

ARCHAEOLOGICAL
SERVICES
DURHAM UNIVERSITY

on behalf of
G W Moore and Sons

Tarset Castle
Northumberland

archaeological post-excavation
assessment and earthwork survey

report 3999
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Contents

1.	Summary	1
2.	Project background	2
3.	Landuse, topography and geology	3
4.	Historical and archaeological background	4
5.	The excavation	8
6.	Analytical earthwork survey	11
7.	The artefacts	14
8.	The palaeoenvironmental evidence	17
9.	The archaeological resource	18
10.	Recommendation	21
11.	Sources	21
Appendix 1: Data tables		23
Appendix 2: Stratigraphic matrix		28
Appendix 3: Updated Project Design		29

Figures

Figure 1:	Site location
Figure 2:	Location of works
Figure 3:	Trench plan
Figure 4:	Sections
Figure 5a:	The earthwork survey
Figure 5b:	The earthwork survey, view of the castle mound
Figure 5c:	The earthwork survey, location of photographs and profiles
Figure 6:	Castle mound profiles
Figure 7:	General shot across the excavation, looking north-west
Figure 8:	Structural foundation [F14], looking north
Figure 9:	Overview of north-east tower wall [F13], looking north-east
Figure 10:	North face of north-east tower wall [F13], showing foundation [F93], chamfered stonework, and concrete [97=28], looking south-west
Figure 11:	Impression [F68] left by facing stones, looking north
Figure 12:	Trench for facing stone [F103] upon structural foundation [F105], wall [F13] (right) and wall [F57] (rear left), looking north
Figure 13:	Structural foundation [F79] for north-west tower, looking east
Figure 14:	The remains of north-west tower wall [F75], looking north
Figure 15:	North face of curtain wall [F57], looking south-east
Figure 16:	Concrete [F59] with wall [F57] to rear, looking north
Figure 17:	19th century excavation trench [F63] (rear left) cut over robber trench into foundation trench [F101], with concrete [28=97], looking west
Figure 18:	Overview of the eastern field, with terracing banks [EF1; EF2; EF3], looking west
Figure 19:	Terracing banks [EF1; EF2; EF3], looking east
Figure 20:	Ridge and furrow earthworks [EF4], looking north
Figure 21:	Low banks [EF6] and [EF7], with road construction ditch and banks [EF8] visible in the foreground, looking north
Figure 22:	Low bank [EF9], leading away from access track [EF17], looking west
Figure 23:	Castle mound [EF16], showing northern land slip scars, looking south
Figure 24:	Southern area of the castle ditch [EF15], with the truncation by the railway cutting [EF14] visible in the foreground, looking north-east

- Figure 25: The north-eastern area of the castle ditch [EF15] at the point of truncation by the land slip, looking south
- Figure 26: Bridge abutment [EF18] on the eastern edge of castle ditch [EF15], looking east
- Figure 27: The south-eastern area of the castle ditch [EF15] showing sheep tracks, looking east
- Figure 28: Access track [EF17] leading into the south-east corner of castle ditch [EF15], looking north
- Figure 29: Access track [EF17] leading into the south-east corner of castle ditch [EF15], looking east
- Figure 30: The castle mound [EF16] at the point of truncation by railway cutting [EF14], looking south-east
- Figure 31: The area of the land slip truncating the northern area of castle mound [EF16], looking south-west
- Figure 32: The western face of the castle mound [EF16], with the land slip visible (left), looking east
- Figure 33: The western face of the castle mound [EF16], showing tracks leading down the escarpment, looking east
- Figure 34: Spoil heaps [EF25] to the south of the structural remains of the castle, looking west
- Figure 35: The western flat area of the castle mound [EF16], with spoil heaps [EF22] visible (rear left), looking south-east
- Figure 36: Slight bank [EF26] running along the upper edge of the western escarpment of the castle mound [EF16], looking south
- Figure 37: Overview of the structural remains of the castle on the eastern side of the castle mound [EF16], looking west
- Figure 38: The remains of the south-east tower [EF19] of the castle, with related excavation spoil heaps [EF30] visible in the foreground, looking south
- Figure 39: The remains of the south-east tower [EF19] of the castle, with related excavation spoil heaps [EF31] visible in the foreground, looking west
- Figure 40: The remains of the south-east tower [EF19] of the castle, with related excavation spoil heaps [EF32] visible in the foreground and right, looking south
- Figure 41: The robbed remains of the south-west tower [EF20], with the robber trench for the western curtain wall [EF21] visible to the rear, looking north
- Figure 42: North-east tower [EF27] (c.f.[F13]) prior to excavation, with the trenches relating to the 19th century excavations visible around the base of the earthwork, looking south-west
- Figure 43: Robber trench [EF21] marking the western curtain wall of the castle, looking north
- Figure 44: Spoil heap [EF21] to the north-west during excavation, showing demolition rubble overlain by spoil from the 19th century excavations, looking north
- Figure 45: The gap [EF23] providing access to the castle remains during the planned demolition, with spoil heaps [EF28] to the left, [EF22] to the right and [EF29] visible to the rear, looking east
- Figure 46: Group of spoil heaps [EF22] to the west of the structural remains of the castle, looking south
- Figure 47: Group of spoil heaps [EF24] to the west of the structural remains of the castle, looking south

- Figure 48: Terracing bank [EF12] to the west of the castle mound [EF16], with railway fencing bank and ditch [EF11] and embankment [EF10] visible (right), looking south-west
- Figure 49: Railway cutting [EF14] from the southern road bridge, with castle mound [EF16] visible (right rear), looking north-west
- Figure 50: Railway embankment [EF10] from the northern rail bridge, looking south-east
- Figure 51: Post (composed of iron rails) upon the castle mound [EF16] marking the northern edge of railway fencing bank [EF11], looking south-west
- Figure 52: Railway fencing bank [EF11] running across the south-western corner of the castle mound [EF16], looking north-west
- Figure 53: Lineman's hut [EF13], with railway fencing bank [EF11], looking east
- Figure 54: The north-east face of the lineman's hut, looking south-west
- Figure 55: The south-west face of the lineman's hut, looking north-east
- Figure 56: The brick chimney on the south-east face of the lineman's hut, looking north
- Figure 57: The interior of the lineman's hut showing the fireplace, iron grate and hearthstone, looking south-east

1. Summary

The project

- 1.1 This report presents the results of an archaeological excavation and analytical earthwork survey conducted as part of a programme of conservation works at Tarset Castle. The objective of this phase of archaeological works was to identify, excavate and record archaeological features located within the excavation areas and to record the monument and its immediate environs. This work will be used to inform future conservation and management of the monument, and to give a better understanding of its layout and development, pursuant to the removal of the monument from the Heritage at Risk Register
- 1.2 The works were commissioned by G W Moore and Sons and conducted by Archaeological Services Durham University.

Results

- 1.3 A former topsoil, which overlay the natural subsoil forming the castle mound, was cut by construction trenches for the sandstone foundation structure which provided a stable base for the construction of the north-east castle tower. Nearly all facing stones have been removed from the tower during later episodes of demolition with the exception of a limited section overlain by partial courses of chamfered stonework, indicating that the upper tower wall would have been set upon a broad chamfered offset. The demolition of the north-western tower has resulted in almost all stone work relating to the structure being removed. Whilst a stone structural foundation layer was identified, little of the upper tower walls have survived demolition. The curtain wall between the two towers was constructed upon a concrete raft, providing a stable foundation for the clay-bonded structure. Concrete laid to the south of the wall had the effect of both reinforcing and raising the internal floor level of the castle. Similar deposits laid against the north face of the castle walls served a similar purpose, reinforcing and stabilising the shallow foundations of the walls in this area. Exterior to the castle mound, the ridge and furrow and the terracing in the east field probably date to the medieval period, whilst the low banks on the western side of the hill in this area delineate the eastern agricultural area and the occupational area of the castle.
- 1.4 The distribution pattern of the spoil heaps and the differential survival of eastern and western areas of the castle demonstrate that the demolition of the castle was methodical, with the site being used as a *de facto* stone quarry in the post-medieval period, and possibly as late as the mid-19th century. The engineering works relating to the construction of the railway significantly truncated sections of the monument, probably indirectly causing the large land slip affecting the northern area of the castle mound. Trenches and earthworks relating to the archaeological excavations in the late 19th century were identified, particularly in the area of the north face of the castle walls and towers, and the south-east tower. The archaeological works have shown that the continued erosion of the castle mound has yet to impact directly upon the known structural remains of the castle. However, any remains situated north of the northern towers and curtain wall may be at risk.

Recommendation

- 1.5 Further research, analysis of the data, and publication are recommended. An Updated Project Design has been included as Appendix 3, which lists the tasks to be undertaken to achieve this.

2. Project background

Location (Figure 1)

- 2.1 The site was located at Tarset Castle, in the parish of Tarset, Northumberland (NGR centre: NY 78831 85473), within the Northumberland National Park. The excavations comprised a single large trench measuring a maximum of 10m north/south and 20m east/west, a total of 125m², in the northern area of the castle mound. In addition, an analytical earthwork survey, with accompanying photographic survey, was undertaken over the castle mound and ditch, and the immediate environs. The castle itself occupies a roughly square mound measuring approximately 5500m². The mound is partially surrounded by a substantial ditch to the east, south and north. The ditch has been significantly truncated by erosion from the Tarset Burn on the north side and by a railway cutting on the south-west side. On the western side of the mound is a steep slope down to the River North Tyne floodplain. The site is surrounded by pasture fields with the Tarset Burn to the north, the line of the former Border Counties Railway to the south, Tarset Hall Farm to the west and a road to the east and south.

Conservation works

- 2.2 The castle site is a Scheduled Monument and Grade II* listed building, and is also currently under a Natural England Higher Level Stewardship (HLS) agreement. A historical land slip between 1862 and 1865 of the northern slope of the castle has led to contained deterioration of this side of the monument (Tarset Archive Group 2010). The site has been on English Heritage's 'Heritage at Risk Register' (No. 1015528) since 2008 and its condition is judged to be declining and generally unsatisfactory, with major localised problems as a result of natural erosion from the Tarset Burn. The HLS agreement allocated funding to address the conservation issues of the site. A geotechnical report (2009), a laser and topographic survey (2010) and a slope stability report (2013) have been produced for the site. The geotechnical works identified that the stabilisation of the northern slope was not financially viable; consequently, an alternative archaeological option was proposed in the form of 'preservation by record'. The scheme of works initially comprised a desk-based assessment and geophysical survey. This was supplemented by an archaeological evaluation to assess the nature, extent and potential significance of the surviving archaeological resource at the castle site. The results of this phase of works is summarised below.

Objective

- 2.3 The objective of the excavation was to identify, excavate and record archaeological features located within the areas defined, thus preserving them by record, pursuant to the removal of the monument from the Heritage at Risk Register.
- 2.4 The objective of the analytical earthwork survey was to provide an accurate record of the monument and its immediate environs, using measured survey techniques, supplemented by an accompanying photographic survey. This work will be used to inform conservation and management of the monument in its immediate and long-term futures, in addition to giving a better understanding of the site layout and development.
- 2.5 The works were designed to address research objectives within the *North-East Regional Research Framework* (Petts and Gerrard 2006), specifically MDiv Medieval

Castles and defensive structures; PMi Post-medieval cultural and ethnic identity; and PM8 Post-medieval Anglo-Scottish identities.

Specification

- 2.6 The works have been undertaken in accordance with a Project Design provided by Archaeological Services Durham University (reference DS15.31rev3) and approved by the planning authority.

Dates

- 2.7 Fieldwork was undertaken between 14th September and 14th October 2015. This report was prepared for December 2015.

Personnel

- 2.8 Fieldwork was conducted by Jenny Richards, Jonathan Dye, Jamie Armstrong, Tudor Skinner, Mathew Claydon and Benjamin Westwood (supervisor). This report was prepared by Benjamin Westwood, with illustrations by David Graham and Helen Drinkall. Specialist reporting was conducted by Dr Charlotte O'Brien (palaeoenvironmental), Carrie Armstrong (animal bone), flint (Helen Drinkall) and Jenifer Jones (other artefacts). Sample processing was undertaken by Tessi Loeffelmann, Rosie Morris and Hannah Woodrow. The Project Manager was Daniel Still.

Archive/OASIS

- 2.9 The site code is **TTC15**, for **Tarset Castle 2015**. The archive is currently held by Archaeological Services Durham University and will be transferred to the Great North Museum in due course. Archaeological Services Durham University is registered with the **Online Access to the Index of archaeological investigationS** project (**OASIS**). The OASIS ID number for this project is **archaeol3-235171**.

Acknowledgements

- 2.10 Archaeological Services Durham University is grateful for continued help and advice from the Tarset Archive Group, and for volunteer assistance with the excavations from the Tynedale North of the Wall Archaeology Group, in particular Phil Bowyer, Lorraine Clay, Derek Gunby, Michael Hall, and Fransje Samsom. In addition, Archaeological Services Durham University is grateful to the landowner Prof. Elizabeth Archibald, the tenants Mr & Mrs Moore of Tarset Hall Farm, and to Historic England and Natural England for facilitating this work.

3. Landuse, topography and geology

- 3.1 The study area comprises a raised spur of pastureland, which contains ridge and furrow earthworks in the east, the castle mound in the centre, and the floodplain of the Tarset Burn in the west. To the east the land slopes down gently from the Bellingham road and then beyond the enhanced castle slope, the land falls away steeply to the north and west, down to the floodplain of the Tarset Burn. The elevation across the ridge and furrow drops from 141m OD to 134m OD and on the castle mound ranges from 131 to 129m OD, whilst the elevation alongside the river is 121m OD. The site lies within the Northumberland National Park close to the confluence of the Tarset Burn and the River North Tyne. The land directly to the north of the site has eroded away into the Tarset Burn and here the land drops down onto its floodplain. To the west and south the land again falls away to the flat

floodplain of the River North Tyne. Beyond the north bank of the Tarset Burn the land rises up onto Thornyburn Common.

- 3.2 The underlying solid geology of the area comprises limestone, sandstone, siltstone and mudstone of the Tyne Limestone Formation formed in the Carboniferous Period, overlain by drift deposits of Devensian Diamicton Till of the Quaternary period (BGS 2014). In places till deposits have been moulded by ice into drumlins. It has been suggested that the castle site sits on such a drumlin, and exposed till in slip scars on site show it to comprise brown silty sandy clay with gravel, cobble and boulder inclusions (Tarset Archive Group 2014).

