

London Gateway A13/A1014 Junction Improvements, Stanford-le-Hope, Essex



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LONDON GATEWAY A1014 JUNCTION IMPROVEMENTS

STANFORD-LE-HOPE, ESSEX

ARCHAEOLOGICAL MONITORING REPORT

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NON-TECHNICAL SUMMARY

In June 2013 Oxford Archaeology monitored the excavation of a drainage pond (NGR 568050, 182750) during improvements to the existing A13 / A1014 road junction, as part of the London Gateway Port development.

Desk-based assessment had highlighted previous discoveries of Roman remains from the stream valley, including pottery and waterlogged timbers, during construction of the Stanford-le-Hope bypass in the mid-1930s, and during construction of the existing A13 / A1014 junction in the early 1970s.

As the works generally involved building up the ground levels within the existing road boundary, excavation of the 3m deep pond had been identified as the only construction activity with the potential to affect archaeological deposits. The pond was located in the valley of the Hassenbrook, in a relatively undisturbed area of ground between the main westbound carriageway of the A13 and the A1013 sliproad.

Although archaeological visibility was reasonable, no archaeological remains were discovered during the monitoring work, the only feature encountered being an undated wooden post found in the upper alluvium infilling the Hassenbrook.

1 INTRODUCTION

1.1 Introduction

- 1.1.1 This report details the results of archaeological mitigation arising from the development by DP World London Gateway of an improved junction layout between the A13 and A1014 road that will be part of the principal road access into the London Gateway Development, in Stanford-le-Hope, Essex (Fig.1).
- 1.1.2 The report is concerned in particular with monitoring during excavation of a pond, in a small area left relatively undisturbed by the original construction of the junction, located at NGR 568050, 182750 (Fig.2). This was the only element of the junction improvements that required archaeological mitigation.

1.2 Project planning background

- 1.2.1 The improved junction layout is part of the London Gateway Port and Park developments, comprising respectively an international deep sea container terminal and a major business and logistics park. The outline planning approval (OPA) for the park was granted in May 2007 by the then Secretary of State following a Public Inquiry. Secretary of State's approval for the related port development was also issued in May 2007 under Harbour Empowerment Order (HEO) procedures following the same Public Inquiry, and this came into force in May 2008.
- 1.2.2 The junction was assessed as part of the HEO Environmental Statement presented at Public Inquiry in 2002. Areas that lie within the OPA/HEO boundary are covered by the London Gateway Archaeological Mitigation Framework (AMF) (OA 2003). Compliance with the AMF is a condition attached to planning consent for the HEO and Reserved Matters for the OPA.
- 1.2.3 The Secretary of State's policy on archaeological remains and how they should be preserved or recorded is set out in Chapter 12 of the National Planning Policy Framework (NPPF). It indicates the need to take account of known archaeology in development proposals and to ascertain the extent of further archaeological remains which may be affected by the proposed development.
- 1.2.4 The guidance states that in the case of nationally important archaeological remains the presumption should be in favour of their preservation *in situ*. Where preservation *in situ* is not justified it advises that it is reasonable for planning authorities to require the developer to make appropriate and satisfactory provision for excavation and recording of remains.
- 1.2.5 The AMF envisages that, wherever possible, any archaeological remains will be preserved *in situ* and that where this cannot be achieved any remains will be investigated and recorded. In accordance with procedures outlined in the AMF, a site specific Archaeological Project Design (APD) was produced (OA 2012), which assessed potential archaeological impacts for each component of the development and detailed appropriate mitigation measures.

1.3 Location, geology and topography

1.3.1 The general distribution of known archaeological sites in the vicinity of the junction improvement is shown on Figure 2. The archaeological potential of the site was described in the DBA by 'Mitigation Zone', the zones being defined on the basis of 1:50000 British Geological Survey mapping, as follows:

- Mitigation Zone 1: Holocene Alluvium infilling the Hassenbrook stream valley
- Mitigation Zone 2: Head Deposits
- Mitigation Zone 3: Lambeth Group (clay, silt and sand)

1.3.1 Each zone has different archaeological potential due to differences in the geological formation history and physical characteristics of the deposits.

