

RED BANK, **CHEETHAM**, **MANCHESTER**, MANCHESTER

Archaeological Deskbased Assessment

Oxford Archaeology North

July 2006

Sinclair Knight Merz

NGR: SJ 8438 9934 OA North Job No: L9727 Report No: 2006-07/560

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SUMMARY

In July 2006, Sinclair Knight Merz requested that Oxford Archaeology North (OA North) undertake an archaeological desk-based assessment of land situated off Red Bank road in the Cheetham area of Manchester (centred on SJ 8438 9934). The study area lies on the north-eastern fringe of Manchester city centre, occupying a site on the western bank of the river Irk, and is currently used as a car park. The assessment followed on from a rapid archaeological review of the site, undertaken by OA North in October 2005, which concluded that the study area had a potential to contain buried remains of medium to high local significance. This has been confirmed by the present assessment, which was required to support and inform a planning application for the proposed redevelopment of the site.

Notwithstanding the recovery of an urn of a probable sixth-century date during construction work in *c*1850, it is likely that the study area and its immediate environs were unoccupied, open land until the post-medieval period. Historic mapping indicates some occupation of the area by the mid-eighteenth century, although it remained largely undeveloped until the early nineteenth century, by which time the first industrial buildings and associated workers' housing had been constructed on the site. The density of industrial buildings increased during the middle of the century, as the Red Bank area evolved as a focus for works associated with the textile-finishing trades, especially dyeing and, latterly, the manufacture of chemicals. The twentieth-century use of the site was dominated by an iron works, which occupied most of the study area, presumably following the demolition of the earlier industrial buildings. It is likely, however, that some buried remains of these earlier structures will survive *in situ* beneath the floor of the former iron works, and that some may be of high local archaeological significance.

The assessment identified 13 sites of archaeological interest within the proposed development area, of which only one is recorded on the Greater Manchester Sites and Monuments Record (SMR); the majority of sites were identified from map regression analysis undertaken as part of the assessment. An additional five sites were identified within the immediate environs of the study area, of which four have been previously recorded on the SMR, including a bridge (Site 02) across the river Irk designated a Listed Building; this is the only statutory building in the vicinity of the study area, and is unlikely to be affected by the proposed development. Of the 13 sites identified within the boundary of the development area, eight were considered to be of high local significance and may require some form of archaeological mitigation in advance of development. This would probably take the form of evaluation trenching to allow for an assessment of the presence, character, depth, and extent of buried remains, and thereby inform the planning process. The sites of potential interest include those of late eighteenth-century workers' housing and an iron foundry/dye works, and two steam-powered mills associated with the textile trades and a chemical works of midnineteenth-century date.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Sinclair Knight Merz for commissioning the project. Thanks are also due to Norman Redhead, of the Greater Manchester Archaeological Unit, for his support and assistance with the documentary research. Thanks are also expressed to the staff of the Local Studies Unit in Manchester Central Library and the Lancashire County Record Office for facilitating access to the sequence of historic mapping.

The desk-based assessment was undertaken by Ian Miller, and the illustrations were produced by Mark Tidmarsh. The report was checked and approved by Alan Lupton.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 In July 2006, Sinclair Knight Merz commissioned Oxford Archaeology North (OA North) to undertake an archaeological desk-based assessment of land situated to the east of Red Bank road in the Cheetham area of Manchester, which lies on the fringe of the city centre (Fig 1). The assessment followed on from a rapid archaeological review of the site, undertaken by OA North in October 2005, which concluded that the study area had a potential to contain buried remains of some archaeological significance.
- 1.1.2 The principle aim of the assessment was to identify, as far as possible, the nature of the study area's archaeological resource, and was required to support a future planning application. This is likely to propose the redevelopment of the site for mixed commercial and residential use.

2. METHODOLOGY

2.1 DESK-BASED ASSESSMENT

- 2.1.1 The principal sources of information consulted were historical and modern maps of the study area, although published and unpublished secondary sources were also reviewed. The study has focused on the proposed development area, although information from the immediate environs has been summarised in order to place the results of the assessment into context. All archaeological sites within the study area and its environs have been included in the Site Gazetteer (*Section 4, below*). The results were analysed using the Secretary of State's criteria for the scheduling of ancient monuments, outlined in Annex 4 of *Planning Policy Guidance 16: Archaeology and Planning* (DoE 1990).
- 2.1.2 *Greater Manchester Sites and Monuments Record (SMR):* the Greater Manchester Sites and Monuments Record (SMR), held in Manchester was consulted to establish the sites of archaeological interest already known within the study area, and information from up to 0.25km around was obtained as a background. The SMR is a Geographic Information System (GIS) linked to a database of all known archaeological sites in Greater Manchester, and is maintained by the Greater Manchester Archaeological Unit (GMAU). For each SMR site within the study areas, an entry was added to the site gazetteer (Section 4) and each was marked on a location plan (Fig 9).
- 2.1.3 *Lancashire County Record Office, Preston (LRO(P)):* before the county boundaries were changed during the mid-1970s, Manchester lay within the county of Lancashire, and therefore most of the available published maps of the area are held in Lancashire County Record Office in Preston. All available Ordnance Survey maps for the study area were examined, covering the period from 1850 to 1992.
- 2.1.4 *Greater Manchester County Record Office, Manchester (GMRO(M)):* the catalogue of the Greater Manchester County Record Office (Manchester City Council 2005) was searched for information relating to the study area, and relevant data was incorporated into the report.
- 2.1.5 *Archives and Local Studies, Manchester Central Library (MCL):* the catalogue of the Archives and Local Studies section of Manchester Central Library was searched for information relating to the study area, and relevant data was incorporated into the report.
- 2.1.6 **Oxford Archaeology North:** OA North has an extensive archive of secondary sources relevant to the study area, as well as numerous unpublished client reports on work carried out both as OA North and in its former guise of Lancaster University Archaeological Unit (LUAU). These were consulted where necessary.

2.2 SITE VISIT

2.2.1 In addition to the desk-based research, a rapid site inspection of the study area was carried out in order to relate the past landscape and surroundings to that of the present. It also allowed for the state of the modern ground surface to be viewed.

2.3 ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with current IFA and English Heritage guidelines (English Heritage 1991). The paper and digital archive will be deposited in the Greater Manchester County Record Office on completion of the project.

3. BACKGROUND

3.1 LOCATION, TOPOGRAPHY AND GEOLOGY

- 3.1.1 The study area comprises a roughly triangular area measuring approximately 7200m², and is situated on the northern fringe of Manchester city centre, centred on NGR SJ 8438 9934 (Fig 1). It is bounded by the river Irk to the south, Roger Street to the north-east, and Back Red Bank and Faber Street to the north-east and west respectively. The land is also bounded by two raised railway viaducts, one to the north-west and one to the south-east, with infilling properties occupying the distinctive broad rounded arches (Plate 1). Victoria railway station lies *c*0.25km to the south-west, and the districts of Strangeways and Cheetham Hill are situated to the north-west and north respectively (Fig 1). The site lies at about 30m above Ordnance Datum (aOD), with land rising gently to 40m aOD to the north.
- 3.1.2 The site comprises a largely level plot of land at the foot of a low sandstone escarpment, from which Red Bank derives its name. The level terrain is the likely to be partially the result of landscaping during the eighteenth and nineteenth centuries, masking the natural topography. The study area is currently in use as a car park.
- 3.1.3 Topographically, the Manchester Conurbation, as a region, lies within an undulating lowland basin, bounded by the Pennine uplands to the east and north. The region comprises the Mersey river valley, which is dominated by its heavily meandering river within a broad flood plain (Countryside Commission 1998, 125). The topography of the present study area, however, was formed largely by the Irwell and Irk rivers. The study area straddles the western side of the river Irk, which flows north-east/south-west to its confluence with the river Irwell, some 600m to the south-west.
- 3.1.4 The underlying solid geology of the area consists mainly of Bunter sandstones of Permo-Triassic age, which were deposited under the marine conditions of the period, between 280 and 195 million years ago (*ibid*). The overlying drift geology is composed of essentially Pleistocene boulder clays of glacial origin, and sands, gravels, and clays of fluviatile/lacustrine origin (Hall *et al* 1995, 8), including fluvial sediments along the Irk valley.

3.2 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

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

Period	Date Range
Palaeolithic	30,000 – 10,000 BC
Mesolithic	10,000 – 3,500 BC
Neolithic	3,500 – 2,200 BC
Bronze Age	2,200 – 700 BC
Iron Age	700 BC – AD 43
Romano-British	AD 43 – AD 410
Early Medieval	AD 410 – AD 1066
Late Medieval	AD 1066 – AD 1540
Post-medieval	AD 1540 – <i>c</i> 1750
Industrial Period	cAD1750 – 1901
Modern	Post-1901

Table 1: Summary of British archaeological periods and date ranges

- 3.2.2 *Prehistoric Period:* there are relatively few sites known from this period in the vicinity, although general patterns of settlement locations that have been identified indicate that the Irwell valley would have been a favourable location for occupation and transport routes. The upland areas of the surrounding moors may have been exploited for hunting, but the poor drainage of the Pennines and spread of blanket peat at higher altitudes would have discouraged any settlement (Hall *et al* 1995, 117). Worked flints have been discovered on the gravel terraces in the vicinity of Ordsall Lane and Albert Park in Salford, and prehistoric finds are known from the general area of Manchester Cathedral (UMAU 2000), although there is no known evidence for prehistoric activity in proximity to the present study area.
- 3.2.3 *Roman Period:* the first military occupation of Manchester was established during the governorship of Agricola (AD 77-84), and commenced with a five-acre wooden fort, known as *Mamucium*, apparently meaning 'a breast shaped hill' (Brunton 1909). The site of this encampment is marked today by Camp Street in Castlefield, situated to the south-west of the city centre, and more than 1km to the south-west of the study area.
- 3.2.4 The fort was supported by a substantial extramural settlement, or *vicus*, that developed in both a northerly direction and along the line of Chester Road to the south (Grealey 1974, 11). It seems that this settlement originated largely during the early second century, and incorporated numerous buildings and a concentration of iron-working hearths or furnaces. Much of the current understanding of the Roman *vicus* in Manchester is derived from three major excavations, which have all focused on the area to the north of the fort: excavations on the southern side of Liverpool Road, centred on the former White Lion Street in 1972 (*ibid*), excavations on Tonman Street (Jones and Reynolds 1978), and an excavation between Liverpool Road and Rice Street (UMAU 2002).

