

**LAND AT NISSAN,
WASHINGTON,
SUNDERLAND,
TYNE AND WEAR**



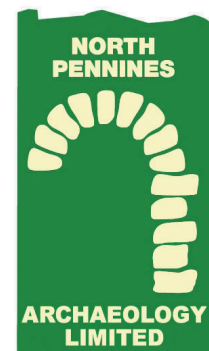
**ARCHAEOLOGICAL
DESK-BASED ASSESSMENT**

CP. No: 968/09

JUNE 2009

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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.

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SUMMARY

In June 2009, North Pennines Archaeology Limited were commissioned by MDA Consulting Ltd to undertake an archaeological desk-based assessment of a plot of land at Nissan, Washington, Sunderland (NZ 340 588), prior to the submission of a planning application for a sustainable manufacturing centre by Gateshead College.

The site lies within the former extent of RAF Usworth (later Sunderland Aerodrome) which was in use between 1916 and 1986, when the site was chosen as the location of the Nissan Car Factory.

An archaeological desk-based assessment was undertaken to assess the historical use of the plot of land north of the Nissan factory, prior to, during and following the creation of the airfield at Usworth. The assessment involved the consultation of historical mapping, and published and unpublished material housed at Tyne and Wear Archives, Sunderland City Library, as well as the study of aerial photographs and maps housed at the North East Aircraft Museum, Sunderland. The Historic Environment Record (HER) maintained by Tyne and Wear Conservation Team was also consulted for information on known historical and archaeological sites within the vicinity as well as the location of previous archaeological work.

The desk-based assessment has revealed that the proposed development area appears to have been undeveloped until the construction of the airfield at Usworth in 1916. The land appears to have been agricultural in character, despite industrial activity within close proximity (for example, the various railway branch lines, collieries and brick works).

Usworth Airfield started life in October 1916 as a Flight Station for 'B' Flight of 36 Squadron, and was initially known as Hylton or West Town Moor. By 1917, when it was used by 'A' Flight, it was starting to be known as Usworth. For most of its wartime career Usworth was a training station. Aerial photographs from 1934 show buildings at the airfield were located on the site of the proposed development area, with the main entrance situated in the approximate location of the present footpath. A map of 1945 shows the extent of the buildings on the site at that date; although these were mostly constructed of timber it is likely these structures sat on brick or concrete footings. An aerial photograph dating to 1941/1942 (Plate 3) shows two cropmarks located to the west of the proposed development area; it is not known if these relate to the airfield or are totally unrelated, but they may suggest earlier activity in close proximity to the airfield site.

The North-East Regional Research Framework '*Shared Visions*' notes that there are relatively few World War I remains in the north-east, though some can still be seen, for example Hartlepool Heugh Gun Battery and Robert's Battery at Hartley. The Research Agenda and Strategy in this publication notes that '*remains relating to the First World*

*War must be recorded, and that full recording is necessary of all 20th century military and defence remains where they are affected by development work*¹. It is clear from the desk-based assessment that the proposed development area was utilised from the early 20th century until the 1980s, as part of the former airfield. From aerial photographs taken in the 1930s and 1940s it is shown that this area was the location of an abundance of buildings relating to the former airfield. Of particular interest are the earliest which were in existence in 1934, located within the boundary of the proposed development area. It is unclear, however, how much of these buildings survive sub-surface, as many of the structures were timber, although presumably the footings will survive. It is also possible that the eastern side of the site, to the east of the present footpath, may have been affected by the construction of car parking and buildings relating to the Nissan plant, and by later landscaping. The western side of the site may provide more information on the buildings and features relating to the former airfield, as this does not appear to have been affected as much by later construction, although it is unclear as to how much landscaping was undertaken following the construction of the Nissan Car Factory.

Given the importance placed on First World War and 20th century military and defence remains, it is recommended that an archaeological evaluation be undertaken to examine the state of preservation of below ground remains, and record any remains uncovered relating to the former airfield.

¹ *Ibid*, Page 195

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North Pennines Archaeology Ltd would like to thank Mr Maurice Low of MDA Consulting Ltd for commissioning the project.

North Pennines Archaeology Ltd would also like to extend their thanks to Jennifer Morrison, Tyne and Wear Archaeology Officer; Sarah Allison, Sunderland City Council; staff at Tyne and Wear Archives Service, Newcastle and staff at the Local Studies section of Sunderland City Library. Special thanks are due to Bill Fulton of the North East Aircraft Museum, Old Washington Road, Sunderland, for his assistance and information relating to Usworth Airfield, and for allowing the reproduction of historical aerial photographs and mapping.

The archaeological desk-based assessment was undertaken by Fiona Wooler. The report was written by Fiona Wooler. The project was managed by Matt Town, Project Manager for NPA Ltd. The report was edited by Matt Town.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In June 2009, North Pennines Archaeology Limited were commissioned by MDA Consulting Ltd to undertake an archaeological desk-based assessment of a plot of land located to the north of the Nissan Factory, Washington, Sunderland (NZ 340 588), prior to the submission of a planning application for a proposed sustainable manufacturing centre by Gateshead College.
- 1.1.2 The land lies within the former extent of RAF Usworth (Sunderland Aerodrome) (HER 1824); consequently Jennifer Morrison, Tyne and Wear Archaeology Officer, had requested that an archaeological desk-based assessment was undertaken to appraise the likelihood that important archaeological deposits survive on the site, and assess the impact of those deposits by construction work associated with the proposed development².
- 1.1.3 The desk-based assessment comprised a search of historical mapping and published and unpublished records held by the Tyne and Wear Archives and Sunderland City Library, as well as the consultation of the Historic Environment Record (HER) maintained by Tyne and Wear Specialist Conservation Team. Online searches were also undertaken of the catalogues of Northumberland Museum and Archives, Woodhorn and Durham Record Office in order to identify any documents relevant to the proposed development area.
- 1.1.4 The principal aim of the desk-based assessment was to identify and characterise the archaeological constraints associated with the proposed development area, and to assess the archaeological and historical potential.

² Morrison, J, 2009

2 METHODOLOGY

2.1 INTRODUCTION

2.1.1 North Pennines Archaeology Ltd was commissioned by the client to undertake the desk-based assessment and site visit. All works was consistent with the relevant standard and procedures of the Institute for Archaeologists (IfA)³, and generally accepted best practice.

2.2 DESK-BASED ASSESSMENT

2.2.1 The study area consisted of a broad overall history of the locality, with an additional detailed c.500m radius area, centred on the proposed development area which was studied in more depth. The principal sources of information were the Historic Environment Record (HER), historical maps and secondary sources.

2.2.2 *Historic Environment Record (HER)*: the HER is maintained by the Tyne and Wear Specialist Conservation Team based at West Chapel, Jesmond Old Cemetery, Newcastle upon Tyne. The HER was consulted to obtain information on the location of all designated sites and areas of historic interest and any other, non-designated sites within the study area, which include monuments, findspots, listed buildings and conservation areas. A brief record including grid reference and description was obtained for the various sites within the study and was examined in depth.

2.2.3 *Tyne and Wear Archives Service (TWAS)*: the Tyne and Wear Archives Service housed at the Discovery Museum, Blandford Square, Newcastle upon Tyne, was consulted for information on the study area. In particular a search was made of the local history books and pamphlets held within their collections.

2.2.4 *Sunderland City Library Local Studies*: the local studies section of Sunderland City Library was consulted for historical mapping, historical photographs, published and unpublished material relating to the parishes of Hylton and Washington, and any information relating to the use of the site as an RAF base and later as Sunderland Aerodrome.

2.2.5 *Northumberland Museum and Archives, Woodhorn, Durham Record Office and Durham Mining Museum*: a search was undertaken of the online catalogues of these establishments in order to identify any documents relevant of the proposed development area.

³ IfA 2008

2.2.6 **Online Sources:** several websites were consulted as part of the desk-based assessment; these included *Structural Images of the North East* (<http://sine.ncl.ac.uk/index.asp>); *Pictures in Print* (www.dur.ac.uk/picturesinprint/) and *Beamish Collections* (<http://www.beamishcollections.com/default.asp>). An electronic enquiry was also made of English Heritage's National Monuments Record (<http://www.english-heritage.org.uk/server/show/nav.19915>) and the website of the Archaeology Data Service (<http://ads.ahds.ac.uk/>). This was in order to enhance and augment the data obtained from a search of the appropriate repositories.

2.2.7 **North Pennines Archaeology Ltd (NPAL):** various publications and unpublished reports on excavations and other archaeological work in the region are held within the North Pennines Archaeology Ltd library and any undeposited archives of the sites themselves were examined.

2.3 SITE VISIT

2.3.1 A site visit was undertaken to assess the nature and extent of any archaeological features within the proposed development area, and to assess any areas of the site where modern development may have had an effect on below ground remains.

2.4 THE ARCHIVE

2.4.1 North Pennines Archaeology and Tyne and Wear County Archaeologist 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 under the unique identifier **northpen-60829**.

3 LOCATION AND GEOLOGY

- 3.1 The city of Sunderland is located in the north-east of England, approximately 16km to the south-east of Newcastle upon Tyne and c.14km to the north-east of Durham. The town of Washington is situated approximately nine kilometres to the west of Sunderland, on the north side of the River Wear. The Nissan factory is located between Sunderland and Washington, on the west side of the A19 and to the north of the A1231 (Figure 1).
- 3.2 The land which is the subject of the present desk-based assessment is situated to the north of the Nissan factory, and to the south of the North East Aircraft Museum (Figure 2). The site is bounded by Old Washington Road to the north and the Nissan factory to the east and south, with the western side being modern roads and a roundabout providing access to the Nissan site. Along the north side of the site, separating the land from Old Washington Road, is a line of trees and foliage which hide the Nissan factory from the Three Horses Shoes public house and the North East Aircraft Museum. A pedestrian footpath runs from Old Washington Road to the Nissan site through the proposed development area. The site is located at a height of c.34m above mean sea level.
- 3.3 The topography of the area in and around Sunderland is determined by the geological structure. The strata found in the area are carboniferous coal measures and deposited Permian limestone overlay by glacial drift and alluvium. This limestone overlay rises in a more or less gentle slope under its blanket of glacial drift from the coast to a western escarpment about 500ft above sea level⁴.
- 3.4 The land around Sunderland has a long tradition of mixed farming, producing both grain and cattle for the monastic estates. The pattern of enclosure into large regular fields, however, is typical of late 17th and early 18th centuries. The monks were the first to exploit the rich mineral wealth of the area, beginning a long history of mining and quarrying. The quarrying of limestone expanded rapidly in the late 18th century, being used early on for agriculture and building lime, then for steel making and pharmaceuticals. The Carboniferous Coal Measures underlying the limestone, forming the concealed coalfield, yielded poor quality gas and coking coal, which was utilised for the expanding steel and engineering industries⁵.

⁴ Sunderland Borough Council, 1962, Page 8

⁵ Countryside Commission, 1998, Page 73

4 ASSESSMENT RESULTS

4.1 INTRODUCTION

4.1.1 The assessment results are based on primary documents, most notably maps, and on secondary sources which are referred to in Section 4.6 below. The Historic Environment Record (HER), a database of known historical and archaeological sites maintained by Tyne and Wear Specialist Conservation Team, was consulted in the first instance. Information on previous archaeological work within the vicinity and any relevant aerial photographs was also consulted at the HER. Cartographic sources and published and unpublished material relating to the locality were consulted at Sunderland City Library and Tyne and Wear Archives Service. Additional information in the form of aerial photographs and historical mapping was obtained from the North East Aircraft Museum.

4.2 HISTORIC ENVIRONMENT RECORD (HER)

4.2.1 **HER Sites:** there are 26 HER sites within a 1km radius of the proposed development area; these are listed in *Table 1* in *Appendix 1* and are shown on *Figure 3*. All of the HER sites are relatively modern, dating to the 19th and 20th centuries. They relate to three specific classes of site; defence, agriculture and subsistence and transport (railway). Of particular relevance to the proposed development area is the extent of the former airfield known as RAF Usworth (later known as Sunderland Aerodrome and Sunderland Airport) (HER No. 1824). Also located within close proximity to the proposed development area was the site of Washington Lane Cabin (a signal box or crossing control) on the NER Pontop and South Shields Branch (HER No. 2629) and a Picket Hamilton Fort (HER No. 5409), a circular sunken concrete pillbox which was one of several located around the former airfield.

4.2.2 **Listed Buildings:** there are only two listed buildings located within a 1km radius of the proposed development area. These are Hylton Castle and Hylton Castle Chapel, both dating to the medieval period (12th-15th century). Descriptions of both these buildings are given in *Table 2* in *Appendix 1*.

4.2.3 **Scheduled Ancient Monuments:** as well as being a listed building, Hylton Castle, located to the east of the proposed development area, is also a Scheduled Ancient Monument (SAM No. 32074). The SAM description is provided in *Table 3* in *Appendix 1*.

4.2.4 **Conservation Areas:** there are no conservation areas within a 1km radius of the proposed development area.

4.3 PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

- 4.3.1 In 2005, Archaeological Services University of Durham (ASUD) undertook an archaeological desk-based assessment and archaeological monitoring at Nissan Wind Farm (NZ 339 579, to the south of the Nissan factory). The desk-based assessment noted that although there was no direct evidence for prehistoric or Roman activity in the development area the presence of activity in the surrounding vicinity indicated that an as yet unidentified resource has the potential to exist. It was also noted that the use of the site as an airfield in the First and Second World Wars suggested that the site may have undergone significant landscaping to provide a level area for aircraft to land and take off⁶.
- 4.3.2 An archaeological desk-based assessment was undertaken by On Site Archaeology Ltd (OSA) of land at Nissan Factory Business Park (located between the Nissan factory and the A1231 to the south), Washington, in July 2007 . The work concluded that there was the possibility that buried remains were present on the site, which could date from any period between the early Bronze Age and the present day. It was noted that the remains may survive as features cut into the natural subsoil and would possibly be visible immediately below the topsoil and B-horizon. The top of the archaeology was suggested to be located between 0.2m and 0.5m below the present ground surface⁷.
- 4.3.3 A geophysical survey was undertaken by Met Surveys in April 2008 at Turbine Business Park, on land to the north of the A1231. The survey covered an area of approximately 20 hectares which at the time was rough pasture. The site had been in agricultural use for the past 20 years and although there were no known sites within the area, it was considered that there was the potential for buried archaeological remains to exist. The survey results revealed no features of archaeological significance, although modern services were noted to run across the site as evidence by manholes. The remains of ridge and furrow were detected in some parts of the site indicating the past agricultural use of the land, but their nature (narrow, closely spaced and straight) suggested they were of fairly modern origin⁸.
- 4.3.4 Following on from the geophysical survey undertaken by Met Surveys, On Site Archaeology (OSA) conducted an archaeological evaluation on the land at Turbine Park in August 2008. Features such as the ridge and furrow and areas of disturbed ground, highlighted by the geophysical results, were targeted with the evaluation trenches. The work concluded that despite the

⁶ ASUD, 2005

⁷ OSA, 2007

⁸ Met Surveys, 2008

sites apparently rural appearance, it was clear that the site had been heavily re-worked during the 20th century. For example, the central, western and northern parts of the site had been used to dispose unwanted waste material from building, which may have originated from the construction of the airfield, the test track or the nearby road. In all cases the method of dumping was the same; the topsoil was removed, the 'fill' material was dumped and then the topsoil was reinstated. The only feature potentially older than the 20th century was found in Trench 1 and consisted of a shallow linear feature containing small fragments of white-glazed pottery of 19th or 20th century date. Interestingly, the areas of ridge and furrow apparently revealed by the geophysical survey, and tested by Trenches 6, 8, 9 and 10, were not found. In the cases of Trenches 6 and 8 the presence of respectively c.0.70m thick and a 1.5m thick layer of dumped material would have prevented the detection of any preserved ridge and furrow⁹.

4.4 AERIAL PHOTOGRAPHS

- 4.4.1 Several repositories were consulted for any historical and modern aerial photographs which may have showed the proposed development area, and provide information on any features or buildings located on the site. The aerial photographs noted in publications and held within the HER have not been reproduced here due to copyright restrictions.
- 4.4.2 The North East Aircraft Museum, located immediately to the north of the Nissan factory, has three aerial photographs showing the site in the 1930s and 1940s; these have been reproduced here with kind permission of the museum. Plate 1 is an aerial photograph dated 24th May 1934 and shows part of the airfield as seen from the south. A main entrance is visible in the centre of the photograph, located to the south side of what is now known as Old Washington Road, and with Hylton Lane running northwards, with the Three Horse Shoes Public House on the corner of the two roads. The modern footpath which dissects the present proposed development area appears to follow the line of the main entrance road into the airfield. What appear to be mainly timber buildings are located on both sides of the main entrance, and therefore on what is the proposed development area. Airplanes are visible to the south, parked on grassland, with a large hangar to the left of photograph. At this date, airplanes took off and landed on grass, with concrete used for vehicles and parking. To the north side of Old Washington Road, further buildings are shown in the location of the present North East Aircraft Museum.

