LAND AT THE FORMER FISONS FACTORY, SILLOTH, CUMBRIA.



ARCHAEOLOGICAL EVALUATION REPORT

CP. No: 1287/10

15/09/2010

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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

North Pennines Archaeology Ltd were commissioned by WA Fairhurst & Partners, on behalf of their clients Harvest Park Developments Ltd, to undertake an archaeological evaluation of land at the former Fisons Factory, Silloth, Cumbria (NGR NY 1130 5310). This work follows a planning application (Planning Application No. SCO/2010/0001) for phased residential development of the brownfield site. The archaeological work was undertaken in line with Allerdale Local Plan (Policy CO21) and government advice as set out in the DoE *Planning Policy Guidance on Archaeology and Planning* (PPG 16), and its successor PPS5: *Planning for the Historic Environment* (Policy HE6).

The proposed works lie within close proximity of important archaeological remains, including the Hadrian's Wall World Heritage Site, the Romano-British settlement known as Silloth Farm and the Roman Frontier Defensive System. As well as these, the previously undertaken desk-based assessment also identified a number of 19th century sites within or close to the site boundary. As a result, Jeremy Parsons, Historic Environment Officer of Cumbria County Council Historic Environment Service (CCCHES), requested that the land subject to the first phase of development was to be subject to a programme of archaeological investigation, in this case evaluation trial trenching.

The results of the previous geotechnical work indicated that a proportion of the proposed development area has been disturbed by the 20^{th} century industrial processes that had taken place there. However, outside of these areas it was considered that the potential for archaeological remains at the site is high, dating from the Roman, and post-medieval periods. The archaeological evaluation targeted the area considered still to have archaeological potential and was undertaken over 7 days between the 31^{st} August and 8^{th} September. 21 trenches were excavated, covering 1000m^2 of the proposed c.2ha development area. The purpose of the evaluation was to establish the nature and extent of below ground archaeological remains within the vicinity.

Trenches 1-4 and 6-20 were devoid of any archaeological features or deposits, whilst Trench 5 revealed the modern platform for the Factory Manager's House. Trench 21 revealed a depth of unstable modern made-up ground. A number of unused services were uncovered during the evaluation, as well as service cuts no longer containing the service pipes or cables. A deposit of broken and stripped cables was found in the topsoil of Trench 13, indicating that during the demolition of the Fisons site, the services on the whole were stripped out, perhaps for salvage and scrap.

The results obtained during the present evaluation, and from previous archaeological investigations suggest that the study area has not been intensively used in the past other than for laying services and later agricultural purposes.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to thank WA Fairhurst & Partners, on behalf of their clients, Harvest Park Developments, for commissioning the project, and for all assistance throughout the work. NPA Ltd would also like to thank Jeremy Parsons, Historic Environment Officer, Cumbria County Council Historic Environment Service (CCCHES), for all his assistance throughout the project.

North Pennines Archaeology Ltd would also like to extend their thanks to George Bowman of Metcalfe Plant Hire Limited, for his help during this project.

The archaeological evaluation was undertaken by Tony Liddell, Jo Beaty, Ian McGregor and Mike McElligott. The report was written by Tony Liddell and the drawings were produced by Tony Liddell and Martin Railton. The project was managed by Martin Railton, Project Manager for NPA Ltd. The report was edited by Martin Railton, Project Manager for NPA Ltd.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- In September 2010, North Pennines Archaeology were invited by WA Fairhurst & Partners, on behalf of their clients, Harvest Park Developments Ltd, to undertake a archaeological evaluation of land at the former Fisons Factory, Silloth, Cumbria (NGR NY 1130 5310; Figure 1), to support a planning application for a scheme of phased residential housing. The proposed works lie within close proximity of important archaeological remains, including the Hadrian's Wall World Heritage Site, the Romano-British settlement known as Silloth Farm and the Roman Frontier Defensive System. As well as these, the previously undertaken desk-based assessment also identified a number of 19th century sites within or close to the site boundary. As a result, Jeremy Parsons, Historic Environment Officer, Cumbria County Council Historic Environment Service (CCCHES), requested that the development area be subject to a programme of archaeological investigation. This is in line with government advice as set out in the DoE Planning Policy Guidance on Archaeology and Planning (PPG 16), and its successor PPS5: Planning for the Historic Environment (Policy HE6).
- 1.1.2 The results of previous geotechnical work indicated that a proportion of the proposed development area has been disturbed by the 20th century industrial processes that have taken place there. However, outside of these areas it was considered that the potential for archaeological remains at the site is high, dating from the Roman, and post-medieval periods. CCCHES advised that an archaeological field evaluation was to be undertaken of this area, in accordance with a written scheme of investigation (WSI), submitted to, and approved by Jeremy Parsons, Historic Environment Officer.
- 1.1.3 This report outlines the evaluation undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design was submitted by North Pennines Archaeology Ltd in response to a request by WA Fairhurst & Partners. Following acceptance of the project design by Jeremy Parsons, Historic Environment Officer of CCCHES, North Pennines Archaeology Ltd was commissioned by the client to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA), and generally accepted best practice.

