

AN ARCHAEOLOGICAL STRIP, MAP AND SAMPLE EXERCISE AT NEWARK ACADEMY, NEWARK

Project Code: NAC

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SUMMARY

- Trent & Peak Archaeology was commissioned by CgMs Consulting on behalf of Kier Group to undertake an archaeological strip map and sample exercise during topsoil removal in anticipation of the construction of a new school block.
- The work was undertaken between 13th & 19th November 2014 according to a Scheme of Archaeological Treatment which was approved by Ursilla Spence, Nottinghamshire County Council Archaeological Officer.
- The site encompassed an area of land measuring approximately 300m north south by 150m east west, to the east of Newark Academy within an area used as sports fields.
- Topsoil stripping revealed seven north-south orientated linear features which are interpreted as 19th century furrows as well as a further modern ditch and four small features which may be the result of a tree root.
- A small quantity of artefacts were recovered from the furrows including 19th century ceramics (not retained) and brick while pieces of wood and brick were recovered from root disturbance in Area 2.

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1 PROJECT BACKGROUND

- 1.1 Site name: Newark Academy, Newark (NAC)
- 1.2 Client: CgMs Consulting
- 1.3 Planning application no:FR3/3101
- 1.4 Proposed development: New School block
- 1.5 Geology/Soils: The study area at c.17 m OD sits on bedrock geology consisting of Branscombe Mudstone Formation. This is overlain by superficial deposits of sand and gravel belonging to the Balderton Sand And Gravel Member (BGS Website).
- 1.6 Previous Archaeological work: Trent & Peak Archaeology desk based assessment (Humphreys 2014).

2 INTRODUCTION

2.1 Trent & Peak Archaeology (TPA), part of the York Archaeological Trust, were commissioned by CgMs Consulting, on behalf of their clients Kier Group, to undertake an archaeological strip, map and sample on an area of land within the grounds of Newark Academy, Newark in advance of the construction of a new school block.

2.2 The excavations were carried out according to a Scheme of Archaeological Treatment, prepared by CgMs (Flitcroft 2014) which was approved by Ursilla Spence, Nottinghamshire County Council's Archaeological Officer in October 2014.

3 ARCHAEOLOGICAL BACKGROUND

3.1 This Archaeological Background uses information from the Desk Based Assessment carried out for the site by Trent and Peak (Humphreys, 2014)

Prehistoric

3.2 There are 5 prehistoric features, all finds spots or scatters. A flint (L3642), finds scatter (L3643) and small hoard (L3644), all dating to the Bronze Age, have been recovered north-west of the Permitted Development Area (PDA), towards Newark. Closer to Balderton, in the south, two further Bronze Age findspots of flint flakes (L3696) and a scraper (L3693) confirm a late prehistoric presence in the region.

Roman/Early Medieval

3.3 A Roman Cremation cemetery (M5811) from which several urns (L5811) have been recovered lies c.700m north-west of the PDA. No further Roman activity has been recorded within the study area. A single Early Medieval findspot (L8495) is located c.800m west of the PDA. There is no further record of Anglo-Saxon activity within the study area.

Medieval

3.4 In addition to the aforementioned C12th Church of St Giles (LB 1369963/M3728), 4 further Medieval finds are recorded within the study area; a selection of finds from Clay Lane (L5830), a pot from Balderton (L3692) and coins from both Newark (L3695) and Balderton (L3694).

3.5 Despite the town of Newark representing a local centre for the wool and cloth trade during the High Medieval period, no further medieval structures or archaeological features are known within the study area.

Post Medieval

3.6 During the Civil War, Newark was a mainstay of the royalist cause, with Newark Castle slighted in 1648. In addition to the SAM at Beacon Hill (1016149), 9 non-designated heritage assets are located within the study area; all are associated with Civil War activity. 4 ramparts (L8524, L8525, L8526, L8527) are located immediately north of the Balderton conservation area, c.650m south-west of the PDA. Map records of the Beacon Hill redoubt/sconce (M3663) and an associated ditch (L3663) are located c.650m north of the PDA. A further sconce (Crawford's; M5817) is known c.350m north-west of the PDA from a map depiction (L5817). The site of a battery construction by Colonel Rossiter is recorded at the north-west extent of the study area.

Modern

3.7 48 non-designated heritage assets are listed as dating the modern period (post C18th), although the list suffers from considerable duplication from multiple references. Within the Balderton conservation area map depictions of almshouses (L3929) and a smithy (L3928) are recorded, as well as a C19th building (L3695). Within the wider Balderton area, historic maps note a wide variety of features associated with a growing sub-urban environment from the early C18th-mid C20th century. These include a hospital (L3958, L3933), sandpit (L3932), malthouse (M3675) and air-raid shelter (M18189).

Other Local Features

3.8 With regards to local industry, 8 descriptions of windmills are recorded across the northern part of the study area (L7422, L7423, L7426, L7427, L7429, L7388, L7424, L7425), all attributed to pre1825. A brickworks (M3206) and lime kilns (M18183) were located c.800m north of the PDA, whilst 2 railway bridges (M3204, M3205) were constructed in the late C19th.

3.9 In addition to the dated heritage assets there are also 4 further undated heritage assets comprising an enclosure at Newark (L3646), 2 linear features at Balderton (L3739, L3697) and a historic well (M3957) of which there is also a historic map depiction (L3957).

4 METHODOLOGY

4.1 All topsoil/subsoil stripping was carried out using a toothless ditching bucket with a tracked 360° machine

4.2 Topsoil stripping began in the north west of the site and was pulled back in an easterly direction respecting the gravel running track that ran through the site and the area occupied by an AstroTurf pitch. Once the northern part of the site was stripped

the same process was repeated on the southern and eastern sides of the site. The areas of the running track and pitch have been previously truncated during their construction.

4.3 All features were cleaned, planned and sectioned to demonstrate their plan/form and to recover any datable artefacts.

4.4 Features were sectioned, photographed and drawn to a scale of 1:20, the site was hand planned using known boundaries and included locations of all cuts.

4.5 Spoil and archaeological levels were searched with a metal detector.

5 RESULTS

5.1 Three areas were stripped and recorded; a half circular area at the north of the site (Area 1), a sub rectangular area at the east of the site (Area 2) and a reverse L shaped piece along the east and south of the former astroturf pitch at the centre of the site (Area 3).

