

## CONTENTS

<b>SUMMARY</b>	<b>2</b>
<b>1 INTRODUCTION</b>	<b>3</b>
1.1 Project origins	3
1.2 Project outline	4
1.3 Archive	4
<b>2 BACKGROUND</b>	<b>4</b>
2.1 Location, topography and geology	4
2.2 Desk-based assessment	5
<b>3 HISTORICAL CONTEXT</b>	<b>6</b>
3.1 Historical background	6
<b>4 METHODOLOGY</b>	<b>12</b>
4.1 Methodology	12
<b>5 RESULTS</b>	<b>13</b>
5.1 The interventions	13
5.2 Finds and ecofacts	15
5.3 Discussion	15
<b>6 ACKNOWLEDGMENTS</b>	<b>15</b>
<b>7 BIBLIOGRAPHY</b>	<b>16</b>

## FIGURES

<b>Figure 1</b>	<b>Site location</b>	<b>3</b>
<b>Figure 2</b>	<b>Location of study area</b>	<b>5</b>
<b>Figure 3</b>	<b>1883 survey of Bishop's Dyke</b>	<b>9</b>
<b>Figure 4</b>	<b>Location of study area with the three interventions</b>	<b>12</b>
<b>Figure 5</b>	<b>Raising ground level to the south</b>	<b>13</b>
<b>Figure 6</b>	<b>Bank clipped by the marquee footprint</b>	<b>13</b>
<b>Figure 7</b>	<b>Trench 1 with drain</b>	<b>15</b>
<b>Figure 8</b>	<b>Trench 13 showing overburden</b>	<b>15</b>

## SUMMARY

The study area proved to be archaeologically sterile represented by a horizon of overburden and garden soil resting above natural clay.

## 1. INTRODUCTION

### 1.1 Project Origins

Gerry Martin was commissioned by Mr Jan Mayer (the client) to prepare a Specification of Works for a Programme of Archaeological Watching Brief Action relating to the insertion of eighteen post-pads in close proximity to Dalston Hall (figure 1). The archaeological watching brief action was requested by Cumbria County Council as potential and significant archaeological remains may be encountered.

Because of the archaeological significance of this location, the development was subject to the “developer” securing the implementation of a formal programme of archaeological observation and investigation during the forthcoming work.

The written scheme of investigation (WSI) was produced by the archaeological contractor and detailed the methods and procedures to be employed during the watching brief action. It was approved by the curatorial authority (Cumbria County Council Historic Environment Service), prior to any fieldwork being undertaken.

