



SEFTON DRIVE FLOOD ALLEVIATION, MAGHULL, MERSEYSIDE

**Desk-Based
Assessment,
Walkover Survey and
Watching Brief**



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SUMMARY

Following proposals by United Utilities for groundworks associated with flood alleviation, involving the installation of lengths of sewer and a sewer retention tank, at Sefton Drive, Magull, Merseyside (NGR SD 368019, Fig 1), Oxford Archaeology North (OA North) were commissioned to undertake an archaeological desk-based assessment, walkover survey and an archaeological watching brief of the groundworks.

The desk-based assessment identified 34 sites of archaeological interest within the study area, two of which may be affected by the proposed pipeline (Fig 2). These are the Scheduled Ancient Monument of Maghull Moated Manor (Site **01**; SAM 22446) and Back Lane Cross (Site **12**). The walkover survey was conducted through the six fields to be crossed by the pipeline easement, in addition to the site of Mughall Manor (Site **02**), the old manor (Site **07**), and the Magull Moated Manor (Site **01**). No finds or additional features of archaeological significance were identified by the walkover survey. However, due to the close proximity of the easement to the site of Mughall Manor, a permanent presence-watching brief during all topsoil stripping activities was recommended.

The archaeological watching brief was undertaken in February 2008, and produced no finds or features of archaeological significance. Several modern drains were observed across the easement, and most likely corresponded to those recorded to the north-west of Sefton Drive. It was likely that the area around Maghull Moated Manor (Site **01**) comprised rural, dispersed settlement, until the eighteenth and nineteenth centuries, when large areas were drained to provide more agricultural land, and there was an increase in industrialisation. Although no obvious elements of industry were identified during the watching brief, the numerous drains seem to correspond to known farming practices from the eighteenth century onwards.

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Oxford Archaeology North (OA North) would like to thank United Utilities for commissioning the project. Thanks are also due to Sarah-Jane Farr at Merseyside Historic Environment Record and also to the staff at local studies library in Liverpool and Lancashire County Record Office in Preston.

Alastair Vannan compiled the desk-based assessment and Kelly Clapperton undertook the walkover survey. The archaeological watching brief fieldwork was carried out by Thomas Mace and Phillipa Haworth, and the results were compiled by Kelly Clapperton. Mark Tidmarsh produced the drawings, and Alison Plummer managed the project, and also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 A proposal was prepared by United Utilities for groundworks associated with flood alleviation at Sefton Drive, Maghull, Merseyside (NGR SD 38019). The proposed development comprised a sewer pipeline, with an associated retention tank, running roughly from east to west (Fig 1) and situated to the north of Maghull Moated Manor House (Site **01**). United Utilities commissioned Oxford Archaeology North (OA North) to undertake an archaeological desk-based assessment and walkover survey of the proposed development area. Subsequently, an archaeological watching brief was undertaken during the groundworks phase.
- 1.1.2 This report sets out the results of the desk-based assessment, walkover survey and watching brief in the form of a short document outlining the findings, and results of the archaeological work at Sefton Drive.

1.2 SITE LOCATION AND TOPOGRAPHY

- 1.2.1 The proposed pipeline is situated to the north of Sefton Lane at the western side of Maghull in Merseyside (Fig 1), which is situated at the northern extent of the Merseyside conurbation, just south of the Lancashire and Amounderness Plain (Countryside Commission 1998, 135–6, 86). The site is located on fairly flat low-lying land at around 10m AOD and lies to the east of the River Alt.
- 1.2.2 The urbanised area that comprises the study area has not been surveyed by the British Geological Survey but lies close to areas of Sollom 1-type soils (British Geological survey 1983).

2. METHODOLOGY

2.1 DESK-BASED ASSESSMENT

2.1.1 A study area that extended 0.5km to each side of the proposed pipeline to form a corridor 1km wide was examined in order to gain an understanding of the historical and archaeological background of the area and to assess the potential impact of the development on sites of archaeological interest. Any such sites within the study area were included in the site gazetteer (*Section 4*, Fig 2). A general historical and archaeological background of the area was also compiled, and map regression analysis was undertaken. Several sources of information were consulted, which have provided a good understanding of the developmental history of the study area. Archive sources that were consulted include:

- ***Merseyside Historic Environment Record (HER), Liverpool:*** the HER is a list of all known sites of archaeological interest within Merseyside, and is the primary source of information for a study of this kind.
- ***Lancashire Record Office, Preston:*** the record office holds cartographic and documentary sources relating to the historic county of Lancashire, which once included the study area.
- ***Liverpool Record Office and Local Studies and Merseyside Record Office, Liverpool:*** the central library at Liverpool includes a local studies section and the Merseyside record office that contains numerous primary and secondary sources relating to the locale of the study area.
- ***OA North Library:*** OA North has undertaken numerous projects in the north-west of England. As a result, it has a large library of secondary sources, as well as unpublished client reports in its offices in Lancaster.

2.2 WALKOVER SURVEY

2.2.1 A walkover survey was undertaken along a 500m corridor centring on the proposed pipeline route (Fig 2). The walkover was carried out to relate the existing landscape with the research findings of the desk-based assessment, and to locate and record any unknown features of archaeological interest.

2.2.2 The area was walked in a systematic fashion, all new features of archaeological interest were plotted on a map in relation to the Ordnance Survey, and a written record of all observations was compiled. A photographic archive was created with the use of appropriate scales, and included monochrome prints and colour slides.

2.3 WATCHING BRIEF

- 2.3.1 An easement approximately 6m wide was excavated along the length of the pipeline route (Fig 1). This was undertaken by a 13 ton, 360° mechanical excavator, removing both topsoil and subsoil to natural geology, under the constant supervision of an archaeologist. All features of archaeological interest were investigated by hand.
- 2.3.2 The results of the watching brief were recorded on OA North *pro forma* sheets, whilst plans and sections were drawn to appropriate scales on permatrace. An indexed photographic archive was compiled, comprising monochrome prints and colour-slides, with digital photographs taken for presentation purposes.

2.4 ARCHIVE

- 2.4.1 A full professional archive has been compiled in accordance with current IFA and English Heritage guidelines (English Heritage 1991). On completion of the project the material archive will be deposited in the CRO in Liverpool, while a copy of the report will be deposited in the HER, also in Liverpool.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 INTRODUCTION

- 3.1.1 In addition to a detailed investigation of the closely defined study area, it is also necessary to present a general archaeological and historical background of the wider locale. This will allow the site to be considered within the context of the differing systems of land use and resource exploitation that helped to define the human landscapes in this area over time.

3.2 THE PREHISTORIC PERIOD

- 3.2.1 ***The late Upper Palaeolithic and Mesolithic periods (c 11,000–4000 cal BC):*** very little Late Palaeolithic evidence is known from north-western England, and the study area at that time would have existed within an environment that had not yet begun to develop the wetland characteristics that would define much of the western mosslands in later periods (Cowell and Innes 1994, 81–3). One flint findspot, at Woodham Knoll, Little Crosby, which lies to the west of the study area, may represent Late Palaeolithic activity (*op cit*, 81). If this was the case, then the lower sea levels of that time would mean that the contemporaneous landscape may have resembled a resource-rich river valley, rather than the low-lying saturated lands typical of later prehistoric periods (*ibid*).
- 3.2.2 The Mesolithic period (8000–4000 cal BC) in this area is difficult to subdivide confidently, due to the lack of a clear contrast in stone tool typologies throughout the period and few excavated sites to provide detailed stratigraphic information (*op cit*, 82). Some flints found in the Alt Valley, at Lunt, were associated with chert implements similar in fabric and form to Early Mesolithic examples from the Wirral, and there may also have been finds of this date from Flea Moss Wood, in Little Crosby (*ibid*). Evidence for the Late Mesolithic period (6800–400 cal BC) in the Merseyside and West Lancashire areas is the richest in the country, although most findspots are restricted to two main concentrations lying to the south-west of the study area, at Little Crosby and the Alt Valley floodplain (*op cit*, 82–3). Many of these sites appear to represent domestic and industrial flint-working sites and it has been suggested that hunting and foraging may have occurred further inland, in river valleys and at the western edge of the western mosslands (*op cit*, 86).
- 3.2.3 ***The Neolithic period (c 4000–2400 cal BC):*** the Mesolithic was the latest cultural epoch in Britain during which people employed a subsistence strategy based wholly upon hunting, gathering, and fishing. Following the introduction of farming to the British Isles, from around 4000 BC, the Neolithic period saw the beginning of the widespread construction of monumental architecture; however, such monuments are not known in the locale of the study area.
- 3.2.4 By the time of the Late Neolithic (c 3500–2400 cal BC), tool types distinguishable from the Late Mesolithic examples were in use, with material coming from Orrell Hill, Lydiate, and Woodham Knoll Ridge (*op cit*, 93).

These sites consisted of assemblages of flint flakes and finished implements, representing specialist working areas distinctive from industrial tool production areas (*ibid*). The use of arable agriculture at this time is represented by woodland clearance in association with cereal pollen at Flea Moss Wood to the west of the study area (*op cit*, 94).

- 3.2.5 ***The Bronze Age and Iron Age (c 2400 cal BC – AD 43)***: the beginning of the Bronze Age in Britain, defined mainly by the introduction of the use of copper, developed gradually out of the preceding Neolithic during the mid third millennium BC (Parker Pearson 2000, 13). The lack of Bronze Age evidence in the locale of the study area has prompted the suggestion that the western mosslands of this area may have been occupied by mobile pastoralists (Cowell and Innes 1994, 94). An enigmatic class of modified flint pebbles has been found at Woodham Knoll, Orrell Hill, and the Alt floodplain, to the south-east, suggesting that the coastal areas and river valleys may have been in use during the Late Bronze Age (*ibid*).

