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Our Ref: NG/C12759

18 September, 2006

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Saco Homes Ltd
Desktop Contaminated Land Study
2/10 Stockport Road, Ardwick, Manchester

1.0 Purpose of Report

1.1 Saco Homes Ltd are proposing to redevelop the above site with a residential apartment building. The development is likely to take the form of a new-build 4-8 storey apartment block, triangular in plan, with a central open area extending through the height of the building.

1.2 This report is prepared on the instruction of Mr S Alazzawi of Saco Homes Ltd, by email dated 6th September, to prepare a Phase 1 desktop investigation of the above site to assess the potential for the site to be affected by contamination.

2.0 Site Location Details

2.1 The site consists of a triangular parcel of land, bordered on three sides by Stockport Road, Brunswick Street and Polygon Street in Ardwick, Manchester. A site location plan is included in the Sitecheck Data report within Appendix C.

2.2 An external walkround/site reconnaissance showed the site to be currently mainly occupied by 3 storey masonry buildings with a small single storey infill to the Polygon street elevation. The site would appear to be vacant, with most recent usage as commercial/retail premises, as suggested by the current 'The Bed Factory' signage.

3.0 Information Provided

3.1 Ian Simpson Architects have provided initial study drawings of the proposed residential development.

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4.0 Service Enquiries

4.1 No service enquiry information has been provided.

5.0 Previous Development

5.1 Historic plans have been consulted to give information on previous developments of the site. These are appended with Appendix A and the details are as follows:

A1 – 6" to 1 mile –	1844 (revised 1915-1916)
A2 6" to 1 mile –	1844 (revised 1932-1933)
A3 – 6" to 1 mile –	1844 (revised 1932-1933)
A4 – 1:2500	1893
A5 – 1:2500 –	1908
A6 – 1:2500 –	1950
A7 – 1:2500 –	1951
A8 – 1:10500 –	1948-1953
A9 – 6" to 1 mile	1948-1954
A10 – 1:2500 –	1963
A11 – 1:2500 –	1965
A12 – 1:10500 –	1949-1963
A13 1:1250 –	1969
A14 1:1250	1970
A15 – 1:10000 –	1949 1968
A16 – 1:10000 –	1949 1976
A17 – 1:10000 –	1949-1976
A18 1:1250 –	1984
A18 – 1:1250 –	1986
A19 – 1:10000 –	1952 1985
A20 – 1:10000 –	1951-1986
A21 – 1:10000 –	1951-1986
A22 1:1250 –	1995
A23 1:1250 –	1996

5.2 These plans indicate that the site appears to have been occupied by Victorian housing until demolition between 1893 and 1908. During this time the site appears to have been redeveloped with new buildings along Stockport Road and Polygon Street, with a bank occupying the corner of Stockport Road and Brunswick Street. The area to the rear of the site on the corner of Brunswick Street and Polygon Street appears to have remained undeveloped following demolition between 1893 and 1908, but then was subsequently developed, along with units on Stockport Road, into a clothing works by 1950. A bank also appeared on the corner of Stockport Road and Polygon Street between 1908 and 1950. Between 1950 and 1965 the clothing works became a works and was extended into 6 Stockport Road. Between 1965 and 1995 the configuration of the site appears to have remained unchanged, although usage of the works alternated with a clothing works until 1986, and thereafter remained as a works until 1995.

6.0 Ground Conditions

6.1 Inspection of the Geological Survey Manchester sheet 85 Solid Edition indicates the solid geology to be bunter sandstone.

6.2 Inspection of the Geological Survey sheet 85 Drift Edition indicates the predominant drift material to be boulder clay.

7.0 Mining Report

7.1 The Coal Authority Mining Report (Appendix B) indicates no problems so far as coal mining is concerned.

7.2 We have no knowledge of mining of other minerals in this vicinity.

8.0 Radon Assessment

8.1 Inspection of BRE Radon Guidance on Protection Measures to New Dwellings 1999 confirms that no radon protection measures are required for this site.

9.0 Database Search

9.1 A computer search has been carried out through Sitescope. This is appended as Appendix D and is summarised below.

9.2 Landfill & Waste

9.2.1 No identified landfill, waste transfer or waste treatment and disposal sites within 250m of the site.

9.3 Statutory Authorisations

9.3.1 A revoked pollution prevention and controls licence is identified to the north-east of the site, whilst an authorised licence for a fuel service station is noted to the north. Both licences lie within 250m of the site.

9.3.2 There are no contaminated land register entries or notices or registered radioactive substances within 250m of the site.

9.4 Discharge Consents

9.4.1 There are no discharge consents or water industry act referrals within 250m of the site.

9.5 Industrial Processes

9.5.1 There are no integrated pollution controls, registered waste sites, prevention and controls or local authority integrated pollution prevention and controls within 250m of the site.

9.6 Storage of Hazardous Substances

9.6.1 There are no records of hazardous substances stored within 250m of the site.

9.7 Contraventions

9.7.1 There are no records of any local authority pollution prevention and control enforcements, enforcement and prohibition notices, planning hazardous substance enforcements, prosecutions relating to authorised processes or controlled waters or substantiated pollution incident register records within 250m of the site.

9.8 Potentially Contaminative Uses

9.8.1 Twenty five records are identified for potentially contaminative current land use within 250m of the site. Records refer to clothing and fabric manufacturers, laundries and launderettes, hygiene and cleansing services, printers, builders' merchants, garage services, and a fuel service station.

9.8.2 Thirteen records are identified for potentially contaminative historical land use within 250m of the site. Records refer to potential tanks, electrical sub-station facilities, electricity industry facilities, an unspecified factory or works, timber sawmilling/treatment premises and a cemetery or graveyard. Potentially infilled land is also recorded to the north-east of the site which appears to relate to a historic stream or pond subsequently infilled to create Ardwick Green Park.

10.0 Source, Pathway & Receptor

10.1 For a risk of pollution or environmental harm to occur as a result of ground contamination, all of the following elements must be present.

(a) A source, i.e. a substance that is capable of causing pollution or harm.
(b) A receptor, i.e. something that could be adversely affected by a contaminant.
(c) A pathway, i.e. a route by which the contaminant reaches the receptor.

10.2 If one of these elements is missing, there can be no significant risk. If all are present then the magnitude of the risk is a function of the magnitude and mobility of the sources, the sensitivity of the receptor and the nature of the migration pathway.

11.0 Site Specific Assesment

11.1 Contamination Sources

11.1.1 Contamination may exist in made ground deposits i.e. demolition rubble from previous buildings, materials stored on site during the previous usage as a works, and also in rubble from existing buildings following demolition.

11.2 Receptors of contamination

11.2.1 On and off site receptors, which could theoretically be influenced by ground contamination, include:

Humans e.g. end users, following redevelopment of the site
Construction workers
Controlled surface water
Major groundwater aquifer underlying the site

11.3 Exposure Pathways

11.3.1 It is planned to re develop the whole of the site with a multi-storey residential building and associated car parking. Therefore there should be no direct contact between people on site and any remaining contaminants. There would be a risk to construction workers involved in redevelopment works however, who could be exposed to contaminants. This risks can however be readily mitigated by the adoption of appropriate health and safety procedures.

11.3.2 Low permeability drift deposits are also identified on site and it is considered that they will attenuate the potential of pollution of the aquifer by source pollutants and liquid discharges.

