

**ARCHAEOLOGICAL  
EVALUATION ON LAND FOR THE  
NEWMARKET  
LOWER LINKS NITRATE SCHEME (WTW SITE)  
WOODDITTON,  
CAMBRIDGESHIRE  
(NDLL 07)**

Work Undertaken For  
**Anglian Water Services**

August 2007

Report Compiled by  
Thomas Bradley-Lovekin MA PIFA

National Grid Reference: NGR TL 6345 6090

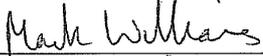
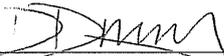
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**ARCHAEOLOGICAL PROJECT SERVICES**



**Quality Control**  
 Newmarket Lower Links Nitrate Scheme,  
 Woodditton  
 NDLL 07

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 Mark Williams	 Denise Drury
Date: 26 August 2007	Date: 24/8/07

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## 1. SUMMARY

*An archaeological evaluation was undertaken on land at the Newmarket Lower Links Nitrate Scheme (WTW site), Woodditton, Cambridgeshire. There are known archaeological monuments of prehistoric, Romano-British and Anglo-Saxon date within the vicinity of the development, the most prominent being, the Devils Dyke a 12km long scheduled Saxon defensive rampart, which passes c.0.5km south of the site.*

*The evaluation revealed no evidence of archaeological remains on the site prior to the construction of the water treatment works although a number of prehistoric worked flints of typical Mesolithic to Early Neolithic form were recovered from both residual and unstratified contexts. The size of the assemblage suggests either peripheral activity, perhaps related to more intensive activity beyond the site's perimeter, or low-key visiting of the site by a transient communities.*

## 2. INTRODUCTION

### 2.1 Definition of an Evaluation

*An archaeological evaluation is defined as, "a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present Field Evaluation defines their character and extent, quality and preservation, and it enables an assessment of their worth in a local, regional, national or international context as appropriate" (IFA 1999).*

## 2.2 Planning Background

The site is presently occupied by an existing water treatment works, the upgrading of which, as part of the Newmarket Lower Links Nitrate Scheme, will require the erection of new structures for holding water treatment tanks, ancillary buildings and an access road.

Archaeological Project Services was commissioned by Anglian Water to undertake the archaeological evaluation of the site in accordance with a specification produced by APS and approved by the Senior Archaeologist, Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA). The work was undertaken between the 12<sup>th</sup> and 13<sup>th</sup> July 2007.

## 2.3 Topography and Geology

The water treatment works are situated 2.5km south of Newmarket, Suffolk within the parish of Woodditton, Cambridgeshire (Fig. 1). Located within woodland on the eastern side of Dullington Road, the site lies at approximately 45m OD, although ground level sloped upwards to the north and east. The site is centred on National Grid Reference TL 6345 6090 (Fig. 2). Local soils consist of superficial deposits of alluvium and Second Terrace sands and gravels, indicating a former watercourse, overlying the Cretaceous Holywell Nodular Chalk Formation (Gdaniec, 2007, 1).

## 2.4 Archaeological Setting

The area is poorly understood in archaeological terms, due mainly to the lack of opportunities for archaeological fieldwork and survey resulting from the preponderance of agriculture. However a number of archaeological monuments are prominent in the landscape to the south of the site, the most conspicuous being the

Devils Dyke (DCB349, Cambridgeshire 5), a scheduled Anglo Saxon defensive ditch and rampart passing c.0.5km south of the water treatment works.

Stretching for 12km from the fen-edge to the high wooded claylands at Woodditton, the Devils Dyke is the most easterly of five parallel Saxon defensive earthworks constructed across the south Cambridgeshire chalk. The dyke was over 10.5m high from the base of the ditch to the top of the bank and was constructed in a single phase. Of early Saxon date, the ditches of all five defences were excavated on the western side, implying that they were intended to protect colonised lands to the east from incursions from disputed territory from the west (Gdaniec, 2007, 1 and Malim 2005, 243-4).

Evidence of archaeological activity from earlier periods is limited to the paired barrows, “two captains”, located just south of the Devils Dyke and a scatter of Romano-British artefacts known 1.4km to the southeast of the site (Gdaniec, 2007, 1)

### **3. AIMS**

The aim of the evaluation was to gather sufficient information to establish the presence or absence, extent, condition, character, quality and date of any archaeological deposits in order to enable the Senior Archaeologist, CAPCA, to formulate a policy for the management of archaeological resources present on the site.

## **4. METHODS**

### **4.1 Trial Trenching**

Three trial trenches measuring 13.5m x 1.8m (Trench 1), 17m x 1.8m (Trench 2) and 25m x 1.8m (Trench 3) (Fig. 3, Plates

1-3) were excavated in positions determined by the locations of the proposed groundworks and agreed by the Senior Archaeologist, Cambridgeshire County Council during a site meeting with APS representatives held on the 11<sup>th</sup> of July 2007.

Removal of topsoil and other overburden was undertaken by mechanical excavator using a toothless ditching bucket. The exposed surfaces of the trenches were then cleaned by hand and inspected for archaeological remains.

Each deposit exposed during the evaluation was allocated a unique reference number (context number) with an individual written description. A photographic record was compiled. Sections and plans were drawn at a scale of 1:20. Recording of deposits encountered was undertaken according to standard Archaeological Project Services' practice.

The location of the excavated trenches was surveyed in relation to fixed points on boundaries and on existing buildings.

