

Spalding Energy Project
Gas Pipeline
Lincolnshire



Archaeological Evaluation Report



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Spalding Energy Project Gas Pipeline

NGR TF 2592 3091- 2495 3005

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SUMMARY

In March 2003 Oxford Archaeology (OA) carried out a fieldwalking survey in advance of construction of a gas pipeline. The work was commissioned by Spalding Energy Company Ltd (SECL). Pottery dating from the 18th to 20th century was found throughout the study area, although earlier dated pieces tended to be concentrated in the southern half of the pipeline, while more recent material was densest in the northern half. Brick, clay pipe and glass fragments were also recovered, along with the occasional iron nail. The finds are likely to derive from domestic activity in the general area and have been incorporated into the ploughsoil through agricultural processes, such as manuring.

1 INTRODUCTION

1.1 Scope of work

- 1.1.1 In March 2003 Oxford Archaeology carried out a fieldwalking survey commissioned by Spalding Energy Company Ltd (SECL) in advance of construction of a gas pipeline. The pipeline route has already been the subject of an Archaeological Desk Based Assessment (1996) undertaken by Oxford Archaeology (then Oxford Archaeological Unit, OAU). The assessment suggested that the proposed development area had potential for archaeological remains.
- 1.1.2 The archaeological works conform to a Written Scheme of Investigation (WSI; OA 2003), which was approved by Lincolnshire County Council after discussions between OA, SECL and the County Council's Archaeology Section.
- 1.1.3 The results provide a basis from which an informed decision can be made regarding the need for further archaeological works as defined in Section 7.65-69 of the Environment Statement (Penspen Ltd 1996).

1.2 Location, geology and topography (Fig 1)

- 1.2.1 The proposed pipeline runs north-east to south-west from Spalding (NGR TF 2592 3091) to Wragg Marsh, close to Carrington Road (NGR TF 2495 3005). The proposed distance measures *c* 7.4 km in length. The corridor has a 'working width' of 26 m and the depth of the pipe is proposed to be 1.10 m. The depth will be greater at road and water course crossings.
- 1.2.2 The site lies on Upper Jurassic Oxfordian, Oxford Clay covered by Terrington Beds Drift. This is made up of younger marine alluvium: salt marsh, tidal creek and river deposits (sandy silt, sand and clay).

1.3 Archaeological and historical background

- 1.3.1 The area crossed by the pipeline is principally a landscape of medieval and post-medieval land reclamation. The pre-medieval coastline ran along the line of the road known variously as Hengate, Hergate and Hardgate (modern A151). Beyond this, to the E, the land has been reclaimed during the past thousand years.
- 1.3.2 Within the reclaimed areas there are unlikely to be substantial permanent pre-medieval settlements. However, information from both archaeological and geological sources, collated in the Desk Based Assessment (OAU 1996), suggested:
- potential for evidence relating to prehistoric utilisation the seamarsh zone comprising temporary occupation of marshland during dry periods;
 - potential for evidence of Roman-period activity, such as salt-extraction debris;
 - potential for Anglo-Saxon remains;
 - potential for evidence of medieval land reclamation. Sections of sea banks, of which the most well-known is perhaps the so-called 'Roman Bank' (actually a

13th century or earlier earthwork protecting a million acres of land), lie within the study area. Traces of medieval land-use, such as droveways, may also be recovered;

- potential for evidence pertaining to further land reclamation in the 17th century.

1.3.3 The area has since been developed to a very limited extent, and current land use continues to be arable cultivation.

1.4 **Evaluation Aims**

1.4.1 To establish the presence/absence of artefacts within the proposal area.

1.4.2 To determine or confirm the likely range, quality and quantity of the artefactual evidence present.

1.4.3 To make available the results of the investigation.

2 FIELDWALKING METHODOLOGY

2.1 Scope of fieldwork

- 2.1.1 The whole site, where practical, was be subject to fieldwalking. The agreement of the County Archaeological Officer that ground conditions were suitable was obtained before fieldwork commences.
- 2.1.2 This area is approximately 60 hectares. Fields had been recently ploughed and crops sown prior to walking. Visibility at the time of the survey was variable, although generally fair to good. Some crop growth was occasionally observed.

