

FURNESS ABBEY VISITORS' CENTRE CAR PARK, BARROW-IN-FURNESS, CUMBRIA

Archaeological Watching Brief



Client: BT Openreach
NGR: 321768 471913
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June 2009



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Non-Technical Summary

An application for Scheduled Monument consent was submitted for the excavation of a trench and the burial of a 90mm diameter plastic duct from an existing jointing chamber to a new jointing chamber at the Furness Abbey car park, Barrow-in-Furness, Cumbria, which lies within the Scheduled Monument of Furness Abbey. A requirement was placed on the Scheduled Monument Consent for an archaeological watching brief to be carried out during the excavation. The work was carried out by Greenlane Archaeology in June 2009.

A rapid desk-based assessment carried out before the work on site revealed that the proposed pipe trench ran between the east side of the Abbey Gatehouse remains, and the west side of the former Furness Abbey Hotel. Prior to the construction of the hotel there was a mansion house in this area, which was built by Thomas Preston in 1671. Due to deterioration the house was sold to the railway company and rebuilt as the Furness Abbey Hotel which eventually opened c1870. The building suffered bomb damage in 1941, and was finally demolished in 1953.

The archaeological watching brief revealed no significant archaeological deposits. The pipe trench largely followed the course of previous trenching, and the original deposits had either been recently disturbed or entirely truncated. An area of made ground below the location of the former hotel access road was discovered at the south end of the pipe trench, and pottery recovered dated this deposit to the 18th or early 19th century.

Acknowledgements

Greenlane Archaeology would like to thank BT Openreach for commissioning and supporting the project. Further thanks are due to the staff of the Cumbria Record Office in Barrow (CRO(B)) for their help, and also to the ductwork contractors (Enterprise PLC) for their patience.

The site work was carried out by Sam Whitehead who also wrote this report. The pottery was examined by Jo Dawson and the other finds by Dan Elsworth, who also managed the project and edited the report. The report was also edited by Tom Mace and Jo Dawson.

1. Introduction

1.1 Circumstances of the Project

1.1.1 As part of the repair of a telecommunications cable it was necessary to excavate an access trench to lay a duct across part of the car park adjoining the visitors' centre on the north side of Furness Abbey, Barrow-in-Furness, Cumbria (NGR 321768 471913). The site of this work is within the Scheduled Monument area of Furness Abbey and in order to gain Scheduled Monument consent (Reference HSD 9/2/13005) one of the conditions placed by the Department of Media Culture and Sport (DCMS), on the advice of English Heritage, was that the excavation be monitored by an archaeologist (DCMS 2009).

1.2 Location, Geology, and Topography

1.2.1 Furness Abbey is located towards the south-west end of the Furness Peninsula between the towns of Dalton and Barrow, in southern Cumbria. This area is on the north side of Morecombe Bay on a sandy coastal plain consisting of gently undulating pastureland, and the Furness low fells begin a short distance to the north (Countryside Commission 1998, 65). The visitors' centre is situated at the base of the west edge of the steep sided and wooded Vale of Nightshade; this sheltered valley is fed by Mill Beck which has cut deep into the Sherwood sandstone geology of the area (Moseley 1978, fig 1). The site is approximately 17m above sea level.