All archaeological artefacts recovered during the evaluation were bagged and tagged according to the context from which they were recovered and were then processed according to standard Archaeological Project Services' practice.

### **4.2 Post-excavation**

Following excavation, all records were checked and ordered to ensure that they constituted a complete Level II archive and a stratigraphic matrix of all identified deposits was produced. A list of all contexts and interpretations appears as Appendix 2. Context numbers assigned in the field are identified in the text by brackets. An equals sign between context numbers indicates that the contexts once formed a single layer or feature. Phasing

was based on the nature of the deposits and recognisable relationships between them.

## **5. RESULTS**

### **5.1 Description of the results**

Above the natural deposits only phases of undated and recent activity were identified.

Phase 1: Natural deposits

Phase 2: Undated deposits

Phase 3: Recent deposits

### **5.2 Phase 1: Natural deposits**

The earliest contexts exposed during the evaluation were natural deposits of mid reddish to buff-yellowish brown sand containing frequent fragments of flint and gravel (1003, 2002 and 3002) (Fig. 4, Sections 1-4, Plates 4-8).

### **5.3 Phase 2: Undated deposits**

A single 0.58m deep deposit of reddish brown clayey sand and flint (1002), sealing (1001) within Trench 1, located in the southwest corner of the site, clearly represents colluvial material eroded down the hill slope (Fig. 4, Section 1, Plate 6). Although fragments of worked flints were recovered from (1002), these may be re-deposited cannot be used to date the deposit (Appendix 3).

### **5.3 Phase 3: Recent deposits**

Deposits of mid to dark greyish brown sand topsoil (1001, 2001, 2003 and 3001) sealed both the natural and colluvial deposits across the site, to depths of between 0.10m and 0.40m.

A substantial irregular cut feature [2006], at least 0.55m deep, cut (2001) at the eastern end of Trench 2. Fragments of

plastic and concrete contained within its fill (2005) confirm its recent origin (Fig. 4, Section 3, Plate 4).

The fill of [2006] was sealed by a final sandy turf deposit (2004).

## **6. DISCUSSION**

Three phases of activity, natural, undated and recent, were identified during the evaluation.

The natural deposits of sand, flint and gravel present in the bases of all three trial trenches clearly relate to the second river terrace known to be present in the area, although no evidence of alluvial deposits was found.

The undated colluvial deposit identified at the foot of the hillslope within Trench 1, clearly represents natural material eroded from higher up the river terrace. The fragments of worked flints recovered from this deposit cannot be used to date it as they may be residual.

In total eleven prehistoric worked flints were recovered from across the site being present within the colluvium in Trench 1, recovered as unstratified finds during the cleaning of Trench 2, as well as being found on the ground surface at a number of locations within the water treatment works.

Struck from locally available flint the lithic assemblage consisted entirely of debitage from core reduction, with no cores or secondarily worked tool types being present. Indicative of Mesolithic to Early Neolithic technologies and possibly struck during more than one phase of activity, the limited size of the assemblage suggests either peripheral activity, with more intensive activity being present within the vicinity but beyond the sites perimeter, or

low-key visiting of the site by transient communities (Appendix 3).

The recent irregular feature exposed within Trench 2 clearly relates to a previous phase of construction at the water treatment works.

## 7. CONCLUSIONS

The archaeological evaluation revealed no evidence of archaeological remains on the site prior to the construction of the water treatment works although a number of prehistoric worked flints recovered from both residual and unstratified contexts attest to activity within close proximity to the site during the Mesolithic or Early Neolithic periods.

A large recent disturbance found within Trench 2 clearly relates to earlier construction work at the water treatment works.

## 8. ACKNOWLEDGEMENTS

Archaeological Project Services wish to acknowledge the assistance of Michael Harrison of Anglian Water Services who commissioned both the evaluation and this report. Mark Williams coordinated the project and, with Denise Drury, edited this report.

## 9. PERSONNEL

Project Coordinator: Mark Williams  
Site Supervisor: Thomas Bradley-Lovekin  
Site Assistants: Chris Moulis and Alex Loven  
Photographic reproduction: Thomas Bradley-Lovekin  
CAD Illustration: Thomas Bradley-Lovekin

Post-excavation Analyst: Thomas Bradley-Lovekin

## 10. BIBLIOGRAPHY

Gdaniec, K., 2007, *Newmarket Lower Links Nitrate Scheme (WTW site), Woodditch: Brief for Archaeological Evaluation*, CAPCA.

IFA, 1999, *Standard and Guidance for Archaeological Field Evaluations*.

Malim, T., 2005, *Stonea and the Roman Fens*, Tempus Stroud.

