

ARCHAEOLOGICAL EVALUATION REPORT:

TRIAL TRENCHING ON LAND AT BIFRANGI, SPA ROAD, LINCOLN, LINCOLNSHIRE

Planning Reference: 2014/0204/F
NGR: SK 99490 71298
AAL Site Code: LIBS 14
Museum Accession Number: LCNCC: 2014.129
OASIS Reference Number: allenarc1-187893



Report prepared for Bifrangì UK Ltd

By
Allen Archaeology Limited
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Allenarchaeology



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Cover image: Development area from northeast corner of site, looking west

Executive Summary

- Allen Archaeology Limited was commissioned by Bifranghi UK Limited to undertake an evaluation by trial trenching on land off Spa Road, Lincoln, Lincolnshire, following a grant of planning permission for a research and development centre.
- The development site lies in an area of known archaeological potential, including the regionally important late Roman Greetwell villa site.
- Two evaluation trenches and a test pit were investigated within the proposed development site, with Trench 2 abandoned due to extensive services, soakaways and modern drains being encountered. Trench 1 showed a sequence of glacial sand overlain by Victorian and modern dumping and then a topsoil horizon, whilst Test Pit 1 revealed only reinforced concrete and rubble.
- The archaeological potential of the site is considered to be negligible; therefore the impact of the proposed development upon archaeological remains is also likely to be negligible.

1.0 Introduction

- 1.1 Allen Archaeology Limited was commissioned by Bifranghi UK Limited to undertake an archaeological evaluation by trial trenching on land off Spa Road, Lincoln, Lincolnshire, following planning permission for a research and development centre.
- 1.2 The site works and reporting conformed to current national guidelines, as set out in the Institute for Archaeologists '*Standard and guidance for archaeological field evaluations*' (IfA 1999, revised 2001 and 2008), the English Heritage document '*Management of Research Projects in the Historic Environment*' (English Heritage 2006) and the local guidelines in the *Lincolnshire Archaeological Handbook* (LCC 2012).
- 1.3 The documentary archive is to be submitted to the Collection Museum in Lincoln, where it will be stored with under the Museum Accession Number LCNCC:2014.129. The agreed date of deposition is December 2014.

2.0 Site Location and Description

- 2.1 The site is located c.1.5km to the east of the historic core of the city of Lincoln, immediately to the east of Spa Road. The proposed development area lies within the holdings of Bifranghi UK Ltd and comprises open ground immediately to the south of a railway line and north of existing Bifranghi UK buildings. The site is centred on NGR SK 99490 71298.
- 2.2 The site lies on a bedrock geology of Scunthorpe Mudstone Formation and Charmouth Mudstone Formation, with no overlying superficial deposits recorded (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>).
- 2.3 Borehole data from c.250m to the west shows a c.0.9m thick peat surviving beneath a 0.6m thick made ground deposit (BGS ID: 251363), although this was taken slightly downslope within the valley where peat may be expected. A further borehole at a position similar to the development area in relation to the valley did not reveal any peat however, showing only 0.9m of made ground over naturally-deposited clayey silty sand (BGS ID: 251362).

3.0 Planning Background

- 3.1 A planning application was submitted on 26th March 2014 for the '*Erection of a two storey research and development centre providing office, laboratory and workshop accommodation*' (Planning Reference 2014/0204/F). Permission was granted, on 1st May, with conditions, including for the undertaking of a programme of archaeological work (condition 7). The evaluation by trial trenching is the first stage of investigation, intended to provide sufficient information to allow the planning authority to determine the nature and extent of any further archaeological mitigation that may be required.
- 3.2 The approach adopted is consistent with the recommendations of Chapter 12: Conserving and Enhancing the Historic Environment of the National Planning Policy Framework (NPPF) (Department for Communities and Local Government 2012).

