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SUMMARY

United Utilities proposed the installation of a link main pipeline through agricultural land and roads to the north-east of Winwick, in Cheshire (NGR SJ 61951 94737: central point). The landscape in the vicinity of the proposed pipeline is rich in terms of significant sites of archaeological interest, with numerous burial mounds having been identified. One of these barrows (Site **01**), or tumuli, lies in the immediate vicinity of the proposed pipeline. As a result of the potential for negative impacts upon heritage assets of archaeological interest during the works associated with the pipeline, the development control archaeologist at Cheshire Archaeology Planning Advisory Services (CAPAS) advised that a programme of archaeological work should be undertaken. Consequently, United Utilities requested Oxford Archaeology North (OA North) undertake a rapid desk-based assessment of the immediate environs of the proposed pipeline to identify any heritage constraints.

The historic research enabled the compilation of a gazetteer of 20 sites of archaeological interest, with seven having been recorded within the historic environment records of Cheshire, Merseyside, and Greater Manchester. Of these sites, 14 are likely to lie within the vicinity of the proposed pipeline and associated easement. These are Kenyon Hall tumulus (Site **01**), Golborne Mill (Site **02**), field boundaries west of Rough Farm (Site **05**), Winwick township boundary (Site **08**), Houghton township boundary (Site **09**), Southworth township boundary (Site **10**), Newton township boundary (Site **11**), Kenyon township boundary (Site **12**), Lower Pit Field (Site **15**), Stone Pit Field (Site **16**), circular cropmarks (Site **17**), sub-ovoid cropmarks (Site **18**), Barrow Field (Site **19**), and Barrow Lane (Site **20**). Intrusive ground works associated with the proposed pipeline present the potential for negative impacts upon these sites, in the form of damage and destruction to the physical remains.

In addition to these sites, the proposed pipeline route crosses areas with the potential for previously unidentified remains of archaeological interest. This includes a strong likelihood of sub-surface remains of Bronze Age burial mounds and the possibility of associated settlement sites. A large palaeochannel runs across the centre of the study area, to the west of Kenyon Hall farm, and the northern end of the study area lies at the eastern side of Highfield Moss. These features, although of natural origin, present the potential for preserved artefacts of archaeological interest, and for preserved plant remains and environmental evidence that might elucidate our understanding of the development and changes of land use within the study area.

Recommendations for further archaeological works to mitigate the impact of the proposed pipeline comprise a Level 1 walkover survey, topographic survey, geophysical survey, archaeological strip and record, and a watching brief. Consultation should also be undertaken with the English Heritage scientific advisor regarding the potential impact of the ground works on palaeoenvironmental remains, and this may result in recommendations for environmental coring or similar investigations.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Michael Barton of United Utilities for commissioning the project. Thanks are also due to the staff of the Lancashire Record Office (LRO) in Preston, and to Liz Stewart of Liverpool Museums, who maintain the Merseyside HER, Lesley Dunkley of Greater Manchester Archaeological Advisory Service, who maintains the Greater Manchester HER, and to Moya Watson of Archaeology Planning Advisory Service Cheshire Shared Services, who maintains the Cheshire HER.

Alastair Vannan undertook the historic research and also compiled the report. Mark Tidmarsh produced the drawings. Emily Mercer managed the project, and also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 United Utilities proposed the installation of a link main pipeline on agricultural land and roads to the north-east of Winwick, in Cheshire (SJ 61951 94737: central point). The pipeline measures *c* 4km (Fig 1).
- 1.1.2 The landscape in the vicinity of the proposed pipeline is rich in terms of significant sites of archaeological interest, with numerous burial mounds having been identified. One of these barrows (Site **01**), or tumuli, lies in the immediate vicinity of the proposed pipeline. As a result of the potential for negative impacts upon heritage assets of archaeological interest during the works associated with the pipeline, the development control archaeologist at Cheshire Archaeology Planning Advisory Services (CAPAS) advised that a programme of archaeological work should be undertaken. Consequently, United Utilities requested Oxford Archaeology North (OA North) to undertake a rapid desk-based assessment of the immediate environs of the proposed pipeline.

1.2 TOPOGRAPHY AND GEOLOGY

- 1.2.1 The route of the proposed pipeline runs along, and through, a combination of pre-existing roads and agricultural fields (Figs 1 and 2; Plate 1). The route occupies an undulating plateau at the eastern edge of the Sankey River valley between approximately 30m and 40m (aOD) and runs north-westwards towards the southern suburbs of Golborne. The central portion of the route crosses three distinctive parallel ridges of higher ground at 35m (aOD), which run approximately north-west/south-east, with the southernmost being occupied by the M6 motorway.
- 1.2.2 The local solid geological deposits comprise the Chester Pebble Beds Formation of gravelly sandstone (British Geological Society 2013). These are overlain by drift deposits of diamicton glacial till, in the southern part of the study area, with clay, silt, sand, and gravel in the northern portion (*ibid*).



Plate 1: A general aerial view of the landscape through which the pipeline runs

2. METHODOLOGY

2.1 HISTORIC RESEARCH

2.1.1 A study area that encompassed 100m either side of the proposed pipeline was used for the desk-based research (Fig 2). The sources consulted included the Cheshire Historic Environment Record (CHER), at the Archaeology Planning Advisory Service from Cheshire Shared Services, Greater Manchester Historic Environment Record (GMHER), held by the Greater Manchester Archaeological Unit, the Merseyside Historic Environment Record (MHER), held by Liverpool Museums. The HER is an extensive database of all known sites of archaeological interest within each respective county. Historic mapping and published and unpublished materials were also examined at the Lancashire Record Office (LRO), in Preston, St Helens Local History and Archives Service, and the OA North library. The summarised results of the historic research were collated into a gazetteer of sites (*Section 4*). The methodology conformed to the *Standards and Guidance for Archaeological Desk-Based Assessment* compiled by the Institute for Archaeologists (IfA 2012). The sources consulted included:

2.2 SITE INSPECTION

2.2.1 A preliminary inspection of the area defined by the proposed pipeline route was undertaken from publically accessible areas to provide familiarity with the terrain and current state of land use. A detailed archaeological walkover survey was beyond the scope of this assessment.

2.3 ARCHIVE

2.3.1 The Arts and Humanities Data Service (AHDS) online database *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project. Copies of the report will be sent to the County Record Offices for each of the counties of Cheshire, Greater Manchester and Merseyside.

3. HISTORICAL BACKGROUND

3.1 INTRODUCTION

3.1.1 The following section presents a summary of the historical and archaeological background of the general area. This is presented by historical period, and has been compiled in order to place the study area into a wider archaeological context.

Period	Date Range
Palaeolithic	30,000 – 10,000 BC
Mesolithic	10,000 – 3,800 BC
Neolithic	4000 – 2,500 BC
Bronze Age	2,500 – 700 BC
Iron Age	700 BC – AD 43
Romano-British	AD 43 – AD 410
Early Medieval	AD 410 – AD 1066
Late Medieval	AD 1066 – AD 1540
Post-medieval	AD 1540 – c 1750
Industrial Period	C AD1750 – 1901
Modern	Post-1901

Table 1: Summary of British archaeological periods and date ranges

3.2 THE PREHISTORIC PERIODS

3.2.1 **Mesolithic:** the Mesolithic was the latest cultural epoch in Britain during which people employed a subsistence strategy based wholly upon hunting, gathering, and fishing. There is substantial evidence for Mesolithic activity across Lancashire, consisting primarily of flint scatters and pollen studies, and concentrations of worked flints have been found in the Winwick area (Cowell 2000, 167). A scatter of Mesolithic flint was discovered at Southworth Hall Farm, 1km to the east of the study area, in 1993 (Philpott *et al* 1993, 11). Several undated features in the proximity of the scatter may have been related (*ibid*). However, no finds of Mesolithic date are currently known from the study area.

3.2.2 **Neolithic:** 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, although few such sites have been identified within Lancashire and Cheshire (*see* Middleton 1996, 41; Hodgson and Brennand 2006, 38-40). Much settlement during this period appears to have been concentrated in the lowlands (Middleton 1996, 41), although there is little evidence for such occupation in the south Lancashire and northern Cheshire (*see* Hodgson and Brennand 2006, 38-40). There is, however, evidence for possible hunting and gathering during the Neolithic period in Formby, where footprints of humans and animals have been found, and the preserved remains of a possible wooden trackway were found on Hightown beach (*op cit*, 34). However, both of these areas are on the west coast, a considerable distance to the north-west of the study area.

