University of Salford MANCHESTER

Post-excavation Assessment

Land at Land Gate,
Ashton-in-Makerfield,
Wigan,
Greater Manchester

Planning Ref:
A/17/84450/MAJOR

Client:
The Environment Partnership

Technical Report:
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The Centre for Applied Archaeology

REGISTERED ORGANISATION CIfA

Site Location:	The development site is located across agricultural land to the north of Ashton-in-Makerfield, near Wigan, Greater Manchester. The site is bounded to the west by Wigan Road (A49) and to the north by Land Gate Lane.
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Summary

Bellway Homes Limited (Manchester Division) has obtained planning consent for a large residential development at Land Gate, near Ashton-in-Makerfield, Wigan (centred on NGR SD 57140 01220). The consented scheme allows for the construction of 157 dwellings, together with associated landscaping works and roads across 5.45 hectares of agricultural land to the north of Ashton-in-Makerfield (Planning Ref: A/17/84450/MAJOR). In view of the extensive earth-moving works required to deliver the scheme, a condition was attached to planning consent that required an appropriate programme of archaeological investigation to be carried out in advance of construction.

The potential for archaeological remains to survive across the development site was highlighted in a desk-based assessment produced by The Environment Partnership (TEP) that was prepared to support the planning application in 2017. This identified that the projected course of the Roman road from Warrington to Wigan crossed the site, and concluded that intrusive investigation to establish the presence or absence of archaeological remains was merited. In the light of this conclusion, TEP on behalf of Bellway Homes Limited, commissioned an appropriate programme of archaeological investigation, which initially comprised a geophysical survey and subsequent trial trenching that targeting the projected line of the Roman road.

Whilst the results obtained from the geophysical survey were inconclusive, a section of the Roman road was exposed during the evaluation. Following consultation between TEP and Greater Manchester Archaeological Advisory Service (GMAAS) it was concluded that the eastern part of the site had potential to contain buried archaeological remains of sufficient research interest to warrant more detailed investigation. GMAAS recommended that detailed archaeological investigation of two areas targeted on the course of the Roman road would constitute an appropriate strategy to mitigate the ultimate loss of the archaeological remains.

The excavation was undertaken by Salford Archaeology between March and April 2018, with invaluable support provided by members of the Wigan Archaeological Society, together with a watching brief that monitored development ground works in May 2018. The excavation revealed the fragmentary remains of the Roman road, together with its associated drainage ditches, one of which contained two sherds of Roman pottery. The upper fill of one of these ditches contained an assemblage of pottery, to which a 12th- to 14th-century date may ascribed, raising a possibility that the road remained in use for a considerable period after the collapse of Roman administration in Britain. In addition, a date returned from radiocarbon assay of material lying immediately beneath the Roman road has indicated some activity on the site during the late Bronze Age.

A post-excavation assessment of the dataset has been carried out following the completion of all elements of the fieldwork. This has concluded that whilst the results obtained from the archaeological investigation are of regional importance and merit an appropriate level of publication, the dataset has little potential for any further analysis.

1. Introduction

1.1 Planning Background

In March 2018, Salford Archaeology was commissioned by TEP on behalf of Bellway Homes Limited (Manchester Division) to undertake an archaeological excavation of land at Land Gate, Ashton-in-Makerfield, Greater Manchester (Plate 1). The development site is located across agricultural land to the north of Ashton-in-Makerfield, bounded to the west by Wigan Road and to the north by Land Gate Lane. Archaeological work was required to satisfy a condition attached to planning consent for a residential development of 157 dwellings (Planning Ref: A/17/84450/MAJOR; Condition 15).

Plate 1: Aerial view across the development site, marking the approximate area of investigation

Condition 15 attached to planning consent stated that:

'No development shall take place until the developer has secured the implementation of a programme of archaeological works in accordance with a Written Scheme of Investigation (WSI) which has been submitted to and approved in writing by the Local Planning Authority. The development shall not be occupied until the site investigation has been completed in accordance with the programme set out in the approved WSI and provision made for the completion of all elements of that programme. The WSI shall cover the following:

i). A phased programme and methodology of site investigation and recording to include:

- geophysical and trial trenching evaluation as set out in the Written Scheme of Investigation prepared by TEP in September 2017 (Document Ref: 6159.1.0);
- depending upon the results of the evaluation, area excavation and recording (subject to a new WSI);
- informed by the above, an archaeological watching brief (subject to a new WSI).

ii). A programme for post investigation assessment to include:

- analysis of the site investigation records and finds;
- production of a final report on the significance of the archaeological and historical interest represented.

iii). Provision for publication and dissemination of the analysis and report on the site investigation and an appropriate level of public site interpretation.

iv). Provision for archive deposition of the report, finds and records of the site investigation.

v). Nomination of a competent person or persons/ organisation to undertake the works set out within the approved WSI.

The excavation followed on from a desk-based assessment that was compiled in 2016 by TEP, and a subsequent geophysical survey undertaken by Magnitude Surveys Ltd and trial trenching carried out by OA North in 2017 (OA North 2017), which confirmed that buried remains of the Warrington to Wigan Roman road survived across the site.

In the light of the significant results obtained from the initial evaluation, it was recommended that a programme of further archaeological investigation was carried out, comprising a 'strip and record' exercise of two targeted areas, followed by controlled detailed excavation where extensive archaeological remains were exposed.

The two areas were targeted across the projected alignment of the Roman road, and aimed to reveal the extent, character and context of the road, together with any other roadside archaeological features. It was proposed that Area A was located in the north of the site, measuring an area of 25 x 25m, whilst Area B, measuring an area of 40m x 20m, was situated in the south of the site, straddling a small watercourse known as the Brooke. The excavation was carried out by Salford Archaeology between March and April 2018, with invaluable support provided by members of the Wigan Archaeological Society. The work was undertaken in accordance with an approved Written Scheme of Investigation (TEP 2018).

The total area of archaeological sensitivity comprised 5401.40 m^2, of which two areas with a combined area of 1484.90m^2 was targeted for archaeological excavation. The remaining area was subjected to an archaeological watching brief, as detailed in a separate Written Scheme of Investigation.

The excavation commenced on Monday 19th March. However, upon initial inspection of the site, it was clear that topsoil had been removed using a tractor and drag-box prior to the arrival of Salford Archaeology, causing damage to the metalled surface of the Roman road. The requirements of the condition stated that topsoil should be removed using a mechanical excavator with a ditching bucket while archaeologists were present in order to prevent damage to the surface of the road.

Following discussions between GMAAS, TEP and Salford Archaeology, it was agreed that both Areas A and B would be split into two smaller areas targeting the best-preserved sections of Roman road. In addition, a small section of the road located to the south of the originally planned Area B and a section of a watercourse, which crossed the projected line of the road, were excavated to look for evidence of the road and a possible bridge or ford across the watercourse.

Following completion of the fieldwork, an assessment has been made of the project archive, with a view to defining the merits and scope of completing further analysis and publication, in accordance with guidelines provided by the National Planning Policy Framework. This assessment examined the results of the excavation, and has assessed the potential for further analysis of each category of data with regard to the project's research aims. The process has been designed to correspond to the objectives laid out in the guidance document *Management of Research Projects in the Historic Environment*; Historic England 2015).

2. Original Research Priorities

2.1 Research Aims

The main research aims of the archaeological investigation were to excavate and record any surviving archaeological remains, and to obtain a full range of artefactual and environmental materials that would enable the stratigraphic sequence to be characterised, dated and interpreted. In particular, it was hoped to:

- to sample the projected line of the Roman road through the development site, and compile a detailed record of any surviving archaeological remains.

2.2 Objectives

In order to meet the principal aim stated above, the following objectives were devised:

- to determine the presence, character, and extent of any buried remains pertaining to prehistoric settlement or activity;
- to establish a date or series of dates for features exposed during the initial evaluation trenching;
- to determine the presence, character, and extent of any buried remains pertaining to Romano-British settlement or activity, particularly the Warrington to Wigan Roman road;
- to make a full record of any archaeological remains to mitigate their damage or destruction during the proposed development;
- to carry out a programme of post-excavation assessment;
- to prepare a project archive for long-term deposition;
- to make the results obtained from the excavation publically accessible in a manner commensurate with their significance.

In addition to the specific project aims and objectives, the project has some potential to address a few of the initiatives outlined in the current North West Archaeological Research Framework. *Initiative 3.27*, for instance, states: 'There is an urgent need for work to locate rural sites and to investigate potential Iron Age/Romano-British sites across the whole region, to determine their chronology, economy, character, and to examine the origins of rural settlement patterns' (Philpott and Brennand 2007, 66).

Similarly, *Initiative 3.27 states:* 'Rural sites need to be considered within their landscape context, by investigation of their field systems and boundaries, the local land use, topography and exploitation of other resources' (*ibid*).

3. The Setting

3.1 Location, Topography and Land use

The development site (centred on NGR SD 57140 01220) comprises agricultural land situated to the east of the A49 Wigan Road and south of Land Gate Lane, to the north of Ashton-in-Makerfield, and some 4.5km to the south of Wigan town centre (Fig 1). The area of proposed development consists of fields divided by a steep rise separating a quadrant in the south-west corner. A range of ecosystems including open pasture, arable land and woodland encompass the area.

Topographically, the Wigan area occupies low-lying land known as the Makerfield Basin, which is enclosed to the north and east by the raised plateau of Central Lancashire and the West Pennine Moors. The current topography of the study area is undulating from 50m to 63.3m above Ordnance Datum (aOD), with a natural bank crossing the centre of the development site, on an east/west alignment. The natural topography of the wider area has been affected by industrial and modern development, such as the expansion of Ashton-in-Makerfield and the widening of nearby roads. However, agricultural land continues to surround Ashton-in-Makerfield, to the north, east, south and particularly to the west.

Archival sources and cartographic evidence imply that the area was sparsely populated, with dispersed rural agricultural settlements throughout the medieval and post-medieval periods. Historic sources from the 17th century highlight a continuity in the rural nature of the area, describing Ashton-in-Makerfield as a small village in a very rural and sparsely populated area (Farrer and Brownbill 1991). The area became densely populated when coal mining emerged as the town's main economic resource in the 19th century; there were 13 collieries in the district of Ashton-in-Makerfield by 1867, with Bryn Hall Colliery, Mains Colliery and Park Lane Colliery opening subsequently. Since the modernisation of the coal-mining industry, however, Ashton-in-Makerfield has had one of the highest proportions of derelict land, mainly in the form of spoil tips left over from mining activity.

3.2 Geology

The solid geology over most of the site consists of Pennine Middle Coal Measures, comprising mudstone, siltstone and sandstone, with superficial glaciofluvial deposits of Devensian Till (www.bgs.ac.uk). The soils are slowly permeable, seasonally wet, acid loamy and clayey soils (Farewell *et al* 2011).

4. Historical Background

4.1 Historical Background

4.1.1 Prehistoric Period

Prehistory in the North West region spans from the Upper Palaeolithic (40,000) to the late Iron Age (700 BC – AD 43), although there is generally a lack of archaeological data pertaining to this period (Hodgson and Brennand 2007, 31). This is likely to be a result of low levels of archaeological fieldwork carried out in the region and reflects intense development and urbanisation of Greater Manchester and industrial towns such as Wigan. Very little direct evidence for prehistoric settlement has been found locally.

The wetlands of the North West have greater archaeological potential as they appear to have been occupied from the Mesolithic period (10,000 – 3500 BC) through to the late Iron Age. Lowland areas close to rivers and the coast as well as the interface between different ecological zones is frequently highlighted as being favourable for prehistoric subsistence and occupation (Hodgson and Brennand 2006, 28; Reader 2016).

The Neolithic period (4000 – 2200 BC), in England, is characterised by the adoption of agriculture and a more sedentary lifestyle, which varies from region to region across the country, where people occupied a landscape characterised by ceremonial and funerary monuments (Hodgson and Brennand 2006, 29). Woodland clearances imply intensive use of the landscape, although known Neolithic sites tended to be close to those known from the Mesolithic period.

Firm evidence for the Neolithic period in the borough of Wigan is largely dependent on artefacts discovered by chance, including polished stone axes that were discovered at Bickershaw Hall in 1831, at Leigh cricket ground in 1912, and at Boar's Head railway station near Standish in 1928. Other finds comprise stone axes found at Bottling Wood, Wigan in 1911, and at Walkden Avenue, Wigan in 1933. Flint tools have also been recorded in the area, including a small flint scraper that was discovered at a garden in Winstanley and, more recently, three small flint flakes that were recovered from the archaeological excavations on Millgate in 2008 (Miller and Aldridge 2011).

The most visible archaeological evidence dating to the Bronze Age (2,200 – 700 BC) are funerary monuments known as round barrows, such as Boar's Den near Wrightington, situated 8.5km to the north-west of Wigan. Another well-known round barrow lies at Winwick, located 16km to the south of Wigan, where excavation in 1860 yielded a large urn containing human bones, a stone axe hammer and a bronze spear head (Miller and Aldridge 2011, 8-9). In addition, it is possible that Toot Hill near Bryn represents the remains of a prehistoric site, although this awaits confirmation.

4.1.2 Romano-British (AD 43 – 410)

The Roman military landed in England in AD 43, and moved into the North West region in AD 69-70. During the governorship of Agricola (AD 77-84), the first military occupation of Manchester was established and commenced with a five-acre wooden fort, known as *Mamucium* (Gregory 2007). The most important centre in the region was the legionary fortress at Chester, although small towns also evolved around other Roman forts, such as those at Northwich, Ribchester and Lancaster. It is assumed that during a similar period, the Roman camp and possible civilian settlement named *Coccium* was established at Wigan.

Coccium appears in the tenth (*Iter X*) route described in the Antonine Itinerary. *Iter X* traces a route of 150 Roman miles from *Clanoventa*, which is thought to have been Ravenglass on the Cumbrian coast, to *Mediolano*, normally believed to be Whitchurch, in Shropshire. Seven places are named on this route, including *Bremetenacum* (Ribchester), and *Mamucium* (Manchester). The post between these two Roman forts, situated 20 Roman miles from the former and 17 miles from the latter, is named as *Coccium.* The exact location of *Coccium* was debated for centuries until excavations on Millgate in Wigan town centre in 2004 and 2008, which proved beyond reasonable doubt that Wigan was a Roman settlement of considerable importance, and is thus the site of *Coccium* (Miller and Aldridge 2011, 14).

The remains of a building were exposed during the excavation undertaken in 2008, the size and layout of which closely resembled a typical barrack block used by the Roman army in Britain during this period. Fragments of pottery recovered from the excavated building indicated that it had probably been built during the late 1st century AD. Other excavations undertaken in 2004 by OA North on the opposite side of Millgate revealed two ditches, which were aligned east/west, set approximately 3.5m apart, and had broad V-shaped profiles, suggesting a military origin. One of these ditches was waterlogged, providing a suitable environment for the preservation of organic material, including abundant fragments of wooden pegs, typical of those used by the Roman army for pitching tents. Fragments of a large storage jar that dated to the late 1st or 2nd century were also contained in the ditch (Miller and Aldridge 2011, 18-35).

Excavation to the south of these remains of the military installation revealed evidence for a building measuring 36m long with a maximum width of 18m, which had been constructed of stone with a tiled roof. The building was clearly a Roman bath house, and contained nine or ten rooms, which included a colonnaded portico on the northern side that presumably formed the main entrance. Beneath three of the rooms were regularly spaced stacks of square tiles, known as *pilae,* which raised the floor level to accommodate an under-floor heating system or *hypocaust* (Miller and Aldridge 2011, 31). As has been the case with earlier excavations in Wigan, there was no evidence for human activity during the 3rd and 4th centuries, implying that it was not occupied during the late Roman period. The remarkable discovery of the bath house and probable fort emphasised the regional importance of Wigan during the Roman period, raising the possibility for habitation sites to have been established in the surrounding area.

Roman industrial settlements were also established at Wilderspool (Warrington) and Walton-le-Dale, which lay at important fording points of the rivers Mersey and Ribble respectively. Wigan was situated approximately midway between Wilderspool and Walton-le-Dale, which were established on the principal north/south Roman road across North West England (Miller and Aldridge 2011, 15-17).

Wilderspool is a southern district of Warrington, and the site of a small Roman town. Supposedly, the route of the Roman road between these two settlements broadly follows the alignment of the modern A49. Historic Ordnance Survey mapping shows the line of the Roman road as traversing the eastern edge of the proposed development site, running along a north-west/south-east alignment (Fig 3).

Situated to the north of Wigan was a Roman supply depot and settlement at Walton-le-Dale, occupying a strategic site at the confluence of the rivers Ribble and Darwen. The north/south road that connected Wigan and Lancaster crossed the River Ribble at Walton-le-Dale. A well-preserved section of the Roman road between Wigan and Walton-le-Dale was recorded during archaeological excavations at Cuerden in 2018. The remainder of this road may lie beneath the A5083 (Salford Archaeology 2018a).

Roman Roads Around Wigan: the main roads across the North West were almost certainly surveyed and laid out by the Roman army during the military conquest of Britain in the 1st century AD. These were essential lines of communication between Roman forts, and were crucial for effective government and trading. Many roads were laid upon a well-constructed embankment, or 'agger', which provided a properly drained base that was essential to the maintenance of the road. The material for the 'agger' was often derived from the excavation of a ditch along one or both sides of the road, and these also helped to drain surface water away.

The roads were designed to carry heavy traffic, and thus required a solid foundation that often comprised large stones. The foundation was typically overlain by layers of rammed gravel, small stones or flints, although the exact composition of the surfacing was dependent upon the materials that were available locally. The roads that crossed the Pennines, such as that between Manchester and the fort at Castleshaw, for instance, incorporated more stone than was used in those around Wigan, creating a surface that was more substantial and robust, capable of withstanding harsher climatic conditions.

The course of the Roman roads in the area was traced in the 1830s by the Reverend Edmund Sibson, the minister of Ashton-in-Makerfield, who described their appearance and direction with reference to nearby landmarks. A similar approach was taken in the 1870s by W Thompson Watkin, who also wrote a detailed description of the Roman roads in the area, largely corroborating Sibson's account. More recently, confirmation of the routes described in these 19th-century accounts has been the objective of numerous archaeological investigations, particularly by the Wigan Archaeological Society, allowing the precise line of several sections of the Roman roads around Wigan to be identified, and providing a record of the buried remains.

Warrington to Wigan Roman Road: the road between the Roman settlements at Wilderspool (Warrington) and Wigan formed part of the main north/south route across the North West. According to Margary (1973, 99-100), the alignment of the Roman road (referenced Road 70b) as it continues northwards from Warrington passes through the grounds of Winwick Hospital and just to the east of the Vulcan Foundry. Margary notes that the remains of the road in this locale were 'found to be quite substantial, consisting of a layer of irregular sandstones blocks with gravel surfacing, and the width was noted as being from 14 to 24 feet (4.27-7.31m). It was in best condition to the north of Winwick, whereas to the south of this the sandstone was found to be soft and much perished while the gravel was less plentiful' (*ibid*). Margary describes a 'distinct relic of the agger' near Earlestown before being subsumed by the modern A49, whilst the development of Bryn 'obliterated former traces'. However, 'part of the course north of this, which lay through fields east of the road, is still marked by a hollow and cart track, nearly down to the point where the side road called Land Gate is crossed' (*ibid*).

The alignment described by Margary is captured on historic Ordnance Survey maps, which show the A49 deviating slightly to the west of the straight line of the Roman road just north of Ashton-in-Makerfield, and rejoining the projected line at Marus Bridge, approximately 1.3km to the north. The line of the Roman road between these two points is shown to pass through Bryn and across fields at Land Gate (Plate 2).

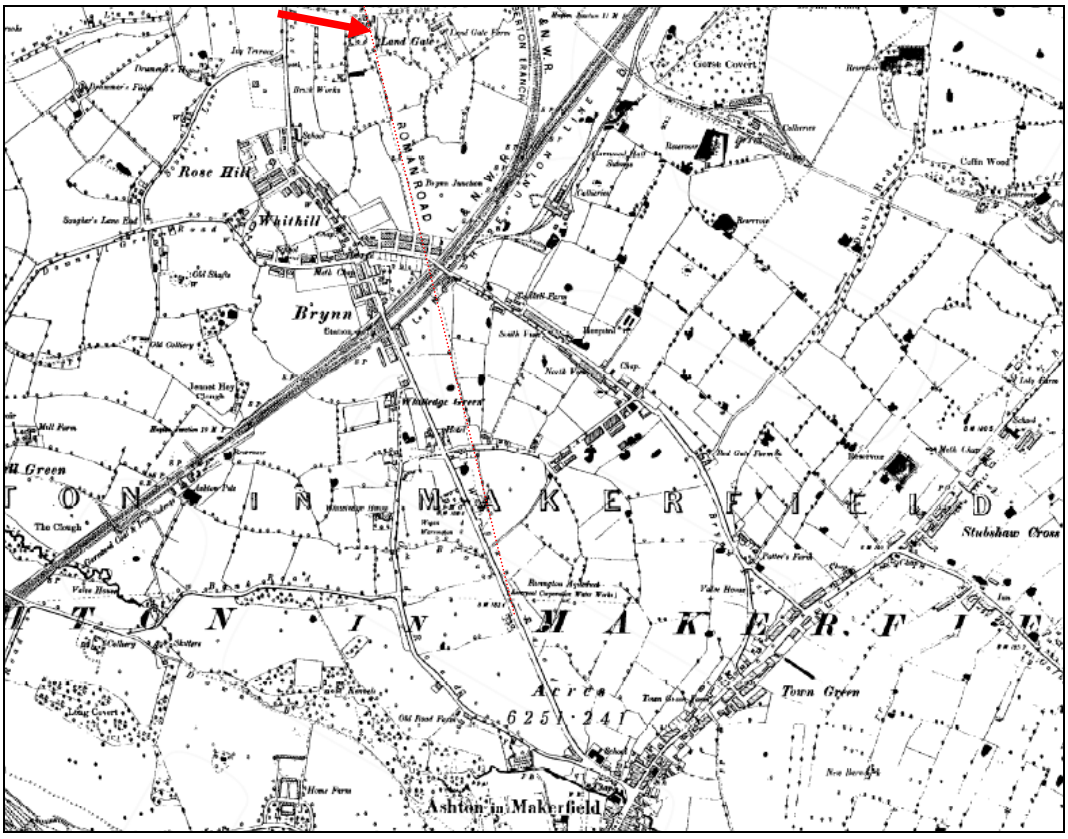


Plate 2: Extract from the Ordnance Survey 1:10,560 map of 1894, showing the course of the Roman road and arrow marking the location of the archaeological excavation at Land Gate

A section of the Roman road was unearthed at Bryn, a short distance to the north of Aston-in-Makerfield and just south of Land Gate, during an archaeological evaluation carried out by the Greater Manchester Archaeological Unit (GMAU) in 1993. The road was seen to be at least 5m wide, with a gently cambered profile, and was constructed using irregular-shaped blocks of sandstone, bedded onto a base of sand and gravel, although there was no surviving evidence for a rammed gravel surface.

