COLWICK COUNTRY PARK, COLWICK, NOTTINGHAM,

FLOOD ALLEVIATION WORKS,

Report on an archaeological watching brief 2011

Prepared by L. Platt

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Project Code – MCP

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Evaluating mound, 0007. Looking east

Trent & Peak Archaeology ©
Unit 1, Holly Lane
Chilwell
Nottingham
NG9 4AB
0115 8967400 (Tel.)
0115 925 9464 (Fax.)

SUMMARY

- Trent & Peak Archaeology was contracted by Black and Veatch on behalf of the Environment Agency to conduct an archaeological watching brief on the enhancement of flood defences at Colwick Country Park, Colwick, Nottinghamshire centred on SK 60718 39920.

- The flood defences form a linear earthwork orientated north-west/south-east between the eastern edge of the Country Park and a housing and industrial development most of which dates to the mid 20th century.

- All intrusive ground work was carried out under archaeological supervision and any features of archaeological significance were recorded.

- In order to coherently record the findings of the watching brief the site was divided into five areas.

- A desk based assessment had noted that the Nottinghamshire S.M.R. 2037 recorded the existence of a mound within the area of study (Allen and Appleton, 2005, Figure 8). This mound was evaluated and was demonstrated to be modern.

- 40m to the north east of the mound there were the remains of ridge and furrow.

- A further mound was seen and evaluated during the topsoil stripping in Area 02. This mound was evaluated and was demonstrated to be modern.

- An archaeological evaluation carried out by Trent & Peak Archaeology and Archaeological Project Services did not record any archaeological deposits along the line of the flood bank. (Lovekin and Walker, 2006)

- Top soil stripping, to a depth of between 200mm and 300mm was monitored along the length of the ground works. Both of the mounds were evaluated and at three points the bases of the plough furrows were excavated but no dating evidence was recovered from them.

- Geoarchaeological assessment was undertaken by staff from Trent & Peak Archaeology using a Van Walt percussion window sampling kit in order to sample a possible palaeochannel. Holes were drilled with window samplers of c.50 to 100mm diameter and extracted in 1m steps which were stratigraphy recorded from the ground surface downwards

COLWICK COUNTRY PARK, COLWICK, NOTTINGHAM,

A Report on an Archaeological Watching Brief 2012

CONTENTS

1. INTRODUCTION

1.1. Trent & Peak Archaeology was contracted by Black and Veatch Ltd on behalf of the Environment Agency to conduct an archaeological watching brief on ground works associated with the enhancement of existing flood defences at Colwick Country Park, Colwick Nottinghamshire centred on SK 60718 39920

2. PROJECT BACKGROUND

2.1. The site of the work at Colwick Country Park was immediately to the south of a significant mudstone outcrop, east of Nottingham Racecourse and west of a 1960's housing development and was subject to an enhancement of the existing flood bank as part of the overall scheme of flood alleviation on the left bank of the Trent at Nottingham. Figure 2.

2.2. All intrusive ground work during the course of the development was carried out under archaeological supervision.

2.3. The intrusive ground works comprised the stripping of an easement and the excavation of a key trench prior to building up the new flood defence. Additional archaeological works were required in the form of an evaluation of an existing earthwork within the car park of the Country Park and sampling of a possible palaeochannel and/or deposits with palaeoenvironmental potential.

2.4. The geology comprises superficial deposits of *a*lluvium comprising Holm Pierrepont sands and gravels. The superficial geology overlies a sedimentary bed rock of Tarporley Siltstone Formation (BGS 2012). The site lies on the Trent floodplain at c21.3m OD, occupying a relatively flat low-lying area at the base of a large outcrop of Gunthorpe Member Mudstone.

3. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

3.1 1 An archaeological evaluation along the projected easement of the proposed flood defences was carried out in 2006. Whilst no archaeological finds or features were revealed, a sondage within Trench C1 revealed sediments containing potential organic remains, possibly consistent with the presence of a palaeochannels of the River Trent (Lovekin and Walker, 2006).

3.2 A desk based assessment (Allen and Appleton 2005), noted the existence of a mound, 0007, Area 05, recorded in the Nottinghamshire SMR (2037). This lay just outside the area of ground disturbance arising from the construction of the new flood defences but was evaluated as part of the overall programme of archaeological work.

