



**STRIP, MAP AND RECORD
METHODOLOGY**

**REVISED
WRITTEN SCHEME OF
INVESTIGATION**

Northern Archaeological Associates Ltd

Marwood House
Harmire Enterprise Park
Barnard Castle
Co. Durham
DL12 8BN

t: 01833 690800

f: 01833 690801

e: gb@naa.gb.com

w: www.naa.gb.com

**GOLDTHORPE INDUSTRIAL
ESTATE, GOLDTHORPE,
SOUTH YORKSHIRE**

Project No.: 849
Text: Gary Brogan
Illustrations: Cath Chisman and Dawn Knowles
Edited by: Paul Johnson

prepared for
Aldi Stores Limited

NAA 10/64
August 2012

NAA Document Authorisation

Project name		Aldi Goldthorpe, South Yorkshire		Project number	
Report title		Goldthorpe Industrial Estate, Goldthorpe, South Yorkshire: Revised Strip, Map and Record Methodology		849	
Report No.		10-64			
Revision	Date	Filename	NAA_0849_Rpt_10-64_WSI.pdf		
v.1	27.08.10	Description	Strip, map and record of all groundworks associated with the construction of an Aldi distribution centre		
			Prepared by	Edited by	Approved by
		Name	Gary Brogan	Richard Fraser	Tania Simpson
v.2	23.11.11	Description	Revised WSI for strip, map and record of all groundworks associated with the construction of an Aldi distribution centre for approval by SYAS		
			Prepared by	Edited by	Approved by
		Name	Gary Brogan	Paul Johnson	Tania Simpson
v.3	16.01.12	Description	SYAS approved revised WSI for strip, map and record of all groundworks associated with the construction of an Aldi distribution centre		
			Prepared by	Edited by	Approved by
		Name	Gary Brogan	Paul Johnson	Tania Simpson
v.4	20.07.12	Description	Revised WSI for strip, map and record to be approved by the client and SYAS		
			Prepared by	Edited by	Approved by
		Name	Gary Brogan	Paul Johnson	Tania Simpson
v.5	28.08.12	Description	SYAS approved revised WSI for strip, map and record		
			Prepared by	Edited by	Approved by
		Name	Gary Brogan	Paul Johnson	Tania Simpson

This document has been approved for release by: *TS*.....

GOLDTHORPE INDUSTRIAL ESTATE
GOLDTHORPE, SOUTH YORKSHIRE

STRIP, MAP AND RECORD METHODOLOGY
REVISED WRITTEN SCHEME OF INVESTIGATION

Summary

1.0	Introduction	2
2.0	Location, topography and geology	4
3.0	Archaeological and historic background	4
4.0	Aims and objectives	6
5.0	Methodology	7
6.0	Monitoring	11
7.0	Post-excavation reporting	12
8.0	Personnel	15
9.0	Sub-contracted studies	16
10.0	Site archive	17
11.0	Programme	19
12.0	Confidentiality, copyright and publicity	19
13.0	Health and safety	19
	REFERENCES	20

GOLDTHORPE INDUSTRIAL ESTATE
GOLDTHORPE, SOUTH YORKSHIRE

STRIP, MAP AND RECORD METHODOLOGY
REVISED WRITTEN SCHEME OF INVESTIGATION

Summary

This document presents a revised written scheme of investigation (WSI) for undertaking archaeological strip, map and record of land to the west of Goldthorpe Industrial Estate, Goldthorpe, South Yorkshire (Fig. 1), in response to a planning condition and prior to the development of an Aldi distribution centre.

The WSI is required as the proposed development will have an impact on a material part of an Iron Age or Romano-British landscape consisting of enclosures and field systems. This historic landscape has been identified as a series of cropmarks in and within the vicinity of the site and geophysical survey has confirmed at least two enclosures and a number of related boundary ditches forming a rectangular field system. The trial trench evaluation of one of the enclosures in the eastern half of the site revealed pits associated with possible occupation activity and confirmed the presence of enclosure ditches. The associated field boundary ditches were also confirmed by the evaluation.

The Government objectives within National Planning Policy Framework (NPPF) state that, especially where a heritage asset is to be lost, opportunities are taken to capture evidence from the historic environment and to make this publicly available (DCLG 2012, 30). Policy 141 within NPPF states that local planning authorities should, 'require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner appropriate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible'. The Practice Guide for the now defunct Planning Policy Statement 5 is still valid and relevant consideration and this states that a written scheme of investigation is the tool to control the standards of any investigation, analysis, reporting and archiving (English Heritage 2010a).

1.0 INTRODUCTION

- 1.1 This document presents a revised written scheme of investigation (WSI) for undertaking archaeological strip, map and record of land to the west of Goldthorpe Industrial Estate, Goldthorpe, South Yorkshire (Fig. 1), in response to a planning condition and prior to the development of an Aldi distribution centre. The site is currently situated within three fields located immediately to the west of Goldthorpe Industrial Estate. The eastern half of the site was subject to archaeological investigations from 2001 to 2003 as part of a previous development proposal by others. They included a sample geophysical survey of approximately 50% of the area, followed by targeted trial trenching which together successfully characterised the archaeology of the eastern half of the site. A geophysical survey of the western half of the site was undertaken in 2011 and the results of this survey suggest that archaeological remains are also present.
- 1.2 The proposed development consists of a distribution centre with associated loading areas, parking, services and landscaping to be located in a large field south of Carr Dike, a canalised stream that bisects the site. A proposed access road, through a field north of Carr Dike, will connect the new distribution centre with Commercial Road, and except for some landscape bunds along the north bank of Carr Dike the remainder of this field will remain undeveloped. A footpath which runs diagonally across the large field will be re-routed around the southern and western boundaries of the field.
- 1.3 The WSI is required as the proposed development will have an impact on a material part of an Iron Age or Romano-British landscape consisting of enclosures and field systems (Fig. 2). This important historic landscape has been identified as a series of cropmarks in and within the vicinity of the site and the two geophysical surveys has confirmed at least two enclosures and a number of related boundary ditches forming a rectangular field system. The trial trench evaluation of the enclosure in the south-eastern field revealed pits associated with possible occupation activity and confirmed the presence of enclosure ditches. Associated field boundary ditches were also confirmed by the evaluation. Only 500m to the north of the site, at Holly Grove Farm, a further enclosure and field system has been confirmed by geophysical survey and trial trench evaluation. Enclosures and field systems dating to the Roman period have been located at Thurnscoe, 1.6km to the north.
- 1.4 The Government objectives within National Planning Policy Framework (NPPF) state that, especially where a heritage asset is to be lost, opportunities are taken to capture evidence from the historic environment and to make this publicly available (DCLG 2012, 30). Policy 141 within NPPF states that local planning authorities should, 'require developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in

part) in a manner appropriate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible'. The Practice Guide for the now defunct Planning Policy Statement 5 is still valid and relevant consideration and this states that a written scheme of investigation is the tool to control the standards of any investigation, analysis, reporting and archiving (English Heritage 2010a).