2.2 THE FIELD EVALUATION

- 2.2.1 The evaluation consisted of the excavation of 21 trenches covering 1000 m² resulting in a 5% sample of the *c*.2ha area chosen for evaluation (see Figure 2 for location of trenches). The purpose of the evaluation was to establish the nature and extent of below ground archaeological remains within the vicinity. All work was conducted according to the recommendations of the Institute for Archaeologists (2002).
- 2.2.2 In summary, the main objectives of the field evaluation were:
 - to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they were observed;
 - to establish the character of those features in terms of cuts, soil matrices and interfaces;
 - to recover artefactual material, especially that useful for dating purposes;
 - to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes.
- 2.2.3 Turf and topsoil was removed by mechanical excavator under close archaeological supervision. The trial trenches were subsequently cleaned by hand and all features were investigated and recording according to the North Pennines Archaeology Ltd standard procedure as set out in the Excavation Manual (Giecco 2003).
- 2.2.4 All finds encountered were of modern date, and were therefore discarded due to holding no intrinsic archaeological value.
- 2.2.5 All deposits encountered were deemed unsuitable for environmental sampling, and therefore no samples were retained.

- 2.2.6 The 21 evaluation trenches were scheduled to be backfilled at the discretion of the client, following excavation and recording.
- 2.2.7 The fieldwork programme was followed by an assessment of the data as set out in the *Management of Archaeological Projects* (2nd Edition, 1991).

2.3 THE ARCHIVE

- 2.3.1 A full professional archive has been compiled in accordance with the specification, and in line with current UKIC (1990) and English Heritage Guidelines (1991) and according to the Archaeological Archives Forum recommendations (Brown 2007). The archive will be deposited within Tullie House Museum, with copies of the report sent to the County Historic Environment Record at Cumbria County Council, available upon request. The archive can be accessed under the unique project identifier NPA10 FFS-B, CP 1287/10.
- 2.3.2 North Pennines Archaeology and Cumbria County Council support the Online AccesS to the Index of Archaeological InvestigationS (OASIS) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION AND GEOLOGICAL CONTEXT

- 3.1.1 Silloth lies approximately 23 miles west of Carlisle, on the western fringes of the North Cumbria Plain. The North Cumbria Plain lies to the north and west of the Lake District massif and encompasses the coastal fringes forming the Solway Coast Area of Outstanding Natural Beauty. Silloth itself is part of the extensive areas of salt marsh running along the coast to the Scottish border. Land use is predominantly pasture, though significant sections of land around Silloth are given over to arable cultivation (Hodgkinson *et al* 2000). The intensification of arable practices has lead to the widespread destruction of monuments in the agricultural belt. However, the use of aerial photography has proved invaluable in the identification of extensive areas of crop marks across the Solway Plain (Bewley 1994).
- 3.1.2 The proposed development area is the former Fisons Factory located to the southeast of the town (Figure 1). The area of the site boundary measures a total of 8.26 hectares (ha) and includes a dismantled railway/informal footpath to the east. The site consists of a number of buildings with open storage areas to the central and rear areas of the site. The proposed development site is considered brownfield in need of immediate regeneration. The site is also on a list of sites included within Allerdale District Council's Derelict Property Strategy.
- 3.1.3 The solid geology of the area consists predominantly of Stanwix Shale. The drift geology consists of a deep accumulation of Devensian till, predominantly boulder clay interleaved with alluvial sands and gravels that forms a gently undulating landscape of low ridges, intersected by a mainly northeast to southwest orientated drainage system. The soils consist of mainly Clifton and Brickfield Associations, the former comprising seasonally waterlogged soils, which developed over tills (Hodgkinson *et al* 2000).

3.2 HISTORICAL CONTEXT

- 3.2.1 *Introduction:* this historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments specific to the study area.
- 3.2.2 *Place Name Evidence:* Silloth comes from the Scandinavian *Selathe*, thought to mean a grain store or barn by the sea, around which a small hamlet of fisher folk dwelled. The name is thought to have referred to one of the granges of Holm Cultram Abbey. Through the years Silloth has been