⁹ OSA, 2008

- 4.4.3 Plate 2 is undated but appears to have been taken at the same time as Plate 1, and therefore dates to 1934. It shows the north side of the airfield as seen from the south-west with the large hangar dominating the site. The Three Horse Shoes Public House is visible in the centre of the photograph, with a row of housing on Hylton Lane and the railway track to the left.
- 4.4.4 By 1941/1942, when the photograph reproduced as Plate 3 was taken, more substantial landing strips appear to have been laid out in concrete. This photograph clearly shows the road around the perimeter of the airfield with E-shaped parking bays for aircraft and Hurricanes visible parked on the grass. To the left of photograph, Old Washington Road is shown with buildings forming part of the airfield to the south side, and further structures to the north. Interestingly this photograph shows two clear cropmarks located to the west of the airfield (this view is looking north-east); a rectangular feature which straddles the road, and part of a circular feature in a field shown in the foreground. Neither of these cropmarks appear to be recorded on the HER, and their date and function are unknown.
- 4.4.5 In the HER file for RAF Usworth (HER No. 1824) there is vertical aerial photograph dating to 1954 which clearly shows the airfield (not reproduced here due to potential copyright issues). Two landing strips are visible, one orientated north-south, and the other north-east to south-west. Buildings relating to the airfield are visible to the north side of the air strips, on both sides of the road, with the railway to the west. On the west side of the railway line, in a field, there are several rows of what appear to be circular features which are recorded in the HER as aircraft obstructions, presumably used to prevent aircraft landing in this location. This aerial photograph shows that in the 1950s the proposed development area was still occupied by buildings, although it is difficult to assess if these were timber or more substantial brick-built structures.
- 4.4.6 In the publication *Images of Wearside*¹⁰ an undated oblique aerial photograph is included showing the airfield as seen from the south-west. The two landing strips are clearly visible, as is the distinctive Lamella hangar. Buildings still appear to be extant on part of the proposed development area (the east side of the main entrance road now the line of the footpath), although the majority of the structures relating to the former RAF base have been demolished, and the site appears to be more civilian than military in character. To the east of the airfield the housing estates of Town End Farm and Castletown are visible, as is the line of the A19. This photograph obviously pre-dates the Nissan factory which opened in 1986¹¹, but was taken after the construction of housing on the east side of the A19. It is noted

¹⁰ Boyle, M, 1994

¹¹ Brett, A, 1997, Page 32

in *Sunderland – River, Town and People* that the housing estates to the north of Sunderland, from Hylton Red House in the north to Pennywell and Farringdon in the south, were constructed between 1951 and 1959¹², consequently this aerial view must have been taken at some point in the 1960s or 1970s.

- 4.4.7 A closer view of the Lamella hangar and the small airplanes parked at the airfield in 1978 is included in the publication *Actions Stations*¹³. This photograph appears to show the locations of buildings similar to those noted in 4.4.6 above, suggesting that the undated photograph referred to above may date to the same period. Buildings on the east side of the main entranceway, and consequently on the site of part of the proposed development area, are clearly visible in this photograph although the view is from too far away to note what these buildings were constructed of.
- 4.4.8 An undated aerial view of the Nissan factory, as seen from the north, is included in *Wearside in Focus*¹⁴. This photograph shows the North East Aircraft Museum, located on the opposite side of Old Washington Road to the proposed development area, and the expanse of the Nissan factory to the south. The buildings visible at the aircraft museum appear to resemble those shown on the 1990 Ordnance Survey map (see Figure 12); therefore it is possible this aerial photograph dates to this period. What is particularly interesting about this view is that the eastern part of the proposed development area, the piece of land between the modern footpath and the Nissan car park, was used as car parking with some buildings visible to the northern boundary. Along the line of what was the former main entrance road into the airfield (now the footpath) is what appears to be a linear building, which terminated at the road which now forms the southern boundary of the proposed development area.

¹² Milburn, G.E and Miller, S.T (Eds), 1988, Page 199

¹³ Smith, D.J, 1983, Page 216

¹⁴ Hardy, C, 1990

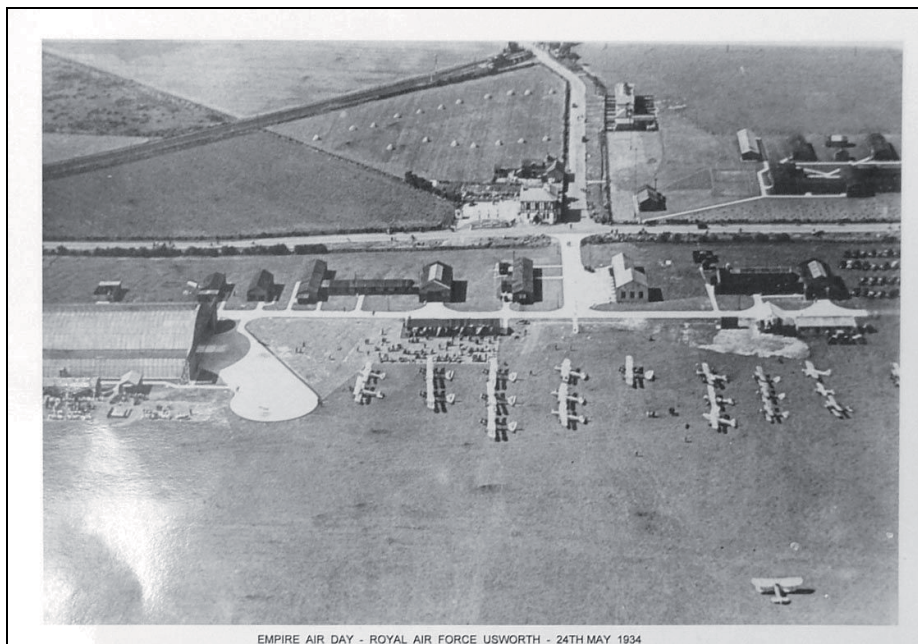


Plate 1: Aerial photograph dated 24th May 1934 showing the airfield as seen from the south (Reproduced by kind permission of the North East Aircraft Museum)

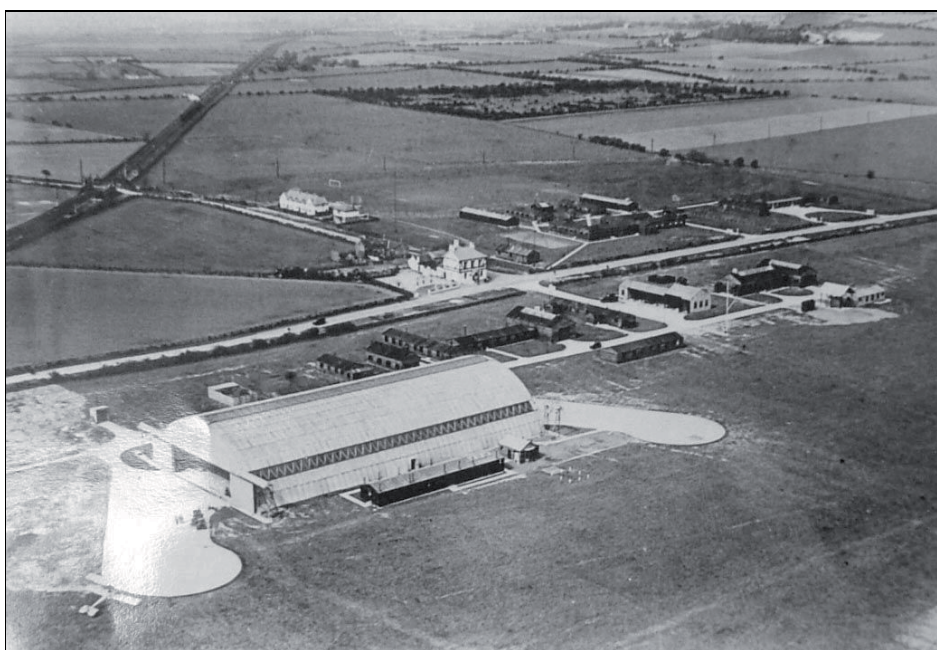


Plate 2: Aerial photograph c.1934 showing the airfield as seen from the south-west (Reproduced by kind permission of the North East Aircraft Museum)



Plate 3: *View of the airfield taken 1941/1942 showing the landing strips and the perimeter road. Note the two cropmarks to the left foreground of photograph (Reproduced by kind permission of the North East Aircraft Museum)*

4.5 CARTOGRAPHIC SOURCES

- 4.5.1 A search of historical maps showing the proposed development area and the wider landscape were consulted at Sunderland City Library. Particular attention was paid to the early Ordnance Survey maps which record the topography of the land in detail. Some earlier maps were observed; although these do not provide a great deal of information about a particular area, they can show the location of isolated farmstead, roads and waterways.
- 4.5.2 The earliest map consulted as part of this desk-based assessment was John Speed's map of the *'Bishopric and Citie of Durham'* 1610. The reproduction of this map, included here as Figure 4, only shows the locations of notable buildings, such as churches or castles, and major waterways, however it is useful to indicate the locations of settlements in the early 17th century. Speed's Map includes a vignette of a property annotated *'Hilton Castle'* which shows the building surrounded by a circular fence line. Vignettes of churches appear to be shown at places such as *'Ford'*, *'Ufferton'* [Offerton], *'West Bedik'* [Biddick] *'Washinton'* and *'Little Usworth'* (Figure 4).
- 4.5.3 Dawson's Map of Sunderland, Bishopwearmouth and Monkwearmouth dates to 1832 and is included here as Figure 5 as it shows the location of roads and farmsteads in the vicinity of the proposed development area. The area which would later become Usworth airfield is shown to have been in Hylton Township in the parish of Monkwearmouth. The line of the road, part of which remains as Old Washington Road, which divided North Camp from South Camp (see Figure 9) is shown with Cow Stand farm to the south and West Moor to the north side. Hylton Bridge is labelled to the north with what appears to be a section of rail track heading eastwards, possibly relating to a colliery. Other farmsteads which were in existence at this date include South Moor and Red House. A small drawing of a windmill is shown to the north of Hilton Castle. The road to the east of Cow Stand, which is orientated north-south, is shown on later mapping as *'Ferryboat Lane'* indicating that it lead to a river crossing over the Wear to the south (Figure 5).
- 4.5.4 The earliest mapping consulted which shows the proposed development area in detail is the First Edition Ordnance Survey dating to the 1850s. Unfortunately there was no relevant sheet in the 6" to 1 mile edition at Sunderland City Library, however the more detailed 25" version dating to 1856 shows that at this date the land which would become Usworth airfield was agricultural in character, with regular fields forming the landscape. The Three Horse Shoes (PH) is shown in the same location as the present building, with Hylton Depot (Manure) and Hylton Lane Cabin to the north beside the railway line. The farmstead known as Cow Stand is shown as a U-shaped plan to the east. A footpath is visible orientated north south in

approximately the same location as the modern path which dissects the proposed development area (Figure 6).

- 4.5.5 The Second Edition Ordnance Survey map (6" scale) dating to 1898 provides clearer information on the land around the proposed development area at the end of the 19th century. To the north of the Three Horse Shoes PH a 'Smithy' is annotated, with Hylton Depot and Hylton Level Crossing shown to the north on the NER Pontop and South Shields Branch railway. The Hylton, Southwick and Monkwearmouth branch line is visible to the south of South Moor farmstead. To the east of Cow Stand is Ferryboat Lane. The proposed development area remains agricultural in character (Figure 7).
- 4.5.6 By the publication of the Third Edition Ordnance Survey map dating to 1921, very little appears to have changed as far as the character of the land is concerned, with the area still apparently remaining agricultural. It must be noted, however, that by this date the construction of the airfield which would later be known as RAF Usworth had already commenced (see 4.6.18 below), and the omission of this from the Ordnance Survey map would presumably be to protect the site from enemy attention. Despite this map not showing the extent of the airfield at this date, very little has changed apart from the creation of East Plantation and Wilson's Plantation to the south (Figure 8).
- 4.5.7 The only map to show the extent of Usworth at any point when it was operational is housed at the North East Aircraft Museum, and has been reproduced here as Figures 9 and 10. Figure 9 shows the extent of the airfield in 1945, being bounded by Ferryboat Lane to the east, the by this date disused 'Old LNER Branch' to the south, the LNER Pontop South Shields Branch railway to the west, and the road to the north which separated South Camp from North Camp (part of which is occupied by the present North East Aircraft Museum). Figure 10 is a more detailed extract from the 1945 map showing the extent of the buildings which previously occupied the proposed development area. The map is accompanied by a list of the various buildings, each of which have been allocated a number, and the list also notes what the buildings were made from, which is particularly useful information should any archaeological work be undertaken on the site. A selection of the various buildings is listed here to provide an indication of the types and uses of structures which were formerly located on the proposed development area:

No on Plan	Description	Construction material
23 (yellow building)	Lamella Hangar, WT Workshop	Steel and corrugated iron
133 (yellow building)	Callender hangar	Steel and corrugated iron
15	Workshops (130' x 60')	Timber
16	MT (motor transport) sheds and office	Timber
17	Station Offices (95' x 20')	Timber
18	Main Stores	Timber
26	Armoury (88' x 20')	Timber
27	Flagstaff	Timber
28	Technical Latrine	Timber
29	Petrol and Oil Store	Timber
33	Air Raid Shelter	Timber and corrugated iron
42	Drill Hall	Steel and temporary brick
84	MT Sheds 4 large bays (40' x 28')	Timber
87	Fire Tender Garage (25' x 10')	Timber
97	Fuel Compounds	Sleepers
106	Operations Room	Timber
116	Lecture Rom (formerly Link Trainer)	Timber
117	Instructional Building (130' x 28')	Temporary brick
117A	4 NO Offices for Intelligence Staff (40' x 13')	Temporary brick
150	Air Raid Shelter	Permanent brick
155	Air Raid Shelter	Concrete
171	Dispersal Pen for Fighter Aircraft, 175' x 62' Blenheim	

As can be seen from this selection, a majority of the buildings on the site were constructed of timber, although it is likely these were set on brick or concrete footings. A full list of the buildings and the construction materials has been obtained should any future archaeological work uncover the remains of any of the buildings, and allow for easier interpretation.

- 4.5.8 The 1951 Provisional Edition Ordnance Survey does not show any detail regarding the Usworth airfield, as already noted on the 1921 version. There appears to have been very little change in the character of the landscape as far as the roads, farms and railways are concerned, apart from the Hylton Southwick and Monkwearmouth Branch line is now labeled 'Dismantled Railway'. Several field boundaries, however, have been omitted in the area occupied by the airfield, and this is the only subtle clue to the airfields existence at this date (Figure 11).
- 4.5.9 By 1990, the buildings and features associated with the Nissan factory are clearly shown occupying the site of the former airfield, with Cow Stand and South Moor farms now no longer extant. The A19 has been constructed to the east of the site, and housing is located to the eastern side of this road. The line of the former Pontop and South Shields Branch Railway is now a road which cuts through Washington Road and Hylton Lane. The aircraft museum is shown on the north side of Washington Road. The proposed development area is shown as undeveloped at this date, with what appears to be car parking immediately to the east (Figure 12).

4.6 PUBLISHED AND UNPUBLISHED SOURCES

- 4.6.1 This historical background is compiled mostly from secondary sources, and is intended as a brief summary of historical developments around the study area.
- 4.6.2 The place name *Sunderland* is believed to have derived from the Old English¹⁵ *Sunder-land*, meaning land set apart for some special purpose, or private land. Plummer suggests that when Bede says he was born *in territorio* of the monastery of Wearmouth and Jarrow, he was really referring to Sunderland by the sea. Hylton is believed to mean 'hill farm' and Usworth from the Old English 'burn by Osa's road'¹⁶.
- 4.6.3 **Prehistoric Period (pre c.AD 43):** the evidence for human settlement and activity in the area around Hylton comes largely from findspots. In 1910 a dug-out canoe was presented to Sunderland Museum by the River Wear Commissioners. The canoe was found in the bed of the River Wear at Hylton in approximately 1885, although an Ordnance Survey map says the date was 1888 and gives the grid reference of the find as NZ 344 567. A second similar canoe was already known to Sunderland Museum as they had in their collection a photograph showing a fragmentary example. This canoe was believed to have been dredged from the River Wear between Hylton Dene and Southwick. The two canoes are suggested to have dated to the late

¹⁵ Old English – The language spoken by the Anglo-Saxons from the 6th to the 12th centuries

¹⁶ Mawer, A, 1920, Pages 122, 192 and 204

Bronze Age or the Iron Age. Their findspots close to a ford across the Wear may be relevant, as the crossing at Hylton is known to have been fordable from the medieval period; the place name Ford is recorded in 1361. Other prehistoric finds within the locality include a bronze socketed axe from the Wear at Hylton and two late Bronze Age swords from the Wear at Ford. The axe and two swords (which are of the Park Ewart type) are considered to be c.900-700BC¹⁷.

- 4.6.4 In the publication *The Prehistory of Tyne and Wear*, Miket provides more information on prehistoric finds in the area around Hylton¹⁸. He refers to the bronze swords already noted as being found at grid references NZ 351 570 and c.NZ 355 574, and the socketed bronze axe head as being found at NZ 3557. A perforated stone axe head was recovered at North Hylton (NZ 3558), and a gritstone adze from Hylton Castle (NZ3558), which was found on the brow of a hill in entrenchments made during World War I. Also found at Hylton Castle were worked flints (NZ 3558).
- 4.6.5 In the wider landscape, prehistoric activity is evidenced by Bronze Age burials at Humbleton Hill and Hastings Hill, and Mesolithic and Neolithic flints and arrowheads have been found at Grindon, all on the south side the River Wear. Mesolithic to late Bronze/early Iron Age occupation have been discovered at Bishopwearmouth, also on the south side of the Wear, and prehistoric burials and enclosures are known at Fulwell and Carley Hill on the north side of the river, and to the east of Hylton¹⁹.
- 4.6.6 No prehistoric activity located close to the proposed development area was noted within the consulted published and unpublished material. The Archaeological Data Service, however, contains an entry in its online catalogue for a possible prehistoric or Roman rectilinear site within an oval enclosure at grid reference NZ 333 90, to the north-west of Usworth airfield, between the Three Horse Shoes and North Moor Farm²⁰. This does not appear to be the cropmark noted on the aerial photograph of 1941/42 (Plate 3).
- 4.6.7 **Romano-British Period (c.AD 43-400):** the main evidence for occupation of the area around Sunderland during this period is in the form of burials and coins. In 1759 a cist containing a large skeleton was uncovered at Fulwell during limestone quarrying. Two coins dating from the beginning of the 3rd century were found close by. To the north, near the Carley Hill quarry, a bronze figurine of Jupiter Dolichenus, a Romano-British god, was discovered

¹⁷ Whitcomb, N.R, 1968, Pages 297-301

¹⁸ Miket, R, 1984, Pages 61-63

¹⁹ Meikle, M and Newman, C.M, 2007, Pages 8-9

²⁰ <http://ads.ahds.ac.uk/catalogue/search> ADS Record ID - NMR_NATINV-762286 (Accessed 16/6/09)

in 1820. In 1971 the hill also yielded two Roman coins dating from the 2nd to the 3rd centuries. To the west at Southwick quarry, pieces of Roman pottery, including the remains of a late 4th century cooling pot were found in 1927. Coins from the period have also been found at and around Hylton, as well as a possible Roman milestone inscribed with a dedication to the Emperor Gordian (AD 238-44) found in the Wear and recorded by the prominent antiquarian, Robert Surtees, although its exact find spot is unknown²¹.

