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ENVIRONMENTAL SERVICES

SAVILLS

LAND AT DEADWATER FARM, KIELDER, NORTHUMBERLAND

HERITAGE IMPACT ASSESSMENT AND WALKOVER SURVEY

May 2016

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CONTENTS

FIGURES

PLATES

SUMMARY

Wardell Armstrong Archaeology was commissioned by Westwood Landscape to undertake a programme of archaeological research and a walkover survey on land at Deadwater Farm, Kielder, Northumberland (NY 29270 59028) to inform a proposed woodland creation scheme, and future management of the area.

A total of 41 assets have been identified within the present site boundary (nine previously known and recorded in the Historic Environment Record (HER); 19 found during the desk-based research and 13 found during the walkover survey). For those heritage assets within areas proposed for plantation, the proposed plans would have a 'very limited' impact on heritage assets within the areas proposed for broadleaf plantation and a 'limited' impact on heritage assets within the areas proposed for coniferous plantation which means that further archaeological mitigation may be required for a total of 28 heritage assets.

Whilst on the basis of the heritage significance attribution method used in this report, the majority of the assets are considered to be of only local significance, this methodology is based on the existing heritage status of each asset. The weakness of this method is that it requires the assets to be well understood and this is not necessarily the case in this instance. It has become clear during the course of this survey that some of the sites, primarily the settlements, were not previously well understood.

The settlement remains relating to Bells Kirk (Asset 10), Scots Dyke (Asset 9) and Hawkhope (Asset 2) and possible associated features (Assets 27, 39 49, 50, 51, 52, 54, 60, 62, 64, 65 and 66) provide an archaeological archive of information relating to settlement history in the Anglo-Scottish border from the late medieval period through to the 18th century. This can be seen to a lesser extent at Blackhope (Asset 69). This period is key in border history, as it covers the Anglo-Scottish wars, border reiving, the union of the kingdoms and the processes of improvement/ clearances. Although the settlements are not well documented and they have limited amenity value because of their lack of accessibility, they have considerable group value. This group value extends over assets 2 and 62 (for Hawkhope), 9, 52 and 60 (for Scots Dyke), 10 and 39 (for Bells Kirk), and 71, 72, 73 and 75 (for Blackhope), with Assets 27, 49, 50, 51, 54, 64, 65 and 66, the series of agricultural related features in the Deadwater Valley located mid-way between Hawkhope and Bells. This group value, and the research value of the high quality earthwork remains, gives these sites an enhanced

significance, despite their current heritage status. Consequently, these remains should be regarded as being of at least County level significance, and potentially could be regarded as being of schedulable quality, at least in part.

ACKNOWLEDGEMENTS

1   INTRODUCTION

1.1   Circumstances of Project

1.1.1   Wardell Armstrong Archaeology (WAA) was commissioned by Westwood Landscape, on behalf of Savills, to prepare a Heritage Impact Assessment and Walkover Survey on land around Deadwater Farm Bells Moor, Kielder, Northumberland, to inform a proposed woodland creation scheme, and future management of the area. The land at present is agricultural and surrounded by forestry. The purpose of this work is to assess the potential for sub-surface archaeological deposits to survive within the site boundary, and to assess the impacts of the proposed development on the heritage significance of any upstanding heritage assets already known, or encountered by the walkover survey.

1.2   The Purpose of the Heritage Impact Assessment

1.2.1   This Heritage Impact Assessment is designed to show the impact of the proposed development on the heritage significance of upstanding heritage assets. It will also assess the archaeological potential of the proposed development site.

1.2.2   The Heritage Impact Assessment seeks to address in detail the issues of impacts on heritage significance and to do this it seeks to understand the significance of the assets, then evaluate the impact of the development proposals upon the assets.

1.3   National Planning Policy and Legislative Framework

1.3.1   National planning policies on the conservation of the historic environment are set out in the *National Planning Policy Framework* (NPPF), which was published by the Department of Communities and Local Government in March 2012. This is supported by *National Planning Practice Guidance* (NPPG) which was published in March 2014.

1.3.2   The NPPF draws a distinction between designated heritage assets and other remains considered to be of lesser significance*;* 'great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be; 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, including scheduled monuments, protected wreck sites, battlefields, Grade I and II* Listed Buildings and Grade I and II* Registered Parks and Gardens and World Heritage Sites, should be wholly exceptional' (NPPF, para 132). Therefore, preservation in-situ is the preferred course in relation to such sites unless exceptional circumstances exist.

1.3.3   The NPPF advises that local planning authorities should look for opportunities for new development within Conservation Areas and within the setting of heritage assets in order to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to or better reveal the significance of the asset should be treated favourably (NPPF, para 137).

1.3.4   Scottish Planning Policy includes a Planning Advice Note on Planning and Archaeology (PAN 2/2011). This states that *"in determining planning applications that may impact on archaeological features or their setting, planning authorities may on occasion have to balance the benefits of development against the importance of archaeological features. The weight that should be given to archaeological considerations will depend on a number of factors, including:*

- *the relative rarity of the archaeological feature concerned;*
- *the completeness of the feature / whether it is a particularly good example of its type;*
- *the historical or cultural associations of the feature;*
- *the value given to the feature by the local community;*
- *the potential value of the feature as an in situ educational or research resource; and*
- *the potential value of retaining the feature for tourism or place-making.*

Since this list is not exhaustive, in considering these factors, it will benefit planning authorities to seek professional advice from their archaeological advisor" (http://www.gov.scot/Publications/2011/08/04132003/0).

1.4   **Local Planning Policies**

1.4.1   The adopted core Strategy for Tynedale includes Core Strategy Policy BE1, which states that the principles for the built environment are to:

> *"a. Conserve and where appropriate enhance the quality and integrity of Tynedale's built environment and its historic features including archaeology, giving particular protection to listed buildings, scheduled monuments and conservation areas"* (Tynedale Council 2007, 26).

1.4.2   Northumberland County Council's Core Strategy, the Full Draft Plan dating to 2014 (http://northumberland-consult.limehouse.co.uk/portal/planning/core_strategy/csfd?pointId=3210287), includes a chapter, number 8, on '*protecting and enhancing Northumberland's*

distinctive and valued natural, historic and built environment', which proposes a Policy 24: Principles for the environment, as follows: *"in plan-making and assessing development proposals, the character and significance of Northumberland's distinctive and valued natural, historic and built environments, landscape, heritage assets, townscapes and the setting of settlements, will be conserved, protected and enhanced".* The relevant historic environment principles are:

"a. Giving appropriate weight to the statutory purposes and special qualities of the hierarchy of international, national and local designated and non-designated nature and historic conservation sites and their setting. Greatest weight will be given to international and national designations, followed by local designated sites and then non-designated sites;

e. Promoting a shared understanding of the significance of natural and historic assets and their setting, the potential harm of proposals, and opportunities to mitigate harm or enhance them.

In the context of the ecosystem approach, and recognising the health, social and economic benefits derived from the enjoyment of Northumberland's rich natural, historic and built environment, the Council will work with relevant lead authorities, land and property owners, local communities and groups, developers, adjoining local planning authorities and Local Nature Partnerships to:

k. Identify opportunities for appropriate environmental enhancements, including:

i. habitat improvement, restoration and creation;

ii. landscape enhancement in accordance with valued characteristics; and

iii. restoring, enhancing and bringing into viable use heritage assets;

l. Gather, record and update evidence to advance understanding of the significance of Northumberland's natural and historic environment and heritage assets; and

m. Identify opportunities to make information on assets widely accessible and promote the enjoyment of the physical and cultural components of these assets".

1.4.3   Policy 26, on Landscape, states: "*in plan-making and assessing development proposals affecting the landscape, the following considerations will apply:*

a. Proposals should maintain and, where appropriate, enhance important elements of landscape character, as set out in the Northumberland Landscape Character Assessment and other relevant studies, guidance or management plans;

c. In assessing development proposals in relation to landscape character, consideration will be given to:

iii. the setting and surroundings of the County's historic towns and villages and its recognised heritage assets including the defined landscape setting of the Hadrian's Wall World Heritage site;

1.4.4   Furthermore, there is a proposed Policy 34: Historic environment and heritage assets, stating that "*in plan-making and assessing development proposals, there will be a requirement to ensure the conservation, and enhancement of the quality, integrity and setting of Northumberland's historic environment and heritage assets by ensuring:*

a. Proposals that would result in harm to or loss of the significance of heritage assets will only be permitted where the harm is outweighed by public benefit which

cannot be met in any other way and is appropriately mitigated against or, as a last resort, compensated;

b. The historical context will be treated as a key material consideration, making use of the Historic Landscape Characterisation, the Historic Environment Record and other relevant records to inform decision-making".

1.4.5   As the south-western part of the site lies beyond the English/Scottish border, within the Scottish Borders County, it is important to also consider relevant Scottish legislation. Policy EP8 of the Scottish Borders Council Proposed Local Development Plan (designed to address future needs up to 2024), includes '(*C) Regional or Local Archaeological Assets*', stating that: "*development proposals which will adversely affect an archaeological asset of regional or local significance will only be permitted if it can be demonstrated that the benefits of the proposal will clearly outweigh the heritage value of the asset".* It also states that where a development will impact upon an asset, "*developers may be required to carry out detailed investigations*" and "*any proposal that will adversely affect a historic environment asset or its appropriate setting must include a mitigation strategy acceptable to the Council*" (Scottish Borders Council 2013, 103; file:///C:/Users/cpeters/Downloads/Proposed_Plan_Volume_1_-_Policies.pdf). This is in-line with Scottish Planning Policy.

2   METHODOLOGY

2.1   Introduction

2.1.1   The preparation of the Heritage Impact Assessment has been undertaken in accordance with guidance recommended by English Heritage and prepared by Bassetlaw District Council (2011). Note is also taken of the English Heritage guidance on understanding place (2010 and 2011) and on the setting of heritage assets (2012).

2.1.2   The data underlying the Heritage Impact Assessment was gathered through desk-based study of documentary sources and via a walkover survey to locate any as-yet unknown assets within the site boundary. The impact of the development on the heritage assets in the vicinity, was assessed using a series of standard tables (see Appendix 2).

2.1.3   The site consisted of land in the vicinity of Deadwater Farm, Bells Moor, Kielder (as shown by the red line on Figure 2) and the search area included a buffer zone of 100m from this boundary (Figure 3).

2.2   Documentary Sources

2.2.1   The primary and secondary sources were used to provide the background to the historical character of the area. Some sources were accessed at Northumberland Record Office (NRO), and others were from internet sources. The locations of known assets in the vicinity are summarised in Appendix 2 and shown in Figure 3.

2.2.2   Historic England's guidance on historic area assessments, conservation areas and heritage asset setting was used to establish the compliance of the development scheme proposals with best practice planning guidance.

2.3   Walkover Survey

2.3.1   The area within the red line boundary was subjected to a walkover survey between 4th and 8th April, and on 3rd May, 2016. Access was unrestricted.

2.3.2   The study area was inspected to:

• consider the potential for sub-surface archaeological remains to survive within the site boundary

• locate and record any as yet unknown upstanding archaeological features within the site boundary

locate and confirm the presence of known upstanding archaeological features within the site boundary

2.4 Impact Assessment Tables

2.4.1 The assessment of the impact of development proposals is undertaken using a series of heritage impact tables (Appendix 2). These tables use standard assessment methods as used by Government agencies, as for example those used in the Highway Agency's *Design Manual for Roads and Bridges* (2007). These tables first establish the significance of the heritage asset against set criteria, secondly they estimate the magnitude of impact and, taking the results of these two together, allow a calculation of impact on overall heritage significance.

2.5 Reporting

2.5.1 A final bound copy of the report will be deposited with the HER at Northumberland County Council's offices in Morpeth, where viewing will be made available on request.

2.5.2 Wardell Armstrong Archaeology support the Online AccesS to the Index of archaeological investigationS (OASIS) project. This project aims to provide an online index and access to the extensive and expanding body of grey literature created as a result of developer-funded archaeological work. As a result, details of the results of this study will be made available by Wardell Armstrong Archaeology, as a part of this national scheme.

2.6 Glossary

2.6.1 The following standard terms for compiling a Heritage Impact Assessment are used throughout the report:

- Designation – the process that acknowledges the significance of a heritage asset and thus advances its level of consideration/protection within the planning process. Designated assets can either be statutory, like listed buildings, or non-statutory such as registered parks and gardens or conservation areas.

- Heritage Asset – a building, monument, site, place, area or defined landscape positively identified as having a degree of heritage significance that merits consideration in planning decisions.

- Historic Environment Record – an information service, usually utilising a database that provides public access to up-to-date and dynamic resources relating to the historic environment of a defined geographic area.

- Mitigation – action taken to reduce potential adverse impacts on the heritage significance of a place.

- Setting – the surroundings in which a heritage asset is experienced. The extent is not fixed and will vary according to the historic character of the asset and the evolution of its surroundings.

- Significance – the value of a heritage asset to present and future generations attributable of its heritage interest. That interest may be archaeological, architectural, artistic or historic (including historical associations).

3 DESCRIPTION

3.1 Location and Topography

3.1.1 The study area lies to the north-west of Kielder Water in England and south-east of Saughtree in Scotland (Figure 1). The south-western part of the site extends across the Scottish border. To the east, is Reel Fell, which dominates the area and marks the western end of the Cheviot Hills. Deadwater Farm lies within the Kielder Water forest, within an agricultural area surrounded by forestry and breeching the Scottish/English border to the west, the area is predominantly within Kielder Forest Park (Figure 2).

3.1.2 The superficial geology is dominated predominantly by Devensian Till, interspersed with Peat and clay, silt, sand and gravel alluvium. The bedrock comprises sandstone, siltstone and mudstone of the Border Group, with some sandstone of the Fell Sandstone Formation within the southern part of the site (British Geological Survey: http://mapapps.bgs.ac.uk/geologyofbritain/home.html).

3.2 Historic Landscape Character

3.2.1 Historic Landscape Character data, provided by Northumberland County Council HER, segregates the site into six landscape area types: the north-eastern part within '*other 20th century fields*'; the main western Bells Moor area west of the track as '*other parkland and recreational*'; the area around Bellsburnfoot in the south, but still west of the track as '*fields other medium lowland irregular*'; the area to the east of the track south of Kerseyclough and west of the burn as '*late 19th century fields*'; the small square area to the north-east of Kerseyclough and in forest as '*other small surveyed fields*'; and the south-easternmost area of the site, east of the burn as '*surveyed enclosure*'.