- 3.2.3 A flint dagger of possible Neolithic date (Cowell and Philpott 1994, 10-11) and a Neolithic stone celt (Garstang 1906) were found near Newton-le-Willows. The celt was particularly large, measuring approximately 0.5m in length (*ibid*). Significant Neolithic or Bronze Age activity was identified at Southworth Hall Farm, where pottery was discovered in a possible ditch (Philpott *et al* 1993, 11). No Neolithic sites have been identified within the study area.
- 3.2.4 **Bronze Age:** 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 tradition of monumental architecture continued into the Bronze Age, with new ritual and religious traditions developing that were associated with new monument types (*see* Hodgson and Brennard 2006, 41-5). The Early Bronze Age evidence from Cheshire and Greater Manchester is dominated by funerary monuments, and a group of five barrows is situated around Winwick (*op cit*, 42-3). Two of these barrows produced evidence for Beaker culture and a flint dagger of Beaker type was also found in this area (*ibid*). These barrows are situated on a ridge, which is an important topographical feature in the locality, and overlooks one of the few fording points across the River Mersey between Runcorn and Manchester (Hall *et al* 1995, 103). This may have contributed to this area becoming a focus for such activity during this period. An axe and bronze ring have been recovered to the south of the study area and, although it has been suggested that the finds were recovered from a tumulus (Harrison 1896, 25) this has not been confirmed. A barrow investigated within the study area at Kenyon Hall (Site **01**) during the nineteenth century, which has been suggested to have been destroyed (CHER 588), produced remains of pottery vessels and a fragment of a bronze brooch. This group of barrows provides one of the greatest concentrations of such sites in the Mersey Basin, and implies that this area of the river valley was of some significance (Cowell and Innes 1994, 175).
- 3.2.5 The possibility exists that additional, previously unidentified, sites of similar type exist within the study area. Indeed, the field name 'Barrow Field' (Site **19**) was recorded in association with a plot on the Newton in Makerfield tithe map of 1839 (DRB 1/56), which suggest that a burial mound may have been situated within or close to this plot. Barrow Lane (Site **20**) also lies partially within the central portion of the study area. Three parallel low undulating ridges run approximately north-east/south-west across the central and southern part of the study area. Each of these ridges appears to be associated with evidence of barrows, with the barrow at Kenyon Hall Farm (Site **01**) occupying the northernmost, Barrow Lane occupying the middle ridge, and Barrow Field occupying the southern ridge (Plates 1 and 2). This appears to suggest that, in addition to the general suitability of the raised plateau for the siting of burial mounds, that these localised ridges may have been targeted specifically.



Plate 2: A view from the low ridge that Barrow Lane occupies, looking north-east towards the low ridge at Kenyon Hall Farm and the rising land beyond



Plate 3: A view from the low ridge that Barrow Lane occupies, looking south-west towards the low ridge in the vicinity of Oven Back Farm

3.2.6 The precise location of a barrow recorded within the north-west of Southworth township in 1911 (Farrer and Brownbill 1911, 166-8) is unclear. Cultivation

has occurred within the area, which could have reduced the height of such earthworks and, in some cases, might have removed all traces above ground of such monuments. Portions of the A579 have also worn over considerable time to form slight hollow ways and might also have caused damage to the remains of such burial mounds along the route of the pipeline. There is, however, potential for the survival of sub-surface remains associated with such sites. A series of circular cropmarks (Site 17) identified from current aerial photographs are of uncertain character and date, and could represent subsurface remains of ditches surrounding prehistoric burial mounds or houses.

3.2.7 Although Early Bronze Age occupation in the North West appears to have been associated with a degree of mobility, with settled farmsteads probably being a relatively small component of the landscape, more intensive land use appears to have occurred during the Late Bronze Age (Cowell 2000, 170). Parr Moss, approximately 6km to the west of the study area, provided pollen evidence of woodland clearance during the Early Bronze Age, with slightly increased clearance during the Late Bronze Age/Early Iron Age in association with cereal farming (*ibid*; Cowell and Innes 1994, 173-7). This demonstrates agricultural activity in the wider region during this period and metalwork of Late Bronze Age date has been found to the north of the study area (Cowell 2000, 170). Few settlement sites dating to the late Bronze Age have been identified in southern Lancashire and northern Cheshire, with the exception of early phases of defended hilltop enclosures, such as Beeston Castle, to the south of the Mersey. However, it is possible that some known lowland enclosed sites of Iron Age date may have had origins in the Bronze Age and a wooden plinth radio-carbon dated to 1000-800 cal BC (2720±50 BP; Beta - 117717) was found at a double-ditched enclosure at Brook House Farm, approximately 15km to the west (*ibid*, 170-1). A possible conjoined double enclosure (Site 18) to the north-west of Kenyon Hall Farm could represent an agricultural or settlement site of prehistoric date. A circular feature was visible within the southernmost of these enclosures, which could represent the ring ditch of a roundhouse or burial mound.

3.2.8 The deliberate deposition of artefacts in wetlands in Lancashire, during both the Neolithic and Bronze Age, is strongly suggested by finds distributions favouring such environments (*eg* Barrowclough 2008, 150-75; Middleton 1996, 38; 45), and this might also explain the location some of the Cheshire wetland finds (Leah *et al* 1997, 151). Such practices of wetland deposition were not restricted to northern England and were part of a phenomenon that occurred throughout Britain and Ireland (Middleton 1996, 45; Waddell 2000, 47). The deposition of such valuable deposits might be understood in many ways, from the survival of non-organic remains that would have accompanied water-based body disposals, to sacrifices intended to appease or honour the gods, or the disposal of wealth in order to elevate the status of the person responsible for the deposition (Parker Pearson 2000, 117). The northern part of the study area lies adjacent to the remnants of Highfield Moss and there may be potential for the discovery of artefacts deposited within former watery contexts and for other forms of activity on the adjacent higher ground.

- 3.2.9 **Iron Age:** the Iron Age is notoriously underrepresented in North West England (Hodgson and Brennand 2006, 51; Haselgrove 1996, 61). This is probably influenced as much by the poor survival of material of this date, the lack of a temporally distinct material culture, and the inherent difficulty of recognising potentially subtle regional site-types (Hodgson and Brennand 2006, 53; Cowell 2005, 75; Haselgrove 1996, 64) as it is by the often-quoted suggestion of a low population density (Haselgrove 1996, 64). Several types of Iron Age lowland settlement have been identified within North West England, including enclosed settlements with the provision of large-scale curvilinear double ditches, such as those at Brook House Farm, in Merseyside, to the west of the study area, and at Great Woolden Hall, in northern Cheshire (Cowell 2005, 75; Cowell 2000, 172-4).
- 3.2.10 The most numerous form of settlement identified within the Mersey basin is that of the single-ditched rectilinear enclosure, which has been conspicuous during aerial photographic surveys (Phillpot 2000, 183-4). Indeed, three curvilinear enclosures have been identified within 13km to the south of the study area. Although many such sites are generally considered to be of Romano-British date (*ibid*; Cowell 2000, 173), the paucity of material culture associated with the Iron Age in the region, in comparison with the occurrence of Romano-British artefacts, means that caution should be exercised when dating rural sites (Hodgson and Brennand 2006, 52; Philpott 2006, 73-4).
- 3.2.11 A series of circular cropmarks identified from aerial photographs (Site 17) has the potential to represent features of Iron Age date. The features measure up to approximately 10m in diameter, which would be consistent with ring ditches associated with prehistoric or Romano-British roundhouses. Two possible conjoined sub-ovoid enclosures (Site 18) visible as cropmarks on aerial photographs lie to the north-west of Kenyon Hall Farm and could represent settlement or agricultural activity during the Iron Age. A possible ring ditch lay within the southernmost enclosure.
- 3.2.12 The topographic location of the study area, close to the wetlands of Highfield Moss and crossing a palaeochannel to the west of Kenyon Hall Farm, is relevant when discussing the potential for remains of Iron Age date in the region. Human remains have been found in boglands and peat mosses at Lindow Moss, Pilling Moss, Red Moss, Bolton, and Worsley in the north-west of England (Turner and Briggs 1986, 148-9; Haselgrove 1996, 70). Not only do peat deposits aid the preservation of organic remains, but wetland places appear to have been venerated in the Iron Age, as they had been in earlier prehistoric periods, making boglands and mosses focal points for the ritual deposition of both artefacts (Ross 1996, 465) and human bodies (Ross 2004, 82-3). Although the body at Lindow Moss in Greater Manchester was of early Romano-British date, it appears to represent the continuity of indigenous British practices.

