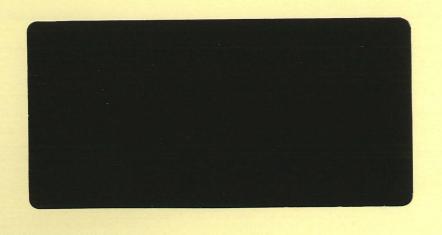
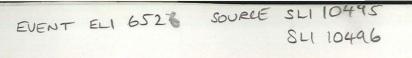
ARCHAELOGICAL
DESK-BASED ASSESSMENT
MARKET DEEPING TOWNGATE TO
DEEPING ST. JAMES
RISING MAIN REPLACEMENT
LINCHFIELD ROAD TO SPALDING ROAD
SECTION



A P S
ARCHAEOLOGICAL
PROJECT
SERVICES



as brown ledged so coupt 6/2/09



PRN 36711 Medieval to post medieval

Conservation Services

0 8 JAN 2006

Highways & Planning Directorate

ARCHAELOGICAL
DESK-BASED ASSESSMENT
MARKET DEEPING TOWNGATE TO
DEEPING ST. JAMES
RISING MAIN REPLACEMENT
LINCHFIELD ROAD TO SPALDING ROAD
SECTION

Work Undertaken For Anglain Water Services Ltd

Report Compiled by Mark Allen BSc (Hons) AIFA

December 2005

National Grid Reference: TF 14865 11362 - TF 15660 10204

A.P.S. Report No: 188/05



# Quality Control Market Deeping Towngate Rising Main Replacement

Project Coordinator	Dale Trimble	
Research	Mark Allen	
Illustration	Mark Allen	
Photographic Reproduction	Mark Allen	
Report Compilation	Mark Allen	

Checked by Project Manager		Approved by Senior Archaeologist		
4	Dale Trimble		1/	Tom Lane
Date: 04/01/06	3	Date:	04-01-0	Će .

## CONTENTS

T	0	T7.	
List	ot	H10	nires
LIBE	OI	1 15	Surer

T	. ,	CD	1 . 7
	1CT	of P	DATE
1	/IOL	OII	lates

1.	Summary	1
2.	Introduction  2.1 Definition of a desk-based assessment  2.2 Planning Background  2.3 Site Location  2.4 Soils and Geology	1 1 1
3.	Aims	2
4.	Methods	2
5.	Results	3 3 3
6.	Constraints	8
7.	Assessment of Significance	9
8.	Assessment of Impact	10
9.	Overview	10
10.	Conclusions	11
11.	Acknowledgements	11
12.	Bibliography	11
13.	Abbreviations	12
Appe	endices	
1.	Extract from Criteria for the scheduling of ancient monuments	
2.	Glossary	
3.	List of Sources Consulted	

#### List of Figures

- Figure 1 General location plan
- Figure 2 The assessment area showing the pipeline route
- Figure 3 Extract from 'Sketch of an estate belonging to Mr Rob' Johnson Cave in the Parish of Deeping Saint James in the County of Lincoln', 1808
- Figure 4 Extract from 'Plan of the Parish of Deeping St James in the County of Lincoln. New Inclosure Map', 1815
- Figure 5 Extract from the Ordnance Survey 1st edition 6" map, 1890

#### List of Plates

- Plate 1 View of Linchfield Road from point that pipe route enters Field 1. Looking northnorthwest
- Plate 2 View along pipeline in Field 1. Taken from point that route enters field from Linchfield Road. Looking southeast
- Plate 3 Route of pipeline in Field 2, taken from east edge of field. Looking west-southwest

#### 1. SUMMARY

A desk-based assessment was undertaken to determine the archaeological implications of a proposed pipeline route between Linchfield Road, Market Deeping and Spalding Road, Deeping St James in Lincolnshire.

Within the study area are records of the chance recovery of prehistoric artefacts, including a cremation urn that may indicate funerary activity in the area in the Middle Bronze Age.

The route crosses a complex of cropmark enclosures and field boundaries associated with a road or trackway of probable Roman date. The recovery of possible Iron Age pottery from the area may indicate earlier origins.

Medieval and post/medieval pottery known from the fields through which the pipeline runs is likely to represent manuring practices rather than evidence of settlement.

Cartographic sources indicate the route was generally open ground from the 19<sup>th</sup> century to the present day, with the current road system in place for at least the previous 200 years.

The pipeline route runs adjacent to Linchfield Road before turning and extending across several open fields and terminating at Spalding Road.

It is deemed probable that some disturbance of archaeological deposits will be encountered. Only one field (Field 2) is suitable for fieldwalking presently, however, both Fields 1 and 2, and possibly a short stretch of grassland adjacent to Spalding Road, are suitable for

geophysical survey, specifically a detailed gradiometer survey.

#### 2. INTRODUCTION

## 2.1 Definition of an Archaeological Desk-Based Assessment

An Archaeological Desk-Based Assessment is defined as 'an assessment of the known or potential archaeological resource within a specified area or site on land, inter-tidal zone or underwater. It consists of a collation of existing written, graphic, photographic and electronic information in order to identify the likely character, extent, quality, and worth of the known or potential archaeological resource in a local, regional, national, or international context as appropriate' (IFA 1999).

### 2.2 Planning Background

Archaeological Project Services was commissioned by Anglian Water Services Ltd to undertake an Archaeological Desk-Based Assessment (DBA) of the proposed route of a new 300mm rising main from Linchfield Road to Spalding Road, Deeping St James, Lincolnshire. This was in order to determine the archaeological implications of the construction of the new pipeline. The route of the pipeline continues westward along Towngate East as far as Peterborough Road (the B1524), but the archaeological impact of this sections was addressed in a DBA undertaken during (Lindsey 1998 Archaeological Services 1998).