4.0 Archaeological and Historical Background

- 4.1 The Lincoln Archaeological Assessment (LARA) has been undertaken to provide a uniform series of 'Character Areas' within the city, detailing an overview of the character of the place, the known archaeology from each area and potential research questions. The Character Areas are analysed focussed on 7 Eras based on specific pre-historical and historical periods, and each area is split into Research Agenda Zones (RAZ). This information is accessible via the publication '*City by the Pool*' (Jones et. al. 2003) and Heritage Connect Lincoln website (<http://www.heritageconnectlincoln.com/>). The site lies within the Great Northern Terrace Industrial Character Area, and the following RAZs apply:
- 5.8: Valley floor deposits
 - 6.7: Valley floor deposits
 - 7.9: Riparian deposits
 - 8.5: Riparian deposits
 - 9.8.5: Common pasture east of Butwerk
 - 10.8.5: Common pasture east of Butwerk
 - 11.36: Heavy engineering works
- 4.2 A search of the City of Lincoln Council Lincoln Heritage Database (LHD) has identified a total of 86 Monuments within 500m of the site. The majority of these refer to Victorian terraced housing and elements associated with the adjacent railway line, although more relevant monuments are discussed in more detail below.
- 4.3 The LHD also noted a total of 41 previous archaeological events within the study area, with the majority of these relating to the discovery of Roman artefacts to the north of the site in the late 19th and early 20th century.
- 4.4 Little of prehistoric date has been encountered in the vicinity of the site; however the valley floor deposits that include the site are known for extensive activity throughout prehistory (RAZ 5.8). Recent excavations in various locations in Lincoln and parts of the Witham Valley have identified a prehistoric ground surface from which flints of prehistoric date have been recovered (for example AAA 2008). This former ground surface has lost its organic content, leaving a leached grey sand. Later Neolithic and early Bronze Age funerary monuments (round barrows) are also noted in the vicinity (RAZ 5.5), and an Iron Age strap mount from a chariot was found in 1891 c.325m to the north of the site (LHD RENO10667).
- 4.5 The Roman military period is also categorized as valley floor deposits (RAZ 6.7), with water meadows in the valley likely utilised for summer pasture for livestock. The site however lies above the 5m OD contour that is generally seen as the upper limit to the riverine deposits, so the site may lie on higher dryer ground overlooking the wetlands to the south. The Roman *colonia* and early medieval periods both classify the site as lying within a riverine area (RAZ's 7.9 and 8.5).
- 4.6 The important late Roman Greetwell Villa is believed to be situated c.300m to the north of the site (RAZ 7.23 and LHD RENO3187), so it is possible that elements of the associated estate lie within the development area. Potential evidence of the villa site has been uncovered at several locations to the north of the site in the past. A portion of tessellated floor was uncovered in c.1890, believed to be around 130m from the site (LHD MON8091), and a stone household altar was found at a location between Monks Road and Greetwell Road in 1924, possibly a further 180m north of the site (LHD MON3919). Approximately 325m north of the site a

Roman tombstone was found in 1932 within a garden on the Monks Tower estate (LHD MON3939).

- 4.7 An outlier to the main concentration of Roman material to the north of the site is the discovery of a early 4th century Roman coin of Constantine I, found less than 200m to the southwest (LHD RENO10664).
- 4.8 Lincoln as a whole appears to have suffered a gradual decline in population and prosperity towards the end of the Roman period, leading to widespread abandonment and decay of much of the Roman city by the 5th century AD. From the Saxon period into the medieval period there is little evidence of activity known to date.
- 4.9 By the high medieval era (c.850 – 1350 AD), the site was part of a large area of common pasture to the east of the suburb of Butwerk (RAZ 9.8.5). This land was owned by the Black Monks (RAZ 9.55.2); however citizens exercised their traditional right to graze their livestock here. This situation continued into the early modern period (1350 – 1750 AD). Within the study area, approximately 200m to the west-southwest of the western boundary of the site was an area of marshland that was known as the Ryvall in the late 14th century, and the Blackdyke or Blakedike up to 1585 (LHD MON1387). This may have included a dock running north to south with a landing stage on the River Witham.
- 4.10 For a century from the 1840s Lincoln's industrial focus was on heavy engineering (RAZ 11.36), evidenced on site by the Bifrangi works and other adjacent industrial buildings. The Tower factory complex in which the site lies was built by Clayton and Shuttleworth during World War 1 for war production of armaments and aircraft (LHD MON6248). Later the complex was owned by United Engineering Forging who went into liquidation in 2001 before the site was taken on by Bifrangi (UK) Ltd. Immediately to the west was the Abbey Works, which were also built by Clayton and Shuttleworth (LHD MON6249).

5.0 Methodology

- 5.1 A strategy for the evaluation of the site was agreed with the Heritage Team at the City of Lincoln Council, comprising two trenches measuring 30m long by 1.6m wide and a 1m x 1m test pit. The fieldwork was undertaken by a team of experienced field archaeologists over a single day, Thursday 14th August 2014. Initial machine excavation was undertaken using a 3CX JCB excavator fitted with a toothless ditching bucket, following the provision of a permit to dig by the client. Where possible in each trench, topsoil, subsoil, and non-archaeological overburden was removed in spits not exceeding 0.1m in thickness until the first archaeological horizon or the natural geology was encountered. Due to ground restrictions only Trench 1 was able to be opened sufficiently to provide a full understanding of the below ground deposits.
- 5.2 A full written record of the archaeological deposits was made on standard Allen Archaeology Limited context recording sheets. Context numbers were ascribed to each layer or deposit revealed based on a two digit number added to the trench number, i.e. Trench 1 topsoil layer is context 100.
- 5.3 Archaeological deposits were drawn in plan and section at an appropriate scale (usually 1:20), with Ordnance Datum heights being displayed on each class of drawing. Full colour photography formed an integral part of the recording strategy, and all photographs incorporated scales, an identification board and directional arrow.

