

# HELLRIGG WIND FARM, SILLOTH, CUMBRIA



## WATCHING BRIEF REPORT

CP. No: 1272/11

25/07/2011

NORTH PENNINES ARCHAEOLOGY LTD  
NENTHEAD MINES HERITAGE CENTRE,  
NENTHEAD,  
ALSTON,  
CUMBRIA,  
CA9 3PD

TEL/FAX: (01434) 382045/043  
WWW.NPARCHAEOLOGY.CO.UK



---

# NORTH PENNINES ARCHAEOLOGY LTD

---

**DOCUMENT TITLE:** Hellrigg Wind Farm, Silloth, Cumbria  
**DOCUMENT TYPE:** Watching Brief Report  
**CLIENT:** RWE Npower Renewables  
**CP NUMBER:** 1272/11  
**SITE CODE:** HWF - A  
**PLANNING APP. NO:** APP/G0908/A/08/2073524  
**OASIS REFERENCE:** northpen3-105560  
**PRINT DATE:** 25/07/2011  
**GRID REFERENCE:** NY 313584 551454

## *Quality Assurance*

This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Institute for Archaeologists (IfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by North Pennines Archaeology Ltd on the preparation of reports.

REVISION SCHEDULE			
	01	02	03
<b>PREPARED BY:</b>	Mike McElligott		
<b>POSITION:</b>	Assistant Supervisor		
<b>DATE:</b>	14/07/11		
<b>EDITED BY:</b>	Martin Railton		
<b>POSITION:</b>	Project Manager		
<b>DATE:</b>	20/07/11		
<b>APPROVED BY:</b>	Matt Town		
<b>POSITION:</b>	Project Manager		
<b>DATE:</b>	20/07/11		

North Pennines Archaeology Ltd is a wholly owned company of North Pennines Heritage Trust (Company Registration No. 4847034; VAT Registration No. 817 2284 31). All rights reserved.

## *Disclaimer*

No part of this report may be copied or reproduced, stored or transmitted by any means without prior written permission from North Pennines Archaeology Ltd, or the client for whom the work was carried out. The report has been produced specifically for the client's usage, and no other party may use, make use of or rely on the contents of the report; any person or party using or relying on this document for such purposes agrees, and with such use or reliance be taken to confirm their agreement, to indemnify NPA Ltd for all loss or damage resulting from their action. No liability is accepted by North Pennines Archaeology Ltd for any use of this report other than the use and purpose for which it was originally intended. Information contained in this report is provided by North Pennines Archaeology Ltd using due care and diligence and no explicit warranty is provided as to its accuracy. No independent verification of any information provided to North Pennines Archaeology Ltd has been made.

---

## CONTENTS

---

<b>SUMMARY .....</b>	<b>5</b>
<b>ACKNOWLEDGEMENTS .....</b>	<b>6</b>
<b>1 INTRODUCTION .....</b>	<b>7</b>
1.1 Circumstances of the Project.....	7
<b>2 METHODOLOGY .....</b>	<b>8</b>
2.1 Written Scheme of Investigation .....	8
2.2 The Watching Brief.....	8
2.3 The Archive .....	9
<b>3 BACKGROUND .....</b>	<b>10</b>
3.1 Location and Geological Context.....	10
3.2 Historical Context .....	10
<b>4 ARCHAEOLOGICAL WATCHING BRIEF.....</b>	<b>14</b>
4.1 Introduction .....	14
4.2 Cable Trench and Base Pit 1 (Turbine 1) .....	14
4.3 Cable Trench and Base Pit 2 (Turbine 2) .....	15
4.4 Cable Trench and Base Pit 3 (Turbine 3) .....	17
4.5 Cable Trench and Base Pit 4 (Turbine 4) .....	18
4.6 Cable Trench 5 .....	19
4.7 Cable Trench 6 .....	20
4.8 Compound Area.....	21
<b>5 CONCLUSIONS .....</b>	<b>23</b>
5.1 Conclusions.....	23
<b>6 BIBLIOGRAPHY .....</b>	<b>24</b>
6.1 Secondary Sources.....	24
<b>APPENDIX 1: CONTEXT TABLE .....</b>	<b>26</b>
<b>APPENDIX 2: FIGURES .....</b>	<b>27</b>

---

## ILLUSTRATIONS

---

### FIGURES (APPENDIX 2)

FIGURE 1: SITE LOCATION

FIGURE 2: LOCATION OF WATCHING BRIEF

FIGURE 3: CABLE TRENCH AND BASE PIT LOCATION PLAN

FIGURE 4: DETAIL OF CABLE TRENCHES AND BASE PITS

### PLATES

PLATE 1: BASE PIT 1 – TURBINE 1 .....	15
PLATE 2: CABLE TRENCH 2.....	16
PLATE 3: LINEAR [108] IN SECTION, CABLE TRENCH 2.....	17
PLATE 4: CABLE TRENCH 3.....	17
PLATE 5: BASE PIT 4, WITH COFFER DAM IN THE BACKGROUND .....	18
PLATE 6: PIECE OF BOG OAK, BASE PIT 4 .....	19
PLATE 7: CABLE TRENCH 5.....	20
PLATE 8: CABLE TRENCH 6.....	21
PLATE 9: IRREGULAR SHAPED OPEN AREA – COMPOUND AREA .....	22
PLATE 10: RECTANGULAR SHAPED OPEN AREA – COMPOUND AREA.....	22

---

## SUMMARY

---

North Pennines Archaeology Ltd were commissioned by RWE Npower Renewables (RWE NRL) to undertake an archaeological watching brief on groundworks relating to the construction of the proposed wind farm at Hellrigg, Silloth, Cumbria (NGR NY 313584 551454). An Environment Statement was undertaken in 2007 in order to establish the scope of the archaeological work required to fulfil the archaeological conditions of the planning decision. This concluded that the site lies within an area of non-intensive historic activity. The report identified a single possible feature within the application area that would likely be impacted upon by the groundworks, which was an undated cropmark in a field where Turbine 2 was located. As a result, the Allerdale Borough Council granted planning consent for the development (Planning App No: APP/G0908/A/08/2073524), on the condition that an Archaeological Watching Brief be undertaken during the groundworks.

The Archaeological Watching Brief was undertaken over 25 days between the 13/09/2010 and 23/05/2011. The watching brief monitored the ground works associated with the locations of the four turbines, associated access roads, crane platforms and service connections, together with temporary construction compound, transformers and a substation control building. A single linear feature was observed at the eastern extent of the cable trench for Turbine 2 which appeared to a modern drainage ditch.