2.3 A walk over conducted by Trent & Peak staff prior to the start of the ground work noted the existence of a further mound, 0004, Area 02, and what was believed to be ridge and furrow in Area 03. Both of these were targeted as being of potential archaeological significance during the monitoring.

4. OBJECTIVES

4.1 The objective of the watching brief was to identify the presence of any archaeological remains that may be affected by intrusive aspects of the development and to achieve an appropriate level of mitigation through preservation by record. Geo-archaeological deposits of palaeo-environmental potential were also to be recorded and accorded an appropriate level of sampling and assessment.

5. METHODOLOGY

5.1 All soil stripping was carried out by a tracked machine using a bladed ditching bucket under archaeological supervision. The exposed surfaces were monitored for the presence of any archaeological features and artefacts.

5.2 A photographic record of the groundwork was carried out by digital images and 35mm black and white film.

5.3 Any archaeological features were given a unique context number, e.g. 0001. Any finds were given a unique finds code, e.g. AAA and their location recorded by GPS (Leica CS15/GS15 RTK Differential GNSS).

5.4 Sections of features were drawn on A3 permatrace at scales of 1:20 and 1:50.

5.5 Prior to the ground works starting the mound in Area 05, 0007 and the ridge and furrow in Area 03 were surveyed using a Leica HDS 6001 3D Laser Scanner in order to preserve a record of them.

6. RESULTS

6.1 **Area 01.** Figure 2**.** Contexts, 0001, 0002,

4.1.1 The top soil, 0001, was removed by a tracked machine using a bladed ditching bucket to an average depth of 300mm. This revealed a light brown sandy loam sub soil, 0002. There were no archaeological features or artefacts revealed as a result of the soil stripping. Plate 1

6.2 **Area 02.** Figure 2. Contexts, 0001, 0002, 0004, 0008.

6.2.1 The top soil, 0001, was removed by a tracked machine using a bladed ditching bucket to an average depth of 300mm. This revealed a light brown sandy loam sub soil.

6.2.2 After the removal of the top soil the foundations of a modern structure, 0008 were revealed. This took the form of brick foundations built on a concrete base. The structural remains have been identified by Officers of Nottinghamshire County Council as the foundations of a now demolished information centre that had been situated in the Country Park. The structure had been demolished some time in the 1980's. Plate 2.

6.2.3 Immediately north east of Area 02 was a mound, 0004. The edge of the easement cut through the south western edge of 0004 and the revealed section was recorded. Figure 5, Plates 3 and 4.

6.2.4 After investigation 0004 has been interpreted as a modern deposit. The bulk of its make up was grey clay with brick and other building rubble. The base of the clay was immediately above a soil layer very similar to 0001 which has been interpreted as the original ground surface. It is likely that the mound is comprised of left over material from either the erection of earlier flood defences or from the building of the modern housing estate to the north east of the site. In both cases the mound would not pre date the mid to late 20th century.

6.3 **Area 03.** Figure 2**.** Contexts, 0001, 0002, 0003, 0005, 0006, 0009, 0010.

6.3.1 Prior to the ground work surviving ridge and furrow orientated north west- south east had been observed in Area 03. There were seven identifiable ridges. These were surveyed, in order to preserve a record of them in advance of their being partially destroyed.

6.3.2 The top soil. 0001 was removed by a tracked machine using a bladed ditching bucket. In patches a sub soil, 0002 survived but over most of the area 0001 directly overlay 0009 a red clay which is interpreted as being part of the mudstone formation which rises in a steep outcrop to the north west of the site.

6.3.3 It was apparent once 0001 had been removed that the ridges had been made up largely of the top soil. The surviving furrows, 0003, 0005 and 0006 were excavated, and recorded by photograph and drawing, Figure 4 and plates 5, and 6. No dating evidence was recovered as a result of the excavations.

6.4 A geo-archaeological investigation was carried out in order to locate a possible palaeochannel that had been observed during trial trenching carried out in 2006. This was positioned at the same location as the trial trench. Appendix 2.