5.2 In the remaining areas of the site the design of the new development did not require extensive ground reduction. Following discussions with CgMs and Nottinghamshire County Council's Archaeological officer, ground reduction in these areas was observed but archaeological levels were not exposed.

5.3 Two test pits (TP 1 and TP 2) were excavated within the area of the former astroturf pitch to establish the level of truncation caused during its construction (Figure 2).

Topsoil Stripping

5.4 The topsoil in Area 1 was a dark grey brown sandy silt that directly overlies yellow and grey sand and gravel. The topsoil was between 0.20m and 0.60m thick and surfaced at between 17.50 and 17.57m OD (Plate 1). The natural sands and gravels surfaced at between 16.90m and 17.20m OD.

5.5 Four linear features considered to be furrows, orientated roughly north – south, were identified cutting into the sand and gravel, running through the area (Contexts [0003], [0005], [0007] and [0009]). Sections dug through these features revealed they were between 0.80m and 1.20m wide and between 0.10m and 0.24m deep and all had similar profiles with gradual breaks of slope at top and bottom and a rounded base (Plates 2 and 3). They were all filled by dark grey sandy silt (Contexts 0004, 0006, 0008 and 0010). The fills all contained white ware pottery while (4) also contained a single sherd of Mocha pottery, all of which date to the 19th century (Elliott, pers. comm.).

5.6 The topsoil at the east of the site was slightly deeper than at the west which may explain the lack of furrows in this area.

5.7 In Area 2 the topsoil was the same dark grey brown sandy silt observed in Area 1 (Plate 4). It was up to 0.60m thick and surfaced at between 17.98m OD at the south of the area and 17.53m OD towards the north of the site. It overlies a mid brown gravelly sandy silt which was up to 0.30m thick. This overlies yellow and grey

natural sand and gravels which surfaced at between 16.85m and 17.22m OD, sloping down to the south.

5.8 A single possible furrow, [0020], was identified at the east of the site (Plate 5). This furrow ran along the eastern edge of the site and was orientated similarly to those observed in Area 1. It is thought to have been contemporary with these as its profile and fill were similar. It was up to 1.20m wide and 0.08m deep.

5.9 Four small irregular pits were also identified towards the north east of the site, all of which were half sectioned. These were between 0.30m and 0.44m in diameter and 0.05m to 0.25m deep. Three of the pits ([0012], [0014] and [0016]) had steep sloping side and sharp break of slope top and bottom with rounded bases (Plates 5 and 6). The fourth, [0018], was only very shallow and had a rounded base.

5.10 All of the pits were filled by dark grey black silty sand (contexts (0011), (0013), (0015) and (0017)). A piece of wood with a nail in it was recovered from (0011), the fill of [0012], while a fragment of brick was recovered from (0013), the fill of [0014]. The pits were obviously modern. A line of trees is known to have run across where the pits were identified and these features may represent the bottom of the root system. This tree line is present on the 1884 Ordnance Survey Map and much of the tree line is still present to the north and south of the site.

5.11 In Area 3 the topsoil was the same dark grey brown sandy silt observed in the other two stripped areas. It was between 0.20m and 0.35m thick and surfaced at between 17.37 and 17.57m OD, sloping down to the north of the area (Plate 8). The topsoil overlay yellow and grey sand and gravels which surfaced at between 17.04m and 17.32m OD and also sloped down to the north of the site.

5.12 Three furrows were identified, similarly orientated to those recorded in Areas 1 and 2. They all had gradual breaks of slope at top and bottom and rounded bases and were filled by dark grey sandy silt (Plate 9). These furrows are thought to be related to those observed in Areas 1 and 2. No artefacts were recovered from their fills.

5.13 A further linear feature, [0021], orientated north east-south west was also observed towards the south east of the area. This linear feature was 2.20m wide and 0.30m deep (Plate 10). It was not observed continuing in Area 2. Brick fragments were recovered from its fill (0022), which was similar to the fills of the furrows, and it appeared to be modern.

Test Pits

5.14 The two test pits (TP 1 and 2) were excavated through the area previously used as an astroturf pitch (Figure 2).

5.15 The stratigraphy in the two test pits was very similar. Natural yellow sand and gravel was identified at the base of both test pits (Plates 11 and 12). In TP1 it was observed at 16.70m OD and in TP2 16.94m OD. In both test pits the natural sand and gravel was overlain by made ground, 0.50m thick in Trench 1 and 0.45m thick in trench 2. This made ground was covered by a crushed stone sub base between 0.10m and 0.15m thick, which was in turn covered by a layer of compressed sand 0.05m thick. This was overlain by grey gravel which was 0.30m thick in TP1 and 0.20m thick in TP2. The level at which the natural sand and gravel was observed within the test pits suggest that it has been truncated during the building of the pitch.

5.16 No features of archaeological significance were observed in either test pit.

6 CONCLUSION

6.1 The strip, map and sample exercise has demonstrated that, despite the close proximity to the school and landscaping in the immediate vicinity, in situ archaeological remains have survived at the site. In total eight linear features were observed, and these can be interpreted as the remains of 19th century furrows. Four features observed in Area 2 at the east of the site appear to be modern. These features lie along the route of a removed tree line and are thought to be related to this. A furrow also observed in this area runs parallel with those in Area 1 and they are thought to be contemporary. Furrows in Area 3 are also thought to be related. A shallow ditch in Area 3, orientated north east-south west contained modern artefacts.

6.2 The excavation of two test pits through the former astroturf pitch at the centre of the site suggests that approximately 0.30m of natural sand and gravel was removed during the pitch construction.

7 ACKNOWLEDGMENTS

7.1 Trent & Peak Archaeology would like to extend their thanks to CgMs for commissioning the work; to Kier Group in particular their site manager Gavin Colton for his co-operation on site and Ben Parkes, Senior Engineer, for his continued assistance. The fieldwork was supervised by John Winfer. The work was project managed by Edmund Taylor (TPA) and Myk Flitcroft (CgMs). Fieldwork was monitored on behalf of Nottinghamshire County Council by Ursilla Spence.