- documented as many different names. *Selathe* was first recorded in 1292. In 1361 it was known as *Selathes, Seelet Meddo* in 1538, *Selythe* in 1552, *Silluthe* in 1576, *Silleth* in 1589, *Selleth* in 1605, both *Sillath* and *Sellath* in 1649 and *Silloth Grange* in 1718 (Scott-Parker 1998).
- 3.2.3 *Prehistoric:* the earliest known occupation of the Solway Plain was during the Neolithic period. Excavations at a settlement at Plasketlands, near Mawbray uncovered an extensive palisade, suggesting possible domestic settlement. Polished Stone axes from the Langdale axe factory in the Cumbrian mountains were traded extensively throughout the British Isles. It is likely that by the 3rd millennium BC, the inhabitants of Cumbria were part of an extensive trans-European trading network and over 100 stone axes have to date been recovered from the Solway Plain. Flaked flint axes were also recovered from raised beach deposits on the west side of Silloth.
- 3.2.4 Occupation during the Bronze Age is evidenced by tools from this period that include a stone hammer found at Plasketlands, a boat-shaped axe hammer found at Wolsty, a blue whinstone axe hammer found near Silloth and a stone-battle axe made from granite found on the Solway Moss. A cluster of prehistoric roundhouses have also been identified between Silloth and Allonby.
- 3.2.5 Romano-British: during the Roman period there was a heavy military presence in Cumbria. Hadrian's Wall was built between 122-130 AD as part of the attempt to construct a permanent frontier border. Shortly after the Wall was completed it was largely abandoned and the Antonine Wall was constructed between the Rivers Forth and Clyde. The Antonine Wall's period of use was short. By 155 AD it was abandoned and Hadrian's Wall was reoccupied (Daniel 1978).
- 3.2.6 The coastal road down the west coast has been identified as the seacoast extension of the Wall thought to connect with the Roman Military Way at Bowness. This road has been seen at Beckfoot, extending for one kilometre in either direction from the fort gates, then lost to ploughing (Breeze 2004). Two phases of coastal defences have been suggested through excavation and crop mark evidence although this phasing is open to debate (*ibid*).
- 3.2.7 A large percentage of the potential Romano-British rural sites around Silloth have been identified through aerial photography; rectangular field systems have also been identified (Bewley 1994). Where rural sites have been excavated, it has been found that the traditional Iron Age building form, the roundhouse, continued to be in use into the Roman period. Excavations at Silloth Farm (1977) found a rectangular enclosure, formed by a ditch and bank, surrounding a series of roundhouses and attached to a substantial field system.

- 3.2.8 *Early Medieval*: there is little in the way of direct settlement evidence from the early medieval period in Silloth; however, it is thought that settlement was continuous. North Cumbria fell under the aegis of Anglo-Saxon, Scandinavian and Scottish influences. In the 7th century the region was absorbed into the Kingdom of Northumbria (Hodgkinson *et al.* 2000). Old Silloth Farm to the north of the site boundary is thought to be the location of an early medieval/medieval settlement or farmstead. This is based on the surrounding field strips visible on early cartographic evidence, some of which still survives. Excavations at Solway Lido have also identified extensive medieval field systems dated back to at least the 10th century (Jones 2004 and Town 2006).
- 3.2.9 *Medieval*: during most of the medieval period the northwest of England was passed back and forth between the English and the Scottish. At this time the history of Silloth is essentially intertwined with that of the abbey of Holm Cultram, to the southeast of Silloth, in the demesne of Allerdale (OAN 2004).
- 3.2.10 In 1092 William Rufus had taken control of Carlisle, although his hold was tenuous. With the death of Henry I in 1135, Civil War broke out. David I of Scotland took advantage of this instability to reassert Scotland's claim to Cumberland. David I's son, Prince Henry founded the Cistercian monastery of Holm Cultram. Prince Henry owned most of the Holm district. With the Lord of Allerdale, who owned the remaining parts, the land was granted to the monks from Melrose Abbey in Scotland (Holme St. Cuthbert History Group 2007). In *c.* 1150 this grant of land was confirmed by Henry II when the area came under English control.
- 3.2.11 The abbey is recorded as retaining the favour of the king, being exempt from shires and hundreds, wapentakes and tolls. The monks of Holm Cultram Abbey cultivated the large areas of marshland that dominated the Silloth landscape into agricultural land that supported sheep and produced grain. The monks established a busy port at Skinburness in order to export their wool (Scott-Parker 1998). Documentation suggests that by 1175 five grange farms had been established in the area, with one at *Skinburne* possessions. Following the destruction of Skinburness between 1301 and 1304, a sea dyke was constructed to protect the village. Throughout the 13th century the abbey was lavished with land, quarries, iron ore works and houses left to them by benefactors (Holme St. Cuthbert History Group 2007).
- 3.2.12 In the 13th century, the abbey was caught up in the ongoing wars between the English and the Scottish. After the signing of the Great Charter, King John marched to Scotland, reaching Berwick in 1216. As he returned south, Alexander II of Scotland set off in pursuit. They moved westward towards the abbey of Holm Cultram and laid waste to the area. The abbey was again wasted in 1316 when border raiders attacked the northwest coast,

