THE THREE TOWERS, DALLAM TOWER ESTATE, CUMBRIA

Management Plan

Oxford Archaeology North

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Dallam Tower Estate

Issue No: 2004-5/300
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GLOSSARY

Specialist or complex terms and abbreviations used in the management plan are given a brief explanation in this section. Architectural definitions are taken from Salter (1998, 104), Perriam and Robinson (1998, 398-405) and Curl (1992).

Ashlar – Finely dressed stone, laid with joints *c*0.005m wide

AONB – Area of Outstanding Natural Beauty

BAR – Buildings at Risk

Barracks – lodgings for soldiers

Buttress – Vertical structure to provide lateral support

Corbel – a projecting bracket supporting other stonework or timbers

Corework – rubble making up the core of the wall, beneath and between the facework

CRoW Act – Countryside Rights of Way Act (2000)

Cruck – inclined curved timbers (blades), joined at the ridge to form a truss

CWAAS – Cumberland and Westmorland Antiquarian and Archaeological Society

CCC – Cumbria County Council

Curtain Wall – wall between towers of a castle or bailey

DfES – Department for Education and Skills

Dais – raised floor where the lord sat at his table

DCMS – Department for Culture, Media and Sport

DDA – Disability Discrimination Act (1995, revised 2005)

DEFRA – Department for the Environment, Food and Rural Affairs

DoE – Department of the Environment

Drawbar – horizontal sliding bar usually locking into deep slots in door reveals

EH – English Heritage

Facework – a finishing applied to the exterior of a building, such as a skin of ashlar or dressed stone

Jamb – vertical side of an opening

HER – Historic Environment Record

HES – Historic Environment Service

LUAU – Lancaster University Archaeological Unit

Leaf – see **Facework**

Lintel – beam spanning a doorway, window or other opening

Loop – a small opening to admit light or for the discharge of missiles

Manor – estate of a lord

Messuage – dwelling house with garden, outbuildings etc

MBAS – Morecambe Bay Archaeological Society

Mullion – upright in a window frame or tracery

Outshut – extension, usually a lean-to

Oversailing – a masonry course projecting beyond the face of the wall

OA North – Oxford Archaeology North

Parapet – a low wall to protect any place where there is a drop, such as the edge of a roof

Pele or Peel – originally a palisaded court, later coming to mean a bastle or tower house

Pinnings – small stones at the interstices of masonry

Purlin – horizontal piece of structural timber lying on the principal rafters of a roof truss

Putlog – horizontal scaffolding member

Quoins – stones at the right angle of a building

Rafter – an inclined timber forming the sides of a roof, and meeting another rafter at the ridge

Reveal – exterior surface of an aperture when recessed, between the face of the wall and the frame

RCHME – The Royal Commission on the Historic Monuments of England

Rubble – rough or irregular stonework

Rubblework – blocks of stone that are either undressed or comparatively roughly dressed, with wide mortar joints

Scarcement – a plain band or a flat set-off in a wall or foundation used as a shelf to carry the ends of joists, or for some other purpose

SLDC – South Lakeland District Council

Sill – the base of a doorway or window

SMR – Sites and Monuments Record

Soffit – underside of an arch, lintel or eaves

Solar – withdrawing room of a hall. Usually in the form of a cross-wing, sometimes in the form of a tower

Spandrel – triangular space between an arch and a rectangular enclosure

Tower – a structure tall in proportion to its depth and width

Truss – a combination of timbers to form a frame, placed at intervals, and carrying the purlins

Turret – small tower, usually with only a small room or garderobe

Undercroft – ground floor room, if built of stone usually with a vaulted ceiling

Wall plate – a timber laid horizontally on a wall, to which joists, rafters and roof-trusses are fixed

Wall-walk – a walkway on top of a wall, always protected by a parapet

Voussoir – wedge-shaped stones forming an arch

SUMMARY

The Dallam Tower Estate contains three medieval towers of considerable archaeological importance: Arnside Tower (SD 4591 7689), Beetham Hall (SD 4997 7905), and Hazelslack Tower (SD 4761 7882). All of the towers are Listed Buildings and Scheduled Monuments and therefore considered to be of national historic significance, and all are in a poor condition and thought to be in need of maintenance as well as requiring a plan for future maintenance and use. Hazelslack and Arnside Towers are both on the English Heritage *Buildings at Risk Register*.

A proposal was presented by Lancaster University Archaeological Unit (LUAU) to compile a management plan for three towers in the Dallam Tower Estate. After lengthy negotiations involving English Heritage, South Lakeland District Council, Cumbria County Council, the Dallam Tower Estate and the Arnside/Silverdale AONB, the proposal was accepted. A project design funded by English Heritage, South Lakeland District Council and Cumbria County Council was produced by LUAU in 2000. In 2001 LUAU became Oxford Archaeology North (OA North) and it was OA North that carried out the project in 2004 and 2005.

The aim of this management plan is to examine the remains of each of the towers and assess their condition and significance, both structural and historical. Their importance within the local landscape in terms of their utility and value have also been assessed through consultation with various affiliated organisations.

The management plan sets out not only the ways in which the towers are significant and of value, but ways in which these features can be maintained and, where possible, enhanced, to the benefit of both the Dallam Tower Estate, visiting members of the public, and interested researchers. A condition survey carried out as a key part of the management plan also outlined the areas in which conservation and repair were required and ways that a planned sequence of future maintenance could be carried out.

The heritage potential of the three towers, comprising their condition, amenity value and significance is detailed as part of the management plan. Utilising this information, areas requiring further work in terms of both repairs to the towers, and ways to enhance their utility to the variety of people who interact and benefit from them, are also presented.

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Thanks are also due to the tenants at the three towers: Mavis Gibson, Eric Burrows and John Bland, for their assistance and co-operation during the site visits. Further thanks are due to Jo Mackintosh at the Cumbria Historic Environment Record for the information supplied about each site, Caron Newman, Field Monument Warden for English Heritage, for additional background information and comments, and to Richard Newman, the Cumbria County Archaeologist, for his support for the project and for additional information and guidance throughout.

Daniel Elsworth carried out the site visits and compiled the management plan, and Mark Tidmarsh produced the figures. Elaine Blackett-Ord (née Rigby) of Elaine Rigby Architects carried out the condition survey. Alison Plummer managed the project and edited the management plan, which was also edited by Rachel Newman.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 Proposals were presented by Lancaster University Archaeological Unit (LUAU) for a management plan of three towers within the Dallam Tower Estate: Arnside Tower (SD 4591 7689), Beetham Hall (SD 4997 7905) and Hazelslack Tower (SD 4761 7882) (Fig 1). After lengthy negotiations involving English Heritage, South Lakeland District Council, Cumbria County Council, the Dallam Tower Estate and the Arnside/Silverdale Area of Outstanding Natural Beauty (AONB), the project proposal was accepted. Funding was provided by English Heritage, South Lakeland District Council and Cumbria County Council for a project design, which was produced by LUAU. After some further negotiation and discussion OA North undertook the project in 2004 and 2005.

1.1.2 Arnside Tower is Grade II* Listed, a Scheduled Monument (SM 21240; Fig 2), and is listed in the Cumbria HER (No 2552). It comprises a single tower, the south-west side of which has collapsed, although there is a limekiln a short distance to the north-east within the Scheduled area. The building is suffering from some gradual damage due to vandalism and the elements. It is listed in the *Buildings at Risk Register* as Category C, '*slow decay; no solution agreed*', and is in a 'very bad' condition (English Heritage 2005). Mr John Bland tenants the nearby farm, although the lease does not include the tower itself (Caron Newman pers comm). The farm at Arnside Tower is currently part of a Country Stewardship Scheme, but this does not include the tower (*ibid*).

1.1.3 Beetham Hall is Grade II* Listed, a Scheduled Monument (SM 21999; Fig 3), and is listed in the Cumbria HER (No 2518). It forms a much larger complex of buildings contained within an outer curtain wall, including a hall, solar, chapel and buttery. Attached to this are a number of later buildings, including a large farmhouse, barns, a pigsty and a bull shed. The buildings are partially used for agricultural purposes and are generally in a stable condition, although large parts of the curtain wall and associated structures only survive as ruins. Mrs Mavis Gibson tenants the farm at Beetham, while Mrs J Ashworth tenants the stables (Caron Newman pers comm). The medieval hall, solar and chapel are not included within either of the tenant leases, however (*ibid*), although the hall is occasionally used to house animals under certain circumstances (Antony Fitzherbet-Brockholes pers comm). The curtain wall is included in Mrs Gibson's tenancy, and stable block to the east of the hall is included with Mrs Ashworth's (Caron Newman pers comm). Beetham Hall farm has been part of a Countryside Stewardship Scheme (UMAU *et al* 1995), but this is soon due to lapse (Caron Newman pers comm).

1.1.4 Hazelslack Tower is Grade II Listed, a Scheduled Monument (SM 21241; Fig 4), and is listed in the Cumbria HER (No 2520). Like Arnside, it comprises a single tower, although it is closely associated with farm buildings to the east. It has reportedly been badly damaged by down-slope sheering; it is listed in the

Buildings at Risk Register as Category A, '*immediate risk of further rapid deterioration or loss of fabric; no solution agreed*', and is in a 'very bad' condition (English Heritage 2005). Mr Eric Burrows tenants the nearby farm, although the tower is not included with the tenant lease (Caron Newman pers comm). The farm at Hazelslack Tower is currently part of a Countryside Stewardship Scheme, but this does not include the tower (*ibid*).

1.1.5 All three are within the Arnside/Silverdale AONB and can be reached or closely viewed from footpaths and public highways. Arnside Tower in particular is well visited, as it is in very close proximity to a footpath.

1.2 PROJECT OBJECTIVES

1.2.1 The objectives of project are detailed in the project design (*Appendix 1*), with reference to English Heritage (Clark 1999; 2001), and are summarised below:

- Produce an understanding of the buildings through a combination of documentary research and visual inspection;
- Assess the significance of the buildings in both historical and archaeological terms, as well as social, architectural and educational;
- Define the issues likely to affect the buildings and their significance;
- Consider the long-term educational value of the buildings;
- Develop conservation policies that will facilitate future use and management;
- Secure long-term conservation and management for the buildings.

1.2.2 Understanding the significance of the different elements of an historic structure is seen as a key element in this process (Clark 2001, 12), and this is outlined in *Section 4.5* below. It is also important that the structure is as fully understood as possible, as it is understanding of the site that enables conservation to be appropriate, rather than merely applied (*op cit*, 13). It is to this end that *Sections 3* and *4* were compiled. Similarly an assessment of condition is of the utmost importance in conservation and forms part of the understanding of the site, and this is provided in detail in *Section 5*.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 OA North (then trading as Lancaster University Archaeological Unit (LUAU)) initially proposed a management plan for the three towers in 1998. Following negotiations and discussions with both English Heritage and the Dallam Tower Estate the details of the project were agreed and a revised project design was produced in 2000 (*Appendix 1*). Following discussions with the Cumbria County Archaeologist this same project design has been retained for use with the current project, with the intention that the emphasis should be placed on the condition survey.

2.2 DOCUMENTARY RESEARCH

2.2.1 A documentary survey of defensible buildings in Cumbria has already been compiled (Ryder 2002). Although the information within this is brief it was agreed with the County Archaeologist that this would form the basis of the background history of the sites and that no further research should be undertaken for this plan. None of the sites have been studied in detail (with the exception of Beetham Hall (University of Manchester Archaeological Unit (UMAU) *et al* 1995)) and primary sources (should these exist) have not been consulted as part of the documentary research.

2.2.2 Additional information about the areas around the buildings was acquired from the Cumbria Historic Environment Record (HER). This was intended to place the monuments in their immediate archaeological and historical context, and assess whether there were additional features (some of which might be related to the towers), which may be relevant to the management plan.

2.3 VISUAL INSPECTION

2.3.1 The visual inspection of the buildings examined how the physical remains fit within the known historical background and attempted to integrate these two pieces of information. An outline of the historical significance of the towers was also produced as part of this through a comparison of the results of the historical background and the visual inspection.

2.4 CONDITION SURVEY

2.4.1 The condition survey is of key importance to the management plan as the physical condition of the buildings has the potential to influence every other aspect of it. The intentions of the survey were to identify areas of structural instability, fabric decay, damage caused by vegetation and the like. Elaine Rigby Architects (2005) carried out the survey.

2.5 HERITAGE POTENTIAL

2.5.1 A consideration of the information acquired during the documentary research and visual inspection, combined with the results of the condition survey, is able to provide some idea of the heritage potential of the buildings themselves. In order to consider the potential of the buildings in their wider context a number of affiliated organisations were consulted (*Appendix 2*). These include those directly involved in the monuments themselves or the area around them (Dallam Tower Estate, Arnside/Silverdale AONB), those involved in their conservation (South Lakeland District Council, Cumbria County Council, English Heritage), and those with other interests in the area or the regional historic environment (the local Parish Councils, the Cumberland and Westmorland Antiquarian and Archaeological Society, Morecambe Bay Archaeological Society, Morecambe Bay Partnership and so forth). The comments received from these organisations were added to the interpretation of the potential of the buildings, and used to consider their future management and use.

2.6 ARCHIVE

2.6.1 A full archive has been produced to a professional standard and in accordance with current English Heritage guidelines (English Heritage 1991). The archive will be deposited in Cumbria County Record Office in Kendal and a copy of the report deposited with the Cumbria Historic Environment Record (HER).

3. BACKGROUND

3.1 INTRODUCTION

3.1.1 The information making up the historical background for each site is taken from Ryder (2002), with additional information from texts such as Perriam and Robinson (1998), Salter (1998) and Hinchcliffe (2001). It is intended to provide a brief outline of what is known about the history and archaeology of each site in order that their development and historical significance can be assessed. This will then be compared with the information gained from the site visit in order to provide a more detailed interpretation of each of the buildings.

3.2 GEOLOGY AND TOPOGRAPHY

3.2.1 All three of the towers are within the Arnside/Silverdale AONB, and within 1km of either Arnside or Beetham (Fig 1). Arnside Tower is at approximately 30m OD, Beetham Hall is at approximately 25m OD, and Hazelslack Tower is at approximately 20m OD (Ordnance Survey 2002).

3.2.2 The entire area is part of an extensive karst landscape that forms the northern fringe of Morecambe Bay (Moseley 1978; Gale 2000, 6), formed out of Carboniferous limestone, which has led to the development of large areas of pavement and caves (Gale 2000, 6). This is overlain by glacially derived tills, which typically form Brown rankers of the Crwbin association (Ordnance Survey 1983), although an area of unripened gley soils is also situated around and to the south of Arnside (*ibid*). The area falls within the Morecambe Bay limestones landscape (Countryside Commission 1998, 69-74), which is typically characterised by outcrops of limestone between which are lower-lying mosses and areas of agricultural land (*op cit*, 71).

3.3 THE ARNSIDE/SILVERDALE AONB

3.3.1 As stated above, the three towers are within the Arnside/Silverdale AONB, which was created, as part of the National Parks and Access to the Countryside Act of 1949 (Arnside and Silverdale AONB Executive Committee 2004, 15). AONBs were given specific responsibility for conserving and enhancing the natural beauty of the landscape (*ibid*), and although the requirements of visitors are not considered as highly as they are within National Parks, many AONBs are also used for recreation (*ibid*; Environment Agency 2005). They also have specific designations dealing with the safeguarding of agriculture, forestry and rural industries and define the landscape as including both natural and human influences, including archaeology (Arnside and Silverdale AONB Executive Committee 2004, 15). While the AONB has its origins in discussions made prior to the Act of 1949 (in 1947), it was not until 1959 that it was considered for inclusion, and it took until 1972 before it was formerly designated.

3.3.2 The status of all AONBs was more recently enhanced by the Countryside Rights of Way (CRoW) Act of 2000 (HMSO 2000). This is '*specifically concerned with AONBs…* [and] *introduces several new provisions that are aimed at improving the management and conservation of AONBs*' (Arnside and Silverdale AONB Executive Committee 2004, 16). This particularly places a duty on local authorities to consider the conservation of the natural beauty of the AONB, and produce and regularly revise a management plan for it (*ibid*). A draft management plan for public consultation was produced for the Arnside/Silverdale AONB on 2003 (The AONB Unit 2003), which was finalised in 2004 (Arnside and Silverdale Executive Committee 2004). The primary aim of the AONB, to conserve and enhance the natural beauty of the landscape, specifically includes archaeological sites, especially Scheduled Monuments, within its remit (*op cit*, 58-63 and 66).

3.4 LOCAL HISTORIC ENVIRONMENT

3.4.1 ***Introduction:*** an outline of the historic landscape surrounding each of the towers was produced in order to place them in their local context utilising readily available information. It was agreed that an intensive study was beyond the remit of the Management Plan. Outline details were acquired from the Cumbria HER for any sites of archaeological interest in the immediate vicinity of each tower (approximately 200m). At each tower a number of such sites were identified, and the information regarding these is presented below. These were taken into consideration when defining the heritage potential of the towers, as well as any issues regarding the impact that visitors might have on the towers and their associated landscapes, neither of which be considered in isolation.

3.4.2 ***Arnside Tower****:* only two sites are recorded in the HER close to Arnside Tower: a limekiln to the south-east (SMR No 2523; Plate 1), which is within the limits of the Scheduled Monument for the tower (Fig 2), and a find-spot of a Norse ring-headed pin to the west (SMR No 535). Neither of these sites has any obvious relationship to the tower, although the limekiln may be connected to any demolition and re-use of materials that may have occurred. Other, largely linear, earthworks of unknown function, perhaps relating to the limekiln are also visible in aerial photographs of the site (Cumbria County Council 1987). The ring-headed pin might suggest that earlier activity should be expected in the area, although few detailed conclusions can be drawn from this single find. Other material dating from the early medieval period have been recorded in the Arnside area, much of it as part of the Portable Antiquities Scheme (Clement 2003, 235). The significant amount of early medieval metalwork from this area perhaps indicates that it was relatively densely occupied during this period.

3.4.3 ***Beetham Hall****:* a large number of features were identified in the environs of Beetham Hall. Unlike the other two sites, the structure itself is made up of several parts, including a house, a barn and the remains of the curtain wall (all of which are included within the Scheduled Monument; Fig 3). A metal detector find of a medieval spur and belt stud was made in the surrounding fields (SMR No 16748) and there are three areas of earthworks in the

immediate vicinity (SMR No 2519, 10777 and 12562). These include an area of ridge and furrow (SMR No 10777), a quarry and field system (SMR No 12562), and a possible cairnfield with associated settlement (SMR No 2519). The dates of these features are not known, although the former two would seem likely to be medieval or post-medieval while the latter could potentially be late prehistoric. In addition, casual finds of Roman date have been found in the vicinity of Beetham Hall (Shotter 1994, 293; 1995, 275), which might indicate the date of the nearby earthworks, cairnfield and settlement and '*raises the possibility of a Roman site (presumably of a military nature) in the area*' (Shotter 1994, 293).

3.4.4 ***Hazelslack Tower****:* only a single site was identified close to Hazelslack Tower: a limekiln (SMR No 12557; Fig 4) possibly with associated earthworks, to the south. This is unlikely to relate to the monument itself, but may be associated with post-medieval use of the local area and possibly even re-use of the tower, which could have been used as a source of stone.

3.5 ARNSIDE TOWER

3.5.1 ***Introduction:*** this is a substantial tower high on a limestone knoll *c*2km south of Arnside village, overlooked by higher ground to the south and east. Its history is not clear; there is a tradition that the sisters of Thomas de Thweng built it in *c*1375, along with Dallam and Hazelslack Towers. Curwen (1913, 249) saw the towers as of fourteenth-century date, and the RCHME (1936, 14-15) as fifteenth century. Beryl Lott (1995, 150) suggests that it may have been built by Thomas de Middleton or George Stanley as late as the fifteenth century, as a hunting lodge. The first specific reference to the tower itself would appear to be in an inquisition taken at the death at Thomas Middleton in 1517 (McIntire 1937, 137). It is known to have been burned in 1602, but appears to have been in good repair in 1655 (*op cit*, 138). Between 1684 and 1690 it is recorded as having been un-roofed, and its timbers sent, along with some from Beetham Hall, to Knowsley. In 1884 the south corner and south-west wall were blown down in a hurricane (Curwen 1913).

3.5.2 There are some accounts of an early investigation into Arnside Tower, which actually raise more questions than they answer. It is recorded in 1770 that '*When the House was pulled in pieces as the Workman was taking up the Floor of this Closet, which, as in all the other Rooms was Earth, they sunk up to the Middle, and to their surprise found two Human Bodies, which on the opening of them to the air moulder'd into Dust*' (Hutton quoted in Barnes 1933, 84). Clearly the building was in far better condition at this time as it is described thus: '*the shell is compleat and may be walk'd round at the top within the Kernell'd battlements* (*sic*)' (*op cit*, 83). A small projection for a privy was apparently located in the '*the South Corner*' and the ground floor was divided in two, with a kitchen on the north side. It is also described as having other buildings nearby (*ibid*), although what these were is not clear. Barnes also states that '*An attempt at excavation was once made, but it revealed only a bed of cockle shells, the rubbish heap doubtless to which the cook had flung them when the dainty morsels within had been consumed*' (*op cit*, 78). It has not been possible to ascertain further details of this excavation.

Medieval pottery deposited at Lancaster Museum, of a type known to have been made in nearby Silverdale, is also recorded as having been found at Arnside Tower, although the exact circumstances of the discovery are not clear (White 1975, 102).

3.5.3 ***Discussion:*** Arnside is something of a rarity amongst Cumbrian towers: a self-contained tower house, more on Scottish than English lines. Lott (1995) may well be correct in her suggestion that it was built as a hunting lodge. She draws parallels with the Clifford hunting lodge at Barden Tower (North Yorkshire) built at around the same time, and also the layout of the tower as a 'much rougher' reflection of the solar tower built by Lord Hastings at Ashby de la Zouche (1480-3) (Ryder 2002).

3.5.4 The building as it stands preserves very little in the way of datable architectural detail; what there is, in particular the roll-moulded lintels to the fireplaces, would be difficult to place any earlier than *c*1500: could it even be a virtually complete rebuild of *c*1602, admittedly in an archaic style? In favour of this one might cite the absence of vaults, the general character of the masonry (with features such as plain square setbacks rather than chamfered ones), the relatively thin walls (for a structure of this size) and the frequency and reasonable size of windows on the lower floors. The style of the windows also calls into question how defensible the tower ever was, as does its location, overlooked by higher ground. Although the windows could be later inserts, corresponding to the rebuilding of *c*1602, they may suggest that Lott's theory that it was built as a hunting lodge is correct. This may also explain why it did not apparently continue in use past the end of the seventeenth century, as it was perhaps never intended as a permanent dwelling, or it changed function following its rebuilding.

3.6 BEETHAM HALL

3.6.1 ***Introduction:*** this is one of the best-known fortified houses of Cumbria, and is situated on the west side of the A6, 0.5km to the south of the village of Beetham. From around 1200 until the end of the 1480s it was in the possession of the de Bethum (or Bethom) family. A 1254 survey referred to '*the Hall of Bethum with other houses within the court*', implying some form of defensible enclosure, and there are one or two later references which actually term the manorial seat a castle (Ryder 2002). For example, in 1347 Ralph de Bethum III was ordered to send prisoners confined in his '*castle*' to the Tower of London. After the Wars of the Roses Beetham passed to the Middleton family, and then to the Earl of Derby. There are some references to a siege in the Civil War, in either 1644 or perhaps 1651, which left the house partly in ruins (*ibid*).

3.6.2 ***Discussion:*** this is one of the best-preserved of a group of Cumbrian manor houses where the principal defensive element is an enclosing curtain wall; there were also external earthwork defences, as the 1995 survey found an infilled moat or ditch to the south of the site (UMAU *et al* 1995). Burneside and Middleton Halls are other good examples of courtyard manors of this type (Ryder 2002). The medieval house itself is in effect a ruin, despite later roofs, but retains quite a number of significant features.

