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PUBLIC SECTOR HOUSING IN SCOTLAND

HENRY ROAN RUTHERFORD

B. Arch Hons., M.Sc., R.I.B.A., A.R.I.A.S., M.R.T.P.I.

Thesis presented for the Degree of Ph.D.

June 1996

University of Glasgow
Glasgow School of Art
Mackintosh School of Architecture

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VOLUME ONE 1900 to 1939

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THESIS SUBMITTED FOR THE DEGREE OF PHD 1996

ABSTRACT

The thesis investigates the relationship between Central Government housing legislation, reports and design guides and the provision and design of public sector housing.

Chapter one looks at the 19th century housing legacy and at Government action, housing provision and design prior to the end of World War One. Subsequent chapters cover the subject by decade from the 1920s to the 1990s. Each chapter reports on housing legislation, Government circulars, design guides and reports and on public sector housing provision and design. Housing design is discussed with reference to schemes built in the period and these are illustrated by drawings and photographs.

The conclusion reached by the thesis is that Central Government has exerted considerable influence on the general form and type of public sector housing in Scotland throughout the twentieth century. This has been achieved with persuasive Government circulars and design guides. The thesis also concludes that, while the quality of design varies, within the discipline of Government legislation and subsidies architects have been able to produce a wide range of solutions to both house and layout design. Many of these are illustrated and described within the text of the thesis.

CONTENTS

Page

| | |
|------|---|
| i. | Abstract |
| 2. | Acknowledgements |
| 3. | Introduction |
| 9. | Abbreviations |
| 10. | Early Twentieth Century 1900 to 1919 |
| 46. | 1919 - 1929 |
| 66. | 1930 - 1939 |
| 98. | 1940 - 1949 |
| 126. | 1950 - 1959 |
| 171. | 1960 - 1969 |
| 226. | 1970 - 1979 |
| 277. | 1980 - 1989 |
| 314. | 1990 - 1996 |
| 343. | Conclusion |
| 350. | List of Illustrations |
| 358. | Bibliography |
| 398. | Appendix 1. Housing Provision and Standards |
| 407. | Appendix 2. List of Housing Awards |

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INTRODUCTION

The Objective of the Thesis

The proposition for the thesis is that the general form and type of public sector housing built in Scotland throughout the twentieth century has been largely determined by Central Government legislation. It sets out to demonstrate that legislation influenced the provision, layout and design of housing constructed by Local Authorities, New Town Development Corporations, Housing Associations, and Government Agencies throughout the period. It also illustrates the variety of design solutions which have been produced by architects while working within these parameters.

The Structure of the Thesis

In order to describe the multiplicity of Government legislation and its affect on housing provision and design, the study is presented chronologically with a pre 1919 introduction and thereafter by decade.

Presenting the information by decade allows the study to be subdivided easily into recognisable time periods of equal length. Obviously legislation passed or reports published at the end of a decade have effect on the housing built in the next period but this would be the case no matter how the study was subdivided. In fact the division by decade does seem to reflect the broad changes in housing priorities during the period under examination.

The thesis is set out as follows:-

| | |
|--------------|---|
| 1900 - 1919, | Introducing Central Government involvement in Housing |
| 1919 - 1929, | Homes for Heroes |
| 1930 - 1939, | Rehousing, Slum Clearance and Overcrowding |
| 1940 - 1949, | Wartime and Post War Housing |
| 1950 - 1959, | Space Saving Houses |
| 1960 - 1969, | High Rise and Industrialisation |
| 1970 - 1979, | Indicative Cost Allowance Housing, Rehabilitation |
| 1980 - 1989, | Tenants Rights, Special Needs Housing |
| 1990 - | Care in the Community |
| Conclusion | |

The introductory chapter 1900-1919 and the chapters dealing with specific decades are subdivided as follows:-

Introduction, A brief outline of factors which form the background to housing legislation and provision of that period is given. These factors include the government in power, economic climate, related legislation and publications.

Housing Legislation, The main features which affect housing provision and design are described for each Housing Act. Important changes in building regulations are also described in this section.

Housing Reports, Government and non-Government Reports, Green and White Papers, memoranda, circulars and handbooks which lead onto and follow on from the Acts are described.

Housing Provision, This is discussed with reference to both Central Government statistics and Local Government statistics where these are available.

Housing Design, Projects which illustrate the housing provision are illustrated by drawings, photographs and text.

Special Features applicable to a particular decade are discussed under a separate sub-heading as appropriate.

Finally, a Summary is given at the end of each chapter.

The chapter "Housing Provision and Standards" describes the rise and fall of public housing construction comparing the contribution of the various public housing agencies with that of the private sector. It also discusses the changing housing space standards drawing attention to the difficulty in making direct comparisons.

The conclusion, drawing from the previous chapters, focuses on the main Government legislation, reports and design guides and shows how Government has influenced the provision, layout and design of public sector housing throughout the 20th Century.

METHOD OF STUDY

Housing Legislation

To research the relevant legislation it was important to use the primary source of the Acts themselves. Secondary sources such as Glasgow Housing Centenary 1866-1966 and Roger Scottish Housing in the Twentieth Century give a brief useful introduction but it was necessary for this study to refer to the Acts in order to ensure that important detail provisions of the Acts were not overlooked.

Housing legislation for Scotland, being passed by a UK government, is part of UK legislation and has been passed in one of two forms.

UK housing legislation is titled "Housing Act" and will apply to the whole of the UK unless it is qualified by a statement that this act will not apply to Scotland or not apply to Northern Ireland. In the case of Scotland, a UK Act applying to Scotland may have a section dealing with issues specifically relating to Scotland or sections may specifically not relate to Scotland.

An Act specifically referring to Scotland is titled "Housing (Scotland) Act". This is the Scottish version of the English and Welsh Act termed "Housing Act" when the latter does not apply to Scotland. Both versions cover the same provisions but with variations to suit Scotland or England and Wales.

The government in passing housing legislation for Scotland may, therefore, pass a Housing Act which applies to the whole of the UK without modification, with modification to suit Scotland or pass a separate Housing (Scotland) Act.

An Act of Parliament comes into being when a Bill has been passed by both houses and received the Royal Assent. A Bill may be private or public. A Private Bill originates outwith parliament, for example, with a Local Authority wishing to acquire certain powers. A Public Bill may be sponsored by a private member of parliament or by the government. Pressure groups or lobbyists, for example a disability group, may persuade a private member or government to sponsor a Bill.

For practical purposes it is only necessary to consider government sponsored public bills in the case of housing legislation as there have been no housing acts passed as a result of a private member's bill.

The most common origins of housing legislation occur in the political manifesto of an incoming or returning government.

The government may request investigation or research to be carried out, for example in the past by SHAC, the Scottish Housing Advisory Committee or now by Scottish Homes. It was possible for SHAC to have suggested further research or research into a field of concern but the research would only be carried out if the government gave them a remit to do so.

In an area of particular concern a Royal Commission may be set up by the Government to report on a particular matter as for example the "Royal Commission on the Housing of the Industrial Population of Scotland" 1912-1917.

A government will issue a "Green Paper" which is a consultative paper and is circulated to interested bodies Local Authorities, Scottish Special Housing Association (SSHA), New Towns, Housing Associations, Convention of Scottish Local Authorities (COSLA) or Scottish Homes for example. Having received and considered the response to the consultation the government will then issue a "White Paper".

The White Paper then forms the basis for the drafting of a Bill. Once the Bill has been passed it becomes an Act of Parliament.

The Act is followed by circulars stating government policy and often by memoranda elaborating on or explaining the Act. The circulars and memoranda may be advisory but may contain instructions which are mandatory, an example of the latter being the circulars and memoranda referring to indicative cost allowances.

In the thesis only the Housing Acts themselves are described under the heading of housing legislation. The reports, Green and White Papers leading up to legislation and the circulars and memoranda following from legislation are described in the next heading "Housing Reports".

Housing Reports

The thesis has included, as influence on government legislation, both government reports and non-government reports.

In the case of government reports, these have been commissioned by the government prior to forming legislation and both Scottish reports such as the Royal Commission Report of 1912-1917 and English/Welsh reports such as the Parker Morris report 1961 have been included. The reason for including both is that while, the majority of housing legislation affecting Scotland has been passed as Scottish Acts, some Acts which applied to Scotland have been UK Acts. It is, therefore, important to include a report commissioned for England and Wales such as the 1961 Parker Morris report which was adopted in Scotland when Bulletin 1 was introduced in 1968.

In the case of non-government reports, such as G. W. Clarke's The Housing of the Working Classes 1930 on overcrowding or the 1994 Ewing report on disability provision, they have been included as private reports aiming to influence government legislation.

Housing Design Bulletins or Handbooks are also described under the heading of "Reports".

These were and are issued by government departments, in the case of Scotland by the Department of Health for Scotland and later by the Scottish Development Department.

Some handbooks such as those dealing with housing layout give the Department's view on best practice or give guidance as in the case of the 1988 handbook on local house condition surveys. Other handbooks such as those on housing design may contain mandatory space standards. These reflect government policy, for example the maximum permitted areas of the 1950's housing design handbooks reflect the government requirement that houses be designed for economy of labour and materials whereas the 1968 Bulletin 1 laid down (Parker Morris) minimum space standards which the government required be provided to qualify for government permitted cost allowances.

Housing Provision

Housing provision has also been studied and recorded. However, whereas past Housing Acts have been archived and are available for study, statistical information on house building in Scotland for the whole of the study period is only available in terms of annual housing completions by agency. This gives a very full picture of the rise and fall of housing provision but it does not differentiate between different types of housing. This is not to say that types of housing provision is not covered by Scottish Office statistics. Statistics have been published for storey heights of housing, improvement grant applications, sheltered housing, wheelchair and ambulant disabled housing. These statistics are not, however, continuous and have only been recorded when considered important to do so by the Scottish Office. For example, Scottish housing statistics on storey heights exists from 1960 to 1986 with no statistics published before or after these dates. Due to a break in recording these statistics from 1974 to 1983 only part of the year's figures are published for 1973 and the figures for 1981 to 1986 are based on incomplete returns. In the case of high rise housing it has been possible to form statistical information from Gazette 1 in Tower Block by Glendinning and Muthesius which recorded starts and approval dates for all high rise contracts by housing authority.

Where statistical information is unavailable housing award files and architectural publications have been used to obtain an indication of the type of housing which has been built.

For the post World War II years housing awards have been given by various bodies. These obviously list only those schemes considered by the jury to be worthy of an award but, while they are not typical of housing design quality, they do give an insight into the type of housing being provided at the date of the award. Saltire Society Housing Design Awards have been given from 1937 to 1939 and from 1948 onwards. The RIBA have made awards from 1978 and the Civic Trust from 1960. More recently the RIAS, with the Scottish Development Agency from 1985 and with its successor Scottish Enterprise from 1991, have organised the "Regeneration of Scotland Award". Only the Saltire Award is exclusively for housing but all include housing in the types of projects considered for awards. These four awards taken together give a picture of the type of housing provided in the post World War II years.

To include housing not covered by awards a search was made of architectural publications for articles covering public housing in Scotland.

In the interwar years no such awards were made and, in order to build up a picture of housing of the period, use was made of articles featured in architectural periodicals and publications on Scottish housing. In the case of Glasgow, however, statistics have been published in terms of number of apartments in houses, flatted houses and flats in Glasgow's Housing Centenary 1866 to 1966, figures being given for the housing provision under the various Acts or groups of Acts from 1919 to 1966. This together with description and illustration of the type of housing gives a picture of housing provision in Glasgow.

Conversely, it is the interwar period which has been most fully covered by the few publications on Scottish public housing. These include publications by Frew, Glendinning or Horsey, McKean, Niven and Rodger and have been used to build up a picture of interwar housing provision.

Housing Design

To illustrate the type of housing built, typical schemes were selected from architectural and building publications and from Saltire, RIBA, Civic Trust and RIAS award lists. The schemes were visited, photographed and described in text accompanied with drawings showing the layout and house types.

The thesis explores the relationship of legislation to the type of housing built. The description of the design, therefore, concentrates on the type of housing (whether it is general or special needs, high or low rise, etc.) and on the form of layout and on the house type.

In describing the housing by photographs and drawings, as well as with text, the architectural style is also illustrated. Presentation of housing designs by decade clearly illustrates the changing architectural style. This illustrates that architects have been free to design in terms of visual imagery.

The Procedure

In order to demonstrate that "the general forms and type of public sector housing built in Scotland throughout the 20th Century has been largely determined by Central Government legislation" the following approach was taken.

The provisions of the Housing Acts and their supporting information (circulars, memoranda and handbooks) were compared with the subsequent housing built.

The first stage was to establish the existence of source material. Reading published material on the subject established the initial leads.

Housing legislation is straightforward as there is the primary source of the Acts themselves. Glasgow's Housing Centenary 1866-1966 and Roger Scottish Housing in the Twentieth Century give useful, very brief précis of the Acts but for this study it was necessary to refer to Acts themselves to ensure important detail provisions were not overlooked.

Reference libraries and housing publications give references to housing reports but there is the advantage to the researcher that, in general, government reports refer to the reports they follow or replace and give a direct lead to the important earlier reports.

The main sources of statistics on housing built were the "Scottish Office Statistical Bulletin, Housing Series" and Glasgow's Housing Centenary 1866-1966. An indication of the type of housing built was obtained from a search of building and architectural publications and from the Saltire, RIBA, Civic Trust and RIAS awards.

A study of the design of housing was carried out by selecting examples from publications and award lists. Each scheme was visited, photographed and described with in most cases accompanying drawings.

The next stage was to record this information for each decade with the date of, the Act being passed, report published, and house constructed. The information on date of construction is less precise than date of enactment or publication. In some cases both start and completion of construction is known in others only the date of publication or award (shortly after completion) is known. For the purposes of the establishing the built response to housing legislation throughout the 20th Century this information on date of construction was considered adequate. In the case of statistical information on completed houses, the Scottish Office figures are only as accurate as the returns of statistical information they receive from local authorities but for the purposes of this study they are more than adequate.

Finally, having established the date of the legislation, the date of any accompanying circulars, memoranda or handbooks and the date of housing construction, it was possible to relate the introduction of important changes in legislation to changes in the type of housing built.

LIST OF ABBREVIATIONS USED IN TEXT

| | |
|--------------|--|
| BRE | Building Research Establishment |
| BTS | Below Tolerable Standard |
| CEC | Commission of European Communities |
| COSLA | Convention of Scottish Local Authorities |
| DoHS | Department of Health for Scotland |
| LGB | Local Government Board (England and Wales) |
| LGBS | Local Government Board in Scotland |
| MoH | Ministry of Health (England and Wales) |
| NBA | National Building Agency |
| NHBC | National Housing Building Council |
| NTS | National Trust for Scotland |
| RIAS | Royal Incorporation of Architects in Scotland |
| RIBA | Royal Institute of British Architects |
| SBoH | Scottish Board of Health |
| SDD | Scottish Development Department |
| SEPD | Scottish Economic Planning Department |
| SHAC | The Scottish Housing Advisory Committee |
| SLASH | Scottish Local Authorities Special Housing |
| SNH | Scottish Natural Heritage |
| SNHC | Scottish National Housing Company |
| SSHA | Scottish Special Housing Association |
| TSA | Technical Services Agency |

EARLY TWENTIETH CENTURY 1900 TO 1919

INTRODUCTION

19th Century Housing Legacy

The Royal Commission reporting in 1917 on the “Housing of the Industrial Population of Scotland” found poor housing conditions in rural areas, mining and industrial towns but poor conditions in the cities were exacerbated by overcrowding and high density.

The reason for the poor housing and sanitary conditions in the cities and large towns was the rapid industrialisation and urbanisation of Lowland Scotland in the 19th century. This is not to suggest that prior to the 19th century housing conditions in Scotland corresponded to an Arcadian ideal.

Prior to the agricultural revolution most Scots lived in fermtouns, groupings of small farms. The typical house had one or two rooms, stone, clay or turf walls with a thatched roof and midden outside. Population growth was small, controlled by disease and by famine (between 1695 and 1702 one third of Scotland’s population died of hunger). The Lowland agricultural revolution with its drainage of wet lands brought more land into cultivation and an end to wide spread famine in the Lowlands. For the farmer and the skilled farm workers improved farm houses and cottages were built whereas the itinerant seasonal labourer was housed in communal bothies.

Cities and burghs, often contained by defensive walls, were densely developed by building upwards. The long feus or rigs to the rear were also built on leaving only narrow access lanes often restricting light and ventilation. These towns expanded outwith their walls in the 17th and 18th century. Edinburgh New Town was begun in the late 18th century but there had been earlier expansion outwith the town walls. The new expansion areas catered for the upper, middle and skilled artisan classes but the poor continued to be housed in the overcrowded core often by subdividing former middle-class housing.

The 1842 report by the Poor Law Commissioners (secretary Edwin Chadwin) on the Sanitary Conditions of the Labouring Population of Great Britain recorded appalling overcrowding and sanitary conditions. In Edinburgh and Glasgow it reported poor water supply, open sewers in the streets and overcrowded lanes and courts which had no drains. Dungheaps were kept in the courts. The dungheaps, the report noted, were sold to help pay the rent. The report found large families accommodated in single rooms often with no furniture and little clothing.

Contamination of drinking water was a major problem. Wells were often contaminated from nearby privies and leaking sewers. There were cholera outbreaks in 1832, 1848 and 1853 and typhus outbreaks in 1837 and 1847.

The fear of disease prompted action, Local Authorities built water schemes, Glasgow Corporation with its 1855 Water Works Act brought water from Loch Katrine. The result of the improved water supply was that when an outbreak of cholera occurred in 1865 to 1866 only 53 people died in Glasgow against 4,000 in the previous epidemic.

Central Government passed Acts dealing with public health, requiring local boards to appoint sanitary inspectors and medical officers of health and Acts giving Local Authorities the power to remove overcrowded and unsanitary houses. It also passed Acts dealing with the provision of new houses.

The 1855 "Dwelling Houses for the Working Classes (Scotland) Act" aimed to facilitate the erection of dwellinghouses for the working classes by voluntary associations. It also gave associations power to acquire and improve property. The Edinburgh Co-op Building Company Limited was the first experiment in co-operative house building in Scotland. Formed in 1861, the company built houses at Abbeyhill, Restalrig, Haymarket and at Stockbridge. These houses were 2 ½ storey flatted terraced houses with the entrance to the ground floor flat through a garden on one side and to the flat on the upper floors through a garden and up stairs from the other side of the terrace. They were based on an earlier design at Rosebank Cottages near Haymarket.

The 1866 "Labouring Classes Dwelling Houses Act" provided government loans at 4% for a maximum of forty years for the purchase of land and buildings for the erection, alteration and adaptation of buildings as dwellings for the Labouring Classes. The loans were available to Local Authorities, Railway, Dock or Harbour Companies, Societies or Associations. Although there was no Government subsidy, the loans having to be repaid in full, this is the first Act with Central Government financial involvement in Local Authority housing.

In 1860 the "Report on Houses for the Working Classes of Edinburgh" recommended a model tenement plan which was to become the typical late 19th century working class tenement in Edinburgh. The model tenement provided sixteen houses per stair on four floors with four room and kitchen flats built around a central stair. The flats were built back to back with no through ventilation and with the only natural light for the stair at roof level. Each flat, however, had an internal WC. These tenements were built speculatively.

The typical speculative working class tenement in Glasgow had three flats per floor with two room and kitchen flats each side of a single room (single end) flat accessed by a rear stair. The room and kitchen flats had cross ventilation having rooms and windows each side of the block, the stair was lit from the rear walls but WC provision was generally on the stair and the cross ventilation of the single end was through the door to the stair.

The Burgh Police (Scotland) Act of 1892 included clauses dealing with new buildings. The height of tenement was limited to 1¼ times the width of the street. Tenements, except in special circumstances, were limited to having twelve flats entering from one common stair or passage, but where there was an outside stair with balconies the limit was raised to twenty-four dwellinghouses. Balcony access flats became a common tenement form in the late 19th century. Glasgow Workman's Dwelling Company and Glasgow City Improvement Trust both built this type of housing. The flats were room and kitchen or single end and would have balcony access to WC provision and laundry.

It is important to remember that the Edinburgh model tenements and the other late 19th century speculative tenements represented an improvement in working class tenement housing. The Royal Commission Report of 1917 was to reveal much poorer accommodation in older houses subdivided to provide one or two rooms and occupied mainly by the unskilled labouring class.

Early Twentieth Century

20th century housing provision prior to the 1914 - 18 war relied, as in the late 19th Century, mainly on private enterprise building houses for sale or rent. 90% of the housing stock was private rented accommodation ⁽¹⁾ and, as municipal housing rented below an economic rent was subsidised wholly out of rates without any subsidy from central government, most Burghs had less than 1% of their housing municipal rented accommodation. There was also housing built by employers for their employees and housing built by housing co-operatives and housing societies but these were numerically small.

The Scottish economy driven by shipbuilding, engineering, coal and financial services enjoyed, with local exceptions, a period of expansion before 1914. Building costs however rose by almost 40% between the 1880s and 1914 as a result of rising labour costs and increased sanitary and structural standards imposed by burgh building regulations. The building industry did not enjoy a stable level of house building. Annual variations in house building between 1880 and 1914 were not uncommonly 30% or 40%. Finance, wary of supply exceeding demand, was liable to be withdrawn at the first sign of house vacancies and consequently the occurrences of bankruptcy of building firms was high. The inflationary costs and the perceived threat to builders' interests posed by municipal housing and clearance schemes made speculators wary. House building fell steadily from 1900 to 1914 by which time production had almost ceased. ⁽²⁾

In 1909 the Scottish Miners Federation initiated an enquiry into housing conditions in colliery areas. This led to a Royal Commission being established in 1912 to investigate the state of working class housing in Scotland. The fact that housing accommodation in Scotland was considerably poorer than in England had already been reported in the 1911 statistics which showed that one and two roomed houses represented 48% of houses in Scotland but only 7% of houses in England.

The Liberals took office in 1905 and formed the Government until the formation of the war time coalition government. A number of social reforms were brought in. Trade Unionists were given greater freedom to strike, and non contributory Old Age pensions of 5 shillings (25p) per week were introduced in 1908. In 1911 there was the National Insurance Act and the veto power of the House of Lords was ended. In 1918 women over 30 were allowed to vote. Government action on housing was to follow.

World War I

The First World War was to bring about a dramatic change in Government policy on housing.

The demand for munitions and armaments brought thousands of workers to the Clyde. Any available housing was quickly tenanted and as demand exceeded supply the immigrants were forced to pay inflated rents. Rent levels in general rose as a result of the shortage leading to widespread discontent. Rent strikes were organised by the middle and skilled working classes against rent levels and the resented sequestrations and inflexible letting arrangements.

Labour Movement, Co-operative Movement and Trade Union activists were all involved but it was women who resisted the rent rises. The rent strike of 1915 had as an example of

resistance the Amalgamated Society of Engineers who had earlier that year organised a strike on Clydeside for a 20% pay increase. They also had the example of the Glasgow and other Scottish Suffragettes who had used arson and hunger strikes and organised marches with demonstrations to draw attention to their cause. The Glasgow Rent strikes used neighbourhood organisation to co-ordinate resistance and used flour and pease meal as weapons to drive away the rent collectors. The resistance took landlords and Government by surprise and Government conceded to the strikers by bringing in the Rent Act of 1915 which fixed Rents at 1914 levels.

In July 1916 Vaughan Nash on behalf of the Reconstruction Committee wrote to the Secretary for Scotland requesting information on the housing shortage in Scotland :

"The strength of the Scottish evidence was accepted: a printed memorandum 'The Housing Question' by Nash to the Reconstruction Committee dated 30 November, 1916 agreed that the housing need must be met by public building on a large scale and estimated the amount of subsidy that would be required. For England and Wales, grants to meet a total deficiency of 200,000 houses would be £12 million; for Scotland 120,000 houses would require grants of £7.2 million - to be almost double if current standards of habitability were to be raised. Scottish housing needs were thus recognised as disproportionately greater than the respective national populations would suggest". (3)

The Royal Commission did in fact estimate that at least 250,000 new houses were required in Scotland which would on Nash's figures require £15 million to be allocated to Scotland.

The Home Rule movement in Scotland had been overshadowed by the war but in Ireland the 1916 Easter Rising in Dublin led to armed insurrection and by 1921 the Irish Free State was established. In 1917 the October Revolution by the Bolsheviks clearly worried the government. Glasgow contributed to their concern with the Red Flag raised in George Square before the police baton-charged the workers demonstration of 1919. The police themselves contributed to the government's anxiety with the police strike in 1919.

It was against this background that the Government considered broad social reforms and an early intimation of a housing programme to be vital.

Prime Minister, Lloyd George told the Cabinet in March 1919 "Even if it cost a hundred million pounds, what was that compared to the stability of the state and the threat posed by Bolshevism". (4)

Lloyd George's Government pledged to "Build Homes Fit for Heroes" but as the Parliamentary Secretary to the Local Government Board elaborated "The money we are going to spend on housing is an insurance against Bolshevism and Revolution". (5)

LEGISLATION

The Act of union joining Scotland with England laid down that Scotland would retain for all time certain key institutions such as the Scottish Legal system, the Presbyterian Church of Scotland, and the Scottish Education system. (6)

The consequence of a separate Scottish legal system is that legislation for the rest of the UK often requires to be amended or a separate act passed for Scotland. Unfortunately this was not always the case in the past, for example the 1866 Sanitary Act was unenforceable in Scotland because those who chose to ignore it could only be sued in the English Court of Queen's Bench which had no authority in Scotland. (7)

The Scottish Office was established in 1855 and, although it was based in London until the transfer to Edinburgh in 1939, most of the anomalies such as the 1866 Sanitary Act were corrected to suit Scottish Law by the start of the 20th Century.

Housing Acts in the early 20th Century , like those in the 19th Century, were passed to enable Local Authorities to build or improve houses but while Central Government loans had been available since the 1866 Act there was no Government subsidy to motivate Local Authority provision of housing. Indeed the experience of Local Authorities in the 19th Century had been that municipal works including municipal house building, which had to be paid for out of the rates, risked political opposition if there was any consequent significant rise in rates.

Building Regulations

Building regulations were the responsibility of the individual Local Authorities who drew up local building by-laws.

Glasgow Building Regulations Act of 1900 laid down standards which included the following space standards for dwelling houses.

| | | |
|--------------------------------|-----------------|-----------|
| Dwellinghouses of 1 apartment | 1000 cubic feet | (28.3 m³) |
| Dwellinghouses of 2 apartments | 1600 cubic feet | (45.0 m³) |
| Dwellinghouses of 3 apartments | 2400 cubic feet | (68.0 m³) |

These volumes were exclusive of any lobbies, closets, presses and recesses.

These minimum standards were exceeded in the 1906 Kennyhill tenements (Fig 1.01) where the smallest ground floor flats with 9' 6" ceilings have approximately 1,300 ft³ for the single end and approximately 2,500 ft³ for the two apartment. The Walker buildings (Fig 1.11) had approximately 2,400 ft³ for the smallest two apartment. In both cases lobbies, bed recesses and sculleries are excluded from the calculation.

The Act also prohibited an enclosed bed or bed recess which was not open in front for three quarters of its length and from floor to ceiling. This also applied to existing dwellings after five years of passing the Act. This was passed to prohibit the practice of boxing in beds and closing them off with a wall and door cutting off ventilation. The Act required that that the front wall of such beds were to be taken down or the space to be no longer used for sleeping in.

The Burgh Police Act 1903

This Act required a minimum street width of 60 feet (18.3m). The application of this requirement is seen at Grierson Lane with the 1906 tenements at Kennyhill, Glasgow. (Fig 1.02).

Edinburgh, which had a historic tradition of high tenements, limited the height of houses to the width of the street and not to be greater than 60 feet by the Edinburgh Local Act of 1906. This was a reduction on the height limitation of $1\frac{1}{4}$ times the width of the street which was part of the Burgh Police (Scotland) Acts of 1892 and 1903.

The 1903 Act required that the minimum space at the rear of a building must not be less than the height of the building to the eaves.

The 1903 Act also required that "hollow squares" of development be provided with 15' 0" (4.5m) gaps in the frontage above 15' 0" (4.5m) from ground level for the purpose of through ventilation.

Housing Town Planning etc., Act 1909

The proportion of the initial capital that the Public Works Loan Board could loan to public utility societies was increased from half to two-thirds. This aimed to encourage societies such as "The Glasgow Garden Suburb Tenants Ltd" set up to build Westerton and which had such a grant approved in 1912.

The Act allowed Local Authorities to extend their municipal boundaries for the purpose of housing and enabled town planning schemes to be drawn up. Under the 1890 Act Burghs and districts could adopt the legislative power to carry out improvement schemes in unhealthy areas, close and demolish unfit houses and to provide lodging houses and housing for the working classes. This power under the 1909 Act was given to burghs and districts as if it had been so adopted. As stated above while Government loans were available there was no Government subsidy, consequently where rents did not cover costs and required to be subsidised this had to be paid for by the Local Authorities, rate financed. It is therefore not surprising that the 1917 report of the Royal Commission on Housing found that only about 1% of families in the largest Scottish Burghs were housed in municipal accommodation. Nevertheless the 1909 Act was a further step towards Local Authority provision of working class housing. The Act, in Section 43 prohibited the erection of back to back houses unless the Medical Officer of Health certified that the houses were so constructed and arranged as to secure effective ventilation of all habitable rooms.

The effect of the prohibition on back to back houses can be seen in the 1906 and the 1920 tenements built at Kennyhill west of Cumbernauld Road, Glasgow. The 1906 tenements follow the common Glasgow late 19th Century speculative tenement plan having two, two roomed houses each side of a rear stair and a single end backing on to the stair. This is not strictly speaking back to back housing but the single end can only obtain very limited cross ventilation through the common stair well.

The 1919 tenements at Kennyhill which have two flats with three rooms, scullery and bathroom off each stair landing clearly demonstrate the improvement in standards of accommodation but also their compliance with the 1909 Act prohibition of back to back houses. (Fig. 1.01 and 1.02).

The Model tenement advocated by the 1860 Committee of the Working Classes of Edinburgh which had a common stair in the centre of the plan with four two roomed houses in each

corner was clearly back to back as there were two flats to the front backing onto two flats at the rear with no possibility of cross ventilation. This type of plan was prohibited under the Act unless certified by the Medical Officer of Health that it secured effective ventilation of all habitable rooms.

Finance Act 1910

The stamp duty was doubled on conveyances or transfers on sale of property above five hundred pounds. This added to the concerns of speculative builders who were already experiencing rising labour costs.

Rent and Mortgage Interest (War Restriction) Act 1915

This Act was the Government's response to the rent strikes. It fixed rents for the duration of the war plus a further six months at 1914 levels for properties with rateable values, not exceeding £35 in London (Metropolitan Police District), £30 in Scotland and £36 elsewhere. Mortgage recall and interest increases were also disallowed.

Given war time conditions this was understandable but it proved extremely difficult to revoke politically and effectively halted private investment in rented accommodation both to build new houses and more seriously to repair existing rented property. It may be argued that these controls also helped to condition the British in general and the Scots in particular to expect housing subsidies of one kind or another and thereby be unwilling to allocate a realistic proportion of their income to housing.⁽⁸⁾

HOUSING REPORTS

The Royal Commission On The Housing Of The Industrial Population Of Scotland (published 1917)

The commission investigated the range and condition of accommodation of working class housing throughout the length and breadth of Scotland. It investigated town and city tenements, miners', agricultural workers' and fishermen's houses, crofter cottages, bothies, itinerant farm, fishing and construction workers' accommodation, hostels and immorality in farmed out houses (brothels).

In the cities it found that the standard accommodation for the working classes varied considerably. Filtered down houses that had been subdivided to provide single ends or two roomed flats were occupied mainly by unskilled labouring class.

Filtering is the process under which dwellings pass from one social class of occupant to another. For example, middle class or skilled working class flats may have become less desirable due to a noxious industry setting up close by or simply because desired living standards have increased. The middle and skilled working classes move out of the less desirable flats and unskilled working class move in. Alternatively it may be a large middle class house is vacated in an area which had become less desirable and the house is subdivided for working class use. This process is sometimes referred to as 'making down'.

In tenements designed and built with four flats per floor, the accommodation ranged from room, kitchen and WC to room, kitchen bed closet and bathroom and were occupied by "good" (skilled) artisan class. The tenements that had three flats per floor, each flat having two rooms kitchen and bathroom, were occupied by the better paid skilled artisan class.

Finally tenements that had only two flats per floor and had three to four rooms, kitchen and bathroom were mainly outwith the reach of the artisan class and occupied by the middle-class. (It is worth noting however that it was the middle and the skilled working classes who led the rent strikes of 1915).

The Commission reported on the damp basement tenements, the poor ventilation, the WCs on the unlit stair landings and the poor health record and high mortality rate of tenement dwellers.

In the mining areas it reported (para. 1002, p 152), on the localised areas where miners owned their own houses such as Windygates in Fife, Leadhills and at Larkhall a former weaving, now mining, community which had a pioneering building society founded in 1815. It reported on good quality miners' houses built by the mining companies at Newtongrange, Dalmellington, Wemys and Valleyfield, Fife. Newtongrange, which the report claimed probably had the best miners' houses in Scotland, had houses with four or five rooms, a kitchen, conveniences and garden. The report described Valleyfield (para. 876) as a carefully designed spacious village with houses arranged in crescents. Two and three roomed houses were built each with scullery, WC and in many houses a bath with hot water from the kitchen range.

This was the standard of house miners wanted together with pit head baths. These were the exception, miners' rows often suffered from subsidence, were damp and laid out along ash roads.

In the rural areas standards also varied, the worst houses were damp with earth floors and no water supply. In fact it was common in rural areas to supply water by a well or a standpipe outside the house. Outside privies were common but rarely a problem in rural areas unless there was a risk of contamination of the well.

High home ownership was found in fishing villages but the Commission reported that often houses were old and frequently damp.

The standard of croft varied considerably. It was usually built by the crofter and the report noted, that using "peasant" labour, houses could be built very cheaply. The report noted that crofters would often save up £40 and then build a house, it also noted that crofters looked on their crofts mainly as a house not a source of employment and that funds for crofts often came from sons and daughters working in the South or overseas.

The Commission visited warm well maintained traditional Hebridean thatched houses in Tiree, which it commented were well designed to suit the climate. (Fig 1.03) It also visited damp, poorly sited, poorly maintained houses in Lewis, where peat fires were burned on the earth floors with no chimney in order to impregnate the thatch with soot. The soot impregnated thatch being replaced every year as last year's thatch was used for the potato crop.

The poor state of bothies and itinerant workers accommodation was reported with particular note made of the lack of privacy, cooking, washing and sanitation facilities.

The report as shown above catalogued the damp decaying houses in the mining and industrial villages but it was in the cities where the damp, decaying infested tenements were made the worse by what the Commission described as "an almost unbelievable density". In Glasgow more than four persons to a room occurred in 10.9% of houses and over three persons to a room occurred in 27.9% compared to 0.8% and 1.5% in corresponding English cities.

The historian, T. C. Smout comments "To say that the Scottish housing problem was of a different order of magnitude from the English is only the literal truth".⁽⁹⁾ The Commission also commented that:

the chief root of industrial unrest is the desire of the workers to establish better conditions of life for themselves and their families Bad housing may fairly be regarded as a legitimate cause of social unrest..... So far as housing is concerned, we cannot but record our satisfaction that, after generations of apathy, the workers all over Scotland give abundant evidence of discontent with conditions that no modern community should be expected to tolerate.⁽¹⁰⁾

The report discusses the relative merits of the tenement and cottage (RC 1917 chapter 8, p 60 to 72).

The tenement, it argues, has the advantage of proximity to work, warmth particularly on a mid floor, has all rooms on one level and security while it has the disadvantage of stair access for the elderly and children, poor ventilation and light in poorer tenements, common stairs, shared ownership and being difficult to police. The cottage has the advantage of quieter, more airy surroundings with garden and clear ownership but the disadvantage of being further from place of work.

It also comments that tenements have been over solidly constructed. The structure, it observed, was well outlasting the fittings. (The commission obviously thought that when the fittings were obsolete the building should be replaced and had obviously not considered that a solid building could be refitted).

The commission, while noting the relative merits, favoured the cottage and commented that, in members' opinion, while tenants who lived in tenements favoured tenements, those who had experienced both favoured cottages.

The commission recommended that tenements should not be built more than three storeys high, that they should not be back to back and that sub-division should not be allowed without agreement of the Local Authority. (Fig 1.04)

It recommended that the existing floor to ceiling height standard of 9' 6" (2.9m) on the ground floor and 9' 0" (2.74m) on other floors should continue to apply to tenements but that for cottages this should be reduced to 8' 6" (2.6m) on the ground floor while on the upper floor the ceiling height could be 8' 0" (2.4m) over a minimum of 50% of the room and no ceiling height was to be lower than 5' 0" (1.5m).

The report also recommended that no tenement should be built in the form of hollow squares and that tenements should be arranged in blocks as separate or detached pavilions so as to admit a sufficiency of light and air.

The report recommended that three storey tenements should not be allowed at a density of more than 32 houses per acre (80/Ha) double flatted houses - 24 houses per acre (60/Ha) and single cottages - 16 cottages per acre (40/Ha).

The commission reported on the role of Building Societies at Larkhall, Hawick, Falkirk, Grangemouth and Edinburgh. In the case of the Edinburgh Co-operative Building Company Limited it had over 50 years built 2080 houses but in the later years had provided houses outwith the means of even the better paid artisans. It reported the role of the public utility companies (whose rules prohibited the payment of a dividend exceeding 5 per cent), the most notable being at Rosyth. It also reported on the "co-partnership societies" (where every tenant shall acquire shares or loan stock in the society). These Scottish experiments were by garden city advocates and operated at Gourock and Greenock, Westerton Glasgow, Renfrew and Irvine. All were either by or influenced by the Glasgow Garden Suburb at Westerton. The commission comments that, while their contribution has been small, they should be encouraged and recommended that Local Authorities should be empowered to grant loans in addition to loans from the Public Works Loan Board. Unfortunately the recommendation in Chapter 25 is not included in the final Chapter 35 "Leading Issues of Report" which perhaps explains why co-partnership, like the crofters' self build which is also missing from Chapter 35, was not given the amount of Government attention accorded to State funded rental housing.

The commission majority view was that they were "unable to recommend that the State should attempt to obtain the houses on any basis which subsidised private individuals". Their main reason was that they were concerned that the State subsidy would simply become enhanced developer's profit. There was however dissent among the members on this issue which formed part of the minority report. The minority view favoured subsidising private building and took the view that unlimited municipal housing would devitalise private enterprise and in time would mean that there would be towns where the majority of householders would be Local Authority tenants. Their dissent was published in the minority report.

The commission had estimated that using the Scottish Standard of 3 persons to a room overcrowding in Scotland was 20 per cent but if the English standard of 2 persons to a room was used, 45 per cent of the Scottish population lived in over-crowded conditions.

Using the Scottish Standard of 3 persons to a room, the commission estimated the number of houses required as 121,430 with an additional 114,560 houses required to take the place of 50 per cent of the one and two roomed houses. Using an average figure of £350 per house, the cost of 235,990 houses was estimated as £82,596,500. (In fact war time inflation resulted in house construction prices being double this figure).

The commission recommended that these houses should be built in the next fourteen years. It also recommended that no more one roomed houses should be built and that three or more roomed houses should take the place of the large proportion of one and two roomed houses. It also proposed that Local Authorities should then tackle Slum Clearance. It is interesting that, while Glasgow for example had built prototype slum clearance tenements in 1923 in response to the higher subsidies for "Rehousing" in the 1923 Act, the main inter war slum clearance Act was the Greenwood Act of 1930, 13 years after the Commission Report. The Commission recommendation was, as stated above, new houses then 14 years later slum clearance.

The commission report had catalogued the appalling condition of Scotland's housing and the effect the poor housing and over-crowding had on health. In Chapter 34, the penultimate chapter, "Bad Housing as a Factor in Industrial Unrest", they claimed that the chief root of industrial unrest is the desire of the workers to establish better conditions for themselves and their families. They were of the opinion that in the present phase of industrial evolution housing was the rallying point.

The Recommendation however, which was to dramatically change 20th Century Scottish Housing, was, as favoured by the majority of the commission, that housing of the industrial population of Scotland was the financial responsibility of the State operating through the Local Authorities.

Special Report 1917

The report, the full title of which is "The Royal Commission on Housing in Scotland Special Report on the Design, Construction and Materials of Various Types of Small Dwellinghouses in Scotland", was prepared by John Wilson, FRIBA architectural inspector of the Local Government Board for Scotland. The report was based on visits to towns and districts throughout Scotland and makes recommendations on the future provision of small houses.

Various house types were illustrated but those chosen were, for the purposes of economy, contained within four walls without out buildings where possible.

Designs A, B, C, D and E are cottage houses suitable for use as semi-detached or, with repositioning of windows, use in a terrace. The report notes that semi-detached houses allow for easy access to the rear avoiding the need for rear lanes which the report claims are a source of nuisance. It also notes however that terraced housing could give better grouping (of urban form). (Fig 1.05)

Designs F, G and H are double flatted houses which can only be built four in a block and do not lend themselves to being used in a terrace. Design H is, the report claimed, for a small family having only a livingroom, bedroom and scullery. (Fig 1.06)

Design J is for farm servants and is a combination of houses for married servants and bothie accommodation for single farm servants.

Design K is for small holders and crofters. (Fig 1.07)

Designs L and M are one apartment houses for an aged couple, a single woman or a woman and young child. (Fig 1.07)

The report makes interesting comments on living practice with the observation that, as in Scotland it is the practice to cook on the open fire and the housewife does not wish to keep two fires burning, cooking will be done on the livingroom fire although a gas cooker would be of advantage in the scullery for summer use. It also recommends that the scullery should not be made large enough as to encourage its use as a livingroom.

The report also suggests that the bath should not be in the scullery but in a separate compartment which may also contain the WC and may be entered off the scullery. The majority of the illustrated plans do in fact show this arrangement.

It recommends a minimum livingroom area of 168 ft² (15.6m²) and that the first two bedrooms should have 125 ft² (11.6m²).

The report comments on construction recommending for walls, cavity brickwork, hard plastered or solid stone walls, lathed and plastered. For windows, it recommends sash and case windows as giving better weather protection than casement windows. Concrete floors are recommended for scullery and bathroom with timber hung floors for other rooms noting the necessity of adequate ventilation to avoid dry-rot.

The recommended density is 12 to 16 cottages per acre (29 to 38 per hectare) and 20 flatted house per acre (48 per hectare).

The appendices include sample bill of quantities and costs of materials through Scotland.

It also includes a schedule of the floor areas of the illustrated house types in ft²

| Type | | <u>Livingroom</u> | <u>Scullery</u> | <u>Parlour</u> | <u>Bedroom 1</u> | <u>Bedroom 2</u> | <u>Bedroom 3</u> | <u>Total</u> |
|--------------------------|---|-------------------|-----------------|----------------|------------------|------------------|------------------|--------------|
| Block of 2 cottages | A | 168 | 66.5 | 186 | 186 | 168 | - | 882.5 |
| | B | 181 | 85.5 | - | 148.5 | 100 | 76.5 | 672.5 |
| | C | 181 | 85.5 | - | 169 | 117 | - | 634 |
| | D | 186 | 90 | - | 174 | - | - | 492 |
| | E | 186 | 71 | - | 174 | - | - | 488 |
| 4 flatted houses | F | 175 | 69 | - | 136.5 | 136.5 | - | 598 |
| | G | 169 | 85.5 | - | 127 | 127 | - | 548.5 |
| | H | 181 | 70 | - | 145 | - | - | 471 |
| Houses for farm servants | J | - | - | - | - | - | - | 2550* |
| House for crofters | K | 195 | 55 | 110 | 169 | 130 | - | 733 |
| Hostel of 6 houses | L | 182 | 39.5 | - | - | - | - | 251.5 |
| | M | 182 | 54 | - | - | - | - | 251 |

* area for 4 houses given

The areas of the houses are small ranging from 882.5 ft² (82m²) to 672.5 ft² (62.m²) for four rooms plus scullery. The designs are extremely economical both in area and in keeping the external envelop to the basic rectangular plan and unadorned with any detail expression.

The flatted houses F, G and H, two storey with hipped roofs are plain, bland boxes which were to become common in the interwar years. The cottages and hostels using gables, coombed ceilings and more variety of form and height have more architectural character.

Tudor-Walters Report 1918

Questions of Building Construction in connection with the provision of dwellings for the working classes in England and Wales, and Scotland and report upon Methods of securing economy and despatch in the provision of such dwellings.

The committee was chaired by Sir John Tudor-Walters, a Liberal MP and included on the committee was Raymond Urwin, architect advocate of Ebenezer Howard's Garden City

Concept. It is worth noting that the Royal Commission on the Housing of the Industrial Population of Scotland had no architect among its members.

The committee were originally asked in July 1917 to look at England and Wales but in April 1918 the Secretary for Scotland agreed that Scotland should be included. The committee presented their report in October 1918. Scotland was therefore only considered during the later stages of the report.

The report is extremely comprehensive and much of the report concerns forms of building construction. The main interest for this study is the sections on Sites, Layout and Accommodation.

The report recommends that the layout, the width and construction of streets is best controlled by town planning schemes. It recommends that these schemes should be designed to take advantage of the site and should include buildings for the convenience and social amenity of the residents. It also recommends a maximum density of 12 houses to the acre in urban and 8 to the acre in rural areas. This is much lower than the Royal Commission's recommendation of a maximum of 36, 24 and 16 houses/acre for tenements, flatted houses and cottages respectively.

The report did not deal with tenements claiming that, although tenements of four or five storeys have commonly been adopted in Scotland, no-one had appeared to advocate this use. (11) It considered the uses of the flatted house and conceded that there might be some advantage in providing them for former Scottish tenement dwellers to a limited extent. It argued that there was no economic argument in favour of the flatted houses if accommodation was built to the same standard as a terraced house and pointed to the disadvantage of the relationship of the first floor flat to its garden. The report clearly favoured cottages.

It does however argue in favour of terraced houses recommending against rear access to gardens preferring rather the "close" access through the terrace to give access to back gardens. It also recommends that, where there are gaps in the terrace, screen walls or roofed extensions should fill the gap to avoid the "violent draught which blows through the gaps between houses". Here again the report is at variance with the Royal Commission which favoured separate pavilions and not having hollow squares in tenement development.

On road access the argument is put forward for avoiding through roads which would allow traffic short cuts through housing areas. The report's preference for culs de sac is backed up with evidence of reduction in road lengths required to serve a scheme with consequent savings. The report also argues for houses being set back from main roads and reducing the width of minor residential roads.

The Report recommends a street width minimum of 70' 0" between houses, this is greater than the 1903 Act minimum of 60' 0" and at variance with the reports concern about creating variety but the case is made to allow sunlight penetration in winter. The report does not mention the effect of latitude on sunlight penetration. (Fig 1.08)

The report includes a variety of house plans most of which are in excess of 20' (6m) frontage. (Fig 1.09) The case is made for variety and while the report accepts there is a case for having a range of plans, these should be improved and altered to suit changing needs and local

circumstances. The report also notes that while dormers increase costs over a plain through eaves there will be cases when houses built in existing towns and villages will require to lower their eaves height to blend in and consequently will require to use the roof space.

The report puts the case for some houses having a parlour in addition to the livingroom but advocates against reducing the livingroom size to achieve it. Where no parlour is provided it suggests that the livingroom should be a through room from back to front. It also makes the case for having a parlour/bedroom on ground floor level to be used for either use and adds that at the time of the report there would be a number of lame men who would have difficulty with stairs. A bath with hot water is recommended for all houses as is provision of a WC at ground floor level.

The floor areas are in general higher than those proposed a year earlier in the Special Report of the Royal Commission.

Desirable minimum sizes of rooms are given as:-

| <u>House without Parlour</u> | <u>ft²</u> | <u>(m²)</u> | <u>House with Parlour</u> | <u>ft²</u> | <u>(m²)</u> |
|------------------------------|-----------------------|------------------------|---------------------------|-----------------------|------------------------|
| - | | | Parlour | 120 | 11.0 |
| Livingroom | 180 | 17.0 | Livingroom | 180 | 17.0 |
| Larder | 24 | 2.2 | Larder | 24 | 2.2 |
| Bedroom No. 1 | 150 | 14.0 | Bedroom No. 1 | 160 | 15.0 |
| Bedroom No. 2 | 110 | 10.0 | Bedroom No. 2 | 120 | 11.0 |
| Bedroom No. 3 | 65 | 6.0 | Bedroom No. 3 | 111 | 10.3 |

The report recommends that food preparation should be in the Scullery which should be designed as a working room.

The report recommends that furniture should be shown in place on the proposed plans when they are considered for selection or approval.

The report states that the most serious scarcity in England and Wales is a house having at least three bedrooms and recommends that houses with less than three bedrooms should not be erected and that a proportion of four bedroom houses should be erected. The report acknowledges "the authority of the Royal Commission on Housing in Scotland and accepts its findings that, owing to the difference of habits, conditions and standards of accommodation, a certain number of houses with less than three bedrooms may be required" .(12)

On the conversion of existing buildings for working class occupation, the report questions whether this would be economic and concludes that conversion of existing large houses into flats suitable for working class dwellings is only likely to be successful to a limited extent. It accepts that conditions in Scotland are more favourable to such conversion and comments on the potential in Scotland of combining smaller tenements to form a reduced number of flats.

HOUSING PROVISION

The dramatic reduction in speculative private house building has been described in the introduction and that the contribution of local authority housing was often less than 1% of housing provision. Nevertheless some housing was being built.

Glasgow

In 1906 the Glasgow Improvement Trust built tenements at Kennyhill on the west side of Cumbernauld Road. ⁽¹³⁾ These are traditional tenements slate roofed with pitched "shed roof" gables over bay windows, stone front and gable walls with brick walls to the rear.

They are three storey tenements with three flats per close at each level. Two of the flats per floor were room and kitchen with scullery and the remaining flat a single end. The flats had no internal toilet facilities, three flats shared a WC on the stair and each flat had running water to the scullery. That these flats were built as "improved" tenements with such a low level of facilities and were sought after, gives some indication of the lack of facilities in the tenements they were replacing. These Kennyhill tenements were good solid structures built to the high standards of Glasgow's Dean of Guild Court for wall thickness, window size and building materials. The structure has lasted well and the flats, having been improved internally, have a continuing life.

Dundee

Dundee did not take up the optional powers offered to Local Authorities to acquire land and build houses under the Housing of the Working Classes Act 1890. However in reaction to the slum conditions and the terrible infant mortality the Dundee Social Union was formed. The Dundee Social Union was mainly involved in investigation and publicity, one of its members being Patrick Geddes, chair of botany at University College Dundee, later to earn the reputation of being the father of modern town planning. The Dundee Social Union acquired and managed one or two tenements in Dundee for a mixture of charitable and experimental motives.

Dundee had already set up a Housing and Town Planning Committee two years prior to the Act of 1909 and its convenor, the Reverend Walter Walsh reiterated in 1912 his belief that Dundee would blossom into a garden city surrounded by an artisan garden suburb. It was envisaged that private enterprise would build the new homes, but Dundee's jute workers were some of the poorest in the country and private builders did not and could not build this artisan garden suburb for workers who could not pay an economic rent for new houses.

Dundee town council informed the Local Government Board for Scotland in 1917 that it would not embark on a municipal housing programme without state assistance. Given state assistance, it considered a crash programme of 6000 houses imperative. ⁽¹⁴⁾

The Royal Commission of 1917 did not include Dundee in its list of 11 burghs which provided almost all of Scottish Local Authority housing in 1913. Glasgow housed 2,199 families (1.31%), Edinburgh 601 (0.81%), Leith 84 (0.74%), Aberdeen 131 (0.36%), Greenock 214 (1.40%), Perth 114 (1.37%), and Kilmarnock 58 (0.77%).

Kilmarnock

Kilmarnock was a prosperous burgh at the start of the century with engineering, textiles and whisky its main source of wealth and employment. One employer, Alexander Walker of the whisky business built in 1904 three, three storey tenement blocks of housing round a square. Each tenement block had two stairwells. Two flats were accessed off each landing on which was provided a shared WC. The flats had two rooms with bed recesses in the larger room. A small scullery was provided in each flat. This group, designed with large wide windows and harled walls with Art Nouveau influenced detailing, was one of Kilmarnock's most interesting housing groups. Unfortunately planning zoning isolated this housing in an industrial wasteland and, lying derelict throughout the 1980s, it has since been demolished. (Fig 1.11)

Mining

New pits were opened up and along with the new pit head buildings new miners houses were built by the Companies. The Fife Coal Company constructed Valleyfield Colliery which tapped the Dunfermline Splint seam in 1911. It was the associated miners' village which the Commission praised as being spacious with two and three roomed houses arranged in crescents. The commission reported even more spacious houses of four or five rooms plus kitchen at Newtongrange in Midlothian. These were unusual for their time and considered to probably be the best miners' houses in Scotland.⁽¹⁵⁾

The Wemyss Coal Company, the commission reported, had built 715 houses in about 15 years of which 300 have a room and kitchen and 415 two rooms and kitchen.

There were also good quality miners houses being built at Dalmellington where the typical house had two rooms, a kitchen, a scullery with washing house, boiler and a water close and coal house.⁽¹⁶⁾

The dimensions of the rooms were

| | | | |
|------------|---|-----------------------|-----------------------|
| Kitchen | 21 ft x 10.5 ft (exclusive of box beds) | 220.5 ft ² | (20.5m ²) |
| Room No. 1 | 11 ft x 10 ft | 110 ft ² | (10.2m ²) |
| Room No. 2 | 11 ft x 10 ft | 110 ft ² | (10.2m ²) |
| Scullery | 10 ft x 9 ft | 90 ft ² | (8.4m ²) |

On the other hand many miners' houses such as those in Drongan in Ayrshire were very poor, the older houses having earth floors under the beds and even the newly built houses at New Row, which according to the Commission were the best in the village, had no internal water supply, scullery or water closet.⁽¹⁷⁾

Central Government

The state had, so far, refrained from financial involvement in public housing. This was to change with the Addison Act in 1919 which is described in the next chapter but prior to this Admiralty decisions to relocate the torpedo factory from Woolwich to Greenock and to establish a naval dockyard at Rosyth was to create local housing shortages that forced direct involvement by the State.

HOUSING DESIGN

The 19th Century expansion of the cities with fine sandstone tenements and terraced houses and with terraced and detached houses in the suburbs continued to be built for the middle classes in the early 20th Century. Lorimer's Rustic Cottages at Colinton outside Edinburgh were built, three in 1901 and a further four in 1904. These attractive cottages have boat hull shaped dormers and are in Lorimer's Arts and Craft style rather than his more historic Scots style in which many of his larger houses were designed. They were commissioned by a private client and while they were not in any sense designed as public housing they are interesting in that they are similar in areas and facilities to that of later public housing built at Rosyth or under the Addison Act and are similar in area to houses built to Parker Morris Standard (1961) Bulletin 1 (1968).

It is the continuation of the 19th Century style and construction which is evident both in city developments such as the red sandstone tenements built at Kennyhill in Glasgow and one and two storey houses built at Coaltown of Wemyss. These developments were infills or extensions of existing settlements and the housing layout simply follows the existing street pattern. (Figs. 1.01 and 1.02)

The Kennyhill flats were built with open through closes with no front or back door but with steps up inside the close to the raised ground floor level flat entrance. This feature raised the windows of the ground floor flat to give privacy from the street. It did not however give security, relying only on the steps to define territory. It may well be that when the flats were built security was not important, after all when they were built most people would rarely lock their doors. It is common now however, when tenements are being rehabilitated to not just put doors on the close entrances but also to provide door entry systems. Door entry systems are not new however as middle class tenements especially in Edinburgh commonly had doors on the close entrance and a set of bell knobs, each landing having a manually-operated mechanism by which the door may be opened.

The Wemyss Coal Company employed an architect for whom a house was provided close to the harbour at West Wemyss. West Wemyss is a traditional Fife village with buildings of architectural and historic interest. Here two storey miners' houses and flats have been incorporated successfully into the fabric of the village. (Fig 1.12) At Coaltown of Wemyss to the north of West Wemyss the houses are mainly single storey with a few later built two storey houses. The commission noted that typical houses were built at a cost of £160 for a three roomed house, water closet and coal store. Several of the houses were reconstructed on the old foundations of previous miners houses others were completely new. (Fig 1.13 and 1.14)

The Coaltown houses are mainly traditional Scots style with harled walls, skews and slate roofs but some of the more recent houses which a plaque dates as rebuilt 1912 have projecting roof rafters rather than the more traditional clipped eaves detail. In the centre of the village is the Miners Welfare Hall. The houses all have gardens, some have both front and back gardens.

The company continued building houses for their workers in the inter war years. The two storey houses at Coronation Place are four and five apartment with bathroom and kitchen but these were not built until 1936 although the brick second storey was built on earlier single storey houses retaining their stone walls. (Fig 1.15)

Coaltown of Wemyss is now a conservation area and in 1994 being restored in a partnership agreement between Scottish Homes and Wemyss Properties.

Many of the Century's new ideas on housing also had their origins in the previous Century, Ebenezer Howard published Tomorrow a Peaceful Path to Real Reform in 1898 and 1902 it was reissued as Garden Cities of Tomorrow. Howard's solution to accommodating the increasing population of congested and sprawling cities was to build garden satellite cities arranged around the old city. The satellite garden cities, it was claimed, would have the advantage of both town and country. (Fig 1.16) The 1901 Exhibition in Kelvingrove included the Sunlight cottages based on the housing blocks at Port Sunlight, Cheshire. Brick with Tudor style half timbering on the upper level, the RIAS guide to Central Glasgow comments they were "so untypical of Glaswegian workers housing, they would have been regarded simply as one of the many 'foreign' exhibits".⁽¹⁸⁾

The Garden City or Garden suburb idea found favour with many especially those concerned with town planning. The Westerton Garden Suburb Co-Partnership society built 85 houses in Glasgow until building was stopped by the war and the cessation of Government Loans. The Public Utility and Co-Partnership Societies were registered under the Industrial and Provident Societies Act 1893 and could since the 1909 Act borrow up to two thirds of the value of houses erected. Westerton was the largest Scottish co-partnership housing society in the early 1900s but only Maxwell Avenue plus two small side streets were built. (Fig 1.17)

Westerton has a railway station giving it good transport into the city centre and is close to the A809. Raymond Unwin was involved in the preparation of the plans and while it is not known whether he was the architect for the houses they have a distinctly English Tudor style popular in English Garden Suburbs. The layout is on a steeply sloping site and the streets curve along the contours of the site. The houses are laid out along the street frontage and have front and back gardens. The promoters of Westerton also started Greenock Garden Suburb which is referred to below.

The Artisans Garden Suburb proposed for Dundee in 1912 was to rely on private enterprise and failed to materialise. In 1919 however Craigiebank garden suburb in Dundee was laid out on a concentric plan with radial roads similar to Howard's diagonal plan. (Fig 1.16). Craigiebank was developed between the wars with both private and public housing. It had as Howard's diagram a circular central park split into four with the arterial roads. In one quadrant a church was built in 1937 and during World War 2 the central park was ploughed and cultivated for vegetables after which flats were built in two of the other quadrants. ⁽¹⁹⁾

Rosyth which is described in more detail under its own heading was arguably the most important housing project in Scotland in the early 1900's. Its Garden City Layout planned with shops, churches and schools was laid out with tree lined avenues and two storey cottage housing grouped attractively along road frontages. The houses all have front and back gardens and while the houses are constructed with harled walls and slate or tiled roofs their architectural style is more traditionally English than Scottish.

STATE INVOLVEMENT

Greenock and Gourock

The Admiralty decision to move the torpedo factory from Woolwich to Greenock was based on the advantages of testing torpedoes on the quiet waters of Loch Long rather than the congested Thames Estuary.

The decision was made to move in 1907 but it was not until 1910 that the housing question became an issue. The four or five hundred men and their families who were to be transferred from Woolwich were not enthusiastic about the move; some refused to move and were dismissed. The cause of the discontent was, although they had been informed that there were 700 vacant houses, they had found out that about two-thirds of these were unsuitable being mainly one-roomed houses in slums. They not unreasonably wished to move to houses at least as good as the houses they were leaving and would prefer cottages to tenements.

"Greenock was among the first authorities to operate the Artisans and Labours' Dwellings Act of 1875 with a clearance area extending over eight acres in the lower part of the town; redeveloping half the site itself and feuing the remainder at preferential rates for private building". (20) Two hundred more houses were built under the 1890 Act but in 1911 the sanitary inspector was warning that the town's low income accommodation was a menace to public health.

In 1910 the Greenock Industrial Building Society wrote to the Scottish Secretary proposing a garden suburb. This project was to include houses for sale and for rent and they requested loans at low interest rates to facilitate it. They received a reply referring to the provisions of the 1890 and 1909 Acts permitting public works loans to be made to public utility societies for up to two-thirds of the cost.

The Government's position was however that while they were aware of the Woolwich workers objections to the housing in Greenock they hoped that private enterprise would provide suitable houses. The Admiralty did not see its role including provision of housing however it entered into agreements with, in 1910, a private company to provide 100 houses for rent and in 1911 with the Scottish Garden Suburb Company to provide, initially, 16 houses for a rent of 8/6 (42.5p) per week. They had hoped to eventually produce 50 houses but progress was slow. A second scheme was started by the Greenock Garden Suburb Company and they were fortunate that the landowner treated them favourably in feuing the ground.

By August 1913 further expansion of the factory was proposed with a need of 300 workers, 200 expected to be incomers. The number of completed houses were 48 by Scottish Garden Suburb Tenants Limited, 4 by Gourock and Greenock Garden Suburb Tenants Limited and 6 under construction by Greenock Garden Suburb Tenants Limited. There were also a few houses and flats built by private development in Gourock.

A public inquiry was held in April/May 1914 and its recommendations included that the authority should immediately proceed to build 250 houses to be followed by a further 250 houses. But it was not until June in 1915 that the Local Government Board Scotland reported to the Admiralty and the Treasury that Greenock had resolved to build 144 houses at

Roxburgh Street. They were available to Admiralty employees for 2 years or more at rents to cover costs. The houses no longer exist.

In 1916 - 1917 two hundred more houses and flats were built in Greenock and Gourock under the instigation of the LGBS (Local Government Board for Scotland), half of them directly provided by the Office of Works.⁽²¹⁾ These houses built for the MOD at Nelson Road, Gourock are very similar in design to the first phase of Rosyth.

Despite the fact that torpedo workers were skilled men in good employment private enterprise had failed to meet the demand. There is no doubt that by the law of supply and demand houses would eventually have been provided, all-be-it at the cost of inflating rents until the supply met the demand. The problem was that private enterprise had not been able to meet the demand in the short timescale required.

Rosyth

Rosyth, unlike Greenock and Gourock, was a greenfield site with no existing houses. The nearest housing was in Dunfermline two miles away. Since the 18th century Rosyth had been recognised as an excellent site for a dockyard and was the obvious choice when the naval tension between Britain and Germany increased the need for a large east coast facility to accommodate the rapidly expanding Royal Navy.

The decision was announced in March 1903, land was acquired and access roads laid down in 1908. 3,500 men were employed in constructing the dockyard and, as was customary at the time, responsibility for housing workers and their families was with the contractor. The contractor erected two hutted encampments, Bungalow City East and Bungalow City West but known in Fife as Tintown. Conditions in the huts of Tintown were primitive with rock roads and up to 26 people to a hut - single men at one end and families at the other. The need for permanent housing was urgent.⁽²²⁾

There was no consensus as to whose responsibility it was to create the New Town of Rosyth. The Admiralty did not see its role including provision of housing and Dunfermline Burgh Council knew that it did not have the resources to build the houses. The Council were however concerned that the area should be well laid out and in July 1912 appointed J. E. Wilkes from Birmingham city surveyors department and two assistants as town planning staff. A plan was prepared which was accepted by the Admiralty and approved by the LGBS but without any clear guidance as to how it was to be brought about.

The one thing there was agreement about was that it was to be laid out on Garden City principles. This was the view of the Admiralty, LGBS and Dunfermline Burgh. The Edinburgh and East of Scotland Branch of the Garden Cities and Town Planning Association offered their help and in December 1913 Raymond Unwin was appointed to prepare a detailed plan using the Garden City concept. (Fig 1.18) This consensus view is not surprising, it was very much the fashionable planning concept. Patrick Geddes had earlier advocated this solution for the provision of artisans houses and expansion of Dundee.

The Admiralty, despite the problems they were having at Greenock, saw private enterprise providing the housing and invited tenders. The tenderers were to state "the feu duty which the applicant is prepared to pay, the classes of houses which it is proposed to erect, number of

houses to the acre, number and classes of house to be completed by certain dates and guaranteed rents".

Several offers were received but none were acceptable to the Admiralty.

In the spring and early summer of 1914 a solution was worked out between the LGBS, Dunfermline Burgh and the Admiralty. A public utility society was to be formed to build 3,000 houses over 6 years at a cost of one million pounds. It was later unveiled as the Scottish National Housing Company. Dunfermline Burgh held the majority of the shares in the company but a small proportion was held by private individuals. 90% of the funds for building operations were loaned by LGBS. This was a considerable increase on the 1909 Act limit of loans up to two-thirds of the cost.

In fact the company completed 1,872 houses between 1916 and 1919. The Burgh Council under the Housing Acts of 1919 and 1924 was able to complete the town and this was virtually achieved by 1930.

The SNHC initially built 150 houses in the triangle of land between Admiralty Road, Backmarsh Road and Queensferry Road. These were designed by Grieg and Fairbairn Architects of Edinburgh but the work was overseen by one of Unwin's pupils A. H. Mottram and many of the subsequent houses were designed by him. Mottram was later to become the first architect on the staff of SSHA.

The first houses were not liked initially by tenants because of awkward shaped rooms, small rooms and terraced houses with no rear access. There were also complaints of high rents. The houses were subsequently managed by SSHA who, in Tom Begg's 50 Special Years, claim that the houses are prized by residents and state that many have bought their homes.

Rosyth is a classic piece of garden city planning. It has short often curved streets, its landscaping has matured and the town is well provided with shops, churches, schools and social facilities.

The influence of Unwin, the designer of Letchworth and architectural advisor of the Tudor Walter Committee, can be seen at Rosyth.

Ebenzer Howard's diagrammatic plan (Fig 1.16) shows an idealised plan with a circular central park surround with houses and gardens, a grand avenue and further houses and gardens in concentric circles and surrounded by a circular railway which links the satellite onto a main line railway. Boulevards radiate out from the centre of Central Park. This town for a population of 32,000 is an idealised plan resembling an atomic diagram or solar system.

Letchworth and Rosyth are not idealised diagrams as can be seen in the 1917 plan by Mottram. Like Letchworth the residential roads are designed with both regular and irregular form but always to discourage non residential traffic from crossing the residential areas. (Fig 1.18) This principle was later to feature in the Tudor Walters report. (Fig 1.08)

Today the houses are well maintained and the gardens well tended. The houses have clearly been well managed by SSHA and appreciated by tenants who are now in some cases owners. The houses are no longer finished in grey render but painted a variety of pastel colours. The

Rosyth houses, particularly the first phase, have been designed to give variety and are designed in a style which is more Southern English than Scottish in form but instead of thatch and tile it is slate and tile on the roofs with harled walls rather than brick walls and half timbered gables. The most obvious example of this is the corbelled out first floor bedroom gables which are clearly half timbered house in form but are finished in plain harl. (Fig 1.19 and 1.20)

The Government had built specialist housing before Rosyth, such as housing for lighthouse keepers, but Rosyth was Britain's first Central Government funded public housing. It is also one of its most successful. Architecturally its main quality is that it is picturesque. In Fife it ceased to be Tintown and became known as Dollytown.

To the west of Rosyth is the small village of Crombie where there is a group of slate roofed houses some with coursed rubble stone walls, others with harled walls. These are houses built for the manager and workers at the Munitions Dump. Unlike Rosyth which is a planned town Crombie is an isolated group of houses built with no facilities. The only facility today is a timber hut shop. Many of the houses have now been sold and residents are campaigning for the District Council to build a community hall. (Fig 1.21)

Wartime Industry

War time created demands for public housing which could not wait for private enterprise to meet. The Local Government Board Scotland and the Ministry of Munitions were involved directly or indirectly through Local Authorities in the provision of housing for government employees at Greenock, Rosyth and Invergordon and for employees of private industry engaged on munitions and other war related industries.

Housing at Greenock/Gourock (200 houses) was by the LGBS, at Rosyth (1872 houses), it was the Scottish National Housing Company Ltd and at Invergordon, where the Navy used the natural harbour of the Cromarty Firth, LGBS built 126 houses.

2,200 houses were built by or on behalf of the Ministry of Munitions for employees of private industry engaged in munitions production. "These schemes were mainly in the West of Scotland, associated with the expanding steel industry in areas where housing conditions were notoriously bad, as in the landward districts of Lanark and Ayrshire and with shipbuilding at Clydebank, but other schemes supported industries quite new to Scotland such as aircraft manufacture at Inchinnan in Renfrew and at Alexandria". (23)

Gretna New Town

Slow production of Cordite the principal propellant caused great problems for munitions supply in the first years of the war. Cordite MD required acetone much of which had to be imported from America. In addition the Royal Ordnance Factory at Waltham Abbey was old and unsuitable for expansion. By 1915 a new form of Cordite, Cordite RDB, was developed which used ether and alcohol both of which could be produced in Britain. In May the Government recommended a new factory be built in an isolated area with an enormous supply of water, good communications and secure from attack. Gretna was chosen as the site for the New Town to house construction workers and employees of the new factory. The land area required for the factories stretched across the border into England with factories being built from Dornock in the West to the Magazine area near Longtown. The area was served by both

,the Caledonian and North British Railways. There were land purchase problems to overcome but by August 1915 work had started on site. The first Cordite RDB reached France a year later and by the end of the war the factory was producing 57,000 tons a year well over its planned target of 40,000 tons.

Raymond Unwin 'the chief town planning expert' of the Local Government Board was borrowed to plan the township. There was considerable debate on the permanency of the development with the Treasury favouring temporary buildings while the Explosives division favoured permanent buildings.

In the end scarcity of timber forced the ministry to build all of the houses on the northern end of the town and almost all of the public and community buildings of permanent materials, mainly brick and slate. The temporary buildings were timber huts and were built to the east, south and west of the centre.

Gretna was like Rosyth laid out on Garden City principles. The centre was formally planned and as at Letchworth, Central Avenue was a twin carriageway with trees in the central reservation. During the war the centre reservation accommodated a railway running along it. This feature also appears on the Rosyth Plan where King Street is shown with twin carriageways with a tramway running down the centre from Dunfermline to the Dockyards. Gretna was planned and built with shops, banks, a school, community halls, churches and a cinema.

The brick built northern end of the town is laid out, as at Rosyth and Letchworth, with the residential roads curving and twisting to give informality and to discourage non-residential traffic. The area to the south built of temporary timber huts is laid out on a grid.

The grid was used for the temporary area presumably as a simple method of laying out a large number of temporary huts as efficiently and cheaply as possible. The huts unlike the brick houses were not laid out along the road frontage but at right angles to the north south roads and accessed by footpaths. (Fig 1.22) Although this was the temporary area and even though most of huts have now gone subsequent house building has retained the grid road pattern.

Eastriggs though smaller had proportionally more permanent houses which with shops and public buildings were grouped around an open space like a village green.

Housing was semi-detached or terraces of four, also two storey brick hostels were built which could be converted to cottages later. (Fig 1.23) Advances were made in servicing. Electric lighting was provided in the streets and to all houses and public buildings. A more economic drainage system was introduced whereby a number of houses shared a common drain and disconnecting trap instead of being connected separately to the sewer. This was to become common practice in Local Authority housing until "the right to buy" when Local Authorities reverted back to separate connections within the feu of a potential house sale.

After the war there was the question of Gretna's future. Advocates of the garden cities like Ebenezer Howard and Frederic Osborn argued that Gretna should be used as a spearhead in the drive to build new towns. Reports of the reconstruction committees had stated that there was a need for up to a million new homes. Osborn in particular worked hard on members of Neville Chamberlain's committee investigating slum housing. Their interim report

recommended that Government give support for decentralising population from slum areas into garden cities.

A Committee of Inquiry investigated the future of the Cordite factory. With the exception of the MP on the committee, all of the committee agreed that Gretna should replace Waltham Abbey as the main source of Cordite in case of any future war. Gretna was modern and more economic than Waltham which was old and had limited capacity.

Gretna had the capacity to supply both the Army and Navy's Cordite needs. Gretna won the rational argument but lost when the political decision was made. The Navy would not agree to close their own Cordite factory at Holten Heath and obtain their Cordite from Gretna. Nobel, the explosive manufacturer, argued that the trade (private industry) could provide Cordite cheaper. Waltham had engineered a protest meeting at Trafalgar Square. At Gretna people called for a "square deal" but in the end after lengthy political prevarication and run down of the workforce at Gretna, the political decision was taken to close the factory and to sell off government assets; factories, shops, houses and huts. By 1920 production of Cordite ceased. It was not until July 1924 that the sale took place. It was reported in the Dumfries and Galloway Standard that the sale had been a dismal failure.

Hopes were raised that the new Labour Government would halt the sales as Government land and assets were being sold. A mass meeting was held at Gretna. Why, it was asked, was land being sold to the original owners for less than half the sum the government had paid? Despite a Cabinet decision on the 30 July to halt sales, in fact the sales continued.

Minett concluding his article on Gretna in Scottish Housing in the Twentieth Century includes a quotation from a war time description by Sir Robert Lorimer.

The sane and extremely simple type of permanent house that was erected shows what a far road has been travelled since the days of the first cheap cottage exhibition at Letchworth, where the plain man went about tearing his hair in the hopeless endeavour to find here and there a cottage the designer of which showed the most rudimentary elements of common sense. Here all was plain and straight forward, of pleasant and reasonable proportion and mercifully devoid of ornament or prettinessThe admirer of the Kate Greenaway type of garden city house doubtless found the Gretna variety too reminiscent of what Morris called the 'brick box with a slate lid', but these houses had to be rattled up at a tremendous pace, and a plain roof in which there are neither dormers nor gables is obviously cheaper and more rapidly constructed and slated than one that is cut up by features". (24)

Lorimer's praise for the plain box devoid of ornament and dormers is interesting. Lorimer's own houses designed mainly for wealthy clients are compositions of wall and roof planes with gables, chimneys and dormers with their richness often coming from the detailing. Here Lorimer is advocating the simple economic box for low cost housing.

Unfortunately, while the cost advantages of the simple box were seized upon in council house design, the lack of understanding of the value of detailing, proportion and grouping of houses is evident in the vast majority of council housing in the inter war period, where semi detached and four in a block houses were arrayed along straight standard width roads.

ARCHITECTURAL COMPETITION

This competition was authorised by the Local Government Board for Scotland and promoted by the Institute of Scottish Architects (now the RIAS).

The competition was announced by a Memorandum in 1918. This referred to the Local Government Board for Scotland circular of 18th March, 1918 which had set out the nature and extent of the financial assistance which the Government proposed to give Local Authorities for the provision of houses for the working classes.

The Memorandum included illustrations of layouts and house types already built by the Board's staff during the previous three years on behalf of the Admiralty and the Ministry of Munitions. The illustrated housing layouts follow similar garden city principles to those of Raymond Unwin but were, of course, built prior to these principles being set out in the Tudor Walters report of 1918. Three layouts are illustrated. Glengarnock is a symmetrical layout on a flat site with a central open space. Cambuslang has small groups of houses in a series of culs-de-sac radiating from a central open space and at Gourrock the houses, built on the side of the hill, follow the contours of the land. (Fig. 1.24)

House types all show English Arts and Crafts styling, popular in the Garden City movement. Six house types are illustrated. Type A is a 2/3 bedroom, 3/4 apartment with a bathroom off the scullery. Type B is 2/3 bedroom, both 4 apartment but with the bathroom off the hall. Type C is 3 bedroom, 5 apartment with scullery and bathroom off the hall. Type D is a 4 in a block flatted house with two bedrooms, livingroom, scullery and bathroom. Types E and F are single storey cottages of 2 and 3 bedrooms. (Figs. 1.25, 1.26)

The Memorandum also includes illustrations of houses built at Gourrock some of which show a strong resemblance to early houses built at Rosyth. (Fig. 1.27)

The Memorandum announced that the Board, in consultation with the Institute of Scottish Architects, had arranged to promote an open competition among architects. Designs were invited for layout plans and plans of various types of houses and it stated that an approved panel of architects would be selected from which local authorities may appoint an architect to advise and assist them in carrying out their schemes. The Memorandum then sets out advice to local authorities on choice of site, layout of site and design of house types. This is not the competition brief but sets out the features considered desirable by the Board.

Livingroom or kitchen should be preferably given a south-east to south-west aspect. The room should be as large as possible with the fireplace at right angles to the windows and should have the fireplace sited away from through circulation. If the room was to be used for cooking, a range was to be provided with a boiler for hot water supply. Even with the range, it was preferable to have provision for a gas cooker in the scullery. (The term kitchen here refers to the old livingroom/kitchen in which the family lived, dined and cooked).

The scullery was where all the household dirty work might be carried out such as washing clothes and as stated above could also be the cooking area. Provision was to be made for hot and cold water to the sink and tub. (The scullery when also used for cooking is the modern kitchen/laundry).

The parlour, where provided, was as the livingroom to have space around the fireplace free for sitting and should not be a sunless room but could face west.

The bathroom was to be a separate apartment, the access to which was desirable off a passage and not through the livingroom or scullery, although the Board's own illustrated house types A and F had accessed the bathroom off the scullery.

The bedrooms it stated should have a minimum of 500 cubic feet for an adult and 250 cubic feet for a child under 10 years. No bedroom should have an area of less than 80 square feet (7.43m²). Coom ceilings were to be reduced to a minimum, although most of their own illustrated house types had coom ceilings. Where possible a press for hanging clothes should be provided in each bedroom.

The most interesting and illuminating statement in the Memorandum is where it states "The largest bedroom should be capable of accommodating two adults and two children".⁽²⁵⁾ Further insight into this is provided by the competition designs which show a double bed and bed or cot in the largest bedroom and sometimes also in the second bedroom.

The minimum number of cubic feet of 500 for an adult and 250 for a child gives 1500 for two adults and two children which, with an eight foot ceiling (2.4m), would require a floor area of 187.5 square feet (17.4m²). The floor area could decrease if a higher ceiling height was provided but would need to increase if coom ceilings were used.

Built to these standards, the largest bedroom would be over 50% greater than the 120 square feet double bedroom of the 1963 Building Standards (Scotland) Regulations. They are, however, very similar in terms of cubic capacity per person, as the 1963 bedroom was intended for two adults.

It is, therefore, wrong to view the 1500 cubic feet (187.5 square feet) bedroom described here as more generous than the bedrooms of the 1963 Regulations or Bulletin 1, 1969. These early larger local authority houses were capable of accommodating larger households which are less common at the end of the 20th century. Nevertheless, as a legacy these large roomed three bedroom houses with livingroom and possibly a parlour give generous accommodation. Using the SHH1 1977 "bedroom standard", it could be allocated to a couple with a boy and girl over ten years of age.⁽²⁶⁾

The results of the competition were published in 1919 by the Local Government Board.

The object of the competition was "first" to establish a panel of architects from which local authorities would be able to choose an architect and second to have prepared specimen plans of various types of houses and modes of development which would be available to local authorities for their guidance in consideration of their schemes".⁽²⁷⁾

The competition had three sections.

Section 1 for two storey cottages and flatted houses required a layout and four house types.

- A. Livingroom, scullery and three bedrooms no more than 17 feet (5.2m) between party walls plus an alternative wide frontage design with a through livingroom suitable for use on north frontages.
- B. Livingroom, scullery and three bedrooms one of which was to be on the ground floor and suitable for use as a parlour.
- C. Livingroom, scullery, parlour and three bedrooms.
- D. Livingroom, scullery and two or three bedrooms in two storey flatted form.

Types A, B and C were to be designed in pairs not more than eight in a block, one of the blocks to have a through pend. Type D was to be four in a block.

Section 2 for three storey tenement houses, required a layout and two house types with livingroom, scullery and one with two and the other with three bedrooms. The maximum number of houses in each block was to be 12 with the stair serving no more than two houses per floor.

Section 3 was for the design of a cottage of one storey containing livingroom, scullery and two bedrooms.

In all house types the bath was to be in a separate apartment which may contain the WC and the apartment should be preferably entered from a passage or landing.

The principal bedroom was not to be less than 160 square feet and the smallest bedroom not less than 70 square feet. (It is worth noting that the cubic capacity of a 160 square foot bedroom would, under the rules noted above in the 1918 Memorandum, likely be able to accommodate two adults plus one child).

Ceiling heights were prescribed for house types A, B and C of Section 1 as 8 feet 6 inches at ground floor and 8 feet at first floor. Type D ceiling heights were to be 8 feet 6 inches as were the ceilings in Section 3. In Section 2 ceiling heights were to be 9 feet.

In the interest of economy breaks in the main walls were to be avoided and coom ceilings used sparingly. Ceiling heights were to be no less than 5 foot and no less than two-thirds of the floor area of any room was to be 8 feet high.

Density was to be ten per acre for two storey cottages, fourteen per acre for flatted houses and twenty-four per acre for tenement houses.

Not issued as part of the above brief but included for future reference by local authorities the Board listed the minimum floor areas in all classes of houses as follows:-

| | <u>ft²</u> | <u>m²</u> |
|-------------|-----------------------|----------------------|
| Livingroom | 180 | (16.7) |
| Parlour | 120 | (11.0) |
| Scullery | 80 | (7.5) |
| 1st Bedroom | 160 | (15.0) |
| 2nd Bedroom | 120 | (11.0) |
| 3rd Bedroom | 80 | (7.5) |

The winner of the Section 1 prize of £125 was Miss E. D. Blacker and Mr. H. Heathman of Bristol. (Fig. 1.28) The layout is frontage development to curving roads within the site. Houses are semi-detached with terraces of four or eight in a block. A few of the houses are grouped in small courts off the frontage giving variety but not increasing the number of houses on the road frontage. The house types, as with all those featured, keep circulation to a minimum. Bedrooms vary in size from 70 to 180 square feet. The style of the houses is English traditional which is not surprising as the winners were from Bristol. However, while all the entries are traditional in style and while with the exception of one practice from London, all the other winners were from Scotland, none of the entries are recognisably Scottish in style.

Second prize in Section 1 was shared between J. A. Arnott and Burnett N.H. Orphoot, Edinburgh and John . W. Grant, Edinburgh. Both are classically proportioned symmetrical designs. (Fig. 1.29)

The design of the competition which is most recognisable as a house design built throughout Scotland by local authorities from 1919 until the 1950's is the Type B by Greig and Fairbairn of Edinburgh, architects for Phase 1 Rosyth. This design which was awarded a premium of £20 is a semi-detached four apartment with a double gable to the front. It is Arts and Crafts in style but so typifies Scottish local authority cottage architecture that it could claim to have become part of Scottish traditional architecture. It is an extremely economical plan using the livingroom as circulation through to the scullery while keeping the circulation route away from the hearth. (Fig. 1.30)

Another firm which was awarded a premium, in this case £15, was Muirhead and Rutherford of Dunfermline whose Type C five apartment house has generous room sizes. Livingroom and main bedroom have 186 square feet (17.3m²). The livingroom is not used for through circulation and while the circulation is compact spaces are generous. Rooms are shown with their furniture layout and the main bedroom is shown accommodating a double bed plus cot. The bathroom has bath and w.h.b.. A separate compartment is provided for the W.C. (Fig. 1.30)

The first prize of £100 in Section 2 for design and layout of tenement houses went to John Arthur of Glasgow. The design is vaguely Arts and Crafts in style more noticeable on the rear elevation. The blocks are three storey in height but the use of the mansard roof and gable at the ends of the block makes the two storey eaves dominate the elevation. The two bedroom house type is located in the centre of the block with the three bedroom house type on the gable

ends. The stair runs along the rear external wall giving a well lit stair and landing. A small point of detail worth noting is that there is no front door provided to the close. Whereas there is variety of form on the tenement block itself the layout simply lays out these blocks in long rows with no attempt made to form a street elevation on the cross streets at each end nor is there any variety or shape to the streets. (Fig. 1.31)

In contrast, John A. W. Grant of Edinburgh was awarded a £10 premium for a layout which provided a variety of enclosure and a central open space. The tenements themselves are simple well-proportioned rectangular blocks with bay windows to livingrooms and a more traditional tenement dog leg stair is provided at the rear of the block. The common stair close front entrance is well articulated on the elevation and is provided with a panelled front door giving privacy and security. In the block of twelve flats, only four have three bedrooms, the remaining eight having two bedrooms. The third bedroom is provided at first and second floor level by utilising the additional space taken up at ground floor level by the entrance close. (Fig. 1.32)

Section 3, the rural cottage, was also won by John Arthur of Glasgow. The informal design suggests an extended cottage with the main roof volume over the livingroom and two bedrooms. The scullery roof is a lower "side extension" to the main form with the porch and bathroom accommodated in a lean-to roof to the front. While almost all roofs in the competition were hipped this design has side gables.

The other designs featured in the rural cottage section all have hipped roofs. Two of the designs by Stewart and Patterson of Glasgow and J.A. Arnott and Burnett and N.H. Orphoot, Edinburgh are economical small rectangular plans. They have a typical "bungalow" plan form with a room (livingroom, scullery and two bedrooms) in each corner with central entrance lobby and bathroom. (Fig. 1.33)

There is also an "L" plan form by Muirhead and Rutherford of Dunfermline designed with the entrance in the south facing internal angle. Cullen, Lochhead and Brown of Hamilton also proposed an "L" plan but here the entrance is on the face of the projection. The cottages are designed to be built semi-detached and have been elevated to give a single storey double gable on the front elevation as featured on Greig and Fairbairn's two storey cottage in Section 1.

SUMMARY 1900 TO 1919

19th Century Legacy

Poor housing conditions had existed in Scotland prior to the 19th century but it was the rapid industrialisation of the 19th century which exacerbated overcrowding and unsanitary conditions in towns and cities. Central Government passed Acts dealing with public health requiring local boards to appoint sanitary inspectors and medical officers of health and Acts giving Local Authorities power to remove overcrowded and unsanitary houses.

Central Government had passed an Act as early as 1866 permitting Local Authorities to build houses for the working classes and providing loans for that purpose. No subsidy was provided, therefore any shortfall in the rents covering the loan had to be paid out of the rates. The consequence of this and local political resistance to increases in the rates was that very little Local Authority housing was built during this period.

Early 20th Century

There was also very little private speculative rental housing built during the early 20th century as speculators were nervous of the rising building costs and although Local Authorities' involvement in producing rental housing was small it was another factor which made speculators wary.

The Burgh Police Act 1903

This Act required a minimum street width of sixty feet. The 1906 tenements at Kennyhill in Glasgow comply with this requirement. They were built as parallel terraces open at each end not as "hollow" squares. The 1903 Act required that hollow squares of development be provided with 15'0" (4.5m) ventilation gaps in the frontage above 15'0" from the ground.

The Housing Town Planning, etc. Act 1909

The 1909 Act allowed Local Authorities to extend their municipal boundaries for the purpose of housing and enabled town planning schemes to be drawn up. In 1912 Dunfermline Burgh appointed J. E. Wilkes and two assistants to prepare a town plan for Rosyth.

The power to carry out improvement schemes and demolish and build housing for the working classes was given to burghs and districts. Previously districts had to apply to adopt these powers now they were given the powers as if they had applied.

Section 43 of the Act prohibited the erection of back to back houses unless the Medical Officer of Health certified that the houses were constructed to secure adequate ventilation of all habitable rooms. The 1860 Model Edinburgh tenement which had flats built back to back contravened this Act. The 1906 Kennyhill tenements with a single end backing onto the stair had poor through ventilation. The later Kennyhill tenements built in 1920 are built two to a stair and the flats have through ventilation.

The Royal Commission on the Housing of the Industrial Population of Scotland

The Royal Commission found that Scotland required 121,430 additional houses plus a further 114,560 houses to replace 50% of the one and two roomed houses which were seriously overcrowded. The Government accepted that Scotland had a disproportionate need and that while England and Wales required 200,000 houses Scotland's requirements were 120,000 houses and almost double that if standards of habitability were to be raised. Given that at the 1911 Census Scotland's population was only $\frac{2}{13}$ of that of England and Wales, the scale of the housing problem was of a different order from that of England and Wales

The Commission's most far reaching recommendation was that housing of the working classes was Central Government's financial responsibility with the necessary houses being provided through the Local Authorities. They were unable to recommend subsidising private individuals as they were concerned that the subsidy would become enhanced profit for the developer.

They had noted the low cost of self build crofts (£40/croft) but made no recommendations that self build should be supported as a method of providing housing. This was perhaps a missed

opportunity, since, as will be seen later, Local Authority housing in rural areas required additional subsidy due to higher costs. It would have been worth supporting and encouraging the expansion of the crofting tradition of self build at least on a trial basis as one method of solving the rural housing problem.

The Commission reported favourably on Public Utility and Co-partnership schemes such as Westerton in Glasgow and recommended that they should be encouraged and that Local Authorities should be empowered to grant loans in addition to the loans from the Public Works Loan Board who could at that time grant loans up to two thirds of the value of houses erected. Unfortunately this recommendation in the body of the report is not repeated in the summary recommendations. The reason for this is not known but it may be that the Commission's comment that "the projects such as at Westerton were small and that their financial viability was not proven" is the reason for the omission in the final recommendations.

The other factor which may have persuaded Government to pursue direct involvement and involvement through Local Authorities was the experience at Greenock and Gourock where private enterprise failed to meet the incoming workers demand for housing and where the Garden Suburb Co-Partnerships produced very little with the result that the Government was forced to fund the provision of housing through the Local Government Board for Scotland (L.G.B.S.) Rosyth was, like the L.G.B.S. houses above, only starting as the Commission published its report and although the Scottish National Housing Company (S.N.H.C.) was a Public Utility it was 90% funded by loans from the L.G.B.S.

Experience at Greenock, Gourock and Rosyth had shown that, where a rapid response was required to provide large numbers of houses for rent, L.G.B.S. funding of S.N.H.C. provision achieved results where private developers and Co-Partnerships had failed. Unfortunately what was not tried was funding Co-Partnerships at the level of loan provision given to the S.N.H.C. at Rosyth.

Whatever the reason, it was the recommendation that Central Government fund housing for the working classes through Local Authorities that became Government Policy.

The Commission favoured the provision of cottages rather than tenements but where tenements were to be built they were to be no more than three storey high and not to be built in hollow squares but preferably in detached blocks or separate pavilions. The reason for this was to avoid the lack of through flow of air which occurred in dense high hollow squares of tenement construction.

The Commission noted the Burgh Police (Scotland) Act of 1903 required a minimum street width of 60' with the maximum height of buildings $1\frac{1}{4}$ times the height of the street and that the Edinburgh Local Act of 1906 reduced the maximum height to be equal to the width of the street. Its own recommendation was that Local Authorities should have the power to control the height and character of any building in a street. (The Tudor-Walter Committee was to recommend a minimum street width of 70 feet (21.4m)).

The Commission also recommended densities of housing development of 36, 24 and 16 houses/acre for tenements, flatted houses and cottages respectively.

The Commissions recommendations were a reaction to the airless, unhealthy conditions which existed on over-developed closely packed tenements or backland development. It failed to distinguish between the airless back courts of the poorest tenements and the perfectly adequate hollow square developments of the better tenements which had a spacious back courts giving shelter and security to tenants and their gardens. The blame, for much of the monotonous later development consisting of streets of uniform width with uniform height three storey tenement developments with broken facades through which the wind was funnelled, lies with the unquestioning acceptance of this recommendation and perhaps that the recommendation that it "should" came to be read as "shall" by unquestioning designers.

The application of the detached pavilion form to one and two storey cottages, which was not part of the Commission's recommendations, frequently resulted in building extensions or infill development in villages which were out of character. Two storey semi detached cottages set back from the road did not blend well with one and two storey traditional terraced houses built hard to the footpath.

The other architectural problem with the Commission's recommendations is the recommended ceiling heights.

The recommended minimum ceiling height for tenements was 9' 6" (2.9m) for the ground floor and 9' 0" (2.74m) for other floors. This was the same ceiling height which applied under the Burgh Police Act of 1892. Where tenements were being built adjacent to existing tenements the architectural scale problem was not one of these heights being too large but one of cost if adjacent buildings had greater floor to ceiling heights and the designer desired to match the storey heights of adjacent buildings.

In the case of the cottages the recommendations were for heights of 8' 6" (2.6m) on the ground floor and 8' 0" (2.4m) over 50% of the room and no ceiling height to be less than 5' 0" (1.5m).

The minimum ground floor ceiling height of 8' 6" (2.6m) for cottages did give problems of architectural scale when development was placed adjacent to traditional houses with a lower ceiling height and where the traditional development had a low ground to floor size whereas the new cottages had raised ground floors to accommodate good under floor ventilation.

The problem with the height recommendations is that they came to be adopted without question whereas a more flexible approach increasing or decreasing ceiling height to suit individual circumstances would have produced better architectural solutions. However, the house types shown in the Special Report for the Royal Commission illustrated how, with the use of coomb ceilings, variety of form and lower eaves heights could be achieved.

Tudor-Walters Report

The Tudor-Walters report on the other hand, while it rejected the tenement as a form of housing and concentrated entirely on low density (12 houses/acre) cottages with street frontage width a minimum of 70 feet, did recommend a more flexible approach to eaves heights and recognised the environmental enclosure value of continuity of frontage.

The recommended 70 ft minimum street width however made it difficult to create a variety of enclosure with the built form. Enclosure where it was created was by trees and hedges planted

within the street width rather than by the buildings themselves as in traditional towns and villages. Enclosure could be created with the curve of the road and variety by opening up the street with squares and crescents giving even greater spaces to be landscaped.

When put into practice the restriction of a minimum street width be it the 1903 Act 60' 0" or the Tudor-Walter 70' 0" was often to lead to monotonous streets of constant width between two storey houses.

The Tudor-Walters report's main areas of departure from the Royal Commission is that it stressed the importance of designing houses to give variety and to blend with neighbouring buildings. Therefore it made the case for cottages being designed to respect neighbouring eaves heights and the necessity of using the roof space to achieve this. It also argued for enclosure of street frontage by low roofed extensions linking houses together or screen walls to give protection against the wind which would otherwise create "violent draughts" through the gaps in the frontage. This is very much in opposition to the separate pavilion and discontinuous tenement frontage recommended by the Commission.

The report strongly advocated against reducing room sizes to make cost savings but instead recommended the use of culs de sac, narrow widths for minor housing roads and open front gardens as possible savings.

There is good architectural advice in the report which unfortunately was often neglected. The report's omission of any housing greater than two storey limits its value in Scotland to towns, villages and suburbs. The report's value to city centre and tenement style development is limited to its acceptance of the value in Scotland of creating large flats out of amalgamation of smaller flats.

Architectural Competition

The architectural competition of 1919 provided local authorities with a panel of architects from which they would be able to choose. It also provided them with specimen layouts and plans of various types of houses. Unlike the Tudor-Walters report the competition report to local authorities featured three storey tenement houses as well as two storey cottages and flatted houses and single storey cottages.

It also made recommendations on standards. Competition densities for two storey cottages, flatted house and tenement houses were 10, 14 and 24 houses per acre respectively. Ceiling heights were 9 feet for tenements, 8 feet 6 inches for ground floor and flatted rooms and 8 feet for first floor rooms of two storey cottages.

The Memorandum of 1918 announcing the competition stated that the largest bedroom should be capable of accommodating two adults and two children. It also stated that the minimum cubic feet which should be provided in a bedroom was 500 for an adult and 250 for a child. This requirement in a bedroom with an 8 foot ceiling would result in a minimum floor area of 187.5 square feet.

The brief for the competition required that the principal bedroom should not be less than 160 square feet and the smallest bedroom not less than 70 square feet.

This was further modified in advice to local authorities that minimum floor areas in all classes of houses should be

| | <u>ft²</u> | <u>m²</u> |
|-------------|-----------------------|----------------------|
| Livingroom | 180 | (16.7) |
| Parlour | 120 | (11.0) |
| Scullery | 80 | (7.5) |
| 1st Bedroom | 160 | (15.0) |
| 2nd Bedroom | 120 | (11.0) |
| 3rd Bedroom | 80 | (7.5) |

It is important to remember, however, that this generous floor area for the first bedroom was to accommodate a double bed plus cot or bed. If the 1,500 cubic feet was provided then the bedroom was considered capable of accommodating two adults and two children.

The designs submitted were all traditional in style but none were recognisably Scottish traditional: rather they were classical, Arts and Crafts or English traditional in elevational treatment. The plans were generally economical with compact circulation space often using the living areas as access to the scullery. Roofs were mainly hipped with a few gable end designs featured.

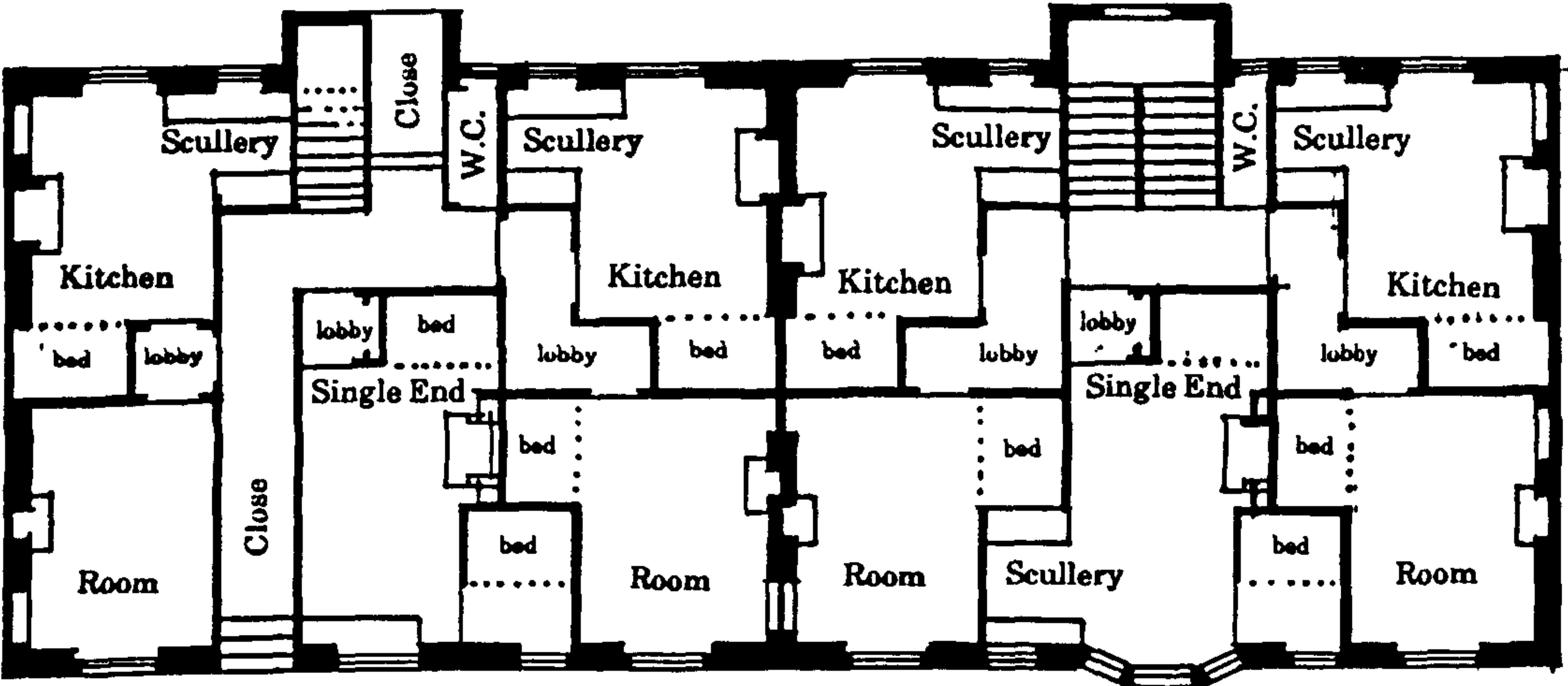
The design which is most recognisable as having been built throughout Scotland by local authorities is the Type B double gable fronted design by Greig and Fairbairn of Edinburgh. Its economical plan and attractive Arts and Crafts street elevation is presumably the reason for its popularity. Its distribution of rooms, two bedrooms and bathroom upstairs with scullery, livingroom and parlour/bedroom downstairs give a very flexible house giving either two public rooms on the ground floor or, with the parlour used as a bedroom, a room ideal for an elderly or infirm member of the family.

1900 - 1919 References

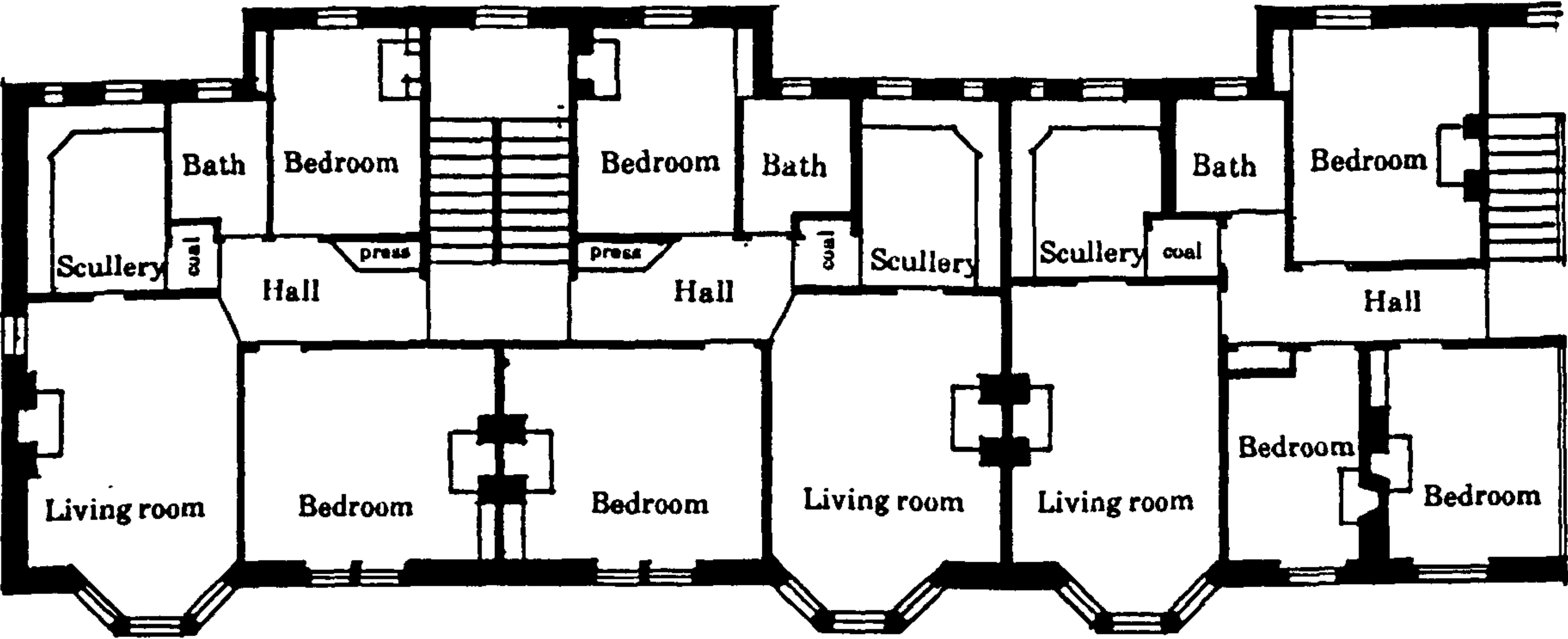
- (1) Roger, R. , Scottish Housing in the Twentieth Century, (Leicester, Leicester University Press, 1989), 214
- (2) Ibid, 31 - 36
- (3) Ibid, 101 - 102
- (4) Ibid, 238
- (5) Ibid, 238
- (6) Hellas, J. G., The Scottish Political System, 2nd Edition, (Cambridge University Press, 1975), 2
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- (9) Smout, op cit, 35
- (10) Smout, op cit, 53
- (11) Tudor-Walters, J., Questions of Building Construction in Connection with the provision of dwellings for the Working Classes in England and Wales, and Scotland, (London, HMSO, 1918), 24
- (12) Ibid, 80
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- (16) Ibid, 141
- (17) Ibid, 160
- (18) McKean, C., Walker, D., Walker, F.A., Central Glasgow, An Illustrated Architectural Guide, (Edinburgh, Mainstream, 1989), 178

- (19) RCAHMS, Dundee on Record, (HMSO, 1992) , 52
- (20) Roger, op cit, 91
- (21) Roger, op cit, 93
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- (24) Roger, op cit, 119
- (25) Provision of Houses for the Working Classes after the War, (Local Government Board for Scotland, Edinburgh, HMSO, 1918), 6
- (26) Scottish Housing Handbook 1, Assessing Housing Needs, a Manual of Guidance, (Scottish Development Department, Edinburgh, HMSO, 1977), 31
- (27) Housing of the Working Classes in Scotland, Selected plans and designs of some of the successful competitors in the Architectural Competition authorised by the Local Government Board for Scotland and promoted by the Institute of Scottish Architects, (Edinburgh, HMSO, 1919), 3

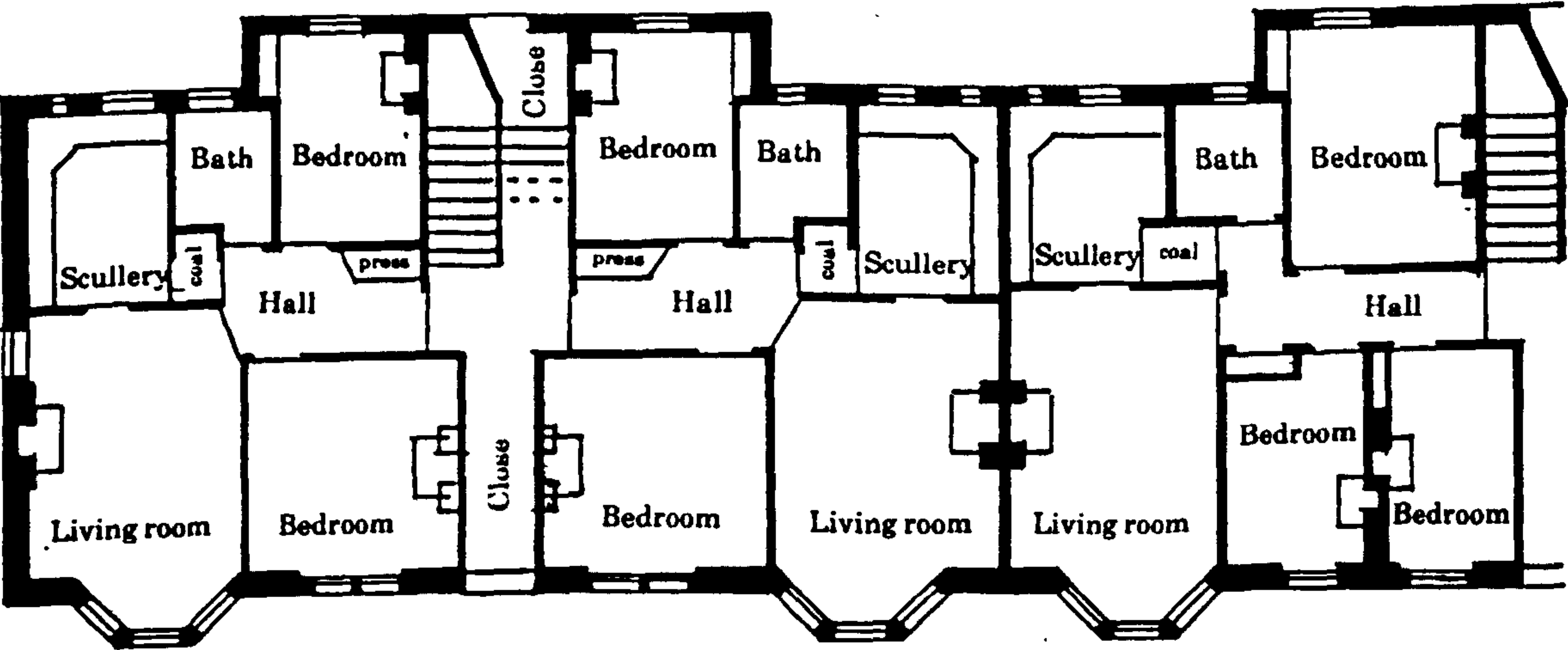
Early 20th Century Glasgow 3 storey tenements



Ground Floor Plan 1:200 Office of Public Works, Glasgow 1st and 2nd Floor Plan 1:200
 Kennyhill Tenements 1906 Two no. 2 room flats plus Single End on each floor, 1 W.C. each floor



1st and 2nd Floor Plan 1:200



Ground Floor Plan 1:200 Kennyhill Tenements
 1919 Two Flats, each with 3 apartments & kitchen and bathroom 4 apartment flat with kitchen and bathroom

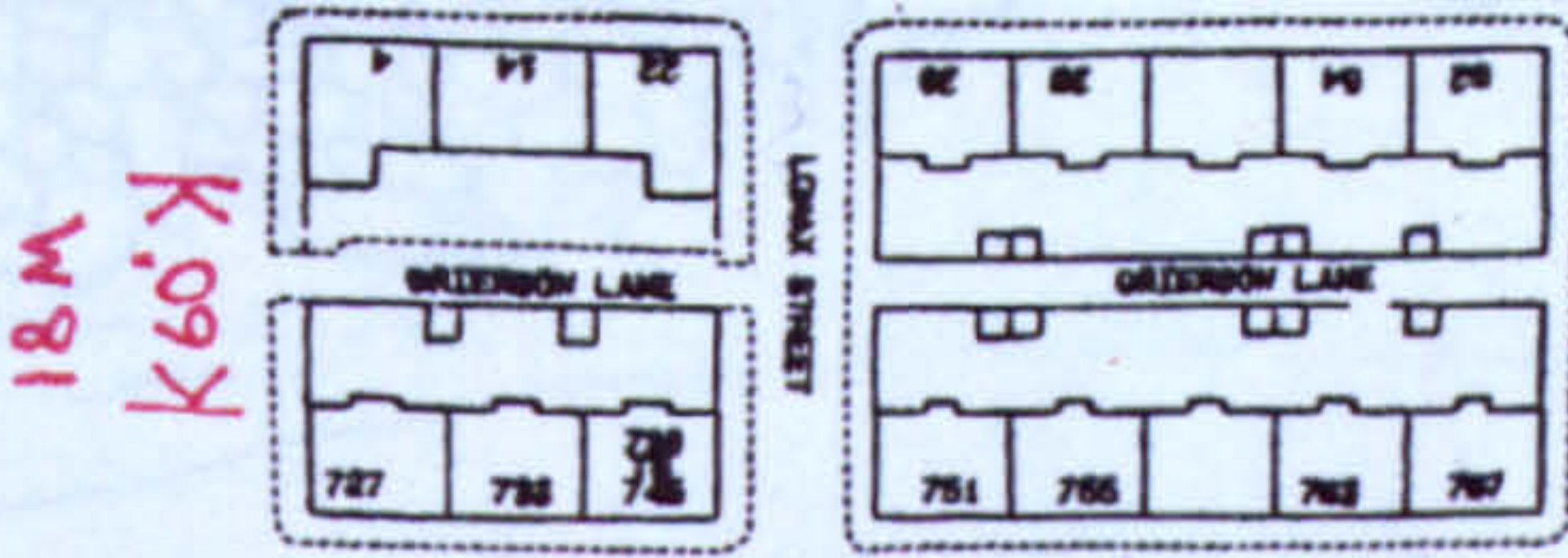
Red Sandstone faced 3 storey flats, Kennyhill
 Note the difference in standards between the 1906 tenements and the 1919 tenement built under the 1919 Addison Act.