3.3 THE HISTORIC PERIODS

- 3.3.1 **Romano-British:** within a relatively undeveloped area of approximately 30km², 15km to the west of the study area, in the vicinity of Tarbock, 14

certain or probable settlement sites of Romano-British date have been identified (Philpott 2000, 178), including numerous rectilinear enclosures (as described above, 3.2.10). Settlements of this date have also been exposed in advance of road building at Brook House Farm, Halewood, where occupation continued from the preceding Iron Age, and at Ochre Brook and Brunt Boggart, Tarbock (Cowell and Philpott 2000).

- 3.3.2 In addition to sites revealed by aerial photography and topsoil stripping, clusters of surface-finds have also been demonstrated in some instances to indicate the presence of Romano-British settlements in the wider area. These include a large unenclosed settlement at Court Farm, in Halewood, and scatters of Roman pottery or metal-detected finds have been found at Oglet, Rainhill, Hale, and Halewood (Philpott 2000, 178–9; 182–3; 189). A lead figurine of Roman date depicting Mars was found at the southern end of the study area (Site 03). This was a declared metal-detecting find and it is not known if it is associated with any other remains relating to activity during this period.
- 3.3.3 A Roman road running north/south between Warrington and Preston has been confirmed 1.5km to the south-west of the southern end of the study area, at Alder Root Farm (Margary 1973, 367; no 70b). A section was also excavated across the road just outside of Newton-le-Willows (Dunlop and Fairclough 1935, 107), with a further section being excavated in 1992 (Greater Manchester Archaeological Unit 1992). These revealed two parallel ditches delineating the road and the remains of a metalled surface (*ibid*). The possible ring gullies (Site 17) and enclosures (Site 18) identified from aerial photographs could date to the Romano-British period, as vernacular circular building styles continued in use into this period.
- 3.3.4 **Early medieval:** the early medieval period is not well-represented in the North West, and no sites of this date are known within the study area. Newton was recorded in the Domesday survey and it has been suggested that Makerfield, with which Newton was formerly associated, may have been referred to as *Maserfield* by both Bede and in the Anglo-Saxon Chronicle (Sephton 1913, 53; 180-1). Prior to the Conquest, Newton formed the head of a hundred that was assessed at five hides, with one of the hides being held by Edward the Confessor as a demesne (Farrer and Brownbill 1911, 132-7), which was an area that was worked directly for the benefit of the manor. The hundred of Newton was a large unit that included numerous manors, and appears to have included the townships of Newton, Kenyon, Southworth, Winwick-with-Hulme, and Houghton (*ibid*), within which the study area lies. The manor of Winwick has been described as pre-dating the Norman Conquest and, therefore, of being in existence during the early-medieval period, during which period it is suggested that the rector of Winwick was also the lord of the manor (Farrer and Brownbill 1911, 140-2). The much larger parish of Winwick was also described as being of ancient origin and primarily occupied by woodland, at the time of the Domesday survey (*op cit*, 122-32). It is possible that the boundaries of the historical townships of Newton, Kenyon, Southworth, Winwick-with-Hulme, and Houghton originated as the boundaries of the preceding ancient manors and, therefore, some, or all, of these boundaries may

have been established as early as the early medieval period. The portions of these boundaries that lie within the study area (Sites 8-12) may, therefore, include fabric or deposits of archaeological interest.

- 3.3.5 Several place-names in the local area are suggestive of linguistic origins pre-dating the Conquest, although the longevity of language and dialect should caution against the presumption that these provide definitive evidence for the date of establishment of these places. The place-name of Kenyon may preserve Old Welsh linguistic origins meaning ‘Einon’s mound’ and could refer to a prehistoric barrow (Mills 1976, 101), many of which are known from the local area. Winwick appears to include the Old English personal name *Wine* or *Wineca* (Wyld and Oakes Hirst 1911, 268; Sephton 1913, 204-5), Croft derives from the Old English word for a small enclosed field (Wyld and Oakes Hirst 1911, 313), and the *tun* element of Newton derives from the Old English for an enclosed piece of land around a dwelling, hamlet, or manor (*op cit*, 389). The first element of Houghton also appears to be of Old English derivation, with *hoh* meaning a heel of land (Sephton 1913, 175). These place-names all suggest Anglo-Saxon influence within the local area.
- 3.3.6 A burial ground located within 1km of the study area, at Southworth Hall Farm, provides evidence of early medieval activity (Freke and Thacker 1987) and supports the likelihood of Anglo-Saxon activity in the local area. The cemetery is difficult to date, and at least three phases of use having been identified (*ibid*). However, it may have been in use during the late Roman period, with the majority of the site interpreted as being of the middle Saxon period, and remaining in use until the eleventh century (Cowell 1992, 9). There is also possible evidence for a small chapel; its location being identified by an area within the cemetery in which no graves were found (*ibid*).
- 3.3.7 Further evidence of early medieval activity within the wider area is provided by the Scheduled Monument of St Oswald’s Well (SM 30378), 500m to the west of the study area. This monument consists of a stone well that is supposedly situated at the place where St Oswald was killed at the Battle of Maserfelth in AD 642. Local legend places the site of this battle at Winwick, although most historians consider that the actual site of the battle was at Oswestry, near the border with Wales (Carter 1971, 23). The Venerable Bede also wrote about the healing properties associated with St Oswald’s well (Lane 1914, 40).
- 3.3.8 **Medieval period:** following the Norman Conquest, the fee of Makerfield was formed, which comprised a similar area to the previous hundred of Newton and comprised numerous manors, including Newton, Kenyon, Southworth, Winwick-with-Hulme, and Houghton (Farrer and Brownbill 1911, 132-7). Southworth was held by the de Croft family prior to 1219 and at around this time Gilbert de Croft took the surname of Southworth and established the Southworth family, who held the manor from the lords of Makerfield (*op cit*, 68-70). The Southworth family held a small portion of Winwick directly of the lord of Makerfield and also acquired the larger portion of the manor of Houghton (*op cit*, 140-2; 166-8). Kenyon originally formed part of the larger manor of Lowton, but was divided and rented as a separate vill during the

reign of Henry III, in the thirteenth century (*op cit*, 154-5). By 1346, Newton was held directly by Sir Robert de Langton, whereas the other manors were held by fealty (*op cit*, 132-7).

- 3.3.9 Some, or all, of the boundaries of the historical townships of Newton, Kenyon, Southworth, Winwick-with-Hulme, and Houghton are likely to have originated as the boundaries of the preceding ancient manors. The portions of these boundaries that lie within the study area (Sites **8-12**) may, therefore, include fabric or deposits of archaeological interest of medieval date.
- 3.3.10 Although the study area occupies parts of five medieval manors, the pipeline does not run close to the known settlement centres associated with these townships. The land within the parish of Winwick, which included all of these townships, was recorded as being primarily woodland in 1086 (*op cit*, 122-32) and it appears likely that the study area occupied agricultural areas associated with dispersed farmsteads, rather than nucleated settlements. The study area lay at the fringes of these manors and appears to occupy land that lay beyond the extents of the parklands associated with the manorial halls. Newton Park was established to the west of the study area by 1322 (Philpott 1987, 15) and was depicted on Saxton's map of 1577. The sub-ovoid shape of this park is preserved in the line of roads and tracks, and in place-names, on the OS mapping of 1849 and lay beyond the extent of the study area. A park also appears to have lain to the east of Kenyon Hall, and is visible as a sub-ovoid space delineated by roads and field boundaries on the OS mapping of 1849. This was not depicted on Saxton's map of 1577, or on Speed's map of 1610 or later mapping (Yates 1786, Greenwood 1818) and, therefore, appears likely to have been established during the medieval period and to have become disused by 1577. This park also lay beyond the extents of the study area.
- 3.3.11 The only recorded site of medieval date within the study area is the site of a windmill and watermill (Site **02**) to the west of Kenyon Hall. It has been suggested (Hall *et al* 1995, 103) that the windmill had reused the site of a Bronze Age Barrow (Site **01**). Although the purported site of a watermill lies to the west of Kenyon Hall Farm, no waterways were shown in this area on any of the OS maps, or on those by Yates in 1786, Greenwood in 1818, or Hennet in 1829, and no streams currently run through this area. A small stream does, however, run eastwards from the north of Kenyon Hall, draining into Cockshot Brook and it is possible that the watermill was situated on a forerunner of this water course. Indeed, current aerial photographs (Plate 6) show what appears to be a very large palaeochannel extending the course of this small stream to the west, towards Highfield Moss, and it is possible that this channel was active during the medieval period.
- 3.3.12 **Post-medieval and Industrial periods:** the historic Ordnance Survey mapping (OS 1849) shows that the study area maintained a rural character during the post-medieval and Industrial periods; occupying fields and roads close to the boundaries of the five townships of Winwick with Hulme; Houghton, Middleton, and Arbury; Southworth with Croft; Newton in Makerfield; and Kenyon. These townships lay within the parish of Winwick and within the historic county of Lancashire. The study area lay to the north of urban area of

