

THE GLASGOW SCHOOL OF ART

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WINDYHILL

(1899-1901)

A SURVEY AND DISSERTATION

PRESENTED TO

THE MACKINTOSH SCHOOL OF ARCHITECTURE



by

GRAEME S GREENOCK

and

STANLEY S P DOYLE

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Introduction

*'In any enumeration of the creative
geniuses of modern architecture,
Charles Rennie Mackintosh must be
counted among the first.'*

'H Muthesius' (1868 - 1928)¹

In 1899 William Davidson Junior appointed a Glasgow Architect, Charles Rennie Mackintosh, to design a dwelling for his family on an exposed hill site in Kilmacolm, Renfrewshire. The house was planned carefully to meet the requirements of the family and in July 1901, the Davidsons moved into the house, appropriately named 'Windyhill'.

Although Mackintosh's work went unnoticed in Britain, in the space of eighty years much of his work has been carefully examined. However, Windyhill still lives in the shadow of Mackintosh's later house design in Helensburgh, named Hill House (1902 - 3) arguably the finest example of modern house design in Britain.

It is the aim of this dissertation to examine Windyhill in view of Mackintosh's ideas and style at this particular stage in his architectural development; to pinpoint influences on the Mackintosh house design and, finally, to establish whether Windyhill can be merited as a significant house design or, whether it was to serve only as a prototype for the one at Helensburgh.

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Footnotes

- 1 Alastair Moffat, Remembering Charles Rennie Mackintosh (Lanark: Colin Baxter, 1989), p.7.

Chapter I

Charles Rennie Mackintosh and the Economic and Social Development of Glasgow in the Nineteenth Century

Towards the end of the nineteenth century, Glasgow was experiencing a period of unparalleled growth. With the decline of the spinning and weaving industries, the city developed as a port, exploiting its geographical location to trade with the rest of the world. An extraordinary level of engineering skill developed, enabling Glasgow to establish its 'Clydebuilt' quality in the ship building market.¹

The growth of industry, trade and commerce together with a powerful civic pride and a well - developed civic mentality led to the conception and realisation of the first international exhibition of 1888 staged in Kelvingrove Park. Exhibitions on a grand scale began in London with the one at Crystal Palace in 1851 and 1889 Manchester, a civic rival to Glasgow, held its Royal Jubilee Exhibition. The Glasgow exhibition was seen as a bid for cultural status to match the city's industrial strength. It was also intended that profit accruing from the exhibition would fund a new art gallery, museum and school of art.

The plans to include a new School of Art were aimed at improving the standard of art and technical education in the city. Manufacturers were becoming increasingly aware of the importance of design and marketing to a new middle class of consumers. In 1885, Francis (Fra) Newberry was appointed as headmaster (or director) of the new Glasgow School of Art. A dynamic personality, he was more than sympathetic to the relationship between Art and Industry and it was under his leadership that the Schools distinctive contribution in art, architecture and especially developed towards the end of the century. It was he who actively supported the recognition of a group of painters who, although not all natives of the city, but used the city as a base for meeting and

discussion, became known as the "Glasgow Boys". It was he who recognised the genius of Charles Rennie Mackintosh and he who influenced the decision to award the winning of the design for the new school of art to the architect in 1897.

From 1850 onwards the architecture of Victorian Glasgow tended to exemplify in its commercial and residential areas the prosperity of its business. The buildings had a fine, city-scape scale but they were mainly derivative of historical forms in Neo-Gothic, Neo-Classical and Neo-Italian Renaissance styles.

The challenge was presented to the architect to break from tradition and to derive forms based on the potential elements offered by the new 'machine age' such as new materials and processes resolving the subsequent problems posed by their use.

Charles Rennie Mackintosh was one such architect to realise the need for a new style in architecture. Through his contact with the Art School and numerous painting galleries in Glasgow, he soon became aware of new cultures and imagery in the art world. From a paper read to the Glasgow Art Association in 1891, Mackintosh believed that the Scottish Baronial style of architecture was suited to generate a move forward to find a new 'national style'.

"In variety of expression the Scottish style is very versatile being equally capable of the most stern and majestic severity, and the most exquisite and refined elegance..."

The lessons of Scottish Baronial architecture were therefore distilled towards a new non-historic architecture inspired by Mackintosh to provide a new vision of a total modern way of life; a room as a work of art, the space, furniture and objects forming a designed totality.²

*"... all great and living architecture has
been the direct expression of the needs and
beliefs of man at the time of its creation,
and now if we would have great architecture
this should still be so."*

C R Mackintosh³

Footnotes

- 1 S G Checkland, The Upas Tree. Glasgow 1875 - 1975 (Glasgow: Robert MacLehose, 1976), p.6
- 2 Andrew MacMillan, Architectural Association Quarterly (1980), vol 12, n.3, p 4 - 10
- 3 Thomas Howarth, Charles Rennie Mackintosh and the Modern Movement (London: Routledge and Kegan Paul, 1952), p.16. The quotation was taken from a paper read to the Glasgow Institute in 1894 on the subject of 'Architecture'.

Chapter II

A Description of Windyhill

i) Internal Arrangement

*"A breach has been made with the past,
which allows us to envision a new aspect
of architecture, corresponding to the technical
civilisation of the age we live in... We
are returning to honesty and thought
and feeling."*

W. Gropius ¹

Mackintosh acknowledged the historical lessons to be learnt in the development of the Scottish keep - a simple round shaped building of the fourteenth century - modified in the fifteenth century by the addition of wings forming an L shaped plan around a courtyard. The buildings initially served as fortifications located on commanding hilltop or hillside positions but as these requirements diminished they were built mostly in scenic locations as residences for the noblemen.

Externally certain Scottish features were expressed such as corbelling, high pitch stone or slate roofs and gables with crow-stepped forms, although in the sixteenth and seventeenth centuries English architectural features influenced the external appearance and even the function of the corbel was displaced by its use as no more than a decorative adjunct to the buildings.

However, Mackintosh recognised that despite the extraneous developments which had taken place, fundamental Scottish forms had survived in evolution:-

*"The L plan and the courtyard plan
survived all others and have continued to
the present day"²*

Windyhill adopts the L plan to provide a practical and simple solution to the difficulties of the site (plate 1). Principal rooms are arranged in one main south facing block, commanding impressive views of the surrounding Renfrewshire landscape. To the north side, the smaller service wing encloses an entry courtyard and small pond.

In the treatment of the entrance block and garden courtyard Mackintosh expresses the need in house design for shelter and refuge within a given landscape.³ He recognises the importance of the entrance as an element within a composition by exploiting change, texture and three dimensional qualities of a material.⁴ Although not as rich in expression as the School of Art, the rounded edge and stone projection over the doorway appear to reduce rationally the wall as a defensive screen to one that is appropriate to domestic architecture (plate 2). The importance of this element is emphasised by the deliberately limited use of the major building surfaces, namely, grey harling to the walls and dark blue Ballachulish slate to the roof.

Entry to the main east to west hall is initially made through a tall porch lit on one side by a small lead panelled window (plate 3A) that faces the courtyard and then by a door having two large stained glass panels depicting an organic design (plate 4A).

The hall itself is spacious with (plate 4B), on the north side, three windows set into deep white coloured walls framed by vertical oak straps which terminate at a continuous oak frieze rail. Dark stained timber floor joists at regular centres with white plaster infill form the ceiling and establish a rhythm which leads to and culminates at the splendid west staircase.

Three principal rooms, the dining room, the play room and the drawing room, are entered from the hall.

The dining room is located at the extreme east end of the house. Whereas, generally, the walls of the rooms at Windyhill are finished in white, those of the dining room are lined in oak to the frieze rail creating an interior with an atmosphere conducive to the function.⁵ Other internal features such as a simply designed fireplace with a bay on either side, three deep set windows, a shallow vault over part of the ceiling and two access doors combine in the satisfactory enclosure of the space.

Comparitively, the play room, at the west end, and the centralised drawing room are sparse in the use of decoration and materials.

However the drawing room has a seating bay which protrudes into the garden terrace and surrounding landscape. The additional fenestration in the feature produces more natural light and the form serves as a functional summer space. By dropping the ceiling level from the decorative timber posts at the bay projection, Mackintosh had created an area within an area. Directly opposite the projection is a highly modelled fireplace with timber posts of a similar design to those mentioned above, thus delineating a heating zone in the winter time.

At this point, although out of context with the description of space elements, mention must be made of the care taken by the architect to integrate natural ventillation panels in the design of the pass doors to all the rooms at the ground floor level. They illustrate both a functional realisation of a modern requirement between internal spatial areas and a design integration to unify the visual appearance of a building element. It is an example of a response to answer a current innovation with, at that time, a modern technology.

*"High technology is not an end in itself
Rather it is a means to social goals
and wider possibilities."*

N Foster⁶

The west staircase is without doubt the 'jewel in the crown' of the entire building design and is an element that Mackintosh appeared to take great enjoyment in combining the influences of different forms and play of light within a space (plate 5A). A tall square timber post springs from the broad semi circular half landing, tapering as it rises to the ceiling, where it is crowned by a square cap. The staircase flows pleasantly onto the ground floor hall, providing a channel for indirect light, broken up and diffused by ranges of lofty oakboard balusters. A sense of freedom and spaciousness engendered by the sparse ornamentation and treatment of the dominating surfaces prevails. Although small square glass insets on the timber balusters are an attractive detail, it is the very simple nature of the staircase itself which makes it such an attractive element. Here Mackintosh can be seen anticipating the new 'machine-age' by grasping the potential of a material, namely wood, and by simple construction methods creating a quality of space that reflects the current life style.

The tall lead panelled window at the first floor landing (plate 3B), is an example of a very specific place created out of a very simple use of very simple elements. The lead panelled window is deliberately set on the same axis as the garden path and gate (plate 5B). These two elements are essentially each a part of larger elements which is either physical - the garden boundary wall or psychological - an edge to the symmetrical arrangement of the garden courtyard. The richness of this mechanism justifies the position, quality and form of the main stair, and must be seen as a conscious decision on behalf of Mackintosh to

create not only a bond between building and landscape, but also an imaginative and visual sequence of events.

"It is the unique responsibility of the architect to raise the human spirit by the quality of the environment which he creates, whether it is a room, a building, or a town."

J Stirling⁷

On the upper floor, to the south are arranged the main bedrooms and guest room; to the north is the practical arrangement of fitted cupboards and bathroom with a seat alcove overlooking the north courtyard. Similar to the mechanism of the first floor landing window, Mackintosh makes the seat alcove a very specific place by providing glimpses of the slate roof.

Looking from the staircase waves of light reflect down the white walls of the interior until halfway along its length, the seat alcove traps and conditions the passage of light by means of timber posts and leaf like engravings before sending a final 'pulse' down the remainder of the corridor.

