

Witham Archaeology

A Report to Wold Grain Storage Ltd
March 2007



PROPOSED GRAIN STORE EXTENSION, WOLD GRAIN STORAGE LTD, HEMSWELL CLIFF, LINCS

Trial Trench Evaluation

R Trimble

PROPOSED GRAIN STORE EXTENSION, WOLD GRAIN STORAGE LTD, HEMSWELL CLIFF, LINCS.

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LCCM Accession No.: 2007.17
Planning Application No.: M06/P/0616
NGR: SK 9503 9056

Trial Trench Evaluation

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PROPOSED GRAIN STORE EXTENSION, WOLD GRAIN STORAGE LTD, HEMSWELL CLIFF, LINCS.

TRIAL TRENCH EVALUATION

SUMMARY

This report describes the results of a Trial Trench Evaluation carried out by Witham Archaeology on the site of a proposed storage facility extension at Wold Grain Storage Ltd, Hemswell Airfield, Hemswell Cliff, Lincolnshire. This work represents a second stage of assessment, following the completion of a Desk-Based Assessment and Geophysical Survey in December 2006. It was commissioned by Wold Grain Storage Ltd in response to a condition of planning permission issued by West Lindsey District Council.

The site lies on the northern side of the complex of buildings formerly associated with RAF Hemswell (now mostly incorporated into a trading estate). Existing storage silos are located on the northern side of the site, while the majority of the proposed new silos are scheduled for construction on a flat, grassed area to the south.

Aerial photographs contained in the County Historic Environment Record show a linear cropmark - probably a ditched boundary of prehistoric or Roman date - to the east of the site. Indistinct cropmarks branching off the main cropmark indicate a potential for associated ditches, possibly forming enclosures. There is also mention of a triple ditched boundary in approximately the same area, but the feature is not visible on the available aerial photographs. The geophysical survey carried out by Stratascan Ltd located several anomalies of potential archaeological significance, most notably a linear cut interpreted as possible ditch, and an area of high to moderate resistance indicative of possible stone remains.

Information provided by Woldgrain Storage Ltd, indicates that the development is likely to impact upon deposits up to one metre below existing ground level. It is therefore likely that any archaeology in the survey area would be substantially affected by the development.

1.0 INTRODUCTION

This report describes the results of a Trial Trench Evaluation carried out by Witham Archaeology on the site of a proposed grain store extension at Wold Grain Storage Ltd, Hemswell Cliff, Lincolnshire. The work was commissioned by Wold Grain Storage Ltd in response to a condition of planning permission issued by West Lindsey District Council. Fieldwork was carried out on an intermittent basis during the period 31 January to 14th February 2007.

Planning permission (Application No. M06/P/0616) has been granted by West Lindsey District Council, for the erection of 27 new grain storage silos, along with 2 dryers, 2 loading hoppers, a fuel tank, a plant building, and interlinking gantries. The plans also provide for a new internal access road. The Trial Trench Evaluation forms a second stage of assessment, following the completion of a Desk-Based Assessment and Geophysical Survey in December 2006.

The information in this document is presented with the proviso that further data may yet emerge. Witham Archaeology cannot, therefore, be held responsible for any loss, delay or damage, material or otherwise, arising out of this report. The document has been prepared in accordance with the Code of Conduct of the Institute of Field Archaeologists.

2.0 SITE LOCATION, TOPOGRAPHY & GEOLOGY (See Figs. 1 & 2)

The village and civil parish of Hemswell Cliff, in the administrative district of West Lindsey, lies approximately 18km north of Lincoln and 14km east of Gainsborough. Founded on the site of the now defunct RAF Station Hemswell (closed in 1967) the village incorporates a residential component - mostly former RAF housing - and a trading estate utilising the surviving airfield buildings. Wold Grain Storage Ltd is situated on the northern periphery of the trading estate, with existing storage facilities occupying the northern half of the c. 2.3 ha site and an area of open ground to the south. The latter is bounded by areas of hardstanding associated with the former airfield to the north and west, with small trees lining the southern boundary. A tarmac track runs along the full length of the eastern boundary.

