



**CULTURAL HERITAGE
DESK-BASED ASSESSMENT
AND ARCHAEOLOGICAL
EVALUATION REPORT**

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**LAND AT THOMAS LANE,
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**LAND AT THOMAS LANE, BURGH ROAD,
CARLISLE,
CUMBRIA**

**CULTURAL HERITAGE DESK-BASED ASSESSMENT AND ARCHAEOLOGICAL TRIAL
TRENCH EVALUATION**

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LAND AT THOMAS LANE, BURGH ROAD,

CARLISLE, CUMBRIA

CULTURAL HERITAGE DESK-BASED ASSESSMENT AND ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

Summary

Northern Archaeological Associates Ltd (NAA) was commissioned by Positive Planning Solutions Ltd, on behalf of their client Story Contracting Ltd, to undertake a desk-based assessment and archaeological trial trench evaluation of land on Thomas Lane, Burgh Road, Carlisle, Cumbria. This assessment is in support of a planning application for the construction of a storage yard centred on NGR NY 3790 5625.

The study identified a total of 39 heritage assets within, or just beyond, a 0.5km radius of the proposed development area. These included one Scheduled Monument, a section of Hadrian's Wall and Vallum, which lies just north of the development boundary, and eight Listed Buildings. No Conservation Areas, Historic Parks and Gardens or Registered Battlefields were recorded within the study area.

The development area included within it a single undesignated heritage asset, comprising a fragmentary cropmark which lay partially within the boundary, and was defined by two ditch circuits, the inner ditch with a possible entrance. The cropmarks were located on an elevated section of land overlooking the River Eden, which indicated they could be significant evidence of prehistoric activity, possibly an early prehistoric ritual enclosure or later settlement site. The development area is located within the vicinity of a number of excavated examples of Iron Age and Romano-British enclosed settlement sites along Caldewgate and Burgh Road, with numerous examples of similar ritual and domestic sites known within the Stainton meander of the River Eden, to the north of the development area. The site also lies in close proximity to an important prehistoric site excavated by OA North in 2008 as part of the Carlisle Northern Development Route, which yielded evidence of activity of Early Mesolithic to Early Bronze Age date.

As a result of the potential impact of the proposed development upon undesignated assets of prehistoric and Roman date, an archaeological trial trench evaluation of the development boundary was required, in accordance with NPPF Paragraph 128. The evaluation comprised the excavation of six trenches. Two trenches were positioned in a T-formation, at the north end of the proposed development site, to test for the presence of remains associated with Hadrian's Wall and the Vallum. A further two trenches were targeted on the cropmark which lay partly within the eastern edge of the site. The remaining two trenches were positioned in the centre and south of the site, in order to assess the survival of any archaeological evidence in these areas.

The results of the evaluation were negative, with only 19th century deposits and a contemporary ditch being encountered within the trenches. The excavated ditch corresponds with a field boundary ditch which first appears on the Ordnance Survey map of 1898-9, which suggests it originated in the second half of the 19th century. The two deposits to the west of the ditch are also dated to the later 19th century or after by the presence of machine-made brick in the lower of the two. The source of the

cropmark proved not to be archaeological in origin and no other remains were encountered.

The assessment and evaluation have demonstrated that the proposed development will not have an impact on any designated assets or undesignated assets either within the development boundary, or within the immediate vicinity as defined by the study area. There is no intervisibility with any of the listed buildings identified in this study. The Scheduled Monument of Hadrian's Wall and Vallum lies to the north of the later 19th century railway embankment of the Port Carlisle Railway and is therefore screened from the development area by the former railway embankment and the mature woodland which grows upon it.

1.0 INTRODUCTION

- 1.1 Northern Archaeological Associates Ltd (NAA) was commissioned by Positive Planning Solutions Ltd, on behalf of their client Story Contracting Ltd, to undertake a desk-based assessment and archaeological trial trench evaluation of land on Thomas Lane, Burgh Road, Carlisle, Cumbria (Fig. 1). This programme of archaeological fieldwork is in support of a planning application for the construction of a storage yard centred on NGR NY 3790 5625 (Application Number 12/0829; Fig. 2). The extent of the development is outlined by Positive Planning Solutions Ltd in the Design and Access Statement and Planning Statement prepared and submitted in support of an outline planning application (Positive Planning Solutions Ltd 2012a and 2012b).
- 1.2 The desk-based assessment provides details of all known historic and archaeological sites (“heritage assets”) within a 0.5km study area (centred on the site). It also assesses the potential for unrecorded heritage assets of archaeological interest to be present within the site boundary. The potential impact of the proposed development on heritage assets is discussed. The purpose of the assessment and heritage statement is to help establish the archaeological / historical sensitivity and significance of the area surrounding the proposed development and the potential impact of the scheme on this significance.
- 1.3 A walkover survey of the proposed development site was conducted in January 2013. Designated heritage assets within the vicinity were also visited. The inspection was undertaken in order to: (i) assess the impact on the setting of heritage assets, (ii) establish if the remains of any previously unrecorded heritage assets were present, and (iii) confirm the condition / extent of recorded remains and also current land use.
- 1.4 Preliminary informal discussions were held with Cumbria County Council Historic Environment Service on the results of the desk-based assessment and site assessment, and the results were used to inform the location of the trenches for the trial trench evaluation, which was carried out in February 2013. The main aim of the trial trenching was to determine whether there were unrecorded sub-surface archaeological remains within the proposed development area, and if so, to confirm their location, extent, nature, date and importance in order that an informed assessment of the impact could be undertaken and a suitable mitigation strategy agreed.
- 1.5 The results of the archaeological fieldwork are presented in this final report, which will be used by Cumbria County Council Historic Environment Service to help determine whether further historic environment work is required as a condition of future planning approval.

2.0 BACKGROUND INFORMATION

Proposed development site

- 2.1 Planning permission is being sought for the construction of a storage yard on land at Thomas Lane, Burgh Road, Carlisle, Cumbria (Figure 1).
- 2.2 The proposed development lies 2.5km west of the centre of Carlisle, and is centred at NY 3790 5625. The development area comprises a vacant open field, and is bounded on the west side by the Burgh Road Industrial Estate, and on the east side by Newtown Industrial Estate. The north side of the area is defined by a disused railway line now covered by heavy tree growth, and to the south by gardens to the rear of residential housing on Newtown Road. The development area covers 17,400m² (Positive Planning Solutions 2012a).
- 2.3 The location of the proposed storage yard (shown in Figure 2) is based on a drawing supplied by Story Contracting Ltd (Drawing No. SC/YE/003) and as discussed in the Design and Access and Planning Statements (Positive Planning Solutions Ltd 2012a and 2012b).

Geology and soils

- 2.4 The solid geology comprises Triassic mudstone of the Mercia Mudstone Group. The drift geology comprises Quaternary till of the Gretna Till Formation, deposited in an environment dominated by ice age conditions (BGS website) The local soils are attributed to the Wick Association, coarse well-drained brown earths, which extend westwards to Burgh-by-Sands and Kirkbampton (Countryside Commission 1998).

Landscape Character

- 2.5 The broad landscape character of Carlisle and its district is outlined in the North West Landscape Character Framework (Countryside 2009), which is based in part on the Urban Fringe Landscape Study undertaken for Carlisle in 2003, and now no longer available. The NWLCF classifies Carlisle as falling within the 'Solway Farmlands' Regional Landscape Character Area, a section of lowland plain fringing the Solway Coast which is intensively managed for pasture. Medium to large scale hedgerow enclosures which are windswept by coastal winds, combined with a network of managed ditches and streams, define this area's local sense of place. The Regional Landscape Type for the development area is of an *Urban River Valley*, a landscape which is characteristically urban and which has developed onto agricultural land (as defined in the Regional Landscape Character Area) in the last few centuries. Development comprises a mix of historical and modern utility and commercial development, settlement and roads, with occasional green spaces. Housing styles vary between Victorian, Edwardian and interwar suburban styles.

- 2.6 The development area is subject to consideration under policy LE1 of the Carlisle District Local Plan (Carlisle City Council 2008, 105) which classifies the area as an 'Urban Fringe Landscape'. The policy is based on an Urban Fringe Landscape Study undertaken for Carlisle in 2003. The classification includes sections of undeveloped open landscape in and around the suburbs of Carlisle, including the River Eden, Caldew and Petheril valleys, which bring rural character to the centre of Carlisle, and which are under threat from development.

Topography and land-use

- 2.7 The proposed development lies at an approximate height of between 15m and 26m AOD. The land within development area slopes westwards and northwards. The slope is steeper at the southern end, but becomes shallower towards the north. The western edge of the development area, along the boundary with Burgh Road Industrial Estate, includes a historic water-course, which runs northwards to the River Eden. Extensive areas of marsh have developed along its edge, particularly towards the north-western corner of the development area. The water course is to be culverted and the marshier areas infilled by material cut from the eastern side (Positive Planning Solutions 2012a). At the southern edge of the site is a small copse of semi-mature trees, and the northern boundary comprises very well established and mature trees. The land use is as a former pasture field, now overgrown and disused for some time. Both industrial estates have encroached slightly into the development area, with banked material revetting the edges of sections of hard-standing, and buildings.

3.0 PLANNING CONTEXT

- 3.1 The historic environment legislation and policies relevant to this development are:
- *Planning (Listed Buildings and Conservation Areas) Act 1990;*
 - *National Planning Policy Framework (NPPF) (2012);*
 - *The North West of England Plan Regional Spatial Strategy to 2021 (July 2008);*
 - *Carlisle District Local Plan 2001-2016 (September 2008) (saved policies); and*
 - *Hadrian's Wall World Heritage Site Management Plan 2008-2014*

Planning (Listed Buildings and Conservation Areas) Act

- 3.2 Statutory protection for built heritage is principally provided by the Planning (Listed Buildings and Conservation Areas) Act 1990. Sections 16 and 66 of the Act require authorities to have special regard to the desirability of preserving the setting of any listed building that may be affected by the grant of planning permission.
- 3.3 Section 72 states that special attention shall be paid to the desirability of preserving or enhancing the character or appearance of Conservation Areas.

National Planning Policy Framework (NPPF) (March 2012)

- 3.4 The NPPF sets out the Government's planning policies for England and how these are expected to be applied. It states, in the foreword, that *'our historic environment – buildings, landscapes, towns and villages – can be better cherished if their spirit of place thrives, rather than withers.'* The historic environment is defined in terms of all aspects of the environment resulting from the interaction between people and places through time. It includes all surviving physical remains of past human activity, whether visible, buried or submerged, and also landscaped and planted flora. Any remains of these activities are classified as a "heritage asset".
- 3.5 Heritage asset is defined in the NPPF Annex 2: Glossary. It is deemed to embrace all manner of features, including: a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets (a World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area) and assets identified by the local planning authority (including local listing). One of the Core Planning Principles within NPPF is to, *'conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life for this and future generations.'*
- 3.6 Policy 12 *Conserving and enhancing the historic environment* sets out the framework for local planning authorities to make informed decisions. The paragraphs of particular relevance to the proposed development are set out below.
- 3.7 **Paragraph 128** sets out the information requirements for applications where development potentially affects heritage assets. It states that planning applicants should provide, as part of the application process, appropriately detailed descriptions of heritage asset significance and the contribution of setting to that significance. The level of detail should be proportionate to the importance of the asset and no more than is sufficient to understand the potential impact of the proposal on that significance. It also states that where an application site includes, or is considered to have

the potential to include, heritage sites with archaeological interest, local planning authorities should require submission of a desk-based assessment and, where desk-based research is insufficient to properly address the interest, a field evaluation.

- 3.8 **Paragraph 129** sets out the policy principle whereby local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by the proposal, including any development effects on the setting of assets. This assessment should be taken into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.
- 3.9 **Paragraph 132** sets out the policy principle guiding the consideration of applications for consent relating to designated assets. It states that when considering the impact of the proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation, and that the more important the asset, the greater the weight should be. It also states that significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments, Grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional. Paragraphs 133 and 134 refer to the level of consideration to be given depending on the level of harm to designated assets.
- 3.10 **Paragraph 133** states that where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, the local planning authority should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or that it can be demonstrated that there is no alternative viable use of the site.
- 3.11 **Paragraph 134** states that where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.
- 3.12 **Paragraph 135** sets out policy principles guiding the consideration of applications for consent relating to non-designated assets. It states that the effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that affect directly or indirectly non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.
- 3.13 **Paragraph 137** states that local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites and within the setting of heritage assets to enhance or better

reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to or better reveal the significance of the asset should be treated favourably.

- 3.14 **Paragraph 141** sets out policy principles guiding the recording of information related to heritage assets and making it publicly accessible. It states that, there should be a requirement to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact. Developers should publish this evidence and deposit copies of the reports with the relevant historic environment record and deposit archives with the local museum or other public depository.

North West of England Plan Regional Spatial Strategy to 2021 (July 2008)

- 3.15 The North West of England Regional Spatial Strategy was published by the Government Office for the North West in September 2008. The Localism Act, given Royal Assent in 2011, allowed the government to revoke regional spatial strategies, and as a result, all Regional Strategies will ultimately be abolished. However, at the time of writing this report, the RSS still forms part of the planning process and is therefore of relevance to the determination of the proposed planning application.

- 3.16 **Policy EM 1** of the RSS deals with the 'Integrated Enhancement and Protection of the Region's Environmental Assets', of which the Historic Environment forms a part. The Policy states that:

- *The Region's environmental assets should be identified, protected, enhanced and managed.*
- *Plans, strategies, proposals and schemes should deliver an integrated approach to conserving and enhancing the landscape, natural environment, historic environment and woodlands of the region.*
- *Priority should be given to conserving and enhancing areas, sites, features and species of international, national, regional and local landscape, natural environment and historic environment importance.*
- *Where proposals and schemes affect the region's landscape, natural or historic environment or woodland assets, prospective developers and/or local authorities should first avoid loss of or damage to the assets, then mitigate any unavoidable damage and compensate for loss or damage through offsetting.*

- 3.17 **Sub-Policy EM1 (C)** deals with the Historic Environment, and states that: *Plans, strategies, proposals and schemes should protect, conserve and enhance the historic environment supporting conservation-led regeneration in areas rich in historic interest, and in particular exploiting the regeneration potential of:*

- the traditional architecture of rural villages and market towns of Cumbria, Cheshire and Lancashire; and
- the historic Cities of Carlisle, Chester and Lancaster.

Carlisle District Local Plan 2001-2016 (September 2008)

3.18 The Carlisle District Local Plan 2001-2016 (adopted 2008) is the current plan used to guide decisions on planning applications. In March 2012 the Government introduced the National Planning Policy Framework (NPPF). This new guidance marked a move away from the previous, multi-document Local Development Framework planning system that was introduced in 2004. The NPPF resurrected the previous Local Plan system whereby strategic planning policies, general development management policies and site allocations were all contained within one single development plan document, The Local Plan, which is now being developed.

3.19 **Policy LE5 Hadrian's Wall World Heritage Site** states that '*development will not be permitted where there is an unacceptable impact on the Hadrian's Wall Military Zone World Heritage Site*':

'The Policy is concerned with the protection of the World Heritage Site. The World Heritage Site includes the Roman, military and related sites of national importance which have been scheduled as Ancient Monuments. The World Heritage Site therefore consists of the principal linear elements of the Roman frontier including the Wall, wall ditch, Vallum and associated milecastles, turrets, forts, civilian settlements and roads, together with the associated outlying sites, [...] including forts at Nether Denton, Brampton Old Church and Boothby, together with the outpost fort at Bewcastle including its Roman approach road and signal towers.'