The sequence of spaces through the building are firstly a dark entrance hall essentially lit by three deep windows, but also underlit by light from the stair. Secondly, light and space are continuous in the large floodlit staircase, and thirdly, the treatment of the first floor corridor (as described above) can be seen as totally different. This mysterious passage through the primary areas, though totally dependant on the unpredictability of natural light to guide the eye, creates a flowing movement through the building by the modelling of the spaces.⁸

The main bedroom located at the extreme west end has very simple purple and lilac organic stencilling set against the pure white background of the walls and built-in wardrobe⁹ (plate 6A). The fresh and almost spring like space is arranged in zones for use in living; the shallow vaulted ceiling delineating the bed space and opposite it, the dressing table, the fireplace (plate 6B) and wardrobe are appropriately arranged. The three delicate leaf patterns with the play of light on the timber surround of the mirror stand, and the carved qualities of the bedstead show Mackintosh,

*"... grasping the potential of any building
form has for expression."*

A MacMillan¹⁰

For Mackintosh to achieve a total environment he literally had to design everything within it, enabling him to develop his great skill and understanding of materials.

ii) External Arrangement

At the turn of the nineteenth century the Scottish architect Sir Robert Lorimer (1864 - 1929) became the pioneer of the Arts and Crafts Movement in Scotland.¹¹ His house design (plate 7A), Ardkinglass in Argyllshire (1906 - 8) displays the expression of the Scottish vernacular and exemplifies that whilst in the design the plan form is freely explored in its evolution, the elevational treatment is Scots Baronial. The preference for the use of the Scots Baronial or Classical styles as appropriate imagery was prevalent in domestic buildings designed by architects at this time.

Mackintosh, in comparison learned from the traditional and historical Scottish forms to evolve his own personalised internal and external expressions which were brilliantly innovative in space and time at the end of the nineteenth century.

"Modern architecture, to be real, must not be a mere envelope without contents... We must clothe modern ideas in modern dress."

C R Mackintosh¹²

However, with regard to Windyhill, in particular the south elevation (plate 7B) is a disappointing feature where it appears to be unimaginative in expression of the internal function. The arrangement of all the major rooms along the south elevation could potentially have resulted in plans being expressed in a richer way to give an organic relationship from the two to three dimensional materialisation of the forms.

The eaves level could have been stronger if the junction of it with the wall head had been emphasised. If the roof had projected beyond the wall face not only would the visual separation of the two elevational elements have been stressed but also there would have resulted an interesting play of shadow on the wall surface.

The Clients themselves appear to have been disappointed with this part of the house having, albeit unsuccessfully, installed white painted shutters presumably to soften the rather austere appearance of the elevation.

Despite the observations made above, it could be argued that the simple statement of the south elevation is a counterbalance to the north one if the building were considered in its external three dimensional form. The north elevation is full of interest with features which can be identified as innovations to the more mature developed ones in Hill House.

As both the main block and the service block are two storeys in height, the difference in the eaves level and the deep shadows cast by the eaves on the north elevation satisfactorily distinguishes the two blocks so the entrance block is given dominance (plate 8A). The eaves projection also sets apart the three major elements of the plan form; the spacious hall, the entrance lobby and staircase tower are the most impressive features showing a change in material and purity of form, the grey harling returning over gables and returning into the window recesses, the tall slits of lead panelled glass one storey tall, anticipate a new direction in architecture (plate 8B).

Windyhill displays Mackintosh's fascination in the grouping of parts to create an overall intricate and thoughtful impression on the skyline; the stair tower, high chimney heads, steep gables, dorm windows and high pitched roofs are all characteristic features derived from historical lessons.

*"In beauty of external outline and grouping
of parts, approach, boldness, form and
variety of conceptions very few styles
approach it."*

C R Mackintosh¹³

Apart from the house itself, Mackintosh also considered the immediate surrounding environment within the boundary.

On the northside two courtyards of different purposes and their own entranceways are separated by a garden wall following the line of the service wing.

The formal entrance on the west side is the main entrance for the occupants and guests whilst on the east side there is a secondary entrance for maids and domestic deliveries.

The north boundary wall (plate 9A) displays organic forms as it gracefully 'bows' to reveal a glimpse of the rich entrance mechanism, and then swells out to form two large stone drums in anticipation of the breach in the wall. The timber architrave symbolises the importance of the breach in the wall and the importance of the space that lies behind.

The steep slopes, bare rock and vegetation are the natural landscape features the site had to offer which Mackintosh skilfully handled in the formation of garden terraces and courtyards so that they became an extension of the internal spaces (plate 9B).

Footnotes

- 1 Deyan Sudjic, New directions in British Architecture (London: Thames and Hudson, 1988) p.33.
- 2 David McGibbon and Thomas Ross, The Castellated and Domestic Architecture of Scotland, Vol III (Edinburgh: James Thin, 1971) p366.
- 3 Thomas Howarth, Charles Rennie Mackintosh and the Modern Movement (London: Routledge and Kegan Paul, 1952) p103.
- 4 The entrance on the west gable of the Glasgow School of Art (1907-09) is one of Mackintosh's finest examples of the 'opening up' of the wall, forming a very complex organisation of entry.
- 5 Thomas Howarth, op. cit., p45. Eating and drinking Mackintosh felt, were an important ritual.
- 6 Deyan Sudjic, op. cit., p54.
- 7 Deyan Sudjic, op. cit., p75.
- 8 A similar device is used in the Art School where small tight spaces of the entrance area are underlit by the large floodlit staircase and then through into a totally different sequence of spaces.

- 9 Thomas Howarth, *op. cit.*, plate 34C. Shows the stencilling to the walls and wardrobe of the master bedroom, all that remains are reproductions of those for the wardrobe.
- 10 Andrew MacMillan, Charles Rennie Mackintosh, A Lecture recorded at a symposium on architectural expressionism at the Architectural Association, London 1980, Sussex Video 1980.
- 11 Margaret Richardson, Architects of the Arts and Crafts Movement (London: Trefoil Books, 1983), p115.
- 12 Thomas Howarth, *op. cit.*, p16. In 1894 Mackintosh gave a paper to the Glasgow Institute on the subject of 'Architecture'.
- 13 Charles Rennie Mackintosh, a paper read to the Glasgow Art Association in 1891 on the subject of 'Scotch Baronial Architecture'.

Chapter III

A Comparison of Windyhill and Hill House

"The redesigning of one's own projects can result from personal affection or at the same time it can be a form of technical exercise - like studying the ancients or urban topography".

Aldo Rossi Milan 1984¹

When Mackintosh's houses are compared it is immediately evident that Hill House is a development of its predecessor in Kilmacolm. With the commission of Hill House, Mackintosh was given a rare opportunity to develop the ideas that were born in Windyhill.

We see this in many aspects of Hill House on a technical level it is noticeable in the absorption of the services into the design; for example a linen cupboard is incorporated into the seat of the first floor alcove, and on the ground floor, in the drawing room, hot water pipes are run under the seat in the bay window.

In another aspect Mackintosh concluded his exploration of the principle of the vernacular building form from which both houses are derived, namely interior space shaped by use. Ideas which are tentatively explored in Windyhill come to their climax in Hill House (plate 10).

In the drawing room of Hill House the dual functions of summer and winter use are more clearly expressed. As was described in chapter 2, in Windyhill the fireplace is directly opposite the bay window, whereas in Hill House the bay takes more prominence in the room and the fireplace is no longer

opposite but almost diagonally opposed to the bay. This produces a summer room centred on the bay window, and a more enclosed winter room gathered around the fireplace. This is a recognition of a facet of Scottish life which is not readily appreciated in an age of central heating and double glazing. It is the withdrawal into the heart of the building during the winter in the same way that blood leaves the extremities of the body in the cold. It is this deep understanding of the Scottish vernacular that separates Mackintosh from his contemporaries in the 'English House' movement and its simple recreation of the 'English Style'.

The master bedroom (plate 11A) is very similar to that of Windyhill but again it is bolder in the expression of its functions. The shallow vault which only partially covers the bed at Windyhill extends to describe fully the bed space. The built in wardrobes are more highly crafted and the specifically designed furniture give the room a greater harmony of composition. It should be noted however that Windyhill was a more modest commission and as such, the intricate craftwork of Hill House may not have been affordable under the budget.

Mackintosh's use of expressionism can also be seen in the fenestration. Whereas at Windyhill, windows fall into a smaller number of types, in Hill House (plate 12A) Mackintosh makes more use of the window as a means of expressing the importance, privacy, and use of the space behind. This can be clearly seen in the niche window of the master bedroom (plate 11B) this small window, with internal shutters that are mirrored in the modelling of the elevation, indicates the privacy of the function behind, namely sleeping, whilst at the same time, as it is a break from the bedroom fenestration type and penetrates through the structure of the wall, it gives prominence to the master bedroom as the major space on the first floor.

The development of elements is, however, not completely successful. The seating bay in the drawing room (plate 12B and 13B), although larger and more highly developed internally, seems externally 'detached' from the building. In the redesigning of the bay Mackintosh lost the natural feel of its predecessor in Kilmacolm. At Windyhill the bay has a more organic quality which seems to be allied to the vernacular forms prevalent in the house. At Hill House, the stark box like quality, which anticipates Loos, suffers the same alienation from the whole as the stair bay at Windyhill, and when Howarth writes about this he claims that "... Mackintosh lost for a moment his vision of the whole, his appreciation of architectural form he was modelling, and, in consequence, the staircase feature is out of harmony with the more conventional main block."²

Although this development of the type is fascinating, the more important quality of the comparison of the two houses is their clear demonstration of Mackintosh's rediscovery of the programmatic derivation of the vernacular form. In these buildings we see the conditioning of the L shaped plan to the differing needs of the clients, Davidson and Blackie.

Mackintosh was a friend of Davidson's before the commission and had designed alterations to their previous house. Blackie however approached Mackintosh as a stranger, having been impressed by the Glasgow School of Art, and Mackintosh insisted on spending time with his family so that he might better understand their lifestyle. It was through these close relationships with his clients that the architect was able to tailor the vernacular form of the houses to suit the lifestyles that they enjoyed.

Although both houses are very similar, both being L shaped with a primary and service wing, and both sited on imposing, open landscape, the subtleties of Mackintosh's approach to the two houses begins even as one arrives at the boundary walls.

When one arrives at Windyhill one is confronted by the wall which runs the length of the boundary at a height of about 2m, excluding views of the house from the passer-by, except at one point where it drops to allow a glimpse into the garden and the house beyond (plate 14A). Entry through the wall is by means of a small timber gate. This is where the street ends and the privacy of the house begins. Once through the gate there is a very controlled and yet peaceful garden and one is led to the door of the house which sits in the 'open arms' of the L shaped plan. The positioning of the door is such that it cannot be directly seen from the gate, but faces back into the angle of the plan again emphasising the privacy.

At Hill House on the other hand, although again the property is bounded by a high wall, this is thrown open by the two large gateways to the carriageway that sweeps up to the main entrance. Here the privacy of the house begins at the doorway, and indeed a distinct line can be drawn in line with the west elevation, following the line of the terrace wall and a garden lattice frame, which divides two zones of privacy within the site.

On the northern side of Hill House there is a private entrance to the house. This occupies nearly the same position on plan as the main entrance of Windyhill and is approached through a controlled garden which also bears a similarity to that of Windyhill.