---

## ACKNOWLEDGEMENTS

---

North Pennines Archaeology Ltd would like to thank RWE Npower Renewables for commissioning the project, and for all assistance throughout the work. NPA Ltd would also like to thank Jeremy Parsons, Historic Environment Officer, Cumbria County Council, for all their assistance throughout the project. Powersystems and Hanson Aggregates, and all staff at Hellrigg, are also thanked for their help during this project.

The archaeological watching brief was undertaken by Jo Beaty, David Jackson, Fiona Wooler, Mike McElligott, Angus Clark, Kevin Mounsey and Don O'Meara. The report was written by Mike McElligott and the drawings were produced by Mike McElligott. The project was managed by Matt Town, Project Manager for NPA Ltd. The report was edited by Martin Railton, Project Manager for NPA Ltd.

## 1 INTRODUCTION

---

### 1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In September 2010, North Pennines Archaeology were invited by RWE Npower Renewables to maintain an archaeological watching brief at Hellrigg Wind Farm, Silloth, Cumbria (NY 313584 551454; Figure 1), during groundworks associated with the construction of the proposed wind farm. The proposed works lie to the northwest of Holm Cultram Abbey, on the Solway Plain.
- 1.1.2 All groundworks associated with the development of the proposed wind farm had to be excavated under full archaeological supervision and all stages of the archaeological work were undertaken following approved statutory guidelines (IfA 2008). The guidance includes the English Heritage Management of Research Projects in the Historic Environment (MoRPHE 2006), which now replaces English Heritage The Management of Archaeological Projects (MAP2 1991).
- 1.1.3 This report outlines the monitoring works undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

## 2 METHODOLOGY

---

### 2.1 WRITTEN SCHEME OF INVESTIGATION

2.1.1 A written scheme of investigation was submitted by Entec Ltd. in response to a request by RWE Npower Renewables, for an archaeological watching brief of the study area. Following acceptance of the project design by Jeremy Parsons, Historic Environment Officer, Cumbria County Council, North Pennines Archaeology Ltd was commissioned by the client to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA), and generally accepted best practice.

### 2.2 THE WATCHING BRIEF

2.2.1 The works involved a structured watching brief to observe, record and excavate any archaeological deposits from the development site. A watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, on a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed (IfA 2008).

2.2.2 The aims and principal methodology of the watching brief can be summarised as follows:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record them;
- to carry out further excavation and recording work, if intact archaeological remains are uncovered during the project;
- to accurately tie the area watched by the archaeologist into the National Grid at an appropriate scale, with any archaeological deposits and features adequately levelled;
- to sample environmental deposits encountered as required, in line with English Heritage (2002) guidelines;
- to produce a photographic record of all contexts using colour digital, 35mm colour slide and monochrome formats, each photograph including a graduated metric scale;
- to recover artefactual material, especially that useful of dating purposes;



- to produce a site archive in accordance with MAP2 (English Heritage 1991) and MoRPHE standards (English Heritage 2006).

2.2.3 An area of approximately 6605m<sup>2</sup> was stripped of soil (topsoil and subsoil), which was stored in a storage area for later restoration purposes. The 6 cable trenches formed lines approximated to 616m x 4m. The cable trenches were stripped of topsoil and overburden to the required formation levels. The four turbine base pits measured 25m x 25m and the parts of the compound area that were opened measured approximately 39.5m x 14m and 39m x 36m. Archaeological monitoring and supervision of groundworks associated with the stripping commenced on 13/09/2010. A summary of the findings of the watching brief is included within this report.

## 2.3 THE ARCHIVE

- 2.3.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991) and according to the Archaeological Archives Forum recommendations (Brown 2007). The archive will be deposited within Tullie House Museum, with copies of the report sent to the County Historic Environment Record at Cumbria County Council, available to view upon request. The archive can be accessed under the unique project identifier NPA11, HWF – A, CP 1272/11.
- 2.3.2 North Pennines Archaeology, and Cumbria County Council, support the **Online Access to the Index of Archaeological Investigations (OASIS)** project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

---

## 3 BACKGROUND

---

### 3.1 LOCATION AND GEOLOGICAL CONTEXT

- 3.1.1 Silloth lies approximately 23 miles west of Carlisle, on the western fringes of the North Cumbria Plain. The North Cumbria Plain lies to the north and west of the Lake District massif and encompasses the coastal fringes forming the Solway Coast Area of Outstanding Natural Beauty. Silloth itself is part of the extensive areas of salt marsh running along the coast to the Scottish border. Land use is predominantly pasture, though significant sections of land around Silloth are given over to arable cultivation (Hodgkinson *et al* 2000). The intensification of arable practices has led to the widespread destruction of monuments in the agricultural belt. However, the use of aerial photography has proved invaluable in the identification of extensive areas of crop marks across the Solway Plain (Bewley 1994).
- 3.1.2 The solid geology of the area consists predominantly of Stanwix Shale. The drift geology consists of a deep accumulation of Devensian till, predominantly boulder clay interleaved with alluvial sands and gravels that forms a gently undulating landscape of low ridges, intersected by a mainly northeast to southwest orientated drainage system. The soils consist of mainly Clifton and Brickfield Associations, the former comprising seasonally waterlogged soils, which developed over tills (Hodgkinson *et al* 2000).

### 3.2 HISTORICAL CONTEXT

- 3.2.1 *Introduction:* this historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments specific to the study area.
- 3.2.2 *Place Name Evidence:* Silloth comes from the Scandinavian *Selathe*, thought to mean a grain store or barn by the sea, around which a small hamlet of fisher folk dwelled. The name is thought to have referred to one of the granges of Holm Cultram Abbey. Through the years Silloth has been documented as many different names. *Selathe* was first recorded in 1292. In 1361 it was known as *Selathes*, *Seelet Meddo* in 1538, *Selythe* in 1552, *Silluthe* in 1576, *Silleth* in 1589, *Selleth* in 1605, both *Sillath* and *Sellath* in 1649 and *Silloth Grange* in 1718 (Scott-Parker 1998).
- 3.2.3 A single Historic Environment Record (HER) occurs within the site boundary. This is a cropmark site near to the location of Turbine 2 and identified on the HER as a settlement site. However, the Environmental Statement has called the validity of the interpretation of the evidence from

aerial photography into question, interpreting the cropmarks as a combination of land-drains, parched grass and natural undulations showing on rough pasture, rather than on the more trustworthy medium of cereal crops (Entec 2010).

