

An Archaeological Desk Based Assessment of land at Store Street, Manchester



View east of the PDA from Store Street

ARS Ltd Report 2021/50

March 2021 (Updated December 2021)

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Prepared on behalf of: M1 Piccadilly Ltd

Date of compilation: March 2021 (Updated
December 2021)

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Local Authority: Manchester City Council

Site central NGR: SJ 84986, 98075

EXECUTIVE SUMMARY

Archaeological Research Services Ltd was commissioned by Zerum Consult Ltd on behalf of M1 Piccadilly Ltd to produce an archaeological desk-based assessment for land at Store Street, Manchester. This assessment has been carried out in advance of a planning application for a multi-storey residential development, including car and bicycle parking and associated landscaping. This assessment addresses the potential impacts of development at this site upon below-ground archaeological remains only, with impacts to the built environment to be addressed within a separate report.

The site was once the location of two industrial complexes: the Thompson, McKay & Co. Warehouse and the J.W.Southern & Son Ltd. Packing Case Manufactory and Timber Yard. The majority of the buildings within these complexes date to the mid-late 19th century, with historic mapping showing the site remains largely unchanged throughout the late-19th – mid-late 20th century, with the wider addition of several new structures. During the late 20th century, both complexes were demolished, with the PDA now void of all buildings. Currently, the ground level within the PDA appears to be c.2.5m above the ground level of the adjacent Store Street, with 2014 ground investigations showing the makeup of the ground within the north-western corner of the PDA comprising made-ground/fill.

In consultation with the Senior Planning Archaeologist with GMAAS, it is recommended that archaeological monitoring in the form of a watching brief should be carried out during future site investigation works (e.g. test pitting) in order to better understand the depth and construct of made-ground and the level of truncation of any below-ground deposits below modern street level. Other styles of site investigation work (e.g. narrow-gauge boreholes/window samples) will not require archaeological attendance, though access to these results will be useful in informing presence/absence of archaeology.

Based on a review of any site investigation, and in consult with GMAAS, it may be appropriate to carry out further archaeological works (e.g. evaluation and/or possible open area excavation) in order to record any significant 18th/19th century remains identified within the PDA.

TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Project and Planning Background	1
1.2	Site description	1
1.3	Geology	1
2	AIMS AND OBJECTIVES.....	2
3	METHOD STATEMENT	2
3.1	Study Area.....	2
3.2	Information Sources.....	3
3.3	Limitations to this Assessment	3
4	BASELINE DATA.....	3
4.1	Archaeological and Historical Background.....	3
4.1.1	The Prehistoric Period	3
4.1.2	The Romano-British Period.....	4
4.1.3	The Early Medieval – Medieval Period	4
4.1.4	The Post-Medieval Period.....	5
4.1.5	The Modern Period.....	8
4.2	Designated Heritage Assets	10
4.3	Non-Designated Heritage Assets	10
4.3.1	Historic Structures	10
4.3.2	Archaeological Remains.....	11
4.4	Archaeological Events	12
4.5	Historic Landscape Characterisation.....	13
5	ASSESSMENT OF THE SIGNIFICANCE OF AFFECTED HERITAGE ASSETS.....	13
6	ASSESSMENT OF POTENTIAL IMPACTS	15
7	RECOMMENDATIONS	16
8	STATEMENTS AND ACKNOWLEDGEMENTS.....	16
8.1	Archive Deposition	16
8.2	Publicity, Confidentiality and Copyright.....	16
8.3	Statement of Indemnity	16
8.4	Acknowledgements.....	16
9	REFERENCES.....	17
9.1	Primary Sources	17
9.2	Secondary Sources	18

LIST OF TABLES

Table 1: Trade Directory Entries for Thompson, McKay & Co.....	7
Table 2: Trade Directory Entries for James W. Southern & Son Ltd.	7
Table 3: Features identified from historic mapping	11
Table 4: Ground investigations within the site boundary	12

LIST OF APPENDICES

Appendix 1: Gazetteer of The Built Environment	20
Appendix 2: Gazetteer of Archaeological Remains and Events.....	21
Appendix 3: Gazetteer of HLC Types.....	24
Appendix 4: Figures.....	27
Appendix 5: Photographs.....	34
Appendix 6: Envirocheck Historic Environment Mapping Report	37

LIST OF FIGURES

Figure 1: Site Location.....	28
Figure 2: Site Plan with Topographic Survey	29
Figure 3: Designated and Non-Designated Heritage Assets.....	30
Figure 4: Features Identified from Historic Mapping	31
Figure 5: Archaeological Events and Ground Investigation Works	32
Figure 6: Historic Landscape Characterisation	33

LIST OF PHOTOGRAPHS

Photograph 1: View east across the PDA from Store Street.	35
Photograph 2: View north-east along Store Street towards the Grade II* listed Aqueduct. The PDA is visible to the right.....	35
Photograph 3: View south east from Store Street across the PDA showing the rise in ground level within the site itself.	36
Photograph 4: View south-west along Store Street of the PDA and the adjacent industrial unit.....	36

1 INTRODUCTION

1.1 Project and Planning Background

Archaeological Research Services Ltd was commissioned by Zerum Consult Ltd on behalf of M1 Piccadilly Ltd to produce an archaeological desk-based assessment (hereafter DBA) for land at Store Street, Manchester. This assessment has been carried out in advance of a planning application for a multi-storey residential development, including car and bicycle parking and associated landscaping. This assessment addresses the potential impacts of development at this site upon below-ground archaeological remains only, with impacts to the built environment to be addressed within a separate report.

1.2 Site description

The 'red line boundary' of the proposed development area (hereafter 'PDA') is depicted by a red polygon on Figure 1, is c.0.07ha in area and is centred at NGR SJ 84986, 98075 (Figures 1 and 2). The site is located on the southern side of Store Street, to the south-west of the Grade II* Listed Stone Street Aqueduct (NHLE 1270666). The site is bounded to the west by the Unit 2a Gateway Industrial Estate building, to the south and south-east by various buildings of the Piccadilly Village complex, and to the east by an enclosed plot of land covered in trees and vegetation.

The site lies above a stone-faced retaining wall which separates the PDA from Store Street to the north. This northern boundary wall is c.2.5m high at its south-western end, steps up to c.3.30m at its north-eastern end, and contains a series of weep-holes inset at regular intervals along the wall. The wall itself appears to be composed primarily of concrete, fronted with dressed stone blocks. The south-western corner and boundary wall appears to be composed of red-orange brick, though it is unknown if this retaining wall is entirely brick or brick-faced. This brick wall is also c.2.5m in height, rising towards its south-eastern end. The southern boundary of the PDA is formed by a mixture of metal railings/fencing and brick stone walling. The eastern boundary is comprised of black metal fencing, with the same style fencing also surmounting the northern, southern and part of the western boundary walls. The northern fencing also contains a small red plaque inscribed 'Piccadilly Village'.

The site, at present, is accessed solely from the Piccadilly Village complex to the south-east and slopes from c.43.83m aOD within the eastern part of the PDA to c.39.34m aOD within the north-western corner of the site. Until recently, the site was overgrown extensively with ivy, brambles and trees. At the time of the site visit on 4th March 2021, the site has been largely cleared of the overgrowth. Ground investigations works carried out in 2014 (section 4.4 below; Geotechnics Ltd 2014) show that ground within the PDA is largely comprises made ground containing a low cobble content of concrete and bricks, and also includes fragments of clinker, slag, slate, sandstone, with occasional glass, porcelain and plastic scraps. It would appear that these ground investigations did not extent much beyond the depth of modern street level, so it remains unknown the composition of ground beyond (Figures 1 and 2; Photographs 1 - 4).

1.3 Geology

The underlying solid geology of the PDA comprises sandstone of the Chester Formation, sedimentary bedrock formed approximately 247 to 250 million years ago in the Triassic

period when the local environment was previously dominated by rivers. This is overlain by superficial deposits of Devensian Till – Diamicton (BGS 2021).

2 AIMS AND OBJECTIVES

The principal aims of this assessment are to produce a report detailing any archaeological potential of the PDA, and to assess the potential impacts of the proposed development upon any buried and upstanding archaeological remains and to assess their significance. The following objectives will contribute towards accomplishing this aim:

- ♦ To collate and assess existing information about the historic environment within the study area and to determine as fully as possible from the available evidence the nature, survival, quality, extent and importance of any archaeological remains and any upstanding buildings/structures within the PDA.
- ♦ To provide an assessment of areas of archaeological potential and survival based on the above research and assess the potential for the use of particular investigative techniques in order to aid the formulation of any necessary mitigation strategy, including further evaluation, excavation, and/or preservation of archaeological remains.
- ♦ To assess, where possible from the available sources, the extent of any ground disturbance associated with any previous intrusive development.

3 METHOD STATEMENT

The DBA was undertaken in accordance with the guidelines set out in *The Chartered Institute for Archaeologists' Standards and Guidance for Historic Environment Desk Based Assessment* (CIfA 2020).

The approach to the assessment of significance is that set out in *Conservation Principles* (English Heritage 2008), which states that the significance of heritage assets derives from the 'heritage values' that they possess, which may be *evidential*, *historical* (either *illustrative* or *associative*), *aesthetic* or *communal*. It is further outlined in Annexe 1 of *Scheduled Monuments & Nationally Important but Non-Scheduled Monuments* (DCMS 2013) which states that 'monuments can have both archaeological and historic interest and derive significance from both their physical presence and their setting. The following principles should be used to gauge the importance of heritage assets: *period, rarity, documentation/finds, group value, survival/condition, fragility/vulnerability, diversity, and potential*' (DCMS 2013, 10-11).

Reference is also made to 'heritage significance' as described in the *National Planning Policy Framework (NPPF)*, which is defined as the '*value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting*' (MHCLG 2019, 71).

3.1 Study Area

The study area adopted for this assessment was agreed with the Greater Manchester Archaeology Advisory Service (GMAAS) and comprises a 250m off-set from the Application

Site boundary. This study area is depicted as a dark blue polygon on Figure 1 and subsequent figures.

3.2 Information Sources

The following sources of information were consulted to inform this assessment:

- ♦ The Greater Manchester Historic Environment Record (HER), maintained by GMAAS for information regarding non-designated assets and previous fieldwork, and Historic Landscape Characterisation (HLC) mapping.
- ♦ The National Heritage List for England (NHLE) maintained by English Heritage for information concerning designated assets within the study area.
- ♦ Google Earth and Bing online historical satellite imagery.
- ♦ Envirocheck Historic Mapping Report for historic Ordnance Survey maps.
- ♦ The British Geological Survey onshore digital maps at 1:50 000 scale (DiGMapGB-50 – WMS).
- ♦ Various other relevant books, journals and publications identified during the course of the assessment, details of which can be found in the references section of the report.
- ♦ A site walkover to Historic England (2017) Level 1 standard was undertaken in overcast conditions on 4th March 2021.

3.3 Limitations to this Assessment

Limitations to this assessment have been outlined below, in line with ClfA's (2020) *Standards and Guidance for Historic Environment Desk Based Assessment* and 'Coronavirus challenges: standards and guidance advice' (ClfA 2021).

It was not possible to consult the following information sources during this assessment:

- ♦ The National Register of the Historic Environment (NRHE) maintained by English Heritage Archives.
- ♦ The Greater Manchester Archives and Local History Library for additional historic maps, plans, trade directories and other documents relevant to the study area.

4 BASELINE DATA

4.1 Archaeological and Historical Background

4.1.1 The Prehistoric Period

Evidence for prehistoric settlement in the Manchester region is scarce. There are small Mesolithic campsites in the Pennines to the north of Manchester though Mesolithic remains closer to the city are rare (Nevell 2008, 11). Neolithic and Early Bronze Age remains within the Manchester region are restricted to isolated finds of worked stone tools, the majority being residual in later contexts. To the south of the city, a Neolithic farmstead was uncovered at Oversley Farm (now part of Manchester Airport), with evidence of occupation continuing on the site through to the Late Bronze Age (Nevell 2008, 15). Finds of Iron Age date, including quern stones and metal finds, have also been identified as isolated findspots

within Manchester (Turner 2020). Within the city centre, there is little evidence of prehistoric activity as a whole, although whether this is the result of poor preservation due to the intensive later developments and redevelopments of the city or a reflection of a genuine settlement pattern is difficult to ascertain. The evidence that has been recovered has generally been centred around the location of the later Roman fort (in Castlefield) and around the cathedral and Hanging Ditch (Nevell 2008, 12). No remains of prehistoric date are recorded by the Greater Manchester HER within the wider 250m study area.

4.1.2 The Romano-British Period

The first Roman military occupation of Manchester was established during the governorship of Agricola in the AD70s, with a fort, known as *Mamucium*, founded in the area now known as Castlefield (Miller 2016). The original fort was a square, timber and turf structure, replaced in the late 2nd century by a slightly larger, rectangular timber fort, and finally rebuilt in stone in the first half of the 3rd century. A civilian settlement or *vicus* developed around the fort, though the full extent of it is unknown. Several excavations around the Castlefield area have produced evidence of domestic and industrial buildings as well as a shrine, with occupation beginning soon after the building of the original fort and continuing throughout its life. The *vicus* seems to have declined by the middle of the 3rd century although the evidence for these later phases of the fort and *vicus* are not clear since later activity has truncated the remains, although the presence of later coins suggests that the fort probably remained in use until the Roman Army's withdrawal from Britain (Nevell 2008, 21-31).

The projected route of the Roman Road from Manchester to Castleshaw (and eventually York) (HER 24.1.0) is noted by the Greater Manchester HER as running through the study area. Store Street is thought to potentially be a continuation of this Roman road (HER 24.1.8) though this awaits confirmation. Sections of the Manchester to Castleshaw Road were exposed on Gaskell Street in Newton Heath c.3km north-east of the PDA in 1856 and was found to have a gravel surface on a log base, with a probable construction date of c.AD79-84 (Burpoe 2020). The tentative alignment along Store Street follows the line identified during the Newton Heath excavation, though it should be noted that Store Street follows the alignment of Shooters Brook, which was culverted when the road was made in the late 18th/early 19th century, so this probable line seems unlikely.

4.1.3 The Early Medieval – Medieval Period

Following the Roman Army's withdrawal, evidence is again lacking for settlement activity. Archaeological remains in the Castlefield area show that the Roman fort area was abandoned from the end of Roman occupation until the early industrial period. It is possible that there were four sunken floored buildings adjacent to the fort, post-dating the Roman period; however, the interpretation of them is unclear (Morris 1983, 6). There is limited evidence of Saxon settlement elsewhere in Manchester, mainly in the form of isolated pottery and coins in the Cathedral area around the junction of the rivers Irk and Irwell (Nevell 2008, 36). In 919, there is a reference that King Edward the Elder sent an army to occupy Manchester, Manchester being located on the border between Anglo-Saxon Mercia and Viking Northumbria, suggesting that there was some form of settlement here at this time (Nevell 2008, 35).

The present site lay beyond the extent of medieval Manchester, which was centred around the Parish Church (now the cathedral) and Manchester Castle (probably beneath what is now Cheetham's School of Music) (Morris 1983, 15). The medieval city comprised a number of burgage plots along Hanging Gate, Withy Grove, Fennel Street, Millgate, The Shambles, Market Street, and Deansgate (Nevell 2008, 48), with Hanging Ditch, and two other ditches within the area, likely medieval in origin.

During the time of the 1086 Domesday Survey, Manchester lay within the Hundred of Salford which included all the land between the river Ribble and the Mersey, which had been granted to Roger de Poitu after the Conquest. In 1222, Manchester was granted an annual fair and in 1301, Thomas Grelley (one of the largest landowners within Manchester) was granted the Great Charter of Manchester by Edward I and thus it became a free borough (Hartwell *et al* 2004). No early medieval or medieval remains are recorded within the study area and it is likely that this area of the PDA remained largely undeveloped until at least the 18th century.

4.1.4 The Post-Medieval Period

By the end of the 16th century, Manchester was established as an important centre for the manufacture and trade of textiles with the town still centred around the medieval core of St Mary's Collegiate Church and Cheetham's School. The first planned expansion outside of this traditional centre was St. Ann's Church and Square in the early 18th century, with new buildings soon after developing between the old town at St. Ann's (Hartwell 2001). The first cotton mill was built in the 1780s and the first steam powered mill in 1789. From the late 18th century to the beginning of the 19th century, the number of mills doubled and continued to increase, as did the local population (Trow 2018).

Two of the earliest published maps that show this part of Manchester in detail are William Green's 1787-94 *Plan of Manchester and Salford* and Charles Laurent's 1793 *Topographical Plan of Manchester and Salford*. Both plans show the PDA immediately south of the open watercourse Shooters Brook within a wider landscape that is being laid out for urban growth, with some development having been already carried out both to the south and west of the PDA and possibly partially within the PDA itself. These plans show part of a long rectangular structure, situated between Shooters Brook to the north and a proposed road extension (possibly Wharf Street) to the south, extending within the southern part of the PDA (AR1). With the available resources, it was not possible to identify the function or any additional information about this structure.

In 1792, the construction of the Ashton Canal (HER 6361.1.0) was authorised by an Act of Parliament, with construction commencing immediately under the direction of Edward Banks. The proposed route of the Ashton Canal is first depicted on Green's 1787-94 plan, with the canal completed between Manchester and Ashton by early 1797. It would appear that this early route depiction was not fixed, as the impressive aqueduct over Store Street (NHLE 1270666), constructed c.1794-99 to span Store Street is in actuality located c.70m east of the earlier canal footprint depiction.

In 1794, another Act of Parliament was obtained, creating the Rochdale Canal Company, thus authorising the construction of the Rochdale Canal (HER 1386.2.0), which officially opened in 1804, although construction work continued through to 1807 (Hartwell 2001,

218). The Rochdale Canal linked the Bridgewater Canal in Manchester to the Calder and Hebble Canal in Yorkshire, thus creating a complete transport link between Hull and Liverpool. By 1800, the Ashton Canal and Rochdale Canal's were linked together (HER 11312.1.0), with this link allowing traffic to connect from the Ashton through to the Bridgewater Canal at Castlefield.

The routes of both canal systems are depicted for the first time on Swire's 1824 *Plan of Manchester and its Environs*. This plan depicts both the main canal alignments, in addition to a series of wharfs set within a rapidly urbanizing area. This plan is also the first to depict the proposed eastwards extension of Store Street, which was laid largely over the alignment of the culverted Shooters Brook likely sometime in the late 1790's. This plan is the first to show the pace of residential and industrial development within this part of Manchester as accelerated since the late 18th century, with a number of new buildings depicted to the north and west of the PDA. The PDA itself is depicted between the proposed alignments of both Store Street to the north and Lomas Street (formerly Wharf Street) to the south. The aforementioned rectangular structure depicted on the earlier 18th century plans is still depicted within the PDA boundary, though it now extends into the proposed footprint of Store Street in the north. By the time of the production of Banck's & Co.'s *Plan of Manchester* by 1831, Store Street has officially been laid out to the north of the PDA boundary, with the building once depicted within the site boundary no longer present.

The 1849 (surveyed in 1848) Ordnance Survey (OS) plan (Appendix 6) shows the continued expansion within this area of Manchester, with new structures now present to the south and east of the PDA. Due to the small scale of this plan, it is not possible to draw much information about the PDA itself, apart from its location within a small area which appears to have remained largely undeveloped. Both the 1851 OS plan (Appendix 6) and Adshead's 1850-51 plan of *Manchester's Municipal Ward: St Clemenet's* provide a more detailed view of the PDA during the mid-19th century. The 1851 OS plan shows the PDA located along the southern extent of Store Street, situated between Norman's Buildings No. 1 (to the south-west) and No.2 (to the east), with connecting roads between both sets of structures running through the PDA itself. What appears to be a boundary wall separates the PDA from a 'Brick Croft' to the south, suggesting this usage was the reason the area has been less developed than the surrounding townscape.

Adshead's 1850-51 plan shows the overall layout of the buildings surrounding the PDA as largely the same, though this plan does not depict the Brick Croft to the south of the PDA. Instead, this map lays out the proposed streets that will fill in this largely blank area between Store Street to the north and Baird Street to the south. This plan does depict a square warehouse between the PDA and Roman Buildings (Norman's Buildings No.2), though no further information is available about this structure, nor is it within the same location as the rectangular structure depicted on the 18th century plans.

The first plan to depict the overall development of this previously 'blank' area of Manchester is the 1891 OS plan (Appendix 6). This plan shows the PDA south of Store Street and separated into two distinct areas, separated by a wall running north-west/south-east through the site itself. The eastern half of the PDA includes three buildings and a yard associated with a Packing Case Manufactory, whilst the western half of the site includes two structures and a yard set back from Store Street to the north. Whilst this plan does not

provide any further information about these structures, the less detailed 1889 Goad Fire Insurance plan (Appendix 6) does provide more detailed information about the buildings within the PDA.

The 1889 Goad Fire Insurance plan (Appendix 6) names the buildings within the western part of the PDA as part of the ‘Thompson, McKay & Co. Provender Warehouse complex (AR4). The main rectangular warehouse complex appears to be formed from five adjoining structures, which are 2-3 storeys in height and composed of red brick with pitched slate roofs. The entirety of the first floor is comprised of stables, with an entrance to this complex from the south along Lomas Street. Documentary research has not revealed much further information about this company, with the first reference to the firm appearing in the 1895 *Directory of Manchester and Salford* (Table 1 below) as ‘sheet & saddlery stores.’

Table 1: Trade Directory Entries for Thompson, McKay & Co.

Year and Directory	Address	Streets Directory
1895 Slater’s	Store Street	Thompson, McKay & Co., sheet & saddlery stores
1909 Slater’s		
1911 Slater’s		

The two structures within the eastern half of the PDA fronting Store Street are still labelled as ‘Packing Case Factory’ (AR2) on the 1889 GOAD plan, with the eastern-most building noted as being 3-storeys in height and composed of brick with a slate roof. The adjacent building (AR3) is depicted as a wooden structure with an open western façade, possibly more of a lean-to structure. Documentary research has identified these structures form part the James W Southern timber merchants and importers and packing-case makers complex which fronts Store Street. The business was founded c.1860 by James W Southern, the son of Lee Southern who is recorded in early census returns and directories as both a ‘chest maker’ and as operating a sawmill off Deansgate in central Manchester (Hulme 2017). It is likely James W. Southern opened his own firm on Store Street after learning these skills from his father. The firm ‘Southern Brothers’, a packing case, chest and trunk maker, is listed in the 1863 *Directory of Manchester and Salford* as being located along Store Street, with later directories showing the evolution of the company from solely packing-cases into timber merchants as well (Table 2 below).

Table 2: Trade Directory Entries for James W. Southern & Son Ltd.

Year and Directory	Address	Streets Directory	Trades Directory
1863 Slater's	-	-	Packing Case, Chest and Trunk Makers: Southern Brothers, 1 Berry St, Store St
1873 Post Office	Store Street	James W. Southern, timber merchant	Timber Merchants: James Wilson Southern
1878 Slater's	38 Store Street		Packing Case Makers: James W Southern Timber Merchants: James W Southern
1883 Slater's			
1886 Slater's			
1895 Slater's			

Year and Directory	Address	Streets Directory	Trades Directory
1909 Slater's		James W. Southern & Son Ltd, timber merchants	-
1911 Slater's			Packing Case Makers: James W. Southern & Son, Limited Timber Merchants: James W. Southern & Son, Ltd.

A series of photographs held within the Manchester Local Image Collection archive from 1896 (m04536; m04540; m10641; m30143), whilst not showing the PDA in full, do provide some information about the Packing Case Factory building fronting Store Street within the PDA. The northern façade of this structure has tall windows along each of the three storeys, with the entrance to the yards to the south visible as a narrow passageway almost immediately adjacent the aqueduct.

Neither the 1889 GOAD plan nor the 1891 OS plan identifies the usage of the building adjacent the southern elevation of the main long rectangular building fronting Store Street (AR5). What can be ascertained is the structure is constructed of either wood or metal, with open sides along three of its elevations. The wider Packing Case Factory complex continues further to the south-east along the extent of the adjacent Ashton Canal, with the buildings within either of brick or wood/metal construction. A chimney is also present c.27m east of the PDA boundary, almost immediately abutting the adjacent Canal and listed Aqueduct.

4.1.5 The Modern Period

By the time of the 1908 OS plan (Appendix 6), the buildings within the PDA itself appear to have remained unchanged, though there has been changes within wider complexes themselves. The main warehouse of Thompson, McKay & Co. appears to have been subdivided even further and now comprises 7 adjoining structures, with the same two structures still falling within the western boundary of the PDA. Within the James W Southern Packing Case Manufactory complex, a long rectangular brick structure depicted on the earlier 1891 plan has been demolished and replaced by a square structure of either wood or metal construction which adjoins the square building that falls within the eastern boundary of the PDA (AR5). A second wood or metal structure has been constructed to the south of the PDA, at the junction of Congu Street and Lomas Street.

A further series of photographs from 1902-1903 primarily show the brick northern faced of the building facing Store Street. However, one photograph from 1903 (m55579) shows a partial view of the PDA from the Ashton Canal to the east. This photo shows a timber upper structure immediately adjacent the aqueduct, with part of a signing bearing the logo 'J.W. Southern & Son. [?] Merchants' visible to the west.

In 1908, soon before the death of James W Southern, the partnership of James Southern and his son Frank Southern was incorporated as a private company and became known as James W. Southern & Son Ltd, with the new company name first noted in Slater's 1909 *Directory of Manchester and Salford*.

The PDA itself appears to be largely unchanged during the early 20th century, with OS plans not showing any changes in the footprint of the structures within either the site or wider

complexes. The 1928 Goad Fire Insurance Plan (Appendix 6), whilst showing the site as having the same layout of the earlier 20th century OS plans, does provide more detailed information about the structures themselves. The Packing Case Factory building fronting Store Street (AR2) still covers the same footprint, with the GOAD plan showing the northern and western elevations of this structure lined with windows on all three storeys. A fire alarm box is also affixed to the northern elevation of this structure. An arched entrance is present at ground level along the north-eastern corner of this structure, providing access from Store Street to the yards to the south. This entrance is depicted on a 1920 photograph of this structure (m10640). The wooden lean-to adjacent the western elevation of the main building is labelled as being 1-3 storeys in height with a patent (felt) roof. The building adjacent the southern elevation of the main Packing Case Factory structure (AR5) is now labelled as a 'saw mill', with the plan also showing the structure is largely 1-storey in height, composed of wood with a slate roof, with a section in its north-eastern corner 2-storeys in height. A series of skylights appear along the western extent of the roof of this structure.

The 1928 GOAD plan is also the first plan to provide some additional information about the yard spaces within the PDA itself. Immediately to the west of the Saw Mill (AR5) is a yard utilised as storage for timber & logs (AR6). To the west of this yard is the location of a travelling gantry (AR7), likely utilised for moving large pieces of lumber within the site. Within the wider J.W. Southern & Son Ltd. Timber Yard complex, there is a second Saw Mill building, in addition to Timber Stores, a Drying Room adjacent the chimney, a Wood Working structure and a Lead Shop. Unfortunately, this GOAD plan does not provide any additional information about the Thompson McKay & Co warehouse within the western part of the PDA.

In 1933, the name of the firm was changed to 'Southern's Ltd' and a majority interest in the packing-case side of the firm was sold to a new company, which took on the old name (Hulme 2017).

Historic OS plans indicate that the PDA remained relatively unchanged until the 1950-1 OS plan (Appendix 6). This map shows that the timber lean-to structure (AR3) is no longer present within the PDA and has been replaced by a new structure with a ground floor passageway connecting Store Street to the yard and elevated crane beyond. A second new structure (AR9) is also depicted within the north-western corner of the PDA, adjacent both the new structure (AR8) in the east and the Thompson, McKay & Co warehouse (AR4) to the south. Both new structures are depicted on a photograph from 1966 (m05943), with the latter structure appearing to be a single storey-timber building with a butterfly roof. Within the wider Packing Case/Timber Yard compound, another structure has been added to the complex, filling in half of the open yard within the eastern part of the wider site.

The 1962 Goad Fire Insurance Plan (Appendix 6) shows some of the changes that have been carried out within the PDA during the mid-20th century. The new structure 2-2 storey structure (AR8) which replaced the earlier timber lean-to is noted as being a 'Timber Office' composed of brick with a flat concrete roof. A series of windows are present along the western elevation across all the storeys. Within the wider J.W. Southern & Son Ltd complex, a series of new buildings of brick and metal have been constructed, especially within the eastern part of the compound, infilling almost the entirety of the yard which was once present. The majority of these buildings are associated within the timber merchant portion

of the business. However, c.58m to the east of the PDA immediately south of the Ashton Canal is a second J.W. Southern & Son Ltd Packing Case brick factory building, with an adjoining metal structure to the south. With the majority of the complex utilised for the timber side of the business, it would appear they built a second premises to help with the packing case aspect of the firm.

Historic OS plans (Appendix 6) shows that the PDA remains largely unchanged until the late 20th century. Southern's became a public company in 1963 and by 1964, the group was trading from 18 branches, mostly in the North and Midlands of England. The premises at 32-34 Store Street was still operating but the firm's headquarters was moved to Widnes in Cheshire. A photograph from 1977 (m05940) shows the somewhat dilapidated nature of the buildings fronting Store Street within the PDA, with the timber office structure (AR8) having a number of the upper-storey windows broken. In the years following, mergers and takeovers of the packing case part of the business created Evans-Southern's, which in 1975, merged with Magnet in Yorkshire to become Magnet & Southern's. In 1988, the Southern's-Evans business was split off again and sold to its management. The Southern's named disappeared from view around 2006 in further takeovers (Hulme 2017).