12.0 Environmental Setting

12.1 The site is considered sensitive to flooding and extreme flooding from rivers or sea without defences.

12.2 The site is within 250m of an Environment Agency ground water source protection zone, classified as Zone III (Total Catchment), and located to the southwest of the site.

12.3 Air quality at the site is generally moderate to poor.

13.0 Conclusions and Recommendations

13.1 The searches and desktop study carried out have indicated that there have been past and current land uses within influence of the site that potentially could have caused some site contamination. These include a fuel station adjacent to the site. Previous use of the site itself has included a works/clothing works which would appear to relate to clothing manufacture and represent a low risk with regard to contamination. We would conclude that there is likely to be no significant contamination affecting the site. In light of the above we would however recommend that during future site investigation appropriate samples be taken to verify the absence of ground contaminants, including petrochemicals.

13.2 Once complete, the new development, incorporating normal construction practices, would provide a substantial barrier between any remaining contaminants within the underlying ground and end users. Risks to construction

workers during construction can be mitigated by the adoption of appropriate health and safety procedures.

13.3 Prior to any demolitions an asbestos survey should be carried out and all asbestos removed from site to prevent any asbestos entering the ground.

13.4 We do not consider at this stage that there is a significant risk to ground water contamination below the site, as any potential ground pollutants of the aquifer would be attenuated by the low permeability drift deposits.

13.5 Potentially infilled land has be identified to the north of the site at Ardwick Green Park. Referring to historical maps this appears to date back to before 1844, and as such we consider the likelihood of land gas generation from same to be negligible. We are not aware of any landfill sites within the influence of the site. We therefore do not consider at this stage that any testing will be required with regard to land gas. There are no other statutory registers within influence of the site, which are considered to be significant for the redevelopment of the site.

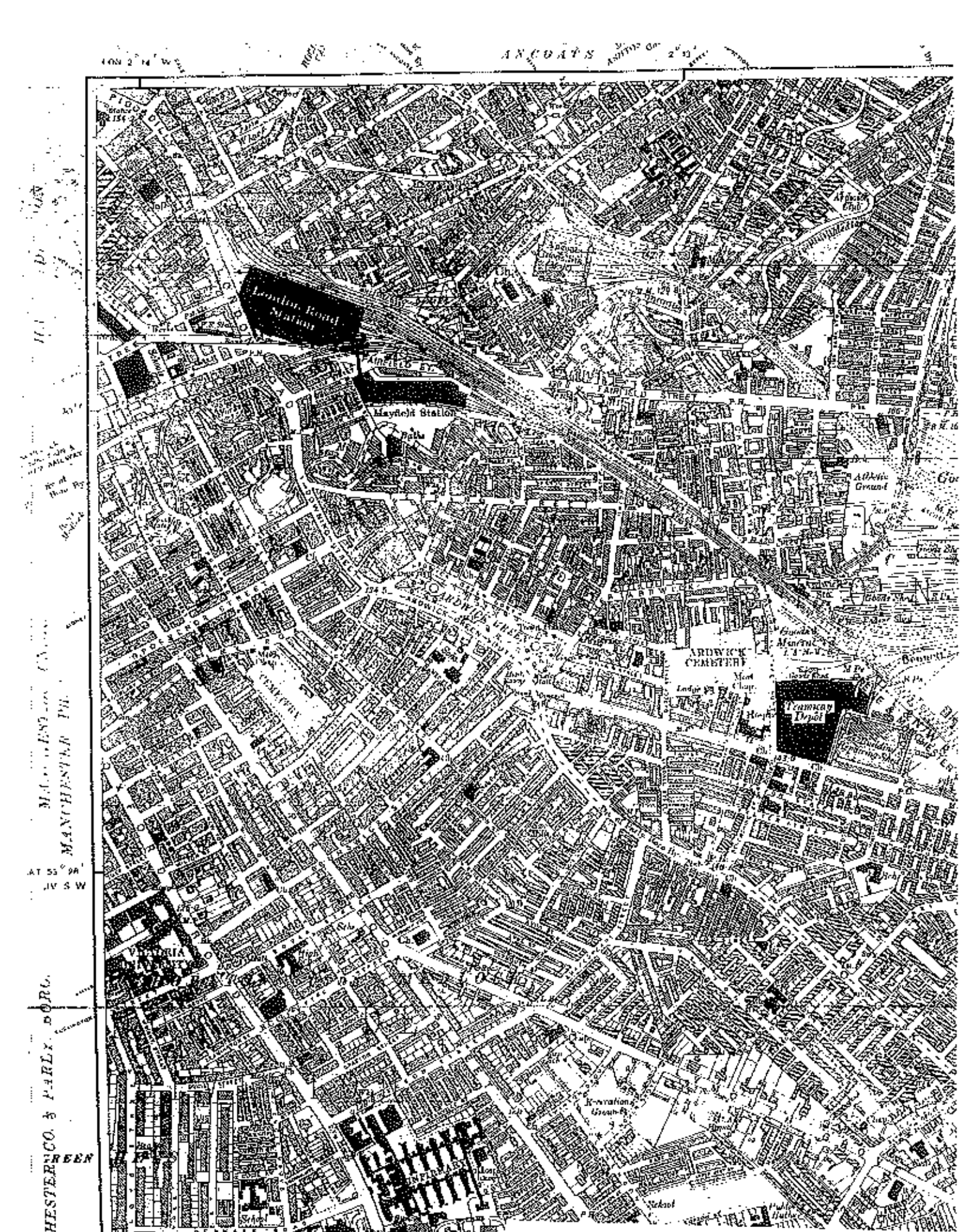
13.6 The database search has revealed that the site is in an area at risk of flooding. Reference to the Environment Agency website reveals that the likelihood of this occurring is categorised as low, with a chance of flooding each year of 0.5% (1 in 200) or less. As the proposed development is to include parking below ground level, we would therefore recommend that a flood study be commissioned to investigate the risk of flooding further, and it's impact on the proposed development.

13.7 There are no natural perils, which are considered to be significant for the redevelopment of the site and no Radon protective measures are required.

13.8 This report is confined to the matters mentioned in Section 1 and no opinion is expressed or implied on matters not specifically mentioned therein