4. Historical and archaeological background

Previous archaeological works

- 4.1 Excavations were undertaken at the site in 1888 by Mr W.L.S Charlton. Although no plan has been found recording excavations at the castle, a plan was made at the time of an excavated underground passage. The plan contains no scale and little locational data, though it probably ran parallel to and south of the Tarset Burn. A note on the plan suggests that stone was taken from the passage for the construction of a cottage. The plan is held by the Northumberland Archives at Woodhorn. A bronze key is recorded as having been found in the passage, which may be of medieval date.
- 4.2 As part of the current programme of archaeological works a desk-based assessment (Archaeological Services 2014a) and geophysical survey (Archaeological Services 2014b) have been carried out over the monument. The geophysical survey identified evidence of possible structures, including remains of the curtain wall and possible annex buildings, to the south and west of the four-towered fortified house on the castle mound. The remains of the castle itself were not clearly defined in the geophysical surveys due to the presence of rubble spreads and stone-robbing. Former ridge and furrow cultivation, which survives as earthworks, was geophysically recorded to the east of the castle.
- 4.3 Several evaluation trenches were excavated over the structural remains of the castle (Archaeological Services 2015). The defensive outer walls were identified, with those to the north exhibiting signs of collapse related to the land slip. Walls forming the north-east tower of the castle were identified, with dressed facing-stones surviving at lower levels. The wall had previously been partially exposed during the 19th-century excavations. In this north-eastern area of the castle mound further walls and floor surfaces were identified. The excavations show that there were extensive episodes of planned deconstruction and stone reclamation in the post-medieval period. Many of the large earthworks visible on the castle mound are spoil-heaps (mortar and stone rubble) discarded during these episodes. As a result, the upper sections of all walls identified during this phase of excavation survived as lime-mortared rubble cores, lacking facing stones and dressed masonry. However, facing stones were preserved at lower levels of the structures. In addition, the original cut of the castle ditch was identified. The sequence of deposits within the ditch indicated a process of colluviation and slumping from the castle mound. Metalled surfaces and overlying sandstone rubble evidenced the existence of structural remains (a probable bridge abutment) exterior to the castle, on the upper eastern edge of the castle ditch.

The prehistoric period (up to AD 70)

- 4.4 There is no direct evidence of prehistoric activity within the study area. Evidence from the surrounding area during this period is at present restricted mainly to burial sites. It is assumed that the area was settled with unenclosed farmsteads and associated field systems as is common elsewhere in the region at this time. However, the lack of identified sites may suggest that the area was not densely populated during this period (The Archaeological Practice 2004, 26-27). There are no indications that the site of the castle was occupied, although the later earthworks would have obscured any such evidence.

The Roman period (AD 70 to 5th century)

- 4.5 The Tynedale area came under Roman control in the latter part of the 1st century AD. However, there are as yet no Roman military sites identified within the study area, the closest site being the fort at Risingham (Habitancum), located on Dere Street some 10km to the east of the study area (The Archaeological Practice 2004, 27). There is however evidence of civilian settlement during this period in the area. At Boggle Hill, some 850m to the north-west of the site, is a Romano-British period settlement (Historic Environment Record -HER- 6996). It consists of a sub-rectangular enclosure with a low spread bank, 3.5 to 4m wide. The site has been plough-damaged but is consistent with other Romano-British farmsteads of this type in the area. Elements of the later prehistoric settlement pattern are likely to have continued in use into the Roman period. There are no indications of a Roman period site at Tarset.

The medieval period (5th century to 1540)

- 4.6 There is little evidence for early medieval activity within the study area. Archaeological evidence for occupation during this period in the wider area is similarly scant, consisting of 9th century stonework found at Falstone, 7km to the west of Tarset Castle (HER 6968). During the early medieval period the area probably retained the characteristic enclosed farmsteads typical of the Romano-British period with tenure and control of land traceable through place name evidence (The Archaeological Practice 2004, 29). Mawer (1920) suggests that the Tarset place-name is Old English in origin, coming from the combination of a personal name and farm, *tīra-scōete*. He suggests that *tīr* was a shortened version of either *tīr* -weald or *tīr* -wulf (Mawer 1920, 193).
- 4.7 The Tynedale area was probably under Scottish control during the first centuries of the medieval period. It remained free from feudalism until 1157, when the valleys of the North and South Tyne were granted by Henry II to the brother of the Scots king. In the latter part of the 12th century feudal subinfeudation continued in the area, with grants of land to individuals and religious houses (The Archaeological Practice 2004, 31).
- 4.8 The Tynedale Barony differed from other English Baronys. Here the Baron was responsible for administrative and judicial duties conferred elsewhere onto royal officials and the area was denoted as the Liberty of Tynedale. The arrangement represented a way for the English Crown to have limited control over Tynedale. Although the area was held by the Kings of Scotland, the Tynedale Liberty remained English territory with the Crown retaining certain powers, such as the license to grant individual feudal tenants the right to 'crenellate' or fortify their manors (ibid).

- 4.9 During the 13th century Upper North Tyndale was divided between three manors, Bellingham, Tarset and Chirdon, with Tarset being the largest and Tarset Hall or Castle at its centre (ibid, 32). The castle was probably built as an earth and timber ringwork in the 12th century by Richard Comyn, when the family first acquired the lands. It is recorded in 1244, when Hugh de Bolbec, Sheriff of Northumberland was instructed to take into his keeping the 'Castle of Tyreset' with the lord, Walter de Comyn being allowed to remove stores and weapons (ibid). In 1267 a licence to crenellate with a stone wall and ditch was granted to John Comyn (HER 6995). The structure is likely to have been a rectangular hall-tower, with turrets at each corner and the licence states that the crenellation was undertaken in the same manner as the Camera of Adam in Jesmond. The court of John Comyn II is recorded at Tarset in 1289 and during border raids between 1308 and 1328 the manor of Tarset was ravaged by Scots under Robert the Bruce (Tarset Archive Group 2010).
- 4.10 Records of the Comyn family dating to 1326-9 note 80 acres of arable, desmesne lands, which were largely uncultivated due to a lack of tenants. It has been suggested that there was a focus of settlement at Tarset, though this may have been a collection of farms rather than a village (HER 7010). In the same document a park is also recorded located to the east of the castle. Though the actual location of the park is not recorded, the persistence of park names in the area records its approximate location (The Archaeological Practice 2004, 36). On Thorneyburn Common, a 2km long ditch and bank with the ditch to the south, suggesting it was used to keep game in, may be a remnant of the park boundary. A similar 0.5km boundary has been recorded to the west of Charlton and may demarcate the eastern limit of the park (Tarset Archive Group 2010).
- 4.11 In 1279 a mill, which processed cloth, is recorded in the manor. It is again referenced in 1326, when it is recorded as broken and unused with a former annual income of £30. The location of the mill is not recorded, though it may have been located on the Tarset Burn or the North Tyne (The Archaeological Practice 2004, 37). It has been suggested that the stone passage recorded during Charton's excavations may have been an associated mill race. This would indicate that the mill was located in the vicinity of the present Tarset Hall Farm (Michael Money, pers. comm.)
- 4.12 The manor is recorded as having been leased to Sir William Heron between 1362 and 1392. In 1373 it was sold to Henry Percy, 1st Earl of Northumberland (Tarset Archive Group 2010).
- 4.13 The manor was probably divided in the 14th century and the castle does not appear in records again until the early 16th century, when it was recommended for use as a garrison. In 1523, Sir Ralph Fenwick was stationed at the castle with a garrison of 80 men. He was routed the next year by William Charlton of Bellingham and 200 Tynedale men. Fenwick returned in 1525 with a garrison of 100 men but was again driven out when the castle was recaptured and burned by an alliance of Scots and 400 Tynedale men. Further bastles and fortified structures were built in the area during this period. Examples survive at Snabdough (HER 7041), where there is also a deserted medieval settlement (HER 7055), and Birks (HER 7042). The castle was not rebuilt and in 1541 was recorded as derelict in the survey of border defences (The Archaeological Practice 2004, 38).

The post-medieval period (1541 to 1899)

- 4.14 Tarset appears on John Speed's map of Northumberland in 1610, depicted as a fortified house, suggesting the continued existence of the castle. The castle is recorded approximately 100 years later, around 1725, as having walls still of 'considerable height' though also suffering from annual deterioration (Tarset Archive Group 2010).
- 4.15 The site is mapped again in 1749 by Kitchen and in 1769 by Armstrong. Although these maps provide little further detail, the presence of the site illustrates its continued importance during the 18th century.
- 4.16 The castle was sketched in 1773 as a rectangular structure with corner towers set at oblique angles to the curtain walls. The sketch is not to scale and the angle of the towers may be due to artistic license. However, it may be taken to indicate that the corner of the castle ditch and bank has been removed by erosion by this date. A further sketch of mid-19th century date again depicts the castle with four towers, though on a rectangular plan.
- 4.17 In 1860, the Border Counties Railway line was laid to the south of the castle mound, with the cutting truncating the south-western corner of the mound. The railway bridged the Tarset Burn to the west; the structure is now Grade II listed (HER 7016). By 1865, a large land slip was recorded on the northern side of the castle mound created by erosion from the Tarset Burn. The mid-19th-century sketch map and the 1st edition Ordnance Survey map of 1865 depict the damage to the castle mound from both the railway cutting and the alluvial erosion. There is little other detail shown on the Ordnance Survey map aside from the suggestion of earthworks on top of the mound. The surrounding area is largely rural, with the outlying settlements of Redmire and Lanehead to the north and Tarset Hall Farm to the west. Possible quarrying is depicted at Lanehead, a suggested site for the stone quarried for the castle structure.
- 4.18 The 2nd edition Ordnance Survey map of 1898 again depicts the damage to the castle mound and shows the presence of earthworks on top of the mound. The erosion does not appear to be substantially different from earlier maps. The surrounding area is little altered, aside from the quarries at Lanehead now labelled as Old Quarries.
- 4.19 During the 18th and 19th centuries rural settlement developed built in the surrounding area (HERs 14570-1, 14578, 15033-4, 15039, 15050-1, 15056, 15058-9, 15062-3, 15065). It is suggested that the castle site was robbed for building stone in the 18th and 19th centuries and several structures in the immediate vicinity contain distinctive large, tooled stone blocks which may be from the castle. Two of these structures are Tarset Lodge to the south-east of the site and the cottage directly to the south of site, which are both of 19th-century date.

The modern period (1900 to present)

- 4.20 The erosion of the site continued into the 20th century and aerial photography dating to 1974 depicts further erosion to the northern side of the castle mound. By 2007 the Tarset Archive Group had been formed and the condition of the castle was brought to the attention of English Heritage. In 2008 it was placed on the Heritage at Risk register and geotechnical works were carried out the following year.

5. The excavation

Introduction

- 5.1 The results of the archaeological evaluation (Archaeological Services 2015) indicated that structural remains in the northern area of the castle mound were most at risk of damage or collapse caused by continued erosion of the northern slope of the mound. Accordingly, two trenches (A1 and A2) were excavated over the probable locations of the north-east and north-west towers or corners of the castle. A further trench (A3) was later excavated between the trenches A1 and A2, thus creating one large trench, in order to better understand the stratigraphic and structural sequence (Figures 3, 7). Four broad phases of activity are indicated.

Prehistoric (Figure 3)

- 5.2 To the south in trench A1, natural subsoil [74=77] was identified at a depth of 1m (136.4m OD), overlain by deposits of grey silty-sand [26; 86: up to 0.0.1m thick]. A similar deposit [100: 0.1m thick] was identified in a sondage excavated in the northern area of the trench overlying the natural subsoil [102], from which two flints, a broken blade and a flake, of prehistoric date, were recovered (Figure 4: section 3).
- 5.3 In trench A2 to the west, natural subsoils [80] and [91] were overlain by a deposit of grey silty-sand [82=88: 2m+ long, 1m+ wide, and 0.3m thick], from which two undiagnostic pieces of prehistoric worked flint were recovered (Figure 4: section 5).

Medieval (Figure 3)

- 5.4 The silty-sand deposit [100] in trench A1 was cut by a shallow foundation trench [F101: 3m+ long, 0.2m+ wide, 0.2m deep] for sandstone wall foundation [F93: 0.24m thick], constructed from mainly roughly squared sandstone blocks (<400x300x200mm; Figure 10). This structural foundation was recorded to the south of the later wall [F13] where it overlay deposits [26 and 86] as wall foundation F14 [F14=F69=F54: 4m wide, 3.5m wide, 0.2m thick] (Figure 8), and to the west within trench A3 where it was recorded as foundation F105 [3.6m long, 1.9m wide, 0.24m thick] (Figure 12). This extensive stone structure extended for over 7m from the southern edge of trench A1 and for 7m into trench A3 to form, with the addition of a small area of additional stonework [F92: 0.05m thick] to the north, a stable platform on which to construct wall [F13].
- 5.5 The remains of the east-facing arm of the north-east castle tower [F13] wall extended north/south for 5.4m, turned east/west for 6.6m, and returned along the west face of the tower for a further 6.8m, extending beyond the southern edge of the trench (Figure 9). At its widest point the tower wall was up to 3.4m thick and stood to a height of 1.6m. Much of the wall survived as a mortared rubble core only, and was constructed from mainly sub-rounded sandstones (<400x300x400mm). Whilst most of the dressed stone had been removed from the wall, four courses of mortared facing stones were identified *in situ* at lower levels along the north face, constructed from regular coursed, dressed sandstones (<450x200x250mm). The facing stones were overlain by the partial remains of two courses of chamfered sandstones (900x300x250mm; Figure 4: section 4; Figure 10). Further sections of chamfered stonework were observed in the unexcavated east face of wall [F13] (Figure 42).