By the 1978 OS plan (Appendix 6), the buildings of the Thompson, McKay & Co Warehouse are no longer depicted and by the 1988 OS, it would appear that all the buildings once comprising the J.W. Southern & Son Ltd company have also been demolished. Currently, the site is located behind a tall stone-faced retaining wall, with the present ground level within the PDA at a higher level than that of Store Street.

4.2 Designated Heritage Assets

Assessment of potential impacts to designated heritage assets are to be dealt with elsewhere and does not form part of this assessment, but the location of these within the study area have been included for completeness.

Site

The NHLE and Greater Manchester HER records no designated heritage assets as falling within the site boundary, nor is the site located within a Conservation Area.

Study Area

The NHLE and Greater Manchester HER records eight Listed Buildings within the wider 250m study area, comprising seven Grade II listed and one Grade II* listed structures. The majority of these assets are located to the north and north-west of the PDA and are largely related to either the pair of canals running through this part of Manchester, or the nearby Manchester Piccadilly Station. Further details of these assets can be found in the gazetteer in Appendix 1 and are illustrated on Figure 3.

4.3 Non-Designated Heritage Assets

4.3.1 Historic Structures

Site

The Greater Manchester HER records no elements of the built environment within the PDA boundary.

Study Area

The Greater Manchester HER records seven non-designated historic structures within the wider 250m study area. These assets are largely represented by the routes of the Rochdale Canal, the Manchester & Ashton under Lyne Canal, and the Ashton Canal and the various basins and bridges which still make up their extents. Further details of these assets can be found in the gazetteer in Appendix 1 and are illustrated in light blue on Figure 3.

4.3.2 Archaeological Remains

Site

The Greater Manchester HER does not record any non-designated archaeological remains within the site boundary. During the historic map regression, a number of former features were identified as having once been present within the boundary of the PDA. These include a series of buildings once associated with various commercial enterprises within the area. Further details of these identified features are provided in Table 3 below and their locations depicted on Figure 4.

Table 3: Features identified from historic mapping

Project ID	Description
	Building (site of)
AR1	First depicted on Green's 1787-94 and Laurent's 1793 plans as a rectangular structure south of Shooters Brook and north of Wharf Street/Thames Street. Building no longer depicted by Bancks 1831 plan.
	James W Southern Packing Case Factory (site of)
AR2	Building first depicted on 1889 GOAD plan. Building depicted as rectangular in shape, 3 storeys in height and composed of brick with a slate roof with small skylights. The northern-eastern façade of the building has an arched entrance from Store Street into the yards to the south. Rows of windows line all stores along the northern and western façade of the building. Building no longer depicted by 1978 OS plan.
	Wood Structure (site of)
AR3	Building first depicted on 1889 GOAD plan. Rectangular in shape, 1-3 storeys in height and composed of wood with a patent (felt &c) roof. Replaced by a brick structure (AR8) likely between 1932 and 1950.
	Thompson, McKay & Co. Provender Warehouse (site of)
AR4	Building first depicted on 1889 GOAD plan. Rectangular in shape, 2-3 storeys in height and composed of brick with slate roofs. This structure has first floors comprised of stables. No longer depicted by the 1985 OS plan.
	Southern & Son Ltd Timber Yard, Saw Mill (site of)
AR5	Building first depicted on 1891 OS plan. Building primarily 1 storey in height, with north-eastern section rising to 2 storeys. Building composed of wood with a slate roof, and a series of skylights along the western edge of the roof. Building no longer depicted by 1988 OS.
	Timber & Log Yard (site of)
AR6	First depicted (not labelled on 1891 OS plan. No longer depicted by 1985 OS plan.
	Travelling Gantry (site of)
AR7	First depicted (not labelled) on 1891 OS plan. No longer depicted by 1985 OS plan.

Project ID	Description
AR8	Timber Office (site of) Building first depicted on 1950 OS, replacing an earlier wooden structure. Building 2-3 storeys in height, composed of brick, with a passage running from Store Street to the yards beyond forming the ground floor. Windows along western elevation. Roof flat and composed of concrete. Building no longer depicted by 1988 OS plan.
AR9	Building (site of) Building first depicted on 1950 OS plan. Photographs show building single storey in height, of timber with a butterfly roof. No longer depicted by 1988 OS plan.

Study Area

The Greater Manchester HER records 19 non-designated archaeological remains within the wider 250m study area. The majority of these assets represent the former industrial nature of the wider landscape. This includes the sites of former wharfs associated with the canals, and a number of warehouses which once lined these canals. Further details of these assets can be found in the gazetteer in Appendix 2 and are illustrated in brown on Figure 3.

4.4 Archaeological Events

Site

The Greater Manchester HER does not record any archaeological investigations as having been carried out within the boundary of the PDA. However, as mentioned in section 1.2 above, two window samples were excavated in 2014 as part of an earlier planning application for the site (Geotechnics Ltd 2014). Unfortunately, due to the overgrown nature of the site at the time of the ground investigation, the two window samples were excavated within an area of the site historic mapping indicates was occupied only by a mid-20th century, single-storey timber structure (AR9).

The results of these works (Table 4) shows that the ground within the PDA appears to be made up largely of made ground, probably backfill associated with the demolition of the adjacent structures. It should be noted that the present street level of Store Street is c.2.5m below the ground level within the northern part of the PDA. Only one of the window samples (WS01) appears to have gone below modern street level, with the second window sample having ended at 0.70m BGL due to an obstruction. It is considered that the two samples do not provide a complete picture of the state of the ground within the PDA. The location of both of these window samples have been illustrated in pink on Figure 5.

Table 4: Ground investigations within the site boundary

WS ID	Depth (BGL)	Description
WS01	0 – 2.55m	♦ Rough vegetation over MADE GROUND: Friable dark brown slightly gravelly sandy clay with a low cobble content of concrete and bricks. Gravel is fine to coarse angular including clinker, slag, slate, sandstone, concrete and brick fragments. Occasional glass, porcelain and plastic fragments. Occasional rootlets. ♦ Between 0.9m and 1.10m, high cobble content of bricks. ♦ At 2.55m, obstruction – unable to penetrate further.
WS02	0 – 0.70m	♦ Rough vegetation over MADE GROUND: Friable dark brown slightly gravelly

WS ID	Depth (BGL)	Description
		sandy clay with occasional pockets of light yellowish brown and orangish brown sandy clay. High cobble content of concrete and bricks. Gravel is fine to coarse angular including clinker, slag, slate concrete and brick fragments. Occasional glass, porcelain and metal fragments. ♦ At 0.70m, concrete cobbles – unable to penetrate further.

Study Area

The Greater Manchester HER records 12 archaeological investigations as having been carried out within the wider 250m study area, comprising largely non-invasive events including desk-based assessments and building surveys. A further 6 archaeological events have been identified as having been carried out within the 250m study area, including four desk-based assessments and two archaeological excavations. Further details of these events can be found in the gazetteer in Appendix 2 and are illustrated in green on Figure 5.

4.5 Historic Landscape Characterisation

Site

The site is located entirely within the ‘Residential – Low Rise Flats’ (HGM11171) unit, which is characterised by late 20th century residential development containing predominantly apartments, though houses are also present. This HLC unit was also the site of late 19th century packing case manufactory and the Phoenix Works, which was located south-east of the PDA fronting Chapel Street. Further details of this HLC unit can be found in the gazetteer in Appendix 3 and are illustrated on Figure 6.

Study Area

There are a further 34 HLC units located within the wider 250m study area. The majority of these units fall within the ‘Commercial’ or ‘Communications’ broad type, as this area was historically industrial in nature, though there are newer areas of both Residential High-Rise and Low-Rise flats. Further details of these HLC units can be found in the gazetteer in Appendix 3 and are illustrated on Figure 6.

5 ASSESSMENT OF THE SIGNIFICANCE OF AFFECTED HERITAGE ASSETS

Greater Manchester HER does not record any heritage assets within the boundary of the PDA. However, the historic map regression has identified a series of structures, largely dating from the late 18th – early 20th century as having once been present within the site boundary, as outlined in section 4.3.2 above (Table 3).

Both Green’s 1787-94 and Laurent’s 1793 plans of Manchester show a rectangular structure extending northwards into the south-western part of the PDA (AR1). This building is of unknown function and is no longer present by Banck’s 1831 *Plan of Manchester*, with historic mapping and documentary evidence showing the site was redeveloped by the mid-late 19th century. It is unlikely that remains of this structure survive below-ground within the PDA boundary, as the footprint of this structure underlies the substantial Thompson, McKay & Co. Warehouse building, as depicted on the 1889 Goad Fire Insurance plan.

The aforementioned Thompson, McKay & Co. Warehouse building (AR4) is first depicted within the western part of the PDA on the 1889 Goad Fire Insurance plan and appears to have been a substantial brick structure of 2-3 storeys, with the entirety of the 1st storey occupied by stables. Later historic plans suggest this structure was subdivided into at least 7 adjoining structure before its demolition in the mid-late 20th century. A modern industrial complex is currently present immediately to the west of the site boundary, which overlies part of the former warehouse building in addition to the later mid-20th century timber building (AR9) to the north. Whilst it is unknown what level of demolition the site underwent during the late-20th century, it cannot be discounted that remains associated with the Warehouse building (AR4) may survive within the south-western corner of the PDA. Whilst the significance of this asset cannot be quantified or assessed without field evaluation, it is likely that it would be of local significance, due to the *illustrative historical* and *evidential value* it could possess as it has the potential to contribute to the wider corpus of information on warehouses throughout Manchester. It is considered that the timber structure (AR9) first depicted on the 1950 OS plan is of little interest and possesses no significance.

The north-eastern part of the site was once the location of the main building of the J.W. Southern & Son Packing Case Factory (AR2), which is likely of mid-19th century date. Historic photographs indicate that this structure was of substantial brick construction, with ground floor of this structure at the same elevation of the adjacent Store Street. The northern exterior wall of this structure also appears to correspond with the currently alignment of the stone-faced retaining wall, though the latter retaining wall does not appear to be constructed from the earlier packing case building. This building appears to have been demolished by the 1978 OS plan. Whilst the significance of this asset cannot be quantified or assessed without field evaluation, it is likely that it would be of local significance, due to the *illustrative historical* and *evidential value* it could possess.

The site was also once the location of one of the saw mills (AR5), timber & log yard (AR6) and travelling gantry (AR7) and timber office (AR8) of the J.W. Southern & Son Ltd. Timber Yard. The former three assets are first depicted on the 1891 OS plan and appear to remain within the site until the mid-late 20th century, whilst the timber office (AR8) was added to the site in the mid-20th century. Whilst timber yards and saw mills were not *rare* features across Manchester during the post-medieval period, few examples of such complexes have survived to present day and there is a limited knowledge associated with the archaeology of the 19th century timber industry across the North-West. A parallel may be found within Liverpool, where excavations revealed the well-preserved remains of the saw mill building, in addition to internal features such as a steam engine housing and saw pits/machine pits carved into bedrock (Trow 2019). Whilst the overall layout of the saw mill, timber & long yard, and traveling gantry within the PDA remains largely unknown, the potential for remains associated with these assets to survive below-ground cannot be discounted. Whilst the significance of these assets cannot be quantified or assessed without field evaluation, it is likely that they would be of local and regional significance, due to the *illustrative historical* and *evidential values* that they could possess, as they would provide information regarding the nature of a poorly studied industrial activity throughout the 18th and 19th century.

Should there be any other previously unknown archaeological remains present within the PDA, these would be likely to possess some *evidential value* that cannot currently be quantified.

The Updated *North West England Regional Research Framework* for the Industrial and 20th century period (Nevell 2021) identifies that further work is needed for those industries that have received little archaeological attention. Furthermore, the research agenda also notes that that further research into warehouses is required. In particular, there is a 'need to examine the [regional] distribution as well as the nature of warehouses' (Nevell 2021).

6 ASSESSMENT OF POTENTIAL IMPACTS

Potential direct physical impacts to heritage assets during the demolition and construction phase include the following.

- ◆ Removal or truncation of heritage assets during ground works, site clearance and construction (e.g. removal of soil, made-ground/fill, erection of fencing, traffic movement).
- ◆ Damage to buried archaeological remains due to rutting from construction traffic movement.
- ◆ Other groundworks associated with a multi-storey residential development, such as foundation and service trenches, which have the potential to damage or destroy below-ground features or deposits of cultural heritage value, should they be present.

As noted in section 4.4 above, two window samples were excavated within the north-western corner of the PDA in 2014, which documented at least 2.55m of made ground/fill likely relating to the demolition of the buildings within and adjacent to the PDA. The current ground level within the PDA is c.2.5m above the present level of the adjacent Store Street, with the two areas separated by a modern stone-faced wall. At least one of the window samples (WS2) appears to have only sampled the made ground/fill within the site, with the other window sample (WS1) appearing to only just sample the ground below street level before being obstructed (Geotechnics Ltd 2014). It has been noted above that due to the overgrown nature of the PDA at the time of the ground investigations, the only part of the site that was sampled was once the location of a mid-20th century, single-storey timber structure (AR9), which is largely of uninterest.

The proposed multi-storey residential development plans include provision for a below ground-floor water tank. This will be situated below the present ground level of the adjacent Store Street. At present, due to the limited nature of the previous ground investigations within the PDA, it is unknown what level of site clearance was carried out during the late 20th century. As evidenced by archaeological investigations within other areas of Greater Manchester, including evaluations at Manchester Piccadilly Car Park (EV2), Crusader Works (EGM4382), Paradise Wharf (EGM3381), Piccadilly Basin (EGM3151) and Store Street (EV6), there is the potential for truncated remains to survive beneath later redevelopments. Given the results of these previous works, it is considered that there is the low-medium potential that the proposed development will result in the disturbance of buried archaeological remains associated within either J.W. Southern & Son Ltd and Thompson, McKay & Co.

7 RECOMMENDATIONS

In consultation with the Senior Planning Archaeologist with GMAAS, it is recommended that archaeological monitoring in the form of a watching brief should be carried out during future site investigation works (e.g. test pitting) in order to better understand the depth and construct of made-ground and the level of truncation of any below-ground deposits below modern street level. Other styles of site investigation work (e.g. narrow-gauge boreholes/window samples) will not require archaeological attendance, though access to these results will be useful in informing presence/absence of archaeology.

Based on a review of any site investigation, and in consult with GMAAS, it may be appropriate to carry out further archaeological works (e.g. evaluation and/or possible open area excavation) in order to record any significant 18th/19th century remains identified within the PDA.

8 STATEMENTS AND ACKNOWLEDGEMENTS

8.1 Archive Deposition

One digital PDF/A copy of the final report will be deposited with the Greater Manchester Historic Environment Record (HER).

8.2 Publicity, Confidentiality and Copyright

Any publicity will be handled by the client. Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

8.3 Statement of Indemnity

All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

8.4 Acknowledgements

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APPENDIX 1: GAZETTEER OF THE BUILT ENVIRONMENT

LISTED BUILDINGS

NHLE ID	HER ID	Description
1200857	11336.2.0	Stable Block to south-east of Junction Works at Paradise Wharf <i>Grade II</i>
1217852	11336.1.0	Former Junction Works at Paradise Wharf <i>Grade II</i>
1217858	1385.1.0	London Warehouse <i>Grade II</i>
1247557	12089.2.0	Rochdale Canal Lock Number 84 (Dale Street Lock) <i>Grade II</i>
1270666	1387.1.0	Store Street Aqueduct <i>Grade II*</i>
1282990	12061.1.0	32 and 34 Laystall Street <i>Grade II</i>
1283014	11407.1.0	Train shed and undercroft at Manchester Piccadilly Station <i>Grade II</i>
1293172	2152.1.0	Crusader Works <i>Grade II</i>

NON-DESIGNATED HISTORIC STRUCTURES

HER ID	Description
1386.2.0	Rochdale Canal Parliamentary approval in 1799 and 1800. Completed 1804. Manchester section over 8 miles long with 8 locks. Largely survives, though number of canal arms have been infilled.
1403.1.0	Manchester & Ashton under Lyne Canal (Ashton Canal) and its branches Opened to navigation in 1797 and closed to commercial traffic in 1957. The several main branches include the Stockport branch, the Hollinwood branch, Fairbottom branch. Three other minor branches are Hollinwood to the Old Lane Colliery; Islington; Dukinfield, all of which were abandoned in the mid-20 th century.
6361.1.0	Ashton Canal Constructed in 1792-97. Used commercially until the 1950's. Most sections can still be seen and is currently being cleaned and reopened in sections.
11312.1.0	Ashton Canal/Rochdale Canal Junction C.1799 canal, open to through traffic c.1800. Site and remains of warehouse still visible.
11313.1.0	Ashton Canal Basin Remains of canal basin dated c.1789/99. Partly infilled for railway development.
11314.1.0	Jutland Street Bridge Bridge built over Ashton Canal c.1820.
11406.1.0	Iron and Steel Warehouse Rectangular complex arranged around a central courtyard (former Vulcan Iron Works). Present buildings have been altered.

APPENDIX 2: GAZETTEER OF ARCHAEOLOGICAL REMAINS AND EVENTS

ARCHAEOLOGICAL REMAINS

HER ID	Description
	Manchester to Castleshaw Roman Road (stretch of)
24.1.0	Part of the Roman road from Manchester to Castleshaw, constructed c.AD79-84. Possibly constructed by elements of the 20 th Legion. Excavation shows it was 24 feet in width and had a gravel surface on a long base designed to carry the road over boggy areas.
	Roman Road (line of?)
24.1.8	Roman road from Manchester to Castleshaw possibly follows the line of Store Street, with Store Street originally following the line of the Shooters Brook. Possibly road was located to the south of Store Street, following the high ground.
	Warehouse (site of)
1385.1.1	Possibly a southward extension of the former London Warehouse. Likely single storey in height. Demolished post-1969.
	Walker's Buildings (site of)
2022.1.0	Originally a block of back-to-back/side-to-back houses, converted to industrial/workshop premises in 1896. First built in 1820's, buildings converted in late-19 th century. Demolished by late 1990's.
	Paradise Wharf (site of)
11315.1.0	Canal basin of c.1799 date. Filled in during the early 20 th century. Remains survive below-ground, as identified during archaeological works.
	Tarpaulin/Saddlery Works (site of)
11414.1.0	Small group of buildings shown along Store Street on 1888-89 OS plan. Since demolished.
	Stone Wharf (site of)
11415.1.0	Triangular plot of land between Ashton Canal and Store Street, part of the Meadow Street Wharfs.
	Goods Station (site of)
11416.1.0	Part of the goods station of the MS & LR, accessed by a railway carried over Stone Street. Mostly demolished by the mid-20 th century, fully demolished by 2009.
	Former Wire Mill (site of)
11698.1.0	Probably a cotton spinning mill, latterly a wire mill of c.1830, later expanded and altered. Site cleared by 2005.
	Ashton Canal Basins (site of)
16916.1.0	Built late 18 th century, section infilled c.1867.
	Dry Dock (site of)
16916.1.1	Small lobate southward extension of the Ashton Canal basin.
	Canal Warehouse (site of)
16917.1.0	First shown on 1831 plan, later labelled as The Huddersfield Canal Company's Stores and Wharfs. Probably demolished during the 1970s.
	Warehouse (site of)
16918.1.0	

An Archaeological Desk-Based Assessment of land at Store Street, Manchester

HER ID	Description
	First depicted on 1831 plan, probably demolished in 1867 when the London Warehouse was constructed.
16919.1.0	Warehouse (site of) First depicted on 1831 plan, probably demolished in 1867 when the London Warehouse was constructed.
16920.1.0	Warehouse (site of) First shown on 1851 OS, probably demolished in 1867 when the London Warehouse was constructed.
16921.1.0	Warehouse (site of) First shown on 1831 plan, probably demolished c.1867 when the Goods Shed was erected here.
16922.1.0	Warehouse (site of) Elongated range named as the Manchester, Sheffield and Lincolnshire Railway Company's General Stores on the 1849 OS. Goods shed demolished by 1969. Further demolition during the early 21 st century.
16922.1.1	Tunnel (site of) Stone-built tunnel leading into warehouse from canal. Appears to have been demolished during early 21 st century.
16923.1.0	Store Street Iron Works (site of) Rectangular range arranged round a central yard shown on 1845 plan. By 1889 the ironworks had been replaced by what became part of the goods station of the MS & LR. Demolished when the railway warehouse was constructed, probably around 1867.

ARCHAEOLOGICAL INVESTIGATIONS

HER ID	ARS ID	Year	Description
EGM1806	-	1991	Walker's Buildings, Ancoats. Archaeological Building Survey
EGM3151	-	2000	Piccadilly Basin – Marina, Canal and Public Realm Works. Archaeological Watching Brief
EGM3237	-	2001	Junction Lead Mills, Paradise Wharf. Archaeological Building Survey
EGM3381	-	2002	Paradise Wharf. Watching Brief
EGM3706	-	2003	81 Dale Street. Photographic Building Survey
EGM4109	-	2014	Tariff Street, Piccadilly. Archaeological Desk-Based Assessment
EGM4223	-	2004	Land off Ducie Street, Piccadilly. Archaeological Assessment
EGM4229	-	2013-14	Manchester Piccadilly and Oxford Road Capacity Schemes. Archaeological Desk-Based Assessment
EGM4380	-	2016	Crusader Works, Chapeltown Street. Archaeological Desk-Based Assessment
EGM4381	-	2016	Crusader Works. Heritage Statement
EGM4382	-	2017-18	Crusader Works, Chapeltown Street. Archaeological Evaluation
EGM4383	-	2017-18	Crusader Works, Chapeltown Street. Historic Building Investigation

HER ID	ARS ID	Year	Description
-	EV1	2010	Broad Street and Sparkle Street, Piccadilly, Manchester. Desk-Based Assessment
-	EV2	2012	Manchester Piccadilly Car Park. Archaeological Evaluation/Excavation
-	EV3	2015	Land at Store Street, Manchester. Archaeological Desk-Based Assessment
-	EV4	2020	Land off Store Street, Manchester. Archaeological Desk-Based Assessment
-	EV5	2020	Store Street, Manchester. Heritage Statement: Significance and Impact
-	EV6	2017	Archaeological Evaluation: Store Street, Ancoats

GROUND INVESTIGATIONS WITHIN SITE BOUNDARY

WS ID	Year	Depth (BGL)	Description
WS01	2014	♦ 0 – 2.55m	♦ Rough vegetation over MADE GROUND: Friable dark brown slightly gravelly sandy clay with a low cobble content of concrete and bricks. Gravel is fine to coarse angular including clinker, slag, slate, sandstone, concrete and brick fragments. Occasional glass, porcelain and plastic fragments. Occasional rootlets. ♦ Between 0.9m and 1.10m, high cobble content of bricks. ♦ At 2.55m, obstruction – unable to penetrate further.
WS02	2014	♦ 0 – 0.70m	♦ Rough vegetation over MADE GROUND: Friable dark brown slightly gravelly sandy clay with occasional pockets of light yellowish brown and orangish brown sandy clay. High cobble content of concrete and bricks. Gravel is fine to coarse angular including clinker, slag, slate concrete and brick fragments. Occasional glass, porcelain and metal fragments. ♦ At 0.70m, concrete cobbles – unable to penetrate further.

APPENDIX 3: GAZETTEER OF HLC TYPES

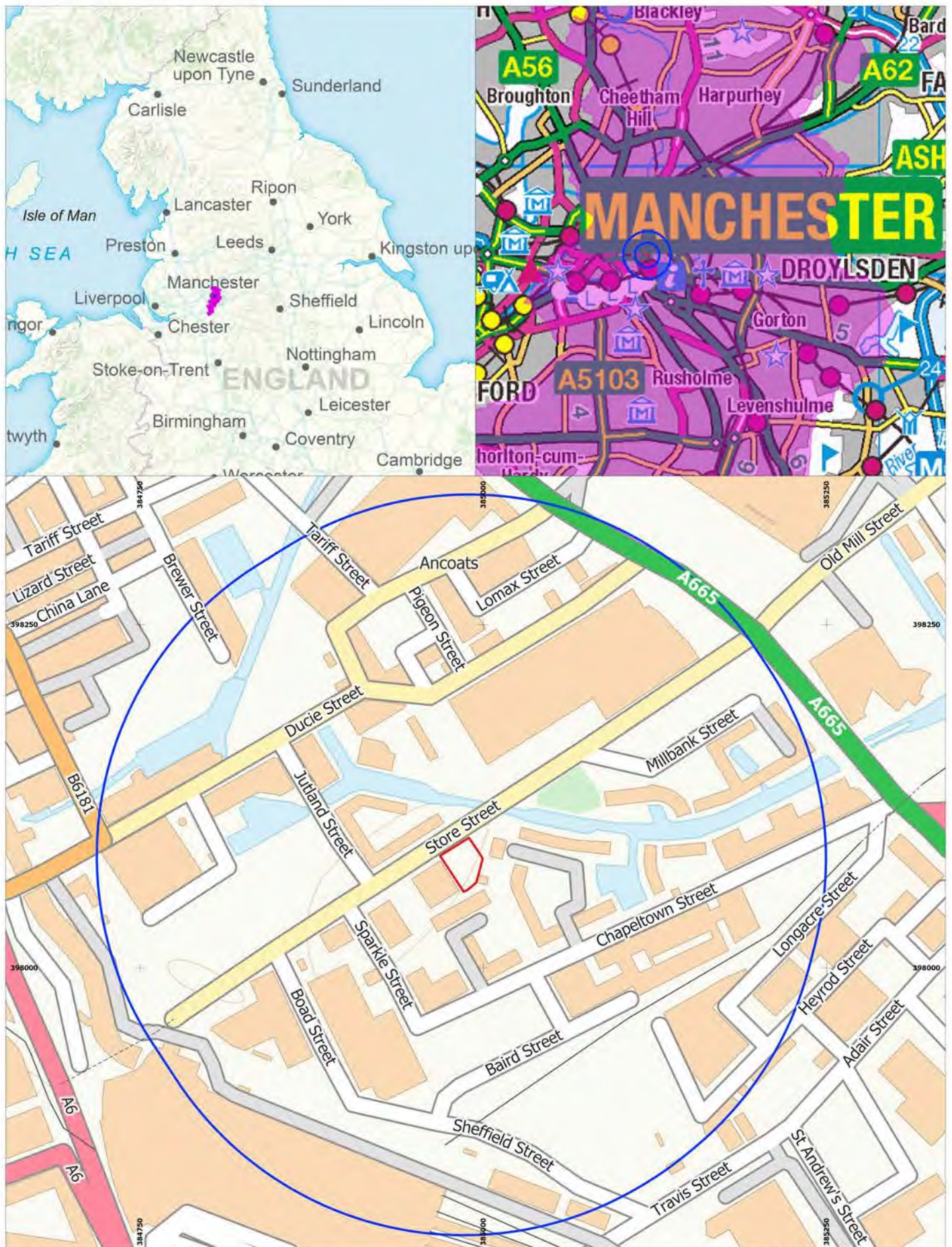
HLC ID	Broad Type	HLC Primary type	Previous Broad Type	Details
HGM11157	Communications	Train Station	Terraced Housing; Piecemeal Enclosure	Piccadilly Station
HGM11158	Communications	Car Park	Piecemeal Enclosure; Terraced Housing; Empty Housing Plots	Baird Street
HGM11159	Communications	Car Park	Terraced Housing; Empty Housing Plots; Piecemeal Enclosure	Store Street and Sheffield Street
HGM11160	Communications	Car Park	Docks, Wharfs and Basins; Piecemeal Enclosure; Metal Trades (Heavy); Goods Station	Ducie Street
HGM11161	Commercial	Offices	Goods Station	Station Approach
HGM11162	Communications	Car Park	Terraced Housing; Piecemeal Enclosure	Sparkle Street and Boad Street
HGM11163	Commercial	Offices	Terraced Housing; Piecemeal Enclosure; Goods Station	Rail House, Boad Street
HGM11164	Commercial	Hotel Complex	Goods Station	The Place, Apartment Hotel, Ducie Street
HGM11165	Communications	Docks, Wharfs and Basins	Piecemeal Enclosure	Rochdale Canal Dale Street Basin
HGM11166	Communications	Car Park	Docks, Wharfs and Basins	Car Park, Brewer Street
HGM11167	Communications	Car Park	Terraced Housing; Piecemeal Enclosure; Docks, Wharfs and Basins	Car Park, Ducie Street
HGM11168	Commercial	Superstore	Docks, Wharfs and Basins	Great Ancoats Street (and corner of Laystall Street)
HGM11169	Communications	Docks, Wharfs and Basins	Piecemeal Enclosure	Paradise Wharf, Ducie and Jutland Street
HGM11170	Communications	Docks, Wharfs and Basins	Piecemeal Enclosure	Piccadilly Village
HGM11171	Residential	Low Rise Flats	Metal Trades (Heavy); Docks, Wharfs and Basins; Terraced Housing	Wharf Apartments and John Smeaton Court, Thomas Telford Basin
HGM11172	Industrial	Industrial Estate	Piecemeal Enclosure; Timber Yard/Builders Yard; Terraced Housing	Gateway Industrial Estate, Store Street

