Suffolk County Council

Ex-Crane site, Nacton Road Ipswich, Suffolk IPS 658

Archaeological Evaluation Report

SCCAS Report No. 2011/209

Client: CgMs Consulting

Author: M. Sommers

December 2011

Ex-Crane site, Nacton Road
Ipswich, Suffolk
IPS 658

Archaeological Evaluation Report

SCCAS Report No. 2011/209

Author: M. Sommers

Contributions By: n/a

Illustrator: M. Sommers

Editor: Dr. R. Gardner

Report Date: December 2011

HER Information

Report Number:	**2011/209**
Site Name:	**Ex-Crane site, Nacton Road, Ipswich**
Planning Application No:	**IP/11/00763**
Date of Fieldwork:	**12th to 16th December 2011**
Grid Reference:	**TM 1977 4215**
Client/Funding Body:	**CgMs Consulting**
Curatorial Officer:	**Dr J. Tipper**
Project Officer:	**M. Sommers**
Oasis Reference:	**suffolkc1-117055**
Site Code:	**IPS 658**

Digital report submitted to Archaeological Data Service:
http://ads.ahds.ac.uk/catalogue/library/greylit

Disclaimer

Any opinions expressed in this report about the need for further archaeological work are those of the Field Projects Team alone. Ultimately the need for further work will be determined by the Local Planning Authority and its Archaeological Advisors when a planning application is registered. Suffolk County Council's archaeological contracting services cannot accept responsibility for inconvenience caused to the clients should the Planning Authority take a different view to that expressed in the report.

Prepared By: M. Sommers
Date: 11th January 2012

Approved By: Dr Rhodri Gardner
Position: Contracts Manager (Acting)
Date: 11th January 2012
Signed:

Contents

List of Figures

List of Plates

List of Appendices

Summary

An archaeological evaluation was carried out within a former factory site (Crane Fluid Systems Ltd.), Nacton Road, Ipswich, in advance of the redevelopment of the site. A total of nineteen trenches were excavated, primarily in the areas of open grassland within the site although a small number were cut through existing hardstanding. Only one possibly archaeological feature, an undated pit with a charcoal rich fill, was revealed in a trench close to the Nacton Road frontage. Despite the area having been the site of an extensive industrial complex since the 1920s the original land surface was found to be relatively undisturbed in the areas sampled, indicating that the absence of archaeological features was a true reflection of the levels of historic activity within the site rather than a result of later activity. (Suffolk County Council Archaeological Service for CgMs Consulting).

1. Introduction

A large scale development has been proposed for the former Crane Fluid Systems Ltd. factory site off Nacton Road, Ipswich. Planning consent has been granted for the development (IP/11/00763) with an attached condition requiring an agreed programme of archaeological work be undertaken in association with this development.

Following a desk-based assessment (Hawkins, 2010), which detailed the archaeological potential of the site, a trenched evaluation was undertaken in order to ascertain what levels of archaeological evidence may be present within the development area and to inform any mitigation strategies that may then be deemed necessary. A Written Scheme of Investigation (Gardner, 2011) was produced; detailing the proposed methods to be used, which was approved by Dr Jess Tipper of the Suffolk County Council Conservation Team.

The National Grid Reference for the approximate centre of the site is TM 1977 4215. Figure 1 shows a location plan of the site.

The archaeological evaluation was undertaken by Suffolk County Council Archaeological Service's Field Team who were commissioned and funded by CgMS Consulting.

2. Geology and topography

The local geology comprises drift deposits of glacial origin that are uniformly acid and sandy. Additionally there surface layers of variable thickness of fine-grained loess deposits, derived from windblown material from glacial sources.

The site consists of a roughly rectangular area of land totalling approximately 16ha, lying on the outskirts of Ipswich. It fronts onto Nacton Road to the south-west and is bounded by Ransomes Way to the south-east, the Ipswich-Felixstowe railway line to the north-east and a small industrial estate to the north-west.