3.7 HAZELSLACK TOWER

3.7.1 ***Introduction:*** Hazelslack Tower, now a roofless ruin, stands *c*2km east of Arnside, on the crest of a small limestone escarpment dropping away to the west. Little is known of the history of the building; in a local legend it is ascribed to one of three co-heiresses of Thomas de Thweng (*c*1375) but Curwen dismisses this as '*manifestly incredible*' (Curwen 1913, 375). Unlike the other two towers, little published research has been undertaken regarding the early history of the site, which is available in easily accessible historical sources, and there is no clear historical statement concerning the tower.

3.7.2 ***Discussion:*** Hazelslack Tower has been assigned a date in the fourteenth or fifteenth century (Ryder 2002). It has one vaulted basement chamber but its walls are quite thin, and it can hardly be classed as a building of any great strength, although the provision of drawbar tunnels and so forth indicates that it was designed to function as a defensible retreat. The quite complex planning seems to be that of a single period building, suggesting that the change in fabric type apparent externally may simply relate to a change in source of material during construction. It would seem possible that the elongated chambers, which in effect form a type of forebuilding, might have housed retainers, and the square chambers in the main body of the tower, with their superior architectural features, the manorial family. The scar of a former roofline indicates that the building originally extended to the east. This lost eastern section is thought to have been the original hall, with the tower perhaps acting as a kitchen block and/or solar wing, although this is not certain, and it has been suggested that the arrangement could have been the other way around (Ryder 2002). A possible similar example to Hazelslack is found at Heversham Hall (Perriam and Robinson 1998, 347).

3.8 THE CONTEXT OF THE THREE TOWERS

3.8.1 Historically all three towers were within the manor of Beetham, of which Beetham Hall was the capital messuage (Newman 2003, 241), although Arnside Tower was also described as such in the mid-seventeenth century (McIntire 1937, 138). The manor also included a probable fortified house at Cappelside, which was a sub-manor within Beetham, held at one time by the de Beethams (Newman 2003, 240). The status of Arnside and Hazelslack is therefore unclear; they do not appear to have been held as part of sub-manors within Beetham (Richard Newman pers comm) and yet they are defensive. This may indicate a later date of construction (Newman 2003, 241) and hence a slightly lower status (as indicated in *Sections 3.4 and 3.6*).

3.8.2 The three towers are three of only four sites with substantial stone built remains of medieval domestic buildings within the Arnside/Silverdale AONB, the other being the 'Priest's House' or Old Rectory at Warton in Lancashire (Farrer and Brownbill 1914, 156-7). The term tower is something of a misnomer, as only Arnside Tower is a true tower house. Beetham Hall is a fortified house with an extant hall and solar wing. Hazelslack now stands as a tower-like building but this would seem to have been the wing of a hall, the foundation outline of which can still be seen at ground level.

4. VISUAL INSPECTION

4.1 INTRODUCTION

4.1.1 A rapid visual inspection was carried out of each of the three towers in June and July 2004, in order to gain a further understanding of their physical development. This would allow them to be placed in their historical context, and was intended to enable a more detailed interpretation to be produced, which would ultimately aid in the understanding of the potential value of each of the buildings (see *Section 6*).

4.2 ARNSIDE TOWER

4.2.1 The extensively damaged condition of Arnside Tower makes it difficult to examine in detail and means that important aspects of the building are likely to have been lost. It is presently a roofless ruin, with no floors surviving and the south-west wall is missing. However, what remains does provide some interesting information about the development and use of the building. The tower and an area to the north-east, which includes a limekiln of probable eighteenth-century date (Singleton *et al* 2003, 6), is a Scheduled Monument (SM 2552).

4.2.2 The tower stands to a height of up to four storeys (Plates 1-2), and the interior is covered in earthfast rubble from the collapsed south-west wall. The plan is relatively simple, and forms a roughly rectangular block orientated north-west/south-east. It has an intramural staircase in the south corner and off the centre of the internal face of the north-east elevation (Fig 5). There is a turret (Plate 2) on the north corner above a large 'oven' on the ground floor (Plate 3). Externally, the tower comprises roughly dressed limestone blocks in rough courses with several irregularly positioned windows and arrow loops. On the ground floor, these have typically been robbed of any jambs or surrounds, but they tend to survive on the upper floors where they comprise dressed red sandstone with reveals. There is a large aperture within the south-east elevation, probably caused by collapse. The north-east elevation has two (with the remains of a third above) large windows in a more ornate style, although all of the surrounds have been lost. Most of the remaining windows in the north-east elevation have retained their original surrounds, and two have been blocked with stone. The north-west elevation is topped with the remains of a probable wall-walk, supported by sandstone corbels and pierced by the occasional stone waterspout.

4.2.3 There are two surviving entrances: one on the north-east side and one on the south-east side (Plate 2). The north-east entrance was almost certainly the main entrance as it allows direct access to a central staircase to the east, which gives entry to the rooms on the first floor. This staircase has, however, been recently blocked with stone bonded with cement. The south-east entrance appears to be a more recent addition; perhaps the enlargement of a smaller aperture. The remains of a cross wall projecting towards the south-west from this staircase are also visible, and there are possible traces of this in the ground

amongst the ruins to the west. The south-west elevation, although mostly collapsed, retains parts of windows in the stub wall that survives and there is another complete window visible in the rubble.

4.2.4 There are a few additional features not visible from the outside. The staircase in the south corner accesses all of the floors. Both the north-west and south-east elevations have fireplaces on each floor (Plate 4). In a number of cases, these have large sandstone lintels with beaded decoration resting on semicircular corbels and heavy dressed sandstone jambs. These more decorative features appear to be later additions. A small alcove, possibly a piscina and perhaps indicating the position of a chapel, similar in appearance to the arrow loops but with the dressed surround on the inside, is visible on the first floor in the south-east elevation. The remains of corbels and joist holes for supporting the floors are visible in many places, and there is a possible garderobe on the ground floor below a window in the north-west elevation. A large ground floor fireplace in the south-east elevation has been partially demolished leaving a large aperture. The large windows in the north-east elevation have voussoir arches. In the north corner there is a large fireplace (Plate 3), which has a number of small alcoves and niches within it (including the end of the drawbar slot for the main door to the south). A broken hole on the north-east side of the back of the fireplace currently provides access to the 'oven' behind, although this seems unlikely to have been an original aperture. The 'oven' at the base of the turret is circular and has the remains of a vaulted ceiling. There is a possible aperture in the south-east side of it, although this is very badly damaged and not evidently original. Above the 'oven' the various floors of the turret are visible and it was clearly accessible on several levels.

4.2.5 Two other features are associated with/in proximity to the tower. To the north-east, lower down the slope is a limekiln (SMR No 2523), which may be of eighteenth-century date (Singleton *et al* 2003, 6). There is a large amount of rubble around this, which may be the remains of the upper part of the kiln. The arch is visible, although largely filled in, and several courses of the structure remain intact (Plate 1). To the south of the tower an area of shallow stone quarrying is visible. It is roughly rectangular, covers an area *c*10m by 5m, and is typically less than 0.5m deep. It is not clear whether this relates to the construction of the tower or the use of the limekiln, although there are the remains of a possible track leading from it towards the limekiln, which might suggest the latter.

4.3 BEETHAM HALL

4.3.1 Beetham Hall comprises a complex arrangement of buildings, not only including those making up the medieval hall and curtain wall, but also a later farm house, barns, stables/shippons, pigsty and bull shed, some of which are incorporated within or re-use parts of the earlier structure (Fig 6). The remains of the hall, tower and curtain wall are included within the Scheduled Area (Fig 6), and they and the attached farmhouse are Listed Grade II*. The barn opposing the farmhouse is Listed Grade II. The majority of the buildings are situated around a courtyard, with the original hall and solar in the south-west corner, the farm along the west side, the curtain wall around the north-east

corner, barn in the south-east corner, and the pigsty and bull shed to the west of the farmhouse (Fig 6). The main medieval hall comprises a simple rectangular room with an intramural staircase built into the north-west corner. A small doorway allows access to this, above which is a corbel sculpted into the shape of a head. The floor comprises a layer of gravel over patchy cobbles, and the roof is slate supported on tie beam trusses with king posts and angled struts. There are square-headed windows in the north-west and south-east elevations with hood moulds externally, the remains of trefoil arches and holes for iron grills. A wagon doorway has been inserted into the north-west elevation, which has resulted in considerable rebuilding. A smaller doorway has been inserted opposite this through the reveal of a large arched window (Plate 5). There are original doorways, both blocked, to the east of the inserted doorways, in the north-west and south-east elevations (Plate 6). Corbels are present below the roofline, perhaps marking the position of an upper floor, and it is possible that the roofline has been reduced in height. Small windows provide light for the intramural staircase.

4.3.2 The solar is attached to the west end of the main hall. It has an earth floor and a later slate roof on half tie beam trusses and principal rafters (Plate 7). The wall level has been much reduced by collapse and additional stone-built buttresses constructed against the west wall support the tie beams (Plate 7). There has been substantial rebuilding of the north-west elevation and a window looking into the shippon beyond has been inserted. The remains of three fireplaces with flues are present in the south-west elevation, two of which are positioned above the level of the current roof, and there is a doorway to the south of these. The south-east elevation is open to the chapel beyond. There is a slight recessed area within the north-east elevation, probably reflecting the position of the first floor. The original doorway into the main hall is blocked and a new doorway has been inserted, with an additional opening to the south.

4.3.3 The chapel is unroofed but survives to its full three storeys. It has square headed windows on the second floor and a more ornate trefoil window in the south elevation at first floor and moulded reveals to the windows in the south-west and south-east elevations. There is a piscina in the southern corner and holes for joists on the ground floor as well as other niches. In the south elevation there is a possible blocked doorway on the ground floor, and the jambs of a collapsed doorway remain in the north elevation.

4.3.4 The former buttery is attached to the east end of the main hall. The majority of this part of the building has been converted into stables or a shippon (probably during the eighteenth or nineteenth century). Hand-finished timber beams and the original stalls remain *in situ* within this. The buttery may have been a later addition to the original hall, as it appears to cut the jamb of the door on the south-east side. A stub of the original wall survives to the east of this and incorporates another intramural spiral staircase and parts of three windows (one per floor; Plate 8). The remains of the buttery have been extensively modified, with the walls rebuilt and extended to form gables finished with quoins, and doorways with dressed jambs. This rebuilding has subsequently been extended on the south side after the removal of the original wall. The

north elevation retains one original window with a hood mould, although this could have been repositioned.

4.3.5 The remains of the original curtain wall extend across the north-east corner of the site. This is much collapsed, although substantial remains do survive. Along the top the remains of a projecting wall-walk supported by stone corbels are present and there are square arrow loops below. There is a projecting section to the wall-line at the north-west end and the wall has been removed altogether at the south-east end for the road to the farm and the barn to the south-east of this, although this probably represents the position of the original gateway. Put-log holes for the upper floor level are visible on the inner face and there is a row of tall recesses, perhaps for upright crucks or posts to support an adjoining structure. The foundations of a small structure are also visible at the south-east end, adjacent to the extant field boundary, which perhaps related to the gateway.

4.3.6 ***Later fabric***: Beetham Hall comprises a number of additional elements beside the medieval buildings, which are principally associated with the farm situated within the courtyard of the earlier hall. This is made up of a farmhouse, stable/barn, a second barn, a pigsty and a bull shed.

4.3.7 The farmhouse, although not examined in detail, is an important historic building in its own right. It is apparent that originally it had a T-shaped plan (the T having been subsequently extended, possibly as late as the nineteenth century), probably with a cross-passage. It has three chimneys with circular plan stacks. The front elevation has four mullion first floor windows, all of four-lights (Plate 9), and there are larger windows on the ground floor at the south end with square surrounds. There are also two smaller windows, blocked with stone, to the north. Between these pairs of windows is a doorway, which has been partially blocked to leave a window. Its lintel is inscribed '1693' and 'TB', presumably the date at which the house was built, rebuilt or enlarged. To the south of this is the current doorway, which has a porch, decorated with finials and a moulded cornice inscribed 'TMB'. There is a further possible blocked doorway immediately to the north of this.

4.3.8 The north end of the farmhouse comprises an arrangement of attached barns, which incorporate parts of the return of the curtain wall. The main barn has a large wagon doorway with a pent-roofed porch, which has re-used beams making up the lintel. It is unclear internally whether there is a single return of the curtain wall making up part of the barn or whether there are two sections representing part of an earlier building within the curtain wall. The barn is split into two sections, both with simple tie-beam trusses constructed of hand-finished timber (Plate 10). The southern section has a flag floor and the northern section has a concrete floor. A large doorway, which appears to cut the curtain wall, connects these two parts and this also re-uses beams in the lintel. An additional, much later outshut has been added to the west side of the barn, which probably formed a shippon. This has a single pitch roof supported by a king post and inclined struts supporting corrugated concrete sheets. Additional modern structures have been added to the west of this.

4.3.9 Between the farmhouse and the solar/main hall is a long building, currently used as a stable (Plate 11). This appears to be contemporary with the farmhouse, although it evidently makes considerable use of the original fabric of the hall on the west side, and may reflect its original arrangement. The south end appears to have been built as a threshing barn as there is a blocked wagon doorway with winnowing slots on either side and a smaller blocked winnowing door in the opposing wall. An extant wagon doorway is positioned to the north of this. There is a flight of steps further north allowing access to a first floor level above a row of arched openings (Plate 11). Three of these are large and one narrow (the narrowest providing access via a cross-passage to the garden to the rear of the house). All of the arches are built of ashlar blocks of stone and are round headed. The original purpose of this addition to the south of the farmhouse is unclear; it probably also acted as a threshing barn, with storage on the first floor, although this was apparently more recently used as accommodation for seasonal workers (Mavis Gibson pers comm). This building is now used for stabling.

4.3.10 A number of other buildings relating to the farm are also present within the complex. On the east side of the courtyard, opposite the present stables, is a large barn. This appears to be relatively late in date, probably eighteenth or nineteenth century, and has dressed quoins and lintels and a slate roof. There are two wagon doorways with porches and access for animals, suggesting that the building was a combination threshing barn and cowhouse. There appears to be some incorporation of earlier fabric in the north end, including a large piece of timber and dressed reveals. A further extension has been added to the east, and modern farm buildings have been added onto this.

4.3.11 Behind the house, to the west of the courtyard, are two small farm buildings. The first is a pigsty, which comprises three or possibly four rooms each with a low doorway on the north side. There are small hatches in the south wall with some doorways allowing access between each room and there are concrete troughs along the south wall. The walls are finished with dressed quoins and the roof, although badly collapsed, is constructed with hand-finished and machine cut timber. Beyond this, to the north-west, is a bull shed. This is a small square building of two storeys with dressed quoins and lintels. The roof has recently collapsed. There are doorways in the south and east elevations and a first floor doorway in the north-east corner of the east elevation. What remains of the roof is evidently constructed of hand-finished timbers.

4.4 HAZELSLACK TOWER

4.4.1 For a tower of such small size (Fig 7) the development of Hazelslack seems remarkably complex. It presently consists of a simple sub-square block with the main rooms in the north-west corner, accessed via a passageway along the south side, which also connects to the present staircase, although it originally connected to a doorway in the south elevation. There is an intramural passageway in the west wall allowing access to the upper floors of the main rooms and a garderobe (Plate 12). Originally there was an additional section to the east, which may have formed the hall, only the roof scar of which survives (Plate 13). Access to the upper floors may have originally been via this

section. The loss of this part has made it difficult to identify the order in which the principal components of the building were constructed. It is evident, however, that the staircase is a later addition (Plate 14), which blocks the doorway in the south elevation. Access to the ground and first floors may have originally been separated, with the upper 'polite' rooms being accessed from the former hall to the east and the lower rooms being accessed via the doorway to the south (Plate 15). This would have also added a degree of security by preventing easy access to the hall via this doorway.

4.4.2 The difference in construction techniques between the lower and upper storeys identified by Ryder (2002) is not particularly noticeable, although there is a distinct change in the style of windows between the first/ground floors and the second/third floors (Plates 15 and 16). Those on the lower floors tend to be plainer, with no dressed jambs or surrounds. This difference appears to correspond to the height of the roof scar visible in the east elevation, perhaps suggesting that the upper parts of the tower were raised or rebuilt when this section was constructed or enlarged. The north-east corner of tower is finished with a straight corner, with no evidence for the north wall of the former hall (Plate 13). A possible explanation for this is that the hall was built of timber (hence there are so few traces of it remaining, although there is the stone stub wall on the south side; Plate 17). It is also conceivable, from the evidence within the remains of the building, that the hall was added at a later date to the already existing tower, but this does not fit with the likely social context of the structure, which would demand space to accommodate visitors. This would, however, leave very little evidence within the fabric of the wall and would support the notion that the wall heights were raised or altered with the construction of the hall.

4.4.3 The surviving staircase is clearly a later addition as it blocks the doorway to the south, and is constructed from large, rough blocks of limestone (Plate 14). It is not clear at which point this was added and what this says about the change in use of the building. It is likely that it post-dates the loss of the hall to the east and relates to the rebuilding at the east end of the stair tower (*Section 4.4.2*).

4.4.4 After the hall had gone out of use there appear to have been further alterations carried out, which may be relatively modern. Almost the entire east wall of the stair tower has been rebuilt, and the rebuild overlies a remaining stub of what is presumably the south wall, or plinth, of the hall (Plate 17). The possible remains of a window are also visible within the rebuilt section. Whether this corresponds to a change in the use of the building or was simply carried out to prevent collapse following the removal of the hall is not clear. This may correspond to the addition of the present staircase (Plate 14), which would have made the doorway adjacent to the fireplace the main entrance (Plate 18).

4.4.5 More recent alterations have also been carried out. The construction of a small outshut on the north-west corner led to the blocking of a window in the north elevation of the ground floor. There has been some repointing carried out to the west elevation of the main chamber of the tower on the ground floor, although it is not clear to what purpose. Part of the extant staircase has been removed (apparently by a previous tenant sometime in the early to mid

twentieth-century to prevent children getting to the upper floors). A considerable amount of rubbish of late nineteenth- to early twentieth-century date has also been deposited within the tower, particularly within the waste chute for the garderobe. According to Mr Burrows there was formerly an additional building that acted as a school to the east end of the farm adjacent to the tower, which may be represented in the earthworks identified by Clare (1982; cited in Ryder 2002). There is a building shown in this location on the first edition Ordnance Survey map of 1862, which was presumably the former school. Some of the rubbish (which included pieces of writing slates) and the damage to the stairs may be related to this.

4.4.6 Other aspects of the landscape around the tower are less interesting. The earthwork identified to the south (Clare 1982) would appear to be entirely natural bedrock, forming limestone shelves, upon one of which the tower is built. The field wall attached to the north-west corner, while pre-dating the small outshut (Plate 16), is not evidently part of a defensive outwork, although this is difficult to determine with any certainty. There is a limekiln over the road to the south shown on the first edition Ordnance Survey map of 1862, which was presumably active throughout much of the nineteenth century. As with Arnside Tower this could have had some effect on Hazelslack Tower in terms of the removal of stone, although there is less evidence for this. Similarly, the demolition of the attached hall may have been encouraged or even brought about by this type of activity.

4.5 CONCLUSIONS

4.5.1 ***Discussion***: the historical background (*Sections 3.5-3.8*) and visual inspection of the three towers present a number of points of interest for consideration. The two most important are the historical significance of each and their functions and how these changed through time.

4.5.2 ***Significance***: historically, Beetham Hall was the most significant of the three towers: it was the principal messuage of the manor of Beetham (Newman 2003, 241) and was probably the first to be built (Ryder 2002). It was also clearly more intensively fortified than the other two (although this could partially be an accident of survival) and was, and still is, large in size, reflecting its status, yet at the same time it would have provided relatively luxurious accommodation (Perriam and Robinson 1998, 326). Arnside Tower, by contrast, may have been primarily used as a hunting lodge rather than a permanent dwelling, although it is not clear whether this was a later alteration that significantly changed its appearance (Ryder 2002). It too formed one of probably four fortified buildings within the manor of Beetham, but its status within the manor is not certain (Newman 2003, 241). Hazelslack is also complex, and the surviving section does not give a very complete picture. Historically its origins are relatively obscure, and its status is not known (Ryder 2002).

4.5.3 ***Function***: Arnside Tower may have been used as a hunting lodge (Ryder 2002), but it is not clear if this is what it was originally built for. The presence of both large windows and fireplaces, alongside arrow loops, might suggest

something of a conflict of function (Richard Newman pers comm). It is clear that it has been altered, probably as a result of the fire of 1602 (Ryder 2002), and this may account for what appear to be substantial changes. The original use of the building is, however, of some importance in understanding its significance as it directly relates to its social status within the manor. The function of Beetham Hall seems less open to debate. It was evidently built as a substantial and important fortified house, as befitted its position in the social hierarchy of the manor. The presence of a curtain wall, enclosing a courtyard, demonstrates the importance that defence played in the arrangement of the hall, and yet at the same time it was also a substantial and comfortable house (Perriam and Robinson 1998, 326). The function of Hazelslack Tower is perhaps the most complex to understand. The missing section, if it is presumed to be the hall, leaves a tower of unknown function, which may have acted as a service wing but was fortified (Ryder 2002). It may have been used as a retreat from the unfortified section of the building, but without further investigation this remains impossible to confirm (*ibid*). Like Arnside, the origins of Hazelslack Tower are also obscure (Newman 2003, 241), which also hampers any attempt at interpretation.

5. CONDITION SURVEY AND RECOMMENDED REPAIRS

5.1 CONDITION SURVEY

5.1.1 ***Introduction:*** Elaine Blackett-Ord of Elaine Rigby Architects compiled the condition survey and the information in this section is taken from the resulting report (Elaine Rigby Architects 2005). The monuments were inspected internally and externally during various visits in May, November and December 2004, and again in April 2005. The appraisal is based on an inspection of the exterior parts of all the monuments, and the examination of the interiors where access was possible without undue risk. Collapsed roofs prevented close examination of some areas, particularly parts of the bull shed, pigsty and Solar at Beetham Tower. The collapsed condition of a number of staircases within the structures restricted access. High level access was provided in December 2004 by a mobile access platform, but inspection was limited to those areas visible from level positions outside the monument.

5.1.2 In each building recommended repair work is presented alongside the descriptive text. These recommendations are summarised in *Section 6* during the consideration of condition as a criterion of the Heritage Potential.

5.2 SUMMARY OF CONDITION

5.2.1 ***General Construction of Masonry Structures:*** predominantly all three towers are built of the same local limestone, comprising quarried, hewn blocks, roughly squared for both quoins and walling stone. Water-washed limestone of variable lengths from limestone pavements is used for through stones and longer lintels, both externally and internally. Smaller rubble walling stone of varied sizes is used with levelling wall stone, pinnings between the large blocks and to bring the wall face flush, and as loose filling or corework within the wall construction.

5.2.2 All the structures were once roofed, plastered and lime washed externally and internally, and extensive evidence of these finishes can still be seen. Loss of this protection has led to the degradation of the surface and exposure of the walling stone to frost and saturation has occurred. Extensive joint erosion has taken place due to the lack of protection afforded by roofs, habitation and complete plastered surfaces. The wall surfaces are generally flush with mortar joints complete and level with the wall line. The lime build mortar and remains of surface plaster is very hard. Mortar has failed and been lost due to saturation and lack of maintenance, together with the effects of frost action; environmental and ecological erosion patterns are also evident. Vertical joints are particularly vulnerable and prone to loss of mortar.

5.2.3 Vegetation has taken hold in open cracks and jacking apart of the masonry has occurred as a consequence. Previous extensive growth has been removed and evidence remains, such as dead roots, which are embedded in joints across wall surfaces. Vegetation in part accounts for the erratic pattern of mortar loss,

particularly at Hazelslack and Arnside. Photographic evidence of verdant, but picturesque, towers concurs with this analysis. Wind forces on extensive vegetation may have lead to the partial collapse of Arnside Tower in 1884 (Curwen 1913).

