

# **MAP**

**ARCHAEOLOGICAL PRACTICE Ltd.**

**MAGDALENE HEIGHTS OLD SCRAP YARD  
GILESGATE  
DURHAM**

**NZ 28224 42925  
DM/14/00921/FPA  
MAP 10.03.2015**

**ARCHAEOLOGICAL WATCHING BRIEF**

**MAP  
ARCHAEOLOGICAL PRACTICE LTD**

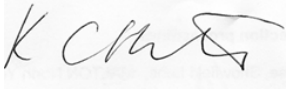
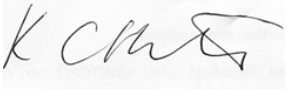
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**MAP 10.03.2015**

**Archaeological Watching Brief Report**

<b>Report Prepared By</b> 	<b>Report Authorised By</b> 
<b>Date:</b> <b>18/09/2015</b>	<b>Date:</b> <b>18/09/2015</b>

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**Archaeological Watching Brief Report**

**Summary**

*A programme of monitored archaeological observation, investigation and recording (an Archaeological Watching Brief) was carried out by MAP Archaeological Practice Ltd. during the construction of access stairs and path for student accommodation units at Magdalene Heights Old Scrap Yard, Gilesgate, Durham (NZ 28224 42925) on the 18<sup>th</sup> August 2015. The work involved monitoring the groundworks associated with the construction of access stairs and a path to the Grade I Listed Building and Scheduled Monument of the Chapel of St. Mary Magdalene located to the south of the new student accommodation.*

*A deposit of topsoil and a deposit of clay was observed overlying natural sand deposits. No archaeological features, deposits or finds were encountered during the Archaeological Watching Brief.*

**1. Introduction**

1.1 This report sets out the results of an Archaeological Watching Brief that was undertaken on the 18<sup>th</sup> August 2015 during the groundworks associated with the construction of an access path/walkway and stairs for the development at Magdalene Heights Old Scarp Yard, Gilesgate, Durham (NZ 28224 42925; Fig. 1). The Archaeological work was undertaken to fulfil an archaeological condition attached to the Planning

Application Consent (DM/14/00921/FPA) and to comply with Scheduled Monument Consent.

- 1.2 The Archaeological Watching Brief was designed to provide the appropriate level of recording for archaeological remains, deposits or finds that might be affected by the development, in accordance with the recommendations of the National Planning Policy Framework (March 2012).
- 1.3 All work was funded by the Ashcourt Group.
- 1.4 All maps within this report have been produced from the Ordnance Survey with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright, Licence No. AL 50453A.

## **2. Site Description**

- 2.1 The site is located in the on the southern part of the Magdalene Heights Old Scrap Yard located east of Ashwood Road and north of Gilesgate (the A690) in Durham City Centre (Figs. 1 and 2).
- 2.2 The area of the Archaeological Watching Brief is c. 25m by 12m, which is located directly north of the remains of St. Mary Magdalene's Chapel.(Figs. 2-3 & Pls. 1-4).

## **3. Historical and Archaeological Background**

- 4.1 The Development Area lies with the City of Durham. The place-name 'Durham' is derived from the Old England 'dun', meaning hill, and the Old Norse 'holme', which translates to island. Dunholme was Latinised to *Dunelm* which later became Durham (DPP 2014, 24).
- 4.2 The city grew up in conjunction with the cathedral, which was founded in 995AD, when a group of Monks from Lindisfarne founded a monastery. The shrines of St. Cuthbert and the Venerable Bede are

located behind the High Altar of Durham Cathedral. Durham Castle was built next to the Cathedral after the Norman Conquest. The Cathedral and Castle hold a prominent position in the city, on a high promontory surrounded by the River Wear on three sides. During the medieval period, the monastic settlement on the peninsula underwent several phases of expansion. Both the Castle and the Cathedral were enclosed by a curtain wall. The town had separate defences in the Medieval Period.

- 4.3 The Reformation during the Reign of Henry VIII, saw many of the Cathedral furnishings damaged or dismantled, however the buildings remained unharmed. In the seventeenth century, the Castle was sold.
- 4.4 The Chapel of St Mary Magdalene is located on the northern side of the A690 and to the south of the Development Area. The Chapel originally formed part of the Hospital of St Mary Magdalene, which was established in the mid-thirteenth century. It is thought that the Chapel was almost entirely rebuilt in 1370. In 1449-50, the chapel had fallen into a ruinous condition and in May 1451, a licence was granted to consecrate the new church. It is probable that the Chapel became ruinous after the reformation. The Building was rediscovered in 1822. The Chapel is both a Scheduled Ancient Monument and Grade I listed building (NZ 2827 4921). Pevsner described the location of the building as '*stranded*'.
- 4.5 Durham had expanded in the eighteenth and early nineteenth centuries. Evidence from historic maps show that the chapel was located next to the former Gilesgate railway station and associated goods yard. This used to be the only railway station located in the city and was the main line from London to Newcastle. The area surrounding the application site is characterised by the development of nineteenth and twentieth century residential housing as part of the urban sprawl of Durham. The Development Site, formally a scrap yard, was evaluated in support of a previous scheme and that the

result indicated modern fill material up to 3m deep at the southern end and the same material, though shallower, at the northern end, here overlying natural deposits.

#### **4. Aims and Objectives**

4.1 The aims of the Archaeological Watching Brief were observe the groundworks and to record all observed features, finds and deposits that were affected by the development, and to prepare a report summarising the results of the work.

4.2 The aim of the archaeological work was to assess the presence/absence of archaeological features. If archaeology was present then to date, sequence, extent, quality of survival and importance of any archaeological deposits surviving in this area.

- a) To excavate, sample, record and interpret any archaeological features and deposits exposed during topsoil stripping and any excavation associated with the development.
- b) To locate, recover, identify and conserve (as appropriate) any archaeological artefacts exposed.
- c) Provision should be made for the full post excavation, recovery and analysis of any finds or eco-facts recovered from the excavations. Where appropriate it is intended to undertake a post- excavation assessment after completion of fieldwork to assess the potential for further analysis and publication, and to undertake such analysis, reporting and publication as appropriate.
- d) To prepare and submit a suitable archive to the appropriate museum.



