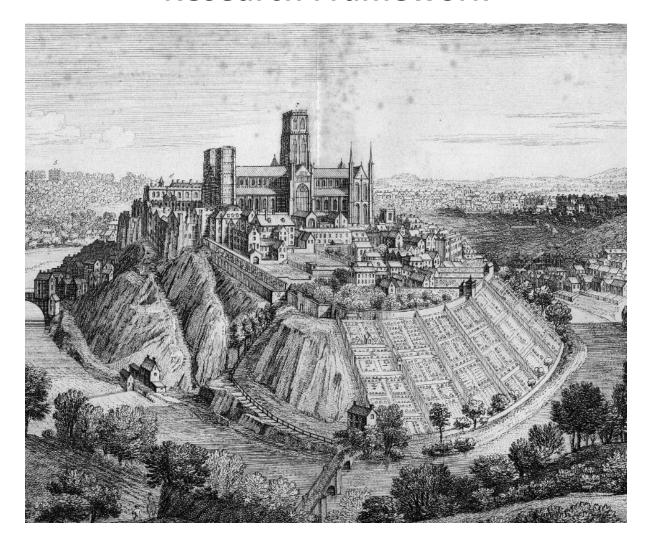
Durham World Heritage Site Research Framework



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1.0 Introduction

1.1 The Durham World Heritage Site

1.2 Durham World Heritage Site Research Framework (DWHSRF)

The Durham World Heritage Site Research Framework (DWHSRF) forms one of a suite of documents that comprise the World Heritage Management plan. It has two primary objectives. First, to place academic research at the core of future management, conservation, interpretation and investigation of the Durham World Heritage Site. Secondly, it explores and prioritises key avenues for further work, presenting a strategy through which this research can be taken forward. Only through rigorous, academically informed research can our understanding and appreciation of the Cathedral, Castle and their environs be progressed. By advancing a robust framework, this document will contribute actively to the improved appreciation of the rich archaeological, architectural and historical record of the WHS.

1.3 What is a research framework?

The notion of a research framework is a familiar one to many researching and managing the historic environment of the UK and engaging internationally with World Heritage Sites. However, this approach to the systematisation and contextualisation of research may not be familiar to those with an interest in research into the Durham WHS, but with different professional or disciplinary backgrounds. Given this, it is useful to outline some of the context and development of such research frameworks.

The need for a more structured approach to the management of World Heritage Site has arisen out of two parallel developments in the ecology of the UK heritage sector. First, there have been changes in the planning system over the last generation, and secondly shifting perspectives about the management of World Heritage Sites.

1.3.1 Research Agendas and the Historic Environment Sector

Despite the global significance of the inscription of historic core of Durham as a World Heritage Site in 1986, it had little immediate impact on the direct management of the historic environment resource, as the status brings no additional statutory protection. Instead, key aspects of the day-to-day curation of the site remain embedded within the English planning system. The current philosophy behind the management of heritage assets within this system was laid out with the advent of PPG16 (*Planning Policy Guidance Note 16:Archaeology and Planning*) (DoE 1990) and PPG15 (*Planning Policy Guidance Note 15: Planning and the Historical Environment*) (DoE 1994) in the early 1990s. These guidance notes fundamentally shifted the dynamic between the historic environment and the town and country planning system in England, and marked the acceptance by central government that archaeological features, historical buildings and other elements of the historic environment were a finite and non-renewable resource requiring careful curation. This was

managed essentially through a presumption in favour of the physical protection of remains of national importance. The same guidance also introduced the 'polluter-pays' principle, requiring developers to pay appropriate and reasonable assessment and fieldwork costs, and led to a switch away from core funding by central government (either directly or via English Heritage) for these activities. This had a rapid and long-lasting impact on the structure of conservation and field archaeology in England and led to the massive increase in fieldwork and recording which has been such a feature of the heritage profession over the last twenty years (Darvill and Russell 2002; Fulford 2011).

One aspect of these changes was the rapid increase in the number of archaeological interventions; there were around three times the number of archaeological investigations in 1999 than in 1990, with the vast majority initiated through the development-control process (Darvill and Russell 2002, 52). With the integration of archaeology and historic building conservation into the planning system new concerns have arisen. The presumption in favour of preservation in situ and the inherent costs involved in major archaeological fieldwork brought changes to excavation strategies, particularly in the urban context. Instead of large projects focusing on the complete removal of substantial volumes of archaeological stratigraphy, there has been a move towards keyhole excavations, small-scale trial trenching and test pits, and rigorously imposed sampling strategies. Such focused, targeted excavation can be seen clearly across the Durham WHS. Since Durham was inscribed as a WHS, almost all archaeological investigation has been carried out in precisely this development-control context, usually small-scale projects triggered by minor structural alterations, particularly those related to heating and other infrastructure requirements. There has been relatively little archaeological work triggered by the de novo construction of new buildings, although the current work being done at the Palace Green Library and the planned construction of the new St John's College Library have provided slightly more substantial opportunities to engage with the sub-surface resource. However, in general, while these developments have emerged from an appreciable drive to protect the archaeological resource, this kind of fieldwork often provides only a very limited insight into the spatial organisation of a site and its full chronological development.

Alongside this change in the structure of field archaeology itself, there has also been a fragmentation in the structure of the development control dimensions in the historic environment sector. The key roles are those of curator (e.g. conservation officers, archaeological development control officers), contractor (organisations and individuals providing a range of contracting services in assessments, fieldwork, analysis and reporting), consultant (providing archaeological advice and acting as agents or representatives for their clients) and client (whose objectives lead to the initiation of the planning process and who provides funding for subsequent work). Amongst curators there has been an increased pressure to provide advice and instruction on the management of the historic environment through the relevant statutory and non-statutory legislation. This has placed an increased burden on development-control staff to deliver well-tailored briefs, and on Sites and Monuments Record staff to provide information required by contractors and consultants for assessments and consultations.

The commercial element of the historic environment sector has also witnessed a substantial expansion, with organisations ranging from very small to larger bodies employing significant numbers of staff. Some provide specialised services and methodologies, such as

environmental archaeology or geophysical survey. Individuals with backgrounds in archaeology or historic buildings are now regularly employed within larger planning and environmental consultancies. Finally, the increase in fieldwork has resulted in a massive increase in the sheer quantity of data. Often this is not formally published, but instead exists as reports produced by contractors on behalf of clients to meet planning requirements. There is often a lack of available funding for the full publication of this fieldwork so that much work exists only as 'grey literature' held at the offices of the county archaeologist or increasingly on on-line repositories such as the Archaeological Data Services project OASIS (Online AccesS to the Index of archaeological investigationS) (www.oasis.ac.uk). Although it is widely acknowledged that small-scale interventions may not produce individually significant results worthy of full publication, their inherent cumulative value is realised only rarely despite the fact that the accumulation of the large quantities of small-scale data has a clear potential for expanding our knowledge.

While the majority of such reports are public documents and available for consultation, the lack of adequate indexing and dissemination means that the wider research community may often not be aware of important new discoveries. While the increase in fieldwork offers great potential for an increase in high-quality research into all aspects of the historic environment, these wider developments are all forming increasing barriers to the continuation and growth of research. The vast increase in data is not being used to its full potential and remains hard to access, and difficult to contextualise and interpret. If an understanding of the fabric of a World Heritage Site is to be more than an exercise in data collection, it is essential that all fieldwork should take place within a structured research atmosphere. The requirement for an appreciation of the research value of all fieldwork is embedded in documents such *Management of Research Projects in the Historic Environment (MoRPHE)*.

Overall, the planning changes in the early 1990s led to a genuinely enhanced programme of protection for heritage assets and a sea-change in the scale and nature of recording and fieldwork interventions. However, there is a need to somehow harness this mass of new data and create a more managed and strategic approach to converting raw data into synthetic research (see Bradley 2006; Fulford 2011).

The current approach to tackling this problem has been the creation of Research Frameworks – indeed MoRPHE demands that research value of a project is clearly defined in terms of the existing framework of regional, national and thematic agendas. It is to meet this demand for research agendas that a series of such frameworks have been developed over the last fifteen years, with much support from English Heritage. English Heritage themselves have produced a series of research documents, including *Exploring Our Past* and the *Draft Research Agenda* (English Heritage 1991; 1997; 2005a; 2005b), while the major national period societies have also moved forward with their own period-based agendas (e.g. Haselgrove *et al* 2001; James and Millett 2001) and more thematic agendas and framework have also been produced (e.g. Perring *et al* 2002; Bayley et al 2008). Finally, a series of regional research framework projects have been rolled out across the country including the North-East Regional Research Framework which includes the area of the Durham WHS and its regional hinterland. (e.g. Brown and Glazebrook 2000; Glazebrook 1997; Williams and Brown 1999; London Archaeology 2002; Petts with Gerrard 2006).

Whilst English Heritage is developing a new strategy for the development of research resources, it is unlikely that the key role of Research Frameworks will disappear in the near future (Miles 2013).

1.3.2 Research Agendas and World Heritage Sites

World Heritage Sites bring with them a range of very specific issues related to the management and monitoring of research (Darvill 2007). The initial process of WHS nomination and inscription demand a detailed research of the site to produce evidence-based statements in support of the extent and character of the site and underpinning its 'outstanding universal value' (Card et al. 2007; Darvill 2007, 437). However, research is also given a central position within the required Management Plans that are at the heart of the curation and management of World Heritage Sites (Card et al; Feilden and Jokilehto 1998; WHC 2005: 57)). Broadly speaking, the key aims of such Management Plans are to safeguard the cultural (and/or natural) heritage through conservation and enhancement works, to inform and educate the public about the cultural and educational significance of the site, to increase public engagement and recognise the wider economic and public benefit of inscription. These are all tasks that clearly grow out of a solid (and dynamic) understanding of history, form and significance of the site itself and require an on-going research engagement with the physical fabric. As Tim Darvill has noted

Archaeological research linked to conservation and management policies is explicitly referred to in the World Heritage Convention (UNESCO 1972: Art. 5) and is implicit in developing education programmes and presenting the heritage to the public (UNESCO 1972: Art. 27).

This requirement for such on-going research is indeed embedded within the management plan for the Durham World Heritage Site. Consequently a series of Research Frameworks for World Heritage Sites have been produced in recent years (e.g. AAHRG 2001; Downes et al 2005; Darvill 2005; Smyth et al 2009).

In addition to these management-led requirements for research agendas, the sheer increase in research outputs through the planning system and the difficulties in keeping track of them have already been noted. This situation is exacerbated at World Heritage Sites, due to their obvious heritage significance. The global importance of the historic environment regularly attracts a wide range of other, non-commercial research, including undergraduate and Master's level dissertations, PhD theses and private individual research. Such research may include active fieldwork, archive investigations as well syntheses and critical reexaminations of existing material.

This document thus aims to address the general and WHS-specific requirements for a Research Framework. The key aims for this agenda are to stimulate research into the Durham WHS in a structured and strategic way building on the existing contingent and ad hoc research activities and to provide a vision for the ways in which such initiatives might be structured. This resulting research will feed into the practical demands of management, preservation, conservation and interpretation, but also enhance and build on a wider sense

of the value and significance of the Durham WHS laying the foundations for an on-going process of deeper discovery and understanding of the site and outstanding universal value.

1.4 Scope of the Research Framework

One challenge faced by the Research Framework has been in defining its precise scope and remit. The chronological reach is the least problematic – the cathedral, which is believed to be the first major structure on the peninsula is of late Anglo-Saxon date, and its establishment marks a realistic *terminus post quem* for the emergence of city, although the extent and nature of earlier activity in and around the Peninsula is a valid question. At the other end of the timeline, it was felt important to bring an understanding of the WHS up to date rather than impose an arbitrary cut-off. The way in which modern groups and individuals engage and interact with the site was recognised as being a key part of the way in which the World Heritage Site functions as an entity, and it is clear that despite the extensive Listing and Scheduling of large areas of the peninsula, there is still continued work and development of the physical fabric of Castle, Cathedral and their environs.

Defining the spatial boundaries of the framework was a little more problematic. It was always clear that the document should cover all the remains within the current World Heritage Site boundary, essentially the Castle, Cathedral and the area in between (Palace Green). However, the land to the east of South and North Bailey are currently outside the WHS, as are the riverbanks on the north side of the Wear. However, as there are plans to redraw the boundary to incorporate these areas, it was decided to include these in the research framework document. Whilst there may be good managerial and research reasons for casting the net further particularly southwards to the other side of the Wear or northwards into historic medieval marketplace of Durham or even beyond, the Research Assessment will limit itself to covering essentially just the historic peninsula itself. However, in an acknowledgement to the difficulties in drawing hard and fast boundaries, a consideration of the wider immediate local, regional, national and international context of the site will be a part of the Research Agenda and Strategy elements of the Research Framework.

The final and most problematic aspect of defining the remit of this project was in defining what was relevant beyond the physical (upstanding and buried) landscape. The Cathedral, Palace Green library and the Castle each house important collections of artefacts and major archives. Some of these collections have no direct relevance to the World Heritage Site itself having only arrived in their present locations relatively recently. However, there is clearly much here that has the potential to shed light on the physical nature of the WHS (building accounts; records of renovation and conservation; financial and tenurial records e.g. Camsell 1985; Bonney 1990), and moving beyond the purely physical, there are collections that comprise and record the wider, intangible elements of culture that are so important to Durham, particularly the role of the Cathedral as a living place of worship. It is absolutely clear that this material is central to an understanding of the past and present communities that have resided and visited the historic peninsula. However, it is necessary to recognise that there are practical and conceptual challenges presented in encompassing and exploring this material within the scope of a document that uses a format taken from the management and curation of the historic environment. Reluctantly, this has meant that at this initial stage, the decision has been made to purely focus on archives and collections that

have a direct relevance to the physical historical environment of the World Heritage Site, as far as the Resource Assessment is concerned. There is a wider acknowledgement of the important role of this material at the Research Agenda and Research Strategy stages. However, it has simply not been possible to give them full justice in the first draft of this Framework. Consideration and engagement with appropriate formats and methodologies for this kind of developing a research framework that tackles this material must be a high priority for future iterations of the framework.

1.5 Research Framework Structure

Over the last fifteen years a standardised model for the creation and structure of historic environment research frameworks has been used. This is derived from the model laid out in the English Heritage internal document *Frameworks for our Past* (Olivier 1996, 5).

This provides a simple tri-partite format consisting of

- 1. Resource Assessment: the current state of knowledge and understanding.
- 2. Research Agenda: gaps in knowledge, potential of resource, research topics.
- 3. Research Strategy: priorities and methods for implementing the agenda.

For this document the main assessment and agenda sections have been sub-divided into individual sections based on the main physical sections of the Durham WHS: Cathedral, Castle, College, Palace Green; Saddler Street/Owengate/North and South Bailey; riverbanks. The agenda uses these basic divisions but also begins to identify common threads and questions that link these areas together and thus also introduces a thematic aspect to the study. As the Strategy primarily tackles structural issues, it is arranged in an entirely thematic way.

It is essential that Research Frameworks, such as the one outlined here, are seen as consensual documents created and supported by the entire historic environment sector. To achieve this other Research Framework Projects have devolved the process of compiling and developing the text to individuals across the region, working with the input of a series of specialist period groups. However, in practice this has not proved possible for this document. This is partly due to the small-size and dispersed nature of those with an active research interest in Durham WHS, but also due to the fact that there have been significant external pressures on time and resources for local researchers who were keen to be engaged with the project. As a consequence of this, the bulk of the writing of this framework has been undertaken by David Petts (Associate Director, Institute for Medieval and Early Modern Studies), who has informally consulted with interested parties in the development of this document – the draft version will also be more widely circulated for feedback, suggestions and correction.

Another key factor that has influenced the methodology used in this project is the fact that this project has run parallel to the creation of a larger Conservation plan for many areas of the World Heritage Site, which has acted as a *de facto* Resource Assessment for many areas of the WHS. Consequently, although brief overviews of the key components of the WHS are

provided here, the reader is referred to the far more in depth documents related to the Conservation Plan, which go into considerable detail about the structural history of, and previous research on, the majority of the site. They also provide the text of the Listings of the historic buildings and fuller detail about designation issues.

This document is inevitably partial and incomplete – as noted in Section 1.4 above; hard decisions have been made about the physical, chronological and intellectual scope of this Framework. However, these decisions are not in any way intended to close down, prevent or discourage further research beyond the initial scope of this work. The Framework is very much intended to be a dynamic and open-ended document, subject to on-going revision on a regular cycle. This revision will involve revisiting existing context, but also further exploring and expanding other facets of research into the Durham WHS. Those with an interest in developing such work are positively encouraged to contact the author.