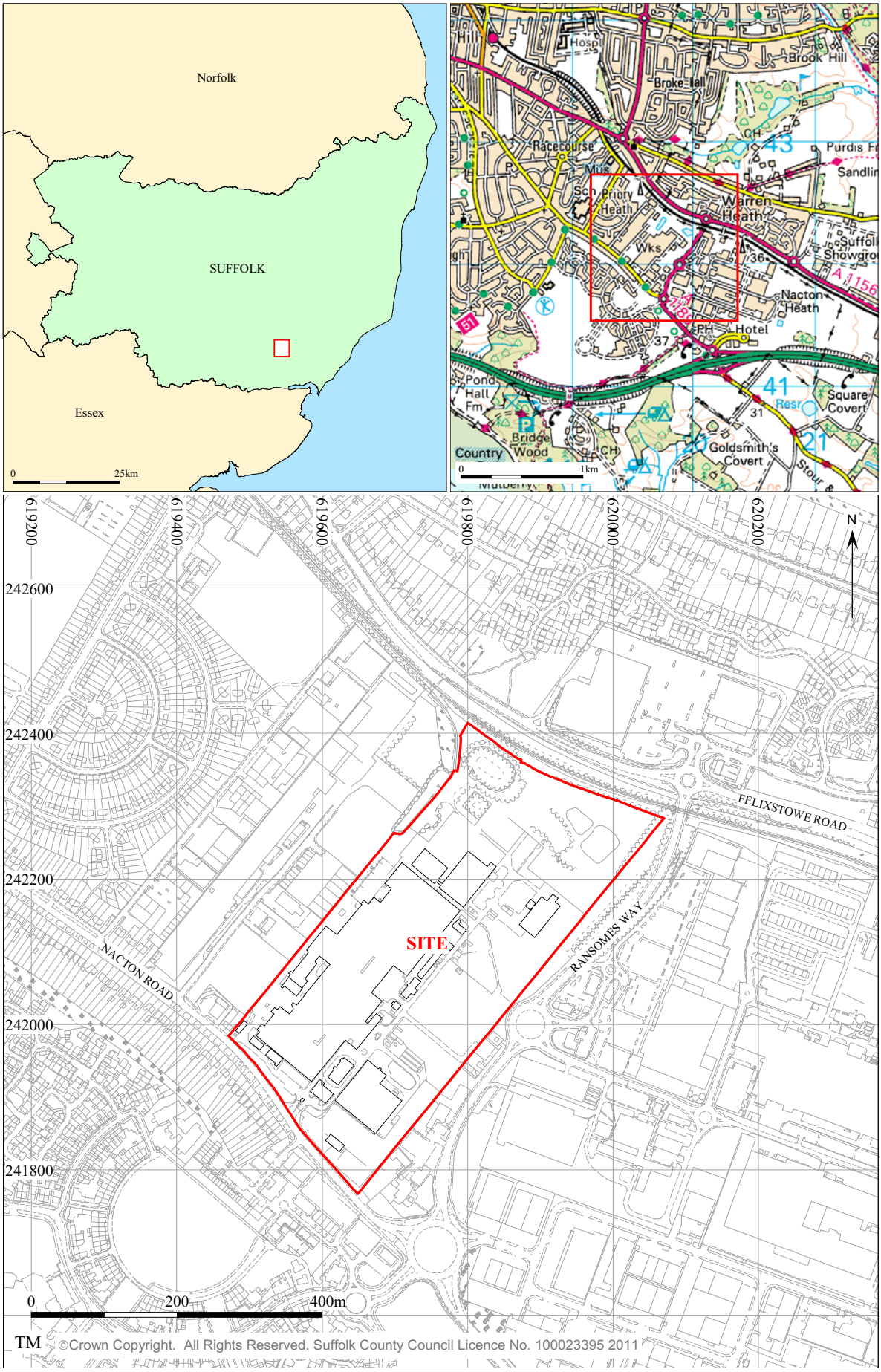

Figure 1. Location map

The site lies at a height of *c.* 38.0m OD and is situated on a large level plateau that overlooks the River Orwell some 2km to the south-west. The site itself is relatively level but with a very gentle slope down towards the north-east. There may have been some landscaping of the north-east end of the site as the land beyond lies at a noticeably lower level.

At the time of the evaluation, much of site was covered in extant factory buildings, primary steel framed sheds with sheet cladding with concrete floors, tarmac roadways and areas concrete hardstanding.

3. Archaeology and historical background

No early archaeological sites are known to exist within the proposed development area although a scatter of prehistoric and Roman sites have been recorded in the local area.