6.4. **Area 04.** Figure 2. Contexts 0009, 0010.

6.4.1 A key trench was cut along the entire length of the stripped surface in Areas 01, 02 and 03. Plate 7. This was then backfilled with clay to provide an impermeable base for the new flood defence.

6.4.2 The excavation of this trench was carried out by a tracked machine using a bladed ditching bucket to an average depth of 800mm.

6.4.3 The exposed sections of Area 04 revealed undisturbed red clay, 0009 which in area 03 overlay a deposit of grey/green stiff clay, 0010. Both of these layers form part of the alluvium which overlies the sandstone bedrock on the site.

.4.5 There were no archaeological features or deposits exposed as a result of the excavation of Area 04.

6.5 **Area 05.** Figure 2. Context 0007.

6.5.1 A desk based assessment, Allen and Appleton, 2006, had identified a mound, 0007, in the Country Park that was recorded in the Nottinghamshire SMR.

6.5.2 The ridge and furrow noted in Area 03 possibly ran up to the edge of 0007 but any relationship had been destroyed by the construction of a modern bridleway associated with the setting out of the Country Park.

6.5.3 As part of the archaeological works there was an evaluation of mound, 0007, in order to establish its character and date. Prior to the evaluation taking place 0007 was surveyed in order to maintain an accurate record of the feature.

6.5.4 The south east quadrant of 0007 was removed strategraphically by a tracked machine using a bladed ditching bucket. The south east and north east facing sections were recorded by drawing and photograph, Figure 3 and Plates 8, 9 and 10.

6.5.5 An examination of the sections and the observation of the stripping that revealed them demonstrated that 0007 was of recent origin. The make up of the mound being a yellowish/orange sandy silt with blocks of red clay giving the appearance of recently deposited material. Within this there were laminations of a similar material to the top soil, 0001, recorded elsewhere on the site. These have been interpreted as tip lines produced during the construction of 0007. There were occasional pieces of modern brick observed in the exposed sections of 0007.

6.5.6 The whole mound appears to have been made up of modern deposits probably as a result of landscaping associated with the development of the country park.

7. DISCUSSION.

7.1 There were features of potential archaeological interest in Area 02, Area 03 and Area 05. Area 01 and Area 04 were archaeologically sterile.

7.2 In Area 02 three furrow bases were excavated and recorded, 0003, 0004, 0006. All were very shallow and none produced any dating evidence. Where ridge and furrow survives it is normally assumed to date to the medieval period but the practice of ridging ploughed land on heavy clay soils may well have carried on into the post medieval period (Williamson, p 141 ff) at least up to the widespread introduction of field drains at the end of the 18th century and throughout the 19th and twentieth centuries. The ridge and furrow in Area 02 therefore probably pre dates the late 18th century but a more specific date cannot be assigned to them.

7.3 Mounds evaluated in Area 02, 0004 and Area 05, 0005. In both cases the mounds appear to be modern in origin and made up and made up of material possibly associated with three phases of recent activity on the site: the building of the modern housing estate to the north east of the site, the construction of earlier flood defences and landscaping of the ground to create the country park.

8. CONCLUSION.

8.1 All intrusive groundwork associated with the development was carried out under archaeological supervision. Ridge and furrow and a mound had been identified prior to the start of the watching brief. A further mound was identified during the course of the watching brief.

8.1 It was not possible to ascribe a date to the ridge and furrow but its presence may indicate a relict landscape the probably pre dates the 18th century and could be medieval in origin.

8.2 The two mounds that were evaluated are modern and arise as a result of recent development in and around the Country Park.

8.3 A geoarchaeological investigation in Area 03 located a possible palaeochannel the details of which are summarised in Appendix 2.

8.4 No further significant archaeological features or deposits were revealed as a result of the intrusive groundworks associated with the construction of the new flood defences. The two mounds that were evaluated are modern and arise as a result of recent development in and around the Country Park and the ridge and furrow remain undated. A small number of pottery sherds were recovered from the stripped surface of Area 03. These were all modern and following an assessment were discarded.