5.2.4 In the ground limestone is naturally jointed and quarried in blocks, then further broken along its fracture lines. Limestone features natural cracks and fissures and is therefore unsuitable for dressed work and unobtainable in length for use as lintels. Limestone pavements, outcropping locally on the surface, is broken up along its water-worn lines to provide longer lengths of stone for quoins and lintels, as can be seen at Hazelslack and Arnside.

5.2.5 Sandstones and gritstones from the north Kent Estuary, and red St Bees sandstone, probably from the Furness Peninsula, are used for quoins, dressed work, window surrounds, fireplaces, lintels, steps and so forth. It is easier to work, softer and finely grained than limestone, and ideal for use in carved detail and external decoration. Surviving sandstone window surrounds are generally in good condition, with little evidence of surface decay. The dressed faces are generally aligned with the limestone wall faces, and would have been protected by the same lime plaster coats until, possibly, the nineteenth century. It has been some time since the structures were last inhabited at Arnside and Hazelslack. At Beetham, which remained roofed throughout, maintenance and adaptation took place until the late nineteenth century. However, as the degree of loss of mortar is similar at each site a similar level of maintenance up till the nineteenth century could be assumed.

5.2.6 Each tower is built on a limestone scarp, in a controlling rather than a defensive position. The walls are perhaps relatively thin for apparently defensive buildings, only 0.9m thick in the case of Hazelslack, and reduced further at scarcement levels and as the structure rises. At Arnside the north-east tower has two scarcements, an architectural trick to reduce the thickness and weight of the walls, creating a visual illusion of height and dominance. Generally the thickest wall construction (1.2m) is at Arnside, which relates to the greater height of the tower. Architectural features common to two or more sites include the corbelling and oversailing courses at wall head level, accommodating wall-walks and seen at Arnside and Beetham. Uniquely, Hazelslack contains evidence of a vaulted undercroft once used as a kitchen.

5.3 MAINTENANCE

5.3.1 In recent years maintenance works have taken place to some degree at each site with varied effects, and details where known are provided below. It is presumed that more detailed future maintenance plans will be formulated and adopted for the group or individual structures as a result of this plan. Recent works have taken place at Beetham Tower under a ten-year stewardship scheme, which has just ended. Previous repairs were carried out by the tenant, as the monument forms part of a working farm. Constant use, and an educational programme as part of the Stewardship Scheme, has ensured that the structures were partly consolidated and stabilised from the 1970s onwards. Such initiatives ceased when the tenant died, and the level of decay has since

accelerated in part because of the present use of part of the property as a livery stable.

5.3.2 Hazelslack and Arnside are within, or border, open fields grazed by sheep and cattle. Consequently, some degree of ground erosion has taken place, but as rock outcrops close to the surface any potential damage is minimised and the structures have not been undermined. Footings are visible at downhill locations, such as around the southern elevation of Hazelslack and the north-eastern turret at Arnside Tower. These minor areas of above ground masonry foundations require localised consolidation.

5.3.3 ***Roots Within Walls***: the type and diameter of roots within the walls gives an indication of the plant species capable of levering apart massive masonry walls. Removing such dead roots will require localised rebuilding; leaving them intact could cause further uncontrolled collapses as they decay. Removal would be the preferred option, particularly at Hazelslack.

5.3.4 ***Wall Tops***: generally, level wall tops have been created by the physical taking down of unstable masonry parapets, possibly in the early twentieth century. Large square stones built up between one and three courses high from the original parapets have been re-used, laid in a dry-stone manner. Their size, depth and weight ensure stability is maintained at wall top level as they span both leaves of the walls. Where large, woody species of vegetation have encroached, deep root systems have dislodged these courses and they are in danger of collapse. During these consolidation works neither cement bedding nor capping treatments, commonly used at the time, were employed, to the long-term benefit of the structures.

5.3.5 The wall tops have since been allowed to develop naturally, and a verdant, soft topping, comprising shallow rooted grasses and mosses, has evolved. The turf and soil coverage occurs mainly above the wet core of the wall, but it also extends across the top of the larger stones, offering a degree of reinforcement or strapping. These species thrive in moist, lime-rich conditions, which are too alkaline and dry to support many deeper rooted plants and trees. The relatively remote locations, set high above the surrounding landscape and at some distance from woodland, have led to few saplings taking root on wall tops. The wall tops are colonised by a thick mat of grasses and this vegetation can be removed carefully and stored prior to repairs commencing. Once loose capping stones have been re-bedded and pointed vegetation can be reinstated.

5.3.6 Internal wall faces generally hold more moisture and colonisation in open joints, and cracks caused by woody species are features of concern at Hazelslack. Open cracks and unconsolidated rubble sills in the masonry walls concentrate water run-off, and these are likely locations for future colonisation by invasive, deep-rooted species, and should be repaired. Distinction should be made between useful and invasive, or destructive, vegetation when formulating any future ecological policy, repair or maintenance strategy. Soil analysis and identification of species should take place before implementing any stabilisation works, and the vegetation layer removed and stored in temporary conditions before reinstatement.

5.3.7 ***Foundations***: foundation movement is not apparent in any of the structures and previous reports of imminent collapse or slippage of the foundations in the BAR appear to be unfounded. The dramatic structural collapse of Arnside in 1884 (Curwen 1913) cannot be linked by evidence on site to a dramatic foundation failure. The masonry adjacent to this collapse remains unaffected; the walls are plumb and wall coursing horizontal, indicating that it probably resulted from a sudden failure along deep, established cracks, followed the line of unbonded or rebuilt masonry panels, possibly associated with the later insertion of fireplaces, or came about due to a lack of lateral support following the decay of embedded timbers or removal of the floors.

5.3.8 ***Open Sockets and Missing Lintels***: throughout each of the structures, few embedded timbers remain, but evidence exists for the size and positions of floor beams and other timbers, such as missing internal lintels over door openings. Where masonry around open sockets is unstable the remains above have formed a natural arch, corework has been exposed, and these areas should be stabilised. Where entire lintels are missing, and masonry above is likely to collapse, consideration should be given to their reinstatement using an identifiable modern solution. A second principle should be to tie together adjacent panels of masonry in those locations. In particular, the south-east garderobe tower at Arnside is not tied into the east wall. This results from openings accessing each chamber on five levels placed vertically, one above the other, thus creating a potential line of weakness, which may lead to a further loss of fabric unless tied.

5.3.9 ***Upper Floors***: where fireplace hearths, and door and staircase threshold masonry, have been robbed from the inner leaf, unstable rubble masonry below is loose, joints have been washed out, and there is a risk of localised collapse. These areas also collect water and channel it onto the masonry face directly below, eroding the mortar joints and creating unstable panels. This is particularly evident between fireplace openings at Hazelslack and Arnside. Similar problems occur at Hazelslack where inner sills and lintels have been lost and the window openings are vertically aligned on the north wall.

5.3.10 ***Window Openings***: the common form of window opening is square-headed with sandstone dressings. More decorative openings have lost most or all of their surrounds and dressings, resulting in arching of rubblework above openings, unstable jambs and exposed corework. Intact trefoil-headed lights remain at Beetham and Hazelslack, at the less accessible second floor level and above.

5.4 ARNSIDE TOWER

5.4.1 The tower comprises the north-east, south-east and north-west principal external walls and the remains of the north-east section of the cross-wall, plus the north turret containing an ‘oven’ at ground floor level (Fig 5). The south-west wall, part of the north-west wall, and the south-west section of the cross-wall fell in 1884 (Curwen 1913), leaving exposed corework. There is no evidence of later significant structural masonry falls, but it is still rated Category C in the BAR (English Heritage 2005). The south-east and north-east

external walls have been taken down to create a new wall top level with large capping stones, in a similar manner to Hazelslack. The north turret wall parapets remain in part, and the corbels to the over-sailing course are intact. The remaining walls have been reduced to a level below the corbel line. The south garderobe tower also has a number of corbels remaining *in situ* at the wall top level, and these are stable. The building is of a single period and there are no vertical joints or abutments; this has contributed to the stability of the structure following the major collapse.

5.4.2 ***Wall Tops and Parapets***: areas of wall top are loose and unstable, in particular interior facework of the north-west wall and at window openings at wall top level, where stonework has been robbed and the lintels removed completely. The two upper openings on the north-east wall are particularly vulnerable. The remaining north-east parapet of the turret is unstable and requires rebuilding and the adjacent area consolidating. The remaining wall tops have low-growing, coarse, grass vegetation colonising the entire area. There is very little vegetation on the tower because of the exposed conditions. On the exterior this is also a result of the completeness of the pointing. The north-east wall is more sheltered and has been colonised by a number of vegetation types. There are no woody species on the building and this has contributed greatly to its stability.

5.4.3 ***Exposed Corework***: exposed areas of corework at the vertical face of the surviving walls of Arnside Tower are in a similar condition. The south-west break joint went through a number of window openings; the section of the north-west wall fell along a line of fireplaces and flues, and this is particularly evident at high levels. The remaining masonry of the cross-wall is corbelled from second floor level. The exposed vertical faces are in remarkably good condition due to the massive nature of the stonework, comprising the external and internal faces of the walls. In particular, the north-west wall corework has very few elements of loose masonry, and should simply be pointed and consolidated in minor areas, particularly where large stones slope downwards. These may also be pinned back. Nearby areas are vulnerable; there is a crack extending from ground level to the second floor on the external face. The joints of the masonry to the south-west of this crack have washed away. There has been considerable movement over the years and this is a potential area of further decay. Cracks and open joints should be deep-packed, pointed and tied across. The exposed internal flue area is also at risk and should be maintained open; again this area should simply be consolidated. The exposed corework of the south-east wall follows a section through a number of window openings, and this face should be consolidated to full height. The inner face of the upper part of the wall has been affected by masonry falls and particular attention is required at the upper floor level, including the corbel course and the masonry immediately beneath.

5.4.4 The upper part is corbelled out and unstable and should be supported by insertion of some discreet metalwork ties, drilled into the mass masonry of the staircase. There is loose corework and vegetation at the higher level on the underside of this corbelling which will require a closer inspection and support. Loose rubble, lower down at the cross-wall, may require tying in. The entire

vertical face of the masonry will require deep packing and consolidation pointing.

5.4.5 ***External Elevations***: the remaining external wall faces are in remarkably good condition. Some works are, however, required to each wall, as outlined below.

5.4.6 ***South-East Wall – External***: the top courses of the masonry should be taken down, rebedded and tied across at the top of two areas of cracking which extend through two storeys from the wall top. The cracking pattern requires some tying across the joints. An area of loose masonry to the south garderobe turret requires a small amount of rebuilding at the south-east corner and all the open joints of the quoins to the turret should be repacked out, consolidated, and repointed. The rest of the wall face is in good condition, the pinnings between the stones are largely intact and only localised areas of the top courses and in the vicinity of cracks should be reinstated.

5.4.7 The windows on this wall are mainly in good condition, apart from those on the second floor, where the sills and jambs have been robbed, and attention is required to throw water from these sills as they are causing water to gather below. The north-east wall of the garderobe tower is in perilous condition and the upper courses, where the raking stonework has fallen away, require rebuilding to a height of approximately 3m. The lower courses contain numerous open joints, and the masonry is unstable in a number of areas, including to the north-west where the masonry fall took place. The lower courses are also badly eroded and require deep packing and repointing. The south-east face of the Tower requires repointing of the quoin stones and possible tying across. The upper courses of the garderobe tower will benefit from tying across. The lower courses of the south-east wall have suffered from a modern opening at the lower level, which provided access to the lower ground floor prior to the fall of 1884. Masonry in this area is remarkably stable, considering, and there does not appear to be any associated cracking or deterioration of the surrounding areas and masonry.

5.4.8 ***South-East Wall – Internal***: a number of upper openings are intact, but the two upper level fireplaces have lost their jambs and sills. At first floor level the lintel has been damaged and this requires additional support. There are two or three pockets where masonry has fallen and these correspond to beam sockets. There is extensive loss of masonry and numerous cracked and fissured stones to the north-east of the upper fireplace hearth and this area requires rebuilding. In addition, the flue from the lower fireplace runs behind this area and is now exposed. A second area to the south-west requires support over the upper part of the socket. On the lower floor level one beam socket also corresponds to the fireplace and the sill there is, once again, missing. Both fireplace hearths should be levelled to prevent water from saturating the masonry below and causing further falls.

5.4.9 The entrances to the garderobe tower are in poor condition, and this is a further line of structural weakness. The lintel on the upper opening is missing and requires additional support, as the capping stones are loose above. The internal angle of the south angle junction masonry has been damaged and tying across this vulnerable corner is required. The ground and first floor

openings have been robbed and there is ineffective tying in of the masonry at this point. Ties should be inserted from the south-west wall into the south-east wall to ensure an effective bond across the corner. It was not possible to access the garderobe chambers and their condition can only be assessed once the building is scaffolded.

5.4.10 ***North-East Wall – External***: the upper window in the north-east wall has been robbed and the loose masonry around the area requires consolidation. The vertical alignment of the windows lower down has led to cracking, a vertical crack between them, and loss of mortar. The lower window has a stone relieving arch, which has ensured the structural integrity of the east corner of the building. Remaining openings have sandstone surrounds with chamfered edges. The staircase has a number of loop windows, all in good condition. The masonry around the north-east entrance has been robbed, and, again, a natural arch has formed; the masonry is stable. It is only the lower courses that have been damaged in more recent times, and the south-east area particularly should be rebuilt. The north-east turret has a similar opening facing north-west, where a later opening has been broken through to the base of the oven. Loose masonry and corework requires structural support.

5.4.11 ***North-East Wall – Internal***: the top of the wall has a number of areas of unconsolidated wall top on the inner leaf, north-west of the staircase, and the highest point of this unstable area corresponds to where the cross-wall fell away. Two upper windows on this wall have lost their sills and a thick mat of vegetation has formed, acting as a green wall topping. The inner stones require rebedding. There is extensive vegetation growth along the step of the second and third floor. No work is recommended as the shelf comprises large horizontal bed-stones, which are built into the wall to some considerable distance and show no sign of movement. Where this floor level meets the cross-wall, larger stones are evident in the section, and the corework is exposed and requires consolidation. The upper opening at this level is in good condition with a number of fallen stones at half level. These should be removed by archaeological excavation and the hearth consolidated to throw water clear of the walls.

5.4.12 At second floor level a number of openings are damaged. To the north, the supporting pier has been removed from between the adjacent doorways into the Mural Chamber, and the lintels and masonry are unsupported. A corbel detail will be required to support this vulnerable area of masonry if the masonry is not reinstated. Similarly, the jamb stones have been taken from the adjacent doorway and the entrance into the central staircase. Although there is natural corbelling and arching of the masonry over, a certain amount of tying in may be required. A number of loose stones are evident around the jambs of the staircase and these will require rebedding. At the springing of the staircase arch an area of masonry is missing, indicating previous movement, and strengthening of the masonry below is required. The pier between this doorway and the doorway to the north is extremely slender and this will require intervention.

5.4.13 The Mural Chamber at this level has an effective sill covered with vegetation. It is not possible to inspect the stonework within the Chamber. The sill appears

to be discharging water, although the masonry below is much colonised with vegetation indicating open joints, which require repointing. The entrance to the staircase at this point has lost its sill and upper steps, and the cantilevered area of masonry abutting the cross-wall is extremely vulnerable and will require an element of propping in the short term and strengthening in the longer term. To the north-west the masonry of a further staircase, contained within the north turret, has a significant covering of vegetation at its base, and this prevented full inspection. It is likely that the masonry below the staircase is extremely thin and has pulled away from the north-west wall. This corner will require tying together, and an effective sill positioned at the base of the staircase. The base of the main staircase opening at this level has completely fallen away. The area below this opening is saturated with water and requires a sill to prevent further loss of fabric, as above.

5.4.14 At ground floor level the fireplace masonry has been robbed and a natural arch formed above the fireplace opening. A further hole has been knocked through to the oven beyond. Here, again, the soffit and surrounding stonework requires consolidation, particularly as this arch is very close to the entrance to the staircase into the mural chamber, where strengthening across the base of the staircase opening and the fireplace will be required as there is considerable damage to a principal stone at this point. The opening adjacent to the fireplace appears to be in good condition. Between the fireplace and the window to the south-east another large opening has been formed in the stonework to the flue, which is unstable at the junction with the fireplace arch.

5.4.15 ***North Turret***: the upper courses of the masonry are in good condition with a few open joints where packing material has fallen, and these should be replaced. The north-east and north-west quoins require minor areas of repointing. At first floor level on the north-east elevation there is an area of unstable masonry between the windows and this will require rebuilding and consolidation work to the core to secure it. The opening into the lower floor oven requires stabilisation and possible insertion of ties to prevent any future falls.

5.4.16 ***North-West Wall – External***: the wall contains one window at each floor level and each retains its complete sandstone surround. The corbel and oversailing course is also complete and supports the largest section of parapet. Consolidation and repointing is required to the lower areas of the wall where mortar has been washed out, along the scarcement level, to a vertical crack at upper levels between the second and third floor windows and along a vertical line 1m from the exposed section where masonry is loose. The remaining parapets and corbel courses and the quoins should also be pointed. A number of areas of indenting of limestone would be advantageous, particularly in an area to the upper north quoins, and to the upper areas of masonry where there have been falls.

5.4.17 ***North-West Wall – Internal***: only half of the north-west wall remains following the collapse, and the standing masonry extends to four floors. There are numerous flues within the wall and three fireplaces in vertical alignment still intact. The flues are exposed at the south-west corner, and work to consolidate the upper parts should take place alongside any work to the wall

tops. The upper fireplace has lost its outer lintel and facing masonry, exposing the flue and the fireback. The north-east jamb is also missing, and the remaining masonry is unstable. The hearth has been lost and is uneven and requires a sill. An area of masonry to the north-east, including a beam socket, is in a state of collapse. This is the most vulnerable area of masonry and could lead to a collapse of the upper floor at this point. The window to the north-east of this fireplace is filled with a rubblework infill panel, and this is falling inwards. Again, it could collapse as the lintel is broken, and above the window numerous loose stones are unstable. This lintel requires a steel plate to reinforce it from below, and the area of masonry above should be rebedded.

5.4.18 At first floor level the main fireplace is intact, the lintel is cracked and there is evidence of stress along the vertical line parallel to the break line. This fault is reflected on the outer wall face. The sill is missing, and there is a considerable loss of masonry along the line of the floor, indicating that a number of joists have been removed from this position. The hearth should be consolidated and drained correctly. The window to the north-east is open, the internal sill is missing, and loose masonry below that level requires consolidation and repointing. Generally, the wall faces at first floor level are in good condition, apart from a number of cracks above the window and at ceiling level. Extant plaster on this wall is probably the best surviving example on the Tower.

5.4.19 Below the second floor fireplace the internal leaf rubblework facing is in a poor condition with numerous open joints, it has lost its pinning stones, which should be replaced during any consolidation works, and the area repointed. A ledge at first floor level has been colonised by vegetation, and this should be removed prior to consolidation works to form a level shelf. There is an area of masonry missing immediately north of the hearth, which will require tying back. The back of the fireplace and the flue is in good condition and requires only repointing in accessible areas. The junction with the north-east wall requires deep packing and pointing, together with areas of adjacent repointing to the wall faces. The north-east jamb is missing and the rubble core exposed. However, the sides of the flue provide good support to this wall, and this area will require consolidation and repointing along exposed edges. The interior is covered with fallen rubble stonework beneath this wall, and the overburden conceals the base of the wall to some considerable depth. This wall is in remarkably good condition considering the earlier collapse. There are few areas of cracking, which would indicate an imminent major collapse; the lintels are intact, together with the jambs of existing windows, which also have stone relieving arches above them. However, two areas of concern, below the second floor fireplace and the window immediately to the north-east, and below the first floor fireplace and adjacent window, require immediate action as further loss of masonry could lead to a loss of the magnificent fireplaces on this wall.

5.4.20 ***Fallen Masonry***: large bushes have grown at the base of the north-west wall and to the south-west amongst the fallen stonework, and close inspection of these areas was limited. The remains of the south-west wall lie in a mound where they fell and there is little evidence of later disturbance, although they are overgrown with vegetation. The largest section, containing the window

openings, lies to the south-west embedded into the ground and is stable. Other large fragments remain where they fell under the south-west wall, and once again this masonry is stable.

5.5 BEETHAM HALL

5.5.1 Beetham Hall is made up of several parts including both elements relating to the medieval hall, and buildings forming a post-medieval farmstead (Fig 3). The hall is in a poor condition, although largely still roofed, and parts of it have been incorporated into the farmstead. It is not, at present, included on the BAR Register (English Heritage 2005), but it is considered essential to add it as soon as possible (Richard Newman pers comm).

5.5.2 ***Former Chapel and South Wing***: the south wing containing the former Chapel at first floor level lies to the south of the Solar Wing (Fig 6). It is small and square in form. The wall tops have been consolidated much in the manner of Arnside and Hazelslack; the north-west corner is in a partial state of collapse, and the south-west corner is in a similar state having lost its quoin stones. Both areas require consolidation of the exposed corework, and stabilisation of the larger capping stones in the area, where, in recent times, modern mortars have been used. The wall top comprises large squared blocks interspersed with cobbles, and the corework has been expressed in a similar manner. At second floor level, three windows are intact, and the central corbels presumably supported a raised truss construction, indicating a pitched roof structure, running north/south, with rainwater discharging via chutes to the east and west. A more detailed stone-by-stone inspection of this area will indicate exact areas where modern mortars are causing harm and should be removed.

5.5.3 ***East Wall – External***: the lower quoin stones to the south-east corner have been robbed and there is substantial exposure of the corework; the upper stonework appears to be loose, but lower down the wall is secure. The south-east corner quoins have been robbed, almost to full height, and the exposed core left unconsolidated and vulnerable to further decay and loss of fabric; this should be repaired. Where the Hall meets the Solar Wing there is a large, unsupported opening, which requires consolidation, although some work was done, evidently in the early part of the twentieth century. However, sections appear to have fallen recently and further exposed the corework. This area is in a dangerous condition and requires immediate attention. The windows are complete and intact. There are a number of holes in the wall where stones have been lost, and these should be built up if the integrity of the wall is to be retained. There is a crack running up the entire height of the wall, approximately 2m from the south-east corner, and this masonry should be tied in to adjacent walls, particularly at high level. The entire wall has been repointed in a cement mortar in a superficial fashion; it can be removed easily and the wall area should be repointed flush, including the numerous open joints.

5.5.4 ***South Wall – External***: the south wall remains intact up to second floor level. The second floor window is a rectangular, chamfered opening lighting the

room above the Chapel and is intact. In the Chapel window, the trefoil-headed dressed stonework remains in a stable condition, but the mullions are missing. Below at ground floor level a large opening has been knocked through the outer wall to form a field access and later blocked up. The opening continues to collapse, and there is evidence of a recent masonry fall. The blocking should be built up from the present sill level and the surrounding area consolidated. Although the nature of the stonework is modern and the outer leaf could be rebuilt, another option would be to form a new sill at a higher level to prevent sheep from climbing onto the ledge. The flush lime pointing and remains of render are intact, and only a small proportion of open joints remain around the quoin stones, at the top of the wall and below sills. The stonework is in remarkably good condition, and the limestone rubble walls are retaining a protective coating in parts. The gritstone quoins are suffering from erosion. Their joints are open and require the replacement of pinnings and flush pointing throughout. Two small openings at Chapel level, with roughly squared lintels and sills, appear on the inside, but their function is unclear.