- 5.6 To the north of wall [F13] brown silty-sand [95: 0.15m thick] was found to fill foundation trench [F101] and lie against wall foundation [F93]. A single prehistoric chert blade was recovered from this deposit. A series of deposits were identified raising the ground level and lying against the tower wall. Overlying levelling deposit [100] to the north was a thin layer of reddish-brown silty sand [99: 1m wide and 0.05m thick], in turn overlain by a thicker layer of grey-brown sandy silt [94: 0.7m wide, 0.3m thick]. This sequence was sealed by an extensive concreted deposit of mortared rubble (including squared and dressed stonework) [28=97: 1m+ long, 2.3m+ wide, and 0.25m thick], laid directly against the lower face of wall [F13].
- 5.7 In the southern area of trench A1 a deposit of mortar [67: 2.9m long, 1m wide, and up to 0.1m thick] was identified, laid upon the structural foundation layer [F14] and enclosed by wall [F13]. Against the eastern inner face of the western arm of tower wall [F13] a shallow impression [F68: 2.2m long, 0.3m wide, and 0.005m deep] was identified, marking the position of removed inner facing stones (Figure 11). Overlying the structural foundation layer [F14] to the east, and abutting shallow trench [F68], was a layer of highly compacted brown clayey-sand [73: 1.5m in diameter, and 0.1m thick]. Partially overlying this compacted levelling layer was a small part of the internal concrete and mortar floor surface [F15: 1.9m long, 0.2m wide, 0.15m thick], initially identified during the archaeological evaluation.
- 5.8 In trench A3 a slot [F103: 3.6m long, 1.6m wide, and 0.4m deep] was identified constructed upon structural foundation layer [F105: *cf.* F14] extending along the western face of wall [F13] (Figure 12; Figure 4: section 2). The trench marks the position of removed outer facing stonework, and thus corresponds to trench [F66] the later robbing trench which marks the position of removed facing stones along the north face (see below). The western edge of the trench [F103] was formed through the pouring of concrete and mortar [F104] (see [F76] below) against the removed facing stones.
- 5.9 Deposit [82/88] in trench A2 was cut by the truncated remains of a large foundation trench [F81: 2.3m+ north/south, 5.4m+ east/west, 0.4m deep] for a sandstone foundation [F79=F78: 4.8m+ east/west, 3m+ north/south, 0.4m thick] (Figure 13). This truncated structural foundation was constructed from large sub-rounded and sub-angular sandstone (<400x500x400mm), and extended toward the southern edge of the trench below later deposits and features (Figure 4: sections 1 and 5). A layer of concrete and mortar [F56: 3.9m east/west, 2.6m+ north/south, 0.1m thick] had been applied to the upper surface of foundation [F79] and was overlain to the east by the remains of a wall [F75: 2.6m+ long, 1.4m wide, 0.2m thick] (Figure 14). The remains comprised the fragmentary mortared rubble core of the wall only, constructed from sub-rounded sandstones (<200x360x150mm).
- 5.10 A concrete and mortar raft was poured between walls F75 (A2) and F13 (A1) [F76=F104: 6.5m east/west, 3.2m+ north/south, 0.1m thick]. This concrete raft provided a stable foundation for the construction of east/west wall [F57: 6m long, 0.8m wide, 1.2m high] (Figure 15). The clay-bonded wall was constructed from random coursed squared sandstones (<500x300x400mm; Figure 4: section 6). To the south of the wall an extensive layer of concrete and stone [F59: 6.4m east/west, 2.6m+ north/south, 1.3m thick] had been laid (Figure 16). A small intrusive slot [F98: 0.7m in diameter, 0.3m deep] was identified cutting the north-western corner of the base of trench [F103] and concrete raft [F76], creating a partial void in the lower

part of [97]. To the north of wall [F57] and structural foundation [F79], and directly overlying silty-sand deposit [82=88], an extensive deposit of concrete, mortar and stone rubble (including squared and dressed stonework) [F58=F87: 10m+ east/west, 2m+ wide, and 0.3m thick] had been laid, partly forming the northern edge of foundation trench [F81]. Two corroded but complete flat topped iron nails, and a further nail fragment, were also recovered from this deposit.

Post-medieval (Figure 3)

- 5.11 To the west in trench A2, rubble wall [F75] (and structural foundation [F79]) were truncated by a large robber trench [F60: 0.3m deep] which extended for 2.4m north/south and 4m east/west, following the excavated edge of foundation [F79]. The robber trench was filled by a mixed deposit of sand, mortar and stone rubble [72: 0.3m thick]. To the north, concrete deposit [F58=F87] was overlain by a rubble deposit [52=55: 0.2m thick] within which a large slot [F89: 1m long, 0.3m wide, 0.3m deep] was identified, creating a void partially filled by a dark brown silt deposit [90: 0.05m thick]. Rubble deposits [72] and [25=55] were overlain by a further rubble deposit [64: 0.5m thick], containing very frequent small sub-angular sandstones (<90x50x80mm) and mortar, which extended throughout much of the northern and western area of trench A2 and from which a single fragment of a flat topped iron nail was recovered. To the south of wall [F57], concrete deposit [F59] was sealed by a similar rubble deposit [65: 0.5m thick] which extended eastward to wall [F13].
- 5.12 Within the area enclosed by wall [F13], to the south in trench A1, compacted sand [73] (and the partial concrete floor surface [F15]) were sealed by a rubble layer [27: 0.4m thick]. This layer was overlain by a sequence of mixed sand, silt, mortar and stone rubble deposits [43, 42, 29: 2.2m long, 0.5m wide, 0.7m thick] that had been tipped from the direction of wall [F13] to the north. At the southern end of the trench A1, layer [27] was truncated by a robber trench [F71: 1.3m+ long, 1.2m+ wide, 0.3m deep], filled by a deposit of sand, silt and rubble [70]. The trench was overlain by an extensive rubble deposit [83: 2.3m+ long, 1m+ wide, 0.25m thick]. All features and deposits to the south of wall [F13] were sealed by a thick layer of rubble, sandstone and mortar [17]. A further robber trench [F85: 1.9m+ long, 4m wide, 0.8m deep] was identified truncating this deposit, cut over the western north/south arm of wall [F13]. The trench was filled by a deposit of grey sandy-silt and rubble [84].
- 5.13 In the northern area of trench A1, concrete layer [97=28] was overlain by a deposit of silty-sand layer [96: 2.3m+ east/west, 5m+ north/south, 0.6m thick] containing moderate amounts of sub-angular sandstone rubble. This deposit was partially overlain by rubble layers [30] and [34] previously identified during the archaeological evaluation in trench 3 (Archaeological Services 2015).

19th century and modern (Figure 3)

- 5.14 Truncating the extensive rubble deposits [64] and [65] to the west, and rubble deposit [34] to the east, was a large trench [F63=F66: 6m+ east/west, 2m north/south, 0.9m deep] excavated over the northern faces of walls [F13] and [F57] and reaching the foundations of the former wall (Figure 17). The trench was filled by deposit [62=53] comprising brown sandy-silt containing frequent sub-rounded and sub-angular sandstones. A small body sherd of post-medieval unweathered green bottle glass was recovered from this deposit. This trench, and a deposit of dark brown sandy silt [7] (previously identified within trench 3 during the archaeological

evaluation) to the east, was overlain by a deposit of grey-brown sandy silt [61: 5m+ in diameter, <0.5m thick] (identified as [18] in the archaeological evaluation).

- 5.15 Topsoil [1: <0.4m thick] overlay all deposits and features, with the exception of some parts of wall [F13] where sections of chamfered stone other stonework were exposed prior to works being undertaken.

6. Analytical earthwork survey

Introduction (Figures 5a, 5b and 5c)

- 6.1 A Level 3 earthwork survey was undertaken over the castle and its immediate environs. The survey area was divided into four parts: the field to the east and south of the castle; the castle mound and ditch; the field to the west of the castle; railway features impacting upon the castle and ditch. In addition north/south and east/west profiles were recorded across the monument (Figure 6).

Method statement

- 6.2 The survey work was conducted using a Leica Viva GS15 global navigation satellite system (GNSS). Real time kinematic (RTK) correction was not available. The survey team was equipped with 2 receivers, a base and rover, with post-processed logged satellite data providing corrective information available for the same time slot from the Ordnance Survey (an OSTN02/OSGM02 transformation). This places the survey as accurately as possible on the National Grid, to minimum accuracies of 20mm in plan and 30mm in height.
- 6.3 The survey recorded the top and bottom of the earthworks, breaks of slope, and variations within them, including evidence of erosion. The GNSS receiver took points to define these features at intervals of 0.1 – 1.5m (up to 10m for hard detail such as fence lines and hedges), suitable to provide output at a scale of 1:500. The profiles across the monument were recorded utilising the same methodology. All earthworks and features within the survey area were assigned a unique identifying [EF] number (Earthwork Feature) and recorded using pro forma context sheets or monument records, as appropriate. The records detailed landuse, date, relationships, truncation, description of any deposits, as well as evidence for erosion, damage and current condition.
- 6.4 The survey was supplemented by photography of features using colour transparency and monochrome 35mm stills, and a Nikon D70S digital SLR camera. All detailed photographs included a metric scale with additional area photographs taken without scales.

Field to the east and south of the castle (Figures 5a, 5b and 5c)

- 6.5 Three low north/south orientated banks [EF1; EF2; EF3] were recorded in the field to the east, forming three terraces on the eastern slope of the low hill to the east of the castle mound (Figures 18 and 19). The latter of the banks [EF3] was barely visible to the north, and became more pronounced to the north. The remains of ridge and furrow earthworks [EF4], orientated north/south, were identified on each of the lower two terraces, and on the apex of the rise, curving slightly to the north and becoming less visible to the west (Figure 20). On the western slope of the low hill a very slight low bank [EF5] was recorded, extending from the south and petering out as it curved to the north. A further adjacent bank was identified curving north/south

around the base of the western slope of the low hill, with a break at the mid-point corresponding to the location of the bridge abutment [EF18] on the south-eastern upper edge of the castle ditch (see below). The southern part of the bank was designated as [EF7], and the northern as [EF6] (Figure 21).

- 6.6 To the south, a series of irregular banks and a shallow drainage ditch [EF8] extended parallel to the north-east/south-west road, probably related to minor changes in the course of the road over the last century. In the area immediately to the west of the castle mound, a further low bank [EF9] was recorded, leading away to the south-west from the current access route [EF17] onto the castle via the castle ditch (Figure 22).

Castle mound and ditch (Figures 5a, 5b and 5c; 23)

- 6.7 The castle ditch [EF15] extends eastward from the western truncation by the railway cutting, turning north-east just prior to the current access route [EF17] onto the castle (Figure 24). Beyond the access route, the ditch continues to extend to the north-east, turning again to the north-west and terminating at the point of truncation by the land slip to the north (Figure 25). A hollow [EF18] was recorded, located on the exterior upper south-eastern edge of the ditch, in the area of the possible bridge abutment (previously identified during the archaeological evaluation (Archaeological Services 2015; Figure 26). Eroded soil from this hollow has partially infilled parts of the ditch in this area. Further areas of erosion and damage by tree roots were recorded just to the north in this area. In addition, numerous sheep-tracks were recorded within the ditch, particularly on the southern edge to the south (Figure 27). A further track or footpath was identified leading down the southern edge of the ditch at the point of intersection with the railway cutting.
- 6.8 The modern access route [EF17] leads into the castle ditch [EF15] at the south-east corner, turning westward at the base of the ditch to lead up onto the castle mound [EF16] (Figures 29 and 30). Whilst the access track was modified and stabilised during recent geotechnical works, it is likely that the track is at least post-medieval in date (see below). The south-western corner of the square castle mound [EF16] was truncated in 1860 by the cutting for the Border Counties Railway line, whilst the land slip in the later 19th century, and continued related erosion, has truncated a large area of the northern mound (Figure 31). To the west the mound slopes sharply, with slumped and eroded soil creating a more gentle gradient around the base of the escarpment (Figure 32). Two tracks were identified leading northward down this western face, the southernmost of which was most substantial, with the other being little more than a sheep track (Figure 33). A further section of the south-western corner of the mound has been removed to create a cutting for the construction of the railway lineman's hut [EF13] (see below).
- 6.9 On the upper area of the castle mound a group of five low mounds and a shallow depression [EF25], probable spoil heaps and features relating to the demolition of the castle, were identified adjacent to the entrance to the access track [EF17] (Figure 34). Beyond these spoil heaps the track leads onto a relatively flat area occupying approximately a third of the upper western area of the castle mound (Figure 35). A low bank [EF26] was identified extending along the upper edge of the western escarpment of the mound (Figure 36).

- 6.10 The remaining area of the castle mound [EF16] to west was dominated by spoil heaps relating to the demolition of the castle, and the partially exposed remains of structural elements of the castle excavated in the late 19th century (Figure 37). The most readily indefinable remains from this latter group is the exposed stonework [EF19] in the south-east corner of the mound (Figures 38-40). The rubble wall core forms an approximate U shape, with part of the wall leading off to the west, constituting the remains of the south-east tower of the castle exposed during the 19th-century archaeological excavations. A number of low banks and trenches were identified to the north, east and south of the wall [EF30] [EF31] [EF32], created as a result of these excavations. To the west a shallow trench extends around a slight mound [EF20] which forms the possible remains of the south-west tower, subject to extensive demolition with the stonework removed to the level of the foundations (Figure 41). The remains of the north-east tower [EF27; cf. F13] are much more substantial. Prior to the recent archaeological evaluation it was clear that the wall had been partially exposed during the 19th century excavations, with the northern and eastern faces forming an L shape (Figure 42). Sections of chamfered stonework were visible on these faces and much of the upper area of the wall was sealed by turf and moss only. The excavations detailed above have established that the tower has a similar U shape layout to that in the south-east corner (Figures 8 and 9). A low bank [EF33], which extended around the eastern and northern sections of the tower wall, was created as a result of the 19th century excavations. The area of the north-west tower was overlain by a large low mound [EF29] which extended into the central area of the castle, and which was partially removed during the subsequent excavation. A shallow irregular trench that extended along the western side of the castle remains [EF21], between the north-west and south-west towers, probably marks the position of the western curtain wall which has also been robbed to the level of the foundations (Figure 43).
- 6.11 The majority of the spoil heaps associated with the demolition and stone reclamation were located along the eastern and western sides of the structural remains of the castle. A large irregular mound was identified [EF28], truncated to the north-east by the land slip and partially excavated during this phase of the archaeological works (Figure 44). The gap between this spoil heap, and the group of spoil heaps to the south [EF22] resulted in the creation of a narrow access route [EF23] into the castle area from the west (Figure 45). This latter group of spoil heaps [EF22] comprised a group of three large mounds along the west, a slight bank to the south-east, and a shallow hollow or depression to the north-west (Figure 46). To the east of the structural remains of the castle a group of five mounds [EF24], arranged north/south along the upper edge of the castle ditch, were recorded (Figure 47).
- Field to the west of the castle** (Figures 5a, 5b and 5c)
- 6.12 The area at the base of the western castle escarpment was relatively flat, sloping away gently to the west. The triangular area was delineated by the Tarset Burn to the north, and the railway embankment [EF10] (see below) to the south-west. Toward the middle of the field was a sharp north-east/south-west orientated slope [EF12], forming a bank leading to a lower river terrace (Figure 48). The bank was steepest and better defined to the south, at the base of the embankment, and petered out to the north as it reached the Tarset Burn.