## **5. Methodology**

- 5.1 The area of the Archaeological Watching Brief was c. 25m by 12m and lay directly north of the remains of St. Mary Magdalene's Chapel (Figs 2-3 & Pls. 1-4). The proposed development will landscape this area, constructing stairs and a walkway between the residential development to the north and the chapel. A 360<sup>o</sup> tracked excavator with a broad, toothless ditching bucket, undertook the topsoil removal and reduced level dig. All spoil was removed from the area using dumpers working to the north of the Archaeological Watching Brief Area.
- 5.3 All work was carried out in line with the Chartered Institute of Field Archaeologists Code of Conduct (CIFA 2014).
- 5.4 A photographic record was maintained throughout the Watching Brief on a high resolution digital camera (Appendix 2).

## **6. Results (Pls. 1-10)**

- 6.1 Vegetation and a deposit of topsoil between 300mm and 500mm was stripped off to reveal a layer of pale brown clay (Pls. 5 & 8). The clay was revealed across the area beneath the topsoil and contained no features or finds. The clay was removed in the northern and western areas of the Archaeological Watching Brief Area as part of the reduced level dig (Pls. 6, 7, 9 and 10). The clay was between 200mm and 500mm in depth (Pls. 6 & 10) and its removal revealed yellow-brown sand.

## **7. Conclusions**

- 7.1. The deposit of clay, located directly beneath the deposit of topsoil, may have been imported and used to form a stable foundation for the building of the chapel in the Medieval period. There were no finds recovered from the clay to directly date this deposit. No archaeological features, deposit or finds were identified during the Archaeological Watching Brief in either the clay or the sand deposit beneath it.

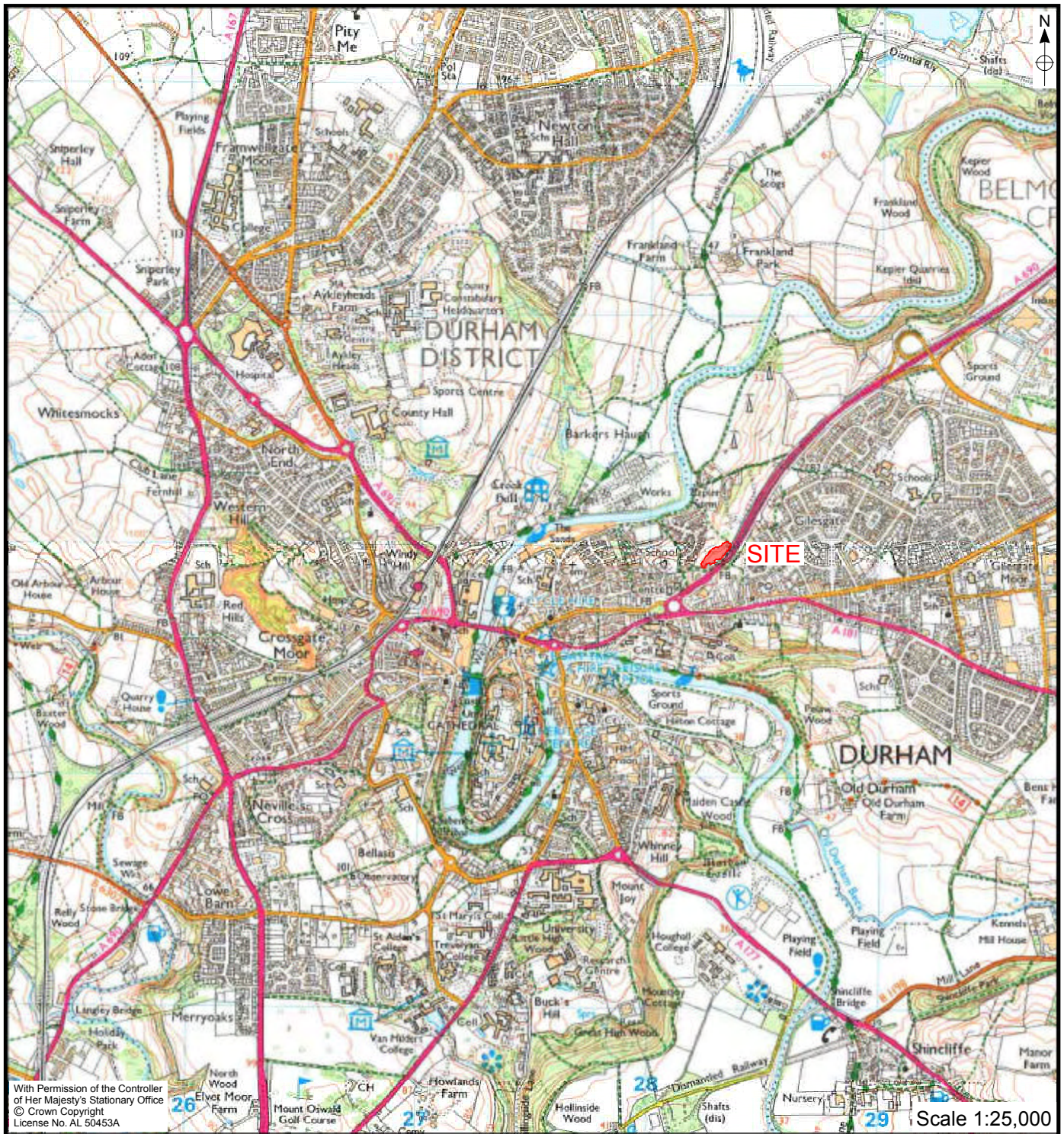


Figure 1. Site Location.