- plundering everything as far as Furness. Six years later, Robert the Bruce led another savage campaign, again laying waste to the abbey.
- 3.2.13 *Post-medieval and Modern*: in 1538 Holm Cultram Abbey, along with 1600 acres of land was surrendered to the Crown as part of Henry VIII's Dissolution of the Monasteries.
- 3.2.14 At the time of Elizabeth I, the lands of Holme Cultram were leased out to tenant farmers. There were no freeholders in the lordship at this time. The manor of Holme Cultram was retained in crown hands until after the Restoration of Charles II and in 1732 it was purchased by the Stephenson family (*ibid*). Carved stone purportedly from the abbey is recorded in the Old Vicarage at Silloth.
- 3.2.15 In 1847 Silloth was mentioned as a hamlet that belonged to Charles Joliffe, Esq. At that time it consisted of a few farm houses of which five were recorded in the historical trade directories (Parson and White 1829, Mannix and Whellan 1847).
- 3.2.16 Until 1823 ships of 100 tons destined for Carlisle could get no further than Port Carlisle. In 1823 the Carlisle Canal opened that allowed ships to sail to the heart of Carlisle. By the late 1840s the canal was facing competition from railway lines that had direct access to the coast. In order to compete, the shareholders of the canal company formed the Carlisle and Silloth Bay Railway and Dock Company in 1852. A scheme was implemented to convert the canal into a railway line (Scott-Parker 1998). In 1853 the directors of the Carlisle Canal Company decided that it would desirable to extend the railway running from Carlisle to Port Carlisle, to Silloth Bay. After much debate it was decided that a dock at Silloth was preferable to one at Maryport as vessels could land their passengers at the end of the jetty whereas at Maryport this was not possible until high tide. Silloth Bay was regarded as a place of safety, a place where ships could go in any type of weather and at all tides. A dock and railway at Silloth Bay meant that cotton could be shipped easier and cheaper from Liverpool to Carlisle. The railway was finally opened in 1856 (Scott-Parker 1998).
- 3.2.17 The considerable income that the railway line was supposed to bring in never materialized. In order to make a profit on their venture, the directors of the Silloth Railway decided to develop Silloth into a resort. In 1855 the directors bought 46 acres of Blitterlees Common 'for building purposes' (Scott-Parker 1998). The town was designed and built by the Messrs. J.W and J. Hay, architects from Liverpool. The streets were described as roomy, straight, well-drained and lighted (Bulmer 1883).
- 3.2.18 By 1860 several streets had been laid out, flagged and paved, with Eden Street being one of the earliest parts of the new town (Holme St. Cuthbert

- History Group 2007). The Gasworks had also been established along with around 100 houses. Many boarding and lodging houses were built in order to accommodate the holiday makers (Whellan 1860). In 1998 the Victorian seaside town was virtually unchanged to the one built in 1857 (Scott-Parker 1998).
- 3.2.19 The desire for development and business of any kind was so strong that in 1856 a Mr. Bell was granted a 99 year lease for a chemical manure works at Silloth, provided that he did not carry out any offensive trade (Scott-Parker 1998). In the late 1870s and 1880s the manure works and a vitriol factory had been allowed to grow up alongside the town where the local residents complained of 'evil smells,' proving the difficulty of mixing functions of resort and commercial port within this area (Walton 1979).
- 3.2.20 Trade at Silloth initially included flour and wheat from Europe, timber from the Baltic and Canada and coal going to Ireland. Cargo that included stone and potatoes came from South Scotland and rock salt from Ireland for a salt works. It was hoped that Silloth would become as big as Glasgow or Liverpool, however this was never realized. The port was fairly quiet until the 1870s when business began to pick up mainly due to the arrival of American wheat. Carr's large bakery was the main customer for the wheat (Wright Unknown Date). By the 1880s principal trade consisted of coal, manure, burnt ore from sulphur ore, imported grain, and phosphorous from South Carolina for the manufacture of chemical manures (Bulmer 1883). Two factories for making chemical fertilizer were built nearby and became big customers of the harbour (Wright Unknown Date).
- 3.2.21 By 1858 the only manufacturers at Silloth listed within the trade directories was that of Carruthers and Blaylock, salt manufacturers (Kelly 1858). In 1873 William Crabb was listed as a chemical manufacturer (Kelly 1873). In 1883 William Crabb was listed as the proprietor of Border Counties Chemical and Manure Works where sulphuric acid, dissolved bone, superphosphate of lime, and special manures for all crops and soils were manufactured. By this time J. Maxwell and Sons had established Solway Chemical Works where dissolved bone, guano, superphosphate of lime, sulphuric acid, and special manures for all crops and soils were manufactured (Bulmer 1883).
- 3.2.22 An undated advert in the Carlisle Journal showed timber buildings connected with the railway with a tall chimney, with William Crabb written in large letters on the outside of the building. William Crabb came to Silloth from Scotland where he had previously been involved with manure manufacturing. As early as 1871 he was listed in newspapers as the manager of Border Counties Chemical Works at Silloth. In 1884 fire broke out at Crabb's manure works where it was reported that most of the buildings burnt as well as a large quantity of machinery and 'a large shed mostly of

- wood and covered with four contiguous roofs,' the plant used for the manufacture of sulphuric acid was saved. The damage was estimated to be between £2000 and £3000. Eventually new buildings replaced the burnt ones (Cumberland News 2009).
- 3.2.23 The Solway Chemical Manure Works had originally been located at Glasson Creek near Drumburgh. In 1883 John and William Maxwell inherited the business from their father, who began the manure works in 1840. Tenders to build the Solway Chemical Manure Works at Silloth were advertised in the Journal in May 1878. In 1899, the Carlisle Journal stated 'Messrs J and W Maxwell, manure merchants, have purchased the works at Silloth, adjoining their own, which for some years belonged to W. Crabb' (ibid).
- 3.2.24 In 1928 John Maxwell died followed by his brother William in 1943. The family firm eventually became Fisons Fertilizer Factory. In 1960 the Cumberland News reported that the firm was to stay for another 12 months (Cumberland News 2009).
- 3.2.25 During World War II a system of defensive structures was established across Britain, aimed at immobilising an invading force and protecting strategic areas. Pillboxes were an important link in this defensive network. Several pillboxes were positioned in order to protect Silloth Airfield that had suffered several air raids in 1940 (OAN 2004).

