1 will be sited at the SE corner of the former playing field, north of North End Farm and at the edge of the village. Pumping Station No. 2 is to be sited on an open field west of Swaton Road in the core of the village.

Planning Background

The archaeological desk-based assessment was requested by Anglian Water Services for internal consideration. Most of the works for the proposed scheme are not subject to planning processes, but planning applications will be submitted for construction of the three areas of structures.

Methods and Sources

A desk-based appraisal of the proposed sites of the new sewage treatment works and two pumping stations, and the pipeline route, was undertaken in order to identify and assess all archaeological constraints. Research was conducted by G. Tann between July 16th and August 20th 2003. The following sources were consulted and available information researched:

- Lincolnshire County Council County Archaeology Office (Sites and Monuments Record, National Mapping Programme overlay of cropmarks, parish files, previous reports)
- North and South Kesteven Heritage Officers' parish files, Heckington (additional Sites and Monuments data, National Mapping Programme overlay of cropmarks, parish files, previous reports)
- Lincolnshire Archives Office (Manuscript maps, Ordnance Survey maps, other documentary and published sources)
- Lincoln Central Library Reference Department, Local Studies Collection (published sources, Ordnance Survey maps)

Topography and Geology

Swaton is immediately west of the edge of the Lincolnshire fenland, with land reclaimed from the Wash to the east. Virtually all of the proposed pipeline route is on soils classified as 711 Beccles 3 Association, typical stagnogley soils (Soil Survey 1983). Land levels vary between about 5m and 8m OD.

A watercourse, the Swaton Eau, flows NW-SE through the village. In 1808 it ran through the centre of the road south of the junction of Swaton Road and West Street.

Archaeological and Historical Background (Fig. 3)

Previously recorded sites and findspots are listed in the Lincolnshire Sites and Monuments Record. These have been allocated Primary Record Numbers (PRNs) and these are used in the text.

Prehistoric and Roman

Although the fenland was not inundated throughout the prehistoric period, the higher land along its western end would have been particularly prominent, and may have been favoured for occupation and funerary sites. The earliest reported artefacts from the vicinity of the Swaton sewerage scheme are Neolithic worked flint implements. A leaf-shaped arrowhead (SMR 32837) and a flint scraper (SMR 60009) have been found to the SE of the village. Further Neolithic flints (SMR 34897) were found in topsoil to the south of the A52 Grantham Road in 1994, in advance of road widening. This area appears to have been a focus for prehistoric activity, with at least one low mound feature interpreted as a Bronze Age burial mound (SMR 60001) (probably a round-barrow), sited beside the Swaton-Horbling Road/A52 crossroads. This

was recorded as visible in 1957, but had been levelled by ploughing before 1967. An air photograph shows small circular features slightly to the NE of this, beside the proposed sewage treatment works site, but these could be later hut circles rather than ditches around burial mounds. Further air photographs record linear arrangements of small pits and other features (NK 61.22) to the west and NW.

Several other sites close to the Swaton sewerage scheme are undated, but suspected to be of Iron Age or Roman date. The A52 Grantham Road is thought to follow the line of a prehistoric or Roman 'Salt Way' (Margary ref. 58b), serving the contemporary flourishing salt-making industry at the eastern edge of the fens (Margary 1973, 223). The road serves as the parish boundary between Horbling and Swaton, which reflects the significant post-Roman landscape feature of the road.

Air photographs indicate an extensive spread of occupation cropmark features (NK 61.22) such as ditches and pits, in the fields between the A52 and West Street. Two 'pit alignments', formed by a row of regularly spaced backfilled pits or post-holes (NK 61.22), are recognisable, including one which is parallel to the present Swaton Road, to the SW of the proposed Sewage Treatment Works site. It is unclear whether these features represent boundaries or had a ritual purpose. The densest identified cropmarks of this cluster are NW of the intended development, but their apparent absence closer to Swaton Road may be the result of masking by later alluvium cover associated with Swaton Eau. Cropmark features are recorded slightly further south, in the immediate vicinity of the proposed treatment works site (Pl. 1). This site probably extends northwards as least as far north as the present village centre. Metal-detecting searches and fieldwalking of farmland west of the church have produced small quantities of Roman pottery and metalwork (SMR 60931).

The Car Dyke, the extensive linear ditch and bank earthwork along the western edge of the fenland, passes 1km to the east of Swaton. Parts of this feature may have been used for local transportation of bulk materials during the Roman period. To the SE of the village, its alignment changes, parallel to the NE-SW direction of the pit alignment close to Swaton Road. This presumably reflects the Roman natural topography at the edge of the higher ground, and probably also the direction of minor natural watercourses.