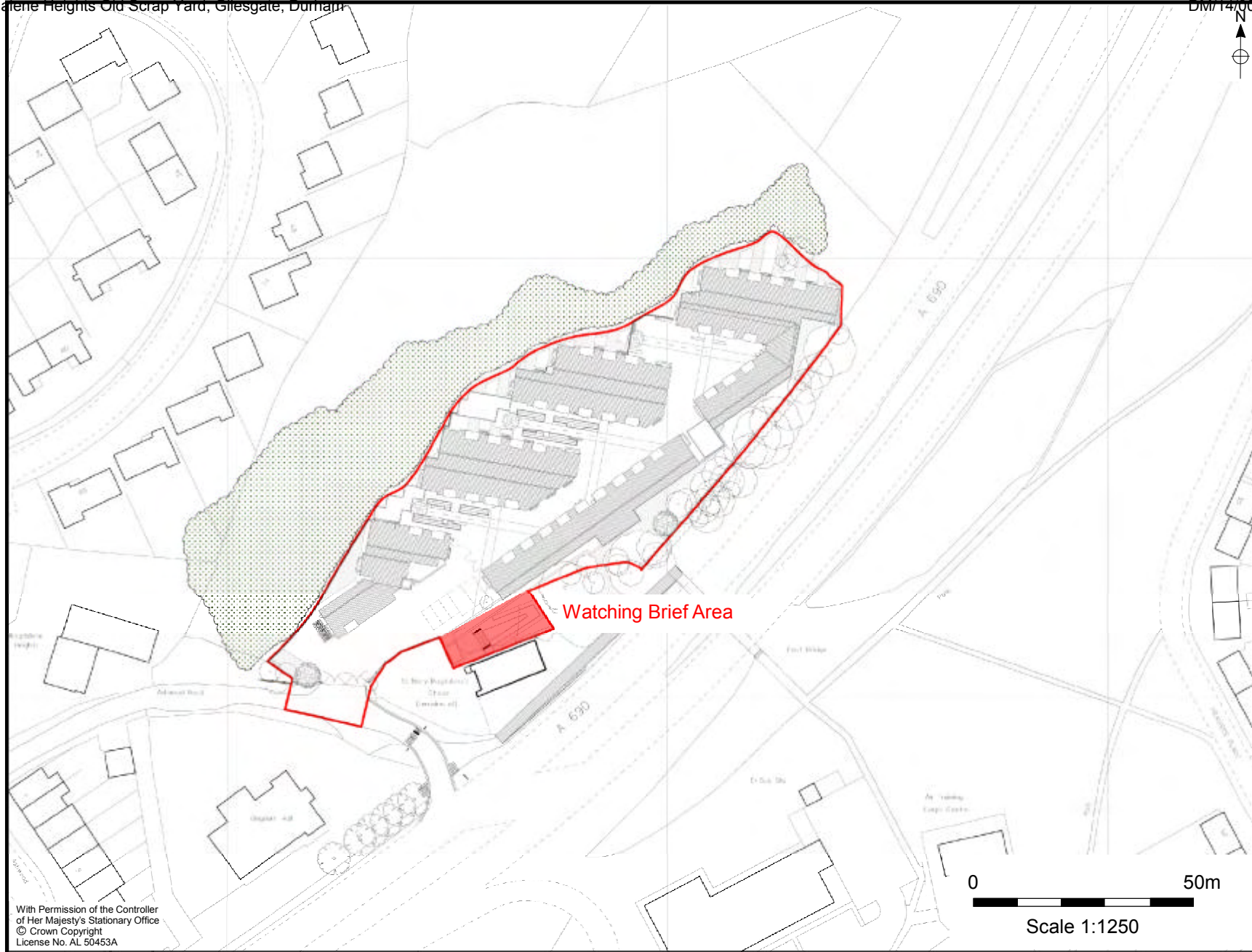


Figure 2. Watching Brief Area.  
MAP Archaeological Practice Ltd.

