Summary

- *An archaeological field evaluation took place to inform proposals in advance of a light industrial development at Wavell Drive, Lincoln.*

- *Three trenches were planned within the footprints of the proposed new buildings. Initial excavation in Trench 3 revealed modern overburden to a depth of 3m below the existing ground level. Following consultation with the Lincoln City Archaeologist, it was agreed to open test-pits in the area of Trenches 1 and 2 to ascertain the presence and depth of modern overburden across the site.*

- *In Trench 2, the overburden was 2.7m thick; in Trench 1, 1.2m. Following a visit by the Lincoln City Archaeologist, it was agreed to suspend the evaluation and reconsider the archaeological approach, after further consultation with the client.*

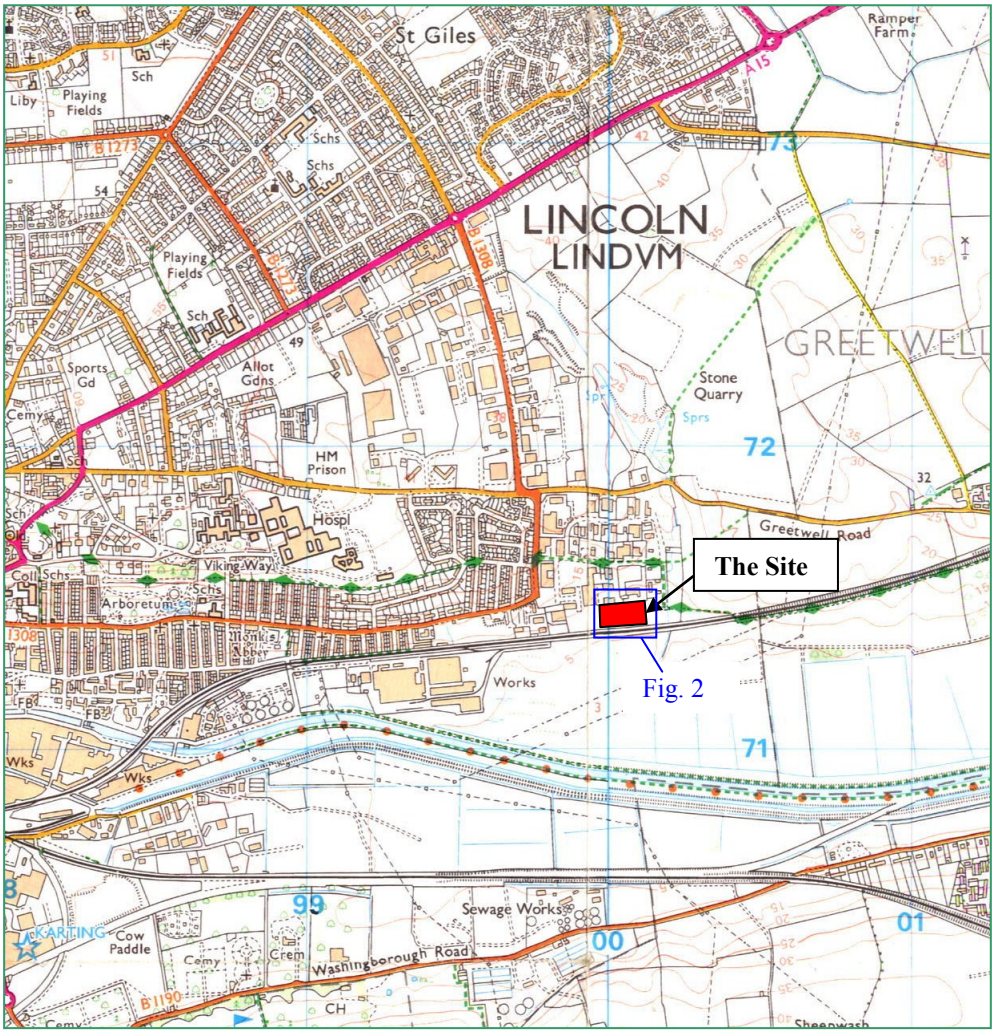

Fig. 1: General site location. The site itself is highlighted in red, and the area shown in Fig.2 is outlined in blue. Scale 1:25 000.

1.0 Introduction

Pre-Construct Archaeology (Lincoln) was commissioned by Oglesby & Limb Ltd. to undertake a programme of field evaluation prior to industrial development at Wavell Drive, Lincoln (National Grid Reference TF 0007 7143 (centre)).