3.3 Previous Work

- 3.3.1 A previous Desk-Based Assessment (Strickland 2009) and an Archaeological Environmental Impact Assessment (Strickland and Wooler 2010) produced by North Pennines Archaeology, both identified a number of historic structures and features within the proposed development area. The Carlisle and Silloth Bay Railway opened in 1856 and ran within the northern edge of the site boundary. Branches of the railway line ran directly into the two chemical and manure works. As early as 1856 a chemical manure works has been present at Silloth. Within the proposed development area were the Border Counties Chemical and Manure Works and J. and W. Maxwell and Sons Solway Chemical and Manure Works, which remained in business until the mid-1900s when it was converted into Fison's Fertilizers Factory.
- 3.3.2 In April 2010, North Pennines Archaeology were invited by W A Fairhurst and Partners, on behalf of their client, to maintain an archaeological watching brief at the Former Fisons Factory site during groundworks associated with a geotechnical survey. The watching brief monitored the excavation of fifteen geological test pits and the sinking of six bore holes. Archaeological remains were identified on the east side of the site, in the

form of a red brick wall and concrete floor surface. These appear to relate to the Chemical and Manure Works constructed in the 1870s (Mounsey 2010).

4 ARCHAEOLOGICAL EVALUATION RESULTS

4.1 Introduction

4.1.1 In total 21 evaluation trenches were excavated, each measuring 30m in length by 1.6m in width and one measuring 15m in length by 3.2m in width. The latter trench (Trench 5) was double the width but half the length due to tree cover restrictions in the excavation area. The location of all trenches can be seen on Figure 2.

4.2 TRENCH 1

- 4.2.1 Trench 1 was located in the eastern part of the evaluation area and was aligned east-west.
- 4.2.2 The trench was excavated to a maximum depth of 0.58m revealing orange-grey natural clay substrate (**101**) below c.0.12m of mid-orange/brown sandy clay subsoil (**102**) and c.0.14m of loose dark brown sandy topsoil (**100**).
- 4.2.3 A disused ceramic sewerage pipe was noted running roughly north-south, *c*. 3.0m from the western end of the trench. No features of archaeological interest were revealed, and no artefactual evidence present.

4.3 Trench 2

- 4.3.1 Trench 2 was located in the eastern part of the evaluation area and was aligned northwest-southeast.
- 4.3.2 The trench was excavated to a maximum depth of 0.49m revealing orange-grey natural clay substrate (**101**) below c.0.11m of mid-orange/brown sandy clay subsoil (**102**) and c.0.17m of loose dark brown sandy topsoil (**100**).
- 4.3.3 No features of archaeological interest were revealed, and no artefactual evidence present.

4.4 TRENCH 3

- 4.4.1 Trench 3 was also located in the eastern part of the evaluation area and was aligned north-south.
- 4.4.2 The trench was excavated to a maximum depth of 0.53m revealing orange-grey natural clay substrate (**101**) below c.0.12m of mid-orange/brown sandy clay subsoil (**102**) and c.0.18m of loose dark brown sandy topsoil (**100**).

4.4.3 No features of archaeological interest were revealed, and no artefactual evidence present.



Plate 1. Trench 3, looking south.

4.5 TRENCH 4

- 4.5.1 *Trench 4:* Trench 4 was also located in the eastern part of the evaluation area and was aligned north-south.
- 4.5.2 The trench was excavated to a maximum depth of 0.57m revealing orange-grey natural substrate (**101**) below c.0.15m of mid-orange/brown sandy clay subsoil (**102**) and c.0.15m of loose dark brown sandy topsoil (**100**).
- 4.5.3 No features of archaeological interest were revealed, and no artefactual evidence present.

4.6 TRENCH 5

4.6.1 *Trench 5:* Trench 5 was located at the western extent of the evaluation area and was aligned northwest-southeast. The trench was excavated to a length of 15m and a width of 3.2m due to the tree coverage in the area.

- 4.6.2 The trench was excavated to a maximum depth of 0.88m revealing orange-yellow natural sand substrate (101) below c.0.27m of mid-orange/brown sandy clay subsoil (102) and c.0.12m of loose dark brown sandy topsoil (100).
- 4.6.3 The edge of a floating concrete raft was located in the western extent of the trench, running c.6m into the trench. This was modern in construction and presumed to be the remains of the demolished Manager's House for the Fisons Factory. A soakaway drain was also found running parallel to the concrete raft in an east-west direction, cut into the natural sand substrate.
- 4.6.4 No features of archaeological interest were revealed, and no artefactual evidence was present.



Plate 2. Trench 5, looking northwest.