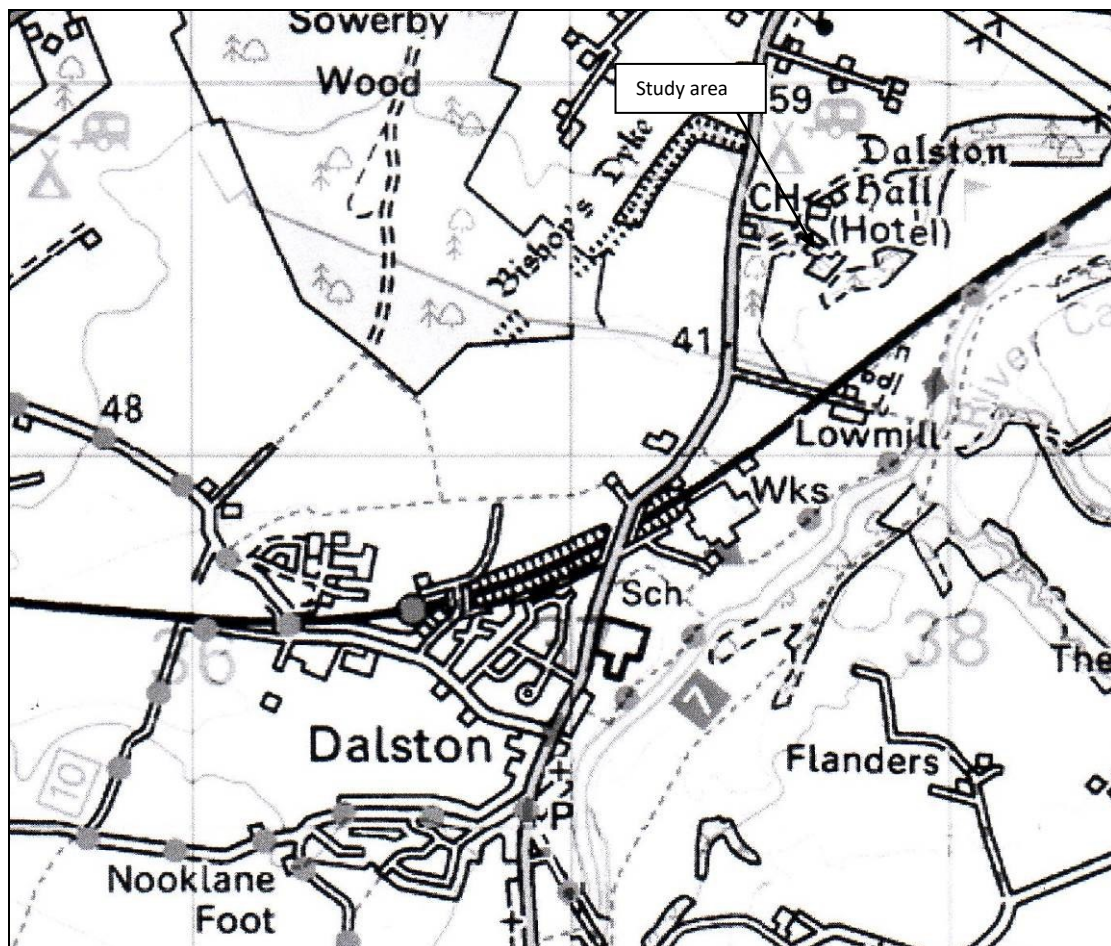


Figure 1. Site location (OS Copyright, Licence no. 100044205)

## **1.2 Project outline**

A written scheme of investigation (WSI) was produced by the archaeological contractor and detailed the methods and procedures to be employed during the archaeological watching brief. It was submitted to the curatorial authority (County Historic Environment Service) for approval and accepted.

A programme of archaeological watching brief was the preferred course of action to be undertaken on March 3rd 2014.

The following document is presented as a summary of the watching brief undertaken during the groundworks.

The report has been assembled to the relevant standards and protocols of the Institute of Field Archaeologists, combined with accepted best practice and in accordance with the brief prepared by the curatorial authority.

## **1.3 Archive**

The archive has been compiled in accordance with the project design and the guidelines set out by Management of Archaeological Projects (English Heritage, 1991) and the Institute of Field Archaeologists (1994 and 2007).

The archive will be deposited with an appropriate repository, Tullie House Carlisle and a copy of the report donated to the County Sites and Monuments Record, as requested by the curatorial authority.

## **2. BACKGROUND**

### **2.1 Location, topography and geology**

The study area NY 37680 51530 is located just east of Dalston Hall, a listed late Medieval building.

The study area lies within former formal gardens overlooking the Caldew towards Dalston. Currently, gravel has been lain to form an overflow car park.

The local topography denotes a gentle incline extending northwards from the River Caldew and its gravel terrace approximately 400m to the southeast to a height of approximately 50m OD. Predominantly, land use has been for pastoral farming and neglected woods although recently, the land adjoining Dalston Hall has been used for recreational purposes as a golf course and caravan park.

The local geology has produced a relatively heavy soil with a higher clay content due to the local underlying pink Boulder Clay lain during successive glaciations between 2,000,000 and 12,000 years ago.