3.20 **Policy LE6 Scheduled/ Nationally Important Ancient Monuments** states that '*development will not be permitted where there is an unacceptable impact on scheduled and other nationally important ancient monuments and their settings*'.

'Archaeological remains are finite, irreplaceable and in many cases fragile and vulnerable to damage. The City Council considers that the former walled area of the City, Hadrian's Wall, the Vallum and associated archaeological remains are of international importance. These, together with other monuments of national importance are all worthy of preservation. Any development affecting a scheduled monument will require scheduled monument consent. The City Council will make full use of its statutory powers to safeguard these archaeological remains and will endeavour to preserve them in situ. In exceptional cases, which can only be decided on the merits of the individual case, where it is either not feasible or the circumstances of the case do not justify the preservation of the remains in situ, the City Council will ensure by condition and Section 106

Obligation that the archaeological evidence is recorded by prior excavation. Any new building or development which affects a scheduled monument and would lead to the destruction of the archaeological remains will not be permitted.'

3.21 **Policy LE7 Buffer Zone on Hadrian's Wall World Heritage Site** states that *'within the buffer zone of Hadrian's Wall Military Zone World Heritage Site, proposals for development which would have an unacceptable impact on the character and/or setting of the World Heritage Site will not be permitted. Development within or adjacent to existing settlements, established farmsteads and other groups of buildings will be permitted, where it is consistent with other policies of this Plan, providing that:*

1. *the proposal reflects the scale and character of the existing group of buildings; and*
2. *there is no unacceptable adverse effect on the character and/or appearance of the Hadrian's Wall Military Zone World Heritage Site.*
3. *Within the outer visual envelope, beyond the Hadrian's Wall Military Zone World Heritage Site, proposals for major development which would have an adverse effect on the character of the World Heritage Site will not be permitted unless the need for the development outweighs the environmental costs.'*

3.22 **Policy LE8 Archaeology on Other Sites** states that *'on land for which there is no archaeological information, but where there are reasonable grounds for believing remains to be present, the City Council will ensure that the archaeological aspects of development proposals are examined and evaluated before planning applications are determined. Planning permission will not be granted without adequate assessment of the archaeological implications'.*

'Where there is no archaeological information for a piece of ground, this does not mean that the ground is archaeologically sterile. Where there are reasonable grounds for assuming that a site has archaeological potential, but where the precise extent of deposits is not known, the City Council will require the developer to arrange for a professional archaeological field evaluation to be carried out prior to determining the planning application.'

3.23 **Policy LE9 Other Known Sites and Monuments of Archaeological Significance** states that *'on other known sites and monuments of archaeological significance, permission for development will be granted, provided the applicant can demonstrate that the site will be either satisfactorily preserved or appropriate arrangements for excavation and recording have been made. These cases will be judged against the following:*

- *the importance of the archaeological features;*

- *the effects of the proposal on the archaeological features;*
- *the need to retain and where possible enhance the features which have a particular archaeological and/or landscape significance; and*
- *the applicant's arrangements for in situ preservation of the features.*

On the other known sites of archaeological significance, the City Council will ensure that the archaeological aspects of development proposals are examined and evaluated before planning applications are determined.'

- 3.24 **Policy LE10 Archaeological Field Evaluation** states that '*on all scheduled and other nationally important monuments, sites of archaeological significance and other sites of high archaeological potential, the City Council will ensure that the archaeological aspects of development proposals are examined and evaluated either before planning applications are determined or in exceptional circumstances by the use of condition. Planning permission will not be granted without adequate assessment of the archaeological implications'*.
- 3.25 **Policy LE12 Proposals Affecting Listed Buildings** states that '*proposals for new development which adversely affects a listed building or its setting will not be permitted. Any new development within the setting of a listed building should preserve the building's character and its setting. The City Council will seek to encourage any new development to be sympathetic in scale, character and materials'*.

Hadrian's Wall World Heritage Site Management Plan 2008-2014 (2008)

- 3.26 Hadrian's Wall and its associated forts, milecastles, turrets, *Vallum* and other related features are Scheduled Ancient Monuments and are protected under ancient monument legislation. They also form the Hadrian's Wall Military Zone World Heritage Site, inscribed on the World Heritage List in December 1987. The definition of World Heritage Sites derives from the United Nations Educational, Scientific and Cultural Organisations (UNESCO) 'Convention Concerning the Protection of the World Cultural and National Heritage' (adopted 1972) and which came into force in 1975. The United Kingdom became party to the Convention in May 1984. The criteria for inscription provides for the selection of outstanding examples of historic and natural landscapes, as well as other types of site. The inscription refers to the Hadrian's Wall Military Zone and includes the entire length of the Wall from Wallsend in the east to Bowness on Solway in the west, except where it is overlaid by the Cities of Newcastle-upon-Tyne and Carlisle. It is described as the most complex and best preserved of the frontiers of the Roman Empire.
- 3.27 A management plan is a UK Government requirement for a World Heritage Site. The Hadrian's Wall World Heritage Site Management Plan 2002 -

2007 was prepared by English Heritage, Local Authorities along the length of the Wall and other interested parties. The Plan sets out the broad issues that relate to Hadrian's Wall and puts forward the policies and actions that have been agreed. It also sets out longer term guiding principles, and an overall vision for the World Heritage Site. The Hadrian's Wall Major Study Report of March 2004 concluded from a visitor audit that tourism infrastructure is inadequate. There is a need for accommodation of all types, shops, food and beverage outlets, public toilets and car parks to cater for visitors wishing to walk the National Trail that follows the route of the Wall. Sustrans launched a Hadrian's Wall cycle path in 2006 largely based on existing access routes. Visitor pressure is growing on this Heritage Site. Although the Government's stance is that World Heritage Sites are not in themselves an instrument of planning control they do indicate the importance of the site as a material consideration in development planning and control.

4.0 METHODOLOGY

4.1 This report has been prepared in accordance with the following guidance on the preparation of desk-based assessments, evaluation reports, assessments of significance and implications of change:

- *Institute for Archaeologists (2011) Standard and Guidance for Historic Environment Desk-based Assessment;*
- *Institute for Archaeologists (2008) Standard and Guidance for Archaeological Field Evaluation;*
- *English Heritage (2008) Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment;*
- *English Heritage (2011) Seeing the History in the View: A Method for Assessing Heritage Significance within Views, and*
- *English Heritage (2011) The Setting of Heritage Assets: English Heritage Guidance.*

4.2 The study area was defined within a Written Scheme of Investigation (WSI) produced by NAA, which was submitted to and approved by the Historic Environment Officer for CCCHES. The original proposed study area as defined in the WSI comprised a radius of 1km centred on the proposed development site; however, CCCHES advised that the resulting baseline dataset would be too extensive for the scope required, and therefore proposed that the study area be refined to 0.5km so as to maintain relevance. The assessment consisted of a comprehensive desk-based review of published and readily accessible documentary, cartographic and aerial

photographic information relating to heritage assets within this study area.

Aims of Assessment

4.3 The principal aims of the Cultural Heritage assessment were to:

- *identify known heritage assets within or immediately adjacent to the proposed development site;*
- *identify nationally or regionally important heritage assets within the zone of visual influence whose setting could be affected by the proposals;*
- *identify areas with the potential to contain any unrecorded archaeological remains within the areas impacted by the development;*
- *assess the effects of the proposed development and ancillary works upon heritage assets and their settings; and*
- *propose mitigation measures which could be built into the development proposals to avoid, reduce or remedy any potential adverse effects identified.*

Information Sources

4.4 This report is based upon a review of existing available information and desk-based studies. The following organisations were researched for the assessment:

- *Cumbria County Council Historic Environment Service (CCCHES);*
- *English Heritage National Monuments Record (NMR)*
- *Carlisle City Library, Carlisle*
- *Cumbria County Record Office*
- *Internet (maps, landscape assessment and planning).*

4.5 The following data sources were utilised for the assessment:

- *Cumbria Historic Environment Record (HER);*
- *Aerial photographs;*
- *Published and unpublished historical and archaeological studies;*
- *Cartographic sources (including Tithe and historic Ordnance Survey maps);*

- *English Heritage National Monuments Record: Archaeology;*
- *English Heritage National Monuments Record: Aerial Photographs;*
- *English Heritage National Heritage List for England*

Limitations

- 4.6 There were no limitations to the material available for study.

Site Walkover Survey

- 4.7 An inspection survey of the proposed development site was carried out on 10th January 2013. The survey utilised the plans of the scheme as supplied by Positive Planning Solutions Ltd and the site of the proposed storage yard was examined in detail. In addition, specific designated assets were also inspected in order to more fully assess the impact of the setting of the proposed development. The objectives of these surveys were:

- *to confirm the presence and condition of previously recorded assets;*
- *to identify additional sites of potential Cultural Heritage interest;*
- *to assess current landscape character, ground conditions and land use; and*
- *to assess the likely impact the development might have on the significance and setting of specific heritage assets and the historic landscape.*

Trial Trench Evaluation

- 4.8 An archaeological trial trench evaluation of the proposed development site was carried out in February 2013. All trial trenches were excavated by a mechanical excavator fitted with a toothless ditching bucket under the direct supervision of a monitoring archaeologist. All features were investigated further by hand. A photographic record of the site was undertaken using 35mm format black and white prints. Digital images were also taken using a digital camera at a resolution of 10 megapixels. A drawn record of all archaeological features was made at an appropriate scale. Written descriptions of archaeological features/deposits and of each trench were recorded on pro forma sheets, using the NAA recording system. The objectives of the evaluation were:

- *to establish the presence, nature, extent, preservation and significance of any archaeological remains within the site;*
- *to provide a detailed record of any such archaeological remains;*

- *to recover and assess any associated structural, artefactual and environmental evidence;*
- *to determine which areas within the proposed area of topsoil stripping require archaeological mitigation in the form of preservation in situ, open area investigation in advance of stripping, or monitoring of soil stripping during construction works;*
- *to prepare an illustrated report on the results of the evaluation to be deposited with the Historic Environment Record (HER) held by Cumbria County Council Historic Environment Service and the National Monuments Record (NMR); and*
- *to evaluate the potential for further unrecorded significant archaeological remains to be present within the site.*

5.0 BASELINE HISTORIC ENVIRONMENT

Prehistory	Palaeolithic	450,000 to 12,000 BC
	Mesolithic	12,000 to 4,000 BC
	Neolithic to Early Bronze Age	4,000 to 1,500 BC
	Middle Bronze Age to Iron Age	1,500 BC to AD78
Roman		AD 78 to 410
Early Medieval		AD 410 to 1066
Later Medieval		AD 1066 to 1536
Post-Medieval		AD 1536 to 1900
Modern		AD 1900 to current

Table 1 Time periods used

5.1 Specific heritage assets recorded within the study area are listed in Appendix 1 and their location is shown on Figure 3. Within this report heritage assets are identified by a unique reference number (**HA**) particular to this text. Appendix 1 also provides HER Primary Record Numbers and NMR Unique Identifiers as appropriate, and includes previously unrecorded assets. Where possible, assets have been assigned to time periods, as defined in Table 1.

Previous Archaeological Interventions

5.2 There have been no previous archaeological interventions at the site of the proposed development.

5.3 Within 0.5km, the HER identified 11 archaeological events. Where

significant archaeological remains have been identified, the results are discussed in the section on Undesignated Assets. Most of the archaeological events comprise desk-based assessments, building recording projects and watching briefs undertaken within the wider area, which are not directly relevant to this scheme. The watching briefs have primarily returned negative results, indicating archaeological remains, where they occur, may be localised or truncated by later developments. These include a watching brief undertaken by North Pennines Archaeology (NPA) Ltd on an extension to Lanercost House, Berkeley Grange, 250m south-west of the site (Jones 2004; **HA 31**), and a watching brief by NPA Ltd at Engine Lonning, 330m east of the site, on a 120m east-west aligned gas pipeline (Jackson 2009; **HA 20**).

Heritage Assets (Fig. 3)

- 5.4 Using the study area criteria set out in Paragraph 4.2 above, the information forming the baseline dataset equates to a total of 38 heritage assets. These include one Scheduled Monument and eight listed buildings. The remainder are non-designated assets considered to be of county or local importance. There are no Conservation Areas, Registered Parks and Gardens, or Registered Battlefields within the study area and no undesignated assets of national importance whose significance could be affected by the scheme.

Designated Assets

Scheduled Monuments

- 5.5 There is one Scheduled Monument within the 0.5km study area: a section of Hadrian's Wall between Davidson's Banks and Grinsdale, and its associated features between Davidson's Banks and the dismantled railway north of Knockupworth Cottage in the west (**HA 04**). The eastern end of the Scheduled Monument lies 30m north of the northern boundary of the development area. Hadrian's Wall, and its associated components, has been grouped into one Heritage Asset for ease of reference.
- 5.6 In AD122, Hadrian visited Britain, installing a new governor, *Aulus Platorius Nepos*. It is thought that Hadrian's Wall was started at this time under the governor's direction, between AD122 and AD126 (Collingwood Bruce 1978). There is no clear evidence when the wall was finished, but it was certainly completed by the end of Hadrian's reign.
- 5.7 Hadrian's Wall was a composite military barrier, which in its final form comprised several separate elements; a stone wall fronted by a V-shaped ditch, and a number of purpose-built stone garrison fortifications such as forts, milecastles and turrets. To the south, a large earthwork and ditch, known as the *Vallum* was built parallel to the Wall, as well as a metalled supply road linking the garrison forts, known as the '*Roman Military Way*'. The Wall began in the east, at Wallsend in Tyneside and continued to the

- west terminating at Bowness-on-Solway in Cumbria, a distance of 80 Roman miles (73.5 English miles or 117 kilometres).
- 5.8 At the western end of the Wall, between Bowness-on-Solway and the River Irthing, the first wall was constructed in turf (Stevens 1966). Where this wall has been excavated, it has been found to be c 6m wide at the base, sometimes placed on a cobble foundation or on a piled foundation on boggy ground, and built of cut turves laid in courses. The Turf Wall was subsequently rebuilt in stone.
- 5.9 The Wall conceived by Hadrian was to be 10 feet wide and c.15 feet high. The front face of the wall most likely sported a crenulated parapet, behind which the soldiers patrolled along a paved rampart-walk (Bedoyere, 1998). The line of the Wall runs eastwards to the River Eden but there are now no physical remains visible and its course is largely based on a survey by MacLauchlan in 1857. The wall was located during the excavations undertaken as part of the Carlisle Northern Development Route (CNDR). An evaluation by CFA in 2005 identified the Wall situated on a steep bank overlooking the River Eden, at Knockupworth Farm, 850m north-west of the site (NMR 1410734). There, only the basal (foundation) course of the Wall had survived, to a maximum width of 2.72m. It had a rubble core faced by flags on its inner (southern edge); the northern edge had been destroyed by river erosion of the escarpment. What may have been either construction deposits or the remains of an associated track were recorded in places to the south of the Wall (OA North 2011a, 10).
- 5.10 The course of the Wall is hard to trace in the vicinity of the site, but Ordnance Survey mapping (Figs. 11 and 12) indicates that the Wall and *Vallum* converge on Davidson's Bank to the north of the site, before heading eastwards and crossing the River Eden, probably on a bridge. The wall appears to follow the crest of a steep cliff overlooking the river, which is being eroded. Investigations by the RCHME in 1990 indicate that the Wall may have eroded into the river at this point. The role of Hadrian's Wall ditch is likely to have been served by the River Eden at this point, as the river would have served the same defensive function.
- 5.11 To the east of the development area, the Wall was identified at Willowholme in 1854 (and again in the same location in 1932), and in 1886 in the angle formed by the main railway line from Carlisle to Glasgow and the branch line to Port Carlisle. The Wall had been reduced almost to its foundation, and rested on river gravels, buried beneath up to 2.5m of alluvial silt (summarised in OA North 2011a, 10). More recent archaeological investigations suggest that evidence of the Wall has disappeared entirely, possibly removed by later development. An evaluation by English Heritage in 1989, to the west of a former power station and 900m north-east of the site, failed to identify the line of the Wall (NMR 1030406). This was also confirmed by an evaluation in 2004, by NPA Ltd, at Willowholme Industrial Estate (NMR 1432727), approximately 1km to the east.