Winwick and to the south of the settlement at Lowton. Two Civil War battles took place in Winwick. In 1643, Colonel Assheton defeated the Royalist forces and, in 1648, Cromwell defeated the Duke of Hamilton and his Scottish force (Farrer and Brownbill 1911, 140-2). The latter battle took place at Red Bank, to the west of the study area, and Gallows Croft is reputedly where many of the prisoners captured were hanged (*ibid*).

- 3.3.13 One of the most conspicuous features within the study area is the A579 (Winwick Lane), along which the central portion of the proposed pipeline runs. This road was depicted as early as Yates' map of 1786, although the route of the road to the north of Kenyon Farm changed slightly between 1891-3 and 1907 (OS 1891-3; OS 1907). This is clearly an early road and indications that parts of the road run along a hollow way formed by erosion from traffic, such as an area to the south of Kenyon Hall Farm (Plate 4), suggest that it may have originated during the early post-medieval period, or even earlier.



Plate 4: A view of Winwick Road, looking north-west, showing the sunken character of the eroded hollow way to the south of Kenyon Hall Farm

- 3.3.14 The Manchester and Liverpool railway runs across the northern portion of the study area, through Highfield Moss, and opened in 1830 as the earliest passenger railway in the world (Thomas 1980). This portion of the railway gained additional significance during the inaugural journeys of the opening day, when William Huskisson, the Member of Parliament for Liverpool, was killed by Stephenson's Rocket whilst the train that he was travelling on had stopped at Parkside and he was standing on the tracks speaking to the Duke of Wellington (Rolt 1960).
- 3.3.15 Several post-medieval or industrial cottages and farms lie within the study area, including Locking Stoop Farm (Site **07**), elements of which date to the seventeenth century. Kenyon Hall appears to have been remodelled between 1839 and 1849, as different building layouts were depicted on the Kenyon

tithe map and OS mapping, respectively. The main ranges depicted on the OS mapping of 1849 may have incorporated elements of the earlier buildings and currently remain standing. However, only the wall, gates, and gate piers (Site **04**) at the front of Kenyon Hall are recorded in the Cheshire HER and these are listed as Grade I structures (no 1356218). The walls and gate piers date to the early eighteenth century, and the gates date to the nineteenth century. Rough Cottage Kennels (Site **06**) was depicted on the Newton tithe map of 1839 and is included within the Merseyside HER.

- 3.3.16 The tithe maps recorded an intensive network of small geometric fields across the whole of the study area during the mid-nineteenth century. At this time, although most of the study area was owned by 13 individuals, the land was sub-divided into 23 tenancies, in addition to plots of land occupied by the owners. These relatively high numbers of land owners and tenants, within the narrow corridor of the study area may partly explain why the fields have been divided into such numerous small plots. An estate plan of Newton in Makerfield produced in 1745 (Yoxall 1745) showed that many of the geometric sub-divisions within this portion of the study area had been present from at least as early as the mid-eighteenth century. This area of field boundaries has been recognised from aerial photos and is recorded within the Merseyside HER (Site **05**). Between 1849 and 1893 (OS 1849; OS 1893) the field boundaries began to diminish as the smaller fields were consolidated into larger plots and the removal of field boundaries continued into the first decade of the twentieth century (OS 1907). This was probably the result of increased agricultural mechanisation, which would have allowed large areas to be cultivated more quickly, with patterns of small fields hindering this swifter rate of cultivation.
- 3.3.17 By 1911, coal mines and factories had been established at Winwick (*op cit*, 122-32), modifying the rural character of the town and the nature of employment opportunities for residents of the local area. The study area remained conspicuously rural in character, lying within a landscape of dispersed farmsteads and field systems. However, indications of industry within the farmland are evident from at least as early as the mid-nineteenth century. The OS mapping of 1849 named a series of pits at the western side of the northern part of the study area as ‘Moss Pits’, and a second group of pits to the eastern side of the northern part of Winwick Road as ‘Black Pits’ (Site **13**). It is unclear exactly what type of extraction was undertaken at these pits, although the name ‘Black Pits’ could indicate coal mining. The Kenyon tithe map of 1839 named two of the fields in the vicinity of Black Pits as ‘Gin Field’ (Site **14**) and ‘Pit Field’ (Site **13**). This suggests that extraction was being undertaken prior to 1839 and the ‘gin’ field name is likely to refer to a mechanism was powered by horses pulling poles that turned a central barrel. The power generated from such a gin could be used for many purposes, but was often used as a means of bringing mined coal to the surface (*eg* Neaverson and Palmer 1994, 51). A field named ‘Lower Pit Field’ (Site **15**) was named on the Southworth tithe map of 1837.
- 3.3.18 Several pumps were named on historic OS mapping (OS 1849), including at Barrow Lane, Old Oven Back, and Kenyon Hall. These may have been used to

help drain the fields and the presence of Highfield Moss at the northern end of the study area, and other ‘moss’ place-names in the surrounding area attests to the, formerly more extensive, wet character of this area. Many of these pumps were situated on the higher ridges, away from the areas that might be likely to be prone to waterlogging. It is likely that these were used to drain the fields for agriculture, although there may have been a connection between the draining of Highfield Moss and the construction of the Liverpool and Manchester railway.

- 3.3.19 In addition to possible coal extraction, several sand pits were also shown on the OS mapping of 1849. Although the presence of sand pits allows us to understand an aspect of the land use in the local area, these pits are unlikely to be associated with any structural remains or to provide additional useful information that is not provided by historic mapping and have not, therefore, been given site numbers as heritage assets. A possible site of stone extraction was recorded in the field name ‘Stone Pit Field’ (Site 16) on the Newton tithe map of 1839.
- 3.3.20 **Modern period:** although the urban areas associated with Golborne and Winwick have expanded and developed considerably since the nineteenth century, there has been very little development within the confines of the study area. The most conspicuous change within this area was the establishment of the M6 across the southern portion of the study area by 1962-5 (OS 1962-5). The removal of field boundaries continued during the early twentieth century and, by 1929, the pattern of fields had changed dramatically from numerous small fields to far fewer, and much larger, plots.
- 3.3.21 The twentieth-century administrative history of the study area is quite complex. Although formerly within the historic county of Lancashire, the study area is now split between several boroughs and counties. The urban district of Newton in Makerfield later became Newton le Willows, which was merged into St Helens Metropolitan Borough in 1974, and is part of the ceremonial county of Merseyside. Kenyon was subsumed into the urban district of Golborne in 1933 and the part that the study area occupies became part of the Metropolitan Borough of Wigan, and the Metropolitan County of Greater Manchester, in 1974. Winwick is a civil parish in the Borough of Warrington, which was formed in 1974 and lies within the ceremonial county of Cheshire, which was also established in 1974 (University of Portsmouth 2009).

3.4 MAP REGRESSION

- 3.4.1 **Introduction:** numerous maps were consulted, spanning 1577 to the present day, most of which depicted little change in the landscape of the study area and immediate environs from the character and appearance of the area in the present day. In order to avoid repetition, a selection of the most relevant sources examined is described below. Relevant details from other map sources have been incorporated within the historic background section (*above*).

