An Archaeological Evaluation on land at Middleton Lodge Estate, Richmondshire, North Yorkshire

Central National Grid Reference: NZ 225 072

Site Code: MLE 07

Commissioning Client: Wardell Armstrong Collingwood Building Collingwood Street Newcastle-upon-Tyne NE1 1JF

Tel: 0191 232 0943

On Behalf of:
James Allison and Sherburn Stone Company Limited
15 Front Street
Sherburn Hill
Durham
DH6 1PA

Tel: 0191 372 0636

Contractor:
Pre-Construct Archaeology Limited
Northern Office
Unit N19a, Tursdale Business Park
Tursdale
Durham
DH6 5PG

Tel: 0191 377 1111



© Pre-Construct Archaeology Limited May 2007

This report is protected by copyright. The report and the information contained herein are and remain the sole property of Pre-Construct Archaeology Limited and are provided on a single site multi-user basis. If provided in paper form, the report may be utilised by a number of individuals within a location, but copying is prohibited under copyright. If provided in an electronic form, the report may be utilised in a shared server environment, but copying or installation onto more than one computer is prohibited under copyright and printing from electronic form is permitted for own, single location, use only. Multiple printing from electronic form for onward distribution is prohibited under copyright. Further distribution and uses of the report either in its entirety or part thereof in electronic form is prohibited without prior consent from Pre-Construct Archaeology Limited.

Pre-Construct Archaeology Limited has made every effort to ensure the accuracy of the content of this report. However, Pre-Construct Archaeology Limited cannot accept any liability in respect of, or resulting from, errors, inaccuracies or omissions herein contained.

CONTENTS

			page		
1.	NON-TEC	HNICAL SUMMARY	1		
2.	INTRODU	CTION	2		
3.	PLANNING	BACKGROUND AND RESEARCH OBJECTIVES	5		
4.	ARCHAEC	DLOGICAL AND HISTORICAL BACKGROUND	8		
5.	GEOLOGY	AND TOPOGRAPHY	11		
6.	ARCHAEC	DLOGICAL METHODOLOGY	12		
7.	THE ARCI	14			
8.	CONCLUS	21			
9.	REFEREN	CES	22		
10.	ACKNOW	23			
	APPENDICES				
	Appendix A: Stratigraphic Matrices				
	Appendix B: Context Index				
	LIST OF				
	Figure 1	Site location	3		
	Figure 2	Trench location	4		
	Figure 3	Trench 1. Plan and section	17		
	Figure 4	Trench 2. Plan and section	18		
	Figure 5	Trench 3. Plan and section	19		
	Figure 6	Trench 4. Plan and section	20		

1. NON-TECHNICAL SUMMARY

- An archaeological trial trenching evaluation was undertaken in March 2007 by Pre-Construct Archaeology Limited on land at Middleton Lodge Estate, Richmondshire, North Yorkshire. The project was commissioned by Wardell Armstrong on behalf of James Allison and Sherburn Stone Company Limited who have submitted a planning application for the site. The site lies in the northernmost part of North Yorkshire, situated east of the A1(T) road and c. 1km to the north-west of the village of Middleton Tyas. Comprising an irregular shaped parcel of land covering c. 13.7 hectares, the central National Grid Reference of the site is NZ 225 072.
- 1.2 The evaluation was required by North Yorkshire County Council Historic Environment Team, prior to determination of the planning application for the development. The proposals include mineral extraction, with the intention of generating funds for a variety of enhancement and renovation schemes within Middleton Lodge Estate. Geophysical survey of approximately half the proposed extraction area was undertaken in 2005. The following year, an Environmental Impact Assessment, compiled on behalf of the developer, included an assessment of the archaeological resource at the site. The main potential of the site was considered to be for late prehistoric and Romano-British remains. The evaluation comprised the investigation of four trenches, positioned to test the main geophysical anomalies identified by the earlier survey and to establish whether these were of archaeological or geological origin.
- 1.3 Trench 1, located towards the northwestern extent of the site, was sited to test a north-south aligned linear geophysical anomaly close to the line of the boundary between the parishes of Barton and Middleton Tyas. This trench revealed natural boulder clay and truncated bedrock, overlain by a sub-soil. In the central portion of the trench, the sub-soil was truncated by a NE-SW aligned ditch, with a re-cut on the same alignment. These features are interpreted as representing two versions of a former field boundary, which was probably formerly associated with a hedge used to define the parish boundary. Although no artefactual material was recovered from the features, both are considered to be of probable post-medieval origin. Topsoil formed the uppermost deposit.
- 1.4 Trenches 2 and 3 were located in the central portion of the site. Trench 2 was positioned to test parallel, NW-SE aligned, linear geophysical anomalies, which came together to the south-east. Natural boulder clay and bedrock were exposed, overlain by layers of sub-soil and topsoil. No archaeological features were encountered to account for the geophysical anomalies. Trench 3 was sited to test two linear geophysical anomalies, the first aligned NNW-SSE, the other branching away from this to the northwest alignment. Natural boulder clay and bedrock were exposed, overlain by layers of colluvium and topsoil.
- 1.5 Trench 4 was sited in the southernmost part of the site, to test the potential junction of two linear geophysical anomalies, the first running WSW-ENE, the second running at right angles to this. Natural boulder clay and bedrock were exposed, overlain by a colluvial deposit. A modern dump deposit overlay the colluvium, with the uppermost deposit being topsoil.
- 1.6 In sum, with the exception of the redefined ditch probably associated with the parish boundary in Trench 1, the archaeological evaluation did not encounter any archaeological remains to account for the geophysical anomalies. Accordingly, these are considered as probably representing variations in the underlying geological material.