BIBLIOGRAPHY

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Walker, D, Bradley Lovekin, T, 2006, *Archaeological Evaluation of the Nottingham Left Bank, APS/TPA.*

Allen and Appleton; 2005, *Desk Based Assessment Stage 2, Proposed Flood Alleviation Scheme Sawley to Colwick. Report for the Environment Agency. Trent & Peak Archaeology 2011.*

Website references

Baker S, 2001, *Trent Valley palaeochannel mapping from aerial photographs.* *http://www..tvg/bham.ac.uk//palaeochannels.pdf*

British Geological Survey (BGS), 2012, *Geology of Britain Viewer,* *http://www.bgs.ac.uk/discoveringGeology*

Cartographic references - Figure 1, O.S. Open Data.

Appendix 1 Summary context list.

CONTEXT	AREA	DESCRIPTION	THICKNESS
0001	All	Mid brown loam	300mm
0002	All	Light brown sandy loam sub soil	200mm
0003	03	Plough furrow	108mm
0004	02	Mound	2000mm
0005	03	Plough furrow	230mm
0006	03	Plough furrow	160mm
0007	05	Mound	1010mm
0008	02	Foundations of demolished information centre	
0009	All	Red clay underlying 0001 and 0002, natural part of the alluvial deposits	620mm
0010	03	Still grey/green clay underlying 0009, natural part of the alluvial deposits	210mm observed

Appendix 2. Geoarchaeological Assessment.

1. INTRODUCTION.

1.1 As a part of the overall archaeological programme carried out by Trent & Peak Archaeology a geoarchaeological investigation, bore hole, was carried out to establish the character of a possible palaeochannel which had been identified during a programme trial trenching carried out in 2006.

1.2 The location of the possible palaeochannel was adjacent to the ridge and furrow that was recorded in Area 03.

1.3 The Trent Valley Palaeochannel Mapping (Baker, 2001) indicated that there was a palaeochannel at the site of the investigation.

2. MEHTODOLOGY.

2.1 The investigation was carried out using a Van Walt percussion window sampling kit in order to sample the possible palaeochannel. Holes were drilled with window samplers of c.50 to 100mm diameter and extracted in 1m steps which were stratigraphy recorded from the ground surface downwards

3. RESULTS.

3.1 The results of the sampling are set out in Table 1. Below the top soil the extracted core revealed layers of alluvial clays ranging in colour from brown in the uppermost layers to dark greyish brown at the base, Table 1. There were no organics in the clay layers and no convincing evidence of a palaeochannel was observed in the retrieved core.

Table 1.

Appendix 2. Geoarchaeological assessment data

Borehole Log

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Borehole number:	BH 01	Date:	13.01.12
Location: MCP	Colwick Country Park	Co-ordinates:	460693.943, 339962.826
Drilling method:	Van Walt percussion auger	Ground level (OD):	21.55m
Logged by:	PW	Vertical scale:	1:20