Figure 1.01

Kennyhill Tenements, Glasgow 1906 and 1919

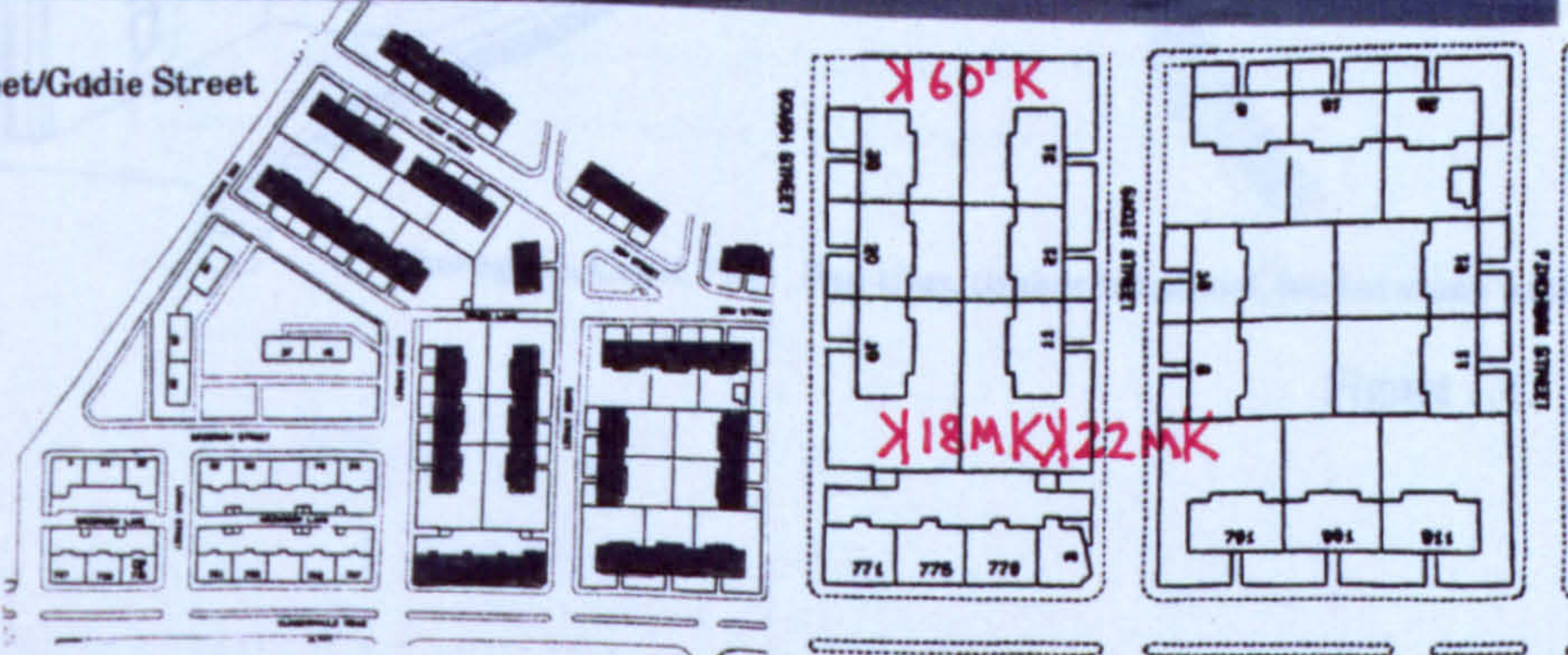


1906 Tenements - Grierson Lane, Cumbernauld Road, Glasgow
The 1906 layout complies with the 60' 0" (18m) minimum street width requirement of the Burgh Police Act 1903

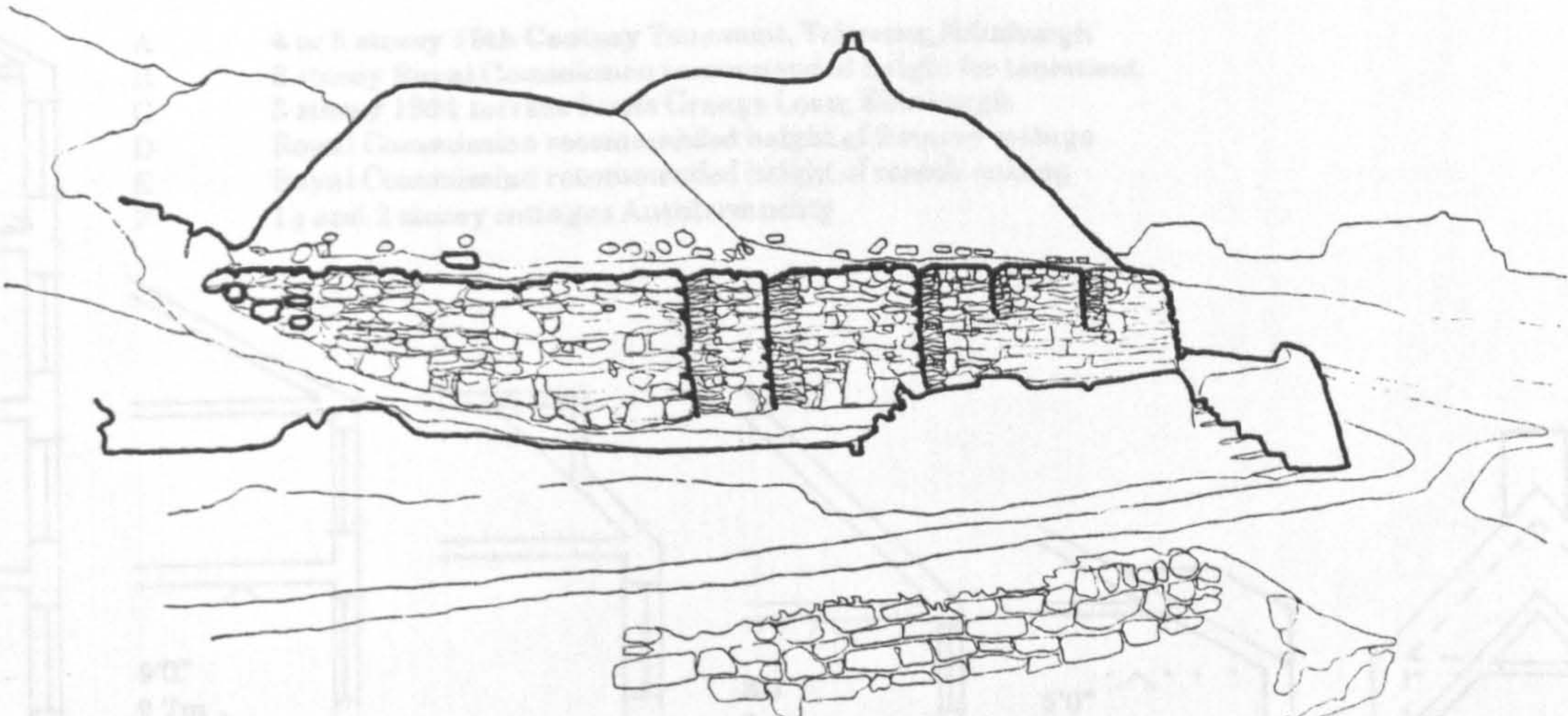


1919 Tenements - Gough Street/Gadie Street

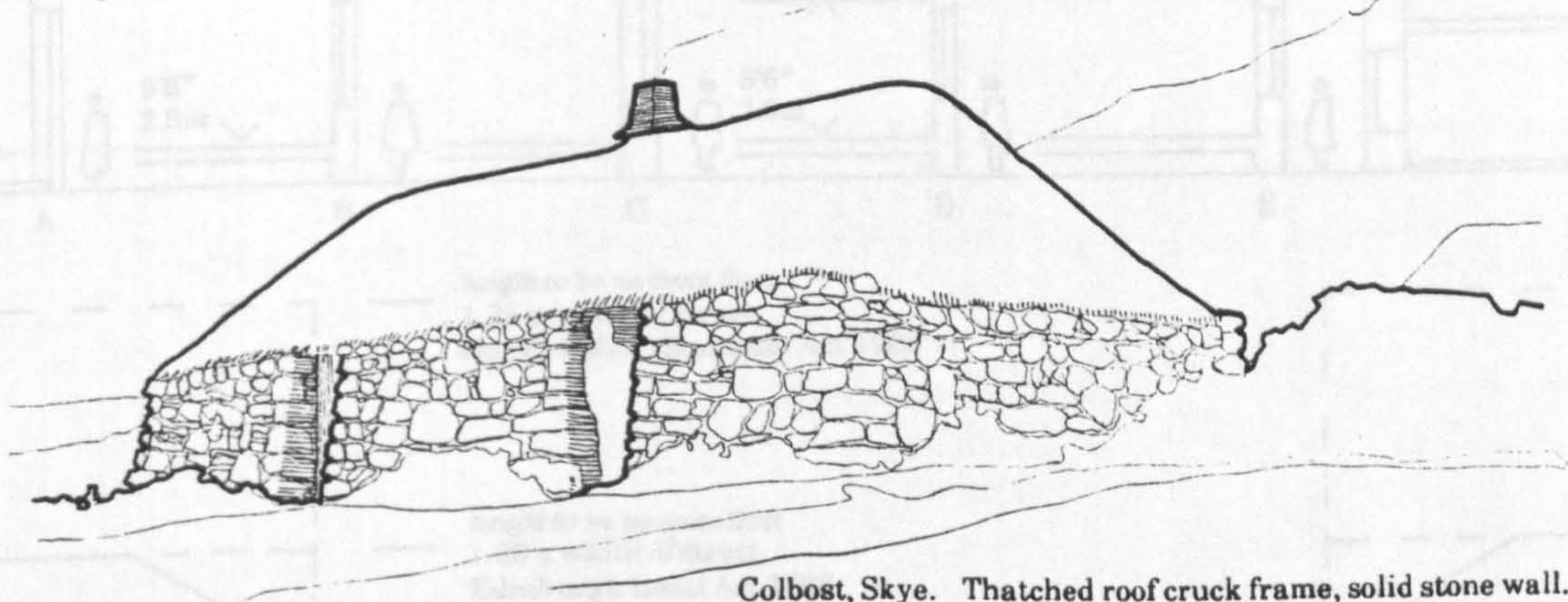
Figure 1.02



Sketches of Crofters' and Fishermen's Cottages



Loch Eport, North Uist. Thatched roof, stone cavity wall.



Colbost, Skye. Thatched roof cruck frame, solid stone wall.



Shoregate, Crail, Fife. Pan tiles, timber truss roof, harled stone wall.

Figure 1.03

Royal Commission Report Floor to Ceiling Heights & Street Widths

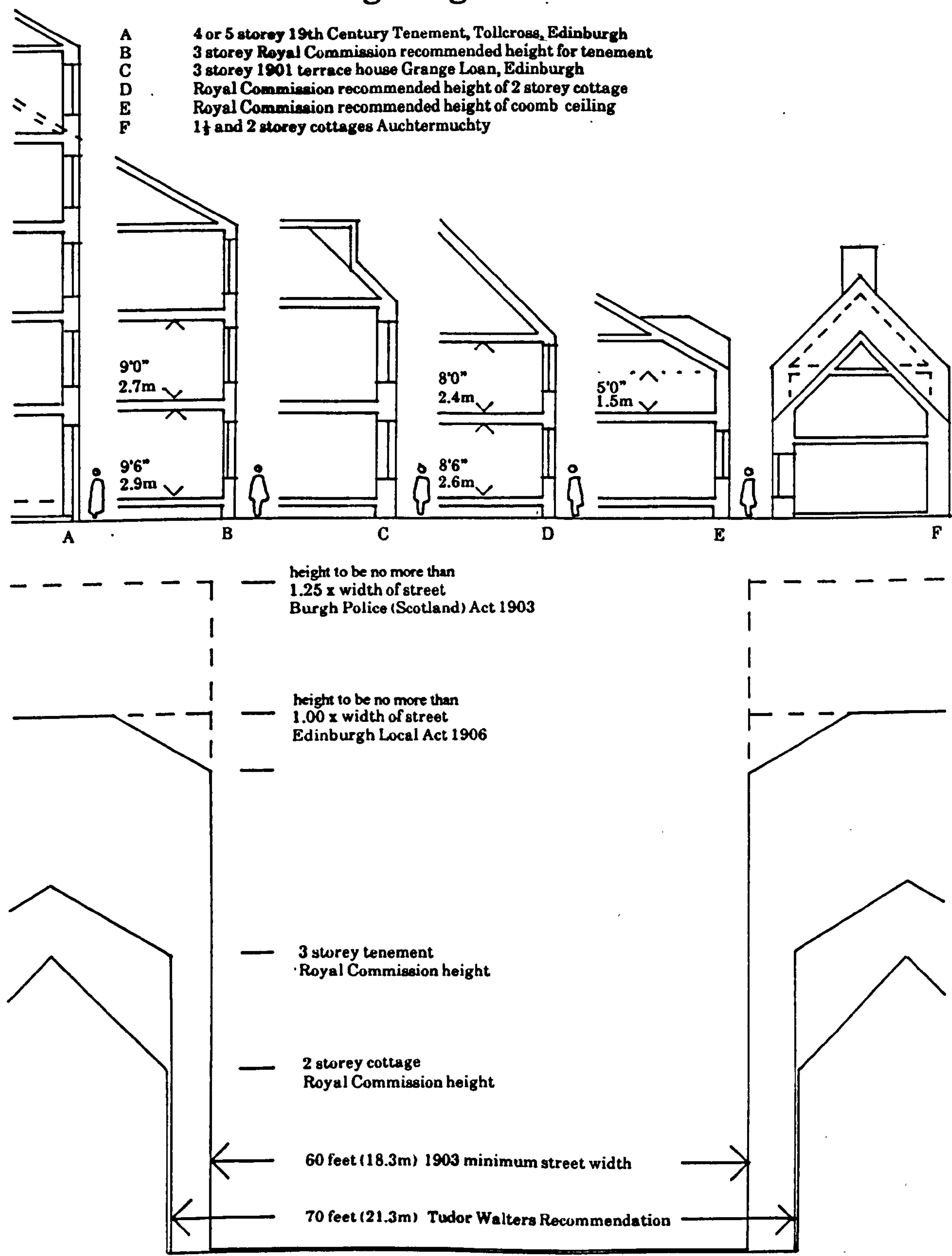


Figure 1.04

Royal Commission on Housing in Scotland 1917

Cottages

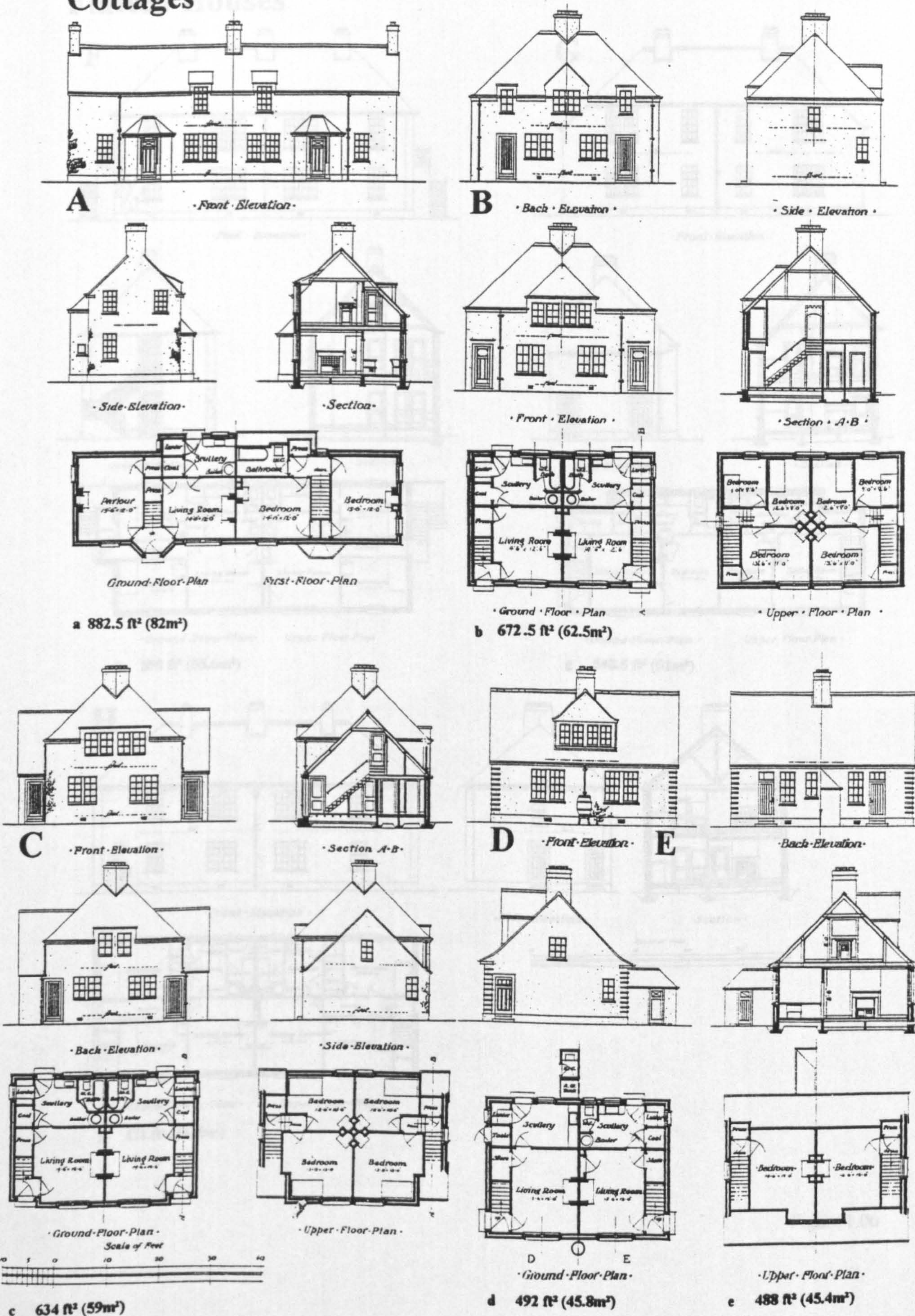


Figure 1.05

Royal Commission on Housing in Scotland 1917

Flatted Houses

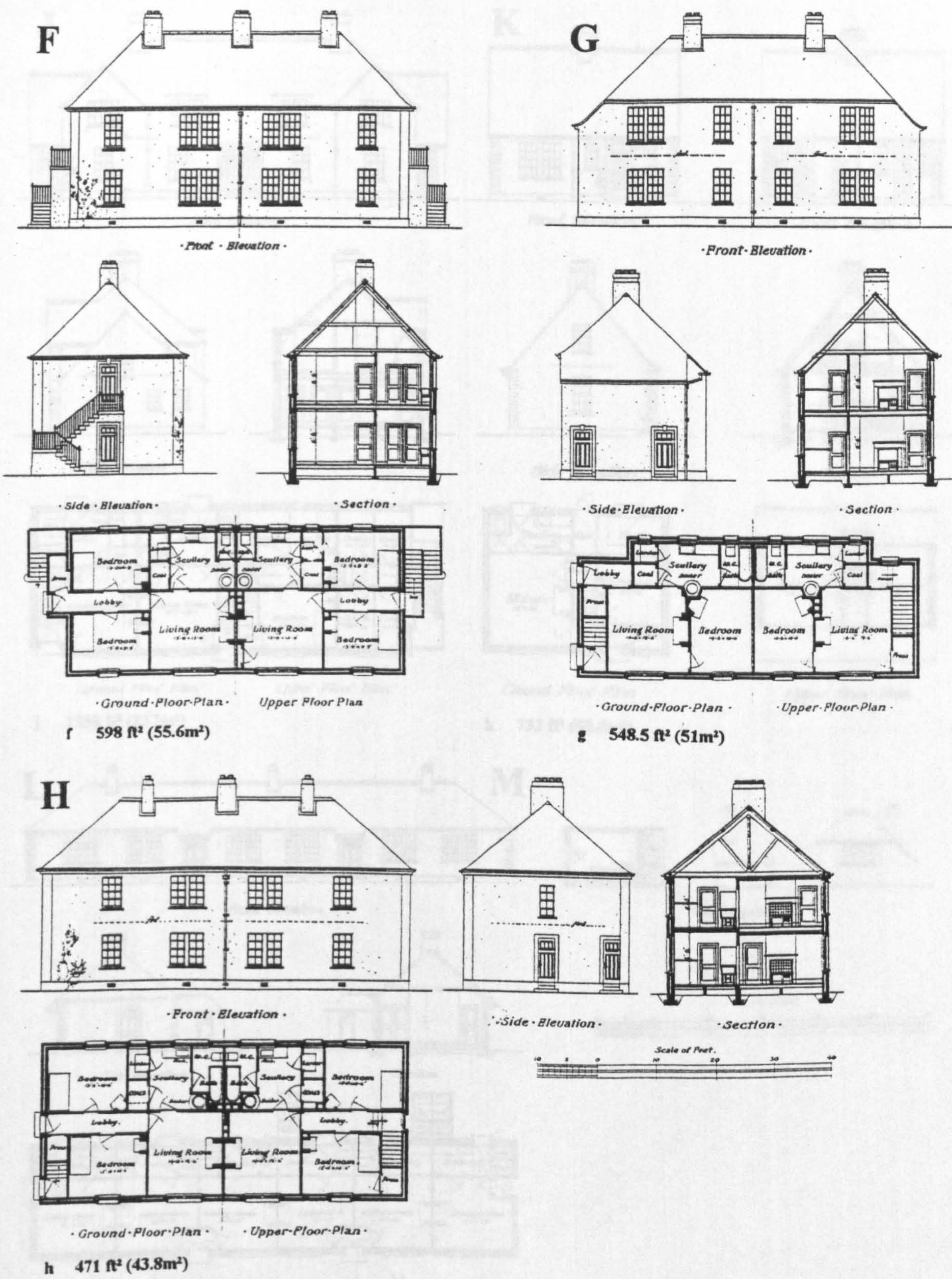


Figure 1.06

Royal Commission on Housing in Scotland 1917

Accommodation for Farm Workers, Crofters and Smallholders

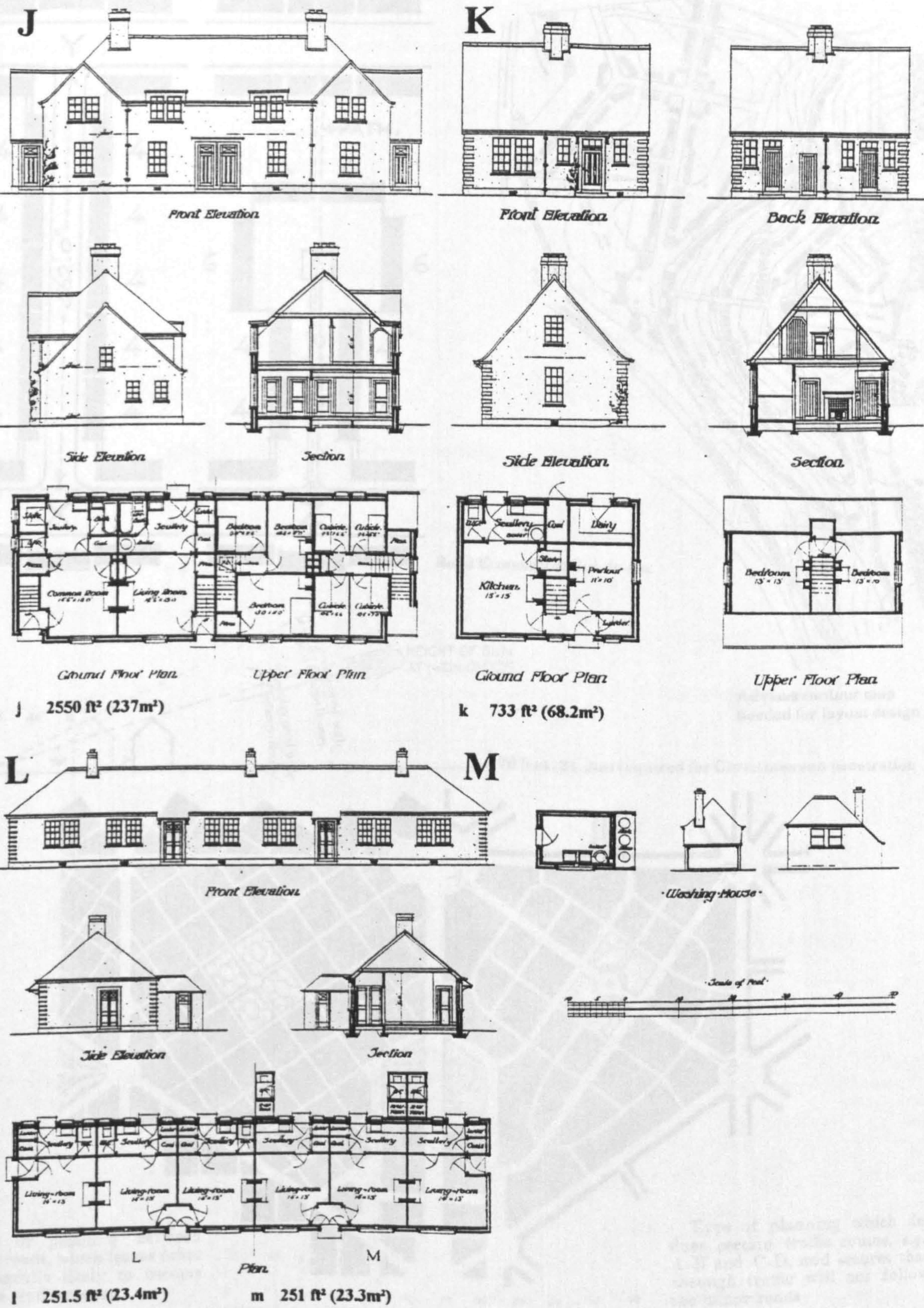
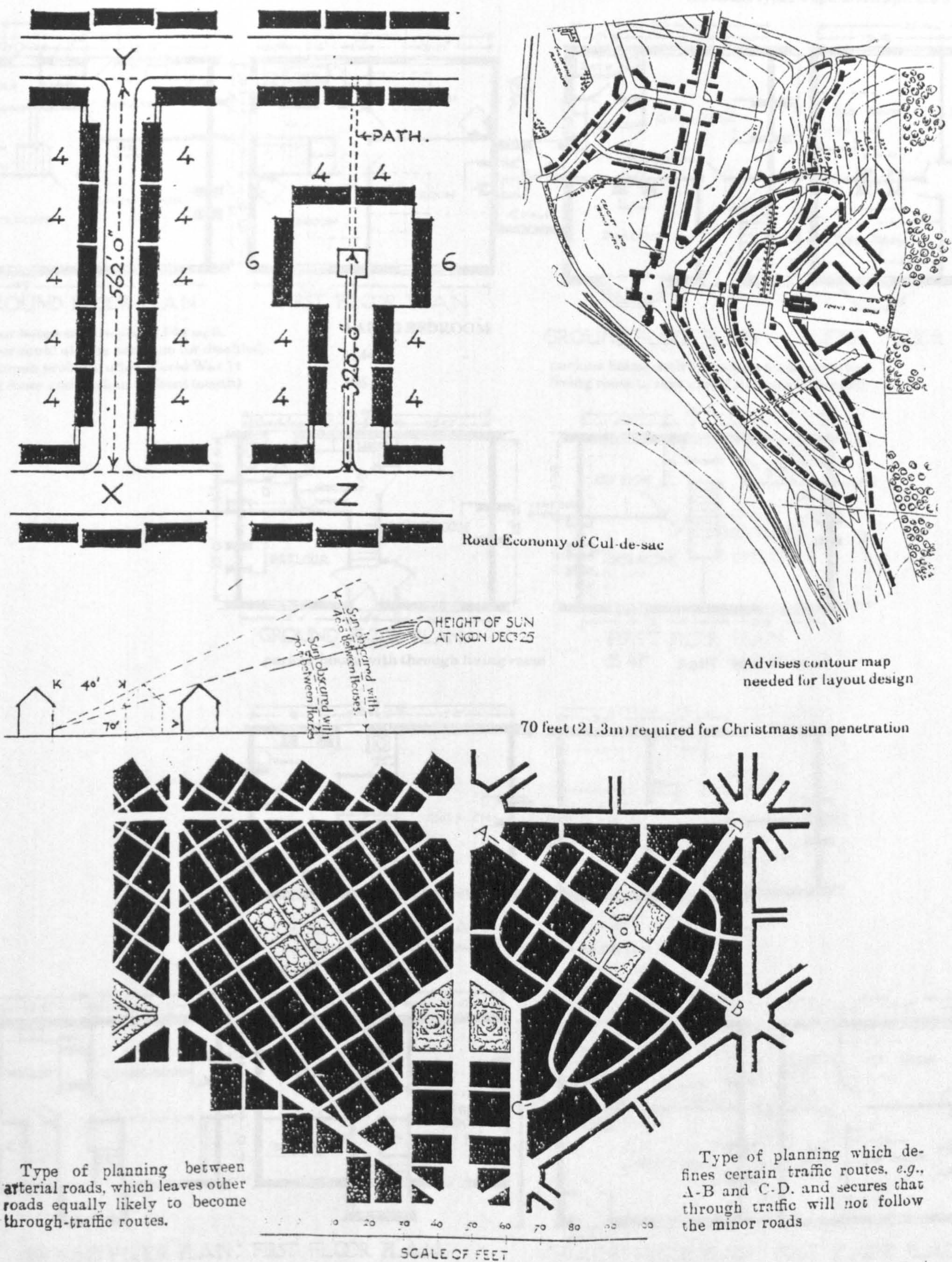


Figure 1.07

Tudor-Walters Layout Recommendations



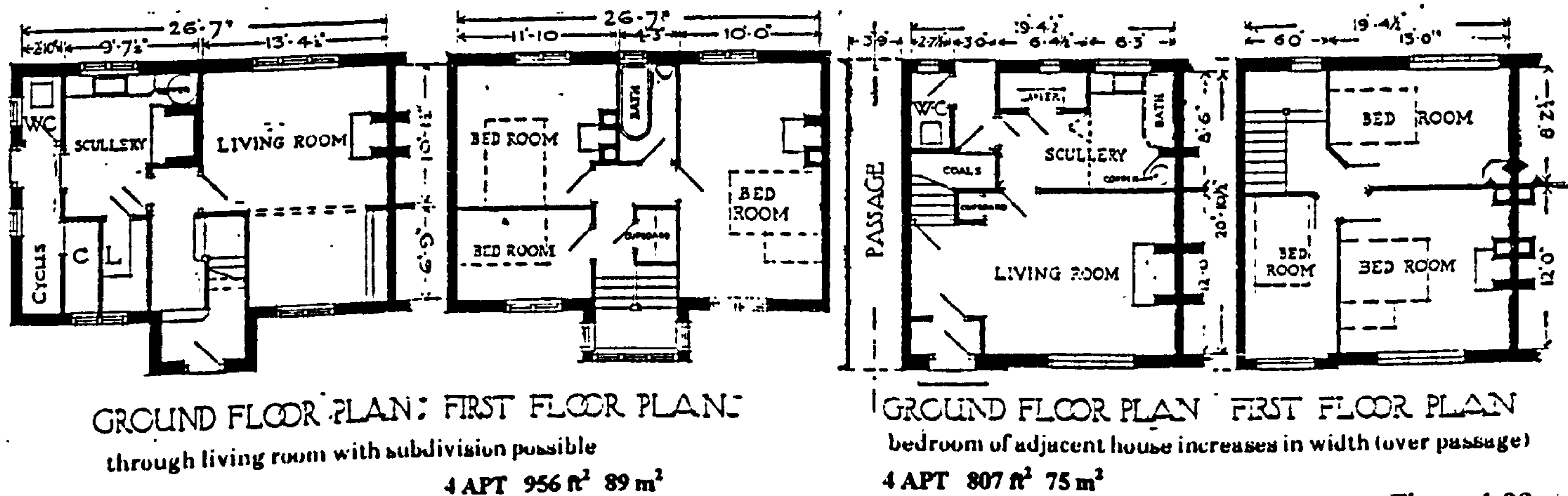
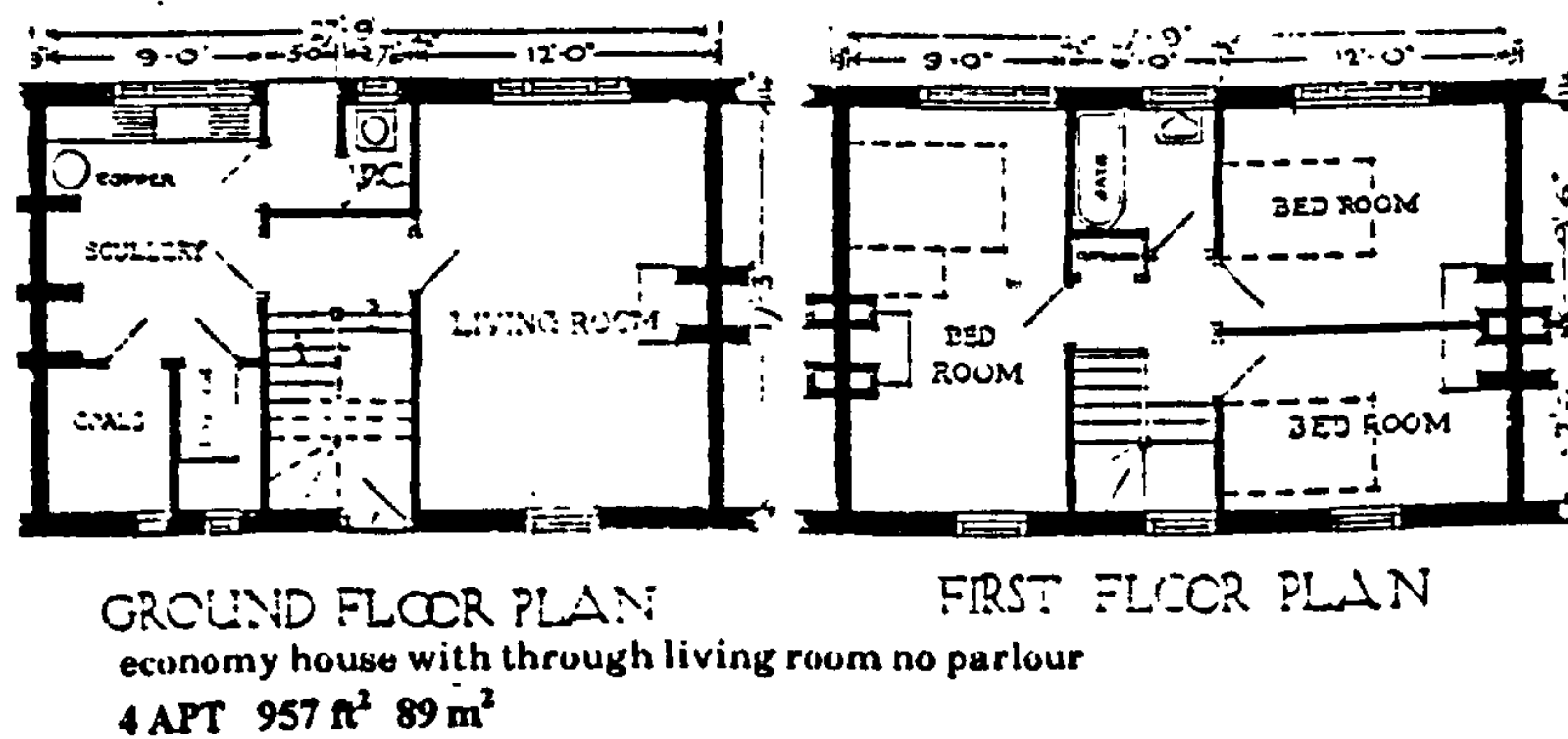
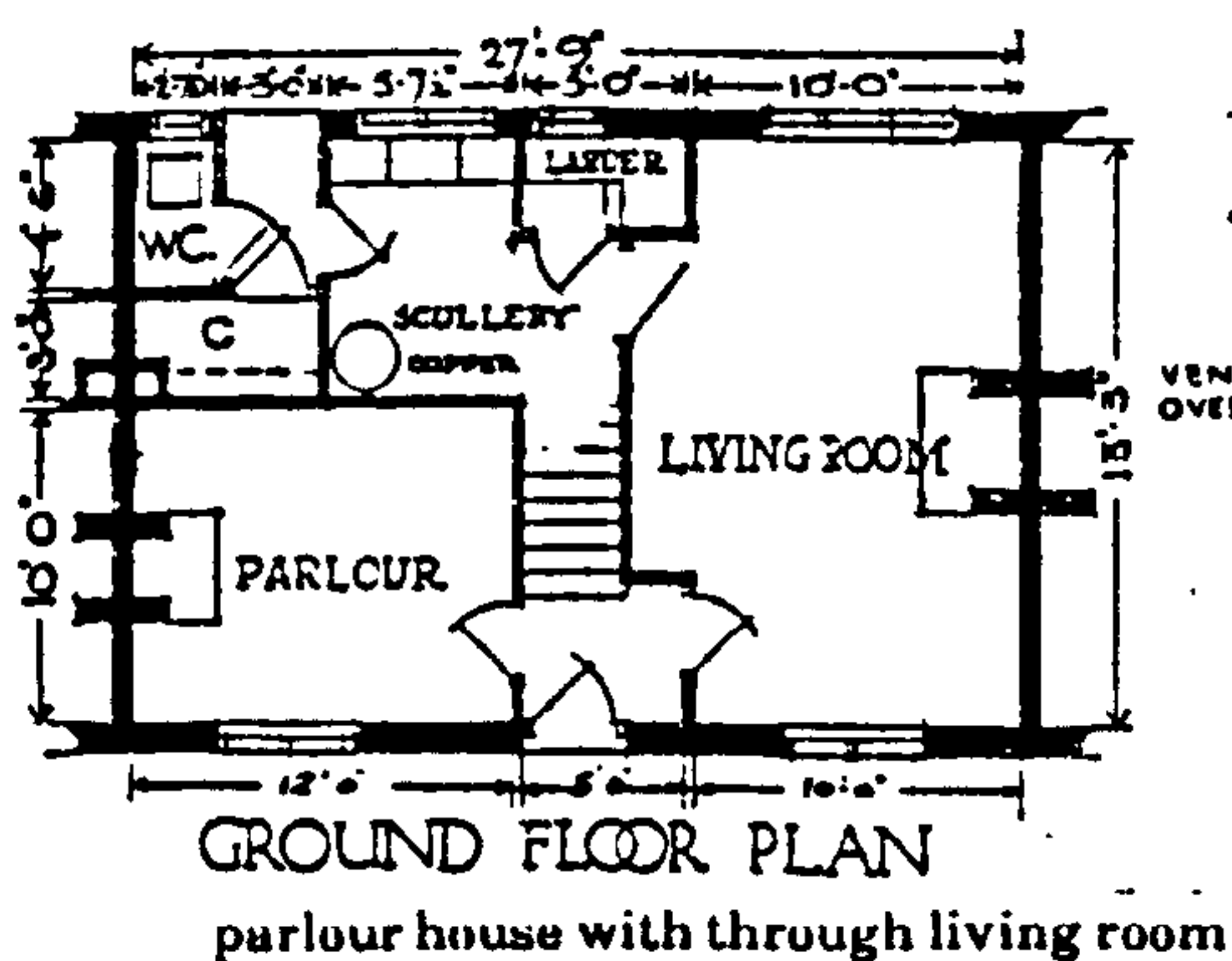
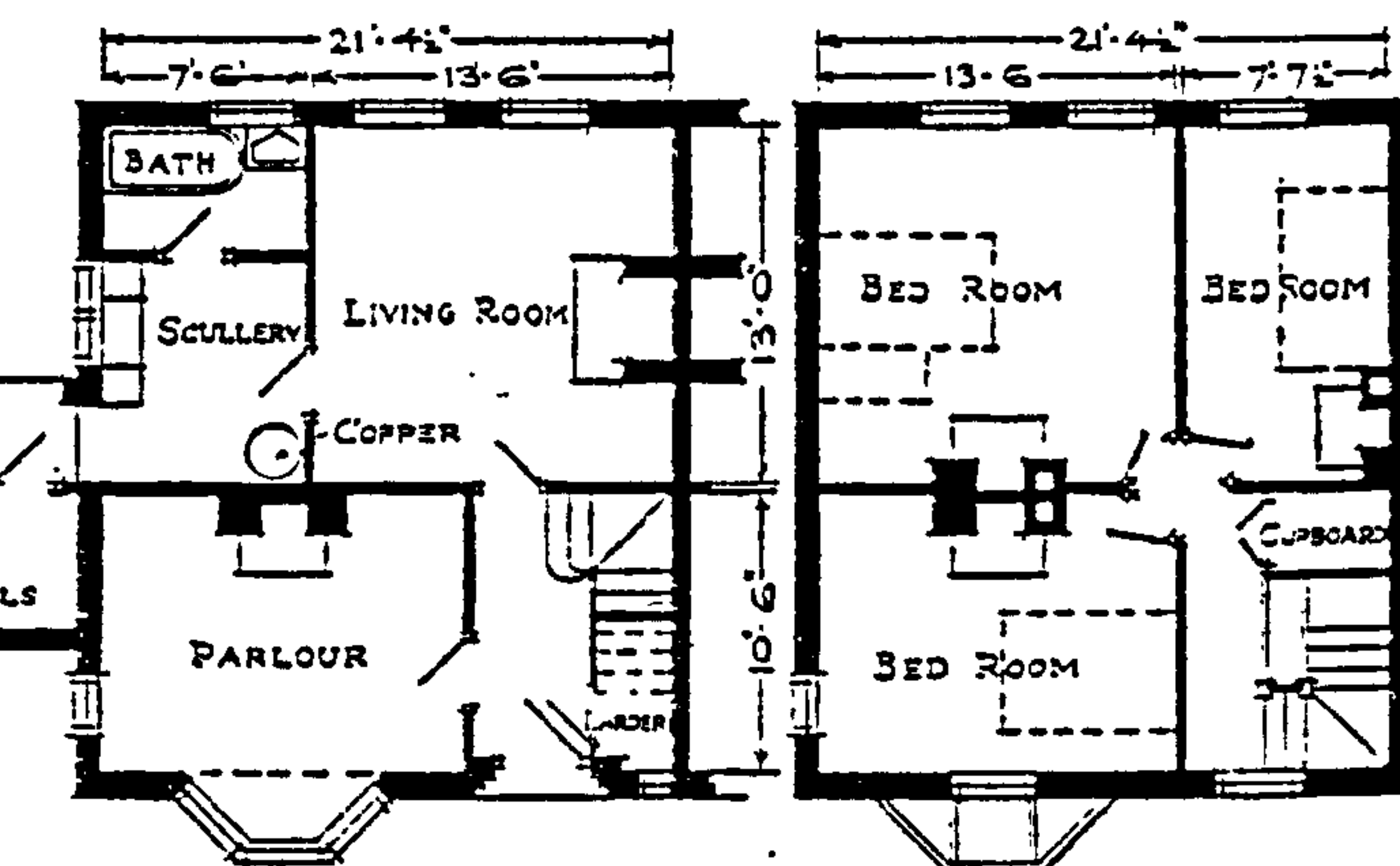
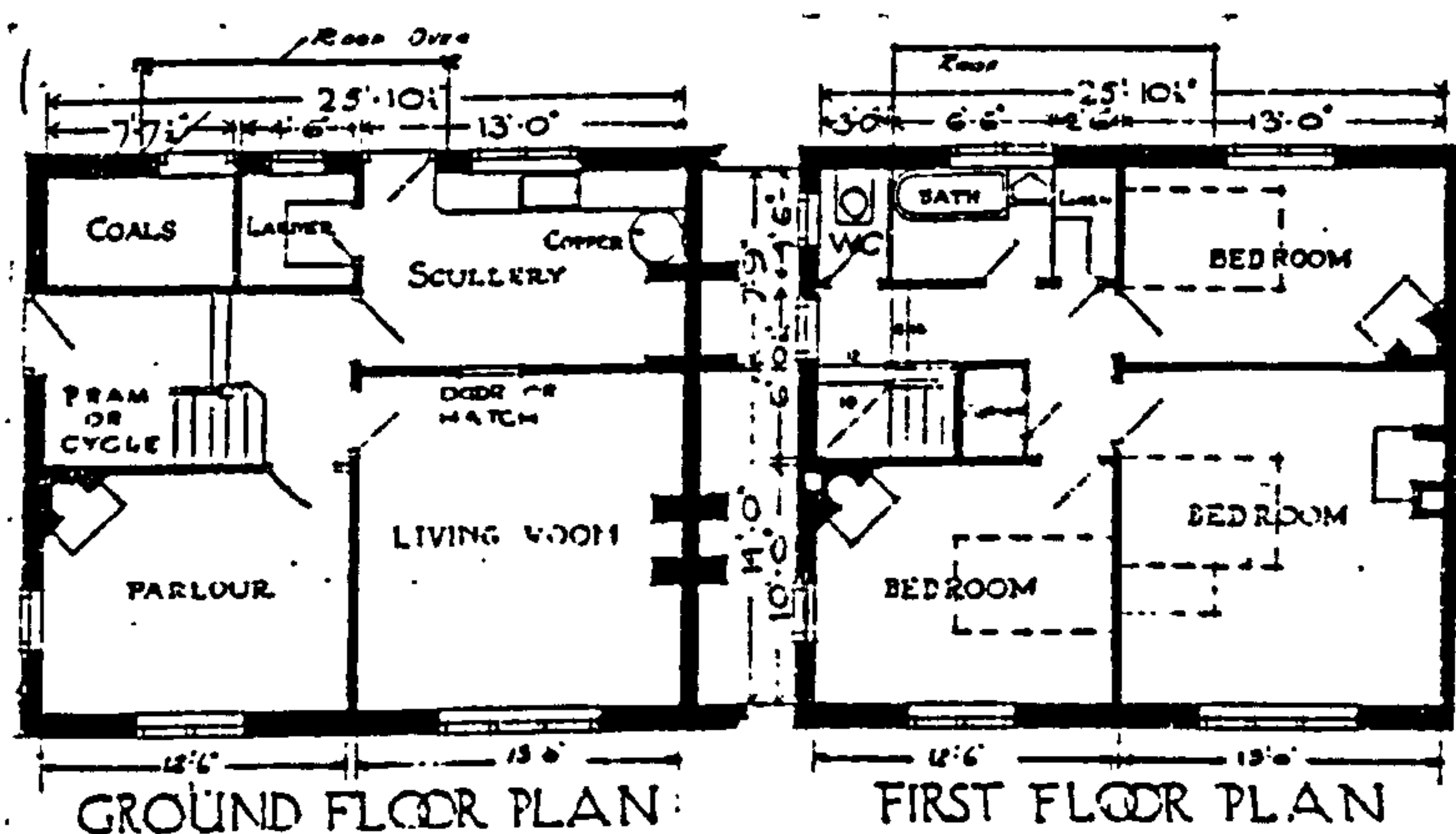
Source Tudor Walters Report

Minor Roads serving housing should not be through routes

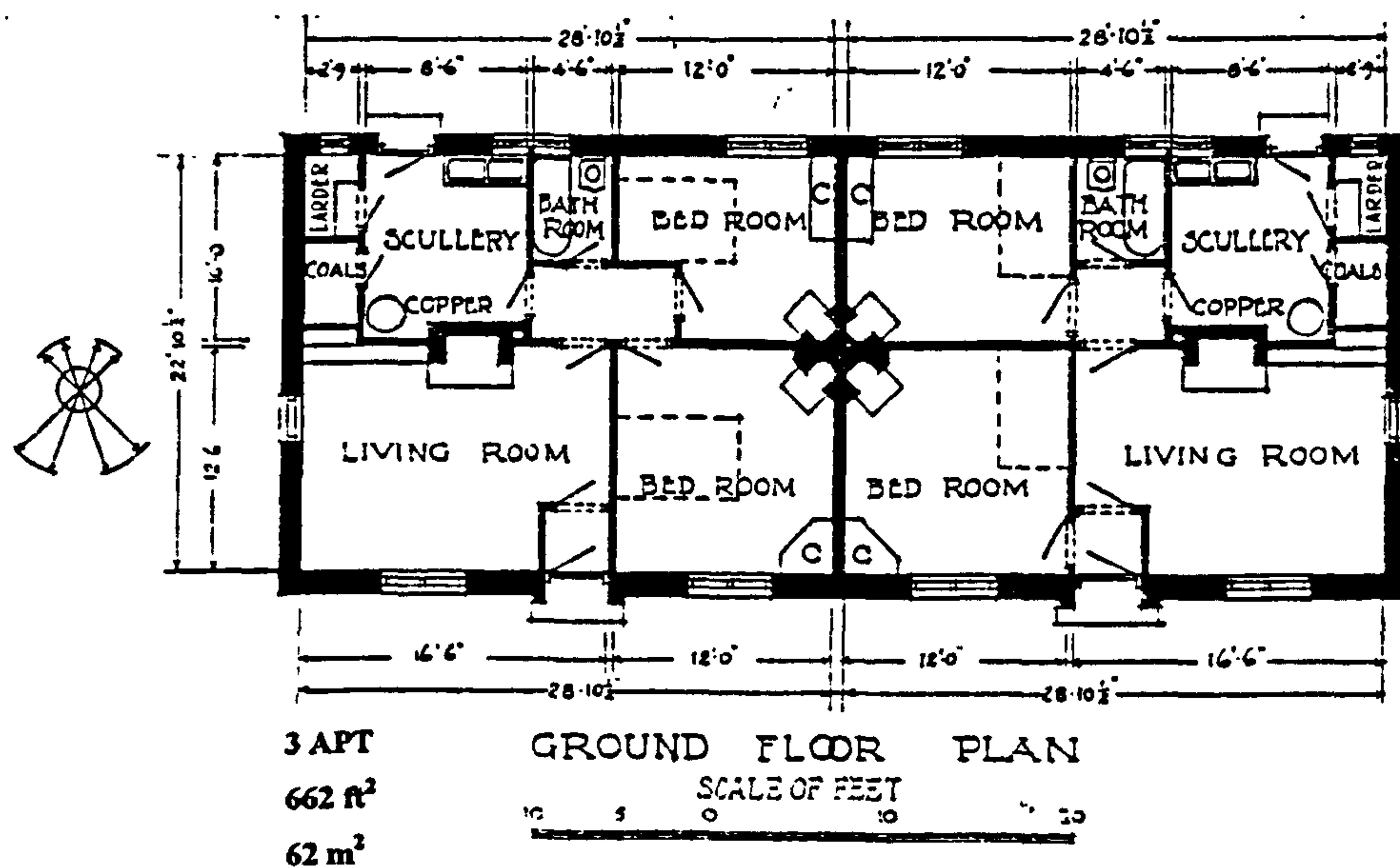
Figure 1.08

Tudor-Walters Cottage House Types

All house types 4 apt. and 5 apt. are 3 bedroom

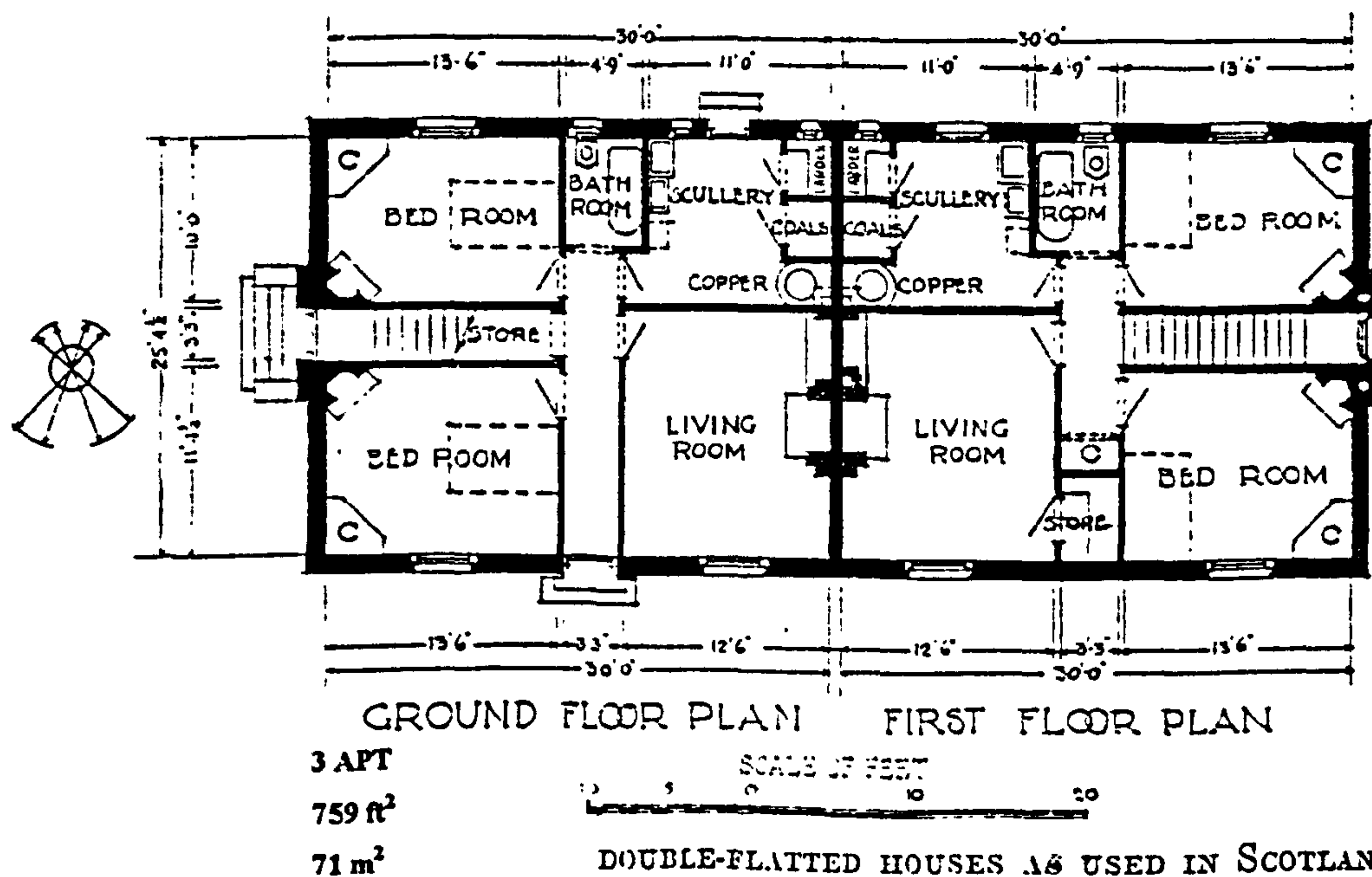


Tudor-Walters Scottish House Types



Source Tudor-Walters Report

SINGLE-STOREY HOUSES AS USED IN SCOTLAND.

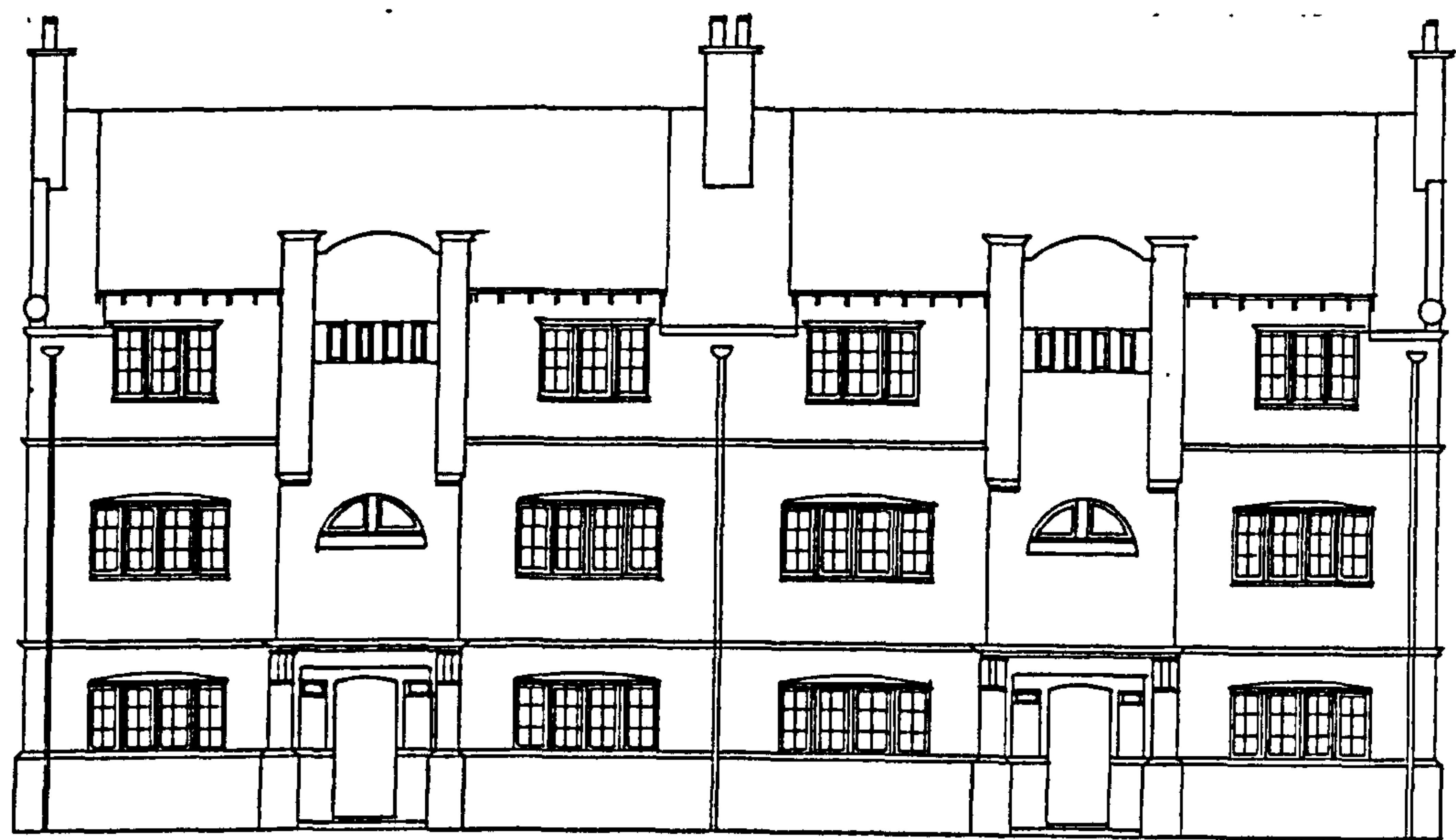


DOUBLE-FLATTED HOUSES AS USED IN SCOTLAND.

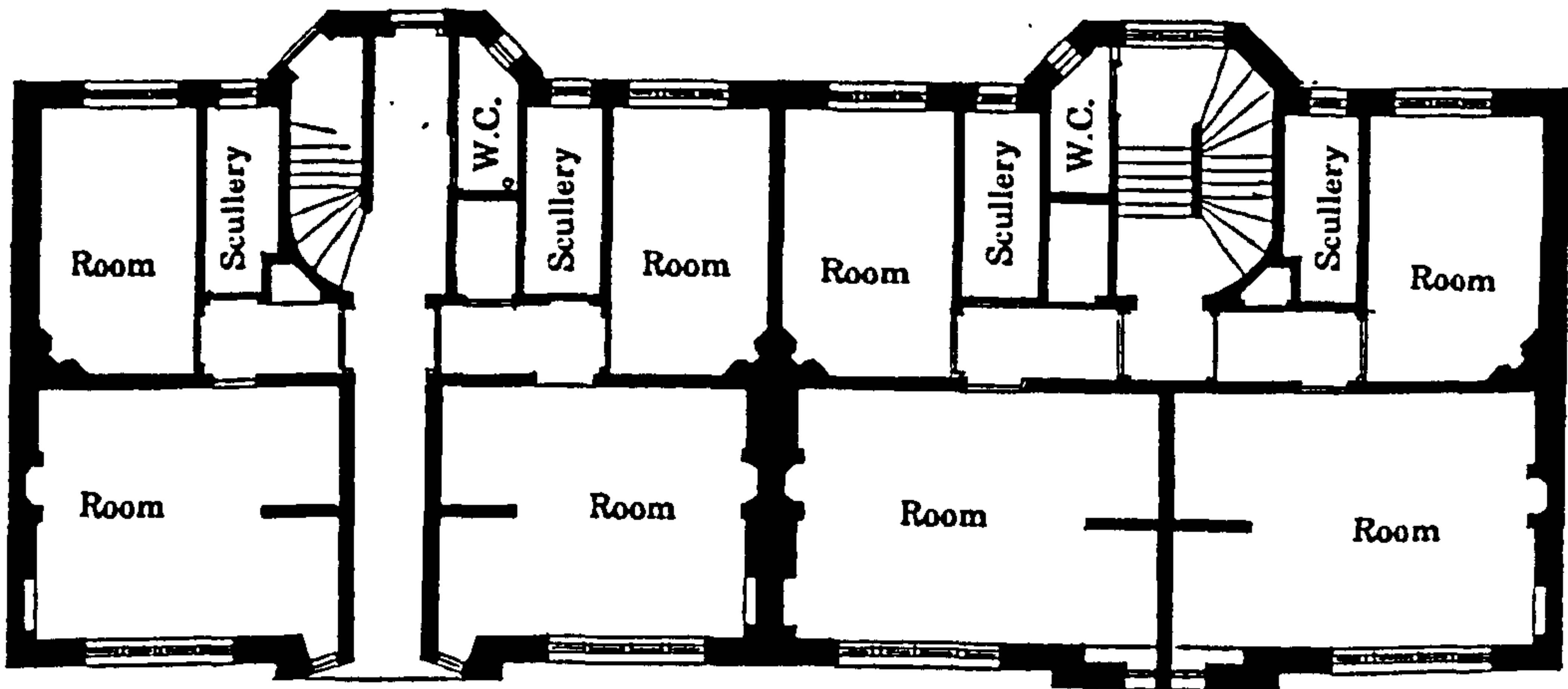
The double flatted house became common in the interwar years but was obviously in use prior to World War 1 hence Tudor-Walters illustration.
The illustrated plan is almost identical to the 1934 Hay Steel designed house type 'A' for Galston.

Figure 1.10

Walker Buildings, Kilmarnock, 1904

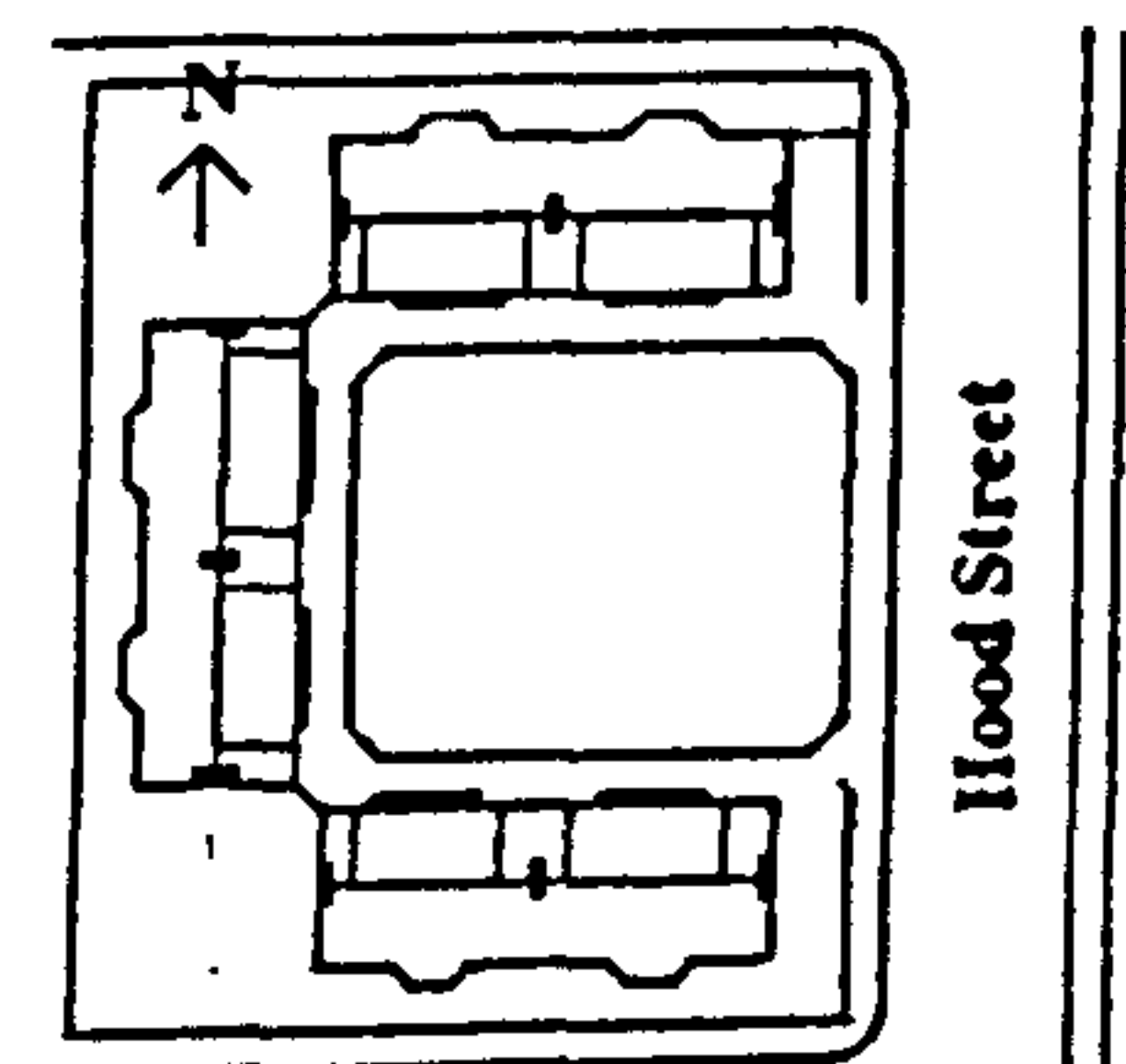


Front Elevation 1:200



Ground Floor

1st and 2nd Floor Plan 1:200



Block Layout

Three pairs of three storey tenements built round a green. Built by Alexander Walker to provide 36, 2 room and scullery dwellings for whisky industry workers. After lying derelict for some years they were demolished in 1993.

Figure 1.11

Former salt making 16th Century Burgh of Barony, West Wemyss became a coal port in the 19th Century. Street frontage of traditional burgh architecture with 18th Century Tollbooth reveals on rear elevation that dwellings were workers flatted houses.

Wemyss Coal Company employed an architect to design its miners' and other workers' houses, schools, halls and hospital. Houses were designed strongly traditional in style.



West Wemyss awaiting renovation 1994.

Figure 1.12

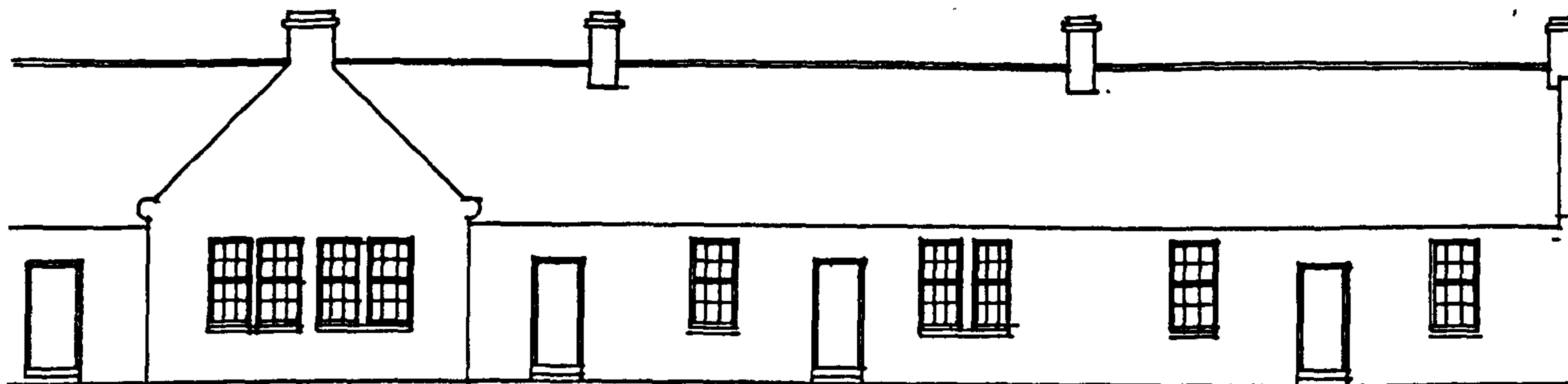
Coaltown of Wemyss, Fife



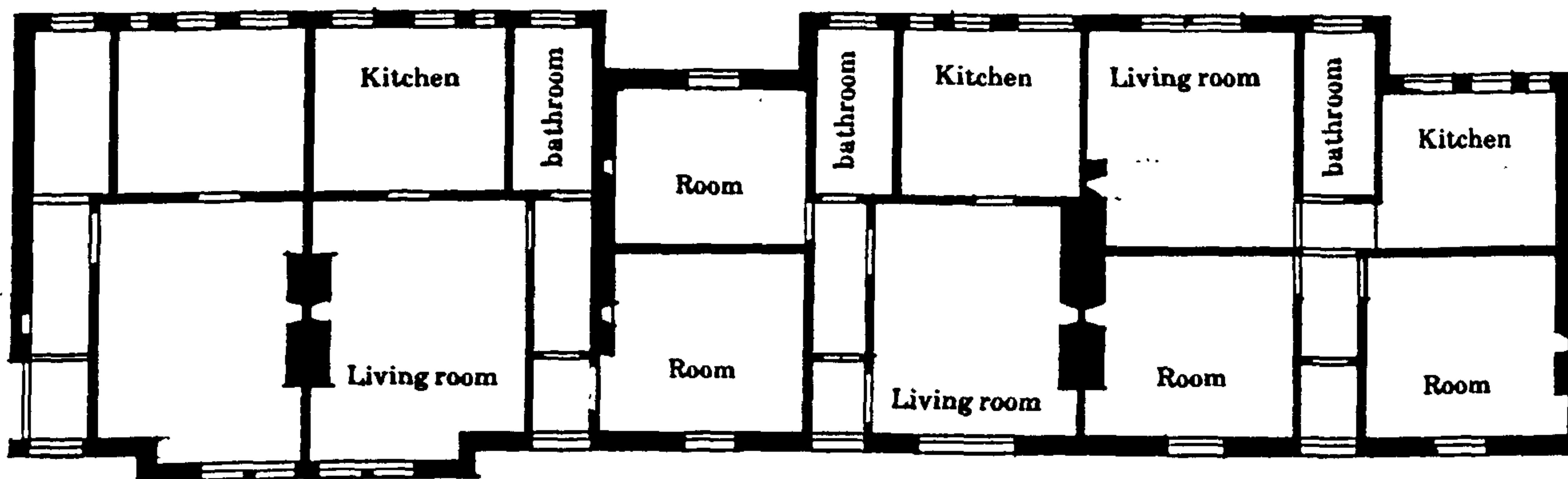
Top : Lochhead Row, crowstep gables, south facing gardens
Middle : Coronation Place heightened to 2 storey to provide large houses, 1936
Bottom : Main Street North, rebuilt 1912

Figure 1.13

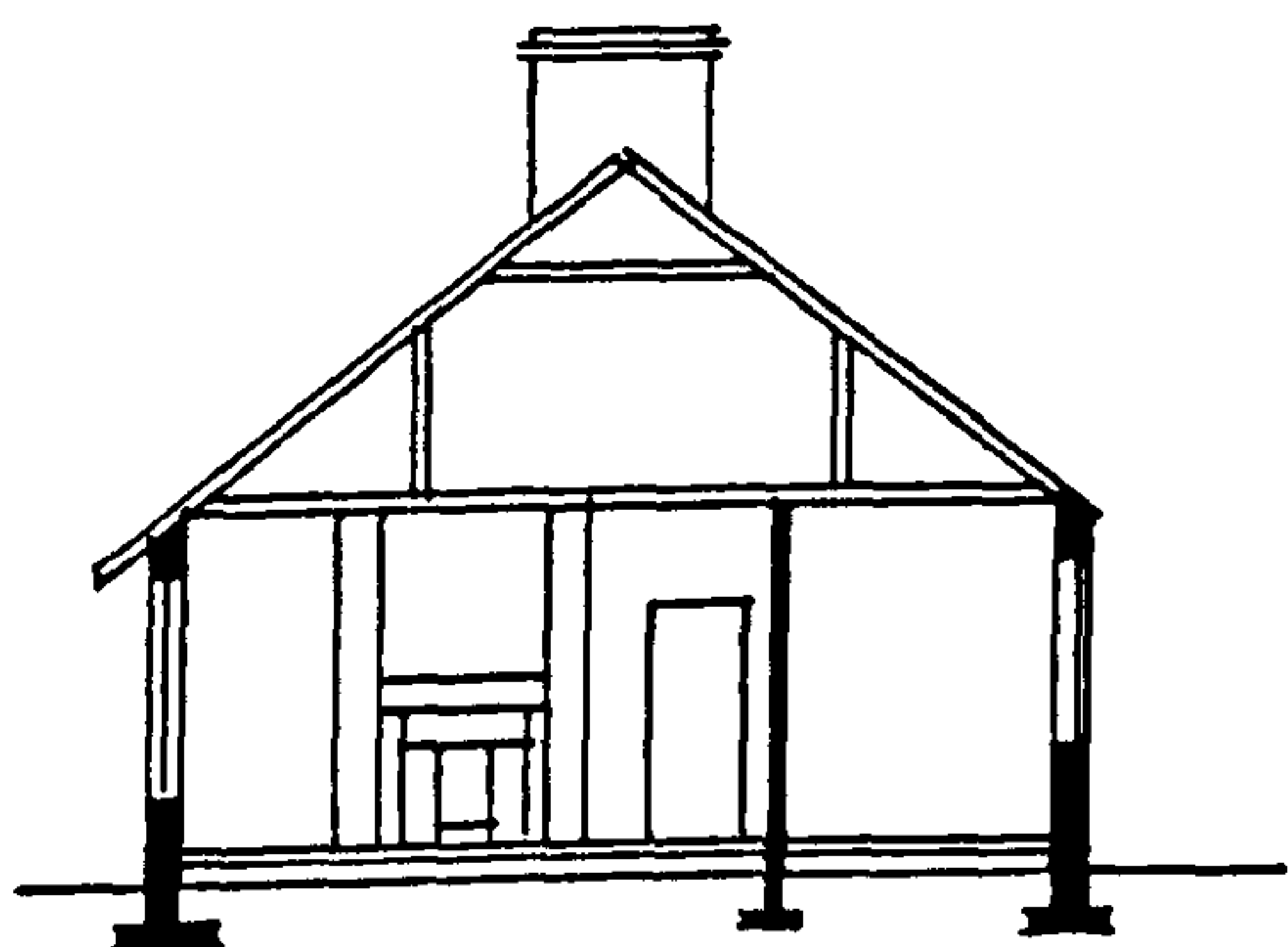
Coaltown of Wemyss, Fife 1912



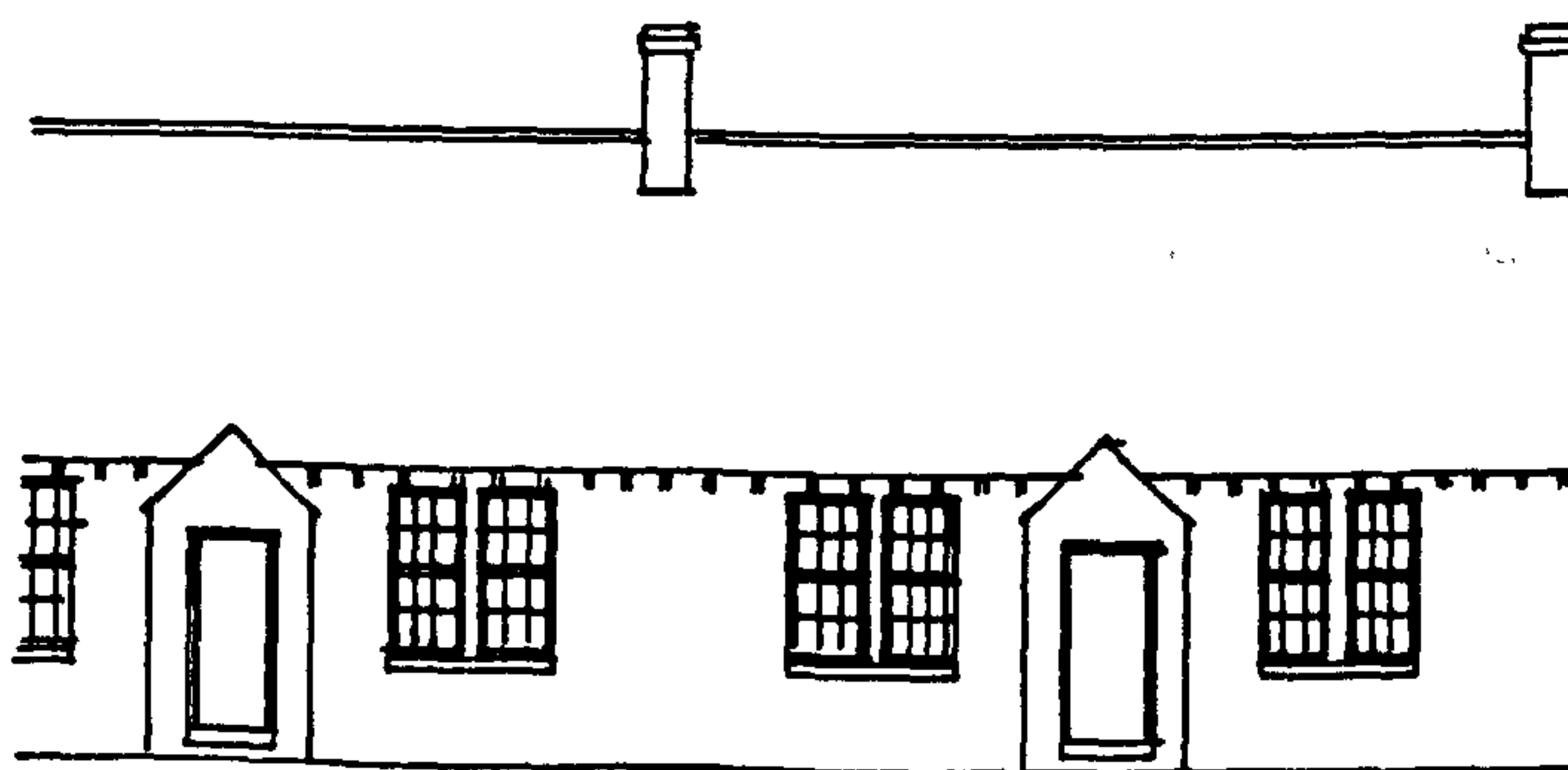
Southrow front elevation



Southrow plan, 2 and 3 apartment houses

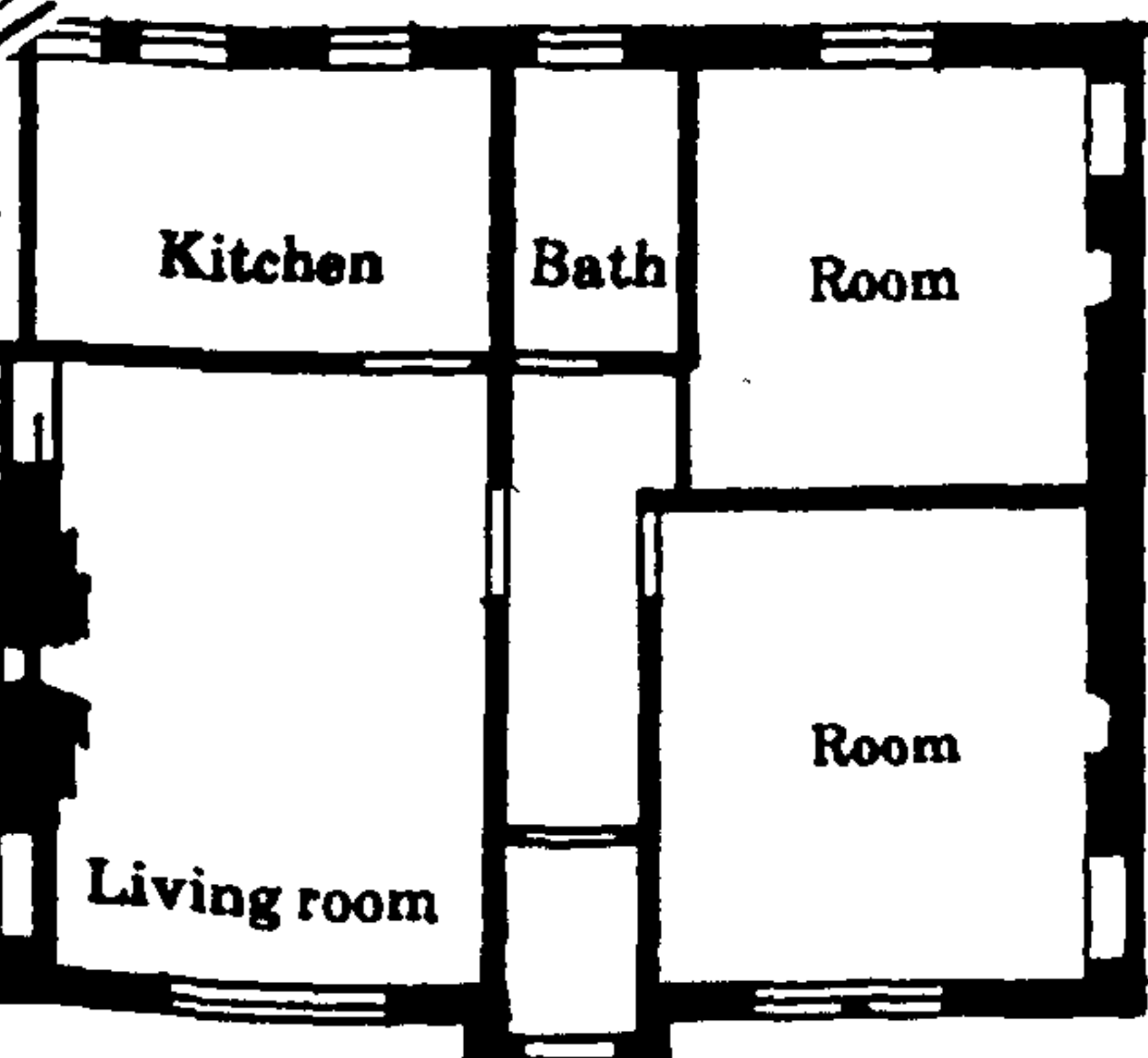
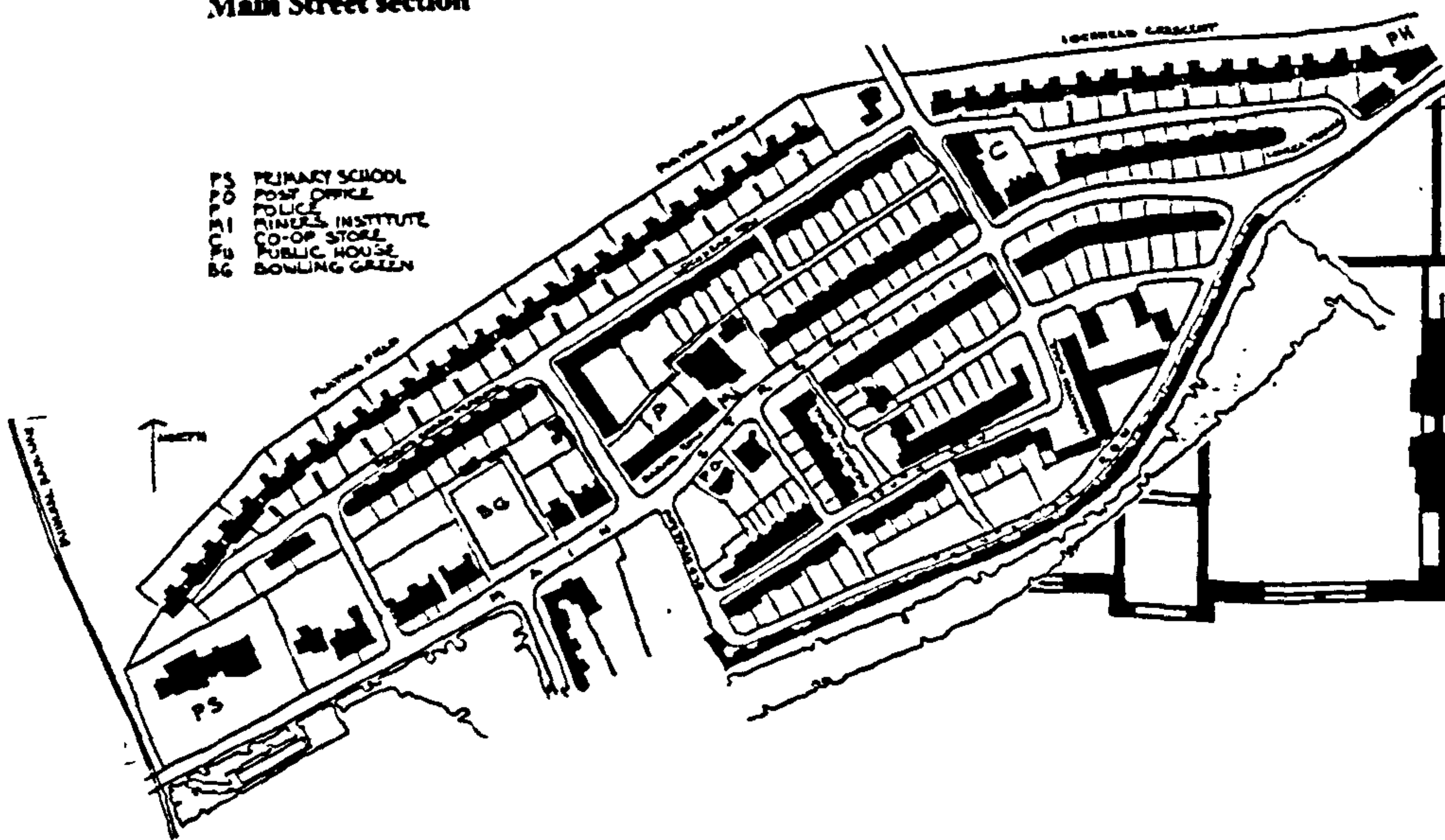


Main Street section



Main Street front elevation 1912

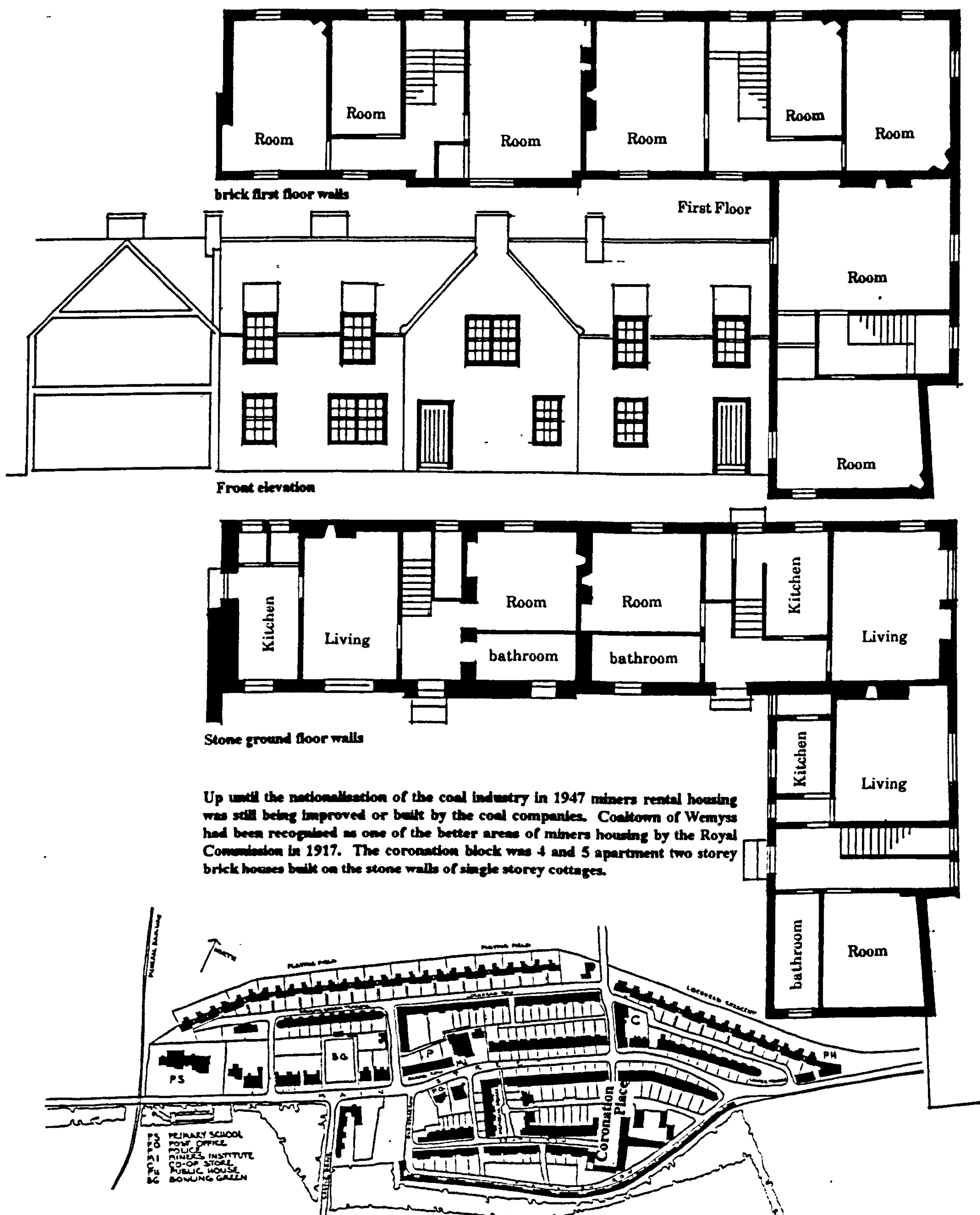
PS PRIMARY SCHOOL
PO POST OFFICE
PI POLICE INSTITUTE
CS CO-OP STORE
PH PUBLIC HOUSE
BG BOWLING GREEN



Main Street plan 3 apartment 1912

Figure 1.14

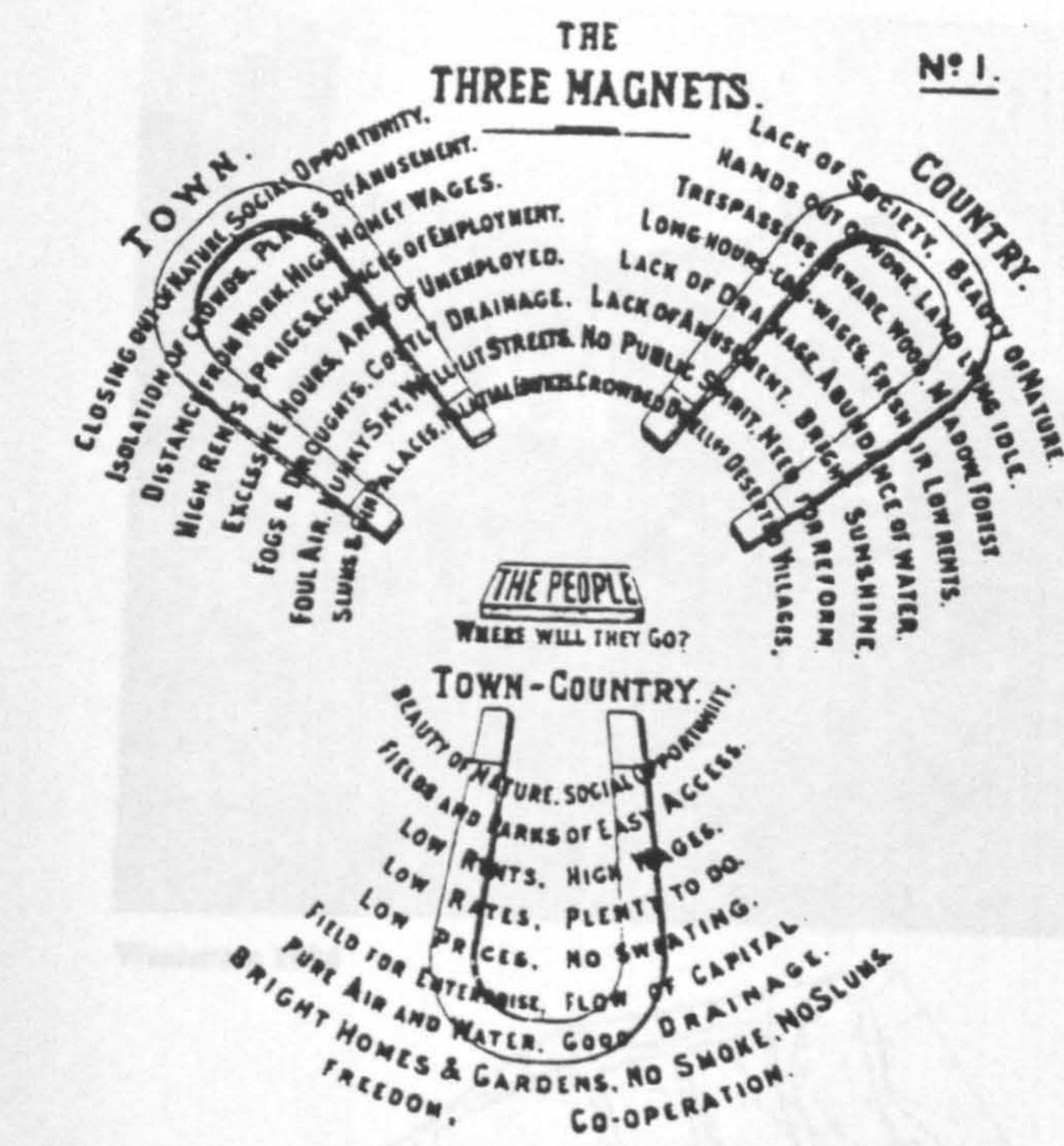
Coronation Place, Coaltown of Wemyss, Fife 1936



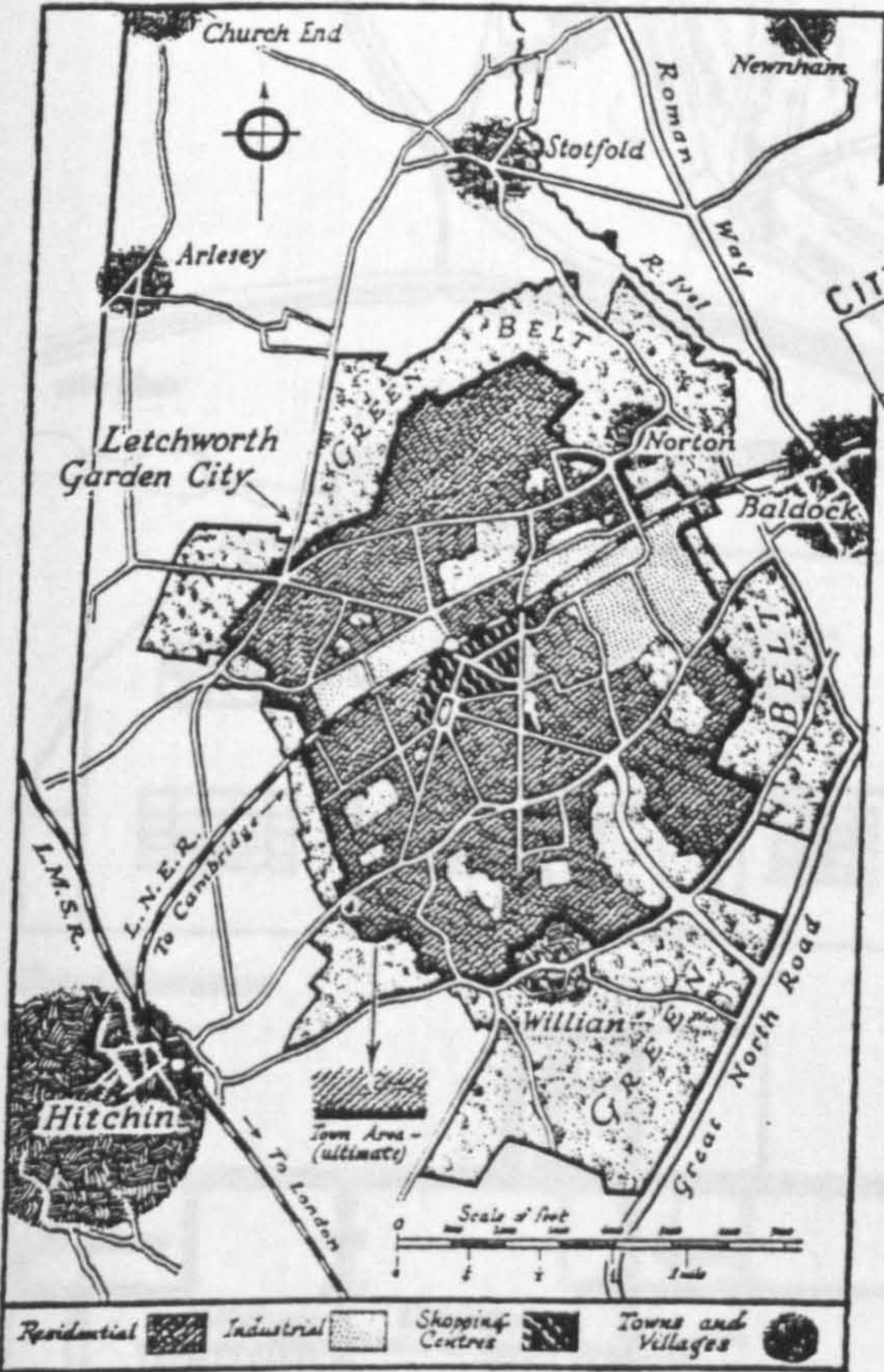
1:5,000 layout

Figure 1.15

Ebenezer Howard, Garden Cities

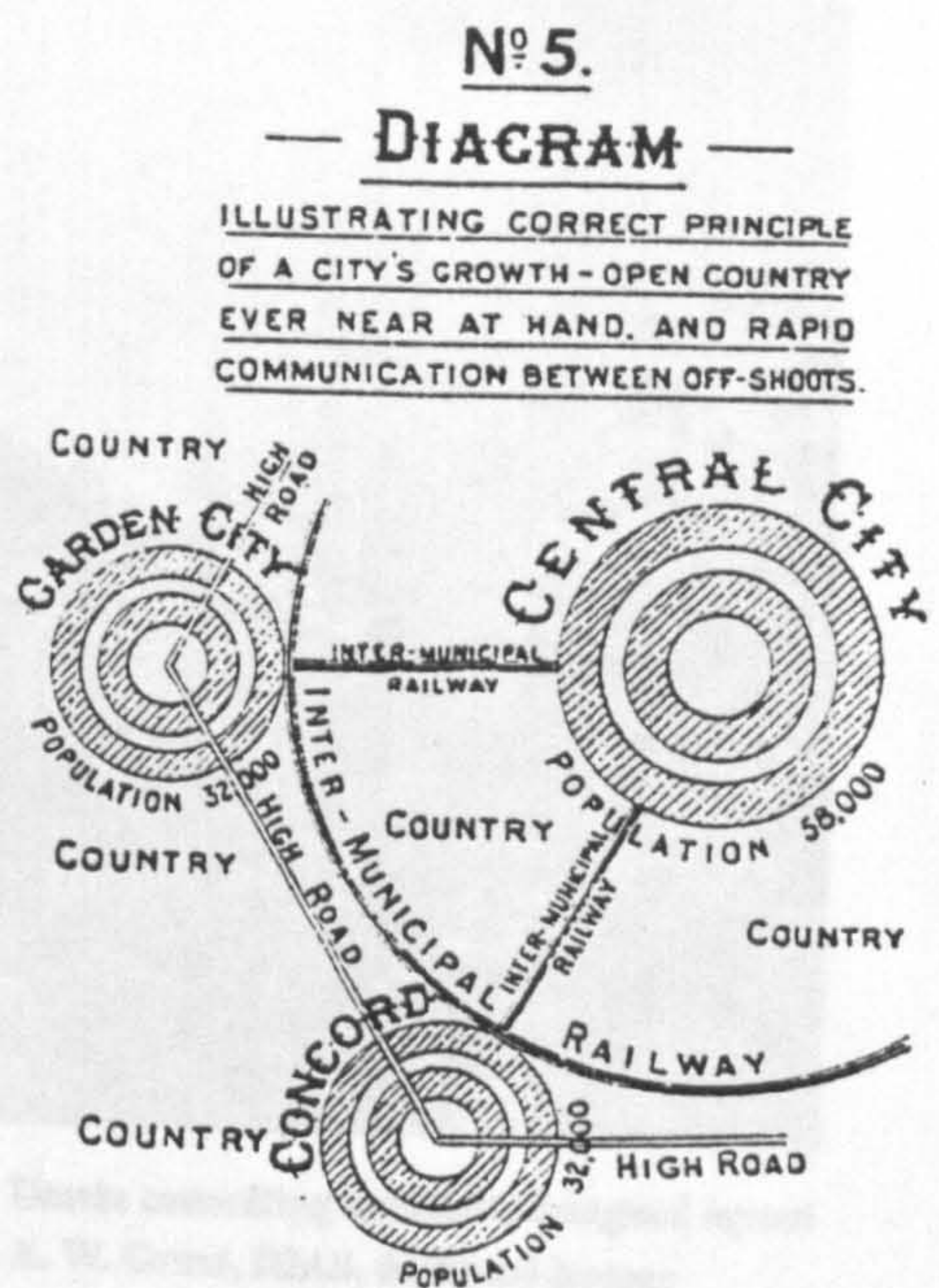


Howard's three-magnet diagram.
Garden City combines advantages of town and country

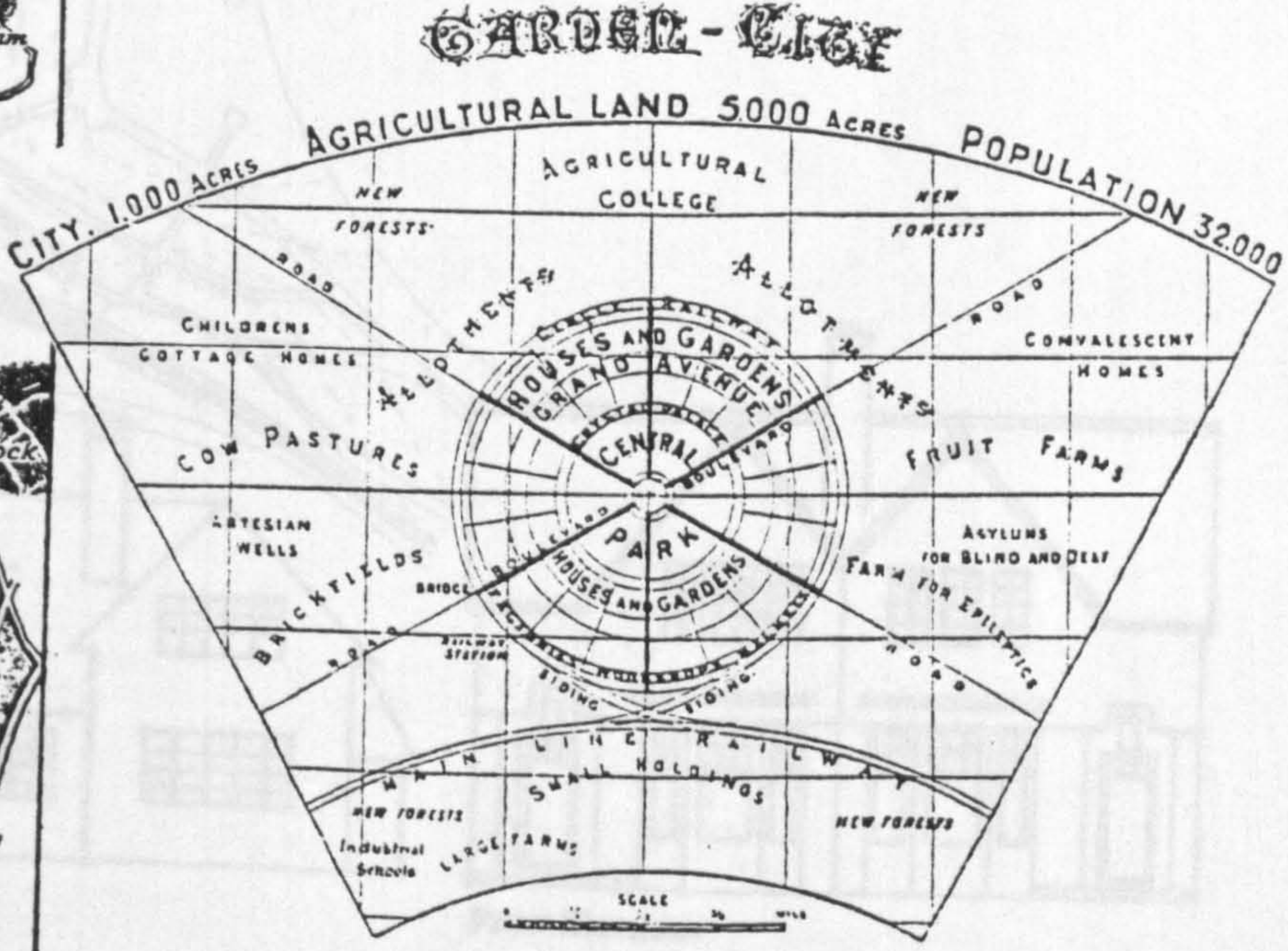


Plan of Letchworth.
(Reproduced from Garden Cities of Tomorrow, Faber & Faber)

Howard's thinking and the example of Letchworth 1904 - 06 influenced the plans of Westerwood Garden Suburb 1913, Rosyth 1913 and Gretna 1915.



City expansion in form of satellite garden cities instead of suburban sprawl expansion



The Garden City in its setting
This diagram of Howard's shows his concentric garden city, complete with central park, houses and gardens, a shopping arcade, and industrial estate, in a setting of rural country-side. His idea was to take the maximum advantage of both town and country. The problems in the central city, however, remained unsolved.

Source Johnston Marshall, Rebuilding Cities

Westerton Garden Suburb 1913



Westerton 1994

R. Unwin consulting architect, designed layout
J. A. W. Grant, RIAS, designed houses
Source : The Story of Westerton

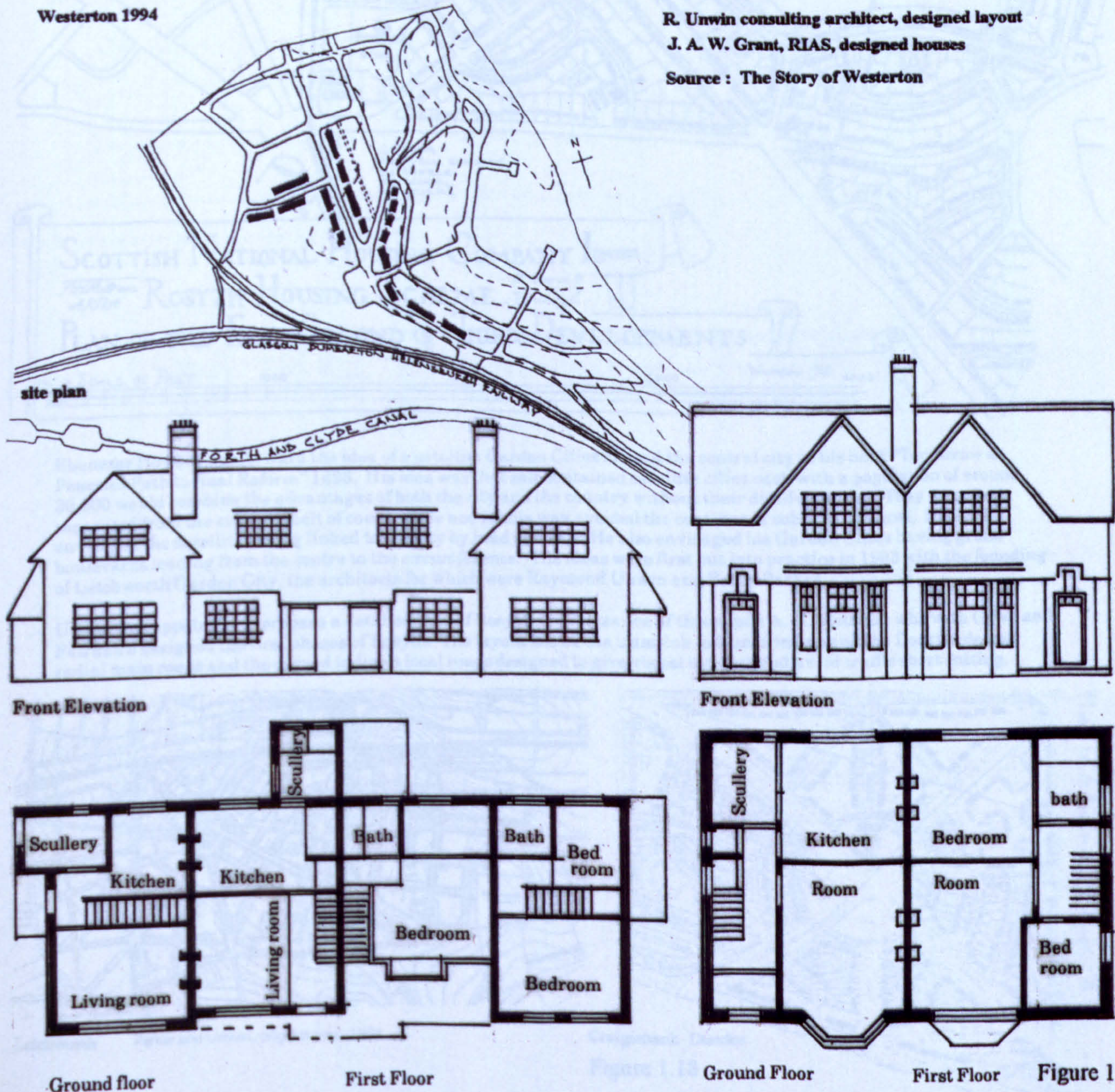
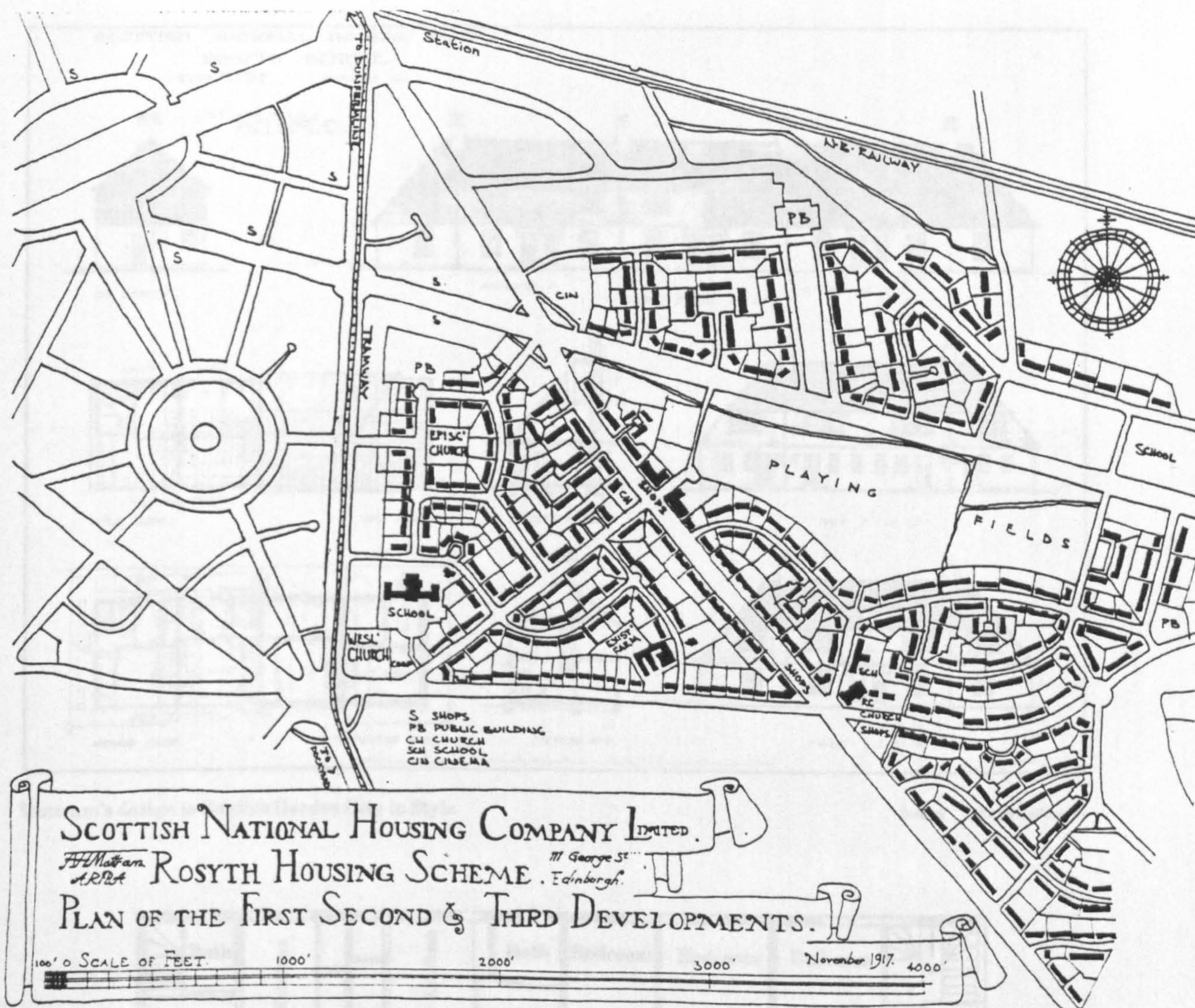


Figure 1.17

Rosyth Housing Scheme 1917

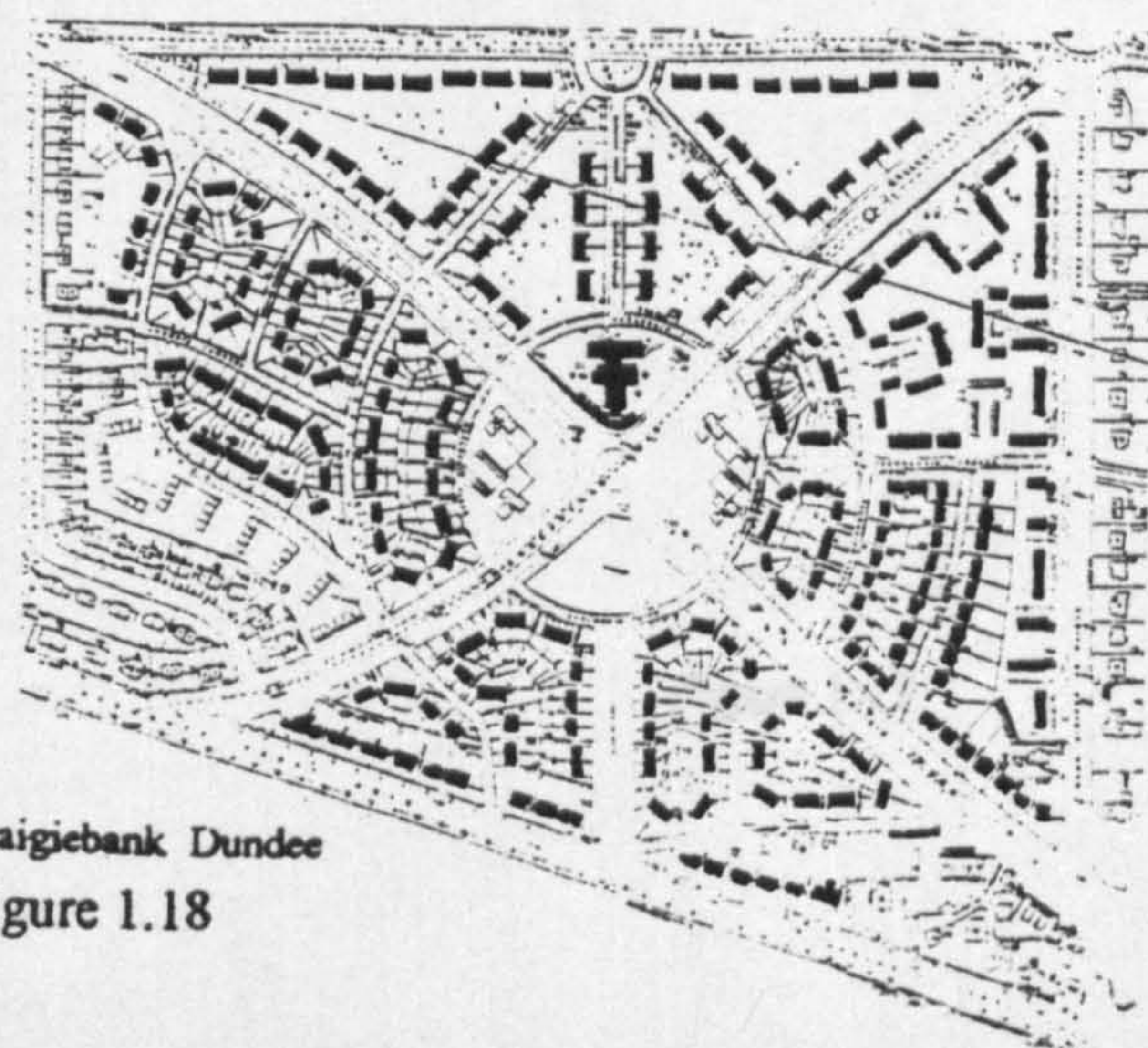


Ebenezer Howard put forward the idea of a satellite Garden Cities around the central city in his book "Tomorrow a Peaceful Path to Real Reform" 1898. His idea was that self-contained satellite cities each with a population of around 30,000 would combine the advantages of both the city and the country without their disadvantages. They were to be separated from the city by a belt of countryside and in this way avoided the continuous suburban sprawl. Howard envisaged the satellites being linked to the city by road and rail. He also envisaged his Garden Cities having grand boulevards leading from the centre to the circumference. His ideas were first put into practice in 1903 with the founding of Letchworth Garden City, the architects for which were Raymond Unwin and Barry Parker.

Unwin was appointed to prepare a detailed plan of Rosyth and it was one of his pupils A. H. Mottram who with Grieg and Fairbairn designed the first phases of Rosyth. The layout shows the tramlink to Dunfermline and the Dockyards, the radial main roads and the curved indirect local roads designed to give visual interest and avoid traffic short cutting.

