

A1 in Northumberland: Morpeth to Ellingham

Scheme Number: TR010059

6.42 Written Scheme of Investigation for an Archaeological Trial Trench Evaluation (Clean) for Change Request

Rule 8(1)(c)

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning
(Examination Procedure) Rules
2010**

**The A1 in Northumberland: Morpeth to
Ellingham**

Development Consent Order 20[xx]

**Written Scheme of Investigation for an Archaeological
Trial Trench Evaluation (Clean) for Change Request**

Rule Reference:	8(1)(c)
Planning Inspectorate Scheme Reference:	TR010059
Doc Reference:	6.42
Author:	A1 in Northumberland: Morpeth to Ellingham Project Team, Highways England

Version	Date	Status of Version
Rev 1	March 2021	Deadline 4

CONTENTS

1	INTRODUCTION	1
1.1	SCHEME BACKGROUND	1
1.2	DETAILED SCHEME DESCRIPTION	2
1.3	CONSULTATION	3
2	HISTORIC ENVIRONMENT BASELINE SUMMARY	5
2.1	SITE LOCATION	5
2.2	TOPOGRAPHY	5
2.3	GEOLOGY	5
2.4	ARCHAEOLOGICAL POTENTIAL	5
3	AIMS AND OBJECTIVES	12
4	METHODOLOGY	13
4.1	GENERAL REQUIREMENTS	13
4.2	FIELDWORK METHODOLOGY	14
4.3	HAND EXCAVATION	15
4.4	ARTEFACTS AND ENVIRONMENTAL SAMPLES	17
5	REPORTING	20
5.1	GENERAL REQUIREMENTS	20
5.2	REPORT CONTENT	20
5.3	PUBLICATION AND DISSEMINATION	21
6	ARCHIVE	23
6.1	GENERAL REQUIREMENTS	23

7	OPERATIONAL FACTORS	24
7.1	PROJECT TIMETABLE AND MONITORING ARRANGEMENTS	24
7.2	HEALTH AND SAFETY	24
7.3	INSURANCE	25
7.4	POST-EXCAVATION DELIVERABLES	25
7.5	COPYRIGHT	25

APPENDICES

APPENDIX A

REFERENCES

APPENDIX B

FIGURES

1 INTRODUCTION

1.1 SCHEME BACKGROUND

- 1.1.1. The Applicant has produced a Written Scheme of Investigation (WSI) for an archaeological trial trench evaluation, in advance of the A1 in Northumberland: Morpeth to Felton (Part A) improvements (National Grid Reference (NGR) 418227, 588556 to 417490, 600795: **Appendix B, Figure 1**). The WSI has been produced as part of the Development Consent Order (DCO) and is required in accordance to the National Policy Statement for National Networks (NPS NN) (paragraph 5.142).
- 1.1.2. Part A comprises 12.6 km of dualling of the existing A1 single carriageway (both online and along a new offline section), de-trunking of a section of the existing A1, three new junctions, an overbridge, an underbridge and a bridge over the River Coquet, new and extended culverts and new access tracks together with new and/or improved ancillary features.
- 1.1.3. A separate programme of archaeological mitigation is required as part of the National Grid Diversion advanced package works within Part A. These are outlined in a separate Written Scheme of Investigation for an Archaeological Strip, Map and Sample Excavation (National Grid Diversion Works), presented within **Appendix 8.6, Volume 7 (Application Document Reference: TR010041/APP/6.7)** of this ES.
- 1.1.4. The WSI sets out the scope and methodology for the archaeological evaluation, including the fieldwork method, approach to sampling, progress reporting, post-excavation reporting, archiving and dissemination. The aim of the evaluation is to clarify the presence, nature, date, extent and significance of any archaeological remains that might be present in the areas of proposed impact. The WSI will be supplemented by detailed methodology statements produced by the archaeological contractor, which will be produced in consultation with the Applicant, the Principal Contractor and Northumberland County Council (NCC).
- 1.1.5. The WSI has been informed by a Historic Environment Desk-Based Assessment (HEDBA) prepared in support of this Environmental Statement (ES), presented within **Appendix 8.1** of Volume 3 (**Application Document Reference: TR010041/APP/6.7**). These set out the legislative and planning background and provide a detailed baseline and an assessment of the likely significant effects of Part A. The WSI has also been informed by geophysical surveys, carried out in 2006, 2017 and 2018 presented within **Appendix 8.5, Volume 7** of this ES, a LiDAR assessment in 2018 presented within **Appendix 8.3, Volume 7** of this ES and a walkover survey undertaken in 2018 as reported in the HEDBA presented within **Appendix 8.1, Volume 7** of this ES.
- 1.1.6. The results of the evaluation will inform any necessary mitigation strategies to be undertaken either in advance of or during the construction phase. Any archaeological mitigation work that may be necessary would require a separate WSI outlining the scope and method for that work and would need to be approved by NCC.

1.2 DETAILED SCHEME DESCRIPTION

- 1.2.1. A full description of Part A is provided in **Chapter 2: The Scheme** of this ES. The following is a summary of the information which is pertinent to the proposed archaeological evaluation.
- 1.2.2. Part A would upgrade the section of the existing A1 from single carriageway road to dual carriageway standard. This would be achieved by a combination of approximately 6.5 km of online widening and approximately 6.1 km of new offline highway to provide more lanes and increase capacity. Part A would permanently require a total of 170 hectares of land (which includes land already owned by the Applicant). The majority of land permanently required comprises agricultural land, particularly for the proposed offline section of Part A. An additional 75 hectares of land would be temporarily required for the construction of Part A.

WARRENERS HOUSE TO PRIEST'S BRIDGE (ONLINE WIDENING)

- 1.2.3. From the southern extent of Part A, dualling of the existing single carriageway section of the A1 would begin where the A1 meets the A697 near Northgate Hospital and Warreners House, Morpeth (approximate Grid Reference NZ 18231 88595), where the existing dual carriageway finishes. Between here and Priest's Bridge (approximate Grid Reference NZ 18579 91676), which is a length of approximately 2.9 km, the existing A1 would be used as the southbound carriageway and a new northbound carriageway would be constructed to the west of the existing carriageways. Both carriageways would comprise two 3.65 m wide lanes with 1 m hard strips either side.
- 1.2.4. The earthworks within this section of Part A would comprise both cuttings and embankments, with the proposed Highlaws Junction raised upon embankments.

PRIEST'S BRIDGE TO BURGHAM PARK (OFFLINE WIDENING)

- 1.2.5. At Priest's Bridge (approximate Grid Reference NZ 18579 91676), Part A would include approximately 6.1 km of offline widening with the construction of new dual carriageway to the west of the existing A1 (the offline section). This new offline section would move away from the existing line of the A1 towards the west of Earsdon Moor, passing east of Fenrother, New Houses Farms and Causey Park and tying back into the existing A1 to the east of Burgham Park and west of Felmoor Park at approximate Grid Reference NZ 17830 97354. Both carriageways would comprise two 3.65 m wide lanes with 1 m hard strips either side.
- 1.2.6. The majority of this section of Part A would be within cutting, with some sections upon embankment, particularly over Burgham Park Underbridge and over culverts. The proposed Fenrother Junction would be raised upon embankments.

BURGHAM PARK TO PARKWOOD (ONLINE WIDENING)

- 1.2.7. From Burgham Park, where the proposed offline section ties in with the existing A1 at approximate Grid Reference NZ 17830 97354, to the northern extent of Part A, where it would tie in with the existing A1 dual carriageway (approximate Grid Reference NU 17476

00762), the widening would be online for approximately 3.6 km. The existing A1 (including the existing bridge over the River Coquet) would form the new northbound carriageway, and a new southbound carriageway (including a new bridge over the River Coquet) would be constructed on the eastern side.

- 1.2.8. Bywell Road is a rural 3.75 km long single carriageway connecting the A697 to the existing A1 in an east-west direction. Along this road, connections to the A697 and A1 are both in the form of at-grade junctions. As part of Part A, Bywell Road would be extended north from its existing junction with the A1 (which would be removed) to connect to West Moor Road, with an at-grade junction, to the west of the proposed West Moor Junction. From there, users would be able to access the new junction and Part A.
- 1.2.9. Within this section of Part A, the majority of earthworks would comprise cutting, the key areas being either side (north and south) of the proposed River Coquet bridge. The proposed West Moor Junction would be raised upon embankments, as would the main carriageway where it passes over the existing Parkwood Culvert and the proposed Parkwood Subway.