#### 2.3 Site Location

Deeping St James is located approximately 12km east-north-east of Stamford and

c.13km north-north-west of the centre of Peterborough, in the administrative district of South Kesteven, Lincolnshire (Figure 1).

The area subjected to the survey begins at the junction of Towngate East and Linchfield Road at the north-eastern edge of Market Deeping, in the parish of Deeping St James (NGR TF 14865 11362, 5.0 OD). The route of the proposed pipeline runs broadly southwards along Linchfield Road for approximately 0.8km before turning southeast and crossing several agricultural fields, terminating adjacent to the Tjunction of Spalding Road and Broadgate Lane in Deeping St James (NGR TF 15660 10204, 5.6m OD), some 0.74km east of Linchfield Road (Figure 2). The working easement will be along roadside verges, and where it crosses farmland, a c.20m wide strip. For the purposes of this study a survey corridor of 1km centred on the proposed route was examined (shown on Figure 2).

#### 2.4 Soils and Geology

Local soils are of the Badsey 2 Association, well drained calcareous fine loamy soils developed over limestone gravel. However, the junction of the Badsey 2 and Fladbury 1 stoneless clayey soils developed on river alluvium lies approximately 1km east of the line of the proposed pipeline. These alluvial soils extend further west to the south, almost reaching the southern terminal of proposed pipeline on Spalding Road (Hodge *et al.* 1984).

#### 3. AIMS

The purpose of the desk-based assessment is to obtain information about the known and potential archaeological resource within the vicinity of the proposed pipeline

route. In addition to the above, statutory and advisory heritage constraints were identified.

#### 4. METHODS

The research undertaken in the compilation of this archaeological desk-based assessment involved the examination of all available primary and secondary sources relevant to the route of the pipeline between Market Deeping and Deeping St James, and the immediate surrounding area. These sources consisted of:

- Historical documents held in the Lincolnshire Archives Office
- Enclosure, tithe, parish, and other maps and plans, held in the Lincolnshire Archives Office
- Ordnance Survey maps
- Lincolnshire Historic Environment Record
- Parish files held by Heritage Lincolnshire
- Secondary sources, in the form of periodical articles and books, held by the Lincolnshire Archives Office, Lincolnshire Library and Heritage Lincolnshire

This research was supplemented by a walkover survey of the land, undertaken to assess the current ground conditions, land-use patterns, and to ascertain the presence of any surface finds of an archaeological character, and of features that might indicate the presence of archaeological remains.

#### 5. RESULTS

#### 5.1 Historical Evidence

Deeping St James is first mentioned in the Domesday Survey of c. 1086 as Depinge, from the Old English deop and the suffix ing, meaning 'the deep place' (Cameron 1998).

At the time of the Domesday Survey, Deeping St James had two main landowners. Alfred of Lincoln and Godfrey of Cambrai. Alfred held 4 bovates of land taxable, with land for ½ plough, as well as 6 villagers and 2 smallholders having 1 ½ ploughs and meadow (20 acres), and 1 fishery. Prior to the Conquest Aelmar, Arnbjorn and Frithgestr held 4 bovates of land taxable, with land for as many ploughs and oxen. Following the Conquest this land was given to Godfrey, with two of his men owning 2 ploughs, with 19 villagers and 4 smallholders who had 7 ploughs, with 93 acres of meadow (Foster and Longley 1976).

### 5.2 Cartographic Evidence

The proposed pipeline lies to the north of the village of Deeping St James. Appropriate maps of the vicinity were examined.

The earliest plan reproduced here is 'A sketch of an estate belonging to Mr Rob' Johnson Cave in the Parish of Deeping Saint James in the County of Lincoln' dating to 1808 (Figure 3). The sketch plan does not show any field boundaries or landscape features along the pipe route, it is mainly a plan of the existing road layout at the beginning of the 19<sup>th</sup> century. Interestingly, the map does show that Linchfield Road is a distortion of an earlier road name, namely 'Lynch Field Road'.

Linch Field is the contemporary name for the group of fields to the west and east of the road.

The parish was enclosed soon after, in 1815, and an extract of the Enclosure Plan is reproduced here as Figure 4. The pipeline route is shown to begin adjacent to a public gravel pit, and later, where it leaves the road, it crosses a number of newly enclosed parcels of land, before running along 'Swift's Road' and terminating adjacent to the T-junction between Horsegate Road and Turnpike Road. Today Swift's Road still exists as a farm track.

The First Edition Ordnance Survey map of Deeping St James (published in 1890) shows that several of the enclosure boundaries adjacent to Linchfield Road had been infilled or removed (Figure 5).

#### 5.3 Aerial Photographic Evidence

A single photograph is held by Heritage Lincolnshire (Code: CPE UK 1932 1079). The photo, which was taken in 1932, depicts fields of ridge and furrow earthworks that had disappeared by 1966 (Figure 2). However, Royal Commission for Historical Monuments crop mark plots held by Archaeological Project Services show a complex of linear features following an east-northeast - westsouthwest alignment (Figure 2, No. 8) extending across the northern section of the pipeline route. Major elements within the complex include a double ditched linear feature interpreted as a Roman road, flanked by a series of rectilinear enclosures, several ring ditches, and other possible trackways.

The Lincolnshire Historical Environment Record Office holds no photographs that depict the proposed development area.

#### 5.4 Archaeological Data

Records of archaeological sites and finds are held in the Lincolnshire Historical Environment Record and at the offices of the Heritage Trust of Lincolnshire. Other, secondary sources were also examined. Details of archaeological and historical remains falling within c. 500m of the proposed pipeline route are collated in Table 1 and located on Figure 2.