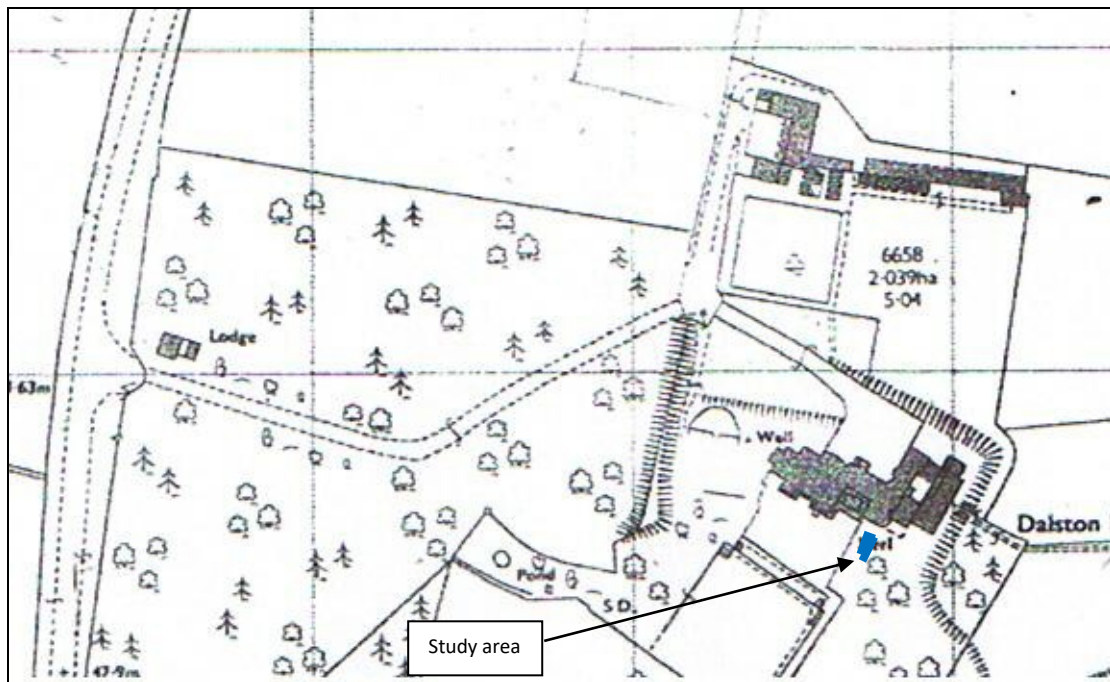


Figure 2. Location of study area. (OS Licence no. 100044205).

Alluvial gravels have accumulated in the vicinity of the River Caldew and from ancient river courses associated with various glacial interludes.

Solid geology comprises of bedded Permian and Triassic red sandstone lain between 200,000,000 and 300,000,000 years ago.

## 2.2 Desk-based assessment

In accordance with the Design Brief, the desk-based assessment investigated primary and secondary historical sources, maps and other literature in order to set the watching brief results into their past cultural, historical and topographic context.

The physical study area centred on Dalston Hall and consisted of a 500m radius from the development.

The historical investigation drew from the ecclesiastical and political importance of Dalston during the high and later Medieval periods *circa* 1092 to 1577 and its association with the Bishops of Carlisle.

The desk-based assessment comprised a search of three archival repositories.

Carlisle Library provided sources for published works including newspaper articles, archaeological and antiquarian reports, photographs and journals.

Cumbria Record Office provided the earliest tithe map for the parish, details of landowners and occupiers, ecclesiastical histories and cartographic evidence.

The Historic Environment Record provided aerial photographs, the Sites and Monuments Record describing previous archaeological observations and electronic media showing the spatial distribution of these findings

### **3. HISTORICAL BACKGROUND**

#### **3.1 Historical background**

The historical background has been drawn from primarily secondary sources and has been divided into broad cultural periods. The narrative attempts to describe the broad historical outline for each period in this region and where records survive, draws attention to specific archaeological observations pertinent to the study area.

##### **Palaeolithic**

No early Palaeolithic material has been recovered within Cumbria. The most recent geological period, the Pleistocene, witnessed the movement of massive north-south travelling ice sheets, which successively scoured the landscape during prolonged periods of glaciation.

Pollen samples from the Windermere Interstadial suggest that winter conditions were severe with excessive surface water and vegetation establishing itself only during the summer (Hodgkinson et al 2000).

Around 13,000 years BP, Late Upper Palaeolithic people returned to Britain, although evidence for this activity extending to northwest England is extremely scarce. However, the discovery of Late Upper Palaeolithic blades near Grange-over-Sands and at Aldingham, on the Furness Peninsula, does not preclude the existence of a Cumbrian Palaeolithic culture (Chamberlain and Williams 2001).

##### **Mesolithic**

Mesolithic activity on the North Cumbrian Plain is also extremely rare comprising of isolated finds.

Hunter-gatherer activity was influenced by changing relative sea-levels on the Solway coast, forming shingle banks along the coast and aforestation inland.

Although there is a sampling bias towards coastal areas, it is highly probable that Mesolithic activity inland was minimal, of which no Mesolithic sites are known.

##### **Neolithic**

The early Neolithic period represents the transition from hunter-gatherer societies to sedentary agricultural communities. As societies became established, specific cultural traits emerged; the appearance of ceremonial and funerary landscape monuments and the development of distinctive ceramic styles and lithic forms.

In the Late Neolithic, social hierarchies emerge through the intensification and increasing sophistication of settlement, land use and artefact production.

Evidence for settlement in Cumbria is primarily inferred by the distribution of polished stone axes from the Langdale axe factory. Along the Solway Plain, distribution of these axes suggests exploitation of both wetlands and the coastal margin with settlement extending inland, into the Plain itself (Hodgkinson *et al* 2000).

Long distance trade and contact is suggested by the frequent appearance of these axes throughout the British Isles and by the 3<sup>rd</sup> Millennium BC, the production of these axes was part of a trans-European trading network.

Within the immediate environs of the study area there is no record of Neolithic inhabitation.

### **Bronze Age**

The Bronze Age in the northwest is noted by an increase in land clearance and the beginning of cereal cultivation from approximately 2000 BC. Despite much continuity from the Late Neolithic, the Bronze Age introduces bronze metalwork, changes in pottery styles and burial practice. However, archaeological visibility within Cumbria is poor and very few Bronze Age sites have been discovered in Cumbria, none within the proximity of the study area.