The parish of Hemswell spans the west facing scarp of the N-S Jurassic limestone ridge (the 'Lincoln Edge') running between Lincoln and the Humber. To the east the parish extends from the scarp to the line of the modern A15 (Ermine Street), attaining a maximum elevation of c. 69m OD. To the west it extends across claylands at an elevation of c. 20m OD (Everson 1991, Archive Notes). The ancient village of Hemswell is located at the foot of the scarp slope, with Hemswell Cliff on higher, generally level ground to the east of the scarp. The superficial geology consists of Lincolnshire Limestone (British Geological Survey, Market Rasen, Sheet 102, Solid and Drift).

3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

A detailed consideration of the archaeology and history of the area has already been presented in the Desk-Based Assessment and Geophysical Survey report completed in December 2006 (Trimble 2006). The following discussion is therefore restricted to the more salient findings of that report.

Prehistoric

The County Historic Environment Record (HER) contains aerial photographs showing cropmarks (HER 50352) immediately east of Hemswell Airfield. These comprise a single ditch, starting at a point c. 500m east of the proposed development and running southeast for a distance of around 500m before turning east to continue for a further 180m. Short linear cropmarks branching off the main 'ditch' could indicate associated enclosures. The same photographs show a linear cropmark (c. 180m long) aligned northeast-southwest, immediately northeast of the airfield. This feature, if projected to the southwest, aligns with a point close to the eastern corner of the development area. Another cropmark lying at right angles to the above and situated some 200m north of the site, takes the form of an interrupted linear. There is also mention in the County HER of a triple ditched boundary in approximately the same area, but the feature is not visible on the available aerial photographs.

Romano-British

The site lies about 1.5km west of the major Roman road connecting London and York (the modern A15). There is no evidence to suggest Romano-British activity in the immediate vicinity of the site.

Anglo-Saxon/Scandinavian

There is no record of Anglo-Saxon activity in the immediate vicinity of the site. However, an Anglo-Saxon barrow (HER 50430) was excavated at Caenby Corner 2.5km to the southeast. The excavations carried out in 1849 revealed a high status burial accompanied by a sword and shield, the latter with silver mounts dated to the early seventh century.

Hemswell was in existence by the time of the Domesday Book of 1086. The place-name – appearing as *Helmeswelle* in Domesday Book – is believed to have derived from 'Helm's spring', after the Old English personal name *Helm* and the Old English *wella* for spring (Cameron 1998, 63). Domesday Book records that there were three principal landowners in the parish during the immediate pre-conquest period. These were the king, with land forming part of the soke of Kirton, and the lords Elnod and Speri, with two small manors.

Medieval

After the Norman conquest in AD1066 the king's land in Hemswell was retained by the crown. It was passed on to subsequent kings until, in the time of Edward III, it became permanently attached to the Earldom of Cornwall. Land belonging to the Saxon lord Elnod was granted by William I to Odo Bishop of Bayeux, eventually descending by marriage to the Whichcote family in the late fifteenth century. Speri's manor passed to the Norman lord Martin after the conquest and then to Earl Stephen of Amuele by the time of the Lindsey Survey in AD1115-18. As a result of later sub-infeudation, there were then a number of tenants, including Oliver Wendover, who in an account of 1346 held a quarter part of a fee of the Earl of Amuele (Binall 1985).

Prior to the Black Death in the mid fourteenth century Hemswell was divided into two separate parishes, centred on St Helen's church to the north and the church of All Saints to the south. St Helen's parish might have suffered more greatly from the depopulation associated with the Black Death, resulting in the demise of the church for which there are no surviving remains (Everson 1991, Archive Notes). The surviving church of All Saints contains Early English and Decorated elements (Pevsnor, Harris & Antram 1989, 380). It appears to have been heavily rebuilt in the fourteenth century, possibly in response to the decline of St Helen's (Binall 1985).