- 5.12 Milecastles, small fortlets 25m square, were constructed every Roman Mile, and attached to the rear of the curtain wall, with two turrets between each milecastle, equally spaced and 6m square. The milecastles included a gated entrance on the north and south side, to allow movement of troops to the land north of the Wall. The location of Milecastle 67 (**HA 01**) lies 370m to the north-east, located by inference from the spacing of other milecastles, but never positively identified. However, during the excavation of a railway cutting in 1861, Roman coins were found at this point (marked on the Second Edition Ordnance Survey Map, Fig. 12). A coin hoard and a Roman gold necklace were also found 150m north-east of the development area (**HA 02**). The hoard, comprising 100 coins including examples of Antoninus Pius, Trajan, Vespasian and others, was found in 1860 during excavations for the construction of the Canal Railway Shed (**HA 09**) which lies close to the development area. The gold chain comprised three one foot long lengths joined by connecting bars and is dated to the 2nd century AD. The first turret, Turret 67a, may lie just beneath the power-lines on Davidson's Bank, 150m north-west of the development boundary.
- 5.13 The line of the *Vallum* was traced around Knockupworth Farm (OA North 2011c), and between Boomby Gill and Knockupworth Gill in 1990 by the RCHME. The *Vallum* is depicted on the First Edition Ordnance Survey as becoming lost beneath the earthworks of the Carlisle Canal and the later railway; nevertheless physical remains have the potential to survive either towards the northern end of the site or just north of the development boundary. The scheduling description indicates it may survive still as a slight intermittent depression and low mound. The course of the Military Way, which runs between the Wall and the *Vallum*, has not been confirmed in this area.

Listed Buildings

- 5.14 There are 8 listed buildings that are considered within 0.5km from the site of the proposed storage yard. Of these, only one, the late 18th century Coledale Hall, is Grade II* (**HA 36**). This lies at 450m east of the development boundary, and is screened from the development by trees and housing. There are two Grade II buildings at Stainton: Eden View (**HA 21**), dated to 1833, and the early 19th century Waverley House and Barn (**HA 22**). Neither of the buildings will have potential views of the new development, as the views are screened by trees. The remaining Grade II listed buildings lie to the south of Newtown Road and will not be affected.

Conservation Areas

- 5.15 There are no Conservation Areas within 0.5km of the development area. The closest Conservation Area is Carlisle City Centre, which lies 1.7km to the east.

Registered Parks and Gardens and Registered Battlefields

- 5.16 There are no Registered Parks and Gardens or Registered Battlefields within 0.5km of the development area.

Undesignated Assets

Prehistoric Activity (Palaeolithic to Iron Age periods)

- 5.17 Evidence for Palaeolithic archaeology is largely absent from the area, and that for the Mesolithic and Neolithic is sparse, though coastal sites along the west and south coasts of Cumbria indicate increased activity from around 8000bc. The presence of human activity only increased following the gradual deglaciation of the area, though subsequent marine transgressions encroached on the fertile coastal landscape, with the most significant being between 5800-4980bc when the sea level relative to the land rose by more than 10m. By the end of the Mesolithic period (3500-3000bc) sea level was still rising, but later fell again by 0.8m (Simmons *et al* 1981, 5-6). The Mesolithic landscape in Cumbria comprised broadleaved woodland and a range of resources for the hunter-gatherers. The habitats provided a rich variety of plants for foods, medicines and fuel, as well as meat and skins from wild mammals and eggs and feathers from birds (Stallibrass and Huntley 2011, 21-2).
- 5.18 Up until recently, evidence for early prehistoric settlement and activity in the Carlisle area had remained fairly sparse, though had seen a gradual increase due in part to modern excavations and the continued recovery of quantities of worked flints (mostly of Mesolithic and Neolithic date), stone axes, axe hammers and other artefacts, as isolated findspots and as residual material in excavations.
- 5.19 This situation was altered in 2008, when Oxford Archaeology North excavated an important prehistoric site, known as Stainton West (Parcel 27 North) as part of the Carlisle Northern Development Relief Road (CNDR), 835m north-west of the development boundary. The site comprised a complex sequence of deposits within a palaeochannel, perched on an early Holocene terrace, above the present floodplain of the River Eden. The deposits filling the channel contained a particularly well-preserved palaeoenvironmental assemblage, including deposits of waterlogged wood, some of which was worked. At various horizons within the channel, lithic, wooden and ceramic cultural material was recovered. Radiocarbon dating suggests that the earliest deposits in the channel formed in, at least, the Later Mesolithic period and the latest during the Late Bronze Age. Adjacent to the channel was an extremely rich assemblage of worked lithic material, seemingly of Early Mesolithic to Early Bronze Age date, although the vast majority of this material is representative of a Later Mesolithic or Early Neolithic technology. The lithic material was associated with features including tree throws, hearths and possible structures that probably indicate a contemporary settlement. Along the banks of the channel were

several pits containing in situ, burnt material associated with spreads of fire-cracked stone. These features have been radiocarbon-dated to the Later Neolithic to Early Bronze Age and probably represent burnt mound activity (OA North 2011b).

- 5.20 Though beyond the 500m radius for this study, the Stainton West site has been described as one of the most important early prehistoric sites investigated within the North West to date, and is of regional if not national importance. The position of the site on a terrace overlooking the River Eden is important, as it lies in much the same topographical location as the development area and indicates that it may have some potential to contain prehistoric remains.
- 5.21 Elsewhere within Carlisle area, unenclosed and enclosed Bronze Age settlements have been identified within low hilltop settings, often associated with earlier Neolithic remains. The most notable site in the area is perhaps Scotby Road, Durranhill, which was excavated by Carlisle Archaeological Unit in 1998 and remains unpublished. The excavations uncovered several phases of palisaded enclosure and other associated features, mainly pits, associated with Grimston and Peterborough wares, Grooved Ware, Beaker and other early Bronze age pottery (Hirst 1998; McCarthy 2000, 134). The site adjacent was more recently by excavated by Wardell Armstrong Archaeology Ltd in 2011, with similar results. Other Bronze Age activity includes the recovery in 1861 of Bronze Age collared urns at Garlands Hospital (Perriam 1992, 3) and in 1996 a burnt mound at the same site (LUAU 1996).
- 5.22 The Solway Plain, on which Carlisle is located, has been subject to extensive aerial survey over the last forty years, and a significant number of cropmark sites have been identified. Potential pre-Iron Age sites, comprising predominantly semi-circular and circular features, have been identified within the Stainton meander, and these could represent the remains of ploughed out barrows or hengiform enclosures, suggestive of Neolithic and Bronze Age ritual activity. A causewayed enclosure has been identified at Kingmoor, 2km to the north (McCarthy 2000, 138). A large number of archaeological settlement sites have also been identified from aerial photographic evidence, some of which are unenclosed, whilst others are enclosed by banks, ditches or fences. The cropmarks are typically associated with trackways and field systems, which may be contemporary. Though most rural examples are unexcavated, these sites are believed to be of mid to late Iron Age date (Bewley 1994, 63), though some could extend back into the Bronze Age (Stallibrass and Huntley 2011, 25). The location of these settlements on well-drained alluvial soils on gravel terraces adjacent to the river is perhaps not unexpected, due to the ease of cultivation of these lands for agricultural purposes (McCarthy 2000, 133), but the correlation could equally be due to better conditions on these soils for the production of cropmarks.

- 5.23 In the immediate vicinity of the proposed development site a number of cropmarks have been identified, particularly on the coastal plain around Stainton to north of the River Eden. The English Heritage National Mapping Programme (NMP) identified cropmarks which lie partially within the development boundary (**HA 38**). The cropmarks are fragmentary and appear to define two ditch circuits, the inner one having a possible entrance. The cropmarks are located on an elevated section of land overlooking the River Eden, which suggests that they might represent significant evidence of prehistoric activity, possibly an early prehistoric ritual enclosure or later settlement site. The cropmarks have now mostly been built over by the Newtown Industrial Estate, but the proposed development will potentially impact on part of the outer circuit. An evaluation undertaken by Headland Archaeology in 2005 at Carr's Field (**HA 32**, Lancaster 2005), 250m to the east, recorded a stone surface, palaeochannel, and several shallow undated linear features, possibly related to the crop marks.
- 5.24 Iron Age hillforts are largely unknown, though Grinsdale Camp, at Cargo, located 2.2km to the north, could be argued as an example. The site comprises a large multivallate enclosure, and is presumed of Iron Age date, though has never been excavated (OA North 2011b, 10). The promontory on which Carlisle Castle stands has also been suggested as a defended settlement or *dun* probably since at least the Iron Age (Doubleday 1901, 285); there is no excavated evidence for this, but GPR survey undertaken on the Castle Green identified two substantial ditches, probably antedating the Roman remains (McCarthy 2000, 136).
- 5.25 Excavated examples of Iron Age sites are limited, but do exist within the city boundary. A possible Iron Age roundhouse was excavated in the Southern Lanes (Zant 2009, 5), though McCarthy (2000, 136) argues it could of late 1st century date, on stratigraphic grounds. Undated ard- and plough-marks found below the Roman levels at Blackfriars Street, Lowther Street, The Lanes and Scotch Street (McCarthy 1990, 13; McCarthy 1993, 1; Zant 2009, 5) are suggestive of pre-Roman agricultural activity. Iron Age activity and Romano-British settlement evidence was also recorded during excavations by Carlisle Archaeology Ltd at Cumberland Infirmary, 890m to the east, in 1992, 1997 and 2001. The settlement occupied the eastern end of a ridge, on the crest and north-facing slope of the ridge. The remains of at least five Iron Age roundhouses were identified, forming part of an unenclosed settlement. No finds were recovered during the excavations. Two flint implements of probable late Neolithic or early Bronze Age date were also found on the site (CAL 2001, NMR 1030522).

Roman

- 5.26 The Roman fort of *Lugovallium* (Carlisle) was established in AD72-3, on the site of the later medieval castle, controlling the Stanegate frontier between the Tyne and the Solway (Shotter 1997, 49), and was partly excavated by Carlisle Archaeology Ltd in 2001 (Zant 2009, 9). The fort became a focus

- of a large civilian settlement, one of the few in close proximity to Hadrian's Wall, and may have acquired the status of the *civitas* capital of the *Carvetii*, the indigenous tribe of the area. Outside the town, the wider landscape comprised military forts and associated civilian settlements (*vici*), and native Romano-British farmsteads comprising one or more buildings, set within an enclosure.
- 5.27 A number of the settlements identified as cropmarks on aerial photographs appear to continue into the Romano-British period, and it is likely that during the '*Romanisation*' of the area change was gradual, rather than immediate. Three sides of a rectangular cropmark (**HA 12**) were identified 500m to the south of the development boundary and this may reflect a possible farmstead. It is also possible, however, that they may be related to Belle Vue Roman Fort (**HA 16**) which lies only 500m to the south-west, and is known only from 18th century mapping.
- 5.28 During the excavations at Cumberland Infirmary in 1992, 1997 and 2001, evidence for a multi-phase Romano-British settlement was recorded, comprising rectilinear buildings and associated yards enclosed by palisades and ditches. Most of the activity appears to have been located within an area bounded to the north and south by a pair of parallel north-west/south-east ditches. Ceramic evidence, together with the discovery of an unworn *denarius* of the Emperor Domitian (AD 81-96), suggests occupation in the early Roman period, probably during the late 1st-2nd centuries A.D (CAL 2001). The Romano-British settlement may have replaced the earlier Iron Age settlement at the site, perhaps indicative of the '*Romanisation*' discussed above. Evidence of primary grain processing and non-native wares such as Samian, amphora and Roman glass suggests active trading with the Roman town of *Lugovallium* (CAL 2001), perhaps supplying the town and garrison.
- 5.29 An enclosure and field system was identified during excavations by CFA Archaeology Ltd in 2008 at Vallum House Hotel on Burgh Road, 400m to the west (**HA 35**, Kirby 2010). The excavations recorded a small ditched rectilinear enclosure, with V-shaped ditches, cutting a network of smaller ditches with U-shaped profiles, representing an earlier field system. Pottery from the fields systems dated to the Flavian-Trajanic periods (AD 75-120), predating the construction of Hadrian's Wall but contemporary with the Stanegate, the line of which must run close to the enclosure. The pottery from the enclosure, comprising Samian ware, mortaria, amphora and coarse wares, as well as metal items and Roman tile, dated the enclosure firmly to the late 2nd/early 3rd century. There were no surviving internal features, and the enclosure is suggested as a farmstead or watch tower.
- 5.30 A further Romano-British enclosure was identified by Oxford Archaeology North during an evaluation at Knockupworth Farm, 880m to the west, dated to between the 2nd and 4th centuries (OA North 2011c). The Stanegate is recorded between Kirkbride and Fingland Rigg (**HA 03**), and the line of the road has been postulated as far as Carlisle, the line of Burgh

Road perhaps indicating its route, though no evidence for any road was noted during the CFA excavations at Vallum House in 2007-8.

- 5.31 The collective evidence indicates a continuation of the settlements from the Iron Age as the area becomes '*Romanised*' and the apparent establishment of other later enclosures from at least the 2nd century onwards, in a landscape pacified following the construction of Hadrian's Wall. Roman settlement activity appears to be tightly focussed on these *loci*, and on the road corridors of the Stanegate and tributaries, with the suggestion of wider landscape use being restricted to open agricultural fields. The influence of Hadrian's Wall on the development area is hard to assess given the paucity of evidence for its survival, though its presence immediately north of the development area is significant.