Saxon and Medieval

Swaton had been settled by the date of the *Domesday Survey* of 1086. The settlement derives its name from *Suavintone*, *Suauitone*, *Suavetone*. The constituent elements are interpreted as indicating *Svafi's* farmstead or village, after an Old Norse personal name. A Norman document mentions *Radulfus filius Swaue de Suauetona*, apparently alluding to a later generation of the founding family. Cameron suggested that an Anglo-Saxon settlement had been partially renamed by a later Danish group (Cameron 1998, 121). The parish was within Avetone

wapentake (administrative area), as does Horbling to the south; it is surprising that the Salters' Way A52 was not the division between wapentakes.

There is an unprovenanced report of skeletons (NK 61.19) found in Swaton parish, which might hint at a Saxon cemetery. Saxon metalwork, including brooches (SMR 60932), has been reported from the field west of Swaton Church. A possible Saxon sherd (SMR 34898) was found redeposited in a later pit south of the A52, and a brooch fragment (SMR 32850) was found to the SW in Horbling parish. Although the fabric of the parish church contains Norman and later fabric, it probably stands within the core of the earlier settlement.

Medieval pottery (SMR 62846) was found during a watching brief at Church View, and metal finds have been reported from adjacent farmland (SMR 60933). A moated site (SMR 60002) off West Street, on the western edge of the village, probably represents one of the five manorial centres in Swaton. The settlement close to that moated site may be an associated hamlet (NK 61.8), since connected by further development with the main community.

An artificial ditch, running from 'the causeway of Holland' to Swaton and then Folkingham, is recorded in the *Curia Regis Rolls* of 1240 as having been made some time previously (Roffe 1980). The ditch provided a means for 'ships' bringing merchandise, and seems to have been a canal. The course of this feature is not obvious on maps, but might be that of the Swaton Eau, which diverges east of Swaton Road to run beside the A52. The curving alignment of Swaton Road and the earlier parallel pit alignment south of the village presumably reflect natural topography and probably a natural watercourse. Opposite the proposed Sewage Treatment Works site, the Eau abruptly leaves this course, in an embanked channel.

Post-Medieval

Archaeological investigations at the A52/Horbling Road junction have identified several backfilled quarry pits (SMR 34899) to the south of the A52, and others have been noted to the north of that road. Their backfill contained post-medieval pottery sherds, and waterlogged wood, as well as a single sherd of Roman or Saxon pottery (Jarvis 1994). It has been suggested that they were excavated for road-building material in the post-medieval period, but the date of excavation is uncertain and could be considerably earlier.

A disenchanted Scots regiment was attacked by Crown forces at Swaton in March 1689, resulting in minor loss of life. Most of the action took place at Swaton Common, NW of the village (Garner 1982).

The earliest available map of Swaton to show the area affected by the sewerage scheme is the Enclosure Plan of 1808 (LAO Swaton Parish Meeting). It shows the stream flowing along West Street, crossing Swaton Road, and following its present course to the east of the road. The only

indication of previous development affected by the current scheme is at the northern edge of the village, where a small building stood on the western verge of Swaton Road in 1903 (Fig. 4; OS 1906). This may be disturbed by works for Pumping Station No. 1. The building had been removed by 1983, and another shed built further north beside the Playing Field (OS 1985).

Site Visit

A site visit was made on July 16th 2003 to determine current land use of the proposed new treatment works site and the two proposed pumping station locations. It was not possible to arrange access permission for this visit, and the appraisal was undertaken from roadside verges. The field assigned for the sewage treatment works was under an arable crop. The site of Pumping Station No. 2, opposite the parish church, was partly under vegetation, although bare soil was visible (Pl. 3). Only late nineteenth/ twentieth century artefacts were seen on the surface. The site of Pumping Station No. 1 is behind tall hedges and could not be viewed from the road (Pl. 4).

Scheduled Ancient Monuments and Listed Buildings

The re sewerage scheme should have no impact on scheduled monuments. The proposed site of Pumping Station No. 2 is about 75m SW of the Listed Grade I St Michael's Church, at the centre of the village. It may affect the setting of that building.

Hedgerows

Hedgerows alongside Swaton Road are affected by the proposed scheme. These are in the positions of field boundaries marked on the 1808 Swaton Enclosure Map (LAO Swaton Par Mtg).

