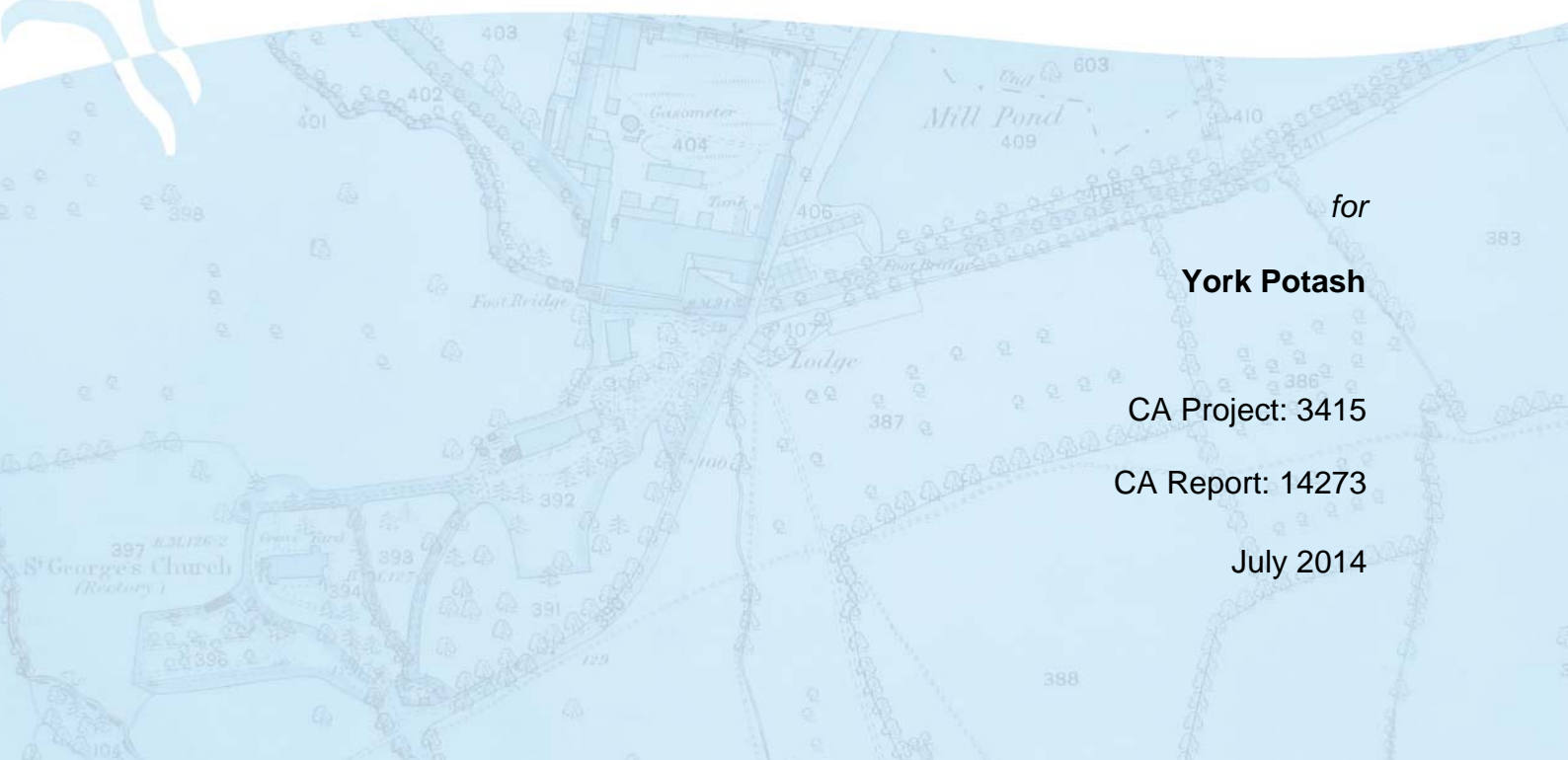


Lockwood Beck – Intermediate Site York Potash: Mineral Transport System (MTS) North Yorkshire

Heritage Desk-Based Assessment



for

York Potash

CA Project: 3415

CA Report: 14273

July 2014

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CONTENTS

1	INTRODUCTION	7
	<i>Outline.....</i>	<i>7</i>
	<i>Location and landscape context</i>	<i>7</i>
2	METHODOLOGY	9
	<i>Setting Assessment and Significance.....</i>	<i>15</i>
3	PLANNING POLICY CONTEXT.....	17
	<i>Planning policy and guidance context.....</i>	<i>17</i>
	<i>National Planning Policy Framework</i>	<i>17</i>
	<i>Local planning policy.....</i>	<i>18</i>
4	BASELINE SURVEY	20
	<i>Introduction</i>	<i>20</i>
	<i>Summary of designated heritage assets.....</i>	<i>20</i>
	<i>Prehistoric (pre AD 43)</i>	<i>22</i>
	<i>Roman (AD 43 – AD 410) and Early medieval (AD 410 – 1066).....</i>	<i>23</i>
	<i>Medieval (AD 1066 – 1539)</i>	<i>24</i>
	<i>Post-medieval (1540 – 1800) and Modern (1801 – present)</i>	<i>25</i>
5	SIGNIFICANCE AND POTENTIAL SIGNIFICANCE	30
	<i>Introduction</i>	<i>30</i>
	<i>Significance of recorded and potential heritage assets</i>	<i>30</i>
6	POTENTIAL DEVELOPMENT EFFECTS ON BURIED ARCHAEOLOGY	34
	<i>Summary of development proposals</i>	<i>34</i>
	<i>Potential physical development effects.....</i>	<i>34</i>
7	SETTING OF HERITAGE ASSETS	36
8	CONCLUSIONS	43
9	REFERENCES	45
	APPENDIX A: GAZETTEER OF SCHEDULED MONUMENTS WITHIN 2KM STUDY AREA	47
	APPENDIX B: GAZETTEER OF LISTED BUILDINGS WITHIN 2KM STUDY AREA.....	48
	APPENDIX C: GAZETTEER OF NON-DESIGNATED ASSETS WITHIN 2KM STUDY AREA	50
	APPENDIX D: GAZETTEER OF INDUSTRIAL HERITAGE WITHIN 2KM STUDY AREA	56
	APPENDIX E: GAZETTEER OF MILITARY HERITAGE WITHIN 2KM STUDY AREA..	58

LIST OF ILLUSTRATIONS

- Fig. 1 Site location plan
- Fig. 2 Designated heritage assets
- Fig. 3 Non-designated heritage assets
- Fig. 4 Recorded medieval / post-medieval field systems
- Fig. 5 Industrial heritage assets
- Fig. 6 Military heritage assets
- Fig. 7 Extract from OS Map of 1856
- Fig. 8 Results of targeted LiDAR survey
- Fig. 9 Construction phase Zone of Theoretical Visibility (ZTV)



SUMMARY

Project Name: Lockwood Beck MTS
Location: Redcar and Cleveland, North Yorkshire
NGR: 467384 514122

In January 2014 Cotswold Archaeology was commissioned by Royal HaskoningDHV, on behalf of York Potash, to carry out a Heritage Desk-Based Assessment at Lockwood Beck Intermediate Mineral Transport System (MTS) Site, Redcar and Cleveland, North Yorkshire. The objective of the assessment was to identify the nature and extent of the recorded heritage and archaeological resource, including designated and non-designated buried archaeological remains and historical structures, within both the site and its immediate environs and to carry out an assessment of the effects of the proposed development upon that resource.

No designated heritage assets are recorded as being present within the proposed development site, and no designated heritage assets would, therefore, be affected by the proposed development. A small number of known and possible non-designated archaeological features are located within the proposed site. These comprise possible remains associated with medieval settlement at Kateridden farm, a possible medieval road, and a number of medieval field systems.

The possible settlement remains and road are unproven, but would be of archaeological interest if confirmed to survive. These would require an appropriate level of mitigation. The known medieval field systems, including remnant ridge and furrow earthworks to the east of Kateridden farm, are of more limited archaeological significance. Any other unknown archaeological remains that might lie buried within the site are also likely to be agricultural features of medieval to modern origin, and of limited archaeological significance.

A programme of phased geophysical survey (magnetometry) is to be undertaken within the proposed site in order to test the potential for known and suspected buried archaeological anomalies – including in proximity to Kateridden farm – and to better characterise the nature, extent and significance of any archaeological remains that may lie as yet undetected.

Settings assessment has identified that there would be no adverse effect on the significance of any heritage assets. During the construction phase, there is likely to be a small, temporary effect on a number of Scheduled prehistoric barrows on the moorland over-looking the proposed development, as well as Red House Grade II Listed Building, and Moorsholm

Conservation Area. This is due to the relative proximity and scale of the temporary winding gear towers. The key contributors to the overall heritage significance of these assets would remain unaffected, and the small temporary adverse effect would be removed at the end of the construction phase.

In summary, this assessment has not identified anything that would prevent the proposed development on heritage grounds, provided appropriate mitigation, agreed in consultation with the council archaeological officer/adviser, is in place. Consideration should be given to both NPPF (2012) and the Planning (Listed Buildings and Conservation Areas) Act (1990), in weighing the small level of temporary harm identified in relation to setting against the wider benefits of the scheme.



1 INTRODUCTION

Outline

- 1.1 In January 2014, Cotswold Archaeology was commissioned by Royal HaskoningDHV, on behalf of York Potash, to carry out a Heritage Desk-Based Assessment of land at Lockwood Beck, Redcar and Cleveland, North Yorkshire (centred on NGR: 467384 514122; Figure 1). The proposed development comprises the construction of a shaft cover building and spoil storage area associated with the York Potash Mineral Transport System. Key associated infrastructure will include an office / welfare compound, an access road, a haul road and an attenuation pond.
- 1.2 This assessment has considered the historic environment (cultural heritage) resource within a minimum 2km 'study area' surrounding and including the site, and the potential for direct physical effects to heritage assets has been assessed. The potential non-physical effects (effects resulting from alteration to setting) upon designated heritage assets within a 6km Zone of Theoretical Visibility (ZTV) focussed on the proposed development has also been assessed.

Location and landscape context

- 1.3 The proposed development site is located to the north of Lockwood Beck Reservoir, north of the A171, c.5km south-east of Guisborough. The proposed site comprises an even mixture of arable and pasture fields, adjacent to Kateridden Wood, and the steep-sided valley of Dale Beck. The site is bounded to the west by Stanghow Road, to the south by the A171, to the east by a belt of plantation woodland, and to the north by Millers Lane.
- 1.4 The proposed site is located within the broad 'East Cleveland Plateau' landscape, as defined within the Redcar and Cleveland Borough Council Landscape Character Supplementary Planning Document (SPD) (R&CBC 2010). This landscape consists of an open, elevated coastal plateau rising towards the south to meet the North York Moors. The plateau has an exposed, open rural character with large-scale farmland bordered by hedges. The plateau is dissected by a complex system of deeply-incised sheltered, heavily-wooded valleys or gills.

- 1.5 A history of mining (and related industries) within the area has left its mark on the landscape and pockets of industry, associated villages, spoil heaps and disused mineral railways all have a strong influence on the landscape character. Some of the spoil heaps and other historical industrial sites remain prominent and visible over a wide area, e.g. the spoil heaps at Kilton (R&CBC 2010:22).

Objectives

- 1.6 The main objectives of the desk-based assessment were:
- to identify designated heritage assets within the site and study area;
 - to gather information on non-designated recorded heritage assets within the site and study area;
 - to assess the baseline information and offer an analysis of the potential for currently unrecorded heritage assets to be present within the site;
 - to assess the significance of identified heritage assets, including elements of setting that positively contribute to their significance; and
 - to assess the potential impact of the proposed development resulting from any alteration to the settings of designated heritage assets within the wider environs of the site.



2 METHODOLOGY

Assessment Methodology (buried archaeology)

Guidance

- 2.1 The methodology for the assessment of buried archaeology and archaeological potential is based on the guidance provided in the Institute for Archaeologists 'Standard and guidance for historic environment desk-based assessment' (2012).

Assessment scope

- 2.2 Identification, definition and analysis of the archaeological baseline has utilised a 2km study area centred on the proposed development site. The size of the study area ensured that historic mapping and data sources provided sufficient information about the proposed development site and its surrounding landscape upon which to inform the baseline, assess archaeological potential and known and potential physical impacts. All known heritage assets identified within this study area have been considered in this assessment and are discussed in Section 4. The methodology and scope adopted in the assessment of potential effects on the significance of heritage assets via alteration to their settings, as a result of the proposed development, is outlined in sections 2.11-2.22 below.

Data presentation

- 2.3 All known heritage assets, and other aspects of the historic environment, identified within the study area are listed in one of five gazetteers (Appendices A – E) according to type. These gazetteers are provided at the back of this report and comprise the following:

- Appendix A Scheduled Monuments within the 2km study area
- Appendix B Listed Buildings within the 2km study area
- Appendix C Non-designated assets within the 2km study area
- Appendix D Industrial heritage within the 2km study area
- Appendix E Military heritage within the 2km study area.

- 2.4 The heritage assets, and other aspects of the historic environment, listed within the gazetteers (Appendices A – E), are given a numerical reference (1, 2, 3... etc.). Their locations, in relation to the proposed site, are then depicted on Figures 2, 3, 5 and 6, which are as follows:

- Figure 2 Designated heritage assets (within the 2km study area)
- Figure 3 Non-designated assets (within the 2km study area)
- Figure 5 Industrial heritage (within the 2km study area)
- Figure 6 Military heritage (within the 2km study area)

2.5 When referred to in the text, all heritage assets and other aspects of the historic environment are accompanied by their figure no. and reference no. in brackets. For example, when referred to in the text, designated heritage asset '1' would be followed by the reference: (Figure 2, 1), while non-designated heritage asset '1' would be followed by the reference: (Figure 3, 1).

Baseline Data Sources

2.6 Baseline historic environment data was acquired from three principal sources:

- The Redcar and Cleveland Historic Environment Record (HER), a publically accessible database of all of the archaeological sites and events (e.g. previous excavations) recorded within the local authority area. Data was acquired from this source on 19th May 2014;
- The North York Moors National Park Historic Environment Record (HER), a publically accessible database of all of the archaeological sites and events recorded within the North York Moors National Park. Data was acquired from this source on 13th May 2014; and
- The English Heritage Archive (EHA), a supplementary publically accessible database of archaeological sites and events recorded across England. Data was acquired from this source on 8th May 2014.

2.7 Data from these sources relates to all known designated and non-designated heritage assets recorded within 2km of the proposed site. It includes detail on a range of heritage assets including monuments, buildings, and find-spots, as well as historic land-use, and previous archaeological investigations.

2.8 The HER and EHA databases also contain records relating to non-heritage assets. These may include: presumed archaeological sites, which have subsequently been disproven; natural features such as stones and natural mounds; modern features, such as spoil mounds and trackways; and landscape features of negligible significance, which would not be considered heritage assets, e.g. lengths of 20th

century field boundary. The information received from the HER and EHA databases has, therefore, been considered and refined as part of this assessment.

Additional Data Sources

2.9 The following additional resources were also consulted in order to further inform the baseline:

- Historic mapping, including (where available) Tithe Mapping and historic Ordnance Survey (OS) mapping, specifically First Edition 1:10,560 scale OS map of 1856, and First, Second and subsequent editions of the 1:2,500 scale OS maps, from 1894 to present. Mapping was acquired from the North Yorkshire Record Office on 1st May 2014, as well as from online historic mapping websites;
- Aerial photographs taken from 1940s onwards, reviewed in English Heritage's aerial photograph search room in Swindon on 16th May 2014;
- Portable Antiquities Scheme (PAS) data, relating to registered spot-finds of archaeological material (e.g. by field-walkers, metal-detectorists etc.). No such finds are registered within the PAS database within the site itself;
- Grey literature reports (published monographs and unpublished client reports), sourced in hardcopy and from online databases of archaeological literature, e.g. Heritage Gateway, Oasis, and the Archaeology Data Service;
- The Redcar and Cleveland Planning and Building web pages, which provide up-to-date information on local planning policy and proximate planning applications;
- The North Yorkshire County Council (NYCC) Historic Landscape Characterisation Project database, which has mapped the historical characteristics of the landscapes within, and bordering, the study area. This has identified, for example, those areas which were enclosed by acts of parliament from the 16th century onwards, and those areas which have retained their pre-enclosure 'open field system' characteristics; and
- The online British Geological Survey (2014) Geology of Britain Viewer, which provides detailed information of the mapped bedrock geology and superficial deposits within Britain.