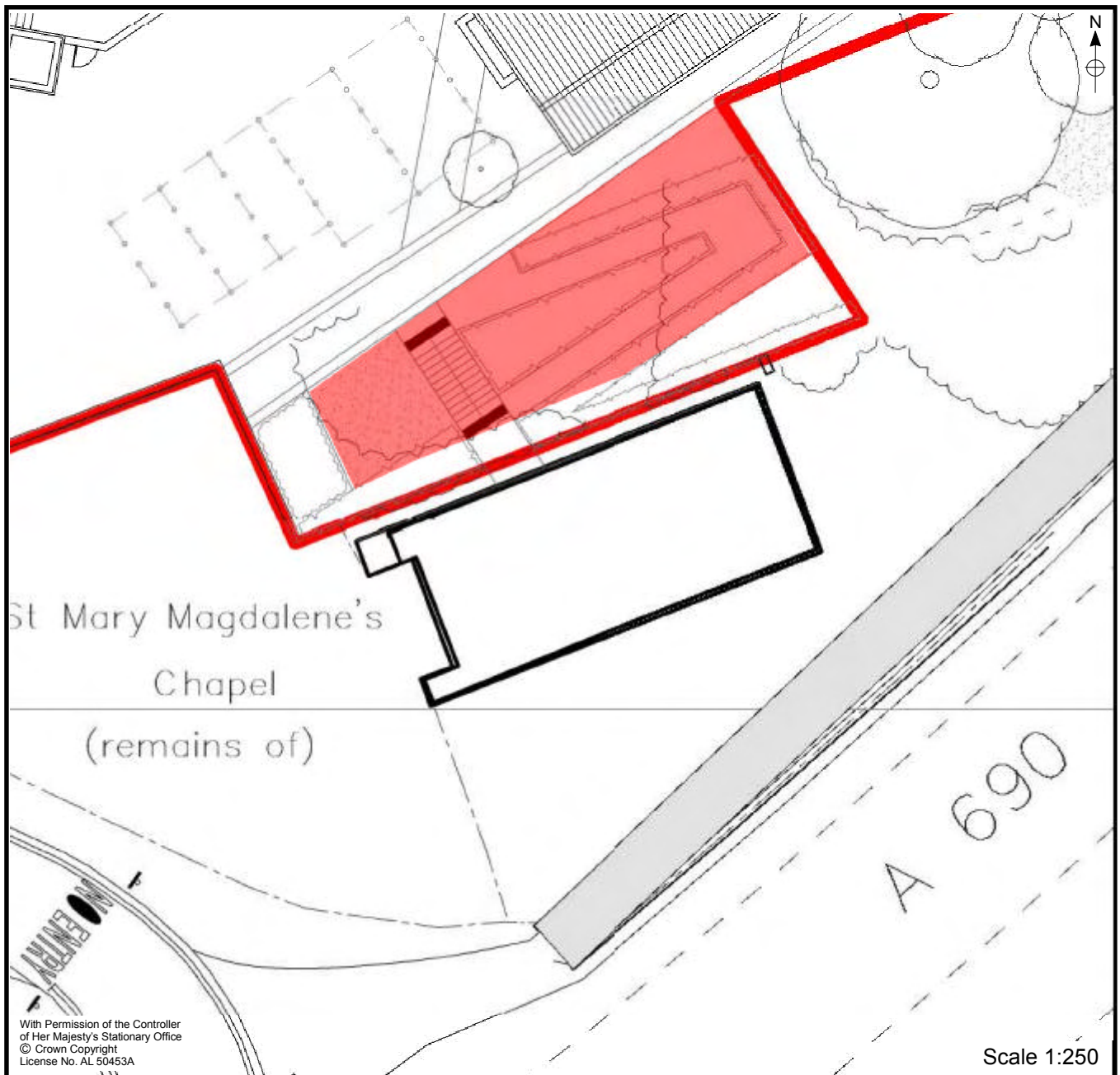


Figure 3. Plan of Path and Stairs.





Plate 1. View of Area of Stairs. Facing South.



Plate 2. View of Area of Stairs and Path. Facing East.





Plate 3. View of Area of Path. Facing East.



Plate 4. View of Area of Path and Stairs. Facing West.





Plate 5. Area of Path after Topsoil Strip. Facing East.



Plate 6. Area of Path after reduced level dig. Facing South.





Plate 7. Area of Path after reduced level dig. Facing East.



Plate 8. Area of Stairs after topsoil strip. Facing West.





Plate 9. Area of Path and Stairs after reduced level dig. Facing East.



Plate 10. Area of Stairs after reduced level dig. Facing West.

## APPENDIX 1

### Magdalene Heights Old Scrap Yard, Gilesgate, Durham (Site Code MAP 10.03.2015)

#### Context Listing

Context	Context Type	Description
001	Deposit	Topsoil: Dark Grey brown sandy silty loam
002	Deposit	Brown firm clay
002	Deposit	Yellow-brown sand

## APPENDIX 2

### Photographic Archive Listing

#### Digital

Frame	Date	Description	Facing
IMGP5795	18/08/2015	Watching Brief Area before start of work	South
IMGP5796	18/08/2015	Watching Brief Area before start of work	South
IMGP5797	18/08/2015	Watching Brief Area before start of work	South
IMGP5798	18/08/2015	Watching Brief Area before start of work	South
IMGP5799	18/08/2015	Watching Brief Area before start of work	South
IMGP5800	18/08/2015	Area of Stairs before start of work	South
IMGP5801	18/08/2015	Area of Stairs and Walkway before start of work	East
IMGP5802	18/08/2015	Area of Stairs and Walkway before start of work	East
IMGP5803	18/08/2015	Area of Stairs and Walkway before start of work	West
IMGP5804	18/08/2015	Area of Stairs and Walkway before start of work	West
IMGP5805	18/08/2015	Area of Stairs and Walkway before start of work	West
IMGP5806	18/08/2015	Area of Stairs and Walkway before start of work	South-west
IMGP5808	18/08/2015	Area of Walkway during topsoil strip.	West
IMGP5809	18/08/2015	Area of Walkway during topsoil strip.	West
IMGP5810	18/08/2015	Area of Walkway during topsoil strip.	West
IMGP5811	18/08/2015	Area of Walkway during topsoil strip.	West
IMGP5812	18/08/2015	Area of Walkway during topsoil strip.	West
IMGP5813	18/08/2015	Area of Walkway during topsoil strip.	West
IMGP5814	18/08/2015	Area of Walkway during topsoil strip.	West
IMGP5815	18/08/2015	Area of Walkway during topsoil strip.	West
IMGP5816	18/08/2015	Area of Walkway after removal of topsoil.	West
IMGP5817	18/08/2015	Area of Stairs during Topsoil Strip	West
IMGP5818	18/08/2015	Area of Walkway during reduced level dig	East
IMGP5819	18/08/2015	Area of Walkway during reduced level dig	West
IMGP5820	18/08/2015	Area of Walkway during reduced level dig	West
IMGP5821	18/08/2015	Area of Walkway during reduced level dig	South-west
IMGP5822	18/08/2015	Area of Walkway during reduced level dig	West
IMGP5823	18/08/2015	Area of Walkway after removal of clay	South
IMGP5824	18/08/2015	Area of Walkway after removal of clay	South
IMGP5825	18/08/2015	Area of Walkway during reduced level dig	South-west
IMGP5826	18/08/2015	Area of Walkway during reduced level dig	East
IMGP5827	18/08/2015	Area of Walkway during reduced level dig	East
IMGP5828	18/08/2015	Area of stairs after removal of vegetation	North
IMGP5829	18/08/2015	Area of Stairs during Topsoil Strip	North
IMGP5830	18/08/2015	Chapel	North
IMGP5831	18/08/2015	Chapel	West
IMGP5832	18/08/2015	Chapel	North

IMGP5833	18/08/2015	Area of Stairs after topsoil strip.	West
IMGP5834	18/08/2015	Area of Stairs during reduced level dig.	West
IMGP5835	18/08/2015	Area of Stairs during reduced level dig.	South-west
IMGP5836	18/08/2015	Area of Stairs during reduced level dig.	West
IMGP5837	18/08/2015	Area of Stairs during reduced level dig.	East
IMGP5838	18/08/2015	Area of Stairs after topsoil strip.	West
IMGP5839	18/08/2015	Area of Stairs during reduced level dig.	North
IMGP5840	18/08/2015	Area of Stairs and Walkway after reduced level dig	West
IMGP5841	18/08/2015	Area of Stairs and Walkway after reduced level dig	West
IMGP5842	18/08/2015	Area of Stairs and Walkway after reduced level dig	West
IMGP5843	18/08/2015	Area of Stairs and Walkway after reduced level dig	West
IMGP5845	18/08/2015	Area of Stairs and Walkway after reduced level dig	West
IMGP5846	18/08/2015	Area of Stairs and Walkway after reduced level dig	West
IMGP5847	18/08/2015	Area of Stairs after reduced level dig	East