- 1.5 This written scheme of investigation has been prepared by Northern Archaeological Associates Ltd (NAA) for Aldi Stores Ltd. It is required by Barnsley Metropolitan Borough Council in response to Condition 13 within the grant of planning permission for planning application No. 2011/0415, '*no development shall take place until the applicant, their agent or successor in title has secured the implementation of a programme of archaeological work in accord with a written scheme of investigation that has been submitted to and approved in writing by the Local Planning authority*'. Therefore, this WSI has been developed in consultation with South Yorkshire Archaeology Service, to ensure that the archaeological work constitutes a scheme of works that is proportionate to the loss of the regionally significant heritage assets of archaeological interest and that the mitigation is appropriate and would therefore be approved by the local planning authority in accordance with Condition 13. South Yorkshire Archaeology Service has confirmed that further evaluation by trial trenching is not required and that the next stage of archaeological mitigation work should be archaeological strip, map and record, undertaken during all soil stripping groundworks associated with the development, including the bulk earthworks and associated services and landscaping. The final stage of work will consist of a report, or series of reports culminating in a published account of the investigation, and ultimately the deposition of the site archive within the appropriate regional museum.
- 1.6 All archaeological works will be undertaken in accordance with relevant standards, guidance and best practice published by English Heritage (1991, 2006), the Institute for Archaeologists (2008a, 2008b) and South Yorkshire Archaeology Service (2011). All archaeological fieldwork will be subject to post-excavation assessment, analysis and reporting. If warranted, the results of the work will also be published in an appropriate journal. Subject to landowner agreement, any finds and archives arising out of the archaeological works will be deposited with the appropriate museum service. Copies of all reports will be deposited with the South Yorkshire Sites and Monuments Record, the recipient museum service and English Heritage.

2.0 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The proposed development area covered by this written scheme of investigation (hereafter referred to as “the site”) comprises parts of three agricultural fields immediately west of Goldthorpe Industrial Estate, to the south-west of Goldthorpe village (Fig. 1). The site, centred on NGR SE 4470 0350, is partially bounded by Commercial Road to the north, Heather Garth Primary School to the south and agricultural fields to the west. The Carr Dike runs within a drain east to west across the northern end of the site, dividing a large field to the south from smaller fields in the north. A footpath runs diagonally across the north-east corner of the site (Fig. 1).
- 2.2 The site encloses approximately 24.18ha of gently undulating agricultural land and lies at an elevation of approximately 28m above ordnance datum.
- 2.3 The underlying solid geology consists of Upper Westphalian coal measures of the Carboniferous period (BGS 1977). The soils and drift geology in the area have not been surveyed (SSEW 1983, Jarvis *et al.* 1984).

3.0 ARCHAEOLOGICAL AND HISTORIC BACKGROUND (FIG. 2)

- 3.1 The eastern half of the site has been subject to a desk-based assessment (Davies and Sayer 2001), a geophysical survey (Webb 2001) and trial trench evaluation (WYAS 2003). The western half of the site has been the subject of a desk-based assessment (Robinson 2007a) and geophysical survey (Biggs 2011). The evaluation has demonstrated that the archaeological remains were preserved beneath topsoil and subsoil layers, a depth of 400mm to 500mm on average. The account below summarises the results of these archaeological investigations.

Iron Age to Romano-British

- 3.2 The site is situated within a wider landscape of late Iron Age to Romano-British settlement enclosures and field systems (Fig. 2). These have been recognised, for the most part, as cropmarks, with the nearest being c. 500m north at Holly Grove Farm (Merrony 1993) and 1.6km to the north at Thurnscoe (Neal and Fraser 2004). A number of these, including Thurnscoe, Jump (Robinson 2007b) and Upper Woodhead Farm, both near Wombswell (Northamptonshire Archaeology 2003), and Armthorpe, near Doncaster (WYAS 2004) have been confirmed by archaeological excavations. The site at Holly Grove Farm was also confirmed through geophysical survey and trial trench evaluation, and included at least two enclosures, a droveway and field boundary ditches. Some of these boundary ditches appear to lead south, across the A635 toward Goldthorpe Industrial Estate and may form part of the same field system within

the proposed development area. The site at Holly Grove Farm was undated but at Thurnscoe, just over 1km to the north, excavation has revealed a very similar site consisting of a series of Romano-British enclosures with associated field systems, linked via a trackway (Neal and Fraser 2004). At Armthorpe excavations revealed progressive sub-division of the land from the Iron Age to the late Roman period, with associated droveways, settlement and corral enclosures, and from one of the field boundary ditches was recovered a very large amount of deliberately dumped Roman pottery.

- 3.3 The geophysical survey of the eastern half of the site revealed that in the northern field was a small rectilinear enclosure, measuring approximately 26m by 22m, with an associated field system radiating from it. A further enclosure, measuring approximately 30m by 24m, was revealed in the southern field and this also appeared to be associated with a field system, possibly the same one, although their alignments were different which may suggest two phases. This enclosure was positioned within the corner of two intersecting field boundary ditches and it has been interpreted as a possible stock corral. The subsequent archaeological evaluation within the southern field, targeting the geophysical anomalies, revealed an enclosure and associated ditches forming a field system, although no dating evidence was recovered. Possible pits located within the enclosure have been tentatively interpreted as resulting from occupation activity.
- 3.4 In 2011 a geophysical survey was undertaken in the western half of the site and this proved that the infilled ditches of the field system extended into this part of the site (Biggs 2011). The ditches define a field system composed of large and small fields, with an additional small corner enclosure or corral. To the south-west a loop in the field ditch was recorded which suggests that there was some pre-existing landscape feature that the excavators of the ditch avoided (Fig. 2). Furthermore, two anomalies in the corner of one of the former fields toward the western edge of the site exhibit a thermoremanent origin, and may represent the location of hearths or kilns. In addition, the evaluation of the eastern field has indicated that features not detected by the geophysical survey, such as pits and small gullies, may survive across the site.

Early medieval

- 3.5 There is no evidence for early medieval activity at the site.

Medieval to Post-medieval

- 3.6 Evidence of medieval or post-medieval ridge and furrow cultivation was recorded throughout the eastern half of the site by the geophysical survey and confirmed during the evaluation. This survived as shallow linear furrows.

3.7 Two parallel north to south aligned rows of pit-like anomalies were revealed within the southern field in the western part of the site by the 2011 geophysical survey. These have been interpreted as possibly related to a former hedgerow and may correspond to a post-medieval field boundary illustrated on historic mapping, although their positions are slightly more to the east than the mapped boundary.

4.0 AIMS AND OBJECTIVES

4.1 The archaeological monitoring of all development related groundworks and the recording and investigation of any archaeological remains which are exposed will seek to achieve preservation by record of those remains.

4.2 The objectives of the archaeological work will be:

- to provide a detailed record of archaeological remains in advance of their loss through construction works;
- to more fully understand the extent, nature and date of archaeological remains; the period of occupation and the relationships between the various periods of human activity;
- to recover and assess any associated structural, artefactual and environmental evidence to help inform understanding of the layout, date, function, phasing, development and economic basis of each area of activity;
- to undertake a programme of investigation which will contribute to the relevant regional research priorities;
- to prepare an illustrated report on the results of the archaeological investigations to be deposited with the South Yorkshire Sites and Monument Record and the National Monuments Record; and
- to undertake further analysis and publish the results in a local, regional or national journal, as appropriate.

5.0 METHODOLOGY

Machine Excavation

- 5.1 The site works should comprise the stripping of topsoil and non-archaeological subsoils across the site, including the area of initial enabling work (Fig. 3). The depth of topsoil and subsoil was recorded during the evaluation as between 400mm and 500mm in the eastern half of the site. The removal of overburden (topsoil and subsoil, vegetation, turf, loose stones, rubble, made ground, tarmac, concrete, hardcore, modern building debris, etc) will be undertaken using 360 degree mechanical excavators fitted with toothless or ditching buckets only, although where materials are exceptionally difficult to lift, a toothed bucket may be used temporarily. All soil removal will be under archaeological supervision.
- 5.2 The mechanical excavator will remove overburden under archaeological supervision down to a level at which significant archaeological deposits are identified or down to natural subsoil deposits, where no archaeological deposits are found at a higher level. Care will be taken not to damage archaeological deposits through excessive use of mechanical excavation. Machine excavation from the surface must be taken down in spits to ensure that deposits or features are not over-excavated and that any artefacts in the topsoil and subsoil are recorded.
- 5.3 Mechanical excavation will cease in any areas where archaeological remains are identified and are deemed to be significant by the monitoring archaeologist. Thereafter all archaeological work will be undertaken by hand unless either extensive or deep deposits require removal.
- 5.4 No mechanical excavators, earthmoving and other vehicles should travel on the freshly stripped natural subsoil surface until any archaeological features have been fully examined and assessed and a strategy for their further treatment established or the area has been certified as archaeologically sterile by the monitoring archaeologist and released back to the principal contractor. Barrier fencing will be erected around those areas that are identified as requiring investigation.