3.3 Historic Background of Deadwater Farm area

3.3.1 The name Deadwater is "*called after the river that has its origin in a sulphur spring in a Scottish bog, and, according to Hodgson, the County Historian, 'runs in the most sluggish manner along a level plain, from which circumstances it is called Dead Water*'" (Watson 1995, 82). Alternatively the name may be derived from that fact that Deadwater is situated in the watershed between the North Tyne to the south and Liddel Water to the north (Godfrey 1979, 63). Kielder Burn means "*violent water*" and it is the burn, that Kielder was named after (Watson 1995, 16).

3.3.2 Iron Age or Romano-British settlements were subjected to survey and excavation prior to the completion of the Kielder Water reservoir scheme, to the south of the site in

the 1970s (*confer* 3.3.22). There is a reference to a possible camp within the study area, though the source for this information is not now known (Asset 5). There is a further Romano-British enclosed settlement to the south of the site (Asset 11) and an enclosure on the north bank of the Cat Cleugh overlain by features relating to a post medieval farmstead (Asset 15). Ridge and furrow cultivation have been recorded at Cat Cleugh, though it is not known from which period this dates (Asset 29). Other evidence for early activity in the area comes from the site of a possible Bronze Age cairn, Ravensworth Moor Cairn, though there are suggestions these remains could instead by traces of one of three stone-built shooting butts (Asset 4) and a possible cist, represented by a number of stones, one upright, which may have since been removed by afforestation (Asset 12).

3.3.3 "*For much of the 12th and 13th centuries, the area was under the control of Scottish kings*" (Bonney nd, 7). Border warfare ensued beyond the 13th century, with real power in the border areas lying with a few ruling clans who undertook raids and revenge attacks on each other. Pele towers and fortified farmsteads were constructed in the area, and there is documentary evidence for Kershope Castle existing from the 13th century in the study area (Asset 3). The site of another Pele tower, Ravenshill Pele was also noted in the vicinity in the 1950s (Asset 13) and earthwork remains in the area have been suggested as the remains of the castle of a 14th century border chieftain, the '*Cout of Kielder*' (Asset 14). In this period, North Tynedale and Redesdale were within the Middle March area, and in the mid 16th century it was estimated that this contained "*1,500 men ready for war and robbery*" with "*100 murders and £10,000 worth of property stolen each year in the Middle March*" towards the end of the 16th century (Bonney nd, 8). There were suggestions that there was evidence for a deserted medieval village at Deadwater (Asset 6), but a visit in 1977 found no traces and that the farm was modern.

3.3.4 These defensive structures were built because of the insecure conditions along the Anglo-Scottish border with both warfare between England and Scotland and internecine warfare between local border families. The Middle Marches, as opposed to the East and West Marches, so divided for administrative and military purposes, included Redesdale, North Tynedale, and upper Wansbeck and Coquetdale (Trevelyan 1976, 13). Cross-border raiding known as reiving added to border insecurity in the 15th and 16th centuries. This seemed to have been of particular concern for populations in the Middle Marches, as they were more cut off and lived "*secluded, under the influence of perpetual border warfare, from which the rest of Northumberland was*

partly sheltered" (Trevelyan 1976, 14). One of the reiving families were the Bells. The Bell clan were divided between Scottish and English branches and are primarily recorded in Annandale, Dumfriesshire and Gilsland in Cumbria (Macdonald Fraser 1989, 57). The survey area was, however, clearly also in Bell territory, as it indicated by the place names Bells Moor and to its south and east, the valley known as Bellsburnhope. The Bells were notorious as a reiving family and are known to have feuded with other border clans, such as the Grahams and Irvines (Macdonald Fraser 1989, 182). The Deadwater/ North Tyne Valley was one of the raiding routes from Scotland (Watts 1975, map 1) and is still one of only two road routes into Scotland through the Middle Marches.

3.3.5 On the north side of Bellsburnhope, near the confluence of the Bells Burn with the Deadwater, the Northumberland HER records the site of Bells Chapel, and associated settlements (Asset 10). This is the site of a church and settlement recorded as Bells Kirk on post-medieval maps. It is first recorded on Christopher Saxton's map of Northumberland. This is the early Saxton County map which is undated, but all the county maps are known to have been completed between 1574 and 1578 (R. Newman *pers. com.*). It is highly likely that this settlement was of medieval origin, a likelihood further evidenced by the presence of an existing cross-shaft socle at the site (Plate 13).

3.3.6 After the union of the crowns in 1603, peace was gradually restored, though "*outbreaks of violence were not uncommon well into the 18th century*" (Bonney nd, 9), and smuggling seemed to have replaced reiving as the illicit activity of the area, particularly in whisky. There was apparently an old traffic route which led from Scotland via Deadwater and passed down the left bank of the Tyne by Falstone, Bellingham and Wark to Hexham (Hope Dodds 1940, 246), perhaps utilised by the smugglers. There appears to be such a route shown on an estate plan of c.1762 passing through Bells Kirk (Asset 10) at the south of the site and adjacent to the western boundary of Bells Moor, the present border with Scotland, within the survey area (Plate 4). After 1603, "*farming activity was able to expand, but the lack of adequate highways and bridges meant the upper valley remained isolated and remote until the early 19th century*" (Bonney nd, 9). Gerhard Mercator's 'Scotia Regnum' map of southern Scotland of 1595 (Plate 1) shows '*Bell Kirk*' (Asset 10). It also indicates the highly marginal nature of the area, showing extensive hills.

Plate 1: Extract from Gerhard Mercator's plan of Scotland, 1595

3.3.7   The Blaeu map of 1654 (Plate 2), based on Timothy Pont's late 16th century map, shows the site of Bells Chapel, this time as '*Bells hauch*' with a settlement to the south-west, labelled '*Bellsyetts*'. This suggests that by 1600, there was a separate settlement to the south of Bells Kirk. This appears to represent two small settlements, one by the church, and another on the opposite side of the burn. No other settlements further up the valley within the site boundary are shown, though it may be that these early cartographers concentrated on mapping churches.

Plate 2: Extract from the Blaeu map of 1654

3.3.8   The covenanters were driven out of Scotland by persecution during the reign of Charles II, and William Veitch is said to have preached between 1679 and 1687 at Kielderhead, Wheelcausey and Deadwater, and there is a "*tradition in the family of Robson of Emmethaugh that their ancestor, William Robson, was baptised by*

Alexander Peden in a cave at the foot of Deadwater Fell" (Hope Dodds 1940, 262). This cave lies within the study area (Asset 7). In around 1709, a Presbyterian meeting house was erected within the south-eastern part of the site (Asset 16), replaced by a new chapel to the south in 1874, which is grade II listed (Asset 1).

3.3.9 Roy's Military Map of Scotland of 1752-5 (Plate 3) does not depict the Bells Kirk, or any buildings on the north side of Bells Burn, indicating that the chapel had gone out of use by this date, along with any associated settlement. A settlement is still shown on the southern side of Bells Burn, and the west side of the River North Tyne, labelled '*Bells*' and consisting of six buildings, which must be the '*Bellsyetts*', shown on the earlier map of 1654 (Plate 2). Associated field systems in the form of rig and furrow have been illustrated to the north of the burn, east of the River North Tyne and south and west of the settlement, perhaps indicative of associated agricultural holdings (Plate 3). A settlement labelled '*Blackhope*' (Asset 69) is also shown, just by the boundary of the western part of the present site with associated rig and furrow, which appears to extend further into the site. Rig and furrow was noted in this area during the walkover survey (Asset 72; *confer* 4.1.26), with bank features further south-west (Asset 71; *confer* 4.1.25). Three more settlements appear on this map within the site boundary, and tracks are likely to have existed linking them. One of these settlements is '*Hakupsole*' towards the Scottish Border on Bells Moor in the north-western part of the site which appears with quite extensive field systems. This is a settlement site, known as Hawkhope Hole, which is noted within the Northumberland Historic Environment Record as comprising at least 18 houses with a large field system that extended beyond the border into Scotland (Asset 2), and images from Google Earth also show an area of rig and furrow to the east (Asset 62), suggesting the features extend further than previously thought. Features in this area were noted during the walkover survey (*confer* 4.1.15- 4.1.16; Figure 5).
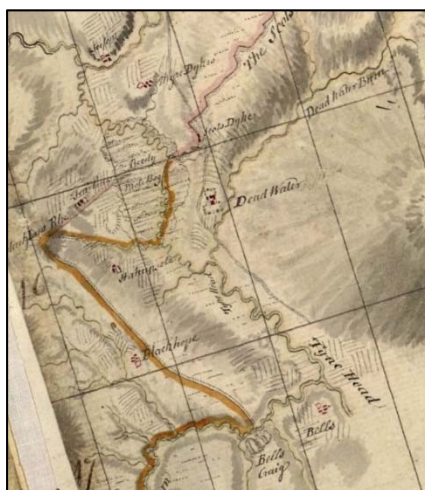
Plate 3: Extract from Roy's Military Map of Scotland, 1752-55

3.3.10 It is suggested that the settlement of Hawkhope Hole was established by refugees from the Scottish Clearances (Northumberland HER record information). As the Scottish Lowland clearances did not occur until about 1760 (Aitcheson and Cassel 2003), by which time this settlement had long been established, this is unlikely. A far more realistic scenario for the origin of this settlement is in the early 17th century, when Northumberland, as elsewhere, had a growth in the landless poor who encroached upon the common waste (such as Bells Moor), often with the tacit connivance of the local manorial lords (Watts 1975, 10-11). The highly marginal nature of the environment of this settlement meant that its existence was brief, and by the later 18th century, it had probably contracted to a single farmstead.

3.3.11 At least a farmstead existed in the vicinity of the present Deadwater Farm by 1752-5 as well, labelled '*Dead Water*' (Asset 6), though whether or not this had once been a medieval village is doubtful. Similarly, a small settlement, depicted as two buildings, is shown to the north of Deadwater Farm, labelled '*Scots Dyke*'. Earthworks at this location are included in the Northumberland Historic Environment Record as Deadwater Rigg earthworks (Asset 9), and several banks and a possible building were encountered during the walkover survey (*confer* 4.1.19). '*The Scots Dyke*' is annotated at the northern boundary of the Deadwater Rigg part of the site. In 1551, when an agreement was eventually reached over the Debateable Land, the land in the Borders repeatedly tussled over, the agreed boundary between England and Scotland "*was defined by a shallow ditch with the earth thrown up on each side forming two parallel banks which became known as the Scot's Dyke*" (http://www.visitcumbria.com/car/scots-dike/). This ran for 3.5 miles to the west of the River Esk, near Langdale. The eastern half was given to the Grahams and Bells in

England and the western half to the Armstrongs and Elliots to Scotland. The Scot's Dyke at Tyne Head is not the same continuing structure as that to the west, though it may relate to an intermittent extension. The Estate Plan of the Duke of Northumberland of *c.* 1762 (Plate 4) also labels the boundary between England and Scotland as Scots Dyke, and it is clear that much of the site was within the territory of the Bell family.

3.3.12   Although no building had been shown in the vicinity of the former Bells Chapel (Asset 10) on Roy's Military map (Plate 3), the Estate Plan of the Duke of Northumberland of c. 1762 (Plate 4) does show one building on the north side of The Bells Burn, labelled '*The Bells Rig House*', with a dashed line, presumably trackway (Asset 68) heading north-westwards towards a further settlement across the Scottish border to the west, and perhaps extending into the site, now '*Blakehope*' (*confer* 4.1.7). This may be a continuation of the '*road from Scotland to Bellingham*' shown and labelled to the south-east. '*Blakehope*' (Asset 69), by this date is shown as two rectangular buildings. Two buildings are depicted on the south side of The Bells Burn, in the vicinity of '*Bells*' shown on Roy's Military map (Plate 3), perhaps indicating a hamlet, though this time annotated with '*The Bells House*' (Plate 4). The settlement shown on the earlier map as '*Hakupsole*' on the northern part of Bells Moor is still depicted, although only one house seems to exist by this date (*c.* 1762), shown as a rectangular structure on a north-west south-east alignment, with circular structure to the south, and annotated '*Horouphole House*' (Plate 4), perhaps suggesting a desertion of the earlier settlement. The farmstead formerly annotated '*Dead Water*' is annotated with '*Dead Water Heads*' on the Estate plan of *c.* 1762. The settlement formerly called '*Scots Dyke*' is not shown, suggesting that this no longer survived.
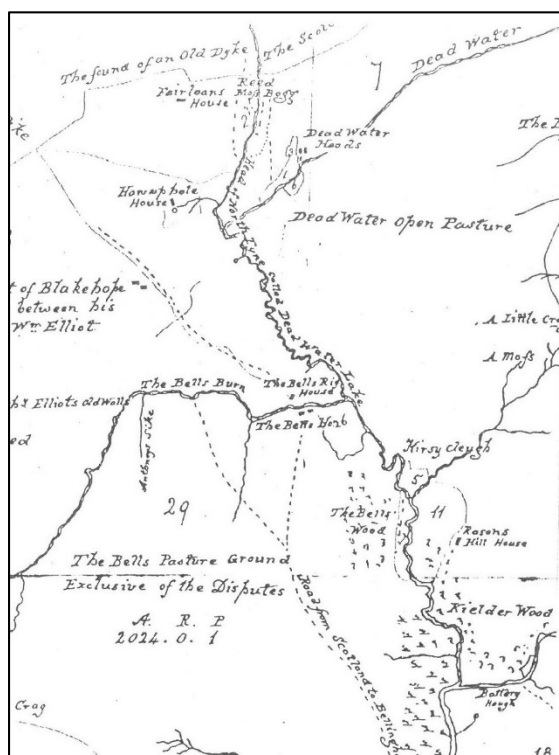
Plate 4: Extract from the Estate Map of the Duke of Northumberland, c. 1762