- 3.2.4 *Prehistoric:* the earliest known occupation of the Solway Plain was during the Neolithic period. Excavations at a settlement at Plasketlands, near Mawbray uncovered an extensive palisade, suggesting possible domestic settlement. Polished Stone axes from the Langdale axe factory in the Cumbrian mountains were traded extensively throughout the British Isles. It is likely that by the 3<sup>rd</sup> millennium BC, the inhabitants of Cumbria were part of an extensive trans-European trading network and over 100 stone axes have to date been recovered from the Solway Plain. Flaked flint axes were also recovered from raised beach deposits on the west side of Silloth. However, direct evidence for prehistoric activity in the vicinity is limited to two finds of axes within 2km of the development site and a number of undated cropmark sites, including that near Turbine 2. The cropmarks could as easily date to the Romano-British period or represent continuation of occupation into that period, when the area is dominated by the watch towers and milecastles which continued the extent of Hadrian's Wall along the coast (Entec 2010).
- 3.2.5 Occupation during the Bronze Age is evidenced by tools from this period that include a stone hammer found at Plasketlands, a boat-shaped axe hammer found at Wolsty, a blue whinstone axe hammer found near Silloth and a stone-battle axe made from granite found on the Solway Moss. A cluster of prehistoric roundhouses have also been identified between Silloth and Allonby.
- 3.2.6 *Romano-British:* during the Roman period there was a heavy military presence in Cumbria. Hadrian's Wall was built between 122-130 AD as part of the attempt to construct a permanent frontier border. Shortly after the Wall was completed it was largely abandoned and the Antonine Wall was constructed between the Rivers Forth and Clyde. The Antonine Wall's period of use was short. By 155 AD it was abandoned and Hadrian's Wall was reoccupied (Daniel 1978).
- 3.2.7 The coastal road down the west coast has been identified as the seacoast extension of the Wall thought to connect with the Roman Military Way at Bowness. This road has been seen at Beckfoot, extending for one kilometre in either direction from the fort gates, then lost to ploughing (Breeze 2004). Two phases of coastal defences have been suggested through excavation and crop mark evidence although this phasing is open to debate (*ibid*).

- 3.2.8 A large percentage of the potential Romano-British rural sites around Silloth have been identified through aerial photography; rectangular field systems have also been identified (Bewley 1994). Where rural sites have been excavated, it has been found that the traditional Iron Age building form, the roundhouse, continued to be in use into the Roman period. Excavations at Silloth Farm (1977) found a rectangular enclosure, formed by a ditch and bank, surrounding a series of roundhouses and attached to a substantial field system.
- 3.2.9 *Early Medieval*: there is little in the way of direct settlement evidence from the early medieval period in Silloth; however, it is thought that settlement was continuous. North Cumbria fell under the aegis of Anglo-Saxon, Scandinavian and Scottish influences. In the 7<sup>th</sup> century the region was absorbed into the Kingdom of Northumbria (Hodgkinson *et al.* 2000). Excavations at Solway Lido have also identified extensive medieval field systems dated back to at least the 10<sup>th</sup> century (Jones 2004 and Town 2006).
- 3.2.10 *Medieval*: during most of the medieval period the northwest of England was passed back and forth between the English and the Scottish. At this time the history of Silloth is essentially intertwined with that of the abbey of Holm Cultram, to the southeast of Silloth, in the demesne of Allerdale (OAN 2004).
- 3.2.11 In 1092 William Rufus had taken control of Carlisle, although his hold was tenuous. With the death of Henry I in 1135, Civil War broke out. David I of Scotland took advantage of this instability to reassert Scotland's claim to Cumberland. David I's son, Prince Henry founded the Cistercian monastery of Holm Cultram in 1150 (4.15km east of the site). Prince Henry owned most of the Holm district. With the Lord of Allerdale, who owned the remaining parts, the land was granted to the monks from Melrose Abbey in Scotland (Holme St. Cuthbert History Group 2007). In c.1150 this grant of land was confirmed by Henry II when the area came under English control.
- 3.2.12 The abbey is recorded as retaining the favour of the king, being exempt from shires and hundreds, wapentakes and tolls. The monks of Holm Cultram Abbey cultivated the large areas of marshland that dominated the Silloth landscape into agricultural land that supported sheep and produced grain. The monks established a busy port at Skinburness in order to export their wool (Scott-Parker 1998). Documentation suggests that by 1175 five grange farms had been established in the area, with one at *Skinburne* possessions. Following the destruction of Skinburness between 1301 and 1304, a sea dyke was constructed to protect the village. Throughout the 13<sup>th</sup> century the abbey was lavished with land, quarries, iron ore works and houses left to them by benefactors (Holme St. Cuthbert History Group 2007).

- 3.2.13 In the 13<sup>th</sup> century, the abbey was caught up in the ongoing wars between the English and the Scottish. After the signing of the Great Charter, King John marched to Scotland, reaching Berwick in 1216. As he returned south, Alexander II of Scotland set off in pursuit. They moved westward towards the abbey of Holm Cultram and laid waste to the area. The abbey was again wasted in 1316 when border raiders attacked the northwest coast, plundering everything as far as Furness. Six years later, Robert the Bruce led another savage campaign, again laying waste to the abbey.
- 3.2.14 *Post-medieval and Modern:* in 1538 Holm Cultram Abbey, along with 1600 acres of land was surrendered to the Crown as part of Henry VIII's Dissolution of the Monasteries.
- 3.2.15 At the time of Elizabeth I, the lands of Holme Cultram were leased out to tenant farmers. There were no freeholders in the lordship at this time. The manor of Holme Cultram was retained in crown hands until after the Restoration of Charles II and in 1732 it was purchased by the Stephenson family (*ibid*). Carved stone purportedly from the abbey is recorded in the Old Vicarage at Silloth.
- 3.2.16 Before drainage in the 19<sup>th</sup> century the low-lying wetlands would have provided a wide range of wild plant and animal resources and, possibly, a venue for summer grazing. The existing pattern of drained fields within and around the site is largely a product of the 1814 enclosure act for the parish of Holme Cultram. Parkhead Farm was established after enclosure and before 1850, but little change has been made to the pattern of fields on the site since then (Entec 2010).
- 3.2.17 In 1847 Silloth was mentioned as a hamlet that belonged to Charles Joliffe, Esq. At that time it consisted of a few farm houses of which five were recorded in the historical trade directories (Parson and White 1829, Mannix and Whellan 1847).