Survey-Based Data

2.10 Alongside the desk-based data, additional information relating to the heritage resource within the proposed site has been acquired through a programme of non-intrusive field investigation and GI test-pitting. To date the following field investigations have been undertaken to inform the baseline:

- *Site Visit.* The proposed site was visited in February, May and June 2014 to identify: any visible potential heritage assets not recorded by the baseline sources, any previous modern disturbance within the site, and to more fully assess the potential constraints, if any, to the proposed development. The settings assessment was also carried out during these site visits (see paragraphs 2.11-2.22 and Section 7 of this report).
- *LiDAR Survey.* A LiDAR survey (Light Detection and Ranging) was undertaken across the proposed site in December 2013 (Fugro 2014). The survey used a FLI-MAP system, mounted on an AS-355F helicopter to model the ground surface within the proposed MTS surface development area, including any artificial (and, thus, potentially archaeological) earthworks. A high-level point density of no less than 15 points per m² was utilised and an absolute accuracy of <0.05m was returned. The survey identified known ridge and furrow earthworks in the west and south of the proposed site, and two possible mounds recorded during field survey in the north of the proposed site (these features are discussed further in Sections 4, 5 and 6 of this report). No further unknown features of potential archaeological origin were identified.
- *Watching Brief.* Archaeological watching briefs were maintained in May and June 2014, during the excavation of multiple Ground Investigation (GI) test pits within the proposed site. The watching brief comprised the monitoring of all GI test pit excavations. These pits revealed only the stratigraphy of the natural soils and underlying geology, and no archaeological features, e.g. pits, ditches etc., were identified. Spotfinds of a single struck flint, a piece of oyster shell, a single sherd of 19th-century pottery, and a burnt stone were retrieved from plough soil. All of these are common background finds; in such low quantities, they are not indicative of substantive occupation.

Assessment Methodology (Setting)

Guidance

- 2.11 The methodology for assessing potential development effects through the alteration of a heritage asset's setting has followed that recommended in *The Setting of Heritage Assets: English Heritage Guidance* (English Heritage, 2011). This document provides guidance on setting and development management, including on assessing the implications of development proposals.
- 2.12 This industry-standard guidance document recommends a stepped approach for assessing the implications of development proposals, as follows:
- Step 1** identify those heritage assets whose settings might be affected;
 - Step 2** assess whether, how and to what degree setting makes a positive contribution to the value of those heritage assets;
 - Step 3** assess the effect of the proposed development on the significance of those assets as a result of changes to setting;
 - Step 4** maximise enhancement and minimise harm; and
 - Step 5** make and document decisions and monitor outcomes.
- 2.13 This assessment includes consideration of Steps 1 to 3. Step 4 has influenced the final scheme design, including proposed bunding and planting.
- 2.14 Information on designated heritage assets was obtained from English Heritage's National Heritage List, an online database of all designated heritage assets in England.
- Scoping*
- 2.15 The Zone of Theoretical Visibility for the construction phase of the development (i.e. the maximum area of theoretical visibility), prepared as part of the associated Landscape and Visual Impact Assessment, was used to determine those designated heritage assets which might be affected via alteration to their setting (Figure 9). The extent to which the proposed development might alter the settings of those identified assets was then carried out via a programme of assessment, including a review of information obtained during field survey, GIS analyses, review of current and historic OS mapping, Google Earth, Google Maps and information provided by the National Heritage List for England.
- 2.16 The form and location of the proposed development, means that only a small number of assets / groups of assets are anticipated to feature the final development

within their settings, while a larger number of assets / groups of assets will temporarily (i.e. during construction) feature the proposed development – specifically the winding gear towers – within their settings.

- 2.17 For the purposes of this assessment of settings, a larger study area was adopted. All Scheduled Monuments, Grade I and II* Listed Buildings and Conservation Areas within the ZTV within 6km of the proposed surface development, and any Grade II Listed Buildings within the ZTV within 2km of the proposed surface development have been assessed.
- 2.18 Given their location within the landscape, many of these assets share a similar setting, range of views and set of landscape associations. As such, they have often been assessed in groups from appropriate and accessible central vantage points. Ten groups of assets were examined in total. These are presented in Table 2.1 below.

Ref. No. (Figure 9)	Asset(s) represented	Approx. distance from MTS Site
1	Two Grade II Listed Buildings, known as Plantation Cottages	850m
2	Stanghow House and its associated walls and gatehouses, both Grade II Listed; Low House Farmhouse, Grade II Listed	900m
3	Moorsholm Conservation Area	1.5km
4	Liverton Conservation Area	3.5km
5	Five Scheduled post-medieval standing stones	700m
6	Barn / cart shed west of Lodge Farmhouse, Grade II Listed	1.6km
7	Red Hall Farmhouse, Grade II Listed	1.2km
8	Six Scheduled prehistoric barrows near Black Howe	1.7km
9	A Scheduled prehistoric barrow on Brown Hill	2.6km
10	Four Scheduled prehistoric barrows, a Scheduled Bronze Age urnfield, a Scheduled cup-marked rock, and a Scheduled prehistoric hut circle settlement on Moorsholm Moor and Dimmingdale	2km
11	Three Scheduled prehistoric barrows on Haw Rigg	3.5km

Ref. No. (Figure 9)	Asset(s) represented	Approx. distance from MTS Site
12	Two Scheduled prehistoric barrows and a Scheduled Bronze Age urnfield on Siss Cross Hill	3.9km
13	Three Scheduled prehistoric barrows, a Scheduled cross dyke, a Scheduled late prehistoric settlement and enclosure, and a Scheduled prehistoric settlement on Gerrick Moor	3.7km

Table 2.1 Assessed heritage assets within 6km ZTV

2.19 The remaining designated heritage assets within the study area are located outside the ZTV and are not, therefore, considered to include the proposed development site (including the temporary winding gear towers) as part of their setting. The locations of these assets are depicted, along with the ZTV, on Figure 9.

2.20 The results of the settings assessment are presented in Section 7 of this report. Photomontages prepared as part of an associated Landscape and Visual Impact Assessment were utilised during the settings assessment (Part 3, Chapter 12 of the ES).

Setting Assessment and Significance

2.21 The significance of a heritage asset is defined in NPPF as the value of a heritage asset to this and future generations because of its heritage interest. The assessment of significance within this report has been undertaken in accordance with the policies and guidance contained in *Conservation Principles* (English Heritage, 2008). The significance of a heritage asset (termed 'place' within Conservation Principles) is defined with reference to four areas of value:

- Evidential value, derived from *"the potential of a place to yield evidence about past human activity"* (English Heritage 2008, 28) and primarily associated with physical remains or historic fabric;
- Historical value, derived from *"the ways in which past people, events and aspects of life can be connected through a place to the present"* (ibid 28). This can derive from particular aspects of past ways of life. Illustrative historical value provides a direct (often visual) link between past and present people, while associative historical value provides an association with notable families, persons, events or movements.

- Aesthetic value, derived from sensory and intellectual stimulation and including design value, i.e. *“aesthetic qualities generated by the conscious design of a building, structure or landscape as a whole”* (ibid 30). It may include its physical form, and how it lies within its setting. It may be the result of design, or an unplanned outcome of a process of events; and
- Communal value, derived from *“the meanings of a place for the people who relate to it”*. Communal value derives from the meanings that an historic asset has for the people who relate to it, or for whom it’s in their collective experience or memory. It may be commemorative or symbolic, such as meaning for identity or collective memory (ibid 31).

2.22 The significance of a heritage asset is typically derived from a combination of some or all of these values, and the setting of a heritage asset can contribute to, or detract from, any of these four values (EH 2011, 32). Within the settings assessment below (Section 7), the contribution setting makes to the significance of the asset is specifically discussed in terms of how it contributes to, or assists in the ability to appreciate, these four forms of value.



3 PLANNING POLICY CONTEXT

Planning policy and guidance context

3.1 The assessment has been written within the following legislative, planning policy and guidance context:

- Ancient Monuments and Archaeological Areas Act (1979)
- Town and Country Planning Act (1990)
- Planning (Listed Buildings and Conservation Areas) Act (1990)
- National Planning Policy Framework (2012)
- National Planning Policy Guidance (April 2014)
- PPS5 Practice Guide (2012)

National Planning Policy Framework

3.2 The NPPF sets out national planning policy relating to the conservation and enhancement of the historic environment. It defines the historic environment as *'all aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.'*

3.3 Individual aspects of the historic environment are considered heritage assets: *'buildings, monuments, sites, places, areas or landscapes identified as having a degree of significance meriting consideration in planning decisions, because of their heritage interest.'*

3.4 Heritage assets include designated sites and non-designated sites, and policies within the NPPF relate to both the treatment of assets themselves and of their settings, both of which are a material consideration in development decision making.

3.5 Key tenets of the NPPF are that:

- when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be;
- significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification.

Substantial harm to or loss of a Grade II Listed building, Park or Garden should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably Scheduled Monuments, Protected Wreck Sites, Battlefields, Grade I and II* Listed buildings, Grade I and II* Registered Parks and Gardens, and World Heritage Sites, should be wholly exceptional;

- where a proposed development 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; and
- with regard to non-designated heritage assets a balanced judgement will be required having due regard to the scale of any harm or loss and to the significance of the heritage asset affected.

3.6 Local planning authorities are urged to request applicants to describe the significance of any heritage assets affected by a proposed development, including any contribution made by their setting. The level of detail required in the assessment should be *'proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.'*

Local planning policy

3.7 Local planning policy is set out within the Development Policies DPD of the Redcar and Cleveland Local Development Framework (2007). This will soon be replaced by the new Redcar and Cleveland Local Plan, currently under consultation. The LDF (2007) provides the following in relation to heritage:

- DP9 Conservation Areas, which states that: *'Development within or otherwise affecting the setting of a conservation area will only be permitted where it preserves or enhances the character or appearance of the conservation area. Development must:*
 - a) Respect existing architectural and historic character and associations by having regard to the positioning and grouping, form, scale, detailing of development and the use of materials in its construction;*
 - b) Respect existing hard and soft landscaping features including areas of open space, trees, hedges, walls, fences, watercourses and surfacing and the special character created by them; and*
 - c) Respect historic plot boundaries and layouts.'*

- DP10 Listed Buildings, which states that *‘Any development affecting the setting of a listed building will only be permitted if the proposal:*
 - e) Preserves or enhances its special character as a listed building;*
 - f) Protects its immediate setting including the space(s) around the building and the hard and soft landscaping including trees, hedges, walls, fences and surfacing; and*
 - g) Retains historic plot boundaries and layouts.’*

- DP11 Archaeological Sites and Monuments, which states that *‘Development that would adversely affect important archaeological sites or monuments will not be approved. Development that may affect a known or possible archaeological site will require the results of an archaeological evaluation to be submitted as part of the planning application. Development that affects a site where there is evidence that archaeological remains may exist will only be permitted if:*
 - a) Any archaeological remains are preserved in situ; or*
 - b) Where in situ preservation is not required, or appropriate, satisfactory provision is in place for archaeological investigation, recording and reporting to take place before, or where necessary during development. Where archaeological investigation, recording and reporting has taken place it will be necessary to publish the findings within an agreed timetable.’*



4 BASELINE SURVEY

Introduction

- 4.1 This section provides an overview of the historical and archaeological background of the study area, in order to provide a better understanding of the context and significance of the historic environment resource that may be affected by development. Significance and potential significance are discussed in Section 5.

Geology

- 4.2 The underlying geology within the site largely comprises Scalby Formation sandstone, siltstone and mudstone. The north-western tip of the site, however, is underlain by bands of Saltwick Formation and Cloughton Formation sandstone, siltstone and mudstone, and Scarborough Formation sandstone and limestone. All of these substrates are sedimentary bedrocks of Jurassic origin (British Geological Survey 2014). More recent, superficial deposits are also recorded within the proposed site. These largely comprise Devensian – Diamicton Till formed up to 2 million years ago (British Geological Survey 2014).
- 4.3 Monitoring of GI test pit excavation within the proposed site recorded the natural substrate as brown boulder clays, sandy silts, coarse gravels, and weathered sandstone identified generally at c.0.2m-0.7m below present ground level. In some areas a grey brown silty clay subsoil, 0.09m to 0.32m thick, was observed to overlie the natural clay. Topsoil overlying the entire site, varied in depth from c.0.15m to c.0.42m.

Summary of designated heritage assets

- 4.4 No World Heritage Sites, sites included on the Tentative List of Future Nominations for World Heritage Sites (January 2012), Grade I or II* Listed Buildings, Registered Parks and Gardens or Registered Battlefields are located within the study area.

Scheduled Monuments (Figure 2 and Appendix A)

- 4.5 Six Scheduled Monuments are located within the 2km study area (see Figure 2 and Appendix A). Five of these are prehistoric burial mounds or 'barrows' on Stanghow Moor, c.1.7km south of the proposed site (Figure 2, **1, 3-6**). Barrows are funerary monuments dating from the Late Neolithic period to the Late Bronze Age, with most examples belonging to the period 2400-1500 BC. Often occupying prominent

locations, they were constructed as earthen mounds, sometimes ditched, and covering single or multiple burials. They occur either in isolation or grouped as cemeteries and often acted as a focus for subsequent burials. Often superficially similar, they exhibit regional variations in size and form and embody a diverse range of burial practices.

- 4.6 The remaining Scheduled Monument relates to medieval Buck Rush Farm, located c.1.6km north-east of the proposed site (Figure 2, **2**). The medieval farmstead is situated to the west of a steep-sided wooded valley, surviving as a series of earthworks located on a spur of land with ground sloping to the east, west and south. Such dispersed farmsteads were a distinctive form of medieval settlement, which stood in contrast to the typical nucleated village.

Listed Buildings (Figure 2 and Appendix B)

- 4.7 There are 27 Grade II Listed Buildings located within the study area. Those of greatest relevance to this assessment are: Plantation Cottages just beyond the north-western boundary of the proposed site (Figure 2, **2** and **25**), Low Farmhouse and Stanghow House and its associated Listed walls, located just beyond the north-eastern boundary of the proposed site (Figure 2, **8**, **3** and **26** respectively), and Ticksey Howe Boundary Stone, c.150m south of the proposed site (Figure 2, **4**). There are no Listed Buildings within the proposed site itself.

Conservation Areas (Figure 2)

- 4.8 Moorsholm Conservation Area, designated in May 1994, is located c.700m east of the proposed site. The Conservation Area includes the greatest concentration of those architectural, archaeological, historic and landscape features that contribute to the hamlet's special character and stretched from Toad Hall Arms to the Guisborough Road. The Conservation Area contains a single Listed Building: a Grade II Listed forge in the east of the hamlet.

- 4.9 The Conservation Area Appraisal (Redcar and Cleveland Council, 2011) contains the following information:

'The Conservation Area straddles an ancient byway interconnecting several East Cleveland settlements. An upland hamlet, it is just 180 metres above sea level, located on the gently sloping, north-facing incline of the North York Moors. It lies along on a rigg or spur formed by the wooded, ravine-like valleys of Swindale Beck

and Mill Beck lying on either side, to the east and west. Moorsholm's location on the edge of an extensive moor gives rise to its name.

The natural, physical and geological features of the broader area have also influenced the character of Moorsholm's built environment, providing building timber, yellow/brown/grey sandstones and clay suitable for making the orange/red bricks and pantiles, all characteristic of the older buildings in the conservation area. In the 19th century the development of the railways brought an end to dependence on indigenous materials by giving access to an eclectic range of building materials from diverse and distant sources, including roofing slates from Cumbria and North Wales.'