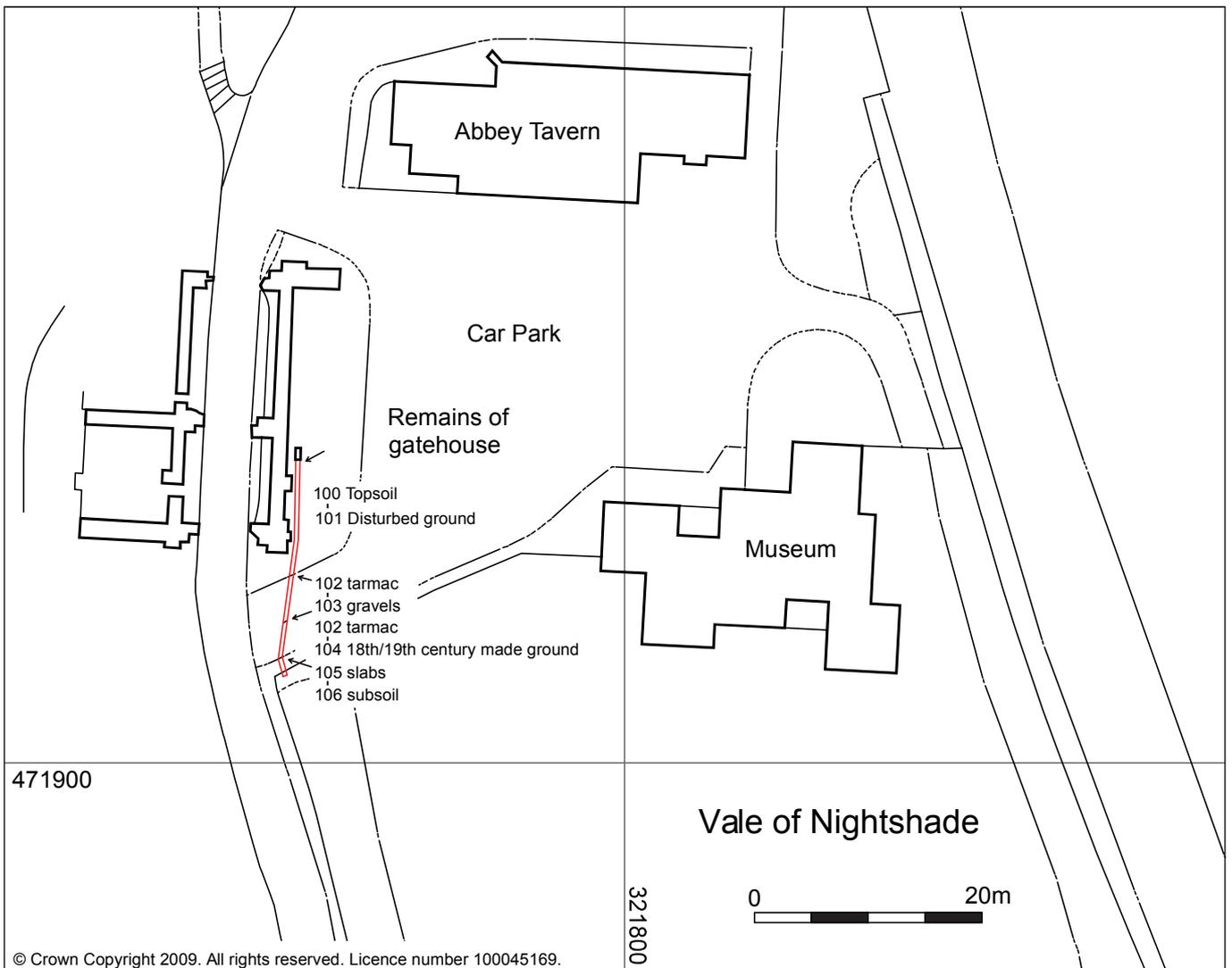
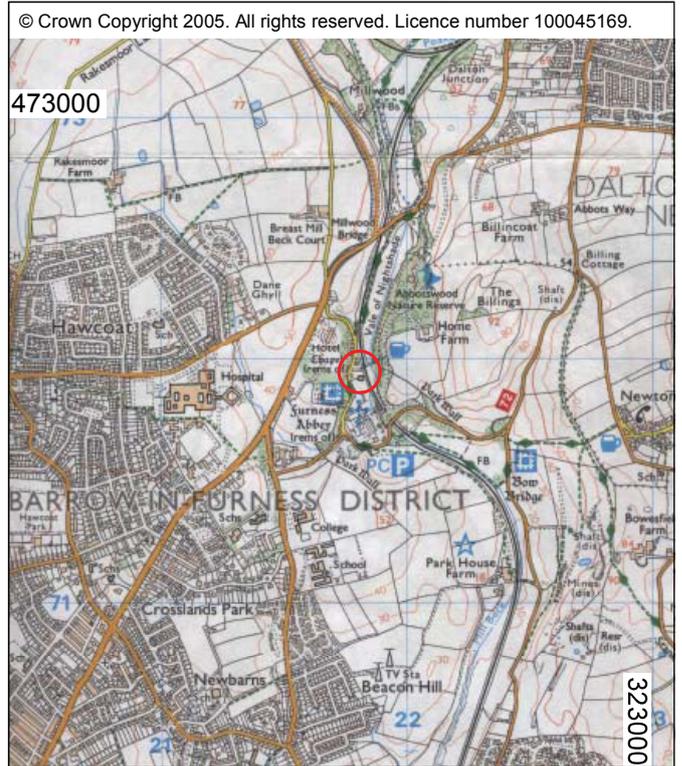
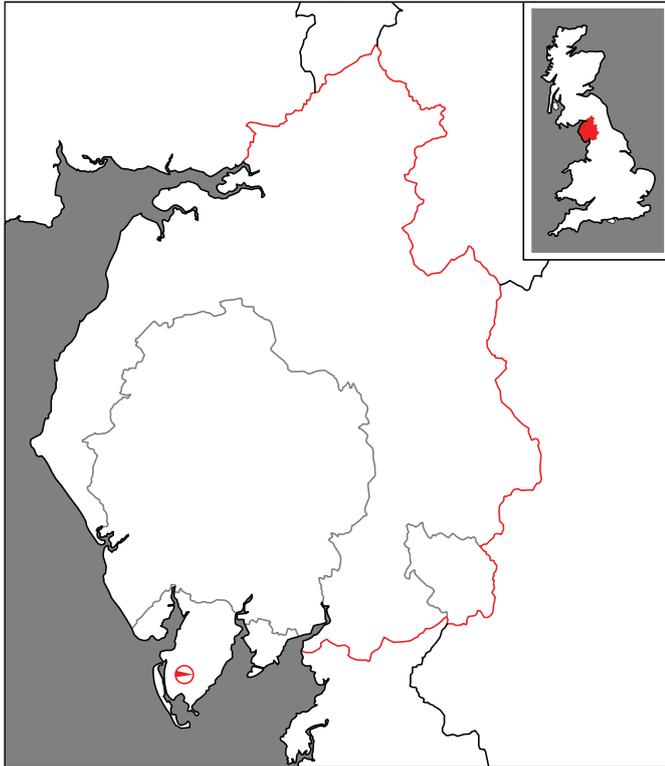


Figure 1: Site location and trench plan

Client: BT Openreach

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2. Methodology

2.1 Introduction

2.1.1 This project comprised a rapid desk-based assessment followed by an archaeological watching brief. The rapid desk-based assessment is intended to establish the extent of the known archaeological resource in the area and produce an outline history of the site environs. The intention of the archaeological watching brief was to observe necessary ground works and record any archaeological deposits therein.

2.1.2 All aspects of the desk-based assessment and archaeological recording were carried out according to the standards and guidance of the Institute for Archaeologists (formerly the Institute of Field Archaeologists; IFA 2001a; 2001b).