The shrunken medieval settlement at Spital in the Street (HER 50846) lies c. 1.5km east of the site, extending either side of Ermine Street (now the A15).

Post Medieval (c. AD 1540 to present)

The population of Hemswell halved during the later seventeenth century but recovered rapidly thereafter. This could account for a discernable southward shift in the focus of the settlement (Everson 1991, Archive Notes).

As a result of parliamentary enclosure of the open fields of the parish during the period 1792-4 (Russell & Russell 1983, 52-4) the area of the proposed development was allocated to Sir Thomas Whichcote. Late nineteenth century maps of the area show evidence of further subdivision but none of the associated field boundaries occur in the proposed development area.

The first airfield at Hemswell was opened in 1916, during World War I. Named Harpswell, it lay immediately east of Middle Street and north of the line of the A631. The airfield was closed in the immediate post-war period but a much larger airfield (HER 53944) was opened during the 1930's. This was used by Bomber Command for bombing operations during World War II. The station was eventually closed by the RAF in 1967.

The main area for the proposed extension lies between hard-standings surviving from the airfield. A hanger or warehouse lies a short distance to the northwest.

4.0 AIMS & OBJECTIVES

The principal aims and objectives of the project, as set out in a Witham Archaeology specification of 17th January 2007, were to:

- *provide information on the presence/absence, nature, date and quality of survival of archaeological deposits and remains which might be contained within the site and to assess their importance.*
- *provide site specific archaeological information which (if necessary) would allow for the design and integration of timing and funding of any further archaeological work (or other mitigating strategy) which might be required in advance of or during the proposed development programme.*

- produce a project archive for deposition with the appropriate museum and from which the potential for further study and academic research could be assessed.
- provide information for accession to the County Historic Environment Record.

5.0 METHODOLOGY

The Witham Archaeology specification was produced in accordance with recommendations made by Karen Dennis, Historic Countryside Officer, Lincolnshire County Council. It provided for the excavation of two trial trenches (Trenches 1 & 2) each 10m long, and a single trench (Trench 3) 5m long. Trench 1 was placed at right angles across a linear anomaly (possibly a ditch) located by geophysical survey on the western side of the area scheduled for development. Trench 2 situated further to the east, investigated an area of high resistance (possible masonry), while Trench 3 was centred upon a possible cut feature on the eastern side of the area.

Topsoil was removed from each trench by a small tracked excavator using a toothless ditching bucket. All trench bases were subsequently cleaned by hand, and features of potential archaeological origin in Trench 1 were part-excavated to ascertain character, extent and date.

Excavated features were recorded through drawn plans and sections at respective scales of 1: 50 and 1: 20, augmented by colour photographs and written context records on *pro forma* Witham Archaeology recording sheets. Trenches and reference points used for recording were located in relation to fixed reference points using an EDM total station and datalogger.

6.0 RESULTS (See Figs. 3 & 4)

6.1 Trench 1

Trench 1 was placed at right angles across a linear geophysical anomaly interpreted as a cut feature of possible archaeological origin.

Geological deposits in the form of fragmented limestone, (107), mixed with silty sand, were encountered at a depth of *c.* 0.40m below existing ground level (*c.* 52.91m OD). The limestone was partially overlain by a 'subsoil' deposit, (106), encountered in a hand-excavated slot 0.80m wide slot, while sandy clay, (108), containing frequent limestone fragments, was encountered through the excavation of a deeper feature, [004] – see below. It was not clear whether (106) extended beneath (107).