## 11. ABBREVIATIONS

APS Archaeological Project Services

IFA Institute of Field Archaeologists



Figure 1 General location map



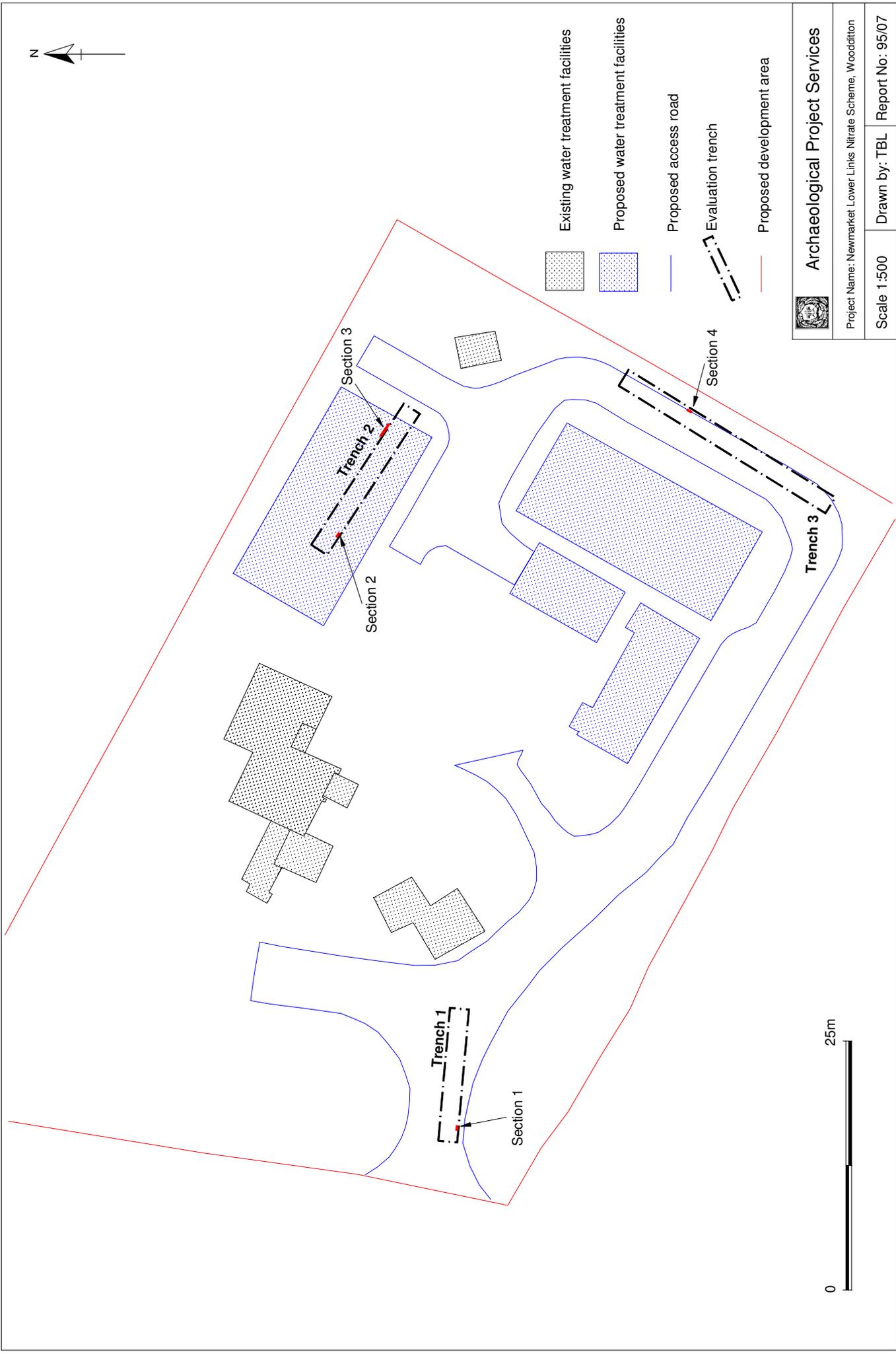
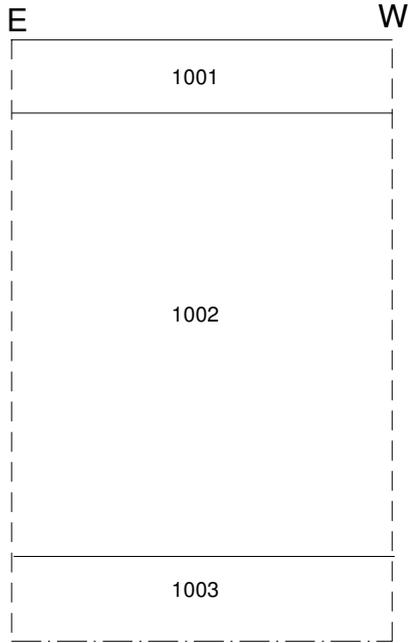