- 3.2.5 The Roman road between the forts at Manchester and Ribchester is known to cross the river Irk and continue northwards through Broughton, approximately along the line of Bury New Road (Dobkin 1984, 10), which takes a course some 0.5km to the east of the present study area. It is feasible that another Roman road, perhaps linking Manchester with the settlement at Wigan, forded the river Irwell at a point close to the modern Princes Bridge, although this awaits confirmation.
- 3.2.6 Whilst some Roman finds have been discovered along the route of the Roman road, there were no known remains of Roman date within or close to the present study area, and the potential for any such buried remains to exist on the site seems low.
- 3.2.7 *Early Medieval Period:* the area around Manchester came under the control of several kingdoms during this period. Aethelfrith extended his kingdom of Northumbria to the Mersey after the battle of Chester in *c*AD 617. Shortly after, his successor, Edwin conquered and occupied Manchester in AD 620, and it may have been during this period that settlement in the town was established around the cathedral, which lies approximately 0.5km to the southwest of the present study area (Farrer and Brownbill 1908).
- 3.2.8 Manchester is mentioned in the Anglo-Saxon Chronicle (AD 919), which refers to Edward the Elder, son of King Alfred the Great, taking over the town and making repairs to the 'fortifications' in the wake of the destruction wrought by an invasion of the Danes during the AD 870s. These fortifications were again probably based around the present cathedral, and would have comprised little more than a wooden palisade. During this period, the church of St. Mary was established at the north end of Deansgate, and is mentioned in the Domesday Book of 1086. In 1028, King Canute regarded the town as important enough to found one of his ten royal mints here (Farrer and Brownbill 1908).
- 3.2.9 The physical remains of this period are rare in the North West as a region (Newman 1996), and this is certainly the case in Manchester. One of the few artefacts in the town known of an Anglo-Saxon origin is the so-called 'Angel Stone', or effigy of the Archangel Michael, which was unearthed by workmen repairing the South Porch of the cathedral in 1871 (manchester2002-uk.com/history). Another remnant of the period is a Saxon-style funerary urn of probable sixth-century date, which was found during construction work in *c*1850 just to the north of Red Bank (Morris 1983).
- 3.2.10 *Medieval Period:* following the Norman Conquest, William I assigned most of the land between the Ribble and Mersey rivers to Roger of Poitou, who retained the manor of Salford demesne (Tupling 1962, 116), but divided his other newly-acquired land into several fiefdoms (Kidd 1996, 13). The largest of these was the landholding centred on Manchester, created by the grant of extensive lands in the hundreds of Salford, Leyland and West Derby to Albert Grelley (Tupling 1962, 116). By the thirteenth century the Grelley family had established a manor house at the confluence of the rivers Irwell and Irk, and the medieval town grew up around it (Hartwell *et al* 2004, 256). It was from this hall that they governed both the manor and the extensive barony.

- 3.2.11 In 1222 the town was granted an annual fair held on land known as Acresfield, just outside of the town (now St Ann's Square). Albert de Greslé's descendant, Thomas, was granted the Great Charter of Manchester in 1301 by Edward I, and thus it became a free borough (*ibid*). Throughout this period, Red Bank probably comprised open or agricultural land beyond the area of settlement associated with the town, although the district of Cheetham is known to have been in existence since at least the thirteenth century, as it is first mentioned in documentation in 1212. This name may have been derived from the Old English for *cheet* and a later suffix of *-ham* and translates as 'village near the wood' (Mills 1976), implying some form of settlement, although Dobkin (1984, 19) contested that the name was actually derived from the Chetham family, who evolved as local wealthy landowners from the sixteenth century.
- 3.2.12 The southern edge of Cheetham was formed by the river Irk, as it flowed towards its confluence with the river Irwell. From the thirteenth century onwards, the Irk drove several water-powered mills, including a fulling mill that is mentioned in a survey of 1282 (Thomson 1966, 42). Indeed, Thomson contested that 'the beginning of [Manchester's] prosperity' was owed to the river Irk (*op cit*, 35). However, there were no known remains of medieval date within or close to the present study area, and the potential for any such buried remains to exist on the site seems low.
- 3.2.13 During the fifteenth century, the nascent linen industry was taking root in the townships on the south side of Manchester, using flax imported from Ireland via the port of Chester (Higham 2004, 196-7). During the same period, economic links were developing between these townships Manchester and those along the Pennine edge, from which goods were increasingly exported eastwards by packhorse (*ibid*). The market of Manchester lay at the centre of this fledgling textile trade, whilst the size and wealth of the town was reflected in a decision of the Lord of the Manor to rebuild St Mary's church in 1421 as a collegiate institution (Hartwell *et al* 2004, 256).
- 3.2.14 *Post-medieval Period:* by 1539, John Leland was able to describe Manchester as the '*finest and busiest town in the whole of Lancashire, with the best buildings and the greatest population*' (Chandler 1993, 263), at a time when the textile industries in south Lancashire were beginning to flourish. Manchester emerged as a centre for the textile finishing processes, as woollen cloth was brought in from outlying areas for bleaching and dying. Most importantly, however, Manchester expanded its role as a market centre for textiles produced in the towns and hamlets of the surrounding district (Frangopulo 1962, 26).
- 3.2.15 From the early seventeenth century, fustians produced in a network of towns with Manchester at their hub were being exported regularly to western and southern Europe, and the town became the principal commercial centre for the region (Hartwell 2001, 8-9). A flourishing business community developed, which was dominated by a few wealthy merchant manufacturers and fustian-dealing families, notably the Chethams, the Booths, the Wrigleys, and the Byroms. These formed a new social elite below the landed gentry, such as the Stanley and Strange families, who estates incorporated Cheetham and the open farmland around the present study area (Hartwell 2001, 299).

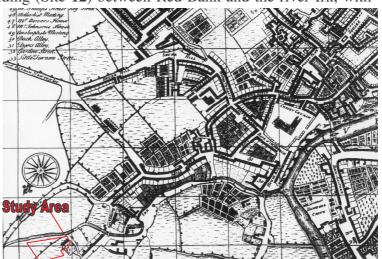
- 3.2.16 *The Industrial Period:* in his tour of the country in the 1720s, Daniel Defoe (1727, 219) noted that Manchester had '*extended in a surprising manner*, *being almost double to what it was a few years ago*', reflecting further expansion the textile trade (Baines 1835). A good impression of the extent of settlement is provided by an engraving of the town in *c*1761, and whilst the present study area is beyond the edge of the depicted area, the west bank of the river Irk in the vicinity is shown as largely undeveloped. By the 1790s, Manchester's thriving export market was beginning to displace London as a centre of overseas trade in cotton cloth (Edwards 1967, 176), reflecting great improvements to the transport network across the North West. Consequently, Manchester '*attracted a dynamic and increasingly cosmopolitan merchant community eager to exploit the town's proximity to the new centres of production*' (Kidd 1996, 29).
- 3.2.17 The first significant improvement in transport infrastructure was the completion of the Mersey Irwell Navigation in 1734, forming a fairly efficient link to the expanding port of Liverpool. Wharfage facilities for boats of up to 50 tons were provided by a quay established on the Manchester side of the river in 1735 (George and Brumhead 2002, 22). The upper limit of the navigation was extended in the 1840s to the new Victoria Bridge Quay at Hunt's Bank, a short distance from the present study area. This important trading route was augmented by the canal network, which developed after the completion of the Worsley Canal to Castlefield in 1765 (Hadfield 1994, 65).
- 3.2.18 The introduction of steam-powered rotary beam engines, and their application to cotton spinning during the late eighteenth century, proved to be the basis for the phenomenal expansion of Manchester as a manufacturing centre of national importance. This was coupled with an explosion in the population; in 1773, the population of Manchester was estimated to be 22,481, but had tripled to 75,281 by 1801. It was during this period that the Red Bank area experienced its first real development, initially as a middle-class residential with some industrial activity along the bank of the river Irk. However, the subsequent industrialisation of the Irk valley resulted in many early residents leaving for more salubrious suburbs (Williams 1985, 177). The construction of Victoria Railway Station and the Leeds Extension Line during 1843-4, and the subsequent of population, which was to contribute to the steep social decline of Red Bank (*ibid*).
- 3.2.19 Red Bank became a focus for the textile finishing industries, and a concentration of dye works became established around the present study area during the first half of the nineteenth century. During this period, the dyeing process utilised natural dyes, and involved intense preparation of both cloth and yarn, which necessitated large amounts of power and water (Nevell *et al* 2003, 93-4). The requirement for water made riverside locations a favourable choice for dye works, and clusters were established along the rivers Irwell, Irk and Medlock, from where complex systems of leats were frequently built to channel water to the works. Dye works contained numerous vats and washing machines, which were usually set into the floor and housed in long thin buildings of either one or two storeys (*ibid*). The industry made rapid

technological progress during the second half of the nineteenth century, with increased mechanisation and, most significantly, the introduction of synthetic dyes produced from coal-tar derivatives. Manchester emerged as an important centre for the development of synthetic dye production, forming a distinct branch of the wider chemical industry (Ashmore 1969, 135). Similarly, the manufacture of vitriol, or concentrated sulphuric acid, was of importance to the textile finishing trades, and also resulted in a highly profitable by-product in the form of Venetian red, an iron oxide (Cossons 1975, 281).

