EUSTON WASTE WATER MAIN

ARCHAEOLOGICAL EVALUATION AND PIPELINE MONITORING

NOVEMBER 2012

PRE-CONSTRUCT ARCHAEOLOGY

R11303

AN ARCHAEOLOGICAL EVALUATION AND MONITORING– Euston Waste Water Main

Site Code: EUN038

National Grid Reference: TL 8996 7956 – TL 8771 8300

Written and Researched by Jan Janulewicz
Pre-Construct Archaeology Ltd, October 2012, Revised November 2012

Project Manager: Mark Hinman

Commissioning Client: Mouchel

Contractor: Pre-Construct Archaeology Ltd
7 Granta Terrace
Stapleford
CB22 5DL

Tel: 01223 845522
Fax: 01223 845522

Email: mhinman@pre-construct.com
Website: www.pre-construct.com

November 2012

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1 ABSTRACT

1.1 This document details the results of a trial trench evaluation and Monitoring exercise commissioned by Mouchel on behalf of Cambridge Water Company at key points along the proposed route of the Euston waste water main.

1.2 The evaluation involved the cutting of five 2m long machine excavated trial trenches between the 19th and 21st September 2012. No archaeological finds or features were observed in any of these trenches although due to the limited depth of the trenches the underlying natural geology was only exposed in trenches 4 and 5.

1.3 Additional monitoring works were carried out on the line of the pipe trench where this crossed Castle Park, adjacent to Castle St, less than 200m north of Thetford Castle at Thetford. This work was carried out between the 15th October and the 15th November 2012. No archaeology was encountered despite the sensitive location of these parts of the pipeline. The park at this location had clearly been subjected to quite extensive landscaping in the modern period.

2 INTRODUCTION

2.1 A new wastewater main will be constructed to serve the nitrate reduction facility at Euston Pumping Station. The total length of the proposed route is 5.1km which crosses the counties of both Norfolk and Suffolk.

2.2 Known heritage assets throughout the area of the proposed scheme indicated that the area has a high archaeological potential, dating in particular to the prehistoric, saxon and medieval periods.

2.3 The Archaeological Officer at Suffolk County Council requested a programme of archaeological trial trenching to evaluate the potential impacts on archaeological remains.

2.4 The evaluation and monitoring was commissioned by Mouchel on behalf of the Cambridge Water Company. The works were carried out by Jan Januelewicz of Pre-Construct Archaeology to a Written Scheme of Investigation prepared by Mouchel (Watson and Randell, 2012).

2.5 The evaluation involved the cutting of five 2m long machine excavated trial trenches between the 19th and 21st September 2012. Additional monitoring works were carried out on the line of the pipe trench where this crossed Castle Park, adjacent to Castle St, less than 200m north of Thetford Castle at Thetford. This work was carried out between the 15th October and the 15th November 2012.

2.6 A risk assessment for the watching brief was prepared by Mark Hinman of Pre-Construct Archaeology and supplied to the principal contractor, (The Cambridge Water Company).

2.7 The archaeological work, site code EUN038, targeted a number of areas along the route of the proposed water main (See Appendix 4). The principal aim of the archaeological evaluation was to determine as far as reasonably possible, the location, extent, date, character,

condition, significance and quality of any surviving archaeological remains at each of the 5 key locations selected for tunnelling. The archaeological and historical background to the study corridor is detailed in Suffolk County Council SMR records (SMR numbers- EUN001 MSF7185 and EUN017 MSF12661).

2.8 The geology and topography of the study corridor is characterised by alluvial sands associated with the floodplain of the River Lark, overlying cretaceous chalk with a subsoil of sandy soil and thin sand.

2.9 The trial trenches monitored by PCA all measured 1.6m wide x 2m long and a maximum of 1m deep. The pits were excavated with a JCB mechanical excavator using a 1.6m toothless ditching bucket under the supervision of the geotechnical contractor Forkers.