Cist burials appear from the beginning of the 2<sup>nd</sup> Millennium BC and it is believed that they represent former monuments within a Bronze Age agricultural landscape. Aerial photography on the North Cumbrian Plain, suggests a number of crop-marks may represent barrows within a network of linear ditches. However, there is no current evidence to suggest that this practice may have penetrated the hinterland.

### **Iron Age**

The Iron Age is noted for the introduction of iron tools and weapons, increasing sophistication in pottery production, long-distance trade and the development of social hierarchies from kinships societies to tribal territories based on regional centres.

In Cumbria, the early and mid-Iron Age is poorly represented suggesting a low population threshold. In the late Iron Age, there is considerable forest clearance suggesting population stress probably associated with proto-regional tensions between Iron Age tribes. The area around Carlisle is associated with the Carvetii, a local tribe within the federation of the Brigantes.

Recent work has not revealed definitive Iron Age occupation near the study area, although Carlisle approximately four miles north, may have acted as a tribal centre and a long barrow (HER 10099, NGR 337160 551800) exists 400m to the west. Ferguson, a 19<sup>th</sup> Century antiquary, suggests that the Bishop's Dyke was an Iron Age enclosure although on what premise is not discussed (Ferguson 1883, 271).

Excavation of a nearby *tumuli* (exact location unrecorded) in 1886 revealed no diagnostic date for its construction. It is recorded that Mrs Hope Johnson excavated to a depth of approximately 1.50m only to reveal an “undisturbed gravel heap on a ridge of gravel” (Taylor 1892, 339-341). This action probably explains the deep scoop visible today, within a mound southwest of Dalston Hall (HER no. 10095) and may suggest a glacial feature e.g. a moraine or an esker.

### **Romano-British**

Carlisle was an important military base, comprising of two Roman forts, civilian settlement and bounded by Hadrian’s Wall just to the north. Its hinterland probably extended to Dalston and though not well understood continued the woodland clearances begun in the Iron Age, implying large-scale cultivation of land (Philpott 2004) probably to satisfy the increased demand from Carlisle and the military.

Roman roads out of Carlisle passed nearby as well as through Dalston onto Red Dial and Wigton, forming a network supporting the military infrastructure providing agricultural produce as well as quarried stone.

Roman settlement has not been observed in the vicinity of the study area, but it is highly likely that Romano-British rural occupation did occur in the locality with Iron Age practices continuing.

Aerial photographs taken during 2006, tentatively may suggest a putative ladder settlement approximately 500m to the west of the study area. However, further research is required to confirm this suggestion.

An undated but probable Roman road comprising of a flanking ditch and cambered metalled surface was uncovered in the woods to the west of Dalston Hall (Martin 2010, 14-15).

The area around Dalston Hall was believed to have served as a Roman camp by some historians. However, there exists no aerial photographs that would support this hypothesis, nor any cultural material. This probable fanciful assertion appears to be based on a Latin inscription to the Roman god Silvanus found on a red sandstone block inserted into a pig-sty (Popple 1993, 24).

### **Medieval**

Bishop’s Dyke (SMR 1353) is likely to represent either a manorial or settlement boundary or a defensive earthwork against Scottish incursions during the 14<sup>th</sup> Century and takes its name from the latin name *Fossa Episcopa* on account of the close proximity of the seat of the Bishops of Carlisle at nearby Rose Castle in Dalston.

The earthwork comprises of a western and probably an eastern limb forming terminals for a contiguous, linear east-west aligned platform with mounds of earth flanking each side of an outside ditch (Ferguson 1883, 271-272). Definition is pronounced towards the western salient with a width of approximately 25m (80ft), whilst at the Carlisle-Dalston road crossing it diminishes to less than



10m (31ft). The outer linear mound is approximately 1.20m in height and 3.10m in width, whilst the inner linear mound is approximately 0.60m in height and 1.20m in breadth.

On the eastern side of the road, the earthwork has been levelled but a cordon of trees and an extant hedge and ditch outline the monuments course and its southward return, its existence confirmed by archaeological evaluation (Martin 2007).