- 3.2.20 During the mid-nineteenth century, Red Bank became one of the main foci for Jewish immigrants into Manchester, attracted by spacious but cheap and easily subdivided houses; the Census Returns for 1841 and 1861 show an increase in Jewish households in Red Bank from two to 149 respectively, with a corresponding increase in population from five to 430. The bulk of the Jewish settlement was focused on Verdon Street and Fernie Street, which evolved as an area of 'immigrant trades', including cap-making, tailoring, slipper-making, and cabinet-making. People on Red Bank dwelt in houses that were erected in rows along excavated terraces cut into the sandstone escarpment, separated and supported by poorly-constructed retaining walls; on at least one occasion, a retaining wall collapsed, killing a recent Jewish immigrant (*Manchester Guardian*, 18 April 1855). Most of the residential streets were unlit, the drains were ineffective due to the topography, the wells tainted, and the '*air polluted by the pestilential effluvia of the Irk*' (Williams 1985, 177).
- 3.2.21 During the 1860s, the Jewish population of Red Bank trebled to a total of 1,153 persons, many of whom were migrants attracted to the area by cheaper housing; in 1861, cellar-dwellings in Red Bank could be rented for between 8d and 1s 9d, and cottages for between 1s 9d and 5s 6d (*Manchester Guardian*, 2 January 1861). In 1866, one Jewish observer noted the 'overcrowding of the miserably furnished houses' in Red Bank (Jewish Chronicle, 16 November 1866), and another described the area as a densely-populated district of 'close, dirty, ill-ventilated and ill-drained habitations' (quoted in Williams 1985, 273). The problems of overcrowding in poor-quality housing in the area culminated in an outbreak of an acute form of scarlatina amongst the Jewish population of Red Bank in November 1875 (op cit, 295).
- 3.2.22 Sub-standard housing across Manchester persisted into the twentieth century, demonstrated forcefully by a detailed report published in 1904 on the housing conditions in the poorest residential districts (Marr 1904). Whilst the situation was addressed in subsequent years, social investigations during the 1930s revealed that the worst housing conditions prevailed in the inner city residential ring, including Red Bank (Kidd 1996, 216).

- 3.3.1 The development of the study area may be traced reasonably well from the sequence of available historic mapping. There are several early county maps produced during the sixteenth and seventeenth centuries that cover the area, but the scale is too great to furnish any details of the use of the site. The earliest detailed cartographic sources for the study area date to the mideighteenth century.
- 3.3.2 *Eighteenth Century:* the earliest survey of the study area is provided by Casson and Berry's *Plan of Manchester and Salford*, which was first published in 1741, with revised editions published in 1745, 1746 and 1755 (Thomson 1966, 169-70). These all show the study area to have been situated on the northern fringe of the expanding town of Manchester, forming part of a semi-rural landscape. The area is shown to have been composed largely of enclosed fields, although Red Bank road was evidently a thoroughfare by this date, with some development along its eastern side. This comprised a block of buildings with small enclosed plots to the rear. The map also appears to depict a large detached building (Site 12) between Red Bank and the river Irk, with

an enclosed plot of land that is seemingly used as gardens or an orchard, although the detail is unclear. This building straddles the north-western corner of the present study area, bounded to the south by what was to become known as Horrocks Lane.



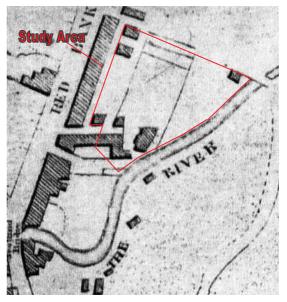
Extract from Casson and Berry's map of 1741, showing study area

3.3.3 The most detailed of the eighteenth-century maps to show the study area is that produced by William Green, which was published in 1794 (Fig 2). This shows some development of the study area and its immediate environs relative to Casson and Berry's map, reflecting the rapid expansion of Manchester during the late eighteenth century. The erection of another block of properties along the eastern side of Red Bank road represent ribbon development along a main route into Manchester from the north-east, whilst the creation of Bank Red Bank, which forms the north-western boundary of the present study area, mark the start of infilling of land down to the river Irk. Notably, Union Bridge across the river Irk has been built, improving access to the area and acting as a catalyst for future development. The bridge led to what was to become Rogers Street, which forms the north-eastern edge of the present study area, although this does not appear to have been fully established at the time of Green's survey. The outlines of two roads to the north of Rogers Street are also shown, traversing land belonging to Messrs Booth and Wild. It is probable that these

had not actually been built at this time, and were merely prospective, but demonstrate that the area was on the verge of intensive development. Similarly, the line of Back Foundry Street is evident within the north-western part of the study area, although it is debatable whether this had actually been constructed. The detached structure shown on Casson and Berry's map is shown to have been expanded or replaced by a wide U-shaped range of buildings, which subsumed the putative garden or orchard to the west. The building at the eastern end of this range (Site 16) is likely to have been used for industrial purposes, whilst the block (Site 17) lining the southern edge of Foundry Street appears to be houses. The remainder of the study area is shown to have been undeveloped, except for a single detached building (Site 13) on the southern side of Rogers Street, adjacent to Union Bridge.

- 3.3.4 Industrial activity had evidently been established within the study area by the time of Green's survey. 'Mr Fletcher's Iron Foundry' is annotated on the map, and whilst it is not absolutely clear exactly which building this was, it is likely to have been the L-shaped structure at the eastern end of Foundry Street (Fig 2). Phoebe Fletcher & Co, iron forgers and founders, are entered in a trade directory for 1788 (Holme 1788, 38), whilst a trade directory for 1794 lists Phoebe Fletcher at the 'Old Iron Foundry' on Foundry Lane, suggesting the works to have been of some antiquity (Scholes 1794, 45). It is perhaps surprising that there were few iron founders active in Manchester and Salford during the late eighteenth century; a trade directory for 1788 lists only nine such firms (Holme 1788), although the rapid development of the engineering industries resulted in some 30 such firms in Manchester by the end of the century (Musson and Robinson 1960, 215).
- 3.3.5 An irregular-shaped structure to the south of the foundry appears to be too large for a domestic property, and probably represents another industrial building; this may have been occupied by Mark Blinkhorn, a hat dyer (Scholes 1797, 15), although firm evidence is lacking. Three buildings lining the south-eastern side of Back Red Bank may represent domestic properties, possibly

early examples of the back-toback type dwellings that came to characterise workers' housing in Manchester. The information provided by Green's map is reproduced on a plan published by Bancks and Thornton in 1800, which was probably surveyed during the previous year. This plan, however, is not as detailed as that of Green's and does not furnish much additional information of the study area. The omission of the field boundary to north of the foundry, the however, may suggest changes in land ownership, paving the way



for further development of the area. Extract of Bancks and Thornton's plan of 1800

Nineteenth Century: one of the earliest maps of the area for the nineteenth 3.3.6 century is that produced by Aston in 1804. This was published at a large scale, and cannot be relied upon for elucidating details of individual buildings. Nevertheless, it does indicate some development along the southern edge of Rogers Street, which had evidently been fully established by this date. In other respects, Aston's map confirms the detail provided by Green's survey. A trade directory for the same year identifies Thomas Fletcher as occupying the 'old iron foundry', and Mark Blinkhorn as a dyer (Dean and Co 1804). The successive available maps, produced by Pigot in 1819 (Fig 3) and Johnson in 1820, are similarly both at a large scale, although some important details of the study area may be observed. Notably, a large U-shaped range of buildings (Site 7) are shown to have been erected in the centre of the study area, fronting the south-eastern side of Back Foundry Lane, which is annotated as such on Pigot's map. The function of the building is not identified, but it had subsumed 'Mr Fletcher's Iron Foundry' and the large irregular-shaped

building to the south-east. Thomas Fletcher is not listed in Pigot and Dean's trade directory for 1821-2, indicating that he was no longer in business, and no other iron founders are entered for Foundry Street. Other entries in this directory provide ample evidence for the area having become a focus for the textile finishing, especially dyeing. On Rogers Street, for instance, were the premises of John Ridgeway and J&R Buckley, whilst Robert Blinkhorn occupied premises on Foundry Street, Alice Clegg and James Hulme established dying businesses on Hargreaves Street, and Johnson's dye works was built on Horrocks Lane.



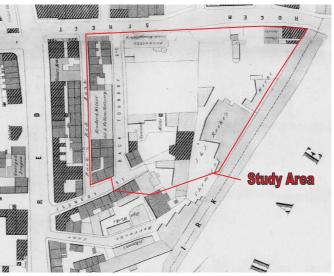
Extract from Johnson's map of 1820

- 3.3.7 The land to the east of the new building complex up to the river Irk is shown to have remained undeveloped, except for the single building within the eastern corner of the study area, which was depicted on Green's map. Johnson's map is one of the few cartographic sources to provide some indication of the topography of the area, and shows the study area to lie at the valley side that rose up from the western side of Red Bank road to Cheetham Road.
- 3.3.8 Bancks and Co's *Map of Manchester and Salford*, published in 1831, provides a more detailed plan of the study area (Fig 4). The large U-shaped range of buildings that straddles the western boundary of the study area is identified as a dye works, and is shown to have comprised several buildings. The main entrance was seemingly at the eastern end of Foundry Street, flanked by buildings that are likely to have been offices, the southern of which may have incorporated the structure shown on Casson and Berry's map. The main

processing plant was probably to the rear of the complex, within the south-western part of the present study area.

- 3.3.9 The land between the dye works and the river Irk is shown to have been developed since the publication of Johnson's survey, with the erection of a substantial building that is identified on the map as a chemical works. A search of the available trade directories reveals that this works was occupied by Rooke & Hunter, who are listed as 'iron and red liquor manufacturers' (Pigot 1841, 71). The manufacturer of iron and red liquor was a fairly specialised trade, indeed only three such manufacturers in Manchester and Salford are listed in Pigot's trade directory of 1841.
- 3.3.10 Bancks and Co's map also confirms that the two blocks of buildings in the plot between Back Red Bank and Back Foundry Lane were indeed domestic properties, which included back-to-back terraced housing. A narrow alley from Back Red Bank seemingly provided access to a courtyard within the southern block of houses. The area in between is shown as open land, as are two plots on the eastern side of Back Foundry Lane, between the dye works and Rogers Street. The properties lining the southern edge of Foundry Street are also clearly shown to have comprised dwellings.
- 3.3.11 The layout of the study area during the mid-nineteenth century is depicted on two detailed plans: the Ordnance Survey 60": 1 mile map, which was surveyed in 1848-9 and published in 1850 (Fig 5), and Adshead's *Plan of the Townships of Manchester*, also published in 1850. Both maps show largely the same configuration of buildings, although some differences may be noted in their perceived use. The houses between Back Red Bank and Back Foundry Lane are as depicted on Bancks and Co's map, and the absence of surveyed cellar lights suggests that none contained basements. The empty plot between the blocks of houses is shown to have been developed for commercial premises,

the Ordnance Survey labelling the building as Red Bank Mill (Cotton), and Adshead indicating it to be an oil and tallow refinery. Adshead's map also identifies а large rectangular building the corner on of Rogers Street and Back Foundry Lane as a card manufactory, although it is not marked on the Ordnance Survey map.



