Wickenhall to Newhey Pipeline, Piethorne, Greater Manchester

Rapid Desk-Based Assessment and Watching Brief

Oxford Archaeology North

March 2008

United Utilities

Issue No: 2007-8/704
OAN Job No: L9530
NGR: SD 9610 1250 to 9350 1080

Document Title: **WICKENHALL TO NEWHEY PIPELINE, PIETHORNE, GREATER MANCHESTER**

Document Type: **Rapid Desk-based Assessment and Watching Brief**

Client Name: United Utilities

Issue Number: **2007-8/704**
OA Job Number: L9530

National Grid Reference: **SD 9610 1250 to 9350 1080**

Prepared by:	Chris Healey	Ged Callaghan
Position:	Project Officer	Assistant Supervisor
Date:	March 2008	
Checked by:	Alison Plummer	Signed……..
Position:	Senior Project Manager	
Date:	March 2008	
Approved by:	Alan Lupton	Signed……..
Position:	Operations Manager	
Date:	March 2008	

Oxford Archaeology North
Storey Institute
Meeting House Lane
Lancaster
LA1 1TF
t: (0044) 01524 848666
f: (0044) 01524 848606

w: www.oxfordarch.co.uk
e: info@oxfordarch.co.uk

Janus House
Osney Mead
Oxford
OX2 0EA
t: (0044) 01865 263800
f: (0044) 01865 793496

Oxford Archaeological Unit Limited is a Registered Charity No: 285627

CONTENTS

SUMMARY

United Utilities has proposed the construction of a new pipeline from Wickenhall to Newhey, Piethorne, Greater Manchester (SD 9610 1250 to 9350 1080, Fig 1). As the scheme affects areas of archaeological potential, the County Archaeologist at Greater Manchester Archaeological Unit Sites and Monuments Record (GMAUSMR), recommended that a rapid desk-based assessment and permanent presence watching brief should be undertaken for previously undisturbed sections of the pipeline, and for areas where industrial remains are known to exist.

The rapid desk-based research was undertaken by OA North in January 2007. A total of 13 sites were identified through inspection of the GMAUSMR and other primary sources. The sites consisted of three findspots, one earthwork site, four industrial sites, five hydrological management features and one chapel building. Of these, two were prehistoric in origin, six were demonstrably post-medieval and a further three were of unknown date.

There was a great deal of disturbance of the landscape within the study area during the construction of the Oldham Loop railway, and municipal reservoirs and associated utility works, which were built in the nineteenth and twentieth centuries. These works may have resulted in the destruction of unknown archaeological deposits or features, which were not recorded.

Two stone culverts were observed during the watching brief and it would appear that these relate to the nineteenth century hydrological management of the landscape. The bulk of the finds assemblage which was recovered during the project comprised kitchenwares and tablewares of the later nineteenth and twentieth centuries, although one fragment of Cistercian-type ware, of seventeenth century date, was present.

There are no recommendations for any further work along the route of the pipeline.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank United Utilities for commissioning the project. Thanks are also due to the County Archaeologist and the staff at the Greater Manchester Archaeological Unit Sites and Monuments Record (GMAUSMR).

The rapid desk-based research was undertaken by Chris Healey, Ged Callaghan undertook the watching brief and Mark Tidmarsh produced the drawings. Chris Healey and Ged Callaghan wrote the report, and Christine Howard-Davis assessed the finds. Alison Plummer managed the project, and also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

1.1.1 United Utilities has proposed the construction of a new pipeline from Wickenhall to an existing manhole to the immediate south of Newhey, Greater Manchester (SD 9610 1250 to 9350 1080, Fig 1). Following the acceptance of a Project Design (*Appendix 1*) devised to meet the Greater Manchester County Archaeologist's verbal brief, Oxford Archaeology North were commissioned by United Utilities to undertake the recommended work.

1.1.2 The rapid desk-based research comprised a search of both published and unpublished records held by the Sites and Monuments Record in Greater Manchester (GMAUSMR) and the archives and library held at OA North. This was followed by the watching brief programme.

1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

1.2.1 The study area is located to the south-east of the M62 motorway, between Wickenhall and Newhey (Fig 1). The area is located on the Manchester Pennine Fringe, which occupies the transitional zone between the open areas of Castleshaw Moor and Moss Moor and the densely populated urban conurbation of Manchester. The Fringe area has been carved '*partly from Millstone Grit and partly from the overlying Coal Measures. Glacial drift cover is extensive only on the lower ground*' (Countryside Commission 1998, 122-3). The land is predominantly used for agriculture, with stock rearing and rough grazing on improved grassland between urban areas. Field boundaries include dry 'gritstone' walls and hedgerows. Woodland cover is sparse, and is concentrated in the river valleys (*ibid*).

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design (*Appendix 1*) was submitted by OA North in response to a verbal brief issued by the County Archaeologist at the Greater Manchester Archaeological Unit Sites and Monuments Record. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

2.2 DESK-BASED ASSESSMENT

2.2.1 The rapid desk-based assessment comprised a search of both published and unpublished records held by the Sites and Monuments Record (SMR) in Manchester, and the archives and library held at OA North. For this purpose, a study area comprising 0.5km either side of the proposed pipeline route (Fig 2) was examined. All known archaeological sites identified have been included in the Historical and Archaeological Background (*Section 3.2* below) in order to assess the impact of the proposed development.

2.2.2 ***Sites and Monuments Record (GMAUSMR):*** the Sites and Monuments Record held in Manchester was consulted to establish the presence of sites of cultural heritage interest. Secondary sources for the area were limited, but 'grey literature' and published sources were studied where available.

2.2.3 ***Oxford Archaeology North:*** OA North has an extensive archive of secondary sources relevant to the study area, as well as numerous unpublished client reports on work carried out both as OA North and in its former guise of Lancaster University Archaeological Unit (LUAU). These were consulted where necessary.

2.3 WATCHING BRIEF

2.3.1 A programme of field observation recorded accurately the location, extent, and character of any surviving archaeological features and/or deposits within all topsoil stripping activities associated with the development works. This work comprised observation during the excavation for these works, the systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.

2.4 ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*), and in accordance with current IFA and English Heritage guidelines (English Heritage 1991). The paper and digital archive will be provided in the English Heritage Centre for Archaeology format and will be submitted to the Rochdale Local Studies Library. The Arts and Humanities Data Service (AHDS) online database *Online Access index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.

3. HISTORICAL BACKGROUND

3.1 INTRODUCTION

3.1.1 The following section presents a summary of the historical and archaeological background of the general area. This is presented by historical period, and has been compiled in order to place the study area into a wider archaeological context.

Period	Date Range
Palaeolithic	30,000 – 10,000 BC
Mesolithic	10,000 – 3,500 BC
Neolithic	3,500 – 2,200 BC
Bronze Age	2,200 – 700 BC
Iron Age	700 BC – AD 43
Romano-British	AD 43 – AD 410
Early Medieval	AD 410 – AD 1066
Late Medieval	AD 1066 – AD 1540
Post-medieval	AD 1540 – *c*1750
Industrial Period	*c*AD1750 – 1901
Modern	Post-1901

Table 1: Summary of British archaeological periods and date ranges

3.2 BACKGROUND

3.2.1 ***Prehistoric Period:*** the earliest clear evidence for human activity in the area dates to the Mesolithic period, although this often takes the form of lithic scatters, particularly on parts of the Pennines (Hodgson and Brennand 2007, 4). Recovery of such Mesolithic scatters seems to show a particularly dense grouping between Saddleworth and Marsden (*ibid*), approximately 8km east of the study area, and it has been suggested that the area may have been particularly good for hunting (UMAU 1996, 7). Structural evidence for settlement is extremely rare by comparison (*op cit*, 2). More recently sites of this period have been found in lower-lying areas (Hodgson and Brennand 2007, 4), but there is nothing known from the study area. Sites belonging to the Neolithic period, which saw the introduction of farming and monumental structures, are also quite rare, although there are a number of burial and settlement sites known across the county (UMAU 1996, 25). Stray finds, however, continue to be the dominant type of evidence for this period. A find spot of Neolithic flints was recorded by the SMR within the study area at Cow Heys Haugh (SMR 2472.1.0; SD 9402 1108).