## APPENDIX 2

### List of Contributors

On Site Archaeologists	Kelly Hunter
Report, Figures and Plates	Kelly Hunter



**LAND AT MAGDALENE HEIGHTS  
OLD SCRAP YARD  
GILESGATE  
DURHAM**

**NZ 28224 42925**

**MAP Archaeological Practice Ltd**

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**LAND AT MAGDALENE HEIGHTS  
OLD SCRAP YARD  
GILESGATE  
DURHAM**

**NZ 28224 42925**

**1. SUMMARY**

- 1.1 This Written Scheme of Investigation is for a programme of monitored archaeological observation, investigation and recording, "Watching Brief" to be carried out during the erection of student accommodation for 198 units at Land at Magdalene Heights Old Scrap Yard, Gilesgate, Durham (DM/14/00921/FPA).
- 1.2 The watching brief will be conducted in accordance with this Written Scheme of Investigation and will be carried out in accordance with the Chartered Institute for Archaeologists (CIfA) Standard and Guidance for Archaeological Watching Briefs (revised 2008). All stages of the project will be carried out in accordance with the requirements established in the English Heritage volume entitled the *'Management of Research Project in the Historic Environment: (MoRPHE 2006)*.
- 1.3 All maps within this report have been produced from the Ordnance Survey with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright, Licence No. AL 50453A.

**2. SITE LOCATION**

- 2.1 The development is centred on OS grid reference NZ 28224 42925.

**3. PLANNING BACKGROUND**

- 3.1 The Planning Reference (DM/14/00921/FPA), has to have been granted subject to an archaeological condition to secure a programme of archaeological work, which stated that:

3.2 *“No development shall take place on the site until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with mitigation strategy that shall be submitted and approved in writing by the local planning authority. The strategy shall include details of the following;*

*i) Measures to ensure the preservation in situ, or the preservation by record, of archaeological features of identified importance.*

*ii) Methodologies for the recording and recovery of archaeological remains including artefacts and ecofacts.*

*iii) Post-fieldwork methodologies for assessment and analyses.*

*iv) Report content and arrangements for dissemination, and publication proposals.*

*v) Archive preparation and deposition with recognized repositories.*

*vi) A timetable of works in relation to the proposed development, including sufficient notification and allowance of time to ensure that the site work is undertaken and completed in accordance with the strategy.*

*vii) Monitoring arrangements, including the notification in writing to the County Durham Principle Archaeologist of the commencement of archaeological works and the opportunity to monitor such works.*

*Reason: To comply with criteria detailed in the NPPF as the site is of archaeological interest.*

3.3 Scheduled Monument Consent has been granted for the above works (11<sup>th</sup> June 2014, English Heritage Ref. S00083239) for the planting and construction of steps and ramp access and condition c) states ‘No groundworks/building works shall take place until the applicant has confirmed in writing the commissioning of a programme of archaeological work (archaeological watching brief) during the development in accordance with a written scheme of investigation which has been submitted to and approved by the Secretary of State advised by English Heritage’.

#### 4. HISTORICAL/ARCHAEOLOGICAL BACKGROUND

- 4.1 The Development Area lies with the City of Durham. The place-name 'Durham' is derived from the Old England 'dun', meaning hill, and the Old Norse 'holme', which translates to island. Dunholme was Latinised to *Dunelm* which later became Durham (DPP 2014, 24).
- 4.2 The city grew up in conjunction with the cathedral, which was founded in 995AD, when a group of Monks from Lindisfarne founded a monastery. The shrines of St. Cuthbert and the Venerable Bede are located behind the High Altar of Durham Cathedral. Durham Castle was built next to the Cathedral after the Norman Conquest. The Cathedral and Castle hold a prominent position in the city, on a high promontory surrounded by the River Wear on three sides. During the medieval period, the monastic settlement on the peninsula underwent several phases of expansion. Both the Castle and the Cathedral were enclosed by a curtain wall. The town had separate defences in the Medieval Period.
- 4.3 The Reformation during the Reign of Henry VIII, saw many of the Cathedral furnishings damaged or dismantled, however the buildings remained unharmed. In the seventeenth century, the Castle was sold.
- 4.4 The Chapel of St Mary Magdalene is located on the northern side of the A690 and to the south of the Development Area. The Chapel originally formed part of the Hospital of St Mary Magdalene, which was established in the mid-thirteenth century. It is thought that the Chapel was almost entirely rebuilt in 1370. In 1449-50, the chapel had fallen into a ruinous condition and in May 1451, a licence was granted to consecrate the new church. It is probable that the Chapel became ruinous after the reformation. The Chapel is both a Scheduled Ancient Monument and Grade I listed building (NZ 2827 4921). Pevsner described the location of the building as '*stranded*'.
- 4.5 Durham had expanded in the eighteenth and early nineteenth centuries. Evidence from historic maps show that the chapel was located next to the former Gilesgate railway station and associated goods yard. This used to be



the only railway station located in the city and was the main line from London to Newcastle. The area surrounding the application site is characterised by the development of nineteenth and twentieth century residential housing as part of the urban sprawl of Durham. The Development Site, formally a scrap yard, was evaluated in support of a previous scheme and that the result indicated modern fill material up to 3m deep at the southern end and the same material, though shallower, at the northern end, here overlying natural deposits.