Medieval

- 5.32 Following the end of Roman governance in the early 5th century, the nature of the settlement in Carlisle is difficult to determine. However, the city is unlikely to have been abandoned, in view of its role as an administrative centre and its position at the hub of a system of roads. The settlement probably lay within the British kingdom of Rheged in the 6th century, although archaeological and historical evidence is almost entirely lacking at present (Zant 2009, 12). The settlement formed part of the Kingdom of Northumbria in the mid 7th century (Newman RM, 2011, 75). By the late 9th century, control of Carlisle and its region had passed from Northumbria to the British kingdom of Strathclyde, which itself owed allegiance by this time to the king of the Scots. Scandinavian political influence at this time is debatable, although it is clear that an army under Halfden made a determined attempt to conquer Northumbria in 875AD; sources have suggested that Halfden sacked Carlisle, although as yet there is no archaeological evidence to support this (Zant 2009, 15).
- 5.33 In the 12th century, chronicler John of Worcester recorded that when William Rufus conquered Cumberland in 1092, Carlisle had lain waste and deserted since its destruction by the Danes two centuries earlier. The arrival of the Normans in 1092 resulted in the enclosure of the settlement by walls, and in 1122, Henry I ordered the settlement to be fortified with '*castles and towers*'. The Anglo-Saxon Chronicle recorded that '*in this year King William went north to Carlisle with great levies and restored the town, and built the castle. He drove out Dolfin who had formerly ruled that district, and garrisoned the castle with his men. Thereafter he went southwards, sending very many peasants thither with their wives and livestock to settle there and till the soil*'. Place name evidence for this phase of settlement occurs throughout the region through the use of Norman prefixes, usually people's names, to the Scandinavian by suffixes, which illustrates the Norman conquest of Cumbria (for example, 'Upperby', 'Botcherby', 'Rickerby' and so on) (Newman, RM, 2011, 82).
- 5.34 Medieval Carlisle was largely confined to its city walls, apart from three

- ribbon-like settlements extending from its city gates: Botchergate, Rickergate, and Caldewgate (Giecco 2011, 122). The site fell within the parish of Caldewgate at this time, though the settlement does not appear to have extended as far as the development area, and certainly little further than the junction between Caldcotes and Wigton Road.
- 5.35 Caldewgate was gifted to Hexham Priory in the 12th century, and was still owned by the Priory at the Dissolution. The area came under the jurisdiction of the manor of Caldcotes, and was subject to numerous raids and skirmishes during the Wars of Independence, and in 1391 Carlisle and surrounding settlements were sacked and burnt by the Scots.
- 5.36 The leases for the land at Caldewgate were held in the 14th and 15th centuries by members of the Goldsmith family, who manufactured gold and silver objects (Giecco 2011, 133). Caldewgate was centre of white metalworking at this time, particularly evidenced by the excavations by NPA Ltd at the Maltsters Arms site in 2004. The excavations uncovered evidence of bronze-working, the raw materials for which (lead and copper) may have been sourced from the Caldbeck Fells, with iron ore from West Cumbria. This may mark a reason for the position of this activity on the west side of the city. Caldewgate is recorded as having been decimated in a cataclysmic flood in 1484, and does appear to have been reoccupied after the 15th century (Giecco 2011, 134).
- 5.37 Archaeological investigations in the vicinity appear to confirm a largely rural agricultural landscape. An evaluation in 2008 by NPA Ltd, 300m to the south of the development boundary, uncovered two medieval field boundary ditches, one of which contained 13th to 14th century pottery (**HA 17-19**, Giecco and Wooler 2008). During the excavations at the Cumberland Infirmary, a significant number of ditched features, possibly representing a field system or farmstead, were identified within the trenches 550m to the east of the site. These dated to the 12th to 14th century (CAL 2001).
- 5.38 The tithe map for Caldewgate, though relatively late (1842), is probably the best representation of the medieval landscape available (Fig. 10). The map shows long thin fields radiating northwards and southwards from Newtown Road particularly between the junction between Burgh Road and Wigton Road, and extending partially up Burgh Road. These strip fields also extend eastwards, particularly on the north side of the road. A medieval cross lies 150m to the north of the development boundary (**HA 06**). The cross is 1m in height, with a carved cross on its east face, and sits on 2.5m square base approximately 0.3m in height. Its position may mark a fording point across the River Eden, as it lines up with a trackway on the north bank leading to the settlement at Stainton.
- 5.39 The strip fields, consist of consolidated ridge and furrow: the ridge and furrow is associated with medieval common farming of open fields divided into strips, and results from deep-ploughing using oxen which produces

- characteristic s-shaped ridges and furrows. These were traditionally unenclosed, and were farmed communally by the village on an individual allotment basis.
- 5.40 The furlongs of the open-field ridge and furrow cultivation of the medieval period were gradually enclosed and divided into narrow strips, often with distinctive ‘reverse-s’ boundaries preserving the shape of the furlongs, visible in the field layouts depicted. The enclosure of the open fields is usually the result of the gradual accumulation of allotments over a number of generations followed by their being enclosed with a hedge or wall of the acquired consolidated holding. Where long strip fields survive, their presence suggests that little ‘parcelling-up’ of land has occurred prior to enclosure, and perhaps that open strip farming had continued up until this time (Crossley 1990, 10). No enclosure map exists for this area, which seems to imply an early enclosure agreement, probably in the 18th century.
- 5.41 Of particular interest is the layout of the road to the west of Coledale Hall (**HA 36**), which is represented but not named. The road running up to the hall from the east is quite narrow, whilst the road between the hall and the road junction is particularly wide, and includes within it, at the eastern end, a large pond. This form of road layout is particularly reminiscent of medieval planned and nucleated settlements. Winchester (1987) dates this form of settlement to the 11th and 12th centuries, which came about as a result of the Norman settlement of the area in 1092. The planned settlements comprised individual cultivation strips (tofts), situated along a street at the head of which were the crofts, comprising the peasant dwelling, outbuildings and yard (Astill 1988). The settlement depicted on 18th century mapping, however, appears to be quite late, and most houses which are known to survive in along the street are no earlier than the 18th century.
- 5.42 According to Lyson, writing in 1816, Coledale Hall (**HA 36**) was historically referred to as Harrington House and dates at least to the 15th century. Harrington (‘Harington’) comes from the Old English *Haueringtona*, meaning ‘an estate associated with a man called Haefer’ and according to Mills (1991, 160) first appears in a document in c1160, but it is unclear whether this relates to this settlement or Harrington near Workington. The settlement of Harrington is depicted with a symbol indicating a significant house on Saxton’s map of 1576 (Fig. 4), implying it was an important building at this time. There were no stone buildings in Carlisle until at least the 1690s, so the settlement (including the hall) is likely to have been built of timber and clay, and records indicate early roofs were covered with turves, known as ‘flakes’ or thatch (Newman R 2011, 147). The house was associated with Richard Coledale, a merchant in the 15th century. His son, John Coldale, was elected as Member of Parliament representing Carlisle in 1529. Following his death, his estate descended through his daughter Eleanor by marriage to the Brisco family of Dacre (The History of Parliament website).

- 5.43 It is possible that the settlement shrank around this time, potentially from the late 15th century onwards when a state of anarchy developed along the border. Control over the area was attempted through the establishment of Wardens of Three Marches defined along each side of the border, and Carlisle was the centre of the Wardenry of the West March. Nevertheless settlements outside the city walls were most susceptible to attack, and this and the culmination of the disastrous floods in Caldewgate at the end of the century may have caused the contraction. Caldewgate is recorded as having been abandoned in the 16th century (Newman R 2011, 150).

Post-medieval

- 5.44 In 1603, the unification of the English and Scottish Crowns and the accession of James I to the English throne led to border being pacified, through the breaking up of traditional forms of Border service and the modernisation of tenureships, which greatly benefitted larger landowners (Spence 1984; 64); although Carlisle's importance declined. The Civil War also affected the town, Carlisle was held for a time by the Royalists but was recaptured by Parliament in 1645 (McCarthy et al 1990).
- 5.45 Caldewgate was re-established in the 17th century, with mapping of the city's defences indicating a well-developed settlement by 1685. At this time Caldewgate consisted of a small suburb immediately west of the city wall, and a further settlement west of the River Caldew, which had originated as a settlement of Flemish settlers in the 12th century (Newman R 2011, 151). The antiquarian maps between Saxton's map of 1576 (Fig. 4) and Morden's map of 1695 (Fig. 5) continue to depict 'Harrington' as a significant house, though the latter map is the first to refer to it with the title 'Harrington'.
- 5.46 A number of maps were drawn up during the Jacobite Rebellion and the siege of Carlisle in 1745 and show the locations of strategic positions and approaches made to the city (Figs. 6 and 7). Newtown is first named as a settlement on these maps, and Smith's 1745 mapping of Carlisle depicts Coledale Hall for the first time as 'Cowdle Hall', though it is first mentioned by this name in the 1670s. A Civil War siegework supposedly exists on the site of Cumberland Infirmary, as depicted the 1745 mapping, but no trace of the siegework was found during the excavations by CAL, and it is now thought to lie within the open land to the north of Lawson Street and Wilson Street, approximately 570m east of the site (CAL 2001).
- 5.47 245 Newtown Road, immediately south of the site, was built in 1735 (**HA 37**), and a barn associated with the house was built in 1722, which may provide an indication as to the approximate date of establishment of the settlement. It seems likely that settlement was re-established on the site of the putative earlier medieval village in the 17th or 18th century, presumably as a result of the decline in border skirmishes from this time, and that this is the origin for its name 'Newtown'. The establishment of the new settlement may also have been the impetus for the rebuilding and/or

- the renaming of the hall in the same period. Coledale Hall was fully rebuilt in 1810 for Henry Fawcett, also a Member of Parliament, when the Carlisle Journal records the laying of the foundation stone on the 26th of May 1810.
- 5.48 Hodskinson and Donald's Map of Cumberland, dated to 1774 (Fig. 8), and Greenwood's map of 1823 (Fig. 9), both depict Newtown in schematic detail only, but indicate a straggling settlement along the roadside at this time, within a predominantly rural context. Greenwood's map depicts the road leading to the ford across the River Eden to Stainton, and also the line of the Port Carlisle Canal (**HA 05**) following a sinuous route westwards from the 'basin' depicted just north of Caldewgate and east of the historic city.
- 5.49 The canal was constructed following an Act of Parliament in 1819 and wholly opened in 1823, and runs just north of the development area. The canal crosses the line of Hadrian's Wall twice, and runs 11.5 miles westwards to Fisher's Cross on the Solway Coast, later named Port Carlisle. The canal included eight locks, and parts of the canal basin, terminus and associated warehouses survive at Port Road, 1.2km to the east. Following its construction, small sea-going vessels were able to sail up to the city. Goods carried in 1830 included locomotives from Robert Stephenson's works in Newcastle, dragged overland and loaded onto vessels for shipment to Liverpool and the Liverpool & Manchester Railway (Robinson 2011, 175).
- 5.50 The later 18th and first half of the 19th centuries saw increased industrial development in Carlisle. A bone works and drainage pumping station (**HA 08**) lies 650m north-east of the development area. The Newton Engine House was constructed in 1824 by the canal company, in order to pump water from the canal to keep the level constant, through a channel known as The Cut, which survives extant. The excess water was used to power the grinding of bones in the Willowholme Bone Mill, constructed in 1832, on the same site. The mill is recorded as having a steam engine added in 1839, when it was run in a partnership between W and J Mattinson. In 1855, the engine was sold, but the plant continued in use even after the closure of the canal, listed as the Willowholme Works run by the National Guaranteed Manure Company. The mill finally closed in 1906. The buildings survive as a ruin.
- 5.51 The canal declined after the opening the railways in the 19th century, and between 1846 and 1850 its income had halved, in part due to the silting of the Solway around Port Carlisle in the late 1840s, but also due to the competition of the new railways (Robinson 2011, 175). In 1852 a decision to replace the canal with a railway was ratified by an Act of Parliament in 1853, which allowed its conversion into the Port Carlisle Railway (**HA 07**). The railway opened between 1853 and 1866, and follows the line of the canal for its entire route. The branch line between Carlisle and Edinburgh, via Hawick, also lies close to the development boundary (**HA 11**), crossing

the River Eden on a bridge 480m to the north east. The line, known as the Waverley Line, was opened in 1861. Both lines were incorporated into the North British Railway system. An engine shed associated with the railway lies 95m north-east of the development boundary (**HA 09**), known as 'Canal Shed' (Robinson 2011, 180). The course of the railways is depicted on Asquith's map of 1853 and the First Edition Ordnance Survey map of 1865 (Fig. 11).

- 5.52 From 1898, a brick pit (**HA 39**) is also depicted north of the development area on the Second Edition Ordnance Survey map. The drift glacial deposits of the area provided a good source of clay for brick making from the early post medieval period, and the relative availability of these local resources is reflected in the primarily brick built character of 19th century Carlisle (Newman, C, 2011, 165).

Modern

- 5.53 In 1900, the establishment of a tramway (**HA 13**) between the city and the suburb of Newtown encouraged the development of housing westwards along the road. A 1905 plan by Henry Marks (Fig. 13) clearly shows the developing street patterns between the Cumberland Infirmary and Coledale Hall. St Barnabas Mission Chapel in Newtown (**HA 14**), dated to 1901, lies 175m south-east of the development boundary, and is the westernmost building shown on the north side of the road, with open fields depicted beyond.
- 5.54 In 1923, the Port Carlisle Railway and the Waverley Line became part of the London and North Eastern Railway, and were subsequently nationalised in 1948. The Port Carlisle Railway closed entirely in September 1964. The Canal Shed was demolished in 1966, and the Hawick to Carlisle Line closed in 1969. The track has since been dismantled; the edge of the Port Carlisle Railway line now forms the northern boundary of the development area. The railway may be impacted on if changes are made to the northern perimeter of the development area.
- 5.55 Newtown Industrial Estate appears to have been developed privately around the end of the Second World War, from references to plans for a new road to a bakers on the estate which date to 1948 (CA/E/6/3/167). Burgh Road Industrial Estate was privately developed in the 1950s (Carlisle City Council website).

Site Walkover Survey

- 5.56 The site was visited on the 10th of January 2013. Access to the site was through a perimeter fence surrounding a yard to the year of the Story Homes offices; there were no other access points. An earthen ramp ran down from the yard, across the beck which formed the western boundary of the development area. There were a number of marshy areas along the edge of this beck.

- 5.57 The western side of the development area, immediately west of the beck, comprised a sloping bank of landscaped material where the construction of the Burgh Road Industrial Estate had been built up along the beck edge. The eastern side of the site replicated this to a certain extent, where Newtown Industrial Estate encroached onto the land, but the banking along this edge is not so pronounced. Both banks were topped by fences.
- 5.58 The southern boundary of the site comprised the fenced boundaries of the gardens to the rear of housing along Newtown Road. There were a number of informal footpaths extending from gates from the gardens. Along the central edge of the southern boundary was a small copse of semi-mature woodland.
- 5.59 The northern boundary comprised fairly mature trees and an overgrown hedgerow along the edge of the former railway line, and the edge of the railway embankment.
- 5.60 The ground sloped westwards towards the beck, and was broadly even, though cut in a few places by smaller run-off tributaries to the beck. The land was mostly overgrown pasture, with no definable earthworks visible, though there was a slight suggestion of earthworks in the position of the cropmarks recorded by English Heritage during the NMP.
- 5.61 There were no services crossing the land, and no overhead lines.

Archaeological Trial Trench Evaluation

- 5.62 The evaluation comprised the excavation of six trenches (Fig. 2). Two trenches were positioned in a T-formation, at the north end of the proposed development site (Trenches 1 and 2), to test for the presence of remains associated with Hadrian's Wall and the *Vallum*. A further two trenches were targeted on the putative cropmark ditch which lay partly within the eastern edge of the site (Trenches 4 and 5). The remaining two trenches were positioned in the centre (Trench 3) and south (Trench 6) of the site, in order to evaluate these areas.

Trenches 1 to 5

- 5.63 No archaeological features were encountered in these trenches. Natural, comprising clays or sandy clays with gravel lenses, lay beneath a dark gray topsoil. An intermediate subsoil layer of mid grey sandy clay, was encountered in Trench 3 and part of Trench 2. Ceramic field drains were identified in Trenches 1 to 4 and a large natural boulder was found in Trench 5.
- 5.64 The topsoil in the area of Trench 1 was thinner than elsewhere and contained pieces of brick and concrete. A quantity of dumped rubbish and rubble had been removed from this location, some years previously (Story Ltd pers. comm.). This work would explain the thin topsoil and also possibly the lack of subsoil (which was encountered upslope in Trench 2).

- 5.65 No evidence was found corresponding to the cropmark at the eastern edge of the field. Neither trench contained subsoil, while the natural clay in both trenches did not contain any variations which would immediately explain the cropmark.