2. INTRODUCTION

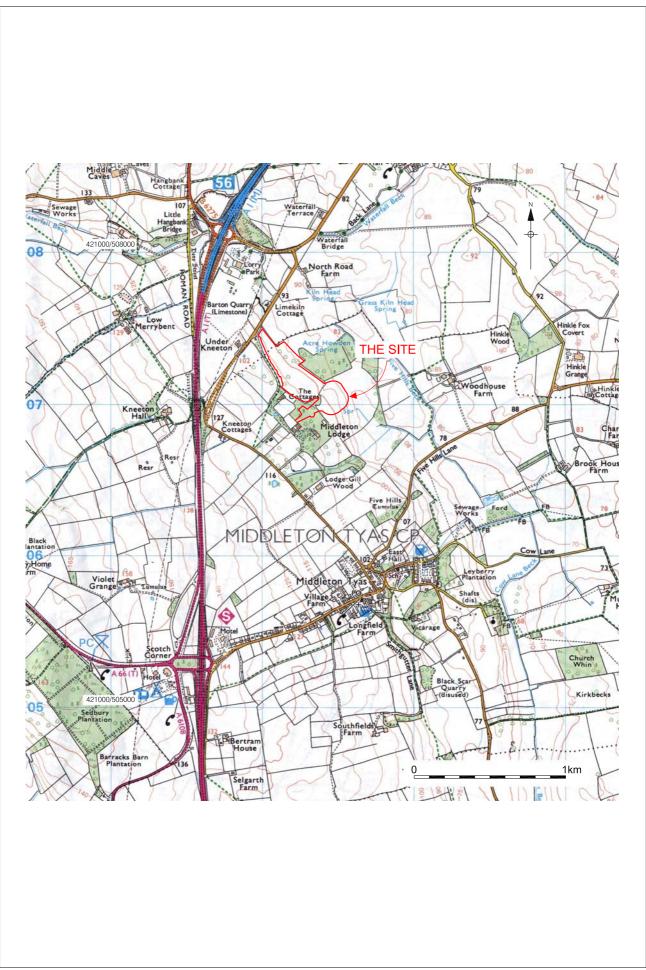
- 2.1 This report details the methodology and results of an archaeological evaluation undertaken by Pre-Construct Archaeology Limited (PCA) from 12th-16th March 2007 on land at Middleton Lodge Estate, Richmondshire, North Yorkshire. The central National Grid Reference of the area subject to archaeological evaluation is NZ 225 072 (Figure 1).
- 2.2 The archaeological investigations were commissioned by Wardell Armstrong (WA) on behalf of James Allison and Sherburn Stone Company Limited (the Client). A planning application has been submitted and the proposals include mineral extraction to fund various schemes within the Middleton Lodge Estate.
- 2.3 Middleton Lodge Estate lies in the northernmost part of North Yorkshire, north-east of Scotch Corner. It is situated less than 1km to the east of the A1(T) and c. 1km to the north-west of the village of Middleton Tyas. The proposed extraction area ('the site') comprises an irregular shaped parcel of land, covering c. 13.7 hectares, north of Middleton Lodge, a Grade II listed building of late 18th century date. At the time of the evaluation, the site comprised open pasture, bounded to the north-west by Kneeton Lane, to the north-east by existing field and plantation boundaries, to the south-west by an access track, areas of woodland and a farmstead, and to the south-east by an open field (Figure 2).
- 2.4 Prior to the evaluation, geophysical survey¹ of *c*. 50% of the site was undertaken by GSB Prospection Limited (GSB). This was followed by an Environmental Impact Assessment (EIA),² part of an Environmental Statement (ES) compiled on behalf of the Client by WA, which included an assessment of the archaeological resource at the site and in the wider area. Following on from the EIA, North Yorkshire County Council Historic Environment Team (NYCCHET) required further, invasive, archaeological evaluation of the site, in the form of a series of trial trenches, pre-determination of the planning application.
- 2.5 A Written Scheme of Investigation³ (WSI) for the evaluation was prepared by PCA and this was approved by NYCCHET prior to the work commencing. The purpose of the work was to allow the impact of the development proposals upon the archaeological resource to be assessed, in order to inform the planning decision. The evaluation comprised the investigation of four trial trenches, Trenches 1-4 (Figure 2).
- 2.6 The completed project archive, comprising written, drawn, and photographic records and artefacts will be deposited at the appropriate museum, under the site code MLE 07. The Online Access to the Index of Archaeological Investigations (OASIS) reference number is: preconst1-26958.

2

¹ GSB 2006.

²Wardell Armstrong 2006.

³ PCA 2007.



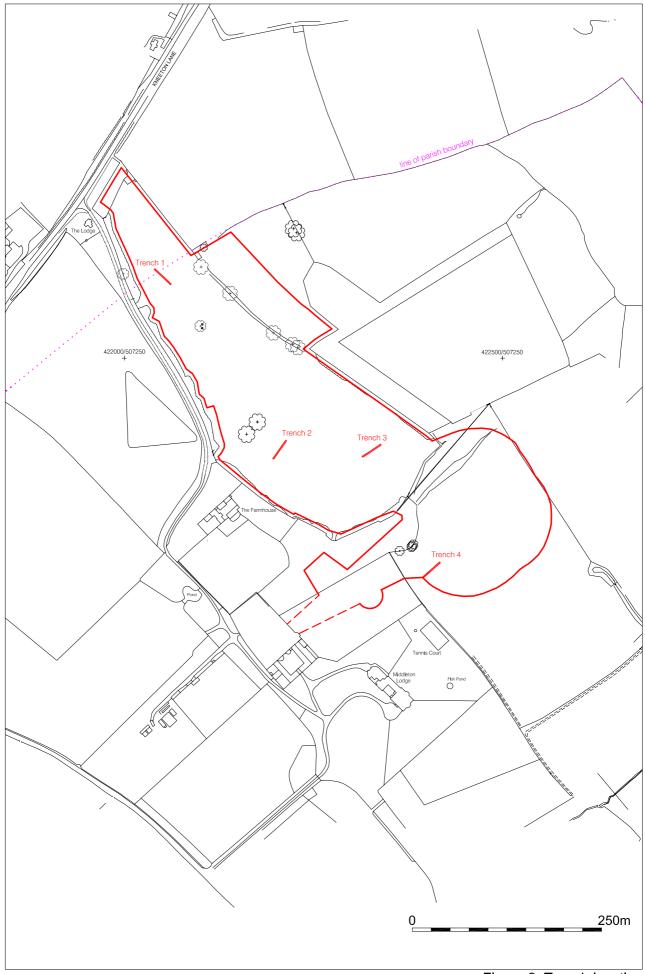


Figure 2. Trench location Scale 1:5,000

3. PLANNING BACKGROUND AND RESEARCH OBJECTIVES

3.1 Planning Background

- 3.1.1 A planning application (No. NY/2006/0399/FUL) has been submitted to North Yorkshire County Council for the proposed scheme at Middleton Lodge Estate, which is to include mineral extraction (as an extension to Barton Quarry) to generate funds towards: enhancing estate parkland and public access to the estate; renovation and conversion of a stable block into a restaurant, function room and estate shop; reconstruction and renovation of a Georgian walled garden into a working garden with renovation and conversion of associated outbuildings into holiday cottages; creation of a themed quarry garden in the landform created by the mineral extraction.
- 3.1.2 The aforementioned ES/EIA, which included an assessment of the archaeological resource of the site and the wider area, was submitted as part of the application, in line with the 'Town and Country Planning (Assessment of Environmental Effects) Regulations 1988'.⁴
- 3.1.3 Government guidance on archaeology is set out in 'Planning Policy Guidance Note 16: 'Archaeology and Planning',⁵ (PPG 16) issued in November 1990. At a county level, the 'North Yorkshire Minerals Local Plan⁶ (adopted 1997⁷) contains three policies related to heritage. Of relevance to this project is:

POLICY 4/7 ARCHAEOLOGICAL ASSESSMENT.

THE MINERAL PLANNING AUTHORITY WILL REQUIRE APPLICATIONS FOR MINING OPERATIONS AND THE ASSOCIATED DEPOSITING OF MINERAL WASTE AFFECTING SITES OF KNOWN OR POTENTIAL ARCHAEOLOGICAL IMPORTANCE TO BE ACCOMPANIED BY AN ARCHAEOLOGICAL FIELD EVALUATION INCLUDING A PROPOSED MITIGATION STRATEGY.