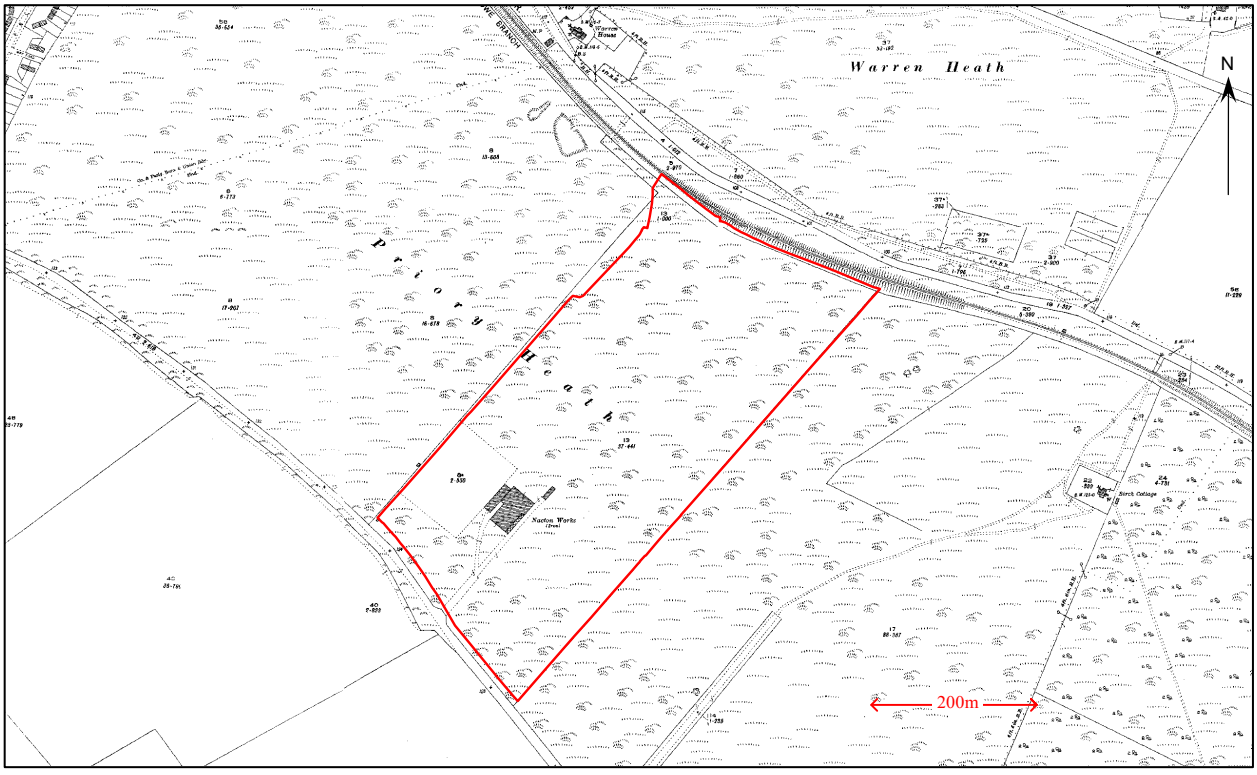

Figure 2. extract from the 2nd edition Ordnance Survey of *c.* 1900
(factory site outlined in red)

Due to the dry mineral soils and the general absence of watercourses the landscape in the vicinity of the development area consisted of formerly open heathland. The site of

the factory, originally known as Nacton Works, was located within an area named as Priory Heath on the 3rd edition Ordnance Survey map of 1926 (Fig.2).

The heathland is not suitable for cultivation and tended to be used for sheep farming with little or no actual occupation. Other than the works, there is very little historic activity recorded in this area until World War 2 when the heaths were criss-crossed with numerous anti-aircraft obstructions. These obstructions, and a number of bomb craters, are visible on aerial photographs taken in the 1940s (recorded on the County Historic Environment Record under the reference NAC 081).

4. Methodology

The trial trenches were machine excavated down to the level of the natural subsoil using a large (21 tonne) tracked machine fitted with a 2.1m wide toothless ditching bucket. The location of the trenches was in accordance with a plan approved by the County Archaeological Service Conservation Team where possible. However, due the possible presence of certain species of wildlife some trenches were not excavated and the locations of others were slightly altered. Where it was not possible to excavate a planned trench an additional trench was excavated in the nearest available area (indicated in Fig. 3). One trench was abandoned due to the presence of buried asbestos.