Extract from Adshead's map of 1850

3.3.12 The annotation on Adshead's map is confirmed in trade directories, which list Daniel Foxwell as a 'patent card maker' on Rogers Street (Slater 1850, 87). Foxwell had evidently relocated to Rogers Street recently, as he is listed in on Bromley Street in earlier directories (Slater 1848, 102). A small rectangular and circular structure situated against the southern corner of this building may represent elements of the steam-raising plant, namely the boiler house and chimney, although this cannot be corroborated from documentary sources. Whilst some of the dye works in the vicinity remained in production, that in the centre of the study area is shown to have been partially converted for use as a chemical works; this had been occupied by Eli Atkin, a 'manufacturing chemist', since the early 1840s (Pigot 1841, 57; Slater 1855, 22). J & J Rooke's chemical works, situated immediately to the south-east, is shown to have expanded slightly. The detached building in the eastern corner of the study area is identified on Adshead's map as the Union Street Vaults public house, and is abutted by new retail premises; the latter is listed in trade directories subsequently as a pawnbrokers.

- 3.3.13 A major addition to the environs of the study area during this period was the construction of the Lancashire and Yorkshire Railway, which ran along a viaduct over the river Irk immediately to the south.
- 3.3.14 In 1892, the Ordnance Survey published the First Edition 25": 1 mile map of the area, which was surveyed in 1888-9 (Fig 6); the survey was also published in 1891 at a scale of 10': 1 mile. These maps show little change to the configuration of buildings occupying the study area, although it is probable that some had changed function. The card manufactory is not labelled, and may not have been in operation, whilst the Red Bank Oil Works to the south represent the most significant addition to the study area that can be identified from cartographic sources, and comprised six small, detached rectangular structures. This occupied an area that is seemingly depicted as vacant land on the Ordnance Survey map of 1850 and Adshead's map. The 10': 1 mile map of 1891 labels Rooke's chemical works, implying this to have continued in production. Eli Atkin's chemical works immediately to the north-west, however, had closed by this date. Atkin's is listed as a 'manufacturing chemist' in a directory for 1869, but his commercial premises are given as Greenwood Street (Slater 1869).
- 3.3.15 A significant addition to the wider area by this date had been the construction of another railway viaduct, which carried the Prestwich Branch of the Lancashire and Yorkshire Railway. It was erected parallel to the southern edge of Red Bank road, effectively enclosing the study area between railways, and will have necessitated the demolition of late eighteenth-century properties along Red Bank road. Many of these properties housed small businesses and retail outlets, thus having a significant impact on the infrastructure of the local community. Similarly, several domestic properties on the south-eastern bank of the river Irk were evidently demolished to allow for the construction of the Union Bridge Iron Works.
- 3.3.16 In general terms, the sequence of insurance plans produced by Charles Goad from 1899 are frequently an extremely useful source of detail for most studies of commercial premises in Manchester. However, a search of the index to these maps revealed that Red Bank was one of the few areas of the city centre that was omitted from Goad's surveys.

3.3.17 *Twentieth Century:* the next edition of Ordnance Survey mapping, revised in 1905-6 and published in 1908, shows the Union Bridge Iron Works to have relocated from the south-eastern bank of the river Irk to within the study area, although seemingly retaining one building on the original site. This relocation was possibly in response to an expansion of the Lancashire and Yorkshire Railway, which presumably involved the construction of an additional viaduct. The iron works occupied most of the study area to the south-east of Back Foundry Lane, subsuming J & J Rooke's chemical works and the Red Bank Oil Works. The remodelling of the iron works appears to have been coupled

with the construction of two new footbridges across the river Irk, which probably linked the iron-working two sites. A photograph taken in 1904, showing the Roger Street elevation of iron works, the depicts the building to have been of three storeys.



Photograph of Roger Street in 1904, showing the entrance to the iron works in the foreground, and the former card manufactory in the centre-left. The railway bridge is visible in the background

- 3.3.18 The next available map of the study area is provided by the Ordnance Survey's 10': 1 mile edition of 1912, and the 25": 1 mile map published in 1922 (Fig 7). These maps replicate the detail provided by the 1908 map, although listings in trade directories provide further information. The card manufactory on Roger Street, for instance, was occupied by Henry & Joseph Buckley, coopers, by this date (Slater 1911, 605). This business was evidently short lived, however, as it is not listed in a trade directory for 1921 (Slater 1921), and the northwestern part of building is shown on the map of 1922 to have been partially converted to an electric sub-station. Foundry Street was re-named to Faber Street during this period.
- 3.3.19 The domestic properties at the northern end of Back Foundry Lane have been demolished, although those to the south remained extant (Fig 7). The industrial building between the houses on Back Foundry Street was in use as the Star Public Saw Mill, wood turners, by 1911 (Slater 1911, 272).
- 3.3.20 The Ordnance Survey 1:1250 map of the study area, published in 1952, shows the iron works to have expanded even further, subsuming the properties that formerly fronted onto Roger Street, including the Union Vaults public house and the adjacent pawnbrokers. The houses at the southern end of Back Foundry Street have been demolished by this date, although the Star Saw Mills remained in business.

3.4 SITE VISIT

- 3.4.1 The site visit confirmed that the study area is presently occupied entirely by a car park (Plates 1 and 2), which is essentially flat and open ground with a rough surface, although areas of concrete surfacing may represent the floor of the former iron works (Site **15**). The area does not contain any extant buildings of archaeological significance, although the fragmentary vestiges of buildings of probable nineteenth-century date survive along the south-eastern boundary of the study area, lining the bank of the river Irk.
- 3.4.2 Several businesses occupy commercial premises beneath the railway viaduct arches on Back Red Bank beyond the north-western boundary of the study area which, significantly, lies at a slightly lower level than the present car park (Plate 3). This suggests that the demolition of Union Bridge Iron Works may have resulted in the raising of land levels across the study area, presumably through the deposition of rubble, offering a good potential for buried remains to survive *in situ*. The former card manufactory/cooperage (Site 11) and other properties on the western side of Roger Street have also been cleared (Plate 4).

4. GAZETTEER OF SITES

Site number	01
Site name	Red Bank Funerary Urn
NGR	SJ 8430 9940
Site type	Findspot
Period	Anglo-Saxon
SMR No	1254.1.0
Stat. Designation	on None
Sources	Morris 1983
Description	A funerary urn with stamped decoration typical of the Saxon period
_	was found during construction work at Red Bank in c1850, although
	the exact place of discovery is uncertain. The decoration consists of
	horizontal linear ornamentation and two rows of portcullis stamps
	above the shoulder. The urn's present whereabouts is not known.
	The imprecise location of the findspot is problematic, but
	cartographic evidence (OS 1850 and Adshead's map of 1850)
	indicates where building may have been taking place along Red
	Bank at about the time of the find.
Assessment	The site is recorded as lying outside of the study area boundary, and
Assessment	will not be directly affected by the proposed development, although
	the possibility of associated finds or features of this period within the
	study area cannot be discounted.
Site number	02
Site name	Union Bridge
NGR	SJ 8445 9934
Site type	Bridge
Period	Post-medieval, eighteenth century onwards
SMR No	11696.1.0
Stat. Designation	n Listed Building No. 458831
Sources	Green's map 1794
Description	A small public road bridge over the river Irk, constructed of
_	sandstone ashlar blocks, forming a single segmental arch span with
	plain voussoirs. It has no parapet, but does incorporate iron railings
	along the south side. It is depicted on Green's map of 1794, and is
	makahly of a late eighteenth contumy date

Assessment probably of a late eighteenth-century date. The site is recorded as lying outside of the study area boundary, and will not be directly affected by the proposed development.

Site number	03
Site name	Cat Nest Houses
NGR	SJ 8424 9935
Site type	Houses
Site type	Houses
Period	Post-medieval; sixteenth century onwards

SMR No	11252.1.0
Stat. Designation	on None
Sources	Green's map 1794; Bancks and Co's map 1831; Ordnance Survey
	maps 1933 and 1962; Photograph MCL m05167
Description	A row of three houses that certainly dated to the eighteenth century,
	but may be as early as the sixteenth century, one of the buildings
	may have been the George and Dragon pub. The site was altered
	when it became part of the Red Bank Spring and Axle works in
	1962, and few upstanding remains currently survive.
Assessment	The site is recorded as lying outside of the study area boundary, and
	will not be directly affected by the proposed development.

Site number	04
Site name	Rope Manufactory
NGR	SJ 8420 9935
Site type	Building
Period	Industrial, nineteenth century
SMR No	11253.1.0
Stat. Designation	on None
Sources	Green's map 1794; Bancks and Co's map 1831; Adshead's map
	1850; Ordnance Survey maps 1915, 1933 and 1962
Description	The site is visible on cartographic sources as a long linear feature in
	the urban landscape, from which the rope works can be dated to
	1818-1905. The site was partly replaced by public baths during the
	early twentieth century. Cartographic evidence demonstrates that
	three other ropery sites were active in the area during the nineteenth
	century, one to the north, one to the north-east and one to the south
	of the site.
Assessment	The site is recorded as lying outside the study area boundary, and
	will not be directly affected by the proposed development.
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Site number	05
Site name	Iron and Red Liquor Works
NGR	SJ 8446 9941
Site type	Site of
Period	Industrial, early nineteenth century
SMR No	-
Stat. Designatio	on None
Sources	Slater 1821
Description	A listing in Slater's commercial directory of 1821 lists Robert Green as an iron and red liquor manufacturer at Hargreaves Street, just to the north of the present site. The site was one of several mid-nineteenth- century chemical works in the area, cumulatively forming an important group of early chemical-manufacturing plants in Manchester.
Assessment	The site is recorded as lying outside the study area boundary, and will not be directly affected by the proposed development.