2.0 Resource Assessment

2.1 Resources (David Petts and Jamie Armstrong)

Although key resources and bibliographic material will be flagged up under each broad section in the Resource Assessment, it is useful to take a broad overview of the range of research resources available.¹

2.1.1. General Overviews

There are discussions of varying details and quality in a number of 18th and 19th century county surveys (Hutchinson 1785-94; Fordyce 1857; Mackenzie and Ross 1834; Rose 1832-35; Surtees 1816-40) and a historical overview of Durham city alone (Allan 1824), but there have been surprisingly few 20th century general overviews of Durham City (although see Pocock 2013).

For general overviews of the historic environment, Martin Roberts' volume on Durham City (1st Edition 1993; 2nd Edition 2003) is the key text. This is an important and authoritative overview of the city's development from its origins to the present day and includes succinct syntheses of the development of the Cathedral, Castle and other areas of the World Heritage Site. The relevant volumes of the Pevsner architectural guides – *Buildings of England: County Durham* - also provide a useful overview of the architectural resource of the city (1st Edition 1953; revised by E. Williamson 1983). Martin Roberts is currently engaged on a new revision of this volume. Peter Clack's *Book of Durham* (1985) provides much that is useful and is written by someone with a close involvement with archaeological research in the city, but has largely been superseded by more recent publications.

For more detailed overviews of particular elements of the World Heritage Sites, the historic buildings appraisals, conservation plans and related material being written as part of the wider management plan provide more detailed reviews (Holton 2012; 2013; Humble 2013). These include complete overviews of the structures and their development, overviews of

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¹ Much of this section is taken from the detailed resource assessment written by Jamie Armstrong (Archaeological Services Durham University) for the English Heritage sponsored *Durham City medieval secular buildings assessment project*. That document provides a more detailed overview of these resources including assessments of threats and accessibility.

their significance, and full cataloguing of all designations. Although drawing on existing literature rather than engaging in primary research, these are important documents.

2.1.2 Buildings

In addition to the volumes by Roberts and Pevsner/Williamson, the resource for the study of buildings within the WHS is Peter Ryder's unpublished Buildings Survey 1990-1 produced for the Durham City Archaeological Conservation and Management Project. This is a comprehensive survey of the buildings of Durham City, and consists of a written description of each building with a date for its construction. Many of the buildings include an indication as to whether they were inspected internally and how comprehensive each inspection was. No illustrations are included in the report, but three volumes of A4 notebooks made during the survey are available. These should be used in conjunction with the report, as they contain a wealth of detail, including sketches of building plans and elevations (including several street frontages and 3D sketches), as well as individual motifs and details which the author thought important (e.g. roofs, dado rails, balustrades). The unpublished recording and notes by Martin Roberts are held in his personal archive (see Archaeological Services 2010, Appendix 5 for an overview of the Roberts archive). There are also important photographic archives that belong to the Heritage and Design Section of the Regeneration & Economic Development Department of Durham County Council. The relevant descriptive texts for the Listed Buildings and Scheduled Monuments within the WHS also provide useful overviews of individual buildings.

2.1.3 Archaeology

For overviews of the archaeological development of the city, the key volume is *The City of Durham: An Archaeological Survey* (Lowther et al. 1993), which provides a comprehensive gazetteer of all recorded archaeological interventions in the city up until 1990, and contains a short synthesis of the development of the city from a broadly archaeological perspective (ibid, 105-116).

As was discussed in the previous section, one of the challenges presented in researching the historic environment of World Heritage Sites is the sheer volume of unpublished 'grey literature' which has been generated through the planning process, including the recording of archaeological interventions and recording and noting of architectural and structural details. For the archaeology, whilst the City of Durham Archaeological Survey forms a useful resource, it pre-dates the advent of PPG16 and the growth of development control archaeology. Thus, the County Durham Historic Environment Record (held in the Archaeology Section, DCC) is a key resource – it holds full details of the all known archaeological sites within the area, and also contains a database of all recorded archaeological fieldwork. The main record can be accessed on-line (www.keystothepast.info) in an abridged format and a full version is accessible by appointment with the Archaeology Section, Durham County Council. The HER also holds a valuable collection of supplementary material including site reports generated through the planning process and a range of secondary literature, reports, observations and comments. Increasingly, archaeological site reports are available on-line via OASIS (Online AccesS to the Index of archaeological investigationS) (http://oasis.ac.uk/) but there is still a formidable back-log of material that is not available on-line. The bulk of the recent work within the World Heritage Site has been carried out by Archaeological Services, Durham University and copies of their reports are also available directly from them. The official museum for

collecting archaeological archives and artefact assemblages from Durham City was formally the Old Fulling Mill Museum, this has recently been closed but the material is still retained by Durham University Museums.

Another important resource which has not been explored in detail for this document is the holdings in the English Heritage National Monument Record at Swindon. This contains a large number of box files of photographs of buildings in Durham. However, this material is uncatalogued; there remains a need for these to be assessed in detail to establish which are duplicates of images held elsewhere, and which are only held in the NMR.

2.1.4 Maps and topographic resources

For pre-1850 topographic images, the website Durham Pictures in Print is a major resource and contains hi-res scans of the vast majority of topographic views of Durham City and County Durham (http://lewis.dur.ac.uk/pip/index.html). There are also a series of publications that list or catalogue this material (Benedikz 1968; Durham Art Gallery 1993; Jones 1969; Turner 1954)

Durham features on medieval maps such as the Gough Map (c.1360), but these provide no detail of the city. However, some medieval and early post-medieval plans of elements of the city survive in the Priory records. A sketch plan of medieval tenement boundaries in Old Elvet dated to 1439-c.1342 was replicated in Bonney 1990 (247), but is not an accurate depiction of the area, being instead a schematic plan. Margaret Bonney (née Camsell) conducted documentary research on the tenements in Old Borough, based on the Sacrist's Rental of 1500 and other medieval title deeds, rentals and other sources, with the aim of reconstructing the layout of the tenements of the medieval town. This information has been used to produce maps of these tenements (Camsell 1985), some of which have been published (Bonney 1990 245).

The earliest contemporary map to show all of Durham in any detail is Schweitzer's map of 1576. Schweitzer's map is a reasonably accurate depiction of the layout of early post-medieval Durham, giving an indication of the appearance of the major buildings in the city by flattening them out, including the defences. However, it is not a reliable indicator as to building location and design, and cannot be used to match up with buildings depicted on later plans. This also applies to those 17th-century maps that replicate the features of this map, such as the plans published by Speed and Hermannides.

Forster's map of 1754 provides a more accurate depiction of Durham, although it contains a mixture of styles. As with Schweitzer, the major buildings are shown as if flattened out. However, the properties lining the streets are shown as blocks, with no indication of where one ends and the next begins, although the individual tenement boundaries to the rear are shown. This limits the usefulness of this resource as it is not possible to see how individual buildings were laid out at this time. Forster does indicate important buildings and other features. Later maps by Armstrong (1768) and Cole (1805) also do not show individual building boundaries, although Cole does depict the major buildings conventionally.

Wood's map of 1820 is an accurate depiction of Durham, showing individual properties, and is therefore the earliest detailed and reliable survey of the city. Wood also names the

owner/occupier of most of the buildings, which will make it possible to trace property ownership. There are also a number of 18th and 19th century paintings of Durham (such as the 18th century painting of the city hanging on the staircase in Durham castle) which contain useful images, but these have not been catalogued.

The most accurate and reliable maps of Durham were produced by the Ordnance Survey from 1856 onwards in a variety of scales. The smallest scale 1:10,560 maps are the least detailed and are unlikely to be useful for any future work on the city as they are superseded by more detailed surveys. A medium scale 1:2,500 was produced and provides complete coverage for the whole of the study area at a good level of detail but only shows the outline of individual buildings. The most highly detailed maps are at 1:500. These generally do not show internal layouts of buildings but are likely to be the most useful for a building survey project.

2.1.5 Photographic images

Not surprisingly, Durham has been extensively photographed since the mid-19th century, so there is a vast resource of images available for the researcher.

The largest archive of photographic material is the Gilesgate Archive, a private collection of photographs of Durham held by Mr Michael Richardson. It is made up of over 16,000 photographs dating to 1850-1960, making it potentially an invaluable resource for local history studies in the city.

A number of photographic collections are held by the Archives and Special Collections of Palace Green library. Collections are named after their former owners, and are the Edis, Fillingham, Gibby, Jones, Wiper and miscellaneous collections. Durham Record office has at least 275 photographs of Durham, and more are held by Beamish Museum and on the SINE website (http://sine.ncl.ac.uk/). Accessibility and indexing of the Durham University Archives and Special Collections photographs is mixed. The Edis photographs and Gibby negatives are available online, fully catalogued and with a scan of each photograph: both are arranged alphabetically by subject (so that Saddler Street is under 'S'). Unfortunately the design of the website means there is no facility to allow the viewer to move directly from one image to the next: each image is opened in a separate window, so to move to the next one it is necessary to return to the main list. This would make examination of the whole catalogue somewhat time-consuming and frustrating. Is there any way to rectify this? The catalogue of the Durham University Library Miscellaneous Albums is also available online. Most of the remaining collections have unpublished hand lists in the Palace Green search room, although the Fillingham and W T Jones collections are currently in the process of being catalogued.

Although the vast majority of these are images of listed buildings taken in the last 10 years, a small number are older, dating as far back as the 19th century. Durham HER entry sheets for listed buildings also contain recent photographs of listed buildings: these are also replicated on the Keys to the Past website.

The Heritage and Design Section of the Regeneration & Economic Development Department of Durham County Council (DCC) contains a large collection of photographs and slides. These

provide both general views of historic buildings in the city and also detailed views of architectural features. There are 88 slide wallets; a sub-division for listed buildings contains the most useful material, with front views of buildings and details of architectural features. The photographic prints occupy six filing cabinets. This is an assorted collection composed mainly of details of architectural elements that were recorded before alteration took place.

[Information from Martin Roberts] The DCC collection of photographs embraces the photographic collection of the Environment Directorate (former City Planning Office) of the City of Durham Council (CDC), extant between 1974 and 2009. Early day-to-day photographs were black and white prints, followed by colour prints, running in parallel with a much slower growing collection of slides used more for promotional work. This slide collection was supplemented by a complete collection of listed building slides. This collection was funded and commissioned by the North East Civic Trust in the mid-1970s and made available to individual local authorities. This collection was fully labelled and catalogued, whereas the CDC collection was certainly chronologically maintained (black files of negatives and contact sheets kept for many years still survive, covering the period from about 1974 to the early 1980s. These early volumes were indexed too, but there were periods of no indexing, though all negatives (black and white and colour) were maintained in files chronologically and all were numbered. Martin Roberts added a lot of rapid recording photographs of historic buildings during repair and renovation, often of fabric during temporary exposure. This information is compiled in the City Planning Office PH1/300 files (a series of about 6-10 lever arch files now in CRO) containing individual listed building front sheets followed by any relevant material collected on that building. This includes a range of information such as owner's details of deeds, historical snippets to annotated drawings showing hidden features recorded during building work (e.g. 4 Church Street).

2.1.6 Palace Green Library: Palace Green library, Archives and Special Collections and Durham Cathedral archives

Durham University hosts the online resources for both the Archives and Special Collections and Durham Cathedral archives, and therefore both are treated as a single entity in this report. The local history section of Palace Green Library holds copies of all of the published works mentioned in this report, with the exception of some of the photographic collections (a full set of which can be obtained at the local studies section of Durham City Library). The Archives and Special Collections search room has access to a number of photographic collections and maps of Durham. Also available from this source are deeds of Durham City dating as far back as the 16th century (catalogued as the City Deeds, the Towers Deeds, and Durham University Papers, which is in turn subdivided into the Barclays Bank deposit and the Surveyor's deposit), as well as wills and probate inventories. Also available are antiquarian collections by Mickleton and Spearman and the Hudleston and Gibby collections. The Cathedral's archives contain extensive 308 volumes of medieval documentary resources, and allow the tracing of properties belong to the priory into the medieval period. Also available from the Cathedral Library are over 500 volumes of antiquarian collections that belonged to Hunter, Randall, Sharp, Surtees, Longstaff and Raine. Collections belonging to Woodness and Fawcett may also contain relevant material.

The Durham City deeds are composed of 47 bundles of material ordered by property. More than half are of Milburngate and Framwellgate properties, but they also cover Allergate, Saddler Street, New Elvet and Hallgarth Street. Some include plans of the property as part of the deeds. They generally date to the 18th-19th centuries, but there are occasional documents from the 17th century. The Towers Deeds comprise six bundles of material ordered by property. One bundle is of a block of properties at the southeast corner of Framwellgate Bridge; other bundles cover 36 Silver Street, 36 Saddler Street, 55 Saddler Street, 49(?) Saddler Street, Owengate (Queensgate) and 55-58 New Elvet. The bundle for 55 Saddler Street dates back to the 17th century, but the remainder date from the 18th century onwards. The papers of the Barclays Bank Deposit are made up by 23 deeds formerly owned by Barclays Bank which later passed to the University. These are also ordered by property and cover the period 1591-1891, although most are 18th and 19th century in date. Finally, the Surveyor's Deposit is the largest collection, and formerly belonged to the University. It comprises 362 documents, most of which are property deeds, and mostly of Durham City properties, although some are from further off (including University properties in London). Of these a total of 211 refer to Durham, although some are not relevant to this study (e.g. fire insurance certificates).

Some of the wills and probate inventories have been published as part of the Surtees Society's series of publications on wills of the northern counties. However, there are around 250,000 documents relating to approximately 90,000 individuals currently in the collection, relating to individuals within the diocese of Durham rather than Durham itself. Around 1000 of these records date to the period c.1545 to 1600 (Drury 2000) and the date range for the rest of these documents is c.1527-1858. However, Andrew Gray has indicated that the documents are unlikely to be of much use in studying the buildings of Durham, except in tracing individuals and properties. Inventories do not describe each room of a building, and rather list the goods within a room; this can be a valuable guide, but it is difficult to know when rooms have been omitted. Nevertheless if inventories can be matched to specific rooms within buildings then an examination of the goods can help determine the role of that room.

The medieval manuscripts of Durham priory are a primary resource, although many have been published or synthesised in other volumes (Camsell 1985; Harvey 2006; Britnell 2008). Michael Stansfield indicated that an examination of the antiquarian sources held by Palace Green and the Cathedral may not be particularly fruitful. The Mickleton and Spearman manuscripts contain information relating to the 17th century courts which may be useful. It was suggested that the remaining antiquarian sources would likely include either original documents that could be of use, or the results of their own research would help contribute to a further understanding of the medieval topography of Durham.

Finally, there are doubtless substantial and significant relevant archival resources outside Durham, such as the Durham Chancery Court Papers, at the National Archives. A more formal scoping exercise to identify key collections and archives would be prudent.

2.2 The Cathedral and cloister

Durham was the final resting place of the Community of St Cuthbert following their departure from Holy Island in 875. Although they had sojourned for a brief time at a number of locations including Norham and Crayke, and stayed for a more substantial period at Chester-le-Street, the arrival of the Community and the relics of Cuthbert on the peninsula in 995 marks the end of this period of peregrination.

Evidence for activity on the peninsula before this point is limited- although scatters of Roman pottery were found during excavation work on the Deanery car park. The description provided by Symeon of Durham of the arrival of the Community makes no reference to any existing settlement at the site, although it is probable that there was some existing Anglo-Saxon ecclesiastical activity around the church of St Oswald's on the south bank of the Wear, where a number of 10th century sculpture fragments have been found.

Documentary sources relate that the initial church was a small wooden structure, but that a large structure, the *Alba Ecclesia*, was soon built². There are no recorded structural details about the physical fabric or appearance of this church, although the general assumption is that it was built of wood and perhaps whitewashed. The *Alba Ecclesia* remained in use until the completion of a more substantial stone church, the *Ecclesia Major*, which had been built by Bishop Aldhun. Documentary sources record that it had two stone towers, a western one and one over the crossing. It stood until the commencement of construction of the Romanesque cathedral in the late 11th century.

The location of these Anglo-Saxon churches has yet to be determined with certainty. It is generally hypothesized that they lay in the area of the medieval cloister to the south of the current cathedral. This is on the basis of records of a medieval cenotaph with a statue of Cuthbert in this area. It has been suggested that this marks the position of the original relic shrine of Cuthbert before the relics were moved to the new cathedral. However, despite a number of excavations in the cloister area and geophysical survey on the cloister green, there has been no archaeological confirmation of this location (Archaeological Services 2007).