Railway features (Figures 5a, 5b and 5c)

- 6.13 From the stone bridge that crosses the road to the south of the castle the steep sided cutting [EF14] for the railway line extended to the north, truncating the castle ditch and the south-western corner of the castle mound (Figure 49). From this point the railway line proceeded on a steep sided embankment [EF10] which extended across the field to the west of the castle to the Grade II listed railway bridge which crosses the Tarset Burn (Figure 50). No traces of original railway features, track, or ballast were recorded within either the cutting or on the embankment. However, two iron rails were recorded on the south-west corner of the castle mound, lying across the railway fence line [EF11]. The remains of this fence line was recorded to the north of the railway cutting and embankment [EF11], and comprised a slightly raised bank with irregularly interspersed posts made from iron rails bolted around wooden posts (Figure 51). The fence line and bank extended from the bridge at the south-west to the southern edge of the castle ditch [EF15], proceeded north-west to the base, turning north-east to ascend the southern edge of the castle mound [EF16]. The bank then extended across the south-west corner of the mound (Figure 52), descended the western escarpment, and continued to run immediately parallel to the base of the railway embankment [EF10] to the north-west. Beyond the terraced bank [EF12] in the western field, the bank was accompanied by a ditch to the north-east (Figure 48). The fence line and bank terminated just prior to a trackway leading beneath the railway bridge over the Tarset Burn.
- 6.14 A railway 'lineman's hut' [EF13] was recorded at the intersection of the embankment and the cutting (Figure 53). The hut is located to the north-east of the railway line, on a flat terrace partially cut into the castle mound, and measures approximately 3.4m north-east/south-west and 4.5m south-east/north-west. The A-cross frame of the hut is roofed with corrugated iron, whilst the existing walls (of which only the north-east and south-west elevations survive) are constructed from re-used railway sleepers set on end with the outer surface contacted with tar (Figure 54). Several fallen sleepers were recorded lying in and around the building; the majority of the sleepers had visible impressions relating to the iron 'chairs' attached to the sleepers to hold the rails, indicating that they were re-used. There was a door in the south-west elevation, of which only the attached 'barn-door' hinges survive (Figure 55). The north-west elevation of the building is completely absent, as is much of the south-east elevation, with the exception of the chimney stack (Figure 56). The chimney is constructed from machine-made brick, and is located exterior to the main structure and topped with a ceramic chimney pot. The interior fireplace has an *in situ* iron grate, with fire-bricks to the rear of the hearth. The hearth stone is constructed from concrete, and a shortened iron railway sleeper has been used to form the mantel (Figure 57). The building is, overall, in a dilapidated condition, with many of the standing wall sleepers in a poor and rotten condition. Additionally, the building was observed to list to the south-west, and several large cracks were present in the structure of the chimney.

7. The artefacts

Pottery assessment

Results

- 7.1 A minute piece (<0.25g wt, not full thickness) of reduced, unglazed pot came from context [102]. Too little survives for dating.

Recommendation

- 7.2 No further work is recommended.

Animal bone assessment

Results

- 7.3 A small bone and shell assemblage was recovered from five contexts (Table 1.3). The bone condition was relatively poor, with flaking and cracking of the surface noted in much of the material. All bones were fragmented with no complete spans present. There was no visible evidence of butchery, although the surface condition may in some cases have precluded identification of this.
- 7.4 The material recovered from context [52] comprised a single large mammal (cattle-sized) rib fragment. The bone from [72] was also a large mammal (cattle-sized) rib fragment, with part of the articulation present. There was no evidence of direct heating of the bones and no working, gnawing or pathology was noted, although the poor condition of surfaces, particularly of the fragment from [52,] may have obscured such evidence. An indeterminate bone fragment in poor condition was recovered from [55]. Some evidence of rodent gnawing was visible on this element. A few elements of rodent bones came from the sample from context [90]. Part of an oyster shell was hand-recovered from robber trench fill [53].

Discussion

- 7.5 The assemblage is small and does not provide evidence to supplement the range of species noted during the earlier evaluation at the site (Archaeological Services 2015). The presence of rodent gnawing on the bone fragment from [55] suggests this may have been exposed on the surface for some time prior to burial. The fragmentary nature of much of the bone material is again suggestive of butchery for consumption or disposal, although none of the bones exhibit any direct evidence for butchery. The recovery of bone, albeit in poor condition, demonstrates the potential for further bone to be recovered from the site.

Recommendation

- 7.6 No further work is recommended on this assemblage due to its small size.

Lithics assessment

Summary

- 7.7 The lithic assemblage consists of five artefacts, all from secondary contexts. Whilst they are of prehistoric date, the time range could be narrowed to a period within the Mesolithic to early Bronze Age.

Results

- 7.8 The five are listed, along with their dimensions and cortex amounts, in Table 1.4. There are no hand recovered pieces, all having been acquired from the samples. Two artefacts are from context [88] sample <17>, a sandy-silt. The first is a small flake on light brown patinated flint. It exhibits a break at the distal end and a soft hammer butt. An older surface is visible on the dorsal, identified by deeper cream/ brown patination. The second artefact is a flake on very rough grained black/reddish chert, with quartz like inclusions present on the tip and right proximal side. There are three previous scars on the dorsal surface. The piece has a step fracture termination and plain butt.

- 7.9 The second context which produced flint was [95] sample <20>, a wall foundation deposit. This piece is a blade on rough green brown chert. It has a hinge termination and soft hammer butt, with two previous removals visible on the dorsal surface. There is evidence of use/wear damage along the right side stretching from the tip half way down the edge.
- 7.10 The final context [100] sample <23> produced two flints. The first is a broken flake on brown mottled flint. There are breaks on both distal and proximal ends. The second is a small broken flake on black chert with lighter reddish banding. The distal end is broken, ending in a sharp point. There is one previous removal on the dorsal and the piece has a marginal butt.

Discussion

- 7.11 The artefacts have been redeposited, and although they appear to be in fresh condition there are a number of breaks present. The use of a variety of different materials of differing quality also suggests this is a derived collection. The pieces are prehistoric in date, although none of the forms are diagnostic. However, their appearance suggests that they most likely originate from a period within the Mesolithic to early Bronze Age.

Recommendation

- 7.12 No further work is recommended.

Shale object assessment

Results

- 7.13 Part of a rectangular-sectioned, shale object 41+mm long came from robber trench context [53], only its width (13mm) surviving intact. One end is rounded and appears original, the other end is broken and the object's thickness is incomplete, surviving to c.11-13mm. The shale is laminating but the top face and long sides of the object are flattish and appear to be original.
- 7.14 Its use is uncertain, but it may be part of a whetstone or smoother for the fine finishing of metal or organic artefacts - though no shaping or wear evidence survives to support this, apart from the rounded end. Such objects were in use over a very long period, and apart from suggesting that some type of metalworking or craft activity was perhaps taking place, the object can tell us little.

Recommendation

- 7.15 No further work is recommended.

Glass assessment

Results

- 7.16 A small body sherd of unweathered green bottle glass came from the fill of robber trench [53]. Post-medieval.

Recommendation

- 7.17 No further work is recommended.

Building materials assessment

Results

- 7.18 Quantities of mortar (c1505g wt total) were hand-recovered or came from the samples from 8 contexts (Table 1.5). Most came from the sample from context [94], c.1245g of which was retained. Most pieces are small and irregularly shaped. Mortar cannot be easily dated, but its presence supports the identification of rubble and demolition contexts.

Recommendation

- 7.19 No further work is recommended.

Iron objects assessment

Results

- 7.20 Five iron nails were recovered. Part of a flooring nail was unstratified. Two highly corroded, complete, flat topped nails (85 & 88mm long) and a further partial, flat topped nail came from rubble context [58] and a bent, flat-topped fragment came from demolition layer [64]. All appear to be hand-wrought. These could be pre-industrial and are likely to be post-medieval.

Recommendation

- 7.21 No further work is recommended.

8. The palaeoenvironmental evidence

- 8.1 A palaeoenvironmental assessment was carried out on 13 bulk samples taken from layers and deposits associated with the castle mound. The samples were manually floated and sieved through a 500µm mesh. The residues were examined for shells, fruitstones, nutshells, charcoal, small bones, pottery, flint, glass and industrial residues, and were scanned using a magnet for ferrous fragments. The flots were examined at up to x60 magnification using a Leica MZ7.5 stereomicroscope for waterlogged and charred botanical remains. Identification of these was undertaken by comparison with modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University. Plant nomenclature follows Stace (1997). Habitat classifications follow Preston *et al.* (2002).
- 8.2 Selected charcoal fragments were identified, in order to provide material suitable for radiocarbon dating. The transverse, radial and tangential sections were examined at up to x600 magnification using a Leica DMLM microscope. Identifications were assisted by the descriptions of Schweingruber (1990) and Hather (2000), and modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University.
- 8.3 The snail assemblages were scanned and the remains identified to species using the descriptions of Cameron (2008) and Kerney & Cameron (1979). Nomenclature follows Anderson (2005) and habitat classifications follow Cameron (2008) and Kerney & Cameron (1979).
- 8.4 The works were undertaken in accordance with the palaeoenvironmental research aims and objectives outlined in the regional archaeological research framework and resource agendas (Petts & Gerrard 2006; Hall & Huntley 2007; Huntley 2010).

Results

- 8.5 The few finds from the samples comprised a small fragment of pottery in context [102], and worked flints in contexts [88], [95] and [100]. Mortar was present in a number of the fills, with the largest amount recorded in context [94], a foundation deposit for wall F13. Charcoal was recorded in small quantities and was generally mineralised and in a poor condition. The identified species were oak, birch and hazel, which were recorded during the evaluation (Archaeological Services 2015). Coal shale, and a few pre-Quaternary trilete megasporangia which derive from coal deposits, were present in several of the samples.
- 8.6 The only charred plant macrofossils were hazel nutshell fragments in deposits [95] and [100], and a wheat grain in [95]. The wheat grain had the characteristic compact shape of *Triticum aestivo-compactum* (cf. bread wheat). Small amphibian bones and an assemblage of land snails dominated by *Discus rotundatus* (Müller), *Cepaea nemoralis* (Linnaeus) and *Oxychilus* sp, were recorded in context [90], the fill of a possible beam slot. *Discus rotundatus* (Müller) and *Oxychilus* sp live in a range of moist, sheltered and often wooded/shaded habitats. *Cepaea* has a widespread habitat distribution and is of little interpretative value. Sclerotia of the soil fungus *Cenococcum geophilum* were noted in layers [26], [88], [95] and [100]. The results are presented in Table 1.6.

Discussion

- 8.7 The samples provide little information about the age or nature of the features, due to the limited number of diagnostic palaeoenvironmental remains. The use of bread wheat is suggested from the single grain recovered from foundation deposit [95], which was a widely cultivated crop of the medieval and post-medieval periods (Greig 1991; Hall & Huntley 2007). Hazel nutshells occur on a wide range of archaeological sites of all time periods.
- 8.8 The occurrence of sclerotia of the soil fungus *Cenococcum geophilum* points to the former presence of trees at the site, as this ectomycorrhizal species is common in woodland soils, having mutualistic associations with the roots of some trees, particularly members of the Fagaceae (oak), Pinaceae (pine) and Betulaceae (birch, alder and hazel) families (Hudson 1986). This may relate to trees growing along the banks of Tasset Burn, as can be observed on the 1980s O.S. map of the site.
- 8.9 The shallow hollow F89, possibly created by the decay of a beam, appears to have provided a sheltered habitat which attracted an aggregation of land snails and amphibians (their predators).

Recommendations

- 8.10 No further work is recommended on the samples due to the limited number of diagnostic palaeoenvironmental remains. If additional work is undertaken at the site, the results of this assessment should be added to any further palaeoenvironmental data produced.

9. The archaeological resource

Prehistoric

- 9.1 Palaeoenvironmental analyses of natural subsoil deposits from trenches A1 and A2, and the lack of data therein, indicates that these layers are undisturbed and unlikely

to be redeposited. The single fragment of pottery recovered from deposit [102] can be considered intrusive. As such it is improbable that material excavated from the castle ditch was deposited in this area to form or re-shape this northern part of the castle mound, as was previously asserted. The recovery of chert and flint artefacts from the silty-sand layers [26; 86; 82=88] recorded in the base of these trenches, together with the identification of woodland tree fungus, indicates that these deposits formed a topsoil layer in the prehistoric period when the mound upon which the castle would later be constructed was heavily wooded.

Medieval

- 9.2 No evidence for an earth and timber castle, or buildings that predated the stone structures, were identified during these excavations. However, this phase of the archaeological works has identified, and fixed the position of, the northern towers and curtain wall of the castle. Whilst surprisingly little artefactual material was recovered during the excavations, the stone structures described below are highly likely date to the later 13th century when the licence to crenellate was given. In trench A1 the former topsoil was cut by construction trenches for the sandstone foundation structure [F105; F69=F14=F54; F93] which in turn provided a stable base for the construction of the north-east castle tower. These excavations have shown that the tower is of similar shape and form to the partially exposed tower in the south-east corner of the castle, excavated during the 19th century. As such the north-east tower is an inverted 'U' shape, likely to have had sharp corners to the north-east and north-west. However, nearly all facing stones have been removed from the tower during later episodes of demolition (see below), with the exception of a limited section of several courses of facing stones identified *in situ* on the north face. The two overlying partial courses of chamfered stonework, together with the limited sections of exposed stonework in the east face, indicate that the upper tower wall would have been constructed upon a broad chamfered offset. The dimensions of the facing trench [F103] identified along the western face of the wall is consistent with the robber trench [F66] cut into the foundations of the northern face where the facing stones have partially been removed.
- 9.3 Evidence within the tower of the internal facing of the rubble walls is drawn from the impressions [F68] made within the mortar [F67] applied to the upper surface of the structural foundation. Very limited evidence for internal flooring of this area can be drawn from the clay-sand levelling layers applied to the stone surface, and the fragments of concrete flooring recorded during the archaeological evaluation. No further trace of this flooring was identified during the excavations; considering the level of disturbance created by later demolition, it cannot be discounted that this concrete may not have survived (and been subsequently recorded) *in situ*.
- 9.4 The demolition of the north-western tower in trench A2 has resulted in almost all stone work relating to the structure being removed. However, the construction methods and form are broadly similar to those of the much more substantial north-east tower. A construction trench [F81] was cut through the former topsoil deposits, and the structural foundation layer [F79] laid within it. Little trace of the upper tower walls have survived demolition, with the exception of a small section of mortared rubble core of the eastern arm of the tower wall [F75].
- 9.5 The curtain wall [F57] that extended between, and abutted, the two towers was set slightly back (to the south) of the north face of the castle and was constructed on a

concrete raft [F76=F104], providing a stable foundation for the structure. Whilst less substantial than the towers, being thinner and clay-bonded only, the considerable amounts of concrete laid to the south of the wall would have had the effect of both reinforcing and raising the internal floor level of the castle. The concrete and stone rubble [F55=F52; F97=28] that was laid against the north face of tower wall [F13] and the face of the north-west tower is likely to have served a similar purpose in reinforcing and stabilising the shallow foundations of the north face of the castle.