The machining of the trenches was closely observed throughout in order to identify any archaeological features and deposits and to recover any artefacts that might be revealed. Excavation continued until undisturbed natural deposits were encountered, the exposed surface of which was then examined for cut features. Any features or significant deposits identified were then sampled through hand excavation in order to determine their depth and shape and to recover datable artefacts. A sample of the fill was also retained for any further analysis that may be deemed necessary.

Following excavation of the trenches, the nature of the overburden was recorded, the trench locations plotted and the depths noted. A photographic record of the work undertaken was also compiled using a 10 megapixel digital camera.

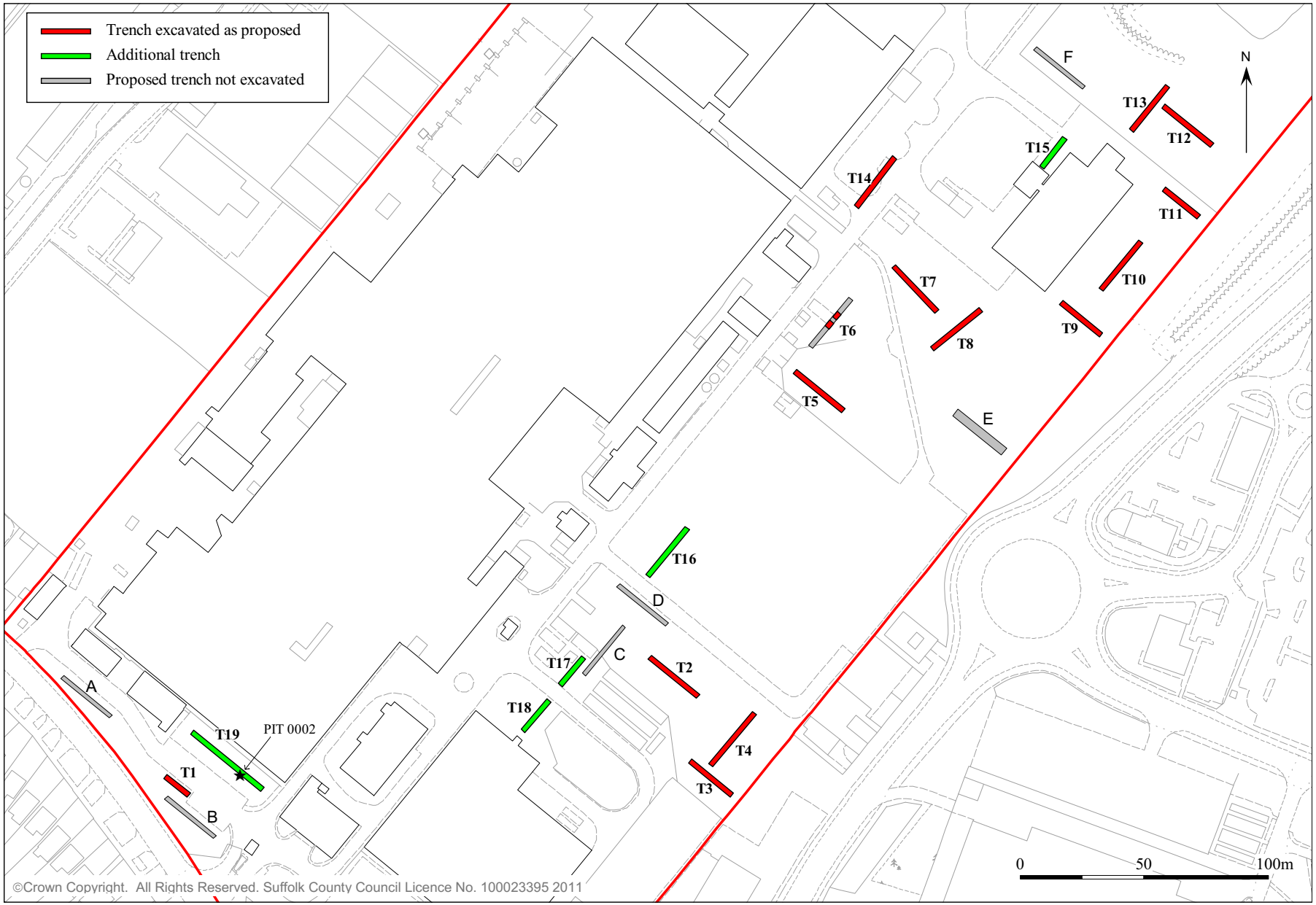

Fig 3. Trench location plan

5. Results

5.1 Introduction

A total of nineteen evaluation trenches were excavated numbered T1 to T19 (fig. 3). Trenches T1 to T14 were excavated broadly in accordance to the approved trench plan. Trenches T15 to T19 were additional trenches. Six trenches could not be excavated as planned (marked A to F in fig. 3).