2.2 Fieldwork methods and recording

- 2.2.1 The programme of field walking was be undertaken across the area to locate the position and extent of any concentrations of surface artefacts. The survey was undertaken using a 20m grid tied into the national grid. Transects of 20m length were walked and staff collected artefacts from a 1m wide strip either side of the transect. Transects were be spaced at 20m intervals and labelled A-Z (excluding O), and if necessary AA, BB etc.
- 2.2.2 The work was carried out during March by a team comprising a Project Supervisor and 3 field archaeologists, under Project Manager Martin Wilson MIFA. The project was undertaken under the general direction of R J Williams MIFA (Director: Operations and Business Development).

2.3 Finds

- 2.3.1 Finds were recovered by hand during the course of the exercise and bagged by transect. Finds and bags were marked with grid co-ordinates and processed prior to analysis.

2.4 Presentation of results

- 2.4.1 In the following sections the results of the fieldwalking are described and presented as density distributions across the area. There are additional comments on the finds, including finds lists in Appendices, and the reliability of the results. A discussion regarding interpretation and conclusions of the results of the survey then follows.

3 RESULTS

3.1 Fieldwalking Survey

- 3.1.1 The site is located on alluvial soil in low relief. Identification and interpretation of 'concentrations' of material, which may imply a site or merely a spread formed through later cultivation, are subjective, given the differentiation between artefact classes in terms of survival in ploughsoils. Worked flint, for example, survives relatively well, though may become abraded. Prehistoric pottery is less well fired than Roman or later examples, and consequently tends not to survive well and may appear, if at all, in very small quantities.
- 3.1.2 Pottery of post-medieval date was the commonest class of artefact found along the proposed route. It was found throughout the study area, although earlier dated pieces (18th-19th century) tended to be concentrated in the southern half of the pipeline, while more recent material (20th century) was densest in the northern half. Other classes of material recovered mainly consisted of brick and clay pipe fragments, but also included glass and iron.

3.2 Finds (Appendix 1; Table 1)

- 3.2.1 Some 170 sherds of pottery were recovered from the site. A broad 18th-20th century date range may be assigned to the assemblage, although the majority of sherds are likely to date to the 19th century. The assemblage was generally in poor condition. Overall, sherds were small and abraded. A large, glazed bowl in a sandy, earthenware fabric (transect B2/B1), dating to the 18th or early 19th century, is among the earliest pieces. The majority of pieces, however, consisted of lead-glazed or non-glazed earthenwares. Some of these almost certainly belonged to 19th-20th century flowerpots. Other forms identified included a probable ceramic wine bottle. A significant proportion of porcelain fragments was also collected. A number of such sherds dated well into the 20th century.
- 3.2.2 Modern glass, brick and clay pipe fragments were also recovered, along with the occasional iron nail.

4 DISCUSSION AND INTERPRETATION

4.1 Reliability of field investigation

4.1.1 The results of the fieldwalking must be viewed in the context of factors that may undermine the reliability of perceived material concentrations. Collection tends to favour artefactually-rich sites and periods. Certain artefacts, such as hard-fired post-medieval ceramics, are likely to survive better in disturbed ploughsoils than others, for example prehistoric pottery. The site itself may offer its own limitations. In the case of the proposed pipeline route, the narrow corridor makes concentrations, which may be located just off-site, difficult to observe. Visibility has also been affected by the weathering of the ploughsoil.

4.2 Overall interpretation and significance (Figs 2-4)

4.2.1 The artefact assemblage recovered within the study area during fieldwalking is almost exclusively post-medieval in date, and there is nothing to conclusively represent earlier periods. The presence of this material indicates activity of these periods occurring within the general environs of the site.