Prehistoric (pre AD 43)

- 4.3 Given the proximity of the proposed site to the large swathe of open moorland to the south, there are a number of prehistoric barrows – burial mounds – located within the study area. The majority of these can be dated to the Bronze Age (2400-700BC), when the tradition was at its peak. Four Bronze Age burial mounds are located on Stanghow Moor, south-west of the proposed site (Figure 3, **1**, **4**, **5** and **9**). Single barrows are also recorded on Low Moor, c.1.3km west of the proposed development site (Figure 3, **7**), and Moorsholm Moor, c.175m south of the proposed site (Figure 3, **6**). Beyond the moorland, two further barrows are recorded at Ridge House, c.750m west of the proposed site (Figure 3, **2**), and Glap Howe, c.1.2km north of the proposed site (Figure 3, **3**).
- 4.4 Also recorded on Stanghow Moor is a cairnfield, c.1.1km south-west of the proposed site (Figure 3, **12**). Cairnfields are concentrations of cairns – mounds of stone – located proximate to one another. They often consist of clearance cairns (piles of stone cleared from the surrounding land-surface to improve its agricultural quality), and on occasion their distribution pattern can even be seen to define field plots. However, as in this case, funerary cairns are also frequently incorporated. The earliest known clearance cairns date to the Neolithic period (c.4000-2400 BC), although the majority of examples appear to be the result of Bronze Age field clearance. This cairnfield comprises a concentration of around twenty dispersed cairns on a gentle north-west facing slope. One of the stones associated with these cairns appears to bear a 'cup mark', a prehistoric artistic carving.

- 4.5 The other prehistoric assets recorded within the study area, all comprise 'standing stones', single or multiple blocks of upright stone, erected to mark important places and/or events. A group of five standing stones is located on Old Castle Hill on Moorsholm Moor, c.2m south of the proposed site (Figure 3, **8**). A further group of three standing stones is located on High Moor, c.1.6km south-west of the proposed site (Figure 3, **11**), though there is some suggestion that these may be medieval in origin.
- 4.6 No prehistoric assets are recorded in the HER or EHA databases within the proposed site itself. Field survey, undertaken as part of the present assessment, identified two possible mounds to the north of the proposed site. One of these is located on Butts Hill, adjacent to the remains of a stone-built drain of probable 19th century origin (Figure 3, **A**). The other is located c.250m to the north-east of this, south of the modern reservoir (Figure 3, **B**). Both of these mounds are apparent on the LiDAR survey (Figure 8), and field survey has identified relatively subtle earthworks in these locations. Both may be natural in origin, though their hilltop locations, and the known prehistoric activity in this area, raise the possibility that they may be archaeological.
- 4.7 A small number of flints have also been recovered within the south of the proposed site, in proximity to Kateridden Farm. Flint tools are common background finds. In such low quantities, they are not indicative of substantive on-site occupation, only a typical background level of prehistoric activity.

Roman (AD 43 – AD 410) and Early medieval (AD 410 – 1066)

- 4.8 No Roman period remains are recorded within the study area, including within the proposed site itself. Evidence for Roman activity in this region is comparatively sparse, and there is considered to be limited potential for any Roman period remains to lie undiscovered within the proposed site.
- 4.9 There is similarly little evidence for early medieval activity within the study area, the only recorded asset being the original settlement at Moorsholm, c.1.2km east of the proposed site (Figure 3, **14**). Settlement at Moorsholm is first recorded in the Domesday Book of AD 1086. Today there is nothing surviving from this period, and the settlement conforms to the typical medieval form of two rows of farmsteads facing each other over a broad green.

- 4.10 No early medieval heritage assets are recorded within the proposed development site itself, and none would be anticipated to survive undiscovered on the basis of the current evidence.

Medieval (AD 1066 – 1539)

- 4.11 Outside of the moorland, much of the study area, and the wider region, were in agricultural use during the medieval period. The remains of relict field systems, including boundaries and ridge and furrow, are widespread, including within the proposed site (Figure 4). Agriculture continued to form an important part of the local economy through into the post-medieval period, when the landscape was also heavily exploited for industry, and was increasingly settled. Agriculture and industry remain key economic mainstays in this area to this day, and the settlement pattern has been heavily influenced by the establishment of 19th century mining towns within the landscape of medieval and post-medieval farmland.
- 4.12 Other than Moorsholm (otherwise known as Great Moorsholm), other medieval settlements located within the study area comprise Stanghow, immediately north of the proposed site (Figure 3, **13**) and Kateridden, immediately west of the proposed site (Figure 3, **15**). The shrunken village of Stanghow was first mentioned in AD 1241. The village green is still evident, and associated earthwork features are also visible upon the green on aerial photographs. The place-name Kateridden derives from 'Kateriding', from the Old Norse personal name 'Kati' and literally meaning 'Kati's clearing'. It is first recorded in the parish of Skelton in AD 1273, though there is nothing surviving of this period above-ground; the present-day farmhouse is post-medieval / modern in date.
- 4.13 The course of a possible medieval road is recorded in the HER as running north-west to south-east from Kateridden farmstead, through the proposed site (Figure 3, **23**). The suggested line of the road is based upon an account by Hayes, who notes that there is a medieval document of 14th / 15th century date describing a road near the line of the present day Guisborough-Whitby road (A171). No other evidence for the projected line of the road is provided in the HER and there is presumably no further basis for its depicted hypothetical location within the site. The significance and potential effects of the development upon this possible road are discussed further in Sections 5 and 6 of this report.

- 4.14 A small circular earthwork is identifiable in the field to the south-west of Kateridden farmstead, within the proposed site (Figure 3, **16**). This feature is recorded in the HER as having first been noted on aerial photographs taken in 1998, accentuated by snowfall. Field survey and LiDAR survey undertaken as part of the present assessment have identified only remnant ridge and furrow in this area (Figure 8), though it may be that the proposed remains are too subtle and are visible only under certain conditions. The possible earthwork is undated, but given the medieval origins of Kateridden, it may also be medieval. The recent field survey also identified a series of possible earthworks to the north of the present farmstead. If they are artificial, then the form of these earthworks suggests that they may be remnant building platforms, possibly associated with settlement. All of the possible archaeological features in proximity to Kateridden farm are discussed further in Sections 5 and 6 of this report, in relation to significance and potential impact.
- 4.15 Two medieval deer parks are located within the study area. The first of these, Margrove Park, also known as Maggery, Margiffe, or Maugrey, is located c.1.5km west of the proposed site (Figure 3, **17**). The land at Margrove Park was emparked and given to Guisborough Priory by Ralph de Hutton during the 14th century, with records of 1349 and 1361 both referring to a 'Maugery Park with deer'. The second medieval deer park within the study area is Kilton Deer Park, which was attached to Kilton Castle, c.2km north-east of the proposed site (Figure 3, **18**). The extent of this park is uncertain. It was described in 1323 as '*a certain park without beasts of the chase in which there is no profit apart from the herbage thereof*'.
- 4.16 The site of Holly Well is recorded on the first edition Ordnance Survey map, south-east of Well House, c.2km north-west of the proposed site (Figure 3, **19**). An earlier documentary source of AD 1301, refers to a 'Hallikeld Cote' meaning 'Cottage near the Holy Well' in this area, and may relate to this same well. The only other medieval heritage asset recorded within the study area is a medieval trackway or 'trod', which Evans records running along the course of Freeborough Road and through Moorsholm (Figure 3, **20**). The trackway is posited to have run from Brotton to White Cross and there are several known surviving lengths of flagstones.

Post-medieval (1540 – 1800) and Modern (1801 – present)

Industrial heritage (Figure 5 and Appendix D)

- 4.17 The vast majority of the post-medieval and modern activity recorded within the study area, and within this area of north-east Yorkshire more generally, relates to industry

(Figure 5). In particular, the local area supported a thriving mining industry, which reached its peak during the 19th century. Of particular importance was the extraction of ironstone, which is found in great quantities locally. Other extracted minerals were sandstone and alum.

- 4.18 Four principal ironstone mines were in operation within the study area by the 19th century, located at Aysdalegate, c.1.8km west of the proposed site (Figure 5, **1**); Stanghow, c.1.9km west of the proposed site (Figure 5, **2**); Lingdale, c.1km north of the proposed site (Figure 5, **3**); and Kilton, c.750m north-east of the proposed site (Figure 5, **4**). These mines partially encircle the proposed site to the west and north, and were responsible for stimulating the growth and development of many of the local mining towns such as Boosbeck and Lingdale.
- 4.19 As well as mines, a large number of quarries (30 in total) also operated within the study area (Figure 5, **5-34**), the majority of which are clustered to the west and south of the proposed site. A 19th century quarry in Stanghow, is located just beyond the northern boundary of the proposed site (Figure 5, **28**). Another 19th century quarry was located at Seaton Hill, c.500m north-west of the proposed site (Figure 5, **24**).
- 4.20 A great deal of associated infrastructure was required to support the local extraction industry. Key elements of this infrastructure included railways and tramways and their associated stations, which were used to transport both miners and mined material (Figure 5, **42-48**). Principal amongst these were the Kilton Thorpe Branch, which passed through Boosbeck, c.2.2km north-west of the proposed site (Figure 5, **42**), parts of Paddy Waddells Railway, and a number of smaller mineral transport lines.
- 4.21 Other key industrial sites located within the study area included mills, brickworks and smiths. Closest to the proposed site is an 18th century watermill, located at the confluence of Dale Beck and Swindale Beck, c.500m east of the proposed site (Figure 5, **50**). The site is recorded on 1856 OS mapping, with two mill races, one leading from either beck. The site of another watermill is recorded in the HER as evident on Jeffries map of 1772, just south of the proposed eastern site boundary (Figure 5, **52**). Given the location of this supposed site, and the known inaccuracies of pre-19th century mapping, it is considered unlikely that there was ever a watermill at this location, and it may be that the mill referred to was further to the south on Dale Beck.

4.22 Other industrial sites comprise Stanghow Firs, c.200m west of the proposed site (Figure 5, **35**), Moor house, c.350m west of the proposed site (Figure 5, **36**), a blacksmith's workshop, just beyond the northern boundary of the proposed site (Figure 5, **37**), and a former dam across Daves Beck, c.150m east of the proposed site (Figure 5, **41**).

4.23 No post-medieval or modern industrial sites are recorded within the proposed site itself.

Military heritage (Figure 6 and Appendix E)

4.24 The 28 military sites recorded within the study area attest to the rich 19th and 20th century military heritage of this area of north-eastern England. The earliest of these are 19th century magazines, located c.2km west and c.2km north-east of the proposed site (Figure 6, **1** and **2** respectively). The remainder relate to World War Two (WWII). Of these the majority (20) are former petroleum warfare sites (Figure 6, **3-5, 9-17, 19-25, 27-28**). Otherwise known as a 'fougasse', a petroleum warfare site comprised the location of an improvised anti-tank mine, which were used extensively in home defence during WWII. The mines were usually constructed from petroleum drums dug into the roadside at strategic locations and camouflaged. When detonated they would shoot a flame c.3m wide x c.30m long. The nearest of these to the proposed site was located in Stanghow, just beyond the north-western corner (Figure 6, **20**).

4.25 Other WWII sites identified within the study area comprise a pillbox located c.200m west of the proposed site (Figure 6, **26**); a home guard store located just beyond the south-west corner of the proposed site (Figure 6, **18**); an anti-aircraft gun emplacement located south of Moorsholm, c.1.8km south-east of the proposed site (Figure 6, **6**); and several bomb craters located c.1.2km south-west of the proposed site (Figure 6, **7** and **8**).

Other post-medieval / modern heritage assets

4.26 The majority of the remaining non-industrial post-medieval / modern heritage assets identified within the study area are trackways. Principle amongst these is Quakers' Causeway, a partially paved trackway running from Birk Brow to Commondale, which crosses the moorland c.1.7km south-west of the proposed site (Figure 3, **26** and **30**). A series of unworked stones running along part of the course of Quakers' Causeway probably served as road markers (Figure 3, **21**), and a deep hollow running upslope to the east of Birk Brow, c.1km south-west of the proposed site

(Figure 3, **31**), joins Quakers' Causeway and may well have been a related trackway. Uxto Lane, part of the stone-lined causeway or trod to the north of Moorsholm, is also considered to be post-medieval (Figure 3, **28**).

Development within the site

- 4.27 There is no evidence for land use, settlement or agricultural activity within the site during the prehistoric, Roman or early medieval periods; whether moorland, woodland or both, it is considered unlikely to have been under cultivation at this time. The preponderance of remnant medieval field systems demonstrates that the proposed site was in agricultural use by the medieval period.
- 4.28 The fields within the proposed site have a regular, 'planned' appearance, suggesting that they probably represent the enclosure of previous medieval agricultural field systems (described previously). The greater part of Redcar and Cleveland is known to have been enclosed during the process of early enclosure, i.e. before AD 1720 (R&C 2010:40). While there is no historic mapping available as confirmation, the nature of the landscape suggests that this is likely to have been the case for the land within the proposed site.
- 4.29 The earliest available mapping for the proposed site is the 1856 1:10,560 OS Map, which depicts the proposed site in agricultural use, as today (Figure 7). At this time the proposed site was divided into a larger number of fields than at present. Kateridden Farm is labelled as 'Kate Ridding', and Little Swindale Woods, the plantation to the east of the south-eastern site boundary, had yet to be established. There are otherwise few differences between the layout and land use depicted within the proposed site during the mid-19th century, and the layout and land use within the proposed site today.
- 4.30 By the time of the First Edition 1:2,500 OS Map of 1894, the only recorded change was the establishment of Little Swindale Wood immediately east of the proposed site. Similarly few changes had occurred by 1915 and the production of the Second Edition 1:2,500 OS Map, which depicts a small paddock and trackway in the north of Kateridden Wood as the only additions. Subsequent historic mapping records only episodes of felling in the north of Kateridden Wood, as well as the pasture to the south of the woodland becoming increasingly scrubby.

- 4.31 Examination of aerial photography from the 1940s onwards has confirmed the minimal changes in layout and land use within the site to the present day, and records that the arrangement of field boundaries within the site had achieved its present form by the 1990s. Examination of aerial photography also identified a stone-built drain on Butts Hill in the north of the site, and this was confirmed by field survey (Figure 3, **A**). Field survey also identified a mound (possibly a barrow) adjacent to the stone drain, and another possible barrow further to the north-east, south of the modern reservoir (Figure 3, **B**). LiDAR survey shows possible, though indistinct features, in the locations of both of these mounds, both corresponding with high ground overlooking southerly slopes (Figure 8).
- 4.32 No further heritage assets, or aspects of historical or archaeological interest were identified on historic mapping, aerial photography or during field survey, within the proposed site.



5 SIGNIFICANCE AND POTENTIAL SIGNIFICANCE

Introduction

5.1 This section assesses the significance of any affected heritage assets identified within, and within proximity to, the proposed site. This section also discusses the potential for encountering unknown buried archaeological remains within the proposed site and anticipates their likely significance.

Significance of recorded and potential heritage assets

5.2 There are a small number of heritage assets / features of possible archaeological interest within / within proximity to the proposed site. These are:

- Possible remains associated with Kateridden farmstead (Figure 3, **15, 16**)
- The remains of medieval field systems (Figure 4; Figure 8)
- The course of a possible medieval road (Figure 3, **23**)

*Possible medieval remains at Kateridden farmstead (Figure 3, **15 and 16**)*

5.3 Although the present buildings comprising Kateridden farmstead are post-medieval / modern in date, settlement is documented here from the early-13th century. As such, it is possible (if not probable) that remains associated with the original settlement lie buried somewhere in the vicinity of the present farm. This includes within the west of the proposed site, though there is no record of any such associated remains in either the HER or EHA databases, and no traces have been identified on LiDAR or during GI test pitting.

5.4 A series of earthworks, possibly building platforms, were identified during field survey within the small, narrow field, running north-east to south-west from the north-eastern boundary of Kateridden Farm. These earthworks are rectilinear and they respect the surrounding boundaries, which are traceable to at least the mid-19th century. The south-western part of this field is outside the proposed site boundary, but the north-eastern end, which contains one of the identified earthworks, is within the proposed site boundary (Figure 8). The fact that the fields in this area are thought to represent post-medieval enclosure, and the fact that these earthworks would appear to respect those boundaries, suggests that, if they are building platforms, then they are likely to have been ancillary post-medieval / modern

agricultural structures associated with Kateridden Farmstead. There remains the possibility, however, that they may be medieval in origin.