Map Code			National Grid Reference	
1	33447	SK25.08	Neolithic polished stone axe and Bronze Age cinerary urn	TF 154 101
2	35428	isplayed as	Worked flint (early Neolithic to early Bronze Age) from fieldwalking	TF 148 113
3	35429	mance of h	Worked flint (early Neolithic to early Bronze Age) from fieldwalking	TF 150 113
4	33445	SK25.02	Middle Bronze Age funerary urn	TF 1500 1032
5	34054	SK25.31	Extensive Romano-British occupation site based on fieldwalking results. Fenland Survey Code DEJ1	TF 1511 109
6	34055	SK25.32	Several concentrations of Romano-British artefacts from fieldwalking. Fenland Survey Code DEJ2	TF 1527 110
7	34056	SK25.33	Possible Romano-British settlement site based on fieldwalking results. Fenland Survey Code DEJ3	TF 1521 113
8	35351	at several wor	Cropmarks of possible Roman date, including a potential road	TF 1440 109
9	35410	while to early	Roman pot sherd from fieldwalking	TF 147 113
10	35714, 35715	SK25.28	Roman features and an undated posthole exposed during trial trenching	TF 1580 097
11	33435	SK25. (20, 21, 22)	Site of Medieval Benedictine Priory	TF 1576 096
12	35409	140 440	Medieval pot sherd from fieldwalking	TF 147 113
13	33455	SK25.(26, 27)	Medieval coin hoard, pottery and animal bone from groundworks at school	TF 1521 099
14	33442	SK25.19	St James' Church	TF 1575 095
15	33460	S ESTERVILLOCK OF	Elizabethan coin hoard	TF 157 096
16	35407	- Fallsten gall	Medieval/post-Medieval artefacts from fieldwalking	TF 1437 112
17	35408	-	Medieval/post-Medieval artefacts from fieldwalking	TF 1455 112
18	35411	-	Post-Medieval artefacts from fieldwalking	TF 147 113
19	35412	• Alka Orla	Post-Medieval artefacts from fieldwalking	TF 152 113
20	35418	- The Table	Post-Medieval artefacts from fieldwalking	TF 161 104
21	33444	Sternal of M	Site of post-Medieval windmill	TF 1571 098
22	35869	T of allow	Undated cropmarks	TF 1545 116
23	af ibis	SK25.09	Circular mound west of priory destroyed in 1957. Possible tumulus	TF 1560 096
24	-	SK56.13	Watching brief on extension to Drain 22. Undated pits and ditches. APS code MDL 99. LCCM Acc. Code 1998.275	TF 1475 107
25	N-13176,95	SK56.19	Watching brief on extension to Drain 21, Towngate East. Undated ditch, no finds	TF 1450 113
26	s of R d to field	SK25.61	Watching brief. Two ponds, Roman and medieval pottery and animal bone. Undated pit. APS Code DPC 03	TF 1577 097
27	70.71	SK25.63	Modern cut features at school. APS Code DJS 04	TF 153 100

Table 1: Archaeological and historical remains within 500m of the proposed pipe route

#### Prehistoric Archaeology

Evidence for prehistoric activity is restricted to chance recovery of artefacts from the ground surface or from groundworks. A Neolithic polished stone axe was found and subsequently displayed as a garden ornament (Figure 2, No. 1). Unfortunately the exact provenance of its discovery remains unclear. The Heritage Trust of Lincolnshire reference to this discovery (SK25.08) also mentions the recovery of a Bronze Age funerary urn, although it is possible that this is a duplicate reference to SK25.02 (See No. 4 below). Fieldwalking associated with archaeological investigations of a previous route of the pipeline recovered several worked flints of likely early Neolithic to early Bronze Age date (Figure 2, Nos. 2 and 3). In 1898, during excavations for gravel extraction in Linch Field, an inverted cremation urn was discovered (Figure 2, No. 4). The vessel, which contained cremated human remains, was dated on typological grounds to the middle Bronze Age. Its discovery was unusual in that its excavators described it as being found on a 'raised gravel platform inside an ancient pit dwelling' (Burchnall 1937, 66). Also lying on this platform was a human skull that 'on exposure to the air ... crumbled' (ibid). The 'dwelling' was covered by a lens of light coloured sand, then a c.4" thick spread of black 'mould', and finally some 3' of alluvial soil. Reanalysis of this description suggests the 'dwelling' was probably the remains of a barrow.

#### Romano-British Archaeology

Remains of Romano-British date are confined to fieldwalking evidence and the dating of cropmarks on typological grounds. Fieldwalking during the Fenland Survey revealed extensive scatters of

artefactual material suggestive occupation sites to the east of the proposed route (Figure 2, Nos. 5 and 6). These remains, which included pottery, rubble, tile, burnt stone, quernstone fragments, oyster shells, animal bones and some possible glass fragments, were spread over an area measuring 150m by 100m. It was noted that the site probably continued further to the southeast into a field not examined as part of the survey. Several sherds of pottery were identified as being of possible Iron Age date. The Fenland Survey also identified a further spread of material of Romano-British date adjacent to Towngate East, less than 300m east of the beginning of the proposed pipe route (Figure 2, No. 7). The fieldwalking recovered Roman pottery, rubble, some animal bone and a worked flint of earlier date. Excavations during the Fenland Survey off Outgang Road, some 500m to the east of the survey area showed Iron Age and Roman remains to be well preserved, including waterlogged wood and a Roman shoe (Fenland Project Site No. MAD 2) (Crowson et al. 2000, 119 – 125).