2.2 Desk-Based Assessment

2.2.1 The area immediately adjoining the site was examined in order to gauge the type of archaeological remains present and provide an historical and archaeological context for the watching brief. In addition, the results of previous pieces of archaeological work were also examined in order to assess the level of survival of archaeological remains, periods present, and significance. Several sources of information were consulted in order to compile a history of the site and assess the presence of any known remains of historical or archaeological interest, although much of this information has already been compiled for a previous project carried out nearby (Greenlane Archaeology 2008):

- **Cumbria County Council Historic Environment Record (CCCHER):** this is a list of all the known sites of archaeological interest within the county, which is maintained by Cumbria County Council, and is the primary source of information for an investigation of this kind. A list was acquired of all of the known sites of archaeological interest within 100m of the centre of the proposed development area; each identified site comes with a grid reference, description and source and any additional information referenced was also examined as necessary;
- **Cumbria County Record Office, Barrow (CRO(B)):** this was visited in order to examine early maps and plans of the site;
- **Greenlane Archaeology Library:** additional secondary sources were examined to provide information for the site background.

2.3 Archaeological Watching Brief

2.3.1 The excavation of a single trench was monitored; it was 20m north/south, 0.40m wide, and typically 0.40m deep. The excavation was recorded in the following manner:

- **Written record:** descriptive records of all deposits and cuts were made using Greenlane Archaeology *pro forma* record sheets. In addition, a general record was made of each trench and the day's events;
- **Photographs:** photographs in both 35mm colour print and colour digital format were taken of all archaeological features uncovered during the watching brief, as well as general views of the foundation trenches, the surrounding landscape, and working shots. A selection of the colour digital photographs is included in this report, and the remainder are presented on the accompanying CD. A written record of all of the photographs was also made using Greenlane Archaeology *pro forma* record sheets;
- **Drawings:** drawings were produced on site as follows:
 - i. A trench plan was produced at a scale of 1:50;
 - ii. Sketch sections were added to the context sheets.

2.3.2 Trench locations were recorded relative to the known location of nearby buildings and other structures that were evident on the site plans and Ordnance Survey maps. A spot height on the road close to the trench gives an indication of its height over datum.

2.4 Finds

2.4.1 **Processing:** artefacts were washed, naturally air-dried, and packaged appropriately in self-seal bags with white write-on panels.

2.4.2 **Assessment and recording:** the finds were assessed and identified, see *Section 4.2*.

2.5 Environmental samples

2.5.1 No samples were deemed necessary as no sealed contexts were encountered.

2.6 Archive

2.6.1 A comprehensive archive of the project has been produced in accordance with the project design (*Appendix 1*) and current IFA and English Heritage guidelines (English Heritage 1991, Brown 2007). The archive, which comprises the drawn, written, and photographic record, will be deposited with the Cumbria Record Office in Barrow-in-Furness (CRO(B)). A copy will be offered to the National Monuments Record, and project details will be submitted to the Online Access to the Index of archaeological investigations (OASIS) scheme (English Heritage 2007a). A copy of the report will be supplied to the client and a digital copy to the client's agent and to English Heritage within six months of the completion of the fieldwork. A digital copy will also be provided for the Cumbria Historic Environment Record (HER).

3. Desk-Based Assessment Results

3.1 Background History

3.1.1 The background to the site is intended to place the results of the watching brief in its local context. More specifically, information regarding the development and use of the site, where known, is also presented, which allows a more detailed understanding of the results of the watching brief. The following background to the Abbey is largely taken from the Victoria History of the County of Lancashire (Farrer and Brownbill 1914).

3.1.2 **Furness Abbey:** the site is within the grounds of Furness Abbey, an important Scheduled Monument (No. 13572). The Abbey was founded by Stephen, Count of Boulogne and Mortain, later king of England. He gave a site at Tulketh, Preston in 1124, before transferring the monks of the Savignac order to Furness in 1127. By 1147 this order had been incorporated into the Cistercian tradition making Furness Abbey the first Cistercian house in England, and further expansion of the site began. The remains of the Savignac monastery are still present above and below ground as well as the more extensive Cistercian monastery. The monastery grew in prosperity, and at the time of its dissolution in 1537 it was the second richest Cistercian monastery in England. The Abbey had acquired extensive property in the Lake District, Yorkshire, and Lincolnshire and the deep water port at Piel allowed access and trade with the Isle of Man and Ireland. Sheep farming played an important part in the Abbey's growing wealth, due to the price of wool, as did the continued exploitation of the Furness iron ore deposits, which paved the way for the region's post-medieval development.

3.1.3 Its increasing wealth led to greater political autonomy and independence, which attracted the attention of Scottish invaders; in the early 14th century it is recorded that the Abbot paid a ransom to Robert the Bruce in order to avoid further attack (NMR entry 13572). After the Dissolution the monastery was handed over to the crown and the land was subsequently granted to the king's minister Thomas Cromwell, two years later it was passed to Sir Thomas Curwen the head of a leading local family. Thomas Curwen passed the property to his son-in-law John Preston, and in 1671 the then owner Thomas Preston built a mansion house on the grounds. The mansion deteriorated until it was sold to the railway company and re-built into a hotel during the 1850's and the 1860's (Wood 1998, 34). The hotel suffered bomb damage in 1941 and was demolished in 1953 (*ibid*). Some traces of the north wing have been incorporated into the Abbey Tavern, which now stands in its place. The hotel was designed to serve the railway which was opened in 1847. In 1923 Richard Cavendish placed the ruins in the care of the Ministry of Works (*ibid*).

3.2 Map Regression

3.2.1 **William Gibson's Estate Plan 1775:** unfortunately, the original plan is privately held; the extract reproduced in Wood (1998, 31) lacks the detail to accurately locate the site although a building is shown in the vicinity.

