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In January 2015 the Centre for Applied Archaeology was commissioned by Land Property Investment Consultancy Limited (LPIC) acting on behalf of Leftfield Investment Holding Limited, to undertake an archaeological Desk-Based Assessment on land bounded by Dantzic Street and Warford Street, Manchester (centred SJ 84639 99460). The aim of the archaeological assessment was to identify as far as possible the nature, extent and significance of the archaeological resource so as to enable informed recommendations to be made for the future treatment of any surviving remains. This information was required in order to inform a planning application for the proposed redevelopment of the site for mixed residential and commercial purposes (**Figure 13**).

Historical research has revealed that prior to the mid-18th century the study area and much of its surroundings consisted of open agricultural plots truncated by route ways. During the late 18th century, the Newtown district of Manchester was experiencing the first phases of industrialisation with open agricultural plots being sold for industrial and residential development. During this period a grid like pattern of streets had begun to be laid out within the study area and along these streets several blocks of residential and commercial buildings had begun to develop (Sites 1 to 4), (Figure 2). During the 19th century the study area continued to be industrialised with the construction of Marsden's Glass Works (Site 8) in the mid-19th century and the Victoria Nut & Bolt Works (Site 9) in the late 19th century. During the same period new streets were laid out along which more workers housing (Sites 5, 6 & 7) were constructed, (Figures 3, 4 & 5). By the end of the 19th century the study area was fully developed and during the early part of the 20th century very little changed (**Figures 6 & 7**). However by the mid -20th century the Newtown district entered a period of decline. By the end of the 20th century the majority of the structures within the study area had been cleared and the site was largely vacant with the exception of its western extent which had been redeveloped for use by the Rubber Works (Sites 10 & 11), which lay to the west of the study area, (Figures 8, 9 & 10). During the early 21st century the remaining structures within the western extent of the study area were cleared and today the site is occupied by a warehouse and car park used by Astra Signs Ltd.

On the available evidence there are no remains within the study area which are considered to be a heritage asset of national significance. However, the study areas contains known and potential remains of late 18th and early 19th century workers housing (**Sites 1 to 7**), a mid-19th century Flint Glass Works (**Site 8**), possible mid-19th century Clay Tobacco Pipe Workshops and Kiln(s) (**Sites 5b & 3**) and a late 19th century Bolt & Nut Works (**Site 9**), which could all be considered to be of regional significance, depending upon the full extent of survival and condition.

The impact of development can be seen to be moderate/slight on (Sites 10 & 11), moderate on (Sites 1, 6 & 7) (see Table 7.2). However, the impact of development on (Sites 2 to 5, 8 & 9) (see Table 7.2) will have a moderate to large effect. Thus, any redevelopment occurring



within the study area would involve the loss and disturbance of a large proportion of the below-ground archaeological remains identified within this report.

Where appropriate because of their significance, mitigation will need to be undertaken through an archaeological record (NPPF 2012, paras 141). Following consultation with the archaeological planning advisory body for the City (the Greater Manchester Archaeological Advisory Service – G.M.A.A.S) it is recommended that any development of the site would require further archaeological evaluation, through a programme of trial trenching, which would focus on (**Sites 1 to 9**). Should the evaluation trenches reveal significant intact archaeology further archaeological works in the form of open area excavation may be required. This heritage work would need to be scheduled and completed prior to the redevelopment of the site.

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1. Introduction

1.1 Planning Background

In January 2015 the Centre for Applied Archaeology was commissioned by Land Property Investment Consultancy Limited (LPIC) acting on behalf of Leftfield Investment Holding Limited, to undertake an archaeological Desk-Based Assessment on land bounded by Dantzic Street and Warford Street, Manchester (centred SJ 84639 99460).

The aim of the archaeological assessment was to identify as far as possible the nature, extent and significance of the archaeological resource so as to enable informed recommendations to be made for the future treatment of any surviving remains. This information was required in order to inform and support a planning application for the proposed redevelopment of the site for mixed residential and commercial purposes (**Figure 13**).

1.2 Government and Local Planning Policies

1.2.1 National Planning Policy Framework (NPPF)

The significance of the archaeological resource identified within this report has been assessed as recommended in *National Planning Policy Framework* (Department for Local Communities, March 2012).

NPPF sets out the Government's planning policies and outlines the presumption in favour of sustainable development, which is defined by three principles: economic, social and environmental. Of the twelve core planning principles underpinning plan and decision making, conserving "heritage assets in a manner appropriate to their significance, so they can be enjoyed for their contribution to the quality of life of this and future generations" is one.

Section 12 specifically deals with the historic environment (paragraphs 126-141) and local planning authorities should consider:

- The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation
- The wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring
- The desirability of new development making a positive contribution to local character and distinctiveness; and
- Opportunities to draw on the contribution made by the historic environment to the character of a place



Paragraph 128 states that local planning authorities, when determining applications, should require the applicant to describe the significance of any affected heritage assets. This should be sufficient so as to understand the potential impact on their significance and this should be done using the appropriate expertise where necessary.

Paragraph 135 indicates that the effect of the proposal on non-designated heritage assets (designated assets are covered in paragraphs 132-134) should be taken into account. Paragraph 141 requires developers to record and advance understanding of heritage assets to be lost, in a manner appropriate to their importance and impact.

1.2.2 Local Development Framework

NPPF outlines the need for local planning authorities to create local plans and frameworks to implement NPPF at a local level. The Manchester Local Development Framework Plan (Manchester City Council: 2012) summarises the approach the local authority will take in determining planning applications which may affect heritage assets.

In addition to this, there is the Manchester Urban Historic Landscape Characterisation Project (Greater Manchester Archaeological Unit), which gives an overview of the complex aspects of Manchester's historic environment. This project provides a neutral and descriptive understanding of the cultural and historical aspects of Manchester's landscape, and provides a context in which other information can be considered within a framework for decision-making with regards to planning.

Manchester City Council is advised on archaeological matters by the development control archaeologist at Greater Manchester Archaeology Advisory Service (GMAAS) formerly the Greater Manchester Archaeological Unit (GMAU).





2. Methodology Statement

The assessment comprised an archaeological desk-based study and a site inspection. The works followed the C IfA standard and guidance for undertaking archaeological desk-based assessments (*Institute for Archaeologists, Standard and Guidance for Archaeological Desk-based Assessment,* 1994, revised 2010).

1.1 Research

The desk-based assessment made use of the following sources:

- Published and unpublished cartographic, documentary and photographic sources.
- The Greater Manchester Historic Environment Record (HER), formerly the Sites and Monuments Record (SMR), held by the Greater Manchester Archaeological Advisory Service (GMAAS) at the University of Salford, Manchester.
- Salford Archives & Local Studies Library.
- Historical Trade Directories, Census Returns & Rate Books.

1.2 Site Inspection

The aim of the site inspection was to relate the findings of the desk-based study to the existing land use of the study area in order to identify any evidence of the structures which formally stood on the site along with the sites potential for surviving below ground remains. The site visit was conducted on Wednesday 27th January 2016, (See Appendix 2).





3. The Setting

3.1 Location, Topography and Land use

The study area (centred SJ 84639 99460) lies within the Newtown area of Manchester which forms part of the township of Cheetham (**Figure 1**). The study area is bounded by Dantzic Street to the north, Dulwich Street and Warford Street to the west and by a railway viaduct to the south (**Figure 1**).

The study area sits on a relatively level plane measuring 32.2m AOD at its —western extent and 30.1m at its southern extent. It lies at the foot of a shallow valley associated with the River Irk which flows north-east/south-west to its confluence with the River Irwell.

Historical research has revealed that prior to the mid-18th century the study area and much of its surroundings consisted of open agricultural plots truncated by route ways. During the late 18th century, the Newtown district of Manchester which was experiencing the first phases of industrialisation with open agricultural plots being sold for industrial and residential development. During this period a grid like pattern of streets had begun to be laid out within the study area and along these streets several blocks of residential and commercial buildings had begun to develop (Sites 1 to 4), (Figure 2). During the 19th century the study area continued to be industrialised with the construction of Marsden's Glass Works (Site 8) in the mid-19th century and the Victoria Nut & Bolt Works (**Site 9**) in the late 19th century. During the same period new streets were laid out along which more workers housing (Sites 5, 6 & 7) were constructed, (Figures 3, 4 & 5). By the end of the 19th century the study area was fully developed and during the early part of the 20th century very little changed (Figures 6 & 7). However by the mid -20th century the Newtown district entered a period of decline. By the end of the 20th century the majority of the structures within the study area had been cleared and the site was largely vacant with the exception of its western extent which had been redeveloped for use by the Rubber Works (Sites 10 & 11), which lay to the west of the study area, (**Figures 8, 9 & 10**). During the early 21st century the remaining structures within the western extent of the study area were cleared and today the site is occupied by a warehouse and car park occupied by Astra Signs Ltd.

3.2 Geology

The overlying drift geology, as mapped by the OS Geological Survey, comprised Glacio-Fluvial Sand and Gravel. The underlying solid geology comprised of Permo-Triassic, interbedded sandstone and conglomerate, also known as Sherwood Sandstone (http://www.bgs.ac.uk).



3.3 Designations

There are no known designations within the study area however to the immediate southwest lies Union Bridge, a grade II listed, 18th century stone bridge crossing the River Irk (EH: 1255163 & GMHER: 11696.1.0).

There are however two sites within the study area which are recorded on the Historic Environment Record for Greater Manchester. These sites are: 19th century Portland Street Glass Works (**GMHER: 12422.1.0**) and Late 18th century Flag Row Terraced Housing (**GMHER: 15724.1.0**).

3.4 Previous Archaeological Works

In August 2013 a desk-based assessment was undertaken on the land to the immediate west of the study area (Nash: 2013). The report identified a total of eighteen sites of archaeological interest, five of which were recorded on the Historic Environment Record for Greater Manchester. These sites included an 18th century Building, Bromley Street (15725.1.0), 18th century Terraced Housing, Bromley Street (15726.1.0), 18th & 19th century Housing & Dyeworks, Dantzic Street (15727.1.0), 19th century Starch Works, Dantzic Street (15728.1.0), 19th century Terraced Housing, Bromley Street (15729.1.0), 20th century Rubber Works, Dantzic Street (15730.1.0).

The results of the desk-based assessment led to a further phase of evaluation and excavation which ran from February to April 2015. The archaeological excavation revealed substantial evidence of late 18th and 19th century industrial activity, which included the remains of a dye and starch works, a rubber works, a silk mill later converted to cotton, several commercial premises including a public house and workers housing. Despite the area being subjected to such heavy development from the late 18th century onwards small surviving portions of the pre-industrial landscape had survived in the form of a c.45cm deep deposit of plough-soil lay under the flooring of the various structures, (Noble: 2015).





4. Archaeological & Historical Background

This section of the report is based on cartographic and documentary research in addition to previous historical research undertaken by Oxford Archaeology North (Miller, 2006: 8 - 26 & Miller 2007: 6 - 21) and the Centre for Applied Archaeology (Nash, 2013: 8 - 14).