3.3 THE HISTORIC PERIOD

- 3.3.1 ***The Romano-British Period (c AD 43 – AD 409)***: the study area lies to the west of the Roman road network described by Margary (1957). Although Roman-British sites have been identified to the north-west, at Lathom (Cowell 2005, 68–9), and at several sites to the south of Prescott (Cowell and Philpott 2000, 213) there is no such evidence in the locale of the study area. Local placename evidence does suggest that a British population may have inhabited the area prior to Anglo-Saxon settlement, with *Hinne*, an earlier form of Ince (Cowell and Innes 1994, 97), and the *Mag* element of Maghull (Wall 1922, 119–20) representing the British words for ‘island’ and ‘plain’ respectively.
- 3.3.2 ***The Early Medieval Period (c AD 409 – AD 1066)***: although the evidence for Romano-British occupation of the local area is sparse, placename evidence suggests that there were several settlements in the area during the Anglo-Saxon period. Melling, Lydiate, Aughton, and Maghull all feature Old English placename elements (*ibid*) and, although there is no archaeological evidence to support the suggestion, the mentions of all three places in Domesday Book (*ibid*) confirm their existence prior to the Norman Conquest. The Old English element of Maghull may derive from *haugh* (*ibid*), indicating a gentle slope, such as those to the east of the River Alt where Maghull is situated, or *halh*, meaning a nook or corner (Lewis 2002, 17). The scatter of Norse placenames in the surrounding area, such as Crosby, Formby, Kirkby, and Ormskirk (Hodern and Miller 1977, 3), once more suggest occupation of the area prior to the Norman Conquest, although little physical evidence from this period survives. It is possible that settlement nucleations were the focus of continuing activity in later periods and that later villages and towns have, therefore concealed or destroyed earlier evidence.
- 3.3.3 ***The Medieval Period (c AD 1066 – AD 1540)***: prior to the Norman Conquest Maghull was one of the six manors held by Uctred and comprised two hides (Lewis 1991, 717–9). Following the Conquest William FitzNigel was granted the manor of Maghull, which was attached to the fee of Widnes (*ibid*). During the medieval period, this manor appears to have consisted of large quantities

of woodland, demonstrated by a grant of 1240 that makes reference to 40 acres in the wood of Maghullcusho and 40 acres in Maghullwoode (Lewis 2002, 13). The local woodland resource was clearly important and numerous documentary sources from the period mention rights of pannage; allowing pigs to feed on nuts and mast in woodlands, timber, and the collection of wood to reinforce hedges (*ibid*; Lewis 1991, 719). By the fourteenth century, however, woodland clearance and assart were having an impact on the landscape (Lewis 2002, 28). It is unclear where the focus of medieval settlement was located in Maghull. Elements of the chapel at Maghull are suggested to date to 1280–90 (Hordern and Miller 1977, 7) and a chapel may have been established here as early as the eleventh century (Lewis 2002, 38). There is little evidence, however, that the site of the chapel acted as the focus for nucleated activity in the medieval period (*op cit*, 53). It has been suggested that settlement in the area was dispersed and that surviving farmsteads may occupy the same, or adjacent, sites as their medieval predecessors (*op cit*, 53; 75).

- 3.3.4 Three wayside crosses were once located in the Maghull area (Sites **12**, **13**, and **29**), all of which fall within the study area. Although these were often situated between a settlement and the parish church these three crosses do not appear to demarcate one direct route within the local area. It is possible that the crosses were sited to mark the main routes used to access the chapel from the dispersed farmsteads in the locale, with Back Lane Cross (Site **12**) possibly representing the convergence of routes from the moated halls at Maghull Hall (Site **01**) and Peel Farm.
- 3.3.5 There were two moated manor houses within the local area; one to the north-west of the study area at Peel Farm and a second in the centre of the study area close to the north-east of the present Maghull Hall (Site **2**). Maghull Manor House (Site **7**) was also referred to as Carr House and Old Hall and was built during the medieval period. ‘Thomas Maghull of the Carr’ was recorded in 1442 and phases of rebuilding or restoration appear to have been marked by the addition of date-stones inscribed 1638, and 1667, that have been used in later buildings close to the site (Lewis 1991, 721). The original manor house is likely to have been located within the moat (Site **1**). This currently survives as two lengths of ditch with differing widths. The moat partially surrounds a slightly raised rectangular platform that measures *c* 80m long and 60m wide (SAM 22446) and it is within this platform that structural and artefactual evidence likely to relate to the early manor house were found following ploughing in the 1970’s (*ibid*). The current entrance to the platform is located at the eastern side, by way of a causeway across the moat; however, it has been suggested (MHER 3602/3) that this was not the original entrance to the site. The manor house was replaced by a later building, located to the south-west of the original house, during the eighteenth century and it is thought that the older house was demolished at this time (SAM 22446).
- 3.3.6 **The Post-Medieval Period:** Maghull Manor House (Site **7**) was demolished in the eighteenth century and replaced by Maghull Hall (Site **02**), possibly around 1780 (Lewis 1991, 721). The later building was situated to the south-west of the earlier hall and incorporated a date stone of 1638 reset above one of the doorways (*ibid*). The current house was partly rebuilt in the nineteenth

century (Baines 1870, 425) and consists of a four-storey brick building with stone dressings (MHER 3601/1). This had apparently replaced an earlier half-timbered structure (Baines 1870, 425), although whether this refers to the original hall (Site 07), within the moat, or an earlier phase of the extant building is not clear. The moated area (Site 01) had been ornamentally landscaped by the time of the first edition Ordnance Survey map of 1851 and, by the time of the Ordnance Survey map of 1893, featured an orchard over much of the raised platform. This orchard had been cleared by the time of a site inspection in 1979 (MHER 3602/3) and ploughing had revealed fragments of burnt daub, a possible floor tile, and medieval pottery. A seventeenth century datestone of 1677 is located in a sandstone building that may be a folly or an outhouse associated with the later phases of the hall (Site 7) within the moat (Lewis 1991, 721). There were brick and sandstone foundations and a stone-lined well discovered on the platform following ploughing in the 1970s (SAM 22446) and a high red brick wall with a heating cavity (Site 08) is situated at the western side of the platform. By 1910 Maghull Hall (Site 02) was in use as a home for people with epilepsy.

- 3.3.7 During the post-medieval period in the Maghull area, the earlier pattern of dispersed agricultural settlement appears to have continued, however, the specific nature of this settlement was affected by changes in the wider locale. As mentioned above, the quantity of woodland in the area continued to decrease throughout the medieval period and the loss of woodland during the post-medieval period is attested by field names on the tithe map of 1840. Many of these field names, particularly to the south of the study area, describe areas of meadow or pasture that had previously been wooded. Managed woodland still existed in the area, and this was utilised in the early eighteenth century for charcoal production (Lewis 2002, 14).
- 3.3.8 The nature of the local environment was also altered by the drainage of large areas of land, such as the works associated with the Alt Drainage Act of 1779. Although these works may have made previously inaccessible land available, the effectiveness of the venture appears to be questioned by valuations made of flood-damaged land in Maghull 100 years later (*op cit*, 8). Such drainage schemes were undertaken from the seventeenth century and led to the distribution of isolated farmsteads in mossland peripheries (*op cit*, 55), suggesting that settlement expansion into naturally saturated areas.
- 3.3.9 From the sixteenth century onwards, as woodland resources decreased, turf appears to have become an important commodity as fuel (Hodern and Miller 1977, 18). In 1578 Richard Hulme, the holder of Maghull Manor, brought legal action against tennants regarding turbary on Maghull Moss (Ellison Gibson 1876, 211) and many other references were made to turbary in legal documents of this period (*op cit*, 5–7). As the local woodlands were depleted the drainage of land would have allowed access to previously unavailable supplies of peat from the mosslands.
- 3.3.10 Two of the most evident changes to the local landscape during the post-medieval period were the communication routes of the Leeds and Liverpool Canal, to the east of the study area, and the Cheshire Lines Railway, to the west. The stretch of the canal that passed through the Maghull area was

navigable by 1774, the project having been undertaken in 1770 (Hordern and Miller 1977, 21). The canal provided a transport route for industrial goods between the port of Liverpool and Yorkshire and, as a result of this amenity, the road route through Maghull was used mainly for stagecoach and mail traffic and was not a particularly busy route (Crosby 1996, 129–30). This road was turnpiked in 1771, however, there was almost no new construction associated with the change of status (*ibid*) and, presumably, the maintenance of the road comprised the main modification to the existing route-way. Following the construction of the canal, the number of inns and beerhouses in the locale increased (Hordern and Miller 1977, 21). As these tended to be situated along the linear communication corridor formed by the canal and the recently turnpiked road, however, it is difficult to confidently attribute their expansion to just one of these new developments.

- 3.3.11 The Cheshire Lines Railway was a short-lived venture that opened in 1884 but had closed by 1917 (*op cit*, 22). This was orientated north-north-west to south-south-east to the west of the study area and, like the works associated with the canal and turnpike, is likely to have bolstered the local economy with the presence of people working on the project. By the late nineteenth century, as well as being a primarily agricultural area, blacksmiths, wheelwrights and a saddler were amongst the professions undertaken in Maghull (*op cit*, 23). These businesses were based in the areas of urban agglomeration that were beginning to develop to the east and north-east of the study area.
- 3.3.12 There also appears to have been industrial activity in the area with two fields on the tithe map of 1840, and the plan of the lands of William Harper of 1798, being named as ‘Brick Kiln Hey’ and ‘Kiln Field’. Another industrial site within the study area is that of Rockfield Mills (Site **27**), which was a late nineteenth century steam mill that produced foodstuffs. Quarrying was also a local industry and the sandstone quarries of Maghull, such as those at Sites **20** and **25**, were reputed to produce good grindstones (Farrer and Brownbill 1907, 184).
- 3.3.13 In the early part of the twentieth century a bridge described as ‘Green Lane Swing Bridge’ was destroyed by an explosion that has been attributed to action by the Irish Republican Army (Hordern and Miller 1977, 30). This appears to have been the same bridge that was marked on the Ordnance Survey maps as ‘Methodist Bridge’ (Site **34**). The HER description of this bridge states that the current bridge was built in 1970 and replaced an earlier one (MHER 3703/48–9). This was not the only impact on the area relating to conflict and, during the Second World War, the line of the canal was chosen as a potential line of defence against coastal invasions (Hordern and Miller 1977, 30). This resulted in the construction of two pill boxes close to the study area at Shop Lane Bridge and Green Lane Bridge (Methodist Bridge; Site **34**) (*ibid*). Three camps were also constructed to the east of the study area and the locale was used as a refuge for evacuees from the air raids at Liverpool. Up to 6000 people sheltered in Maghull each night during the May blitz of 1941, returning to Liverpool each morning (*op cit*, 31).
- 3.3.14 The growth of the population of Maghull continued to rise between 1950 and 1980 and the area is currently heavily urbanised. The western part of the study

area is still largely agricultural, with the exception of the Sefton Drive estate, whereas the northern and eastern parts of the eastern end of the study area have become heavily urbanised with the construction of numerous housing developments.