3.3.13 Armstrong's map of 1769 (Plate 5) still shows Bells Chapel, though it was not shown on the maps of 1752-5 or *c.* 1762. This could be an error. '*Bells Linn*' is annotated on the south side of Bells Burn, though no structures are depicted, and the track formerly depicted heading north-westwards (Asset 68) within the site boundary now appears to run on the west side of the Scottish boundary to what is now labelled '*Bleakhope*', still with two buildings depicted (Asset 69). The former settlement on Bells Moor on the 1769 map is labelled '*Hawkhope*' and two structures seem to be depicted, though this may be representative of size, rather than accurately surveyed detail, and three are depicted at '*Dead Water*'. No settlement is depicted at the northern boundary, which itself is annotated '*The Boundary Dike*' on this plan. The lands to the south still appear to be '*DISPUTED*'. This is also the earliest map to show '*Bath and Spaw Well*' (*confer* 3.3.18).
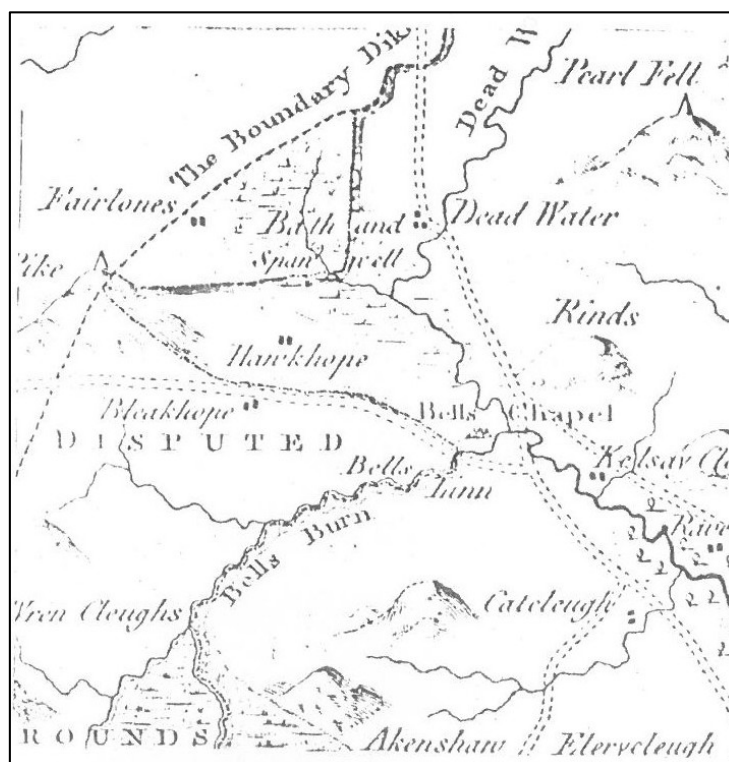
Plate 5: Extract from Armstrong's Plan of Northumberland, 1769

3.3.14   A similar layout is shown on Fryer's map of 1820 (Plate 6), although the track leading past the building annotated as '*Bells Chapel*' seems to lie within the site boundary, and to the north of Bells Burn. The Scottish part of the site is not shown on this map. The settlement on Bells Moor, on the later plan is labelled '*Hawkhope Hole*' and only one building is shown, which appears to be nearer the northern boundary than formerly shown. Hawkhope Hole appears to have finally been abandoned between 1820 and 1863, but in 1888 it was claimed "*at Hawkhope, nearly a mile to the north-west, are remnants of the rude old Border architecture*" (Tomlinson 1888, 285). Two structures are shown at '*Dead Water*' and the well is labelled '*Spaw Well*' (Asset 41). Fryer's map is also the earliest to show '*Lightpipe*' (Asset 36).
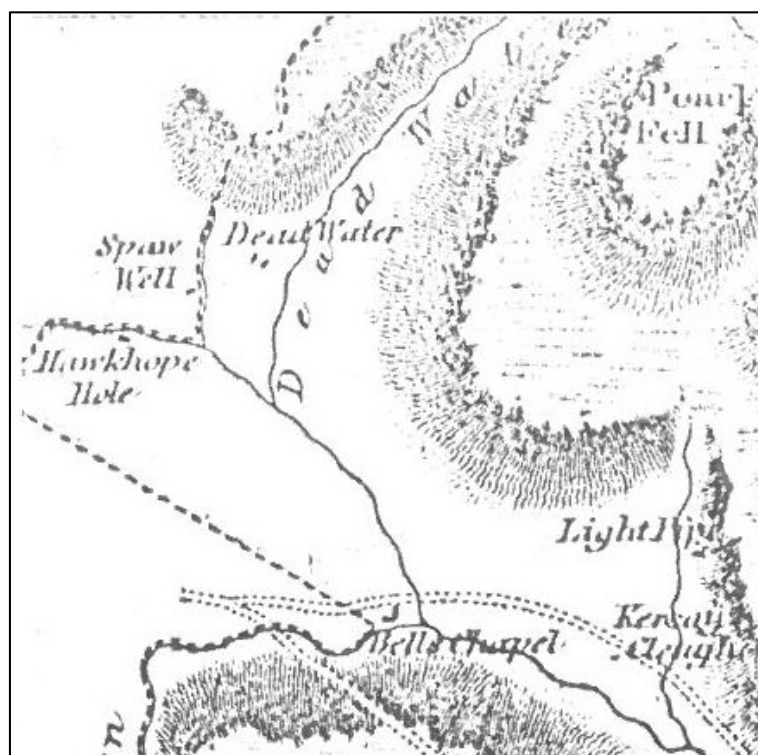
Plate 6: Extract from Fryer's Plan of Northumberland, 1820

3.3.15 The site lay "*in the township of Plashetts and Tynehead in the parish of Falstone... The township is extensive, consisting of detached houses extending to the borders of Scotland, situated on the North Tyne river, in a mountainous district abounding with game*" (Kelly's Trade Directory 1910, cited at http://communities.northumberland.gov.uk/005065FS.htm)*.* In 1888, the area was described as comprising "*far-stretching moors which abound in grouse*" (Tomlinson 1888, 226). There is also a reference to an "*irregular circle of stones, just outside a rude wall, enclosing what was once an ancient burial-ground*" a "*short-distance from the mouth of the Bell's Burn*" and near the "*site of an old chapel*" (*ibid*, 227; Asset 10). The irregular circle of stones may be the known remains of a possible village associated with Bells Chapel including field system remains (Asset 30) or the remains of an old stell to the south-east of the chapel (Asset 31; '*stell*' is a Northumbrian dialect word for a circular sheepfold).

3.3.16 In the 18th century mining became increasingly important, and "*coal dug from the Duke of Northumberland's colliery at Plashetts supplied limekilns over the border in Liddesdale*" (Bonney nd, 9). There were also a number of 19th century industrial developments in the area, including "*a tile works, lead mining and a short-lived iron*

foundry at Hareshaw", all of which led to "*the development of better roads in the valley*" (Bonney nd, 11).

3.3.17   "*There were the freeholders on the south-eastern part of the district but the sheep-farms in the north-west on the border formed two large estates, one owned by the Duke of Northumberland and the other by Sir John Edward Swinburn*" (Hope Dodds 1940, 268). In 1850, the Duke of Northumberland's farms in Falstone parish included, among others, "*East and West Kielder, Bell's Rig and Deadwater*" (*ibid*). He bought Hawkhope from Sir Matthew White Ridley in 1867 (*ibid*). There is an abstract of administration of William Brown, Farmer of Deadwater in the Parish of Simonburn dating to 24th August 1801 (IR/323/487). The largely agricultural nature of the area remained, and this is represented by a number of features known to have existed within the site including sheepfolds depicted on the First Edition Ordnance Survey Map of 1863 (Figure 4; Assets 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 and 70) and on Google Earth (Assets 64, 65 and 66). Stack stands are also represented, and associated features (Asset 8). Kerseycleugh Cottage (Asset 18), Kerseycleugh (Asset 35), Lightpipe (Asset 36) and Bellsburnfoot (Asset 37), all in the south-eastern part of the site, also seen on the First Edition Ordnance Survey Map of 1863 (Figure 4), presumably housed agricultural workers, and field boundary features seen on the First Edition Map within the site boundary also relate to earlier agricultural land use (Assets 38, 39, 40 and 75). A series of three linear banks to the north of Deadwater Farm seen on Google Earth to south of an existing sheepfold, must also relate to earlier agricultural divisions of this part of the site (Asset 63). Google Earth imagery has also revealed a number of features in the landscape of possible archaeological origin, including a linear bank (Asset 48), a possible sheepfold (Asset 49), a series of features including circular and rectangular enclosures probably for livestock (Asset 50), further possible sheepfolds (Assets 51, 66, 65 and 66) and irregular features, possibly representing enclosures on the south side of Deadwater Rigg (Asset 52).

3.3.18   Also depicted on the First Edition Ordnance Survey map (Figure 4) is '*Deadwater Well (Sulphureous) Bathing House*' (Asset 41) next to Deadwater Well. This was shown on Armstrong's map of 1769 (Plate 5). It was described by Mackenzie in 1825 as "*much frequented by persons who are afflicted with cutaneous and scrophulous complaints, and who receive great benefit by drinking the water, and by using it as a warm bath. It only wants, observed Chambers, proper accommodation to make Dead Water a place of more resort*" (cited by Andrew Curtis at: http://www.geograph.org.uk/photo/4134098). When the Tyneside Naturalists Field

Club visited the site in 1863, they reported that it had reached its peak 40 to 50 years previously, and that "*when the house was inhabited, visitors were required to fill the boiler with water from the well, and heat it by setting a fire using peats placed near the house. However, on the occasion of their visit, they reported that this 'primitive apparatus' had been recently destroyed*" (Andrew Curtis at geograph.org: http://www.geograph.org.uk/photo/4134098). The location was just over the border into Scotland, to the west of Deadwater Farm. Crofton suggests that it was this bathing house that led to the establishment of a railway station at Deadwater (Crofton 2014, 59), though there were quarries further into Scotland to the west.

3.3.19 In 1862, "*to speed the movement of coal destined for the textile factories across the border, the Border Counties Railway was opened*" (Bonney nd, 11; Asset 32). There was a sign within the study area denoting the English/Scottish Border, though this is now in the National Railway Museum in York (Asset 34). Also included, was a station at Deadwater, a single-storey building with an extension set back at the north-west end (Asset 33; Plate 7), which opened as a public station in 1880. Before this, "*probably in 1871, a timber platform was built on the up side, close to a siding, to serve quarry workers*" (http://www.disused-stations.org.uk/d/deadwater/). Several sidings were also provided from the line to serve industrial sites, including to Hawkhope drift mine, north of Falstone, in the 1860s-70s for Bellsburn quarry one mile north of Kielder and "*Thorlieshope limeworks north-west of Deadwater and Muirdykes quarry a further mile beyond*" (http://www.disused-stations.org.uk/d/deadwater/). The line eventually closed in 1952.

Plate 7: Deadwater Station (NRO 06639.2.7.15)

3.3.20 The Second Edition Ordnance Survey Map of 1897 shows a quarry (Asset 42) to the south-east of Bells Chapel (Asset 10), to the south of the site, with Kerseycleugh Bridge Cottages to the north (Asset 43), which may have been accommodation for the quarry workers. A rectangular structure is also shown between the chapel and the quarry, which may have related to the railway (Asset 44). A structure (Asset 45) is also shown on the 1897 map in the vicinity of the former Bells Chapel (Asset 10). A further rectangular structure is depicted towards the north of the central section of the site, to the west of the railway line, abutting a field boundary, and may have been a stell, or shelter for livestock (Asset 46). The former settlement at Blackhope (Asset 68) is shown as a single rectangular north-west south-east building on all publications of the Ordnance Survey maps up until modern mapping. The 1952 Ordnance Survey map depicts a rectangular enclosure to the south-west of Lightpipe (Asset 47), but this is no longer shown on modern mapping, and no traces was found during the walkover survey.

3.3.21 The Forestry Commission established the first large-scale plantations near Falstone in 1926, and the forest was extended gradually over land acquired mainly in the 1930s (NRO 3451/B/Box10/4). This was "*to give employment to previously unemployed men. The farms included in Kielder Forest are Raw, Kielderhead, East Kielder, West Kielder, Deadwater, Bewshaugh, Gowanburn, Plashetts and Wainhope, Belling and Law, Lewisburn, Oakenshaw, Willowbog, Otterstone, Cranecleugh, Emmethaugh, Shilburnhaugh, Whickhope, Smales, Chirdern Head*" (Hope Dodds 1940, 268). To house the workers, three new villages were established between 1950-2, designed by Dr Thomas Sharp, at Kielder (58 houses), Byrness (49 houses), and Stonehaugh (35 houses). Twelve houses were also built at Falstone, as well as 800km of road to manage and harvest the forest (NRO 3451/B/Box10/4). Prior to afforestation, hill farms covered most of the area, predominantly pastoral with Blackface sheep and some cattle (NRO 3451/B/Box10/4).

3.3.22 Kielder Water, established in the late 1970s and opened in 1982, is a "*seven mile long reservoir containing 44,000 million gallons*" (Stoker 1982, 7) and is larger than Ullswater. It required the flooding of two farms and 70 houses (NRO 3451/B/Box10/4). Other areas had been put forward in the area as potential reservoir sites, including Deadwater itself, though this was discarded. An archaeological paper entitled 'Kielder Water- Archaeology' (NRO 3451/B/Box10/4) states that 23 archaeological sites were identified "*within or close to the reservoir basin, any one of which might be affected by the inundation of the area, or the accommodation works close by*", with 16 "*worthy*

of either full or partial excavation or survey". Medieval sites targeted included "*farmsteads and a mill from 13th century onwards*" with "*the excavation of the earlier sites … [proving] the land settlement of the Romano British period… [as] agricultural settlements, not military, but … [with] a degree of security from palisades around the circumference*" (NRO 3451/B/Box10/4).

4   WALKOVER SURVEY

4.1   Results

4.1.1   The walkover survey, the majority, within the English border, undertaken between 4th and 8th April 2016, and within the Scottish extended area to the west, on 3rd May 2016, was undertaken to assess the assets located during the desk-based research, and to locate and record any new assets within the site boundary.

4.1.2   At the time of the walkover survey, the ground was wet and boggy, and, especially Bells Moor, the western part of the site, contained numerous drainage channels which made identification of archaeological features more difficult, and this was made worse by undergrowth and rushy plants. Unfortunately, the weather conditions, which included fog, low cloud and intermittent snow and hail showers, also hindered the survey. Features noted on Google Earth in the low lying bottom of the Deadwater Valley in particular, were difficult to identify because of the boggy character of their environs. Summaries of the results are included in the gazetteer (Appendix 2). A total of 37 known heritage assets, encountered through the desk-based research, were targeted and ground-truthed by the walkover survey, and a total of 13 further previously unknown features were recorded during the walkover survey (Figure 5). Some of the features previously surveyed in the late 1980s (Long 1988) have been positionally refined and details adjusted.

4.1.3   *The South-Eastern Area- Lightpipe area:* Kerseyclough Cottage (Asset 18), seen on the First Edition Ordnance Survey Map of 1863 (Figure 4) was still in existence as a dwelling at the time of the walkover survey, but is now known as Lightpipe. Historically, Lightpipe (Asset 36), first depicted on Fryer's Plan of Northumberland of 1820 (Plate 6) was located to the south-east of the present Lightfoot/previous Kerseyclough Cottage (Asset 18) in the south-east corner of an enclosed area. The field boundary remained the same as it appeared on the First Edition Ordnance Survey map of 1863 (Figure 4) at the time of the walkover survey, although only a slightly raised area of ground was noted at the location of the former Lightpipe farmstead (Asset 36; Plate 8). A break in the drystone wall forming the southern boundary, noted during the walkover survey, may indicate a former entranceway for the farmstead (Plate 9).