---

## 4 ARCHAEOLOGICAL WATCHING BRIEF

---

### 4.1 INTRODUCTION

4.1.1 The watching brief monitoring was undertaken between September 2010 and May 2011. This involved the monitoring of six cable trenches and four base pits for the turbines and an area that was stripped for the site compound. Four of the cable trenches were associated with the four turbines while a fifth trench linked Turbines 1 and 3 with Turbines 2 and 4. The sixth trench was for a section of overhead electricity cables near Turbine 4 that was being diverted underground. At the end of four of the trenches, there were four square base pits for the foundations for the turbines. All trenches, pits and opened areas consisted of either a silty clay topsoil or peat overlying the natural sandy clay substrate. A tracked 360 excavator with a V-shaped bucket was used for the excavation of five of the cable trenches while the sixth trench was excavated with a mini-digger. A tracked 360 excavator was also used for the excavation of the four turbine base pits and the compound area (Figure 3).

### 4.2 CABLE TRENCH AND BASE PIT 1 (TURBINE 1)

4.2.1 Cable Trench 1 was located at the southern end of the site in a field on the west side of the track way and was excavated along its eastern and southern sides. It measured 175m in length, 4m in width and was excavated to a depth of approximately 1.25m. The final 7m at the its eastern end, crosses over the track way to join with Cable Trench 5. It measured 0.7m in width and 1.25m in depth (Figure 4).

4.2.2 Base Pit 1 was located in the southern corner of the same field as Cable Trench 1. It measured 25m long by 25m wide and was excavated to a depth of 1.25m. The cable trench joined with the base pit on its southeast side.

4.2.3 The natural substrate (111), which consisted of a firmly compacted mid-brown / yellow sandy clay was revealed 0.25m below the surface in the base pit and 0.4m in the cable trench. Overlying it was a moderately compacted mid – brown silty clay topsoil, (110), which was across the whole field. In the final 7m at the east end, the topsoil stopped at the track way, which consisted of a top layer of tarmac (117), which measured 2m in width and 0.1m in depth. It overlay a layer of stone hardcore (118) which measured 2m in width and 0.3 in depth. No archaeological features were noted, only some tree boles and several land drains that were cut into the natural.



*Plate 1: Base Pit 1 – Turbine 1*

#### **4.3 CABLE TRENCH AND BASE PIT 2 (TURBINE 2)**

- 4.3.1 Cable Trench 2 was located in a field on the western side of the site, to the northwest of Turbine 1. It was excavated along the northern boundary of the field and it measured 75m in length, 4m in width and 1.5m in depth. The final 7m at the its eastern end, crosses over the track way to join with the southern end of Cable Trench 5. It measured 0.7m in width and 1.25m in depth (Figure 4).
- 4.3.2 Base Pit 2 was located in the western corner of the field and it measured 25m in length by 25m in width and was excavated to a depth of 1.2m. The cable trench joined with the base pit on its norhteast side.

4.3.3 The natural substrate (107), which consisted of a firmly compacted light yellow / orange sandy clay was revealed 0.3m below the surface in both the cable trench and base pit. Overlying it was a moderately compacted dark brown silty clay topsoil (106), which contained post-medieval pottery. No archaeological remains were noted in the base pit, but in the cable trench, a linear feature [108], was observed, in section only, in the eastern extent of the trench. It was roughly aligned north to south and measured 2.1m in width and was 0.5m in depth. It was filled by (109), a mid / dark brown silty clay. A sherd of modern porcelain was found on top of the deposit but it may have come from the topsoil which makes dating the feature uncertain. In the final 7m at the east end, the topsoil stopped at the track way, which consisted of a top layer of tarmac (117), which measured 2m in width and 0.1m in depth. It overlay a layer of stone hardcore (118) which measured 2m in width and 0.3 in depth.



*Plate 2: Cable Trench 2*





*Plate 3: Linear [108] in section, Cable Trench 2*

#### **4.4 CABLE TRENCH AND BASE PIT 3 (TURBINE 3)**

- 4.4.1 Cable Trench 3 was located in a field on the eastern side of the site. It was excavated along the southern boundary of the field and it measured 130m in length, 4m in width and 1.5m in depth (Figure 4).



*Plate 4: Cable Trench 3*

- 4.4.2 Base Pit 3 was located in the centre of a field on the eastern side of the site, near its southern boundary. It measured 130m in length and was 4m wide. It was excavated to a depth of 1.2m. The cable trench joined the pit on its southwest side.
- 4.4.3 The natural substrate (113), which consisted of a firmly compacted yellow / brown sandy clay was revealed 0.34m below the surface. Overlying it was a moderately compacted mid – brown silty clay topsoil, (112) which was across the whole field covering both the trench and pit. No archaeological features were noted.

#### 4.5 CABLE TRENCH AND BASE PIT 4 (TURBINE 4)

- 4.5.1 Cable Trench 4 was partially located in the same field as Turbine 3 and in the field to the north of it. It was L-shaped and was excavated along the northern boundary (east - west) of the first field before turning in a roughly north – south direction. It measured 160m in length and 4m in width and was excavated to a depth of 1.5m (Figure 4).
- 4.5.2 Base Pit 4 was located on the eastern side of the site in the southwest corner of a field that was to the north of Turbine 3. It measured 25m in length by 25m in width as was excavated to a depth of about 6m. The field was waterlogged and a coffer dam was used to excavate the pit. The cable trench joined to the pit at its southern end.



*Plate 5: Base Pit 4, with Cofferdam in the background*

- 4.5.3 The natural substrate (114), which consisted of blue clay, was revealed 6m below the surface. Overlying the natural was a thick layer of moderately compacted waterlogged peat (105) which contained rich wood deposits of oak and possible ash. A large piece of bog oak was also excavated out of the pit. The peat covered the whole field. No archaeological features were noted (Figure 4).