An Archaeological Desk-Based Assessment of land at Store Street, Manchester

HLC ID	Broad Type	HLC Primary type	Previous Broad Type	Details
HGM11173	Residential	Private Housing Estate	Terraced Housing; Textile Mill	Wharf Close
HGM11174	Residential	Low Rise Flats	Docks, Wharfs and Basins; Terraced Housing; Piecemeal Enclosure	Navigation House, Jutland House, Bridge House and Junction House, Ducie Street and Jutland Street
HGM11175	Industrial	Metal Trades (Heavy)	Metal Trades (Heavy); Terraced Housing	Presbar Diecastings, Ducie Street and Store Street
HGM11176	Commercial	Distribution Centre	Terraced Housing; Empty Housing Plots	Warehouse, Chapeltown Street
HGM11177	Industrial	Industrial Works (general)	Piecemeal Enclosure	Crusader Works No. 1, Chapeltown Street
HGM11178	Residential	Low Rise Flats	Piecemeal Enclosure; Docks, Wharfs and Basins	James Brindley Basin, Millbank Street
HGM11189	Commercial	Distribution Centre	Goods Station; Piecemeal Enclosure	Depot, Travis Street
HGM11191	Industrial	Industrial Estate	Metal Trades (Light)	Around Heyrod Street
HGM11192	Industrial	Textile Mill	Terraced Housing; Piecemeal Enclosure	Greenway House, Portugal Street East
HGM11193	Commercial	Business (General)	Medical Complex; Piecemeal Enclosure; Metal Trades (Heavy)	Chancel Place, Manchester
HGM11194	Industrial	Waste Ground	Food Manufactory	Chapeltown Street
HGM11196	Residential	Conversions	Docks, Wharfs and Basins; Piecemeal Enclosure; Metal Trades (Heavy)	Junction Works, The Stables and Whittles Croft Wharf, Ducie Street
HGM11197	Commercial	Commercial Core-Urban	Commercial Core-Urban	Around Lomax Street, Pigeon Street and Whittle's Croft
HGM11270	Commercial	Distribution Centre	Commercial Core-Urban	Around Lever Street, Hilton Street, Newton Street and Tariff Street
HGM11283	Commercial	Distribution Centre	Commercial Core-Urban	Around Upper Stanley Street
HGM11285	Residential	High Rise Flats	Docks, Wharfs and Basins	Vantage Quay, Brewer Street
HGM12104	Residential	High Rise Flats	Terraced Housing; Piecemeal Enclosure	1 to 55 (odd) Chapel Town Street
HGM12833	Communications	Railway Line	Piecemeal Enclosure	Railway Line, Manchester London

HLC ID	Broad Type	HLC Primary type	Previous Broad Type	Details
				Road and Ardwick
HGM16257	Commercial	Retail Park	Terraced Housing	Central Retail Park, Great Ancoats Street

APPENDIX 4: FIGURES



Site name: Piccadilly Wharf, Manchester
 Date: March 2021
 Drawn by: MB
 Scale: Varies

**Figure 1:
Site location**

- Site Boundary
- Manchester City Council
- 250m Study Area



Archaeological Research Services Ltd

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 First Floor
 Dunham House
 Cross Street
 Sale
 M33 7HH



Tel: 01619 762544

www.archaeologicalresearchservices.com

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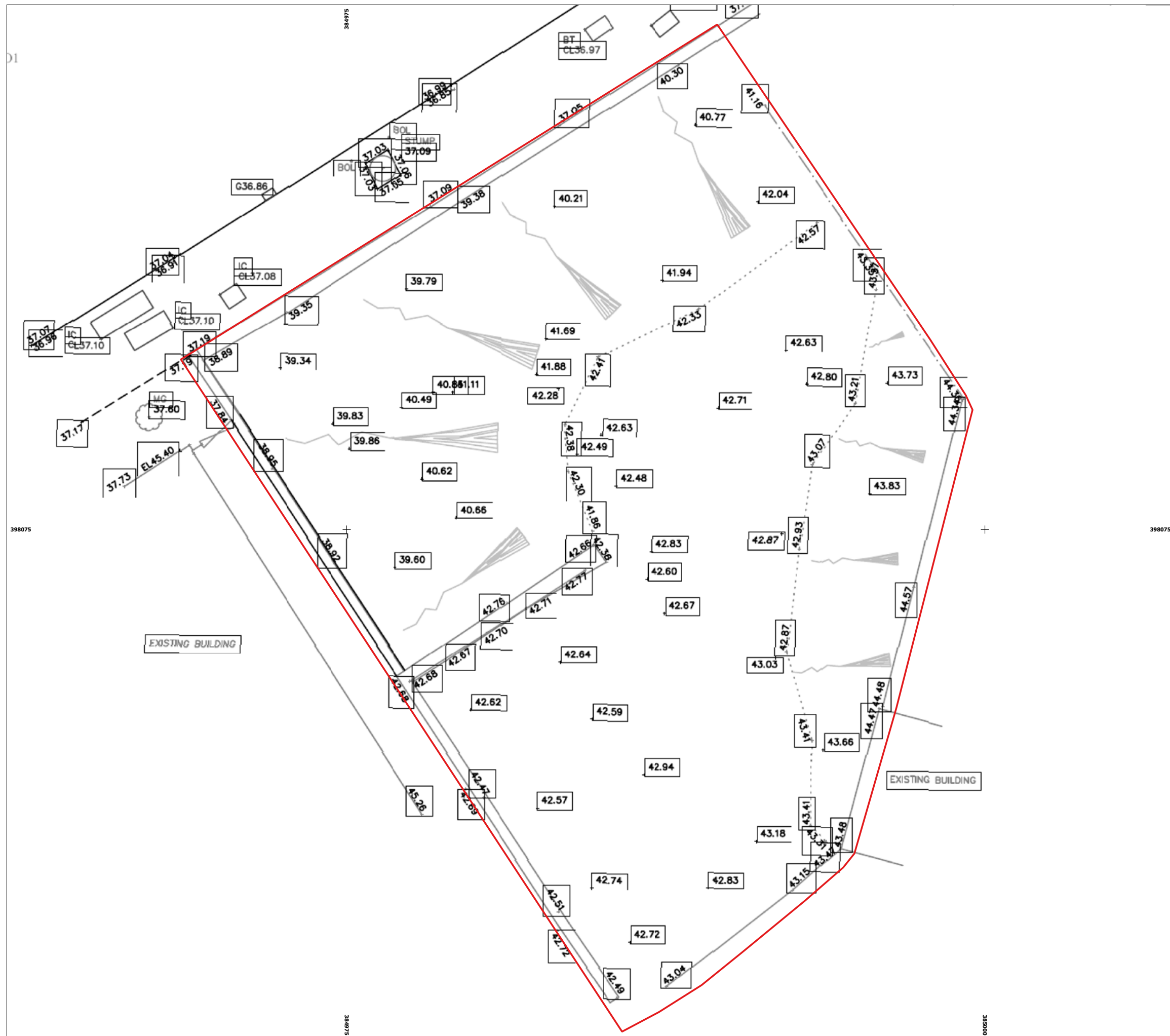
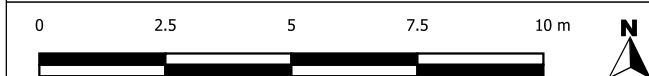


Figure 2: Site Plan with Topographical Survey

Site Boundary



Site name: Piccadilly Wharf, Manchester
Date: March 2021
Drawn by: MB
Scale: 1:150 @ A3

This drawing: © ARS Ltd

G.E.O.(UK)L.T.D Drawing Reference S20-SST-T.01

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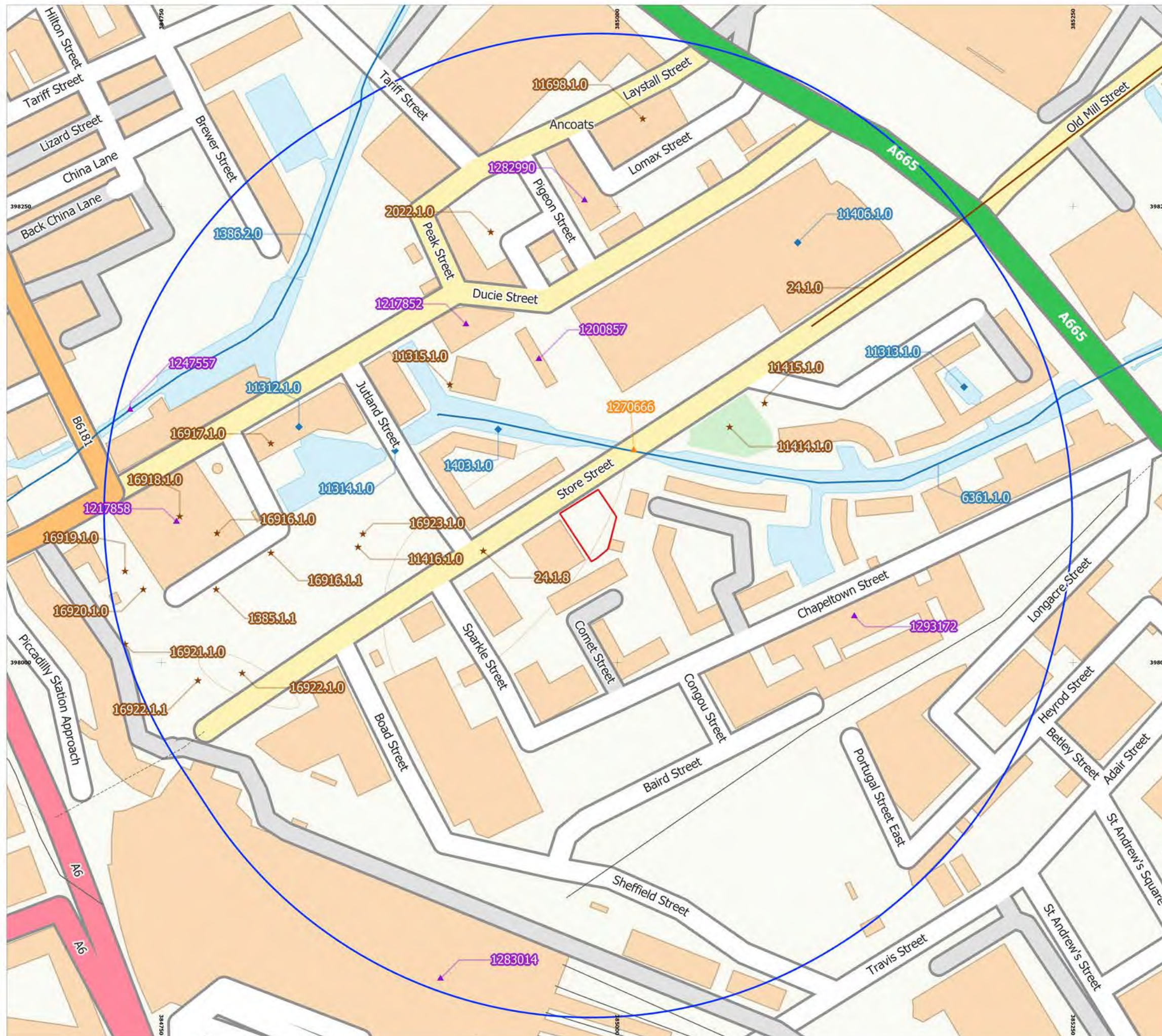


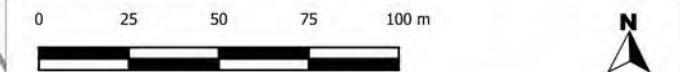
Figure 3: Designated and Non-Designated Heritage Assets

- Site Boundary
- 250m Study Area
- Listed Buildings**
 - ▲ Grade II*
 - ▲ Grade II
- ◆ Historic Structure (point)
- Historic Structure (polyline)
- ★ Archaeological Remain (point)
- Archaeological Remain (polyline)

Information based upon Historic Environment Record Data © Greater Manchester Archaeological Advisory Service and NHLE data © Historic England 2021. Contains Ordnance Survey data © Crown copyright and database right 2021. The Historic England GIS data contained in this material was obtained on 01.02.21.

The most publicly available up to date Historic England GIS data can be obtained from <http://www.HistoricEngland.org.uk>.

0 25 50 75 100 m



Site name: Piccadilly Wharf, Manchester
Date: March 2021
Drawn by: MB
Scale: 1:2100 @ A3

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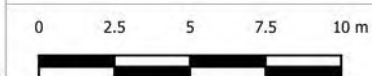


Figure 4: Features identified from Historic Mapping

Site Boundary

Historic Mapping Features

- AR1: Unknown 18th century Building
- AR2: J.W. Southern Packing Case Factory
- AR3: Wooden Lean-To
- AR4: Thompson, McKay & Co. Warehouse
- J.W. Southern & Son Ltd Saw Mill
- AR6: Timber & Log Yard
- AR7: Travelling Gantry
- AR8: Brick Timber Office
- AR9: Wooden 20th Century Building



Site name: Piccadilly Wharf, Manchester
 Date: March 2021
 Drawn by: MB
 Scale: 1:250 @ A3

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Background Map Splus Architects. Project
 05868_MP_00_2201

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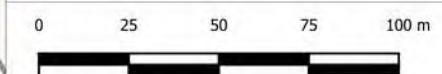
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Figure 5: Archaeological Events and Ground Investigation Works

- Site Boundary
- 250m Study Area
- ◆ 2014 Window Sample
- ◆ Archaeological Event (point)
- Archaeological Event (region)

Information based upon Historic Environment Record Data © Greater Manchester Archaeological Advisory Service



Site name: Piccadilly Wharf, Manchester
 Date: March 2021
 Drawn by: MB
 Scale: 1:2100 @ A3

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APPENDIX 5: PHOTOGRAPHS



Photograph 1: View east across the PDA from Store Street.



Photograph 2: View north-east along Store Street towards the Grade II* listed Aqueduct. The PDA is visible to the right.

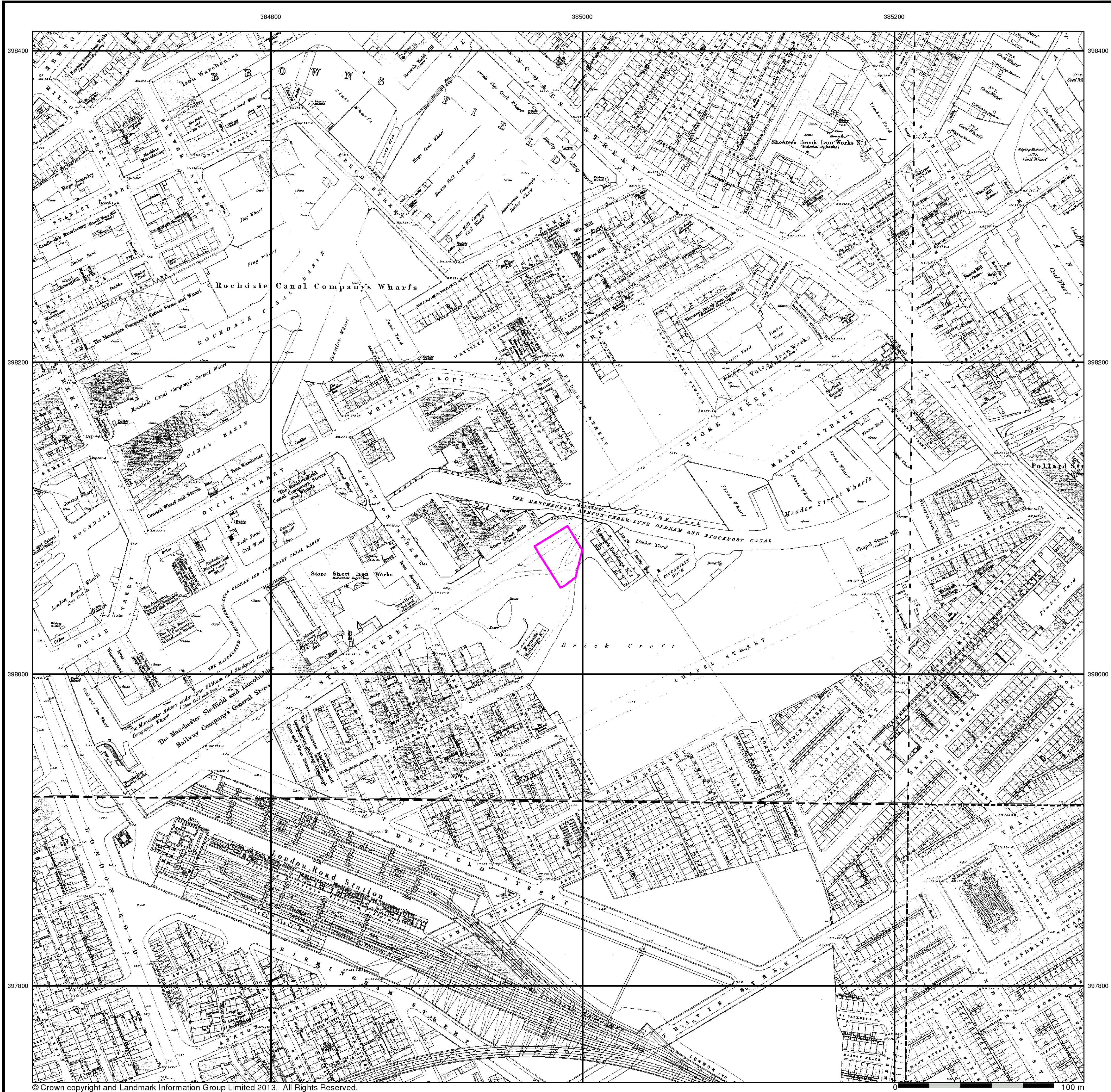


Photograph 3: View south east from Store Street across the PDA showing the rise in ground level within the site itself.



Photograph 4: View south-west along Store Street of the PDA and the adjacent industrial unit.

APPENDIX 6: ENVIROCHECK HISTORIC ENVIRONMENT MAPPING REPORT



Lancashire And Furness

Published 1851

Source map scale - 1:1,056

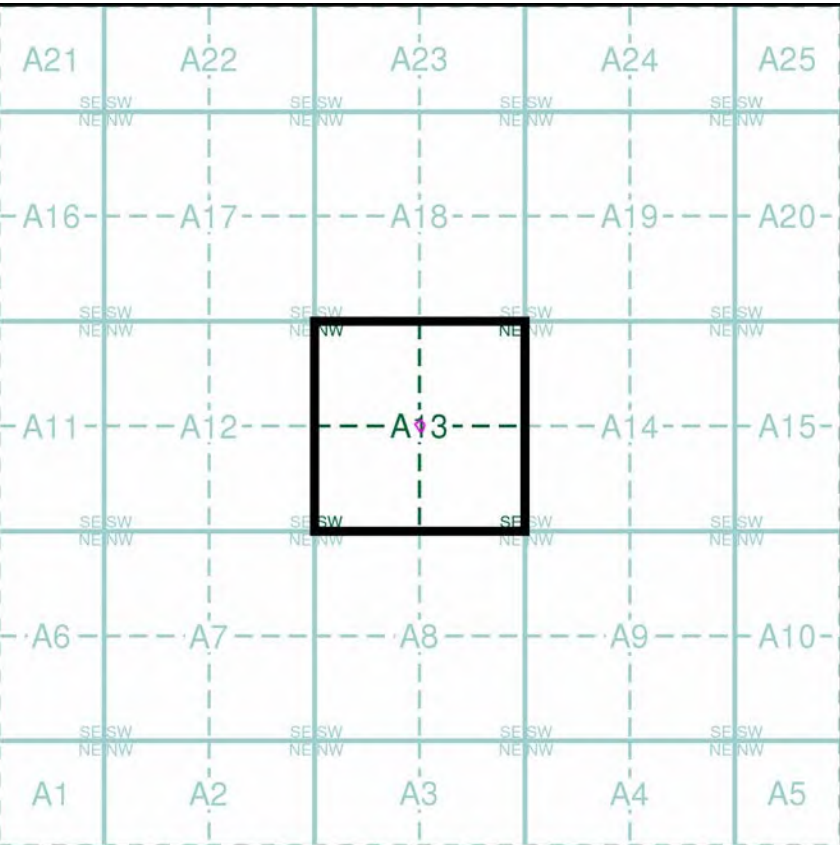
The 1:1056 scale of Ordnance Survey mapping was adopted from Ireland in 1848 and was used to survey towns with a population of over 4000, plus county towns of lesser population, in those counties mapped at the six-inch scale in 1841-55. The scale was the largest scale at which London was mapped by the Ordnance Survey and a 'skeleton' survey of the capital, showing little more than streets, street names, frontages and altitudes, was undertaken between 1848 and 1850. The majority of the 1:1056 surveys were later replaced by 1:500 surveys; although almost all the remainder were revised at this scale, sometimes more than once before 1895. The type of detail shown on the 1:1056 scale is broadly similar to that on 1:500; the apparent omission of minor details such as sewer access points and street lights may be as much a reflection of the generally earlier date of these plans, as of the specification of the map.

Please note: Due to the partial coverage of Historical Town Plans, it is possible that not all segments within an order will contain mapping. Only the segments that have Town Plan coverage will be generated.

Map Name(s) and Date(s)

000_00_029	000_00_030
1851	1851
1:1,056	1:1,056
000_00_034	000_00_035
1851	1851
1:1,056	1:1,056

Historical Town Plan - Segment A13



Order Details

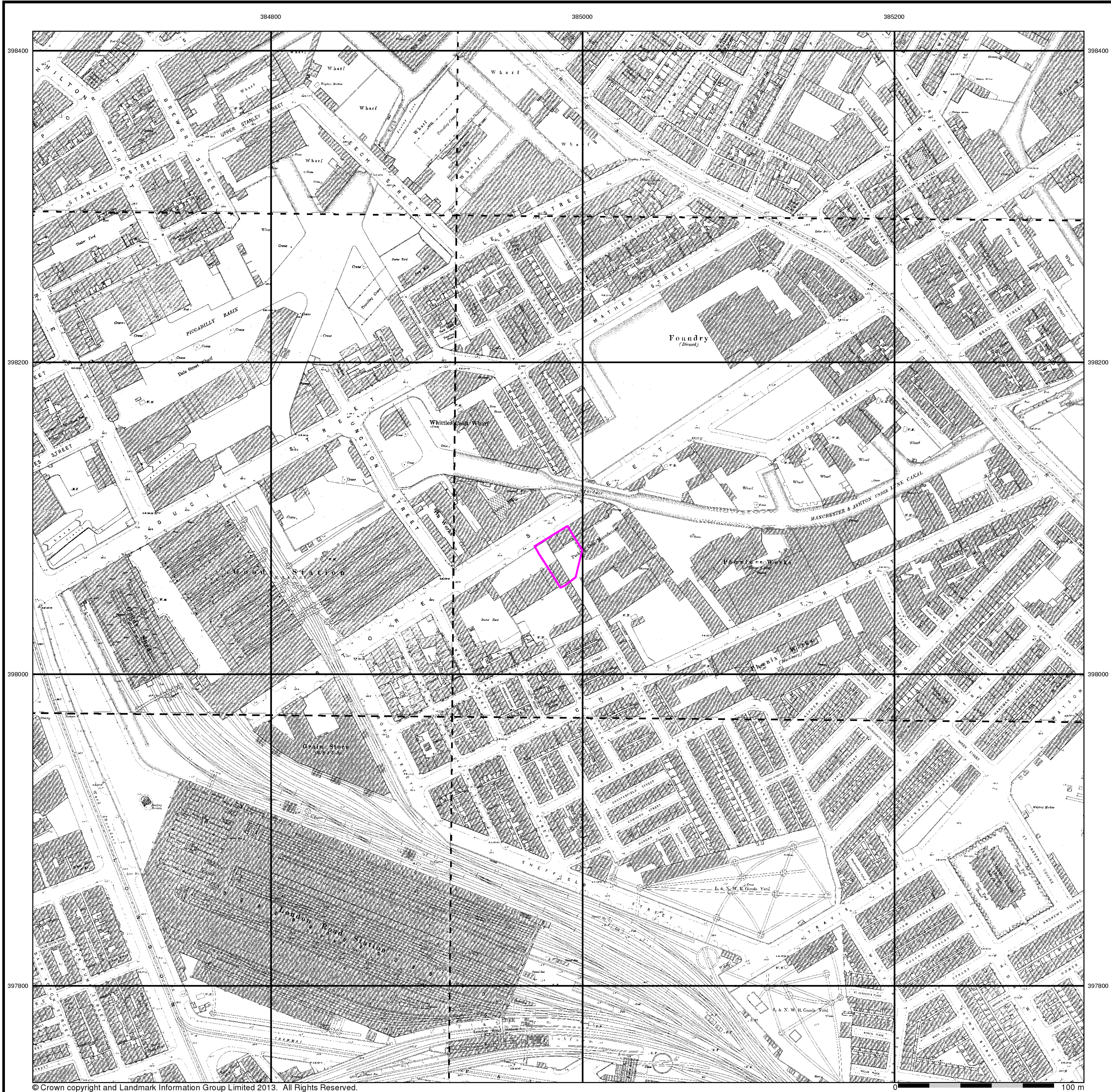
Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
Search Buffer (m): 0

Site Details

Site at 384980, 398080



Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



Lancashire And Furness

Published 1891

Source map scale - 1:500

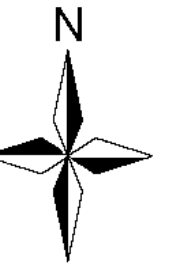
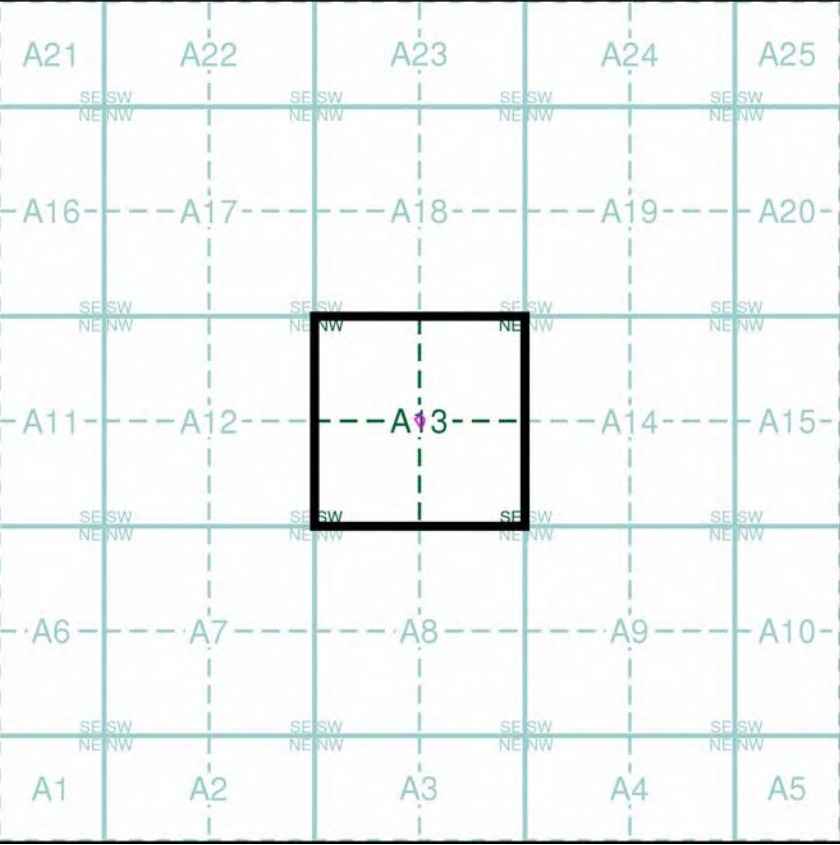
The 1:500 scale Ordnance Survey mapping was introduced in 1855 as a replacement for the 1:528 scale and to complement the 1:2500 scale that had been implemented in 1853. By 1895, the 1:500 scale covered most towns over a population of about 4000 at the time of survey, although very few towns were mapped more than once at this scale, and none have been since 1910. The 1:500 scale gives particular emphasis to such features as lamp posts, man holes, arched passages and minor building projections. Also often featured are divisions between tenements, interior ground floor layouts of public buildings, and on earlier plans, the functions of the various parts of larger industrial premises are also indicated. Content of the plans does vary however, from one town to the next in terms of, for example, the completeness of railway tracks and the coverage of public buildings.

Please note: Due to the partial coverage of Historical Town Plans, it is possible that not all segments within an order will contain mapping. Only the segments that have Town Plan coverage will be generated.