3.4 MAP REGRESSION ANALYSIS

3.4.1 **Introduction:** several historic cartographic sources were consulted in order to trace the physical development of the study area:

- Yates' map of 1786
- Plan of land in Maghull, Melling, belonging to William Harper of 1798
- Greenwood's map of 1818
- Tithe map of Maghull township of 1840
- Ordnance Survey first edition map of 1851 (6" : 1 mile)
- Ordnance Survey second edition map of 1893 (25" : 1 mile)
- Ordnance Survey third edition map of 1910 (6" : 1 mile)
- Ordnance Survey map of 1927 (25" : 1 mile)
- Ordnance Survey map of 1937 (25" : 1 mile)

3.4.2 Very little detail of the Maghull area was shown on any of the early 'antiquarian' map sources. One point of interest was that the location of the Maghull moated manor site (Site **01**) was marked as 'Old Hall' on Yates' map of 1786. However, by the time of Greenwood's map of 1818 this area was annotated 'New Hall', in contrast to the 'Hall' and 'Maghull Hall' shown to the south-east. This might suggest that at the time of Yates' survey the older phase of the manor house (Site **07**), consolidated in 1638 (Lewis 1991, 721), was still standing, having been replaced by the extant eighteenth century building (Site **02**) by the time of Greenwood's survey. This would support the assertion of a late eighteenth-century date for the later hall (*see* SAM 22446 and Lewis 1991, 721), rather than the early eighteenth-century date suggested by Baines (1870, 425) and quoted by later commentators. It is possible, however, that the later building may have been standing at the time of Yates' survey but that the reused datestone inscribed 1638, which is still present, might have misled the surveyor.

3.4.3 The plan of the lands of William Harper from 1798 is the earliest map to show the study area in any detail. This detail was restricted mainly to field names and the names of other landowners in the area. Three of the fields crossed by the proposed pipeline route were named as 'Horse Grass', 'Brick Kiln Hey', and 'Barn Hey'. No structures were depicted within these fields on this map, or on any other maps of this area, suggesting that a barn and brick kiln may have stood in this area prior to 1798, but that these buildings may have become badly ruined or demolished by this date. The 'hey', 'meadow', 'pasture', and 'grass' fieldnames that were annotated throughout the study area attest to the agricultural, and essentially pastoral, nature of the locale. The house (Site **09**) just to the north of the proposed pipeline route was depicted on this plan. The tithebarn (Site **17**) and two fields labelled chapel were shown at

the east of the study area and the some of the lands to the south of the study area were shown to have retained woodland at this time. Other fields to the south retained only the indication of former woodland in their field names.

- 3.4.4 The tithe map of the Magull township of 1840 (Fig 3) showed a similar level of detail to that produced by the plan from 1798. This map, however, was not restricted to the holdings of a single landowner and showed that most of the fields in the area were named according to their use as hayfields, pasture, or meadow. The group of buildings associated with the moated manor site (Site **01**) was depicted as eight separate units, including the lodge at the southern end of the access road (Site **05**), and wooded areas were depicted to the north-west and south of the Maghull Manor house (Site **02**). A building was depicted in the area denoted 'Tythe Barn' (Site **17**) on the 1798 plan, and described as a tithe barn and croft in the apportionment, and the chapel referred to on the earlier plan was depicted as a labeled building. This was the first map to label the Leeds and Liverpool canal, although this waterway had been depicted on the earlier plan of 1798. A building was also depicted that corresponded with the position of later representations of Lime Cottage (Site **13**), as was the house that constitutes Site **09**. Croft fieldnames were associated with the fields in the immediate environs of the north-eastern end of the proposed pipeline, while the south-eastern end of the proposed works terminates in a field named as 'Carr' in the tithe apportionment, suggesting poorly-drained land (Muir 2004, 22).
- 3.4.5 The first edition Ordnance Survey map of 1851 (Fig 4) depicted the Maghull Moated Manor site (Site **01**) as a group of nine buildings, including the lodge (Site **5**), arranged within an area of landscaped gardens, with woodland immediately to the north-west and south of the main buildings. The main buildings were named as 'Maghull Hall' and the north-westernmost building was annotated as a dog kennel. The moat was named on this map and the shape was depicted as being very similar to the current form of this feature, although no sign of the eastern entranceway, a possible later addition (MHER 3602/3), was visible. The house (Site **09**) to the north of the proposed pipeline was depicted without any corresponding annotation, and Lime Cottage was named on this map. None of the wayside crosses within the study area (Sites **12**, **13** and **29**) were depicted on this map and there is no clear indication of a tithe barn (Site **17**). Two sandstone quarries were shown to the west of proposed development area, including Site **20**. Three bridges within the study area were shown on this map, all of which bridged the Leeds and Liverpool Canal, and were named Methodist Bridge (Site **34**), Shaw's Bridge (Site **21**) and Red Lion Bridge (Site **18**). Rockfield Mill (Site **27**) was not shown on this map. Numerous houses and farms were depicted, particularly at the northern periphery of this agricultural area. Maghull Chapel was named and depicted to the south of the tithe barn (Site **17**) and to the south-east of Woodbine Cottage a cockpit was named. At the far western end of the study area the River Alt marks the western boundary of the township of Maghull, as depicted on the tithe map of 1840, and this is likely to explain the presence of a boundary stone (Site **04**) close to Dover's Bridge.

- 3.4.6 The second edition Ordnance Survey map of 1893 (Fig 5) depicted the environs of the Maghull Moated Manor site (Site **01**) as having been subject to modifications since the survey of the 1851 Ordnance Survey map. A large area to the north and west of the house (Site **02**) was shown as being wooded and the buildings previously depicted to the west and immediately south of the house were no longer shown. The three buildings shown on the earlier map to the north-east of the house, arranged around an ornamental garden, were again depicted with an additional greenhouse attached to a probable shed. Three pumps were also shown close to the house and around four small buildings and one very large rectangular building were shown to the west of the house. The wooded driveway leading southwards to the lodge (Site **17**) was once more shown, although an additional L-shaped building was also shown to the north-west of this building. The moat was annotated as before and to the east of this a small rectangular building was shown for the first time and a pond that was previously represented as being irregularly-shaped was depicted as being perfectly circular with a well-defined surrounding band of trees.
- 3.4.7 To the west of the moated manor site, Manor House Farm was depicted for the first time and, to the west of this, the conspicuous addition of the Cheshire Lines Railway, running from north-north-west to south-south-east. The house (Site **9**) was once again depicted to the south of Glebe Farm. Other than some slight alterations to the field boundaries, very little change was evident from the earlier map in the immediate vicinity of the proposed pipeline route. The locale of Rockfield Mill (Site **27**) was depicted as an arrangement of buildings and landscaped areas around a large central structure, but was not named.
- 3.4.8 The Ordnance Survey map of 1910 showed only two obvious additions in the immediate locale of the proposed pipeline route. These were a gasometer and filter bed, both of which were situated to the south of the proposed pipeline route and to the north-east of the moated manor site (Site **01**). The most obvious changes to the locale were the construction of the Harrison and Henry Cox homes for 'epileptica', to the north-east and east of the moated manor site respectively. By this time the Maghull Manor House (Site **02**) was also being used as a home for those with epilepsy, in common with Chapel House Farm and Chapel House to the east of the study area. A building was shown on the site of Rockfield Mill (Site **27**) but was not named.
- 3.4.9 The Ordnance Survey map of 1927 (Fig 6) showed a further addition to the institutions that catered for those with epilepsy, with the Bartlett Home being depicted to the south of the proposed pipeline route. A further two such institutions were depicted to the east of Chapel House. Other than the gradual increase of houses and buildings in the area that had begun to be seen on the map of 1910, the most obvious change in the study area was the addition of large expanses of greenhouses at the nursery to the west of Lime Cottage.
- 3.4.10 The Ordnance Survey map of 1937 showed little change to the immediate environs of the proposed pipeline route. The most obvious change to the general area was the high degree of urbanisation that was evident to the north and north-west of Rockfield Mill (Site **27**).

4. GAZETTEER OF SITES

Site Name	Maghull Manor Moated Site (also Carr House and Old Hall)
Site number	01
NGR	SD 366 0202
HER no	36/02/3
Site Type	Moated site
Period	Medieval
Statutory Designation	Scheduled Ancient Monument (no. 22446)
Source	(1) Baines 1870 (2) Field visit by MHER (3) English Heritage, 1993 Scheduled Ancient Monument description, no. 22446
Description	Includes a slightly raised rectangular island measuring <i>c</i> 80m by 60m that is flanked on its eastern and northern sides, and around the north-west corner by a waterlogged moat. This is 1.4m deep to the water level and up to 21m wide on the northern side and 8m wide on the eastern side. Elsewhere the moat has been infilled. A waterlogged outlet channel issues from the moat's north-west corner. Access to the island is by a causeway on the eastern side. The building that occupied the island is thought to have been demolished during the late eighteenth century when the present manor house was built to the south-west of the moated site. Brick and sandstone foundations, a stone-lined well, fragments of burnt daub, floor tile and medieval pottery were found on the island after shallow ploughing in the late 1970's. All fences, walls, paths, and a brick and sandstone folly at the island's north-east corner are excluded from the scheduling, although the ground beneath these features is included (3).
Assessment	The site lies outside the proposed pipeline route, however the setting of the site may be affected by the visual impact of the works.