The trenches were primarily located in area of open grassland although for some it was necessary to remove concrete hardstanding with a breaker (T14 to T18). All trenches measured just over 2.1m in width.

The natural subsoil, which was exposed in all trenches, consisted of dark yellow-brown sand with occasional gravel.

5.2 Trench results

Only one feature was recorded during the evaluation, an oval shaped cut located in Trench 19 and interpreted as a pit (numbered 0002 - see Fig. 3). It was situated on the edge of the trench. It measured 1m by at least 0.6m and was 0.3m deep with a bowel shaped profile (see Fig. 4 and Plate 1 for the recorded section).

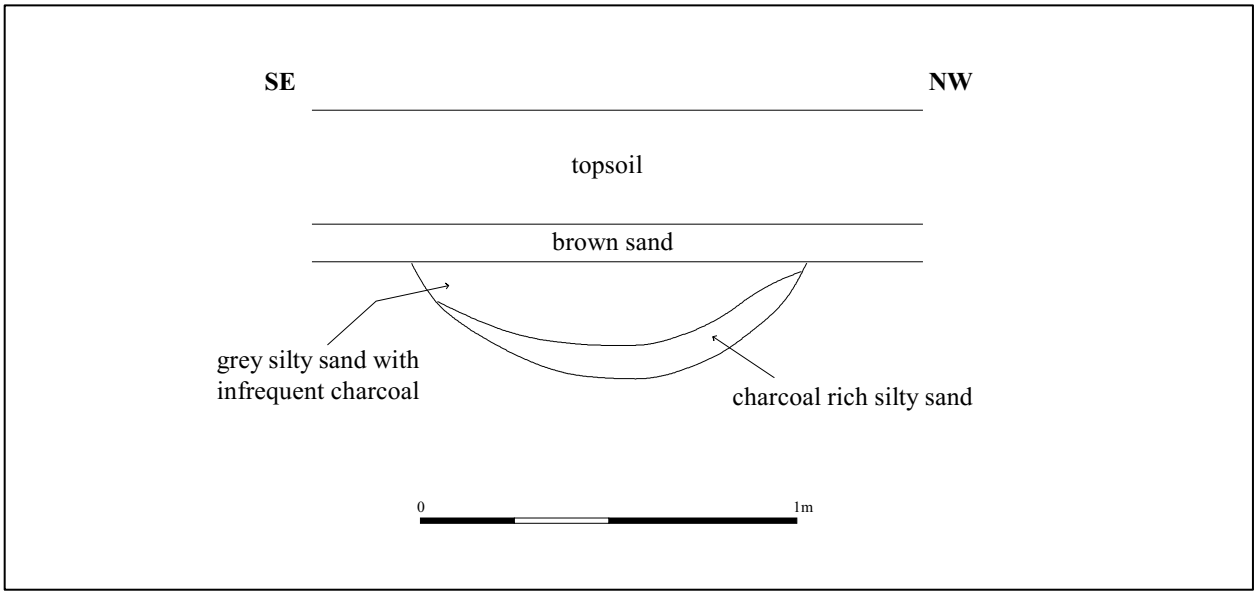

Figure 4 Pit 0002 (T19) section

Plate 1 Pit 0002 (T19) - as excavated

The fill (0003) comprised a basal layer of charcoal rich silty sand with occasional charcoal lumps overlain by a mass of grey silty sand with frequent charcoal. It was cut into the natural subsoil which lay beneath 0.3m of topsoil and a 0.10m thick layer of brown sand. No artefacts were recovered but a bulk soil sample from the fill was retained for further analysis, should this be deemed necessary.

A summary of the results follows below:

Trench no.	**Length**	**Depth of subsoil**	**Revealed soil profile and other notes**
T1	12m	0.2m	Natural subsoil encountered immediately beneath a layer of topsoil. Interface between the two was very clear suggesting probably truncation of the natural subsoil.
T2	25m	0.6m	0.35m of topsoil over 0.25m of grey-brown sand over the natural subsoil. No indication of previous truncation.
T3	21.5m	0.75m	0.3m of topsoil over 0.2m of foundry waste (clinker, ash etc.) over 0.25m of grey-brown sand over the natural subsoil. No indication of previous truncation.