The pond excavation described in this report was located within the valley of the Hassenbrook, a freshwater stream which drains into Mucking Creek. The valley includes areas of Holocene alluvium infilling the stream valley itself, but also areas of Head and River Terrace Deposits in immediate proximity to the stream which are intrinsically likely locations for settlement in all periods. The alluvial sediment sequences within the stream valley were considered particularly likely to contain archaeological remains, which might be exceptionally well-preserved in the water-logged conditions.

1.4 Archaeological background

1.4.1 No prehistoric finds or features had been recorded previously within the area of the junction improvement. A prehistoric flint scatter (OA 25) dating from the Neolithic and Bronze Age has been recorded in a quarry c 300m to the east of the junction improvement site (Fig. 2).

1.4.1 Documentary, cartographic and archaeological evidence indicates that the Hassenbrook stream valley has been the main focus of settlement in the Stanford-le-Hope area since at least the late Saxon period (OA 2012). Two estates are listed in the Domesday Book of 1086 under the name '*Hassingbroc*' ('Stanford-le-Hope' does not appear by name). Documentary evidence suggests that the largest and most important of several manorial estates in the parish from the 11th century until the early 20th century was Hassenbrook Hall (OA 124), which is located c 300m north-east of the A13/A1014 junction, at a probable spring site. Burials found close to Hassenbrook Hall suggest that this location may also have been occupied in the Roman period (OA 27). Stanford-le-Hope itself seems to have been established as a settlement by at least the late 12th or early 13th century (the parish church dates from this period). It was apparently not a manorial site but may have developed as a meeting place and market, at the point where the London Road crosses the stream (c 300m south of the A13/ A1014 junction). The Hassenbrook forms the parish boundary between Stanford-le-Hope and Mucking for much of its length.

1.4.2 Two heritage assets of Roman date are recorded within or close to the road junction (Fig. 2). These comprise Roman pottery and timbers found in the early 1970s during construction of the existing A13/A1014 junction (OA 276) and a possible Roman well, along with a mortarium fragment (OA 287) which were found in the mid-1930s when the A13 Stanford-le-Hope by-pass was originally constructed. These finds demonstrate the potential for the preservation of organic materials within the alluvium, while the presence of the possible well suggests that a Roman settlement of some sort may lie in the immediate vicinity. The finds described in these HER entries were

clearly exposed and presumably destroyed during construction of the original junction, but similar deposits may survive in pockets of relatively undisturbed ground within the road boundary.

- 1.4.3 A number of Roman graves and finds of Roman and medieval pottery (OA 24 and 26, Fig.2) were found during quarrying in the 1950s, c. 300m east of the road junction. The quarrying activity will have had a severe impact on the survival of archaeological deposits in this area.

2 EVALUATION AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The main project aims were as follows:

- Identify any archaeological remains or significant deposits that may be removed or impacted during the formation of the pond, in order to develop a further understanding of past human activity and changing environments and landscapes within the local area.
- Investigate the extent, conditions, nature, character, quality and date of any archaeological and palaeo-environmental remains encountered.
- Preserve by record any significant archaeological features or deposits that may be removed during construction of the junction improvements.

2.2 Methodology (Figs. 3 and 4)

- 2.2.1 The methodology was detailed in the site-specific APD (OA 2012) which was developed within the context of the London Gateway AMF (OA 2003). The investigation strategy was determined in consultation with Gill Andrews, the London Gateway Archaeological Liaison Officer (ALO), and the local authority archaeological advisor, Richard Havis (Essex County Council Historic Environment Branch), to ensure compliance with the aims and methods of the AMF.
- 2.2.1 Discussions with the contractor indicated that the groundworks would generally be at a superficial level within the existing road boundary, and would not impact upon surviving archaeological deposits. Deeper excavations however included a drainage pond located in a small area of relatively undisturbed ground on the line of the Hassenbrook stream valley (Fig. 2). The pond lies in close proximity to the previously discovered Roman features (OA 276 and 287, Fig. 2). Archaeological monitoring during excavation of the pond was therefore undertaken (from 13th - 25th June 2013).