Continuing northwards from Bryn, the line of the Roman road has been traced by the Wigan Archaeological Society (WAS) as far as Goose Green, which lies some 2.8km to the south-west of Wigan, after which the route is lost. It has been suggested that the road continued north to Standish, passing to the west of Wigan, although firm evidence is lacking. Conversely, a short section of a Roman road leading north out of Wigan towards Standish is marked on the Ordnance Survey 1": 1 mile map of 1842-4, taking a route described subsequently by W Thompson Watkin. The line of this road has been investigated by WAS at Brimelow Farm, some 2km to the north of Wigan town centre (Plate 3), where attention was focused on two fields lying to the south-west of the farmhouse. Building on the results of resistivity surveys that were carried out in 1986 across the suspected line of the road, WAS excavated two narrow trenches across this area in 1988-9. A metalled surface with a shallow ditch along its western side was exposed in the trenches. The surface was typical of a Roman road, measuring some 8m wide, and comprising a mixture of river-washed cobbles and flat blocks of sandstone in a matrix of smaller stones, sand and compacted gravel (Miller and Aldridge 2011).

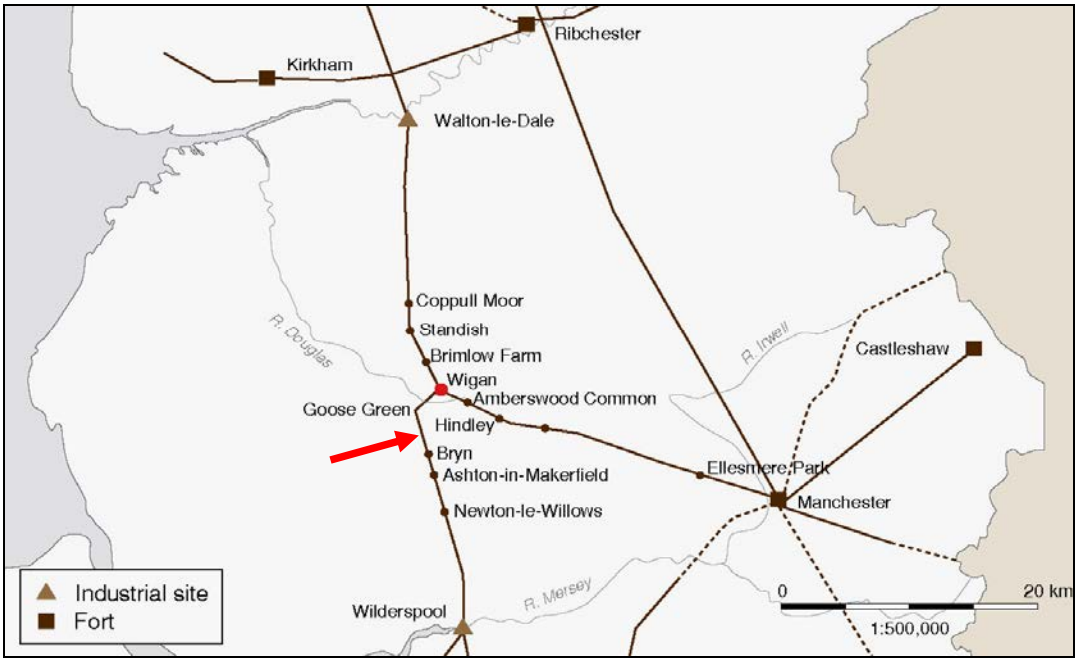


Plate 3: Roman roads in the North West, showing location of Roman settlements and sites where the roads have been investigated, with arrow marking the location of Land Gate

4.1.3 Early Medieval (AD 410 – 1066)

During the 5th century, Angles, Saxons and Jutes invaded England, although it is thought that Germanic incursions into the Wigan area came from the north by the Northumbrians, with Mercian's arriving later. Scandinavians resettled the West Lancashire plain after their expulsion from Ireland in 902. Their presence is evidenced through Scandinavian influence of place-names such as Millgate and Land Gate– with *gata* deriving from the Old Norse word for street.

Ashton-in-Makerfield is first referenced in documentary sources in 1212, under the name Eston, which derives from Old English meaning 'farmstead where ash trees grow'. Later the affix 'Makerfield' was added originating from an old district name recorded in 1121, Macrefeld, which merges Celtic words for wall and ruin with the Old English word *feld* meaning open land (Mills 2003). The Domesday Survey of 1086 records that the Makerfield district had been divided into the Hundreds of West Derby, Newton, and Warrington. Documentary sources indicate that the area was lightly populated during the medieval period, probably with rural agricultural settlements. Therefore, physical evidence from the medieval period is scarce.

In 1246, Wigan was granted borough status by King Henry III and was in equal standing to Liverpool, Preston and Lancaster (Farrer and Brownbill 1911, 68-78). Archaeological evidence for medieval activity was encountered in the centre of Wigan in 1984, comprising the remains of a 13th-century well (Jones and Price 1985, 3). Further excavation on Millgate in 2004 and 2008 provided evidence for a range of domestic and industrial features with a date range spanning the 12th to 16th centuries (OA North 2011).

Whilst there is scant physical evidence for medieval settlement in Ashton-in-Makerfield and the surrounding area, a medieval moated site known as 'Old Bryn' lies some 700m to the east of Land Gate Farm. Little is known about this site, although it is thought to date to the early 14th century, and was the original seat of the Gerard family. It was described by a local historian in the 1820s, based on an antiquarian account written in 1780. According to the description, the ruinous Old Bryn Hall had 'a spacious courtyard, the approach to which is by means of a bridge over the moat which surrounds this fabric. The gatehouse is secured by very strong and large doors. Within the court is what has been a rich porch. The entrance into a spacious room called the Hall, on the Chimney Piece of which are the Arms of England in the reign of James I. Across one side of the Hall runs a railed gallery, on which persons might stand to see any entertainment below. This gallery is supported by double pillars in the front of pilasters, and forming arches bewixt each other under which persons may pass from one room to another. On these carved pillars and arches is abundance of rich carved work, but rotten with age and moisture... A popish priest resided here and above stairs is a Romish Chapel, still used by the neighbours. Here is kept in a white silkbag what they call Father Arrowsmiths Hand, who was put to death at Lancaster in the reign of William III, for his religion' (Roby 1829). The remaining stonework of this medieval hall was reclaimed by the current landowner in the late 20th century, and the site returned to agricultural use.

4.1.4 Post-medieval (AD 1540 – c 1750)

By the 17th century, Ashton-in-Makerfield was a small village in a rural and sparsely populated area (Farrer and Brownbill 1911). Several institutes were established including a free grammar school at Seneley Green, which was founded in 1588 by Robert Byrchall, and was endowed with £50 per annum (Lewis 1848, 90-96). The village church was built in the centre of the town: it was rebuilt in 1715 and extended in 1784. Historic mapping shows that the development site lies to the north of the nucleated village.

4.1.5 Industrial Period (c 1750- 1914)

During the late post-medieval and early industrial period, coal mining became a large economic resource throughout the county. As the process of industrialisation gathered momentum, coal was in high demand to power steam engines that operated machinery in the many mills and factories that were being established. Coal was also required to power steam locomotives and steamships, which expanded international trade by transporting large quantities of goods manufactured in mills and factories.

Ashton-in-Makerfield was part of the St Helens area of the South Lancashire Coalfield and by 1867 there were 13 collieries in the district, such as Park Colliery, which continued to operate until the 1950s (Bartholomew 1887). In the late 19th century, the district had become heavily industrialised and was renowned as a centre for the manufacture of locks and hinges. As a result, the population of Aston-in-Makerfield rapidly grew and the area became more densely populated.

The extent of the tow at the end of the 19th century is captured on Ordnance Survey mapping, which also depicts the projected course of the Roman road extending through the eastern edge of the development site (Plate 3).

4.2 Archaeological Background

The archaeological significance of the site was first highlighted in a desk-based assessment produced by TEP in 2016. This work concluded that buried remains of archaeological interest could survive within the development area, specifically the remains of the projected course of a Roman road from Warrington (Wilderspool) to Wigan.

Based on the findings of the desk-based assessment a geophysical survey carried out by Magnitude Surveys Ltd and trial trench evaluation was undertaken OA North by 2017. Although the geophysical survey produced inconclusive results (Magnitude Surveys 2017), the trench evaluation located a fragmentary section of the Roman road (OA North 2017). This comprised a gravel surface overlaying larger fragments of sandstone with a prominent camber located to the east. The feature measured approximately 7m wide, and lay just to the east of the projected route of the Roman road.

Several sections of the Roman roads between Manchester and Wigan and Warrington to Wigan have been examined archaeologically, as outlined in *Section 4.1.2* above. The remains of other Roman roads in the Greater Manchester area have also been subject to archaeological investigation in recent years. One such excavation that is pertinent to the present study examined a section of the Chester to York Roman road at Broadheath, near Altrincham. This involved the excavation of several trenches across the projected line of the road, which revealed a turf and soil horizon immediately beneath the compacted sand and peddles of the Roman road surface. This was subject to palaeo-environmental sampling and radiocarbon dating.

Analysis of the samples concluded that the buried soil horizons were 'clear indications of a partially podzolised, natural profile in the process of the formation of a humus-iron pan podzol'. The organic, humic materials as a stage of this process was considered to reflect the initiation of podzolisation following phases of forest clearance in the Early to Middle Bronze Age. This conclusion was coupled with evidence on the pollen and charcoal record, which provided a firm indication for the local clearance of an alder-birch-hazel woodland (UMAU 1996).

The conventional radiocarbon date that was obtained for the upper 20mm of the buried turf horizon of 2640+/- 80 BP was seen to indicate Late Bronze Age trackway construction. The conclusion drawn was that the buried turf horizon was of Late Bronze Age, and as the buried soil profile showed no signs of physical alteration prior to road construction, it seemed likely that the road was of pre-Roman origin (UMAU 1996).

5. Results of the Fieldwork

5.1 Introduction

The Roman road was investigated in five separate areas across the Site, which were targeted following a site inspection at the start of the excavation programme. Each of the features, deposits and structures encountered during the investigation has been ascribed to one of five general phases of activity:

- *Phase 1*: Prehistoric
- *Phase 2*: Romano- British
- *Phase 2*: Medieval
- *Phase 4*: Post-medieval
- *Phase 5*: Industrial/Modern

A summary of the results obtained from the excavation is presented below. This narrative is divided into five sections, which consider the archaeological development of each area (Areas A1-2, B1-2 and C). Additional contextual information is provided in *Appendix 2* in tabular form. Site plans and principal sections are presented in *Appendix 1*.

Prior to Salford Archaeology's arrival on site, topsoil *(102)* and subsoil *(101)* had been removed using a tractor and drag-box (Plate 4). Consequently, the metalled surface (*103)* of the Roman road had been significantly damaged and 0.10m deep ruts were present on the remaining road surface caused by the tractor and drag-box tyres. As a result, both Areas A and B were significantly reduced, which led to the investigation of additional sections of the Roman road.

Plate 4: View of stripped land and excavation of the Roman road in Area A1, looking north

5.2 Area A1

Area A1 examined an area measuring 8.60 x 19.15m (Plate 5). Natural yellowish-brown sands, gravels and clays *(100)*, together with layers of boulder clay *(106)* were encountered at a depth of approximately *c* 0.42m below the level to which the ground had been stripped prior to the archaeological work.

The natural geology was overlain in places along the course of the Roman road by a thin lens of black organic material *(105),* which has been interpreted as a relic soil horizon, presumably buried when the road was constructed in the 1st century AD. Samples were recovered from this thin lens of material, from what a Late Bronze Age date was returned from radiocarbon assay (*Appendix 3*).

The organic lens was sealed by a layer of large fragments of yellow sandstone *(104),* which represented the foundations of a road designed to withstand heavy traffic. The large foundations stones were in turn overlain by a gravel surface *(103)*, the vestiges of which survived as patches of rammed gravel.

Plate 5: Aerial view of Area A1, Blue lines mark the boundary of the area, white lines show the location of possible roadside ditches, orange lines mark the limit of the stone surface. A section was excavated across the road immediately to the south of Area A1 (Photograph courtesy of Mellor Archaeological Trust)

Sandstone layer *(104)* represented the majority of the road, as gravel *(103)* only partially survived in discrete pockets along its course (Fig 4). Sandstone layer *(104)* measured 6m wide and had an average thickness of *c* 0.1m. A central spine formed by a concentration of larger stones was situated within sandstone layer *(104)*. Fewer and smaller stones were used towards the outer edges of the road (Plate 6). This construction technique continued in Area 2.

Gravel *(103)* and sandstone *(104)* had been subjected to plough damage as deep grooves filled with plough soil *(107)* were evident in isolated sections of the road. Sherds of 20th-century pottery and pieces of modern plastic were contained within plough soil *(107)* indicating that it can be attributed to recent agricultural activity (Phase 6).

Plate 6: Larger fragments of sandstone in the central spine of the road (layer 104), looking north

The remains of a roadside ditch were exposed on the eastern side of the road, cut into the natural sand geology (Plates 7 and 8). The cut of the ditch *[108]* comprised concave sides with a flattish base and was filled by deposit *(109),* which consisted of firm yellowish-brown silty clay with occasional inclusions of very small rounded stones. Fill *(109)* was devoid of finds and large inclusions, indicating that the feature may have silted up naturally. Fill *(109)* measured 1m wide, with a depth of 0.48m (Plates 9 and 10). Cut *[110]* truncated the western edge of ditch *[108]* and fill *(109)*, and had moderately sloping sides and a concave base. Fill *(111)* was contained within cut *[110]* and comprised distinctive firm yellowish-orange clay, which contained 19th- and 20th-century finds.

Cut *[108]* and fill *(109)* almost certainly represent a Roman roadside ditch, excavated initially to gain material for the 'agger' and also for drainage purposes. Cut *[110]* is likely to represent the re-cutting of the earlier ditch in the 19th or 20th century (Phase 5), indicated by the finds recovered from the fill *(111)*.

At the eastern edge of the excavated section were the remains of a linear feature *[112]*, cut into the base of roadside ditch *[108]*. This feature had near vertical sides with a flattish base, measuring 0.13m wide and 0.48m deep. Cut *[112]* was filled by *(113)*, which comprised orange-brown silty clay. Feature [*112*] may have been associated with a palisade inserted into ditch *[108]* (Plates 9 and 10), although firm evidence is lacking.

Plate 7: Bands of natural sand (100) on the eastern side of the road between sandstone (104) and ditch fills [109] / [111], looking south-east

Plate 8: Pre-excavation view of ditch [108] and re-cut [110], looking west

Plate 9: South-facing section of a sondage excavated across the eastern side of the road, showing original ditch cut [108] and later re-cut [110] and fill (111) visible in the centre, looking north

Plate 10: The north-facing section of a sondage excavated through ditch [108] and re-cut [110]

The section excavated through ditch *[108] / [110]* was extended along an east/west alignment to the south of Area A1 for a distance of 18m to investigate the construction of the Roman road (Fig 5). The sondage revealed that the construction of the road was thin compared to other major roads in the region.

The sondage also exposed bands of whitish-yellow clay *(114)*, which survived in isolated patches below sandstone layer *(104)*. A mechanical excavator with a ditching bucket was used to widen and deepen the sondage to establish the exact nature of boulder clay *(114)*. This confirmed that the archaeological horizon lay above white clay *(114)*, and that *(114)* was a variation in colour of the natural boulder clay (Plate 11).

Plate 11: Hand-excavated sondage to the south of Area A1, showing eastern ditch [108] / [110] in the foreground and white clay (114) in the background, looking west

Plate 12: Machine-excavated sondage, looking east

At the western end of the sondage were the remains of two intercutting ditches similar to ditches *[108]* and *[110]* excavated on the western side of the road. The earliest of these was feature *[115]*, which is likely to have been the Roman ditch on the western side of the road A section was excavated through ditch *[115]* revealing that it comprised concave sides and a flattish base measuring approximately 1m wide and 0.49m deep.

A later ditch comprising cut *[117]* and fill *(118)* cut ditch *[115] / (116)*. Ditch [*117*] had moderately sloping sides and a concave base, which was filled by (*118*). Fill (*118)* comprised dark brownish-grey silty clay, which contained a few 19th- and 20th-century artefacts, indicating a date range for infilling (Plates 13 and 14).

Plate 13: Ditches [115] / [117] along the western side of the road, looking north

Plate 14: Hand-dug sondage showing the location of a possible ditch in the foreground, looking east

5.3 Area A2

Area A2 lay some 40m to the north of Area A1, measuring approximately 8m x 19m. The area targeted a section of Roman road that appeared to be comparatively well-preserved (Plate 15).

Plate 15: View of Area A2, looking south

The surface of the road was cleaned carefully by hand to expose similar results to Area A1. Large sandstone blocks *(119)* were concentrated in the centre of the road and appeared to be the same as *(104)* in Area A1 (Fig 6). Similarly, sandstone blocks *(119)* were smaller and fewer towards the edges of the road, while the central spine of the road was defined by larger sandstone blocks. Sandstone *(119)* measured approximately 6m wide, the same as *(104),* although the depth of *(119)* was greater than *(104),* measuring up to 0.5m in places (Plate 16-17).

Stratigraphically above foundation stones *(119),* located towards the edge of the road, were the remains of very compacted surface *(120),* which comprised small pebbles inclusions. Surface *(120)* possibly represented the original rammed gravel surface of the road edges.

An attempt at hand digging a sondage through sandstone *(119)* proved the solidity of the construction method. Consequently, a machine-excavated sondage was opened across the road, exposing original ground surface *(121)* upon which the road was built (Plate 16). Layer *(121)* comprised a lens of dark greyish-brown clay with yellow mottling and was believed to have represented a buried soil similar to *(105)* in Area A1 (Plate 17). Samples of this thin lens were taken and sent for palaeo-environmental assessment and radiocarbon dating, but these did not return conclusive results.

Plate 16: Area A2 showing the central spine of the road formed by (119) and (120) towards the edge of the road, looking south-west

Plate 17: Area A2 showing the remains of (119) and (120), looking west

Plate 18: Sandstone (119) and layer (121) surviving as a dark layer beneath (119), looking south

The profile of ditches situated either side of the road were exposed in the sections of the machine-excavated sondage. The profiles of these ditches were on the same alignment as ditch *[108] / [110]* and ditch *[115] / [117]* in Area A1 (Plates 19 and 20).

The remains of ditch *[122]* were identified to the west of the Roman road (Fig 6). The ditch measured 1m wide and 0.48m deep, and comprised gradually sloping sides and a concave base. The ditch fill *(123)* consisted of mid-orange brown silty clay (Plate 19). Ditch *[122] / (123)* was cut to the west by feature *[124]*, representing a re-cut of the roadside ditch, which had moderately sloping sides and a tapered base. The fill *(125)* of *[124]* consisted of dark greyish-brown silty clay. Neither features yielded any artefacts.

Another roadside ditch *[126]* survived to the east of the Roman road, and comprised concave sides and a flattish base, which was filled by *(127)*. Fill *(127)* consisted of mid-orange brown silty clay, which was void of artefacts (Plate 20). There was no evidence for this ditch having been re-cut. Ditches [*122*], [*124*] and [*126*] were all cut into the natural clay geology (Plate 21).

Plate 19: Ditch [122] / (123) in the right and ditch [124] / (125) in the left, situated to the west of the road

Plate 20: Possible roadside ditch [126] / (127), situated at the eastern edge of the road, looking south

Plate 21: Natural clay exposed at the base of machine-excavated sondage, looking north-west

5.4 Area B1

The excavation of topsoil *(102)* and subsoil *(101)* by the groundwork contractor prior to the commencement of the archaeological work is presumed to have damaged the remains of the Roman road within the targeted areas, and an initial inspection concluded that no archaeological remains survived in Area B. However, physical remains of the road were present to the north and south of Area B. These are referred to as Area B1, which was situated to the north of the original excavation area, and Area B2 that located to the south (Fig 2). The original aim of Area B was to locate and assess the remains of the Roman road and crossing point of a small watercourse, which intercepted the line of the road.