5.5.5 ***South and West Walls – Internal***: there are two south-facing openings within the chapel: a large square window with tracery head facing south-east, and a small square window with splayed jambs above. Plasterwork to the north wall extends the full height of the wing, and contains evidence of previous floor construction. However, the lower levels are affected by a concentration of damp conditions and vegetation growth. The interior wall surfaces are in good condition with only the upper part requiring repointing. The Chapel plasterwork is intact across large areas, and requires minor conservation work and cleaning. The lower floor level has a modern opening to the south, and this requires some judicious rebuilding of the upper parts to support masonry above adequately. Plaster surfaces remain around the east window opening at first floor level, and to the west window. The upper windowsill is missing and large stones remain unsupported. The stone relieving arch above the traceried window is evident above the plaster line. Minor areas require repointing. A large opening has been punched through the south wall at ground level, which has been blocked. Blocking of the large opening is evident, and the upper part should be rebuilt to support the opening and the loose stonework secured. At first floor level the plaster surfaces remain intact within the Chapel, except below the windowsill where this area has been saturated, and there is a large area of lichen growth. At second floor level the small opening is intact across the wall, and open joints should be repointed except in areas of extant plaster. In the Chapel window reveals the plaster remains intact, but the underside of the lintel is particularly eroded due to moisture penetrating from above. Therefore, the upper windowsill should be consolidated and made waterproof to protect the plasterwork and the window beneath.

5.5.6 ***West Wall – External***: the upper areas externally are loose and require consolidation, particularly the south-west corner where the quoin stones have fallen away. There is evidence of the original flat roof construction with a projecting rainwater chute at wall top level. The parapet is likely to have extended some 0.9m above the present level. The wall surfaces are in good condition below the upper band of masonry and above the second floor window. Below that window there has been significant erosion. These areas,

and other isolated areas of masonry across the wall surface, should have their pinning stones replaced and exposed, then repointed flush. At the junction of the South Wing and the Solar at second floor level, a panel of masonry links the two areas obliquely; this detail may indicate a continuation of the parapet. This detail is repeated on the inner corner. At lower levels, large boulders have been exposed by the reduced ground levels. Above this line there has been erosion of the joints, which require remedial work. The window openings at first and second floor levels are intact.

5.5.7 ***North Wall – Internal***: the north elevation contains a number of openings from the South Wing into the Solar, and at the first floor level. A large opening has been punched through the wall, obscuring most of the doorways, and it is itself partially blocked by the roof inserted within the Solar. The masonry junction of the lower Solar roof and the Chapel is in poor condition. This section of roof has dropped and there is a gap between the slating and the cement fillet above due to failure of the purlin ends. An area approximately 1m deep below the wall top requires repointing. Evidence of plaster in the north-west corner is substantial but decayed by saturated conditions and affected by moisture-loving plants, which should be removed, and the plaster consolidated to the full height of the wall. The junction of the former Hall and the South Wing appears to have been rebuilt, probably in the nineteenth century, when the Hall was roofed. It is inadequately drained, and water has saturated the north-east corner of the Chapel. Rainwater must be channelled away effectively from this area and the lead-work redetailed. The remaining walls require very little work apart from the opening in the north wall. There has been a door opening from the Solar at first floor level into the Chapel with an adjacent Mural Chamber to the east. The ceiling stones are unsupported at this level and require immediate attention if this unsupported opening is not to continue to deteriorate. The doorway at second floor level gave access to this chamber from the Solar Wing, and it is intact, complete with plasterwork on either side.

5.5.8 ***Solar Wing, Roof***: the later mono pitch roof to the Solar slopes from east to west, and rests on a roof construction of softwood joists, purlins, and half trusses. There is no evidence of any rainwater goods, and it appears that the roof has always drained to the west, discharging water directly into the Solar for some time, causing extensive damage. The ruin has been saturated throughout this time and the bare earth floor is completely saturated. Slating is now damaged in a number of areas, principally, the north-west and south-west corners, and at the junctions or abutments on all sides. The purlin and rafter timbers are rotten throughout, and the roof is in imminent danger of collapse and should be removed as a matter of urgency. Whilst the roof is in place, it is impossible to access the upper walls of the Solar for maintenance purposes, or to complete the survey, and its complete removal is recommended. The rainwater discharge has significantly affected the plaster in the south-west corner of the Solar, and decay and deterioration will accelerate as the roof collapses.

5.5.9 ***West Wall – External***: this dramatic elevation is complete up to three floors, and has a horizontal wall top. The garderobe tower has been extensively

robbed and the masonry has been lost entirely at ground floor level, together with the north quoin stones to first floor level. The upper masonry is suspended without any clear means of support, and appears to cantilever from the west wall. The plinth stones and masonry of the Solar wing continue behind and beyond the garderobe tower. The ground floor and foundations may not be contemporary with the Solar, but construction seems to have commenced immediately after. The suspended masonry is in a precarious condition and the insertion of ties may cause a catastrophic collapse. Therefore the preferred repair would be simply to prop the overhanging masonry in some discreet manner. At lower levels exposed corework could then be tied back and supported. Dead ivy roots should also be removed. The contemporary chimneystack in the centre of the wall remains to the full height of the wall, but very little external dressed masonry remains. The corework is covered in vegetation, which should be removed to allow a detailed inspection of the upper parts. It is likely that the entire wall section will require consolidation and repointing. The lower doorway has been broken through and the masonry is stable but the soffit comprises loose masonry, which should be fixed back.

5.5.10 The main wall face is in remarkably good condition, and shows little evidence of decay or movement. Here again, the lower foundation stones have been exposed by excavations to form a level terrace. The depth of the foundations is unknown. Where two courses of foundation stones are exposed, there may be a risk of future instability. The lower plinth and foundation stones require repointing. Consolidation of the upper wall stones, a number of areas beneath the intact second floor windows, and the first floor windows, particularly the south window where part of the sill has been lost, is also required. A large jagged opening formed to the north requires consolidation, particularly to the corework, which is loose and exposed. If the opening is to remain it requires some sort of additional support, new lintels or propping, as it is a main access from the Solar to the tenant's garden. A blocked up window to the south of nineteenth-century rubble masonry, is of poorer quality, but it is stable and should remain differentiated from the surrounding wall surface in any repointing works.

5.5.11 ***West Wall – Internal***: wall tops in this area have been consolidated in a similar manner to the South Wing to approximately third floor level; no masonry remains above this line. On the west wall the south window has lost its inner lintel, but the outer lintel remains. The north window remains intact and its lintel supports a substantial masonry panel above. The doorways from the staircase into the garderobe turret to the south are in good condition, and, again, surrounded by intact plasterwork. Only the sills of these doorways have been damaged, and the lintels are intact, but the mortar in these areas has been washed away by the drainage from the roof, particularly at the first floor level. The sills have been lost and loose masonry requires consolidation. The first floor fireplace on this wall has an arch of large blocks of stone with a chamfered edge. The shoulders of the arch are resting on springing stones with large notches, which presumably contained a bressemer beam, with a small candle recess adjacent. The north window has a flat sill comprising rubblework, and moisture below the window has encouraged a collection of moisture-loving plants. The north jamb of the window has evidence of early

plaster and part of the window surround retains limewash coats. The lintels are in good condition and adequately support the masonry above. The second floor construction rested on a ledge on the west and east walls. The south wall of the Tower retains little evidence except two beam sockets, and no ledge. The first floor construction was similar. Modern piers on the south wall support the half trusses and obscure the lower fireplace and a blocked window. If the roof were removed they should remain as part of the site's development.

5.5.12 ***South Wall – Internal***: the upper course of the masonry has been rebuilt to accept the nineteenth-century roof structure. Large areas of masonry around the upper middle areas of the wall require repointing as the mortar has been washed out. Likewise, the label mouldings and other dressings on this elevation are decayed in areas and require repointing and lead flashings. A new opening below the principal south first floor window, giving access through the barn, has rough jamb stones of varied sizes; a number are loose and require consolidation and repointing. The large foundation stones to this wing are exposed, and the overall depth is unknown. However, a number of open joints above this line require deep packing and consolidation. The level of this area appears to have been reduced in recent times, presumably to provide access and create a small pen. A jagged, modern opening at the base of the hall completes the circulation pattern probably created in the nineteenth century. The large opening between the Solar and South Wings has unconsolidated jambs and quoin structural support. Overall the walls are straight and true, and the areas of blocking to windows are intact, and remain complete, apart from the east window where partial blocking allows a small ventilation gap at the top.

5.5.13 ***North Wall – External***: the north wall has been partially demolished at second floor level to allow the insertion of the Stable roof, which presently rests on this construction surrounded by loose rubblework; it remains unconsolidated and in a dangerous state. A number of falls of masonry have taken place damaging the roof below, and stonework lies on the ground beneath. This area of wall is inaccessible, and consolidation work is a priority. To the north-west, a large ivy creeper, extending onto the roof of the adjacent Hall, affects the wall and this should be removed completely to a level below the Stable roof. There appears to be evidence of a sill on this wall where the north roof intersects, but otherwise any repair should be to stabilise corework only.

5.5.14 ***North Wall – Internal***: this wall forms the south wall of the Stable. The principal feature is the large window at first-floor level, which was blocked when the Stable was built. The wall above has collapsed along with part of the arched opening; no evidence of flues remains.

5.5.15 ***East Wall – Internal***: this elevation forms the west wall to the Hall and contains the Staircase. At first floor a masonry panel resting on the floor ledge blocks the doorway. Sockets have been formed to support the truss ties. There is very little evidence of historic plaster and the walls have more recently been limewashed.

5.5.16 ***Stable and Granary***: this range is built behind the mid-section of the west curtain wall. The stable is a double height space with a two-storey structure to

the north. Later alterations to form a cart shed included the insertion of dressed-stone arched openings, with the Granary remaining above. The stable stalls and upper floor are supported off posts and beams; no new sockets have been formed in the curtain wall. Modern roof trusses, resting on the inner masonry leaf, support purlins and a corrugated sheet roof. The roof has asbestos cement gutters and downpipes, which are damaged, blocked and ineffective, and should be renewed particularly on the west elevation. The west rainwater goods do not discharge correctly and terminate above ground level. The east rainwater goods are effective and drain into the yard. There does not appear to be an effective below-ground drainage system to the west. On the west elevation there is a central window, of approximately eighteenth-century date, with a timber lintel protected by slate hanging and a stone sill. The west wall has been repointed in the early twentieth century in areas including around the window, at ground level, where small areas of erosion have taken place, and at eaves' level, where the curtain wall was consolidated to receive the new roof construction. Otherwise the flush lime mortar or degraded render covers the entire surface. Large joints between foundation stones have been eroded and require pointing. The floor structure to the Granary was added later, and is similar to the stables. An external staircase to the west comprises large limestone treads with rubble masonry below, with levelling slate packing, providing access to an upper Granary above the Carthouse. A crude modern pine handrail has replaced an earlier version. New fixings securing the base plate have been drilled into the treads and conceal earlier fixings.

5.5.17 ***The Hall Range***: the Hall retains its form and now has a modern pitched roof, with a ridge running east to west. The west gable has been built up in areas to take the new roof, and on the east side, the roofs extend over the East Range, comprising the former Buttery.

5.5.18 ***Roof***: the roof is of Westmorland green slate laid in diminishing courses with sandstone ridging and pine roof structure, indicating an early to mid-nineteenth century date. The medieval Hall was roofed over with three king post trusses with three purlins to each slope. The ridge beam rests on the outer masonry of the main east and west walls, which have been raised above a previous line indicated by the lower level of the internal masonry. The roof structure appears to be in good condition. The slating has been repaired a number of times in recent years. The north slope has been re-roofed on roofing felt in recent years, but the south slope retains its full torching to the underside of the slate. The roof condition has deteriorated in recent times, and there is a hole in the roof at the ridge, at the west end, central section, and a number of holes at the eaves. The east verge has been cement rendered, and lead soakers have been inserted, but no flashings. A small lead back gutter between the south abutment of the roofs appears to be effective. The roof water drains into cast iron guttering, which, in turn, discharges into rainwater pipes on the north and south walls. Where the gutters have failed, mortar has been washed out, although it can be seen above the large barn opening, partly protected by vegetation. Any repairs should retain and consolidate this surface *in situ*. The north rainwater goods are intact but the south has been lost and should be replaced.

5.5.19 ***North Wall***: the modern, barn door opening to the south probably dates from the 1930s, and has *in situ* cast-concrete lintels, supporting a large area of rebuilt masonry above. In turn, this masonry has been repaired with the use of four metal bars tying together the outer and inner leaves. It is likely that this replaced an earlier barn door opening, possibly from the seventeenth century, as there is evidence of a masonry east jamb. The remaining openings are contemporary with the Hall, and are complete, apart from the central mullion, which is missing in each case. The north and south doorways from the Hall have been blocked up, and these openings remain stable. Extensive and invasive vegetation affects the roof and eaves' level, and should be removed as a matter of urgency.

5.5.20 ***Staircase***: the doorway to the Spiral Staircase has lost its sill, but is otherwise intact, and so are the various windows at the ground level. The treads of the lower part of the Spiral Staircase remain intact, but much broken and eroded. The doorway at first floor level into the Solar Wing has lost its north jamb, and the loose core remains. The entrance has been blocked, although there is a small opening at the lower level. The south jamb has been robbed, but it appears to be well built-in. The upper treads from the second floor remain, covered by the roof over the Hall. There is an opening above the Solar roof, and this is covered elsewhere. The interior of the Spiral Stair retains its original plaster finish. It is dangerous and access should continue to be restricted.

5.5.21 ***West Wall – Internal***: the blocked opening between the Solar and Hall is intact, but a number of areas are loose to the underside of the arch lintel.

5.5.22 ***South Wall – External***: the two-light mullion windows with decorated heads and chamfered drip-mouldings remain intact and unaltered. The central mullion to each has been lost. The windows have been partially blocked by nineteenth-century rubblework, presumably as protection from the prevailing winds. There are no gutters on this wall and eaves' slates are uneven, although they overhang the wall surface. It is obvious that guttering was once in place, but this has been taken down. If rainwater discharge can be provided, then the rainwater gutter should, ideally, be replaced. The foundation stones are visible on this elevation and there is no sign of foundation movement or differential movement between the Buttery Wing and the South Wing. The two-centred arch of the main, south doorway has partially lost its label mould. The new doorway to the south has a modern lintel, and timbers, internally, are badly affected by wood-boring beetle and completely rotten at the east end. The south courtyard has also been used by the livery stables, and this has caused some churning up of the ground and, particularly, the cobbles to the south leading to the gateway to the fields.

5.5.23 ***South Wall – Internal***: the Hall abuts the Staircase Tower of the former Buttery Wing to the west, which cuts across the jambs and label mouldings of the south doorway. The gutters on this elevation are missing, and rainwater is concentrated on the west junction with the former Chapel, and at the junction with the Staircase Tower. Internally this has caused mould growth and deterioration of the mortars and plaster surfaces within the Hall. The internal surfaces are true and flash-pointed overall, including evidence of earlier

plasterwork, particularly in the lower areas, which has been cleaned following lambing. All other doorways have been blocked and the masonry is intact. Upper wall levels have been built-up to receive the new roof structure. The west opening has been broken through at ground level to form a modern doorway. There remains evidence of an earlier ground floor window, which, presumably, lit the dais area. The jambs have been repaired a number of times in recent years, but the exposed corework at lower sill level remains loose and should be consolidated. It is vulnerable to damage by horses and livestock using this area.

5.5.24 ***Hall Floor***: the floor to the Hall is cobbled in part, and as a result of the use of this area for horses, a number of areas have been lifted, and the cobbles are mixed with the overlaid gravel surface. There is evidence of a flagged floor immediately in front of the dais window, and the remainder of the floor appears to be dirt mixed with gravel. No evidence of extensive cobbled areas remain, apart from adjacent to the east wall. The walls remain intact and have been preserved because of roofing and the continued use of the Hall and the Barn for storage. The continued use of the Hall for horses is not suitable and should be stopped, although it is acknowledged that the Hall is not supposed to be regularly used for the housing of livestock (Dallam Tower Estate pers comm).

5.5.25 ***Buttery Wing East of the Hall***: the Buttery Wing, east of the Hall, was converted to a barn or stable, probably in the eighteenth century. This remaining block pre-dates the south wall of the Hall. The main feature is the Spiral Staircase in the south-east corner of the Hall, which provided access to the first and second floors. Adjacent to the first floor entrance is evidence of a large, arched window opening, and another, smaller opening at second floor level. The west wall from the staircase continues north, and this wall top is exposed and unconsolidated above the roofline between the Stable and the Hall. Only the upper treads of the staircase remain in part. There are elements of loose masonry above that level and the unconsolidated wall tops above, which require some stabilisation work. The jambs to the first floor opening have been robbed, and only two stones remain. The lintel is missing from the first floor opening, and the panel of masonry above is unsupported to the north-west. Above that line, little dressed masonry remains, and the exposed corework requires consolidation. The uppermost tread supports a large area of loose masonry, and this should be further investigated and stabilised as a matter of urgency. There are three openings into the staircase, which are intact. Externally, the south-west quoins have been robbed, and the exposed corework consolidated to a height of approximately 3m. Above that line the masonry core and mortar is loose and requires consolidation. All the external masonry is limestone, open-jointed and requires flush pointing. The first floor window jambs have been robbed externally, and this area should be consolidated. Woody growth on the wall tops should be removed, but lower down gentians have colonised the wall and should be replanted if work is carried out. The inter-mural stair opening has been used to feed a water pipe through from the east Barn Range, and a more sympathetic solution to water distribution around the site should be found.

5.5.26 ***South Curtain Wall***: the remaining elements of this wall are unaltered along its length. The top has been taken down to eaves' level of the Barn built behind the wall, the roof of which rests on the inner leaf of the Curtain Wall. The wall is built of massive limestone blocks and contains two loop openings along its length. A central opening giving access to the south field was formed before the barn was built, but has been blocked up later in dry-stone wall fashion. The west section of the foundations is exposed where they rest on the outcropping rock, and areas at low level have been repointed. The stonework in this area is very small in comparison to the blocks above. Rainwater goods on the roofed building behind remain in good condition, and this adds an element of protection to the wall. It was not possible to inspect the north face of the curtain wall.

5.5.27 To the west the wall has been consolidated in a similar fashion to the east wall, but the mortar has largely fallen out across the top levels of the wall where vegetation has encroached, and where there is a crack running from foundation to head, approximately 2m from the south-east corner. This should be investigated further, but it is likely that the wall has been undermined on its east side, and this is evident from the lower external ground level. Deep-rooted vegetation should be removed and the wall pointed flush where there are open joints. The modern mortar should not be removed at this stage, just patched, as it is hard and will be extremely difficult to remove. The loop windows have been blocked from inside and it is impossible to remove this masonry as an inner wall has been built. There is a further crack in the masonry, approximately 3m from the west end, and this can be tied across, deep packed and pointed along with the rest of the wall. The wall is generally true and level. The upper stones appear to be large and placed intentionally and some consolidation has evidently taken place. The wall is in a vulnerable state; the upper masonry has been colonised by deep-rooting vegetation along its length, and this has caused recent falls of masonry. The wall top requires complete consolidation and levelling.

5.5.28 ***West Curtain Wall***: a length of masonry forming part of the barns in the north-west corner of the farmyard/courtyard comprises part of the west curtain wall. The former outer face, now the inner face, has been replastered and limewashed many times. However, there may be evidence of fourteenth-century external plasterwork, or render, remaining intact, particularly at the higher levels. The wall now supports two eighteenth-century trusses, and sockets have been formed to receive them. There is a central pitching door, which is an addition. There may be evidence of the wall-walk on the top of the walls, but this was inaccessible and unsafe. A modern blockwork wall has been formed at right-angles to the north end, and a number of adjacent areas have been repaired using cementitious mortars. To the south end a later stone gable wall has been inserted, and this has moved away from the curtain wall since it was built. Above the internal barn door opening in this wall, the masonry is extremely loose, and any collapse of this wall would affect the medieval masonry. A previous first floor level is evident to the north section of the wall, where a central beam has been sawn off; this is a later insert. Two further sockets remain visible with unstable masonry surrounding them and

these areas should be consolidated. These features follow the line of an external slot in the wall, the purpose of which is unknown.

5.5.29 The masonry contains numerous open joints and loose rubblework. Careful consolidation and repointing will be required to prevent damage to the surrounding plasterwork. There is evidence externally of former loop windows, or openings, in the wall. Areas of more recent rebuilding are associated with the inserted floor, and other agricultural modifications. The external face of the wall is vertical but is outward leaning above the over-sailing course. An area of rebuilt rubble masonry at the lower parts, together with a limestone feature at the lower part of the wall, was likely to have been below ground. Only minor areas of cementitious pointing or render have been applied. The broken north-east corner has been cement-rendered to match the modern, north wall, and some damage has occurred due to impact at a height of about 2m. The barns are roofed and have effective gutters and downpipes, although the downpipe does not discharge into a gully on the south-east corner, and effective drainage should be provided. There is a single structural crack, approximately 3m from the south and extending from the large foundation stones to the over-sailing course. Below that line the masonry is level and there is a large stone lintel supporting the masonry above. There is no evidence of previous floor levels on this side of the building.

5.5.30 ***East Curtain Wall***: the Curtain Wall runs north-south with two transverse wings at either end, and is set back to the north forming a later barn construction. The wall tops have been consolidated, together with the wall faces, in the early twentieth century in a hard mortar with an exposed aggregate laid over the original mortar. Although hard and impervious this pointing is flush and intact. Evidence of original mortar can be seen in the loop reveals. The over-sailing course has been consolidated and the wall top remains stable. The wall face has been colonised by a number of gentian plants, which are non-invasive; there is no evidence of deep-rooted species, or invasive ivies, colonising the structure. There are two blocked openings, or previous loops. To the south the Gatehouse return wall has been treated in a similar manner. The mortar is badly cracked on the south wall where ivy has colonised. There have been past efforts to remove this, but it is invasive and should be removed completely. At the south end of the main wall the corework has been consolidated in a rough-racking fashion, typical of the early to mid twentieth-century repairs by the Ministry of Works. The outer wall has been consolidated in a similar fashion, but the mortar is in a poor condition with a number of holes and gaps and numerous cracked areas. There is evidence of cracking to the south section, and this may be caused by the use of cement mortars, particularly to the lower courses, which are now exposed. There is no evidence of recent structural movement.

5.5.31 The upper corbels supporting the remaining sections of parapet are intact and stable along the two remaining lengths. The three loop windows to the south are intact, and the fourth to the north has lost its jambs, prior to the twentieth-century restoration. The lintel appears to be suspended and requires support. The modern mortar work continues across the face of the building, and it is evident that the east ground level has been further reduced since this work was

done. Exposed below the course of large stones forming the foundation is an area of rubblework of an inferior quality. The north section of wall has a single drainage outlet at low level, presumably from the Barn, and two loops, which remain intact. The north wall terminates and abuts a dry-stone field wall, and this wall is treated in a similar fashion. The north wall section is generally in better condition, as it was roofed during the mid-period, and the style of masonry, although similar, has been completely covered by the modern mortar in the form of flush pointing. The upper sections of the wall have been colonised by the same plants; it is evident these areas are holding water behind the modern mortars. The external south-east angle of the Barn has been repaired in the same rough-racking style, but has undergone later repairs as well. The south-facing loop window has lost its jambs, and, again, the lintel is unsupported, although it has been well mortared. The depth and hardness of this mortar precludes removal and replacement with a more suitable lime mortar, and, therefore, it is suggested that no work is carried out to the wall at this time.

5.5.32 ***The Bull Shed***: the structure to the west of the complex has two storeys, with a pitched roof running east-west. It is built of dressed limestone and rubblework in lime mortar. In recent times the roof has fallen in, and the eaves and verges have partially collapsed. The roof has been lost due to rotten timbers and wind uplift caused by the long-term absence of doors and windows. The west elevation has a number of severe cracks, and the masonry in the middle section is leaning outwards. The south elevation is reasonably true, but there are a number of cracks to the west of the main lintel, and numerous open joints and gaps in the masonry. The upper courses are unstable. The south boarded door remains in part, but it is rotten at the base. The east elevation mortar has washed out completely due to the discharge of rainwater from the adjacent open-sided shed, and considerable vegetation has colonised the wall due to high moisture levels in this location. The level of the foundations is not known, but excavation has taken place adjacent to the west elevation when concrete hard standing was laid. Run-off drains towards the shed, where the foundations will be saturated, and this rainwater and top water should be diverted. The east door is missing.