Plate 8: Former site of Lightpipe Farmstead (Asset 36), facing north-west

Plate 9: Break in boundary wall south of former site of Lightpipe Farmstead (Asset 36), facing north

4.1.4   To the south-west of the buildings in the Lightfoot area, no trace was found of the former small rectangular enclosure shown on Ordnance Survey mapping of 1952 (Asset 47). Two banks were noted (Asset 38), either side of a modern forestry track, and presumably cut by it, following the route of a track and field boundary shown on the First Edition Ordnance Survey map of 1863 (Figures 4 and 5; Plates 10 and 11). This may represent the remains of a track which once led beyond the site boundary, to the former farm of Kerseycleugh (Asset 35) to the west.

Plate 10: Northernmost bank forming part of Asset 38, facing south-east

Plate 11: Southernmost bank forming part of Asset 38, facing north-west

4.1.5   ***The Southern Area- Bells Burn area (Asset 10)***: another part of the walkover area was centred on Bells Burn, at the southern part of the site, west of the Lightpipe area. Features encountered in this area seemed to relate to the former settlements, highlighted by the research, either side of the burn. The northern side was once occupied by '*Bell Kirk*' (Asset 10) shown on 16th and 17th century maps (Plate 1). This is likely to have gone by 1752-5, as it is not illustrated on Roy's Military map of that year (Plate 3) or the estate plan of *c.* 1762 (Plate 4), though it does appear on later County maps (Plates 5 and 6), which, like the later OS mapping, may have been showing the site of the former chapel. There may have been other buildings associated

with it on the north side of the burn, or it may have been isolated. The estate plan of *c.* 1762 shows a building at this location, but names it '*The Bells Rig House*'.

4.1.6   The Blaeu map of 1654 shows '*Bells haugh*' (the chapel site) and '*Bellsyetts*', to the south, on the southern side of Bells Burn (Plate 2). This same settlement is shown on Roy's Military map of Scotland of 1752-5 (Plate 3) as '*Bells*' consisting of a number of buildings and associated cultivated land. Only '*Bells Rig House*' is shown on the estate map of *c.* 1762, however, suggesting that this settlement had been largely abandoned (Plate 4). Certainly, no buildings are shown on Armstrong's map of 1769 (Plate 5).

4.1.7   A number of features were encountered in this area during the walkover survey, including the possible remains of the chapel itself, appearing as a series of raised overgrown stone banks forming a roughly rectangular plan (Plate 12) to the south-east of the surviving stone cross shaft socle (Plate 13). A further boundary surrounded this area, perhaps formerly the garden or graveyard for the chapel (Plate 14). Further features in the vicinity included two banks, possibly representative of a former Holloway or sunken track heading north-westwards from the complex (Plate 15), with a semi-circular enclosure to the west of that, which, along with the features noted from Google Earth, suggest that the area utilised extended northwards onto Bells Moor (Assets 59 and 50). The Holloway is likely to be the trackway shown on old mapping, which once led to the former settlement of Blackhope, just north of the western extension to the survey area. In fact, '*Old Road, Blackhope*' (Asset 68) is included within the Scottish online Sites and Monuments Record, Canmore, though Blackhope itself is not. In addition, '*Old roads in Liddesdale*' (Asset 69) is included within the Scottish online Sites and Monuments Record, Canmore, just to the west of the site boundary, which covers the area to the west of the site and makes it clear that the settlement of Bells was part of a wider community which extended across the border.

Plate 12: Possible former chapel (Asset 10), facing south-west

Plate 13: Possible cross shaft socle, part of Bells complex (Asset 10)

Plate 14: Possible entrance in boundary wall of chapel complex (Asset 10), facing south-east

Plate 15: Possible former Holloway (Asset 10), facing west

4.1.8   A further L-shaped field boundary, to the north-west of the existing building of Bellsburnfoot (Asset 39; Figure 5), and the ruined agricultural building first shown on Second Edition Ordnance Survey mapping (Asset 45; Plate 16) may relate to later activity at the complex.

Plate 16: Ruined building (Asset 45), facing south

4.1.9   Features were also identified to the south of Bells Burn during the walkover survey (Figure 5) and these extended eastwards towards the River North Tyne, east of the former railway line (Asset 32), beyond the proposed plantation areas. These included possible former buildings. Within the site boundary itself, to the west of the former railway line (Asset 32) and north-west of Bellsburn Cottage (Asset 17) were a series of features which may relate to early terracing of the area or division into individual plots. A bank and a raised area were also noted on the north side of Bells Burn (Figure 5; Plates 17 and 18).

Plate 17: Bank, north of Bells Burn (Asset 10), facing south-west

Plate 18: Raised area, north of Bells Burn (Asset 10), facing south-west

4.1.10 There were further features to the south, and north of Bellsburn Cottage which seemed to represent a rectangular area, likely relating to an earlier larger enclosed area, the former garden associated with the cottage (Plate 19). These are first shown on the Second Edition Ordnance Survey map of 1897

Plate 19: Former enclosure associated with Bellsburn Cottage, facing south-east

4.1.11 ***The North-Western Area- Bells Moor:*** Bells Moor seemed to have the majority of the known heritage assets within the site boundary, though this may be because it consisted of the largest area of land. Several of these were not found during the walkover survey, but this may be because of the relatively poor ground visibility rather than because they no longer survive. These included Deadwater Lakes Sheepfold (Asset 27), the site of the Border Railway sign (Asset 34), further possible sheepfolds (Asset 49, 51, 64, 65 and 66) and a small complex of circular and rectangular structures towards the eastern side of Bells Moor (Asset 50; Figure 5). This latter complex may have been associated with either the Bells settlement (Asset 10) or Hawkhope (Asset 2) and likely represent agricultural activities dating from the 16th to 18th centuries.

4.1.12 Other known assets were identifiable during the walkover survey. One of these, a rectangular structure seen on the Second Edition Ordnance Survey map of 1897 (Asset 46), survived well and was still in use, and appeared to be associated with a spread of rubble, thought to relate to a raised trackway which extended into the adjacent field (Plate 20), and likely to be of late 19th century origin. There was also a raised area of ground in the adjacent field, to the south-east, which may relate to an earlier site of an agricultural building, though none is known at this location from early mapping (Asset 55; Plate 21).

Plate 20: Former trackway (Asset 56), facing north-east

Plate 21: Possible former building (Asset 55), facing north-west

4.1.13 Further agricultural features in the form of a sheepfold (Asset 54; Plate 22), encountered towards the south-eastern part of Bells Moor (Figure 5) and a curvilinear bank, possibly an earlier boundary (Asset 53) were recorded towards the southern central part of the moor (Figure 5; Plate 23).

Plate 22: Former sheepfold (Asset 54), facing east

Plate 23: Curvilinear bank (Asset 53), facing south

4.1.14 Another feature found on Bells Moor during the desk-based research, and confirmed during the walkover survey, was a large bank at the southern boundary of the site, that didn't extend beyond it, and may be a former boundary bank once forming the boundary between England and Scotland, perhaps relating to the Scots Dyke, depicted further to the north on earlier mapping (Plate 3; Asset 48; Figure 5). A possible example of rock art (Asset 61) was also encountered close to a stream on Bells Moor (Plate 24; Figure 5).

Plate 24: Possible rock art found on Bells Moor (Asset 61)

4.1.15 Perhaps the most interesting feature encountered on Bells Moor was the known deserted post medieval village site (Asset 2). This is known from cartographic evidence (*confer* 3.3.9-3.3.10), and was surveyed in 1988 (Long 1988). Numerous banks and some areas of rig and furrow were noted in this area, some only identifiable on Google Earth (Asset 62), as well as the known sheepfold and associated enclosure, shown on modern mapping (Figure 5). These features differed slightly from Long's plan of 1988, logged with Northumberland County Councils HER (Long 1988). This included possible building structures, but not all of these were visible at the time of the walkover survey. Clear field systems were observable, on a roughly north-west south-east alignment, covering an area approximately 400m in length and 115m in width (Figure 5). In some areas, rig and furrow was clearly visible (Plate 25), and the banks forming the boundaries survived better in some areas than others (Plate 26). The mixture of buildings (probably including houses) and paddocks with little obvious plan form is both characteristic of post-medieval encroachment settlements and also of the Scottish settlement variant knowns as the '*fermtoun*'.

Plate 25: Area of rig and furrow within wider complex (Asset 2), facing south

Plate 26: Area where bank survived quite well (Asset 2), facing south-west

4.1.16 A settlement is shown at this location on Roy's Military map of 1752-5 (Plate 3), annotated as '*Hakupsole*' but only shown as a single house by *c.* 1762 (Plate 4), labelled '*Horouphole House*', and as '*Hawkhope*' on Armstrong's plan of 1769 (Plate 5). Fryer's Plan of 1820 shows a single building, labelled '*Hawkhope Hole*' (Plate 6). No buildings are shown on the First Edition Ordnance Survey map of 1863 (Figure 4). It is an interesting location for a settlement, on highly marginal land. Some of the field systems were focused on a particularly steep hillside that would have been difficult to plough. The settlement is likely to have been established by a locally generated population as a result of pressure on local resources. Elsewhere commons were squatted on during the 16th and 17th centuries. The settlement's presence on maps of the mid 18th century, but not on 16th and 17th century plans (Plates 1 and 2) may indicate a late 17th or early 18th century origin, perhaps resulting from the pacification

of the area after 1603. It is more likely, however, that this is just a result of the scale of the mapping. Its form is of a classic post-medieval Scottish style '*fermtoun*' settlement. It seems to have been reduced to a single farm by 1820 (Plate 6), disappearing altogether by the mid 19th century (Figure 4). Features relating to this settlement were observed to extend beyond the site boundary, north of the border, into Scotland in the form of stells, stackstands, enclosures and stackstands within enclosures.

4.1.17 ***The North-Eastern Area- Deadwater Farm area:*** the supposed site of a medieval village at Deadwater, cited by the Northumberland Historic Environment Record (HER) as in the vicinity of Deadwater Farm, was not located during the walkover survey (Asset 6), and neither was a former field boundary, known from First Edition Ordnance Survey mapping (Asset 40) or sheepfold (Asset 22). Buildings at the site of the present Deadwater Farm are shown on Roy's Military Map of Scotland of 1752-5 (Plate 3), suggesting that at least a farmstead was in existence by this date. This plan also shows a settlement annotated as '*Scots Dyke*' to the north-west, a site referenced in the HER as Deadwater Rigg (Asset 9) and it could be that these have been confused, and the medieval village was actually at the latter's location. Certainly the settlement '*Scots Dyke*' at Deadwater Rigg is not shown on any subsequent mapping. The area was planned by Long in 1988, and the walkover survey noted similar findings (Figure 5), although the area had been affected by modern post and wire fencing on a north-west to south-east alignment across Deadwater Rigg and along the western boundary, and by the erection of a monument (Asset 57; Plate 27) and associated trackway to reach it heading south-eastwards from it adjacent to the boundary to meet the road. A stone upright was also recorded nearby, perhaps a former gate stoop (Asset 58; Plate 28).

Plate 27: Monument to Source of North Tyne (Asset 57), facing north-east

Plate 28: Possible former gate stoop at Deadwater Rigg (Asset 58), facing north-west

4.1.18   The boundary wall in the area of Deadwater Rigg, since replaced with post and wire fence, was respected by the settlement features and may be of some antiquity, and

although ruined and grown over in most places (Plate 29), some areas with capping stones still survived, but the wall tended to be better preserved when it was west of the modern boundary fence, beyond the present site boundary (Plate 30). It is possible that this relates to '*The Scots Dyke*', marked on 18th century (Plates 3 and 4).

Plate 29: Boundary wall at Deadwater Rigg area to left (Asset 9), facing south-west

Plate 30: Boundary wall with capstones in vicinity of Deadwater Rigg (Asset 9), facing north-west

4.1.19 The remains of a possible former building were recorded at Deadwater Rigg, with extensive associated field systems, close to the northern boundary of the site (Figure 5). The possible building remains seemed to represent a multi-roomed cross passage building (Plate 31), and as it respected the boundary, is likely to post-date it, and therefore, perhaps, post-date 1551 (*confer* 3.3.11). It is not shown on the *c.* 1762 plan, so may have been abandoned by then (Plate 4). A number of banks extended from the boundary wall, sub-dividing much of the north-west boundary of the fell including

towards the northern extent of the site (Asset 60; Plate 32), though traces of rig and furrow identified by Long in 1988 were difficult to locate.

Plate 31: Possible remains of building (Asset 9), facing south

Plate 32: Bank (Asset 60), facing north-east

4.1.20 It is likely that the complex at Deadwater Rigg (Assets 2 and 60) was more extensive than seen on mapping, and observed during the walkover survey, as features noted from Google Earth imagery to the east are likely to be further field systems associated with the settlement/ farmstead (Asset 52).

4.1.21 More recent use of the area was represented by a decorative iron fencepost, located at the northern extent of the site at the southern end of a small copse of older trees of a variety not seen elsewhere. Perhaps the post is indicative of a 19th century forestry plantation (Asset 59; Plate 33).

Plate 33: Fencepost (Asset 59), facing east

4.1.22 In the valley, at the foot of Deadwater Rigg, the known site of Deadwater Railway station was still inhabited at the time of the walkover survey (Asset 33), and the former bathing house (Asset 41), first shown on Armstrong's plan of 1769 (Plate 5; *confer* 3.3.18) survived in a ruinous state amongst an area of plantation just to the west of the site boundary (Plate 34).

Plate 34: Former bathing house (Asset 41), facing north-west

4.1.23 ***The South-western Area- into Scotland:*** much of this area of the site was laid to pasture within an area of agricultural improvement. The sheepfold, shown on the First Edition Ordnance Survey map of 1863 (Figure 4), and on modern mapping, within the

site boundary was noted during the walkover survey as surviving, but in a state of disrepair (Plate 35). It survived to a maximum height of 1.4m, though much of it was only up to 0.3m in height, and had two entrances. It was in a low-lying valley area just to the north of Bells Burn (Figure 5), but with steep rising ground to the immediate north.