Site Name	Maghull Hall (also Maghull Manor)
Site number	02
NGR	SD 3665 0199
HER no	36/01/1
Site Type	Building
Period	Post-medieval
Statutory Designation	—
Sources	(1) Baines 1870 (2) Ordnance Survey first edition map of 1851 (3) OS card SD30 SE 4 Name book Lancs, 91 SE (4) Farrer and Brownbill (eds), 1907 (5) Maghull tithe map of 1840
Description	Eighteenth century with later additions and incorporating earlier engraved lintel, four storey brown brick mansion with stone dressings; stone cornice at third floor with papapet above. Part has old slate roof. Recessed sash windows with glazing bars, including also some dummy painted windows. Stone lintel, above ground floor window on south side, has arch-headed panel with raised inscription 'RAM 1633 WM'
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Wing wall at south-west corner of manor hall
Site number	03
NGR	SD 3665 0199
HER no	36/01/2
Site Type	Carved Stone
Period	Medieval
Source	HER
Statutory Designation	-
Description	Remains of thirteenth century stone arch and capital from the site of Maghull Chapel
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Boundary stone by Dover's Bridge
Site number	04
NGR	SD 3625 0162
HER no	36/01/5
Site Type	Boundary stone
Period	Undated
Statutory Designation	-
Source	(1) First edition Ordnance Survey map of 1851, sheet 99
Description	
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Lodge
Site number	05
NGR	SD 3668 0184
HER no	36/01/7
Site Type	House
Period	Romano-British
Statutory Designation	-
Sources	(1) First edition Ordnance Survey map of 1851, sheet 99 (2) Maghull tithe map of 1840
Description	Building in possession of WG Unsworth
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Maghull manor house
Site number	06
NGR	SD 3664 0197
HER no	36/01/8
Site Type	Sundial
Period	Post-medieval
Source	(1) Farrer and Brownbill (eds), 1907
Description	Sundial with motto and date 'volenda dies' 1748
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Old Hall, also Carr House, and Maghull Manor House
Site number	07
NGR	SD 3666 0202
HER no	36/02/1
Site Type	Manor House

Period	Medieval, Post-Medieval
Statutory Designation	-
Sources	(1) Farrer and Brownbill (eds), 1907
Description	Owber of Carr House in 1543 was Robert Maghull. In 1606 Maghull Manor included the capital messuage of Carr House. The hearth tax returns of 1666 recorded six hearths. Local tradition states that mass was said secretly in an old building in the grounds of Maghull Manor. Richard Maghull was steward to Sir Richard Molyneux, to whom his sister was married.
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Maghull Manor
Site number	08
NGR	SD 3670 0200
HER no	36/02/2
Site Type	Wall
Period	Post-medieval
Statutory Designation	-
Source	(1) Sefton Planning Department, 1979
Description	Building, no longer extant
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	House
Site number	09
NGR	SD 3690 0230
HER no	36/02/13
Site Type	House
Period	Post-medieval
Statutory Designation	-
Source	(1) Maghull tithe map of 1840 (2) Estate plan of 1825 (3) Estate plan of William Harper of 1798
Description	Domestic dwelling
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Woodlane Cottages
Site number	10
NGR	SD 3709 0194
HER no	37/01/5
Site Type	Cottage
Period	Post-medieval
Statutory Designation	-
Sources	(1) First edition Ordnance Survey map of 1851, sheet 91 (2) Maghull tithe map of 1840
Description	Domestic dwelling
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	House
Site number	11
NGR	SD 3719 0177
HER no	37/01/6
Site Type	House
Period	Post-medieval
Statutory Designation	-
Sources	(1) First edition Ordnance Survey map of 1851, sheet 91 (2) Maghull tithe map of 1840
Description	Corner of Rosslyn Avenue and Liverpool Road South
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Back Lane Cross
Site number	12
NGR	SD 3710 0239
HER no	37/01/3
Site Type	Cross
Period	Medieval?
Statutory Designation	-
Sources	(1) Farrer and Brownbill (eds), 1907 (2) OS card SD 30SE.9 (3) Taylor 1901
Description	One of three ancient Maghull crosses (1). A quarter of a mile west of Clent Cross in Backlane (2). Ancient cross stood on west side of turnpike road between Liverpool and Preston, a quarter of a mile west of Clent Cross in Back Lane (3).
Assessment	The site lies close to the proposed pipeline route and it might be affected by the works.

Site Name	Clent Farm Cross
Site number	13
NGR	SD 3751 0254
HER no	37/02/4
Site Type	Site of cross
Period	Undated
Statutory Designation	-
Sources	(1) Farrer and Brownbill (eds), 1907 (2) OS card SD 30SE.8 (3) Taylor 1901 (4) Site visit and local informant
Description	Removed in 1890 (1, 2). Cross stood half a mile south of the Coach and Horses Inn and 100 yards east of the turnpike road. Removed after 1890 (3). The grandfather of Mr DJ Cropper removed the cross in the nineteenth century. It had been situated behind the library, between that building and the A59, near to the quarry.
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	House
Site number	14
NGR	SD 3720 0210
HER no	37/02/5
Site Type	House
Period	Post-medieval
Statutory	

Designation -
Sources (1) Maghull tithe map of 1840
Description South of Green Lane
Assessment The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name Barn
Site number 15
NGR SD 3707 0239
HER no 37/02/7
Site Type Barn
Period Post-medieval
Statutory Designation -
Sources (1) Maghull tithe map of 1840
Description West of Green Lane
Assessment The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name Shop
Site number 16
NGR SD 3725 0213
HER no 37/02/8
Site Type Shop
Period Post-medieval
Statutory Designation -
Sources (1) First edition Ordnance Survey map of 1851, sheet 91
(2) Maghull tithe map of 1840
Description Corner of Liverpool Road and Balmoral Road
Assessment The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name Maghull Chapel
Site number 17
NGR SD 3752 0203
HER no 37/02/9
Site Type Site of Tithe barn
Period Post-medieval
Statutory Designation -
Source (1) Maghull tithe map of 1840
(2) Estate plan of 1825
(3) Estate plan of William Harper of 1798
Description Destroyed by road building by July 1982.
Assessment The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name Red Lion Bridge
Site number 18
NGR SD 3707 0241
HER no 37/02/11
Site Type Bridge
Period Industrial Period
Statutory Designation -

Sources	(1) First edition Ordnance Survey map of 1851, sheet 91
Description	Liverpool Road South, over Leeds Liverpool Canal
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Lime Cottage
Site number	19
NGR	SD 3707 0241
HER no	37/02/13
Site Type	Cottage
Period	Undated
Statutory Designation	-
Sources	(1) First edition Ordnance Survey map of 1851, sheet 91 (2) Maghull tithe map of 1840
Description	West side of Green Lane, opposite Shop Lane
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Quarry
Site number	20
NGR	SD 3746 0235
HER no	37/02/14
Site Type	Quarry
Period	Undated
Statutory Designation	-
Sources	(1) Farrer and Brownbill (eds), 1907 (2) First edition Ordnance Survey map of 1851, sheet 91
Description	Sandstone quarry near Shaw's Bridge. Between Liverpool Road and Northway and east of Shop Lane.
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Shaws Bridge or Shaws Turn Bridge or Bridge 14
Site number	21
NGR	SD 3739 0239
HER no	37/02/15
Site Type	Draw Bridge
Period	Industrial Period?
Statutory Designation	-
Sources	(1) First edition Ordnance Survey map of 1851, sheet 91 (2) Site visit
Description	Wooden swing bridge pivoted on east bank. Swings northwards. Original guard bases and stanchions.
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Hare and Hounds
Site number	22
NGR	SD 3739 0241
HER no	37/02/16
Site Type	Inn
Period	Undated
Statutory	

Designation	-
Sources	(1) First edition Ordnance Survey map of 1851, sheet 91 (2) Maghull tithe map of 1840
Description	West side of Liverpool Road, north of Shaws Bridge. Owned by Jane Shacklady in 1840 (2).
Assessment	The site lies outside the development area and is unlikely to be affected by the works.

Site Name	Clent Farm
Site number	23
NGR	SD 324 0252
HER no	37/02/17
Site Type	Farm
Period	Post-medieval?
Statutory Designation	-
Source	(1) First edition Ordnance Survey map of 1851, sheet 91 (2) Maghull tithe map of 1840
Description	Corner of westway and Liverpool Road North
Assessment	The site lies within the development area and will be affected by the works.

Site Name	Stone Barn Farm
Site number	24
NGR	SD 3707 0258
HER no	37/02/19
Site Type	Site of farm
Period	Post-medieval
Statutory Designation	-
Sources	(1) First edition Ordnance Survey map of 1851, sheet 91 (2) Maghull tithe map of 1840
Description	North of Green Lane. Probably destroyed by housing estates, roads and landscaping.
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Quarry
Site number	25
NGR	SD 3725 0266
HER no	37/02/20
Site Type	Quarry
Period	Undated
Statutory Designation	-
Sources	(1) First edition Ordnance Survey map of 1851, sheet 91 (2) Farrer and Brownbill (eds), 1907
Description	West side of Liverpool Road. Sandstone quarry near Stone Barn Farm. Good grindstones from Maghull quarries.
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Building
Site number	26
NGR	SD 3713 0211
HER no	37/02/26
Site Type	Building
Period	Post-medieval
Statutory	

Designation	-
Source	(1) Maghull tithe map of 1840
Description	East of Bartlett House
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Rock Mills
Site number	27
NGR	SD 3739 0253
HER no	37/02/27
Site Type	Steam mill, foodstuffs
Period	Industrial Period
Statutory Designation	-
Sources	(1) Field observations (2) 1979 CBA industrial archaeology report card
Description	Between Westway and Leeds Liverpool Canal. Late nineteenth century single storey flour mill. Was first steam powered and then converted to electricity. The name appears in white bricks on the wall of the building. A fire occurred there in 1976.
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Milepost
Site number	28
NGR	SD 3730 0250
HER no	37/02/28
Site Type	Milepost
Period	Industrial Period
Statutory Designation	-
Sources	(1) Field observations
Description	West bank of Leeds Liverpool Canal, north of Shaws Turn Bridge. Cast Iron milepost. Triangular sectioned and hollow. Reads: 'Liverpool 13 miles and Leeds 114 ¼ miles.
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Woodlands Cross
Site number	29
NGR	SD 3729 0299
HER no	37/02/2
Site Type	Site of cross
Period	Medieval
Statutory Designation	-
Sources	(1) Farrer and Brownbill (eds), 1907 (2) OS card SD 30SE.6
Description	Pedestal of Woodlands Cross visible above footpath at junction of Green Lane and Liverpool Road (1). Present whereabouts unknown (2).
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Bank House Cottage
Site number	30
NGR	SD 3706 0299
HER no	37/02/24

Site Type	Cottage
Period	Undated
Statutory Designation	-
Sources	(1) First edition Ordnance Survey map of 1851, sheet 91 (2) Maghull tithe map of 1840
Description	North side of Green Lane, east of Iron bridge Road
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	The Grove
Site number	31
NGR	SD 3723 0296
HER no	37/02/25
Site Type	House
Period	Undated
Statutory Designation	-
Sources	(1) First edition Ordnance Survey map of 1851, sheet 91 (2) Maghull tithe map of 1840
Description	South side of Green Lane
Assessment	The site lies outside the development area and is unlikely to be affected by the works.