3.1.4 Accordingly, NYCCHET required an archaeological trial trenching evaluation to be undertaken at the site prior to determination of the planning application. The aforementioned WSI prepared by PCA set out the justification for the project, its objectives and the strategy and procedures to be employed during the fieldwork and post-excavation phases of the project. The WSI was approved by NYCCHET prior to the evaluation commencing.

⁵ Department of the Environment 1990.

⁴ HMSO 1988.

⁶ The 'North Yorkshire Minerals Local Plan - Adopted 1997" is available online at www.northyorks.gov.uk/public/site/NYCC/menuitem.

⁷ NYCC is preparing a new Minerals and Waste Development Framework to replace the Minerals Local Plan. The 'Minerals Core Strategy Preferred Options Consultation' document has been available since December 2006 and is available online at www.northyorks.gov.uk/files/NYCC/Environment/Planning/Minerals.

3.2 Research Objectives

- 3.2.1 Geophysical (geomagnetic) survey had been used as an initial investigative tool to test the archaeological potential of site. The aims of the geophysical survey were:
 - To establish the presence/absence and nature of any geophysical anomalies within the area proposed for mineral extraction.
 - To define the extent of any such anomalies, and to characterise them, if possible.
- 3.2.2 The GSB report on the geophysical survey should be consulted for full details and findings. In summary, the work identified geophysical anomalies potentially representing elements of a possible enclosure/field system pre-dating the existing field system and, therefore, of possible late prehistoric and/or Romano-British origin.
- 3.2.3 In broad terms, the archaeological evaluation aimed to establish the date, nature, extent and significance of archaeological remains at the site as evidenced by any buried deposits, structures and features and any artefactual and ecofactual evidence that they may contain.
- 3.2.4 The specific objectives of the archaeological trial trenching were:
 - To test the main geophysical anomalies identified by the earlier survey; and establish whether these are of archaeological or geological origin. Trench 1, located towards the northwestern extent of the site, was sited to test a north-south aligned linear geophysical anomaly close to the line of the boundary between the parishes of Barton and Middleton Tyas. Trenches 2 and 3 were located in the central portion of the site. Trench 2 was positioned to test parallel, NW-SE aligned, linear geophysical anomalies, which came together to the south-east. Trench 3 was sited to test two linear geophysical anomalies, the first aligned NNW-SSE, the other branching away from this to the northwest alignment. Trench 4 was sited in the southernmost part of the site, to test the potential junction of two linear geophysical anomalies, the first running WSW-ENE, the second running at right angles to this.
 - To determine or confirm the general nature of any archaeological remains present.
 - To determine the approximate date or date range of any archaeological remains by means of artefactual or other evidence.
 - To determine the approximate extent, condition and state of preservation of any archaeological remains.
 - To determine or confirm the likely range, quality and quantity of any artefactual evidence present.
 - To determine the potential of the site to provide palaeoenvironmental and/or economic evidence and the forms in which such evidence may be present.

- 3.2.5 Additional aims and objectives of the project were:
 - To compile a site archive consisting of all site and project documentary and photographic records, as well as artefactual and palaeoenvironmental material recovered.
 - To compile a report that contains an assessment of the nature and significance of the stratigraphic, artefactual, archaeological and palaeoenvironmental data.
- 3.2.6 Trial trenches were used to investigate the archaeological potential and assess the impact of the development on the archaeological resource.
- 3.2.7 The evaluation aimed to provide sufficient data to enable an appropriate mitigation strategy to be devised in order to minimise the impact of the proposed development upon the archaeological resource.

4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

(This information is extracted mostly from the EIA prepared by WA; the research of those responsible is gratefully acknowledged))

4.1 Archaeological Background

- 4.1.1 The NYCC Historic Environment Record (HER) was consulted for entries within the study area (which was an area of c. 1km radius from the centre of the planning application area). Besides identifying sites that may be directly or indirectly affected by the proposed mineral extraction, this search area was expected to provide sufficient data to represent the archaeological character of the area.
- 4.1.2 Ten HER entries are recorded within the study area, as detailed in the table below:

HER No.	Description	NGR	Status
12580	Five Hills round barrow; Late Neolithic to Late Bronze Age	NZ 2293 0632	SAM
13436	Spoil heap; undated	NZ 2294 0631	
322124	Kneeton Hall & attached building to the north	NZ 21368 0687	Grade II listed building
12577	Copper mine; Late Neolithic	NZ 2288 0635	
12581	Middleton Lodge	NZ 2235 0681	Grade II* listed building
	Also associated with the lodge:		
322641	North Gateway	NZ 21955 0744	Grade II
322128	Kitchen Garden Walls	NZ 22175 0681	Grade II
322129	Gateway on South Drive	NZ 22257 0669	Grade II
322130	Entrance Gateway	NZ 22118 0657	Grade II
322127	Stable Block	NZ 22242 0684	Grade II

- 4.1.3 There are no Scheduled Ancient Monuments (SAMs) within the application area, however, there is one SAM within the wider search area, c. 750m from the application area boundary. This is a Late Neolithic-Late Bronze Age round barrow (Five Hills round barrow; HER 12580, SAM 24512). The monument is, on the whole, well preserved and is recorded at 3m in height on its north-western side. The south-east side of the monument falls to a height of 1.5m, due to disturbance during the Second World War.
- 4.1.4 There are two listed buildings within the application area boundary. These comprise the Stable Block and the Kitchen Garden Walls of Middleton Lodge, both listed at Grade II. Within the wider search area, another five listed buildings are present, including four buildings at Grade II (three gateways to Middleton Lodge and Kneeton Hall) and one at Grade II* (Middleton Lodge).
- 4.1.5 The HER contains two entries that are not statutorily protected. The copper mine (HER 12577) is dated to the Neolithic period, re-enforcing the evidence, provided by the Five Hills round barrow, that the study area was occupied during the prehistoric period.
- 4.1.6 The spoil heap (HER 13436), located in immediate proximity to the Five Hills round barrow, is undated, however the name of the SAM is suggested to derive from such spoil heaps from mining.
- 4.1.7 In 1992, a desk-based archaeological assessment was undertaken for an area close to Middleton Lodge Estate site; this was followed by fieldwalking, geophysical survey and trial trenching, all conducted in advance of works along the route of the A1.

- 4.1.8 The work described above concluded that the general area of the A1 in the vicinity has potential for Roman and medieval remains, although in areas of ploughing any such remains may be badly damaged. Few sites were identified in the northern sector of the route, including in the vicinity of the A1 to the west of Middleton Lodge Estate, although it was concluded that this was due to the constraints of the field survey, rather than being a true representation of the archaeology of the area.
- 4.1.9 As previously mentioned, approximately 50% of the proposed extraction area at Middleton Lodge Estate was sampled by geomagnetic survey in 2005, the work being undertaken by GSB. Several linear and curvilinear features were identified, which appeared to indicate an enclosure/field system that pre-dates the existing historic field system and therefore of potential prehistoric and/or Romano-British origin. The report on the survey was consulted prior to the evaluation and the four trenches were located to investigate the four main geophysical anomalies.