3.2.2 **Ordnance Survey 1851** (Plate 1): this is the first accurate map of the area and shows that there was a hotel immediately to the east of the proposed trench line. It is evident that the south part of the pipe trench crosses the access road to the hotel.



Plate 1: Ordnance Survey map, 1851, showing the approximate location of the watching brief area

3.2.3 **Ordnance Survey 1891** (Plate 2): this map shows that very little has change in the immediate area of the site since the OS map of 1851.

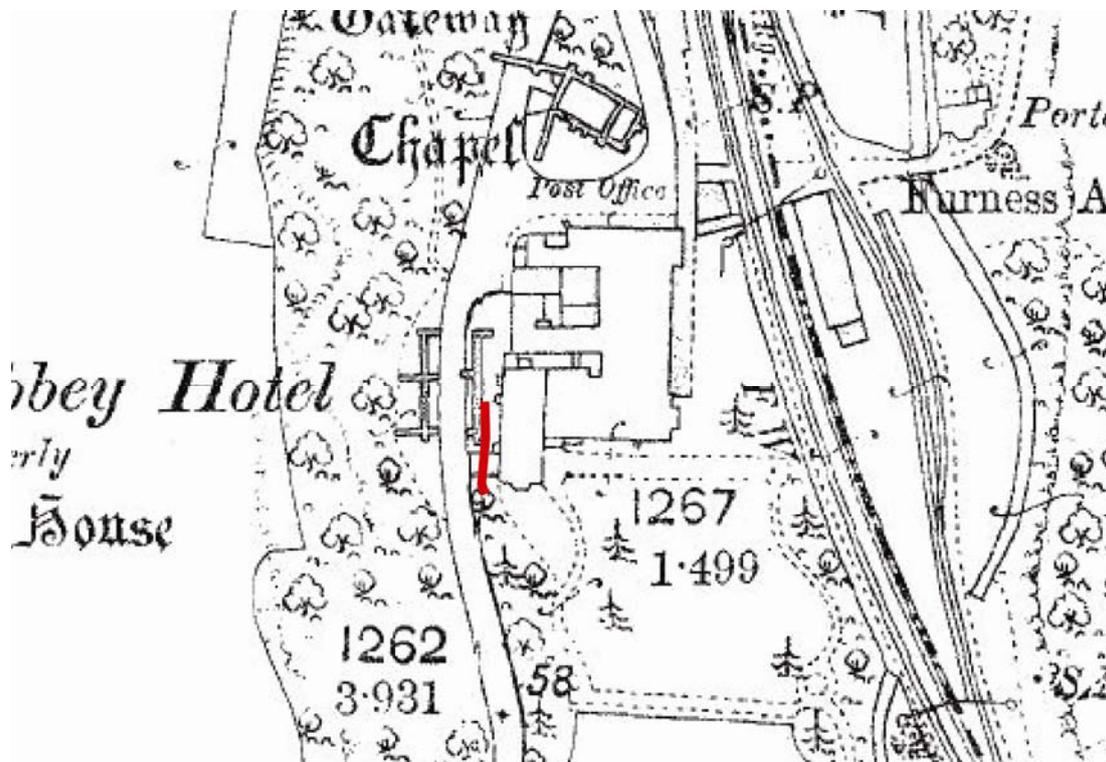


Plate 2: Ordnance Survey map, 1891, showing the approximate location of the watching brief area

3.3 Previous Work

3.3.1 Details of previous archaeological work carried out within the study area were also examined. These can help to determine the likely nature of any archaeological deposits in the local area, the presence or absence of any remains of particular interest, and add to the general background history of the site and its environs.

3.3.2 **Watching brief at Abbey Cottage, 2008:** a watching brief was carried out on land at Abbey Cottage during groundworks for an extension and porch (Greenlane Archaeology 2008). The groundworks revealed the footings to the adjacent coach house, which was demolished during the mid-1900s.

3.3.3 **Watching brief at Furness Abbey Visitor Centre, 2005:** a watching brief was carried out which involved monitoring ground works for the new visitor centre. No details of the results were available (OA North 2005, quoted in English Heritage 2007b). No report appears to have been deposited in the HER.

3.3.4 **Watching brief at Abbey House Hotel, 2002:** a watching brief was carried out on land at the Abbey House Hotel during groundworks for an extension (OA North 2002, quoted in English Heritage 2007b). Post-medieval features and a possible extension to the Precinct boundary wall of Furness Abbey were recorded (*ibid*). No report appears to have been deposited in the HER.

3.4 Conclusion

3.4.1 The results of the desk-based assessment show that the proposed pipe route crosses the access road way to the former hotel, as well as running very close to the south end of the east side of the Abbey gatehouse. The pipe trench would therefore appear to be located in an area with some archaeological potential. No archaeological work has been carried out in the immediate vicinity of the gatehouse, and the results of the work that has been carried out at the nearby hotel and visitors centre are not available in any detail.

4. Fieldwork Results

4.1 Watching Brief

4.1.1 **Introduction:** a single north/south trench was excavated, which was 20m long, 0.40m wide and 0.40m deep. The excavation of the trench was monitored by an archaeologist throughout. Colour print and digital photographs were taken at the location before the machine and hand excavation of the trench, as well as after the excavation and ground reinstatement had been completed (see Plate 3 and Plate 4). A plan of the trench was made with reference to the Abbey Gatehouse, which is shown on the site plan (see Figure 1), and sketch sections were produced on the context sheets that recorded the deposits encountered.