3 RESULTS

3.1 Conditions during fieldwork

- 3.1.1 Excavation of the pond was to a maximum depth of 3.0m below present ground level. It was located on the south-west side of the present course of the Hassenbrook, immediately south-east of the culvert where the stream passes under the road. The area was surrounded on all sides by the existing road junction, but in this localised area there was little or no modern made ground.
- 3.1.2 The excavation of the pond was carried out under close archaeological observation. Ground conditions were generally favourable to archaeological visibility and weather conditions were dry. The pond was maintained in a dry state during the excavation.
- 3.1.3 The scope of the agreed monitoring did not involve altering the contractor's preferred method of groundworks. The pond was therefore excavated with a toothed excavator bucket, which impeded visibility to some extent. Nevertheless there was a high level of confidence that artefact-rich or otherwise obvious features (similar to the Roman features previously discovered) would have been seen if present.

3.2 Soil sequence

- 3.2.1 The surface deposits were variable but generally heavily disturbed by previous construction activity.
- 3.2.2 In the south-western side of the pond a considerable depth of soil had already been removed and replaced with gravel for a former construction compound. The gravel was removed during excavation of the pond, revealing oxidised orange brown silty clay deposits, overlying blue-grey clay deposits (alluvium). The blue-grey clay decreased in thickness to the south-west, away from the present course of the stream (Plate 2).
- 3.2.3 In the north-east side of the pond the alluvial sequence appeared to survive relatively intact, although heavily oxidised near the surface. In the area nearest the present course of the Hassenbrook, a thin layer of brown peaty soil was found underneath an upper layer of oxidised alluvium (orange brown silty clay).

3.3 General distribution of archaeological deposits

- 3.3.1 No archaeological features or artefacts were identified. General views of the pond during excavation are included as Plates 1-3.
- 3.3.2 A poorly preserved small wooden post (context 100) was recorded on 17/06/2013, which was discovered at a high level in the alluvial sequence and is probably of relatively recent date (Plate 4).

3.4 Finds summary

- 3.4.1 No finds were recovered. The single wooden post recorded (context 100) was recorded and left *in situ*.

3.5 Environmental summary

3.5.1 No environmental samples were taken.

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 The pond was of limited extent, and largely avoided excavation through the most archaeologically sensitive alluvial deposits infilling the deepest part of the Hassenbrook stream valley. The visibility was sufficient to be confident that there were no artefact-rich or complex archaeological sites within the pond area. More ephemeral features may have been missed.

4.2 Conclusions

4.2.1 The excavation failed to identify any further evidence for Roman settlement to add to previous discoveries from the A13/A1014 junction area. The alluvial deposits encountered were in general relatively shallow as they lay on the SW edge of the Hassenbrook stream channel.

4.2.2 The base of a single wooden post was identified. It was not associated with any other artefacts and is currently undated. As it was recorded fairly high in the alluvial sequence it is likely to be of relatively recent date. As an isolated feature it has no potential for further analysis.

4.2.3 The upper part of the sequence clearly had the potential to contain waterlogged organic material, but the sediments appeared oxidised and disturbed in places, and unsuitable for palaeo-environmental sampling.

4.3 Acknowledgements

4.3.1 Oxford Archaeology would like to thank Marcus Pearson, Emma Deary and Chris Wild of DP World London Gateway's Environment Team, and Gill Andrews (LG Archaeological Liaison Officer), for facilitating the works, and Richard Havis (Essex County Council Historic Environment Branch) for monitoring and advice during the fieldwork.