A deposit of sandy silt, (103), was located at the point where Trench 1 intersected with the linear geophysical anomaly (see Plates II & III). Part excavation within the previously mentioned slot, revealed a 'hollow', [004], 1.75m wide and generally 0.30m deep. The base of the feature, as excavated, displayed a number of irregularities, which were not excavated - in part due to an overlying electricity cable (see below). A small cut, [105], immediately to the southeast of [004] was partially excavated (to a depth of 0.22m), to reveal an irregular shape, and steep sides undercutting the natural in places. Its sandy silt fill was indistinguishable from the material, (103), filling [004]. The morphology of cuts [004] and [005] would tend to suggest a natural origin – possibly as ice-wedges or solution-holes in the natural limestone.

An E-W aligned service trench, [102], was found to cut (103). The trench contained an electricity cable together with a small diameter iron pipe. Topsoil, 0.40m thick, extended throughout the upper levels of the trench.

A small fragment of unglazed pottery (body sherd) identified as post-medieval or modern in date (Gary Taylor, *pers comm*), was recovered as unstratified, (116), from Trench 1.

6.2 Trench 2

Trench 2 was positioned to investigate a high resistance anomaly interpreted as an area of possible masonry.

Fragmented limestone, (115), identical to (107) in Trench 1, was located at approximately 0.25 to 0.30m (c. 52.60m OD) below existing ground level. Irregular patches of sandy silt, (114), identical in composition to (103) in Trench 1 and probably having a similar origin, were visible across the base of the trench. An irregular 'cut', [115], containing this material, was noted at the NE end of the trench.

Topsoil, (113), was 0.25m thick in Trench 2.

There was no evidence to suggest the presence of masonry in this part of the site.

6.3 Trench 3

Trench 3 was positioned over a low resistance anomaly (possible cut feature) located by the geophysical survey.

Fragmented limestone, (112), was located at depth of between 0.40 – 0.50m (c. 53.50m OD) below existing ground level. It was sealed by topsoil, (111), 0.20m thick. The latter was in turn sealed by a layer of mixed sand and limestone, (110), with an average thickness of 0.15m, and by limestone and turf, (109), 0.10m thick (See Plate IV). These deposits of redeposited 'natural' are almost certainly recent in origin (probably spoil from the construction of airfield structures or grain store facilities) and appear to account for the distinct rise in ground level towards the eastern end of the site.

There was no evidence of the possible cut feature indicated by the geophysical survey.

7.0 DISCUSSION & CONCLUSIONS

The programme of trial trench evaluation located the topmost geological horizon of limestone brash at shallow depth in all three trenches. In Trench 1, the limestone was 'cut' by a shallow feature (or features), irregular in form and occurring in a linear trend coincident with a 'negative' anomaly located by the geophysical survey. The morphology of the feature indicates a natural origin – as an ice-wedge, or possibly (together with 004) as an aggregation of solution holes. Comparable irregularities (filled with an identical sandy silt) visible in plan within Trench 2, almost certainly result from the same weathering processes. A single fragment of post-medieval or later pottery was found in Trench 1.

There was no indication of masonry in Trench 2, and no evidence to suggest a cut feature in Trench 3.

To conclude: investigation of the anomalies located by geophysical survey has produced a negative result. The combined results of desk-based assessment, geophysical survey and trial trench evaluation indicate a low potential for archaeologically significant remains in the area scheduled for extension of the storage facility.

8.0 ACKNOWLEDGEMENTS

The author of this report would like to thank Mr Richard Milligan-Manby of Wold Grain Storage Ltd for his interest and assistance in ensuring the successful completion of this project.

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10.0 PROJECT/ ARCHIVE DETAILS

10.1 LHA NOTE DETAILS

SITE CODE: WGHC07

PLANNING APPLICATION No.: M06/P/0616

FIELD OFFICER: R Trimble

NGR: TF 9503 9056

CIVIL PARISH: Hemswell Cliff

SMR No.:

DATE OF INTERVENTION: 31st January – 14th February 2007 (on intermittent basis)

TYPE OF INTERVENTION: Trial Trench Evaluation

UNDERTAKEN FOR: Wold Grain Storage Ltd

10.2 ARCHIVE DETAILS

PRESENT LOCATION: Witham Archaeology, 65 Grantham Road, Sleaford, Lincolnshire, NG34 7NG

FINAL LOCATION: The City and County Museum, Friars Lane, Lincoln

MUSEUM ACCESSION No.: 2007.17

ACCESSION DATE: -

The Site Archive Comprises:

Context Records	17
Plans at Scale 1:50	1 sheet
Section Drawings	1
Colour Print Photographs	15
Site Notes	3 sheets

It is intended that transfer of the archive in accordance with current published requirements will be undertaken following completion of this project.