*Plate 6: Piece of bog oak, Base Pit 4*

#### 4.6 CABLE TRENCH 5

- 4.6.1 Cable Trench 5 was located in the centre of the site; aligned parallel to the track way and it joined Turbines 1 and 3 with Turbines 2 and 4 which are to the north. It was excavated along the northwest boundary of the field that Turbine 3 is in and part of Cable Trench 4, and was aligned parallel to the track way and measured 120m in length, 4m in width and was 1.5m in depth (Figure 4).
- 4.6.2 The natural substrate (113), which consisted of a firmly compacted yellow / brown sandy clay was revealed 0.34m below the surface. Overlying it was a moderately compacted mid – brown silty clay topsoil, (112). These contexts are the same as for Cable Trench and Base Pit 3 as they are in the same field. No archaeological features were noted.



*Plate 7: Cable Trench 5*

#### **4.7 CABLE TRENCH 6**

- 4.7.1 Cable Trench 6 was located in the field on the eastern side of the site that also contains Turbine 4. The trench cuts across Cable Trench 4 and was about 16m south of Base Pit 4. After 126m it turns in a roughly easterly direction, parallel to the trench and when it reaches the track way, 40m away, it changes again and runs in a northwest - southeast direction, parallel to the track way. It measured 240m in length and was 0.3m in width. It was excavated to a depth of 1.3m and was for an overhead electricity cable that was being diverted underground (Figure 4).
- 4.7.2 The natural substrate (101) / (103) consisted of a firm grey / blue / orange / brown sandy clay that was revealed 0.2m below the surface. Overlying it, was a layer of moderately compact mid – brown silty clay (100) / (102). Going eastward, towards Turbine 4, the topsoil changed to (105) / (104) which was a peat deposit; Cable Trench and Base Pit 4 were excavated into this deposit. No archaeological features were noted.





*Plate 8: Cable Trench 6*

#### **4.8 COMPOUND AREA**

- 4.8.1 The compound area was located at the northern end of the site. Two areas were opened up for the site entrance and compound. The first part that was excavated was next to the road and was irregularly shaped and it measured 39m in length and was 36m wide at its northern end and 11.8m wide at its southern end. The second part opened was rectangular in shape and it joined to the southern end of the first area and it measured 39.5m in length and was 16m in width. Both areas were excavated to a depth of 0.4m. The rectangular area was the location of the site compound and was initially larger but after the removal of topsoil, terram was laid down to cover the natural and hardcore was spread across it, but the ground was too soft so the remaining bit was not excavated, with the terram was spread out over the grass before being covered by hardcore (Figure 4).
- 4.8.2 The two parts that were excavated consisted of a darkish mid-grey / brown silty clay, (115) and measured 0.4m deep across both areas and the whole field. The deposit overlay the natural substrate, (116), which consisted of a light orange / grey / brown sandy silt. No archaeological features were

noted, though several tree boles, plough scars and land drains were observed in both areas.



*Plate 9: Irregular shaped open area – Compound Area*



*Plate 10: Rectangular shaped open area – Compound Area*

## 5 CONCLUSIONS

---

### 5.1 CONCLUSIONS

- 5.1.1 A total of 6 cable trenches, 4 turbine base pits and 2 small areas at the site compound were opened during the course of groundworks at Hellrigg Wind Farm, near Silloth.
- 5.1.2 A single linear feature was observed in one of the cable trenches and was probably a modern drainage ditch.
- 5.1.3 No archaeological features were observed in the other five trenches, other than modern land drains. The base pits were also devoid of any archaeological features; only a large piece of bog oak was uncovered from a peat deposit in one of the base pits. The two small areas at the compound only contained modern land drains, along with plough scars and tree boles.

---

## 6 BIBLIOGRAPHY

---

### 6.1 SECONDARY SOURCES

Bewley, R. (1994) *Prehistoric and Romano-British Settlement in the Solway Plain, Cumbria*. Oxbrow Monograph: Oxford

Breeze, D.J. (2004) Roman Military Sites on the Cumberland Coast in Wilson, J.A. and I.D. Caruana (eds) *Romans on the Solway: Essays in honour of Richard Bellhouse*. Cumberland and Westmorland Antiquarian and Archaeological Society: Kendal.

Brown, D.H. (2007) *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation*. Archaeological Archives Forum

Countryside Commission (1998) *Countryside Character Volume 2: North-west - The character of England's natural and man-made landscape*. Cheltenham.

Daniel, C.M. (ed) (1978) *J. Collingwood Bruce's Handbook to the Roman Wall, 13<sup>th</sup> Edition*. Newcastle-upon-Tyne.

DoE (1990) *Planning Policy Guidance Note No.16: Archaeology and Planning*. Department of the Environment.

English Heritage (1991) *Management of Archaeological Projects (MAP2)*. London: English Heritage.

English Heritage (2002) *Environmental Archaeology: A Guide to the Theory and Practice of Methods from Sampling and Recording to Post-Excavation*. London: English Heritage.

English Heritage (2006) *Management of Research Projects in the Historic Environment*. London: English Heritage.

English Heritage, (2008) SHAPE: guidance for external grant applicants, London

Entec UK Ltd (2010) *RWE Npower Renewables: Hellrigg Onshore Wind Farm – Written Scheme of Archaeological Investigation*, unpublished document

Giecco, F.O. (2003) *North Pennines Archaeology Ltd Excavation Manual*, unpublished document.

Hodgkinson, D., E. Huckerby, R. Middleton and C.E. Wells (2000) *The Lowland Wetlands of Cumbria* Lancaster Imprints: Lancaster.

Holme St. Cuthbert History Group (2007) *More Plain People and Places on the Cumbrian Solway Plain*. Holme St. Cuthbert History Group.

IfA (2008) *Standards and Guidance for Archaeological Watching Briefs*. Reading: Institute for Archaeologists.



Jones, C.J. (2004) *Archaeological Assessment for a Proposed Development at Greenrow, West Silloth, Cumbria*. Unpublished Client Report by North Pennines Archaeology (NPA) Ltd. for Senator Homes Ltd.

Mannix and Whellan (1847) *History, Gazetteer and Directory of Cumberland*. W.B. Johnson: Beverley.

Ove Arup & Partners (2007) *Npower Renewables Ltd. Hellrigg Wind Farm Environment Statement*.

Oxford Archaeology North (OAN) (2004) *Solway Lido, Silloth Cumbria. Desk-Based Assessment and Rapid Identification Survey*. Unpublished report for Mr. S. Hinchliffe. (HER Ref. No.: 2/07/1733).

Parson, W. and W. White (1829) *History, Directory and Gazetteer of the Counties of Cumberland and Westmorland*. White and Co.: Leeds.