Site Name	Bartons House
Site number	32
NGR	SD 3736 0285
HER no	37/02/21
Site Type	House
Period	Undated
Statutory Designation	-
Sources	(1) First edition Ordnance Survey map of 1851, sheet 91 (2) Maghull tithe map of 1840
Description	Corner of Liverpool Road and Dodds Lane
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Sundial near Dodds Lane
Site number	33
NGR	SD 3736 0287
HER no	37/02/23
Site Type	Sundial
Period	Undated
Statutory Designation	-
Source	(1) First edition Ordnance Survey map of 1851, sheet 91
Description	Between Liverpool Road and Granville Avenue
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

Site Name	Methodist Bridge, or Bridge 15
Site number	34
NGR	SD 3725 0300
HER no	37/02/48
Site Type	Draw Bridge
Period	Industrial Period
Statutory Designation	-
Sources	(1) Field observations (1) First edition Ordnance Survey map of 1851, sheet 91
Description	North side of Green Lane. Wooden swing bridge pivoted on east bank and swings northwards. In 1970 an earlier bridge was replaced.
Assessment	The site lies outside the proposed pipeline route and is unlikely to be affected by the works.

5. WALKOVER SURVEY

4.1 INTRODUCTION

- 4.1.1 The walkover survey was conducted across six fields, as well as a survey of Mughall Manor (Site **02**), the old manor (Site **07**), and the moat (Site **01**). No finds or features of archaeological significance were identified in the fields, but the following is a brief summary of the observations made.

4.2 RESULTS

- 4.2.1 **Mughall Moat and Manor:** the earliest feature observed was the moated manor (Site **01**), which is located to the north-east of the current manor house (Site **02**). It remains as a substantial earthwork but is partially in-filled to the south-east and wholly to the south. It is open and still containing water for the rest of its length. The banks are covered in thick shrubbery, and to the south-west, where there is no water, stone revetments are visible along the inside bank. The platform inside the moat has been heavily landscaped, and is currently one of the main garden areas of the present manor house. A small ruined building was observed in the north-east corner of the platform, and may relate to the folly recorded in the Merseyside HER. Due to the quantities of foliage present visibility was partially restricted, but it could be seen to have been constructed from worked sandstone blocks with lime mortar, and different phases could be identified. A block of finely-worked stone lay on the ground in the doorway located on the southern side of the building, it bore an inscription of *RM 1667*. It was most likely a lintel from the aforementioned doorway.
- 4.2.2 The present manor house is much as it has been described in the Gazetteer (Section 4). It is currently derelict and several of the windows have been smashed. Several brick outbuildings are located to the north and south, and are in a similar state. The whole area has been subject to significant landscaping, and several stands of trees have been planted since the first edition Ordnance Survey (1851). Although the gardens are being maintained the buildings have been left untouched, however, a sign at the main entrance indicates that the manor is soon to be converted into flats.
- 4.2.3 The area around the moat and manor is quite heavily wooded and visibility to the proposed pipeline is minimal, it is unlikely that its immediate environment will be affected by the development.
- 4.2.4 **Fields 1 and 2:** located along the eastern half of the pipeline, Fields 1 and 2 have been amalgamated into one large field. It is flat in the eastern half, and gently sloping to the west. The fields are currently under rough pasture, but it has been kept down through machine mowing rather than grazing. The scars of drainage ditches are visible running east/west down the slope to the marshy area located along the western edge of Field 2. The areas immediately around Bartlett Home and Henry Cox Home contain several piles of garden waste. Two unworked flint nodules were recovered from Field 1.

- 4.2.5 **Field 3:** was not accessible as it was covered in impenetrable woodland and marshland.
- 4.2.6 **Field 4:** was flat in the main, although a slight rise was detected in the south-west, where the proposed tank will be located; it has been demarcated with orange fencing. The field has been used for crop and has recently been harvested, and the ground is heavily scarred by modern ploughmarks. Along the southern side of the field and in the south-west corner, which leads into Field 3, there is a very marshy area. The field is bound on all sides by drainage ditches, all of which are very deep except to the east. The western ditch, which divides it from Field 5, has quite high banks, of which the eastern contained a small concentration of brick. No features or finds of archaeological interest were observed.
- 4.2.7 **Field 5:** similar to Field 4, Field 5 comprised arable stubble, and was near flat with a barely detectable slope to the south. It is divided from Field 6 by another substantial drainage ditch that only runs up the fields for half their lengths. No archaeological finds or features were identified.
- 4.2.8 **Field 6:** this westernmost field was virtually identical to Field 5, near flat with crop stubble. It, again, had heavy modern plough damage, and the drainage ditch that divided it from Field 5 had a pond-like projection to the west, which was choked with trees and shrubbery. No features or finds of archaeological interest were observed.

6. SIGNIFICANCE OF THE REMAINS

6.1 INTRODUCTION

6.1.1 In total, 34 sites were identified within the local study area during the desk-based assessment. All of these sites had been recorded in the Merseyside HER. The earliest sites within the study area derive from the medieval period and consist of the Maghull Moated Manor site (Site **01**), including the moat, Maghull Manor House (Site **07**), the remains of an arch from Maghull Chapel (Site **03**), Woodlands Cross (Site **29**), and possibly Back Lane Cross (Site **12**) and Clent Farm Cross (Site **13**). The rest of the sites consist mainly of post-medieval structures, such as houses, barns, and canal bridges, as well as Rockfield Mill (Site **27**), two sundials (Site **6** and **33**), and a tithe barn (Site **17**). Many of these sites have not, however, been closely dated due to several of the HER entries having been produced from analyses of historic mapping. The works associated with the proposed pipeline may affect two out of the 34 identified sites within the study area. These are the Maghull Moated Manor (Site **01**) and Back Lane Cross (Site **12**). All of the sites within the study area are summarised in Table 1 below.

Period	No of Sites	Sites
Medieval	6	Maghull Moated Manor site (Site 01), Maghull Manor House (Site 07), Maghull Chapel arch (Site 03), Woodlands Cross (Site 29), Back Lane Cross (Site 12), Clent Farm Cross (Site 13)
Post-medieval	15	Maghull Hall (Site 02), sundial (Site 06), wall at Maghull Moated Manor (Site 08), house west of Green Lane (Site 09), house south of Green Lane (Site 14), barn west of Green Lane (Site 15), shop (Site 16), tithe barn (Site 17), Red Lion Bridge (Site 18), Shaws Bridge (Site 21), Hare and Hounds inn (Site 22), building east of Bartlett House (Site 26), Rockfield Mill (Site 27), milepost (Site 28), Methodist Bridge (Site 34)
Not closely dated (probably post-medieval)	13	Boundary stone (Site 04), lodge (Site 05), Wood Lane Cottage (Site 10), house (Site 11), Lime Cottage (Site 19), quarry (Site 20), Clent Farm (Site 23), Stone Barn Farm (Site 24), quarry (Site 25), Bank House Cottage (Site 30), The Grove (Site 31), Bartons House (Site 32), sundial at Bartons House (Site 33)

Table 1: Number of Sites within the study area

6.1.2 There is one Grade II listed building within the study area, this being Maghull Hall (Site **02**). There is one scheduled ancient monument within the study area, this being Maghull Moated Manor (Site **01**).

6.2 CRITERIA

- 6.2.1 The methodology that will be used to assess the archaeological significance of sites is ‘Secretary of State’s criteria for scheduling ancient monuments’, which is included as Annex 4 of Planning Policy Guidance 16 (Department of the Environment 1990). The sites listed in the gazetteer (*Section 4*) that were considered likely to be affected by the proposed development were each considered using these criteria and the results are detailed below
- 6.2.2 **Period:** Maghull Moated Manor (Site **01**) is medieval in origin and datable to 1442 at the latest (Lewis 1991, 721). The manor of Maghull dates to at least the time of the Domesday survey (*c* 1068) and the chapel masonry (Site **03**) dates to the thirteenth century, suggesting activity in the general area predating the fifteenth century documentary evidence for the hall. The wayside cross at Back Lane (Site **12**) is also likely to have originated from the medieval period, although this has not been closely dated.
- 6.2.3 **Rarity:** around 6000 moated medieval sites have been identified in England (SAM 22446) with at least 500 in the north-west of England, although at least 15% of these sites are considered to have been destroyed (Newman 2006, 121). Three ancient crosses are reported to have stood in the Maghull area (Farrer and Brownbill 1907, 215) although two of these at Back Lane (Site **12**) and Woodlands (Site **29**) may have been reduced to pedestals, and the cross at Clent Farm (Site **13**) has been removed entirely (*ibid*). Any traces of the Back Lane Cross (Site **12**) would be rare survivals of this local group of monuments. Although recorded by field names, there is little record of any kiln sites close to the study area and brick kiln (Site **35**) may represent a little known industrial site-type in the local area.
- 6.2.4 **Documentation:** there are various legal documents relating to the ownership of the Maghull Moated Manor site (Site **01**, *see* Lewis 1991, 717–8).
- 6.2.5 **Group Value:** the Back Lane Cross (Site **12**) was one of three known wayside crosses in the Maghull area and may, therefore, have been one element in a complex of monuments that may be better understood as a group than as isolated sites. As all three of these monuments have now been substantially damaged, or destroyed, any information relating to them would be significant. The Maghull Moated Manor site (Site **1**) represents one example of a site-type that is represented by 6000 known examples throughout England (SAM 22446), and over 500 in the north-west (Newman 2006, 121) and which by its nature is representative of accumulated wealth and perceived social hierarchy and status, as well as possible political influence. Therefore, such sites, as a group, inform our understanding of the distribution of wealth and status in the countryside, and the expression of such factors in the material form of buildings and their associated landscaping.
- 6.2.6 **Survival/Condition:** although any upstanding remains relating to the original manor house (Site **07**) have been destroyed, to the extent of ploughing having taken place over the site, sub-surface remains are likely to survive in association with the platform, within the moated area. Structural remains from later phases of the Maghull Hall (Site **02**) complex also survive in the area of

the platform, including a small sandstone building bearing a datestone inscribed 1667 (Lewis 1991, 721). Consultation of modern aerial photographs shows the site to be heavily wooded in the environs of the moat, although large areas of the house platform remain clear of trees. As the platform area was once the site of an orchard, before being ploughed in the late 1970's and early 1980's, it is likely that there has been disturbance of sub-surface remains in this area. The moat survives on the eastern and western sides of the platform, although a causewayed entrance at the eastern side is not thought to be an original feature. Even if the moat has been backfilled in places, this should not have caused extensive damage to the feature, except in the reduction of the visibility of the site. Indeed, deposits related to the original use of the site, including potential waterlogged deposits, could survive beneath the later backfilling. The suggestion (MHER 3602/3) that the moat may have been widened at some time, if correct, would have more serious implications for the morphological survival of the original moat.

6.2.7 The pedestal of Back Lane Cross (Site **12**) may survive *in-situ*, but would require a site inspection to determine this.