4.2 Historical Background

- 4.2.1 Prehistoric activity within the study area is attested by the Late Neolithic–Late Bronze Age Five Hills round barrow and the Neolithic copper mine. Roman activity is represented by the close proximity of the A1, which follows the route of a Roman Road (Dere Street).
- 4.2.2 Place-name evidence, with place names ending in 'ton' (Moulton, Barton, Kneeton and Middleton) suggests the establishment of settlements in the study area from the Anglo-Saxon period. Further, the existence of these settlements by the 11th century is verified by their inclusion in the Domesday Book of 1086 and the extensive settlement of the area in the medieval period is demonstrated in the grounds of Kneeton Hall where the remains of a deserted medieval settlement are present. Further, the presence of ridge and furrow earthworks in the area has been identified from aerial photographs.
- 4.2.3 An important family with regards to the development of the wider study area from the late medieval period was the Hartley family. East Hall, located immediately adjacent to the southern boundary of the study area, was recorded in the 16th century as a farmstead inhabited by a yeoman family under the name of George Hartley. From this time, as their wealth increased due to their involvement in the wool industry, the Hartley family began purchasing more land and property within the area and during the late medieval period substantial enclosure of the open fields and commons around Middleton Tyas took place that benefited them.
- 4.2.4 In 1697, Marmaduke Hartley bought mining and quarrying rights in the area and during the mining of limestone, copper ore was discovered in the mines on the land owned by the Hartley family in the 1730s. By the end of the 18th century this part of Yorkshire was in an area very much involved in the mining and quarrying industries. Wealth from the mining allowed the Hartley family to buy more land around Middleton Tyas that became known as the Hartley estate and also provided them with the wealth to build Middleton Lodge.

- 4.2.5 John Carr of York for George Hartley designed Middleton Lodge (HER 12581) a Grade II* listed building. It was constructed between 1777 and 1780 and has been described as being built two storeys high in a 1:3:1 bay shape with a three storey service range of 2:3 bays to the left behind a courtyard wall. Building materials are sandstone ashlar with a slate roof. Details comprise sash windows and decorative cornicing. Stacks flanked the central bay that had a hipped roof. The interior ground floor comprised an entrance hall, library, octagonal drawing room, morning room, dining room and a central staircase.
- 4.2.6 The Walls to the Kitchen Garden (HER 322128), west of Middleton Lodge, are in red brick using a stretcher bond and slab coping. The garden forms a square, with the wall on the southeast side being lower than the three main sides which were four metres high. An arched opening interrupts the centre of the north-west wall and further arched doorways feature at the ends of the side walls.
- 4.2.7 The Gateway on the South Drive (HER 322129), the North Gateway (HER 322641) and the Entrance Gateway (HER number 322130) comprise sandstone ashlar walls, with wrought iron railings and gates. Designed by John Carr and contemporary with the house, the bars of the railings have fleurs-de-lys finials and the gates have guilloche motif to mid rail.
- 4.2.8 The Stable Block (HER 322127), designed either by John Carr of York or John Foss of Richmond and contemporary with Middleton Lodge, comprises of stables, a coach house and a hayloft. The structure, west of Middleton Lodge and built around three sides of a courtyard, was built in coursed sandstone with ashlar dressings and roofed in Westmorland slate.

4.3 Cartographic Sources

- 4.3.1 The earliest cartographic evidence consulted for the study area was the 1844 tithe map of Middleton Tyas Parish. The majority of the application area fell within this parish and was included on this map, however, the northern extremity was located in Barton township for which no tithe map exists.
- 4.3.2 On the tithe map, areas of plantation were recorded inside and in the immediate vicinity of the application area, and the site subject to evaluation comprised three fields described in the tithe apportionment as a mixture of arable and pasture. The field boundaries typologically appeared to be post-medieval in date.
- 4.3.3 Middleton Lodge and the Stable Block are clearly recorded on the tithe map. The southern gateways to Middleton Lodge and the Kitchen Garden Walls (all described as late 18th century in the listed building description) were not recorded, although these were probably not sizeable enough structures to warrant representation on the map. The North Gateway was located in Barton Township and its presence and configuration could not be confirmed.
- 4.3.4 The 1st edition Ordnance Survey map of 1857 depicts the Lodge and the location of the North Gateway in their present day location. The establishment of a quarry, in the north of the wider search area, at Barton, by this time can also be verified from this map and a limestone quarry within the Acre Howden plantation, in the immediate vicinity of the application area boundary, is evident.

4.3.5 The 1st edition and subsequent Ordnance Survey maps of 1915, 1919, c. 1960, and the current Ordnance Survey map, show that field boundaries in the study area have undergone very little change since the tithe map. The only major change that could be seen by the time of the 1960s map was the loss of a field boundary transecting the application area southwestwards from the edge of the Acre Howden plantation in the direction of Middleton Lodge Stable Block.

5. GEOLOGY AND TOPOGRAPHY

5.1 Geology

5.1.1 The underlying solid geology of the site comprises carboniferous limestone overlain by the 'drift' geology, which is characterised in this area by Glacial Till, with other glacial, and fluvioglacial deposits intermittently present.

5.2 Topography

5.2.1 Previously undeveloped, the site occupies ground that slopes away to the east, from c. 110m OD to c. 95m OD.

6. ARCHAEOLOGICAL METHODOLOGY

6.1 Trial Trenching

- 6.1.1 The archaeological fieldwork was undertaken in accordance with the relevant standard and guidance document of the Institute of Field Archaeologists. PCA is an IFA-Registered Archaeological Organisation.
- 6.1.2 The WSI for the evaluation proposed that four trial trenches be investigated. Each trench was located to test one or more linear geophysical anomalies possibly indicative of archaeological features. The archaeological evaluation trenches were rectangular in plan, each measuring *c*. 30m x 1.70m. The maximum excavated depths of Trenches 1 and 4 was 1.0m whilst Trench 2 was excavated to a maximum depth of 1.10m and Trench 3 to a maximum depth of 0.80m.
- 6.1.3 In all trenches, initial excavation was undertaken by a mechanical excavator utilising a wide blade, non-toothed 'ditching' bucket under archaeological supervision. Machine excavation ceased at the first archaeologically significant horizon or when natural undisturbed ground was encountered, whichever was encountered soonest. All further excavation was undertaken by professional archaeologists using appropriate hand tools. Spoil was mounded away from the edge of each trench.
- 6.1.4 Subsequent excavation and recording was undertaken in accordance with recognised archaeological practice and following methodology set out in PCA's field recording manual. Following machine clearance, the section and the base of all trenches were cleaned using appropriate hand tools. Sections were drawn at a scale of 1:20 and the base of each trench was planned at a scale of 1:50 relative to a baseline established along the trench, which was then located relative to the Ordnance Survey grid.
- 6.1.5 Archaeological deposits were recorded using a 'single context recording' system. Features, deposits and structures were recorded on *pro forma* context record sheets. The height of all principal strata and features were calculated relative to Ordnance Datum (OD) and indicated on the appropriate plans and sections. A 'Harris Matrix' stratification diagram to record stratigraphic relationships was compiled and fully checked during the course of the fieldwork.
- 6.1.6 Within appropriate archaeological horizons, partial excavation, the recovery of dating evidence or cleaning and recording of deposits was preferred to full excavation, and was practised wherever possible.
- 6.1.7 A photographic record of the investigations was compiled using SLR cameras. This comprised black and white prints and colour transparencies (on 35mm film), illustrating in both detail and general context the principal features and finds discovered. All photographs included a graduated metric scale.
- 6.1.8 Temporary Bench Marks (TBM's) were established on the site from the Ordnance Survey
 Bench Mark (value 115.40m OD) on the southeastern elevation of a farm building at Upper
 Kneeton Farm, off Kneeton Lane, to the north of the site.