2.10 No archaeological finds or features were observed although due to the limited depth of the trenches the underlying natural geology was only exposed in trenches 4 and 5

2.11 The path of the pipeline adjacent to Castle Street was cut to a width of 0.40m using a mechanical excavator. Made Ground containing modern building materials was observed along the route to a depth of up to 1.8m.

3 ARCHAEOLOGICAL METHODOLOGY

3.1 The stratigraphy of the each evaluation trench was recorded. The excavations were photographed. Depths of deposits were recorded below ground level. A daily record of the monitoring was kept.

3.2 OD heights of deposits in each of the test pits were recorded by the author using a Leica 1200 GPS rover unit.

4 ARCHAEOLOGICAL SEQUENCE

4.1 All trial trenches were 1.6m wide x 2m long x and a maximum of 1m deep. No archaeological finds or features were present in any of the five trenches monitored by PCA.

4.2 **Trench 1**: The trench fill consisted entirely of recently deposited made ground sealed by the turf line subsoil to a total depth of 1m. Ground level was at 11.60m AOD

4.3 **Trench 2**: The trench fill consisted of 0.35m mid brown silty sandy topsoil over 0.49m a mid- light brown silty sand subsoil to a total depth of 0.84m. Patches of the underlying natural chalky gravel were visible at 15.63m AOD. Ground level was at 16.47m AOD.

4.4 **Trench 3**: The trench fill to a depth of 1m consisted entirely of made ground sealed by the turf line. Ground level was at 11.55m AOD.

4.5 **Trench 4**: The trench fill consisted of 0.48m mid brown silty sandy topsoil containing fragments of modern brick over 0.44m a dark brown silty sand subsoil to a total depth of 0.92m. The underlying natural chalk was present at 14.02m AOD. Ground level was at 15m AOD.

4.6 **Trench 5**: The trench fill consisted of 0.28m mid brown silty sandy topsoil over 0.70m of a mid-dark brown silty sand subsoil to a total depth of 0.98m. The underlying natural chalk was present at 10.53m AOD. Ground level was at 11.51m AOD.

5 CONCLUSION

5.1 No archaeological finds or features were encountered in any of the evaluation trenches or observed at any time during the subsequent monitoring works. In part this was perhaps due to the small size of the trenches and in the main by the presence of modern made ground deposits along the route of the pipeline adjacent to Castle Street. This made ground was observed to the maximum depth of excavations in Trenches 1 and 3.

ACKNOWLEDGEMENTS

6.1 PCA would like to thank Mouchel for commissioning this evaluation and providing the trench location figures. The author would like to thank Forkers their helpful cooperation during this watching brief evaluation.

6.2 In addition, the author would like to thank Mark Hinman for project management and editing.

APPENDIX 1: CONTEXT REGISTER

Context	Trench	Description	Type
1	1	Trench 1	Cut
2	2	Trench 2	Cut
3	3	Trench 3	Cut
4	4	Trench 4	Cut
5	5	Trench 5	Cut
6	1	Brown silty sand	Topsoil
7	1	Loose yellow/brown silty sand	Subsoil

APPENDIX 2: DIGITAL PHOTOGRAPHS

Figure 1: Trench1

Figure 2: Trench 2

Figure 3: Trench 3

Figure 4: Trench 4

Figure 5: Trench 5

Figure 6: Pipeline Monitoring

APPENDIX 3: OASIS FORM

OASIS DATA COLLECTION FORM: England

Printable version

OASIS ID: preconst1-129473

Project details

Project name	Geotechnical Watching Brief Euston Wastewater Main
Short description of the project	Archaeological monotoring of 5 geotechnical pits along the proposed route of the Euston wastewater main
Project dates	Start: 03-07-2012 End: 15-11-2012
Previous/future work	Not known / Not known
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 4 - Character Undetermined
Monument type	NONE None
Monument type	NONE None
Significant Finds	NONE None
Significant Finds	NONE None

Project location

Country	England
Site location	SUFFOLK ST EDMUNDSBURY EUSTON Euston watermain
Study area	19.00 Square metres
Site coordinates	TL 8996 7956 52 0 52 22 50 N 000 47 28 E Line
Site coordinates	TL 8771 8300 52 0 52 24 44 N 000 45 36 E Line
Height OD / Depth	Min: 16.00m Max: 25.00m