Figure 3 Plan of development area showing trench location

43.382mOD

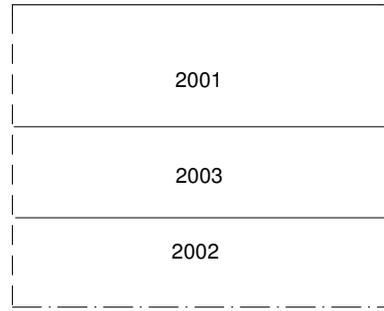


Section 1

WNW

ESE

47.172mOD

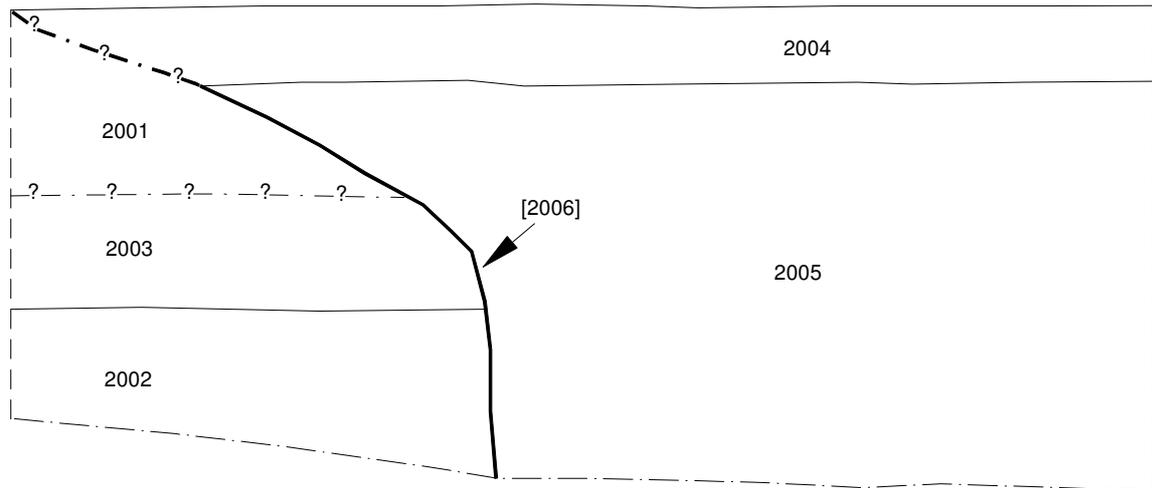


Section 2

WNW

ESE

47.452mOD

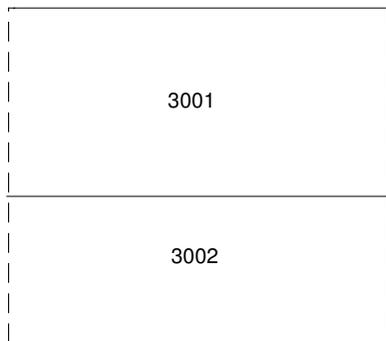


Section 3

NE

SW

47.427mOD



Section 4

0 0.5m



Archaeological Project Services

Project Name: Newmarket Lower Links Nitrate Scheme, Woodton

Scale 1:10

Drawn by:TBL

Report No:95/07

Figure 4 Sections 1-4



Plate 1 East facing view across site showing Trench 1



Plate 2 Northwest facing view across site showing Trench 2



Plate 3 Northeast facing view across site showing Trench 3



Plate 4 North facing view Section 3 (Trench 2)



Plate 5 West facing view Section 4 (Trench 3)



Plate 6 Northeast facing view Trench 1 prior to removal of colluvial deposits



Plate 7 West facing view Trench 2



Plate 8 Southwest facing view Trench 3

## **Appendix 1**

### **LOWER LINKS WATER TREATMENT WORKS, DULLINGHAM RD NEWMARKET CAMBRIDGESHIRE NGR TL 6345 6090**

### **SPECIFICATION FOR ARCHAEOLOGICAL EVALUATION PREPARED FOR**

### **ANGLIAN WATER SERVICES**

### **BY ARCHAEOLOGICAL PROJECT SERVICES Institute of Field Archaeologists' Registered Archaeological Organisation No. 21**

**July 2007**

#### **SUMMARY**

- 1.1 *This document comprises a specification for the archaeological evaluation of the proposed Lower Links Water Treatment works, Dullingham Road Newmarket.*
- 1.2 *There are site of archaeological significance within the area, the devils dyke lies 0.5km to the south and bronze age monuments are also known within the region.*
- 1.3 *The works comprise structures and infrastructure associated with a water treatment works. An evaluation is requested to determine the archaeological implications of the proposed development.*
- 1.4 *On completion of the fieldwork a report will be prepared detailing the findings of the investigation. The report will consist of a text describing the nature of the archaeological deposits located and will be supported by illustrations and photographs.*

#### **2 INTRODUCTION**

- 2.1 This document comprises a specification for the archaeological evaluation of the proposed Lower Links Water Treatment works, Dullingham Road Newmarket, NGR TL6345 6090.
  - 2.1.1 The document contains the following parts:
  - 2.1.2 Overview
  - 2.1.3 The archaeological and natural setting
  - 2.1.4 Stages of work and methodologies to be used
  - 2.1.5 List of specialists
  - 2.1.6 Programme of works and staffing structure of the project

### **3 SITE LOCATION**

- 3.1 The site is located 2.5km south of the town of Newmarket, the site lies within the County of Cambridgeshire.

### **4 SOILS AND TOPOGRAPHY**

- 4.1 The site is located on alluvium and second terrace River Gravels.

### **5 ARCHAEOLOGICAL OVERVIEW**

- 5.1 The area is poorly understood in archaeological terms, due mainly due to the lack of opportunity for survey. The Devils Dyke, a Saxon monument lies 0.5km to the south. Other archaeological finds within the area include Bronze age monuments and Roman artifacts.

### **6 AIMS AND OBJECTIVES**

- 6.1 The aim of the work will be to gather sufficient information for the archaeological curator to be able to formulate a policy for the management of the archaeological resources present on the site.
- 6.2 The objectives of the work will be to:
- 6.2.1 Establish the type of archaeological activity that may be present within the site.
  - 6.2.2 Determine the likely extent of archaeological activity present within the site.
  - 6.2.3 Determine the date and function of the archaeological features present on the site.
  - 6.2.4 Determine the state of preservation of the archaeological features present on the site.
  - 6.2.5 Determine the spatial arrangement of the archaeological features present within the site.
  - 6.2.6 Determine the extent to which the surrounding archaeological features extend into the application area.
  - 6.2.7 Establish the way in which the archaeological features identified fit into the pattern of occupation and land-use in the surrounding landscape.