- 3.4.2 ***Tithe maps of Kenyon (1839; DRB 1/42), Southworth with Croft (1837; DRB 1/75), Newton in Makerfield (1839; DRB 1/56), Houghton, Middleton, and Arbury (1840; DRB 1/38), and Winwick (1838; DRB 1/90) (Figs 3 and 4):*** the tithe maps presented the earliest detailed depiction of the study area and showed an area that was primarily agricultural, with dispersed cottages and farmsteads scattered throughout networks of field systems that had been sub-divided into numerous small geometric plots. The accompanying tithe schedules recorded a variety of agricultural land use that included the use of the fields for pasture, meadow, clover, wheat, oats, and potatoes. An indication of the presence of one or more burial mounds was provided by the field name 'Barrow Field' (Site 19) in Newton. Extraction of marl, which was used as fertiliser, was indicated by the name 'Marl Field', in Newton, and other extraction is suggested by the names 'Pit Field' (Site 13), in Kenyon, and 'Lower Pit Field' (Site 15), in Southworth. A field named 'Gin Field' (Site 14) lay adjacent to 'Pit Field' and this may indicate the former presence of an industrial mechanism, possibly in association with coal extraction. A field called 'Stone Pit Field' (Site 16), in Newton, may have recorded stone extraction in the area.
- 3.4.3 ***OS First Edition map of 1849 at 6" to 1 mile (Fig 5):*** this map depicted an agricultural landscape of field systems and dispersed farmsteads very similar to that shown on the tithe mapping. An area of pits at the north-east of the study area was named as 'Black Pits' (Site 13), and two pumps were shown along Barrow Lane, and pumps were also shown at Old Oven Back Farm and Kenyon Hall. Winwick Lane (A579) was named as Back Lane.
- 3.4.4 ***OS First Edition map of 1891-3 at 25" to 1 mile (Fig 6):*** this mapping presented a similar depiction of the previous OS map, but with a higher degree of detail. Some changes were, however, evident and by the time of the production of this map the Winwick Water Works had been established at the southern end of the study area. The dense patchwork of numerous small fields had begun to be consolidated into fewer and large fields by this date, although many of the smaller fields remained. The pumps shown on the map of 1849 were not depicted on this map.
- 3.4.5 ***OS Second Edition map of 1907 at 25" to 1 mile (Fig 7):*** the consolidation of fields had continued in the years since the mapping of 1891-3 had been surveyed, with previously enlarged fields being subject to further boundary removal in order to form even larger plots. By this date, the course of Back Lane (Winwick Lane; A579) had been straightened at the point that it passes Kenyon Hall, in order to remove the severe dog-leg that had been depicted in this area on the earlier mapping.

3.5 AERIAL PHOTOGRAPH INSPECTION

- 3.5.1 Aerial photographs were consulted in order to examine the area for indications of previously unrecorded features, such as earthworks, and sub-surface remains that might be visible as crop marks.

3.5.2 **Current vertical colour aerial photographs:** current aerial photographs available through Bing mapping were examined. These indicated a series of numerous circular anomalies (Site **17**) within a field at the northern end of the study area, through which the pipeline will pass (Plate 5). The character and date of these anomalies is unclear, although they were not seen to continue into the adjacent fields, which were in different states of cultivation and vegetation. This could suggest that the anomalies are cropmarks that relate to sub-surface features and that the specific conditions associated with the field at the time that the photograph was taken were conducive to their visibility. The circular features measure up to approximately 10m in diameter, which would be consistent with ring ditches associated with prehistoric or Romano-British roundhouses, or possibly with ditches surrounding burial mounds. A barrow excavated near Kenyon Hall Farm (Site **01**) was approximately 10m wide and surrounded by a ditch (Hall *et al* 1995, 103).



Plate 5: A series of circular cropmarks at the northern end of the pipeline route

3.5.3 A second cropmark was identified to the north of Kenyon Hall Farm (Site **18**; Plate 6). This cropmark looks like a pair of sub-ovoid ditched enclosures joined by a narrow ditched passage. This could be of prehistoric date and the presence of burial mounds in the near vicinity (*eg* Site **01**) demonstrates that there was activity in this area during the Bronze Age. This cropmark appears to lie immediately to the north of a large palaeochannel, or ancient river. It is unclear at what date this water course channel ceased to follow the palaeochannel through this area, although a stream flowing eastwards from Kenyon Hall Farm is likely to represent its diminished flow in the current landscape. This channel is of potential significance due to records of a medieval water mill at Kenyon Hall (Site **05**).



Plate 6: An aerial photograph showing a cropmark, possibly representing a double enclosure (Site 19), lying to the north of a large palaeochannel.

- 3.5.4 A faint pair of circular features were visible to the north-west of the western end of Sandy Brow Lane (Plate 7). These lie in the approximate location of a barrow (Site 01) and medieval windmill (Site 02) recorded in the Cheshire HER and appear likely to represent these sites, or closely associated features. The easternmost of the circular features measures approximately 10m in diameter, which is the size that the barrow measured when excavated (Hall *et al* 1995, 103).

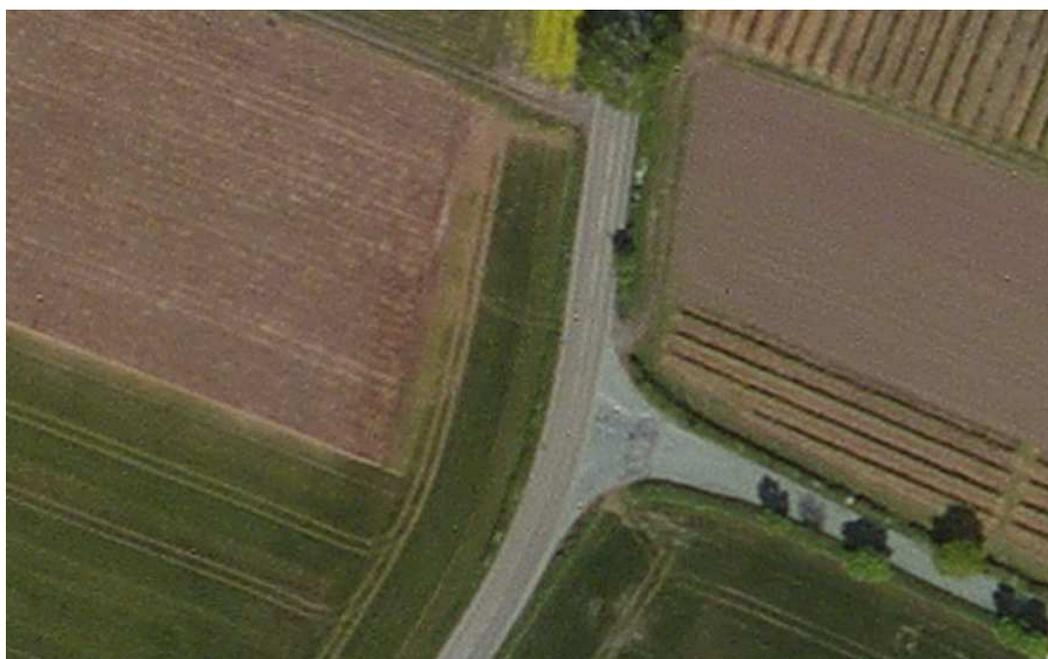


Plate 7: Two circular features to the north-west of Sandy Brow Lane that may represent the Bronze Age Barrow (Site 01) and medieval windmill (Site 02)

3.5.5 Numerous former field boundaries are visible as cropmarks across the study area, with those around Rough Farm being particularly conspicuous (Plate 8). Aerial photographs of this particular area have been examined previously and the Merseyside HER has recorded cropmarks representing former field boundaries in this area (Site 06). The visibility of the field boundaries on aerial photographs demonstrate the potential for the sub-surface survival of sites that are no longer visible as features within the study area.



Plate 8: An aerial photograph showing numerous former field boundaries as cropmarks to the west and north-west of Rough Farm

4. SITE GAZETTEER

Site	Kenyon Hall Tumulus
Site number	01
NGR	SJ 6194 9480
HER number	588
Statutory Designation	-
Period	Bronze Age
Source	CHER
Description	The tumulus was purportedly destroyed between 1887 and 1903 and contained fragments of at least three cinerary urns, one of which contained the tongue of a bronze brooch. Remains of several cremations and a bronze pin were also reported as being found within the mound. Reports of the find of a tanged awl with an urn and burnt bones from a low barrow to the west of Winwick Lane in the Newchurch area may refer to the same site.
Assessment	Although purportedly destroyed, sub-surface remains of the site may survive <i>in situ</i> and the site lies within the pipeline route and will be affected by the works.