Fieldwalking undertaken as part of the 1998 DBA of the previous route of the pipeline recovered three sherds of mid 2<sup>nd</sup> to late 3<sup>rd</sup> century AD date and a piece of roof tile, identified as tegula (Lindsey Archaeological Services 1998). The same phase of fieldwalking recovered a single piece of Roman pottery to the west of Linchfield Road (Figure 2, No. 9). An archaeological watching brief undertaken west of Linchfied Road by APS (Figure 2. No 8) (Snee 2000) revealed five undated possible pits or ditches that were likely related to the features identified in this area on the Royal Commission cropmark plots (Fig 2). To the south of the pipeline, an evaluation by trial trenching identified a

ditch and pit that were dated to the Romano-British period on the basis of the ceramic evidence from their excavated fills (Figure 2, No. 10) (Clay 2002). The evaluation also uncovered a posthole; however this remains undated.

#### Saxon Archaeology

Surprisingly, considering the abundance of Roman remains (see above), no Saxon sites have been identified within the study area. However, this is consistent with the results of the Fenland Survey, which highlighted the dearth of Saxon sites along this part of the fen edge (Hayes and Lane 1992).

#### Medieval Archaeology

At the southern end of the study area, over 400m to the south of the end of the pipeline, is the site of the Benedictine Priory of Deeping St James (Figure 2, No. 11). The Priory was established in 1139 by Baldwin Fitz Gilbert as a cell of Thorney Abbey. The house was finally dissolved in 1539. Excavations in 1968 by the Deepings Archaeology and History Society recovered painted window glass, a piece of decorated tile and medieval pottery. The parish church of St James (Figure 2, 14) was originally part of the priory construct in the 12<sup>th</sup> century; however it always retained its role as the parish church for the local villagers. Although the priory was dissolved as part of the reformation in 1539, the church continued in use.

Fieldwalking to the west of the junction between Linchfield Road and Towngate East recovered a sherd of medieval pottery (Figure 2. No. 12), likely to represent manuring of the fields. Further fieldwalking to the west of Linchfield Road identified medieval/post-medieval

material (Figure 2, Nos. 16 and 17).

During the excavations for the foundations of a new school at Deeping St James a late medieval coin hoard was found (Figure 2, 14). The hoard contained nine silver coins, four of Edward IV (1471 – 83) and five of Henry VII (1495 – 1500). The excavations also revealed quantities of animal bone and medieval pottery. Later, two more silver coins were recovered, including a half groat of Henry VII that was minted at Canterbury, and an Escapium of Alphonsus V of Portugal, dating to 1432 – 1481.

A late medieval/post-medieval hoard of seven silver pennies was also found in the study area (Figure 2, No. 15). The coins were recovered during excavations in the 1960s at the former priory site (see No. 12 above).

#### Post-medieval Archaeology

Fieldwalking has recovered material of post-medieval date from various locations within the study area (Figure 2, Nos. 18 – 20). Also, the HER records the presence of a post-medieval windmill to the south of the route, along Broadgate Lane (Figure 2, No 21).

Buildings in the assessment area may also include post-medieval examples.

#### Modern Archaeology

A series of modern cut features were recorded during an archaeological watching brief at the school to the south of the proposed pipe route (Figure 2, No. 27).

#### Undated

Cropmarks noted at the northeast edge of

the study area (Figure 2, 22) are recorded as being undated. These include an enclosure and trackway and are almost certainly associated with the Roman, and possibly Iron Age, remains noted throughout the north half of the study area.

A circular mound to the south of the pipe route was levelled in 1957 (Figure 2, No. 23). It has been recorded as a possible tumulus, or burial mound.

#### **Previous Archaeological Intervention**

There have been several archaeological investigations within the assessment area, mostly watching briefs during developments, although an evaluation by trial trenching was undertaken in Deeping St James, to the south of the pipeline. These interventions are all discussed above. None of the interventions are on the route of the proposed pipeline.

#### 5.5 Walk-over Survey

The route was walked on 18<sup>th</sup> December 2005 to assess its potential to contain archaeological features and to note any constraints to further work. The results of the walk-over survey are depicted on Figure 2.

The route starts at the junction of Towngate East and Linchfield Road, running southwards for approximately 800m within the confines of the existing road. The route then turns east-southeast crossing Field 1. Field 1, now set-aside, had previously contained a wheat crop. There were no visible undulations in the field; however the low scrub vegetation may have masked any micro-topographical variations.

In Field 2 the route follows the field boundary south-southeastwards before

turning 90° at the southwest corner of the field and following the east-northeast boundary (comprising a grass track and leylandi tree avenue). The field had been left as set-aside at the time of the survey, with good ground visibility (approximately 90%). The visible soil was a clayey silty loam with a fairly high proportion of flint gravels in its matrix. Along the south edge of the field the ground was uneven and difficult to traverse Several sherds of medieval/post-medieval pottery were visible in the ploughsoil.

At the southeast edge of the field the pipeline traverses a dyke that contained standing water (approximately 1m below ground level) before turning southeastwards and running down a muddy track. Immediately prior to the track joining Spalding Road the pipe route turns to the southwest, re-crosses the drain and runs parallel with Spalding Road before linking up with an existing foul sewer.

#### 6. CONSTRAINTS

#### 6.1 Heritage Constraints

There are no sites of scheduled Ancient Monument status protected by the Ancient Monuments and Archaeological Areas Act of 1979 (HMSO 1979) within the study area. Therefore the works will not require Scheduled Monument Consent, and all archaeological remains within the construction corridor will therefore only be protected through the implementation of PPG16 (DoE 1990).

#### 6.2 Other Constraints

Mapping provided by Anglian Water Services Ltd shows an existing operational potable water main running along the edge of Linchfield Road. A line of electricity pylons ran down the side of the road, at the edge of the field. The mapping also shows a 250mm diameter plastic main running across the fields which is crossed twice by the proposed new route.