JUNCTIONS

- 1.2.10. Three new grade-separated junctions (junctions at a different level / height to the roads to which they connect with connector roads rather than slip-roads) are proposed as part of Part A, to replace the existing at-grade junctions (junctions at the same level / height to the roads to which they connect) and provide new efficient and safer access onto the main Scheme alignment from existing side roads. Each new junction would include a bridge over the main Scheme alignment connecting to the side roads, so that traffic can move along the main Scheme alignment without flow disruption, thereby reducing delays and improving safety.
- 1.2.11. The proposed Highlaws Junction would be located at approximate Grid Reference NZ 18416 89821 in the area of Low Espley. The junction would connect with High Highlaws Road to the west and Hebron Road to the east.
- 1.2.12. The new Fenrother Junction is proposed along the offline section of Part A where it crosses Fenrother Lane to the east of Fenrother and west of the Tritlington Church of England First School at approximate Grid Reference NZ 18249 92554. Fenrother Lane (west) would connect over a bridge to Fenrother Lane (east).
- 1.2.13. The new West Moor Junction is proposed to the west of Eshott Airfield at approximate Grid Reference NZ 17424 98864. West Moor Road would connect over a bridge to Felton Road. The proposed Bywell Road extension would also connect to West Moor Road at this Junction.

1.3 CONSULTATION

- 1.3.1. The Draft WSI was submitted to NCA on the 24 May 2019 and comments were received on the 6 June 2019. The WSI was amended in light of the comments and resubmitted to NCA.

- 1.3.2. As a result of the proposed changes to the Scheme, submitted at Deadline 4 , the Draft WSI was updated and submitted at Deadline 4. The updates were submitted to NCA on the 8 March 2021 for comment.

2 HISTORIC ENVIRONMENT BASELINE SUMMARY

2.1 SITE LOCATION

- 2.1.1. Part A is located in Northumberland between Warreners House (Northgate) and the existing B6345 overbridge at Felton (NGR 418227, 588556 to 417490, 600795).

2.2 TOPOGRAPHY

- 2.2.1. The topography along Part A varies from 80 m above Ordnance Datum (aOD) and 110 m aOD at the southern and central sections of Part A. At the northern end, the land is lower lying and more level, and varies in height at between 50 m aOD and 60 m aOD.

2.3 GEOLOGY

- 2.3.1. Information gathered from the British Geological Society (BGS accessed 04/03/2019) identifies the underlying bedrock geology as being Stainmore Formation (mudstone, siltstone and sandstone). This is a sedimentary bedrock formed (approximately) 319-329 million years ago in the Carboniferous period. The superficial geology, for the majority, is Till, Devensian (Diamiction). To the very north of Part A lies Glaciofluvial deposits and throughout Part A where a watercourse runs (i.e. River Lyne), alluvium is present. The superficial deposits were formed 2 million years ago in the Quaternary Period, previously dominated by icy conditions.

2.4 ARCHAEOLOGICAL POTENTIAL

INTRODUCTION

- 2.4.1. **Chapter 8: Cultural Heritage** of this ES identified a total of 150 heritage assets within the inner (500 m) and wider (1 km) study areas. Of these, 66 are recorded as designated heritage assets. One asset, 'Old Felton Bridge over River Coquet' appears twice in the Historic England's database as a Grade II* Listed Building and is also designated as a Scheduled Monument. Therefore, taking the duplicate records into account, there are 64 designated heritage assets which consist of:
- i 61 Listed Buildings (excluding the two Grade II* entries for Old Felton Bridge);
 - i One Scheduled Monument (including the two Grade II* entries for Old Felton Bridge);
 - and
 - i Two Conservation Areas
- 2.4.2. There are 93 non-designated heritage assets recorded within 500 m of the Order Limits for Part A; 91 of these have been identified from the Historic Environment Record (HER) and two have been identified during the assessment. Within the Order Limits there are six designated assets, nine non-designated and sixteen areas identified as being of potential to contain further non-designated remains based on the geophysical survey presented within **Appendix 8.2, Volume 7 (Application Document Reference: TR010041/APP/6.7)** and LiDAR assessment presented within **Appendix 8.3, Volume 7** of this ES.

CHRONOLOGICAL SUMMARY

- 2.4.3. The HEDBA provides a detailed archaeological and historical background, which is summarised below.

Prehistoric Period

- 2.4.4. The Palaeolithic period is typically represented by isolated finds such as the flints found at Eltringham, near Prudhoe, c.25 km south-east of Part A, however, there is no evidence of Palaeolithic activity within Part A or the Study Area. The Mesolithic period is represented in the Study Area by several pieces of Mesolithic flint found near West Moor Farm, approximately 50 m to the east of the A1. In the wider landscape the Mesolithic period is represented by a Mesolithic settlement site at Howick, approximately 20 km north-east of Felton. The Neolithic period is represented in the Study Area by isolated finds consisting of an arrowhead and three stone axe heads. Notably, two of the stone axe heads were located in an area where, documentary evidence suggests, there was an undated earthwork 75 m in diameter. The location lies to the east of Part A and is now occupied by the disused East Thirston Moor Camp RAF airfield. Bronze Age activity within the Study Area consists of a bowl barrow burial monument, which lies to the east of Part A. It is believed that the primary burial here is undisturbed. There is no evidence of Iron Age activity within the boundary of Part A, however, a complex of un-investigated cropmarks within the Study Area at Silver Hill may date to the period.
- 2.4.5. Evidence for later prehistoric evidence is often compromised by the impacts modern farming activity, particularly ploughing, which results in the truncation of the remains. This results in the remains being represented as shallow features which are not responsive to geophysical survey.

Roman Period

- 2.4.6. Part A lies 19 km to the north of Hadrian's Wall and as a result there was limited Roman influence over patterns of land use and settlement in the landscape. It is, therefore, thought that many of the field systems, enclosed settlements and farmsteads identified as cropmarks could have seen continuity in use from the Iron Age to the Romano-British period. Cropmark complexes comprising rectilinear enclosures and circular features, which may reflect Romano-British activity, have been identified within the Study Area close to Northgate Farm, West Shield Hill Farmhouse and Fenrother and at Silver Hill.

Early Medieval Period

- 2.4.7. There is no evidence of Early Medieval activity within 1 km of the boundary of Part A, although it is well represented in the wider area, included at Shotton, south of Morpeth and north of Felton. The Anglo-Saxon kingdoms of Bernicia and Deira covered the Northumbria region and between the seventh and eighth centuries the "Golden Age of Northumbria" arose with monasteries being built at Lindisfarne and Hexham. In the late 8th century the Vikings famously raided the east coast, beginning at Lindisfarne however, there is little Viking evidence available.

Late Medieval Period

- 2.4.8. The origins of the townships within the area surrounding Part A can be traced back to the 13th and 14th centuries and many of the regions churches were founded in this period. Elements of Felton's Church of St Michael and All Angels date to the 13th century and the Church of St Cuthbert in Hebron is thought to have medieval chancel walls of 12th century origin. There is also evidence for a settlement known as Helm, located approximately 1.5 km north of Causey Park Bridge and the site of a 13th century Chapel is recorded within the boundary of Part A, 400 m south-west of Home Cottage.
- 2.4.9. Following the Norman Conquest, 16 motte and bailey castles were built within the region including at Morpeth and Mitford (located 3.5 km to the south east and south west of Scheme, respectively). Several monasteries were established in the area from the mid-12th century, including at Newminster, near Morpeth. The early part of this period also saw the steady increase in the population resulting in the establishment of new settlements and their gradual growth, including Morpeth.
- 2.4.10. War with Scotland and the Black Death outbreak in the 14th century led to population decline and the shrinking of settlement, with some villages being abandoned altogether. There is evidence for this in the Study Area at Bockenfield, Burgham and at Helm. During the 15th century, existing defences at the castles were strengthened and a new type of building, "the tower house", was introduced in many Northumberland villages as part of the Lord's residence. One example of a tower house is located at Causey Park, although documentary evidence points to this being of 16th century date.

Post-Medieval Period

- 2.4.11. The Post-Medieval period appears to be one of the most prosperous periods for the area surrounding Part A, and there are a large number of heritage assets near Part A from this period. The majority of these assets are buildings, milestone markers and headstones. The Grade II* Sundial from Causey Park is quite rare and contains the dated name of a local man: "William Ogle 1703". The agricultural heritage assets within the area indicate the prosperity of the agricultural sector during this time. Many land owners reorganised their fields and converted arable land in to intensive pasture, resulting in the preservation of areas of ridge and furrow cultivation as earthworks throughout the area.