4.1 Prehistoric Period

No prehistoric finds are known to have come from within the study area. Within the north-west evidence for prehistoric activity tends to be sporadic and is based on chance finds, however within the region there is growing evidence for Prehistoric and Romano British settlement and other activities taking place on well drained sands and gravels close to water courses (Mottershead, 2006: 4). However whilst the study areas geology may indicate potential for prehistoric activity the intensity of the development which has occurred within the study area over the last 150 years means that the chances for any Prehistoric remains to survive is slight.

4.2 Roman Period

Approximately 1.9km to the south-west of the study area lies the Roman Fort of Manchester (*Mamucium*) and its associated civilian settlement (*vicus*). The fort was established during the governorship of Agricola (AD 77 -84) and it is thought that the civilian settlement developed during the 2nd century AD (Miller, 2007: 7). Running between the forts at Manchester and Ribchester was a Roman road, which is known to have crossed the River Irk and continued northwards through Broughton along the line of Bury New Road approximately 0.6km to the west of the study area (Miller, 2007: 7).

Within the study area no Roman finds have been discovered. However in 1904 approximately 200m to the south of the study area, a Roman Quern was found at St Michael's Square, Ashley Lane and a coin of Constantine the Great was found in Angel Street (HER: 1253.1.0). In addition approximately 200m south-west of the study area a large quantity of Roman and later coins have also been found in the old river bed of the Irk between Scotland and Ducie Bridge, when the river was diverted by the construction of the Lancashire and Yorkshire Railway during the end of the 19th century (HER: 1393.1.0). All of the aforementioned finds appear to be isolated discoveries and no associated features were identified. Given this in addition to the industrial development which has taken place within the study area the chances of discovering remain of this period are limited.

4.3 Medieval Period

Documentary research suggests that during the early medieval period Manchester and its



surrounding's came under the control of several kingdoms. In AD 620 Edwin conquered and occupied Manchester and research suggests that it is during this period that settlement in the town was established around the Cathedral (Miller, 2006: 9). Manchester is mentioned in the Anglo-Saxon Chronicle of AD 919, which refers to Edward (eldest son of King Alfred the Great) taking over the town and making repairs to the fortifications (Miller, 2006: 9). It is probable that these fortifications comprised of little more than a timber palisade which again was most likely positioned around the Cathedral settlement. In 1028 King Canute founded one of his ten Royal Mints in the town and in the Domesday book of 1086 the church of St Mary at the north end of Deansgate was mentioned (Farrer & Brownbill, 1908). The physical remains of this period are rare within the north-west and only a few artefacts of this period have been uncovered within the Manchester area. One such artefact; a 6th century funery urn stamped with decoration typical of the Anglo Saxon period was found at Red Bank in 1850, to the south-west of the current study area (HER: 1254.1.0.). There is however no known evidence for early medieval activity within the study area and given the development of the area during the 18th and 19th centuries the potential for any such buried remains to exist would be slight.

Following the Norman Conquest the town of Manchester with the greater part of the parish was granted to the Grelley family, who constituted it the head of their barony (Farrer & Brownbill, 1911). Salford, with the adjacent townships of Broughton, Cheetham, Hulme, and Stretford was retained by the King as demesne and were bestowed on the great nobleman to whom he entrusted 'the land between Mersey and Ribble' or in later times the honour of Lancaster, the holders of which received the title of earl and duke successively (Farrer & Brownbill, 1911). The Grelley family established a manor house at the confluence of the Rivers Irk and Irwell from which the family governed both the manor and extensive barony and it is thought that the medieval town of Manchester grew up around this manor (Hartwell, Hyde & Pevsner, 2004: 256). During the 13th century Manchester emerged as an urban centre and in AD 1227 Henry III granted Robert Grelley the right to hold a weekly market every Saturday and an annual fair (Farrer & Brownbill, 1911). In 1301 Manchester was granted borough status which encouraged the growth of the boroughs economy with many of its inhabitants already being artificers and traders (Farrer & Brownbill, 1911). Further documentary research for the period has revealed that a Corn Mill and a Woollen Fulling Mill had been established along the River Irk by AD 1282 and by the later medieval period the River Irk was utilised by several Water Mills (Miller, 2007: 8). Throughout this period the study area most likely comprised of open agricultural land which lay beyond the area of settlement associated with the town.

4.4 Post Medieval Period

Manchester continued to prosper during the post medieval period by which time the towns market lay at the center of a fledgling textile trade industry (Miller, 2006: 10). The size and wealth of the town during this period was the reflected in the decision of the Lord of the manor to rebuild St Mary's church in 1421 as a collegiate institution (Hartwell, Hyde & Pevsner, 2004: 256). By 1539, Manchester was described by John Leland as 'the finest and



busiest town in the whole of Lancashire, with the best buildings and the greatest population (Chandler, 1993: 263 & Miller, 2006: 10). During this time Manchester emerged as the center for the textile finishing processes as cloth was brought into the town for bleaching and dying and its market expanded for trading the finished cloth (Miller, 2006: 10). From the early 17th century a flourishing business community developed within Manchester which was dominated by wealthy merchant's manufacturers and fustian dealers most notably the Chethams, the Booths, the Wrigleys and the Byrom's (Miller, 2006: 10). These families formed the social elite below the landed gentry such as the Stanley's and Strange families, whose estates incorporated Cheetham and the open agricultural land around the present study area (Miller, 2006: 10). However there are no known remains of this period within the study area and it is likely that during this period the study area remained undeveloped.

4.5 18th Century

In his tour of the country during the early 18th century Daniel Defoe noted that Manchester had extended in a surprising manner reflecting the town's further expansion into the textile trade (Miller, 2007: 8). By the 1790's Manchester's thriving export market was beginning to displace London as the centre of overseas trade in cotton cloth reflecting great improvements to the transport networks within the north-west, most significantly the completion of the Mersey Irwell Navigation in 1734 which formed a link to the expanding port of Liverpool (Miller, 2006: 11). The introduction of steam power to cotton spinning during the late 18th century was the catalyst for the massive expansion of Manchester as a manufacturing centre and with this came the rapid growth of the town's population from 22, 481 in 1773 to 75,281 by 1801 (Miller, 2006: 11).

By the late 18th century the study area and its immediate surroundings formed part of the Newtown district of Manchester. During this period Newtown was experiencing the first phases of industrialisation with its open agricultural plots being sold for industrial and residential development. Green's map of Manchester dated 1794 shows that during this period a grid like pattern of streets had begun to be laid out on the east side of the River Irk and along these streets several blocks of residential and commercial buildings had begun to develop (**Figure 2**).

Within the study area Green's map showed that three roads had been laid out. Along the northern edge of the study area was Portland Street, which followed the line of a pre 18th century route way which formed the main thoroughfare through Newtown, (Figure 2). Running in a south-easterly direction from Portland Street was Bilsborough Street which ran along the western edge of the study area. Along the eastern side of Bilsborough Street two blocks of properties were depicted. The most northerly block was comprised of two properties with an enclosed rear yard (Site 1a), whilst the southerly block comprised a terrace of four properties each with its own rear yard and privy (Site 1b), (Figure 2). Running eastwards from Bilsborough Street was a third road named Flag Row which ran across the entirety of the study area. Along the north side of Flag Row, a terrace of four properties (Site 2a) were depicted abutting the eastern extent of (Site 1a) and along the south side of Flag



Row a terrace of six, larger properties with enclosed rear yards (Site 3) was shown. To the rear of (Site 3), not associated with any of the roads a large rectangular structure was depicted, which had a small square protrusion and yard along its western extent, (Site 4).

The Manchester Township Rate Books of 1795 and 1820 list the buildings on Bilberry Street and Flag Row as houses and show that the assessed annual rents of these properties were around £1.10.0d to £2.10.0d. Census returns from the mid-19th century confirm that the houses were largely occupied by industrial workers and their families. The only exception to this was the most southerly property within (**Site 1b**) which functioned as a Grocer's Shop / Provisions dealer. No documentary information could be sourced with regards to (**Site 4**) and as such the function of this structure is unknown.

4.6 Early 19th Century

During the early 19th century Newtown continued to be industrialised. Banck's map of 1831 showed that several industrial works (Dye, Starch, Chemical & Gas, Silk & Cotton) had immerged to the south and west of the study and by the OS survey of 1844-9 the Lancashire and Yorkshire Railway and associated viaduct had been constructed, (**Figure 4**). The increasing industrialisation of Newtown resulted in the laying out of several new roads and the construction of more housing to accommodate the increasing working population.

Banck's map shows that within the study area Bilsborough Street (Site 1) had been renamed Bilberry Street and the large rectangular structure (Site 4), to the south of Flag Row had been cleared, (Figure 3). Furthermore the terrace of properties (Site 1b) fronting Bilberry Street had been substantially extended rearwards and a seventh property had been added to the terrace on the south side of Flag Row (Site 3). In addition to these alterations the study area had also been subject to further development largely owing to the laying out of Water Street and Dixon Street, (Figure 3). Banck's map shows that along the north side of Flag Row, at its junction with Water Street, a row of six back to back properties (Site 2b) had been constructed, (Figure 3). Furthermore within the north-eastern corner of the study area, encompassed by the new roads a quadrangle of properties had been constructed. The northern row fronting Portland Street was comprised of two large properties (Site 5a), the eastern row fronting Dixon Street comprised of a terrace of five smaller properties (Site 7), the southern row fronting the north side of Flag Row comprised of a single small property (Site 2c) and a passage way leading into the central courtyard and the western row fronting Water Street was comprised of a terrace of five properties (Site 6).

By the OS first edition survey of 1844-9 a terrace of five properties (**Site 5b**), had been constructed along Portland Street, (**Figure 4**). To the immediate south of this the most northerly block of properties fronting Bilberry Street (**Site 1a**) had been extended and appeared to comprise of four rather than two properties. The back to back properties fronting the north side of Flag Row (**Site 2b**) appeared to have been reduced from six to four houses and a substantial extension had been constructed within the courtyard to the rear of one of the houses which fronted Water Street (**Site 6**). The 1844-9 survey also showed that (**Sites 2b**,



2c, 5a, 6 & 7) had cellar lights indicating that these properties were cellared.

Manchester Township Rate Book of 1845 and 1850 list the properties on Portland Street as houses, a workshop and yard, and show that the assessed annual rents of these properties were £5.10.0d for the houses and £2.10.0d for the yard and workshop. The properties on Water Street and Dixon Street are all listed as houses with assessed annual rents of £2.10.0d. Mid-19th century Census Returns and Trade Directories indicate that the two properties within (**Site 5a**) were mixed commercial and residential premises comprising of a public house named the White Hart and a Provisions Store and one of the properties within (**Site 5b**) was listed as a Drapers Shop. In contrast the properties on Water Street and Dixon Street were domestic dwellings occupied by industrial workers and their families.