## 7. ASSESSMENT OF SIGNIFICANCE

The criteria used to assess the significance of the remains present within the assessment area were adopted from the Secretary of State's criteria for scheduling ancient monuments (Department of the Environment 1990, Annex 4; see Appendix 1).

#### Period

Remains dateable from the prehistoric to the post-medieval periods have been recognised within the assessment area.

#### Rarity

Early prehistoric remains are indicated by chance finds in the study area, and it is possible that further artefactual material would be recovered during the groundworks. Earth-cut features of Roman, and possibly Iron Age date, are indicated by the complex of cropmarks evident at the north end of the route. These are not particularly scarce in Lincolnshire.

#### Documentation

Records of archaeological sites and finds made in the Deeping St James/Market Deeping areas are kept in the Lincolnshire Historical Environmental Record and at the offices of Heritage Trust of Lincolnshire.

This report provides the first site-specific consideration of the archaeological and historical aspects of the proposed development area.

There is likely to be some contemporary documentation regarding the site which has not been examined.

#### Group Value

Roman, and possibly Iron Age remains, recorded within the assessment area include evidence for settlement with an associated road. As such, these have moderate group value.

#### Survival/Condition

Archaeological interventions within the assessment area have demonstrated that archaeological remains often survive in good condition.

#### Fragility/Vulnerability

All archaeological deposits present on the site would potentially be vulnerable to disturbance from proposed development of the site.

#### Diversity

High period diversity is represented by archaeological remains of early prehistoric to post-medieval date occurring in close proximity to the proposed pipeline route.

Moderate functional diversity is provided by evidence of funerary activity and domestic settlement evidence.

#### Potential

The predominantly rural nature of the route may indicate some potential for the survival of prehistoric or later archaeological remains at the site.

The low lying nature of the site suggests that waterlogged environmental material may survive in quite good condition. The low water table suggests that any waterlogged deposits may not be exposed

unless excavations for the pipe trench are, say, over 1.0m deep. This is based on observations of the various drains along the route.

#### 8. ASSESSMENT OF IMPACT

The route has mainly functioned as undeveloped agricultural land from at least the Roman period onwards.

The proposed pipeline will involve a mixture of open cut and directional drilling methods of construction. Where the route crosses the fields a 20m wide easement will be stripped of topsoil and a pipe trench excavated. The method of construction along the road sections may involve open cut or directional drilling. Both methods are likely to impact upon the archaeological resource.

#### 9. OVERVIEW

The general scatter of prehistoric material indicates some background activity in the Neolithic and Bronze Ages, with the possibility of some funerary activities in the Bronze Age, particularly towards the southern half of the route. Cropmarks show Roman settlement remains exist alongside a former road that crosses the pipe route towards its northern end. Therefore, the principal area of interest will lie in the northern half of the pipeline route.

There is some limited potential for non intrusive archaeological evaluation techniques (ie fieldwalking and geophysical survey). Only Field 2 is suitable for fieldwalking, although it is recognised that if this is not done in early 2006 then the growth of weeds and grasses

will render this technique unusable.

Fields 1-3 are suitable for detailed gradiometer survey, although several obstacles may cause some localised disruption to the survey results.

At the western extreme of Field 1 a line of electricity pylons running parallel with Linchfield Road may distort geophysical survey readings. Also, materials associated with the construction of the modern road, possible services running alongside, and material dumped at the edge of the field, or off the road, may cause 'noise' that would masks any geophysical anomalies of potential archaeological significance. At the point the route crosses into Field 2 the pipeline runs close to a metal mesh fence that separates the field from a sports field to the south. Again, the presence of the metal fence may cause some disruption to geophysical survey results. Between the pipe route and the metal fence there is a drain and cleaning of the drain may have resulted in upcast being spread across the pipe corridor; material within this upcast could affect the results of a gradiometer survey.

In Field 2 the presence of the metal mesh fence running parallel with the pipe corridor may cause some disturbance to the results of a gradiometer survey, and farm equipment left at the east end of the field would also disrupt the results.

The track to the east of Field 2 (that the pipeline follows) would not benefit from a geophysical survey due to the narrowness of the track and the likelihood of metalling causing 'iron spikes' in the survey results.

Where the route turns towards the southwest, into Field 3, a gradiometer survey may give some indication of

activity alongside Spalding Road, however upcast from the adjacent drain may affect any geophysical survey results. Also the short length of survey would mean that it would be difficult to accurately interpret any results at this end of the pipeline.

#### 10. CONCLUSIONS

An archaeological desk-based assessment of the route of a proposed new water pipe between Linchfield Road and Broadgate Lane in Deeping St James, Lincolnshire, was undertaken in order to determine the archaeological implications of the proposed development of the site.

The assessment has identified evidence of prehistoric and later activity occurring within the assessment area and in close proximity to the pipe route, with a linear spread of Roman road and settlement cropmarks being crossed by the route at its northern end. It is therefore reasonable to suggest that such deposits may also occur within the proposed development area.

The route is currently predominantly agricultural land is, therefore, occupied mainly by open fields. The route would benefit from geophysical survey of Fields 1 and 2, and possibly 3. Only Field 2 is suitable for fieldwalking at this time.

#### 11. ACKNOWLEDGEMENTS

Archaeological Project Services would like to thank Dodie Honisett who commissioned this report on behalf of Anglian Water. This work was coordinated by Dale Trimble who edited this report along with Tom Lane. Access to the County Sites and Monuments Record was kindly provided by Mark Bennet and Sarah

Grundy of the Archaeology Section, Lincolnshire County Council. Thanks are also due to the staff of Lincolnshire Archives Office and Lincoln Central Library. Dave Start permitted examination of the parish files and library maintained by Heritage Lincolnshire.