Project creators

Name of Organisation	Pre-Construct Archaeology Ltd.
Project brief originator	Mouchel
Project design originator	Mouchel

Project director/manager	Mark Hinman
Project supervisor	Alexander Pullen
Type of sponsor/funding body	Developer

Project archives

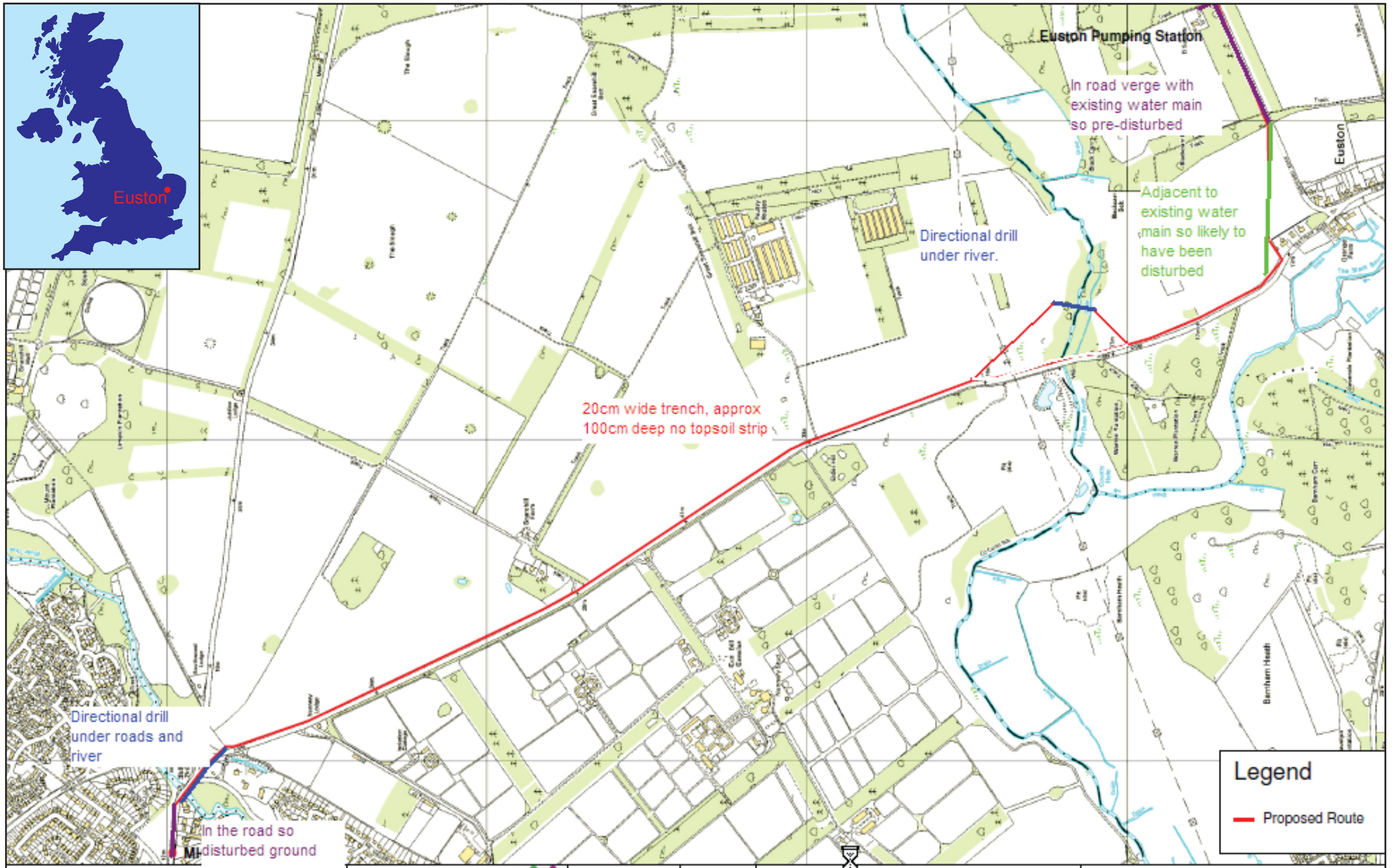
Physical Archive Exists?	No
Digital Archive recipient	Suffolk County Council
Digital Media available	"Images raster / digital photography"
Paper Archive recipient	Suffolk County Council
Paper Media available	"Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Geotechnical Watching Brief on the Euston Wastewater Main, Euston, Suffolk
Author(s)/Editor(s)	Janulewicz, Jan
Date	2012
Issuer or publisher	Pre-Construct Archaeology Limited
Place of issue or publication	Stapleford
Description	A4 Grey Literature Report