4.2.2 Taking into account the limitations of a fieldwalking of this type the results appear to indicate low potential for archaeological remains within the study area. However, some comments about the artefactual distribution can be made. Pottery dated to the 18th-19th century was found throughout the study area, although this material appears to be densest in the southern half of the route. In contrast, 20th century material seems to be represented more strongly in the northern half. This distribution corresponds closely with known activities. The earlier material can be linked with contemporaneous reclamation and subsequent agricultural use of fields around Weston towards the south. Conversely, the 20th century pottery is almost certainly related to cottages constructed between 1907 and 1913 at the northern end of the pipeline (OAU 1996, 7-8).

4.2.3 Overall, the central portion of the pipeline corridor enjoyed the greatest density of finds. These span the 18th to 20th centuries, reflecting a degree of chronological overlap as the northern and southern concentrations meet. This portion bisects Weston Marsh, and runs close to the so-called 'Roman Bank'. Unfortunately, the artefacts do little to clarify the origins of this earthwork, certainly being later than it and unlikely to be associated.

4.2.4 In summary, the finds are likely to derive from domestic activity in the area. They date mainly from the 18th to 20th century, and have been incorporated into the ploughsoil through agricultural processes, such as manuring.

APPENDICES

APPENDIX 1 POTTERY

Transect	No frags	Date/comments
A1/A0	1	18th-20th cent pipe
A1/A1	1	18th-20th cent pipe
A1/D0	1	18th-20th cent pipe
A1/D1	1	18th-20th cent
A2/A0	1	CBM
A2/A0	1	CBM
A2/D3	1	20th cent
A2/F1	1	18th-20th cent
A2/G1	1	CBM
A3/A1	2	18th-20th cent
A3/A1	2	CBM
A3/D2	1	18th-20th cent
A3/D3	1	18th-20th cent
A3/G2	1	CBM
A3/I2	1	18th-20th cent
A3/I2	1	Glass
B1/A2	1	20th cent
B1/A4	1	18th-20th cent
B1/B0	1	18th-20th cent
B1/H1	1	18th-20th cent
B1/I4	1	18th-20th cent
B2/A4	1	18th-20th cent
B2/B1	1	?L18th/E19th cent earthenware bowl rim
B3/A0	1	18th-20th cent
B3/A4	1	Glass
B3/I1	1	CBM
B3/I2	1	18th-20th cent
B3/I2	1	CBM
C1/E3	1	18th-20th cent pipe
C1/E4	1	18th-20th cent
C1/F0	1	CBM
C1/G1	1	18th-20th cent
C1/G2	1	18th-20th cent
C1/G4	1	18th-20th cent
C1/H0	2	18th-20th cent
C1/H0	1	Glass
C1/H1	2	18th-20th cent
C1/H2	1	18th-20th cent
C2/A3	1	CBM
C2/G1	1	18th-20th cent
C2/I1	1	18th-20th cent
C2/I2	1	Glass
C2/J4	2	18th-20th cent
C3/A1	2	18th-20th cent
C3/E4	2	18th-20th cent
C3/E4	1	Slate pencil
C3/F2	1	20th cent
C3/G0	1	18th-20th cent
C3/H3	3	CBM
C3/H4	1	18th-20th cent