#### 12. BIBLIOGRAPHY

#### **Primary Sources**

CRAGG 2/2/20. Sketch of an estate belonging to Mr Rob' Johnson Cave in the Parish of Deeping Saint James in the County of Lincoln, 1808.

Kesteven Award 22. Plan of the Parish of Deeping St James in the County of Lincoln. New Inclosure Map of 1815.

#### Secondary Sources

Burchnall, C R., 1937, The Lincolnshire Magazine. Vol. 3, No. 3, page 66.

Cameron, K. 1998, *A dictionary of Lincolnshire place-names*. English Placename Society, School of English Studies, University of Nottingham

Clay, C., 2002, Archaeological Evaluation Report, No. 1 Priory Close, Deeping St. James, Lincolnshire. Pre-Construct Archaeology (Lincoln). Unpublished client report.

Cope-Faulkner, P., 2001, Archaeological Watching Brief of Development at 33 Broadgate Lane, Deeping St James, Lincolnshire (DBL 01). APS Report No. 95/01. Unpublished client report.

Crowson, A., Lane, T., and Reeve, J. (eds), 2000, Fenland Management Project Excavations 1991-1995. Lincolnshire

#### DESK-BASED ASSESSMENT OF MARKET DEEPING TOWNGATE - DEEPING ST JAMES RISING MAIN REPLACEMENT

Arch	aeo	logy and	Heritag	ge R	Reports	Series
No.	3.	Heritage	Trust	of	Lincol	nshire.
Shor	t Ri	ın Press L	td., Exet	ter		

DoE, 1990, Archaeology and Planning, Planning Policy Guidance note 16

Foster, C.W. and Longley, T. (eds), 1976, The Lincolnshire Domesday and the Lindsey Survey, The Lincoln Record Society 19

Hayes, P.P., and Lane T.W., 1992 The Fenland Project, Number 5: Lincolnshire Survey, The South-West Fens East Anglian Archaeology 55

HMSO, 1979, Ancient Monuments and Archaeological Areas Act

Hodge C.A.H ed. et al 1984, Soils and their use in Eastern England. Soil Survey of England and Wales Bulletin No. 13

IFA, 1999, Standard and Guidance for Archaeological Desk-based Assessments

Lindsey Archaeological Services, 1998, Market Deeping Rising Mains. Archaeological Desk Top Assessment and Fieldwalking Survey. LAS Report No. 332. Unpublished client report.

Parker, N., 2004, Archaeological Watching Brief at the Deepings School, Deeping St James, Lincolnshire (DJS 04). APS Report No. 91/04. Unpublished client report.

Snee, J., 2000, Archaeological Watching Brief during improvements to Drain 22 off Linchfield Road, Deeping St James, Lincolnshire (MDL99). APS Report No. 131/00. Unpublished client report.

#### 13. ABBREVIATIONS

APS	Archaeological Project Services
DoE	Department of the Environment
HMSO	Her Majesty's Stationery Office
HER	Historic Environment Record
IFA	Institute of Field Archaeologists
LAO	Lincolnshire Archives Office
LAS	Lindsey Archaeological Services
PCA •	Pre-Construct Archaeology (Lincoln)