Site	Golborne Mill
Site number	02
NGR	SJ 6194 9480
HER number	590
Statutory Designation	-
Period	Medieval
Source	CHER
Description	This site was recorded in the County Treasures Record index as the site of a medieval windmill and watermill
Assessment	Sub-surface remains of the site may survive <i>in situ</i> and the site lies within the pipeline route and will be affected by the works.

Site	Roman Lead Figurine
Site number	03
NGR	SJ 6070 9330
HER number	7225
Statutory Designation	-
Period	Roman
Source	CHER
Description	A fragment of a Roman lead figurine depicting Mars was found. The fragment comprises of the head and has a small D-shaped perforation in at the base of the neck indicating that it may have been hollow cast. The face is very worn and, although the eyes appear to be oval, the mouth and detail of the nose have worn away. The figure is wearing a helmet with a pointed sub-lozenge shaped rim. There is a rounded crest at the top of the helmet and some worn grooves can be seen decorating the crest. The object has a light brown patina.
Assessment	The location of the findspot lies close to the pipeline route, although the find is no longer <i>in situ</i> . It is possible that associated finds or features may lie in the vicinity of the findspot.

Site	Wall, Gate, and Gate Piers at Kenyon Hall
Site number	04
NGR	SJ 6201 9492
HER number	1356218

Statutory Designation	Grade II listed building (No 1356218; DCH8653)
Period	Post medieval-Industrial (eighteenth and nineteenth centuries)
Source	CHER
Description	Early eighteenth-century wall and gate piers with nineteenth-century gates lie to the front of Kenyon Hall. The masonry utilises dressed stone with Gothic moulding to the coping stones and the gate piers have rustications, moulded caps and bases, and hemispherical finials. Spiked uprights are used for the cast iron gates, which are supported on secondary cast-iron posts.
Assessment	The site lies beyond the pipeline route and will not be affected.

Site	Field Boundaries West of Rough Farm
Site number	05
NGR	SJ 6130 9410
HER number	6194-001
Statutory Designation	-
Period	Post medieval/Industrial
Source	MHER
Description	Oblique aerial photographs taken in 1994 indicated former field systems lying within fields to the west of Rough Farm.
Assessment	The field boundaries lie within the route of the pipeline and will be affected by ground works.

Site	Rough Cottage Kennels
Site number	06
NGR	SJ 6142 9401
HER number	6194-007
Statutory Designation	-
Period	Industrial
Source	MHER
Description	Rough Cottage was shown on the Newton tithe map of 1839 and was photographed during a site visit in 1994.
Assessment	Rough Cottage lies beyond the pipeline route and will not be affected.

Site	Locking Stoop Farm
Site number	07
NGR	SJ 6208 9637
HER number	4940.1.0
Statutory Designation	-
Period	Post medieval/Industrial (eighteenth century)
Source	GMHER
Description	This rendered brown brick farmhouse has seventeenth-century beams at ground floor. The flush casement has been altered. The flag roof is said to incorporate a toll-bar, although this was not visible when inspected by the Department of Environment at an unspecified date. The cottage has a modern roof and window frames with an original brown brick chimney stack and a brown brick barn is situated in the grounds. This was formerly a Grade III listed building.
Assessment	The farm lies beyond the pipeline route and will not be affected.

Site	Winwick with Hulme Township Boundary
Site number	08
NGR	SJ 60780 93649 (selected point of extensive boundary)
HER number	-

Statutory Designation	-
Period	?Early medieval/medieval
Source	Farrer and Brownbill 1911, 132-7
Description	Prior to the Norman Conquest, the hundred of Newton was a large unit that included numerous manors, and appears to have included those of Newton, Kenyon, Southworth, Winwick-with-Hulme, and Houghton. Following the Norman Conquest, the fee of Makerfield was formed, which comprised a similar area to the previous hundred of Newton and included the manors that share the names of the townships that fall within the study area. Some, or all, of the boundaries of the historical townships of Newton; Kenyon; Croft with Southworth; Winwick-with-Hulme; and Houghton, Middleton, and Arbury are likely to have originated as the boundaries of the preceding ancient manors. The portions of these boundaries that lie within the study area may, therefore, include fabric or deposits of archaeological interest of medieval date.
Assessment	The township boundary lies within the pipeline route and will be affected by the ground works.

Site	Middleton, Houghton, and Arbruy Township Boundary
Site number	09
NGR	SJ 60950 93657 (selected point of extensive boundary)
HER number	-
Statutory Designation	-
Period	?Early medieval/medieval
Source	Farrer and Brownbill 1911, 132-7
Description	Prior to the Norman Conquest, the hundred of Newton was a large unit that included numerous manors, and appears to have included those of Newton, Kenyon, Southworth, Winwick-with-Hulme, and Houghton. Following the Norman Conquest, the fee of Makerfield was formed, which comprised a similar area to the previous hundred of Newton and included the manors that share the names of the townships that fall within the study area. Some, or all, of the boundaries of the historical townships of Newton; Kenyon; Croft with Southworth; Winwick-with-Hulme; and Houghton, Middleton, and Arbury are likely to have originated as the boundaries of the preceding ancient manors. The portions of these boundaries that lie within the study area may, therefore, include fabric or deposits of archaeological interest of medieval date.
Assessment	The township boundary lies within the pipeline route and will be affected by the ground works.

Site	Croft with Southworth Township Boundary
Site number	10
NGR	SJ 61134 93855 (selected point of extensive boundary)
HER number	-
Statutory Designation	-
Period	?Early medieval/medieval
Source	Farrer and Brownbill 1911, 132-7
Description	Prior to the Norman Conquest, the hundred of Newton was a large unit that included numerous manors, and appears to have included those of Newton, Kenyon, Southworth, Winwick-with-Hulme, and Houghton. Following the Norman Conquest, the fee of Makerfield was formed, which comprised a similar area to the previous hundred of Newton and included the manors that share the names of the townships that fall within the study area. Some, or all, of the boundaries of the historical townships of Newton; Kenyon; Croft with Southworth; Winwick-with-Hulme; and Houghton, Middleton, and Arbury are likely to have originated as the boundaries of the preceding ancient manors. The portions of these boundaries that lie within the

study area may, therefore, include fabric or deposits of archaeological interest of medieval date.

Assessment The township boundary lies within the pipeline route and will be affected by the ground works.

Site **Newton Township Boundary**

Site number **11**

NGR SJ 61739 94585 (selected point of extensive boundary)

HER number -

Statutory Designation -

Period ?Early medieval/medieval

Source Farrer and Brownbill 1911, 132-7

Description Prior to the Norman Conquest, the hundred of Newton was a large unit that included numerous manors, and appears to have included those of Newton, Kenyon, Southworth, Winwick-with-Hulme, and Houghton. Following the Norman Conquest, the fee of Makerfield was formed, which comprised a similar area to the previous hundred of Newton and included the manors that share the names of the townships that fall within the study area. Some, or all, of the boundaries of the historical townships of Newton; Kenyon; Croft with Southworth; Winwick-with-Hulme; and Houghton, Middleton, and Arbury are likely to have originated as the boundaries of the preceding ancient manors. The portions of these boundaries that lie within the study area may, therefore, include fabric or deposits of archaeological interest of medieval date.

Assessment The township boundary lies within the pipeline route and will be affected by the ground works.

Site **Kenyon Township Boundary**

Site number **12**

NGR SJ 61933 94504 (selected point of extensive boundary)

HER number -

Statutory Designation -

Period ?Early medieval/medieval

Source Farrer and Brownbill 1911, 132-7

Description Prior to the Norman Conquest, the hundred of Newton was a large unit that included numerous manors, and appears to have included those of Newton, Kenyon, Southworth, Winwick-with-Hulme, and Houghton. Following the Norman Conquest, the fee of Makerfield was formed, which comprised a similar area to the previous hundred of Newton and included the manors that share the names of the townships that fall within the study area. Some, or all, of the boundaries of the historical townships of Newton; Kenyon; Croft with Southworth; Winwick-with-Hulme; and Houghton, Middleton, and Arbury are likely to have originated as the boundaries of the preceding ancient manors. The portions of these boundaries that lie within the study area may, therefore, include fabric or deposits of archaeological interest of medieval date.