- 9.6 Exterior to the castle mound, the ridge and furrow and the terracing in the east field probably date to the medieval period, contemporary with the construction and occupation of the castle. The low banks [EF5; EF6; EF7] on the western side of the hill in this area delineate the eastern agricultural area and the occupational area of the castle, with the break between banks [EF6] and [EF7] corresponding to the position of the proposed bridge abutment [EF18]. The terracing of the lower western field may also be considered to be contemporary to the construction and occupation of the castle.

Post-medieval

- 9.7 The excavations have demonstrated that there were extensive episodes of deconstruction and stone reclamation in the post-medieval period, and possibly as late as the mid-19th century, with the castle site becoming a *de facto* stone quarry. Planned deconstruction is indicated by the arrangement of the spoil heaps along the eastern [EF24] and western [EF22] edges of the castle and the reduction of the western towers [F79; EF20] and the western curtain wall [EF21] to their foundations. The eastern sections of the castle seem to have fared better, the rubble wall cores indicating the survival of the lower sections of many structures with the occasional *in situ* facing stonework. The distribution pattern of the spoil heaps and the differential survival of eastern and western areas of the castle suggests that works to demolish and recover stone from the castle began from the west, working eastward across the remains. Access to the site was via access track [EF17] across the ditch to the south, the post-medieval date of which is well attested (see MacLauchlan 1867, 70). Access to the castle structures was via the gap [EF23] between spoil heaps to the north-west, leading from the flat western area of the mound. The low bank [EF9] in the field to the south of the castle probably relates to egress across the southern field leading to the access track [EF17].

19th century and modern

- 9.8 The spoil deriving from the archaeological excavations in the late 19th century was markedly different in appearance, having a darker colour and greater silt content with less mortar and rubble. This greatly aided the identification of backfilled trenches excavated against and over the north-east tower and northern curtain wall. Similar deposits were seen in the north-west corner of trench A2, overlying spoil heaps [EF28], indicating that this part of the north-west area of the castle was excavated; however, the excavations had not extended to the depth achieved during this phase of works. Trenches and spoil heaps relating to the Victorian excavations were readily visible as earthworks around wall [F13/EF27] (in particular the exposed off-set chamfered stonework) and within and surrounding tower [EF19] to the south-east.
- 9.9 The Border Counties Railway line was laid in 1860, with the nearest station being located at Tarset, 220m south-east of the castle. The excavation of the railway

cutting and the creation of the embankment have truncated significant sections of the south-west castle ditch and the mound. As such the relationship of the ditch to the western escarpment of the castle is lost. It is highly likely that the railway engineering works, particularly those which impacted upon the Tarsset Burn, indirectly caused the large land slip affecting the northern area of the castle mound, first recorded in 1865. This phase of archaeological excavation has shown that the continued erosion of the castle mound has yet to impact directly upon the known structural remains of the castle. However, any remains situated north of the northern towers and curtain wall may be at risk. Limited evidence for structures in this area, in the form of collapsed walls and rubble, were identified during the archaeological evaluation.

- 9.10 Tarsset Castle is of considerable regional significance, being the administrative centre of the manor of Tarsset in the Barony of Upper North Tyndale during the medieval period. This phase of works mark the first detailed investigation and survey of the archaeological remains at Tarsset, and will enable an accurate footprint of the castle to be projected onto the castle mound. The Northumberland National Park research framework (Young *et al* n.d) contains an agenda for archaeological research in the region, which is incorporated into regional planning policy implementation with respect to archaeology. In this instance, the archaeological resource addresses a number of agenda items, specifically the medieval research topic of Castles, Manors and Military Sites: Origins and development of castles within the Park area (i) transition from timber motte and bailey castles to stone keeps and the role of early castles (e.g. Tarsset, Elsdon) within the border area between England and Scotland and (iii) Organisation of space within the bailey areas of extant castles; Landscape context of castles in the Park - castles in their overall cultural and environmental setting. With regard to the North-East Regional Research Framework (Petts and Gerard, 2006) the archaeological resource addresses agenda items: MDiv. Castles and defensive structures. In addition, castles in the North-East on the Heritage at Risk Register (as Tarsset Castle is) are specifically highlighted as a strategic research objective, with a recommendation for full recording and data dissemination.

10. Recommendation

- 10.1 Further research, analysis of the data, and publication are recommended. An Updated Project Design has been included as Appendix 3, which lists the tasks to be undertaken to achieve this.

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Appendix 1: Data tables

Table 1.1: Context data

The • symbols in the columns at the right indicate the presence of artefacts of the following types: P pottery, B bone, M metals, F flint, I industrial residues, G glass, C ceramic building material, O other

No	Type	Trench	Description	P	B	M	F	I	C	O
1	Eval	all	Topsoil and turf	•						
2	Eval	1	Redeposited natural subsoil		•					
3	Eval	all	Natural clay subsoil							
F4	Eval	1	Rubble							
5	Eval	1	Subsoil			•	•			
F6	Eval	1	Rubble							
7	Eval	3	Rubble deposit							
8	Eval	3	Rubble deposit		•	•				
9	Eval	5	Subsoil/ rubble deposit							
10	Eval	5	Silt and large stone rubble deposit	•						
11	Eval	3	Degraded mortar and silt		•	•			•	
F12	Eval	3	Concrete and mortar							
F13	Eval	6	Lime-mortared wall (NE tower)							
F14	Eval	6	Unbonded wall							
F15	Eval	6	Concrete surface							
16	Eval	6	Silt in C19th exc. trench							
17	Eval	6	Rubble deposit							
18	Eval	6	Spoil from C19th exc. trench							
19	Eval	3	Sandy-silt layer (below 11)							
20	Eval	3	Sandy-clay (over F37)							
F21	Eval	5	Metalled surface							
22	Eval	2	Rubble deposit							
F23	Eval	2	Rubble core of wall							
24	Eval	2	Rubble west of F23							
25	Eval	2	Rubble at east end of Trench 2							
26	Eval	6	Silty-sand deposit, base of trench							
27	Eval	6	Rubble deposit							
28	Eval	6	Concrete and mortar							
29	Eval	6	Backfill/rubble deposit							
30	Eval	3	Rubble deposit	•					•	
F31	Eval	3	Mortared wall core							
F32	Eval	3	Mortared wall core							
F33	Eval	3	Faced/dressed sandstones							
34	Eval	3	Silty-sand layer							
F35	Eval	3	pit							
36	Eval	3	Fill of pit F35							
F37	Eval	3	Metalled surface							
38	Eval	5	Metalled surface							
39	Eval	2	Rubble deposit							
40	Eval	4	Basal fill of castle ditch F51							
41	Eval	4	Fill of ditch F51							
42	Eval	6	Compacted sand and mortar layer							
43	Eval	6	Mortar/sand rubble deposit							
44	Eval	7	Fill of ditch F51					•		
45	Eval	7	Fill of ditch F51						•	
46	Eval	7	Fill of ditch F51							
47	Eval	7	Fill of ditch F51	•						
48	Eval	7	Fill of ditch F51							
49	Eval	7	Fill of ditch F51							
50	Eval	4	Fill of ditch F51							
51	Eval	4/7	Cut of castle ditch							
52	Exc	A2	Rubble layer (=55)		•					
53	Exc	A1	Fill of robber trench F66 (=62)		•					•
F54	Exc	A1	Structural foundation (=F14;F69;F93;F105)							
55	Exc	A2	Rubble deposit (=52)		•					

No	Type	Trench	Description	P	B	M	F	I	C	O
56	Exc	A2	Concrete layer							
F57	Exc	A2	Northern curtain wall							
58	Exc	A2	Concrete deposit north of F57(=87)							
F59	Exc	A2	Concrete deposit south of F57							
F60	Exc	A2	Robber trench over F79							
61	Exc	A2	Rubble deposit (=18)							
62	Exc	A2	Rubble fill of F63 (=53)							
F63	Exc	A2	Robber trench (=F66)							
64	Exc	A2	Rubble deposit							
65	Exc	A2	Rubble deposit							
F66	Exc	A1/2	Robber trench (=63)							
F67	Exc	A1	Mortar layer							
F68	Exc	A1	Impression made by facing stones (in F67)							
F69	Exc	A1	Structural foundation (=F54;F14;F93;105)							
70	Exc	A1	Fill of robber trench F71							
F71	Exc	A1	Robber trench							
72	Exc	A2	Fill of F60		•					
73	Exc	A1	Clay-sand over structural foundation F14							
74	Exc	A1	Natural clay under F14 (=3;77;80;91;102)							
F75	Exc	A2	Remains of north-west tower (rubble core)							
F76	Exc	A2/3	Concrete raft (=F104)							
77	Exc	A1	Natural clay (=3;74;80;91;102)							
F78	Exc	A2	Structural foundation (=F79)							
F79	Exc	A2	Structural foundation (=F78)							
80	Exc	A2	Natural clay (=3;74;77;91;102)							
F81	Exc	A2	Construction cut for F79							
82	Exc	A2	Subsoil, former topsoil (=88)							
83	Exc	A1	Rubble deposit							
84	Exc	A1	Rubble deposit							
85	Exc	A1	Rubble deposit							
86	Exc	A1	Subsoil, former topsoil							
F87	Exc	A2	Concrete deposit north of F57(=58)							
88	Exc	A2	Subsoil, former topsoil (=82)				•			
F89	Exc	A2	Beam slot forming void							
90	Exc	A2	Fill of F89		•					
91	Exc	A2	Natural clay (=3;74;77;80;102)							
F92	Exc	A1	Upper foundation course (above F93)							
F93	Exc	A1	Structural foundation (=F14;F69;F54;F105)							
94	Exc	A1	layer							
95	Exc	A1	Subsoil, former topsoil				•			
96	Exc	A1	Thin rubble deposit over 28							
97	Exc	A1	Concrete layer (=28)							
F98	Exc	A3	Cut/intrusion through F105							
99	Exc	A1	Layer							
100	Exc	A1	Subsoil, former topsoil				•			
F101	Exc	A1	Cut for structural foundation F93							
102	Exc	A1	Natural clay under F14 (=3;77;80;91;74)	•						
F103	Exc	A1	Trench for facing stones, west F13							
F104	Exc	A3	Concrete raft (=F76)							
F105	Exc	A3	Structural foundation (=F54;F14;F93;F69)							

Table 1.2: Earthwork monument data

Feature No	Location	Description
EF1	East Field	Lower terrace bank
EF2	East Field	Middle terrace bank
EF3	East Field	Upper terrace bank
EF4	East Field	Ridge and furrow
EF5	East Field	Low bank to west
EF6	East Field	Bank to west (north)
EF7	East Field	Bank to west (south)
EF8	East Field	Ditch and banks related to road construction
EF9	East Field	Low bank extending south-west from access track EF17
EF10	Railway	Embankment
EF11	Railway	Bank and ditch
EF12	West Field	Terracing bank
EF13	Railway	Lineman's hut
EF14	Railway	Cutting
EF15	Castle	Castle ditch
EF16	Castle	Castle mound
EF17	Castle	Access track to castle across ditch EF15
EF18	Castle	Hollow, possible bridge abutment, south-east bank of ditch EF15
EF19	Castle	South-east castle tower
EF20	Castle	Likely remains of south-west castle tower
EF21	Castle	Shallow (robber) trench marking position of western curtain wall
EF22	Castle	Group of demolition spoil heaps, west of castle remains
EF23	Castle	Gap between spoil heaps EF22 and EF28, access route to castle during demolition
EF24	Castle	Group of demolition spoil heaps, east of castle remains
EF25	Castle	Group of demolition spoil heaps, adjacent to access track EF17 on castle mound
EF26	Castle	Slight bank extending along upper edge of western escarpment
EF27	Castle	North-east castle tower (c.f.F13 in exc.)
EF28	Castle	Spoil heaps north-west of castle remains
EF29	Castle	Low spoil heap, south of location of north-west tower
EF30	Castle	Bank, north of south-east tower, related to 19th century excavations
EF31	Castle	Bank, east of south-east tower, related to 19th century excavations
EF32	Castle	Bank, south of south-east tower, related to 19th century excavations
EF33	Castle	Bank, around north-east tower, related to 19th century excavations

Table 1.3: Data from bone and shell assessment

Context	52	53	55	72	90
Bone (unburnt) lge mammal rib frags	1		-	1	
Bone (unburnt) indet. frags	-		1	-	
Indet rodent frags					9
Oyster shell frag		1			

Table 1.4: List of flint artefacts with dimensions and cortex amounts

Context	Type	Length (mm)	Width (mm)	Thickness (mm)	Cortex
[88] <17>	Broken flake	10.00	11.50	2.15	none
[88] <17>	Flake (chert)	24.54	18.90	4.15	none
[95] <20>	Blade	18.48	8.84	2.11	none
[100] <23>	Flake	13.73	10.91	3.71	none
[100] <23>	Flake (chert)	9.08	6.50	1.70	none

Table 1.5: Mortar by context

Context	Wt (g)
26 <16>	45
53	5
88 <17>	5
90 <21>	18
91 <18>	5
94 <19> sample	1245
95 <20>	60
100 <23>	125
Total	1505

Table 1.6: Data from palaeoenvironmental assessment

Sample	14	15	16	17	18	19	20	21	22	23	24	25	26
Context	73	74	26	88	91	94	95	90	102	100	80	80	77
Feature	Layer	Mound	Layer	Layer	Layer	Deposit	Deposit	?Slot	Mound	Layer	Mound	Mound	Mound
Material available for radiocarbon dating	-	-	✓	(✓)	-	-	✓	✓	-	✓	-	-	-
Volume processed (l)	14	19	17	17	15	16	18	6	19	20	11	8	7
Volume of flot (ml)	25	40	10	25	5	3	70	40	80	90	50	40	20
<i>Residue contents</i>													
Bone (unburnt) indet. frags	-	-	-	-	-	-	-	(+)	-	-	-	-	-
Charcoal	-	-	-	-	-	-	-	+	-	-	-	-	-
Coal shale	-	+	-	-	+	+	-	+	+	-	-	-	-
Flint	-	-	-	2	-	-	1	-	-	2	-	-	-
Mortar	-	-	++	+	(+)	++++	++	+	-	++	-	-	-
Pot (number of fragments)	-	-	-	-	-	-	-	-	1	-	-	-	-
<i>Flot matrix</i>													
Bone (unburnt) amphibian	-	-	-	-	-	-	-	+	-	-	-	-	-
<i>Cenococcum geophilum</i> (Soil fungus) sclerotia	-	-	+++	++	-	-	++	-	-	++	-	-	-
Charcoal	(+)	-	+	+	-	(+)	+	-	(+)	++	-	-	-
Coal / coal shale	++	++	+	+	+	-	+	+	++	++	++	++	++
Mortar	-	-	-	-	-	-	+	-	-	-	-	-	-
Pre-Quaternary trilete megasporangium	-	(+)	-	-	-	-	-	-	-	-	-	-	(+)
Roots (modern)	-	-	-	-	-	-	-	+	-	-	-	-	-
Snails terrestrial	-	-	-	-	-	-	(+)	+++	-	-	-	-	-
Tuber / rhizome (charred)	-	-	-	(+)	-	-	-	-	-	+	-	-	-
Uncharred seeds	-	-	-	-	-	-	-	-	-	+	-	-	-
<i>Charred remains (total count)</i>													
(c) <i>Triticum</i> cf. <i>aestivum</i> (cf. Bread Wheat) grain	-	-	-	-	-	-	1	-	-	-	-	-	-
(t) <i>Corylus avellana</i> (Hazel) nutshell frag.	-	-	-	-	-	-	1	-	-	1	-	-	-
<i>Identified charcoal (✓ presence)</i>													
<i>Betula</i> sp (Birches)	-	-	-	-	-	-	✓	✓	-	✓	-	-	-
<i>Corylus avellana</i> (Hazel)	-	-	✓	✓	-	-	-	-	-	✓	-	-	-
<i>Quercus</i> sp (Oaks)	✓	-	-	✓	-	-	-	✓	-	✓	-	-	-