8 REFERENCES

Flitcroft, M. 2014, *A Specification for an Archaeological Strip, Map and Record Programme*. CgMs Report for Kier Group

Humphreys, R. 2014, *Newark Academy, Newark, An Archaeological Assessment*. TPA Report for Kier Group

Appendix 1: Written Scheme of Investigation

Written Scheme of Investigation

**A SPECIFICATION FOR AN
ARCHAEOLOGICAL
STRIP & RECORD PROGRAMME**

**“Scheme of Archaeological
Treatment”**

**THE NEWARK ACADEMY,
LONDON ROAD,
NEW BALDERTON,
NOTTINGHAMSHIRE**

**Planning ref FR3/3101
Condition 05**

October 2014

**Planning Authority:
Nottinghamshire County Council**

Site centred at: SK 8154 5243

**Author: Myk Flitcroft
Approved by: Simon Mortimer**

**Report Status: FINAL
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CgMs Ref: MF/18195/01**

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A Specification for an archaeological strip & record programme

The Newark Academy

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FIGURES

Figure 1: Site Location and Current Layout

Figure 2: Extent of soil strip and new building footprints

INTRODUCTION

1.1 Site Location and Description

1.1.1 The Newark Academy site is located to the south-east of the town of Newark, within the suburb of New Balderton. Nottinghamshire.

1.1.2 The academy site is bordered by the East Coast Main railway line to the north-east and London Road to the west. Sports fields and domestic properties lie south of the site; the Grove Sports Centre and residential properties lie to the north-west. The site is centred at National Grid Reference SK 8154 5243 (Fig 1).

1.1.3 Topographically, the site is roughly flat and lies at approximately 17.7m AOD, but has seen some landscaping for creation of the existing school. It contains the buildings and sports fields of the current Newark Academy, and redundant sports facilities.

1.1.4 The solid geology of the site and surrounding area is mudstone of the Branscombe Mudstone Formation. This is overlain by superficial deposits of sand and gravel belonging to the Balderton Sand and Gravel Member (mapapps.bgs.ac.uk/geologyofbritain/home.html).

1.2 Planning Background

1.2.1 Planning permission has been granted for erection of a three storey replacement school, split level single and two storey sports building, replacement sports provision including new flood lit multi-use games area (MUGA), car parking, cycle parking, lighting and CCTV, alteration to pedestrian access and landscaping with reuse of existing weld mesh security fence and 2.4m high new weld mesh security fencing (Nottinghamshire County Council Planning reference FR3/3101).

1.2.2 Condition 5 of the planning permission relates to treatment of archaeological issues:

Prior to the commencement of development a scheme of archaeological treatment for the stripping, mapping, recording and sampling of the archaeology of the site shall be submitted to and approved in writing by the CPA. The scheme shall be carried out in accordance with the approved details under the supervision of an archaeologist or archaeological organisation that shall first be approved in writing by the CPA.

1.3 Archaeological Background

1.3.1 The archaeological background and context of the development site has been considered in a desk-based assessment prepared by Trent & Peak Archaeology in June 2014, and submitted to support the planning application.

1.3.2 The desk-based assessment established that there are no *designated heritage assets* (Scheduled Monuments, Listed Buildings, Conservation Areas, Registered Battlefields, Registered Historic Parks, World Heritage Sites) or *non-designated heritage assets* with archaeological interest within the Academy site (the non-designated buildings of Grove House lie on the northern side of the Academy site).

1.3.3 It is acknowledged that there has been no previous archaeological investigation within the site, and little in the surrounding area. The Trent & Peak Archaeology desk-based assessment reviewed the available information and considered the site's potential for additional, as-yet undiscovered archaeological remains.

1.3.4 On the basis of limited evidence for Prehistoric sites and finds from the surrounding area, the assessment concluded there is a low potential for prehistoric sub-surface remains or surface finds within the site.

1.3.5 The site's potential for Roman period remains was assessed as being 'moderate', despite the presence of only one recorded site within 1km surrounding area: a Roman cremation cemetery located around 700m north-west of the site.

1.3.6 The potential for as-yet undiscovered below-ground archaeology of Medieval and Post-Medieval date was assessed in the desk-based report as being "low". This assessment was made on the basis of the site previously falling between two nucleated settlement areas of Newark and Balderton, with the surrounding area not subject to development until the early 20th century, and the site itself remaining undeveloped prior to construction of the Grove school (now Newark Academy).

1.4 Development Proposals

1.4.1 The replacement school and sports buildings are located to the east of the current school buildings, in an area currently occupied by a redundant running track and AstroTurf sports area, and the western edge of the playing fields. Current ground levels lie at 17.5m AOD within the perimeter of the running track, and 17.9m AOD in the adjacent part of the playing field.

1.4.2 The development will require initial soil stripping from the footprint of the new buildings and a surrounding working area. Following a strip of topsoils / astroTurf, fill will be imported to make up the levels to the proposed formation level of 17.800m OD under the building footprint and associated hard standings.

1.4.3 Exploratory borehole surveys and small scale test pitting indicate that in the area of the new school and sports buildings, the stratigraphy comprises the artificial sports pitch surface and crushed rock sub-base (or playing field topsoil) overlying natural sands and gravel.

1.4.4 In the area of the redundant sports pitch itself, the astroTurf surface directly overlay crushed stone sub-base, with the natural gravel recorded 1.0m below the current astroTurf sports pitch surface. Elsewhere inside the running track perimeter, topsoil between 0.25m and 0.4m thick was recorded above gravels (gravels at 17.1 – 17.2m AOD). Outside the running track, within the playing field, topsoil depths were around 1.0m (gravel at 16.9m AOD).

1.4.5 These results would suggest that formation of the sub-base for the sports area may have truncated the upper surface of the natural gravels.

1.4.6 Within the footprint of the school and sports buildings, foundations will be formed through vibro stone piling to compact the natural gravels, with new footings constructed above these piles.

1.4.7 Outside the buildings' footprints no vibro-compaction will be required, and fill material will be imported on the soil-stripped surface to form the hardstanding areas.

1.4.8 Outside the building footprint and hard standings (i.e. outside the area shown in Figure 2), topsoil will be retained. There will be no potential for impacts on surviving archaeological remains outside the new buildings and hard surfaces.

2.0 RESEARCH DESIGN

2.1 Aims and Objectives

2.1.1 The overall aim of the scheme of archaeological works will be to identify and to record and advance understanding of the significance of any archaeological remains affected by the development of the site.

2.1.2 The archaeological works will comprise a strip & record archaeological programme targeting areas that are being soil-stripped for the new development (in summary the site of the new school building, new sports building, and associated working areas). The excavated data will be assessed and analysed, and information on the investigation's findings disseminated.