C3/I4	5	CBM
C3/J4	2	18th-20th cent
C3/J4	1	Iron nail
D1/C3	1	18th-20th cent
D3/A1	1	Iron nail
D3/A4	4	CBM
D3/A4	1	Glass
D3/D0	1	18th-20th cent
D3/D0	1	?Slag
D3/D2	3	CBM
D3/J0	1	18th-20th cent
D3/J4	1	18th-20th cent
D3/J4	1	CBM
E1/A1	1	18th-20th cent
E1/A2	1	18th-20th cent
E1/A3	1	18th-20th cent
E1/B0	1	CBM
E1/B1	1	18th-20th cent
E1/B3	1	18th-20th cent
E1/B4	2	18th-20th cent
E1/D2	1	18th-20th cent
E1/F3	1	18th-20th cent
E2/B2	1	18th-20th cent
E2/E1	1	CBM
E2/F1	1	CBM
E3/A1	2	18th-20th cent
E3/B0	3	18th-20th cent
E3/B2	2	18th-20th cent
E3/B3	2	18th-20th cent
E3/D0	1	18th-20th cent
E3/D3	2	CBM
E3/E2	1	CBM
E3/E3	1	18th-20th cent
E3/E4	1	18th-20th cent
E3/F4	1	18th-20th cent
E3/G1	1	18th-20th cent
E3/G2	1	18th-20th cent
E3/I4	1	CBM
E3/J0	1	CBM
F1/I2	1	18th-20th cent
F2/E0	1	18th-20th cent
F2/F2	1	CBM
F2/F4	1	18th-20th cent
F3/B1	2	CBM
F3/D0	1	18th-20th cent
F3/E2	1	CBM
F3/E4	1	18th-20th cent
F3/F0	1	18th-20th cent
F3/F1	1	18th-20th cent pipe
F3/F4	5	CBM crumbs
F3/G0	1	CBM
F3/H3	1	18th-20th cent
F3/I4	1	18th-20th cent pipe
G1/D2	2	18th-20th cent

G1/E1	2	18th-20th cent
G1/F0	3	?20th cent
G1/F1	3	18th-20th cent
G1/F2	1	18th-20th cent
G1/F4	3	18th-20th cent; clay pipe
G1/G0	3	18th-20th cent
G1/H0	2	18th-20th cent
G2/D0	1	18th-20th cent
G2/E2	1	18th-20th cent
G2/E3	1	18th-20th cent
G2/E4	2	18th-20th cent
G2/F0	1	18th-20th cent pipe
G2/F3	1	18th-20th cent
G2/G0	1	18th-20th cent
G2/H0	1	CBM
G3/C2	1	18th-20th cent
G3/D3	1	18th-20th cent
G3/E0	1	18th-20th cent pipe
G3/E0	1	CBM
G3/E1	1	CBM
G3/E2	1	18th-20th cent
G3/E3	1	18th-20th cent
G3/F0	1	18th-20th cent
G3/F1	2	18th-20th cent pipe
G3/F2	2	CBM
G3/G0	2	18th-20th cent

Table A1: Finds by transect. All material comprises post-medieval pottery, unless specified otherwise.

APPENDIX 2 BIBLIOGRAPHY

- OA, 2003 *Spalding Energy Project Gas Pipeline: Written scheme of investigation*
 OAU, 1996 *Proposed Gas Pipeline, Spalding: archaeological desktop assessment*
 Penspen Ltd, 1996 *Proposed Spalding Energy Centre -gas pipeline: environmental statement*