The ground immediately to the north of the watercourse (Area B1) was examined in the first instance (Plate 22), and included a trench across the watercourse.

Plate 22: Area B1 and watercourse demarcated by the blue line, looking south

The trench excavated across the watercourse exposed the remains of feature *[128]* and fill *(129)*. Cut *[128]* comprised gradually sloping sides with an uneven base, whilst fill *(129)* consisted of greyish-brown silty clay and contained artefacts of mainly of 20th-century pottery sherds and a horseshoe. The results obtained from the excavation of the watercourse were inconclusive; it remains probable that the watercourse was not present during Roman occupation and was possibly cut in more modern times for land drainage. The watercourse is shown on 19th-century maps, and is known to have been culverted under a public footpath that takes a route immediately to the east of the development site.

A wide band of light brown clay *(130)* that was bounded by natural orange brown sand *(131)* marked the vestiges of the Roman road. Natural orange brown sand *(131)* was the same as natural sand *(100)* (Plate 21). Small- and medium-sized river pebbles *(132)* were situated along the suspected edges of the road.

On the western side of the road were the remains of a circular feature containing orange brown sand *(134)*, clusters of river pebbles *(138)* and a single large stone (Plates 23 and 24). A section excavated through the centre of the feature, removing the southern half, revealed light brown clay *(133)* that was 0.20m deep. Clay *(133)* appeared to cap orange-brown sand *(134)*, which contained a large stone. No visible cuts were encountered, and it was concluded that the feature was of natural origin, probably representing a tree bowl. The presence of a large stone and pebbles *(138)* suggests that part of the road structure may have gradually washed down the sides of the road.

Plate 23: Pre-excavation of possible feature, looking south; Scale 1m

Plate 24: Section excavated through the southern end the possible feature, looking north

Another possible feature was situated to the south-east, comprising a sub-circular-shaped cut surrounded by four large stones (Plate 25). A section excavated through the exposed a thin lens of dark brownish-grey silty clay *(135)* in the centre. It is possible that fill *(135)* represented the very base of a post, although no cut was visible. A sample of the dark patch from the centre of fill (*135*) was taken for palaeo-environmental assessment, but failed to yield meaningful results.

Plate 25: Pre-excavation shot of possible posthole containing fill (135) surrounded by four stones, looking south

Plate 26: Section excavated through the putative posthole, showing dark layer (136), looking south

Further excavation revealed that the putative posthole was very shallow, and that it cut through / overlay layers *(139)* and *(140)*, consisting of light brown silty clay that contained small-, medium- and large-sized pebbles; this layer appeared to be of natural origin, although it was cut at depth by narrow linear feature *[141]*, which appeared to represent a field drain. Dark black silty clay *(142)* filled cut *[141]* and contained fragments of a 19th- or 20th-century land drain (Plate 27).

Plate 27: Excavation that revealed a relic land drain, looking south

Two machine-excavated sondages were placed to the north and south of Area B1 to further investigate any archaeological remains and to expose roadside ditches that may have survived in this area (Plates 28 and 29). The southernmost sondage measured 18m x 3m x 0.58m, and exposed the profile of a probable roadside ditch on the eastern side of the road (Plates 30 and 31). At the base of the sondage natural yellowish-orange clay *(146)* was exposed and patches dark blackish-brown organic material *(147)*, located at the western end of the trench, and was the same as *(136)* and *(137)*.

The ditch was marked by cut *[143]*, consisting of gradual to moderate sloping sides and a concave base measuring a maximum of *c* 1m wide. The primary fill of the ditch comprised light grey silty clay *(145)*, containing occasional flecks of charcoal, medium angular stones and two sherds of Roman pottery. The presence of Roman pottery added considerable weight to the interpretation of the features as a roadside ditch.

The upper fill of the ditch comprised light brown silty clay (*144*), which contained occasional charcoal and other burnt organic inclusions. Fill *(144)* also yielded several sherds of medieval pottery, which may indicate that ditch *[143]* and the road continued in use, or at least persisted as a feature of the landscape into the medieval period.

Plate 28: Machine-excavated sondage through the southern end of Area B, showing the natural geology (146), looking west

A second sondage was machine excavated to the north of Area B1, placed over an area of ground that was at the lowest point of the road to investigate areas of 'hill-wash' that might contain dating evidence. The sondage was excavated to a depth of 0.28m exposing a mixed natural ground, comprising orange-yellow clay *(148)* and dark greyish-brown material *(149).* The natural geology *(148)* was the same as *(146),* while *(149)* was the same as *(136), (137)* and *(147).*

Layer *(150)* overlay natural deposits *(148) / (149)* and comprised yellowish-orange mixed gravels and sands, which were similarly of natural origin. Deposit *(150)* also contained several fragments of 19th- and 20th-century domestic pottery and glass. Furthermore, several fragments of 19th- or 20th-century land drains had been installed throughout this area as it was subject to flooding. The installation of the land drains may have removed or disturbed earlier archaeological activity as the roadside ditch was not visible within the sondage.

Plate 29: Machine-excavated sondage through the southern end of Area B1, showing dark layer (147), looking east

Plate 30: Roadside ditch [143] visible in the south-facing section of sondage, looking north

Plate 31: Detail of roadside ditch [143] filled by (144) and (145), looking north

Plate 32: Machine-excavated sondage to the north of Area B1, looking east

5.5 Area B2

Area B2 was situated to the south of Area B1, and targeted an area that comprised several clusters of river pebbles and large stones that were similar in appearance to those used in the construction of the road excavated in Area A1 and A2 (Plate 33). Area B2 was cleaned by hand to expose surface *(151)*, which comprised very compacted sand with relatively frequent small river pebble inclusions that produced a 'metalled' sound when cleaning (Fig 8). Surface *(151)* is likely to have represented the metalled surface of the Roman road and was the same as partially surviving gravel surface *(103)* exposed in Area A1.

Surface *(151)* was bounded by yellow clay *(152)* to the west and was truncated by a water channel to the east (Plates 34-6). The remains of the water channel were the same as *[128] / (129)* excavated in Area B1. Large stones positioned in a row and aligned north/south were exposed within the water channel, although it could not be confirmed whether these were deliberately place or if they had formed part of the road structure.

A machine-excavated sondage was placed across the southern end of Area B2 to further investigate the exposed remains. The excavation of the sondage shed little light on the remains of the road, but did imply that the construction method of the road was either different or that surface *(151)* may have represented a lower layer in the construction process possibly relating to 'agger' formed from densely compressed soil (Plate 37).

Plate 33: Area B2 showing a possible stretch of road truncated by a watercourse, looking north

Plate 34: Area B2 showing the line of the naturally weathered watercourse and compact surface (151), looking south; Scale 2m

Plate 35: Possible road surface (151), showing a bank of yellow clay (152) along the western side in the foreground, looking east

Plate 36: Line of large stones exposed within the water channel, looking north-west

Plate 37: Machine-excavated sondage, looking north-west

5.6 Further Trenches

Following the results obtained from the excavation of the four targeted areas, two evaluation trenches were placed to the east and west of the Roman road stretching from Area A to Area B, targeting the remains of roadside ditches to determine whether they continued. Additionally, the trenches were intended to investigate the possibility that a roadside settlement may have existed.

During the excavation of trenches 1-2, it was necessary to spoil onto the road itself due to space restrictions. Trench 1 was located to the north-east of the road and was aligned north/south. It was split into two trenches (Trench 1a and 1b) as the fencing perimeter obstructed the possible projection of the roadside ditch. Trench 2 was excavated to the west of the road, aligned north/south (Fig 9).

Trench 1a was located to the north-east of the Roman road in Area B, bordering the northern fence line and was orientated north/south, measuring 11.70m x 2.5m wide and was excavated to a depth of 0.8m-1.10m. During the excavation, there was no evidence for the continuation of roadside ditches. The sections of the trench were similarly devoid of archaeological features. Natural clay and sands *(153)* were exposed throughout trench 1a (Plate 38).

Plate 38: Showing natural ground (153) in Trench 1a, looking north

Trench 1b was located to the south of Trench 1a, continuing along a north/south orientation, measuring 16.50 m x 2.5m and was excavated to a depth of 0.8m-1.10m. No evidence pertaining to the continuation of the roadside ditch or any other archaeological features were exposed in the trench. Furthermore, the sections of the trench were devoid of archaeological features. Natural clay and sands *(153)* were exposed throughout Trench 1b (Plate 39).

Plate 39: Trench 1b, showing natural clay (153), looking north

Trench 2 was located to the west of the road in Area B, orientated north/south, measuring 34.7m x 2.5m wide, and was excavated to a depth of 0.8m-1.10m. There was no evidence to suggest that the roadside ditch continued or any presence of a roadside settlement as shown (Plates 40 and 41).

Plate 40: Trench 2, showing orange/yellow clay (153), looking north

Plate 41: Trench 2, facing south

5.7 Area C

Area C was located to the east of the Roman road, positioned along the eastern edge of the current public footpath, and was investigated via a watching brief that was maintained during the groundworks necessitated by the construction programme. The northern part of Area C was to be used as a containment pond to assist with water management throughout the development, while the southern part of the field was allocated for housing. The topography of Area C varied in height with the ground level rising towards the south (Plate 42).

The watching brief was required to monitor the removal of topsoil *(102)* and subsoil *(101)*, using a 25-tonne excavator and ditching bucket, and to establish the presence or absence of any archaeological remains pertaining to a settlement or other development.

Plate 42: View of Area C, showing the public footpath to the west and previously excavated areas, looking north

Several linear features had been cut into natural yellowish-orange mottled clay *(154)*, which was exposed at a depth of 0.36m. The linear features extended along various alignments, and were mainly associated with 19th- or 20th-century field drainage. Several hand-made, orange drainpipes were exposed, each measuring an outer diameter of 0.09m and inner diameter of 0.06m, and presumably constructed during the 19th or 20th century.

Two parallel ditches extended along a north/south orientation in the southern part of Area C (Plate 43). The westernmost ditch was formed by cut *[155],* comprising gradual sloping sides and a concave base and fill *(156),* which consisted of a compact mid-brownish-grey silty clay. Cut *(155)* measured *c* 1m wide and 0.36m deep. Fill *(156)* contained two artefacts; an opaque glass marble and a ceramic rim sherd from a large garden pot, which both dated to the late 19th or 20th century.

Linear ditch formed by cut *[157]* and fill *(158)* was situated 0.90m to the east of ditch *[155] / (156)* (Plate 43). Ditch *[157]* comprised gradual sloping sides and a concave base measuring *c* 1m wide and 0.30m deep. Fill *(158)* consisted of compact mid-brownish-grey silt clay, similar in appearance and texture to fill (*156).* Ditch *[155]* and *[157]* were likely to have functioned as drainage ditches during the 19th century, and were presumably backfilled simultaneously, given the similarities of fills *(156)* and *(158).*

Plate 43: Ditch [155] and fill (156) in the right and ditch [157] and fill (258) in the left, facing north

An additional area of interest was situated on the incline of the field, to the east of the excavated area, which comprised a series of sandstone and gritstone slabs. Initially, the stone feature was considered to have formed a potential settlement feature, however, once excavated it was clear that it formed part of the construction for the current footpath. The excavated section also demonstrated that the sandstones and gritstones were used to support the edges of the footpath, while some gaps were filled with clinker and ash to assist with draining the modern footpath (Plate 44).

The natural clay *(154)* had been cut by several 19th-century drainage features across Area C, but no archaeological features pertaining to the Roman road or a roadside settlement were identified (Plate 45-6).

Plate 44: Section of stone feature, which was associated with the construction and drainage of the current public footpath

Plate 45: General view of Area C, looking south-west

Plate 46: General view of Area C, looking south

6. Material Assessed

6.1 Introduction

The entire paper and material archive generated from all stages of the fieldwork was examined to ascertain its potential for further study. The method of assessment used varied with the class of information examined, although in each case it was undertaken in accordance with guidance provided by English Heritage in *Management of Archaeological Projects*, 2nd edition (English Heritage 1991) and updated subsequently by MoRPHE (Historic England 2015). All classes of finds were examined in full, with observations supplemented by the records generated during the course of the fieldwork and maintained within the project archive. Quantifications are incorporated within the individual assessments. A breakdown of the paper and photographic archive appears in Table 1.

Total Contexts	58
Drawings	16
Palaeo-environmental Sample Records	13
Total Digital Photographs	295

Table 1: Quantification of the paper / digital archive

6.2 Aims and Objectives

The aim of the assessment was to evaluate all classes of data from the excavation, in order to establish the merits of further analysis appropriate to the potential demonstrated by the site archive. A statement of the significance of the results from each element of the archive is given below. The quantification and assessments represent an amalgamation of the total body of work undertaken in 2018.

The objectives of this assessment correspond to *Appendix 4* of *Management of Archaeological Projects,* 2nd edition (English Heritage 1991). They are:

- to assess the quantity, provenance and condition of all classes of material: stratigraphical, artefactual and environmental;
- to comment on the range and variety of that material;
- to assess the potential of the material to address questions raised in the course of the project;
- to formulate any further questions arising from the assessment.

This assessment will present:

- a factual summary, characterising the quantity and perceived quality of the data contained within the site archive;
- a statement of the academic potential of the data;
- recommendations for the storage and curation of the data.

6.3 Stratigraphic Data

6.3.1 Assessment

The paper archive represents a percentage of the overall data gathered during the course of the excavation (Table 1). In total, 58 contexts were recorded. The context record has confirmed the identification of features and structures of various periods. Overall, the main features of significance can be grouped into Roman activity associated with the road, and with medieval activity represented by finds recovered from the roadside ditch.

6.3.2 Potential

The stratigraphic sequence is simple, and does not offer any potential for more detailed analysis.

6.4 Photographic Data

6.4.1 Assessment

In all, there are 295 site images, including a series of aerial images. The site photographs cover the whole of the excavation works.

The images are an invaluable aid in all aspects of post-excavation assessment. They provide a general and detailed pictorial record of the site throughout all phases of its excavation and recording.

6.4.2 Potential

The images include archaeological features and finds, and record how the site was excavated. They have aided the stratigraphic analysis through the assessment process, and have been integrated with the site database to provide a visual element, which is helpful when dealing with a large corpus of information.

6.5 Digital Data

6.5.1 Assessment

The digital data include all the records of survey undertaken using a GPS, and the digital photographic archive. This is complimented by rectified aerial photography.

6.5.2 Potential

The digital data forms an integral element of the project archive. However, it has been interrogated fully as part of the post-excavation assessment process, and has little potential to yield any additional information through further analysis.

6.6 The Finds Evidence

6.6.1 Introduction

The artefactual assemblage comprises finds from various material categories, mainly pottery (medieval and post-medieval), ceramic building material, clay tobacco pipes, glass, metalwork and palaeo-environmental data. An assessment of each class of artefact/ecofact is provided in the following sections. The aim of the finds assessment is to evaluate all classes of archaeological material from the excavation to assess their research potential and regional significance.

6.6.2 Methodology

All finds were returned to the Salford Archaeology finds laboratory in sealed and labelled polyethylene bags. All finds were washed, except metal objects, which were dry brushed, and grouped by material for assessment.

6.6.3 Overview of the Assemblage

The finds assemblage was recovered from just two stratified contexts and the topsoil across the site. The assemblage comprises a total of 33 individual artefacts, consisting mainly of ceramic vessel fragments, the majority of which (54% by fragment count) was of medieval date, together with two sherds of Roman pottery. Other material categories included clay tobacco pipes, ceramic building material, glass and iron objects, all of which were represented by a small number of fragments (Table 2).

The medieval and Roman pottery was recovered from stratified contexts, whilst the remainder of the assemblage was recovered from the topsoil, and may therefore be considered as unstratified.

Material	Count	Weight (g)	Period
Roman pottery	2	25	2nd century
Medieval pottery	18	280	13th-14th century
Post-medieval pottery	5	41	18th-19th century
Clay tobacco pipes	3	12	19th century
Ceramic building material	1	14	19th century
Glass	2	10	18th-20th century
Ironwork	2	71	Undated
Total	**33**	**453g**	

Table 2: Breakdown of the finds by type / material category

6.6.4 Roman Pottery

Quantification: two body sherds of a Roman ceramic vessel were recovered from the lower fill (*145*) of ditch *143* (Plate 47).

Condition: both sherds of Roman pottery displayed evidence of abrasion, although sharp breaks suggest that the pottery had not been rolled and is likely to have been recovered from its original place of deposition.

Fabric and Form: the fabric was examined by eye and sorted into ware groups on the basis of colour, hardness, feel, fracture, inclusions and manufacturing technique, and reference was made to the National Fabric Collection (Tomber and Dore 1998). The pottery was examined and catalogued according to the *Guidelines of the Study Group for Romano-British Pottery* for basic archiving (Darling 2004).

Both sherds are likely to have derived from a single, sandy orange ware vessel. The fabric is consistent with sandy orange wares identified by Tomber and Dore and considered to have been produced in Wilderspool, near Warrington (Fabric Code WIL OX). This oxidised ware is typical of the Cheshire Plans and South Lancashire, and has been recovered in large quantity from excavations in the centre of Wigan and Manchester (OA North 2011; Salford Archaeology 2018b).

The two sherds recovered from ditch *143* do not have any distinctive features such as part of a rim or base, although the angle of one of the body sherds suggests that it may have derived from a bulbous, narrow-mouthed jar. Similar material has been found in mid- / late 2nd-century groups excavated at Wigan and Manchester (*ibid*).

Dating: the sherds of Roman pottery are likely to date to the 2nd century, although the absence of diagnostic features, such as part of a rim or base, precludes a more precise date being ascribed.

Potential: the Roman pottery does not have any potential for further analysis and research, given that the group only comprises two abraded body sherds, although a detailed description of the fabric should be included n the archive.

Plate 47: Roman pottery recovered from lower fill (145) of ditch [143]; Scale 10cm

6.6.5 Medieval Pottery

Quantification: a total of 18 fragments of medieval pottery, weighing 280g, was recovered during the excavation, all of which were examined for assessment purposes (Plate 48). The assessment of the material has been undertaken in accordance with the guidelines provided by the Medieval Pottery Research Group (2001), and terminology developed by the Medieval Pottery Research Group (1998).

The entire assemblage was recovered from upper fill (*144*) of ditch *143*. It is of note that no later material was recovered from this ditch fill, suggesting that it had not sustained any post-depositional disturbance. This may be corroborated by the unabraded condition and the comparatively large size of some sherds, which implies that the fragments have not been subject to much, if any, post-depositional disturbance.

Condition: as might be expected, the bulk of the medieval assemblage comprises vessel body sherds, although a small number of diagnostic rims and a handle were also retrieved. Only a few sherds have any indication of decoration, suggesting the assemblage is dominated by functional utilitarian wares. All vessels seem to have been wheel-turned.

Provenance: a date range spanning the late 12th to early 14th centuries may be ascribed to the medieval pottery. Two different fabric types may be identified, comprising locally produced Gritty Wares and oxidised Sandy Wares. Notably, the assemblage does not contain any Reduced Grey Wares, which formed part of a widespread 'Reduced Greenware' tradition in northern England, and were the dominant fabrics across much of Lancashire during the 15th and 16th centuries (McCarthy and Brooks 1992, 29).

Only two co-joining sherds of Gritty Wares were present (Plate 49), forming part of the everted rim of a globular jar with a splashed, dark green lead glaze. Some modest decoration was identified in the form of impressed thumb marks on the edge of the rim.

The assemblage was dominated by Sandy Wares, characteristically fully oxidised and predominantly orange in colour. This small group appeared to comprise fragments of at least three separate vessels (Plate 50). All had everted rims, and two of the vessels are likely to have been globular jars. At least one of the rim sherds appeared to have been moulded to receive a lid. The other two rim sherds both had thumb-impressed decoration, and one had traces of a dark green splashed lead glaze. One sherd incorporates part of an applied strap handle, which has traces of a splashed light green lead glaze, and clearly formed part of a jug.

Dating: medieval ceramics in the North West are not understood sufficiently to provide close dating of archaeological deposits, although broad dates may be ascribed typologically. This has been based largely on archaeological excavations carried out in Chester, Carlisle, Lancaster and Wigan.

In broad terms, a late 12th- / 13th-century date may be suggested for the earliest material from the fill (*144*) of ditch *143*. This material comprises the coarse fabrics, with numerous sub-angular to sub-rounded inclusions, conforming to a widespread ceramic tradition referred to as Northern Gritty wares.

Plate 48: Medieval pottery excavated from upper fill (144) of ditch [143]; Scale 20cm

Plate 49: Rim sherds of a Gritty Ware vessel

Gritty Wares were the dominant type in circulation throughout the North until the mid-13th century (McCarthy and Brooks 1992, 22). These coarse wares were superseded by the finer and more decorative wares of the later 13th and 14th centuries, which are absent from the Land Gate assemblage.