Map Name(s) and Date(s)

104_07_021	104_07_022
1891	1891
1:500	1:500
104_11_001	104_11_002
1891	1891
1:500	1:500
104_11_006	104_11_007
1891	1891
1:500	1:500

Historical Town Plan - Segment A13



Order Details

Order Number: 59513547_1_1
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National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
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Site Details

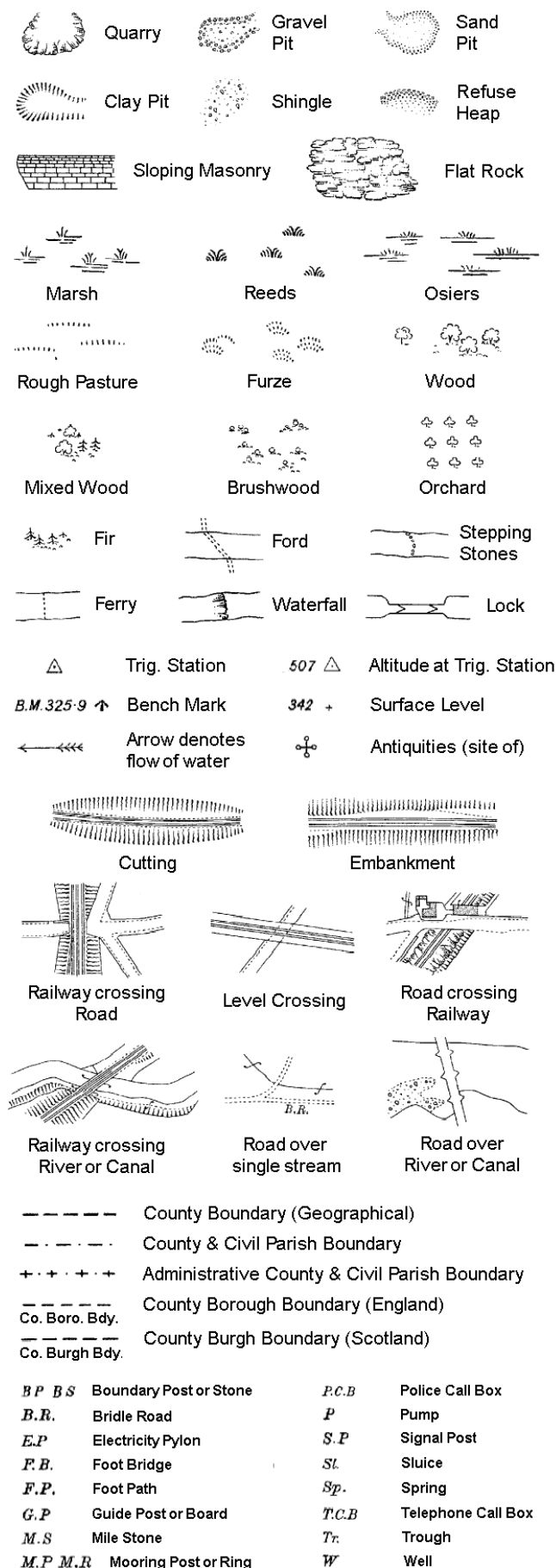
Site at 384980, 398080



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Historical Mapping Legends

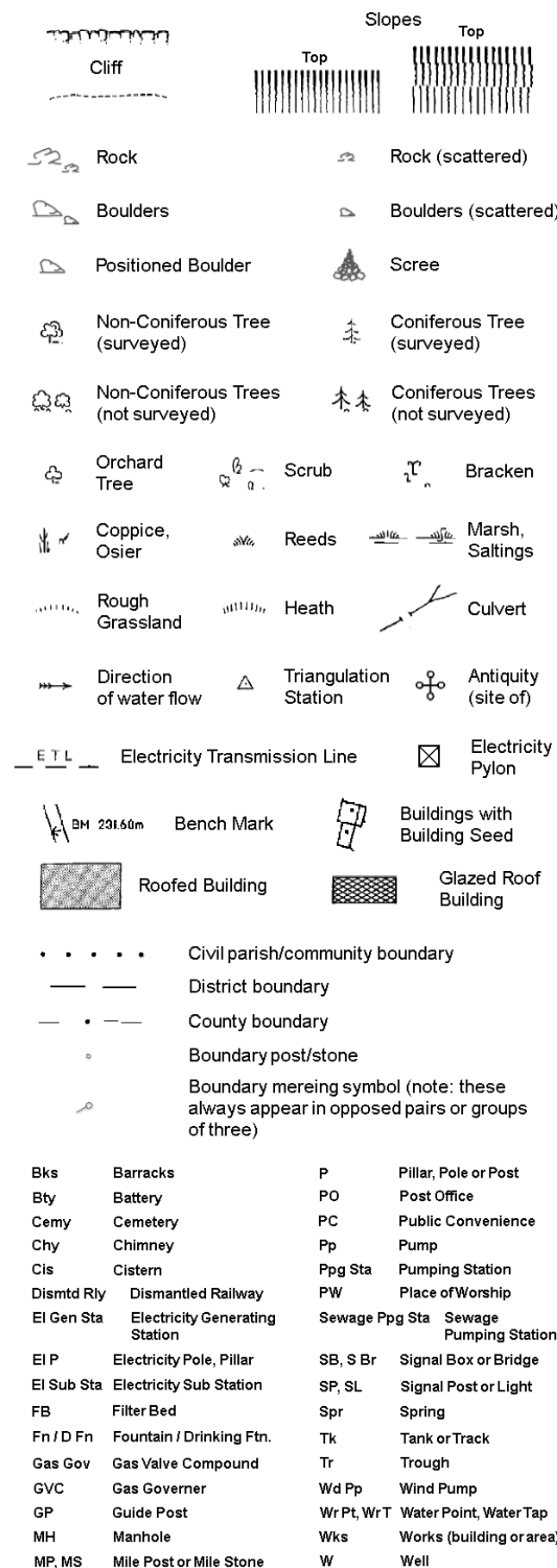
Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



Large-Scale National Grid Data 1:2,500 and 1:1,250

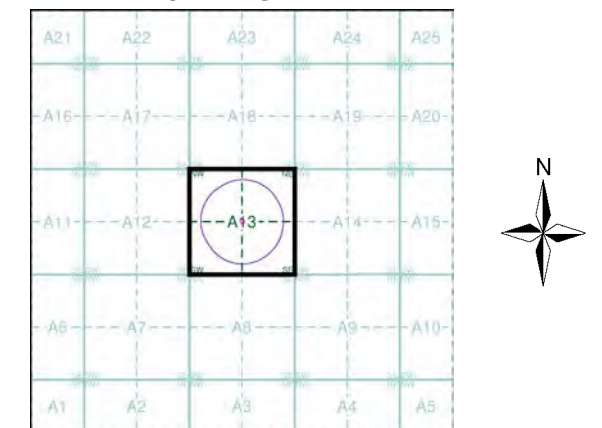


geotechnics

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:2,500	1893	2
Lancashire And Furness	1:2,500	1908	3
Lancashire And Furness	1:2,500	1922	4
Ordnance Survey Plan	1:1,250	1948	5
Ordnance Survey Plan	1:2,500	1950 - 1951	6
Ordnance Survey Plan	1:2,500	1953 - 1965	7
Ordnance Survey Plan	1:1,250	1954 - 1963	8
Ordnance Survey Plan	1:1,250	1964 - 1981	9
Ordnance Survey Plan	1:2,500	1965	10
Ordnance Survey Plan	1:2,500	1969 - 1970	11
Ordnance Survey Plan	1:1,250	1971 - 1989	12
Supply of Unpublished Survey Information	1:1,250	1974 - 1976	13
Additional SIMs	1:1,250	1978 - 1985	14
Additional SIMs	1:1,250	1988 - 1991	15
Additional SIMs	1:1,250	1991	16
Large-Scale National Grid Data	1:1,250	1992	17
Additional SIMs	1:1,250	1992	18
Large-Scale National Grid Data	1:1,250	1994 - 1995	19
Large-Scale National Grid Data	1:1,250	1996	20

Historical Map - Segment A13



Order Details

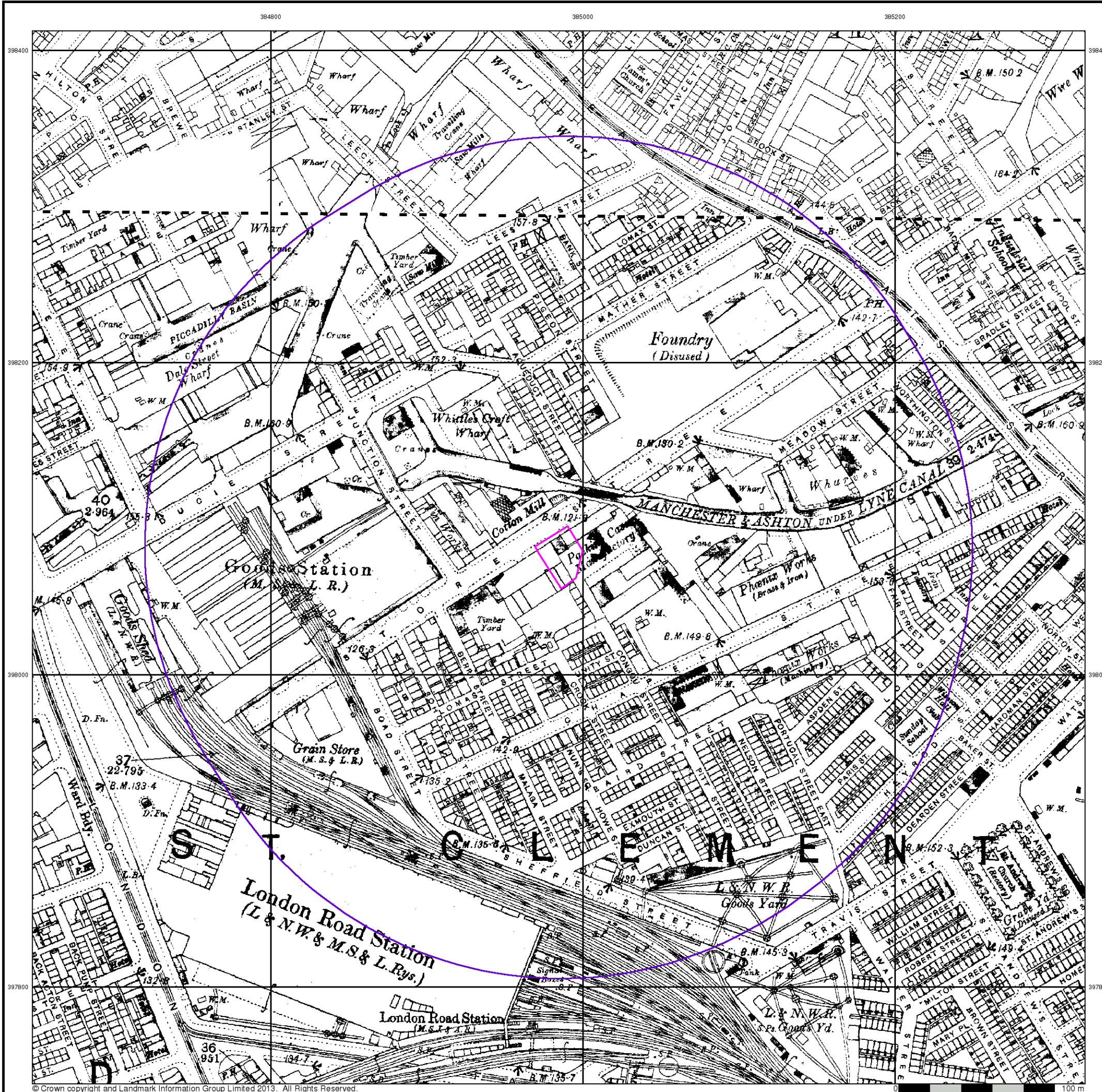
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National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
Search Buffer (m): 250

Site Details

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Lancashire And Furness

Published 1893

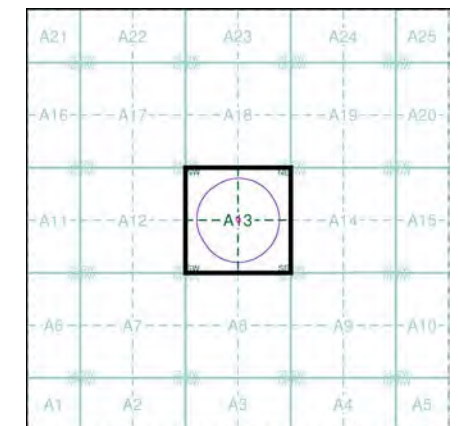
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

104.07
1893
1:2,500
104.11
1893
1:2,500

Historical Map - Segment A13



Order Details

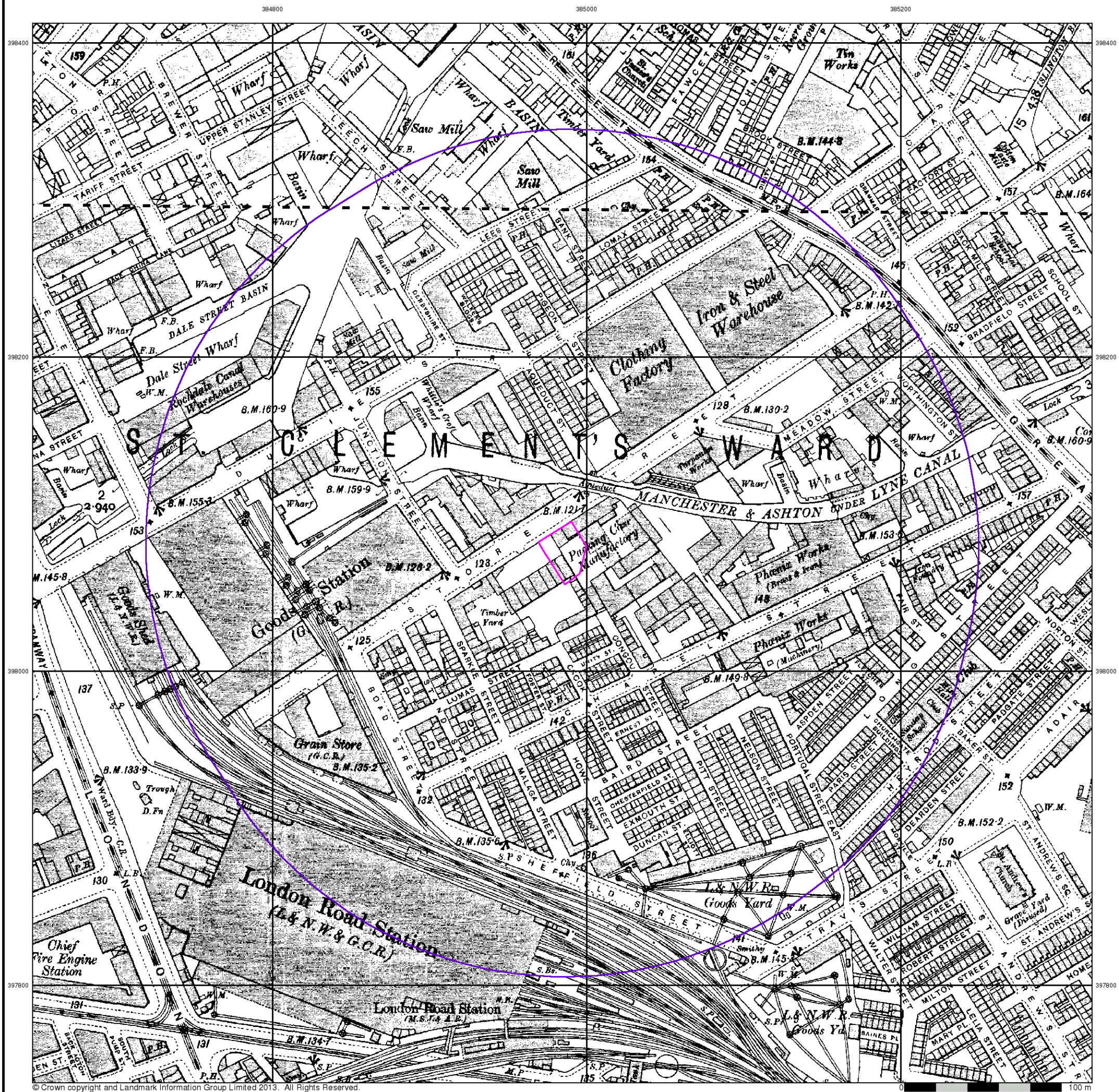
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Customer Ref: PN143226
National Grid Reference: 384990, 398080
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Site Area (Ha): 0.07
Search Buffer (m): 250

Site Details

Site at 384980, 398080

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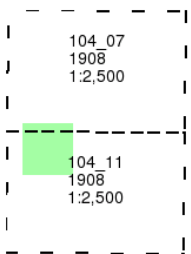
Lancashire And Furness

Published 1908

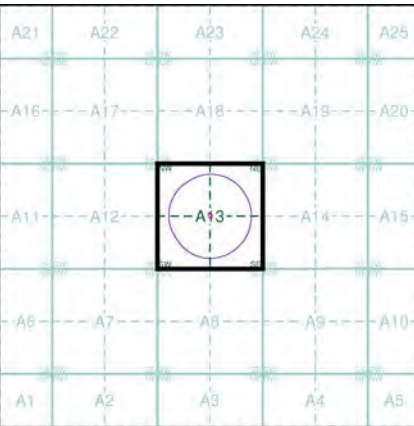
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

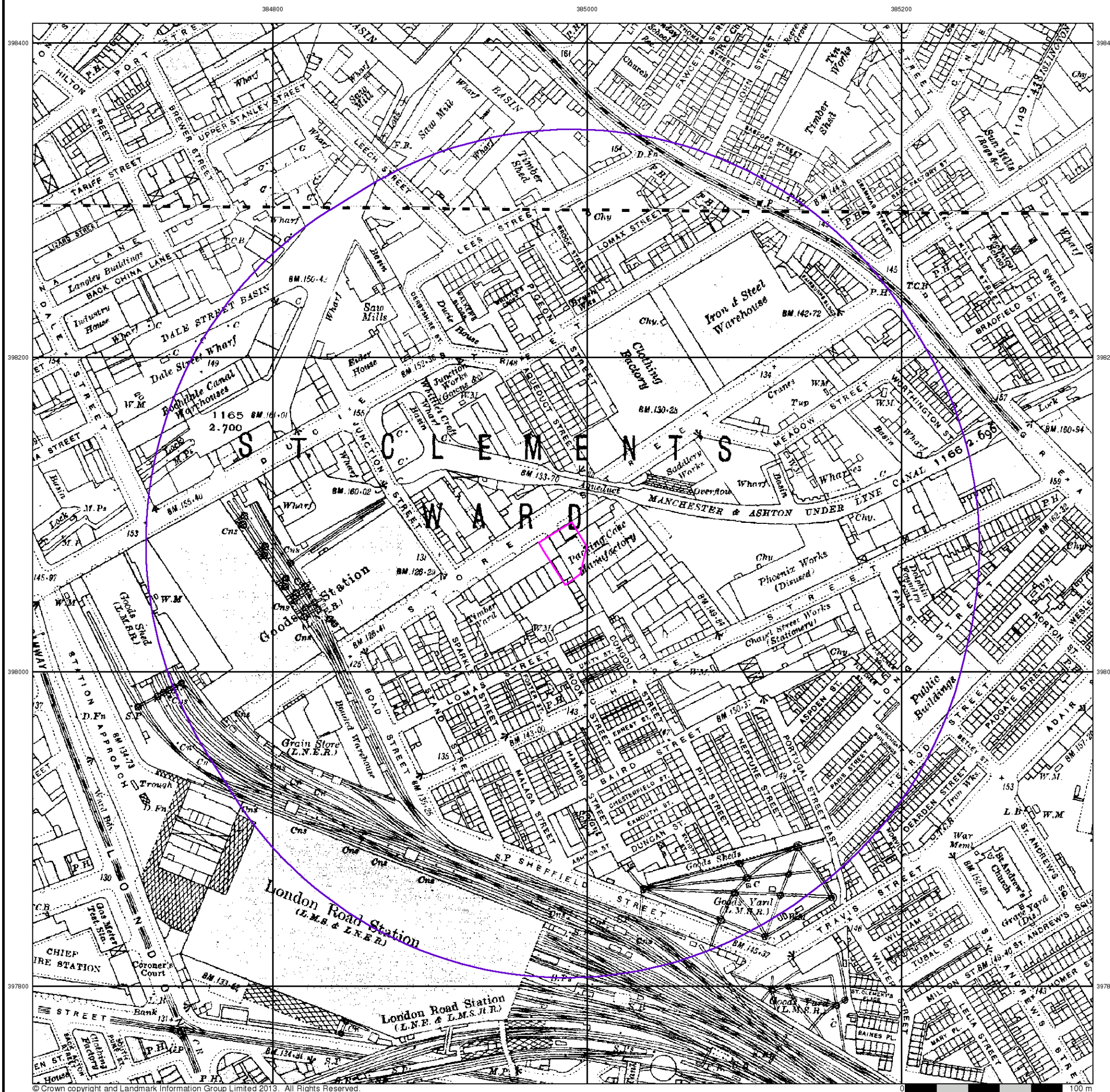
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National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
Search Buffer (m): 250

Site Details

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Ordnance Survey Plan

Published 1948

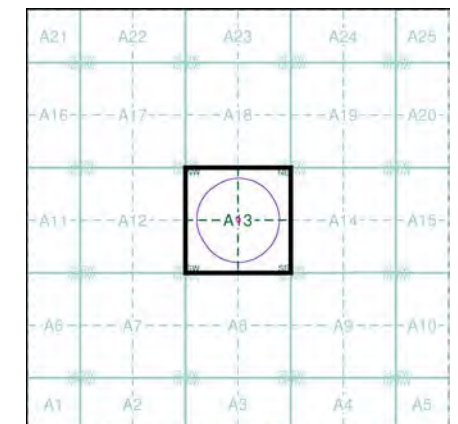
Source map scale - 1:1,250

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Map Name(s) and Date(s)

SJ8498SE	1948	1:1,250
SJ8497NE	1948	1:1,250
SJ8597NW	1948	1:1,250

Historical Map - Segment A13

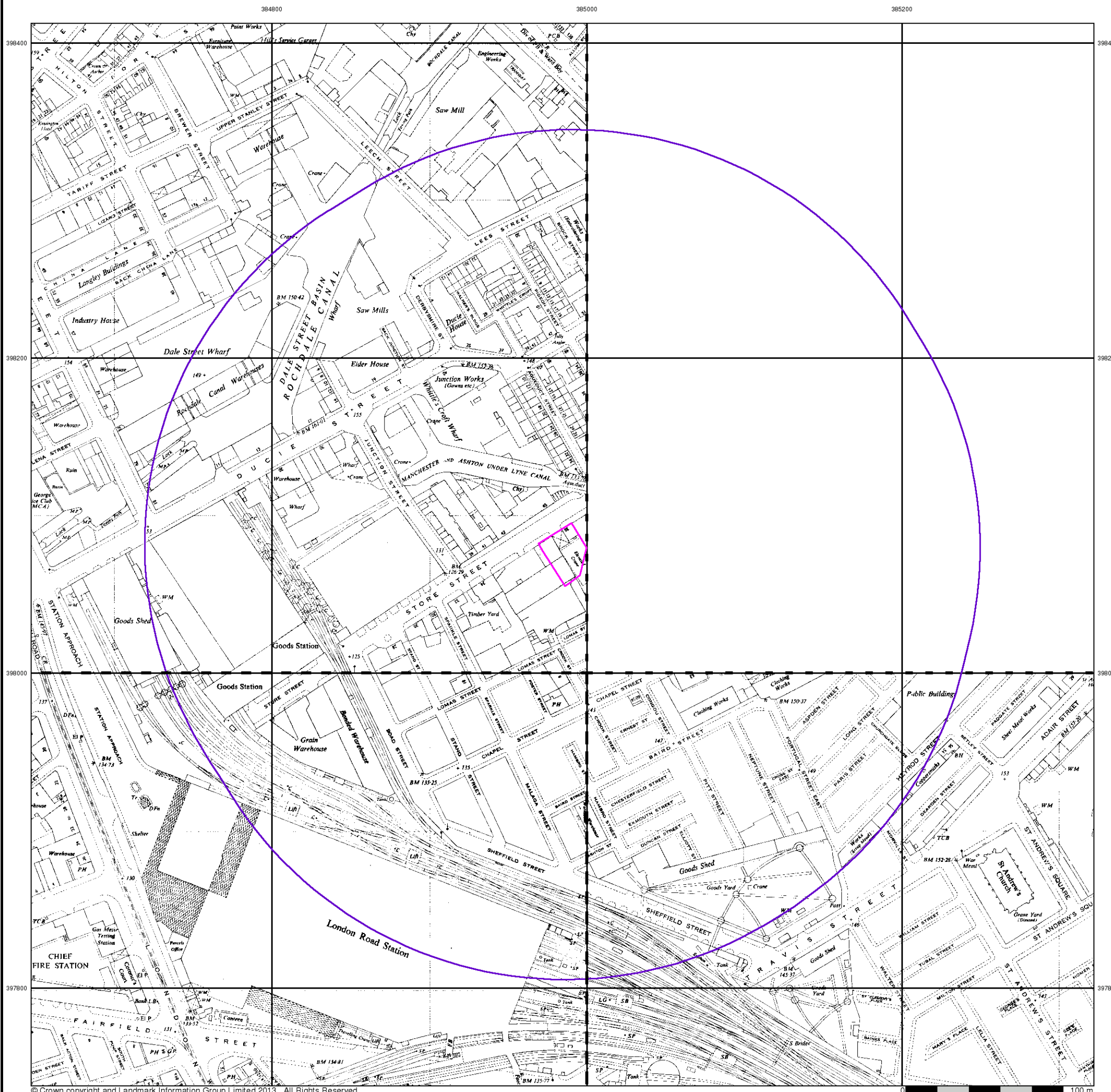


Order Details

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 Search Buffer (m): 250

Site Details

Site at 384980, 398080



Ordnance Survey Plan

Published 1950 - 1951

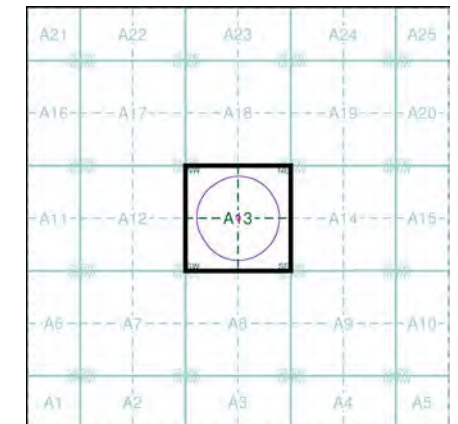
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SJ8498	SJ8598
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12,500	12,500
SJ8497	SJ8597
1950	1950
12,500	12,500

Historical Map - Segment A13

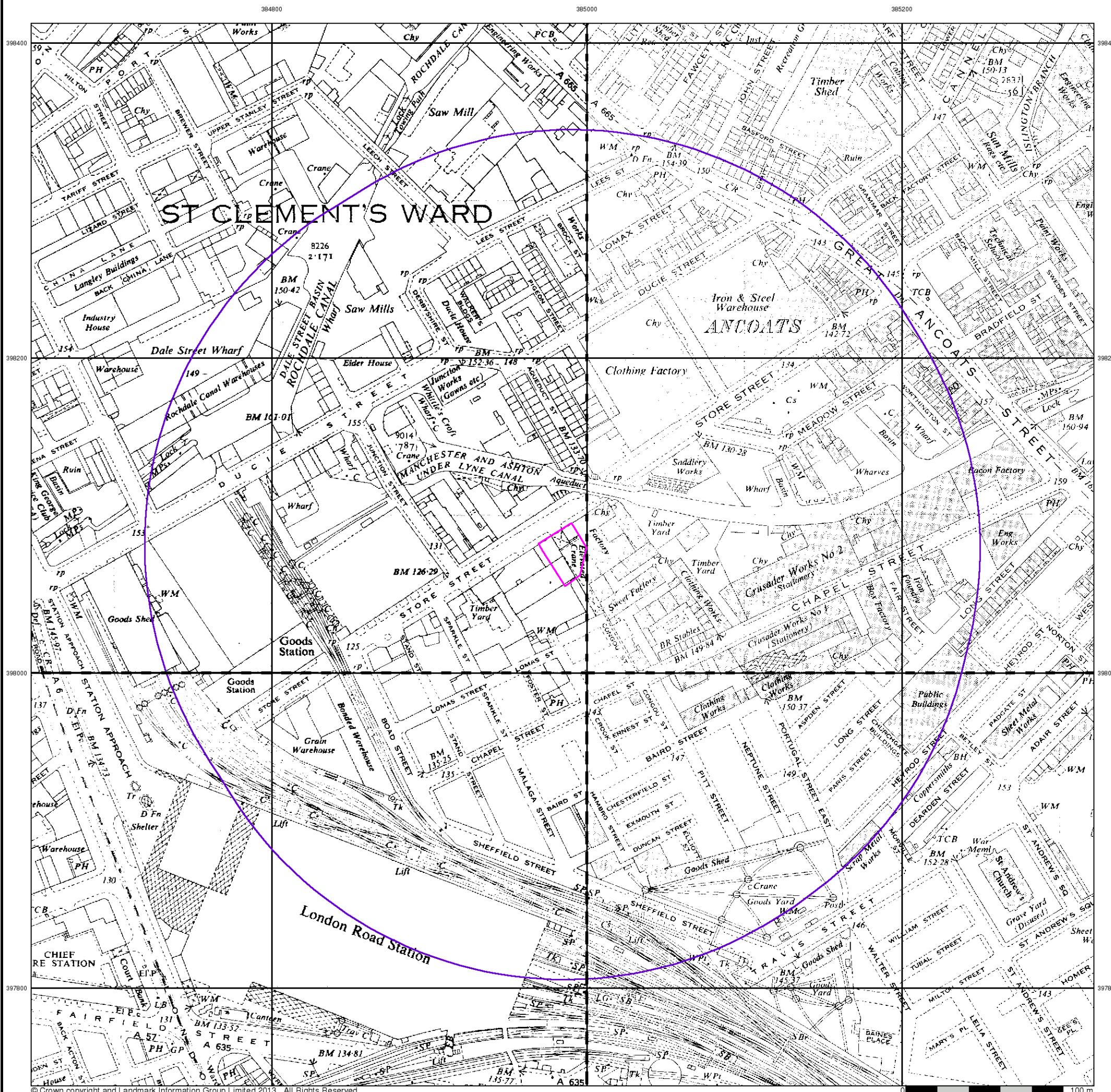


Order Details

Order Number: 59513547_1_1
 Customer Ref: PN143226
 National Grid Reference: 384990, 398080
 Slice: A
 Site Area (Ha): 0.07
 Search Buffer (m): 250