## **5. AIMS AND OBJECTIVES**

- 5.1 The aim of this archaeological watching brief is observe the groundworks and to record all observed features, finds and deposits in to establish the presence/absence, date, sequence, nature depth, quality of survival and importance of any archaeological deposits surviving in this area. The area of the Archaeological Watching Brief is c. 25m by 12m as noted on Figure 1 and lies directly north of the remains of St. Mary Magdalene's Chapel. The proposed development will landscape this area, constructing stairs and a walkway between the residential development to the north and a footbridge over the A690.
- a) To excavate, sample, record and interpret any archaeological features and deposits exposed during topsoil stripping and any excavation associated with the development.
  - b) To locate, recover, identify and conserve (as appropriate) any archaeological artefacts exposed.
  - c) Provision should be made for the full post excavation, recovery and analysis of any finds or eco-facts recovered from the excavations. Where appropriate it is intended to undertake a post- excavation assessment after completion of fieldwork to assess the potential for further analysis and publication, and to undertake such analysis, reporting and publication as appropriate.

- d) To prepare and submit a suitable archive to the appropriate museum.

## **6. METHODOLOGY**

- 6.1 The proposed scheme of works shall comprise the archaeological monitoring of all below ground disturbance, including any preliminary landscaping and/or ground preparation. These works should be undertaken under archaeological supervision. The topsoil and any recent overburden can be removed using a rear-acting or 360° mechanical excavator with a wide, toothless ditching bucket. Mechanical excavation equipment will be used judiciously under direct archaeological supervision down to the first significant archaeological horizon or natural subsoil.
- 6.2 If archaeological features were indeed shown to be present, then targeted archaeological excavation would need to take place, in order to establish their nature, significance, date, depth, and quality of survival.
- 6.3 If archaeological deposits are encountered, then they are to be investigated and fully recorded; this may necessitate a temporary halt to construction works in this part of the site, whilst the investigations and recording are completed.
- 6.4 A sufficient sample of any archaeological features and deposits revealed will be excavated in an archaeologically controlled and stratigraphic manner. The complete excavation of features is not regarded as necessary; a sufficient sample will be investigated to understand the full stratigraphic sequence in each trench, down to naturally occurring deposits. The sampling policy is as follows:
  - a) A 100% sample will be taken of all features less than 1.5m in diameter.
  - b) A 50% sample will be taken of all post-holes, and of pits with a diameter of over 1.5m;

- c) A minimum 20% sample should be taken on all linear features, up to 5m in length and all intersections/terminals;
  - d) A 10% sample should be taken on all linear features greater than 5m in length and all intersections/terminals.
- 6.5 Any human remains encountered will be accurately recorded, including in-situ examination by a palaeo-pathologist, but not removed from site until a Section 25 licence has been obtained from the Ministry of Justice. Both the client and the Senior Archaeologist must be informed if human remains are found so that an agreement can be reached on the best possible way forward.
- 6.6 Horizontal survey control of the site will be by means of a coordinate grid, using metric measurements. The location of the grid will be established, where possible, relative to the National Grid. Vertical survey control will be tied to the Ordnance Survey datum. Details of the method employed will be recorded, including the height of the reference point.
- 6.7 Sections will be recorded by means of a measured drawing at an appropriate scale. The height of a datum on the drawing will be calculated and recorded. The locations of sections will be recorded on the site plans, relative to the site grid. Cut features will be recorded in profile, planned at an appropriate scale and their location accurately identified on the appropriate trench plan.
- 6.8 All drawn records will be clearly marked with a unique site number, and will be individually identified. The scale and orientation of the plan will be recorded. All drawings will be drawn on dimensionally stable media. All plans will be drawn relative to the site grid and at least two grid references marked on each plan. Sections will be drawn at 1:10, and plans at 1:20 or 1:50. All levels will be tied into Ordnance Datum and the trenches accurately located with the National Grid.
- 6.9 Each archaeological context will be recorded separately by means of a written description. The stratigraphic relationships of each context will be recorded.

Pro-forma record sheets will be used throughout. An index will be kept of all record types.

- 6.10 All archaeological features will be photographed and recorded at an appropriate scale. Photographic records will use black and white prints. Suitable digital images for inclusion on the Keys to the Past website must be included with the report (these may be general site images or images of specific features or finds).
- 6.11 Pottery and animal bone will be collected as bulk samples by context. Significant small finds must be three dimensionally located prior to collection. All finds must be processed to MAP2 standards and subject to specialist assessment. Palaeo-environmental samples must also be taken where appropriate. If necessary conservation of finds must be appraised to allow for specialist study (see section 6.0 Specialist Services below).
- 6.12 Scientific dating techniques such as archaeo-magnetism and radio-carbon (C14) must be applied where appropriate. X-ray photography of metal objects must be used where appropriate.
- 6.13 All relevant procedures relating to artefacts which fall under the Treasure Act (1996) will be adhered to should any such finds be discovered in the course of the watching brief.
- 6.14 Following the completion of recording the site will be left in a condition to be agreed with the client.

## 7. SPECIALISTS

7.1 The specialists that MAP Archaeological Practice Ltd use are as follows:

Conservation	Ian Panter	YAT	01904 612529
Prehistoric Pottery	Terry Manby		01430 873147

Roman Pottery	Dr Jerry Evans		
Pre-conquest Pottery	Mark Stephens	MAP	01653 697752
Medieval Pottery	Mark Stephens	MAP	01653 697752
Post Medieval Pottery	Mark Stephens	MAP	01653 697752
Clay Tobacco Pipe	Mark Stephens	MAP	01653 697752
CBM	Dr Phil Mills	University of Leicester	0772 0889002
Animal Bone	Jane Richardson	YAT	01904 612529
Small Finds	Hilary Cool		0116 981 9065
Textile	Penelope Walton Rogers	Textile Research in Archaeology	01904 634585
Slag/Hearths	Rod Mckenzie		0114 2352028
Flint	Pete Makey		01377 253695
Environmental Sampling	Diane Alldritt		
Human Remains	Malin Holst	York Osteology Ltd	01904 737509

## 8. MONITORING

- 8.1 The work will be monitored under the auspices of the Durham County Council and the Principal Archaeologist and the Inspector of Ancient Monuments at English Heritage should be consulted at least one week before the commencement of site works.

## **9. HEALTH AND SAFETY**

9.1 Health and Safety will take priority over archaeological matters. All undertaking fieldwork will comply with the 1974 Health and Safety Legislation. Appropriate provision of First Aid, telephone and safety clothing as described in SCAUM manual on archaeological health and safety will be followed.