Industrial Period

- 2.4.12. Within the Study Area there are three sites associated with industrial activity, all of which are Grade II Listed. They comprise Felton Water Mill, Felton Former Gas Works and Thirston Corn Mill. In the wider landscape coal mining became the dominant industry within the region and improved transport links allowed for greater trade links and a steady supply of workers. As a result, the population grew and between 1801 and 1891 it doubled in Northumberland. This increase was reflected in the expansion of towns and villages.

Modern Period

- 2.4.13. World War II remains dominate evidence of the Modern period within the landscape around the Study Area. RAF Eshott Airfield was built between World War I and World War II and the site contained accommodation, air raid shelters and hangers. Further evidence comprises a crash site of a Republic P47 Thunderbolt and a Royal Air Force Spitfire, a Grade II Listed Pillbox near West Thirston and a tank depot at Felton Park.

BURIED ARCHAEOLOGICAL REMAINS WITHIN PART A

- 2.4.14. Buried archaeological ground remains and potential archaeological remains have been identified from the DBA presented within **Appendix 8.1**, Volume 7 (**Application Document Reference: TR010041/APP/6.7**) of this ES, geophysical survey presented within **Appendix 8.2**, Volume 7 of this ES and LiDAR assessment presented within **Appendix 8.3**, Volume 7 of this ES. They comprise:
- ┆ Nine non-designated heritage assets identified in the HEDBA.
 - ┆ Fifteen areas containing geophysical anomalies of potential archaeological origin.
 - ┆ Fifty areas of ridge and furrow cultivation identified through the LiDAR assessment.
- 2.4.15. Of the nine heritage assets identified in the DBA, there is just one of prehistoric date: a scatter of Mesolithic lithics (HER 11356). The position of the Mesolithic site is not precisely recorded; however it appears to be located at West Moor junction overbridge. The discovery of the lithic assemblage as surface finds suggests that there may be buried archaeological remains here relating to early prehistoric settlement activity of at least medium value. The geophysical survey did not identify any clear anomalies of potential archaeological origin; however, early Prehistoric remains are often not susceptible to geophysical survey. The Mesolithic period is not well represented in the archaeological record as the hunter-gatherer lifestyle adopted by largely mobile populations left little trace. Therefore, any remains found would be, as a minimum, of medium value as they would contribute to the understanding of early Prehistoric activity in the region.
- 2.4.16. The location of the Chapel or Hermitage at Helm (HER 11347) is shown immediately outside of the Order Limits. The recorded location of the asset is not precise, and it is possible that potential remains of the asset may extend into the Order Limits. The site of the chapel or hermitage at Helm and the location medieval pottery assemblage at Bockenfield township (HER 11362) are 50 m apart and in the offline section between Burgham and Causey Park. The evidence for the chapel is drawn largely from documentary evidence for a 13th century chapel and reports from a farmer on the discovery of stone building foundations in the early 20th century. No geophysical anomalies were, however, identified in this area consistent with either a buried structure, or with evidence of the robbing out of remains. The geophysical survey did identify linear trends consistent with ridge and furrow cultivation and it is possible that the pottery assemblage recovered, comprising of approximately 100 sherds of probable early 13th to 14th century date (HER 11362), are a result of manuring activity, although this cannot be confirmed at this stage.

- 2.4.17. The value of the chapel or hermitage at Helm would be medium as it would contribute to the understanding of the development and use of ecclesiastical buildings in the region, and any structural remains identified would have historic, architectural and archaeological value. The value of the pottery scatter is drawn from its archaeological value, providing information about settlement patterns and is of low value.
- 2.4.18. The assessment has identified fifty areas which contain remains of ridge and furrow cultivation. The majority have been recorded using the LiDAR data and are not readily discernible as earthworks at ground level. Some areas are visible as upstanding earthworks, however. The remains assist in the understanding the morphology of the medieval and post-medieval agricultural landscape and are of low value, based on their historical and archaeological interest.
- 2.4.19. The route of the current A1 follows the route of the Morpeth North Turnpike Road (HER 18214), which was established in the 18th century in order to improve transport links through the county. The potential for the presence of buried remains associated with the heritage asset within Part A is judged to be low as all traces are likely to have been lost with the construction of the current carriageway. Where present, however, the remains would be of low value as they would provide information about the development and use the local transport network in the Post-Medieval period.
- 2.4.20. The site of the Building at Tile Kiln Rush (HER 17065) is located on the edge of Part A DCO Boundary on the west side of the existing carriageway, north of the River Coquet. The building is recorded on mid to late 19th century Ordnance Survey mapping and is no longer extant. Any surviving remains would be of low value as they would provide information about local, low status buildings.
- 2.4.21. The site of a former 19th century well is located in the offline section of Part A by Causey Park Bridge (HER 17379), while a second 19th century well is recorded in the online widening, north of Warreners House interchange (HER 18214). Both are of negligible value as they provide limited archaeological, historical or architectural information.
- 2.4.22. The location of the Post-Medieval Causey Park Lodge Wood Enclosure (HER 11371) is shown in the offline section of Part A, north of the Causey Park overbridge. The asset was identified from 19th century mapping and from an aerial photograph from 1947, however no above ground trace of the asset was identified during the walkover and the geophysical survey. The asset is of negligible value as it provides little archaeological, historical or architectural information.
- 2.4.23. A cropmark of a rectilinear enclosure (HER 11367) is located south of the Causey Park overbridge, in the area of the National Grid Diversion. Potential traces of this enclosure were identified in the LiDAR data (WA 37) and four geophysical anomalies in the form of short linear features are also recorded in this location. The enclosure is potentially of Prehistoric date, however without further investigation the date is unknown. The value of the potential heritage assets cannot be determined at this stage without further investigation.

- 2.4.24. There is a potential for currently unknown buried archaeological features dating to the Prehistoric to Modern era throughout Part A. This potential is supported by the geophysical survey, which has identified 16 areas which contain anomalies of possible archaeological origin. The nature of the anomalies can only be confirmed through archaeological investigation. The value of such features is currently unknown.
- 2.4.25. There is a potential for further buried archaeological remains dating from the Prehistoric period to the 20th century, based on the evidence from the surrounding landscape and an examination of the historic cartographic evidence. The value of the potential buried assets is unknown at this stage.

Geophysical Survey

- 2.4.26. A total of 119 ha of Part A has been subject to a geophysical survey in 2006, 2017 and 2018. The geophysical survey has identified buried anomalies of potential archaeological origin across the length of Part A. Many of the features identified correspond to features shown on early Ordnance Survey maps, including former field boundaries, a former quarry and a former course of the road which later became the A1. Areas of former ridge and furrow cultivation were also identified. The survey has also identified areas containing land drains and existing services.
- 2.4.27. In some sections of Part A, the survey results have been adversely impacted by the use of green waste fertiliser, which presents as high concentrations of small dipolar magnetic anomalies and therefore can mask anomalies of potential archaeological origin. This could potentially impact on the quality of any future surveys, such as fieldwalking or metal detecting, and could present a health and safety risk for intrusive works due to contamination.
- 2.4.28. Anomalies of potential archaeological significance comprise mainly of linear features, possibly ditches, and isolated features which could be pits. Notably, there is a line of regularly spaced anomalies which could be the remains of pit alignment in the area to the north of Helm.

LiDAR Assessment

- 2.4.29. LiDAR data was available for two sections of Part A. The archaeological assessment of the data has identified 71 separate features.
- 2.4.30. Ridge and furrow is the dominant feature type, with concentrations in the areas around Earsdon Mill, Causey Park Bridge and south of the River Coquet. Most examples display straight and narrow sets of ridges, although a small number displaying a very shallow 'S'-shape. The ridge-and-furrow remains are of low value as they provide evidence for Medieval and Post-Medieval settlement and agricultural patterns.
- 2.4.31. The LiDAR assessment has identified features of potential archaeological origin, however without further investigation the value of these features is unknown. They include an enclosure earthwork (WA37), covering 2.2ha, which corresponds well with the location of a cropmark of a rectilinear enclosure (HER 11367). The enclosure is sub-rectangular in form

and is largely formed of two sections of ditch, approximately 0.5 m in depth in places, but generally shallower. A trace of a bank is just visible on the western side. Other LiDAR faint features of potential archaeological origin are located around WA37 (WA35, WA36, WA38 and WA39), however, these could be of more recent origin and possibly associated with modern agricultural activity.

- 2.4.32. Groups of possible earthwork ditches and banks are located north of Burgham Park Road (WA41) and east of Thirston New Houses (WA58). They are located in an area where ridge and furrow cultivation has been identified as well as possible remnants of former field boundaries or plough headlands.
- 2.4.33. The remainder of the features identified can be attributed to recent activity (e.g. drainage systems and trackways) and, therefore, not heritage assets.