6.2.8 **Fragility/Vulnerability:** the Maghull Moated Monor site (Site **01**) is a scheduled ancient monument (SAM 22446) and should, therefore, be protected from all known threats to the integrity of the site. The platform is currently host to a lawn, which should not cause damage to sub-surface remains, and the moat is currently concealed within trees and so may suffer gradual long-term damage from root action.

6.2.9 **Potential:** the Maghull Moated Manor site (Site **01**) has the potential to provide waterlogged deposits and, therefore, to preserve organic remains.

6.3 SIGNIFICANCE

6.3.1 Table 2 summarises the levels of significance attributed to generic site-types, together with guideline recommendations for appropriate mitigation strategies in each case.

Significance	Examples of Site-type	Mitigation
National	Scheduled Monuments (SMs), Grade I and II* Listed Buildings	To be avoided
Regional/County	Conservation Areas, Registered Parks and Gardens (Statutory Designated Sites), Grade II Listed Buildings Historic Environment Record	Avoidance recommended
Local/Borough	Sites with a local or borough value or interest for cultural appreciation Sites that are so badly damaged that too little remains to justify inclusion into a higher grade	Avoidance not envisaged
Low Local	Sites with a low local value or interest for cultural appreciation Sites that are so badly damaged that too little remains to justify inclusion into a higher grade	Avoidance not envisaged

Significance	Examples of Site-type	Mitigation
Negligible	Sites or features with no significant value or interest	Avoidance unnecessary

Table 2: Summary of significance according to site-type and appropriate mitigation

- 6.3.2 By definition, the scheduled ancient monument of Maghull Manor moated site (Site **1**) is of national significance, whilst Back Lane Cross (Site **12**) is of regional/county significance. The significance of these sites has been attributed following the assessment of each if the criteria in *Section 6.2*. It should be remembered, however, that the understanding of these sites is based on limited documentary evidence and their dates of origin are not known.

7. IMPACT ASSESSMENT

7.1 IMPACT

7.1.1 In its Planning Policy Guidance *Note 16*, the Department of the Environment (DoE) advises that archaeological remains are a continually diminishing resource and *‘should be seen as finite, and non-renewable resource, in many cases, highly fragile and vulnerable to destruction. Appropriate management is therefore essential to ensure that they survive in good condition. In particular, care must be taken to ensure that archaeological remains are not needlessly or thoughtlessly destroyed’*. It has been the intention of this study to identify the archaeological potential of the study area, and assess the impact of redevelopment, thus allowing the advice of the DoE to be enacted upon. Assessment of impact has been achieved by the following method:

- assessing any potential impact and the significance of the effects arising from redevelopment;
- reviewing the evidence for past impacts that may have affected sites of archaeological interest;
- outlining suitable mitigation measures, where possible at this stage, to avoid, reduce or remedy adverse impacts on sites of archaeological interest.

Scale of Impact	Description
Substantial	Significant change in environmental factors; Complete destruction of the site or feature; Change to the site or feature resulting in a fundamental change in ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.
Moderate	Significant change in environmental factors; Change to the site or feature resulting in a significant change in ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.
Slight	Change to the site or feature resulting in a small change in our ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.
Negligible	Negligible change or no material changes to the site or feature. No real change in our ability to understand and appreciate the resource and its cultural heritage or archaeological value/historical context and setting.

Table 3: Criteria used to determine scale of impact

7.1.2 The impact is assessed in terms of the sensitivity or importance of the site to the magnitude of change or potential scale of impact during future redevelopment scheme. The magnitude, or scale of an impact is often difficult to define, but will be termed as substantial, moderate slight, or negligible, as shown in Table 3.

- 7.1.3 The interaction of the scale of impact (Table 3) and the significance of the archaeological site (Table 2) produce the impact significance. This may be calculated by using the matrix shown in Table 4:

Resource Value (significance)	Scale of Impact Upon Archaeological Site			
	Substantial	Moderate	Slight	Negligible
National	Major	Major	Intermediate/ Minor	Neutral
Regional/County	Major	Major/ Intermediate	Minor	Neutral
Local	Intermediate	Intermediate	Minor	Neutral
Local (low)	Intermediate / Minor	Minor	Minor/ Neutral	Neutral
Negligible	Neutral	Neutral	Neutral	Neutral

Table 4: Impact significance matrix

- 7.1.4 The extent of any previous disturbance to sub-surface deposits of archaeological interest is an important factor in assessing the potential impact of the development scheme. The western end of the proposed pipeline route, as far east as Green Lane, has not been greatly disturbed through modern development, but may have been affected by modern deep ploughing. The state of preservation of any buried remains within this area is, therefore, potentially good. The part of the pipeline extending to the north and east of Green Lane runs through an area of dense urban development. The pipeline route, however, conforms to the route of the roads in this area and it is, therefore, possible that sub-surface remains predating the roads might still survive in this area.

7.2 IMPACT ASSESSMENT

- 7.2.1 Following on from the above considerations, the scale of impact on the present condition of sites of archaeological interest has been determined based on the present understanding of the nature of the proposed development. The results are summarised in Table 5, although these would require review should there be any changes to the nature of the proposed works.

Site	Site Name/Type	Nature of Impact	Significance	Scale of Impact	Impact Significance
01	Maghull Moated Manor	Negative aesthetic effect on the setting of the monument	National	Slight	Intermediate/Minor
12	Back Lane Cross	Exact location and extent of site is unknown. Incidental activity related to the groundworks, such as tool and machine storage and movement could impact upon the site	Regional	Moderate	Major/Intermediate

Table 5: Assessment of the impact significance on each site that has the potential to be affected by the proposed works

8. WATCHING BRIEF RESULTS

8.1 INTRODUCTION

- 8.1.1 Following the results of the desk-based assessment and walkover survey; which identified a Scheduled Ancient Monument, and the likely high potential for medieval remains in the vicinity, an archaeological watching brief was undertaken in November 2007. The watching brief monitored the topsoil strip of the sewer pipeline easement, south-west from Green Lane for approximately 760m. Topsoil was removed down to the natural geology, which was then assessed for potential archaeological remains.

8.2 FIELDWORK RESULTS

- 8.2.1 The pipeline easement comprised a dark, black-brown silty-sand topsoil, averaging 0.43m in depth, which overlaid natural geology, a mid, grey-brown sand. No features of archaeological interest were identified across the pipeline easement, although several field drains were observed (Plate 1). These most likely corresponded to the modern drains recorded to the north-west of Sefton Drive.

9. DISCUSSION

9.1 SYNTHESIS

- 9.1.1 The desk-based assessment and rapid walkover survey identified 34 sites across the local study area. The earliest sites within the study area dated to the medieval period and consisted of the Maghull Moated Manor site (Site **01**), Maghull Manor House (Site **07**), the remains of an arch from Maghull Chapel (Site **03**), Woodlands Cross (Site **29**), and possibly Back Lane Cross (Site **12**) and Clent Farm Cross (Site **13**). The remainder of the sites comprised mainly post-medieval structures, such as houses, barns, and canal bridges, as well as Rockfield Mill (Site **27**), two sundials (Site **6** and **33**), and a tithe barn (Site **17**). Many of these sites have not, however, been closely dated, as several of the HER entries had been produced solely from analyses of historic mapping. The groundworks associated with the proposed pipeline may have affected two of the sites identified within the study area. These are the Maghull Moated Manor (Site **01**) and Back Lane Cross (Site **12**).
- 9.1.2 It was likely that the area around Maghull Moated Manor (Site **01**), until the eighteenth and nineteenth centuries, comprised rural, dispersed farmsteads and settlements, after which large areas of land were drained to provide more agricultural land (*Section 3.3*). This also corresponded with an intensification in surrounding industrial activity. Although no obvious elements of industry were identified during the monitored strip of the easement, the observation of numerous post-medieval and modern drains seem to correspond to identified farming practices dating from the eighteenth century onwards, suggesting that the majority of land immediately around Maghull Moated Manor retained its agricultural economy.
- 9.1.3 No further archaeological investigations are recommended for the area of the proposed pipeline works.

10. BIBLIOGRAPHY

10.1 PRIMARY AND CARTOGRAPHIC SOURCES

Plan of land in Maghull, Melling, belonging to William Harper of 1798

Maghull Estate plan of 1825, DRL 3/3-5

Tithe map of Maghull township of 1840, MHER DRL 1/53

Yates, W, 1786 *The county Palatine of Lancaster*

Greenwood, C G, 1818 *A map of the county Palatine of Lancaster*

Ordnance Survey 1851 *Sheet 91*, 6" : 1 Mile

Ordnance Survey 1893 *Sheets 91.11, 15, 25"* : 1 Mile

Ordnance Survey 1910 *Sheet 91 SE*, 6" : 1 Mile

Ordnance Survey 1927 *Sheets 91.11, 15, 25"* : 1 Mile

Ordnance Survey 1837 *Sheets 91.11, 15, 25"* : 1 Mile

Sefton Planning Department, 1979 *Listed Buildings Record 9/64*

10.2 SECONDARY SOURCES

Baines, E, 1870 *The history of the County Palatine and Duchy of Lancaster*, volume 2, London

British Geological Survey, 1983 *Soils of northern England*, Southampton

Countryside Commission, 1998 *Countryside Character Volume 2: North West*, Northampton

Cowel, RW, and Innes, JB, 1994 *The Wetlands of Merseyside*, Lancaster

Cowel, RW, and Philpott, RA, 2000 *Prehistoric, Romano-British and medieval settlement in lowland north west England, archaeological investigations along the A5300 road corridor in Merseyside*, Liverpool

Cowell, RW, 2005 Late prehistoric lowland settlement in north-west England, in M Nevell and N Redhead (eds) *Mellor: living on the edge, a regional study of an Iron Age and Romano-British upland settlement*, Manchester, 65–76

Crosby, A, 1996 *A history of Cheshire*, Chichester

Department of the Environment, 1990 *Planning Policy Guidance 16: Archaeology and Planning* (PPG 16)

Ellison Gibson, T, 1876 *Lydiat Hall and its associations*, London

English Heritage, 1991 *Management of Archaeological Projects*, 2nd Edition.