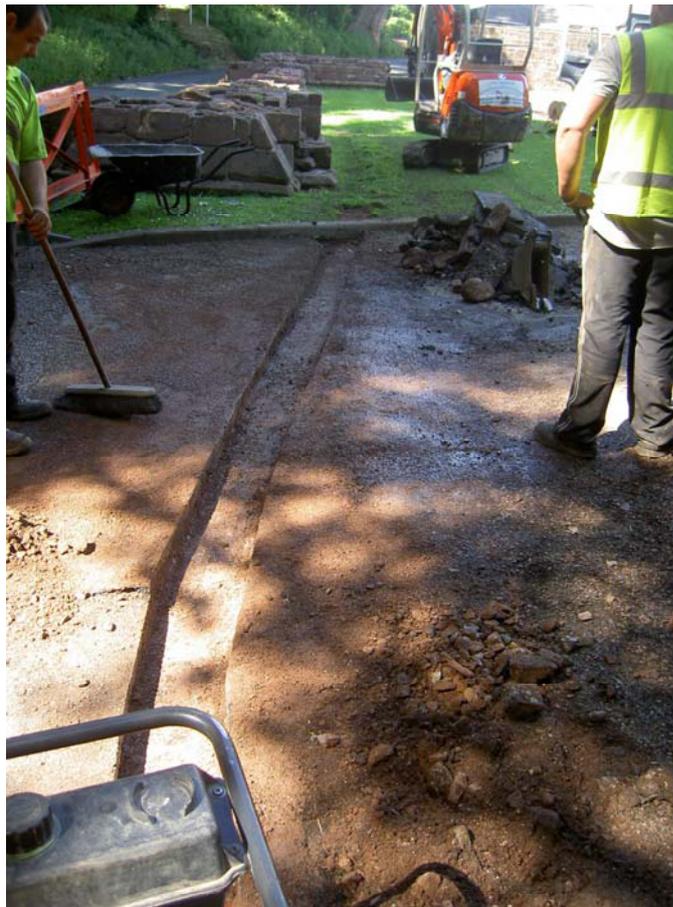
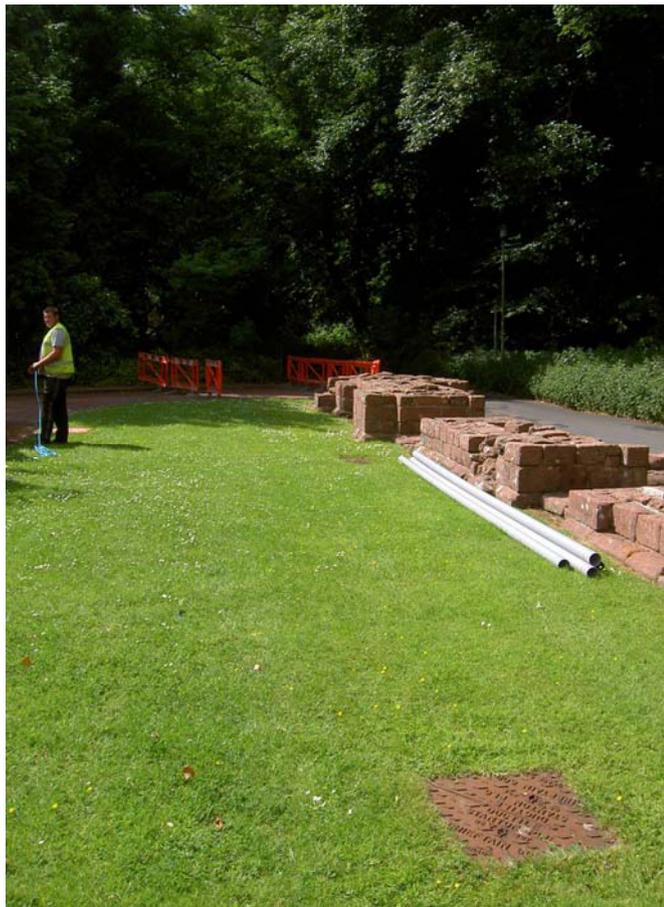


Plate 3 (left): Site prior to excavation, viewed from the north

Plate 4 (right): Site following excavation, viewed from the south

4.1.2 **Summary:** a total of seven contexts were recorded, although only deposit (104) was of any archaeological interest, and indicated made or disturbed ground of a 18th or early 19th century date, which probably related to the bed for the former hotel's access road. This deposit comprised a mid-dark brown clayey-sand with occasional to moderate mortar fragments and crushed red sandstone pieces. Two pottery shards were recovered from this deposit (see Section 4.2). Deposit (104) underlay a 0.10m thick layer of tarmac and extended to the limit of excavation, and was therefore at least 0.30m in depth. The remaining deposits represented topsoil (100), tarmac (102), paving slabs (105), trench backfills (101 and 103), and natural subsoil (106). It was clear that all of the deposits to the north of (104) represented recently disturbed ground in the form of backfill of previously excavated trenches and/or bedding for the modern visitors' centre access road (see Plate 5 and Plate 6). Backfill (103) comprised uniform sterile modern sandy gravels indicating complete truncation of earlier deposits. Backfill (101) in the northern part of the pipe trench contained a mid-brown silty-sand with frequent gravel sized pieces of crushed

sandstone and mortar fragments (see Plate 7 and Plate 8), mixed with modern glass and ring-pulls from drinks cans. The deposit was located below a 0.10m thick layer of topsoil and was interpreted as disturbed subsoil with some re-worked demolition debris.