Whilst evidence of the Anglo-Saxon churches has been unforthcoming, there is other evidence of activity of early 11th century date. In 1874, J T Fowler excavated the area of the Norman Chapter house, which had been demolished in 1795 (Emery 2003; Fowler nd). The remains of the Chapter house were found, as well as burials, thought to be of earlier bishops, and an earlier phase of burials interpreted as being part of a pre-Conquest. This work in the same area also brought to light a number of fragments of late Anglo-Saxon stone sculpture, including a cross head bearing a 'lamb of god' and several fragments showing a baptismal scene, which are probably planned from the same template (Coatsworth 1978; Cramp 1980; 1984; Greenwell 1890-5). Other fragments include an elaborate coped grave-cover.

With the advent of Norman rule there were initial attempts to rebuild the claustral buildings, and in 1092 St Calais decided to build a new cathedral, work starting on site in July

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² The description of the cathedral that follows is based on Roberts 2003, 55-88, to which the reader is referred for a more detailed overview.

1093. At St Calais' death in 1096 construction on the nave had been partially completed. The work continued under Flambard and this initial phase of construction was completed in 1133. This resulted in a building of pre-eminent importance in English Romanesque architecture. Cruciform in plan, the choir and nave were aisled, as was the east side of the transepts. The eastern end had an apse around the shrine of Cuthbert and two internal apses terminating the side aisles (Bilson 1896). These features were however destroyed by the later construction of the Chapel of Nine Altars in the 13th century. The west end was surmounted by twin towers. There would have been a central tower, but this was replaced in the late 13th century. Other significant features included one of the first stone-vaulted roofs in a Romanesque church of this scale and ambition. This vaulting used a system of double bays with alternating primary and secondary piers. Access to the nave was through doors with impressive figurative and decorative sculpture, including the Prior's Door from the Cloister.

In the later 12th century, after failed attempts to build a Lady Chapel at the east end of the building, Le Puiset constructed a new, five aisled chapel, known as the Galilee, at the west end in transitional Romanesque-Gothic style (Halsey 1980; Harrison 1994). Internally, it was decorated with wall paintings, some of which survive (Johnson 1962). The problems at the east end of the church caused by the pressure of pilgrimage and structural faults meant that new work was carried out there in the later 13th century resulting in the construction of the Chapel of the Nine Altars, which drew on the similar Chapel at Fountains Abbey for inspiration (Coldstream 2003; Draper 1980).

The fourteenth century saw no major structural extensions to the Cathedral, but there were significant additions including the west window of the nave, the north window of the north transept, Hatfield's tomb and throne and the Neville Screen (Cambridge 1992; Dunham 1957; Wilson 1980). This period also saw the rebuilding of the central tower (which was repaired in the mid-15th century) and then rebuilt again following a lightning strike in the 1460s. This rebuild was vertically extended around 1483 with the addition of a new belfry stage, which marked the last pre-Reformation stage of construction.

The Reformation has a profound effect on the interior adornment of the Cathedral and the interior use of space was transformed. Internal divisions and screens taken out and much painted or carved iconography damaged, destroyed or covered over. With the removal of the shrine of Cuthbert the entire centre of gravity of the Cathedral shifted. Despite these iconoclastic moves, the Laudian reforms were supported by Hunt and Cosin (as a prebend). Cosin, however, fled to the continent during the ECW, during which there was major damage to the Cathedral, not least by Scottish prisoners of war over the winter of 1650-51. However, Cosin's return saw the installation of new woodwork that continued the Laudian combination of Gothic and neo-Classical forms, but with new Baroque detail, such as the font canopy and the choir stalls.

The 18th and 19th centuries saw some attempts to carry out restoration and consolidation, including John Wooller's drastic treatment of the external stone work which involved the removal of up to 75mm of weathered surface; later work on the stonework by the likes of Bonomi, Jackson and Pickering saw the addition of new stone to replace damaged fabric. The Galilee narrowly escaped demolition, although the revestry of the south aisle was

removed. The Chapel of Nine Altars saw campaigns of restoration by Nicholson, Wyatt and Bonomi.

The interior of the Cathedral was reordered in the mid-19th century, with the font relocated and the Cosin choir stalls cut up and relocated. Typical of the period, the longitudinal view down the Cathedral was opened up with the removal of the Cosin choir screen (although this was replaced by George Gilbert Scott in 1860 who did much of the earlier reordering).

The Claustral Buildings

The claustral buildings consist of three ranges of structures lying to the south of the cathedral itself with a central open cloister garth – they originally accommodated the residential and key administrative spaces of the monastic community of St Cuthbert. Broadly speaking the most important spaces were originally on first floor level with undercrofts on the ground floor, the only major exception being the Chapter House.

Working clockwise around this complex, the east range contains the Prior's Hall (Deanery), with its undercroft, the Chapter House, along with a sacristy, and a prison cell to its south. The Chapter House is a large two-bayed space with an apsidal end. It has the earliest example of keeled vault ribs in England. The floor contains a number of complete and fragmentary grave-slabs of post-medieval date. Despite its undoubted importance, it is important to remember that much of the current space was heavily restored in the 19th century following major 18th century alterations. To the north of the Chapter House is the Slype, a barrel vaulted space originally providing access for the monks to the south transept of the cathedral as well as to the eastern cemetery. Over the Slype is the current Song School, originally a library. This space has a Romanesque door in its north wall, which would have originally provided access to the south transept via the night stair before the extension of the Chapter House in the 12th century led to a change in circulation.

The main space on the south range is the Refectory, which also lies over a substantial undercroft. The main refectory is now used as a library and is accessed from the cloister walk by a classical style door. The main library space contains a series of large wooden bookshelves of uncertain date. On the ground floor at the west end of the undercroft is a small but complex sequence of spaces, known as the Covey, which forms a transitional area between the cloister walk and the Great Kitchen. It was created when the south range was extended westwards to meet the west range. The Great Kitchen itself is octagonal with vault and central lantern. Large fireplaces stand beneath relieving arches.

The western range includes the long first-floor dormitory (now the library) accessed via a large Romanesque doorway. It is unusual to have the dormitory space in the western range of a cloister, and originally dormitory space lay in the eastern range until the reordering of that range in the 12th century. It is probable that this western range was converted to the dormitory to allow drainage of the sewage over the edge of the peninsula. Currently the long dormitory space is largely lined by modern book shelving. The most impressive visual feature is the 15th century timber roof comprising 21 oak trusses. Beneath it was its double-aisled undercroft (now used as the shop and café). The undercroft is divided into several areas and in the past has variously contained the Song School, the Common House and the Great Cellar and stabling. Although now detached from the main range of buildings,

elements of the Reredorter survive in the toilet block that stands between the west range and the peninsula and forms the southern edge of the Monks' Garden.

The Cloister walks provided key circulation space, and also functioned as shared common space in its own right. Traces of the original positions of the carrels used for study and manuscript work can be seen as slight scars on all but the eastern range. The cloister walk ceilings are wooden and mainly of 15th century date, although the stone floor is likely to be of more recent date. Access to the outer court was made via the Dean's Walk, a low, barrel-vaulted tunnel which leads off from the south-east corner of the range. It also provides access to the undercroft beneath the south range and to that beneath Prior's Hall.

Although the Anglo-Saxon Cathedral must have been provided with some form of monastic buildings, even less is known about their form and location than the contemporary churches. If the suggestion that the AS church lay across the current cloister, then presumably the associated residential buildings lay even further south. Reconstruction of these buildings was initiated by Walcher in the 1070s when he decided to introduce regular Benedictine monks to replace the existing community, resulting in the typical Benedictine cloistered plan with an eastern Chapter House. His work was continued by St Calais with the Chapter House, dormitory and most of the rest of the ground floor completed by 1083. The monks continued construction of the refectory during St Calais' absence. The plans for a larger cathedral led to new work on the claustral range in the 12th century with the chapter house being rebuilt as a two storey structure. The later 12th and 13th century saw a general expansion of the range with buildings particularly expanding to the west, whilst the former dormitory was converted into the Prior's lodgings, with its own chapel (today vertically subdivided) (Graves and Rollason 2010; 2013). The most important 14th century construction is John Lewyn's "Great Kitchen", which has survived to be nationally significant (Cambridge 1992). In the 15th century there was a major phase of new building seeing the construction or reconstruction of the cloisters, a library and the infirmary.

The Dissolution clearly meant there was a major change in the function of many of these structures, although the needs of the Chapter meant that some of the Community's functions were taken over by it. This can be seen clearly with the former Prior's lodgings being given over to the Dean. The refectory which first became the Petty Canons' Hall was subsequently converted into a new library for the Dean. This may have happened in the 1680s as he left money for its completion in his will (d.1684). Despite these conversions it retains some Romanesque wall paintings. Dendrochronological work on the roof found the majority of the dated timbers are thought to have been felled in AD1683. However, one sample has the slightly earlier estimated felling date range of AD 1647-72 (English Heritage 2007).

2.2.2 Existing scholarship

Not surprisingly given its international significance, Durham Cathedral has attracted significant levels of scholarship. Research on evidence for activity anterior to the Romanesque structure has focused inevitably on the Anglo-Saxon sculpture (Coatsworth 1978; Cramp 1980, 1984) in the absence of any structural remains.

Not surprisingly the bulk of research and commentary has focused primarily on the Romanesque architecture at the Cathedral (e.g. Bony 1990; Curry 1986; Fernie 1980; Jarrett and Mason; McAleer 1994; 2001; Reilly 1997; Russon 1994; Thurlby 1994). As well as overviews and considerations of particular features, this research has also included considerations of the local, regional and national influence of Durham (e.g. Cambridge 1994; Fernie 1994). The Galilee Chapel has attracted some focused interest (Hasley 1980; Harrison 1994; Johnson 1962; Johnson 1965) as has the Chapel of the Nine Altars (Draper 1980; Russell 1980). Work on 13th -15th century developments has been less extensive, but not insignificant (Cambridge 1992; Coldstream 2003; Draper 1980; Dunham 1957), with a particular interest in the role of the Master Mason John Lewyn (Cambridge 1992; Hislop 1998; 2007). There has been far less interest in the post- Reformation developments, although there have been a small number of relevant studies (e.g. Cocke 1973; Cordingley 1995).

There has been relatively little extended research into the architecture of the claustral buildings. Most important is Jane Cunningham's Phd thesis (1995) – although note Pam Graves and Linda Rollason's recent research on the Prior's Chapel (Graves and Rollason 2010; 2013).

As far as research into aspects of cathedral decoration, adornment and monumentality is concerned there has been relatively little research. The most recent overview of the stained glass dates to 2001 (Norris 2001), though see also Fowler (1876), Haselock and O'Connor (1980) Longstaffe (1876) and Wild (1974). There has been surprisingly little work on Cosin's woodwork (though see Parry 2006).

Most work on the burial monuments is of 19th century date (e.g. Fowler 1891; Fowler 1905; Fowler 1912; Macalister 1899), although there has been a recent survey of the funerary monuments by the Cathedral Archaeologist. Final specialist reports are due on skeletal remains. This will enable the study of all burials, burial practices and grave markers etc. to be drawn together for publication (Norman Emery pers.comm).

2.2.3 Archaeological interventions and historic building recording

Although the vast majority of research on the Cathedral has focused on the standing building fabric, there has been some limited archaeological excavation in and around the main buildings, including Fowler's important work on the Chapter House and a series of early 20th century interventions around the cloister. Briefly these consist of the following activities

- 1874 Excavations in the Deanery Garden revealing Chapter House apse. Also located cemetery of pre- and post-Conquest date. (Fowler 1882; Emery 2003, 58)
- 1890s Excavation of area between the Reredorter and the Galilee (Soldier's Walk) (Greenwell 1890-5, 100, n.200; Emery 2010, 5.1.3)
- 1891 Excavation of east end of Chapter House (Emery 2003, 59)
- 1896 Excavation in Cloister Green (Emery 2010, 6.1)

- 1902 Excavation on Cloister Green adjacent to west walk locates the lavatorium (St John Hope 1903; Emery 2010, 6.1)
- 1908 Excavation on North Cloister walk paving lifted to locate AS cathedral. No earlier structures identified.
- 1931 Excavations in the Dormitory (see Emery 2010, 4.2.2; Durham D&C Lib. Add. MS. 204)
- Salvage Recording was carried out at Prior's Kitchen Garden, Durham Cathedral, when a passage along the south side of the south range was removed. 1 1.5 metres of deposits were recorded mainly earlier floor levels with other layers interleaved (Lowther et al. 1993, 46)
- 1960/1 Watching brief on floor replacement in South Range, Chapter Library, Cathedral Refectory located 11th century steps to Refectory, tiled floor, position of an oriel window and a lead melting oven (poss related to 16th century reroofing) (Gee 1967)
- 1967 Excavation by R Cramp and W. Dodds on heating services trench at south aisle of Neville Chapel two burial vaults located (Lowther et al. 1993, 46)
- 1975 Excavations in Undercroft on trenches dug for heating a pit containing a pit and some modern material was identified (Lowther et al. 1993, 46)
- 1977 Excavation in the Undercroft in the west range (Clack 1979; Emery 2010, 4.1).
- 1977-8 Excavation in the Monks' Garden/Reredorter. NE corner of Reredorter identified had been infilled with waste dating to the second half of the 17th century (Clack 1979; Emery 2010, 5.1.1).
- Salvage excavation and recording by E Cambridge and S. Mills at Prior's Hall Undercroft, Durham Cathedral (Lowther et al. 1993, 47)
- 1985 Excavations in Deanery Garden small assemblage of Roman pottery; three AS burials (Lowther et al. 1993, 45; Emery 2010, 7.1)
- 1991. Limited excavation and watching brief outside NE tower of Cathedral in advance of service trenches (E41706³)
- 1991-2 Limited excavation around the north door- early phases of the porch, burials and remains of the 15th century registry building located (Carne 1996)
- 1997 Excavation to west of Great Kitchen record 13th/14th century waste deposits (Emery 2010, 3.1.3)

The Cathedral has its own archaeologist (Norman Emery) who is engaged in on-going recording and fieldwork documenting the archaeology and architecture of the Cathedral. Since 2000 major work has included:

- 2001 Galilee ramp, human remains.
- 2002 Nine Altars, stone repair.
- 2003 Nine Altars. Historical survey of 18th-19th C work on Chapter house (DAJ 17).

³ 'E' numbers refer to the relevant entry in the Events database of the County Durham Historic Environment Record

- 2004 Nine Altars.
- 2005 Mapping Cosmatesque flooring.
- 2006 Dormitory lift. Refectory roof repairs.
- 2007 Chapter Office, proposed development, preliminary investigations. West cemetery wall
 excavation and reconstruction.
- 2008 Prior's Hall south wall and entrance repairs.
- 2009 Work on Galilee west window with steeplejacks.
- 2010 Conversion of Deanery Undercroft.

A major phase of on-going research is centred on the alterations being carried out as part of the Open Treasure Project including archaeological recording (stone-by-stone drawings) and geological examination of the fabric affected. Future related work will include test excavations in the Covey and Great Kitchen, archaeological monitoring of drainage and floodlighting trenches and removal of 1950s plaster in fireplaces and recording of features exposed. Evidence from this work will be drawn together to record the historical/structural development of the west claustral range and allied buildings.

He has also been involved in a recording and monitoring the Cathedral's collections and material culture. A major project has been the production of the Cathedral inventory (restricted access for security reasons). There has also been a study of all post-medieval memorials and a separate detailed report on the Skene family. Specific artefact studies include an analysis of a German navel shell fragment from the 1914 bombardment of Hartlepool, work on the message in a bottle found the Galilee chapel, cleaning of the DLI flags and the Haswell Lodge banner. Historical research has been carried out on the battle of Dunbar and its aftermath (in relation to the Scottish prisoners held in the Cathedral). The archaeologist's work generally results in internal 'grey literature' reports held at the Cathedral. A summary of the role of archaeology at the Cathedral will appear in the forthcoming Yale University publication (Emery pers.comm)

2.2.4 Research resources

Pictures in Print has around 150 images of the Cathedral exterior dating from the mid-17th century onwards (although many of these are duplicated or later editions of the same images); the earlier ones give a good sense of the appearance of the building before the 18th and 19th century restorations. There are also many more detailed images (around 130) of the interior of the cathedral showing wider vistas of the interior, as well as architectural details. The bulk of these are 19th century in date, but there are number of interesting 18th century interior views. There are also images of the claustral buildings include the cloisters, the Chapter House and the Cathedral kitchen- these are mainly 19th century date.