COLOUR PLATES



Plate I – General view of Trench 1, looking north (1m scale)



Plate II – Features [004] and [005] in Trench 1, looking north (1m scale)

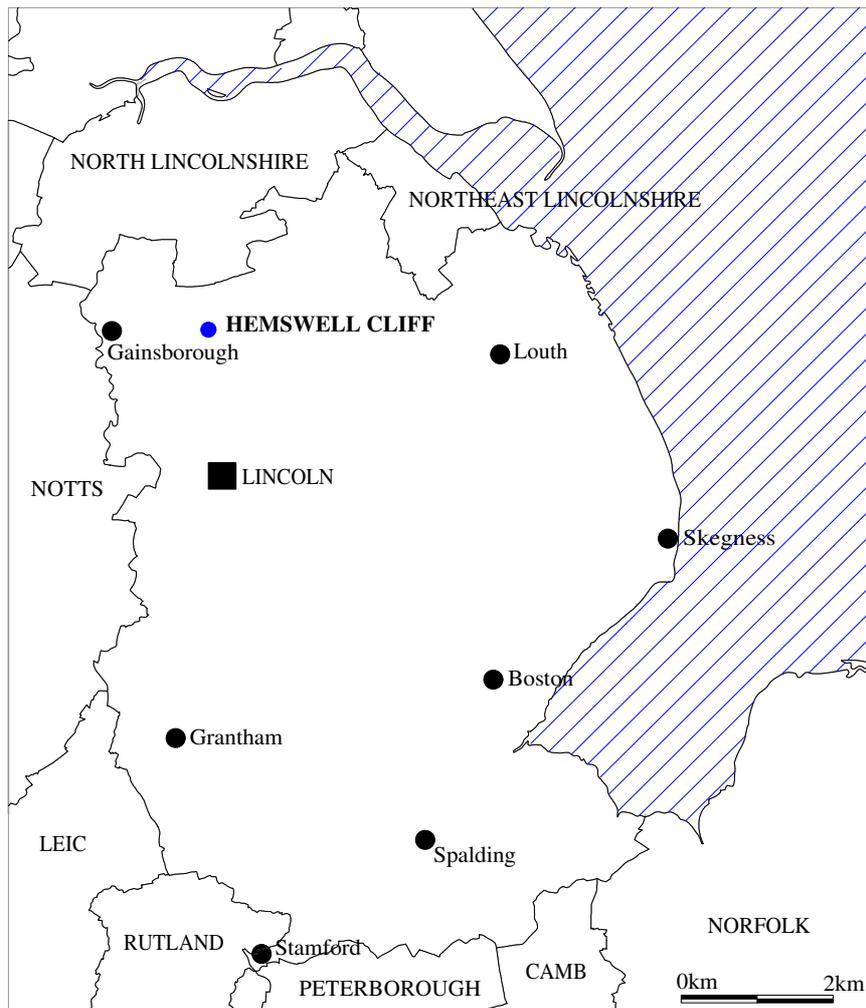
COLOUR PLATES

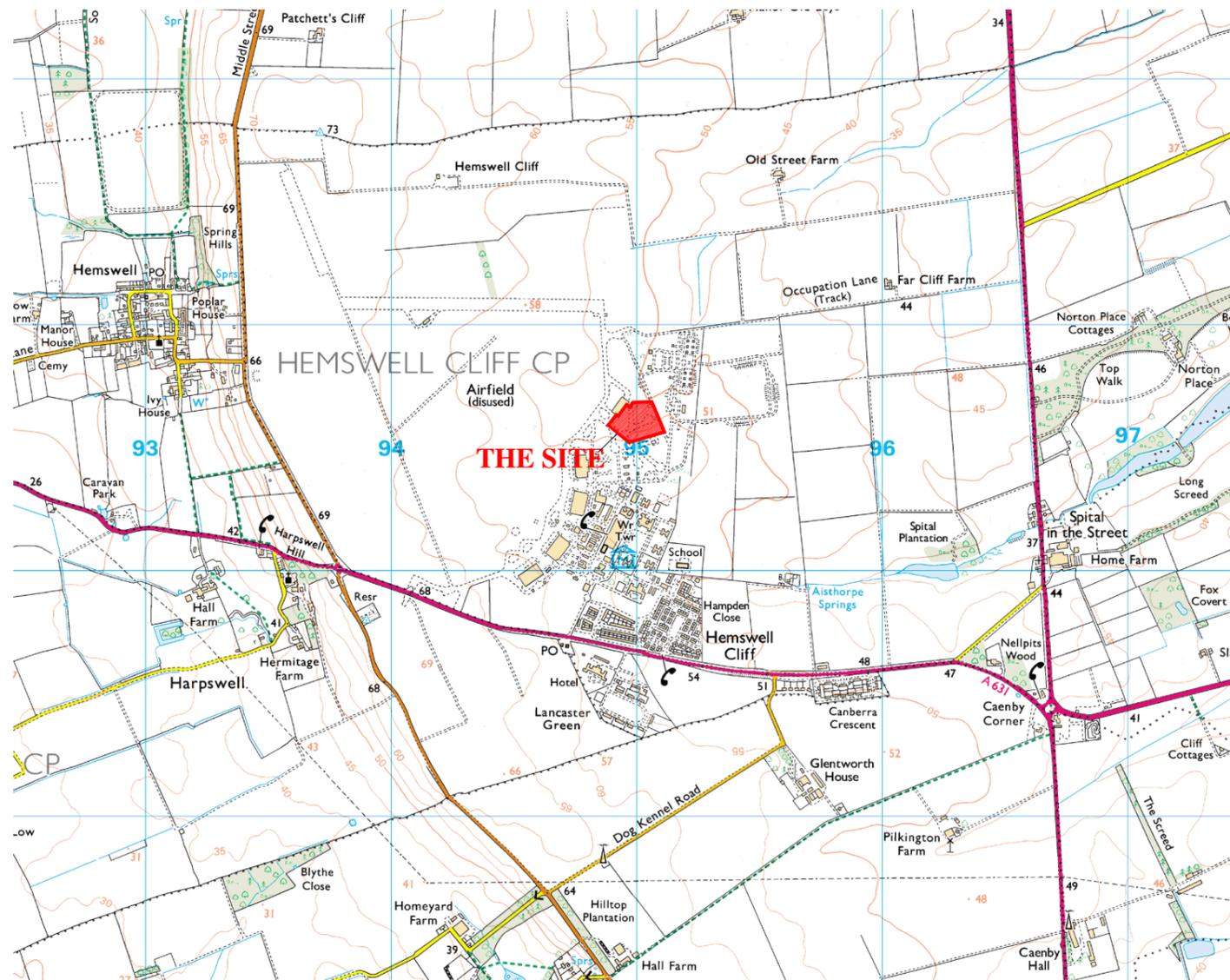


Plate III – Section with features [004] and [005] – digital photograph shot in improved light