5.5.33 In the north elevation some slates remain on the roof in a precarious condition and these should be removed immediately using an access platform, and the unstable verges and eaves consolidated up to wall-plate level as a temporary measure. The north-pitching door is missing; masonry has eroded considerably beneath the sill, and there is cracking beneath. A blocked up window at ground floor level is intact, but the lower parts of the masonry and all quoin stones require repointing. The structure has suffered considerable collapse in recent times and, should the remaining roof purlins fail, the east wall will fall, with the eaves and upper part of the north wall. The walls require propping prior to any work taking place. The remaining slates are of Westmorland green slate with sandstone ridging, laid in diminishing courses with full lime torching beneath. The first floor structure is on the verge of collapse and the remains of some stalls are supporting the central beam. Floor joists running north-south have all failed and are supporting the remains of the roof from above. Previous movement has occurred on the west wall where the sill to the pitching door

has moved as a result of the loose nature of the rubble beneath. If further collapse is to be avoided the remaining timbers should be removed from above. It is unsafe to enter the structure given the amount of debris on the ground.

5.5.34 ***The Pigsty***: this structure comprises three separate compartments, the cross-walls of which remain; the outer walls are in a serious state of collapse. The roof structure is mono pitch, sloping down from south to north, with Westmorland green slates laid in diminishing courses; a central purlin supports roughly squared rafters. The central portion of the roof is intact above the cross wall, but is likely to collapse at the north end due to the rotten state of the wall plate. The central masonry pier supporting the north wall plate has been lost, and this appears to be the cause of collapse, together with the rotten state of the intermediate purlin. New quoin stones will be required between the two north doorways and this supports the wall plate and roof structure. The feeding holes are intact, including their doors. The east pigsty roof structure has failed and slates are lying on the ground within.

5.5.35 The internal walls are generally in good condition, but the north-east corner collapsed when the roof gave way. The rubblework is generally open-jointed and a number of stones have been lost. The south wall is complete, together with the parapet coping stones, and only the south-east corner has collapsed; the stones lie on the ground internally and could be repositioned as part of any future repairs. The south wall remains well mortared, but a number of cracks are evident, and in some areas the mortar has been washed out. A large crack runs the entire height of the wall in the south-west corner, and will require tying back. The west wall is in a similar condition; it is buttressed in part by a small, modern lean-to toilet to the south. There are many open joints, particularly at the upper parts of the wall, where the end rafter is visible and the masonry is loose below. There is a further crack along the line of the quoin stones to the south-west, and these require to be built into the wall. Once again, rainwater discharge appears to be the cause of major instability to the north-west corner, where trees are now growing out of the structure and rubble. An adjacent building to the north-west abuts the pigsty. There is a farrowing pen to the west, the north wall of which has collapsed entirely, taking with it short lengths of the east and west walls. This collapse occurred possibly 20-30 years ago; the main roof collapsed more recently. The building is repairable in its current state as the masonry walls are, on the whole, intact and can be rebuilt or tied together *in situ*. The areas of urgent rebuilding are fairly minimal at this stage, if further collapse can be prevented. The internal timber lintels to the feeding hatches are intact and the south wall is therefore the most stable element of the complex.

5.6 HAZELSLACK TOWER

5.6.1 Hazelslack Tower is a roofless ruin (Fig 7), and is listed Category A on the BAR Register (English Heritage 2005). The monument was last maintained by the tenant in about 1998, when trees and roots were removed. It is situated to the north of Hazelslack Tower Farm and there is a small cottage immediately to the east of it (Fig 4).

5.6.2 ***Wall Tops***: loose areas are evident on the north elevation at the west end and to the west elevation, particularly the south-west corner, in an area where a fourth floor loop window has been lost. An area of exposed core is also unstable. The wall top requires the re-bedding of the top two to three courses, which are loose, and further courses in the north-east corner. Pointing is loose to the horizontal sills, hearths and so forth, at wall top level.

5.6.3 ***East Wall and Projection of South***: a shelf has been created where the masonry thickness reduces on the internal east wall, and brambles, other woody species, and ivy have colonised the area. Fresh vegetation has taken root and colonised the upper levels where open joints were created by previous vegetation. Roots should be removed from the north wall top courses, including all forms of ivy, and from around the line of stone flashings and scar of where the Hall roof abutted the Tower. Below this the majority of the external part of the ground floor of the east elevation is filled by the large fireplace, which would have been within the now demolished Hall.

5.6.4 The following high level areas require repointing: above the apex of the Hall wing, to a height of 1-1.5m internally to the fireplace lintel, and rebuild the area to the west of the lintel; the east projection, 1-1.5m from the wall top and above the top window, including the upper lintel; all open joints to the quoins; and the reintroduction of gallets and packing stones to vertical joints and the bedding of mortar joints to improve stability; the pointing is very loose above the internal fireplace lintel, and should be replaced. The internal area of masonry where the east projection meets the main east wall requires rebuilding following the collapse of the upper part of the east/west internal wall. Loose quoins and the remains of the east range eaves and verge lines should be consolidated and the projecting stones secured into the wall. Localised areas of indenting and repointing are required to the east projecting wing between the second and third floor, at the line of change in the masonry style, below fireplaces and around other openings. At ground level in the area adjacent to the main north doorway, the loose and exposed corework should be consolidated.

5.6.5 ***South Wall***: this elevation remains up to the third floor and the upper window and complete lintels at this level are in place. Loose masonry to the wall top, 0.5-1m deep, should be reset and tied in across the large vertical crack at this level and below. Invasive vegetation remains a problem and the upper part of the wall is colonised by deep-rooted ivy of some age. Some jacking apart of the masonry has taken place and in these areas the plant should be killed and the roots removed completely. This will require the removal of small areas of masonry, which would then be reset. Similar unrestricted growth at high level in the past was the likely cause of the large adjacent cracks and areas of unstable masonry, because the plant was not removed completely. The wall top has been taken down to a horizontal level along this elevation and the wall top has been consolidated and capped with large flat stones spanning each leaf. Cracking is evident to the east and west of the upper third floor window, which is intact. Unstable masonry should be re-bedded and ties provided by means of horizontal flat stainless steel bars positioned on either side of the lintel, and at the jamb stone joints, to reinforce this potential point of

weakness. Window surrounds at second and first floor levels, and the garderobe loops, require vertical joints and joints between lintels, sills and quoins to be packed and pointed to prevent rotation.

5.6.6 Large vertical open joints to the lower sections of the wall should to be cleared of all loose rubble and roots, and the joint depth consolidated prior to repointing. Sufficient large horizontal stones will act as ties, as at present. Lower masonry courses on the downhill side up to the jambs of a blocked doorway should be pointed up to door head height. At the south-west corner numerous mortar joints have eroded to a great depth, in part due to the condition of the low-quality rubble masonry in this area, which is particularly poorly bedded, and much fissured. The masonry incorporates too many small rubble stones, many of which have fallen out and require resetting. A number of quoins are unsupported and a broken quoin, at a height of approximately 1.5m, should be reinforced by additional packing and levelling stones between the stones prior to repointing. A similar pattern of decay can be seen at the south corner of the west wall.

5.6.7 ***West Wall***: upper levels of masonry have collapsed leaving a rough wall line to the south, where evidence of a window surround remains without lintels, leaving this area particularly vulnerable to further collapse. Raking wall tops above the spiral staircase and the garderobe shaft require consolidation to secure loose rubble corework, and the capping stones reset. The third floor window and surround have been lost, leaving a raking wall line to the north with exposed corework and four unstable courses above. At the mid point of the wall above the second floor window the two leaves of stonework have pulled apart and an area approximately 4m² will require rebuilding and tying back together. Ideally the area should be tied across to vertical masonry, on either side of the repair, with stainless steel ties, and deep voids packed out prior to repointing. Although concealed by vegetation, the wall top will have opened up, creating a large open joint running north/south within the wall core. Large capping stones or flags should be repositioned over the core to provide long-term protection in these situations.

5.6.8 The second floor trefoil window surround and mullion are intact. At first floor level three windows have been inserted in plain openings with rough rubble jambs and shallow lintels. The sills have been lost to the central and south openings and erosion patterns are evident beneath. Repointing in these areas of wall and to the lintels is required and the pinning stones replaced where they have been lost. An area at the base of the wall, likely once to have been an opening or access from the field, but now disused and blocked up, has been rebuilt in cement mortar, presumably in the early twentieth century, and the mortar should be left intact as it has had no detrimental effect. Lower courses of the wall require repointing along with large areas of the second floor, together with the lower quoin stones and adjacent masonry to the north and south of this elevation. The lower opening of the garderobe has a large, intact lintel with a stone relieving arch above, which has failed, and a panel of masonry above it has fallen outwards exposing the core and loosening adjacent stones. Three stones above have formed a natural arch above this area. The

masonry is stable at present but requires consolidation of the corework and repointing.

5.6.9 ***North Wall***: this elevation is relatively sheltered and the mortar is intact across large areas. Upper courses have lost their mortar and require deep packing and repointing. The quoins are vertical and straight. Generally, the wall face is in good condition apart from the upper courses of the walls, which require rebuilding to a height of approximately 1m in the east and north-west corner, tapering to the lintel of the second floor window. Below that level the spandrel stonework between windows requires repointing.

5.6.10 There are three windows in vertical alignment within the north elevation, and this is a point of weakness. The upper opening has lost its outer jambs and lintel; masonry adjacent to both jambs and the sill require rebedding. Only the inner lintel remains intact and spans between existing inner jambs. The area below the opening has lost its sill, and an effective sloping sill should be provided to throw the water clear of the masonry between the third and second floor windows to prevent further degradation. This area of stonework is badly eroded and is in danger of collapse as a result of a broken, and partially missing, external lintel to the second floor window. This lintel can be retained *in situ* and reinforced by the insertion of a steel plate and a discreet secondary lintel within the cavity. In addition, the end-bearing stones of the lintel have been lost and the lintel can now rotate, exacerbating the problem. This window requires a properly detailed sill as the masonry between the second and first floor windows has a large vertical crack and is in a similar condition to the panel above. The first floor window has a broken lintel, although the jambs of this window are intact in this instance. The sill of this window requires similar treatment to that suggested for upper windows.

5.6.11 Above the first floor window there is a line of joist sockets, which indicate that either a separate building or a large lean-to roof had been constructed previously. This has since disappeared. There is a large void in the masonry above the first floor window, which indicates a fall of masonry at some stage. It has adequate lintels and no action should be taken apart from general local repointing. A number of lower areas of the wall have been cement pointed, probably in the early part of the twentieth century, and this mortar is of poor quality, but there are no obvious signs of related decay in the vicinity. A small lean-to, probably constructed in the seventeenth century, is attached to the west side of the north elevation, and it was not safe to inspect the lower level of the wall close to or within this. Approach steps to the lean-to from the west are not built into the wall of the Tower but butted against it. They have now collapsed and the remaining landing and treads are unstable and require additional support and resetting.

5.6.12 ***North Lean-to***: the west-wall of the north lean-to is in line with the west wall of the Tower (Plate 16) and a large open joint between the two sections should be packed out and recess-pointed to define the junction. The structure is also built in limestone, but utilises much smaller rubble in construction than the Tower, in a dry-stone fashion. It is contemporary with the west field wall, and features a number of projecting through stones. The mortar at the face has eroded completely, giving these walls a different character from the Tower,

which should be preserved. A number of timber ties are embedded in and through the outer face of the stonework, but their purpose is unclear. The roof sloped to the north, and a number of large Westmorland green slates still remain on the verges and eaves; however, the roof has fallen completely and only isolated timber rafters remain. The structure is unsafe to enter, but it is possible to see the remains of an interior lime plaster and coats of limewash on the plaster, particularly on the west elevation. The west window is intact, including a large projecting sill stone. The verge and eaves' stonework are the main areas of concern; they are loose and in danger of collapse, following removal of the roof. The masonry above the east doorway appears not to be tied into the Tower and rests precariously on the timber frame of the doorway. The lintel appears to be built into the Tower and should be propped immediately. It was not possible to inspect this area closely, but the frame could be reinforced once the area above has been stabilised, and a new lintel securely fixed to the Tower. Lower areas of masonry in the east elevation have been undermined by the failure of the stone steps, and a structural solution is required by either reinstatement of the steps, or propping or the reinstatement of stonework to prevent collapse to the north. Minor repointing is required to the jamb stones and the masonry panel above the doorway, and replacement of all embedded and rotting timbers in hardwood.

5.6.13 Evidence of a lower timber lintel in the east elevation of the lean-to, below floor level, indicates an access point to an undercroft area. Although the structure is believed to date from the seventeenth-century, the doorway and other imbedded timbers appear to be of nineteenth-century origin, along with the roof and floor structures. The masonry structure has never been tied into the Tower, and it is unlikely that this would be an option to stabilise the lean-to in the future. Some form of floor and roof structure, tied to the Tower, would stabilise the three unbraced walls. Re-roofing could also be considered.

5.6.14 ***Interior of the Tower***: the thinner, central cross-wall between the two principal spaces has collapsed to the third floor level. It is at a lower level than the external walls and is at risk of further falls. The remains of the spiral staircase terminate at this level and it is from here that access is gained to the top of the outside walls. Within the cross-wall at second floor level, where it abuts the east elevation, there is a separate fireplace with a flue linked to the main stack to the north. The masonry above this fireplace lintel to the immediate west is extremely loose and collapsing due to the weight of vegetation carried above it. The two principal chambers are open to the sky. The garderobe and staircase are protected by their enclosed nature and small loop openings. Because of the height of the Tower, and its correspondingly small footprint, the lower areas receive very little daylight, and remain constantly wet. These conditions could be alleviated by overlaying the floor area with a gravel surface, following archaeological investigations, and utilising any external drainage holes to channel water away. The east wall of the stair appears to be a free-standing masonry panel, as the lintels to the garderobe chamber at third floor level are missing, but a cross-wall of masonry to the staircase provides lateral support. It was not possible to inspect this area fully, as the garderobe is inaccessible.

5.6.15 ***Large Chamber – Interior***: the vaulted ceiling and fireplace at ground floor level suggest that this may have been the Kitchen. The floor level has risen over the years and is covered with fallen material, small trees and farm debris, and it was impossible to inspect any extant surface. The entrance doorway height is very low, possibly indicating an alternative access from outside at some time. The fireplace has a stone relieving arch, with a limestone lintel below, built into the jambs of the fireplace opening. The flue is clear and there are no signs of collapse within it. The entrance opening is of a similar construction to the fireplace, with a limestone lintel and a limestone relieving arch above following the curve of the barrel vault. There is a single crack at the mid-point of the lintel, but this is not of structural concern. Similar slabs are used elsewhere for lintels, stair treads and ceiling slabs, and for later openings, including a lintel over a lower blocked window on the inner leaf of the west wall. This is also sheered and may require additional support. Internally the north-west corner was previously colonised by ivy, and roots have jacked apart a large section of masonry north of the second floor window, where there is some evidence of earlier rebuilding. Dead roots remain embedded above the lintel and north of the jamb stones and these should be removed.

5.6.16 The stone barrel vault over the possible Kitchen area has been removed, evidence remaining in the form of springing stones on the north and south walls. Vegetation should be removed from this area and the loose masonry consolidated. A feature of the interior is the predominance of large open sockets, which supported floor beams, on both the north wall and cross-wall at second and third floor levels. They have lintels above them and they are thus not a cause of movement although the masonry around them should be pointed. On the cross-wall the door threshold of the stairs at second floor level has been lost but the lintels and those below are intact and sound. On the internal face of the north wall the internal lintels are all in place and the other parts of the wall have been affected by vegetation at third floor level. Consolidation and repointing should take place around the top window as far as the third floor joist sockets, together with the sill to the second floor window, second floor joist sockets, and first floor window. Cracks between the first and second floor windows should be tied across as part of the external repairs, to prevent further movement. Until the vegetation is removed from the upper areas, and particularly the north-west corner of this wall, it is not possible to provide any more detail concerning repairs.

5.6.17 ***Small Elongated Chamber – Interior***: the south-west staircase is in reasonable condition from its mid-point, and access is possible to wall-top level. The large mural ceiling slabs have cracked, but these cracks are of long-standing and of no structural concern. The staircase provided access to the upper floors of both parts of the Tower. At high level the large slab treads forming the soffit to this area are intact, but the north lintel is cracked through along a point of weakness of the masonry above. All lintels are adequately built into the walls, and show no sign of movement. On the east internal wall there is evidence of rebuilding of a previous opening some time in the early twentieth century. This area matches areas of pointing on the external elevation. The south wall contains a recessed panel of masonry at first floor

level with corbelled stones above, supporting the inner leaf. This area has not been rebuilt and is not contributing to the poor structural condition of the wall.

5.6.18 ***Vegetation***: the continuing problems of vegetation, moss and lichen growth will not be overcome without regular maintenance on an annual basis. The build-up of vegetation can therefore be minimised, while retaining less invasive species. Any destructive plants should be removed immediately. Once the monument is repaired and all open joints pointed flush, the risk of invasive plant growth colonising the structure will be considerably reduced, and this will correspondingly lessen the need for maintenance.

5.6.19 ***Access***: the tenant should be dissuaded from using the lower floor level for storage. There is no reason why the monument cannot remain open and accessible at ground floor level. As the lower treads to the mural staircase are missing access onto the upper levels is restricted. A number of openings off the stairs would require guarding and other safety measures should be considered. However, depending on the level and type of any public access agreed in the future, the erection of a small, removable temporary stair at the lower levels of the staircase, and some removable guards to the upper openings, could be considered to enable visitors to appreciate the upper parts of the two chambers more fully.

5.7 SUMMARY

5.7.1 A summary of the recommended consolidation and repair work is outlined in Table 1 below:

Site	***Recommended work***
Arnside Tower	• ***Immediate***: structural repairs to remains of the north-west wall to prevent possible further collapse, replacement of lintels or rebuilding throughout where these are missing; • ***Short-term***: repointing and packing of cracks, tying-in of areas of movement, rebedding of loose stone and general consolidation; • ***Long-term***: establishment of a maintenance regime, regular removal of excessive vegetation (with corresponding consolidation).
Beetham Hall	• ***Immediate***: consolidation and rebuilding of dangerous openings, particularly in the Solar Wing and the south wall of chapel, removal or repair of the roof of the Solar Wing to prevent damage from damp and further collapse, propping of overhanging masonry in the Solar Wing; • ***Short-term***: building-up of walls, tying-in of areas of movement, repointing of eroding joints, removal of vegetation to aid eradication of damp and preservation of the building's structure, conservation and cleaning of plasterwork, repair or replacement of rainwater goods, consolidation of unstable wall tops, repair of bull shed and pigsty; • ***Long-term***: removal of damaging modern mortar and cement render, regular maintenance, particularly where buildings are in use, discouragement of use of hall for housing animals, finding a more sympathetic way of piping water around the building.
Hazelslack Tower	• ***Immediate***: repair to large cracks in masonry, consolidation or removal of north lean-to; • ***Short-term***: repointing and rebuilding of loose joints, removal of vegetation (with corresponding consolidation), consolidation of loose areas of rubble core, re-bedding of unstable masonry, packing of badly exposed joints, tying-in of areas of structural movement; • ***Long-term***: establishment of a programme of maintenance, regular removal of excessive rubbish in the interior should be removed and the tenant discouraged from replacing it, the creation of a temporary stair would improve access.

Table 1: Summary of recommended consolidation and repair work

6. HERITAGE POTENTIAL

6.1 INTRODUCTION

6.1.1 Heritage potential can be defined as a site, building or landscape's exploitable value. This should take account of both its intrinsic significance as a component of the historic environment, and its potential for interpretation through a variety of media and for a range of consumers. Within this it should take account of the likely visitor experience and the degrees of possible access to the site, taking particular note of the Disability Discrimination Act (DDA) of 1995 (HMSO 1995), which was revised in 2005 (HMSO 2005).

6.1.2 The value of the historic environment has been outlined in a number of national and regional publications, all of which stress its importance in economic regeneration, cultural well being, social inclusion and aesthetic and educational appreciation of the wider landscape. The latter two are discussed in particular detail in the DCMS's *The Historic Environment: A Force for Our Future* (2001). This identifies the importance that people place on their historic environment (*op cit*, 25), while at the same time identifying a need for further education about it. The educational benefit of the historic environment is, however, much wider than merely learning about history (*op cit*, 17), and the government acknowledges the importance of this and is committed to enabling its full potential to be realised (*op cit*, 20). More recently English Heritage stated that '*The North West's historic environment contributes to the region's tourism, quality of life, health, learning, and to sustainable development*' (2003, 1), and stressed the importance of the historic environment in economic development and sustainability (*op cit*, 5). This is supported by figures presented in *Heritage Counts* (English Heritage 2004), which show the high level of interest in the historic environment in the North West of England.

6.1.3 Within the more immediate region, South Lakeland District Council (SLDC) and Cumbria County Council (CCC) have emphasised the important part that cultural facilities, including heritage, play in the tourism industry (SLDC 2005, 30). They directly affect the economic status of the county, and there is therefore a need to maintain appropriate and high-quality access (*op cit*, 31). Preserving the historic environment is also seen as an important part of the action plan for protecting and enhancing the environment in general (*Theme F, Priority KPc*; CCC 2005, 24). The Management Plan for the Arnside/Silverdale AONB also makes specific reference to the historic environment and cultural heritage within its action plan (Arnside and Silverdale AONB Executive Committee 2004, 58-59), again stressing its importance in the local area. The three towers make up almost a third of the ten Scheduled Monuments situated within the AONB (*op cit*, 25) and both Arnside and Hazelslack are considered good examples of surviving medieval fabric (*ibid*).

6.1.4 As Scheduled Monuments the three towers are of national importance and considered to be '*of public interest by reason of the historic, architectural,*

traditional, artistic, or archaeological interest' (Sinclair 2004). They are protected by the Ancient Monuments and Archaeological Areas Act of 1979, which requires that an application must be made for Scheduled Monument Consent prior to any work being carried out.

6.1.5 Several factors have to be taken into consideration regarding the heritage potential of the three towers with regard to their future management. Whilst they are undoubtedly significant historic sites, this has to be balanced against a number of other elements. Their condition is very important in defining the amount of time, finance and effort that would be required to maximise the potential of each site (that is to say they are only worth investing a great deal in if they are likely to survive). They also need to demonstrate some intrinsic amenity value to the local community, as an educational and economic resource, and to visitors as sites of interest in the area. Consultation with a number of relevant organisations and individuals (*Appendix 2*) was carried out in order to assess this value, as well as taking into account the criteria listed below.

6.1.6 ***Criteria***: three criteria have been taken into consideration in order to assess the overall heritage potential of each site: condition; amenity resource and heritage value; and significance.

6.2 CONDITION

6.2.1 All of the towers are in a fragile condition, and all will require maintenance. However, there are not thought to be any serious structural problems at any of the towers, even at Arnside, where the three surviving walls seem to be sound. In the cases of Arnside and Hazelslack there has been little maintenance in recent years and parts of the original fabric have been removed. At Beetham Hall maintenance was carried out until recently by the tenant and, since this ceased, its condition has rapidly declined.

6.2.2 In summary, both Arnside and Hazelslack Towers, which are on the *Buildings at Risk Register* (English Heritage 2005), appear to be in relative stasis. Beetham Hall, which until recently was in the best condition, is now deteriorating and should be added to the BAR register. All three of the towers may soon be assessed as part of the English Heritage Monuments at Risk Programme (Richard Newman pers comm).