4.7 TRENCH 6

- 4.7.1 *Trench 6:* Trench 6 was located in the western extent of the evaluation area and ran parallel with the hedgerow and modern trackway, aligned eastwest.
- 4.7.2 The trench was excavated to a maximum depth of c.1.40m revealing orange-grey natural clay substrate (**101**) below *c*.0.40m of mid-orange/brown sandy subsoil (**102**) and *c*.0.80m of loose dark brown sandy topsoil (**100**). In this area the topsoil had been artificially deepened by decades of household and garden rubbish being tipped over the area. Due to the instability of the subsoil strata, it was deemed that this trench was too deep to record safely, so all recording work was undertaken from the edge of the trench before the trench being immediately backfilled for health and safety purposes.
- 4.7.3 No features of archaeological interest were revealed, and no artefactual evidence present.

4.8 TRENCH 7

- 4.8.1 *Trench 7:* Trench 7 was also located in the western end of the evaluation area and was aligned northeast-southwest.
- 4.8.2 The trench was excavated to a maximum depth of 1.80m revealing greybrown sand with gravel natural substrate (**101**) below *c*.0.49m of midorange/brown sandy clay subsoil (**102**) and *c*.0.32m of loose dark brown sandy topsoil (**100**).
- 4.8.3 Two ceramic land drains were revealed in this trench, along with one disused water pipe.
- 4.8.4 No features of archaeological interest were revealed, and no artefactual evidence present.

4.9 TRENCH 8

- 4.9.1 *Trench 8:* Trench 8 was located in the northwestern extent of the evaluation area, located 11.5m north of Trench 7 and was aligned east-west.
- 4.9.2 The trench was excavated to a maximum depth of 1.70m revealing grey-brown sand with gravel natural substrate (**101**) below *c*.0.69m of midorange/brown loose sandy subsoil (**102**) and *c*.0.38m of loose dark brown sandy topsoil (**100**).
- 4.9.3 One cast-iron water pipe was located in the northeastern corner of the trench, aligned northwest-southeast. Due to the instability of the subsoil strata, it was deemed that this trench was too deep to record safely, so all

- recording work was undertaken from the edge of the trench before the trench being immediately backfilled, again for health and safety purposes.
- 4.9.4 No features of archaeological interest were revealed, and no artefactual evidence present.

4.10 TRENCH 9

- 4.10.1 *Trench 9:* Trench 9 was located in the northern extent of the evaluation area, located 23m east of Trench 8 and was aligned northwest-southeast.
- 4.10.2 The trench was excavated to a maximum depth of 1.10m revealing greybrown sand with gravel natural substrate (**101**) below *c*.0.41m of midorange/brown sandy subsoil (**102**) and *c*.0.48m of loose dark brown sandy topsoil (**100**).
- 4.10.3 No features of archaeological interest were revealed, and no artefactual evidence present.



Plate 3. Trench 9, looking east.

4.11 TRENCH 10

- 4.11.1 *Trench 10:* Trench 10 was located in the northern extent of the evaluation area, *c*4m south of Trench 9 and was aligned northeast-southwest.
- 4.11.2 The trench was excavated to a maximum depth of 0.65 revealing grey-brown sand with gravel natural substrate (101) below c.0.31m of mid-orange/brown sandy subsoil (102) and c.0.28m of loose dark brown sandy topsoil (100).
- 4.11.3 Three disused water pipes were present in this trench, running northwest-southeast.
- 4.11.4 No features of archaeological interest were revealed, and no artefactual evidence present.

4.12 TRENCH 11

- 4.12.1 *Trench 11:* Trench 11 was located in the northern extent of the evaluation area, located *c*7m south of Trench 10 and was aligned northwest-southeast.
- 4.12.2 The trench was excavated to a maximum depth of 0.78m revealing greybrown sand with gravel natural substrate (**101**) below *c*.0.20m of midorange/brown sandy clay subsoil (**102**) and *c*.0.22m of loose dark brown sandy topsoil (**100**).
- 4.12.3 One concrete encased service was noted in the western extent of the trench, aligned north-south.
- 4.12.4 No features of archaeological interest were revealed, and no artefactual evidence present.

4.13 TRENCH 12

- 4.13.1 *Trench* 12: Trench 12 was located centrally in the evaluation area, located *c*9.4m south of Trench 11 and was aligned northeast-southwest.
- 4.13.2 The trench was excavated to a maximum depth of 1.2m revealing grey-yellow compact sand natural substrate (**101**) below *c*.0.26m of midorange/brown sandy subsoil (**102**) and *c*.0.25m of loose dark brown sandy topsoil (**100**).
- 4.13.3 One ceramic land drain was noted *c*.4m from the northern end of the trench, running at a northeast-southwest alignment.
- 4.13.4 No features of archaeological interest were revealed, and no artefactual evidence present.