4.7 Mid to Late 19th Century

Between the OS surveys of 1844-9 and 1893 the study area and its immediate surroundings had undergone a substantial phase of industrialisation which saw the clearance of some of the older building stock and the construction of new residential and industrial buildings in the areas which had been previously undeveloped. This period saw the expansion of the Lancashire & Yorkshire Railway, the construction of the Newtown Sidings and the the Rochdale Road Gas Works to the south of the study area, the construction of a large Rubber Works to the west of the study area and the construction of two large Gasometers opposite the study area on the north side of Portland Street, (**Figures 4 & 5**).

Within the northern extent of the study area the OS survey of 1893, showed that the properties fronting the west end of Portland Street (**Site 5b**) had been extended eastwards through the construction of a further four properties and yards. To the east of this a new roadway named 'Beesley Street' had been laid out, and between Beesley Street and Water Street a terrace of twelve properties (**Site 5c**), had been constructed. To the south of Portland Street, along the east side of Bilberry Street, the four most northerly properties (**Site 1a**) had been amalgamated into two larger buildings and the large extensions to the rear of the southerly properties (**Site 1b**) had been demolished and replaced by small enclosed yards, (**Figure 5**). Rate Books from 1850 to 1873 show that one of the houses within (**Site 5b**) had a workshop and yard which was occupied by a Thomas and Peter Bradshaw who were listed as Pipe Manufacturers. Late 19th through to mid-20th Census Returns and Trade Directories show (**Sites 1b, 5a & 5b**) to continue as mixed commercial and residential properties, whilst the properties within (**Sites 1a & 5c**) appeared to be purely residential, being occupied by industrial workers and their families.

Within the central section of the study area, along the north side of Flag Row the 1893 survey showed that the back to back properties (**Site 2b**) first identified on Banck's map of 1831 had been cleared and a terrace of twelve properties (**Site 2d**), identical to those along Portland Street (**Site 5c**), had been constructed between Beesley Street and Water Street, (**Figure 5**). On the south side of Flag Row a further two properties had been added to the western end of the older terrace (**Site 3**) and several of the older houses appear to have been subject to



some alteration, (Figure 5). The Rate Book of 1859 showed that during this period the assessed annual rents for the properties on the south side of Flag Row had risen to between £4.0.0d and £8.10.0d. A large proportion of these houses were recorded as being owned by a William Houghton who's family were listed as occupying number 10 Flag Row from the 1840's through to 1880's. Unlike the other properties which were listed as being domestic dwellings, number 10 was listed as a Beer House and Coal Yard. The 1861 census records number 10 as the 'City Arms' and William Houghton is recorded as a Pipe Manufacturer. It is unclear whether William Houghton operated a Pipe Works from this property or on premises elsewhere, but the 1861 census does list nine of the fourteen occupants of Number 10 as being Pipe Makers or Pipe Finishers which would support the former. Although it is unclear from the documentary records which property number 10 was, Trade Directories from the late 19th and early 20th century list the most easterly property in the terrace as being occupied by a Beer Retailer named Percival in 1895 who is subsequently listed as a Ham and Bacon Curer up until the early 1950's (Kelly 1895, 1910, 1925, 1940, 1945 & 1954). It is therefore likely that Houghton's Beer House is the large property on the corner of Flag Row and Water Street.

It is the southern extent of the study area which saw the most redevelopment during this period. The OS survey of 1893 showed that a large enclosed yard, accessed from Water Street had appeared to the rear of the houses on Flag Row (Site 3), (Figure 5). Within the yard were two adjoining structures; the first (Site 8a) occupied the northern half of the yard and was roughly 'U' shaped in plan and contained a square chimney, the second (Site 8b) occupied the southern half of the yard and was rectangular in plan with a circular chimney at its centre, (Figure 5). The Manchester Township Rate Books of 1858 through to 1865 list the site as a Glass Works owned by Robert and later William Marsden's. The 1861 Trade Directory describes William Marsden as a Flint Glass Manufacturer, however trade directories from the 1870's onwards show that the Glass Works had been subdivided, with (Site 8a) being occupied by a Joseph Halliday & Co, Engineers up until the 1890's and (Site 1b) being occupied by P Jeffers, Tripe Dresser and Neatsfoot Oil Dealer, (Post Office: 1873, Slater: 1886 and Kelly: 1895, 1910, 1925, 1940, 1945 & 1954).

To the west of this yard on the east side of Bilberry Street a second yard containing two roughly rectangular structures (**Sites 9a & 9b**) was depicted. Slaters Trade Directory of 1890 identified (**Sites 9a & 9b**) as Victoria Bolt & Nut Works which was listed as being occupied by Richard Davies & Sons, producers of all kinds of engineer bolts and nuts, bright finished nuts, set screws, washers and rivets. Richard Davies & Sons appear to occupy the site until 1945, when the site is listed as Collinghurst Foundry Ltd, Iron Founders (Kelly 1890, 1899, 1908, 1925, 1940 & 1945).

4.8 Early to Mid-20th Centuries

During the first decade of the 20^{th} century the study areas immediate surroundings continued to be increasingly industrialised with the further expansion of the Lancashire & Yorkshire



Railway and the construction of a large Rubber Works to the immediate west of the study area. However from the 1920's onwards OS mapping suggests that the Newtown district had entered into a period of decline. During this period some of the industrial works depicted on earlier mapping had been cleared or labelled 'disused' and the former streets packed with terraces of workers housing had begun to be cleared.

The OS survey of 1908 records some small scale changes within the study area, (**Figure 6**). The eastern block of structures (**Site 5b**) along the south side of Portland Street appeared to have been altered and extended whilst the northerly block of properties along the east side of Bilberry Street (**Site 1a**) appeared to have been amalgamated into one larger structure, (**Figure 6**). The largest change to be recorded was the extension of the Victoria Bolt & Nut Works (**Sites 9a, 9b & 9c**), which had been extended eastwards to amalgamate with the northern half of the former Glass Works (**Site 8a**), and also westwards across Bilberry Street (**Figure 6**). The southern half of the former Glass Works (**Site 9b**) remained separate and several small workshops (**Site 9c**) had been erected within its eastern yard, (**Figure 6**).

By the OS survey of 1922 Portland Street had been renamed Dantzic Street and the only recorded change to the study area was the demolition of the Victoria Bolt & Nut Works most southerly building (Site 9b). The study area appears unchanged on the OS survey of 1931 however by the survey of 1949 parts of the study area had begun to be cleared, (Figures 7 & 8). During this period the houses which fronted Bilberry Street (Site 1a & 1b), Water Street (Site 6) and Dixon Street (Site 7) had been demolished along with some of the houses along Dantzic Street (Site 5b) and Flag Row (Site 2a), (Figure 8). In place of the Bilberry Street and Flag Row houses, an enclosed yard had been erected which contained two rectangular features labelled 'Tanks', (Site 10a), (Figure 8). The 1949 survey also showed that the Victoria Nut & Bolt Works (Site 9c) had been renamed 'Collyhurst Foundry' and the former Glass Works structure (Site 8b) was named 'Tripe Works'.

By the OS survey of 1966 the housing fronting Dantzic Street had been subject to further clearance with only the early 19th century White Hart Public House (Site 5a) and the late 19th century terraced housing (Site 5c) surviving, (Figure 9). The enclosed tank yard (Site 10a) on the corner of Bilberry Street and Flag Row had been extended northwards to Dantzic Street and a large square structure (Site 10b) had been constructed to the north of the tanks, (Figure 9). Historic photographs dating to 1958 show that (Site 10b) was a single storey unit, constructed from corrugated metal sheets, (Manchester Local Image Archive - m01279). During the same period the houses on the southern side of Flag Row (Site 3) had been demolished along with the Collyhurst Foundry (Site 9c), which had been replaced by a large square structure and yard (Site 11) which appeared to be associated with the Rubber Works, which lay beyond the western extent of the study area.

4.9 Late 20th Century to the Present Day.

By the OS surveys of 1999 the study area had been completely cleared with the exception of the Tripe Works (Site 9b & c), which still appeared to survive although it had been truncated



at its northern extent, (**Figure 10**). During this period the Rubber Works to the west of the study area had been substantially extended eastwards into the study area and the large rectangular structure (**Site 11**) identified on the 1966 survey was amalgamated into this extension, (**Figure 10**).

During the early 21st century the Rubber Works was demolished with the exception of a small office block fronting Dantzic Street, which sat within the north-west corner of the study area and a large rectangular structure of the same scale as the structure depicted on the OS survey of 1966 (**Site 11**), which sat within the centre of the study area. The aforementioned office block was demolished in 2015 and the site is currently occupied by a large rectangular structure and associated car park occupied by Astra Signs Ltd, along with a handful of prefabricated structures along the south-eastern boundary of the study area.





5. Gazetteer of Sites

The following gazetteer provides a summary of the sites identified within the study area. For their location please see (**Figure 12**).

Site Number: 1

Site Name: Bilsborough Street / Bilberry Street (East Side)

NGR: SJ 84568 99424 Site Type: Housing

Green's map of 1794 depicts two blocks of structures on the east side of Bilsborough Street (later Bilberry Street), flanking the western end of Flag Row. The northern block (Site 1a) appeared to be comprised of one large rectangular building with an enclosed rear yard, whilst the southern block (Site 1b) was comprised of a terrace of four properties each with an enclosed rear yard and outdoor privy (Figure 2). On the OS survey of 1844-9 (Site 1a) appeared unaltered and was shown to comprise of a terrace of four properties. In contrast (Site 1b) had been substantially extended to the rear with the addition of two large rectangular structures, (Figure 4). The absence of cellar lights depicted on the 1844-9 map would suggest that none of the properties contained cellars. By the OS survey of 1893 three of the structures that formed (Site 1a) had been amalgamated and extended to form one larger 'L' shaped property and within (Site 1b) the large extensions to the rear of the terrace had been demolished, (Figure 5). The site appeared unaltered on the OS surveys of 1908, 1922 and 1931 however by the survey of 1949 the properties forming (Site 1a) had been demolished and replaced by a large enclosed yard containing two tanks (Site 10) and all but one of the properties within (Site 1b) had been cleared (Figures 6 to 8). By the OS survey of 1966 the remaining property within (Site 1b) had been demolished and the site had been occupied by a large rectangular structure (Site 14).

The Manchester Township Rate Books of 1795 and 1820 list the buildings on Bilberry Street as houses and show that the assessed annual rents of these properties were around £2.10.0d. Census returns from the mid-19th through to early 20th centuries confirm that the houses were largely occupied by industrial workers and their families. The only exception to this was the most southerly property within (**Site 1b**) which functioned as a Grocer's Shop / Provisions dealer.

Site Number: 2

Site Name: Flag Row (North Side). HER: 15724.1.0

NGR: SJ 84582 99436 (centred)

Site Type: Houses

Green's map of 1794 depicts two rectangular structures (Site 2a) at the western end of Flag



Row, abutting the eastern extent of (Site 1a), (Figure 2). The most westerly structure appeared to contain a large enclosed rear yard containing out-buildings, whilst the eastern structure had no yard. By Pigot's map of 1813 two further structures had been added at the eastern end of Flag Row, one at its junction with Water Street (Site 2b) and one close to its junction with Dixon Street (Site 2c). Banck's map of 1831 showed that (Site 2a) was comprised of a terrace of four properties which fronted Flag Row, (Site 2b) was comprised of a block of six back to back properties which fronted Flag Row and Water Street and (Site 2c) was comprised of a single property which fronted Flag Row, (Figure 3). By the OS survey of 1844-9 (Site 2b) had been reduced to four back to back properties and the presence of cellar lights on (Sites 2b & 2c) would suggest they were cellared, (Site 2a) appeared to be uncellared (Figure 4).