Upon entering Windyhill one finds oneself in a spacious hall from which the three principle rooms can be directly accessed. By the entrance the stairs rise to the bedrooms. This is a very open space. No controls are placed on movement and this shows that the house was simply a home for the Davidsons and that Davidsons home and business lives were quite separate.

Blackie on the other hand ran a large publishing firm and of necessity had to carry out business at home on occasion. Mackintosh recognised here a need for zoning within the house itself. Although the disposition of the three principle rooms is the same as at Windyhill, by placing the entrance of the building on the 'end' of the corridor Mackintosh could employ a progression of spaces to keep the various activities separate.

The first zone upon entering is given over to receiving guests and business contacts. Here on either side of the hall are the library and the cloak room. Someone coming to the house on business would not pass this point.

Penetrating deeper into the building one moves down a length of corridor and up a small flight of steps into the next zone (plate 13A) from which the drawing and dining rooms can be entered. From this space another small flight of steps doubles back to take one to the staircase. This is a similar technique to the one used by Mackintosh with the entrance to Windyhill. Whereas at Windyhill the door was hidden from view but by use of the sandstone steps and decorative lintel, at Hill House one passes a screen which partially hides the stairs and although at this point one is aware of the position of the stairs further penetration into the building is necessary before the stairs can be reached.

It is also interesting to compare the relationships of service wings to main wings in the two houses. At Hill House an almost complete break is made between the two wings (plate 10), with, on the ground floor a buffer zone of cupboards and a corridor separating service and living on the upper floor this again happens with a bathroom and the guest bedroom on either side of the separating corridor. This blunt division of the two functions seems in keeping with the businesslike lifestyle of the Blackies.

At Windyhill, on the other hand the meeting of the two wings is more subtle with only a door separating the kitchen and stores from the principle rooms on the ground floor, and on the first floor only the change in direction of the corridor serves to make any distinction between the wings. This more open attitude to the service wing is also seen in the relationship of the approach to the house and the elements. At Windyhill as already stated the entrance to the house is protected by the arms of the building which also welcome the visitor, whereas at Hill House the service wing is obscured by the approach from the south west, and the stair tower.

What becomes apparent from a deeper examination of the two houses is that Hill House is not merely the concluding of Windyhill's potential in technical terms, but both houses, although obviously linked by this, are very different and individual developments of a shared prototype, namely the typical seventeenth-century Scottish town house.

The misunderstanding of these buildings, as of Mackintosh's work in general, began in Mackintosh's own lifetime. His work was resented by the powerful English Arts and Crafts Movement, and consequently, due to their influence on publication, the impact of his work in Britain was lessened. This lack of publication led to the almost theoretical design of the 'Haus Eines Kunstfreundes' becoming Mackintosh's introduction to Europe. Perhaps without any vernacular precedent from which to draw from, this house was to be seen as a work of outstanding originality, and in consequence, the two Scottish houses were more or less dismissed, and even today the historical roots of the buildings are either seen as a fault;

"It is possible, however, to feel that the step from the 'Haus Eines Kunstfreundes' to Hill House was slightly retrogressive. The latter is more overtly historical in that it is notably more tied to tradition and less completely dictorially resolved in its exterior treatment"

Robert MacLeod³

Or in some cases a lack of understanding of the manipulation of the L shaped plan has led to Windyhill and Hill House not being as highly thought of as other buildings designed by Mackintosh. This continuing lack of understanding can be seen in Kenneth Frampton's description of the two houses where he claims that "Mackintosh's perverse attempt to fuse the ornamental with the gauche was often far from successful, and the houses seem somewhat chaotic and unresolved when compared to the magnificent and highly influential 'Haus Eines Kunstfreundes' "⁴

Footnotes

- 1 Aldo Rossi A Scientific Autobiography (MIT Press, Chicago).
- 2 Thomas Howarth Charles Rennie Mackintosh and the Modern Movement (London: Routledge and Kegan Paul 1952) p102.
- 3 Robert MacLeod Charles Rennie Mackintosh Architect and Artist (Glasgow: Collins 1988) p96.
- 4 Kenneth Frampton Modern Architecture A Critical History (London: Thames and Hudson 1985) p77.

Chapter IV

The Influence of Japan

*"The appearance in, and dissemination
through Europe and America of the arts of
Japan, fortuitously provided the necessary
proof that a non-historic approach was
possible to form and shape, and to ornament
and enrichment"*

A MacMillan¹

In the early 1860's painters discovered Japanese Art as it began to arrive in the form of woodcuts that were used to wrap imported goods. It was their symbolic rather than realistic depiction of objects, the use of void, bright areas of colour and space rather than line which both Mackintosh and Wright were able, solely, to understand and incorporate into their architecture. In this confrontation with Japanese culture that Mackintosh found the catalyst that gave his work its unique direction.

Mackintosh's understanding of the Japanese print is evident in his highly stylised watercolour studies of flowers which he produced during his stay in England between 1909 and 1915, and also in landscapes produced in France at a later date. In these watercolours there is similar abstraction of forms to the style of Japanese masters such as Hokusai, whose work Mackintosh had studied. Although Mackintosh's watercolour works show a clear understanding of the Japanese art forms, he was an architect foremost and a painter second, and it is his translation of Japanese culture into built architecture which is of most interest (plates 15A and B).

Windyhill demonstrates this translation better than any of Mackintosh's other house designs and shows the love of more than just a surface enthusiasm for the style, but for the discipline of the architecture which he shared with Frank Lloyd Wright in 1905 Wright wrote:

*"We of the west couldn't live in Japanese houses and we shouldn't. But we could live in houses disciplined by an ideal at least as high and fine as this one of theirs - if we went about it for half a century or so. I am sure the west needs this inspiration."*²

Indeed many architects followed Wright and Mackintosh's lead, and Wright's prediction of fifty years was brought forward by Mies Van Der Rohe whose work included the Barcelona pavillion of 1929 and his house with three courts of 1934 fully embrace the Japanese idea of house and garden as an organic whole, which Wright and Mackintosh pioneered in the west at the turn of the Century.

The Japanese garden is so truly indispensable to the house that a Japanese house is almost unthinkable without a garden. Traditionally the Japanese house is not placed right on the road but generally stands in the middle of the garden surrounded by a high fence or wall. This wall must be regarded as the real exterior wall of the Japanese house.

As we have seen in the previous chapter, this is a device used by Mackintosh at Windyhill. As with the traditional Japanese house the garden wall at Windyhill is enclosed, giving a peaceful and harmonious atmosphere unlike the magnificence of its contemporary houses in suburban Glasgow (plate 14B).

The design of the gate also shows the importance of the boundary in relation to the house. Mackintosh uses much of the symbolism present in Japanese architecture. The gate posts are raised past the top of the gate and are capped with a timber cross piece which echoes the small roofs prevalent in Japan. This emphasises the entry from road to garden in a manner that demonstrates the importance of the garden to the house.

The garden itself is deeply rooted in the Japanese tradition. The courtyard is modelled in the manner of the main garden. Traditionally this is conceived as a work of art in which hillocks, ponds and streams are created artificially to form a landscape. Although the courtyard retains geometric character of the European garden it clearly demonstrates its purpose as a place of contemplation.

The path through the garden follows the traditional route between the gate and the entrance, that is, a diagonal or curved path to the house door, which never lies directly opposite the garden gate.

On the south side of the house Mackintosh applies less control, although a terrace, which may be seen as a symbol of a Japanese verandah, strongly ties the house to the sloping hillside. At the foot of the hill Mackintosh created another artificial garden reached by a curving stepped path which linked the natural geography of the garden to the carefully planned installations that he designed. As with his interiors, Mackintosh designed furniture for specific parts of the garden in keeping with the idea of the whole creation of the garden being a work of art.

The link between house and garden is further emphasised by the use of the 'framing' of views from the house to the garden. This is most evident on the north side of the house where the 'main garden' is situated. On ground floor level the small square leaded windows of the entrance porch and cloak room give

picture like views into the courtyard. On the first floor landing the floor to ceiling window is on axis with the gate and so gives a delightful aspect of the garden and again forms another harmonious link between house and garden.

The traditional Japanese window is a wide moveable, translucent screen, which can be slid open to give a complete view of the garden. Mackintosh realised the impracticality of this kind of window in the vastly different Scottish climate, and so whilst retaining the principle of framed views, he adopted more traditionally Scottish windows. There is however still a link with the Japanese in the leaded windows. They symbolically echo the secondary window type prevalent in Japan; the *Shitajimado*, or lattice window. These are round or semicircular windows which were occasionally squared off. These windows were frequently covered with a grating of thin bamboo rods and served a primarily decorative purpose. The square grid like pattern of Mackintosh's windows makes reference to these windows whilst at the same time fitting in with the other more vernacular windows of the house.

Whilst the planning of the house follows the traditional arrangement of the Scottish baronial town house the interior shows many of the qualities of Japanese design that Mackintosh so admired. We see the use of unpainted wood and stained timber which allow both the natural colour and grain to be given its full value, furniture is specifically designed and appropriately built in to permit the full use of available room and create a harmonious whole that was an essential part of the Japanese home. There is a standardisation of the various structural components, for example the trusses, window types and the materials, which made possible in Japan a rapid and cheap construction that did not rob the house of its individual character.

All these features come together in the hall of Windyhill, which is the most influenced space in the house. The space itself consists of three cubes, showing Mackintosh's recognition of the pure space used in the traditional Japanese dwelling. Here in the hall Mackintosh exposes the timber ceiling joists revealing the structural order of the floor above and this echoes the nature of the Japanese house as a framework building. The heights of the windows and doors are the same, and this is emphasised by the running of a picture rail at lintel height throughout the hall. Even the fireplace is connected to this line through its use of two posts and a cross-piece similar to that of the gate. Furniture and light fittings were again specially designed for this space and each piece fits into the space for which it was designed with ease and shows great sympathy for its surroundings.

It was Mackintosh's clear perception of what was specifically Japanese which enabled him to discern the features that were common to all architecture and to use them in his creation of a unique style which was to be developed by architects like Le Corbusier and Mies Van Der Rohe into the international style of the modern movement. In Windyhill we see Mackintosh's most successful creation of the intimate relationship between house and garden and the groundwork for the strongly Japanese influenced interiors of Hill House.

Footnotes

- 1 Andrew MacMillan, Charles Rennie Mackintosh: A mainstream forerunner Architectural Association Quarterly Vol 12 N 3 1980 p4-10.
- 2 Tetsuko Yoshida, The Japanese House and Garden Pall Mall Press, London 1969, p195.

Chapter V

The Success of Windyhill as a 'Total' Design

*"Notoriously the machine-like purity of form of the 1920's was achieved by the most laborious and costly handicraft techniques. Such buildings have subsequently required heavy expenditure on their maintenance to preserve their original pristine quality."*¹

The development of Mackintosh's ideas in anticipation of the 'machine-age' and expression of pure form were however, not yet fully adapted to the rigours of the 'Scottish climate. The extent of water penetration at Windyhill is a serious problem created more by the implications of Mackintosh's design than faulty craftsmanship of the builder. There are three distinct areas in the design each with their own source of problems.