Trench 6

- 5.66 This trench lay at the south end of the proposed development site and produced the only archaeological features. Ditch [602], which was orientated roughly north-south, lay near the eastern end of the trench (Fig. 15; Plates 1 and 2). The feature, 2.3m wide and 0.5m deep, contained three distinct fills. The primary deposit was a grey silt (604), 0.3m deep. Over this, lay a small quantity of pink-orange sandy clay (603), possibly deriving from a ditch-side bank. The top of the ditch was filled by topsoil (601). A field drain (feature number {607}) had been cut into the western side of the ditch and was presumably excavated at a time when the ditch was still a visible earthwork. No finds were recovered from the ditch.
- 5.67 Two further deposits lay in the centre of the trench (Fig. 15). A layer of broken stones (606), up to 0.3m thick, occupied the edge of the level ground and part of the slope down to the beck running through the site. Layer (606) contained a small number of handmade and machine-made brick fragments and small pieces of lime mortar (all discarded). Above this lay a second layer of redeposited natural sandy clay (605), up to 0.2m thick and covering roughly the same zone as stones (606). This latter layer may represent the remains of a bank originally beside ditch [602], or may have been deposited with the stones below.

Discussion

- 5.68 The only archaeological features lay at the south of the site, and these are 19th century and later in date. Although ditch [602] was itself undated, it corresponds with a field boundary ditch which first appears on the OS map of 1898-9 (Fig. 12). It is therefore most likely to have been dug in the second half of the 19th century. The two deposits to the west of the ditch are also dated to the later 19th century or after by the presence of machine-made brick in the lower of the two.
- 5.69 The putative cropmark ditch within the site appears not to be archaeological in origin and no other remains were encountered. Much of the ground either slopes steeply, or is boggy close to the beck which runs through the site, both of which are likely to have discouraged settlement or other activity here.

6.0 ASSESSMENT OF IMPACT

Construction impact

6.1 The proposed application involves the construction of a new storage yard. The following processes involved with the construction phase of the development have the potential to impact on heritage assets, including previously unknown archaeological remains:

- *topsoil and subsoil stripping;*
- *excavation including cut and fill operations, installation of services, drainage, landscaping and planting; and*
- *movement of heavy plant and machinery.*

Undesignated heritage assets

Possible curvilinear prehistoric/Romano-British enclosure (HA 38)

6.2 A single undesignated heritage asset, comprising a fragmentary cropmark (**HA 38**) defined by two ditch circuits, the inner ditch with a possible entrance, is recorded lying partially within the development boundary. In order to assess the potential impact on this possible ditch, two trenches were positioned across it, and additional trenches were positioned within the vicinity to test for associated archaeological features.

6.3 The results of the trenching were negative, and the cropmark was not located; it is probable that the cropmark lay further to the east, and has been truncated by the construction of Newtown Industrial Estate. On the basis of the existing information, it is anticipated that effects on this asset from the proposed development are likely to be negligible or minor adverse.

Unrecorded prehistoric to Romano-British archaeological remains

6.4 The desk-based assessment suggested that there was moderate potential for prehistoric and Romano-British remains to be present within the development boundary. The development area is located within the vicinity of a number of excavated examples of Iron Age and Romano-British enclosed settlement sites along Caldewgate and Burgh Road, with numerous examples of similar ritual and domestic sites known within the Stainton meander of the River Eden, to the north of the development area. The site also lies within close proximity of an important prehistoric site excavated by OA North in 2008 as part of the Carlisle Northern Development Route, which yielded evidence of activity of Early Mesolithic to Early Bronze Age date. There remained also a moderate potential for archaeological remains associated with Hadrian's Wall and *Vallum* to survive at the northern end of the development boundary. In accordance with NPPF paragraph 128, the archaeological potential of this site required

further evaluation.

- 6.5 This potential was further tested by additional trenching nearest to the line of Hadrian's Wall and *Vallum*, and within the vicinity to test for associated archaeological features. The results of the trenching were negative. No evidence for Hadrian's Wall and *Vallum* were identified, which would support the recorded evidence which suggests the monument lies further to the north. On the basis of the existing information, it is anticipated that effects on any unrecorded undesignated heritage assets from the proposed development are likely to be negligible.

Operational impact

- 6.6 The main consideration with respect to operational impacts is whether the proposed development would affect the significance of the setting of designated and undesignated heritage assets. The setting of a heritage asset, whether designated or not, is protected under the National Planning Policy Framework (NPPF). In terms of the guidance, a heritage assets setting is defined as:

"the surrounding in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral." (NPPF 2012, 56)

- 6.7 As such, setting does not necessarily have to relate spatially to a given designated site but might be any element which affects our understanding, appreciation or enjoyment of the heritage asset. The setting of a heritage asset can be affected by development outside of its boundaries due to any of the following effects:

- *Visual intrusion;*
- *Changes in views in and out of a site;*
- *Changes in landscape character or context;*
- *Inappropriate or unsympathetic design and build;*
- *Impacts on amenity; and*
- *Cumulative change*

Assessment of impact on the significance of the setting of affected heritage assets

Hadrian's Wall and Vallum – Davidson's Banks to Grinsdale (HA 04) and Milecastle 67 (HA 01)

- 6.8 The course of the Hadrian's Wall is hard to trace in the vicinity of the site. It is believed that the Wall and *Vallum* converge on Davidson's Bank to the north of the site, following the crest of a steep cliff overlooking the river, before heading eastwards, and the wall appears to have eroded into the river at this point.
- 6.9 There is no intervisibility between the monument and the proposed development boundary. The new development will not impact on the settings of either the line of *Vallum* or Hadrian's Wall, as the views of both are screened by trees and a later 19th century railway embankment. On the basis of the existing information, it is anticipated that effects are likely to be negligible.

Listed Buildings

- 6.10 There are 8 listed buildings within 0.5km from the site of the proposed storage yard. There is no intervisibility with any of the listed buildings identified in this study as the views are screened by trees, and more recent development adjacent to the development boundary. On the basis of the existing information, it is anticipated that any effects are likely to be negligible.

7.0 CONCLUSIONS

- 7.1 The programme of archaeological fieldwork has demonstrated that the proposed development will not have an impact on any designated assets or undesignated assets either within the development boundary, or within the immediate vicinity as defined by the study area. There is no intervisibility with any of the listed buildings identified in this study. The Scheduled Monument of Hadrian's Wall and Vallum lie to the north of the later 19th century railway embankment of the Port Carlisle Railway and is therefore screened by this feature and the mature woodland which grows upon it.

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MAGIC website www.magic.gov.uk

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Appendix 1: Known Heritage Assets within the Study Area

Heritage assets (HA) recorded within the study area are listed below and shown on Figure 2 (unless marked “NI”). Sites are identified by a unique reference number and by their Northumberland Historic Environment Record number (HER...) and/or their National Monuments Record (NMR) Unique Identifier (UI...). A central grid reference (or start to finish for the linear assets) is provided for most sites and a description and date are provided for all sites. The location of the all sites is shown on Figure 2.

The significance of all heritage assets has been assessed and grades have been applied to denote whether they are considered to be of national (grade 1), regional (grade 2), county (grade 2/3) or local (grade 3) importance. Scheduled Monuments are all Grade 1 and listed as SM followed by the monument number. Where buildings are listed the grading is indicated (e.g. LB II). In line with the NPPF buildings graded I or II* are Grade 1 and grade II listed buildings are Grade 2.

HA No.	HER No.	NMR No.	NGR Grid Ref.	Description	Period	Grade
1	432	10566	NY 3818 5645	Milecastle 67, Stainton, Carlisle: probable site of a Roman milecastle, Roman coins were found in 1861 during railway construction, no visible remains.	Roman	3
2	462	10580	NY 3807 5642	Findspot: a gold necklace of the 2nd century AD found in ad 1860 on the line of the wall at or near Grinsdale is in the British museum.		3
3	4677	1327320	NY 3634 5680	Kirkbride to Carlisle Roman Road (cropmark): a possible Roman road running from Carlisle to Kirkbride. A section of this road was recorded, as cropmarks from air photographs, running up to and into the fort at Kirkbride.	Roman	3
4	5782	908267, 909624-5, 909627, 1011613, 101615, 101618-9, 101621	NY 3740 5686	Scheduled Monument 26110: Hadrian's Wall and <i>Vallum</i> between the east end of Davidson's Banks & road to Grinsdale & <i>Vallum</i> between Davidson's Banks & dismantled railway in Wall Miles 67 & 68	Roman	1
5	6296	1037954	NY 3158 5891	Port Carlisle Canal / Carlisle Navigation Canal: canal from Carlisle to Port Carlisle opened 1823 abandoned 1853	Post medieval	2

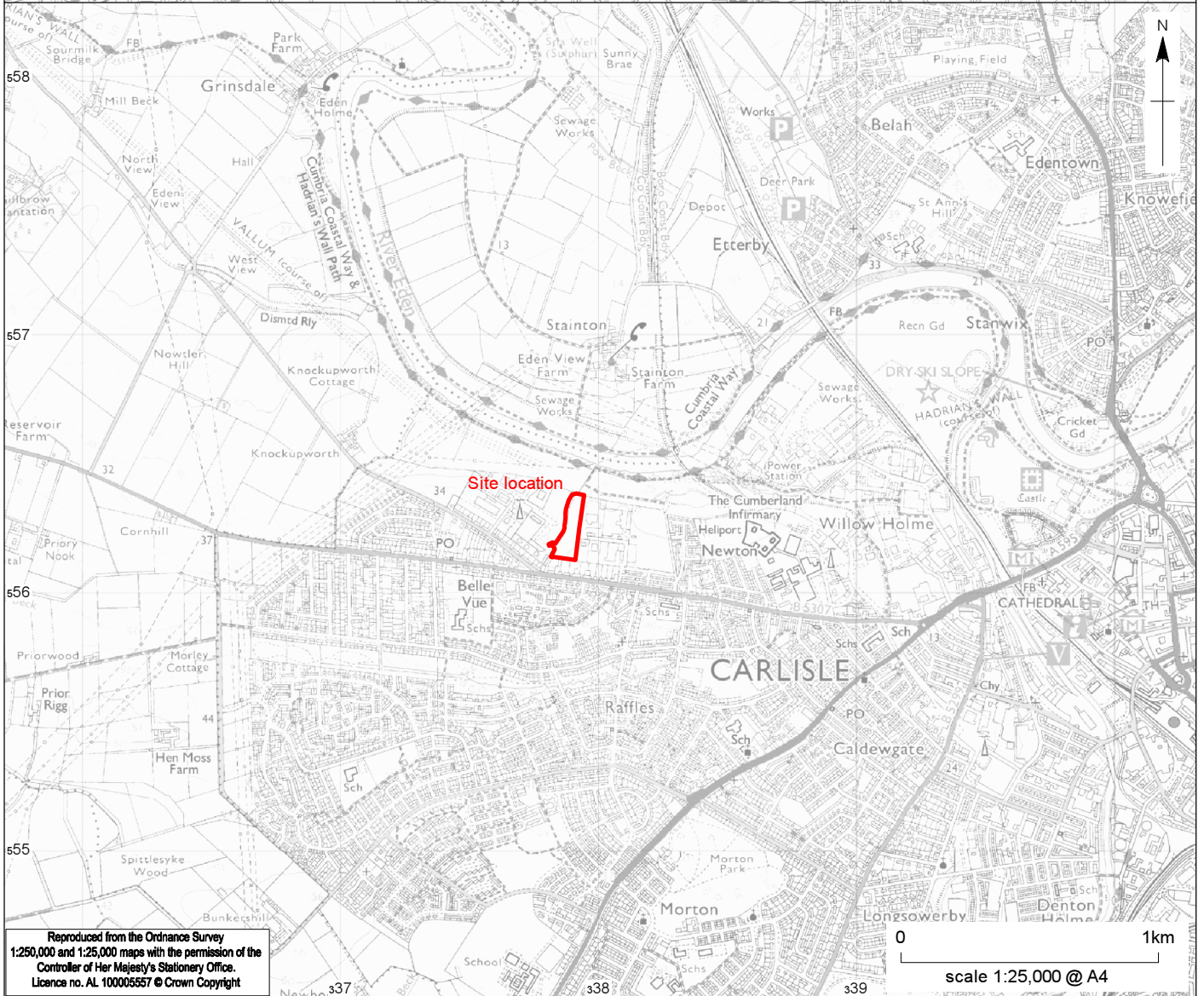
HA No.	HER No.	NMR No.	NGR Grid Ref.	Description	Period	Grade
				and replaced by railway opened 1854. Surviving earthworks.		
6	6358		NY 3788 5653	Findspot: stone cross		3
7	10036	10075	NY 3468 5596	Port Carlisle Railway (North British Railway, Carlisle & Silloth Branch): dismantled railway opened in 1854 and closed 1964.	Post medieval	3
8	10202	1541361	NY 3845 5646	Willowholme Bone Manure Works: site of a bone works and drainage pumping station built in 1825. It was originally used to pump water to keep the level of the Carlisle Canal constant, the excess power being used to grind bones	Post Medieval	3
9	10204		NY 3803 5643	Newtown Engine Shed / Canal Shed	Post-medieval	3
10	10552		NY 3829 5600	Newtown Animal Pound	Post medieval	3
11	12430	1373164	NY 3078 7053	The Waverley Line (North British Railway, Edinburgh And Carlisle Branch): The North British Railway from Hawick to Carlisle opened in 1861 with a branch to Gretna Green. Closed 1969 and dismantled.	Post medieval	3
12	16559	1383226	NY 3779 5589	Belle Vue cropmark site, Carlisle: three sides of a rectangular enclosure of possible Iron Age or Roman date are visible as a cropmark on an air photograph. The one measurable dimension of the enclosure is 41m.	Unknown	3
13	40968		NY 3021 5557	Carlisle Tram System	Modern	3
14	41048		NY 3807 5606	St Barnabas Mission Chapel, Newtown, Carlisle	Post Medieval	3
15	42071		NY 3836 5600	Burgh Road enclosure and field system, Carlisle	Roman	3
16	43246		NY 3760 5580	Belle Vue Roman fort, Carlisle	Roman	3
17	43248		NY 3787 5580	Belle Vue medieval field boundary, Carlisle	Medieval	3
18	43249		NY 3803 5588	Belle Vue medieval field boundary, Carlisle	Medieval	3
19	46600	1499867	NY 3795 5585	Land adjacent to Low Meadow (NPA, evaluation): evaluation in advance of residential development recorded two medieval field boundary ditches	Medieval	3
20	56493	1504528	NY 3832 5631	Land at Engine Lonning, Carlisle, Cumbria (NPA, Watching Brief): monitoring of groundworks for a gas pipe	N/A	3

HA No.	HER No.	NMR No.	NGR Grid Ref.	Description	Period	Grade
				trench recorded no significant archaeological activity		
21	78360	1098688	NY 3804 5687	Eden View, Stainton: Grade II: Farmhouse dated 1833 with initials T. & J.A. Over rear entrance. Of two storeys and three bays.	Post-medieval	2
22	78361	1098699	NY 3810 5685	Waverley House and Adjoining Barn, Stainton: Grade II: an early 19th century farmhouse and barn; of two storeys and three bays, lower two storey barn forms an integral part of the farmhouse.	Post-medieval	2
23	162443	1505926	NY 3825 5667	Caldew and Carlisle City Flood Alleviation Scheme (The Archaeological Practice, Assessment)	Post-medieval to Modern	3
24	386642	1196988	NY 3809 5581	Church Of St Barnabas: Grade II	Post-medieval	2
25	386643	1208913	NY 3807 5579	St Barnabas Vicarage: Grade II	Post-medieval	2
26	386812	1218220	NY 3839 5600	No 92, Newtown Road : Grade II	Post-medieval	2
27	386814	1218228	NY 3809 5600	No 241 Newtown Road, Newtown House: Grade II	Post-medieval	2
28	386927	1291680	NY 3832 5651	Waverley Viaduct, west of the former electricity works: Grade II	Post-medieval	2
29	1/01/333	1031581, 1383134	NY 3859 5610	Cumberland Infirmary (CAL, Evaluation)	Iron Age, Roman	3
30	1/04/1258	1489309	NY 3820 5619	Carr's Field (ASWYAS, Geophysical Survey)	N/A	3
31	1/04/1305	1432956	NY 3764 5602	Lanercost House (NPA, Watching Brief)	N/A	3
32	1/05/1498	1504783	NY 3820 5619	Carr's Field (Headland, Evaluation): eight evaluation trenches were excavated recording a stone surface, palaeochannel/pond and several shallow linear features, all heavily truncated.	Unknown	3
33	1/06/1598	1512725	NY 3820 5619	Carr's Field (Headland, Watching Brief): a watching brief was maintained during groundworks at the site. Undated probable field drains were recorded.	Unknown	3
34	1/06/1627	1520020	NY 3892 5321	Caldew and Carlisle City Flood Alleviation Scheme (The Archaeological Practice, Assessment): photographic recording of the railway embankment at the Waverley viaduct and flood defence embankment at Stainton	Post-medieval to Modern	3
35	1/07/1787	1523119	NY 3742 5622	Land off Burgh Road (CFA, evaluation/excavation):	Roman	3