2.1.3 The objectives of the archaeological works are as follows:

- To identify any archaeological remains exposed or affected by the construction works
- To determine the extent, character, condition, significance and quality of any such archaeological remains
- To safeguard the heritage significance of such remains through investigation and recording of surviving below-ground archaeological remains, and dissemination of resulting information
- To produce a site archive for deposition with an appropriate museum and to provide information for accession to the Nottinghamshire HER.

3.1 Research Framework

2.2.1 The programme of archaeological investigation will be conducted within the general research parameters and objectives defined by 'East Midlands Heritage: A research Agenda and Strategy for the Historic Environment' (compiled on behalf of the region's historic environment community by D. Knight, B. Vyner and C. Allen) and the earlier Archaeological Resource Assessment and Research Agenda for the East Midlands 'The Archaeology of the East Midlands' edited by N. Cooper (2006).

2.2.2 The investigation will also take account of the national research programmes outlined in English Heritage's '*Strategic Framework for historic Environment Activities and Programmes in English Heritage (SHAPE)*' first published in 2008.

2.3 Standards

2.3.1 This specification conforms to the requirements of the National Planning Policy Framework (DCLG 2012) (NPPF), and the current English Heritage draft Historic Environment Good Practice Advice in Planning Note 2: Decision-Taking in the Historic Environment (consultation draft 11 July 2014). It has been designed in accordance with current best archaeological practice and the appropriate national standards and guidelines including:

- Management of Archaeological Projects* (English Heritage, 1991);
- Code of Conduct* (Institute of Field Archaeologists, 2000);
- Standard and Guidance for Archaeological Field Evaluations* (Institute of Field Archaeologists, 2001)

2.4 Scope of Works

2.4.1 The proposed works comprise an area of controlled strip & record type excavation to target the site of the new Academy buildings and hardstanding areas only.

2.4.2 The blue area shown in Figure 2 is the area that will require soil stripping for the development (total area approx 1.75ha). This encompasses the new buildings' footprints (highlighted in light blue) and surrounding working areas for vehicle access and materials storage (dark blue).

2.4.3 Stripping of topsoil and any underlying deposits within the 'blue area' will be supervised by a suitably qualified and experienced archaeologist. Mechanical excavation will cease at the upper surface of natural sands & gravels (or suitable modern made ground in the area of the redundant sports pitch), or where archaeological deposits are identified above the sands and gravels level.

2.4.4 Work will be controlled by the archaeological team to ensure that where the potential archaeological horizon is exposed, this horizon will be sufficiently clean to allow identification of any archaeological features present (the 'potential archaeological horizon' is interpreted as being the upper surface beneath modern topsoil or modern made ground/sub-base for the running track/sports pitch).

2.4.5 Where archaeological features are exposed, their nature and interpretation will be assessed by hand excavation prior to further machine stripping or deposition of material to create the required formation levels. A detailed strategy and sampling strategy will be agreed with NCC's Archaeological Officer and implemented. Detailed archaeological investigation and recording will be undertaken in accordance with the standards and methods detailed in Section 3 of this Specification.

2.4.6 Following completion of the archaeological fieldwork, the results of the investigations will be integrated into a single report and archive for dissemination.

3.0 METHODOLOGY

3.1 Fieldwork Methods: Excavation of strip area

3.1.1 Stripping of topsoil and the excavation area will be conducted using a mechanical excavator fitted with a toothless ditching bucket.

3.1.2 Stripping will be supervised by a suitably qualified and experienced archaeologist and controlled by the archaeological. The spoil generated during the excavation will be removed - by dumper if required - and mounded away from the edges of the stripped area.

3.1.3 Mechanical excavation will cease at formation levels, or where archaeological features are identified above formation level. The nature of any such archaeological deposits will be assessed by hand excavation.

3.1.4 The location and anticipated extent of supervised soil strip is shown in blue in Figure 2.

3.1.5 Upcast and spoil from mechanical excavation will be scanned by eye and by metal detector to aid the recovery of artefacts.

3.1.6 The stripped surface will be cleaned with hand tools (hoe and trowel) as necessary to assist the identification and interpretation of exposed archaeological features and the nature of identified features assessed by excavation.

3.1.7 The following sampling levels will form the standard to be applied to features and deposits identified as contributing to the project objectives and any additional specific objectives identified.

Feature Class Proportion to be excavated

Pre-modern linear features not associated with structural remains

10% of fill, to include terminals, intersections, unusual deposits
Prehistoric discrete pits 100% of fill/deposit

Pits associated with agricultural & other activities Initial 50% of fill; increased to 100% where significant deposits/assemblages are present

Layers/ deposits/horizontal stratigraphy relating to domestic/industrial activity [e.g. hearths, floor surfaces, floor make-up deposits...] 100% of deposit

Post-built structures of pre-modern date 100% of each post hole fill

Domestic ring ditches or roundhouse gullies 50% of fill

Linear features (ditches/gullies...) associated with structural remains 20% of fill, to include terminals, intersections, unusual deposits

Human burials, cremations & other deposits relating to funerary activity 100% of fill/deposit

3.1.8 The aim is to avoid 'digging by numbers' and to allow the excavation/sampling strategy to evolve as an iterative process on site. Excavation will be driven by a desire to answer the research strategy to be refined on site. This will involve a characterisation of the archaeology across the site, followed by phases of more closely targeted excavation, focussed on features likely to contribute most to an understanding of the site.

3.1.9 Should archaeological remains extend to more than 1.2m below ground level (or less depending on the nature of the soil), it may be necessary to step or shore the sides of the excavation area in order to enable safe working.

3.2 Recording Methods & Standards

3.2.1 A site grid will be established relative to Ordnance Survey National Grid. Data capture for site plans will be by GPS/Total Station, electronic distance measurement, measured survey or a combination of techniques. Data-capture for site plans will as standard be capable of reproduction at a scale of 1:100; more complex features or areas of complex archaeological remains will be recorded at greater resolution (for reproduction at 1:10, 1:20, 1:50 as necessary). The sections of excavated archaeological features will be recorded by measured drawing at an appropriate scale (normally 1:10 or 1:20). Spot heights and those of individual features will be recorded relative to Ordnance Datum.