The bulk of the important building and archaeological recording work carried out by the Cathedral archaeologist remains unpublished, but access to the reports can be arranged. A particularly important overview, including a consideration of the extensive archival

resource, can be found in Emery (2011). The archival resources themselves are available at 5 The College.

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2.3 The College

The area today known as the College was originally the outer, service precinct of the medieval monastery, but owes much of its present importance to its development as the focus of prebendary residences following the Dissolution. As a group, the medieval remains form a useful counterpoint to the high-status architecture associated with the Cathedral and the main claustral range.

Key buildings constructed in the medieval period include the no longer extant infirmary that stands to the west rather than the more usual east of the main claustral block, and was probably of late 12th century origins. It stood adjacent to the Guest Hall which was another large open aisled hall.

Five prebendal houses stood along the south range- although the western one was demolished in the 1840s. At Number 8, a medieval three-bay arcade can still be seen in western wall of the rear wall of its neighbour that must have related to a now-missing third aisled building in the outer court. The rest of the buildings in this range mostly have medieval cores although often with later, mainly 18th century, frontages. Early features however do survive in places. These survivals include a barrel-vaulted undercroft in the basement of Number 6. The original function of these buildings was primarily related to the logistical support of the Community and includes granaries and the office of the Granator.

The buildings of the east range are on a smaller scale but also include service buildings, including a storage building (Nos 1-2) of c. 1531-2, part- converted into a prebendal house. A small barn (No.4) has been dendro dated to c.1445. The gatehouse to the north was rebuilt around 1500 replacing an earlier gate. It has a chapel over the entrance passage. The chapel contains some later- inserted 15th century glass.

A number of important medieval survivals remain to the north of the gatehouse, including the former monastic brew house, which retains its chimney stack and brick vats, there are also the remains of a timber loft. The north range includes the former Chamberlain's Exchequer building.

In addition to the medieval elements of the structures, the College also features important later elements of architectural interest. Almost all the buildings have facades of 18th century or later date. Important later internal features also survive including panelling and staircases. The Conduit Well house is of mid-18th century date including earlier fabric and probably designed by Sanderson Miller, with later modifications.

2.3.2 Recent scholarship

There has been relatively little published work on the buildings or archaeology of The College. The only recent published synthesis can be found in Roberts (2003, 85-88) and a brief description of the area in the County Durham Pevsner volume (Pevsner 1983, 207-9). There is also much that is useful in the 2012 Historic Buildings Appraisal (Holton 2012). Useful descriptions of the buildings can be found in the Durham volume of Pevsner and the descriptions from the building Listings (reproduced in Holton 2012). This is regrettable as Durham Cathedral Priory contains a very significant collection of medieval buildings. With so little published material, there is consequently a lack of references to Durham in wider contextual studies.

2.3.3 Archaeological interventions and historic building recording

Compared with the Cathedral and the associated claustral buildings there have been far fewer archaeological and building investigations reflecting the relative lack of interest in the area. The limited interventions include

- 1977 Small-scale excavation in The College, Blacksmith's shop. Revealed five west-east burials sealed by deposits of 13th/14th century date. Structural remains and evidence of post-medieval bell casting was identified (Lowther et al. 1993, 45; Bennett 1979; Benett and Coll 1979)
- 1978 Recording of a building trench in the work's yard A drainage trench revealed a probably thirteenth century feature, possibly a pit, as well as other internal and external occupation layers. The building was used for an industrial process, and later for grain storage (Lowther et al. 1993, 46-7; Coll 1979).

Recent work by the Cathedral Archaeologist (Norman Emery) includes:

- 2001 No. 12 The College, re-rendering.
- 2002 Conversion work in No. 12.
- 2004 Survey of Water Tower.
- 2005 Timber store repairs.
- 2006 Repairs at No. 7 The College.
- 2008 No. 7 garden wall reconstruction.
- 2009 No.14 tree-ring dating. Conversion work in Chorister school.

There are reports on this work held by Durham Cathedral.

2.3.4 Research resources

Pictures in Print holds remarkably few views of building in The College, reflecting the relative lack of interest in this suite of buildings until relatively recently. The British Library holds a couple of sketches by Samuel Hieronymous Grimm showing a view of the south range of buildings and a view towards the west including the conduit house- these date to 1773.

Reports on the work carried out by the Cathedral Archaeologist are not published, but are accessible.

2.3.5 The College: Select bibliography

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2.4.1 The Castle: Brief architectural overview

Durham Castle stands at the northern end of the Durham peninsula separated from the Cathedral by Palace Green. The medieval core of Durham city lies to the east and north of the Castle itself, including Saddler Street and the Market Place- to the north-west lies Saddler Street and the steep slopes of the Wear gorge abut it to the west. It has a visually dominant position over the lower town particularly when seen from Framwellgate Bridge. Although there is nothing that survives within the Castle that precedes the later 11th century it is possible that there may have been some form of pre-Norman secular centre at the north end of Palace Green by the Northumbrian Earl Uhtred, and which may have been besieged in the conflict recorded in the *De obsessione Dunelmi* (Morris 1992). Frustratingly, the base of a coloured glass vessel found during excavation in the early 1950s was identified by Denis Harden as a possible early medieval import, but the fragment cannot now be located (Lowther 1993, 44).

The construction of the current building is recorded by Symeon of Durham as commencing in 1072 following a hostile local reception to the Earls of Northumberland appointed by William the Conqueror. From 1076 when the secular and ecclesiastical rule of Durham was combined, the Castle became the residence of the Prince Bishops.

As it stands today, the Castle consists of a series of key building elements including the motte and keep, the west and north ranges and the gatehouse. There are also smaller subsidiary structures including the south gatehouse and a series of external spaces including the main courtyard, the Fellow's Garden, the Master's Garden and the North Terrace. The standing structures are all Grade 1 Listed Buildings. There is also likely to be significant subsurface structural remains, such as the putative eastern range, which may survive beneath the modern main courtyard.

The western range is largely occupied by the Great Hall, which is still used for college dining. As is typical of medieval halls, there is a servery and buttery at one (south) end and an adjacent service area which incorporates the excellently preserved medieval kitchens, which are still used for their original purpose. Beneath this sequence of spaces is a substantial undercroft with several bays of the central arcade preserved. The range was probably first constructed by Bishop Walcher in the 11th century, although all that survives of this initial phase of construction is probably the undercroft. The original south gatehouse probably originally lay beneath the service end of the Great Hall. In the 13th century further reconstruction by Bishop Bek resulted in the bulk of the surviving structure, and the role of the Great Hall was further emphasised by expansion and elaboration under Bishop Hatfield in the mid-14th century. In the 15th century, the size of the hall was reduced, with new suites of rooms being inserted at the south end. This is likely to have coincided with major remodelling of the kitchens and the creation of the impressive stone and brick fireplaces.

Like the west range, the north range extends to five levels. Again of Norman origins, it was also repeatedly remodelled. Here, the public spaces are smaller than in the west range and a series of galleries run along the south side of the building. The Lower Tunstall Gallery leads to the Norman chapel. The chapel forms part of the earliest element of the north range. It has three bays with columned arcades on a herringbone floor. Although it originally had southern and eastern windows these have been blocked by a subsequent external

obstructions. Although conventionally called a chapel, and now used as such, there is some debate as to its original function, with some suggestions that it may have been simply an undercroft for a chapel that lay above it. However, the most recent discussion confirms that it was a lower chapel, possibly with another above it (Wood 2010).

Alongside the chapel may have been two Norman halls of late 12th century date. The lower hall was been significantly remodelled, although the impressive Romanesque doorway still survives. Today, however, it provides an entrance for a suite of meeting and reception rooms, whilst the Tunstall Gallery that forms the southern side of the 1st floor leads to the Tunstall Chapel (both dating from the 1530s). Above this was a second, upper, Norman hall, which although now subdivided still retains a greater sense of its original plan, and retains some 12th century fenestration. It is possible that the lower hall served the castellan, whilst the upper hall was used by the Bishop. The lower hall was increasingly subdivided from the late 15th century with onwards with work commenced by Bishop Fox, and the Senate Room has a grand fireplace, possibly connected to a visit by James I in the early 17th century.

The western and northern ranges are articulated by impressive and decorative Black Stairs constructed by Cosin, which may have replaced an earlier tower constructed by Tunstall. The stairs are cantilevered into the walls of the stair tower, later reinforced by additional columns. At its east end the north range it is connected with the Castle Keep. Although no longer extant there was also once an east range of probable late 11th century date. It is believed to have run southwards from the eastern end of the north range beneath the current courtyard. It has occasionally been seen in excavation and the sub-surface remains of the garderobe still survive. It was probably demolished when the new (current) south gatehouse was constructed to the east of its predecessor in the 12th century

The mound (motte) on which the current Castle Keep sits probably belongs to the earliest phase of Norman construction at the site, and is likely to have originally been surmounted by a timber keep, with a lower bailey beneath it. Later alterations are likely to have been carried out by Bishop Flambard, including the initial conversion of the timber keep to a stone keep. It was again reconstructed, this time in more substantial stone fabric, under Bishop Hatfield in the mid-14th century. This required the enlargement of the motte, which blocked the eastern windows of the Norman chapel in the north range. The resulting keep was four storeys high and octagonal in plan, with ranges of rooms around an open well.

By the 17th century the keep had largely fallen out of use and the moats were becoming filled in with debris. Other major 17th century changes include the demolition of the barbican of the south gate under Cosin, who was also responsible for the Black Stairs and a new entrance to the west range. The motte was also landscaped into a series of terraced walks. From the 18th century there were relatively few major changes to the west and north ranges beyond internal re-arrangements, such as Crewe's subdivision of the upper Norman gallery and the re-arrangement of some internal spaces and external features in a more contemporary Gothick style. More significant was the reduction in height of the now abandoned keep.

In 1836 the Castle was transferred to the newly established University of Durham. The most significant intervention following this transfer of ownership was the major restoration of the keep as a block of student rooms. This retained the shell of the keep, but constructed the accommodation around a central stairwell, where the previous open well had stood. There

was also significant refenestration of this building. There were also structural alterations and renovation made to the Great Hall and renovation of the Tunstall Chapel.

Although there were continued internal changes and alterations throughout the 20th century, the most significant interventions addressed the major threats to the entire structural integrity of the castle structures caused by problems with the underlying geology. This resulted in a major campaign of structural underpinning in the 1920s and 30s. There were also associated programmes of repair and replacement of internal timbering including the roofs of the Great Hall, the Kitchen and the Tunstall Chapel,

2.4.2 Castle: Scholarship

Despite its importance, Durham Castle saw relatively minor research into its architectural development until the 20th century. There were a number of general observations on particular aspects of the surviving fabric and contents of the building or its history in journals (e.g. Charlton 1954; Fowler 1883 Gee 1905, 1909; Ornsby 1866).

The most important overview of the early development of the castle is Martin Leyland's 1994 PhD thesis (for a summary see Leyland 1994b), and until the 2013 Historic Building's Appraisal (Holton 2013), the only overall synthesis of the Castle was by Brickstock (2007); although, as always, the relevant chapter in Roberts (2003, 31-54) provides an insightful overview of the building's development. The one element of the castle that has attracted more detailed coverage is the Norman chapel (see Wood 2010 for an overview of scholarship). Overviews of the wider context of Durham Castle are also limited, although Rait discussed it in relationship to other northern episcopal residences (Rait 1911, 100-200) and there has been a consideration of Norman parallels in Thompson 1994.

2.4.3 Archaeological interventions and historic building recording

The Castle has seen a series of archaeological interventions and recording events

- Nd. Observations of pre-1928 date of building beneath the courtyard with small window opening, an undercroft of four bays and possible wall foundations- related to East range? (Lowther et al 1993, 43; VCH Durham 3, 69)
- Observations of excavations close to gateway indicating original form of gateway, showed partial foundations of barbican and possible location of drawbridge (Lowther et al 1993, 43; VCH Durham 3, 68-9)
- Observations of building work on edge of motte beneath Tunstall's Chapel. Showed blocked medieval window opening of structure cut into the motte; buried beneath rubble deposit forming floor of Chapel, including 13th/14th century potter (and a poss fragment of early medieval glass) (Simpson and Hatley 1953).
- 1986 Recording beneath floor of Senate Room ante-chamber noted a wall running beneath the standing Norman north range- possibly part of earlier Norman hall complex unstratified 11th and 13th century pottery was recovered (Lowther et al 1993, 44)
- 1990-1 Boreholes in the eastern side of the Fellows Garden- located some made ground and possibly the butt end of the moat. Test pits located tip-line deposits pottery of 12th, 13th/14th century date (Lowther 1993, 44)
- 1991 Excavations across the line of the moat in the Fellows Garden (Lowther et al 1993, 44)

- 1996 Assessment and recording of a wall in the Wine Cellar. Broadly 1500-1800 and incorporating reused architectural pieces.
- During the course of the construction works in the Lowe Library the concrete cellar was removed and three test-pits dug which showed that there were substantial archaeological deposits beneath the floor in every area of the cellar. The highest deposits that were visible relate to the construction of the south end of the hall. (Archaeological Services 1997)
- 1999 Monitoring at the Masters House recorded the remains of a possible earlier alignment of the castle retaining wall, predating the construction of the house (Archaeological Services 1999)
- 2001 Recording on a wall during the installation of an Electric Supply at Durham Castle Kitchen. Details of the castle walls were noted (Archaeological Services 2002)
- 2010-11 Heritage and condition survey of the Castle Walls (Archaeological Services)
- Nd Salvage recording of sites in the Barbican area prior construction of a new building between the Inner Bailey and Exchequer building. On the gatehouse site, a brick arch being demolished was recorded and dated to the 18th century. The surrounding stonework predates the wall, probably 12th century. In the Barbican area, watching brief was carried the base of the trench contained a uniform layer of rubble and mortar which was thought to correspond to the demolition deposits of Bishop Cosin's work in the 17th century. Two 1993 service trenches on the east and west sides of the Barbican,. The east side contained a lot of pottery and bone and a length of stonework lower down which proved to be the east side of a massive wall with facing blocks and a rubble core. Evidence of the Barbican refurbishment of Wyatt in the 19th century was found to the south end. A large stone foundation was observed on the west side of the Gate house, thought to be the original foundation for the south curtain wall.

2.4.4 Resources

A drawn survey of the entire structure funded by English Heritage was carried out at some point in the 1990s, although it is not clear where the digital archive of this project is located.

There are a range of key documentary archives available in the Durham University Special Collections - the Durham Castle Buildings Archive (GB 033 CAS) is primarily connected to 19th and 20th century building work on the castle. These include the archives relating to the conversion of the keep to student accommodation (Archives; Chapter Durham Cathedral) and the archives relating to the major conservations and consolidation work in the 1920s and 1930s (Durham University) – the latter not only records the standing structure but also provides important records and observations on the sub-surface remains on the site of the castle.

There are also substantial episcopal archives that are likely to shed light on the development and investment in structural programmes related to the castle by the Bishops of Durhamparticularly important are likely to be records connected to Cosin and Tunstall.

Pictures in Print holds twenty-three images specifically of the exterior of the Castle, although many of these are multiple versions of the same basic image (e.g. six variations of Samuel Buck's original 1728 birds' eye view. There are also many other images of the

outside of the castle incorporated into larger panoramic views of Durham City, although as these tend to be of views from the south of the city, the castle is usually largely obscured by the Cathedral and other buildings on Palace Green. There are also a number of images of the Castle interior- most of these focus on the Romanesque architecture (door on Tunstall's Gallery and Chapel), but other features such as the Great Hall are shown. Many of these give a good sense of University life in the mid/late 19th century.

There are several paintings of the Castle hanging on the Black Stairs, and I think these are important too.

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2.5 Palace Green

Palace Green forms the open space between the Cathedral to the south and the Castle to the north and is at the heart of the peninsula. On either side it is fringed by a series of significant historic buildings, many with connections to the administration of the Palatinate.

This area formed the Upper Bailey of the Durham enceinte. Today, it is largely in university hands.