The first area occurs at the exposed edges of the window openings. Derived from cottage design, the roughcast is made to continue into the window recess to express the pure form of the window element. However weathering cracks the exposed edge of the roughcast and forms a passage for water.

Similarly, the second area occurs at the east and west gables where the roughcast continues over the wall head before terminating at the slate roof (plate 16A). The inclusion of a damp proof course would have created cracks in the roughcast and therefore sufficiently thick stone walls and render are the only barriers to water penetration. The patchwork of the roughcast to the west gable (plate 16B) is proof that Windyhill has suffered to keep the damp out and demonstrates that whether cavity wall or solid wall construction, the application of roughcast to all the surfaces will always create vulnerable areas to water movement.

Finally, the third area of concern is at the chimney heads. The most affected one being the large chimney stack of the main block where the damp penetration was once able to work its way down the chimney flues and into the primary rooms of the ground and first floors.²

An explanation for this level of water penetration was that till 1925 the house was unoccupied for ten years. During this period the lack of heat passing up the chimney flues would have provided a source for water movement.

The fascination of 'the grouping of parts to form an intricate skyline', as already mentioned, was vulnerable to the movement of water down through the building and Mackintosh was as much to fault as the traditions of Scottish building for the development of the constructional process (plate 17A).

It would appear that the same enthusiasm to overcome the problems of the interior was not used to the same creative level for the exterior.

*"The wonderful manner in which our style
shapes itself to every accidental requirement:
grapples with every difficulty, and converts
it into a source of beauty."*

C R Mackintosh³

The expression of individual elements ultimately creates awkward situations when one form comes in contact with another. Windyhill has examples of this where Mackintosh treats the problem with varying degrees of success.

Firstly, the introduction of the chimney stack at the east end of the main wing provides a satisfactory solution to the junction of the service roof to the higher main roof.

Secondly, the juxtaposition of the staircase to the bay window of the toyroom appears very awkward in plan form but externally, the two storey staircase tower dominates the single storey bay protrusion.

The third example is an unsatisfactory approach to resolve the problem of the junction of the staircase and the ground floor hall. The termination of the continuous oak frieze rail at the porch door creates an awkward foot and a half wide strip of wall that neither recognises the continuous frieze rail, nor the oak panelling of the staircase.

Over the last ninety years, Windyhill has experienced four owners, the last two owners having contributed much time and expense in its restoration. However, the second owner of the house, a Mr Rowan, removed a lot of the built-in features including the fireplace and timber posts from the hall and drawing room, and the dovecot from the service courtyard⁴ (plate 17B). To increase light penetration into the building, Rowan altered the size of the windows in the principal rooms and raised the ceiling of the bay window in the drawing room.

Although the height of the ceiling and cills have since been restored to the original dimensions, Windyhill functions as a 'dark' house.⁵

Footnotes

- 1 Deyan Sudjic, New Directions in British Architecture (London: Thames and Hudson, 1988), p47.
- 2 This information was brought to light in a meeting with Mr Fisher.
- 3 Charles Rennie Mackintosh, a paper read to the Glasgow Art Association in 1891 on the subject of 'Scotch Baronial Architecture'.
- 4 A new dovecot was reproduced from old photographs and installed in exactly the same position as the original one. This was very fortunate, as the hole for the new dovecot uncovered the original foundation block.
- 5 An expression used by Mrs Fisher to describe the interior qualities of the house.

Conclusion

*"Mackintosh was the first British
Architect since Adam to be a
name abroad and the only one
that has ever become the
rallying point for a continental
school of design"*

Morton P Shand ¹

Although Windyhill is not as clearly successful in the development of Mackintosh's style, as his first independent commission, it nevertheless shows the beginnings of his exploration of Japanese culture and the Scottish vernacular in the formation of a new non-historic architecture.

Windyhill has been overlooked to a large extent, not only due to its early lack of publication, but also because it has remained in private hands, continuing to be used, as intended, as a home and not, in the case of Hill House, a shrine to the architect.

This inaccessibility has led to Hill House being seen as the masterpiece of British house design, and a misunderstanding of the importance of Windyhill, which demonstrates all the principles that were to make Mackintosh a pioneer of the modern movement.

Footnotes

1. Kenneth Frampton Modern Architecture A Critical History (London: Thames and Hudson 1985) p77.

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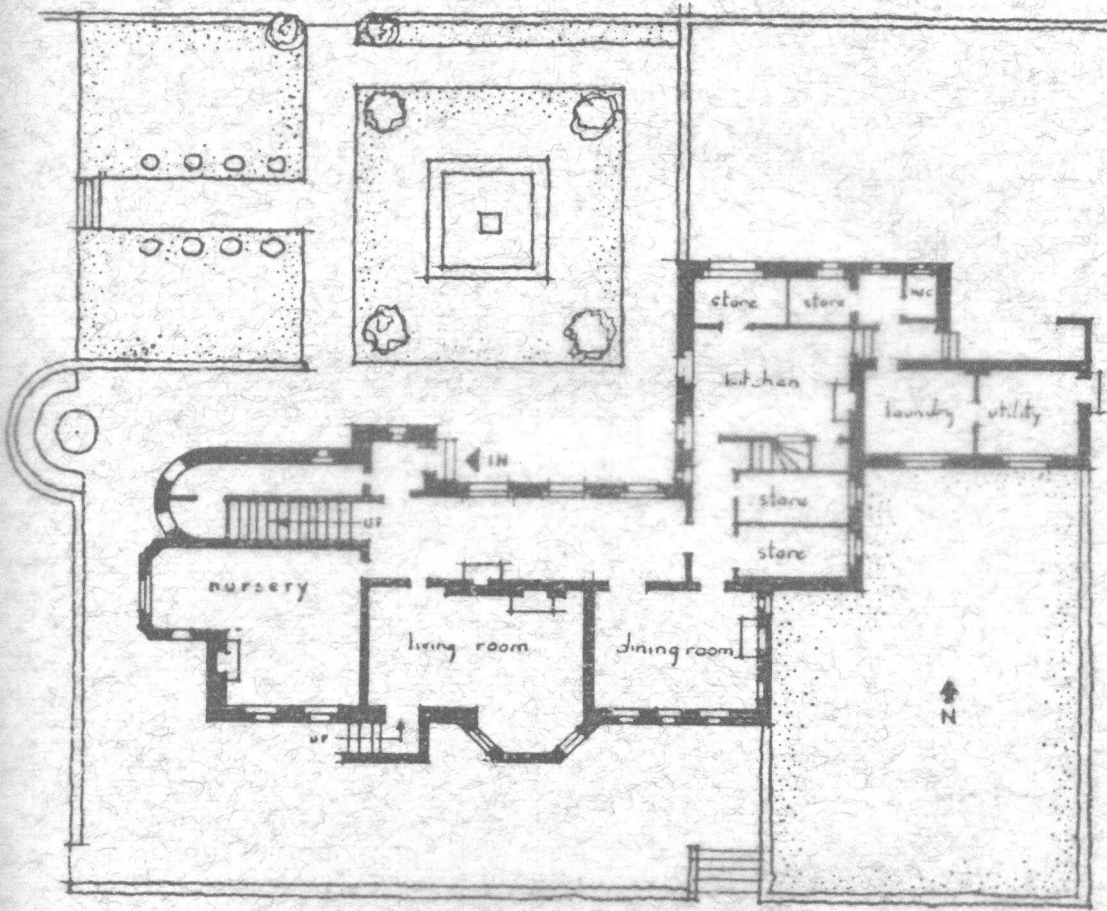
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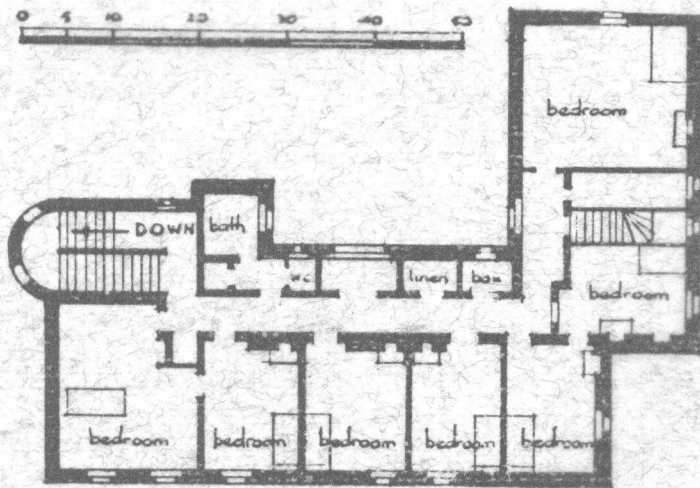
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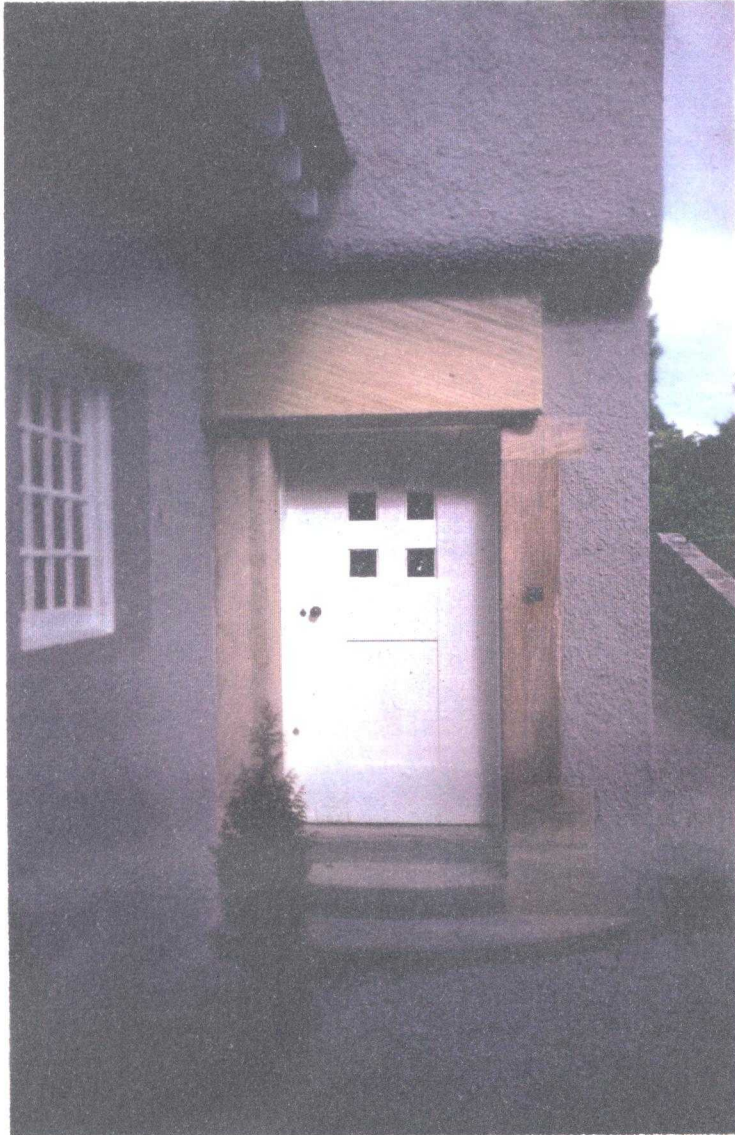