Entered by	Jan Janulewicz
Entered on	3 Dec 2012

APPENDIX 4: TRENCH LOCATION



Scale

0 250 500

m

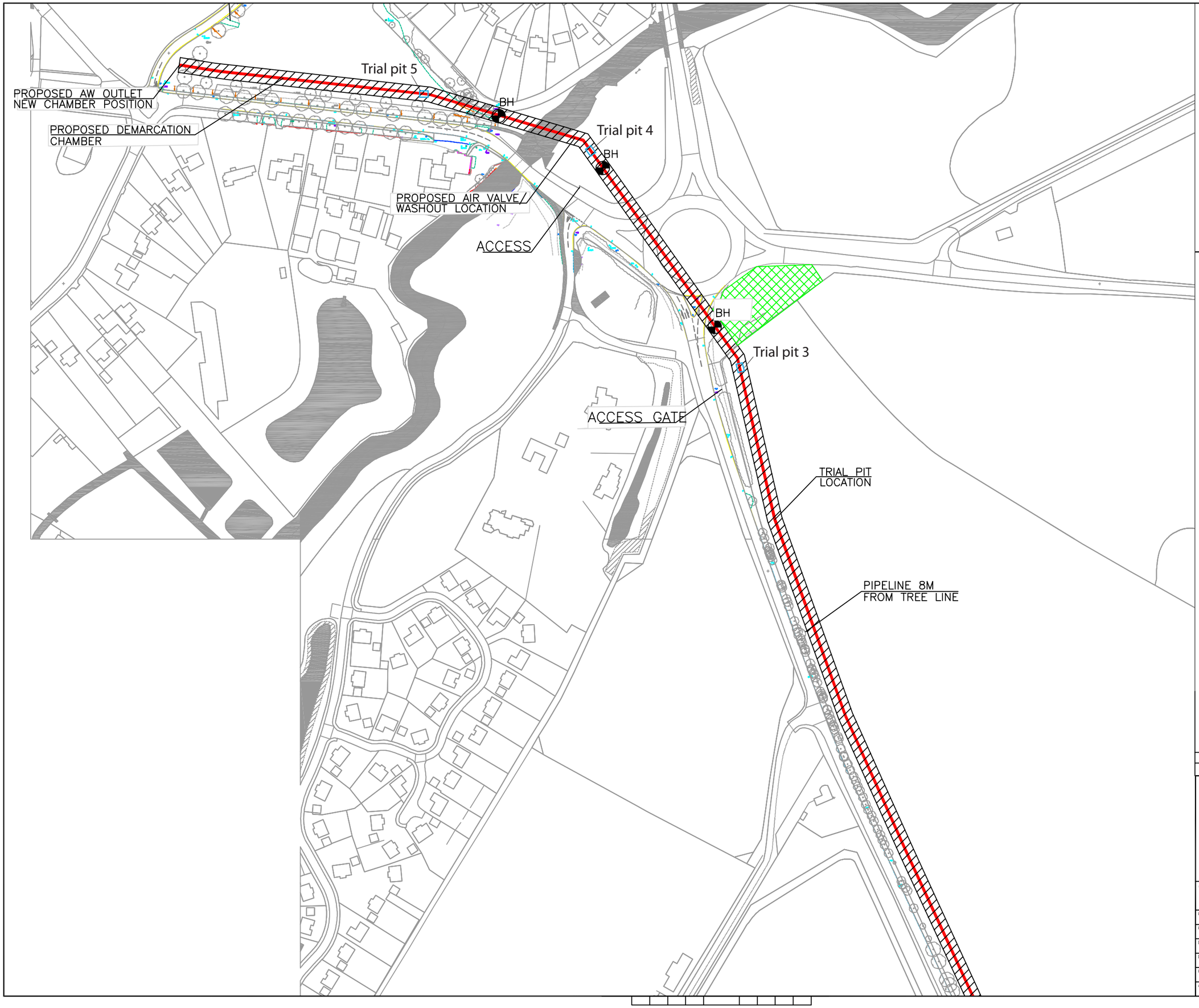
mouchel

	Initials	Issue	Description of Drawing
Drawn	PH	19/09/11	Euston wastewater main
Checked			Proposed route - draft
Authorised			

Scheme Title

Cambridge Water Company

Drawing No 1031765 (Figure 1)



Notes

1. The tie dimensions to utilities shown are for indicative purposes only and where they are from hedgelines they should be used with caution. Greater accuracy would be obtained by scaling on site from known permanent features shown on the drawing. Where utilities have no tie dimensions it was not possible to reasonably indicate them with the limited detail shown. Excavations in the vicinity of services shown are to be carried out with due diligence (Ref:HS9G(47).
2. Air valves and chambers within the cropped area to have concrete cap and timber fence surrounding.

A

KEY

- TRIAL PIT
- 10m WORKING AREA
- ACCESS ROUTES
- PROPOSED PIPELINE
- BORE HOLE

REV	AMENDMENT DESCRIPTION	REV BY	DATE	CHKD	APPD
A	AMENDED AS PER BIDWELLS REQUIREMENTS	DB	25/5	SM	JB

MWH

MWH Farrer Consulting Ltd, Gregge House, Gregge Street