Plate 35: Sheepfold (Asset 70), facing north-east

4.1.24 At the northern end of the Scottish part of Bells Moor were two roughly square enclosures formed by dry stone walls (Asset 75). These walls abut the English/Scottish boundary wall to the unenclosed part of Bells Moor and mark the Anglo-Scottish border. The walls are located just to the south of Blackhope (Asset 69), a settlement know to have existed in the 18th century (*confer* 3.3.9) They are likely to have been agricultural enclosures for livestock control, and been associated with the settlement. The walls themselves (Asset 75) were well-preserved, surviving to an average height of 1.2m and with surviving coping stones (Plate 36). The build of these walls, was very similar to the build of the Anglo-Scottish border wall, to the east, and may have been contemporary. The build is typical of parliamentary enclosure period walls (late 18th to mid 19th century) Noted within the boundary wall, at two locations, were sets of stepped stones extending from the wall (Plates 37 and 38), observed on both sides of the wall at this location, clearly stiles to allow people to access both sides. Both of these sets of stiles occurred at locations shown on the First Edition Ordnance Survey map of 1863 (Figure 4) to be where a trackway led to the wall, and continued on the other side, suggesting that this track was merely a footpath to allow access to their local chapel at Bells (Asset 10) and to access their lands. The archaeological evidence suggests that this area was enclosed within its existing enclosures in the later eighteenth century.

Plate 36: Central stone wall (Asset 75), facing north-west

Plate 37: Stone Stile near Blackhope (Asset 73), facing north-east

Plate 38: Stone stile (Asset 74) near hollow way at Bells (Asset 10), facing north

4.1.25 Within the northern enclosure formed by the walls (Asset 75) was a 1.5m wide bank feature, forming an approximate u-shape 20m north-west to south-east and 12m north-east to south-west (Plate 39), and located on the north side of the Day Sike (Asset 71). Just to the south-west was a low bank formed of stone, perhaps an earlier wall (Plate 40). These are likely to relate to earlier agricultural use of the now enclosed area.

Plate 39: Wide bank feature (Asset 71), facing east

Plate 40: Low stone bank (Asset 71), facing south-east

4.1.26 At the northern corner of the site, just to the south-east of Blackhope (Asset 69), an area of rig and furrow was noted next to the English/Scottish border wall (Asset 72). The rigs were quite wide, averaging 1-1.2m, and measured 2m apart from the top of one rig to the next rig (Plate 41). As the ground got boggier, it became much less clear, but appeared to only run approximately up to 25m from the border wall. This is roughly in line with where the track, shown on the First Edition Ordnance Survey map of 1853 (Figure 4) ran, to the stile in the boundary wall (Asset 73). The location of the rig and furrow suggests it was associated with Blackhope and was formed to allow the growing of crops, possibly root vegetables.

Plate 41: Area of rig and furrow (Asset 72), facing north-east

4.1.27 Though shown and annotated on modern mapping, Blackhope itself was in a ruinous state at the time of the walkover survey. It survived as a linear row of buildings, possibly three, though some could have been formerly for livestock, so it may only represent one farmstead, or family's, dwelling (Plate 42). A fireplace survived in the second most north-easterly part (Plate 43). Modern brick in stretcher pattern was visible, for repairs and alterations, suggesting a relatively modern habitation or use (i.e. into the 20th century).

Plate 42: Blackhope (Asset 69), facing north-west

Plate 43: Fireplace in Blackhope (Asset 69), facing north-north-west

4.1.28 Some bricks, visible in the surrounding rubble, were observed, once reading '*Sandysike*', seen in the building, and '*Whitehill*', by an area of repair on the south-west facing elevation (Plates 44 and 45). Sandysike Brickworks was one of a number of tile and brickworks south of Longtown, based at Arthuret, Cumbria, and shown on maps dating to between 1863 and 1948 (www.solwaypost.co.u; www.geog.port.ac.uk). Whitehill Brickworks was at Rosewell, or Lasswade, Midlothian and was formed from the Newbottle and Whitehill Pits. It dated from the 1890s (www.scottishbrickhistory.co.uk/whitehill). In 1938-9 the brickworks were rebuilt and

equipped with new machinery, eventually closing in 1977 (www.penforma.com/bricks/scotland).

Plate 44: Brick at Blackhope (Asset 69)

Plate 45: Brick at Blackhope (Asset 69)

5   DISCUSSION

5.1   Heritage Significance

5.1.1   The significance of each of the heritage assets identified by this archaeological work has been assessed using one of a series of heritage impact tables as used by Government agencies, as for example those used in the Highway Agency's *Design Manual for Roads and Bridges* (2007; *confer* 2.4; Appendix 1, Table 1). This has found that the majority of the heritage assets are, on this basis, of local significance, except for Kielder United Reformed Church (Asset 1), which, as a grade II listed building, is of District or County (Higher) significance, Kershope Castle (Asset 3) and the Romano-British settlement (Asset 11), which, as scheduled monuments, are of National significance and the site of a railway sign (Asset 34) which is of negligible significance.

5.2   Magnitude of Impact

5.2.1   The magnitude of impact on each of the heritage assets has been assessed using one of a series of heritage impact tables as used by Government agencies, as for example those used in the Highway Agency's *Design Manual for Roads and Bridges* (2007; *confer* 2.4; Appendix 1, Table 2). This has found a distinction between those assets within and those outside the site boundary, with the plantation proposals assessed to result in 'no change' to those assets outside the site boundary (Figure 5). This includes 32 assets (Assets 1, 3, 4, 5, 7, 8, 11, 12, 13, 14, 15, 19, 20, 21, 23, 24, 25, 26, 28, 29, 30, 31, 32, 33, 35, 41, 42, 43, 44, 67, 68 and 69).

5.2.2   The magnitude of impact of the proposed plantation plans on assets within the site boundary, but outside the areas due to be planted (Figure 5) has been assessed to be minor, in that the only change will be to the setting of those assets. This relates to 15 assets (Assets 6, 14, 17, 18, 22, 27, 36, 37, 38, 40, 45, 47, 51, 59 and 73).

5.2.3   For the eight heritage assets (Assets 48, 56, 57, 58, 61, 70, 71 and 72) within the areas proposed for broadleaf plantation, the magnitude of impact has been assessed to be less than substantial. For the final 20 assets (Assets 2, 9, 10, 34, 39, 46, 49, 50, 52, 53, 54, 55, 60, 62, 63, 64, 65, 66, 74 and 75) within the areas proposed for coniferous plantation or forest roads, the magnitude of impact has been assessed to be substantial.

5.3   Impact on Heritage Significance

5.3.1   The impact on the heritage significance has been assessed using one of a series of heritage impact tables as used by Government agencies, as for example those used in

the Highway Agency's *Design Manual for Roads and Bridges* (2007; *confer* 2.4; Appendix 1, Table 3). This has resulted in no appreciable impact on the heritage significance of 47 assets (Assets 1, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 37, 38, 40, 41, 42, 43, 44, 45, 47, 51, 59, 67, 68, 69 and 73), meaning that no archaeological mitigation is likely to be required for these heritage assets as a result of the proposed plantation scheme.

5.3.2   For those heritage assets within areas proposed for plantation, the proposed plans will have a 'very limited' impact on heritage assets within the areas proposed for broadleaf plantation (Assets 56, 57, 58, 61, 70, 71 and 72) and a 'limited' impact on those assets within the areas proposed for coniferous plantation and forest tracks (Assets 2, 9, 10, 34, 39, 46, 48, 49, 50, 52, 53, 54, 55, 60, 62, 63, 64, 65, 66, 74 and 75), which means that further archaeological mitigation may be required for a total of 28 heritage assets. A summary of these findings is included in the table below:

Asset No.	Asset Name	Heritage Significance	Magnitude of Impact	Impact on Heritage Significance
1	Kielder United Reformed Church	District or County (Higher)	No Change	No appreciable impact (no mitigation)
2	Hawkhope Hole settlement	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
3	Kershope Castle	National	No Change	No appreciable impact (no mitigation)
4	Ravensworth Moor Cairn	Local	No Change	No appreciable impact (no mitigation)
5	Possible earthwork	Local	No Change	No appreciable impact (no mitigation)
6	Site of Deadwater medieval village	Local	Minor (change to setting)	No appreciable impact (no mitigation)
7	Peden's Cave	Local	No Change	No appreciable impact (no mitigation)
8	Bar Knowe stack stands and folds	Local	No Change	No appreciable impact (no mitigation)
9	Deadwater Rigg	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
10	Bells chapel and settlements	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
11	Romano-British enclosed settlement	National	No Change	No appreciable impact (no mitigation)
12	Cist	Local	No Change	No appreciable impact (no mitigation)
13	Ravenshill Pele	Local	No Change	No appreciable impact (no mitigation)
14	Old Kielder	Local	No Change	No appreciable impact (no mitigation)
15	Catcleugh, north enclosure	Local	No Change	No appreciable impact (no mitigation)
16	Former Presbyterian Meeting House	Local	Minor (change to setting)	No appreciable impact (no mitigation)
17	Bellsburn Cottage	Local	Minor (change to setting)	No appreciable impact (no mitigation)
18	Kerseyclough Cottage	Local	Minor (change to setting)	No appreciable impact (no mitigation)
19	Deadwater Burn Sheepfold	Local	No Change	No appreciable impact (no mitigation)

Asset No.	Asset Name	Heritage Significance	Magnitude of Impact	Impact on Heritage Significance
20	Deadwater Burn Sheepfold	Local	No Change	No appreciable impact (no mitigation)
21	Deadwater Moor Sheepfold	Local	No Change	No appreciable impact (no mitigation)
22	Sheepfold near Deadwater	Local	Minor (change to setting)	No appreciable impact (no mitigation)
23	Deadwater Moor Sheepfold	Local	No Change	No appreciable impact (no mitigation)
24	Lightpipe Sike Sheepfold	Local	No Change	No appreciable impact (no mitigation)
25	Sheepfold	Local	No Change	No appreciable impact (no mitigation)
26	Airshope Sheepfold	Local	No Change	No appreciable impact (no mitigation)
27	Deadwater Lakes Sheepfold	Local	Minor (change to setting)	No appreciable impact (no mitigation)
28	Sheepfold	Local	No Change	No appreciable impact (no mitigation)
29	Cultivation at Catcleugh	Local	No Change	No appreciable impact (no mitigation)
30	Field System Remains	Local	No Change	No appreciable impact (no mitigation)
31	Old Stell	Local	No Change	No appreciable impact (no mitigation)
32	Border Counties Railway	Local	No Change	No appreciable impact (no mitigation)
33	Deadwater Station	Local	No Change	No appreciable impact (no mitigation)
34	Border Railway Sign Site	Negligible	Substantial (coniferous planting)	Limited impact (may need mitigation)
35	Site of Kerseycleugh	Local	No Change	No appreciable impact (no mitigation)
36	Site of Lightpipe	Local	Minor (change to setting)	No appreciable impact (no mitigation)
37	Bellsburnfoot	Local	Minor (change to setting)	No appreciable impact (no mitigation)
38	Former field boundary	Local	Minor (change to setting)	No appreciable impact (no mitigation)
39	Former field boundaries (associative value with Asset 10)	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
40	Former field boundary	Local	Minor (change to setting)	No appreciable impact (no mitigation)
41	Site of Bathing House	Local	No Change	No appreciable impact (no mitigation)
42	Site of quarry	Local	No Change	No appreciable impact (no mitigation)
43	Kerseycleugh Bridge Cottage	Local	No Change	No appreciable impact (no mitigation)
44	Site of rectangular structure	Local	No Change	No appreciable impact (no mitigation)
45	Site of rectangular structure	Local	Minor (change to setting)	No appreciable impact (no mitigation)
46	Rectangular structure	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
47	Site of rectangular enclosure	Local	Minor (change to setting)	No appreciable impact (no mitigation)
48	Linear bank	Local	Less than substantial (broadleaf planting)	Very limited impact (may need mitigation)
49	Possible former sheepfold	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
50	Circular and rectangular features	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
51	Possible former sheepfold	Local	Minor (change to setting)	No appreciable impact (no mitigation)

Asset No.	Asset Name	Heritage Significance	Magnitude of Impact	Impact on Heritage Significance
52	Irregular features (associative value with Asset 9)	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
53	Linear bank	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
54	Former sheepfold	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
55	Possible former building	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
56	Spread of rubble	Local	Less than substantial (broadleaf planting)	Very limited impact (may need mitigation)
57	Cancer trail monument	Local	Less than substantial (broadleaf planting)	Very limited impact (may need mitigation)
58	Stone upright	Local	Less than substantial (broadleaf planting)	Very limited impact (may need mitigation)
59	Fencepost	Local	Minor (change to setting)	No appreciable impact (no mitigation)
60	Series of banks (associative value with Asset 9)	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
61	Possible rock art	Local	Less than substantial (broadleaf planting)	Very limited impact (may need mitigation)
62	Area of rig and furrow (associative value with Asset 2)	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
63	Three linear banks	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
64	Possible former sheepfold	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
65	Possible former sheepfold	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
66	Possible former sheepfold	Local	Substantial (coniferous planting)	Limited impact (may need mitigation)
67	Old Roads in Liddesdale	Local	No change	No appreciable impact (no mitigation)
68	Old Road, Blackhope	Local	No change	No appreciable impact (no mitigation)
69	Blackhope	Local	No change	No appreciable impact (no mitigation)
70	Sheepfold	Local	Less than substantial (broadleaf planting)	Very limited impact (may need mitigation)
71	Bank features	Local	Less than substantial (broadleaf planting)	Very limited impact (may need mitigation)
72	Area of Rig and furrow	Local	Less than substantial (broadleaf planting)	Very limited impact (may need mitigation)
73	Stone stile	Local	Minor (change to setting)	No appreciable impact (no mitigation)
74	Stone stile	Local	Substantial (may need to be removed as access track is proposed near this location)	Limited impact (may need mitigation)
75	Stone walls	Local	Substantial (may need to be removed for planting and access)	Limited impact (may need mitigation)

5.4   Recommendations

5.4.1   It is likely that mitigating against the impact of the proposed plantation scheme on the heritage significance of these 28 heritage assets could involve the avoidance of planting in the areas surrounding them (Figure 5). This is particularly likely for the features associated with former settlement sites (Assets 2, 62, 10, 39, 9, 52 and 60) and for the former boundary bank (Asset 48) and rig and furrow associated with Blackhope (Asset 72), which could easily be achieved by bringing the areas for

plantation in from the boundaries in the areas at Deadwater Rigg, Bells Chapel and Bells Rigg, avoiding much of the central area from the northern boundary at Hawkhope Hole, and bringing the broadleaf plantation boundary in further from the Blackhope area of the site. The other features, mainly agricultural in origin may also need to be avoided, though this would depend on advice from Northumberland County Council Conservation Team.