Ground Floor



First Floor

1. Windyhill



Windyhill : Detail of Main Entrance

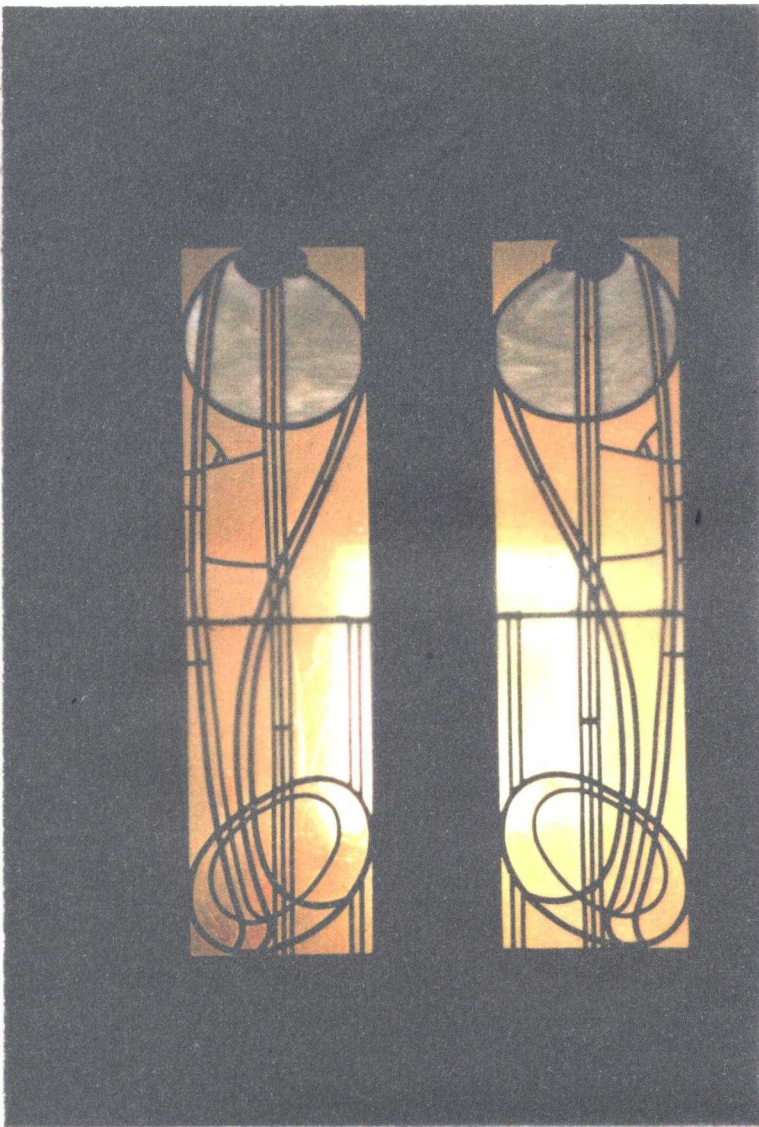


A. Windyhill : Porch Window

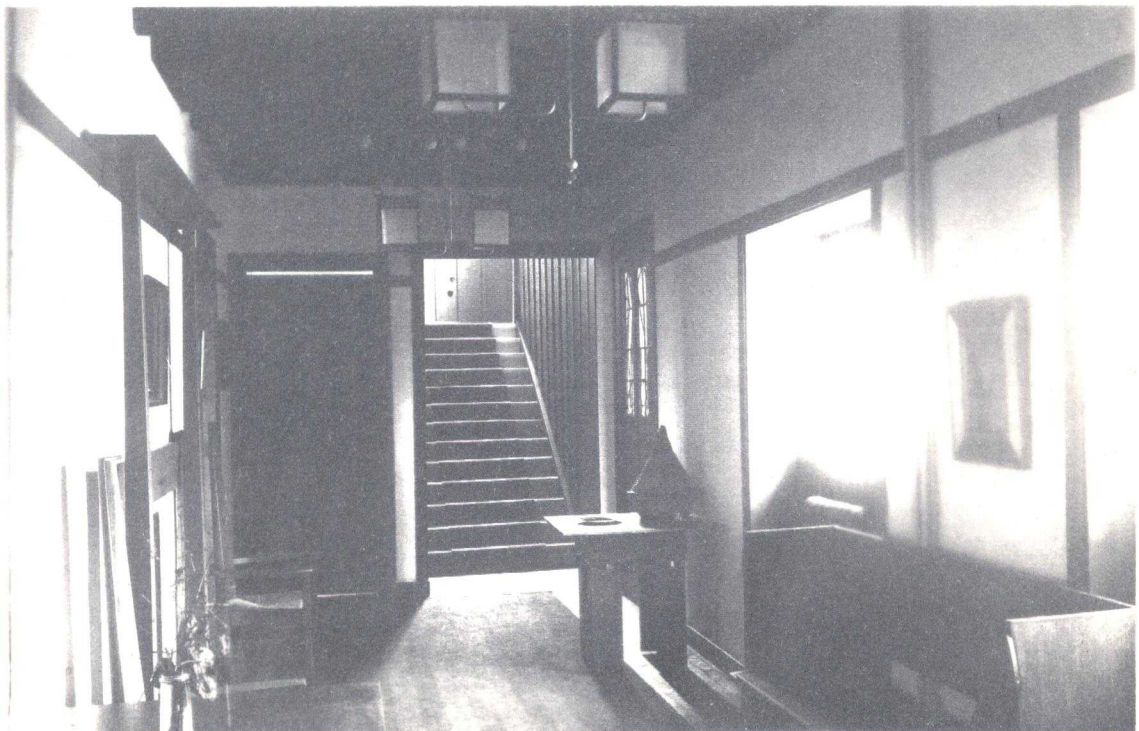


B. Windyhill : First Floor Landing Window

A. Windyhill : Stained Glass
Door Panel, Porch To Hall



B. Windyhill : View of Hall
Towards Stair





A. Windyhill : View of Stair From
First Floor Landing



B. Windyhill : View of Garden Gate
from First Floor Landing



A. Windyhill : Built-in Wardrobe,
Master Bedroom



B. Windyhill : Fireplace,
Master Bedroom



A. Ardkinglass : Argyllshire (R. Lorimer, 1906 - 08)



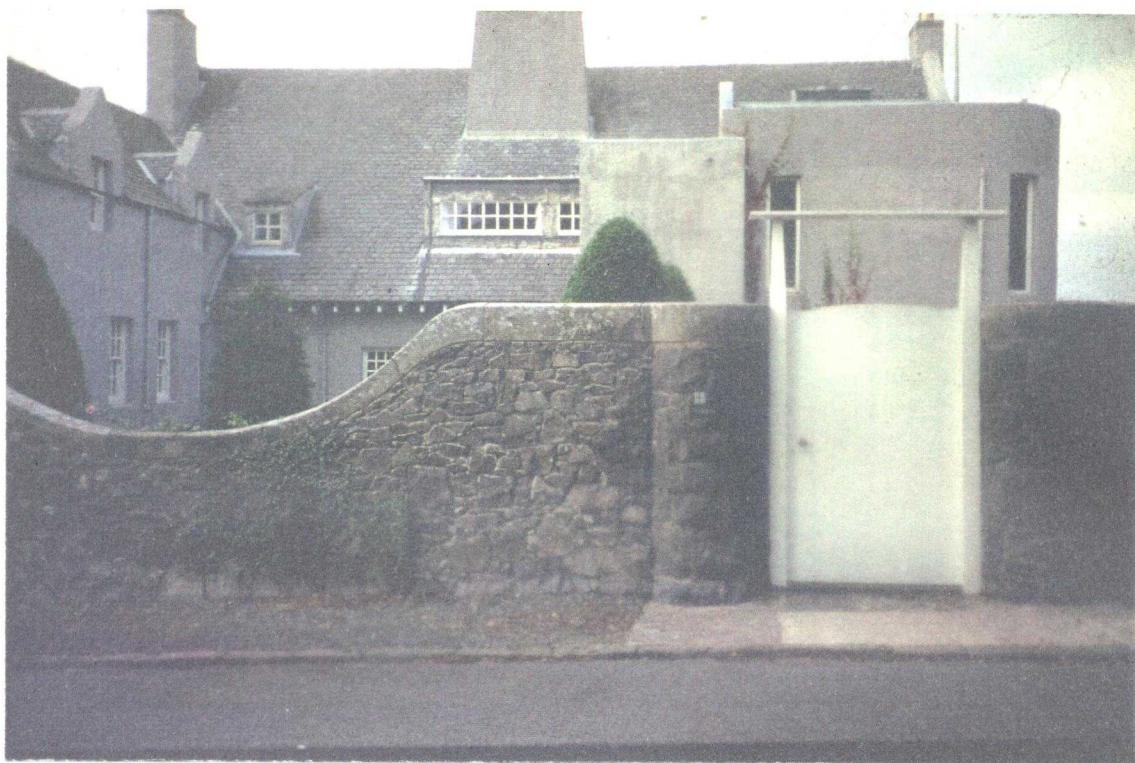
B. Windyhill : View from South-West

A. Windyhill : Detail of
Overhanging Eaves



B. Windyhill : View of Staircase
and Entrance

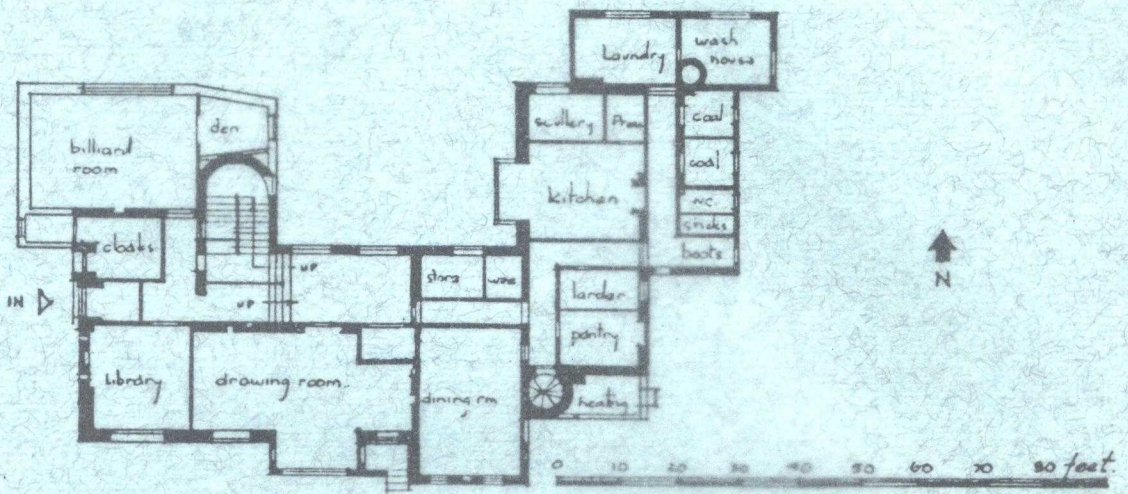




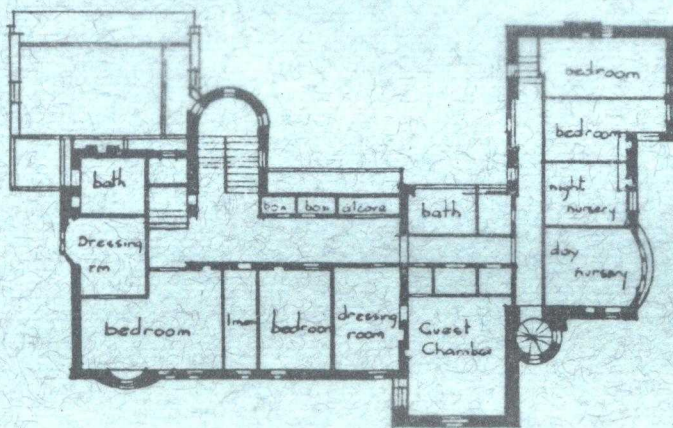
A. Windyhill : North Boundary Wall and Gate