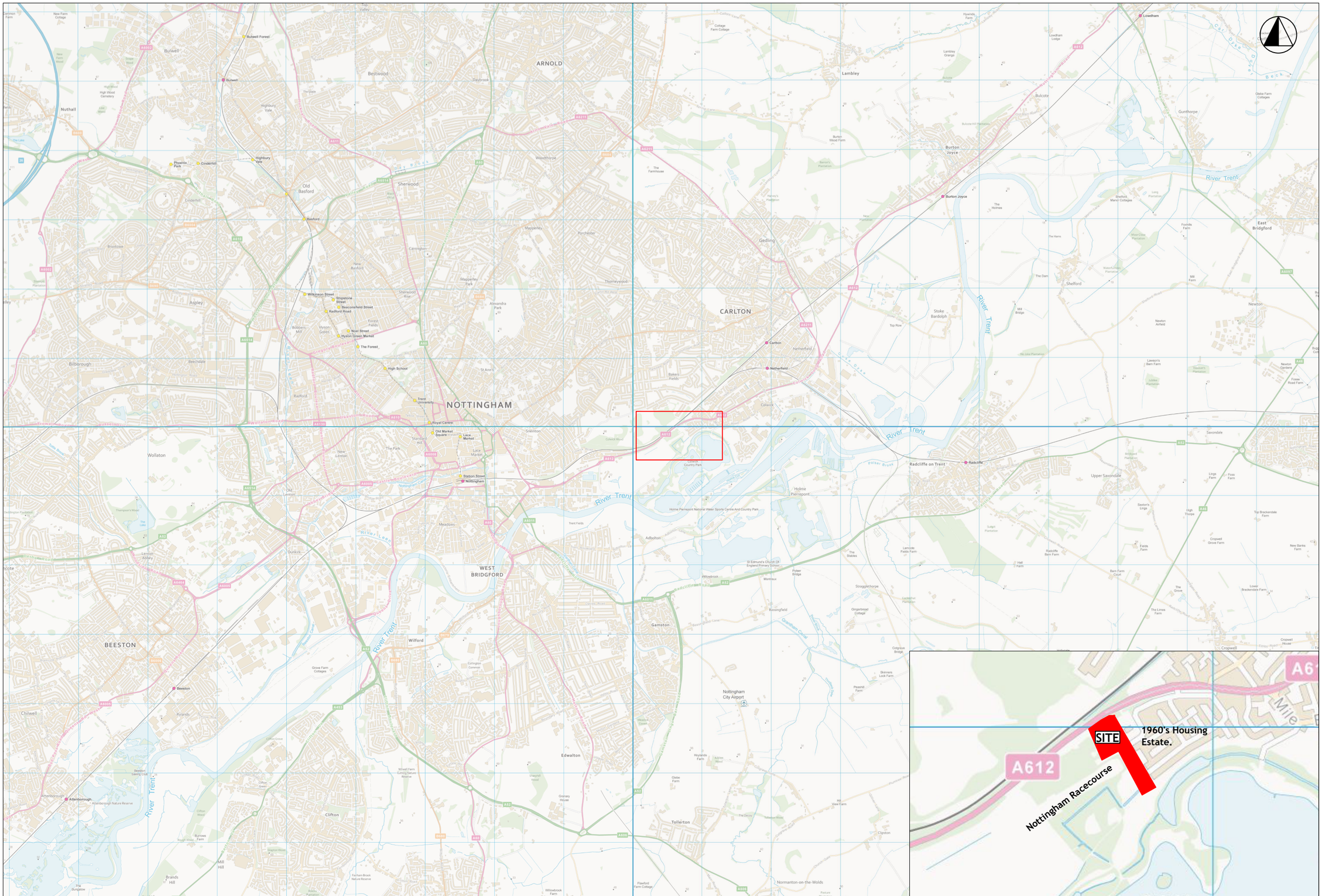
Description	Legend	Depth (thickness) m	Comments / Samples
Very dark brown soft silt loam		0.16m (0.16m)	Topsoil
Dark brown stiff silt clay loam		0.26m (0.10m)	Subsoil
Strong brown stiff clay		0.66m (0.40m)	Alluvium
Strong brown stiff clay		0.82m (0.16m)	Alluvium
Brown-strong brown stiff clay		0.95m (0.13m)	Alluvium
Dark olive brown stiff clay		1.17m (0.22m)	Alluvium
Brown stiff silty clay		1.33m (0.16m)	Alluvium
Very dark greyish brown soft clay		1.51m (0.18m)	Possible palaeochannel deposit? No organics
Yellowish brown sand & gravel (sub rounded 1-3cm		1.67m (0.16m)	Fluvial sands and gravels
End of borehole			

APPENDIX 3: Index of Archive and Arrangements for Deposition

Field Records	***Description***	***Number***
Watching brief record sheets	Record of visit and work carried out	5
Drawing record sheets	List of drawings made on site	1
Photographic record sheets	List of photographs taken on site	1
Context records sheets	Record of contexts recorded on site	0
Site drawings on permatrace sheets	Section drawings @1:20 and 1:50 on A3 permatrace. Plan of pond @1:200	7
Photographs:-		
Digital	All views	44
B&W (with negatives)	All views	19
Finds	Ceramic	9
Documents	*Description*	*Number*
Health & Safety	Safe working statement & risk assessment	1
Report to client	Report of findings of the watching brief.	1