Site number	06
Site name	Red Bank Chemical Works
NGR	SJ 8436 9930
Site type	Site of and remains
Period	Industrial, early nineteenth century
SMR No	-
Stat. Designation	on None
Sources	Bancks and Co's map 1831; Ordnance Survey 1850.
Description	Bancks and Co's 1831 map clearly shows the chemical works along
_	the south-east part of the proposed development site, fronting onto
	the river Irk, although the exact date of construction is not known.
	The site is also marked on the 1850 Ordnance Survey map, and
	Adshead's map of the same year. Entries in trade directories for the
	mid-nineteenth century list the occupants as Rooke & Hunter, and
	latterly J & J Rooke, iron and red liquor manufacturers. This was one
	of an important group of early chemical works in the area; Pigot's
	trade directory for 1841 lists only three such works in the whole of
	Manchester and Salford. The works was demolished between 1889
	and 1905.
Assessment	The site lies along the southern part of the study area. There is
	potential for buried archaeological remains of high local
	significance, which may be affected by the proposed development.

Site number	07
Site name	Iron Foundry/Dye Works/Chemical Works
NGR	SJ 8432 9929
Site type	Site of foundry, dye works and chemical works
Period	Industrial; late eighteenth century
SMR No	9859.1.0
Stat. Designation	on None
Sources	Green's map 1794; Bancks and Co's map 1831
Description	Green's map of 1787-94 marks two buildings within an enclosed
I.	courtyard, one of which is identified as 'Mr Fletcher's Iron
	Foundry'; an L-shaped building (Site 16) forms the southern edge of
	the yard. Scholes' trade directory for 1794 describes the site as the
	'old iron foundry', suggesting it to be of some antiquity. Bancks and
	Co's map identifies the site as a dye works, forming one of a
	significant concentration of such works in the Red Bank area. No
	evidence is provided for the power or water-management features.
	By 1841, the site was occupied partially by Eli Atkin, a
	manufacturing chemist. His chemical works, and a smithy, are
	identified on the 1850 Ordnance Survey map and Adshead's map of
	the same year.
Assessment	The site is recorded as lying within the study area boundary. There is
	potential for buried archaeological remains of high local
	significance, especially those pertaining to the dye and chemical
	works, which may be affected by the proposed development; any
	physical remains of the iron foundry are likely to have been
	destroyed by nineteenth-century development.
	· · · · ·

Site number Site name NGR Site type Period SMR No	08 Red Bank Mill SJ 8431 9934 Site of Industrial, mid-nineteenth century
Stat. Designation	on None
Sources	Ordnance Survey 1850 60": 1 mile map; Adshead's map of 1850
Description	A cotton mill situated between Back Foundry Street and Back Red
	Bank, shown on historic mapping as a single rectangular building. The same building is annotated upon Adshead's map of 1850 as an oil and tallow refinery. By the early twentieth century, it had been converted to a saw mill. No nineteenth-century cartographic evidence for the position of the steam plant, suggesting it may have been situated internally.
Assessment	The site lies along the northern edge of the study area boundary. There is potential for buried archaeological remains of high local significance, which may be affected by the proposed development.

Site number	09
Site name	Back-to-back houses
NGR	SJ 8430 9931
Site type	Site of
Period	Industrial, late eighteenth to mid-nineteenth century
SMR No	-
Stat. Designatio	n None
Sources	Green's map 1794; Bancks and Co's map 1831
Description	A block of late eighteenth-century domestic properties, including
Assessment	back-to-back and court dwellings, situated at the southern end of a plot of land between Back Red Bank and Back Foundry Lane. The site lies along the northern edge of the study area boundary. There is potential for buried archaeological remains of high local significance, which may be affected by the proposed development.

Site number	10
Site name	Back-to-back houses
NGR	SJ 8433 9937
Site type	Site of
Period	Industrial, mid-nineteenth century
SMR No	-
Stat. Designatio	n None
Sources	Green's map 1794; Bancks and Co's map 1831
Description	A block of late eighteenth-century domestic properties, including
Assessment	back-to-back and court dwellings, situated at the northern end of a plot of land between Back Red Bank and Back Foundry Lane. The site lies along the northern edge of the study area boundary. There is potential for buried archaeological remains of high local significance, which may be affected by the proposed development.

Site number Site name NGR Site type Period SMR No	11 Card Manufactory SJ 8434 9937 Site of Industrial, mid-nineteenth century
Stat. Designation	on None
Sources	Adshead's 1850 Map of the Townships of Manchester
Description	A card manufactory, concerned with the production of textile machinery components, situated on the corner of Roger Street and Back Foundry Street. A photograph taken in 1904 shows this to have been a three-storey building of brick construction. Cartographic evidence suggests that it may have been steam-powered, and that the steam-raising plant and chimney were situated adjacent to the southern corner of the building. By 1911, the works was occupied by a cooperage firm.
Assessment	The site lies along the northern edge of the study area boundary. There is potential for buried archaeological remains of high local significance, which may be affected by the proposed development. In particular, the buried remains of the steam-raising plant may survive.

Site number	12					
Site name	Building					
NGR	SJ 8430 9928					
Site type	Site of					
Period	Post-medieval, eighteenth century					
SMR No	-					
Stat. Designatio	on None					
Sources	Casson and Berry's 1741 map; Green's map of 1794					
Description	An ill-defined rectangular building, seemingly with an associated garden or orchard, shown on the northern side of Horrocks Lane on					
	Casson and Berry's map of 1741. The same building is depicted on					
	Green's map of 1794, although it had evidently been incorporated or					
	subsumed by Site 16.					
Assessment	The site lies partially along the northern edge of the study area					
	boundary. There is potential for buried archaeological remains of					
	significance, which may be affected by the proposed development.					

Site number	13				
Site name	Building				
NGR	SJ 8441 9934				
Site type	Site of				
Period	Post-medieval, eighteenth century				
SMR No	•				
Stat. Designatio	n None				
Sources	Green's map of 1794; Bancks and Co's map 1831; Adshead's map				
	1850; Ordnance Survey 1850.				

Description	A detached building lying on the southern edge of Roger Street, adjacent to Union Street bridge (Site 02), shown on Green's map of 1794. It is marked on Adshead's map as the Union Street Vaults public house, and as a hotel on the Ordnance Survey map of 1892.
Assessment	The site lies partially along the eastern edge of the study area
	boundary. There is potential for buried archaeological remains of
	significance, which may be affected by the proposed development.
	In particular, the area to the rear of the building appears to have
	remained as open land until the twentieth century.

Site number	14					
Site name	Red Bank Oil Works					
NGR	SJ 8433 9935					
Site type	Site of					
Period	Industrial, late nineteenth century					
SMR No	-					
Stat. Designation	on None					
Sources	Ordnance Survey 1892.					
Description	An oil works lying to the south-east of Back Foundry Street, within					
	the northern part of the study area.					
Assessment	The site lies within the northern part of the study area boundary.					
	There is little potential for buried remains of archaeological					
	significance.					
	significance.					

Site number	15					
Site name	Union Bridge Iron Works					
NGR	SJ 8434 9933					
Site type	Site of					
Period	Industrial, twentieth century					
SMR No	-					
Stat. Designation	on None					
Sources	Ordnance Survey 1908.					
Description	A large iron works that had been erected by 1908, and was demolished during the later twentieth century. Its construction necessitated the demolition of many of the industrial sites identified in the present study, although the modern ground level suggest that there may be potential for buried remains to survive beneath the floor of the former iron works.					
Assessment	The site lies partially along the eastern edge of the study area boundary. There is little potential for buried archaeological remains.					

Site number	16
Site name	Building
NGR	SJ 8429 9929
Site type	Site of
Period	Industrial, late eighteenth century
SMR No	-

Stat. Designation	on None				
Sources Green's map 1794; Bancks and Co's map 1831					
Description	An L-shaped building of probable industrial function situated beyond				
	the southern end of Faber Street, and partially within the south-				
	western part of the study area. The building appears on Green's map				
	of 1794, and may have formed part of Johnson's dye works on				
	Horrocks Lane. It may have incorporated a rectangular structure				
	(Site 12) shown on Casson and Berry's map of 1741, although the				
	detail is unclear.				
Assessment	The site lies along the northern edge of the study area boundary.				
	There is potential for buried archaeological remains of high local				
	significance, which may be partially affected by the proposed				
	development.				

Site number	17				
Site name	Houses				
NGR	SJ 8428 9929				
Site type	Site of				
Period	Industrial, late eighteenth century				
SMR No	-				
Stat. Designation	on None				
Sources	Green's map 1794; Bancks and Co's map 1831				
Description	A terrace of late eighteenth-century domestic properties situated				
Assessment	along the southern side of Foundry Street, shown on Green's map of 1794. Subsequent mapping indicates that these were larger than the houses situated between Back Red Bank and Back Foundry Street (Sites 9 and 10), and are unlikely to have been of the back-to-back type. The site lies immediately beyond the south-western edge of the study area boundary, although the site of the south-easternmost house encroaches into the proposed development area. There is potential for buried archaeological remains of high local significance, which may be partially affected by the proposed development.				