3 AIMS AND OBJECTIVES

- 3.1.1. The aim of the evaluation is to clarify the presence, nature, date and extent of any archaeological remains that might be present within the areas of impact. This is for the purposes of informing an appropriate mitigation strategy for any significant archaeological remains. If the evaluation reveals little of archaeological significance, then no further work may be required. This would need to be agreed and confirmed in consultation with NCC.
- 3.1.2. The objective of trial trench evaluation as defined by the Chartered Institute for Archaeologists (CIfA) is to 'determine, as far as is reasonably possible, the nature of the archaeological resource within a specified area using appropriate methods and practices' (CIfA, 2020a). The results of the evaluation will inform an appropriate mitigation strategy for any archaeological remains, if required.
- 3.1.3. This is further explained as 'a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate.'
- 3.1.4. In respect of the archaeological research objectives specific to the site, based on the archaeological potential as identified in the ES and HEDBA these are as follows:
- ┆ Identification of any additional evidence for Mesolithic activity in Part A, as evidenced by the scatter of Mesolithic flints recorded at West Moor Farm, Thirston (HER 11356).
 - ┆ Identification of any additional evidence for medieval activity within Part A, as evidenced by discovery of Medieval pottery around Bockenfield Township (HER 11356) and the evidence for deserted medieval settlement in the wider landscape.
 - ┆ Establish if there is any evidence for prehistoric, Romano-British or early Medieval activity within Part A.
 - ┆ Confirmation of the nature and date of the cropmark of the potential enclosure at Causey Park Hag (HER 11367).
 - ┆ Establish if any of the anomalies identified from the geophysical survey and LiDAR survey are potential archaeological origin, and if so confirm the date, extent and value.
 - ┆ Examine the potential for archaeological remains in areas which are not appearing as geophysical survey anomalies.
 - ┆ Provide sufficient information in order to develop a programme of archaeological mitigation to be completed either prior to the main phase of construction (i.e. strip map and sample) or during the construction (i.e. archaeological watching brief).

4 METHODOLOGY

4.1 GENERAL REQUIREMENTS

- 4.1.1. The archaeological evaluation will be carried out by a suitably qualified archaeological contractor, as defined by the Chartered Institute for Archaeologists' (CIfA) Code of Conduct (2019) and in the CIfA Standard and Guidance for Archaeological Field Evaluation (2020a). They would be required to prepare a detailed method statement (see below) which would set out how the evaluation would be undertaken. The archaeological contractor will supply a suitably qualified and experienced team of archaeologists to carry out the investigation. The archaeological contractor will have demonstrable experience of working on similar projects and with comparable archaeological remains.
- 4.1.2. The evaluation would be monitored by the Applicant (or their representative), the Principal Contractor and NCC.
- 4.1.3. All work undertaken will conform to Historic England's Management of Research Projects in the Historic Environment (2015a), the CIfA Code of Conduct (2019), the CIfA Standard and Guidance for Archaeological Field Evaluation (2020a) and other relevant CIfA Standards and Guidance documents.

DETAILED METHOD STATEMENT

- 4.1.4. The archaeological contractor will prepare a detailed Method Statement for the archaeological evaluation in response to this WSI. The Method Statement will set out how the trial trenching will be delivered. It will include detail of the archaeological contractor's staff, programme, contingencies and specialists. The contractor's Method Statement should conform to the outline in MoRPHE Project Planning Note 3: Archaeological Excavation and would contain information on the following:
- i The size and qualification of the work force including names and experience of key personnel.
 - i Details of staffing levels and the number of person days to be spent on each specific task.
 - i Details of specialists, including qualifications, who are likely to have input into Part A. Whether they are in-house or contracted in.
 - i Details of the recording system for fieldwork and post-excavation analysis.
 - i A timetable covering the whole project from setting up on site through report writing to deposition of the archive, including suitable allowance for bad weather or other unforeseen circumstances, the latter must be clearly indicated.
- 4.1.5. It is recommended that the archaeological contractor undertakes a walkover survey as part of the preparation of the Method Statement in order to review the suitability of the proposed trench locations proposed (**Figure 2**), review any on-site constraints (e.g. overhead cables) and to determine appropriate plant, access points and location of temporary welfare sites.

- 4.1.6. The archaeological contractor would be required to request up to date details of any buried utilities within Part A and to review all records of ecological constraints available.

EXCAVATION CONSTRAINTS

- 4.1.7. The archaeological contractor will be responsible for locating any drainage pipes, service pipes, cables etc., which may cross the area of excavation, and for taking the necessary measures to avoid disturbing such services. It will be the responsibility archaeological contractor to address the requirements of any other constraints, which may include Tree Preservation Orders, public rights of way, contaminated land, areas of ecological interest and the habitats of protected species.

Confirmation of Adherence to Specification

- 4.1.8. Prior to the commencement of any work, the archaeological contractor must confirm adherence to this WSI in writing to the Applicant (or their nominated representative) and the Northumberland County Archaeologist (NCA), or state (with reasons) any proposals to vary the WSI. Should the contractor wish to vary the specification, then written confirmation of the agreement with the Applicant (or their nominated representative) and the NCA to any variations is required prior to work commencing. Unauthorised variations are made at the sole risk of the contractor.

Documentary Research

- 4.1.9. As part of Part A, a Historic Environment Desk-Based Assessment (HEDBA) of the site was carried out presented within **Appendix 8.1, Volume 7 (Application Document Reference: TR010041/APP/6.7)** of this ES. The HEDBA will be made available to the archaeological contractor in order to provide an overview of the archaeological/historical background of the site and its environs. In addition to providing a knowledge base for the work in hand, the results of this assessment may be incorporated into the contractor's report where they are considered to contribute to that report, but any extraneous material should be omitted.

4.2 FIELDWORK METHODOLOGY

- 4.2.1. The archaeological evaluation will involve the mechanical excavation of 668 trenches (**Appendix B, Figure 2**), measuring 50 m length and 1.8 m in width, providing a 4% sample of Part A. Contingency provision of 1% will be made to allow for the further investigation of any significant features or deposits that are encountered. A proposed trench location plan is provided in **Appendix B Figure 2**, based a review of online aerial mapping. They have been positioned to avoid any obvious obstructions, such as areas of woodland and visible overhead cables. All the trench locations will need to be reviewed as part of the preparation of the Method Statement and, where necessary, repositioned.
- 4.2.2. The trenching will be undertaken using a suitable mechanical excavator fitted with a toothless 1.8 m (minimum) ditching bucket operating under archaeological supervision. Excavated material will be stored at least 1 m from the edge of the area of excavation. Topsoil and subsoil deposits will be stored separately and scanned for artefacts.

- 4.2.3. Some trenches are targeted on potential archaeological features identified as anomalies in the geophysical survey, whilst others are located in 'blank' areas where no anomalies were identified, to confirm that no remains are indeed present.
- 4.2.4. Excavation will cease at either the surface of the natural geology or at the first archaeological horizon. Any features of potential archaeological origin will be examined through hand excavation. The archaeological contractor will ensure that sufficient time is allowed to thoroughly investigate and record all archaeological deposits encountered.
- 4.2.5. The trenches will be located and marked out by the archaeological fieldwork contractor surveyor and tied to the National Grid.
- 4.2.6. Based on the predicted depth of deposits, it is assumed that the trenches will be no more than 1.2 m deep. This is sufficiently deep to reach the underlying geology and any archaeological features cut into it. Shoring or stepping the sides is not, therefore, required.
- 4.2.7. In the event that any archaeological deposits or features of high significance or sensitivity are encountered during the works, the excavations must be halted and no further ground disturbance may occur at that location until the Applicant (or their nominated representative) and the NCA have been contacted.

4.3 HAND EXCAVATION

- 4.3.1. All excavations will be recorded according to the normal principles of stratigraphic excavation. The stratigraphy of each trench is to be recorded, from the modern ground surface down to natural deposits, even if no archaeological deposits have been identified.
- 4.3.2. All archaeological deposits, features and finds will be recorded according to accepted professional standards (refer to references section) and in line with the archaeological contractor's established recording systems. The recording system employed will be approved by the CAA prior to the works commencing.
- 4.3.3. Hand excavation of identified remains will consist of a minimum of:
 - i Linear boundary features not associated with settlement will be sufficiently sampled to allow for informed interpretation of their date and function. Each section should be at least 1 m wide and, where possible, sections will be located and recorded adjacent to the trench edge. All intersections will be investigated to determine the relationship(s) between the component features.
 - i All termini will be investigated. Care will be taken to note the stratigraphic position of any dateable artefacts recovered. If, after hand excavation, no dateable finds are recovered from large or extensive features then up to 100% will be excavated.
 - i Other linear and discrete features: all stake-holes, post-holes, pits, ring ditches, kilns, and other structural/funerary/industrial features will be 50% excavated and recorded in section. All intersections will be investigated to determine the relationship(s) between the component features. Where possible, sections will be located and recorded adjacent to the trench edge.