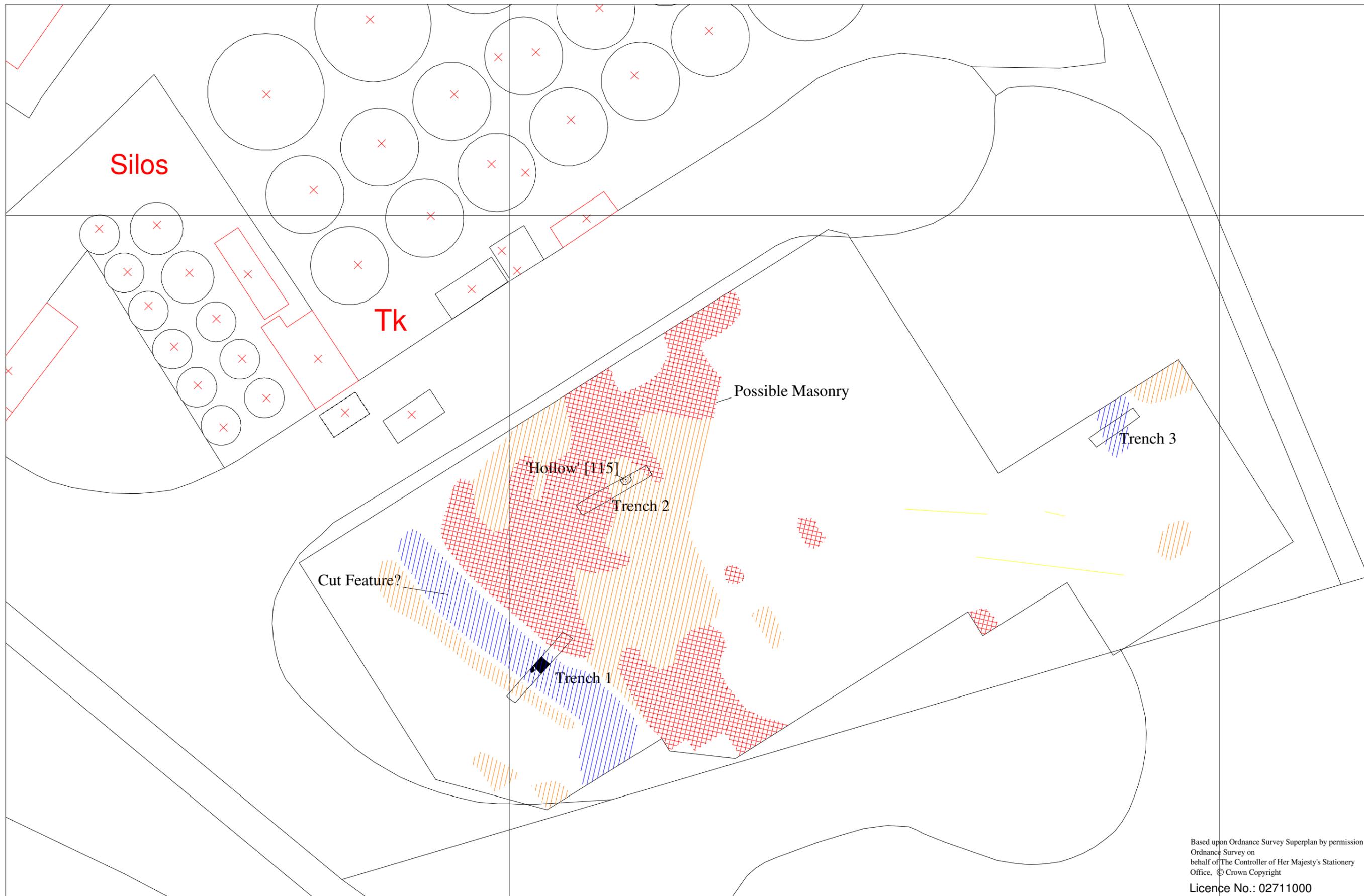


Plate IV – General view of Trench 3, looking north (1m scale)