## **10. REPORT**

10.1 The watching brief report will follow the standards and layout as set out in MAP2 (phase 4 and appendix 4):

- executive summary
- a site location plan to at least 1:10,000 scale with at least an 8 figure central grid reference
- OASIS reference number; unique site code
- Planning application number
- contractor's details including date work carried out
- nature and extent of the proposed development, including developer/client details
- description of the site location and geology
- an OS based site plan to a suitable scale and tied into the national grid so that features can be correctly orientated
- discussion of the results of field work
- context & feature descriptions
- features, number and class of artefacts, spot dating & scientific dating of significant
- finds presented in tabular format
- plans and section drawings of the features drawn at a suitable scale
- initial assessment reports by specialists to MAP2 standards
- recommendations regarding the need for, and scope of, any further archaeological work
- bibliography

- 10.2 A report synthesising the results of the watching brief will be produced for the client. At least 2 copies must be prepared for the client and a further one including a digital PDF copy on CD with digital images (JPEGs) sent to the HER at County Hall, so that the condition can be discharged and copies sent to English Heritage and the National Monument Record (as a condition of the SMC). The report shall be a hard bound colour copy using a comb binder and card covers.
- 10.3 The report must contain a title page listing site/development name, district and County together with a general NGR, the name of the archaeological contractor and the developer or commissioning agent. The report must be page numbered and supplemented with sections and paragraph numbering for ease of reference.
- 10.4 The report will seek to identify any deposits remaining on or associated with the site that will remain following the completion of the watching brief.
- 10.5 The online OASIS form will be completed within 3 months of completion of work.
- 10.6 The report will be the copyright of MAP Archaeological Practice Ltd, a copyright licence is granted to Durham County Council to use the report for the function of the HER.

## **11 ARCHIVE**

- 11.1 The site archive comprising the original paper records and plans, photographs, negatives, and finds etc, will be deposited at the Archaeology Collection Palace Green Library at the completion of post-excavation. In the rare event that the landowner should wish to retain the finds, then a full measured, written and graphic record of the assemblage must be made.
- 11.2 Deposition will be in accordance with the County Durham Archaeological Archive policy.

11.3 MAP Archaeological Practice Ltd will ensure that suitable costs are in place to cover archiving requirements.

## **12. BIBLIOGRAPHY**

DDP 2014 Chapel Heights, Durham. Heritage Assessment.

English Heritage (1991). *Management of Archaeological Projects*. London, Her Majesty's Stationary Office.

IfA (revised 2008). *Standard and Guidance for Archaeological Watching Briefs*. Reading, Institute for Archaeologists.



## APPENDIX 1

### **Conservation Strategy By Ian Panter of York Archaeological Trust**

Artefacts from all categories and all periods will be recovered as a matter of routine during the excavation. When retrieved from the ground finds will be kept in a finds tray or appropriate bags in accordance with **First Aid for Finds**. Where necessary, a conservator may be required to recover fragile finds from the ground depending upon circumstances.

If waterlogged conditions are encountered a wide range of organic materials may be recovered, including wood, leather and textiles. Advice will be sought from a conservator to discuss optimum storage requirements before any attempt is made to retrieve organic finds and structural timbers from the ground.

After the completion of the fieldwork stage, a conservation assessment will be undertaken which will include the X-radiography of all the ironwork (after initial screening to separate obviously modern debris), and a selection of the non-ferrous finds (including all coins). A sample of slag may also be X-rayed to assist with identification and interpretation. Wet-packed material, including glass, bone and leather will be stabilised and consolidated to ensure their long-term preservation. All finds will be stored in optimum conditions in accordance with **First Aid for Finds** and **Guidelines for the Preparation of Excavation Archives for Long-Term Storage** (Walker, 1990).

Waterlogged wood, including structural elements will be assessed following the English Heritage guidelines, **Waterlogged wood: sampling, conservation and curation of structural wood** (Brunning 1996). The assessment will include species identification, technological examination and potential for dating.

The conservation assessment report will include statements on condition, stability and potential for further investigation (with conservation costs) for all material groups. The conservation report will be included in the updated project design prepared for the analysis stage of the project.

## References

Brunning, R. 1996

*Waterlogged wood. Guidelines on the recording, sampling, conservation and curation of waterlogged wood.* English Heritage, London.

Walker, K. 1990 *Guidelines for the preparation of excavation archives for long-term storage*, Archaeology Section of the United Kingdom Institute for Conservation.

Watkinson, D. and Neal, V. 1998 *First Aid for Finds (3<sup>rd</sup> edition), RESCUE and the Archaeology Section of the United Kingdom Institute for Conservation.*

## APPENDIX 2

### Environmental Strategy By Diane Alldritt

The on-site environmental sampling strategy will systematically seek to recover a representative sample of botanical, molluscan (both terrestrial and aquatic), avian and mammalian evidence from the full range of contexts encountered during the excavation. This will enable, at the assessment stage, the possibility for radiocarbon dating material to be obtained, and for an initial analysis of the economic and environmental potential of the site. In order to achieve this, a bulk sample (BS, Dobney *et al* 1992) comprising an optimum size of 28litre of sediment (where possible) should be taken from **every stratigraphically secure and archaeologically significant context**. In practice it may not always be possible to obtain 28l of sediment from certain features during the assessment stage, for instance from partially excavated pits or post-holes, in which case a single bucket sample, c.10 to 14litre should be taken at the site supervisors discretion. Deposits of mixed origin, for instance topsoil, wall fills and obvious areas of modern contamination, should be avoided where possible, as these will contain intrusive material and not provide secure radiocarbon dates.

All buckets and other sampling equipment must be clean and free of adherent soil in order to prevent cross-contamination between samples. If dry soil is to be stored for any length of time it should be kept in cool, dry conditions, and away from strong light sources. However, it is preferable to process samples as soon as possible after excavation.