HA No.	HER No.	NMR No.	NGR Grid Ref.	Description	Period	Grade
				evaluation in advance of proposed development recorded a series of ditches, possibly of Roman date. Excavation yielded field system of 1st/2nd century date and enclosure of 2nd/3rd century date.		
36	43247, 386813	10677, 1196932	NY 3742 5624	Cowdle Hall / Coledale Hall, Newtown Road, Carlisle: Grade II* listed	Post medieval, Modern	1
37		602384	NY 3850 5650	No 245 Newtown Road: built in 1735. A barn associated with the house was built in 1722.		3
38		1383230	NY 3795 5622	A potential curvilinear enclosure of possible prehistoric or Roman date is visible as fragmentary cropmarks on vertical air photographs. The enclosure may be defined by two ditch circuits, but there is too little visible to be certain to any degree. The	Post-medieval	3
39			NY 3787 5649	Brick Pit	Post-Medieval	3

Appendix 2: Context Catalogue

Context	Interpretative description	Relationships	Trench	Notes	Finds and sample information
101	Topsoil		1		
102	Natural		1		
201	Topsoil		2		
202	Subsoil		2		
203	Feature number - Field Drain		2		
204	Feature number - Field Drain		2		
205	Natural		2		
206	Wooden post - Feature number		2		
301	Topsoil		3		
302	Subsoil		3		
303	Feature number - Field Drain		3		
304	Natural		3		
401	Topsoil		4		
402	Feature number - Field Drain		4		
403	Natural		4		
501	Topsoil		5		
502	Natural		5		
503	Stone Hole - Feature number		5		
601	Topsoil		6	Fills top of ditch 602	
602	Ditch cut		6		
603	Fill of ditch 602	Secondary fill	6		
604	Fill of ditch 602	Primary fill	6		
605	Layer		6	Redeposited natural	
606	Layer - stones	Below 605	6	Burnt stones and soil	Contained brick
607	Feature number - Field Drain		6		
608	Subsoil	Part overlain by 606	6		

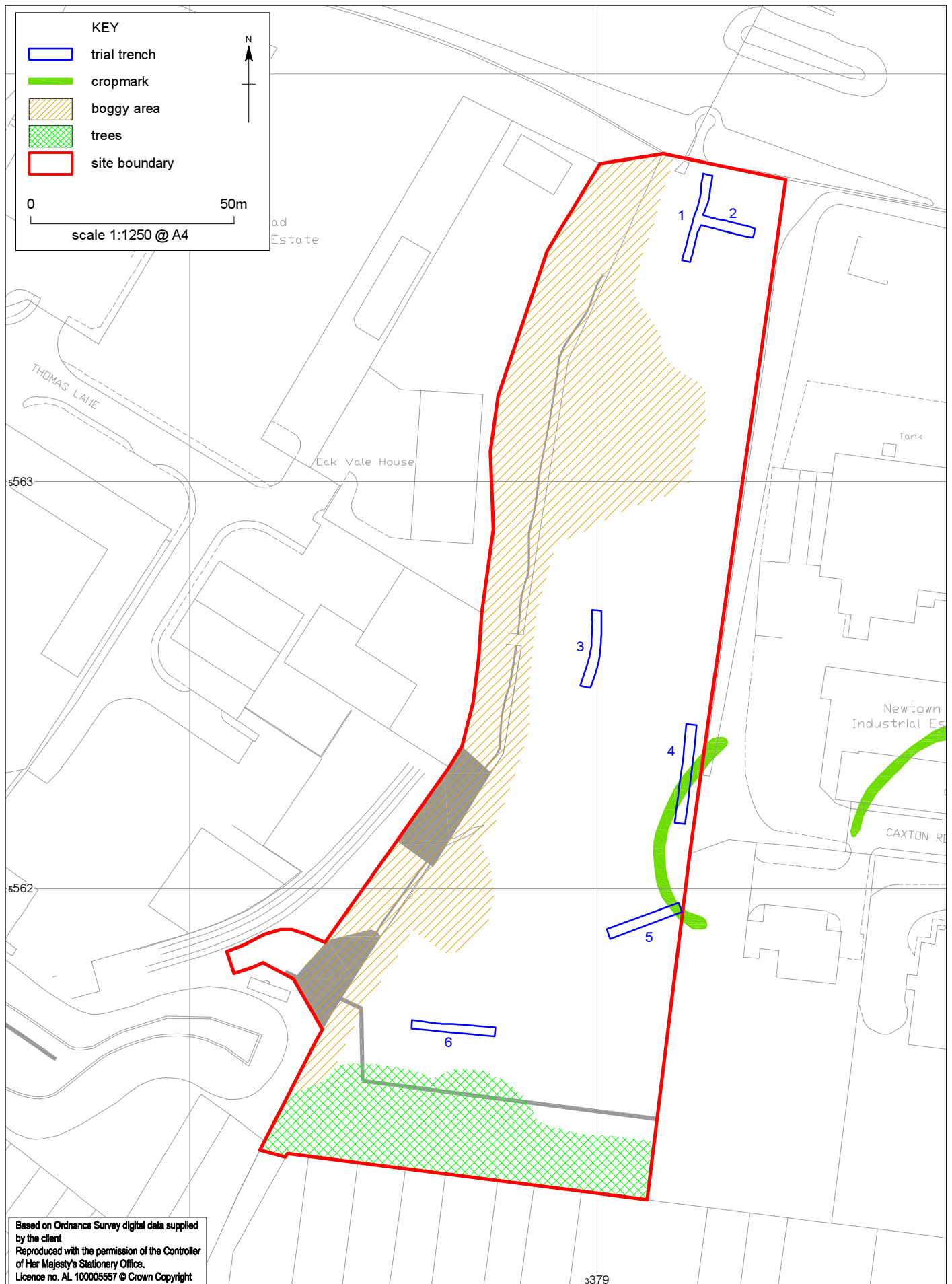


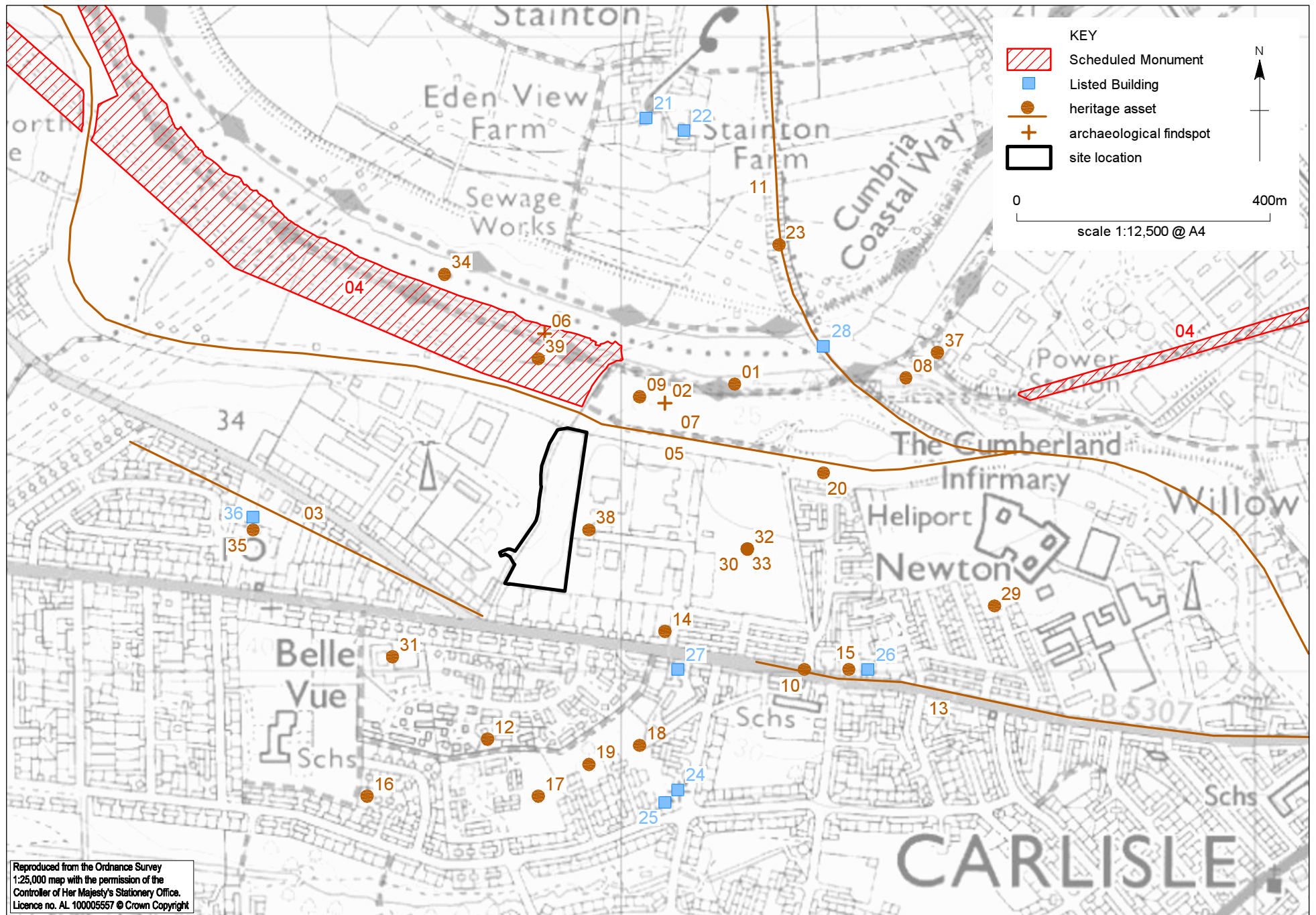
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Burgh Road, Carlisle: site location

Figure 1





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Burgh Road, Carlisle: heritage assets in the vicinity of the development

Figure 3



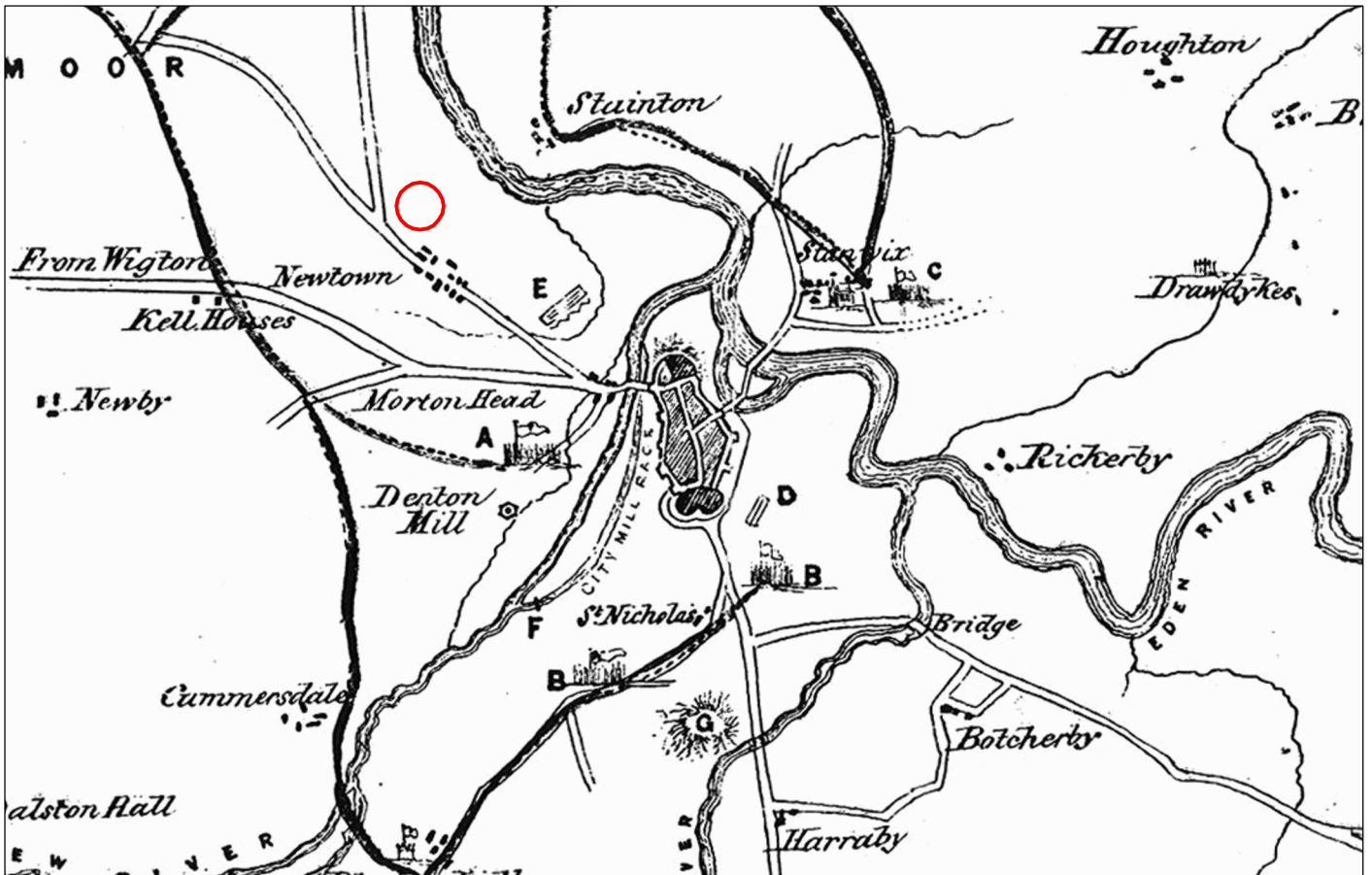
Burgh Road, Carlisle: Christopher Saxton's map of Westmorland and Cumberland, 1576