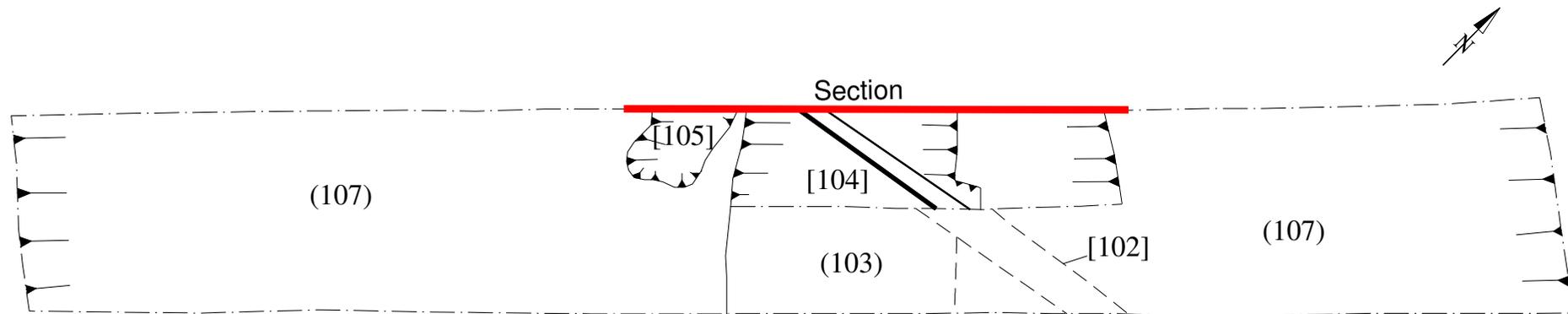
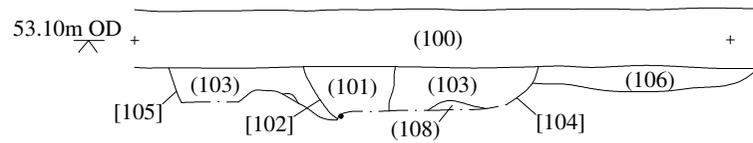




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APPENDIX – CONTEXT DESCRIPTIONS

<i>No.</i>	<i>Tr.</i>	<i>Interpretation</i>	<i>Description</i>
100	1	Topsoil	Loose, dark greyish brown silty sand; frequent limestone; 0.4m thick
101	1	Fill of [102]	Compact, mixed light brown and dark greyish brown sand/silt; frequent limestone fragments
102	1	Service trench cut	Linear with steep sides; aligned E-W; 0.3m wide and 0.3m deep
103	1	Fill of [104]/[105]	Soft, mid reddish brown sandy silt; occasional grits
104	1	Solution holes or ice-wedge?	Generally linear with irregular profile; aligned SE-NW; 1.75m wide x 0.30m average depth
105	1	Solution hole?	Irregular plan shape and profile; 0.6 x 0.6m visible plan dimensions (extending beyond limits of excavation); at least 0.22m deep
106	1	Layer – natural?	Moderately compact light to mid brown slightly clayey silty sand; 0.16m maximum thickness
107	1	Natural limestone	Moderately compact, mix of fragmented limestone (60%) and light to mid brown (yellowish) silty sand (40%)
108	1	Natural	Moderately compact, very light yellowish brown sandy clay; frequent limestone fragments
109	3	Layer – redeposited	Loose, limestone rubble with turf over; 0.1m thick
110	3	Layer – redeposited	Moderately compact, light yellowish brown clayey sand (50%) and irregular limestone fragments (50%); 0.15m thick
111	3	Topsoil (buried)	Moderately compact, mid grey-brown slightly clayey silty sand; frequent small limestone fragments; 0.2m thick
112	3	Natural limestone	As (107)
113	2	Topsoil	As (100); 0.25m thick
114	2	Fill of [115]/ Natural?	As (103); occurs intermittently in Trench 2 in irregular patches including [115]
115	2	Solution hole?	More defined patch of (114) occurring at NE end of Trench 2; approximately 1.5 x 1m visible extent; not excavated
116	1	Unstratified find	-

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