.

⁸ IFA 2001.

⁹ PCA 1999.

6.2 Post-Excavation

- 6.2.1 The stratigraphic data generated by the project is represented by the written, drawn and photographic records. A total of 18 archaeological contexts were defined in the trenches (Appendix B). Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data (Appendix A). A written summary of the archaeological sequence was then compiled, as described below in Section 7. No artefactual material was recovered.
- 6.2.2 The palaeoenvironmental sampling strategy of the project was to recover bulk samples where appropriate, from well-dated (where possible), stratified deposits covering the main periods or phases of occupation and the range of feature types represented, with specific reference to the objectives of the evaluation. No appropriate deposits were encountered and therefore no environmental samples were recovered.
- 6.2.3 Survival of all materials from archaeological fieldwork depends upon suitable storage. The complete project archive, comprising written, drawn and photographic records (including all material generated electronically during post-excavation) and all 'finds' will be packaged for long term curation according to relevant guidelines. ¹⁰ None of the material recovered required specialist stabilisation or an assessment of its potential for conservation research. The depositional requirements of the receiving body will be met in full.

¹⁰ UKIC 1990.

7. THE ARCHAEOLOGICAL SEQUENCE

7.1 Phase 1: Natural Limestone Bedrock (Figures 5 & 6)

- 7.1.1 The earliest deposits encountered in Trenches 3 and 4 comprised carboniferous limestone bedrock, this material representing the underlying solid geology typical of the region.
- 7.1.2 Limestone bedrock, [301], was encountered extending across the base of Trench 3, with the exception of the southwestern end of the trench, at a depth of c. 0.30m below ground level. The level at which bedrock was exposed sloped down from a maximum height of 100.90m OD in the north-east to 99.42m OD in the south-west.
- 7.1.3 In Trench 4, limestone bedrock, [401], was encountered at the northeastern and southwestern ends of the trench, recorded at highest and lowest levels of 103.69m OD and 102.39m OD, respectively, and at a maximum and minimum depth of c. 0.66m and c. 0.16m below ground level.

7.2 Phase 2: Natural Boulder Clay (Figures 2, 3 & 6)

- 7.2.1 The natural sub-stratum exposed in Trenches 1 and 2 and the central portion of Trench 4, generally comprised mottled mid pinkish brown or mid yellowish brown clayey silt. This material represents the boulder clay (till) glacial 'drift' that is typical of the area.
- 7.2.2 In Trench 1, the natural sub-stratum, [101], extending across the base of the trench, sloped down from a maximum height of 104.02m OD at the northwestern end of the trench to 103.04m OD at the southeastern end. This boulder clay was encountered at a depth of c. 0.80m below present ground level.
- 7.2.3 Natural boulder clay, [201], in Trench 2, encountered at a depth of c. 0.65m below present ground level and recorded across the base of the trench, sloped down from a maximum height of 104.71m OD at the southwestern end of the trench to 102.80m OD at the northeastern end.
- 7.2.4 In Trench 4, boulder clay, [404], was encountered in the central portion of the trench, overlying bedrock, and was recorded over a distance of 21m NE-SW x 1.70m NW-SE. This deposit was recorded at highest and lowest levels of 102.77m OD and 102.53m OD, respectively, at a depth of *c*. 0.80m below present ground level.

7.3 Phase 3: Natural Colluvium (Figures 5 & 6)

- 7.3.1 Colluvial deposits, recorded in Trenches 3 and 4 only, generally comprised light orange brown clayey silts. These deposits have been interpreted as representing colluvial accumulation within natural undulations in the landscape.
- 7.3.2 Towards the southwestern end of Trench 3, limestone bedrock was overlain by a colluvial deposit, [302], recorded for a maximum thickness of 0.56m at a depth of c. 0.20m below present ground level. The highest level at which this deposit was recorded was 101.01m OD.
- 7.3.3 In Trench 4, boulder clay was overlain by a colluvial deposit, [403], encountered in the central portion of the trench within what appeared to be a broad natural undulation. This deposit was up to 0.70m thick and was recorded at a highest and lowest level of 103.41m OD and 102.53m OD, at a depth of c. 0.20m below present ground level.

7.4 Phase 4: Undated Sub-soil (Figures 3 & 4)

- 7.4.1 A layer of sub-soil, encountered in Trenches 1 and 2 only, comprised mid orange brown clayey silt.
- 7.4.2 In Trench 1, boulder clay was overlain by a sub-soil, [106], up to 0.48m in thickness. This was encountered extending across Trench 1, recorded at highest and lowest levels of 104.52m OD and 103.34m OD, respectively, at a depth of c. 0.22m below ground level.
- 7.4.3 Boulder clay in Trench 2 was also overlain by a 0.48m thick sub-soil, [202], recorded extending across the trench at highest and lowest levels of 105.15m OD and 103.27m OD, respectively, at a depth of *c*. 0.30m below ground level.

7.5 Phase 5: Post-medieval Boundary (Figure 3)

- 7.5.1 A NE-SW aligned linear feature, [105], truncated the sub-soil layer in the central portion of Trench 1. Only the southern side of this feature was recorded as it had itself been truncated to the north. It measured at least 1.02m wide and extended across the trench for a distance of 1.85m NE-SW, continuing beyond the limits of excavation. The feature was up to 0.82m deep and had a steep side and concave base. It was recorded at highest and lowest levels of 103.98m OD and 103.15m OD, respectively, with its uppermost part at a depth of c. 0.28m below ground level. No datable material was recovered from its single fill, [104], which comprised light brown clayey silt. This feature is interpreted as an obsolete field boundary ditch, on the same alignment as a parish boundary shown on mapping of the area a short distance to the northwest (Figure 2). The ditch is likely to date from the post-medieval period, although it is possible that the boundary may have originated in the medieval period or earlier.
- 7.5.2 The ditch described above was truncated to the north-west by another NE-SW aligned linear feature, [103]. This was 3.08m wide and was recorded running across trench for a distance of 1.70m, continuing beyond the limits of excavation. This had a generally U-shaped profile, with an undulating concave base, and was up to 1.10m deep. It was recorded at highest and lowest levels of 104.27m OD and 103.08m OD, respectively, with its uppermost part at a depth of *c*. 0.20m below present ground level. Again, no datable material was recovered from its single fill, [102], which comprised light brown clayey silt. This feature is interpreted as a later phase of the aforementioned field boundary, representing a re-cut of the earlier, silted-up, ditch.