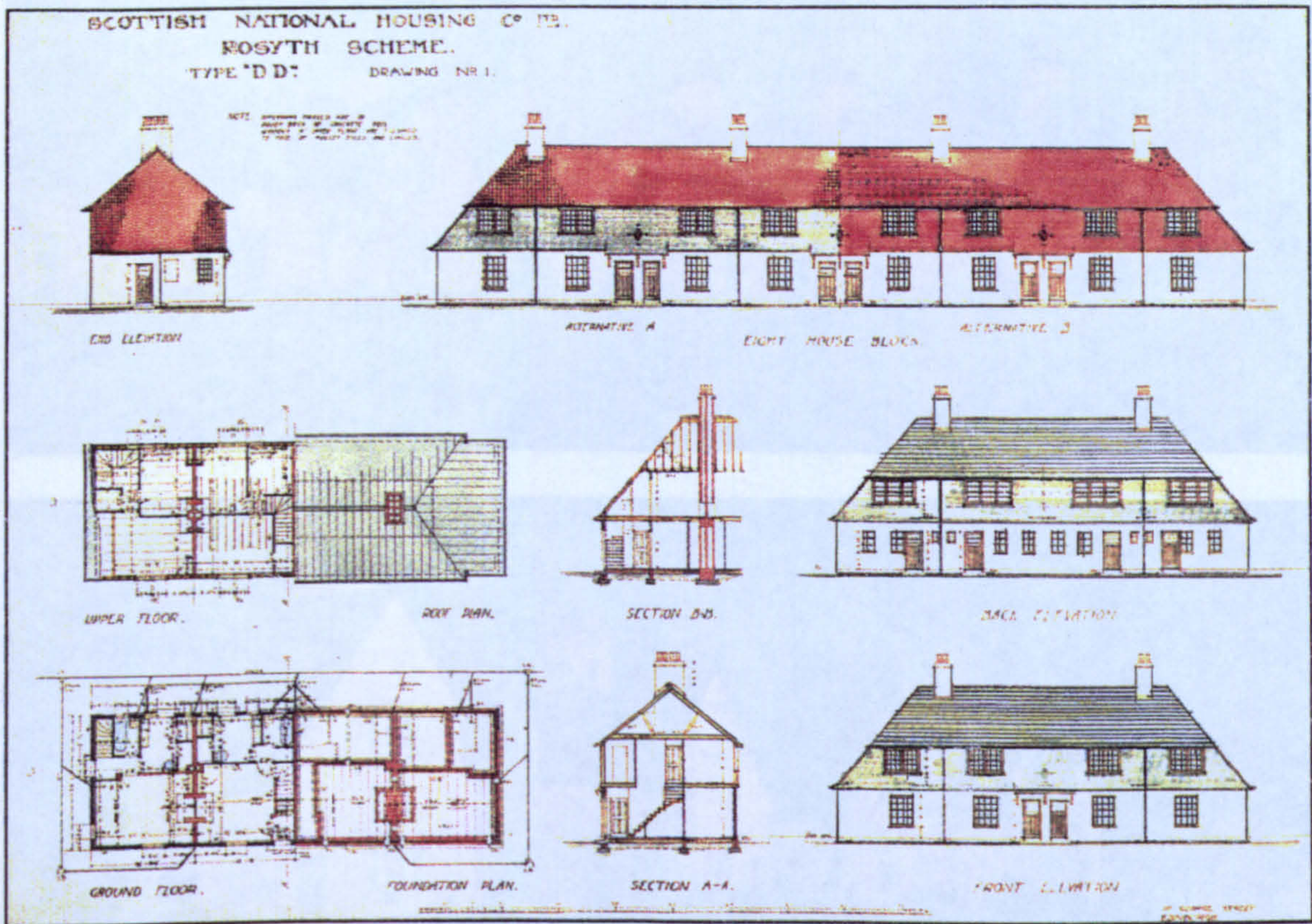


Letchworth Parker and Unwin, original plan, 1904



Craigiebank Dundee
Figure 1.18

Rosyth Cottages 1917 by A.H. Mottram



Mottram's design is English Garden City in Style

Source RIAS Collection

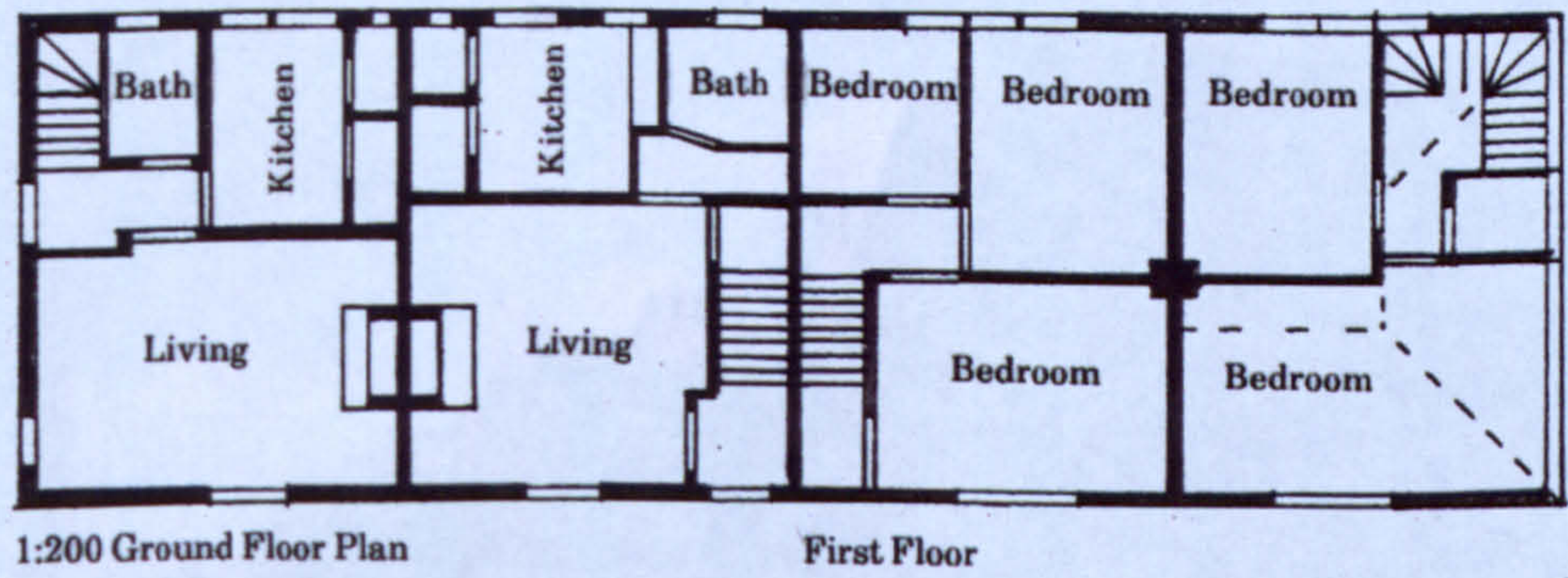


Figure 1.19

Rosyth. Phase One designed 1916 - 1919



Rosyth was built by the Scottish National Housing Company and designed by A. H. Mottram with Grieg and Fairbairn. The architectural style is South of England Garden City influenced. It became known in Fife as Dolly Town in the interwar years.

Figure 1.20

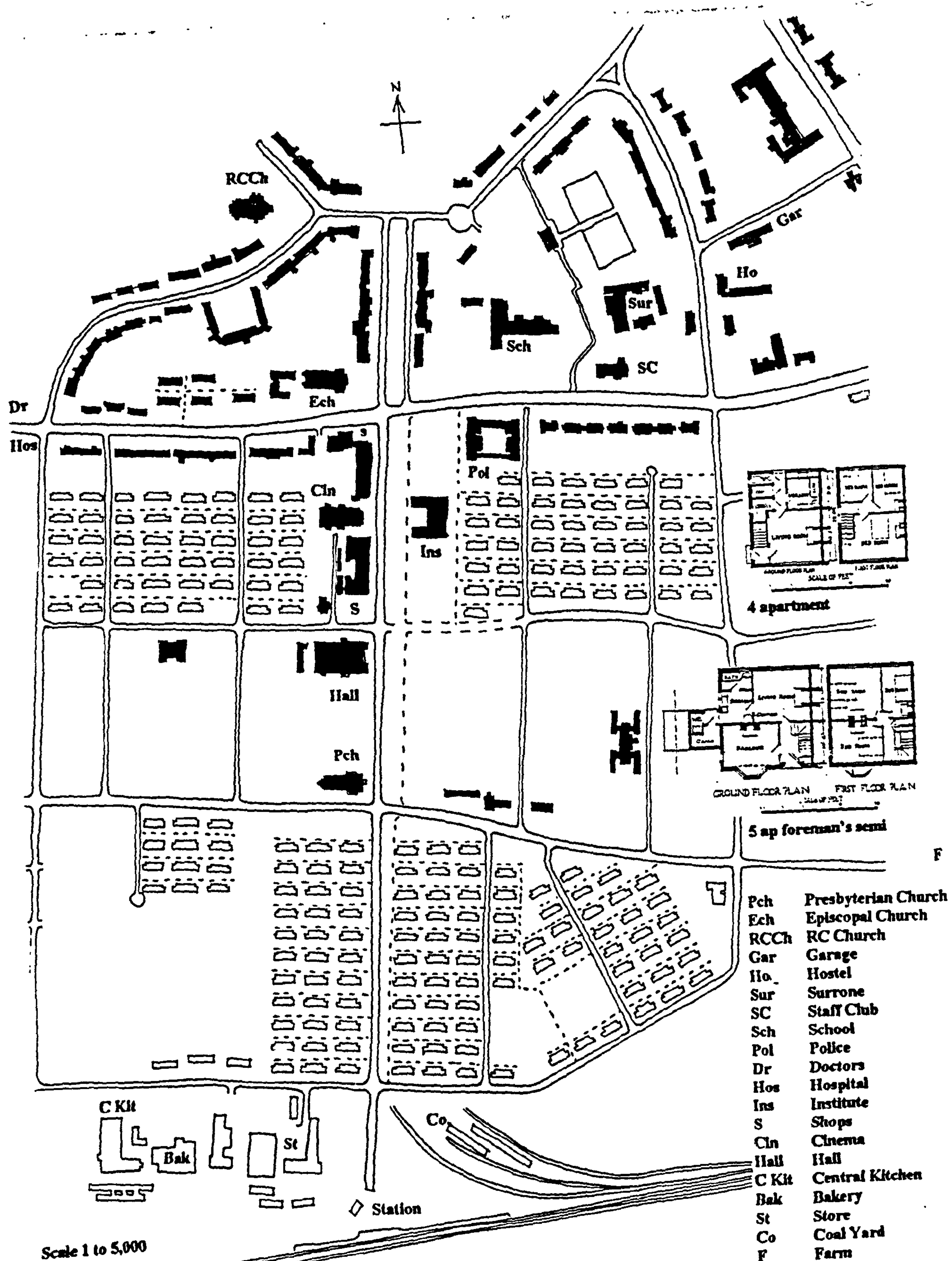
Crombie, Fife, Munitions Satellite of Rosyth



Crombie was built at the same time as Rosyth but unlike Rosyth it had no facilities planned. A group of coursed rubble stone workers' houses, harled terraced houses and a harled detached manager's house was built to house workers at the munitions dump near Rosyth.

Figure 1.21

Gretna Township Dumfriesshire



Source : 1924 Plan of Sale by Auction, C. Thurnam and Sons, Carlisle

Figure 1.22

Gretna Township Dumfriesshire



Brick houses on Central Avenue.



Some houses were designed as hostels suitable for conversion to houses.



Courtyard off Victory Avenue.



One of the few remaining timber huts with new brick skin



Shops

Figure 1.23

Local Government Board for Scotland Memorandum 1918

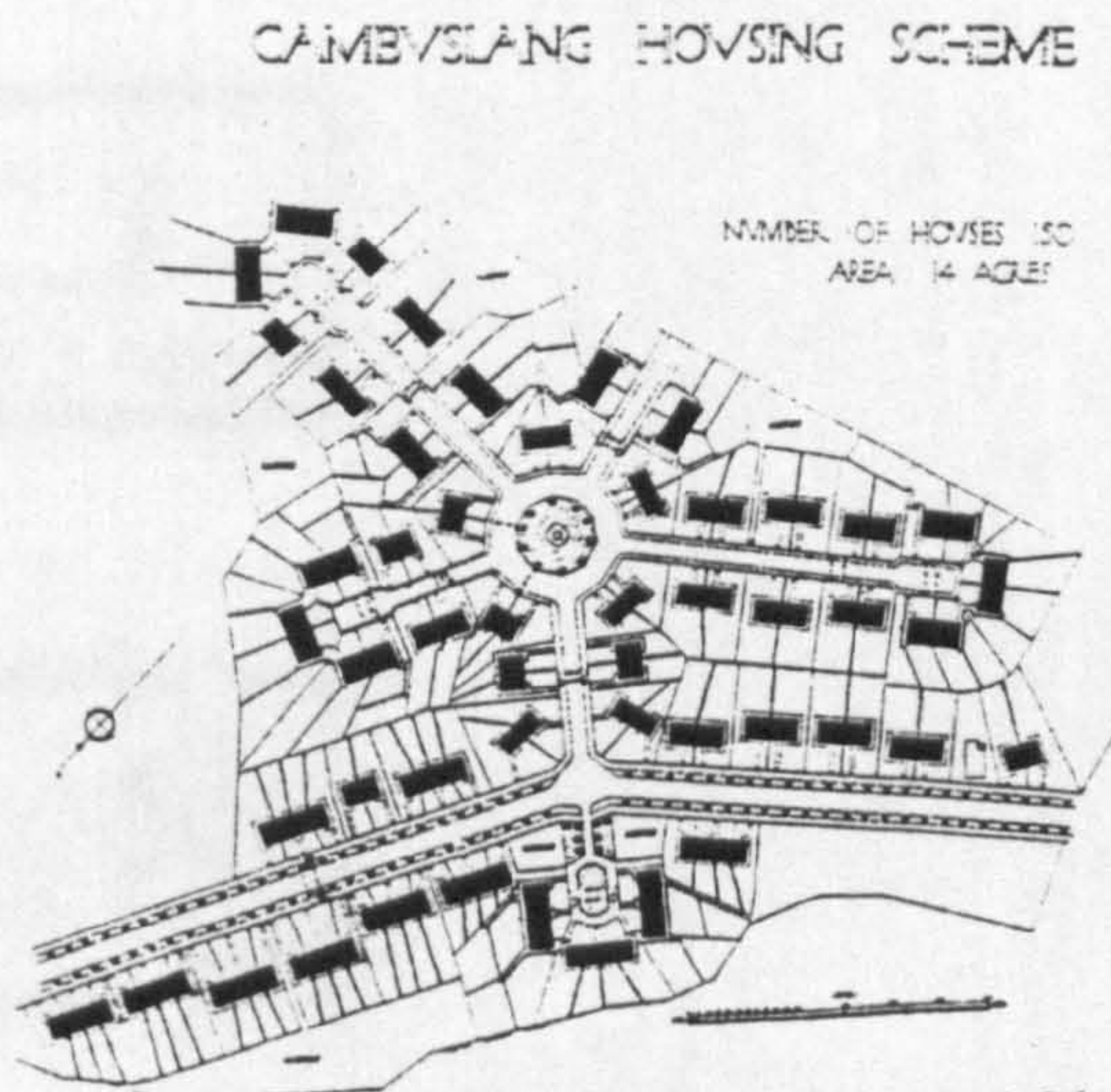
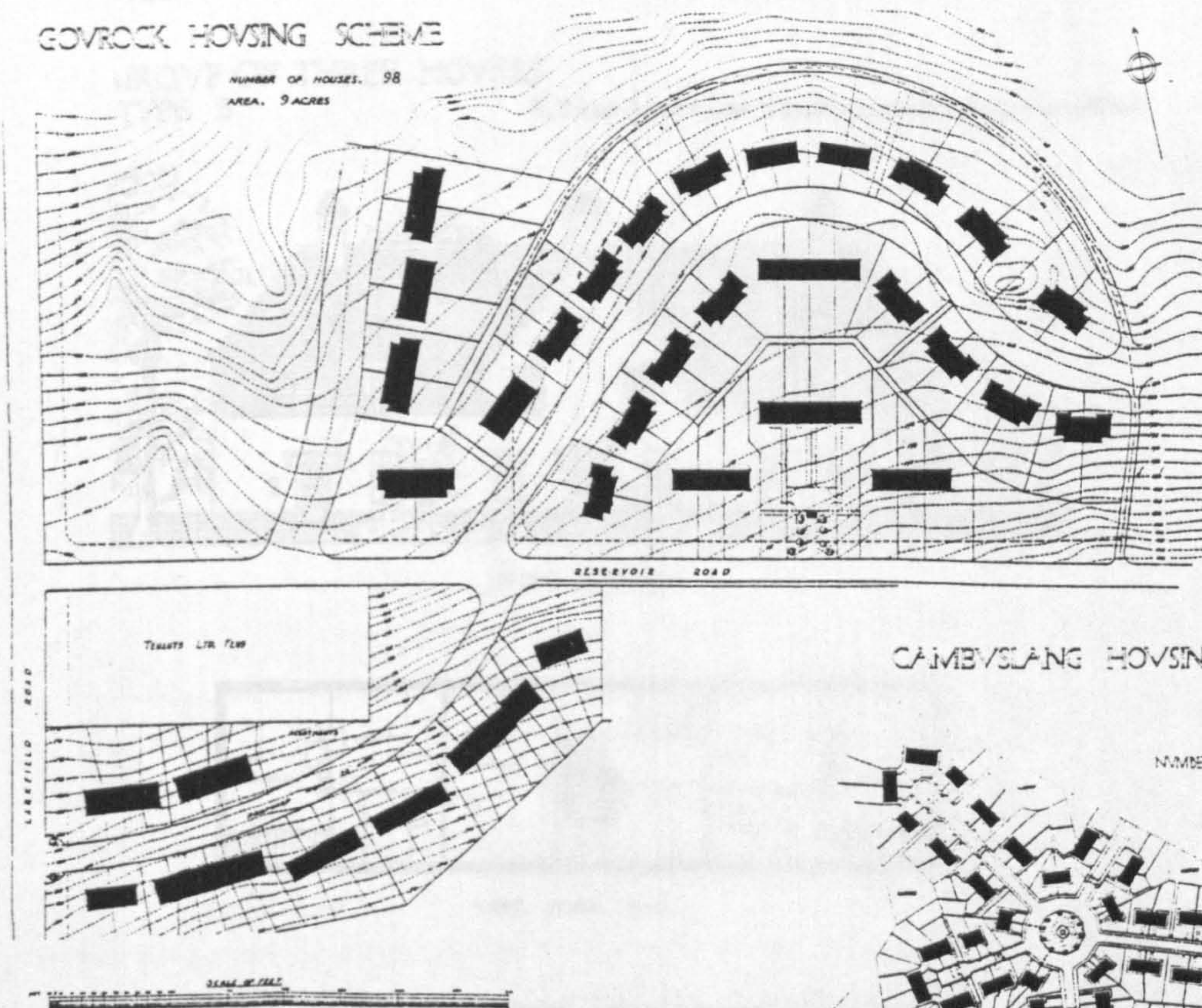
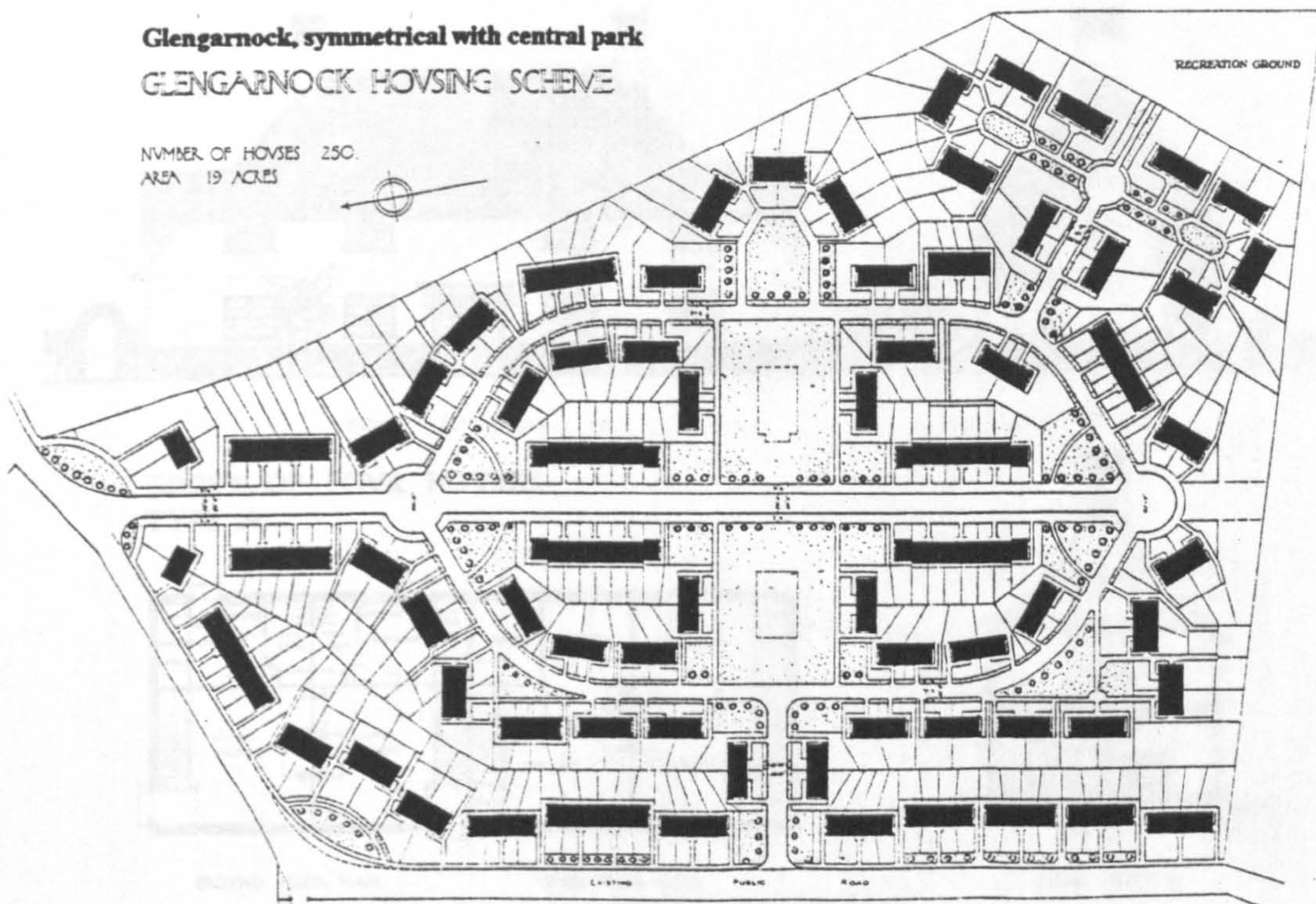


Figure 1.24

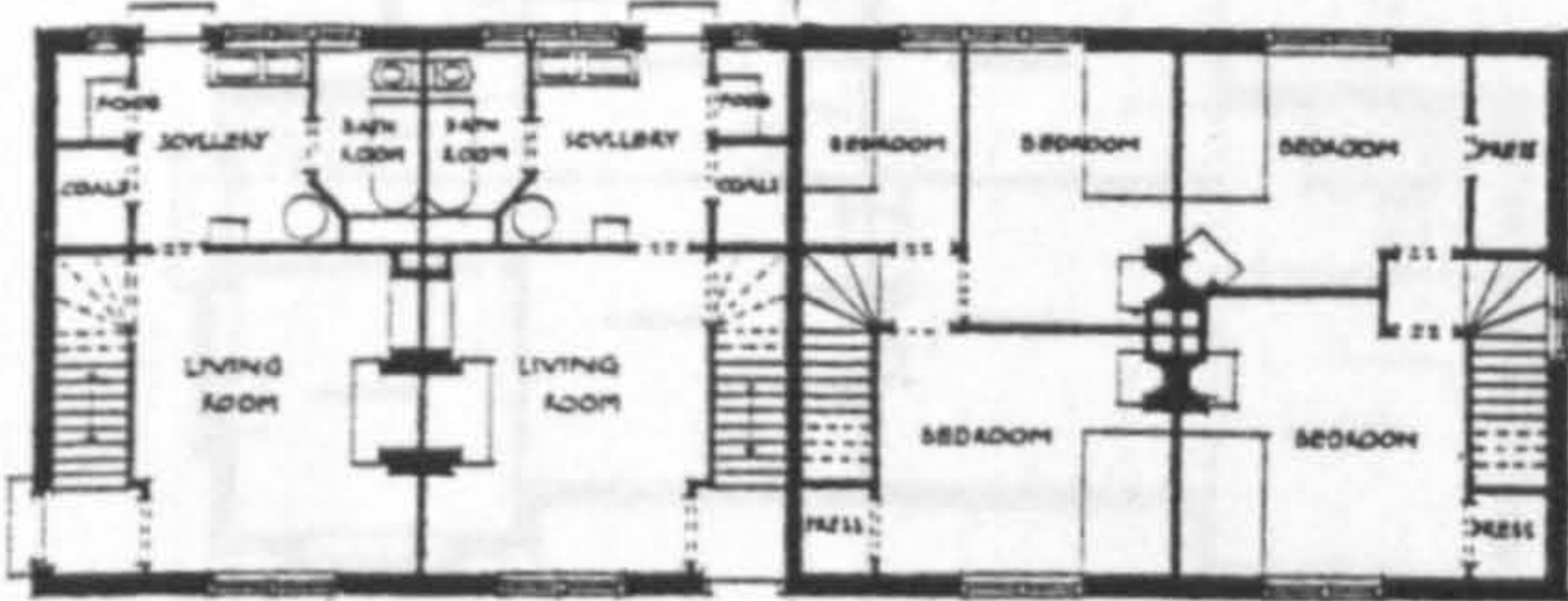
Local Government Board for Scotland Memorandum 1918



FRONT ELEVATION

END ELEVATION

GROUP OF FOUR HOUSES
TYPE A



GROUND FLOOR PLAN

UPPER FLOOR PLAN



CROSS SECTION

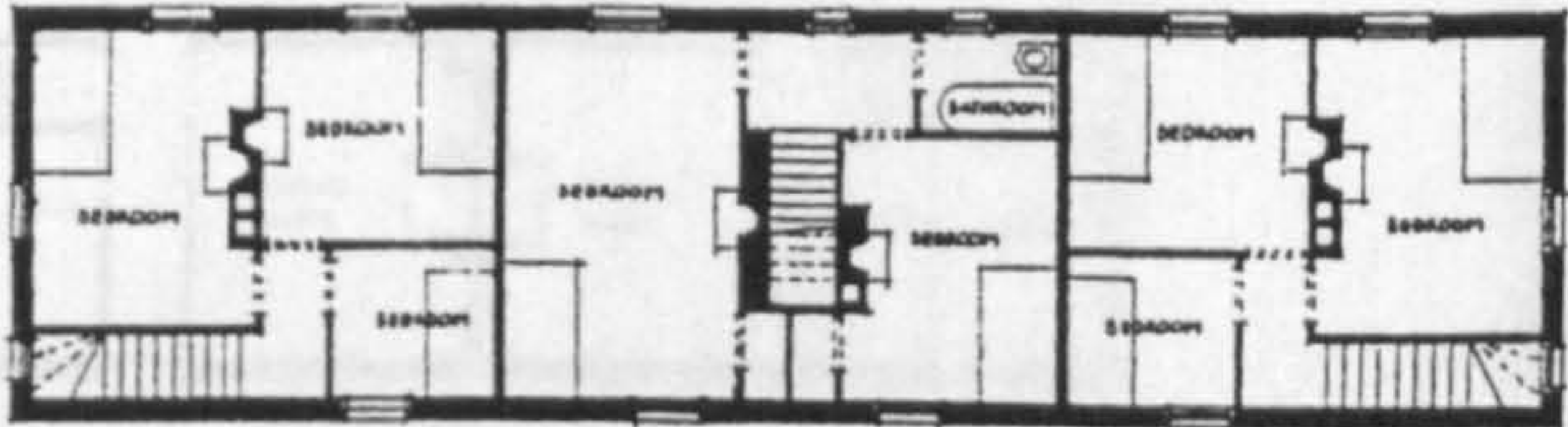
A, 2 and 3 bedroom 3 and 4 apartment with bathroom off scullery

GROUP OF THREE HOUSES
TYPE B

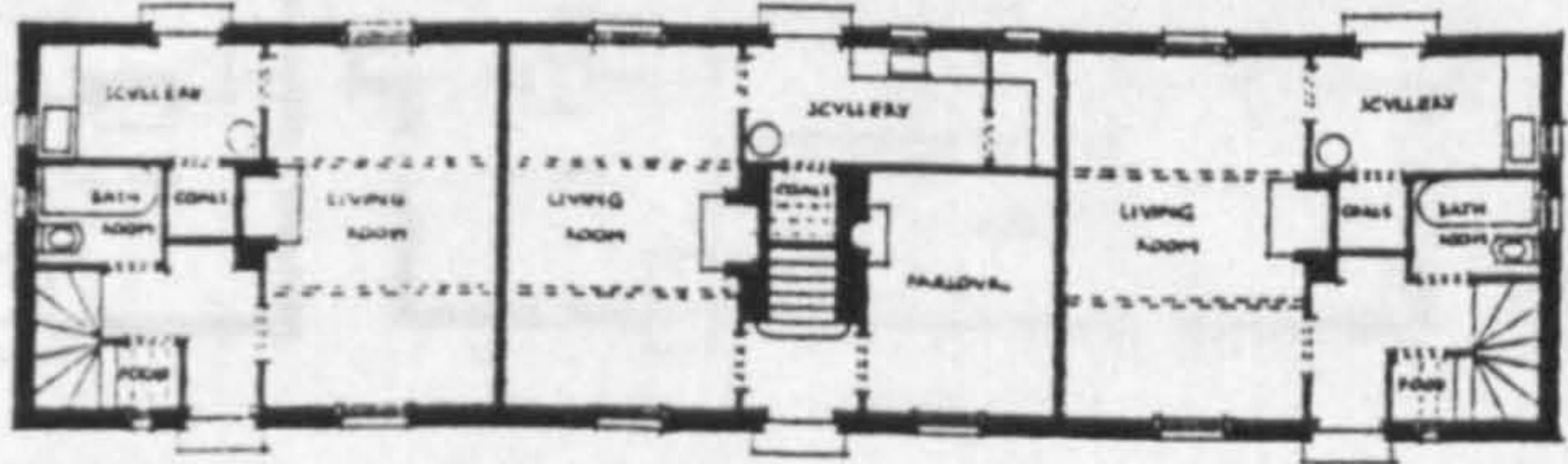
B, 2 and 3 bedroom 4 apartment with bathroom off hall



FRONT ELEVATION



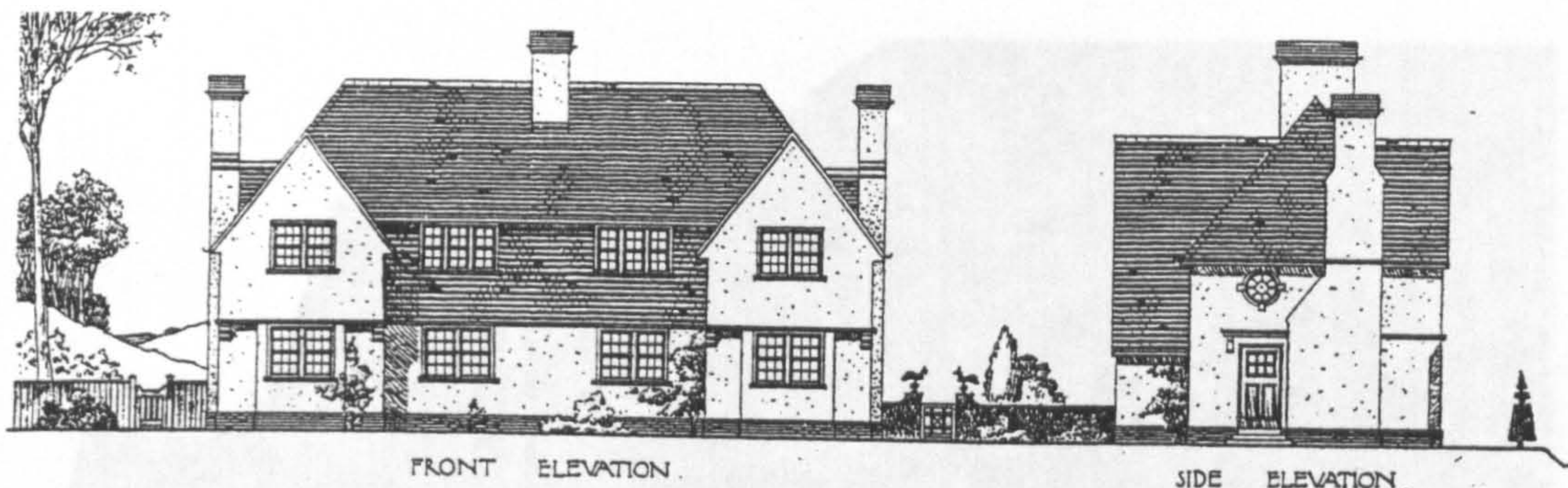
UPPER FLOOR PLAN



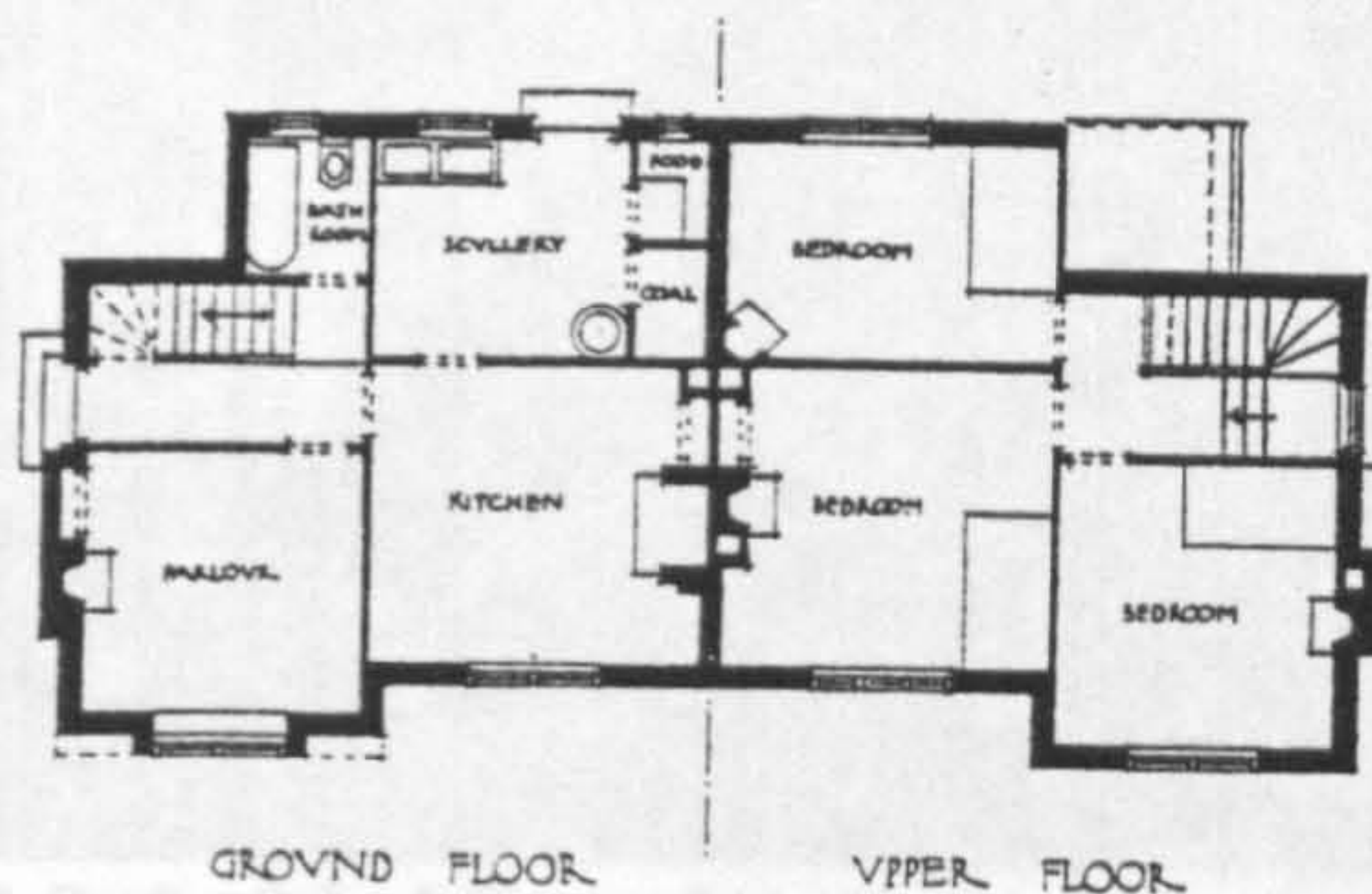
GROUND FLOOR PLAN

Figure 1.25

Local Government Board for Scotland Memorandum 1918

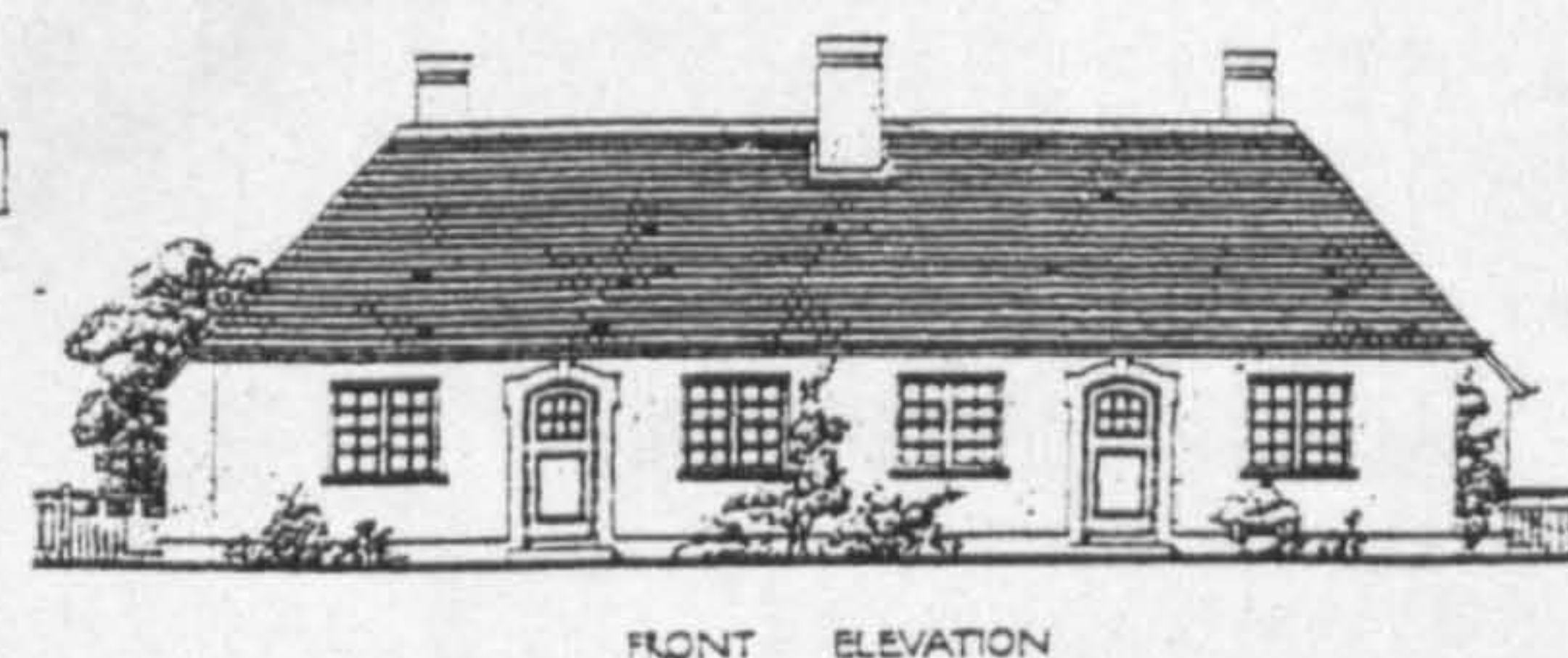
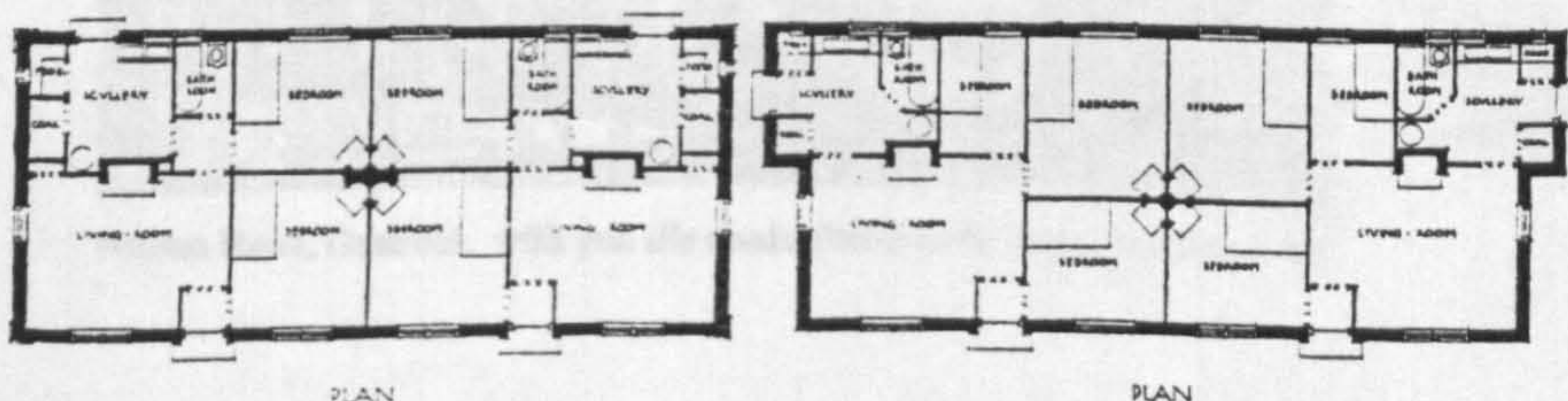
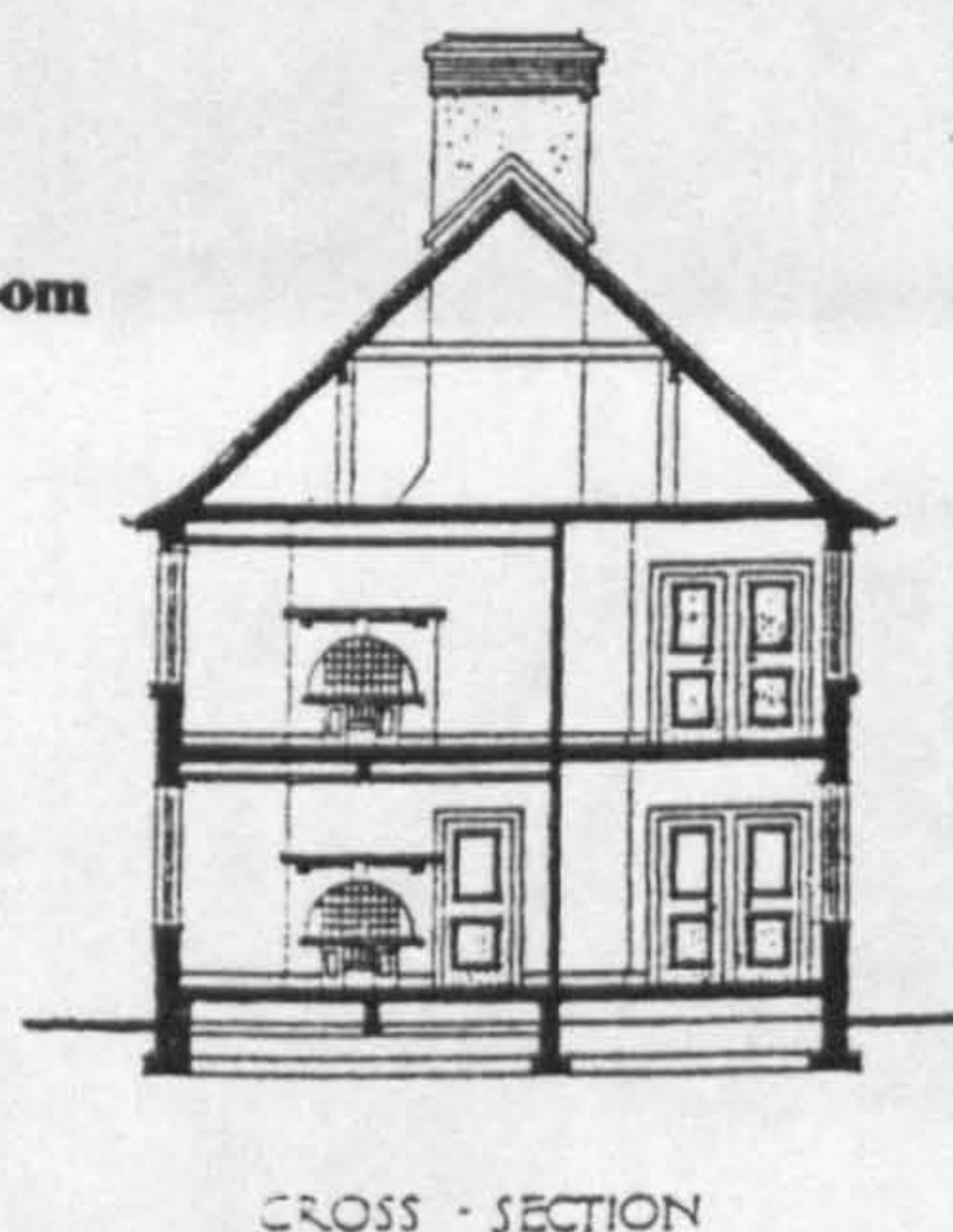
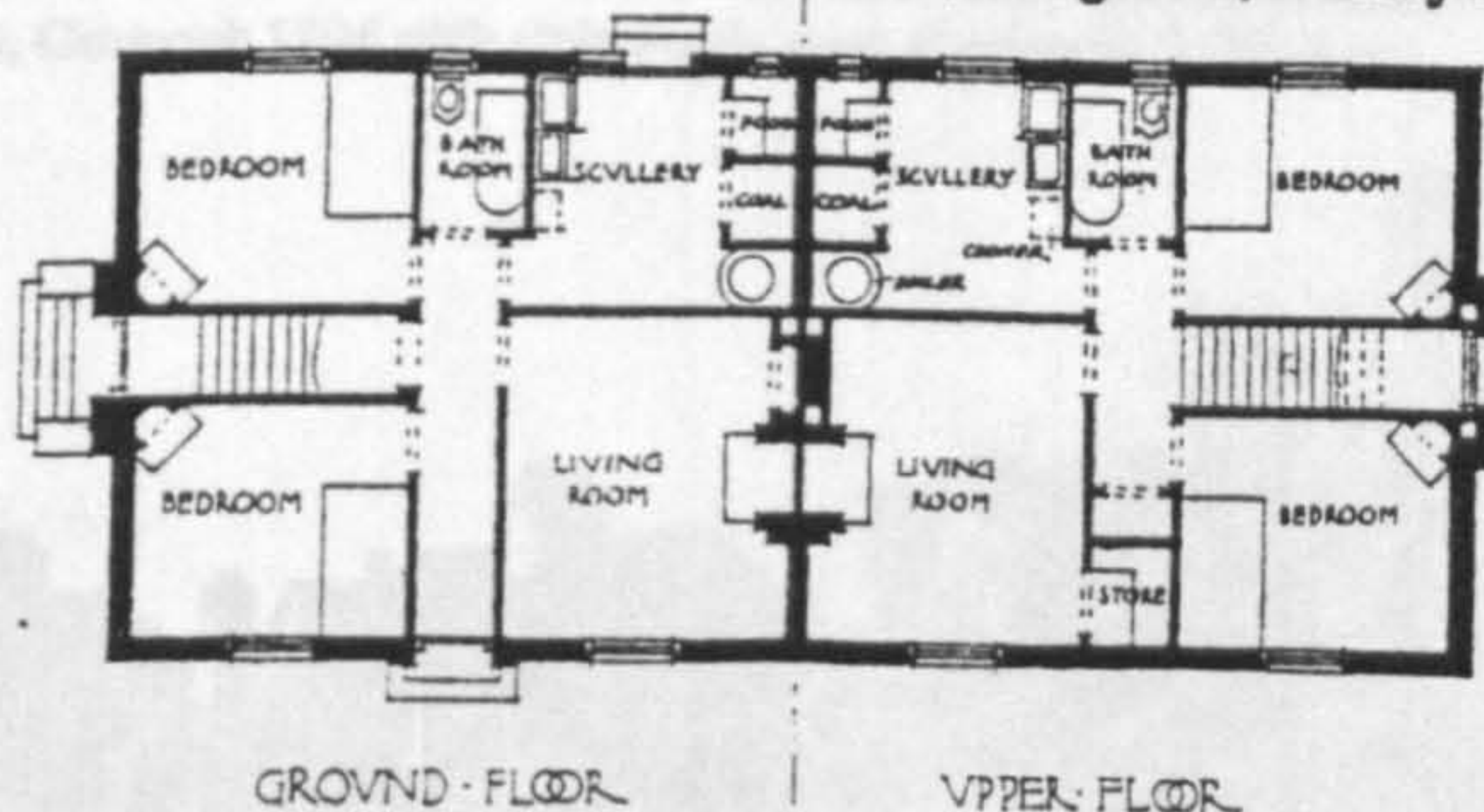


PAIR OF HOUSES WITH PARLOVR
TYPE C
C, 3 bedroom 5 apartment with scullery and bathroom off hall



GROUP OF FLATTED HOUSES
TYPE D.

D, 4 in a block with 2 bedrooms, livingroom, scullery and bathroom



E, F, 2 and 3 bedroom single storey cottages

Local Government Board for Scotland Memorandum 1918



Gourock and Greenock Garden Suburb Tenants Ltd., Reservoir Road, Gourock



Nelson Road, Gourock 1994 with slate roofs, note similarity to Rosyth



Nelson Road, Gourock with pan tile roofs featured in Memorandum 1918

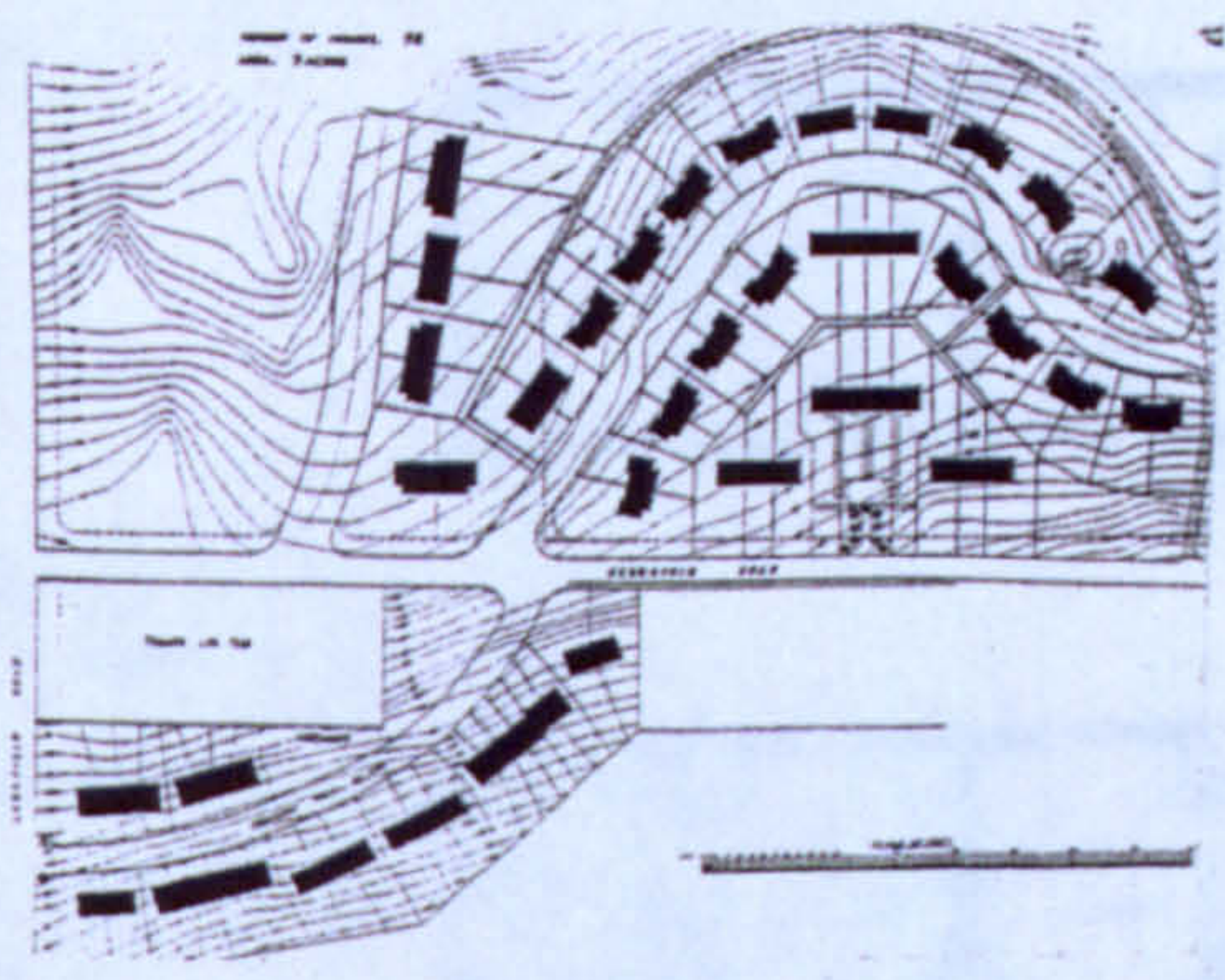


Figure 1.27

1919 L.G.B.S. Competition, Cottages

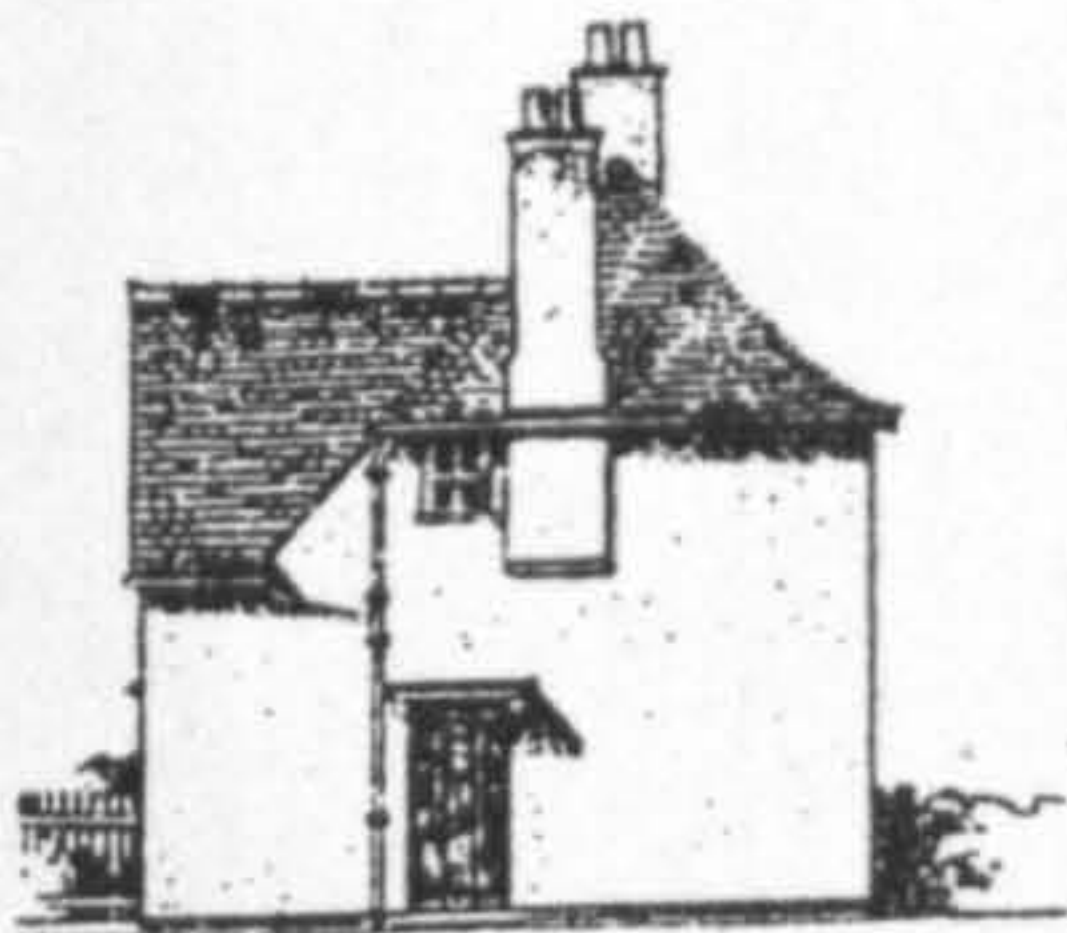
HOUSING OF THE WORKING CLASSES
IN SCOTLAND. COMPETITIVE DESIGNS

SECTION I
LAY-OUT PLAN

SCHEDULE OF HOUSES

| | | |
|-------------------------|------------|---|
| TYPE A | 36 | ③ |
| DE A (Narrow Frontage) | 64 | ③ |
| DE B | 46 | ③ |
| DE C | 38 | ③ |
| DE D (Two Storey Flats) | 18 | ③ |
| TOTAL | 202 | |

NOTE: ALL NOTES APPLICABLE TO TYPE B
ARE OUTLINES FOR TYPE C. NOT REPRODUCED.



END ELEVATION



SECTION I. TYPE B: FIRST PREMIUM

Miss E. D. Blacker and H. Heathman (Bristol)



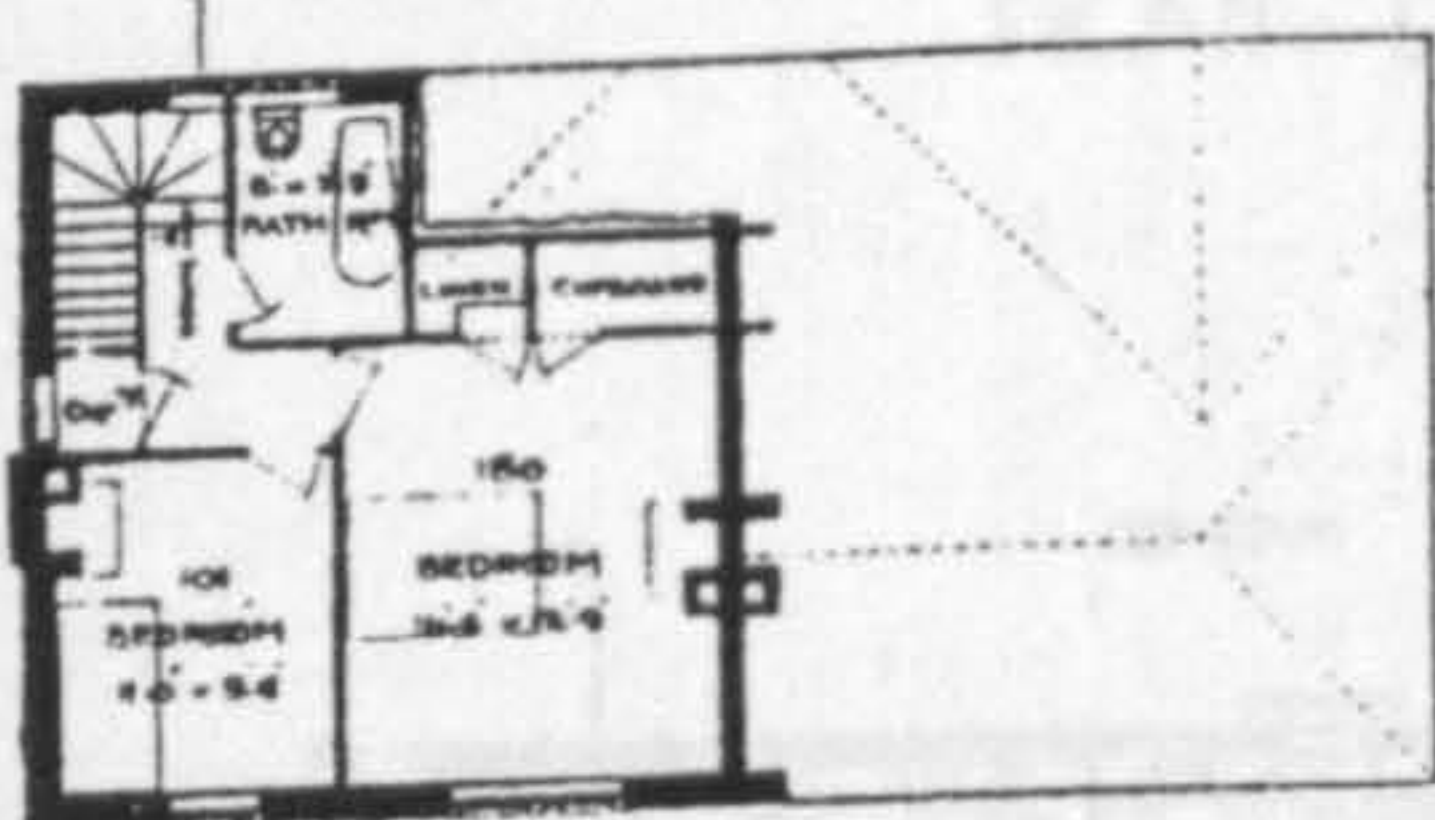
FRONT ELEVATION



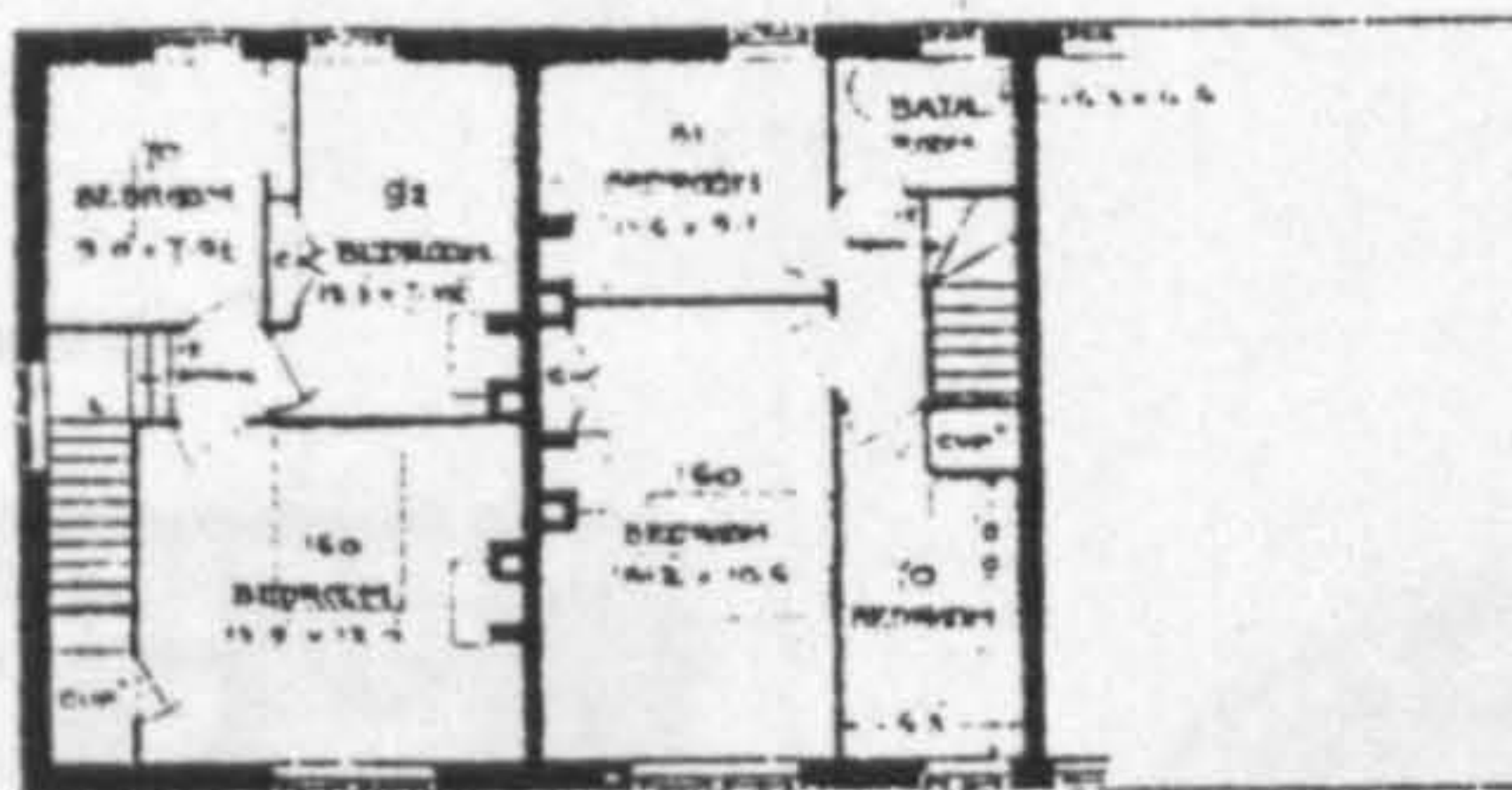
FRONT E



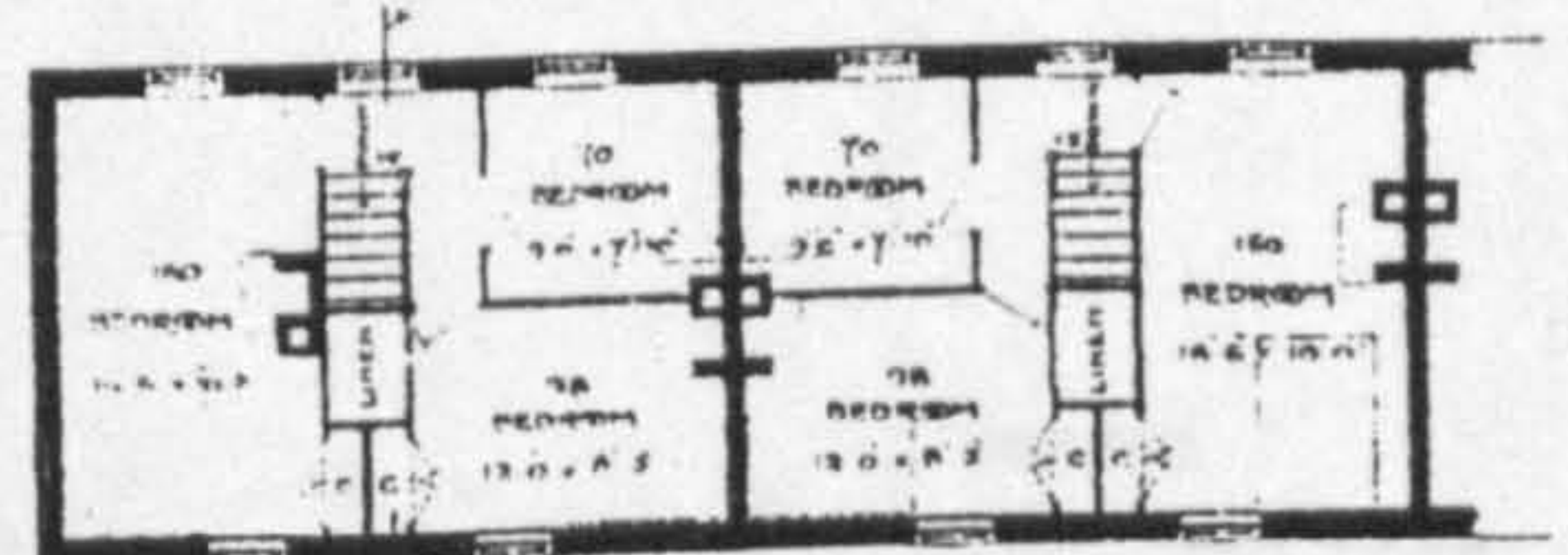
FRONT ELEV



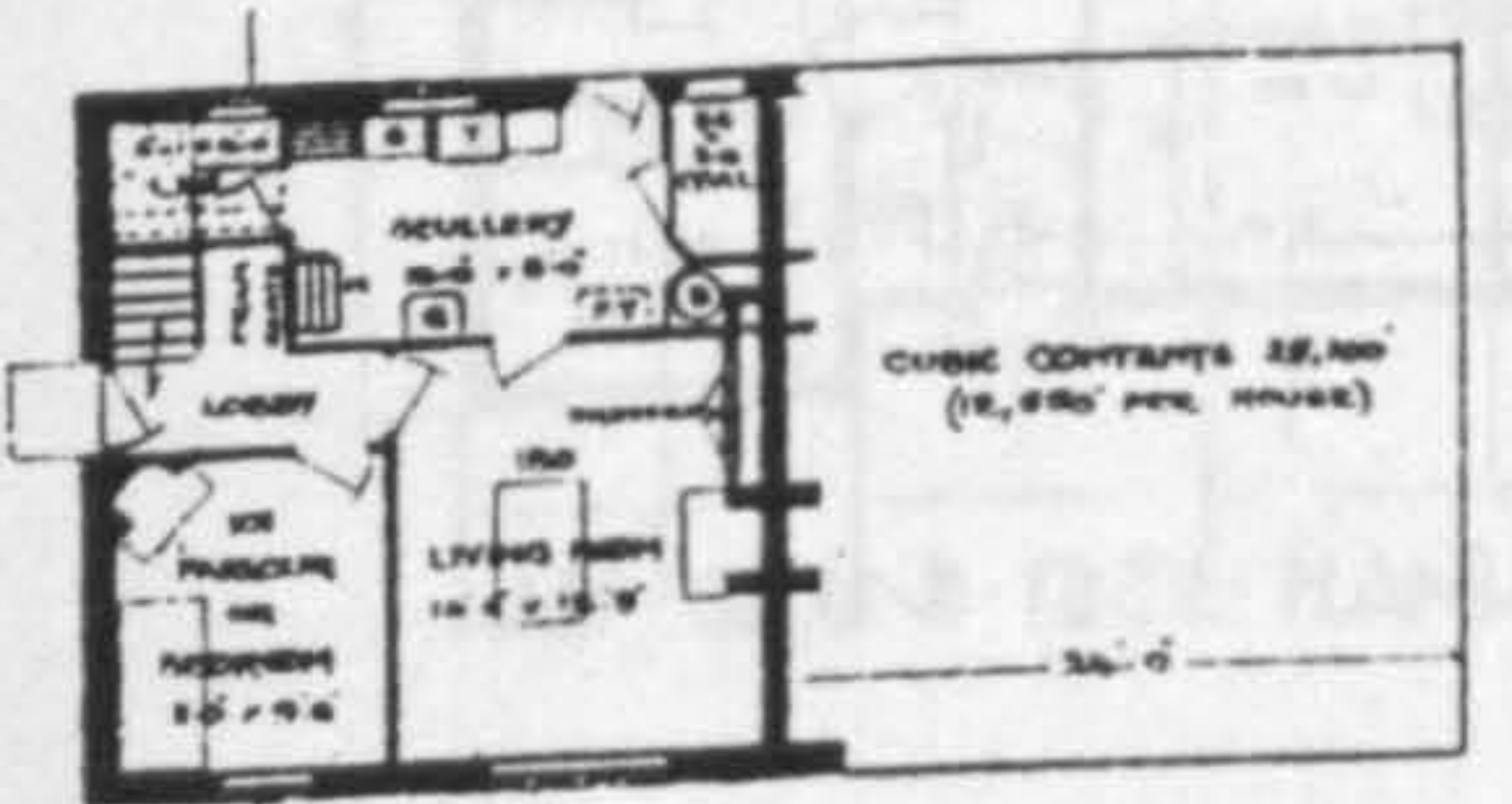
FIRST FLOOR PLAN



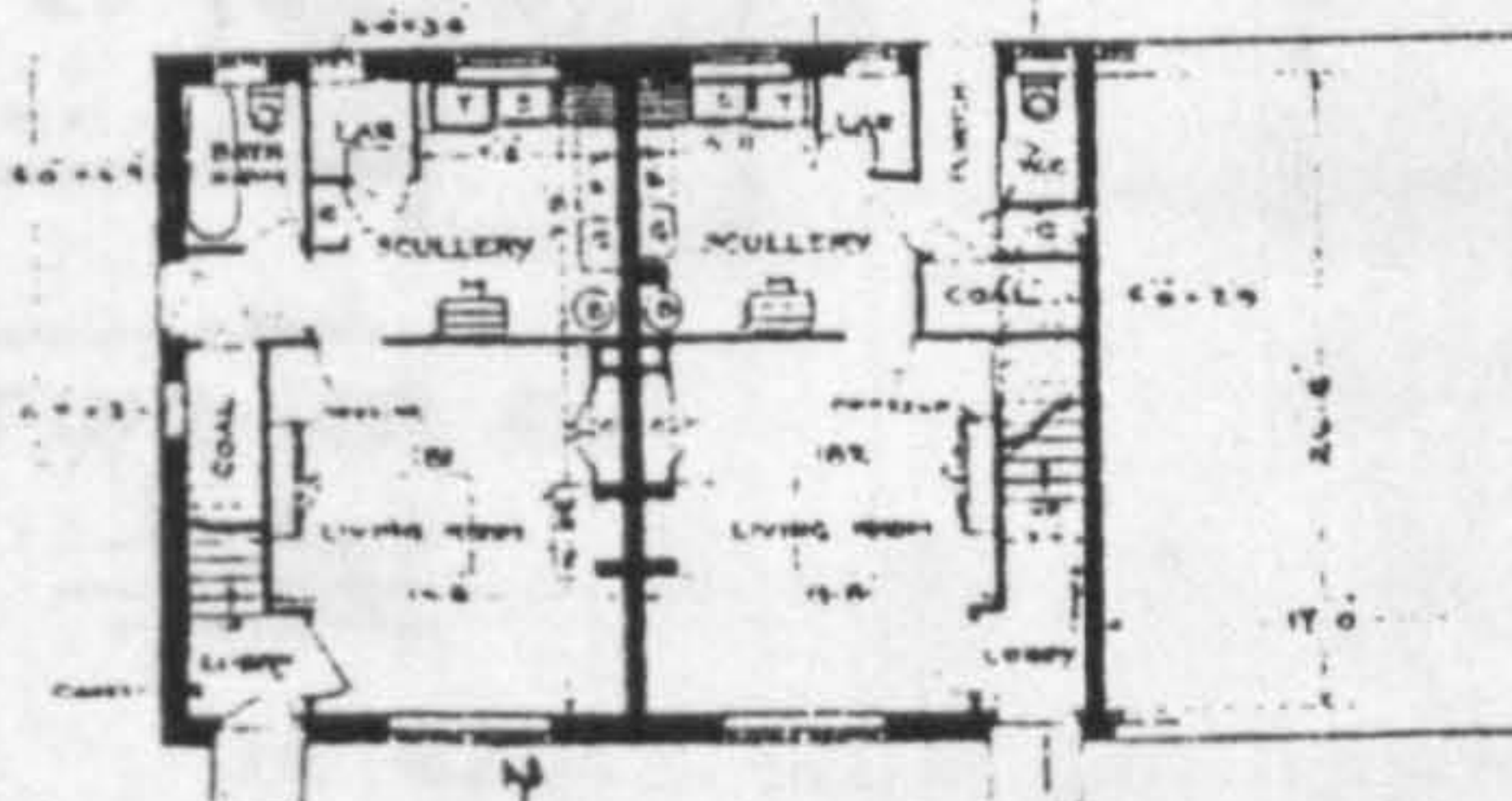
FIRST F



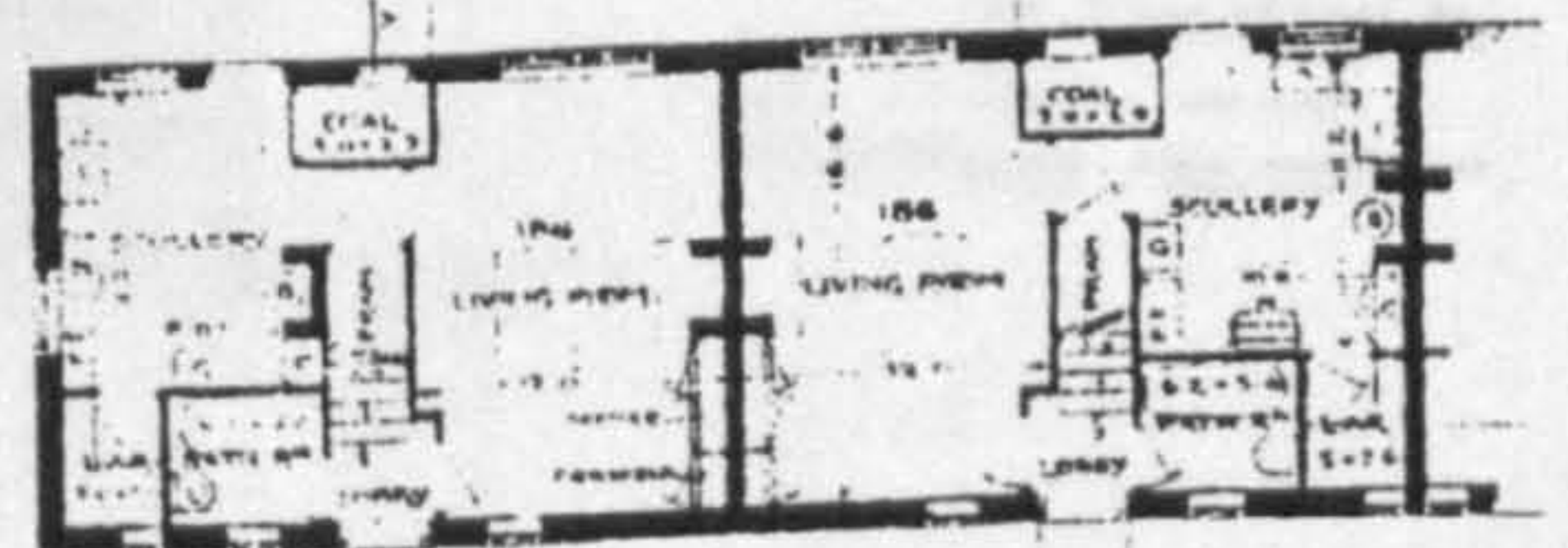
FIRST FLOOR



GROUND FLOOR PLAN



GROUND F



GROUND FLOOR

Type B Parlour

Type A 17 feet frontage

Type A north frontage

Figure 1.28

The image contains three architectural drawings of a two-story house:

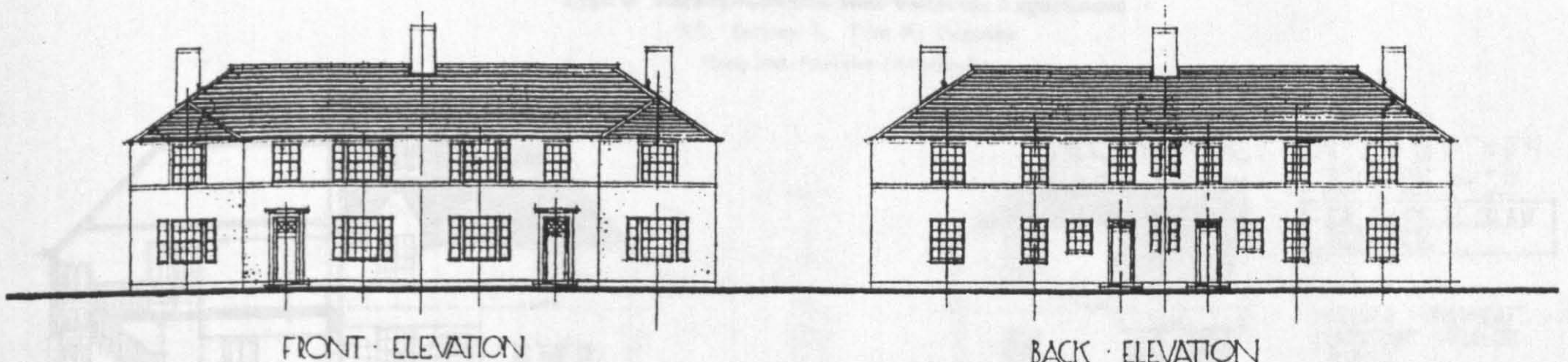
- END ELEVATION:** A side view of the house showing a gabled roof with a chimney on the left, a single window on the first floor, and a brick foundation.
- FRONT ELEVATION:** A long side view of the house showing a symmetrical facade with a central entrance, multiple windows, and four chimneys along the roofline.
- SECTION A-B:** A cross-section of the house showing the internal structure, including the roof trusses, a staircase, and the foundation.

The floor plan shows three units on the second floor. Each unit has a living room, kitchen, bathroom, and bedroom. The plan also shows a central hallway and stairs.

- Unit 1 (Left):**
 - Living Room: 11'0" x 13'0"
 - Kitchen: 10'0" x 10'0"
 - Bathroom: 5'0" x 6'0"
 - Bedroom: 11'0" x 13'0"
- Unit 2 (Middle):**
 - Living Room: 11'0" x 13'0"
 - Kitchen: 10'0" x 10'0"
 - Bathroom: 5'0" x 6'0"
 - Bedroom: 11'0" x 13'0"
- Unit 3 (Right):**
 - Living Room: 11'0" x 13'0"
 - Kitchen: 10'0" x 10'0"
 - Bathroom: 5'0" x 6'0"
 - Bedroom: 11'0" x 13'0"

| CUBIC | CONTENTS |
|---------|--------------|
| 33744 | CFT 3 HOUSES |
| 11252 6 | CFT 1 HOUSE |

Type A north frontage



Hand-drawn floor plan of a building, showing the Half Ground Floor and Half Upper Floor. The plan is symmetrical, with a central corridor connecting various rooms. The overall dimensions are 34' 0" wide by 34' 0" deep.

Rooms and Dimensions:

- Living RM: 100 S.F.
- Dining RM: 100 S.F.
- Kitchen: 100 S.F.
- Bed RM: 100 S.F.
- Bath: 10 S.F.
- Toilet: 5 S.F.
- Hall: 10 S.F.
- Staircase: 10 S.F.

Labels:

- HALF GROUND FLOOR PLAN
- HALF UPPER FLOOR PLAN

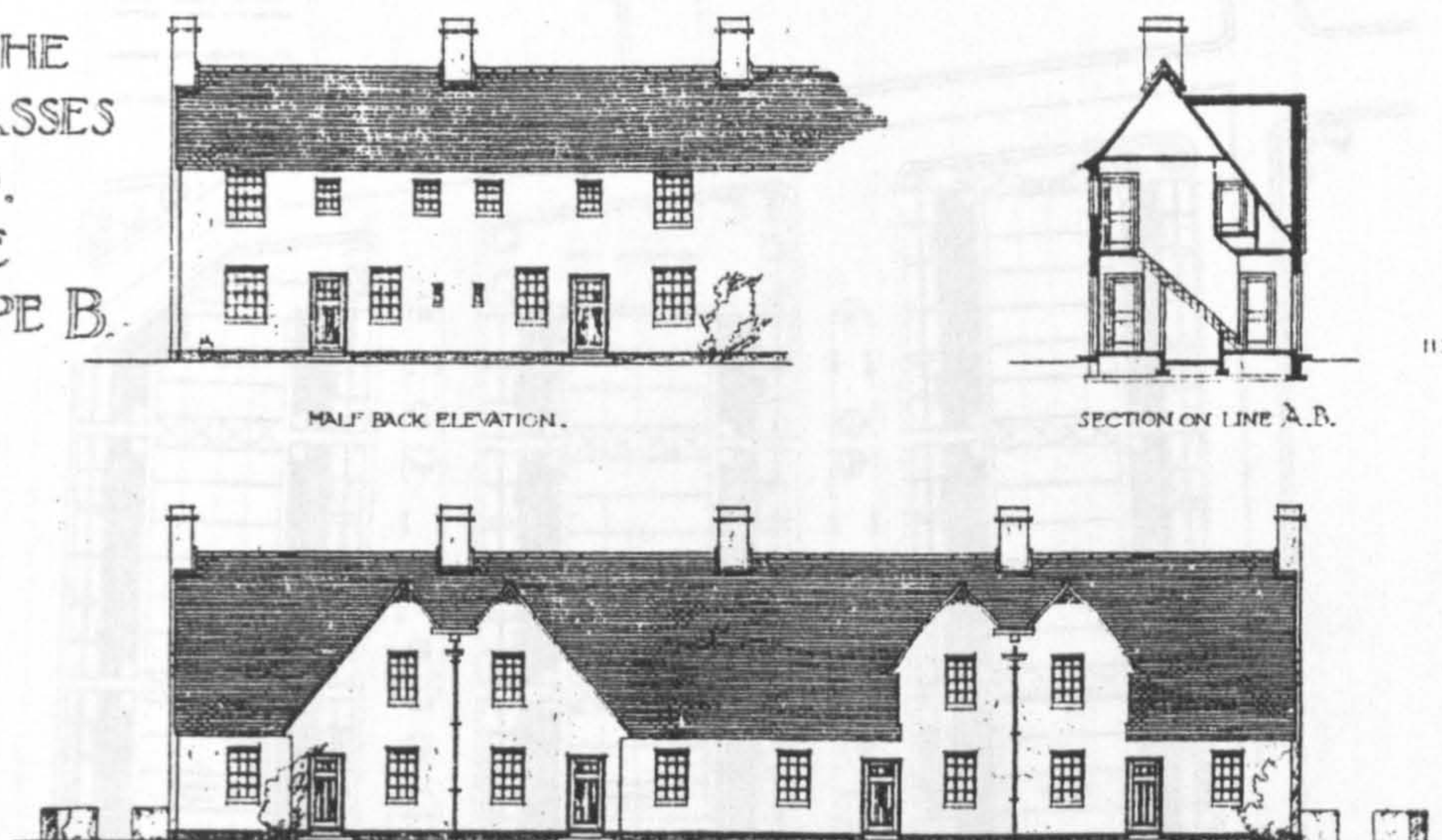
A line drawing of a two-story house with a chimney. The drawing shows the exterior and a cross-section of the interior. On the right side, there is a staircase with a railing leading from the ground floor to the second floor. A window with multiple panes is visible on the second floor. The house has a gabled roof and a chimney on the left side. The drawing is simple and appears to be a technical or architectural sketch.

[illegible]

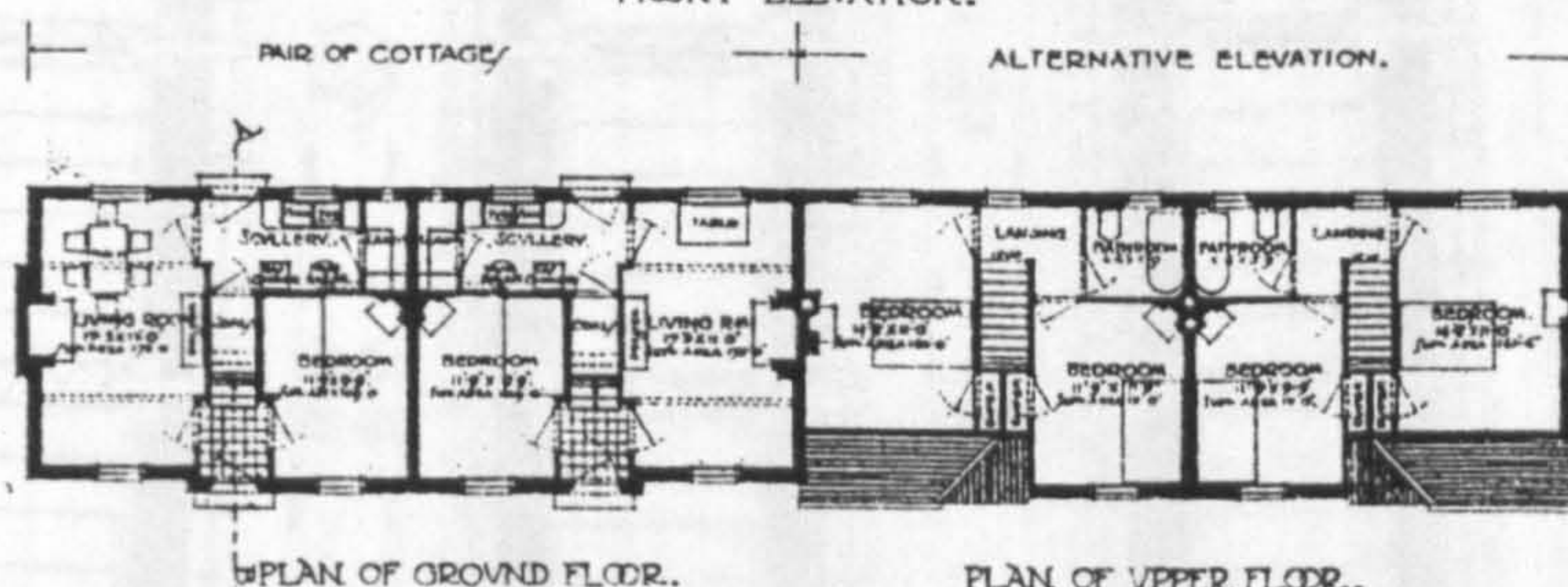
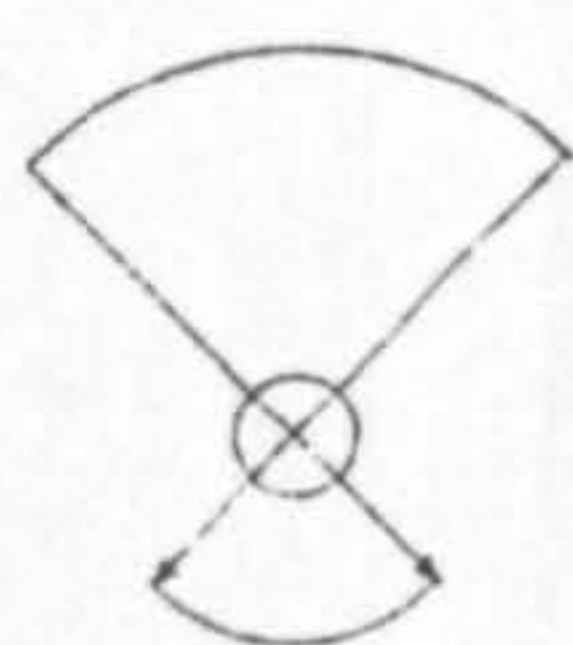
Type D flatted house 4 in a block

1919 L.G.B.S. Competition, Cottages

HOUSING OF THE
WORKING CLASSES
IN SCOTLAND.
COMPETITIVE
DESIGN. TYPE B.



CUBIC CONTENTS.
11528 CUB. FT. PER HOUSE.

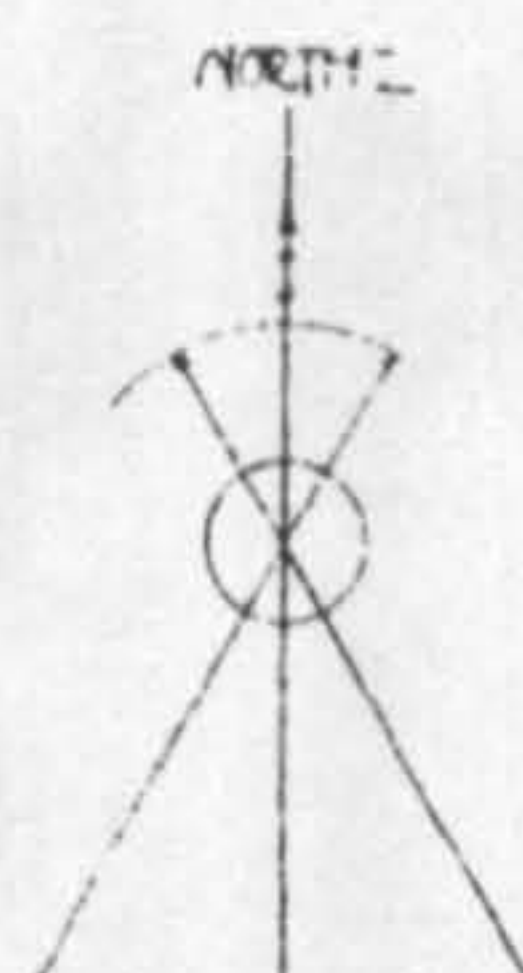
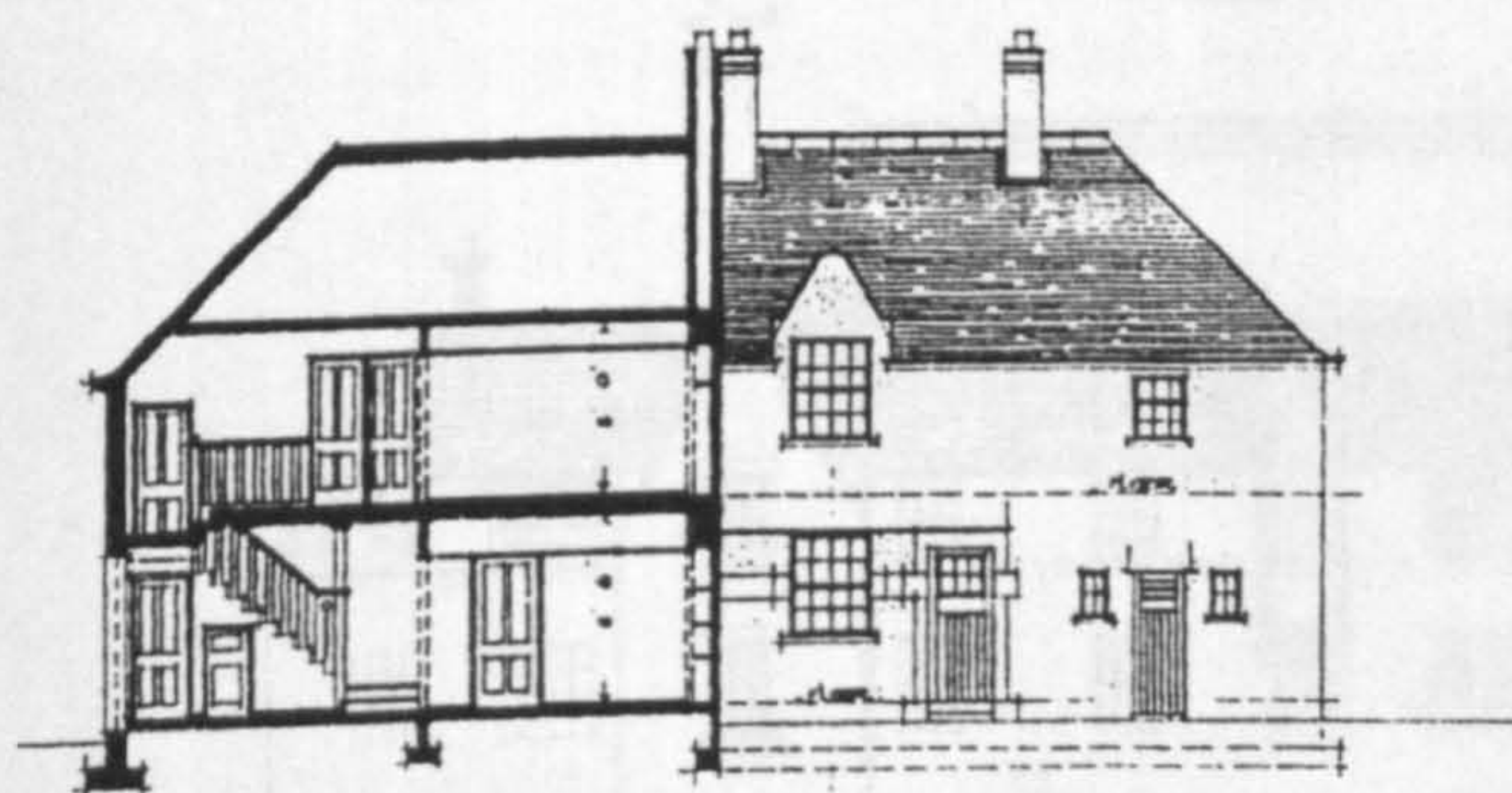


SCALE OF FEET.

Type B Parlour/Ground floor bedroom 4 apartment

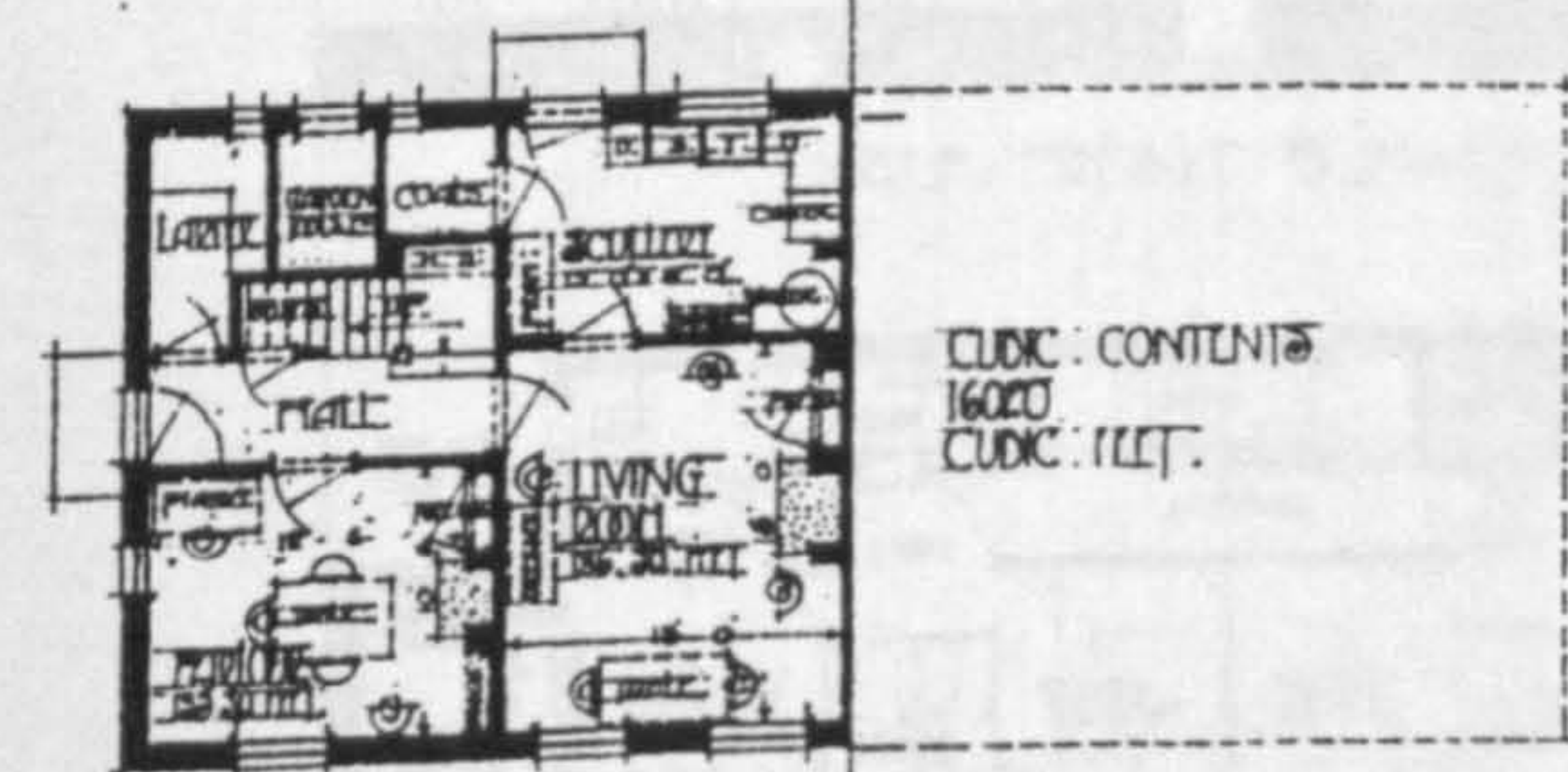
XX. SECTION I. TYPE B: PREMIUM

Greig and Fairbairn (Edinburgh)

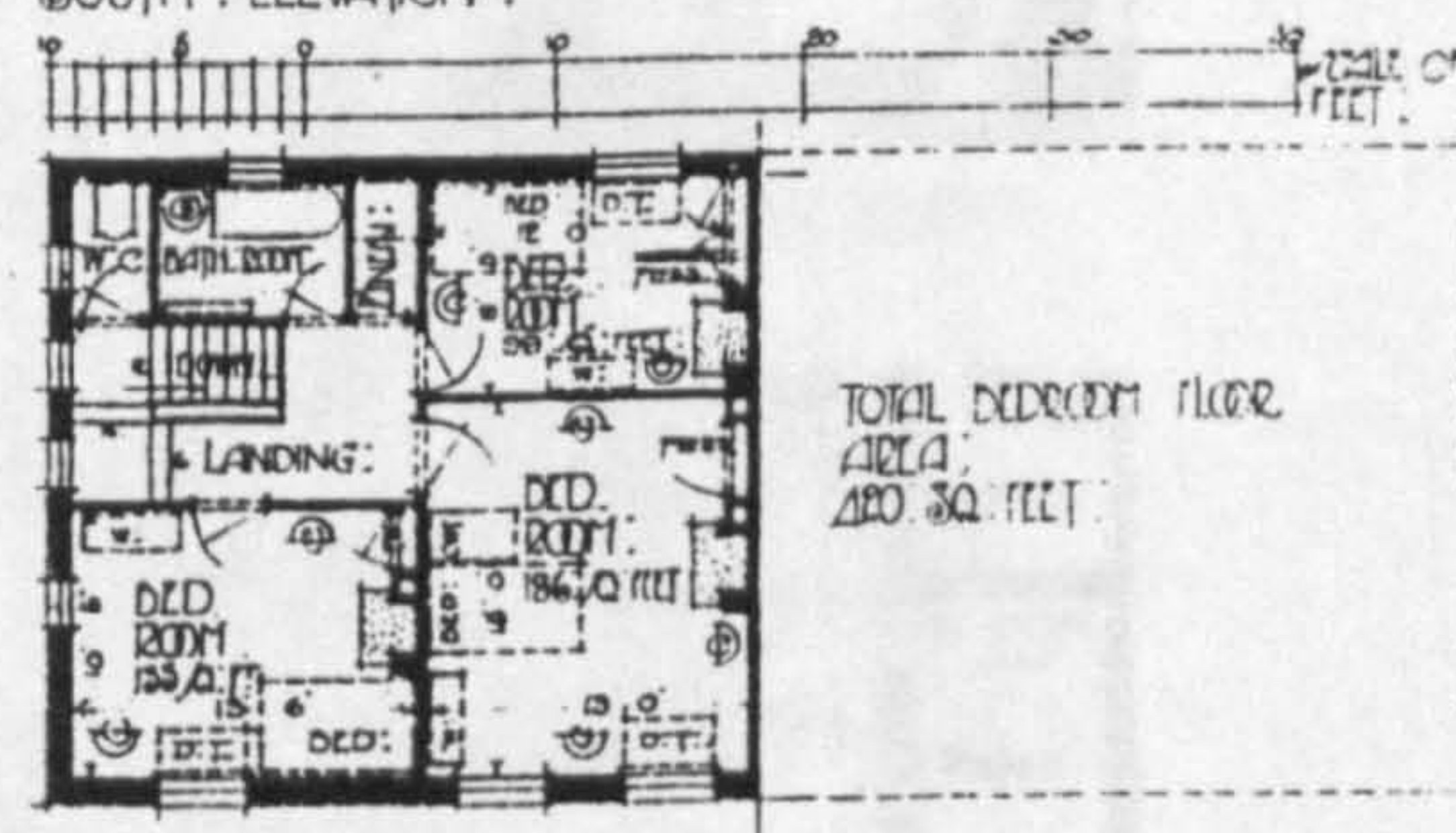


SECTION I.
TYPE C.
FOR SOUTH, S.E. OR S.W.
COTTAGES.

HOUSES CONTAINING:
LIVING ROOM, SCULLERY,
KITCHEN,
THREE BEDROOMS,
BATH ROOM,
& CONVENIENCES.



CUBIC CONTENTS
16000
CUBIC FEET.



TOTAL BEDROOM FLOOR
AREA:
180 SQ. FEET.

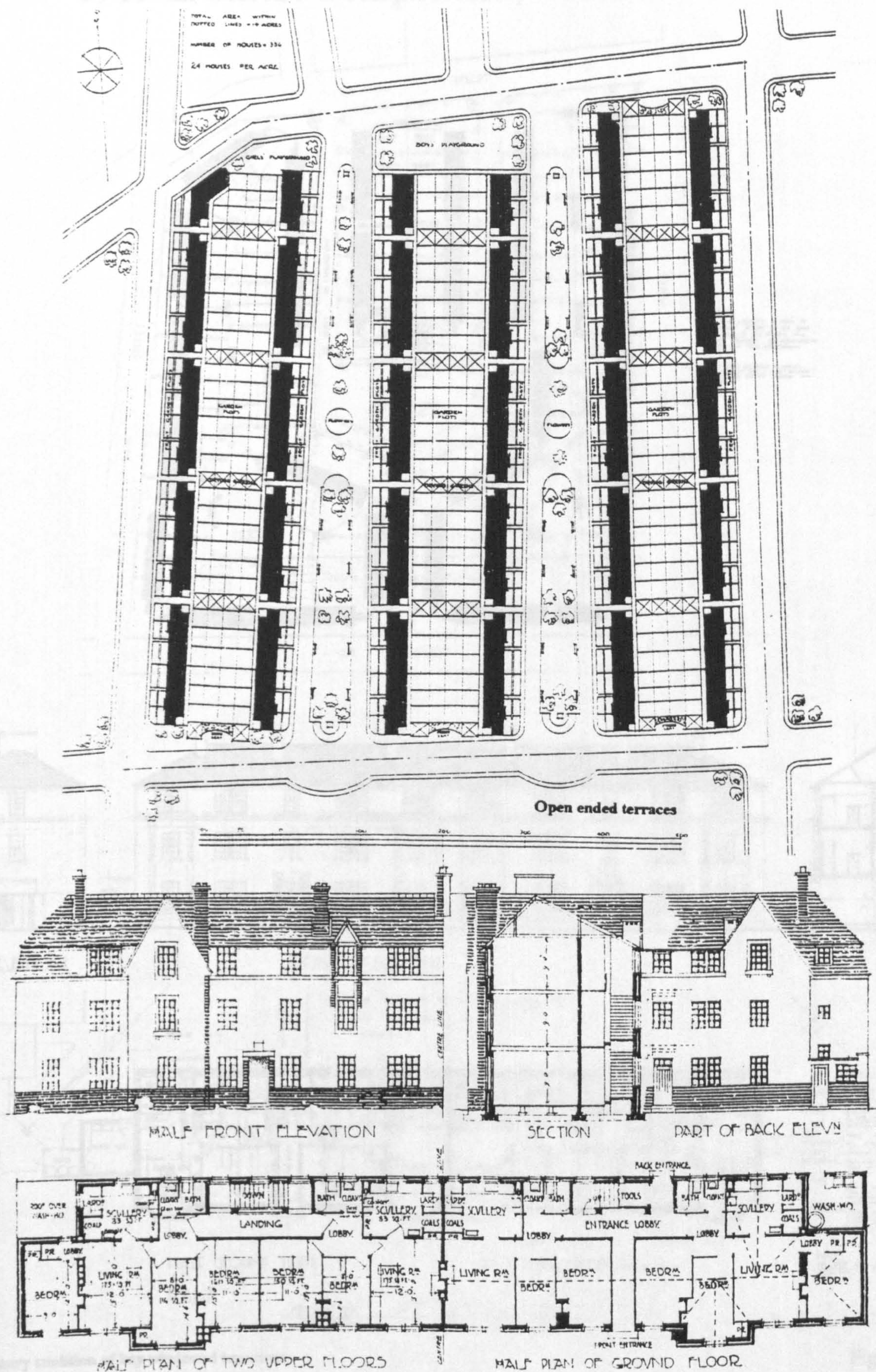
Type C Parlour 5 apartment

XXX. SECTION I. TYPE C: PREMIUM

Muirhead and Rutherford (Dunfermline)

Figure 1.30

1919 L.G.B.S. Competition, Tenement

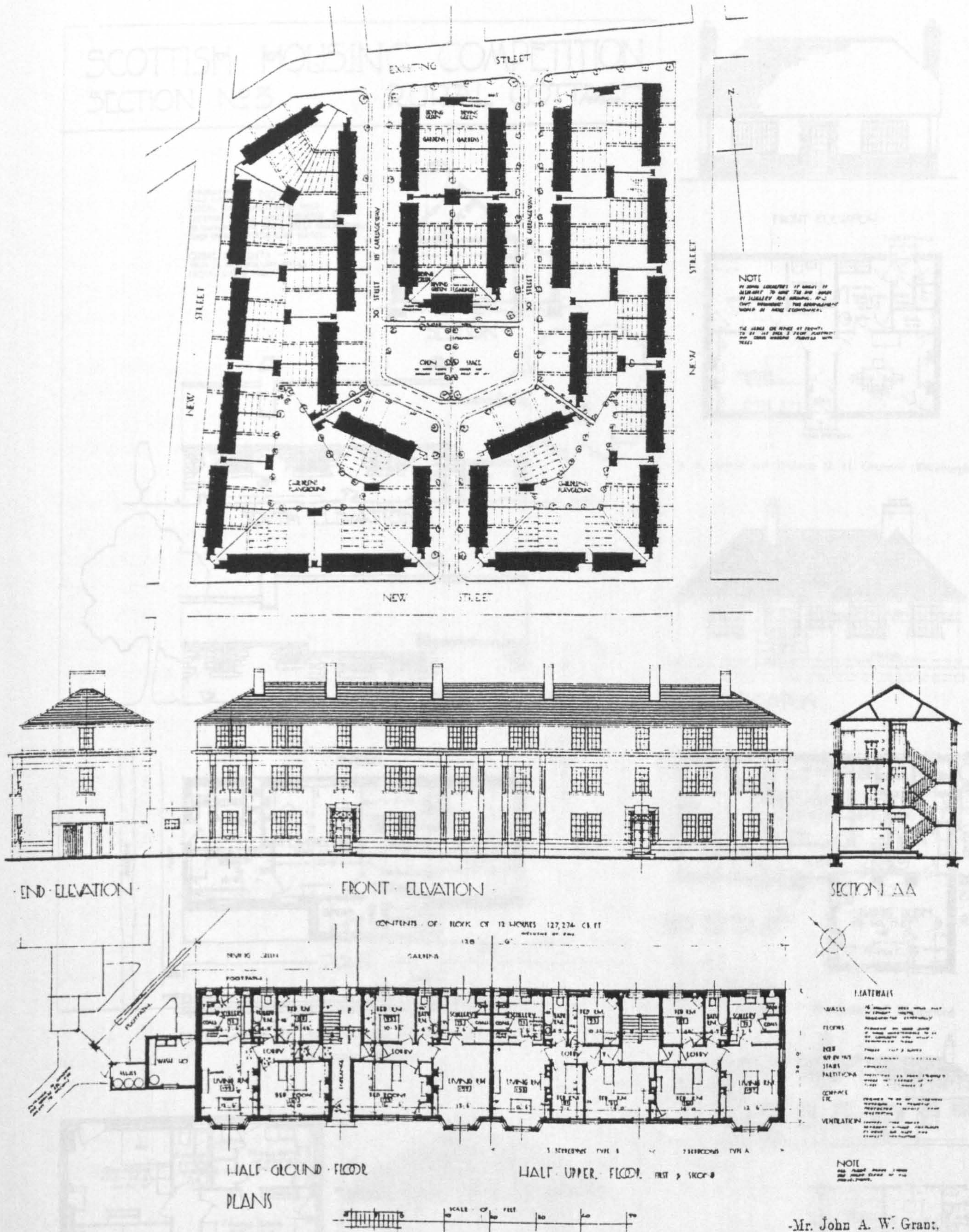


SECTION II LAYOUT PLAN: FIRST PREMIUM
John Arthur (Glasgow)

First Premium to tenement with 3rd floor in mansard roof

Figure 1.31

1919 L.G.B.S. Competition, Tenement

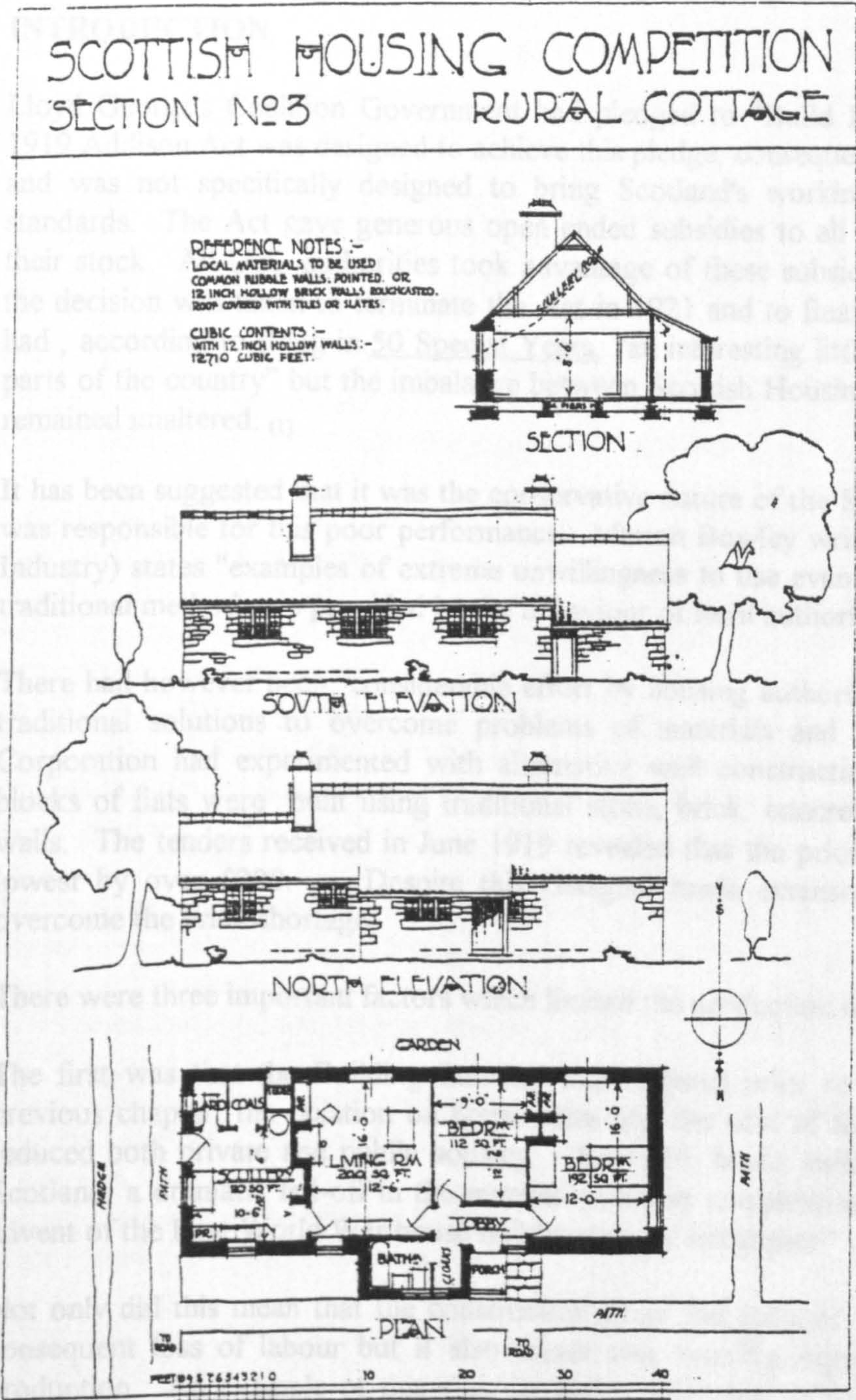


19th Century tradition of bay windowed tenement

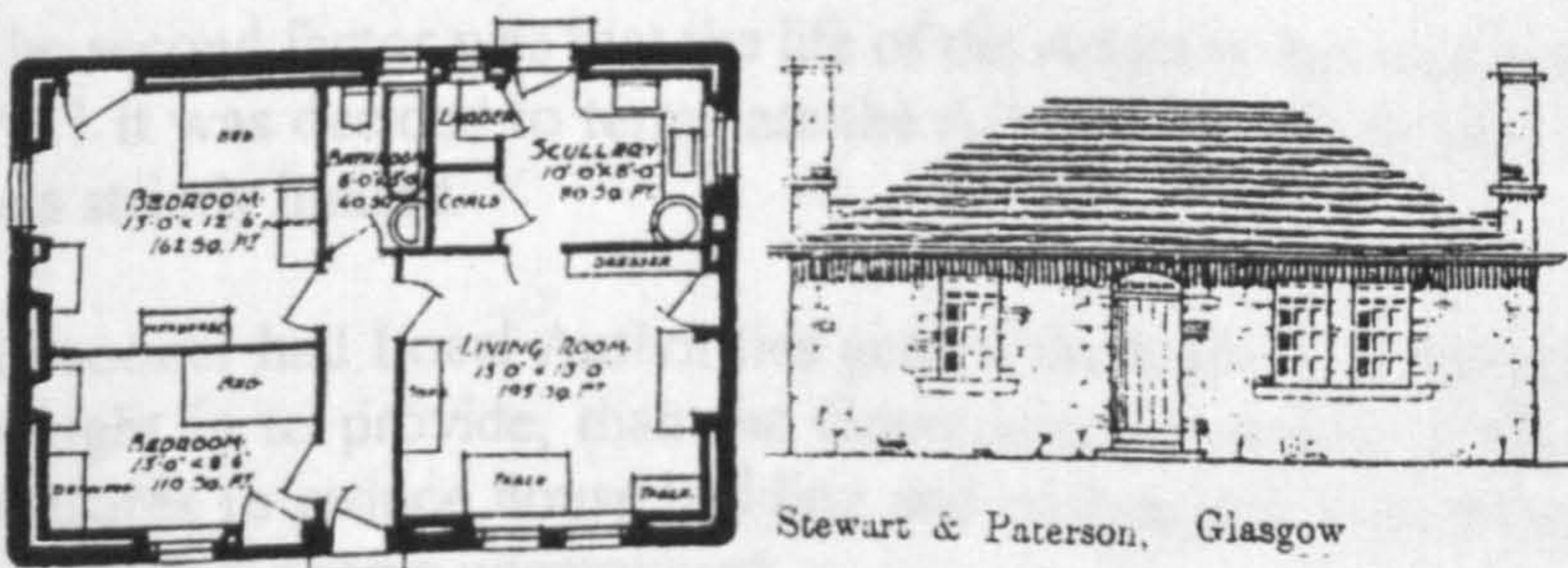
-Mr. John A. W. Grant.