Archaeological excavation

- 5.5 Where archaeological features are encountered they will be cleaned and planned prior to excavation. Thereafter, the excavation of all archaeological or palaeoenvironmental features within a stripped area is necessary to understand the full stratigraphic sequence of deposits down to natural subsoil. When the site has been stripped and any archaeological features cleaned and planned, a monitoring meeting will be held on site with South Yorkshire Archaeology

Service to review the excavation sampling strategy.

- 5.6 As a minimum, all discrete archaeological features will be half sectioned in the first instance. Full excavation of some features may then be required but this aspect of the sampling strategy will be decided at an onsite monitoring meeting with South Yorkshire Archaeology Service. It is anticipated that excavated sample sections will constitute 100% of features of a ritual and ceremonial nature (including burials) and a minimum 20% sample of the overall length of linear features, such as ditches and gullies; where feasible each sample section will not be less than 1m in length, and may typically be 2m in length. Notwithstanding the above, the deposits at junctions or interruptions of linear features will be sufficiently excavated for the relationship between components to be established. Following the hand excavation of 20% of the field boundary ditches, a mechanical excavator fitted with a toothless ditching bucket will be used to excavate a further 30% (making 50% in total) in order to maximise the potential for the recovery of any significant artefactual deposits, such as the Roman pottery found at Armthorpe. Other types of archaeological deposits such as flint scatters or isolated finds will be excavated and sampled as appropriate. This strategy will be reviewed, at a site meeting, with South Yorkshire Archaeology Service in light of the findings when the work is on-going. This could happen at several stages during the project, but there will be an initial site meeting following the main site strip.

Recording

- 5.7 An initial pre-excavation plan of the site and any archaeological features will be compiled using sub-centimetre GPS. This plan will form the basis of discussion with South Yorkshire Archaeology Service to refine the excavation sampling strategy.
- 5.8 A drawn record of all archaeological features will be made at an appropriate scale. Sections/profiles will normally be drawn at a scale of 1:10. Plans will usually be drawn at a scale of 1:20, although largely blank areas will be recorded at a scale of 1:50. Drawings will include appropriate data on levels relative to Ordnance Datum. Drawings will be located within the site and the National Grid using sub-centimetre GPS.
- 5.9 Written descriptions of archaeological features/deposits will be recorded on *pro forma* context sheets, which employ standard archaeological recording conventions.
- 5.10 A detailed photographic record of the site and any encountered archaeology will be produced during the work. Formal record photographs will be taken on film using 35mm black and white and 35mm colour slides. To supplement

these high resolution digital shots will also be taken.

Finds retrieval

- 5.11 Archaeological artefacts will normally be collected as bulk finds, but artefacts deemed to have special significance will be three-dimensionally recorded prior to removal. Finds will be appropriately recorded, processed and submitted for post-excavation assessment.
- 5.12 All recovered finds will be appropriately packaged and stored under optimum conditions. Finds recovery and storage strategies will be in accordance with published guidelines (English Heritage 1995; Watkinson and Neal 1998). If appropriate, provision will be made for site visits from the conservator, particularly if timber structures or fragile finds are exposed which may require specialist lifting.
- 5.13 A systematic metal detecting survey shall be undertaken of all exposed areas within the site if appropriate, including the scanning of topsoil and spoil heaps. It shall be carried out by suitably-experienced individuals working under direct archaeological supervision. All detectorists working on the site shall have signed a form waiving any claim to finds, including those falling within the scope of the Treasure Act 1996 Code of Practice (revised 2002).
- 5.14 In accordance with English Heritage guidance (2001), all iron objects, a selection of non-ferrous artefacts (including all coins) and a sample of any industrial debris relating to metallurgy will be x-radiographed before assessment. Where there is evidence for industrial activity, large technological residues will be collected by hand, with separate samples collected for micro-slugs, in accordance with published guidelines (English Heritage 2001).
- 5.15 Any artefacts of gold or silver recovered during the course of the archaeological works which are considered to be treasure will be dealt with in accordance with the Treasure Act Code of Practice (HMSO 1996, revised 2002). Any such finds would also be reported to the Finds Liaison Officer for South and West Yorkshire. Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the finds from theft.

Burials and pyre deposits

- 5.16 Any human remains (inhumations and cremations/pyre deposits) encountered during the work will be investigated, planned, recorded and removed. Any such remains will be reported to South Yorkshire Archaeology Service and an application for a 'Licence for the Removal of Human Remains' will be made to the Ministry of Justice. If a burial is partially beyond the extent of excavation

an on-site meeting will be held with South Yorkshire Archaeology Service and the client. Where cremated bone and/or pyre deposits are encountered, bulk samples will be taken to ensure complete recovery. Where appropriate, either a conservator or an osteoarchaeologist would attend site to advise on recovery and recording. Recovery and processing of human remains will be undertaken in accordance with published guidelines (McKinley and Roberts 1993; English Heritage 2002a; English Heritage and Church of England 2005). Artefactual or ecofactual material will be recovered in accordance with the finds retrieval and sampling methodologies set out elsewhere in this section.

Environmental/dating sampling

- 5.17 From the 11 bulk soil samples (each 10 litres) retrieved during the evaluation, charcoal was recovered from six of the flots and charred cereal grains were recovered from two, both fills of ditches forming the corner enclosure or corral. Therefore it is considered that there is moderate potential for environmental remains and material suitable for scientific dating to be preserved at the site.
- 5.18 Bulk soil samples of 40 litres, where possible, will be taken from appropriate deposits and submitted to the named environmental specialist for assessment of their environmental potential, including charcoal, small bones, cereal grains, pollen, mollusca and macro-environmental material. Particular attention will be paid to the recovery of samples from any waterlogged deposits that may be present. Recovery and sampling of environmental remains will be in accordance with published guidelines (English Heritage 2002b, 2003, 2010b). Samples will be specifically taken for pollen analysis from appropriate deposits (e.g. the primary silts of pits and ditches) to answer targeted questions about the contemporary site environment and activities, and the period immediately following its abandonment. Any other types of samples will be taken as appropriate.
- 5.19 Organic-rich deposits will either be bulk sampled or sampled in extended columns. Parallel samples will also be taken for radiocarbon dating and for plant and macrofossil assessment if appropriate.
- 5.20 Any buried former ground surfaces, which have been protected either by accumulation of overlying sedimentary deposits or burial beneath banks, will be specifically targeted for palaeoenvironmental sampling. The primary focus for palaeoenvironmental studies from such deposits will be pollen, insect macrofossils, wood (range of species), the micromorphological analysis of the palaeosol and a dating program to address and date major changes in the site landscape linked to questions addressing the form and function of the site as well as activities that were undertaken in different enclosures. Advice from the named environmental specialists will be sought.