6.0 Results

Trench 1 (Figures 2 and 3)

- 6.1 Trench 1 was located in the eastern part of the development site, within a grassed area and running east – west. Removal of the 0.3m thick mid brown sandy silt topsoil 100 revealed an undulating 0.2m – 0.5m thick dark grey sandy silt with abundant concrete that contained large pieces of modern ferrous slag and several modern glass bottles. This dump of Victorian and modern industrial waste overlay natural sand 102.



Plate 1: Trench 1 representative section, scales are 0.5m.

Trench 2 (Figure 2)

- 6.2 Trench 2 was also located towards the centre of the proposed development site, aligned broadly northwest to southeast. The trench was moved slightly to accommodate a modern large brick soakaway and also a brick drain; however machine excavation soon revealed a c.300mm diameter cable/service of possible Victorian date orientated along the length of the trench. The soil sequence encountered at this stage showed a 0.3m thick topsoil 200 overlay a 0.3m thick contaminated layer of concrete and stone rubble 201 sealing natural orange sand and gravel 202. Due to the presence of the soakaway, drains and cable/service it was clear that it would not be possible to excavate the trench without damaging existing infrastructure or damaging potentially live services.



Plate 2: Exposure of large cable/service pipe in Trench 2.

Test Pit 1 (Figure 2)

- 6.3 Test Pit 1 was located within the western half of the proposed development site, within the footprint of former structures associated with the industrial activities associated with the site. Due to extensive reinforced concrete across this half of the site, the test pit was located within the footprint of a previous geotechnical pit to make use of a previously excavated area.
- 6.4 Machine excavation removed 0.15m of concrete onto a dump of concrete fragments and hardcore. This layer was shown to be at least 1m deep and the test pit was abandoned at this stage due to the depth of water encountered resulting in a lack of visibility. As services, etc had been encountered elsewhere on the site it was deemed unsafe to continue excavations.



Plate 3: Test Pit 1 looking south, scale is 0.5m

7.0 Discussion and Conclusions

- 7.1 The trial trenching and test pitting has not identified any archaeological deposits of significance. Despite Trench 2 being abandoned, sufficient trenching was completed to show that previous industrial development of the site from the 1840s onwards has likely removed any remains that may have existed previously.
- 7.2 The evidence indicates a negligible archaeological potential for the site, and the proposed development is unlikely to have any appreciable impact upon the local archaeological resource.

8.0 Effectiveness of Methodology

- 8.1 The methodology employed was appropriate to the nature and extent of the proposed development. It has indicated a negligible archaeological potential for the proposed development site.

9.0 Acknowledgements

- 9.1 Allen Archaeology would like to thank Bifranghi UK Ltd for this commission and Stem Architects Ltd for their help throughout the scheme.

10.0 References

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Appendix 1: Context Summary List

Trench 1

Context	Type	Description	Interpretation
100	Layer	Firm mid brown sandy silt with some concrete rubble, 0.3m thick, seals 101	Topsoil
101	Layer	Dark grey sandy silt with frequent concrete rubble and some modern ferrous slag, seals 102	Victorian and modern dump
102	Layer	Mid orange sand	Drift geology

Trench 2

Context	Type	Description	Interpretation
200	Layer	Mid brown sandy silt, 0.2-0.3m thick, seals 201	Modern topsoil
201	Layer	Large concrete rubble and limestone rubble, seals 202	Rubble spread
202	Layer	Mid orange sand and gravel	Drift geology

Test Pit 1

Context	Type	Description	Interpretation
300	Layer	Reinforced concrete, 0.15m thick, seals 301	Reinforced concrete ground surface
301	Layer	Concrete fragments and hardcore, over 1m thick	Hardcore layer