3.2.2 During the Bronze Age there is an increase in the number of presumed mortuary sites, particularly burial mounds or barrows. A number of settlement

sites appear to have been recently identified at Oversley Farm (Manchester Airport), Mellor and Tatton in Cheshire (Hodgson and Brennand 2007, 4). At Castleshaw, approximately 6km to the south-east of the study area, fragments of ceramic vessels were recovered from a pit feature (UMAU 1996, 8-9). Within the area of the Piethorne Brook, flint, jet and shale artefacts formed part of an assemblage obtained through excavation, alongside the remains of a rare stake-built structure, perhaps indicative of a nomadic or at least partially transhumant lifestyle. This was interpreted as being of Bronze Age date (*op cit*, 10). Stray finds of Bronze Age flint and a socketed bronze spearhead (SMR no 5017.1.0) have also been recovered from the area (UMAU 1996, 10). A small group of mounds in Piethorne Brook possibly represent Bronze Age cairns (UMAU 1996, 10), although this is currently unproven.

3.2.3 Subsequent to the Bronze Age archaeological evidence becomes increasingly scarce across the north of Britain. One of the defining site-types of the Iron Age is the hillfort, the closest example of which is Mellor (Crosby 1996, 20). Although no sites of conclusively Iron Age date are known within the study area, stone heads, thought perhaps to be Iron Age, have been recorded from the Rochdale area (Hodgson and Brennand 2007, 26). One of the stone heads was reportedly found within the study area, at Newhey (SMR 9058.1.0; SD 950 120).

3.2.4 ***Roman Period:*** the Roman fort at Castleshaw (*Rigodunum*?) was constructed in AD 78 or 79 along the road from Manchester to York, although it was abandoned by the end of the century (Philpott 2007, 4). Although the site at Castleshaw was reoccupied in the early years of the 2nd century AD (approximately 105 AD), this time the Roman army only constructed a fortlet, and what may represent a civilian settlement has been partially excavated outside the gates (UMAU 1996, 20). Both fortlet and settlement seem to have been abandoned around the year 125 AD (*ibid*). The occurrence of Roman-period remains in the area of Piethorne Brook is, however, considered '*highly unlikely*' (GMAU 1992, 3).

3.2.5 ***Late Medieval Period:*** both documentary and archaeological evidence are silent from the early Roman period until the centuries following the Norman Conquest. Although medieval land ownership is problematic until the 13th century, with numerous landowners holding ill-defined parcels of land (Redhead 2003, 76), the study area lay within the township of Butterworth, in the parish of Rochdale, and in the County of Lancashire. The Manor of Butterworth appears to have been held by the Eland family in the 12th century, although it came into the possession of Sir John Byron in 1292 (UMAU 1996, 75). Ogden appears to be referred to in the *c* 1450 'Byron Chartulary', as *Akeden*, *Hakeden*, *Hokeden*, and *Okeden* (*ibid*). The moors, probably comprising common land at this time, would not have been divided by archaeologically visible features such as ditch or wall boundaries (GMAU 1992, 4).

3.2.6 ***Post-medieval Period:*** it is claimed that the bipartite arrangement of land depicted on an 1846 Tithe map of Butterworth, showing the township divided into 'freehold' and 'lordship' sides, represented an earlier medieval organisation (*ibid*). Land ownership appeared to have changed radically since the medieval period, although information regarding tenure is scarce (UMAU

1996, 76). The financial problems which prompted the Byrons to begin to sell their Lancashire assets was accompanied by the purchase of tenements by yeoman farmers. In 1625 Byron's ownership of the Manor of Rochdale reverted to the Crown, and in 1626 came into the possession of Sir Robert Heath, whose survey of the manor provides much of the documentary detail for the early 17th century (*ibid*).

3.2.7 Many of the farms appear to have achieved freehold status by the 17th century, although some had already become freehold by the mid 16th century (UMAU 1996, 77). Much of the architectural fabric comprising these farms, which are mostly now ruined, appears to have been built during this period, although ceramic evidence from Tanning Holes, in the Piethorne Valley, suggests a late medieval origin for at least some of the sites (GMAU 1992, 35). It appears as though the early 17th century saw a prosperous yeomanry constructing new farms, and enclosing unclaimed land with which to enrich freeholds lately purchased from the Byron estate (*op cit*, 36). Enclosure of the moorland by the use of hedges, ditches and stone walls is probably attested by some of the undated earthworks in the study area, and by the 1851 Ordnance Survey the study area was entirely enclosed, probably for a mixture of rough pasture and fodder-crops. The poor quality of this farmland forced most to seek a second income, which was provided by weaving (GMAU 1992, 36) across much of the Lancashire and West Yorkshire Pennines. Occupants of the farms in the Piethorne Valley also appear to have enjoyed turbary (peat-extraction) rights on the moors in the early 17th century (Redhead 2003, 77).

3.2.8 ***Industrial Period:*** the Ordnance Survey of 1851 shows a series of six mills along the Piethorne Valley and the river Beal (Fig 3; *Section 3.3.4* below), and earlier cartography indicates that water-power was certainly a feature of the region, if not necessarily the study area, by the late 18th century. In the first half of the 19th century six mill sites had been built in the vicinity of New Hey alone. Ogden Mill (SMR 5160.1.0; SD 9495 1210), shown on the 1851 Ordnance Survey, may be the mill represented on Hennet's Map of 1830 (*Section 3.3.2* below; Plate 1). Spring Mill (SMR 5161.1.0; SD 9533 1225) post-dates this particular edition of the Ordnance Survey mapping, although part of its fabric appears to date from the mid 19th century. The ruined footprint of a complex 19th- or early 20th-century buildings to the north of Piethorne Brook (SMR 11052.1.0; SD 9470 1201) may be associated with the Wood Mill woollen mill shown on the 1851 Ordnance Survey First Edition map (annotated on the 1890 Second Edition map as being used for fellmongering; Fig 4). Other hydrological features shown on the Ordnance Survey mapping include a weir (SMR 11068.1.0; SD 9476 1207) on the Piethorne Brook.

3.2.9 Coal and stone extraction is also attested by 19th century Ordnance Survey mapping, which shows coal-workings, mines and sandstone quarries near to the study area (Figs 3 and 4). Small-scale mining of these materials is archaeologically visible in the form of bell-pits (SMR 6216.1.0; SD 9628 1207), a feature which appears to represent medieval and subsequent activity. Unidentified ruined buildings (SMR 11088.1.0; SD 9459 1192) located immediately to the north of the Piethorne Brook may have been associated with sandstone quarry workings which are shown on the Ordnance Surveys of 1851 and 1890.

3.2.10 The water resource within the Piethorne Valley, in common which the majority of the rain-sodden Pennines, saw increasing exploitation in the second half of the 19th century, as the *Oldham Corporation Gas and Water Act* of 1855 precipitated the construction of Norman Hill, Hanging Lees, Piethorne, and Kitcliffe Reservoirs between 1858 and 1866 (UMAU 1996, 84). These were followed by the Ogden reservoir (1872-8) and the Rooden reservoir (1894-1901). It appears as though the Kitcliffe and Ogden reservoirs were constructed to provide a compensatory supply of water to some of the local mill owners (UMAU 1996, 84). A small reservoir (SMR 10360.1.0; SD 9511 1216) below the major Ogden Reservoir is shown on the 1890 map, and this still supplies water to Greater Manchester. Late 19th and 20th century ancillary structures relating to hydrological management of the area survive in the forms of weirs, culverts and associated stonework (SMR 11068.1.1; SD 9480 1202 and SMR 11090.1.0; SD 9459 1192).

3.2.11 The increasing exploitation of the area by medium-scale industry, such as the mills required a large working population, which in turn required accommodation. Terraced housing appears during the 19th century, although the buildings at Thorn Bank (SMR 10359.1.0; SD 9582 1236) may have been constructed for the benefit of a high-ranking water-board official. Rail and road links, which began to appear in the area during this period, stemmed from the increase in the necessary traffic of both people and industrial material, and the Baptist Chapel (SMR 10429.1.0; SD 9513 1209) which was built in 1861 alongside the site of the Friend's Meeting House, itself erected in 1783, was probably intended to serve the growing population.