Scott-Parker, M. (1998) *Silloth*. Bookcase: Carlisle. Located at Carlisle Library, Ref. No. 1B9 SIL9.

Town, M. (2006) *Archaeological Desk-Based Assessment and Walkover Survey on land at Fell View, Silloth Cumbria*. Unpublished Client Report by North Pennines Archaeology (NPA) Ltd. for Harvest Housing Group.

UKIC (1990) *Guidelines for the preparation of excavation archives for long-term storage*

---

## APPENDIX 1: CONTEXT TABLE

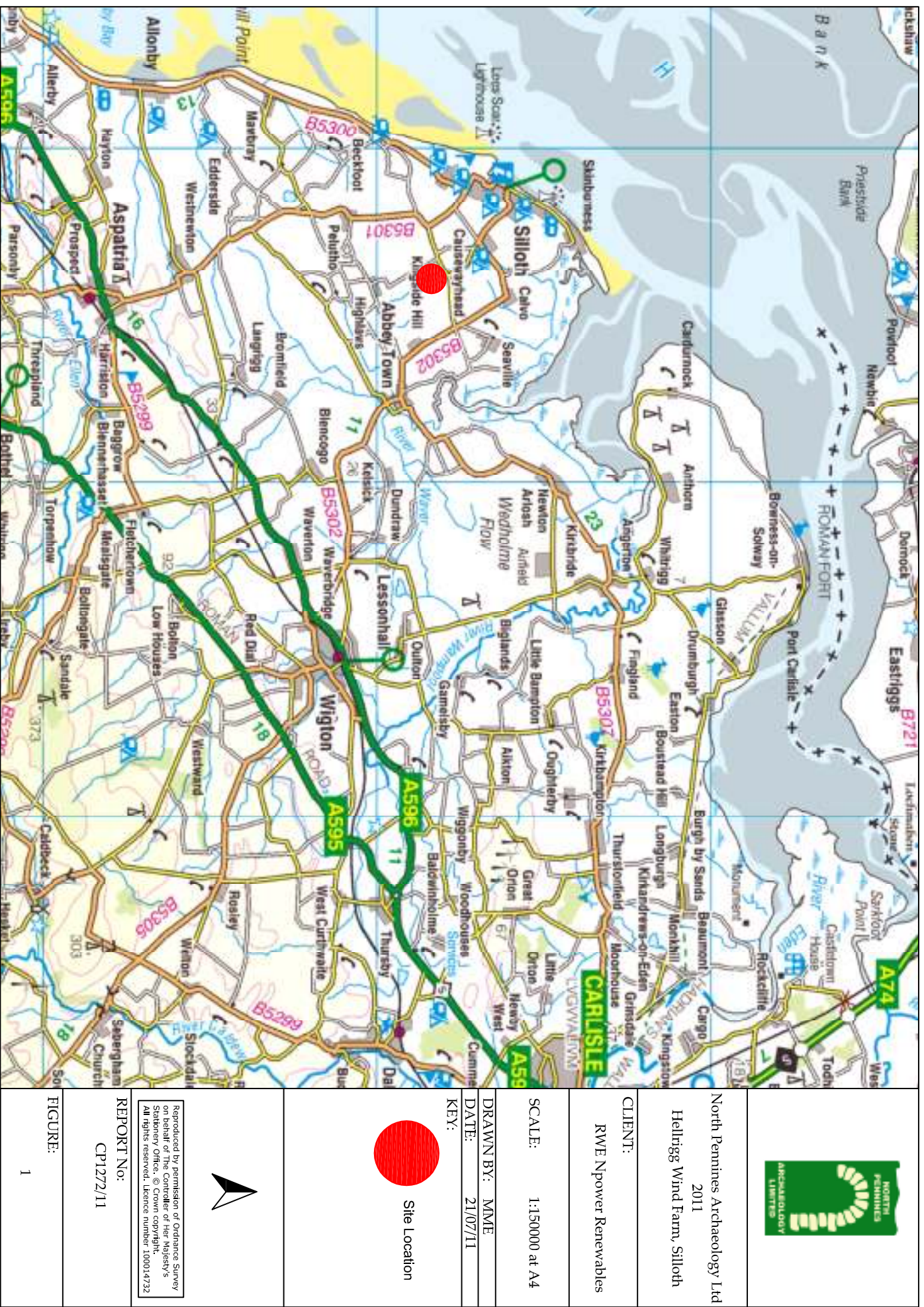
---

Context Number	Context Type	Description
100	Deposit	Topsoil – Cable Trench 6
101	Geological	Natural – Cable Trench 6
102	Deposit	Grey Organic Layer – Cable Trench 6
103	Geological	Natural – Cable Trench 6
104	Deposit	Peat – Cable Trench 6
105	Deposit	Peat – Cable Trench & Base Pit 4
106	Deposit	Topsoil – Cable Trench & Base Pit 2
107	Geological	Natural – Cable Trench & Base Pit 2
108	Cut	Cut of Linear Feature – Cable Trench 2
109	Deposit	Fill of Linear [108]
110	Deposit	Topsoil – Cable Trench & Base Pit 1
111	Geological	Natural – Cable Trench & Base Pit 1
112	Deposit	Topsoil – Cable Trench 3 & 5, Base Pit 3
113	Geological	Natural – Cable Trench 3 & 5, Base Pit 3
114	Geological	Natural – Cable Trench & Base Pit 4
115	Deposit	Topsoil – Compound Area
116	Geological	Natural – Compound Area
117	Deposit	Tarmac – Track way
118	Deposit	Stone Hardcore – Track way