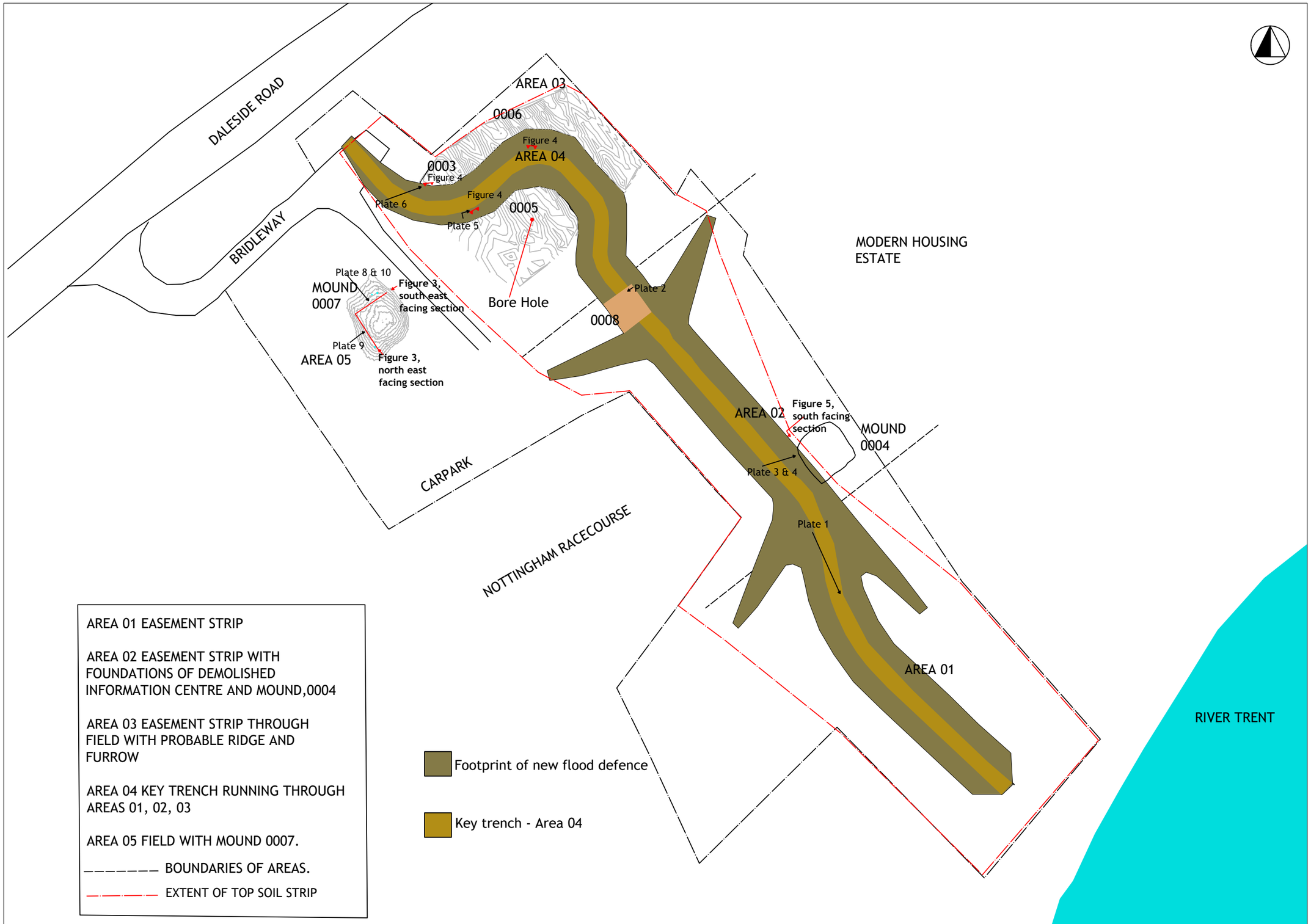
Archive Deposition.

The archive is currently held in the offices of Trent & Peak Archaeology, Unit 1, Holly Lane, Chilwell, Nottingham, NG9 4AB. Currently Nottinghamshire Museums are not receiving archives. Until such time as they do the archive will be held at the offices of Trent & Peak Archaeology.