The bulk of the Land Gate assemblage, however, is dominated by oxidised Sandy Wares which, in broad terms, have a slightly later inception date than Northern Gritty Wares, and are likely to have been in circulation in tandem with the finer and more decorative wares of the later 13th and 14th centuries. Indeed, the oxidised Sandy Wares recovered from Land Gate are reminiscent of the dominant 13th- to early 14th-century fabrics excavated in Wigan (OA North 2011), and are likely to have a similar date range.

Plate 50: Sherds of Sandy Ware vessels

Comparative material: the paucity of good medieval pottery assemblages from excavations in north-west England was highlighted in the late 20th century by McCarthy and Brooks (1992) and by English Heritage (Mellor 1994). In some cases this is due to the absence of a secure stratigraphic sequence, or the fact that the pottery does not occur in close association with dated buildings or events. Some significant groups of medieval pottery have been recovered from archaeological excavations in the early 21st century, although very few have derived from a rural context. This is reflected in the current *North West Archaeological Research Framework*, which also emphasises a lack of knowledge of production centres and the recovery of independent dating in association with medieval pottery as factors that preclude a better understanding of the region's ceramic traditions between the 12th and 15th centuries.

Whilst the sources of pottery in the North West during the medieval period are not well understood, it is likely that the bulk of the medieval pottery recovered from the excavation was derived from local sources, which probably included potters in Wigan. The oxidised sandy wares recovered from Land Gate are certainly reminiscent of the dominant 13th- to early 14th-century fabrics excavated in Wigan (OA North 2011). The production of medieval pottery in Wigan town centre is implicit in a document of 1310, which refers to 'Adam the potter of Wigan' who held a house and half an acre of land on Marking Place (cited in Powell 1998, 7-8), whilst archaeological excavations on Hallgate in 1991 yielded fragments of ceramic wasters from medieval deposits, providing reasonable evidence for a pottery kiln to have been in the vicinity (GMAU 2001).

Similar fabrics having also been recovered from excavations near Salmesbury, some 20 miles to the north-east of Wigan, where a medieval pottery kiln was discovered in 2004 (Wood *et al* 2009). A range of fabric types and forms were produced at this kiln, including oxidised Sandy Wares, examples of which have been recovered from excavations in Wigan (OA North 2011). Other known medieval pottery kilns in the wider region lie to the south, and include a site excavated in Prescot, Merseyside (Edwards 2000), and four known sites in Cheshire: Ashton (Newstead 1934), Audlem (Webster and Dunning 1960), Eaton-by-Tarporley (Edwards 2000), and Brereton Park (Rutter 1983).

Retention and Packaging: the assemblage of medieval pottery is appropriately packed for long-term storage and requires no particular conservation measures other than stable storage conditions. All the stratified material should be retained; discard of the pottery is not recommended, but if it is to be undertaken, vessels which are good examples of their fabric or type should be retained, and a record should be kept of all material discarded.

Potential: whilst of considerable interest to an enhanced understanding of the excavation area, and post-Roman activity in the area, it would seem unlikely that the assemblage of medieval pottery could provide firm dating that could inform stratigraphic analysis, beyond a broad period determination. As such, the assemblage does not have any potential for further analysis.

6.6.6 Post-medieval Pottery

Quantification: a total of five fragments of post-medieval pottery, weighing 41g, was recovered during the excavation, all of which were examined for assessment purposes. All of the sherds were small and abraded, indicative of having been subject to post-deposition disturbance from processes such as ploughing.

Provenance: all the sherds were recovered from the topsoil across the excavation area, and are likely to have derived from processes such as nightsoiling. The material is thus considered to be unstratified.

Dating: the sherds all date to the 19th or early 20th century.

Fabric: several common fabric types were represented, comprised dark-glazed utilitarian earthenware (two sherds), self-coloured red earthenware (two sherds), and a small sherds of a feather-edged tableware vessel.

Potential: the small group of post-medieval pottery is of very limited interest, reflecting its comparatively late date and its recovery from the topsoil, and has no potential to inform an enhanced understanding of the site. The assemblage has no potential for any further analysis.

6.6.7 Clay Tobacco Pipes

Quantification: a total of three fragments of clay tobacco pipes, weighing 12g, was recovered during the excavation, all of which were examined for assessment purposes. The group comprised one complete pipe bowl, and two short stem fragments.

Provenance: both fragments were recovered from the topsoil across the excavation area, and are thus considered to be unstratified.

Dating: whilst none of the fragments have diagnostic features that enable a precise date to be attributed to the clay tobacco pipes, it is likely that they all date to the 19th century.

Potential: the small group of unstratified clay tobacco pipe fragments is of very limited interest, and has no potential for any further analysis.

6.6.8 Ceramic Building Material

Quantification: a single, small fragment of ceramic building material, weighing 14g, was recovered during the excavation. Whilst lacking any diagnostic features, it is likely that the fragment derived from a ceramic field drain.

Provenance: the small, abraded fragment of ceramic field drain was recovered from the topsoil across the excavation area, and is thus considered to be unstratified. Whilst a precise date cannot be ascribed to the fragment, it is likely to have been manufactured in the 19th or 20th century.

Potential: the small sherd of ceramic field drain is of very limited interest, and has no potential for any further analysis.

6.6.9 Glass

Quantification: a total of two fragments of glass, weighing 10g, was recovered during the excavation. These comprised a small sherd of dark green bottle glass and a complete marble.

Dating: the glass objects probably date to the 19th or 20th century.

Provenance: both of the fragments were recovered from the topsoil across the excavation area, and are thus considered to be unstratified.

Potential: the small sherd of bottle glass and the marble are of very limited interest, and have no potential for any further analysis.

6.6.10 Ironwork

Quantification: two iron objects, weighing 71g, was recovered during the excavation, both of which were examined for assessment purposes. The group comprised one large nail and an iron staple. Both objects were heavily corroded.

Provenance: both iron objects were recovered from the topsoil across the excavation area, and are thus considered to be unstratified. Whilst neither object can be ascribed a date with any degree of confidence, in all probability they are likely to represent modern agricultural activity.

Potential: the iron objects are of very limited interest, and have no potential for any further analysis.

6.6.11 Palaeo-environmental Remains

Quantification: in total, 13 environmental bulk samples were taken from a variety of secure contexts for the assessment of charred and waterlogged plant remains. The aim of the sampling strategy was to provide information about the environment and economy of the site, plus material suitable for radiocarbon dating. Some of the material sampled was of a very dark grey / black colour, indicative of organic deposits. Subsequent assessment of these samples, however, showed that the material was mineralised soil with little or no organic content, and were thus further analysis was considered unlikely to yield any significant data. The samples taken are summarised in Table 3.

Evaluation: none of the bulk samples contained faunal remains, and palaeo-environmental evidence was scarce due to the acidic nature of the subsoil, which is not conducive to the survival of such material.

A small number of samples contained material that was considered to be potentially suitable for radiocarbon dating. However, once processed and submitted for radiocarbon assay, only a single sample proved suitable for scientific dating (*Appendix 3*).

Potential: the archaeobotanical record in the north-west of England for the late medieval and post-medieval periods is very sparse (Hall and Huntley 2007, 207; Newman and McNeil 2007, 148), and more research is needed to reconstruct urban and rural environments. Information is also needed about the exploitation of plants and animals in this period (Newman and McNeil 2007, 119). However, the assessment of the samples recovered from the excavation at Land Gate concluded that no plant remains or organic material were present, apart from modern roots. As such, there is no potential for any further palaeo-environmental analysis.

Sample	Area	Description
1	A2	1 bag taken from thin lens of buried soil/original ground surface (*105*) below Roman road from Area A1 sondage/section
2	A1	1 bag charcoal from Area A1 – very light grey clay below the centre of the Roman Road
3	A1	1 bag charcoal from Area A1 sondage/section from yellow/grey patchy clay containing small- and medium-sized stones, on the western side of the very light grey clay, below the Roman road
4	B1	1 bag charcoal from Area B1 – possible timber post
5	B1	1 bag charcoal from Area B1 – rectangular feature, sand layer below brown clay
6	B1	1 bag charcoal from Area B1 – rectangular feature, yellow/grey clay below sand at base of test pit
7	B1	1 large bag charcoal in dark grey sandy clay deposit below possible post-hole (see sample 4) test pit
8	B1	1 bag very dark grey slightly silty sand?? From possible timber post (as sample 4)
9	B1	1 bag unstrat. Charcoal possibly from 'post' (as sample 4) ???
10	B1	1 bag more charcoal from possible 'post' (as sample 4)
11	B1	1 bag organic material from Area B1, test pit 4 from lower black deposit
12	B1	1 bag timber/organic material from Area B1, test pit 4 from lower black deposit
13	B1	1 bag organic material from Area B1 machine dug section from black deposit to the west

Table 3: List of samples retained for palaeo-environmental assessment / radiocarbon assay

7. Curation and Conservation

7.1 Recipient Museum

The finds, the paper archive and the electronic archive will be offered for deposition with the Museum of Wigan Life. Contact details are:

41 Library Street,
Wigan WN1 1NU

7.2 Conservation

There are no conservation requirements.

7.3 Storage

The complete project archive, which will include digital plans, photographs, datasheets and artefacts, will be prepared following the guidelines set out in *Environmental standards for the permanent storage of excavated material from archaeological sites* (UKIC 1984, Conservation Guidelines 3) prior to deposition.

For long-term storage of the digital data, DVDs will be used, the content including the reports, plans, scanned images and digital photographs. Each DVD will be fully indexed and accompanied by the relevant metadata for provenance.

All dry and stable finds will be packed according to the museum's specifications, in either acid-free cardboard boxes, or in airtight plastic boxes for unstable material. The very small artefactual assemblage is stable, but will be packed carefully with bubble wrap protecting the bags to minimise movement and abrasion in the boxes.

7.4 Packaging

The assemblage is currently well-packaged and will require no further packaging. Box lists derived from the site database have been compiled.

7.5 Discard Policy

A discard policy will be prepared, in consultation with the recipient museum. Material of no discernible long-term archaeological potential will be discarded, with the museum's agreement. It is recommended, however, that all the material except for the Roman and medieval pottery, is discarded.

8. Statement of Potential

8.1 Introduction

The archaeological investigation undertaken at Land Gate has provided a valuable opportunity to investigate a section of the main Roman road between Wigan and Warrington, and has confirmed the precise alignment of the road on its approach to Wigan. The excavation also produced interesting findings relating to the character of the Roman road, and subsequent land-use during the later medieval period.

Overall, the results of the 2018 excavation can be regarded as being of regional importance. Data pertinent to all of the original research themes was recovered, although in some cases no firm conclusions can be drawn. Assessment of the stratigraphic, artefactual and environmental data generated by the fieldwork is primarily concerned with the potential of the data to address these fieldwork aims and, if appropriate, formulate new questions and research aims that can be addressed by an analytical phase of the post-excavation programme.

8.2 Principal Potential

8.2.1 Overview

The present section reviews the success of the fieldwork and post-excavation assessment in providing data to address the original research aims. Assessment of the primary stratigraphic records has established activity on the site during the prehistoric, Roman and later medieval periods, including regionally rare evidence for Bronze Age clearance and a section of a main Roman road, a result that reflects the conclusions drawn from an archaeological investigation of the Chester to York Roman road at Broadheath, near Altrincham (UMAU 1996).. Of particular importance is confirmation that the route of the Roman road at Land Gate lies very slightly to the west of the course shown on historic mapping. The recovery of medieval pottery from the fill of one of the roadside ditches is also of archaeological interest, not least as this may imply continuity of use of the Roman road into the 13th / 14th century. The sequence is summarised in *Section 5*, above.

8.2.2 Stratigraphy and Phasing

Stratigraphic data typically provide the framework within which the other analyses can take place. The stratigraphic sequence excavated at Land Gate is informative but very simple, and further interrogation of the dataset is unlikely to yield any additional information to that elucidated during assessment. The mechanical stripping of the topsoil and, in places, subsoil prior to the implementation of the archaeological works is likely to have damaged the buried remains of the Roman road. Nevertheless, each of the features, deposits and structures encountered during the investigation has been ascribed to one of five general phases of activity. These are summarised below.

Phase 1: Prehistoric

Relic soil layer *(105),* exposed in Area A1, overlay the natural geology beneath the surviving sections of the Roman road. Radiocarbon dating of a sample taken from this lens of organic material returned a ^{14}C age of 2856 + 28 in conventional years BP. Calibration of the date specified to the calendar scale produced a date of 931cal BC (Late Bronze Age), with a 95.4% probability. It remains uncertain, however, whether the carbon derived from deliberate clearance of vegetation, or if it was the result of natural events, although evidence for vegetational clearance during the Late Bronze Age was similarly obtained from samples recovered from beneath a Roman road near Altrincham (UMAU 1996).

Assessment of the palaeo-environmental samples taken from this thin layer has concluded that it does not contain any charred or waterlogged plant remains that will sustain further analytical work. Whilst the material had a dark, organic appearance, this evidently derived from mineralisation of the soil.

Phase 2: *Romano-British*

Remnants of the Roman road were positively identified across the excavation areas. The best-preserved remains were exposed in Areas A1 and A2, where fragments of a metalled surface *(103) / (119)* had survived above sandstone blocks *(104) / (120)*, interpreted confidently as the foundations of the road. The vestiges of the Roman road in Area B1 were represented mainly by a layer of clay that had partially surviving fragments of metalled surface along the edges of the road, whilst there was little evidence for the Roman road survived in Area B2, other than a small patch of metalled surface. Similarly, there was no evidence for a ford or bridge across the watercourse between Areas B1 and B2, although the evidence from the excavation suggests that the present route of this stream may be a result of 19th-century remodelling.

The surviving foundations of the road revealed in Area A1 and Area A2, although fragmentary and evidently disturbed across much of the excavation area, indicated that the Roman road had a width of approximately 6m. This corresponds with the evidence obtained from an excavation of the same road at Bryn by the Greater Manchester Archaeological Unit in 1993, which also concluded that the foundation of the road comprised large blocks of sandstone and gravel, creating a surface that had a width in excess of 5m. This contrasts with evidence obtained from an excavation of the Roman road from Wigan to Walton-le-Dale in 2008, were a well-preserved section of the road surface was seen to measure *c* 10m wide (Salford Archaeology 2018a).

The excavation at Land Gate confirmed that the Roman road had been served by ditches on both sides. The remains of roadside ditches were identified immediately to the east and to the west of the surviving road surface. Whilst the neither of the ditches had a direct stratigraphic relationship with the surviving elements of the road, their position strongly implied that they were contemporary with the Roman road. A Roman date for the ditches, moreover, is implied by the recovery of two sherds of Roman pottery from the primary fill of roadside ditch *143* in Area B1.

The excavation did not provide any evidence for Romano-British settlement or other activity other than the vestiges of the road. Whilst the presence of Roman pottery sherds in one of the roadside ditches may indicate domestic settlement in the immediate vicinity, it is nevertheless possible, or indeed likely, that the pottery derived from passing traffic on the road.

Phase 3: Medieval

The upper fill of the Roman roadside ditch excavated in Area B1 contained an assemblage of medieval pottery with a broad date range spanning the 12th to 14th centuries. The good condition of the pottery fragments indicate that they were probably recovered from their original place of deposition, and indicate medieval habitation in the immediate vicinity. However, no other features were exposed during the excavation that could be ascribed to the medieval period.

The presence of medieval pottery in ditch *143* also suggests that that road persisted as a feature in the landscape during the medieval period.

Phase 4: Post-medieval

No features definitively dating to the post-medieval period were exposed during the excavation.

Phase 5: Industrial/Modern

Several drainage ditches and ceramic drainpipes cut into the natural geology represented modern agricultural practice. In Area A1, modern plough soil containing 20th-century pottery sherds can be attributed to Phase 5.

Along with several re-cuts that truncated Roman roadside ditches *[108]/ (109), [115]/ (116)* and *[122]/ (123)*. Cut *[110]* truncated earlier ditch *[108]/ (109)* and was filled by *(111),* which contained 19th- and 20th-century pottery sherds, situated at the east of the road. Similarly, at the western edge of the road cut *[117]* truncated earlier ditch *[115]/ (116).* Fill *(118)* was contained within cut *[117],* containing 19th/ 20th century pottery, which indicated that it was back filled during this period.

In Area B2, cut *[124]* truncated earlier ditch *[122]/ (123).* Although fill *(125)* did not contain any 19th- and 20th-century pottery, sherds it was likely to have been the same as ditch *[117]/ (118),* situated to the west of the Roman road.

In Area B1 deposit *(150),* situated above *(148)* and *(149)* contained 19th- and 20th-century artefacts, as did fill *(142)* within the cut [*141*] that functioned as a land drain.

In Area C, cut *[155]* formed a ditch filled by *(156),* which contained sherds of 19th century pottery. Fill *(158)*, excavated from an adjacent ditch formed by cut *[157],* was also interpreted as being back filled at a similar date due to their close proximity and similarities between both fills.

8.2.3 Artefactual Data

The small artefactual assemblage recovered from the site has no potential for further analysis. The only items of interest are the sherds of Roman and medieval pottery, although their small number, abraded condition and lack of diagnostic features limit their research potential.

8.2.4 Palaeo-environmental Data

Assessment of the samples taken from the excavation has concluded that there is little or no potential for further analysis due to paucity of faunal remains.

8.3 Regional Research Priorities

The publication of the *Archaeological Research Framework for North West England* (NWARF; Brennand 2006; 2007) has provided a region-specific agenda that includes several research topics that are relevant to the study of the archaeological remains excavated at Land Gate. A detailed national research agenda for, in particular, the Roman period has been compiled, although there is significant overlap between many of the research topics discussed in the regional and national research agendas.

The NWARF raised broad issues relating to the poor site visibility and chronology of prehistoric remains in the North West as a whole. Amongst the initiatives that were drawn up to address these issues:

- *Initiative 2.30:* 'Sites that have been identified through survey require further targeted work and characterisation, accompanied by programmes of dating.'
- *Initiative 2.69:* 'Many of the issues raised regarding Iron Age settlement' are shared with the previous prehistoric period and relate to poor site visibility and inadequate representation across the North West as a whole' (Brennand 2007, 39-40).

Whilst the discovery of the precise course of the Roman road between Warrington and Wigan provides a welcome addition to the corpus on information on Roman roads in the region, the dataset from the Land Gate excavation does not address any of the specific research priorities for the Roman period that was raised in the NWARF. However, it is stressed that all excavated Romano-British sites should have an entry in *Britannia* in order to improve accessibility and awareness (Philpott and Brennand 2007, 55); a summary of the excavations at Land Gate have been submitted for inclusion in *Britannia*.

9. Conclusion

9.1 The Key Results

The road's foundation layer, however, has survived and is in the form of large blocks of red and yellow sandstone (red sandstone known as the Sherwood Group was quarried in Ashton in the 19th century). It shows the road to have been about 6m wide, and whilst this is slightly narrower that may be expected, it corresponds closely with the section of the road excavated in 1993 on the other side of Bryn Road.

Sections of the Roman road as it continued northwards from Wigan towards the crossing of the River Ribble at Walton-le-Dale have been revealed by several excavations. One such excavation to the east of Brimelow Farm, some 2km to the north of Wigan town centre, was carried out by the Wigan Archaeological Society in 1988. This exposed the remains of a metalled surface with a shallow ditch along its western side, and concluded that the road measured approximately 8m wide. More recently, excavations at Cuerden revealed a well-preserved section of the Roman road on its approach to Walton-le-Dale. Here, the road was seen to be approximately 10m wide (Salford Archaeology 2018a). These results tentatively suggest that the Wigan to Walton-le-Dale road was of larger and more substantial fabric than the section between Warrington and Wigan, implying that it was built by a different road-building gang, and possibly at a different date.

The date yielded from radiocarbon assay of the material immediately beneath the Roman road has indicated that the land may have been cleared during the Late Bronze Age. It is impossible to ascertain whether this clearance was a deliberate anthropogenic event, or if it was the destruction of scrub vegetation resulting from a natural fire; the excavation did not produce any physical; evidence for Bronze Age activity or settlement in the area. Nevertheless, it remains possible that the course of the Roman road followed an earlier routeway that was created initially during the Late Bronze Age, a scenario that has been identified from an excavation of the Chester to York Roman road near Altrincham.

The recovery of Roman and medieval pottery from the roadside ditches implies that the road persisted as a landscape feature long after the end of formal Roman administration in the 5th century, and may have continued in use as a thoroughfare during the later medieval period. Apart from the fragments of pottery, no physical evidence for medieval settlement in the immediate vicinity of the Roman road was identified during the course of the archaeological investigation, although any such settlement is likely to have been focused on Old Bryn Hall, situated some 700m to the east of Land Gate Farm.

Notwithstanding the probable damage to the archaeological remains that was wrought by topsoil stripping in advance of the archaeological investigation, it is clear that the site has been used for agricultural purposes since at least the 19th century. This was evident from several plough furrows, containing modern material, cut into the surviving vestiges of the Roman road surface. With this is mind, it is likely that much of the Roman road across the site had been damaged or removed by ploughing.

9.2 Dissemination

Whilst the excavation has provided an enhanced understanding of the Wigan to Warrington Roman road, and interesting data on prehistoric and later medieval periods, the assessment of the dataset has concluded that no elements merit further analytical work. It would be entirely appropriate, however, to make the results from the excavation available publically, in accordance with the guidelines provided in *MAP2* and MoRPHE (English Heritage 1991; Historic England 2015). It is proposed that the results of the project should be presented as follows:

Project archive: the completion of the project will result in an integrated project archive, which it is envisaged will be deposited with the Museum of Wigan Life in Wigan. It is proposed that the present report is formatted for limited distribution in paper copy to local libraries and the Greater Manchester Historic Environment Record, in addition to its deposition with the site archive.