Plate 5 (left): South end of the trench

Plate 6 (right): East facing section of the trench at the junction of (103)/(104)



Plate 7 (left): North end of the trench

Plate 8 (right): East facing section at the north end of the trench, showing backfill (101)

4.2 Finds

4.2.1 A total of eight finds were recovered during the watching brief, which are summarised in Table 1 below:

Cxt	Fabric	Qty	Description	Date range
101	CBM	1	Very abraded and fragmented piece of mid-orange brick	18 th -19 th century
101	Aluminium	1	Ring-pull from drinks can	Late 20 th century
101	Stone	1	Piece of dark grey slate(?) paving slab with neatly dressed polished surface and sides and chamfered edge	Late 19 th – 20 th century?
101	Mortar	1	Lump of gritty lime mortar with pink plaster adhering to one face	Not closely dateable
101	Stone	1	Broken piece of red sandstone with one dressed surface with deep peck marks	Medieval?
104	Pottery	1	Brown-glazed red earthenware rim fragment	Late 17 th – early 20 th century
104	Pottery	1	Blue transfer-printed (?) white earthenware fragment	Late 18 th – early 20 th century

Table 1: Summary finds list

4.2.2 The majority of the finds add little to the interpretation of the results of the watching brief, although the two pieces of pottery from deposit **104** might indicate the date at which it was formed. The finds from the backfill (**101**) demonstrate the modern date at which this disturbance took place, but also comprise a mixture of finds representing several different periods, some of which probably relate to the original abbey, the later manor house, or the hotel.

5. Conclusion

5.1 Discussion of results

5.1.1 The results from the rapid desk-based assessment and the watching brief have added little or nothing to our overall knowledge of the Furness Abbey Scheduled Monument site. The map regression illustrated that the pipe trench was located in an area of high archaeological potential between the medieval gatehouse and the location of the former Furness Abbey Hotel. It was clear, however, that the area of the pipe trench had been heavily disturbed by the excavation of previous service trenches, and it was largely their backfills that were encountered. A small area of 18th or 19th century made ground was located below the tarmac at the south end of the pipe trench, and it is possible that at a lower depth undisturbed deposits remain. The worked stone from the backfill clearly indicates that the area has some potential.

6. Bibliography

6.1 Primary and Cartographic Sources

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6.2 Secondary Sources

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Appendix 1: Project Design

FURNESS ABBEY VISITORS' CAR PARK, BARROW-IN-FURNESS, CUMBRIA

Archaeological Watching Brief Project Design



Client: Openreach

May 2009

Commercial in confidence

Client: BT Openreach

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1. Introduction

1.1 Project Background

1.1.1 As part of the repair of a telecommunications cable it is necessary to excavate an access trench across part of the car park adjoining the visitors' centre on the north side of Furness Abbey, Barrow-in-Furness, Cumbria (NGR 321768 471913). The site of this work is within the Scheduled Monument area of Furness Abbey and in order to gain Scheduled Monument consent one of the conditions placed by the Department of Media Culture and Sport (DCMS), on the advice of English Heritage, was that the excavation be monitored by an archaeologist (DCMS 2009). This project design has been produced in response to this request.

1.1.2 Furness Abbey was founded in 1127 as a Savignac monastery, originally based at Tulketh near Preston, but it was amalgamated into the Cistercian order by c1150 (Wood 1998, 23). The Cistercians were a much larger organisation who practised a very austere form of monasticism, but they became very powerful, with Furness one of their wealthiest sites (*op cit*, 26). It continued to grow and prosper and was even able to withstand the Scottish attacks of the early 14th century, making full use of its wealth in order to do so (*op cit*, 27). In its latter years, however, it declined somewhat and was finally closed as part of Henry VIII's Dissolution in 1536 (*op cit*, 29). Following its closure it was initially acquired by the Curwen family and passed through their descendants who had a large manor house close to the south-west gateway (*op cit*, 31). By the later 18th century the manor house was infrequently used and had become a mere farmhouse (*ibid*), before being remodelled into a hotel with the coming of the railway and tourists in the 19th century (*op cit*, 34).

1.2 Greenlane Archaeology

1.2.1 Greenlane Archaeology is a private limited company based in Ulverston, Cumbria, and was established in 2005 (Company No. 05580819). Its directors, Jo Dawson and Daniel Elsworth, have a combined total of over 16 years continuous professional experience working in commercial archaeology, principally in the north of England and Scotland. Greenlane Archaeology is committed to a high standard of work, and abides by the Institute for Archaeologists', formerly the Institute of Field Archaeologists' (IFA) Code of Conduct. The desk-based assessment and building recording will be carried out according to the Standards and Guidance of the Institute of Field Archaeologists (IFA 2001a; 2001b).

1.3 Project Staffing

1.3.1 The project will be managed by **Dan Elsworth (MA (Hons), AIFA)**. Daniel graduated from the University of Edinburgh in 1998 with an honours degree in Archaeology, and began working for the Lancaster University Archaeological Unit in 1999, which became Oxford Archaeology North (OA North) in 2001. After six and a half years at OA North, during which time worked on excavations and surveys, building recordings, desk-based assessments, and conservation and management plans and ultimately became a project officer, Daniel established Greenlane Archaeology in 2005 with his partner Jo Dawson. He has continued to carry out similar projects since that time, and these have principally taken place in the North West, an area in which he has a particular interest. He has recently managed a wide variety of projects including building recordings of various sizes, watching briefs, and excavations.