4.3.2 Ashley Strutt carried out the monitoring on behalf of OA, under management of Stuart Foreman.

4.4 Location of archive

4.4.1 The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with the Thurrock District Museum in due course.

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Figure 1: Location of site in relation to overall LG development

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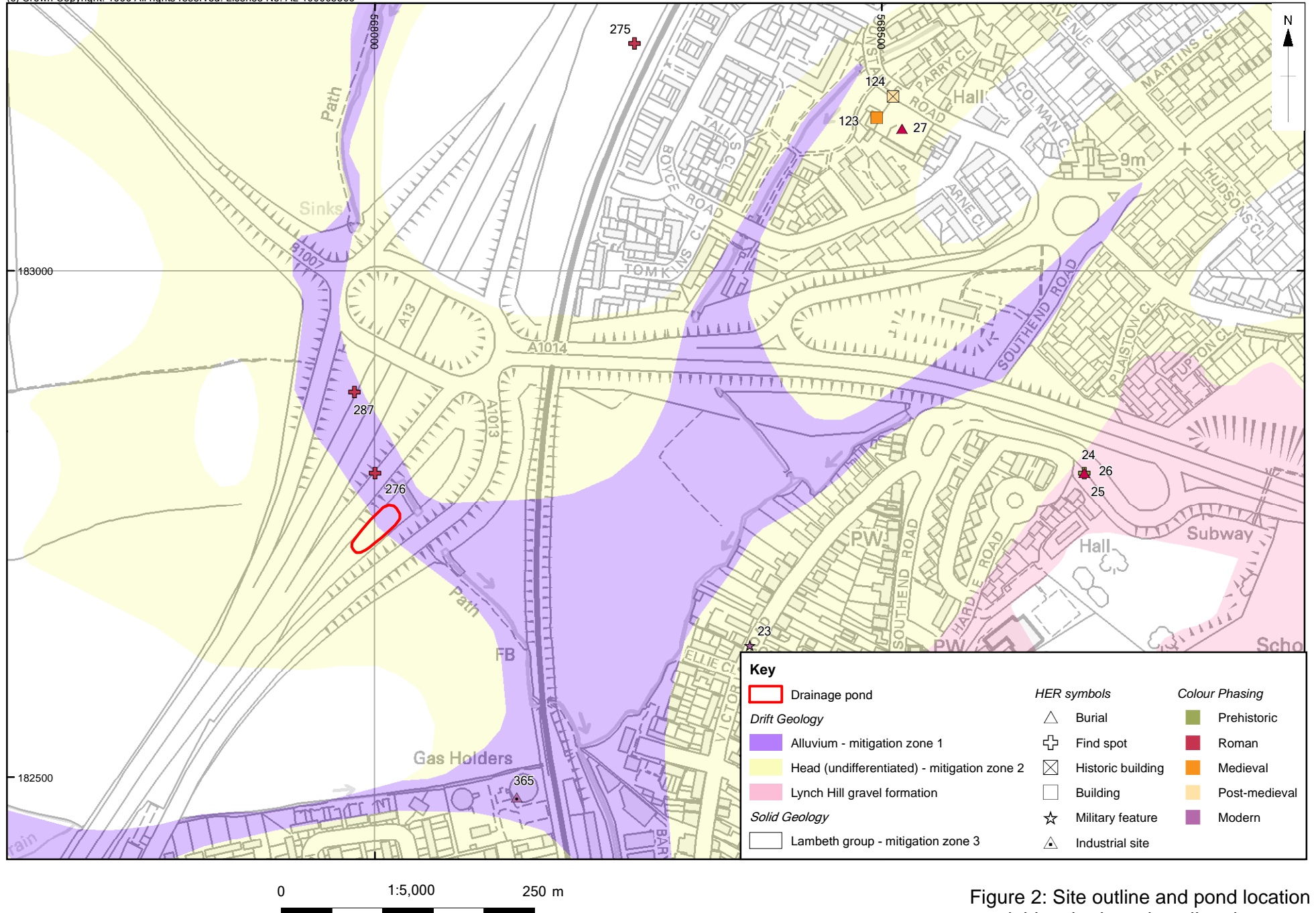


Figure 2: Site outline and pond location overlaid on heritage baseline data



Plate 1: Drainage pond under excavation, general view SW



Plate 2: Drainage pond under excavation, general view NE



Plate 3: Soil sequence in pond area



Plate 4: Wooden post (undated) found during excavation of pond



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