Publication: appropriate dissemination of the results obtained from the analytical phase of the project will be required. A summary of the excavation has been compiled and submitted to *Britannia*, the leading national journal for Romano-British studies, for inclusion in the summary of excavation work carried out in 2018. In addition, it is proposed that a more detailed academic paper, comparing the results obtained from the excavation of the Roman road at Landgate with the section of the Wigan to Walton-le-Dale Roman road excavated recently at Cuerden, is prepared for publication in either *Britannia* or the *Transactions of the Lancashire and Cheshire Antiquarian Society*.

Information board: it is suggested that the results obtained from the excavation could be used to inform the production of an historical information board. This should be a permanent installation on the site, and should be designed to inform the public of the heritage of the site.

Sources

Cartographic Sources

Ordnance Survey 1:10560 map, 1849

Ordnance Survey 1:2500 map, published 1893

Ordnance Survey 1:2500 map, published 1911

Ordnance Survey 1:2500 map, published 1931

Ordnance Survey 1:2500 map, published 1965

Secondary Sources

Brennand, M (ed), 2006 *The Archaeology of North West England. An Archaeological Research Framework for North West England: Volume 1. Resource Assessment,* CBA North West, **8** (18), Manchester

Cowell, R,. 1996 The Upper Palaeolithic and Mesolthic. In *The Archaeology of Lancashire, Present State and Future Priorities* Ed. Newman, R. Lancaster: 19-34

Cowell, R, 2005 Late Prehistoric lowland settlement in North-West England. In *Mellor: Living on the Edge* Nevell, M, and Redhead, N (eds) Manchester, 65-76

Edwards, J, 2000 'Pottery Studies in the North West 1975-2000 and Beyond', *Medieval Ceramics*, **24**, 40-48

Farewell, TS, Truckell, IG, Keay, CA, Hallett, SH, 2011 *The derivation and application of soilscapes: soil and environmental datasets from the National Soil Resources Institute*, Cranfield University

Farrer, W. and Brownbill, J. 1911 *The Victoria County History of the Counties of England: Lancashire* **4** London, 68-78

GMAU, 1991 *Bryn Road, Ashton-in-Makerfield: Archaeological Evaluation Report,* Greater Manchester Archaeology Unit, Greater Manchester, unpub rep

Greater Manchester Archaeological Unit, 1993 *M63 Improvement, Junctions 6-9: An Archaeological Assessment*, Greater Manchester Archaeological Unit

Gregory, RA, 2007 *Roman Manchester: The University of Manchester's Excavations within the Vicus 2001-5*, Oxford

Hodgson, N. and Brennand, M. 2006 Prehistoric Period resource assessment. In *The Archaeology of the North-West, an Archaeological Research Framework for North West England: Vol 1, Resource Assessment* Ed. Brennand, M. Council for British Archaeology North West: 23-58

Hodgson, J and Brennand, M, 2007, *Research and Archaeology in North West England: The Prehistoric Period Research Agenda (Chapter 2),* Archaeology North West Vol 9: 12

Jones, GC, and Price, J, 1985 *Excavations at The Wiend*, Wigan 1982-4, The Greater Manchester Archaeological Journal, **1**, 25-37

Lewis, S, 1848 Ashton-in-Makerfield, in Lewis, S (ed), 1848 *A Topographical Dictionary of England,* London, 90-96

Magnitude Surveys, 2017 *Land at Landgate, Ashton in Makerfield, Greater Manchester; Archaeological Geophysical Survey*, unpubl report

Margary, ID, 1973 *Roman Roads in Britain*, 2nd edn, London

Medieval Pottery Research Group, 1998 *A Guide to the Classification of Medieval Ceramic Forms*, MPRG Occ Pap **1**, London

Medieval Pottery Research Group, 2001 *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*, MPRG Occ Pap **2**, London

McCarthy, MR, and Brooks, CM, 1992 The establishment of a medieval pottery sequence in Cumbria, England, in D Gaimster and M Redknap (eds), *Everyday and exotic pottery from Europe c 650-1900,* 21-37, Oxford

Miller, I, and Aldridge, B, 2011 *Discovering Coccium: The Archaeology of Roman Wigan*, Greater Manchester's Past Revealed, **3**, Lancaster

Mills, AD, 2003 *A Dictionary of British Place-Names: Ashton*, Oxford

Newstead, R, 1934 'Medieval Pottery and Kiln at Ashton, near Chester, Liverpool'm *Annals Archaeol Anthropol*, **21**, 5-26

OA North, 2011 *Joint Service Centre, Millgate, Wigan: Archaeological Excavation*, unpubl rep

OA North, 2017 *Land at Landgate, Ashton in Makerfield, Greater Manchester; Archaeological Evaluation Report,* Oxford Archaeology North, Lancaster, unpubl report

Powell, P, 1998 *Wigan Town Centre Trail*, 2nd edn, Wigan

Roby, J, 1829 *The Traditions of Lancashire*, **2**, Manchester

Salford Archaeology, 2018a *Cuerden Strategic Site, Cuerden, Lancashire: Post-excavation Assessment Report*, Salford Archaeology, unpubl report

Salford Archaeology, 2018b *Owen Street, Castlefield, Manchester: Post-excavation Assessment Report*, Salford Archaeology, unpubl report

The Environment Partnership, 2016, *Land at Landgate, Makerfield, Historic Environment Desk-based Assessment*, unpubl report

The Environment Partnership, 2017, *Land at Landgate, Makerfield, Written Scheme of Investigation for a programme of Archaeological Work*, unpubl report

The Environment Partnership, 2018, *Land at Landgate, Makerfield, Written Scheme of Investigation for a programme of Archaeological Work*, unpubl report

Tindall, AS, 1983 *Excavations in Wigan, 1982-3*, Greater Manchester Archaeological Unit Annual Report, 1982-3, Manchester

Tindall, AS, 1985 *Wigan: The Development of the Town,* The Greater Manchester Archaeological Journal, **1**, 19-23

UMAU, 1996 *Davenport Road, Broadheath: An Archaeological Excavation*, unpubl rep

UMAU, 2003 *Gadbury Fold, Wigan Archaeological Excavation Report, Greater Manchester,* unpubl report

Wood, PN, Bradley, J, and Miller, I, 2009 'A Pottery Production Site at Samlesbury, near Preston, Lancashire', *Medieval Ceramics*, **30**, 21-48

Web Resources

British Geological Survey, 2017 *Geology of Britain Viewer*, [Online], available at: http://mapapps.bgs.ac.uk/geologyofbritain/home.html (accessed January 2019)

Acknowledgements

Salford Archaeology would like to thank The Environment Partnership, and specifically Helena Kelly and Jason Clarke for commissioning and supporting the programme of archaeological works on behalf of Bellway Homes. Salford Archaeology is also grateful to Norman Redhead of the Greater Manchester Archaeological Advisory Service for his support and guidance. Particular thanks are expressed to Bill Aldridge and other members of the Wigan Archaeological Society for participating in the excavation and recording of the Roman road. Salford Archaeology is also grateful to Bob Humphrey-Taylor of the Mellor Archaeological Trust for taking aerial photographs of the excavations.

The fieldwork was directed by Mandy Burns with assisted by Katie Harvey, Rob Haworth, Andy Coutts and Lorraine McVinnie. The site survey was completed by Oliver Cook and Andrew Radford, and the finds were processed by Sam Rowe. Radiocarbon dating was carried out by the Scottish Universities Environmental Research Centre.

The report was compiled by Mandy Burns and Katie Harvey, and was edited by Ian Miller, who was also responsible for project management. The illustrations were produced by Richard Ker and Sarah Mottershead.

Appendix 1: Illustrations

Figure 1: Site location

Figure 2: Excavation areas superimposed on modern mapping

Figure 3: Excavation areas superimposed on the Ordnance Survey map of 1893

Figure 4: General plan showing the excavation areas

Figure 5: Detailed excavation plan of Area A1

Figure 6: Section excavated across the Roman road in Area A1

Figure 7: Detailed excavation plan of Area A2

Figure 8: Detailed excavation plan of Area B1

Figure 9: Section excavated across the Roman road in Area B1

Figure 10: Detailed excavation plan of Area B2

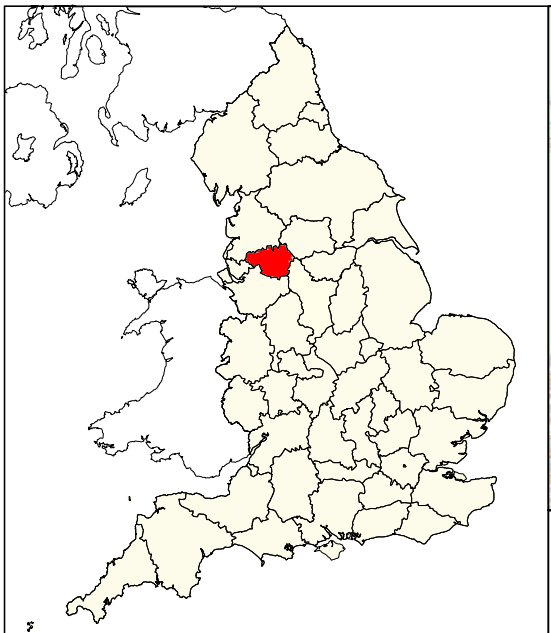


Figure 1:

Site location

SALFORD ARCHAEOLOGY

Salford Archaeology, Peel Building,The Crescent, Salford, M5 4WT

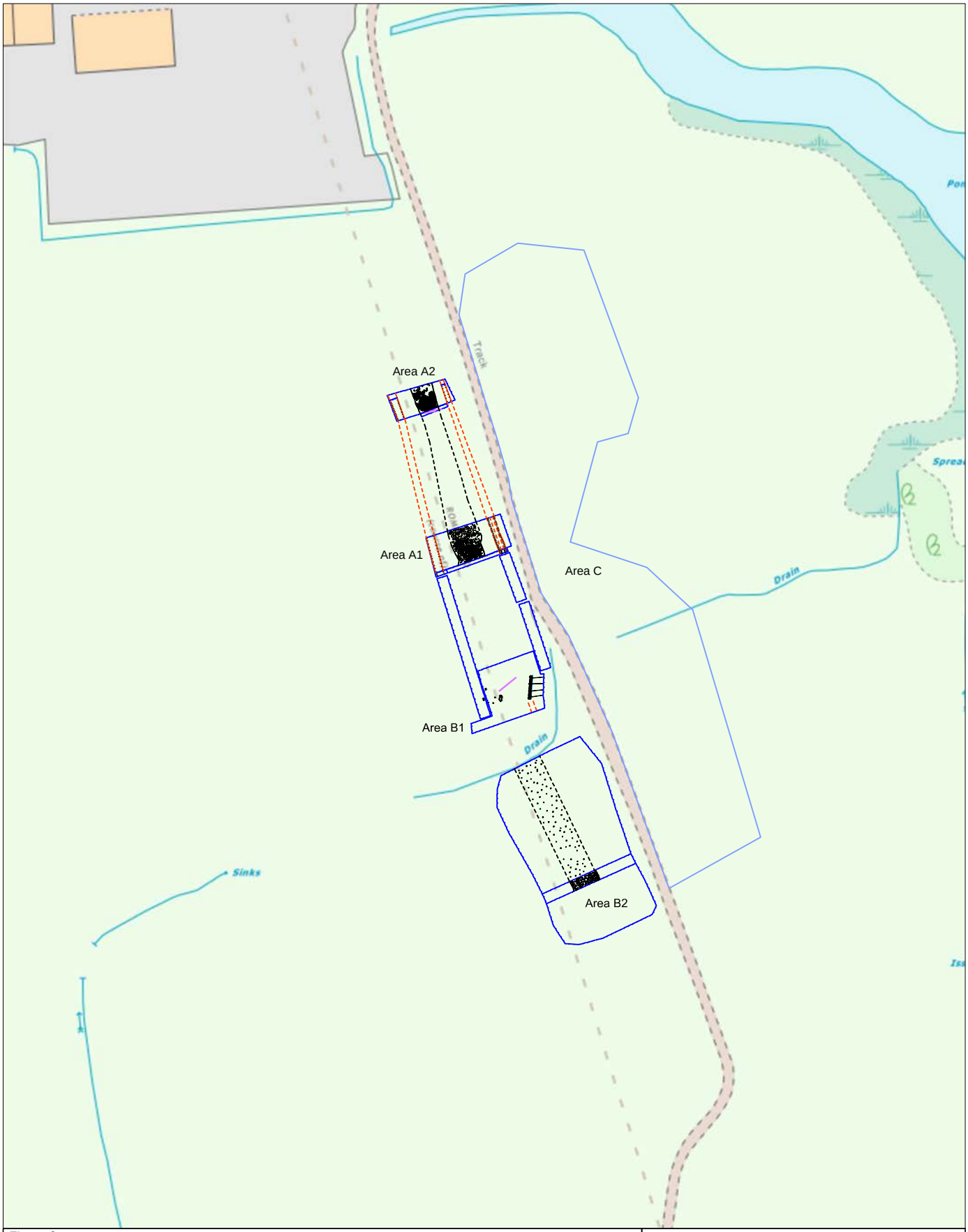


Figure 2:

Location of archaeological excavation trenches

N

Key:

- Trench
- Stone
- Ditch
- Watercourse
- Drain

SALFORD ARCHAEOLOGY

0 50 m

Scale at A4 1:1250

Salford Archaeology, Peel Building,The Crescent, Salford, M5 4WT

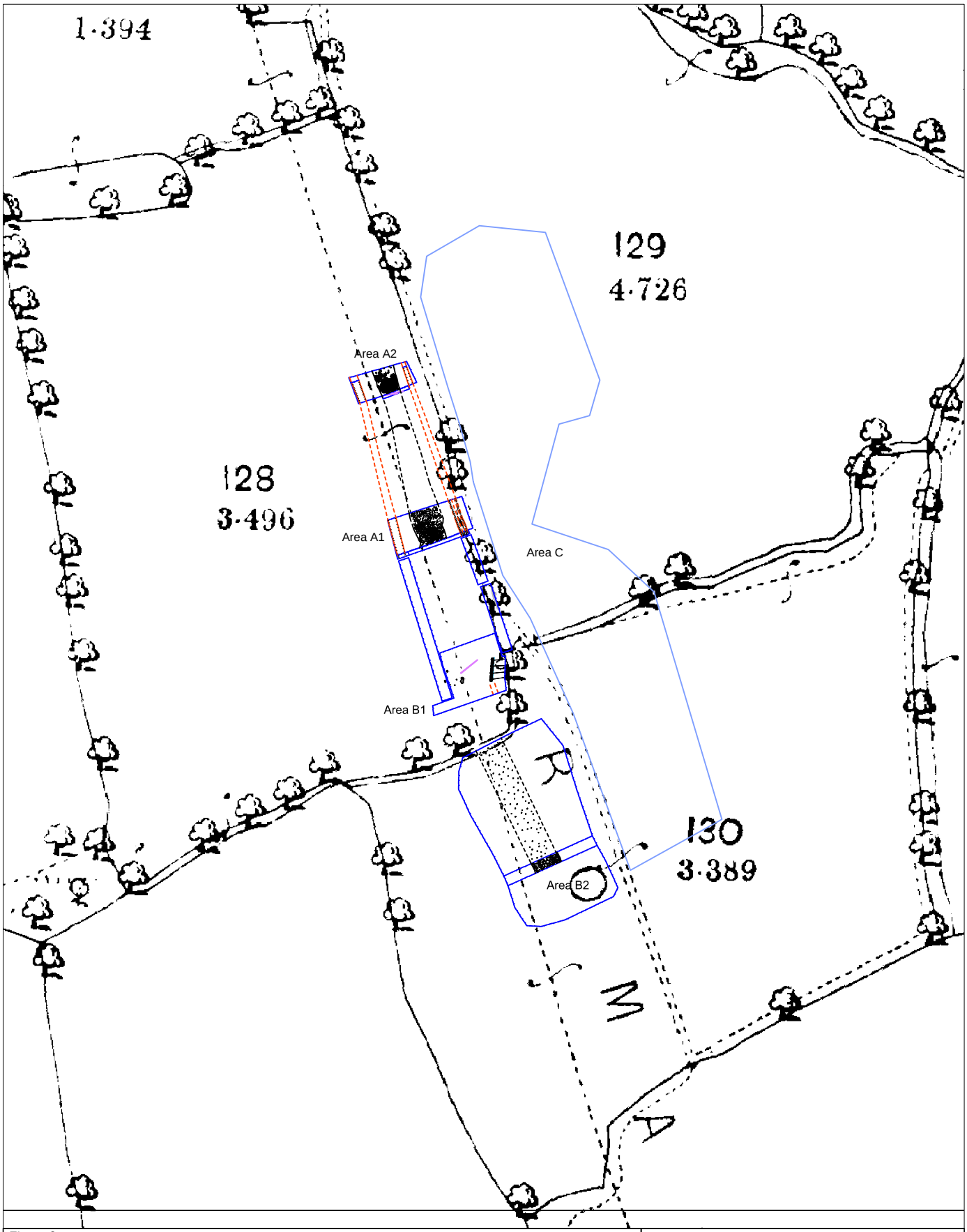


Figure 3:

Archaeological trenches superimposed onto the Ordnance Survey 1st Edition 1:2500 County Series 1893

N

Key:

- Trench
- Stone
- Ditch
- Watercourse
- Drain

SALFORD ARCHAEOLOGY

0 50 m

Scale at A4 1:1250

Salford Archaeology, Peel Building,The Crescent, Salford, M5 4WT

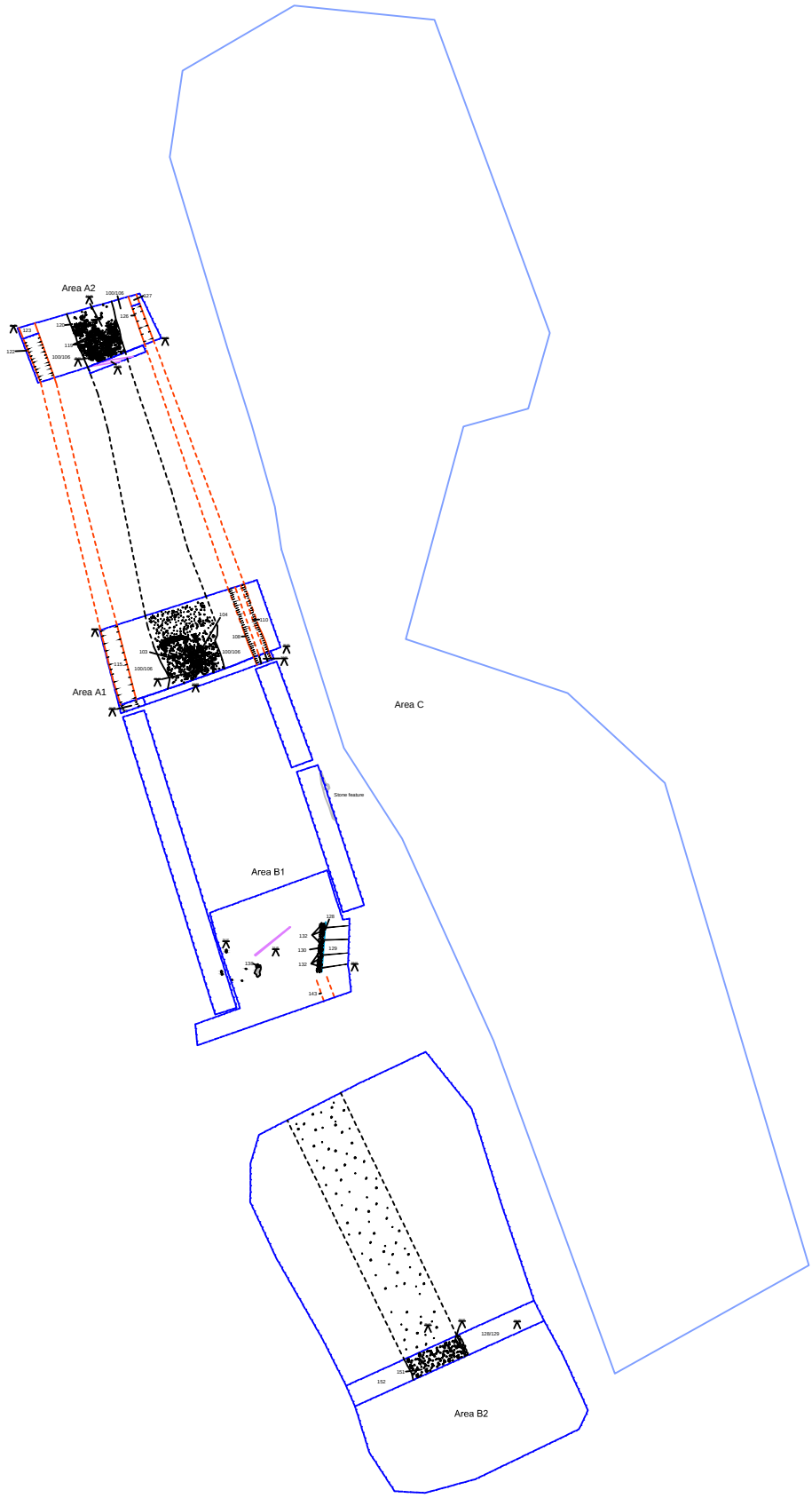


Figure 4:

General plan showing excavation areas

N

Key:

- Trench
- Stone
- Ditch
- Watercourse
- Drain

SALFORD ARCHAEOLOGY

0 50 m

Scale at A4 1:750

Salford Archaeology, Peel Building,The Crescent, Salford, M5 4WT

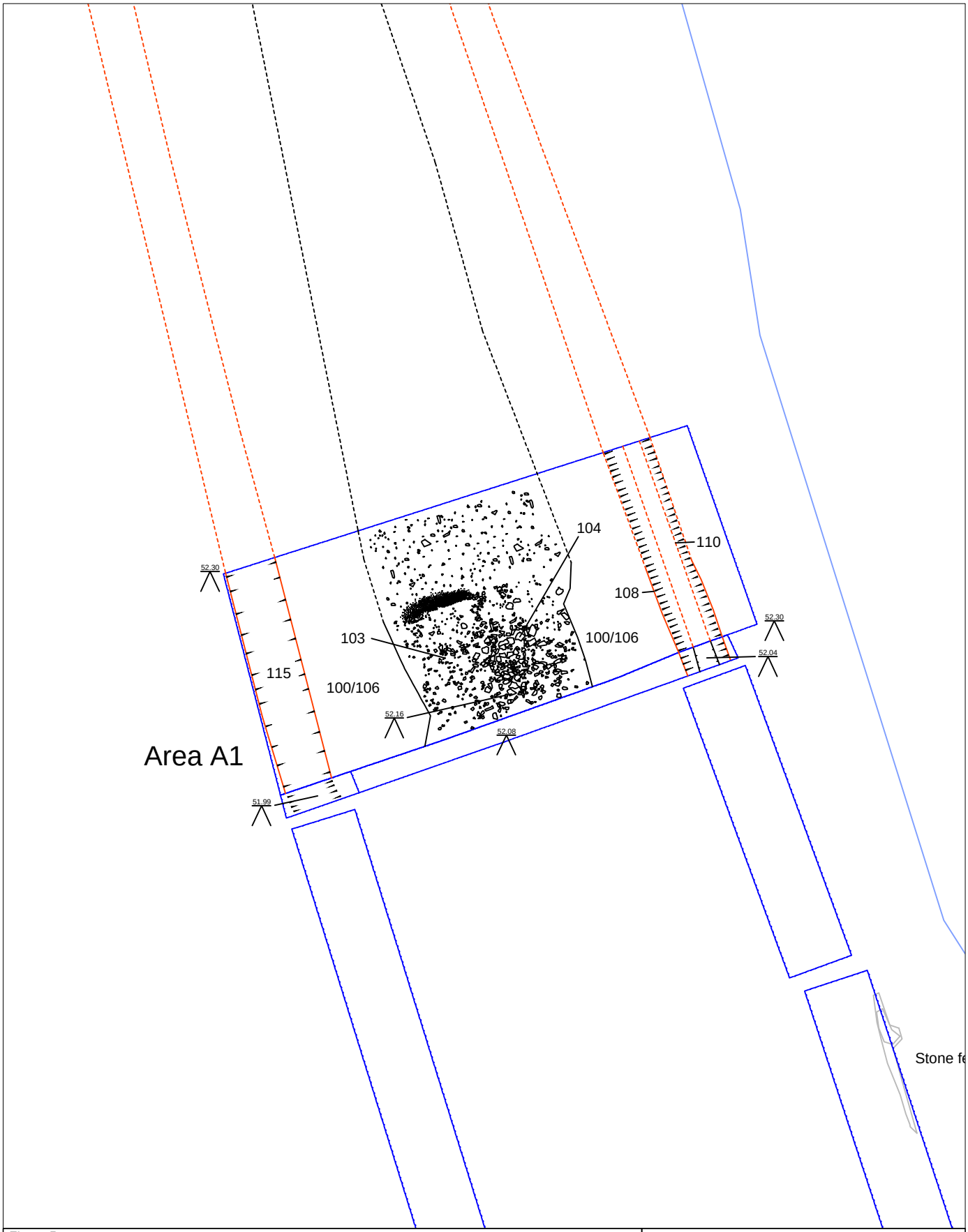


Figure 5:

Detailed plan of excavation Area A1

N

Key:

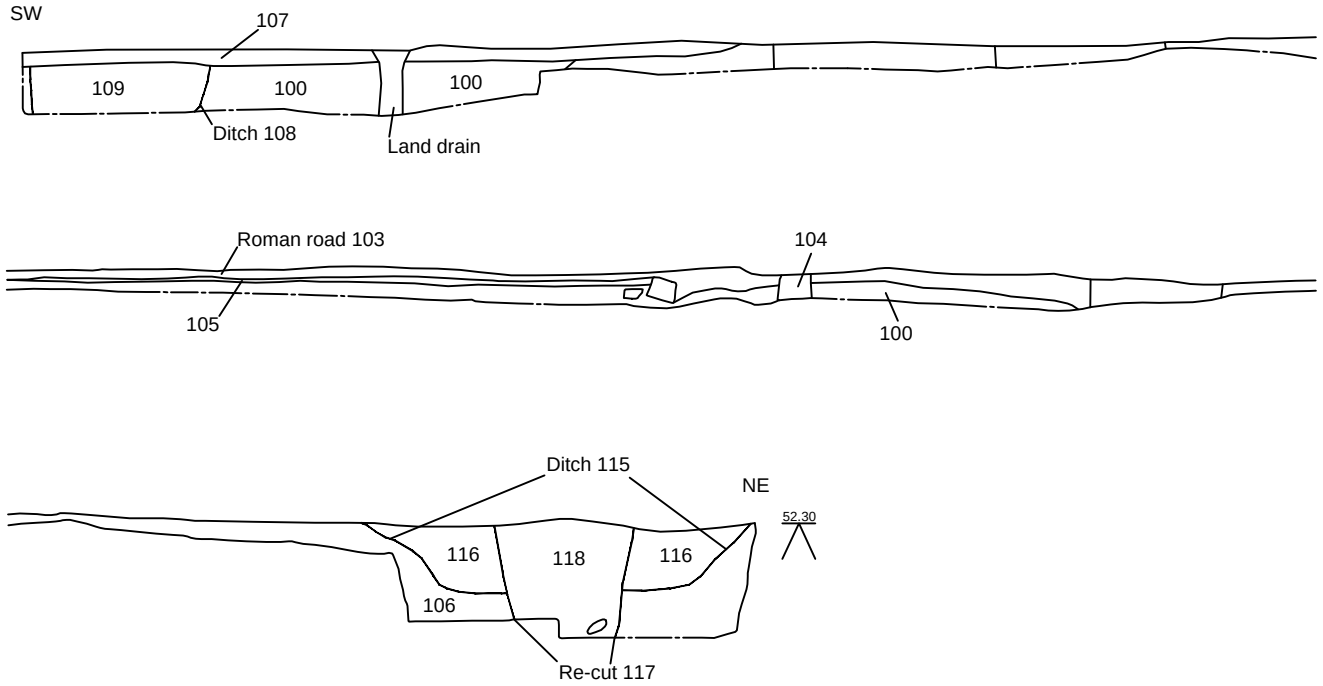
- Trench
- Stone
- Ditch
- Watercourse
- Drain

SALFORD ARCHAEOLOGY

0 10 m

Scale at A4 1:200

Salford Archaeology, Peel Building,The Crescent, Salford, M5 4WT



SALFORD ARCHAEOLOGY

0 2 m

Scale at A4 1:40

Figure 6:

Section excavated across the Roman road in Area A1

N

Key:

- Limit of excavation
- Layers and inclusions
- Cut feature

Salford Archaeology, Peel Building, The Crescent, Salford, M5 4WT

Area A2

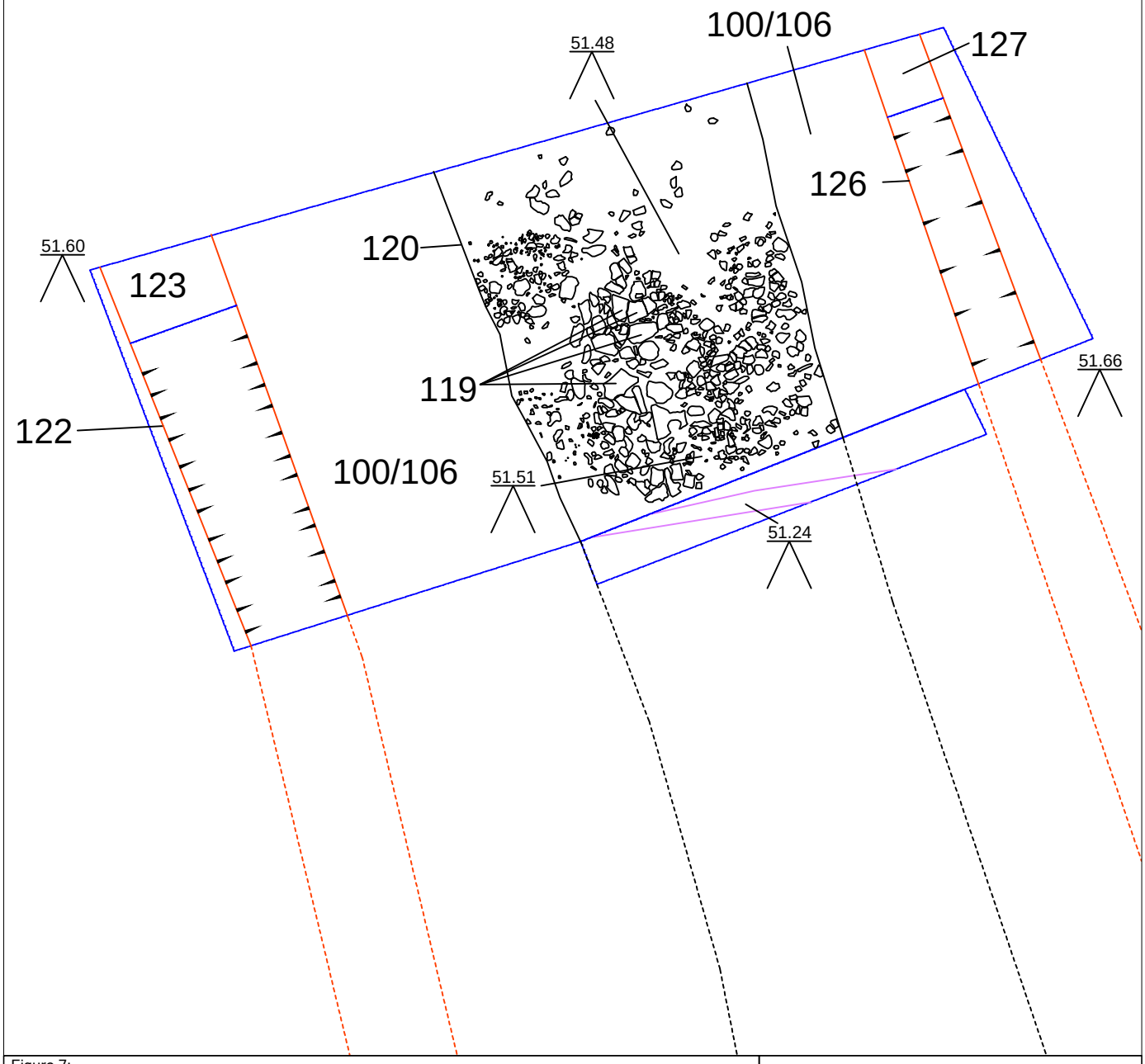


Figure 7:

Detailed plan of excavation Area A2

N

Key:

- Trench
- Stone
- Ditch
- Watercourse
- Drain

SALFORD ARCHAEOLOGY

0 5 m

Scale at A4 1:100

Salford Archaeology, Peel Building,The Crescent, Salford, M5 4WT

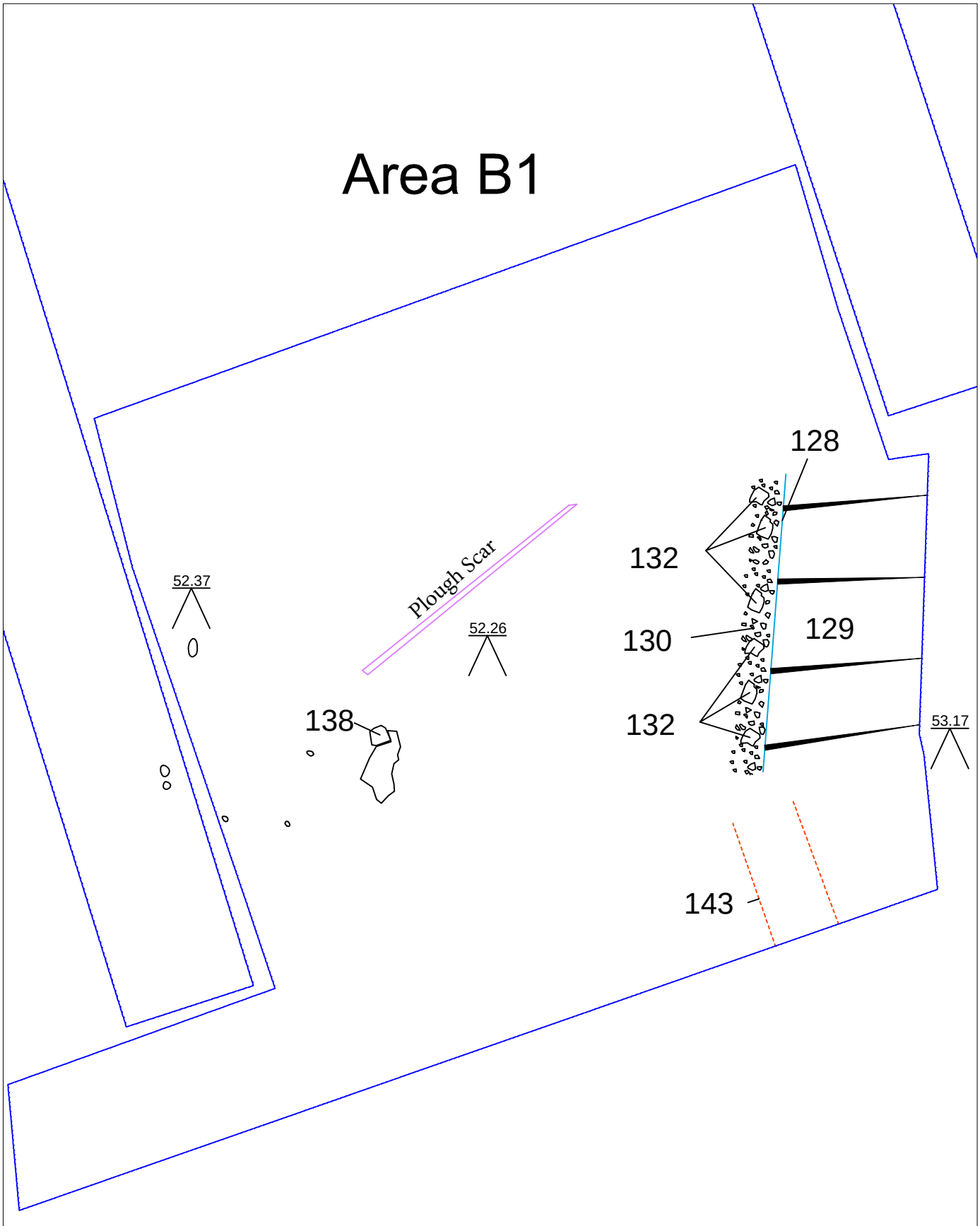


Figure 8:

Detailed plan of excavation Area B1

N

Key:

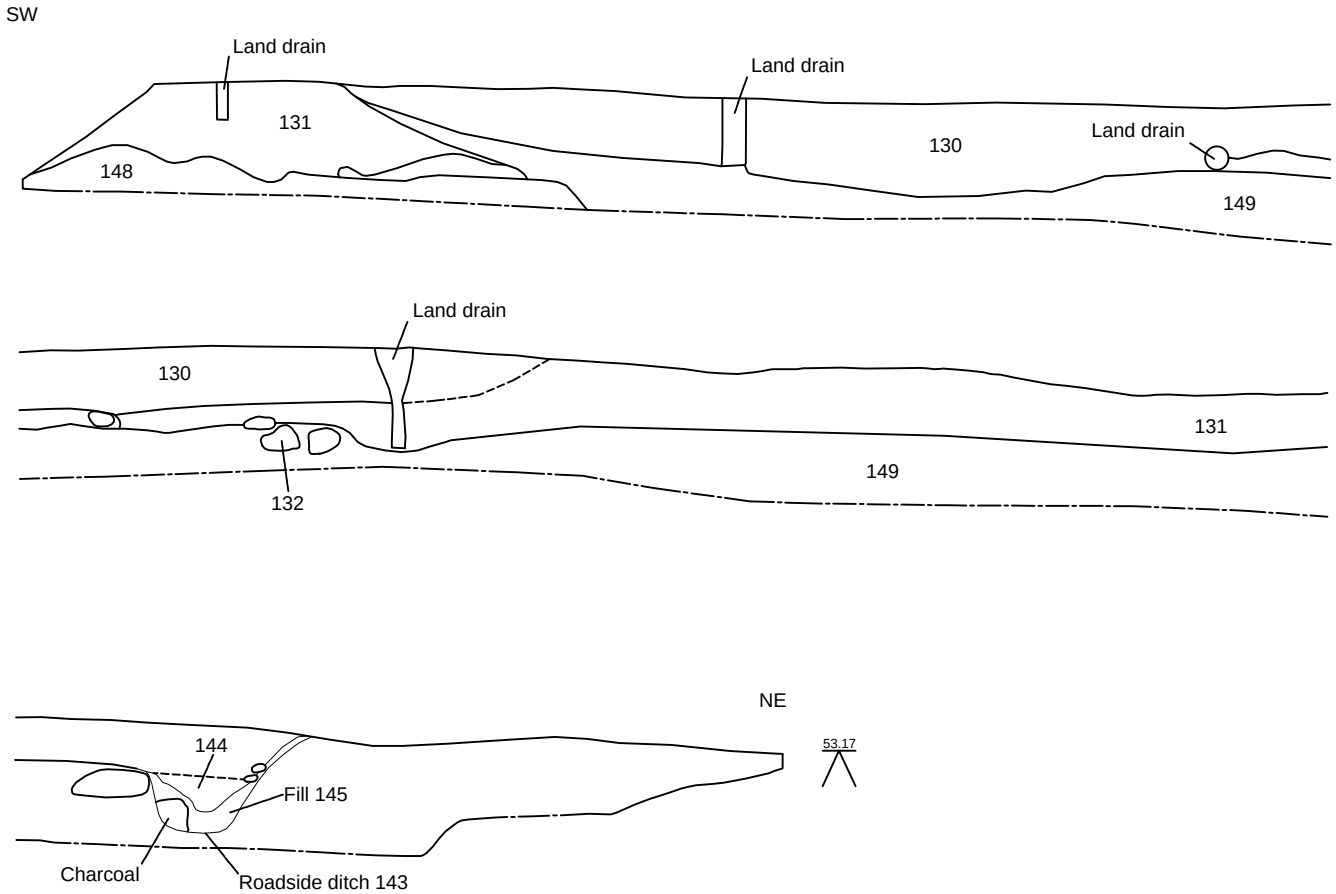
- Trench
- Stone
- Ditch
- Watercourse
- Drain

SALFORD ARCHAEOLOGY

0 5 m

Scale at A4 1:100

Salford Archaeology, Peel Building,The Crescent, Salford, M5 4WT



SALFORD ARCHAEOLOGY

0 2 m

Scale at A4 1:40

Figure 9:

Section excavated across the Roman road in Area B1

N

Key:

- Limit of excavation
- Layers and inclusions
- Cut feature

Salford Archaeology, Peel Building, The Crescent, Salford, M5 4WT

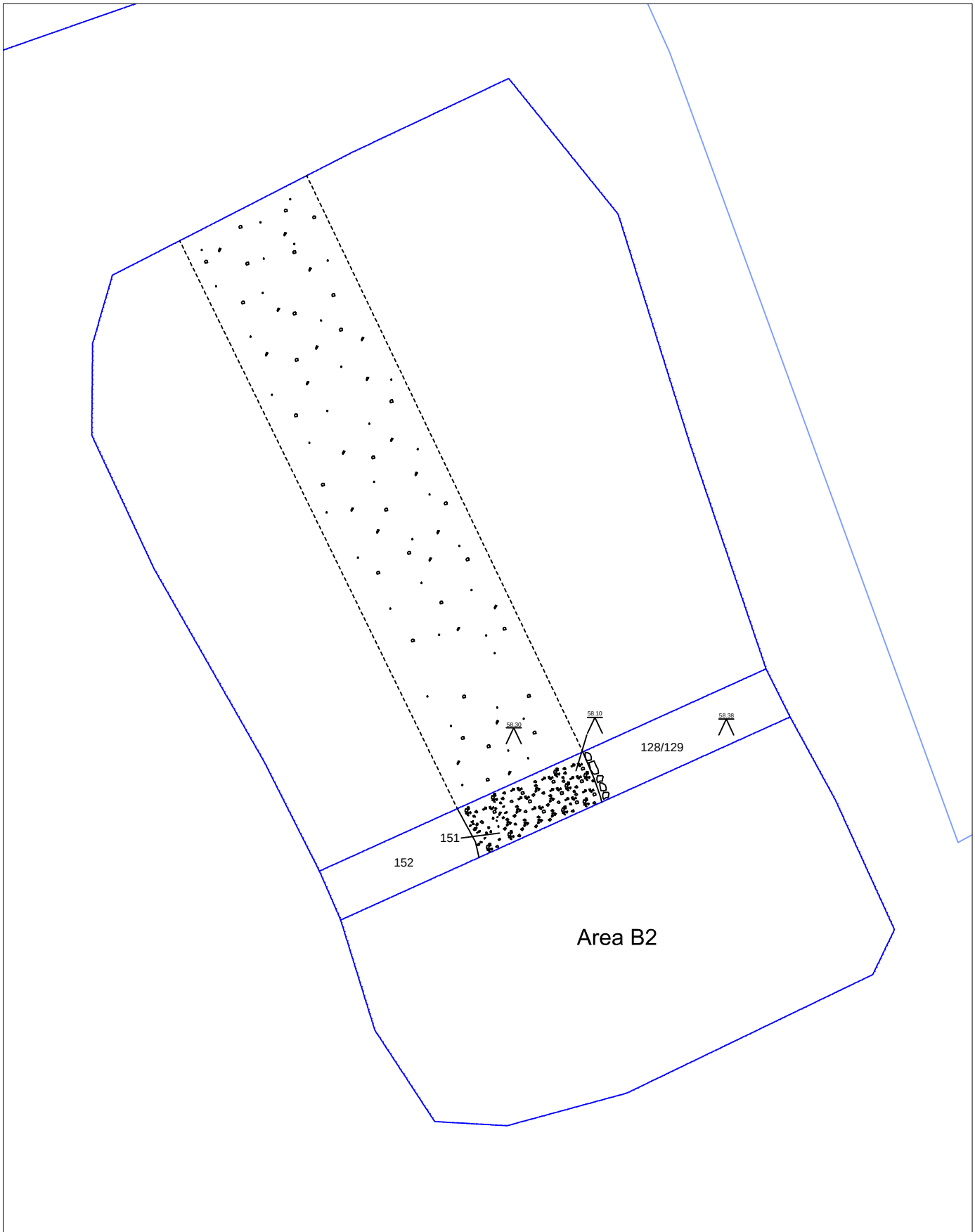


Figure 10:

Detailed plan of excavation Area B2

N

Key:

- Trench
- Stone
- Ditch
- Watercourse
- Drain

SALFORD ARCHAEOLOGY

0 10 m

Scale at A4 1:250

Salford Archaeology, Peel Building,The Crescent, Salford, M5 4WT

Appendix 2: Context List

Context Number	Context Description
	AREA A1
100	Natural sands and gravels
101	Subsoil
102	Topsoil
103	Gravel/metalled road surface
104	Large sandstone blocks, demarcating the majority of the road below (*103*)
105	Relic soil/organic material below (*104*)
106	Below (*105*), boulder clay, natural ground
107	Modern plough soil containing 20th-century pottery
108	Original cut of possible Roman roadside ditch
109	Fill of possible Roman ditch [*108*]
110	Re-cut of Roman ditch, possibly dating to 19th- / 20th-century, cuts [*108*]
111	Fill of [110] contained sherds of 19th- / 20th-century pottery
112	Palisade cut, cuts [*108*]
113	Palisade fill
114	Bands of whitish yellow clay below (*104*)
115	Earlier ditch at the western end of the Roman road
116	Fill of [*115*]
117	Cut of possible later ditch, cuts [*115*] / (*116*)
118	Fill of [*117*], 19th / 20th century?
	AREA A2
119	Sandstone blocks in Area A2, same as (*104*)
120	Compact surface with pebble inclusions, along the road edge, above (*119*)
121	Buried soil, beneath (*104*)
122	Cut of possible earlier ditch situated to the west of the road
123	Fill of [*122*]
124	Cut of later ditch to the east of the road
125	Fill of [*124*]
126	Cut of ditch to the west of the road
127	Fill of [*126*]
	AREA B1
128	Cut of possible watercourse
129	Fill of [*128*]
130	Light brown clay demarcating the remains of the Roman road
131	Natural orange brown sand same as (*100*)
132	Small river pebbles demarcating the edges of the roman road
133	Clay above sand (*134*) in Test Pit 3
134	Orange sand in possible feature (Feature 1) below (*134*) Test Pit 3

Context Number	Context Description
136	Dark organic material at the base of Test Pit 2
135	Dark patch/ lens in Test Pit 2, possible fill of post hole
137	Dark organic material at the base of Test Pit 4 likely to be the same as *136*
138	Small river pebbles in Test Pit 3
139	Pebble layer in Test Pit 4
140	Fill above pebble layer *139*, light brown silty clay
141	Cut of land drain
142	Fill of land drain
143	Cut of ditch south of Area B1 in sondage
144	Upper fill of ditch [*143*] in sondage
145	Lower fill of ditch [*143*] below (*144*) in sondage
146	Natural clay revealed in sondage
147	Dark organic material same as (*136*) and (*137*) in sondage
148	Natural ground in sondage to the north of Area B1, same (*146*)
149	Dark organic material in sondage to the north of Area B1
150	Deposit above (*148*) and (*149*) contained 19th- / 20th-century artefacts
	AREA B2
151	Metalled surface, same as (*103*) exposed in Area A1
152	Yellow clay situated to the west of surface (*151*)
	TRENCH 1A AND TRENCH 1B
153	Natural clay same as (*146*) and (*148*) etc
	AREA C
154	Natural clay
155	Cut of ditch
156	Fill of [*155*]
157	Cut of ditch
158	Fill of [*157*]

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RADIOCARBON DATING CERTIFICATE

27 September 2018

Laboratory Code	SUERC-81960 (GU48983)
Submitter	Sam Rowe Salford Archaeology LG22A Peel Building University of Salford Salford, Manchester M5 4WT
Site Reference	Owen Street
Context Reference	170
Sample Reference	9
Material	Charcoal
$\delta^{13}C$ relative to VPDB	-26.0 ‰
Radiocarbon Age BP	1859 ± 28

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

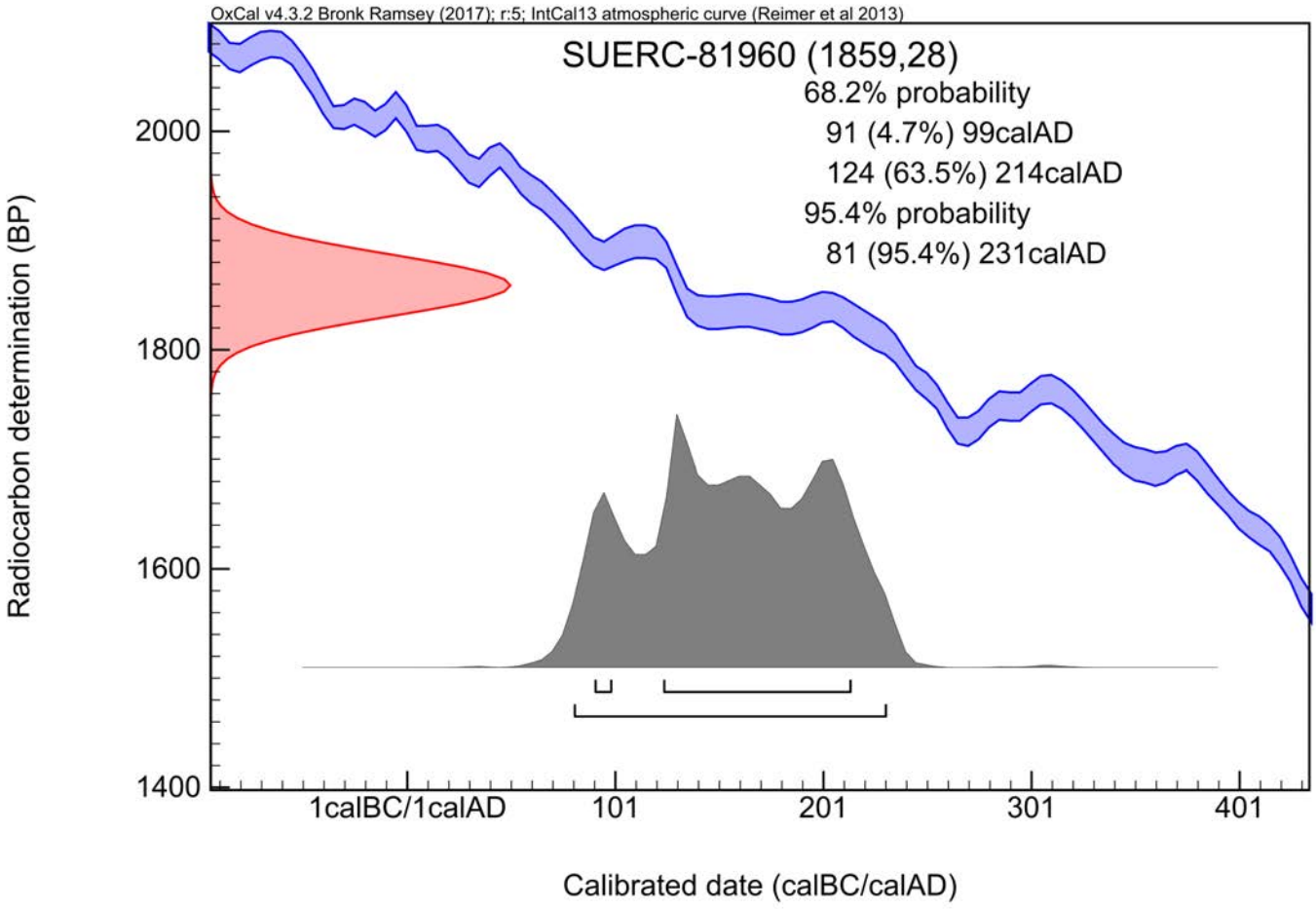
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

27 September 2018

Laboratory Code	SUERC-81961 (GU48984)
Submitter	Sam Rowe Salford Archaeology LG22A Peel Building University of Salford Salford, Manchester M5 4WT
Site Reference	Owen Street
Context Reference	147
Sample Reference	3
Material	Charcoal
$\delta^{13}C$ relative to VPDB	-24.6 ‰
Radiocarbon Age BP	1901 ± 28

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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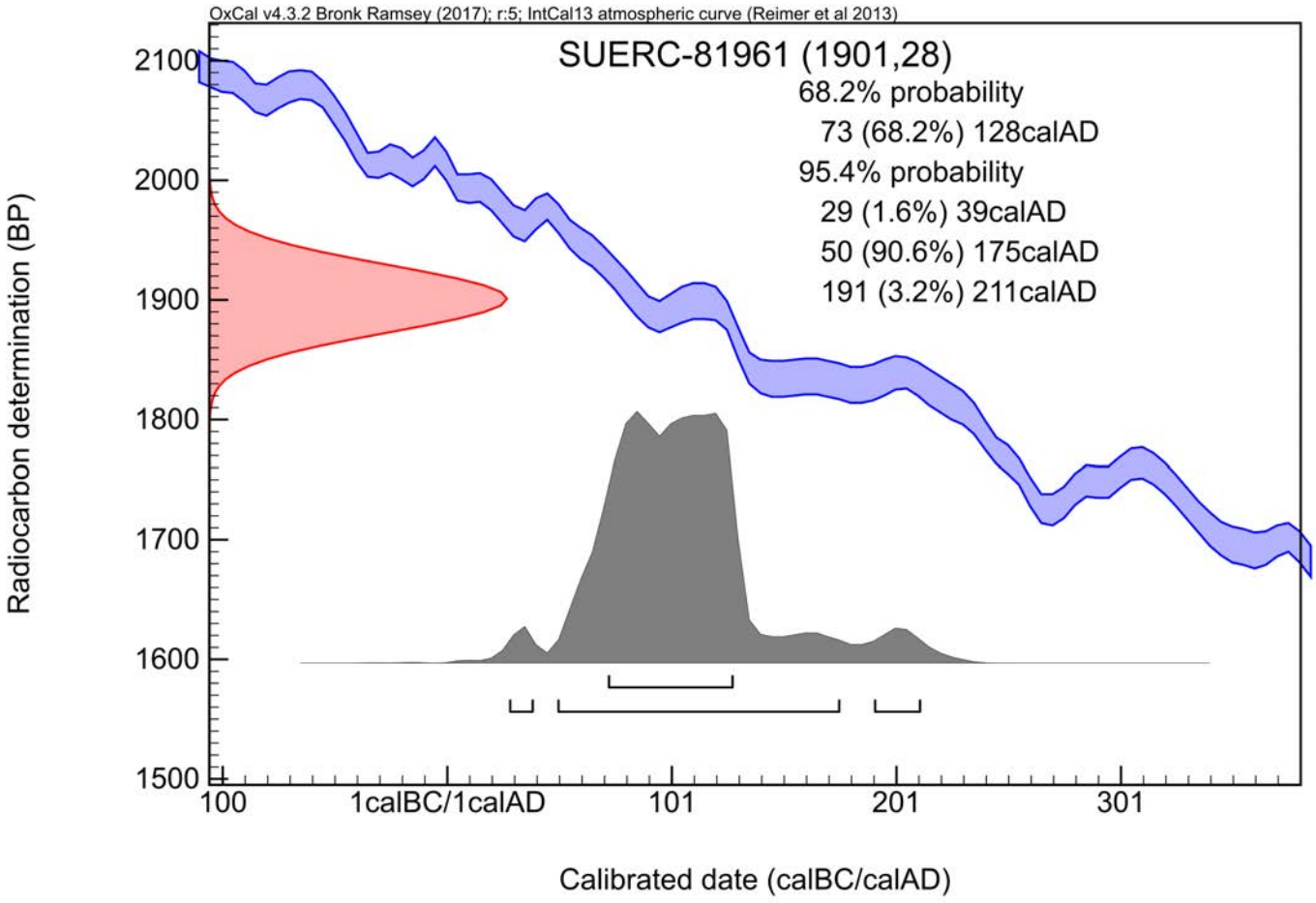
Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

27 September 2018

Laboratory Code	SUERC-81962 (GU48985)
Submitter	Sam Rowe Salford Archaeology LG22A Peel Building University of Salford Salford, Manchester M5 4WT
Site Reference	Owen Street
Context Reference	183
Sample Reference	12
Material	Charcoal
$\delta^{13}C$ relative to VPDB	-28.3 ‰
Radiocarbon Age BP	1912 ± 28

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

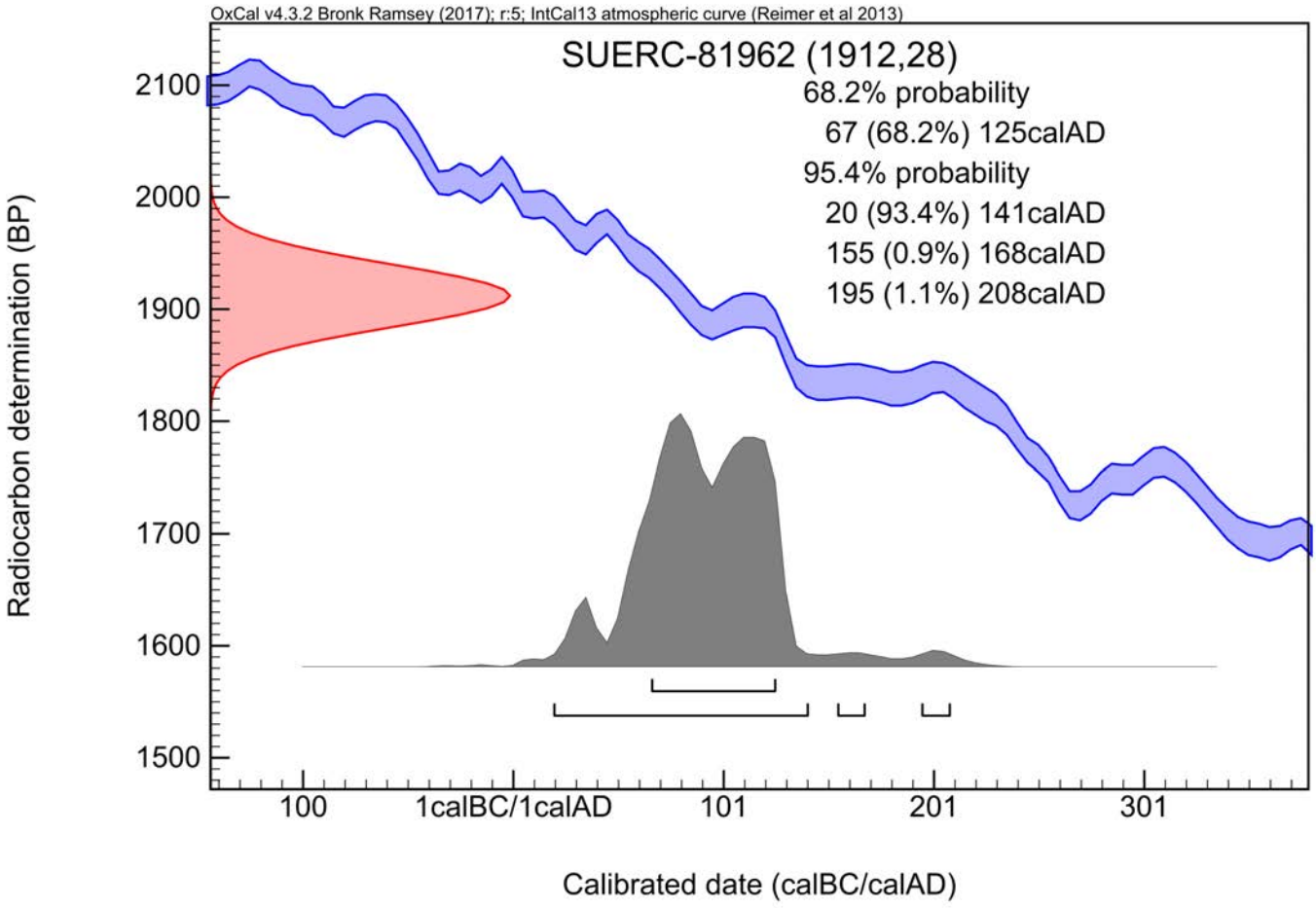
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

27 September 2018

Laboratory Code	SUERC-81963 (GU48986)
Submitter	Sam Rowe Salford Archaeology LG22A Peel Building University of Salford Salford, Manchester M5 4WT
Site Reference	Owen Street
Context Reference	166
Sample Reference	16
Material	Charcoal
$\delta^{13}C$ relative to VPDB	-27.6 ‰
Radiocarbon Age BP	1856 ± 28

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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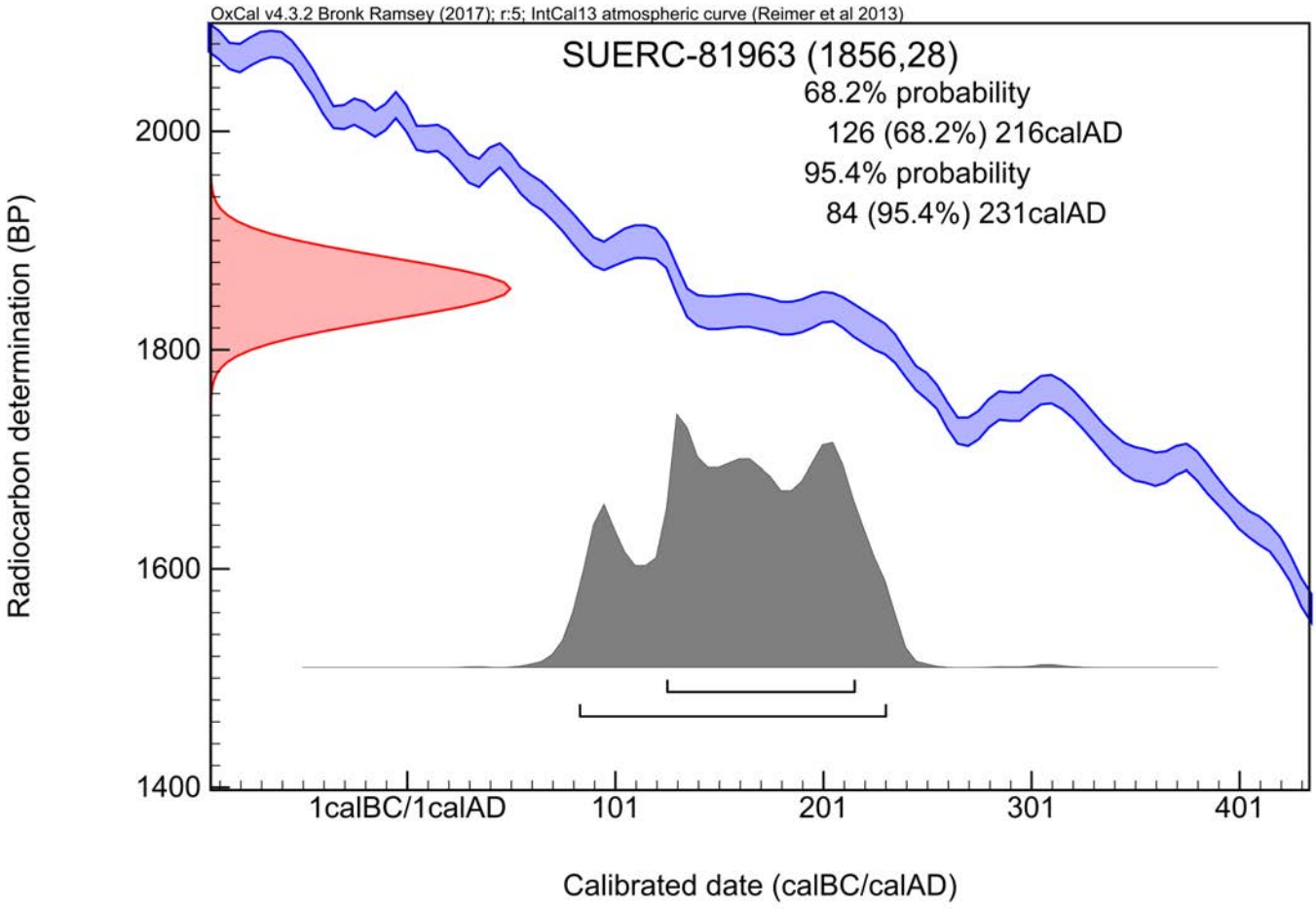
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



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The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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RADIOCARBON DATING CERTIFICATE

27 September 2018

Laboratory Code	SUERC-81964 (GU48988)
Submitter	Sam Rowe Salford Archaeology LG22A Peel Building University of Salford Salford, Manchester M5 4WT
Site Reference	Owen Street
Context Reference	142
Sample Reference	1
Material	Charcoal
$\delta^{13}C$ relative to VPDB	-23.7 ‰
Radiocarbon Age BP	Background Result > 55000

N.B. The above sample yielded a result indistinguishable from our background samples and is consequently reported as a greater than age in conventional years BP (before 1950 AD).