- 5.5 The possible circular earthwork to the south-west of the farm (identified in the HER as having been recorded on aerial photographs: Figure 3, **16**), is undated, but it may be medieval and it may relate to the former settlement. No trace of the earthworks was identified during field survey and neither were they identified during the examination of aerial photography or LiDAR, undertaken as part of the present assessment (Figure 8).
- 5.6 Depending on their nature and level of survival, medieval settlement remains associated with Kateridden might be of archaeological significance, as they would have the potential to inform our understanding of the development of medieval Kateridden itself, as well as rural medieval settlement more generally, during the 11th to 16th centuries.

Medieval field systems (Figure 4)

- 5.7 Medieval field systems are located within the south of the proposed site. These systems can be seen on aerial photography, and have been confirmed in the field as part of the present assessment. The remains largely comprise remnant ridge and furrow earthworks, most prominent in the fields to the east of Kateridden farmstead. Ridge and furrow resulted from a distinctive form of ploughing practiced from the early medieval period through, in some areas, until the 19th century. It involved ploughing fields into a series of undulating ditches and banks, which had the effect of improving drainage for both pasture and arable, and improving crop yield. The resulting earthworks form a distinctive series of parallel lines, the earlier tending to be more S-shaped due to the use of oxen-drawn ploughs, and later examples tending to be straighter due to the use of horse- or steam- drawn ploughs. Those surviving remnants within the proposed site would appear to be medieval in character.
- 5.8 The vestiges of former hedgerows were also identified within the south of the proposed site on aerial photographs, and these too were confirmed during the field survey. There may also be associated buried field boundary ditches, dis-used (i.e. back-filled) at the point of enclosure of the fields during the subsequent post-medieval period.

- 5.9 Medieval agricultural features such as these are not uncommon and would be anticipated in areas, such as the proposed site, which supported intensively administered medieval and post-medieval agriculture. Knowledge of the distribution of medieval / post-medieval field systems is of value as it allows for the mapping of historic landscapes and informs understanding of the sequence of development of those landscapes. Archaeologically, however, the remains of former field boundaries (manifest as back-filled ditches, typically free of archaeological material) and remnant ridge and furrow, have little to contribute to our knowledge of the medieval period, and such remains would be of limited heritage significance.

Possible medieval road (Figure 3, 23)

- 5.10 The majority of medieval roads comprised tracks with little or no formal surfacing, often in the form of a hollow way or 'sunken road' worn into a depression by human and animal traffic. There is no evidence for any such feature along its projected course, or anywhere else within the proposed site; this was confirmed during field survey, examination of LiDAR and examination of aerial photographs.
- 5.11 Though it is considered highly unlikely, if the remains of this purported medieval road should lie buried within the proposed site, then they would likely be of some archaeological significance. Given the typically informal nature of medieval roads (as described above), however, the road's principal interest would derive from knowledge of its location within the landscape and in relation to other proximate medieval sites, such as churches and settlements, rather than from its physical remains, which would provide little, if any, further information.

Other potential features

- 5.12 The proximity of the moorland to the proposed site, and the fact that a small quantity of flint is recorded in the HER as having been recovered from within the west of the proposed site, both raise the potential for prehistoric remains to survive undetected. However, there is no evidence for substantive prehistoric activity within the proposed site, and deep ploughing associated the known long-term agricultural use of the site from at least the medieval period through until the present day would be likely to have disturbed any such remains. There is a demonstrably greater potential for unknown medieval and post-medieval agricultural remains to lie buried within the proposed site. Such features would be of limited archaeological significance.

- 5.13 A programme of phased geophysical survey (magnetometry) will be undertaken within the proposed site in order to test the potential for buried archaeological anomalies, and to better characterise the nature, extent and significance of any archaeological remains that may lie as yet undetected. The geophysical survey should also help to confirm the existence, or not, of remains potentially associated with medieval settlement at Kateridden (including the possible earthwork: Figure 3, **16**), remains associated with the projected course of the medieval road (Figure 3, **23**), and any buried remains associated with the known medieval field systems in the south of the proposed site (Figure 4).



6 POTENTIAL DEVELOPMENT EFFECTS ON BURIED ARCHAEOLOGY

Summary of development proposals

- 6.1 The development proposals comprise the construction of the shaft cover building (20m x 20m x 8m high) and shaft platform, an office and welfare compound, a car park, an access road, a haul road, a laydown area, small earthen screening bunds, attenuation ponds, and the two main spoil storage bunds, c.8m high, as well as other 'small' infrastructure such as fencing and gates. The proposals also include the widening and improvement of the A173, to the north-west of the proposed site to accommodate the new access road. The proposed new infrastructure is depicted in Part 1, Chapter 3 of the Environmental Statement, 'Description of the Proposed Scheme'.
- 6.2 The construction of the aforementioned infrastructure will include the stripping of topsoil and subsoil from all working areas, including beneath the spoil storage bunds, the excavation of the main shaft, and the excavation of foundation trenches for built infrastructure, roads and associated service-lines.

Potential physical development effects

- 6.3 Depending on their location and depth, possible archaeological remains associated with Kateridden farmstead (Figure 3, **15**), including the possible circular earthwork (Figure 3, **16**), and any remains associated with the possible medieval road (Figure 3, **23**), might be truncated, or removed, by topsoil/subsoil stripping prior to deposition of the southern spoil storage bund. Any such remains in this area (that are not removed by topsoil/subsoil stripping) might also be affected by compaction, i.e. being crushed by the weight of the proposed spoil bund, as well as by construction machinery tracking across stripped surfaces. If any remains associated with the medieval settlement and / or medieval road do survive in this area then these would probably be of archaeological significance. An appropriate programme of mitigation would be required, in liaison with the Local Planning Authority's archaeological advisor, to ensure that they are recorded to a suitable standard.
- 6.4 The medieval field systems in the south of the site would probably be truncated, or removed, by the topsoil/subsoil stripping prior to construction of the shaft platform, offices, welfare compound, car park, screening bunds and haul road. Deeper excavations (e.g. foundation trenches) associated with all of these elements might

also truncate, or remove, remains associated with these field systems. In particular, a small area of the low earthworks comprising the remnant ridge and furrow to the east of Kateridden farm would be removed during the construction of the haul road and the temporary storage bunds associated with the haul road. Again, the remains of these field systems are of limited archaeological significance, and recording during archaeological monitoring (e.g. in the form of a watching brief), agreed with the Local Planning Authority's archaeological advisor, would be an appropriate level of mitigation.

- 6.5 Should any other as yet unknown archaeological remains survive buried within the site, then, depending on their location and depth, they too might be affected by any of the construction activities described above (paragraph 6.1). As discussed, buried archaeological remains are vulnerable to the effects of topsoil/subsoil stripping and trenching, which may result in their truncation or removal. Buried archaeological remains may also be affected by compaction, i.e. being crushed by the weight of the proposed spoil bunds, and by any changes to the present moisture content of the underlying soils as a result of changes to on-site drainage; this might lead to either the 'de-watering' or the saturation and potential 'washing out' of fragile buried remains. Again, agricultural remains of medieval to modern date would be anticipated, but these would be of limited archaeological significance.



7 SETTING OF HERITAGE ASSETS

7.1 An assessment of potential development effects resulting from possible alteration to the settings of designated heritage assets within 6km of the site was undertaken (see Section 2 above for specific methodology). The majority of the designated assets located within the ZTV (Figure 9) would sustain either no harm or only a small level of temporary harm (i.e. as a result of the visibility of the winding gear towers during construction) resulting from changes to their setting. The results of the settings assessment are summarised in Table 7.1 below. Effects are discussed in terms of development construction (temporary), which will last 39 months, and operation (permanent). Details on the duration of the construction phase are contained within Part 1, Chapter 3 of the Environmental Statement, 'Description of the Proposed Scheme'.

Ref. No.	Assets	Development effects
1	Two Grade II Listed Buildings, known as Plantation Cottages, c.850m north of the proposed development	<p><i>Construction</i></p> <p>The significance of these assets primarily derives from their historic value, as well as from their historical and visual association with the other buildings within the village of Stanghow. Views to the north and north-east across the historic industrial / mining landscape also make a positive contribution to the assets' significance. These will remain unaffected. Views to the south, towards the proposed development are largely blocked by a combination of built form, and the natural topography, which drops away to the south of Low Stanghow Road creating a blind summit. The tops of the winding gear towers will probably be visible in the distance, and this will result in a change to the wider setting of the assets. The construction phase of the development would, however, have no temporary adverse effect on the heritage significance of the assets.</p> <p><i>Operation</i></p> <p>Given the limited scale of the final development, the intervening distance, and the screening effect of the built form and topography to the south, no part of the proposed operational development is likely to be visible, or otherwise appreciable, from these assets. The development will not form part of the setting of the assets and there will, therefore, be no adverse effect on the assets' heritage significance, which derives primarily from their historic value, historical associations and key northerly views across the historic industrial landscape.</p>
2	Stanghow House and its associated walls and gatehouses, both Grade II Listed; Low House Farmhouse, Grade II Listed, c.900m north-east of the proposed development	<p><i>Construction</i></p> <p>The significance of these assets primarily derives from their historical and aesthetic value, as well as from their historical and visual associations with each other, the surrounding non-Listed historic farm buildings in the east of Stanghow, and the undulating pasture fields immediately south and south-east of the assets. Views further to the south-east towards Moorsholm also make a positive</p>

Ref. No.	Assets	Development effects
		<p>contribution to the assets' significance. These will remain unaffected. Views to the south, towards the proposed development are largely blocked by a combination of the naturally undulating topography. The tops of the winding gear towers will probably be visible in the distance, and this will result in a change to the wider setting of the assets. The construction phase of the development would, however, have no temporary adverse effect on the heritage significance of the assets.</p> <p><i>Operation</i> Given the limited scale of the final development, the intervening distance, and the screening effect of the topography to the south of the assets, no part of the proposed operational development is likely to be visible, or otherwise appreciable, from these assets. The development will not form part of the setting of the assets and there will, therefore, be no adverse effect on the assets' heritage significance, which derives primarily from their historic value, historical associations and south-easterly views towards Moorsholm.</p>
3	Moorsholm Conservation Area, c.1.5km east of the proposed development	<p><i>Construction</i> A large proportion of the significance of the Conservation Area derives from its evidential value, as the remains of the original 12th century settlement, house plots, backyards or 'garths', roads and the central green are preserved beneath the present-day hamlet. Key views within the Conservation Area are along the high street, to the north across the historic industrial landscape, to the east towards Mill Beck and its surrounding woodland, and to the south towards Freebrough Hill. Views towards the proposed development are largely blocked by tall hedges along the western boundary of the Conservation Area, and by the woodland surrounding Swindale Beck. Views of the tops of the winding gear towers will be possible from certain places along the western boundary, and this will result in a change to the wider setting of the Conservation Area. Given that the proposed development will not be appreciable from the majority of the Conservation Area, however, and given that much of the significance of the Conservation Area derives from its evidential value and southerly views, there will be only a small temporary adverse effect upon the significance of the Conservation Area.</p> <p><i>Operation</i> Given the limited scale of the final development, the intervening distance, and the partial screening effect of the woodland surrounding Swindale Beck, inter-visibility with the proposed development will be limited post-construction. Views will only be possible from certain places along the western boundary, from where the re-planted tops of the spoil heaps will blend in with the current undulating farmland. The top of the shaft cover building may also be visible, though this will be partially screened by the adjacent woodland, with the remainder, if visible, at least partially camouflaged against the high ground beyond. This will represent a small change, if discernible, to a small part of the wider setting of the Conservation Area. The final (operational) development will, therefore, form part of the setting of the Conservation Area, but there will be no adverse effect on the asset's heritage significance, which derives primarily from its evidential value, historical and</p>

Ref. No.	Assets	Development effects
		architectural associations, and southerly views.
4	Liverton Conservation Area, c.3.5km north-east of the proposed development	<p><i>Construction</i></p> <p>A large proportion of the significance of the Conservation Area derives from its evidential value, as the remains of the original 11th century settlement, house plots, 'garths' and roads are preserved beneath the present-day settlement, and there is even the recognised potential for earlier Anglo-Saxon and prehistoric remains. Key views within the Conservation Area are along the high street, and across the immediately surrounding countryside. Views of the proposed site are blocked from the majority of the Conservation Area by a combination of intervening distance, vegetation and built form within the Conservation Area itself. The tops of the winding gear towers will be visible in the far distance from certain places along the western boundary, and this will result in a small change to the peripheral setting of the Conservation Area. Given that the proposed development will not be appreciable from the majority of the Conservation Area, however, and given that much of the significance of the Conservation area derives from its evidential value, historical associations and architecture, there will be no temporary adverse effect upon the significance of the Conservation Area.</p> <p><i>Operation</i></p> <p>Given the limited scale of the final development, the large intervening distance, and the screening effect of the intervening, vegetation, topography and built form, no part of the proposed operational development is likely to be visible, or otherwise appreciable, from the Conservation Area. The development will not form part of the setting of the asset and there will, therefore, be no adverse effect on the asset's heritage significance, which derives primarily from its evidential value and historical and architectural associations.</p>
5	Five Scheduled post-medieval standing stones, c.700m west of the proposed development	<p><i>Construction</i></p> <p>These assets are arranged along the sides of the A171. The road itself, as well as the sight, sound and smell of the traffic forms the major part of the assets' setting. Their significance derives primarily from their historic value as markers denoting the end of Moor Plateau Road and the approach to Birk Brow Bank, and their aesthetic value, which is primarily appreciated by passing traffic. Their wider setting of moorland and farmland makes only a minor contribution to their overall significance. The winding gear towers and the other construction infrastructure will be visible from the assets, and this will constitute a change in their wider setting. Given the minor contribution of their wider setting to the heritage significance of the assets, their historical and aesthetic values will remain unaffected, and there will be no temporary adverse effect on their significance.</p> <p><i>Operation</i></p> <p>Both the spoil mounds and the shaft cover building are likely to be visible from these assets. Once replanted, the relatively low-lying spoil mounds will likely be indiscernible from the surrounding landscape of undulating farmland when viewed from these assets, and the shaft cover building will be largely camouflaged against the woodland surrounding Swindale Beck. Neither the spoil mounds nor the shaft cover building would look incongruous within the</p>

Ref. No.	Assets	Development effects
		<p>historic industrial landscape, which is characterised by the remains of large former industrial sites such as at Kilton, Lingdale and Margrove Park, which are considered to contribute positively to the character of the industrial Cleveland landscape. So while the development will form part of the wider setting of these assets, it will not form a prominent or incongruous part, and there will be no adverse effect on the assets' heritage significance, which derives primarily from their historical and aesthetic value.</p>
6	<p>Barn / cart shed west of Lodge Farmhouse, Grade II Listed, c.1.6km east of the proposed development</p>	<p><i>Construction</i> The significance of this asset primarily derives from its historical and evidential value, as well as from its association (as a barn) with the surrounding non-Listed farm buildings, which form its primary setting. Inter-visibility with the proposed site is blocked by a combination of the intervening distance, vegetation and, in particular built form, including the large complex of buildings at Cleveland House Farm. The tops of the winding gear towers may be visible from certain places around the asset in the distance. If so, then these would constitute a small change to the asset's wider setting, but there would be no temporary adverse effect on the heritage significance of the asset.</p> <p><i>Operation</i> Given the limited scale of the final development, the intervening distance, and the screening effect of the intervening vegetation and built form to the west of the asset, no part of the proposed operational development will be visible, or otherwise appreciable, from the asset. The development will not form part of the setting of the asset and there will, therefore, be no adverse effect on the asset's heritage significance, which derives primarily from its historical and evidential value, and from its historical and architectural association with the surrounding agricultural buildings.</p>
7	<p>Red Hall Farmhouse, Grade II Listed, c.1.2km east of the proposed development</p>	<p><i>Construction</i> The significance of this asset primarily derives from its historical and evidential value, as well as from its association with the non-Listed buildings to the north. Expansive westerly views also contribute to the overall significance of the asset, and these include areas of the proposed site. The tops of the winding gear towers will be visible from certain places around the asset, and this will constitute a change to the asset's wider setting. Given the scale of the winding towers, there will be a small temporary adverse effect on the heritage significance of the asset.</p> <p><i>Operation</i> Given the limited scale of the final development, and the partial screening effect of the woodland surrounding Swindale Beck, inter-visibility with the proposed development will be limited post-construction. The re-planted tops of the spoil heaps will blend in with the current undulating farmland. The top of the shaft cover building will not form a prominent feature and will be largely camouflaged against the high ground and vegetation beyond. Neither the spoil mounds nor the shaft cover building would look incongruous within the historic industrial landscape, which is characterised by the remains of large former industrial sites such as at Kilton, Lingdale and Margrove Park, and settlements, including Skelton,</p>