3.3 MAP REGRESSION ANALYSIS

3.3.1 ***Yates' Map of Lancashire 1786:*** this is the first useful cartographic representation of the study area, showing the nearby settlements of Ogden and Haugh (Plate 2), and the distinctive layout of forked road over forked watercourse. No other features of note are shown in the area with the exception of a water-wheel icon representing an unnamed water-powered mill to the north of New Hey. Given the scale of the map and the propensity of the cartographer to make mistakes it is not possible to confidently identify the location of this water-wheel icon.

3.3.2 ***Hennet's Map of Lancashire 1830:*** this map shows New Hey and the road linking it to the Milnrow/Shaw road (Plate 1). Piethorne Brook is shown as terminating in a large pool to the immediate south of New Hey, and a water-wheel icon is located in the approximate position of Ogden Mill.

3.3.3 ***Ordnance Survey Map, Lancashire 1st edition 1851, 6" to 1 mile:*** the pool shown previously in Hennet's map is now clearly illustrated as a mill pond or reservoir, serving the 'Lower Two Bridge Mill' (Fig 3). Six water-powered mills are shown drawing power from the Piethorne Brook. Three cotton mills in the immediate vicinity of New Hey draw water either from Piethorne Brook or the river Beal, both of which appear to have been subject to hydrological management in the form of weirs, reservoirs and races. Ogden Mill is clearly shown as two buildings, with ancillary structures also occupying the site.

3.3.4 ***Ordnance Survey Map, 1890, First Edition, 1:2500:*** the area is now dominated by the Oldham Loop railway and the Newhey station (Fig 4). The layouts of individual mills seem to show expansion in some cases and reduction in others. This reflects differing fortunes since the 1850s. Lower Two Bridges Mill (now annotated '*cotton*') had hardly changed in plan, whilst Higher Two Bridge Mill (no longer annotated) had become a building of intermediate size. The layout of New Hey Mills (woollen) is shown as having changed considerably, although it appears not to have changed in terms of overall size. New Hey Mill (cotton) is a comparative giant not shown on the earlier maps. The former Salt Pye Cotton Mill is now called Two Bridges Mill (woollen), and it appears to have grown somewhat. The settlement at New Hey has become somewhat of a sprawl either side of the railway, as the mills' thirst for a labour force demanded an industrial village in the form of terraced housing. Ogden Mill is now annotated as a Dyeing and Finishing works, and has expanded to approximately double its former size. Spring Mill is shown as a similarly large complex.

3.4 PREVIOUS ARCHAEOLOGICAL WORK

3.4.1 Excavations at Piethorne Brook conducted in the 1980s recorded a Bronze Age settlement, as well as lithic artefacts, stone adornments and Bronze Age ceramics (Poole 1986). Surveys have been carried out within the Piethorne Valley (GMAU 1992), and excavations have taken place at the site of Tanning Holes in the same valley, both in the late 1990s (UMAU 1996). The immediate study area has not benefited from any intrusive archaeological investigation.

4. WATCHING BRIEF

4.1 INTRODUCTION

4.1.1 A programme of permanent presence monitoring, in the form of a watching brief, was conducted from March to June 2007 in two phases. The first phase comprised the observation of 27 geological test pit and trench excavations around the Wickenhall Water Treatment Works (Fig 5), and the second phase comprised the observation of topsoil stripping activities within a 2km long pipeline easement, leading from Wickenhall to Newhey Water Treatment Works (Fig 2). The entire pipeline route was stripped of topsoil within the 3m wide easement. The easement was stripped in sections as shown on Figure 2. A 0.80m wide pipe-trench was excavated in the centre of this easement (Plate 3). Contexts recorded during the watching brief are presented in *Appendix 2*.

4.2 RESULTS

4.2.1 ***Phase 1:*** Eighteen test pits (TP 1-18) were excavated on the high ground adjacent to Wickenhall Water Treatment Works (Fig 5), and contained layers of dark brown topsoil (***101***), measuring as much as 0.25m thick, over layers of mid greyish-brown subsoil (***102***), up to a maximum thickness of 0.60m. This subsoil layer contained <3% fragmentary building material including brick and tile fragments. To the north of the Wickenhall Water Treatment Works, adjacent to the access road, nine test trenches (TT 1-8) were excavated (Fig 5), with similar compositions to the 18 adjacent to the Wickenhall Water Treatment Works. A large modern rubbish pit had been filled with farm waste (***110-112***) in TP 4. Natural geology occurred at depths varying between 0.30m and 1.50m.

4.2.2 A trackway surface (***103***) encountered in TP 1, adjacent to Wickenhall Water Treatment Works, appears to have been built in the early twentieth century from reused demolition material, and continues to form a functional farm track. No other archaeological features, structures or deposits were encountered.

4.2.3 ***Phase 2:*** the positions of the pipeline easement and the roadway trench are shown in Figure 2. Within the easement, dark brown topsoil layers (***113***, ***118***, ***123***, ***128***, ***133***, ***138***, ***143***, ***148***, ***152*** and ***156***) were recorded, above subsoil layers (***114***, ***119***, ***124***, ***129***, ***130***, ***134***, ***139***, ***144***, ***149***, ***153*** and ***157***) respectively. A single layer of very dark brown subsoil (***158***), was observed in Trench 15, between Wickenhall Water Treatment Works and Ogden Lane, although no artefacts or other dateable material was recovered from this layer. Natural geology occurred at depths of up to 1m below the existing ground surface.

4.2.4 On Ogden Lane, approximately 250m from the Piethorne Water Treatment Works, a stone culvert (***161***; Plate 4) was revealed occupying a north/south alignment beneath the modern road surface, conveying run-off water from the higher ground down towards the Kitcliffe Reservoir. A similar structure twelve metres away was situated above ground on the opposite side of the

road, and both probably represent parts of the monumental reservoir infrastructure constructed between 1858 and 1894 (*Section 3.2.10*). No other features or deposits of any archaeological significance were encountered.

4.3 FINDS

4.3.1 In all, 134 fragments were recovered during the investigation, from topsoil and subsoil contexts ***119***, ***129***, ***130***, ***133***, ***134***, ***141***, ***144***, and unstratified contexts. Their distribution is shown below (Table 1).

Context	Pottery	Glass	Clay tobacco pipe	Other	Totals
Unstratified Topsoil	7		1	1	9
119	4	3		1	8
129	6	1	3		10
130	24		1		25
133	5				5
134	15				15
141	18				18
144	38	4	1		43
Unstratified	1				1
Totals	118	8	6	2	134

Table 1: Distribution of Principal Finds Types

4.3.2 Pottery comprised the majority (88%) of the material recovered. It was in good condition, the fragments being reasonably large and unabraded, suggesting that the contexts from which it derived had not been repeatedly disturbed. Most of the finds date to the last quarter of the nineteenth or the earlier part of the twentieth century. The earliest material was derived from subsoil deposit ***144***, which produced a single small fragment of Cistercian-type ware, probably of seventeenth century date. Subsoil context ***119*** and topsoil deposit ***133*** both produced small fragments of slip-decorated vessel, a typically eighteenth century type. In addition, topsoil ***119*** produced a fragment of an earthenware lidded jar, probably engine-turned, this production method having been developed in the Staffordshire potteries during the later eighteenth century. It must be noted that these fragments are likely to be residual in both contexts. The bulk of the pottery comprised kitchenwares and tablewares of later nineteenth and twentieth centuries.

5. DISCUSSION

5.1 INTRODUCTION

5.1.1 The rapid desk-based assessment identified 13 sites (*Section 3.2*) within 0.5km of the proposed pipeline corridor. Of these, all 13 were already recorded in the SMR. There are no recorded Scheduled Monuments and no other sites with Statutory Designations within the study area. The recorded sites within the study area chiefly relate to the industrial period (textile mills) and ancillary industrial buildings and features constructed to facilitate the management of the water resources which supplied these industries.

5.1.2 The watching brief recorded only limited evidence for human activity. Some areas of the pipeline were excavated across poorly-drained ground, and the culverts observed during the watching brief attest to the problems caused by weather in this extremely wet area of the Pennines. The recovery of artefacts proved to be sporadic and was mainly confined to areas adjacent to existing farmhouses. The pottery was also, in most cases, only found in the topsoil or subsoils, although a sherd was found amongst spoil from lower down (approximately 1.5m below the existing ground surface) in TP 10, close to Wickenhall Water Treatment Works.