- 5.21 Where animal bones are well preserved within archaeological contexts at the site, bulk samples will be taken to retrieve assemblages that can be used to investigate the frequencies and identities of bird and fish bones, and to investigate the relative frequencies of bones of different species (avoiding the inevitable size-based biases in hand-recovered collections). This would inform on site activities and perhaps aid interpretation of certain context types and also the function of specific zones within the enclosure system. In order to achieve this large bulk sediment samples, of up to 100 litres, will be taken from deposits in which animal bones are well preserved and sieved (either wet or dry) through coarse mesh of approximately 5 – 10mm diameter.
- 5.22 Secure contexts will be sampled for dating as appropriate (whether on site or as sub-samples of processed bulk samples). This might include radiocarbon dating, archaeomagnetic dating and dendrochronological dating. Samples for archaeomagnetic dates, if appropriate, will be taken on site by the relevant specialist. Samples for dendrochronological dates, if appropriate, will be taken either on site or from recovered timbers by the relevant specialist in accordance with published guidelines (English Heritage, undated). Samples will be processed subsequent to initial post-excavation assessment.
- 5.23 Where appropriate, sampling strategies will be reviewed at intervals in consultation with the environmental and botanical specialists and the English Heritage Regional Science Advisor. The environmental specialists will be afforded the opportunity to visit the site and to advise on the environmental sampling strategy. Any specialist recommendations will be implemented.

6.0 MONITORING

- 6.1 The South Yorkshire Archaeology Service will be kept informed of the progress of the archaeological work and will be notified of the discovery of any unexpected or important archaeological remains. A monitoring meeting would be held to discuss and agree the strategy for excavation, following the initial phase of stripping and mapping, where significant remains are exposed.
- 6.2 During the course of the work, access will be made available at all reasonable times to South Yorkshire Archaeology Service so that they can inspect the archaeological works being undertaken on site. Access to the site will be on the basis of prior notification and will be subject to any necessary health and safety requirements.

7.0 POST-EXCAVATION REPORTING

7.1 On completion of the archaeological fieldwork, a programme of reporting will undertaken in accordance with national and regional guidance and Policy 12.3 within PPS5 (English Heritage 1991, 2006 & 2010a; IfA 2008b; PPS5 2010). If following the initial enabling works there is to be a delay before the main site works, then the enabling works will be subject to a separate report following the stages set out below. The stages of the reports will consist of the following:

- an assessment report on the site records and any finds, with recommendations for further study;
- an up-dated project design to include a programme of further reporting linked to research frameworks;
- an analysis report on the site stratigraphy, the fully analysed finds reports and environmental reports; and if required
- a publication report, which would be a synthesised account of the archaeological investigations, focusing on the significance of the site.

7.2 Specialist assessment of each category of artefactual material will follow English Heritage (1991) guidelines and will include:

- preparation of a descriptive catalogue;
- dating (where possible);
- an assessment of the significance of the assemblage;
- an assessment of the potential for further analysis to contribute to the interpretation of the archaeology of the site;
- an assessment of the potential for further analysis to contribute to artefact studies;
- recommendations for additional artefact illustration and photography; and
- an assessment of the condition of the assemblage and realistic recommendations for conservation, retention or discard and archiving.

- 7.3 Specialist assessment of biological remains will follow English Heritage (2002b) guidelines and will include:
- preparation of a descriptive table or catalogue;
 - identification of material suitable for scientific dating;
 - an assessment of the significance of the assemblage;
 - an assessment of the potential for further analysis to contribute to the interpretation of the archaeology of the site;
 - an assessment of the potential for further analysis to contribute to environmental studies; and
 - an assessment of the condition of the assemblage and realistic recommendations for retention or discard and archiving.

Reporting

- 7.4 An assessment report will be completed within three months of the completion of each phase of the archaeological investigations (enabling works, main works) or one report for all of the archaeological investigation if they are conducted within a reasonably short period of time of each other. The timeframe may be extended if specialist reports are awaited, in which case a revised date will be agreed with the client and South Yorkshire Archaeology Service.
- 7.5 The report(s) will be prepared in accordance with national and regional guidance and will contain:
- a non-technical summary of the project's results;
 - a summary of the project's background;
 - a site location plan reproduced at an appropriate scale;
 - the site's National Grid Reference;
 - an account of the methodology employed;
 - a full description of the project's results;
 - an interpretation of the results in a local, regional or national context as appropriate;

- all relevant plans and section drawings reproduced at appropriate scales;
- site photographs reproduced at a size of at least 5" by 4", to include general site views, a general view of each investigated area and views of key archaeological features and feature groups;
- photographs of significant artefacts;
- a post-excavation assessment of the written, drawn and photographic records;
- a catalogue and post-excavation assessment of each category of artefact recovered during the fieldwork (including a conservation assessment);
- a catalogue and post-excavation assessment of any faunal remains recovered during the fieldwork;
- a catalogue of any soil samples collected and post-excavation assessment of the results of the soil-sampling programme;
- catalogues and post-excavation assessments and summary reports of all scientific dating procedures or other analyses carried out;
- recommendations for further artefactual and environmental analysis;
- recommendations for additional scientific dating;
- recommendations for publication, if warranted (see paragraph 7.8, below);
- a full bibliography;
- appendices containing unedited copies of specialist reports;
- an appendix containing a list and summary description of all contexts recorded;
- a summary of the contents of the project archive and its location, together with its accession number and a timescale for its deposition; and
- a copy of the OASIS form for the project.

7.6 If no archaeological remains are identified then a negative report will be completed and deposited with the South Yorkshire Sites and Monuments Record on instruction from Aldi Stores Ltd.

- 7.7 If further analysis is required, then an Updated Project Design specification will be produced in accordance with national and regional guidance (English Heritage 1991, Annex 2; IfA 2008b) and agreed in writing with South Yorkshire Archaeology Service. The full analysis of any recommended further work would then be undertaken in accordance with the Updated Project Design, and a full post-excavation report produced that will include the analysis reports and a detailed stratigraphical statement on the excavation.
- 7.8 If required by South Yorkshire Archaeology Service, the results of the archaeological investigations will need to be published within a local, regional or national journal as appropriate. This report will form a synthesised account of the archaeological remains, the finds and environmental data set within a local, regional or national context. This will be the final report on the archaeological investigation and it would be completed within 18 months of the completion of the fieldwork.
- 7.9 A copy of all completed post-excavation assessment and analysis reports will be submitted for inclusion within the South Yorkshire Sites and Monuments Record on instruction from Aldi Stores Ltd. A digital copy of all reports will also be supplied.
- 7.10 A summary report of an appropriate length, accompanied by illustrations, will be prepared and submitted in digital format for publication in the appropriate volume of Archaeology in South Yorkshire.
- 7.11 Illustrated notices will be displayed on site, with the client's agreement, explaining what work is in progress and why. Text is to be reproduced as a minimum 16 point font.
- 7.12 Provision will be made for publicising the results of the work locally, e.g. by a presentation at South Yorkshire Archaeology Day and talking to local societies.

8.0 PERSONNEL

- 8.1 NAA has been commissioned by Aldi Stores Ltd to prepare the present WSI. NAA or another archaeological contractor would undertake the archaeological scheme of works and compile the necessary reports.
- 8.2 Gary Brogan, Senior Project Officer, has overall responsibility for the project within NAA.
- 8.3 The archaeological contractor and relevant Project Officer with responsibility for undertaking and reporting on the archaeological works will be assigned prior to the commencement of fieldwork.

8.4 Additional archaeological staff will be engaged to assist with fieldwork as required and will be recruited from personnel with appropriate archaeological experience.

9.0 SUB-CONTRACTED STUDIES

9.1 Although the range of artefacts that may be recovered cannot be accurately predicted at this stage, the most common specialist requirements are listed below. This list gives the nature of the material, the name of the relevant specialist that NAA would use and the associated organisation (if applicable). Each of the specialists listed below has a proven record of expertise in their particular field of work and has previously undertaken specialist work for NAA. If another archaeological contractor is appointed to undertake the fieldwork and reporting they must submit their list of specialists to South Yorkshire Archaeology Service for approval. Assemblages will only to be studied if they have come from secure contexts and are relevant to answering specific questions on activities at the site, consumption and the site environment.