Farrer, W, and Brownbill, J (eds), 1907 *The Victoria history of the county of Lancaster*, **3**, London

Hordern, R, and Miller, I, 1977 *A history of Maghull*, Maghull

Lewis, J, 1991 *The medieval earthworks of the hundred of West Derby, tenurial evidence and physical structure, volume 2*, unpubl thesis

Lewis, J, 2002 Sefton rural fringes, in J Lewis and R Cowell (eds) *The archaeology of a changing landscape, the last thousand years in Merseyside*, J Merseyside Archaeol Soc, **2**, 5–58

Margary, I, D, 1957 *Roman Roads in Britain*, London

Muir, R, 2004 *Landscape Encyclopaedia*, Macclesfield

Newman, C, 2006 The medieval period resource assessment, in M Brennan (eds) *The archaeology of north west England, an archaeological resource framework for north west England, volume 1, resource assessment*, 115–145

Parker Pearson, M, 2000 *Bronze Age Britain*, London

Taylor, H, 1901, *Transactions of the Lancashire and Cheshire Antiquarian Society*, **XIX**

Wall, E, K, 1922 *The Placenames of Lancashire*, Manchester

11. ILLUSTRATIONS

11.1 LIST OF FIGURES

Figure 1: Site Location

Figure 2: Plan of gazetteer sites

Figure 3: Extract from the Maghull tithe map, 1840

Figure 4: Extract from Ordnance Survey First Edition 6"map, 1851

Figure 5: Extract from Ordnance Survey Second Edition 25"map, 1893

Figure 6: Extract from Ordnance Survey Third Edition 25"map, 1927

11.2 LIST OF PLATES

Plate 1: View of stripped easement showing modern drain

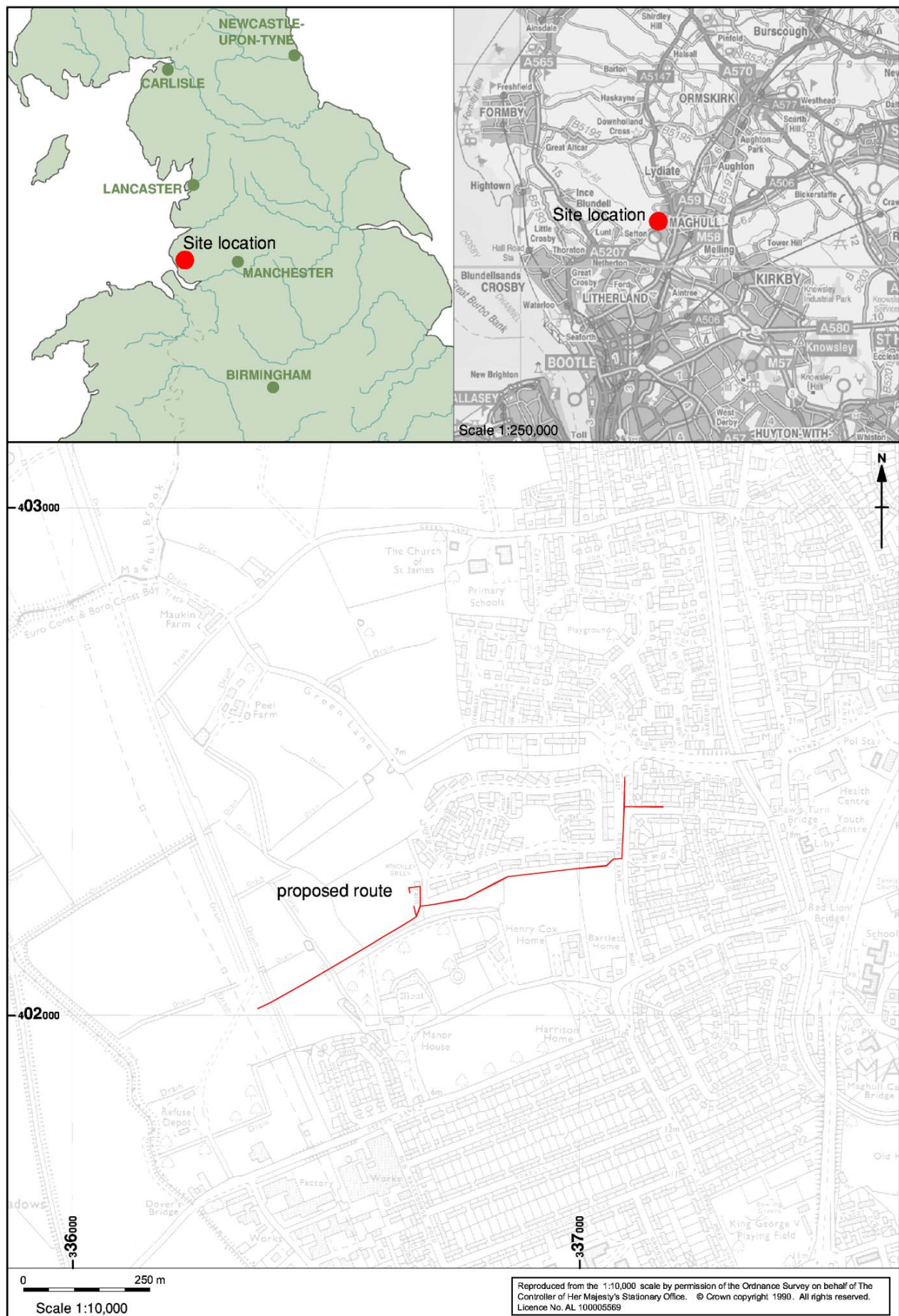


Figure 1: Site Location

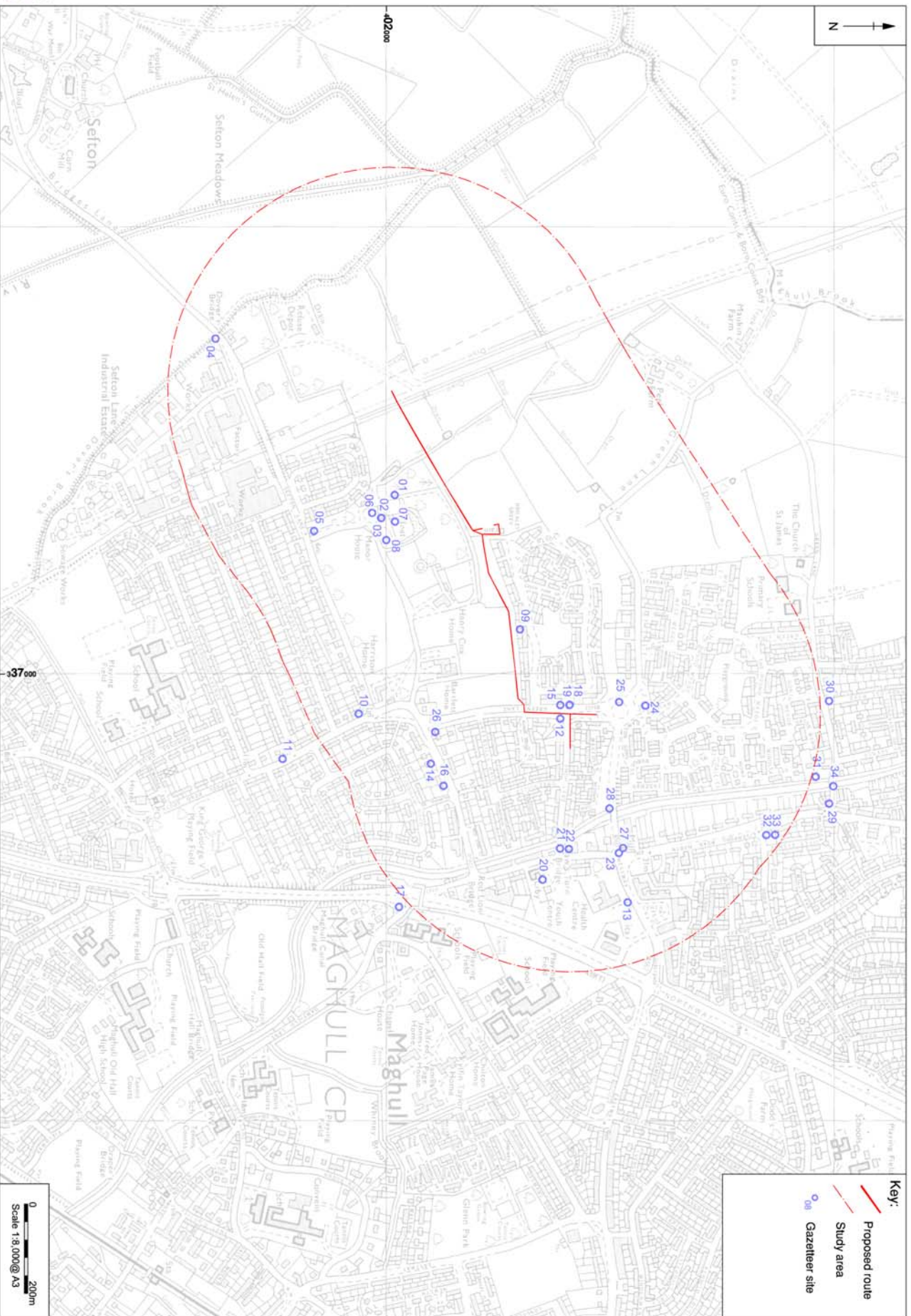


Figure 2: Plan of gazetteer sites



Figure 3: Extract from the Maghull tithe map, 1840

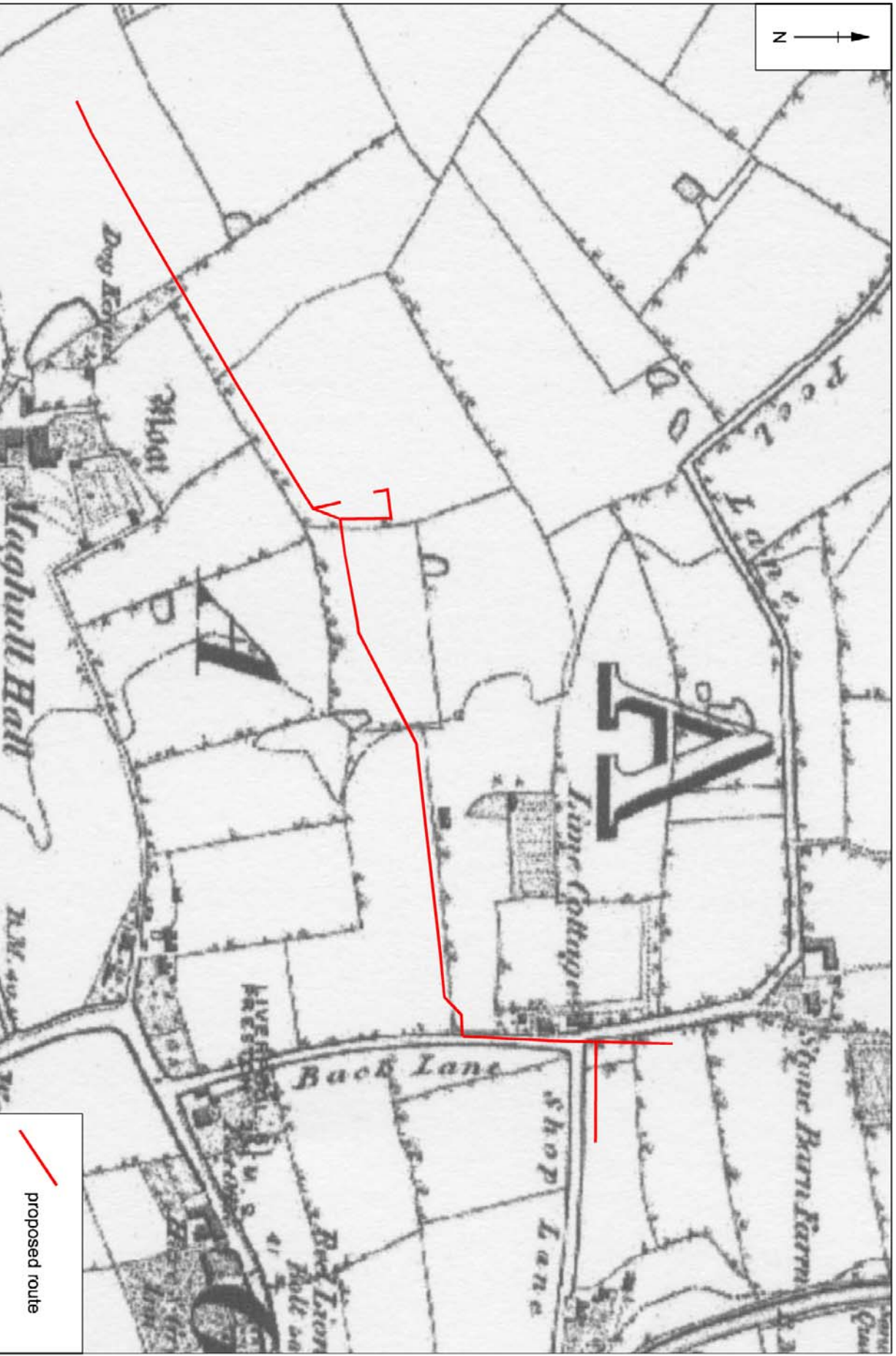


Figure 4: Extract from Ordnance Survey First Edition 6 inch map, 1851

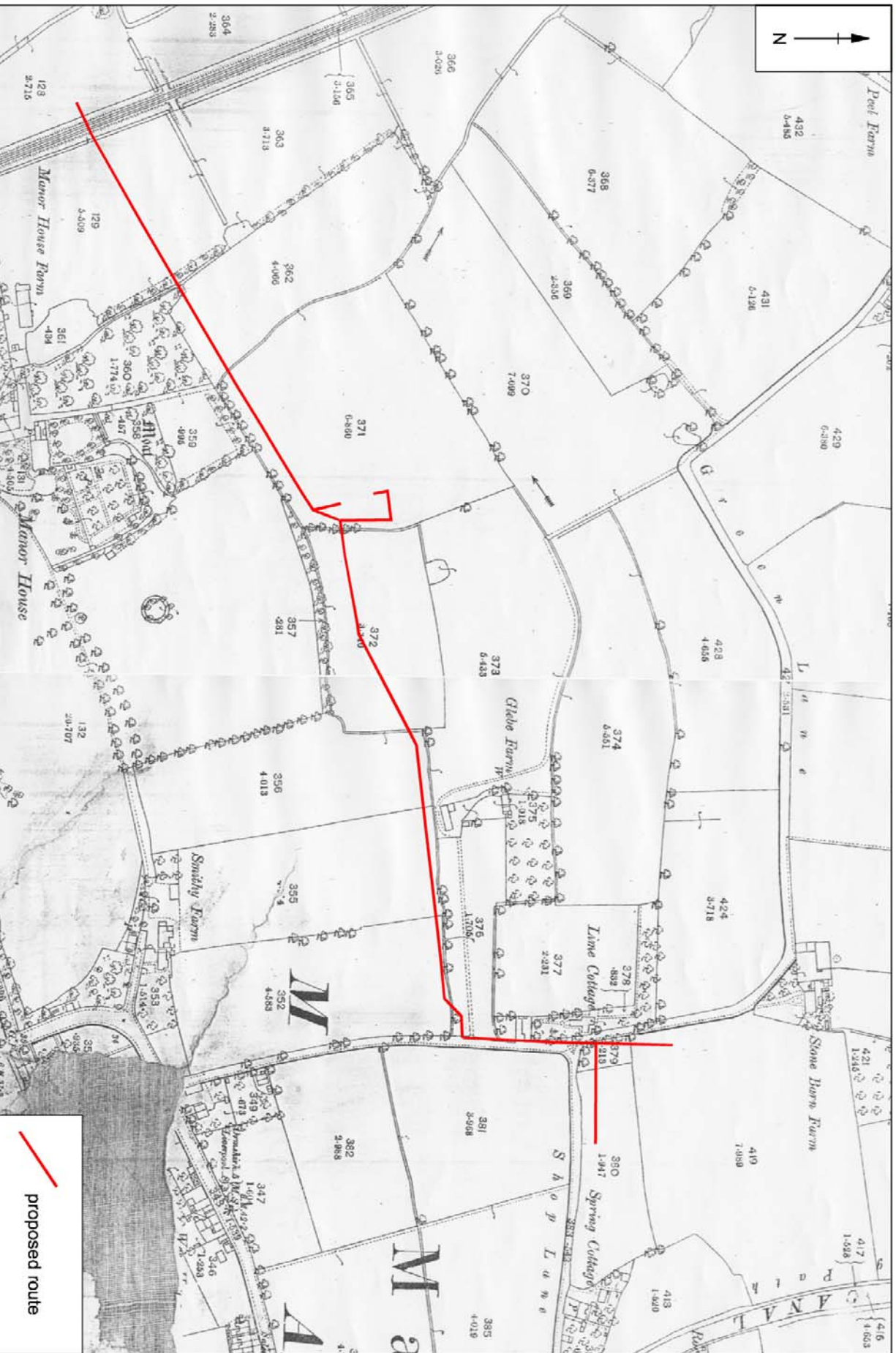


Figure 5: Extract from Ordnance Survey Second Edition 25 inch map, 1893

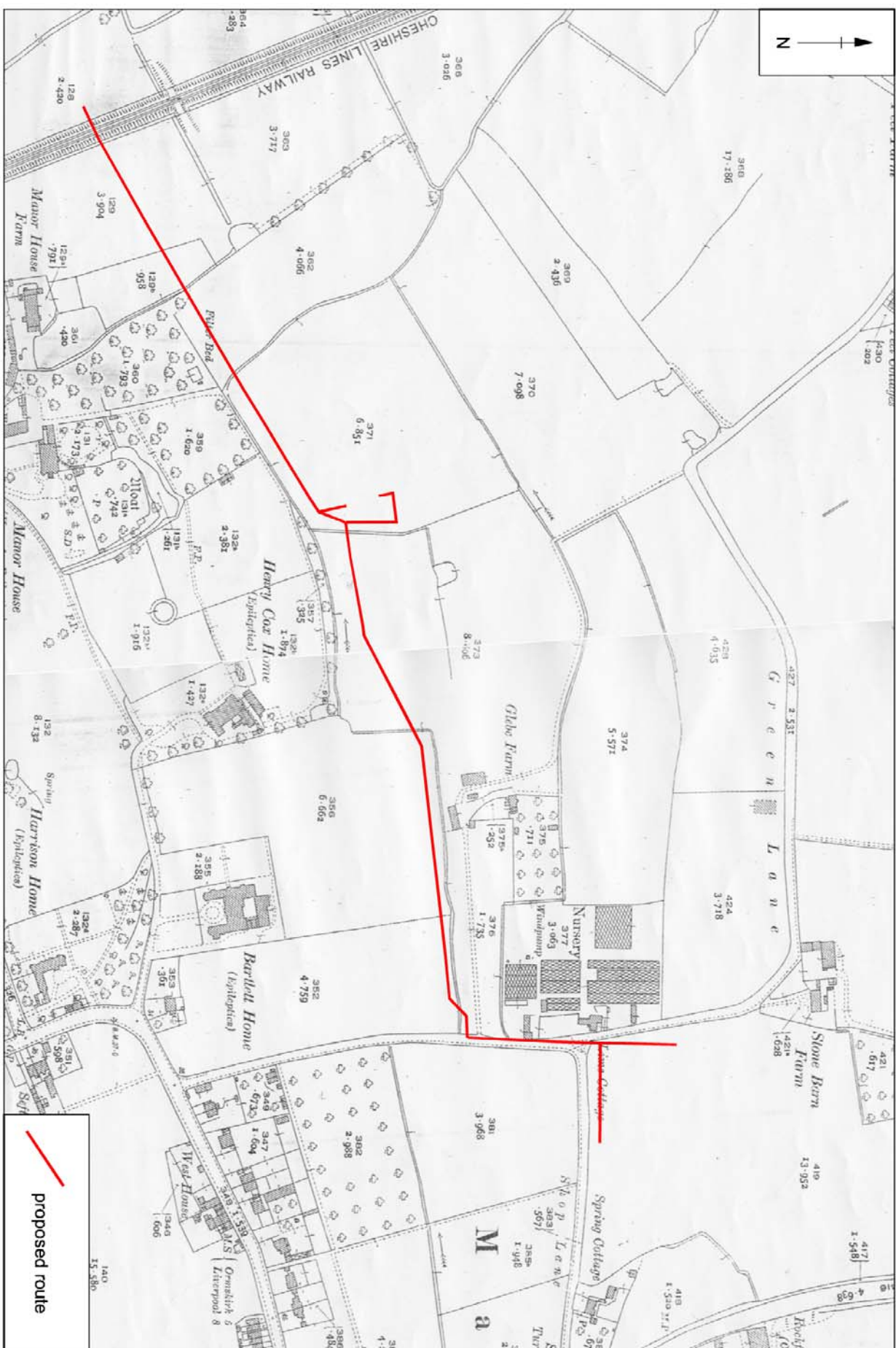


Figure 6: Extract from Ordnance Survey Third Edition 25 inch map, 1927



Plate 1: View of stripped easement showing modern drain