T4	27.5m	0.75m	0.3m of topsoil over 0.2m of foundry waste (clinker, ash etc. with areas of crushed brick rubble) over 0.25m of grey-brown sand over the natural subsoil. No indication of previous truncation.
T5	25m	0.8m to 1.3m	The ground surface in the area of the trench was level but the natural subsoil sloped down gently towards the southeast from a depth of 0.8m to a depth of 1.3m. The overburden consisted of a buried topsoil layer (grey-brown sand) overlain by an increasingly thicker layer of made ground comprising dark loam, ash, clinker and large fragments of slag and other foundry waste, all sealed beneath the present topsoil (Plate 2). No indication of previous truncation apart from a modern pit, *c.* 2m wide, which ran across the width of the trench. It cut the natural subsoil by a depth of *c.* 0.3m and was filled with a light grey material (ash?) and large fragments of slag (strong chemical smell - similar to paint).
T6	*c.* 6m	0.7m	Area of suspected dumping. Trench started but significant deposits of crushed and broken asbestos sheeting encountered along with window frames and other building debris. A second attempt was made further to the southwest but the same deposit was encountered although a small area of what was probably the natural subsoil was exposed at a depth of 0.7m.
T7	25m	0.6m	0.3m of topsoil over 0.25m of foundry waste (clinker, ash etc., occasional brick rubble) over 0.05m of grey-brown sand over the natural subsoil. No indication of previous truncation.
T8	25m	1.0m	0.3m of topsoil over 0.55m of made ground (primarily brick rubble with occasional clinker etc.) over 0.15m of grey-brown sand over the natural subsoil. No indication of previous truncation.
T9	21m	0.8m to 1.0m	The ground surface in the area of the trench was level but the natural subsoil sloped down gently towards the southeast from a depth of 0.8m to a depth of 1.0m. The overburden consisted of a buried topsoil layer (grey-brown sand) overlain by an increasingly thicker layer of made ground comprising ash, clinker and large fragments of slag and other foundry waste, all sealed beneath the present topsoil. No indication of previous truncation.
T10	25m	1.0m	0.3m of topsoil over 0.55m of made ground (primarily a deposit of very dark loam with occasion lenses of brick rubble) over 0.15m of grey-reddy-brown sand over the natural subsoil. No indication of

			previous truncation other than a large brick rubble filled pit towards the southwest end of the trench which cut the natural subsoil to an unknown depth.
T11	18m	1.4m	0.3m of topsoil over 0. 5m of yellow sand over 0.5m of foundry waste (clinker, ash etc.) over 0.10m of grey-brown sand over the natural subsoil. No indication of previous truncation.
T12	25m	1.4m	0.3m of topsoil over 0. 2m of yellow sand over 0.8m of made ground comprising dense dark loam with occasional brick rubble or crushed brick rubble over 0.10m of grey-brown sand over the natural subsoil. No indication of previous truncation.
T13	23m	1.1m	0.2m of gravelly topsoil over 0.8m of made ground comprising brown loam with occasional brick rubble over 0.10m of grey-brown sand over the natural subsoil. No indication of previous truncation.
T14	25.5m	0.45m	0.1m of tarmac or concrete road surface over 0.15m of sand and gravel hardcore over 0.2m of grey-reddy-brown sand over the natural subsoil. No indication of previous truncation.
T15	15m	0.4m	0.11m thick layer of concrete over 0.3m of dark yellow-grey sand (darker towards base) over the natural subsoil. No indication of previous truncation.
T16	25m	0.5m	0.12m thick layer of reinforced concrete over 0.25m thick layer of sand and gravel hardcore over 0.10m of dark brown sand over the natural subsoil. No indication of previous truncation.
T17	16m	0.4m	0.08m thick layer of gravel with some tar over 0.35m of brown silty sand over the natural subsoil. Interface between the naturals subsoil and the overlying layer was fairly abrupt indicating possible truncation.
T18	15m	0.3m	Concrete over hardcore lying directly on the natural subsoil (Plate 3). Natural subsoil has been truncated by an unknown degree.
T19	36.5m	0.4m	0.3m of topsoil over a 0.10m thick layer of grey-brown sand over the natural subsoil.