- 4.6.8 In 1883-84 the Reverend Dr Hooppell put forward evidence for a Roman bridge at Hylton. In a number of papers to the Newcastle Antiquarian Society he cited the testimony of a Mr Lister who was in charge of a shipyard at North Hylton. In the mid-1860s Mr Lister had seen '*tons of worked stone*' taken out of the river near the ferry crossing. These were removed by the River Wear Commissioners for harbour improvements. The stones were set in an oak framework along with large quantities of lead. Local people called these the 'Brig Stones'. One of the stones is believed to have carried the inscription IM_ _D_ _AUG which Dr Hooppell gave as evidence for a bridge dating to around AD81²².
- 4.6.9 A hoard of Roman coins were found at Washington Station in 1939. The hoard contained 59 coins including one minted during the reign of Emperor Constantine²³ [possibly 4th century? – date not given]. There is no evidence as yet for activity during this period in close proximity to the proposed development area although the cropmarks already referred to may date to this period. It has been mentioned by Mr Fulton at the North East Aircraft Museum, that '*Roman remains*' were found during preparatory work for the construction of the Nissan plant on the former airfield. No written confirmation of this has, however, been found during the desk-based assessment.
- 4.6.10 ***Early Medieval Period (c.AD 400-1066)***: the only evidence for activity or settlement during this period comes from place names, as already referred to in 4.6.2 above. What is now known as Tyne and Wear was certainly an important area during this period as show by early Christian sites such as Jarrow (HER 1227), Tynemouth (HER 124-9) and Monkwearmouth which was founded by Bishop Biscop in 674AD (HER 87). There is no evidence of activity during this period in close proximity to the proposed development area, although as with earlier periods this does not mean a total absence of settlement or land use.

²¹ Meikle, M and Newman, C.M, 2007, Page 15

²² Brett, A, 1997, Page 46

²³ Bennett, C, 1967, Page 3

- 4.6.11 **Medieval Period (c.AD 1066-1485):** although, like the rest of Monkwearmouth parish, Hylton had presumably been part of the lands of the Anglian monastery, after the Norman Conquest it did not pass with the other townships to the priory's monastic cell. From the 12th century, and perhaps earlier, the manor and township of Hylton belonged to the Hilton family who took their name from the estate. There is evidence that there was a mill at Hylton by the late 12th century, although its precise location is unknown. If it was a watermill it may have stood at Hylton Dene. In later centuries a windmill was sited to the north of the castle²⁴ (a windmill is visible on Dawson's map of 1832 to the north of Hylton Castle, see Figure 5).
- 4.6.12 Hylton Castle, located to the east of the proposed development area and now surrounded by housing, was built by Sir William Hylton as a gatehouse style fortified manor house. Although no construction records survive, the style of the architecture and coats of arms on the west front mean that it dates to the 1390s or the first decade of the 1400s. Other buildings may have existed on the site at this time, as the inventory taken on Sir William's death in 1435 mentions a hall, four chambers, two barns, a kitchen and the chapel in addition to the castle. Early in the 18th century, Baron John Hylton made the first major alterations. He completely redesigned the interior and inserted large windows in the fashionable Italianate style. His son, John, made even greater alterations. He built a south wing and added crenellations to both wings. When he died in 1746, the Hyltons sold the castle, as there was no male heir to inherit it. Successive owners failed to maintain it, and in 1863 it was bought by William Briggs, who knocked down the north and south wings, gutted the interior and added new windows²⁵.
- 4.6.13 The chapel at Hylton Castle, dedicated to St Catherine, is known to have existed on the site since 1157, when it was likely that Hylton Castle was a wooden building. Nothing remains of the first chapel and the ruins seen today date from the early 15th century²⁶.
- 4.6.14 There was no evidence of medieval activity in the vicinity of the proposed development area from published and unpublished sources consulted. It is possible that the land may have been on the edges of Hylton Castle estate, and may have been waste, common or agricultural in nature.
- 4.6.15 **Post-Medieval Period (c.AD 1485-1900):** Hylton Castle was the site of skirmishes during the Civil War in the middle of the 17th century. Corfe

²⁴ Meikle, M and Newman, C.M, 2007, Pages 52 - 53

²⁵ Sunderland City Council, Undated, Local Studies Centre Fact Sheet No. 8

²⁶ *Ibid*

noted that these skirmishes took place on high ground to the north of the castle in 1644²⁷.

4.6.16 Industries along the Wear appear to have been well established by the early 19th century. Parson and White refer to industry at Southwick (1¼ miles north-west of Sunderland and to the east of Hylton) on the north bank of the river, which included several shipyards, lime-kilns and earthenware and glass manufactories. The trade directory in Parson and White lists the trades in the township of Hylton in 1828, these appear to be more agricultural in nature rather than industrial, apart from Auston Dixon & Co, earthenware manufacturers at Hylton Ferry and Robert Reay, shipbuilder and timber merchant at the same location. Farms such as Cow Stand (occupied by Marmaduke Robinson), West Moor (Thomas Reed) and South Moor (George and James Curry), all previously located within close proximity to the proposed development area, were all in existence at this date. The Three Horse Shoes is listed as occupied by John Merriman, victualler and blacksmith, at 'Road Stone' in Hylton township; this may be an earlier name for the site although it is not shown on later mapping²⁸. North Hylton appears to have been more industrial than the rest of the township, no doubt due to its proximity to the river. Brett refers to industries such as iron ore (on land close to the ship building yards); charcoal; lamp black; grindstones and whetstones (North Hylton had quarries that yielded grindstones in the 17th and 18th centuries) which were exported all around the world; sandstone quarried from sites such as Wood House at North Hylton; tar; a pottery had been established at North Hylton in 1762 by the Maling family. The Malings had been Huguenot refugees who settle in Scarborough before moving to Sunderland. Rich clay beds and the riverside location for east of transport on the Wood House estate made it an ideal site for a pottery. The outbreak of the Crimean War in 1854 signaled an upturn in industry in North Hylton. The old pottery building was turned into a forge and iron works and shipbuilding yards sprang up on vacant lots on the riverside²⁹.

4.6.17 Writing in 1967, Bennett refers to the 'Blackwood' located beside Usworth Aerodrome, as providing some idea of what the countryside was like in the area before any clearance was undertaken, although the exact location of the 'Blackwood' does not appear to be shown on any historical mapping. He noted that the land between Biddick Forest and the Three Horse Shoes was drained in 1820. Oak was mainly grown in Biddick Forest, and for centuries

²⁷ Corfe, T, 1973, Pages 46-47

²⁸ Parson, W and White, W, 1828, Page 179

²⁹ Brett, A, 1997, Page 50

it was exported from Sunderland port, providing a considerable trade in hardwood as well as coal³⁰.

- 4.6.18 With reference to Hylton Colliery (or Castletown Colliery), Brett noted that the Wearmouth Coal Company bought the Wear Steel Works, 36 acres of land and 190 workmen's cottages for £37 000. The company began work on sinking the first shaft in March 1897. In October 1900 the mine was still being developed but was still producing 500 tons of coal a day. Output almost doubled when Hylton was at its peak and the workforce topped the 1000 mark. In 1907 the coal company bought the whole of the 2000 acres Hylton Castle Estate including the castle. As they already owned the coal rights the purchase was made as an investment³¹. In the late 1970s Hylton was one of a number of small Durham collieries which ceased mining coal, the pit finally closed in July 1979³². The colliery at Hylton (located approximately 2km to the south-east of the proposed development area) was not the only colliery site in the area; Usworth Colliery is shown on the Ordnance Survey map of 1921 (HER No. 365) and a colliery also existed at Boldon to the north which opened in 1862 and closed in 1982 (HER No. 2567). There does not appear to have been any collieries within close proximity to the proposed development area.
- 4.6.19 The mining of coal was greatly aided by the railways. The colliery at Usworth (NZ 315 584) was served by sidings alongside what became the North Eastern Railway line from Washington to Pelaw, ½ mile north of Usworth Station. Prior to the first locomotives, trucks on these sidings were almost certainly shunted by horses³³. The Pontop and South Shields Branch of the North Eastern Railway was originally the Stanhope and Tyne Railway which opened in 1834 as the first public railway on Tyneside. It carried minerals from County Durham to the Tyne and passengers from South Shields to the Durham Turnpike (HER No. 2290). The Hylton, Southwick and Monkwearmouth Railway was formed in 1871 to develop industry on the north bank of the Tyne. It opened in 1876 between the NER line at Monkwearmouth and the NER's Tyne Dock-Consett line at Southwick Junction, although the latter connection was removed shortly after³⁴. Both the Pontop and South Shields Branch of the NER and the Hylton, Southwick and Monkwearmouth branch line are located to the west and the south of the proposed development site respectively. There was no evidence that any railway lines or associated features crossed the proposed development area.

³⁰ Bennett, C, 1967, Page 5

³¹ Brett, A, 1997, 61

³² Durham Mining Museum <http://www.dmm.org.uk/colliery/h013> (Accessed 16/6/2009)

³³ Mountford, C.E and Holroyde, D, 2006, Page 407

³⁴ <http://ads.ahds.ac.uk/catalogue/search> ADS Record ID - NMR_NATINV-1375854 (Accessed 16/6/09)

- 4.6.20 **Modern (1900-Present):** the industrial nature of the area around Sunderland, such as shipbuilding and coal mining, meant that the town and its hinterland were obvious German targets during the First World War. In April 1916, for example, a Zeppelin passed over Seaham harbour and crossed over the colliery villages towards Washington. Fourteen explosive bombs and seven incendiary bombs were dropped within five minutes. The first bomb in Sunderland landed in a yard in Peacock Street. The Zeppelin then made its way towards Monkwearmouth goods yard, hitting North Bridge Street, the tramway sheds and the Workmen's Hall (Calvert Street). The greatest amount of damage was done to Fern Street, North Bridge Street and Victor Street³⁵.
- 4.6.21 As a consequence of Zeppelin raids on the area around Sunderland, an airfield was created outside the town in October 1916 as a Station for 'B' Flight of No. 36 Squadron. It was originally known as Hylton, although when it was being prepared it was known as West Town Moor. Due to the increase in German bombing, the Royal Flying Corps undertook the task of Home Defence, setting up a number of squadrons, with flights spread over the length of the British coastline. The north-east was protected by No. 36 Home Defence Squadron, which was formed by Capt. R O Abercromby at Cramlington in February 1916. No. 36 Home Defence Squadron defended the coast between Whitby and Newcastle. The main base was at Cramlington, to the north of Newcastle, with flights being attached to Seaton Carew and Ashington, as well as Hylton. By August 1918 Hylton was in use by 'A' Flight and continued as such until the Armistice, when it was just beginning to become known as Usworth³⁶.
- 4.6.22 Following the end of the First World War, Usworth airfield reverted to non-flying use, as was the case with many First World War aerodromes. Usworth languished unused for over a decade, apart from at least one visit by Alan Cobham's Flying Circus, until it was re-activated on March 17th 1930. From this period, the flying field was located to the south side of the road between Washington and Sunderland, and ancillary buildings were located to the north. The airfield was designed to accommodate one squadron of the recently expanded Royal Auxiliary Air Force, No. 607 (County of Durham) Squadron. North Camp was provided with living quarters and dining facilities for Officers, NCOs and airmen. It was initially proposed to erect canvas Besoneaux Hangars on the South Camp, however these were rejected in favour of the erection of a large Lamella Hangar. The South Camp also housed the Squadron Office, pilot huts, armoury, photographic hut and bombing training aids. The firing butts were alongside the railway. On May

³⁵ Thyme, M, 2000, Page 26

³⁶ <http://www.neam.co.uk/usworth.html> - Accessed 10/6/2009

24th 1934, the airfield was opened to the public on Empire Air Day; this attracted 1300 visitors with an estimated 5000 other spectators watching the flying displays from outside the airfield. Proceeds from the Empire Air Day went to the RAF Benevolent Fund. The aerial photograph reproduced as Plate 1 shows the airfield on Empire Air Day 1934. The Empire Air Day in 1937, as well as having flying demonstrations and aerobatics, also included the erection of a dummy fort near the southern perimeter of the airfield, which was the subject of 'attacks' by the Hinds of 103 Squadron with the Demons of No. 607 Squadron 'defending'³⁷.

4.6.23 Flying at Usworth was never very easy for the pilots, as the weather conditions in the north-east could be extremely bad and industrial haze and smoke were significant hazards. The pilots had little in the way of radio aids and flew by dead reckoning, map reading and '*by the seat of their pants*'³⁸.

4.6.24 In September 1939 work commenced on the laying of two concrete runways, as well as the expansion of the airfield to the south, east and west by taking in adjoining fields. The new 2800 feet (c.900m) long runway was laid north-west to south-east, with another of similar length on a north-south heading. A new perimeter track was laid out along the airfield boundary with eight dispersal pens, each capable of holding a twin-engined aircraft. There were also 34 hard standings for single-engined fighters. Three of the older Callender Hangers were dismantled, leaving the Lamella and a single Callender hangar opposite the main gate (shown as No's 23 and 133 on Figure 10). Additional buildings were constructed between the airfield and the road. An Operations Room was built near the Lamella hangar; this was later supplemented by an underground Battle Headquarters near the Cow Stand Farm corner of the airfield. On the North Camp side new accommodation blocks were erected for the expected large influx of personnel which included WAAFs. On both sides of the road numerous air raid shelters were constructed. To assist in the defence of the airfield a series of dispersed sites were set up over a wide area around the site; these included a searchlight camp at the top of Ferryboat Lane and small gunposts on the Birtley Road, above the old quarries at the bottom end of Boldon Bank and along the disused railway line towards North Hylton. At Downhill Farm a large gun site was set up, and a decontamination centre was constructed well away from the airfield³⁹ [Mr Fulton of the North East Aircraft Museum noted this was located to the north of the Three Horse Shoes public house]. During the Second World War, a watch tower was

³⁷ *Ibid*

³⁸ *Ibid*

³⁹ <http://www.neam.co.uk/usworth.html> - Accessed 10/6/2009

constructed on stilts on the roof of the Three Horse Shoes; the pub also acted as a Mess for Officers during this period⁴⁰.

4.6.25 In the publication *Archaeology of the Twentieth Century Defence Sites of Tyne and Wear: An Illustrated Guide*⁴¹, several sites in and around the airfield at Usworth are listed. Of particular interest are the Pickett-Hamilton Forts, which were a form of pillbox unique to airfields, and which were often placed down the very centre of the runway⁴². Pickett-Hamilton Forts were sunken, circular reinforced concrete pillboxes which remained flush with the airfields surface to permit the free movement of aircraft. If there was a threat of attack, however, the forts would be raised by a hand operated hydraulic jack and manned with guns⁴³. One of the Pickett-Hamilton Forts from the airfield at Usworth has been relocated to the entrance of the North East Air Museum (Plate 4).

4.6.26 Sunderland and its surrounding area did not escape bombing during the Second World War. The first bombs dropped on the district fell soon after midnight on the 22nd June 1940. Areas affected included buildings at the Old Rectory at Whitburn, a field near Church Lane and The Bents, and the Fishermen's Cottages, which narrowly escaped being demolished. An incendiary bomb fell onto Hylton Dene, 100 yards from Hylton Colliery, Castletown⁴⁴.

4.6.27 The airfield at Usworth had the distinction of being singled out for a major Luftwaffe attack during the Battle of Britain. On August 15th 1940, German aircraft were detected approaching the east coast of Britain. Spitfires from 72 Squadron Ackington met them off the Farne Islands, and although heavily outnumbered, several German aircraft were destroyed. The German formation then split in two, one portion making for Tyneside, while the other turned south. The Second Ackington Squadron, No. 79, encountered the northern group just off the coast and a wild dog-fight ensued. Reforming, the Hurricanes caught up with the bombers approaching Newcastle, where their primary objective would appear to have been Usworth. Harried by the Tyne guns and by more Hurricanes from Drem in Scotland, the German 'Heinkels' made off, scattering their bombs with little effect, and leaving Usworth untouched⁴⁵.

4.6.28 For much of the Second World War, Usworth was used for training, with pilots of several nations stationed there, including Polish, Czech, Canadian,

⁴⁰ Brett, A, 1997, Page 26

⁴¹ Whaley, R, Morrison, J and Heslop, D, 2009

⁴² *Ibid*, Page 30

⁴³ Brown, I *et al*, 1996, Page 124

⁴⁴ Brady, K, 1999, Page 28

⁴⁵ Smith, D.J, 1983, Page 215

Australians, Americans and New Zealanders. The training of new pilots up to operational status was a hazardous activity with many aircraft damaged or destroyed during this period. Many of these pilots have their last resting place in Castletown cemetery near the airfield⁴⁶.