APPENDIX 3 SUMMARY OF SITE DETAILS

Site name: Spalding Energy Project Gas Pipeline

Site code: SPEP03

Grid reference: NGR TF 2592 3091-2495 3005

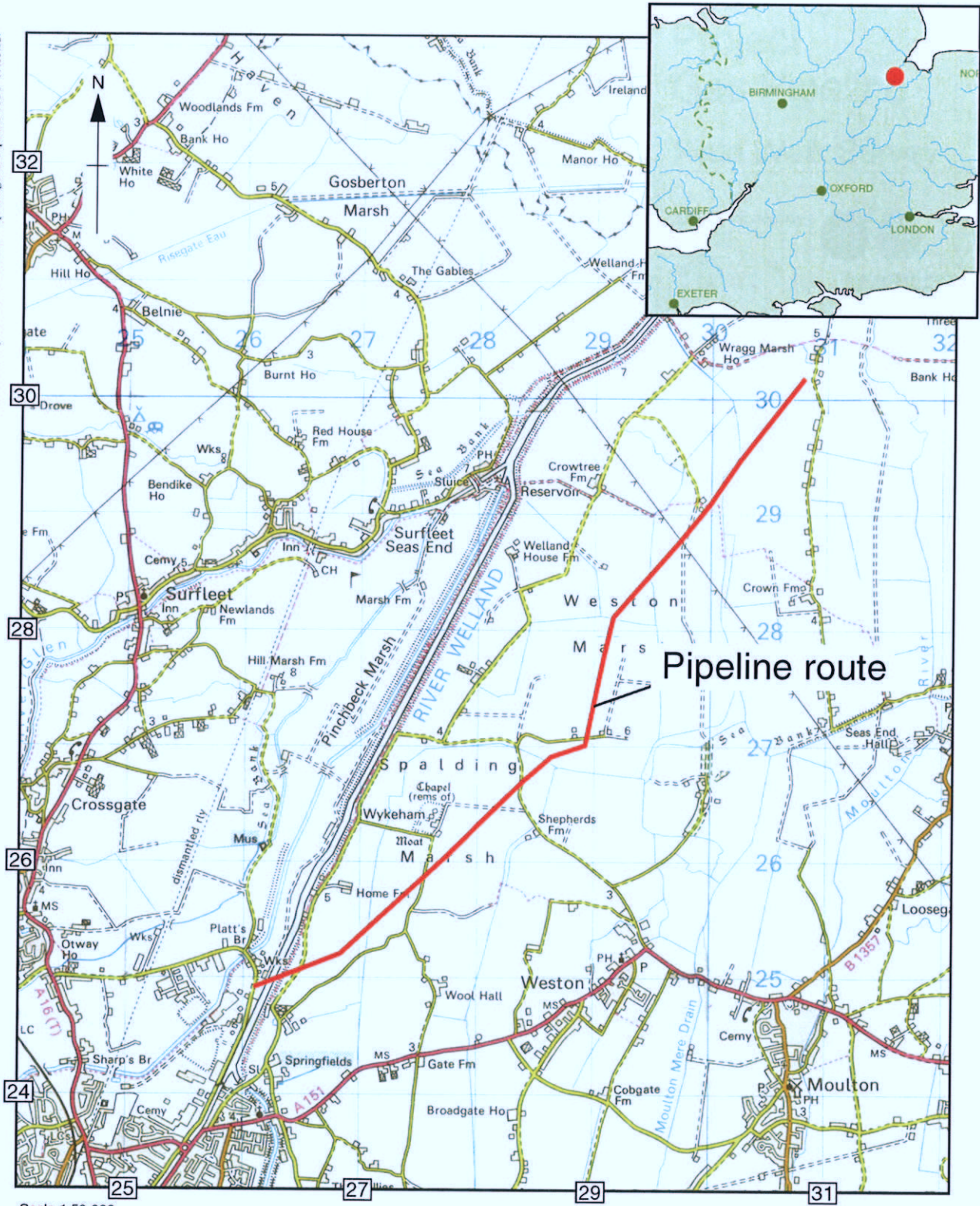
Type of evaluation: Fieldwalking

Date and duration of project: March 2002

Area of site: approximately 7.5 km length

Summary of results: In March 2003 Oxford Archaeology (OA) carried out a fieldwalking survey in advance of construction of a gas pipeline. The work was commissioned by Spalding Energy Company Ltd (SECL). Pottery dating from the 18th to 20th century was found throughout the study area, although earlier dated pieces tended to be concentrated in the southern half of the pipeline, while more recent material was densest in the northern half. Brick, clay pipe and glass fragments were also recovered, along with the occasional iron nail. The finds are likely to derive from domestic activity in the general area and have been incorporated into the ploughsoil through agricultural processes, such as manuring.