By the OS survey of 1893 (**Site 2a**) was depicted as comprising five properties all with enclosed rear yards; (**Site 2b**) had been demolished and replaced by a terrace of twelve properties (**Site 2d**) which fronted Flag Row between Beesley Street and Water Street and (**Site 2c**) appeared unaltered, (**Figure 5**). The site appears unaltered on the OS surveys of 1908, 1922 and 1931, however by 1949 (**Site 2a**) had been cleared and replaced by an enclosed yard which contained two tanks (**Site 10**), (**Figures 6 to 8**). The survey showed (**Sites 2c & 2d**) to be unaltered and identified (**Site 2d**) as being comprised of numbers 3 Beesley Street, 13 to 31 Flag Row and 2 Water Street, whilst (**Site 2c**) was 33 Flag Row. Both (**Sites 2c & 2d**) appeared unaltered on the OS survey of 1966 however by the OS survey of 1986-94 both sites had been cleared.

The Manchester Township Rate Books of 1795 and 1820, confirm that the properties on the north side of Flag Row were houses and show that the assessed annual rents of these properties were £1.10.0d to £2.10.0d, which rose to £3.0.0d by the 1860's. Census returns from the mid to late 19th and early 20th centuries indicate that the properties on Flag Row were domestic dwellings occupied predominantly by industrial workers employed within the textile trades.

Site Number: 3

Site Name: Flag Row (South Side) NGR: SJ 84582 99436 (centred)

Site Type: Housing

Green's map of 1794 depicts a terrace of six properties on the south side of Flag Row, (**Figure 2**). The properties were rectangular in plan each with a small projection and enclosed yard to the rear, (**Figure 2**). Banck's map of 1831 and the OS survey of 1844-9 show that there had been some small scale extension to the rear of some properties and at the western end of the terrace an additional seventh property had been constructed, (**Figures 3 & 4**). The absence of cellar lights depicted on the 1844-9 map would suggest that these properties were not cellared. By the OS survey of 1893 a further two properties had been added to the



western end of the terrace, and several of the older houses appear to have been subject to some alteration through the demolition of their rear projections, (**Figure 4**). The site appears unaltered on all subsequent OS mapping and the 1949 survey identifies the properties as being 8 to 22 Flag Row and 4 Water Street (**Figures 6 to 8**). By the OS survey of 1966 the site had been cleared (**Figure 9**).

The Manchester Township Rate Books of 1795 and 1820, list the buildings on Flag Row as houses and show that the assessed annual rents of these properties were between £1.10.0d and £2.10.0d. By the Rate Book of 1859 the assessed annual rents for the properties on the south side of Flag Row had risen to between £4.0.0d and £8.10.0d. A large proportion of these houses were recorded as being owned by a William Houghton who's family are listed as occupying number 10 Flag Row from the 1840's through to 1880's. Unlike the other properties on the south side of Flag Row, number 10 was listed as a Beer House and Coal Yard. The 1861 census records number 10 as the 'City Arms' and William Houghton is recorded as the head of a household of fourteen, the majority of whom were lodgers. The census records William Houghton's profession as a Pipe Manufacturer and goes on to note that nine of the residents of number 10 Flag Row were Pipe Makers (6) or Pipe Finishers (3). It is unclear whether William Houghton operated a Pipe Works from this property or whether this was located elsewhere, however Rate Books show that number 10 continued to function as a Beer House and Coal Yard well into the 1880's.

Although it is unclear from the documentary records which property number 10 is, Trade Directories from the late 19th and early 20th century list the most easterly property in the terrace as being occupied by a Beer Retailer named Percival in 1895 who is subsequently listed as a Ham and Bacon Curer up until the early 1950's (Kelly 1895, 1910, 1925, 1940, 1945 & 1954). It is therefore likely that Houghton's Beer House is the large property on the corner of Flag Row and Water Street.

Site Number: 4

Site Name: Unknown Structure, Water Street.

NGR: SJ 84659 99424 Site Type: Unknown

Green's map of 1794 depicts a large roughly rectangular structure with a small enclosed yard to the south of Flag Row (Site 3), (Figure 2). According to Green's map the structure was not associated with any of the surrounding roads, however later mapping showed that the structure would have fronted Water Street. The structure does not appear on any subsequent mapping and documentary research could not glean any further information about the structures function (Figures 3 to 10).



Site Number: 5

Site Name: Portland Street / Dantzic Street (South Side).

NGR: SJ 84580 99443 (centred)

Site Type: Mixed Housing & Commercial Premises

Greens map of 1794 depicts a roadway named 'Portland Street' running in a north-easterly direction from Ashley Lane towards Blakely, (Figure 2). By Pigot's map of 1813 a block of structures (Sites 2c, 5a, 6 & 7) had been erected on the south side of Portland Street, between Water Street and Dimity Street (later Dixon Street). Later mapping showed that the northern part of this block was comprised of two large cellared properties which fronted Portland Street (Site 5a), (Figure 3). By the OS survey of 1844-9 a terrace of five, un-cellared properties (Site 5b) had been constructed at the western end of Portland Street, at its junction with Bilberry Street, (Figure 4). The OS survey of 1893 showed (Site 5a) to be unchanged and identified the most easterly property as a Public House. The survey also showed that a further properties and yards had been added to the eastern extent of (Site 5b) along with a roadway named Beesley Street, (Figure 5). The survey also showed that between Beesley Street and Water Street a terrace of twelve properties (Site 5c) which fronted Portland Street, had been constructed, (Figure 5).

The site appeared unaltered on the OS surveys of 1908, 1922 and 1931 however between the maps of 1908 and 1922 Portland Street had been renamed Dantzic Street (**Figures 6 & 7**). By the survey of 1949 four of the properties within (**Site 5b**) had been demolished, and the remaining properties were identified as forming 176 – 182 Dantzic Street (**Site 5a**), 192 to 212 Dantzic Street (**Site 5c**) and 214 – 216 Dantzic Street (**Site 5a**), (**Figure 8**).By the OS survey of 1966 (**Site 5b**) had been cleared and replaced by a large rectangular structure (**Site 11**) and the most westerly structure within (**Site 5a**) had been demolished, (**Figure 9**). By the OS survey of 1986-94 all remaining structures (**Sites 5a & 5c**) had been cleared.

Manchester Township Rate Book of 1850 lists the buildings on Portland Street as houses, a workshop and yard, and show that the assessed annual rents of these properties were £5.10.0d for the houses and £2.10.0d for the yard and workshop. Mid-19th century Census Returns and Trade Directories indicate that the two properties within (**Site 5a**) were mixed commercial and residential premises comprising of a public house named the White Hart and a Provisions Store. Similarly one of the properties within (**Site 5b**) was listed as a Drapers Shop. Rate Books from 1850 to 1873 also show that one of the houses within (**Site 5b**) had a workshop and yard which was occupied by a Thomas and Peter Bradshaw who were listed as Pipe Manufacturers. Late 19th through to mid-20th Census Returns and Trade Directories show (**Sites 5a & 5b**) to continue and mixed commercial and residential properties, whilst the properties within (**Site 5c**) appeared to be purely residential, being occupied by industrial workers and their families.



Site Number: 6

Site Name: Water Street / Warford Street (East Side).

NGR: SJ 84651 99466 Site Type: Houses

Greens map of 1794 depicts a road way named Water Street running between the north side of Portland Street and the River Irk (**Figure 2**). By Pigot's map of 1813 Water Street appeared to have been extended southwards, across Portland Street and into the study area (**Figure 3**). Pigot's map depicts a block of structures along the eastern side of Water Street but no detail is given. However Banck's map of 1831 and the OS survey of 1844-9 confirm the structure was a terrace of five properties, the most central of which appeared to have a large rearwards extension accessed by a passageway on the north side of Flag Row, (**Figure 4**). The presence of cellar lights would also indicate that these structures were cellared. By the OS survey of 1893 the large extension at the rear of the central property had been cleared and replaced by a yard (**Figure 5**). The site appears unaltered on the OS surveys of 1908 however by the survey of 1922 Water Street had been renamed Warford Street. Between the OS surveys of 1931 and 1949 all but one of the properties had been demolished (**Figures 6 to 8**). By the OS survey of 1966 the remaining property had been cleared and the site appeared vacant (**Figure 9**).

The Manchester Township Rate Book of 1845, list the buildings on Water Street as houses and show that the assessed annual rents of these properties were £2.10.0d. Rate Books and Census returns confirm that the properties on Water Street continued to be used as domestic dwellings until their demolition.

Site Number: 7

Site Name: Dixon Street / Dulwich Street (West Side).

NGR: SJ 84670 99482 Site Type: Houses

Pigot's map of 1813 depicts a block of structures within the north-east corner of the study area. The structures were flanked to the north by Portland Street, to the west by Water Street and to the south by Flag Row. The roadway to the east of the structures (Dixon Street) is not depicted until Pigot's map of 1836 (Figure 3). Banck's map of 1831 and the OS survey of 1844 showed that the structures on the west side of Dixon Street were comprised of a terrace of five structures with rear yards. The most southerly structure appeared to have an extension in place of a yard and was therefore nearly double to size of the other properties, (Figures 3 & 4). The sites appears unaltered on all subsequent mapping until the OS survey of 1949, when all but the most southerly property had been demolished, (Figures 5 to 8). The remaining property appears unchanged on the OS survey of 1966, however by the survey of 1999 the site was vacant, and the road had been renamed Dulwich Street, (Figures 9 & 10).



Census Returns from the 19th and early 20th centuries confirm that the properties on Dixon Street were domestic dwellings occupied by industrial workers and their families. Trade directories do not indicate the presence of any commercial properties within this site.

Site Number: 8

Site Name: Portland Street Glass Works (HER: 12422.1.0)

NGR: SJ 84664 99413 Site Type: Industrial

Between the OS surveys of 1844-9 and 1893 a large enclosed yard appeared to the rear of the houses on the southern side of Flag Row, (Site 3), (Figures 4 & 5). The yard was accessed from Water Street and contained two adjoining structures each with their own enclosed yard. The first (Site 8a) occupied the northern half of the yard and was roughly 'U' shaped in plan and contained a square chimney. The second (Site 8b) occupied the southern half of the yard and was rectangular in plan with a circular chimney at its centre, (Figure 5). By the OS survey of 1908 the 'Bolt Work's' (Site 9) to the immediate west of the site had been extended and (Site 8a) was amalgamated into this structure, (Figure 6). In contrast (Site 8b) appeared independent to the Bolt Works and within its eastern yard two small rectangular structures had been constructed (Site 8c). The site appears unaltered on the OS surveys of 1908, 1922 and 1931 however by 1949 one of the structures within (Site 8c) had been cleared and (Site 8b) was identified as Tripe Dressers, (Figures 6 to 8). The site appears unchanged on the OS survey of 1966, and by the survey of 1968-90 (Site 8b) was labelled as an Asphalt Works and the chimney at its centre had been demolished, (Figures 9 & 10). By the OS survey of 1986-94 the site had undergone some redevelopment with the partial demolition of (Site 8b). The site appears unaltered until the present day.