N. GILL
B.Eng. C.Eng. M.I.Struct.E.

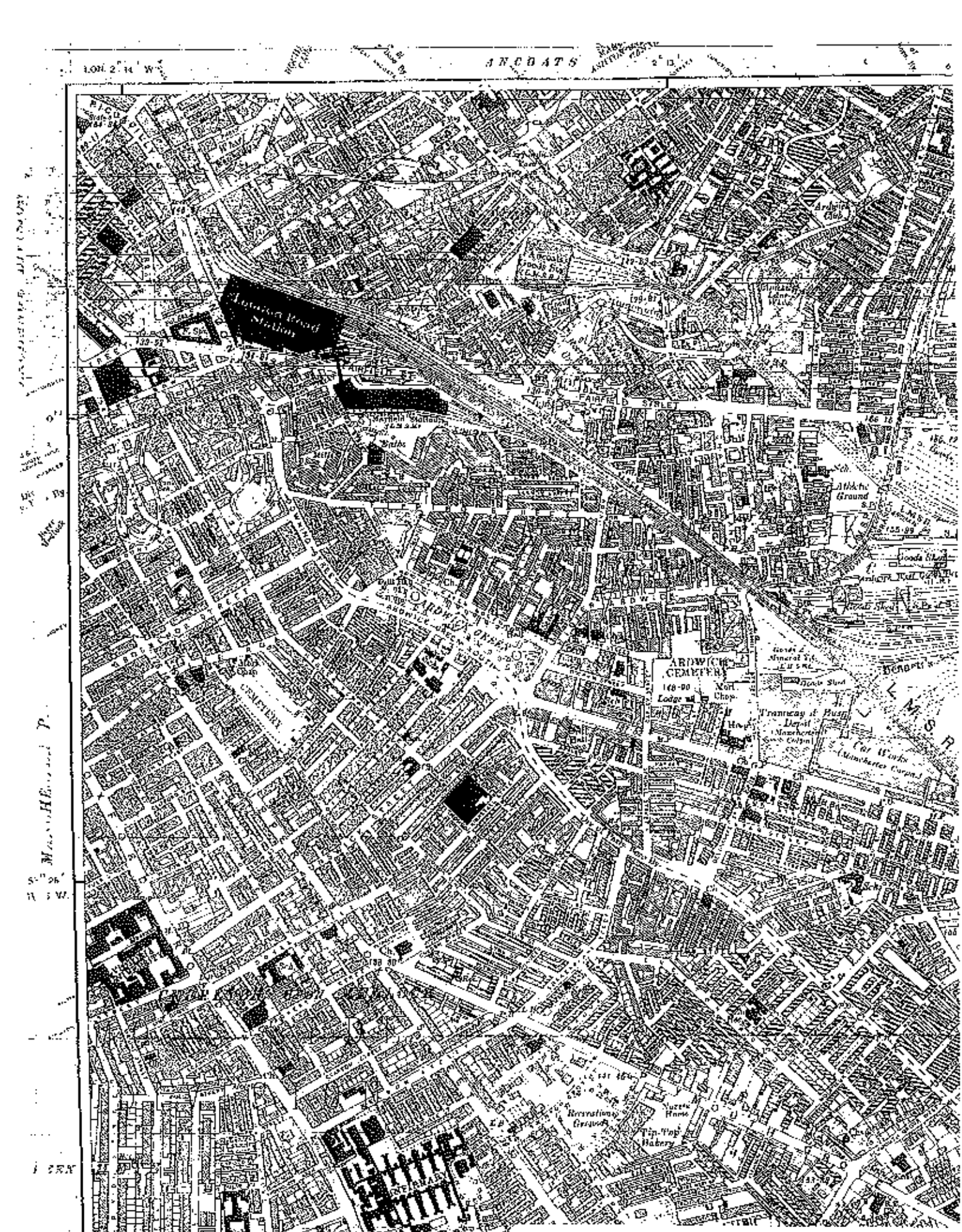
Appendix A



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Appendix A1
Date: 18/09/06
From Lancs. 104 SE
Date 1844 (R. 1915-1916)
Scale 6" to 1 mile

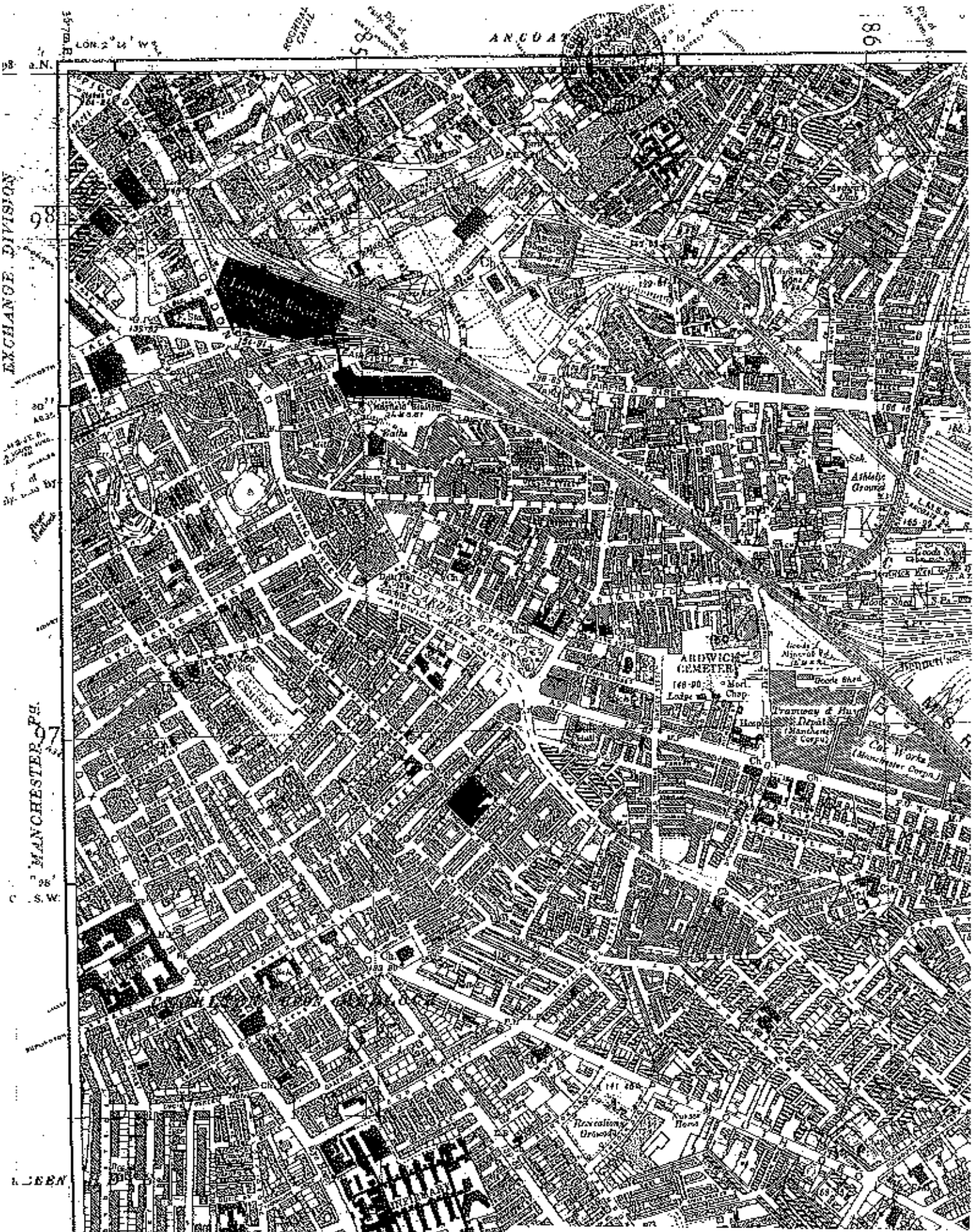
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Appendix A2
Date: 18/09/06
From Lancs. 104 SE
Date 1844 (R. 1932-1933)
Scale 6" to 1 mile