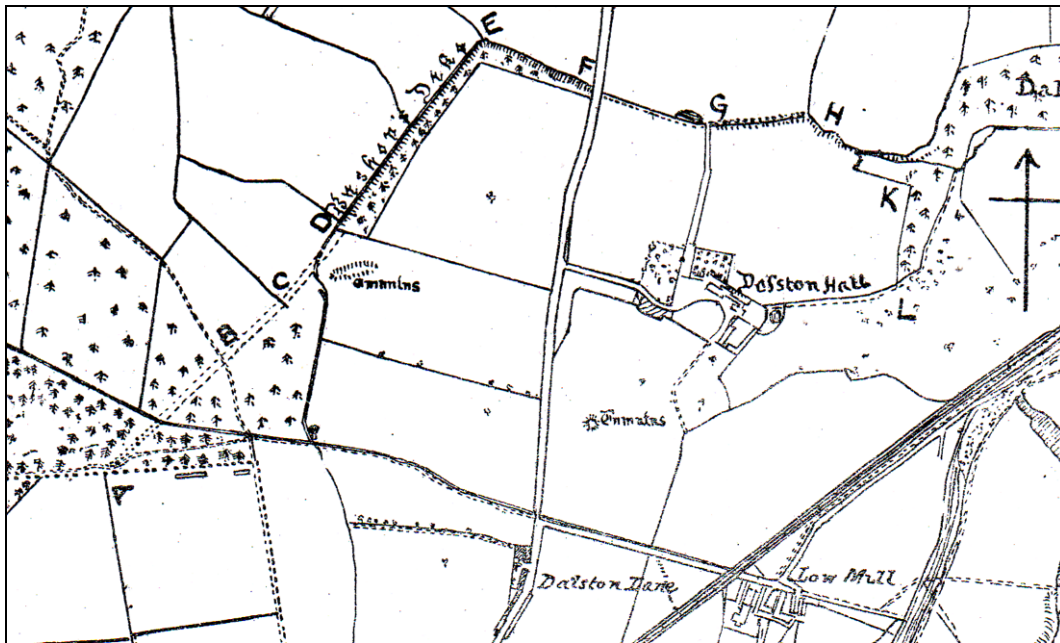


Figure 3. 1883 survey of Bishop's Dyke

The western limit of the monument loses definition southwards, marked as a parallel set of ditches before forming a massive mound flanked on either side by ditches before its resolution dissipates (see figure 3).

In 1936, W.T.McIntyre, suggested that the Dyke was the ancient boundary of the "town-field". Anglian settlements it is claimed were fenced "and marked off the community's land from the waste without".

In this case, McIntyre is postulating that the Dyke is a formal boundary between settlement and wilderness, a boundary that is not only physical but also embedded with psychological, religious or spiritual connotations; a boundary between the known safe world and the "mark", an area imbued with superstition and the unknown, that was to later become the dense medieval Forest of Inglewood.

This formal boundary may have been inaugurated during the medieval period, when following the annexation of Cumberland in 1092, the Norman barony of Dalston was granted to Robert de Vaulx. This appears to parallel a similar Dyke at Irthington, which divides the lands of the Barony of Gililand with those of the Bishop of Carlisle at Crosby-on-Eden.

The descendants took their name from the place as “de Dalston” only for their lands to be confiscated by David I of Scotland in 1135.

The recovery of the barony by Henry II in 1157 did not revert back to the de Dalston family but was kept as crown property as the Royal Forest of Inglewood. The dispossessed family could only retain the manor of Little Dalston, where they built their hall.

In 1189, the manor was given to a younger brother of the de Dalston family and was retained through many generations until 1761 when it was sold to Monkhouse Davison a London grocer who lived there until his death in 1793 (Bullock 1993, 24). In the Calendar of Patent Rolls held at the Public Record Office, Dalston is referred to as a park by 1295 (Cantor 1983, 20).

The Bishopric of Carlisle was founded in 1133 having been formerly part of the See of Durham in 1092 and York in 1101. The church of St Michael was an important living for the Bishops of Carlisle and the consequent ties between Dalston and Carlisle becoming inextricable to the point where Bishop Robert de Claury remains in Dalston between 1267 and 1277 (Smith 2005).

Following the granting of the manor of Dalston to Bishop Malclerk in 1230 by Henry III, the area became the seat of the Bishops of Carlisle and an ecclesiastical centre based at Rose Castle, approximately three miles southwards (McIntyre 1936).

Rose Castle mentioned in the itinerary of Bishop Vipont in 1256 was later founded in 1300 and comprised of an Edwardian crenellated, concentric castle. Between 1310 and 1356, the Scottish Wars made the area increasingly unstable, further impaired by the Cattle Plague and poor harvests between 1315 and 1320 and the Black Death during 1348-49.

The Scots laid waste to Dalston in 1337 and 1346 necessitating the suspension of taxes due to the crown. As a response to the lawlessness, fortified Pele towers were built at Dalston Hall and Rose Castle and Bishop’s Dyke may have formed an enhanced defensive fortification described as the *Fossa Episcopa* in order to prevent Scottish incursions from the north and west.

By 1423, the Court Rolls record that the Dyke needed to be repaired, whereupon it probably fell into decay or had a secondary function as a boundary for a deer park and the grounds of Dalston Hall

Possibly, Dalston Hall was the site of the earlier manor, the present building dating from the mid to late 15<sup>th</sup> Century (Dept of Environment 1984, 41) supposedly built by John Dalston (Curwen 1913, 366). This comprised of a late 15<sup>th</sup> Century Pele Tower (SMR 3776) with hall range and later additions (Perriam and Robinson 1998, 200-201).