### **7 TRIAL TRENCHING**

#### **7.1 Reasoning for this technique**

- 7.1.1 Trial trenching enables the *in situ* determination of the sequence, date, nature, depth, environmental potential and density of archaeological features present on the site.
- 7.1.2 The trial trenching will comprise 3 trenches each approximately 20-25m long. The location have been agreed at a discussion between APS representatives and Kasia Gdaniek at a site meeting on 11<sup>th</sup> July 2007.

#### **7.2 General Considerations**

- 7.2.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the investigation.
- 7.2.2 The work will be undertaken according to the relevant codes of practice issued by the Institute of Field Archaeologists (IFA). *Archaeological Project Services* is an IFA Registered Archaeological Organisation (No. 21).
- 7.2.3 Any and all artefacts found during the investigation and thought to be 'treasure', as defined by the Treasure Act 1996, will be removed from site to a secure store and promptly reported to the appropriate coroner's office.
- 7.2.4 Excavation of the archaeological features exposed will only be undertaken as far as is required to determine their date, sequence, density and nature. All archaeological features exposed will be excavated and recorded unless otherwise agreed with the Cambridgeshire Archaeology Office. The investigation will, as far as is reasonably practicable, determine the level of the natural deposits to ensure that the depth of the archaeological sequence present on the site is established.
- 7.2.5 Open trenches will be marked by hazard tape attached to road irons or similar poles. Subject to the consent of the archaeological curator, and following the appropriate recording, the trenches, particularly those of excessive depth, will be backfilled as soon as possible to minimise any health and safety risks.

### 7.3 Methodology

- 7.3.1 Removal of the topsoil and any other overburden will be undertaken by mechanical excavator using a toothless ditching bucket. To ensure that the correct amount of material is removed and that no archaeological deposits are damaged, this work will be supervised by Archaeological Project Services. On completion of the removal of the overburden, the nature of the underlying deposits will be assessed by hand excavation before any further mechanical excavation that may be required. Thereafter, the trenches will be cleaned by hand to enable the identification and analysis of the archaeological features exposed.
- 7.3.2 Investigation of the features will be undertaken only as far as required to determine their date, form and function. The work will consist of half- or quarter-sectioning of features as required and, where appropriate, the removal of layers. Should features be located which may be worthy of preservation *in situ*, excavation will be limited to the absolute minimum, (*ie* the minimum disturbance) necessary to interpret the form, function and date of the features.
- 7.3.3 The archaeological features encountered will be recorded on Archaeological Project Services pro-forma context record sheets. The system used is the single context method by which individual archaeological units of stratigraphy are assigned a unique record number and are individually described and drawn.
- 7.3.4 Plans of features will be drawn at a scale of 1:20 and sections at a scale of 1:10. Should individual features merit it, they will be drawn at a larger scale.
- 7.3.5 Throughout the duration of the trial trenching a photographic record consisting of black and white prints (reproduced as contact sheets) and colour slides will be compiled. The photographic record will consist of:
- the site before the commencement of field operations.

- the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
  - individual features and, where appropriate, their sections.
  - groups of features where their relationship is important.
  - the site on completion of field work
- 7.4 Should human remains be encountered, they will be left *in situ* with excavation being limited to the identification and recording of such remains. If removal of the remains is necessary the appropriate Home Office licences will be obtained and the local environmental health department informed. If relevant, the coroner and the police will be notified.
- 7.5 Finds collected during the fieldwork will be bagged and labelled according to the individual deposit from which they were recovered ready for later washing and analysis.
- 7.6 The spoil generated during the investigation will be mounded along the edges of the trial trenches with the top soil being kept separate from the other material excavated for subsequent backfilling.
- 7.7 The precise location of the trenches within the site and the location of site recording grid will be established by an EDM survey.
- 7.8 Should evidence of pottery kilns be found, these will be excavated only so far as necessary to identify the feature as such and give an indication of level of preservation. Pottery will be sampled in order to give a broad indication of form and date.

## **8 ENVIRONMENTAL ASSESSMENT**

- 8.1 During the investigation specialist advice will be obtained from an environmental archaeologist. If necessary the specialist will visit the site and will prepare a report detailing the nature of the environmental material present on the site and its potential for additional analysis should further stages of archaeological work be required. The results of the specialist's assessment will be incorporated into the final report.
- 8.2 Samples will be taken from all waterlogged feature fills of pre-18th century date. Otherwise, samples will be taken from primary and secondary fills of ditches and pits, the level of sampling being appropriate to the content of the individual feature. Samples to characterise the survival of plant remains, molluscs and small faunal remains will be taken from suitable archaeological contexts. The samples will be extracted and recorded in accordance with Murphy & Wiltshire 1994. Bulk samples for small faunal remains will be wet-sieved through 0.5mm collecting meshes.

## **9 POST-EXCAVATION AND REPORT**

### **9.1 Stage 1**

- 9.1.1 On completion of site operations, the records and schedules produced during the trial trenching will be checked and ordered to ensure that they form a uniform sequence constituting a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued: the colour slides will be labelled and mounted on appropriate hangers and the black and white contact prints will be labelled, in both cases the labelling will refer to schedules identifying the

subject/s photographed.

- 9.1.2 All finds recovered during the trial trenching will be washed, marked, bagged and labelled according to the individual deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.