Figure 1.32

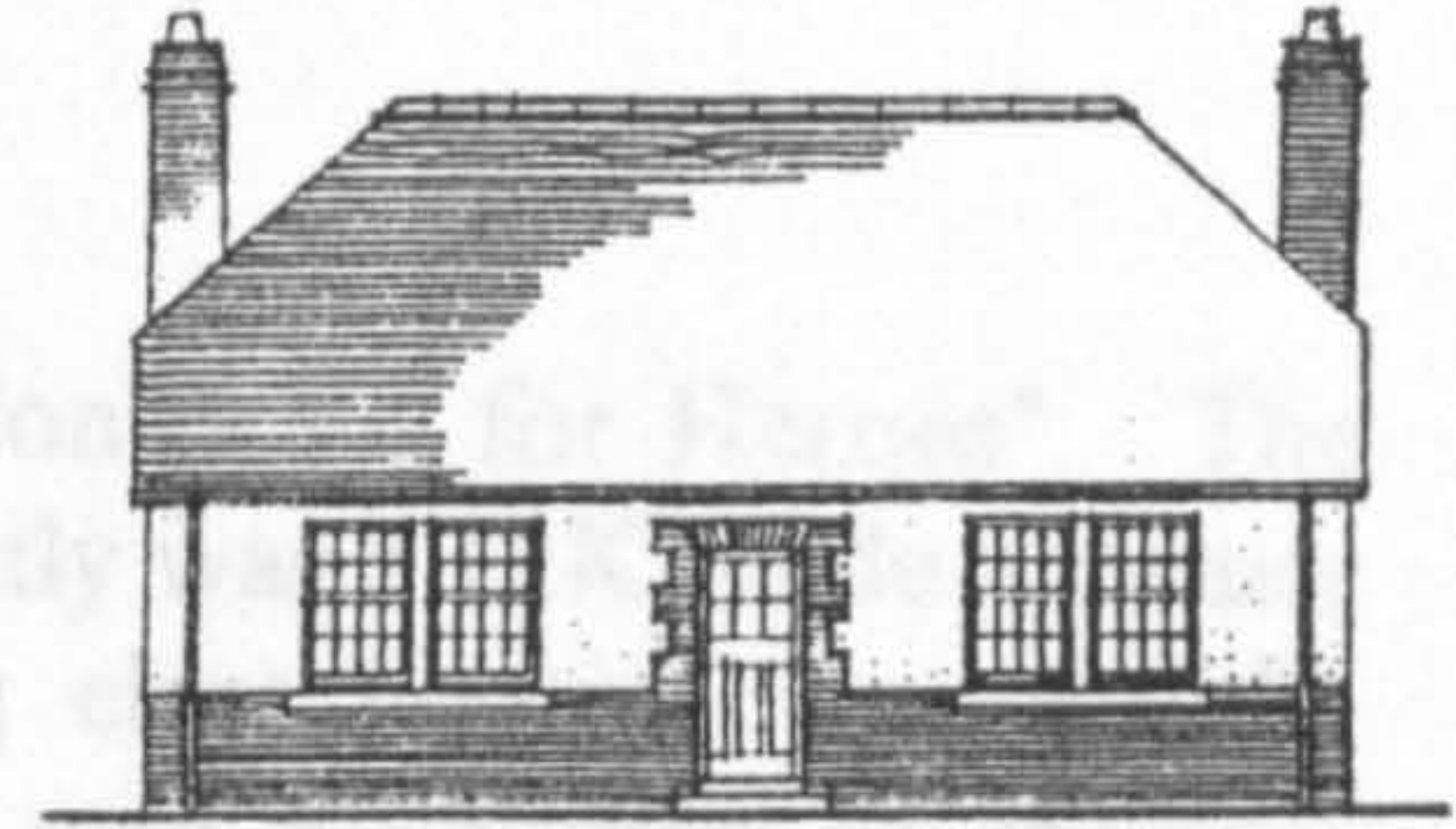
1919 L.G.B.S. Competition, Rural



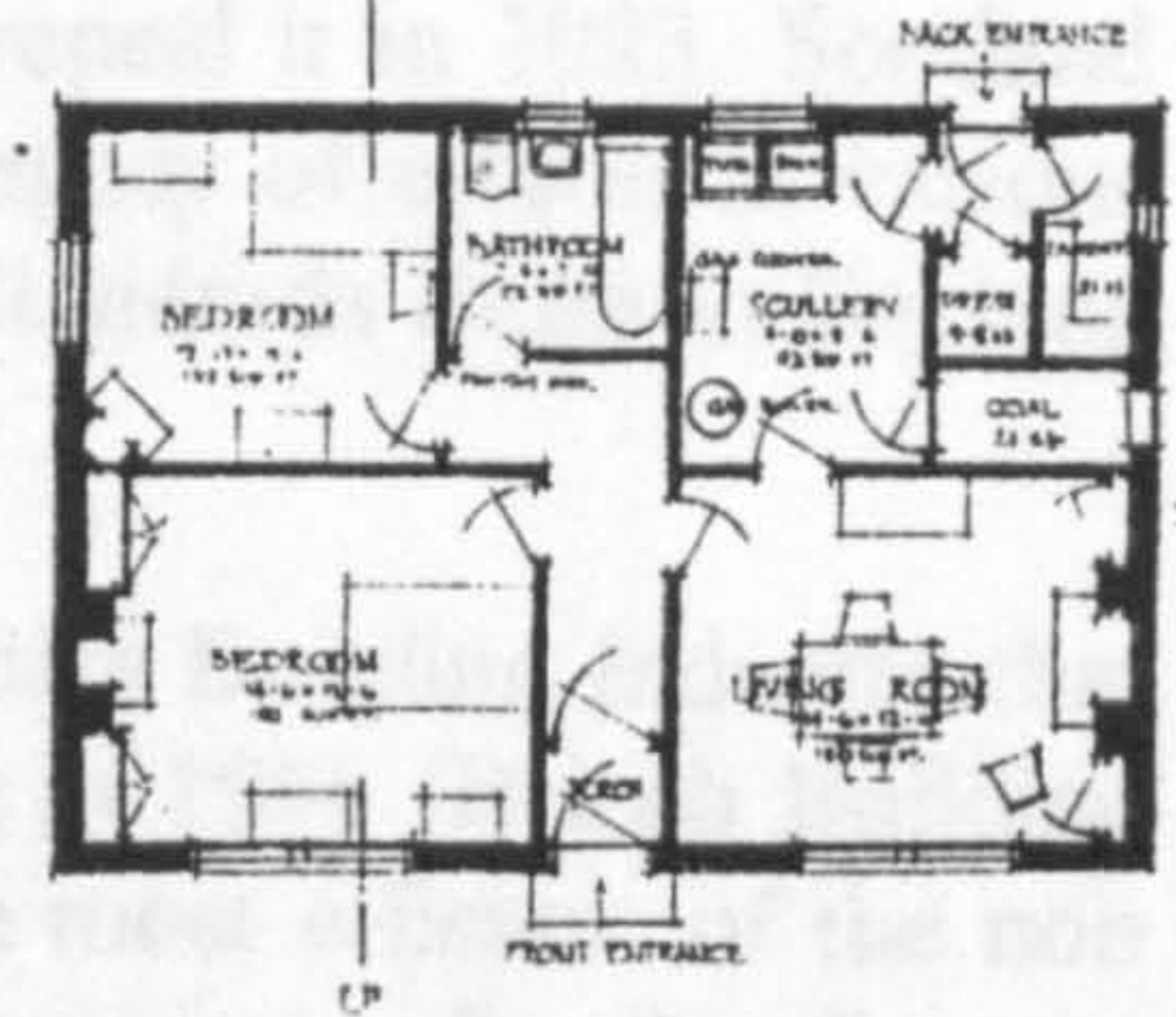
XI.VI. SECTION III. PLAN AND ELEVATION: FIRST PREMIUM
John Arthur (Glasgow)



Single storey cottages with livingroom scullery and 2 bedrooms



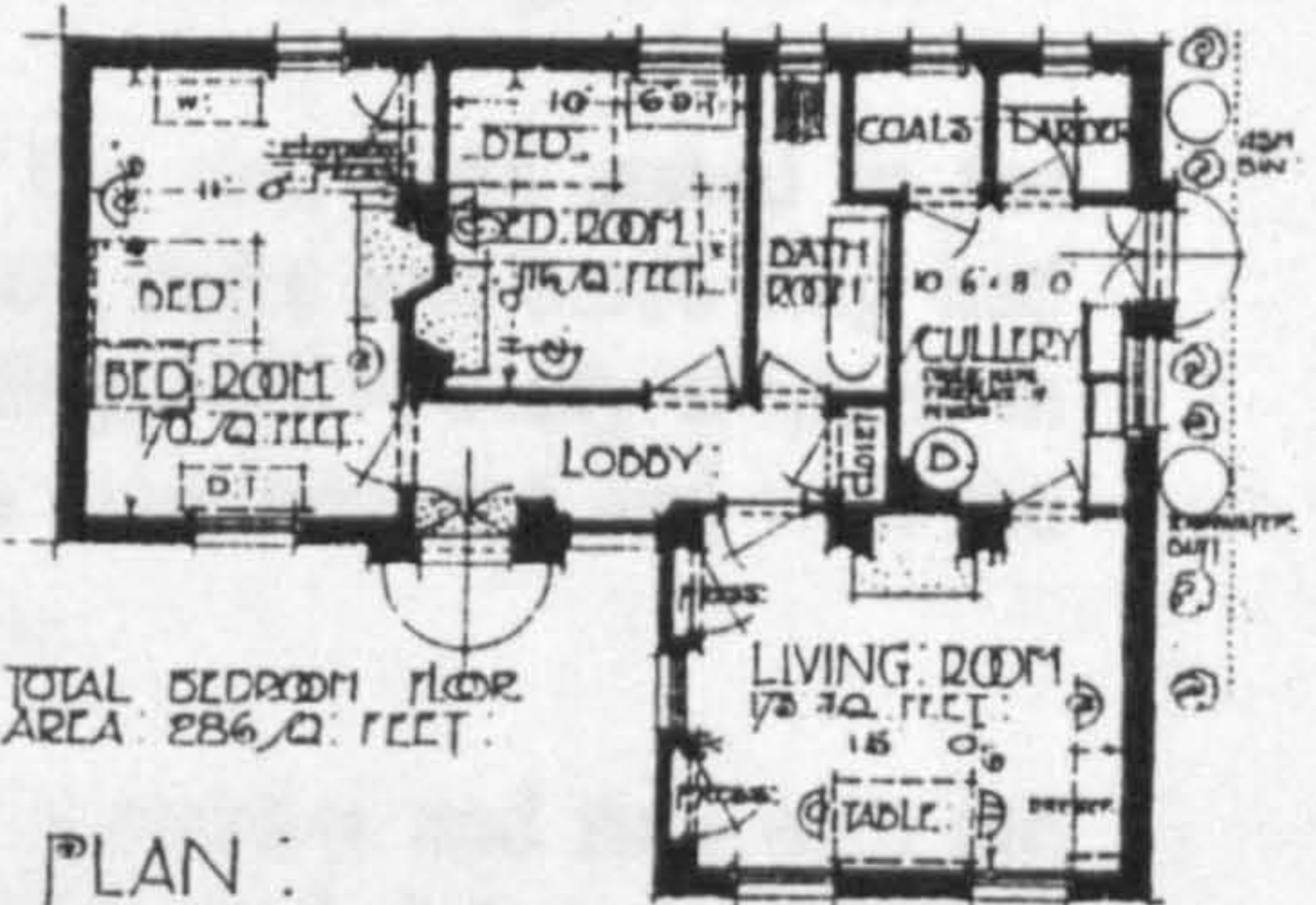
FRONT ELEVATION



J. A. Arnott and Burnett N. H. Orphoot (Edinburgh)

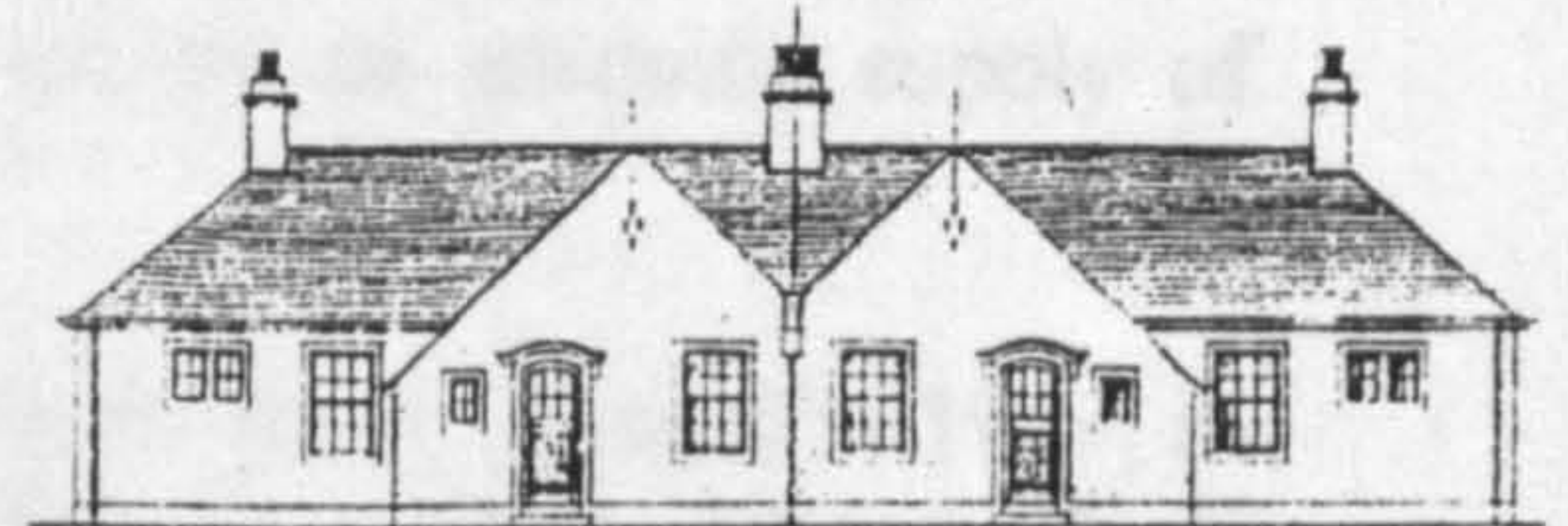


SOUTH ELEVATION

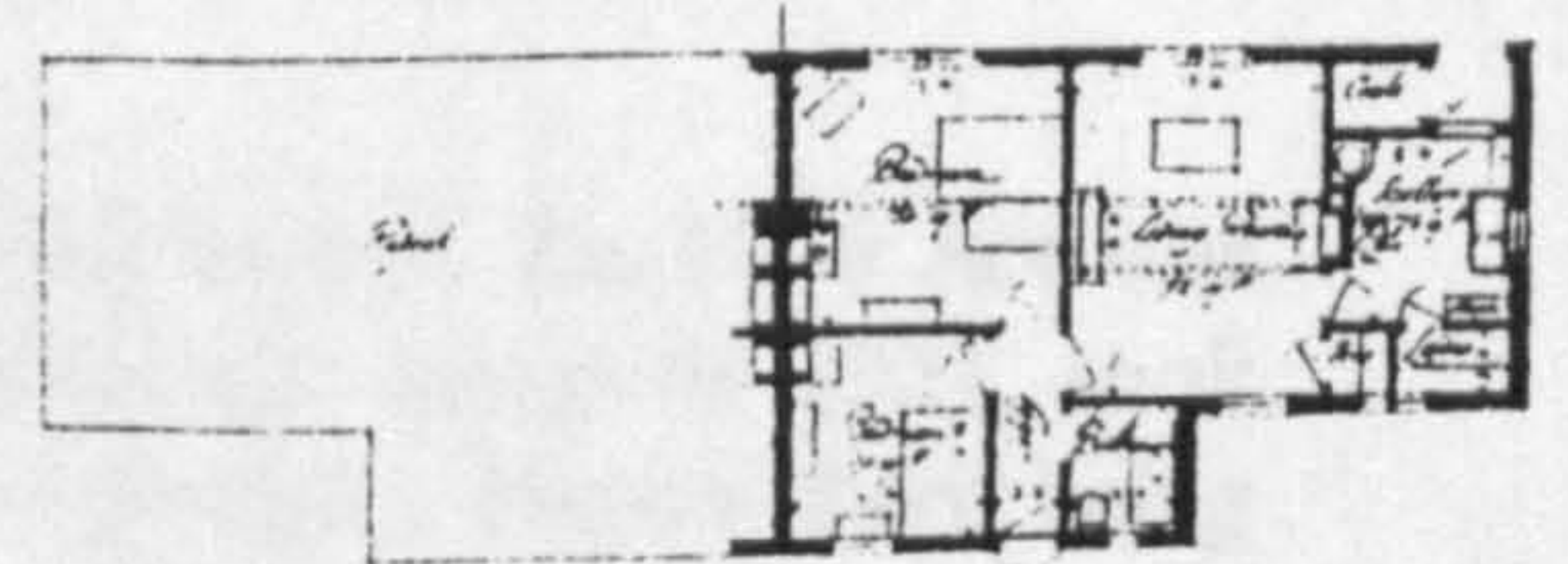


PLAN:
SUITABLE FOR SOUTH
SOUTH EAST OR
SOUTHWEST FRONTAGE.

Muirhead and Rutherford



Front Elevation



Cullen, Leckhead and Brown (Hamilton)

Figure 1.33

1919 TO 1929

INTRODUCTION

Lloyd George's Coalition Government had pledged to "Build Homes Fit for Heroes". The 1919 Addison Act was designed to achieve this pledge, consequently was a U.K. wide measure and was not specifically designed to bring Scotland's working class housing up to U.K. standards. The Act gave generous open ended subsidies to all Local Authorities to improve their stock. All U.K. authorities took advantage of these subsidies with the result that when the decision was taken to terminate the Act in 1921 and to finally repeal it in 1923, Scotland had, according to Begg in 50 Special Years, "an interesting little legacy of estates in various parts of the country" but the imbalance between Scottish Housing Standards those in England remained unaltered. (1)

It has been suggested that it was the conservative nature of the Scottish Building Industry that was responsible for this poor performance. Marion Bowley writing in 1966 (British Building Industry) states "examples of extreme unwillingness to use even the most efficient of the non traditional methods are provided by the behaviour of local authority housing in Scotland". (2)

There had however been considerable effort by housing authorities like Glasgow to find non traditional solutions to overcome problems of materials and labour shortages. Glasgow Corporation had experimented with alternative wall construction at Gilshochill where four blocks of flats were built using traditional stone, brick, concrete block and patent concrete walls. The tenders received in June 1919 revealed that the price for the brick built flats was lowest by over £200. (3) Despite this Glasgow made extensive use of concrete block to overcome the brick shortage.

There were three important factors which limited the production of houses in large numbers.

The first was that the Building Industry had suffered prior to the war. As stated in the previous chapter, the taxation on house sales and the cost of feus, rates and borrowing had reduced both private and public housing. "By 1910, house building had virtually stopped in Scotland; a dramatic fall-off in the number of house completions was recorded and with the advent of the First World War house building ceased altogether." (4)

Not only did this mean that the construction firms had reduced in number and size with the consequent loss of labour but it also meant that building suppliers had reduced or halted production. An example of this was the serious shortage of bricks. Glasgow Corporation considered it necessary to purchase brick works in order to ensure an adequate supply of bricks.

The second factor was that the life of the Addison Act was extremely short. Passed in 1919, in 1921 it was decided to terminate the Act and from then until 1923 the number of houses built was strictly limited.

No sooner had Local Authorities geared themselves up to build the houses, the 1919 Act was brought in to provide, than the Government, reacting to the economic slump of 1921, took measures to reduce house building and consequent Government spending despite there being two million people unemployed.

The third factor was that the Act required that local authorities refer all site and type plans, specifications and tenders to the Scottish Board of Health before building could commence. This checking by the Scottish Board of Health meant that a period waiting for Scottish Board of Health approvals had to be built into any programme but for the Scottish Board of Health reducing the flow of approvals was an ideal way to reduce the flow of expenditure.

This delay in approvals was a common complaint then and later. In 1924 an official from Hamilton complained "the 1919 Act was wrecked through every little authority having to send their plans to the Board of Health to sit for a year or 18 months".

These or similar factors would also affect English and Welsh authorities although in areas where the economy and the building industry was more buoyant the industry would be better able to quickly take advantage of the generous subsidies of the 1919 Act.

Under the 1919 Housing Acts England and Wales achieved 85% of their target (170,000 of 200,000) and Scotland only 21% (25,100 of 120,000) or 10% (25,100 of 250,000) of the Royal Commission target. Stated like this it would appear that Scotland's public rented house building performance was extremely poor in comparison to the rest of the U.K. However if looked at in terms of houses built, 25,100 in Scotland 170,000 in England and Wales, then with only 13% of the population of England and Wales (1911 Census) Scotland had built 15% of the number of houses built in England and Wales and therefore compares reasonably well. Scotland's housing need was not however proportionate to that of the rest of the U.K., it was much greater.

The task set the Scottish Local Authorities was consequently considerably greater and as Government assistance was not allocated proportionate to the task set it was inevitable that the number of houses built was more closely related to the size of the authority and its ability to mobilise its local building industry than it was to the housing need.

The Coalition Government's response to the economic recession was to cut public spending including that on Local Authority housing. The Conservatives won the 1922 election and brought in the 1923 Housing Act which restricted Local Authority house building but provided subsidy for privately built small houses. It also specifically directed subsidy towards rehousing costs resulting from slum clearance.

In the 1923 election the Conservatives lost their overall majority and an alliance of Liberal and Labour took office in the new year with Ramsay MacDonald as Prime Minister. John Wheatly was made Minister of Health. John Wheatly had campaigned in 1913 for eight pound cottages for Glasgow citizens (£8/year), the scheme to be financed out of the surplus of the City's tramway operations. The Liberal/Labour alliance Government lasted only eight months after which the Conservatives returned to power but during the MacDonald Government the 1924 Wheatly Act was passed, increasing housing subsidy and removing restrictions on Local Authority house building.

The Conservatives held power until 1929 during which period only minor financial changes were made to housing legalisation. In the 1929 election the Labour Party became the major Party and while they did not have an overall majority they formed the Government with Ramsay MacDonald as Prime Minister.

The world wide depression that affected the 1930s began and in October 1929 the New York Stock exchange crashed.

Building costs fell and the 1929 Housing Act revised subsidies downwards in line with building costs.

The difference between Scottish income levels and those in England showed in both council and private housing. Whereas in England up to 1934 council housing was a third of output, in Scotland it was two thirds. In the private market, the majority of houses built in England were of a size exceeding that attracting the 1923 Act subsidy for small privately built houses. In Scotland the market was in the smaller private dwelling which did qualify for subsidy.

HOUSING LEGISLATION

Housing Town Planning, etc. (Scotland) Act 1919 Addison Act

In 1919 the Department of Health in England and the Department of Health in Scotland were charged with a commitment to improve housing. (The Department of Health was responsible for housing from 1919 to 1951).

The Addison Act accepted the principle of Government responsibility towards housing. The Government favoured economic rents as they feared that if rents were below economic level then this would discourage private enterprise from providing rented accommodation. They held to this principle although criticism was being made that only the middle class and the better off working class could afford economic rents of new built houses.

The Act was in five parts:

Housing for the Working Classes
Town Planning
Acquisition of Small Dwellings
Improvement of Housing
General

The Local Authorities were required to "consider the needs of their area with respect to the provision of houses for the working classes". This was to be done within three months of the passing of the Act and "thereafter as often as occasion arises". They were to prepare and submit to the Scottish Board of Health a Scheme for the exercise of their powers under part three of the 1890 Housing Act (Part three enabled Local Authorities to initiate building of new houses as originally passed in the 1866 Act).

The scheme was to specify:

- a) The approximate number and the nature of the houses to be provided by the Local Authority;

- b) The approximate quantity of land to be acquired and the localities in which land was to be acquired;
- c) The average number of houses per acre;
- d) The time within which the scheme or any part thereof is to be carried into effect.

The Act required that Local Authorities in preparing (and the Board of Health in approving) any scheme should as far as possible preserve structures of architectural, historic or artistic interest and that schemes should be designed sympathetically to the natural amenities of the area. This is an early example of Government concern for areas of architectural and historic interest.

In Scotland the 1919 competition by the LGBS and Institute of Scottish Architects had resulted in selected plans of successful competitors being published together with a list of the architects. The LGBS proposed in the publication of the competition results that to this list would be added after consultation with the Institute of Architects in Scotland and the committee of selection, the names of architects serving in HM Forces.

The Local Authority was to provide estimates of the cost of the scheme and of the rents expected to be derived from the houses provided under the scheme. Financial cost of the house building was limited to the equivalent of 0.8 penny on the rates (elsewhere in the U.K. it was 1 penny) with the Treasury paying any further costs.

The Act provided for a relaxation of Bylaws where a scheme was approved by the Board. The Act also made provision for the assistance of public utility societies and housing trusts.

There was a duty placed on every Local Authority with a population of over 2,000 to prepare and submit a Town Planning Scheme. Every Local Authority was required to make by-laws relating to improvements of housing.

Interestingly the Act stated that houses of less than three apartments would not be approved except in exceptional circumstances. (Clearly it must have been felt that the need was for larger houses and that Scotland had more than enough one and two apartment dwellings).

The Addison Act subsidies were open ended, picking up the Local Authorities deficit between the cost of borrowing capital on the open market and an economic rent based on the eventual cost of house building (once building costs had fallen from the inflated war prices). Houses built under this Act were classified as Ordinary Rent.

The Act also gave local authorities the right (with consent of the Board of Health) to sell or lease any of the houses.

Increase of Rent and Mortgage Interest (War Restrictions) Act 1919

The rent controls which had been introduced in 1915 were renewed and extended. The continuation may have been due to Government concern over political unrest but it is also an indication that rent controls once introduced were politically difficult to revoke.

The financial burden of this Act was borne by owners of private rented property who were now unlikely to build new property and less able to repair existing rented property.

Housing (Additional Powers) Act 1919

Private builders were eligible for a Treasury lump sum subsidy under this Act. The lump sum subsidy was for constructing houses within the following twelve months. This desire to obtain houses quickly resulted in 368 houses being reconstructed from army huts in Glasgow at about £400 each, approximately half the cost of a permanent house at that time. (5) The additional powers also made it an offence to demolish or alter the use of a dwellinghouse considered to be reasonably fit for habitation.

Housing (Scotland) Act 1920

Councils were permitted to hire compulsorily (take over) private properties for working class housing.

The Housing (Scotland) Act 1921

The economic slump of 1921 in which two million people were unemployed and the high cost of the Addison Act subsidies led to the decision to terminate the Act in 1921. The 1921 Act limited exchequer grants under the Addison legislation to £1.65 million. Houses continued to be built under the Addison Act until 1923, when the Act was repealed, but the number of houses built was strictly limited.

Housing Etc., Act 1923 (Rehousing Rental/Slum Clearance)

The Conservative Minister of Health, Neville Chamberlain amended the 1919 Act in 1923. Unlike the Addison Act which had a separate Act for Scotland the 1923 Act was modified for Scotland as part of the Act.

The 1923 Act was intended to give speculators an incentive to build for low paid workers. The Act limited assistance to Local Authorities to £6 per annum for 20 years or a lump sum of £100 direct grant to a builder or purchaser to promote private investment. This was approximately 25% of the cost of a house covered by the Act. The Government restricted the size of the houses covered by the Act, not wishing to subsidise houses which were too small nor large houses which, in the Government's opinion were being built for people who, if they could afford the economic rent for that size of house, could afford to buy their house.

The size of houses covered by the Act were 620 to 950 ft² (58 - 88m²) for two storey houses and 550 to 880 ft² (51 - 82m²) for self contained flats and bungalows. However at the discretion of the Local Authority, subject to the approval of the Sheriff, the minimum areas could be reduced to 570 and 500 ft² (53 and 46m²) for two storey and flats/single storey respectively. A fixed bath was first introduced as a statutory obligation for all subsidised houses.

The "Rehousing" Rental Group (Slum clearance rehousing) was introduced in this Act. This was for low rental properties and subsidised at 50% of the average annual loss of rehousing from slum clearance. Local Authority house building was only approved by the Scottish Board

of Health if it agreed with the Local Authority that it was "more appropriate" than private enterprise building.

New private house building had virtually stopped as a result of the economic slump and the incentives in the Act to build for rent had little or no effect. The cessation of new private building for rent had more or less stopped the filtering (housing vacated by one class being used by a less well off class) from older property, while rent control had begun to discourage maintenance of these houses. (6)

Housing (Financial Provisions) Act 1924 (Wheatly Act)

The main modification made by the Wheatly Act was to increase the financial assistance to £9.00 (£12.5 in rural areas) per annum for 40 years. Local Authorities could add a subsidy of £4.00 from rates and any costs beyond that were to be charged in increased rent. The burden of proof on Local Authorities to prove the inadequacy of private enterprise to provide rental housing was removed.

When the Conservatives were returned to power in the Autumn of 1924 the Act was left until 1926 when the subsidy was reduced from £9.00 to £7.50.

Housing (Rural Workers) Acts 1926

Local Authorities were able to give grants and loans up to a maximum of £100 (half of which was payable by the Treasury) to reconstruct/improve houses for agricultural workers.

Housing (Revision Of Contributions) Act 1929

This Act revised subsidies downwards in line with reductions in building costs.

In 1929 the Department of Health in Scotland conceded that 25% of Local Authority houses could be built with only two rooms. This concession was made to Local Authorities who had argued that there was a demand for lower rent and heating costs of a smaller house. As early as 1922 John Wheatly, who had been a pioneer in the fight for higher housing standards, pressed Glasgow Corporation to build 13,000 two roomed houses (with bathroom and a scullery) to rehouse those from the slums who were unable to pay the rents imposed on general needs schemes by the Scottish Board of Health. (7) Two roomed houses had been built prior to this, for example in Glasgow's Rehousing slum clearance schemes, but under the terms of the Addison Act it was envisaged that houses of less than three apartments would not be approved except in exceptional circumstances.

HOUSING REPORTS

Housing Manual 1919

The Local Government Board (England and Wales) issued in 1919 a Manual on the Preparation of State-Aided Housing Schemes. This manual followed the Tudor-Walters recommendations but gave information on the Addison Act and included specimen documents for submission to the board for approval of house plans.

The manual was, it states, primarily for the guidance of Local Authorities but it was hoped that it would also be of service to Public Utility Societies (housing associations) and others concerned with the provision of houses for the working classes. It included details of the subsidy to Local Authorities described previously and the different subsidy to Public Utility Societies which was 40% of the annual charges on three quarters of the total capital.

The manual reiterates many of the design recommendations of the Tudor-Walters Report such as the 70 ft minimum width between frontages, the need for layouts to work with the contours of the land and for economy of road provision.

It provides additional information such as the recommended road widths. These range from; 8' 0" (2.4m) for short roads round quadrangles or greens where vehicles need not pass one another, 13' 0" (3.9m) for short roads where vehicles have to pass, 16' 0" (4.9m) for larger roads serving more houses, up to 24' 0" (7.3m) for roads of greater importance where three lines of vehicles may require to pass at one time. The smaller roads may or may not have a footpath whereas the larger roads have the footpaths shown separated by grass and trees from the road. Interestingly the roads are all shown with houses fronting onto the roads. (Fig 2.01)

Twelve house types are illustrated, 2 single storey, 9 two storey cottage houses and 1 flatted two storey house. They are similar but not identical to the Tudor-Walters house types and show parlour and non parlour house types for northerly and southerly aspect. Drawn at one eighth inch to one foot they are shown in plan, section and elevation and are strongly traditional English in style. The manual emphasises the need for houses to be designed to suit the character of the local area using local materials and traditions. The manual also recommends the employment of a competent architect or where a local authority has in their employ a properly qualified engineer or surveyor it states that they may consider it desirable that schemes are prepared by "him" with the assistance of a competent architect.

House plans are illustrated with 8'0" (2.4m) ceiling height to both ground floor and first floor rooms. This is lower on the ground floor than the 8'6" (2.6m) minimum recommendation by the Royal Commission Report for cottage houses built in Scotland. (Fig 2.02)

The manual was prepared by the Local Government Board (responsible for England and Wales) however as with the Tudor-Walters report (which had been appointed by the L.G.B. and the Secretary for Scotland) the manual was sold by H.M.S.O. in London, Cardiff, Edinburgh and Dublin.

In view of its distribution it is unfortunate that the house styles illustrated do not show various English, Welsh, Scottish and Irish traditional styles.

Type Plans and Elevations 1920

The 1919 Manual was followed in 1920 by the Ministry of Health issuing Type Plans and Elevations which contained thirty four house types. Although the Ministry of Health was responsible for England and Wales the booklet was distributed throughout the UK and sold through all HMSO branches including Edinburgh. All house types were cottages and were either semi detached or in a terrace of four.

While some houses are economical rectangular plans many of the house types have projecting wings, porches or gables to the street. Roofs are generally hipped and the irregular plan types produce interesting roof shapes. There are two classes of houses illustrated.

Class A - cottages containing livingroom, scullery and 3 bedrooms

Class B - cottages with a parlour in addition to the above

No flatted house types are illustrated

The houses illustrated show various wall and roof finishes and although intended to show house elevations reflecting various local traditions non can be said to reflect Scottish traditional domestic architecture. The preface stresses that in circulating 34 plans these are not intended as the last word in cottage planning. The main intention was to provide a key to the various types for which full working drawings and bills of quantities had been prepared by the Ministry.

One of the most interesting features of the booklet is the groups of four terraced cottages with end terrace and mid terrace house illustrated. These are interesting little architectural compositions utilising the advantages of northern and southern aspects. (Fig 2.03)

HOUSING PROVISION

The three categories of housing built under the 1919, 23 and 24 Acts were tenements, four in a block cottage flats and cottage houses. Cottage houses refer to 1 or 2 storey houses. They were usually built semi detached or terraced.

Tenements

The tenements were built to standards which prior to the Act had been associated with middle-class tenements. The Act had also stated that houses of less than three apartments would not be approved except in exceptional circumstances.

Three storey stone fronted tenements were built before and after the Addison Act at Kennyhill (West of Cumbernauld Road), Glasgow. Comparison of the two types of tenements illustrate the changes in provision.

The pre-Addison Act tenements, built in 1906 between Cumbernauld Road and Grierson Street, had three flats and a shared WC accessed off each stair landing. The three flats comprised two two room flats flanking a single end. The tenement block was built hard to the pavement.

Those flats, built post-Addison Act in 1919/1920, have only two flats per landing and are set back from the pavement behind a small front garden. Each flat has a livingroom, one large and one small bedroom, scullery, bathroom and coal store. Having three apartments with internal sanitary facilities they represent the minimum standard of accommodation built under the Addison Act. (Fig. 1.01 and 1.02) This tenement design was also used at Riddrie where 348, 3 apartment tenement flats and 271 cottage houses of 3, 4 and 5 apartments were built in 1920.

Four In A Block Flatted Cottages

Semi-detached housing was expensive in both cost and land usage and a flatted cottage, two flats over two ground floor flats all with their own separate entrance was cheaper. In 1923 average costs of a three apartment flatted cottage was £392 while in 1924, an average three apartment cottage was £425 at a time when costs were coming down from a high of £895 in 1920.⁽⁸⁾

The lower cost of the flatted house is however explained by the fact that flatted houses could be built under the 1923 Act at a minimum of 570 ft² (53m²) and cottage houses a minimum of 620 ft² (58m²).

The flatted cottage also had the advantage that not only was all the accommodation at one level but half of the flats were at ground floor level. This may have been seen as an advantage to cope with war disabilities in the same way as the Tudor-Walters report advocated the parlour/bedroom for this reason. Today the ground floor flats are an asset in housing the elderly.

Cost was no doubt the major factor particularly after the demise of the more generous subsidies of the 1919 Act and explains why 57% of all Scottish rental housing between the wars was built as 'four in a block' or flatted cottage type. There is considerable variety of plan type mainly with two but also with some three bedroom flats. They generally have either both ground and first floor entrances from the gable or front entrance for the ground floor with the gable entrance for the first floor. (Fig 2.04)

Cottage Houses

The housing for which the 1920s is best known is its cottage housing usually semi-detached.

While the majority of flatted cottages were three apartment, cottages were more likely to be four apartment although three apartment cottages and to a lesser extent five apartment cottages were also built. For example, the housing built in Glasgow under the 1919/1920 Acts is as follows:-

| Act | <u>2 Apt.</u> <u>Cottage</u> <u>Flat</u> | <u>2 Apt.</u> <u>Flat</u> | <u>3 Apt.</u> <u>Cottage</u> | <u>3 Apt. 4</u> <u>in block</u> | <u>3 Apt.</u> <u>Flat</u> | <u>4 Apt.</u> <u>Cottage</u> | <u>4 Apt. 4</u> <u>in a block</u> | <u>4 Apt. flat</u> | <u>5 Apt.</u> <u>Cottage</u> | <u>Total</u> |
|------|--|------------------------------|---------------------------------|------------------------------------|------------------------------|---------------------------------|--------------------------------------|--------------------|---------------------------------|--------------|
| 1919 | - | - | 199 | 1,670 | 582 | 1,459 | 112 | 126 | 542 | 4,690 |
| 1923 | 268 | 3,308 | 407 | 824 | 3,024 | 818 | 108 | 174 | 95 | 9,026 |
| 1924 | - | - | 1,516 | 8,208 | 6,749 | 1,510 | 1,712 | 1,696 | 195 | 21,586 |

SOURCE : "Glasgow's Housing Centenary 1866-1966", p.17-19

The above table illustrates the 1919 Act bias towards cottages and greater number of apartments and the 1923 bias towards flats and smaller number of apartments.

In Glasgow the first cottage houses (Ordinary Rents) were started at Riddrie in 1920 and Mossbank in 1921. (Fig. 2.05) Major developments followed in Carntyne, Scotstoun and Knightswood. The biggest by far not just in Glasgow but in Scotland was at Knightswood. It was built in phases accommodating 25,000 or 30,000 people. (Fig. 2.06, 2.07, 2.08) Knightswood was of the size of Howard's proposed satellite Garden Cities but, whereas the

Garden City Movement advocated that these towns were provided with all the associated social recreational and commercial facilities, Knightswood was built as a residential suburb with few facilities and without its own town centre. In Glasgow Corporation's Farewell to the Single End it is claimed, in answer to the criticism that municipal housing lacked amenities, that Knightswood being a spacious area "could cater for all reasonable needs with shops, sports facilities including a golf course, medical services and things of that kind".⁽⁹⁾ It may well be that in time response to demand has created all the facilities that its population and location can support. However this is not the same as having designed or allowed for the provision of all the commercial, social, educational and recreational facilities as part of the initial concept of the town or area. The pre 1919 Act new townships of Gretna and Rosyth had been designed in accordance with Garden City Movement principles as complete towns. It has to be conceded that Gretna had no existing towns close by and at Rosyth the nearest town Dunfermline was two miles away whereas Knightswood was on the edge of a large city. Nevertheless the criticism that municipal housing areas or for that matter speculative housing areas lack amenities is valid. In both cases the priority has been to build houses and at best leave space for facilities to be built later. This was not the intention of the Garden City Movement, which saw its proposed new towns or satellite towns as traditional villages or towns with clear identifiable centres containing commercial, educational and recreational facilities and having a sense of place.

Segregation

The Scottish small burgh tradition of road frontage terraced housing was not fashionable, Local Authority housing was either cottage (mainly semi detached) or tenement development. There was also a class distinction between these forms of development. The cottage dwellings were rented at Ordinary rent to lower middle class and to better paid skilled manual workers who enjoyed a secure income. "Even the Glasgow Corporation was anxious that the new housing stock should not be damaged by irresponsible tenants and defaulting families".⁽¹⁰⁾ Tenements, built under the 1923 Act to rehouse tenants from tenements demolished in improvement areas, were generally rented to unskilled working class at the lower Rehousing rent.

Whereas in the 19th Century land transactions and building contracts were small, the 1920s saw the commencement of large land purchases and large scale development. Consequently large areas were developed with council cottage or council tenement development. These areas were therefore far more homogeneous in class structure than the 19th Century developments which had been built, sold and rented small sections at a time. There was therefore in the 19th Century likely to be a greater variety of accommodation and therefore the possibility of a wider spectrum of society living in the local community than there was with the large scale 20th Century council developments.⁽¹¹⁾

Rehousing Slum Clearance Families

In 1922 in Glasgow the Independent Labour Party had been pressing the controlling party, the Moderates, to cater for the unskilled working class by rehousing them into newly built homes. This was in response to the Medical Officer of Health's report that there were 58,000 people living in the city in uninhabitable houses.

In 1923 when the 50% subsidy was made available for the cost of low rental rehousing from slum clearance, a 2,000 house clearance programme was commenced with Glasgow's first 'Rehousing' scheme, Hamiltonhill.

Further programmes were authorised in 1926 and 1927 by which date 2,314 flats were complete and 2,426 under construction, and a rolling programme started in the 1930s. In these Rehousing schemes the combination of sparing Government subsidies (deficit subsidy of 50% under the 1923 Act and unit subsidy for each person rehoused under the 1930 Act) and the poverty of the occupants had two results: firstly, economy in provision through the building of large numbers of two apartment flats with the use of concrete block construction for nearly three quarters of all inter-war Glasgow tenements and secondly, large scale subsidising of rents.⁽¹²⁾

The moral and physical welfare of tenants in Glasgow's completed schemes was closely superintended by resident caretakers while the interests of the Medical Officer of Health were represented by lady inspectors and housing nurses.

This is interesting in itself as the concierge principle is now only belatedly being applied to high rise blocks as a method of combating crime and vandalism.

The Hamiltonhill flats themselves were built two per stairwell landing and had accommodation of livingroom, one or two bedrooms, scullery and bathroom.

The overwhelming impression is that they were designed to be as cheap as possible to keep the rent as low as possible. There is little for tenants to take pride in or opportunity to improve their own environment. The "garden" areas to the front were not related to any specific flat and the rear areas were open drying areas shared by the enclosing blocks of flats. This is of course judgement by today's standards, since Hamiltonhill would have been a vast improvement in accommodation over that of the slums it was replacing. Nevertheless the inclusion of back and front doors to the close, some window or access relationship between the ground floor flat and the front garden and subdivision of the back green to form greens exclusive to each close would have added little to the cost and greatly improved the amenity.

The Rehousing programme for slum clearance families which commenced with the 1923 Act increased in importance after the 1930 Greenwood Act. Whereas 69% of completions during the 1920s in Glasgow were cottages, they accounted for only 20% of completions in the first half of the 1930s.

In Scotland as a whole there was an increase in production of houses throughout the 1920s in both the private and public sector but whereas there was a more or less gradual increase in the private sector, the increase in the public sector fluctuated dramatically in response to government subsidies.

| | <u>1920</u> | <u>1922</u> | <u>1924</u> | <u>1927</u> | <u>1930</u> |
|----------------|-------------|-------------|-------------|-------------|-------------|
| Private Sector | 1,140 | 2,527 | 3,274 | 5,484 | 4,546 |
| Public Sector | 817 | 9,523 | 2,993 | 16,923 | 7,918 |

(Refer also to Fig 11.01 to 11.03)

HOUSING DESIGN

Flatted Cottages

One of the first and most ambitious schemes of flatted cottages was built in 1919 at Logie in Dundee. Laid out in curved terraces at right angles to a central boulevard it provided 250 flatted houses, 4 in a block, with one third of the flats 1 bedroom and two thirds, 2 bedroom. The houses were heated and supplied with hot water from a central (district) heating system, the first in Britain, and included in the scheme was a large communal laundry. (Fig 2.09)

The vast majority of flatted cottages, built after the 1923 Act, were however designed to keep cost as low as possible. At Carntyne Glasgow brickwork up to cill level and around the entrance door has been used to give some variety. Seaforth Road in Ayr is however more basic still and, unfortunately for the towns in which this type of housing was built, the more typical. It is a grey harled brick box with hipped slated roof laid out in regimented fashion along equally regimented roads with no imagination shown in either layout or house style.

These house types were built throughout the 1920s and 1930s often adjacent to or infilling gaps in 18th Century/19th Century villages and towns destroying their architectural scale and character or spawling over large areas of the edges of cities and large towns. (Fig. 2.04)

It is however important to remember that however bad they may be architecturally they did and still do provide good basic housing. Each house had its own entrance and allocated area of garden. The front garden and hedge provide the flats with defensible space and the side garden has become a valuable asset in many cases allowing residents access to rear gardens, garages or simply curtilage parking. Their main disadvantages are poor sound insulation between floors and poor relationship between flats and gardens when compared with 2 blocks of semi-detached houses or 4 terraced houses.

Cottages

The spawling cottage estate ⁽¹³⁾ with architectural style derived from the English Garden city is a frequent description. This is valid. The cottage estates consumed large areas of land at a time when keeping land in agricultural production was still considered important. Cottages with sixty degree pitched roofs, gable features to the street, gable end first floor bedrooms corbelled out over the ground floor have their architectural style derived from timber framed thatched and plain tiled roofed houses of Southern England not from slate roofed, stone wall construction of Lowland Scotland.

It is common to contrast this development with an image of traditional Scottish urban form as tenemental. For example, Roger in Scottish Housing in the 20th Century describes Scottish urban development as, "Densely packed high rise tenements flats which characterises the Scottish Victorian cities and are replicated in the smaller burghs of the urban hierarchy". ⁽¹⁴⁾ It is true that in common with many Northern European cities Scotland had built high. Edinburgh prior to its expansion outwith the city walls had been forced to build high and had buildings commonly of six storeys but occasionally reaching ten storeys high. The feuing system had encouraged high density tenement development for working class housing and in this respect differed from England where long rows of working class brick terraced houses was common.

It is important to remember that this is a description of City and large burgh building tradition in Scotland whereas the tradition in smaller burghs and villages was for one, two and three storey stone built terraced development. This tradition was still compact in form, houses even being flatted, but it was more of a "terraced cottage" development, to use the 1920s architectural nomenclature.

In defence of the cottage, particularly the semi-detached cottage, it has to be said that it has probably been the most adaptable form of housing built in the public sector. Its main weakness as a type is that it is more expensive in land usage and therefore site servicing. It is also, comparing like construction, more expensive to heat than a terraced house or flat as it has a greater external surface area.

Its strength is that with a back and front garden and side access it only requires public front access. This facility was also catered for with terraced housing which provided a close through the block to give access from front to back. The front garden provides defensible space, the rear garden a private area outwith public gaze. The rear garden may be a gardeners pride and joy, it may be a children's play area or where a hut, garage or greenhouse sits. It, more than flats or tenement area, Radburn housing layout or any dual access housing layout, provides a layout where it is socially acceptable to have messy areas.

It has also adapted well to recent demands put on public housing. Cottage houses built in the 1920s have accommodated the increase in car ownership and coped better with property related crime than later housing. The main reason for this is that the 1920s semi detached housing was generally built on generous plots which had allowed residents to construct run-ins to park cars on curtilage or even in a garage built in the back garden. The lack of rear access lanes aided security and while many had open access to the side of the houses it was not difficult to gate, fence or wall off the access between semi detached houses. Even the 1920s and 1930s fashion for bay windows increased informal supervision.

Cottage and Flatted Cottage Layout

Cottage and flatted cottage housing layouts at their best show influences of the Garden City movement and the Tudor-Walters report. They have roads designed to discourage through traffic, culs-de-sac and curving roads creating informal layouts with variety and interesting detail. Typical examples of this are Mosspark, Knightswood and Riddrie in Glasgow and Northfield in Edinburgh. (Fig. 2.10) In Glasgow most of the houses are slate roofed with harled walls although some are built with concrete blocks cast to look like stone and some houses have clay tile roofs. Sash and case windows are usually full pane on the lower sash with astragals and multi panes on the upper sash. Gables, door canopies and bay windows are all used to create variety. Most of the houses are semi detached but where terraced houses are built closes are provided in the terrace to gain access to the rear garden.

At their worst semi detached and four in a block flatted cottages are laid out at regular intervals along a grid pattern of roads. Street patterns were determined by the Burgh Engineer and standard house types laid out along the roads. Many villages and small towns were spoiled with the addition of overscaled blocks of two storey houses built in areas where the architectural character was one or two storey terraced houses with low eaves built hard to the pavement.

Architects were employed however and a good example of this exists at Northfield off Willowbrae Road in Edinburgh. Reginald Fairlie with Reid and Forbes designed some of Edinburgh's first Local Authority housing in 1919 at Northfield. The design lays out the houses and flats in two crescents curving around the small Northfield Circus. The crescents are accessed off the main road, Willowbrae, with only pedestrian cross circulation thereby avoiding non local residential vehicular movement through the area.

The two storey houses and flats are semi detached or in short terraces using both facing brick and harled common brick as wall finishes. Three storey flats were built using stone on some of the blocks. The flats are set back in a small crescent off Northfield Broadway, the main road on the edge of the site.

Economy of road width is used within the scheme. Whereas the Main Roads on the edge of the site are 13 metres wide, the roads within the scheme are 4.8 metres wide and the small crescent and circus roads serving only a few houses are 4 metres wide. Footpaths are provided alongside the road with additional footpaths looping into minor crescents. (Fig 2.11)

Improvement Schemes

The improvement schemes built in Glasgow to provide low rental accommodation for families rehoused from slum clearance were three storey tenements built two flats off each stairwell. The flats being either 2 or 3 roomed flats with scullery and bathroom. Typical of these houses were those built at Hamiltonhill Rehousing scheme in 1923 and at Possil in 1926 to 1930. These were built using concrete block as a substitute for stone. The concrete block was either cast grey concrete with the appearance of coursed rubble stone or cast with a pea gravel finish. Roofs were slated. The three storey blocks were laid out set back from the regular road pattern to provide a front garden and the blocks are discontinuous with gaps in the frontage for air penetration. (Fig 2.12) These designs clearly follow the recommendations of the 1917 Royal Commission which recommended that hollow squares of tenements should not be built. Although the set back gives the tenements some privacy from the street, the lack of relationship of the front gardens to the ground floor flats give little reason for tenant involvement in the care of these spaces. (Fig 2.13)

The closes were built with no front or rear door and only a few steps create a threshold at the entrance to the close. The tenement block together with the open close through which the wind whistles gives a lack of security to the back court where today there is little left of any sub-division there may have been. Layout plans of the original proposals show no sub-division of the back courts.

There is no variety in the design, corners of blocks are splayed at 45° to give sightlines at road junctions and this with the uniformity of building line creates monotony with very little to distinguish one street or area from another.

Quality of Design

From an architectural or planning point of view the housing developments of the 1920s did not achieve the promises of the earlier developments at Rosyth. Housing Authorities were concerned with building housing and, whereas at Rosyth shops, schools, churches and social

facilities were all designed as part of the original layout, the 1920s housing schemes consisted only of houses. Nor were they of the architectural quality of Rosyth or of the 1904 Lorimer rustic cottages in Colinton, although Lorimer influence occasionally appears. (Fig 2.14)

It is ironic that Lorimer was given numerous commissions to design war memorials to dead heroes but was not given a commission to design houses for the living heroes. "Mackintosh four years younger than Lorimer was in virtual retirement from 1911 and died in obscurity in 1928. Lorimer, who died the year following was at the height of his reputation ..".⁽¹⁵⁾

That Mackintosh was forgotten and Lorimer was only commissioned for war memorial design was a waste of talent in the years following a war which had already wasted so many lives and talents.

Nevertheless the appearance of houses built under the 1919, 1920s Acts was of less importance than the improved space standards to many Scots of the period. The fact was that, particularly in the case of the four apartment cottage houses, they were considered to be significantly better than many of the existing old middle class houses.

ALTERNATIVE CONSTRUCTION

The Moir Committee appointed in 1924 to investigate non traditional housing for the working classes published its findings in the form of interim reports. The first dealt with steel houses and was followed by two White Papers which considered concrete construction, steel and timber frame houses, burnt clay blocks and various substitutes for other traditional materials.

Steel Houses

The steel houses are the alternative construction houses which most typify the late 1920s. Prime Minister Baldwin had announced a £40/house subsidy for local authorities to erect houses built by the shipyards. The idea was to overcome the shortage of traditional labour and to utilise the large pool of unskilled under employed shipyard workers to fabricate steel houses. It was also to use large quantities of steel sheet which had been produced to build warships etc., but which the shipbuilding slump had made excess to requirements. The building workers were distrustful of the Government's proposals which they saw as undermining their position. Glasgow, whose shipyards the scheme was intended to assist, was wary of the scheme. It feared a strike by building workers which would have halted the traditional building programme which was, after all, by far the main producer of houses.

The Government overcame this impasse by forming a new housing agent, the Second Scottish National Housing Company, to build 2,500 steel houses. The SSNHC used three companies to achieve this programme Atholl Steel, Cowieson and Weir.

Atholl Steel built 573 two storey houses, 4 in a block and semi detached cottages. The houses had either 3 or 4 apartments. A steel frame was used which was clad on the outside with steel sheets and coated with paint half of red lead paint and granulated cork. Horizontal joints were made with a joggle lapped joint and vertical joints with a 150mm steel cover strip. Both joints were bedded on paint impregnated canvas strips. The roof was a pitched timber roof covered with tiles or asbestos slates.

Cowieson built 487 houses, 3 apartment single storey semi detached and 3 and 4 apartment two storey semi detached and terraced cottages. The structure was a light timber frame clad with steel protected against corrosion on the inner face by bitumen felt fixed with bitumen solution. The external face had curved steel strip cover plates and the whole external surface painted. The roof was a timber pitched roof truss covered with sarking, felt and asbestos slates.

Weir built the largest number of steel houses, 1,650 single or two storey semi-detached cottages and two storey 4 in a block cottages. There were three or four apartments in each house. The Weir houses were also timber framed clad with steel sheets. Plain lapped joints were used horizontally and 150mm wide flat steel cover strips were used on vertical joints. The 100mm cavity was sealed and divided into two compartments by a vertical sheet of bituminous building paper. The external finish was paint or paint harling. The roof was pitched with timber couples covered with sarking, felt and asbestos slates or clay tiles. (Fig 2.15, 2.16)

There were also 4 three apartment single storey semi detached cottages built by Reith in Edinburgh.

In Kilmarnock a "Dennis Wild" block of two storey four in a block flatted cottages was built at 4 - 11 Munro Avenue by James Wild and Company. This, Scotland's only example of this type, was of steel stanchion and beam construction. In Kilmarnock the whole construction is clad in cavity brick walls which are finished in harling. Consequently it is indistinguishable from traditional four in a block flatted cottages. The roof has the timber secondary roof members supported on the "Wild Patent Cradle Roof Truss".

Apart from the occasional flat roof the non traditional housing is very traditional in style. The Nissen Petren is the exception. Nissen Petren of Yeovil built only ten in Scotland, all in Edinburgh probably in 1926. The construction is "T" steel beams forming a semi circular roof which spans over the semi detached houses with the party wall cutting the section to give each house a quarter circle section.. Room sections are squared off with the result that no spatial advantage is made of the circular vault. The awkward internal section is equally awkward externally where skew walls taken up beyond the roof give a clumsy chamfered gable to the street in which oblong windows are positioned. Straightforward Nissen huts look considerably better. The roof finish to the houses consisted of Robertson's Asbestos Protected Metal Roofing on 100 x 50mm timber purlins.

Concrete Houses

New materials such as concrete block were already being used as a substitute for stone but there were also forerunners to the non traditional housing built under the subsidy and by the Second Scottish National Housing Company.

Fifty no-fines poured in-situ concrete houses using clinker aggregate developed by the Dutch were built by Corolite Construction Company Limited London for Edinburgh Corporation in 1923. The house type was a two storey four in a block flatted cottage, but while the ground floor flats had their own gable entrances, the first floor flats had a shared entrance stair to the front. The roofs were mostly timber pitched roofs with slate or tile roofs but in some cases a 76mm reinforced clinker concrete flat roof was used with a finish of built-up bitumen.

In 1925 Edinburgh Corporation in conjunction with Wm. Airey and Sons (Leeds) Limited built 1,608 houses mainly in the Lochend area. The construction was 2 leaves of precast clinker concrete slabs slid into a shutter with timber batten spacers to form a cavity and leaving vertical voids, at approximately 1.2 metre centres, which were cast as in-situ unreinforced concrete columns. The clinker blocks were dry bedded held by their splayed ends in the columns. They were harled externally and plastered internally. The house type was two storey three apartment 4 in a block flats.

Aberdeen Corporation designed and constructed 228 houses in the Pittodrie area all four in a block 2 apartment flats. The walls are in-situ dense concrete 330mm thick at ground floor and 250mm thick at first floor. The roof has a concrete parapet balustraded and concealing a timber flat trussed roof covered with reinforced bitumen felt on sarking.

The last of the non traditional houses covered by this chapter is the Boot Pier and Panel Continuous Cavity system. Henry Boot of Sheffield built, in 1929, 500 in Dundee and 546 in Glasgow of two storey semi detached, 4 in a block and terraced cottages. Piers and two leaves infill panels of clinker slabs were used. The double piers were reinforced concrete, piers spaced with wall ties to give a continuous cavity. All precast was manufactured on site, the panels by a semi dry process. There were, to the detriment of the system, no cavity gutters over openings which were spanned by precast lintels checked into the piers.

The Boot house is the only 1920s house system classified as a defective house in Scotland under part 14 of the Housing Scotland Act 1987.⁽¹⁶⁾

Glasgow built 20% of its general needs housing under the 1919, 1923 and 24 Acts using new methods of construction, mainly concrete construction. The city had not been prepared to risk industrial action in the building industry over the steel houses thereby risking its housing programme. It did however experiment with new forms of construction to improve its house building programme. This is quite the reverse of Marion Bowley's accusation that it was the conservatism of the Scottish Building Industry that led to it producing few houses under the 1919 to 1924 Acts. Indeed with the benefit of hindsight more reliance on traditional construction and building skills might have resulted in fewer houses constructed but it would have had less future maintenance problems. Building professionals, especially architects such as Sir Frank Baines were very critical of the non traditional systems such as the Weir system when giving evidence to the Moir Committee. Other witnesses criticised the use of non traditional materials and methods not just on technical or aesthetic grounds but argued that it was socially divisive to produce homes for the working classes that were so physically distinctive.⁽¹⁷⁾

That the non traditional houses were generally more expensive then and later is evident from the necessity of Government to give financial incentives to encourage non traditional construction and from Glasgow City's tenders which allowed comparison between traditional and non traditional construction costs for the same house type.

SUMMARY 1919 to 1929

The Housing Town Planning, Etc. (Scotland) Act 1919

This was the first Act which provided a Government subsidy for Local Authority housing. It was a generous “open ended” subsidy in which the Local Authorities’ contribution was limited to 0.8 penny on rates, with the Treasury funding the balance. The intention was to build for economic rent, the houses to be let to the better paid working classes. It was hoped that the houses vacated would then be available to the poorer paid.

The Royal Commission Special Report of 1917, the Tudor-Walters report of 1918, the Housing Manual of 1919 and the Ministry of Health Type Plans and Elevations of 1920 all favoured and illustrated only one and two storey housing, mainly two storey cottage housing, with a few examples of single storey cottages and a few flatted houses. The Local Government Board for Scotland Memorandum of 1918 also only illustrated cottages but included tenement design as one of the categories in the architectural competition announced in the Memorandum. All reports illustrated housing layouts influenced by the Garden City Movement, with roads designed to give variety and to discourage through traffic. Road layouts illustrated included curved roads, narrow loop house access roads and culs-de-sac often enclosing small parks.

In consequence the housing built under the 1919 Act was mainly cottage houses, typically four apartment and with Garden City layouts featuring open space and curving roads. Mosspark in Glasgow and Northfield in Edinburgh typify this type of layout. Tenements were built under the 1919 Act although the main provision of flats was in flatted cottages as featured in the above reports. Tenements, three storey high, formed part of the Northfield housing in Edinburgh.

Housing, Etc. Act 1923 (Rehousing Rental/Slum Clearance)

This Act gave speculators an incentive to build for low paid workers. It also shifted subsidy for Local Authority housing away from providing for the better paid working class to providing low rent housing for families rehoused after slum clearance. The subsidy was half of the average annual loss of rehousing costs for slum clearance. It also introduced a “rehousing” rent band which was lower than the “ordinary” rent of the 1919 Act housing.

The sizes of the houses covered by the Act were small, 58-88 square metres for two storey housing and 51-82 square metres for flats and single storey housing. The main housing form built under the 1923 Act was three apartment flats built in “four in a block” two storey flatted cottages or in three storey tenements. Hamiltonhill in Glasgow is an example of tenement provision under this Act. It was built as hollow squares on a rectilinear road pattern similar to traditional tenement development, but has gaps in the frontage of each side of the block to provide through ventilation. The tenements accommodate two and three apartments at ground floor level and three apartments at first and second floor level.

Moir Committee 1924

Following the Moir Committee report on steel housing the Prime Minister announced a £40 per house subsidy for Local Authorities to build steel houses fabricated in the shipyards. As a

result of lack of progress the Government set up the Second Scottish National Housing Company to build 2,500 steel houses. The SSNHC used Atholl Steel, Cowieson and Weir to produce these houses. Examples of these houses exist at Glen Avenue, Glasgow which are two storey and at Perth Road, Cupar which are single storey.

The Moir Committee also reported on other non-traditional housing built of concrete, timber frame or burnt clay blocks. In order to overcome the shortage of brick in the post World War One years, many Local Authorities used non traditional alternative wall construction. The most common was concrete block but in Edinburgh no fines concrete was used in 1923 for the first time in Scotland.

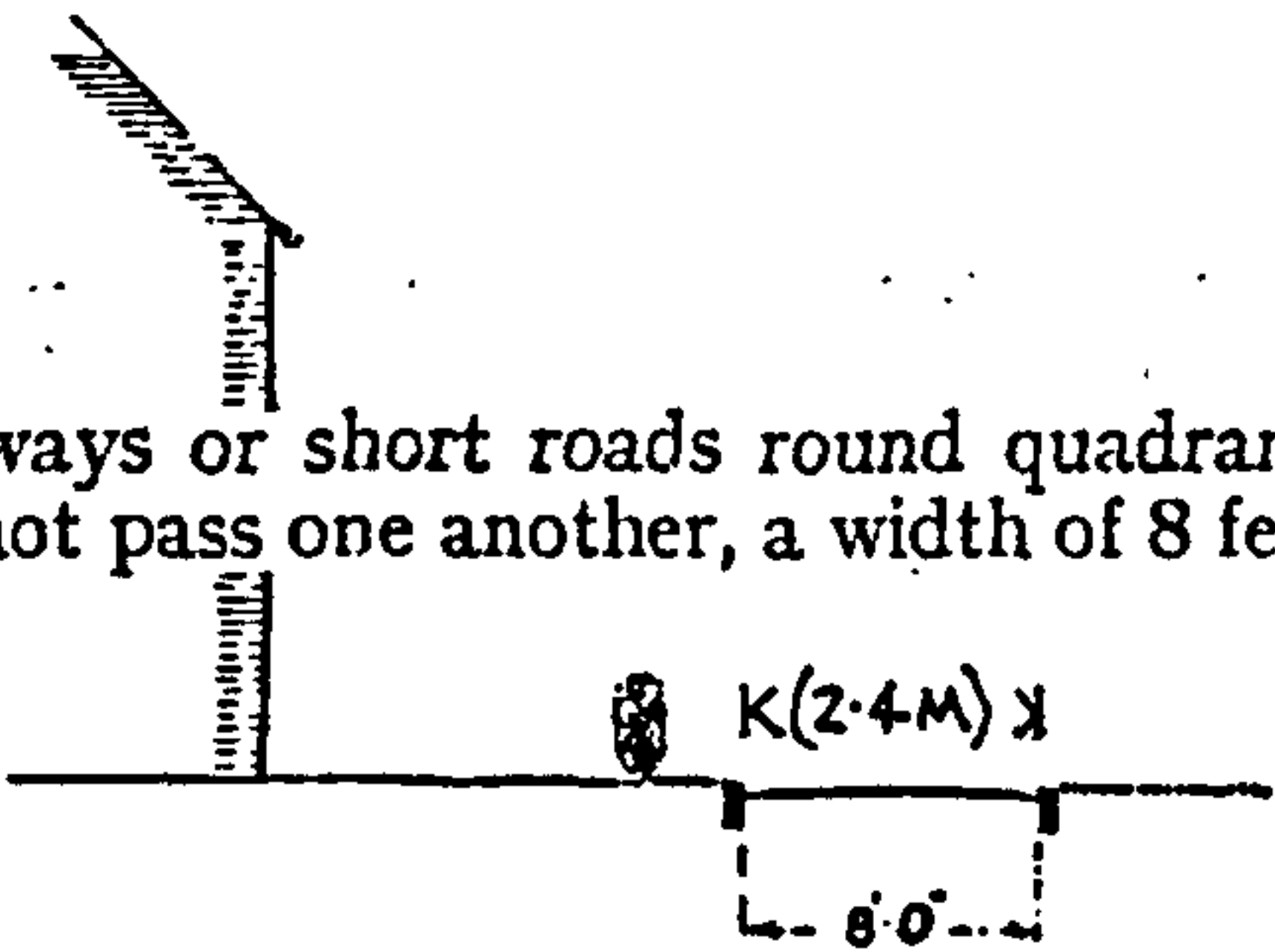
1919 to 1929 References

- (1) Begg, T., 50 Special Years. A Study in Scottish Housing : The Scottish Special Housing Association, (London, Henry Melland Ltd, 1987), 11
- (2) Roger, R., Scottish Housing In the Twentieth Century (Leicester, Leicester University Press, 1989), 132
- (3) Ibid, 132
- (4) Niven, D., The Development of Housing in Scotland, (London, Croom Helm, 1979), 26
- (5) Worsdall, F., The Tenement A Way of Life, (Edinburgh, Chambers Limited, 1979), 126
- (6) Horsey, M., Tenements and Towns Glasgow's Working Class Housing 1890 - 1990, RCAHMS, (HMSO), 13
- (7) Roger, op cit, 141
- (8) Roger, op cit, 131 and 136
- (9) Reoch, E., Farewell to the Single End, (The City of Glasgow District Council, 1975), 14
- (10) Roger, op cit, 76
- (11) Niven, op cit, 70
- (12) Horsey, op cit, 13/14
- (13) Horsey, op cit, 11
- (14) Roger, op cit, 13
- (15) Savage, P., Lorimer and the Edinburgh Craft Designers, (Edinburgh, Paul Harris Publishing, 1980), 156
- (16) SOBD, A Guide to Non Traditional and Temporary Housing in Scotland, 1923 - 1955 (Edinburgh, HMSO, 1987), 36 to 68
- (17) Roger, op cit, 137

Local Government Board Manual 1919

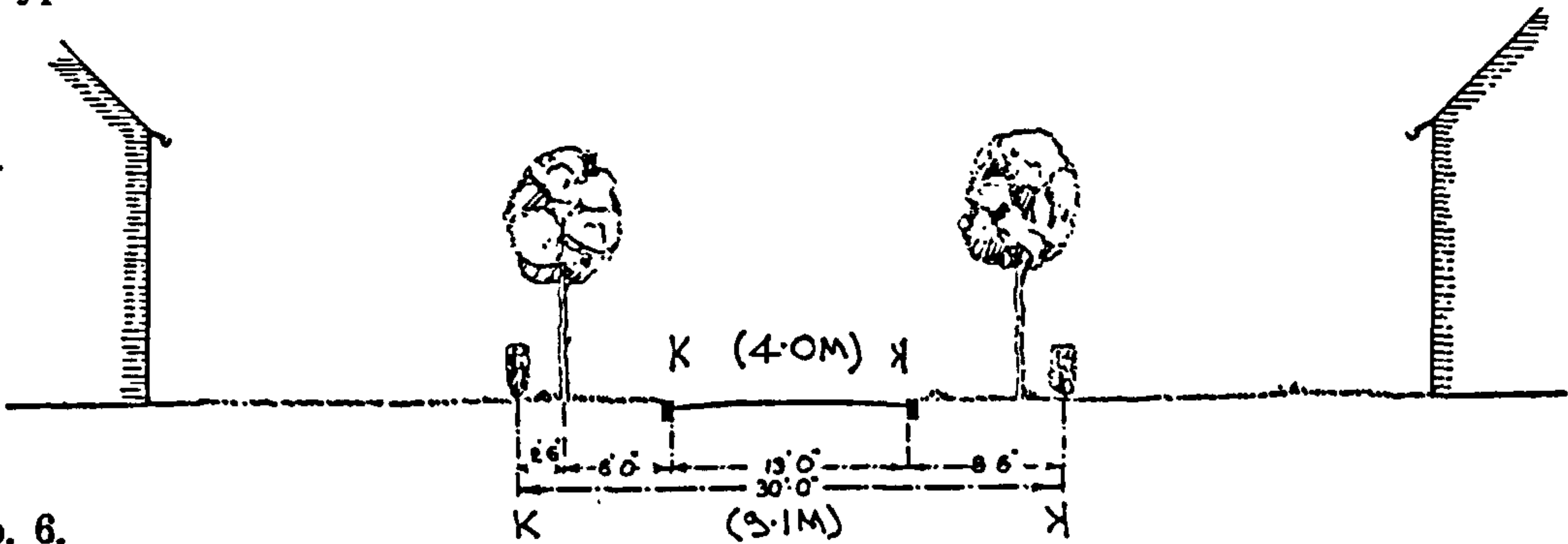
Type No. 1.

For simple footways or short roads round quadrangles, greens, or open spaces of limited extent, where vehicles need not pass one another, a width of 8 feet will often be sufficient.



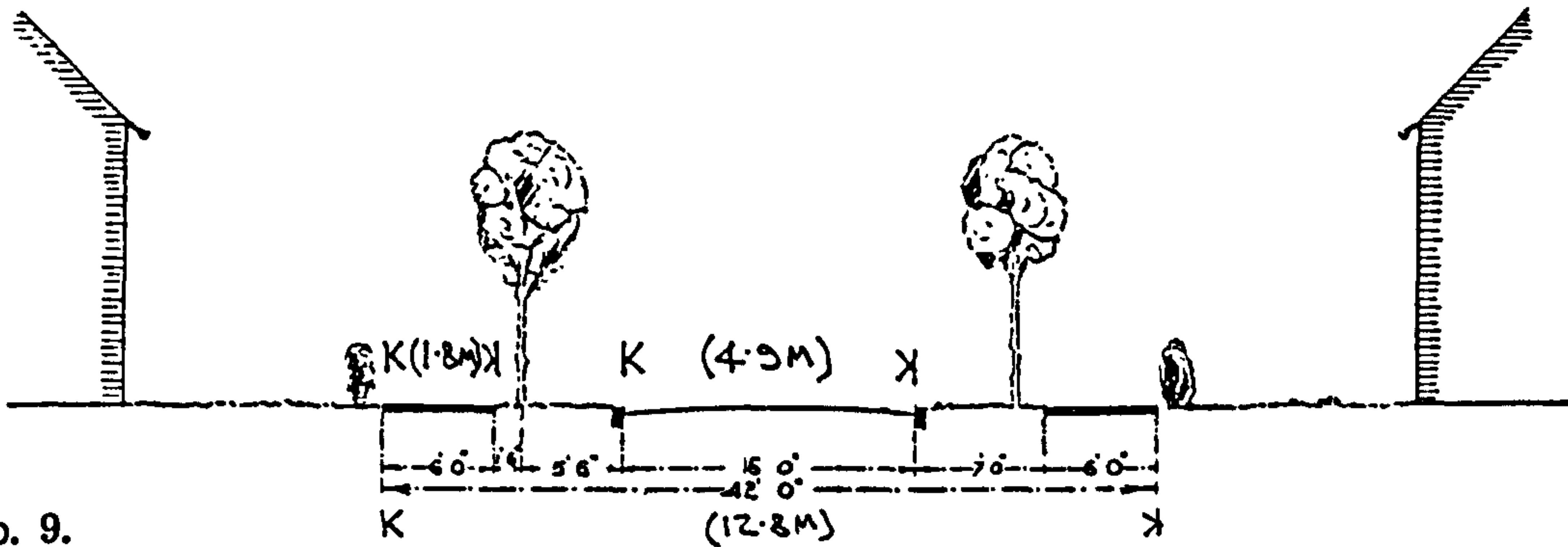
Type No. 2.

For short residential roads not intended for through traffic, but serving more houses than No. 1, the carriageway should be at least 13 feet wide, to allow for two vehicles to pass going slowly. The remainder of the width may be occupied by footways or by grass margins, with trees planted well back from the road to allow for future widening or the addition of footways. The width between the fences for this type of road should be about 30 feet.



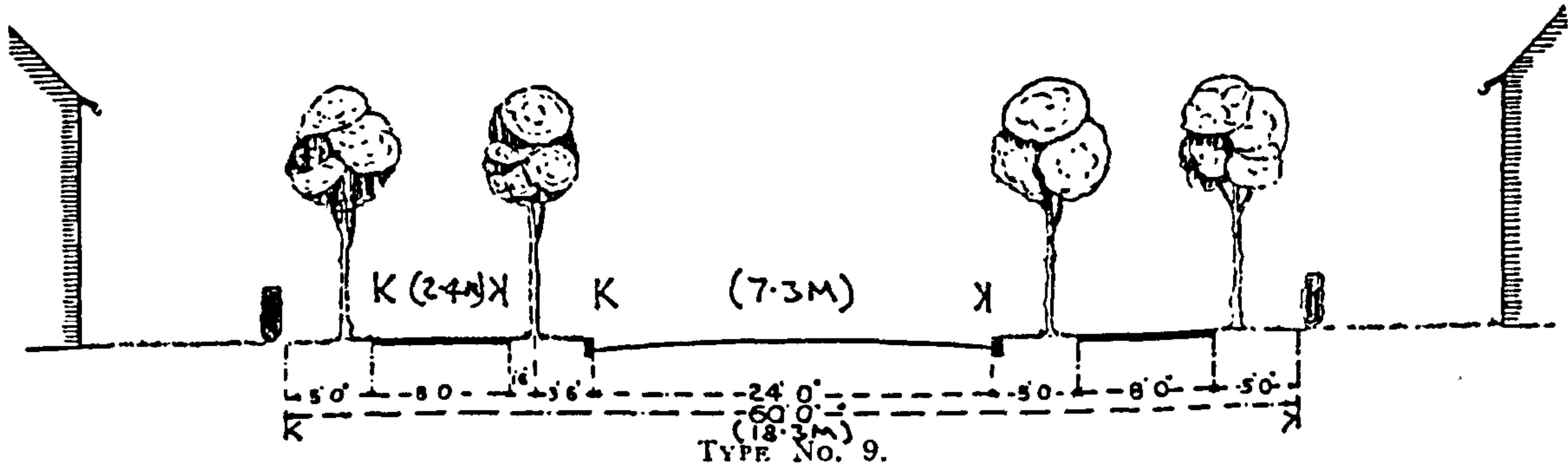
Type No. 6.

It will sometimes be desirable to leave a greater total width of road without increasing the width of carriageway. In this case the trees on each side may be well set back to allow for future widening, and a paved footway can be provided next to the boundary fences.



Type No. 9.

A double avenue arrangement similar to No. 7 may be useful also for this class of road, a total width of about 60 feet being required.



Manual illustrates a range of housing roads from the single track to the three lane road. All roads provide frontage access to houses and on the small roads pedestrians have no separate footpath.

Figure 2.01

Local Government Board Manual 1919

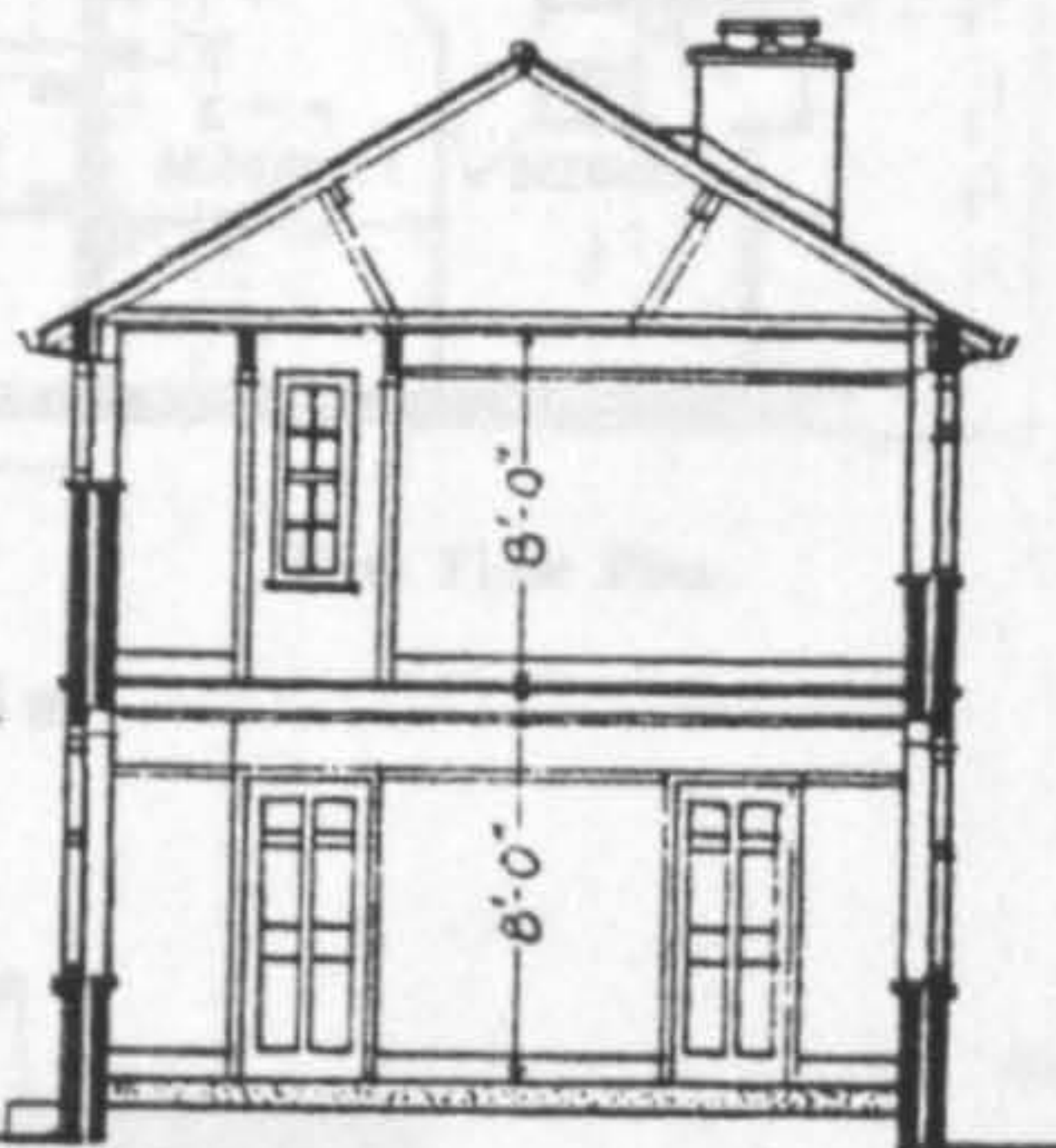
N^o3 CLASS A URBAN
NORTHERLY ASPECT



BACK ELEVATION



SIDE ELEVATION

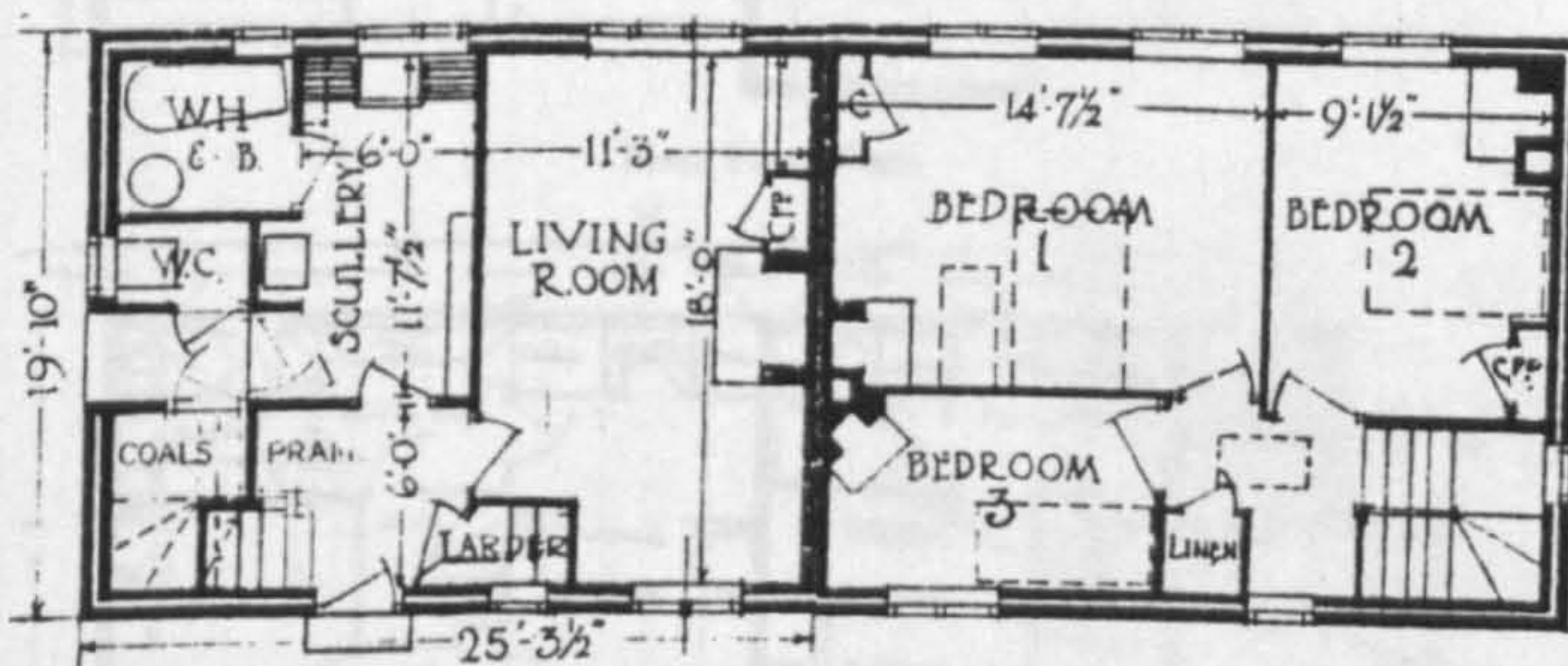


SECTION A-B



L.G.B. H.D.

FRONT ELEVATION



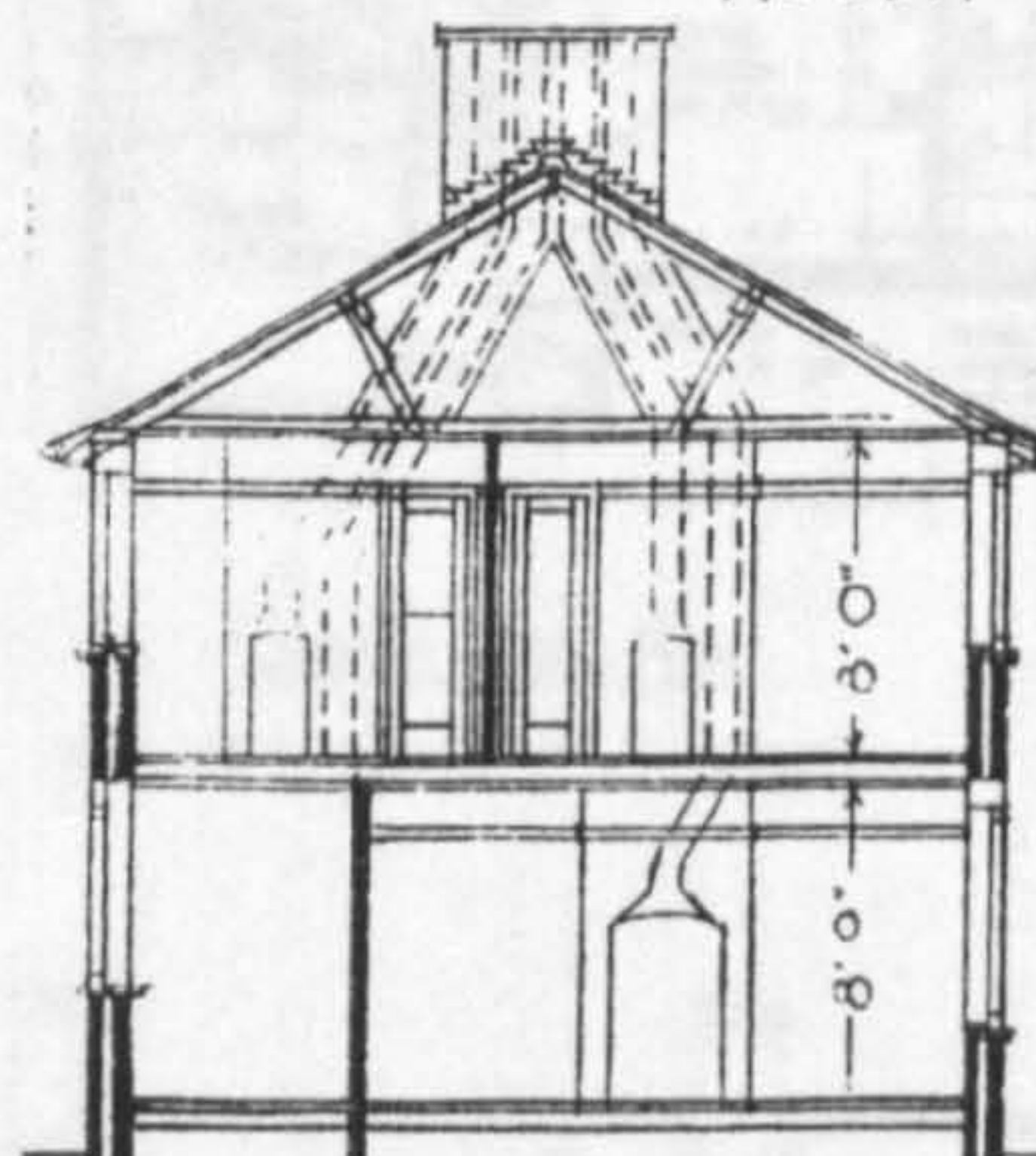
GROUND FLOOR

FIRST FLOOR

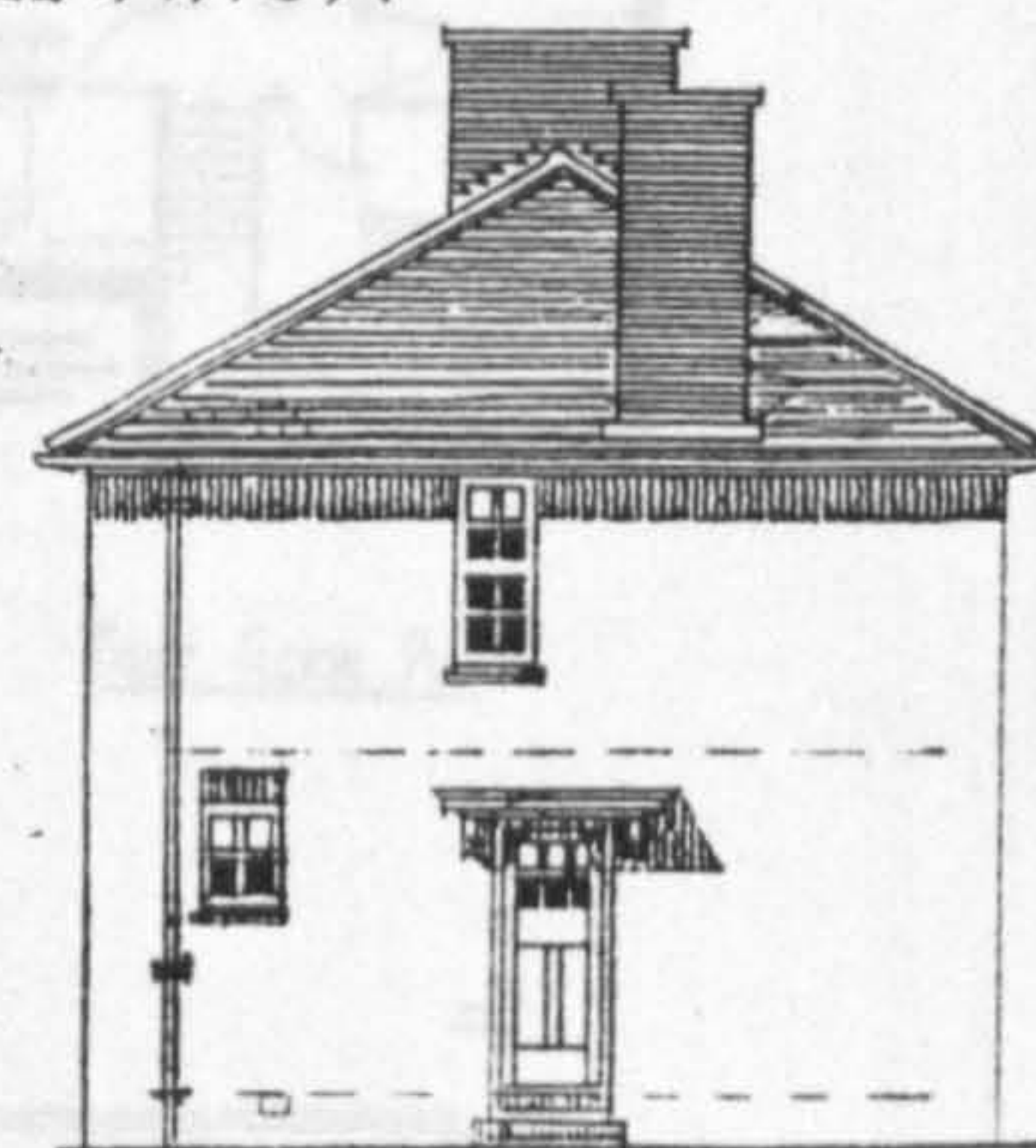
N^o5 CLASS B⁺ URBAN
SOUTHERLY ASPECT



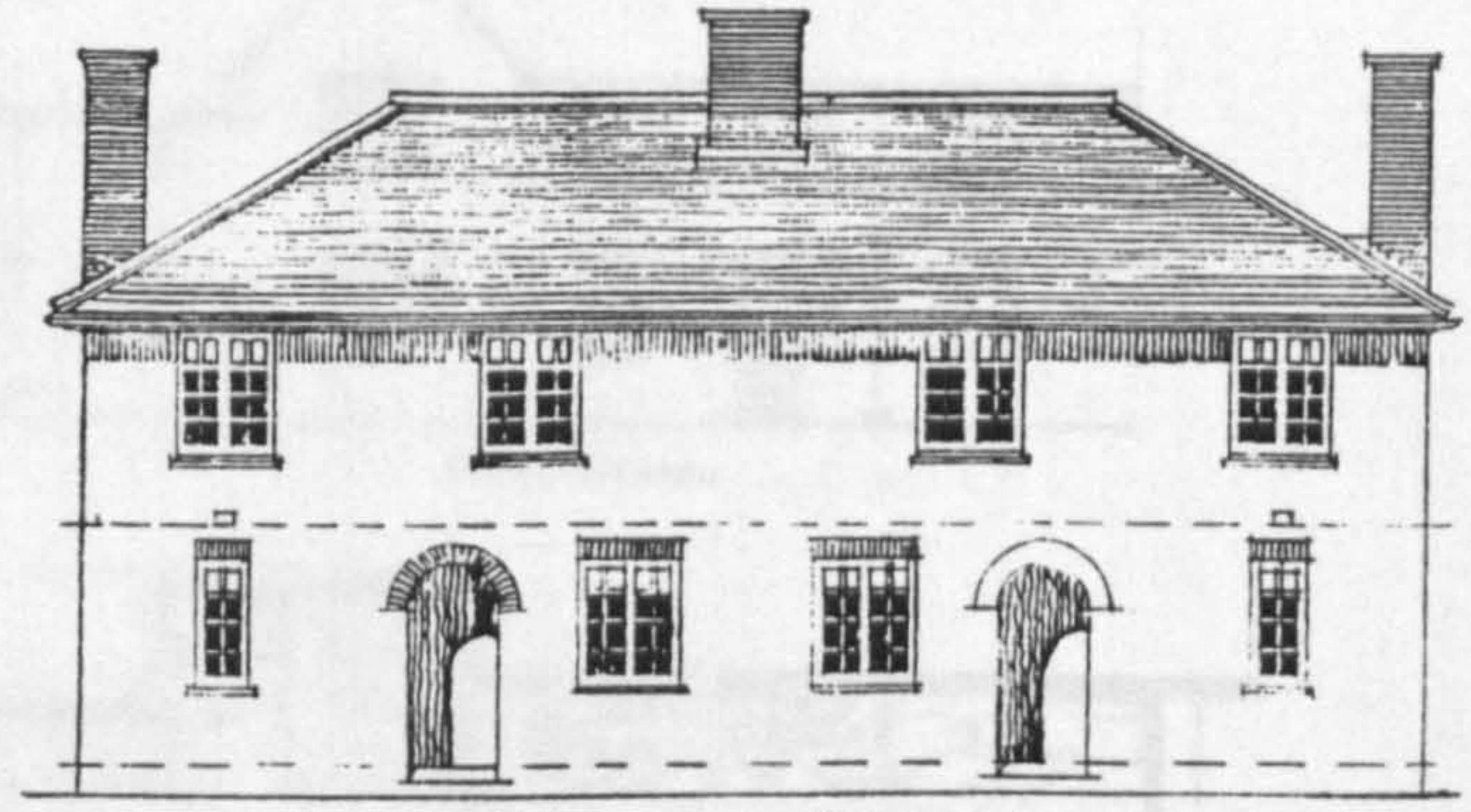
FRONT ELEVATION



SECTION AB

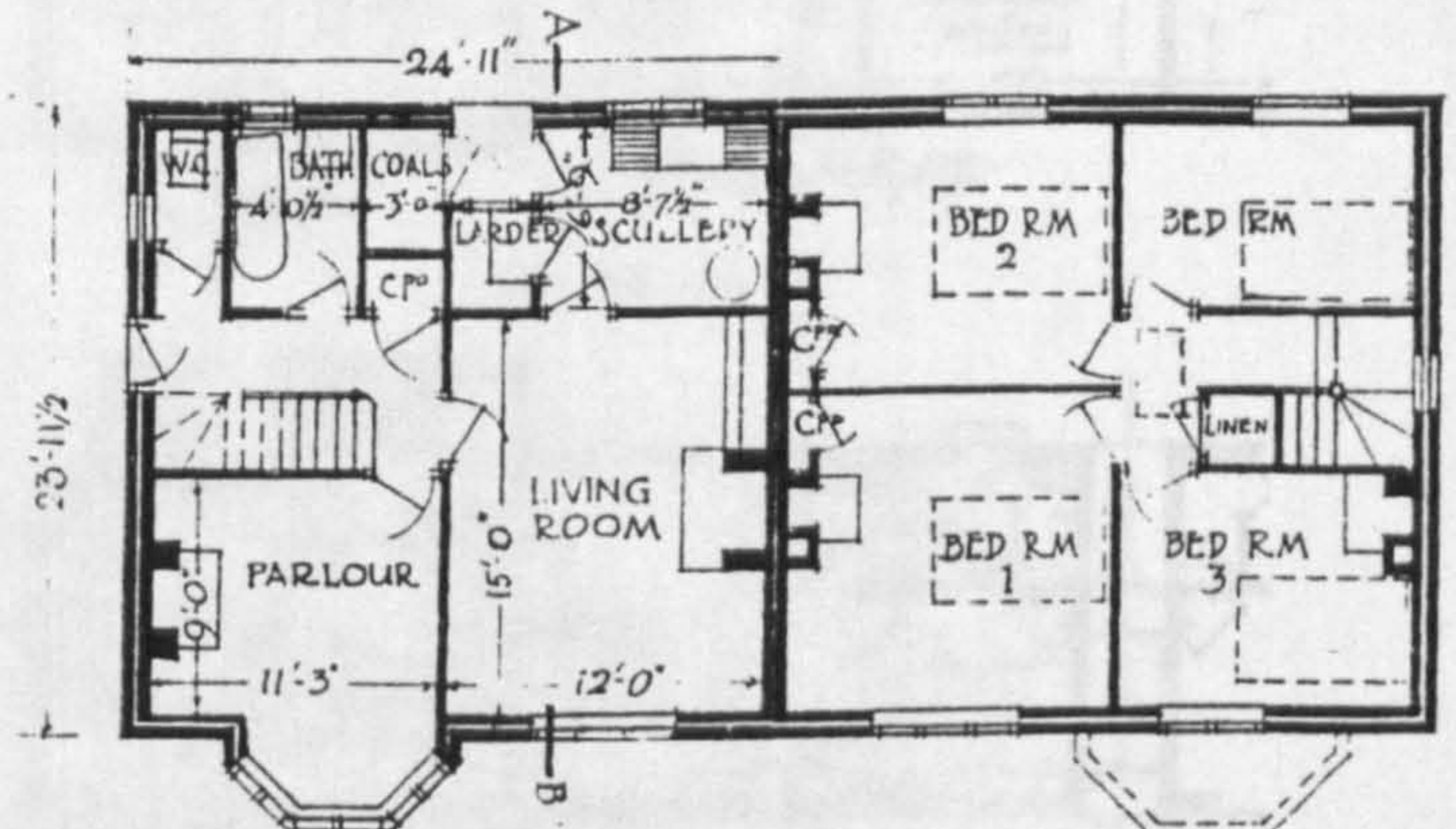


SIDE ELEVATION



L.G.B. H.D.

BACK ELEVATION



GROUND FLOOR

FIRST FLOOR

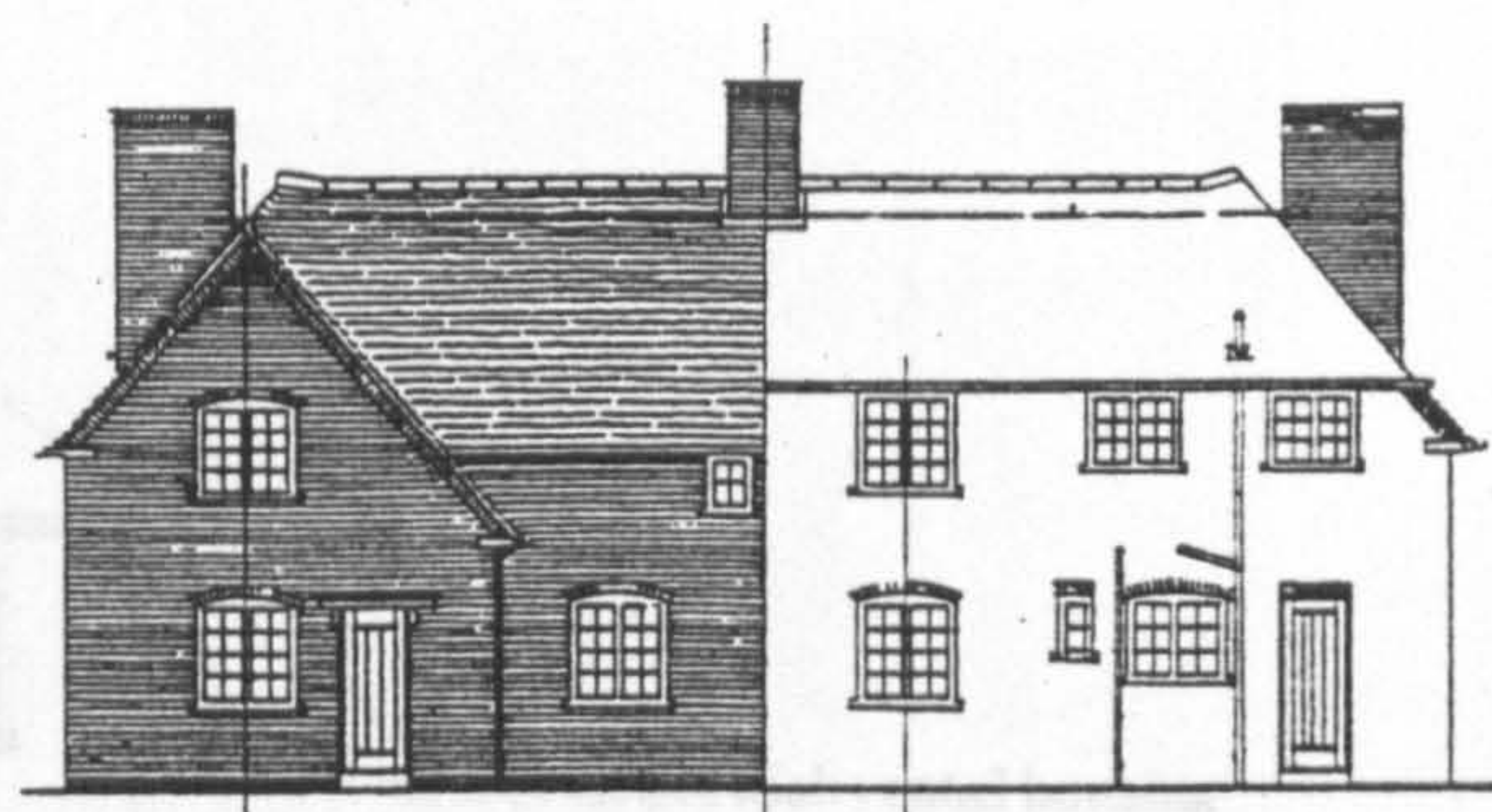
House type 3 and 5 of the manual's 12 house types. Manual illustrates 2 single storey, 9 two storey and 1 flatted 2 storey house type. Although manual was sold throughout UK and advocates designs to reflect local character, all illustrated designs are in traditional English style.

Figure 2.02

M o H Type Plans and Elevations 1920



CUBIC CONTENT OF ONE HOUSE
12645 FEET.



FRONT ELEVATION

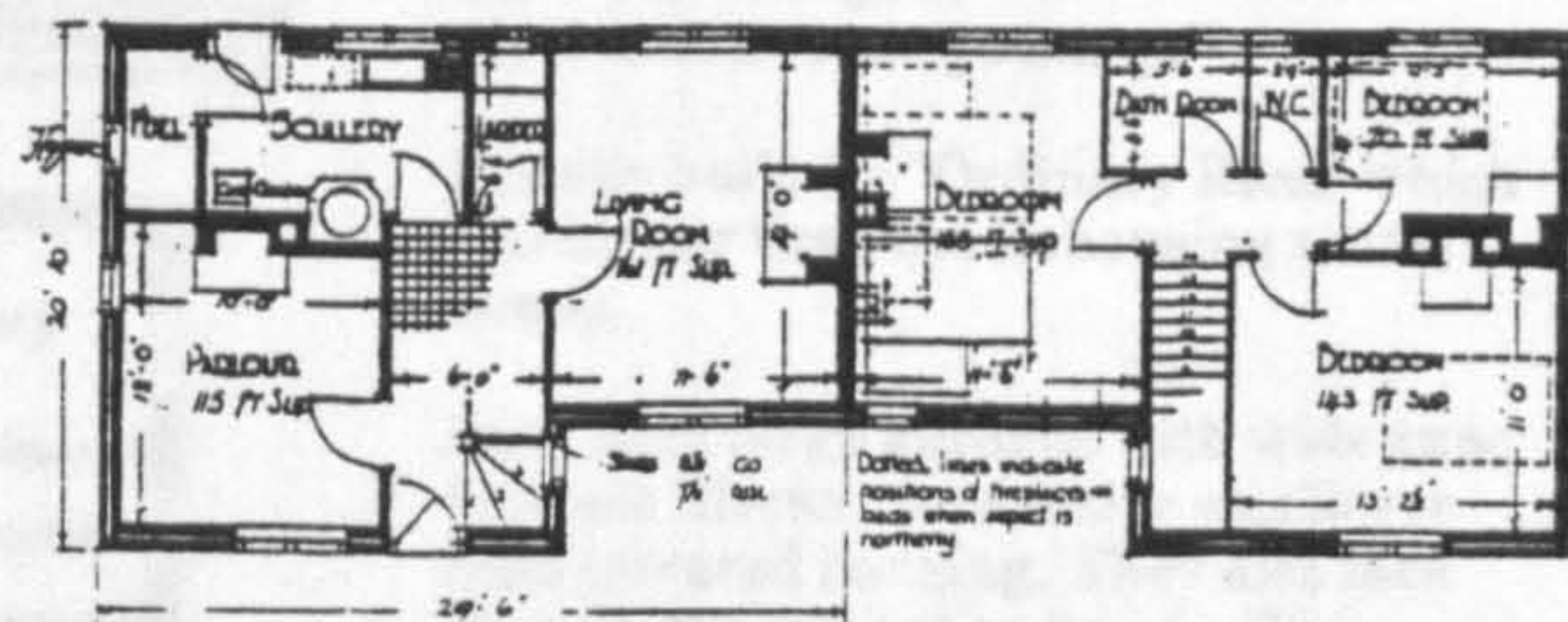
DEAR ELEVATION



Ground Floor Plan.

First Floor Plan.

No. 22 909 ft² 84.5 m²



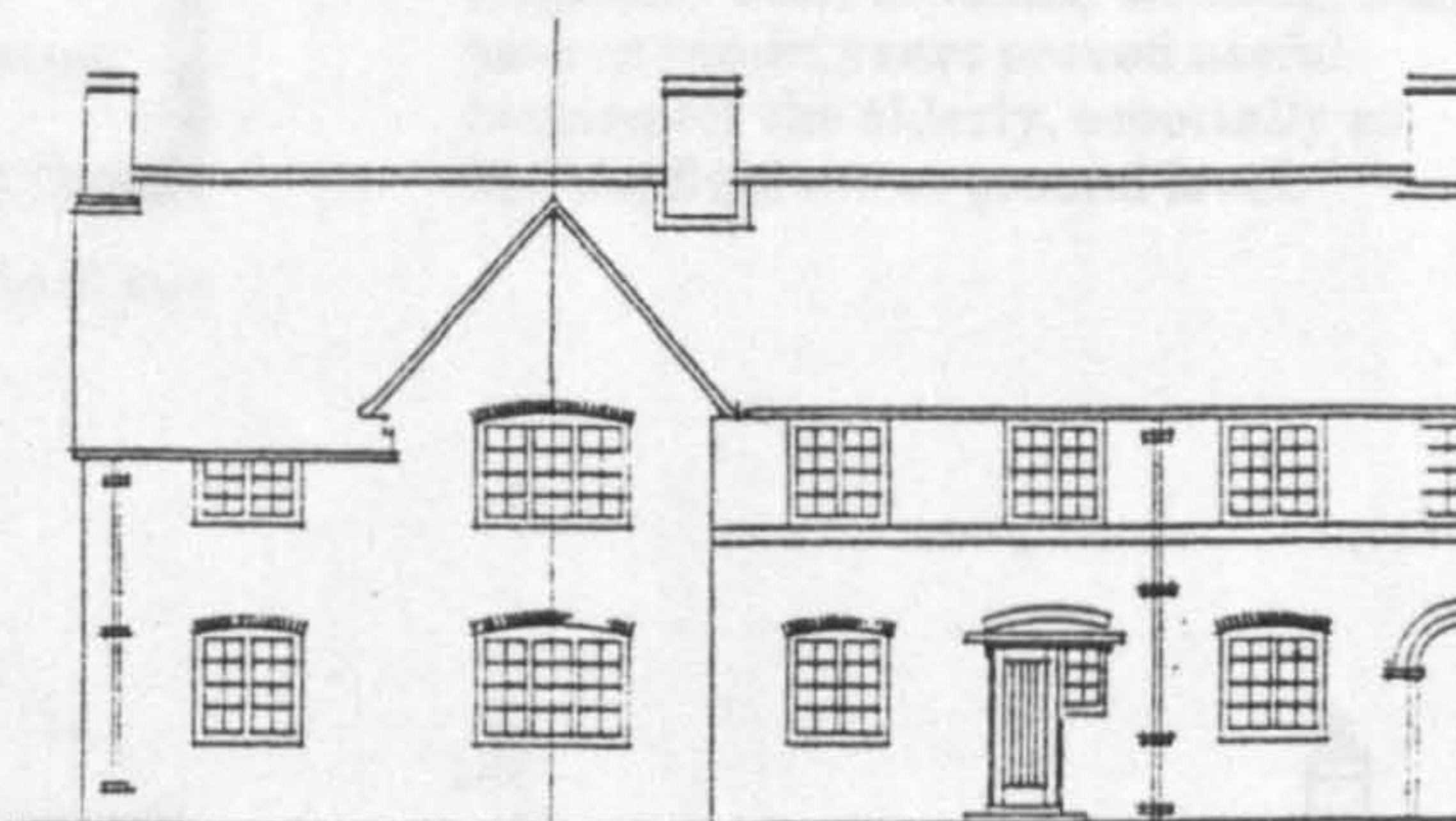
GROUND FLOOR PLAN

FIRST FLOOR PLAN

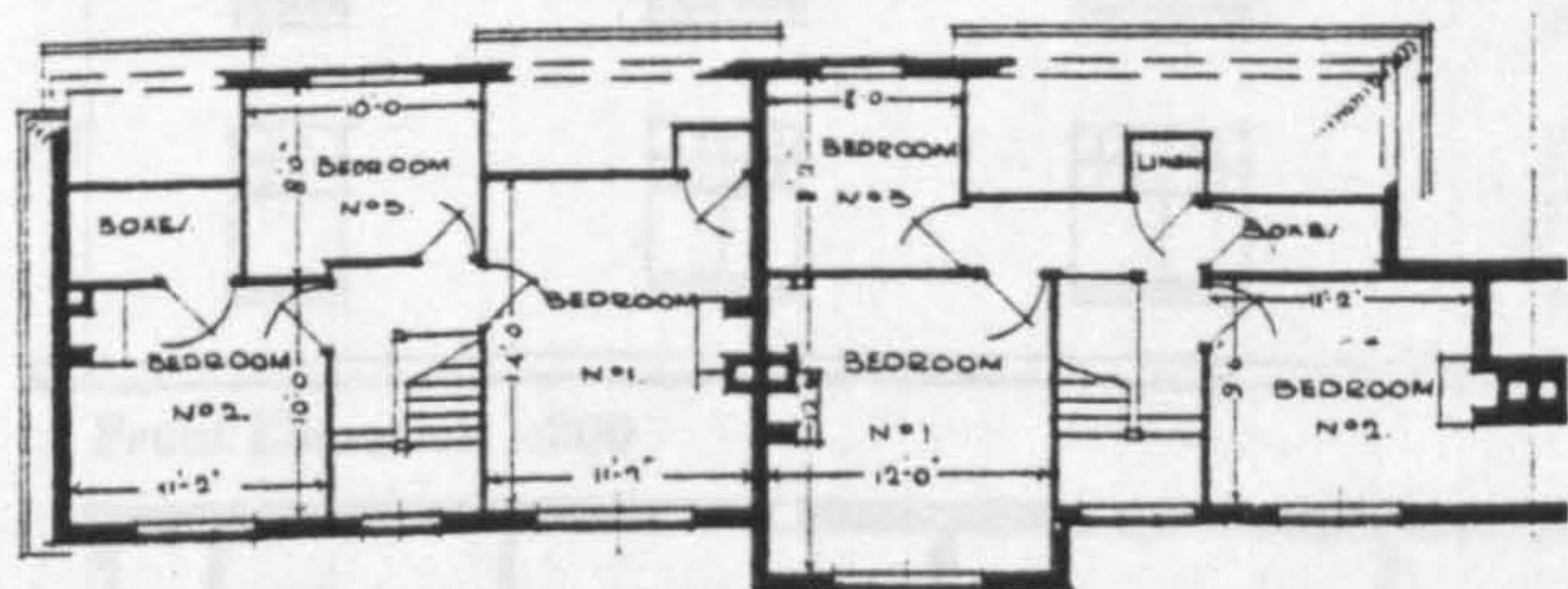
No. 23 968 ft² 90 m²



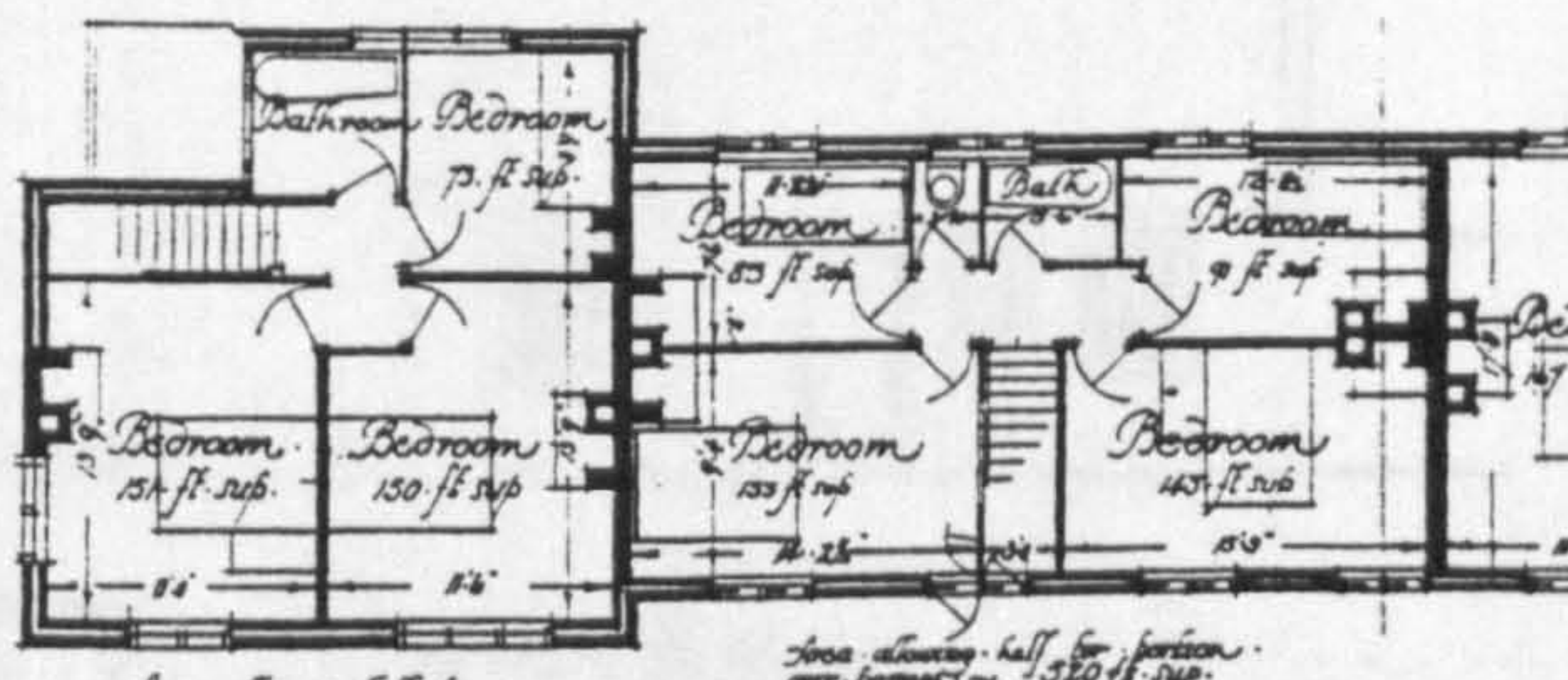
Front Elevation.