Material	Specialist
Worked flint	Peter Rowe
Prehistoric pottery	Terry Manby / Chris Cumberpatch
Roman pottery	Ruth Leary
Anglo-Saxon pottery	Jane Young
Medieval & post-medieval	Chris Cumberpatch
Human bone	Malin Holst (York Osteoarchaeology Ltd)
Animal bone	Deborah Jaques (Palaeoecology Research Services)
Palaeobotanical remains and molluscs	John Carrott (Palaeoecology Research Services)
Insect remains	Harry Kenward (Environmental Archaeology Unit)
Conservation	Jenny Jones (Durham University)

9.2 Further details of the individuals and organisations listed can be supplied if required.

10.0 SITE ARCHIVE

- 10.1 Archiving work will be carried out in accordance with local policy (Turnpenny 2012), national guidelines (Brown 2007 and IfA 2008c) and the archive will be assembled in accordance with the specifications set out by English Heritage (1991). Also in line with the local policy the archaeological contractor will complete and submit a 'Project Initiation Form' to the recipient museum and South Yorkshire Archaeology Service after they have been commissioned but before the start of the fieldwork (Turnpenny 2012, Appendix 1). A 'Mid-Project Agreement Form' will also be sent to the recipient museum and South Yorkshire Archaeology Service at the half-way point of the fieldwork (*ibid*, Appendix 3) and on completion a 'Completion Form' will be submitted (*ibid*, Appendix 4).
- 10.2 The site archive will contain all of the data collected during the investigative work detailed in section 5.0 above, including records, finds and environmental samples. It will be quantified, ordered, indexed and internally consistent.
- 10.3 Adequate resources will be provided during fieldwork to ensure that records are accurate and internally consistent.
- 10.4 Archive consolidation will be undertaken immediately following the conclusion of archaeological fieldwork. As part of this consolidation:
- the site record will be checked, cross-referenced and indexed as necessary;
 - all retained finds will be cleaned, conserved, marked and packaged in accordance with the requirements of the recipient museum;
 - all retained finds will be assessed and recorded by suitably qualified and experienced staff. *Pro forma* recording sheets will be used. Initial artefact dating will be integrated with the site matrix; and
 - all retained environmental samples will be processed by suitably experienced and qualified staff and recorded using *pro forma* recording sheets.
- 10.5 In addition to the site records, artefacts, environmental remains and other sample residues, the archive will contain:
- site matrices where appropriate;
 - a summary report synthesising the context record;

- a summary of the artefactual record; and
 - a summary of the environmental record.
- 10.6 The integrity of the primary field record will be preserved. Security copies will be maintained where appropriate.
- 10.7 The archiving of any digital data arising from the project will be undertaken in a manner consistent with professional standards and guidance (Richards & Robinson 2000).
- 10.8 An online OASIS form will be initiated immediately before fieldwork commences and key fields will be completed on the *Details, Location* and *Creators* forms. Upon completion of the fieldwork, all parts of the OASIS online form will be completed for submission to the South Yorkshire Sites and Monuments Record. This will include an uploaded .pdf version of the entire report (a paper copy will also be included with the project archive). The OASIS form will be validated by South Yorkshire Archaeology Service once they have received the report, which will become a public document upon submission.
- 10.9 A copy of the report and the full site archive will be deposited with an appropriate local museum on completion of the final report (i.e. within twelve months of the completion of the fieldwork). The beneficiary museum will be determined and contacted in advance of the commencement of fieldwork. Deposition will be subject to the agreement of the client. Deposition shall be in accordance with written guidelines on archive standards and procedures (Society of Museum Archaeologists 1995). The archaeological contractor will liaise with the museum curator regarding requirements for ordering, boxing and labelling the site archive.
- 10.10 In addition to the deposition of the archive, copies of all relevant reports will be deposited with the South Yorkshire Sites and Monuments Record, the English Heritage Regional Science Advisor and the National Monuments Record.
- 10.11 Unless agreed otherwise with the local planning authority, the archaeological condition will be considered discharged once the archive and all reports, including any warranted publication report, have been agreed with and deposited.

11.0 PROGRAMME

- 11.1 The works programme has yet to be finalised. However it is anticipated that a programme of site enabling works will be undertaken in 2013, and this will comprise the construction of the first stage of the site access road at the corner with Dudley Drive and Commercial Road, and the re-routing of the footpath from current position to around the southern and western side of the site.
- 11.2 The main phase of topsoil strip will be staged. It is anticipated that the first stage would involve the stripping of the topsoil from the bund areas and any archaeological remains exposed by this process would be cleaned, mapped and recorded. The second stage would then be the main site strip, with the spoil being stored in the bund areas. In order to assist the construction schedule, zones of the site could be cleared of archaeological remains as per section 5.6 and handed over to the principal contractor following monitoring and approval by South Yorkshire Archaeology Service.

12.0 CONFIDENTIALITY, COPYRIGHT AND PUBLICITY

- 12.1 The copyright of any written, graphic or photographic records and reports will rest with the archaeological contractor; that is, with the archaeological organisation undertaking the fieldwork and analysis. The archaeological contractor will grant additional licences in favour of the repository accepting the archive and the South Yorkshire Sites and Monuments Record to use such documentation for their statutory functions and to provide copies to third parties as an incidental to such functions.
- 12.2 During the course of archaeological investigations, no publicity will be entered into with respect to the results of the work without the express consent of Aldi Stores Ltd.

13.0 HEALTH AND SAFETY

- 13.1 The archaeological contractor will comply with the 1974 Health and Safety Act and its subsequent amendments in all of its operations. The FAME (2010) manual on archaeological health and safety would be followed for site works and it is normal practice to provide first aid boxes, an accident book and a telephone for each project. A risk assessment complying with the Management of Health and Safety at Work Regulations (1999) will be prepared in advance of the commencement of site works. The work will be supervised by a competent member of staff who has all necessary first aid training. Appropriate PPE (safety helmets, reflective jackets and safety boots) will be worn at all

times. Site staff will also be appropriately equipped in terms of bad weather gear.

- 13.2 The archaeological contractor would adhere to the sub-contractors duties within the CDM Regulations (2007). The archaeological contractor would co-operate with the principal contractor, the CDM coordinator and the designers.

REFERENCES

- Biggs, M. (2011) *Geophysical Survey Report: Goldthorpe, South Yorkshire*. Stratascan unpublished report
- British Geological Society (BGS) (1977) *Geological Survey, Ten Mile Map, South Sheet (Solid)*
- Brown, D. H. (2007) *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation*. Published by IFA on behalf of the Archaeological Archives Forum (AAF)
- Davies, G. and Sayer, D. (2001) *Archaeological Desk-Based Assessment of Land Adjacent to Goldthorpe Industrial Estate*. ARCUS unpublished report
- Department for Communities and Local Government (DCLG) (2012) *National Planning Policy Framework*
- English Heritage (undated) *Dendrochronology: Guidelines on producing and interpreting dendrochronological dates*
- English Heritage (1991) *Management of Archaeological Projects*
- English Heritage (1995) *A Strategy for the Care and Investigation of Finds*
- English Heritage (2001) *Archaeometallurgy*
- English Heritage (2002a) *Human Bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports*
- English Heritage (2002b) *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation*
- English Heritage (2003) *Archaeological Science at PPG16 interventions: Best Practice Guidance for Curators and Commissioning Archaeologists*
- English Heritage (2006) *Management of Research Projects in the Historic Environment*
- English Heritage (2010a) *PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide*
- English Heritage (2010b) *Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood.*
- English Heritage and Church of England (2005) *Guidance for best practice for*

*treatment of human remains excavated from Christian burial grounds in
England*

Federation of Archaeological Managers and Employers (FAME) (2010) *Health and Safety in Field Archaeology*

HMSO (1996, revised 2002) *Treasure Act 1996*

Institute for Archaeologists (IfA) (2008) *Standard and guidance for an archaeological watching brief*