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Figure 1: Site location

**Spalding Energy
Project
Gas Pipeline
Field Walk Survey**



KEY

— Pipeline route

● 18th-19th century pottery

● 1

● 2

● 3

● 18th-19th century pipe

● 1

● 2

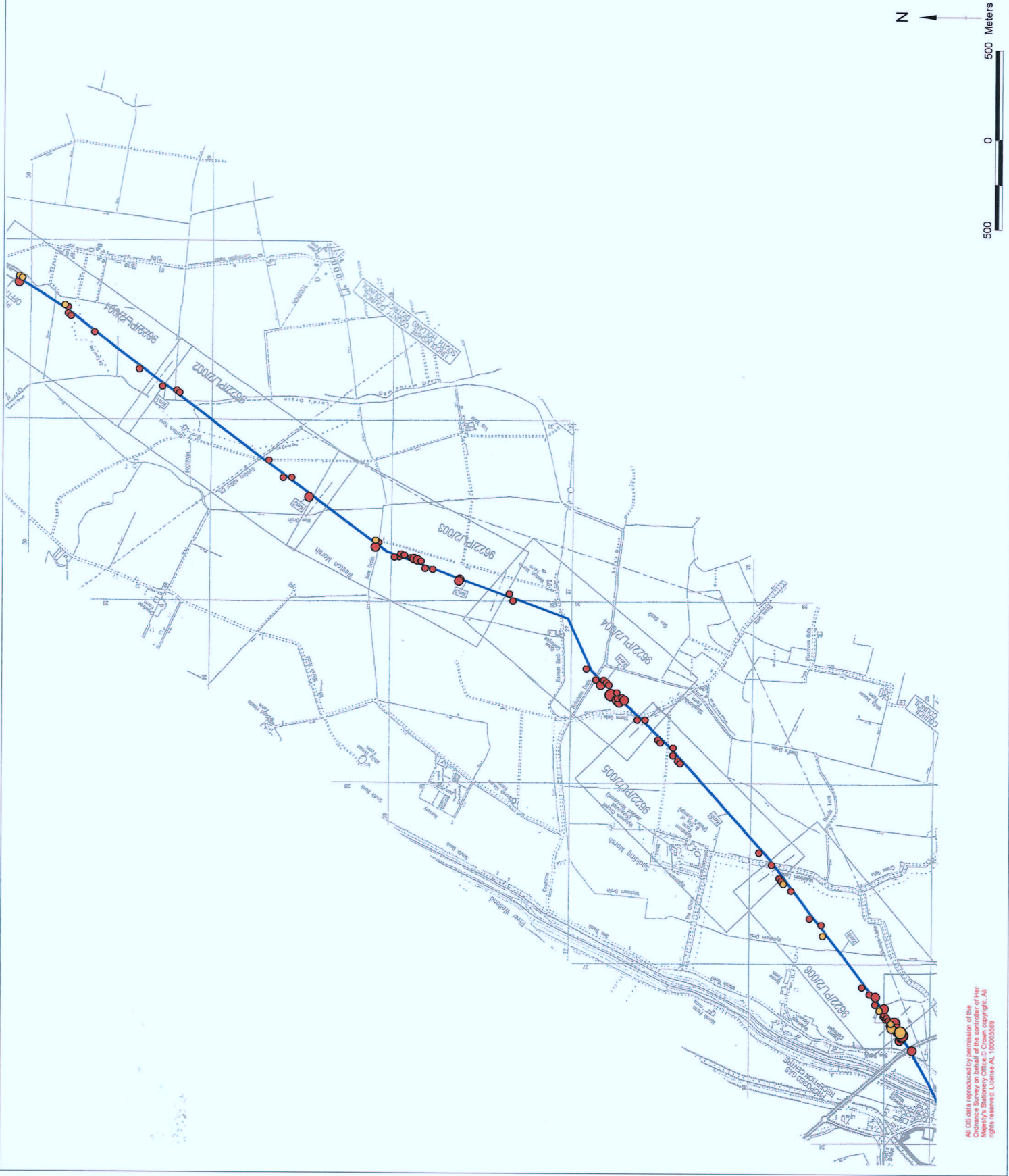
● 3

Drawing
No

Figure 2

Drawing
Title

**Distribution of
18th - 19th century
pottery**



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Spalding Energy Project Gas Pipeline Field Walk Survey