Although the earliest historical sources imply that the currently open Green was partially or entirely built upon, it was cleared in the early 12th century as part of defensive works along connecting the Cathedral precinct, castle and intermediate spaces. Symeon of Durham stated that Bishop Flambard 'levelled the space between the church and the castle [i.e. Palace Green], which had hitherto been occupied by numerous poorhouses, and made it as a plain in a field; in order that the church should neither be endangered by fire nor polluted by filth' (Stevenson 1855, 716). The Green has remained open ever since. No archaeological evidence of any 11th century activity in this area has yet been identified, and the many early layers may have been destroyed by subsequent erosion, utility work and the construction of water storage tanks. However, some features located on a geophysical survey of the area carried out in 2009 by Archaeological Services have the potential to relate to this activity. There was continued work on the defensive elements of the Castle/Cathedral complex, including the completely rebuilding of the now vanished 15th century North Gate, which was the last major defensive work to be constructed. Already by this time the Green was flanked by administrative buildings, particularly along the western side, although the mint probably stood at the north-east corner. Some key officials and important tenants may also have had residences around the Green. An example of a domestic structure of 15th/16th century date survives at No. 5 Owengate. The Restoration and the appointment of Bishop Cosin saw a major period of rebuilding, with major work on Cosin's Almshouses, Cosin's Library and Divinity House, in addition to Cosin's investment in the Castle. The next major transformative stage for the Green began in the 1830s when the University was established. Over the next hundred years this saw the commencement of major developments around the Library, as well as the new Pemberton Lecture Rooms. Further additions in the 1960s, including the Pace Library, Bailey Court and Bailey House, although none of these have a significant visual impact on the Green itself.

In the north-east corner of Palace Green, just to the south of the Castle stand the small complex of buildings connected to the medieval administration of the Palatinate. Indeed in the medieval period, many of the buildings along the western side of the Green were connected to the secular running of the region and included the exchequer and chancery courts, the jail, the mint and storage areas. The surviving Exchequer Building is the oldest surviving example of these structures and dates to the mid-15th century but was refenestrated in the mid-19th century. Although heavily altered inside, it does retain some original features including a 17th-century staircase and original ceiling beams over some rooms.

To the south of the Exchequer stands Bishop Cosin's Library, built in the 1660s. The original library space still survives, with original bookcases and decorative portraits of famous writers. These form parts of a larger group of buildings that are now all part of the University's Palace Green library. This includes the Tudor-style Registry Building constructed in the 1820s, the main Library building constructed in the 1880s (also in Tudor/Renaissance style) and the 1960s Pace Library. The Registry building replaced the County Court building constructed in 1588 and substantially rebuilt under Cosin, which was fronted by a Renaissance-style loggia.

In the south-east corner of the Green is Divinity House. As with so many other buildings around Palace Green it owes its current appearance to Cosin and his mason John Longstaffe and was originally built as a Grammar School replacing, or a remodelling of, an earlier structure (a tithe barn?) destroyed by the Scots. In 1844 it was passed over to the University and despite its name is currently the Music School. Schoolboy graffiti is still visible on the window sills of the main school room.

Along the eastern side of Palace Green are a further range of buildings, also now used by the University. At the south-east corner stands Abbey House, originally a residential property, on the corner of Dun Cow Lane. Mainly later 17th or early 18th century in date there are clearly earlier elements surviving within the structure – it also retains important internal features including a Regency stair and panelled doors. Adjacent to Abbey House stands the Pemberton Lecture Rooms, which reflect the Tudor style used in the 19th century Palace Green library buildings, although dating slightly later, and designed by W.D. Caroe in the late 1920s. Bishop Cosin's Almshouses were constructed in the 17th century by Bishop Cosin on the site of an earlier plainsong and grammar school built by Bishop Langley in 1414. It is not clear how much of this earlier structure survives within the current fabric. The arms of both bishops can be seen on the frontage of the building. For a time, it was used as the University Museum. Bishop Cosin's Hall is a further residential property, built for the Mickleton family in the late 17th century. It has an impressive entrance and internally contains important period features. It is now used as the Institute for Advanced Studies. Tucked into a corner between Cosin's Hall and Owengate is the Bishop's former stable/coach house of mid-19th century date.

2.5.2 Recent Scholarship

As an ensemble there has been relatively little research on Palace Green. Some of the University buildings are touched on in Roberts 2013, but his English Heritage book on Durham remains the best overview of most of the individual buildings.

2.5.3. Archaeological interventions and historic building recording

There have been a number of archaeological interventions

- 1965 Rescue work carried out on Palace Green library extension. Material mainly suggesting a seventeenth/early eighteenth midden deposit was recovered. A stone structure was also recorded in the north west corner of the site, suggested by the excavator to be the base of a tower.
- H Wheeler excavated a trial trench at Palace Green, Durham Castle in an area used as a builder's yard during the building of an extension to the University Library. The exact location is unclear. Cobbled surfaces, post holes, pits and building rubble were recorded, with the earliest features being dated to the fourteenth century. (Lowther et al. 1993, 40; Wheeler 1966)
- 1998 Excavation on course of electrical cable. The majority of the deposit excavated consisted of modern deposits. No significant archaeological deposits were identified. (Archaeological Services 1998)
- 2001 Excavation in Windy Gap. Disarticulated remains of a human skeleton found in previous service trench.
- Geophysical survey (magnetometry and GPR) of Palace Green. Funded by Historic Scotland to find location of possible mass graves of Scottish soldiers. Historic Scotland geophysics: In May 2009,

Archaeological Services Durham University carried out Ground Penetrating Radar Survey and Magnetometry Survey on Land at Palace Green, Durham City. The work was funded by Historic Scotland to look for a possible mass burial grave of Scotlish soldiers captured after the Battle of Dunbar 1650. No anomalies of this sort were detected, though a possible earlier phase of the Green itself was recorded.

- 2011 Archaeological Services Durham University carried out an Excavation at Palace Green Library, Durham City. The works involved hand excavation of service and foundation trenches. Made ground of broadly post medieval date was recorded, as were foundations for nineteenth century buildings.
- Archaeological Services Durham University carried out an evaluation at the Master's House, Palace Green, Durham City. Archaeological deposits were encountered in the 4 test pits. Examination of areas stripped of plaster showed only nineteenth and twentieth century alterations. Further work was recommended.
- 2013 Excavations at Palace Green library by Archaeological Services Durham University uncovered mass burial (c.18 complete or partial skeletons) may be related to recorded mass grave of Scottish soldiers.

2.5.4 Research Resources

There are only a small number of detailed images of Palace Green, although views of the area are often incorporated into views of the Cathedral from the north. Amongst the better images are sequences by Joseph Bouet of Palace Green seen from the south. Surprisingly there are virtually no views of the western range of buildings, including Bishop Cosin's Library. The few views of this area are primarily found in views of the north side of the Cathedral – a number show the loggia of the former County Court (e.g. James Terry 1821 view). Although the earliest maps show Palace Green in a schematic manner, from the mid-18th century maps of Durham do start to show the area in more details (e.g. Thomas Forster's 1754 map of Durham City).

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2.6.1 Saddler Street, Owengate, North and South Bailey

Saddler Street constitutes the main access route from central Durham up into the administrative and episcopal enceinte on the peninsula running up from the Market Place and Elvet Bridge. Access to and from the peninsula was formerly controlled by the 15th century gate, known as North Gate, which stood at the point where Saddler Street became North Bailey, just to the north of Owengate. This was removed in 1820, although traces of the original structure can still be seen in the basement of 46 Saddler Street, 2 Owengate and Owengate House.

Excavation was carried out in the back lots of 61, 62 and 63 Saddler Street in the late 1970s. This showed evidence for the destruction of the first phase of occupation in the early 11th century. Tenements were delineated with wattle fencing. A bow-sided building was found, similar to buildings influenced by the Vikings elsewhere in England and in Denmark. The level of preservation of organic materials was high. Some elements of a stone building were found at the rear of 60-61 Saddler Street. Evidence of leather workers using ox hide to make boots, shoes and knife-sheaths was also recovered. The excavator suggested that this earliest phase dated to the second half of the 10th century AD, which would have placed this activity contemporary with or even potentially, earlier than, the arrival of the Community of St Cuthbert on the peninsula in 995 AD. However, this dating has been critiqued more recently, with a suggestion on the basis of a reanalysis of the leather ware and the ceramic assemblage that the earliest activity on this site was post-Conquest.

The extant buildings on Saddler Street and North and South Bailey generally have facades of 18th century appearance, but many are likely to be of medieval origin, and typically have narrow frontages and are at least three storeys high (for an assessment of surviving medieval fabric see Archaeological Services 2010, 46-57). A significant proportion of these buildings are likely to hide medieval timber-framed structures, such as at nos. 79 and 80 which also contains a 17th century staircase and a decorative plaster ceiling of c.1600. Many of these jettied rear wings of these building survive, such as at nos. 78 and 79. There are also a number of interesting post-medieval buildings including the former Drury Lane Theatre and the Assembly Rooms (No. 49). Important internal features survive at a number of properties including the cast iron gallery at Nos. 41 and 42, a crude early 18th century staircase at No. 40 and a late 17th century staircase at No. 46.

In the areas behind Saddler Street and to the north of the Castle a network of vennels of medieval origin survive, providing access to properties and structures that were built towards the rear of the long city centre plots. In some cases these passageways were enclosed or 'privatised'. This can be seen at 80 Saddler Street where two properties were joined by building a staircase in the vennel that ran between them.

Just to the south of the site of the North Gate, Owengate provides access up to Palace Green. Key structures include the Almshouses (now the WHS Visitor Centre) which date to 1837, and were constructed to replace Cosin's Almshouses on Palace Green when they were taken over by the University. Two medieval houses survive reasonably intact (Nos. 3 and 5 Owengate) whilst the house of the Master of University College is early 18th century in date.

North and South Baileys, as the name suggests, originally formed part of the large, outer enclosure that surrounded the medieval castle. Remarkably little is known about the extent and nature of medieval activity in this area, although it is known the space was subdivided by a wall that divided the secular from episcopal zones. This ran from the east end of the Cathedral down Bow Lane to Kingsgate – elements of the gate were incorporated into the tower of St Mary-le-Bow.

By the end of the 16th century though it is clear that there were houses built along the eastern edge of both North and South Bailey- these can be seen on Patterson's map of 1595. The map also shows buildings on the western side of South Bailey. The two churches, St Mary-le-Bow and St Mary-the-Less are of medieval origin. However, it is unclear how much medieval fabric survives in both churches – St Mary-le-Bow collapsed and was rebuilt in the 17th century following the collapse of the adjacent gatehouse, whilst St Mary the Less was rebuilt in the mid-19th century. A report on Mary-the-Less was undertaken by some post graduates at Edinburgh University in 2014 and can be produced upon request.

From the 16th century onwards increasing numbers of professionals, wealthy tradesmen and members of the local gentry took up residence in this part of the upper town. This often resulted in the encasing of buildings of medieval origin in brick or the addition of new facades. In some cases entirely new properties were built.

The expansion of these wealthy residences also saw the expansion of their back lots and the creation of ornamental gardens running down the river bank, although stretches of the medieval defences survive to the rear of 3 and 4 North Bailey and the run of properties from 16 North Bailey to 13 South Bailey. Key buildings of this period include Haughton House (St John's College), with its rusticated stone façade standing set back from the street. It was built 1721-c.1723 as the town house of Sir Robert Eden. Cranmer House built in the late 17th century for the Bowes family and modernised by the Earl of Strathmore in the mid-18th century is another example of the gentry housing in this area and retains good internal features.

In addition to these historic buildings, in the 19th and 20th century the University has also left its mark along North and South Bailey. This is most extensive at Hatfield College, established in 1846. With 17th and 18th century core buildings, the college added block designed by Salvin, a mid-19th century chapel and a series of early/mid-20th century structures. There are also 20th century elements to St Chad's College.

2.6.2 Recent scholarship

There are no comprehensive overviews of these outer areas of the peninsula, although Martin Roberts's book on Durham (2011) and the Durham Pevsner both discuss some of the buildings. Martin Roberts' recent book on the architecture of Durham University also looks at some of the buildings along these streets. Despite the extensive levels of archaeological intervention along the roads, there is no recent synthesis of the archaeological dimensions of the development of the area. Adrian Green's MA Thesis "Emulating Esquires? The Social and Built Development of the Bailey, Durham c.1660-1730' contains an overview of the development of the Bailey and place this in its social context. The work is supplemented with plans of buildings, photographs of architectural details, and transcripts of probate inventories.

There is some general discussion in *The City of Durham Archaeological Survey* (Lowther et al. 1993), but this obviously does not include any archaeological work carried out under PPG16. The *Durham City Medieval Secular Buildings Assessment Project* (2010) explored the potential for the survival of medieval secular buildings in Saddler Street, Owengate, Dun Cow Lane, North and South Baileys (west sides). This includes an overview of all useful archives and information resources, an assessment of likely surviving fabric and an overview of documentary sources.

2.6.3 Archaeological interventions and historic building recording

There has been relatively little recording of historic buildings along these streets, although the unpublished recordings and notes by Martin Roberts on 19 and 20 North Bailey, 8, 37, 70, 71-2, 73-5 and 2 South Bailey and recording by him 80 Saddler Street, and 2 South Bailey. There was also some recording on 37 and 38 North Bailey (Greenslade 1947), the south elevation of Abbey House (Dodds 1971-2) and the Rectory, Bow Lane (Lloyd undated).

Saddler Street

c.1880	66 Saddler Street. Finds made digging excavations- quern, stone mortar/creeing trough, C18 bottle (Lowther et al 1993, 42, 61).
1967	Rear of 4-7 Saddler Street. Deposits C17 onwards with redeposited medieval pottery (late C13-14, C14-15) – some structural remains (Lowther et al, 1993, 41, 56).
1968.	4-7 Saddler Street, Salvage work. Clay embankment, w-e wall, deposits containing C13, C14-15, C18 ceramics (Lowther et al 1993, 41, 55).
1989.	69 Saddler Street. Floors – C17/18. (Welsby 1989).
1974.	Rescue archaeology – rear of 61-3 Saddler Street. Up to 6m of deposits, some waterlogged. (Carver 1980).
1975	Rear of 61 Saddler Street ('Judo Hall'). Stratified features with good organic preservation. Pottery late C12 – C15.
1977	78 Saddler Street. Complete Stamford Ware lamp (C11) (Clack 1980b).
1977.	80 Saddler Street/11 Market Place. Medieval / post –medieval pottery recovered (Lowther et al 1993, 42, 65).
1988.	71 Saddler Street. Watching brief/structural recording. No pre-modern deposits- although C13-14 deposits recovered (Edwards 1991; Lowther et al. 1993, 42, 63).
1990	38 Saddler Street Watching brief. 2.7m medieval deposits- upper layers with C13-14 pottery. Run under basement at rear of property and retained by a revetment. Later C17-18 levelling up (NAA 1990).
1990	41-2 Saddler Street. Watching brief and structural survey of basement and cellar. Several phases of cellar access and possible that cellars pre-date current building (C16-17) – deposits with C14 pottery seen at rear (Tann 1990).

North Bailey 43-46 North Bailey J E Parson (?) salvaged material from the area. Finds are undocumented, 1955-56 but suggest midden deposits in this area (Lowther et al. 1993, 39, 39). Hatfield College Gatehouse. Collapse revealed possible timber framing (Whitworth nd, 43-6). 1955-5 1961 Hatfield College gatehouse cleared – large assemblage of medieval ceramics (C10-12; C10-13; C13-14) (Whitworth nd, 43-6). 1961. 15 North Bailey, St Chad's College Dining Room. Stratified deposits revealed after removal of cellar walls. Revealed at least one medieval pit, stone walls pre-dating demolished building. Late post-med css pit. Cellar features from earlier structures (Parsons 1961). 1966 1-7 North Bailey. Possible prehistoric remains including animal bone and a red deer antler pick - overlain by waterlogged deposit ("black bed") with C14 date 0 961-1153 cal. AD. C10-12 to C14 recovered from service trench. Medieval remains C10-12 pottery sherd and later fragments C12-C16 (Lowther et al. 1993, 38, 31; Whitworth 1968-9). 1967. Trial trenching by M. Pocock at Museum Square. Small quantity of Roman remains. Medieval remains including probable hearth and post-holes. Ceramics C10-12, C12-14, C13-14, C14-15. Walls predating 18th century structural remains recorded (Pocock 1967). 1969/70 41/2 North Bailey/ Bailey Court. Rescue excavation by J E Parsons at Bailey Court (behind Bishop Cosin's House). Stratified remains noted but not well recorded. Finds include ceramics (11th-15th century; last quarter 18th century) and glass (last quarter 18th century). Possible midden deposits (Lowther et al 1993, 39, 38). Late 1960s Small group of medieval pottery (C14-15) recovered during construction of Pace building at east end of 7 North Bailey (Whitworth 1968-9). 1978. 2 North Bailey. Rescue excavation. C12 footings of Bailey wall – deposits include probable structural features (surfaces; slots; trenches). C13 pottery. Bone 'typical of medieval domestic occupation' Used as ash tip in C17. Levelled in C18 (Clack 1980). 1990 Watching brief on gas mains along North and South Bailey. Seven possible pits, organic deposits and metalling (Sewter 1990). 1990. 19 North Bailey. Watching brief on service trenches; only post-med deposits (Sewter 1990b). Watching brief and excavation on 28A North Bailey. Finds- 13th/14th century pottery; animal 1994. bones. Handmade brick frontage of house identified. Also porcelain c.1700. Nd. 48 North Bailey The area at the rear of the property was observed archaeologically during excavations below the present floor level. 19th century activity in the area appeared to have removed any trace of earlier deposits. Part of a stone wall was also observed but it could not be accurately dated (Leyland nd.c). South Bailey 4 South Bailey (St John's College)- small group of C12-14 pottery (Lowther et al. 1993, 43, 1961 69). 1984-6 Unstraified material from drain and spoil recovered from river bank. Ceramics C11/12-C14.