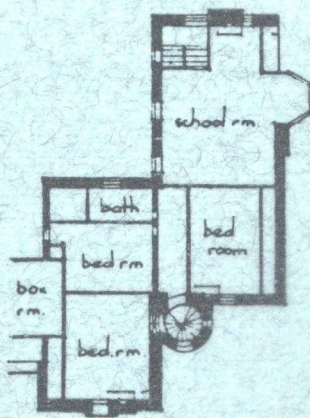
B. Windyhill : South Elevation



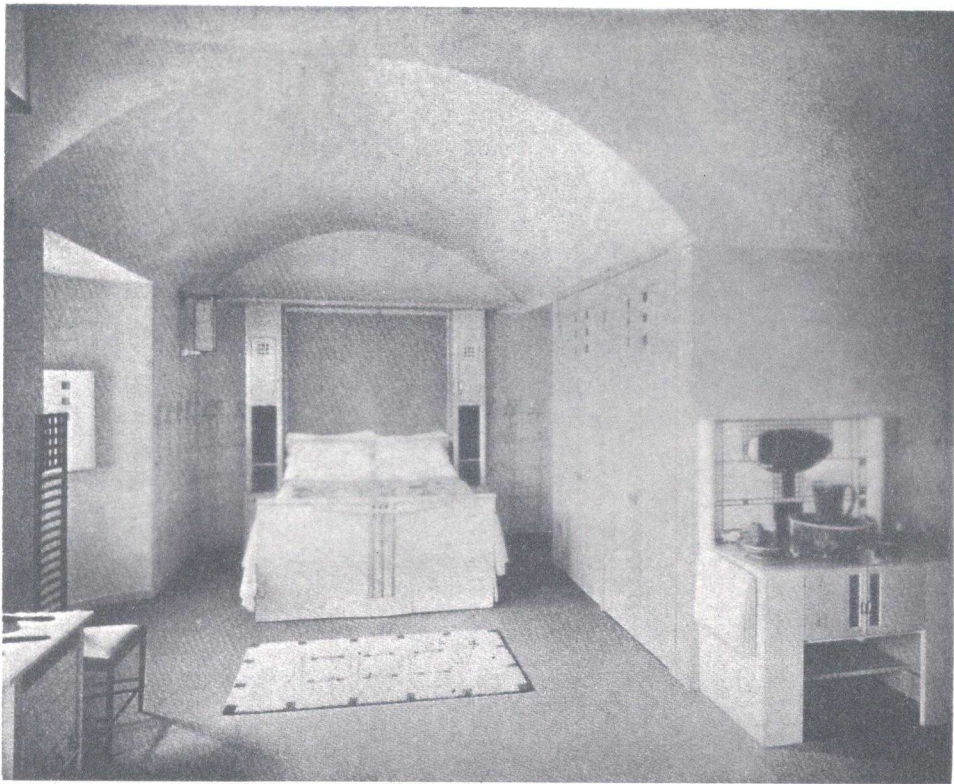
Ground Floor Plan



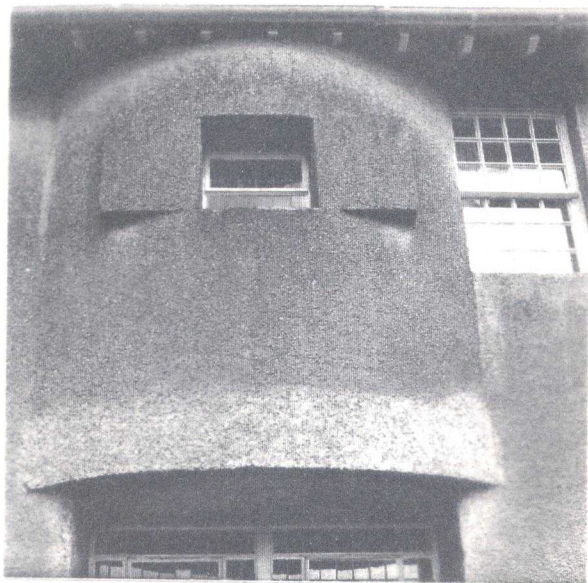
First Floor Plan



Second Floor Plan



A. Hill House : Master Bedroom



B. Hill House : Niche Window, Master Bedroom

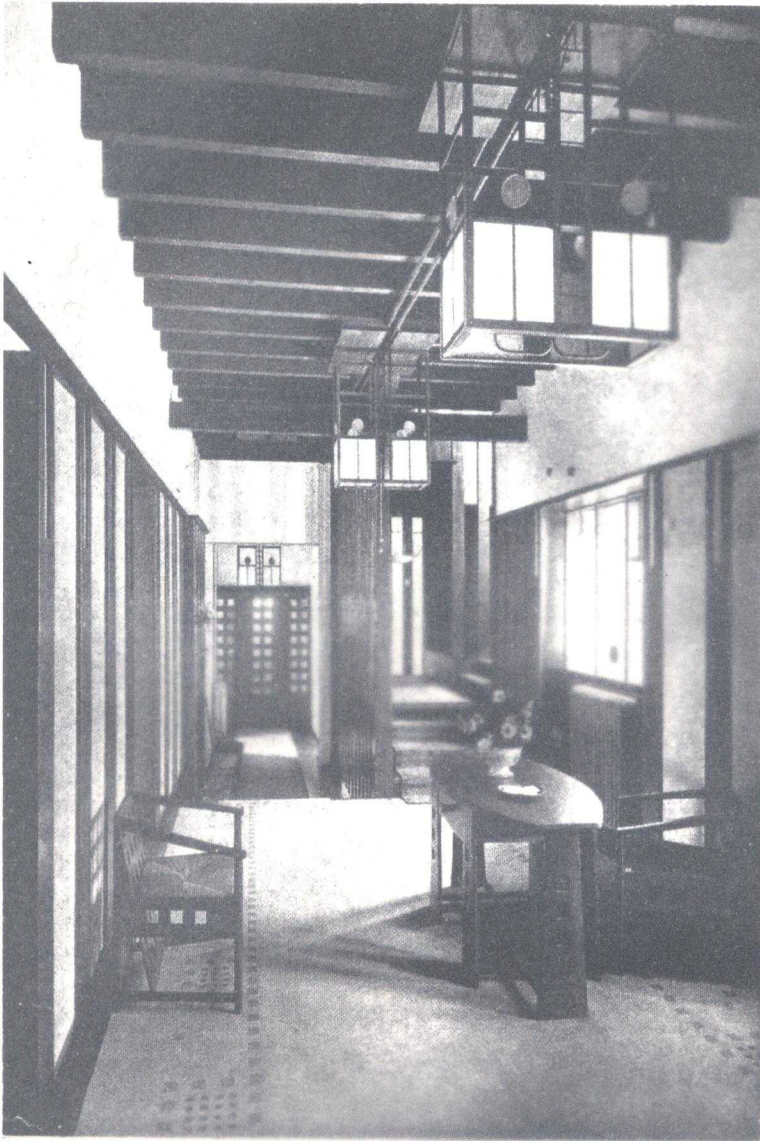


A. Windyhill : Detail of East Elevation

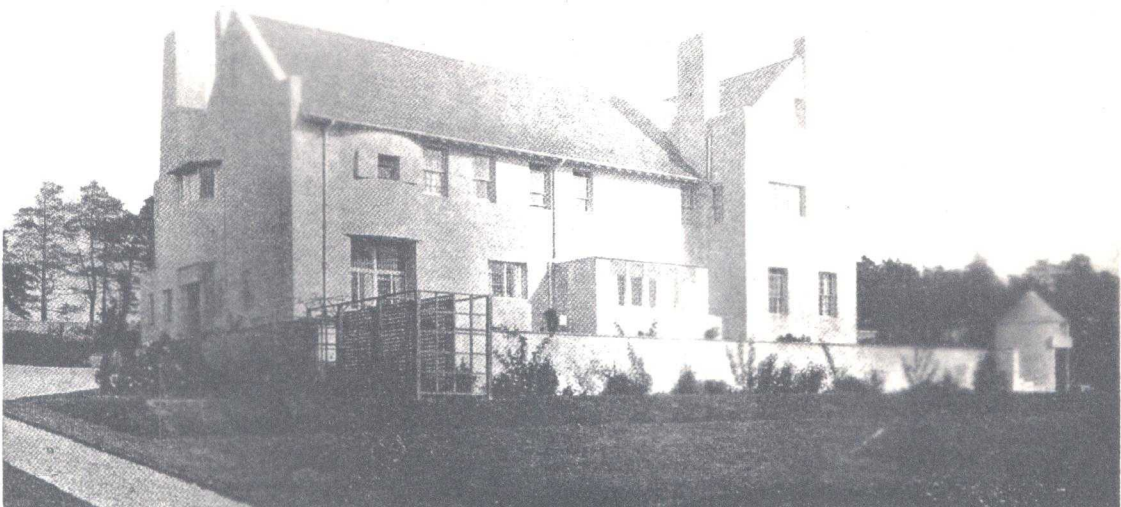


B. Windyhill : Detail of Bay Window,
South Elevation

A. Hill House : View of Hall
Towards Entrance



B. Hill House : View From
South-West