3.2.2 All archaeological features or deposits encountered will be described fully on proforma individual context recording sheets, using standard methods of the archaeological contractor appointed. A stratigraphic matrix will be compiled to record the relationships of any archaeological features or deposits encountered and to indicate those features or deposits requiring further stratigraphic clarification by excavation.

3.2.3 A photographic record, utilising black and white negative film, supplemented by high resolution digital data capture, will be maintained during the course of the fieldwork and will include:

- the site prior to commencement of fieldwork;
- the site during work, showing specific stages of fieldwork;
- the layout of archaeological features;
- individual features and, where appropriate, their sections;
- groups of features where their relationship is important.

3.2.4 All artefacts will be treated in accordance with UKIC guidelines, First Aid for Finds (1998). All finds will be bagged and labelled according to the individual deposit from which they were recovered, ready for later cleaning and analysis.

3.2.5 If finds are made that might constitute 'Treasure' under the definition of the Treasure Act (1996), these will if possible be archaeologically excavated and removed to a safe place. Such finds will also be reported immediately to the local Coroner (within 14 days, in accordance with the Act). Should it not be possible to remove the finds that day, suitable security will be arranged.

3.2.6 The environmental sampling strategy will focus on sampling of undisturbed, securely dated deposits identified as having a high palaeo-environmental potential. The sampling strategy will include programmes of sampling and assessment for animal bone and charred plant macrofossils. All environmental work will be undertaken in accordance with English Heritage guidelines (see Environmental Archaeology: A guide to the and theory practice of methods, from sampling and recovery to post-excavation, Centre for Archaeology Guidelines 2011). Sample sizes will normally be 40-60 litres unless the deposit is smaller in volume

3.2.7 A suitable specialist will, if necessary, make a site visit to advise on deposits suitable for environmental sampling and/or geoarchaeological assessment.

3.2.8 Charred plant samples will be wet-sieved with flotation using a 0.5mm mesh. All residues will be checked.

3.2.9 Samples will be taken for scientific dating (principally radiocarbon dating), where dating by artefacts is insecure.

3.2.10 Should waterlogged deposits be encountered, further consultation with a suitable specialist will determine methods for recovery.

3.2.11 If human remains are encountered, they will be cleaned with minimal disturbance, prior to recording and removal, following receipt of the required Ministry of Justice licence. Investigation and excavation of human remains will be undertaken by, or under supervision of, suitably experienced specialist staff and in accordance with IFA Guidelines ("Excavation and Post-excavation Treatment of Cremated and Inhumed Human Remains" Roberts, C & McKinley, J 1993 – IFA Technical Paper 13; "Guidelines to the standards for recording human remains" ed Brickley, M & McKinley, J 2004 – IFA Paper 7). Assessment of excavated human remains will be undertaken in line with current English Heritage Guidelines ("Human Bones from archaeological sites: Guidelines for the production of assessment documents and analytical reports" Centre for Archaeology Guidelines 2004). The archaeological contractor will comply with all reasonable requests of interested parties as to the method of removal, re-interment or disposal of the remains or associated items. Every effort will be made, at all times, not to cause offence to any interested parties.

3.3 POST EXCAVATION: METHODS

3.3.1 Both the County Archaeological Officer and the relevant museum curator will be informed in writing of the completion of fieldwork. The archaeological fieldwork contractor will also provide an estimate of the size of the archive and programme for deposition. The archive will be prepared in accordance with the museum guidelines and the County Archaeological Officer will be informed in writing of final deposition of the archive.

3.3.2 Until the fieldwork is complete, the precise details of post-excavation analysis and reporting requirements will be uncertain. If necessary, a formal process of post excavation assessment of potential for analysis, in line with English Heritage 'MoRPHE' procedures will be undertaken to ensure that analytical and reporting work is most effectively targeted and that the potential of the excavated data is fully met in the post-fieldwork analytical programme. However, on this project it is anticipated that such formal assessment will not be necessary, and a simple post-excavation programme can be undertaken.

3.3.3 Post excavation work will comprise the following:

- checking of drawn and written records during and on completion of fieldwork;
- production of a stratigraphic matrix of the archaeological deposits and features present on the site, if appropriate;
- cataloguing of photographic material and labelling of slides that will be mounted on appropriate hangers;
- cleaning, marking, bagging and labelling of finds according to the individual deposits from which they were recovered. Any finds requiring specialist treatment and conservation will be sent for appropriate treatment. Finds will be identified and dated by appropriate specialists.

3.3.4 Unless otherwise agreed with the County Archaeological Officer, a report detailing the findings of the archaeological works will be prepared within four weeks of the completion of site works (dependant on receiving specialist reports) and will consist of:

- a title page detailing site address, site code and accession number, NGR, author/originating body, client's name and address;
- full contents listing;
- a non-technical summary of the findings of the excavation;
- a description of the topography and geology of the site;
- the archaeological background to the site;
- a description of the methodologies used;
- a description of the findings of the excavation;
- site location plans and plans of the excavation area showing the archaeological features exposed;
- sections of the excavated archaeological features;
- interpretation of the archaeological features exposed and their context within the surrounding landscape;
- specialist reports on the artefactual / ecofactual remains from the site (including recommendations for retention/discard and conservation recommendations);
- appropriate photographs of specific archaeological features and general area shots;

- a full context list
- the OASIS reference and summary form
- an archive statement (location, accession number, deposition date etc)
- publication proposal (see below)

3.3.5 The format and contents of the report will conform to Nottinghamshire County Council requirements and to published regional Standards.

3.3.6 A draft copy of the report will be supplied to the County Archaeological Officer for comment. Following approval of the draft report, one copy of the approved report will be provided to the LPA; one hard copy and one digital copy (including a CD with a pdf of the report and indexed copies of digital site photographs) will be supplied to Nottinghamshire HER.

3.3.7 A copy of the approved report will be uploaded to the OASIS database.

3.3.8 The project archive will be prepared according to the recommendations in Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation (AAF 2007), and Standards in the Museum Care of Archaeological Collections (Museums and Galleries Commission 1992).

3.3.9 The project archive will be deposited with an appropriate store in accordance with the terms and conditions which are to be agreed with the store in advance of deposition.

3.3.10 Notes or articles describing the results of the archaeological fieldwork will be submitted for publication to an appropriate local journal and/or national journals, dependant on the nature of the results.

3.3.11 OASIS (Online AccesS to the Index of archaeological investigationS) data capture forms will also be completed and submitted on completion of the project.