Frag of Roman pot (Lowther et al. 1993, 43, 70).

1985? Small group of unstrat pottery – C13-14, C17-18 (Lowther et al 1993, 43, 72).

1990 Watching brief on gas mains along North and South Bailey. Seven possible pits, organic

deposits and metalling (Sewter 1990).

2001 Excavations at St –Mary-the-Less. Trial pits in church and churchyard. Mainly post-medieval

burials and rubble layer probably associated with 1847 rebuild. Small dump of medieval

pottery at southern edge of graveyard (Emery and Langstone 2009).

Nd. Archaeological monitoring at St Cuthbert's Society (Leyland nd.c).

Dun Cow Lane

1965 Dun Cow Lane. J E Parson carried out a Watching Brief during the excavation of a heating

trench. L.13th/14th century ceramics recovered

Early 1970s Quantity of human bone found in sack in cellar of Abbey Cottage – possibly related to nearby

cathedral cemetery (Lowther et al. 1993., 35)

Owengate

2009. Owengate- six testpits/trenches by Archaeological Services. In vicinity of bishop's mint. Series

of four walls; earliest deposits 14th century. Industrial residues rich in copper alloy and

possible crucible/furnace lining fragments.

Nd. Standing building recording at 2 Owengate (Leyland nd.a).

2.6.4 Research resources

There are very few good images of buildings along the North or South Bailey in *Pictures in Print*, beyond some good views of the Churches of St Mary-le-Bow and St Mary-the-Less (including several before the mid-19th century rebuild of the latter). Many of the wider views of the peninsula from the south and south-east do however show the back of buildings along these roads and the associated stretches of city wall. For example, the images by Bok (prob. 1665) and Samuel Buck (c.1723 and 1745) are particularly informative (Roberts 2003). Early maps such as Forster's of 1724 are also useful.

A key resource is Peter Ryder's unpublished Durham City Historic Building Survey and Martin Robert's personal recording and notes.

Margaret Bonney (née Camsell) conducted documentary research on the tenements Durham, based on the Sacrist's Rental of 1500 and other medieval title deeds, rentals and other sources, with the aim of reconstructing the layout of the tenements of the medieval town. This information has been used to produce maps of these tenements (Camsell 1985), some of which have been published (Camsell 1985; Bonney 1990 245). The Woodifield Survey of 1799-1807 covers Dean and Chapter property and is crucial to identifying properties in the documentary sources (Woodifield 1799). This is an invaluable source for the history of the Baileys and some other areas of the city, as it allows researchers to determine which house any particular D&C lease or document in probate relates to.

The archives and finds from the majority of the sites excavated are held by the University Museums.

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2.7.1 Riverbanks

The riverbanks of the north bank of the Wear as it encloses the peninsula form an integral element of the striking visual appearance of the World Heritage Site. Although now largely wooded, they have had a complex history that has left its physical marks on this landscape. The steep slopes also enhanced the defensive capabilities of the focal enceinte. The earliest evidence for activity on the banks comes in the form of quarrying for stone for the Cathedral, Castle and city walls.

It is clear from documentary evidence and early topographic illustrations that the banks were open and the land was used for grazing livestock and growing produce (including the presence of an orchard). There was also some industrial activity, with two mills recorded, one of which was used for fulling cloth. The amenity value of the banks also clearly developed in the post-medieval period, with the creation of scenic walks (e.g. Bishop's Walk and Prebends' Walk). The increasing development of North and South Bailey as areas of high-status housing in the 18th and 19th century led to the expansions of the gardens of these properties down the river banks, with new terraces and garden compartments created and ice houses, viewing points and gazebos constructed. The increasing appreciation of the picturesque aspects of this area continued throughout the 18th and 19th century with further landscaping and new walks being created. The current Prebends' Bridge was clearly designed with these picturesque perspectives in mind, and replaced an earlier bridge destroyed by flooding in 1771.

2.7.2 Recent research

Research on the riverbanks is at a relatively early stage and a recent overview of their history is provided in Roberts 2010. There is however, much unpublished research that has been carried out in recent years, including that carried out by Fiona Green for an HLF Bid that requires publication/dissemination.

2.7.3 Archaeological interventions and historic building recording

There has been very limited archaeological investigation of this area. There has been a watching brief on Prebends' Bridge (Emery 2001) and there was limited trial trenching on the site of some gardens in 2002. More general survey work has been carried out on some of the ice houses (Archaeological Services 2002).

2.7.4 Research resources

The Durham *Pictures in Print* provide numerous post-medieval views of the riverbanks including Samuel Buck's 1745 view showing the gardens on the south-east river banks. Views across the Wear towards the Cathedral form a common perspective for landscape painters. However, accuracy often takes second place to more artistic considerations (e.g. JMW Turner's views of the cathedral from Prebends' Bridge). Maps including early editions of the OS maps also provide useful information about land use on the riverbanks. Today, the riverbanks are fairly wooded and their steepness makes access tricky.

2.7.5 Riverbanks: Select bibliography

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3.0 Research Agenda

This section of the Research Framework builds on the information derived from the Research Assessment to identify key areas for future research in an attempt to clarify and prioritise future research directions. These priorities are not intended to be limited or prescriptive but to highlight the potential for future research within the World Heritage Site area. Whilst some of these topics and themes identified below are focused on individual elements, aspects or periods of the WHS, others are more thematic and cross-cutting.

The Agenda will commence with identifying a small group of high-level priorities that could be said to be the key fronts on which future work is required and then present a series of other issues or topics that might provide scope for further work. These more specific and focused projects are presented in tabular format.

3.1 Key Research Priorities

Research priority 1: Understanding the WHS today

The World Heritage Site is the centre of a living community- it contains a living cathedral, much of an internationally important University and a school. It is the home of students, academics and cathedral staff; it is the workplace for many more. It is also an internationally known tourist attraction. For many it is also an important place of commemoration, such as during the Miner's Gala or on Remembrance Sunday. These groups and individuals all react and engage with the landscape and buildings in different ways, bringing different preconceptions and leaving with new understandings. A key question is how these attitudes and understandings can be better understood.

The living nature of the WHS also brings many practical issues, concerning managing and conserving buildings, managing the movement of people and providing educational and interpretative resources. In particular, the Cathedral is a thriving and vibrant centre of worship for local people and visitors. The ways in which worshippers, tourists and researchers interact and engage with the site is a profoundly important one.

There is a key need to better understand how the WHS operates as a living community. There has already been some work carried out by Sarah Semple (Department of Archaeology), Ana Pereira Roders (University of Eindhoven and in 2013 an IMEMS Senior Research Fellow), who worked with MA students on the International Cultural Heritage Management course to record public perceptions of the WHS. The on-going conservation plans and the WHS management plans also raise many important issues linked to the practical management of the area. There is clear scope for bringing together scholarship and researchers in Durham to better understand the living WHS. Any wider intention to involve the WHS in academic "impact" case studies will require this kind of detailed understanding of the wider users of the monument, as well as the collection of key metric information.

Research priority 2: Understanding the built resource

The majority of building recording on the Peninsula has been ad hoc, and usually responding to development or construction requirements. However, there is clear scope for a more strategic and formal programme of building recording. This might include drawing, laser scanning, and photography.

Major individual projects might include a holistic survey of the Castle, and there are elements of the Cathedral that might benefit from (re-)recording. Key buildings on Palace Green that could see further work include the Music School and the Exchequer. There are also a series of buildings on Saddler Street and North/South Bailey deserving of further work. For these secular buildings a detailed list of priorities was pulled together in the 2010 *Durham Medieval Secular Buildings Project* (Archaeological Services 2010).

Ideally, such a strategic project, whether conceived as a single large-scale initiative or a series of smaller tasks should agree on a consistent methodological approach.

Research priority 3: Mapping the archaeological resource

The sub-surface archaeological deposits of the Durham WHS are often well-preserved and widely spread. In some places towards the lower end of Saddler Street, deposits up to 6m deep may survive whilst in other places there may have been large-scale destruction in a later period.

The City of Durham archaeological survey effectively collated details of all known archaeological interventions and observations up until 1990 (Lowther 1993). However, data collection stopped just at the point that new planning regulations transformed the character of urban archaeology. There is major need to collate and map all archaeological research carried out since 1990 and integrate it with the earlier survey results. This should include all planning-driven archaeology and also all archaeological work done at the Cathedral. In practice, any such project should not limit itself to the WHS boundaries, but should instead use the same boundaries as the City of Durham survey.

Although there has been some geophysical survey on Palace Green and in the Cloister Garth, there are other areas of open space that might be surveyed, particularly the Castle courtyard and the area to the west of the gatehouse and the Master's Garden, also College Green and gardens to the south of the College and to the east of North and South Bailey.

In practice, the development of Geographic Information Systems, 3D deposit modelling software and LiDAR topographic data means that any new survey of the archaeology could be much more sophisticated than the 1993 survey and some form of digital 3D deposit model could be developed. This would also require a cellar survey – the results of the excavations on the site of Chad's College Dining Room in the early 1960s demonstrated the potential of cellars to both destroy and preserve archaeological deposits

Any such project would require significant resourcing- potentially via EH or a University funded post-doctoral project.

Research Priority 4: The intangible heritage

Durham has a rich and complex intangible heritage connected to the site, particularly, but not exclusively, through the Cathedral. The role of hymnody, liturgy, artistic and literary inspiration and folklore needs to be considered. However, the Research Framework structure might not be the best format for developing a research framework for this kind of material. There is a need for a piece of scoping work that could capture the broad categories

of intangible heritage connected to the WHS site, and a more detailed investigation into how research on this topic might be taken forward.

3.2 Monument specific research questions

3.2.1 The Cathedral and cloister

	Research question	Potential methodologies and resource	Possible organisation and partners
CATH1	More detailed analysis of setting out and dimensions of the Cathedral. Are there connections to Old St Peters? Parallels with Monte Cassino? Why was there an expansion of nave bay length post-1104?	May require more detailed (re)survey of Cathedral plans – potential use of digital survey methods. Scope for combining with holistic 3D survey or laser scanning.	Would make suitable PhD project. Key involvement of Cathedral Archaeologist Full survey may require wider partnerships (Cathedral; English Heritage)
CATH2	What was the military function of the Cathedral if any? How did the west end engage with the castle walls? How did the east end engage with the wall running across North Bailey and down Bow Lane?	Documentary research, Comparative research on defensive aspects of monastic houses in Northern Britain and elsewhere. Possible small-scale recording work on Dun Cow Lane; St Mary-le- Bow to identify fragmentary remains of gate and cross wall.	Potential PhD project. Small scale survey projects may make suitable Masters level student projects.
CATH3	Detailed study of feretory screen – Marian, Elizabethan, Laudian Cosin or Restoration Cosin	Documentary research; fieldwork and recording of other broadly contemporary woodwork regionally and nationally – links in to CATH4-6	Potential PhD project Small scale survey projects may make suitable Masters level student projects. Key involvement of Cathedral Archaeologist
CATH4	Cosin's Woodwork	Absence of documentation for cathedral work despite evidence for other sites.	Potential PhD project; AHRC research project on Cathedral woodwork

		Are there other avenues of investigation? – links to CATH3-7	Key involvement of Cathedral Archaeologist
CATH5	Choir stalls. Is the attribution to "James Clement" correct? No other work is attributed to him.	I Documentary research; fieldwork and recording of other broadly contemporary woodwork regionally and nationally – links to CATH3-6	Potential PhD project: AHRC research project on cathedral woodwork Key involvement of Cathedral Archaeologist
CATH6	Cosin's Choir screen. It's totally classical design against Gothic stalls and use of Gothic/classical hybrid screening elsewhere (Brancepeth, Sedgefield) needs explaining	There is enough evidence in Billings and other engravings, plus extant material to undertake a measured survey and drawn/virtual reconstruction. links to CATH3-6	Potential PhD project; AHRC research project on cathedral woodwork Key involvement of Cathedral Archaeologist
CATH7	Prior Castell's Clock. How much is medieval and how much belongs to the mid- 17 th century restoration. How does it compare to similar clocks elsewhere?	Documentary research.	Potential PhD project: AHRC research project on cathedral woodwork Key involvement of Cathedral Archaeologist
CATH8	Cathedral as site of commemoration. The Cathedral and its immediate environs have been a site of commemoration for over 1000 years. It contains memorials to individuals, professional groups and military units. Some memorials have remains in their current position over a long term- others have moved. This resource has potential for looking at long-term and short-term patterns of memorialisation and attitudes to death and commemoration,	Much existing work on basic recording of monuments. However, there is scope for combining this with documentary research. Also comparative work on patterns of commemoration elsewhere (e.g. war memorials; memorials connected with mining); comparison with York Minster, Newcastle St Nicholas and other major churches. Key subtopics might include-commemoration of	Scope for wider projects on commemoration — either at PhD level or as Research council funded project. Scope for community involvement (HLF-funded?) in recording monuments and basic documentary research; AASDN Key involvement of Cathedral Archaeologist

САТН9	Durham as pilgrimage centre. The shrine of St Cuthbert was of immense importance in the development of Durham Cathedral. Although the remains of his shrine and his burial have been extensively analysed- there may be scope for further work. What is the post-medieval and modern legacy of Cuthbert? How do modern visitors engage with his cult?	bishops; war memorials; rise of gentry in 17 th and 18 th century. Has there been a full grave-yard survey? Possible further recording building on Emery's work, including laser scanning of selected monuments. Analysis of surviving paintwork. Although the remains of the material from the coffin of Cuthbert have been extensively analysed in the past, modern scientific techniques may squeeze more information from surviving objects. Is there scope for further research on the documentary archive to expand and elucidate the nature of the Cult of Cuthbert in the medieval period. Survey work with modern visitors	Collaborative interdisciplinary AHRC project on the remains from the shrine Student MA work on modern perceptions of shrine of Cuthbert and pilgrimage – joint projects or UG/MA dissertations Key involvement of Cathedral Archaeologist
CATH10	Monastic kitchen is one of the most architecturally important elements of the claustral buildings. Scope for comparative work on other monastic kitchens (e.g. Glastonbury) and secular kitchens (e.g. Durham Castle, Raby Castle)	Detailed building survey / laser scanning.	PhD project AHRC project Scope for high-level of public engagement given popular response to recent discoveries of 12 th century recipes from Durham Priory Links with Blackfriar's Restaurant Key involvement of

			Cathedral Archaeologist
CATH11	Potential of the Rites of Durham. What scope is there for developing the research value of the Rites of Durham? One of the things that is significant about the Rites is that it is patchy. It may have focused on describing what had been lost?	Documentary research Use as a basis for 2D or 3D reconstruction of the appearance of the Cathedral just before the Reformation – combined with laser scanning of surviving elements of the pre-Reformation church furnishing.	PhD / AHRC work HLF educational project -
CATH12	What is the wider influence of the cathedral's architecture on its daughter houses e.g. Jarrow; Lindisfarne. Is there scope for building on Cambridge's thesis	Further building recording and documentary research.	Scope of linking in with HLF Peregrini Project on Lindisfarne PhD / AHRC work
CATH13	Better understanding of building materials used in construction and repair of the Cathedral	Laboratory analysis of building materials to improve understanding of their chemistry and performance, and replication or re-use where appropriate;	Scope of individual student projects or larger projects brining in other structures within WHS. Support from the Cathedral Key involvement of Cathedral Archaeologist
CATH14	Resource enhancement	Publication or dissemination of Norman Emery's important work All interventions within Cathedral to be placed on HE	Cathedral archaeologist- scope for assistance from University DCC for HER enhancement Lodging as e-texts on WHS website
CATH16	Sudbury's Library. Better understanding of nature of library before 1850s work by Salvin. Was it originally intended to be classical, then changed to Gothic? Or	Possible documentary evidence; any surviving images/illustrations	Student project (MA)

	is it just an intentional mixed palette, as so much (slightly earlier) Cosin work. There is some evidence to suggest a change in the design in this instance. Is there	
CATH17	The cathedral and college possesses a significant number of <i>ex situ</i> , architectural fragments, both stone and wood. For example (1) the refectory basement houses the amassed decorated stonework – is there a catalogue? Does it need updating/digitising? There are also collections in some of the College buildingshave these been catalogued? Finally, the material stored in the gallery above the nave needs assessing? The C17 choir screen is there – this needs assessment, cataloguing and study.	