## 9.2 Stage 2

- 9.2.1 Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.

- 9.2.2 Finds will be sent to specialists for identification and dating.

## 11.3 Stage 3

- 11.3.1 On completion of stage 2, a report detailing the findings of the investigation will be prepared. This will consist of:

- A non-technical summary of the results of the investigation.
- A description of the archaeological setting of the site.
- Description of the topography and geology of the investigation area.
- Description of the methodologies used during the investigation and discussion of their effectiveness in the light of the results
- A text describing the findings of the investigation.
- Plans of the trenches showing the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.
- Sections of the trenches and archaeological features.
- Interpretation of the archaeological features exposed and their context within the surrounding landscape.
- Specialist reports on the finds from the site.
- Appropriate photographs of the site and specific archaeological features or groups of features.
- A consideration of the significance of the remains found, in local, regional, national and international terms, using recognised evaluation criteria.

## 11 ARCHIVE

- 12.1 The documentation, finds, photographs and other records and materials generated during the evaluation will be sorted and ordered in accordance with the procedures in the Society of Museum Archaeologists' document *Transfer of Archaeological Archives to Museums* (1994), and any additional local requirements, for long term storage and curation. This work will be undertaken by the Finds Supervisor, an Archaeological Assistant and the Conservator (if relevant). The archive will be deposited within an approved County store as soon as possible after completion of the post-

excavation and analysis.

- 12.2 If required, microfilming of the archive will be carried out at Lincolnshire Archives. The silver master will be transferred to the RCHME and a diazo copy will be deposited with the Cambridgeshire County Council Archaeology Service Historic Environment Record.
- 12.3 Prior to the project commencing, the Cambridgeshire County Archaeological Office will be contacted to obtain their agreement to receipt of the project archive and to establish their requirements with regards to labelling, ordering, storage, conservation and organisation of the archive.
- 12.4 Upon completion and submission of the evaluation report, the landowner will be contacted to arrange legal transfer of title to the archaeological objects retained during the investigation from themselves to the receiving museum. The transfer of title will be effected by a standard letter supplied to the landowner for signature.

### **13 REPORT DEPOSITION**

- 13.1 An unbound draft copy of the report will be supplied initially to the County Archaeological Office for comment. Copies of the final report will be sent to: the client; the Cambridgeshire County Council Archaeology Office (2 copies); and the Cambridgeshire County Historic Environment Record.

### **14 PUBLICATION**

- 14.1 A report of the findings of the investigation will be submitted for inclusion in the appropriate local journal. Notes or articles describing the results of the investigation will also be submitted for publication in the appropriate national journals: *Medieval Archaeology* and *Journal of the Medieval Settlement Research Group* for medieval and later remains, and *Britannia* for discoveries of Roman date.
- 14.2 A entry will be submitted to Online Access to the Index of Archaeological Investigation (OASIS) and the final report uploaded as a PDF.

### **15 CURATORIAL MONITORING**

- 15.1 Curatorial responsibility for the project lies with Cambridgeshire County Council Archaeology Office. As much notice as possible will be given in writing to the curator prior to the commencement of the project to enable them to make appropriate monitoring arrangements.

### **16 VARIATIONS TO THE PROPOSED SCHEME OF WORKS**

- 16.1 Variations to the scheme of works will only be made following written confirmation from the archaeological curator.
- 16.2 Should the archaeological curator require any additional investigation beyond the scope of the brief for works, or this specification, then the cost and duration of those supplementary examinations will be negotiated between the client and the contractor.

### **17 SPECIALISTS TO BE USED DURING THE PROJECT**

- 17.1 The following organisations/persons will, in principle and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of any objects or material recovered during the investigation that require their expert knowledge and input. Engagement of any particular specialist subcontractor is also dependent on their availability and ability to meet programming

requirements.

<u>Task</u>	<u>Body to be undertaking the work</u>
Air Photograph plotting	Roger Palmer, independent specialist
Conservation	Conservation Laboratory, City and County Museum, Lincoln.
Pottery Analysis	Prehistoric: Dr F Pryor, Soke Archaeological Services Ltd or Dr Carol Allen, independent specialist  Roman: M Darling, independent specialist (formerly City of Lincoln Archaeological Unit), or local specialist if required  Anglo-Saxon: J Young, independent specialist (formerly City of Lincoln Archaeological Unit), or local specialist if required  Medieval and later: David Hall, independent specialist, or local specialist if required
Other Artefacts	J Cowgill, independent specialist
Human Remains Analysis	R Gowland, independent specialist
Animal Remains Analysis	J Kitch, APS
Environmental Analysis	Val Fryer, independent specialist
Soil Assessment	Dr Charly French, independent specialist
Pollen Assessment	Pat Wiltshire, independent specialist
Radiocarbon dating	Beta Analytic Inc., Florida, USA
Dendrochronology dating	University of Sheffield Dendrochronology Laboratory

## **18 PROGRAMME OF WORKS AND STAFFING LEVELS**

- 18.1 The Senior Archaeologist, Archaeological Project Services, Tom Lane, MIFA, will have overall responsibility and control of all aspects of the work.
- 18.2 Site work will be undertaken by a Project Officer with experience of archaeological excavations of this type, assisted by 1-2 appropriately experienced archaeological technicians. The archaeological works are programmed to take 3 days days.
- 18.3 Post-excavation Assessment report production is expected to take up to 10 person-days. Post-excavation analysis will be undertaken by the Project Officer, or post-excavation analyst as appropriate, with assistance from a finds supervisor, illustrator and external specialists.
- 18.4 Contingency

- 18.4.1 A contingency allowance has been included in the costing in the event of delays due to adverse weather conditions; of discoveries necessitating special analyses or dating; or of other unexpected discoveries, requiring additional site time and/or post-excavation resources or conservation.
- 18.4.2 The activation of any contingency requirement will be by agreement with the client and in consultation with the County Archaeology Office.