- 4.6.29 Following the end of the Second World War, Usworth was home to No. 31 Gliding School which had formed around 1944. The role of the Gliding School was to provide elementary flying training to cadets of the Air Training Corps from local squadrons in the north-east. In 1951 control of Usworth passed to No. 2 Basic Air Navigation School which disbanded in 1953 when control passed to Durham University Air Squadron. In 1958 the Gliding School, the University Air Squadron and the G.C.I aircraft were moved to RAF Ouston as Usworth was to close, although some limited use of the site was made by the Territorial Army for parachute training from tethered balloons. On 3rd July 1962, Usworth was bought by Sunderland Corporation for £27, 000 and reopened as Sunderland Airport⁴⁷.
- 4.6.30 Sunderland Corporation re-laid the runways and renovated the hangar, and in June 1963 Sunderland Flying Club came into being. On June 28th 1964 an Open Day and commemorative ceremony took place to celebrate the rebirth of what became Sunderland Airport. The Air Day in 1964 became an annual event with subsequent shows attracting greater participation⁴⁸. Sunderland Air Day in June 1981 attracted an estimated 50, 000 people to the airfield and surrounding hills⁴⁹. In the 1980s, 700 people a year made their first parachute jump at Sunderland Airport⁵⁰.
- 4.6.31 During the 1970s and 1980s, the collapse of manufacturing in the Sunderland area had a detrimental effect on employment. For example, over 34 000 jobs were lost between 1971 and 1981 alone. In the 1980s the economic outlook was bleak, although Sunderland enjoyed Development Area status and was eligible for maximum Urban Aid and EEC grants. The co-ordinated efforts of Sunderland Borough, Tyne and Wear Council, Washington Development Corporation and the government scored a major success in 1984 when they succeeded in attracting Nissan to build its new UK factory on Wearside⁵¹. The massive Nissan plant was constructed on the 297 acre site of Sunderland (Usworth) Airport⁵². In the six years between 1986-92, three Japanese companies opened large purpose-built car assembly plants in Britain, all of

⁴⁶ <http://www.neam.co.uk/usworth.html> - Accessed 10/6/2009

⁴⁷ *Ibid*

⁴⁸ <http://www.neam.co.uk/usworth.html> - Accessed 10/6/2009

⁴⁹ Brett, A, 1997, Page 28

⁵⁰ *Ibid*, Page 30

⁵¹ Milburn, E.E and Miller, S.T (Eds), 1988, Page 203

⁵² Brett, A, 1997, Page 32

them on sites which had been airfields. Vehicles built in Britain, unlike those assembled in Japan, could be exported to fellow members of the European Community without the payment of import duties. The Nissan plant at Usworth was only one of three built in an area of high unemployment. The Toyota plant at Burmaston, which was completed in 1992, was constructed on the site of the former Derby municipal airport, and the Honda plant at Swindon, also of 1992, was built on the site of a wartime shadow factory and airfield⁵³.

4.6.32 The beginnings of the North East Aircraft Museum go back to 1974, when a group of vintage aircraft enthusiasts met at Sunderland Airport. In 1984, when Usworth Airfield was chosen as the site for the new Nissan factory, the museum moved to its present location⁵⁴.



Plate 4: *One of the circular Pickett-Hamilton Forts relocated to the entrance to the North East Air Museum, view looking east towards the Vulcan*

⁵³ Stratton M and Trinder, B, 2000, Page 71

⁵⁴ North East Aircraft Museum Official Guide Book, Undated

5 SITE VISIT

- 5.1 The plot of land which is the subject of the present desk-based assessment was visited on 16th June 2009 in order to observe any features of archaeological interest which may survive on or close to the proposed development area.
- 5.2 From the north the proposed development area could be accessed via a footpath located on the opposite side of Old Washington Road to the Three Horse Shoes public house (Plates 5 and 6). The footpath splits the proposed development area into two areas of green space, with the northern boundary between the plot of land and the Old Washington Road, consisting of trees and a fence line. It is presumed that this foliage was planted following the construction of the Nissan plant to provide a form of screen, effectively hiding the factory from Old Washington Road and the Three Horse Shoes pub (Plate 6).
- 5.3 There appears to be some form of landscaping on the eastern side of the site, with a crescent-shaped bank located to the northern edge (Plate 7). Located in the northern bank of this feature is a circular structure complete with concrete 'post' (Plate 8). This circular feature is easily visible on modern satellite photograph (Google Earth), and is the feature which is referred to in the Specification as a possible blast defence mound. This does not appear to be the case, as it is more likely to relate to modern services. It must be remembered that an aerial photograph of the Nissan factory, as noted in 4.4.8 above, shows the eastern part of the proposed development area as having been used as car parking and with some buildings located on it, therefore the crescent-shaped earthen bank, and the circular feature, must post-date this photograph, which is undated but may have been taken c.1990.
- 5.4 The western portion of the proposed development area is neatly grassed with trees (Plate 9). An earthen bank is also located in this area, to the west of the footpath, and presumably is also related to landscaping. Located to the north side of this area is a small brick-built structure with a flat roof, and a locked door in its eastern elevation (Plate 10). This may have been a former generator house for the airfield.
- 5.5 No archaeological features were noted within the tree line which forms the northern boundary of the proposed development area, although it is possible that some may be hidden by the foliage. The only feature of note was the remains of a former entrance gate, which may have related to the later stages of the site as an airfield (Plate 11)



Plate 5: *View looking north from the top of the footpath which crosses the proposed development area showing the Three Horse Shoes public house*



Plate 6: *View looking south from the road junction beside the Three Horse Shoes showing the footpath which crosses the proposed development area with the Nissan plant in the background*



Plate 7: View looking west of the eastern side of the proposed development area showing the curving earthen bank



Plate 8: Circular feature located in the north side of the earthen bank with concrete service post (Scale = 1m)



Plate 9: View looking west of the western side of the proposed development area showing the green space and trees. The road to the left of photograph is located to the north side of the Nissan plant



Plate 10: Brick-built structure on north side of western section of proposed development area, possible generator house? (Scale = 2m)



Plate 11: *Metal gate in the northern tree-lined boundary of the proposed development area (Scale = 2m)*

6 CONCLUSION

- 6.1 The desk-based assessment has revealed that the proposed development area appears to have been undeveloped until the construction of the airfield at Usworth in 1916. The land appears to have been agricultural in character, despite industrial activity within close proximity for example the various railway branch lines, collieries and brick works.
- 6.2 Usworth Airfield started life in October 1916 as a Flight Station for 'B' Flight of 36 Squadron, and was initially known as Hylton or West Town Moor. By 1917, when it was used by 'A' Flight, it was starting to be known as Usworth. For most of its wartime career Usworth was a training station. Aerial photographs from 1934 show buildings at the airfield were located on the site of the proposed development area, with the main entrance situated in the approximate location of the present footpath. A map of 1945 shows the extent of the buildings on the site at that date; although these were mostly constructed of timber it is likely these structures sat on brick or concrete footings. An aerial photograph dating to 1941/1942 (Plate 3) shows two cropmarks located to the west of the proposed development area; it is not known if these relate to the airfield or are totally unrelated, but they may suggest earlier activity in close proximity to the airfield site.
- 6.3 The North-East Regional Research Framework '*Shared Visions*' notes that there are relatively few World War I remains in the north-east, though some can still be seen, for example Hartlepool Heugh Gun Battery and Robert's Battery at Hartley⁵⁵. The Research Agenda and Strategy in this publication notes that '*remains relating to the First World War must be recorded, and that full recording is necessary of all 20th century military and defence remains where they are affected by development work*'⁵⁶. It is clear from the desk-based assessment that the proposed development area was utilised from the early 20th century until the 1980s, as part of the former airfield. From aerial photographs taken in the 1930s and 1940s it is clear that this area was the location of an abundance of buildings relating to the former airfield, of particular interest are the earliest which were in existence in 1934 located within the boundary of the development area. It is unclear, however, how much of these buildings survive sub-surface, as many of the structures were timber, although presumably on brick or concrete footings. It is also possible that the eastern side of the site, to the east of the present footpath, may have been affected by the construction of car parking and buildings relating to the Nissan plant, and by later landscaping. The western side of the site may provide more information on the buildings and features relating to the

⁵⁵ Petts, D and Gerrard, C, 2006, Page 115

⁵⁶ *Ibid*, Page 195

former airfield, as this area does not appear to have been affected as much by later construction, although it is unclear as to how much landscaping was undertaken following the construction of the Nissan plant.

- 6.4 The Specification for the desk-based assessment has requested information on the suitability of geophysical survey on the proposed development area⁵⁷. As a result, North Pennines Archaeology Ltd geophysics specialist was consulted as regards the feasibility of survey on the site⁵⁸. North Pennines Archaeology Ltd undertook a geophysical survey to the south of the Nissan plant, on behalf of Met Surveys, with good results⁵⁹, and therefore it can be presumed that geophysical survey (in the form of a magnetometer survey, or resistivity survey) could be undertaken successfully on this plot of land. However, as it is clear from historical mapping and aerial photographs that the area was the site of numerous buildings relating to the former airfield, it is unlikely that geophysical survey will detect anything earlier than demolition material or concrete/brick footings of the wartime buildings, the presence and position of which is already known through documentary sources. It is not deemed necessary, therefore, for a geophysical survey to be undertaken, as it is known that archaeological remains are likely to be encountered sub-surface.
- 6.5 Given the importance placed on First World War and 20th century military and defence remains, it is recommended that an archaeological evaluation be undertaken to examine the state of preservation of below ground remains, and record such remains relating to the former airfield.

⁵⁷ Morrison, J, 2009, Page 3

⁵⁸ *Pers.comm.* Martin Railton

⁵⁹ Met Surveys, 2008

7 BIBLIOGRAPHY

7.1 CARTOGRAPHIC SOURCES

SCL = Sunderland City Library

John Speed's Map of 'The Bishopric and Citie of Durham' 1610

Dawson's Map of Sunderland, Bishopwearmouth and Monkwearmouth 1832

First Edition Ordnance Survey Map, Sheet VII.12, 25" to 1 mile Scale, 1856 (SCL)

Second Edition Ordnance Survey Map, Sheet VII.SE, 6" to 1 mile Scale, 1898 (SCL)

Third Edition Ordnance Survey Map, Sheet VII.SE, 6" to 1 mile Scale, 1921 (SCL)

Usworth, Record Site Plan, Air Ministry, 1945, 1:2500 Scale (North East Air Museum)

Ordnance Survey Map, Provisional Edition, Sheet 45/35NW, 6" to 1 mile Scale, 1951 (SCL)

Ordnance Survey Map, Sheet NZ 35 NW, 1:10 000 Scale, 1990 (SCL)

7.2 SECONDARY SOURCES

Archaeological Services University of Durham (ASUD), 2005, *Nissan Wind Farm, Washington, Tyne and Wear: Archaeological Desk-Based Assessment and Monitoring*, Unpublished Client Report, HER Ref. 2005/78

Bennett, C, 1967, *Washington Local History*, and Pelaw: CWS Printing Works

Boyle, M, 1994, *Images of Wearside*, Derby: The Breedon Books Publishing Company

Brady, K, 1999, *Sunderland Blitz*, Seaham: The Peoples History Ltd

Brett, A, 1997, *Around Hylton Castle*, Black Cat Publishing

Brown, I, Burridge, D, Clarke, D, Guy, J, Hellis, J, Lowry, B, Ruckley, N and Thomas, R, 1996, *Twentieth Century Defences in Britain: An Introductory Guide*, Practical Handbooks in Archaeology No. 12, York: Council for British Archaeology

Corfe, T, 1973, *History of Sunderland*, Newcastle upon Tyne: Frank Graham

Countryside Commission, 1998, *Countryside Character, Volume 1: North East*, Cheltenham

Hardy, C, 1990, *Wearside in Focus*, Huddersfield, Richard Netherwood Ltd

Institute for Archaeologists (IfA), 2008, *Standard and Guidance for Archaeological Desk-Based Assessment*, Reading

- Mawer, A, 1920, *The Place Names of Northumberland and Durham*, Archaeological and Ethnological Series, Cambridge University Press
- Meikle, M and Newman, C.M, 2007, *Sunderland and its Origins: Monks to Mariners*, Phillimore & Co Ltd
- Met Surveys, 2008, *Turbine Business Park, Land North of A1231, Nissan Way, Sunderland: Geophysical Survey*, Unpublished Client Report, HER Ref. 2008/37
- Miket, R, 1984, *The Prehistory of Tyne and Wear*, Wooler: Northumberland Archaeological Group/Cheviot Museum and Field Centre Ltd
- Milburn, G.E and Miller, S.T (Editors), 1988, *Sunderland – River, Town and People, A History from the 1780s to the Present Day*, Sunderland Borough Council
- Morrison, J, 2009, *Specification for an Archaeological Desk Based Assessment of a plot at Nissan, Washington, Sunderland*, Unpublished Document, Tyne and Wear Specialist Conservation Team
- Mountford, C.E and Holroyde, D, 2006, *The Industrial Railways and Locomotives of County Durham with a History on their Owners and Sites, Part 1*, Melton Mowbray: Industrial Railway Society
- North East Aircraft Museum Official Guide Book*, Undated
- On Site Archaeology (OSA), 2007, *Nissan Factory Business Park, Washington: Archaeological Desk-Top Assessment*, Unpublished Client Report, HER Ref. 2007/91
- On Site Archaeology (OSA), 2008, *Turbine Park, Sunderland: Report on an Archaeological Evaluation*, Unpublished Client Report, HER Ref. 2008/126
- Parson, W and White, W, 1828, *History, Directory and Gazetteer of the Counties of Durham and Northumberland*, Volume II
- Petts, D and Gerrard, C, 2006, *Shared Visions: The North-East Regional Research Framework for the Historic Environment*, Durham County Council
- Smith, D.J, 1983, *Actions Stations: 7. Military Airfields of Scotland, the North-East and Northern Island*, Patrick Stephens Limited
- Stratton, M and Trinder, B, 2000, *Twentieth Century Industrial Archaeology*, London: E & F N Spon
- Sunderland Borough Council, 1962, *Sunderland: A Guide for Industrial Development*
- Sunderland City Council, City Library and Arts Centre, Undated, *Hylton Castle and Dene*, Local Studies Centre Fact Sheet Number 8
- Thyme, M, 2000, *Monkwearmouth Life*, Sunderland: The Peoples Press

Whaley, R, Morrison, J and Heslop, D, 2008, *A Guide to the Archaeology of the Twentieth Century Defence Sites of Tyne and Wear*, Newcastle City Council, Tyne and Wear Specialist Conservation Team

Whitcomb, N.R, 1968, *Two Prehistoric Dugout Canoes from the River Wear at Hylton, near Sunderland, County Durham*, Archaeologia Aeliana, The Publications of the Society of Antiquities of Newcastle upon Tyne, Volume XLVI, Fourth Series

North East Air Museum Website – www.neam.co.uk

APPENDIX 1: HER ENTRIES

Table 1: List of HER Sites located within a 1km radius of the proposed development area (Site locations are shown on Figure 3)

Site No.	HER No.	Site Name	Grid Ref	Description	General Period
1	1824	Usworth, Sunderland Aerodrome (RAF Usworth)	NZ 3407 5896	<p>Started life in October 1916 as a Flight Station for "B" Flight of 36 Squadron and was known as Hylton. By 1917, when it was used by "A" Flight, it was just beginning to be called Usworth. Site now largely under Nissan.</p> <p>Usworth was a training station for most of its wartime career. In 1934, 607 Squadron of the Auxiliary Air Force was based at Usworth. The trainee pilots were mostly local miners and shipworkers. The squadron was transferred to Fighter Command in September 1937. There were two squadrons based here in World War II, one of which was the 607 squadron (City of Durham) whose squadron leader was called Blackadder. In 1940 the site was a fighter command. It was singled out for a major Luftwaffe attack during the Battle of Britain, but due to successful action of the 13 Group and the Anti-Aircraft guns Usworth was left untouched. During the Battle of Britain, Usworth Sector came under the direction of No. 13 Group. Hurricane Squadron No. 43, based at Tangmere in the south, were sent to Usworth in September 1940. Later the No. 55 Operational Training Unit was based there. 607 Squadron</p>	Modern 20 th century

Site No.	HER No.	Site Name	Grid Ref	Description	General Period
				continued to operate from Usworth throughout the War. They were disbanded on 19 August 1945. In July 1963 it became Sunderland Aerodrome - a successful light aviation centre. The site is now home to the North East Aircraft Museum	
2	2290	Stanhope & Tyne Railway (NER, Pontop & South Shields Branch)	NZ 2815 5405	Originally the Stanhope and Tyne Railway, the line opened in 1834	Early Modern 19 th century
3	2627	North Hylton, Hylton Manure Depot	NZ 3390 5907	Hylton Depot (Manure) on the North Eastern Railway, shown on the First Edition OS map 6" 1862	Modern 19 th century
4	2628	North Hylton, Hylton lane Cabin	NZ 3391 5909	Situated at the junction of the North Eastern Railway, Pontop and South Shields Branch (HER ref. 2290) and Hylton lane, this may have been a signal box/crossing control of some sort. Shown on the First Edition OS map 6" 1862	Early Modern 19 th century
5	2629	North Hylton, Washington Lane Cabin	NZ 3373 5871	Washington Lane Cabin, at the junction of Washington Lane and the North Eastern Railway, Pontop and South Shields Branch (HER ref. 2290), was probably a signal box or crossing control	Early Modern 19 th century
6	2634	North Hylton Brickfield	NZ 3510 5822	Site of brick and tile making shown on First Edition OS map 6" 1862	Early Modern 19 th century
7	5404	Usworth, Pillbox	NZ 346 587	Pillbox of WW2 origin	Modern 20 th century
8	5405	Usworth, Pillbox	NZ 344 578	Pillbox of WW2 origin	Modern 20 th century
9	5406	Usworth, Pillbox	NZ 342 578	Pillbox of WW2 origin	Modern 20 th century