- i Built structures: walls, floors etc. will be excavated sufficient to establish their form, phasing and construction techniques. All intersections will be investigated to determine the relationship(s) between the component features.
 - i Excavation must not compromise the integrity of the archaeological record. Investigation should be undertaken in such a way as to allow for the protection of the deposits through the application of mitigation procedures or through the opportunity for better excavation under the conditions pertaining to full investigation of a larger area.
- 4.3.4. Section drawings (at a minimum scale of 1:20) must include heights aOD. Plans (at a minimum scale of 1:50) must include aOD spot heights for all principal strata and any features. All site drawings will be completed on plastic drafting film.
- 4.3.5. The actual areas of excavation and all archaeological (and possibly archaeological) features should be accurately located on a trench plan and recorded by photographs, scale drawings and written descriptions sufficient to permit the preparation of a detailed archive and report on the material. The trench location, as excavated, will be accurately surveyed using industry standard GPS equipment with sub one-centimetre accuracy, tied into the O.S. National Grid and located on an up-to-date 1:1250 O.S. map base.
- 4.3.6. A site diary, comprising a description and discussion of the archaeology, is to be maintained on a daily basis.
- 4.3.7. A 'Harris Matrix' stratification diagram will be used to record all stratigraphic relationships on the site. Spot dating should be incorporated where applicable.
- 4.3.8. The trial trenches will not be backfilled before they have been inspected by the NCA or the agreement of that Officer has otherwise been obtained for the backfilling of specific trenches.

Photography

- 4.3.9. A full and detailed photographic record of individual contexts will be maintained and similarly general views from standard view points of the overall site at all stages of the excavation will be generated. Photography will be undertaken using high-resolution digital cameras (no less than 10 megapixels). Photograph records will be maintained on index pro-forma sheets.
- 4.3.10. Images may be captured in RAW format, but archiving should follow the guidance given by Historic England (2015b) in Digital Image Capture and File Storage: Guidelines for Best Practice. Digital images will be archived in both a JPEG and TIFF formats. The latter as uncompressed 8-bits per channel TIFF version 6 file of not less than 25 Mbs (refer to section 2.3 of the Historic England guidance). The contractor must include metadata embedded in the TIFF file. The metadata must include the following: the commonly used name for the site being photographed, the relevant centred OS grid coordinates for the site to at least six figures, the relevant township name, the date of photograph, the subject of the photograph, the direction of shot and the name of the organisation taking the photograph.

4.4 ARTEFACTS AND ENVIRONMENTAL SAMPLES

Artefacts

- 4.4.1. All recovery, retention and treatment of finds and samples will be carried out mindful of the overall purpose of the exercise, i.e. to evaluate for further decision making, as expressed in ClfA (2014a) para 3.2.12. and 3.3.8. To this end, all artefactual and ecofactual material will be reviewed on site for its capability to inform the evaluation report.
- 4.4.2. Identified archaeological finds and artefacts will be carefully recovered by hand and bagged or boxed according to the type of artefact (i.e. pottery, ceramic building material/CBM, bone, worked flint, metal) archaeological context from which they came, with a label indicating the site code, find type and context reference number). Particularly notable artefacts will be recorded as a 'registered' find and recorded three dimensionally with Ordnance Datum levels. This will include in situ prehistoric worked flint.
- 4.4.3. Initial conservation and storage will be in a proper manner and to standards set out follow First Aid for Finds (Leigh *et al* 1998) and the ClfA 'Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials' (ClfA 2020b). If necessary, an appropriately qualified and experienced archaeological conservator will be appointed to advise and assist in the lifting of fragile finds of significance and or value and to arrange for the X-raying and investigative conservation of objects as may be necessary.
- 4.4.4. Certain classes of bulk material, i.e. post-medieval pottery and building material may be discarded if there is a considerable quantity (more than a single standard archive box of c. 0.016 m²), after recording with a representative sample.
- 4.4.5. Post-medieval remains associated with industrial activity will not be subject to discard and post-excavation analysis is required on the full sample.
- 4.4.6. All pottery, bone and worked flint will be washed and then marked in accordance with the project archive repository guidelines. Most building material and burnt flint (not including significant diagnostic material) will be identified, counted, weighed and discarded. Samples will be retained as appropriate. The finds identification and specialist work will be undertaken by the relevant find's specialists agreed with the NCA to assess the date range of the assemblage with particular reference to pottery use relevant county or region-specific type series for identification and dating, where available. This evidence will be used to characterise the site, and to establish the potential for all categories of finds should further archaeological work be necessary. Records of artefact assemblages will clearly state how they were recovered, sub-sampled and processed. Consideration will be given for donation of appropriate artefacts to type series reference collections.

Treasure

- 4.4.7. Any artefacts that fall under the statutory definition of Treasure (as defined by the Treasure Act of 1996 and its revision of 2002) will be reported immediately to The Applicant (or their

representative), the Principal Contractor, the NCA, the relevant Coroner's Office, the Finds Liaison Officer and the landowner. A Treasure receipt must be completed, and a report submitted to the Coroner's Office and the FLO within 14 days of understanding the find is Treasure. Failure to report within 14 days is a criminal offence.

Human Remains

- 4.4.8. If human remains are encountered the Applicant (or their nominated representative), the NCA and the local Coroner will be informed immediately. Human remains should be left in situ and only removed if absolutely necessary. Where excavation of human remains is unavoidable, it will be undertaken following the provisions of the Coroners Unit in the Ministry of Justice and relative professional guidelines. It is essential that the post-excavation assessment of excavated human remains contains an analysis of the material and a statement for the final deposition of the assemblage. The qualified statement must address future research potential, where applicable, and the options for reburial.

Environmental Samples

- 4.4.9. If archaeological deposits, which may have environmental potential are identified, a programme of environmental sampling will be initiated. A range of samples will be undertaken from dated and undated deposits and features. The sampling strategy will follow the Historic England environmental sampling guidelines outlined in Environmental Archaeology, A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (English Heritage 2011).
- 4.4.10. Secure and phased deposits, especially those related to settlement activity and/or structures will be considered for sampling for the recovery of charred plant remains, charcoal and mineralised remains. Any cremation-related deposits will be sampled appropriately for the recovery of cremated human bone and charred remains. If any evidence of in situ metal working is found, suitable samples for the recovery of slag and hammer scale will be taken.
- 4.4.11. Where sealed waterlogged deposits are encountered, samples for the recovery of waterlogged remains, insects, molluscs and pollen, as well as any charred remains, will be considered. The taking of sequences of samples for the recovery of molluscs and/or waterlogged remains will be considered through any suitable deposits such as deep enclosure ditches, barrow ditches, palaeo-channels, or buried soils. Monolith samples will also be taken from this kind of deposit as appropriate to allow soil and sediment description/interpretation as well as sub-sampling for pollen and other micro/macrofossils such as diatoms, foraminifera and ostracods.
- 4.4.12. For remains suspected to be of Neolithic to Romano-British, the use of multiple radiocarbon dates should be applied and where possible samples should be taken from contexts with stratigraphic relationships to allow the use of Bayesian calibration of dates, in accordance with the North Eastern Regional Research Framework (Petts and Gerrard 2006). The need for any more specialist samples, such as OSL, archaeomagnetic dating and

dendrochronology will be evaluated and will be taken under the direction of the relevant specialist.

- 4.4.13. The need for any more specialist samples, such as OSL, archaeomagnetic dating and dendrochronology will be evaluated and will be taken under the direction of the relevant specialist.
- 4.4.14. The strategy for environmental sampling must be outlined in the archaeological contractor's method statement and will be subject to variation as appears necessary during the evaluation. Variations to the strategy will be made following consultation with the NCA, The Applicant (or their nominated representative) and the Historic England Assistant Science Advisor or the project's palaeoenvironmentalist.

Metal Detecting

- 4.4.15. Spoil heaps are to be scanned for ferrous and non-ferrous metal artefacts using a metal detector capable of making this discrimination, operated by an experienced metal detector user (if necessary, operating under the supervision of the contracting archaeologist). Modern artefacts are to be noted but not retained (19th-century material and earlier should be retained.) Artefacts recovered by metal detecting should be clearly identified in the final report.
- 4.4.16. If a non-professional archaeologist is to be used to carry out the metal-detecting, a formal agreement of their position as a sub-contractor working under direction must be agreed in advance of their use on site. This formal agreement will apply whether they are paid or not.