## **19 INSURANCES**

- 19.1 Archaeological Project Services, as part of the Heritage Trust of Lincolnshire, maintains Employers Liability insurance to £10,000,000. Additionally, the company maintains Public and Products Liability insurances, each with indemnity of £5,000,000. Copies of insurance documentation can be supplied on request.

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- 20.2 Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.
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Specification: Version 1, 11<sup>th</sup> July 2007

**APPENDIX 2**  
**Context Summary**

Trench 1

Context	Description	Depth/ Height	Interpretation
1001	Loose mid-greyish brown sand containing scarce flint fragments	0.10m	Topsoil
1002	Loose reddish brown clayey sand containing frequent flint fragments	0.58m	Colluvial deposit
1003	Loose mid-reddish to buff-yellowish brown sand containing frequent flint fragments	0.12m>	Natural

Trench 2

Context	Description	Depth/ Height	Interpretation
2001	Friable dark greyish brown sand	0.25m	Topsoil
2002	Friable mid-reddish brown mixed deposit of sand and flint nodules	0.12m	Natural
2003	Friable dark grayish brown humic sand	0.13m	Buried topsoil
2004	Friable dark grayish brown sand	0.10m	Turf deposit
2005	Compact light brownish yellow sand and flint deposit, containing plastic and concrete fragments of recent origin	0.55m>	Fill of [2006]
2006	Large irregular cut feature	0.55m>	Modern feature
2007	Unstratified material recovered during machining		

Trench 3

Context	Description	Depth/ Height	Interpretation
3001	Friable dark greyish brown humic sand containing moderate gravel and flint fragments	0.26m	Topsoil
3002	Friable mid-reddish brown mixed deposit of sand and flint gravel.	0.20m	Natural

400 This context refers to unstratified material collected from the ground surface.

## Appendix 3

An Archaeological Evaluation at Dullington Road, Woodditton,  
Cambridgeshire

Site Code: NDLL07

Lithic Assessment

Barry John Bishop August 2007

### Introduction

This report quantifies and describes the struck flint recovered during an Archaeological Field Evaluation at the above site. No contexts contained sufficient quantities to enable detailed metrical, typological or contextual analysis, and the recovered material has generally been treated as one assemblage.

### Quantification

A total of 11 struck flint were recovered from three separate contexts. These comprised two unstratified contexts ([400] and [2007]) and a colluvial layer ([1002]). The worked flint consisted of debitage from core reduction and no cores or secondarily worked tool types were present.

### Raw Materials

The raw materials used all consisted of good quality fine-grained translucent black flint. Cortex comprised rough, relatively unabraded chalky cortex and heavily recorticated ancient thermal scars. This indicates that the raw materials were obtained from derived peri-glacially affected deposits located close to the parent chalk, which would be readily available in the vicinity of the site.

### Condition

Although all from residual or unstratified deposits, the material was mostly in good condition with only minimal post-deposition edge damage visible. They were clearly not recovered *in situ* but all were likely to have been recovered from close to where they were originally discarded. All but three of the pieces, those from context [1002] and one piece from context [400] showed incipient recortication resulting in the flints attaining a bluish surface colouration.

## Description

### Context [400] Unstratified deposits

This context produced seven struck pieces that included three decortication flakes from primary core preparation, two blades and two blade-like flakes. One of the blade-like flakes had been removed from an opposed platform core and retains part of the opposed striking platform on its distal termination. It appears to have been struck in order to remove a series of prominent hinge fracture scars and is indicative of attempts to rejuvenate a blade core.

### Context [1002] Colluvial deposits in Trench 1

This produced two struck pieces, a decortication flake and a tertiary flake, neither of which were chronologically diagnostic. They were both in a good condition with no evidence of edge abrasion or chipping. They appear to have been largely unaffected by the colluvial process and were unlikely to have travelled far from where they were originally discarded. Unlike most of the rest of the worked flint from this site, these two pieces had not started to recorticate, tentatively suggesting that these may belong to a different (later?) industry from the rest.

### Context [2007] Unstratified deposits in Trench 2

This context produced a small core trimming flake and a competently produced and relatively large blade, measuring in excess of 78mm long.

## Discussion

No typologically diagnostic pieces were present although technologically the assemblage was relatively homogeneous and included a number of blades and a possible rejuvenation flake from an opposed platformed core. These are indicative of a blade-based reduction strategy, typical of Mesolithic to Early Neolithic industries. The differences in degrees of recortication between the bulk of the assemblage and the three unrecorticated pieces may tentatively suggest that flintworking occurred at the site during more than one phase of activity.

The assemblage is too small for any firm conclusions to be reached but the lack of retouched pieces may suggest an absence of domestic or any specialized lithic-using activities at the site. The presence of core-working waste, such as decortication flakes and the possible rejuvenation flake, indicate that raw materials, presumably obtained locally, were being reduced with the intention of producing blades and other usable pieces, possibly for use elsewhere. The size of the assemblage indicates that this was a peripheral activity, although more intensive activity may be present in the vicinity but beyond the site's perimeter. By itself, the lithic material indicates low-key visiting of the site by mobile communities as part of a much wider inhabitation of the landscape.