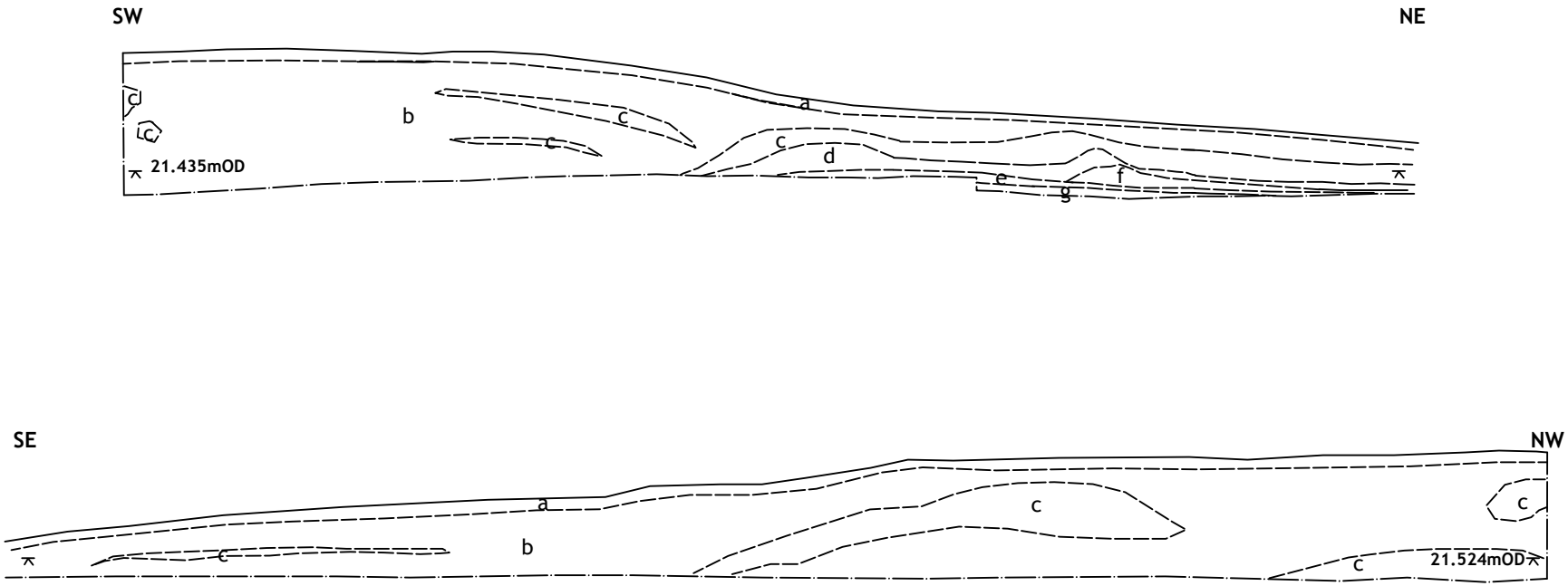


MCP Figure 1. Site Location. Scale 1:50,000 @A3. Inset, Scale 1:10,000 @A3.

Trent & Peak ARCHAEOLOGY

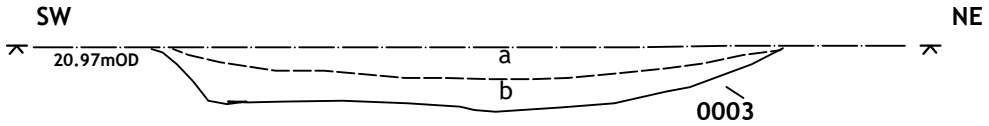


MCP Figure 2. Colwick Country Park, Site Plan, Scale 1:1000 @ A3

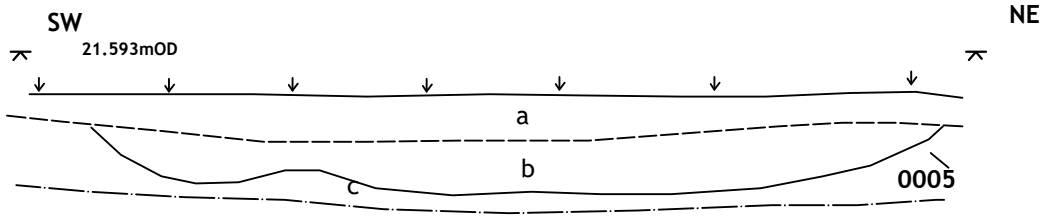


a mid brown loam, top soil.
b yellowish orange sandy silt
c brown soil, tip lines caused when the mound was being constructed
d red clay
e brown soil, same as c
f red clay mixed with orange/yellow sandy silt
g grey/brown silty clay, sub soil over the area on which the mound was placed