Ref. No.	Assets	Development effects
		Boosbeck and Brotton, all of which are considered to contribute positively to the character of the industrial Cleveland landscape. So while the development will form a small part of the wider setting of the asset, it will not form a prominent or incongruous part, and there will be no adverse effect on the asset's heritage significance, which derives primarily from its historical and evidential value.
8	Six Scheduled prehistoric barrows near Black Howe, c.1.7km south of the proposed development	<p><i>Construction</i></p> <p>The significance of these assets derives primarily from their evidential value. Key views which also contribute positively to their significance are to the east towards the prehistoric landscapes on Moorsholm Rigg, across the surrounding Skelderskew Moor and north towards Lockwood Beck reservoir. The tops of the winding gear towers will be visible beyond the reservoir to the north, and this will result in a change to a small part of the assets' wider setting. Given the intervening distance, and the fact that key views with associated moorland prehistoric landscapes will remain unaltered, this small degree of change will have only a small temporary adverse effect on the heritage significance of these assets.</p> <p><i>Operation</i></p> <p>Once replanted, the relatively low-lying spoil mounds will likely be visible in the distance, but will be virtually indiscernible from the surrounding landscape of undulating farmland when viewed from these assets. The top of the shaft cover building is also likely to be visible from these assets. Given the limited scale of the final development, however, and the intervening distance, the top of the shaft will not form a prominent feature and will be largely camouflaged against the high ground and vegetation beyond. Neither the spoil mounds nor the shaft cover building would look incongruous within the historic industrial landscape, which is characterised by the remains of large former industrial sites such as at Kilton, Lingdale and Margrove Park, and settlements, including Skelton, Boosbeck and Brotton, all of which are considered to contribute positively to the character of the industrial Cleveland landscape. So while the development will form a small part of the wider setting of these assets, it will not form a prominent or incongruous part, and there will be no adverse effect on the assets' heritage significance, which derives primarily from their evidential value.</p>
9	A Scheduled prehistoric barrow on Brown Hill, c.2.6km south of the proposed development	<p><i>Construction</i></p> <p>The significance of these assets derives primarily from their evidential value. Key views which also contribute positively to their significance are to the north-west across Stanghow Moor, west across Moorsholm Moor, and east across Gerrick Moor and towards Liverton Moor. The tops of the winding gear towers will be visible beyond Lockwood Beck reservoir to the north-west, and this will result in a change to a small part of the assets' wider setting. Given the intervening distance, the partial screening effect of the intervening vegetation and relief, and the fact that key views with adjacent associated moorland prehistoric landscapes will remain unaltered, this small degree of change will have only a small temporary adverse effect on the heritage significance of these assets.</p>
10	Four Scheduled prehistoric barrows, a Scheduled Bronze Age urnfield, a Scheduled cup-marked rock, and a Scheduled prehistoric hut circle settlement on Moorsholm Moor and Dimmingdale, c.2km south-east of the proposed development	<p><i>Construction</i></p> <p>The significance of these assets derives primarily from their evidential value. Key views which also contribute positively to their significance are to the north-west across Stanghow Moor, west across Moorsholm Moor, and east across Gerrick Moor and towards Liverton Moor. The tops of the winding gear towers will be visible beyond Lockwood Beck reservoir to the north-west, and this will result in a change to a small part of the assets' wider setting. Given the intervening distance, the partial screening effect of the intervening vegetation and relief, and the fact that key views with adjacent associated moorland prehistoric landscapes will remain unaltered, this small degree of change will have only a small temporary adverse effect on the heritage significance of these assets.</p>
11	Three Scheduled prehistoric barrows on Haw Rigg, c.3.5km south-east of the proposed development	<p><i>Construction</i></p> <p>The significance of these assets derives primarily from their evidential value. Key views which also contribute positively to their significance are to the north-west across Stanghow Moor, west across Moorsholm Moor, and east across Gerrick Moor and towards Liverton Moor. The tops of the winding gear towers will be visible beyond Lockwood Beck reservoir to the north-west, and this will result in a change to a small part of the assets' wider setting. Given the intervening distance, the partial screening effect of the intervening vegetation and relief, and the fact that key views with adjacent associated moorland prehistoric landscapes will remain unaltered, this small degree of change will have only a small temporary adverse effect on the heritage significance of these assets.</p>

Ref. No.	Assets	Development effects
12	Two Scheduled prehistoric barrows and a Scheduled Bronze Age urnfield on Siss Cross Hill, c.3.9km south-east of the proposed development	<p><i>Operation</i></p> <p>Once replanted, the relatively low-lying spoil mounds will likely be visible in the distance, but will be virtually indiscernible from the surrounding landscape of undulating farmland when viewed from these assets. The top of the shaft cover building is also likely to be visible from these assets. Given the limited scale of the final development, however, and the intervening distance, the top of the shaft will not form a prominent feature and will be largely camouflaged against the high ground and vegetation beyond. Neither the spoil mounds nor the shaft cover building would look incongruous within the historic industrial landscape to the north of the moorland, which is characterised by the remains of large former industrial sites such as at Kilton, Lingdale and Margrove Park, and settlements, including Skelton, Boosbeck and Brotton, all of which are considered to contribute positively to the character of the industrial Cleveland landscape. So while the development will form a small part of the wider setting of these assets, it will not form a prominent or incongruous part, and there will be no adverse effect on the assets' heritage significance, which derives primarily from their evidential value.</p>
13	Three Scheduled prehistoric barrows, a Scheduled cross dyke, a Scheduled late prehistoric settlement and enclosure, and a Scheduled prehistoric settlement on Gerrick Moor, c.3.7km south-east of the proposed development	
14	Brotton Conservation Area, c.6km north of the proposed development	<p><i>Construction</i></p> <p>A large proportion of the significance of the Conservation Area derives from its evidential value, as the remains of the original 12th century settlement are preserved beneath the present-day town. The expansion of the town during the 19th century ironstone boom, and the construction of numerous workers houses, also makes a positive contribution to the Conservation Area's character and overall significance. Views of the proposed site are blocked from the majority of the Conservation Area by a combination of the substantial intervening distance, vegetation and built form within the Conservation Area itself. The tops of the winding gear towers may be visible on the horizon from certain places along the southern boundary, but the distance is such that they would not be prominent and may well be indiscernible. This might result in a very small change to the periphery of the Conservation Areas wider setting. Given the great intervening distance, however, and the fact that the proposed development will not be appreciable from the majority of the Conservation Area, if at all, there will be no temporary adverse effect upon the significance of the Conservation Area.</p> <p><i>Operation</i></p> <p>Given the limited scale of the final development, the substantial intervening distance, and the screening effect of the intervening, vegetation, topography and built form, no part of the proposed operational development will be visible, or otherwise appreciable, from the Conservation Area. The development will not form part of the setting of the asset and there will, therefore, be no adverse effect on the asset's heritage significance, which derives primarily from its evidential value and historical and architectural associations.</p>

Table 7.1 Summary of settings assessment

Decommissioning

- 7.2 Decommissioning will involve the demolition of above-ground infrastructure, including the shaft cover building, the removal of foundations up to 2m deep, the drainage and backfilling of attenuation ponds and the return of the land to agricultural use. The only element of the development which would remain visible in the landscape following decommissioning would be the spoil storage mounds; these would already have been returned to agricultural use following the construction phase, and would remain in agricultural use subsequent to decommissioning.
- 7.3 No significant lasting adverse effects are anticipated during the decommissioning of the proposed development. Any temporary adverse effects that might result from the sight and sound of the decommissioning activities (including demolition), would be limited and short-term.



8 CONCLUSIONS

- 8.1 No designated heritage assets are present within the proposed development site, and no designated heritage assets would, therefore, be physically affected by the proposed development. A small number of known and possible archaeological features are located within the proposed site, including possible remains associated with medieval settlement at Kateridden farm, a possible medieval road, and a number of medieval field systems.
- 8.2 The possible settlement remains and road are unproven, but would be of archaeological interest if confirmed to survive. These would require an appropriate level of mitigation. The known medieval field systems, including remnant ridge and furrow earthworks to the east of Kateridden farm, are of more limited archaeological significance. Any other unknown archaeological remains that might lie buried within the site are also likely to be agricultural features of medieval to modern origin, and of limited archaeological significance.
- 8.3 A programme of phased geophysical survey (magnetometry) is to be undertaken within the proposed site in order to test the potential for known and suspected buried archaeological anomalies – including in proximity to Kateridden farm – and to better characterise the nature, extent and significance of any archaeological remains that may as yet lie undetected.
- 8.4 The settings assessment has identified that, during the construction phase of the development, there is likely to be a small, temporary effect on a number of Scheduled prehistoric barrows on the moorland over-looking the proposed development (Figure 9, 8-13), Red House Grade II Listed Building (Figure 9, 7), and Moorsholm Conservation Area (Figure 9, 3). This is due to the relative proximity and scale of the temporary winding gear towers. The key contributors to the heritage significance of these assets would remain unaffected, and the small temporary adverse effect would be removed at the end of the construction phase.
- 8.5 There would be no adverse effect on the significance of any heritage assets, via alteration to their setting, during the operation or decommissioning phases of the development. This area of Cleveland comprises a dynamic industrial / mining landscape characterised by the remains of large former industrial sites, e.g. the

Kilton spoil mound. Neither the proposed spoil mounds nor the proposed shaft cover building would form incongruous features within such a landscape.

- 8.6 In summary, this assessment has not identified anything that would prevent the proposed development on heritage grounds. Consideration should be given to both NPPF (2012) and the Planning (Listed Buildings and Conservation Areas) Act (1990), in weighing the small level of identified harm against the wider benefits of the scheme.



9 REFERENCES

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21 SEP 1965	MAL/65082
16 AUG 1972	MAL/72075
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04 SEP 1980	OS/80134
15 MAY 1984	OS/84130
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10 SEP 1997	OS/97935
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28 AUG 1979	ADA/BKS/2875

APPENDIX A: GAZETTEER OF SCHEDULED MONUMENTS WITHIN 2KM STUDY AREA

CA Ref.	Source	Orig. Ref.	Description	Period
1	EH	1018798	Round barrow at Stony Ruck, 520m south of Freebrough Farm.	Prehistoric
2	EH	1020322	Medieval farmstead 420m east of Buck Rush Farm.	Medieval
3	EH	1015445	Round barrow 550m south of Lockwood Beck on Quaker's Causeway, north of Black Howes.	Prehistoric
4	EH	1015446	Two round barrows on Moorsholm Moor known as Black Howes.	Prehistoric
5	EH	1015447	Round barrow 640m north west of Old Castle Hill, on Quaker's Causeway, south east of Black Howes.	Prehistoric
6	EH	1015773	Round barrow 550m south west of Lockwood Beck and 1.4km south west of Lockwood Beck reservoir.	Prehistoric



APPENDIX B: GAZETTEER OF LISTED BUILDINGS WITHIN 2KM STUDY AREA

CA Ref.	Source	Orig. Ref.	Description	Grade
1	EH	1136465	Red Hall Farmhouse and Farm Cottage.	II
2	EH	1136499	Plantation Cottages.	II
3	EH	1136507	Boundary Walls and Gatepiers to Stanghow House.	II
4	EH	1136518	Ticksey How Boundary Stone 450m South East of Lockwood Beck Farmhouse.	II
5	EH	1136574	Claphow Farmhouse Farm Cottage.	II
6	EH	1136581	Cart Shed and Stable 35m South East of Claphow Farmhouse.	II
7	EH	1139680	Liverton Mill, Mill House and Byre with Wash-House and Stable.	II
8	EH	1139684	Low House Farmhouse.	II
9	EH	1139688	Stables East of Claphow Farmhouse.	II
10	EH	1139710	Guidepost Attached to Oven Close Bridge.	II
11	EH	1139711	Aysdalegate Farmhouse.	II
12	EH	1139712	Boundary Stone, c.475m East of Aysdalegate Farmhouse.	II
13	EH	1139713	Boundary Stone, c.350m South East of Aysdalegate Farmhouse.	II
14	EH	1139714	Boundary Stone, c.600 Metres South East of Aysdalegate Farmhouse.	II
15	EH	1139715	Two Standing Stones (Six Stoups) c.335m South West of Ridge Farmhouse.	II

CA Ref.	Source	Orig. Ref.	Description	Grade
16	EH	1139716	Standing Stone (Six Stoups) c.340m South West of Ridge Farmhouse.	II
17	EH	1139717	Two Standing Stones (Six Stoups) c.335m South West of Ridge Farmhouse.	II
18	EH	1139718	Church of St Aidan.	II
19	EH	1139719	Barn/Cart Shed with Granary, c.23m West of Lodge Farmhouse.	II
20	EH	1139720	Boundary Stone, 460m South East of Claphow Farmhouse.	II
21	EH	1139721	Boundary Stone, 415m South East of Claphow Farmhouse.	II
22	EH	1312757	Barn/Cart Shed, Stables And Byre, c.40m North of Green Hills Farmhouse.	II
23	EH	1312759	Boundary Stone, 500m South East of Claphow Farmhouse.	II
24	EH	1329560	Forge c.5m South East of Number 37.	II
25	EH	1329561	Plantation Cottages.	II
26	EH	1329584	Stanghow House.	II
27	EH	1329588	Cart Shed, Byre, Milking Parlour and Privy/Coalhouse, 10 Metres South East of Claphow Farmhouse.	II

APPENDIX C: GAZETTEER OF NON-DESIGNATED ASSETS WITHIN 2KM STUDY AREA

CA Ref.	Source	Orig. Ref.	Site Name	Description	Period
1	R&C HER	358	Birk Brow	Circular mound with central depression.	Bronze Age
2	R&C HER	359	Ridge House, Stanghow	This ploughed out burial mound lay approximately 90m to the north-east of Ridge Farm. It is shown on the 1857, 1899 and 1920 Ordnance Survey editions as a physical mound, however by the 1938-52 edition it is shown as 'site of'.	Bronze Age
3	R&C HER	362	Glap Howe	Large round barrow of earthen construction. No visible kerb. The dimensions are given by the OS as 31.0m x 27.0m x 1.3 m high, with no ditch.	Bronze Age
4	R&C HER	179	Stanghow Moor	Remains of a possible cairn, 9-10m in diameter, consisting of an amorphous collection of stone situated on the top of rising ground, with no traces of a kerb.	Bronze Age
5	R&C HER	407	Lockwood Hills	This is described as a tumulus, measuring 5.2m x 4.7m. It is constructed of small stones and is 0.4 m high. It stands on an E-facing slope. The centre of the cairn has been disturbed.	Bronze Age

CA Ref.	Source	Orig. Ref.	Site Name	Description	Period
6	R&C HER	379	Smeathorns	Small stone cairn. The mound is 7.0m wide and 0.4m high. There is a central depression with larger stones set into the perimeter. The mound is gorse-covered and stands on a slight rise looking to the NE.	Bronze Age
7	R&C HER	393	Low Moor	Originally described as a tumulus c.12.5m in diameter. When surveyed in 1977 there was no trace of this mound, as the field in which it stands is ploughed annually.	Bronze Age
8	R&C HER	424	Old Castle Hill	Site of five standing stones. These stones are said to stand, not quite in a straight line, over a distance of 150 yards. A photograph shows them standing, but they could not be located in 1973.	Prehistoric
9	R&C HER	429	Quakers' Causeway	This is a small, much spread barrow with a large central disturbance c.5m wide by 0.2m high. The disturbance is oval and 2 x 2.5 m. The barrow appears to have been made up with stone and earth.	Bronze Age
10	R&C HER	1076	North Of Ridge Farm, Stanghow	This feature is shown on the 1857-1861 Ordnance Survey map as a 'Standing Stone' within a large field to the north of Ridge Farm. It is present on the 1958 Ordnance Survey map but absent from the 1974 edition and is presumed to have been removed.	Prehistoric