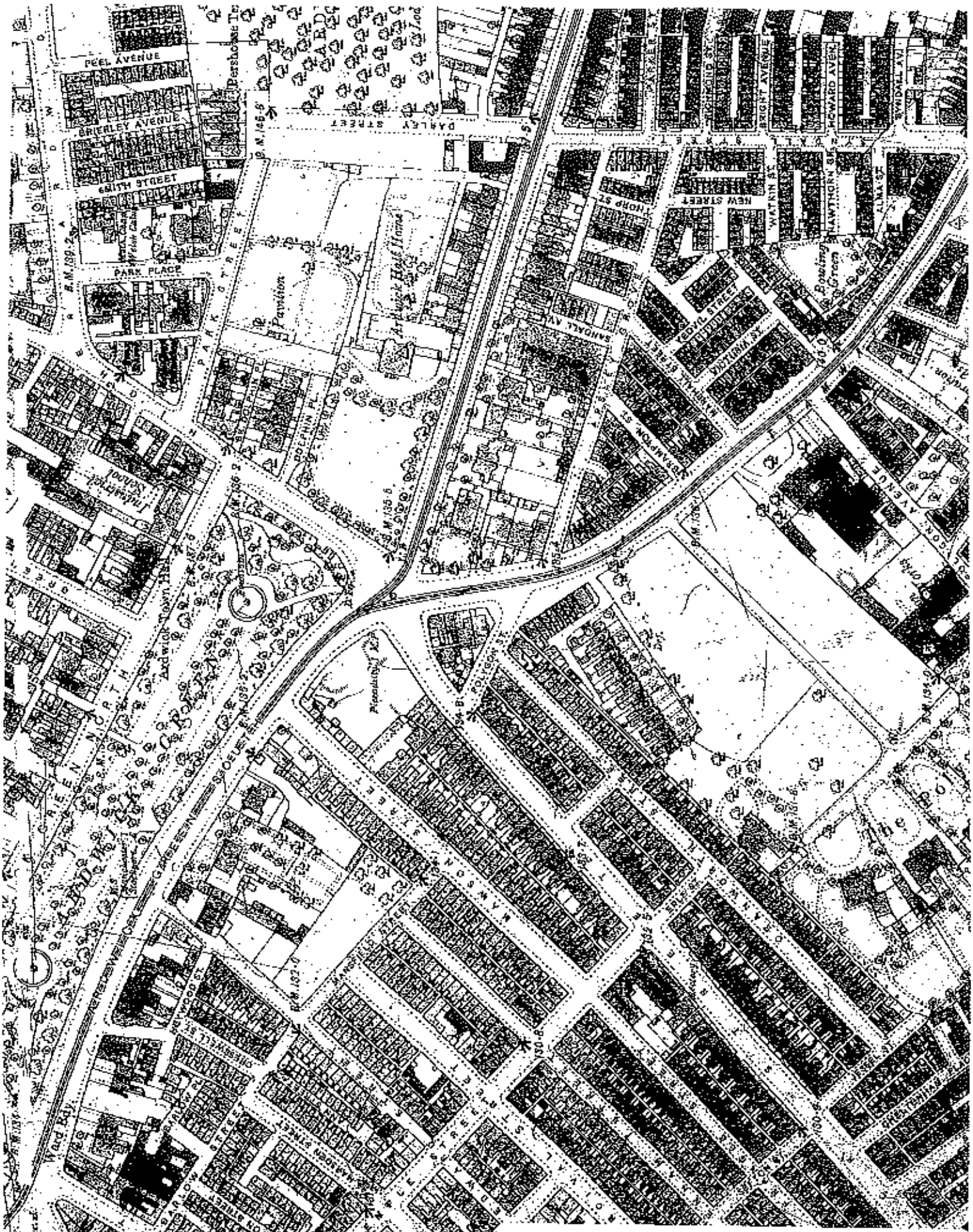
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Appendix A3
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Date 1844 (R. 1932-1933)
Scale 6" to 1 mile

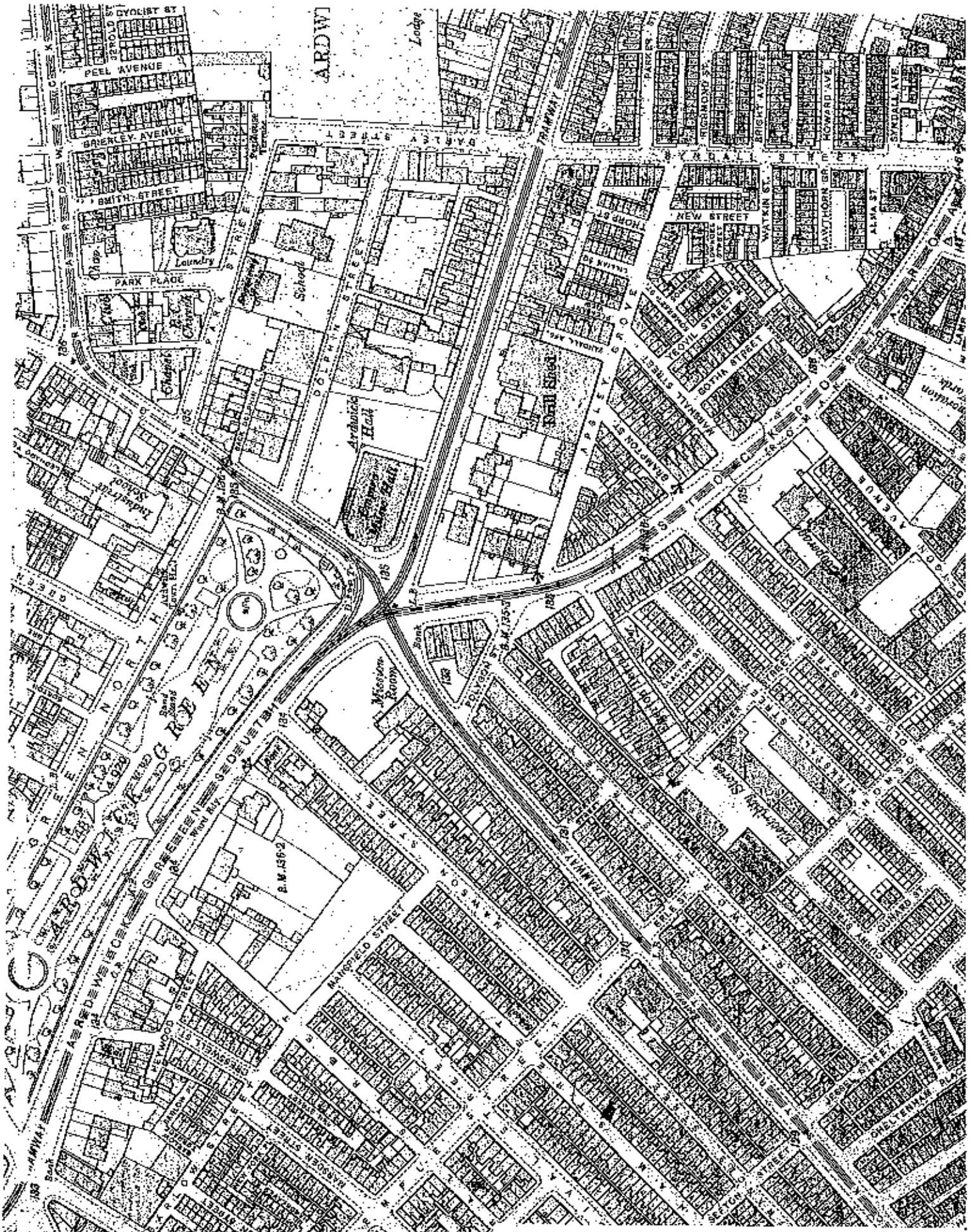
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Appendix A4
Date: 18/09/06
From Lancs. 104.11
Date 1893
Scale 1:2500