3.2.2 The College

	Research question	Potential methodologies and resource	Possible organisation and partners
COL1	Resource Enhancement	Publication or dissemination of Norman Emery's important work All interventions within cathedral to be placed on HE	Cathedral archaeologist - scope for assistance from IMEMS – University and others DCC for HER Enhancement Lodging as e-texts on WHS website
COL2	Improved chronological history for the priory buildings.	Possibly just dissemination of existing work.	Cathedral archaeologist – scope for assistance other

	There is architectural evidence for a post-1133 building campaign into the cloisters and outer court (College) – has this been mapped out? Just what was the oneaisled hall on S side of the College used for?	Further targeted building recording.	partners
COL3	Impact of Reformation – better understanding of the transition from monastic outer court to prebendary residences.	Documentary research; targeted building recording	Key involvement of Cathedral Archaeologist PhD project
COL4	Placing the monastic buildings in their wide English and European context of architectural history.	Requires publication of existing archaeological and architectural backlog.	Key involvement of Cathedral Archaeologist PhD project
COL5	Better understanding of sub-surface archaeological deposits	Geophysical survey of College Green and open space to the south of the College buildings Targeted evaluation of any anomalies	Student project (BA/MA) Excavation might involve community groups (HLF funding); AASDN
COL6	The role of the pre-19 th century Gothick Revival in the College (e.g. Conduit House, Butler's Pantry; Sudbury's Library)	Documentary research; targeted building recording	Some ongoing work by Martin Roberts. PHD project

3.2.3 The Castle

	Research question	Potential methodologies and resource	Possible organisation and partners
CAS1	There is still a need for a better understanding of the basic structure of the castle and how the various elements relate to each other	A systematic programme of producing stone-by-stone elevation drawings (either via laser scanning or photogrammetry) would significantly improve the site record, serving as a valuable	Major project- beyond scope of even PhD project. Likely to require multipartner collaborative project. Possible AHRC funding — contributions in kind

		resource for archaeological recording	via University E&B
		and interpretation, as well as conservation.	
		Decisions need to be	
		taken as to whether this would need to address	
		only the most complex	
		areas of multi-period	
		stonework.	
		If appropriate techniques	
		used could lead to wider 3D modelling of the	
		whole site as an aid to	
		interpretation and presentation.	
CAS2	Better understanding of the	The interior fixtures and	Requires skilled
	fixtures and fittings of the Castle	fittings (especially the Cosin and Tunstall	recording – scope for University funding?
	Castle	woodwork) should also	Oniversity funding:
		form the subject of a	
		drawn recording programme.	
CASS	Datter understanding of the	Datailad atama bu atama	DhD / Dagagash
CAS3	Better understanding of the Norman Chapel – need to	Detailed stone-by-stone recording; laser scanning	PhD / Research Council project
	define the construction		
	sequence and the origins of the space. Building on the		
	recent paper by Rita Wood		
	(2010) – particularly exploring the wider context		
	of double chapels (cf.		
CAS4	Westminster; Aachen) Improved understanding of	Dendrochronology (tree-	PhD /Research council
CA34	chronology of structure	ring dating) of timbers to	project
		improve knowledge of	
		dating and significance, and to enhance the	
		dating sequence for the	
		Durham area generally. Sample areas could	
		include the 'inserted'	
		support posts of the Black Stairs and the ceiling of	
		the SCR;	
		Trial mortar dating (by	
		C14 of burnt fuel	
		residues) to confirm or	

		challenge the understanding of the construction sequence of the main ranges; Exploit documentary evidence including the 16th-century accounts of Tunstall as well as a thorough survey of the vast 1930s restoration archive.	
CAS5	Better understanding of the archaeological deposits that still survive in and around the Castle.	Improved coverage of geophysical survey to enhance understanding of below-ground archaeology – particularly possible survival of traces of the east range in the courtyard. This should be twinned with a more comprehensive review of existing HER data to reveal the full richness and complexity of the below-ground archaeological resource, its research potential and the constraints it may place on future development; Archive of the 1930s conservation campaign may yield further insights via the drawn and photographic record into the archaeology of the site that was exposed during the underpinning.	Geophysical survey (GPR) and review of HER data would make a good student (BA/MA) research project. Review of archive would be a larger project perhaps MA research project
CAS6	Need for improved basic understanding of collections	The compilation of a room-by-room gazetteer of the site to record the current status of each space with an inventory of important features,	Durham University Museum/University College. Volunteer work with student from MA Museum and Artefact Studies

		fixtures, fittings and/or collection items; A database of materials and historic repair methods observed on the site to inform future archaeological recording	
CAS7	Better understanding of building materials used in construction and repair of the Castle	and conservation. Laboratory analysis of building materials to improve understanding of their chemistry and performance, and replication or re-use where appropriate.	Scope of individual student projects or larger projects bringing in other structures within WHS. Support from the University E&B
CAS8	University life	How has the building accommodated its use as university building? How does it compare to other 19 th and 20 th century university buildings? Documentary and archive research- scope for looking at topographic images/cartoons of university life. Recording of university memorabilia (trophy boards; war memorials etc)	Student project (BA/MA/PhD) Link to PG5 and SS&

3.2.4 Palace Green

	Research question	Potential methodologies and resource	Possible organisation and partners
PG1	Extent of survival (if any) of early (pre-Flambard clearance) activity on Palace Green	Possible targeted evaluation trenches on anomalies identified on Archaeological Services geophysical survey.	Possible small-scale HLF project – joint working with Durham students (Durham Student Archaeological
		Development-control archaeological recording of all building and construction on Palace Green – with sufficient funding for appropriate levels of post-excavation	Society)

		analysis.	
PG2	Better understanding of the Exchequer	Detailed recording of building and collation of any topographic	Student project (MA) Scope for using as
PG3	Better understanding of the Music School. Was it the Bishop's tithe barn? How	illustrations. Proper measured building survey	Student project on graffiti?
	was it used as a school? What can be made of the graffiti from this period?	Proper recording of graffiti- laser scanning? Photographic recording	Student project (MA) Scope for using as teaching project
PG4	Palace Green churchyard graves; Scope for research on their styles, inscriptions and the individuals in them.	Has there been a full graveyard survey, including planning, photography and condition survey?	Ideal community project – HLF funding- Durham student involvement
PG5	Impact of the University? Building on recent book by Martin Roberts (2013)	What has been the impact of the University on Palace Green? What decisions have been made about building style/design?	Student project (MA/PhD) Link to CAS8 and SS7
		Documentary research and building project	

3.2.5 Saddler Street/North Bailey/Owengate

	Research question	Potential methodologies and	Possible organisation and
		resource	partners
SS1	Better understanding of the extent of surviving medieval building fabric	The <i>Durham Medieval Secular Buildings</i> project highlighted 22 North Bailey, 5 Owengate, 45-	Individual structures could be surveyed as discrete projects or as a group as part of a

		T	T
SS2	Detailed understanding of the development of Northgate	46 Saddler Street, 47-48 Saddler Street, 62 Saddler Street as having particular potential. Wider scope for survey of both attics and cellars to better understand structural history. Combine analysis of surviving fabric and topographic images.	larger project (PhD)? For access would require cooperation of University E&B and individual Colleges MA Student project
		Scope for 3D digital reconstruction.	
SS3	Better understanding of gardens and garden features on the east side of North and South Bailey	Map, topographic and surviving structures. Targeted building/earthwork recording	Student projects (BA/MA)
SS4	Better understanding of the sub-surface archaeology (see Priority 5)	Collation of data from post-1990 interventions to compliment City of Durham survey. Targeted geophysical survey (GPR)	Part of major deposit modelling project – City of Durham Survey successor project.
SS5	Housing the gentry. Better understanding of the increased use of this area for gentry/professional residences in 17 th /18 th century- building on important work by Adrian Green (1996). There has been considerable movement of internal features- woodwork in chimneypiece of Jevons house to Master's House in Bow Lane; roof of no. 5 Owengate to Bowes Museum; fireplace from Red Lion (Hatfield) to Guild Hall.	Targeted building recording Photographic/drawn survey of internal features. Scope for linking into SS3	Student project (MA)
SS6	Medieval fabric in the churches. Does any medieval fabric survive in the churches of St Mary- le-	Detailed recording work of exposed walls	Student projects (BA/MA) – Scope for teaching

	Bow and St Mary- the-Less? Although both are meant to have be post-medieval rebuilds, was this work total?		project
SS7	University life	How have the buildings along these rose accommodated to their use as university building? What new buildings have been built? How does it compare to other 19 th and 20 th century university buildings? Documentary and archive research- scope for looking at topographic images/cartoons of university life. Recording of university memorabilia (trophy boards; war memorials etc)	Student project (BA/MA/PhD) Link to PG5 and CAS8

Building project recommended further survey to

3.2.6 Riverbanks

	Research question	Potential methodologies and resource	Possible organisation and partners
RB1	Resource enhancement – need to publish work by Dorothy Hamilton's classes; Fiona Green's garden		Publication in DAJ/ AA- other appropriate journal.
	history in HLF bid document.		Lodging as e-texts on WHS website

3.3 Period specific

3.3.1 Prehistoric and Roman

	Research question	Potential methodologies and resource	Possible organisation and partners
PRH1	What evidence is there for prehistoric or Roman activity on the peninsula?	Collating evidence from post-1990s fieldwork to build on Lowther et al 1993, 105-8.	Student (BA) project
		Is the antler pick from the 1966 excavations at 1-7 North Bailey still in existence? Could it be C14 dated?	
		Scope for geophysics in some of the open areas on the peninsula (gardens; open ground to the south of the College; College Green)	
PRH2	Wider synthesis of prehistoric and Roman activity in the hinterland?	Collating 'grey literature' in HER- building on the Durham Archaeological Assessment. Integrating new sites, such as recent work on Mountjoy; Targeted fieldwork (e.g. Maiden's Castle). Could also integrate PAS data.	Student project (BA/MA); Departmental teaching activities
PRH3	Better understanding of pre- Anglo-Saxon environment	Collation of existing environmental information Identification of possible areas for collecting more environmental material – waterlogged/bog sites in Wear Valley.	Student projects;

3.3.2 Anglo-Saxon Durham

	Research question	Potential methodologies and resource	Possible organisation and partners
AS1	Extent and nature of Anglo- Saxon monastery and	Further geophysical survey including on	Student projects
	church	College Green.	Cathedral

			archaeologist
	Where is the Anglo-Saxon church? If it is in the Cloister area why has geophysics not picked it up?	Revisiting the Anglo- Saxon sculpture – thirty years since publication of the Anglo-Saxon Corpus.	
	Need for synthesis and publication of 19 th century excavation of AS burials in area of the Chapter House?	Materials analysis of material recovered from Chapter House	
AS2	What is the date of the earliest secular activity on the Peninsula? Carver argued for a mid/late 10 th century date at 61-4 Saddler Street but this has been queried more recently by Vince and Mould. Is this redating sustainable?	Re-examination of other pottery assemblages from Saddler Street and North/South Bailey? Is the difference in date too small to be resolved by scientific dating? How do these assemblages compare with those from Newcastle, York and elsewhere?	Student project- requires advice/support on pottery assemblages. Collaboration with external experts (e.g. York Archaeological Trust)
AS3	Is there any evidence for a defensive complex preceding the Norman Castle as implied in <i>De obsessione Dunelmi?</i>	Likely to be destroyed by later castle- but geophysics in the open spaces in and around the Castle may identify possible traces.	Could work as individual projects but could be integrated into a wider Durham archaeological mapping project.
AS4	Exploring the Anglo-Saxon hinterland of Durham. What is the nature of the Anglo-Saxon activity at Old Elvet? This is likely to have preceded that on the Peninsula? Is there any evidence for Anglo-Saxon activity at Finchale (location of a series of 8 th and 9 th century synods)	Need to revisit the documentary evidence (particularly Symeon of Durham; Historia Sancto Cuthberto) and build on placename work of Victor Watts. Could also integrate PAS data.	Student projects (BA/MA). Perhaps wider PhD on landscape of the community of St Cuthbert- linking into research by David Petts on Lindifarne/Islandshire

3.3.3 Norman and medieval Durham

Research question	Potential methodologies and resource	Possible organisation and partners
	and resource	and partifers

			B 111 B15 1115
NM1	A wider understanding of	Scope for desk-top	Possible PhD or AHRC
	the topographic meanings	research and field survey.	projects.
	and implications of the		
	pairing of the Cathedral and		Clear potential for
	Castle and the distinct		collaborating with
	hilltop location- there are		European partners
	parallels in the UK at Lincoln		and other UNESCO
	and elsewhere in Europe		sites
	such as at Laon (France),		
	Limburg an der Lahn and		
	Stift Melk (Germany)		
NM2	Prince bishops. Although	Scope for desk-top	Possible PhD or AHRC
	unique in Britain, the	research and field survey.	projects. Potential for
	institution of Prince –		European money?
	Bishops		
	(Fürstbistum/Hochbistum)		Clear potential for
	was relatively wide spread		collaborating with
	in Europe, particularly in the		European partners
	Holy Roman Empire, but		and other UNESCO
	also in Livonia. There were		sites.
	also Orthodox prince-		
	bishops of Montenegro		
	under Ottoman suzerainty.		
	Did this particular		
	articulation of secular and		
	ecclesiastical power have		
	any consistent impact on		
	the associated architecture?		
NM3	The role of individuals in the	Scope for documentary	Possible PhD projects/
	building programmes of	work both in Durham and	AHRC research
	medieval Durham. It is well	elsewhere	7 ii ii C i C i C i C i C i i
	attested that the Bishops		
	were actively involved in		
	commissioning building		
	work. Some were also		
	connected to commissions		
	beyond Durham, such as		
	Bishop Skirlaw who funded		
	the creation of the		
	internationally acclaimed		
	Great East Window of York		
	Minster. We also know of		
	named architects (e.g. John		
	Lewyn, John Middleton and		
	Peter Dryng). How easy is it		
	to recognise the impact of		
	these individuals on		
	Durham?		

	Pilgrimage and cult	Scope for documentary	PhD projects; AHRC
	landscapes. Although the	and archive work.	projects; potentially
	cult of Cuthbert was focused		with aspect of
	on his shrine in the		community
	Cathedral, in practice the		involvement (e.g. links
	pilgrimage experience was		into the HLF Peregrini
	dispersed across the		project on Holy
	landscape. What wider		Island).
	evidence for this survives? A		,
	number of probable		
	medieval stone crosses		
	survive in Durham, and the		
	former locations of others		
	are known. Can these be		
	mapped to show the key		
	approaches of pilgrims?		
	What can the pattern of		
	church dedications tell use?		
	How was Durham linked to		
	its daughter establishments,		
	locally (e.g. Finchale;		
	Beaurepaire) and further		
	afield (e.g. Jarrow;		
	Lindisfarne). How far did		
	these attract their own		
	pilgrimages?		
NM5	Resourcing production and	This is a project that can	Whilst there may be
	consumption. The Castle	bring the documentary	individual projects
	and the Cathedral would	and archaeological	(AHRC/PhD) that could
	have required a huge	evidence to bear. There is	be developed from
	number of resource – some	plentiful information in	this material, a larger
	were probably supplied by	the documentary archives	project bringing
	their own estates, others	about the economic life	together parallel and
	acquired on the open	of the Cathedral and	complimentary
	market. How can this be	Priory - some of this has	research on the
	better understood?	been explored in the	archaeological and
		•	~
			-
		much that can be	_
			11
		archive.	
		•	
		~	
		environmental evidence	
		from archaeological sites	
		i i o i i ai ci acologicai sites	
		both within and beyond the WHS boundaries.	
		both within and beyond	
		extracted from the archive. There are also plentiful assemblages of animal bones, ceramics and environmental evidence	documentary resource would make an ideal large Research Council funded project.