4.0 TIMETABLE & PERSONNEL

4.1 Myk Flitcroft MIfA (CgMs Senior Associate Director) will be in overall charge of the project and will monitor the work on behalf of the developers, Kier Construction.

4.2 The archaeological strip and record fieldwork will be undertaken by a professional archaeological team from Trent & Peak Archaeology. It is anticipated that the initial site strip will take 2 weeks to complete, with works supervised by one archaeologist. Additional staff will be deployed as necessary to enable the investigation and recording of any exposed archaeological remains. Details and CVs of key personnel and specialists will be provided to the County Archaeological Officer on request.

4.3 CgMs Consulting and Trent & Peak Archaeology are Registered Organisations with the Institute for Archaeologists.

4.4 The fieldwork is anticipated to take place w/c 10 November 2014 & w/c 17 November 2014. Subject to findings, a report will be produced within 4-6 weeks of completion. This reporting programme is subject to review.

5.0 MONITORING

5.1 The aims of monitoring are to ensure that the archaeological works are undertaken within the limits set by this specification, and to the satisfaction of the County Archaeological Officer.

5.2 Myk Flitcroft MifA, Senior Associate Director for CgMs will monitor implementation of the programme of works on behalf of Kier Construction Ltd.

5.3 Ursilla Spence, Nottinghamshire County Council Archaeological Officer, will be given notice of when work is due to commence and will be free to visit the site by prior arrangement with CgMs. The County Archaeological Officer will monitor implementation of the programme of works on behalf of the County Planning Authority and evaluate the work being undertaken on site against the methodology detailed in this specification.

5.4 The County Archaeological Officer will also be responsible for considering any changes to the specification of works; any such alterations should be agreed in writing with the relevant parties prior to commencement of on site works, or at the earliest available opportunity.

6.0 INSURANCE

6.1 The archaeological contractor will produce evidence of Public Liability Insurance to the minimum value of £5m and Professional Indemnity Insurance to the minimum of £5m and Profession.

7.0 HEALTH AND SAFETY

7.1 All works will be in compliance with the Health and Safety at Work Act (1974) and all applicable regulations and Codes of Practice and the Construction Design Management Regulations 2007.

7.2 All archaeological staff will undertake their operations in accordance with safe working practices.

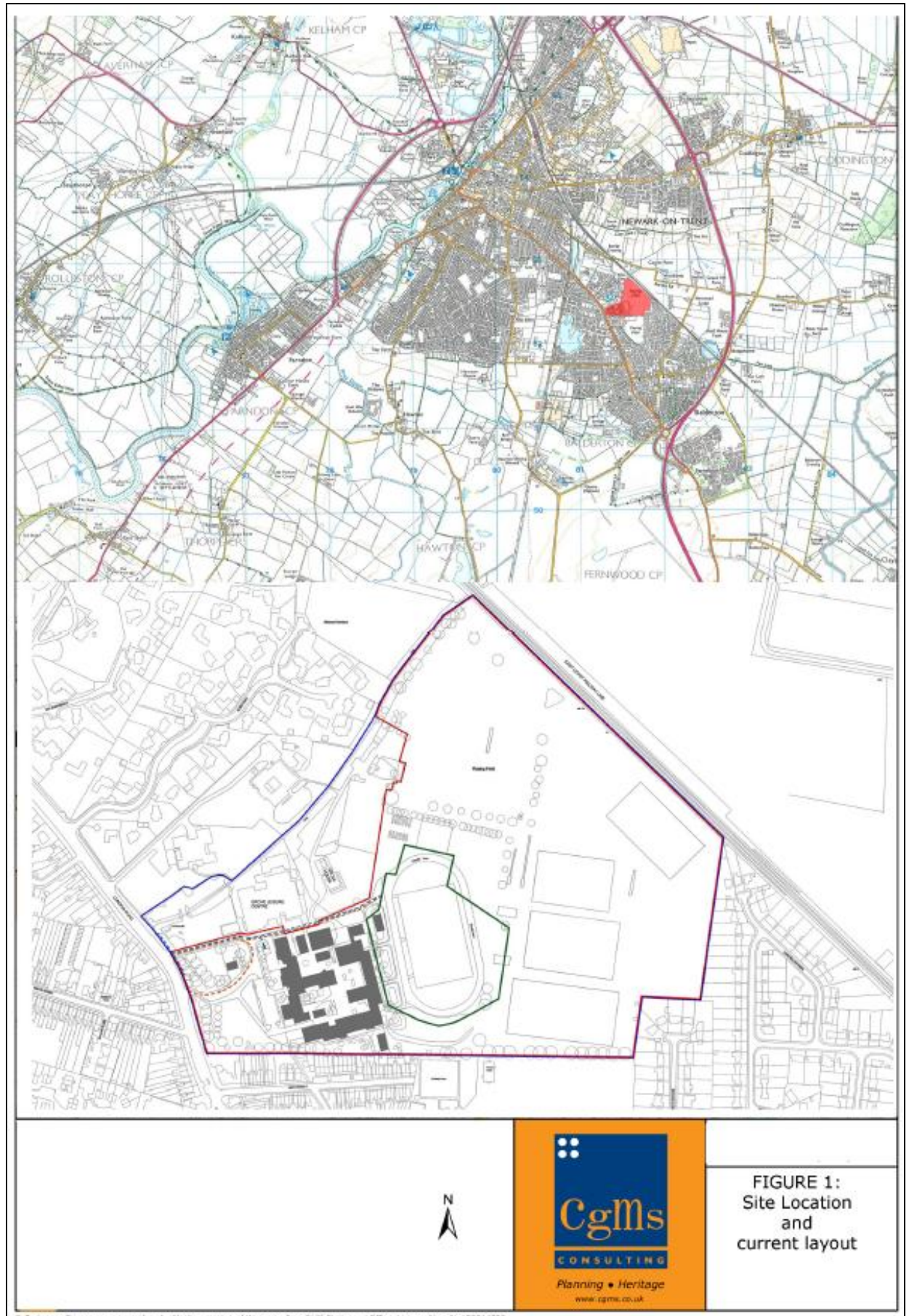
7.3 A site-specific risk assessment will be undertaken and recorded prior to the commencement of work on site.