Site Details

Site at 384980, 398080



Ordnance Survey Plan

Published 1953 - 1965

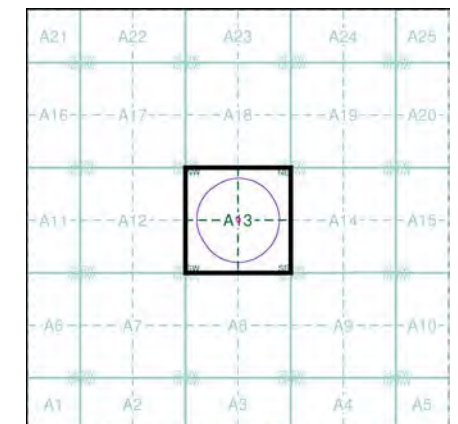
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SJ8498	SJ8598
1955	1953
12,500	12,500
SJ8497	SJ8597
1955	1965
12,500	12,500

Historical Map - Segment A13

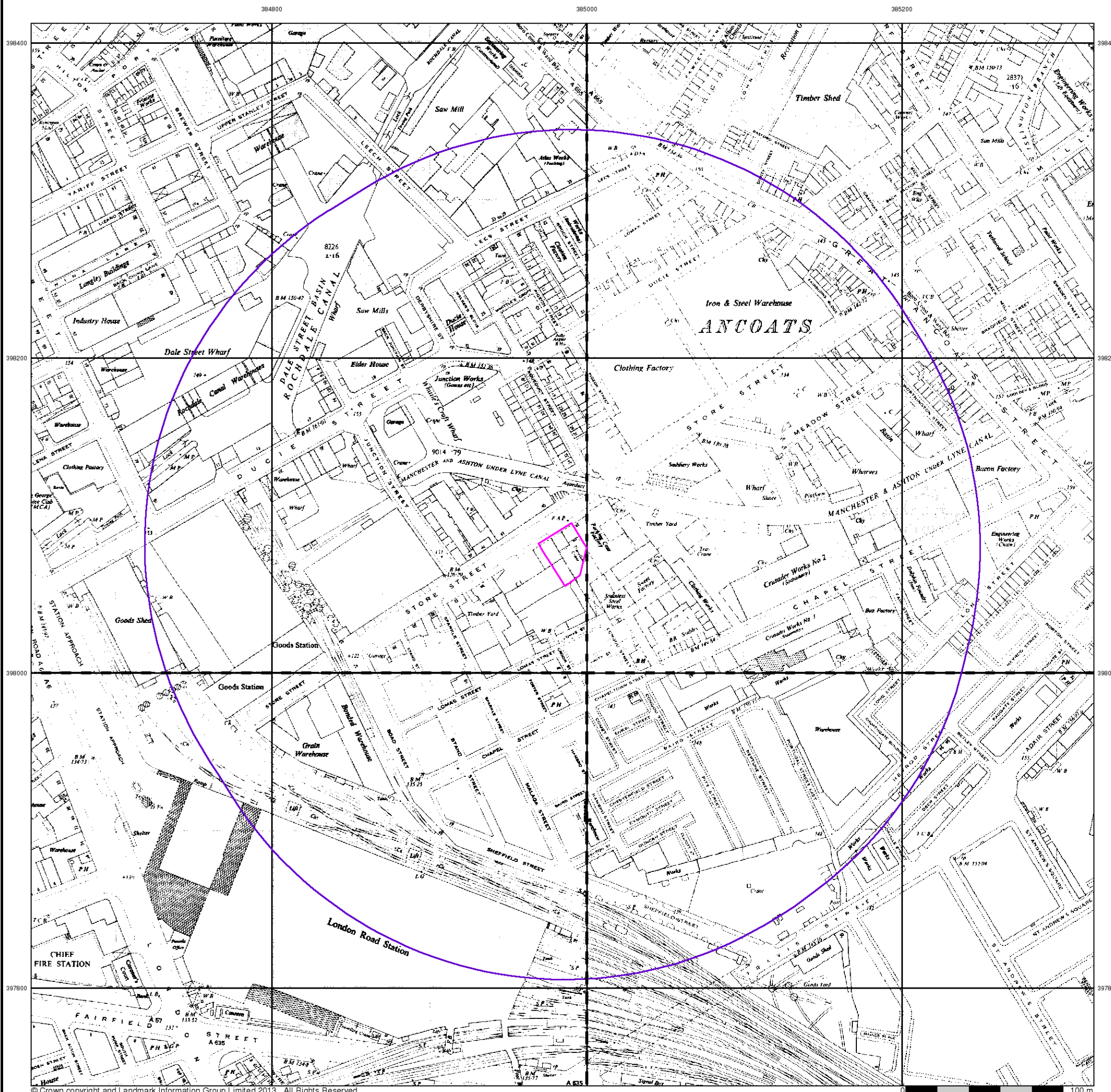


Order Details

Order Number: 59513547_1_1
 Customer Ref: PN143226
 National Grid Reference: 384990, 398080
 Slice: A
 Site Area (Ha): 0.07
 Search Buffer (m): 250

Site Details

Site at 384980, 398080



Ordnance Survey Plan

Published 1954 - 1963

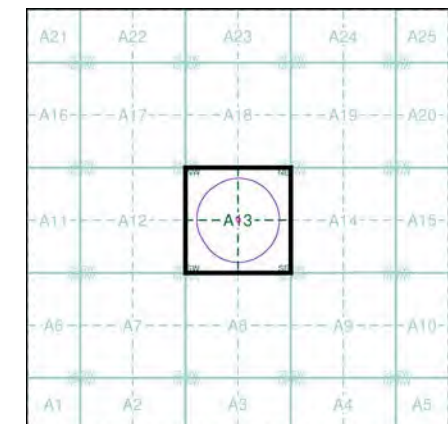
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SJ8498SE	SJ8598SW
1954	1955
1:1,250	1:1,250
SJ8497NE	SJ8597NW
1954	1963
1:1,250	1:1,250

Historical Map - Segment A13

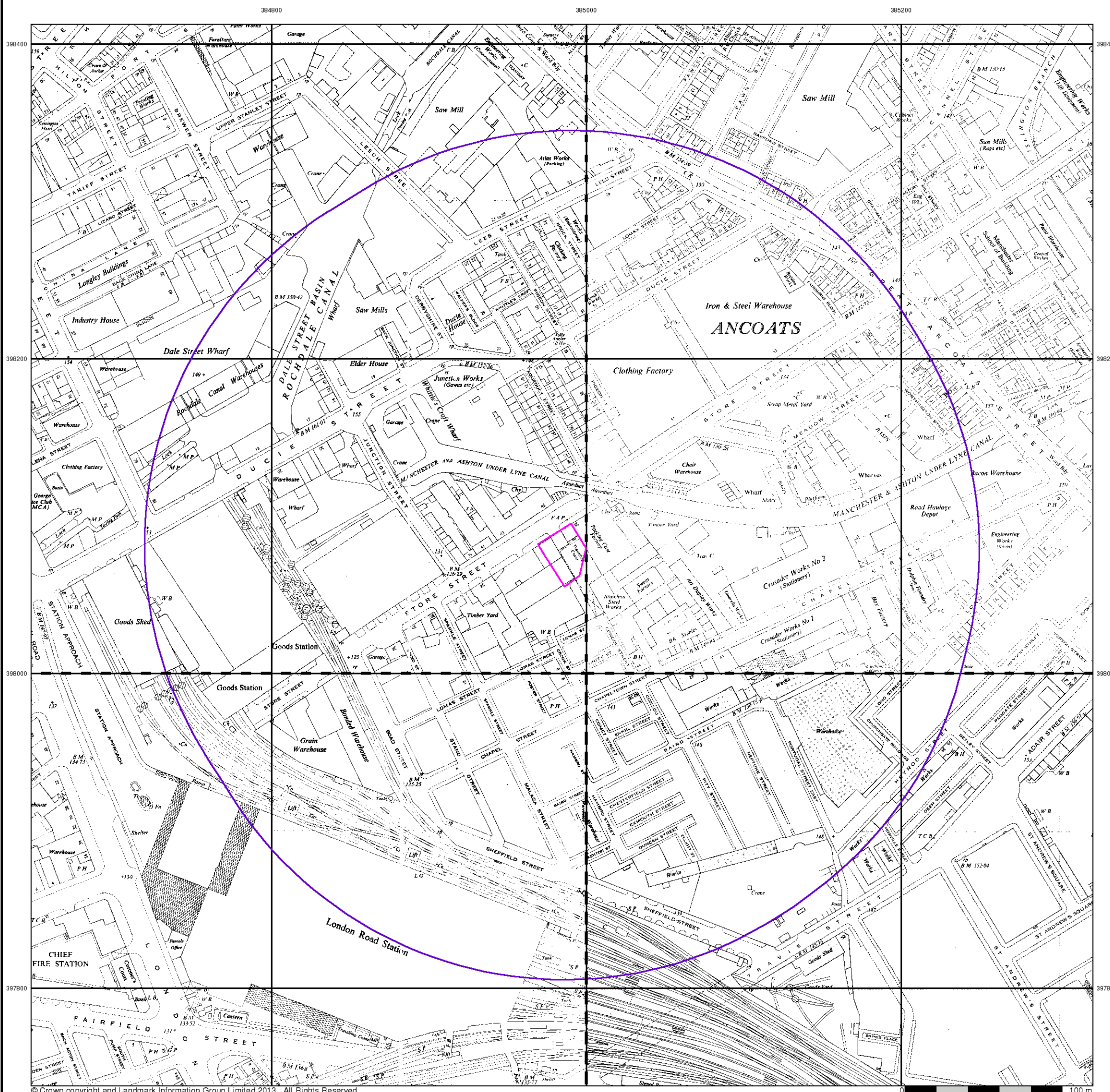


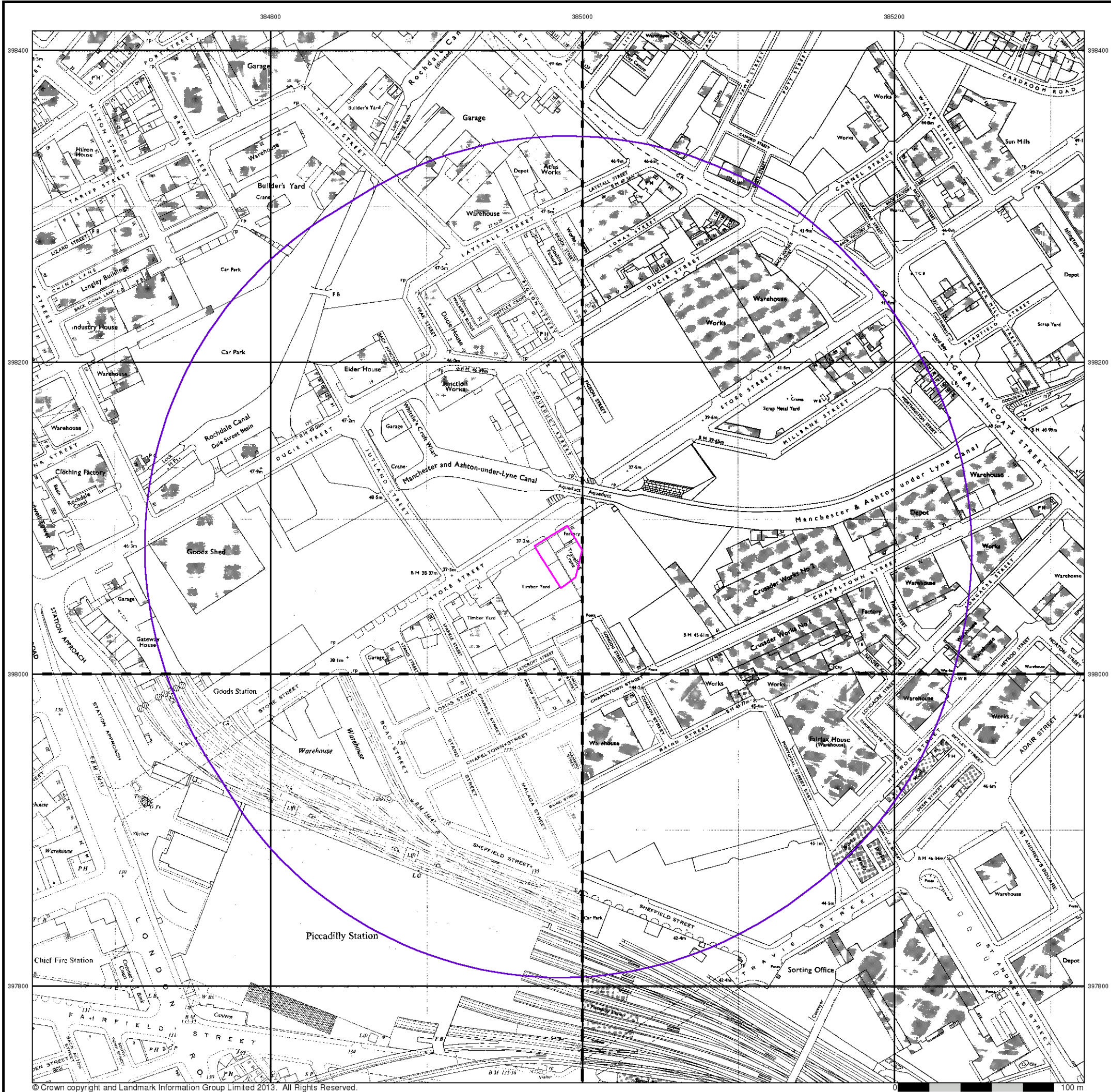
Order Details

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 National Grid Reference: 384990, 398080
 Slice: A
 Site Area (Ha): 0.07
 Search Buffer (m): 250

Site Details

Site at 384980, 398080





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Ordnance Survey Plan

Published 1964 - 1981

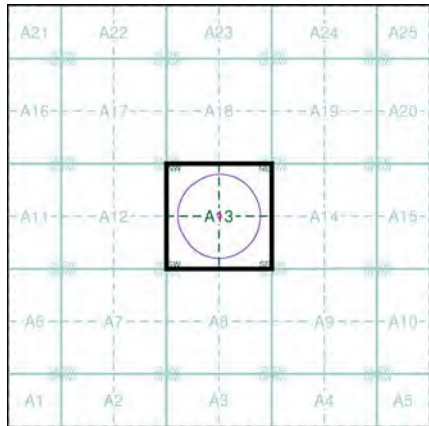
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SJ8498SE	SJ8598SW
1971	1981
1:1,250	1:1,250
SJ8497NE	SJ8597NW
1964	1977
1:1,250	1:1,250

Historical Map - Segment A13



Order Details

Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
Search Buffer (m): 250

Site Details

Site at 384980, 398080

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Ordnance Survey Plan

Published 1965

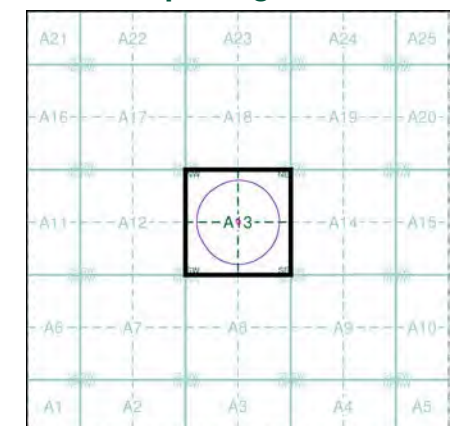
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SJ8498	SJ8598
1965	1965
12,500	12,500
SJ8497	
1965	
12,500	

Historical Map - Segment A13

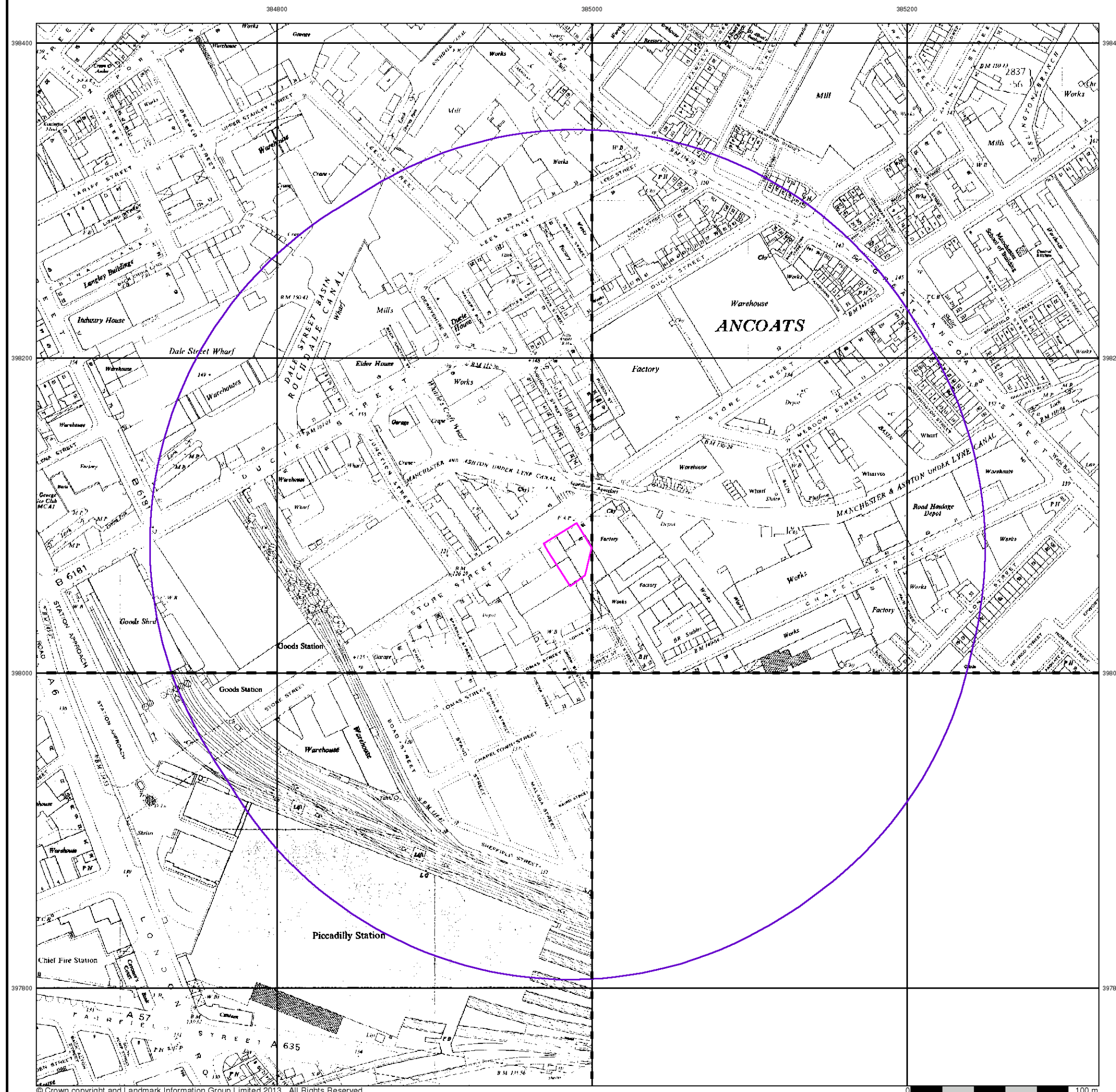


Order Details

Order Number: 59513547_1_1
 Customer Ref: PN143226
 National Grid Reference: 384990, 398080
 Slice: A
 Site Area (Ha): 0.07
 Search Buffer (m): 250

Site Details

Site at 384980, 398080



Ordnance Survey Plan

Published 1969 - 1970

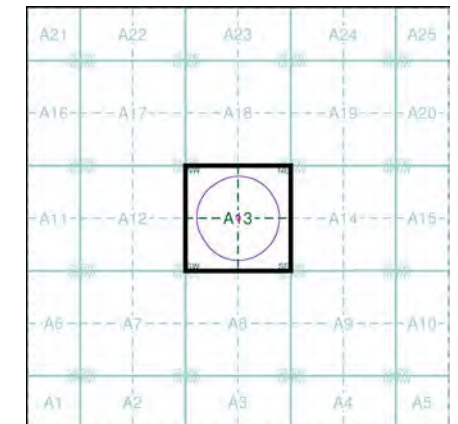
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

SJ8498	SJ8598
1969	1969
12,500	12,500
SJ8497	SJ8597
1970	1970
12,500	12,500

Historical Map - Segment A13

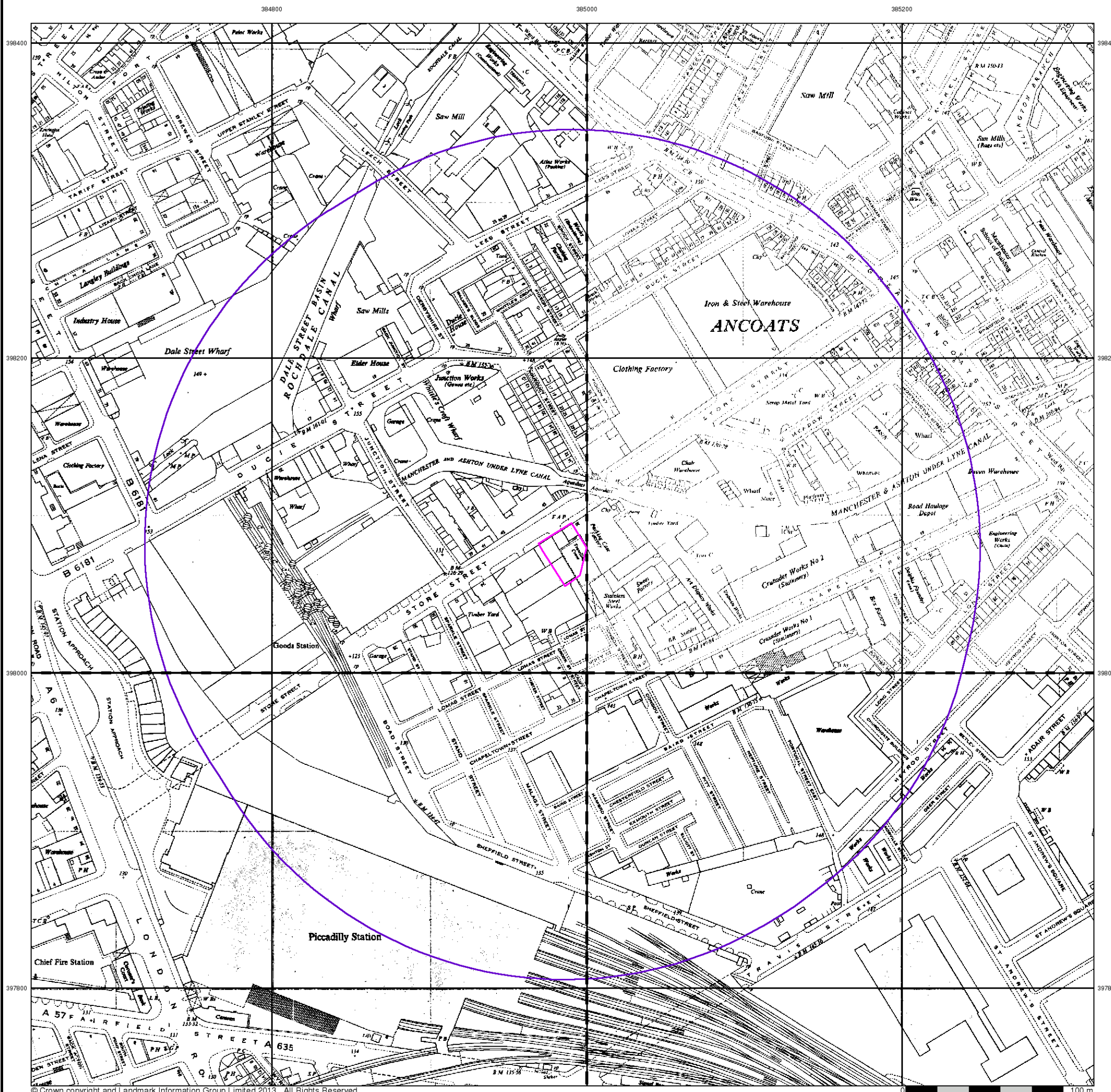


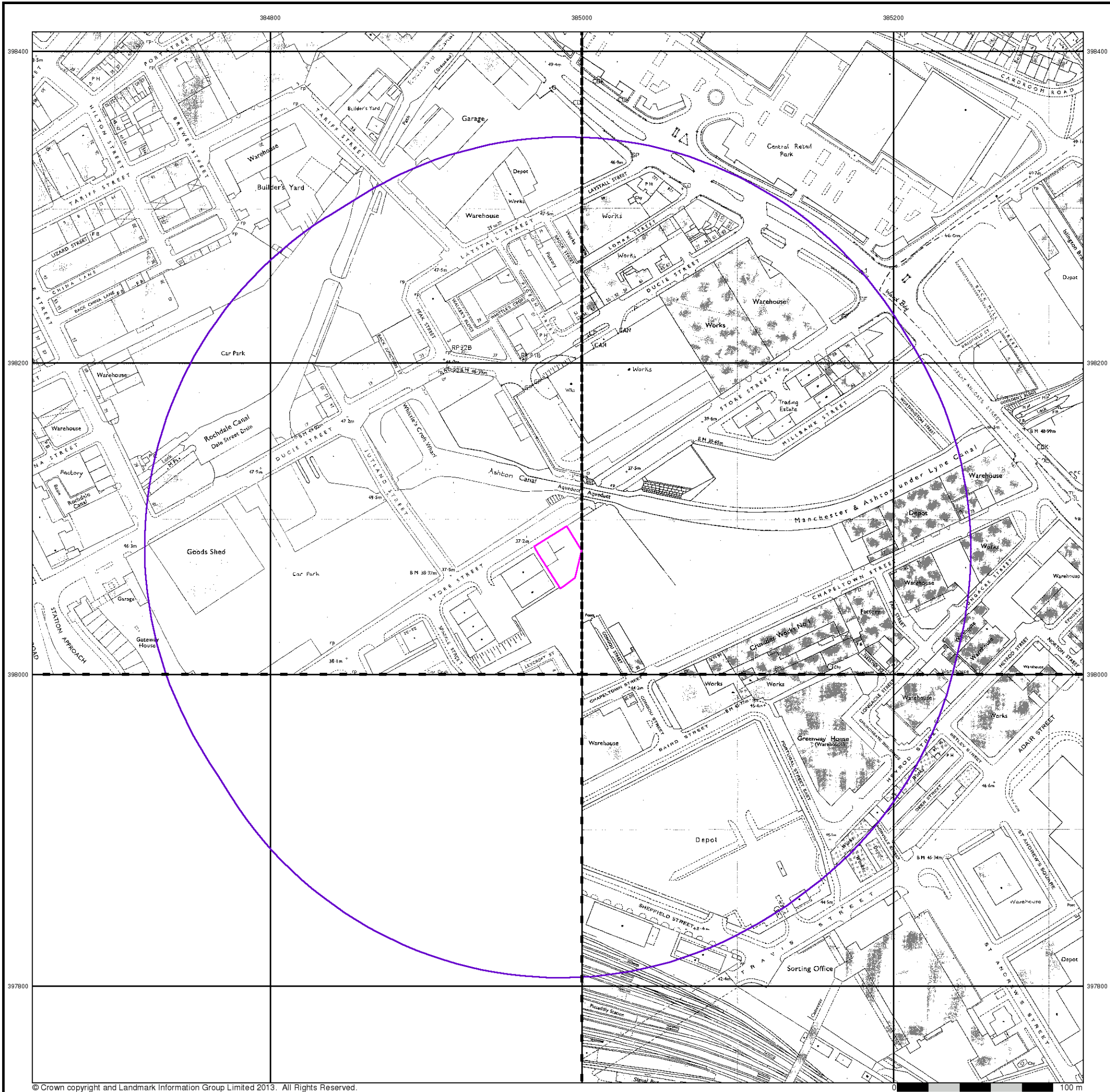
Order Details

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 National Grid Reference: 384990, 398080
 Slice: A
 Site Area (Ha): 0.07
 Search Buffer (m): 250

Site Details

Site at 384980, 398080





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Additional SIMs

Published 1988 - 1991

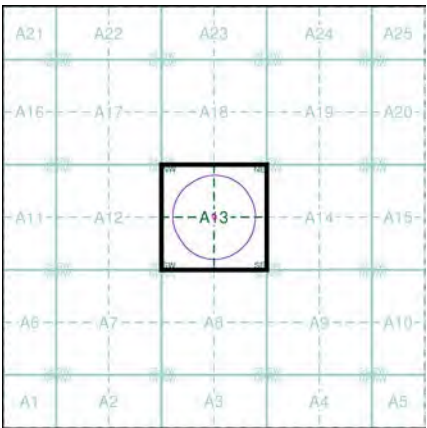
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SJ8498SE	SJ8598SW
1990	1988
1:1,250	1:1,250
	SJ8597NW
	1991
	1:1,250