Institute for Archaeologists (2008) *Standard and guidance for archaeological excavation*

Institute for Archaeologists (IfA) (2008c) *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*

Jarvis R. A., Bendelow V. C., Bradley R. I., Carroll D. M., Furness R. R., Kilgour I. N. L. and King S. J. (1984) *Soils and Their Use in Northern England* Soil Survey of England and Wales Bulletin no. 10

McKinley, J. and Roberts, C. (1993) *Excavation and post-excavation treatment of cremated and inhumed human remains* Institute of Field Archaeologists Technical Paper 13

Merrony, C. J. N. (1993) The Archaeological Assessment in Advance of the Dearne Towns Link Road (Stage 4) Development at Goldthorpe. *Archaeology in South Yorkshire* 1992-1993, 43-52

Neal, G. E. and Fraser, R. (2004) A Romano-British Enclosed Farmstead at Billingley Drive, Thurnscoe, South Yorkshire. *Yorkshire Archaeology Journal* 76, 7-92

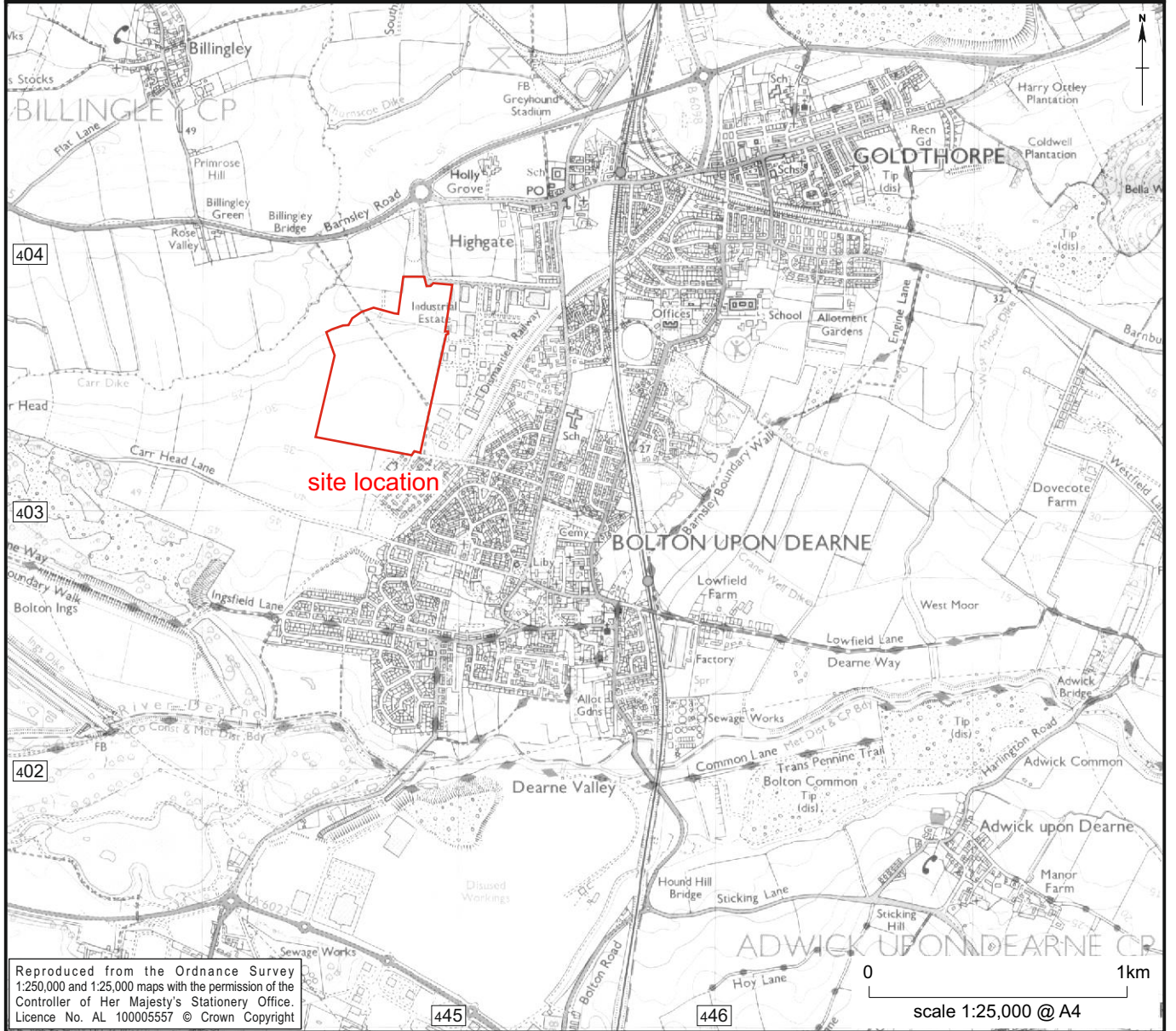
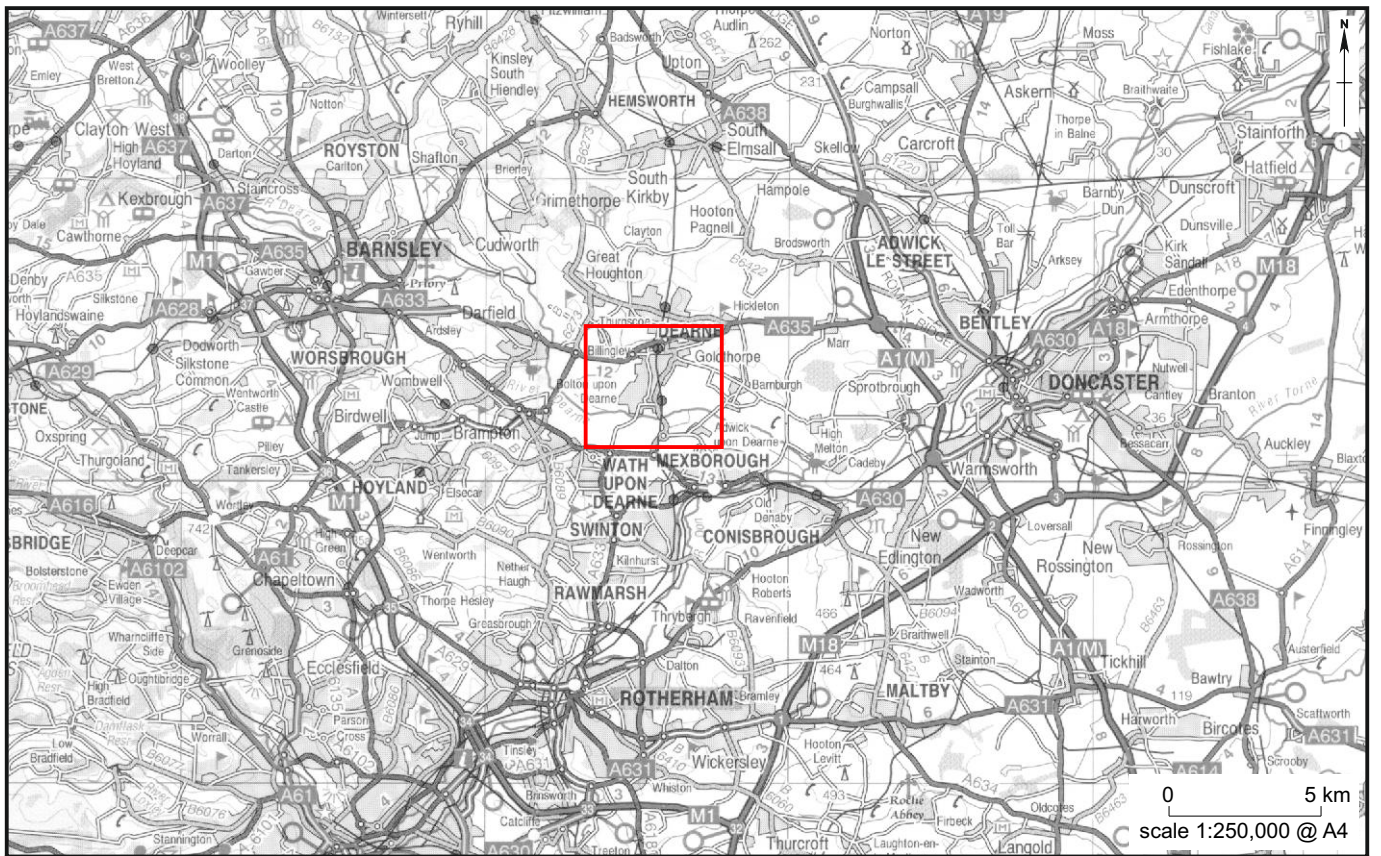
Northamptonshire Archaeology (2003) *Woodhead Opencast site, Upper Wood Head Farm, Wombwell, South Yorkshire: Archaeological Evaluation*. Unpublished report