4.14 TRENCH 13

- 4.14.1 *Trench 13:* Trench 13 was located running parallel to the modern trackway, *c*14m southeast of Trench 12 and was aligned northwest-southeast.
- 4.14.2 The trench was excavated to a maximum depth of 0.70m revealing grey-yellow compact sand natural substrate (**101**) below *c*.0.30m of midorange/brown sandy subsoil (**102**) and *c*.0.37m of loose dark brown sandy topsoil (**100**). Unlike Trench 6 to the west, this trench did not contain a deep overburden of modern tipped rubbish, instead it contained the remains of service pipes and cables removed during the decommissioning of the Fisons Factory.
- 4.14.3 Two ceramic land drains were noted, one running northeast-southwest and the other north-south.
- 4.14.4 No features of archaeological interest were revealed, and no artefactual evidence present.

4.15 TRENCH 14

- 4.15.1 *Trench 14:* Trench 14 was located *c.*9m east of Trench 13 and was aligned northeast-southwest. The trench was excavated to a length of 30m and a width of 1.6m, and formed the western arm of an irregular 'U' shaped trench, also comprising Trenches 19 and 20.
- 4.15.2 The trench was excavated to a maximum depth of 0.66m revealing grey-yellow compact sand natural substrate (**101**) below *c*.0.10m of midorange/brown sandy subsoil (**102**) and *c*.0.22m of loose dark brown sandy topsoil (**100**).
- 4.15.3 One ceramic land drain was noted, running northeast-southwest.
- 4.15.4 No features of archaeological interest were revealed, and no artefactual evidence present.

4.16 TRENCH 15

- 4.16.1 *Trench 15:* Trench 15 was located *c*.16m west of Trench 14 and was aligned roughly north-south.
- 4.16.2 The trench was excavated to a maximum depth of 0.86m revealing banded grey-yellow compact sand and clay natural substrates (**101**) below *c*.0.11m of mid-orange/brown sandy subsoil (**102**) and *c*.0.23m of loose dark brown sandy topsoil (**100**).

- 4.16.3 Two ceramic land drains were noted, both running northeast-southwest, as well as one water pipe and two empty service cuts, also of the same alignment.
- 4.16.4 No features of archaeological interest were revealed, and no artefactual evidence present.

4.17 TRENCH 16

- 4.17.1 *Trench 16:* Trench 16 was located directly to the north of Trench 15 and was aligned northeast-southwest.
- 4.17.2 The trench was excavated to a maximum depth of 0.90m revealing grey-yellow compact sand natural substrate (**101**) below *c*.0.22m of midorange/brown sandy subsoil (**102**) and *c*.0.42m of loose dark brown sandy topsoil (**100**).
- 4.17.3 One cast iron water pipe was located at the northern end of the trench, running east-west, and a gravel soak-away was also present, *c*.14m from the northern end of the trench, again aligned east-west. The soak-away was a modern feature, cut from the top of the subsoil and presumably dates to when this area was used as an allotment after the destruction of the factory.
- 4.17.4 No features of archaeological interest were revealed, and no artefactual evidence present.



Plate 4. Trench 16, looking north.

4.18 TRENCH 17

- 4.18.1 *Trench* 17: Trench 17 was located *c*.24m east of Trench 16, and *c*.11m north of Trench 18, aligned roughly north-south and positioned on the western edge of the known made ground running through the site.
- 4.18.2 The trench was excavated to a maximum depth of 0.75m revealing orange-brown compact clay natural substrate (**101**) below *c*.0.13m of midorange/brown silty subsoil (**102**) and *c*.0.33m of loose dark brown sandy topsoil (**100**).
- 4.18.3 Two ceramic land drains were noted, running east-west.
- 4.18.4 No features of archaeological interest were revealed, and no artefactual evidence present.

4.19 TRENCH 18

- 4.19.1 *Trench 18:* Trench 18 was located *c*.11m south of Trench 17 and was aligned northwest-southeast.
- 4.19.2 The trench was excavated to a maximum depth of 0.64m revealing greybrown compact clay natural substrate (**101**) below *c*.0.11m of midorange/brown sandy subsoil (**102**) and *c*.0.31m of loose dark brown sandy topsoil (**100**).
- 4.19.3 Two ceramic land drains were noted, running east-west, as well as one empty service trench of the same alignment.
- 4.19.4 No features of archaeological interest were revealed, and no artefactual evidence present.

4.20 TRENCH 19

- 4.20.1 *Trench 19:* Trench 19 was located *c*.5m south of Trench 18 and was aligned northwest-southeast. The trench was excavated to a length of 30m and a width of 1.6m and formed the eastern arm of an irregular 'U' shaped trench, also comprising Trenches 14 and 20.
- 4.20.2 The trench was excavated to a maximum depth of 0.75m revealing grey-yellow compact sand natural substrate (**101**) below *c*.0.30m of midorange/brown sandy subsoil (**102**) and *c*.0.20m of loose dark brown sandy topsoil (**100**).
- 4.20.3 Three ceramic land drains were noted, running roughly east-west.
- 4.20.4 No features of archaeological interest were revealed, and no artefactual evidence present.