Historical Map - Segment A13



Order Details

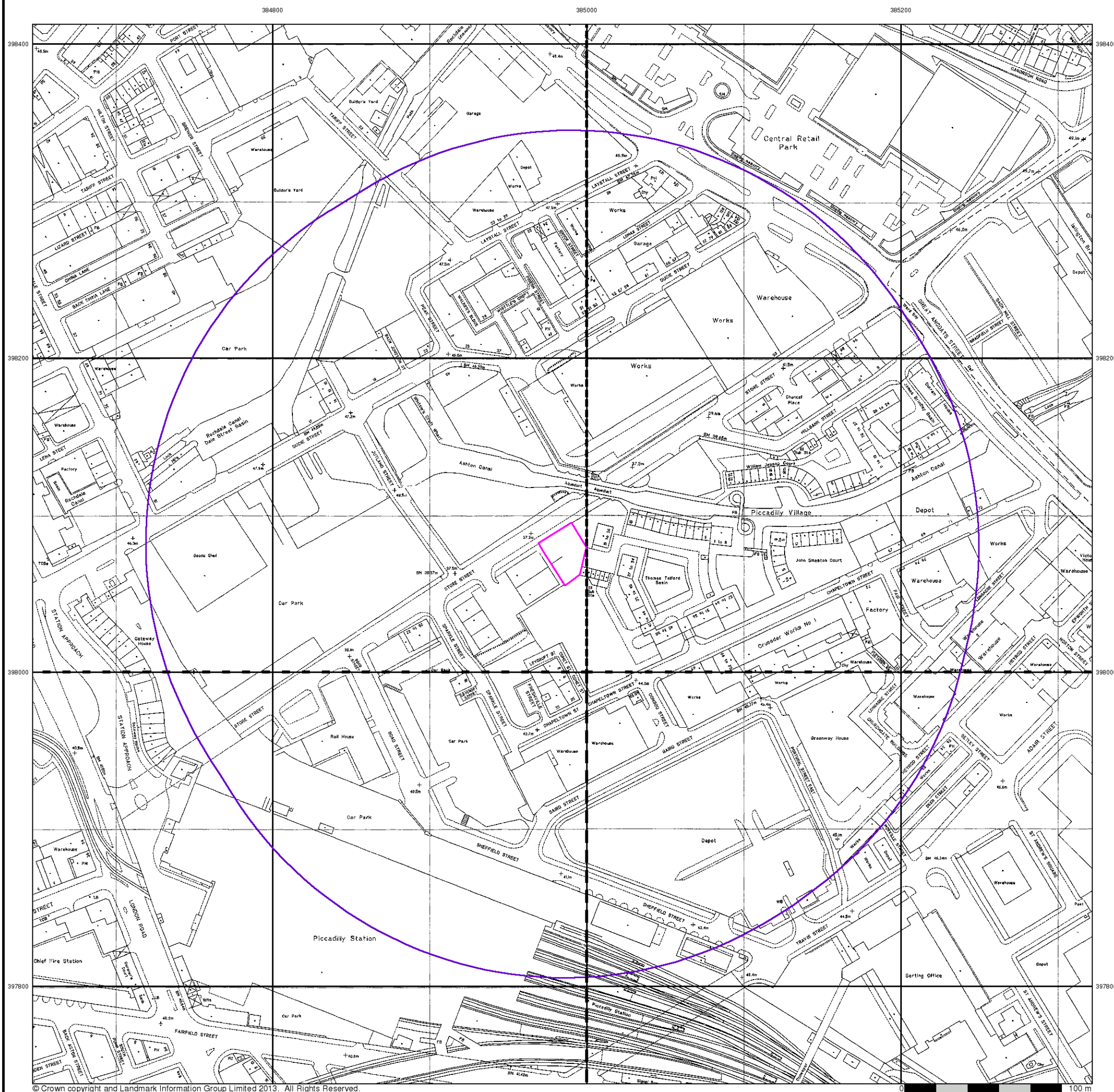
Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
Search Buffer (m): 250

Site Details

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Large-Scale National Grid Data

Published 1992

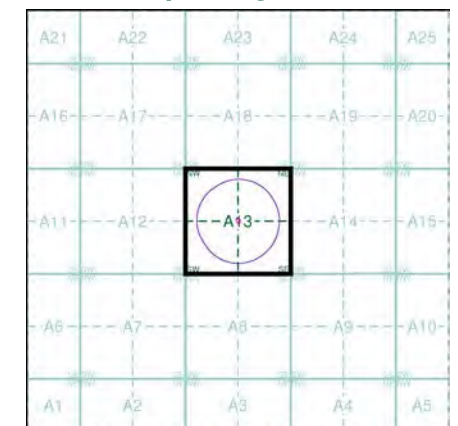
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

SJ8498SE 1992 1:1,250	SJ8598SW 1992 1:1,250
SJ8497NE 1992 1:1,250	SJ8597NW 1992 1:1,250

Historical Map - Segment A13



Order Details

Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
Search Buffer (m): 250

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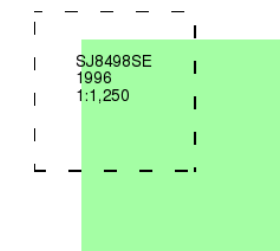
Large-Scale National Grid Data

Published 1996

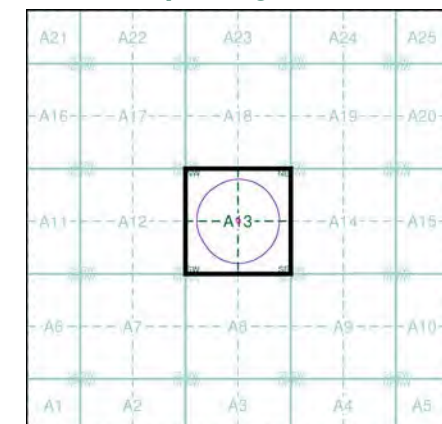
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13

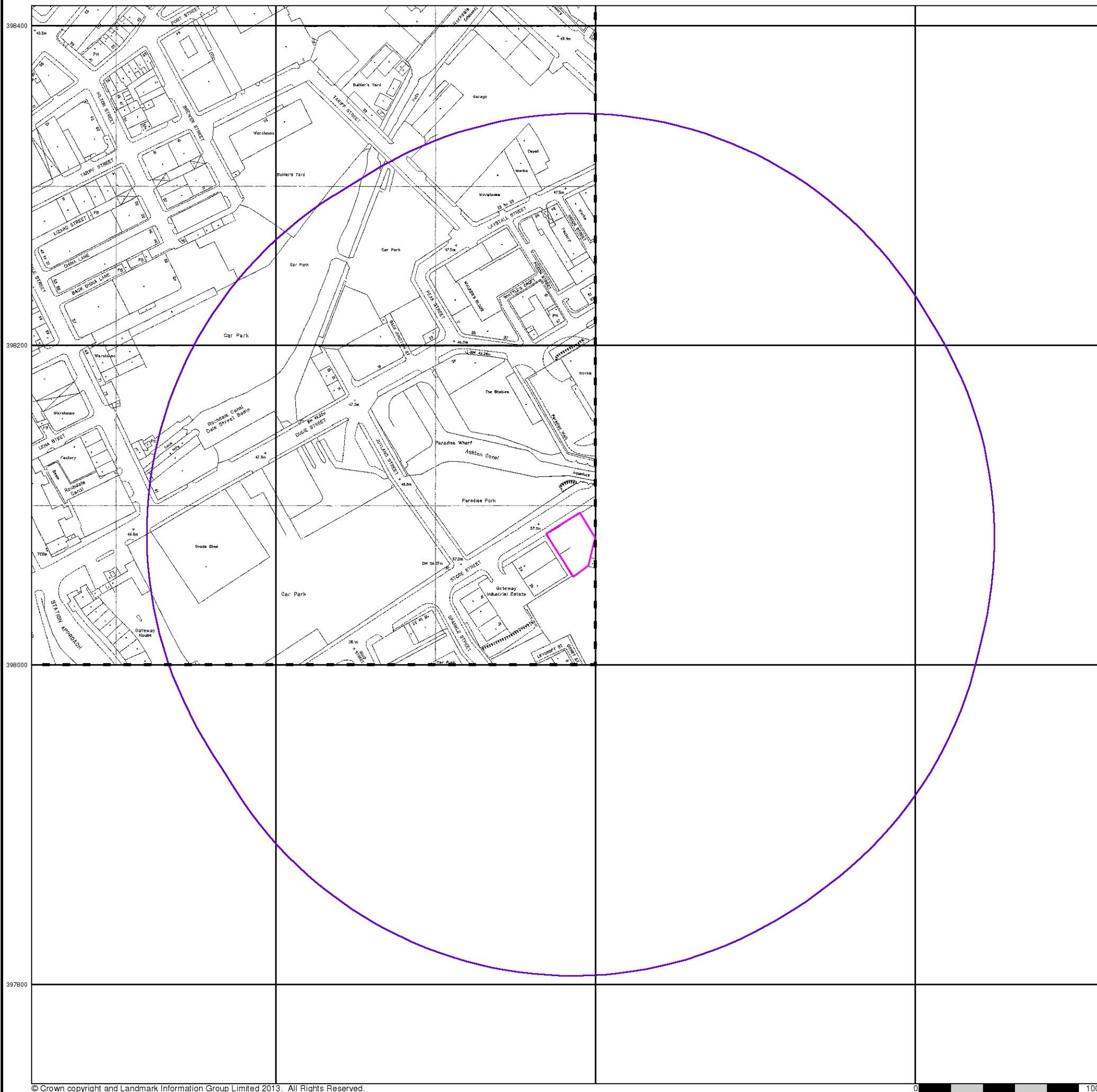


Order Details

Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
Search Buffer (m): 250

Site Details

Site at 384980, 398080



Historical Mapping Legends

Ordnance Survey County Series 1:10,560

	Gravel Pit		Sand Pit		Other Pits
	Quarry		Shingle		Orchard
	Osiers		Reeds		Marsh
	Mixed Wood		Deciduous		Brushwood
	Fir		Furze		Rough Pasture
	Arrow denotes flow of water		Trigonometrical Station		
	Site of Antiquities		Bench Mark		
	Pump, Guide Post, Signal Post		Well, Spring, Boundary Post		
	285 Surface Level				
	Sketched Contour		Instrumental Contour		
	Main Roads		Minor Roads		
	Sunken Road		Raised Road		
	Road over Railway		Railway over River		
	Railway over Road		Level Crossing		
	Road over River or Canal		Road over Stream		
	Road over Stream				
	County Boundary (Geographical)				
	County & Civil Parish Boundary				
	Administrative County & Civil Parish Boundary				
	County Borough Boundary (England)				
	County Burgh Boundary (Scotland)				
	Rural District Boundary				
	Civil Parish Boundary				

Ordnance Survey Plan 1:10,000

	Chalk Pit, Clay Pit or Quarry		Gravel Pit
	Sand Pit		Disused Pit or Quarry
	Refuse or Slag Heap		Lake, Loch or Pond
	Dunes		Boulders
	Coniferous Trees		Non-Coniferous Trees
	Orchard		Scrub
	Bracken		Heath
	Marsh		Reeds
	Building		Glasshouse
	Sloping Masonry		Pylon
	Cutting		Embankment
	Road Under		Road Over
	Level Crossing		Foot Bridge
	Standard Gauge Multiple Track		Standard Gauge Single Track
	Siding, Tramway or Mineral Line		Narrow Gauge
	Geographical County		Administrative County, County Borough or County of City
	Municipal Borough, Urban or Rural District, Burgh or District Council		Borough, Burgh or County Constituency
	Civil Parish		
	Boundary Post or Stone		Police Station
	Church		Post Office
	Club House		Public Convenience
	Fire Engine Station		Public House
	Foot Bridge		Signal Box
	Fountain		Spring
	Guide Post		Telephone Call Box
	Mile Post		Telephone Call Post
	Mile Stone		Well

1:10,000 Raster Mapping

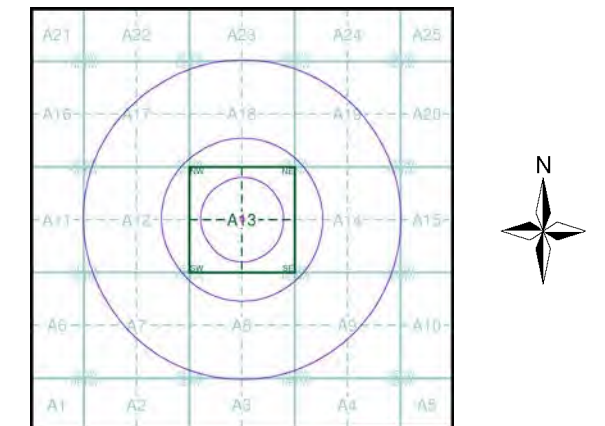
	Gravel Pit		Refuse tip or slag heap
	Rock		Rock (scattered)
	Boulders		Boulders (scattered)
	Shingle		Mud
	Sand		Sand Pit
	Slopes		Top of cliff
	General detail		Underground detail
	Overhead detail		Narrow gauge railway
	Multi-track railway		Single track railway
	County boundary (England only)		Civil, parish or community boundary
	District, Unitary, Metropolitan, London Borough boundary		Constituency boundary
	Area of wooded vegetation		Non-coniferous trees
	Non-coniferous trees (scattered)		Coniferous trees
	Coniferous trees (scattered)		Positioned tree
	Orchard		Coppice or Osiers
	Rough Grassland		Heath
	Scrub		Marsh, Salt Marsh or Reeds
	Water feature		Flow arrows
	Mean high water (springs)		Mean low water (springs)
	Telephone line (where shown)		Electricity transmission line (with poles)
	Bench mark (where shown)		Triangulation station
	Point feature (e.g. Guide Post or Mile Stone)		Pylon, flare stack or lighting tower
	Site of (antiquity)		Glasshouse
	General Building		Important Building

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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1848	3
Cheshire	1:10,560	1882	4
Lancashire And Furness	1:10,560	1894 - 1896	5
Lancashire And Furness	1:10,560	1909	6
Lancashire And Furness	1:10,560	1923	7
Lancashire And Furness	1:10,560	1931 - 1933	8
Lancashire And Furness	1:10,560	1938	9
Ordnance Survey Plan	1:10,000	1956	10
Ordnance Survey Plan	1:10,000	1968	11
Ordnance Survey Plan	1:10,000	1972	12
Manchester	1:25,000	1975	13
Ordnance Survey Plan	1:10,000	1980 - 1981	14
Ordnance Survey Plan	1:10,000	1985 - 1987	15
Ordnance Survey Plan	1:10,000	1989	16
Ordnance Survey Plan	1:10,000	1993 - 1994	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2014	19

Historical Map - Slice A



Order Details

Order Number: 59513547_1_1
 Customer Ref: PN143226
 National Grid Reference: 384990, 398080
 Slice: A
 Site Area (Ha): 0.07
 Search Buffer (m): 1000

Site Details

Site at 384980, 398080

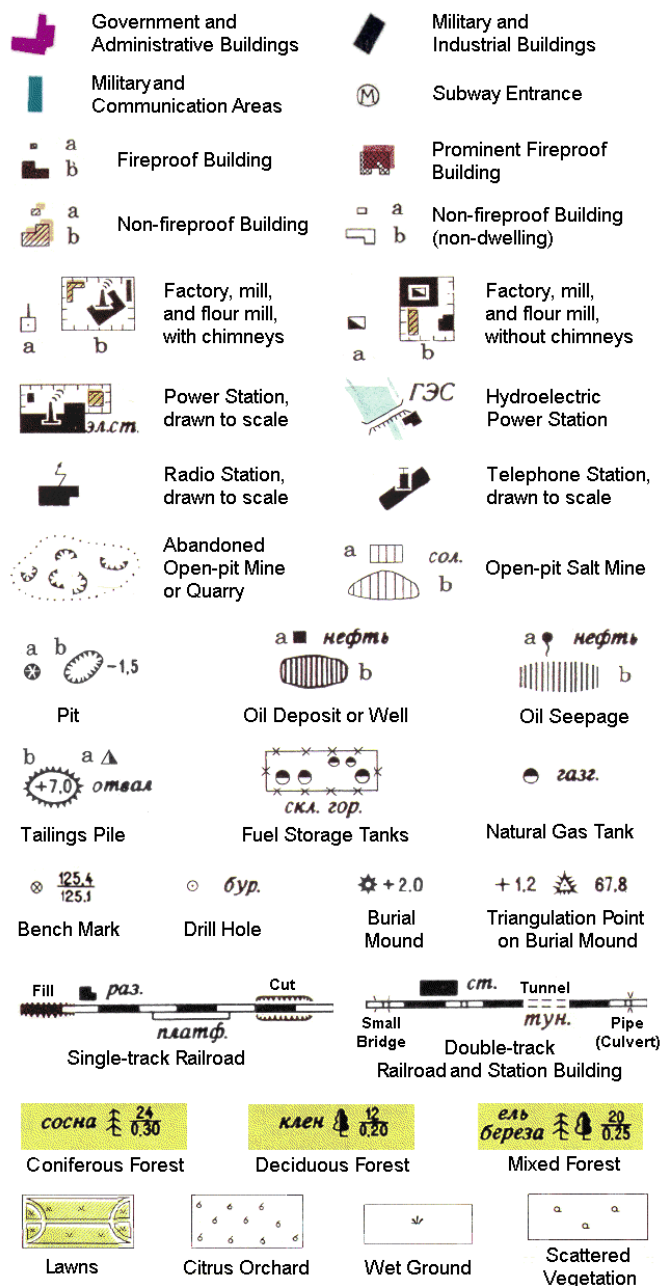
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Russian Military Mapping Legends

1:5,000 and 1:10,000 mapping

a. Not drawn to scale b. Drawn to scale



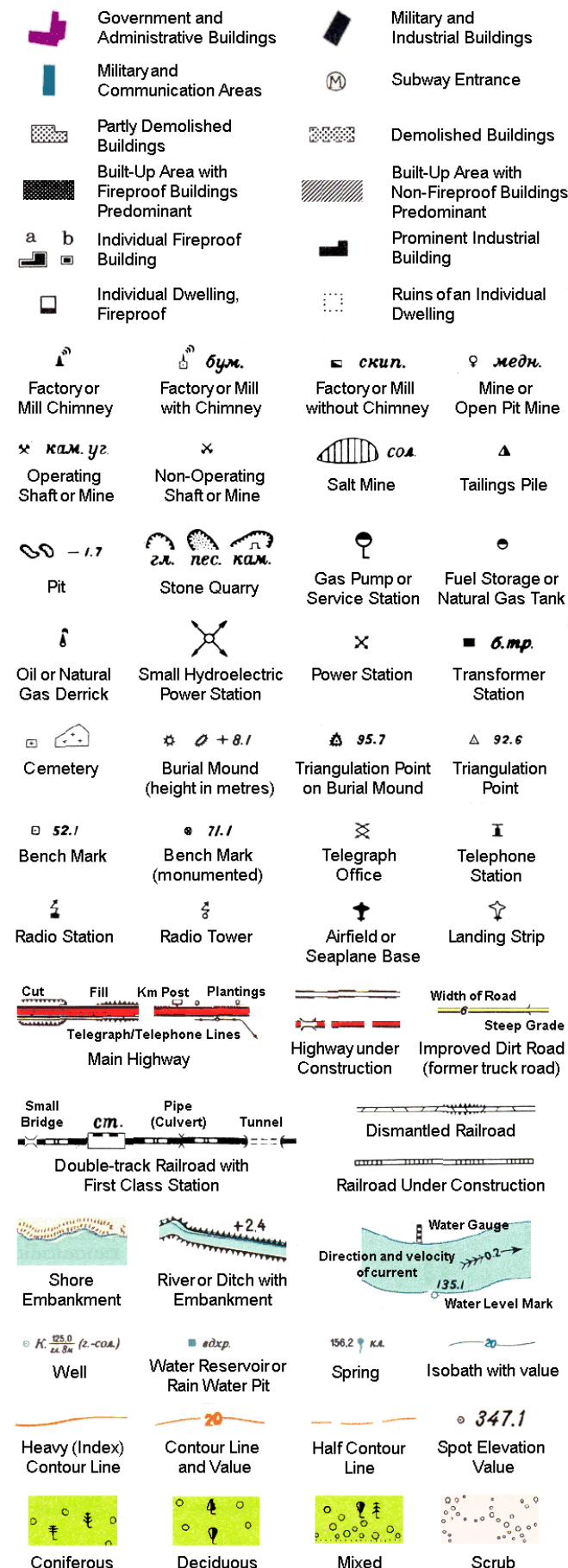
243.8 Values for prominent elevations
186.0 Numbers for spot elevations, depth soundings, contour lines, etc.
0.2 Velocity of the current, width of river bed, depth of river
180/12 Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

Russian Alphabet (For reference and phonetic interpretation of map text)

А а (A) **З з (Z)** **П п (P)** **Ч ч (CH)**
Б б (B) **И и (I)** **Р р (R)** **Ш ш (SH)**
В в (V) **Й й (Y)** **С с (S)** **Щ щ (SHCH)**
Г г (G) **К к (K)** **Т т (T)** **Ъ (-)**
Д д (D) **Л л (L)** **У у (U)** **Ы (Y)**
Е е (E) **М м (M)** **Ф ф (F)** **Ь (')**
Ё ё (YO) **Н н (N)** **Х х (KH)** **Э э (E)**
Ж ж (ZH) **О о (O)** **Ц ц (TS)** **Ю ю (YU or IU)**
Я я (YA or IA)

1:25,000 mapping

a. Not drawn to scale b. Drawn to scale



Key to Numbers on Mapping

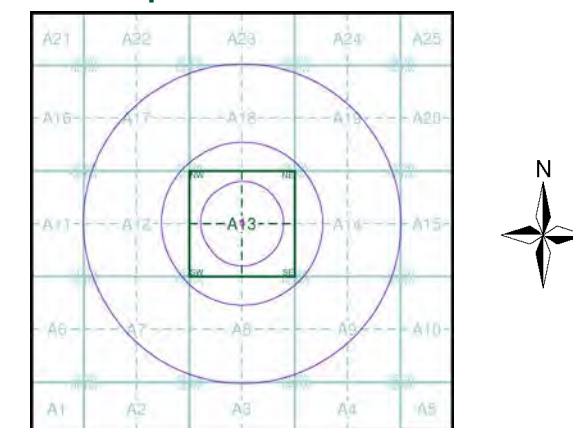
SJ89_Manchester

No.	Description
168	Post Office
169	Post Office

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:10,560	1848	3
Cheshire	1:10,560	1882	4
Lancashire And Furness	1:10,560	1894 - 1896	5
Lancashire And Furness	1:10,560	1909	6
Lancashire And Furness	1:10,560	1923	7
Lancashire And Furness	1:10,560	1931 - 1933	8
Lancashire And Furness	1:10,560	1938	9
Ordnance Survey Plan	1:10,000	1956	10
Ordnance Survey Plan	1:10,000	1968	11
Ordnance Survey Plan	1:10,000	1972	12
Manchester	1:25,000	1975	13
Ordnance Survey Plan	1:10,000	1980 - 1981	14
Ordnance Survey Plan	1:10,000	1985 - 1987	15
Ordnance Survey Plan	1:10,000	1989	16
Ordnance Survey Plan	1:10,000	1993 - 1994	17
10K Raster Mapping	1:10,000	2006	18
VectorMap Local	1:10,000	2014	19

Russian Map - Slice A



Order Details

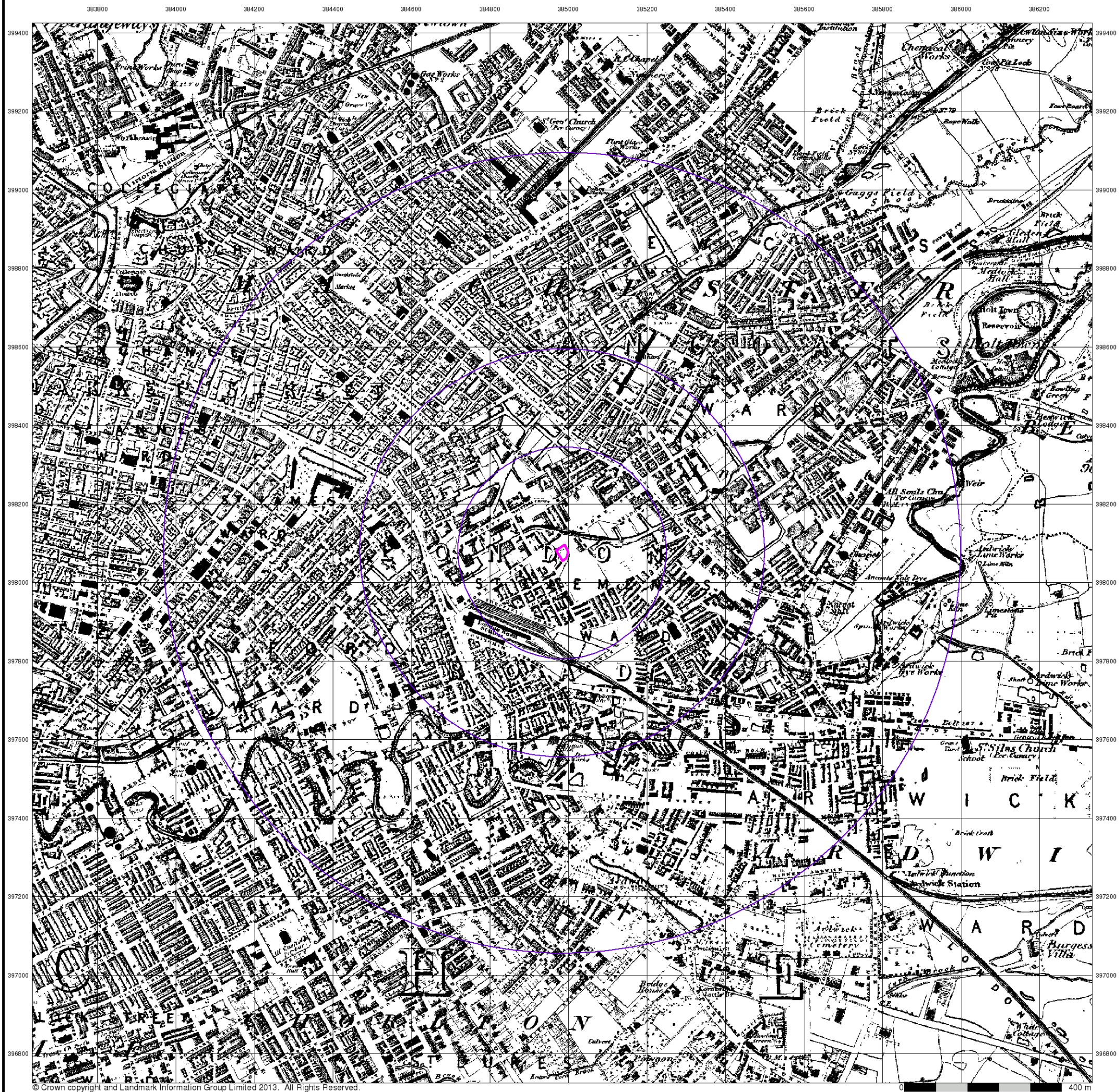
Order Number: 59513547_1_1
 Customer Ref: PN143226
 National Grid Reference: 384990, 398080
 Slice: A
 Site Area (Ha): 0.07
 Search Buffer (m): 1000

Site Details

Site at 384980, 398080



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Lancashire And Furness

Published 1848

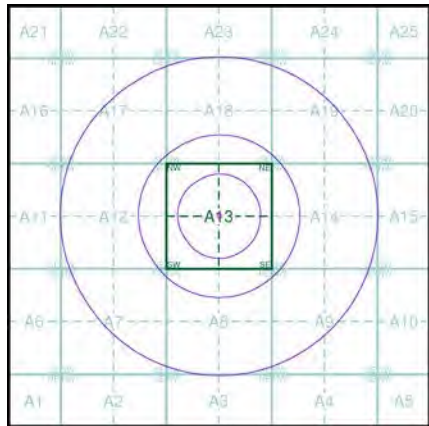
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