Site No.	HER No.	Site Name	Grid Ref	Description	General Period
10	5407	Usworth, Picket Hamilton Fort	NZ 337 584	Picket Hamilton Fort - sunken circular concrete pillbox used on WW2 airfields (site is adjacent to Usworth RAF base HER 1824). They remained flush with the surface to permit the free movement of aircraft, but if attack threatened could be raised and manned to give covering fire	Modern 20 th century
11	5408	Usworth, Picket Hamilton Fort	NZ 338 583	As above	Modern 20 th century
12	5409	Usworth, Picket Hamilton Fort	NZ 337 586	As above	Modern 20 th century
13	5410	Usworth, Picket Hamilton Fort	NZ 340 588	As above	Modern 20 th century
14	5411	Usworth, Picket Hamilton Fort	NZ 342 588	As above	Modern 20 th century
15	5412	Usworth, Picket Hamilton Fort	NZ 343 587	As above	Modern 20 th century
16	5511	Castletown, Heavy Anti-Aircraft Battery	NZ 34 58	Site of heavy anti-aircraft battery	Modern 20 th century
17	5534	Usworth RAF, Searchlight Battery TT237	NZ 346 593	Searchlight Battery - During WW2 many of the Tyneside searchlights were manned by the 225th Anti Aircraft Artillery (Searchlight Battalion) USA. Their headquarters was at Debdon Gardens in Newcastle (HER 5559). Many of the searchlight sites were used as low security POW camps after the American troops left, accommodating the prisoners who were working on local farms. Until radar was invented, searchlights were the only means by which aimed anti-aircraft fire and	Modern 20 th century

Site No.	HER No.	Site Name	Grid Ref	Description	General Period
				<p>fighter interception were possible at night. The searchlights forced the enemy aircraft to fly higher, thus reducing their bombing accuracy. They also guided disabled allied aircraft back to base. During WW1 searchlights were emplaced to defend London and other vulnerable points. In 1916 a searchlight belt was established 25 miles inland from Sussex to Northumberland. In WW2 almost the whole country was covered in a grid of searchlights. A searchlight site would comprise of a circular earthwork around 9.14 metres in diameter for a 90cm light, a predictor emplacement, at least one light anti aircraft machine gun pit and a number of huts for the detachment and generator. These sites only generally survive as crop marks, unless the huts or foundations survive</p>	
18	5851	Usworth, WW2 Roadblock	NZ 3300 5840	<p>Site of WW2 concrete roadblock near RAF Usworth. Stop-lines included permanent and moveable road barriers. The most substantial works were formed from square or cylindrical concrete blocks entwined with barbed wire and fitted with explosives. Moveable obstacles consisted of horizontal or vertical bars or poles of steel, set between concrete blocks. Bent steel girders could also be slotted into sockets cut into the road surface. Modern road improvements are removing evidence for both, but some of the original blocks or</p>	Modern 20 th century

Site No.	HER No.	Site Name	Grid Ref	Description	General Period
				apertures have been observed in-situ. Cylindrical blocks have been used to line private roads or placed on river banks to combat erosion {Defence of Britain Handbook 1995}	
19	6773	Usworth, West Moor	NZ 3313 5850	Farmstead shown on the First Edition OS map 1856	Early Modern 19 th century
20	6774	Usworth, North Moor	NZ 3300 5908	Farmstead shown on the First Edition OS map 1856	Early Modern 19 th century
21	6793	Usworth, South Moor	NZ 3438 5803	Farmstead shown on the First Edition OS map 1856	Early Modern 19 th century
22	6794	Usworth, Cow Stand	NZ 3452 5881	Farmstead shown on the First Edition OS map 1856	Early Modern 19 th century
23	No number assigned yet	Smithy		Smithy shown on Second Edition OS map 1898	Modern 19 th century
24	No number assigned yet	Three Horse Shoes PH		Public house shown on First Edition OS map 1856	Early Modern 19 th century
25	No number assigned yet	Aircraft Obstructions		Shown on aerial photograph dated 7 th August 1954 (Ref. F22540/RAF 1381)	Modern 20 th century
26	No number assigned yet	NER Hylton, Southwick & Monkseaton		Shown on Second Edition OS map 1898	Modern 19 th century

Table 2: Listed Buildings located within a 1km radius of the proposed development area

HER No.	Site Name	Grid Ref	Description ⁶⁰	General Period
12	Hylton Castle	NZ 2578 5879	A fine gatehouse tower with extravagant battlement works and a magnificent display of heraldry. Built by Sir William Hylton in late 14th or early 15th century. Basically rectangular in plan with a central through passage and two vaulted rooms on each side at ground floor level. A stair in the east turret led to the first floor where a central hall rose to the roof and was flanked at the north (high) end by the principal chamber, etc., and at the south (low) end by the kitchen, etc. Other rooms include the chapel in the east turret. The castle was gutted by John Hylton (died 1712) who converted it to 3 storeys and added the north wing. His son John added the south wing, and Neo-Gothick porch. The castle left the Hylton family in 1746, was later bought by Mrs Bowes, then rescued by Simon Temple in 1812, and in 1863 bought by William Briggs, a Sunderland merchant, who carried out major alterations. Threatened with demolition, it was taken into guardianship in c. 1950. Several archaeological excavations have been carried out since the late 1980s, including a detailed study of Hylton Castle compiled by Tyne and Wear Museums Services in 1993, and geophysical survey and excavation by the "Time Team" television programme in June 1994 which revealed a complex of buildings and gardens to the	Medieval 14 th /15 th century

⁶⁰ Description obtained from <http://www.magic.gov.uk/rsm/32074.pdf> - Accessed 16/06/2009

HER No.	Site Name	Grid Ref	Description ⁶⁰	General Period
			<p>west of the castle, with ploughed out ridge and furrow beyond. Excavation showed the building closest to the castle to be a probable medieval feasting hall contemporary with the gatehouse, with a building further to the east interpreted as a large Elizabethan house. In July 1994 TWMS produced the "Hylton Castle Historic Gardens Project, Research and Restoration Design" report, followed in 1995 by an Earthwork and Documentary Survey of Hylton Castle gardens which concluded that the easternmost range and terraced garden were post medieval in date. Following the interest generated by "Time Team" local residents formed the Friends of Hylton Dene group which has published a new information leaflet and secured LHI funding to hold an event to raise awareness of their local heritage in May 2003. The gardens and dene have been restored by City of Sunderland and Durham Wildlife Trust. SCHEDULED ANCIENT MONUMENT AND LISTED GRADE 1</p>	
13	Hylton Chapel	NZ 3584 5882	<p>The earliest known reference is 1157, when <i>Romanus</i> of Hylton obtained permission to appoint a chaplain for his chapel. The Hyltons were later allowed to bury there, leading to the foundation of chantries, and there were 3 chantry priests by 1370. The last recorded chaplain was 1536. Thereafter there were only occasional attempts to keep it in repair. Roofless, the chapel now consists of a chancel, rebuilt in the early 15th century and subsequently altered by the</p>	Medieval 12 th -15 th century

HER No.	Site Name	Grid Ref	Description ⁶⁰	General Period
			insertion of some windows, the blocking of others, external refacing and, in the mid/late 16th century by the addition of two double-storey "transepts". The chapel once had a nave, which was perhaps added at the same time as the "transepts", but demolished in the 18th century when the chancel arch was blocked except for a new door and window. SCHEDULED ANCIENT MONUMENT AND LISTED GRADE 1	

Table 3: Scheduled Ancient Monuments located within a 1km radius of the proposed development area

SAM No.	Site Name	Description
32074	<p>Hylton Castle: a medieval fortified house, chapel, 17th and 18th century country house and associated gardens</p> <p>NZ 3589 5869</p>	<p>The monument includes the site and remains of a medieval fortified house modified throughout the 17th and 18th centuries, alongside the remains of its 17th century and later gardens and medieval ridge and furrow cultivation. The only upstanding remains of the house are the gatehouse tower, a large towerhouse of c.1400 built over the west gateway and the house. The gatehouse was built by Sir William Hylton, whose family had held the manor since at least 1157. The gatetower remained the family's principal residence throughout the 15th and 16th centuries. It is a substantial rectangular building of well covered ashlar and was originally four-storeyed. The gate is flanked by two square turrets and surmounted by a rich display of heraldic devices which provide important evidence for the tower's date. The gatehouse was blocked by a stone decorative screen to the exterior of a central east turret on the east internal wall. Around all but the north wall of the tower, the parapets around the roof and turrets project forward from the walls on supporting corbels. The ground floor included a central gate-passage flanked by vaulted chambers. Those on the north side were used as storerooms while those on the south side functioned as the guardroom and a private chamber. The first floor was occupied by the baron's hall and solar, and also a kitchen with an attached buttery and pantry. The latter lay at the south or 'low' end of the hall, farthest from the baron's table at the north end of the hall. The hall was lit by three main windows. The central window was located above the gate, and below it in the floor was a slot through which the portcullis could be raised, worked via a winding mechanism located in a mural chamber in the southern of the central turrets. Access to the hall was via a newel stair in the projecting central east turret. Also, in the projecting east turret, and adjacent to the entrance to the hall, was the oratory or private chapel. To the north of the hall was the solar, a private chamber, equipped with a garderobe and at least one window seat. There would have been a fireplace in the south wall which divided the chamber from the hall, but this was demolished during 18th century alterations. Three similar private chambers existed on the second floor; one lay above the solar and would have been for the baron's family and the other was above the oratory and was the chaplain's lodgings. Both of these were accessed from the hall via a stair at the northern end of the central east turret. The third</p>

		<p>private chamber on the second floor was over the kitchens and was accessed via the main stair at the southern end of the central east turret. A further two private chambers existed above the chaplain's lodgings in the central east tower accessed via the main stair. The gatetower formed the west side of a courtyard arrangement of buildings which has been identified by geophysical survey and excavation in 1994 and 1995. Externally, these buildings measure about 50m long by 30m wide. A hall, mentioned in a survey of 1435 and slightly revealed by excavation in 1993, would have formed the east range of the courtyard with service rooms and kitchen at its 'low' or southern end. The south range of the courtyard was a barn and the north range contained chambers to provide additional accommodation. The evidence from the excavations indicate that these buildings had not been in use after the medieval period. A 17th century country house identified from geophysical survey as 50m long and 20m wide is located about 70m east of the gatetower. In 1640 the manor was bequeathed by Henry Hylton to the Corporation of London. After a lengthy legal battle, the estate was returned to Henry's nephew, John Hylton, at high financial cost as he had to discharge the conditions of the will and settle the claims of rival contestants. By 1700 the gatetower became the basis for a large house, which was built in two phases between 1700 and the death of the last Baron Hylton in 1746, along with a number of alterations to the interior of the gatetower. A north wing was added between 1700 and 1712, and a matching south wing was constructed between 1712 and 1746. The north wing no longer survives as a standing feature and the south wing has three courses of ashlar sandstone blocks upstanding. The wings were demolished in the 1860s by the then owner, William Briggs who also 'medievalised' the entrances and windows and gave the gatetower its present appearance. His internal alterations were removed when the gatetower was taken into the Secretary of State's care in 1950. The general appearance of the 18th century house is known, however, from a number of contemporary illustrations, most notably an engraving by Samuel and Nathaniel Buck, dated 1728, and a painting by an unknown artist, dated about 1800. The ground plans of the demolished wings also survive as buried features. A separate chapel, dedicated to St Catherine, is known to have existed at Hylton since 1157. No standing remains of this early structure survive but buried remains of this chapel and those of subsequent medieval chapels, will survive beneath the present ruined chapel. This was built in the early 15th century and altered by the insertion of an east window in the late 15th or early 16th century and the addition of two-storey transepts in the late 16th century,</p>
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		<p>after the Reformation. The first chapel was founded by Romanus of Hylton and, in the 13th century, permission was given for members of the family and household to be buried there. This led, in the 14th century, to the founding of chantries (endowments for the singing of masses for the souls of the dead). In 1322 there was one chantry, dedicated to the Virgin Mary, and, in 1370, there were three chantry priests. The last chaplain was appointed in 1536. After that, the chapel may have continued in use as a burial place, but it had clearly gone out of use by 1728 as the Buck engraving shows it as roofless. The last Baron Hylton, who died in 1746, carried out some repairs and temporarily restored it to use, as did the early 19th century owner, Simon Temple. During the 19th and 20th centuries, however, it fell into disrepair and was saved from demolition at the same time as the tower. The landscape around the surviving upstanding remains of Hylton Castle and chapel is of at least two phases, a 17th century garden, and a 19th century landscaped park. The remains of the 17th century gardens include three terraces (a lower terrace to the east of the gatetower, an upper terrace to the east of the chapel, and a terrace to the west of the gatetower), and a canal water feature. The lower terrace is 218m long and 45m wide and overlies a stretch of 10m wide ridge and furrow cultivation, which is visible to the east of this terrace. The upper terrace, to the east of the chapel, is 100m long and tapers from 28m wide near the chapel to 18m. Access from the lower to the upper terrace is by two earth ramps cut into its slope. These are 2m wide by 30m long. A map of the Sunderland area by Burleigh and Thompson, published in 1737, uses as a vignette an elevation of Hylton Castle and shows a knot garden on the upper terrace with a wall at its east end. Information on this garden layout will be preserved beneath the present ground surface. The terrace to the west of the gatetower is about 90m long by 100m wide and was the main access to Hylton Castle. These terraces would have been laid out to gardens and incorporated recreational facilities such as a bowling green recorded in the estate sale of 1750. The canal water feature is situated about 190m south of the gatetower and measures 70m long by 14m wide. In the 19th century the area around Hylton Castle was turned into a landscaped park. A vista from the gatetower to the west was created by an avenue between wooded areas and a walled garden was established to the north of this avenue, about 250m north west of the gatetower. Other earthworks associated with the 17th century gardens and 19th century landscaped park survive within the vicinity of Hylton Castle but remain undated and further remains will be preserved beneath the present ground surface, which will provide important information on the development of the surrounding landscape.</p>
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		<p>Excavation 140m south of the gatetower has confirmed that features associated with the gardens survive, uncovering a 19th century track which overlay an earlier, undated kerbed track. The gatehouse and chapel are Grade I Listed Buildings and are in the care of the Secretary of State. The wooden post and rail fence, the iron railings, football goal, playground apparatus and surfaces, and the surfaces of metalled paths are excluded from the scheduling, although the ground beneath them is included</p>
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APPENDIX 2: SPECIFICATION

TYNE AND WEAR SPECIALIST CONSERVATION TEAM

Specification for an Archaeological Desk Based Assessment of a plot Nissan, Washington, Sunderland

Introduction

A site at Nissan, which is presently open space with some trees, is proposed for a sustainable manufacturing centre by Gateshead College.

The site lies within the former extent of RAF Usworth.

HER 1824 RAF Usworth (Sunderland Aerodrome)

Started life in October 1916 as a Flight Station for "B" Flight of 36 Squadron and was known as Hylton. By 1917, when it was used by "A" Flight, it was beginning to be called Usworth. Site now largely under Nissan. Usworth was training station for most of its wartime career. In 1934, 607 Squadron of Auxiliary Air Force was based at Usworth. The trainee pilots were mostly miners and shipworkers. The squadron was transferred to Fighter Command in September 1937. There were two squadrons based here in World War one of which was the 607 squadron (City of Durham) whose squadron leader was called Blackadder. In 1940 the site was a fighter command. It was singled out for a major Luftwaffe attack during the Battle of Britain, but due to successful action of the 13 Group and the Anti-Aircraft guns Usworth was untouched. During the Battle of Britain, Usworth Sector came under direction of No. 13 Group. Hurricane Squadron No. 43, based at Tangmere the south, were sent to Usworth in September 1940. Later the No. 55 Operational Training Unit was based there. 607 Squadron continued to operate from Usworth throughout the War. They were disbanded on August 1945. In July 1963 it became Sunderland Aerodrome - a successful light aviation centre. The site is now home to the North East Aircraft Museum.

In CS Dobinson's "Twentieth Century Fortifications in England" Airfield Themes, Usworth is listed as a Fighter Command station in March 1939 and a permanent station operational in September 1940. Only 2 blast defence mounds remain and a repositioned Pickett Hamilton fort from the runway. The cast iron hangar of 1929 with a corrugated tin roof, said to be a rare German, said to be a rare type was demolished circa 2003. Nothing remains of the RAF runway as it was destroyed by the construction of the A19 and then by Nissan from 1986. Some RAF officer-type houses (Usworth Cottages) survive and the much altered public house 'The Three Horse Shoes'.

An aerial photograph from Google supplied by the commissioning seems to show a circular earthwork in the eastern half of the site. Is this of the blast defence mounds?

Aerial photographs, especially RAF wartime photographs, **must** be examined.

HER 5404 pillbox

HER 5405 pillbox

HER 5406 pillbox

The pillbox is the most familiar type of C20 defensive building. Sometimes referred to as defence posts, blockhouses or police posts. Concrete pillboxes were first used by the Russians in the Russo-Japanese War. The concept was copied by the Germans in WW1 and later by the British. The majority of WW2 pillboxes were associated with beach defences, stop-lines and nodal points. Some were sited to defend coastal batteries, airfields, radar stations and factories. More than 18,000 were built during 1940. In June 1940 branch FW3 of the War Office Directorate of Fortifications and Works issued designs for about a dozen standard pillboxes. In practice a multiplicity of designs arose. However most pillboxes consist of a basic squat, heavily constructed building, usually flat-roofed, no more than 1.98m high and quadrilateral, polygonal or circular in plan. There were one or two entrances, sometimes protected by a porch or wall. They all have a series of horizontal slits (firing loops, loopholes or embrasures) to provide interlocking fields of fire over the anticipated direction of attack. Most pillboxes were designed for rifles or light machine guns. More heavily armed examples had Vickers machine guns, anti-tank guns or Hotchkiss guns. Pillbox walls are almost invariably of concrete, sometimes with brick shuttering or stone facing {Defence of Britain Handbook, 1995, pp 79-82}.