CA Ref.	Source	Orig. Ref.	Site Name	Description	Period
11	NYM HER	8288		3 stones marked on early OS editions to east of the Black Howes. Proximity to Howes may suggest prehistoric date, but there are also many post-medieval way markers and boundary stones in this area, so could be later.	Uncertain
12	NYM HER	8274		Area of dispersed cairns S of Birk Brow, largely on gentle NW-facing slope. Less than 20 identified in rapid walkover by maw, but likely to be more. One possible terrace defined by a stony bank at N end of area plus one possible cup-marked stone.	Prehistoric
13	R&C HER	370	Stanghow	Shrunken village first mentioned in 1241. The village green is still evident although its eastern end is largely in-filled. Earthwork features are visible upon the green on aerial photographs.	Medieval
14	R&C HER	932	Moorsholm	The village of Moorsholm, also known as Great Moorsholm, is first recorded in the Domesday Book of 1086 AD. Today the village takes the typical form of two rows of farmsteads facing each other over a broad green.	Early Medieval / Medieval
15	R&C HER	4490	Kateridden	The placename 'Kateriding' is first recorded in the parish of Skelton in 1273 AD. In 1301 it is referred to a 'Cadringle'. The name is derived from the Old Norse personal name 'Kati' and literally means 'Kati's clearing'.	Medieval

CA Ref.	Source	Orig. Ref.	Site Name	Description	Period
16	R&C HER	4491	Kateridden	There is at least one small circular earthwork in the field to the south-west of Kateridden medieval farmstead (SMR 4490). The feature was first noted on an aerial photograph taken in 1998 at which time there was a light covering of snow.	Medieval
17	R&C HER	4697	Margrove Park	Margrove Park. This park is also known as Maggery, Margiffe, or Maugrey. This land was given to Guisborough Priory by Ralph de Hutton and the land emparked in the 14 th century. Records exist of 1349 and 1361 referring to a 'Maugery Park with deer'.	Medieval
18	R&C HER	4698	Kilton Park	Kilton Deer Park was attached to Kilton Castle (SMR 0023). It is described in 1323 as '. A certain park without beasts of the chase in which there is no profit apart from the herbage thereof'.	Medieval
19	R&C HER	1180	Hollywell Farm	The Ordnance Survey first edition map shows a 'Holly Well' approximately 20 metres to the south-east of 'Well House'. There is an earlier documentary reference of 1301 to a 'Hallikeld Cote' meaning 'Cottage near the Holy Well'.	Medieval
20	NYM HER	7994	Brotton To White Cross Trod	Evans records a possible trod running from Brotton to White Cross. Some short sections of flags survive, but much is on metalled roads. Longest surviving length of flags is in Uxto Lane, Moorsholm.	Medieval

CA Ref.	Source	Orig. Ref.	Site Name	Description	Period
21	R&C HER	417	Stanghow Moor	These are unsquared, untooled stones alongside Quakers' trod.	Post Medieval
22	R&C HER	418	Lockwood Hills	Boundary stone. This is unmarked. There is another such slab to the north and four or five smaller ones to the west.	Post Medieval
23	NYM HER	8287		Deep hollow running up slope to east of Birk Brow, with less well-defined braided routes on either side. Levels out of quarry 14139, but route continues S to Quakers' Causeway.	Post Medieval
24	R&C HER	365	Lingdale	Site of enclosure from Aberg's map. Not now visible, beneath school playing fields.	Unknown
25	R&C HER	366	Stanghow	Standing stones - possibly boundary stones.	Unknown
26	R&C HER	1400	Stanghow Moor	Quakers Causeway from Birk Brow to Comondale. Partially paved.	Post Medieval
27	R&C HER	4340	Stony Ruck	Earthwork enclosure identified in 1997 from aerial photographs. The enclosure is approximately 17 metres square. The site is labelled as 'Old Bank' on the 1 st edition Ordnance Survey map. It is suggested that the site is a post medieval agricultural enclosure.	Post Medieval

CA Ref.	Source	Orig. Ref.	Site Name	Description	Period
28	R&C HER	4392	Uxto Lane	Uxto Lane. Stone lined causeway from the north end of Moorsholm Village to Hagg Wood. The route appears to be a general path to the north east leading in the direction of Moorsholm Mill and Stanghow.	Post Medieval
29	R&C HER	6956	Ness Hagg, nr. Kilton	Ness Hagg lies in high woodland between the confluence of Hagg Beck and Liverton Beck. Ness Hagg was occupied until 1658 by Roger Kirk, who worked there as a cooper (Ref. 1). A ruined sandstone building survives today.	Post Medieval
30	NYM HER	5155	Quakers Causeway	Hayes records the line of a paved way that ran from White Cross to Aylesford gate. This was known as the Quakers Causeway as it provided a link between Commondale and the meeting house at Guisborough.	Post Medieval
31	R&C HER	376	Oven Close Beck	This site comprises two cropmarks identified on an R.A.F. photograph taken in 1946 and first recorded on the SMR in 1953.	Unknown
32	R&C HER	420	Smeathorns	Rough standing stone, unmarked. Not now extant (10/10/89) as destroyed when drain built.	Unknown

APPENDIX D: GAZETTEER OF INDUSTRIAL HERITAGE WITHIN 2KM STUDY AREA

CA Ref.	Source	Orig. Ref.	Description	Period
1	R&C HER	1110	Aysdalegate Ironstone Mine	19 th century
2	R&C HER	1147	Stanghow Mines (Ironstone)	19 th century
3	R&C HER	1128	Lingdale Mines (Ironstone)	19 th century
4	R&C HER	1126	Kilton Mines (Ironstone)	19 th century
5	R&C HER	5874	Aysdale Gate Quarry	19 th century
6	R&C HER	5878	Gravel Pit	19 th century
7	R&C HER	5879	Woodhill Gill Quarry	19 th century
8	R&C HER	5882	Birk Brow Quarry	19 th century
9	R&C HER	5883	Quarry	19 th century
10	R&C HER	5886	Quarry	19 th century
11	R&C HER	5889	Quarry	19 th century
12	R&C HER	5891	Quarry	19 th century
13	R&C HER	4483	Freeborough Plantation Bell Pit	Post-medieval
14	R&C HER	4484	Freeborough Plantation Bell Pit	Post-medieval
15	R&C HER	5894	Sand Pit	19 th century
16	R&C HER	5896	Quarry	19 th century
17	R&C HER	5897	Quarry	19 th century
18	R&C HER	5899	Quarry	19 th century
19	R&C HER	5901	Ridge House Quarry	19 th century
20	R&C HER	5904	Quarry	19 th century
21	R&C HER	5906	Sand Pit	19 th century
22	R&C HER	5909	Lingdale Howl Quarry	19 th century
23	R&C HER	5911	Quarry	19 th century
24	R&C HER	5916	Quarry	19 th century
25	R&C HER	5917	Quarry	19 th century
26	R&C HER	5918	Gravel Pit	19 th century
27	R&C HER	5921	Wygrave Quarry	19 th century
28	R&C HER	5925	Quarry	19 th century
29	R&C HER	5933	Quarry	19 th century
30	R&C HER	5969	Quarry	19 th century
31	R&C HER	5895	Old Quarry	19 th century

CA Ref.	Source	Orig. Ref.	Description	Period
32	R&C HER	5907	Gravel Pit	19 th century
33	NYM HER	8282	Gravel Pit	16 th century
34	NYM HER	8283	Sandstone Quarry	16 th century
35	R&C HER	4496	Stanghow Firs Industrial Site	Post-medieval
36	R&C HER	4497	Moor House Industrial Site	Post-medieval
37	R&C HER	5922	Blacksmiths Workshop	19 th century
38	R&C HER	5946	Blacksmiths Workshop	19 th century
39	R&C HER	5943	Malt Kiln	19 th century
40	R&C HER	5905	Coal Depot	19 th century
41	R&C HER	5929	Dam	19 th century
42	R&C HER	5769	Guisborough And Saltburn Branch	19 th century
43	R&C HER	5947	Kilton Thorpe Branch	19 th century
44	R&C HER	5872	Mineral Railway	19 th century
45	R&C HER	5875	Mineral Railway	19 th century
46	R&C HER	5948	Kilton Mines Branch	19 th century
47	EHA	n/a	Part Of Paddy Waddells Railway	19 th century
48	R&C HER	5948	Old Railway Works	19 th century
49	R&C HER	5880	Margrove Park Cottages	Modern
50	R&C HER	1101	Moorsholm Mill	Post-medieval
51	R&C HER	1232	Liverton Mill, Sluice And Race	Post-medieval
52	R&C HER	1237	Stanghow Watermill	Post-medieval
53	R&C HER	1659	Aysdale Gate Brickworks, C.1860	Modern

APPENDIX E: GAZETTEER OF MILITARY HERITAGE WITHIN 2KM STUDY AREA

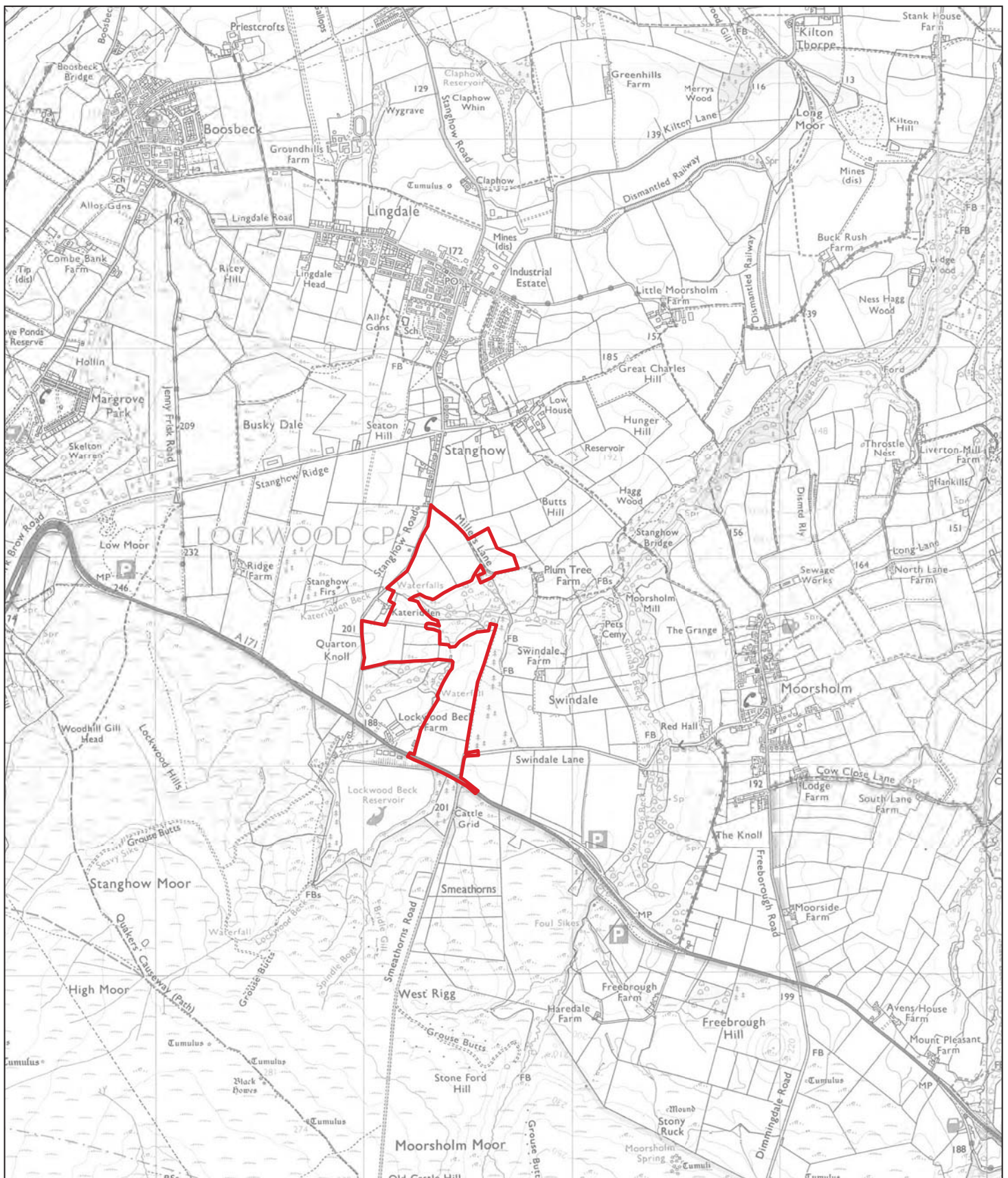
CA Ref	Source	Orig. Ref.	Description	Period
1	R&C HER	5873	2 nd edition OS shows the magazine to be associated with Stanghow Mines. Not shown on modern mapping.	19 th century
2	R&C HER	5952	2 nd edition OS shows a small building associated with Kilton Mines. Not shown on modern mapping.	19 th century
3	NYM HER	18142	Petroleum warfare site.	20 th century
4	NYM HER	18142	Fougasse.	20 th century
5	NYM HER	18143	Petroleum warfare site.	20 th century
6	NYM HER	18201	Anti-aircraft gun emplacement.	20 th century
7	NYM HER	1567154	Line of bomb craters.	20 th century
8	EHA	1567146	7 second world war bomb craters are visible as earthworks on air photographs. The features are extant on the latest 2009 vertical photography.	20 th century

CA Ref	Source	Orig. Ref.	Description	Period
9	EHA	1425033	A destroyed WWII petroleum warfare site - fougasse.	20 th century
10	EHA	1424979	Petroleum warfare site - demigasse, now destroyed.	20 th century
11	EHA	1425055	WWII petroleum warfare site - fougasse, now destroyed.	20 th century
12	EHA	1425028	WWII petroleum warfare site - fougasse, now destroyed.	20 th century
13	EHA	1424985	WWII petroleum warfare site - fougasse, now destroyed.	20 th century
14	EHA	1425026	WWII petroleum warfare site - demigasse, now destroyed.	20 th century
15	EHA	1424974	WWII petroleum warfare site - demigasse.	20 th century
16	EHA	1424970	WWII petroleum warfare site - demigasse, now destroyed.	20 th century
17	EHA	1425035	WWII destroyed petroleum warfare site - demigasse.	20 th century

CA Ref	Source	Orig. Ref.	Description	Period
18	EHA	1425082	WWII home guard store.	20 th century
19	EHA	1425025	WWII petroleum warfare site - demigasse, now destroyed.	20 th century
20	EHA	1425027	WWII petroleum warfare site - demigasse, now destroyed.	20 th century
21	EHA	1424976	A destroyed WWII petroleum warfare site - fougasse.	20 th century
22	EHA	1425031	A destroyed WWII petroleum warfare site - demigasse.	20 th century
23	EHA	1424978	A destroyed WWII petroleum warfare site - fougasse.	20 th century
24	EHA	1425034	A destroyed WWII petroleum warfare site - demigasse.	20 th century
25	EHA	1424968	WWII petroleum warfare site - fougasse, now demolished.	20 th century
26	EHA	1424355	WWII pillbox, built into a cow shed. The site commands an important road junction and there is evidence to suggest that it was associated with an AA search light and used by the local home guard.	20 th century