1.3.2 The watching brief will be carried out by **Steve Clarke** or **Sam Whitehead (BSc (Hons), MA)**, depending on scheduling constraints. Steve began working for Albion Archaeology in 2001, before moving to OA North in 2004, where he worked in a supervisory capacity principally on excavation projects, and has carried out large numbers of watching briefs on sites across the north-west of England. He joined Greenlane Archaeology in 2008 and has since been involved in a wide variety of projects including building recordings, desk-based assessments, and excavations. Sam has extensive experience of excavations, evaluations, and watching briefs, as well as report writing and illustration production. He joined Greenlane Archaeology in 2006 having worked for several previous companies including Pre-Construct Archaeology, Network Archaeology, and Cambridge County Council Archaeological Field Unit, and since then he has increasingly been involved in running larger excavations and evaluations, as well as all aspects of building recording projects. He recently carried out a watching brief at Furness Abbey Cottage, a short distance to the north-west of the visitors' car park (Greenlane Archaeology 2008).

1.3.3 All artefacts will be processed by Greenlane Archaeology, and it is envisaged that they will initially be examined by Jo Dawson, who will fully assess any of post-medieval date. Finds of earlier date will be assessed by specialist sub-contractors as appropriate, and in this case it is envisaged that medieval pottery will be examined by Ian Miller and/or Jeremy Bradley at Oxford Archaeology North. English Heritage will be notified of any specialists, other than those named, who Greenlane Archaeology wishes to engage, before any specialist contracts are awarded, and their approval will be sought.

1.3.4 Environmental samples and faunal remains, should significant deposits of these be recovered, will be processed by Greenlane Archaeology. It is envisaged that charred plant remains will be assessed by Scott Timpany of Headland Archaeology Ltd, and faunal remains by Auli Tourunen, also at Headland Archaeology. Should any human remains be recovered it is envisaged that these will be assessed by Malin Horst at York Osteoarchaeology, following appropriate advice on initial processing. English Heritage will be informed and their approval will be sought for any changes to these arrangements should they be necessary.

2. Objectives

2.1 Rapid Desk-Based Assessment

2.1.1 To examine early maps of the site and any other relevant primary and secondary sources in order to better understand its dating and development, and set it in its historic context.

2.2 Watching Brief

2.2.1 To identify any surviving archaeological remains and to investigate and record any revealed archaeological remains or deposits.

2.3 Report

2.3.1 To produce a report detailing the results of the watching brief, which will outline the nature, form, extent, and date of any archaeological remains discovered.

2.4 Archive

2.4.1 Produce a full archive of the results of the watching brief.

3. Methodology

3.1 Rapid Desk-Based Assessment

3.1.1 An rapid examination of both primary and secondary sources, particularly maps, but also published and unpublished local histories, pieces of research, articles and studies relating to the proposed development site and a suitable area around it (the 'study area') will be carried out. Much of this information has already been gathered for a similar piece of work carried out close to the site (Greenlane Archaeology 2008) and so it will not be necessary to re-visit the original sources in most cases. The sources will be or have been consulted at the following locations:

- **Cumbria Historic Environment Record (HER):** this is a list of all of the recorded sites of archaeological interest recorded in the county, and is the primary source of information for a study of this kind. The details of sites recorded in the HER from a suitably sized study area around the development site will be obtained. Each HER site is recorded with any relevant references, a brief description, and location related to the National Grid. All of the references relating to sites identified in the HER will be examined in order to verify them and add any necessary background information. In addition, relevant secondary sources, particularly details of previous archaeological investigations in the immediate area and relevant aerial photographs, will also be examined;
- **Cumbria Record Office (Barrow-in-Furness):** the majority of original and secondary sources relating to the site are deposited in the Cumbria Record Offices in Barrow-in-Furness. Of principal importance are early maps, especially those produced by the Ordnance Survey. These will be examined in order to trace the development of the study area, its previous uses, and details of any structures present within it. This is particularly useful in order to identify the potential for further, as yet unknown, sites of archaeological interest and areas of likely disturbance that might be present. In addition, information relating to the general history and archaeology will also be consulted, in order establish the local context of the site;
- **Greenlane Archaeology:** a number of copies of maps, local histories, unpublished reports, and journals are held in Greenlane Archaeology's library. These will be consulted in order to provide further information about the development of the site, and any other elements of archaeological interest.

3.1.2 The results of this assessment will be used to establish the location, extent, date, and development of any sites of archaeological interest demonstrated to be present within the proposed development area. The extent of all of the sites identified will be shown on an appropriately scaled map where possible. In addition, areas of archaeological interest or significance will be shown and the extent or level of their potential expressed.