7.6 Phase 6: Modern Dump (Figure 6)

7.6.1 In Trench 4, the colluvium was overlain by a dark grey clayey silt deposit, [402], recorded in section at the southwestern end of the trench for a distance of 14.90m NE-SW x 1.70m NW-SE, continuing beyond the limits of excavation to the north-west, south-east and south-west. This deposit was up to 0.49m thick and was recorded at highest and lowest levels of 103.87m OD and 103.31m OD, respectively. This deposit contained fragments of brick and 19th-20th century pottery and has been interpreted as a dump deposit of modern origin.

7.7 Phase 7: Modern Topsoil (Figure 3, 4, 5 & 6)

- 7.7.1 Topsoil was recorded in all four trenches and generally consisted of mid brownish grey clayey silt with a maximum thickness of 0.32m and a minimum thickness of 0.19m.
- 7.7.2 The maximum height of topsoil was recorded at 105.35m OD in Trench 2 and the minimum height of 99.68m OD was recorded in Trench 3.

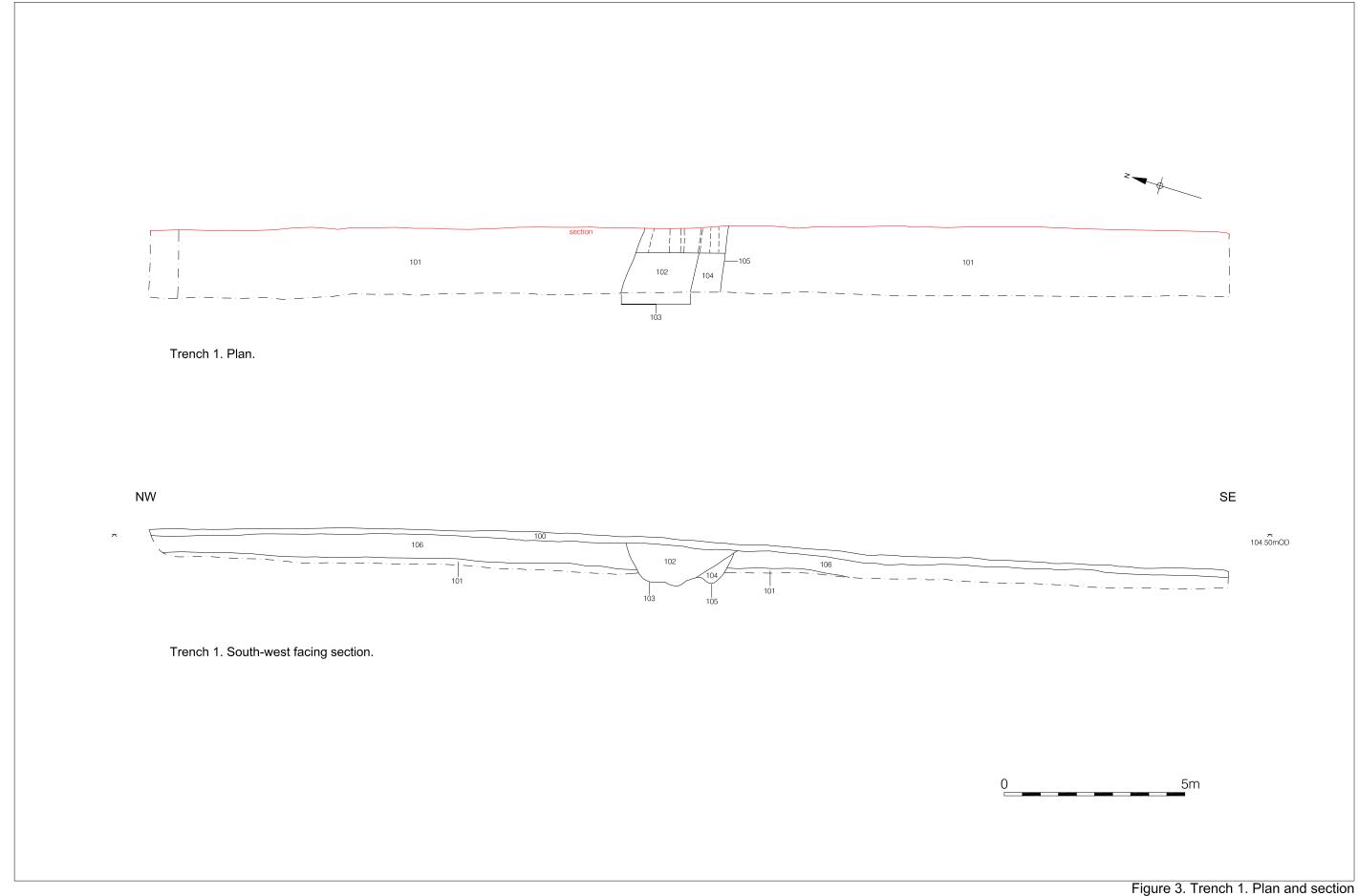


Figure 3. Trench 1. Plan and section Scale 1:100

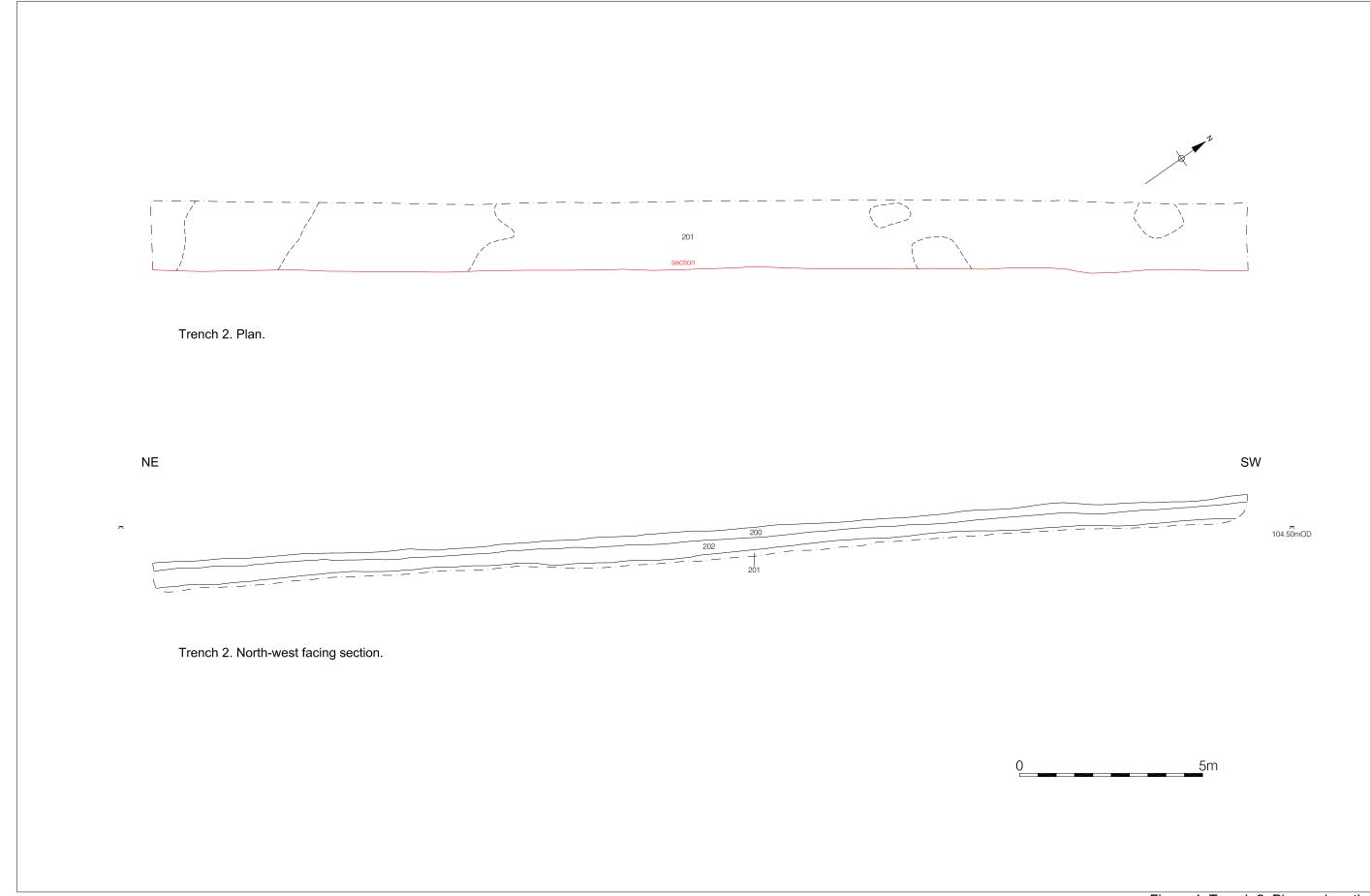


Figure 4. Trench 2. Plan and section Scale 1:100

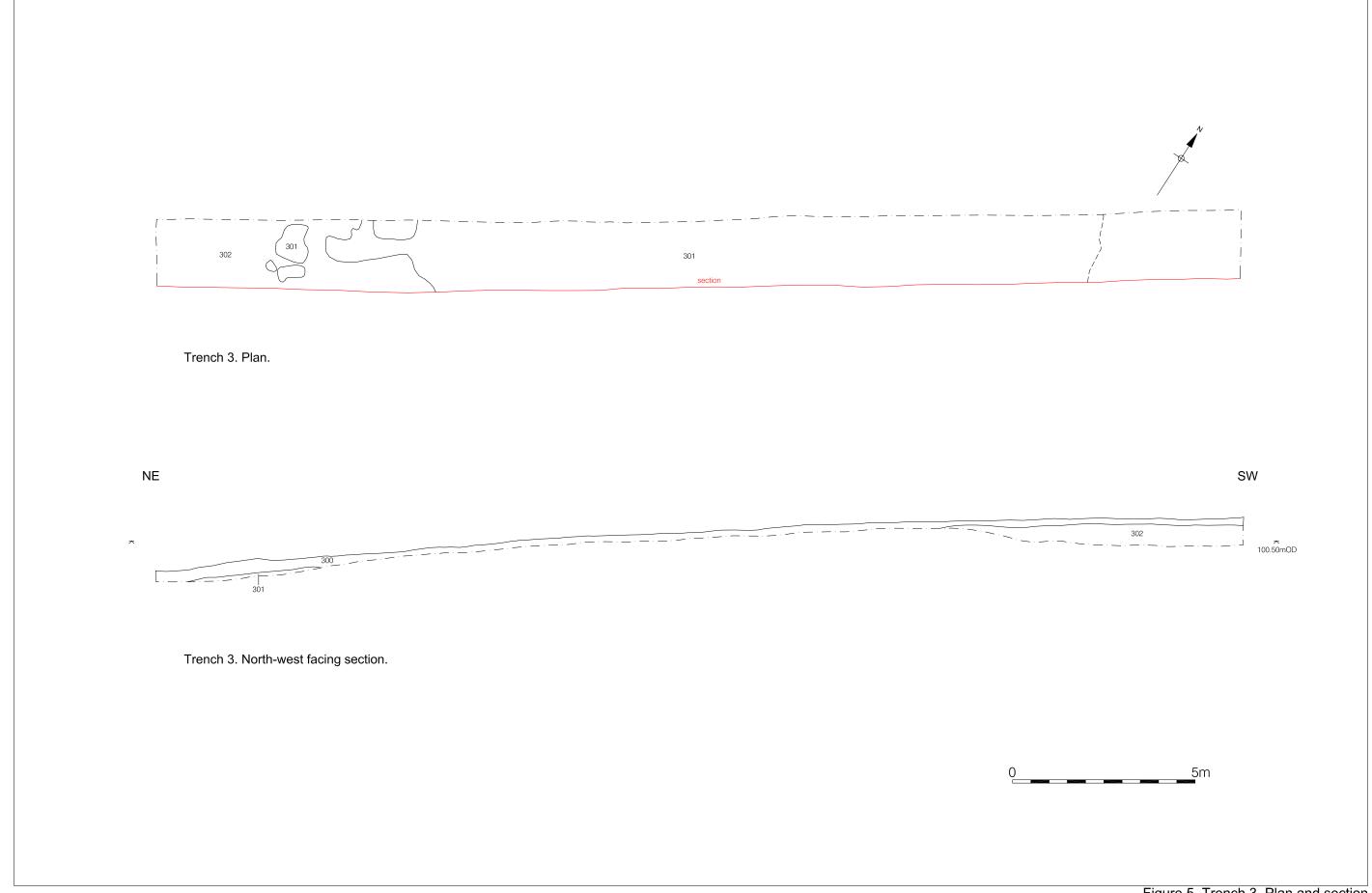


Figure 5. Trench 3. Plan and section Scale 1:100



Figure 6. Trench 4. Plan and section Scale 1:100

8. CONCLUSIONS

- 8.1 Deposits and features encountered at the site have been assigned to seven main phases of 'activity'. The earliest, Phase 1, comprised natural geological bedrock and the latest, Phase 7, comprised modern topsoil.