The Manchester Township Rate Books of 1858 through to 1865 list the site as a Glass Works owned by Robert and later William Marsdens, however Peter Bone suggests that the works operated until 1867 (Bone, 2004: 59). The 1861 Trade Directory describes William Marsden as a Flint Glass Manufacturer, living in Windsor Street, Old Trafford. The southern half of the site (**Site 8b**) is discussed by Owen Ashmore as being 'a roughly square building with a wide tapering brick chimney emerging from the centre of its hipped roof...The building is approximately 60ft square with a timber framed roof, supported by beams radiating from the chimney. The furnace itself is of 14ft 4 in in diameter at the bottom, and there are eight semi-circular headed openings round the perimeter, where the glass blowers could operate, (Ashmore, 1969: 128).

Trade Directories show that that from the early 1870's through to 1954 (**Site 8b & 8c**) were occupied by P Jeffers, Tripe Dresser and Neatsfoot Oil Dealer, (Post Office: 1873, Slater: 1886 and Kelly: 1895, 1910, 1925, 1940, 1945 & 1954. The directories also show that before its amalgamation with (Site 9a) in the late 1890's, the most northerly building (**Site 8a**) was occupied by a Joseph Halliday & Co, Engineers. From 1961 up until its demolition the site



Site Number: 9

Site Name: Victoria Bolt & Nut Works / Collyhurst Foundry

NGR: SJ 84608 99414 Site Type: Industrial

Between the OS surveys of 1844-9 and 1891 two roughly rectangular structures (Sites 9a & 9b), were erected on the east side of Bilberry Street (Site 1) to immediate west of the Glass Works (Site 8), (Figure 5). Both structures were identified as belonging to the Victoria Bolt & Nut Works. By the OS survey of 1908 the most northerly building (Site 9a) had been substantially extended eastwards (Site 9c) amalgamating with the northern half of the former Glass Works (Site 8a) and also westwards, blocking off Bilberry Street, (Figure 6). By the OS survey of 1922 the more southerly building (Site 9b) had been cleared, presumably as part of the widening of the Lancashire & Yorkshire Railway. The site appears unaltered on the OS survey of 1931 and by 1949 the site had been renamed 'Collyhurst Foundry', (Figures 7 & 8). Between the 1949 and 1966 OS surveys (Sites 9a & 9c) appeared to have been demolished and the site re-occupied by a large rectangular structure associated with the Rubber Works (Site 11), (Figures 9 & 10).

Slaters Trade Directory of 1890 identified (**Sites 9a & 9b**) as Victoria Bolt & Nut Works which was listed as being occupied by Richard Davies & Sons, producers of all kinds of engineer bolts and nuts, bright finished nuts, set screws, washers and rivets. Richard Davies & Sons appear to occupy the site until 1945, when the site is listed as Collinghurst Foundry Ltd, Iron Founders (Kelly 1890, 1899, 1908, 1925, 1940 & 1945).

Site Number: 10

Site Name: Building, Tanks & Yard

NGR: SJ 84568 99424 Site Type: Industrial

Between the OS surveys of 1931 and 1949 the some of the houses on the junction of Bilberry Street and Flag Row (**Site 1a & 2a**) had been cleared and the land occupied by an enclosed yard which contained two rectangular tanks (**Site 10a**), (**Figures 7 & 8**). By the OS survey of 1966 the yard was extended through the demolition of the houses on the junction of Bilberry Street and Dantzic Street (**Site 5b**) and a large rectangular structure (**Site 10b**) had been erected in place of the houses, (**Figure 8**). Historic photographs dating to 1958 show that (**Site 10b**) was a single storey unit, constructed from corrugated metal sheets, (Manchester Local Image Archive - m01279). By the OS survey of 1968-90 the Rubber Works which lay just beyond the western extent of the study area was extended eastwards into the study area and (**Site 10b**) was replaced by an office block was not demolished until the summer of



Site Number: 11

Site Name: Rubber Works, Dantzic Street – HER: 15730.1.0.

NGR: SJ 84552 99392 Site Type: Industrial

Between the OS surveys of 1949 and 1966 a large rectangular structure had been built within the western extent of the study area, on the land formerly occupied by (Sites 1 & 9), (Figures 8 & 9). The structure appeared to sit within a large yard associated with the Rubber Works, which lay beyond the western extent of the study area. By the OS survey of 1968-90 the Rubber Works had been extended eastwards and the rectangular structure was amalgamated into this extension, (Figure 10). Although the Rubber Works was demolished in the early 21st a rectangular structure of the same scale is present on site today and is occupied by Astra Signs Ltd. It is not possible to say whether this is the same structure as the one depicted on the 1966 survey.

Historical trade directories record the site in 1905 as being occupied by B. Cohen an Indian Rubber Manufacturer however by 1911 the Rubber Works was occupied by The Premier Waterproof & Rubber Co Ltd, Indian rubber manufacturer (Slater's Directory 1905 & 1911). Between 1925 and 1930 the Rubber Works began to manufacture Rubber soles and heels which was a niche market during the period (Kelly's Directory 1930 & 1940). Historic photographs from 1967 show that at some time after 1940 the Rubber Works had been renamed Phillips Rubbers who continued to produce rubber heels and soles on the site until the beginning of the 21st century.





6. Significance of the Remains

6.1 The Policy Context of Heritage Assets

The archaeological resource of an area can encompass a range of assets, including belowground remains, earthworks, and standing buildings and other structures. Some of these remains may have statutory protection, as Scheduled Ancient Monuments or Listed Buildings. Others do not but may nevertheless be of archaeological significance. Under both national and local planning policy, as outlined below, both statutory and non-statutory remains are to be considered within the planning process.

The NPPF (National Planning Policy Framework, March 2012) sets out the Secretary of State's policy on planning and includes a section on the conservation of the historic environment (including historic, archaeological, architectural and artistic heritage assets, NPPF paras 126-141), and its wider economic, environmental and social benefits. NPPF emphasises the significance of an individual heritage asset within the historic environment and the value that it holds for this and future generations in order to minimise or avoid conflict between the heritage asset's conservation and any aspect of the planning proposals. NPPF draws a distinction between designated heritage assets of national importance and heritage assets that are not designated but which are of heritage interest and are thus of a material planning consideration (paras 134 and 135). In the case of the former, the presumption should be in favour of conservation; in the case of the latter, where this is warranted by its significance, the developer is required to record and understand the significance of the heritage asset before it is lost, in a way that is proportionate to the nature and level of the asset's significance, by the use of survey, photography, excavation or other methods.

NPPF states that non-designated assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments should be considered in the same manner as designated sites (NPPF para 139). Regarding this policy a lack of formal designation does not itself indicate a lower level of significance; in this instance the lack of designation reflects that the site was previously unknown and therefore never considered for formal designation. Wherever possible, development should be located and designed so as to avoid damage to archaeological remains, ensuring that they are preserved in situ. Where this is not possible, or appropriate, the developer will be required to make suitable provision to ensure that the archaeological information is not lost, and in many cases to secure the preservation of the remains.

The Greater Manchester Archaeological Advisory Service (GMAAS) act as archaeological curator for the Greater Manchester Region and provide archaeological advice to Manchester City Council and have been consulted for the present assessment.



6.2 Assessment Methodology and Significance Criteria

The most commonly accepted methodology for assessing archaeological significance is the Secretary of State's criteria for the scheduling of ancient monuments, outlined in Annex 1 of Scheduled Monuments: identifying, protecting, conserving and investigating nationally important archaeological sites under the Ancient Monuments and Archaeological Areas Act 1979 (DCMS March 2010). These criteria have all been utilised in this assessment and are listed below:

- Period
- Rarity
- Documentation
- Group Value
- Survival/Condition
- Fragility/Vulnerability
- Diversity
- Potential

6.3 Baseline Significance Conditions for the Dantzic Street Study Area.

Period

The study area contains known archaeological remains which date from the late 18^{th} century through to the late 20^{th} century. These remains belong to three main types of activity:

- Housing Sites 1, 2, 3, 5c, 6, & 7: late 18th through to mid-19th centuries
- Commercial Premises **Sites 3, 5a & 5b**: early to mid-19th century
- Industrial Works Sites 8, 9, 10 & 11: mid-19th through to late 20th centuries
- One site of unknown function **Site 4** late 18th century

Rarity

Portland Street Glass Works:

The remains relating to the mid-19th century Glass Works (**Site 8**) on Water Street, would contribute to an important but little studied part of Manchester Industrial development. Manchester glass is one of the least known aspects of English glass history, and yet during the mid-19th century, Manchester was producing up to twenty five tons of flint glass per week (Dodsworth, 1980: 64).

Recent archaeological investigations at the site of Percival, Vickers & Co Ltd Flint Glass Works on Jersey Street in Manchester, highlighted that few details are available regarding the improvements made to glass furnaces during the 19th century, reflecting the situation that glass making was a closely guarded secret and little was recorded in the period 1826 to 1896



(Miller, 2004: 12-13). However what is known is that during the mid-19th century the round reverbatory furnaces of the early 19th century which contained two or four crucibles saw enlargements to accommodate eight to ten crucibles (Miller, 2004: 13). The Glass Works identified within the study area sits within this transitional period and as such offers a rare opportunity to investigate these currently unknown improvements to the glass making industry.

Victoria Bolt & Nut Works:

The Archaeological Research Framework for the North West of England highlights the need for more research into the smaller but highly significant 19th and 20th century workshop based industries such as nail and bolt making (Newman & McNeil, 2007: 154). Therefore the remains of the works on Bilberry Street would offer the opportunity to gather further information on this little studied industry.

Workers Housing (Sites 1 to 7):

The remains of the late 18th and early to mid-19th century workers housing and commercial premises (**Sites 1 to 7**) would provide an opportunity to increase our understanding of the early industrial development of the Manchester area. Within the Archaeological Research Framework for the North West, Richard Newman and Robina McNeil suggest that there are many aspects of 19th century urban life which are insufficiently covered within the documentary record and archaeological research is needed to shed light on the children, servants, domestic based workers and the urban working classes within the region (Brennand, 2007: 144).

Documentation

The landscape history of the site has been recovered from the historic map base, the use of archival material such as the census returns and trade directories, from local historical sources and previous archaeological work. More detail could undoubtedly by learned about the development and use of the site through the examination of further documentary sources, but these are unlikely to alter significantly the archaeological and historical importance of the sites identified in this report.