6.2.3 In all three cases there are matters that will require attention, in particular the removal of larger and more damaging vegetation, consolidation of damaged areas (either where elements of the building have been removed or resulting from vegetation growth), and replacement of structural elements such as lintels. Adequate maintenance would also need to be carried out, in the main to monitor vegetation but also to carry out any necessary structural repairs that were identified. The type of repair and maintenance work necessary at each site can be divided into three types:

- ***Immediate*** – repairs that need to be carried out to prevent further severe damage or to make the structures safe;

- ***Short-term*** – work that would be necessary in order to improve the visitor experience and enhance the appearance and/or understanding of the sites;

- ***Long-term*** – maintenance schemes that would preserve the towers and enable them to be an asset for some time to come.

6.2.4 The general condition of each of the towers is outlined in *Section 5* together with recommendations for further repair, consolidation and rebuilding. This is summarised in Table 1 (*Section 5.7*), and expanded upon for each site in the following sections, according to the scale of urgency (immediate, short-term and long-term). It must be realised, however, that in order to justify the expenditure of public funds on the preservation of these monuments, through whatever funding mechanism, it is likely that some direct public benefit will need to be demonstrated. This is likely to involve either improvements in access or better publicly available information concerning the sites, but certainly an enhancement of the current level of experience associated with these monuments. There should also be a clear objective to help advance the relevant priorities of the funding agencies and principal historic environment managers, including the Department for Culture, Media and Sport, English Heritage, Cumbria County Council, South Lakeland District Council, and the Arnside/Silverdale AONB.

6.3 AMENITY RESOURCE AND HERITAGE VALUE

6.3.1 The value of the towers as an amenity can be measured in a number of ways (English Heritage 2000, 4). They are of archaeological and historical importance, but they also have the potential to be valuable economically, socially and educationally (for a comparable example, see LUAU 1998). Some of the ways in which they can be valued are expressed below.

- ***Historical and Archaeological:*** the three towers are important archaeological sites in their own right, a fact that is evident in their Listed Building and Scheduled Monument status;

- ***Educational:*** they are able to provide details about the past, the people that lived in them, the impact they had on the surrounding landscape, and the part that they played in local and national events, as well as information about the development of building techniques, technology and society in general;

- ***Economic:*** they improve the experience of visitors coming to the Arnside/Silverdale AONB, which might encourage them to return or others to visit. This contributes to an important source of income into the area. They may also provide an impetus for the improvement of other forms of economic activity such as service and hospitality facilities;

- ***Social:*** improving the appearance and interpretation of the towers can also enhance the quality of life of people living in the locality by generating or increasing a feeling of value in the landscape;

- ***Natural:*** the three towers form part of the Arnside/Silverdale AONB, which has been greatly influenced by human activity. The towers, although artificial, form part of this landscape, and have even become home to a variety of animal and plant species;

- ***Aesthetic:*** the three towers form an important element of the landscape's appearance and contribute significantly to its aesthetic appreciation. This has the potential to enhance both their economic and social value.

6.3.2 Whilst value has been identified in a number of different ways in this document, it is largely an individual definition, and as such is extremely subjective. Consultation with a variety of relevant organisations is therefore important in defining the amenity value and heritage potential of the three towers.

6.3.3 In order to assess the amenity value a number of organisations were consulted for their opinions on the management of the three towers and how this could be improved (*Appendix 2*), and while responses were not forthcoming in all cases, several groups did supply useful information. In general, these were positive regarding this management plan, although they tended to consider the three towers as a whole, rather than as separate entities. This suggests that, as a group, the three towers have more potential than as individual monuments.

6.3.4 The majority of comments received were aimed at the management plan as a whole; in many cases they covered similar areas or expressed similar opinions. These general comments are summarised below, grouped according to the criteria in *Sections 6.2-6.4*: condition, amenity resource, and significance.

6.3.5 ***Condition***:

- It was hoped that the management plan would help to prioritise repair and consolidation work and serve to inform future archaeological recording and investigation. It was also thought that it could help to assess where further documentary research might be useful as well as identify what additional sources might be available (at the Dallam Tower Estate for example).

6.3.6 ***Amenity Resource***:

- Education should be encouraged in some format, at a minimum in the form of leaflets and display boards. It should also be encouraged to fit within and complement any existing literature;

- Concerns were raised over access both in terms of potential damage to the monuments and safety of visitors. There was an understandable reluctance from both landowner and tenants to encourage visitors if there was any risk, particularly because of concerns over legal liability;

- Encouraging greater numbers of visitors or improving visitor access through additional parking was not thought to be beneficial to the towers;

- It was suggested that the towers be integrated into existing visitor amenities such as walking and cycling routes and events, as part of a long-term visitor access policy. This should also fit within schemes and management plans already established by relevant bodies such as the Arnside/Silverdale AONB (eg AONB Unit 2003, superseded by Arnside and Silverdale AONB Executive Committee 2004), Dallam Tower Estate, and the Morecambe Bay Partnership;

- Concerns over the potential impact of an increase in visitors on the local ecology were raised, particularly local bird and animal species that might inhabit the towers. It was also thought that this would inevitably be increased during any phase of repairs, which would in addition adversely affect vegetation at the monuments.

6.3.7 ***Significance***:

- The position of the towers within a wider landscape is important and this aspect should be explored where possible, as well as conserved and enhanced. This was also considered to be important at a local level in such matters as the planting of complementary crops and trees in the vicinity of the towers;

- Stewardship schemes such as the Countryside Stewardship Scheme (DEFRA 2005a), Higher Level Stewardship Scheme (DEFRA 2005b), Environmental Stewardship scheme (DEFRA 2005a), and the Rural Enterprise Scheme (DEFRA 2004), which might aid maintenance and repair, should be encouraged.

6.4 SIGNIFICANCE

6.4.1 There are a number of methodologies used for assessing the archaeological significance of sites. In this case a statement of the criteria set out by the Secretary of State used to define Scheduled Monuments (DoE 1991, Annex 4) has been used.

6.4.2 In general, all three of the towers are considered to be of national importance and of high regional and local significance because of their period, architectural and historic interest, and survival. They are some of the oldest building in the region, and therefore rare survivors, and were of some local significance during the medieval period. They are now locally important because of their rarity, there being relatively few buildings of their type in the immediate and wider area, although conversely they also represent an important characteristic regional site type: the 'fortified medieval house'. They are not, however, considered to be of great significance on account of enhancement by associated documentary sources, although the extent of the resource is not clear. They are also of regional importance for their contribution to the landscape character of the Arnside/Silverdale AONB.

6.4.3 The three towers, whether they are historically related or not, form an interesting and unusual group. Their current condition and level of survival is

also a cause for their having greater significance in the general area, as a result of the urgent need for repair. Both Arnside and Hazelslack are included on the *Buildings at Risk Register*; Arnside at the highest rating (A) and Hazelslack at rating C (English Heritage 2005), and Beetham is in a worse condition than previously thought. Each site is relatively diverse, covering a wide area of interest, and in the case of Beetham a large physical area, and all three towers have considerable potential for further research and investigation, again making them of considerable significance in the local and regional area.

6.5 ARNSIDE TOWER

6.5.1 ***Condition***: despite the loss of almost an entire wall, Arnside Tower is apparently more stable than previously thought, although its condition is still generally very poor. There are, however, areas requiring repairs:

- ***Immediate:*** structural repairs to remains of the north-west wall to prevent possible further collapse, replacement of lintels or rebuilding throughout where these are missing;

- ***Short-term:*** repointing and packing of cracks, tying-in of areas of movement, rebedding of loose stone and general consolidation;

- ***Long-term:*** establishment of a maintenance regime, regular removal of excessive vegetation (with corresponding consolidation).

6.5.2 ***Amenity Resource and Heritage Value***: specific comments during the consultation relating to Arnside Tower focussed in particular on the condition of the building and the relative ease of access. This was considered to be a specific problem and serious safety issue at Arnside, particularly because of the close proximity of a public footpath (which comes within a few metres of the tower). The tenant was, however, certainly keen to see the building maintained, and he was happy for visitors to continue to come, as long it was safe. He also expressed an interest in opening a tea-room at the farm for walkers, which would presumably benefit from improvements to the tower. It was also noted that Arnside is the most easily accessible, and as such is perhaps at most risk from damage from increased visitors, so this may not be something that should be encouraged without appropriate mitigation measures being carried out.

6.5.3 ***Significance***: Arnside Tower is perhaps only more significant than the other two towers on account of its general vulnerability to damage (because of its exposed and easily accessible position) and its relatively poor condition. It is otherwise probably of no greater significance than the other two towers, although its greater visibility and accessibility via the footpath does add to this. Historically, it is also of some interest because of its uncertain position within the manor of Beetham. It is not certainly known, for example, whether it was even built solely for accommodation as it may have been used as a hunting lodge.

6.6 BEETHAM HALL

6.6.1 ***Condition***: while much of Beetham Hall remains in a relatively good condition, it is more complex than the other two towers and there are therefore more separate elements to consider. Several areas are in need of urgent consolidation in order to prevent collapse or further damage, the structures having become neglected. The occasional, and inappropriate, use of parts of the medieval structure of Beetham Hall for housing animals means that some improvement in condition could be brought about simply through a change in or cessation of these activities. Nevertheless, there have recently been a number of unsympathetic changes to management of the building and this needs to be dealt with. Other works specific works are also necessary:

- ***Immediate:*** consolidation and rebuilding of dangerous openings, particularly in the Solar Wing and south wall of the chapel, removal or repair of the roof of the Solar Wing to prevent damage from damp and further collapse, propping overhanging masonry in the Solar Wing;

- ***Short-term:*** building-up of walls, tying-in of areas of movement, repointing of eroded joints, removal of vegetation to aid eradication of damp and preservation of the building's structure, conservation and cleaning of plasterwork, repair or replacement of rainwater goods, consolidation of unstable wall-tops, repair of the bull shed and pigsty;

- ***Long-term:*** removal of damaging modern mortar and cement render, regular maintenance, particularly where buildings are in use, discouragement of use of the hall for housing animals, finding a more sympathetic way of piping water around the building.

6.6.2 ***Amenity Resource and Heritage Value***: Beetham Hall is perhaps the most complex site in terms of judging the amenity value as it is still in active use as a farm and as domestic accommodation. The tenant has been very supportive of visitor access in the past and several events have been organised, which have always been successful, but it is not clear whether the change in the tenancy arrangement has affected this. Nevertheless, there is some concern over the condition of parts of the building and, as a working site, it requires the most maintenance and is most likely to be affected by development or damaged through use. Beetham has, however, been part of a Countryside Stewardship Scheme (University of Manchester Archaeological Unit (UMAU) *et al* 1995), which has enabled work to be carried out in some areas, such as the replanting of the orchard. An education pack, in conjunction with the Arnside/Silverdale AONB, has also been produced in the past. The current scheme is due to lapse, however (*ibid*), and every inducement should be made to incorporate the Hall into a new Higher Level Stewardship Scheme.

6.6.3 ***Significance***: Beetham Hall is unusual in that the buildings are still actively used, thus exposing them to a greater potential for damage and re-development. It is arguably, therefore, of greater significance on this account. The entire site, including the later farmstead, is also more diverse and has a greater potential for further research, both into its fabric and historic sources, because of its longer period of use. This also gives it a higher level of

significance than the other two towers in this area. Historically, Beetham Hall was also more significant than the other two towers as it was the manorial centre. The other sites were, in this respect, subservient to it.

6.7 HAZELSLACK TOWER

6.7.1 ***Condition***: this building has perhaps been subject to the least recent repairs and has also suffered the least extensive damage. Nevertheless, there are areas requiring repair and consolidation:

- ***Immediate:*** repair of large cracks to masonry, consolidation or removal of the north lean-to;

- ***Short-term:*** repointing and rebuilding of loose joints, removal of vegetation (with corresponding consolidation), consolidation of loose areas of rubble core, re-bedding of unstable masonry, packing of badly exposed joints, tying-in of areas of structural movement;

- ***Long-term:*** establishment of a programme of maintenance, regular removal of excessive vegetation and carry out appropriate repairs at the same time, the rubbish in the interior should be removed and the tenant discouraged from replacing it, the creation of a temporary stair would improve access.

6.7.2 ***Amenity Resource and Heritage Value***: the tenant was principally concerned over the legal implications that improving access might bring, particularly if someone were to be injured. He was, however, generally in favour of the building being maintained.

6.7.3 ***Significance***: Hazelslack Tower is perhaps the least significant of the three towers; although its condition is poor it is not as much at risk as the other two. Its small size and poor documentary history also limit its significance in terms of potential when compared to the other two towers. Historically, it is of interest because it was apparently held by someone relatively low in the social hierarchy, and does not appear to have even been part of a sub-manor of Beetham (Richard Newman pers comm).

6.8 GENERAL CONCLUSIONS

6.8.1 ***Condition:*** the heritage potential of the three towers is not considered to be compromised by their condition. In all three cases it is evident that there is consolidation work and repairs that need to be carried out, but that none of the towers is facing serious structural threats except in a few minor areas. All three towers can probably be maintained at a condition that would allow their heritage potential to be realised more fully, although it is important that some consolidation work is carried out as soon as possible. Perhaps the most important factor to be taken into consideration in this respect is making the towers safe by carrying out the immediate repairs listed above (*Section 6.2*), something that would be essential if they are to become more of an asset to the

local area. This would also prevent the condition of the towers from deteriorating further.

6.8.2 ***Amenity Resource and Heritage Value:*** in general, the consultation provided a positive response to this management plan, balanced by an understanding that any increased use and utility of the towers needed to be supported by suitable repair and maintenance. There is a clear sense in the comments provided that the three towers already act as a useful amenity in several low-level ways:

- they act as a recreational resource for people already visiting the AONB;
- they are a source of education for schools and interested organisations Beetham Hall in particular);
- they form part of a wider landscape, which provides some economic benefits and a great deal of aesthetic appreciation.

6.8.3 The general opinion was that, rather than radically altering the ways in which the towers are currently used, any future plans should respect and enhance the current situation, while providing long-term support for existing uses and finding ways to encourage and facilitate appropriate maintenance and repair. It was not felt that any immense changes to the existing patterns of use were beneficial to either the monuments or their surrounding landscapes, although consolidation was considered to be of some importance. There was also seen to be a need for further research into the buildings, but this was generally considered to be of considerably less importance than maintenance and general upkeep.

6.8.4 ***Signifance:*** all three of the towers are important and significant archaeological and historical monuments in the local, regional and even national context. However, of the three Beetham Hall is the most diverse, best documented, best preserved and yet most at threat, is therefore perhaps the most significant. Locally, however, there is a strong identification of the three towers as forming a group and the realisation of their potential as heritage assets perhaps can best be approached by treating them as a single entity rather than as individuals.

6.9 HERITAGE POTENTIAL

6.9.1 ***Introduction:*** the preceding sections have outlined the different elements that give value to the three towers. Their overall heritage potential, informed by this, explores how the monuments can be used to the greatest benefit, without damaging their condition or historic importance. This takes three main forms, which are applicable to all three towers: function; education; and economy.

6.9.2 ***Function***: of the three towers only Arnside stands separate from any other buildings, although it is close to Arnside Tower Farm. Hazelslack is within close proximity to working farm buildings, and Beetham Hall is situated within the grounds of a working farm and some of its buildings are made use

of as a result. All three of the towers can be utilised in various ways by different people, principally as working buildings and as visitor attractions. In all three, their potential as a visitor attraction is an important consideration, although there are several terms that can be used to define 'visitors'. Only Arnside is easily accessible and routinely visited, by a mix of both locals and tourists (partially as a result of the nearby caravan park) as it is close to a public footpath and not protected by fences and the like. Beetham, which is a working farm, is regularly, but perhaps less frequently, visited by appointment by individuals and groups, generally local residents, and is used as part of local events. It too has a number of footpaths nearby. Hazelslack is not easily accessible, although there is a footpath nearby that allows some degree of visitor experience. Both Arnside and Hazelslack are at some distance from major roads, and Beetham, which is close to the A6, is accessed via a private track. None of the towers are therefore particularly easy to visit by car, although it is technically possible at Beetham, and access requirements meeting the provisions of the DDA are also poor in all cases.

6.9.3 Although the number of visitors to the towers themselves is not known, an estimated 250,000 to 400,000 people are thought to come annually to the Arnside/Silverdale AONB (Ian Henderson pers comm; Arnside and Silverdale AONB Executive Committee 2004, 25). Given that this number comes with a minimum of targeted external advertising and that a reasonable percentage must be presumed to come into some form of contact with one or all of the three towers, the number of visitors to these monuments may already be quite large. Encouraging further visitors may not, therefore, be necessary or even advisable at some of the sites because of their fragile condition. Meeting the requirements of the DDA might also prove problematic in terms of balancing the needs of less able-bodied visitors with the minimum of impact on the historic fabric on the monuments.

6.9.4 ***Education***: the three towers form a valuable educational resource at many levels, ranging from school children to university students, as well as interested societies, other organisations and individuals. They could also provide stimulation to encourage members of the public to enjoy the countryside and the benefit of fresh air and exercise. A number of ways in which additional archaeological and historical information can be gained is applicable to all three towers:

- the need for repair would provide suitable opportunities for associated detailed structural recording, investigation and/or excavation;
- research could be carried out as part of stewardship schemes (as at Beetham Hall);
- academic research, either into the buildings themselves or documentary sources, by either undergraduate or post-graduate students, should be encouraged;
- the results of academic research can then be used to enhance the presentation of information at the three towers through interpretative

information panels, leaflets, books and so forth either on or near the site or at suitable outlets such as local Tourist Information Centres;

- subsequent schemes of investigation could be carried out by local societies, academic institutions and professional organisations as part of research programmes, Heritage Lottery projects or similar;

- although not necessarily an educational benefit, visits to the three towers can be a health benefit, encouraging walking and exercise. This could be tied to the educational amenity of the towers, providing a multi-purpose resource.

Increasing the understanding of the sites would in turn feed back into the possibility of providing an improved visitor experience (*Section 6.9.2*), which in turn would enhance the economic benefits to the area (*Section 6.9.5*).

6.9.5 Any increase in understanding would also enhance the potential educational benefits of the three towers:

- local schools can use the towers for trips and educational events. This is particularly relevant for primary schools, which have more flexible teaching programmes, and Key Stage 3, which covers the medieval period (DfES 2005);

- they can form part of teaching about the history of the local area in general;

- they can be connected to any existing educational programmes relating to the natural environment of the Arnside/Silverdale AONB;

- the towers also form an important aspect of the aesthetic appreciation of the landscape and the development of technology, and can therefore be used in the teaching of art, architecture and even engineering, as well as history and archaeology.

6.9.6 ***Economy***: the towers can provide an economic benefit to the area in part through the increase of visitors and investment created by their functional and education uses, but also through increasing the appreciation of the general area. There are a number of general potential economic benefits, applicable to all three towers:

- local businesses in the area, particularly shops and those providing accommodation, would benefit from any additional visitors;

- while visitor numbers to the Arnside/Silverdale AONB could increase, providing additional revenue, this is not necessarily desirable. A more likely, and preferable, outcome is a possible increase in repeat visits as a result of improvements in the visitor experience;

- other heritage attractions in the area would benefit from visitors who came specifically to see such sites;

- the landowners might be able to tie the towers into existing events and activities taking place within the Dallam Tower Estate;

- the towers can form part of local events, economically benefiting the community.

Specific economic benefits for each tower, where applicable, are presented in the sections below.

6.9.7 ***Group Value***: an important aspect of the heritage potential of the three towers is their group value. While this evidently involves many of the areas listed above, it also needs to be considered as an entity in itself. Similarly, considering the landscape as a whole is an important part of the remit of the Arnside/Silverdale AONB Management Plan (Arnside and Silverdale AONB Executive Committee 2004). The consideration of group value can be linked closely with elements of the Arnside/Silverdale AONB action plan (*ibid*), in particular, those dealing with environmental education and awareness (*op cit*, 66), communities (*op cit*, 60), and landscape and rural land management (*op cit*, 55). The benefits of promoting the towers as a group can be summarised as follows:

- access is generally improved and the interpretation of the sites can be made more coherent, providing a wider understanding of the local landscape, yet having a less direct impact on each individual monument;

- the visitor experience is improved by the provision of a co-ordinated and organised way in which to approach the towers, with appropriate interpretation and information, perhaps provided along a way-marked route. This need not make it necessary to visit each monument individually, however (see below);

- a linked visitor trail could be connected to other attractions (heritage or otherwise) in the area, which would benefit local businesses. The requirements of the DDA need to be taken into consideration in order to achieve this aim, however;

- encouraging visitors to use recommended parking areas would reduce congestion on the roads, promote sustainable tourism, and would provide some additional revenue for the local council through pay and display car parks. Again, this could be used to provide opportunities for disabled access;

- footpaths or trails established as part of any group interpretation could be linked to existing trails and help to stimulate regeneration of underused footpaths or promote and encourage ongoing maintenance of others;

- access does not have to involve actual visits to all three towers, which would reduce the stress on the remains themselves. The positioning of interpretation panels at suitable locations, such as car parks, would enable the dissemination of information without requiring the towers to be visited

physically, and would enhance the experience of people who were unable to visit.

6.9.8 The easiest way in which the group value of the three towers can be exploited is through the establishment of way-marked trails linking them together along existing footpaths, bridleways, and permissive rights of way (once suitable permissions had been obtained). If other rights of way were to be established to accommodate this, this would have to be carried out by Cumbria County Council through the usual process of consultation. There are many such routes already in existence in the general area and these could be linked together to form an appropriate route. In order for such as route to fulfil its aim of providing an improved visitor experience, it would require suitable leaflets or other literature and interpretation at or near each site. The leaflets could be made available from local Tourist Information Centres, shops, public houses and the offices of Arnside/Silverdale AONB at Arnside station.

7. FUTURE WORK

7.1 INTRODUCTION

7.1.1 The heritage potential of each of the three towers, and of the three towers as a whole, as detailed in *Section 6* above, demonstrates areas in which improvements can be made in order for their potential to be realised. A consideration of the potential of each site, in the context of their known history, the information gained through the visual inspection, the existing amenity value, and the significance of each site allows recommendations to be made for future work. This, however, also demonstrates that the three towers are far more significant collectively than they are individually. The principal factor in assessing the requirements for future work is, however, the condition survey and its recommendations (*Section 5*). The long-term survival and maintenance of the three towers is the most pressing issue, and the one that needs the most work, and so it is their condition that has influenced the proposals presented below more than anything else.

7.1.2 An understanding of the Heritage Potential initially allows areas in which it can be fulfilled to be proposed (*Section 7.2* below). This, in turn, enables actual future work to be proposed (*Section 7.3* below).

7.2 FULFILLING THE HERITAGE POTENTIAL

7.2.1 The heritage potential of the three towers, as outlined in *Section 6*, needs to be tempered against the practicalities of fulfilling it. At each site there are conflicts that would need to be resolved in order for the heritage potential to be achieved, the details of which are presented below.

7.2.2 ***Arnside Tower***: this is presently the most easily accessible to visitors, which means it is also probably the most susceptible to further damage. It is unlikely that increased visitor numbers would be good for the monument, or that in its present condition it would be advisable to encourage greater numbers of visitors. However, restricted access would be less likely to cause additional damage, although fencing around part or of the tower, for example, does present its own difficulties, and could be counter-productive as it may actually encourage people to climb over. It is also likely that the adjacent limekiln (which makes up part of the site's environs and is within the Scheduled Monument Area) is even more at risk that the tower, as it is already in a poor condition. It is therefore considered likely that improving the current visitor experience at the site itself would only increase the potential of the site, which would conversely increase the likelihood of it being damaged. Ways of increasing the monument's potential therefore need to take these two factors into consideration and a balance needs to be struck between improving the monument's amenity value without significantly increasing the potential for further damage to it.

- ***Repair and consolidation*** – to improve safety and minimise the potential for further damage. This could also be used as a means to control access (in particular preventing it to the upper floors). In addition, a fence or suitable barrier may need to be added to prevent potentially damaging levels of access (see below).