Archaeological Potential of the Assessed Scheme

It is evident that Swaton occupies a site which has been occupied since the prehistoric period, exploiting the varied resources of a fen-edge location. The known extent of the prehistoric and Roman settlement reflects areas of past fieldwork, air photography and recent metal detecting, and necessarily excludes most of the village core. The actual extent of early occupation probably extends through the village, following the course of natural watercourses, soil distinctions and favourable topographical position.

The most obvious area of archaeological potential is around the proposed site of the Sewage Treatment Works. One air photograph illustrates small circular ditched features close to the proposed site; numerous others show a great density of features to the NW, abruptly ending away from Swaton Road. It is likely that the eastern edge of the prehistoric and/or Roman occupation site has been buried below subsequent alluvium from flooding of watercourses. This report suggests that Swaton Eau has been canalised since the medieval period past the proposed Sewage Treatment Works, and that the road follows the sinuous line of a natural

watercourse. This would explain alluvium deposition close to Swaton Road at this end of the village.

Assuming the cropmark occupation site to extend as far east as Swaton Road, the proposed Treatment Works site could affect well-preserved features of buildings and field systems. The close proximity of a recorded Bronze Age barrow raises the possibility of further ploughed-out burial mounds and later burial sites. Relocating the Sewage Treatment Works to the eastern side of Swaton Road, probably east of the natural watercourse superseded by Swaton Eau, might reduce the archaeological potential, although some cropmark features are recorded east of the village.

The proposed site of Pumping Station No. 2 is also likely to encounter archaeological features forming part of the same occupation complex, although in this location there is the potential (and evidence for) Saxon and medieval activity. This close to the church site, in the core of the village, traces of the early phases of Swaton could be present unless already removed by plough action. Any location near to Pumping Station No. 2 is likely to encounter archaeological remains, and there seems nothing to be gained from seeking a different site.

The new sewer will disturb deposits below the road and roadside verge throughout the village, but it is unlikely that significant remains can be identified in these conditions. The site of Pumping Station No. 1 will require topsoil clearance of a broader area, and despite no recorded archaeological remains from that vicinity, it is anticipated that foundations of a late post-medieval or twentieth century building will be exposed. Earlier artefacts might also be found. Confirming the presence or absence of early remains in this part of the village would help determine the extent of the site known to the south.

Potential Archaeological Impact of the Proposed Scheme

Construction of the new treatment works and pumping stations is anticipated to involve temporary topsoil stripping of part of the affected fields, as well as limited groundworks, with building foundations and service supply trenches, in addition to pipe trenches and an access road. The combined effect of these activities will be the removal of any archaeological remains on the affected part of the fields.

The trench for the new pipelines will remove any archaeological remains along its course, but this will be restricted to a narrow corridor. Connection of the new sewer to individual properties may affect further small pieces of the verges and possibly land beside houses.

Conclusion

This scheme will affect known archaeological sites in the centre and to the SW of the village. In advance of any contractors' groundworks, the extent and nature of affected archaeological

features will need to be determined. As each of these locations requires planning permission for structures, provision for archaeological investigation and recording can be agreed with the planning authority. The site of Pumping Station No. 1 is not known to affect any significant archaeological site, but no fieldwork has been undertaken in this area.

Although significant archaeological remains are likely to be present elsewhere in the village, the limited nature of the groundworks means that observation at other locations may be less useful.

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The illustrations were prepared by Karen Dennis. The report was collated and produced by Naomi Field.

Geoff Tann
Lindsey Archaeological Services
29th August 2003

References and Background Sources

- Cameron, K. 1998 *A Dictionary of Lincolnshire Place-Names*. English Place-Name Society Popular Series 1.
- Cope-Faulkner 2003 *Archaeological Watching Brief at Church View, Swaton, Lincs.*. Archaeological Project Services Report No. 104/03, June 2003.
- Foster, C.W. and Longley, T. 1976 *Lincolnshire Domesday and the Lindsey Survey*. Lincoln Record Society 19 (1924), reprinted 1976.
- Garner, A.A. 1982 "The Swaton Skirmish" in *Lincolnshire Life* 21, pt. 12, March 1982.
- Hallam, H.E. 1965 *Settlement and Society: A study of the early agrarian history of South Lincolnshire*.
- Jarvis, M. 1994 *Evaluation Excavation on land next to Swaton Crossroads, Horbling, Lincs.* Archaeological Project Services.
- JSAC 1997 *Land at East View Cottage, Main Road, Swaton: An Archaeological Watching Brief*. John Samuels Archaeological Consultants Report No. 268/97/02, August 1997.
- LAO Swaton Parish Meeting *Swaton Enclosure Award and Plan, 1808*. Lincolnshire Archives.
- Margary, I.D. 1973 *Roman Roads in Britain*.