3.2 Watching Brief

3.2.1 The groundworks are to be monitored, with one archaeologist on site.

3.2.2 The watching brief methodology will be as follows:

- The service trench will be excavated by machine under supervision by staff from Greenlane Archaeology;
- All deposits of archaeological significance will be examined by hand if possible in a stratigraphic manner, using shovels, mattocks, or trowels as appropriate for the scale;
- The position of any features, such as ditches, pits, or walls, will be recorded and where necessary these will be investigated in order to establish their full extent, date, and relationship to any other features. If possible, negative features such as ditches or pits will be examined by sample excavation, typically half of a pit or similar feature and approximately 10% of a linear feature;
- All recording of features will include detailed plans and sections at a scale of 1:20 or 1:10 where practicable or sketches where it is not, and photographs in both colour print and colour digital format;
- All deposits, drawings and photographs will be recorded on Greenlane Archaeology *pro forma* record sheets;
- All finds will be recovered during the watching brief for further assessment as far as is practically and safely possible. Should significant amounts of finds be encountered an appropriate sampling strategy will be devised;
- All faunal remains will also be recovered by hand during the watching brief as far as is practically and safely possible, but where it is considered likely that there is potential for the bones of fish or small mammals to be present appropriate volumes of samples will be taken for sieving;
- Deposits that are considered likely to have preserved environmental remains will be sampled. Bulk samples of between 10 and 40 litres in volume, depending on the size and potential of the deposit, will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches) and occupation deposits such as hearths and floors. An assessment of the environmental potential of the site will be undertaken through the examination of samples of suitable deposits by specialist sub-contractors (see *Section 1.3.4* above), who will examine the potential for further analysis. All samples will be processed using methods appropriate to the preservation conditions and the remains present;
- Any human remains discovered during the watching brief will be left *in situ*, and, if possible, covered. English Heritage will be immediately informed as will the local coroner. Should it be considered necessary to remove the remains this will require a Home Office licence, under Section 25 of the Burial Act of 1857, which will be applied for should the need arise;
- Any objects defined as 'treasure' by the Treasure Act of 1996 (HMSO 1996) will be immediately reported to the local coroner and secured stored off-site, or covered and protected on site if immediate removal is not possible;
- Should any significant archaeological deposits be encountered during the watching brief these will immediately be brought to the attention of the English Heritage so that the need for further work can be confirmed. Any additional work and ensuing costs will be agreed with the client and according to the requirements of the English Heritage, and subject to a variation to this project design.

3.3 Report

3.3.1 The results of the watching brief will be compiled into a report, which will incorporate the information collected during the desk-based assessment. The report will contain the following sections:

- A front cover including the appropriate national grid reference (NGR);
- A concise non-technical summary of results, including the date the project was undertaken and by whom;
- Acknowledgements;
- Project Background;
- Methodology, including a description of the work undertaken;
- Results of the rapid desk-based assessment;

- Results of the watching brief including descriptions of any deposits identified, their extent, form and potential date, and an assessment of any finds or environmental remains recovered during the watching brief;
- Discussion of the results, with specific reference to their relationship with previous discoveries at Furness Abbey and the information compiled during the desk-based assessment;
- Illustrations at appropriate scales including:
 - a plan showing the location of the ground works;
 - plans and sections of the watching brief ground works, as appropriate, showing any features of archaeological interest;
 - photographs of the watching brief, including both detailed and general shots of features of archaeological interest and the trenches;
 - photographs of individual artefacts as appropriate.

3.4 Archive

3.4.1 The archive, comprising the drawn, written, and photographic record of the watching brief, formed during the project, will be stored by Greenlane Archaeology until it is completed. Upon completion it will be deposited with the Cumbria Record Office in Barrow-in-Furness. The archive will be compiled according to the standards and guidelines of the IFA (Brown 2007), and in accordance with English Heritage guidelines (English Heritage 1991). In addition details of the project will be submitted to the Online Access to the Index of archaeological investigations (OASIS) scheme. This is an internet-based project intended to improve the flow of information between contractors, local authority heritage managers and the general public.

3.4.2 A copy of the report will be supplied to the client, and within six months of the completion of fieldwork, a digital copy will be supplied to English Heritage, and the Cumbria Historic Environment Record (HER). In addition, Greenlane Archaeology Ltd will retain one copy, a copy will be placed in the archive, and a digital copy will be provided to the OASIS scheme as required.

3.4.3 The client will be encouraged to transfer ownership of the finds to a suitable museum. Any finds recovered during the watching brief will be offered to Kendal Museum. If no suitable repository can be found the finds may have to be discarded, and in this case as full a record as possible would be made of them beforehand.

4. Work timetable

4.1 Greenlane Archaeology will be available to commence the project on **18th May 2009**, or at another date convenient to the client. It is envisaged that the project will involve tasks in the following order:

- **Task 1:** rapid desk-based assessment;
- **Task 2:** watching brief;
- **Task 3:** post-excavation work on archaeological watching brief, including processing of finds and production of draft report and illustrations;
- **Task 4:** feedback, editing and production of final report, completion of archive.

5. Other matters

5.1 Access

5.1.1 Access to the site will be organised through co-ordination with the client and/or their agent(s).

5.2 Health and Safety

5.2.1 Greenlane Archaeology carries out risk assessments for all of its projects and abides by its internal health and safety policy and relevant legislation. Health and safety is always the foremost consideration in any decision-making process.

5.3 Insurance

5.3.1 Greenlane Archaeology has professional indemnity insurance to the value of **£250,000**. Details of this can be supplied if requested.

5.4 Environmental and Ethical Policy

5.4.1 Greenlane Archaeology has a strong commitment to environmentally- and ethically-sound working practices. Its office is supplied with 100% renewable energy by Good Energy, uses ethical telephone and internet services supplied by the Phone Co-op, is even decorated with organic paint, and has floors finished with recycled vinyl tiles. In addition, the company uses the services of The Co-operative Bank for ethical banking, Naturesave for environmentally-conscious insurance, and utilises public transport wherever possible. Greenlane Archaeology is also committed to using local businesses for services and materials, thus benefiting the local economy, reducing unnecessary transportation, and improving the sustainability of small and rural businesses.

6. Bibliography

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Appendix 2: Summary Context List

Context	Type	Description	Interpretation
100	Layer	Fairly loose dark-brown silty-sand	Topsoil
101	Layer	Mid-brown silty-sand, freq crushed sandstone, slate and mortar fragments	Disturbed subsoil
102	Layer	Tarmac	Tarmac
103	Deposit	Homogenous sandy gravels	Trench backfill/road bedding
104	Layer	Mid-brown clayey-sand, moderate mortar and sandstone fragments	Made ground of 18 th /19 th century date
105	Layer	Paving slabs	Path
106	Layer	Mid-brown silty-sand	Natural subsoil