Heywood, Lancashire OL10 2DX England
Telephone (01706)626258 Facsimile (01706)626294

CLIENT/ CONTRACT: MWH TREATMENT

CAD REF: F26214/119	TITLE: EUSTON WTW PROPOSED PIPELINE AND TRIAL PIT LOCATIONS GENERAL LAYOUT 5 OF 5
ORIGINAL SCALE: 1:2500 @ A3	
DRAWN: SMc	
DATE: 05/12	CONTRACT NUMBER: F26214_119
CHECKED: DB	DRAWING NUMBER: (FIGURE 2e) F26214-119-SK08
APPROVED: JB	REV: 0

ORIGINAL SIZE : A3

P C A

PCA SOUTH
UNIT 54
BROCKLEY CROSS BUSINESS CENTRE
96 ENDWELL ROAD
BROCKLEY
LONDON SE4 2PD
TEL: 020 7732 3925 / 020 7639 9091
FAX: 020 7639 9588
EMAIL: info@pre-construct.com

PCA NORTH
UNIT 19A
TURSDALE BUSINESS PARK
DURHAM DH6 5PG
TEL: 0191 377 1111
FAX: 0191 377 0101
EMAIL: info.north@pre-construct.com

PCA CENTRAL
7 GRANTA TERRACE
STAPLEFORD
CAMBRIDGESHIRE CB22 5DL
TEL: 01223 845 522
FAX: 01223 845 522
EMAIL: info.central@pre-construct.com

PCA WEST
BLOCK 4
CHILCOMB HOUSE
CHILCOMB LANE
WINCHESTER
HAMPSHIRE SO23 8RB
TEL: 01962 826 761
EMAIL: info.west@pre-construct.com

PCA MIDLANDS
17-19 KETTERING RD
LITTLE BOWDEN
MARKET HARBOROUGH
LEICESTERSHIRE LE16 8AN
TEL: 01858 468333
EMAIL: info.midlands@pre-construct.com