- ***Health and safety*** – the relatively poor condition of Arnside Tower, coupled with the ease with which it can be accessed, makes the health and safety issues of particular concern. It is therefore not only important that consolidation is carried out as soon as possible and some way of restricting access to the interior of the ruins considered, but that consideration is taken of health and safety implications. It is recommended that advice be sought from English Heritage on this matter and that a suitable framework is established for dealing with it. The positioning of warning signs at the tower may be considered necessary, for example. The issue of unrestricted access to Arnside Tower needs to be addressed as soon as possible, and should remain a high priority in future management of the site. It is not considered likely that the creation of a trail linking the three towers would worsen the situation, but it is important that any associated literature states the importance of the dangerous condition of the structure (even after consolidation);

- ***Improve interpretation*** – at present there is no information available at the site about the tower. The positioning of an information board or the creation of/incorporation into existing leaflets would help to enhance the site, although this does not need to be at the tower itself (which could have implications with regard to buried archaeology). A more suitable location might be in or adjacent to the car park at the farm nearby. More detailed information could be provided in supplementary literature available at local Tourist Information Centres, libraries, town halls, the Silverdale/Arnside AONB office, Dallam Tower and so forth. Repair work would also allow an opportunity for further investigation into the fabric, which would also enhance understanding.

- ***Advertising*** – increased advertising of the site on its own would probably be at best unnecessary and at worst potentially damaging to the monument. At present the Arnside/Silverdale AONB is well visited despite minimal advertising; there is a caravan park nearby and the site is situated alongside a popular public footpath. There is, therefore, little need for additional advertising.

- ***Access*** – improving physical access to the site, through the creation of a car park for example, would only encourage increased numbers of visitors. The present access arrangements should therefore be maintained, although means for allowing mobility-impaired visitors to access the site and the requirements of DDA need to be taken into consideration. In order to protect the tower, however, it may also been necessary to restrict access to the actual remains with the addition of a fence or suitable barrier (see above).

7.2.3 Arnside Tower also has the potential to provide further academic information both from more detailed investigation of its fabric and by study of the documentary record (see *Section 6.9.4*). At present little is known about the historical background of Arnside Tower, and no detailed investigation has been carried out of the standing or below-ground remains. Similarly, a topographic survey of the tower's immediate environs would be a beneficial means of furthering an understanding of the site, and would, in any case, be required prior to any repair and consolidation work.

7.2.4 Arnside Tower is also of potential economic benefit to the area, which is popular with walkers and holidaymakers. This can be identified in a number of ways:

- the tenants at the adjacent farm have expressed an interest in opening a tea room, which would not only provide an economic benefit to them, but would also improve the visitor experience and be particularly beneficial in addressing the issues raised by the DDA (HMSO 2005);

- Arnside is a popular location with holidaymakers and any increase in visitors would benefit a number of other local businesses (see *Section 6.9.5*).

7.2.5 Arnside also has a number of educational benefits, as defined in *Sections 6.9.3-6.9.4*. It is situated close to Arnside itself and could therefore be easily made use of by local schools. There is only a single, primary, school in Arnside, however, but there are at least a further three primary and junior and one secondary school within approximately 5km. This comment should therefore be taken as applying to all three towers and could be included as part of their interpretation as a group of monuments (see *Section 6.9.6*).

7.2.6 ***Beetham Hall:*** Beetham Hall's situation, in comparison to the other two towers, is made more complex by its use as a working farm. At present, this appears to be partially to its benefit, as not only are some of the buildings being preserved as a result but the site is open to visitors by appointment and is regularly used in local events, many with an historical and educational basis. However, elements of the site have been damaged as a result of being used, and this needs to be borne in mind when considering its potential. In many ways this makes it a more interesting site than the others because of its later use and the presence of a large, and varied, selection of farm buildings on the site. The buildings are in need of repair, however, and require a certain degree of sympathetic treatment in their use.

- ***Repair and stabilisation*** – there are some areas in need of urgent repair (see *Section 5.5*), and there are signs of a recent deterioration in the condition of the medieval fabric. Such repair is essential not only to preserve the building but also to make it a viable amenity;

- ***Improve interpretation*** – at present there is a limited amount of interpretation on the site and there have been a number of interpretative leaflets and information packs produced. This process should be continued, with assistance from suitable professionals where necessary, and, indeed,

improved. Additional literature could be made available at local Tourist Information Centres, libraries, town halls, the Arnside/Silverdale AONB office, Dallam Tower and so forth;

- ***Advertising*** – it would probably not be necessary to increase significantly the amount of advertising the site receives. It is a working farm, used for a variety of activities, and the adjoining house is occupied by one of the tenants. This would be very difficult to reconcile with an increase in visitors. The fragile condition of the buildings also makes increased numbers of unmanaged visitors undesirable. It could, however, be advertised in connection with specific events, much as it already is, including Heritage Open Days and the National Archaeology Week;

- ***Access*** – again the presence of a working farm on the site means that improved access would be impractical, and it would also contribute to the potential for damage from increased visitors. At present access is by appointment with the tenant, although the buildings can be viewed from nearby footpaths and the A6, and this arrangement should be maintained. Access can, and is, increased during special events, which is undoubtedly the most appropriate way for this to occur. Of all the towers Beetham has the best disabled access, and this should be taken advantage of in order to improve the visitor experience of those who cannot easily reach the towers at Arnside or Hazelslack or appreciate them from a distance (the partially sighted, for example. It might, therefore, be beneficial to utilise Beetham as a focus in terms of disseminating detailed information about the structure of the towers to those who might find it impossible to visit the other two sites. This would help to fulfill some of the criteria within the DDA, while relieving the pressure on the towers as a whole.

7.2.7 Like Arnside Tower, there is considerable scope to improve the academic understanding of Beetham Hall in the general ways outlined in *Sections 6.9.3-6.9.4*. The presence of a number of later buildings at Beetham and the more complex nature of the site present other opportunities for research:

- an examination of the development of the entire complex, not just the medieval part, would be useful in understanding the site as a whole;

- the later farmhouse, barns, pigsty and bull shed are all historic buildings in their own right and would benefit from further investigation. Their later date might mean that this would be easier, because of the availability of documentary sources, than investigating the earlier hall, but it should also help to place the hall in its local context and provide information about later alterations;

- details of the various occupants of the medieval hall might be difficult to ascertain, but the occupants of the farm should be much easier to investigate. This is still an important aspect of the history of the site.

7.2.8 Beetham Hall is situated close to the village of Beetham and could therefore be made use of by local schools, although there is only a single primary school

in Beetham itself. There are, however, at least four other schools within approximately 5km (see *Section 7.2.5*).

7.2.9 The potential for economic benefits (as outlined in *Section 6.9.5*) at Beetham Hall is perhaps higher than at the other two sites, as it is easier for events to take place here and it is more readily accessible. Its use for specific, supervised events should also allow for safer access, something which is difficult to ensure at the other two sites. It is also connected to the local community through its use as a venue for events, and such activities undoubtedly bring economic benefits to the general area.

7.2.10 ***Hazelslack Tower***: Hazelslack Tower is perhaps the most difficult of the three towers for which much potential to improve visitor access can be identified, or the visitor experience as a whole. It is currently only accessible from a private drive, and although a footpath passes close by, this is situated away from the main entrance to the tower. In its current condition, although this is better than previously thought (see *Section 5.6*), visitor access inside the tower is probably not something that should be encouraged, and even following repair the upper floors would be extremely dangerous. The greatest way in which to enhance the visitor experience would probably be through information, either in the form of interpretative panels outside the monument or additions to existing literature. There are several ways in which its potential as a visitor attraction can be increased.

- ***Repair and stabilisation*** – there is a definite need to carry out repair work at Hazelslack Tower, as a matter of safety and in order to prevent further decay of the fabric. This could also be used as an opportunity to consider the provision of steps to the upper floors and corresponding means of preventing access into dangerous parts of the building, as well as assessing the type of access that would be suitable in general at the site. At the same time it would be necessary to clear the accumulated rubbish and rubble from the ground floor, preferably under archaeological supervision;

- ***Improve interpretation*** – the positioning of an interpretation panel on the footpath to the west of the tower would provide information for visitors. An additional panel at the end of the drive to the east of the tower could also be erected, although this would have to be considered against current traffic regulations in the immediate area and the access requirements of the tenant at the adjoining cottage. The panels could be supplemented by more detailed information available off-site at Tourist Information Centres, libraries, town halls, the Silverdale/Arnside AONB offices, Dallam Tower and so forth;

- ***Advertising*** – Hazelslack is perhaps the most isolated of the three towers, despite being close to the village of Storth, and is less visible in the local landscape than the other two because of its relatively low-lying position. Some increase in advertising might be beneficial, although the difficulties of access might make this of limited use and an increase in unmanaged visitors is not considered beneficial;

- ***Access*** – improving access to Hazelslack Tower is difficult as it is approached by a private road and has a house adjacent to it. This, combined with its small size, would suggest that improving uncontrolled or unmanaged access would not be desirable. Nevertheless, it might be possible for people to arrange visits through the tenant, although it would be preferable to clear the rubbish from the interior of the building before this could happen. Once the structure has been consolidated, made safe and rubbish removed then allowing visitors access, in a controlled fashion, would become a more acceptable proposal. There is no scope within the environs of the site for the provision of car parking facilities. Hazelslack Tower does, however, have relatively easy disabled access and this could be taken advantage of, especially with regard to the DDA, but this might require a limited provision for parking specifically for this purpose.

7.2.11 Like the other towers Hazelslack has the potential to provide additional academic and education potential as outlined in *Sections 6.9.3-6.9.4*. Relatively little is known about Hazelslack Tower and so any further work to investigate its development and use would be of great benefit. This would then enhance the interpretation of the site, which in turn would improve its value as a visitor attraction by increasing the possibilities of interpretation. The specific economic benefits of improvements to Hazelslack Tower are possibly limited to the more general ones outlined in *Section 6.9.5*, although it would potentially have a positive effect on Storth, which is perhaps less well-visited than other towns and villages in the area.

7.2.12 Hazelslack Tower is relatively isolated, but situated close to the village of Storth on the edge of Arnside, and could therefore be made use of by local schools. There is only a single, primary, school at Arnside, however, although there are at least four other schools within approximately 5km (see *Section 7.2.5*).

7.2.13 ***Group Value***: as outlined above (*Sections 6.9.7-8*), the group value of the three towers is extremely important in their interpretation, presentation and access. While each tower has its own requirements for future work, particularly consolidation and repair, it is necessary to view them as a whole in order to maximise the appreciation of them. The points raised in *Sections 6.9.7-8* and below therefore attempt to take this into account, and should be considered a means to improve the wider appreciation of the historic landscape as well as preserving, maintaining and interpreting the three towers.

7.2.12 ***Summary:*** there is evident potential for all three towers to be enhanced and provide visitor benefits, although this has to be tempered against two considerations: the condition of the buildings and their ability to sustain visitors, although the majority may only be passing by. The general impression gained during the consultation was that, rather than wanting to change the present situation in any radical way, it was preferable to maintain and improve it. This should, then, be the overriding aim when considering the potential of the three towers: not to alter greatly what is already there, but to maintain and improve upon it and to think about the sites as a group in a wider landscape, rather than focussing on individual structures. Indeed, this fits well within the remit of the management plan of the Arnside/Silverdale AONB: to '*enhance*

and conserve… [its] *natural beauty*' (Arnside and Silverdale AONB Executive Committee 2004, 15). The provision of better facilities and access, in particularly a walk linking the three towers and their landscape, is perhaps the easiest and best way in which this can be achieved. This too fits within the aims of the action plan within the Arnside/Silverdale AONB management plan (*op cit*, 61-62).

7.3 FUTURE WORK

7.3.1 Although some pieces of work are considered urgent in order to preserve the buildings and make them safe, the remaining work can be prioritised by its importance. This can be defined according to the short-term and long-term needs of the towers, the requirement for additional understanding, and improvements to access and interpretation. Where elements of the proposed future work can be linked to specific elements of the Arnside/Silverdale AONB action plan (Arnside and Silverdale AONB Executive Committee 2004) reference is made to the relevant section.

7.3.2 ***High priority:***

- ***Protection*** – while Arnside and Hazelslack Towers have been found to be in a better condition than previously thought they are still at risk from further deterioration and should remain on the *Buildings at Risk Register* as an acknowledgement of this. Beetham Hall should be added to the register as a matter of urgency, as its condition is rapidly deteriorating. In addition, the inappropriate use of some of the medieval buildings at the site should be discouraged in order to preserve them in their present condition. The protection of the three towers links to the Arnside/Silverdale AONB actions HCH1 and HCH3 (*op cit*, 58);

- ***Safety*** – although unmanaged visitor access to the three towers is not strictly possible, the safety of those who do gain access is an important consideration. This is particularly critical at Arnside Tower, which is easy to access and is regularly visited. It is therefore important that advice is sought from English Heritage on appropriate ways to improve site safety in order for it to be resolved quickly;

- ***Recording*** – before repairs are carried out there needs to be adequate archaeological recording of the affected fabric prior to the work taking place. This should consist of an illustrated record of affected elevations, the production of plans showing phasing and alterations, and archaeological excavation where below-ground areas are likely to be affected. An assessment of the likely impact on the ecology of the three towers should also be carried out prior to any repair work in order to minimise its impact;

- ***Repairs*** – at each site a certain amount of repair work is necessary in order to preserve the building(s), particularly where catastrophic collapse is likely. This is also important for reasons of health and safety. As all three towers are Scheduled Monuments they would require suitable consents

before work could begin, and proper recording (see above). This, of course, applies not only to the three towers but to other features within the Scheduled Monument areas, such as the limekiln at Arnside Tower (which is included within a programme of repairs outlined as part of the *Limestone Heritage Project* (Singleton *et al* 2003, 9)). This links to the Arnside/Silverdale AONB action HCH5 (Arnside and Silverdale AONB Executive Committee 2004, 58).

7.3.3 ***Medium priority:***

- ***Maintenance*** – long-term maintenance strategies need to be established for the three towers. These should include regular programmes of inspection and repair (with corresponding fabric recording as necessary) and removal of damaging vegetation. These should be tied to existing or future management agreements, which can be supported by English Heritage and/or Higher Level Stewardship schemes;

- ***Access and interpretation*** – there is a general need to improve the level and nature of access to the three towers. Various issues relating to degrees of access at each site and suitable interpretation should be dealt with as soon as possible so that the potential of the towers as visitor amenities can be established. This can be achieved through the suitable positioning of interpretation panels next to footpaths, associated portable literature, and appropriate access to the towers themselves either as part of guided tours or specific events. It would also, and very suitably, link to the on-going Limestone Heritage Project within the Arnside/Silverdale AONB, which specifically aims to improve access and interpretation of limestone areas and structures (Askew 2004, 18; Arnside/Silverdale AONB Service 2005). The establishment of a way-marked walk with accompanying literature and/or interpretation incorporating the three towers would be the most appropriate way of achieving this aim. This should then provide further impetus for continued development and improvement of each of the towers. This links to the Arnside/Silverdale AONB actions HCH10-12 (Arnside and Silverdale Executive Committee 2004, 59), AR9 and AR12 (*op cit*, 62), and TT9 (*op cit*, 65), and will enable access to fulfil some of the criteria present in the DDA (HMSO 2005);

- ***Disabled access*** –there is a need for a more detailed examination of the possibilities of improved disabled access or an improved off-site visitor experience, coinciding with the enhancement of access in general. This would probably require a specialist study into the issues surrounding this and the ways these can be dealt with, which could be achieved through consultation with the Fairfield Trust, for example;

- ***Safety*** – even after the towers have been stabilised and conserved there is a need to maintain adequate safety at all three buildings. Interpretation panels and leaflets need to stress any important safety information, and a periodic review of the amount of inappropriate access may need to be carried out in order to assess the need for any change to access arrangements;

- ***Car parking*** – this is closely connected to access, in particular disabled access (which might help satisfy some of the criteria of the DDA), as it is at present difficult, if not impossible, at all three towers. A walk linking all three towers could be established starting from Milnthorpe, where there are already car parks, but an assessment of possible parking areas closer to each of the towers would probably also need to be carried out, particularly to facilitate those with limited mobility. This links to the Arnside/Silverdale AONB action TT2 (*op cit*, 65);

- ***Education*** – making the most of the educational potential of the three towers is an extension of improving their access and interpretation. This can be done through similar means, in particular the provision of interpretative literature and signs, events, academic research and teachers' packs. It is important, however, that this is dealt with relatively quickly, as it will also help to give the three towers additional prominence in the local landscape.

7.3.4 ***Low priority:***

- ***Economic:*** as the potential value of the three towers begins to be fulfilled their economic benefits should gradually become apparent. Any activity related to encouraging the economic benefits of the three towers should perhaps be left to a minimum, and will probably need to be the responsibility of various individuals and organisations such as local businesses, the Dallam Tower Estate, the Arnside/Silverdale AONB, local councils and so forth;

- ***Academic:*** further academic research into the three towers will be extremely beneficial, but it is not something that needs to be carried out at an early stage. Little is known in detail about any of the sites and it is essential in the long-term, in order to carry out appropriate maintenance and repair, that this is carried out. It may, however, also rely on additional information coming to light as a result of recording work during consolidation, and could therefore be something that is difficult to schedule;

- ***Further access:*** in those cases where access is difficult, or uncontrolled access might have an adverse affect on the monument or be potentially dangerous, schemes could be put in place to allow access under strictly controlled conditions. This could take the form of organised and supervised visits, perhaps as part of study tours or school trips, or events such as the Heritage Open Days and National Archaeology Week, with a suitably qualified guide. The three towers could then be visited as a group and seen in more detail under these circumstances;

- ***Advertising:*** this may be considered useful if used appropriately. In particular, it could be required to promote a particular event, or where there is perceived to be a specific need. If a linked walk is established, advertising could take the form of a leaflet or brief guidebook, and details could be made available on the internet, perhaps hosted as part of the

Arnside/Silverdale AONB website (www.arnsidesilverdaleaonb.org.uk). Such a development could easily be linked with the existing HLF funded Limestone Heritage Project. This could also provide basic information about each of the towers in order to introduce them to interested parties.

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9. ILLUSTRATIONS

9.1 FIGURES

9.2 PLATES

Plate 16: West external elevation, Hazelslack Tower, showing attached lean-to on the north (left) side

Plate 17: Detail of east external elevation showing stub wall and area of rebuilding, Hazelslack Tower