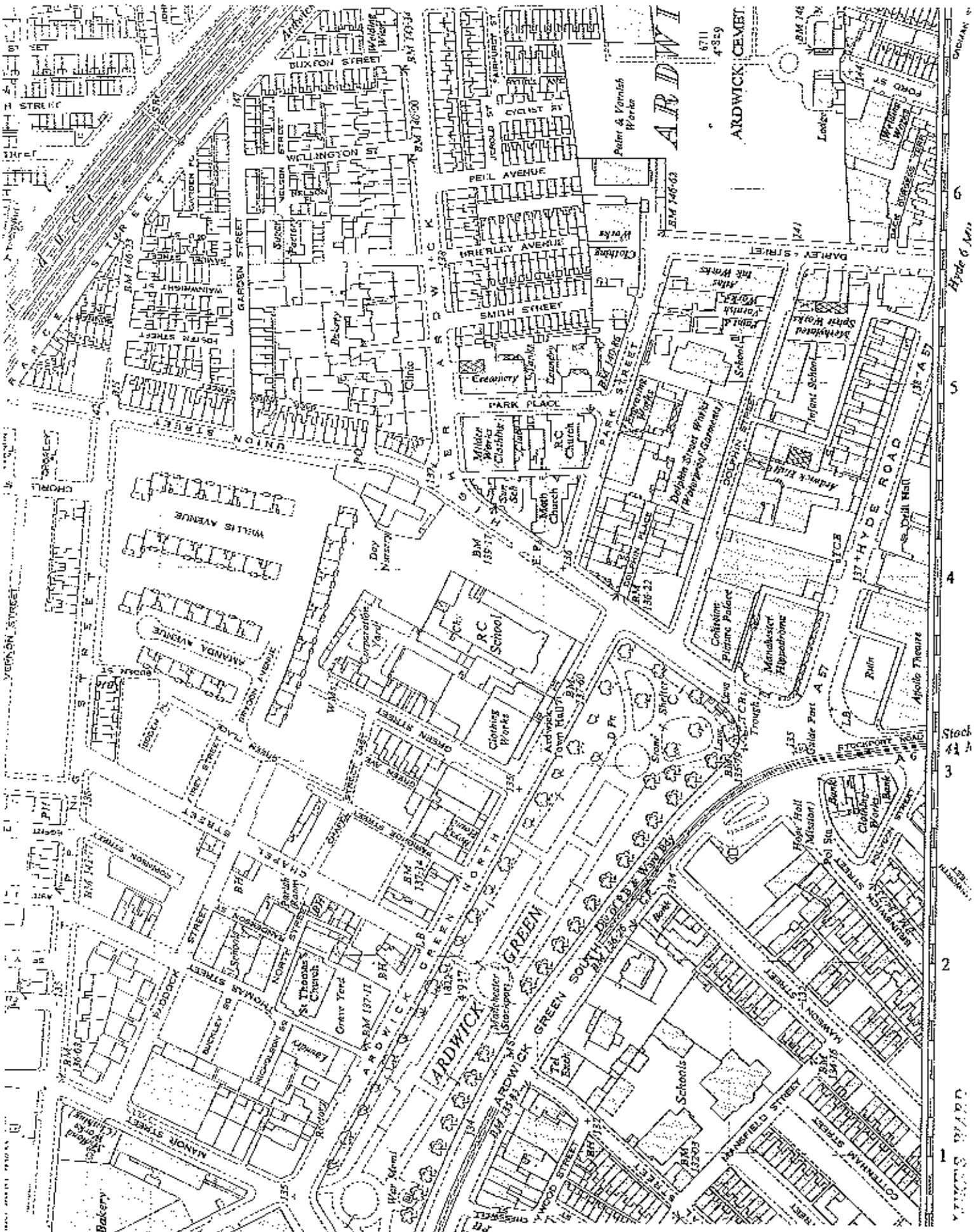
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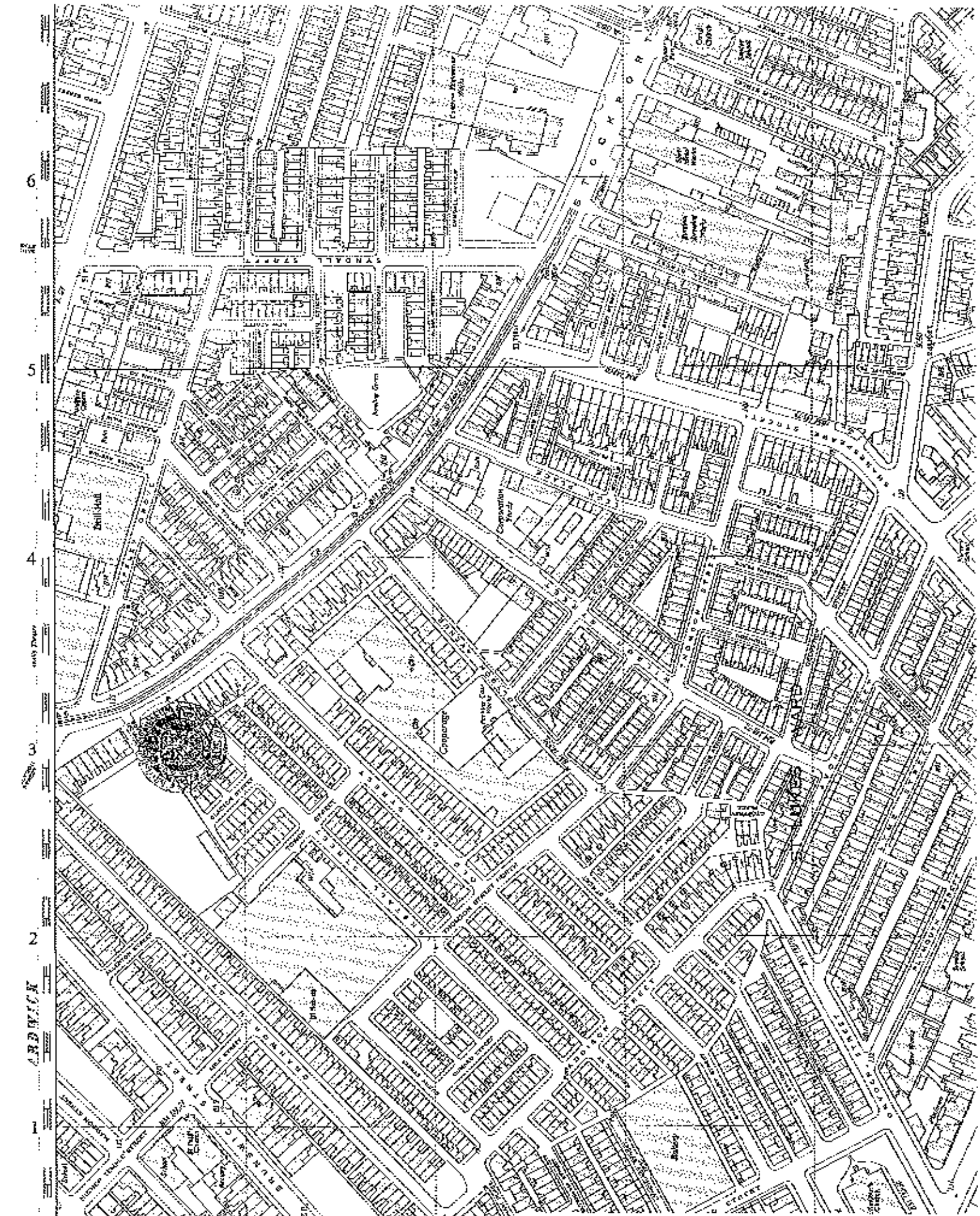