NM6	Wider defensive role of Castle and walls. The defences of the peninsula have tended to be looked at as discrete elements (e.g. castle; north gate; wall along North and South Bailey). There is a need for a more integrated approach to exploring their construction, development and decline. Need to be compared with similar patterns elsewhere in Britain (e.g. York; Newcastle; Lincoln etc)	provide an important source of information for a better understanding of the economic life of the castle and cathedral. Important resources include the recent LiDAR survey, and the various topographic views of the city, as well as archaeological work.	Potential student project focussing on just Durham or AHRC or similar project developing the comparative perspective.
NM6	Improved understanding of archaeological and documentary evidence for the Cathedral Priory's manorial estates. Important existing work on the documentary resource includes that of Richard Lomas and Jane Fieldings 1980 PhD thesis which looks at the documentary and to some extent the surviving structures of the Bursar's manors (Fielding 1980). Surviving remains and archaeological excavations at sites such as Muggleswick and Beaurepaire need integrating into a larger framework.	Three key aspects of work – documentary research; synthesising and publishing already excavated sites (particularly Beaurepaire); building recording on upstanding fabric	Scope for a larger project bringing together existing material and carrying out new research. Building recording might be structured as a major integrated campaign or a series of smaller project. Possible scope for combining with NM5. AHRC or similar project?
NM7	Improved understanding of Auckland Castle and its relationship to the Castle. Both were key residences for the Bishops, but clearly developed in different ways. How did the choice of buildings and their design at the two sites compare and	Major scope for building recording archival research and archaeological investigation at Auckland Castle and its grounds.	Building on growing links between Auckland Castle and Durham University, particularly developing plans for fieldwork there by the Dept. of Archaeology.

contrast?	

3.3.4 Post-medieval Durham

	Research question	Potential methodologies and resource	Possible organisation and partners
PM1	The role of individuals in the building programmes of post-medieval Durham. These include James Wyatt (1747-1813), Ignatius Bonomi (1787-1870), Anthony Salvin (1799-1881), Philip Charles Hardwick (1822-1892), Charles Hodgson Fowler (1840-1910) and George Pace (1915-19750). How easy is it to recognise the impact of these individuals on Durham?	Scope for documentary work both in Durham and elsewhere	Possible PhD projects/ AHRC research
PM2	Resourcing production and consumption. The Castle and the Cathedral would have required a huge number of resource – some were probably supplied by their own estates, others acquired on the open market. How can this be better understood? (see also NM5).	This is a project that can bring the documentary and archaeological evidence to bear. There is plentiful information in the documentary archives about the economic life of the Cathedral and Chapter. However, there is still much that can be extracted from the archive. There are also plentiful assemblages of animal bones, ceramics and environmental evidence from archaeological sites both within and beyond the WHS boundaries. These have never been fully synthesised but provide an important source of information for a better understanding of the economic life of the	Whilst there may be individual projects (AHRC/PhD) that could be developed from this material, a larger project bringing together parallel and complimentary research on the archaeological and documentary resource would make an ideal large Research Council funded project.

		Castle and Cathedral.	
PM3	The impact of the Reformation. The Reformation and the dissolution of the Community of St Cuthbert had a profound impact on Durham. It transformed the liturgical use and layout of the Cathedral – as well as	Substantial resource, standing buildings, monuments and documentary, available for this study.	Large project- scope for major investigation, particularly if an element of wider comparison with other sites is brought in. Scope for PhDs on individual elements or
	the claustral buildings and in particular led to major changes in the College. Wider theological changes led to changes in burial monumentality, attitudes to charity (e.g. growth of almshouses). The echoes of these events were longlived. How did these religious changes echo throughout the entire complex of structures on the Peninsula? How did the Reformation impact on comparable monastic cathedrals e.g York; Norwich?		wider collaborative project.
PM4	The 17 th and 18 th century saw an increased opening up of space on the Peninsula. Increasingly, gentry families and newly wealthy professionals moved into the area, particularly along North and South Bailey and to a lesser extent onto Palace Green. What was the impact of these new social groups- in terms of architectural developments, patterns of consumption, funerary commemoration? (see also PM2 ; SS5)	Extensive resources available – documentary, standing structures and artefactual remains from archaeological investigations.	Large project- scope for major investigation, particularly if an element of wider comparison with other sites is brought in. Scope for PhDs on individual elements or wider collaborative project.
PM5	The foundation of the University in 1832 led to further profound transformations on the	Martin Roberts recent book provides and important start, but there is much further building	PhD project; scope for co-operation with colleges.

Peninsula, particularly in	recording and	
terms of its architectural	documentary research	
development. These include	that can be done. Also	
the construction of major	untapped resource of	
new buildings and the re-	topographic images,	
working of old buildings	memorabilia, University	
(e.g. Castle). This needs	publications/college	
better understanding in	magazines.	
terms of what requirements		
were needed, what idioms		
were used? How does this		
compare with architectural		
developments at other		
Universities? Key		
comparisons include		
Newcastle (former Kings		
College, Durham), older		
universities (e.g. Oxford;		
Cambridge; Edinburgh) and		
other 19 th century chartered		
universities (e.g. UCL; KCL)		

4.0 Research Strategy

The aim of the Research Strategy is to explore the practical issues related to bringing forward and developing many of the research ideas that have been outlined in the Research Agenda. As can be seen above, the agenda already has a column labelled "Possible partners and organisations" that in some ways forms the seed of such an agenda – highlighting possible partners and potential ways in which research projects might be packaged. Some aims are ideal small-scale initiatives suitable for undergraduate dissertations others might work most successfully as major collaborative grant-funded projects – the scale of research varies widely.

The final research strategy will only be finalised following a consultative phase and a public meeting which will allow all interested parties to come together to think about ways in which research might be taken forward. However, in the meantime there is scope here for a short overview of the range of current research communities and the funding landscape which may help focus thoughts about developing future research projects.

4.1 Strategic Priorities

At this stage it is possible to outline a small number of strategic priorities for the Durham WHS to address.

Strategic Priority 1: Assessing the intangible heritage

The Durham World Heritage Site is far more than the sum of its parts. Whilst the Outstanding Universal Value of the WHS is based on the physical legacy of the Community of St Cuthbert and the Prince-Bishops it is clear that there is more to Durham than its historic environment. The Cathedral has a rich legacy of non-tangible or at least non-structural traditions and practices and is also the focus of an active and engaged community today. The role of liturgy and hymnody is central in the modern life of the Cathedral, but has its roots in the past. There is also a rich intellectual legacy of scholarship. Home to important early historians such as Symeon of Durham and Reginald of Durham, the Cathedral has been the centre of an important community of scholars whose work transcends the boundaries of the WHS. These intangible aspects of the WHS are not just confined to the Cathedral - the University is nearly 200 years old and has generated its own legacy of traditions, 'rites' and intellectual output. These too are worthy of better understanding.

Finally from the work of Walter Scott and JMW Turner to modern artists and writers, the physical landscape of Durham has been a source of inspiration, but the resulting output and its importance is not easily captured or assessed.

However, as noted above (1.4) this Research Agenda has focused primarily on the more tangible aspects of the historic environment. Indeed as currently conceived the existing structure of Research Frameworks whilst well suited for auditing and understanding physical aspects of the landscape is less well suited to tackling these more intangible aspects of the World Heritage Sites importance.

A key priority must be a parallel assessment of the intellectual and social resources of the World Heritage Site. Some thought will be required in creating an appropriate format or

template for such a project. This may involve consulting with UNESCO, canvassing amongst the regional, national and international research communities, and wider engagement across the heritage and research sector. Nonetheless, the strong body of expertise within Durham, with interests in researching and capturing heritage value, will provide a solid starting point for any such initiative. The MA in International Cultural Heritage Management course taught in the Department of Archaeology may also provide groups of students able to carry out research into potential methodologies for capturing this intangible heritage.

Strategic Priority 2: Assessing the collections

The World Heritage Site also houses many collections of objects and artefacts of historical value. For example, there are important collections of textiles held by the Cathedral, including those from the Shrine of St Cuthbert (the only pieces of surviving Anglo-Saxon embroidery in England), four late medieval velvet copes and a cope bought for the visit of King Charles I. There are also important 17th century tapestries in Castle. The Cathedral also has a major collection of ecclesiastical and liturgical plate and other metalwork, whilst the Colleges, particularly University College, have important collections of metalwork, ceramics and other items (e.g. the collections of armour and weaponry in University College). There are also major collections of pictures, paintings and other images in the Cathedral and University buildings. These include views and images of Durham, many of which do not seem to be on Pictures in Print. Other key resources include the Anglo-Saxon sculpture and later medieval stone fragments held in the cathedral and the range of artefactual material held by the University Museums (particularly the material held in the former Old Fulling Mill Museum).

The recent re-organisation of the curatorship of University College and changes in the structure of the University Museums provide an important opportunity for this material to be assessed. There is already an inventory of the Durham Cathedral collections, but this is restricted access for security reasons. There may also be a need for individual colleges to be approached to assess the material and collections they hold that might be outside the University Museums' system.

Again, Durham has strong expertise in museum and collections management through the University Museums, and students working on the MA Museums and Artefact Studies might provide a source of volunteers keen to get involved in cataloguing and collating information.

Strategic Priority 3: Resource enhancement

It is clear from Resource Assessment that there is much important information about the Castle, Cathedral and other parts of the WHS that is not easily publically accessible or usable for research. There is a clear requirement for this important body of research information to be made accessible if many of the research projects listed below are to proceed effectively.

The key tasks can be broken down into two key headings: cataloguing and enhancement and dissemination.

Cataloguing and enhancement

There are a number of important collections of material that require further cataloguing if they are to be of further use. These include the Red Box files at the English Heritage NMR,

the photographic archive held by the Heritage and Planning Department at Durham County Council and the Gilesgate photo archive. Some, such as the NMR files are easily accessible, others such as the Gilesgate photo archive, are private collections and may pose political issues. All this work has some resource implications, whether in terms of time, travel costs or work space. Ideally, a unified catalogue, perhaps with entries for each property or building element would be created to allow the collations of material references from multiple collections for ease of cross-referencing would be developed. However, again, this would have resource implications and would require a body to take ownership of the project.

Other resources whilst useful have scope for enhancement. For example, there are images of Durham in Peter Clack's Book of Durham (1985) that are not in *Pictures in Print,* and there are inconsistencies between the Historic Environment Record and the City of Durham Archaeological Survey which need resolving.

Dissemination

There is much research that has been carried out which is of some importance that would benefit from further dissemination. For example, there a number of important PhD and MA theses that could usefully be made more readily accessible (e.g. Camsell, Cambridge, Leyland; Green). Most PhD theses are available digitally via the British Library, but it might be possible, if there is agreement with the authors, to develop an E-library element of the WHS webpage which collates such documents. MA theses tend not to be digitised, so they would need to be scanned in, which has resource implications.

Another important work that deserves greater dissemination include Peter Ryder's Durham City Building survey, Linda Drury's research on the 15th and 16th century episcopal building accounts should also see publication- perhaps by the Surtees Society and the highly important work by Norman Emery within the Cathedral precincts. Much of the archaeological work on the cathedral and its precincts takes places within the formal planning framework and under formal ecclesiastical powers, copies of the report need to be lodged with the Historic Environment Record and should be publically available.

4.2 Research Communities and partners

Currently, the ownership of the vast majority of the World Heritage Site is divided between Durham Cathedral, who are responsible for the Cathedral itself and its precincts, including the College; and the University, who own the Castle, all the properties on Palace Green and most of the properties on the eastern side of North Bailey and South Bailey and most of the buildings on the upper part of Saddler Street. Both bodies have research resources and individuals with interests in researching the WHS and its tangible and intangible legacy.

The Cathedral has its own archaeologist, currently Norman Emery, who has carried out extensive research in the Cathedral and its precincts and it is a fund of important knowledge about its standing architecture and sub-surface archaeological remains. There are also others within the Cathedral with detailed knowledge about particular aspects of its holdings and history.

The University in particular houses a large number of scholars whose work engages with the WHS, particularly within the Department of Archaeology and the Department of History. There are also many others within the University who potentially have research interests or practical skills that might coincide with potential work on the site; this includes full-time academics, post-doctoral researchers, post-graduates and undergraduates. Most of these individuals are brought together under the aegis of the University's Institute for Medieval and Early Modern Studies (IMEMS). Within IMEMS the responsibility for leading research and engagement with the World Heritage Site is that of one of the two Associate Directors, currently Dr David Petts. There are also bodies with a key interest and involvement with the WHS, most particularly the University Museums and Libraries, who have major relevant holdings of archives and artefacts, and are also responsible for curating the collections in the Castle (University College). The individual colleges on the peninsula, University, Hatfield, Chad's, St John's and St Cuthbert's Society all also have vested interest in the area's heritage, both as academic bodies but also as key occupants with their own pressures to utilise and develop the limited space available. A similar, but more strategic role in managing the many other properties is taken by the University Estates and Buildings Department. Finally, the Cathedral employs the World Heritage Site Co-ordinator (currently Jane Gibson), who occupies a key position in bringing together interest groups and partners and particularly helps connect the University and the Cathedral.

Durham has also attracted much work by those outside the employment of the University. The Cathedral and Castle in particular have attracted research by international scholars; some, but not all, with Durham links. Next is the all-important body of local researchers who have engaged with research connected to the WHS. Individuals, such as Martin Roberts, have an extensive and detailed knowledge of the buildings and history of the site and many links with the wider research community. Ideally there should be a Register of Research complied through local history societies, academic bodies, of the kind some national groups (Garden History Society) used to undertake. This would also avoid duplication of effort.

There are also local interest groups representing the wider local community who have an interest in the heritage and history of Durham City. Based on the peninsula itself is the Durham Museum and Community Heritage Centre and its Friends Group who have the most focused interest in the history and heritage of the city. The Heritage Centre itself has the potential to act as a useful focus for wider community activity. With a wider county-focus, but still with potential for great involvement are the Archaeological and Architectural Society of Durham and Northumberland (AASDN) and the Durham County Local History Society- both have lively memberships and extensive expertise in many useful research skills including achieve work and building recording. Any major research project should certainly look at capitalising on such groups; the Department of Archaeology already has close working relationships with the AASDN and are keen to develop such links.

4.3 Funding landscape

Inevitably, given the current economic climate, funding streams for major research projects are increasingly competitive. Many, bodies that previously might have been looked to for support, such as English Heritage, have had their own funding slashed and no longer provide viable grant programmes.

The only bodies which are likely to be in a position to fund substantial research projects are currently the main academic grant givers – in practice this means the Arts and Humanities Research Council (AHRC), the Leverhulme Trust and the British Academy. Increasingly the AHRC is operating a system of highlighted themed calls, but still operates a stream of responsive funding. The standard AHRC Research Grant offers grants at a full economic cost (FEC) of between £50,000 and £1,000,000 for a varying duration up to a limit of five years these would be suitable for projects involving several lead researchers and post-doctoral researchers although they no longer fund PhD studentships attached to such projects via the standard responsive route. They also offer a range of other grants including research fellowships to allow individuals to follow specific research projects. They also offer funding for the establishment of research networks to facilitate interactions between researchers and stakeholders through, for example, a short-term series of workshops, seminars, networking activities or other events. These have the potential to fund such networks which might then result in a bigger grant application. The Leverhulme Trust offers research project grants of up to £500,000 over five years; it too has a range of personal fellowship schemes and networking grants. The British Academy focuses primary on funding research fellowships at different levels. A source of funds for major projects involving international cooperation and partnerships with several European partners is the European Union. These though would be for projects of trans-European interest, although work centered on the Durham WHS might form one package of a larger cluster of work programmes.

Below these large grants there are also a range of smaller grants available. The British Academy/Leverhulme Small Grants scheme covers projects to a maximum of £10,000 over two years. A number of other bodies, including the Society of Antiquaries of London, the Royal Archaeological Institute, the Society for Medieval Archaeology, the Society for Post-Medieval Archaeology and the Society for Church Archaeology offer small grants of between £500 and £5000. Durham University has an internal "seedcorn" funding scheme of up to £10,000, with the expectation that the funded research aims towards the development of larger research grant.

Although all of these funding streams expect, quite rightly, an element of wider "Impact" (dissemination/outreach/co-production) activities with the wider community, their key focus is funding new research. For wider community involvement and education the key source of funding is the Heritage Lottery Fund. These range from relatively small grant schemes aimed at local community groups (e.g. Sharing Heritage-£3k-10k; Our Heritage-£10k-£100k; Heritage Grants: over £100k), as well as funding for more strategic initiatives that would require professional involvement (e.g. Heritage Enterprises £100k-£5 million; Landscape Partnerships £100k to £3 million).

More generally, most funding partners now expect that project proposals should involve collaborative and partnership working; for the academic sources of funding, community involvement/impact activities are increasingly important. There are also often expectations of match funding and supporting in kind.

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