Site number	18				
Site name	Building				
NGR	SJ 8439 9935				
Site type	Site of				
Period	Industrial, early nineteenth century				
SMR No	-				
Stat. Designatio	n None				
Sources	Bancks and Co's map 1831				
Description	A building associated with a public weighing machine, situated on				
	the southern side of Roger Street.				
Assessment	The site lies on the north-eastern boundary of the study area. There is				
	little potential for buried archaeological remains of significance.				
Stat. Designatio Sources Description	 None Bancks and Co's map 1831 A building associated with a public weighing machine, situated on the southern side of Roger Street. The site lies on the north-eastern boundary of the study area. There is 				

5. SIGNIFICANCE OF THE REMAINS

5.1 INTRODUCTION

5.1.1 In total, 18 sites of archaeological significance were identified during the assessment, of which 13 lie within the boundary of the study area (Fig 9). None of these sites included Scheduled Monuments, although on site (Union Street Bridge, Site 2) is designated as of architectural or historical significance as a Listed Building. All of the other sites identified are non-statutory, and, with the exception of one site from the early medieval period (Site 1), all are post-medieval in date (Sites 2-18).

Site	Туре	Below-ground/ earthworks	Period	Area located
01	Funerary Urn	Findspot	Anglo-Saxon	Red Bank, poorly located but probably outside of site
02	Union Bridge	Extant bridge	Late eighteenth century	Across river Irk, outside of site
03	Three houses	Below-ground	Sixteenth century onwards	Red Bank, outside of site
04	Rope Manufactory	Below-ground	Eighteenth century	Red Bank, outside of site
05	Iron and Red Liquor Works	Below-ground	Early nineteenth century	Hargreaves Street, outside of site
06	Red Bank Chemical Works	Below-ground	Early nineteenth century	Within south-eastern part of site
07	Iron Foundry/Dye Works/Chemical Works	Below-ground	Eighteenth century onwards	Within central part of site
08	Red Bank Mill	Below-level	Mid-nineteenth century	Within northern part of site
09	Back-to-back housing	Below-ground	Late eighteenth century onwards	Within northern part of site
10	Back-to-back housing	Below-ground	Late eighteenth century onwards	Within northern part of site
11	Card manufactory	Below-ground	Mid-nineteenth century	Within northern part of site
12	Building	Below-ground	Eighteenth century onwards	Partially within western part of site
13	Building	Below-ground	Late eighteenth century	Within eastern part of site
14	Red Bank Oil Works	Below-ground	Late nineteenth century	Within northern part of site
15	Iron Works	Below-ground	Twentieth century	Within centre of site
16	Building	Below-ground	Late eighteenth century	Partially within south-western part of site
17	Housing	Below-ground	Late eighteenth century	Partially within south-western part of site
18	Weighing machine	Below-ground	Early nineteenth century	Within north-eastern part of site

Table 2: Summary of gazetteer sites

5.2 CRITERIA

- 5.2.1 There are a number of different methodologies used to assess the archaeological significance of sites; that to be used here is the 'Secretary of State's criteria for scheduling ancient monuments' which is included as Annex 4 of PPG 16 (DoE 1990). The sites previously listed (*Section 4*, above) were each considered using the criteria, with the results below.
- 5.2.2 *Period:* the earliest known site within the environs of the study area is a funerary urn of Anglo-Saxon date, although this is poorly located. The sites within the study area are all mid-eighteenth century onwards.
- 5.2.3 *Rarity:* the study area contains several sites which can be considered to be of regional rarity:
 - the poorly-located Anglo-Saxon funerary urn (Site 1);
 - early nineteenth-century chemical works (Site **6**), forming a significant group, and representing early examples of works of their type;
 - the eighteenth-century iron foundry/early nineteenth-century dye works, (Site 7), and part of a probable late eighteenth-century dye works (Site 16), representing early examples of urban finishing works;
 - late eighteenth-century workers' housing (Sites 9, 10 and 17).
- 5.2.4 **Documentation:** the historical development of the study area from the late eighteenth century can be traced reasonably well from cartographic sources, and the occupants and uses of the various commercial premises may be identified from the sequence of available trade directories. Further documentary research would undoubtedly furnish additional evidence, including more precise dating of the construction of the relevant buildings, although this is unlikely to alter the outline presented in this assessment.
- 5.2.5 *Group value:* the industrial sites within the study area form part of the industrial archaeology of the Irk valley, which would both complement and offer comparison with similar remains known within other parts of Manchester, such as Ancoats. The group value is particularly high in the case of industries associated with the textile finishing trades, notably the group of dye works and chemical works. This value would be enhanced by the remains of housing occupied by workers associated with these industries.
- 5.2.6 *Survival/Condition:* there no survival of above-ground archaeological remains within the study area, except the fragmentary remains of industrial buildings along the western bank of the river Irk. The extent to which any buried archaeological remains survive beneath the modern ground surface is unknown. The intensive development of the study area during the nineteenth century is likely to have obliterated some remains from earlier periods, although cartographic evidence indicates that the area has sustained little modern disturbance, and the demolition of the last buildings to have occupied the site may have resulted in a slight raising of the ground levels. It is therefore possible that the foundations of late eighteenth- and nineteenth-century buildings may survive reasonably intact, and may contain evidence for the use of the site during the Industrial Period, although the full extent of survival within the study area is unknown.

- 5.2.7 It should also be noted that the elements of the eastern part of the study area do not appear to have been developed prior to the early twentieth century, offering some potential for undisturbed soil horizons to survive *in situ*.
- 5.2.8 *Fragility:* any surviving buried remains may be adversely affected by development, dependent upon the nature of development.
- 5.2.9 *Diversity:* the remains relate mainly to industrial, commercial and associated residential use from the late eighteenth and nineteenth centuries.
- 5.2.10 *Potential:* all sites have the potential to reveal specific information that is not available from other sources. However, given the intensive development of the study area and its environs from the late eighteenth century, the potential for remains of an earlier date to survive is low.

5.3 Assessment

5.3.1 Using the above criteria, the significance of the identified sites within the study area may be classified as high, medium, low, negligible, or unknown.

	High	Medium	Low	Negligible	Unknown
Description	Internationally and nationally important resources, legally protected and non-scheduled remains of national Importance	Regionally important resources not legally protected of a reasonably defined extent, nature and date and significant examples in a regional context	Locally important resources of low or minor importance	Resources which have little or no archaeological or historical value, or where remains may have been previously destroyed	Resources whose archaeological importance is unknown, sites of uncertain character or date
Examples	Scheduled Ancient Monuments, Listed Buildings	Burial sites, Roman roads, dense scatters of finds	Historic landscape components, old field boundaries	Modern field boundaries, drains and ponds	Single find spots, unidentified features on aerial photographs
Mitigation	To be avoided	Avoidance recommended	Avoidance not envisaged	Avoidance unnecessary	Further investigation to assess impact

Table 3:	Criteria for	determining	significance
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- 5.3.2 One site (Site **02**) is of high significance, as reflected in its Listed Building designation. The other identified sites are of low significance, although these may be considered to be of a regional or high local importance. These sites within the proposed development area include:
 - Red Bank Chemical Works (Site **6**);
 - Iron Foundry/Dye Works/Chemical Works (Site 7);
 - Steam-power plant associated with Red Bank Mill (Site 8) and Site 11;
 - Possible Dye Works (Site 16) on site of earlier building (Site 12);
 - Workers' housing (Sites 9, 10 and 17).

6. LIKELY IMPACT OF DEVELOPMENT

6.1 IMPACT

- 6.1.1 In broad terms, the archaeological impact of any development of the study area can be assessed as being either direct or indirect.
- 6.1.2 *Direct Impact:* this would involve an alteration to the physical condition of the site, which might be either positive or negative. A positive direct impact might include the removal of possible threats to the site, such excessive ground contamination derived from historic industries, whilst a negative direct impact would involve damage or destruction to any buried remains. These impacts can be refined by assessing the likely extent of the alteration to the site once a detailed design proposal has been formulated.
- 6.1.3 *Indirect Impact:* this would involve an alteration to the setting of a site, and may again be either positive or negative. Indirect impacts might, for instance, improve or detract from the appearance, understanding or appreciation of a site.

6.2 STANDING REMAINS

6.2.1 The study area does not contain any standing buildings or archaeological significance. Redevelopment of the site will not therefore have a direct impact on any extant structures within the study area, and it is considered unlikely that development will have an indirect impact on Site **02**.

6.3 SUB-SURFACE REMAINS

6.3.1 Redevelopment of the site may have a direct negative impact on buried remains in the study area, involving their damage or destruction as a result of ground-reduction works or the excavation of service trenches. The extent of any negative impact can only be established once the nature and depth of the sub-surface archaeological resource has been physically investigated, and details of the development have been devised.

7. RECOMMENDATIONS FOR ARCHAEOLOGICAL MITIGATION

7.1 INTRODUCTION

- 7.1.1 Current legislation draws a distinction between archaeological remains of national importance and other remains considered to be of lesser significance. Those perceived to be of national importance may require preservation *in situ*, whilst those of lesser significance may undergo preservation by record, where high local or regional significance can be demonstrated.
- 7.1.2 No sites have been identified within the proposed development area that may be considered as being of national importance and therefore merit preservation *in situ*. However, the study area has a potential to contain *in situ* buried remains of high local or regional importance. As such, in accordance with current planning policy guidance, these would require preservation by record should they be directly affected by future development proposals. The scope and details of any archaeological recording required in advance of redevelopment would be devised by the Assistant County Archaeologist for Greater Manchester once design proposals are known. However, in general terms, it may be anticipated that, in the first instance, a programme of archaeological evaluation will be required.

7.2 ARCHAEOLOGICAL EVALUATION

- 7.2.1 It is envisaged that a limited programme of archaeological evaluation will be required in advance of any ground-reduction works within the study area. The primary objectives of any such evaluation would be to establish to presence, character, date and extent of any buried remains. In particular, any surviving remains of the dye and chemical works in the centre and across the southern boundary of the site, the steam-power plant associated with the cotton mill and card manufactory on the northern and north-eastern boundaries respectively, and the late eighteenth-century workers' dwellings on the western boundary are likely to be priorities.
- 7.2.2 Little information pertaining to the early large urban textile finishing works exists in the current archaeological record, despite this element of the textile industry having played a important role in the eighteenth- and early nineteenth-century development of Manchester as a global leader in textile manufacturing. In particular, understanding the internal layout of such dye works would represent an academic objective. Even less is known about early chemical works, and the assessment has highlighted that the Red Bank area of Manchester incorporated an important concentration of such works.
- 7.2.3 Recent archaeological work in other parts of Manchester, including Piccadilly (OA North 2006) and Ancoats (OA North 2005), have demonstrated the value of investigating the remains of workers' housing, and the present study area includes the sites of early examples.