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Appendix A5
Date: 18/09/06
From Lancs. 104.11
Date 1908
Scale 1:2500

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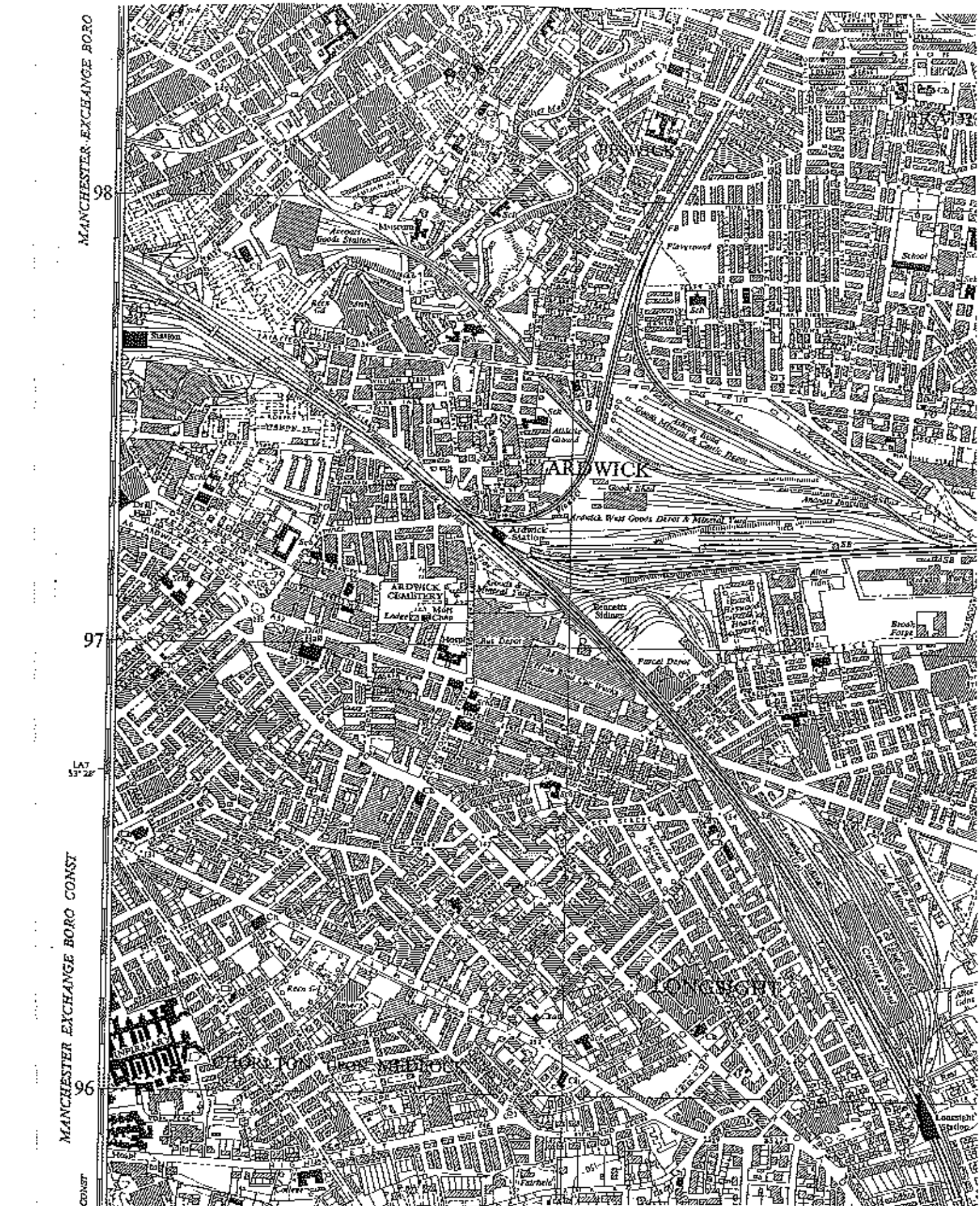

ARDWICK
ARDWICK GREEN NORTH
ARDWICK GREEN SOUTH
HYDE ROAD
A57
A6
PARK PLACE
SMITH STREET
PEEL AVENUE
BRIERLEY AVENUE
WELLINGTON ST
BUXTON STREET
GARDEN STREET
WILMSLOW STREET
TOSSIE STREET
NORTH STREET
CHAPEL STREET
NORTON STREET
NIMROD STREET
NIXON STREET
NANOR STREET
BUCKLEY ST
GROVE STREET
WOOD STREET
MANSFIELD STREET
COTTENHAM STREET
GREEN STREET
ARUNDA AVENUE
DRYDEN AVENUE
WELLIS AVENUE
VERNON STREET
GREEN STREET
STOCKPORT
Town Hall
Clothing Works
Day Nursery
Creamery
Bakery
Dairy
Clinic
Laundry
Public Baths
Infant School
Schools
Drill Hall
Mineral Water Factory
Apollo Theatre
Hippodrome
Picture Palace
Ruin
Tel Exch
Post Sta
Bank
Police Station
Parish Church
Grave Yard
Mission
Loco
Tyre
Paint & Varnish Works
Electric Light Works
Sanitary Steam Laundry
Dolphin Street Works
Waterproof Garments
Joiners Shop
Fire Station
Ambulance Station
Cabinet Works
Clothing
Welding Works
Lodge
Gas Governor
Sub Sta
Refuse Destructor Works
Sorting Office
Cycle Repairs
Motor Repairs
Motor Works
Chapel
Sch
Sch of Art
Ch Sch
Ch Inst
Ch Hall
Mkt
Fr
Trough
Lamp
Pillar Box
Tel Box
Sub Sta
Refuse Destructor Works
Sorting Office
Cycle Repairs
Motor Repairs
Motor Works
Chapel
Sch
Sch of Art
Ch Sch
Ch Inst
Ch Hall
Mkt
Fr
Trough
Lamp
Pillar Box
Tel Box
BM 135.5
BM 136.22
BM 137.11
BM 138.58
BM 135.76
BM 135.84
BM 136.63
BM 135.56
BM 135.03
BM 135.99
BM 136.76
BM 135.15
BM 135.38



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Appendix A7
Date: 18/09/06
From SJ 85 96
Date 1951
Scale 1:2500