5 REPORTING

5.1 GENERAL REQUIREMENTS

- 5.1.1. A report on the fieldwork and archive will be completed and made available within six weeks of the of the completion of fieldwork. The report will describe the methods employed and its conclusions will include a clear statement of the archaeological value of the results, and their significance. The report will conform to the standards set out in the ClfA Standard and Guidance for Archaeological Field Evaluation (2020a) and must contain sufficient detail to enable the results to be interpreted without recourse to the site archive. It will include tabulations of contexts and finds by context. It will also include a non-technical summary of the project and its results.
- 5.1.2. The findings of the fieldwork will be related to the relevant known archaeological and historical information held by the Northumberland HER.
- 5.1.3. Reporting on ceramic artefacts and pottery should follow the guidance given in 'A Standard for Pottery Studies in Archaeology' (2016) and endorsed by the Prehistoric Ceramics Research Group; the Study Group for Roman Pottery & the Medieval Pottery Research Group.
- 5.1.4. In the first instance, the archaeological contractor will submit a digital copy of the draft report in .docx format to the Applicant (or their nominated representative) for review and comment.
- 5.1.5. Following any amendment required by the Applicant (or their nominated representative), the draft report will be submitted by the archaeological contractor to the NCA for approval. The report will be submitted in a timely manner to allow further work, if necessary, to be scheduled and the planning application to be determined in an informed manner. If specialist reports are outstanding, then a catalogue of finds with spot dates may be submitted with the report.
- 5.1.6. A fully indexed field archive shall be compiled consisting of all primary written documents, plans, sections, photographic negatives and a complete set of labelled photographic prints.
- 5.1.7. The full report, once accepted by the NCA, will be supplied on the understanding that it will be added to the Northumberland HER and will become a public document after an appropriate period of time (generally six months).

5.2 REPORT CONTENT

- 5.2.1. The report will include, as a minimum:
 - i A summary sheet providing the following information:
 - Site name and grid reference
 - Site activity (i.e. type of investigation)
 - Date and duration of project
 - Contractor Site code

- Area of site
- Summary of results
- Monuments identified
- Location and reference of archive

i And the following main sections, as appropriate to results:

- Summary
- Site location
- Archaeological and historical background
- Methodology
- Description of results (including stratigraphic description, if necessary)
- Interpretation of the results in the appropriate context
- Summary of the archaeological potential of Part A and its immediate surrounding area
- Consideration of the significance of the findings on a local, regional and national basis
- Critical review of the effectiveness of the methodology
- References
- Appropriate photographs in colour
- Location Plan (no smaller than 1:10 000)
- Site layout plans on an OS base, with north point and scale with the location of trial pits/trenches
- Plans and sections of significant archaeological remains, as necessary, including Cardinal Points, Ordnance Datum, vertical and horizontal scales
- Site matrices where appropriate
- Specialist descriptions of artefacts and ecofacts as required
- Summary of the contents of the project archive and its location (including summary catalogues of finds)
- Photographic Register, and
- Copy of the OASIS record form.

5.3 PUBLICATION AND DISSEMINATION

- 5.3.1. In order to fulfil the planning condition, the results of the investigation will need to be published and disseminated at a level that is appropriate to the significance of the remains recorded.
- 5.3.2. Copies of the report should be deposited with the Northumberland Historic Environment Record (HER), on the understanding that it will be made available as a public document after an appropriate period (not exceeding 6 months from the completion of fieldwork); a further hard copy to be sent to the client. Electronic (PDF) copies of the report will also be provided alongside the hard copies.
- 5.3.3. A summary account of the work should be submitted to the editor of the local archaeological journal Archaeology Round-up and any relevant period journals (e.g. Medieval Archaeology,

Proceedings of the Prehistoric Society) no later than March 31st of the year following completion of fieldwork.

- 5.3.4. Further publication may range from a 'grey literature' archaeological report, to a short journal article in local and period-based archaeological journals as appropriate (as above), to a full monograph (in the event that the evaluation resulted in further excavation). The level of dissemination would be determined in consultation with the NCA.
- 5.3.5. In all cases a short summary of the results of the work will be submitted to the HER, and National Record for the Historic Environment (NHRE), as maintained by Historic England, via a standard OASIS archaeological report form. The archaeological contractor must, therefore, complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/>.

6 ARCHIVE

6.1 GENERAL REQUIREMENTS

- 6.1.1. All recovered artefacts are the property of the Landowner. The Applicant (or their nominated representative) will provide the relevant contact details of the Landowner(s) to the archaeological contractor in order to commence the transfer title of artefacts so that the archive, including all artefacts, can be deposited with the Great North Museum.
- 6.1.2. The site archive will be assembled in accordance with Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation (Archaeological Archive Forum 2007). It will also adhere to the recommendations in MoRPHE (Historic England 2015), Guidelines for the Preparation of Excavation Archives for Long-term Storage (United Kingdom Institute for Conservation, 1990), Standards in the Museum Care of Archaeological Collections (Museums and Galleries Commission, 1994); and Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives (ClfA 2020c).
- 6.1.3. The site archive will contain all the data collected during the fieldwork, including records and finds, and all reports. The archaeological contractor will ensure that the archive is quantified, ordered, indexed and internally consistent, and adequate resources will be provided to ensure that all records are checked. Archive consolidation will be undertaken immediately following the conclusion of fieldwork.
- 6.1.4. The archaeological contractor will ensure that the project is recorded on the OASIS database. All parts of the OASIS online form <http://ads.ahds.ac.uk/project/oasis/> will be completed and a copy will be included in the final report and also with the site archive. A digital copy of the approved report will be uploaded to the OASIS website.

Archive Deposition

- 6.1.5. An integrated project archive (including both artefacts/ecofacts and project documentation) should be prepared upon completion of the project for deposition with the Great North Museum. The digital archive will be deposited with the Archaeology Data Service. Provision should be made for the payment of a 'deposit grant' at the time of archive transfer towards the costs of archive curation in perpetuity. The rates and requirements currently employed by the nominated depositing museum for its archive store should be used for guidance.

7 OPERATIONAL FACTORS

7.1 PROJECT TIMETABLE AND MONITORING ARRANGEMENTS

- 7.1.1. The Applicant (or their nominated representative) will liaise with the archaeological contractor regarding access and the health and safety requirements in force on the site. Information will be provided to the NCA as relevant. A programme of works, monitoring, recording and access will be agreed by the archaeological contractor, the Applicant (or their nominated representative) and the NCA before the project commences.
- 7.1.2. The Applicant (or their nominated representative) will be kept informed of progress by the archaeological contractor to allow for any monitoring visits by the NCA to be conducted during the course of the fieldwork.

Monitoring

- 7.1.3. The Applicant (or their nominated representative) will monitor and assure all elements of the archaeological fieldwork and will ensure that the work is carried out in accordance with this WSI, professional standards and the requirements of the NCA. Any variance in the scope of work shall be made by the Applicant (or their nominated representative), in consultation with the NCA.
- 7.1.4. Any key decisions (such as excavation strategy or work scope changes) that are made on site shall be noted during the monitoring visits and communicated by the Highways England (or their nominated representative) to relevant parties. Visits by the NCA will be arranged so that they are satisfied that the works are being conducted to proper professional standards. Access is also to be afforded at any reasonable time to Historic England's Archaeological Science Advisor.

7.2 HEALTH AND SAFETY

- 7.2.1. All relevant health and safety regulations and codes of practice will be respected. The Applicant will provide the archaeological contractor with all known site constraints, such as areas of contamination, utilities and access limitations. The archaeological contractor will provide a Health and Safety Statement prior to the commencement of the archaeological investigation. All site procedures will be carried out in accordance with the guidance set out in the Health and Safety Manual compiled by the Federation of Archaeological Employers and Managers (FAME) and in accordance with current legislation which includes:
- ┆ The Health and Safety at Work Act (1974)
 - ┆ Management of Health and Safety at Work Regulations (1999)
 - ┆ The Construction (Design and Management) Regulations (2015)
 - ┆ The Control of Asbestos Regulations (2006)
 - ┆ Construction (Health, Safety and Welfare) Regulations (1996)
 - ┆ The Health and Safety (Miscellaneous Amendments) Regulations (2002)
 - ┆ The Control of Substances Hazardous to Health Regulations (2002)

- ┆ The Health and Safety (First-Aid) Regulations (1981)
- ┆ The Regulatory Reform (Fire Safety) Order (2005)
- ┆ The Provision and Use of Work Equipment Regulations (1998)
- ┆ Lifting Operations and Lifting Equipment Regulations (1998)

- 7.2.2. Prior to the start of the archaeological investigation, risk and method statements will be produced and submitted to the Client and/or Contractor. All staff involved or associated with the investigation will be provided with copies of the documents prior to the beginning of the works and they will be required to read them before commencing construction works.
- 7.2.3. The archaeological contractor will be responsible for the safeguarding of its staff, as far as reasonably practicable, and others who may be affected by the works on site.
- 7.2.4. The Applicant (or their nominated representative) must be notified immediately of the nature and extent of any unexpected site hazards and the appropriate health and safety precautions required.
- 7.2.5. Personal Protective Equipment (PPE) will be worn by all staff as appropriate.