OS 1906 Ordnance Survey 1: 10,560 map, Sheet Lincs. 116 SW. Revised 1903.

OS 1948 Ordnance Survey 1: 10,560 map, Sheet Lincs. 116 SW. Revised 1903 and 1947.

OS 1985 Ordnance Survey 1:10,000 map, Sheet TF 13 NW.

OS 1987 Ordnance Survey 1:25,000 map, Explorer Sheet 836.

Roffe, D. 1980 Typescript copy transcript of *Curia Regis* Rolls XVI (1240), July 1980. Heritage Trust for Lincolnshire office, Swaton parish folder.

Soil Survey 1983 *Soils of Eastern England: Sheet 4*. Soil Survey of Great Britain.

Trollope, E. 1872 *Sleaford and the wapentakes of Flaxwell and Aswardhurn*.

Air Photographs

TF 1237/8 1785-11

TF 1237/7 1718-27

TF 1336/7 1412-9

TF 1237/16 3025-11

TF 1237/13 2573-6

TF 1237/14 2573-7

TF 1237/5 1717-27 22/7/1979

TF 1236/2 1513-8 27/7/1977

TF 1236/5 1513-11 27/7/1977

HSL UK 71 155 R13 2149 30/7/1971

Archive Summary

Correspondence

Developer's plans

Photographs: colour prints, LAS film no. 03/80/1-6

APPENDIX 1

APPENDIX 1

Archaeological Sites and Findspots close to the Sewerage Scheme

(sources: Lincolnshire Sites and Monuments Record;
North Kesteven records held by Heritage Trust for Lincolnshire)

SMR PRN No.	HTL code	NGR (all TF)	Description	Status
32837		136 366	Neolithic flint arrowhead found	
32849		125 367	Roman harness bell	
32850		125 367	Saxon brooch fragment	
33291		136 366	Medieval pottery scatter	
33292		136 366	Post-medieval pottery scatter	
34897	nk61.25	1290 3670	Neolithic flints from archaeological excavation, 1994	
34898	nk61.25	1290 3670	Single sherd Roman or Saxon pottery, with animal bones, in pit backfill	
34899		1290 3670	Post-medieval quarry pits, backfilled	
60001	nk61.11, nk61.15	1293 3690	site of ?Bronze Age round barrow, removed by ploughing 1957-1967; cropmarks	
60002	nk61.9	1282 3745	?medieval moated site	
60009	nk61.16	138 367	flint scraper	
60931	nk61.24	1315 3755	Roman coins, brooches and other artefacts, found from metal detecting	
60932	nk61.24	1315 3755	Saxon brooches and other artefacts, found from metal detecting	
60933	nk61.24	1315 3755	Medieval metal finds, found from metal detecting	
60934	nk61.24	1315 3755	Post-medieval finds	
62270	nk61.18	1329 3752	St Michael's Church, Norman and later fabric	LBI
62845		132 375	3 undated pits, identified during watching brief	
62846		132 375	13th-14thC pottery from watching brief	
62847		132 375	Post-medieval sand quarry	
	nk61.13	129 378	ring ditch cropmarks	
	nk61.17	137 389	trackway cropmarks	
	nk61.19	unlocated	skeletons	
	nk61.20	134 389	road	
	nk61.21	136 373	enclosure cropmarks	
	nk61.22	127 371	enclosures and ditches cropmarks	
	nk61.23	132 376	cropmarks	
	nk61.8	127 375	West Street ?deserted medieval hamlet	