Site	Туре	Period	Impact	Recommendations
01	Funerary Urn	Anglo-Saxon	Unlikely to be affected	None
02	Union Bridge	Late eighteenth century	Will not be affected	None
03	Three houses	Sixteenth century onwards	Will not be affected	None
04	Rope Manufactory	Eighteenth century	Will not be affected	None
05	Iron and Red Liquor Works	Early nineteenth century	Will not be affected	None
06	Red Bank Chemical Works	Early nineteenth century	May be affected	Evaluation trenching, which should aim to establish the presence or absence of any surviving internal features
07	Iron Foundry/Dye Works/Chemical Works	Eighteenth century onwards	May be affected	Evaluation trenching, which should aim to establish the presence of any internal structures, and power and water-management features
08	Red Bank Mill	Mid-nineteenth century	May be affected	Evaluation trenching, which should target the remains of the steam- power plant
09	Back-to-back housing	Late eighteenth century onwards	May be affected	Evaluation trenching
10	Back-to-back housing	Late eighteenth century onwards	May be affected	Evaluation trenching
11	Card manufactory	Mid-nineteenth century	May be affected	Evaluation trenching, which should target the remains of the steam- power plant
12	Building	Eighteenth century onwards	May be affected	Watching brief
13	Building	Late eighteenth century	May be affected	Watching brief, focusing on the area to the rear of the building
14	Red Bank Oil Works	Late nineteenth century	May be affected	None
15	Iron Works	Twentieth century	May be affected	None
16	Building	Late eighteenth century	May be affected	Evaluation trenching, which should aim to establish the survival of any original fabric, and water-management features for the putativ dye works.
17	Housing	Late eighteenth century	May be affected	Evaluation trenching
18	Weighing	Early nineteenth	May be affected	None

724	A summary of the site-specific recommendations is presented i	n Table 4.
1.2.1	To summary of the site specific recommendations is presented i	

Table 4: Summary of site-specific recommendations

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9 ILLUSTRATIONS

9.1 FIGURES

Figure 1: Site location map

Figure 2: Extract from William Green's map of 1794, showing the study area boundary

Figure 3: Extract from Pigot's map of 1819, showing the study area boundary

Figure 4: Extract from Bancks and Co's map of 1831, showing the study area boundary

Figure 5: Extract from the Ordnance Survey 60": 1 mile map of 1850, showing the study area boundary

Figure 6: Extract from the First Edition Ordnance Survey 25": 1 mile map of 1892, showing the study area boundary

Figure 7: Extract from the Third Edition Ordnance Survey 25": 1 mile map of 1922, showing the study area boundary

Figure 8: Extract from the Ordnance Survey 1:1250 map of 1952, showing the study area boundary

Figure 9: Plan of gazetteer sites

9.2 PLATES

Plate 1: Plate 1: General view looking south-west across the study area from Roger Street

Plate 2: General view looking west across the study area from Roger Street

Plate 3: View north-east along Back Red Bank Street from Faber Street

Plate 4: View looking north-west along Roger Street, showing the railway viaduct

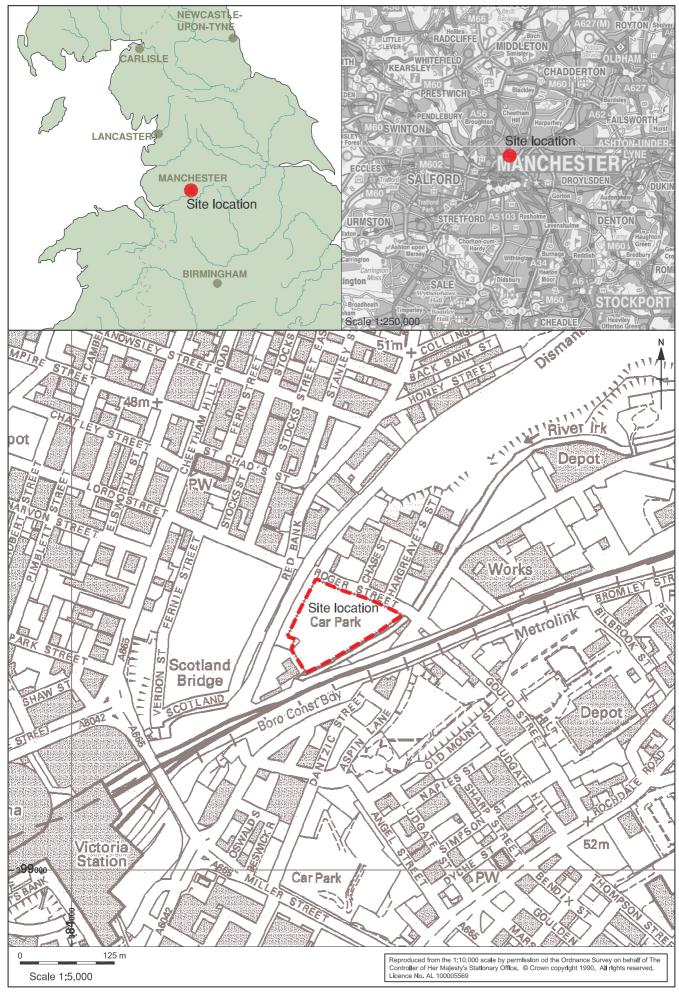


Figure 1: Site Location

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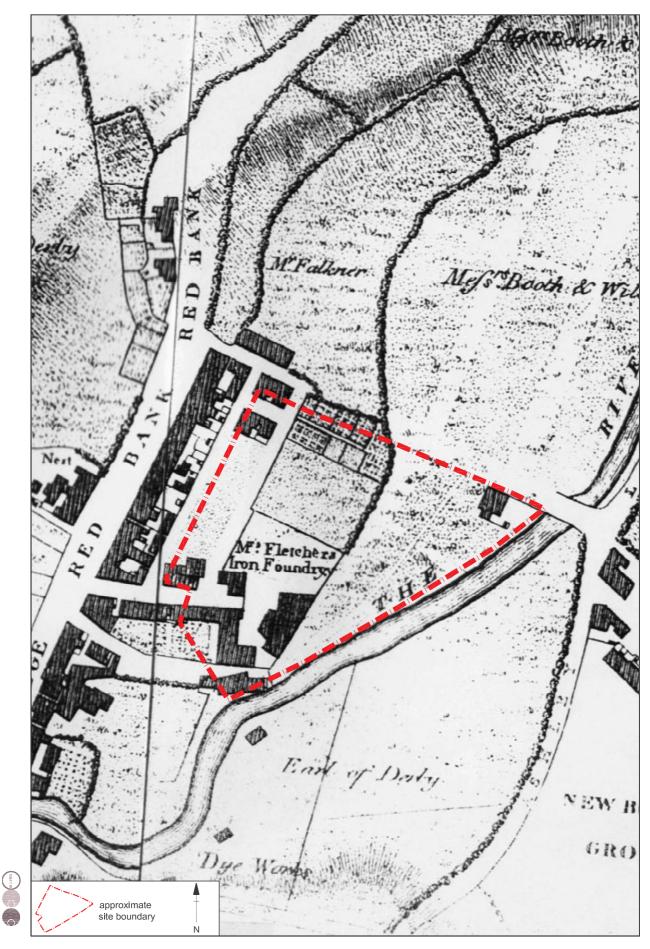


Figure 2: Extract from William Green's map of 1794, showing the study area boundary

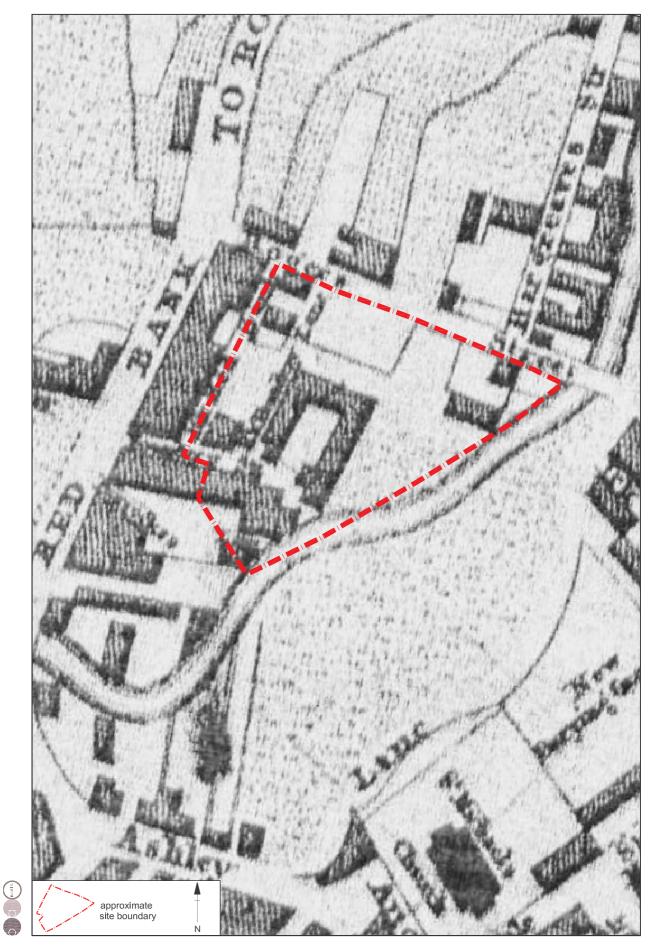
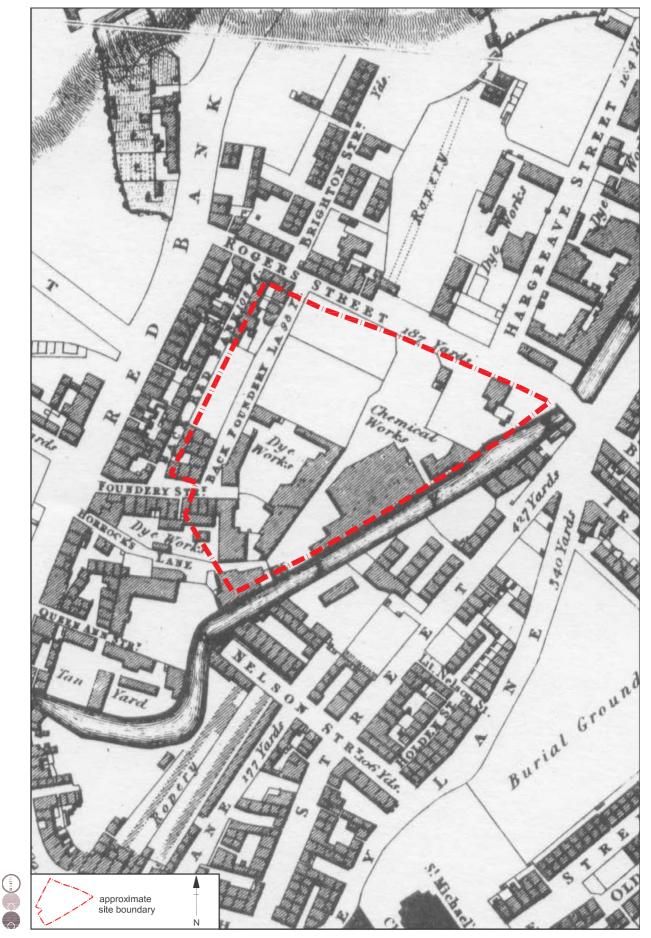