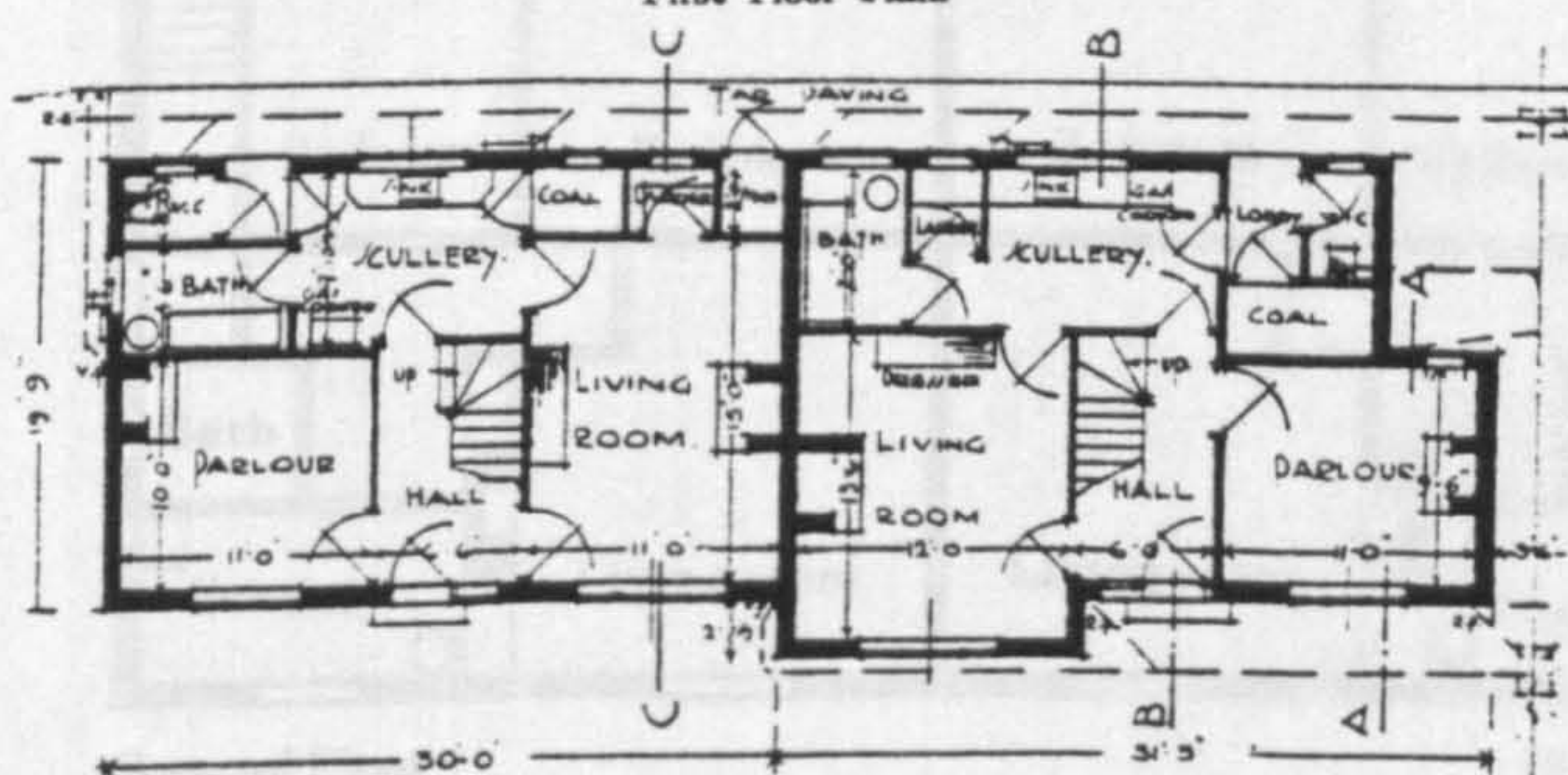
Front Elevation.



First Floor Plan.

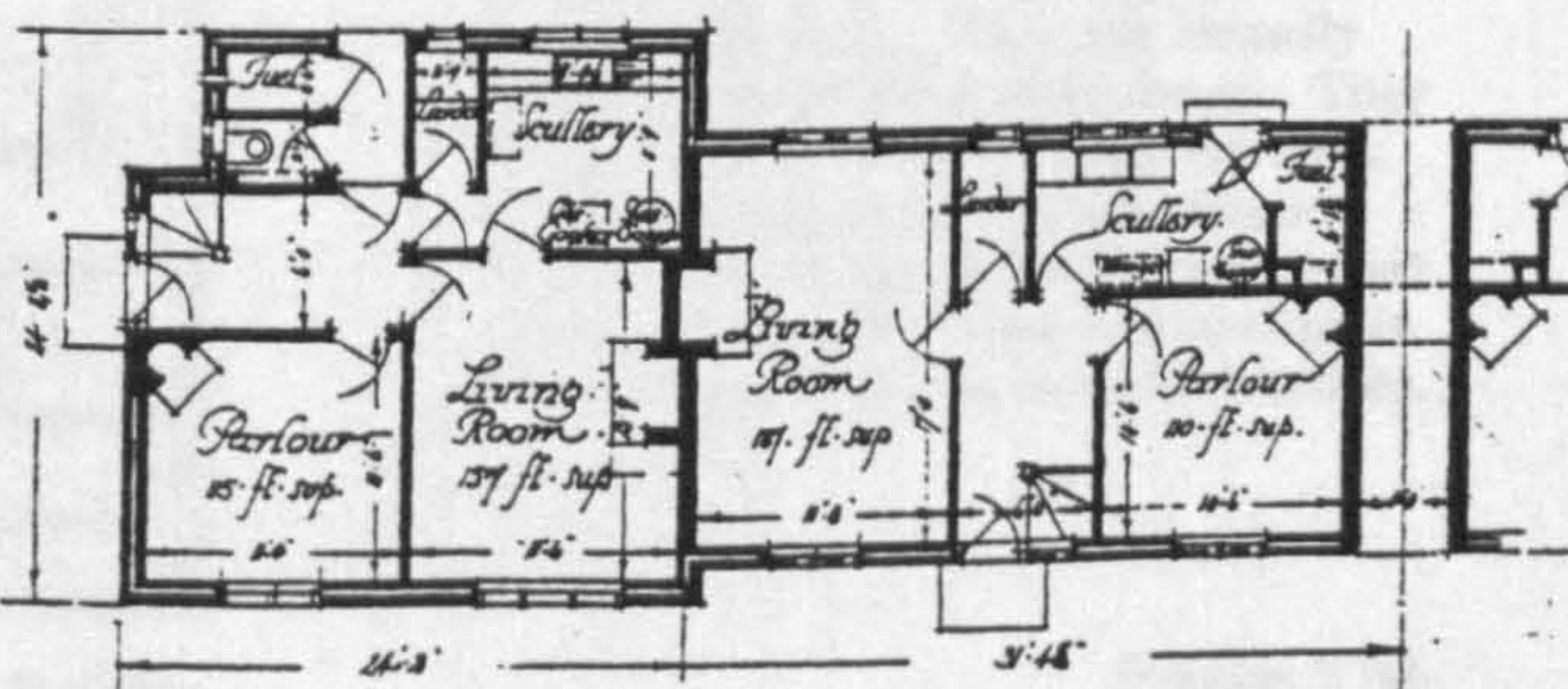


First Floor Plan.



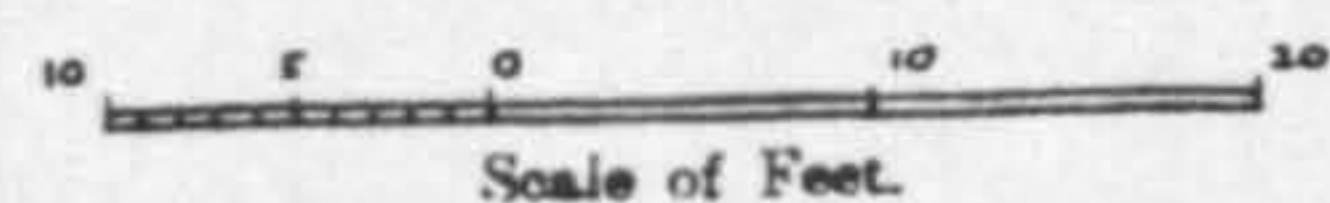
Ground Floor Plan.

No. 31 957 ft² 89 m²

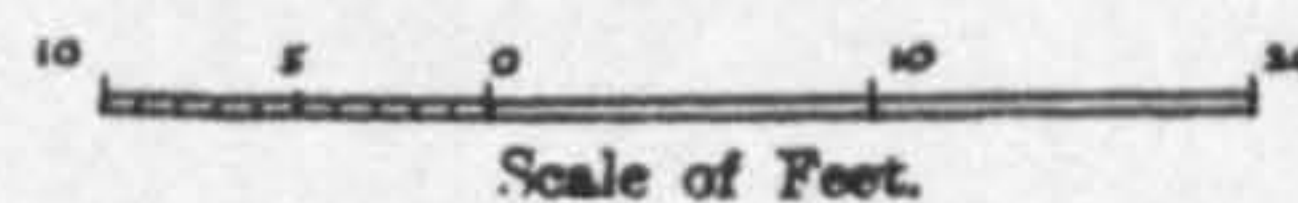


Ground Floor Plan.

No. 33 1054 ft² 98 m²



Scale of Feet.



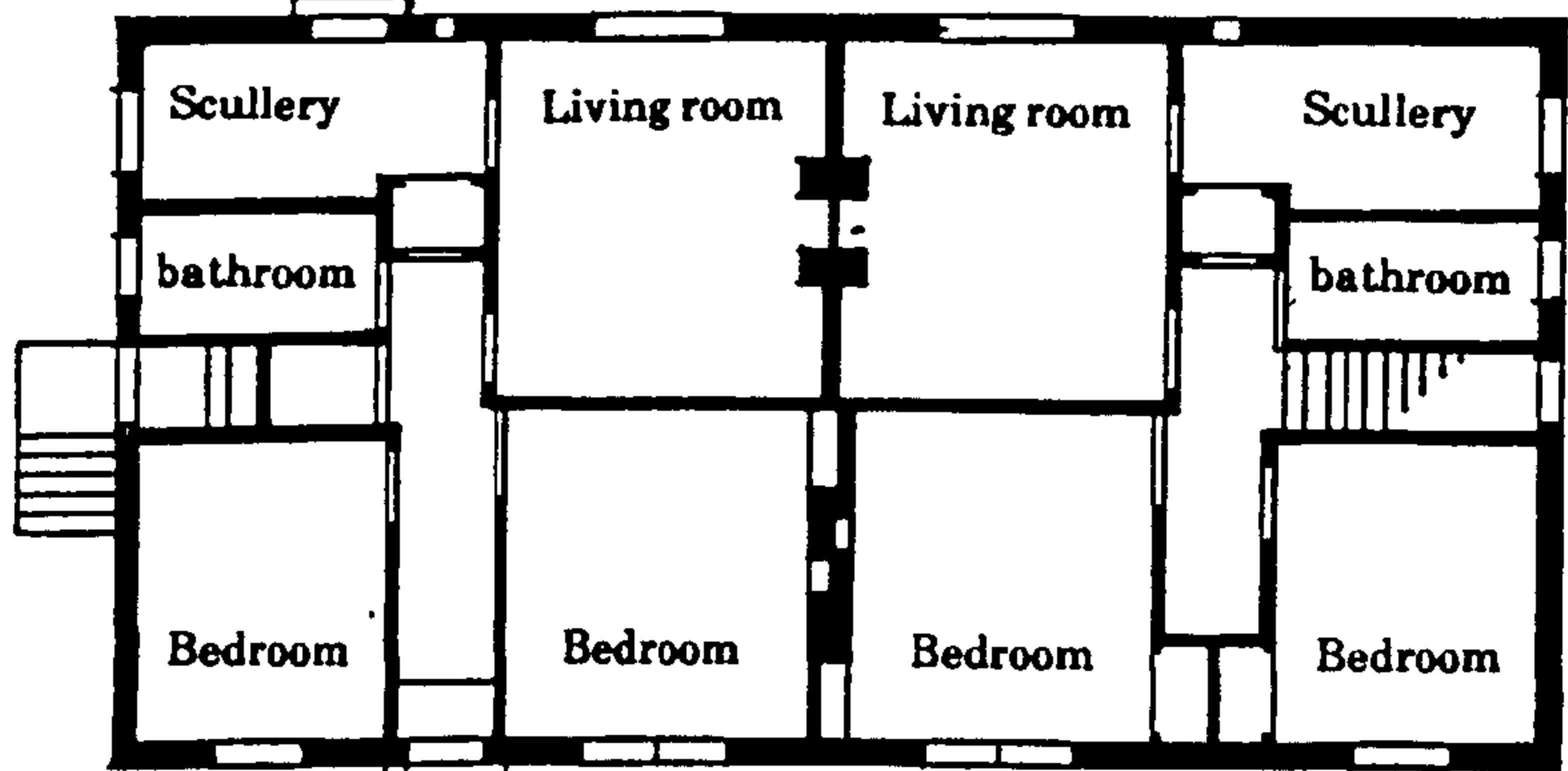
Scale of Feet.

Figure 2.03

Interwar 'Four in a Block' Flats

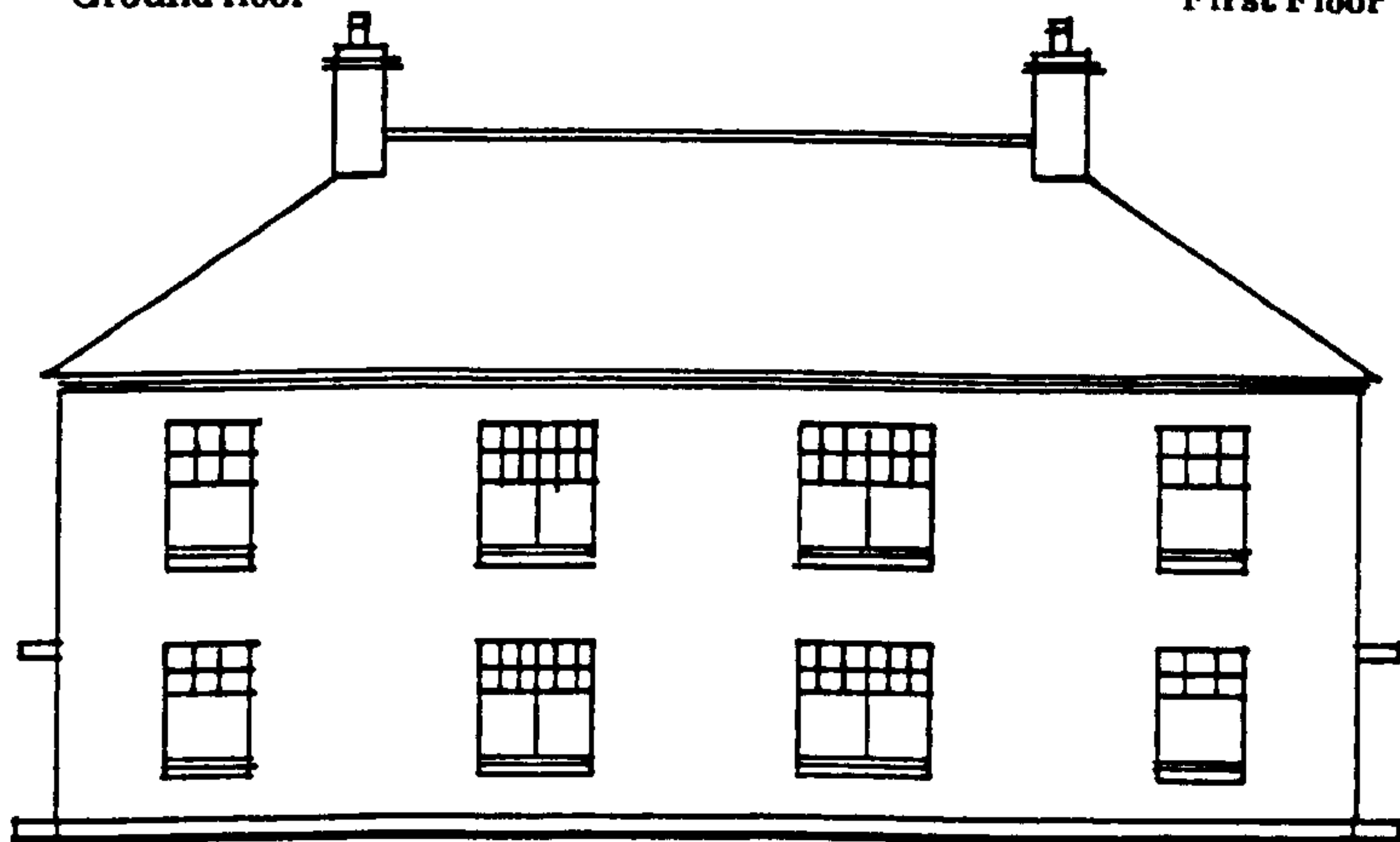


Front Elevation 1:200

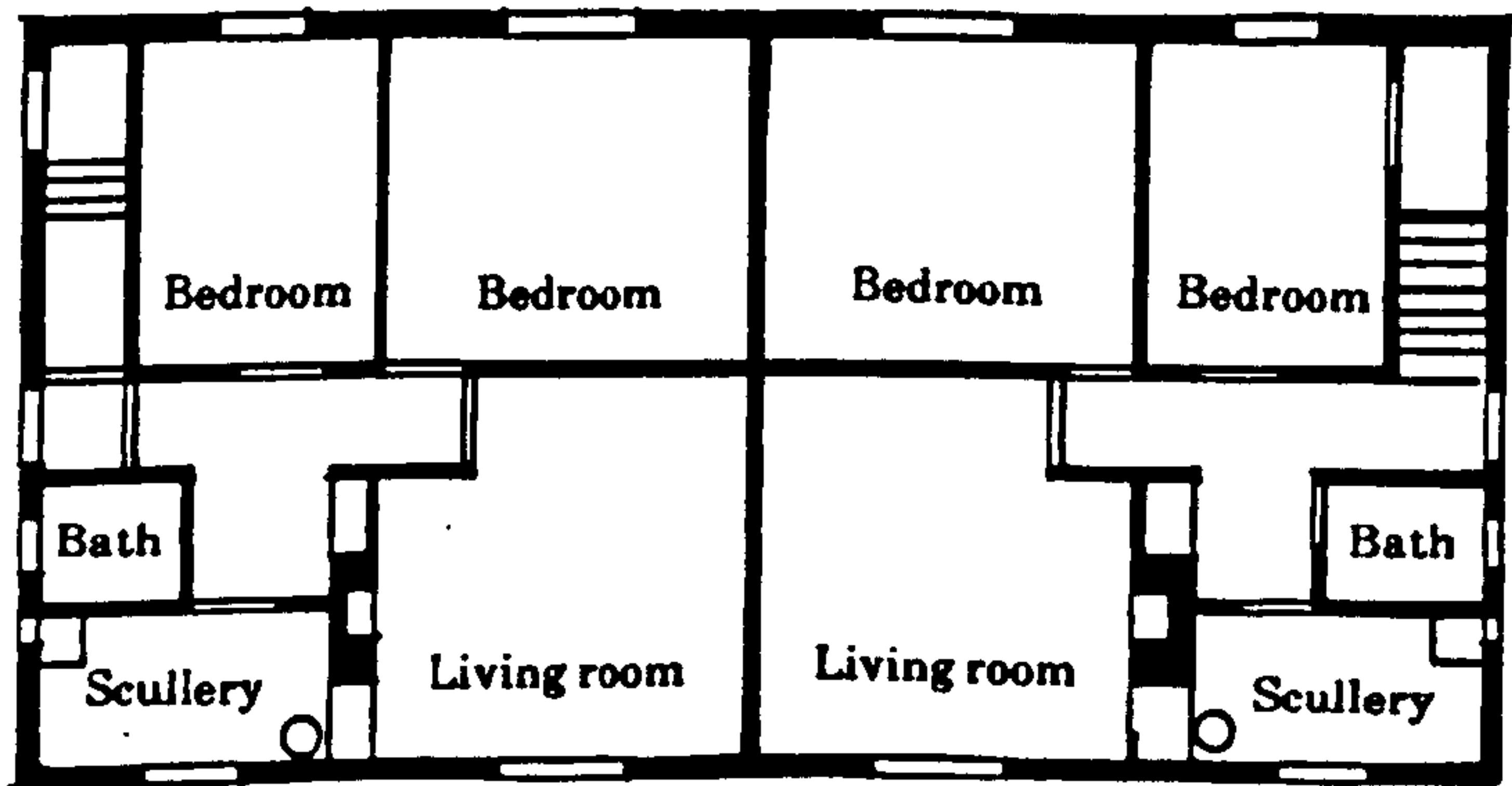


Ground floor

First Floor



Front Elevation 1:200



Ground Floor

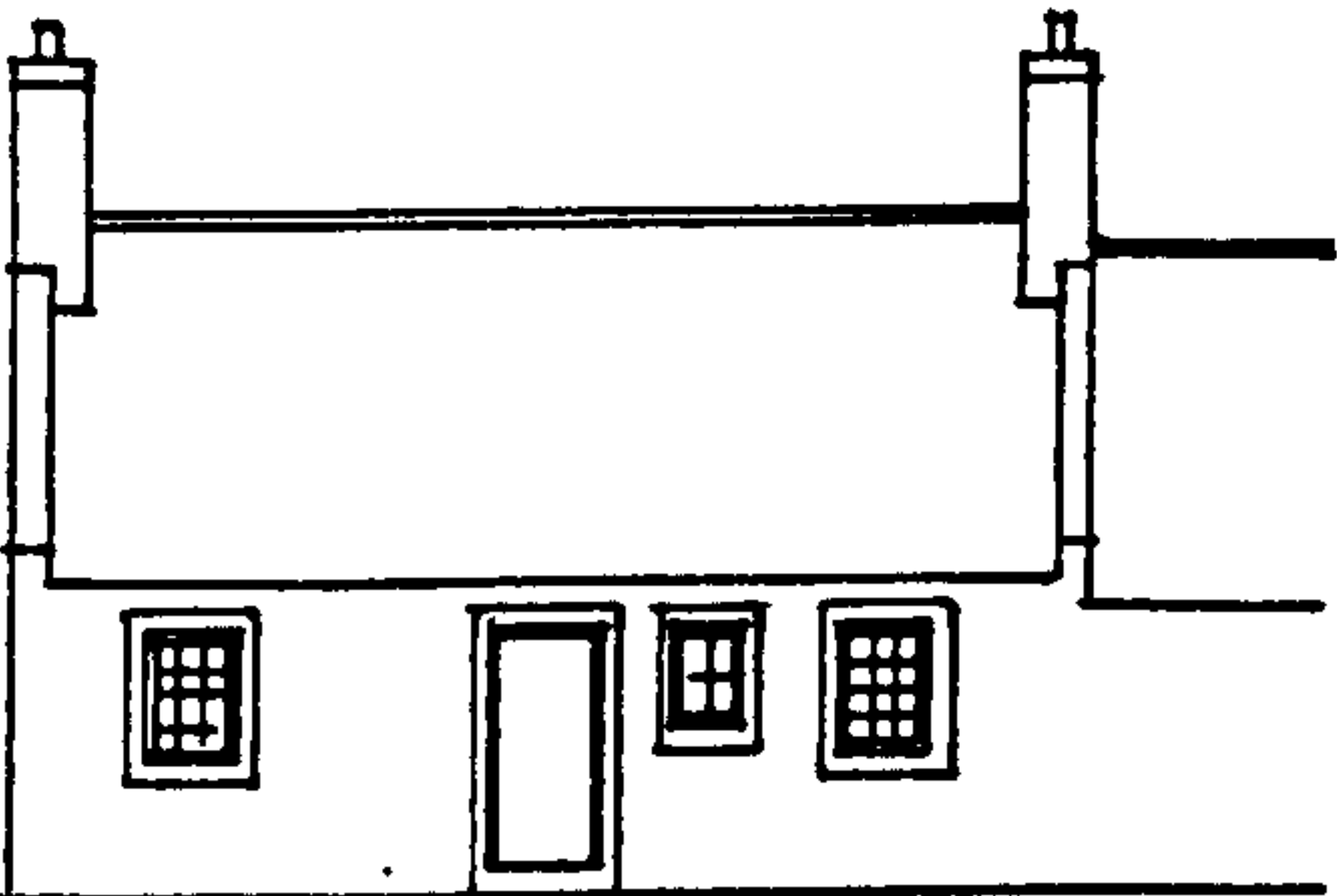
First Floor

57% of all Scottish rental housing between the wars was built as "four in a block".

Carntyne Glasgow.
Flats with a "cottage image"

Usually built for "Ordinary Rent" which was higher than the Rehousing rental Group.

Built with large gardens with wide gaps between blocks, the density was lower than terraced housing. They also lack the height and continuity of a City Street. They did however, have the 'flats' advantage that all accommodation was at one level within the house. Consequently while originally built as family housing, they have in recent years proved useful housing for the elderly, especially as half the flats are at ground level.



Seaforth Road, Ayr.
They were widely used for town and village extension. They usually laid out in regimented fashion along equally regimented roads. They are visually drab with no architectural detail. They are at their worst when used, set back from the road, as infill replacement houses in villages. Despite the fact that external finishes of slate and harling is often the same as adjacent older houses.

Figure 2.04

Mosspark, Glasgow. Addison Act Cottages. 1920's

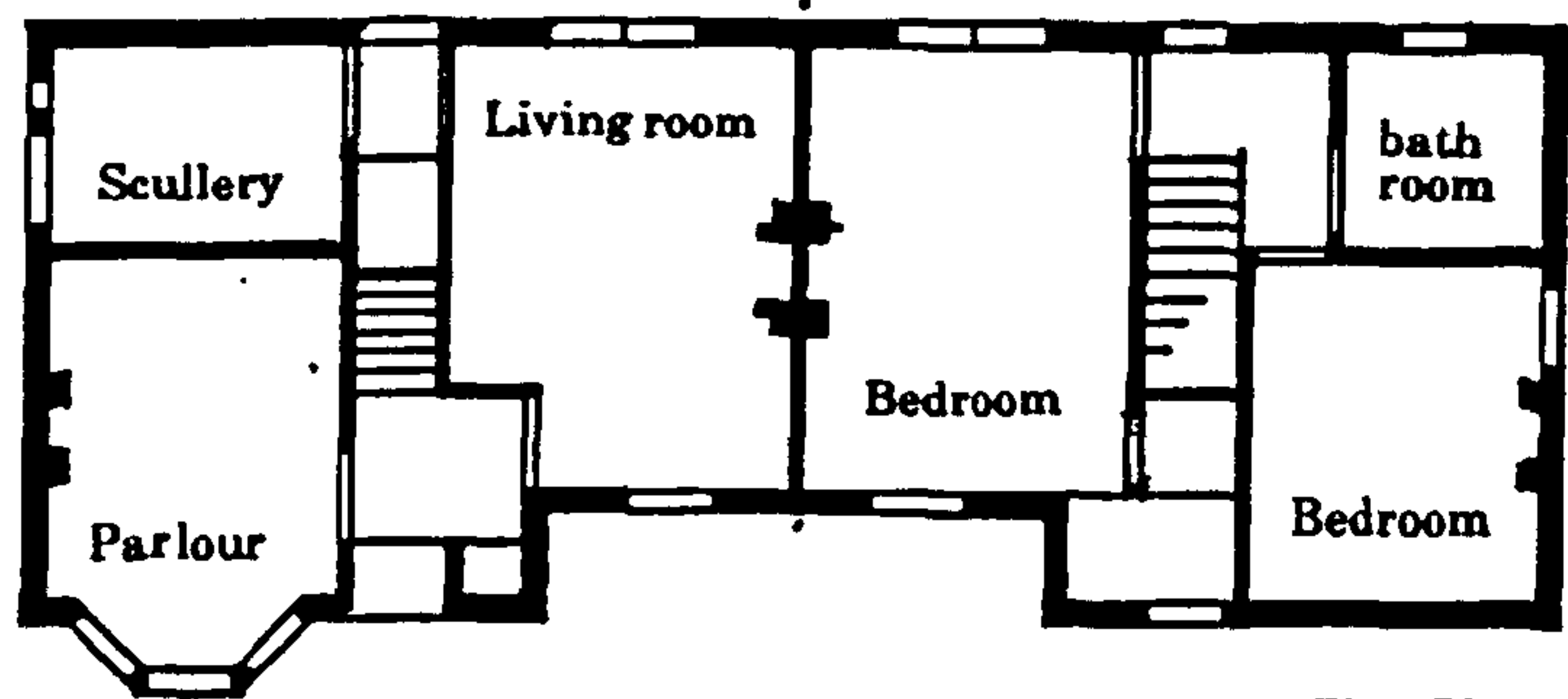


Figure 2.05

Inter War Cottage Houses Knightswood Glasgow

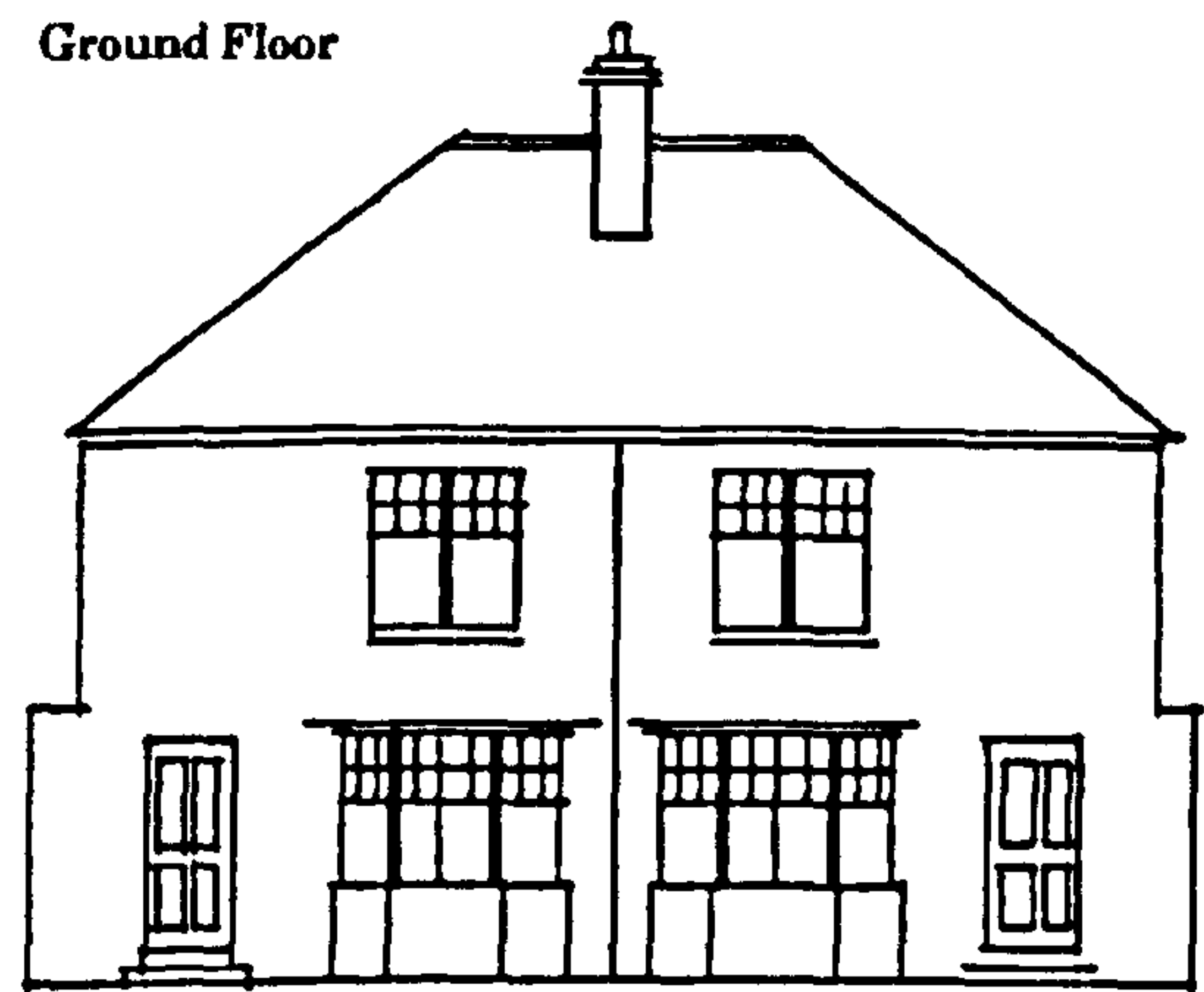


Cowdenhill Rd/Baldwin Ave.

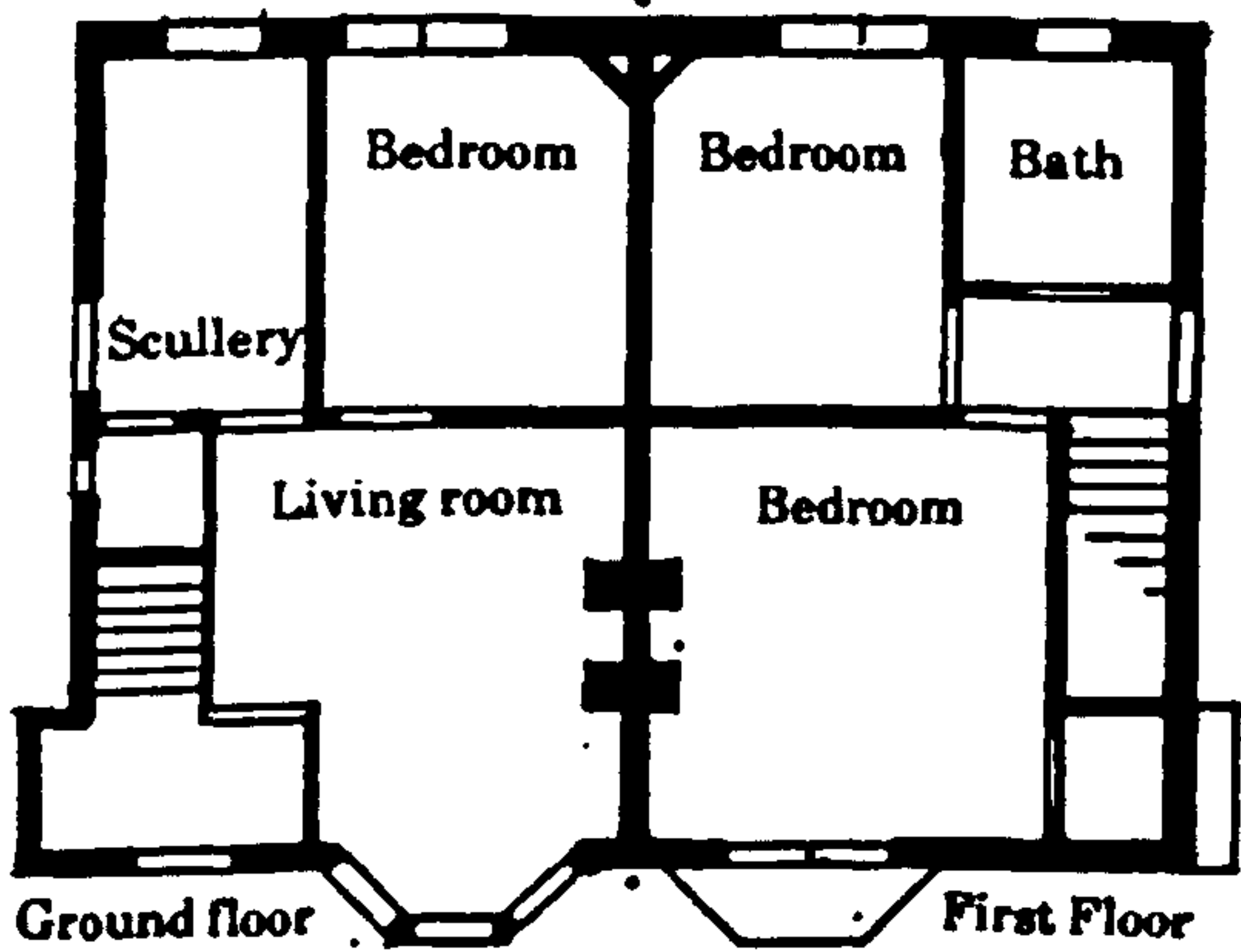


Ground Floor

First Floor



Cowdenhill Road



Ground floor

First Floor

Plans from A Barclay Public Housing (Scotland) Acts 1919 to 1938

The 1917 Royal Commission on the Housing of the Industrial Population of Scotland was strongly in favour of cottage type development and saw tenement and tenement development as inferior. This view was endorsed by the Scottish Board of Health.

Ordinary Rent houses were therefore mainly built in Cottage form.

The poorer working class could not afford "Ordinary Rents" consequently the cottage houses were occupied by skilled working class and middle class tenants.

The architectural style in the main did not derive from the Scottish town house or cottage, but from the English Architectural Style which had been designed by architects such as Unwin and Mottrom for English Garden Cities and for Rosyth in Fife.

Figure 2.06

Cottages Knightswood, Glasgow 1920 s



Home owner replacement windows and Corporation lack of maintenance has not helped to conserve Knightswoods character.

Figure 2.07

Cottages Knightswood, Glasgow 1920 s



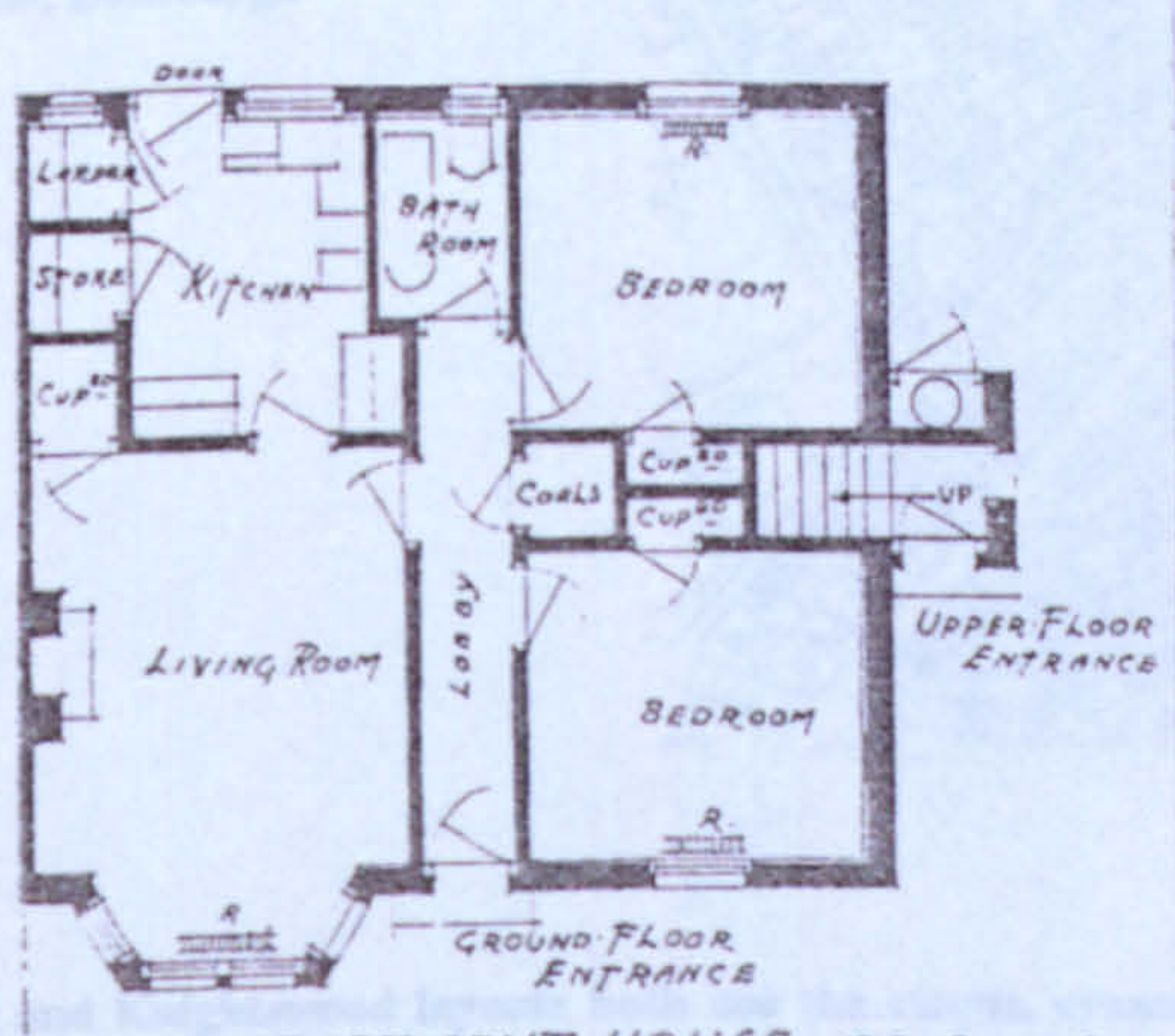
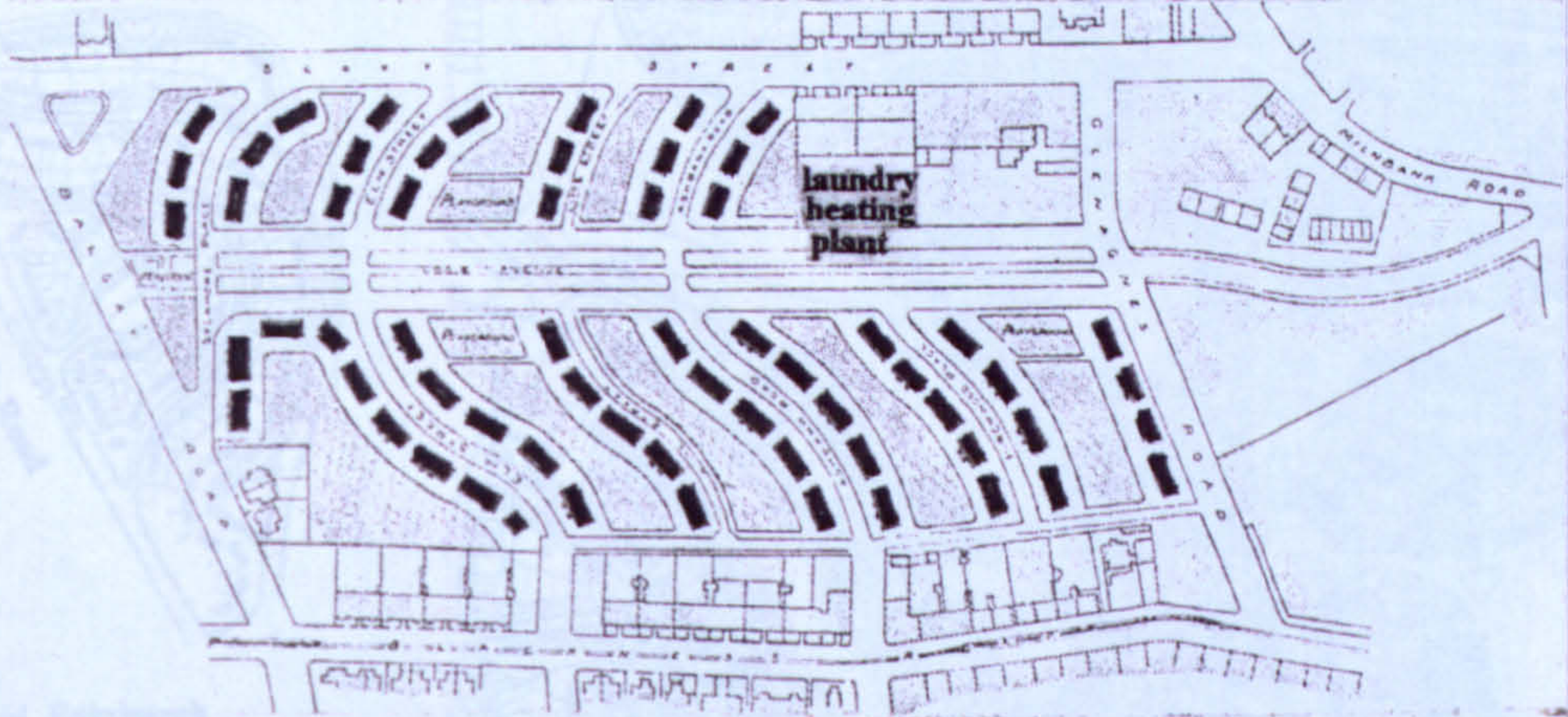
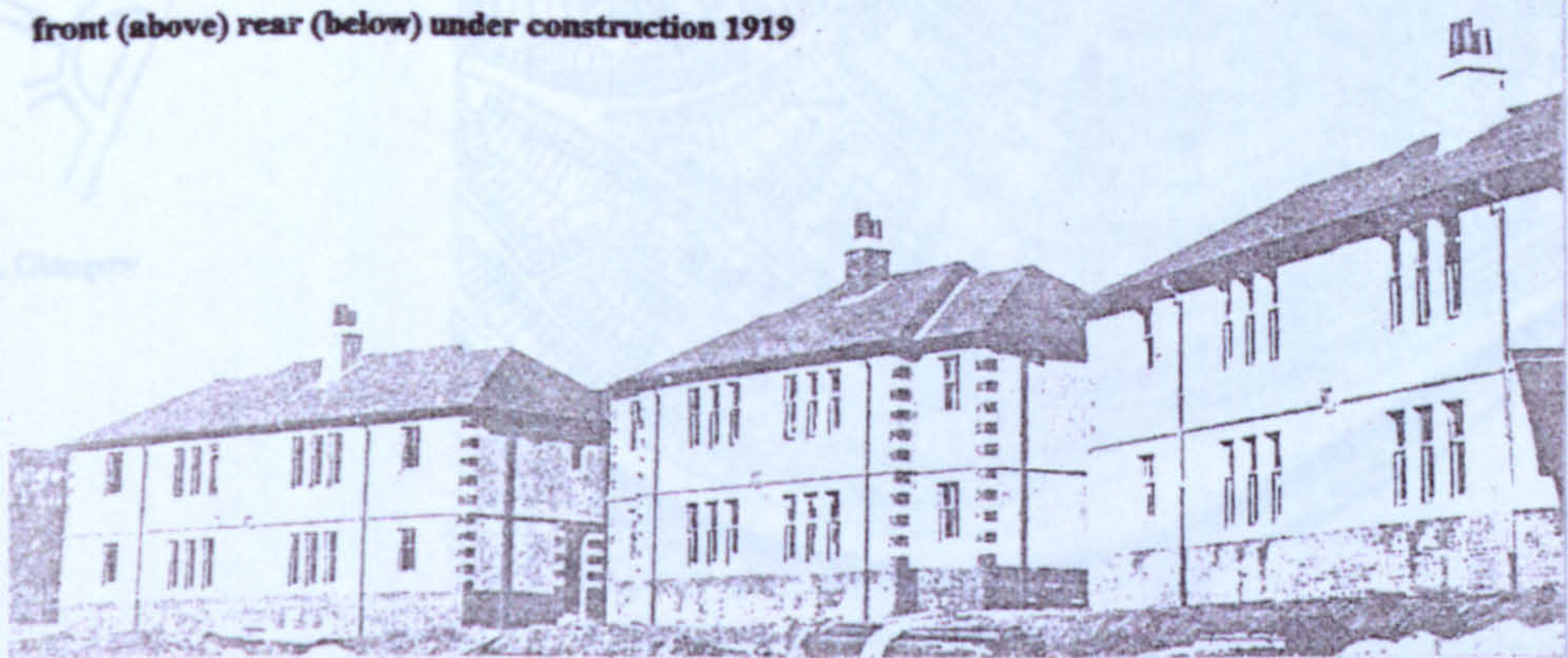
Home owner replacement windows and Corporation lack of maintenance has not helped to conserve Knightswood's character.

Figure 2.08

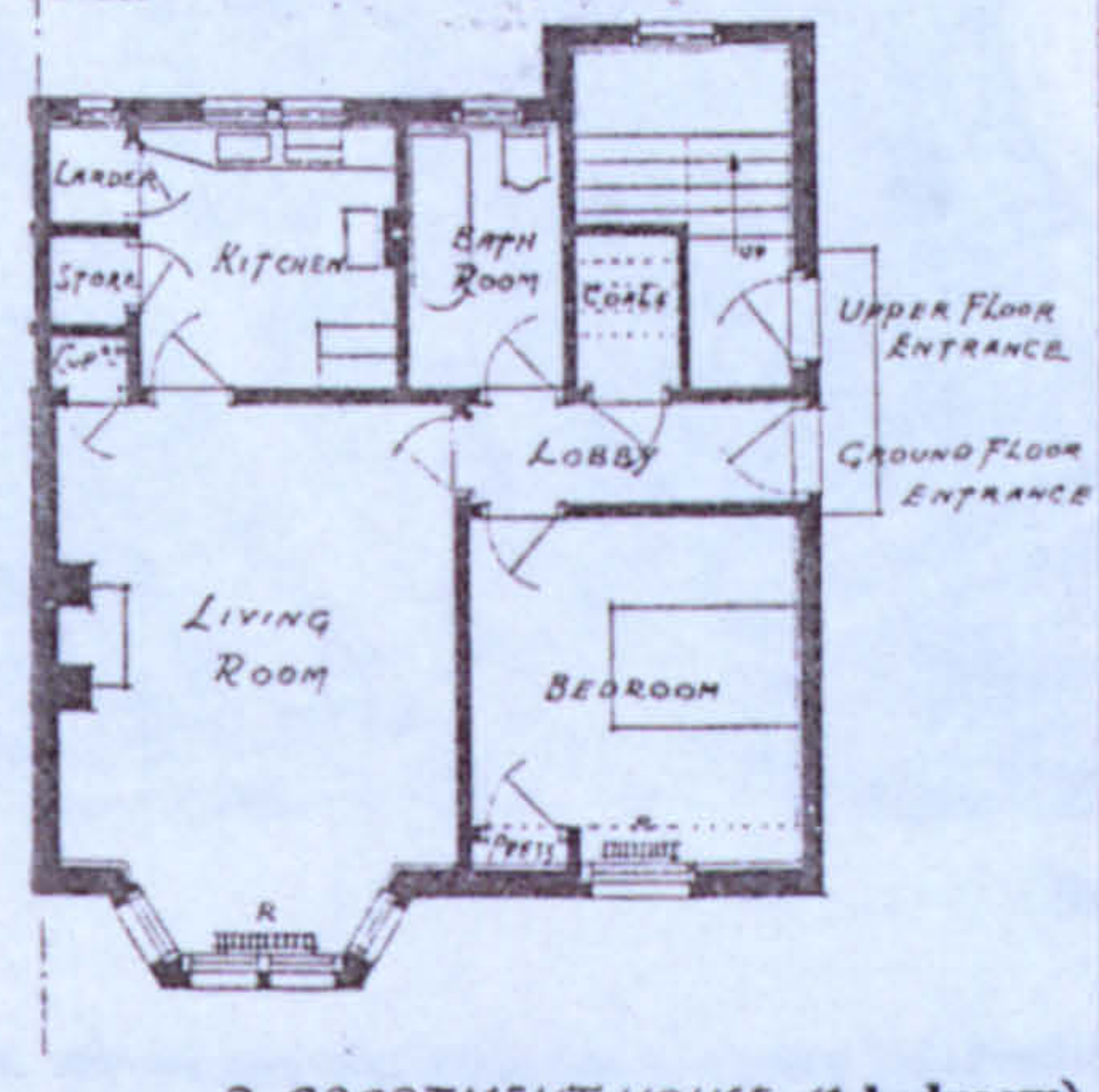
Logie, Dundee 1919



front (above) rear (below) under construction 1919



4 APARTMENT HOUSE (2 bedroom)

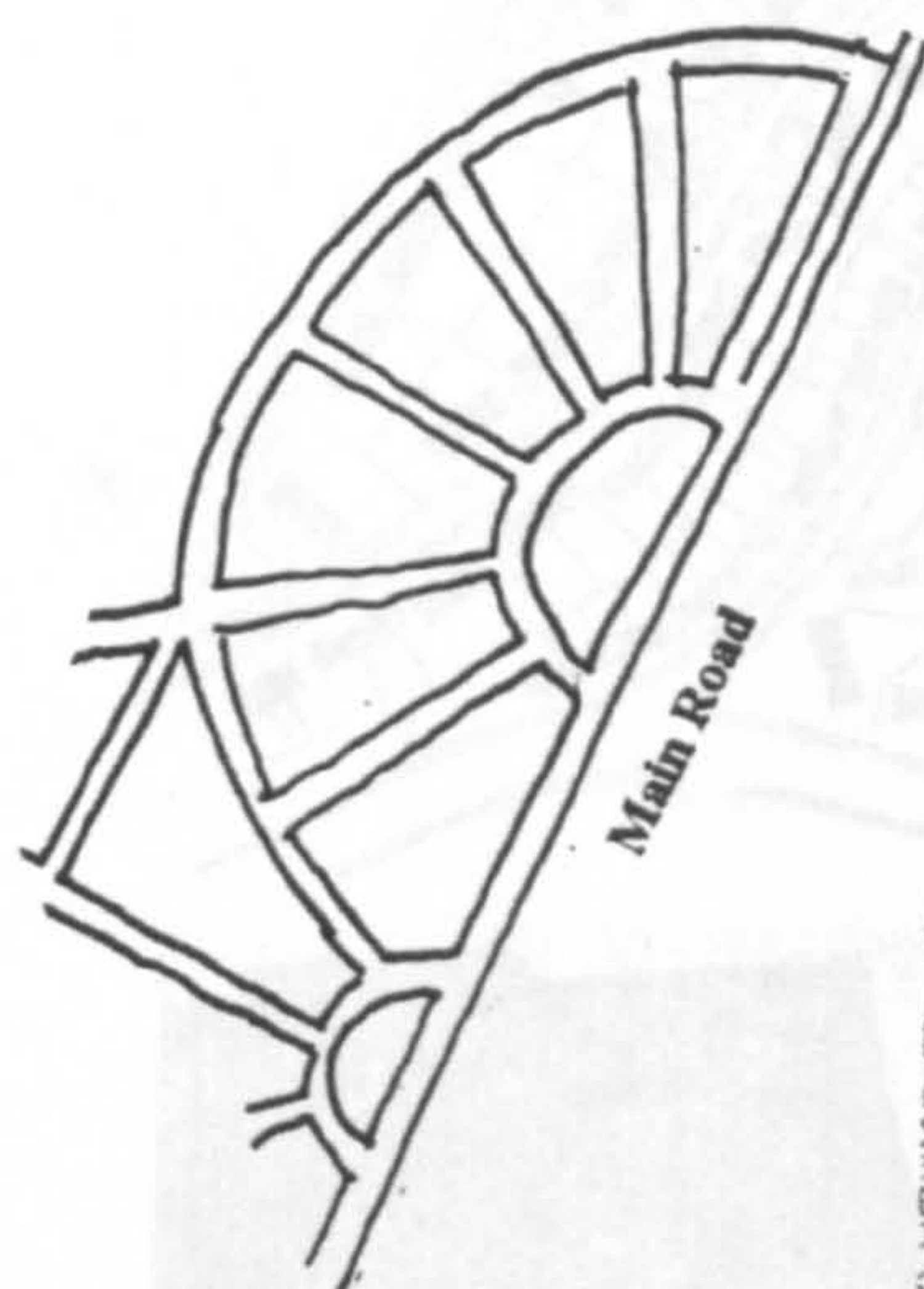


3 APARTMENT HOUSE (1 bedroom)

Source : Souvenir of the Opening of Logie Scheme
NOTE "Souvenir" counts kitchen as an apartment

Figure 2.09

Mosspark and Knightswood Layout



Riddrie, Glasgow



Mosspark



Northfield, Edinburgh



North Knightswood

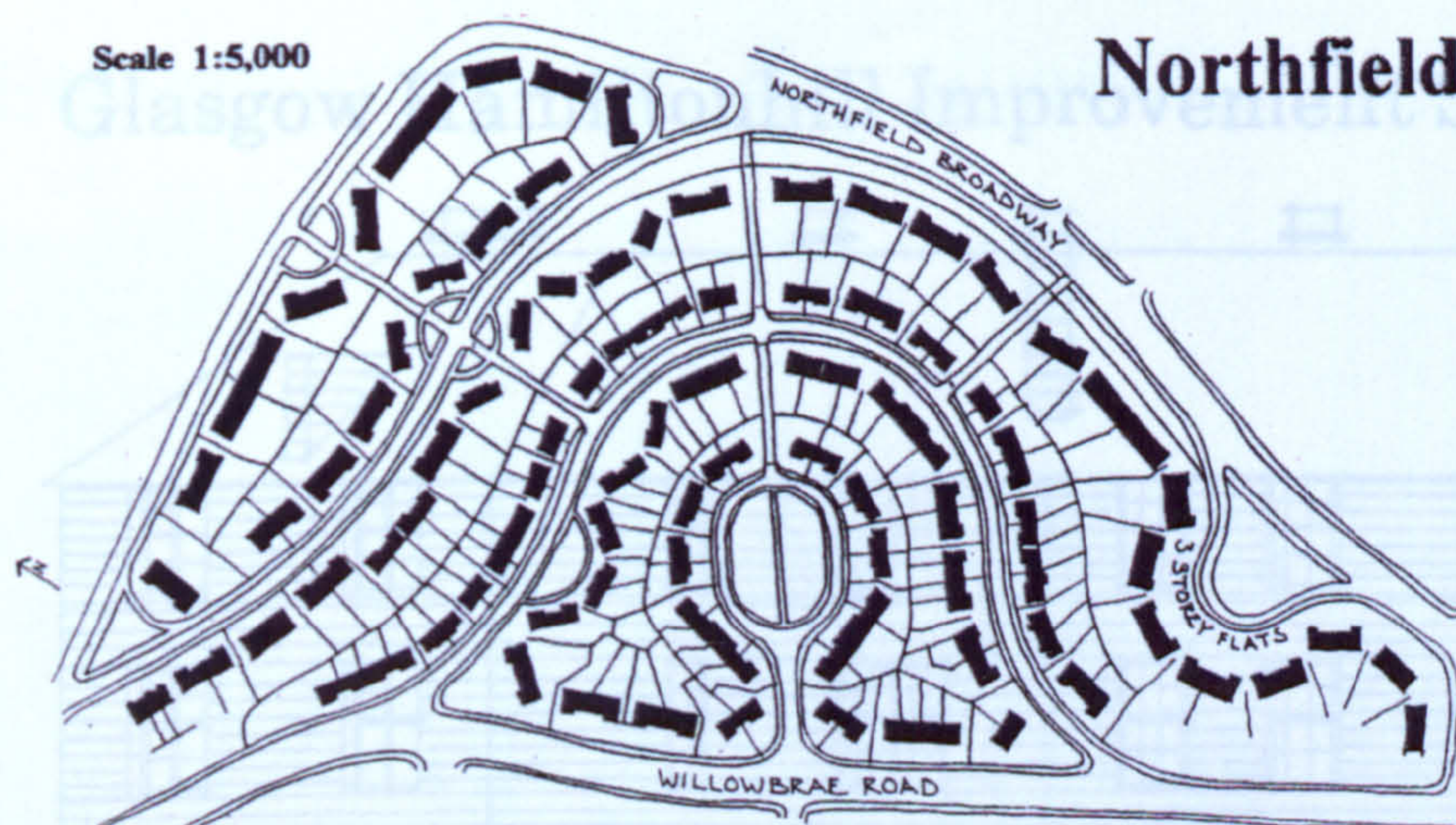
1:10000

Mosspark and Knightswood layouts both use the circus, crescent, curves and discontinuity to create informality and discourage through traffic. The crescent form of North west Mosspark was also used earlier at Riddrie in Glasgow and Northfield in Edinburgh. Both commenced 1919.

Figure 2.10

Scale 1:5,000

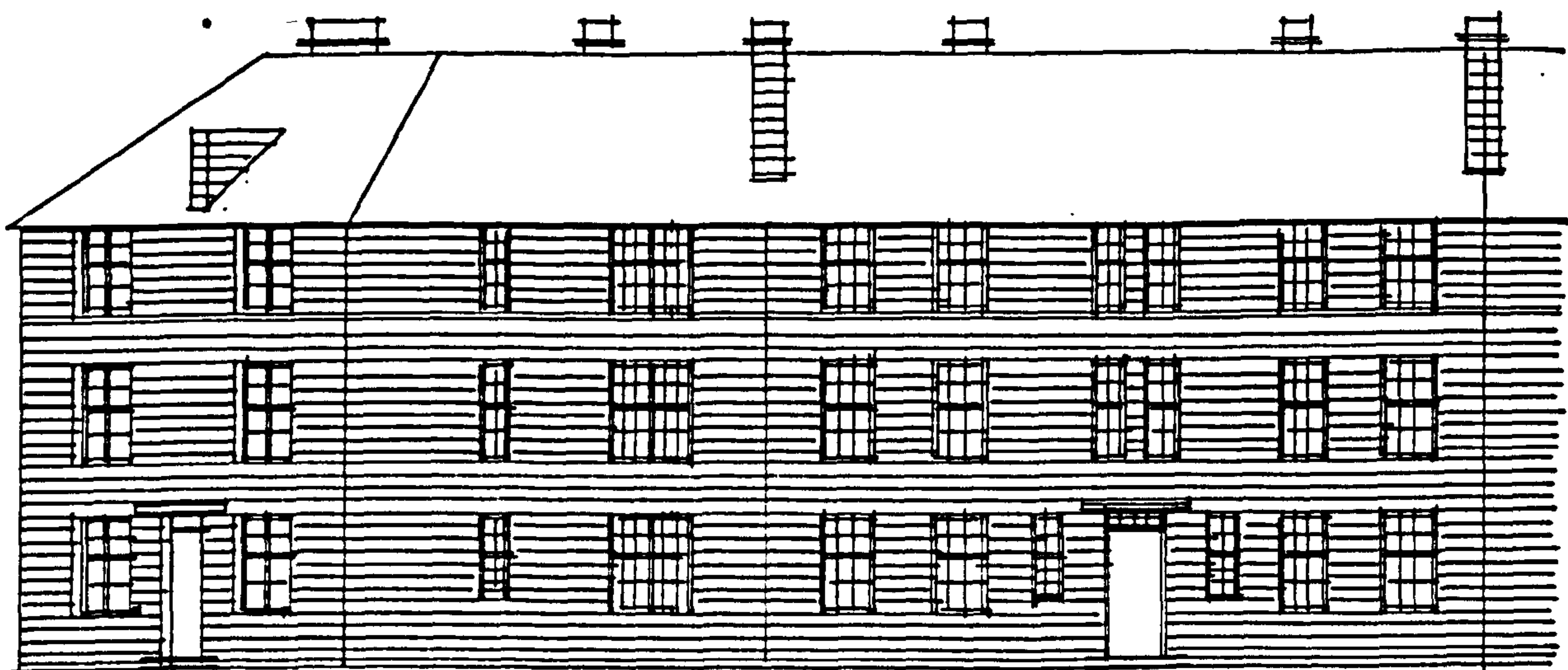
Northfield Broadway, 1919 R. Fairlie



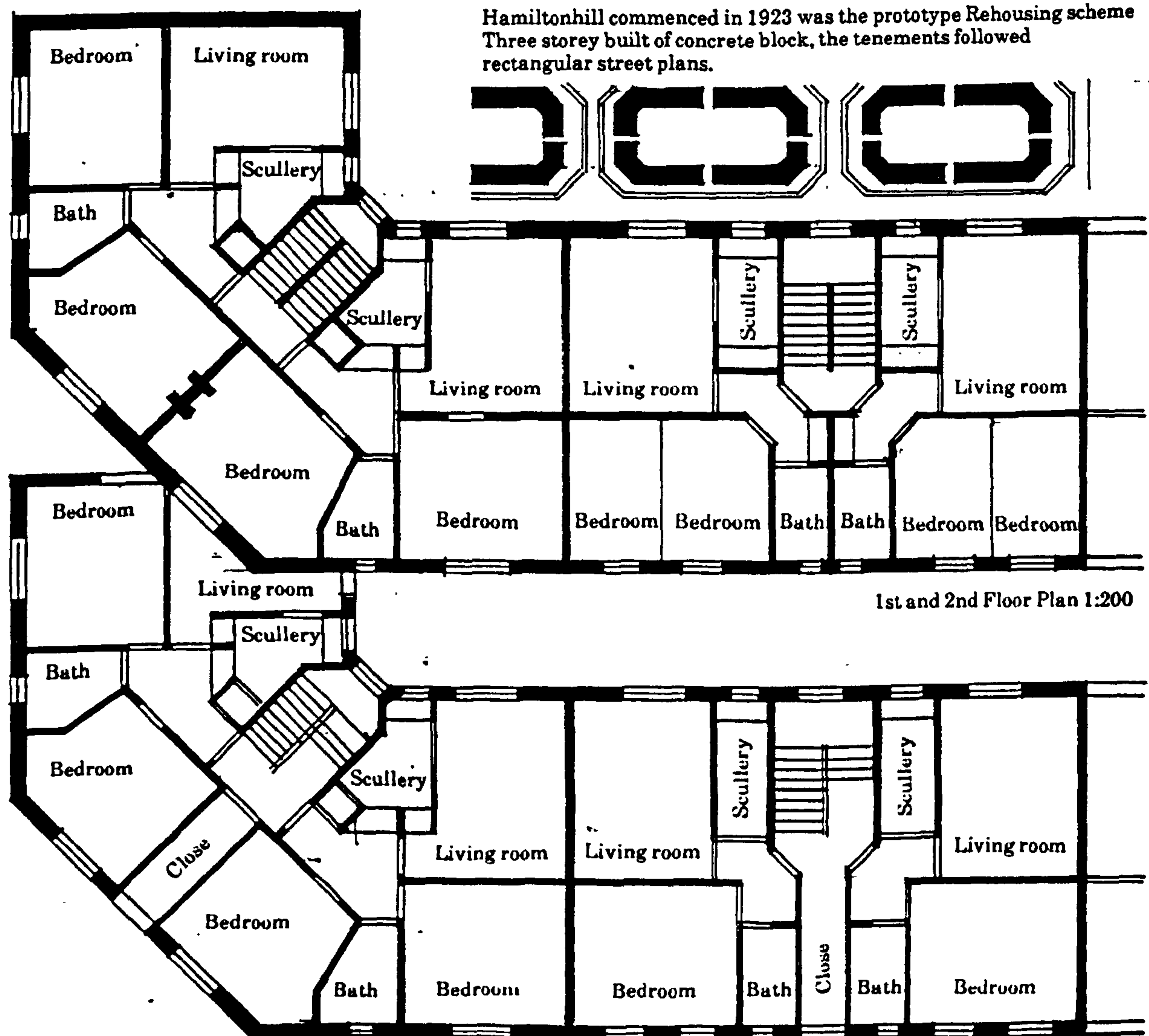
Some of Edinburgh's first Local Authority housing.

Figure 2.11

Glasgow Hamiltonhill Improvement Scheme 1923



Hamiltonhill Rehousing Scheme Front Elevation 1:200



1st and 2nd Floor Plan 1:200

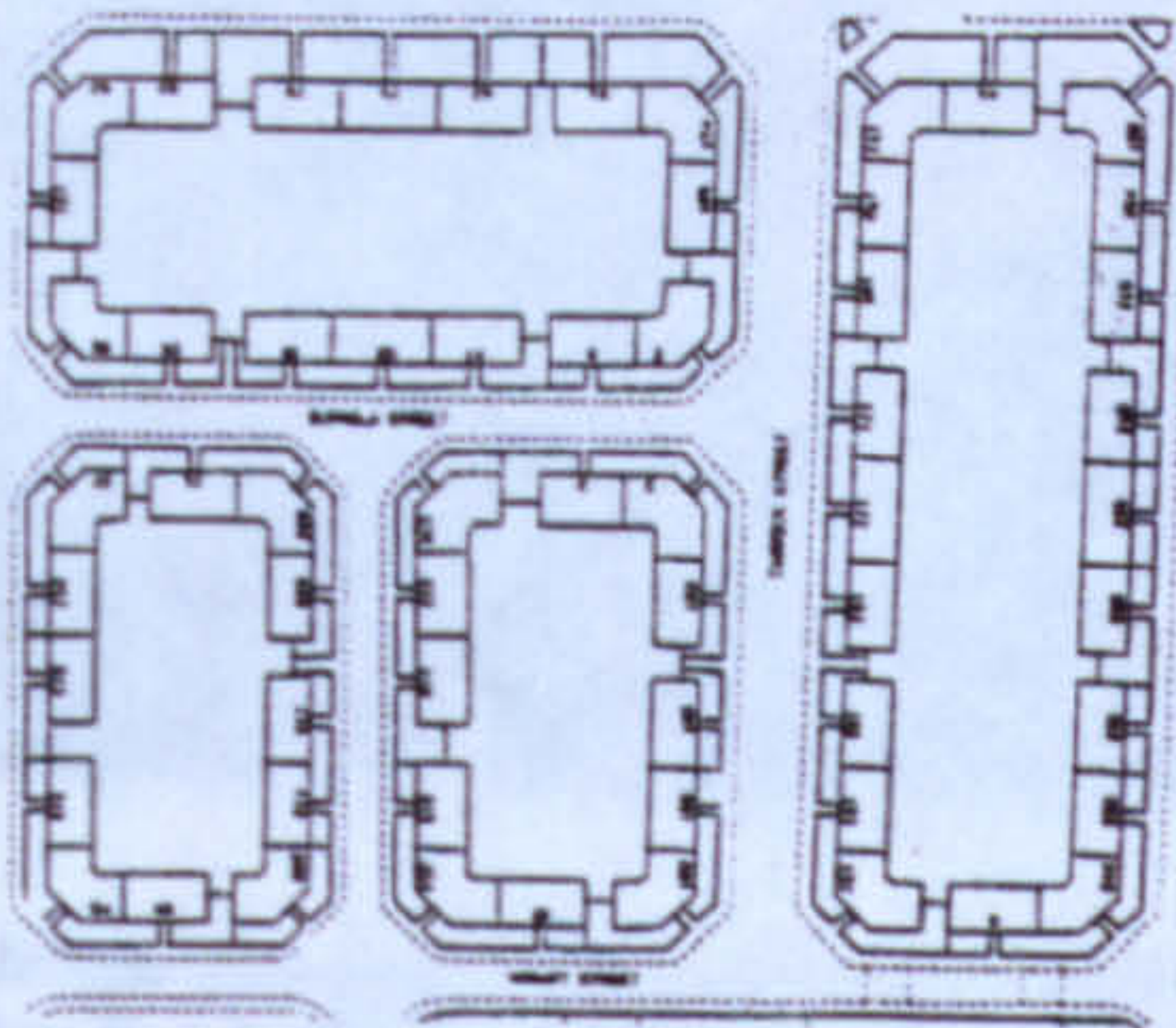
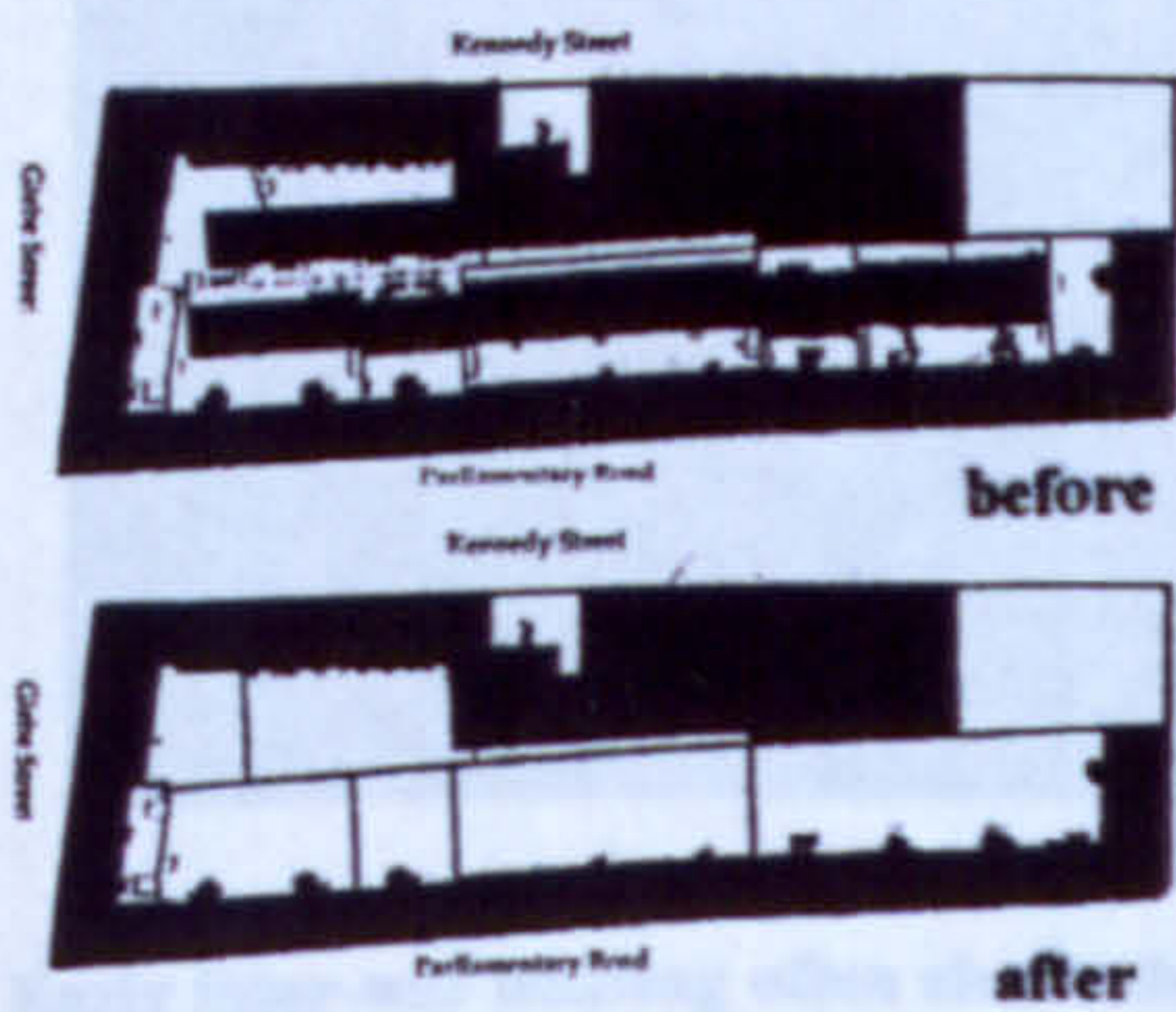
Ground Floor Plan 1:200

The "Rehousing" Rental Group (Sum Clearance) was introduced by the 1923 Act.

Source Horsey, M. Tenements and Towers.

Figure 2.12

Stoneyhurst Street, Hamiltonhill, Glasgow 1923



Top
Hamiltonhill original facade
Mid
Hamiltonhill reclad 1994
Foot Left
Backlands slum clearance
in Town Head, Glasgow
Foot Right
Stoneyhurst Street Plan

Prototype rehousing scheme, concrete block three storey tenements. Improvement scheme built to rehouse slum clearance tenants. Reroofed, reclad, reglazed with porch roof and doors entry system. The technical upgrading of the fabric has not been matched by an aesthetic improvement. Dour solidity has been made to look flimsy.

Figure 2.13

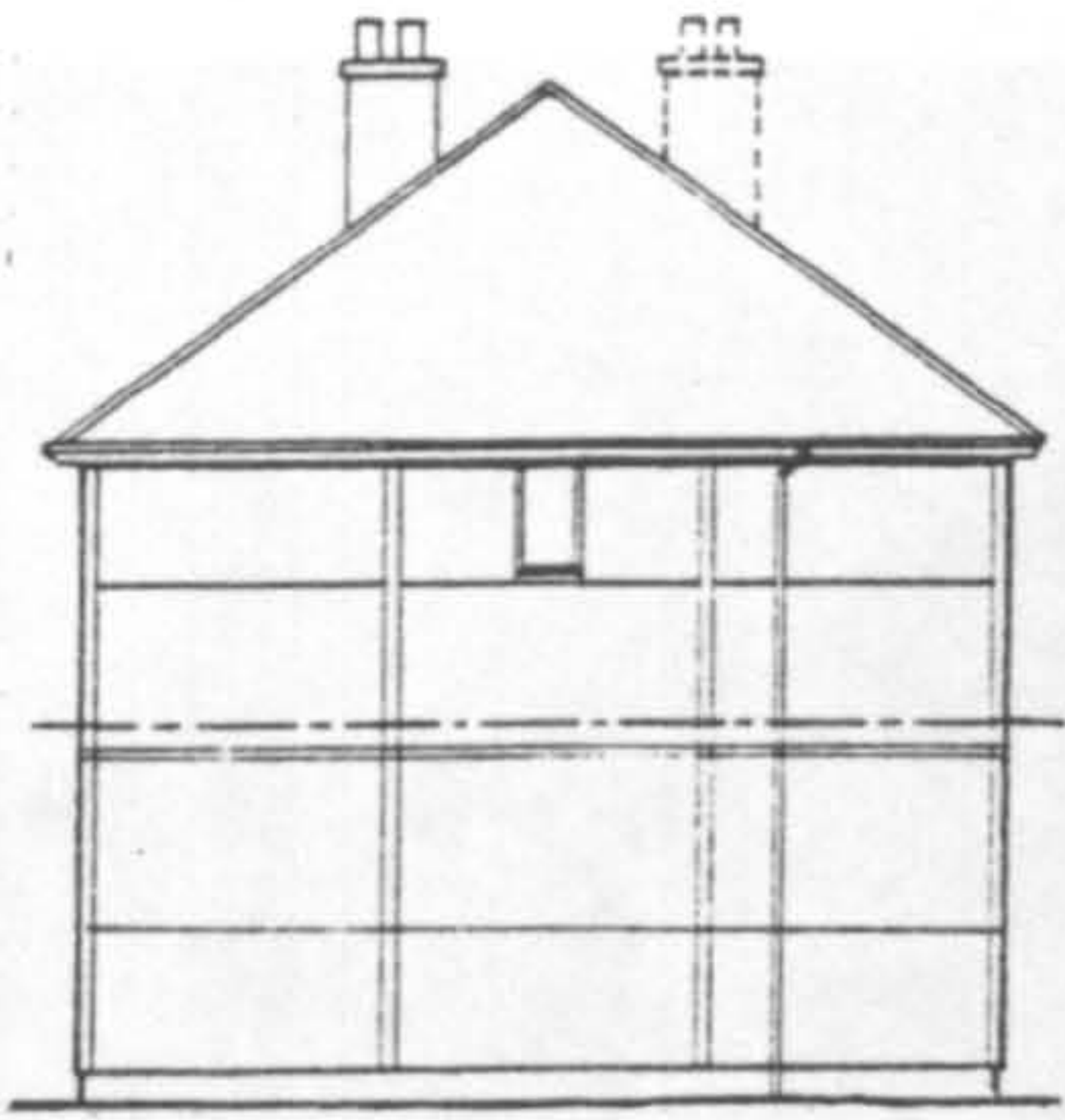
Lorimer Influence 1926



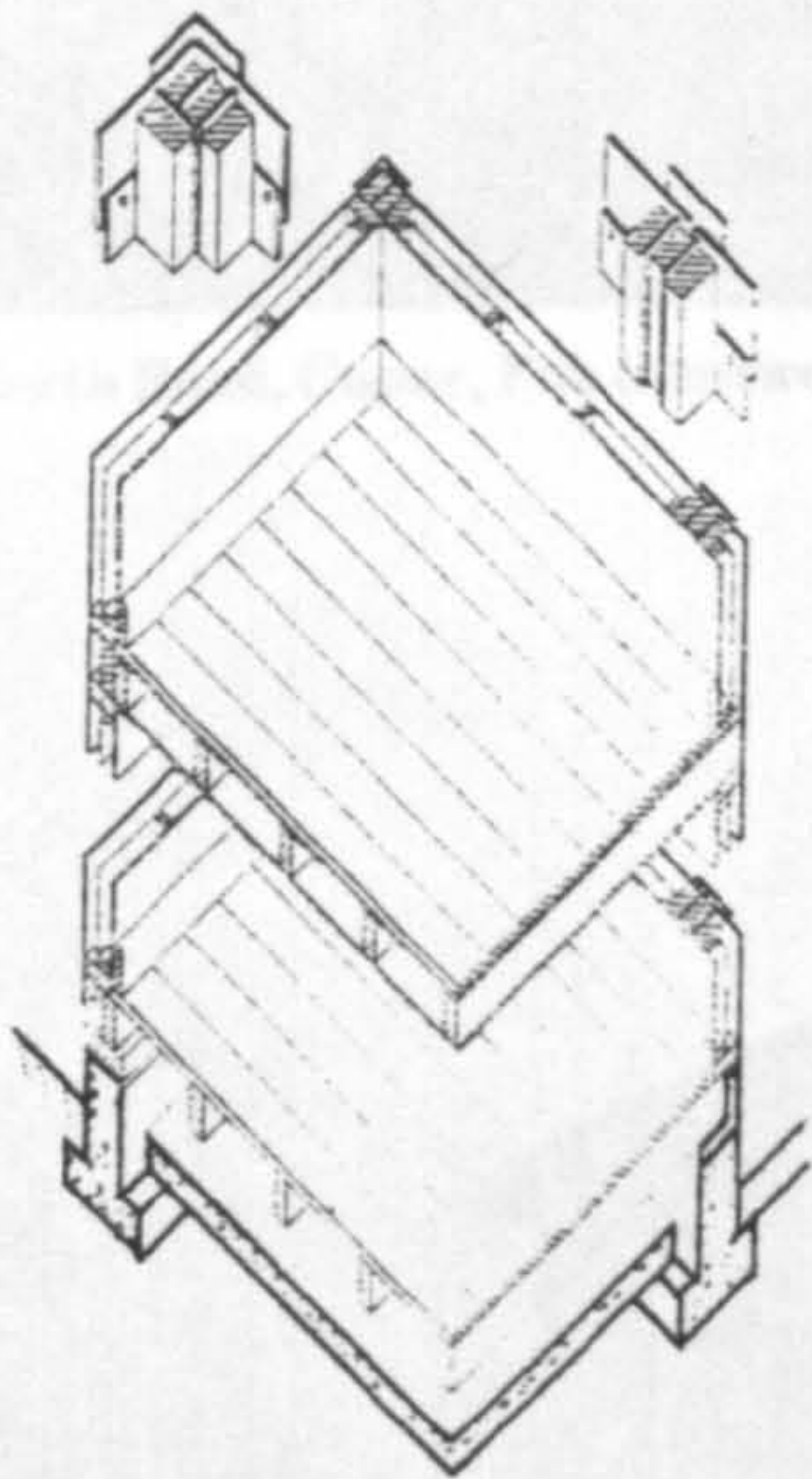
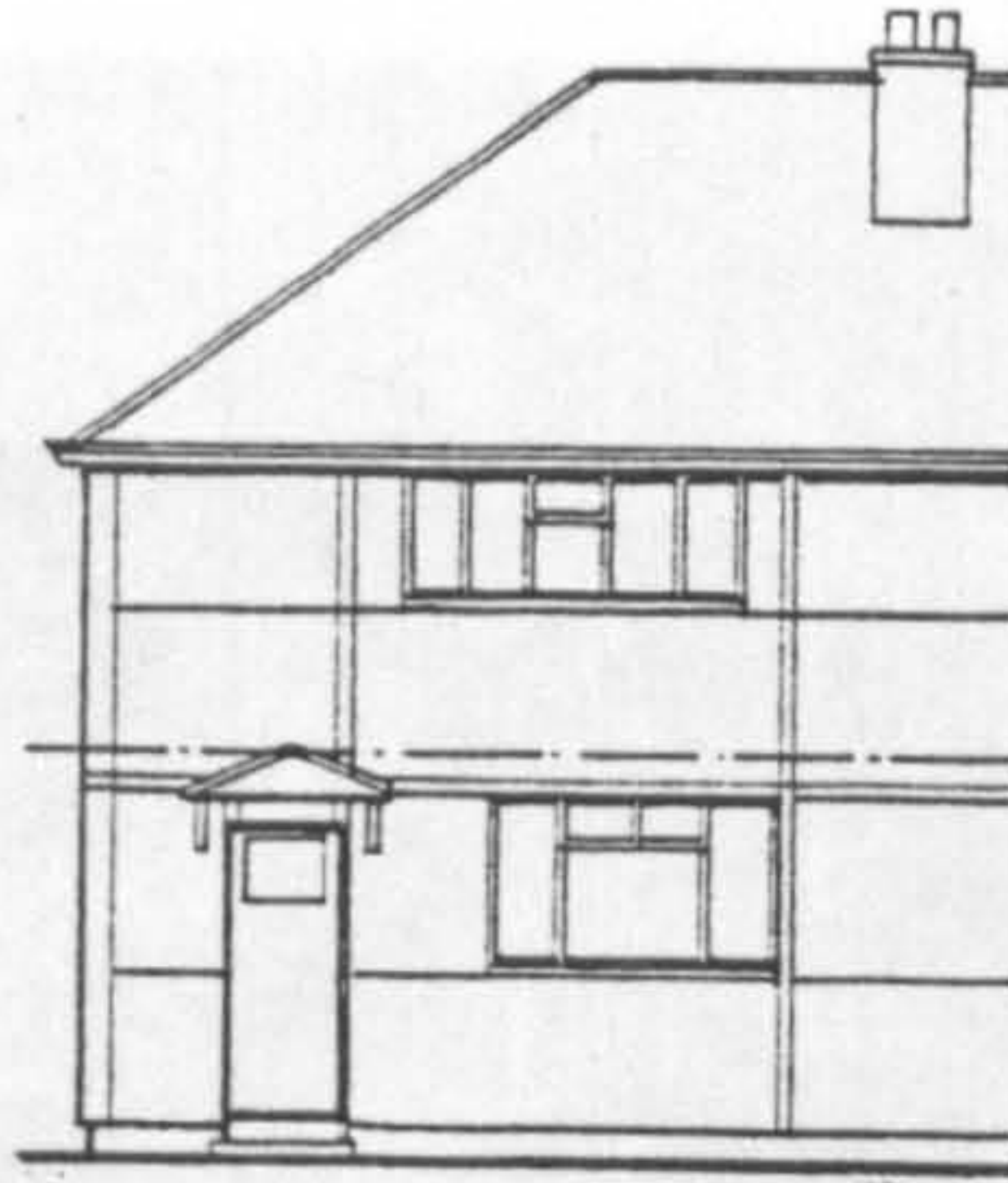
Early inter-war housing often shows the design influence of the Arts and Crafts movement and in particular the influence of Lorimer. Here a housing scheme on London Road, Kilmarnock shows the influence of Lorimer and Arts and Crafts style. Top is Lorimer's Rustic Cottages, mid is one of Lorimer's Colinton Cottages at 21 Gillespie Road and bottom is Hay Steele's design in Kilmarnock.

Figure 2.14

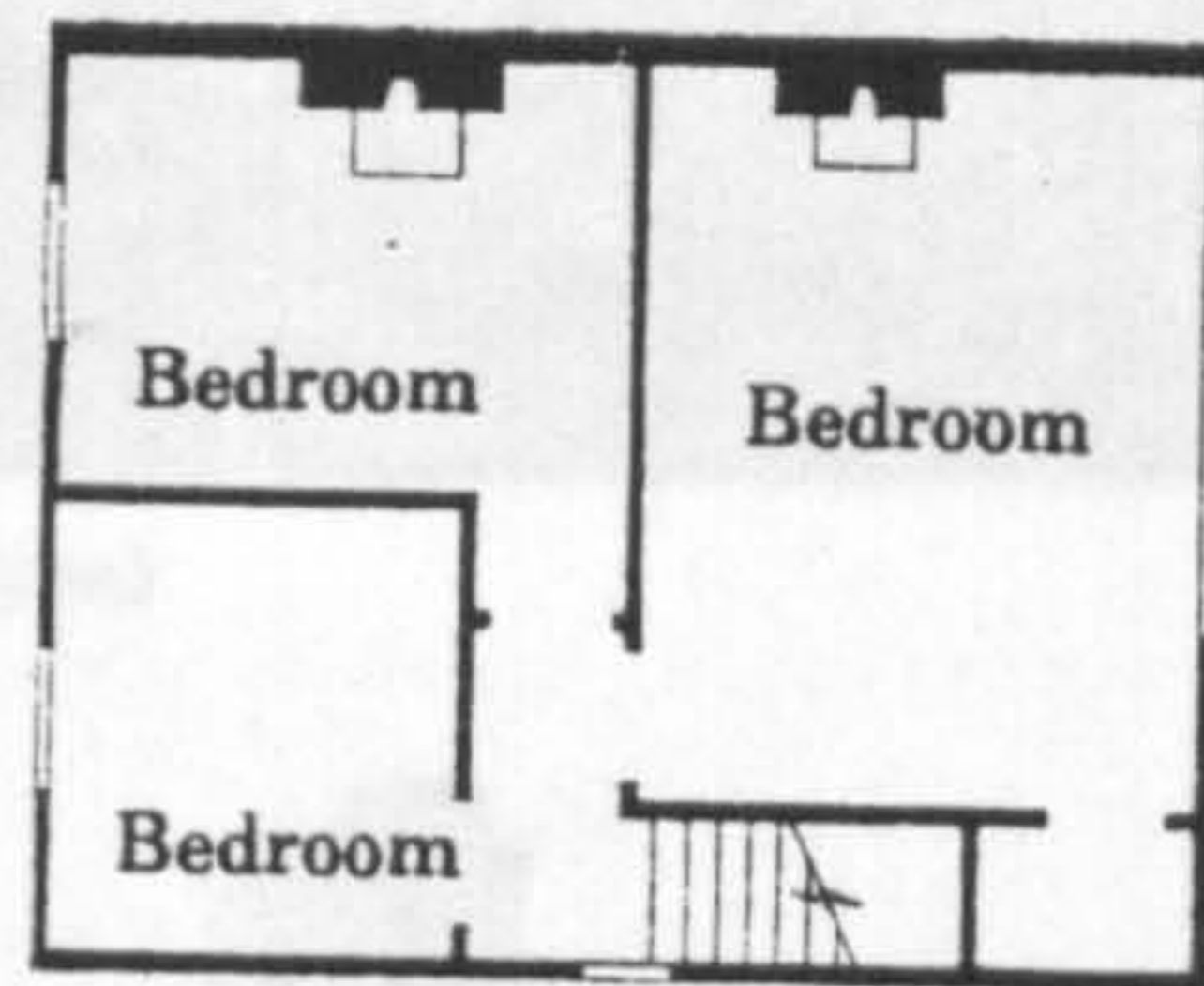
Weir Steel Houses 1926



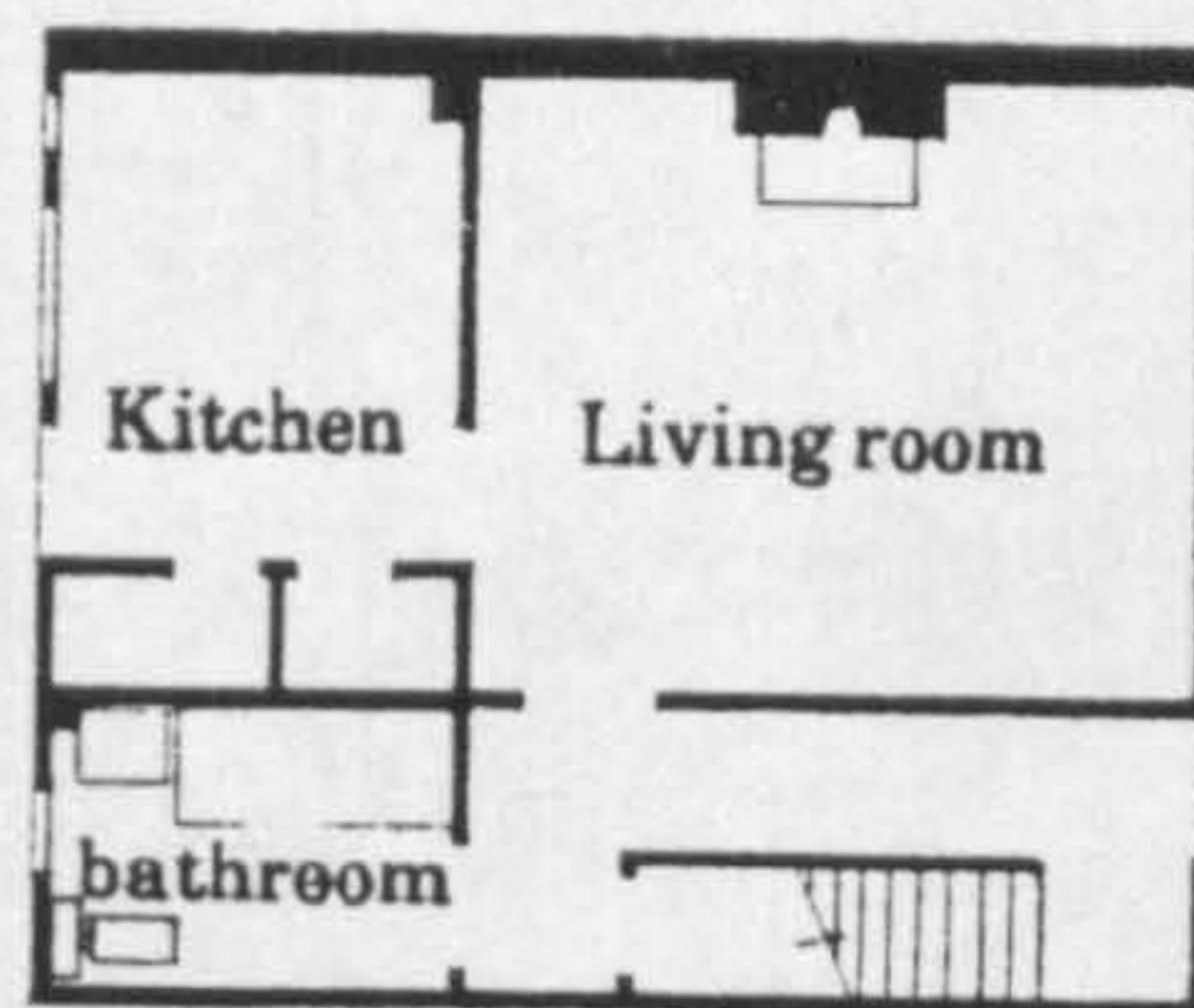
Side and Front Elevation 'Douglas' Cottage



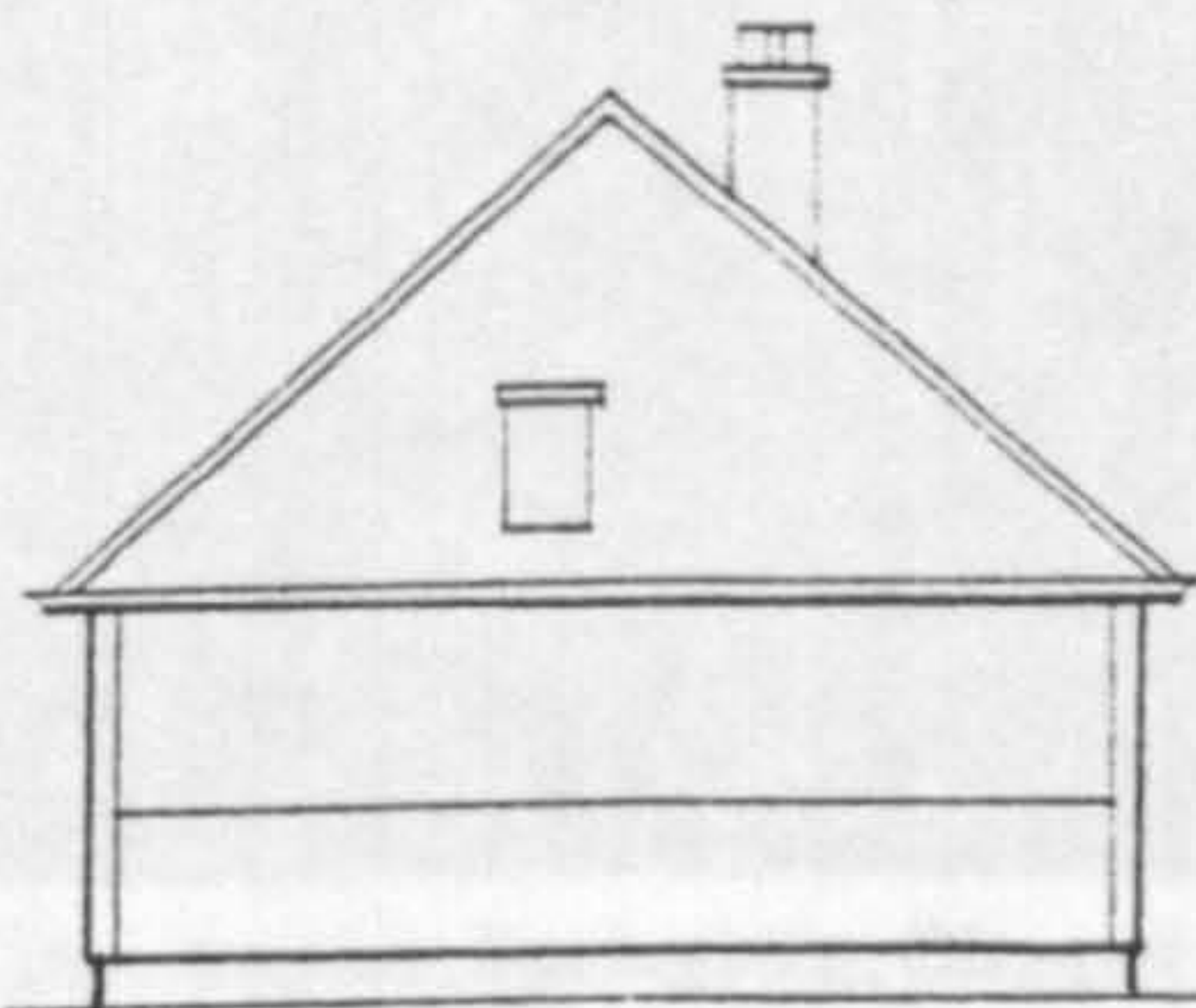
Weir Steel (1920s) detail.



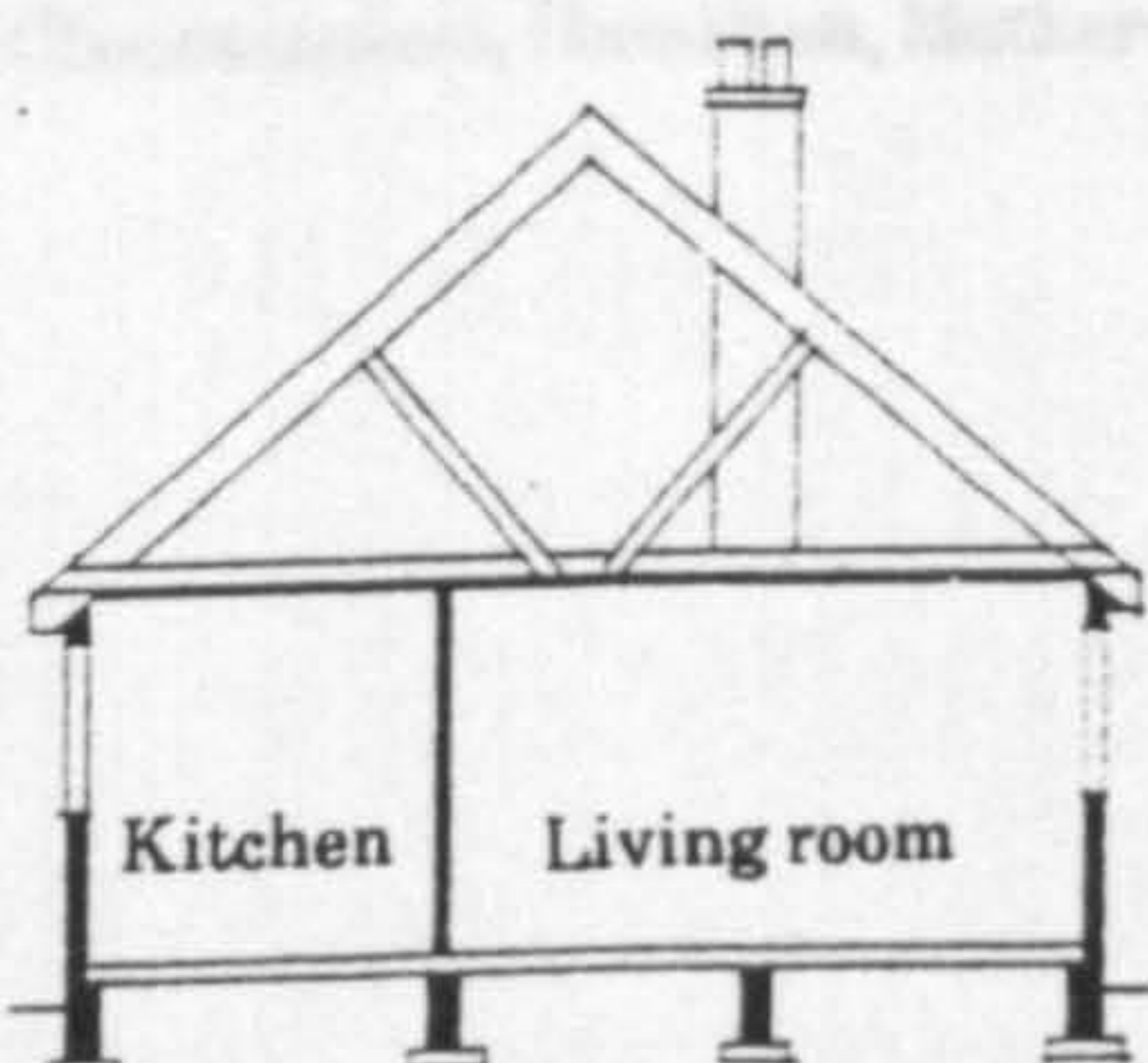
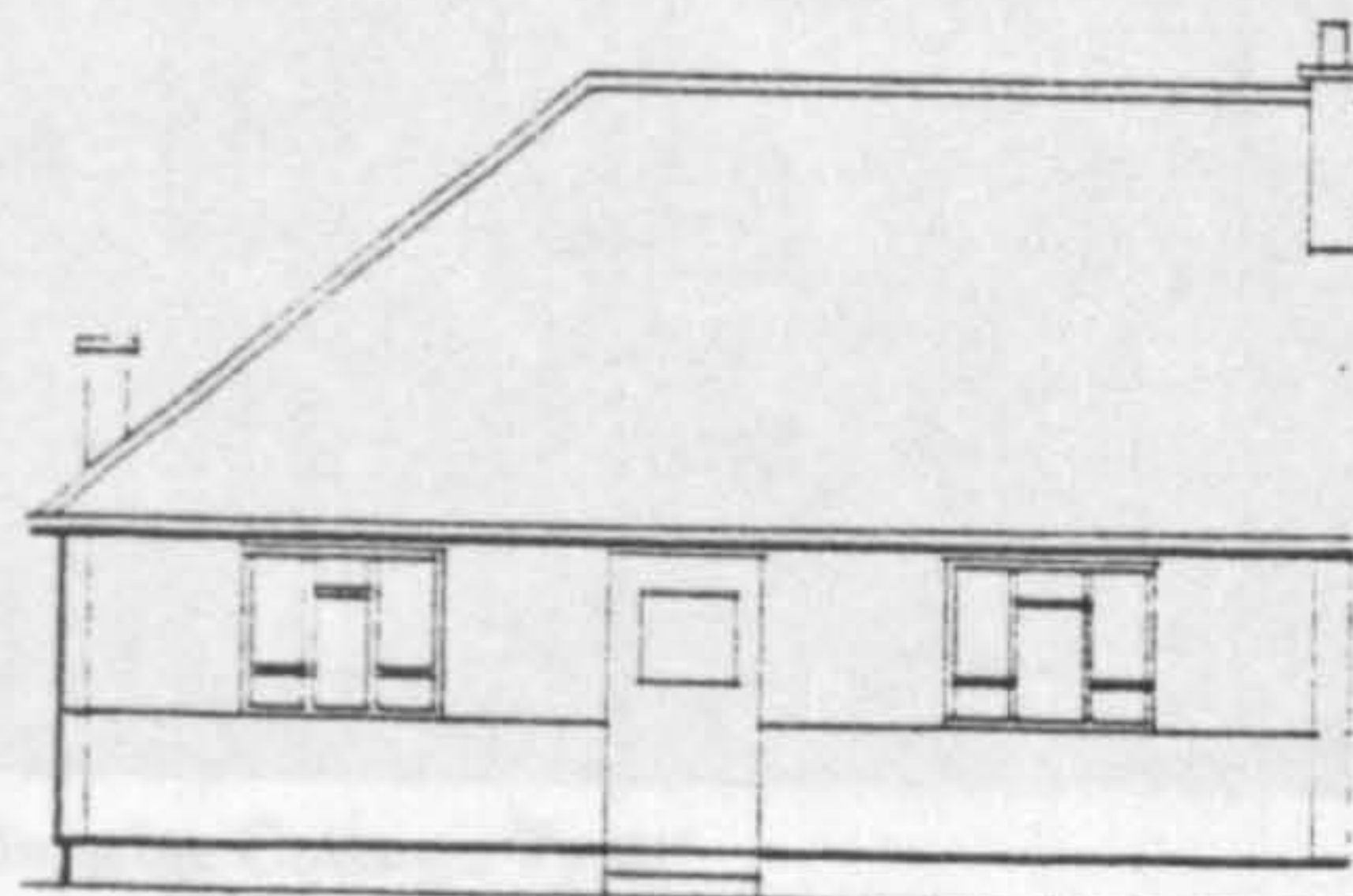
First Floor Plan 1:200



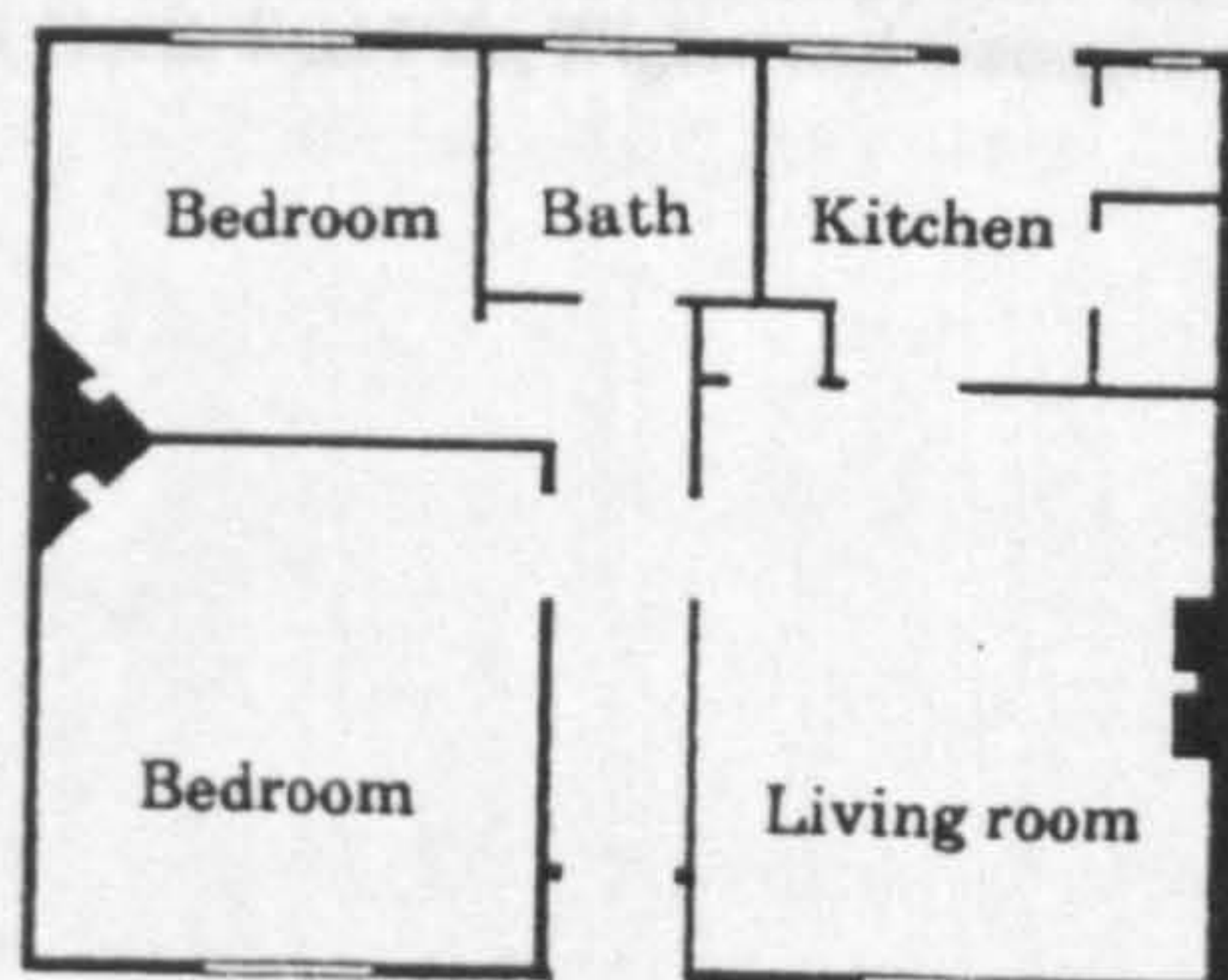
Ground Floor Plan 1:200



Side and Front Elevation 'Eastwood' Bungalow



Section



Ground Floor Plan 1:200

In 1925 Prime Minister Baldwin announced on a visit to the Clyde a £40 per house subsidy to Scottish Local Authorities to erect steel houses built by shipyards. There was a meagre response to this and in December the Government announced they themselves would build 2,000 prefabricated houses. A further 500 houses were added later. The Second Scottish National Housing Company was formed and in the years 1926 to 1928 2,552 steel houses were erected throughout Scotland. The three firms involved were Cowieson, Atholl and Weir.

The Weir houses took the form of single or two storey semi detached cottages and four in a block flats. There were 3 or 4 apartments in each house or flat.

External Wall Construction

Timber framing clad externally with steel sheets and internally with pulpboard was used for the external walls. The steel sheets were of 3mm (1/8") plate (ground floor) and 12-gauge sheets (first floor), protected against corrosion on the inside with black stoved enamel. Plain lapped joints were used horizontally between the sheets and the latter were fixed to the framing by drive screws. Flat steel cover strips 152mm wide were used to cover the vertical joints. The external finish was paint and later, in many cases, paint harling.

The internal lining was of 10mm laminated pulpboard. The 102mm wide cavity was sealed and divided into 2 compartments by a vertical sheet of bituminous building paper. Internally, the laminated pulpboard had timber cover strips. A plywood dado was provided in the living room and hall.

Source S.O.B.D.
Non traditional Housing in Scotland

Figure 2.15

Weir Steel Non-Traditional Houses 1920's



Perth Road, Cupar, Fife (Eastwood Bungalow Type)



Glen Avenue, Springboig, Glasgow (Douglas Cottage Type)

The Weir Steel Houses were built by the Second Scottish National Housing Company set up to build non-traditional houses utilising the spare capacity materials and labour of the shipyards. Weir Steel built a total of 1,650 houses in Clackmannan, Hamilton, Motherwell, North East Fife, Wigton and throughout Scotland for S.S.N.H.C.

1930 TO 1939

INTRODUCTION

In Britain unemployment reached 2 million in 1930. In 1931 Ramsay MacDonald, heeding advice from the Bank of England, drastically cut public expenditure including housing subsidies. Ramsay MacDonald was replaced as Labour leader but continued as PM to head the National Government that swept to power in October that year. The National Coalition Government retained power throughout the 1930s and became increasingly dominated by Conservatives with Baldwin as PM in 1935 and Chamberlain as PM from 1936 onwards. All housing legislation in the 1930s was therefore passed by the National Coalition Government. The UK economy improved throughout the 1930s. Unemployment fell from 2 million in 1930 to 1 million by 1939 although this was partly a consequence of rearmament as the threat of war increased.

The Scottish economy suffered badly through the 1930s. The industrial decline had started before the First World War but at that time rearmament had stayed the effects. By 1939, despite the optimism of building No. 534, the Queen Mary, at John Brown's yard, Clydeside had shed 100,000 shipyard workers permanently. The move to Corby by steel producer Stewart and Lloyd of Mossend in 1934, accompanied by 1,000 Scots workers, was regarded as proof that Scotland was being abandoned.