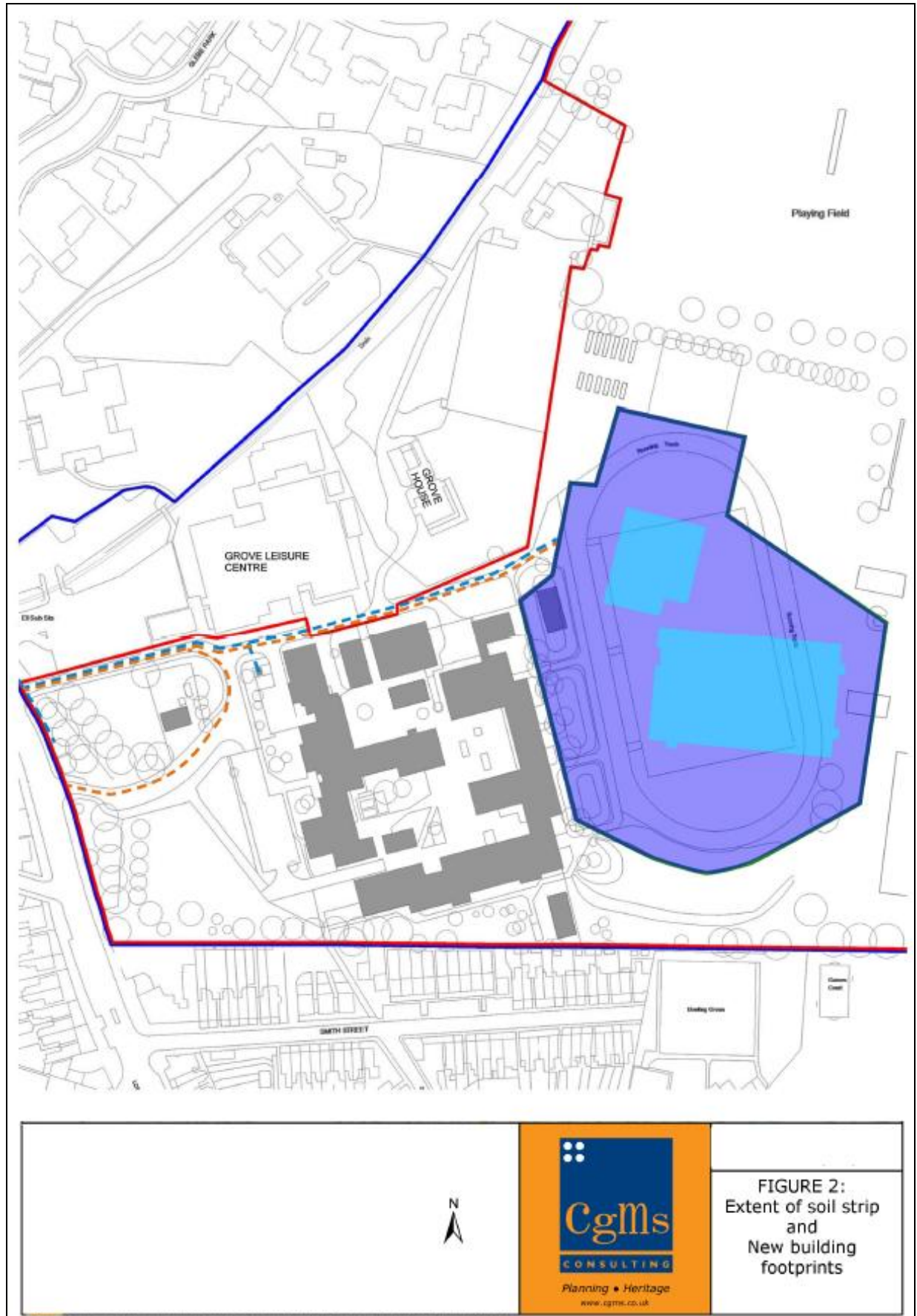
7.4 A continuous process of dynamic risk assessment will be undertaken and if significant hazards are identified a specific risk assessment will be undertaken and recorded. Control measures will be implemented as required in response to specific hazards.

7.5 Safe working will take priority over the desire to record archaeological features or remains, and where it is considered that recording is dangerous, any such features or remains will be recorded by photography, at a safe distance.