Figure 3: Extract from Pigot's map of 1819, showing the study area boundary





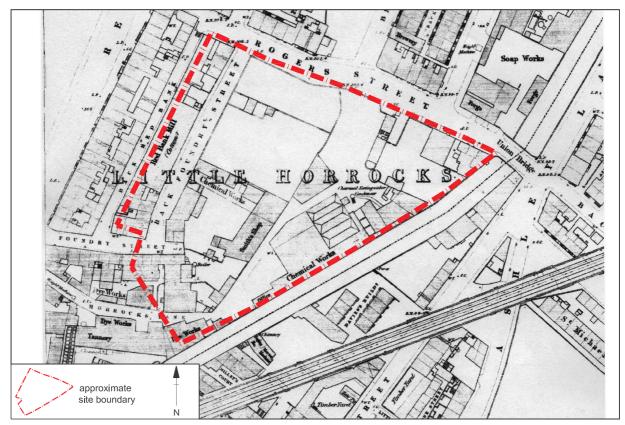


Figure 5: Extract from the First Edition Ordnance Survey 60" : 1 mile map of 1850

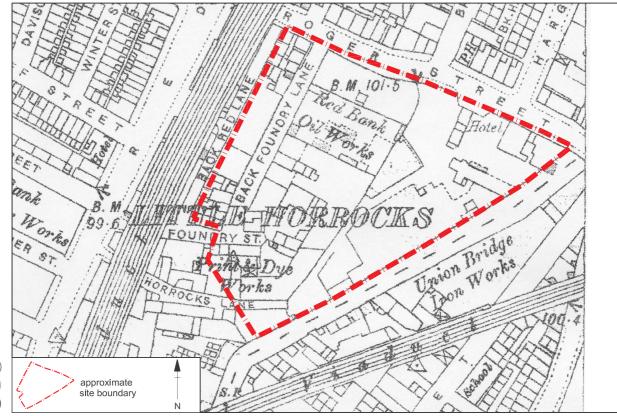


Figure 6: Extract from the First Edition Ordnance Survey 25" : 1 mile map of 1892

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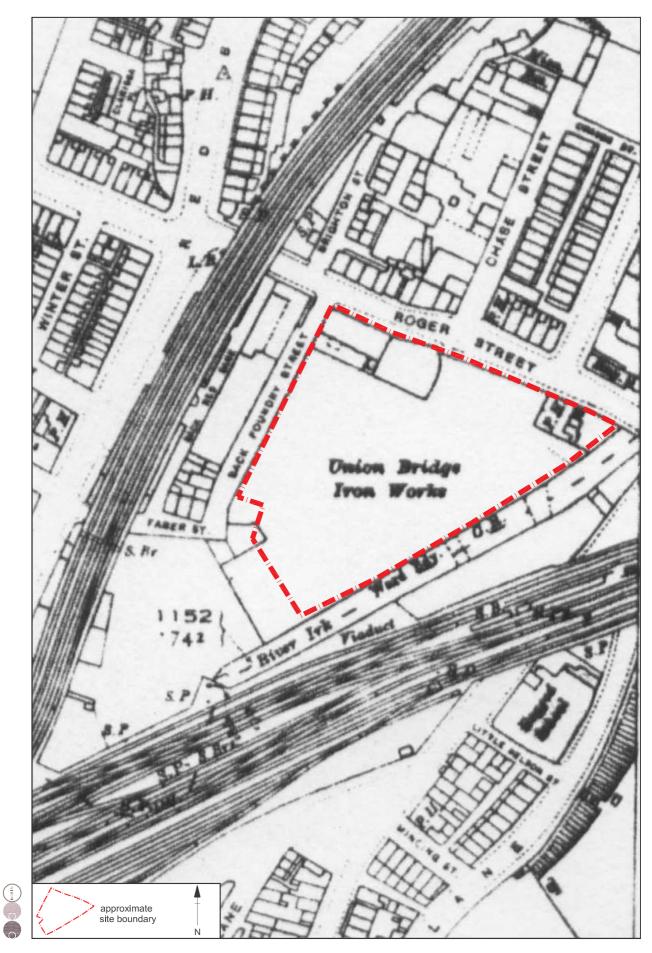


Figure 7: Extract from the First Edition Ordnance Survey 25" : 1 mile map of 1922

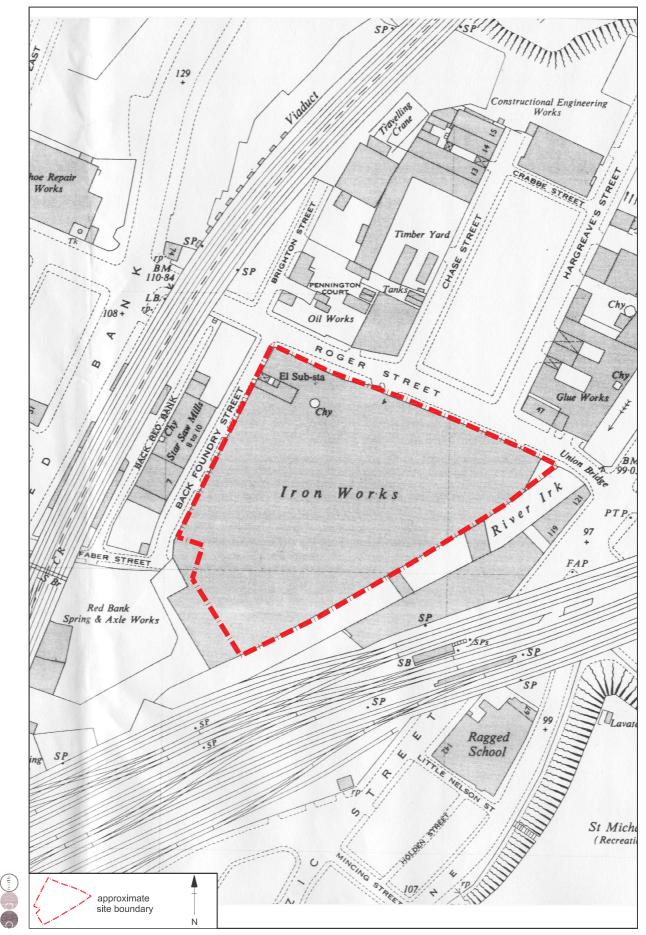


Figure 8: Extract from the Ordnance Survey 1:1250 mile map of 1952

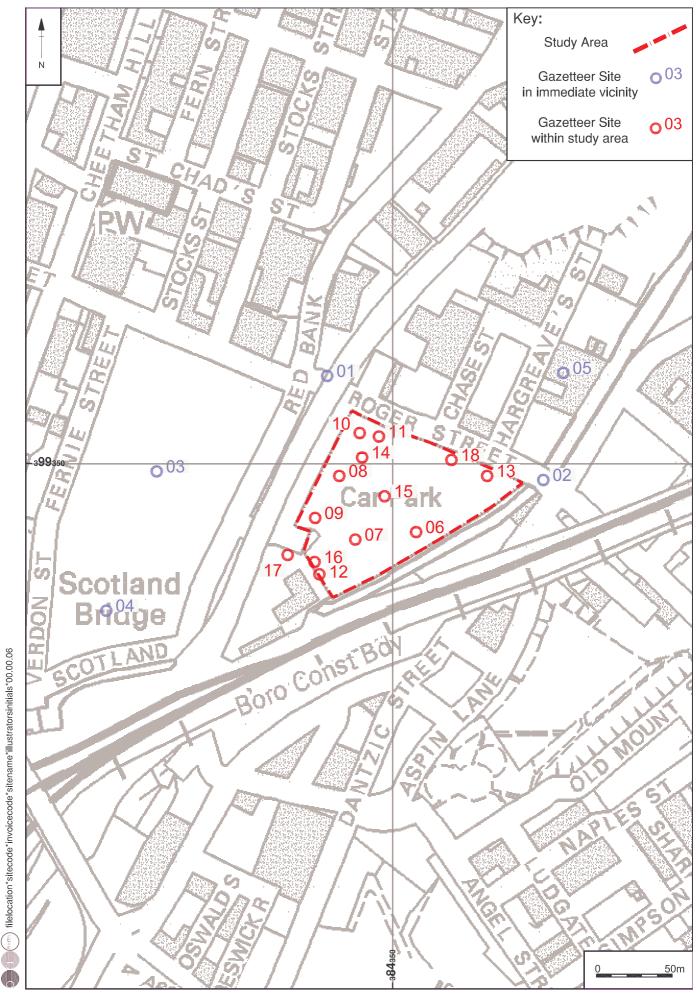


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