Unemployment in Scotland in 1931 and 1932 was 27% (7% higher than in England), and by 1935 25% of Scots were on poor relief, half of whom were means tested. For the unemployed life was grim; many emigrated to better themselves. For those who stayed housing conditions were still poor. Overcrowding was still a serious problem and despite some 300,000 houses being built between 1919 and 1939, in 1938 it had been estimated that there were still 66,538 houses unfit and 200,000 required to solve overcrowding. (1)

For those in employment however, living standards were rising. Mass production resulted in cars, radios, washing machines etc., becoming cheaper in real terms and, with the base rate dropping to 2% in 1932, house mortgages became more attractive.

Agricultural land prices had fallen and consequently land became available for urban expansion. Speculative developers met the demand for home ownership by building detached and semi-detached bungalows. These bungalows, built at low density with associated car space, had little in common with traditional Scottish architecture. Local Authorities also took advantage of low land prices and expanded their boundaries with one and two storey cottage and flatted cottage development.

In cities and large towns urban expansion included both cottage development and increasingly three storey flatted development.

Health had a major impact on design as the provision of sunlight and fresh air was one of the aims of housing and school designs. Open air swimming pools were built and by 1936 50 youth hostels existed in Scotland to cater for the new outdoor life.

There was a general improvement in health. Free school milk was introduced in 1930 aiding school children and dairy farmers alike. The average height of Glasgow school children for example increased by about 1" (25mm) for 5 and 9 year olds and 2" (50mm) for 13 year olds between 1929 and 1939.⁽²⁾

Concern About Architectural Quality

Architectural criticism about urban sprawl and the quality of housing design at the RIBA conference in Glasgow in 1935 prompted this response from the Lord Provost when he addressed the conference "I believe you will have been condemning the many municipalities for the want of foresight, and the want of thought, and the want of making use of you. Glasgow has built something like 50,000 houses. Some of you who are architecturally minded will say that is 45,000 abortions and 5,000 houses. But after all is said and done, we have improved the situation to what it was".⁽³⁾ The same year two remarkable reports were published by the Department of Health for Scotland.

The first reported a trip by its Permanent Secretary, John Highton, at the instigation of the Secretary of State to examine Working class housing on the Continent (HMSO 1935). His group looked at a wide range of housing issues, some management and some design. It concluded that the internal planning and servicing of Scottish public housing was at least equal to that on the continent but as far as architecture they had this to say:

We found that on the continent, much more attention is paid to social and aesthetic aspects of housing schemes than is paid here. Insofar as this involves additional expenditure, the cost is willingly faced. In Scotland, we are, I think, too much inclined to regard any expenditure which is not purely utilitarian as unnecessary luxury The deficiencies which exist in our Scottish schemes are on the aesthetic and social side of our housing activities rather than on the purely material side Briefly, the general impression left on me as a result of our visit to the Continent is that in Scotland we should aim at a more imaginative architecture, and a more imaginative planning, a brighter and more colourful layout, and the provision, in an immediate proximity to the houses, of improved facilities for rest, recreation and social intercourse.⁽⁴⁾

The second, the Report of the Scottish Architectural Advisory Committee (HMSO 1935) made the same point, stating:

There is, we believe, a general, probably unconscious, tendency in Scotland on the part of administrators and inhabitants alike, to regard working class houses as merely measurable units of accommodation, to be judged solely on standards of internal space and comfort, and to be provided on a purely quantitative basis, and in whatever location happens to be the most convenient at the moment.⁽⁵⁾

Both reports made recommendations on the building of better quality tenements; these are discussed later.

In the late 1920s a vigorous artistic movement had begun which contemporaries termed the Scottish Renaissance. This was a Cultural Revival although some had strong political commitment. The writer Cunninghame Graham was involved in setting up the National Party

of Scotland and the poet McDiarmid was committed to communism and independence. Architects, dependant on the patronage of clients and the Government usually both representing the establishment, are generally less radical than writers. They were none the less not unaffected by the notion of a Scottish Renaissance.

McKean in the Scottish Thirties had this to say 'The Scots of the Thirties - even in the heat of the 'renaissance' - did not reject the past; neither were they going to use it as a convenient retreat from the present. They used that cultural legacy to create a future that was as modern and adventurous as could be found in all Europe - but nonetheless Scottish'.⁽⁶⁾

Typical thirties architecture is soaring vertical elements of towers, triangular windows or masts offset by horizontal sweeping balconies, curved glass, corner windows and cantilevered flat roofs. This is rarely to be found in municipal housing. Costs prohibited extravagant gestures in public housing. A few private houses such as Gysels House Cupar, Lady Niven Avenue Kirkcaldy, Ravelston Flats (Fig 3.27) and Kininmonth's own house at Dick Place, Edinburgh exhibit some of these features. Even more so do some factories, pit head buildings, swimming pools and picture houses.

One of the rare public housing examples is the flat roofed two storey flats with balcony access at Carntyne Road in Glasgow built in 1938 and forerunner of the similar housing built with foam slag aggregate at Penilee Glasgow in 1944.

Most flat roofed municipal houses are however two or three storey harled boxes which look as if they were designed for a pitched roof, as at Pilton in Edinburgh.

There are two reasons why architects continued to design pitched roof council housing and they are not unconnected. The first is that the pitched roof was clearly better at shedding water. According to McKean, of the many houses designed by Spence in the thirties only the first had a flat roof and it failed.⁽⁷⁾ The second is cultural. Architects attempting to be true to the present and to Scottish Architectural Cultural Heritage could not fail to see the logic of linking the practicality of the pitched roof with its cultural tradition.

Tait's Howwood Road in Johnstone, built 1935 is clearly of its time but is a composition of cantilevered canopies and balconies together with pitched roofs and chimneys.

Restoration And Its Influence On New Housing

The other influence of the time related to the Scottish Cultural interest was the interest in the restoration of historic properties in city centres which almost without exception had been transformed into multi occupied slums. (fourteen families lived in Achison House, Cannongate, Edinburgh prior to its restoration by Robert Hurd into a single desirable residence). McKean stated "It is possible that the 1933 publication of the final selection from the National Art Survey, which celebrated in immense drawn detail the 15th - 17th Century skills of Scots masons and architects, may have helped to mould public opinion towards restoration".⁽⁸⁾

The restoration of grander historic houses had been a large proportion of Lorimer's work at the beginning of the century but this was the beginning of the movement towards respect for humbler dwellings and the National Trust's and others' later restoration programmes of

artisans houses in the 1960's. In the case of Achison House it was restored to a grand town house once again. Today this type of property is more likely to be restored as small flats.

Architects working on restoration and new construction will inevitably find influences of the one affecting the other. E. J. MacRae, City Architect of Edinburgh, was responsible for reconstruction of old historic houses in both the Cannongate and Grassmarket of Edinburgh. He was also responsible for the high quality 'Scots style' tenements in the Pleasance, Piershill and Morrison Street which he managed to convince the City Council should be built stone faced.

Concern for Scotland's Heritage had led to the formation in 1926 of the Association for the Preservation of Rural Scotland. In 1931 the National Trust for Scotland was formed taking into custody 9,000 acres of historic landscape at Newton Stewart. In 1936 the Saltire Society was formed for "the encouragement of everything that might improve the quality of life in Scotland and restore the country to its proper place as a creative force in European civilisation". The Saltire Society adopted a suggestion by one of its members to inaugurate a series of annual "commendations" for houses which "were of good design and harmonious with the Scottish scene". It was hoped that by recognising an architect producing good work it would encourage the employment of good architects to design housing at a time when the design of council housing was often left to the Burgh Surveyor.

The 1930s saw the beginning of the change in architectural education away from the apprentice-based training to full time college training of the post war years.

HOUSING LEGISLATION

The Housing (Scotland) Act 1930 (Greenwood Act)

This Act gave the Medical Officer of Health powers to close and order the demolition of uninhabitable houses (which could not at reasonable expense be rendered fit) without the procedures involved in improvement schemes. It also provided for the building of hostels for displaced single persons (mainly spinsters and widows).

The main change in respect of new housing was financial and took the form of a fixed sum per person displaced from a slum clearance area for whom housing had been provided.

Standards were set as :-

2 apartment for 3 persons

3 apartment for 5 persons

4 apartment for 7 persons.

The grant was £2.50 per person unit payable over 40 years (£2.75 in rural areas). The grant was therefore related to occupancy and therefore to the size of the house in contrast to the earlier Acts. To replace condemned houses, 15,800 houses were built in 1933 and 1934. This compares with 19,700 built to replace condemned houses in the period 1919 to 1932 when the priority was for building new cottage houses.

Section 28 of the Act required that the local authority in the layout planning and treatment of the houses shall have regard to the beauty of the landscape and other amenities of the area. In particular it draws attention to the desirability of preserving existing works of architectural, historic or artistic quality and that they shall comply with such directions, if any, by the Department.

The Housing (Financial Provisions)(Scotland) Act 1933

The (Housing Revision of Contributions) Act 1929, which revised subsidies downwardly in line with reductions in building costs, was taken further. It suspended payments to private enterprise under the 1923 and 1924 Acts and contributions to Local Authorities were reduced from £9 to £3 per annum per house. They were subsequently discontinued from 1935. Maximum rents were specified to Local Authorities.

The Housing (Scotland) Act 1935

This Act dealt with the prevention of over crowding and the redevelopment and reconditioning of buildings. It provided a subsidy of £6.75 per annum for 40 years for each house built to relieve overcrowding. The Treasury could make larger contributions as seemed reasonable for housing provision in remote areas. Local Authorities were permitted to cross subsidise Housing Revenue Accounts out of rates.

The Scottish Act allowed a larger subsidy, not exceeding £10.75, to provide houses on redevelopment sites which it recognised were more expensive to develop. The wording and subsidy is less specific than that of the Housing Act 1935 for England and Wales which allowed additional contributions specifically for the provision of flats on sites of high value. The Act for England and Wales related the subsidy to the cost of development of the site per acre giving subsidy of £6 at development cost £1,500 to £4,000/acre rising to £8 at £5,000 to £6,000/acre increasing by £1 for every £2,000 or part of £2,000/acre.

In practice, however, expensive city and town centre redevelopment sites in Scotland were developed with flats and the difference between the Acts is mainly in that while the Housing Act for England and Wales was specific, the Housing (Scotland) Act was more general and, therefore, more flexible.

It fixed, for the first time, a national minimum standard of overcrowding. Standards of overcrowding on room and room areas were set 50 to 70 ft² - 0.5 person, 70 to 90 ft² - 1 person, 90 to 110 ft² - 1.5 person, 110ft² or more - 2 person. A child under one year was not counted and a child aged between one to ten years was 0.5 person.

It also fixed standards for overcrowding by room or apartment.

| | |
|---------|--|
| 1 room | 2 persons |
| 2 room | 3 persons |
| 3 room | 5 persons |
| 4 rooms | 7½ persons (previously 7 persons - 1930 Act) |
| 5 rooms | 10 persons |

And for each additional room over 110 ft² two additional persons.

Overcrowding was also deemed to exist if persons (other than the householders, husband, and wife) of 10 years or more and of opposite sex had to sleep in the same room. It also made it an offence if the occupier allowed the house to become overcrowded (e.g. by taking in a lodger) but not (unless he had turned down a suitable house) if children were born or by virtue of children growing older since taking occupancy of the house.

The above room standard was unfortunately applied administratively by the Department of Health for the purpose of assessing the accommodation capacity of new houses built with exchequer assistance by Local Authorities. Local Authorities in Scotland, as a condition of receiving subsidy under the Housing Acts, were required to certify that houses for which subsidy was sought were not occupied either above or below this standard. This meant that a four apartment house built by a Local Authority must be initially let to a family which comprised not less than 5½ and not more than 7½ persons.

This was even less generous than it seems at first sight as children under 10 years were counted as ½ and under 1 year not counted at all. A four apartment would under these rules be allocated to a family with 2 adults, 2 children over 10 years and 7 children under 10 years, i.e. 11 individuals in all. Obviously the living room was used for sleeping.

This government requirement of “minimum capacity” was condemned in the Scottish Housing Advisory Committee 1945 report Planning our New Homes when discussing persons per room in Chapter 3 “Space for Living”.

Prior to 1935 broadly the same standards were applied to rehousing operations in Scotland by the Department of Health and Local Authorities.

This contrasted with England where a four apartment was assessed as suitable for 5 persons irrespective of age.

The overcrowding survey carried out in 1935 threw into such sharp relief the inadequacy of existing housing accommodation that it brought about a marked change in the sizes of houses built by Local Authorities. It had found that in Local Authority houses built to the end of 1935 overcrowding in Scottish Local Authority houses was 4½ times as great proportionally as in England and Wales. More seriously it found that 23.1% of Local Authority built houses compared to 22.6% of all houses in Scotland were overcrowded.

Houses built in the years 1936 to 1939 consequently consisted of a greater proportion of larger houses than previously. For example in 1938 of the 19,160 houses built by Local Authorities 76% were of 4 apartments or more whereas in 1933 when 15,679 houses were built only 25% were of 4 apartments or more.⁽⁹⁾

The Department of Health Circular No. 76 (1935) laid down the following minimum room areas:-

| | | |
|-------------|---------------------------|----------------------------|
| living room | 180 ft ² | (17m ²) |
| 1st bedroom | 150 - 160 ft ² | (14 - 15m ²) |
| 2nd bedroom | 120 - 130 ft ² | (11 - 12m ²) |
| 3rd bedroom | 110 ft ² | (10m ²) |
| 4th bedroom | 90 - 110 ft ² | (8 - 10m ²) |
| Scullery | 70 - 80 ft ² | (6.5 - 7.5m ²) |

The Housing (Agricultural Population)(Scotland) Act 1938

The Act provided higher rates of subsidy for replacement of unfit farm housing.

The Housing (Financial Provision)(Scotland) Act 1938

The Act revised subsidies on a sliding scale according to house size in response to a 38% increase in building costs from 1934 to 1938.

| | | |
|--------------|--------|------------------------|
| 3 apartments | £10.50 | per house for 40 years |
| 4 apartments | £11.75 | per house for 40 years |
| 5 apartments | £13.00 | per house for 40 years |

REPORTS

Anti Overcrowding (A.O.C.)

In 1930 a book by G. W. Clark The Housing of the Working Classes was published. It was an updated version of a 1924 privately circulated report and made a case for tackling Scotland's overcrowding in housing. The aim was to bring Scotland, where the two roomed house was the norm, up to the housing standard of England where the four roomed house was the normal provision.

The book was written at a time when it was believed that the number of houses being built in Scotland had largely solved the housing shortage whereas in England there was still a shortage of houses. Clark, without specifying who, voiced concern that there was a feeling in some quarters that the house building programme in Scotland should be slowed down. He comments that "One half of the world does not know how the other half lives There is now a widespread feeling that if more houses are required the people requiring them should pay for their own and that Private Enterprise would readily meet the demand". (10)

Clark demonstrated that while numerically Scotland did not have England's housing shortages it had instead many unsatisfactory houses and a very serious overcrowding problem. (Fig 3.01, 3.02) The definition of overcrowding was greater than 3 persons per room in Scotland and greater than 2 persons per room in England. The official justification for this was the claim that Scottish rooms were typically larger. Clark argued that this claim had no factual basis and was a myth, backing up his argument with comparisons between typical Scottish and English houses and illustrating that whereas a Scottish two room house was only two rooms, an English four roomed house had a scullery, pantry and store in addition to the four rooms.

He argued for a programme of demolition of unsatisfactory houses and rebuilding with larger houses at a lower density and amalgamation of small houses to form large houses with two, two roomed houses being the amalgamated to give a modernised three roomed house with scullery and bathroom.(11)

He argued that as, the greatest housing overcrowding was in the area of greatest unemployment, the Anti-Overcrowding and Amalgamation programme would aid the faltering building industry and create much needed employment, using the unemployed to solve the overcrowding problem.

He argued that the A.O.C. programme should be financed by the state and that low income families should receive rent subsidies with subsidies related to the size of the house. He also suggested a desirable housing mix by number of rooms. 5% one room, 10% two room, 25% three room, 30% four room, 15% five room, 15% six or more rooms.

The Whitson Report, 1933

This Scottish Development Committee on Housing, made recommendations to secure the maintenance of proper standards of fitness for human habitation in working class housing. These included, an obligatory code of by-laws to be framed and adopted by Local Authorities. The bye-laws it proposed were to be strictly enforced and would define the duties of owners, tenants and occupiers of working class houses. The bye-laws were to cover the provisions of a WC for each house and where gravitation allowed, hot and cold water supply. It also proposed that where practicable each house should have a bath, scullery, larder, press and accommodation for storing coal and drying clothes. It also proposed financial assistance to Local Authorities to improve property which had at least 20 years life, the Local Authority to approve any rent changes, and Local Authorities to be given power to acquire properties. Only the power to acquire was included in the 1935 Act.

Economically Planned Houses of Satisfactory Design 1933

This memorandum was produced by the Department of Health for Scotland to encourage Local Authorities, in the interest of the rate payers generally and to secure the lowest possible rents for tenants, to make every effort to keep down costs.

In the foreword by the Secretary of State for Scotland, Collins, it states that the interior arrangements and equipment of houses built are generally acceptable but there is criticism of cost and appearance. On cost the memorandum states that local authorities must do everything in their power to secure economy not only in the planning of the houses but also in the layout, advising that unnecessary underbuilding can be avoided by placing the houses to suit the contours. On appearance it suggests avoidance of monotony in large schemes by the use of different materials at suitable points, the use of different colours in the external woodwork and the tinting of the roughcast in various colours.

The memorandum also draws attention to Section 28 of the Housing (Scotland) Act 1930 which required local authorities to design schemes with regard to landscape and other amenities of the area and expressed the desirability of local authorities preserving existing works of architectural, historic or artistic interest. It also drew attention to plans prepared by the Association for the Preservation of Rural Scotland for use by local authorities.

The memorandum gives examples of some of the lowest tenders from various parts of Scotland. The costs exclude land, roads, fees, etc. and underbuilding beyond 2 feet 6 inches (750mm). Cottage houses are quoted as £296 to £305 for three or four apartment houses. Flatted cottages are quoted as £232 to £245 for three apartment and £286 to £290 for four apartment flats. Tenement flats are quoted as £229 for a three apartment and £317 for four apartment flats.

Photographs and plans illustrated similar house types to those tenders quoted. Examples are from Hawick to Thurso. Cottage houses are mainly semi-detached although the Hawick example is of a short terrace of four. Flatted houses are four in a block and while two storey tenements are illustrated most are three storey. The style is uniformly traditional with one example, Thurso, built with stone walls. Roofs are pitched and window openings are formed to classical proportions with astragals in the sashes. The only 1930s style is the vertical emphasis and vertical windows over the doorway in the Saughton tenement. (Fig. 3.03) This Saughton house type was used throughout Edinburgh including, as illustrated later, at Niddrie.

Layouts are illustrated. All avoid straight through routes which would encourage non-essential traffic to short cut through the scheme. Housing access roads are generally looped off the main road and use crescents or short culs-de sac for frontage development. The layouts are symmetrical in concept with the pure symmetry broken or adjusted to meet local site conditions.

Built examples of urban design include the classical crescent form of The Quadrant, Saughton, Edinburgh and the infill development in Broad Street, Stirling with stone faced three storey tenements. (Fig. 3.04)

Working Class Housing on the Continent, Highton Report 1935

The foreword to this report by the Secretary of State for Scotland, Sir Godfrey Collins, observes that whereas the structure, internal planning and equipment of state assisted housing (in Scotland) could be subjected to little criticism the same could not be said for its aesthetic treatment.

The report gives the Department of Health's study team's conclusions on a tour examining recent developments in working class housing in major cities in Holland, Germany, Czechoslovakia, Austria and France.

The study team found that, whereas in Scotland the average income spent on rent was 14%, on the Continent it was generally 20-33%. They also claimed that tenants on the Continent took better care of and more pride in their homes and posed the question as to whether this commitment was related to their level of expenditure on their homes.

The study team found that whereas it was normal in Scotland to provide internal bathrooms with hot water supply this was not always the case on the Continent. Continental housing schemes however had better communal facilities and in tenement schemes on the Continent it was normal practice to employ caretakers whose duties included not just collecting rents and securing proper maintenance but also taking a personal interest in the tenants. It also found continental housing schemes better in terms of architectural design and external finish. Continental schemes were bright and colourful designed by competent and often talented architects whereas in Scotland housing schemes were, the study team observed, often dull and repetitive produced by overworked local authority officials. The report observed that Scottish architectural talent was hardly being used. It also commented that young men newly qualified from architecture schools were anxious to express their ideas but were given little chance to do

SO. (12)

They found that in general housing on the Continent tended to be built as flats. The exceptions were Germany and Austria, where there had been a political reaction against flats, and land settlement schemes "Siedlungen" with five or less cottages per acre were then in favour. These cottages were often occupied by the unemployed allowing them to grow their own food.

The study team visited "skyscraper" schemes of eleven storeys at Bergpolder, Rotterdam and of fifteen storeys at Drancy, Paris. At the Cité de la Muette Drancy six storey flats arranged around a quadrangle open to the south enclosed south facing open spaces. Similar enclosure was formed with three storey blocks with fifteen storey towers at the northern end. The housing was built with standardised mass produced units using a construction method invented by M. Mopin, a Paris engineer. The construction was steel framed and the flats were designed with flat roofs.

Considerable interest was shown by the study team in the Paris high flats. Reference to Le Corbusier who had built Le Pavillon Suisse 1930/32 and the Salvation Army Refuge in Paris 1929 is notable by its absence.

The study team concluded, however, that in Scotland, except in a few areas where site values are abnormally high, building beyond four storeys is doubtful: the reason being the undesirability of housing families in high flats and of compelling children to climb many stairs.

What it did favour was more attention being given to social and aesthetic aspects of housing schemes and that in Scotland we should aim at more imaginative architecture and planning and a brighter more colourful layout. These John Highton concluded could all be achieved at small additional costs.

Report of the Scottish Architectural Advisory Committee 1935

This report followed the study tour and advised on how best architectural quality and amenity could be incorporated in the layout planning and external treatment of houses for the working classes.

It criticised the uniformity of bye law roads and their excessive width when serving to only access housing areas. It also criticised the monotonous use of four in a block houses commenting on the futility of endeavouring to simulate the informal effect of the garden suburb, which was based on cottages of varied design, with schemes embracing only a monotonous repetition of four in a block flats.

It also questioned the Department of Health's refusal to allow tenements of more than three storeys unless in exceptional circumstances. It concluded that in city centre locations tenements up to five storeys should be permitted if the case was justified by architectural or economic reason. It rejected building above five storeys on the grounds that lifts would be necessary above five storeys and the expense of installing and maintaining lifts could not be justified at present. It also commented that with the reduced height of ceiling compared to earlier tenements the new five storey blocks would be of similar height to the old four storey blocks.

It recommended that slum clearance redevelopment should be comprehensive and should not be limited to the old form of development, suggesting, as one alternative, three sided enclosure of a quadrangle with the open end to the south.

Where cottages and two storey flats were concerned the committee advised that there should be a greater degree of variation in the length of the block as well as some increase in the average length of the blocks. It advised combining different types of houses in the same group to give variety and a sense of unity in design.

It advised Local Authorities to employ the best architectural skills and suggested architectural competitions. It also suggested that the Department of Health should have a special section to guide and control the layout design and amenity of Scottish State aided housing schemes.

It also suggested that a special panel of architects should be set up by the Royal Incorporation of Architects in Scotland to assist Local Authorities in the preparation of housing plans.

Rural housing it considered should be dealt with by a separate report.

Visit to the Continent to Study Housing

A more personal report Visit to the Continent to study Housing 23:10:34 was given by Edinburgh City Architect, E. J. McRae to the Edinburgh Town Clerk. McRae's report is similar to the Highton report but gives some additional detail and McRae's own reaction to some of the projects. McRae confirms that on the Continent the majority of state funded housing, whether built by the state or by state aided housing associations, was tenemented in form, with stair access and was mainly three or four storey in height.

In Holland in addition to three and four storey tenements, cottages in continuous rows for large families (1,300 children in 294 houses) and a high rise experiment had been visited. McRae also noted that a twelve storey skyscraper block built by private enterprise in Amsterdam could not be let at the rent expected.

In Germany although three, four and five storey tenements had accounted for 78% of housing in Berlin in 1924, rising to 91% in 1929, the new political organisation now favoured small holdings on the edge of the cities and towns. A similar change had taken place in Austria where previously tenemental housing was the norm. In Vienna in the immediate post World War One years walk up tenements of six, seven and eight storey had been built but their unpopularity had resulted in later tenements being built at three, four or five storeys. McRae also noted that 70% of new houses in Vienna had only one or two rooms plus scullery and were built back to back with twenty small houses off one stair in a five storey tenement. (Not unlike the 19th century model tenement in Edinburgh which had four back to back two room flats per landing).

In Prague the tradition was for large tenemental blocks of five storeys.

In France around Paris new planned satellite settlements were being built with 1,200 houses in the case of Drancy and 5,000 in the case of Plessis Robinson. Most houses were two, three and four storey tenements but in several cases skyscrapers were introduced as a feature. Considerable detail description is given about the experimental fifteen storey skyscrapers at Drancy but McRae comments that he found them cold and stark and questioned whether the human aspect had been considered.

McRae's praise was reserved for Karl Marx Hof, Vienna which he described as "one of the most outstanding housing schemes in the world".

The Karl Marx scheme, illustrated No. 15 in the Highton report, has 1930s styling, flat roofs, balconies corner glazing and solid walls punctuated with small square windows. This scheme provided 1,400 dwellings, mostly very small with two rooms and built back to back in tenement form of four to six storeys. The scheme had a large central space around which were tenement quadrangles each of which was landscaped and each quadrangle had its own washhouse, baths block and kindergarten.

That McRae, whose own designs for tenements in Edinburgh were traditional, should be so enthusiastic about such a modern movement scheme is interesting especially as it shows that his questioning of the wisdom of the stark fifteen storey skyscrapers at Drancy was not the reaction of a traditionalist to the new but, as he stated, questioning whether the human aspect had been considered.

The Rural Housing Report 1937

The Scottish Housing Advisory Committee on rural housing in Scotland found that Rural County Councils were in general:-

- a) Not adequately inspecting working class housing to ascertain whether they were fit for habitation.
- b) Not making sufficient use of their powers to secure the repair and maintenance of defective houses and the demolition or closure on unfit houses which were not capable of repair at reasonable expense.
- c) Paying out grants on houses which were not capable of being made fit and that there had been wastage of public money.

They recommended that there should be a tightening up of controls and that the standard of reconstruction qualifying for a grant should be raised.

Report on Rehousing of Aged Persons 1938

This report by the Scottish Housing Advisory Committee arose out of representations made to the department of Health by some Local Authorities that there was an urgent need for the provision of small houses for the accommodation of aged persons living in unsanitary or overcrowded conditions. The Local Authorities felt that the Department's policy, following the 1935 Housing (Scotland) Act, not to approve the erection of additional two apartment houses was hampering the efforts of Local Authorities to secure the closing and demolition of unfit houses. Some authorities pointed out to the committee that, as the houses most likely to be vacated by overcrowded families were in central areas near shopping centres, their situation was particularly suitable for old people, many of whom wished to stay in familiar surroundings.

The committee considered that Local Authorities should be able to arrange for the rehousing of aged persons in private ownership and that it should be possible for the Local Authority to acquire property and repair and improve property at reasonable cost to suit the needs of aged people.

Model Building Bye-laws 1932

The Department of Health for Scotland issued Model Building Bye-Laws in 1932. These were adopted, in some cases with adaptation, by 27 of the 33 County Councils but only 47 of the 195 Town Councils and in many cases this was not until after a Public Health Circular of 1937 was issued intimating that the Department of Health considered it essential that bye-laws should be made.

The Corporations of Aberdeen, Dundee, Edinburgh, Glasgow and Greenock did not adopt the model building bye-laws preferring to make provisions under local Building Acts.⁽¹³⁾

HOUSING PROVISION

Housing completions fell from 14,316 in 1929 to 7,918 in 1930 due to severe house building cuts by the Ramsay MacDonald National Government in 1929 following the New York Stock Market collapse.

Government legislation in the 1930s set standards of rooms per person and gave grants related to the size of the house thereby encouraging the building of larger houses and flats. Whereas previous housing legislation had addressed health standards in housing and slum clearance the 1935 Housing Act addressed the problem of overcrowding.

The 1931 census revealed that 23,477 houses were occupied by two or more families. The situation deteriorated with the result that when the overcrowding survey was taken in 1935, houses in dual occupation in Glasgow and Edinburgh had risen from 7,418 to 9,320, an increase of 26%. ⁽¹⁴⁾ The housing shortage in Scotland was all the more acute as for every 30 houses built by private enterprise in England and Wales only one was built in Scotland. ⁽¹⁵⁾ It was not Local Authority house building in Scotland that lagged behind England and Wales but less favourable market forces resulted in private enterprise contributing approximately only a third of the contribution made in England and Wales when production is related to population.

In the cities there was an expansion of their boundaries. For example Glasgow annexed Hogganfield and East Carntyne in the early 1930s and just before the war took in a further 10,000 acres (4,000 hectares) that included Easterhouse, Darnley, Penilee, Drumchapel and Summerston. Glasgow also wanted to absorb Giffnock and Newton Mearns but was turned down by the Parliamentary Commissioners.⁽¹⁶⁾

The 1930 and 1935 Acts produced in the cities a shift away from low density cottage style housing towards higher density tenements and flats. These tenements were the Rehousing category (low rent) first introduced in the 1923 Act. Cottage housing was built as Ordinary category (higher rent). Flatted cottages (4 in a block) and some tenements were also built for Ordinary rent under the 1924 Act but in 1933 many of these were transferred to a new Intermediate category. ⁽¹⁷⁾ The 1935 Highton Report which advocated the building of better quality tenements resulted in more tenements being built for ordinary rent.

In the smaller burghs and rural areas where it was possible to develop at low density the preference was for garden city arcadia and the cottage style of the 1920s. Cottages were still built but in general it was the flatted cottage rather than the semi detached cottage.

The 1930 Act was aimed at rehousing slum clearance and set standards of two apartment for three persons, three apartment for five persons and four apartment for seven persons. The 1935 Act dealt with overcrowding and set similar standards as maximum occupancy 2 ap. - 3p, 3 ap. - 5p but 4 ap. - 7½ persons, with a child 1-10 years counting as ½ person. The effect of these Acts on Glasgow's housing provision can be seen in the greater provision of flats, the majority of which were three apartment (which under the 1930 and 1935 Acts could be occupied by five persons which could be two adults, two children over ten years and two under ten years). The influence of the 1938 Act which gave greater subsidy for larger houses, can be seen in Glasgow's shift to providing percentage of four and five apartment houses.

| <u>Act</u> | <u>1ap.</u> <u>hostel</u> | <u>2ap.</u> <u>4 in</u> <u>block</u> | <u>2ap.</u> <u>flat</u> | <u>3ap.</u> <u>cottage</u> | <u>3ap.</u> <u>4 in</u> <u>block</u> | <u>3ap.</u> <u>flat</u> | <u>4ap.</u> <u>cottage</u> | <u>4ap.</u> <u>4 in</u> <u>block</u> | <u>4ap.</u> <u>flat</u> | <u>5ap.</u> <u>cottage</u> | <u>5ap.</u> <u>4 in</u> <u>block</u> | <u>5ap.</u> <u>flat</u> | <u>Total</u> |
|------------|------------------------------|--|----------------------------|-------------------------------|--|----------------------------|-------------------------------|--|----------------------------|-------------------------------|--|----------------------------|--------------|
| 1930-35 | 99 | 16 | 1,356 | 368 | 1,270 | 5,324 | 343 | 997 | 1,803 | 186 | 4 | 64 | 11,830 |
| 1938 | - | - | - | 416 | 470 | 747 | 462 | 675 | 1,342 | 222 | 4 | 213 | 4,551 |

Source "Glasgow's Housing Centenary 1866 - 1966", p.20-21

Housing Associations

Despite the provision in the 1919 Act for assistance for public utility societies and housing trusts, Housing Associations had very little attention or encouragement from Local Authorities or Central Government and consequently did very little work in Scotland during the inter war years.

Housing Completions

Both public and private house building increased in production after the low point of 1930/31 which had resulted from the depressed state of the economy and government cuts in expenditure. While there was not a continuous increase in production, the housing completions of both public and private were above that achieved in the 1920s until programmes were restricted on the outbreak of war in 1939.

| | <u>1930</u> | <u>1933</u> | <u>1935</u> | <u>1937</u> | <u>1939</u> |
|----------------|-------------|-------------|-------------|-------------|-------------|
| Private Sector | 4,546 | 8,155 | 7,086 | 8,187 | 6,411 |
| Public Sector | 7,918 | 15,808 | 18,814 | 13,341 | 19,118 |

(Refer also to Fig. 11.01 to 1.03)

HOUSING DESIGN

Urban Design

Local Authorities had been given the power to produce town planning schemes in 1909 and the Addison Act 1919 had placed a duty on every Local Authority with a population of over 2,000 to prepare and submit a Town Planning scheme. Despite this and a Town and Country Planning Act in 1932 few Local Authorities had achieved much in the way of Town Planning. There were few qualified town planners in Scotland in the 1930s: qualification was by means

of a London correspondence course. It is also questionable whether Local Authorities in the 1930s saw the need to plan and control development. Glasgow preferred to leave development to market forces. The Corporation instead saw fit to boast that "a considerable amount of latitude is permitted to the landowner in the matter of zoning, and the initiative in the development is left to the proprietor in the first instance" (Glasgow Corporation, *A Short Account of Municipal Undertakings* (1938), p 51). The City's sole contribution to town planning was the employment of four unqualified assistants in the Master of Works' office scheduling roads and open space.⁽¹⁸⁾

Despite this there were isolated examples of urban design. The private house builder Mactaggart and Mickel designed their Broom Estate with an arcadian layout but promoted, as part of the scheme, Bauhaus influenced house designs with flat roofs, smooth white rendered walls, cantilevered concrete canopies, cuboid massing and metal windows set asymmetrically into the external massing. (Fig 3.05) None of those house designs were built, the buyers preferring the more traditional designs. The Broom estate despite its promotion of new design was typical of private development in that it was purely a housing estate with no social, educational or commercial facilities included as part of the layout.

The urban designs which did include these facilities came at the end of the decade and were designs for large public housing estates. Tait's design for Howwood Road in Johnston and Bunton's design for Shortlees in Kilmarnock are both formal axial layouts which include as part of the design, shops, schools and churches.

Rehousing Slum Clearance Families

Large areas of housing were built with few shops and few community facilities other than statutory education facilities. The traditional tenement or terraced house had been built hard to the edge of the public footpath or in the case of better tenements had been set back behind railings with paved semi-basements. The new rehousing tenement was set back from the footpath with garden space but the garden was not related to the ground floor flats and consequently became 'uncared for' wasted space. Unlike the garden city Arcadian idea of leafy public spaces the rehousing areas have little landscaping and consequently the streets are bleak in comparison.

Typical rehousing development of the 1930s in Glasgow was the large scale building of the concrete block three storey tenement first built in 1923 at Hamiltonhill. Accommodating two and three apartment flats with scullery and bathroom, they were set back from the road with front gardens and splayed at 45° at road junctions. (Fig 2.10, 2.11) They vary very little, sometimes bay windows were added, and they were repeated over the city in areas such as South Carntyne, Haghill, Calton and Blackhill. The house type itself is not particularly bad although the stairwell and the relationship of the ground floor flats to the front gardens could have been better designed. It is the unrelenting repetition of identical house types on identical street layouts which crushes any sense of place or identity either of the individual or of the community.

Slum clearance developments were built in Edinburgh, Aberdeen, Dundee and in Paisley. Paisley's Ferguslie park is claimed to be the largest slum clearance development in Scotland.

Edinburgh's main slum clearance developments were at Craigmillar, neighbouring Niddrie and at Pilton.

Niddrie's three storey tenement blocks are grouped to give an urban character to this peripheral estate on the south eastern edge of the city. Its formal layout and blocks with steep pitched roofs, projecting stair towers and cuboid corner towers to the blocks gave it a strong architectural form. As in Glasgow the tenements have front gardens which act only as a buffer to the street and cannot be accessed directly from the ground floor flat. (Fig 3.06)

Pilton was built on the northern edge of the city close to Granton Harbour and was split into East and West Pilton by the harbour railway line. East Pilton was begun in 1930 and West Pilton, begun before the war, continued to be built during the war and after it. East Pilton and the early houses at West Pilton are two and three storey flats with pitched slated roofs, harled walls, cast stone quoins and astragaled sash and case windows. The architectural composition has a strong solid traditional Scots style, typical of Edinburgh City Architects Department in the 1930s. (Fig 3.07) Recent renovation has included painting the harling, brightening and freshening the scheme. Unfortunately the replacement windows are single pane which loses the traditional delicacy of the astragalled windows which had been a counter to the solidity of the walls. Later houses in West Pilton were flat roofed. It is not known for certain, but it is likely that the flat roofs were built, not for reasons of style, but as a result of war time shortages of timber which will be discussed in the next chapter.

The layout of both East and West Pilton is a formal grid pattern with crescents and circles breaking up the grid thereby interrupting direct routes through the centre and restricting through traffic to the edges of the estates. Schools, churches, recreation space, shops and a picture house were included in the estate.

The difference in architectural style between Edinburgh's and Glasgow's rehousing schemes is striking. Both provide flats or tenement accommodation but whereas Edinburgh reinterpreted Scotland's 17th and 18th Century tradition, Glasgow continued the 19th Century tenement form reduced in height and set back from the road.

Tenement building was not confined to the cities. Towns, while they might build cottage housing on the periphery, would often build in tenement form in their centres. Campbeltown built two and three storey tenements at Parliament Place in 1936 and at Prince's Street in 1939. The tenements are baronial styled and built with crow step gables and conical roof capped tower projections. The walls are harled and while the base course is of stone the skews and quoins are of cast concrete. The livingrooms and bedrooms mainly face the street with kitchens and bathrooms facing the rear court. The development does not form a continuous terrace but has gaps in the frontage allowing access to the rear court from which all access to the tenement stairs is obtained, thus avoiding a through close at ground floor level. Consequently, ground floor plans are similar or identical to first and second floor plans. The flats have either two or three bedrooms with livingroom, kitchen and bathroom. The flat plans are often forced to fit the external form and, although in the three bedroom end terrace flat the tower extension fits the flat plan, in other flats the livingroom needs part of a bedroom to fit the gable projection. The plan which is most uncomfortable is however the 135° corner flat which divides its tower projection between two bedrooms. (Fig. 3.08)

Higher Quality Tenement

The Highton Report in 1935 on Working Class Housing in the Continent had recommended that higher quality tenements should be erected by Scottish Local Authorities. The Permanent Secretary, John Highton, was accompanied by the chief architect to the Department, John Wilson, the senior deputy medical officer of health for Glasgow, Dr. Clark and the city architect for Edinburgh, E. J. McRae.

McRae had already built high quality tenements in Edinburgh. He had persuaded the city council that stone, Edinburgh's traditional building material, should continue to be used in the historic core of the city. In 1932 he built a stone three storey tenement in the Pleasance. It is built in traditional style, hard to the pavement with a close access to stair and balcony access at the rear. The stair and balcony gives access to one three apartment flat on one side and two two apartment flats on the other.

McRae, who was Edinburgh city architect from 1925, was responsible for the restoration of houses in the Cannongate and Grassmarket and wrote the Historical Review for the 1949 Abercrombie Civic Survey and Plan for the City and Royal Bank of Edinburgh. His respect for Scotland's and Edinburgh's architectural history is seen in his department's new stone tenements in the Pleasance, Piershill and Morrison Street, "in which the quality of detail and craftsmanship is excellent". (19) The style of these stone tenements is traditional Scots style.

The three and four storey tenements at West Richmond Street are slate roofed, stone to the front and side walls with harling to the rear walls. The detailing is traditional with moulded stone surrounds to doors, stone arching over stone lintels, skews and huge stone chimneys giving a strong Scots character to the scheme. The tenements on the side streets have walled and fenced front gardens and the stair closes have doors, (unlike the typical Glasgow 1930s tenements). The Piershill housing is similar in style but set round a green and has a mixture of stone and harling on the front elevation. Windows in both schemes are traditional sash and case. (Fig 3.09)

Glasgow was also building better class tenements in stone. Three and four storey tenements were built from 1937 to 1942 to the west of Anniesland Cross on Great Western Road providing 433 flats for ordinary rent. According to Horsey in Tenements and Towers "they rapidly became one of the most coveted lets in the city".(20) They are slate roofed with red sandstone front and gables with red brick rear elevation and although traditional in construction those with curved stone balconies give a hint of 1930s style.

Tenements similar in style but using lower cost concrete blocks were built at Shettleston Road. (Fig 3.10)

In style they are inspired by Glasgow's 19th Century tenement tradition whereas McRae's Tenement design owes its style to the 17th Century lands of Edinburgh's Old Town.

Aberdeen's response to the Highton Report was Rosemount Square designed in 1938 by the city architect's department and built, according to council dictate, in granite. Aberdeen's housing convenor was the architect/developer/businessman Tom Scott Sutherland, who had advocated "flats for the workers on the Viennese model".(21) Rosemount Square was the result. It is an immense elongated "D" plan of flats entered on three sides through great semi

circular arches. The flats present a large granite wall to the street with horizontal windows with transoms lining with the stone coursing. They are unusual in that the access to the staircase is not, as the normal tenement, from the street but from the private courtyard. (Fig 3.11)

These examples of higher class tenements in Edinburgh, Glasgow and Aberdeen were all built in stone and have a strong identity, not just of Scotland but of the particular city. In the case of Edinburgh it was deliberately chosen to give the tenements a local historic style. In Glasgow the style was mainly traditional with, at Anniesland, less traditional balconies while Aberdeen was only traditional in its use of traditional granite wall and slate roof. The wall materials, grey stone for Edinburgh, red sandstone for Glasgow and grey granite for Aberdeen, more than anything else allowed them to blend into the city fabric.

Cottage Housing, Semi-detached, Terraced and Flatted

The cottage housing designed for ordinary rental accommodation in the 1920s continued to be built in the 1930s often the same house types or similar house types being used in different parts of the country. Fenestration is the main difference; whereas the 1920s house would have sash and case timber windows with astragals and vertically proportioned glass panes, the 1930s particularly the later houses would more likely have metal windows with horizontal proportioned glass panes.

In fact the double gable house from the 1919 competition (Fig. 1.03 and 3.12) not only continued to be built in the 1930s but appeared in the Department of Health's approved house designs 1945 and was still being built in the early 1950's as illustrated by the example at Westfield Road, Cupar.

A good example of this is the Hay and Steel designs which were used in the 1920s and continued to be used during the 1930s in Kilmarnock, Galston and Newmilns. The houses are laid out along culs de sac and streets designed to avoid through traffic. At Newmilns the houses are linked with high walls to provide enclosure and the street corners are turned with single storey cottages which jut forward to enclose the street. The houses have been designed with low eaves and cast stone bands round the doors and windows. Here, perhaps because it was built in the early 1930s (around 1934) or perhaps to relate to the existing village houses, the windows were originally sash and case. The scheme, although clearly an extension to the original village and originally roofed with red rosemary tiles, matches the scale of the original village houses successfully. Despite using repeating house types, there is variety of form with single storey, one and a half storey and two storey with low eaves. Gables are introduced with the fashionable 60° pitch to break up the elevation. (Fig. 3.12 to 3.15)

Joseph Weekes was an architect who in the 1930s earned a reputation for designing interesting architectural compositions of houses in traditional Scots style.

He had formal architectural training at Edinburgh College of Art in the 1900s and had been Burgh Surveyor in Newport on Tay and Irvine prior to becoming county architect for Dumbartonshire in 1919.⁽²²⁾

His best known works were groups of flats as the emphasis of the 1930s housing legislation was on building low cost flats to house those displaced by slum clearance (1930) and prevention of overcrowding (1935).

Not all new housing was in the form of flats. At Whitehurst in Bearsden Weekes designed an attractive housing layout which is mainly composed of semi detached cottages. The street is terminated with a terrace block of flats facing down the central open space. The Whitehurst flats design is a common composition of Weekes having a central feature and two wings on a symmetrical plan. The circular stair towers positioned in the internal angle of each wing are also a common design feature of Weekes but are unusual here in that they are flat roofed. (Fig 3.16)

At Cambusmoon Terrace, Gartochan a similar symmetrical plan has Weekes' circular stair features again in the internal angle of the wings of the composition but here they are cantilevered over the flats entrance in the style of the old corbelled stair towers in fortified houses. Cambusmoon is less successful in its setting as its two storey mass, sitting above the road with high underbuilding to cope with the sloping site, overpowers the neighbouring single storey low eaves cottages of Gartochan village.

Weekes' most romantic and perhaps best composition is at Braehouse, Brae Road, Rhu. It is again symmetrical this time a "U" plan form with the wings turning back into the site. Conical capped circular stair towers are positioned at the junction of the wings to the main facade. The lower tower is used to handle the change in level as the terrace steps down the brae. The design accommodates eight three apartments, two four apartments and two five apartments. The composition sits well on its site and also relates well to the neighbouring buildings. Weekes' preference for low eaves helps to allow the terrace to sit snugly into a fairly small site. Unfortunately the original astragalled sash and case windows have in most cases been replaced with bland single pane sashes damaging the original design. (Fig 3.16)

It was however at Whytes Corner at Milton near Bowling that Weekes' design was commended by the Saltire Society in 1937. The design fronts the main Dumbarton Glasgow road with two terraces of flats set at an obtuse angle to each other with a smaller terrace turning up the hill on the east side. The two frontage terraced blocks accommodate four three apartment and four two apartment flats each. The terraces have a central close which has a chamfered entrance with the central two apartment flats entrance doors on the splay. The three apartment flats on the wings have their entrances on the curved cornered gable stairs. The flats have small front gardens behind a stone wall and have a common drying green at the back. The materials are in, common with Weekes' other projects, slate roofs and harled walls. (Fig 3.16)

John A. W. Grant was awarded a commendation for good housing design from the Saltire Society in 1938 for the model village for miners at West Quarter near Falkirk.⁽²³⁾ The flatted houses and cottages are similar in style to those designed by Hay and Steel for Kilmarnock and the Irvine Valley in the inter war period. Houses are grouped in short terraces or semi detached and are linked together with high walls with arched entrances to the back gardens. The model village contains as a central feature a linear park laid out on the haughs of a small burn. Houses are grouped along the northern bank of the burn and along the ridge of a hill which forms the southern boundary of the park on the haughs. The model village included a

school and community hall and with the recreational facilities of the park has the educational and social facilities recommended by the Highton Report. (Fig. 3.17)

The schemes described above are exceptional in their quality.

At the north west foot of Stirling Castle Rock lies Raploch. Laid out on the flat plain of the River Forth it is mainly two storey four in a block tenements but also includes cottage houses. The layout is unimaginative with the houses spaced out along streets which mostly follow a grid pattern. The houses are mainly featureless without detail or decoration to give interest. The four in a block units are not the usual four in a block where each has its own front door but follow the tenement form with the four flats accessed off a stair close. Unlike the usual four in a block design where the garden areas are identified with individual flats here the front gardens are not obviously associated with any flat. (Fig 3.18) Not surprisingly the gardens are not given the same care and attention by the residents it is usual to find with a cottage scheme. This is not the whole story however as on the main street elevations often on corner houses, there are little baronial style details and on Drip Road, the A84 road into Stirling from Blair Drummond, the flats and houses are grouped along the street in a terraced form with ornate gable and linking screen walls. Built for one of the 1936 coronations, it is clearly intended to give an ornate civic front to an otherwise monotonous scheme. (Fig 3.19, 3.20)

A local retired architect claimed that the original scheme was laid out by the burgh surveyor and that the Burgh, objecting to its dreariness, appointed a local architect to design some embellishment to the basic scheme. (24) Whether or not this is correct it is certainly the case that the Burgh were prepared to incur considerable additional expenditure on the Coronation group. It is also the case that the Coronation Group could have been as attractive with less embellishment and the rest of the scheme would have benefited from attention to detail, the use of better house types and a more imaginative layout.

Unfortunately Raploch is only unusual in that the public facades were given special treatment and perhaps for this the Burgh should be commended. In most cases housing schemes of the 1930s are poorly laid out and allowed to mar the approach into otherwise attractive towns and villages.

The typical 1930s cottage rental housing scheme shows little, if any, sign of flair or consideration of enclosure vistas, or any civil design which was sought after by the early garden city designers and achieved in the early phases of Rosyth. Nor was there the planning and building of social educational, commercial and recreational facilities advocated by the garden city architects and planners.

Rural Housing

The Association for the Preservation of Rural Scotland was concerned with the planning of rural areas, the conserving of historic buildings and sites, and the improvement of rural housing, the standard of which was often worse than the city slum housing. It was also greatly concerned about what it described as the "appalling quality" of new rural house design. It attributed the poor quality to the failure of many councils to employ qualified architects. In 1931 Leslie Graham Thomson and Frank Mears produced six prototype houses. The designs ranged from single storey cottages to two storey detached houses and were offered to Local Authorities at £2 per house. In 1938 the Department of Health with the RIAS staged a

competition for the design of rural housing, the winning design being cottages with pitched roofs. This was followed during the war years with the RIAS organising unemployed member architects to produce house types which were included in a booklet and offered to Local Authorities. The styles varied from traditional single storey houses to pitched roofed cottages to flat roofed houses with horizontal metal windows. House types were individual cottages, semi detached cottages and houses and four in a block flats. Sixty nine Burghs and sixteen County Councils took up the offer and the designs were realised in tens of thousands from one end of Scotland to the other. (25) (Fig 3.21)

Thirties Style

Thirties architecture is often associated with flat roofs but these proved to be unpopular for house design.

A flat roofed scheme of terraced houses for Tillicoultry by Arthur Bracewell in 1934 remained unbuilt. (Fig 3.22) There were exceptions to this; the four in a block flats at Carntyne Road Glasgow, private houses at Lady Nairn Avenue Kircaldy, Mansion (Private) Flats and a number of private one off houses of which Kininmonth's own house at 46a Dick Place is the most famous.

The most prominent Scots architect of the 1930s was Thomas Tait. Tait was the controlling designer of the Empire Exhibition and designer of St. Andrews House for the Scottish Office. He was appointed to design housing in Elgin, Lincluden and Johnstone. Only Howwood Road Johnstone was built.

The proposals were featured in the Town Planning Review 1936 and described as:

an attractive layout which embodies many modern ideas of planning, not only of the individual houses but of a large estate for community life The houses will consist of flatted cottages and tenements, providing in all, in the first development for 892 flats and, in the future extension for another 274 flats A community centre will be placed in the middle of the site between the cottages and tenements. It will consist of club houses for boys and girls, social club rooms and library for older people, dental and maternity clinics, post offices, administration offices and chemist's shop. A children's and infant's playground is also provided for and there is space for a school and a churchThe estate will be planted with trees and shrubs and the roads laid out so as to prevent through traffic and to keep them safe for children and pedestrians. All unit parts of the houses, so far as possible, will be standardised in order to cheapen the cost. The flatted cottages will be two floors, and the tenement blocks three floors high. Windows will be large so as to admit as much sunlight as possible; all living rooms will have east, west or southerly aspects; in the tenements a small balcony will be provided to all living rooms above the ground level so that babies can sleep in the open air and yet be under the eye of the mother.The exterior walls of the houses will be finished in white Portland cement and coloured to give variety and to emphasise the design.(26) (Fig 3.23, 3.24)

The articles also comments "The necessity of providing properly equipped social centres in housing schemes is now being strongly urged by the Department of Health. Both in England

and in Scotland, the need for such centres, which cater for the recreational, social and cultural requirements of tenants, has received very scanty attention in the post war (World War I) period".(27)

The article is very revealing about housing attitudes in 1936. There clearly was concern about the large number of estates being built with little provision for social, commercial, educational or recreational facilities. There was obviously in the period just before World War II the intention to try to rectify this situation as the article goes on to mention action proposed to remedy the lack of facilities in existing estates. The intervention of a second World War and the subsequent race to build large number of houses resulted in the social and commercial facilities being given scant attention once again. Even in the Scottish New Towns where these facilities were planned, the community and educational facilities were the responsibility of the local authority to be paid out of the rates rather than central government finance.

The article also reveals the concern to provide residents with a healthy environment, plenty of fresh air and sunlight. It was realised that the lack of sunlight and fresh air was detrimental to health although the fact that glass vastly reduces the benefits of sunlight does not appear to have been known. Insulation was not mentioned nor was heating which was by coal fires. The aim of standardisation to cheapen the cost was also revealing. This was more a statement of faith than of fact as the 1930s houses were mainly hand crafted and even continuous runs of standardised units required machines to be reset. Whether the savings from standardisation were realised in tendering is not known but it is far removed from the garden city aims of variety.

The Howwood Road flats were large having 2, 3 and 4 bedroom house types. The entrance hall, kitchen, bathroom and livingroom is in the centre of the flatted plans and is a standard plan for all house types. The outside wings vary to provide the 2, 3 or 4 bedrooms. (Fig 3.25, 3.26)

Only one third was built in 1937. This was the north eastern end of the layout which was built as originally planned with a dual carriageway axial avenue flanked with small culs de sac each containing five blocks of four flats. Unfortunately the avenue and the northern culs de sac with all the three storey tenements have been demolished.

The remainder of the site was built in 1946 to 1947 with the site of the planned church infilled with flatted houses in 1956. None of the commercial or social facilities were built and the school was not built to terminate the avenue as planned but instead two primary schools were built, one non denominational and one denominational facing the main Beith Road. The remainder of the site was infilled with flatted houses of the original design but the drama of the original layout was lost along with the shops, social and health facilities.

There is no evidence of any of the originally planned landscaping in the scheme. The houses have been altered with dry dash render replacing the smooth render, gas meter boxes placed on the front elevation and the corner windows infilled on the corner and the 30's style metal windows have been replaced with timber windows. (Fig 3.27) The original layout as built had all back garden fences contiguous one with another. This has been altered to give open grass spaces between back gardens. These are now used for dumping rubbish.

The article goes on to describe a scheme in Kilmarnock for 350 houses which has been influenced by the campaign by the Department of Health for better housing. It does not say where in Kilmarnock but the layout with its school, church, shops, open spaces and other communal facilities identifies it as Shortlees.

Shortlees was designed by Sam Bunton for SSHA. This layout is also an axial layout with the church and shops on axis to the main entrance with schools, flanking symmetrically each side. The houses have pitched roofs but with 30's design features such as smooth rendered walls, balconies, concrete slab canopies and corner windows. (Fig 3.28)

The houses were either 4 in a block flatted houses or semi detached 2 storey houses. The houses built with poured concrete walls developed structural defects and the cantilevered walls over the corner windows required steel props. The houses were demolished in 1995.

Westfield Court, Edinburgh

This project is interesting in that it illustrates the use of the private mansion flats concept for public housing.

It was designed by Williamson and Hubbard as private flats in 1938 three years after Neil and Hurd's Ravelston flats. Whereas Ravelston is three pavilions of double sided four storey flats set in spacious grounds, Westfield is a single massive eight storey crescent plan block in a tight urban site. The Westfield project was halted by the war and built by the Local Authority as public rental housing in 1946.

The Westfield flat plans as built are less generous than those at Ravelston but both provide three bedroom flats with balcony. The Ravelston flats have the balcony related to the dining room and sitting room whereas the Westfield balconies are less usefully accessed off the middle size bedroom.

Ravelston provides 48 five apartment flats. Westfield provides 8 two apartment flats, 76 four apartment flats in the first seven floors and on the eighth floor accommodates 4 four apartment flats plus a nursery school with roof playground. (Fig 3.29, 3.30)

Kininmonth And Spence

Piershill and the Pleasance represent historic Scot style and if Carntyne represented the international 30's style then Spence's houses at Dunbar, at the Empire Exhibition and at Forth typify the move towards the utilitarian simplified style of the post war years.

Spence had a loose association with Kininmonth from 1931 until the war. They built a small group of houses in Dunbar in 1935. These are two storey terraced houses stepping down the hill towards the sea. Cottage style with individual front gardens they have stone up to ground floor window cill level and are white painted brick above. Windows have horizontal panes and entrance doors are also small paned glazed. The cottages have their plans handed as in semi detached houses and the front doors grouped together under a large arch on the front facade forming a shared porch. (Fig 3.31)

Spence is better known at the 1938 Empire Exhibition for the Scottish Pavilion but he was also responsible for the Country House for the Scottish Council.

This design with skews and pantiled roof and small banded windows on white walls is stripped down traditional Scots style. A two storey house with a huge chimney separating the garage from the entrance porch is both Scots and Nordic in style and but for the skews looks typical of houses built twenty years later. (Fig 3.31)

The newly formed SSHA commissioned Kininmonth and Spence in 1938 to build Canadian Cedar houses at Forth, a remote village in the central uplands. They produced a scheme of low monopitched one and two storey terrace houses. They have none of the historic Scots style or 30's imagery but are clearly influenced by Modern Movement and Scandinavian style. (Fig. 3.30) Their low mono pitched roofs with their flat roofed entrance porches are uncannily like the first Irvine New Town houses built thirty years later at Pennyburn (timber frame and no fines) and Dreghorn (no fines). At Irvine the walls are harled with timber clad mono pitch roofs and timber clad flat roofed porches. Unfortunately, whereas at Irvine the houses are unaltered, at Forth SSHA have "transformed" the houses by harling the walls and "duo pitching" the roofs as part of "modernisation" of the houses.

The Forth houses were controversial in their day. The high straight face on the high side of the mono pitch roof was criticised as was the colour scheme of various shades of blue. (McKean suggested in the Scottish Thirties that the scheme was originally designed to be brown but does not say why the colour scheme was changed). The grey asbestos roofing was considered drab and the SSHA Chairman, Mr. McKinna recommended a russet shade should be used. Mr. McKinna also recommended that the scheme should be well planted with trees to soften/screen the houses.⁽²⁸⁾

THE WORK OF THE SSHA

The origins of the concept of the SSHA are in the Scottish National Housing Companies, the first of which had the task of building Rosyth and the second had the task of building the steel houses. It also owes its origins to the 1934 "Investigation into the Industrial Condition in Certain Distressed Areas" which was followed by the Special Areas (Development and Improvement) Act. This resulted in the appointment of commissioners, whose job it was to promote schemes to aid the recovery of the parts of the country which were most severely depressed. The Commissioner for England came under the Minister of Labour whereas in Scotland the Commissioner was under the Secretary of State.

When the Secretary of State Collins died in 1936, he was succeeded by Walter Elliot who had previously campaigned for the steel houses programme. Elliot persuaded the government to extend the boundaries of the special areas and to empower the Commission to build industrial estates, to let factories and subsidise new industry.

In January 1937 he put to the Cabinet that the deplorable state of Scottish housing would not be solved by Local Authorities alone and that the new methods of construction, steel, concrete or timber houses would not significantly alter this. He proposed a separate agency to tackle the problem. He proposed using the Scottish National Housing Company, however the SNHC was having severe financial difficulties despite their houses having high rents, and consequently there was some resistance to this proposal.

In 1937 the English economy was pulling out of the depression whereas the Scottish economy was still in difficulty. It was for this reason Elliot had been allowed to extend the remit of the Special Areas Commissioner and in the event a new housing agency, the Scottish Special Areas Housing Association was formed in May 1937 with the specific task of building working class housing within the Special Areas of Scotland. This remit was extended "to undertake the erection of working class housing elsewhere for experimental or demonstration purposes" by the Housing (Financial Provisions)(Scotland) Act 1938. (29) The programme was to build 20,000 houses within the Special Areas and a further 8,500 outwith them.

They were also given a special remit to investigate new forms of construction so that employment in house building could be offered to semi skilled or unskilled people. The two main non traditional forms of construction were timber house construction, researched in consultation with the Forestry Products Research Laboratory, and poured cellular concrete which was developed by SSHA using direct labour. It became known later as no-fines concrete, as it used a mix of crushed whinstone with cement and no sand. Cavity wall concrete construction was also used but proved to have difficulties with shuttering and was more expensive, whereas "no-fines" was comparable in cost with traditional cavity brick construction.

The Association was registered as a company in November 1937 appointing A. H. Mottram as its consultant architect giving him the first three schemes at Tannochside, Cairneymount Carluke and O-Wood Holytown. There was a great deal of haste, a panel of consultant architects was appointed to prepare schemes throughout the country (including Kininmonth and Spence at Forth). By early May, schemes were presented for a number of sites including Johnston, Forth, Motherwell and Ayr. They had also decided to buy further sites at Whatling Street and Muirhouse in Motherwell, at Hurlford, Stevenston, Dalry and Kilbirnie in Ayrshire, whilst the Burghs of Kirkintilloch, Airdrie, Bathgate and Armadale had all approached SSHA with requests for houses. By mid 1939 some of the early schemes were reaching completion.

Hitler invaded Czechoslovakia on 15th March, 1939 and in the same month SSHA were requested to provide "permanent" camp accommodation for children evacuated in the event of war. The outbreak of war in September 1939 led to the immediate suspension of work in all new housing schemes. Steps were taken to speed up the completion of houses already under construction. Some schemes were to be wholly completed while others were left partially complete.

War time needs changed priorities. Building materials, particularly timber, became scarce and houses were required for the influx of workers to war production factories. In some of these areas houses were built, in others hostels were built for workers, the hostels being designed for conversion to houses at a later date.

The intended programme for the construction of 20,000 houses within the Special Areas came almost to a standstill.

NON TRADITIONAL HOUSING

The main types used by SSHA and a few Local Authorities were poured cellular concrete solid wall (no fines), poured dense concrete solid wall and cavity wall, timber solid and framed with outer wall of timber.

Poured dense concrete cavity wall proved to be more difficult to pour and 30% more expensive than the poured cellular concrete ⁽³⁰⁾ and consequently became less used than the other forms of construction.

The SSHA's no fines concrete system was the result of study of the Dutch no fines concrete but whereas the Dutch used clinker aggregate, SSHA used crushed whinstone. No fines concrete construction used unskilled labour, often miners, who were trained to erect the shutters and pour the no fines concrete. The first programmes using this method were at Tannochside and Carluke in Lanarkshire, Holytown, Dunfermline and, in Rosyth, for the Admiralty. The house types were usually two storey cottages either semi detached or terraced and two storey four in a block flatted cottages. External walls were 200mm thick cellular concrete with harling to the outside and plaster on the hard inside. Partitions were also cellular concrete of varying thickness with plaster finish. Roofs were of traditional timber construction with plain concrete or Rosemary tiles and sometimes slate. Later houses built in 1940 in Motherwell, when timber was in short supply, used flat roofs constructed of a flat reinforced - concrete slab and covered with a built up bituminous felt roof. SSHA built 901 no fines houses during this period.

Aberdeen Corporation constructed 52 houses on the Tullos estate and 68 on the Kairnhill estate using cast in-situ dense concrete. The concrete was cast 178mm thick on the front and back walls and 203mm for the gable walls. The concrete walls were reinforced with 6mm rods set vertically and horizontally at 914mm centres in the centre of the wall. 25mm thick woodwool slabs were placed on the inside in the framework prior to pouring and cast in to provide insulation.

The external concrete/woodwool walls had an insulation value better than a cavity brick wall but the 152mm concrete block party walls performed less well for sound insulation than the traditional 229 brick wall. The remaining construction was traditional, as was the design, with the result that the only noticeable difference between the concrete houses and the traditional equivalent on the same estate was their concrete base course. They were however more expensive than brick houses and no saving on craftsmen labour was achieved.⁽³¹⁾

Aberdeen Corporation also built 76 timber houses in the Auchinyell area in 1939. They built storey and a half semi detached cottages with timber framed external walls (125 x 50 studs at 400mm centre) and cedar boarding finish. They also built two storey flatted cottages with 76mm tongue and groove deal boards set vertically and lined externally with wind proof paper and 19mm cedar weather boarding.

Lanark County Council built single storey, storey and a half and two storey semi detached houses in the Westburn area of Cambuslang (now in the City of Glasgow). These were insulated timber frame walls with 25mm thick timber weather boarding on the outside and plasterboard in the inside.

Tarron of Hull developed the Solid Cedar House and in 1938 built 556 houses in Dundee for Dundee Corporation. The house types were two storey, four apartment semi detached houses and two storey, three apartment, four in a block flatted houses. The wall construction was 76mm tongue and groove vertical cedar boards strapped and lined with plasterboard internally and lined with 19mm cedar weather boarding externally.

The SSHA built timber houses on various sites between 1937 and 1941. These were not prefabricated but built on site and the design varied to suit the area. (Fig 3.32)

The house types were single storey, storey and a half and two storey semi detached cottages.

The walls were 100 x 50 mm timber framing covered on the outside with sawn diagonal boarding, building paper and faced with either vertical boarding with cover plates, horizontal boarding, shingles or "log cabin" boarding. The lower floor walls of the two storey houses however were constructed of 150 x 50mm or 150 x 75mm feather jointed scantling. External finish was as for the studs but the internal face was strapped and then lined with plasterboard. Party walls were strapped and lined with plasterboard. Roofs were timber trusses covered with sarking, felt and shingles.(32)

Many of the timber frame houses are still timber clad, others however have been "renovated" or "upgraded" by fixing insulation on the outside and harling on lath over the insulation, replacing the timber windows with PVC windows and usually destroying the character of the original house.

1938 EMPIRE EXHIBITION

The Scottish Economic Committee, which had from the Secretary of State responsibility for the creation of the SSHA, also had responsibility for creation of the Scottish Estates Company and the 1938 Empire Exhibition.

The 1938 Empire Exhibition represented an £11 million investment in the future of Scotland. Visually dominated by Tait's Tower it was a bold statement in the future.

The Scottish Council for Art and Industry commissioned Mervyn Noad to design prototype working class flats "demonstrating the most modern practice at home and abroad which is at the same time suitable for our climate" (quote from Building Industries September 1938). (33) (Fig 3.22) The ground floor of the design for a three storey block of flats was built at the exhibition. The flat was designed with a balcony large enough for a pram accessed off the livingroom but overlooked by both livingroom and scullery. Natural wood was used for the furniture, and birch or beech used for the floors. Access to the flats was off a stairwell, through a glazed main entrance door. The provision of a front door to the stairwell was not a feature of Glasgow working class tenements or flats before or even immediately after the war.

The Exhibition flats attracted enormous attention with official visits from Housing Authorities and immense correspondence. The Scottish Council established a committee with Housing Authorities to exert its influence on future house design. (34)

SUMMARY 1930 TO 1939

The Housing (Scotland) Act 1930/Slum Clearance

The Act gave new impetus to slum clearance rehousing first addressed by the 1923 Act. The 1930 Act provided a subsidy in the form of a fixed sum per person displaced from slum clearance areas for whom housing had been provided.

Glasgow built most of its housing under this Act as three storey tenement flats with most of those as three apartment flats. Two and four apartment flats were also built under this Act as were four in a block flatted cottages but few cottages were built under this Act.

Glasgow's tenement flats were similar to those built in the 1920s at Hamiltonhill and were in architectural style similar to its 19th century tenements. Edinburgh's slum clearance rehousing at Craigmillar, Niddrie and Pilton were also built as tenements but show an architectural influence of 17th and 18th century Scots style. This is a good example of how an Act influences the type of housing built but gives architectural freedom in terms of character and style.

Economically Planned Houses DHS Memorandum 1933

An "intermediary" rent band was introduced in 1933. Typically but not exclusively the higher rent band "ordinary" was cottage housing, "intermediary" was flatted cottages and the low rental (slum clearance) "rehousing" band was tenement housing. This reflected the capital cost of provision. The 1933 Memorandum quoted housing prices for a three apartment as £296 for a cottage, £232 to £245 for a flatted cottage and £229 for a tenement flat. The Memorandum illustrated housing plans and layouts from all over Scotland and illustrated cottages flatted cottages and tenement housing. The inclusion of tenement housing in the 1933 design memorandum reflects legislative priority being given to low rent slum clearance housing.

The Housing (Scotland) Act 1935 Overcrowding

This Act set minimum standards for overcrowding. Overcrowding was now accepted as a need for rehousing.

While the setting of overcrowding standards was important in identifying overcrowding in existing property it has to be remembered that the standards were not onerous especially with a child of 1 - 10 years counting as ½ person. Nevertheless this is an important Act, recognising the problem of overcrowding and in consequence the need to build flats adequate for the size of the household.

The Department of Health Circular No. 786/1935 laid down statutory minimum room areas which were similar to the 1918 Memorandum.

Whereas the 1918 standards were recommended, the 1935 room areas were mandatory for Public Authority housing. An important feature of these standards is the 14 - 15m² bedroom which could accommodate not only the parents bed but also a child's cot. This is a useful feature of interwar housing.

Working Class Housing on the Continent, Highton Report 1935

The Highton report, following a visit to examine continental housing, recommended building better quality tenement flats at “ordinary” rent and that housing developments should be built with recreational and social facilities. The report considered that high rise housing which had been built in Paris and Rotterdam was inappropriate for Scotland except perhaps for very expensive sites in city centres.

A prototype working class flat was built at the 1938 Empire Exhibition to demonstrate the most modern practice at home and abroad. The flats were designed with a balcony, large enough for a pram, accessed off the livingroom but overlooked by both livingroom and scullery.

Howwood Road in Johnstone and Shortlees in Kilmarnock were both large housing projects designed in the late 1930s and both included schools, shops, churches and other social facilities in their layouts. Howwood Road was designed with tenement and flatted housing. The layout included large house types with two, three and four bedroom flats being built. Although the houses had pitched roofs, the curved balconies, corner windows and smooth rendered walls gave a recognisable 1930s style to the design.

The Housing (Financial Provision) (Scotland) Act 1938

This Act revised subsidies to reflect house size. This gave an incentive to provide larger houses. Whereas Glasgow’s 1930s housing prior to the 1938 Act was mainly of three apartment flats, those built under the 1938 Act were mainly four apartment.

The late 1930s saw better quality tenements being built. Red sandstone tenements such as those west of Anniesland Cross were built in Glasgow. In Edinburgh grey sandstone tenements were built at Piershill and in Aberdeen grey granite was used in the 1938 design for Rosemount Square.

Scottish Renaissance

The cultural revival of the late 1920s and 1930s had its impact on housing design. In 1938 the Department of Health with the RIAS staged a competition for the design of rural housing. In 1936 the Saltire Society was formed with the aim of fostering and enriching the cultural heritage of Scotland. The Saltire Award for housing design was established in 1937 with Whytes Corner at Bowling by J. Weekes being commended for good design in 1937 and West Quarter by J.A.W. Grant being commended in 1938. Both schemes were traditional slate roof harled wall Scots style designs. Weekes had produced a number of Scots style housing designs in Dumbartonshire. Most of the schemes were for flatted cottages. Weekes grouped his flatted houses with variety of plan and elevational form to give interesting terraced compositions.

Unfortunately most flatted house schemes built in the 1930s were “four in a block” laid out at regular intervals along straight constant width roads, with unrelenting repetition and lack of variety.

Non Traditional Housing

Following on from the Moir committee recommendations on non traditional construction “no-fines” and timber frame houses were built. Many of these were built by the Scottish Special Housing Association which had been formed in the late 1930s to build housing in economically depressed areas and to experiment and build non traditional housing.

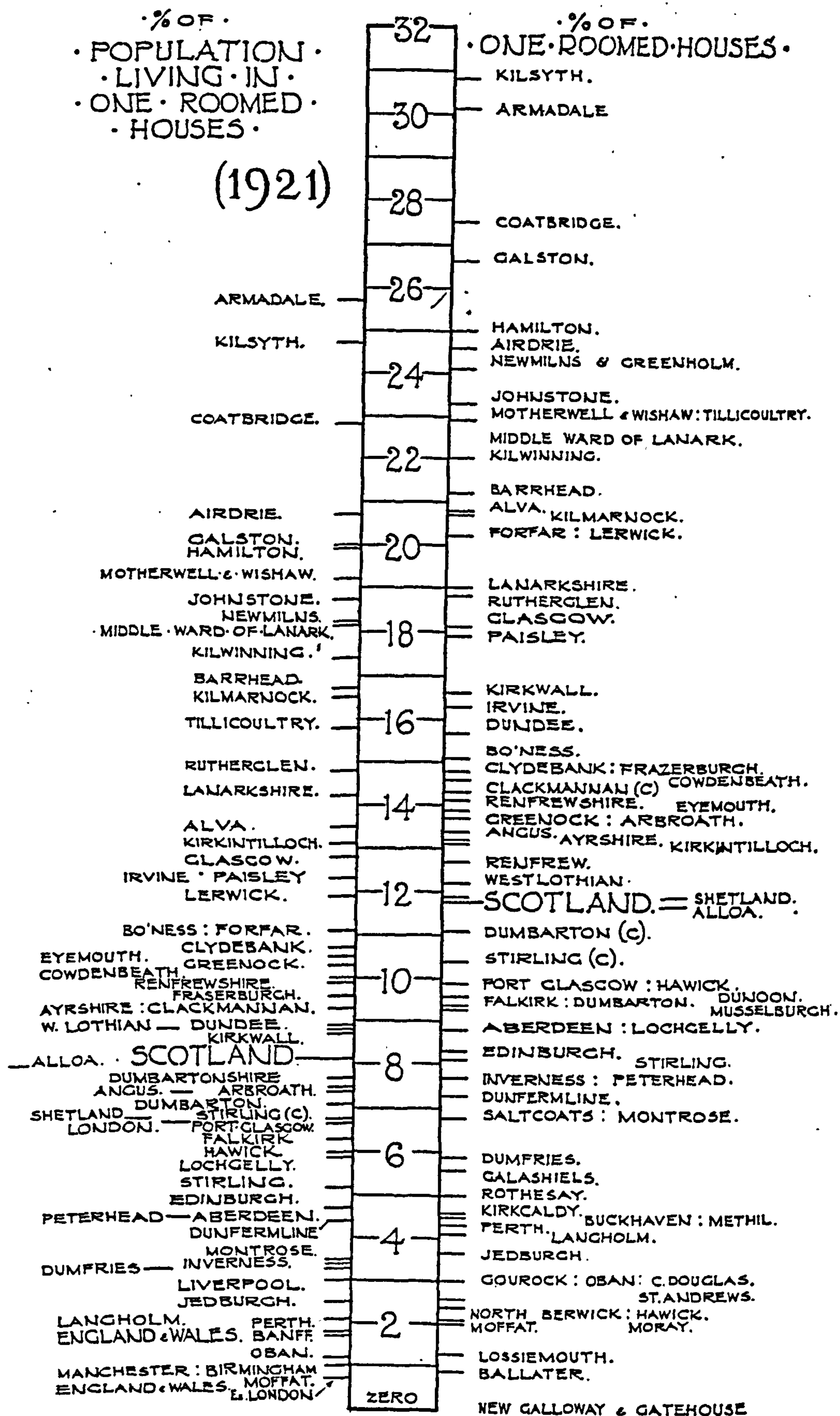
1930 - 1939 References

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- (2) Smout, R. C., A Century of the Scottish People 1830 - 1930, (London, William Collins, 1986), 127
- (3) McKean, The Scottish Thirties, an architectural introduction, (Edinburgh, Scottish Academic Press Ltd, 1987), 140
- (4) Highton, J. E., Working Class Housing on the Continent, (Edinburgh, HMSO, 1935), 24-25
- (5) Report of the Scottish Architectural Advisory Committee, (Edinburgh, HMSO, 1935), 9. Also McKean, C., The Scottish Thirties, 143
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- (7) Ibid, 36
- (8) Ibid, 22
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- (15) Ibid, 10
- (16) Reoch, E., Farewell to the Single End, A History of Glasgow Corporation's Housing 1866 - 1975, (Glasgow District Council), 21
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- (18) McKean, C., The Scottish Thirties, 17 and 18

- (19) McKean, C., The Scottish Thirties, 22
- (20) Horsley, M., Tenements and Towers Glasgow Working Class Housing 1890 - 1990, (RCAMS), 25
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- (22) Grier, S., and Fulton, D., Joseph Weekes, County Architect, (Dissertation Mackintosh School of Architect), 7
- (23) RIAS Quarterly No. 58
- (24) Interview with Anne Low, Stirling District Architects
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- (26) Town Planning Review, June 1936, Housing in Scotland, 33
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- (31) SOBD, A Guide to non-traditional and Temporary Housing in Scotland, 1923 - 1955, (Edinburgh, HMSO, 1987), 35 and 45 - 48.
- (32) Ibid, 69 to 79
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- (34) McKean, The Scottish Thirties, 153

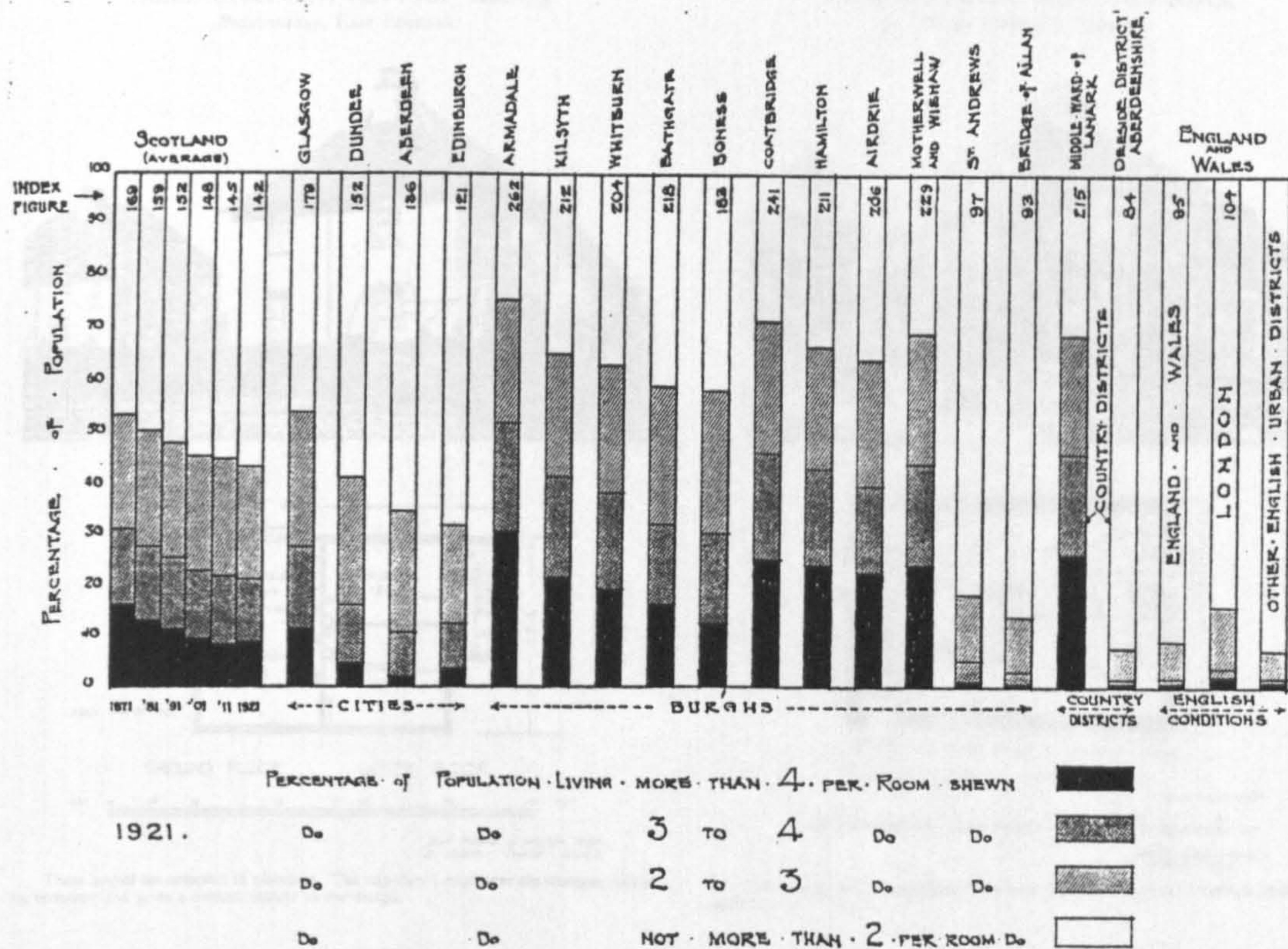
Anti Overcrowding, G. W. Clark 1930

Comparing overcrowding in Scotland with England and Wales in 1921

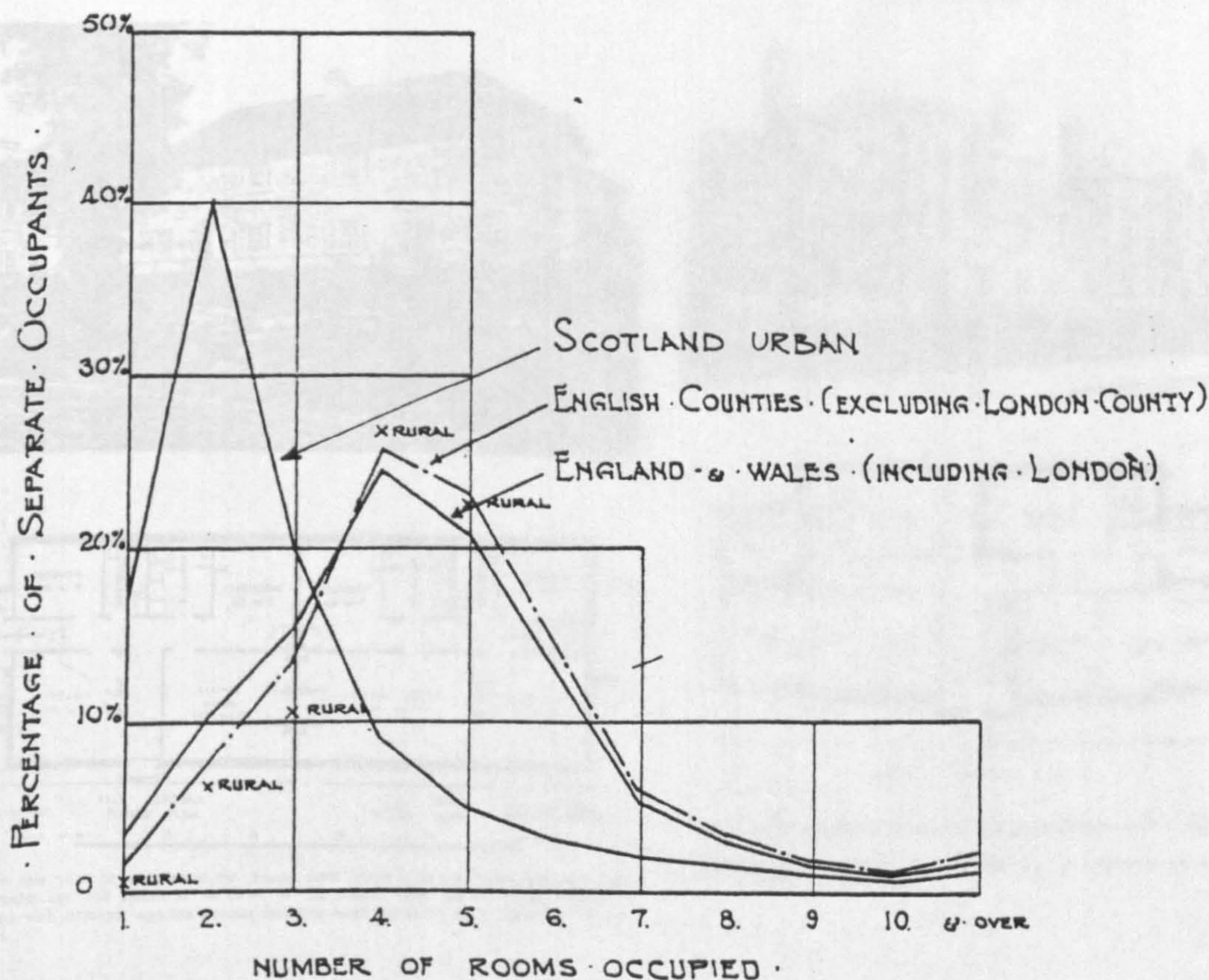


Anti Overcrowding, G. W. Clark 1930

Comparing the occurrence of single ends in Scotland with England and Wales in 1921



Percentage of Population Living in Overcrowding Conditions by Area



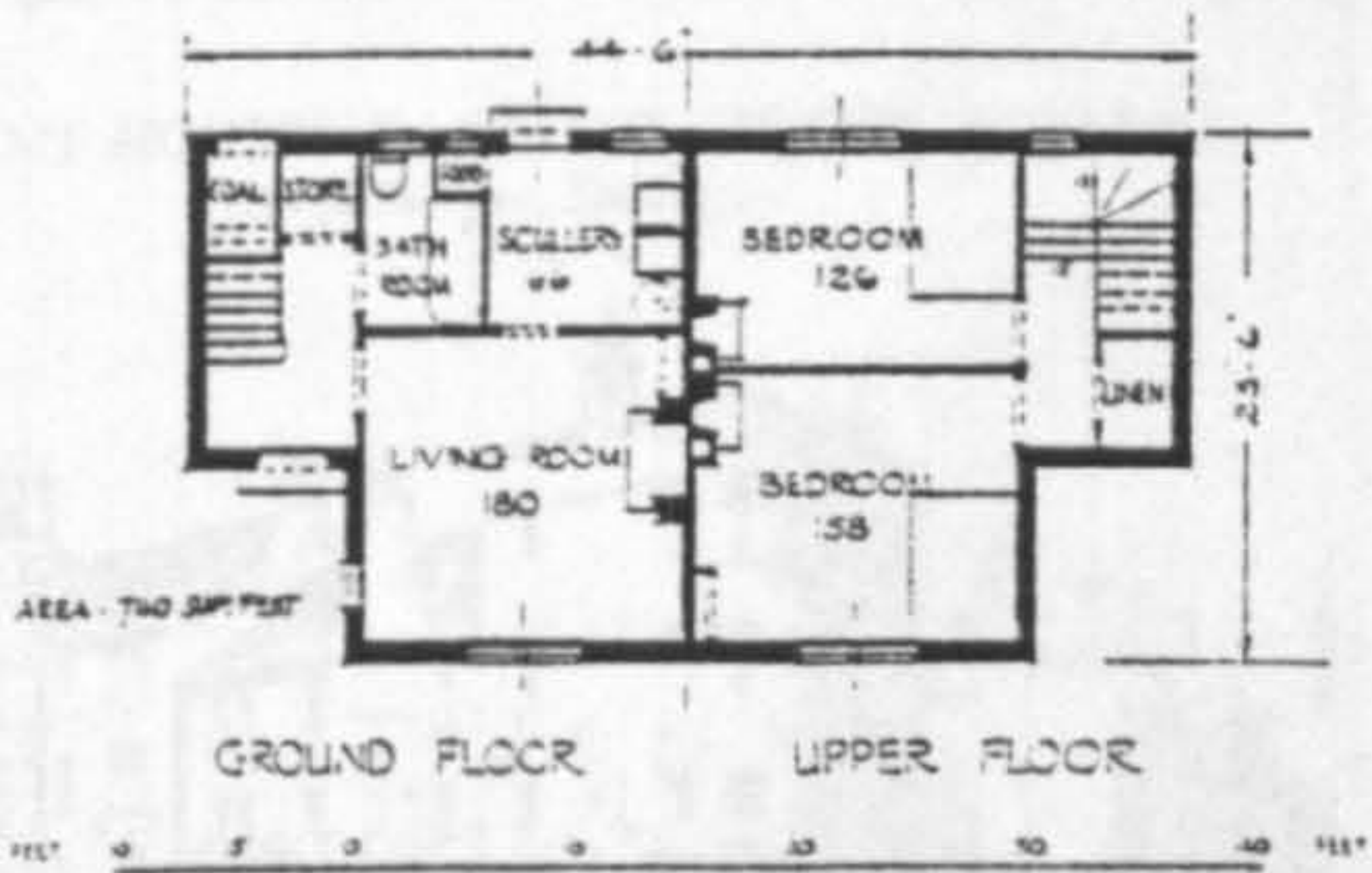
Proportion of Families living in Various House Sizes

Source, Clark, G. W., The Housing of the Working Class of Scotland, p.29, 66

Figure 3.02

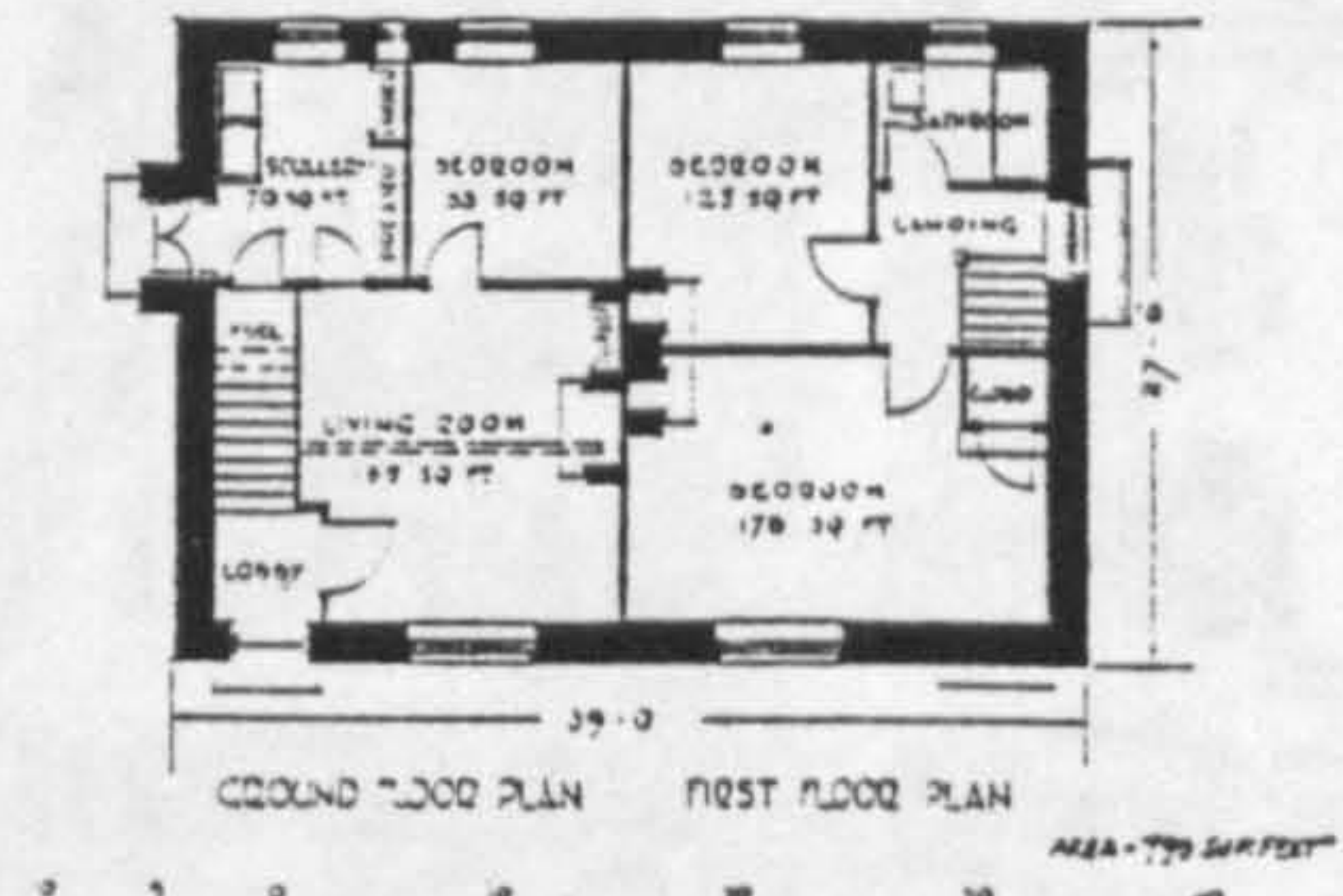
Economically Planned Houses, DHS Memorandum 1933

THREE-APARTMENT COTTAGE HOUSES,
PRESTONPANS, EAST LOTHIAN.



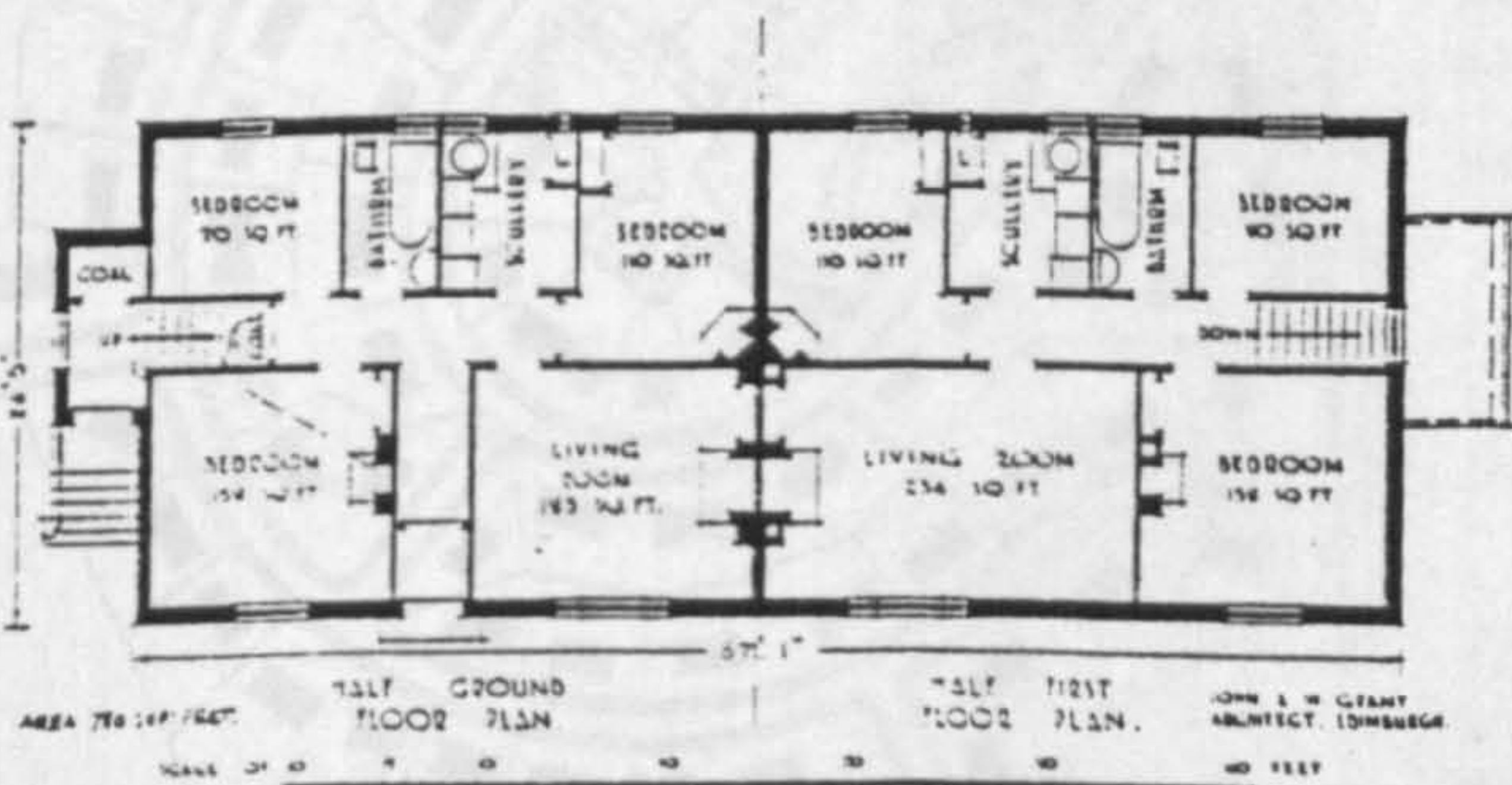
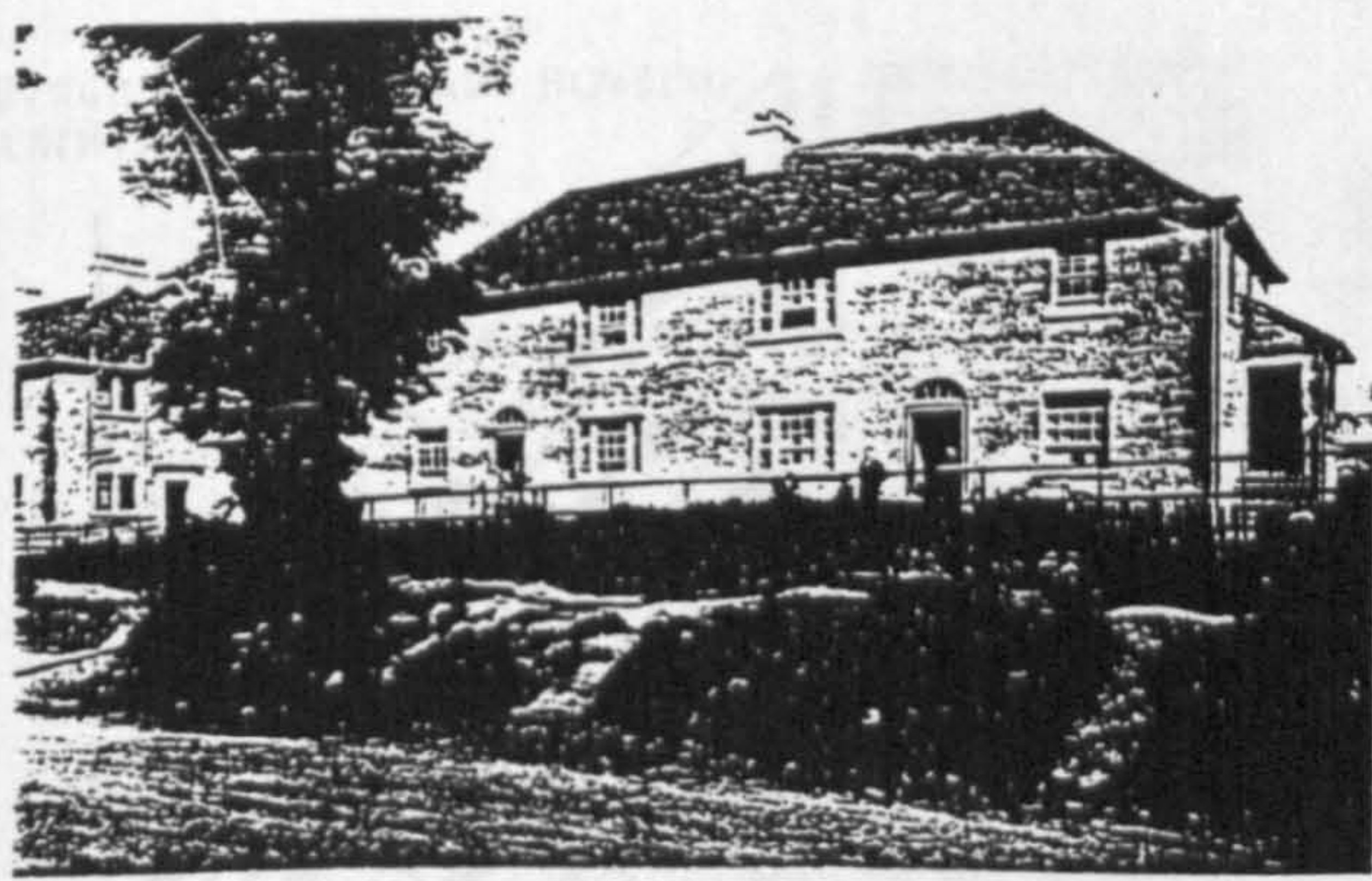
These houses are compact in planning. The slip-down roof over the staircase makes for economy and gives a distinct feature to the design.

FOUR-APARTMENT COTTAGE HOUSES,
DURNES STREET, THURSO.



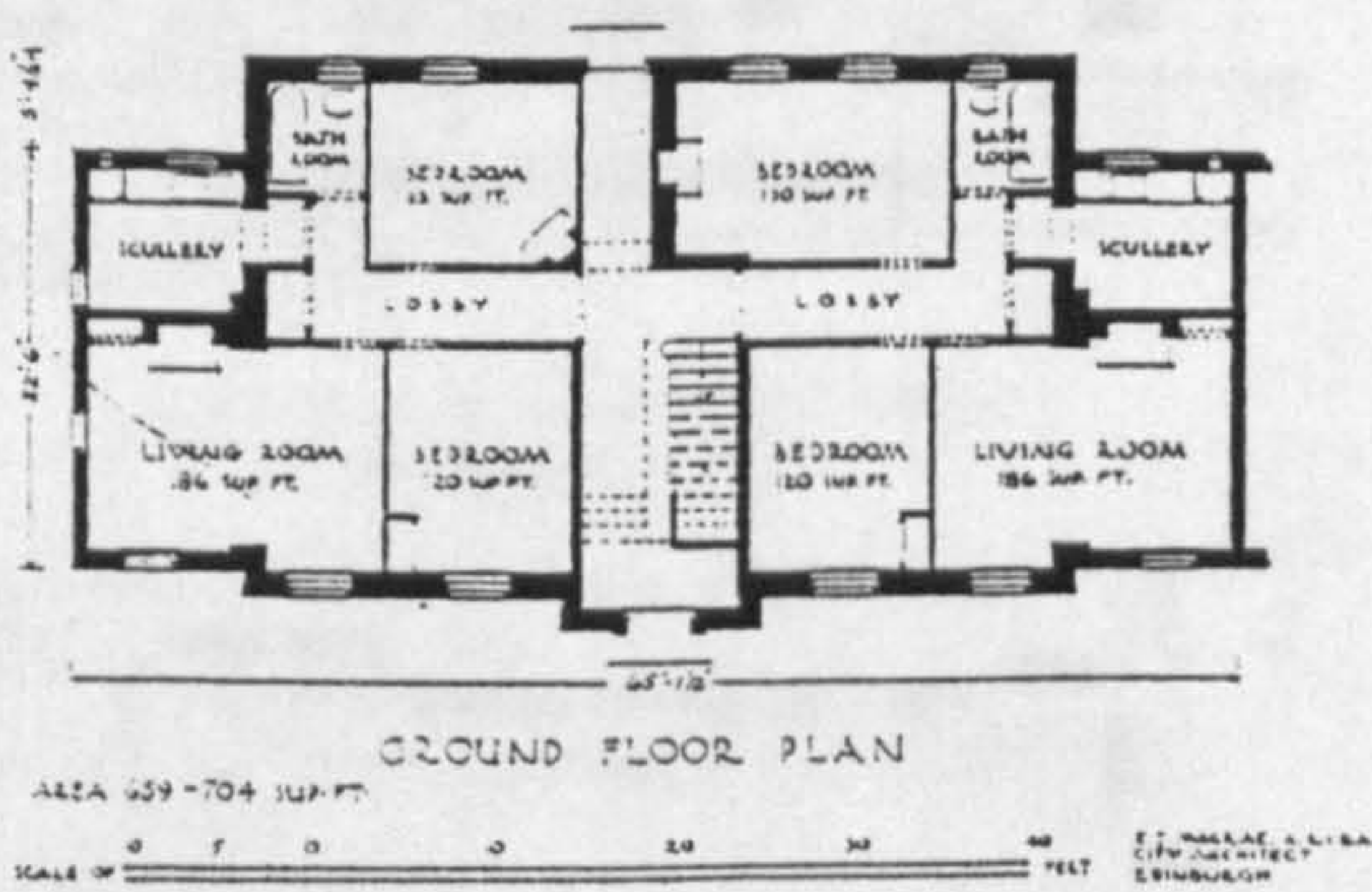
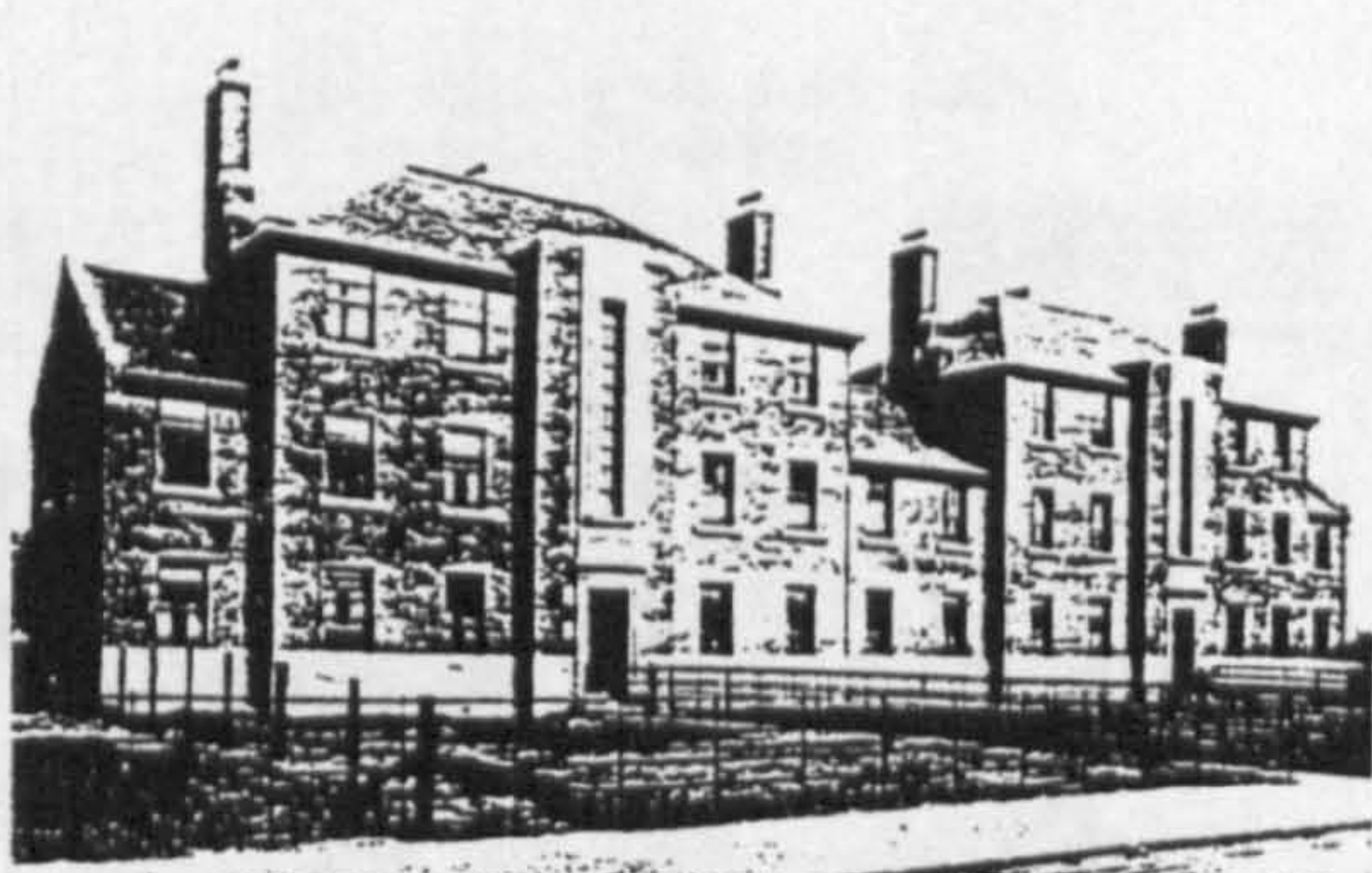
The plan is of an economical type and has been adopted in various parts of the country.

FOUR-APARTMENT FLATTED HOUSES,
POLTON ROAD, LASSWADE.



In this plan the entrance to the ground floor house is at the front, and only two apartments are thus placed at the front of the house. The use of broad windows divided with astragals and the circular fanlights over the doors give character to the design.

THREE-APARTMENT TENEMENT HOUSES,
SAUGHTON, EDINBURGH.



This plan shows a block of twelve houses with low recessed wings which give prominence to the central portions.

Figure 3.03

Economically Planned Houses, DHS Memorandum 1933

TENEMENT HOUSES IN THE QUADRANT, SAUGHTON, EDINBURGH
(City Architect, Edinburgh).



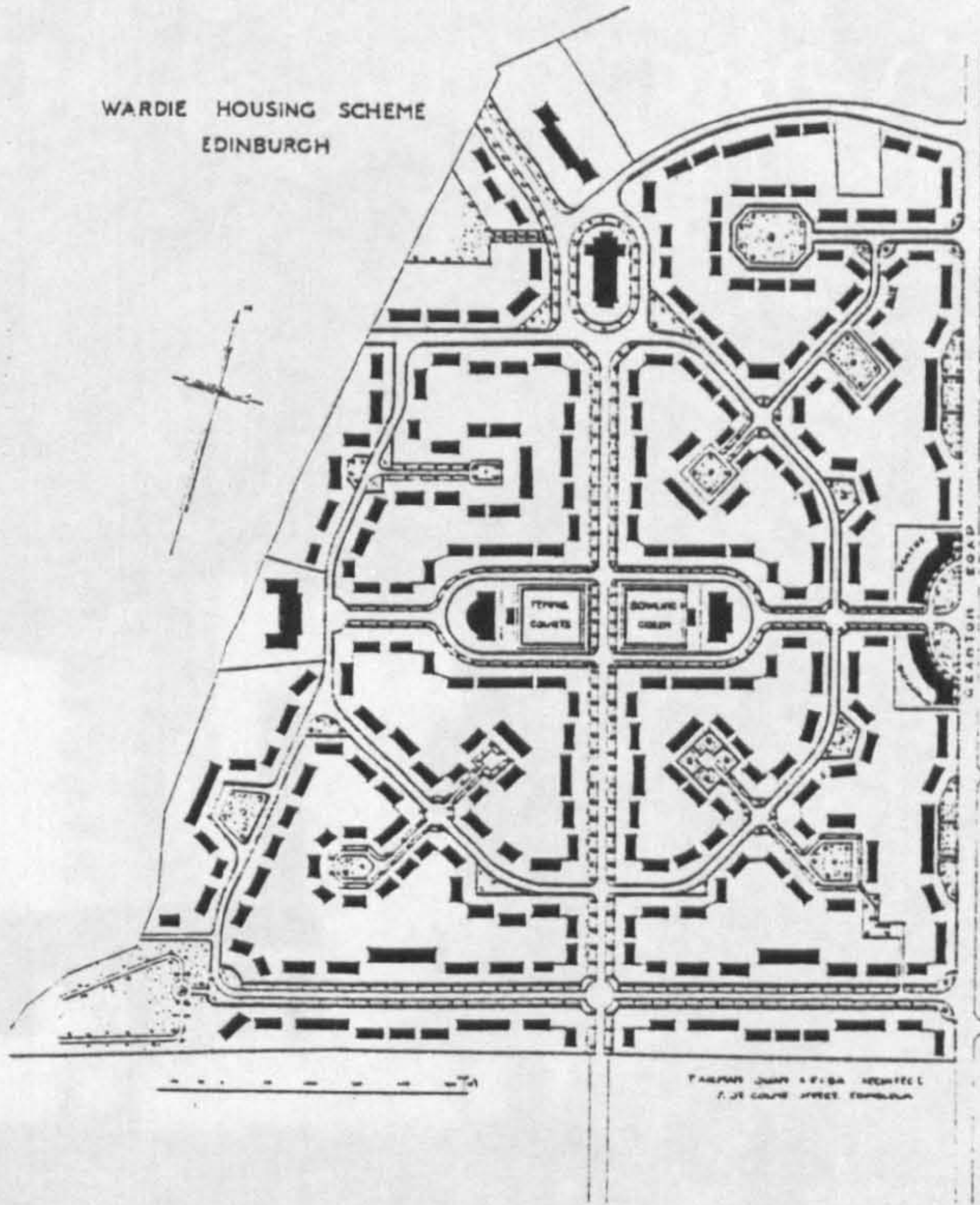
A view of a pleasing three-storey block of continuous houses. This quadrant which faces the large open space is broadly treated and forms a distinctive feature in the Housing Scheme.

TENEMENT HOUSES IN BROAD STREET, STIRLING
(Burgh Surveyor, Stirling).



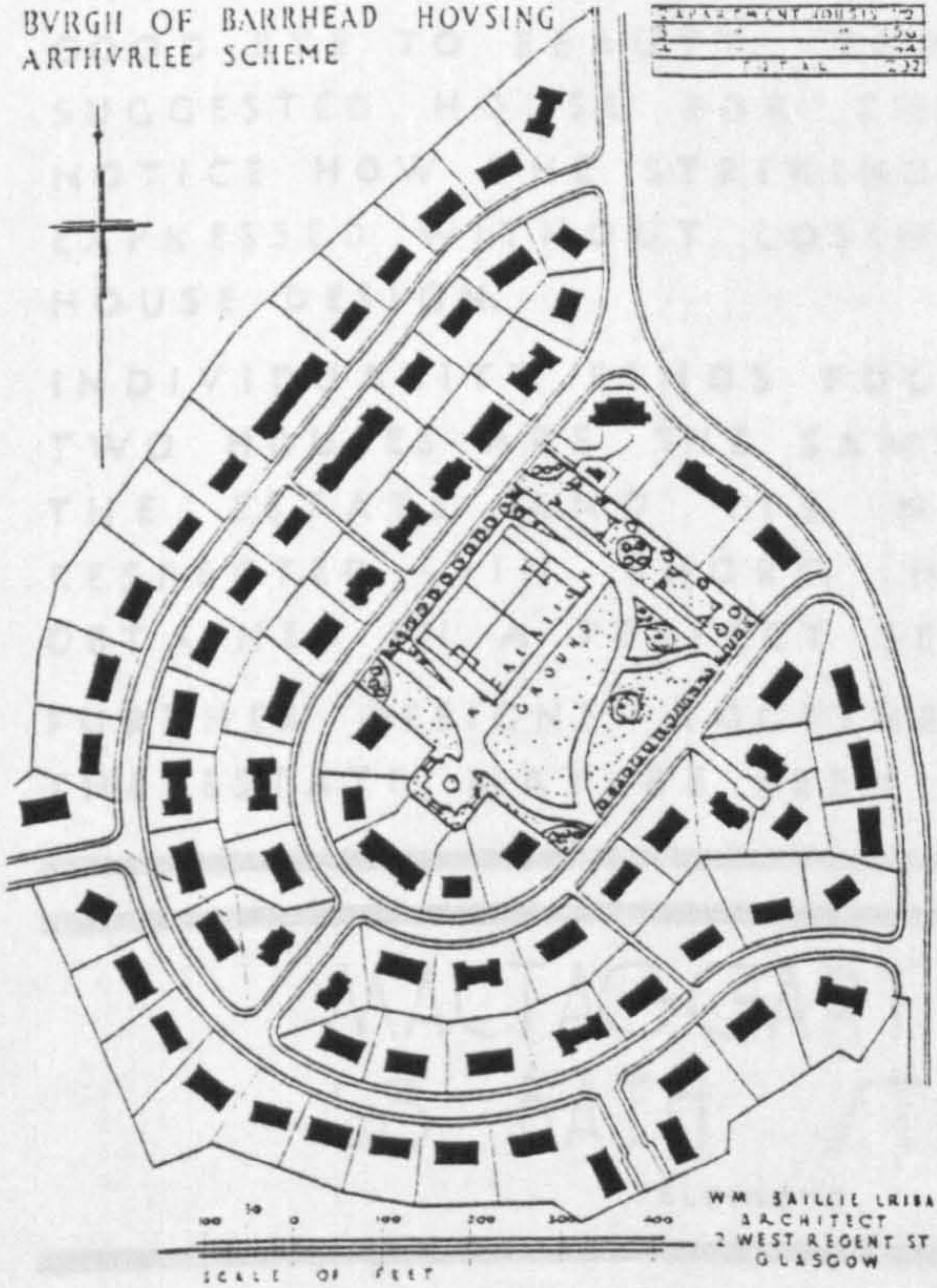
This view of houses illustrates how successfully the new work has been made to harmonise with the character of the old work in this well-known street.