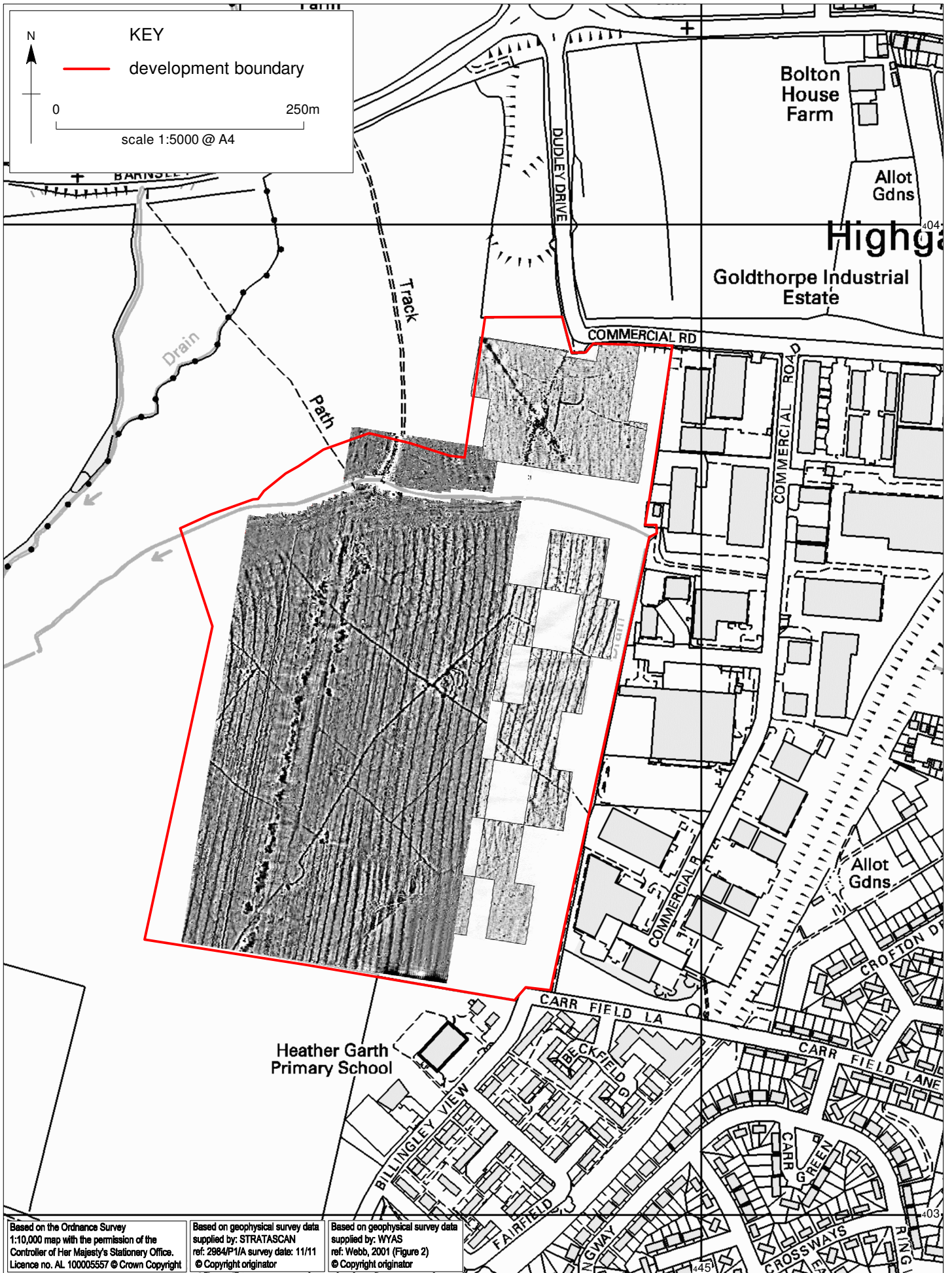
Richards J. and Robinson D. (eds.) (2000) *Digital Archives from Excavation and Fieldwork: Guide to Good Practice, Second Edition* AHDS <http://ads.ahds.ac.uk/project/goodguides/excavation/>

Robinson, G. (2007a) *Goldthorpe Industrial Estate, Goldthorpe, South Yorkshire: Desk-Based Assessment* Northern Archaeological Associates Report 07/86

Robinson, G. (2007b) *Roebuck Hill, Jump, Barnsley, South Yorkshire; Post Excavation Assessment Report* Northern Archaeological Associates Report 07/12

- Society of Museum Archaeologists (1995) *Towards an Accessible Archaeological Archive – The Transfer of Archaeological Archives to Museums: Guidelines for use in England, Northern Ireland, Scotland and Wales*
- Soil Surveys of England and Wales (SSEW) (1983) *Soils of England and Wales 1:250 000: Sheet 1 – Northern England*
- South Yorkshire Archaeology Service (SYAS) (2011) *Yorkshire, the Humber and the North East: A Regional Statement of Good Practice for Archaeology in the Development Process*
- Turnpenny, M. (2012) *Archaeological Archive deposition Policy for Museums in Yorkshire and the Humber*. York Museums Trust
- Watkinson, D. and Neal, V. (1998) *First Aid for Finds (3rd Edition)* RESCUE and the Archaeological Section of the United Kingdom Institute for Conservation
- Webb, A. (2001) *Land Adjacent to Goldthorpe Industrial Estate, Goldthorpe, South Yorkshire: Geophysical Survey*. WYAS unpublished report
- West Yorkshire Archaeology Service (WYAS) (2003) *Goldthorpe Industrial Estate, Goldthorpe, South Yorkshire: Archaeological Trial Trenching*. Report No. 1110
- West Yorkshire Archaeology Service (WYAS) (2004) *Lincolnshire Way, Armthorpe, South Yorkshire*. Report No. 1212