6. Finds and environmental evidence

No artefacts of any period were recovered during the evaluation.

A bulk sample of the fill of pit 0002 was retained to enable the extraction of a sample suitable for radio-carbon dating. A decision regarding the merit of such analysis is pending.

7. Discussion

The results of the evaluation did not identify any significant archaeological evidence within the areas sampled, other than the single undated pit recorded in Trench 19. No features and no stray artefacts (excepting modern debris) were identified in any trench.

The undated pit (0002) could potentially be an early feature and relate to prehistoric activity on the heath. Similar pits have been located elsewhere within the former heathland that have yielded Bronze Age pottery and are thought to be associated with settlement sites.

It was expected that large areas of the site would have been damaged by 20th century industrial activities associated with the works and foundry but in the majority of the trenches the previous land surface appeared to have survived intact, having been buried under a layer of made ground formed primarily of waste deposits from the foundry. This would suggest that the absence of archaeological remains is a real phenomena and not a result of modern disturbance.

Only in the area of Trench 18 was the surface of the natural subsoil obviously truncated. This trench was cut through a relatively substantial concrete surface, the formation of which was clearly the cause of the truncation. It was noted during the evaluation that the floor surface of the factory buildings immediately to the northeast of Trench 19 lay approximately 0.5m lower than the grassed area around the trench. The natural subsoil within the trench was at a depth of only 0.4m. It is therefore highly likely that the natural subsoil has been truncated in the area of the adjacent standing buildings. This truncation may not be as severe at the northeast end of the site as the local topography

slopes down gently away from Nacton Road whereas the factory buildings appeared to be on a level plateau.

8. Conclusions

Other than the undated pit, no archaeological evidence of any period was identified in any of the excavated trenches suggesting that there are no significant archaeological sites or deposits under threat from the redevelopment of the majority of the site.

The pit, located in Trench 19 toward the Nacton Road frontage, is assumed to be Bronze Age in date, like similar features recorded in the general vicinity.

9. Archive deposition

Historic Environment Record reference under which the archive is held: IPS 658.
The digital archive will be stored on the SCC secure servers at the location:

R:\Environmental Protection\Conservation\Archaeology
Current Recording Projects\Ipswich\IPS 658 Evaluation (Cranes)

Digital photographs are held under the references HLR45 to HLR84

A summary of this project has been entered into OASIS, the online database, under the reference: suffolkc1-117055

10. Acknowledgements

The evaluation was carried out by Phil Camps and Mark Sommers from Suffolk County Council Archaeological Service, Field Team.

The project was directed by Mark Sommers and managed by Rhodri Gardner, who also provided advice during the production of the report.