10400
1848
1:10,560

Historical Map - Slice A



Order Details

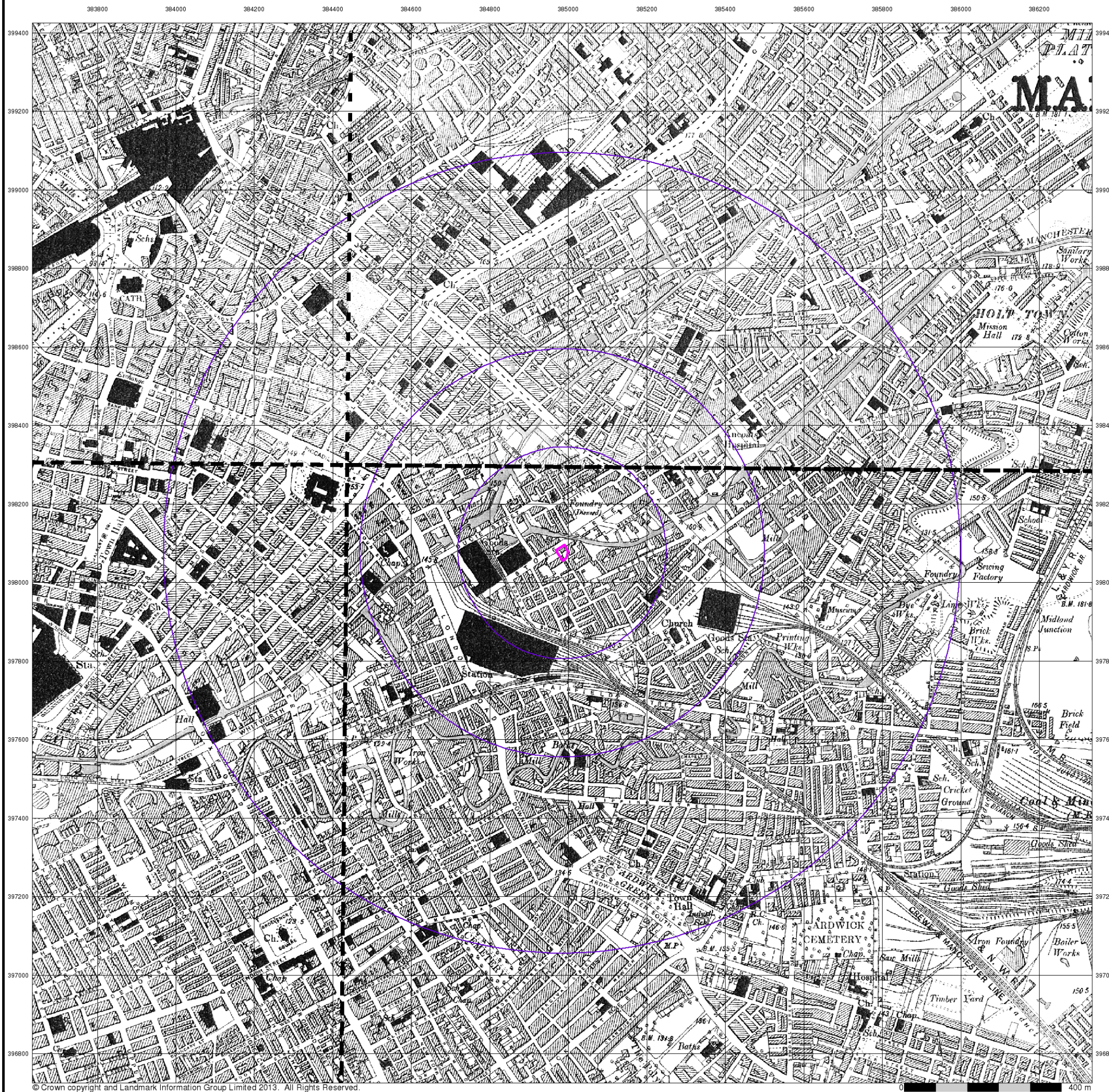
Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
Search Buffer (m): 1000

Site Details

Site at 384980, 398080

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Lancashire And Furness

Published 1894 - 1896

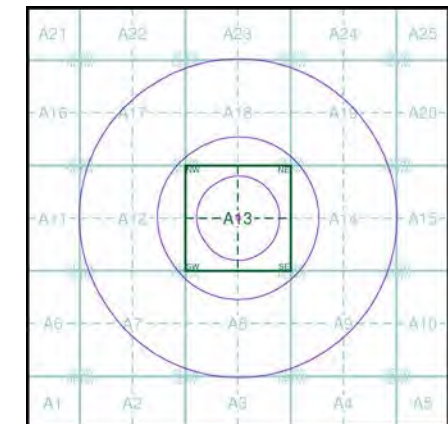
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

104NW 1894 1:10,560	104NE 1894 1:10,560
104SW 1896 1:10,560	104SE 1894 1:10,560

Historical Map - Slice A



Order Details

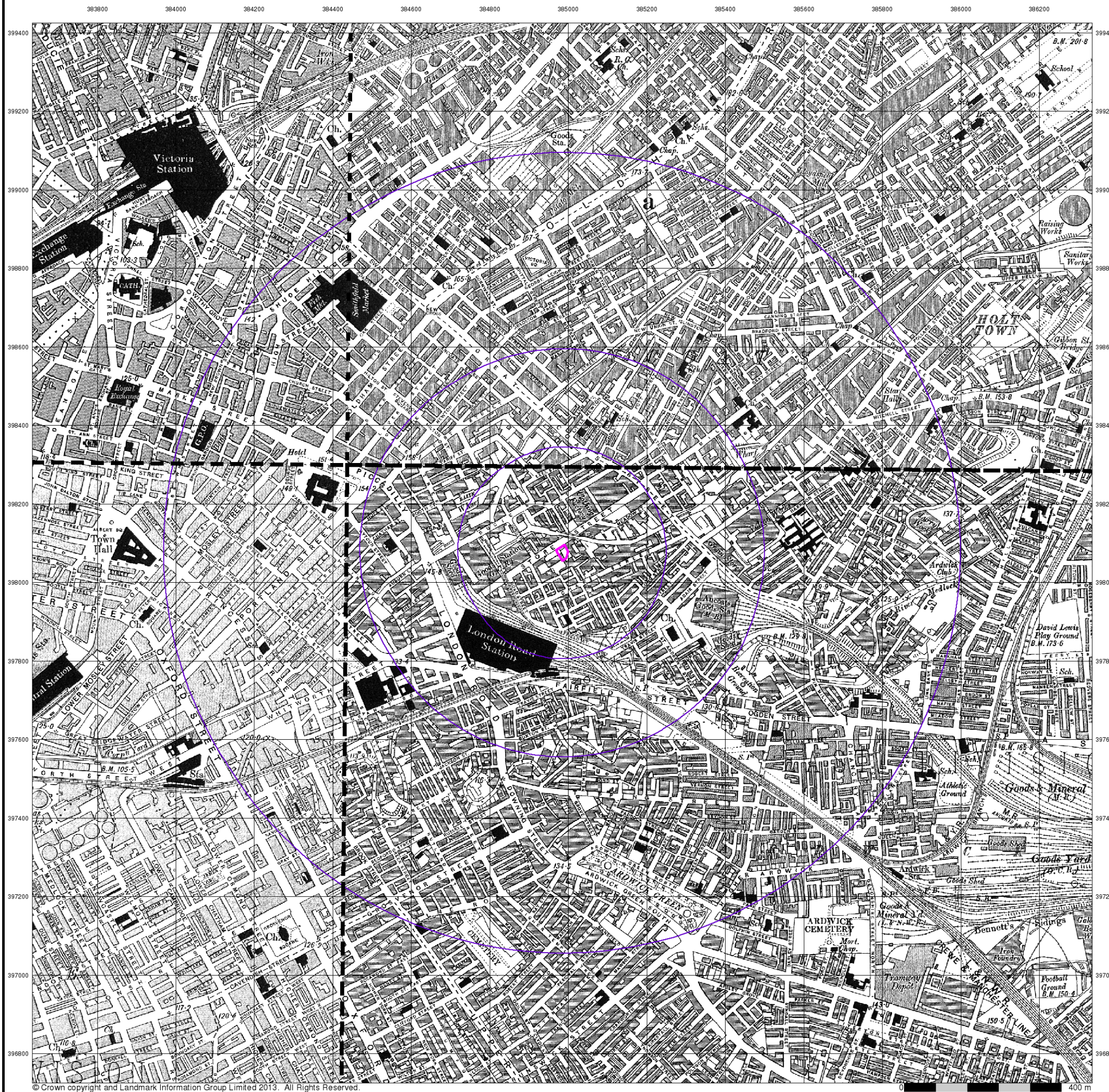
Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
Search Buffer (m): 1000

Site Details

Site at 384980, 398080

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Lancashire And Furness

Published 1909

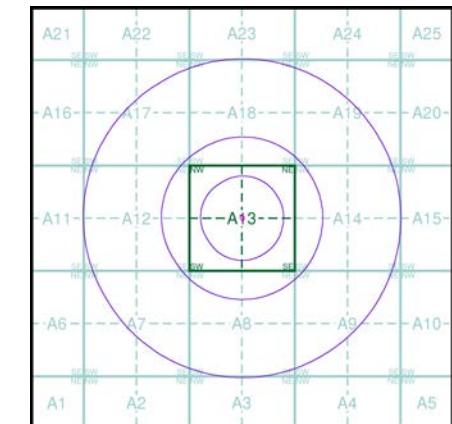
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

104NW 1909 1:10,560	104NE 1909 1:10,560
104SW 1909 1:10,560	104SE 1909 1:10,560

Historical Map - Slice A



Order Details

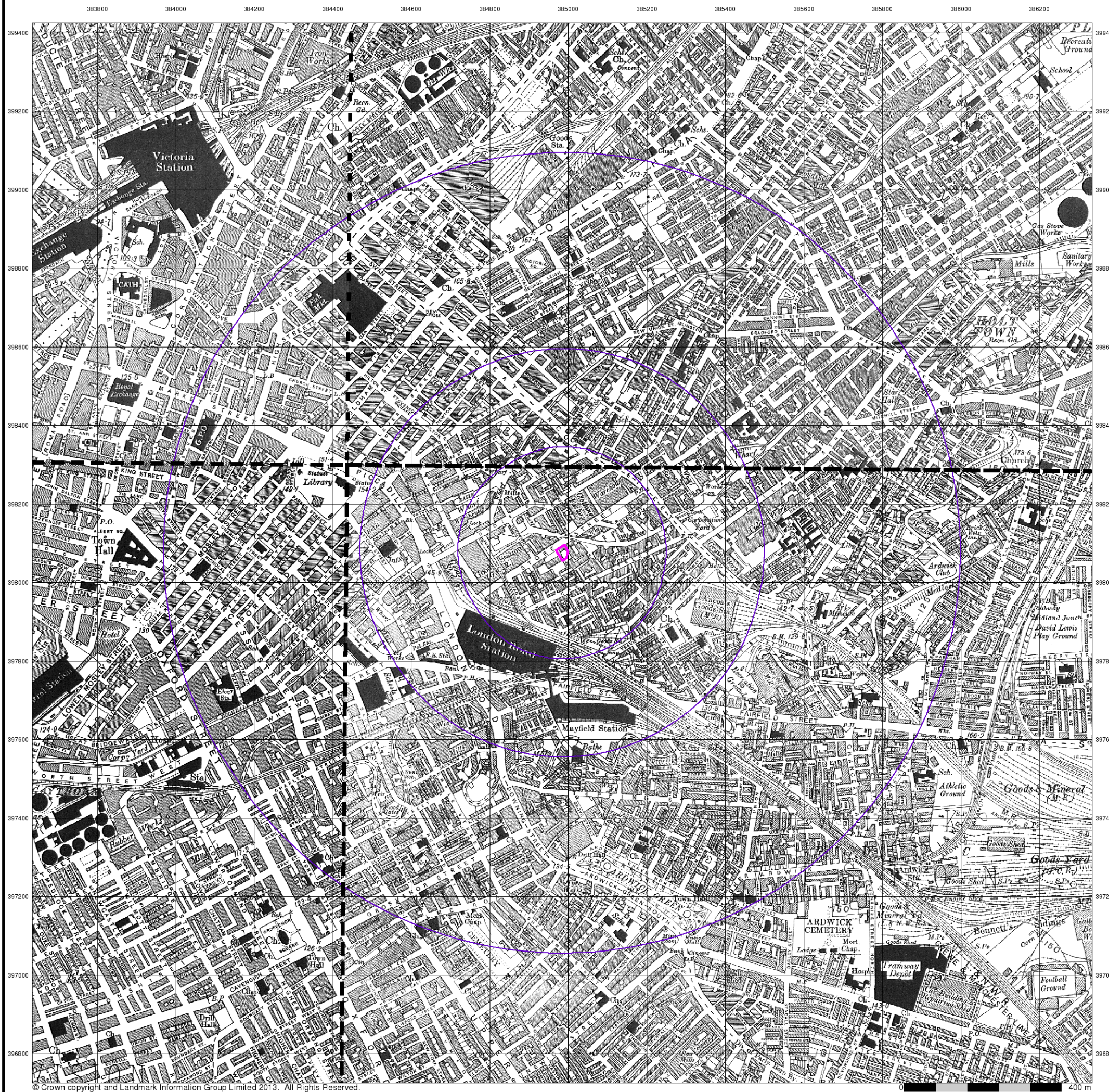
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National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
Search Buffer (m): 1000

Site Details

Site at 384980, 398080



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Lancashire And Furness

Published 1923

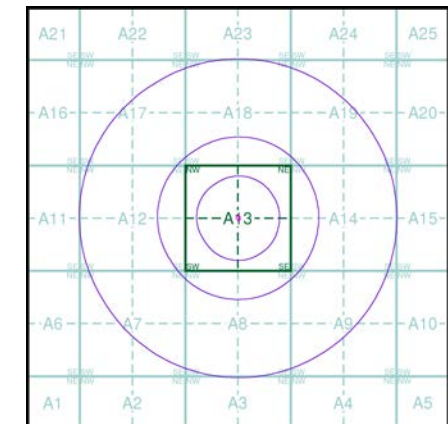
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

104NW 1923 1:10,560	104NE 1923 1:10,560
104SW 1923 1:10,560	104SE 1923 1:10,560

Historical Map - Slice A



Order Details

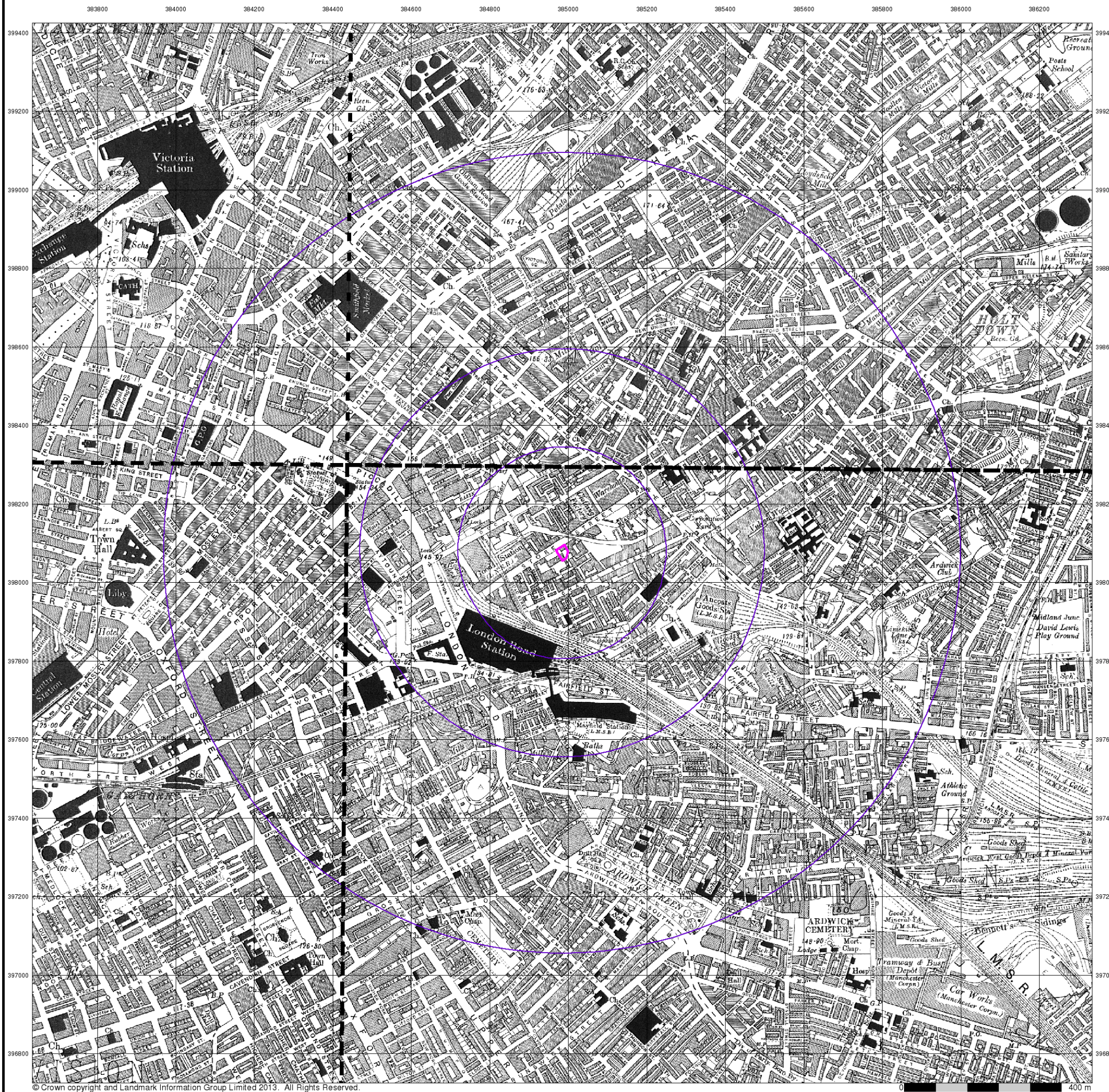
Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
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Lancashire And Furness

Published 1931 - 1933

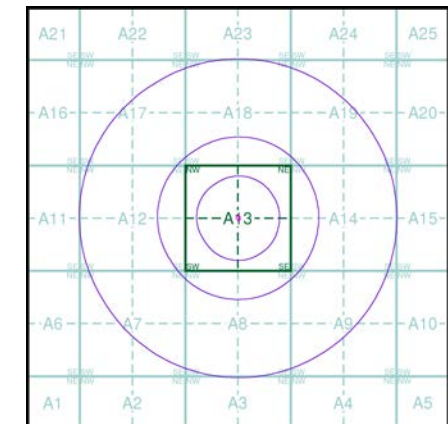
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

104NW 1931 1:10,560	104NE 1932 1:10,560
104SW 1932 1:10,560	104SE 1933 1:10,560

Historical Map - Slice A



Order Details

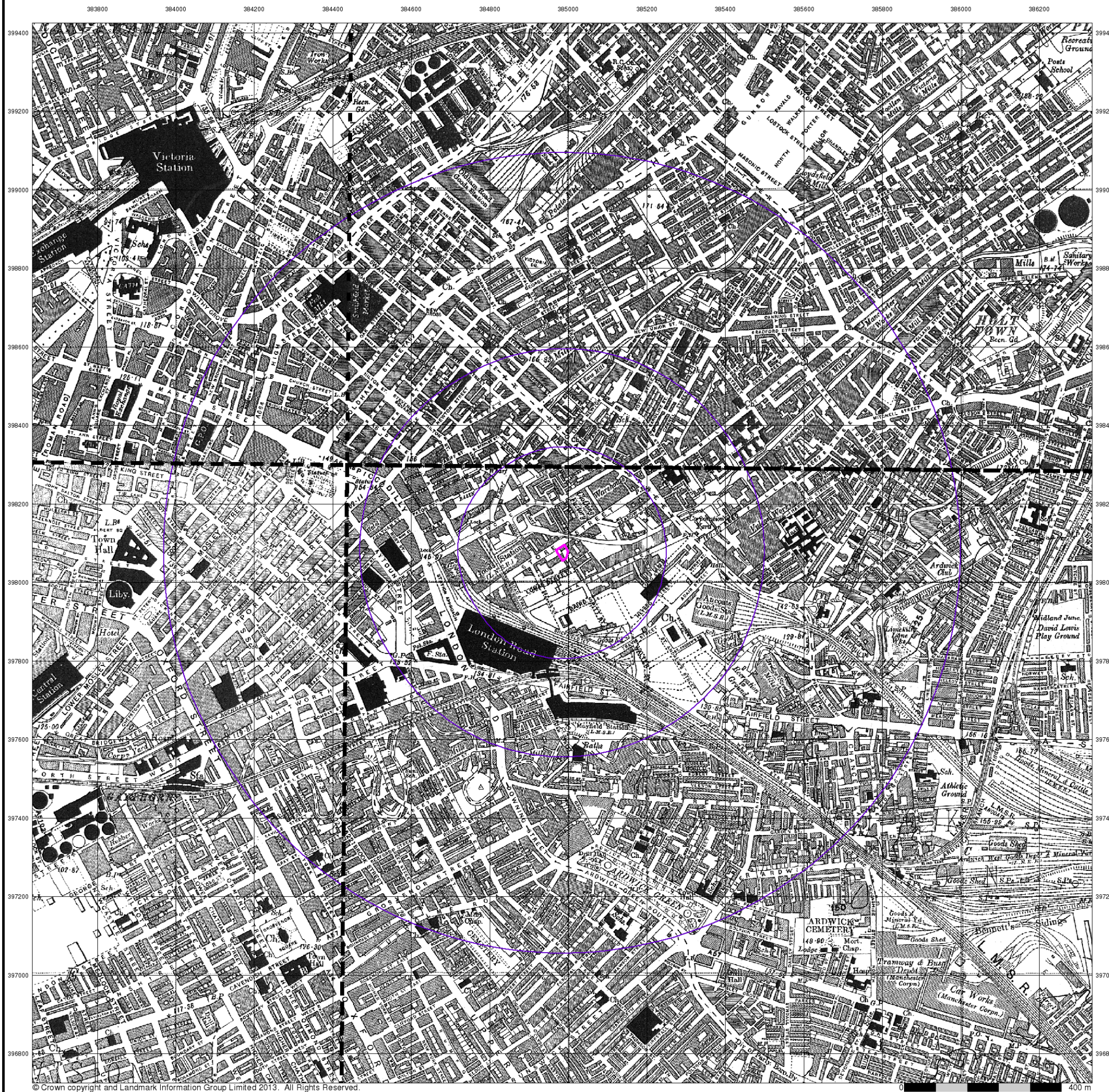
Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
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Lancashire And Furness

Published 1938

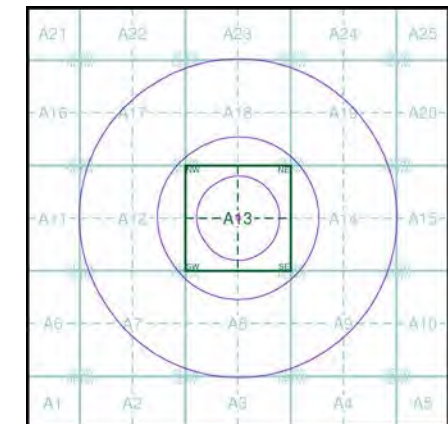
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

104NW 1938 1:10,560	104NE 1938 1:10,560
104SW 1938 1:10,560	104SE 1938 1:10,560

Historical Map - Slice A



Order Details

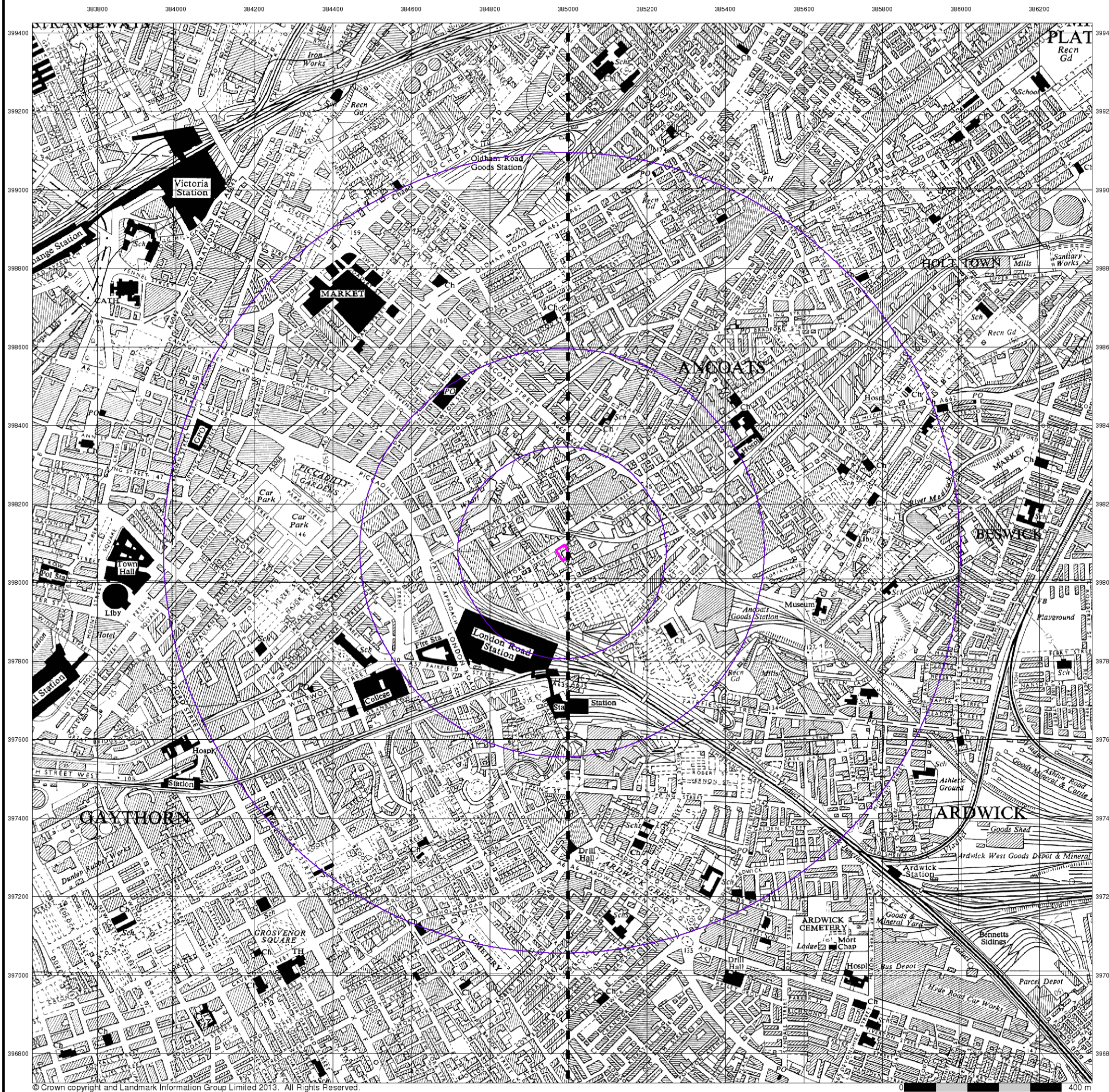
Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
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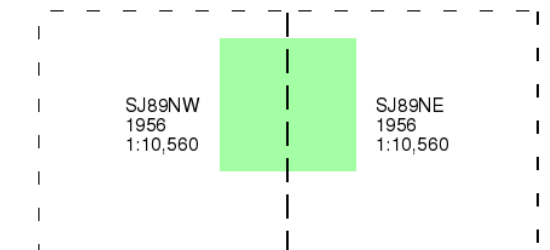
Ordnance Survey Plan

Published 1956

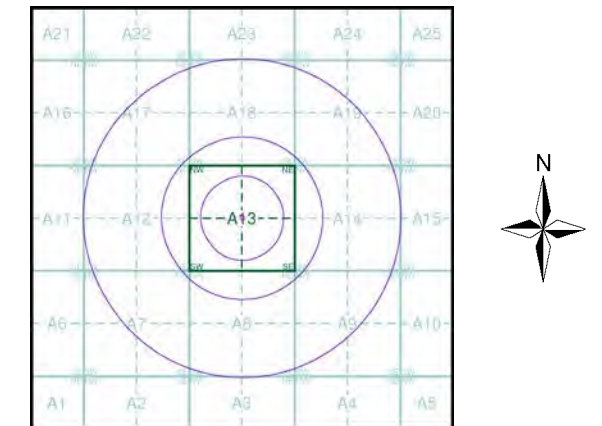
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

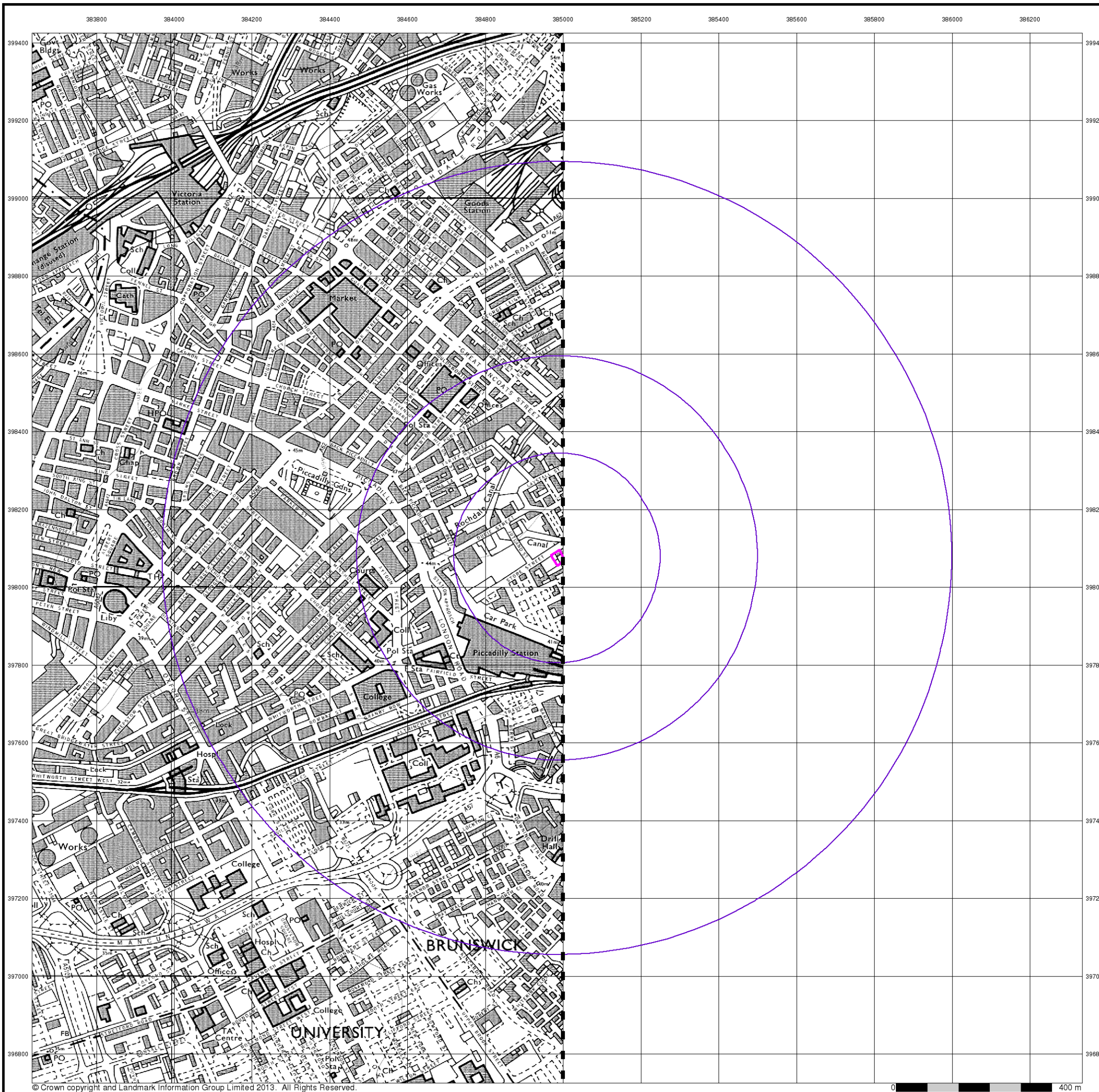
Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
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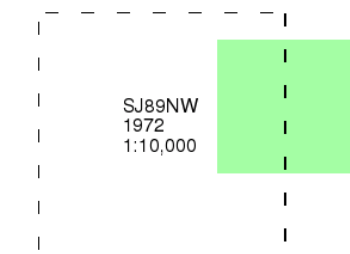
Ordnance Survey Plan