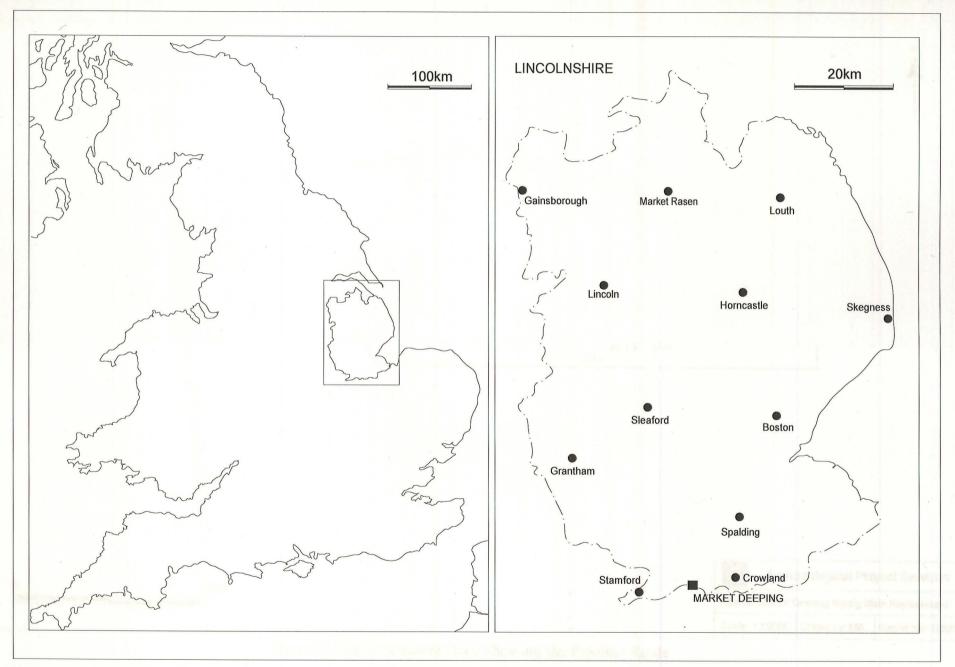


Figure 1: General Location Plan



Figure 2. The Assessment Area Showing the Pipeline Route

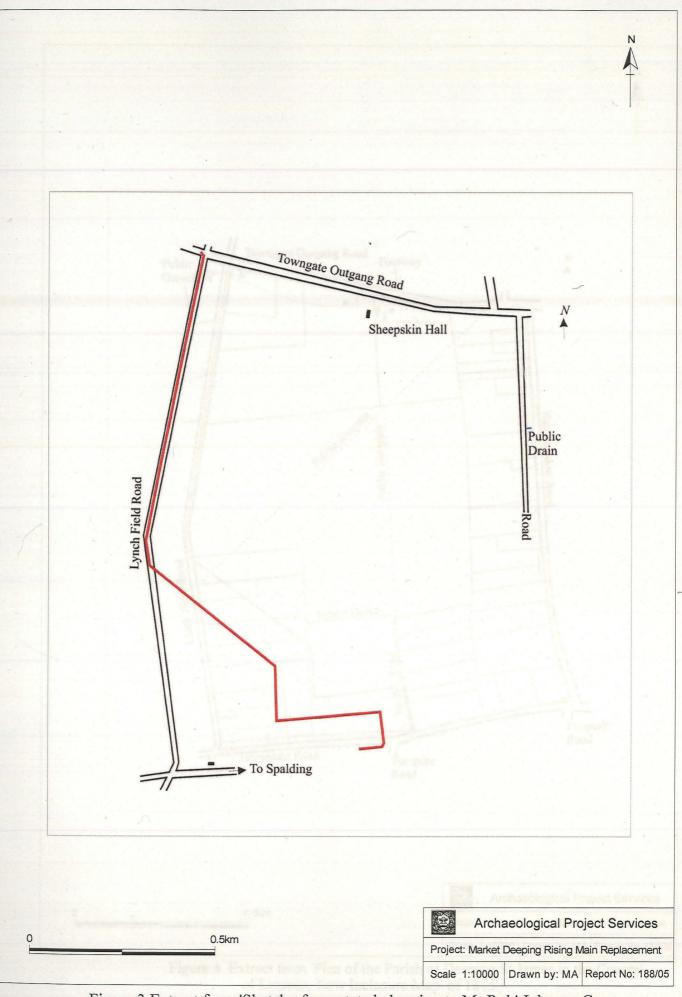


Figure 3 Extract from 'Sketch of an estate belonging to Mr Rob' Johnson Cave in the Parish of Deeping Saint James in the County of Lincoln', 1808

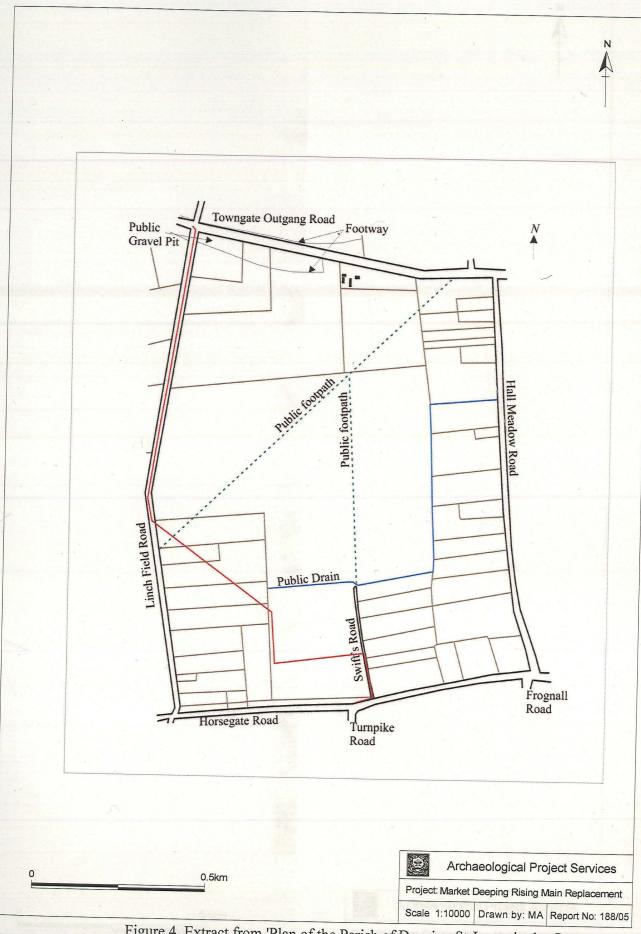
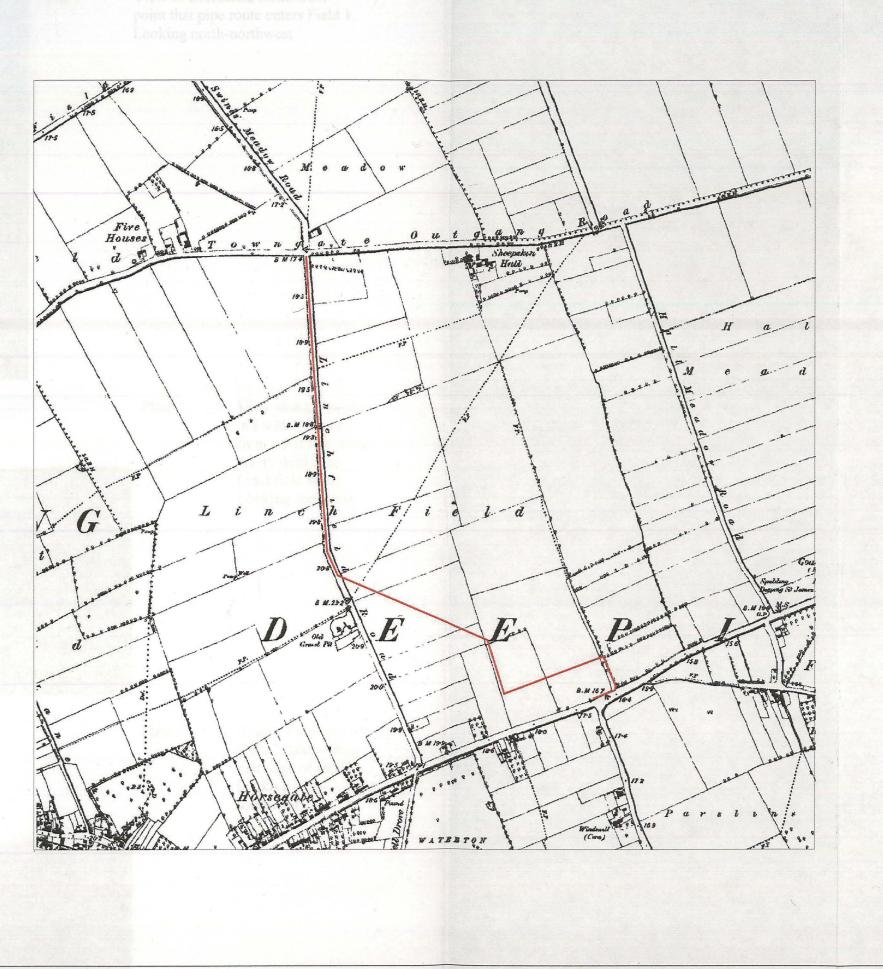