5.4.2   Whilst on the basis of the heritage significance attribution method used here, the majority of the assets are considered to be of only local significance, this methodology is based on the existing heritage status of each asset. The weakness of this method is that it requires the assets to be well understood and this is not necessarily the case in this instance. It has become clear during the course of this survey that some of the sites, primarily the settlements, were not previously well understood. The settlement remains relating to Bells Kirk (Asset 10), Scots Dyke (Asset 9) and Hawkhope (Asset 2) and possible associated features (Assets 27, 39 49, 50, 51, 52, 54, 60, 62, 64, 65 and 66), and to a lesser extent, Blackhope (Assets 69 and 72) provide an archaeological archive of information relating to settlement history in the Anglo-Scottish border from the late medieval period through to the 18th century. This is a key period in border history, as it covers the Anglo-Scottish wars, border reiving, the union of the kingdoms and the processes of improvement/ clearances.

5.4.3   Although the settlements are not well documented and they have limited amenity value because of their lack of accessibility, they have considerable group value. This group value extends over Assets 2 and 62 (for Hawkhope), 9, 52 and 60 (for Scots Dyke) and 10 and 39 (for Bells Kirk), with Assets 27, 49, 50, 51, 54, 64, 65 and 66, the series of agricultural related features in the Deadwater Valley located mid-way between Hawkhope and Bells. In addition, it is possible that this group value could be extended to include agricultural features likely to relate to Blackhope (Assets 69, 71, 72, 73 and 75). This group value, and the research value of the high quality earthwork remains, gives these sites an enhanced significance, despite their current heritage status. Consequently, these remains should be regarded as being of at least County level significance, and potentially could be regarded as being of schedulable quality, at least in part.

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APPENDIX 1: HERITAGE IMPACT ASSESSMENT TABLES

Table 1 Measuring Significance

Significance	Designation	Asset types and justification	Preferred response to negative impact
International	Non-statutorily designated heritage assets.	World Heritage Site (NPPF s132).	Avoid negative impact where asset contributes to the WHS's defined outstanding universal values (NPPF s138).
National	Statutorily designated heritage assets.	Scheduled monuments, Grade I and II* Listed Buildings (NPPF s132).	Avoid negative impact.
National	Non-statutorily designated heritage assets.	Registered Battlefields, Grade I and II* Registered Parks and Gardens (NPPF s132).	Avoid negative impact.
National	Non-designated heritage assets of demonstrable equivalence to a scheduled monument (NPPF s138).	Assets where assessment for designation is pending, assets that have been assessed as being capable of designation but have not been designated at the SoS discretion, assets worthy of designation but which are outside the scope of the 1979 Act (NPPF s139).	Avoid negative impact.
District or County (Higher)	Statutorily designated heritage assets.	Grade II Listed Buildings (NPPF s132).	Limit negative impact (avoid substantial harm) and mitigate.
District or County (Higher)	Non-statutorily designated heritage assets.	Conservation area (NPPF s127), Grade II Registered Park and Garden (NPPF s132).	Limit negative impact (avoid substantial harm) and mitigate.
District or County (Lesser)	Non-designated heritage assets within a national park or AONB.	Any extant heritage assets (NPPF s115).	Limit negative impact and mitigate.
District or County (Lesser)	Non-designated heritage assets.	Heritage assets placed on a local planning authority list (NPPG).	Limit negative impact and mitigate.
District or County (Lesser)	Non-designated heritage assets.	Any area of potential listed in a local plan (NPPG).	Limit negative impact and mitigate.
Local	Non-designated heritage assets.	Any extant heritage assets outside of a national park or AONB.	Mitigate.
Negligible	Non-designated heritage assets.	Heritage assets recorded in the HER that are no longer extant, individual findspots or structures of no heritage value.	No action.

Table 2: Establishing the Magnitude of Impact

Magnitude of Impact	Heritage Asset		
	Archaeological Remains (Archaeological Interest)	Historic Buildings (Architectural/Artistic Interest and/or Historic Interest)	Historic Landscapes (Historic Interest)
Loss	• Change to most or all key archaeological materials, such that the resource is totally altered • Comprehensive changes to setting	• Change to key historic building elements, such that the resource is totally altered • Comprehensive changes to setting	Major change to historic landscape character resulting from: • Changes to most key historic landscape elements, parcels or components • Extreme visual effects • Major change to noise or change to sound quality • Major changes to use or access
Substantial	• Changes to many key archaeological materials, such that the resource is clearly modified • Considerable changes to setting that affect the character of the asset	• Changes to many key historic building elements, such that the resource is significantly modified • Changes to setting of an historic building such that it is significantly modified	Moderate change to historic landscape character resulting from: • Changes to many key historic landscape elements, parcels or components • Visual change to many key aspects of the historic landscape • Noticeable differences in noise or sound quality • Considerable changes to use or access
Less than substantial	• Changes to key archaeological materials, such that the asset is slightly altered • Slight changes to setting	• Change to key historic building elements, such that the asset is slightly different • Changes to setting of an historic building such that it is noticeably changed	Limited change to historic landscape character resulting from: • Changes to few key historic landscape elements, parcels or components • Slight visual changes to few key aspects of the historic landscape • Limited changes to noise levels or sound quality • Slight changes to use or access
Minor	• Very minor changes to archaeological materials	• Slight changes to historic buildings elements or setting that hardly affect it	Very small change to historic landscape character resulting from: • Very minor changes to key historic landscape elements, parcels or components • Virtually unchanged visual effects • Very slight changes to noise levels or sound quality • Very slight changes to use or access
No change	No change		

Table 3 Impact on Heritage Significance

Assessment Matrix to define the degree of impact on heritage asset significance		Magnitude of impact				
		No change	Minor alteration with no reduction in significance	Less than substantial	Substantial	Loss
Significance of Heritage Asset	National	Blue	Yellow	Dark green	Red	Red
	District/County (Higher)	Blue	Yellow	Light green	Dark green	Red
	District/County (Lesser)	Blue	Yellow	Light green	Light green	Dark green
	Local	Blue	Blue	Yellow	Light green	Light green
	Negligible	Blue	Blue	Blue	Blue	Blue

Blue (no appreciable impact) = no mitigation necessary
Yellow (very limited impact) = low level mitigation eg photographic record/watching brief etc
Light green (limited impact) = may need evaluation to establish appropriate mitigation which may include site survey/excavation etc
Dark green (major impact) = may not be agreed and then only with significant justification, may require evaluation and will require significant mitigation such as excavation, detailed building survey, visual restoration, some in-situ preservation and on-site interpretation
Red (very major impact) = unlikely to be agreed except in exceptional circumstances and only with a high level of mitigation

APPENDIX 2: HERITAGE ASSET GAZETTEER

Asset No.	Reference	Asset Name	Description	Grid Reference	Period
1	NHL 239686; HER 6287	Kielder United Reformed Church	Grade II listed former Presbyterian Church, 1874 by F.R. Wilson. Romanesque style	362380,594140	Post Medieval
2	HER 5932	Hawkhope Hole deserted post-medieval village	The 'village' comprises at least 18 houses with a large field system and continues beyond the English/Scottish border. Marked on 18th century estate plans of the Duke of Northumberland. Field systems may be represent at least two periods. The walkover survey encountered a series of features in this area (Figure 5)	359800,596400	Post Medieval
3	SM 32716; HER 6231	Kershope Castle	Scheduled Monument. Tower at Kershope Castle and associated ruined foundations. Documentary evidence references cite a Robert of Gresshope in 1249 and a grant of land in 'Creshope' in 1304	361440,595950	Medieval
4	HER 6232	Ravensworth Moor Cairn	The possible site of a round cairn, marked on 1950 OS map, though a source in 1977 thought the site of the cairn was the easternmost of three stone-built shooting butts with no earlier structure beneath. Long (1988) noted the remains of a cairn to the south-east of Ravenshill Moor just inside the forest fence	363500,595330; 363640,595410	Bronze Age; Post Medieval
5	HER 6234	Possible earthwork	Possible camp on a gentle south-west facing slope. Nothing visible on aerial photographs or on the ground and source of 'earthworks' not now known	363340,595330	Uncertain
6	HER 6235	Deadwater deserted medieval village	Possible deserted medieval village at Deadwater, though the farm is modern and there was no trace of a former village in 1977. No features were noted in this area during the walkover survey	360580,596850	Medieval
7	HER 6236	Peden's Cave	Cave. Reputedly the site where Presbyterian refugee minister Alexander Peden baptised William Robson of Emmethaugh	362870,595690	Uncertain
8	HER 6237	Bar Knowe stack stands and folds	A group of 'remains', found by Long to be stack stands and other folds and enclosures	361300,595500	Post Medieval
9	HER 6238	Deadwater Rigg	Earthworks in the form of remains of small enclosures and turf banks and possible remains of a house, part of Deadwater Farm former field system. A number of features were noted at this location during the walkover survey (Figure 5)	360510,597620	Post Medieval
10	HER 6256	Bells Chapel and settlements	The site of a chapel, which once had a graveyard, possible cottage, Bells House and perhaps village. The first reference to 'Bells Kyrk' was in 1574-8. Extensive features were noted in this area during the walkover survey (Figure 5), including a cross shaft socle	361320,594980	Medieval, Post Medieval
11	SM 25109; HER 6258	Romano-British enclosed settlement	Scheduled Monument. Camp in the wood known as Bells Hunkers or Cat Cleugh Wood above a hollow called Nutty Hole, in the form of an irregular oval with rock rampart, with internal hut circles, measuring 65m north-east south-west by 48m	362040,594250	Roman
12	HER 6259	Cist	A number of stones, one upright, were noted, but they may have since been removed during afforestation as none were located in the late 1950s	361900,594110	Uncertain
13	HER 6261	Ravenshill Pele	The site of a pele tower, the remains of which were noted in the mid 1950s, though no further information could be obtained	362710,594290	Medieval

Asset No.	Reference	Asset Name	Description	Grid Reference	Period
14	HER 6269	Old Kielder	Possible earthwork remains of a single-banked irregular enclosure, possibly the castle of 'Cout of Keilder', a 14th century border chieftain. Observation in the 1980s noted that the enclosures may be associated with the post-medieval steading (HER 892)	363200,594300	Medieval
15	HER 6280	Catcleugh, north enclosure	Enclosure lying on the north bank of the Cat Cleugh, roughly semi-circular in plan with no internal hut circles and is overlain by field boundaries associated with a post-medieval farmstead to the west	362350,593570; 362340,593640	Uncertain; Post Medieval
16	HER 6283	Former Presbyterian Meeting House	Remains of a Presbyterian Chapel, since incorporated into a hayshed with only the gable ends, parts of the north wall and the lower courses of the south wall surviving. Chapel reputed to have been built c.1709, and replaced by a new chapel in 1874 (Asset 1)	362424,594829	Post Medieval
17	HER 18747	Bellsburn Cottage	Cottage seen on OS second edition 6inch 1897	361726,594947	Post Medieval
18	HER 18750	Kerseyclough Cottage	Cottage seen on OS first edition 6inch 1866. This is now 'Lightpipe' on modern maps, and was still inhabited at the time of the walkover survey	362484,594925	Post Medieval
19	HER 20508	Deadwater Burn Sheepfold	Sheepfold marked on OS first edition 6inch 1866	361689,598190	Post Medieval
20	HER 20509	Deadwater Burn Sheepfold	Sheepfold marked on OS first edition 6inch 1866	361457,598138	Post Medieval
21	HER 20510	Deadwater Moor Sheepfold	Sheepfold marked on OS first edition 6inch 1866	361284,597548	Post Medieval
22	HER 20511	Sheepfold near Deadwater	Sheepfold marked on OS first edition 6inch 1866. Not seen during walkover survey	360412,597030	Post Medieval
23	HER 20512	Deadwater Moor Sheepfold	Sheepfold marked on OS first edition 6inch 1866	361230,596800	Post Medieval
24	HER 20520	Lightpipe Sike Sheepfold	Sheepfold marked on OS first edition 6inch 1866	362780,595346	Post Medieval
25	HER 20521	Sheepfold	Sheepfold marked on OS first edition 6inch 1866	361094,596108	Post Medieval
26	HER 20522	Airshope Sheepfold	Sheepfold marked on OS first edition 6inch 1866	361398,595674	Post Medieval
27	HER 20523	Deadwater Lakes Sheepfold	Sheepfold marked on OS first edition 6inch 1866. Not seen during walkover survey	360703,595731	Post Medieval
28	HER 20524	Sheepfold	Sheepfold marked on OS first edition 6inch 1866	362024,595045	Post Medieval
29	HER 25193	Cultivation at Catcleugh	Earthwork traces of ridge and furrow cultivation have been recorded in this area at Catcleugh north of Kielder village	362600,593900	Uncertain
30	HER 25194	Field System Remains	Remains of field system with remains of five houses and garths in the area near Bells Chapel	361470,594860	Uncertain
31	HER 25195	Old Stell	Remains of an old stell to the south-east of Bells Chapel	361330,594880	Uncertain

Asset No.	Reference	Asset Name	Description	Grid Reference	Period
32	HER 27286	Border Counties Railway	Railway, opened to passengers in 1862 and closed in 1958, ran 26.25miles between Hexham and Deadwater. The route survived at the time of the walkover survey, in use as a cycleway and footpath, and is not due to be affected by the plantation scheme	360306,596839-392470,565210	Post Medieval
33	HER 27387	Deadwater Station	Railway station constructed as part of the Border Counties Railway (Asset 32) consisting of a single platform with a single-storey building. It opened on 1st March 1880. Now a private house. It was still inhabited at the time of the walkover survey	360337,596768	Post Medieval
34	HER 27388	Border Railway Sign Site	Site of a sign, now in the York Railway Museum, denoting the English-Scottish Border located on the Border Counties Railway. No features were noted relating to this during the walkover survey	360301,596584	Post Medieval
35	First Ed OS 1863 (Fig 4)	Site of Kerseycleugh	Site of dwelling depicted on First Edition OS mapping of 1863. This lay just outside the site boundary, and was not noted during the walkover survey, although banks in the vicinity may relate to the former trackway and field boundary depicted on the First Edition OS map (Asset 38)	362161,594839	Post Medieval
36	First Ed OS 1863 (Fig 4)	Site of Lightpipe	Site of farmhouse depicted on First Edition OS mapping of 1863. A slight rise in ground level was observed during the walkover survey, though not obviously a former building	362414,594785	Post Medieval
37	First Ed OS 1863 (Fig 4)	Bellsburnfoot	Dwelling depicted on First Edition OS mapping of 1863	361477,595118	Post Medieval
38	First Ed OS 1863 (Fig 4)	Former field boundary	Site of former field boundary located to the south-west of Lightpipe (Asset 36) on First Edition OS mapping of 1863. Noted as a double bank, cut by a modern forestry track during walkover survey, which may have been an earlier trackway with boundary wall either side once leading to Kerseycleugh (Asset 35) and beyond	362213,594782	Post Medieval
39	First Ed OS 1863 (Fig 4)	Former field boundaries	Site of former field boundaries located to the north-west of Bellsburnfoot (Asset 37) on First Edition OS mapping of 1863. Some were recorded during the walkover survey and thought to relate to the earlier settlement of Bells	361383,595124	Post Medieval
40	First Ed OS 1863 (Fig 4)	Former field boundary	Site of former field boundary located to the south of Deadwater (Asset 6) on First Edition OS mapping of 1863. Not noted during walkover survey	360520,596785	Post Medieval
41	First Ed OS 1863 (Fig 4)	Site of Bathing House	'Deadwater Well (Sulphureous) Bathing House' shown to the west of Deadwater (Asset 6) on First Edition OS mapping of 1863. Some ruined walls were noted in this area during the walkover survey, though they are outside the present site boundary, and plantation has already occurred	360274,596865	Post Medieval
42	Second Ed OS 1897	Site of quarry	Former quarry shown on Second Edition OS mapping of 1897. Just outside survey area	361803,594783	Late 19th century
43	Second Ed OS 1897	Kerseycleugh Bridge Cottage	Cottages, first shown on Second Edition OS mapping of 1897. Still occupied at the time of the walkover survey	361736,595113	Late 19th century
44	Second Ed OS 1897	Site of rectangular structure	Site of rectangular structure to west of railway line (Asset 32), shown on Second Edition OS mapping of 1897, noted to be just outside the site boundary in an area of plantation	361552,594989	Late 19th century
45	Second Ed OS 1897	Site of rectangular structure	Site of rectangular structure in vicinity of former Bells Chapel (Asset 10), shown on Second Edition OS mapping of 1897. A ruined building did survive at this location and was recorded during the walkover survey	361327,594957	Late 19th century