Published 1972

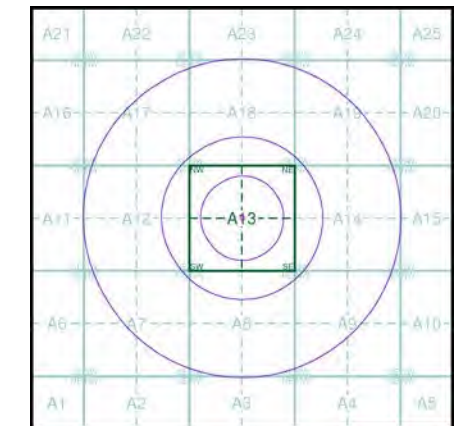
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
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Manchester

Published 1975

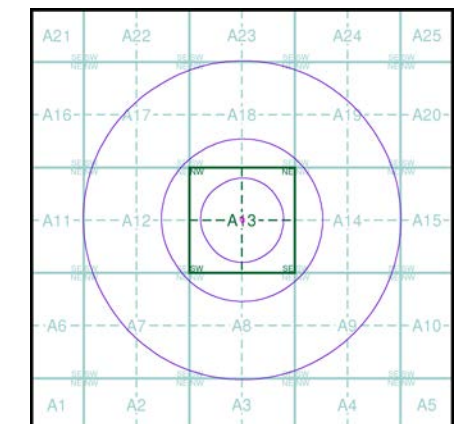
Source map scale - 1:25,000

These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use. They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

Map Name(s) and Date(s)

SJ89
1975
1:25,000

Russian Map - Slice A



Order Details

Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
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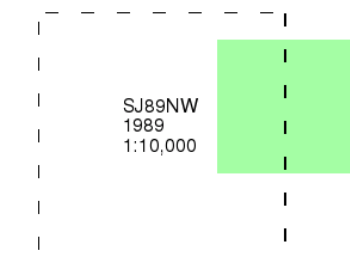
Ordnance Survey Plan

Published 1989

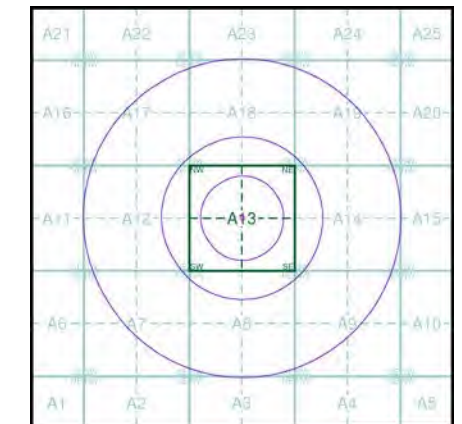
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A

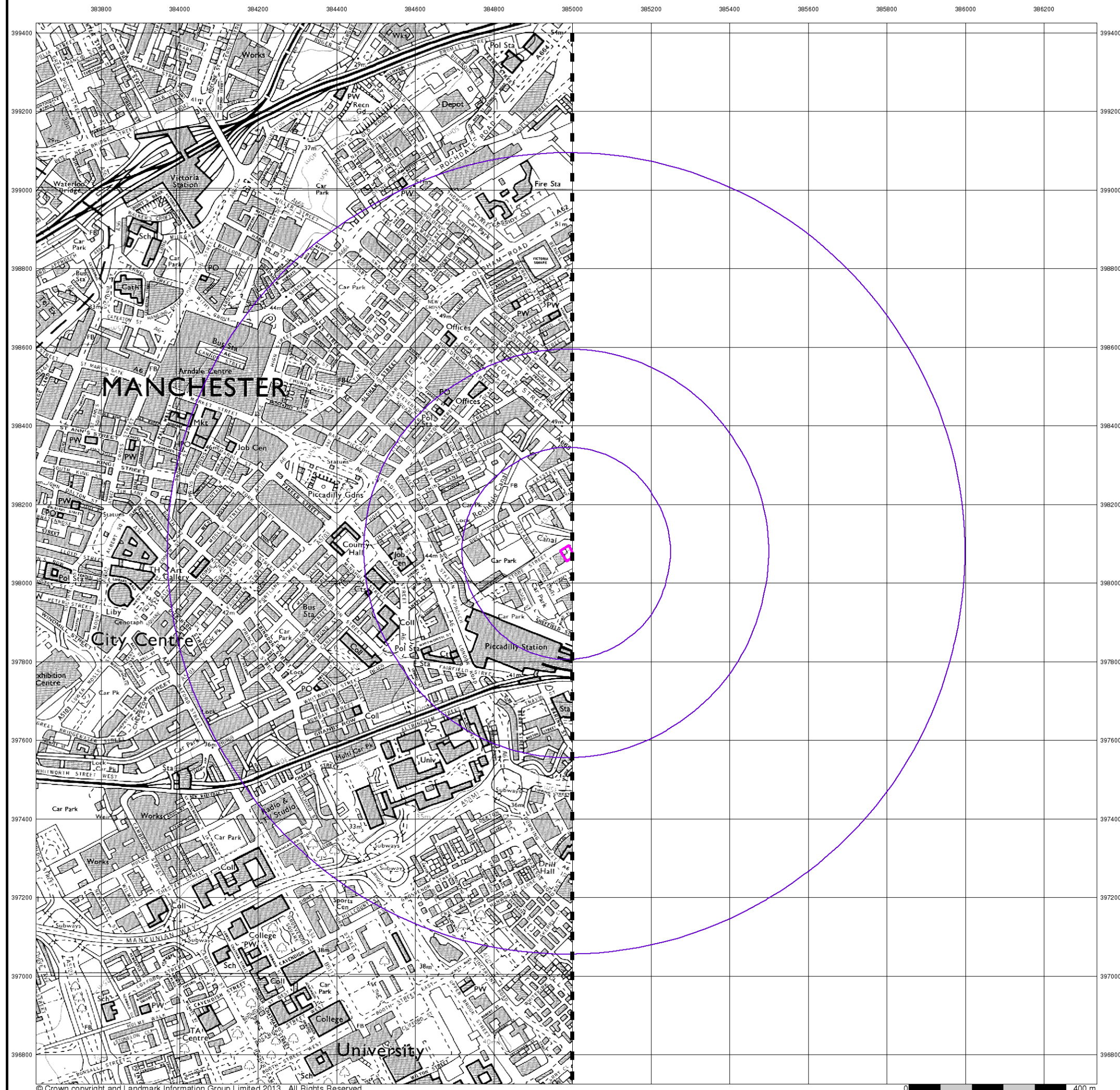


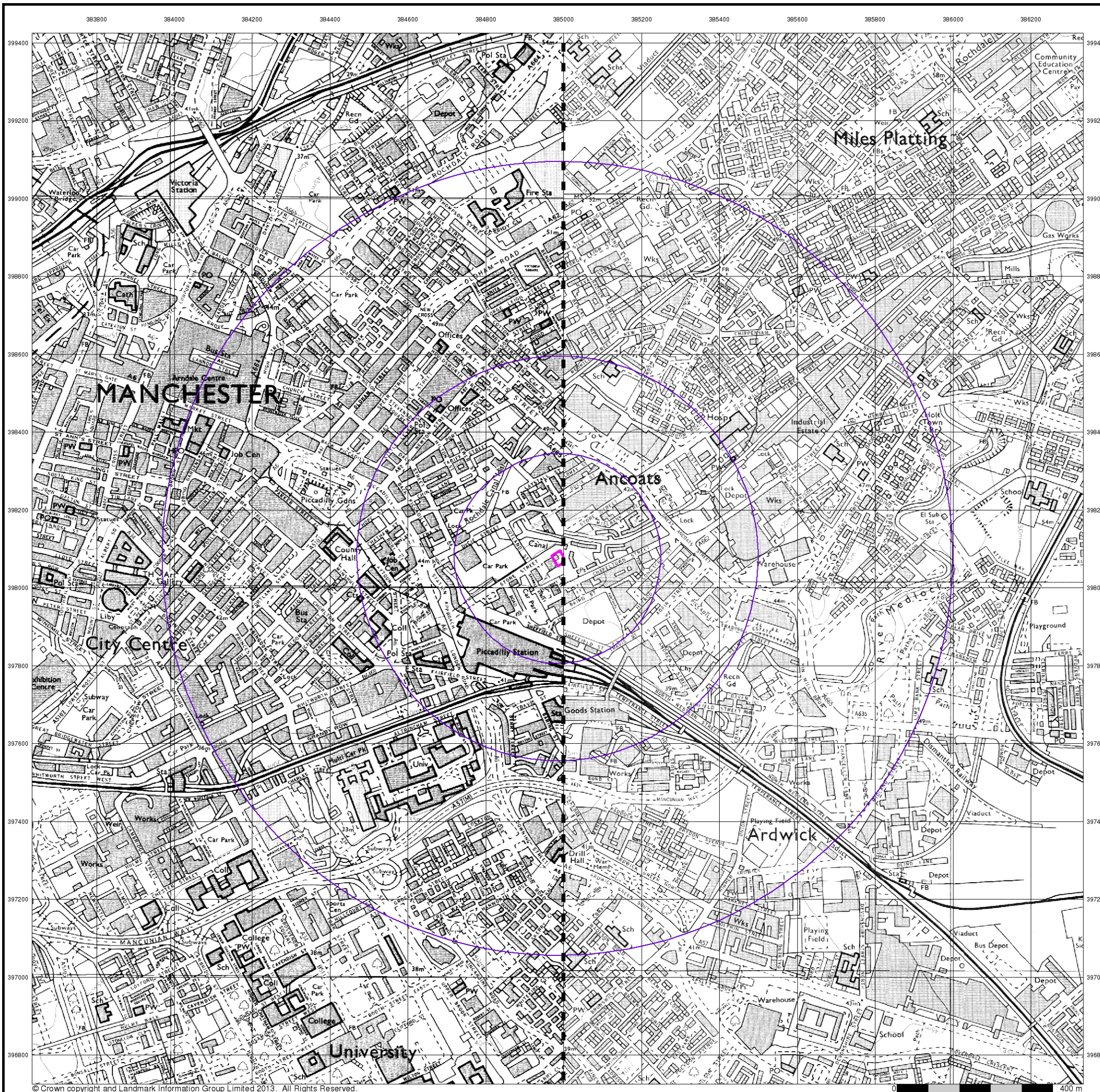
Order Details

Order Number: 59513547_1_1
Customer Ref: PN143226
National Grid Reference: 384990, 398080
Slice: A
Site Area (Ha): 0.07
Search Buffer (m): 1000

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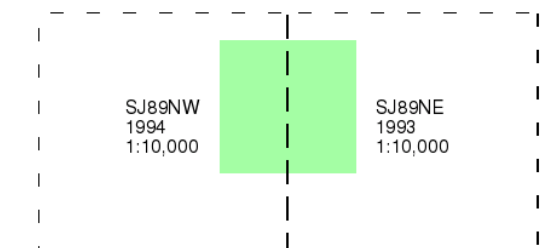
Ordnance Survey Plan

Published 1993 - 1994

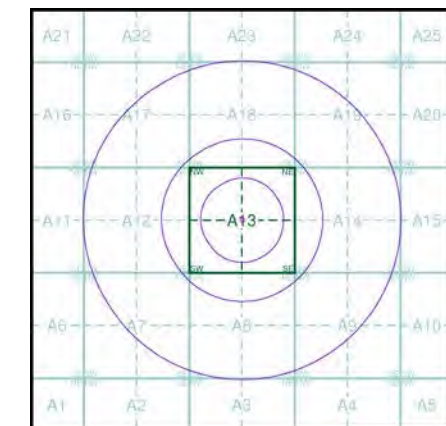
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

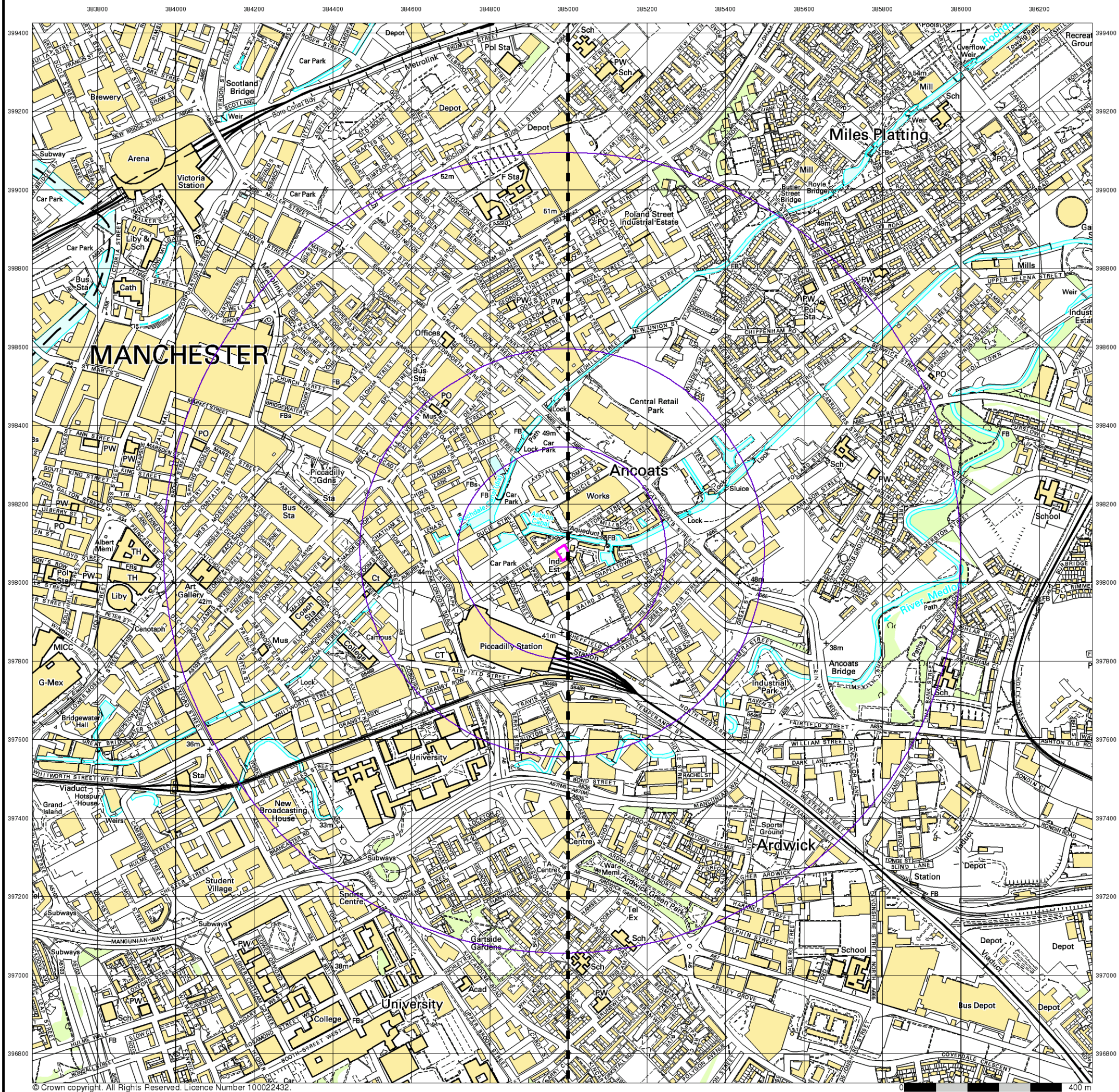
Order Number: 59513547_1_1
Customer Ref: PN143226
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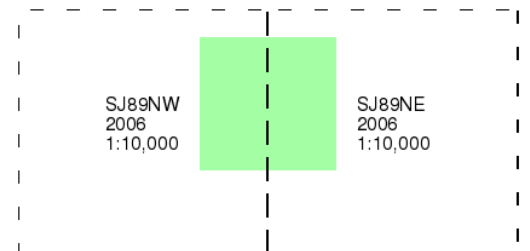
10k Raster Mapping

Published 2006

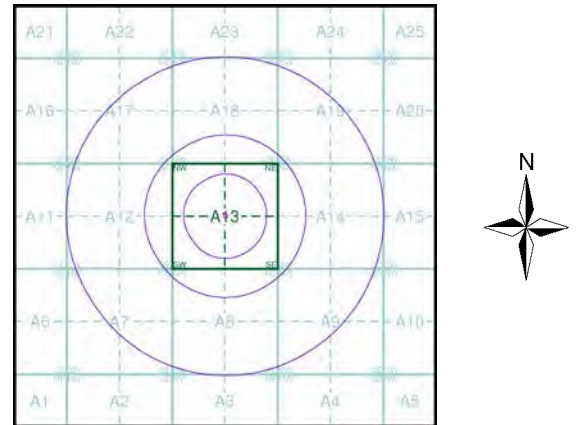
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

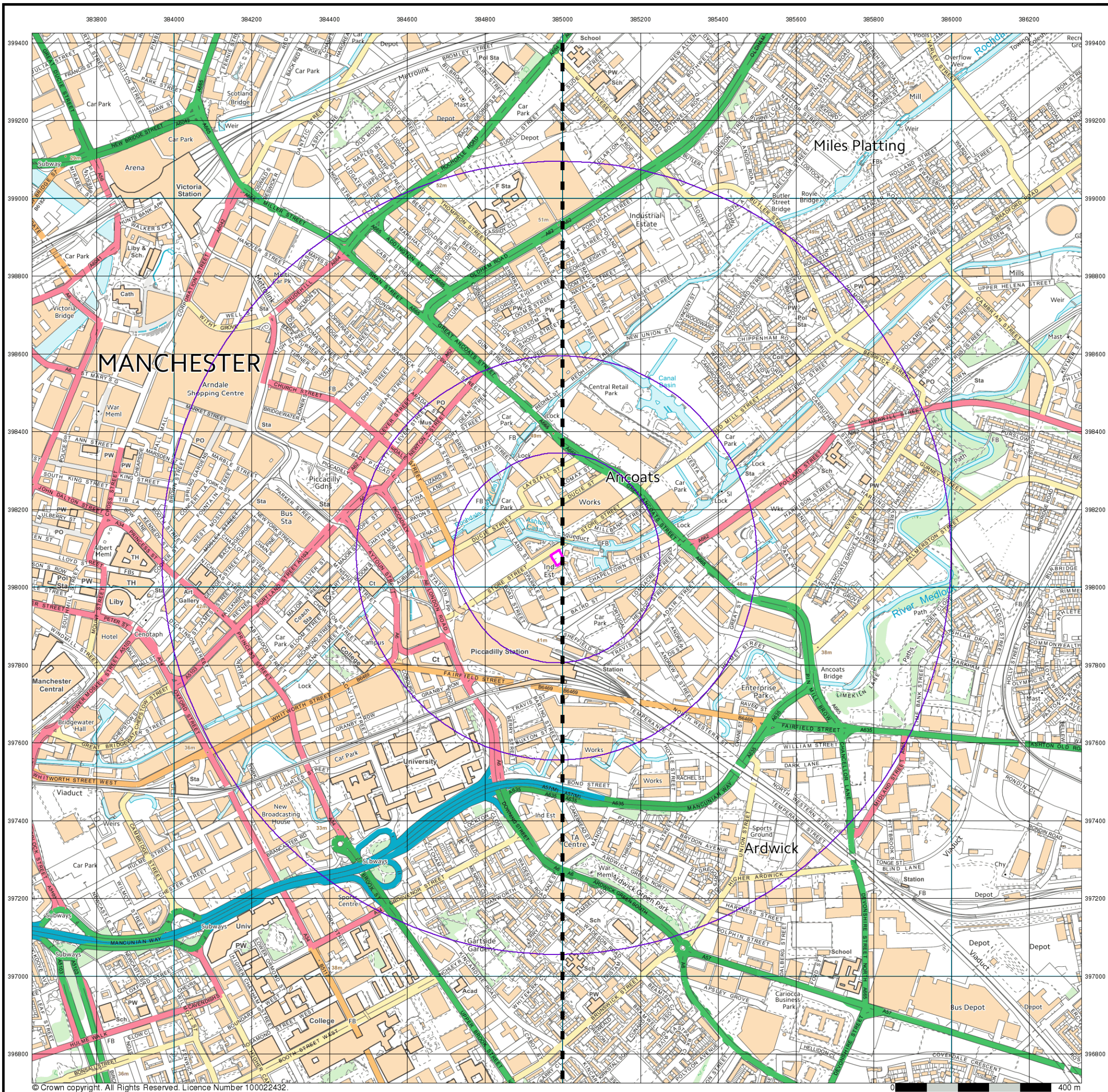
Order Number: 59513547_1_1
Customer Ref: PN143226
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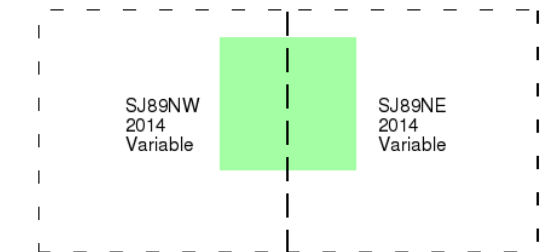
VectorMap Local

Published 2014

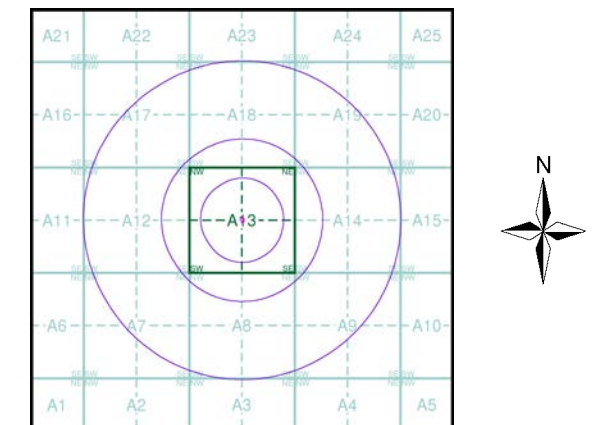
Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

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ABBREVIATIONS

ASB.	ASBESTOS
CORR.	CORRUGATED IRON
D.I.D.	DOUBLE IRON DOORS
DRA.	DRAPERY
D.	DWELLING
ELECT.	ELECTRICIAN
(E.M.)	ELECTRIC MOTORS
(ENG.)	STEAM ENGINE
FURNE.	FURNITURE
GAR.	GARAGE
(G.E.)	GAS ENGINE
H.W.	HARDWARE
I.COLS.	IRON COLUMNS OR STEEL STANCHIONS
JWLY.	JEWELLERY
M.CL.	METAL CLAD
M.W.	MANCHESTER WAREHOUSE
M.L.	MATCH (OR WOOD) LINED
OIL	OIL & COLOR
(O.E.)	OIL ENGINE
P.H.	PUBLIC HOUSE
S.	SHOP
S.I.D.	SINGLE IRON DOORS
S.I.S.	SINGLE IRON SHUTTERS
TAI.	TAILORS
TENS.	TENEMENTS
W.G.	WIRED GLASS
W.N.	WIRE NETTING OVER GLASS.

COLORS

	BRICK, STONE OR CONCRETE
	WOOD
	AREAS CLEARED DUE TO ENEMY ACTION
	SKYLIGHTS ON 1 & 2 STORY BUILDINGS
	SKYLIGHTS ON HIGHER BUILDINGS
	METAL BUILDINGS.
	TIMBER PILED OR STACKED

WALLS

	PARTY WALL 2 STORIES OR OVER, A PROBABLE FIRE CUT OFF
	ENTIRE WALL, BUT DOUBTFUL AS FIRE CUT OFF
	DEFECTIVE WALL - IMPERFECT
	WALL ABOVE, IRON COLS. UNDER
	WALL SOME FLOORS ONLY (OR WOOD OR PLASTER PARTITION)
	ABOVE ROOF 6' TO 1'-6"
	— D ⁹ — 1'-6" TO 2'-6"
	MATCH OR WOOD LINED
	WOOD CLAD WITH CORRUGATED IRON

OPENINGS

	PASSAGE UNDER	UNPROTECTED
	ON ALL FLOORS	
	SOME FLOORS ONLY	SINGLE IRON DOORS
	ALL FLOORS (PROTECTED)	
	ALL FLOORS (SOME PROTECTED)	DOUBLE IRON DOORS
	SOME FLOORS ONLY (PROTECTED)	
	ALL FLOORS (SOME PROTECTED)	WOOD LOADING DOOR
	ALL FLOORS (PROTECTED)	
	SOME FLOORS ONLY (PROTECTED)	IRON LOADING DOOR
	WOOD LOADING DOOR	
	IRON LOADING DOOR	

WINDOWS

	ON ALL OR MOST FLOORS	UNPROTECTED
	MORE THAN USUAL	
	OVERLOOKING	PROTECTED BY WIRED GLASS
	NEARLY ALL GLASS	
	OPENINGS THRO' & WINDOWS OVER	PROTECTED BY SINGLE IRON SHUTTERS
	ON SOME FLOORS ONLY	
	PROTECTED BY WIRED GLASS	PROTECTED BY DOUBLE IRON SHUTTERS.
	PROTECTED BY SINGLE IRON SHUTTERS	
	PROTECTED BY DOUBLE IRON SHUTTERS.	
	WINDOWS IN FRONT & REAR OF BUILDINGS UNDERSTOOD UNLESS OTHERWISE SHOWN	

FLOORS

1.2.3.3½ &c ON BUILDINGS ARE NUMBER OF STORIES ABOVE GROUND
(3½=3 FLOORS & ATTIC)
2&2B MEANS 2 STORIES & 2 BASEMENTS EAST & SUB-BASEMENT.

SKYLIGHTS

A	LESS THAN 50 SQUARE FEET (SAY 10'x5', OR 7'x7')
A	OPENINGS THROUGH 2 FLOORS UNDER (EACH STROKE DENOTES AN OPENING.)
	WITH WELL HOLE THROUGH 3 FLOORS.
	LANTERN LIGHT, SIDES ONLY GLASS.
	OR VENT. OR RAISED VENTILATOR

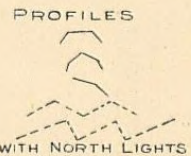
HOISTS & LIFTS

	OPEN		OPEN TO STREET
	OPEN (WOOD FLAPS TO FLOORS)		ENCLOSED BRICK OR FIRE RESISTING WIRED GLASS DOORS
	ENCLOSED WOOD OR PLASTER		

IRON DOORS SHOWN AS EXPLAINED UNDER "OPENINGS"

ROOFS

ASB	ASBESTOS
C	CONCRETE
CORR.	CORRUGATED IRON
T	METAL
P	PATENT (FELT &c)
O	SLATE
T	TILE



SUNDRIES

	STEAM BOILERS
	BOILER SET IN BRICK
	FACTORY CHIMNEYS
	STEAM ENGINE
	OVERHANGING WOOD CORNICE
	FIRE ALARM BOX
	D ⁹ ON KEY PLAN
	HYDRANT
	HYDRAULIC HYDRANT
	PRIVATE HYDRANT OR STAND PIPE
	DOUBLE HYDRANT
	SALT WATER HYDRANT
	SPRINKLER OR AUTO ALARM BELL

REFERENCE NUMBERS

	NUMBERS PARALLEL WITH STREET ARE EXISTING STREET N ^{os}
	WHERE TWO SETS OF STREET N ^{os} IN SAME BLOCK COINCIDE, ADDITIONAL ARBITRARY N ^{os} ARE GIVEN TO ONE SET (500 & UPWARDS)
	WHERE BUILDINGS TO WHICH THEY APPLIED ARE DEMOLISHED, STREET & ARBITRARY N ^{os} ARE SHOWN & CROSSED THROUGH ON REVISION
	ARE STREET WIDTHS.
	ARE HEIGHTS OF GROUND ABOVE ORDNANCE DATUM
	HEIGHT IN FEET OF ADJOINING BUILDINGS WHERE STORIES DIFFER IN HEIGHT
	SIZES OF WATER MAINS SUPPLYING HYDRANTS