4.21 TRENCH 20

- 4.21.1 *Trench* 20: Trench 20 was located running parallel with the modern track and formed the southern arm of an irregular 'U' shaped trench, also comprising Trenches 14 and 19.
- 4.21.2 The trench was excavated to a maximum depth of 0.62m revealing grey-yellow compact sand natural substrate (**101**) below *c*.0.24m of midorange/brown sandy subsoil (**102**) and *c*.0.19m of loose dark brown sandy topsoil (**100**).
- 4.21.3 No features of archaeological interest were revealed, and no artefactual evidence present.

4.22 TRENCH 21

- 4.22.1 *Trench* 21: Trench 14 was located *c*.30m east of Trench 20 and was aligned northwest-southeast.
- 4.22.2 The trench was excavated to a maximum depth of 1.65m, but did not reveal natural substrate at this level. The area consisted of made-up ground, comprised of bricks, sand, concrete, broken pipes and other modern material, over which was *c*.0.24m of loose dark brown sandy topsoil (100). The modern make-up was noted to be moving under the weight of the mechanical excavator and was seen to be unstable: no staff members entered the trench due to necessary safety precautions, and the trench was recorded from the side of a stable excavated area.
- 4.22.3 No features of archaeological interest were revealed, and no artefactual evidence present.

4.3 ARCHAEOLOGICAL FINDS AND ENVIRONMENTAL SAMPLING

4.3.1 No significant archaeological finds were recovered, and no environmental samples were retained during the groundworks.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

- 5.1.1 During the archaeological field evaluation at the former Fisons Factory, twenty one trenches were excavated, covering 1000m² of the western part of the development area. The purpose of the evaluation was to establish the nature and extent of below ground archaeological remains within the vicinity.
- 5.1.2 The majority of the trenches were devoid of any archaeological features or deposits, whilst Trench 5 revealed the modern platform for the Factory Manager's House. Trench 21 revealed a substantial depth of unstable modern made-up ground.
- 5.1.3 A number of disused services were uncovered during the evaluation, as well as service cuts no longer containing the service pipes or cables. A deposit of broken and stripped cables was found in the topsoil of Trench 13, indicating that during the demolition of the Fisons site, the services on the whole were stripped out, perhaps for salvage and scrap. All finds were either late post-medieval or modern in date and were discarded.
- 5.1.4 The results obtained during the present evaluation, and from previous archaeological investigations suggest that the study area has not been intensively used in the past other than for laying services and later agricultural purposes. The archaeological potential of other areas within the development area is very low.

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APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description
100	Deposit	Topsoil
101	Deposit	Natural
102	Deposit	Subsoil

Table 1. List of Contexts issued during the evaluation.

APPENDIX 2: FIGURES

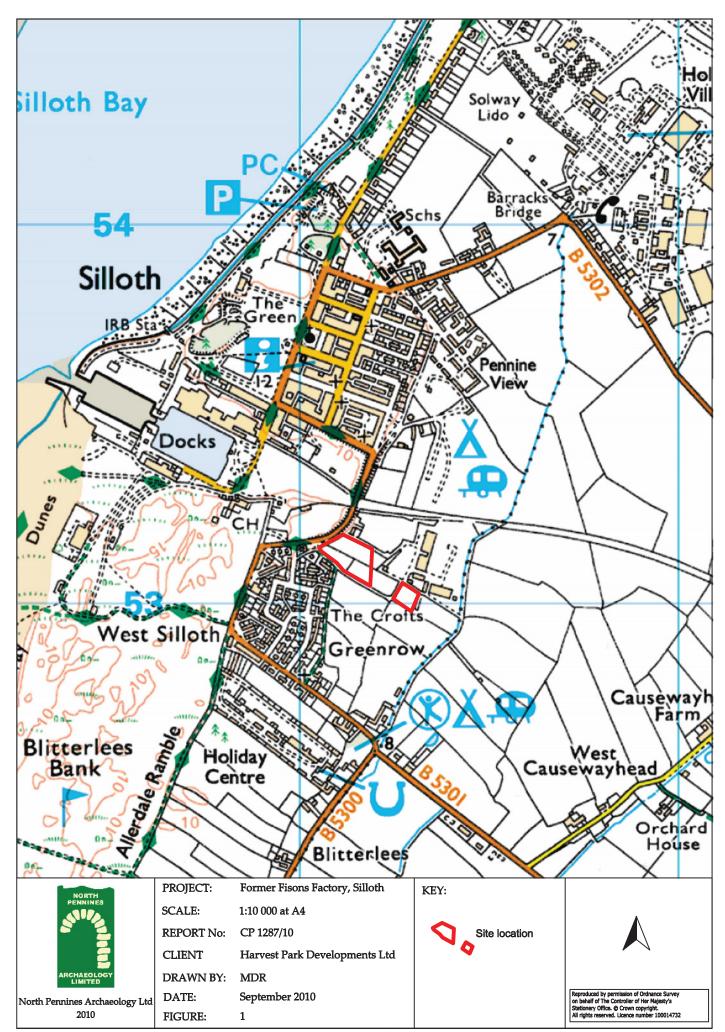


Figure 1: Site Location



Figure 2 : Locations of proposed evaluation trenches showing services (blue=sewage, pink=BT, green=electricity)