Assessment The township boundary lies within the pipeline route and will be affected by the ground works.

Site **Black Pits**

Site number **13**

NGR SJ 62229 95651

HER number -

Statutory Designation -

Period Industrial (pre-1849)

Source OS 1849

Description	An area of irregular and sub-ovoid pits was named as 'Black Pits' on the OS mapping of 1849. An adjacent field was named as 'Gin Field' (Site 14) on the Kenyon tithe map of 1839 and these names could relate to former coal mining in the area.
Assessment	The site lies beyond the pipeline route and will not be affected.

Site	Gin Field
Site number	14
NGR	SJ 62283 95800
HER number	-
Statutory Designation	-
Period	Industrial (pre-1839)
Source	Kenyon tithe map of 1839
Description	A field was named as 'Gin Field' on the Kenyon tithe map. This may relate to machinery used in association with localised mining and an adjacent area was named as 'Black Pits' (Site 13) on the OS map of 1849.
Assessment	The site lies beyond the pipeline route and will not be affected.

Site	Lower Pit Field
Site number	15
NGR	SJ 60958 93892
HER number	-
Statutory Designation	-
Period	Industrial (pre-1837)
Source	Croft with Southworth tithe map of 1837
Description	A field was named as 'Lower Pit Field' on the Croft with Southworth tithe map. This may relate to localised extraction, such as coal mining or marl extraction.
Assessment	The site lies within the pipeline route and might be affected.

Site	Stone Pit Field
Site number	16
NGR	SJ 61294 94037
HER number	-
Statutory Designation	-
Period	Industrial (pre-1839)
Source	Newton tithe map of 1839
Description	A field was named as 'Stone Pit Field' on the Newton tithe map. This is likely to relate to localised stone extraction.
Assessment	The site lies within the pipeline route and might be affected.

Site	Circular Cropmarks south of Locking Stoop Farm
Site number	17
NGR	SJ 62166 96207
HER number	-
Statutory Designation	-
Period	?Bronze Age to Romano-British
Source	Modern vertical aerial photographs
Description	A series of circular cropmarks (Site 17) identified from current aerial photographs are of uncertain character and date and could represent sub-surface remains of ditches surrounding prehistoric burial mounds or houses. Roundhouses with annular ring gullies continued in use into the Romano-British period.
Assessment	The site lies within the pipeline route and will be affected.

Site	Sub-ovoid Cropmarks west of Kenyon Hall
Site number	18
NGR	SJ 61984 95175
HER number	-
Statutory Designation	-
Period	?Bronze Age to Romano-British
Source	Modern vertical aerial photographs
Description	Two conjoined sub-ovoid shapes were visible as cropmarks on modern vertical aerial photographs. The two features may represent ditched enclosures and appeared to be joined by a narrow ditched corridor. A smaller circular feature that could represent a ring ditch associated with a house or burial mound was visible within the southernmost enclosure.
Assessment	The site lies within the pipeline route and will be affected.

Site	Barrow Field
Site number	19
NGR	SJ 61324 94005
HER number	-
Statutory Designation	-
Period	?Bronze Age
Source	Newton tithe map of 1839
Description	A field was named as 'Barrow Field' on the Newton tithe map. This may record the former presence of a burial mound, or mounds, within the locale.
Assessment	The site lies within the pipeline route and might be affected.

Site	Barrow Lane
Site number	20
NGR	SJ 61627 94391
HER number	-
Statutory Designation	-
Period	?Bronze Age
Source	OS 1849
Description	The name 'Barrow Lane' was recorded as early as the OS map of 1849 and may record the former presence of a burial mound, or mounds, within the locale.
Assessment	The site lies within the pipeline route and might be affected.

5. ARCHAEOLOGICAL RECOMMENDATIONS

5.1 INTRODUCTION

5.1.1 A total of 20 heritage assets have been identified within the study area, with seven having been recorded within the historic environment records of Cheshire, Merseyside, and Greater Manchester. Of these sites, 14 are likely to lie within the vicinity of the proposed pipeline and associated easement. These are Kenyon Hall tumulus (Site **01**), Golborne Mill (Site **02**), field boundaries west of Rough Farm (Site **05**), Winwick township boundary (Site **08**), Houghton township boundary (Site **09**), Southworth township boundary (Site **10**), Newton township boundary (Site **11**), Kenyon township boundary (Site **12**), Lower Pit Field (Site **15**), Stone Pit Field (Site **16**), circular cropmarks (Site **17**), sub-ovoid cropmarks (Site **18**), Barrow Field (Site **19**), and Barrow Lane (Site **20**). Intrusive ground works associated with the proposed development present the potential for negative impacts upon these sites, in the form of damage and destruction to the physical remains.

5.1.2 In addition to these sites, the proposed pipeline route crosses areas with the potential for previously unidentified remains of archaeological interest. This includes a strong likelihood of sub-surface remains of Bronze Age burial mounds and the possibility of associated settlement sites. A large palaeochannel runs across the centre of the study area, to the west of Kenyon Hall farm and the northern end of the study area lies at the eastern side of Highfield Moss. These features, although of natural origin, present the potential for preserved artefacts of archaeological interest, and for preserved plant remains and environmental evidence that might elucidate our understanding of the development and changes of land use within the study area.

5.2 RECOMMENDATIONS

5.2.1 It is recommended that a programme of archaeological work comprising several elements is undertaken in order to ensure the preservation by record of the remains or potential remains of archaeological interest discussed above.

5.2.2 **Walkover survey:** although the study area was subject to a rapid inspection from publically accessible areas during the preparation of the rapid desk-based assessment, it was beyond the scope of the current work to undertake a detailed survey of the study area. A Level 1 identification survey should be undertaken prior to the beginning of ground works in order to examine the area of the proposed pipeline and associated easement for indications of sites of archaeological interest. Particular attention should be given to those areas where previous sites of archaeological interest have been identified (Sites **01** and **02**) and the areas where cropmarks, field names, and road names suggest the potential for such sites (Sites **05**, **15**, **16**, **17**, **18**, **19**, and **20**). The character of each portion of township boundary (Sites **08**, **09**, **10**, **11**, and **12**) crossed by the pipeline route should also be examined.

- 5.2.3 **Topographic and photographic survey:** the study area includes portions of five township boundaries, which could have been established during, or prior to, the medieval period. Remains of these boundaries may include earthworks that are visible at ground level and, therefore, these should be subject to topographic and photographic survey prior to disturbance by ground works. Any additional earthworks identified during the walkover survey should also be subject to topographic survey, where appropriate.
- 5.2.4 **Geophysical survey:** tumuli, or burial barrows, are sited consistently in prominent elevated locations, as is demonstrated locally by the distribution of numerous such sites in the immediate vicinity of the study area, and the topographic location of field and road names that include the word ‘barrow’ (Sites **19** and **20**). Although it is possible that barrows might be present within several parts of the study area, a series of circular cropmarks (Site **17**) in the northern part of the study area could represent the sub-surface remains of such features. Alternatively, these cropmarks could represent settlement remains of prehistoric or Romano-British date, and a pair of apparent conjoined sub-ovoid enclosures within the central part of the study area (Site **18**) could also relate to settlement or agricultural activity. Therefore, geophysical survey should be undertaken along the proposed route of the pipeline and easement within these two locations.
- 5.2.5 **Archaeological watching brief:** given the presence of a barrow (Site **01**) and other potential indicators of barrows in the immediate environs of the study area (Sites **19** and **20**), cropmark evidence suggestive of possible previously unrecognised prehistoric sites within the study area (Sites **17** and **18**), and the presence of numerous barrows within the wider vicinity, it is recommended that a watching brief should be undertaken during all ground works, such as topsoil stripping and the excavation of the pipe trench. The potential also exists for the presence of preserved waterlogged environmental and artefactual evidence as a result of the presence of a palaeochannel within the central portion of the study area and the close proximity of Highfield Moss to the northern part of the study area. The watching brief would enable any buried peat deposits or other waterlogged deposits to be inspected.
- 5.2.6 **Archaeological strip and record:** the pipeline will pass directly through the locations of a known barrow (Site **01**) and medieval windmill (Site **02**). It is likely that portions of these sites survive below ground level and there may also be additional previously unidentified sites associated with these features. It is, therefore, appropriate that a 100m long strip along the route of the pipeline and easement running northwards from Sandy Brow Lane should be subject to controlled strip and record investigation under the direction of an archaeologist. This would entail the removal of topsoil from the easement, as would be already be necessary to facilitate the pipeline works, but this would be undertaken under the direction of an archaeologist to ensure to ensure that the topsoil was fully removed to expose the underlying horizon cleanly.
- 5.2.7 **Consultation and survey:** consultation should be undertaken with the English Heritage scientific advisor regarding the potential impact of the groundworks on palaeoenvironmental remains in the study area, in terms of the presence of

preserved environmental evidence. The study area lies close to Highfield Moss and a palaeochannel runs across the central portion of the area and it is, therefore, possible that buried peat deposits, or other waterlogged deposits, might preserve plant remains or other indicators of environmental development in the past. It is possible that, following this consultation, a programme of environmental coring or other similar palaeoenvironmental investigation might be recommended.