HER 5407 Picket Hamilton fort

HER 5408 Picket Hamilton fort

HER 5409 Picket Hamilton fort

HER 5410 Picket Hamilton fort

HER 5411 Picket Hamilton fort

HER 5412 Picket Hamilton fort

Picket Hamilton Fort - sunken circular concrete pillbox used on airfields (site is adjacent to Usworth RAF base HER 1824). They remained flush with the surface to permit the free movement of aircraft, but if attack threatened could be raised and manned to give covering fire.

HER 5534 Searchlight Battery TT37

Searchlight Battery - During WW2 many of the Tyneside searchlights were manned by the 225th Anti Aircraft Artillery (Searchlight Battalion) USA. Their headquarters was

at Debdon Gardens in Newcastle (HER 5559). Many of the searchlight sites were used as low security POW camps after the American troops left, accommodating the prisoners who were working on local farms. Until radar was invented, searchlights were the only means by which aimed anti-aircraft fire and fighter interception were possible at night. The searchlights forced the enemy aircraft to fly higher, thus reducing their bombing accuracy. They also guided disabled allied aircraft back to base. During WW1 searchlights were emplaced to defend London and other vulnerable points. In 1916 a searchlight belt was established 25 miles inland from Sussex to Northumberland. In WW2 almost the whole country was covered in a grid of searchlights. A searchlight site would comprise of a circular earthwork around 9.14m in diameter for a 90cm light, a predictor emplacement, at least one light anti aircraft machine gun pit and a number of huts for the detachment and generator. These sites only generally survive as crop marks, unless the huts or foundations survive {"20th Century Defences in Britain, An Introductory Guide", 1995, Handbook of The Defence of Britain Project}.

HER 5841 road block

Site of WW2 concrete roadblock. Stop-lines included permanent and moveable road barriers. The most substantial works were formed from square or cylindrical concrete blocks entwined with barbed wire and fitted with explosives. Moveable obstacles consisted of horizontal or vertical bars or poles of steel, set between concrete blocks. Bent steel girders could also be slotted into sockets cut into the road surface. Modern road improvements are removing evidence for both, but some of the original blocks or aperatures have been observed in-situ. Cylindrical blocks have been used to line private roads or placed on river banks to combat erosion {Defence of Britain Handbook 1995}. The site might retain buried evidence associated with RAF Usworth.

In accordance with PPG16 and UDP policy B14

WHERE DEVELOPMENT PROPOSALS AFFECT SITES OF KNOWN OR POTENTIAL ARCHAEOLOGICAL IMPORTANCE, THE CITY COUNCIL WILL REQUIRE AN ARCHAEOLOGICAL ASSESSMENT/EVALUATION TO BE SUBMITTED AS PART OF THE PLANNING APPLICATION. PLANNING PERMISSION WILL NOT BE GRANTED WITHOUT ADEQUATE ASSESSMENT OF THE NATURE, EXTENT AND SIGNIFICANCE OF THE REMAINS PRESENT AND THE DEGREE TO WHICH THE PROPOSED DEVELOPMENT IS LIKELY TO AFFECT THEM {Sunderland City Council, Adopted Unitary Development Plan 1998}

A Desk Top Assessment is required to appraise the likelihood that important archaeological deposits survive on the site, and assess the impact on those deposits by construction work associated with the proposed development. It will make

recommendations for further archaeological work required. Will geophysical survey be a suitable technique?

The assessment must be carried out by a suitably qualified and experienced archaeological organisation. The purpose of this brief is to obtain tenders for this work. The report must be the definitive record for deposition in the Tyne and Wear HER.

Research Aims and Objectives

The assessment should make reference to Regional and Thematic Research Frameworks. The North-East Regional Research Framework for the Historic Environment (2006) notes the importance of research as a vital element of development-led archaeological work. It sets out key research priorities for all periods of the past allowing commercial contractors to demonstrate how their fieldwork relates to wider regional and national priorities for the study of archaeology and the historic environment. The aim of NERRF is to ensure that all fieldwork is carried out in a secure research context and that commercial contractors ensure that their investigations ask the right questions.

See resource assessment 20th century pages 115-116

See Twentieth-century research agenda, key research priority MOvi (military and defence)

See Research agenda and strategy, Defence and Fortification, pages 211-213

See <http://www.algao.org.uk/Association/England/Regions/ResFwks.htm>

Ideally and where possible the evaluation should cross-reference its aims and objectives to national priorities, defined in SHAPE (Strategic Frameworks for Historic Environment Activities and Programmes in English Heritage), and the English Heritage Research Agenda 2005-2010.

Where appropriate note any similar nationwide projects using ADS, internet search engines, ALSF website, HEEP website, OASIS, NMR excavation index.

All work must be carried out in compliance with the codes of practice of the Institute of Field Archaeologists and must follow the IFA Standard and Guidance for Archaeological Desk Based Assessment, revised September 2001

www.archaeologists.net

Archaeological Brief

1. The Assessment must inform the planning authority of the archaeological and historical importance of the site.
2. The following sources **must** be consulted:

Tyne and Wear Historic Environment Record, West Chapel, Jesmond Old Cemetery, Jesmond Road, Newcastle upon Tyne NE2 1NL (0191 2816117 or jennifer.morrison@newcastle.gov.uk). An appointment must be made. Archaeological contractors are advised that there is a search fee payable for consulting the HER (Access and Pricing Policy available on request). Contractors visiting the HER in person and conducting their own research will be charged the basic search fee of £50 plus photocopying costs.

The County Industrial Archaeologist, Ian Ayris must be consulted on any industrial aspects of the Assessment (tel. 0191 2777190 or email ian.ayris@newcastle.gov.uk)

Please note - Tyne and Wear is a modern county, created in 1974. The area was formerly divided between County Durham and Northumberland. Archive sources for Tyne and Wear are therefore spread between Tyne and Wear Archives, County Durham Record Office, Northumberland Museum and Archives and 5 district local studies libraries.

Northumberland Museum and Archives at Woodhorn, Queen Elizabeth II Country Park, Ashington NE63 9YF (open Wed-Sun) 01670 528041 – mostly holds records for Newcastle and North Tyneside but does hold some records relating to those districts south of the River Tyne and has a lot of mining records.

Tyne and Wear Archives at Blandford House, Blandford Square, Newcastle upon Tyne NE1 4JA (tel. 0191 2326789 ext 407)

Amongst other items they hold Building Control Plans for Tyne and Wear which provide useful information on the location of cellars or basements or other features which may have destroyed or truncated archaeological deposits. The location of the cellars or areas of disturbance must be marked on a plan in the finished report.

Durham Record Office, County Hall, Durham DH1 5UL (tel. 0191 3833253)

Mostly holds records for Gateshead, Sunderland and South Tyneside but does hold some records relating to those districts north of the River Tyne and has a lot of mining records. Visitors must make an appointment. Closed on Fridays.
www.durham.gov.uk/recordoffice

Durham University Library, Archives and Special Collections, Palace Green
Section, Durham DH1 3RN (tel. 0191 3342932)

Holds amongst other items the tithe maps for County Durham and church records.
The separate local history section in the library has a good collection of books, journals
and leaflets.

Sunderland Local Studies Centre, City Library and Arts Centre, Fawcett Street,
Sunderland SR1 1RE (tel. 0191 5148439)

National Monuments Record, Kemble Drive, Swindon SN2 2GZ (tel. 01793 414600)

www.english-heritage.org.uk/NMR

www.pastscape.org.uk – publicly accessible online version of the NMR

www.english-heritage.org.uk/viewfinder - online picture resource of NMR's
photographic collections

Defence of Britain website

and any other local resource with relevant information.

Useful Websites:

www.twositelines.info - **not** to be used instead of visiting the HER in person because it
is only updated every six months and does not include event data/grey literature
reports

<http://local.live.co.uk> – aerial photographic coverage

<http://museums.ncl.ac.uk/archive/index>

www.sine.ncl.ac.uk

www.beamishcollections.com – building and street photographic collection

www.tynesidelifeandtimes.org.uk

www.magic.gov.uk/website/magic/

www.tomorrows-history.com

www.dur.ac.uk/picturesinprint/

www.nemlac.co.uk – North East Museums Libraries & Archives Council

www.collectbritain.co.uk/galleries - Grimm's sketches of C18 Northumberland and Durham

www.newcastle.gov.uk/SOPNE - images of the NE region

www.neemark.com - collection of mining archives based at Murray Library, Sunderland University

www.dmm.org.uk – Durham Mining Museum

www.english-heritage.org.uk/server/show/nav.9596 - database of all English Heritage Department reports completed since 2006

Documentary Sources

All relevant documentary sources relating to the vicinity must be consulted and synthesised within the report (and images copied if copyright allows this), including:

- local history books
- journals
- papers
- documents
- county histories
- trade directories
- census returns
- council minutes
- court rolls
- wills
- newspaper cuttings
- historic photographs and postcards
- prints and engravings

Cartographic Sources

All relevant cartographic sources relating to the vicinity must be consulted and synthesised within the report (and copied if copyright allows this), including:

- historic mapping
- archive plans
- building control plans
- surveys
- Goad Insurance Plans
- estate plans
- tithe maps

- OS mapping – all editions first to present

Geological bedrock and drift mapping

Geological bedrock and drift mapping for the area must be analysed.

Aerial Photographs

There **must** be a search of aerial photographs at:

- Durham University Archaeology and Geography Departments (Gateshead, Sunderland & South Tyneside only)
- Sunderland City Council
- The NMR at Swindon
- Aerofilms Collection 1916 to 2006, NMR Katy.Whitaker@englishheritage.org.uk
- <http://local.live.co.uk>
- www.ukaerialphotos.com – online RAF photos from WW2 to present day
- Cambridge University Committee on Aerial Photography
- Google Earth
- Google Maps

Listed buildings and Conservation Areas

Information on nearby listed buildings and Conservation Areas must be included and is available from the HER. The Assessment must describe the land-use history of this part of Usworth and assess the probability that archaeological deposits survive on this plot.

The Assessment must describe the geology, topographic position, soil type and drainage of the site, using geological and soil survey maps. The report must make reference to the anticipated preservation conditions likely to be encountered on the site, especially relating to variables affecting the preservation of biological or organic remains.

The archaeological contractor must make at least one site visit and the finished Assessment will briefly describe the current condition of the site. Site photographs must be included in the finished report.

The archaeological contractor will assess the impact of the proposed development on archaeological deposits by analysing the plans and foundation designs (where available) for the proposed new building. The commissioning client will provide copies of available plans.

The Assessment Report

The Assessment report must contain and synthesise the results of the analysis of all the sources mentioned above. As far as possible, all maps shown should be at the same scale, to assist in comparing maps of different date and scale, ideally as overlays on a modern base-map, although highlighted enlargements may be used to facilitate the addition of extra annotation.

The report must include a catalogue/gazetteer of features of archaeological or historical interest within or close to the study area. Their location must be shown on a site plan. This must include all sites of interest, **not** just those currently included in the HER.

A final section of the report should consist of recommendations (in the opinion of the consultant, after assessing all evidence available at the present time) about the type, scale and location of any future archaeological work needed to locate and record historic buildings or archaeological deposits suspected on the site. If evaluation is recommended then the finished report will include a site plan showing the scale and location of suggested trial trenches.

The report must have the following features:-

1. Site location plan and grid reference
2. List of all sources consulted, and their location
3. Details of field visits undertaken by the consultant
4. Site photographs
5. Geology of site
6. Period by period discussion of site history and development
7. Historic map regression
8. Copies of any relevant archive plans and historic photographs
9. Brief discussion of the potential of the site in relation to NERRF, EH research agenda and other relevant agenda
10. A card cover with title, date, author, consultant organisation and commissioning client
11. Some form of binding which allows easy copying of the report
12. Copy of this specification

Three paper copies of the report need to be submitted:

- one for the commissioning client plus a copy on CD

- one for the planning authority (Sunderland City Council) plus a copy on CD – to be submitted formally by the developer with the appropriate fee

- and one for deposition in the County HER. A digital copy of the report

on CD is also required by the HER – to be sent with the paper report but not attached to it. *The report and CD for the HER must be sent by the archaeological consultant directly to the address below. If the report is sent via the planning department, every page of the report will be stamped with the planning application number which ruins the illustrations. Also the HER is often sent a photocopy instead of a bound colour original which is not acceptable.*

OASIS

The Tyne and Wear County Archaeologist supports the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an online index/access to the large and growing body of archaeological grey literature, created as a result of developer-funded fieldwork.

The archaeological contractor is therefore required to register with OASIS and to complete the online OASIS form for their desk based assessment at <http://www.oasis.ac.uk/>. Please ensure that tenders for this work takes into account the time needed to complete the form.

Once the OASIS record has been completed and signed off by the HER and NMR the information will be incorporated into the English Heritage Excavation Index, hosted online by the Archaeology Data Service.

The ultimate aim of OASIS is for an online virtual library of grey literature to be built up, linked to the index. The unit therefore has the option of uploading their grey literature report as part of their OASIS record, as a Microsoft Word document, rich text format, pdf or html format. The grey literature report will only be mounted by the ADS if both the unit and the HER give their agreement. The grey literature report will be made available through a library catalogue facility.

Please ensure that you and your client understand this procedure. If you choose to upload your grey literature report please ensure that your client agrees to this in writing to the HER at the address below.

For general enquiries about the OASIS project aims and the use of the form please contact: Mark Barratt at the National Monuments Record (tel. 01793 414600 or oasis@english-heritage.org.uk). For enquiries of a technical nature please contact: Catherine Hardman at the Archaeology Data Service (tel. 01904 433954 or oasis@ads.ahds.ac.uk). Or contact the Tyne and Wear Archaeology Officer at the address below.

Jennifer Morrison
Tyne and Wear Archaeology Officer
West Chapel
Jesmond Old Cemetery
Jesmond Road
Newcastle upon Tyne
NE2 1NL
Tel (0191) 2816117
jennifer.morrison@newcastle.gov.uk

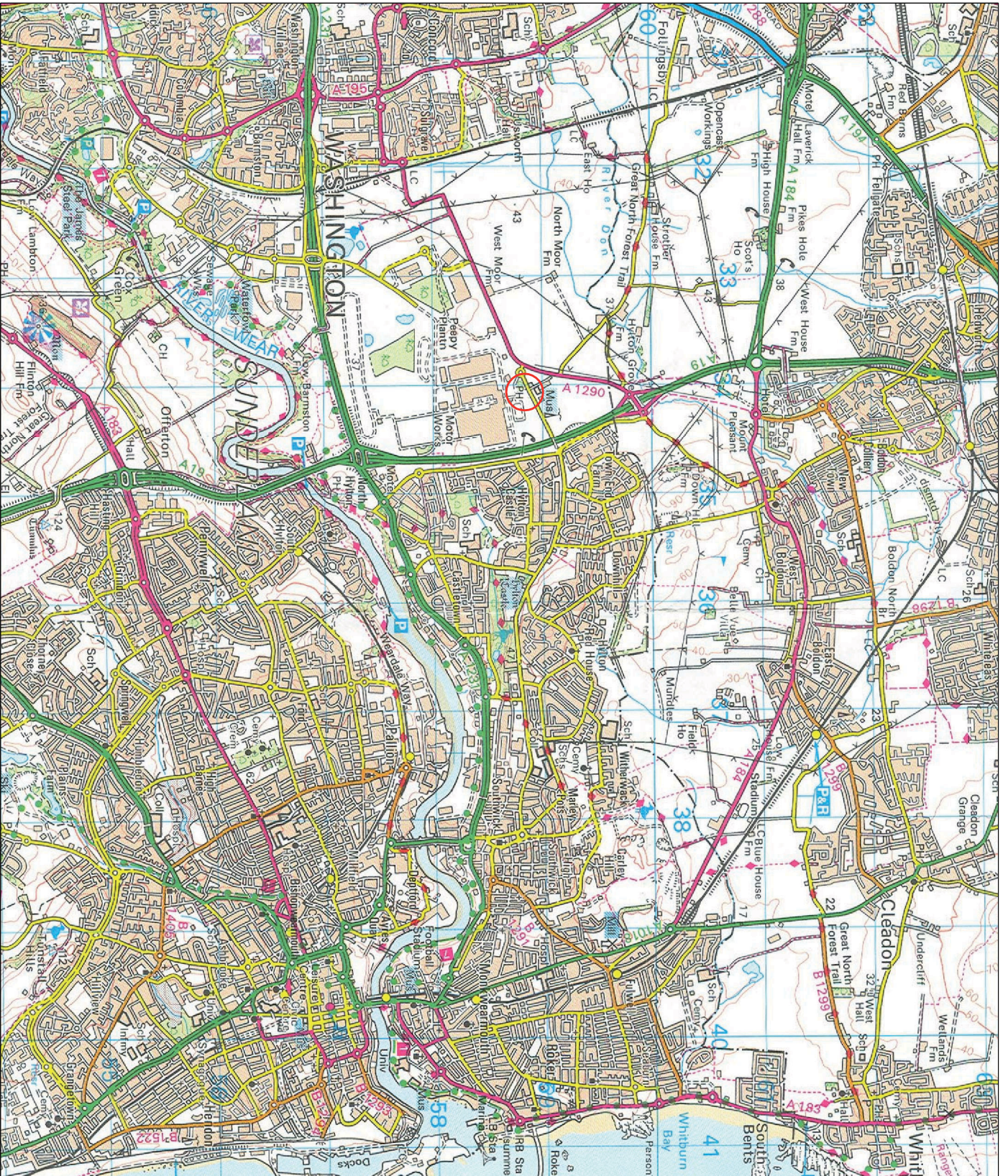
If you need this information in another format or language, please contact Jennifer Morrison at the above address.