7.3 INSURANCE

- 7.3.1. Full details of the insurance and copies of certificates covering the archaeological contractor shall be supplied upon request.

7.4 POST-EXCAVATION DELIVERABLES

- 7.4.1. The Applicant (or their nominated representative) will technically assure the deliverables conform to the format and scope agreed with the NCA, and that the reporting is accurate and clear and with sound conclusions, and that it has been produced to professional standards and the requirements of the NCA. This will be the case whether the agreed deliverables take the form of an archaeological report for the HER, journal article or monograph.
- 7.4.2. The Applicant (or their nominated representative) will liaise with the archaeological fieldwork subcontractor to ensure that the work is carried out to an agreed delivery programme.

7.5 COPYRIGHT

- 7.5.1. Copyright will remain with the archaeological fieldwork contractor under the *Copyright, Designs and Patents Act 1988* with all rights reserved. An exclusive licence will be provided to the client, or their appointed representative, for use of all project records and reports in all matters directly relating to the project. The archaeological fieldwork contractor retains the right to be identified as the author of all project documentation and reports.

Appendix A

REFERENCES

PUBLISHED AND DOCUMENTARY SOURCES

Archaeological Archive Forum, 2011, *Archaeological Archives: a guide to best practice in creation, compilation transfer and curation*

Archaeological Services Durham University, 2018, A1 Morpeth to Felton Geophysical Survey, unpublished report

British Geological Survey, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> accessed 04/03/2019

Chartered Institute for Archaeologists, 2020a, *Standard and Guidance for an Archaeological Evaluation*

Chartered Institute for Archaeologists, 2020b, *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*

Chartered Institute for Archaeologists, 2020c, *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*

Chartered Institute for Archaeologists, 2019, *Code of Conduct*

Historic England, 1992, *Archaeological Assessment and Evaluation Reports (Guidelines)*

Historic England, 2009, *Archaeological Guidance Paper 3: Standards and Practices in Archaeological Fieldwork*

Historic England, 2011, *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*

Historic England, 2015a, *Management of Research Projects in the Historic Environment (MoRPHE)*

Historic England, 2015b, *Digital Image Capture and File Storage: Guidelines for Best Practice*

Leigh D, Watkinson and Neal V 1998, *First Aid for Finds: Practical Guide for Archaeologists*

Museums and Galleries Commission, 1992, *Standards in the Museum Care of Archaeological Collections.*

Museum of London, 1994, *Archaeological Site Manual*

Petts, D, and Gerrard, C. 2006. *Shared Visions: The North-East Regional Research Framework for the Historic Environment*, Durham County Council

Society of Museum Archaeologists, 1995, *Towards an Accessible Archive. The Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland, Scotland and Wales.*

Standing Conference of Archaeological Unit Managers, 1991 revised 1997 *Health and Safety in Field Archaeology, Manual*

Treasure Act 1996 *Code of Practice (2nd Revision)* 1996, DCMS

Treasure (Designation) Order 2002, TSO

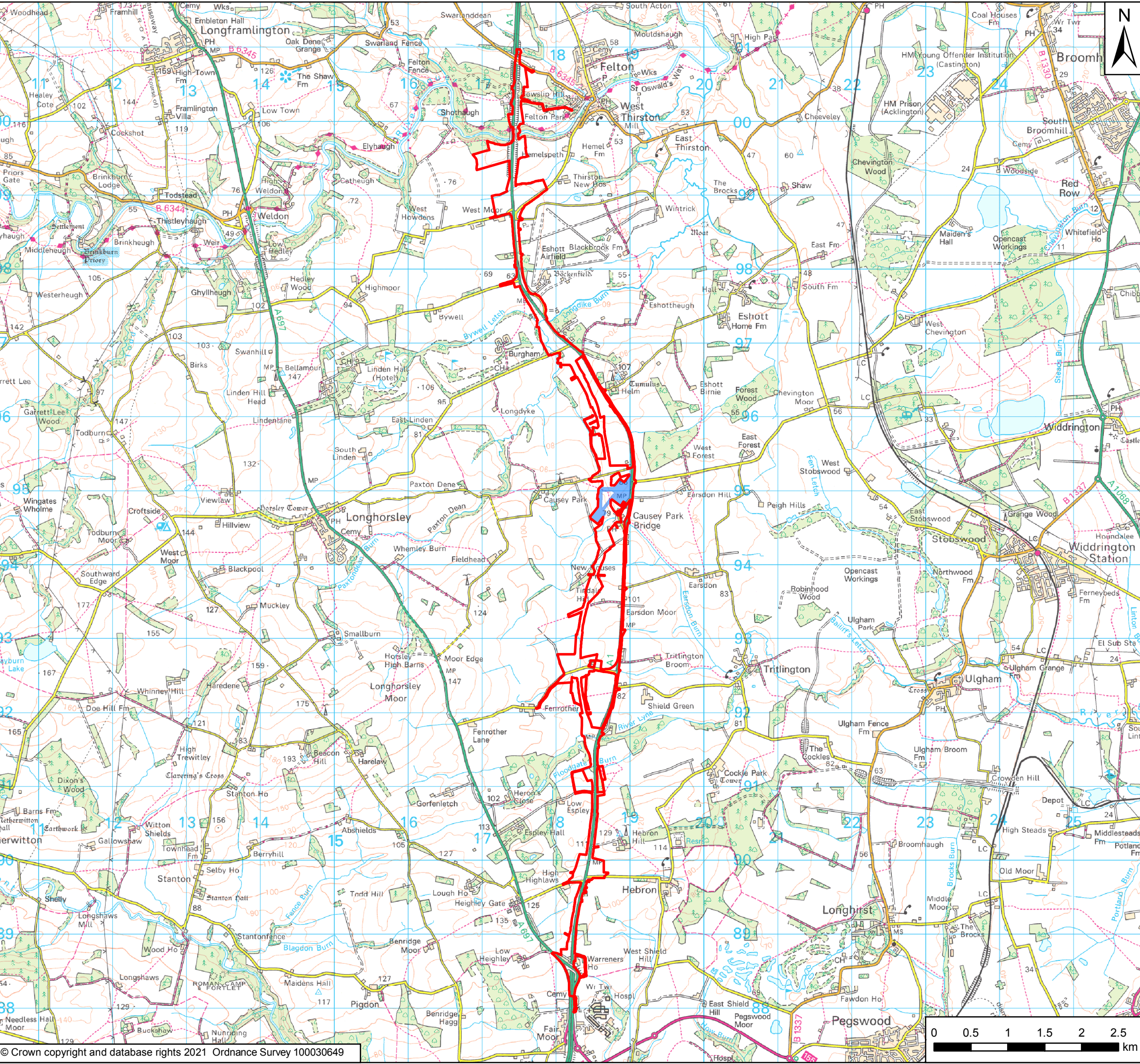
United Kingdom Institute for Conservation, 1990, *Guidance for Archaeological Conservation Practice*

Wessex Archaeology, 2018, A1 Morpeth to Felton: LiDAR Assessment, unpublished report No. 210460.01

WSP, 2018, *A1 in Northumberland: Morpeth to Felton Scheme, Historic Environment Desk-Based Assessment*, Unpubl. Rep.