Group Value

The remains of the late 18th and early 19th century workers housing and commercial premises (**Sites 1 to 7**) along with the remains of the mid-19th century Glass Works (**Site 8**) and late 19th century Bolt and Nut Works (**Site 9**) represent a contemporary group of structures which cumulatively represent the early urbanisation of the Newtown district of Manchester and its subsequent industrialisation.



Survival / Condition

The extent and survival of the below ground archaeological remains within the study area is presently unknown.

Cartographic sources confirm that the majority of the archaeological remains identified within the study area were not cleared until the mid to late 20th century and since this clearance large areas have remained undeveloped (**Figures 2 to 10**). Therefore the study area does have the potential to contain intact archaeological remains relating to the late 18th to mid-19th century workers housing and commercial premises (**Sites 2b, 2c, 3, 5a, 5c, 6 & 7**), the mid-19th century Glass Works (**Site 8**) and the late 19th century Bolt & Nut Works (**Site 9**).

However the extension of the Rubber Works in the late 19th century may have disturbed some of the archaeological remains located within the western extent of the study area, these include the late 18th and early 19th century workers housing and commercial premises on Portland Street (**Site 5b**), Bilberry Street (**Site 1**) and the western extent of Flag Row (**Site 2a**). In addition during the early 21st century a warehouse structure currently occupied by Astra Signs Ltd was constructed at the southern end of the site and this may have impacted on some of the remains relating to the western extent of the Victoria Bolt & Nut Works (**Site 9**).

Fragility/Vulnerability

See below section 7.1 The Identification and Evaluation of the Key Impacts on the Archaeology.'

Diversity

The diversity of the below-ground remains with the study area is presently unknown. However cartographic sources suggest that any intact remains would most probably relate to the late 18th to mid-19th century workers housing (**Sites 2b, 2c, 3, 5a, 5c, 6 & 7**), the mid-19th century Glass Works (**Site 8**) and the late 19th century Bolt & Nut Works (**Site 9**).

Potential

The study area contains the potential to yield intact archaeological remains relating to the early urbanisation of the Newtown district of Manchester during the late 18th and early 19th centuries (**Sites 1 to 7**) and its subsequent industrialisation specifically with regards to the production of Flint Glass and Engineering components (**Sites 8 & 9**).

However documentary research suggests that the site may also have the potential to yield



archaeological remains relating to the manufacturing of clay tobacco pipes. Mid-19th century Census Returns and Rate Books show that one of the properties fronting Portland Street (**Site 5b**) contained a house and workshop owned and occupied by a Thomas and Peter Bradshaw who were listed as a Pipe Manufacturer and Pipe Maker. Furthermore along Flag Row a house and Yard (**Site 3**) were listed as being owned and occupied by a Pipe Manufacturer named William Houghton and a further six Pipe Makers and three Pipe Finishers were listed as living in the property. Excavations carried out less than 1km to the south-west of the study area at Hurst Court, revealed the remains of two mid- 19th century clay pipe kilns within the rear yards of two late 18th / early 19th century buildings and it maybe that similar remains could be encountered within the current study area.

Excavations carried out by the Centre for Applied Archaeology on the land to the immediate west of the study area have revealed extensive intact archaeological remains of late 18th and 19th century date, similar to those identified within this report, (Noble: 2015). In addition, the excavations also uncovered small surviving portions of the areas pre-industrial landscape in the form of a 0.45m deep deposit of plough-soil which contained several sherds of medieval pottery. On this basis it is plausible to suggest that the current study area does have the potential to yield substantial below ground archaeological remains. However the previous excavations also revealed that the late 20th century extension to the Rubber Works (**Site 11**) had been constructed on a concrete raft which had caused some damage to the archaeological deposits beneath. As such any remains contained within the western extent of the study area may have been subject to some damage, (Noble: 2015).

6.4 Significance

On the available evidence there are no remains within the study area which are considered to be a heritage asset of national significance.

However, the study areas contains known and potential remains of late 18th and early 19th century workers housing (**Sites 1 to 7**), a mid-19th century Flint Glass Works (**Site 8**), possible mid-19th century Clay Tobacco Pipe Workshops and Kiln(s) (**Sites 5b & 3**) and a late 19th century Bolt & Nut Works (**Site 9**), which could all be considered to be of regional significance, depending upon the full extent of survival and condition.

The remains relating to the late 20th and early 21st century industrial units could be considered to be of Low Significance in that they are of little archaeological significance.





7. Impact of the Development

7.1 The Identification and Evaluation of the Key Impacts on the Archaeology

There are no nationally recognized standard criteria for assessing the significance of the impact of development on archaeological remains. However, the following criteria have been adopted from *the Highways Agency's Design Manual for Roads and Bridges, Volume 11, Section 3, Part 2, Annex 5, August 2007.* Although designed for use in transport schemes, these criteria are appropriate for use in other environmental impact assessments.

The value of known and potential archaeological remains that may be affected by the proposed development has been ranked using the following scale: Very High, High, Medium, Low, and Negligible:

- **Very High** includes World Heritage Sites and archaeological remains of international importance.
- **High** includes Scheduled Ancient Monuments and undesignated archaeological remains of national importance.
- **Medium** includes undesignated archaeological remains of regional importance.
- Low includes undesignated archaeological remains of local importance.
- **Negligible** includes archaeological remains of little or no significance.
- **Unknown** applies to archaeological remains whose importance has not been ascertained.

The Dantzic Street study area contains archaeological remains of potentially Medium (regional) and Negligible significance.

Impacts on archaeological remains can be adverse or beneficial, direct or indirect, temporary or permanent. The magnitude of sensitivity for the study area has been assessed using the following scale:

- **Major** involves change to archaeological remains or their setting such that the resource is totally altered.
- Moderate involves change to archaeological remains or their setting such that the resource is significantly modified.
- Minor involves change to archaeological remains or their setting such that the



resource is slightly altered.

- **Negligible** involves very minor change to archaeological remains or their setting such that the resource is hardly affected.
- **No Change** involves no change to archaeological remains or their setting. Assessment of the magnitude of the impacts has been ranked using the following scale:

Assessment of the magnitude of the impacts has been ranked using the following scale:

- Very Large
- Large
- Moderate
- Slight and
- Neutral

This assessment combines the value of the archaeological resource and the magnitude of impact, as shown in the table below:

Table 7.1: Significance of Impact Matrix

Value of Remains	Magnitude of Change				
	No Change	Negligible	Minor	Moderate	Major
Very High	Neutral	Slight	Moderate/ Large	Large/ Very Large	Very Large
High	Neutral	Slight	Moderate/ Slight	Moderate/ Large	Large/ Very Large
Medium	Neutral	Neutral/ Slight	Slight	Moderate	Moderate/ Large
Low	Neutral	Neutral/ Slight	Neutral/ Slight	Slight	Moderate/ Slight
Negligible	Neutral	Neutral	Neutral/ Slight	Neutral/ Slight	Slight

The proposed redevelopment of the study area would see the construction of a twenty two storey apartment block with commercial units and parking at ground level (**Figure 13**). This development would involve substantial piling and foundation works, along with associated service works and landscaping all of which could result in the removal and destruction of a large proportion of the below ground archaeological remains discussed within Chapters 5 & 6.



The magnitude of impact to these sites is from minor to major, the latter affecting the below ground archaeological remains directly either through damage or removal – the development fundamentally altering their present character. The significance of the impact is shown in Table 7.2 below.

Table 7.2: Impact Matrix for the Archaeological Remains at Dantzic Street.

Archaeological Remains	Value	Magnitude of Sensitivity	Magnitude of Change
Site 1: Bilsborough / Bilberry Street	Medium	Moderate	Moderate
Sites 2 & 3: Flag Row	Medium	Major	Moderate/Large
Site 4: Unknown Structure	Medium	Major	Moderate/Large
Site 5: Portland / Dantzic Street	Medium	Major	Moderate/Large
Site 6: Water / Warford Street	Medium	Moderate	Moderate
Site 7: Dixon/ Dulwich Street	Medium	Moderate	Moderate
Site 8: Portland St Glass Works	Medium	Major	Moderate/Large
Site 9: Victoria Bolt & Nut Works	Medium	Major	Moderate/Large
Site 10: Industrial Works	Low	Major	Moderate/Slight
Site 11: Rubber Works	Low	Major	Moderate/Slight





8. Recommendations for Mitigation

8.1 Heritage Assets

Where the loss of the whole or a material part of a heritage asset's significance is justified by a development, the developer should be required to record that asset and advance understanding of its significance, and to make this evidence publicly accessible (NPPF para 141).

None of the known and possible heritage assets identified within the application site are considered to be of national importance. However, there are known and potential heritage assets of lesser archaeological significance which merit preservation by record, should they be directly affected by development.

8.2 Mitigation Measures

The impact of development can be seen to be moderate/slight on (Sites 10 & 11), moderate on (Sites 1, 6 & 7) (see Table 7.2). However, the impact of development on (Sites 2 to 5, 8 & 9) (see Table 7.2) will have a moderate to large effect. Thus, any redevelopment occurring within the study area would involve the loss and disturbance of a large proportion of the below-ground archaeological remains identified within this report.

Where appropriate because of their significance, mitigation will need to be undertaken through an archaeological record (NPPF 2012, paras 141). Following consultation with the archaeological planning advisory body for the City (the Greater Manchester Archaeological Advisory Service – G.M.A.A.S) it is recommended that any re-development of the site would require further archaeological evaluation, through a programme of trial trenching, which would focus on (**Sites 1 to 9**). Should the evaluation trenches reveal significant intact archaeological remains, further archaeological works in the form of a programme of open area excavation would be required. This heritage work would need to be scheduled and completed prior to the redevelopment of the site.

All archaeological works will require a Written Scheme of Investigation (WSI) to be produced in consultation with the Greater Manchester Archaeological Advisory Service and should be concluded at the earliest possible opportunity.

8.2 Residual Effects

As a consequence of the proposed mitigation measures, following development, there will be no significant residual impact on the archaeological resource





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- Local Image Archive: http://images.manchester.gov.uk/ (accessed 20/01/2016)





The archive comprises a historical map regression, historical photographs and historical research notes. This archive is currently held by the Centre for Applied Archaeology and a copy of this report will be forwarded to Land Property Investment Consultancy Limited and Leftfield Investment Holdings Limited, following the publication of the site report.

A copy of this report will be deposited with the Greater Manchester Historic Environment Record held by the Greater Manchester Archaeological Advisory Service (GMAAS).