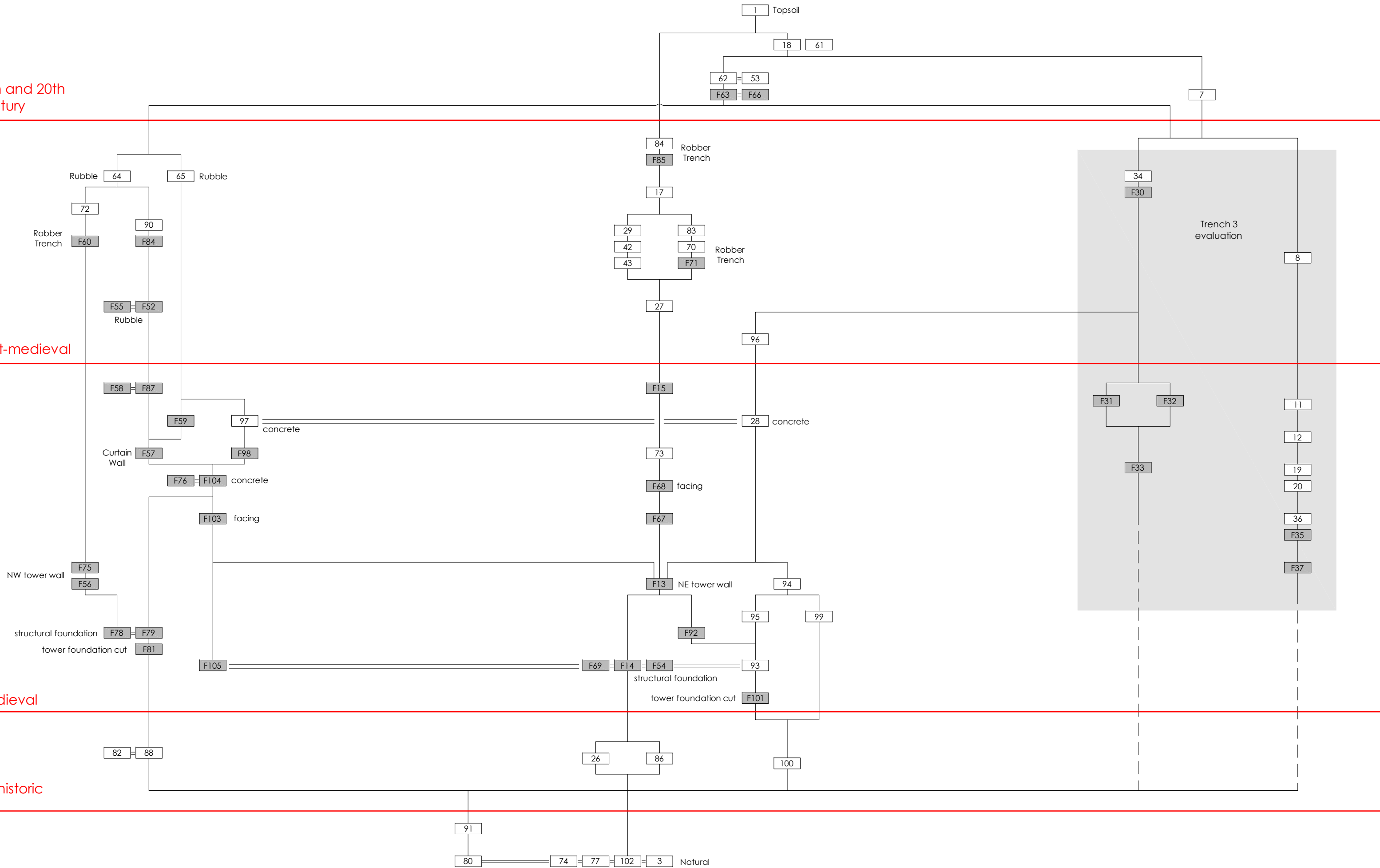
Appendix 2: Stratigraphic matrix

19th and 20th century

post-medieval

medieval

prehistoric



ARCHAEOLOGICAL
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on behalf of
G W Moore
and Sons

Tarset Castle
Northumberland

archaeological post-excavation
assessment and earthwork survey
report 3999

Stratigraphic matrix

Appendix 3: Updated Project Design

Project management

1. The project manager will be responsible for the management and coordination of the timetable, personnel, and resources, and for quality control.

Radio-carbon (AMS) dating

2. Three deposits have been selected as suitable candidates for radio-carbon (AMS) dating. Substitutes may be used where sample dating fails:
 - Context 88 (sample 17)– buried soil
 - Context 95 (sample 20) – fill of foundation cut F101
 - Context 100 (sample 23) – buried soil

Digitising

3. Plans and sections from the site archive will be digitised.

Excavation graphics

4. Phased plans and section drawings will be prepared for the full analysis report.

Report preparation

5. Phased data structure incorporating the results of the evaluation and excavation will be written and integrated with the illustrations.
6. Preparation of report, including collation of specialist reports and illustrations.
7. Integration of specialist reports into data structure.
8. Research into relevant parallels for the data, previous research, and analysis of the data will be conducted in accordance with defined research objectives.
9. A synthesis of the site will be prepared, bringing together all the results of the excavations.
10. The report will be edited by the Project Manager.
11. Full analysis report production.

Publication

12. Preparation of text for publication.
13. Reformatting of illustrations for publication.
14. Editing of publication text by the Project Manager.
15. Submission of publication report to the editor of *Archaeologia Aeliana*.
16. Revision of text / illustrations following referee's comments

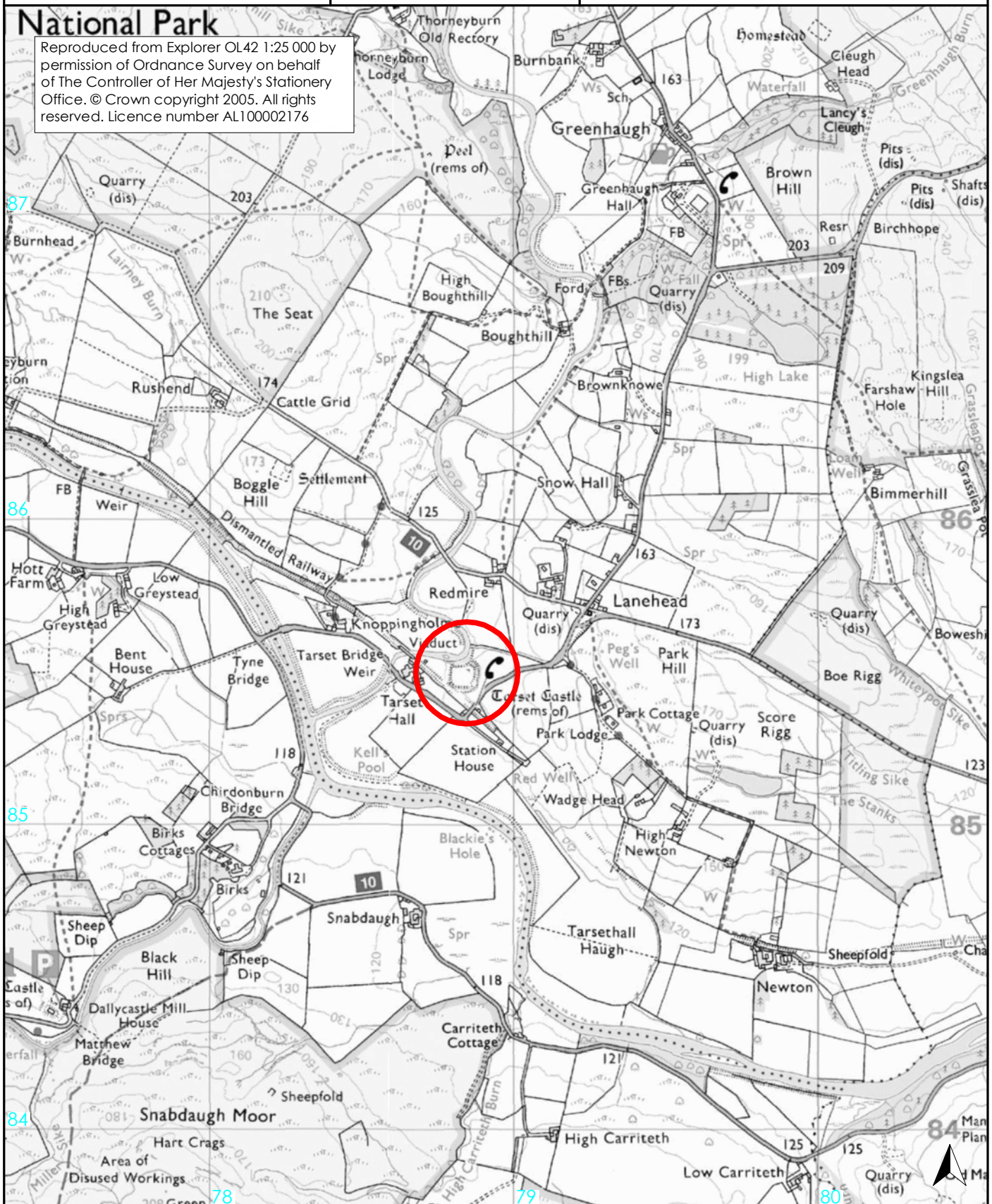
Archive

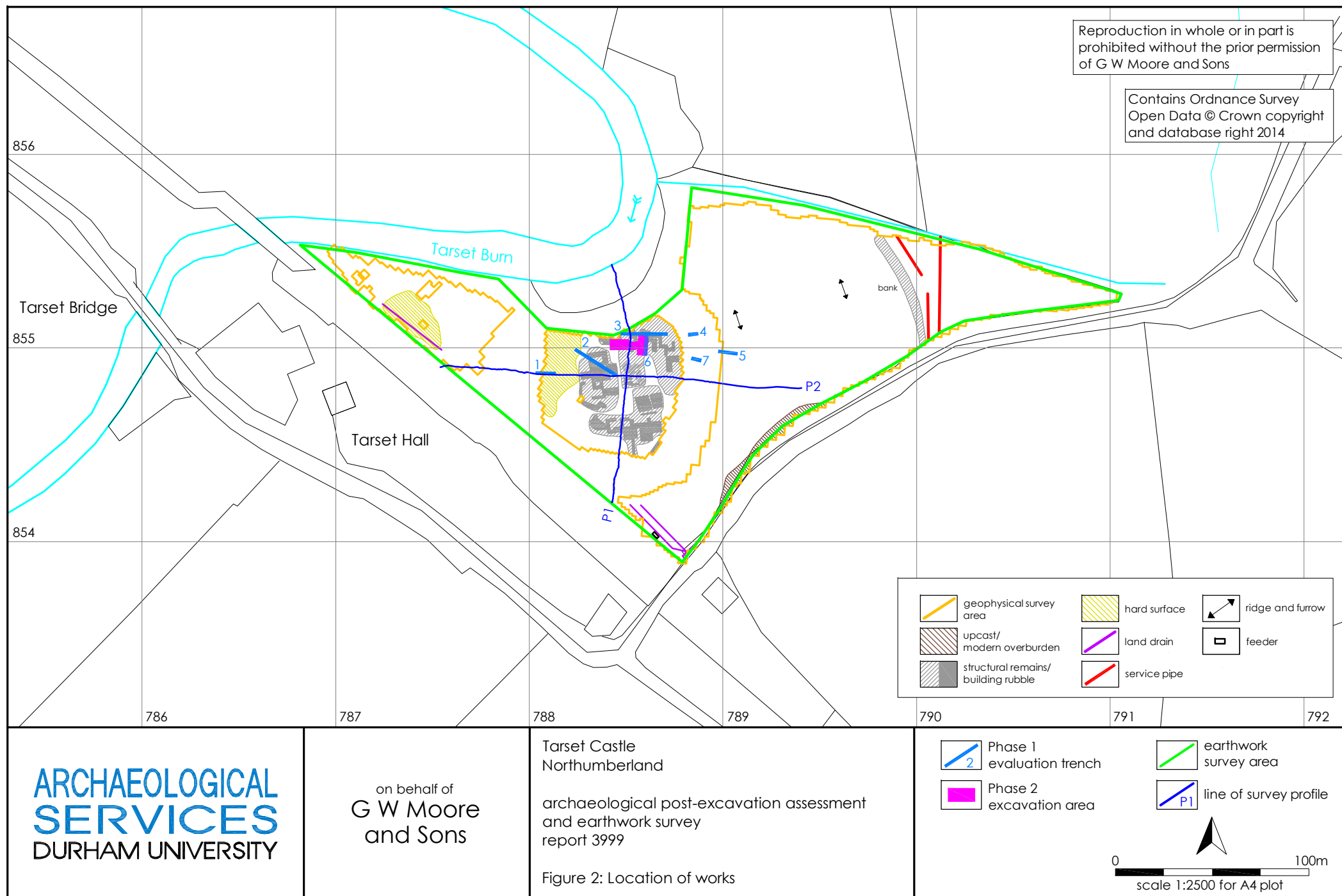
17. Preparation of the project archive.