CA Ref	Source	Orig. Ref.	Description	Period
27	EHA	1424975	WWII petroleum warfare site - demigasse, now destroyed.	20 th century
28	EHA	1425024	WWII petroleum warfare site - demigasse, now destroyed.	20 th century





 extent of works

0  1km

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PROJECT TITLE

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North Yorkshire

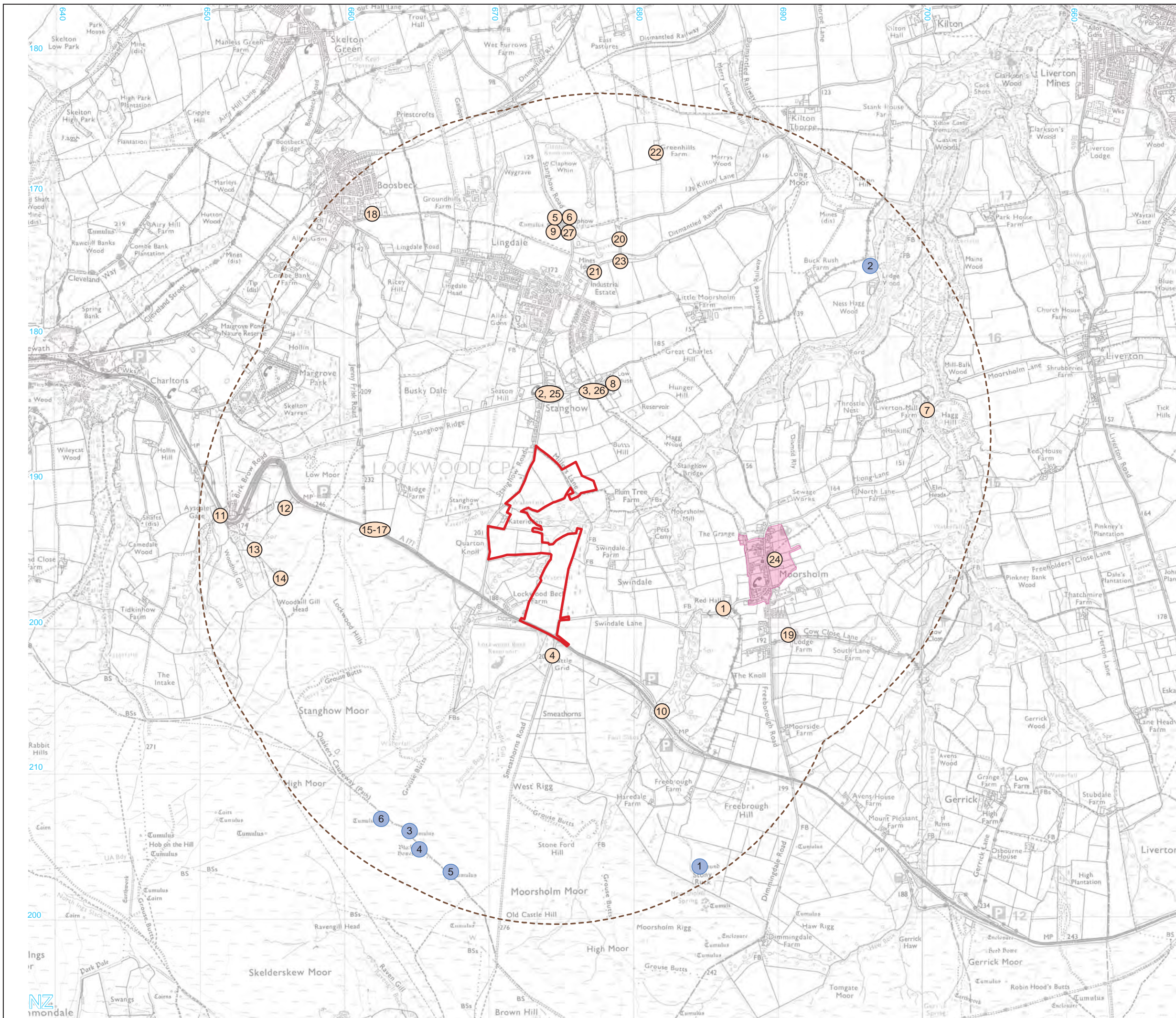
FIGURE TITLE

Site location plan

PROJECT NO. 3415 DATE 19/06/2014
DRAWN BY AO REVISION 00
APPROVED BY LM SCALE@A4 1:25,000

FIGURE NO.

1



- extent of works
- study area
- Moorsholm Conservation Area
- Scheduled Monument
- Grade II Listed Building



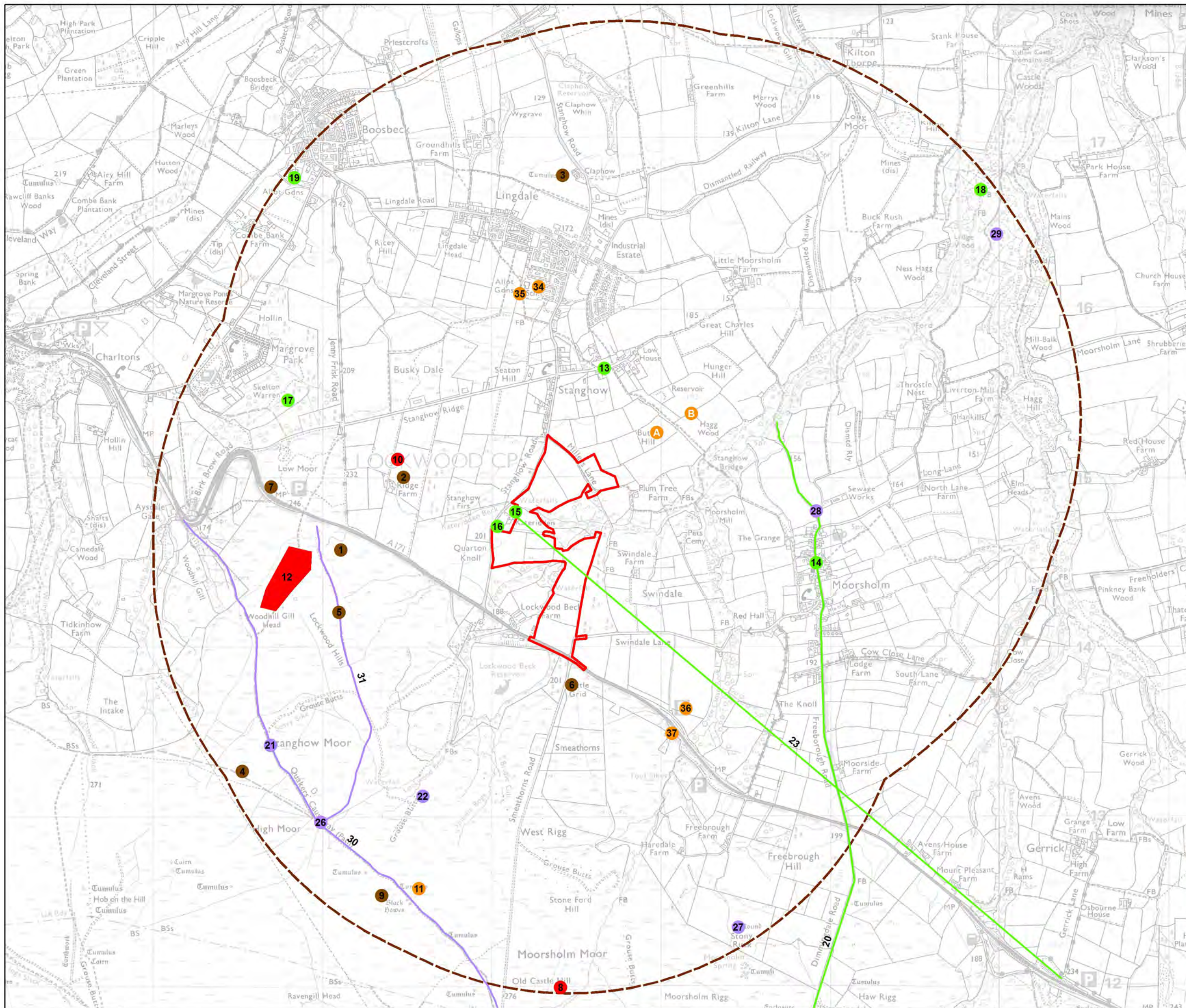
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FIGURE TITLE
 Designated heritage assets

PROJECT NO. 3415	DATE 19/06/2014	FIGURE NO.
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APPROVED BY LM	SCALE @A3 1:25,000	



- extent of works
- study area
- Prehistoric
- Bronze Age
- Medieval
- Post-medieval
- Uncertain

0 950Meters

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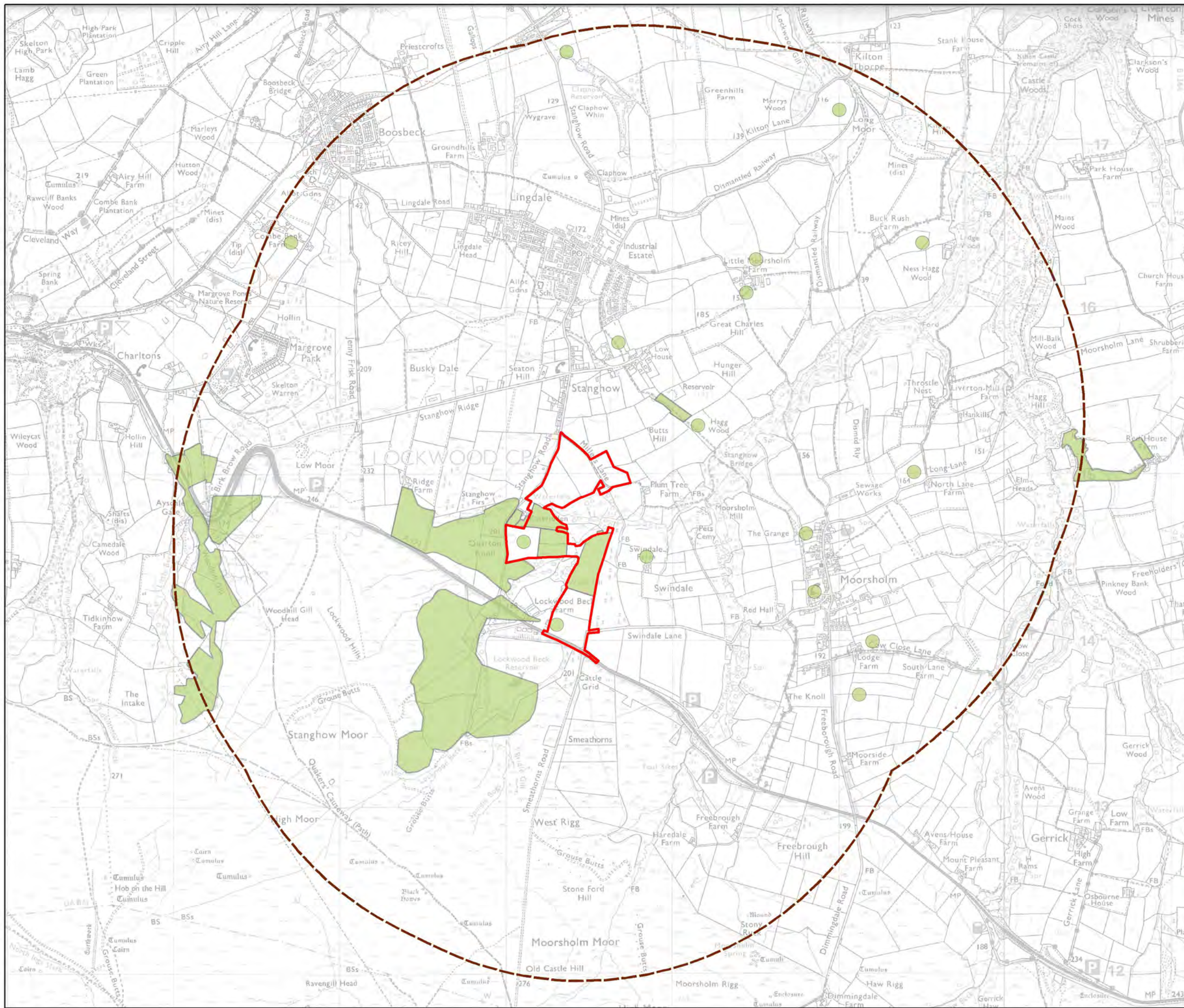


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FIGURE TITLE
Non-designated heritage assets

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APPROVED BY CM	SCALE@A3 1:21,150	



- extent of works
- study area
- Field systems
- Field systems

0 950Meters

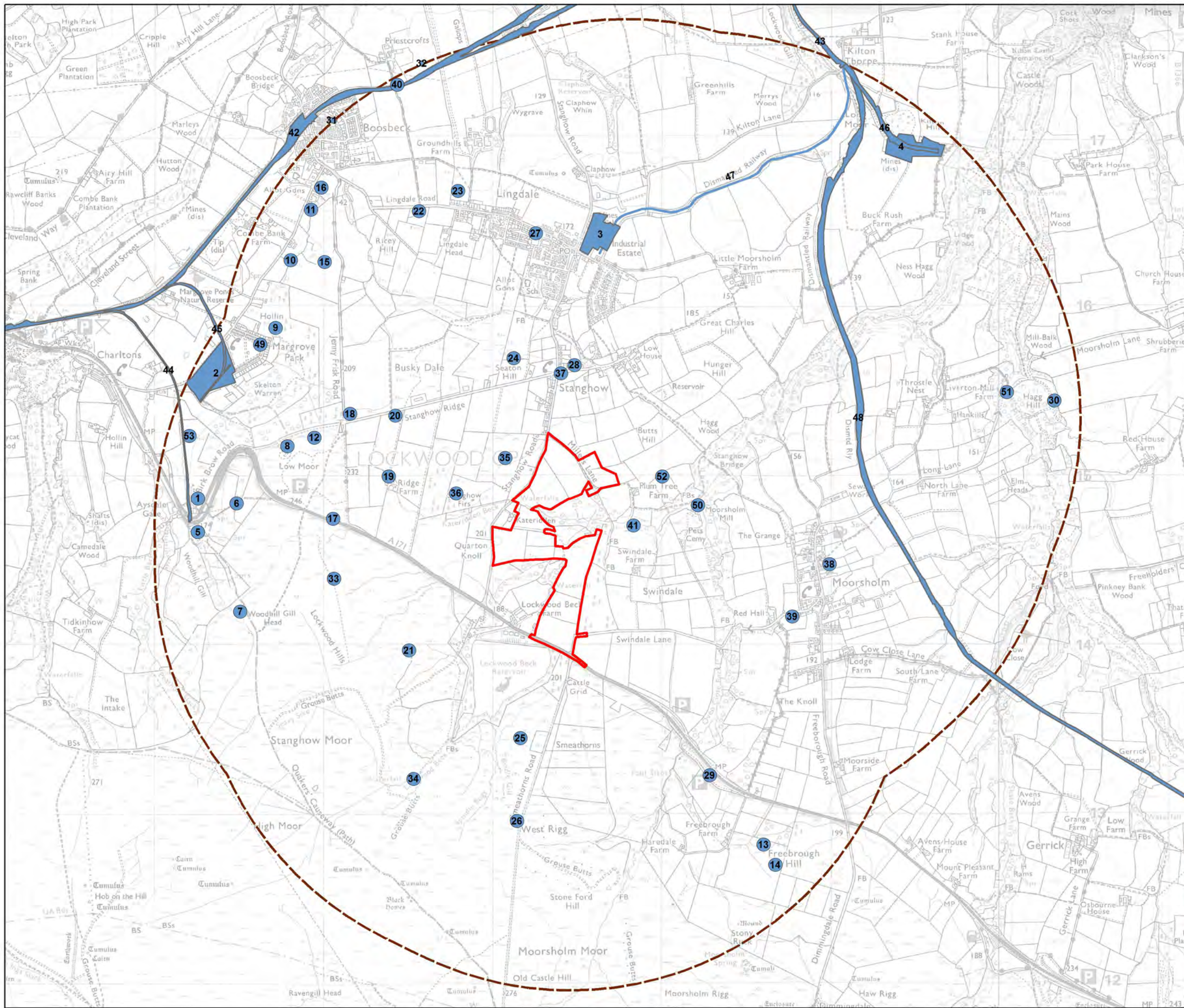
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FIGURE TITLE
 Recorded medieval field systems

PROJECT NO. 3415 DATE 03-06-2014 FIGURE NO. 4
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 APPROVED BY CM SCALE@A3 1:21,500