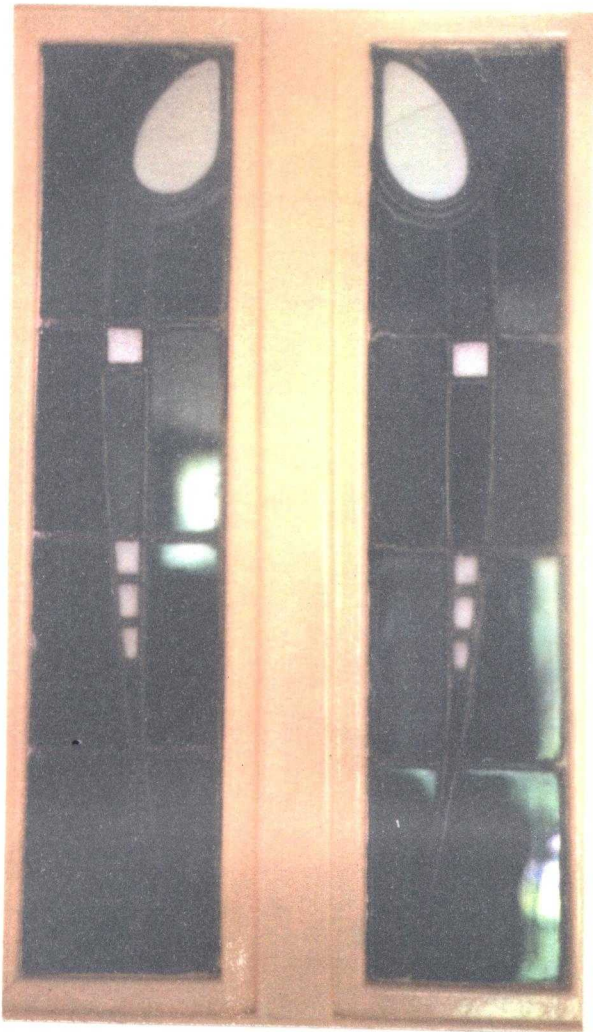




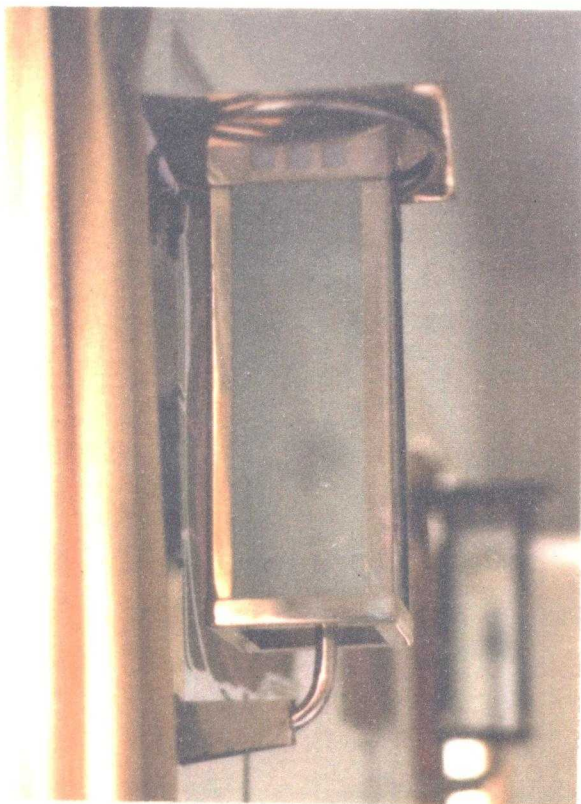
A. Windyhill : Detail of
Boundary Wall



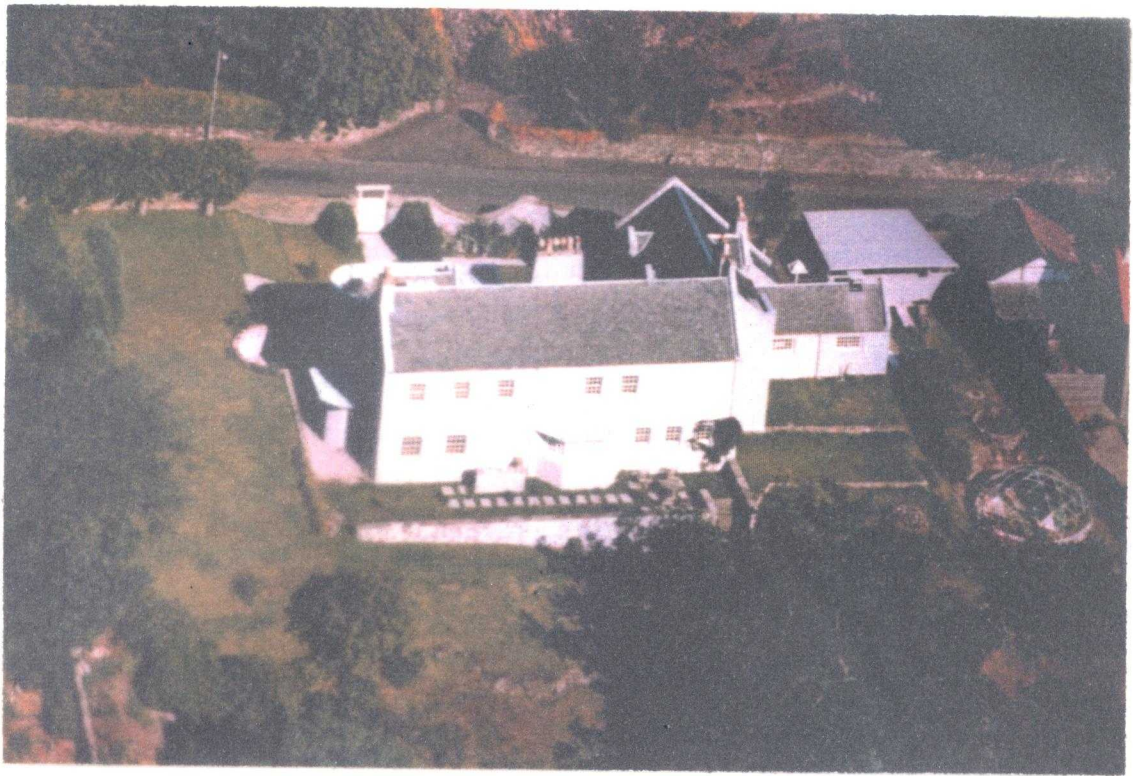
B. Windyhill : View of Courtyard



A. Windyhill : Stained Glass Door
Panel, First Floor



B. Windyhill : Light Fitting
Master Bedroom



A. Windyhill : Aerial View



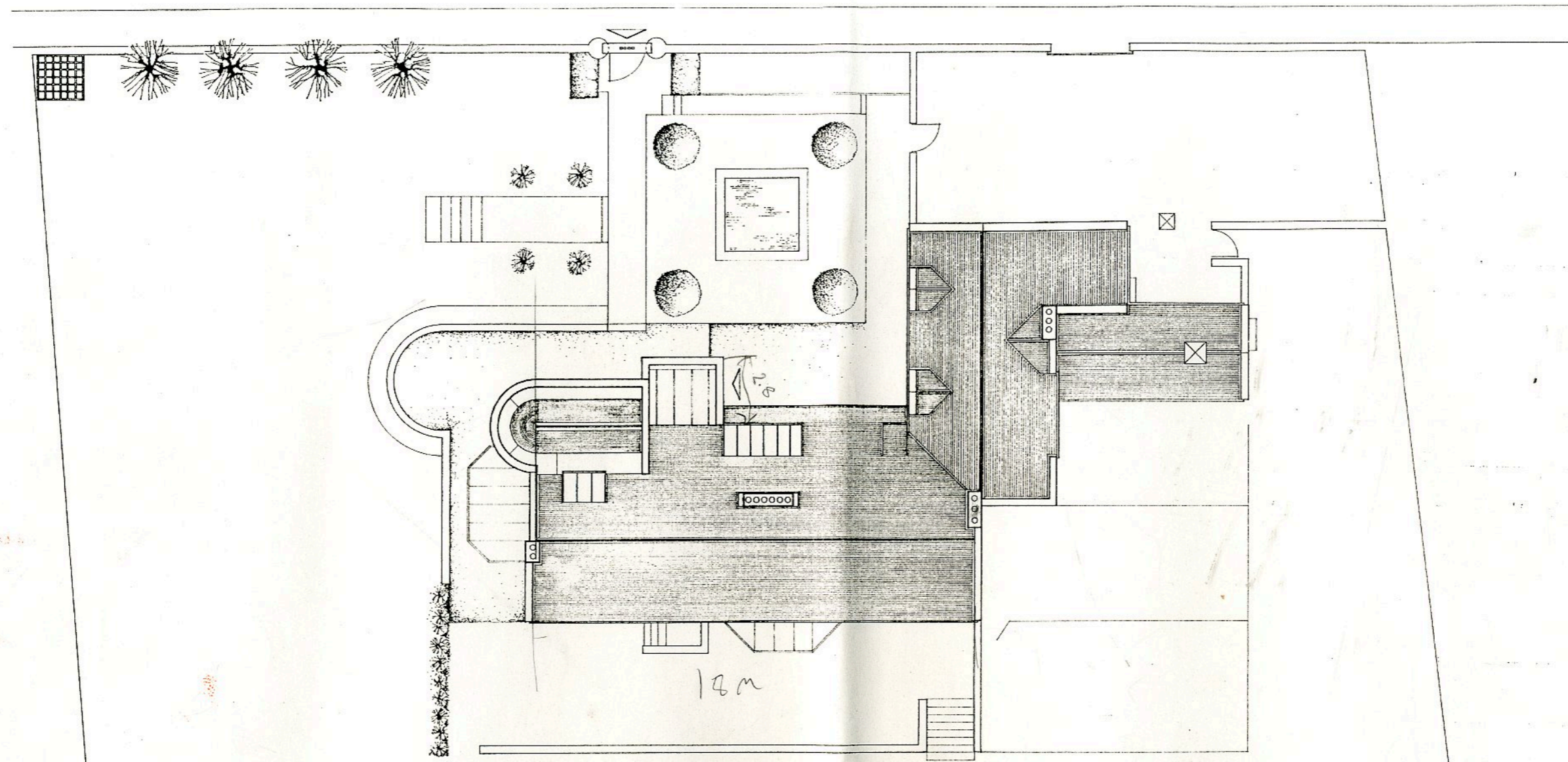
B. Windyhill : Staircase and Bay Window



A. Windyhill : View From South-East



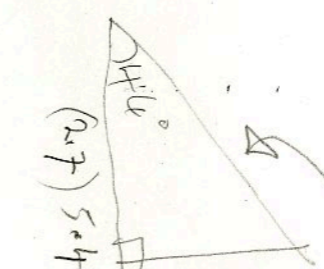
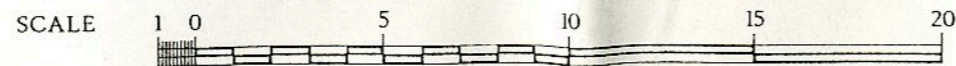
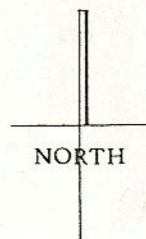
B. Windyhill : Dovecot