Figure 4. Extract from 'Plan of the Parish of Deeping St James in the County of Lincoln. New Inclosure Map' of 1815



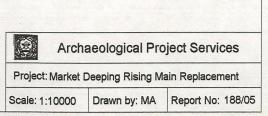


Figure 5. Extract from the Ordnance Survey 1st Edition 6 inch Map, 1890

0.5km



Plate 1 View of Linchfield Road from point that pipe route enters Field 1.

Looking north-northwest



Plate 2 View along pipeline in Field 1. Taken from point that route enters field from Linchfield Road.

Looking southeast

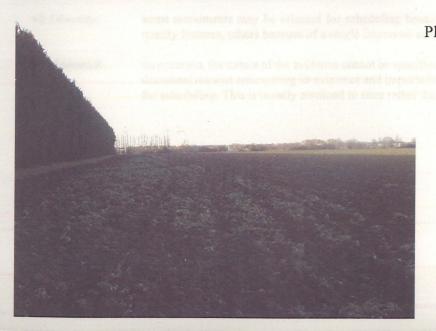


Plate 3 Route of pipeline in Field 2, taken from east edge of field.

Looking west-southwest

#### Appendix 1

SECRETARY OF STATE'S CRITERIA FOR SCHEDULING ANCIENT MONUMENTS - extract from *archaeology and planning* DoE planning policy guidance note 16, November 1990

The following criteria (which are not in any order of ranking), are used for assessing the national importance of an ancient monument and considering whether scheduling is appropriate. The criteria should not however be regarded as definitive; rather they are indicators which contribute to a wider judgment based on the individual circumstances of a case.

i Period: all types of monuments that characterise a category or period should be considered for

preservation.

ii Rarity: there are some monument categories which in certain periods are so scarce that all surviving

examples which retain some archaeological potential should be preserved. In general, however, a selection must be made which portrays the typical and commonplace as well as the rare. This process should take account of all aspects of the distribution of a particular class of monument,

both in a national and regional context.

iii Documentation: the significance of a monument may be enhanced by the existence of records of previous

investigation or, in the case of more recent monuments, by the supporting evidence of

contemporary written records.

iv Group value: the value of a single monument (such as a field system) may be greatly enhanced by its association

with related contemporary monuments (such as a settlement or cemetery) or with monuments of different periods. In some cases, it is preferable to protect the complete group of monuments,

including associated and adjacent land, rather than to protect isolated monuments within the group.

v Survival/

Condition: the survival of a monument's archaeological potential both above and below ground is a

particularly important consideration and should be assessed in relation to its present condition and

surviving features.

vi Fragility/

Vulnerability: highly important archaeological evidence from some field monuments can be destroyed by a single

ploughing or unsympathetic treatment; vulnerable monuments of this nature would particularly benefit from the statutory protection that scheduling confers. There are also existing standing structures of particular form or complexity whose value can again be severely reduced by neglect or careless treatment and which are similarly well suited by scheduled monument protection, even

if these structures are already listed buildings.

vii Diversity: some monuments may be selected for scheduling because they possess a combination of high

quality features, others because of a single important attribute.

viii Potential: on occasion, the nature of the evidence cannot be specified precisely but it may still be possible to

document reasons anticipating its existence and importance and so to demonstrate the justification

for scheduling. This is usually confined to sites rather than upstanding monuments.

#### Appendix 2

#### **GLOSSARY**

Geophysical Survey Essentially non-invasive methods of examining below the ground surface by measuring

deviations in the physical properties and characteristics of the earth. Techniques include

magnetometry and resistivity survey.

Medieval The Middle Ages, dating from approximately AD 1066-1500.

Post-medieval The period following the Middle Ages, dating from approximately AD 1500-1800.

Prehistoric The period of human history prior to the introduction of writing. In Britain the

prehistoric period lasts from the first evidence of human occupation about 500,000 BC,

until the Roman invasion in the middle of the 1st century AD.

Romano-British Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.

Saxon Pertaining to the period dating from AD 410-1066 when England was largely settled by

tribes from northern Germany.

#### Appendix 3

#### LIST OF SOURCES CONSULTED

Lincolnshire County Sites and Monuments Record, parish of Deeping St James

Heritage Trust of Lincolnshire parish files, parish of Deeping St James

Lincolnshire Archives: Cartographic Sources, Secondary Sources (Books and Journals)

Plans and Maps for the parish of Deeping St James, held at the Lincolnshire Archives

Lincoln Central Reference Library

Heritage Trust of Lincolnshire Library

Ordnance Survey Maps

#### Sources Not Consulted

Cursory examination was made of primary historical documentation held at Lincolnshire Archives—experience has shown that the consultation of primary historical documents is extremely time-consuming, and only fortuitously affords information relevant to archaeological inquiries.