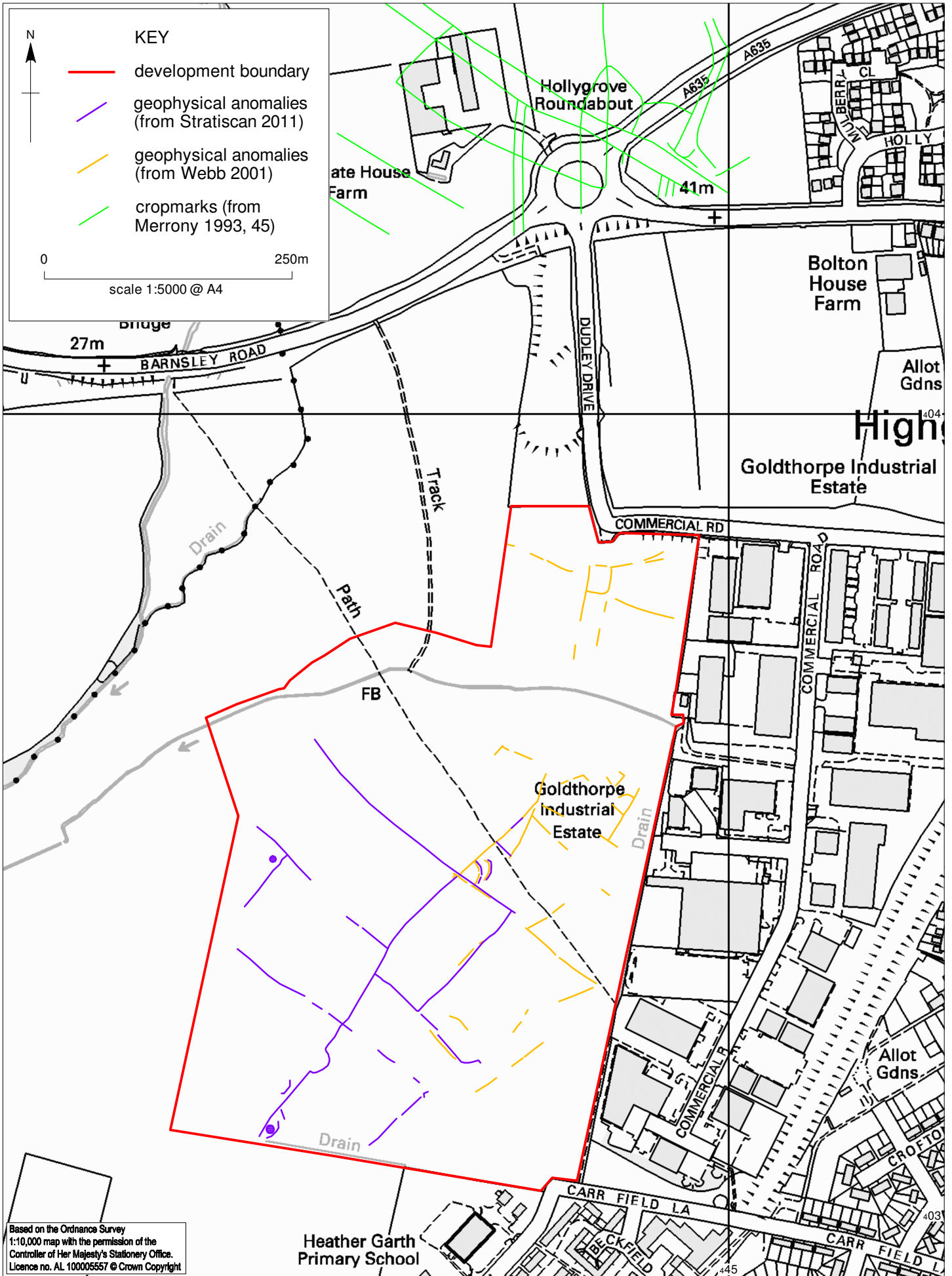




Based on the Ordnance Survey
1:10,000 map with the permission of the
Controller of Her Majesty's Stationary Office.
Licence no. AL 100005557 © Crown Copyright

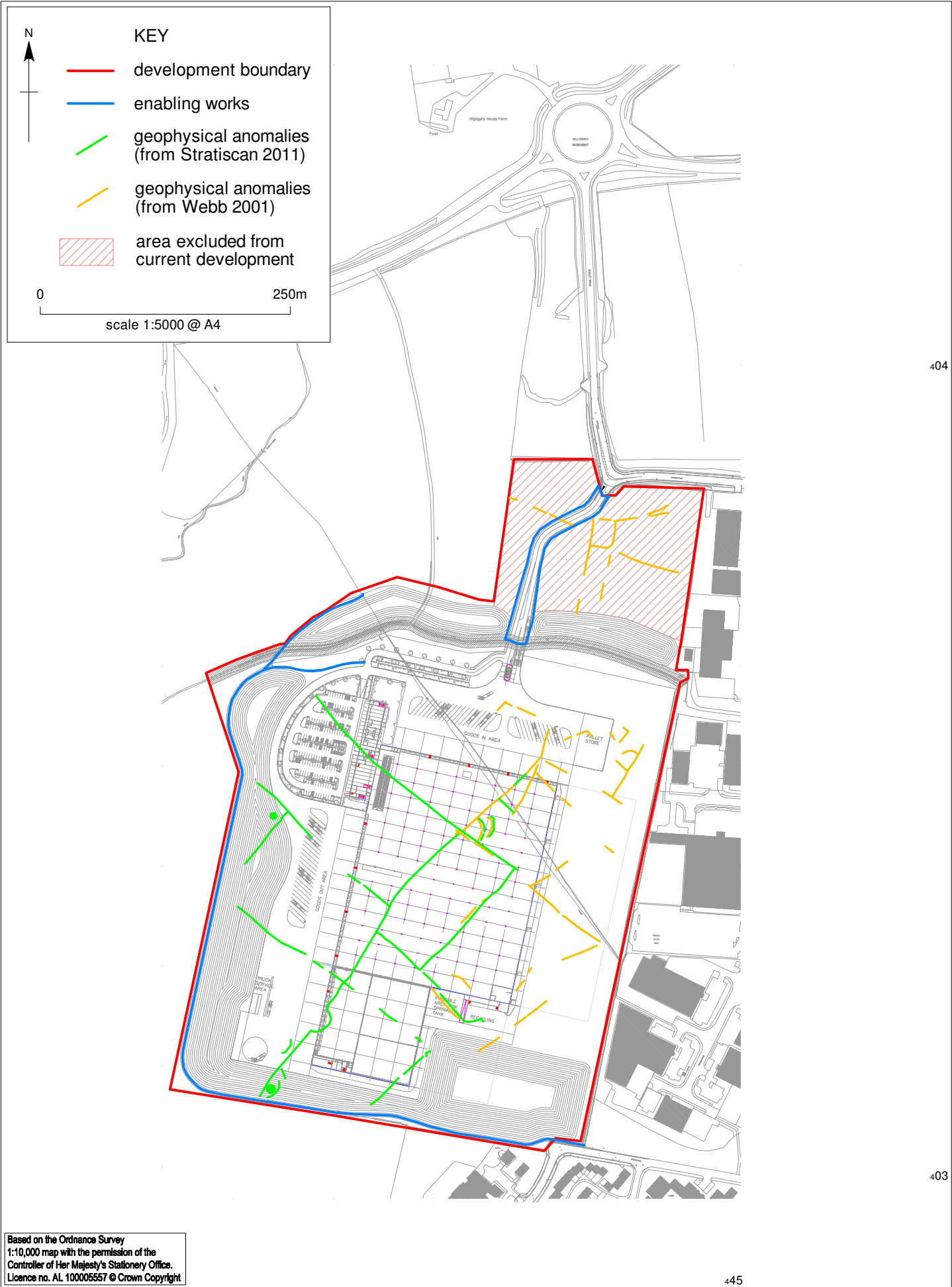
Based on geophysical survey data
supplied by: STRATASCAN
ref: 2984/P1/A survey date: 11/11
© Copyright originator

Based on geophysical survey data
supplied by: WYAS
ref: Webb, 2001 (Figure 2)
© Copyright originator



Goldthorpe Industrial Estate, Goldthorpe: results of geophysical surveys, location of trial trenches and cropmarks

Figure 3



404

403

Based on the Ordnance Survey
 1:10,000 map with the permission of the
 Controller of Her Majesty's Stationery Office.
 Licence no. AL 100005557 © Crown Copyright

445

©NAA 2012

Goldthorpe Industrial Estate, Goldthorpe: results of geophysical survey interpretation
 overlain on proposed construction plan

Figure 4