THE FIGURES

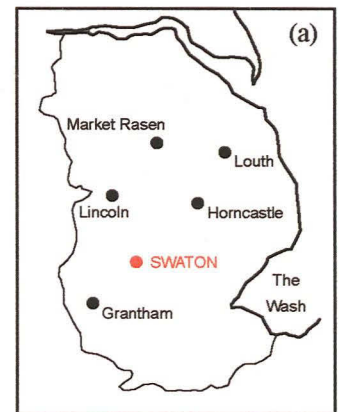
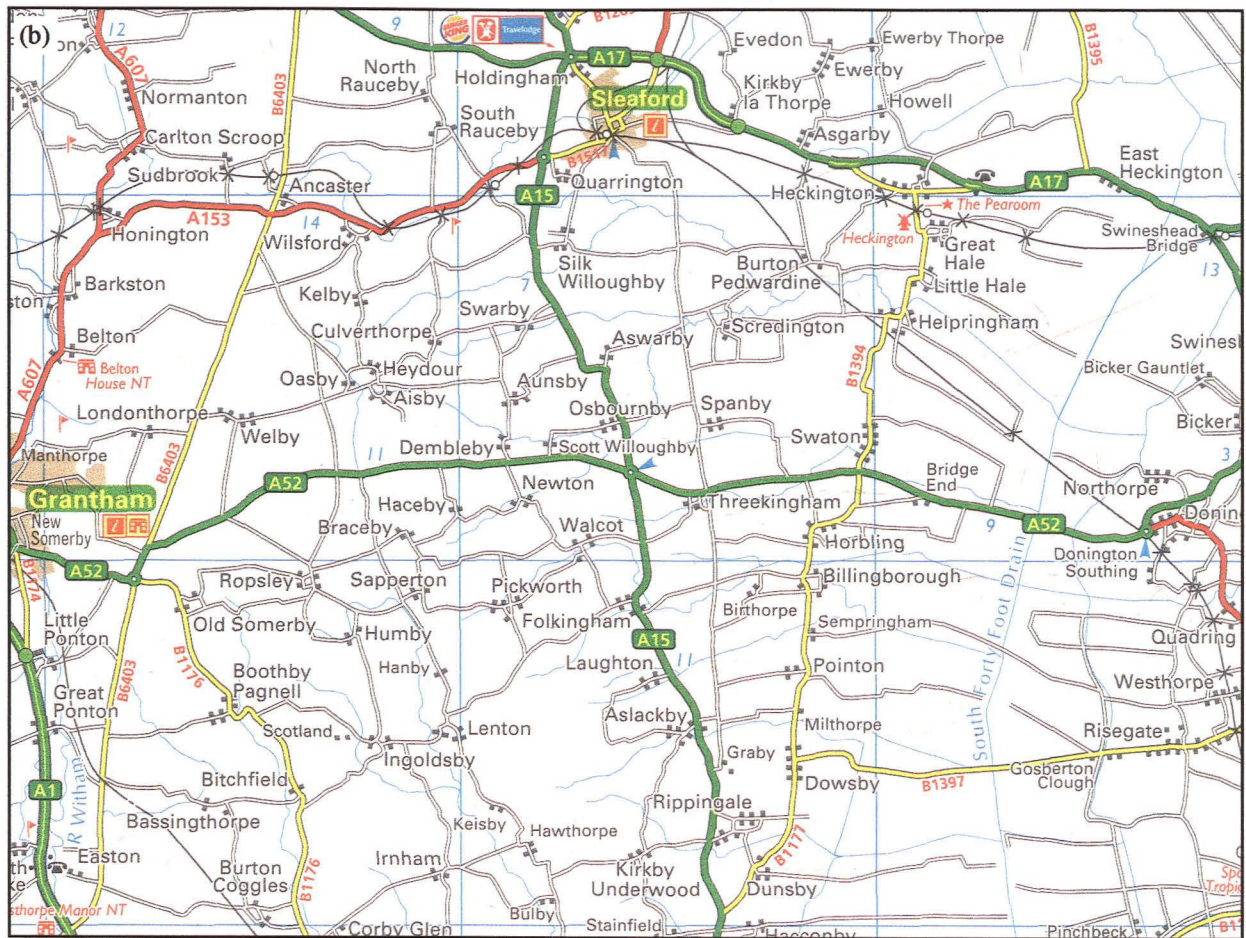


Fig. 1 Location of Swaton (c based on the 1987 1:25,000 Ordnance Survey map, Explorer Sheet 836. © Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. 100002165).