Figure 4



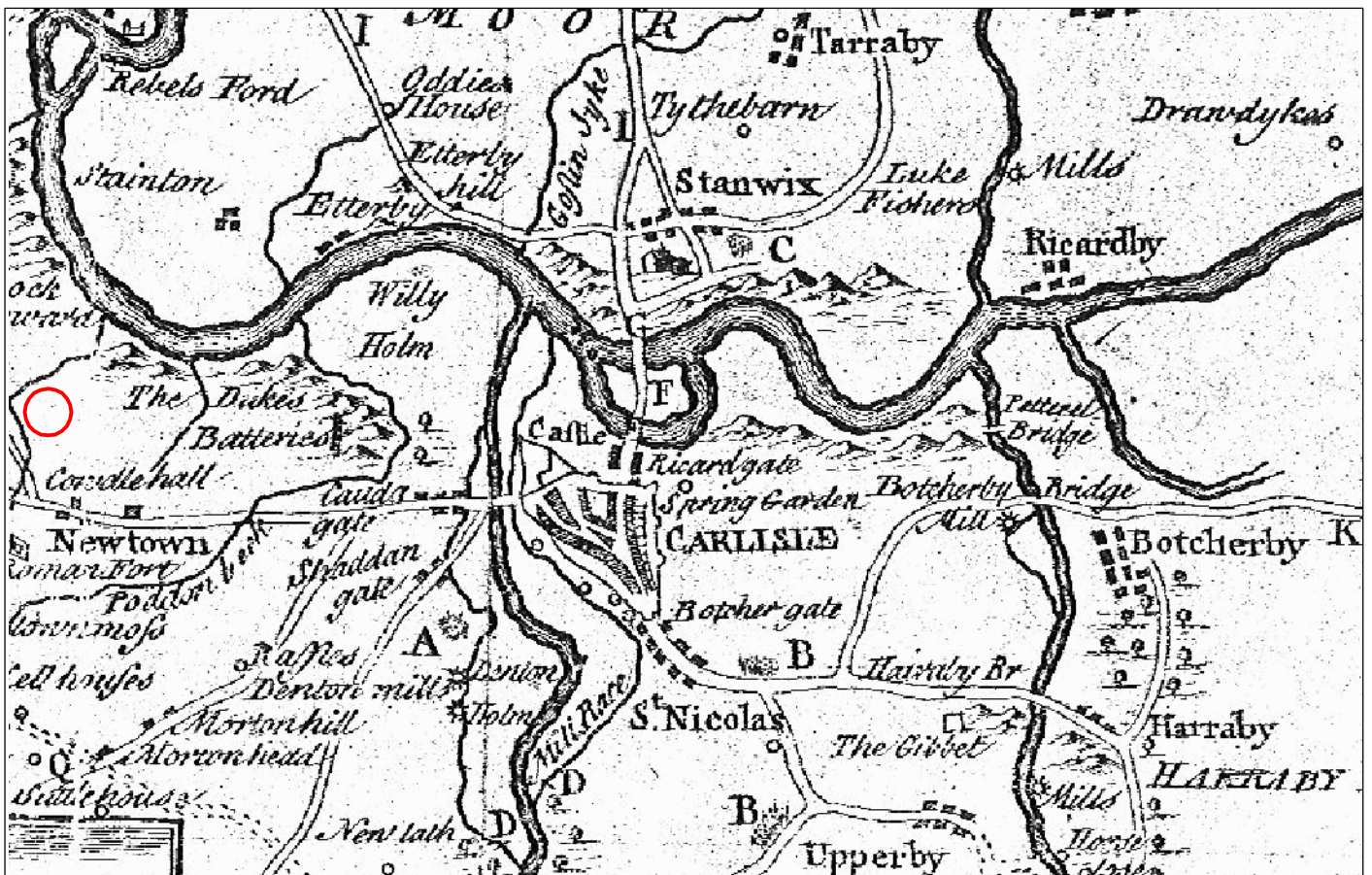
Burgh Road, Carlisle: Robert Morden's map of Cumberland, 1695

Figure 5



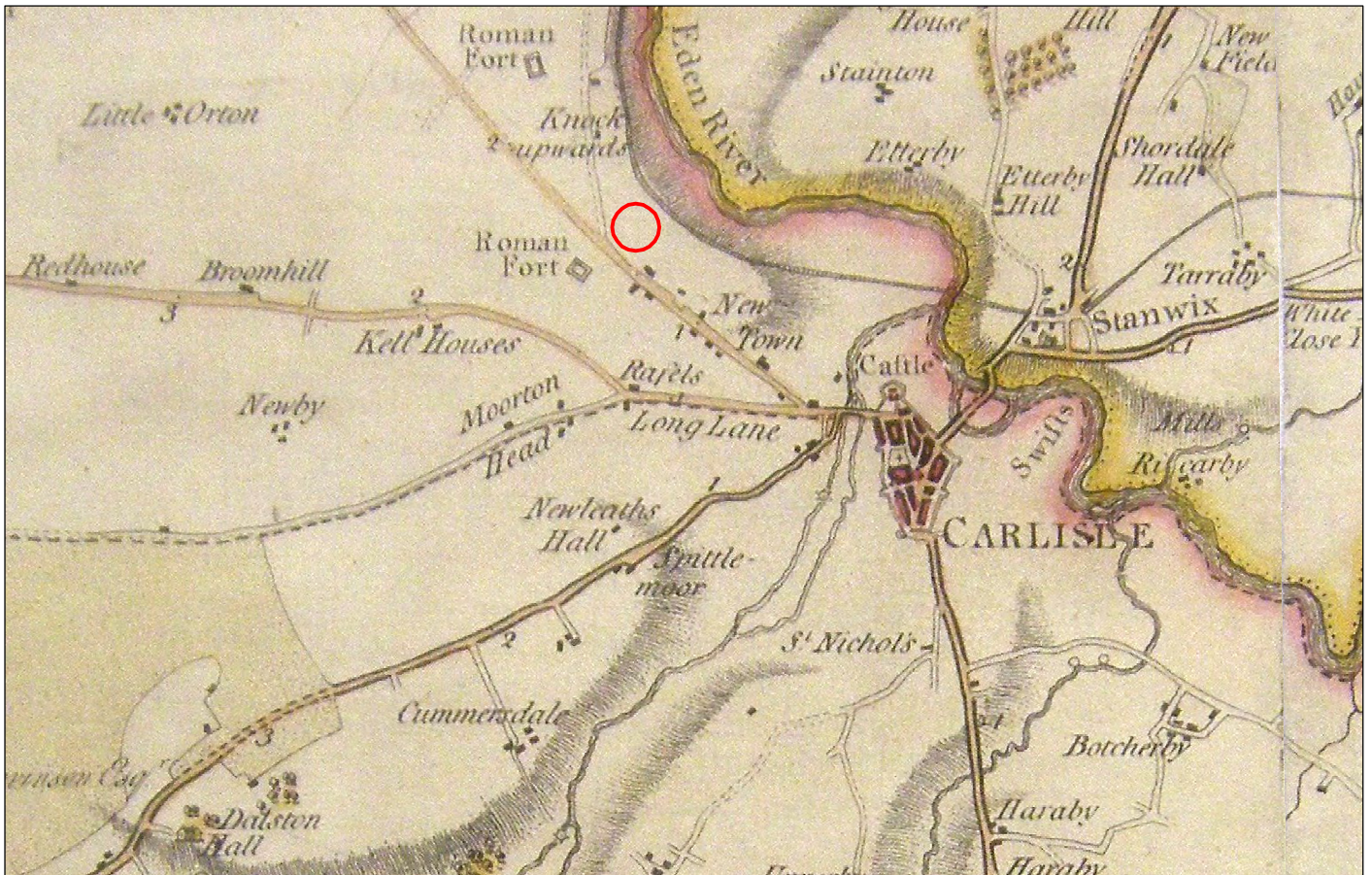
Burgh Road, Carlisle: plan of Carlisle and the surrounding country, 1745

Figure 6



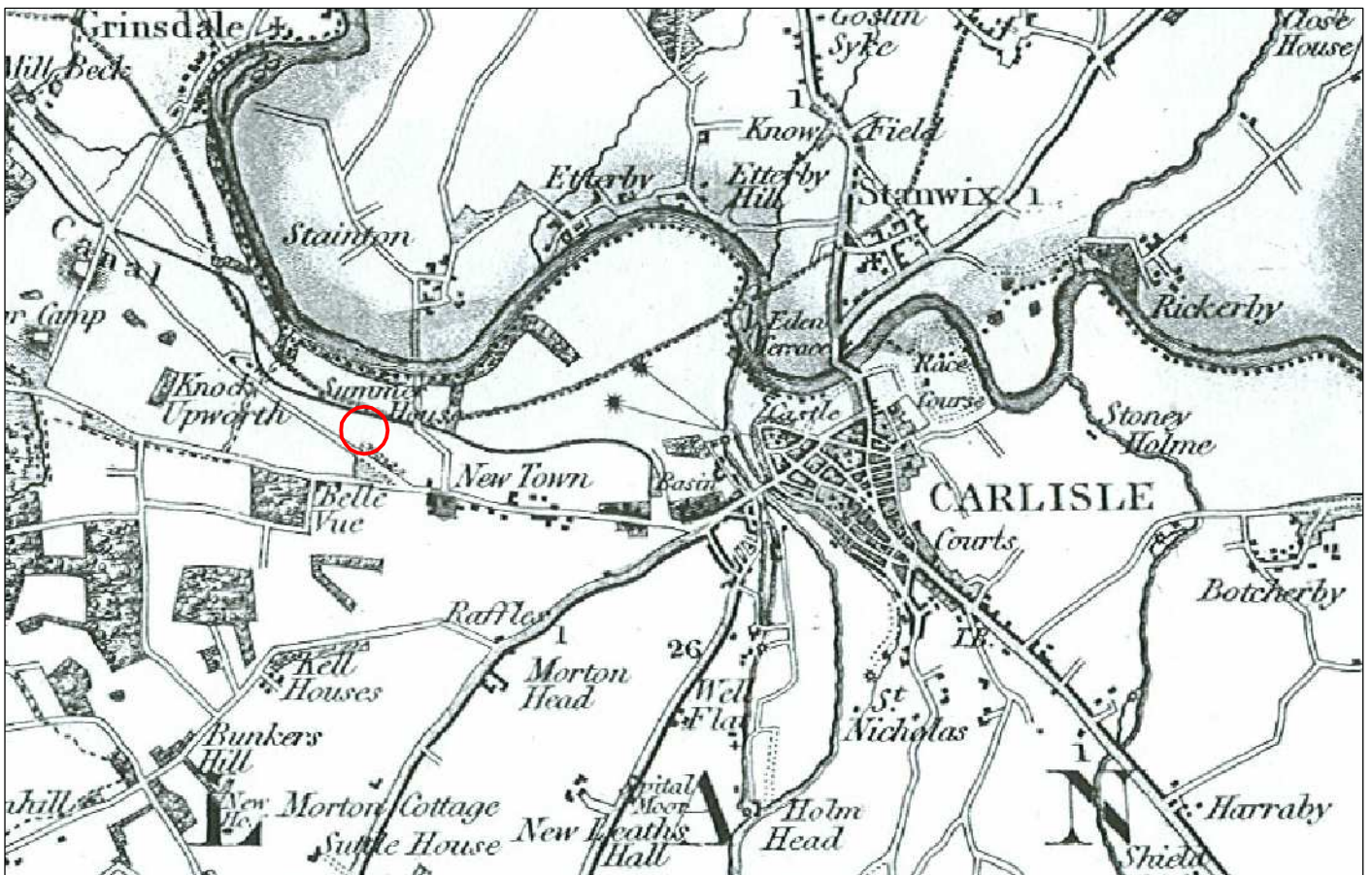
Burgh Road, Carlisle: G Smith's plan of the city of Carlisle, 1746