Site	Recommendations
Kenyon Hall Tumulus (Site 01)	Strip and Record
Golborne Mill (Site 02)	Strip and Record
Field boundaries west of Rough Farm (Site 05)	Watching brief
Winwick with Hulme township boundary (Site 08)	Walkover survey, topographic and photographic survey, watching brief
Middleton, Houghton, and Arbury township boundary (Site 09)	Walkover survey, topographic and photographic survey, watching brief
Croft with Southworth township boundary (Site 10)	Walkover survey, topographic and photographic survey, watching brief
Newton township boundary (Site 11)	Walkover survey, topographic and photographic survey, watching brief
Kenyon township boundary (Site 12)	Walkover survey, topographic and photographic survey, watching brief
Lower Pit Field (Site 15)	Walkover survey, watching brief
Stone Pit Field (Site 16)	Walkover survey
Circular cropmarks (Site 17)	Geophysical survey
Sub-ovoid cropmarks (Site 18)	Geophysical survey
Barrow Field (Site 19)	Walkover survey, watching brief
Barrow Lane (Site 20)	Walkover survey, watching brief

Table 2: Archaeological recommendations for gazetteer sites

6. BIBLIOGRAPHY

6.1 PRIMARY SOURCES

Greenwood, CG, 1818 *A map of the county Palatine of Lancaster*

Hennet, G, 1829 *A map of the county Palatine of Lancaster*

LRO DRB 1/75 Croft with Southworth tithe map and schedule of 1837

LRO DRB 1/42 Kenyon tithe map and schedule of 1839

LRO DRB 1/38 Middleton, Houghton, and Arbury tithe map and schedule of 1840

LRO DRB 1/56 Newton tithe map and schedule of 1839

LRO DRB 1/90 Winwick with Hulme tithe map and schedule of 1838

Ordnance Survey 1849, 6":1 Mile, first edition

Ordnance Survey 1891-3, 25":1 Mile, first edition

Ordnance Survey 1907, 25":1 Mile, second edition

Ordnance Survey 1962-5, 25":1 Mile

Saxton, C, 1577 *Lancastrie*

Speed, J, 1610 *The countie (sic) Pallatine (sic) of Lancaster described and divided into hundreds*

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

Yoxall, B, 1745 Map of Newton Township

7.2 SECONDARY SOURCES

Barrowclough, D, 2008 *Prehistoric Lancashire*, Stroud

British Geological Society, 2013 *Geology of Britain Viewer*,

<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>, accessed on 21st May 2013

Carter, GA, 1971 *Warrington and the Mid-Mersey Valley*, Didsbury

Cowell, RW, 1992 *Extension to Southworth Quarry, Winwick: Draft Report on the Archaeological Assessment*, unpubl rep

Cowell, RW, 2000 The Early Prehistoric Period in Southern Merseyside, in Cowell and Philpott 2000, 165-8

Cowell, R, 2005 Late Prehistoric Lowland Settlement in North West England, in M Nevell and N Redhead (eds) *Mellor: Living on the Edge*, Manchester, 65–76

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

Cowell, R, and Philpott, RA, 1994 Some finds from Cheshire reported to Liverpool Museum, *Cheshire Past: An Annual Review of Archaeology in Cheshire*, **3**, 10-11

Cowell, R, and Philpott, RA (eds), 2000 *Prehistoric, Romano-British and Medieval Settlement in Lowland North West England, Archaeological Investigations Along the A5300 Road Corridor in Merseyside*, Liverpool

Dunlop, GA, and Fairclough, B, 1935 The Roman Road from Newton Brook to the South of the Parish Church, Warrington, *Trans Hist Soc Lancashire and Cheshire*, **85**, 99-130

English Heritage, 2006 *Management of Research Projects in the Historic Environment (MoRPHE)*, London

Farrer, W, and Brownbill, J, (eds), 1911 *The Victoria History of the County of Lancaster*, **6**, London

Freke, DJ, and Thacker, AT, 1989 *The Early Cemetery at Southworth Hall Farm*, unpubl rep

Garstang, J, 1906 Early Man, in Farrer, W, and Brownbill, J, (eds) *A History of the County of Lancaster*, **1**, The Victoria History of the Counties of England, London, 211-56

Greater Manchester Archaeological Unit, 1992 *Evaluation at Alder Root Farm, Winwick, R2110*, unpubl rep

Hall, D, Wells, CE, and Huckerby, E, 1995 *The Wetlands of Greater Manchester, North West Wetlands Survey 2*, Lancaster Imprints **3**, Lancaster

Harrison, W, 1896 *An Archaeological Survey of Lancashire*, London

Haselgrove, C, 1996 The Iron Age, in R Newman (ed) *The Archaeology of Lancashire, Present State and Future Priorities*, Lancaster, 61–73

Hodgson, J and Brennand, M, 2006 The Prehistoric Period Resource Assessment, in M Brennand (ed) 2006 *The Archaeology of North West England: An Archaeological Research Framework for North West England: Volume 1, Resource Assessment*, Archaeol North West, **8**, Manchester, 23–58

Institute for Archaeologists, 2012 *Standard and Guidance for Historic Environment Desk-based Assessment*, Reading

Lane, JH, 1914 *Newton-in-Makerfield: Its History, With Some Account of its People*, **I**, Newton-le-Willows

Leah, M, Wells, CE, Appleby, C, and Huckerby, E, 1997 *The Wetlands of Cheshire*, Lancaster Imprints, 5, Lancaster

Margary, ID, 1973 *Roman Roads in Britain*, London

Middleton, R, 1996 The Neolithic and Bronze Age, in R Newman (ed), *The Archaeology of Lancashire*, Lancaster, 35-60

Mills, D, 1976 *The Place-Names of Lancashire*, London

Neaverson, P, and Palmer, M, 1994 *Industry in the Landscape, 1700-1900*, London

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

Philpott, R, 1987 *Merseyside Historic Towns Survey Report: The Development of Newton-le-Willows, Prescott, and Liverpool to 1800*, Archaeological Survey of Merseyside, Liverpool

Philpott, R, 2000 *The Excavations*, in Cowell and Philpott 2000, 120-36

Philpott, R, 2006 *The Romano-British Period Resource Assessment*, in J Hodgson and M Brennan (eds) 2006, 59-90

Philpott, R, Simmons, P, and Cowell, RW, 1993 *An Archaeological Evaluation at Southworth Hall Farm, Croft, Cheshire*, National Museums and Galleries on Merseyside, 11-14

Rolt LTC, 1960 *George and Robert Stephenson*, London

Ross, A, 1996 *Pagan Celtic Britain*, Chicago

Ross, A, 2004 *Druids: preachers of immortality*, Stroud

Sephton, J, 1913 *A Handbook of Lancashire Place-Names*, Liverpool

Thomas, RHG, 1980 *The Liverpool and Manchester Railway*, London

Turner, RC, and Briggs, CS, 1986 The bog burials of Britain and Ireland, in IM Stead, JB Bourke, and D Brothwell (eds) *Lindow Man, the body in the bog*, London, 144-161

University of Portsmouth, 2009 *A Vision of Britain Through Time, Cheshire: Historical Boundaries*, www.visionofbritain.org.uk, archived on 6th May 2007, accessed on 4th June 2013

Waddell, J, 2000 *The Prehistoric Archaeology of Ireland*, Bray

Wyld, HC, and Oakes Hirst T, 1911 *The Place Names of Lancashire, their origin and history*, London

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