Plate 18: Doorway in return of east external elevation, Hazelslack Tower

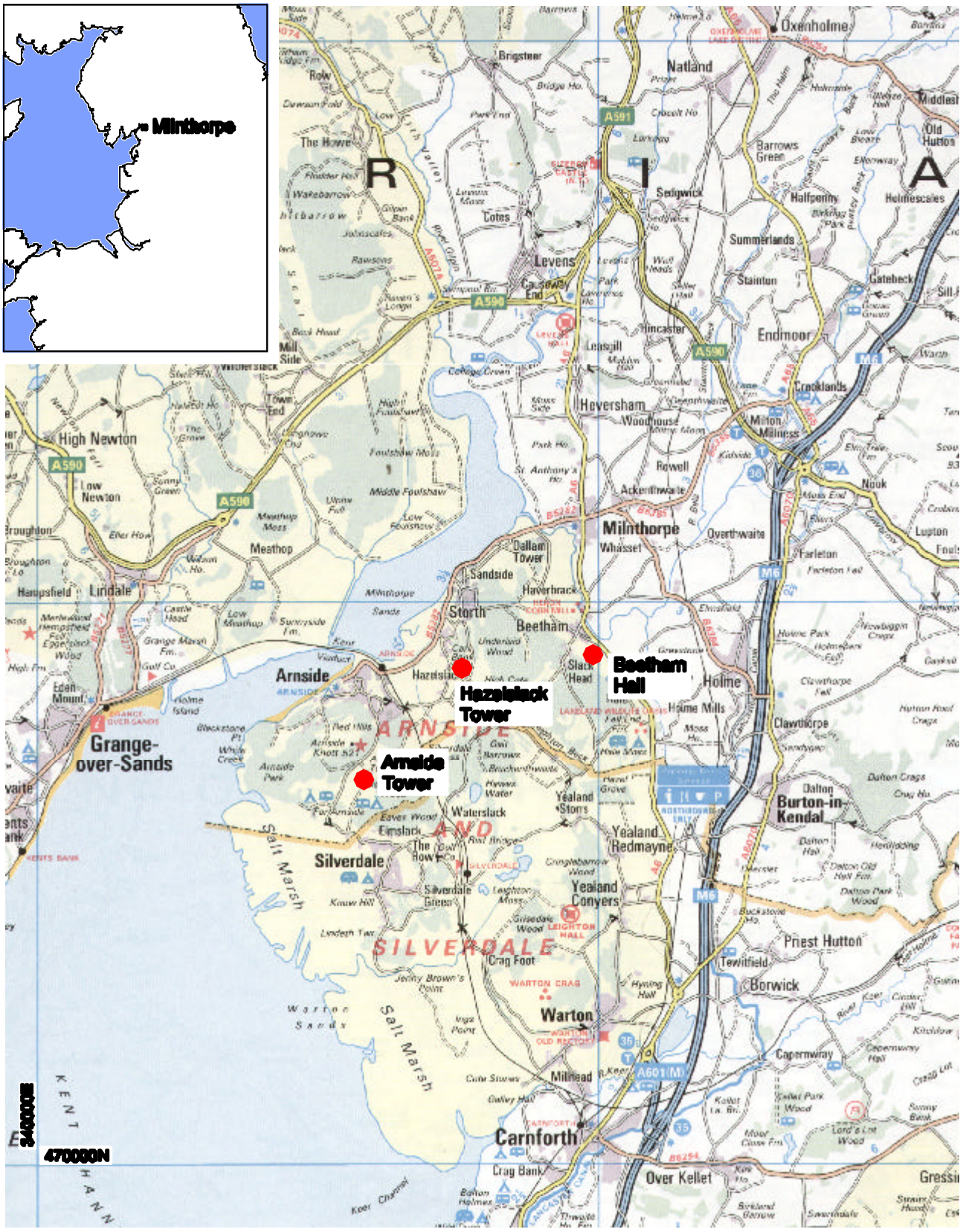


Figure 1: Location Map

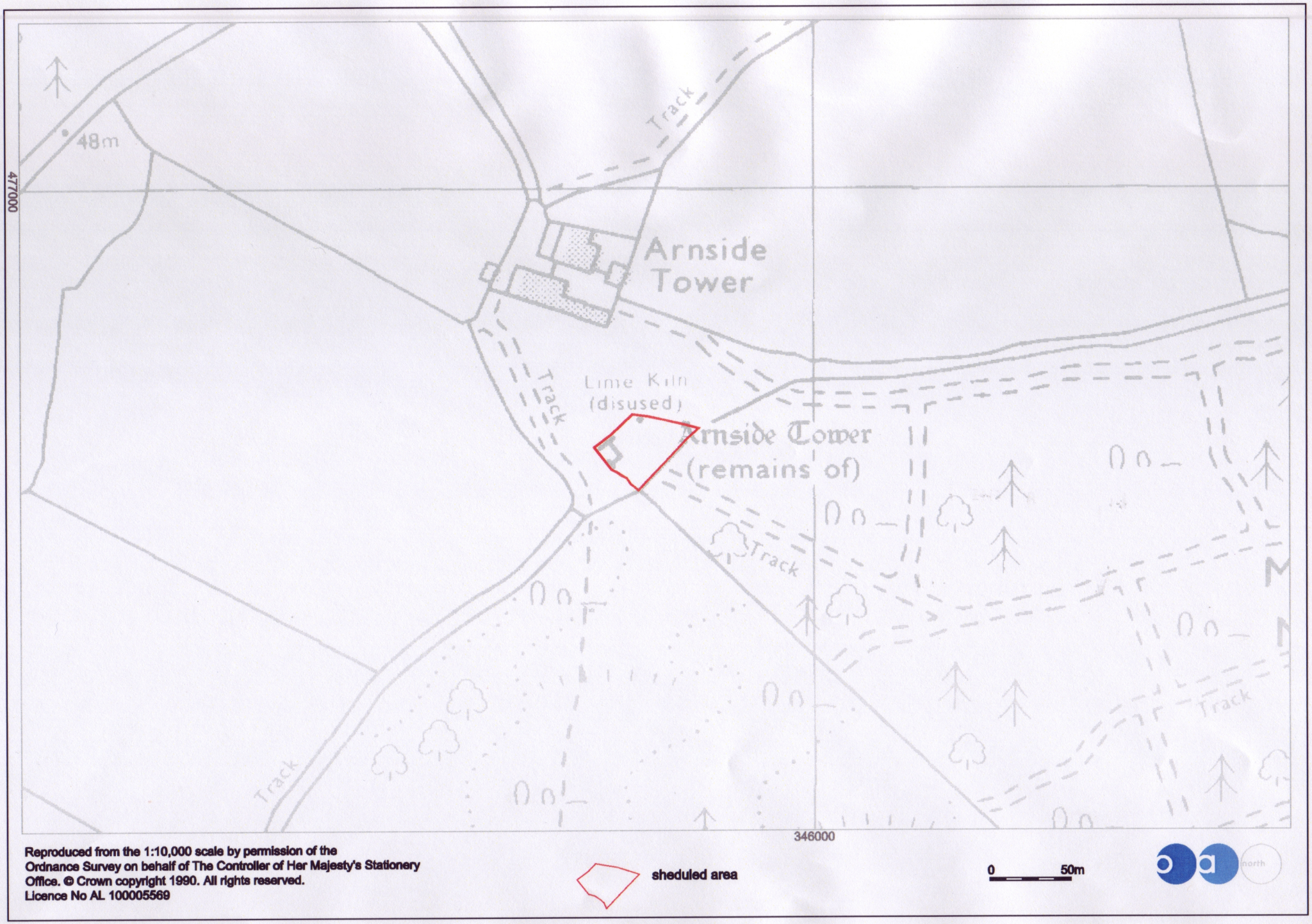


Figure 2: Arnside Tower, site plan

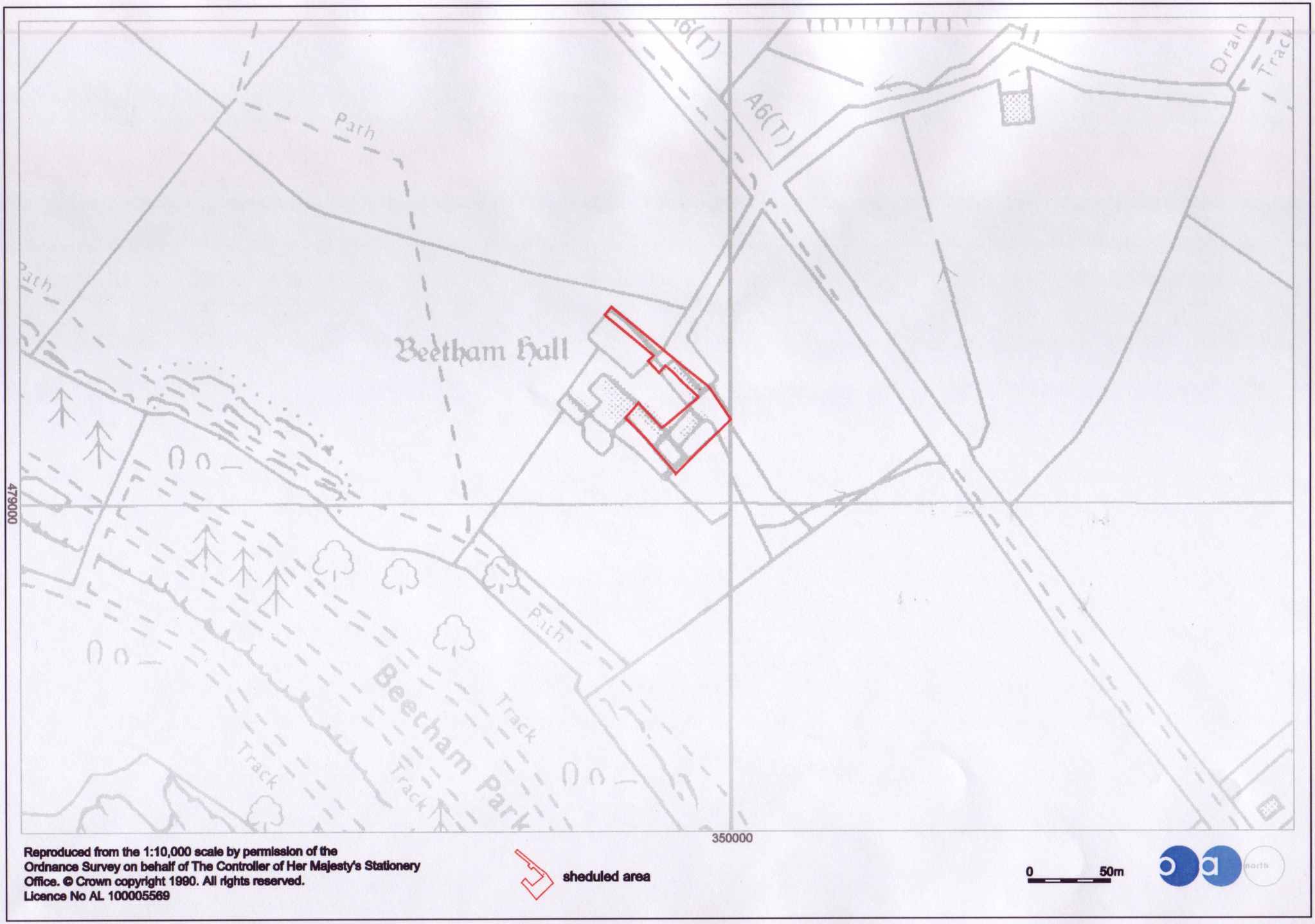
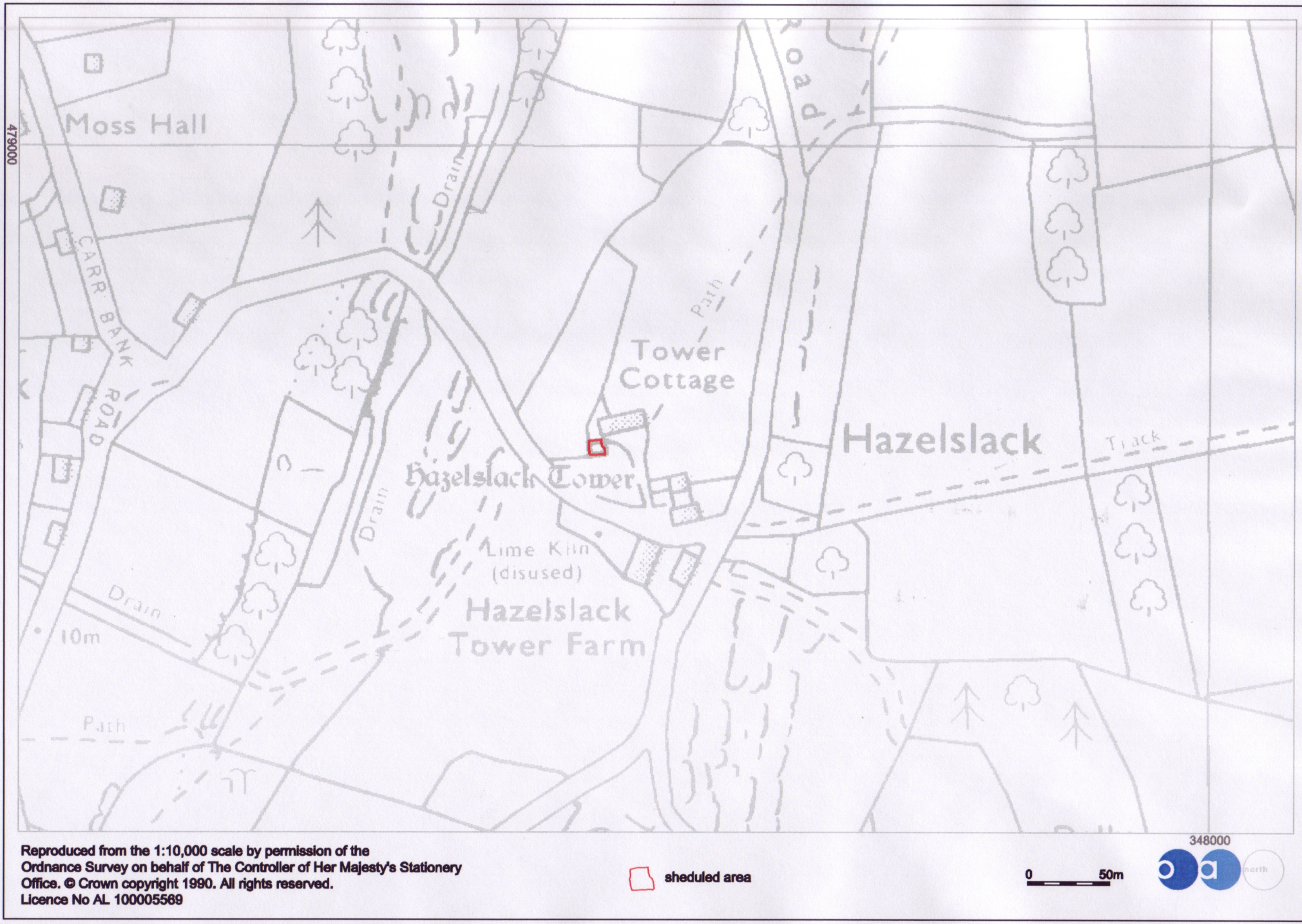


Figure 3: Beetham Hall, site plan



sheduled area

Figure 4: Hazelslack Tower, site plan

Plate 1: Limekiln and north-east external elevation, Arnside Tower

Plate 2: South-east and north-east external elevations, Arnside Tower

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Plate 7: Remains of the interior of the Solar, Beetham Hall

Plate 8: Truncated end of south side of hall, Beetham Hall

Plate 9: Farmhouse within remains of Beetham Hall

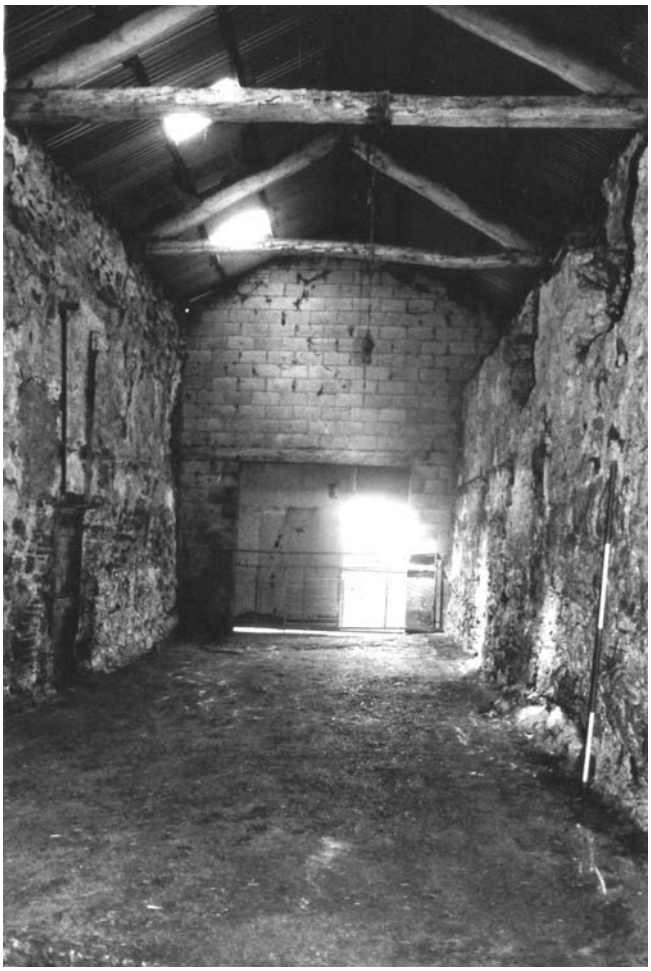

Plate 10: Interior of barn attached to farmhouse, Beetham Hall

Plate 11: Stable attached to north side of hall, Beetham Hall

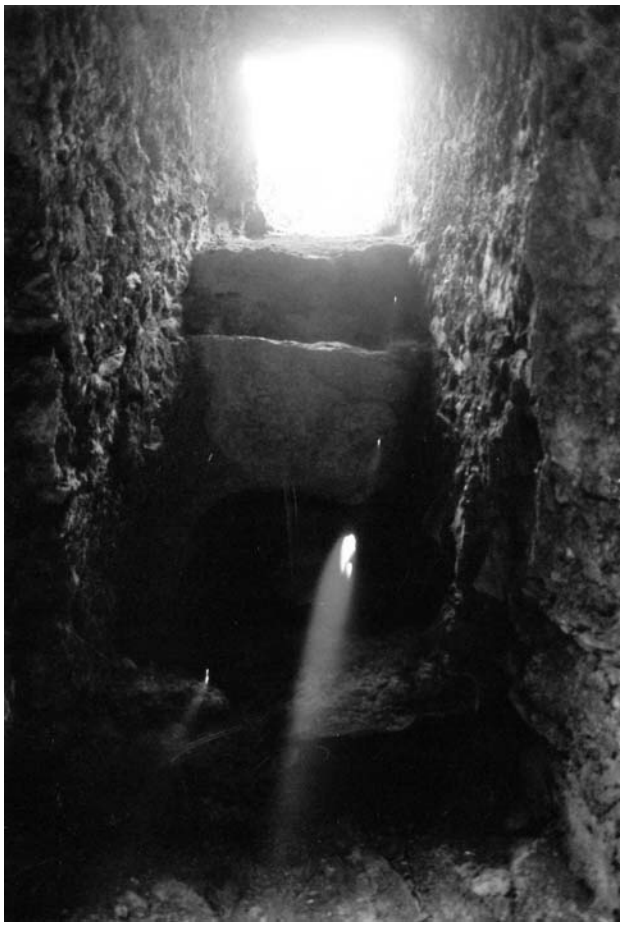

Plate 12: Garderobe on first floor, Hazelslack Tower

Plate 13: East external elevation showing roof scar, Hazelslack Tower

Plate 14: Staircase within Hazelslack Tower

Plate 15: South external elevation, Hazelslack Tower

Plate 16: West external elevation, Hazelslack Tower

Plate 17: Detail of east external elevation showing stub wall and area of rebuilding, Hazelslack Tower

Plate 18: Doorway in return of east external elevation, Hazelslack Tower

APPENDIX 1: PROJECT DESIGN

1. INTRODUCTION

1.1 The purpose of this document is to outline proposals for a feasibility study that will serve to assess the conservation needs of Beetham Hall, Arnside Tower and Hazelslack Tower, Cumbria. All three sites belong to the Dallam Tower Estate, Beetham and are situated in the parish of Beetham within the Arnside/Silverdale Area of Outstanding Natural Beauty.

1.2 BACKGROUND TO THE PROJECT

1.2.1 LUAU have discussed with English Heritage the possibility of carrying out a feasibility study of the Arnside, Hazelslack and Beetham fortified farmsteads and tower houses with a view to securing their long term conservation. Preliminary views of the proposal have also been discussed with the tenants and the landowner Brigadier Trion-Wilson and their response has been positive. The Landscape Trust, South Lakeland District Council and Dallam estate have all indicated an interest in the proposals.

1.2.2 This document presents outline proposals for the feasibility study with special reference to an assessment of historical and archaeological importance, ownership, tenancy and access requirements, costs and possible funding sources for conservation and recording works and the potential of the sites as an educational and recreational amenity.

1.3 ARCHAEOLOGICAL AND HISTORICAL IMPORTANCE

1.3.1 Beetham Hall and Hazelslack Tower are Grade II listed, Arnside tower is grade II* listed. All three sites which have a linked estate and manorial history, are situated within the Arnside/Silverdale Area of Outstanding Natural Beauty and are located within a few miles of each other. Arnside and Hazelslack towers are both on the buildings at risk register and are scheduled ancient monuments, as are parts of Beetham Hall.

1.3.2 Beetham constructed c.1340 is listed as a fortified single storey manor hall with crosswings, barns to the south and a chapel to the rear. The remains of an enclosing wall can still be seen, with arrow loops and evidence for a parapet. The hall is dated to the fourteenth century being apparently ruined by 1671.

1.3.3 The square remains of Hazelslack Tower are also thought to date to the late fourteenth century, with a later date being attributed to the garderobes. The tower exhibits evidence for what was probably a hall attached to the east. This was again ruined by the seventeenth century. There is some documentary evidence for a curtain wall. Further documentary evidence suggests that both this tower and Arnside were built by the descendants of Thomas de Thweng c.1375, fourth owner of the barony of Kendal.

1.3.4 Arnside Tower is the largest single structure of the three sites being five storeys in height and is more elaborate in design. Documentary evidence offers construction dates of both the fourteenth and fifteenth centuries

although it is listed as probably fifteenth. In 1602 it was partially destroyed by a fire and following a subsequent rebuild underwent partial dismantling later in that century. The south-west angle was blown down in a storm of 1884.

1.3.5 There is some discrepancy within the documentary evidence as to the date of construction of all three sites and as to evidence for two phases of early construction within Hazelslack and Arnside. The interpretation of Beetham Hall raises several questions with regard to its form and development in particular to the medieval curtain wall line and the so called barracks. There are several interpretations as to the nature and class of the monuments although currently listed as towerhouses (Arnside, Hazelslack) and a fortified manor hall (Beetham) documentary sources make reference to peel towers for Arnside in particular and Beetham has often been referred to as an additional towerhouse. Hazelslack in many ways appears to be a smaller version of Beetham but the hall has been removed to ground level. This presents immense scope for thorough analysis of the form and function of the monuments, allowing for an accurate and consistent classification of the sites highlighting their significance within a regional context.

1.3.6 Beetham Hall exists in a better state of repair than either of the other two monuments. This can be attributed to its continued agricultural use and the protection of the interior and wall tops by the existing roof. Both Hazelslack and Arnside are open to the elements and neither appear to have been used recently for agricultural purposes. The well preserved state of the Beetham Hall presents an excellent opportunity to record and analyse the development of a fortified manor hall. The state of preservation also lends itself well to a programme of consolidation works that, if carried out in the near future, would have the opportunity to preserve insitu several fine historical architectural features in an environment that is sympathetic to the needs of the building. Studied together the individual development of the three sites has the potential to lend an insight into the structure, status and development of the local landscape from the fourteenth century well into the seventeenth.

1.3.7 ***Current condition:*** Beetham hall exists in a stable state, largely due to being roofed and in current agricultural use. Accompanied visits can be arranged by permission of the estate. The walls of Hazelslack Tower are undergoing rapid deterioration caused by downslope sheering. This tower is in a dangerous state and requires urgent works to stabilise it. Arnside is subject to occasional loss of stone and vandalism. This site is also in an unstable, dangerous state and stands beside a public footpath via which it is frequently visited. The safety of visitors needs to be addressed for all three of the sites.

1.3.8 ***General access:*** as mentioned above Arnside Tower can be reached by a public footpath. A good network of footpaths exist with the AONB which offers the possibility of linkage of the sites. The AONB if frequently visited by walkers who use the current network of paths.

2 PURPOSE OF THE PROJECT

2.1 The principal objective of the study will be to assess the conservation needs of Beetham Hall, Arnside Tower and Hazelslack Tower and to assess the historical, architectural and archaeological value of the sites utilising the characterisation and discrimination criteria for monuments of national importance.

2.1.2 Based on the objectives above the specific aims for the project will be as follows:

(i) to assess the accessibility of the sites

(ii) to assess the structural condition of the individual towers to determine the possibility of making the sites safe

(iii) to investigate the potential for interpretation both as individual monuments and as a group

(iv) to determine the attitude of the owner and tenants to visitor access

(v) to assess the impact of increased public access

(vi) to offer an archaeological analysis and interpretation of the monuments in their setting

3 OUTLINE METHODOLOGY

3.1 CONSERVATION PROGRAMME

3.1.1 An assessment will be made for a costed programme of recording by the most suitable method of all interior and exterior elevations. In view of the current state of disrepair (with the exception of Beetham Hall) of the structures the programme will pay particular attention to the requirements of safe working. The programme will assess the need for the production of survey drawings and the provision for interpretation, in the form of annotation of drawings and in a free-text format.

3.1.2 An assessment will be made for a costed programme of recording by instrument survey of the ground plan of the monuments including both standing masonry and earthworks. Consideration will be given to the requirements of safety as above.

3.1.3 An assessment will be made for a costed programme of conservation works to the upstanding remains of the sites; this will be undertaken in consultation with an experienced conservation architect. The intention would be that any programme of conservation adopted and approved by English Heritage would be carried out by experienced historic building restorers following the completion of structural surveys. Priorities for conservation will be identified

on an elevation-by elevation basis. These will be identified by oblique photographs. A timetable of works will be provided.

3.1.4 Following the formulation of the conservation programme of works discussions will be held with English Heritage, Cumbria County Council and the South Lakeland District Council as to possible sources of funding from the public and private sector.

3.2 EDUCATIONAL AND RECREATIONAL POTENTIAL

3.2.1 An assessment will be made of the tourism potential of the towers in consultation with the project sponsors and interested parties and in the context of the relevant local tourism strategies and planning policies. Although a lessor priority than the establishment of an appropriate conservation programme, it is nevertheless essential to the long term survival and stability of the towers that an assessment is made of their merit as an educational and recreational source. Only by giving the sites 'value' can their long term future be guaranteed and the cost effectiveness of various ownership arrangements and conservation requirements be evaluated.

3.2.2 The feasibility study will contain an examination of the relationship of the towers to other tourist centres and attractions in the locality, consider visitor figures and visitor patterns at adjacent sites and the potential for networking with other attractions. An assessment of the potential for linking the sites in terms of access and interpretation should include examination of footpaths.

3.2.3 Consideration will be made of the position of the sites in relation to main communication routes and public transport. The likely catchment area will be defined with reference to potential visitor origins and critical journey times.

3.2.4 The assessment will also consider the community value of the sites, taking the views of local amenity or interest groups in consultation with local authorities. this could include consultation at a parish as well as district level. The views of the public could be sought through the AONB Landscape Trust's magazine, Keer to Kent.

3.2.5 An outline for an interpretative scheme will be proposed.

3.3 ARCHAEOLOGICAL AND HISTORICAL IMPORTANCE

3.3.1 ***Documentary Research:*** the primary purpose of the desk-based component of the feasibility study will be to establish the significance of the monuments at regional and national levels. An historical framework will be established and potential sources of information listed as an aid to future research. The purpose of the desk based study will not be to provide a definitive history of the sites but to establish context and appraise the potential for future study. The desk top study will examine past cartographic and pictorial sources such as paintings, prints, postcards and old photographs will yield information on processes and rates of decay. The historical record will also be inspected and discussions with the owners and interested local experts.

3.3.2 ***Assessment of Class Importance:*** based on the information gained from the documentary research an assessment will be made of the architectural, archaeological and historical importance of Beetham Hall, Arnside and Hazelslack towers, based on the Secretary of States's criteria for monuments of national importance.

3.4 MANAGEMENT ISSUES

3.4.1 Discussions will be held with the owner of the towers and the tenant farmers with regard to how they see the future of their monuments.

3.4.2 A management assessment will consider the condition, fragility, vulnerability and conservation value of the monuments and will be directly related to any consolidation works proposed.

APPENDIX 2: ORGANISATIONS CONSULTED

Arnside Parish Council

Arnside/Silverdale Area of Outstanding Natural Beauty

Beetham Parish Council

Cumbria County Council

- County Archaeologist
- Historic Environment Record

Cumberland and Westmorland Antiquarian and Archaeological Society

Dallam Tower Estate

English Heritage

Forestry Commission

Friends of the Lake District

Holgate's Caravan Park

Morecambe Bay Archaeological Society

Morecambe Bay Partnership

National Trust

South Lakeland District Council

- Conservation Officer