Figure 7



Burgh Road, Carlisle: Hodkinson and Donald's map of Cumberland 1774

Figure 8

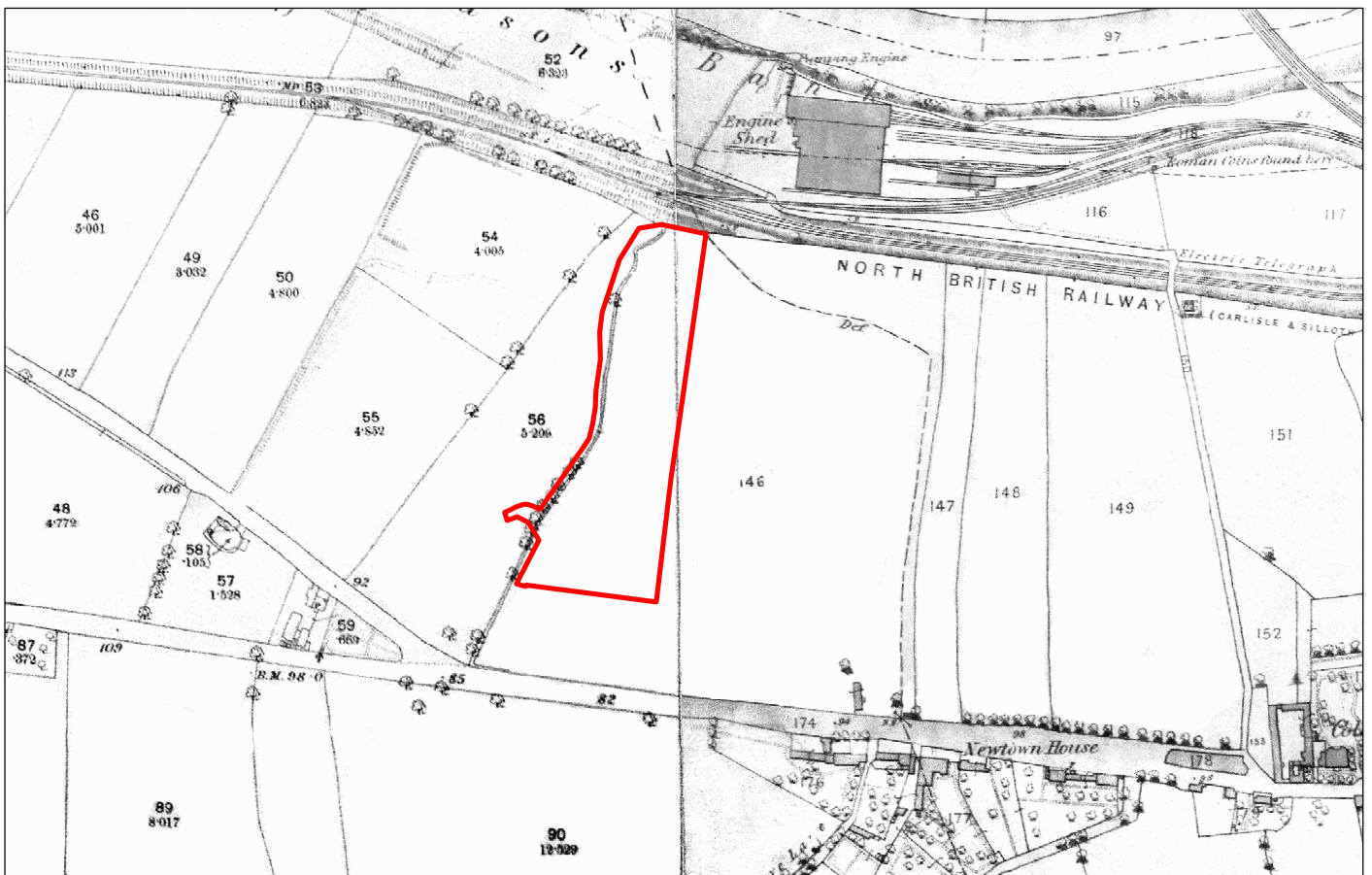


Burgh Road, Carlisle: Greenwood's map of Cumberland, 1823

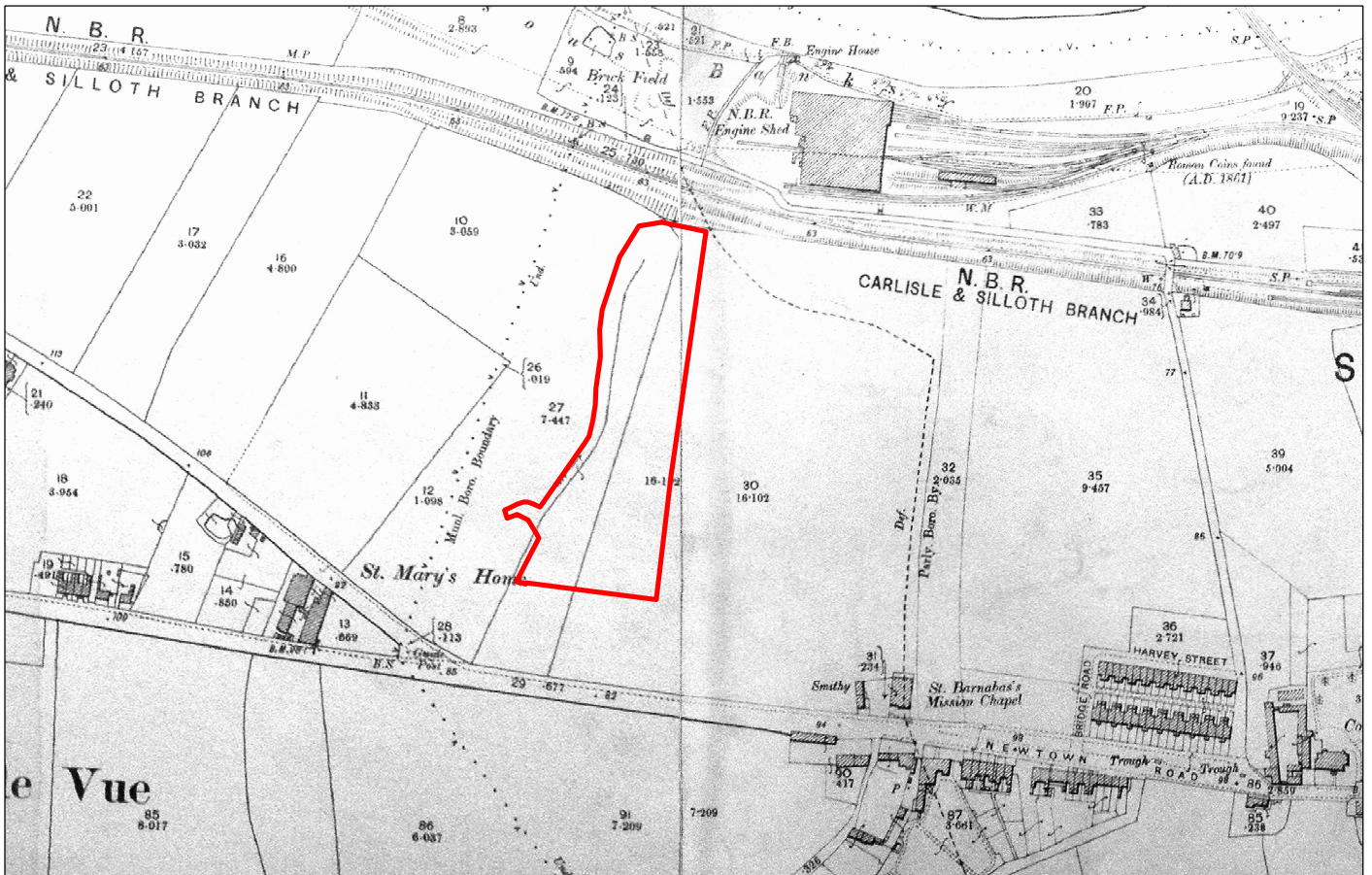
Figure 9



Burgh Road, Carlisle: plan of Caldewgate Township in the parish of St Mary Carlisle' Figure 10
Tithe map, 1842

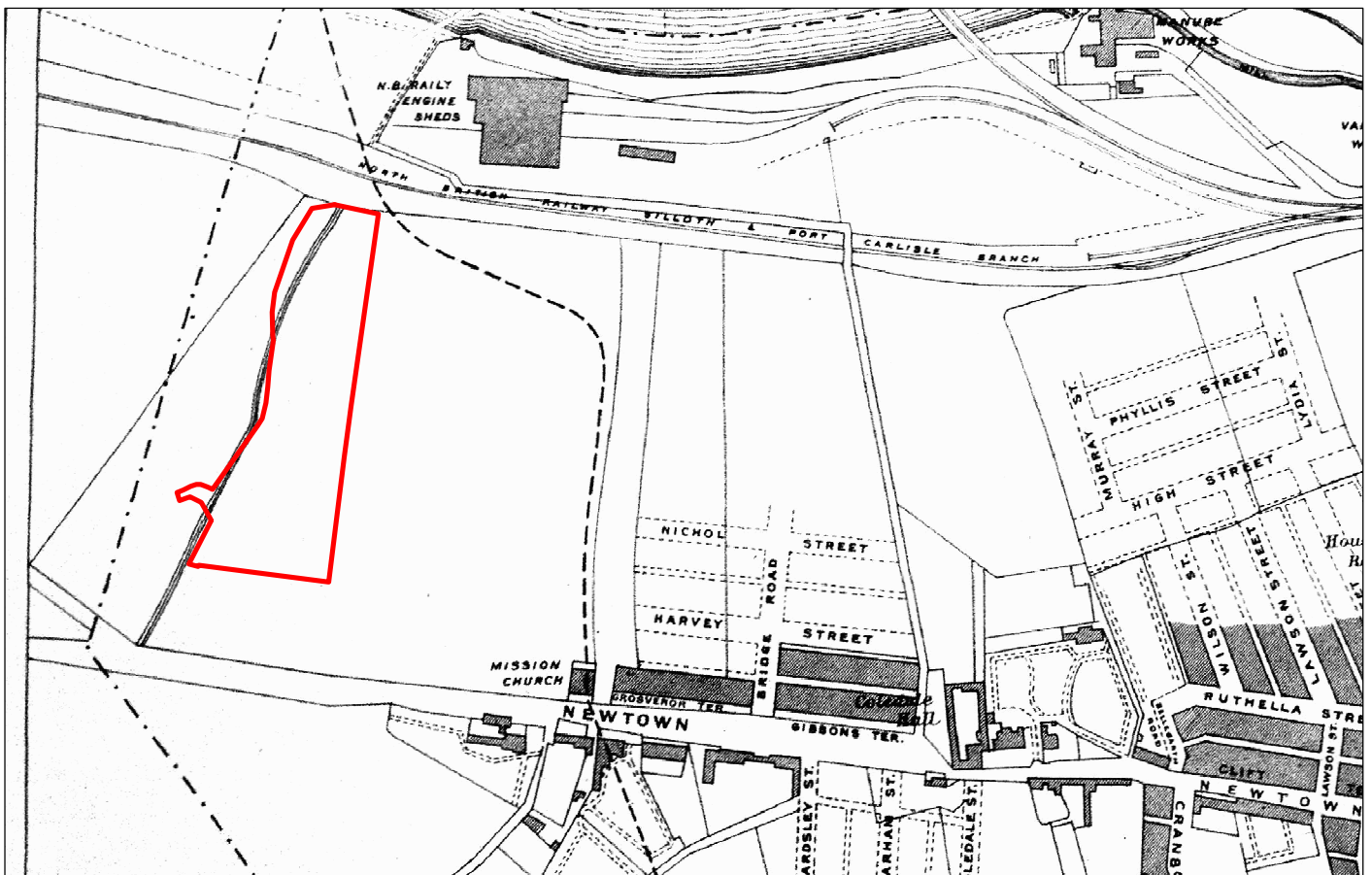


Burgh Road, Carlisle: Ordnance Survey First Edition map, 1865 Figure 11



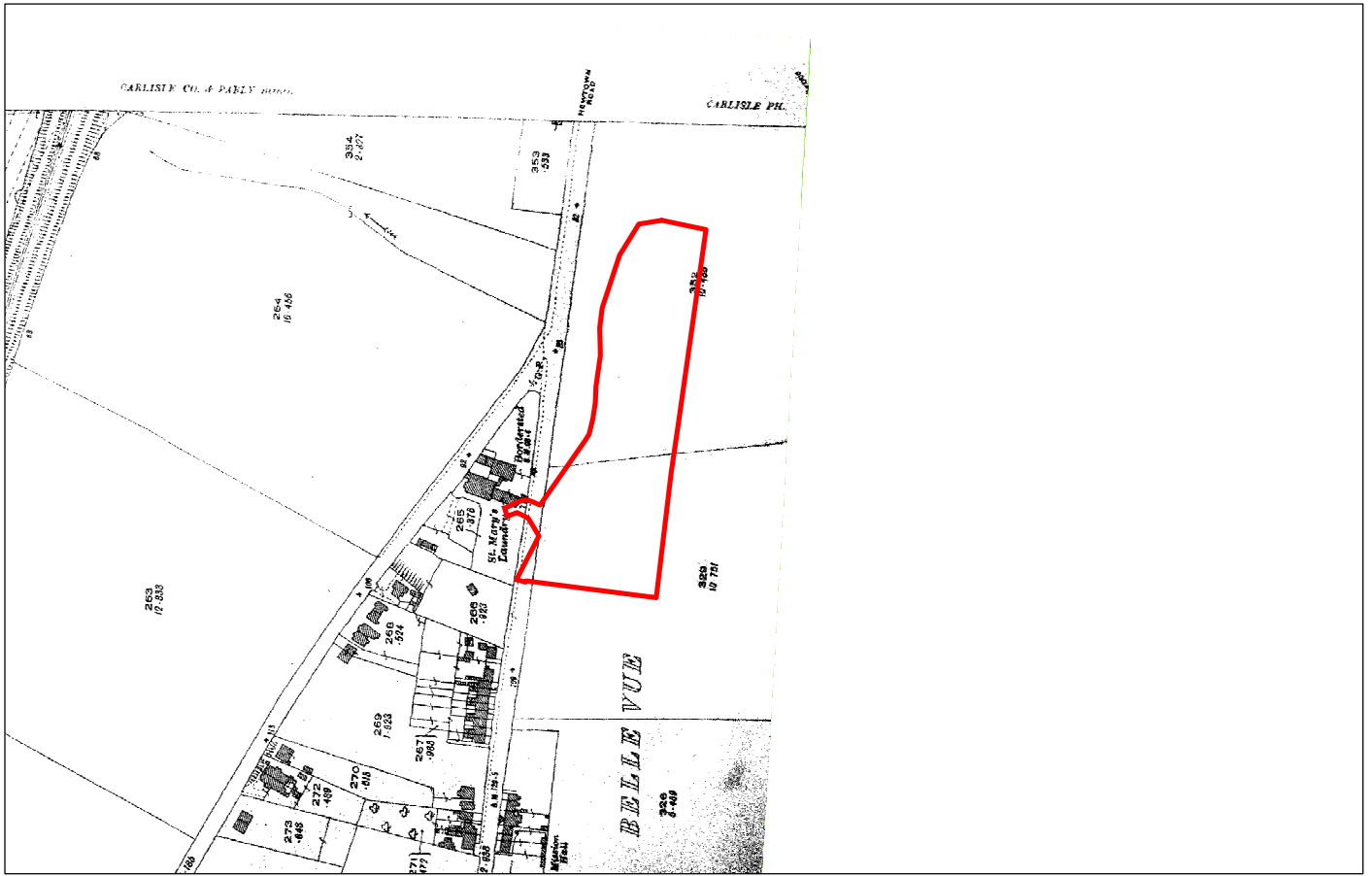
Burgh Road, Carlisle: Second Edition Ordnance Survey map 1898-9

Figure 12



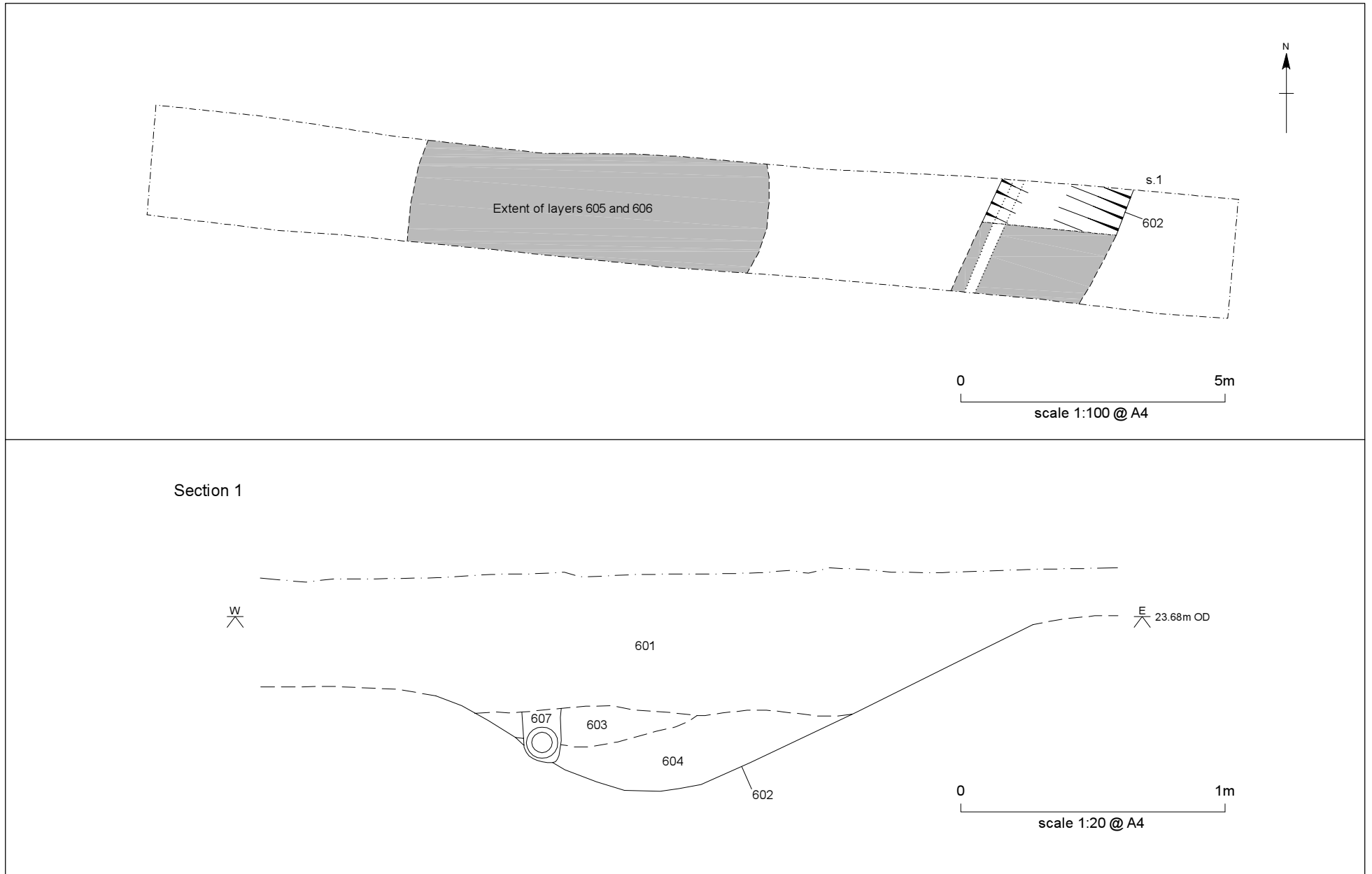
Burgh Road, Carlisle: map of Carlisle, April 1905, H.C. Marks Surveyor

Figure 13



Burgh Road, Carlisle: Third Edition Ordnance Survey map 1924,
25" to 1 mile scale

Figure 14





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Burgh Road, Carlisle: Trench 6, eastern end, Plate 1
showing ditch 602 on higher level ground



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Burgh Road, Carlisle: Trench 6, ditch 602, Plate 2
sample excavated