- extent of works
- study area
- Industrial heritage
- Industrial heritage

0 950Meters

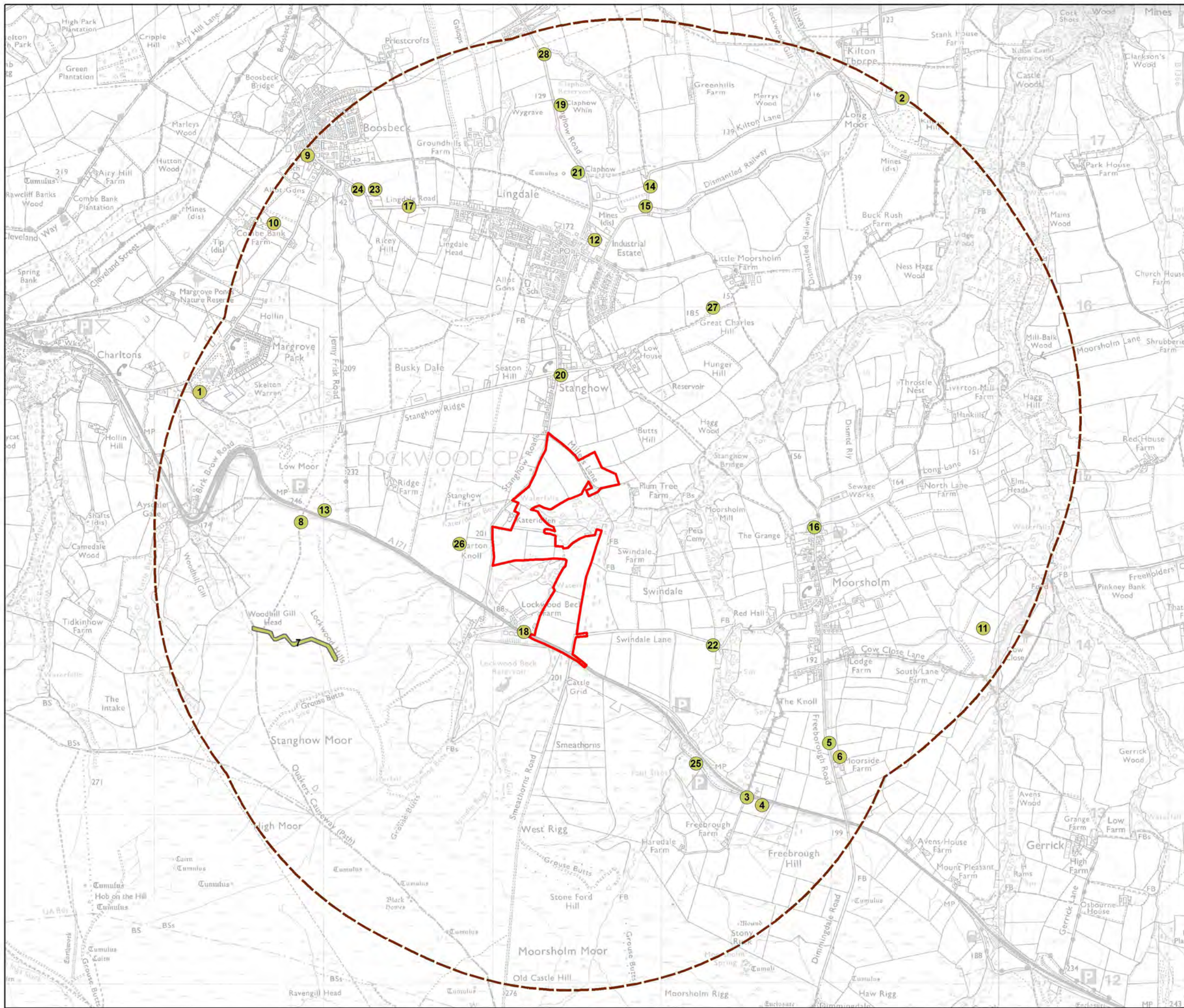
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FIGURE TITLE
 Industrial heritage

PROJECT NO. 3415 DATE 03-06-2014 FIGURE NO.
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 APPROVED BY CM SCALE@A3 1:21,150



- extent of works
- study area
- Military heritage
- Military heritage

0 950Meters

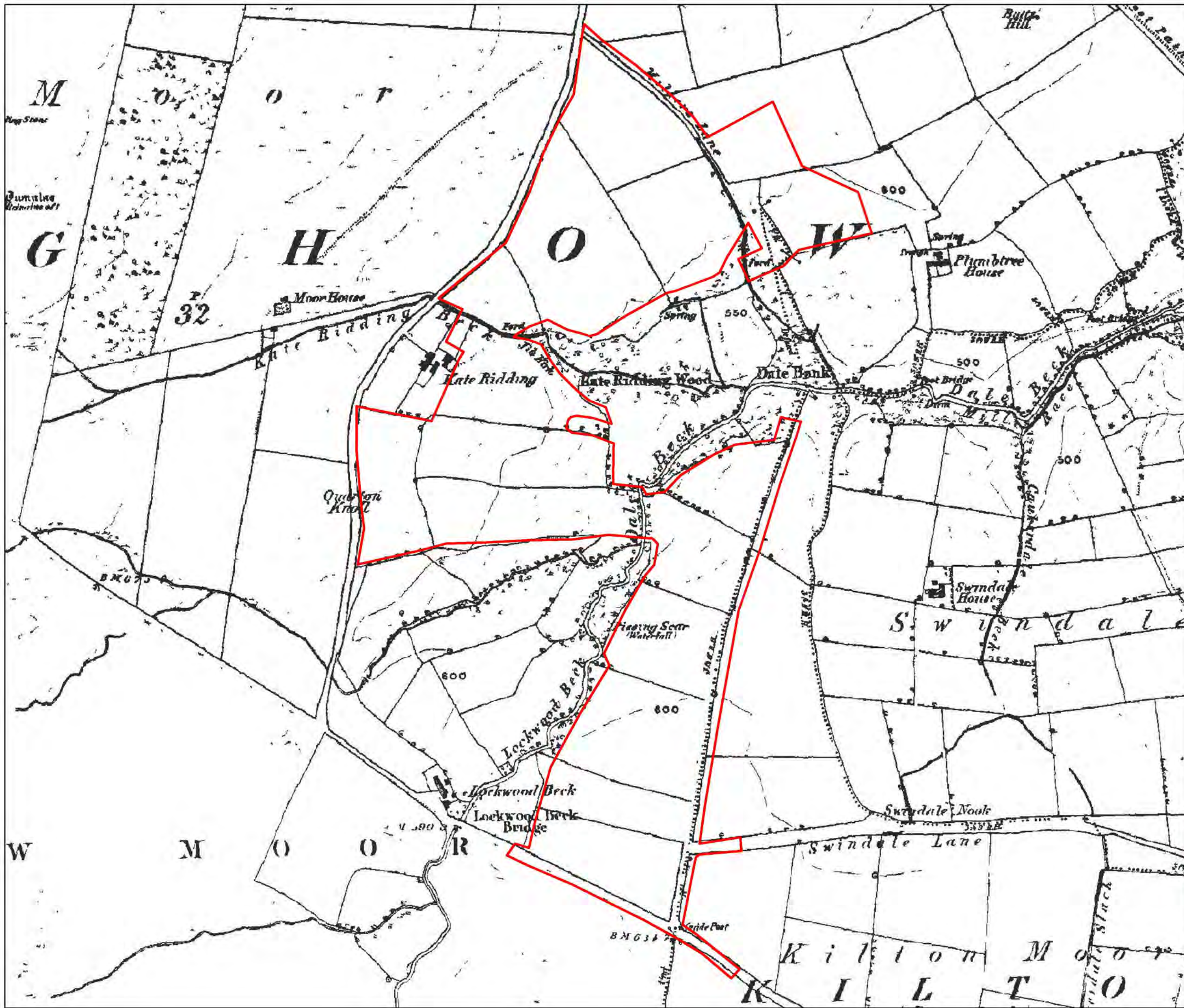
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FIGURE TITLE
Military heritage

PROJECT NO. 3415 DATE 03-06-2014 FIGURE NO.
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 APPROVED BY CM SCALE@A3 1:21,150



 extent of works



0  200Meters

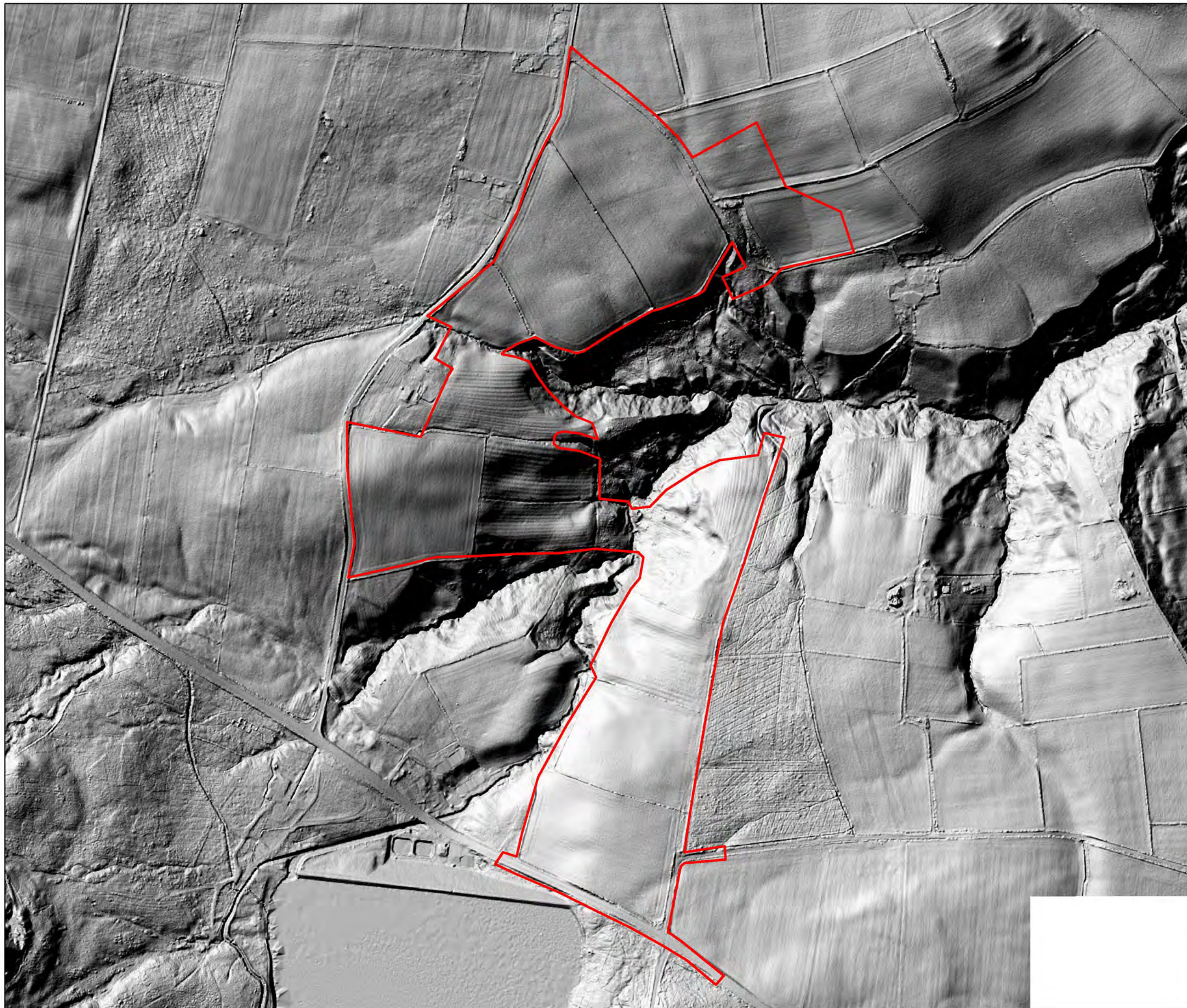
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FIGURE TITLE
Extract from OS Map of 1856

PROJECT NO. 3415 DATE 03-06-2014 FIGURE NO. 7
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 APPROVED BY CM SCALE@A3 1:5,200



 extent of works

0  200Meters

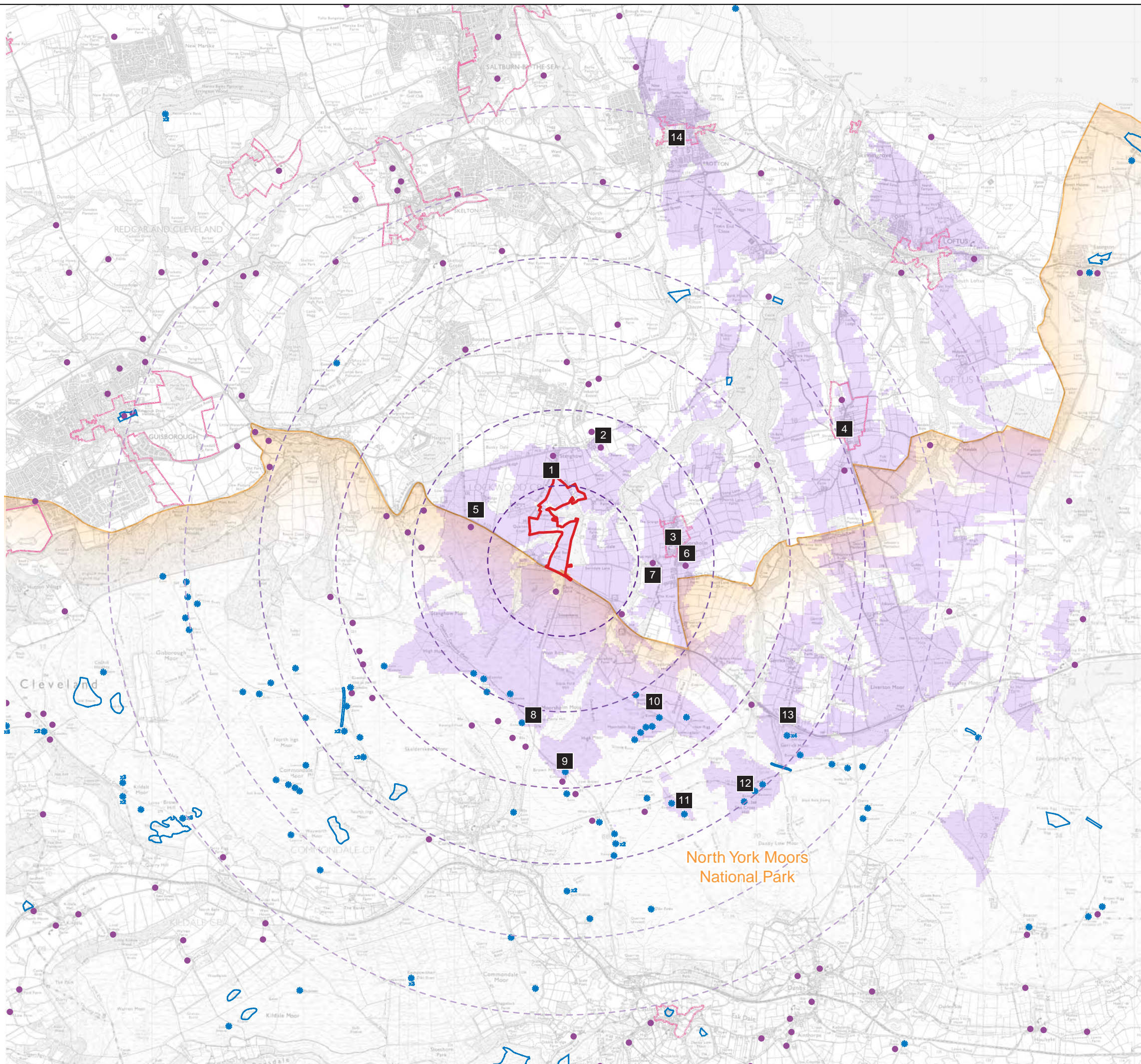
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FIGURE TITLE
 Results of targeted LiDAR survey

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APPROVED BY CM	SCALE@A3 1:5,300	



- extent of works
- 1km offsets from winding gear towers
- Zone of Theoretical Visibility
- * Scheduled Monument
- Listed Building
- Conservation Area
- North York Moors National Park boundary
- 1 Asset group



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FIGURE TITLE
 Construction phase Zone of Theoretical Visibility (ZTV)

PROJECT NO. 3415	DATE 25/06/2014	FIGURE NO.
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APPROVED BY LM	SCALE @A3 1:50,000	