The primary objectives of the Pele Tower were defence and shelter. The principal access was gained at first floor level that was used for eating, sleeping and cooking. The lower floor was the cellars and storage, whilst the upper floor was a sleeping chamber and the top floor a fighting deck (Bullock 1993, 25).

During the Civil War Sir George Dalston was forced to leave the house when occupied by Royalist troops under General David Leslie, Lord Newark.

### **Modern**

The Enclosure Awards of 1803 for Dalston parish probably left the study area unaffected as it was already parkland assigned to the Dalston Hall estate.

The arrival of the railway in 1846 into Dalston did not directly impact upon the study area.

In 1897 Edward Wright Stead, owner of calico printers Stead McAlpin bought the house and initiated great changes. He commissioned local architect C.J.Ferguson to remodel the frontage of the building in red sandstone, completed in 1899.

During the First World War, the Hall was requisitioned as a hospital for recovering troops. A number of isolated and now demolished outbuildings are probably associated with this facility.

In the latter part of the 20<sup>th</sup> century, the Hall was used as a youth training centre before entering its current incarnation as a country house hotel in 1971.

The building was listed on 19<sup>th</sup> September 1984 as a Grade II \* property. It is identified as List Entry No. 1087441 described below:

Fortified house now hotel. Mid or late C15, dated by inscription below parapet: JOHN DALLSTON ELSABET MI WYF MAD YS BYLDYNG. West wing c1556 for Sir John Dalston, with central block of c1620; late C17 alterations and further extensions, dated 1899 on lead rainwater heads, by C.J. Ferguson for E.W. Stead. Large blocks of red and calciferous sandstone. Flat lead roofs on towers; graduated green slate roofs on wings; ashlar chimney stacks. 3-storey C15 tower to right; 4-storey C16 tower to left, linked together by C16 wing with early C17 2-storey projecting entrance bay; flanked by late C19 wings and C19 extension to rear. Early tower has extremely thick walls on chamfered plinth with string courses and battlemented parapet. Angle stair turret projecting above parapet has 4 C15 carved shields of arms of the Kirkbride and Dalston families. 2-light stone mullioned windows in moulded surrounds under hood moulds. 3-light first floor window with rounded heads in round arch. Interior: stone vaulted basement, now library. Newel (central supporting pillar for a spiral staircase) for full 3 storeys to roof. Ground floor inner yett (gate or door) of iron is C15. Bedroom above has mural recess: former fireplace cut through to form bathroom. Wing to left has plank door in roll-moulded architrave. 2- and 3-light stone mullioned windows in roll-moulded architraves. Roll-moulded cornice has cannon-like water spouts. Battlemented tower to left with similar 2- and 3-light windows. Side wall to right has corbelled-out semi-circular stair turret from first floor to roof. C19 extensions have stone mullioned windows imitating the earlier work. C20 extension to extreme right is not of interest. Interior of C16 wing was extensively altered by C.J.

Ferguson in Arts and Crafts style; banqueting hall inglenook with firehood of pewter dated 1900 with initials E.W.S. (Edward Wright Stead). Ground floor room on extreme left has fireplace with William de Morgan tiles.