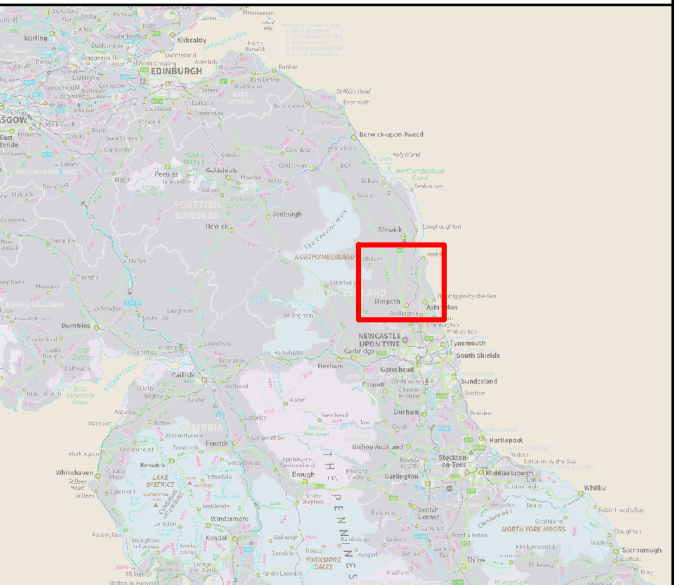
Appendix B

FIGURES



Key

- Order Limits
- Areas Excluded from Order Limits
- National Grid Temporary Works



Rev	Date	Description	By	Chk'd	App'd
P03	26/02/21	Order Limits updated	RM	AG	KS
P02	12/07/19	Second Issue	GH	AG	KS
P01	29/04/19	First Issue	GH	AG	KS

Client

Project Title: **A1 in Northumberland: Morpeth to Felton Scheme**

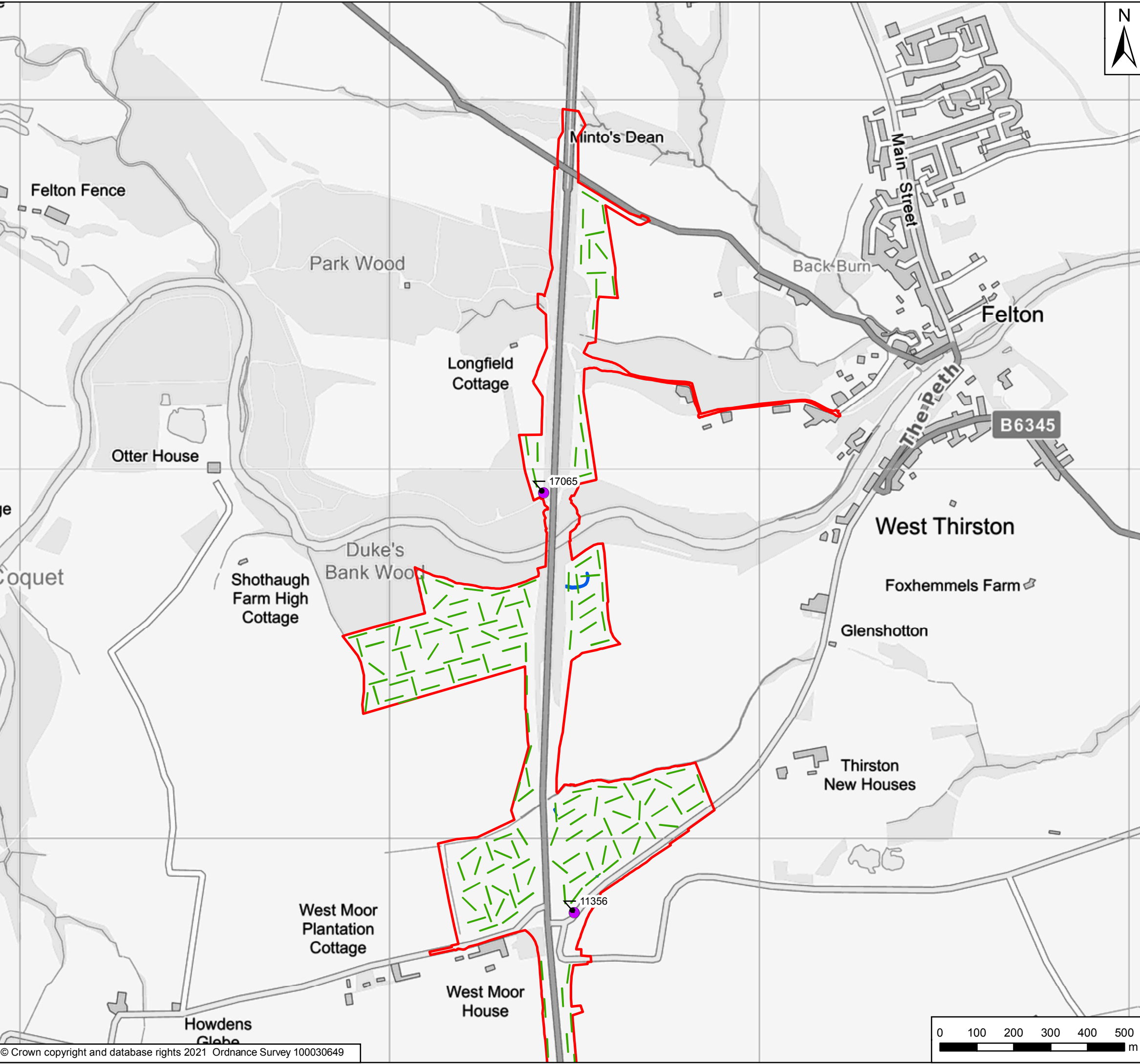
Drawing Title: **Figure 1 Scheme Location Plan**

Scale	Drawn	Checked	Approved	Authorised
1:50,000	GH	AG	KS	NR
Original Size	Date	Date	Date	Date
A3	29/04/19	29/04/19	29/04/19	29/04/19

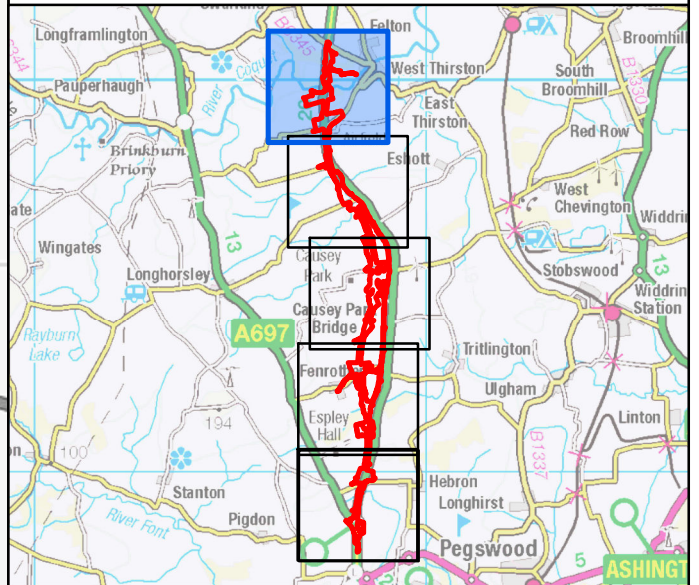
Drawing Status: **For Information** Suitability: **S1**

Drawing Number Project: HE551459	Originator: WSP	Volume	Project Ref. No. 70044136
M2F Location	Type	Role	Number P03

Document Path: \\uk.wspgroup.com\central\data\Projects\7003600x\70036004 - A1 Northumberland\03 Environment\GIS\Environmental Statement\Heritage WSI Report\Rev P02\Main Scheme WSI\Figure 2 - Proposed Locations of Trenches_Feb2021.dwg Saved: 26/02/2021 15:11:13 User Name: UKRJM017



- Key**
- Order Limits
 - Areas Excluded from Order Limits
 - National Grid Temporary Works
 - Non-Designated Assets
 - Evaluation Trenches
 - Geophysical Anomaly



Rev	Date	Description	By	Chk'd	App'd
P03	26/02/21	Order Limits updated	RM	AG	KS
P02	12/07/19	First Issue	GH	AG	KS
P01	29/04/19	First Issue	GH	AG	KS

Client

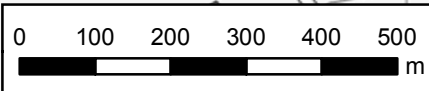
Project Title
A1 in Northumberland: Morpeth to Felton Scheme

Drawing Title
Figure 2 Proposed Locations of Archaeological Evaluation Trenches

Scale	Drawn	Checked	Approved	Authorised
1:10,000	GH	AG	KS	NR
Original Size	Date	Date	Date	Date
A3	29/04/19	29/04/19	29/04/19	29/04/19

Drawing Status: **For Information** Suitability: **S1**

Drawing Number Project HE551459	Originator WSP	Volume	Project Ref. No. 70044136
M2F Location	Type	Role	Number P03



© Crown copyright 2021.

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence:

visit www.nationalarchives.gov.uk/doc/open-government-licence/

write to the **Information Policy Team, The National Archives,**

Kew, London TW9 4DU, or email

psi@nationalarchives.gsi.gov.uk.

This document is also available on our website at www.gov.uk/highways

If you have any enquiries about this document
A1inNorthumberland@highwaysengland.co.uk
or call **0300 470 4580***.