5.2 SIGNIFICANCE AND RECOMMENDATIONS

5.2.1 The small number of archaeological features noted during the course of the watching brief support the assertion that the area has been predominantly agricultural and pastoral in nature, and that the impact of human activity is limited to more recent history. Given the late date and the limited significance of the archaeological material recovered during the programme no further work is recommended.

6. BIBLIOGRAPHY

6.1 CARTOGRAPHIC SOURCES

Hennet's Map of Lancashire 1830

Ordnance Survey 6" to 1 mile, First Edition, Lancashire sheet 89, surveyed 1844-8, publ 1851

Ordnance Survey 6" to 1 mile, Second Edition, Lancashire sheet LXXXIX, surveyed 1890-1, publ 1895

Yates' Map of Lancashire 1786

6.2 SECONDARY SOURCES

Crosby, A 1996 *A History of Cheshire*, Chichester

Countryside Commission 1998, *Countryside Character, Volume 2: North West*, Cheltenham

English Heritage 1991, *Management of Archaeological Projects*, 2nd edn, London

English Heritage 2006, *Management of Research Projects in the Historic Environment (MoRPHE)*

GMAU 1992, *Wicken Hall Water Treatment Works: An Archaeological Assessment*, unpubl rep

Hodgson, J, and Brennand, M 2007, The Prehistoric Period Resource Assessment

Institute of Field Archaeologists, 1999 *Standard and guidance for archaeological Desk-based Assessments*

Poole, S 1986, A Late Mesolithic and Early Bronze Age Site at Piethorn Brook, Milnrow, *Greater Manchester Arch Jour* **2**, 11-30

Philpott, R 2007, *North-West Research Framework: Romano-British Resource Assessment*

Redhead, N 2003, The Castleshaw and Piethorne Valleys. The Industrial Exploitation of a Pennine Landscape, in Nevell M (ed), *From Farmer to Factory Owner. Models, Methodology and Industrialisation*, Council for British Archaeology North West, 69-78

UMAU 1996, *Castleshaw and Piethorne North West Water Landholding: Archaeological Survey*, unpubl rep

Walker, J (ed), 1989 *Castleshaw. The Archaeology of a Roman fortlet*, Greater Manchester Archaeological Unit