11. Additional plates

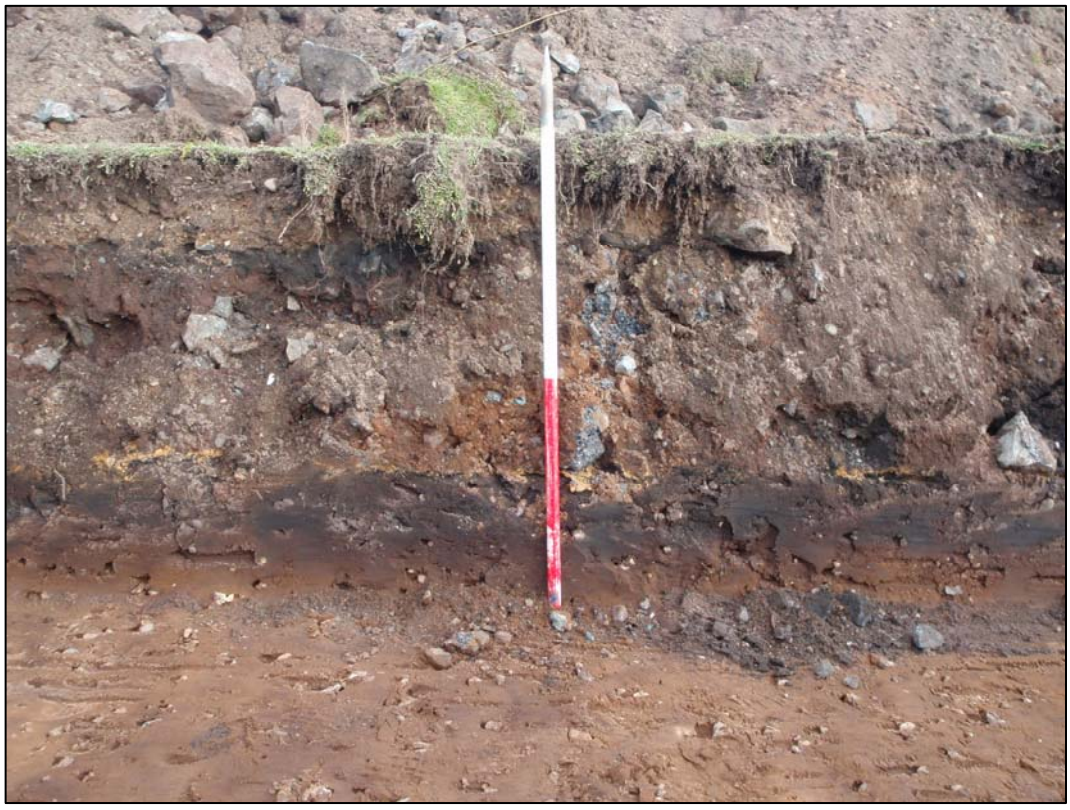

Plate 2. Trench 5, camera facing NE. showing the typical soil profile (ref. HLR54)

Plate 3. Trench 18, camera facing SE showing the truncation of the natural subsoil (ref. HLR81)

Appendix 1. OASIS data collection form

OASIS ID: suffolkc1-117055

Project details

Project name	IPS658 - Ex-Crane site, Nacton Road, Ipswich
Short description of the project	trenched evaluation of former works/foudry site revealed single undated pit.
Project dates	Start: 12-12-2011 End: 11-01-2012
Previous/future work	No / Not known
Any associated project reference codes	IPS658 - HER event no.
Any associated project reference codes	IP/11/00763 - Planning Application No.
Type of project	Field evaluation
Current Land use	Vacant Land 1 - Vacant land previously developed
Monument type	PIT Uncertain
Significant Finds	NONE None
Methods & techniques	'Sample Trenches'
Development type	Urban commercial (e.g. offices, shops, banks, etc.)
Prompt	Direction from Local Planning Authority - PPG16
Position in the planning process	After full determination (eg. As a condition)

Project location

Country	England
Site location	SUFFOLK IPSWICH IPS658 - Ex-Crane site, Nacton Road
Study area	16.21 Hectares
Site coordinates	TM 1977 4215 52.0335828436 1.204408359690 52 02 00 N 001 12 15 E Point

Project creators

Name of Organisation	Suffolk County Council Archaeological Service
Project brief originator	Consultant

Project design originator	Suffolk County Council Archaeological Service, Field Team
Project director/manager	Rhodri Gardner
Project supervisor	Mark Sommers
Type of sponsor/funding body	Consultant on behalf of client

Project archives

Physical Archive recipient	Suffolk County SMR
Physical Archive ID	IPS658
Physical Contents	'other'
Digital Archive recipient	Suffolk County SMR
Digital Archive ID	IPS658
Digital Contents	'other'
Digital Media available	'Images raster / digital photography','Text'
Paper Archive recipient	Suffolk County SMR
Paper Archive ID	IPS658
Paper Media available	'Correspondence','Notebook - Excavation',' Research',' General Notes','Report'

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological Evaluation Report: Ex-Crane site, Nacton Road, Ipswich, Suffolk
Author(s)/Editor(s)	Sommers, M.
Other bibliographic details	SCCAS 2011/209
Date	2011
Issuer or publisher	SCCAS
Place of issue or publication	Ipswich
Description	printed sheets of A4 paper with card covers and a plastic comb binding

Entered by	**Mark Sommers (mark.sommers@suffolk.gov.uk)**
Entered on	**11 January 2012**

Archaeological services
Field Projects Team

Delivering a full range of archaeological services

- Desk-based assessments and advice
- Site investigation
- Outreach and educational resources
- Historic Building Recording
- Environmental processing
- Finds analysis and photography
- Graphics design and illustration

Contact:

Rhodri Gardner

Tel: 01473 581743 Fax: 01473 288221

rhodri.gardner@suffolk.gov.uk

www.suffolk.gov.uk/Environment/Archaeology/