LAY-OUT PLAN OF HOUSING SCHEME, WARDIE, EDINBURGH.



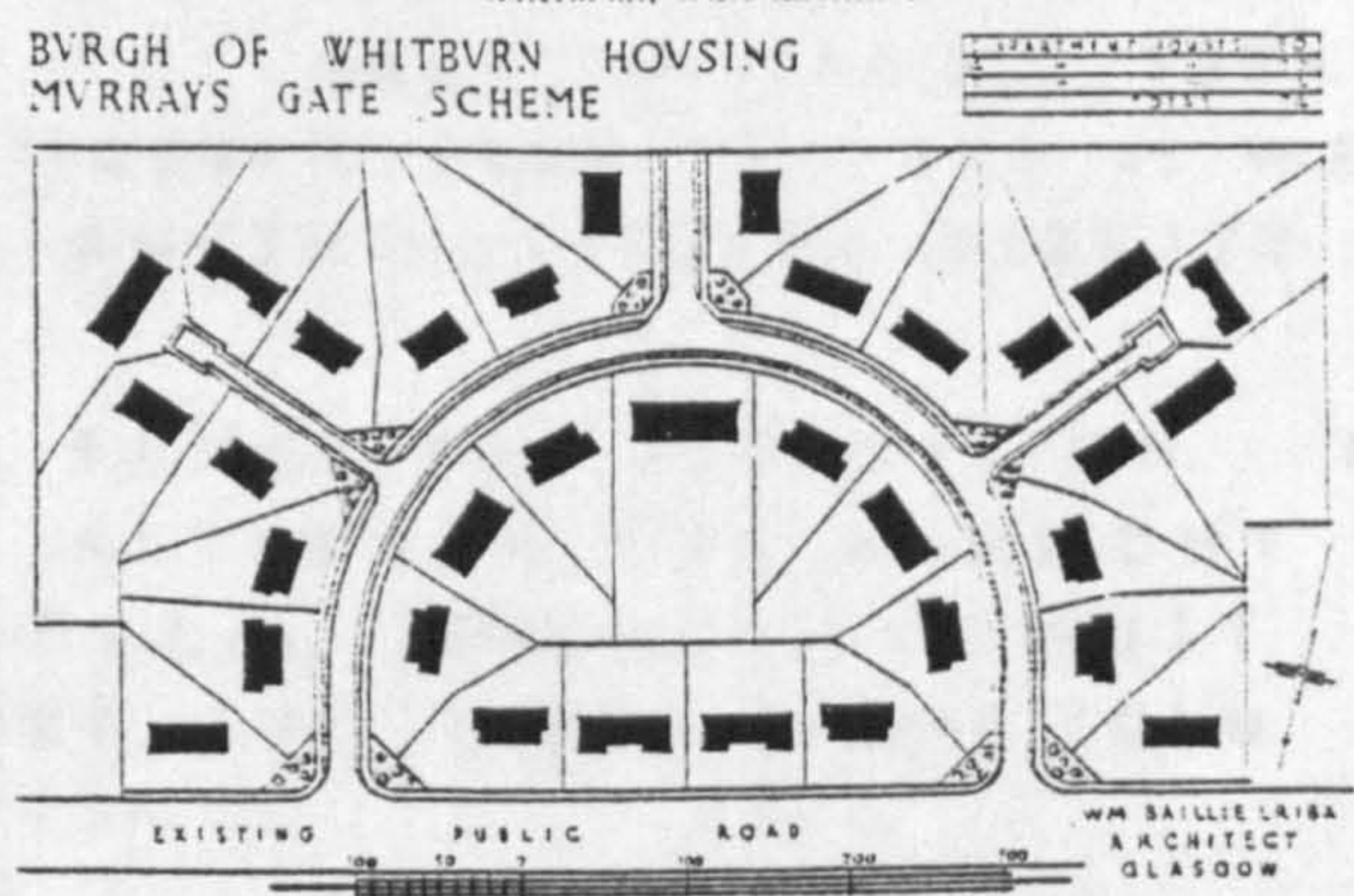
This plan is a good example of the successful lay-out of a large scheme. The eastmost portion was developed by private enterprise, and was altered considerably in execution.

BURGH OF BARRHEAD HOUSING ARTHURLEE SCHEME



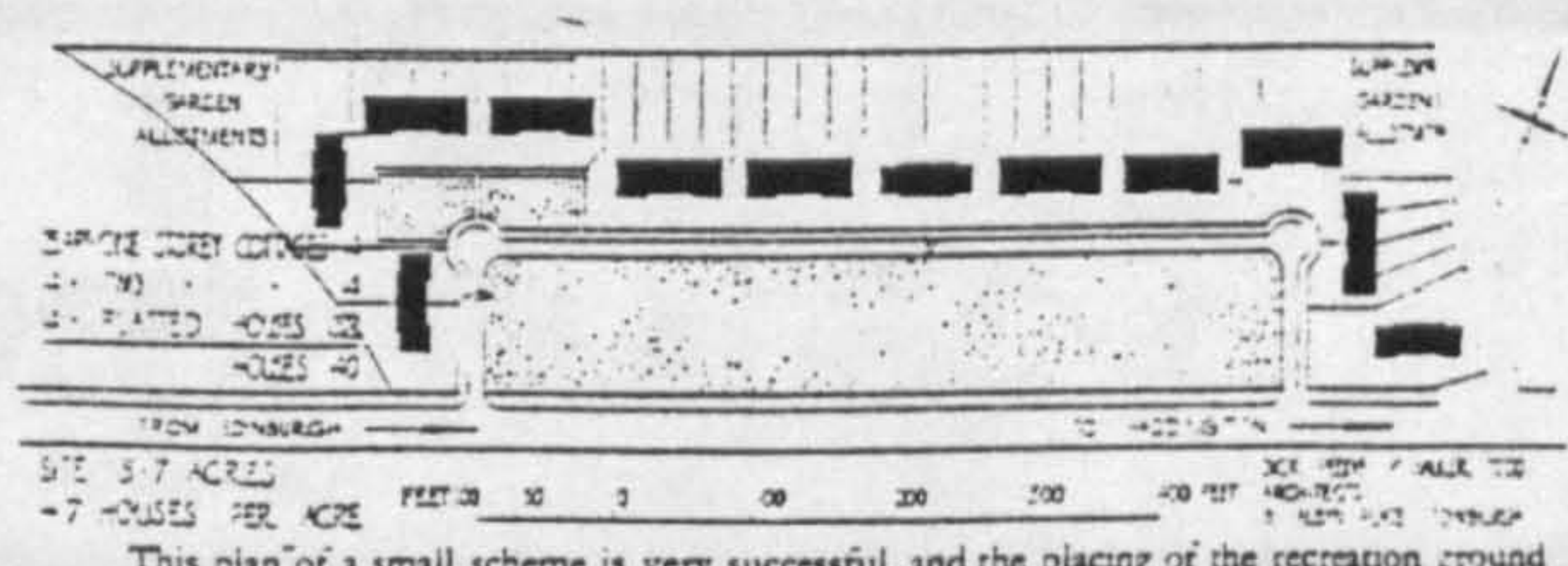
This plan shows the houses grouped round the recreation ground in the centre, giving a feeling of spaciousness to the scheme.

LAY-OUT PLAN OF HOUSING SCHEME, WHITHORN, WEST LOTHIAN.



This plan of a smaller scheme shows how by means of the circular treatment of the street, breadth of design can be obtained.

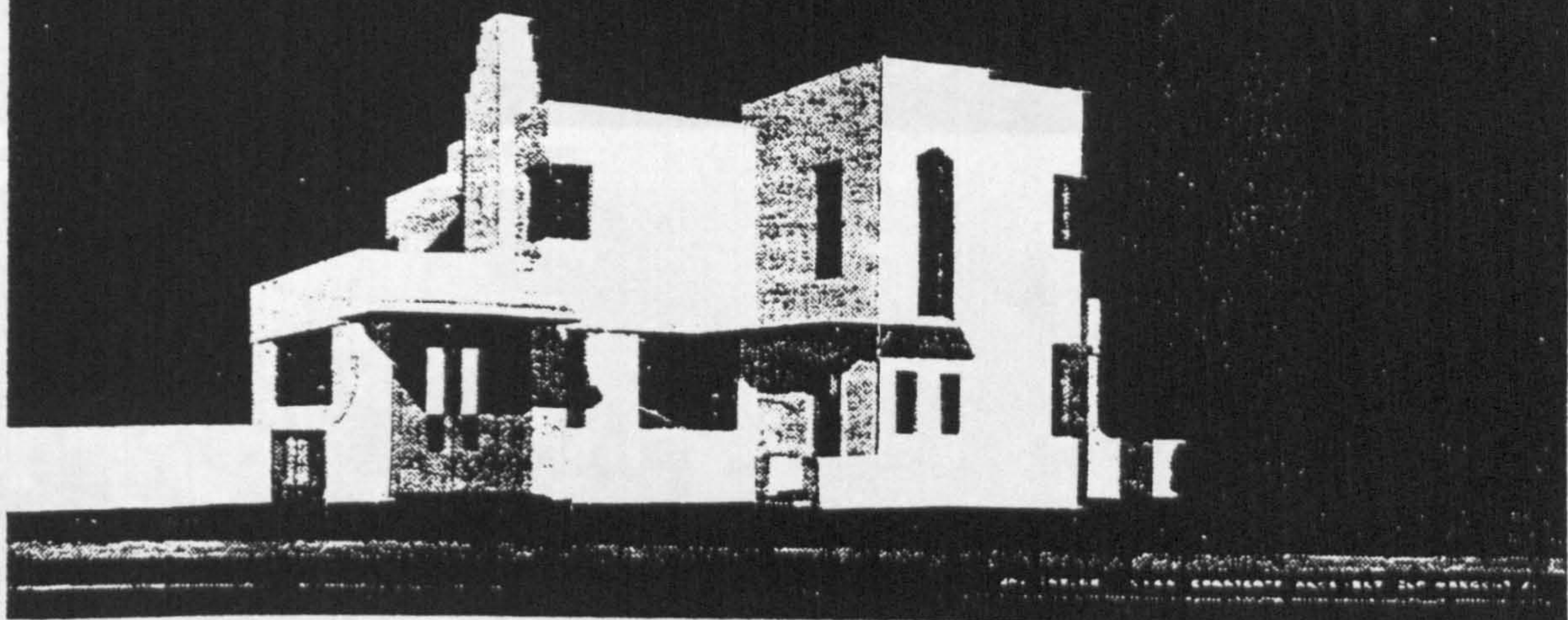
LAY-OUT PLAN OF HOUSING SCHEME, MACMERRY, EAST LOTHIAN.



This plan of a small scheme is very successful, and the placing of the recreation ground between the road and the houses is one that might be adopted more where houses are placed along a main road in a country district.

Proposed Private Housing 1930 s style

THE BROOM ESTATE WHITECRAIGS



THE ADOPTION OF MODERNISM DOES NOT ALWAYS BID GOOD-BYE TO BEAUTY. THE ILLUSTRATION ABOVE SHOWS A SUGGESTED HOUSE FOR THE "A" AREA OF BROOM ESTATE. NOTICE HOW THE STRIKING MODERN ARCHITECTURE IS WELL EXPRESSED WITHOUT LOSING ANYTHING OF THE DIGNITY OF HOUSE DESIGN.

INDIVIDUALITY FINDS FULL RANGE FOR EXPRESSION. NO TWO HOUSES ARE THE SAME, ALTHOUGH THE HARMONY OF THE ESTATE AND ITS NATURAL AMENITIES MUST BE RESPECTED. IN SHORT, HERE THE IDEAL HOME CAN BE OBTAINED IN A PERFECT SETTING.

FURTHER DESIGNS, TOGETHER WITH A MODEL OF PART OF THE ESTATE, MAY BE SEEN AT—

MACTAGGART & MICKEL LTD
63 BATH STREET GLASGOW

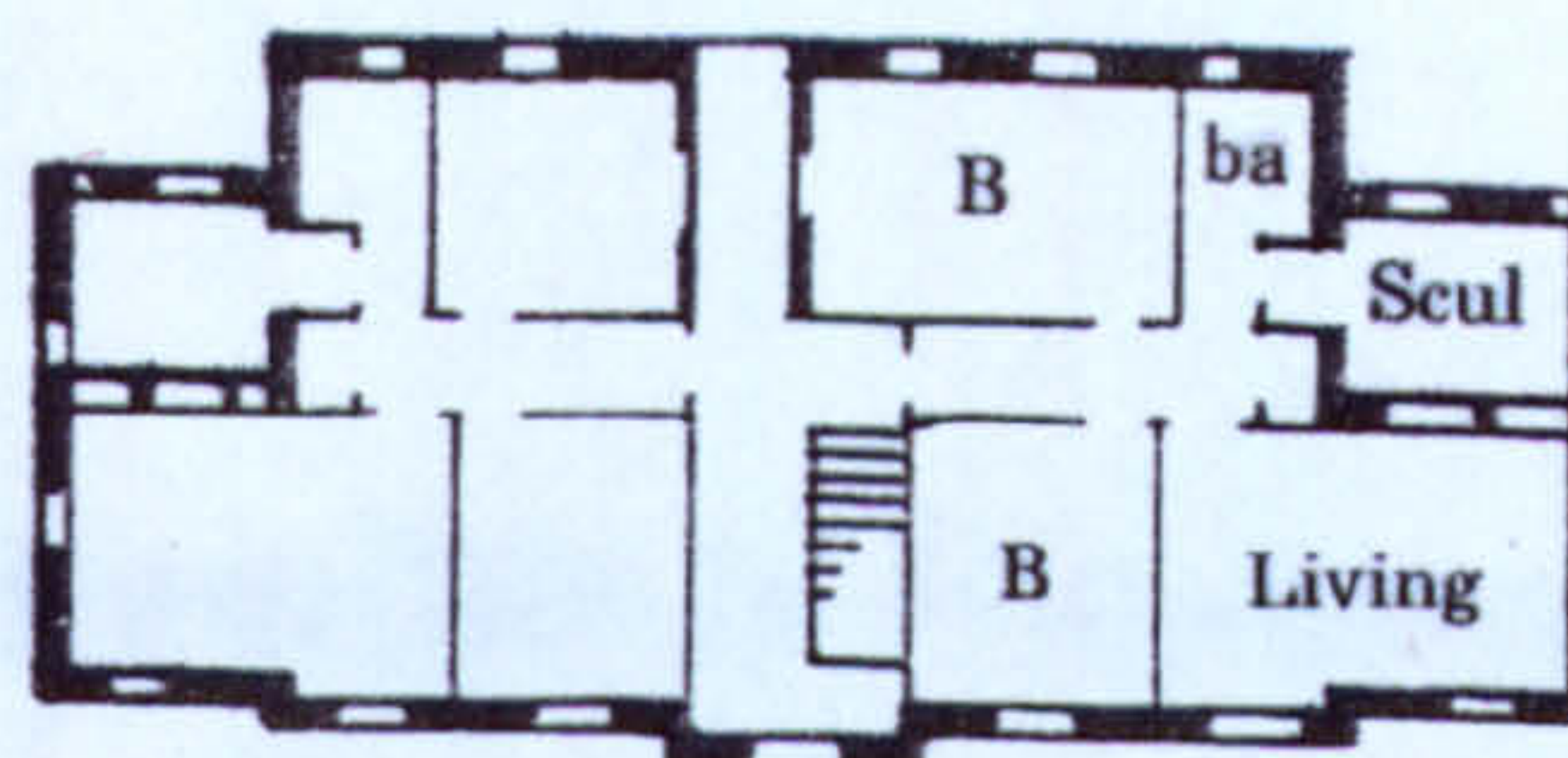
TELEPHONE DOUGLAS ONE

The Broom Estate offered both pitched and flat roof designs. Although some houses were built with 1930's style features, there is no evidence that any flat roof houses were built.
Source : "The Scottish Thirties", p.169-171

Figure 3.05

Niddrie, Craigmillar

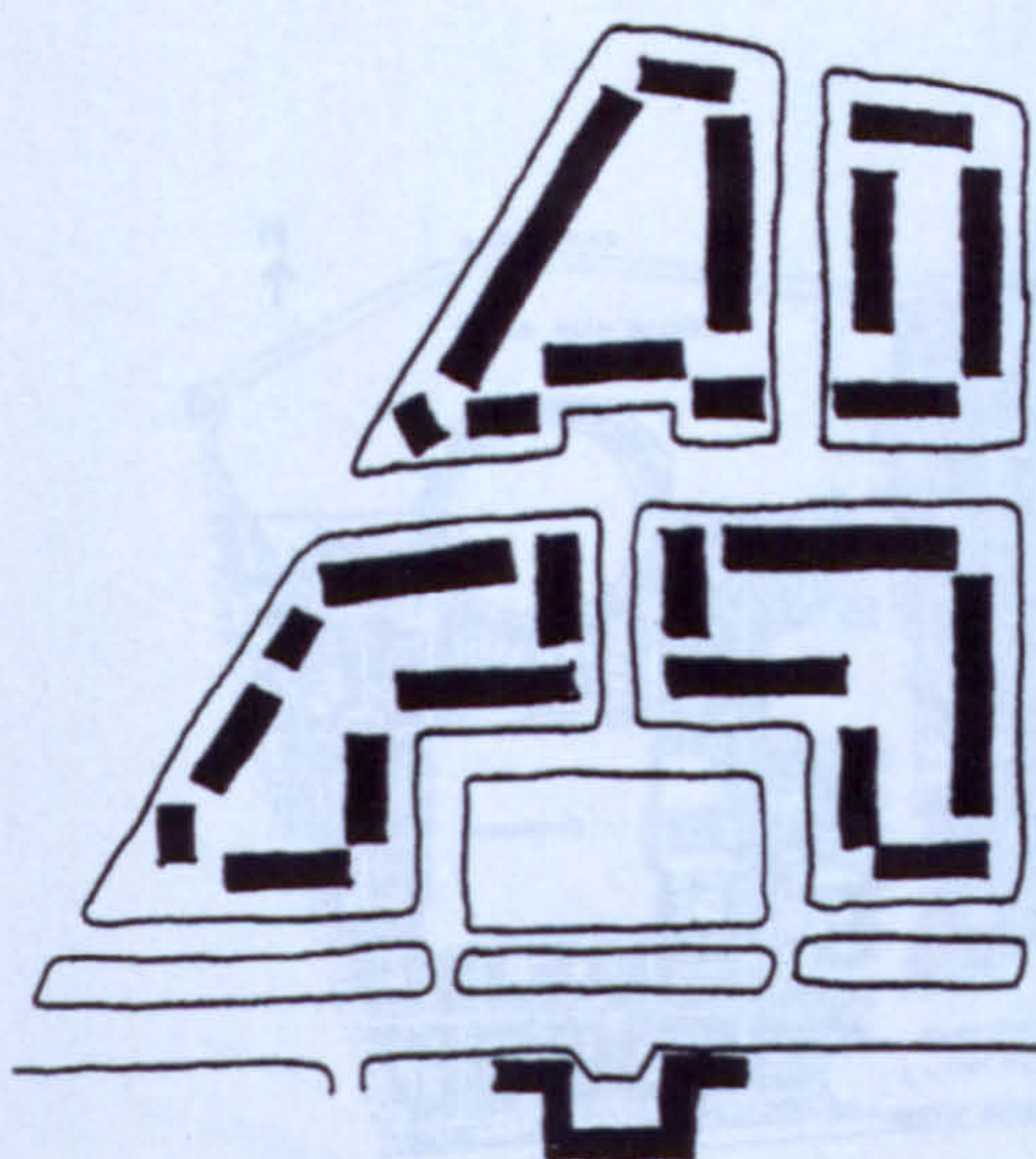
Edinburgh



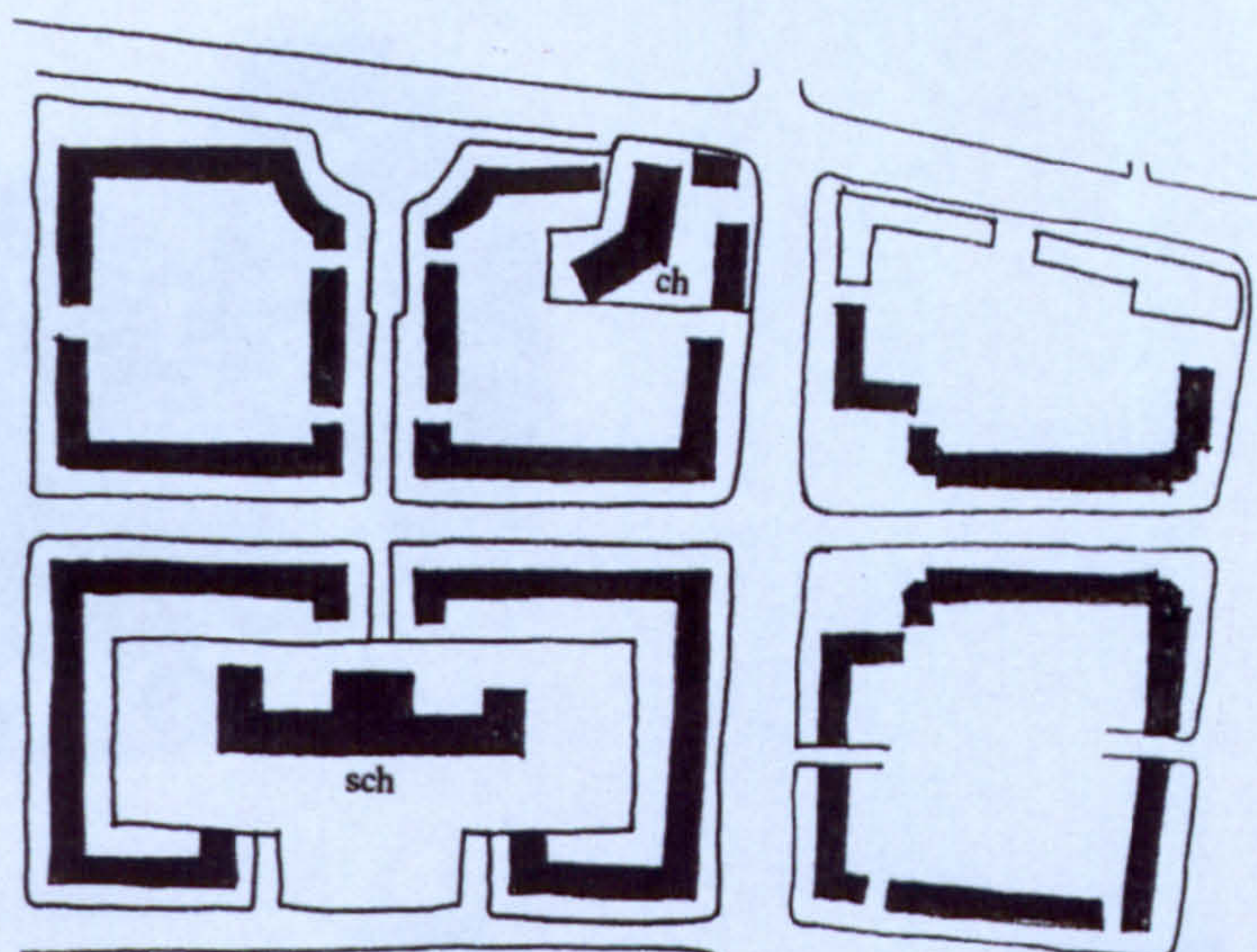
Formal axial massing of Niddrie from Wauchope Square



Craigmillar 1930 - 34 slum clearance housing two and three storey tenements 'in formal layout



Niddrie



Craigmillar

1:5,000

Figure 3.06

Pilton, Rehousing Slum Clearance Families in Edinburgh



East Pilton begun 1930



West Pilton begun 1937

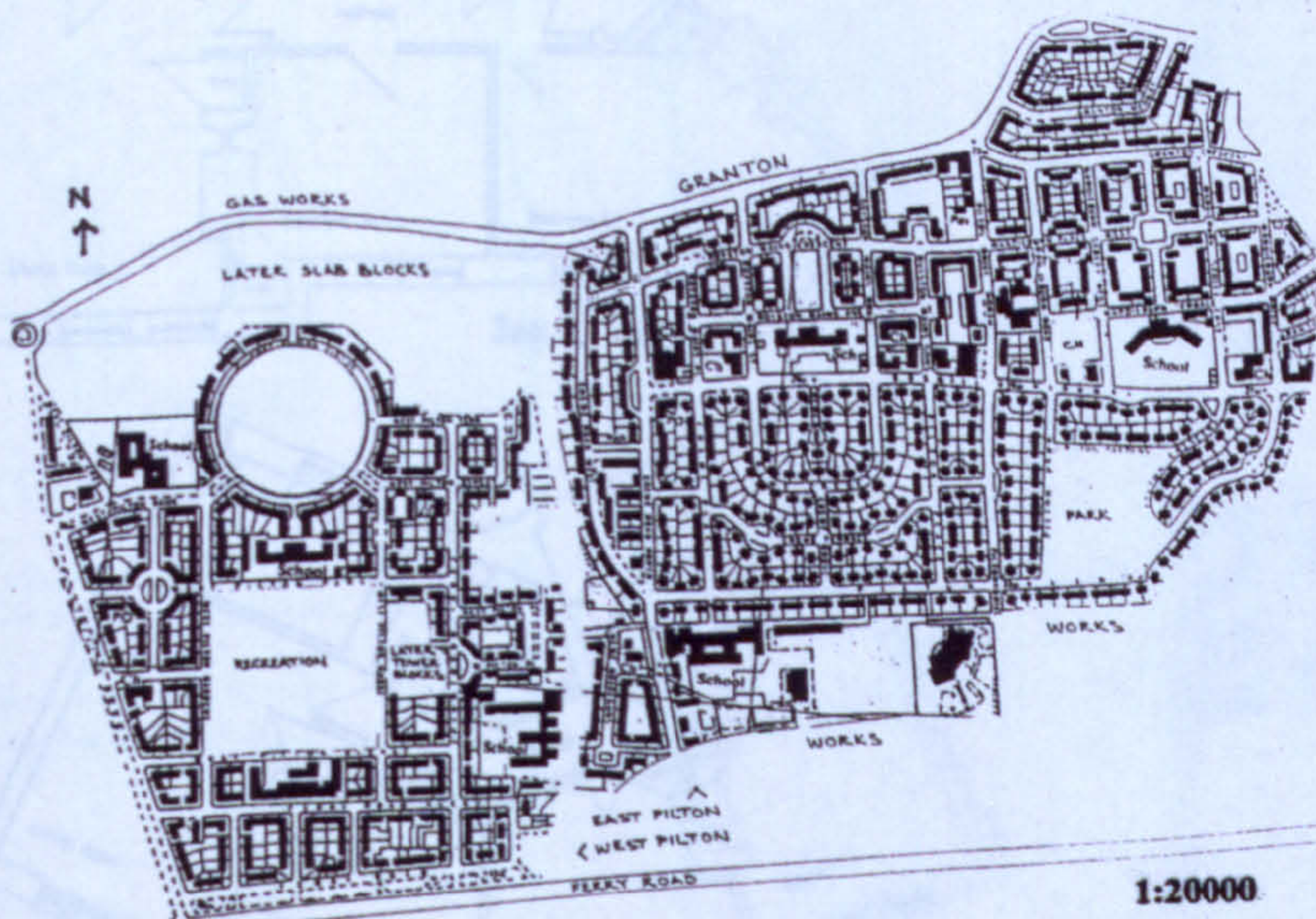


Figure 3.07

Parliament Place, Cambeltown 1936

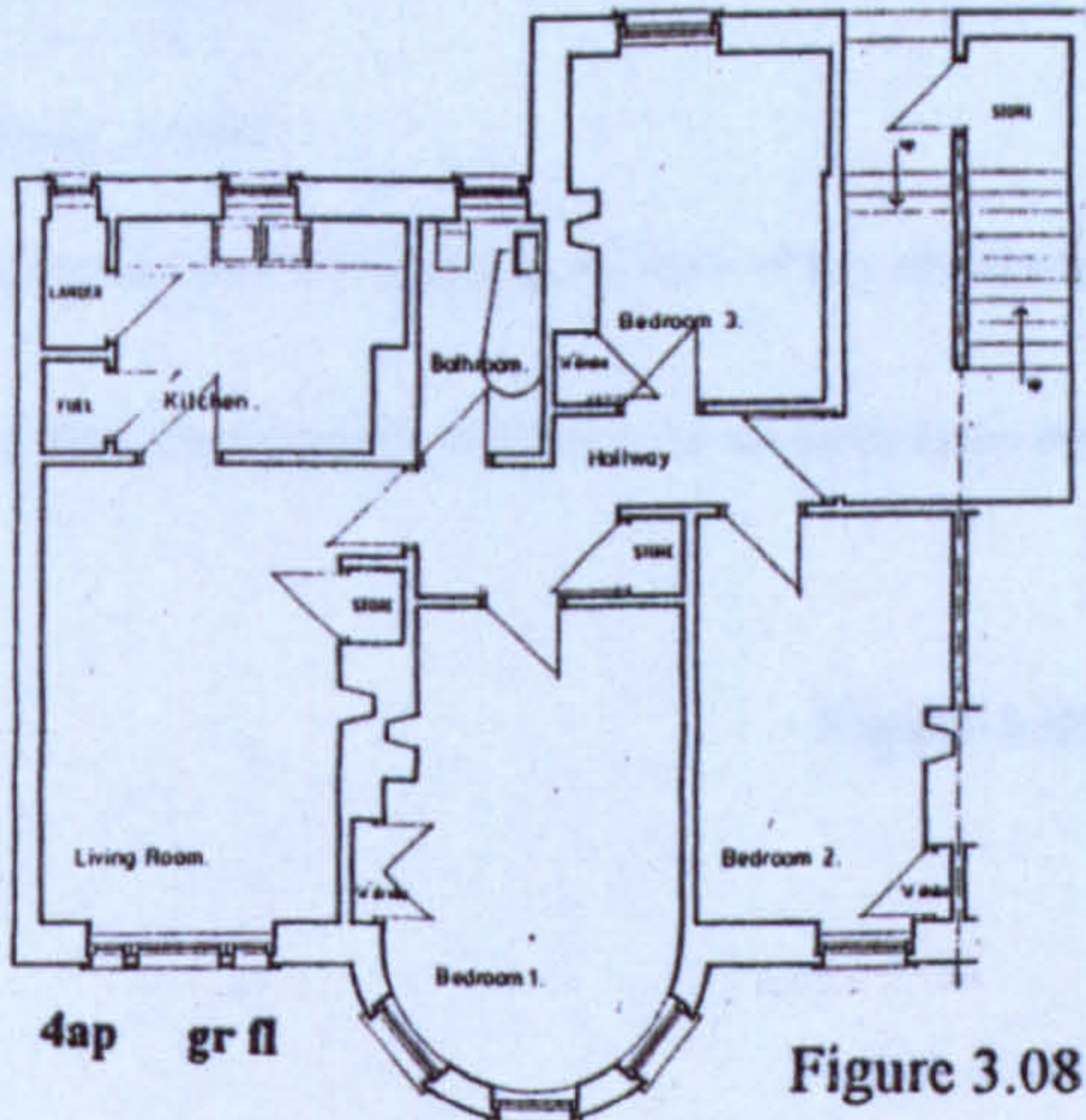
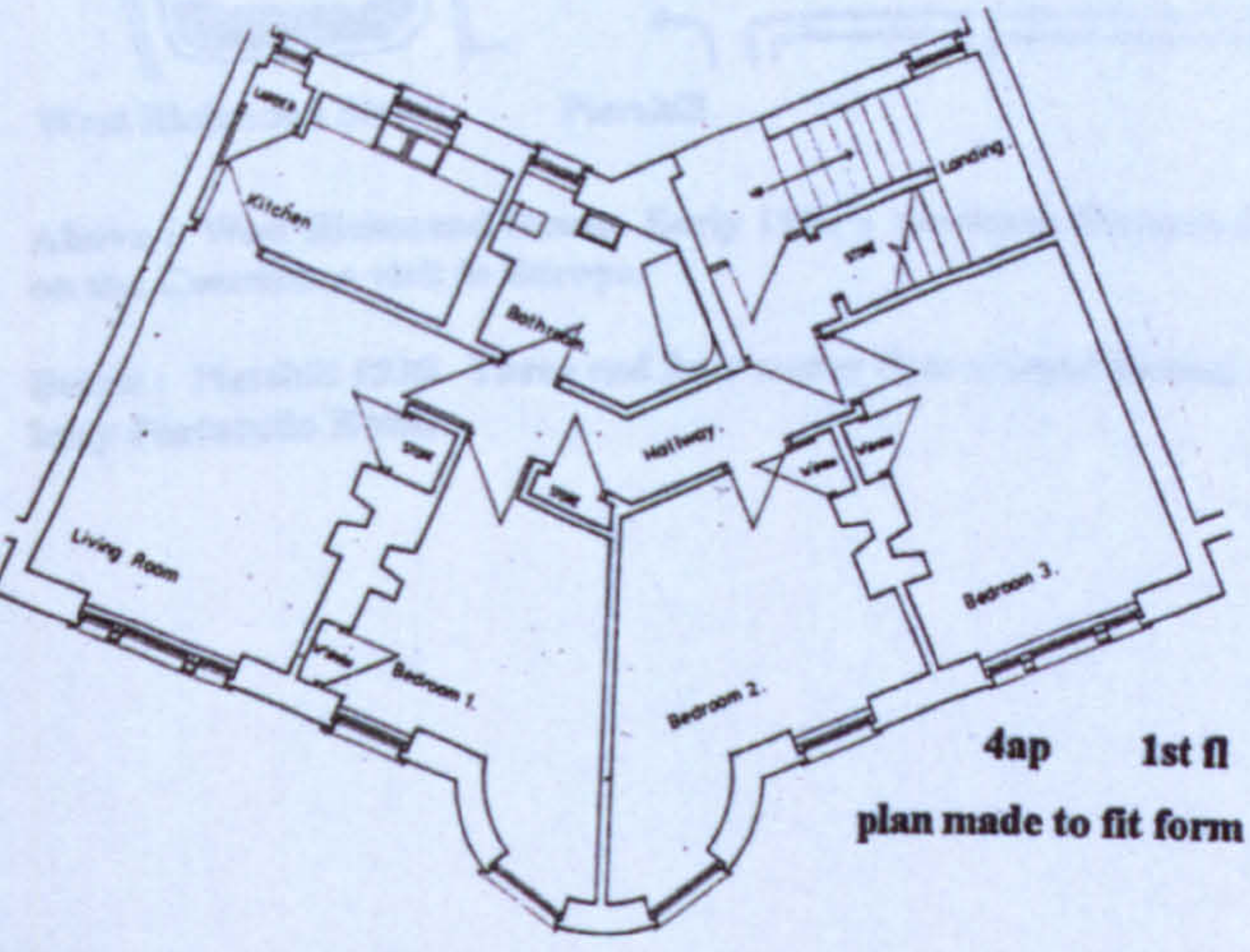
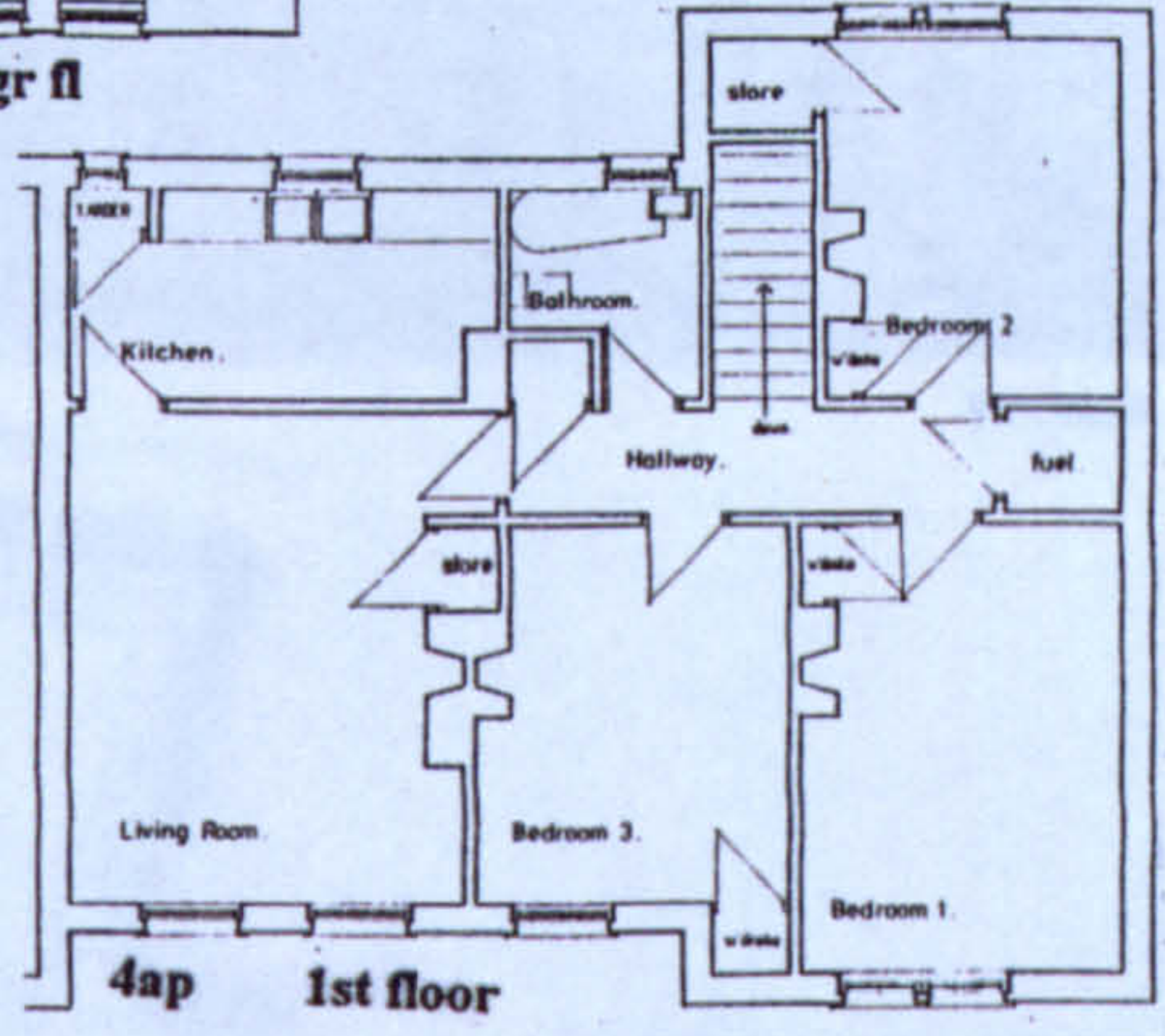
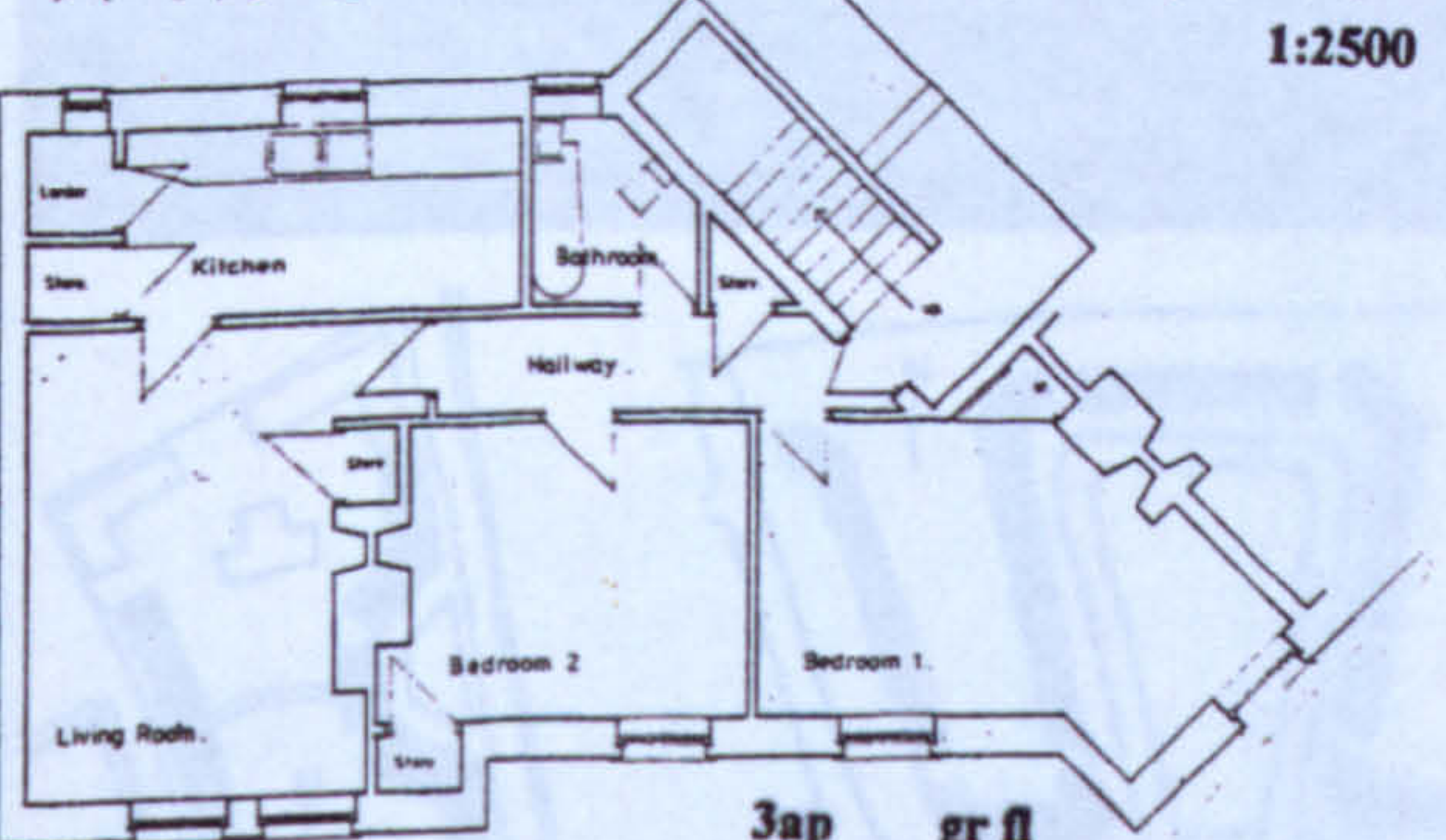
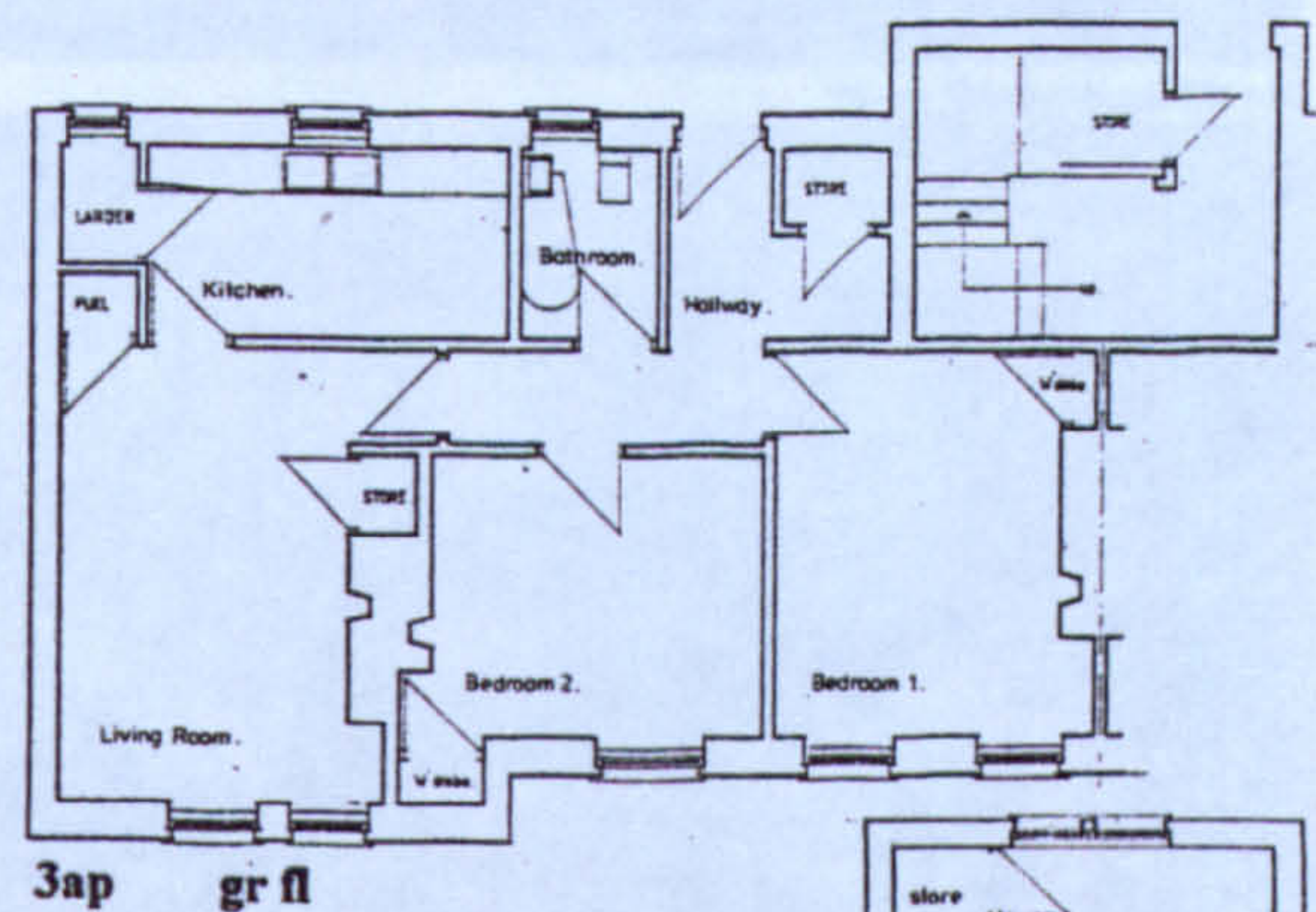
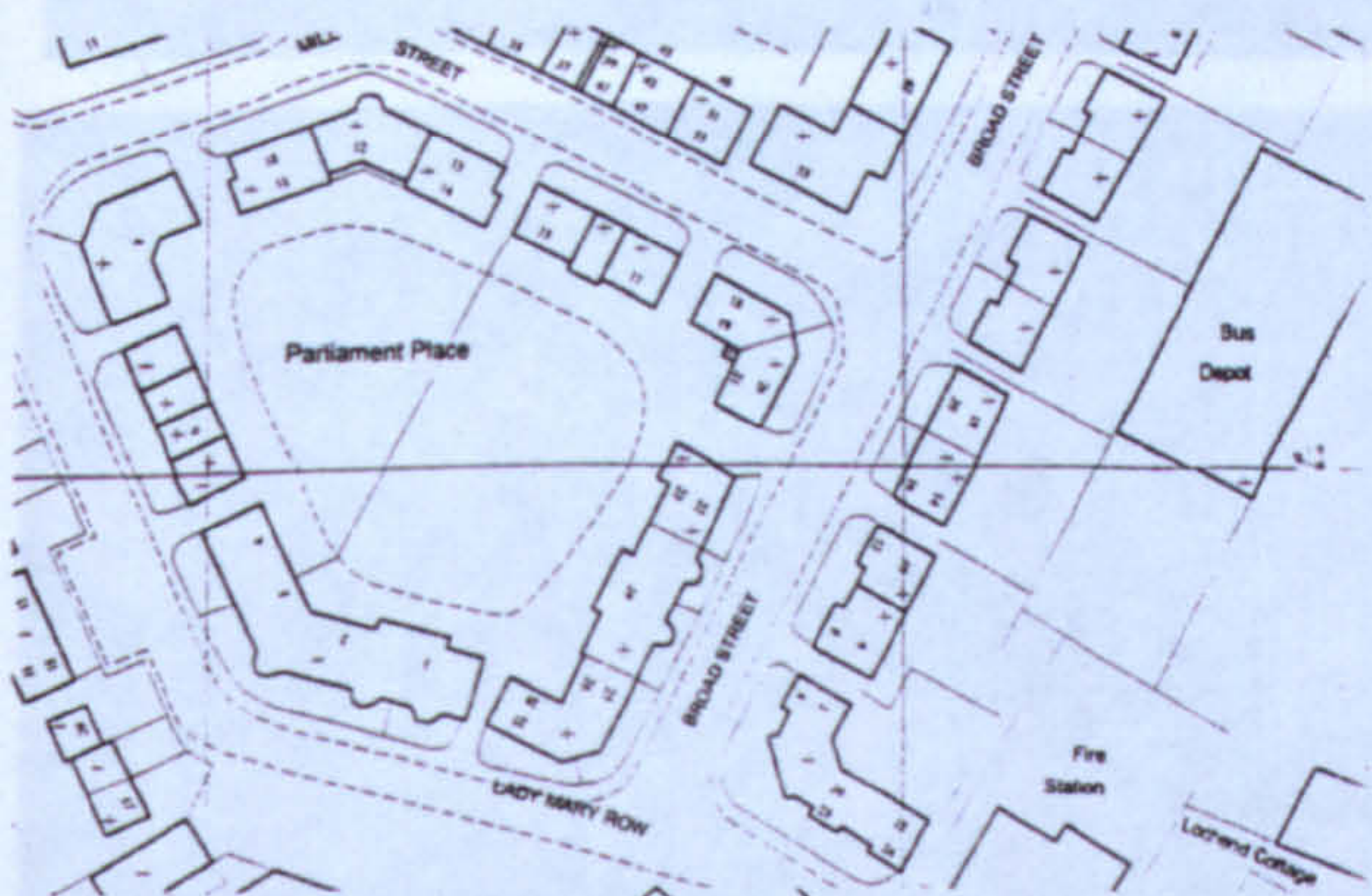


Figure 3.08

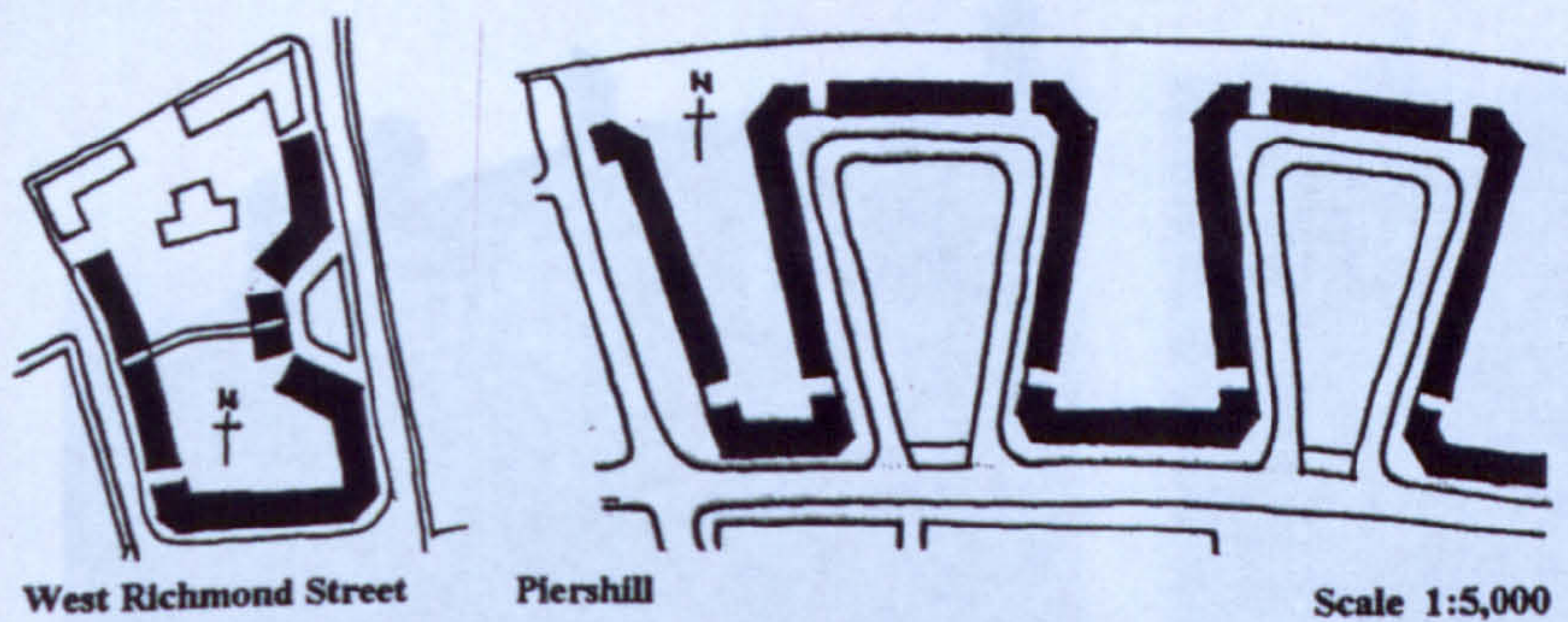
E. J. MacRae, Edinburgh City Architect



West Richmond Street



Piershill



West Richmond Street

Piershill

Scale 1:5,000

Above : West Richmond Street. Early 1930's predates Highton Committee report of 1935. MacRae was one of the architects on the Committee visit to Europe.

Below : Piershill 1938. Three and four storey flats around formal squares to allow the majority of flats to be set back from the busy Portobello Road.

Figure 3.09

Tenements Glasgow late 1930 s



1505 Shettleston Road - Concrete Block

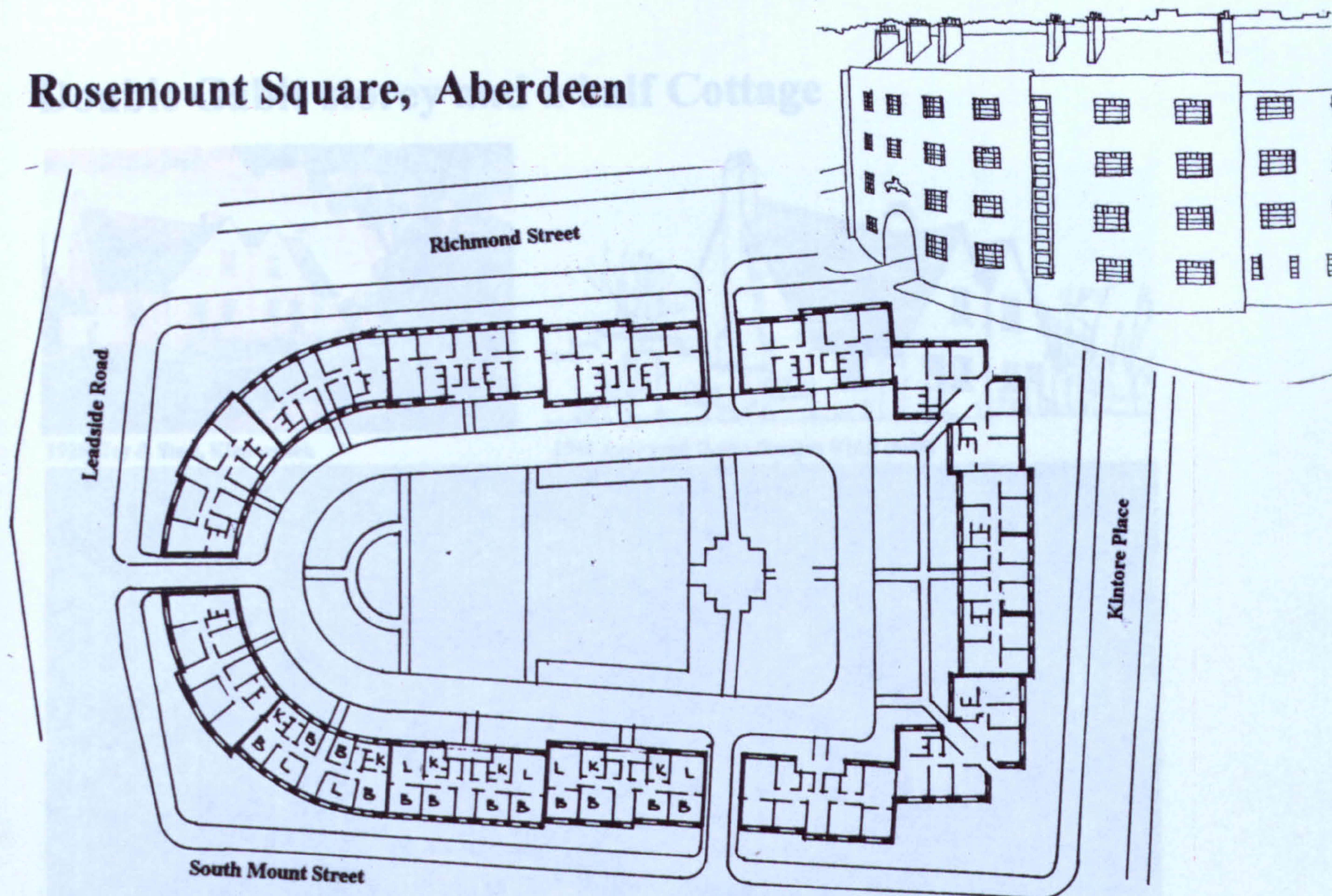


Anniesland Cross - Red Sandstone



Figure 3.10

Rosemount Square, Aberdeen



Designed by Aberdeen City Architects Department in 1938 it was not completed until 1945. Designed as a D plan of flats with three arched entrances it is unusual in that entrance to the flats is not from the street but from the internal court. Slate roof and granite walls, it is Aberdeen's answer to the 1935 Highton Report which advocated better quality tenements.



Entrance with winged horse sculpture over the arch.

Figure 3.11

Double Gable storey and a half Cottage



1928 Hay & Steel, Kilmarnock



1945 Approved House Designs RIAS DoHS



1930's Boyd Street, Galston, Ayrshire



1953 Westfield Road, Cupar, Fife

All the above use Grieg and Fairbairn's 1919 competition house type

Figure 3.12

Newmilns, Ayrshire 1930's



Houses have traditional detailing around doors and windows, originally all houses had sash and case windows.

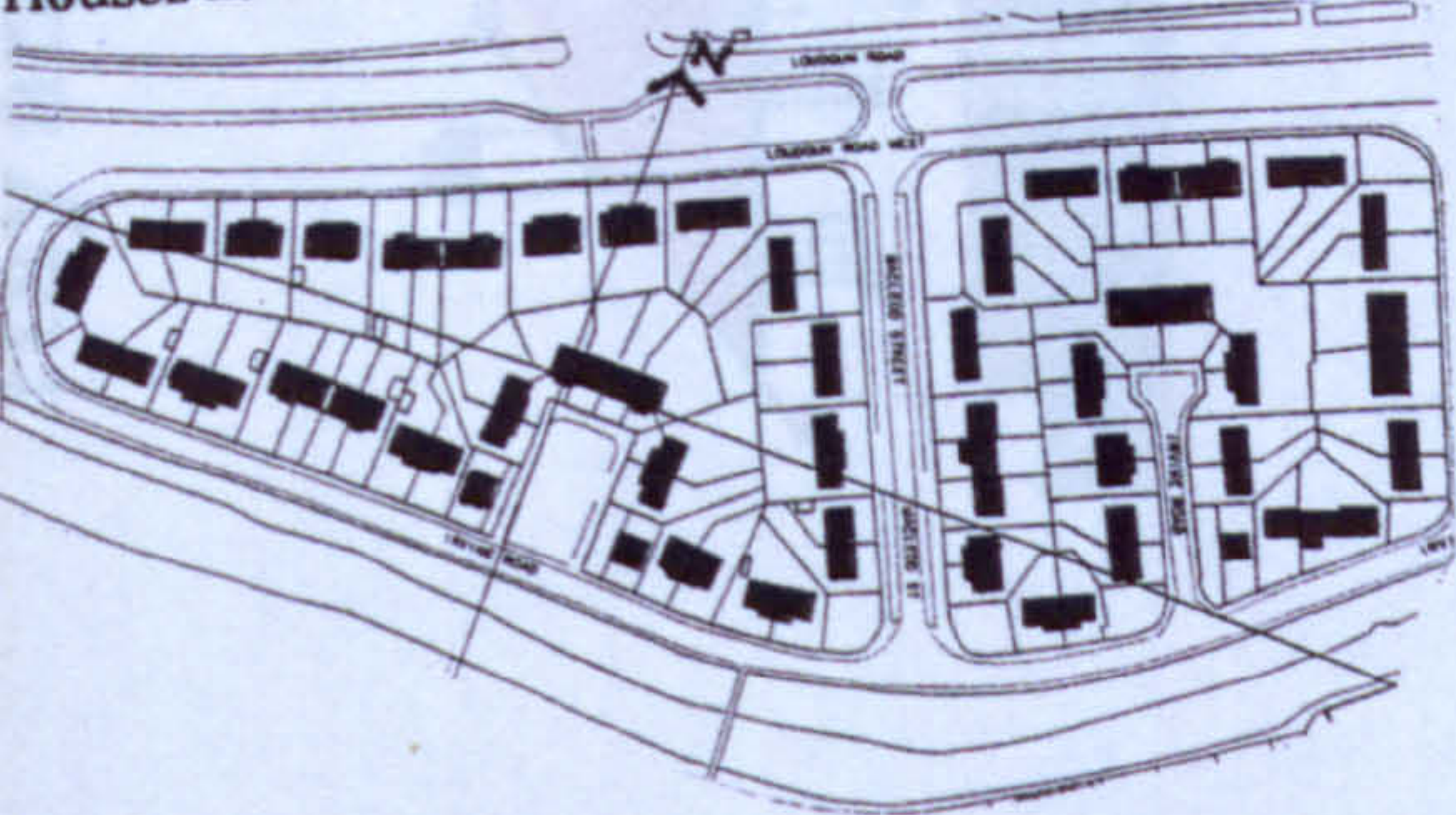
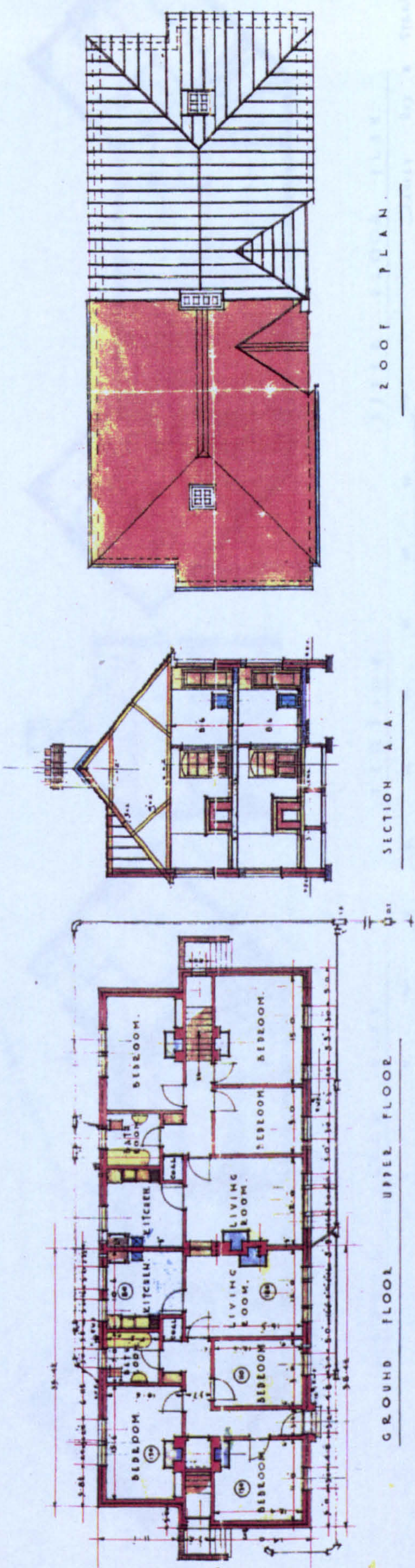
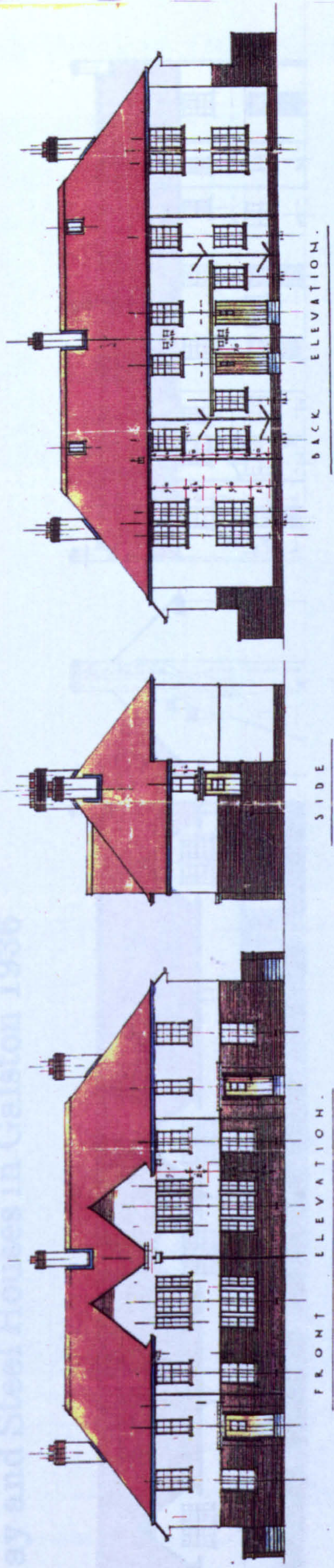


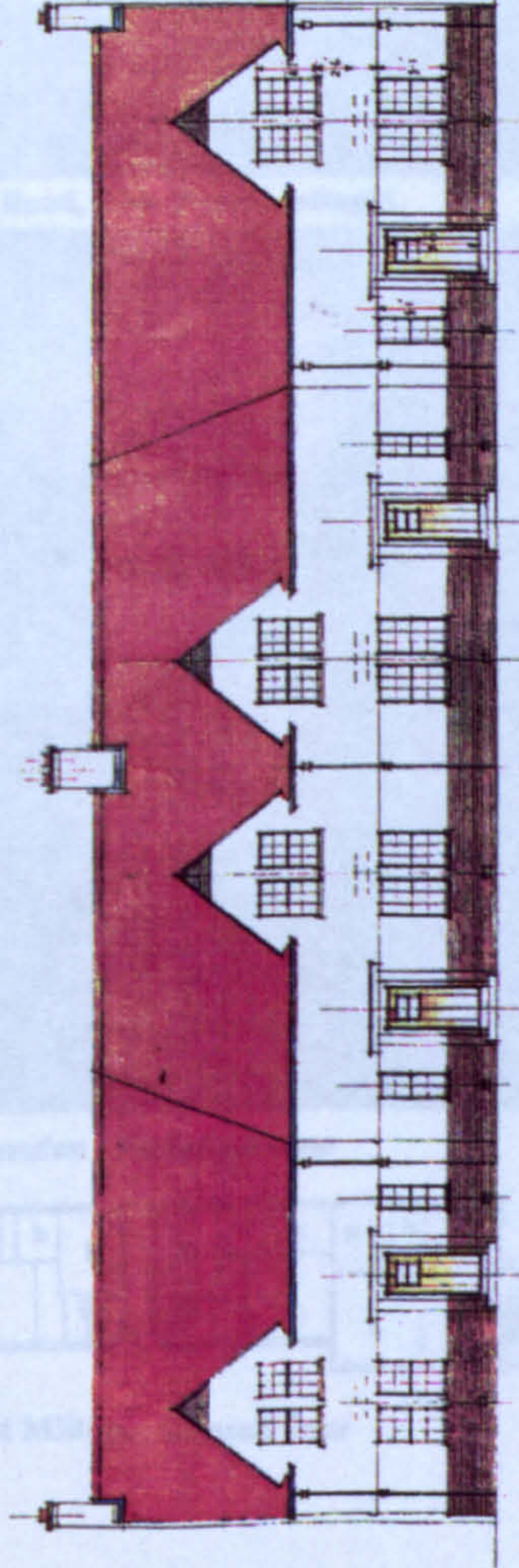
Figure 3.13



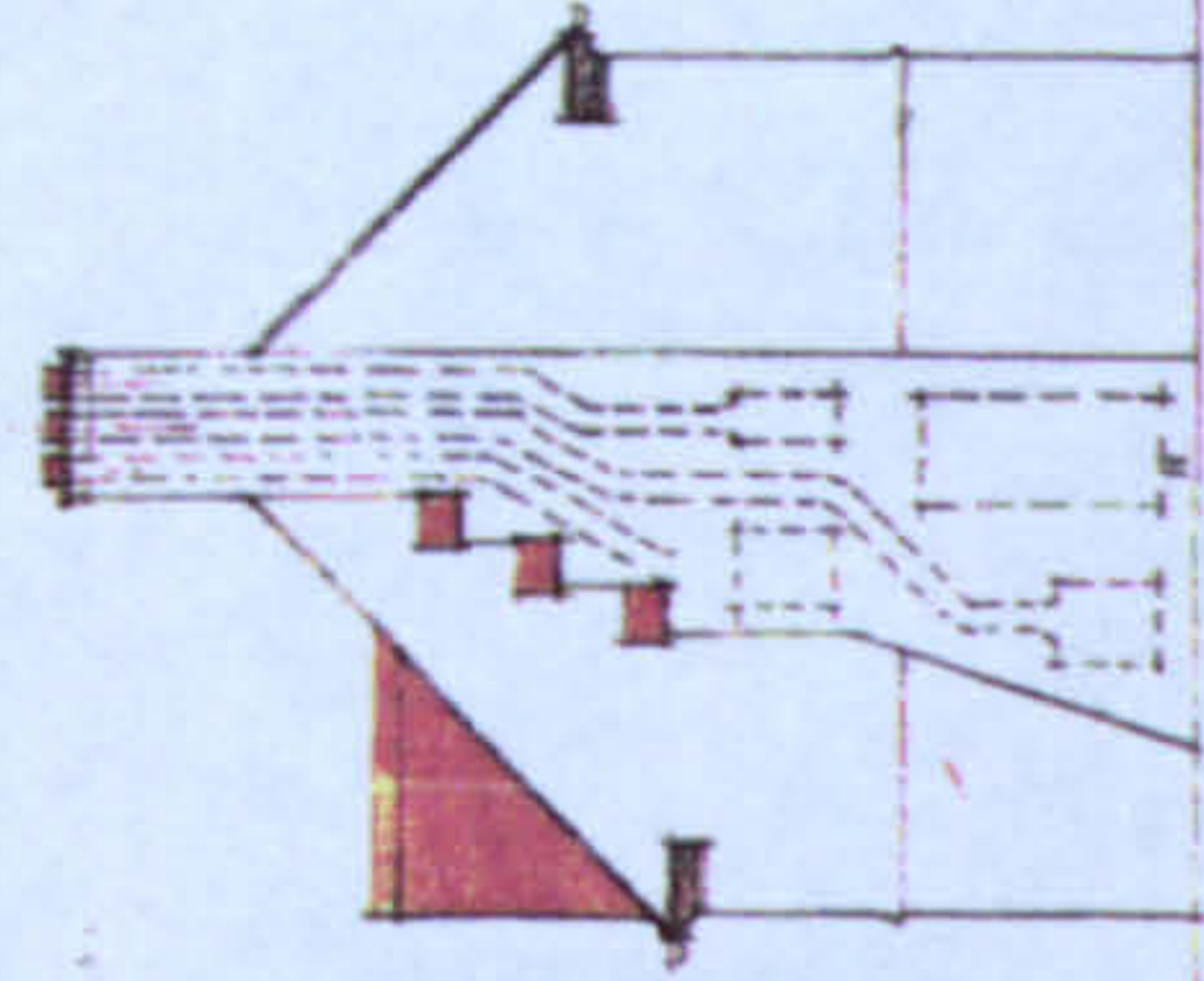
JAMES HAY & STEEL
ARCHITECTS

Figure 3.14

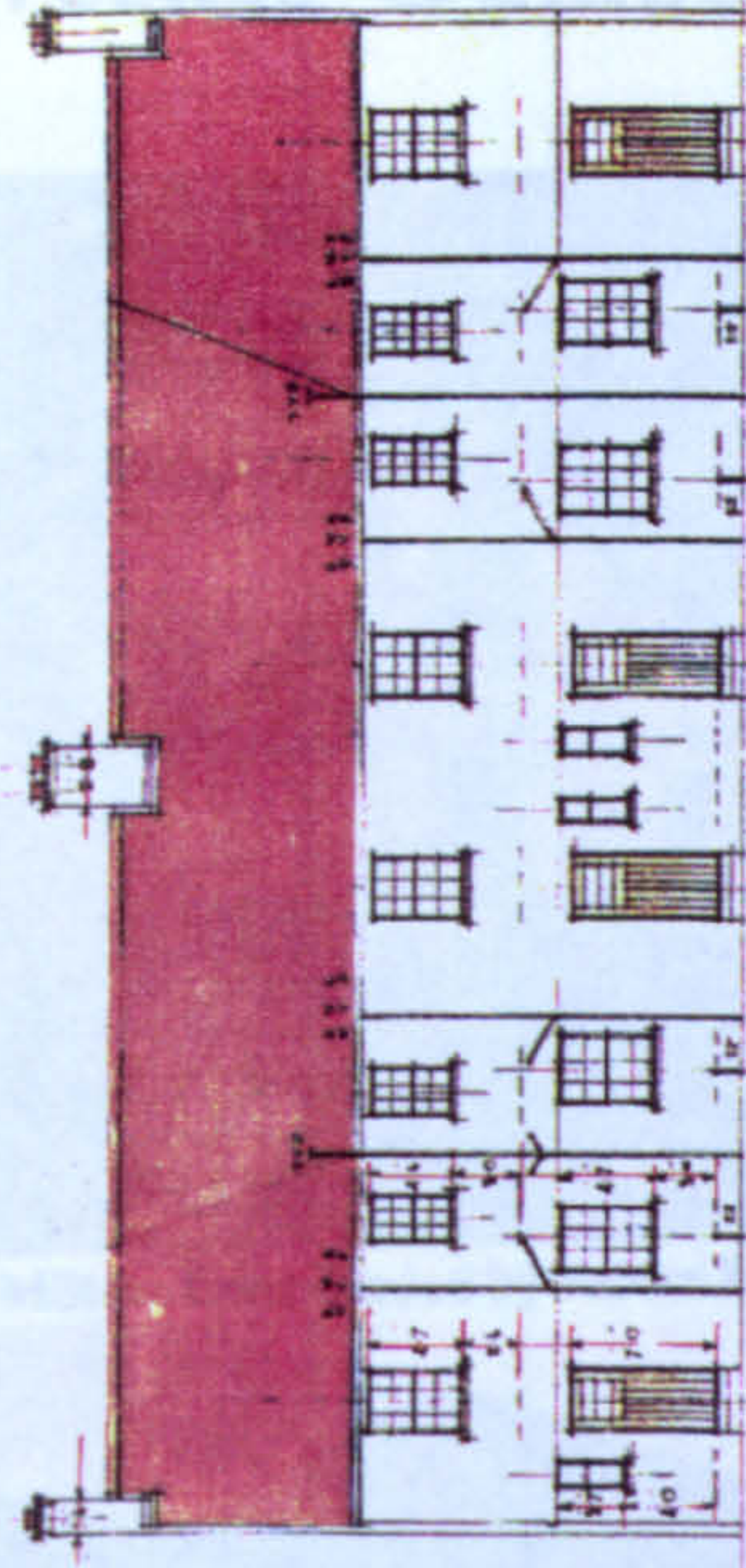
Hay and Steel Houses in Galston 1936



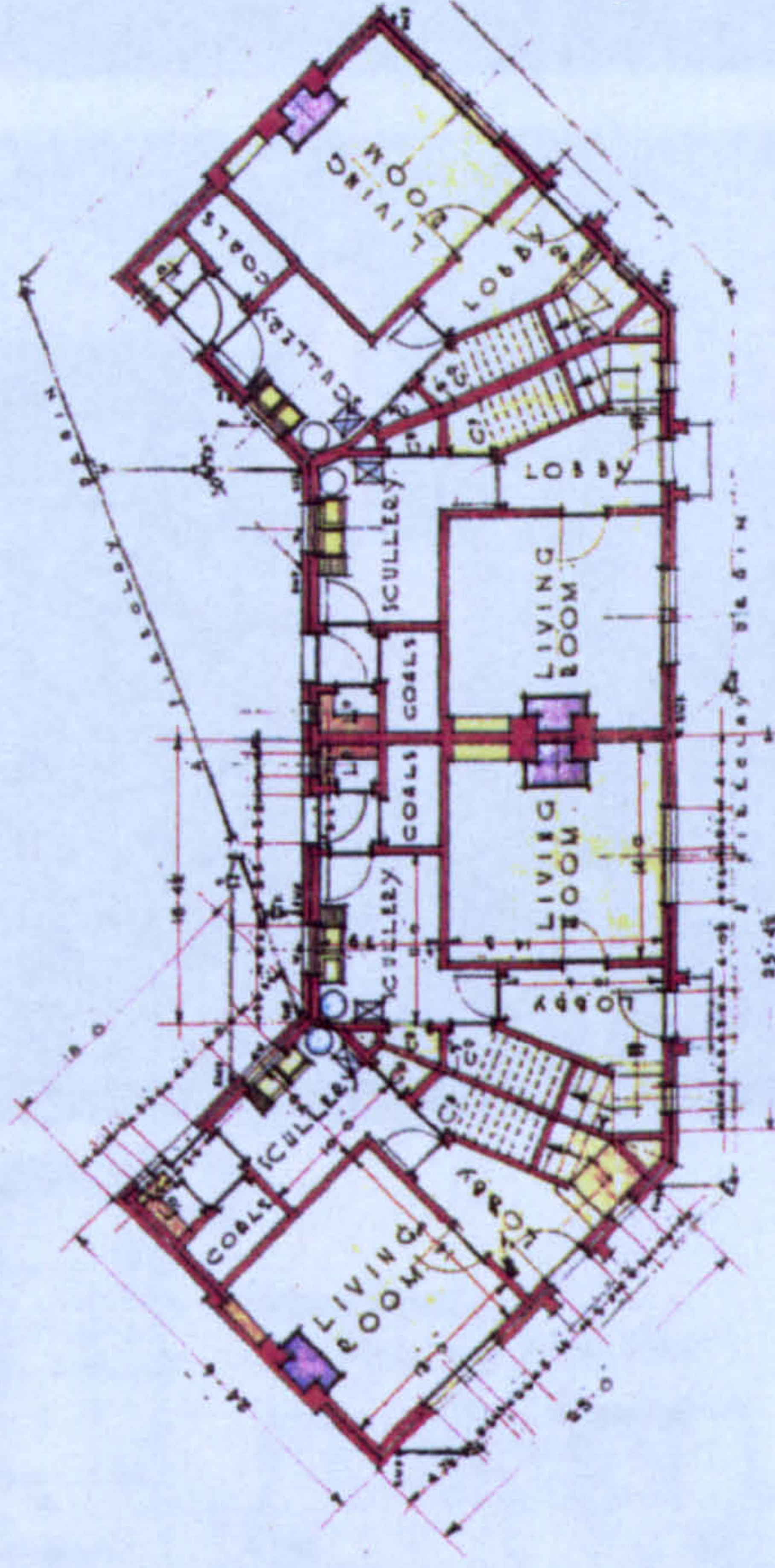
EXTENDED FRONT ELEVATION



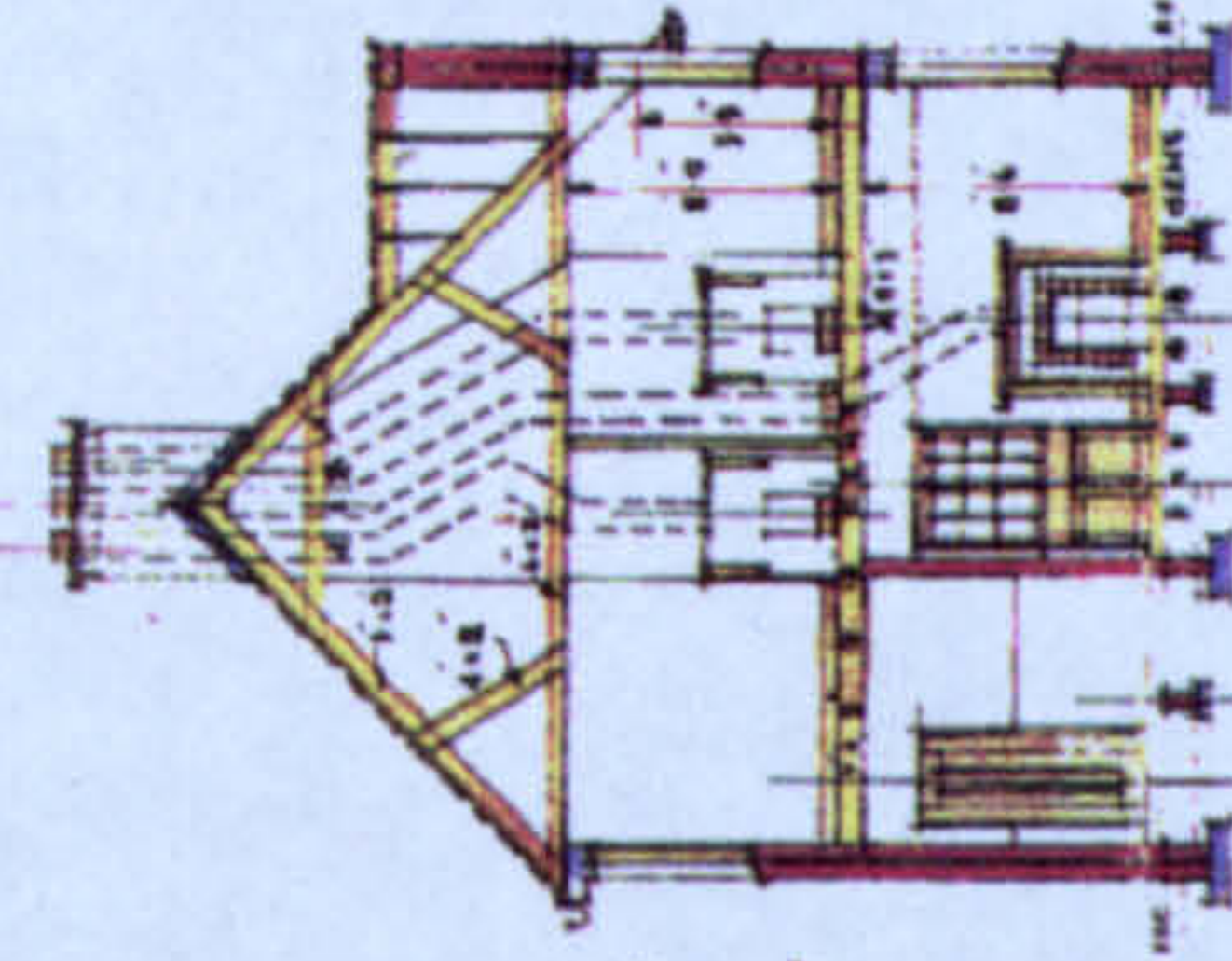
END



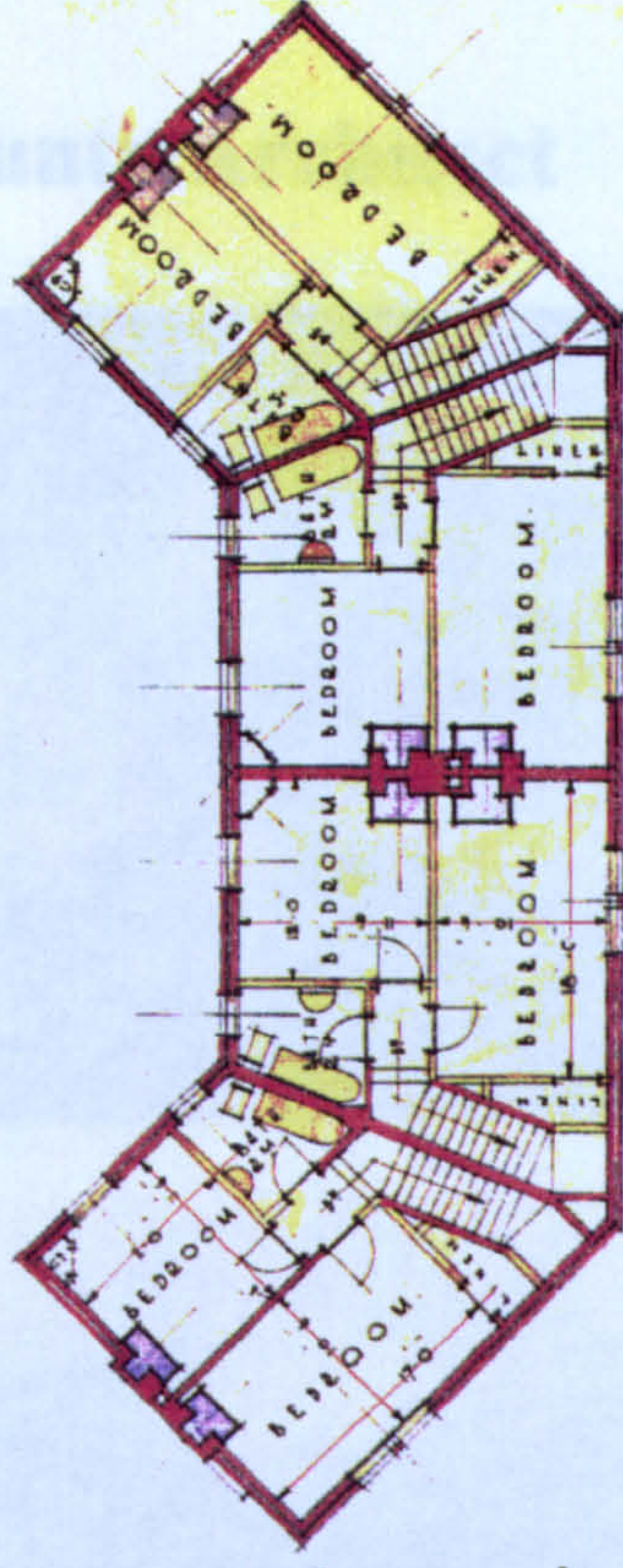
EXTENDED BACK ELEVATION



GROUND FLOOR PLAN



SECTION



UPPER FLOOR PLAN



JAMES HAY & STEEL
ARCHITECTS
WILMARTON, MARCH 1936

Figure 3.15

Joseph Weekes Dumbarton County Architect



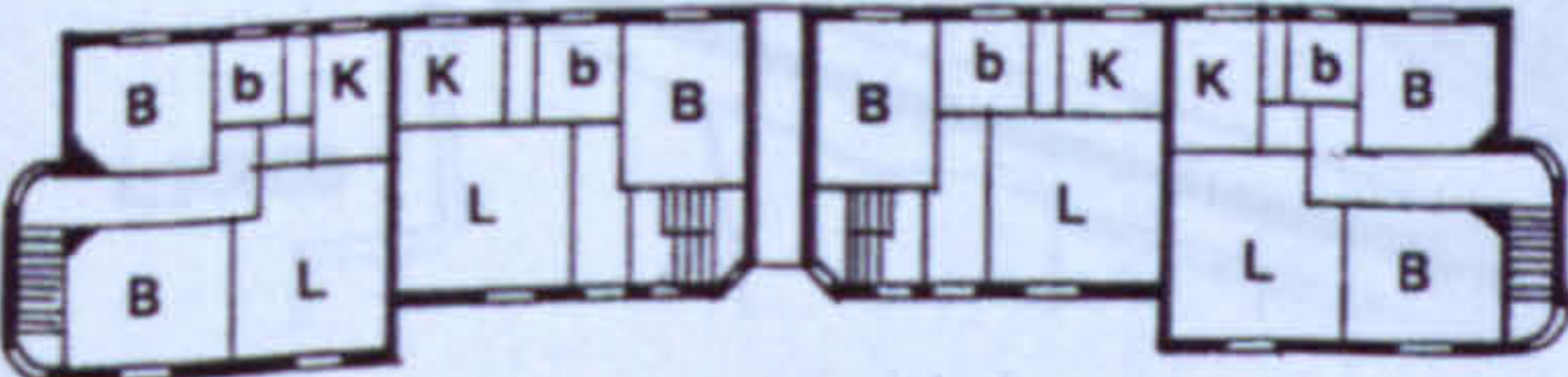
Whytes Corner at Milton, Commended by Saltire Society in 1937



Braehead, Brae Road, Rhu Flatted cottages



Whitehurst, Bearsden Flatted cottages



Whytes Corner at Milton, Ground floor

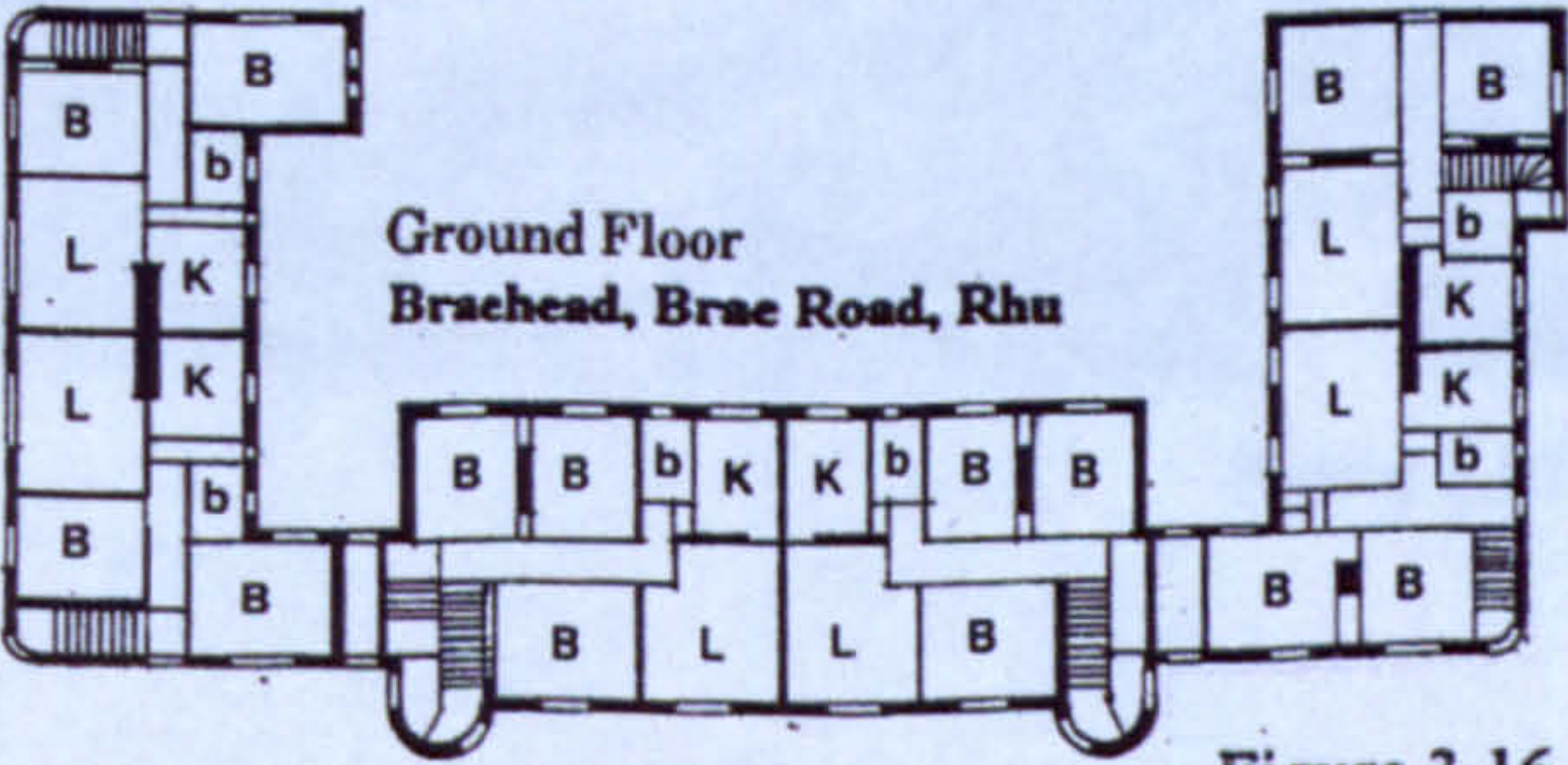


Figure 3.16

Westquarter model village for miners. J. A. W. Grant



A Beach Crescent



B Lanton Road

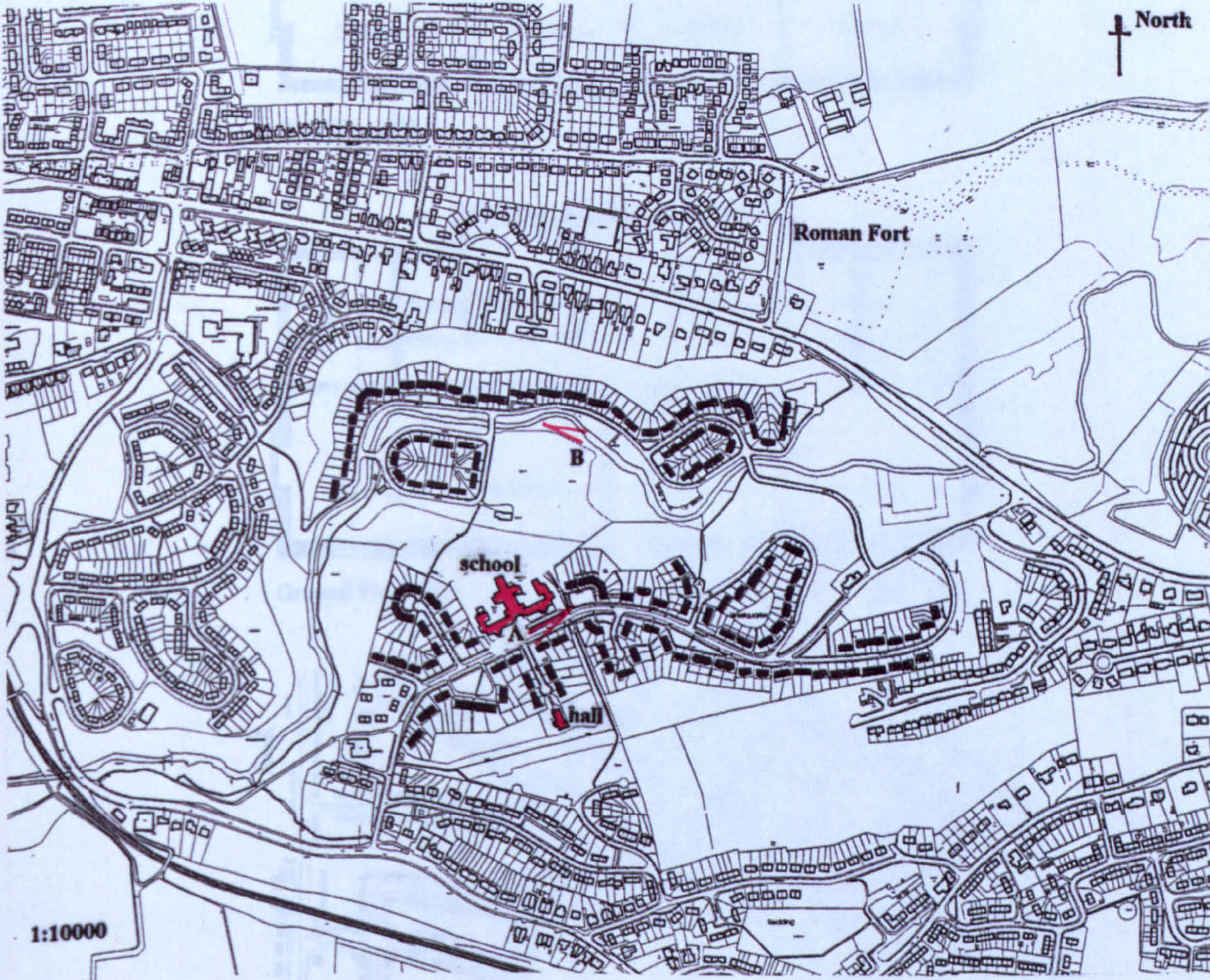


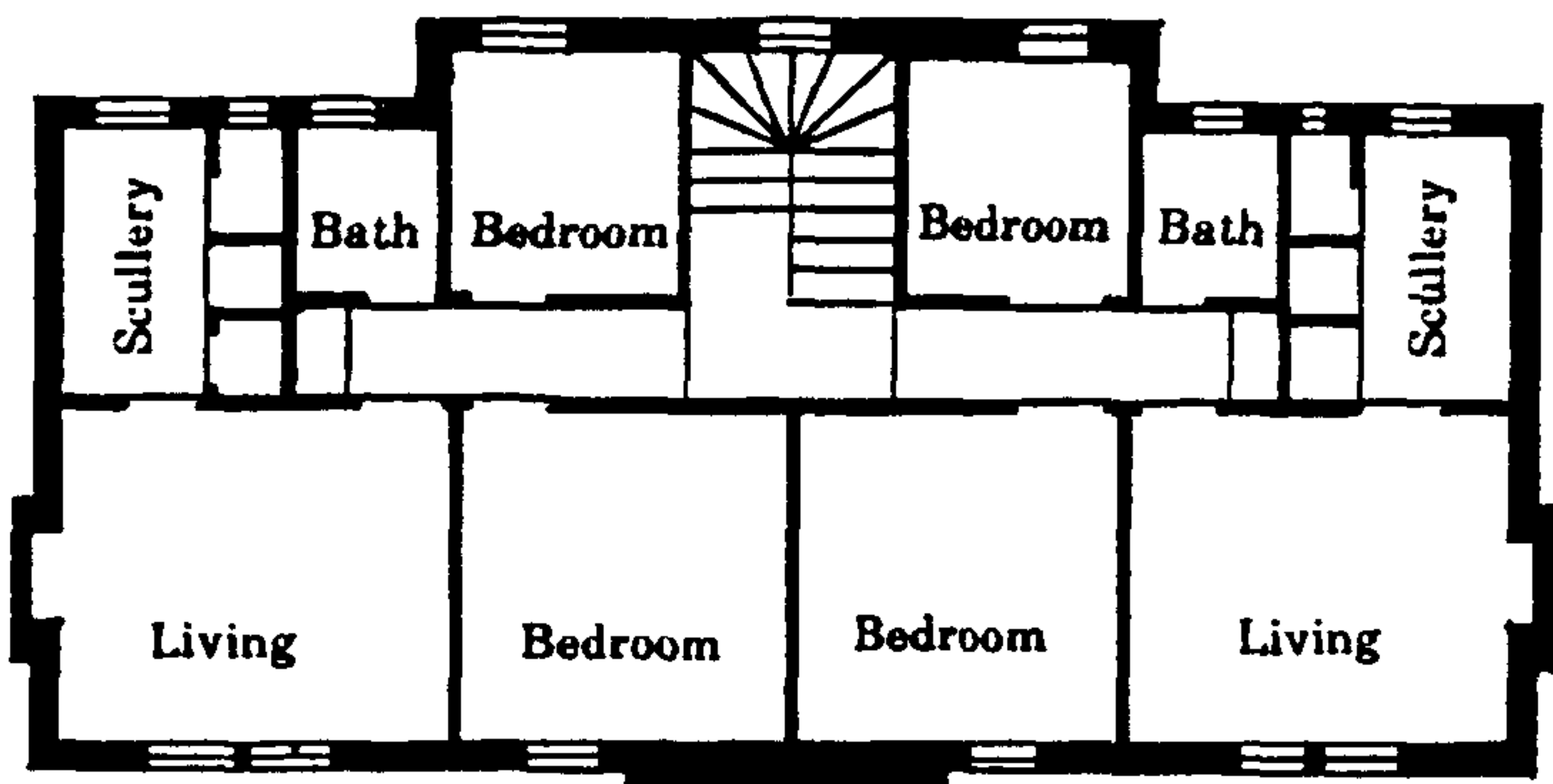
Figure 3.17

Raploch Rehousing Scheme, Stirling

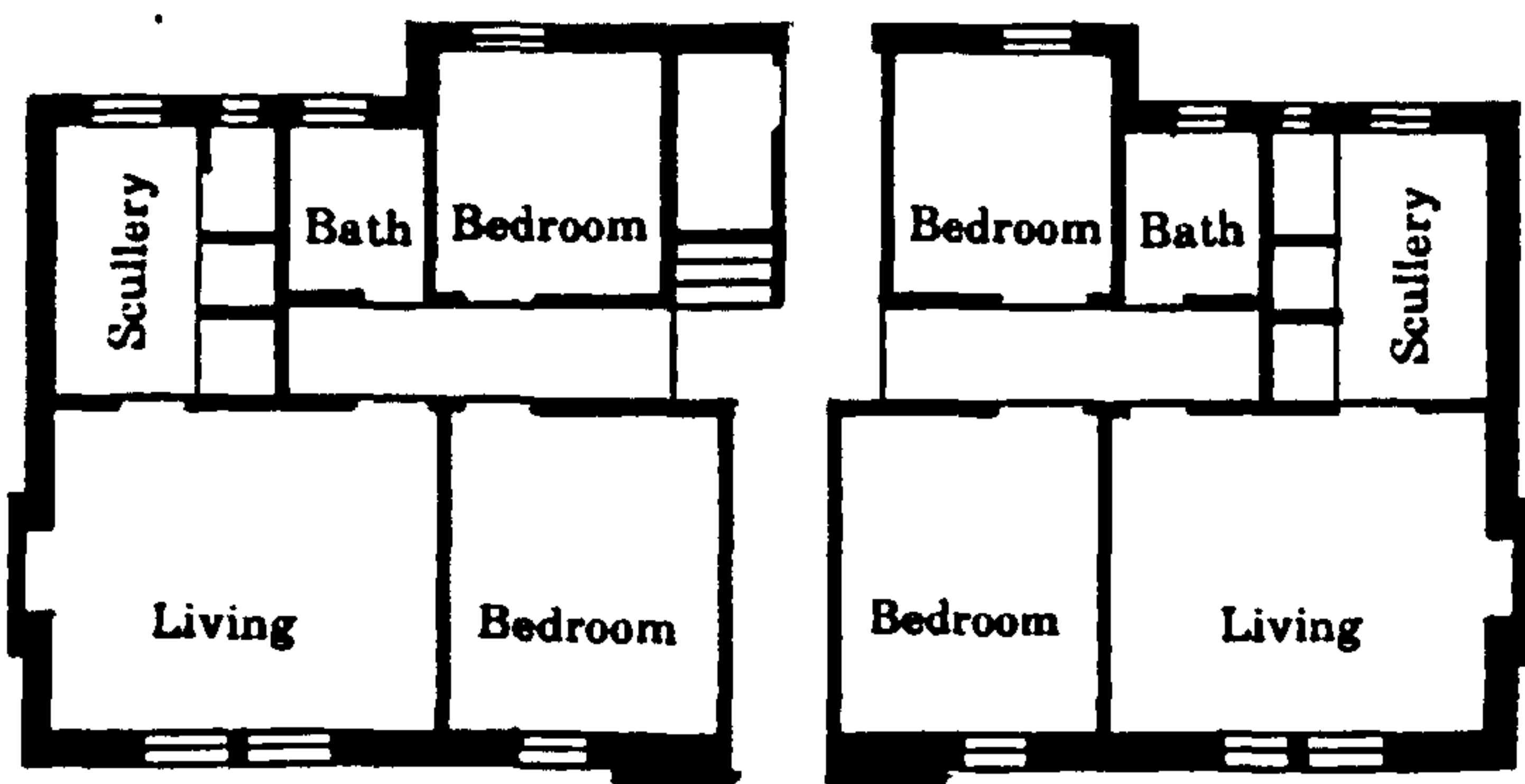
The "Rehousing" Rental Group (Slum Clearance) was introduced by the 1923 Act.



Front Elevation 1:200



First Floor Plan



Ground Floor Plan 1:200

Burgh Engineer's Office 1929

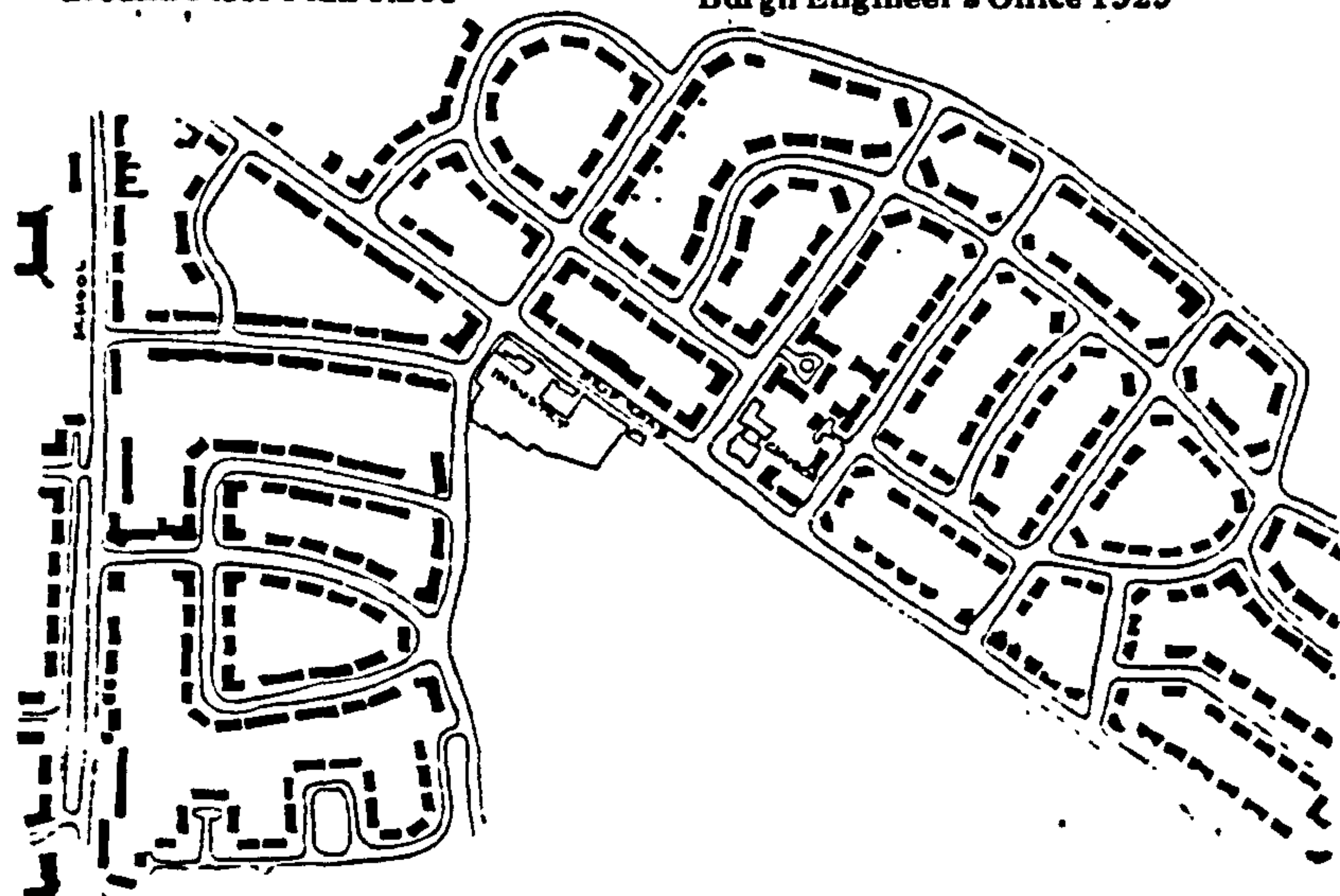
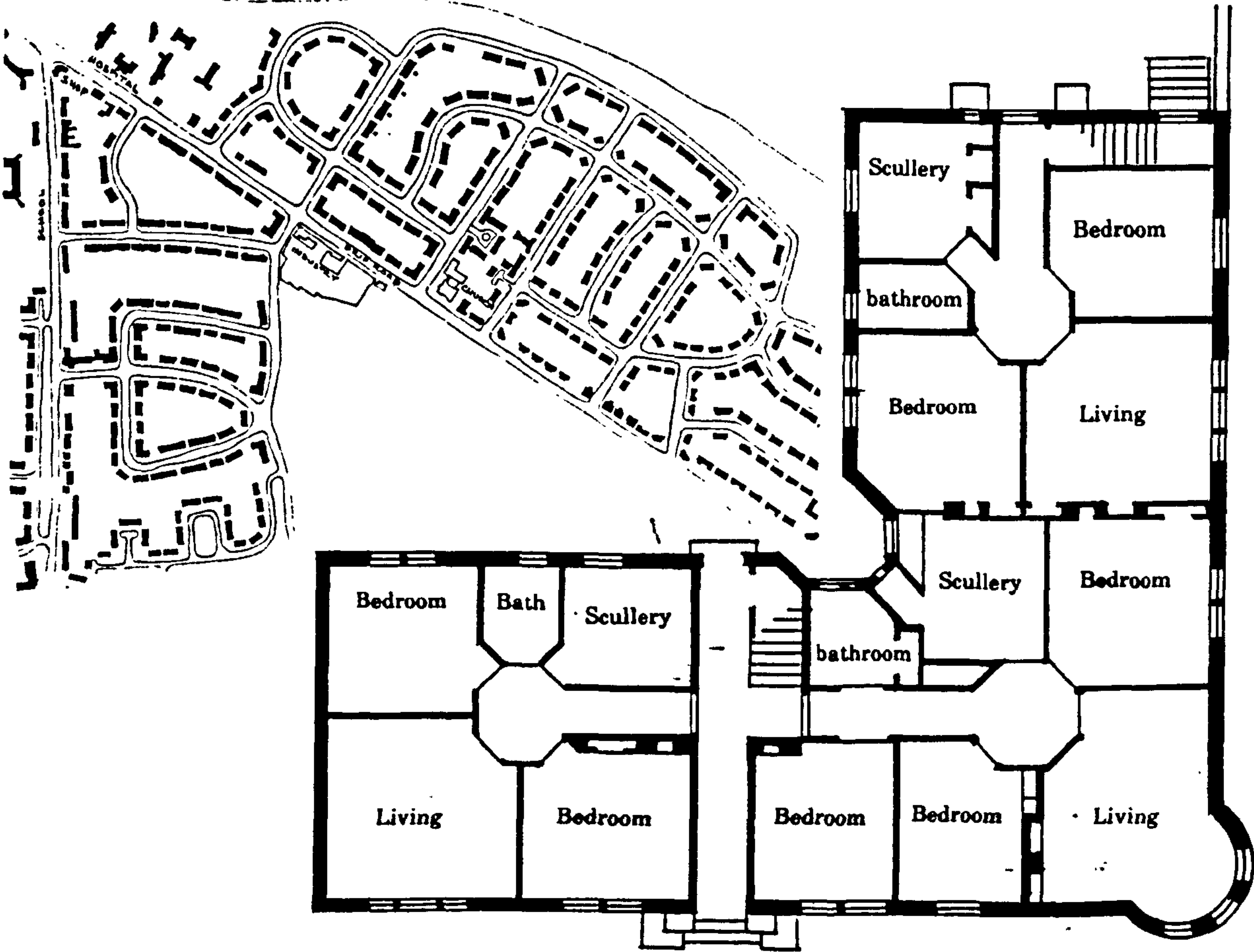


Figure 3.18

Corner Block - Drip Road, Stirling 1936



Front Elevation Designed by E. S. Bell, L.R.I.B.A. 1936



Ground Floor Plan 1:200

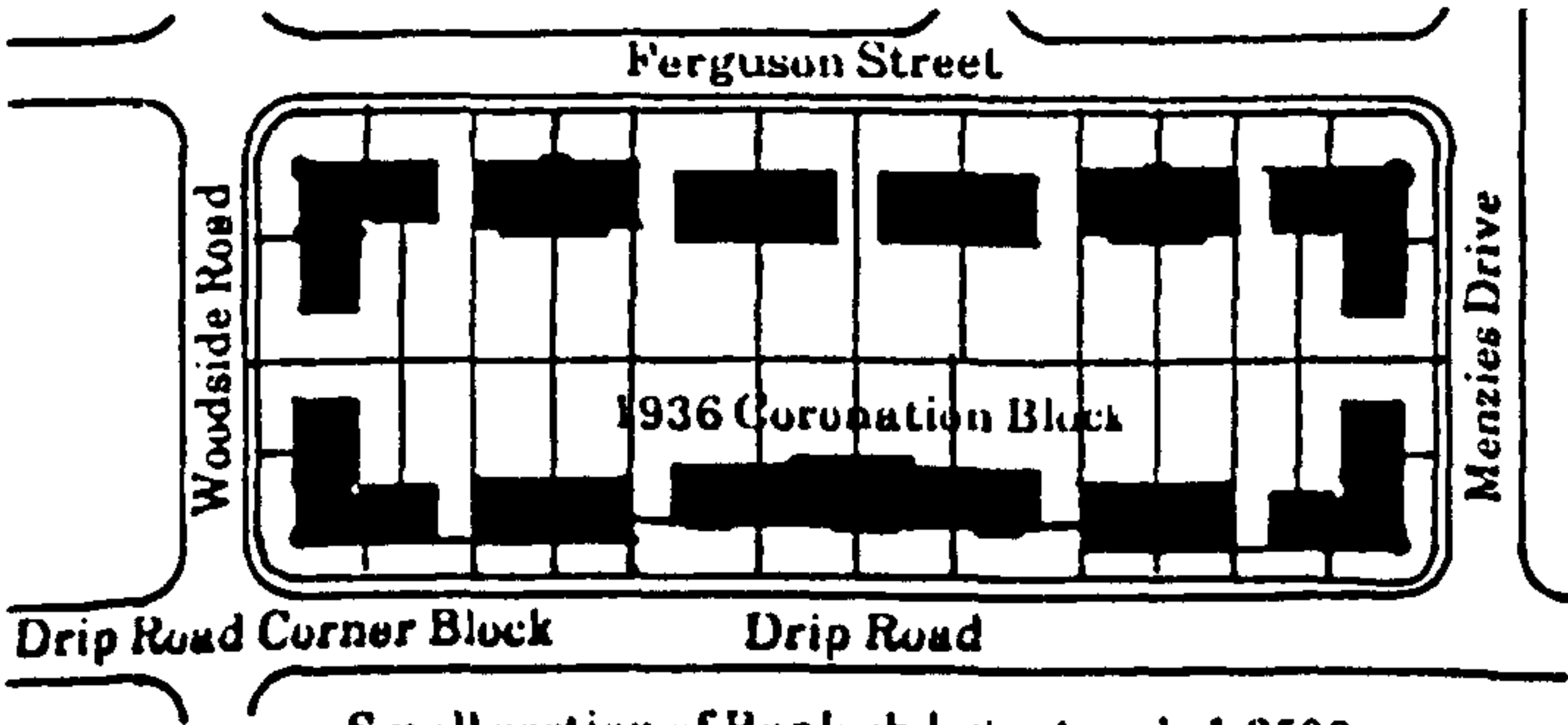


Figure 3.19

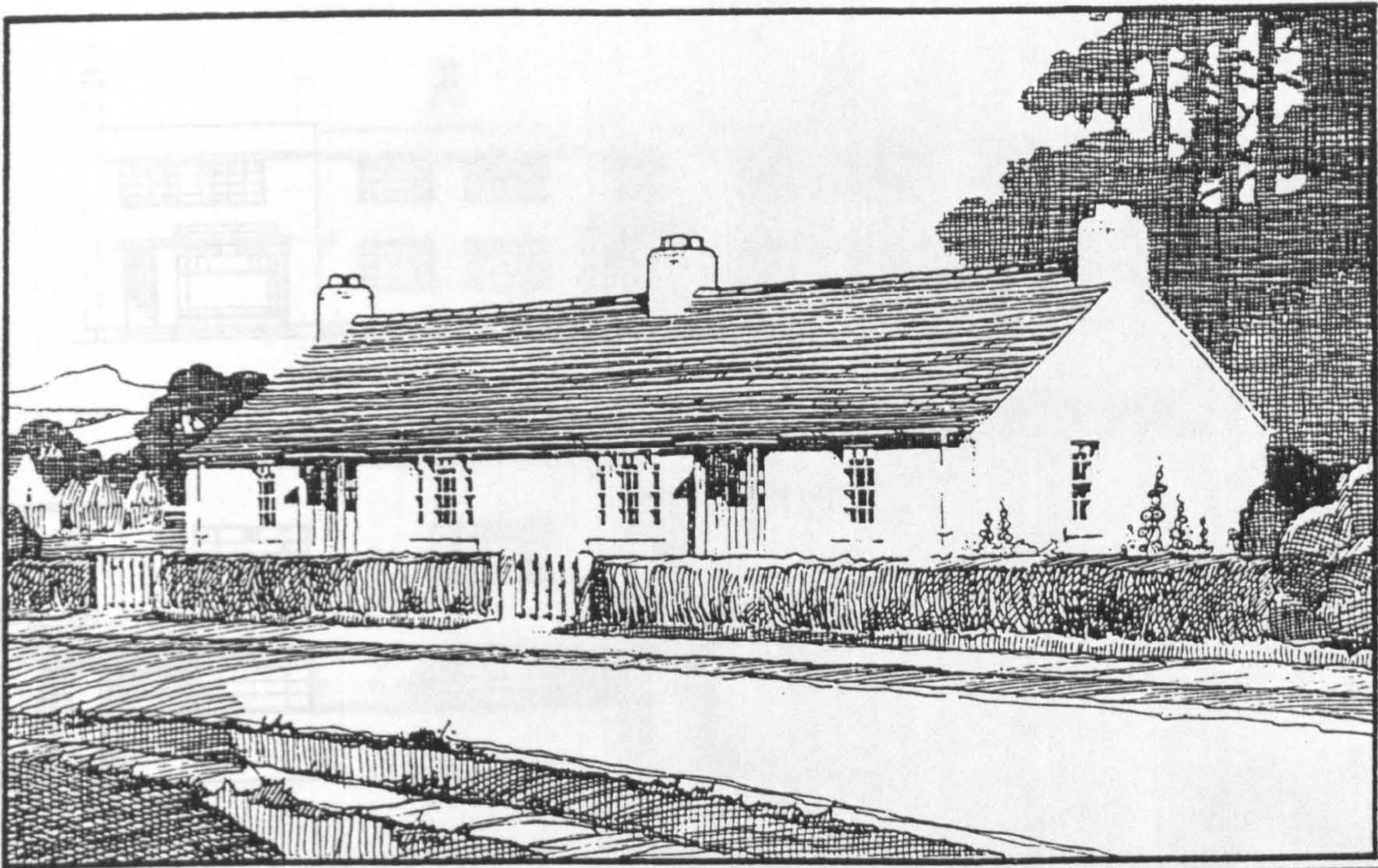
Drip Road, Raploch, Stirling 1936



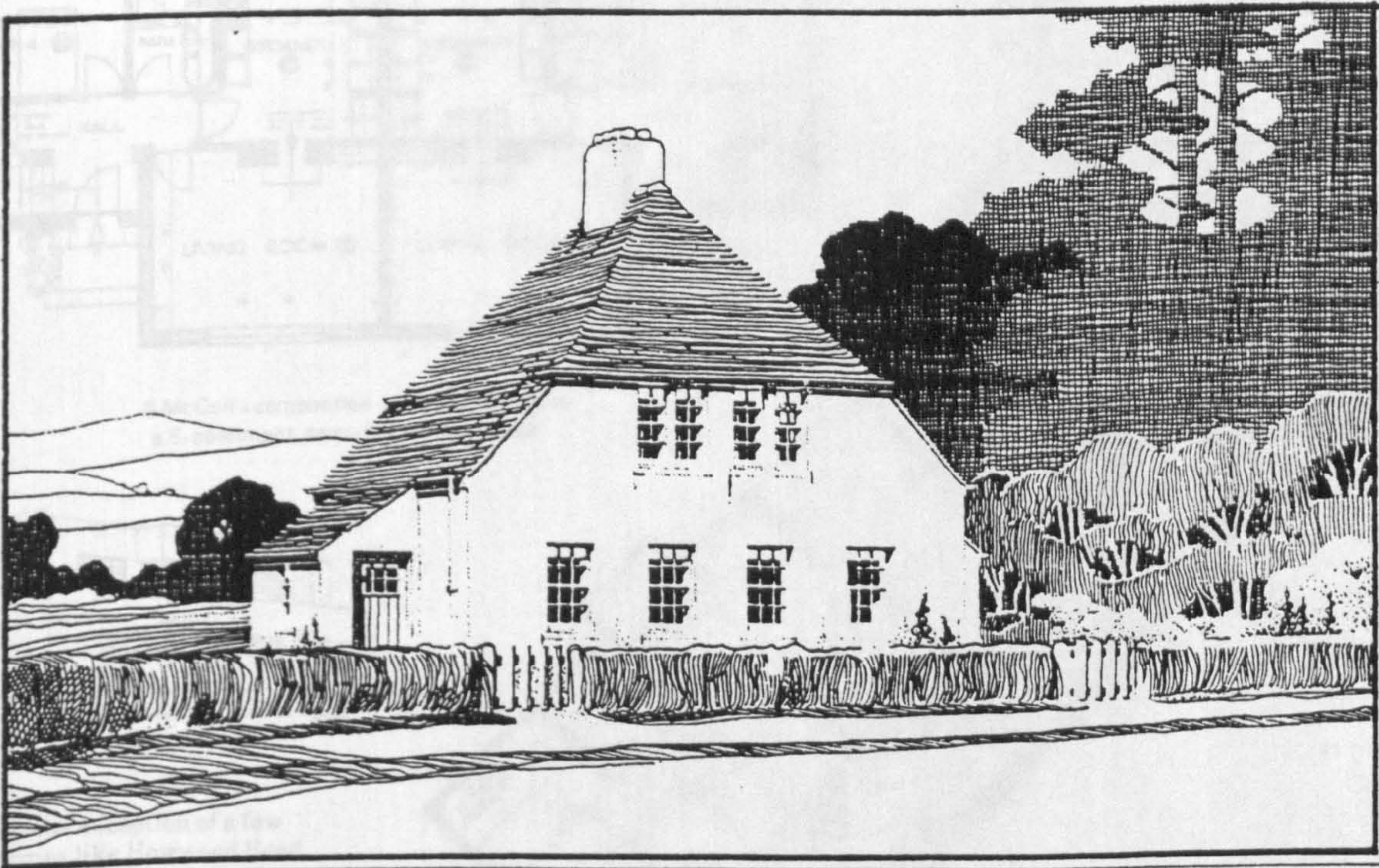
Top & Mid - Coronation Block on Drip Road.
Bottom - Raploch on the other side of Drip Road forms a poor setting for Stirling Castle.