7. ILLUSTRATIONS

7.1 FIGURES

7.2 PLATES

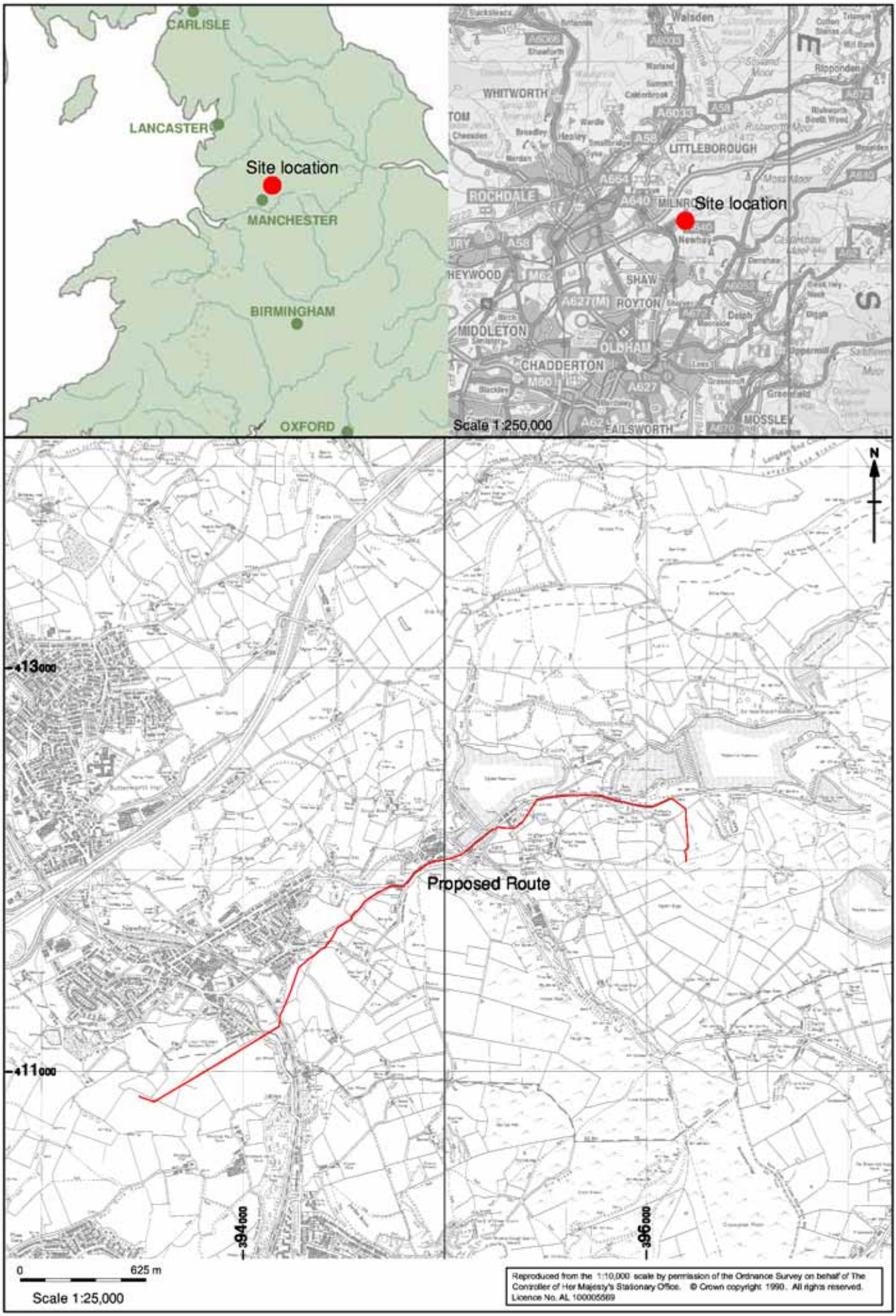

Figure 1: Site Location

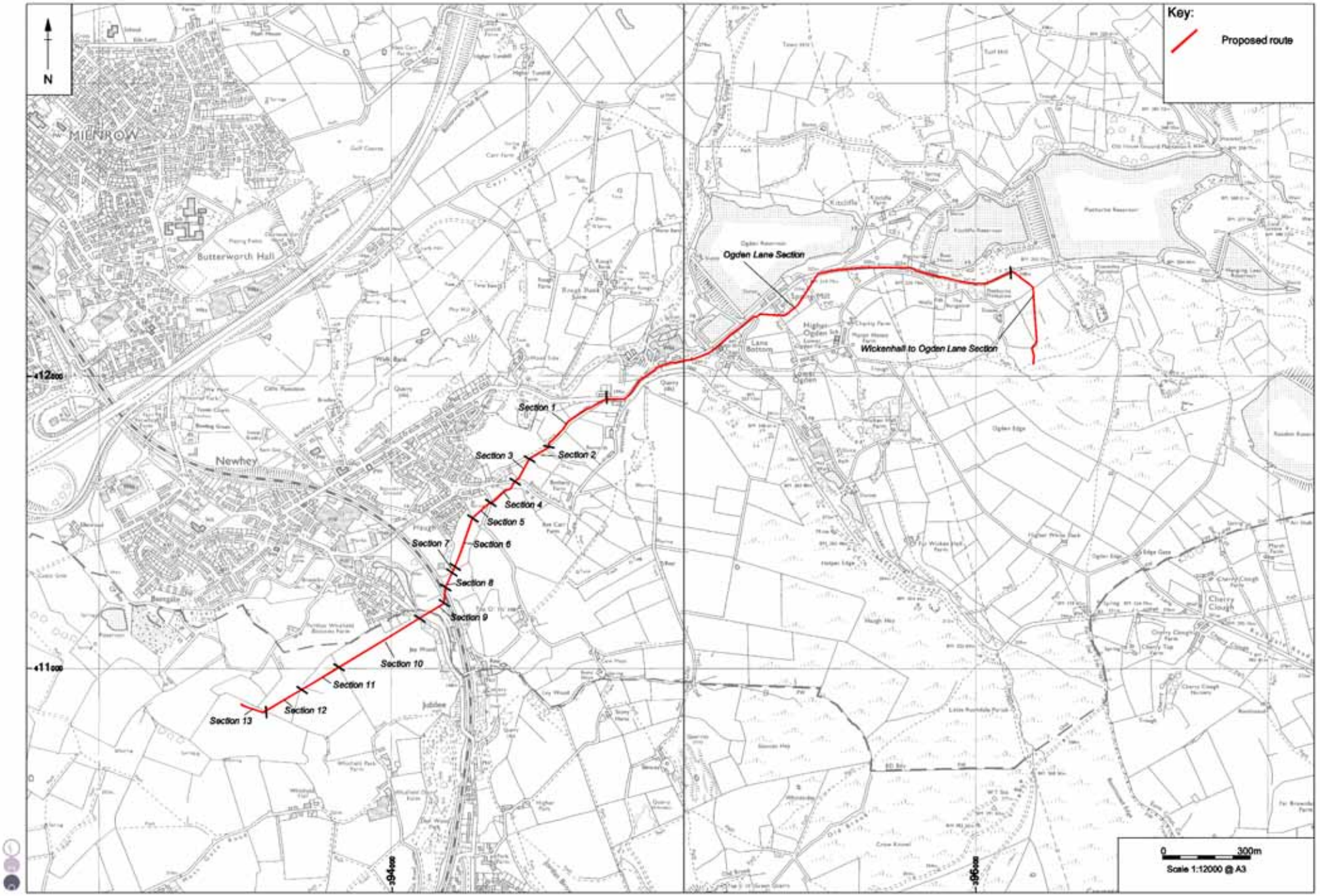

Figure 2: Pipeline route showing location of stripped sections of the easement

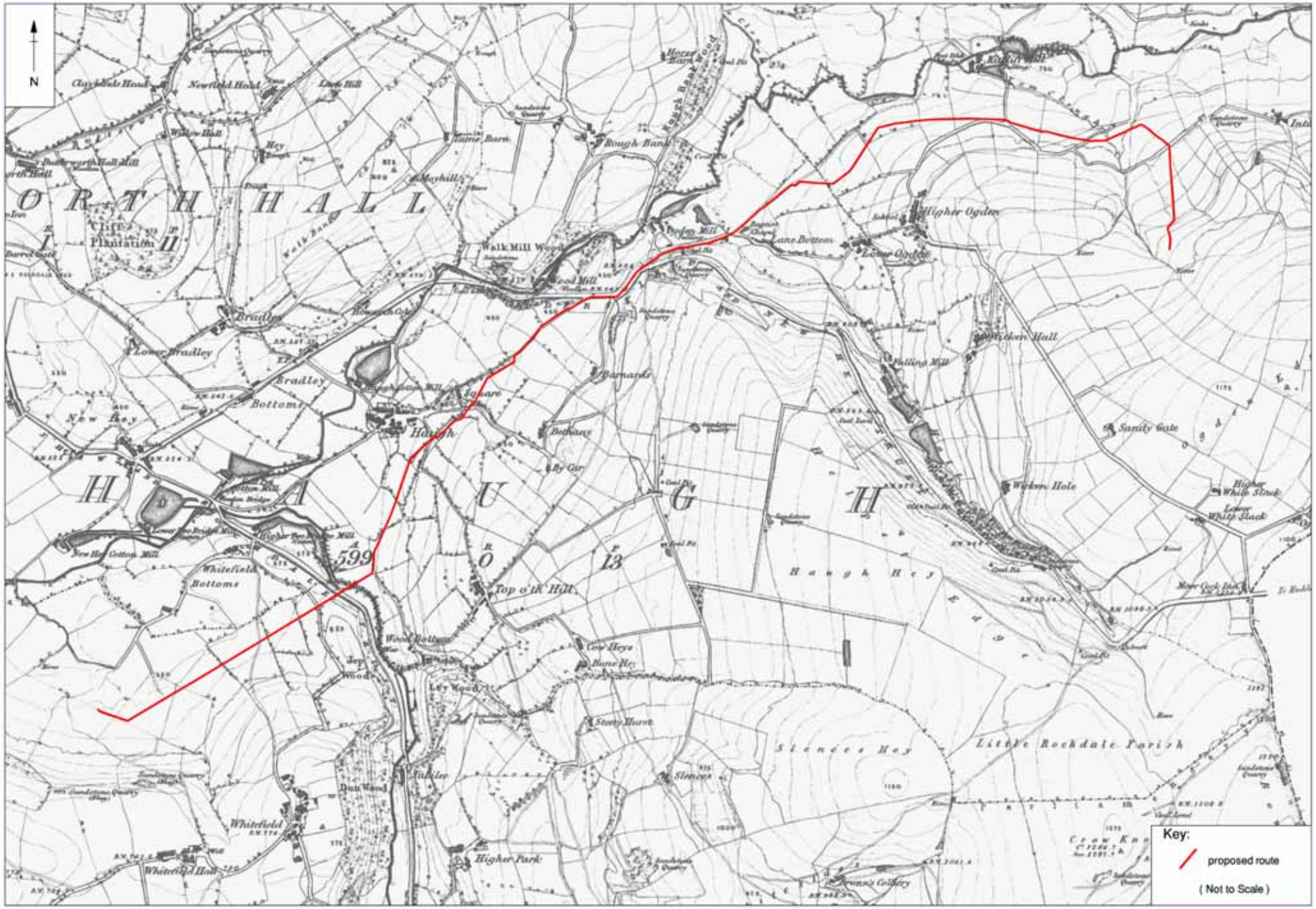

Figure 3: Extract from Ordnance Survey First Edition 1:6 inch map, 1851

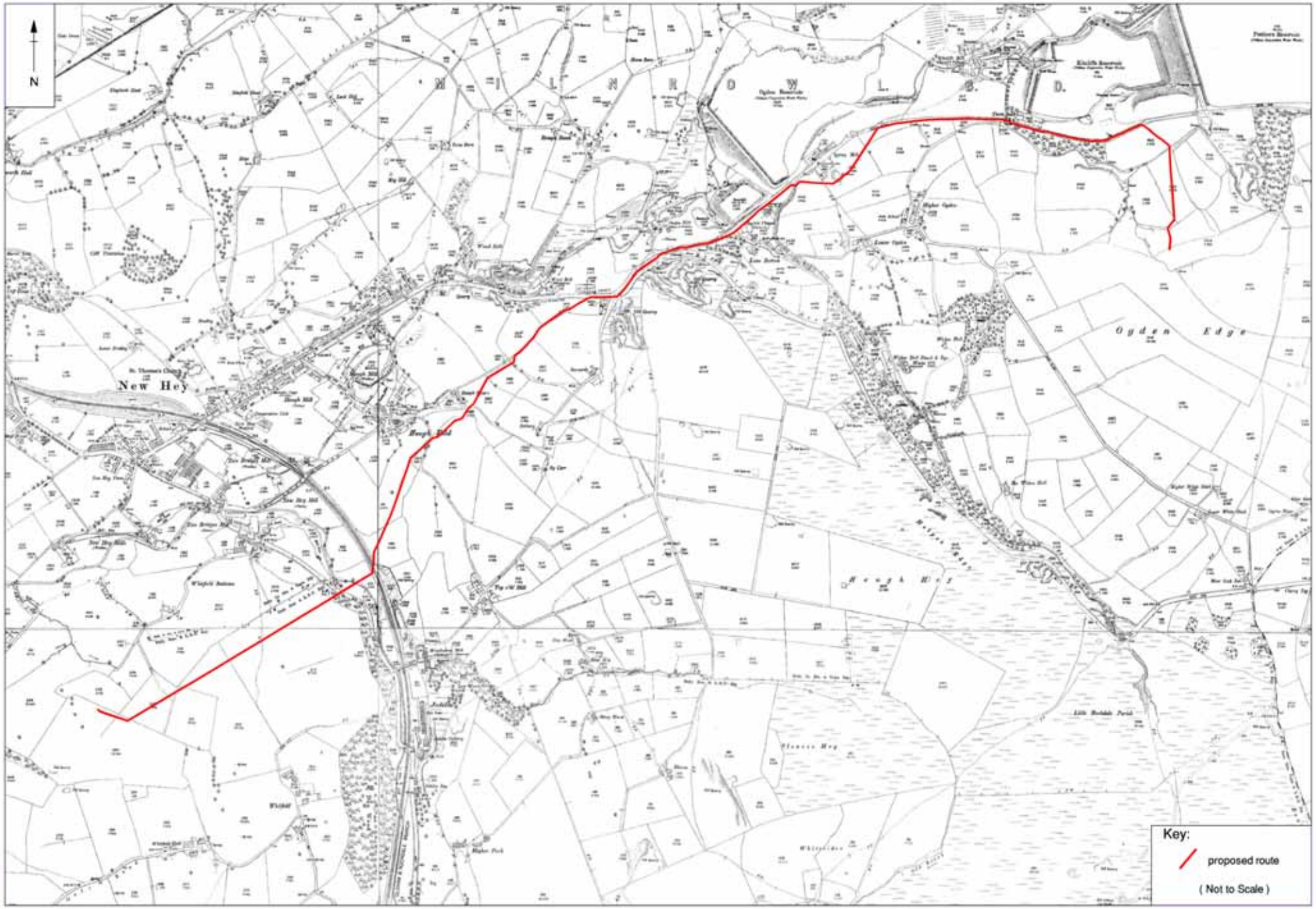

Figure 4: Extract from Ordnance Survey First Edition 1:25 inch map, 1890

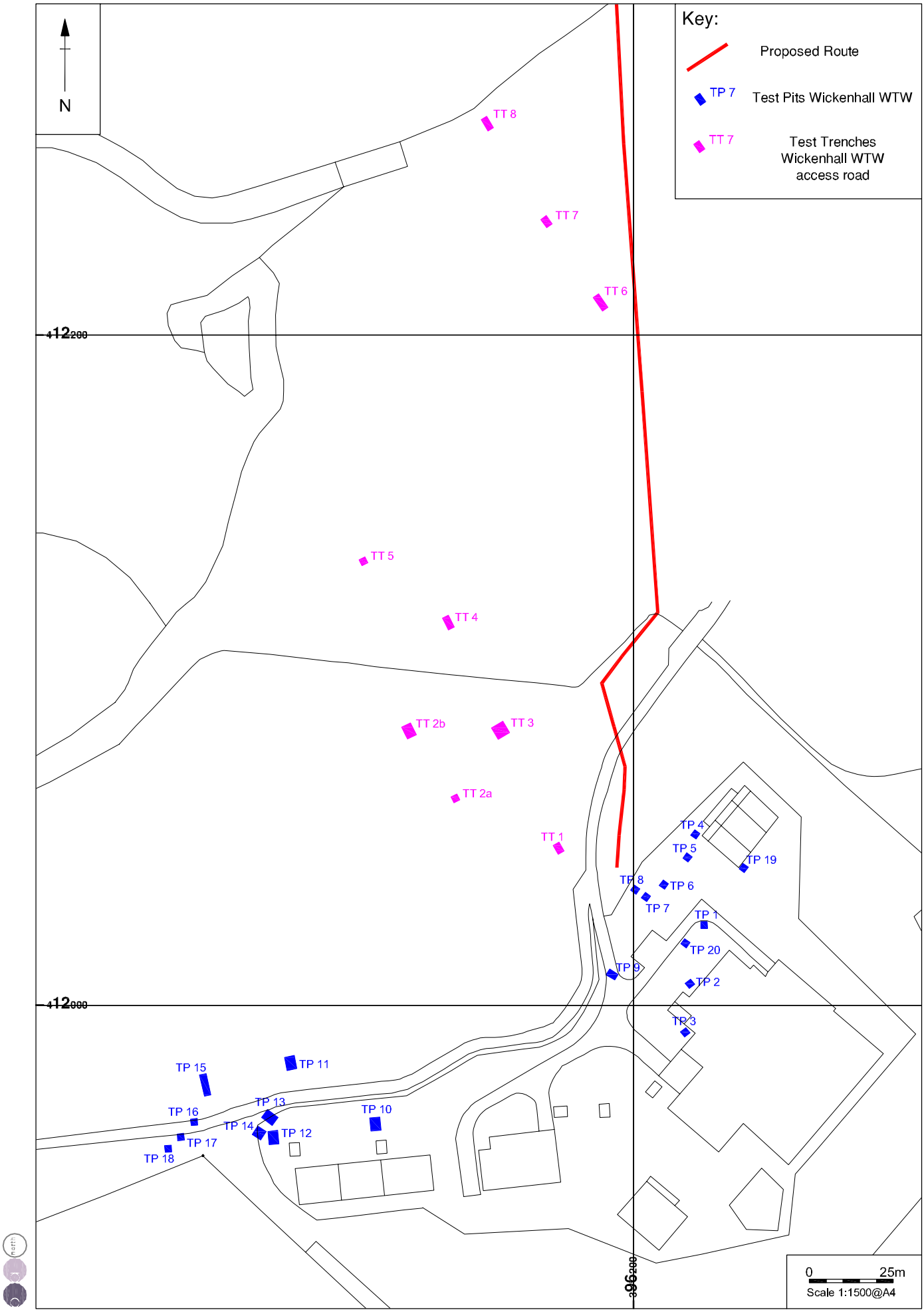

Figure 5: Detail of Test Pits in vicinity of Wickenhall Water Treatment Works

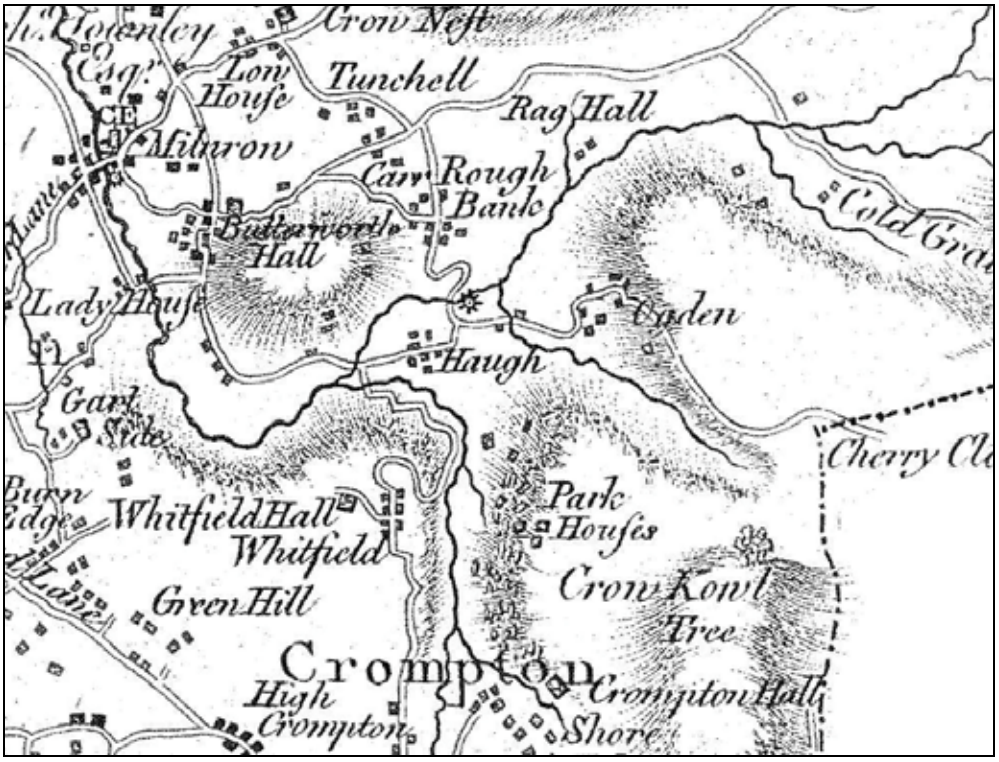

Plate 1: Extract of Yates' Map of Lancashire, 1786

Plate 2: Extract of Hennet's Map of Lancashire, 1830

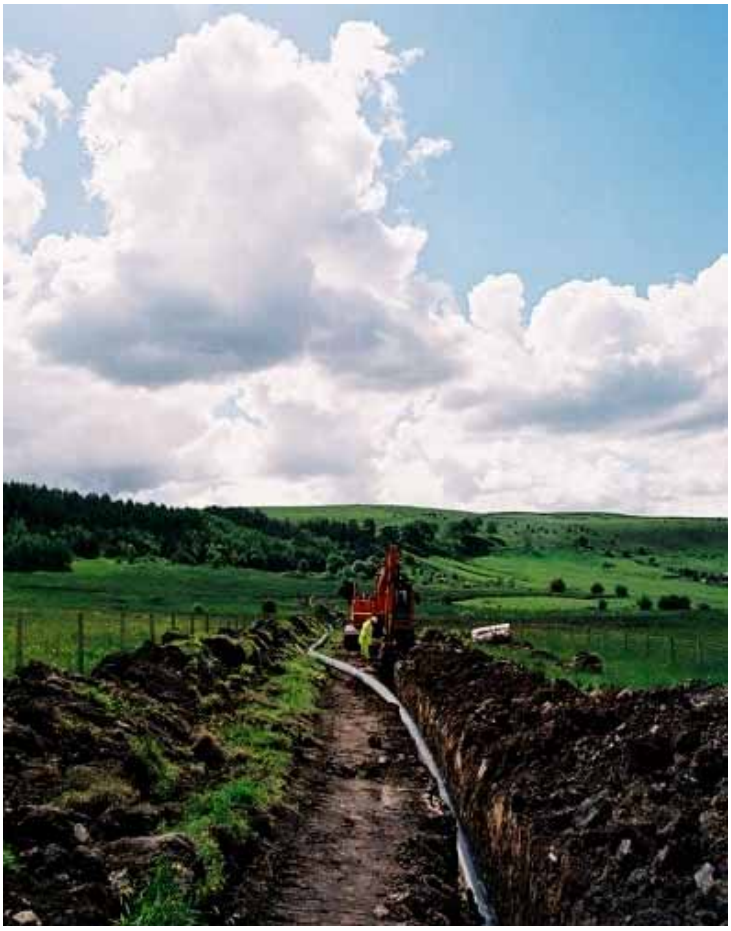

Plate 3: Topsoil stripping within the pipeline easement

Plate 4: Culvert ***161*** on Ogden Lane, facing south

APPENDIX 1: PROJECT DESIGN

WICKENHALL TO NEWHEY WATER TREATMENT WORKS PIPELINE (PIETHORNE), GREATER MANCHESTER

Archaeological Watching Brief Project Design

Oxford Archaeology North

January 2007

United Utilities

OA North Tender No. t2926
NGR SD 9312

1. INTRODUCTION

1.1 United Utilities (hereafter the client) have proposed the construction of a new pipeline from Wickenhall to Newhey, Greater Manchester. As the scheme affects areas of archaeological potential, dating from the Bronze Age through to the Industrial Period, the Assistant County Archaeologist at Greater Manchester Archaeological Unit Sites and Monuments Record (GMAUSMR) has recommended that a formal watching brief should be undertaken for previously undisturbed sections of the pipeline and areas where industrial remains are known to exist.

1.2 OA North has considerable experience of the assessment, evaluation and excavation of sites of all periods, having undertaken a great number of small and large-scale projects during the past 20 years. Watching briefs, evaluations and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables.

1.3 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists (IFA) registered organisation, registration number 17, and all its members of staff operate subject to the IFA Code of Conduct.

2 OBJECTIVES

2.1 The following programme has been designed to evaluate the archaeological resource of the proposed development area. The required stages to achieve this are as follows:

2.2 ***Rapid Desk-Based Assessment:*** a brief appraisal of the data held by the Sites and Monuments Record Office (SMR) will be undertaken;

2.3 ***Permanent Presence Watching Brief:*** this will be undertaken during all ground disturbances associated with previously undisturbed sections of the pipeline or where known remains of industrial archaeology are present;