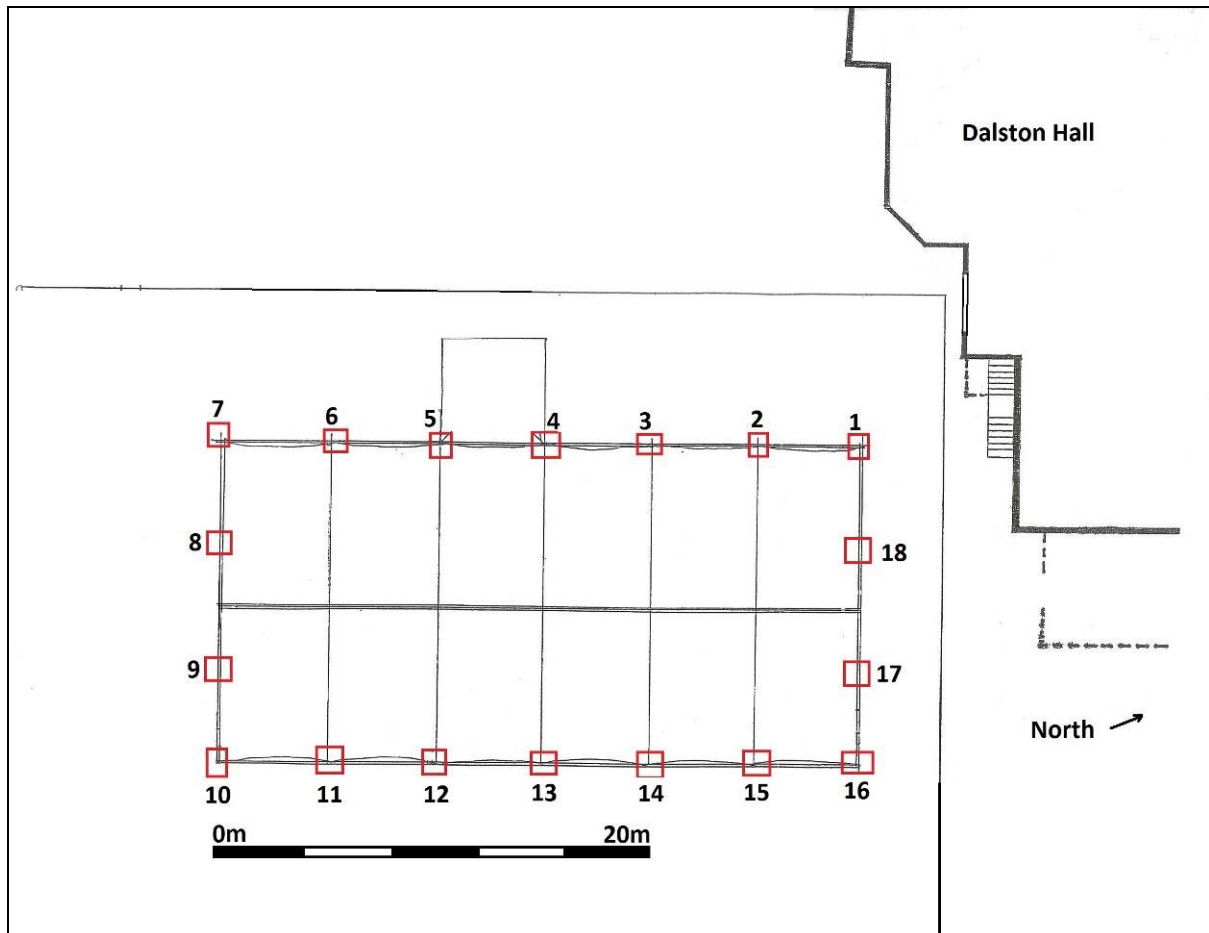


Figure 4. Location of study area with the three interventions

## 4. METHODOLOGY

### 4.1 Methodology

A Working Scheme of Investigation was presented by the archaeological contractor for approval by the curatorial authority Cumbria County Council Historic Environment Service (CCCHES) to monitor the excavation work comprising eighteen trenches (figure 3).

The WSI was approved by Cumbria County Council prior to the fieldwork commencing.

The objective of the watching brief investigation was to carry out a formal programme of archaeological observations and investigations during any operations on site that may disturb or damage archaeological or architecturally informative deposits or remains. The specific aims of the work were to:

- Provide a record of those works associated with the removal of the topsoil

- Provide a record of any significant archaeological or architectural features encountered by intrusive activities

In order to achieve these objectives, a record of all archaeological informative deposits encountered during the ground operations were made consisting of detailed context records on individual proforma sheets and field drawings, according to the protocols set out in the GMA manual.

The ground-works were undertaken by machine under archaeological supervision. This action consisted of observation of the displaced soil. Revealed sections were checked for any past cultural activity and if necessary recorded according to the protocols of the GMA manual.

## 5. RESULTS

### 5.1 The Interventions

The footprint for the development involved eighteen square trenches measuring 1.00m x 1.00m approximately 4.00m apart (figure 4).

The interventions were excavated by machine digger on Monday March 3<sup>rd</sup> 2014.

Visual inspection of the study area indicated that the southern part of the study area had been artificially raised with brick and clay debris (figure 5).



Figure 5. Raised ground level to the south



Figure 6. Bank clipped by the marquee footprint

The northern end had been covered with gravel and had in the past been reduced from its original ground level.

To the east, an artificial bank had been formed from the clay removed when the sunken front garden was established (figure 6).

The details of each trench are summarised in the following table.