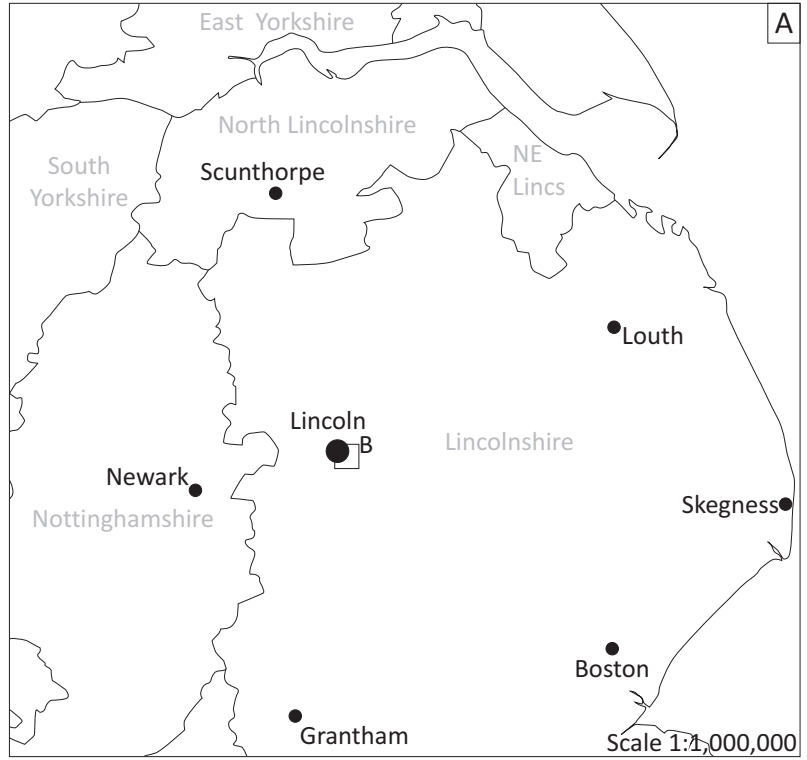
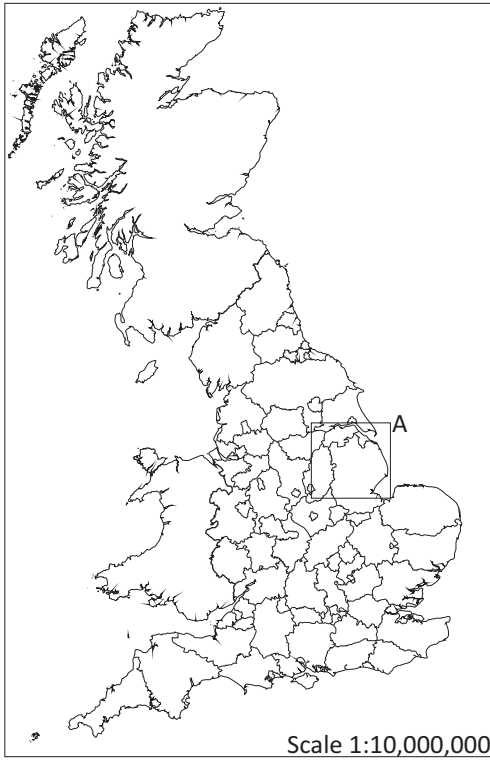


Figure 1: Site location outlined in red

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Site Code	LIBS 14
Scales	1:10,000,000 1:1,000,000 1:25,000 @ A4
Drawn by	M Allen
Date	15/08/14

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Figure 2: Site location with boundary in red and trenches in blue

Trench 1
North Facing Section

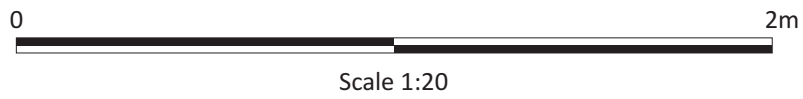
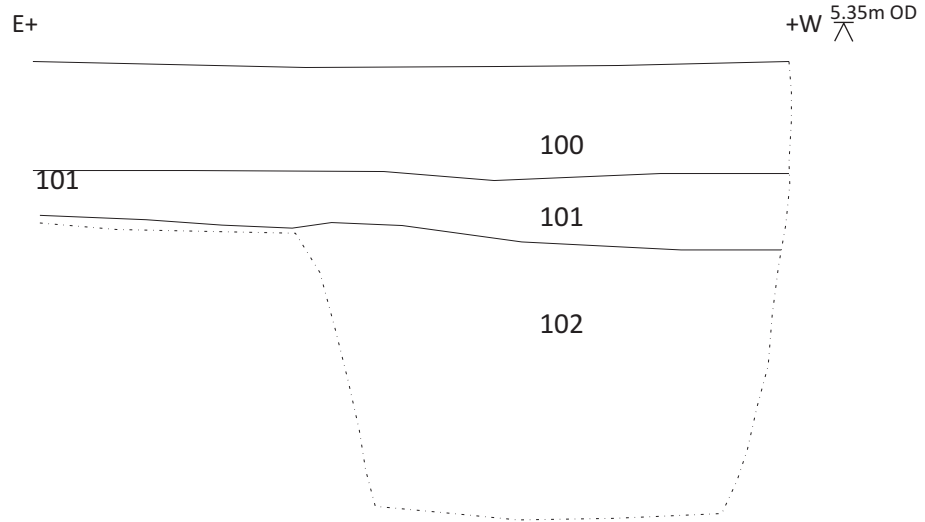


Figure 3: Trench 1 representative section

Site Code	LIBS 14
Scale	1:20 @ A4
Drawn by	M Allen
Date	15/08/14

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