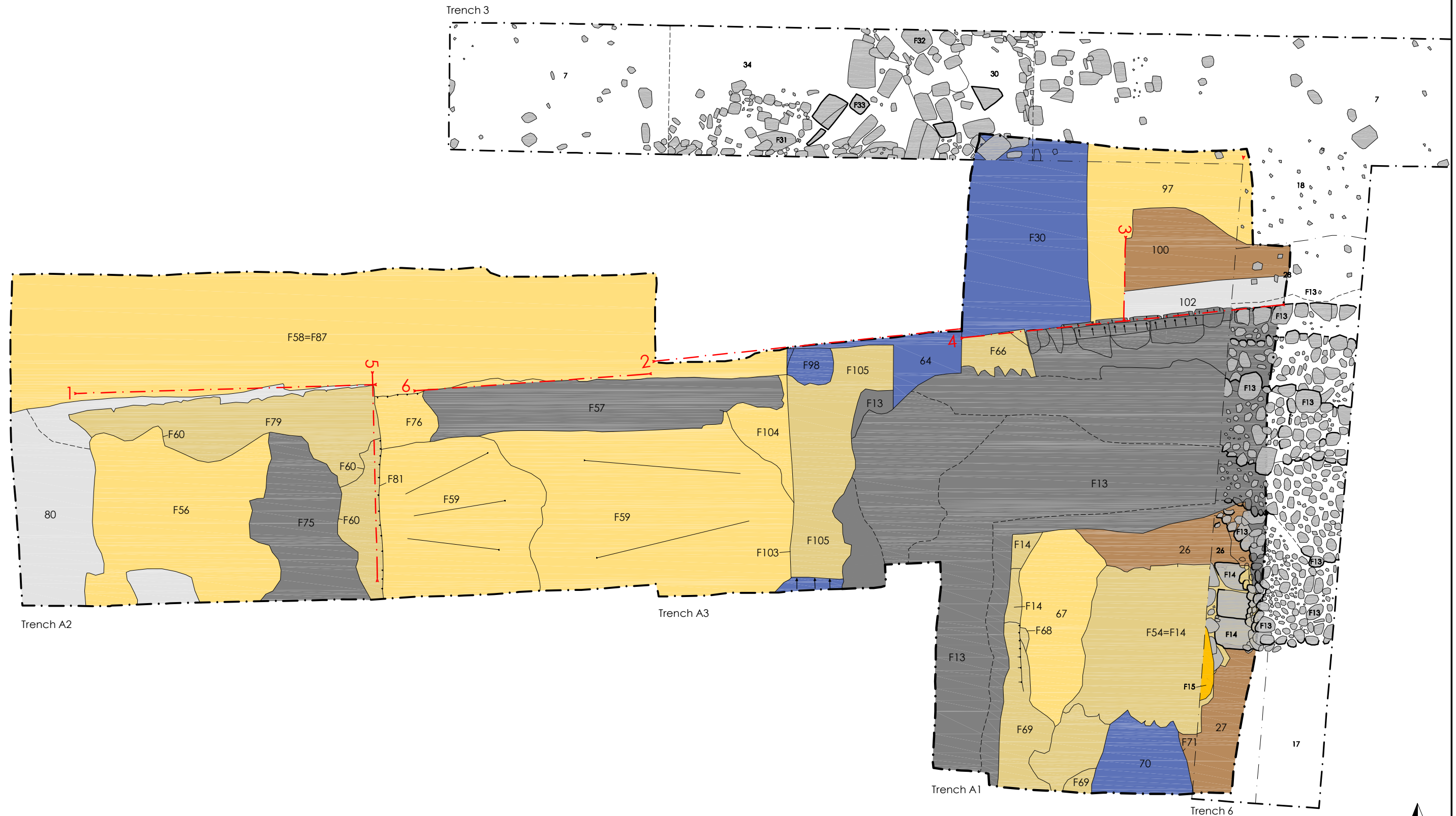
18. Transfer of the site archive to the Great North Museum.

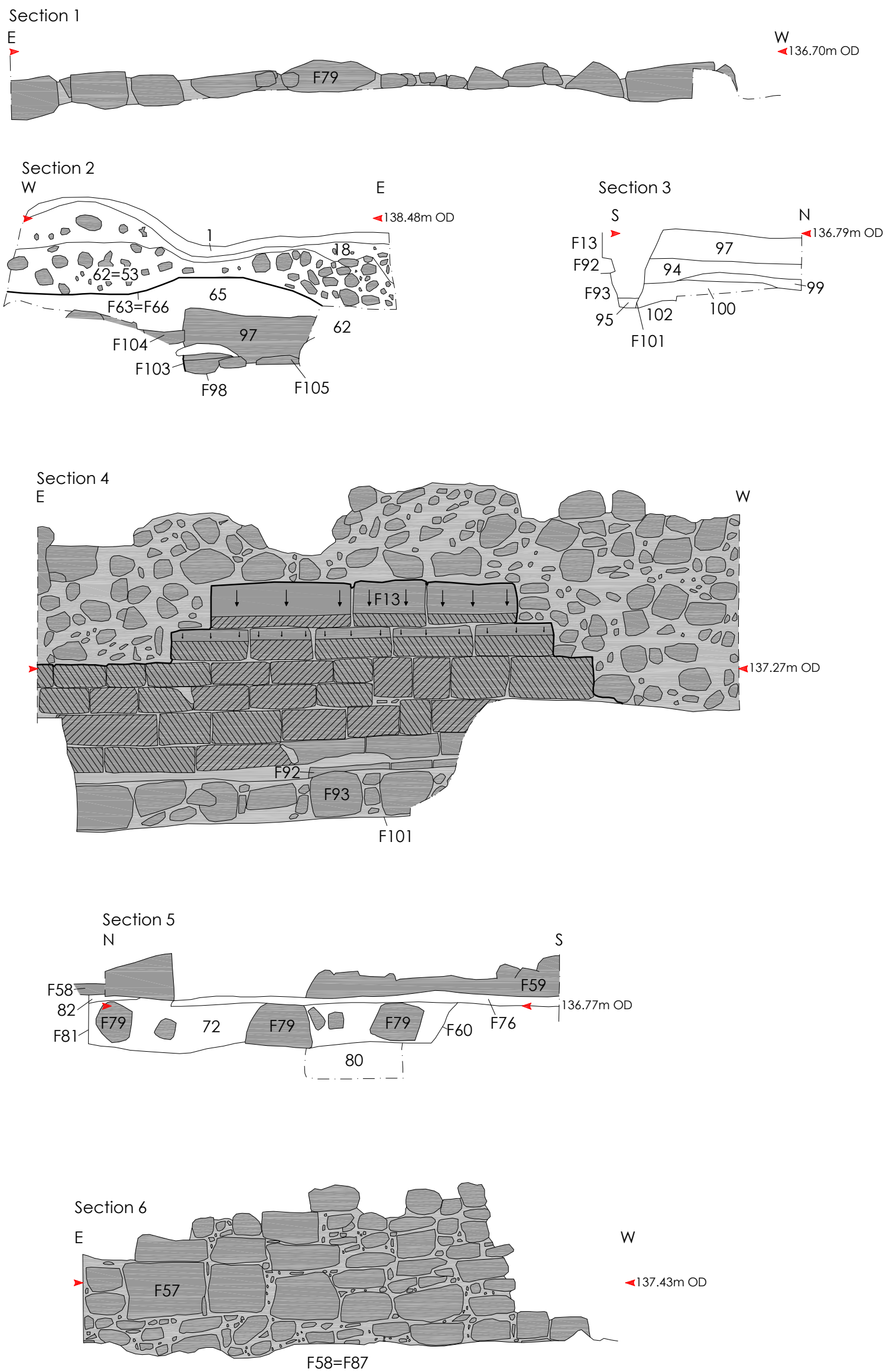
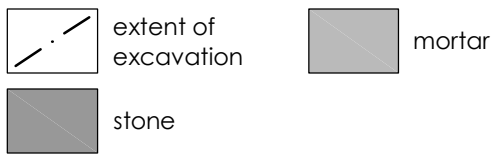
Programme

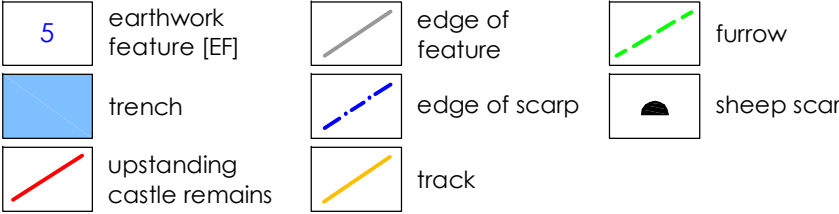
19. The works can be completed within 9 months of commission.