2.4 ***Report and Archive:*** production of a report following the collation of data during *Sections 2.2* and *2.3* above.

2.5 It should be noted that there is the possibility of follow-on excavation works in addition to the archaeological programme of work highlighted above. Such works will be subject to discussions with the Assistant County Archaeologist and would be a variation to this project design. It would be advisable for the client to set aside a contingency sum of approximately £25,000 to cover this eventuality.

3 METHOD STATEMENT

3.1 WATCHING BRIEF

3.1.1 ***Rapid Desk-Based Assessment***: an examination will be undertaken of SMR data made available to the project in order to place the findings of the watching brief into a local and regional context.

3.1.2 ***Fieldwork***: a programme of field observation will record accurately the location, extent, and character of any surviving archaeological features and/or deposits within all topsoil stripping activities associated with the development works. The watching brief will also be maintained for sections of the pipeline that are to be excavated without easement works ie within road surfaces. This work will comprise observation during the excavation for these works, the systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.

3.1.3 Putative archaeological features and/or deposits identified by the machining process, together with the immediate vicinity of any such features, will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and where appropriate sections will be studied and drawn. Any such features will be sample excavated (ie selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal).

3.1.4 It is assumed that OA North will have the authority to stop the works for a sufficient time period to enable the recording of important deposits. It may also be necessary to call in additional archaeological support if a find of particular importance is identified or a high density of archaeology is discovered. This would only be called into effect in agreement with the Client and the County Archaeology Service and will require a variation to costing. In the event that significant archaeological features or deposits are identified the immediate area will be sealed off to avoid machine tracking and a meeting called between the Assistant County Archaeologist, United Utilities representative and the OA North project manager.

3.1.5 ***Written Record:*** during this phase of work, recording will comprise a full description and preliminary classification of features or materials revealed. All information identified in the course of the site works will be recorded stratigraphically utilising OA North pro-forma. Areas of excavation will be assigned trench numbers and context numbers will be applied to archaeological features.