*Table 1: List of Contexts issued during Watching Brief*

## APPENDIX 2: FIGURES

---





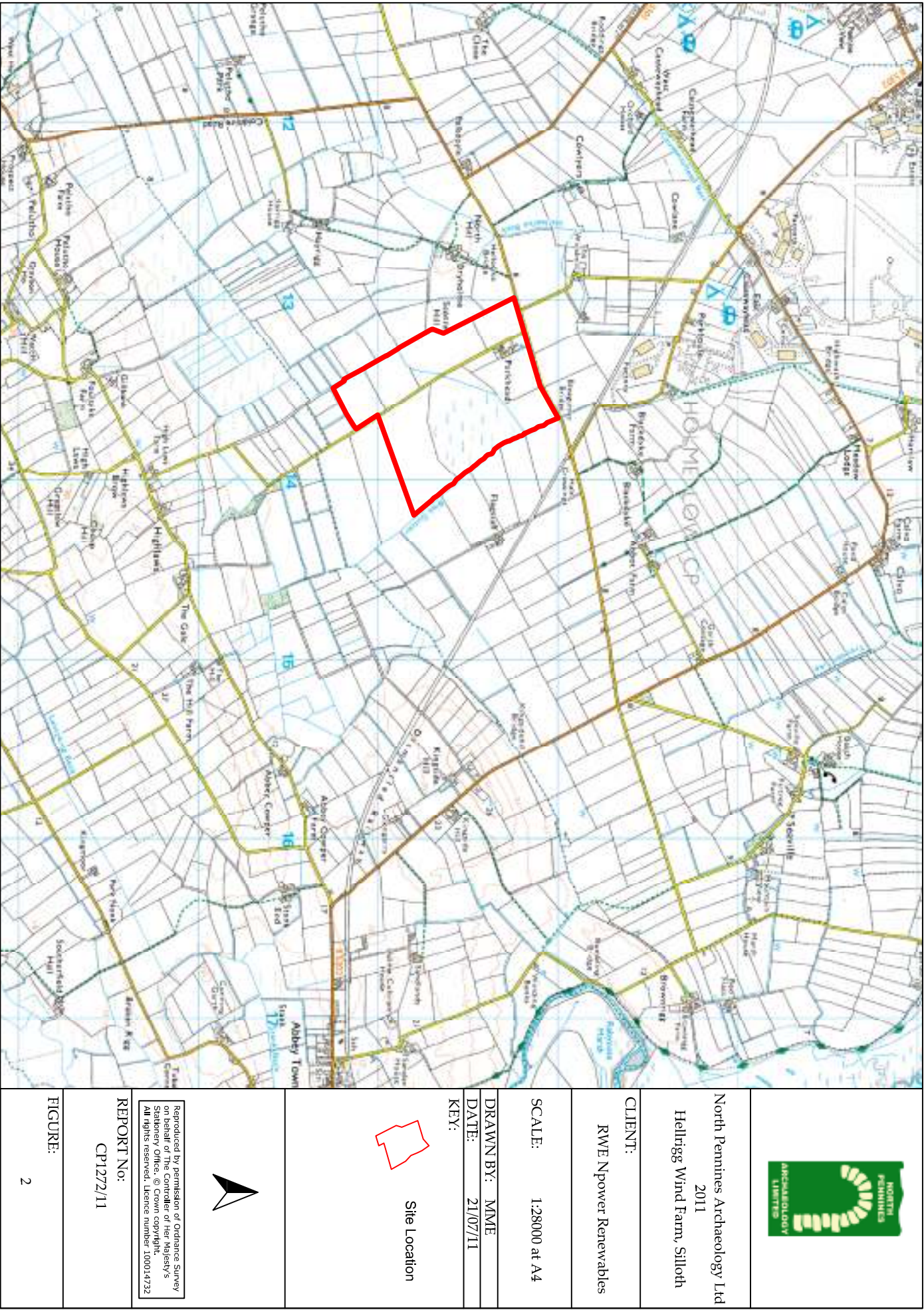
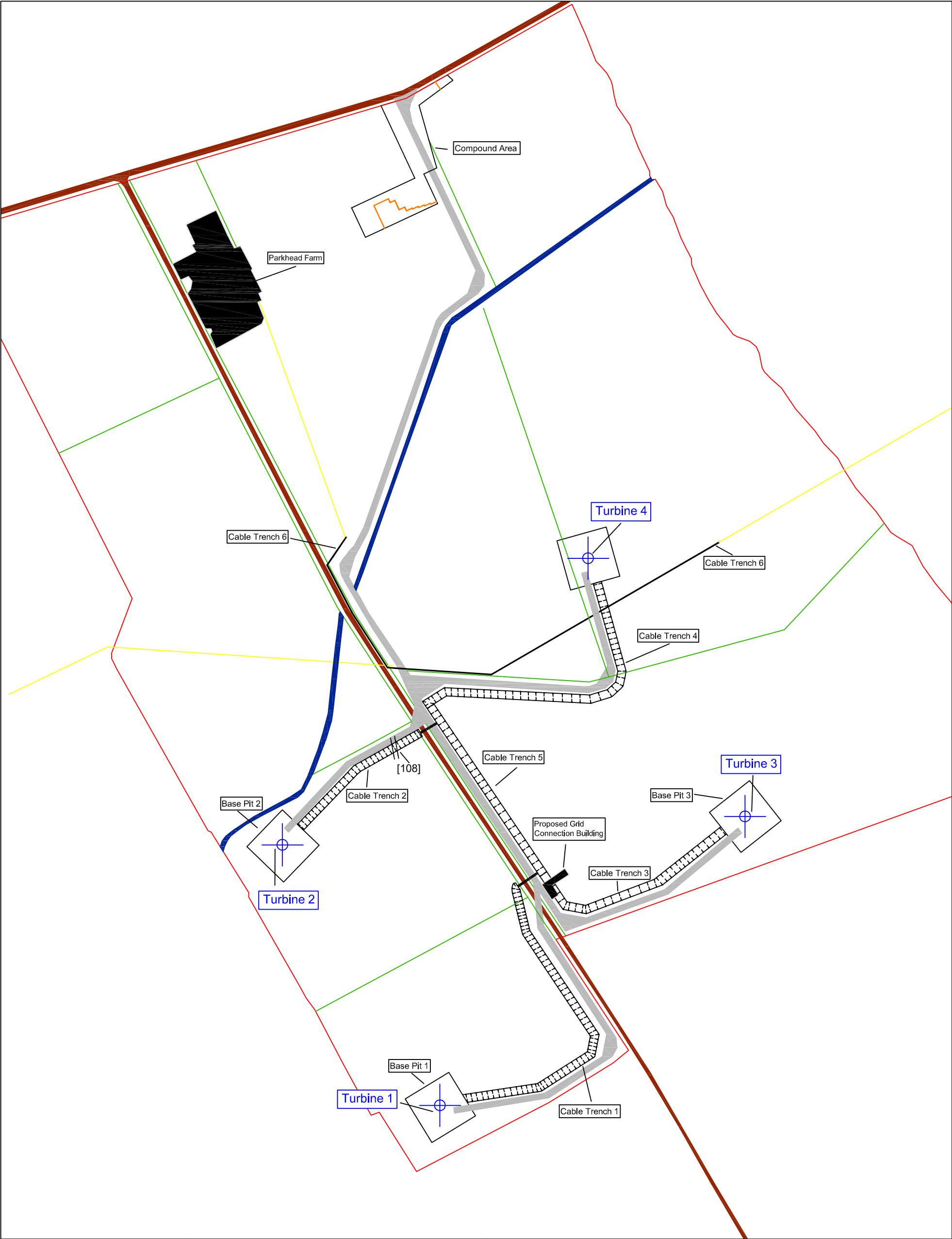