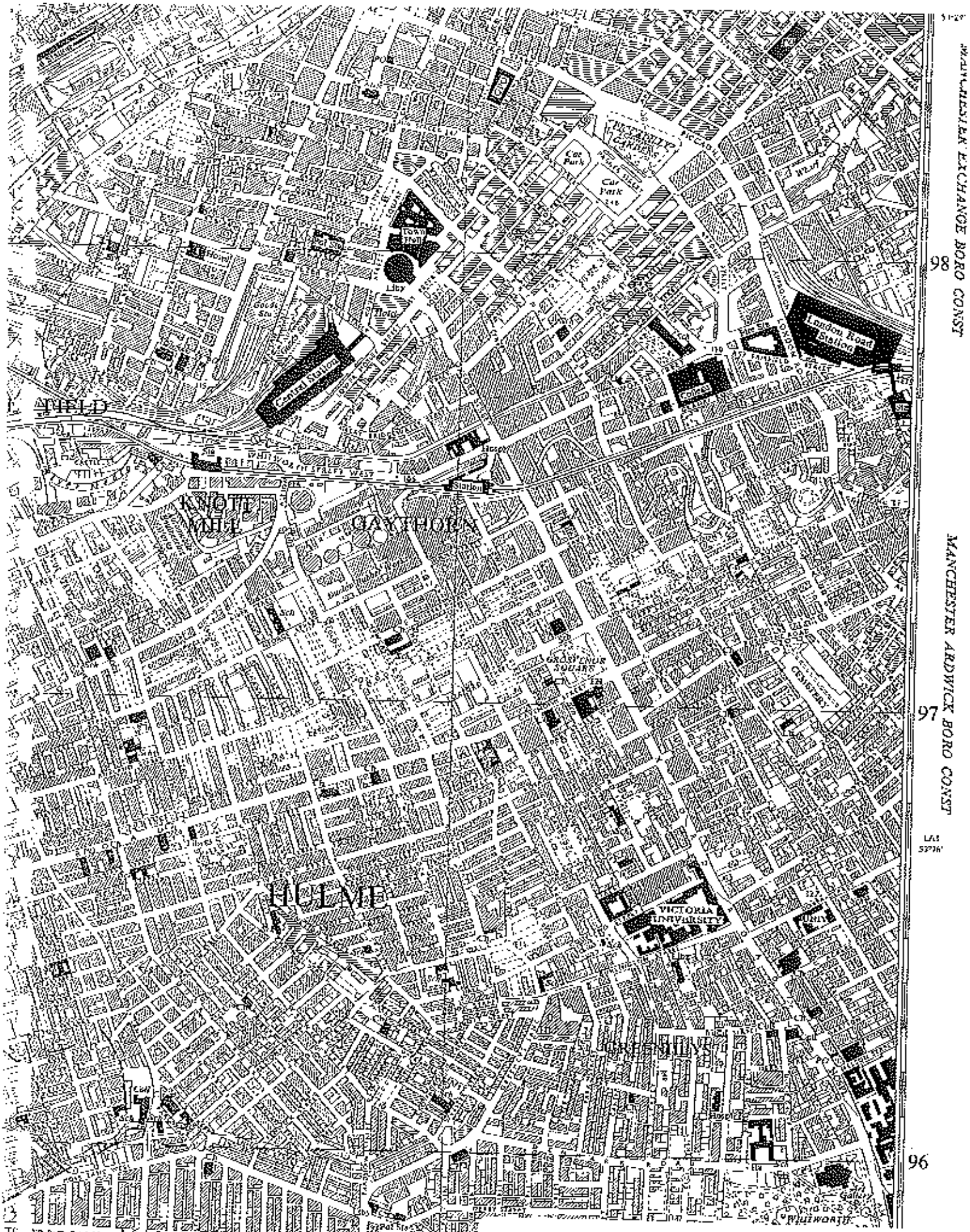
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Appendix A8
Date: 18/09/06
From SJ 89 NE
Date 1948-1953
Scale 1:10560

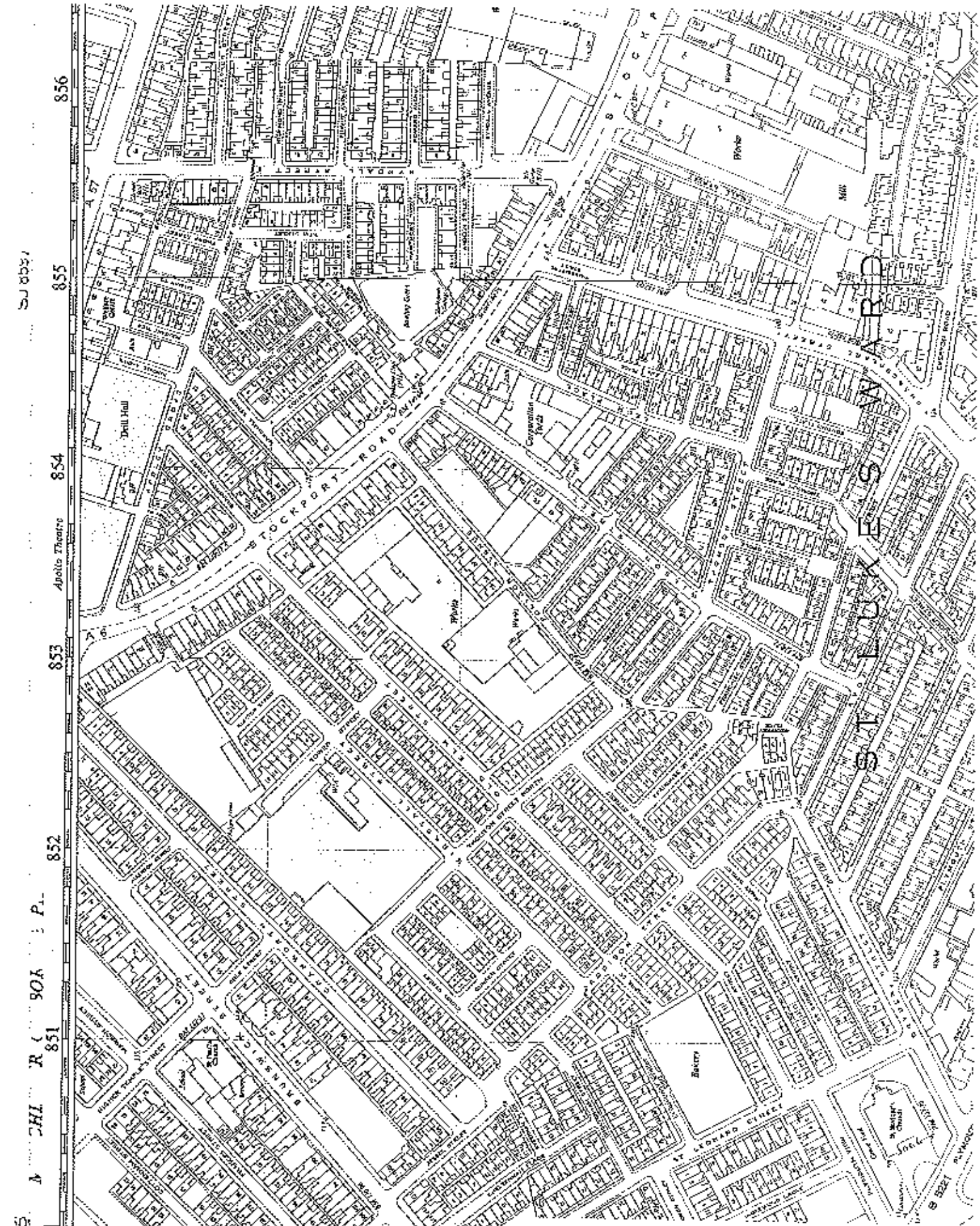
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Appendix A9
Date: 18/09/06
From SJ 89 NW
Date 1948-1954
Scale 6" to 1 mile