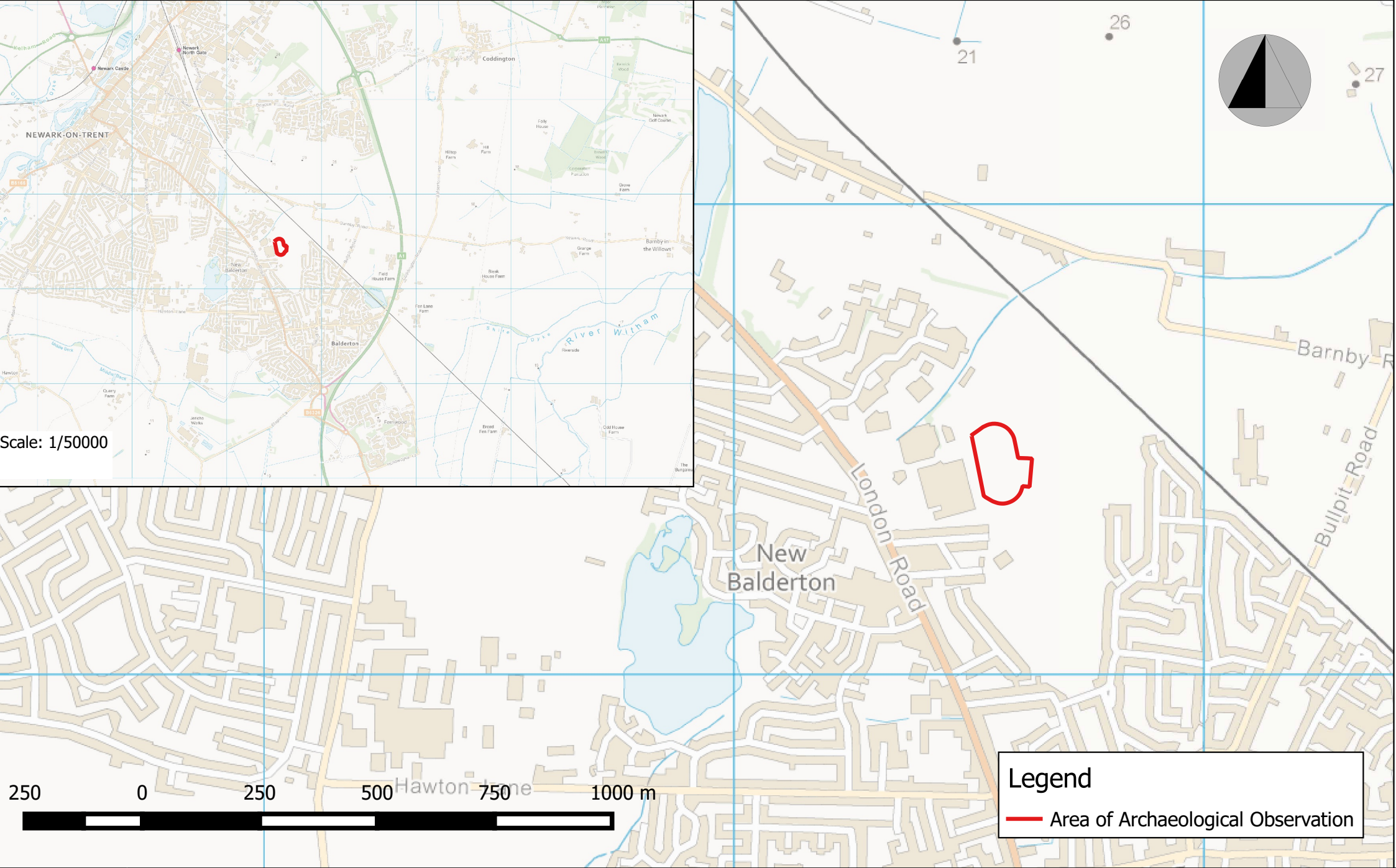
FIGURES

Note: All maps based upon Ordnance Survey are with the sanction of the Controller of H.M. Stationery Office, Crown Copyright Reserved
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Figures



Scale: 1/50000

Legend
— Area of Archaeological Observation



Figure 1: Site Location
Title: NAC Newark Academy
Scale 1/10000

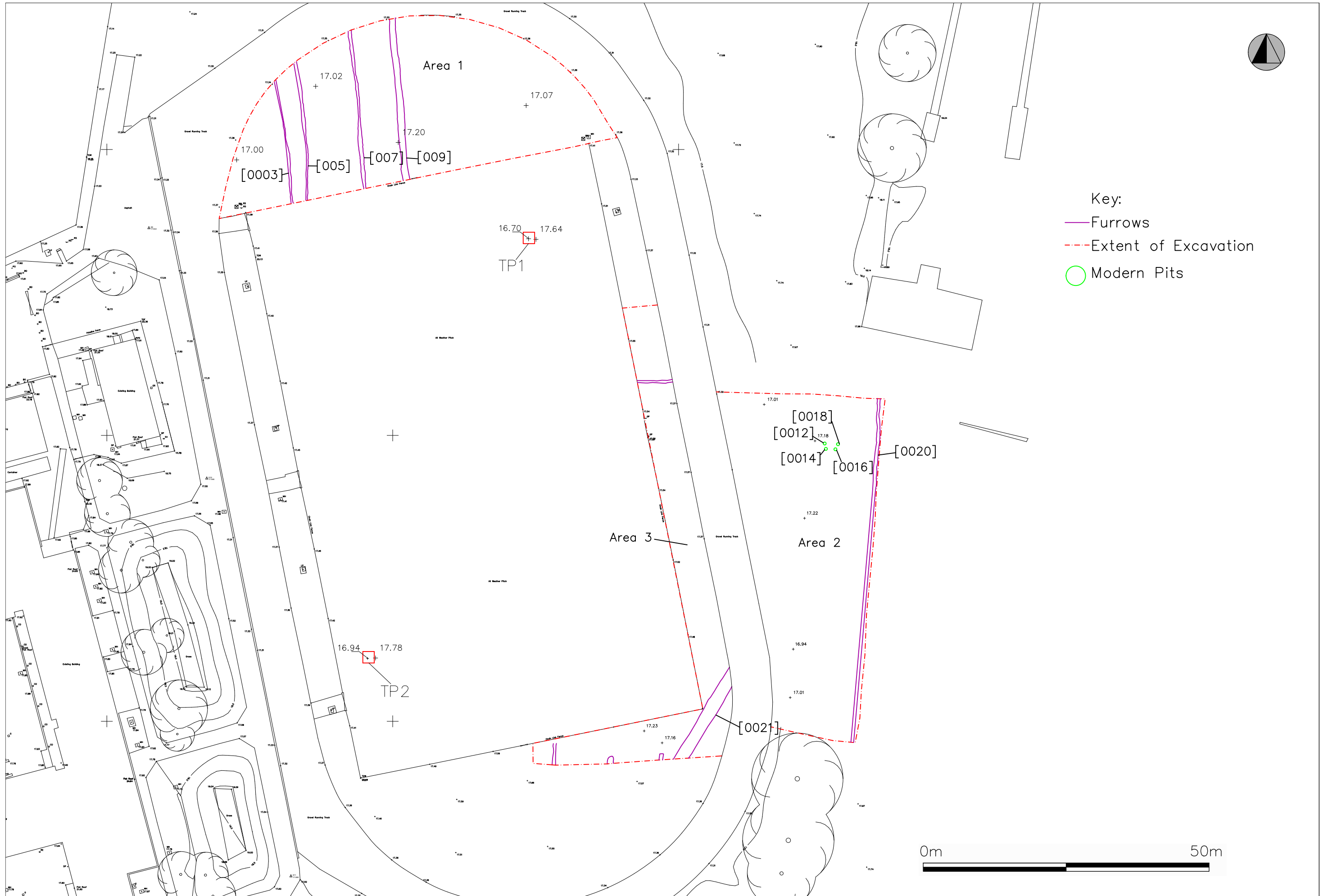


Figure 2: Site Plan

Plates



Plate 1: Area 1 looking north east



Plate 2: Section of Furrow [6] looking south



Plate 3: Section of furrow [4] looking south



Plate 4: Area 2 looking north



Plate 5: Section of furrow [20] looking north



Plate 6: Section of pit [14] looking west



Plate 7: Section of pit [16] looking west



Plate 8: Area 3 looking east



Plate 9: Section of furrow [23] looking south



Plate 10: Section of linear feature [21] looking north east



Plate 11: TP1 looking north west



Plate 12: Section of TP2 looking north