Figure 2 : Location of Watching Brief


























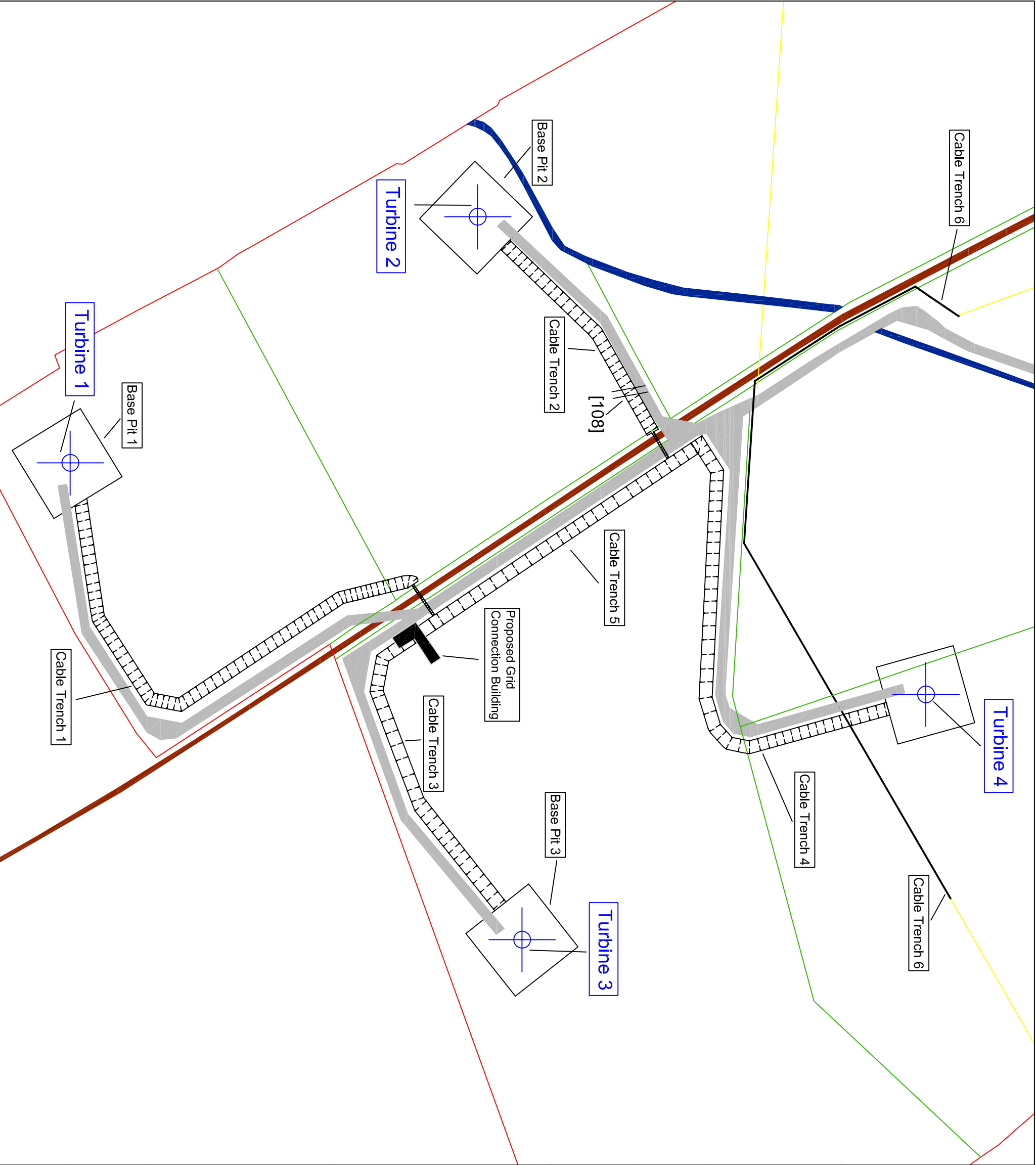
 <p>North Pennines Archaeology Ltd 2011</p>	<p>PROJECT: Hellrigg Wind Farm, Silloth</p> <p>SCALE: 1:1800 at A3</p> <p>REPORT No: CP1272/11</p> <p>CLIENT: RWE Npower Renewables</p> <p>DRAWN BY: MME</p> <p>DATE: 21/07/11</p> <p>FIGURE: 3</p>	<p>KEY:</p> <table><tr><td></td><td>Access Road</td></tr><tr><td></td><td>Road / Track way</td></tr><tr><td></td><td>Watercourse</td></tr><tr><td></td><td>Overhead Electricity Cable</td></tr><tr><td></td><td>Field Boundary</td></tr><tr><td></td><td>Site Boundary</td></tr><tr><td></td><td>Land Drains</td></tr></table>		Access Road		Road / Track way		Watercourse		Overhead Electricity Cable		Field Boundary		Site Boundary		Land Drains	 <p>Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number 100014732.</p>
	Access Road																
	Road / Track way																
	Watercourse																
	Overhead Electricity Cable																
	Field Boundary																
	Site Boundary																
	Land Drains																

Figure 3 : Location of Cable Trenches and Base Pits





North Pennines Archaeology Ltd  
2011

Helling Wind Farm, Silloth

CLIENT:

RWE Npower Renewables

SCALE:

1:1200 at A3

DRAWN BY:

MME

DATE:

21/07/11

KEY:

- Access Road
- Road / Track way
- Watercourse
- Overhead Electricity Cable
- Field Boundary
- Site Boundary



Reproduced by permission of Ordnance Survey on behalf  
of The Controller of Her Majesty's Stationery Office.  
© Crown copyright. All rights reserved.  
Licence number 100014732.

REPORT No:

CP1272/11

FIGURE:

4

Figure 4 : Detail of Cable Trenches and Base Pits