This report documents the results of archaeological investigations that were undertaken on 28.11.2006 to fulfil the objectives of a project brief issued by the Lincoln City Archaeologist, and a project specification prepared by Pre-Construct Archaeology (Lincoln). This approach is consistent with the recommendations of *'Lincolnshire Archaeological Handbook: A Manual of Archaeological Practice'* (LCC, 1998), *Archaeology & Planning: Planning Policy Guidance Note 16* (Department of the Environment, 1990) and *Standards and Guidance For Archaeological Evaluations* (IFA, 1994 as revised).

Copies of this report will be deposited with the commissioning body, the City Archaeologist, the Lincolnshire Historic Environment Record, and the Local Planning Authority. Reports will also be deposited at the City and County Museum, Lincoln, accompanied with an ordered project archive.

2.0 Location and Description (Figs 1 and 2)

The site is on the eastern periphery of Lincoln, on the north side of the Witham valley. It is located in the southeast corner of the Allenby Road industrial estate and accessed off Wavell Drive, which extends south from Crofton Road. It occupies an area of rough pasture and scrubland (of approximately 1.2 hectares) to the north of the Lincoln-Market Rasen railway line, and has neighbouring industrial units to the north, east and west.

In the floodplain of the valley, to the south of the railway line, the local drift geology consists of alluvial sand deposits over Lincolnshire Limestone. East of the site is an outcropping of the Lincolnshire Limestone (not masked by river valley alluvium). The valley slope to the north of the railway line consists of laminated bands of Lincolnshire Limestone (British Geological Survey, 1973).

3.0 Planning Background

Full planning permission for the erection of four buildings, making up nineteen light industrial units on land at Wavell Drive, Lincoln was granted on 14th September 2006. Condition 6 of the Grant of Planning Permission Document stated that a program of works designed to "evaluate, preserve, and/or record the archaeological content of the site" must be undertaken "to ensure that any archaeological remains contained in the site are properly recorded in the Sites and Monuments Record and the Urban Archaeological Database" (Planning Ref. 2006/0095).

4.0 Archaeological and Historical Background

The Witham valley was a focus of activity throughout the prehistoric period: finds of worked flint suggest intermittent occupation from the Mesolithic period through to the Later Bronze Age. A stretch of the Witham floodplain, from Lincoln to Stainfield, features groups of Bronze Age barrows, and a cropmark barrow cemetery (SMR ref. 52841) is located immediately to the south-east of the proposed development area. Numerous high-status artefacts from the Bronze and Iron Ages, apparently ritual deposits, have also been retrieved from the Witham during engineering works.

To the north-west of the current site, 19th century ironstone mining encountered the remains of a high status late Roman building, with painted wall plaster and elaborate mosaics. The building has been interpreted as the residence of the provincial governor of the 4th century AD and later administration.

A recent archaeological evaluation carried out by PCA (Lincoln) to the east and south of the current application site encountered small amounts of prehistoric material from the Mesolithic to the Bronze Age. The majority of the archaeology, however, dated to the Romano-British period: the earliest pottery was from the late 1st century AD, the period of establishment of the legionary fortress at Lincoln. Stone building remains associated with quantities of animal bone and surrounded by a series of field boundaries indicated that cattle were being butchered on the site, which was interpreted as being pastoral land belonging to the fort. High status pottery and tile suggests that there was a well-appointed domestic residence beyond the excavated area. The structures identified were in use from the late 1st to mid 2nd century AD, and appear to have been deliberately demolished. The latest excavated material consisted of two Christian burials of suspected late Roman date (Clay, 2004).

5.0 Methodology

To evaluate the site, the City Archaeologist required the investigation of three trial trenches. These were to be excavated to a minimum of 1.5m wide, with a single trench measuring 60m long (Trench 1) and two further trenches of 30m long (Trenches 2 and 3). The longest trench was to be situated in the area of the two proposed westerly buildings to cover the full north-south width of the site, whilst the shorter trenches were placed to cover the areas of the proposed east-west aligned buildings.

The evaluation was carried out on 28th November 2006. Initial excavation was undertaken with a JCB 3CX excavator employing a 1.5m wide ditching bucket.