## Recommendations and Further Work

Due to its size and lack of typologically diagnostic artefacts, this assemblage is of little interpretative value beyond that indicated here. This report is all that is required of the material for the purposes of the archive and no further analytical work is proposed. The assemblage does indicate flint working occurring at the site during the Mesolithic or Early Neolithic and possibly later in the prehistoric period, and therefore a brief description of it should be included in the Cambridgeshire Historic Environment Record as well as in any published account of the investigations.

## Appendix 4

### GLOSSARY

<b>Anglo-Saxon</b>	Pertaining to the period dating from AD 410-1066 when England was largely settled by tribes from northern Germany.
<b>Context</b>	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretations of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, <i>e.g.</i> (004).
<b>Cut</b>	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, <i>etc.</i> Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.
<b>Fill</b>	Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be back-filled manually. The soil(s) which become contained by the 'cut' are referred to as its fill(s).
<b>Layer</b>	A layer is a term to describe an accumulation of soil or other material that is not contained within a cut.
<b>Medieval</b>	The Middle Ages, dating from approximately AD 1066-1500.
<b>Mesolithic</b>	The 'Middle Stone Age' period, part of the prehistoric era, dating from approximately 11000 - 4500 BC.
<b>Natural</b>	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity.
<b>Neolithic</b>	The 'New Stone Age' period, part of the prehistoric era, dating from approximately 4500-2250 BC.
<b>Post-medieval</b>	The period following the Middle Ages, dating from approximately AD 1500-1800.
<b>Prehistoric</b>	The period of human history prior to the introduction of writing. In Britain the prehistoric period lasts from the first evidence of human occupation about 500,000 BC, until the Roman invasion in the middle of the 1 <sup>st</sup> century AD.

## Appendix 5

### THE ARCHIVE

The archive consists of:

4	Drawing sheet
1	Section record sheet
3	Context registers
1	Plan record sheet
3	Trench recording sheets
1	Context sheet
1	Level sheet
1	Photographic record sheet
1	Box of finds

All primary records and finds are currently kept at:

Archaeological Project Services  
The Old School  
Cameron Street  
Heckington  
Sleaford  
Lincolnshire  
NG34 9RW

The project archive will be deposited at:

Cambridgeshire Archaeology Planning and Countryside Advice  
County Hall  
Castle Court  
Castle Hill  
Cambridge  
CB3 0AP

The archive will be deposited in accordance with the guidelines contained in *Guidelines for the Preparation of Excavation Archives for long-term storage* (UKIC 1990) and *Standards in the Museum Care of Archaeological Collections* (Museum & Galleries Commission 1992).

Event Number: ECB 2649

Archaeological Project Services Site Code: NDLL 07

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.

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**OASIS ID: archaeol1-30670**

## Project details

Project name	Newmarket Lower Links Nitrate Scheme, Woodditton, Cambs
Short description of the project	3 Trench Evaluation in advance of extension to water treatment works, no features found but unstratified prehistoric worked flint recovered
Project dates	Start: 12-07-2007 End: 13-07-2007
Previous/future work	Not known / Not known
Any associated project reference codes	NDLL07 - Sitecode
Any associated project reference codes	ECB2649 - Museum accession ID
Type of project	Field evaluation
Site status	None
Current Land use	Transport and Utilities 3 - Utilities
Significant Finds	FLINT Early Prehistoric
Significant Finds	FLINT Late Prehistoric
Methods & techniques	'Sample Trenches'
Development type	Service infrastructure (e.g. sewage works, reservoir, pumping station, etc.)
Prompt	Direction from Local Planning Authority - PPG16
Position in the planning process	Not known / Not recorded

## Project location

Country	England
Site location	CAMBRIDGESHIRE EAST CAMBRIDGESHIRE WOODDITTON Newmarket Lower Links Water Treatment Works
Study area	5103.11 Square metres
Site coordinates	TL 6345 6090 52.2215809474 0.393136904410 52 13 17 N 000 23 35 E Point
Height OD	Min: 45.00m Max: 45.00m

## Project creators

Name of Organisation	Archaeological Project Services
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Mark Williams
Project director/manager	Mark Williams
Project supervisor	Tom Bradley-Lovekin
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Anglian Water Services

**Project archives**

Physical Archive recipient	Cambridgeshire County Archaeology Office
Physical Archive ID	ECB 2649
Physical Contents	'Worked stone/lithics'
Digital Archive recipient	Cambridgeshire County Archaeology Office
Digital Archive ID	ECB 2649
Digital Contents	'Worked stone/lithics'
Digital Media available	'Database','Images raster / digital photography','Text'
Paper Archive recipient	Cambridgeshire County Arcaeheology Office
Paper Archive ID	ECB 2649
Paper Contents	'Worked stone/lithics'
Paper Media available	'Context sheet','Diary','Drawing','Photograph','Plan','Report','Section','Unpublished Text'

**Project bibliography 1**

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological Evaluation on Land for the Newmarket Lower Links Nitrate Scheme (WTW Site), Woodditton, Cambridgeshire
Author(s)/Editor(s)	Bradley-Lovekin, T
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