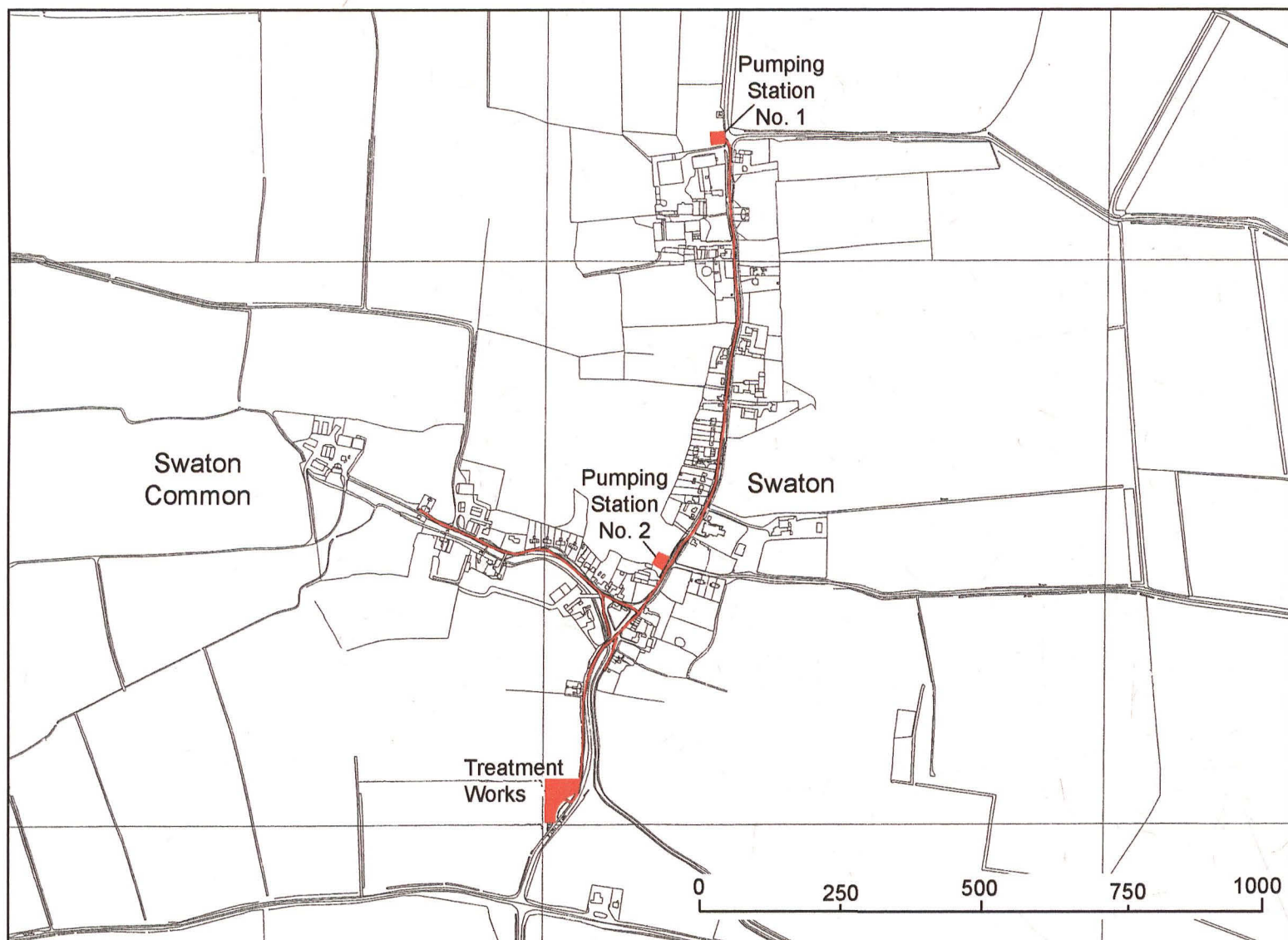


Fig. 2 The Pipeline route and sites of the proposed new treatment works and pumping stations (based on a reduced scale copy of WS Atkins dwg. no. AK2998/SK/141. © Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. AL 100002165).



Fig. 3 Previously reported archaeological sites and findspots from the Swaton vicinity (Source: Lincolnshire County Sites and Monuments Record, and Heritage Trust for Lincolnshire. Based on the 1985 1:10,000 Ordnance Survey map, Sheet TF 13 NW. © Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. AL 100002165).



Fig. 4 Extract from the 1906 Ordnance Survey 1:10,560 map, Sheet Lincs. 116 SW.

THE PLATES



Pl. 1 Air photograph, showing cropmarks of archaeological occupation features on the proposed site of the sewage treatment works, west of Swaton Road. (© J. Pickering, reproduced with permission. TF 1337-2 SF 1516-36).



Pl. 2 The proposed site of the sewage treatment works, looking SW from Swaton Road.



Pl. 3 Proposed site of Pumping Station No. 2, looking south towards West Street



Pl. 4 The proposed site of Pumping Station No. 1 is at the northern edge of Swaton village; the site is behind the tall hedge (right). Looking south along Swaton Road.