Ref: Gateshead College Nissan

9th June 2009

Planning Application: pre-application

APPENDIX 3: FIGURES





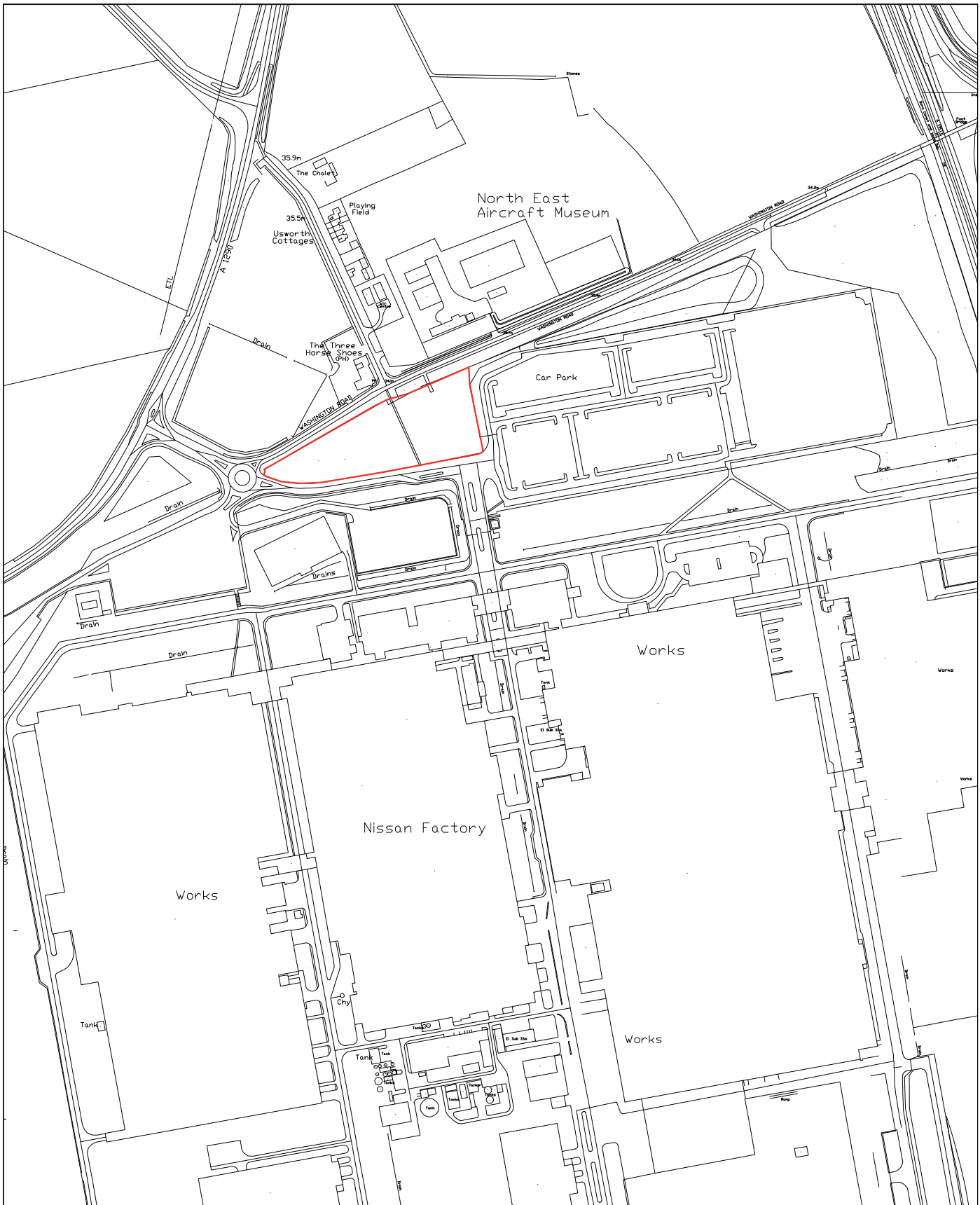
 <p>North Pennines Archaeology Ltd 2009 Land at Nissan, Washington, Sunderland</p>	<p>CLIENT: MDA Consulting Ltd</p>	<p>SCALE: 1:50 000 at A4</p> <p>DRAWN BY: FW</p> <p>DATE: June 2009</p>	<p>KEY:  Site Location</p>	<p>Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number 100014732</p> <p>REPORT No: CP968/09</p> <p>FIGURE: 1</p>
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Figure 1 : Site Location



North Pennines Archaeology Ltd
2009

PROJECT: Land at Nissan, Washington
 SCALE: 1:5000 at A4
 REPORT No: CP968/09
 CLIENT: MDA Consulting Ltd
 DRAWN BY: FW
 DATE: June 2009
 FIGURE: 2

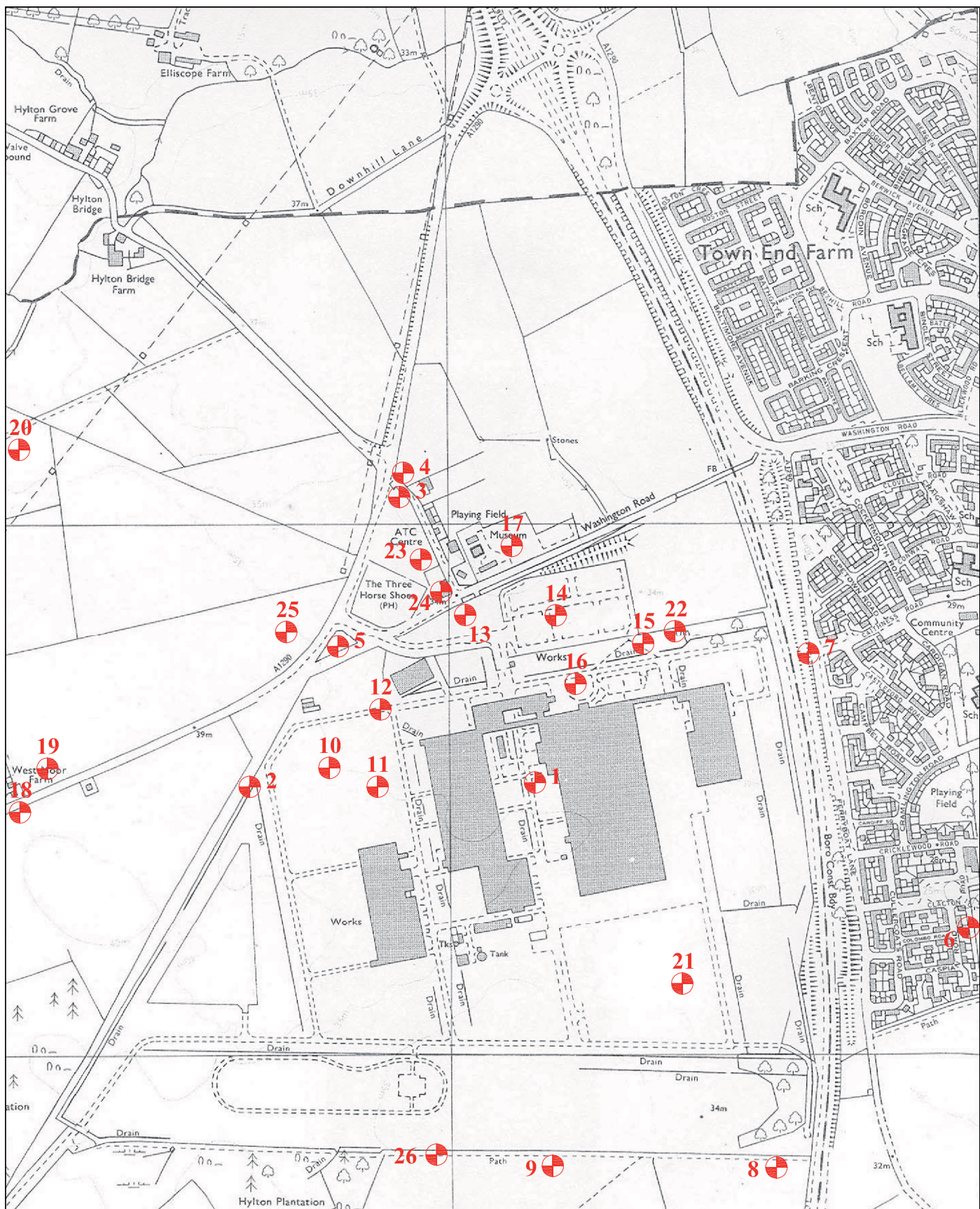
KEY:

— Boundary of Proposed Development Area



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Figure 2 : Detailed Site Location



North Pennines Archaeology Ltd
2009

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 DATE: June 2009
 FIGURE: 3

KEY:
 1  Location of HER Sites



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Figure 3 : Location of HER Sites (based on OS Map 1990)



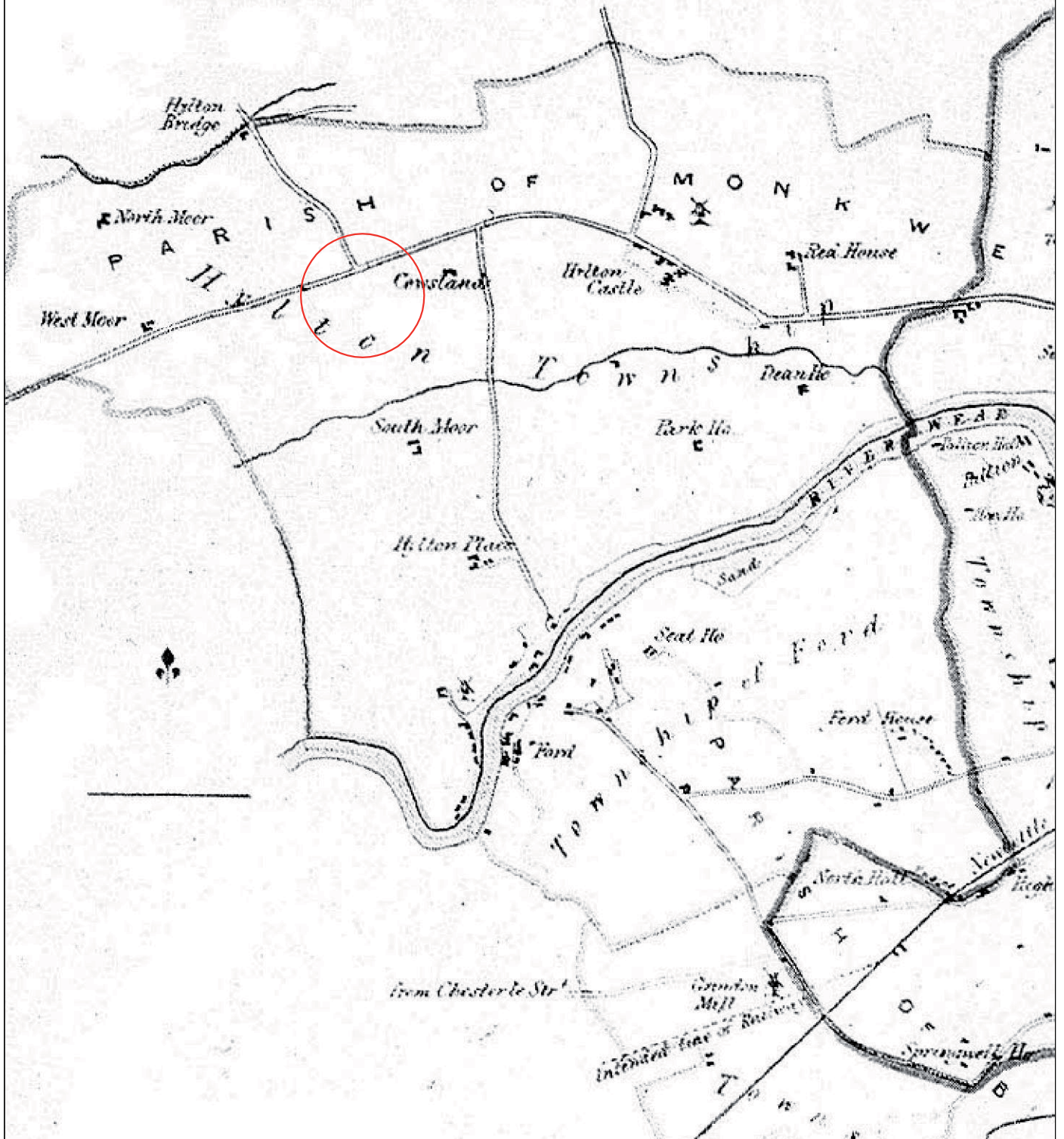
North Pennines Archaeology Ltd
2009

PROJECT: Land at Nissan, Washington
 SCALE: Not to Scale
 REPORT No: CP968/09
 CLIENT: MDA Consulting Ltd
 DRAWN BY: FW
 DATE: June 2009
 FIGURE: 4



Figure 4 : Extract from John Speed's map of the 'Bishopric and Citie of Durham' 1610

SUNDERLAND, BISHOPWEARMOUTH AND MONKWEARMOUTH.



North Pennines Archaeology Ltd
2009

PROJECT: Land at Nissan, Washington
 SCALE: Not to Scale
 REPORT No: CP968/09
 CLIENT: MDA Consulting Ltd
 DRAWN BY: FW
 DATE: Date as report
 FIGURE: Figure No

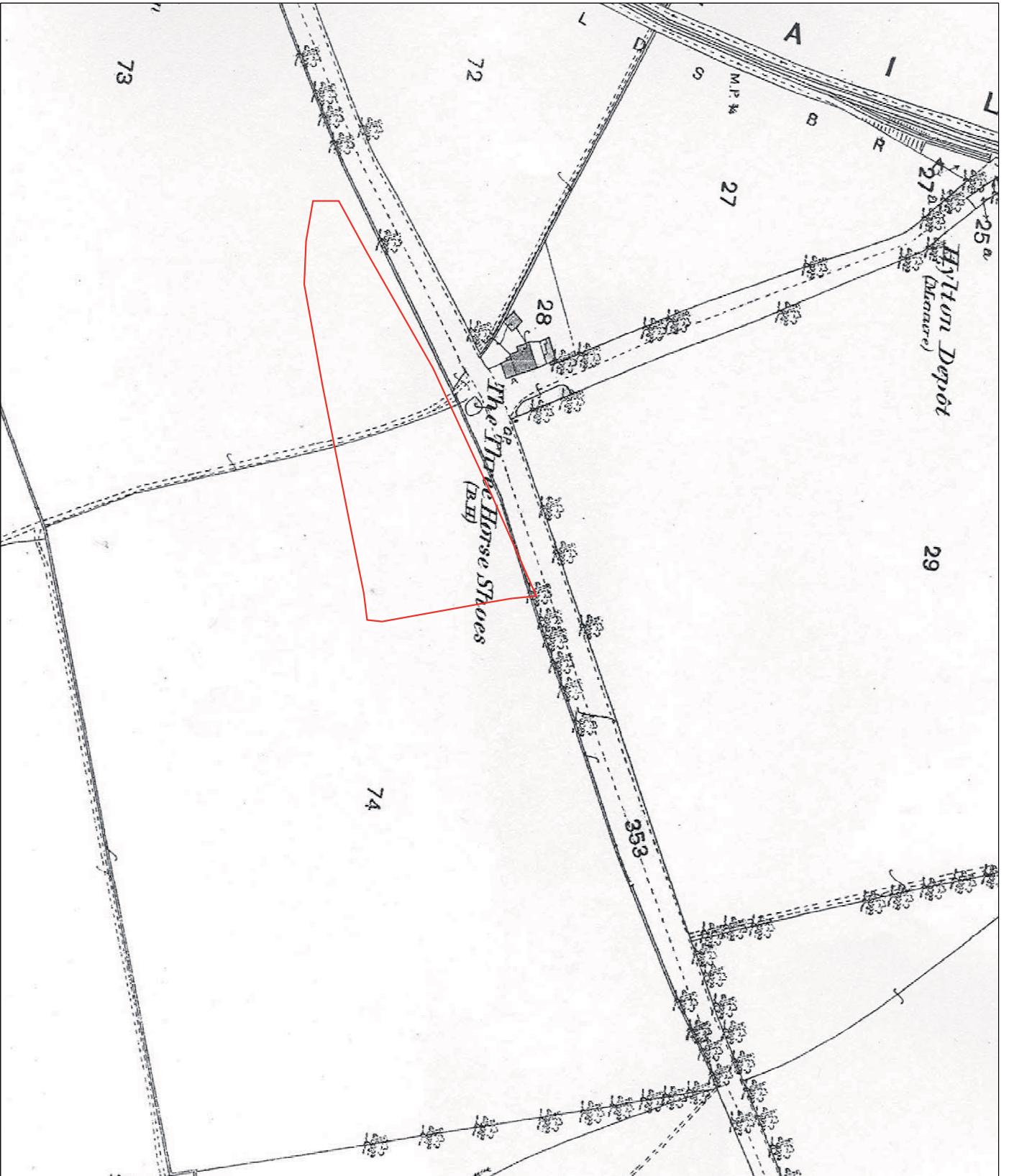
KEY:



Approximate
Location of Site



Figure 5 : Dawson's Map of Sunderland, Bishopwearmouth and Monkwearmouth 1832



North Pennines Archaeology Ltd
2009

Land at Nissan, Washington,
Sunderland

CLIENT:

MDA Consulting Ltd

SCALE: 1:2500 at A4

DRAWN BY: FW

DATE: June 2009

KEY:

— Boundary of
Proposed
Development
Area



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REPORT No:

CP968/09

FIGURE:

6

Figure 6 : First Edition Ordnance Survey Map 1856 (25" to 1 mile scale)

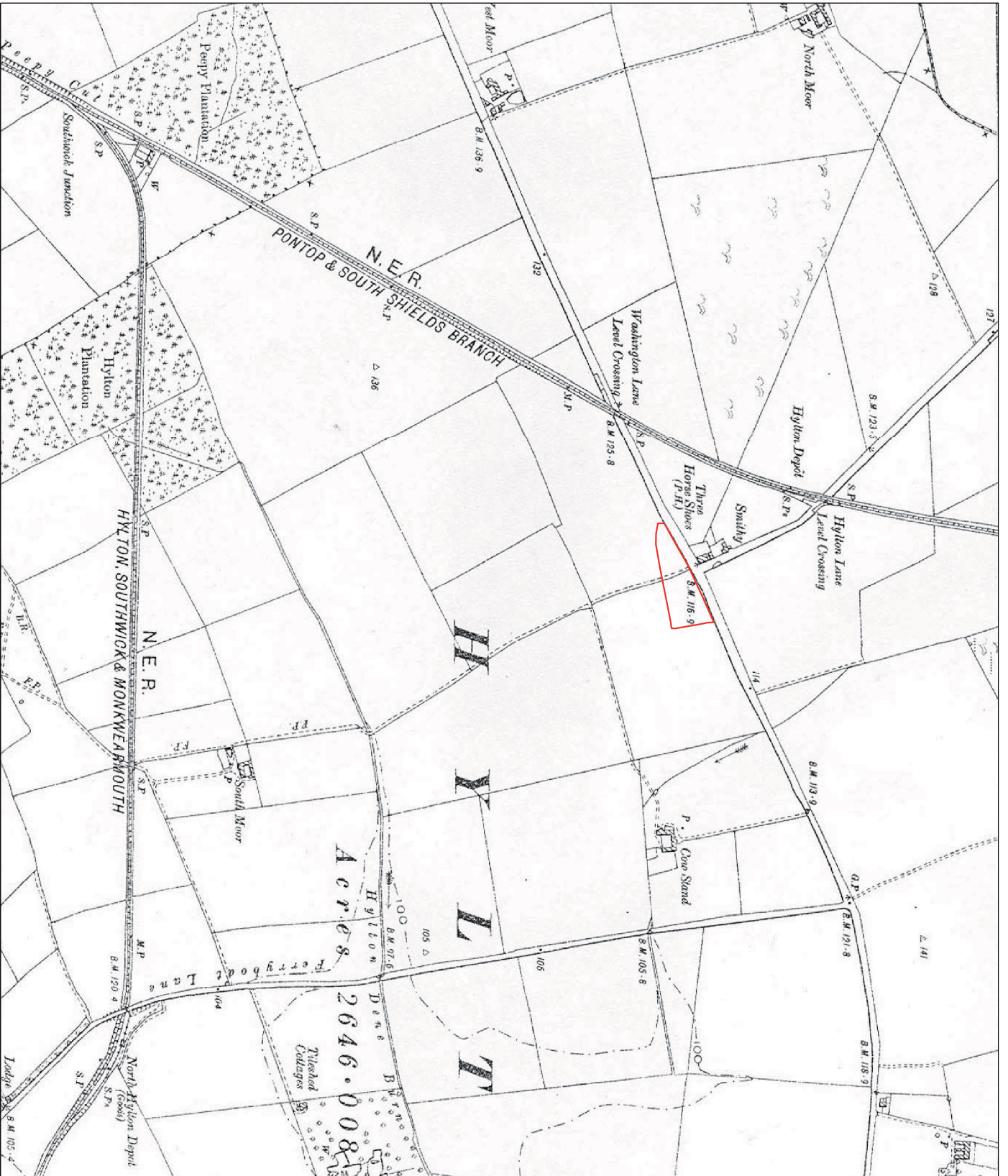


Figure 7 : Second Edition Ordnance Survey Map 1898 (6" to 1 mile scale)



North Pennines Archaeology Ltd
2009
Land at Nisga, Washington,
Sunderland

CLIENT:
MDA Consulting Ltd

SCALE: 1:10 000 at A4

DRAWN BY: FW
DATE: June 2009

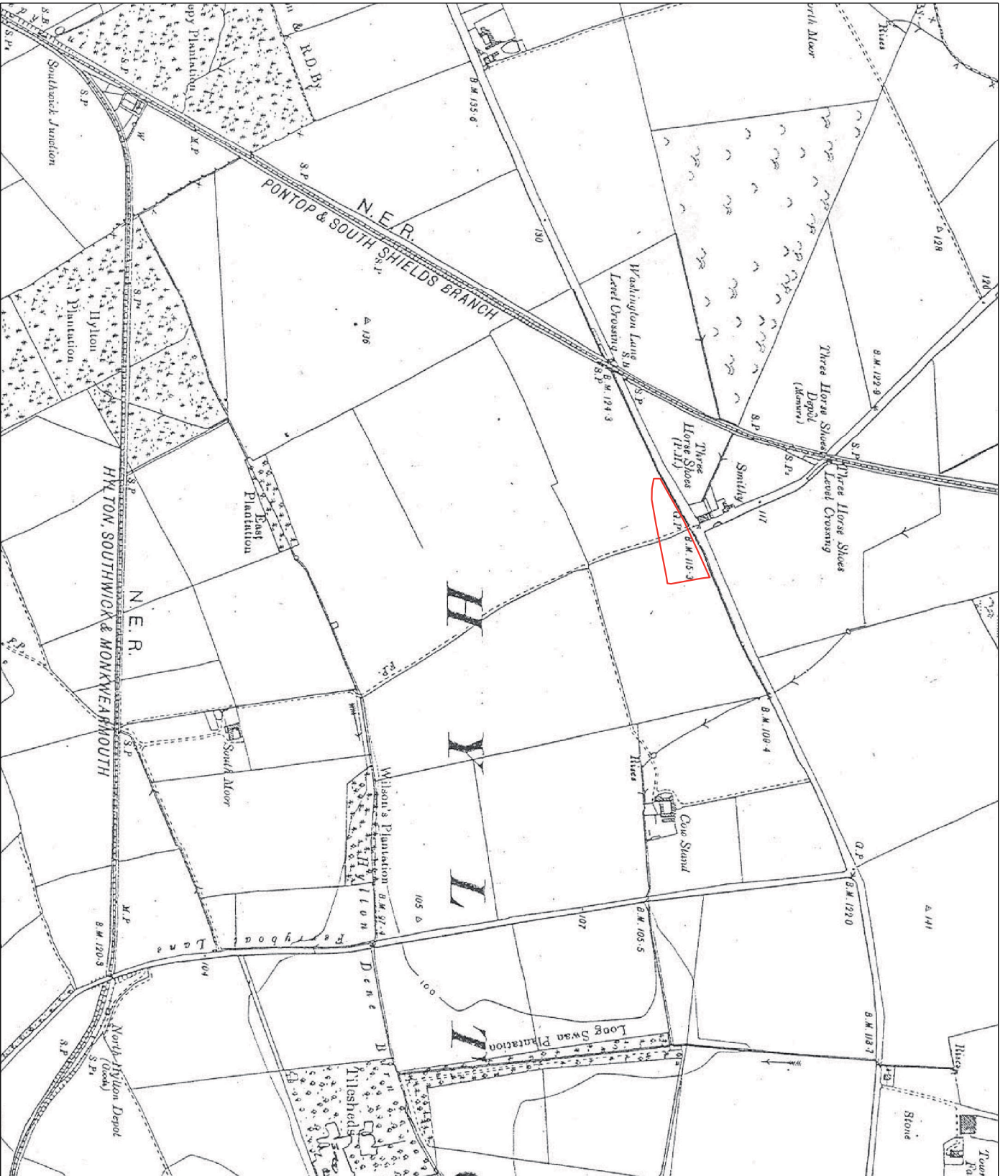
KEY:
 Boundary of Proposed Development Area



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REPORT No:
CP968/09

FIGURE:
7



North Pennines Archaeology Ltd
2009
Land at Nissen, Washington,
Sunderland

CLIENT:
MDA Consulting Ltd

SCALE: 1:10 000 at A4

DRAWN BY: FW
DATE: June 2009

KEY:
— Boundary of
Proposed
Development
Area



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FIGURE:
8

Figure 8 : Third Edition Ordnance Survey Map 1921 (6" to 1 mile scale)



North Pennines Archaeology Ltd
2009
Land at Nissau, Washington,
Sunderland

CLIENT:
MDA Consulting Ltd

SCALE: 1:10 000 at A4

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DATE: June 2009



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REPORT No:
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FIGURE:
9

Figure 9 : 1945 Map showing the extent of Usworth Airfield



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Land at Nisart, Washington,
Sunderland

CLIENT:
MDA Consulting Ltd

SCALE: 1:3500 at A4

DRAWN BY: FW
DATE: June 2009

KEY:
 Boundary of Proposed Development Area

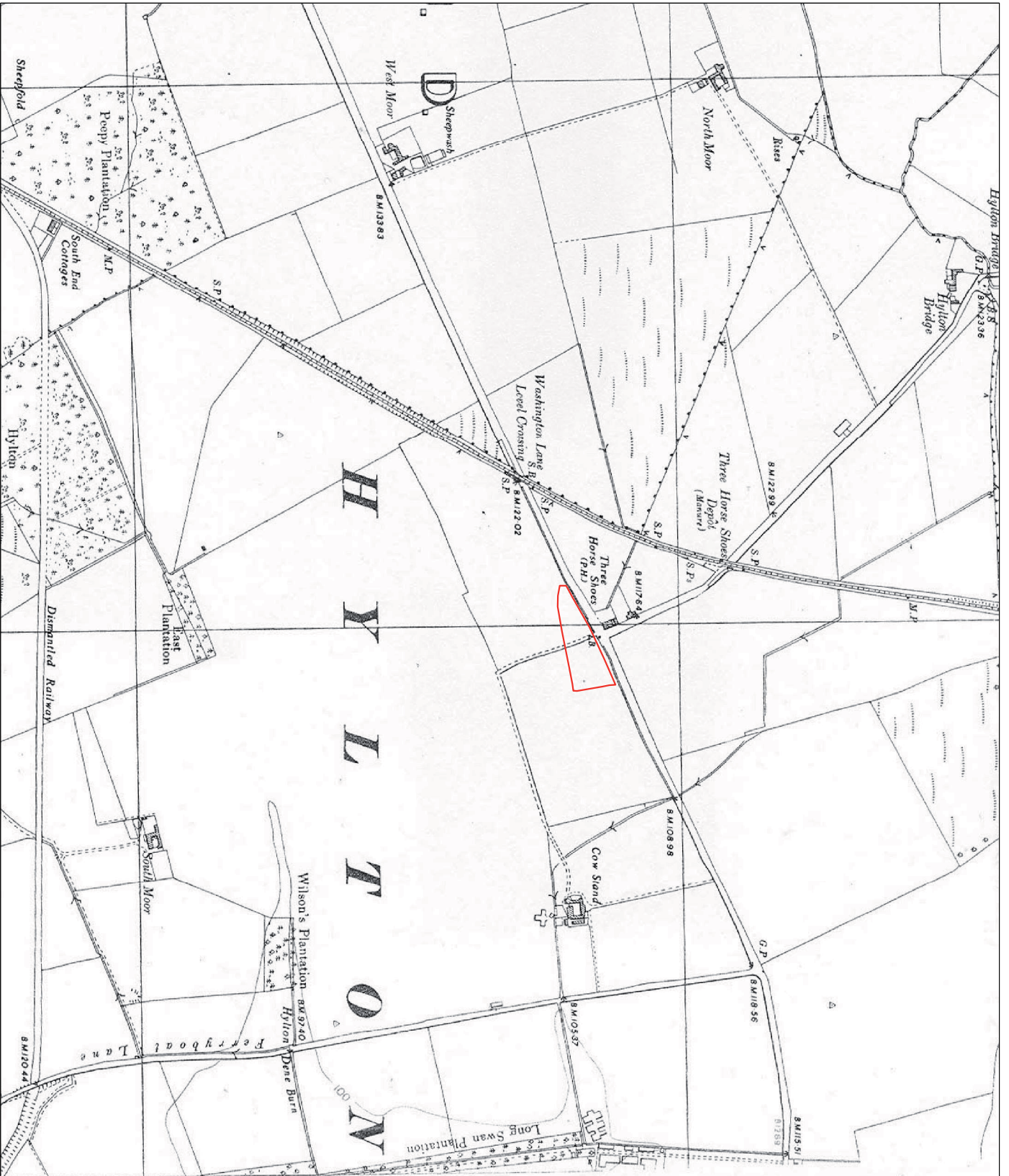


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REPORT No:
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FIGURE:
10

Figure 10 : Extract from the 1945 Map of Usworth showing detail of buildings on proposed development area



North Pennines Archaeology Ltd
2009
Land at Nissan, Washington,
Sunderland

CLIENT:
MDA Consulting Ltd

SCALE: 1:10 000 at A4

DRAWN BY: FW
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 Boundary of
 Proposed
 Development
 Area

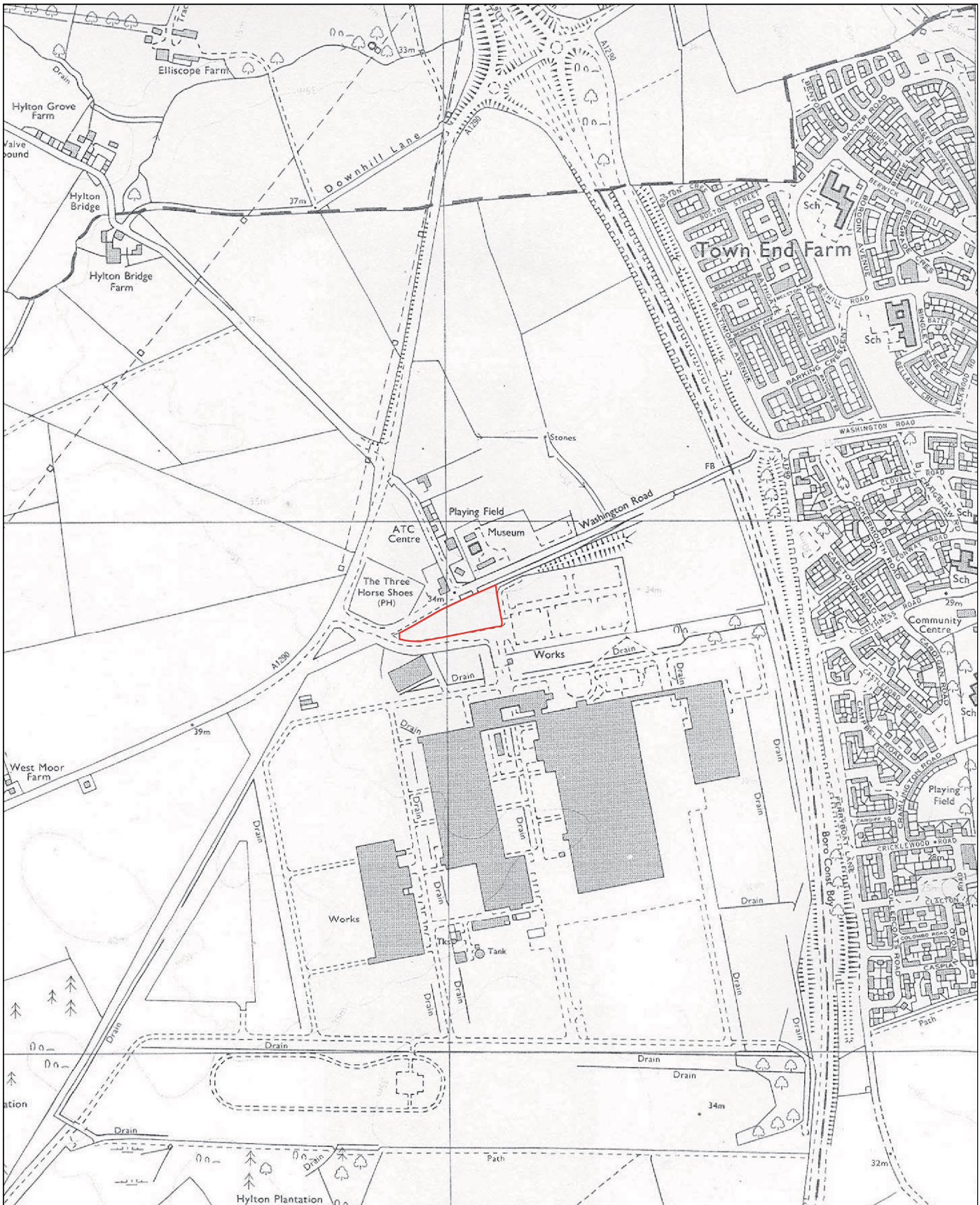


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FIGURE:
11

Figure 11 : 1951 Ordnance Survey Map (6" to 1 mile scale)





 <p>North Pennines Archaeology Ltd 2009</p>	<p>PROJECT: Land at Nissan, Washington</p> <p>SCALE: 1:10 000 at A4</p> <p>REPORT No: CP968/09</p> <p>CLIENT: MDA Consulting Ltd</p> <p>DRAWN BY: FW</p> <p>DATE: June 2009</p> <p>FIGURE: 12</p>	<p>KEY:</p> <p>— Boundary of Proposed Development Area</p>	 <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>
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Figure 12 : Ordnance Survey Map 1990 (1:10 000 Scale)