Trench	Location	Depth	Description	Summary
1	NY 37691 51547	0.90m	0.20m modern gravel onto truncated natural	Modern drain present
2	NY 37687 51543	1.10m	0.30m modern gravel onto truncated natural	Sterile
3	NY 37685 51538	0.90m	0.50m modern gravel and brick rubble onto truncated natural	Sterile
4	NY 37683 51533	1.00m	0.70m of modern overburden with 0.30m of dark grey soil	Sterile
5	NY 37681 51527	1.00m	0.60m of modern overburden with 0.40m of dark grey soil	Sterile
6	NY 37679 51523	0.90m	0.90m of brick debris	Sterile
7	NY 37677 51518	1.00m	0.80m of modern overburden with 0.20m of dark grey soil	Sterile
8	NY 37682 51516	1.00m	0.80m of modern overburden with 0.20m of natural clay	Sterile
9	NY 37686 51513	0.90m	0.90m of modern overburden	Sterile
10	NY 37690 51512	0.80m	0.80m of modern overburden	Sterile
11	NY 37693 51516	0.90m	0.90m of modern overburden (re-deposited yellow-brown clay above dark grey topsoil)	Sterile
12	NY 37696 51520	1.00m	0.40m of re-deposited clay above grey garden soil	Sterile
13	NY 37697 51525	1.00m	0.60m of building debris above 0.40m of garden soil	Sterile
14	NY 37699 51530	1.00m	0.60m of building debris above 0.30m of natural clay. Slight dressing of topsoil above building debris	Sterile
15	NY 37701 51533	0.90m	0.30m of building debris above 0.60m of natural clay	Sterile
16	NY 37704 51537	0.90m	0.20m of overburden above 0.70m of natural clay	Sterile
17	NY 37704 51542	1.00m	0.30m of gravel overburden above 0.70m of natural clay	Sterile
18	NY 37695 51540	1.00m	0.30m of gravel overburden above 0.70m of natural clay	Sterile

Summary of each trench

The investigation proved that modern activity had removed any putative archaeological deposits.

Trenches 1 (figure 7), 2, 3, 14, 15, 16 17 and 18 revealed natural orange-brown clay above which modern gravel, building debris, re-deposited clay and a dressing of topsoil had been dumped. This action congregated towards the north of the study area

Trenches 5, 6, 7, 8, 9, 10, 11, 12 and 13 (figure 8) consisted of modern overburden that sealed a buried soil horizon. The southern part of the study area did not isolate natural drift geology.



Figure 7. Trench 1 with drain



Figure 8. Trench 13 showing overburden

## 5.2 Finds and ecofacts

No finds were present during the watching brief programme.

Due to the constricted nature of the trench and the lack of environmentally informative deposits, no environmental samples were taken.

## 5.3 Discussion

The building extension directly to the north (figure 4) was built *circa* 1897 as part of the improvements initiated by W.S.Stead. This action probably removed any putative archaeological deposits that may have extended into the study area.

Considerable landscaping has taken place in this area, primarily the disposal of clay from the sunken garden situated at the front of the house.

Most probably when Dalston Hall was used as a World War I hospital, brick debris from demolished outbuildings was used as hard core as a general levelling horizon.

The watching brief indicated that the study area was archaeologically sterile.

## 6. ACKNOWLEDGMENTS

I am grateful to Mr Jan Mayer for commissioning the project and for his assistance with the plans and development details that have undergone considerable change.

I would like to thank the staff of Carlisle Library with my research into the local history of the area and David Bowcock and his staff at Cumbria Record Office, Carlisle with the map regression and documentary material.

## 7. BIBLIOGRAPHY

- Andrews, G. Management of Archaeological Projects, English Heritage 2<sup>nd</sup> Edition 1991, London
- Bullock, P.J.Ed History of Dalston Parish, Dalston 1993
- Cantor, L. Medieval Parks of England, A Gazateer, Loughborough 1983
- Curwen, J.F. Castles and Towers of Cumberland and Westmorland, Kendal, 1913
- Dept of Environment List of Buildings of Special Architectural or Historical Interest, London, 1984
- Ferguson, R.S. *The Bishops, Dyke, Dalston*. Cumberland and Westmorland Trans Old Series Vol VII, Kendal 1883
- Hodgkinson, D. et al The Lowland Wetlands of Cumbria, Lancaster Imprints, Lancaster, 2000
- IFA Institute of Field Archaeologists' Standards & Guidance documents, Reading 2001.
- Martin, G.M.T. An Archaeological Evaluation in the Grounds of Dalston Hall, Dalston, GMA Ltd Report 19. Carlisle, 2007
- Martin, G.M.T. An Archaeological Evaluation in the Grounds of Dalston Hall, Dalston, GMA Ltd Report 62. Carlisle 2010
- McIntyre, W.T. Lakeland and the Border Country Vol 3, 1930-1939, Carlisle, undated
- Perriam, D.R. & Robinson, J. The Medieval Fortified Buildings of Cumbria, Kendal, 1998
- Popple, A. In "History of Dalston Parish", Dalston 1993
- Smith, D.M. English Episcopal Acta 30, Oxford, 2005
- Taylor, M.W. Old Manorial Halls of Cumberland and Westmorland, Kendal, 1892