KEY

Pipeline route

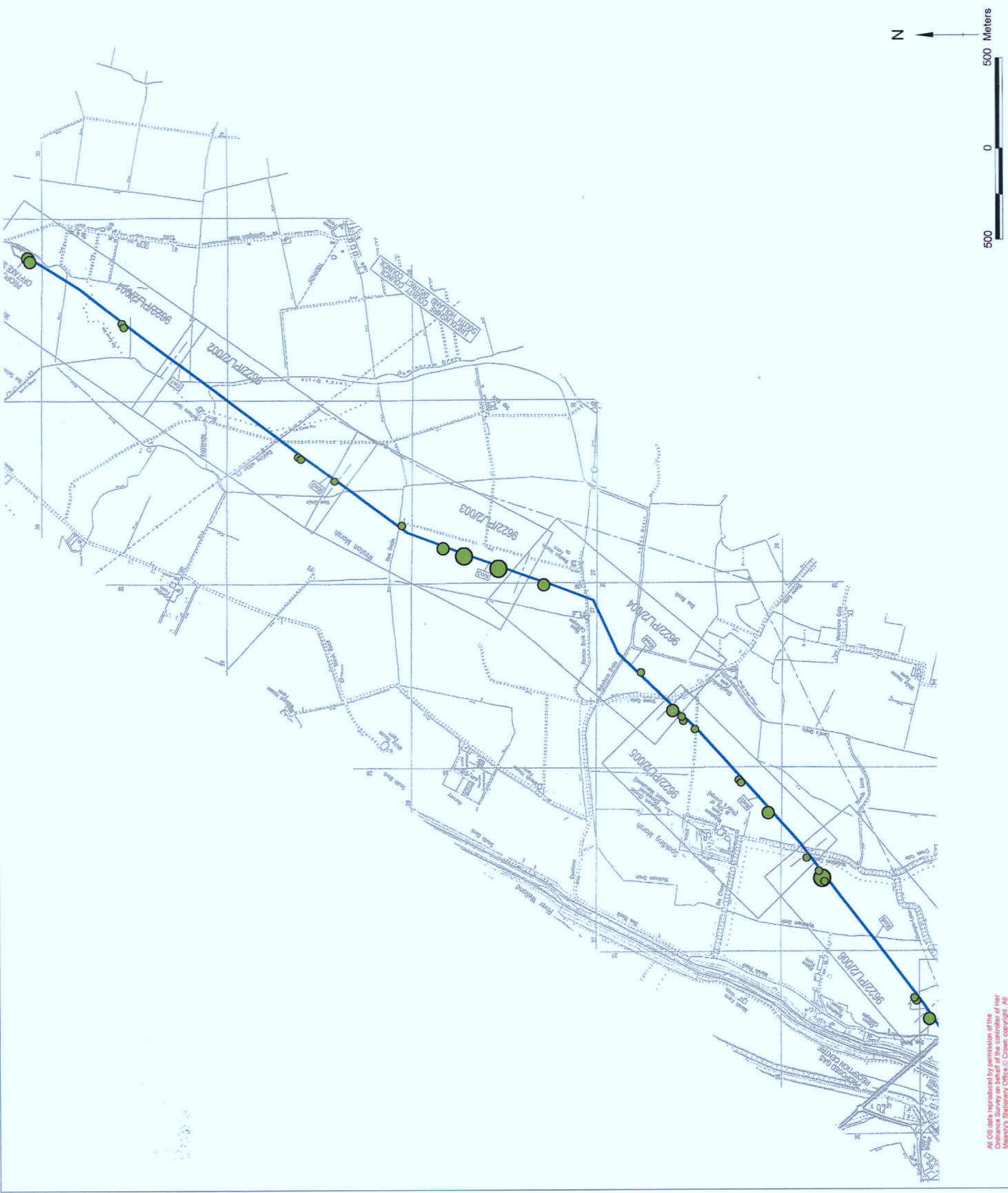
CBM

- 1
- 2-3
- 4-5

Drawing No
Figure 3

Drawing Title

Distribution of CBM









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**Spalding Energy Project
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KEY