Asset No.	Reference	Asset Name	Description	Grid Reference	Period
46	Second Ed OS 1897	Rectangular structure	Site of rectangular structure abutting field boundary to the west of the railway line (Asset 32), shown on Second Edition OS mapping of 1897. An agricultural structure still survived at this location at the time of the walkover survey, possibly associated with a raised trackway represented by a spread of rubble (Asset 56)	360356,596522	Late 19th century
47	1952 OS Map	Site of rectangular enclosure	Site of small rectangular enclosure to south-west of Lightpipe (Asset 36) under modern footpath, shown on 1952 OS mapping. No evidence for this was visible at the time of the walkover survey	362257,594669	20th century
48	Google Earth	Linear bank	Large curvilinear bank observed towards the south of Bell's Moor. A large bank was noted at this location during the walkover survey, possibly relating to a former boundary dyke or Scots Dyke	360232,595457-360322,595262	Unknown
49	Google Earth	Possible former sheepfold	Circular feature seen on Google Earth, with possible rectangular enclosure to the south-east, not noted during walkover survey	360511,596014	Unknown
50	Google Earth	Circular and rectangular features	Two circular enclosures, with adjacent rectangular enclosure noted towards the eastern part of Bells Moor, not noted during walkover survey	360543,595973	Unknown
51	Google Earth	Possible former sheepfold	Circular feature seen on Google Earth, not noted during walkover survey	360704,595905	Unknown
52	Google Earth	Irregular features	Irregular features, possibly representing enclosures, seen on south side of Deadwater Rigg close to Asset 9. Features were encountered in this area during the walkover survey, and they were thought to represent field systems associated with the possible former settlement of Scots Dyke, at Deadwater Rigg (Asset 9)	360512,597422	Unknown
53	Walkover Survey	Linear bank	Curvilinear bank observed towards the southern end of Bell's Moor	359870,596219-360319,595339	Unknown
54	Walkover Survey	Former sheepfold	Former sheepfold with associated enclosure noted towards south-eastern part of Bell's Moor	361047,595361	Unknown
55	Walkover Survey	Possible former building	Possible site of former building visible as raised rectangular area in otherwise level field of improved pasture	360443,596514	Unknown
56	Walkover Survey	Spread of rubble	Roughly L-shaped spread of rubble leading from raised trackway in adjacent field to existing building first noted on Second Edition OS mapping (Asset 44). Probable continuation of track. Rubble predominantly consisted of stone and masonry, with occasional brick, one of which was marked 'HMC', which relates to 'Hartley Main Colliery' company near Blyth (http://www.penmorfa.com/bricks/index.html)	360278,596574	Unknown
57	Walkover Survey	Cancer trail monument	Monument to the 'Source of the North Tyne', located north-west of Kielder Farm and set up in 2013	360455,597420	2013
58	Walkover Survey	Stone upright	Rectangular stone upright, located 22m south-east of 'Source of the North Tyne' monument (Asset 52) to the east of the River North Tyne- 1m high; 0.22m width and breadth. Possible former gate post or bridge support. Had fitting on south-east side	360469,597406	Unknown
59	Walkover Survey	Decorative iron Fencepost	Isolated fencepost observed at northern extent of Deadwater Fell to the immediate south of an older tree copse. Perhaps part of an earlier boundary associated with early forestry plantation	360741,597937	Early-mid 20th century

Asset No.	Reference	Asset Name	Description	Grid Reference	Period
60	Walkover Survey	Series of banks	Series of banks located towards northern extent of Deadwater Fell to the south-east of an older tree copse. Possible extension of features associated with Asset 9	360672,597852	Unknown
61	Walkover Survey	Possible rock art	An example of possible rock art was encountered on Bells Moor	359729,596254	Prehistoric
62	Google Earth	Area of rig and furrow	Area of rig and furrow close to, though perhaps representing a later phase, of the extensive settlement and field system remains of the former Hawkhope Hole (Asset 2)	359914,596455	Unknown
63	Google Earth	Three linear banks	A series of three linear banks close to the existing sheepfold north of Deadwater Farm and east of the road	360439,597184	Unknown
64	Google Earth	Possible former sheepfold	Circular feature seen on Google Earth, not noted during walkover survey	360433,595741	Unknown
65	Google Earth	Possible former sheepfold	Circular feature seen on Google Earth, not noted during walkover survey	360747,595555	Unknown
66	Google Earth	Possible former sheepfold	Circular feature seen on Google Earth, not noted during walkover survey	360674,595519	Unknown
67	CANMORE 343039	Old Roads in Liddesdale	A road, known on CANMORE. No further information is given	360000,595020	Unknown
68	CANMORE 343038	Old Road, Blackhope	Starts near head of daysike and runs for 500m to regional boundary to the south-east, and perhaps onwards to Bells rig and Bells Line on the English side. Possible continuation of Hollow Way noted from walkover survey at Bells (Asset 10), as shown on First Edition OS map of 1863 (Fig 3), though this may have just been an access footway, rather than major route, as noted from results of walkover survey	359600,595600	Unknown
69	Roy's Military Map, 1752-5 (Plate 3)	Blackhope	Former settlement, shown on early mapping just within the Scottish Border, some buildings of which are still shown on modern mapping, and one building was still labelled on 1982 OS map	359863,595584	Post Medieval
70	First Ed OS 1863 (Fig 4); Walkover Survey	Sheepfold	Extant ruins of former sheepfold, shown on First Edition Ordnance Survey mapping of 1863 (Figure 4), and depicted on modern mapping. At the time of the walkover survey it was noted to have two former entrances and survive to a height of 1.4m in an area, though mostly not to more than 0.4m in height.	360583,594918	Post Medieval
71	Walkover Survey	Bank features	A 1.2m wide bank forming an approximate u-shape, with possible low former wall to the south-west, was observed during the walkover survey within the northern of two enclosed areas formed by stone walls (Asset 75)	359899.595350	Post Medieval
72	Walkover Survey	Area of rig and furrow	An area of rig and furrow observed near the northern part of the site boundary, to the south-east of Blackhope (Asset 69). Rig and furrow was marked on Roy's Military Map of 1752-5 (Plate 3), but to the north and west of the settlement rather than south-east	359939,595564	Unknown

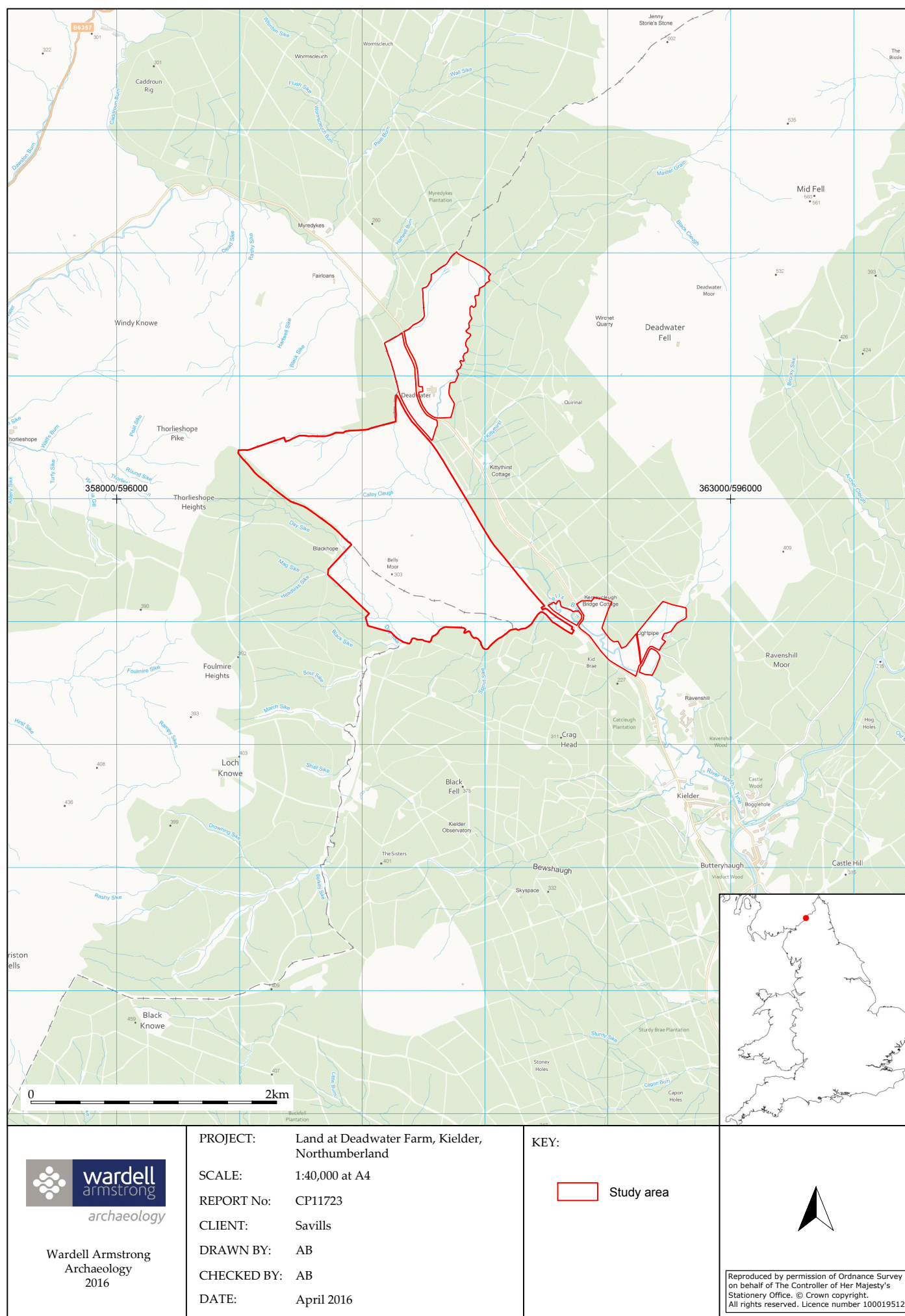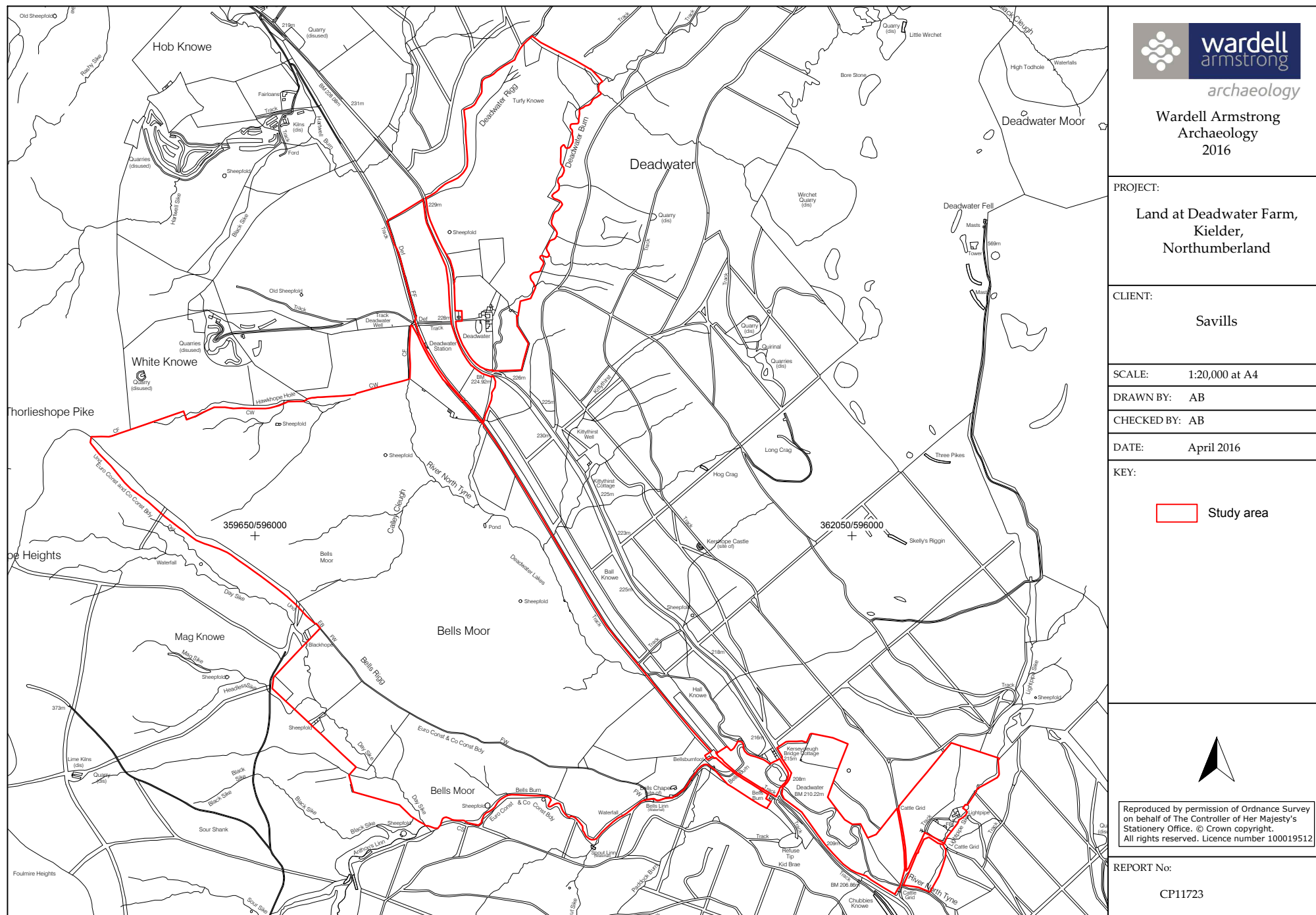| Asset No.	Reference	Asset Name	Description	Grid Reference	Period
73	Walkover Survey	Stone stile	A stone stile, built into the English/Scottish boundary wall, observed during walkover survey and noted to be at the location that a trackway leading from Blackhope (Asset 69) to Bells (Asset 10) crossed the wall, shown on the First Edition OS map (Figure 3)	360075,595420	Unknown
74	Walkover Survey	Stone stile	A stone stile, built into the English/Scottish boundary wall, observed during walkover survey and noted to be at the location that a trackway leading from Blackhope (Asset 69) to Bells (Asset 10) crossed the wall, shown on the First Edition OS map (Figure 3)	361179,595001	Unknown
75	Walkover Survey	Stone walls	A series of four stone walls, similar in build to the extant English/Scottish border wall, noted during the walkover survey in the northern part of the south-western part of the survey area, south of Blackhope (Asset 69). These formed two roughly similar-sized and square-shaped enclosed areas, seen on the First Edition OS map (Figure 3)	Centred on 359986,595338	Unknown

APPENDIX 3: FIGURES

Wardell Armstrong Archaeology 2016	**PROJECT:**	Land at Deadwater Farm, Kielder, Northumberland	**KEY:**
	SCALE:	1:40,000 at A4	
	REPORT No:	CP11723	▢ Study area
	CLIENT:	Savills	
	DRAWN BY:	AB	
	CHECKED BY:	AB	
	DATE:	April 2016	

Figure 1: Location of study area.