- 8.2 Natural limestone bedrock, overlain by boulder clay and colluvial deposits, was encountered in Trenches 3 and 4, in the southern portion of the site.
- 8.3 The basal deposits encountered across Trenches 1 and 2 comprised boulder clay, this being overlain by a sub-soil.
- 8.4 No features or deposits of archaeological significance were recorded within Trenches 2, 3 and 4 during the evaluation. The geophysical anomalies tested by these trenches can be reasonably attributed to variations in the underlying geological strata.
- 8.5 Trench 1 recorded two linear NE-SW aligned features truncating the sub-soil layer in the central portion of the trench. The earlier of the two features had silted-up and subsequently had been re-cut on the same alignment, with the full profile of the later feature being exposed. These have been interpreted as representing successive versions of an obsolete field boundary ditch. Positioned on the same alignment as the long established boundary, which runs a short distance to the north, between the ancient parishes of Barton and Middleton Tyas, both ditches probably date to the post-medieval period. A strong linear geophysical anomaly tested by this trench was most likely caused by the sub-surface remains of these ditches, with a weaker, slightly sinuous anomaly to the north possibly caused by the unidentifiable remains of a former associated hedgeline, this probably used as the parish boundary.
- 8.6 The uppermost deposits in each trench comprised topsoil.
- 8.7 Based on the results of this evaluation, it is recommended that no further archaeological work be undertaken at the site.