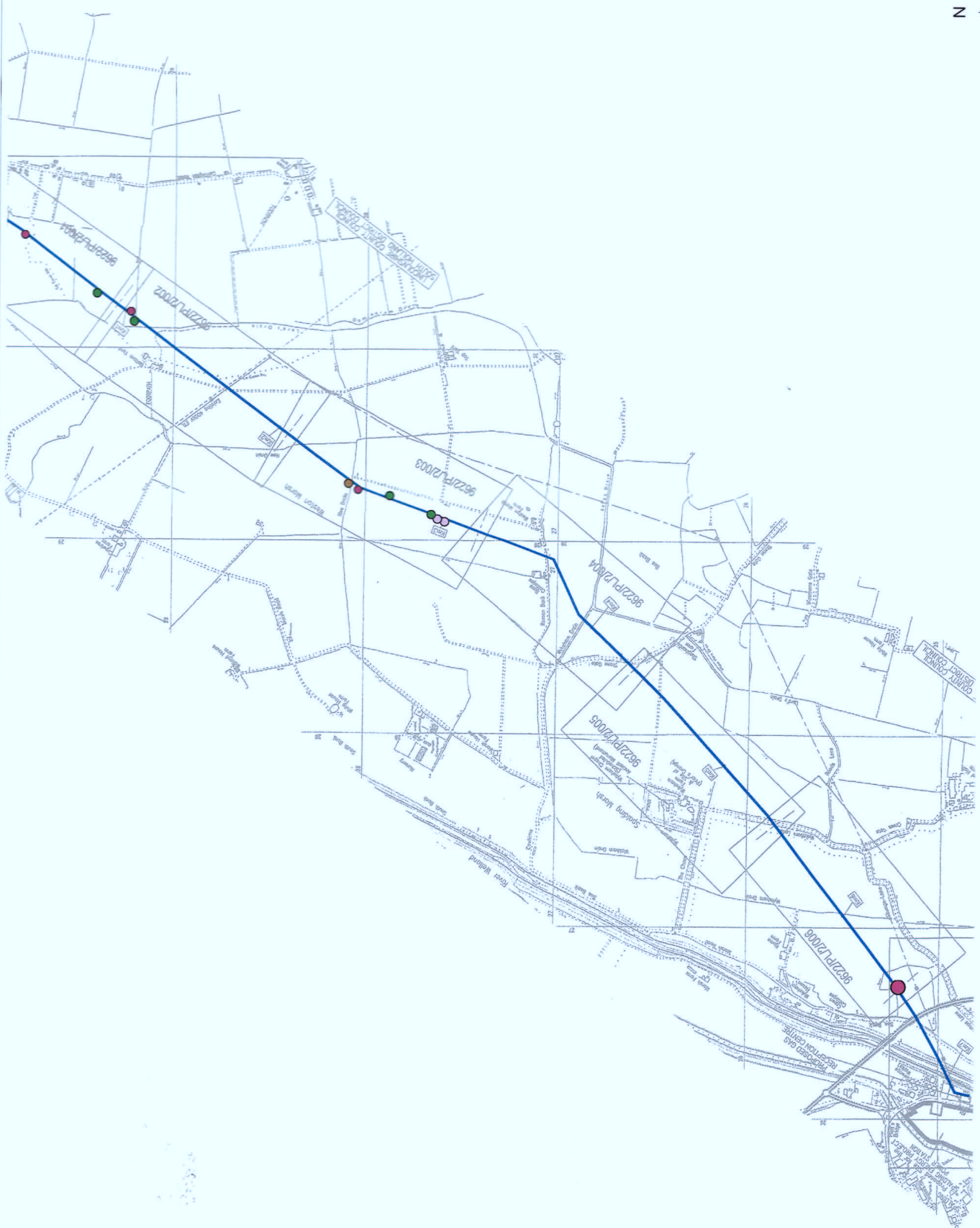
-  Pipeline route
- 20th century pottery
 -  1
 -  2 - 3
- Slate pencil
 - 
- Glass
 - 
- Iron nail
 - 

Drawing No

Figure 4

Drawing Title

Distribution of other finds



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