Figure 2: Detailed site location.

PROJECT:

Land at Deadwater Farm,
Kielder,
Northumberland

CLIENT:

Savills

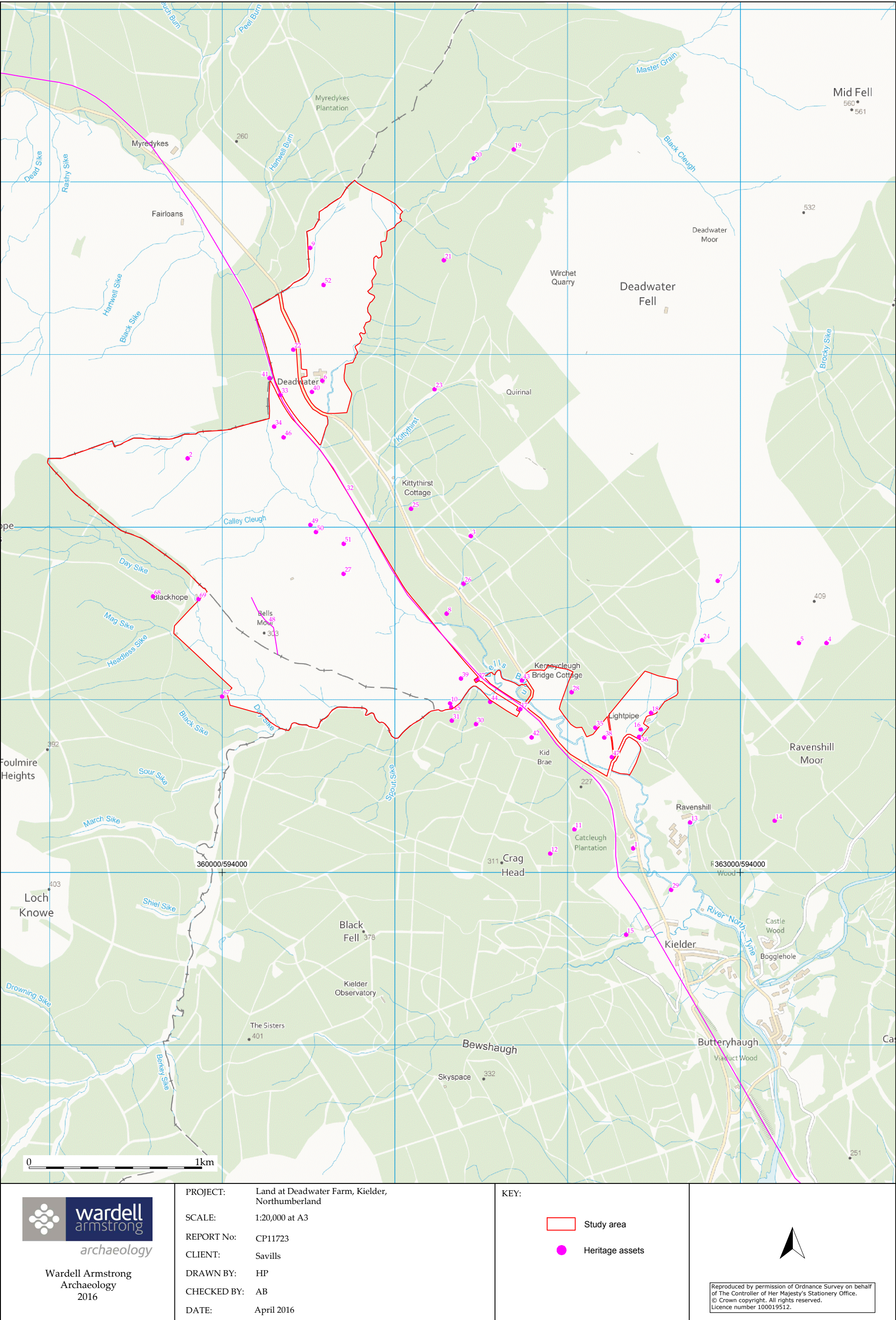|	
SCALE:	1:20,000 at A4
DRAWN BY:	AB
CHECKED BY:	AB
DATE:	April 2016

KEY:

☐ Study area

REPORT No:

CP11723

KEY:

Study area

Heritage assets

Figure 3: Location of known heritage assets.
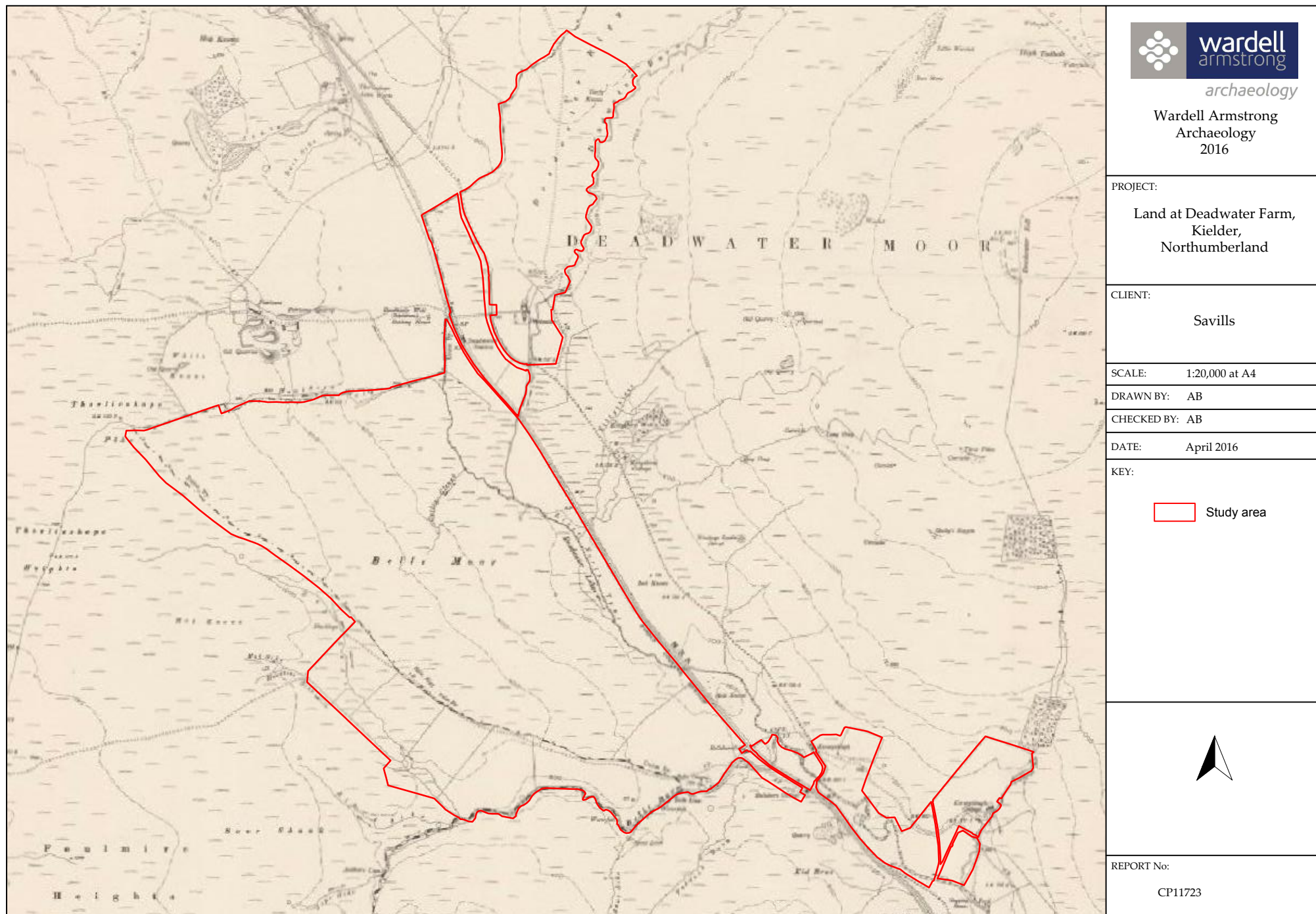
Figure 4: First Edition Ordnance Survey Map, 1863 *(6 inches to 1 mile).*

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Wardell Armstrong
Archaeology
2016

PROJECT:

Land at Deadwater Farm,
Kielder,
Northumberland

CLIENT:

Savills

SCALE:	1:15,000 at A3
DRAWN BY:	HP
CHECKED BY:	AB
DATE:	April 2016

KEY:

— Study area

— Heritage assets observed during walkover survey

— Heritage assets observed on Google Earth

— Other heritage assets

Proposed area of broadleaved trees

Proposed area of coniferous trees
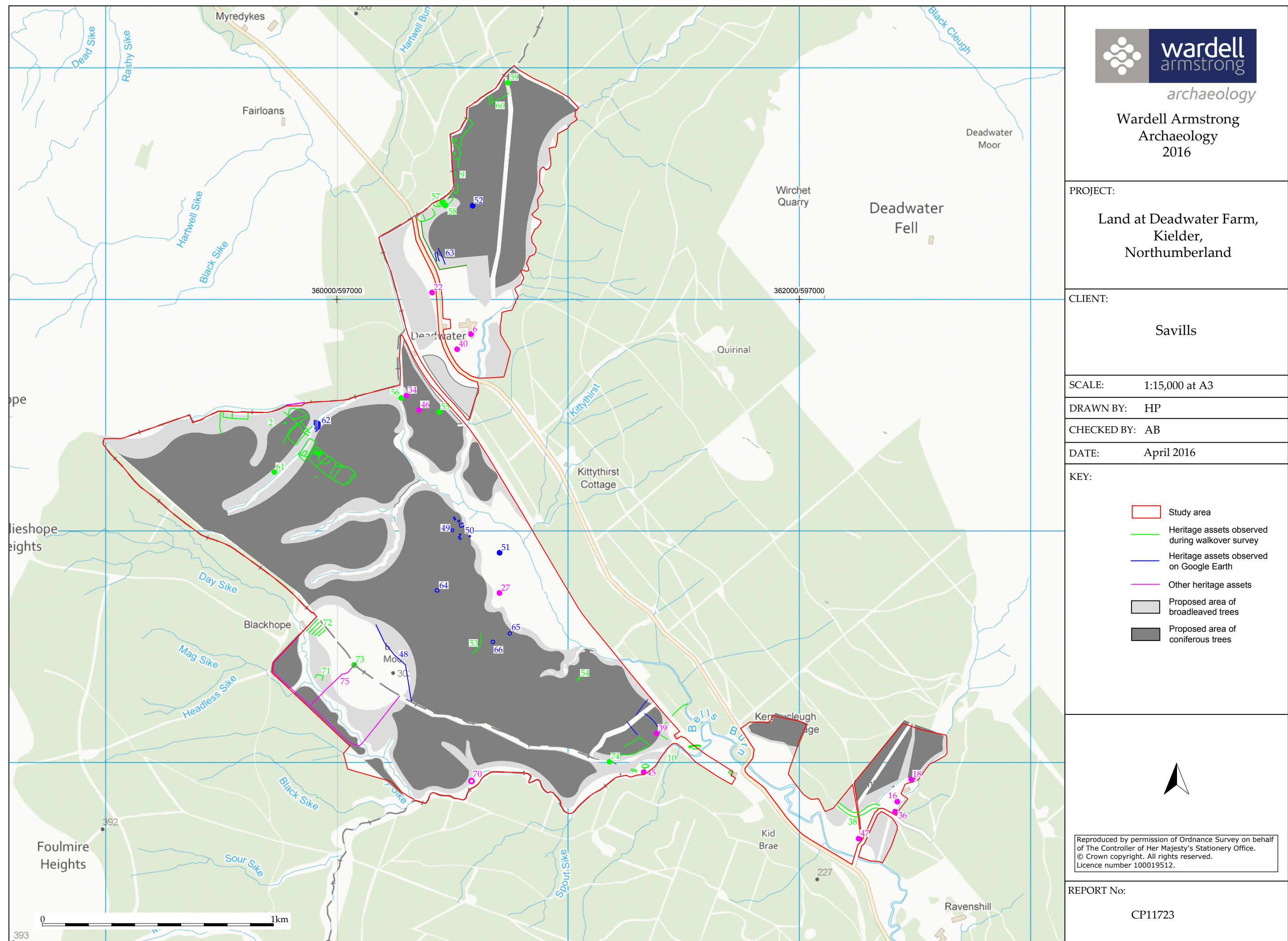
REPORT No:

CP11723

Figure 5: Heritage assets within site boundary in relation to proposed plantation scheme.

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