Appendix 1: Figures

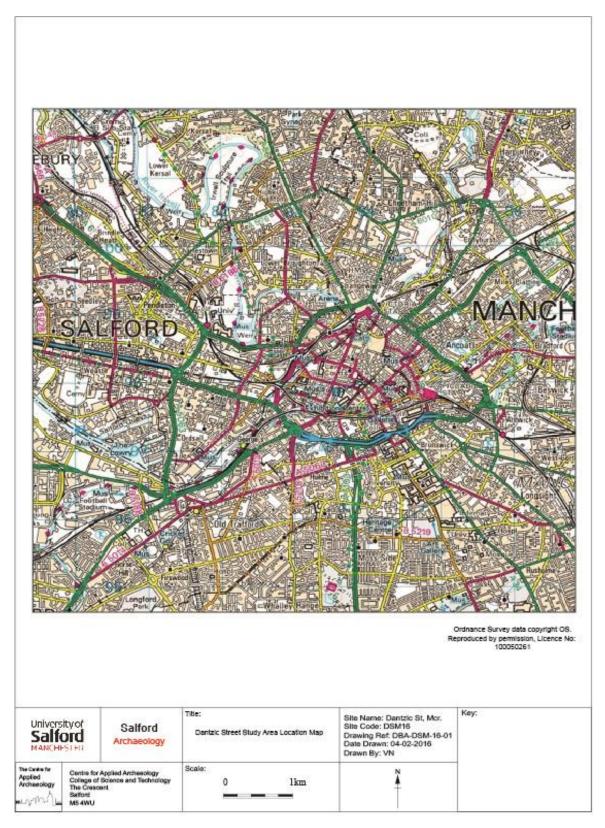


Figure 1: Location Map of the Dantzic Street Study Area



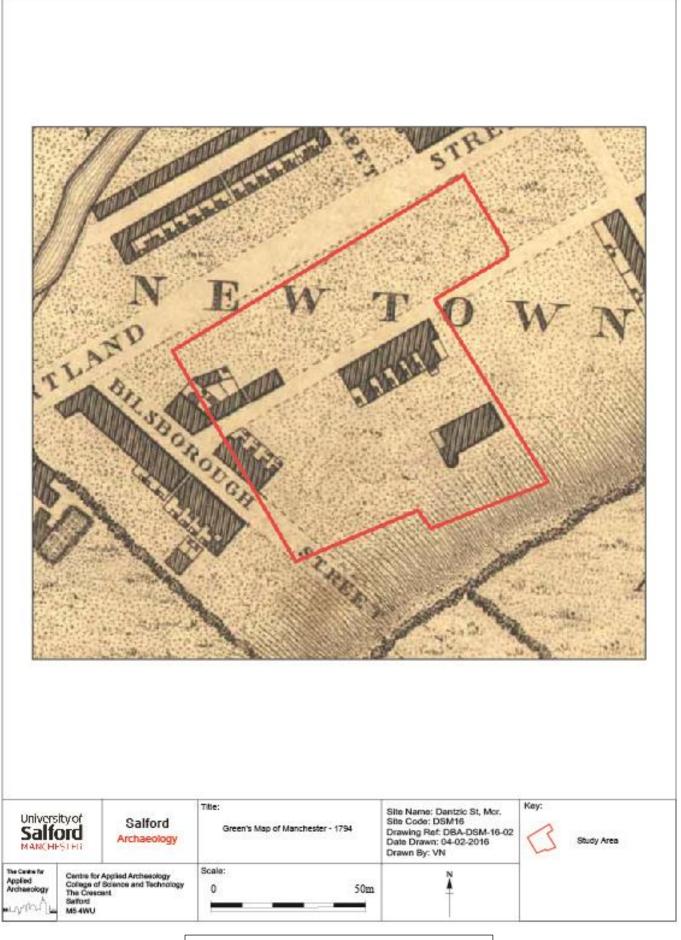


Figure 2: Green's Map of 1794





Figure 3: Banck's Map of 1831



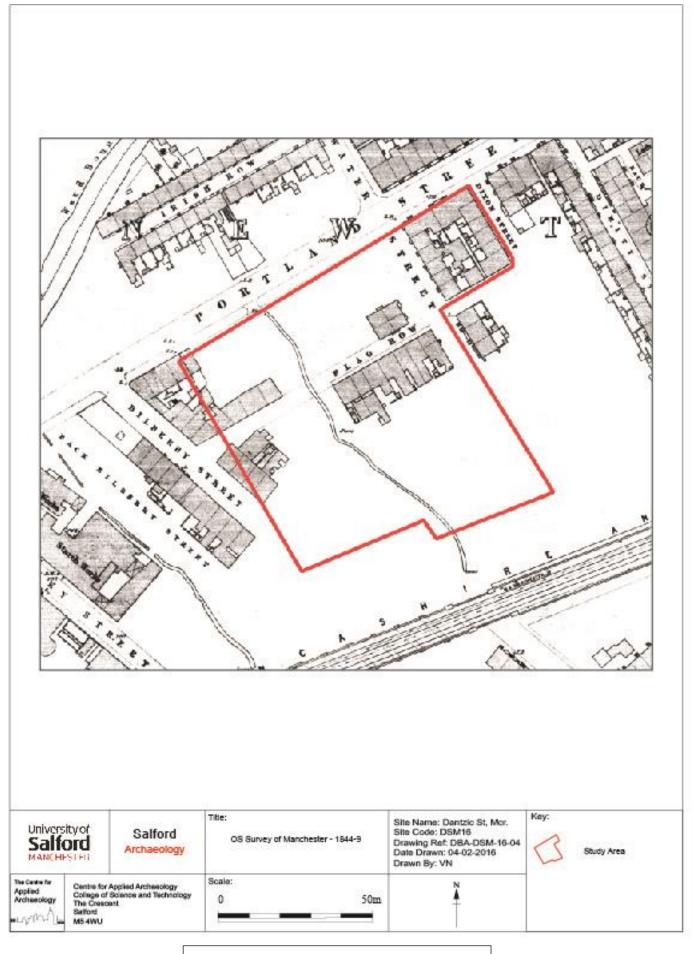


Figure 4: OS Survey of 1844-9



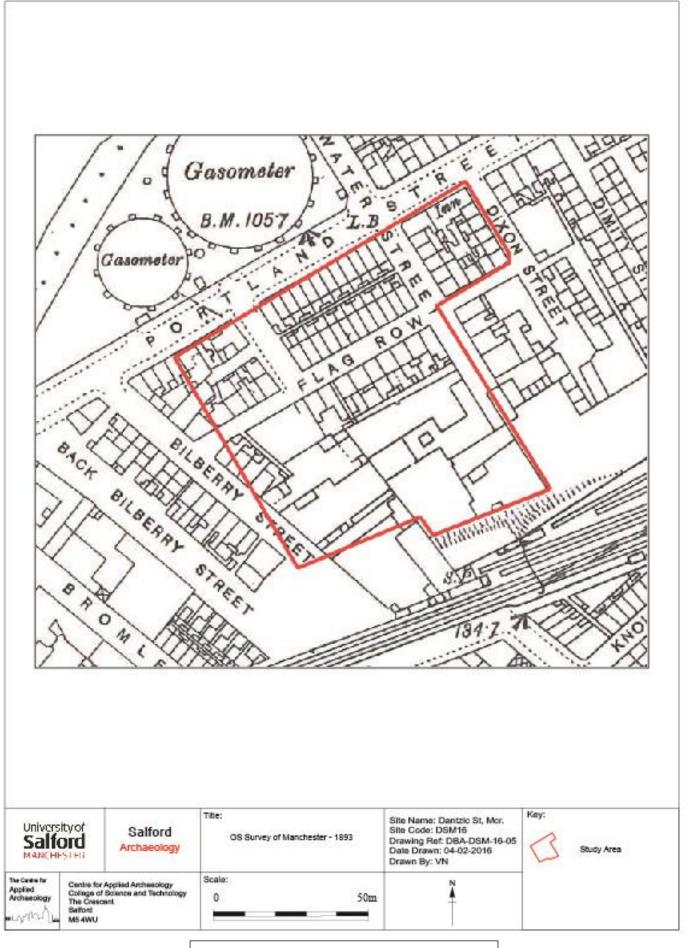


Figure 5: OS Survey of 1893



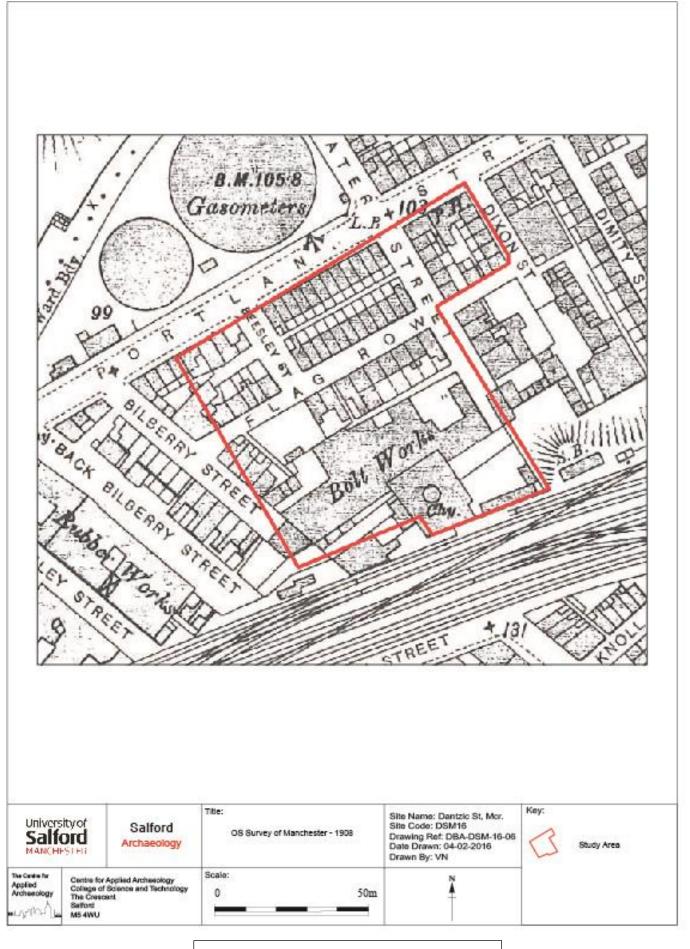


Figure 6: OS Survey of 1908



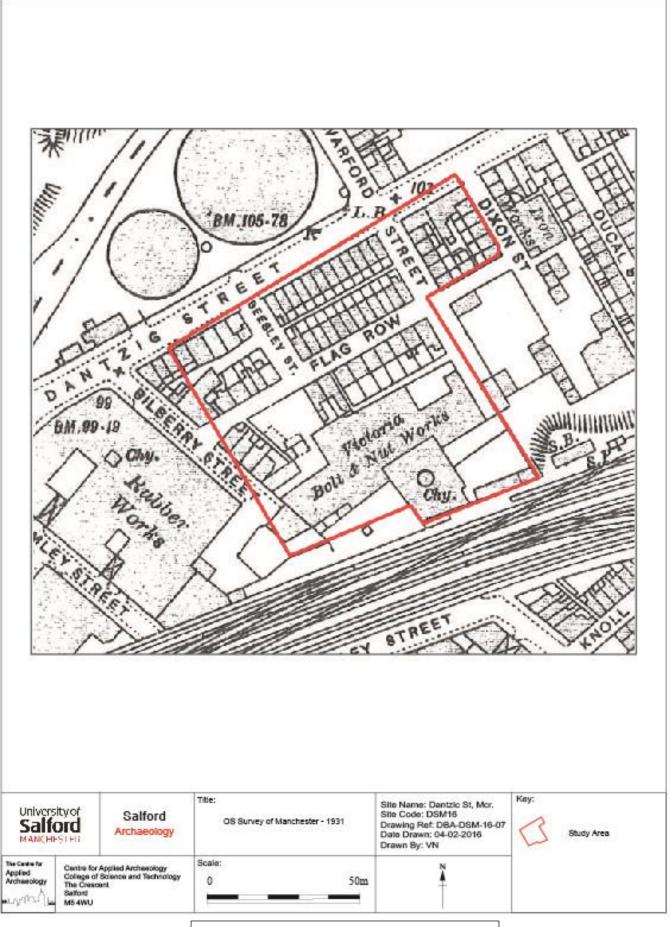


Figure 7: OS Survey of 1931



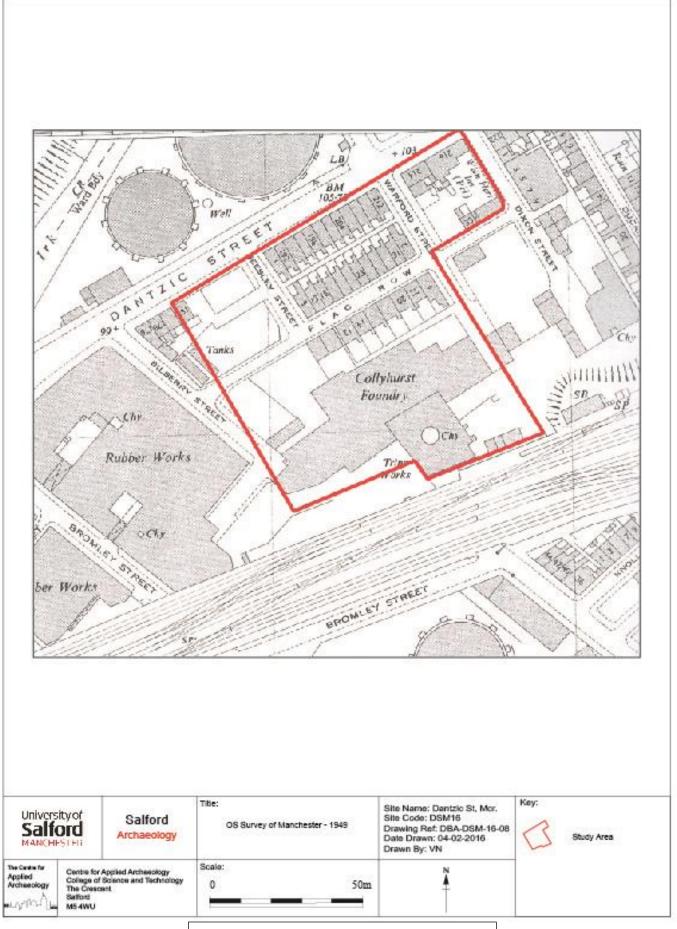


Figure 8: OS Survey of 1949



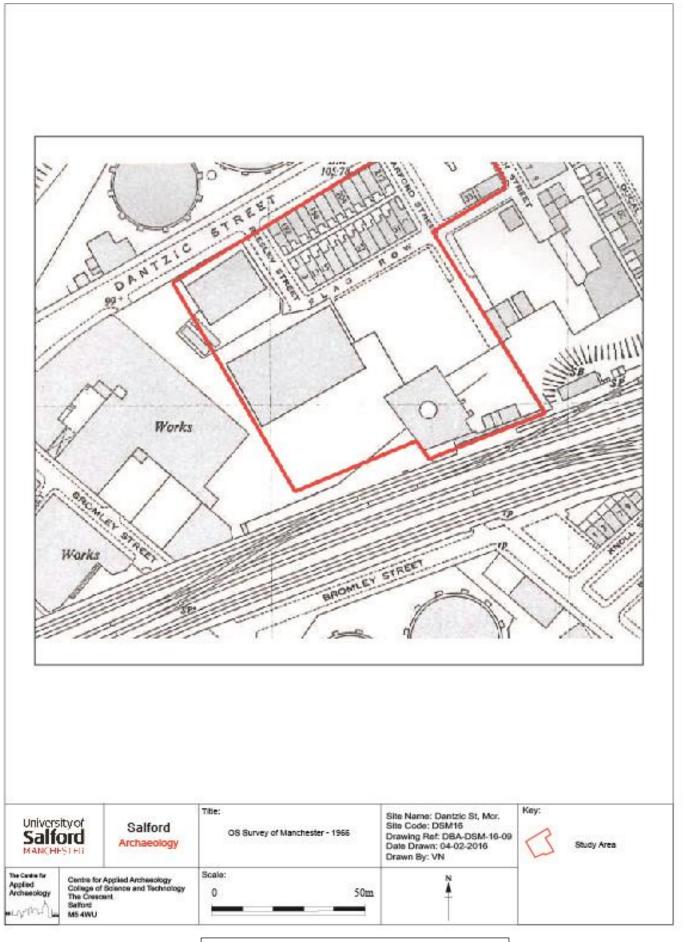


Figure 9: OS Survey of 1966



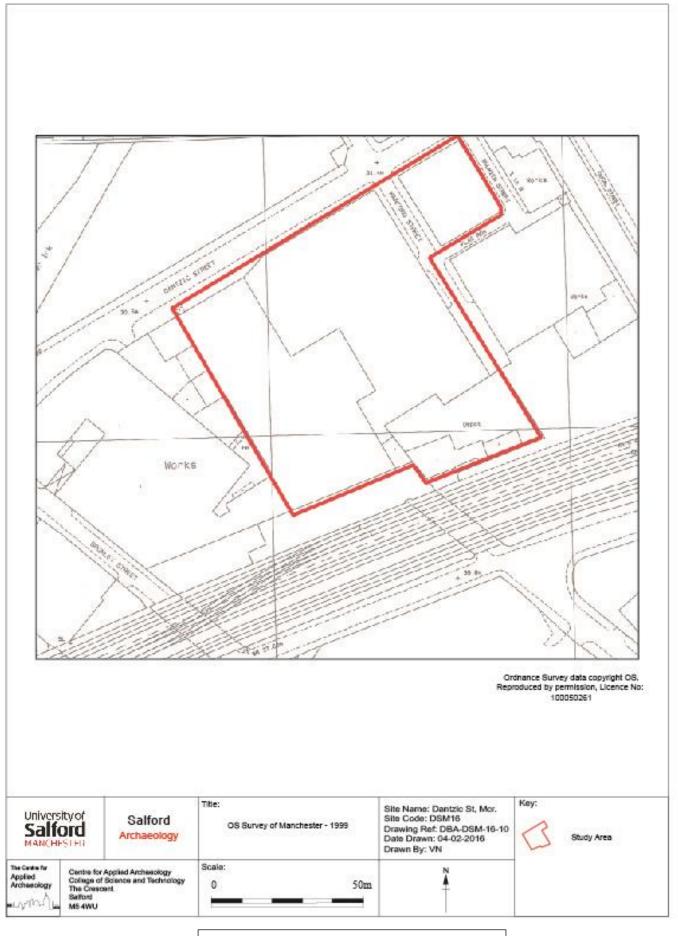


Figure 10: OS Survey of 1999





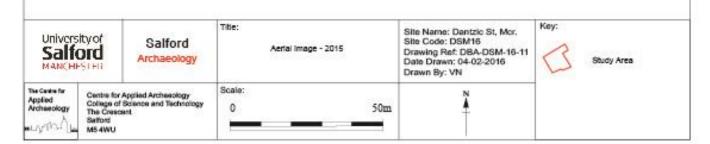


Figure 11: Modern Aerial View of the Study Area (2015)



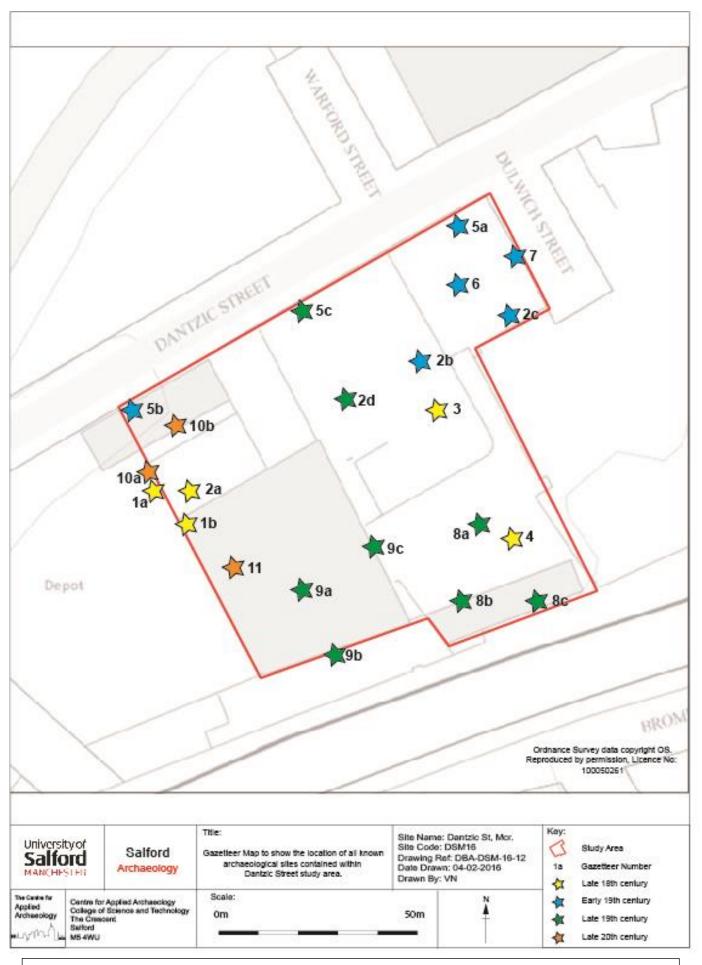


Figure 12: Gazetteer Map showing all known archaeological sites within the study area.





Appendix 2: Site Visit Photographs



Figure 13: View of the study area (background), looking North-East



Figure 14: Western extent of the study area, looking North-East





Figure 15: Warehouse structure within the western half of the study area, looking South-East



Figure 16: Eastern extent of the study area, looking South-West





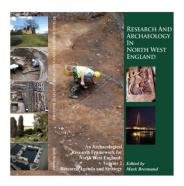
Figure 17: Eastern half of the study area, looking South-East.







CONSULTANCY



DESK BASED ASSESMENTS



WATCHING BRIEF & EVALUATION



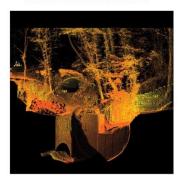
EXCAVATION



BUILDING SURVEY



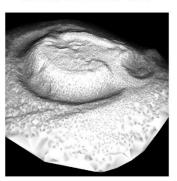
3D LASER SCANNING



COMMUNITY INVOLVEMENT



LANDSCAPE SURVEYS



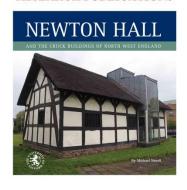
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