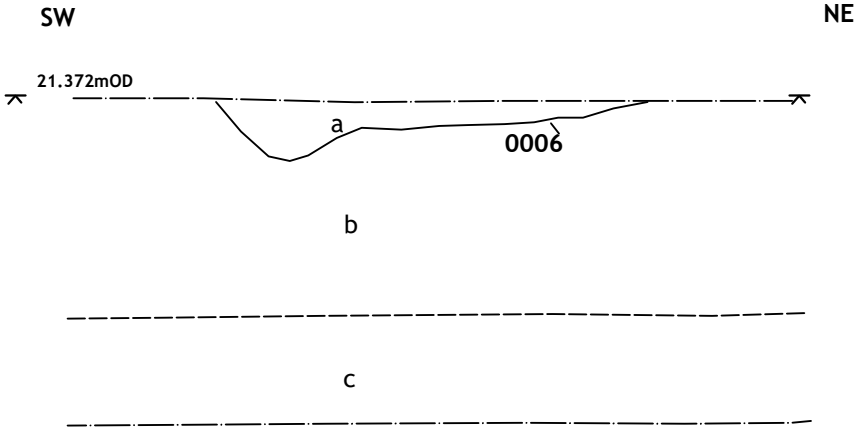
MCP Figure 3.South east and north east facing sections of mound 0007 at Colwick Country Park. Scale 1:50 @A4.



0003	a light brown sandy loam b yellow sand

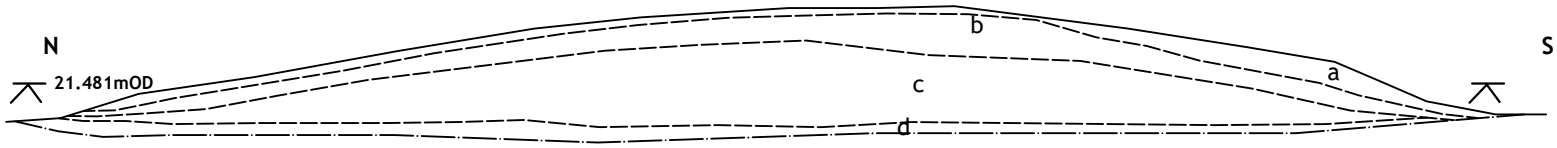


0005	a mid brown clayey loam, top soil b yellowish brown sand c red clay



0006	a yellowish grey sandy silt, fill of 0006 b red clay c yellow green clay

MCP Figure 4. South east facing sections of plough furrows, 0003, 0005, 0006. Scale 1:20 @A4.



0004 a gravel mixed with white crushed stone.
b mid brown clayey loam, top soil
c grey clay with brick rubble
d grey/brown silty loam, probably original ground surface.

MCP Figure 5. West facing section of mound 0004. Scale 1:50 @A4.

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PLATE 1. Top soil stripping in Area 01. Looking east.

PLATE 2. Area 02, 0008. Footprint of demolished modern building.

PLATE 3. Exposed section of 0004. Looking east.

PLATE 4. Detail of excavation of 0004 showing modern bricks in the grey clay matrix. Looking north.

PLATE 5. Furrow base, 0005. looking north west.

PLATE 6. Furrow base 0003. Looking north west.

Plate 7. Area 04, Key Trench cut through Area 01. Looking east.

PLATE 8. South east facing section of 0007. Looking north west.

PLATE 9. North west facing section of 0007. Looking south.

PLATE 10. Detail of south east facing section of 0007 showing lenses of top soil within the matrix of the mound. Looking north west.