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

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Conventional age calculated by : E. Dunbar

Checked and signed off by : P. Nayont

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RADIOCARBON DATING CERTIFICATE

01 October 2018

Laboratory Code	SUERC-81965 (GU48989)
Submitter	Sam Rowe Salford Archaeology LG22A Peel Building University of Salford Salford, Manchester M5 4WT
Site Reference	Owen Street
Context Reference	158
Sample Reference	7
Material	Charcoal
$\delta^{13}C$ relative to VPDB	-24.1 ‰
Radiocarbon Age BP	2082 ± 28

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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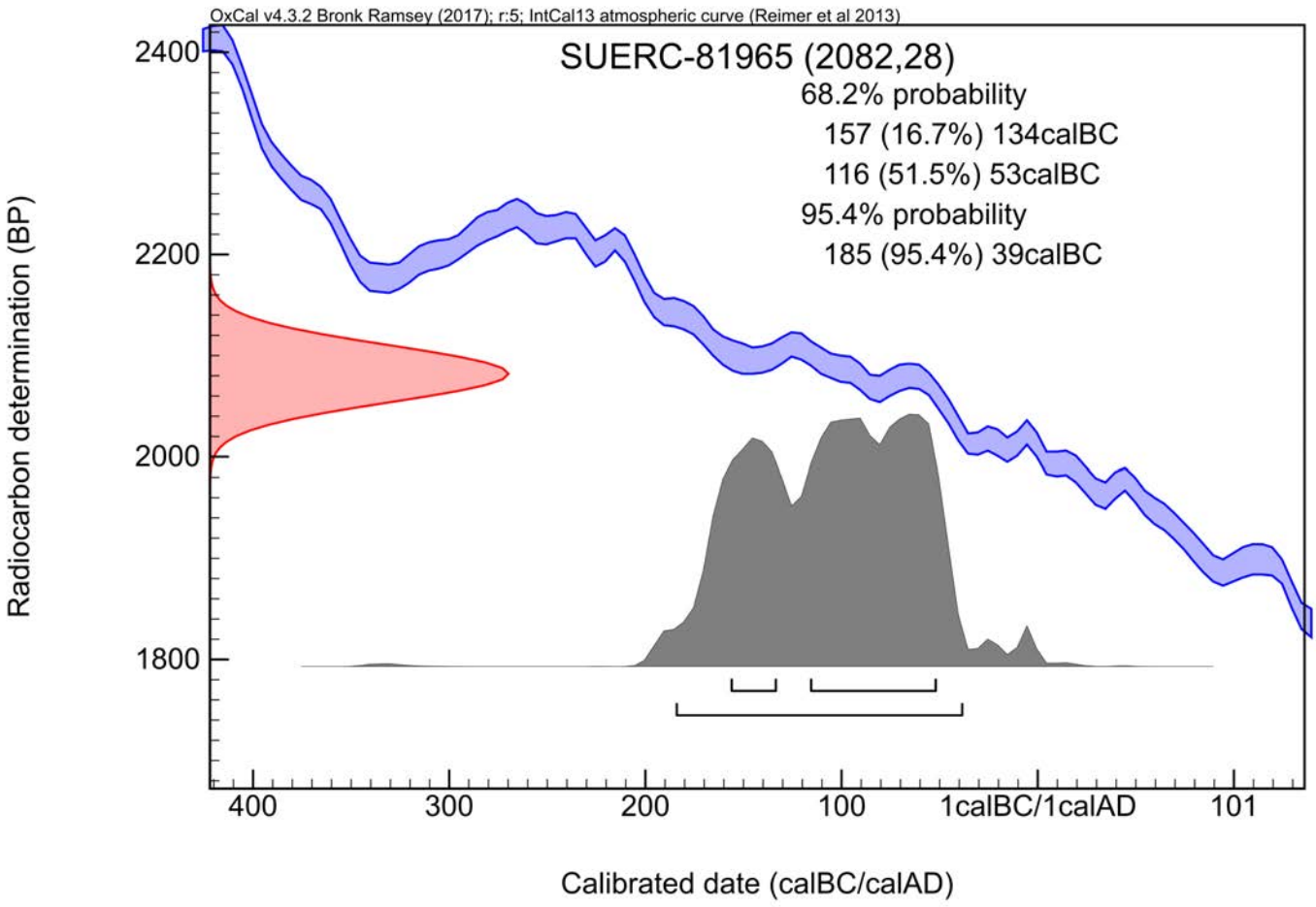
Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

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† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

27 September 2018

Laboratory Code	SUERC-81969 (GU48990)
Submitter	Sam Rowe Salford Archaeology LG22A Peel Building University of Salford Salford, Manchester M5 4WT
Site Reference	Owen Street
Context Reference	152
Sample Reference	8
Material	Charcoal
$\delta^{13}C$ relative to VPDB	-25.1 ‰
Radiocarbon Age BP	1980 ± 28

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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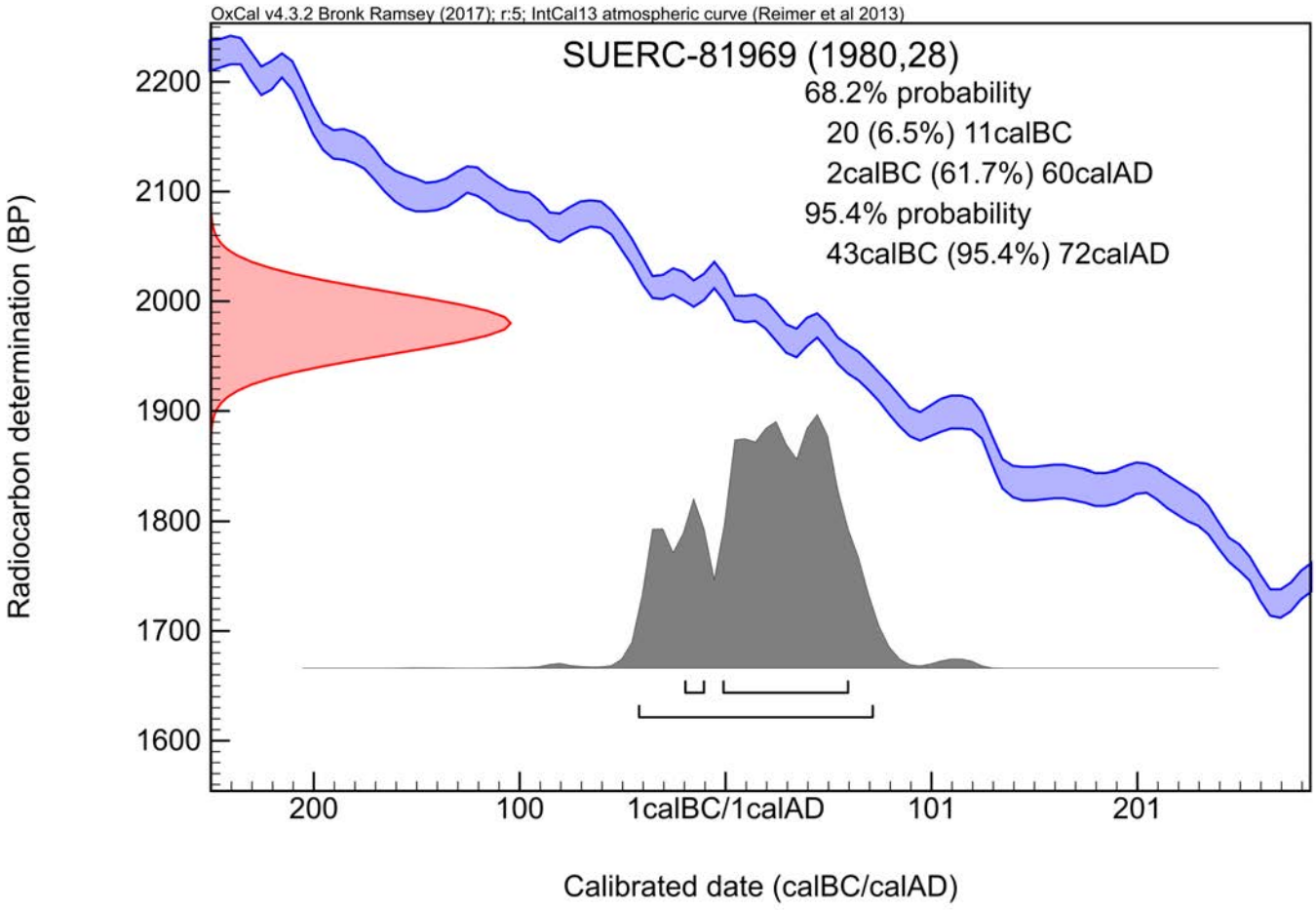
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

Scottish Universities Environmental Research Centre
Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow G75 0QF, Scotland, UK
Director: Professor F M Stuart Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

27 September 2018

Laboratory Code	SUERC-81970 (GU48991)
Submitter	Sam Rowe Salford Archaeology LG22A Peel Building University of Salford Salford, Manchester M5 4WT
Site Reference	Owen Street
Context Reference	189
Sample Reference	102
Material	Charcoal
$\delta^{13}C$ relative to VPDB	-29.3 ‰
Radiocarbon Age BP	2649 ± 28

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

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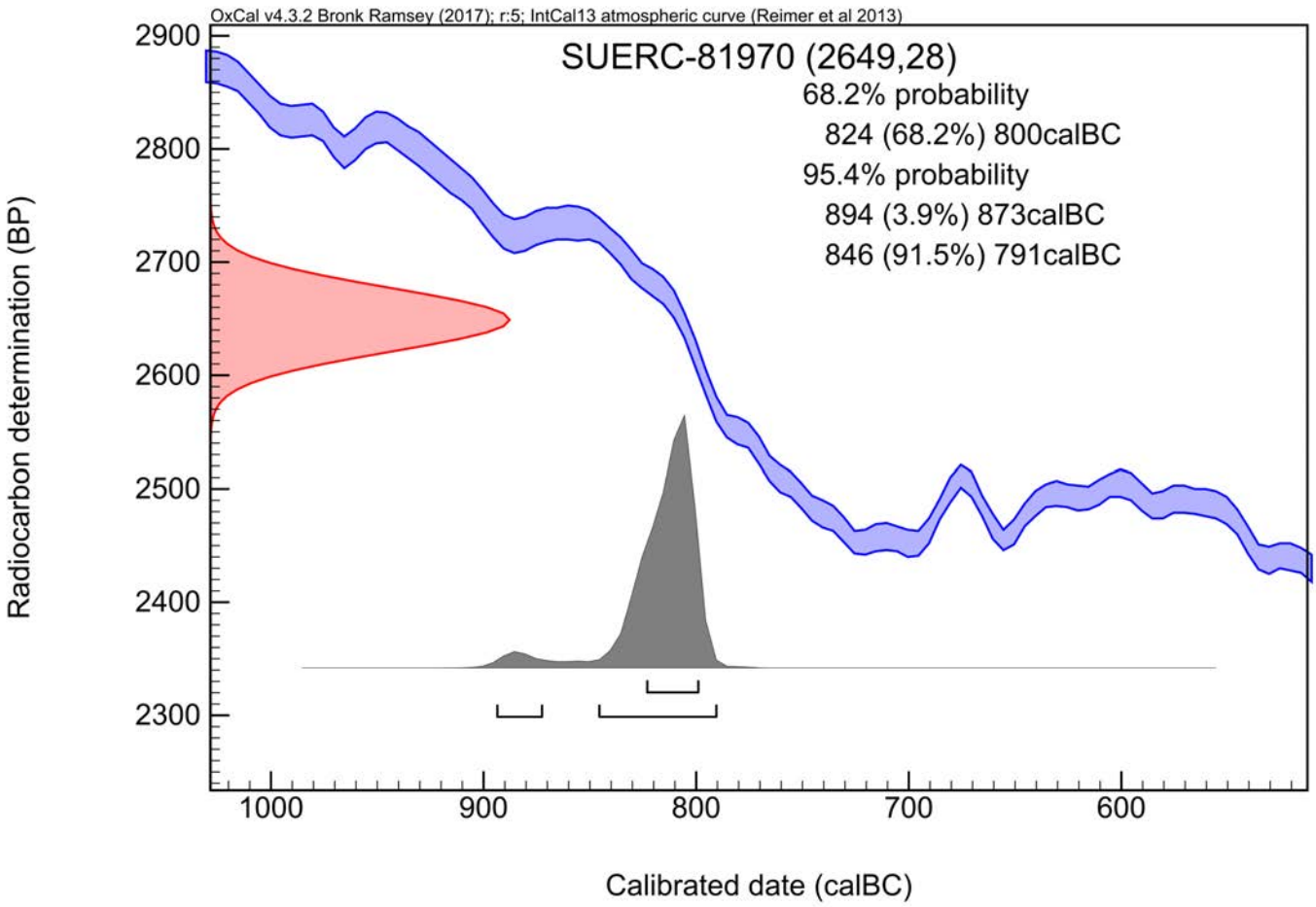
For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by : E. Dunbar

Checked and signed off by : P. Nayont



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RADIOCARBON DATING CERTIFICATE

27 September 2018

Laboratory Code	SUERC-81971 (GU48992)
Submitter	Sam Rowe Salford Archaeology LG22A Peel Building University of Salford Salford, Manchester M5 4WT
Site Reference	Land Gate
Context Reference	A1
Sample Reference	2
Material	Charcoal
$\delta^{13}C$ relative to VPDB	-26.5 ‰
Radiocarbon Age BP	2856 ± 28

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

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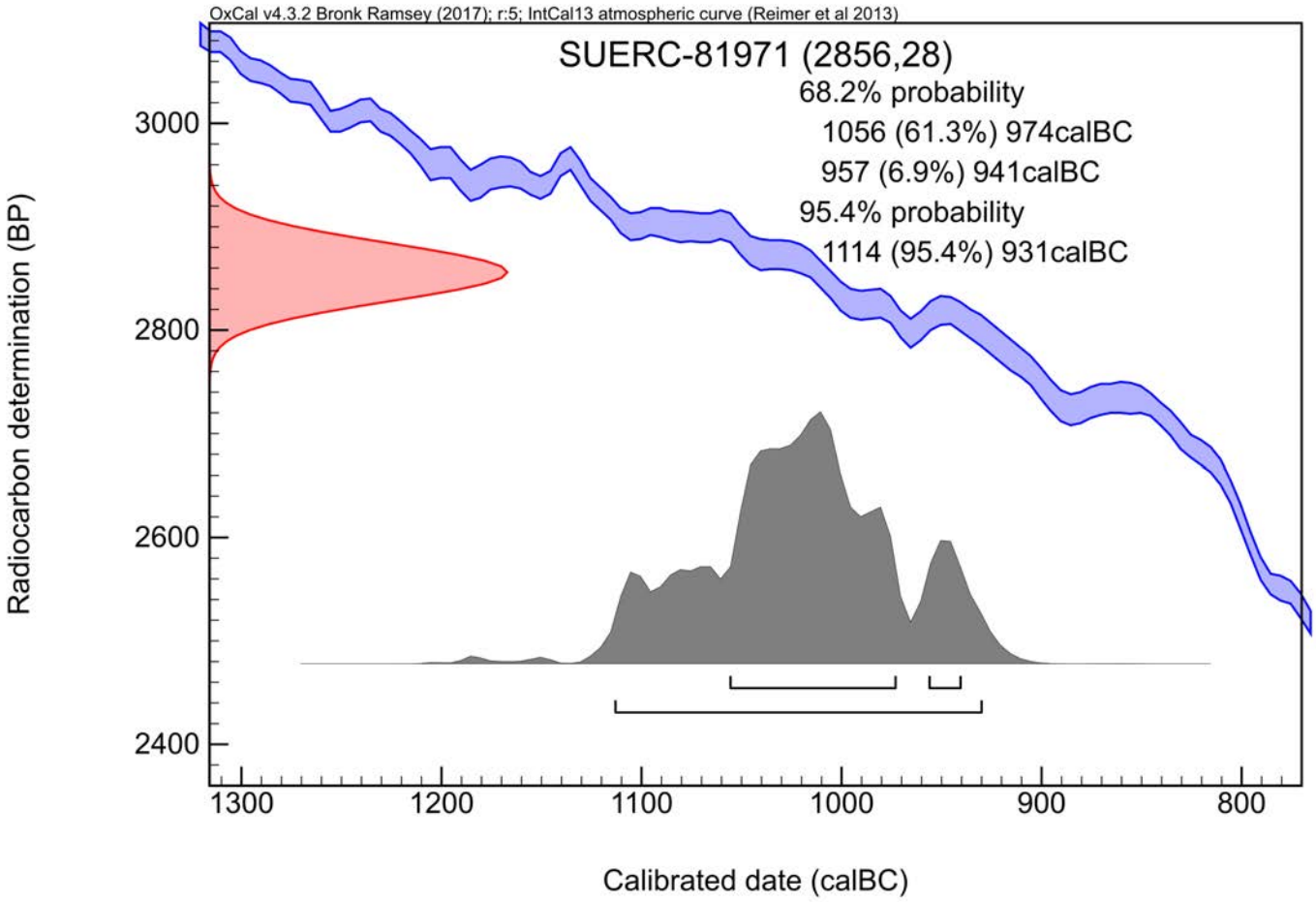

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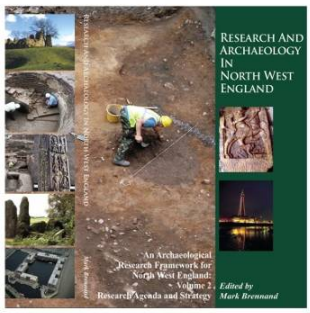
University of Salford MANCHESTER

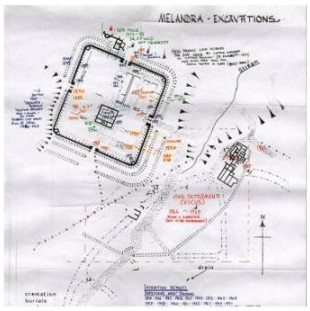
The Centre for Applied Archaeology

REGISTERED ORGANISATION CIfA

CONSULTANCY



DESK BASED ASSESMENTS

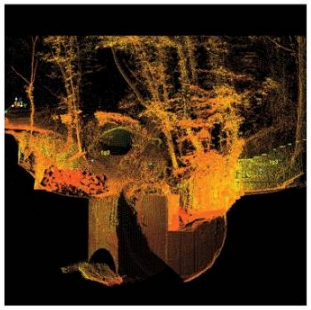


WATCHING BRIEF & EVALUATION

EXCAVATION

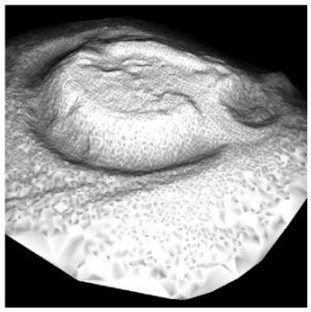
BUILDING SURVEY

3D LASER SCANNING



COMMUNITY INVOLVEMENT

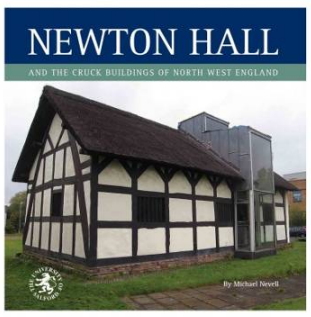
LANDSCAPE SURVEYS



GEOPHYSICAL SURVEYS

WORKSHOPS & VOCATIONAL TRAINING

RESEARCH PUBLICATIONS



SEMINARS, DAYSCHOOLS CPD EVENTS

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