9. REFERENCES

Bibliography

- Department of the Environment, 1990. *Planning Policy Guidance Note 16: 'Archaeology and Planning'*, HMSO.
- GSB Prospection Limited, 2006. *Geophysical Survey, Middleton Lodge Estate*, GSB unpublished.
- Institute of Field Archaeologists, 2001. Standard and guidance for archaeological field evaluation, IFA unpublished.
- Pre-Construct Archaeology Limited, 1999. Field Recording Manual, PCA unpublished.
- Pre-Construct Archaeology Limited, 2007. Written Scheme of Investigation: Archaeological Evaluation on Land at Middleton Lodge Estate, North Yorkshire, PCA unpublished.
- United Kingdom Institute for Conservation (UKIC), 1983. Conservation Guidelines No.2.

 Packaging and storage of freshly excavated artefacts from archaeological sites,

 Archaeology Section of the UKIC.
- United Kingdom Institute for Conservation (UKIC), 1990. Conservation Guidelines No.3.

 Environmental standards for the permanent storage of excavated material from archaeological sites, Archaeology Section of the UKIC.
- Wardell Armstrong, 2006. Environmental Impact Assessment, Middleton Lodge Estates

 Limited, Middleton Lodge Development, Wardell Armstrong unpublished.
- Watkinson, D. and Neal, V., 1998. First Aid for Finds (3rd edition), Rescue and Archaeology Section of the UKIC.

10. ACKNOWLEDGEMENTS AND CREDITS

Acknowledgements

Pre-Construct Archaeology would like to thank Wardell Armstrong for commissioning the work described in this report on behalf of James Allison and Sherburn Stone Company Limited. The roles of Helen Kennedy and Dave Hodgkinson of Wardell Armstrong are particularly acknowledged.

The curatorial role of Neil Campling, of the North Yorkshire County Council Historic Environment Team, is acknowledged.

PCA Credits

Fieldwork: Aaron Goode (Site Supervisor), Kate Downey

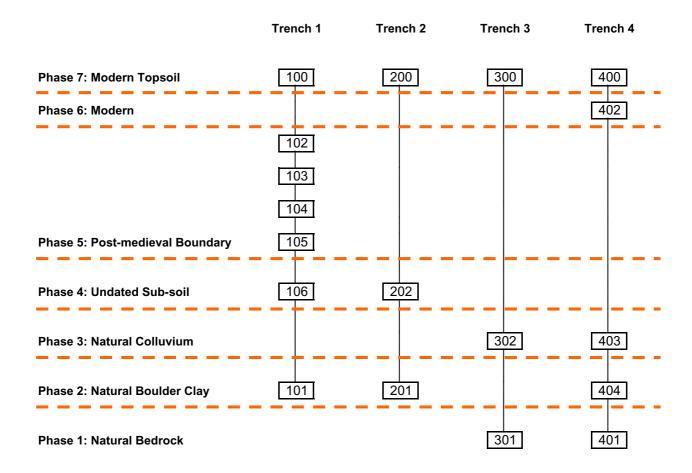
Report: Aaron Goode

Project Manager: Robin Taylor-Wilson

CAD: Adrian Bailey

Survey: Jim Wright

APPENDIX A STRATIGRAPHIC MATRICES



APPENDIX B CONTEXT INDEX

MLE 07: CONTEXT INDEX

	Phase	Trench	Type	Type	Description	Interpretation
100	7	1	deposit	layer	friable; mid brownish grey; clayey silt; extends across Trench 1 up to 0.26m thick	topsoil
					friable; mottled mid pinkish brown and mid yellowish brown; clayey silt; extends across Trench 1,	
101	2	1	deposit	layer	thickness not established	natural boulder clay
					friable; light brown; clayey silt; very occasional small to medium sized angular stones (<0.17m);	
102	5	1	deposit	fill	measures at least 1.70m NE-SW x 3.08m NW-SE x 1.10m thick	fill of ditch
					linear; sharp top break of slope; steep to moderately steep sloping concave sides; gradual break	
					of slope at base; shallow concave base; orientated NE-SW; measures at least 1.70m NE-SW x	
103	5	1	cut	ditch	3.08m NW-SE x 1.10m deep	field boundary
					friable; light brown; clayey silt; occasional small sub-round stones (<0.10mm); measures at least	
104	5	1	deposit	fill	1.85m NE-SW x at least 1.02m NW-SE x 0.82m thick	fill of ditch
					linear; top break of slope truncated; moderately shallow sloping concave sides; imperceptible	
					break of slope at base; concave base; orientated NE-SW; measures at least 1.85m NE-SW x at	
105	5	1	cut	ditch	least 1.02m NW-SE x 0.82m deep	field boundary
					friable; mid orange brown; clayey silt; very occasional small sub-angular stones (<15mm);	
106	4	1	deposit	layer	extends across Trench 1 up to 0.48m thick	sub-soil
200	7	2	deposit	layer	friable; mid brownish grey; clayey silt; extends across Trench 1 up to 0.32m thick	topsoil
					firm to friable; mottled light orange brown and light yellowish brown; silty clay and clayey silt;	
201	2	2	deposit	layer	extends across Trench 2, thickness not established	natural boulder clay
					friable; mid orangey brown; clayey silt; very occasional small to medium sized sub-round stones	
202	4	2	deposit	layer	(<0.20m); extends across Trench 2 up to 0.48m thick	sub-soil
300	7	3	deposit	layer	friable; mid brownish grey; clayey silt; extends across Trench 3 up to 0.30m thick	topsoil
					limestone bedrock; measures at least 26m NE-SW x at least 1.70m NW-SE, thickness not	
301	1	3	deposit	layer	established	limestone bedrock
					friable; light orange brown; clayey silt; very occasional small sub-angular stones (<0.15m);	
302	3	3	deposit	layer	measures at least 8.30m NE-SW x at least 1.70m NW-SE x at least 0.56m thick	colluvium
400	7	4	deposit	layer	friable; mid brownish grey; clayey silt; extends across Trench 4 up to 0.19m thick	topsoil
401	1	4	deposit	layer	limestone bedrock; extends across Trench 4, thickness not established	limestone bedrock
					friable; dark grey; clayey silt; frequent small to medium sub-angular limestone fragments,	
					occasional small to medium fragments of ceramic tile and brick; measures at least 14.90m NE-	
402	6	4	deposit	layer	SW x at least 1.70m NW-SE x up to 0.49m thick	modern layer
					firm; light orange brown; clayey silt; occasional small rounded stones(<50m); measures 18.50m	
403	3	4	deposit	layer	NE-SW x at least 1.70m NW-SE x up to 0.70m thick	colluvium
					firm; mottled mid pinkish brown and mid yellowish brown; silty clay; occasional small to medium	
404	2	4	deposit	layer	sub-round and sub-angular stones (<0.15m); extends across Trench 4, thickness not established	natural boulder clav