Figure 3.20

House Types for A.P.R.S. 1932



| | | |
|---------|--|---|
| TYPE A2 | SINGLE STOREY SEMI-DETACHED COTTAGE with LIVING ROOM & THREE BEDROOMS | ASSOCIATION for the PRESERVATION of RURAL SCOTLAND 3, FORRES ST., EDINBURGH |
|---------|--|---|



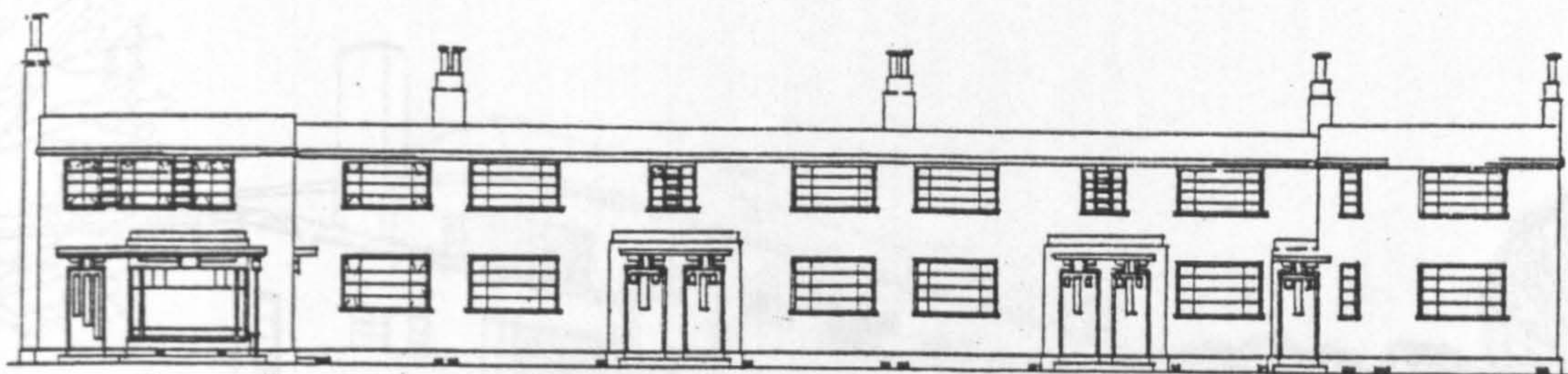
| | | |
|---------|---|---|
| TYPE B1 | TWO STOREY SEMI-DETACHED COTTAGE with LIVING ROOM & TWO BEDROOMS | ASSOCIATION for the PRESERVATION of RURAL SCOTLAND 3, FORRES ST., EDINBURGH |
|---------|---|---|

Two house types designed by Sir Frank Mears and Leslie Graham Thomson at the request of the Association for the Protection of Rural Scotland. Sets of working drawings for these were on offer in 1932 to local authorities and private individuals at a price ranging from £1 per unit for schemes of more than 12 to £9 for a single house.

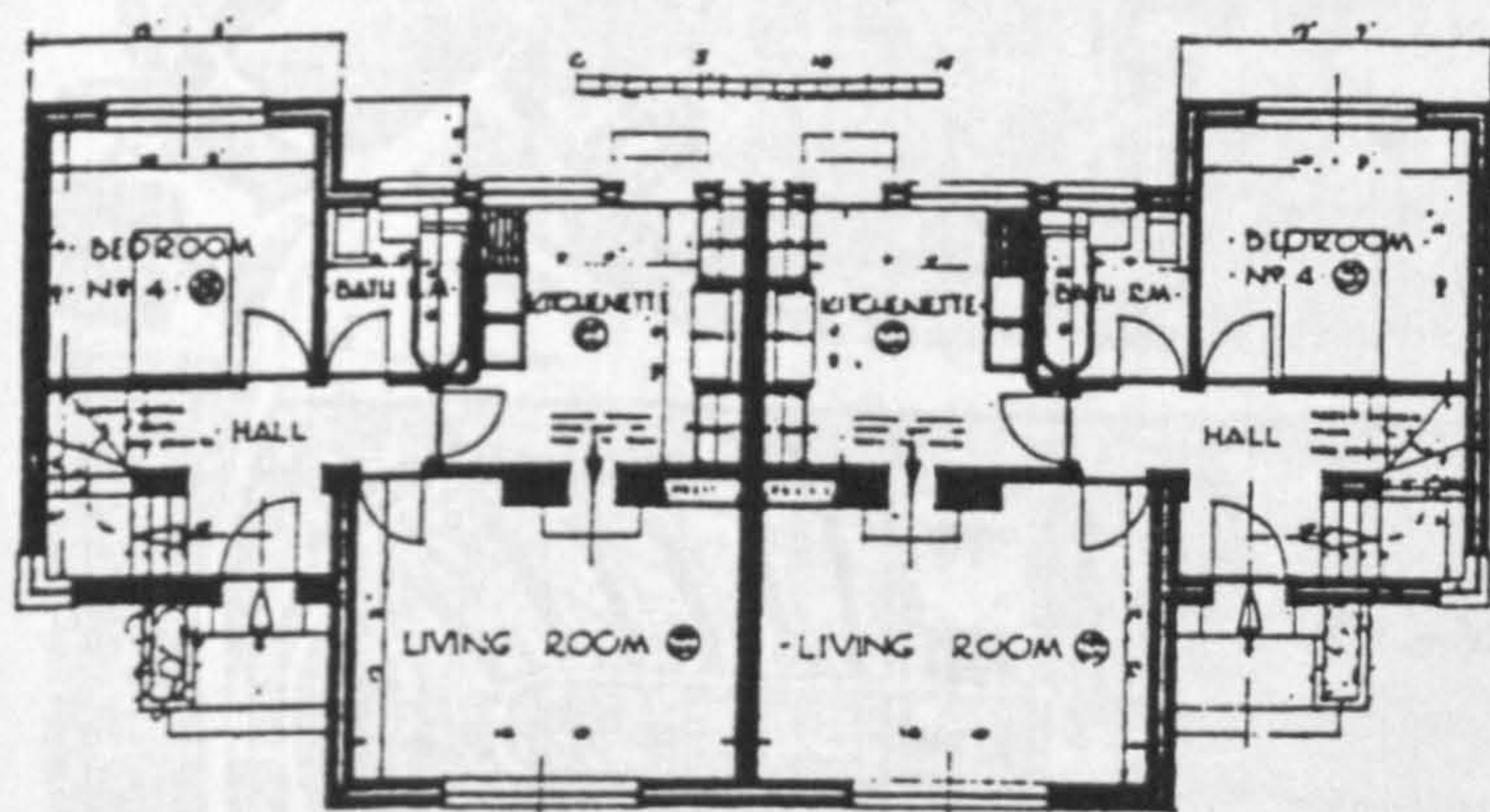
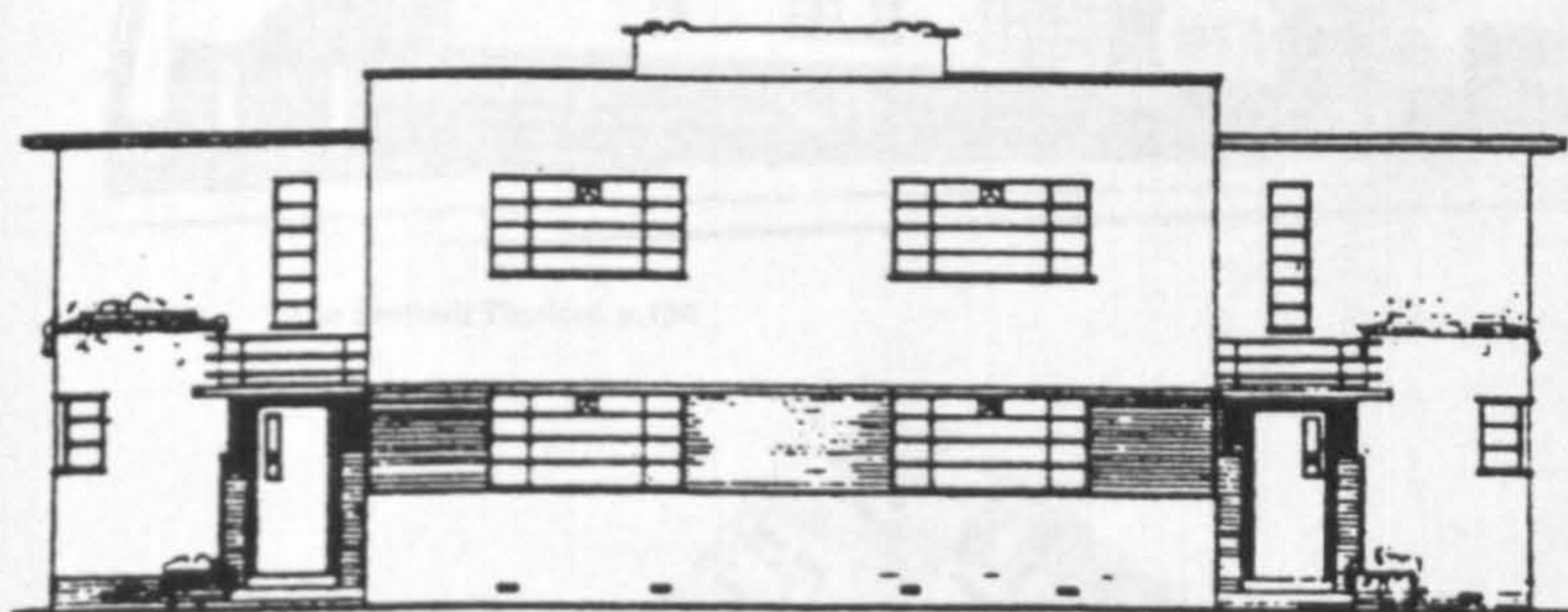
Source : Tomorrows Architectural Heritage, p.166-167

Figure 3.21

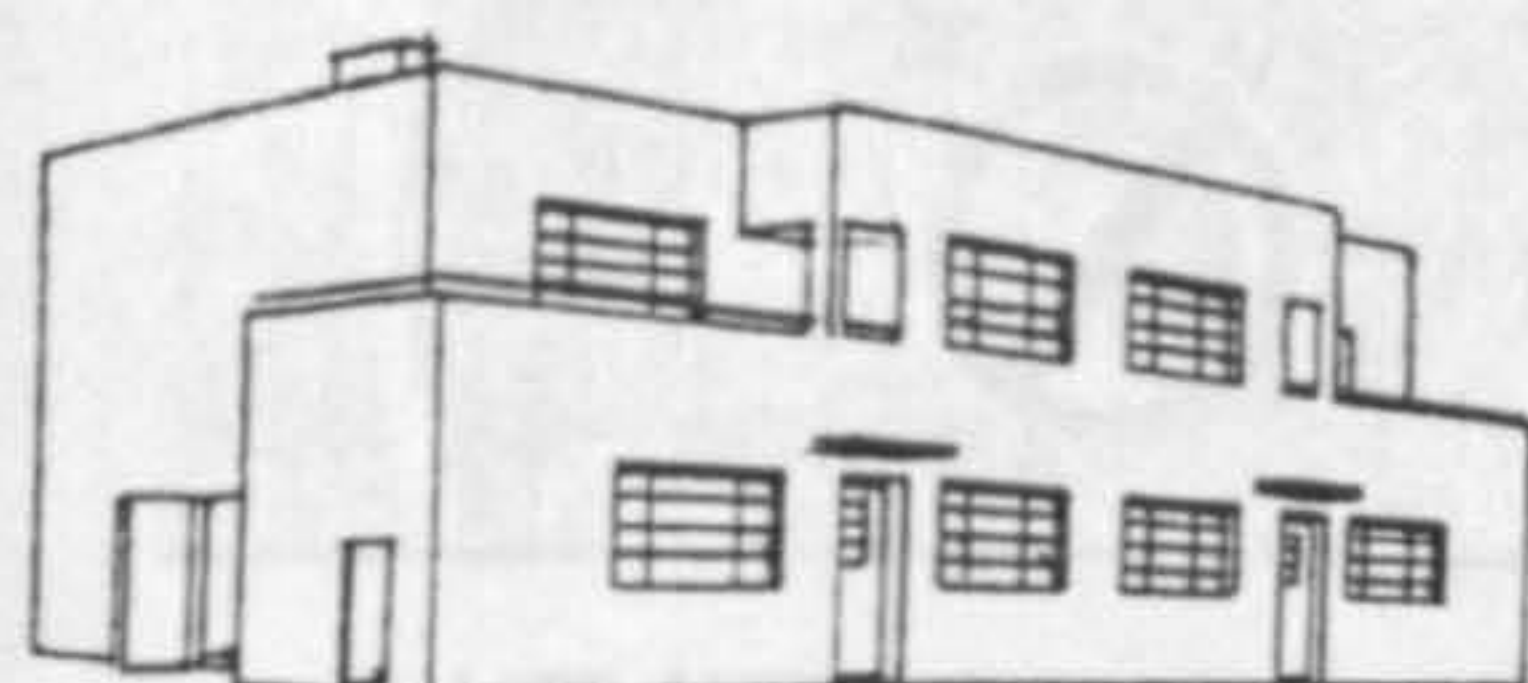
Housing Design 1930 s style



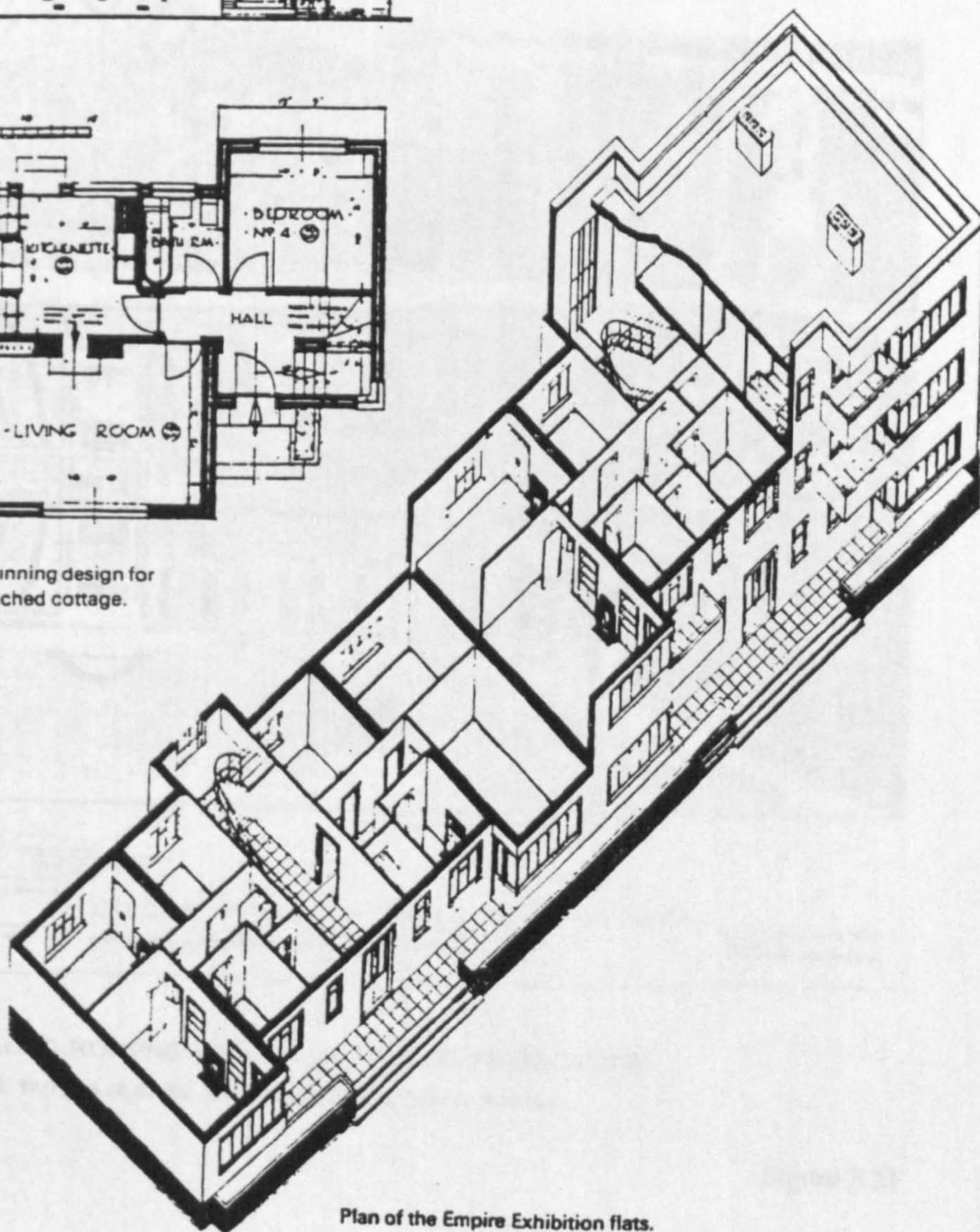
Unbuilt scheme of terraced houses in Tillicoultry (1934), by Arthur Bracewell.



S McColl's competition-winning design for a 5-apartment, semi-detached cottage.



332-338, CARNTYNE ROAD GLASGOW



Plan of the Empire Exhibition flats.

Source The Scottish Thirties, p.139, 145, 153

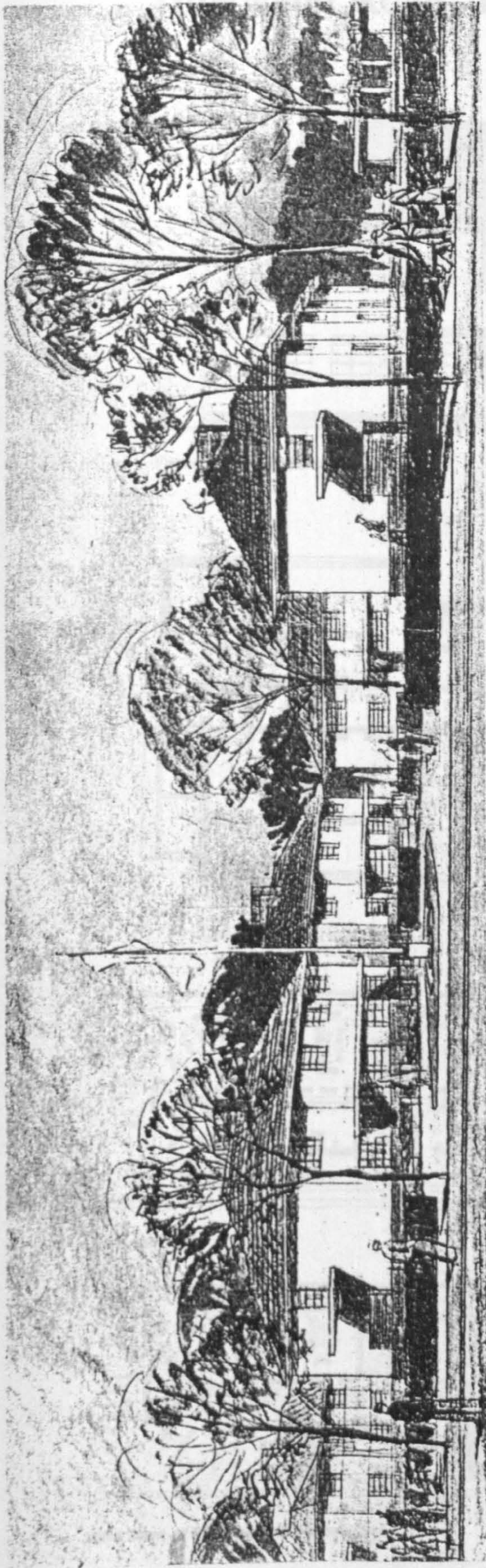
With the exception of a few schemes like Howwood Road and the small block of flats at Carntyne, public housing was traditional in style rather than international 30's style. Many 1930's style projects were unbuilt or designed and built after the war. These designs had considerable influence on the early post-war housing design.

Figure 3.22

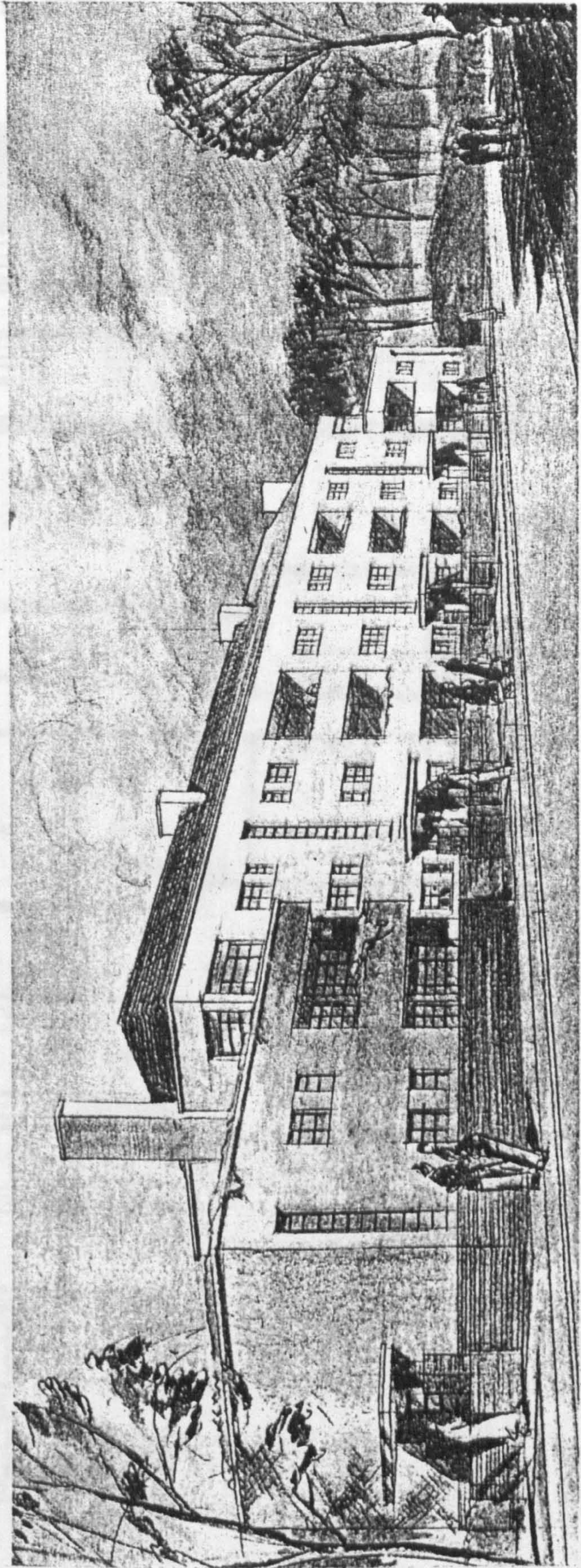
[illegible]

MR. T. S. TAIT, F.R.I.B.A. (Sir John Burnet, Tait and Lorne), Architect.

Source The Builder 6.3.1936



FLATTED COTTAGES.

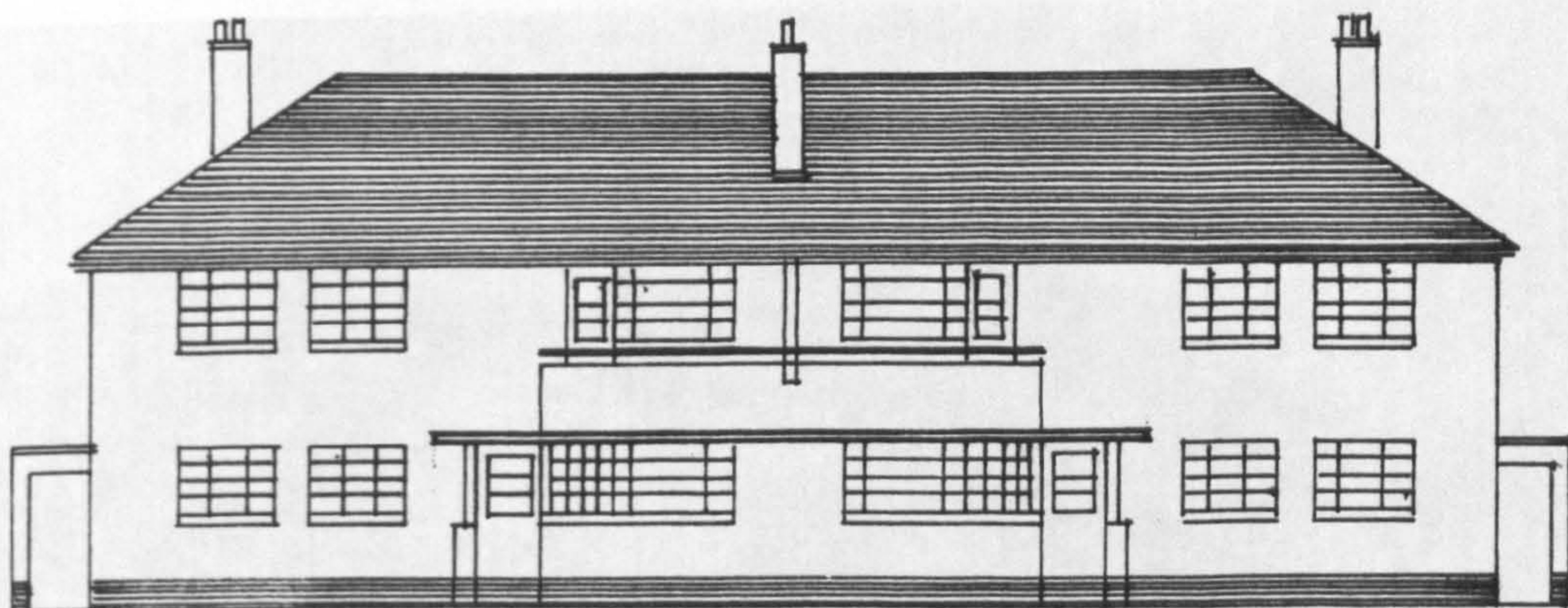


A TENEMENT BLOCK.

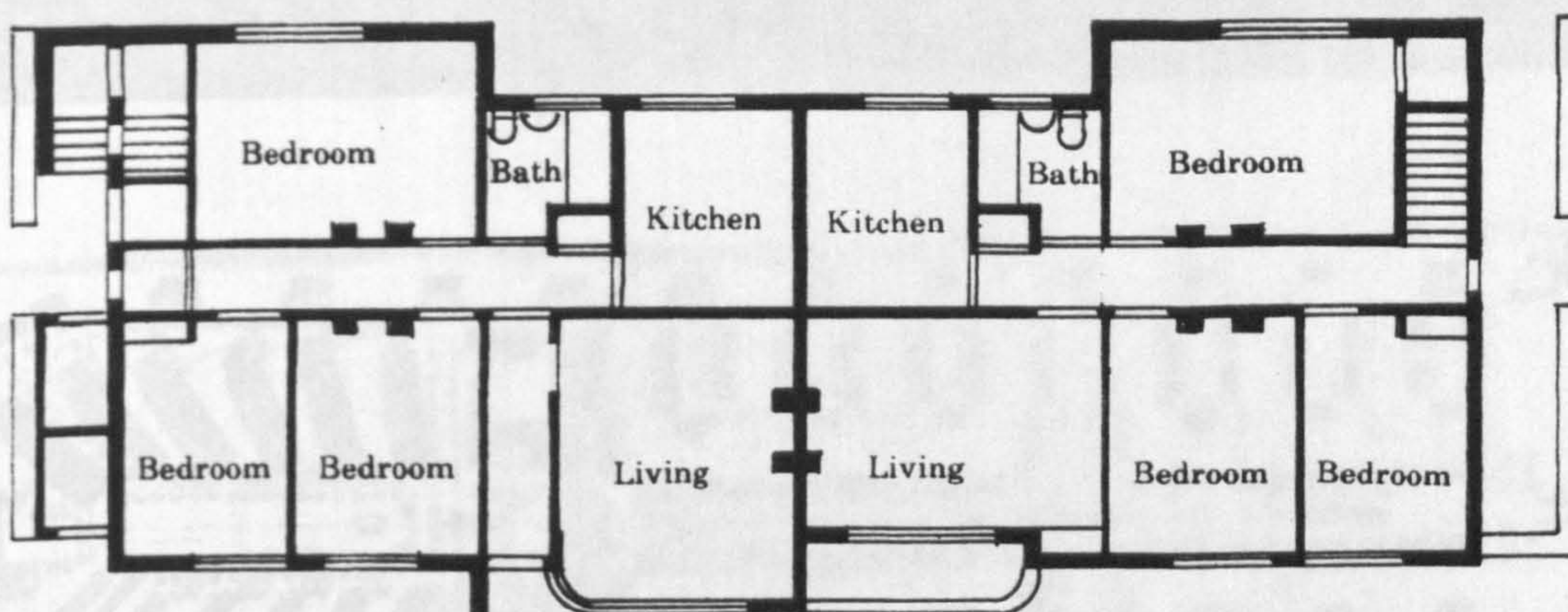
HOWWOOD ROAD HOUSING SCHEME, JOHNSTONE; RENFREWSHIRE.

MR. T. S. TAIT, F.R.I.B.A. (Sir John Burnet, Tait and Lorne), Architect.

Howwood Road, Johnstone

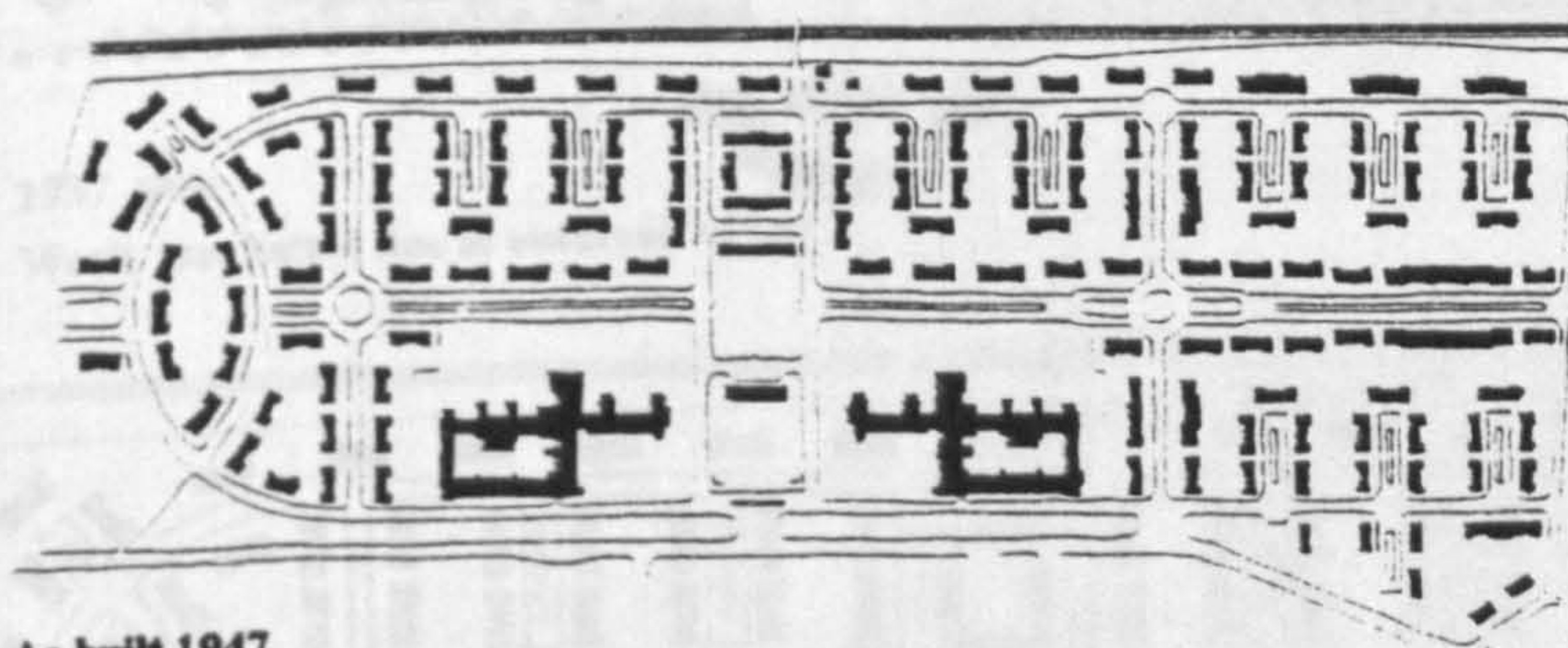


Front Elevation 3 bedroom house

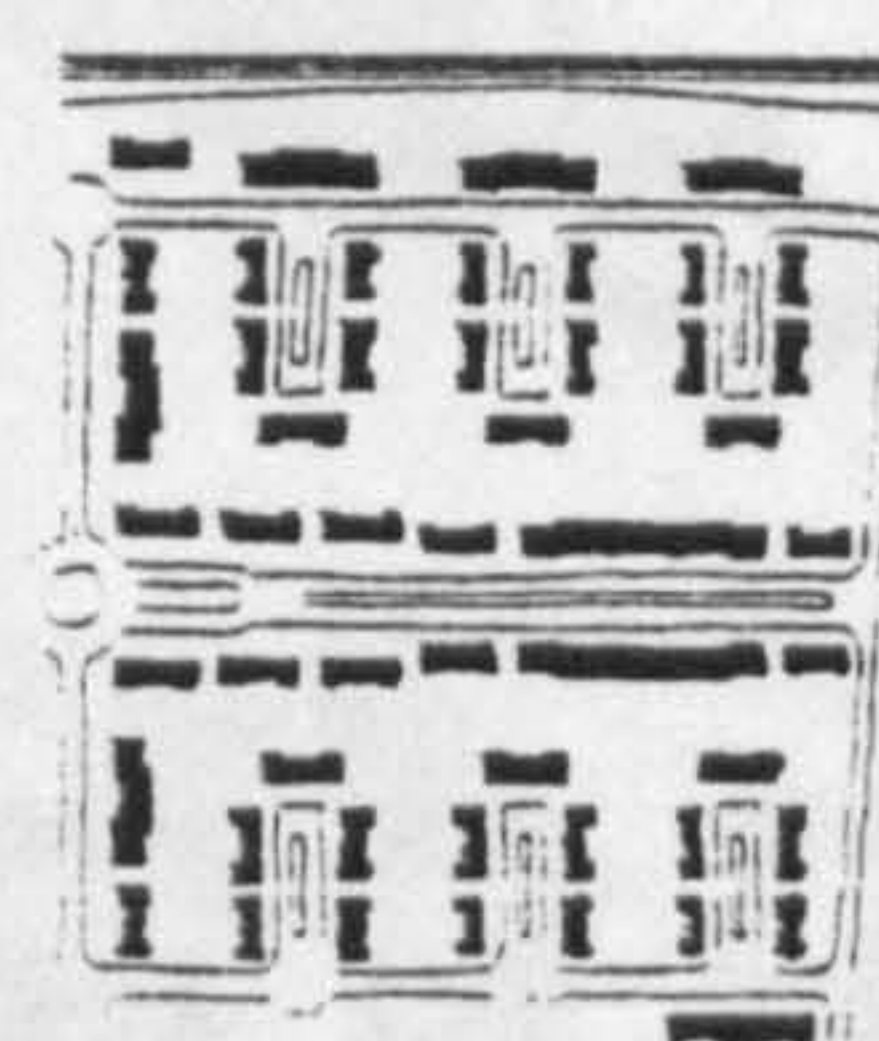


Ground Floor Plan

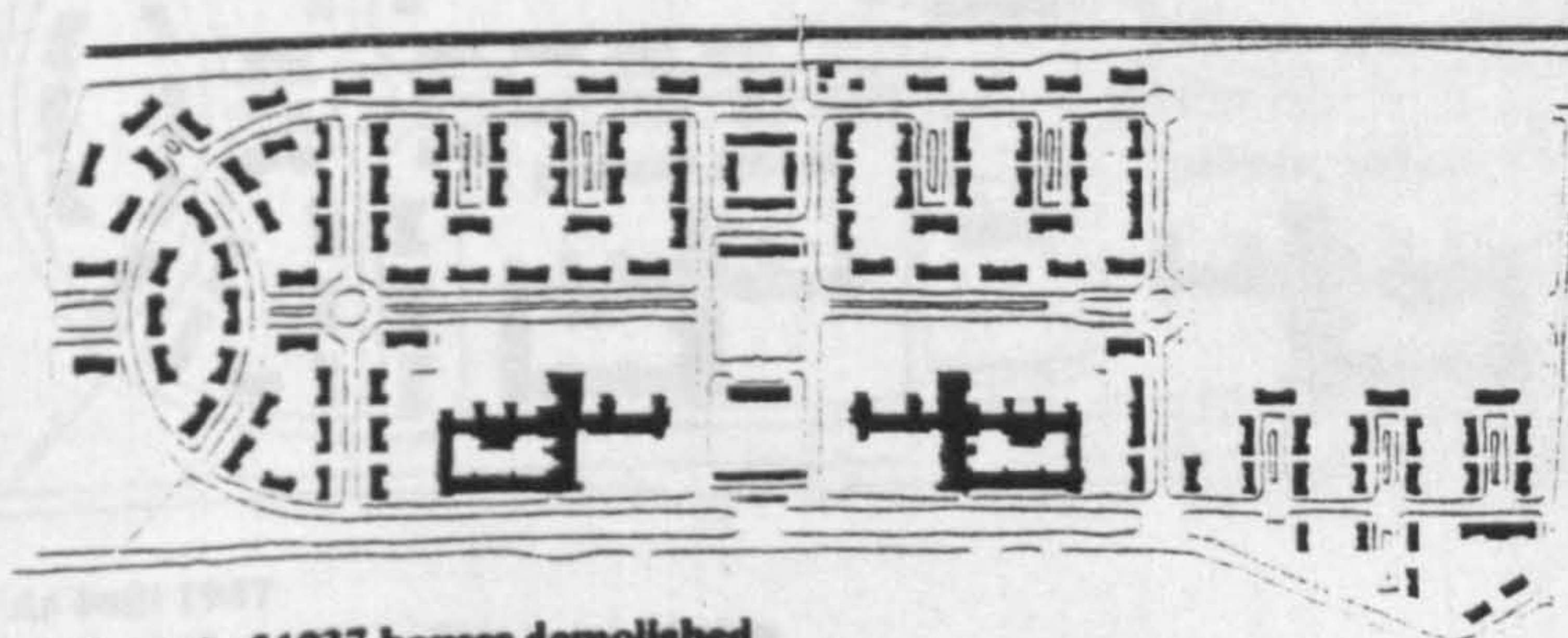
First Floor Plan 1:200



As built 1947

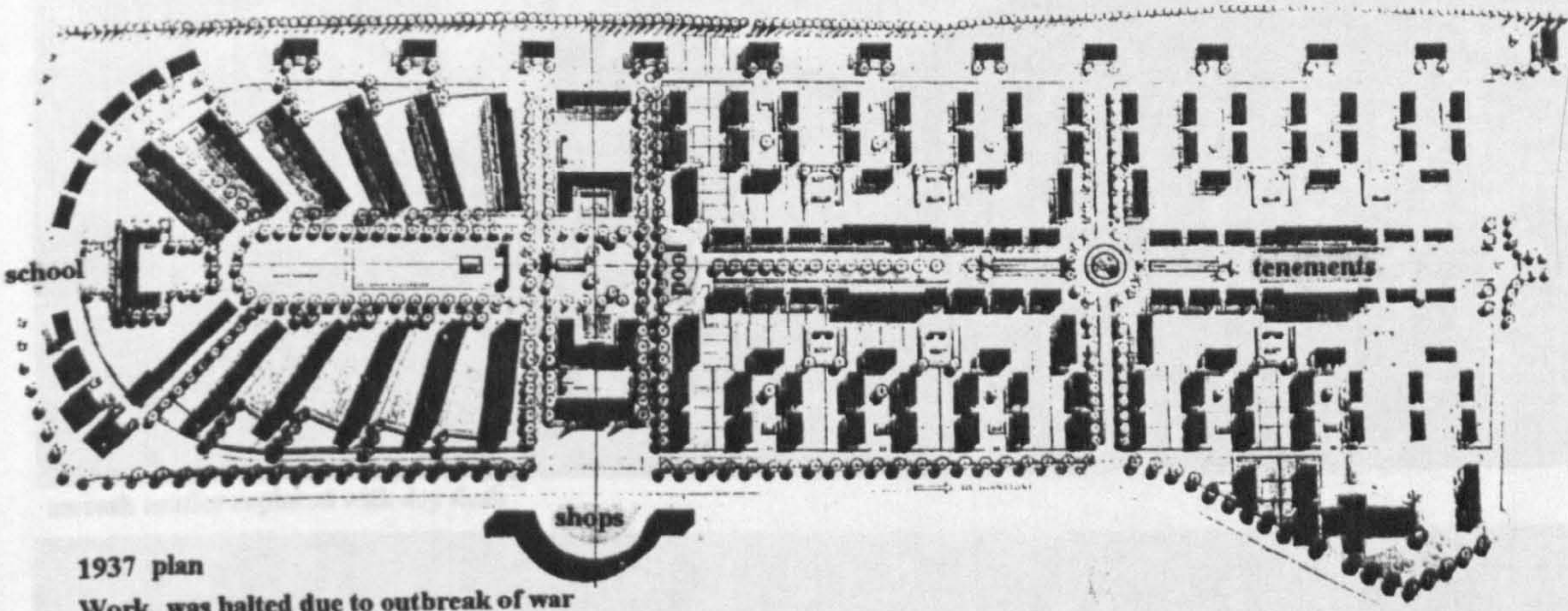


As built 1937

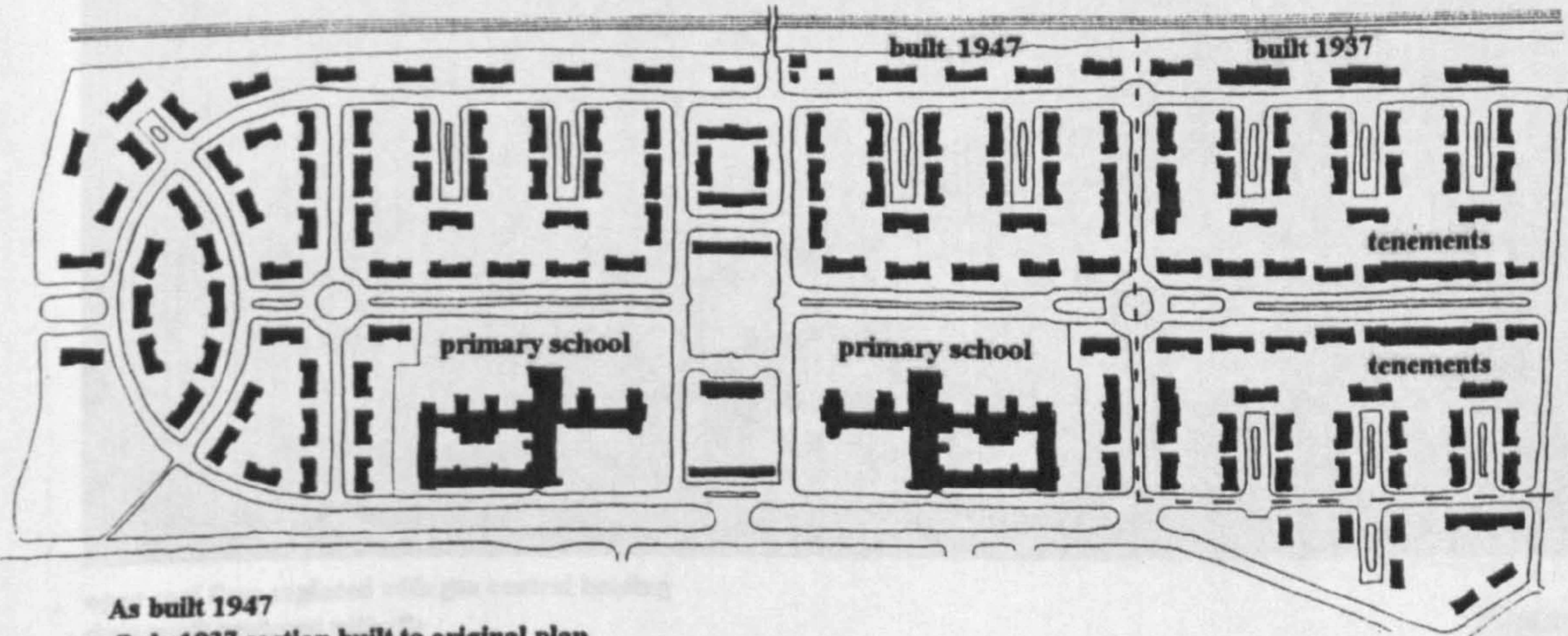


1994 most of 1937 houses demolished

Howwood Road, Johnstone



1937 plan
Work was halted due to outbreak of war



As built 1947
Only 1937 section built to original plan

Figure 3.26

Howwood Road, Johnstone in 1994



30's metal windows replaced with timber pivots



smooth render replaced with dry dash



open coal fires replaced with gas central heating
slate roofs replaced with tile

Figure 3.27

Commissioner's Houses (S.S.H.A.) late 1930 s

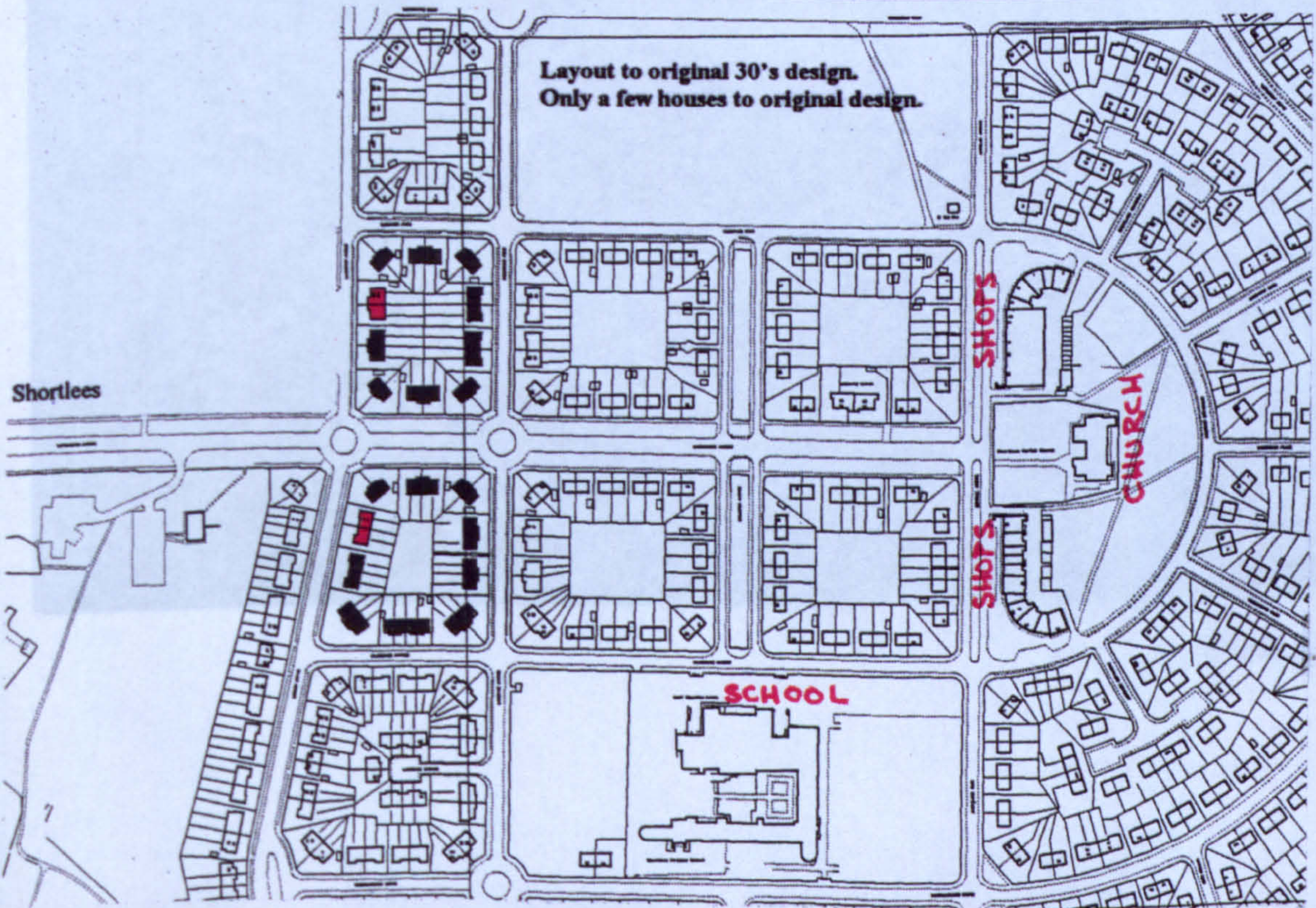
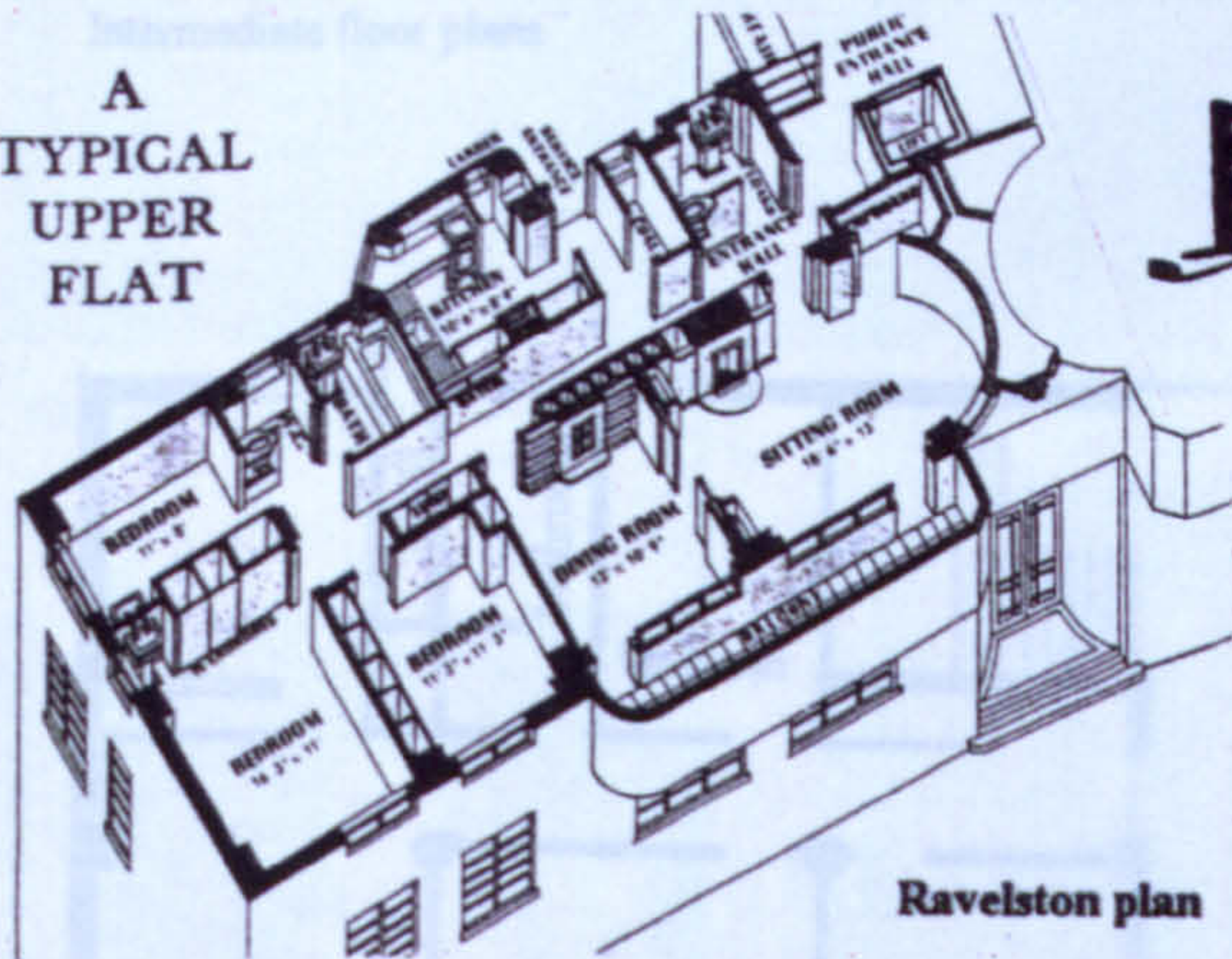


Figure 3.28

Ravelston Mansion Flats and Westfield Court, Edinburgh



Ravelston axonometric

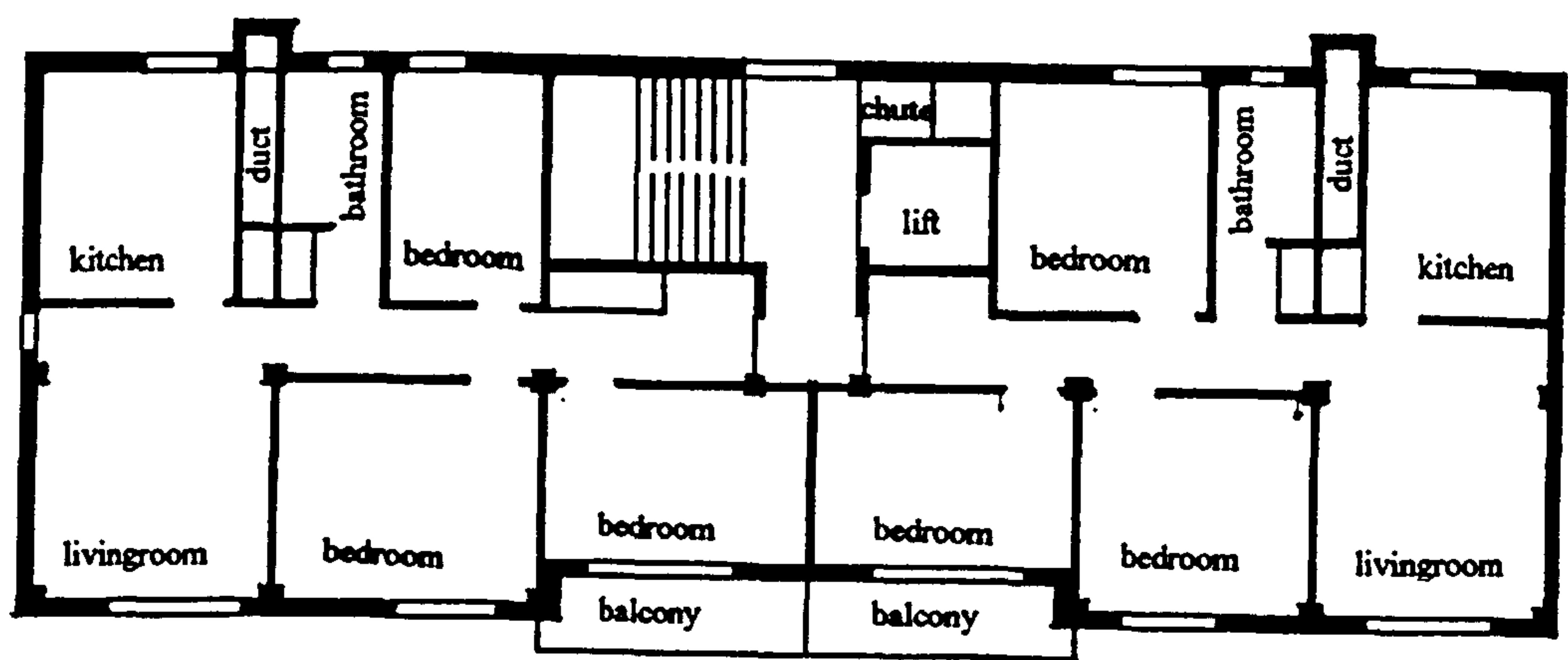
Neil and Hurd's Mansion Flats (above) at Ravelston, Edinburgh (1935) were designed for wealthy tenants. Westfield Court by Williamson and Hubbard was also designed as private flats (1938) but the project was stopped by the war and built by the Local Authority as public rental (1946).

The desire to maximise the use of sunlight and fresh air can be seen in both private and public 1930's housing. The use of balconies and the relationship to living space is also a feature of the Empire Exhibition flats and the Glasgow Tenements of the late 1930's.

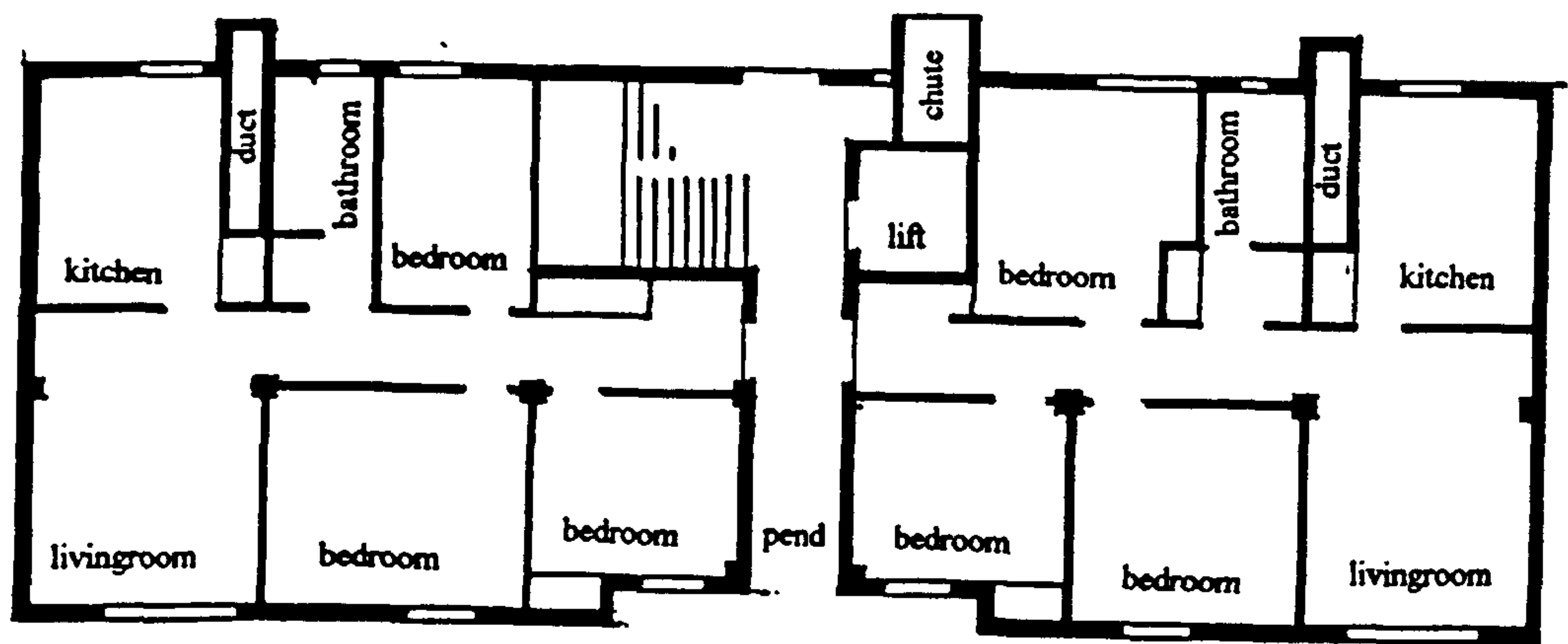


Figure 3.29

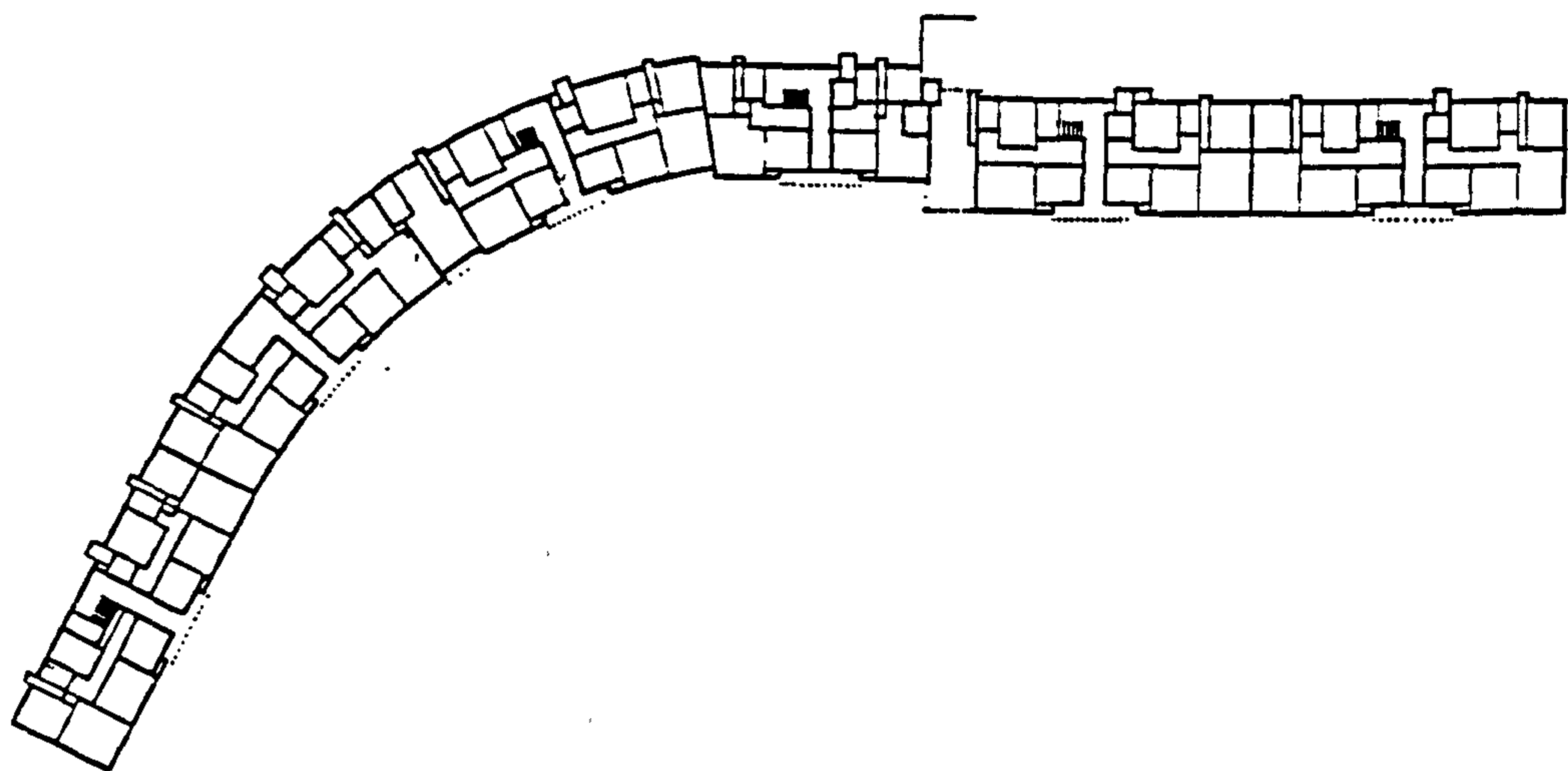
Westfield Court, Edinburgh



Intermediate floor plans



Ground floor plans



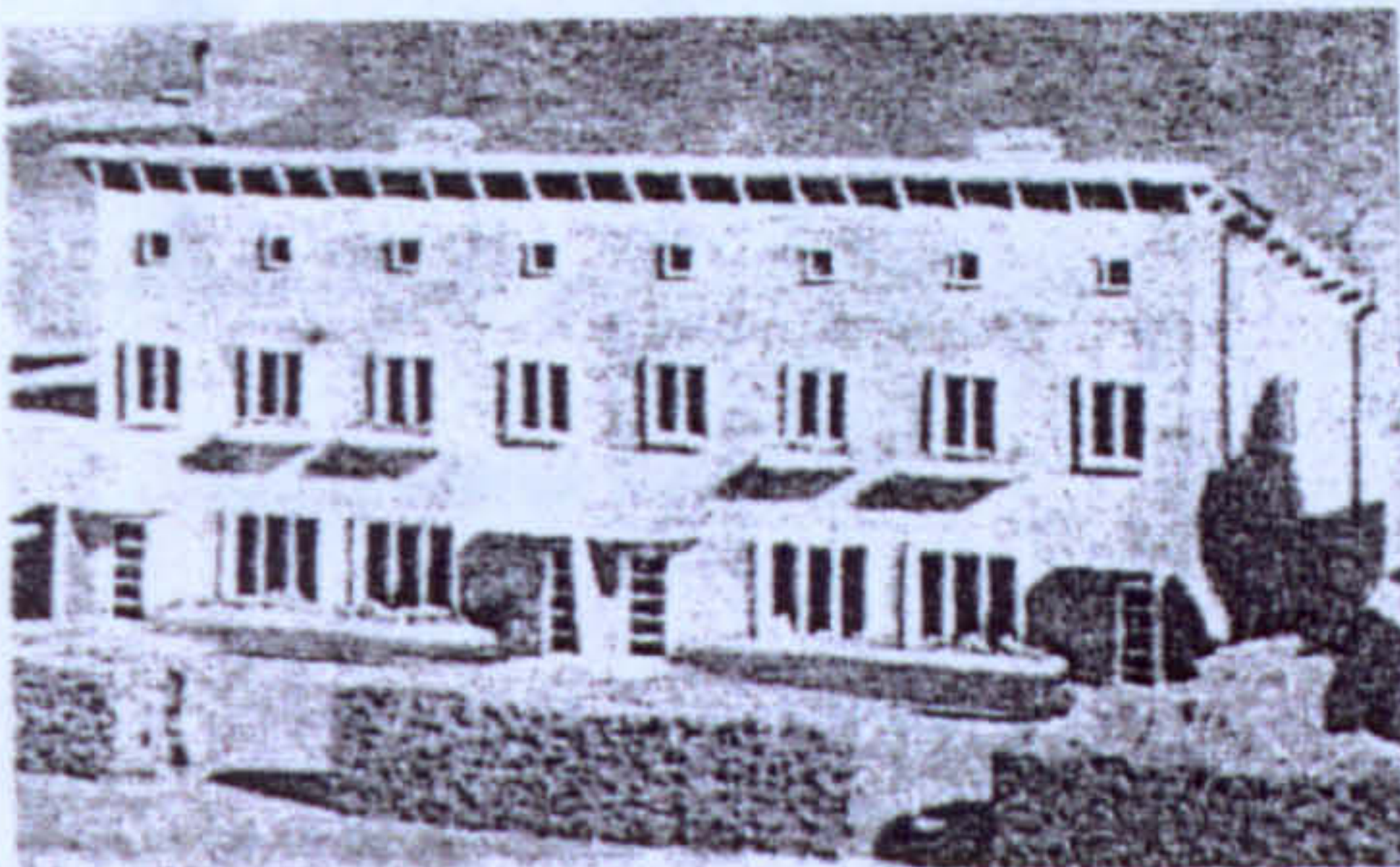
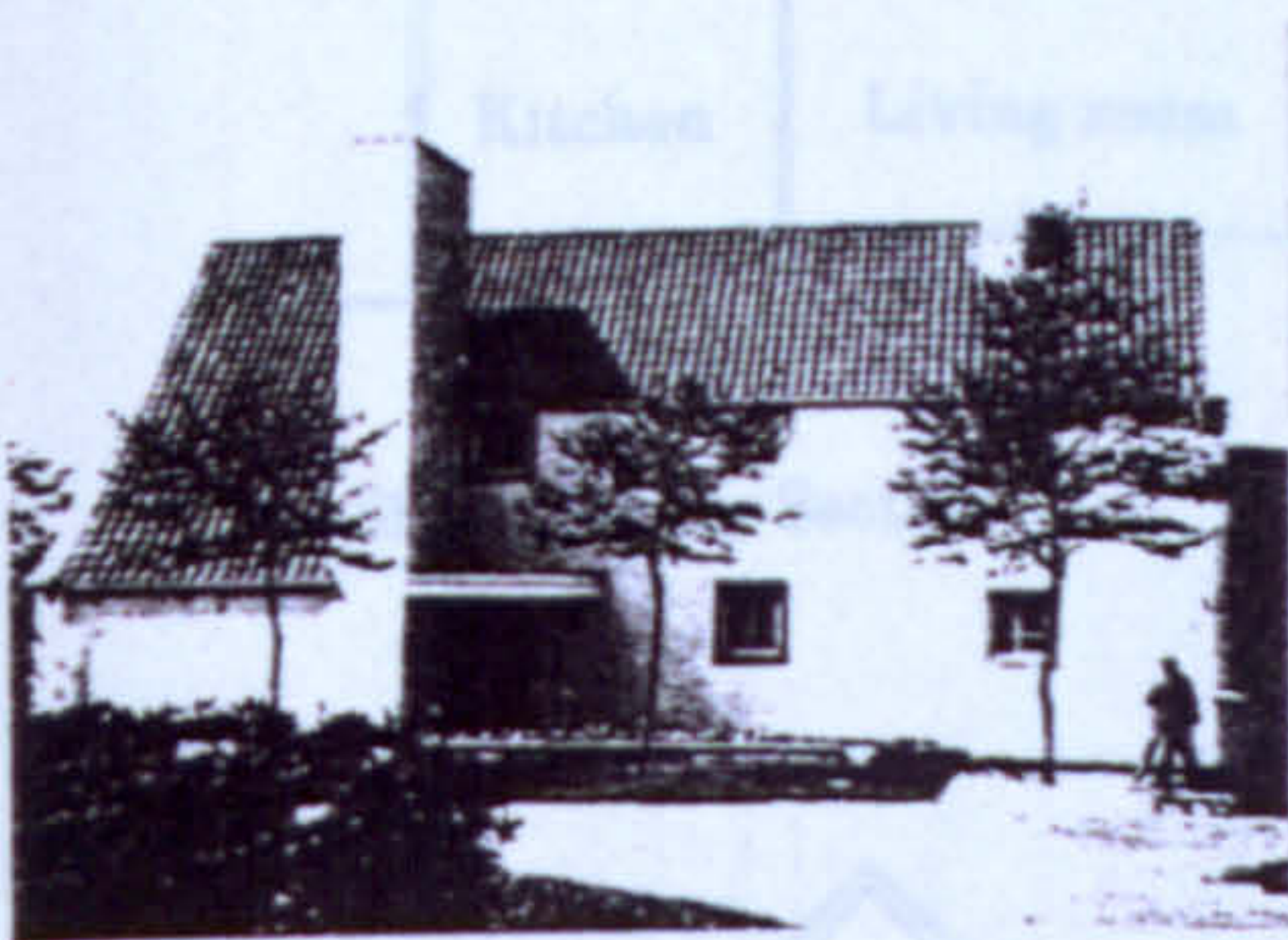
block plan
1:1000

Figure 3.30

Kininmonth and Spence



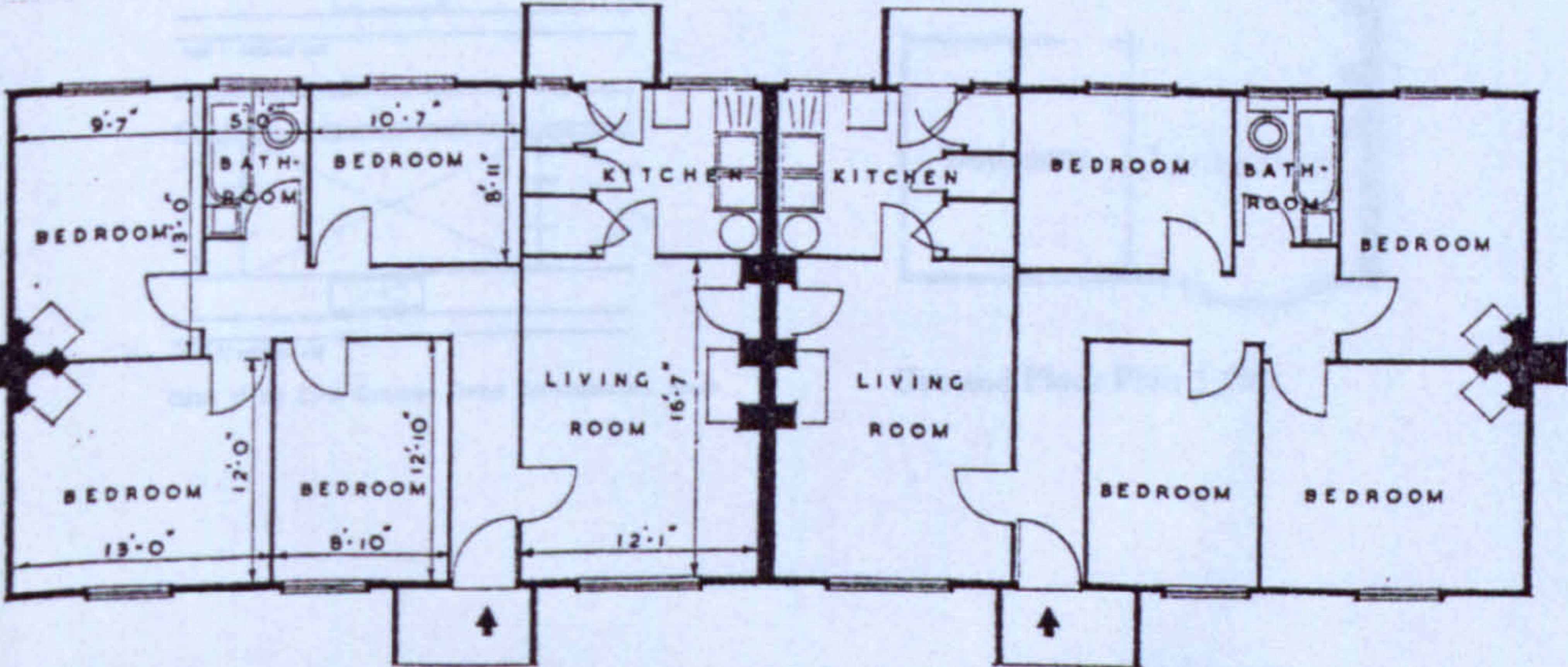
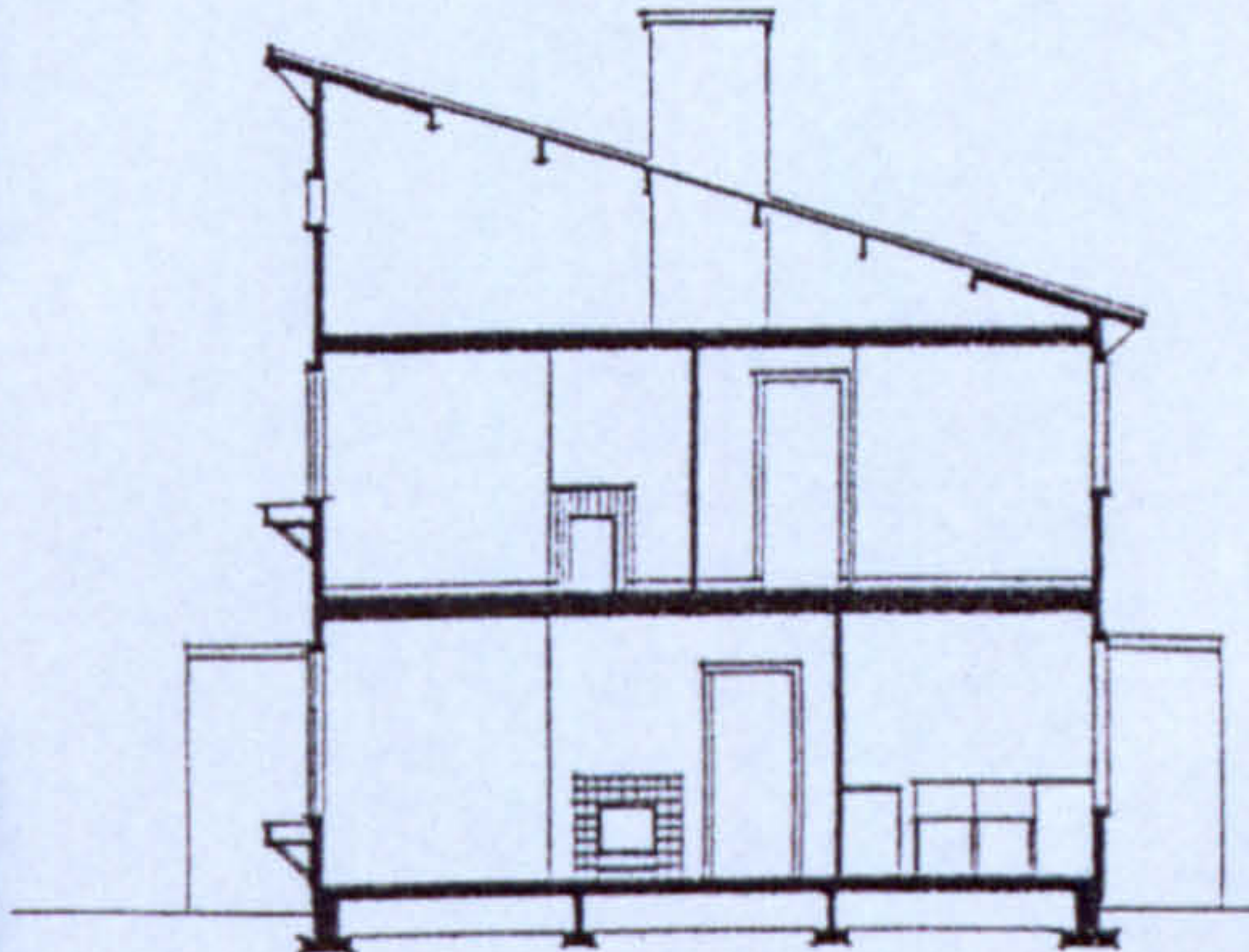
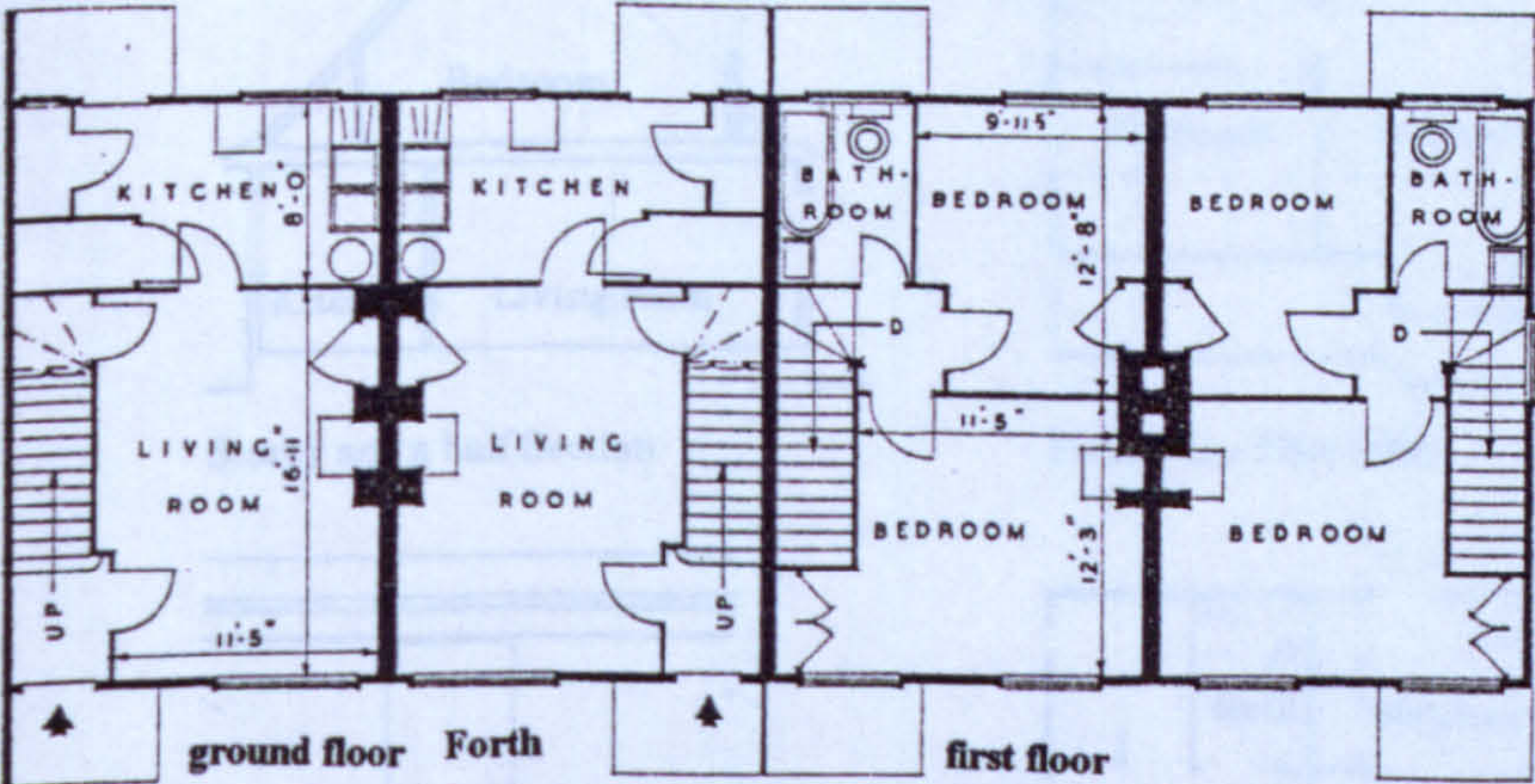
Council houses, Dunbar 1935



1938 Empire Exhibition Source Scottish 30's Forth houses model



The Neuk and Merlindale, Forth as built

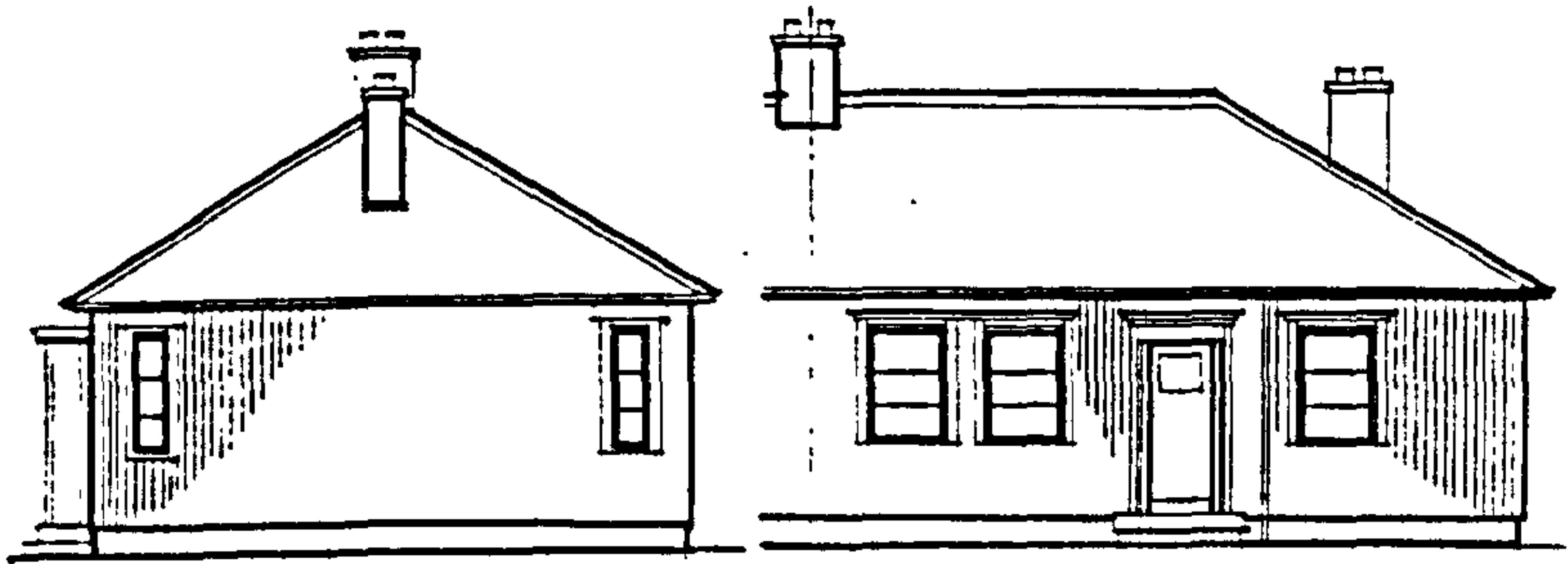


Timber Housing Scheme at Forth
 Above : Plans and section of the three-apartment type
 Left : Plan of the five-apartment, one storey type
 Architects : Rowand Anderson, Paul & Partners [FF.]
 source RIBAJ 6.3.1939, 456 - 459

Figure 3.31

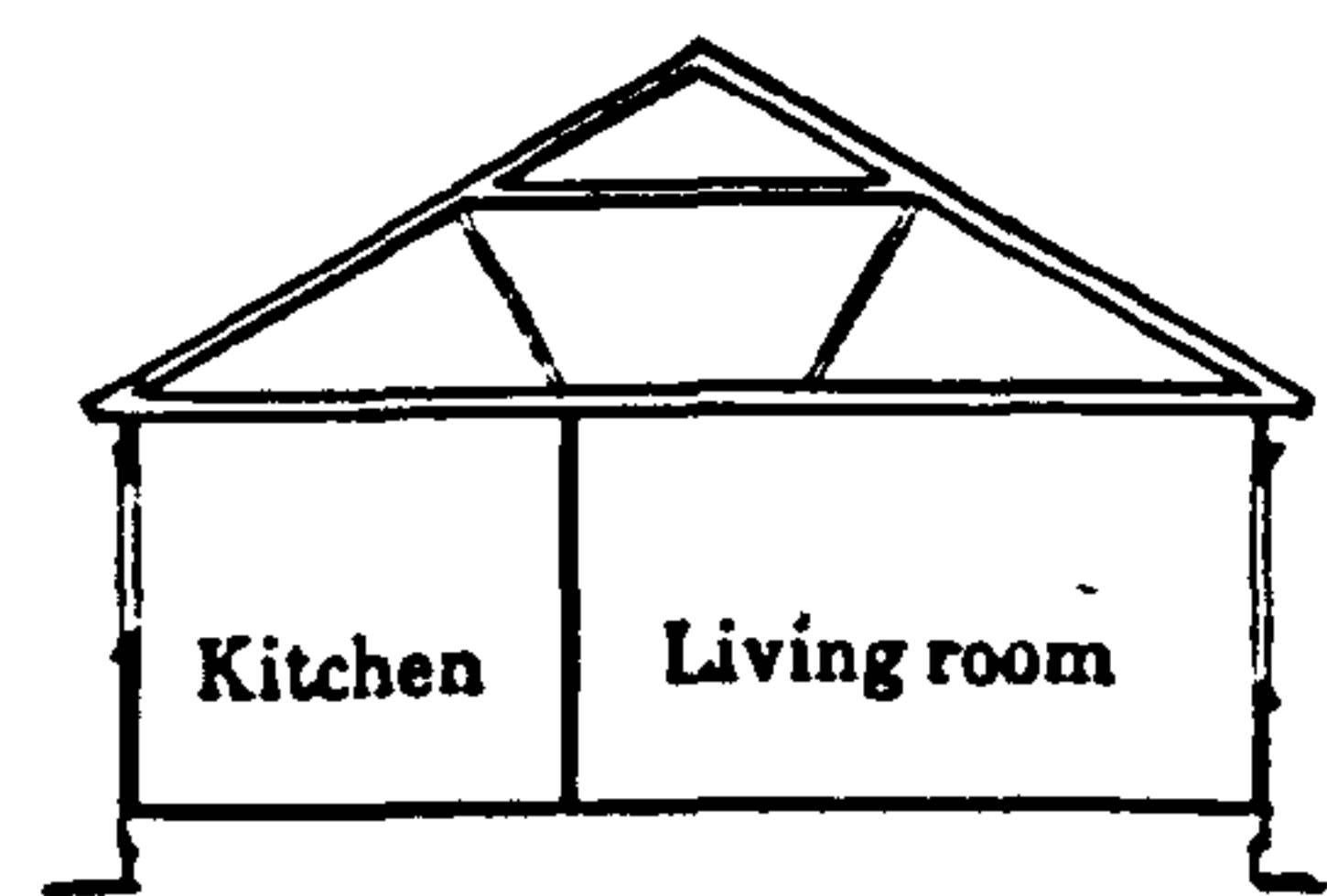
Architects Rowand Anderson, Paul and Partners, designer B. Spence 1938
 Forth houses later "rehabed" with facing brick and harled walls and duo pitched roofs.

SSHA Canadian Timber Houses

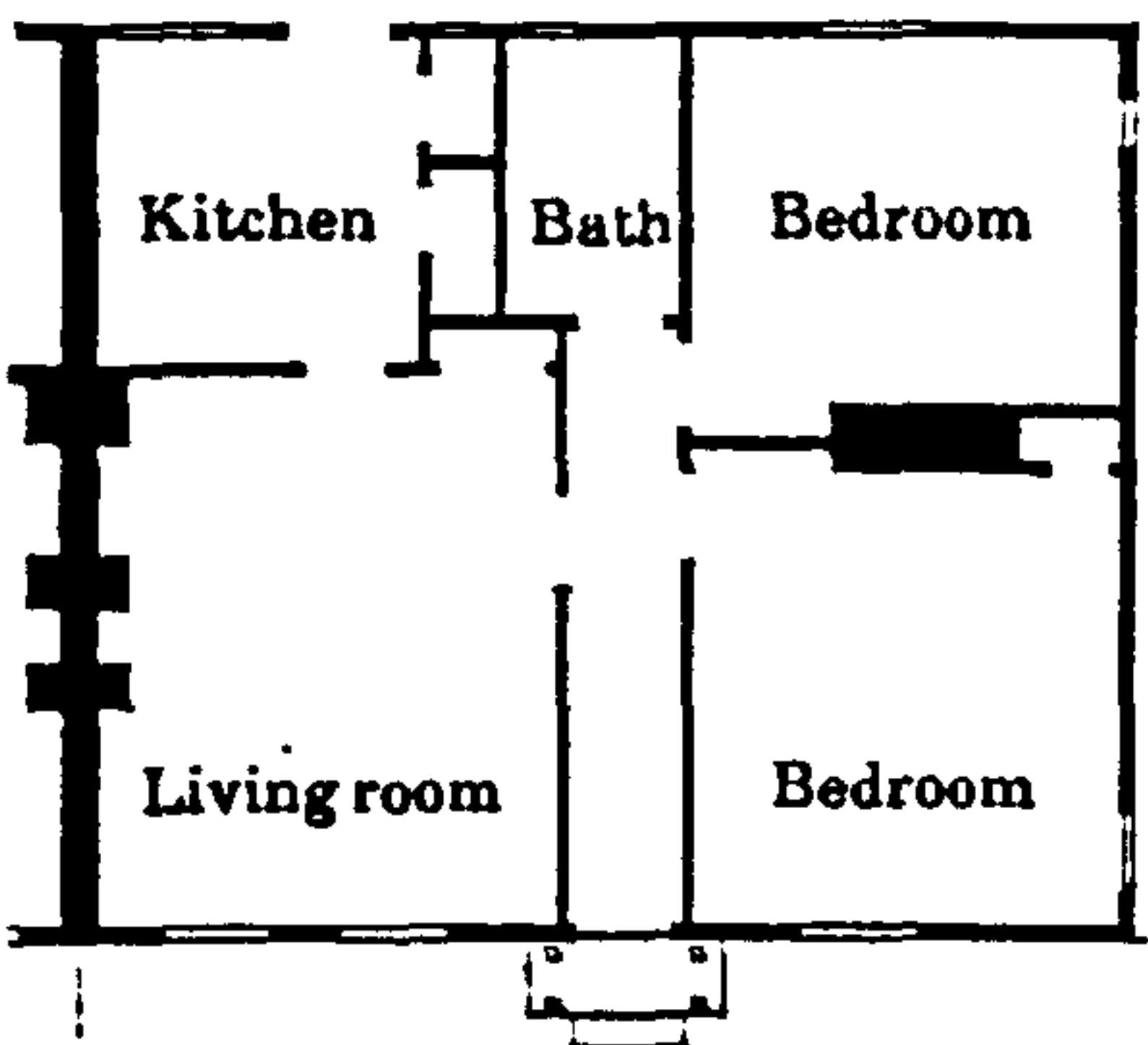


Side Elevation

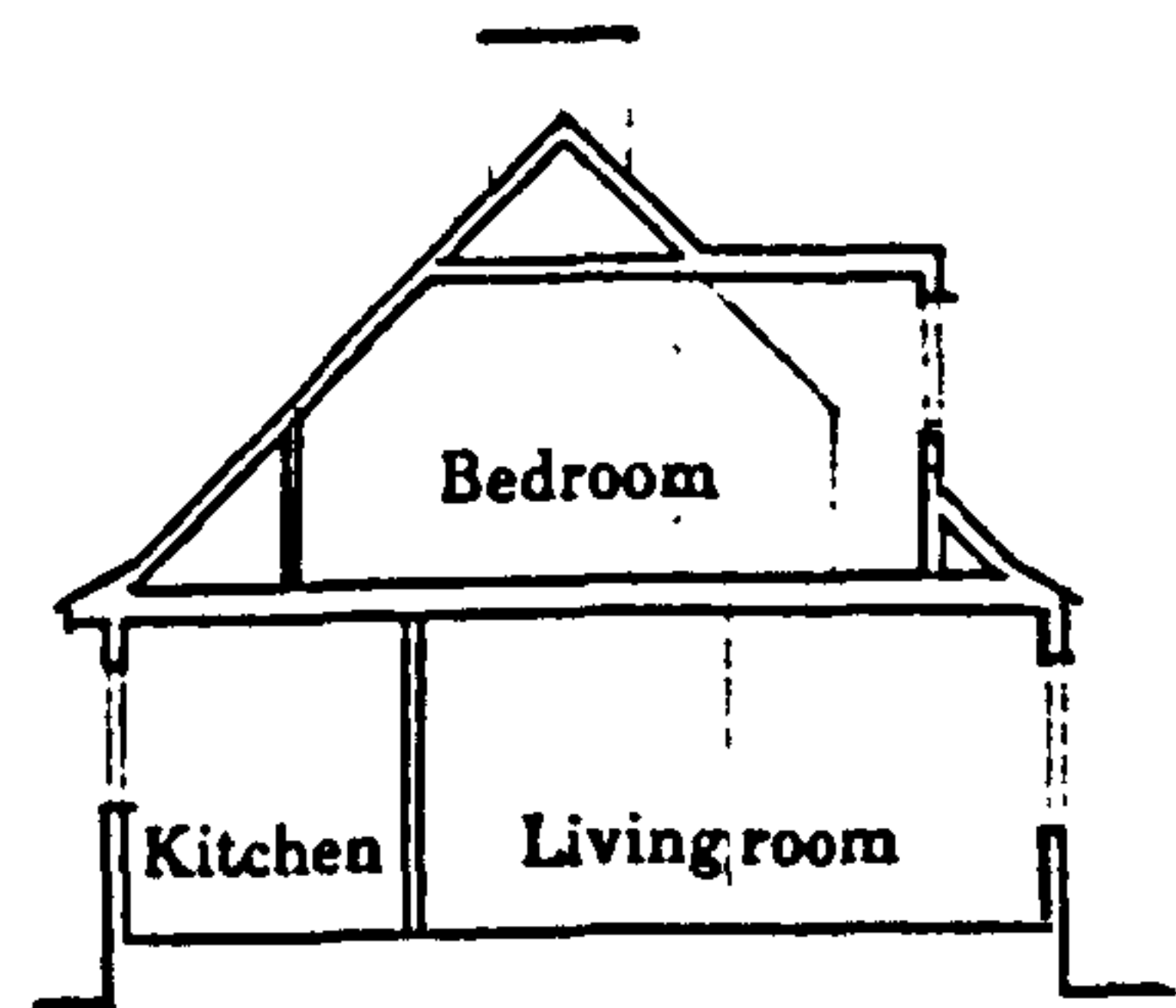
Front Elevation



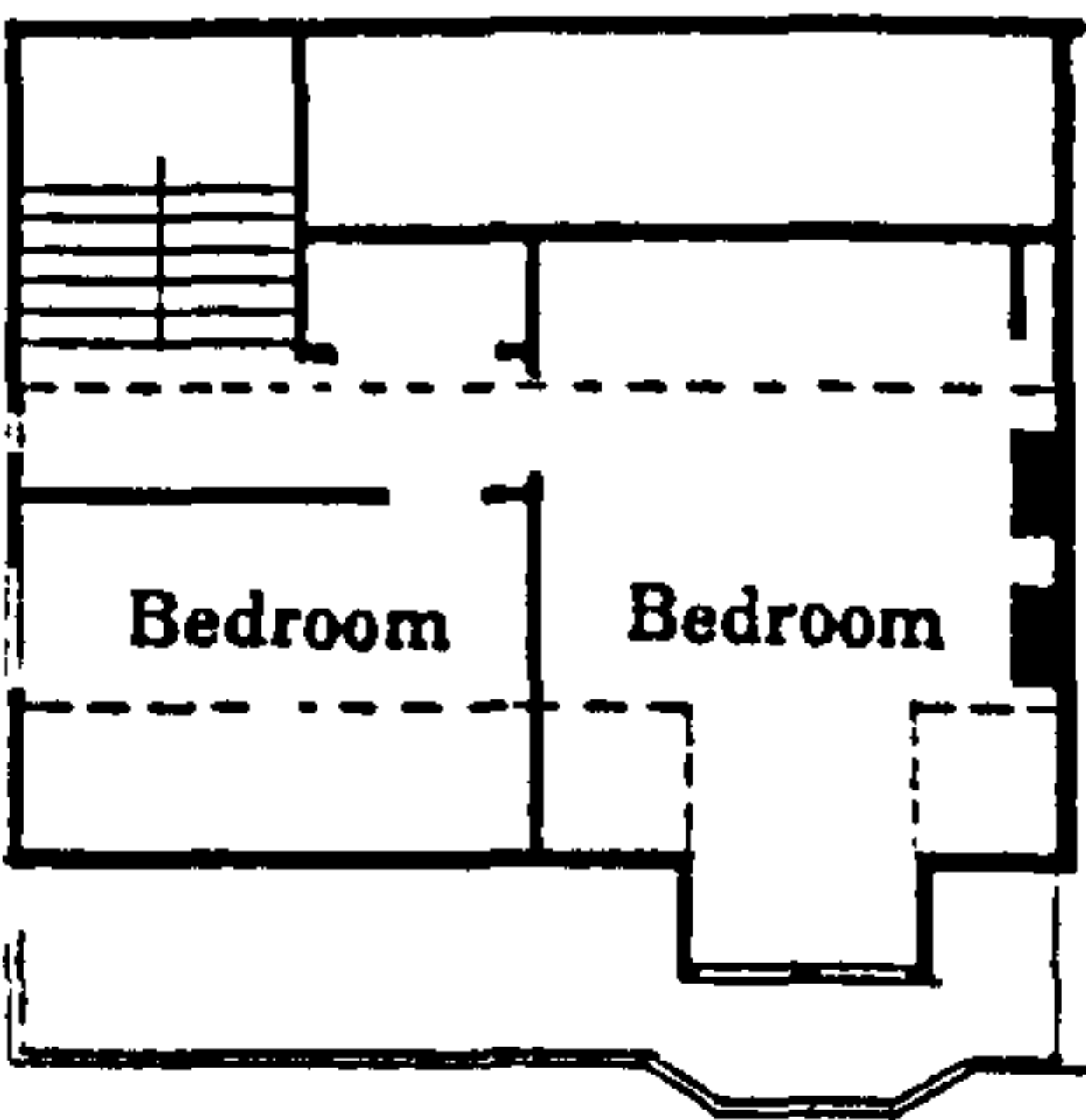
Single Storey Section



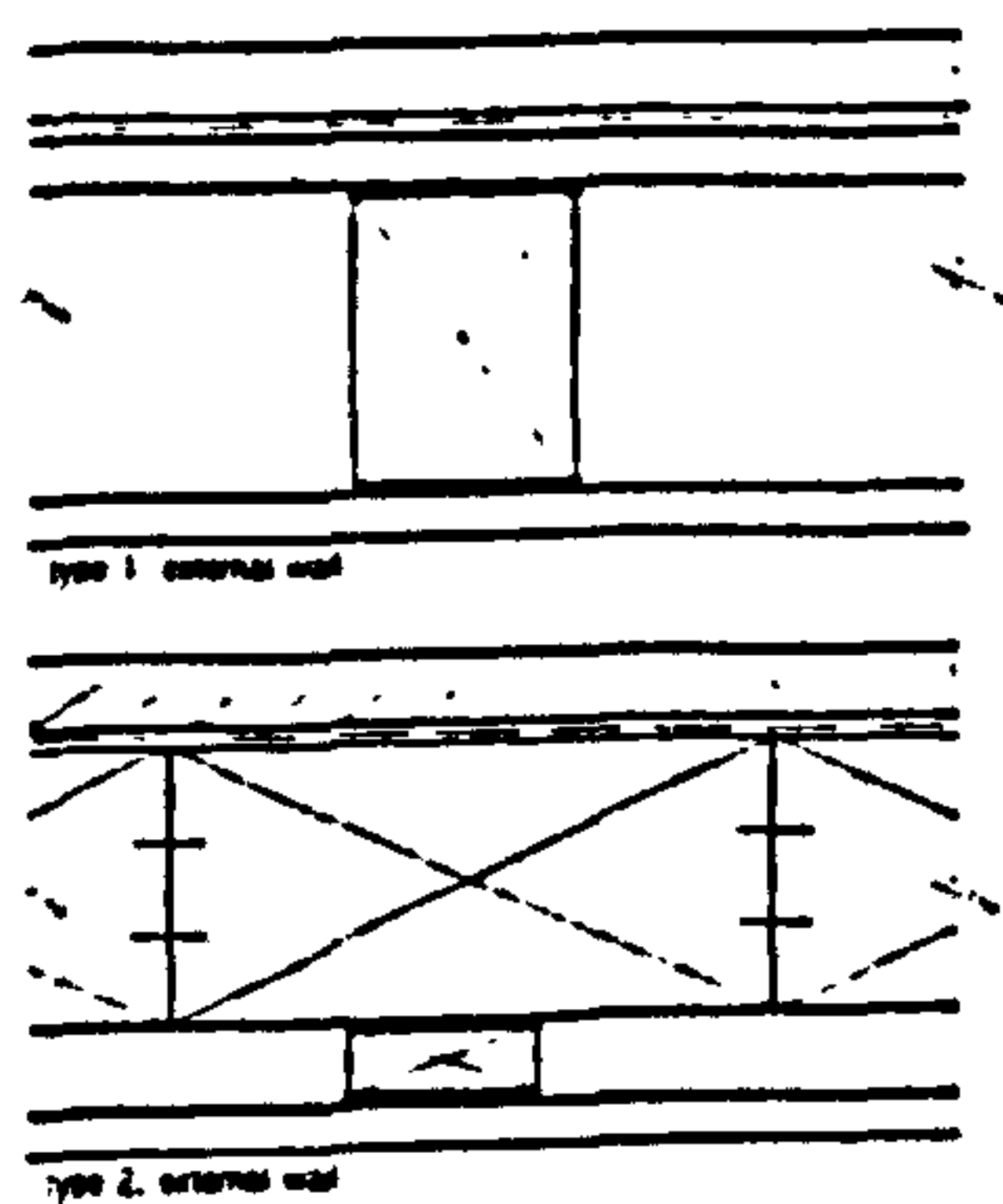
Single Storey Plan 1:200



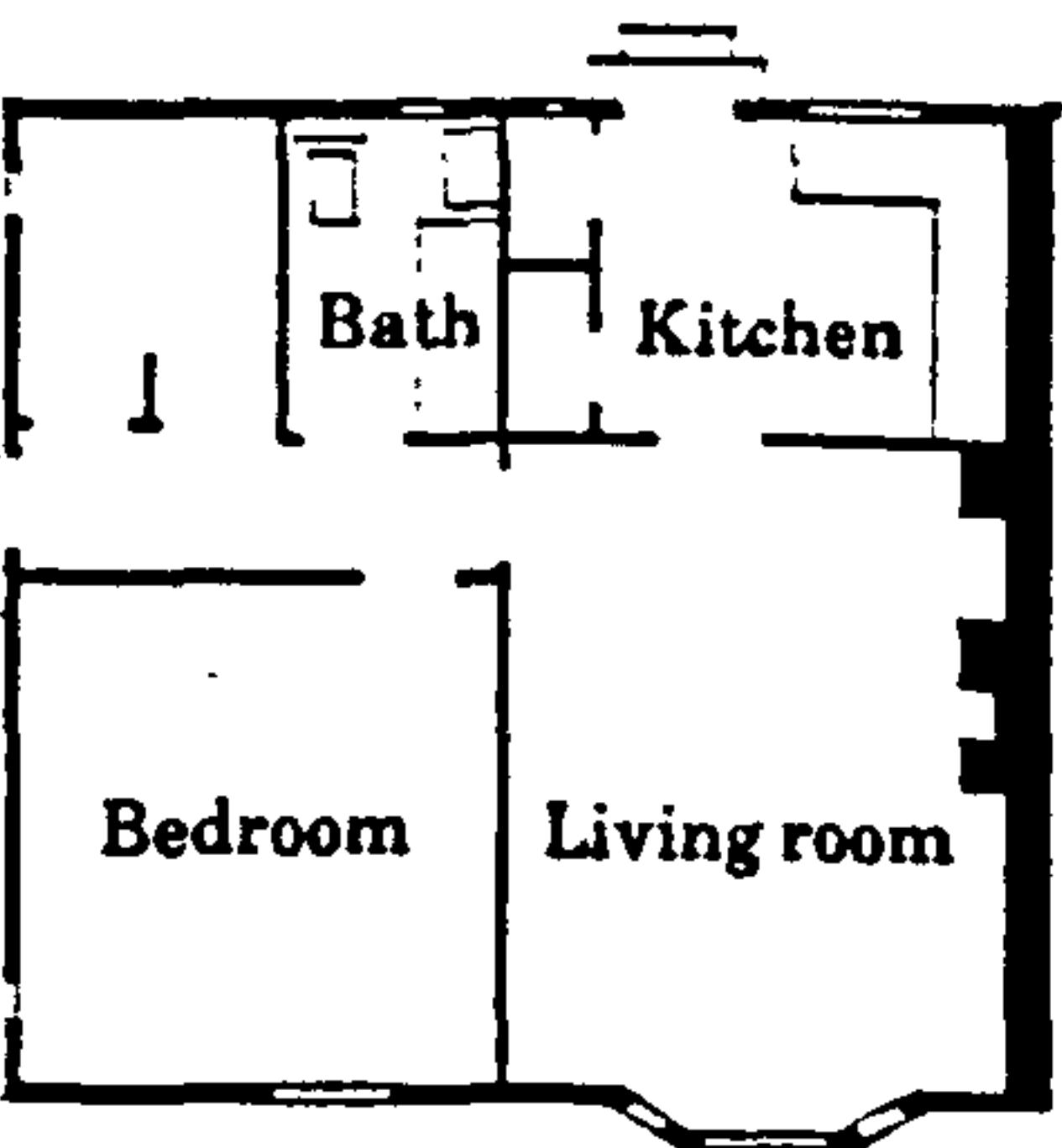
Storey and a half Section



First Floor Plan 1:200



Detail of the SSHA Canadian Timber Commissioners house.



Ground Floor Plan 1:200

The Scottish Special Housing association built timber houses on various sites between 1937 and 1941. These were not prefabricated, but built on site and they differed substantially in design to harmonise with the surroundings of each area.

External Wall Construction

The bungalows and the upper storey of the 2-storey houses consisted of 100x50mm timber framing covered on the outside with sawn diagonal boarding, building paper and finished with one of the following:

1. Vertical boarding with cover plates
2. Horizontal boarding
3. Log cabin boarding
4. Shingles.

The lower storey of the 2-storey houses consisted of heavy timber planking of 150x50mm or 150x75mm scantling, feather jointed together with a layer of building paper on the outside and finished with the coverings indicated above. The internal finish was either 6mm or 10mm plasterboard. Some houses were lined with fibreboard. In some kitchens, a dado of cement on metal lathing was installed.

Figure 3.32