Machining began at the eastern end of Trench 3: however, it soon became apparent that there was a deep layer of dumped demolition material sealing the potential archaeology. After consultations with the City Archaeologist, it was decided to discontinue excavation in this area and open test-pits in the area of the two remaining trenches to determine if the depth of overburden encountered in Trench 3 was present across the whole site. The bucket was changed to a 1m toothed bucket (more effective at excavating coarse rubble); test-pits were opened at the west end of Trench 2 and the

southern end of Trench 3, and a visit was made by the City Archaeologist to assess the situation.

All excavations were undertaken under direct archaeological supervision, ensuring that the deposits exposed were identified and recorded. For safety reasons, the test-pits could not be entered, but samples of the deposits were lifted out by the machine to allow accurate records to be made. This resulted in the production of written descriptions of each layer on standard context recording sheets. Colour photographs and scale drawings complement these accounts.

6.0 Results

6.1 Trench 1 (Figs. 2, 3)

Located in the southwest corner of the site, this became a machine-excavated test-pit to establish the depth of the modern overburden at the southern end of the planned Trench 1. The test-pit was excavated to a total depth of 1.7m.

Immediately below the modern topsoil (context 100) was a 1.1m thick layer of limestone rubble – context 101. At the base of this was a lens of mid orange dumped clay (102). This material sealed a layer of friable, very dark grey silty sand containing occasional brick and mortar fragments (103), which was interpreted as a buried topsoil.

At the base of the trench, a layer of light buff limestone-derived clay was present, containing occasional medium limestone fragments and pea-gravel (104). This was interpreted as the natural underlying weathered limestone.

6.2 Trench 2 (Figs. 2, 4)

Located 60m to the east of Trench 1, this was again a machine-excavated test-pit to establish the depth of the modern overburden on the site. It was excavated at the west end of the planned Trench 2, in the middle of the development area, on the south side. The trench was excavated to a total depth of 2.8m.

Immediately below the modern topsoil (context 200), which was thicker but cleaner than in Trench 1, lay a 0.3m thick layer of mid orange, redeposited, coarse stony clay – context (201). This sealed a 2.3m thick layer of demolition rubble, (202), consisting of a loose mid grey gritty sand matrix, the upper part of which was a coarse modern demolition rubble including whole bricks, concrete, plastic etc., while the lower part was more fragmented brick, all in a loose mid grey sand/mortar matrix.

At the base of the trench, a mid brown medium sand layer (203) was present, which became cleaner and more yellow with depth. This was interpreted as natural alluvial sand.

6.3 **Trench 3** (Figs. 2, 5)

This was located in the northeast corner of the site. Only the eastern 7m of trench was machine excavated before it was discontinued at a total depth of 3.4m.

The modern topsoil (300) was thickest here – 0.28m: it sealed a series of dumped demolition deposits (301-304) comprising aggregate and brick/concrete rubble, including plastics and metal components which were present to a depth of 3m below existing ground level. The modern rubble sealed a dark greyish-brown medium silty sand layer (305). This was interpreted as a buried topsoil or subsoil horizon; present before the dumping of the demolition rubble. No clear distinction could be made between layer (305) and the yellowish brown coarse sand (306) below it, which was interpreted as the underlying natural.

7.0 Discussion and Conclusions

It is clear that large-scale dumping of modern demolition material has taken place across the whole area of the site. This is at its thickest in the north eastern part of the site, where it was present in Trench 3 to a depth of 3m. It is shallowest in the southwestern part of the site where, in Trench 1, it was only 1.2m thick. In the south-central part of the site (Trench 2) it was 2.8m thick. Exploratory trenching has confirmed that buried topsoil is present below the modern dumping, at least in the areas of Trenches 1 and 3, and this may seal features of archaeological significance.

The mass of modern overburden present on the site is considered to have made further archaeological evaluation prohibitive in terms of time and expense (i.e. considering the quantity of material that would need to be removed in order to safely reach the underlying horizons of potential archaeological interest).

The Lincoln City Archaeologist has advised that a different approach needs so be considered to fulfil the requirements of the condition placed on the planning permission, and further consultation is required to mitigate the impact the new buildings may have on the potential archaeological resource.

8.0 Effectiveness of Methodology

The methodology employed to assess the archaeological content of the site has proved effective in demonstrating that horizons of potential archaeological interest survive below a significant depth of modern overburden and in establishing the nature and depth of this overburden.

9.0 Acknowledgements

Pre-Construct Archaeology (Lincoln) would like to thank Oglesby & Limb Ltd. for this commission.

10.0 Bibliography

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