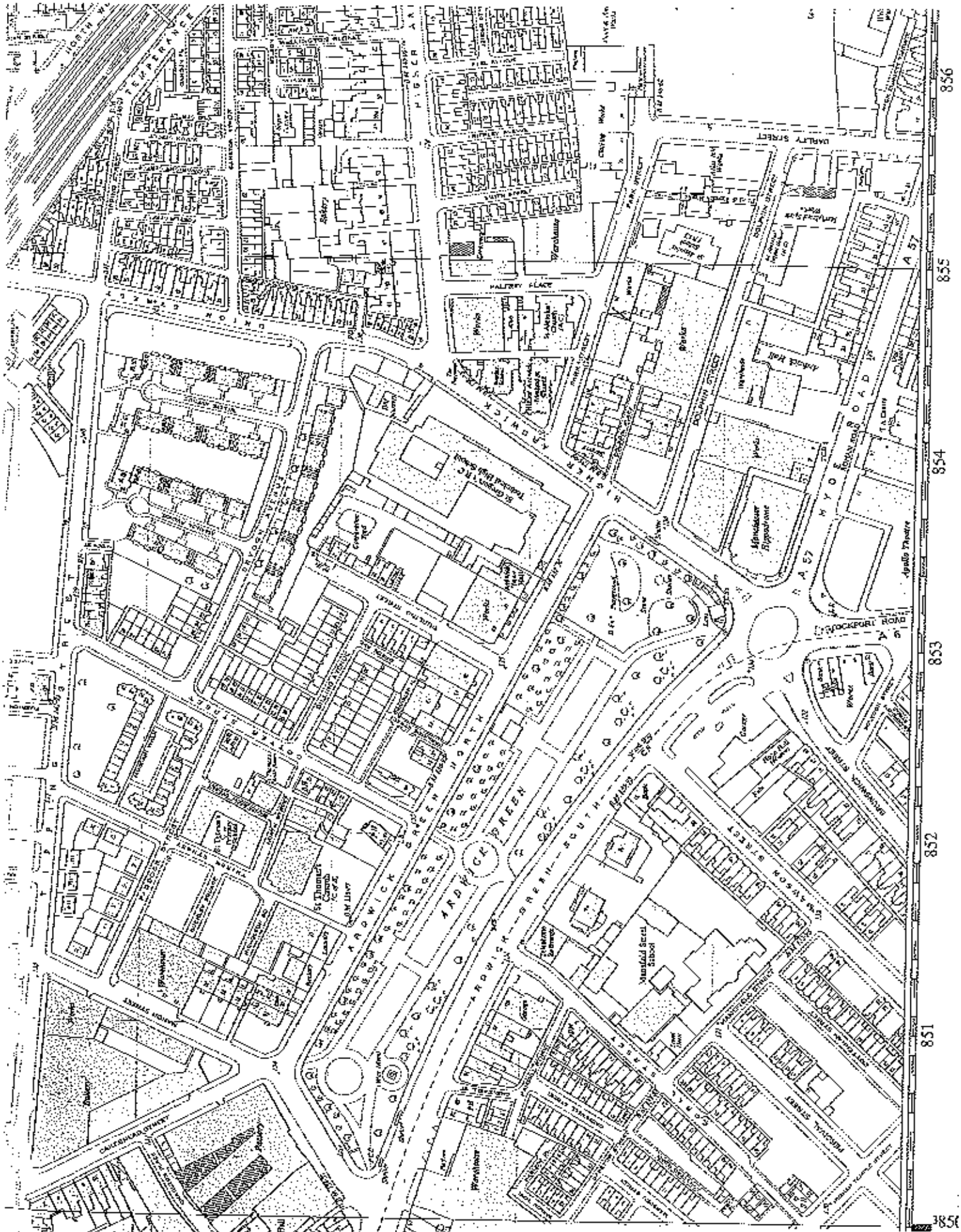
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Appendix A10
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From SJ 8496/8598
Date 1963
Scale 1:2500

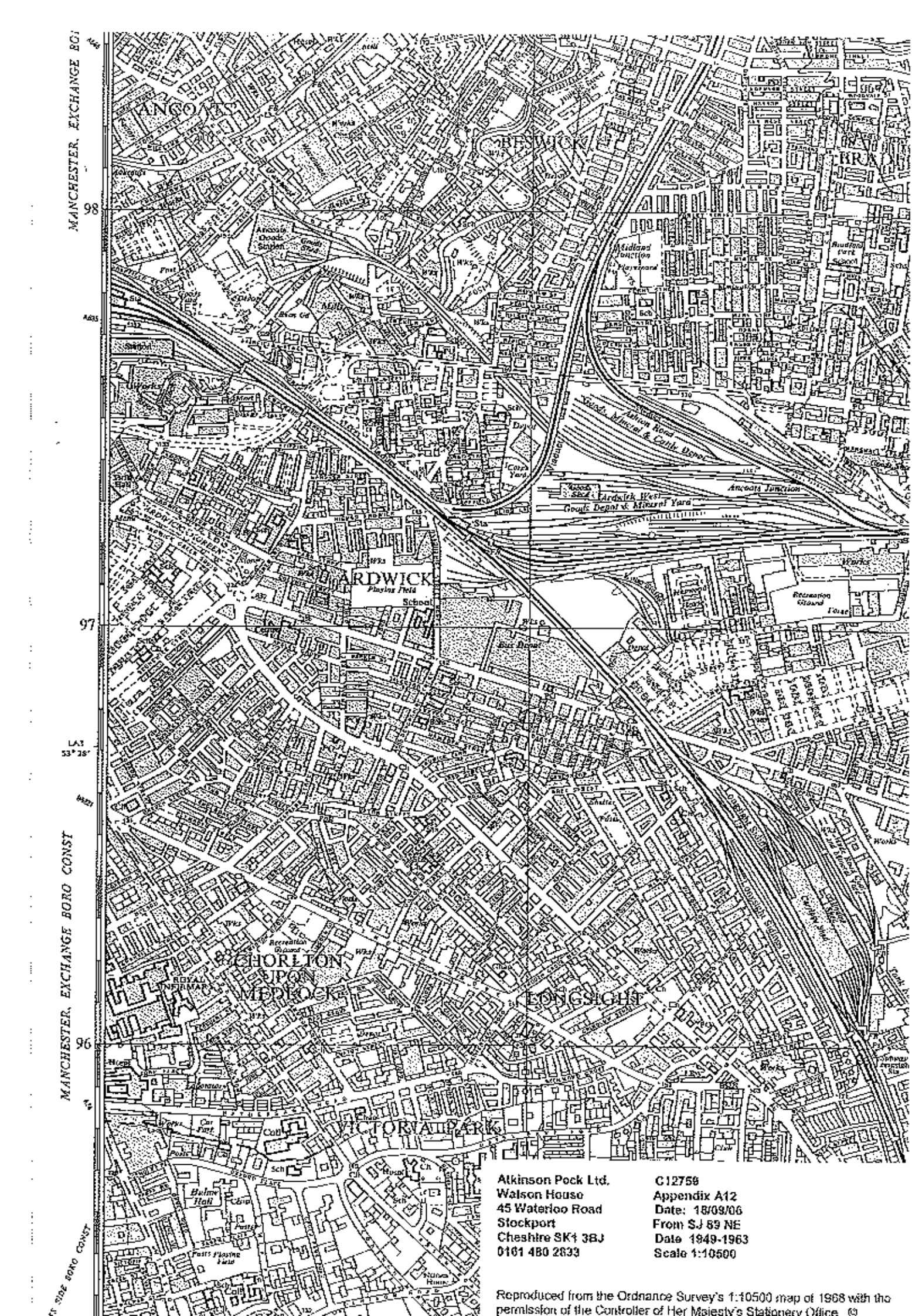
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From SJ 8497/8597
Date 1965
Scale 1:2500

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Date 1949-1963
Scale 1:10500

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