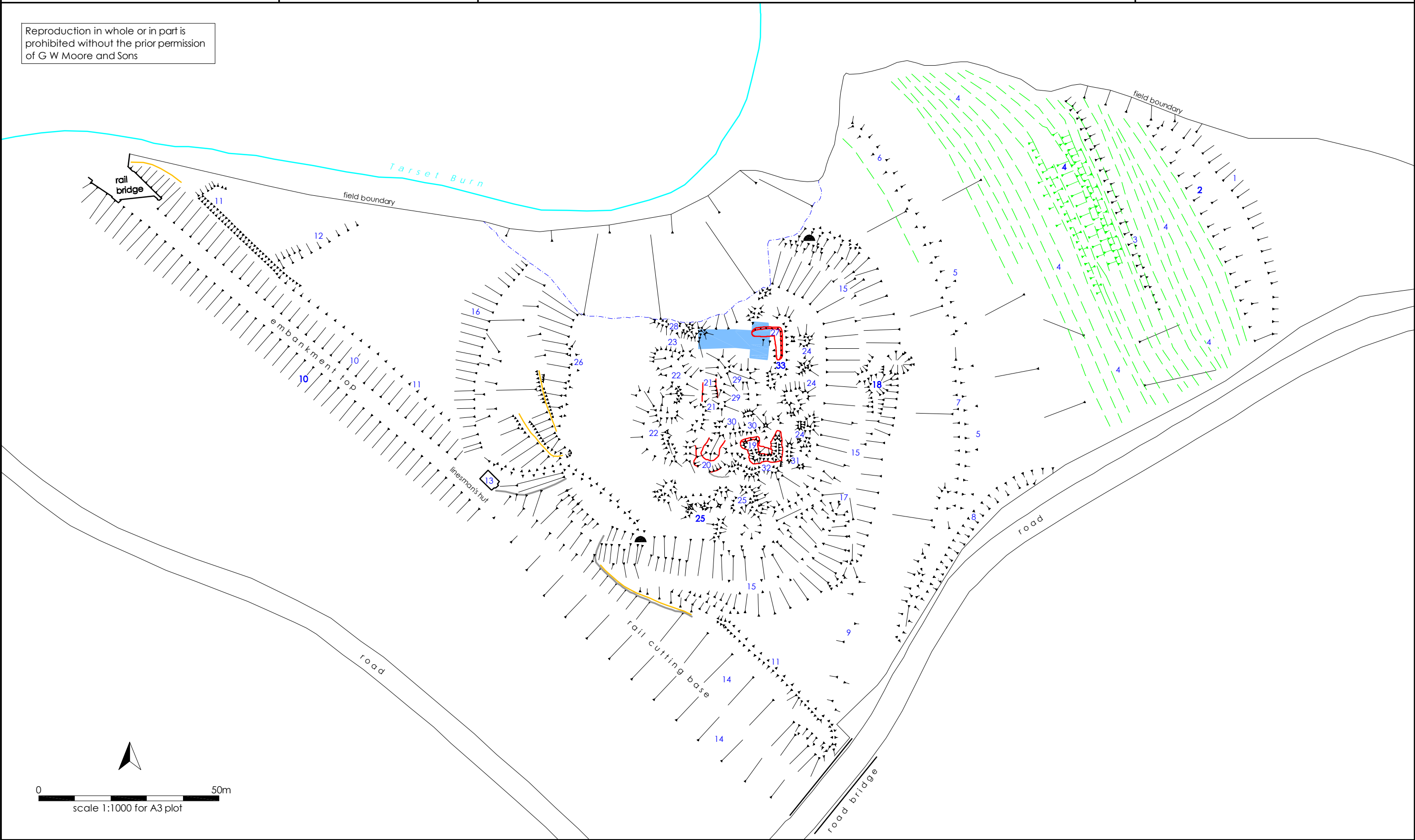


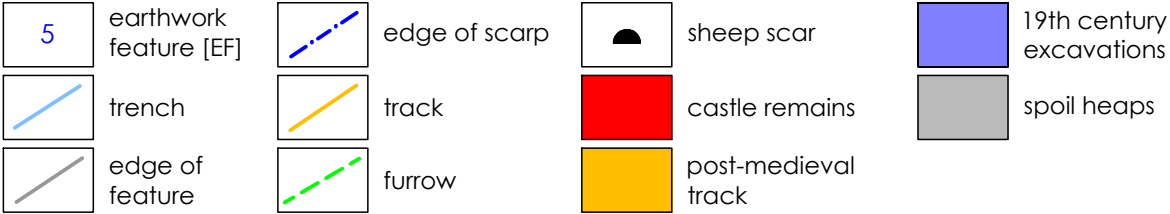




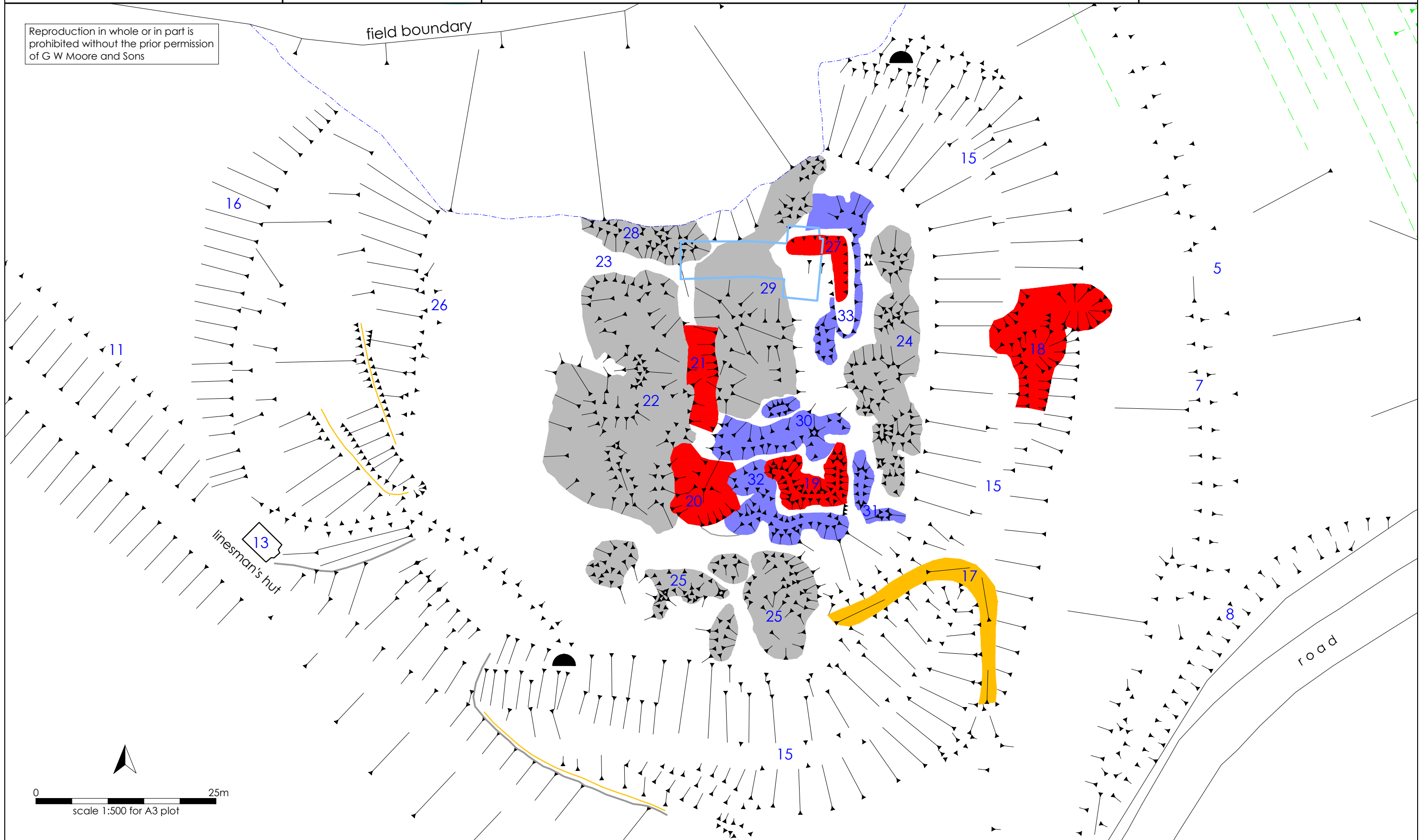


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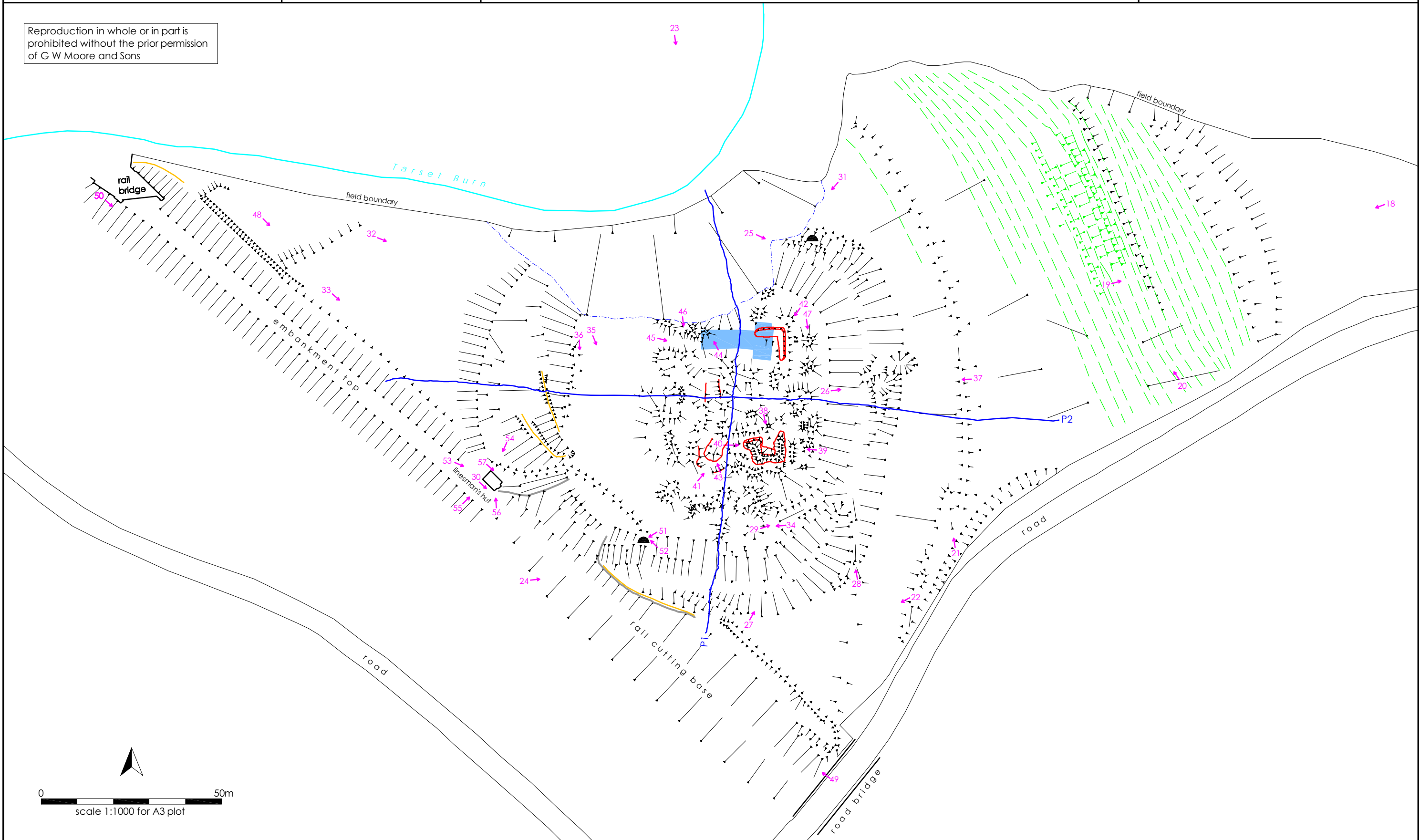
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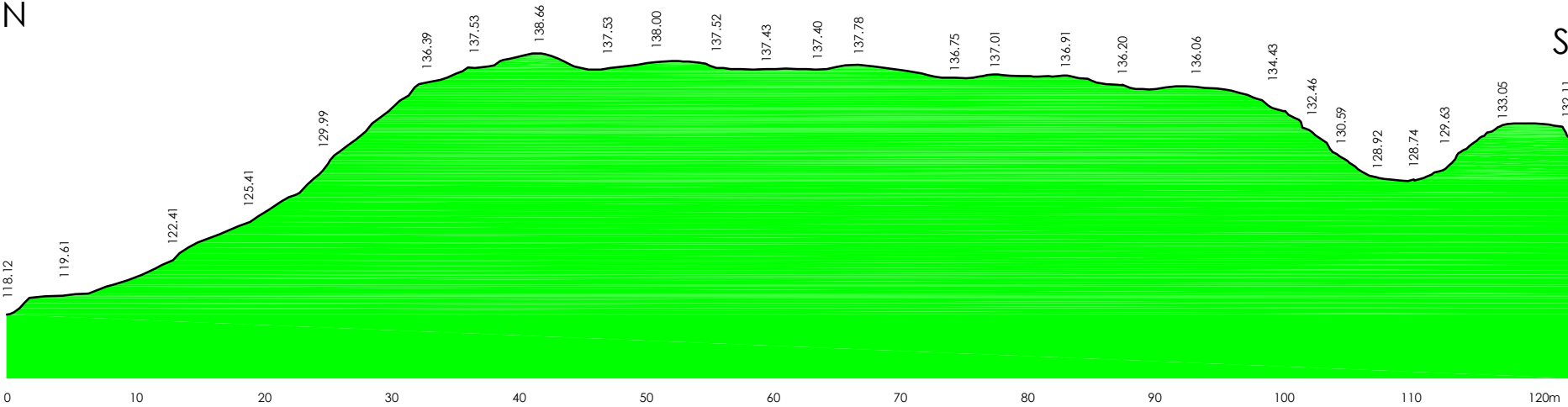
- 8 photograph figure number and direction of view
- P1 profile (see Figure 6)
- trench

- upstanding castle remains
- edge of feature
- edge of scarp
- track
- furrow
- sheep scar

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Profile 1
N



Profile 2
W

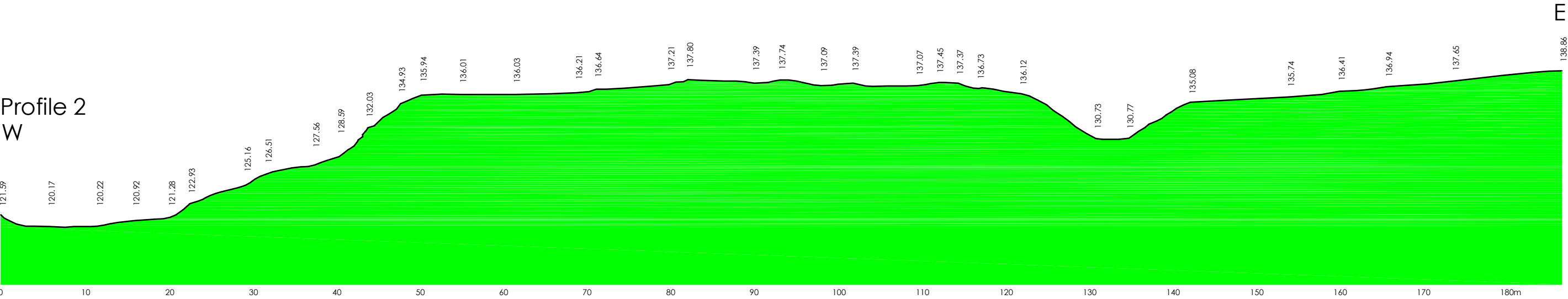




Figure 7: General shot across the excavation, looking north-west



Figure 8: Structural foundation [F14], looking north



Figure 9: Overview of north-east tower wall [F13], looking north-east



Figure 10: North face of north-east tower wall [F13], showing foundation [F93], chamfered stonework, and concrete [97=28], looking south-west



Figure 11: Impression [F68] left by facing stones, looking north



Figure 12: Trench for facing stone [F103] upon structural foundation [F105], wall [F13] (right) and wall [F57] (rear left), looking north



Figure 13: Structural foundation [F79] for north-west tower, looking east



Figure 14: The remains of north-west tower wall [F75], looking north



Figure 15: North face of curtain wall [F57], looking south east



Figure 16: Concrete [F59] with wall [F57] to rear, looking north



Figure 17: 19th century excavation trench [F63] (rear left) cut over robber trench into foundation trench [F101], with concrete [28=97], looking west



Figure 18: Overview of the eastern field, with terracing banks [EF1; EF2; EF3], looking west



Figure 19: Terracing banks [EF1; EF2; EF3], looking east



Figure 20: Ridge and furrow earthworks [EF4], looking north



Figure 21: Low banks [EF6] and [EF7], with road construction ditch and banks [EF8] visible in the foreground, looking north



Figure 22: Low bank [EF9], leading away from access track [EF17], looking west



Figure 23: Castle mound [EF16], showing northern land slip scars, looking south



Figure 24: Southern area of the castle ditch [EF15], with the truncation by the railway cutting [EF14] visible in the foreground, looking north-east



Figure 25: The north-eastern area of the castle ditch [EF15] at the point of truncation by the land slip, looking south



Figure 26: Bridge abutment [EF18] on the eastern edge of castle ditch [EF15], looking east



Figure 27: The south-eastern area of the castle ditch [EF15] showing sheep tracks, looking east



Figure 28: Access track [EF17] leading into the south-east corner of castle ditch [EF15], looking north



Figure 29: Access track [EF17] leading into the south-east corner of castle ditch [EF15], looking east



Figure 30: The castle mound [EF16] at the point of truncation by railway cutting [EF14], looking south-east



Figure 31: The area of the land slip truncating the northern area of castle mound [EF16], looking south-west



Figure 32: The western face of the castle mound [EF16], with the land slip visible (left), looking east



Figure 33: The western face of the castle mound [EF16], showing tracks leading down the escarpment, looking east



Figure 34: Spoil heaps [EF25] to the south of the structural remains of the castle, looking west



Figure 35: The western flat area of the castle mound [EF16], with spoil heaps [EF22] visible (rear left), looking south-east



Figure 36: Slight bank [EF26] running along the upper edge of the western escarpment of the castle mound [EF16], looking south



Figure 37: Overview of the structural remains of the castle on the eastern side of the castle mound [EF16], looking west



Figure 38: The remains of the south-east tower [EF19] of the castle, with related excavation spoil heaps [EF30] visible in the foreground, looking south



Figure 39: The remains of the south-east tower [EF19] of the castle, with related excavation spoil heaps [EF31] visible in the foreground, looking west



Figure 40: The remains of the south-east tower [EF19] of the castle, with related excavation spoil heaps [EF32] visible in the foreground and right, looking south



Figure 41: The robbed remains of the south-west tower [EF20], with the robber trench for the western curtain wall [EF21] visible to the rear, looking north



Figure 42: North-east tower [EF27] (*c.f.* [F13]) prior to excavation, with the trenches relating to the 19th century excavations visible around the base of the earthwork, looking south-west



Figure 43: Robber trench [EF21] marking the western curtain wall of the castle, looking north



Figure 44: Spoil heap [EF21] to the north-west during excavation, showing demolition rubble overlain by spoil from the 19th century excavations, looking north



Figure 45: The gap [EF23] providing access to the castle remains during the planned demolition, with spoil heaps [EF28] to the left, [EF22] to the right and [EF29] visible to the rear, looking east



Figure 46: Group of spoil heaps [EF22] to the west of the structural remains of the castle, looking south



Figure 47: Group of spoil heaps [EF24] to the west of the structural remains of the castle, looking south



Figure 48: Terracing bank [EF12] to the west of the castle mound [EF16], with railway fencing bank and ditch [EF11] and embankment [EF10] visible (right), looking south-west



Figure 49: Railway cutting [EF14] from the southern road bridge, with castle mound [EF16] visible (right rear), looking north-west



Figure 50: Railway embankment [EF10] from the northern rail bridge, looking south-east



Figure 51: Post (composed of iron rails) upon the castle mound [EF16] marking the northern edge of railway fencing bank [EF11], looking south-west



Figure 52: Railway fencing bank [EF11] running across the south-western corner of the castle mound [EF16], looking north-west



Figure 53: Lineman's hut [EF13], with railway fencing bank [EF11], looking east



Figure 54: The north-east face of the lineman's hut, looking south-west



Figure 55: The south-west face of the lineman's hut, looking north-east



Figure 56: The brick chimney on the south-east face of the lineman's hut, looking north



Figure 57: The interior of the lineman's hut showing the fireplace, iron grate and hearthstone, looking south-east