Bulk soil samples shall be processed using an Ankara-type water flotation machine (French 1971) for the recovery of carbonised plant remains and charcoal. The flotation tank should contain a >1mm mesh for collection of the retent or 'residue' portion of the sample (which may contain pottery, lithics and animal / bird bone, in addition to the heavier fragments of charcoal which do not float). The 'flot' portion of the sample, which may include carbonised seeds, cereal grain, charcoal and sometimes mollusc shell, should be captured using a nest of >1mm and >300micron Endicot sieves. Flotation equipment, including sieves, meshes, brushes and so forth

must be meticulously cleaned between samples in order to prevent contamination of potential radiocarbon dating material. All material resulting from flotation will be dried prior to microscopic examination. Flotation is not suitable for the recovery of pollen or for processing waterlogged samples, which shall be discussed below.

Where there is potential for waterlogged preservation, shown for instance by the presence of wood and other organic or wet material, then a 5 to 10litre size sample should be taken (GBA sample, Dobney *et al* 1992). This material is to be retained for later processing using laboratory methods to enable the recovery of waterlogged plant material and insects. For assessment purposes a 1litre sub-sample of the organic sediment from each potential waterlogged sample shall be processed using laboratory wash-over methods, and once processed **kept wet**. All waterlogged samples awaiting processing should be kept damp, preferably stored in plastic sealable tubs, and in cool conditions. Where large waterlogged timbers are recovered these should be stored under refrigerated conditions and an appropriate conservator consulted.

If sediment suitable for pollen analysis is encountered, for instance rich organic peaty deposits, or deep ditch sections with organic preservation, the archaeobotanical specialist is to be consulted prior to any sampling taking place. These deposits would require sampling with large kubiena tins and require the specialist to be on-site. Pollen analysis, even at assessment level, would subsequently impose a considerable cost implication should it be carried out.

The specialist is available to provide consultation and advice on the environmental sampling strategy throughout the course of the excavation and during post-excavation processing if required.

## References

Dobney, K. D., Hall, A. R., Kenward, H. K. and Milles, A. 1992 A working classification of sample types for environmental archaeology. *Circaea* 9 24-26.

French, D. H. 1971 An Experiment in Water Sieving. *Anatolian Studies* 21 59-64.



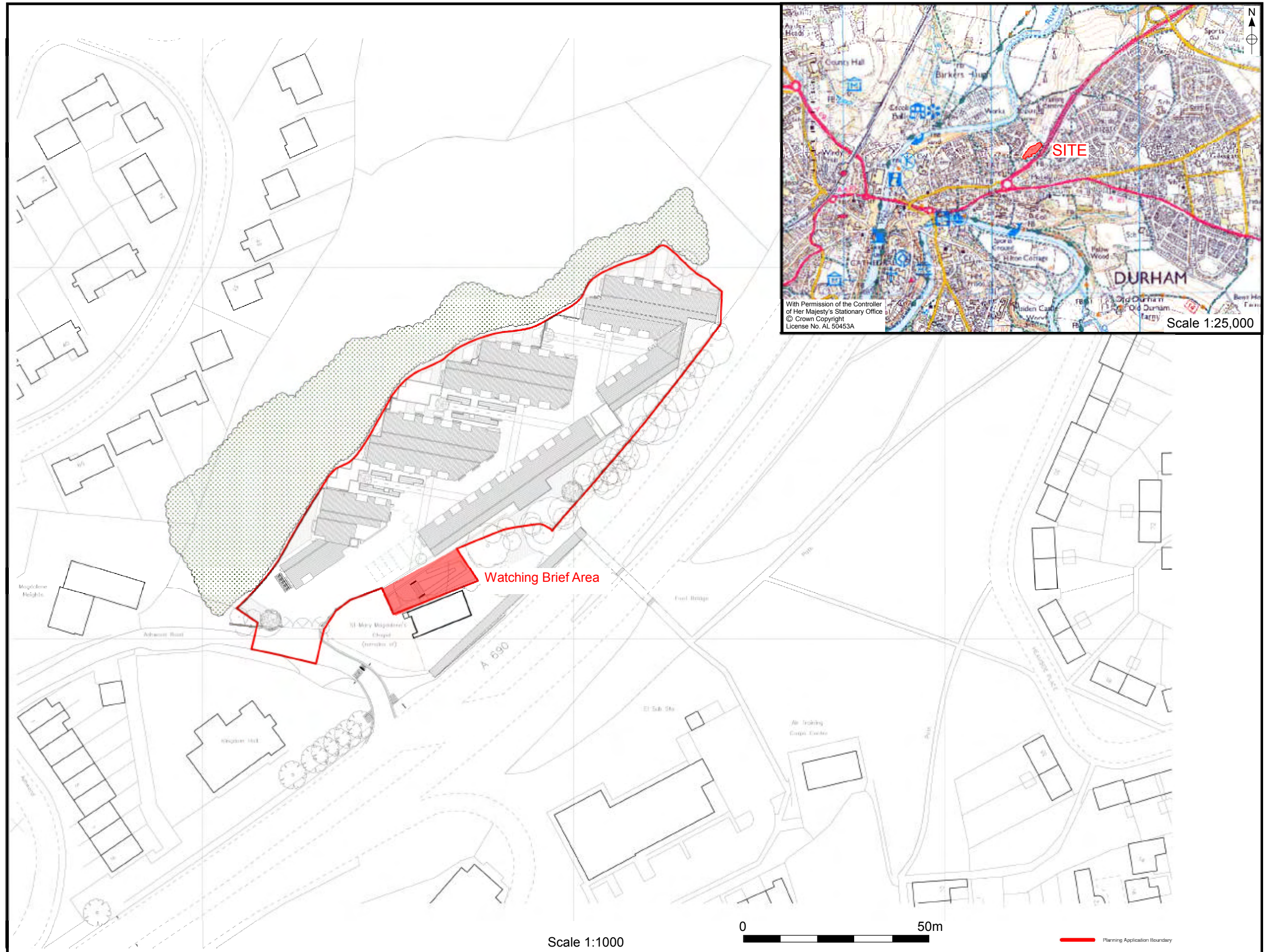


Figure 1. Site Location and Watching Brief Area.