3.1.6 ***Site Drawings:*** a large-scale plan (provided by the client) will be produced of the area of the groundworks showing the location and extent of the ground disturbance, appropriately labelled to correspond with the written record. Archaeological features will be recorded accurately (either on plan (1:20) and/or section (1:10), and as grid co-ordinates where appropriate).

3.1.7 The site drawings will be manipulated in an industry standard CAD package (AutoCAD release 2000) for the production of final drawings.

3.1.8 A photographic record will be undertaken simultaneously. This will utilise a 35mm camera for the production of both colour slides and monochrome contact prints. A photographic scale will appear in all images captured. The photographic index will describe and locate each area/feature photographed.

3.1.9 ***Human Remains****:* any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish

the date and character of the burial. The GMAUSMR and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Department of Constitutional Affairs license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations, and if appropriate, in compliance with the 'Disused Burial Grounds (Amendment) Act, 1981.

3.1.10 ***Treatment of finds:*** no sampling of finds will take place during fieldwork. All finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines (Rochdale Museums Service).

3.1.11 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained on advice from the recipient museum's archive curator.

3.1.12 ***Treasure:*** any gold and silver artefacts recovered during the course of the excavations will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.

3.1.13 ***Environmental Samples***: samples will also be collected for technological, pedological and chronological analysis as appropriate. If necessary, access to conservation advice and facilities can be made available. OA North maintains close relationships with Ancient Monuments Laboratory staff at the Universities of Durham and York and, in addition, employs artefact and palaeozoological specialists with considerable expertise in the investigation, excavation and finds management of sites of all periods and types, who are readily available for consultation.

3.2 REPORT AND ARCHIVE

3.2.1 ***Interim Statement***: in the event that further work is recommended an interim statement will be issued. In this instance or in the event that the client specifically requests an interim statement it should be noted that all illustrations will be copies of field drawings and not finished CAD drawings.

3.2.2 ***Final Report:*** two copies of the final report will be submitted to the client and a further copy to the GMAUSMR. Both paper and digital copies will be provided on CD-ROM in pdf format. The report will present the following information:

(i) ***Summary:*** a summary statement of the findings;

(ii) ***Introduction:*** the background to the project including location details;

(iii) ***Methodology:*** an outline of the methodology of all elements of the programme of work;

(iv) ***Historical Background:*** a brief historical background to the site;

(v) ***Results:*** an account of the past and present land use of the study area;

An account of archaeological features identified during the course of the watching brief:

(vi) ***Discussion:*** a description of the significance of the study area in its local and regional context;

(vii) ***Recommendations:*** the identification of areas where further development will impact upon the archaeological resource in addition to the impacts of the current development;

(viii) ***Illustrations:*** maps, plans, sections and copies of the site photographic archive;

(ix) ***Appendices:*** a copy of the brief and this project design;

3.2.3 Provision will be made for a summary report to be submitted to a suitable regional or national archaeological journal within one year of completion of fieldwork, if relevant results are obtained.

3.2.4 ***Confidentiality:*** all internal reports to the client are designed as documents for the specific use of the Client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

3.2.5 ***Archive:*** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). This archive, including a copy of the report, will be provided in the English Heritage Centre for Archaeology format. In this instance the archive will be submitted to the Rochdale Local Studies Library.

3.2.6 The Arts and Humanities Data Service (AHDS) online database *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.

4 PROJECT MONITORING

4.1 Monitoring of this project will be undertaken through the auspices of the GMAUSMR Assistant County Archaeologist, who will be informed of the start and end dates of the work.

5 WORK TIMETABLE

5.1 The rapid desk-based assessment is expected to take in the region of one day to complete.

5.2 The duration of the watching brief will be dependent upon the progress of the contractor.

5.3 The client report will be completed within eight weeks following completion of the fieldwork.

6 STAFFING

6.1 The project will be under the direct management of **Alison Plummer BSc (Hons)** (OA North Senior Project Manager) to whom all correspondence should be addressed.

6.2 Present timetabling constraints preclude detailing at this stage exactly who will be undertaking the rapid desk-based assessment and watching brief, but both of these elements of the project are likely to be supervised by an OA North project supervisor experienced in these types of project. All OA North project officers and supervisors are experienced field archaeologists capable of carrying out projects of all sizes.

7 INSURANCE

7.1 OA North has a professional indemnity cover to a value of £2,000,000; proof of which can be supplied as required.

APPENDIX 2: CONTEXT LIST

Context	Site Division	Category	Description
101	Wickenhall Test pit 13	Topsoil	Dark-brown sandy silt <2% chalky, limestone fragments
102	Wickenhall Test pit 13	Subsoil	Mid greyish-brown, clayey silt <3% ceramic building material
103	Wickenhall Test pit 13	Brick rubble	Orangey-red indurated brick fragments
104	Wickenhall Test pit 13	Pipe-trench Backfill	Greyish-brown, sandy clay <2% field stone fragments
105	Ogden Lane	Road surface	Tarmac
106	Ogden Lane	Hardcore	Greyish-brown Stone fragments in a sandy matrix
107	Ogden Lane	Fill	Light greyish brown clayey silt <3% sandstone chips (Fill of ***109***)
108	Ogden Lane	Natural	Mid brown sandy silt <4% stone fragments
109	Ogden Lane	Cut	Linear feature with U-shaped section, aligned NE/SW Culvert construction cut
110	Wickenhall Test Trench **4**	Fill	Mid green, soft clayey silt <2% small rounded stone fragments Modern dump material
111	Wickenhall Test Trench **4**	Fill	Dark brown, clayey silt Modern dump material
112	Wickenhall Test Trench **4**	Fill	Mid grey clayey silt Modern dump material
113	New Haugh Farm. Easement section **1**	Topsoil	Black clayey silt <3% small sub-rounded stones
114	New Haugh Farm. Easement section **1**	Subsoil	Light grey sandy silt
115	New Haugh Farm. Easement section **1**	Natural	Light grey silty clay
116	New Haugh Farm. Easement section **1**	Natural	Light brown silty sand
117	New Haugh Farm. Easement section **1**	Natural	Orange yellow soft plastic clay
118	New Haugh Farm. Easement section **1**	Topsoil	Black sandy silt
119	New Haugh Farm. Easement section **1**	Subsoil	Light mid grey sandy silt
120	New Haugh Farm. Easement section **1**	Natural	Light brown sandy silt
121	New Haugh Farm. Easement section **1**	Natural	Mid-to-light brown silty sand
122	New Haugh Farm. Easement section **1**	Natural	Brown/orange soft, plastic clay
123	New Haugh Farm. Easement section **3**	Topsoil	Black sandy silt <2% small rounded stones
124	New Haugh Farm. Easement section **3**	Subsoil	Light grey sandy silt <2% small sub-rounded stones
125	New Haugh Farm. Easement section **3**	Natural	Light mid brown sandy silt
126	New Haugh Farm.	Natural	Light mid brown, silty sand

	Easement section **3**		
127	New Haugh Farm. Easement section **3**	Natural	Yellow orange, soft clay
128	Bethany Lane T Easement section **4**	Topsoil	Black sandy silt
129	Bethany Lane Easement section **4**	Subsoil	Light grey sandy silt.2% small stones
130	Bethany Lane Easement section **4**	Subsoil	Light mid brown sandy silt.
131	Bethany Lane Easement section **4**	Natural	Light mid brown soft sand
132	Bethany Lane Easement section **4**	Natural	Yellow-orange, plastic clay
133	Haugh Spring Easement section **5**	Topsoil	Black sandy silt <2% sub rounded stone inclusions
134	Haugh Spring Easement section **5**	Subsoil	Light grey sandy silt
135	Haugh Spring Easement section **5**	Natural	Light to mid brown sandy silt
136	Haugh Spring Easement section **5**	Natural	Mid brown silty sand
137	Haugh Spring Easement section **5**	Natural	Yellow orange, soft plastic clay
138	Meadowside Farm Easement section **6**	Topsoil	Black sandy silt <2% small sub-rounded stone inclusions
139	Meadowside Farm Easement section **6**	Subsoil	Mid light grey sandy silt.2% mix of sub-rounded and angular stones
140	Meadowside Farm Easement section **6**	Subsoil	Light mid brown sandy silt 2% mix of sub-angular and rounded stone inclusions
141	Meadowside Farm Easement section **6**	Subsoil	Mid brown silty sand
142	Meadowside Farm Easement section **6**	Natural	Orangey brown soft, plastic clay
143	Whitfield Park Farm. Easement section **12**	Topsoil	Black sandy silt <4% small angular stones
144	Whitfield Park Farm. Easement section **12**	Subsoil	Light brown sandy silt <5% sub-angular stone inclusions
145	Whitfield Park Farm. Easement section **12**	Natural	Mid brown sandy silt
146	Whitfield Park Farm. Easement section **12**	Natural	Mid greyish brown sandy silt
147	Whitfield Park Farm. Easement section **12**	Natural	Greyish yellow firm plastic clay
148	Whitfield Park Farm. Easement section **13**	Topsoil	Black sandy silt <5% sub-angular stones
149	Whitfield Park Farm. Easement section **13**	Subsoil	Mid greyish brown sandy silt <2% sub-angular stones
150	Whitfield Park Farm. Easement section **13**	Natural	Light greyish brown sandy silt
151	Whitfield Park Farm. Easement section **13**	Natural	Greyish yellow firm plastic clay
152	River Beal Sump. Easement section **14**	Topsoil	Black sandy silt <4% sub-angular stones
153	River Beal Sump. Easement section **14**	Subsoil	Light greyish brown sandy silt <4% sub-rounded and sub-angular stones <,0.05m

154	River Beal Sump. Easement section **14**	Natural	Orange brown sandy silt
155	River Beal Sump. Easement section **14**	Natural	Greyish yellow firm plastic clay
156	Wickenhall to Ogden Lane. Easement section **15**	Topsoil	Black sandy silt <5% rounded stones
157	Wickenhall to Ogden Lane. Easement section **15**	Subsoil	Light brown sandy silt <4% sub angular stones
158	Wickenhall to Ogden Lane. Easement section **15**	Layer Deposit	Dark brownish black sandy silt
159	Wickenhall to Ogden Lane. Easement section **15**	Natural	Mid grey silty clay
160	Wickenhall to Ogden Lane. Easement section **15**	Natural	Greyish-yellow firm plastic clay