WINDYHILL 1899 · 1901

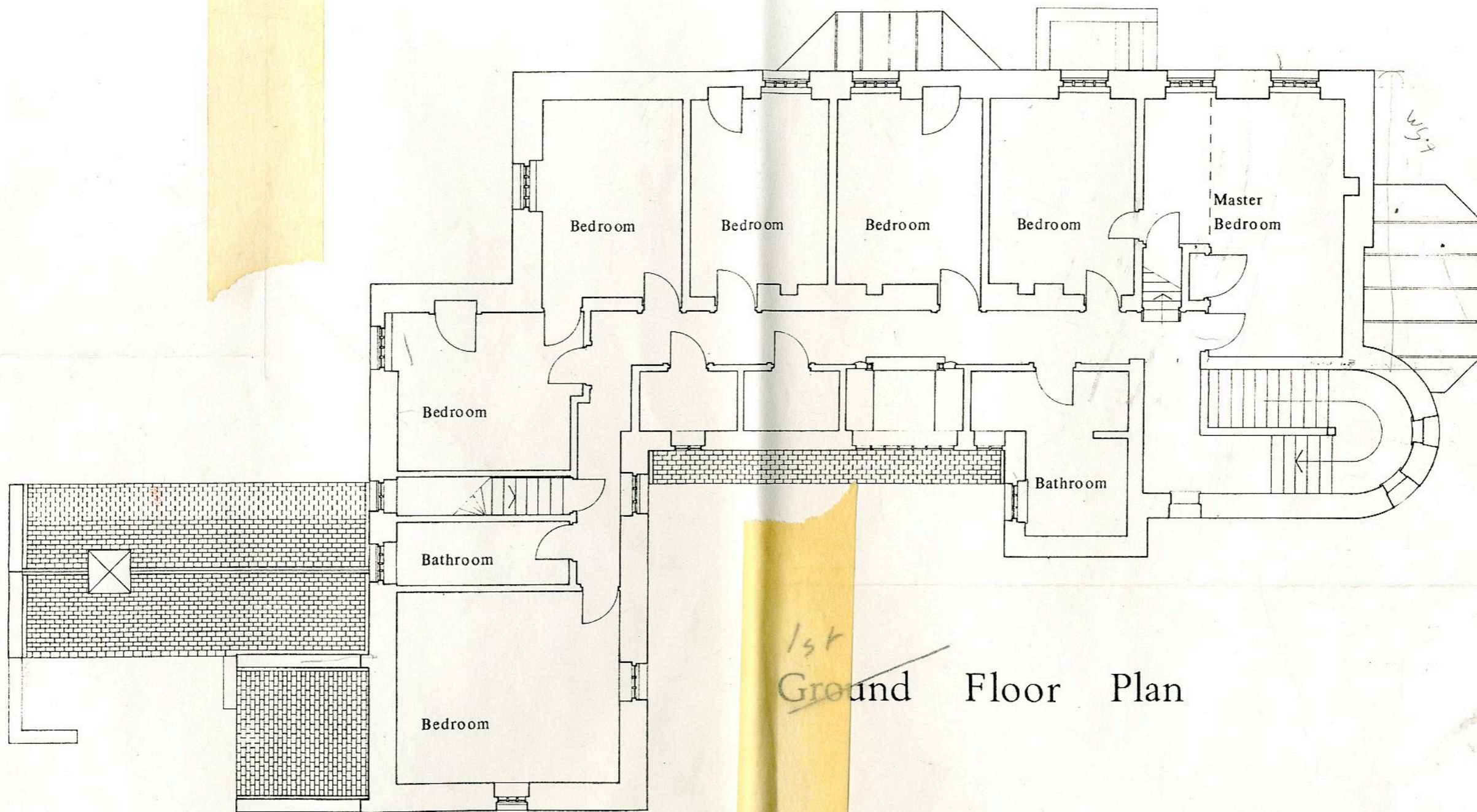
Charles Rennie Mackintosh

Site Plan 1:200



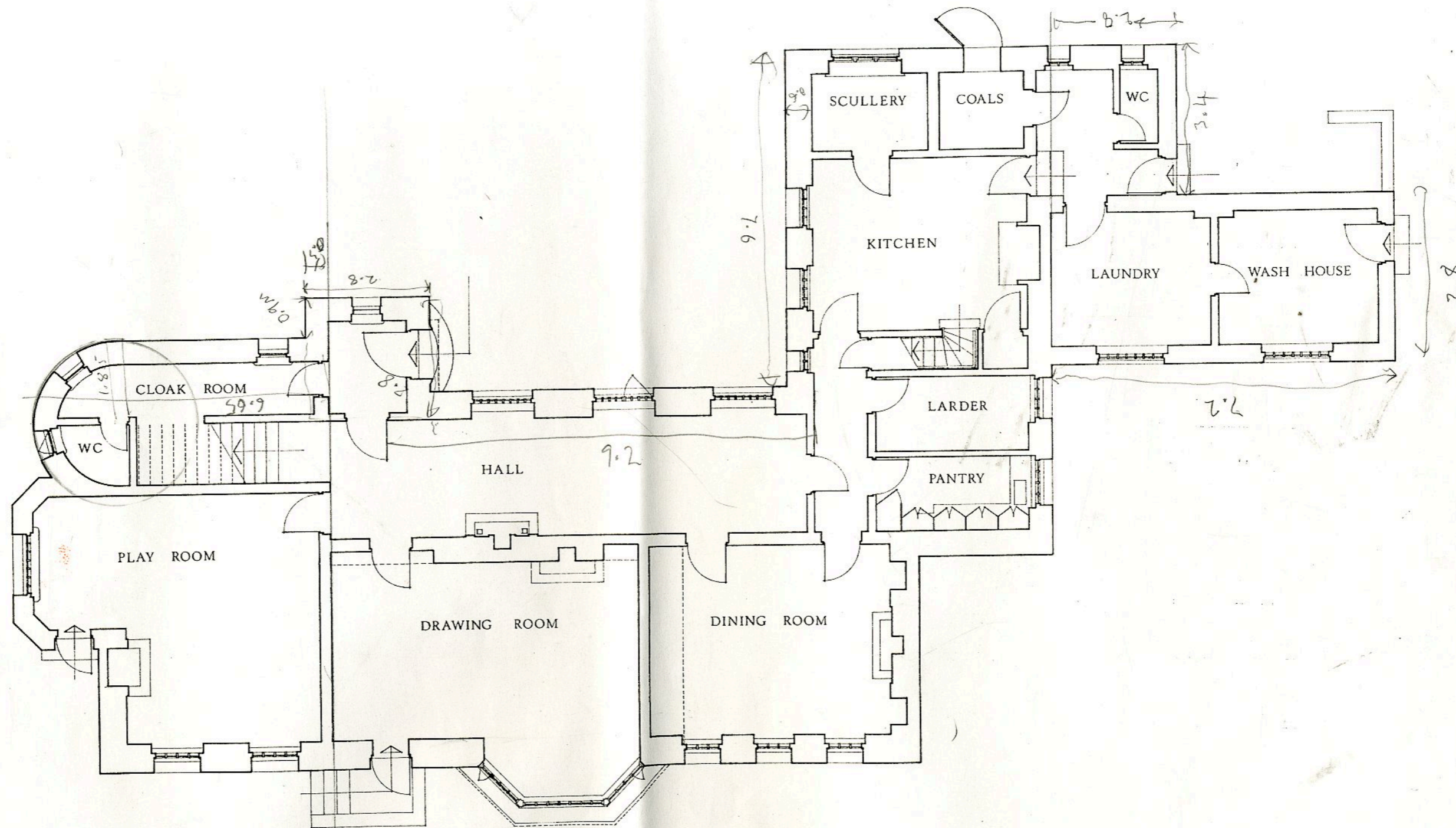
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 $5.4 \times 2 = 10.8$
 Total cost = $10.8 \times 7.5 = 81.0$
 Total cost = $81.0 \times 2 = 162.0$
 Total cost = $162.0 \times 2 = 324.0$

G S Greenock
 and
 S S P Doyle



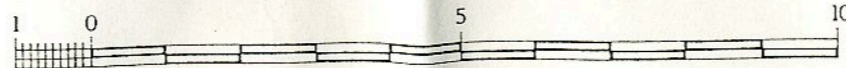
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Ground Floor Plan

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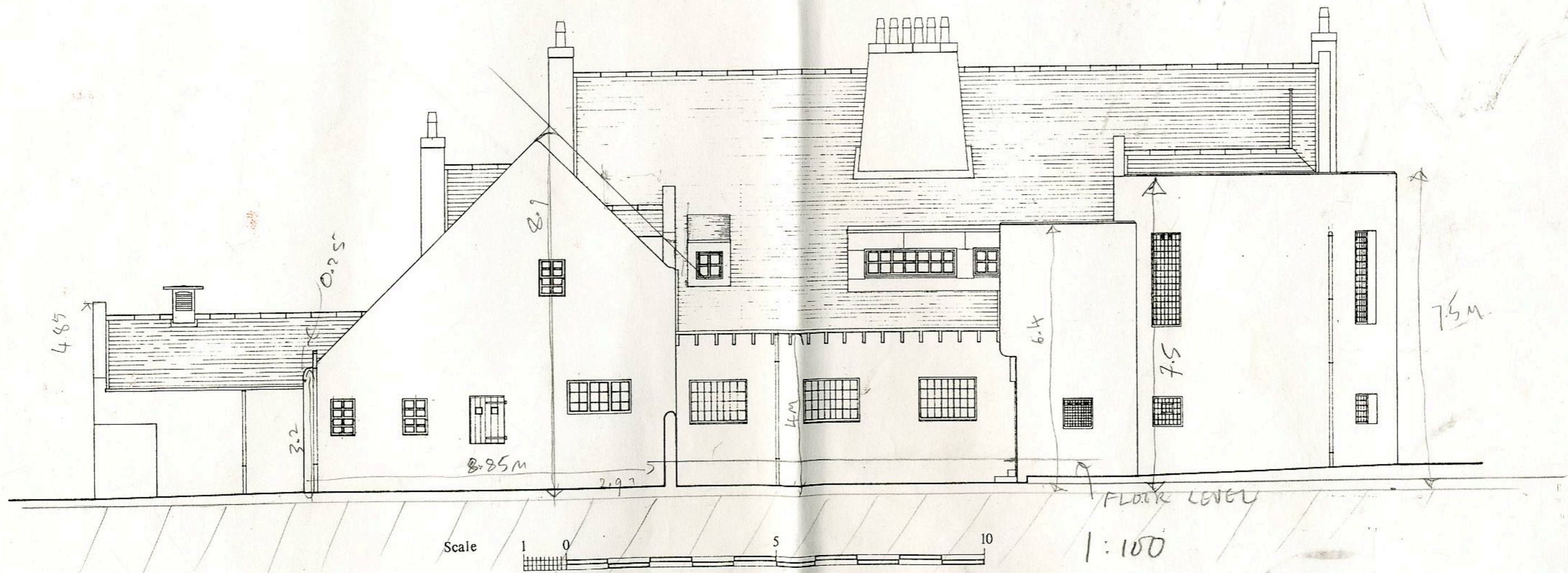


Ground Floor Plan

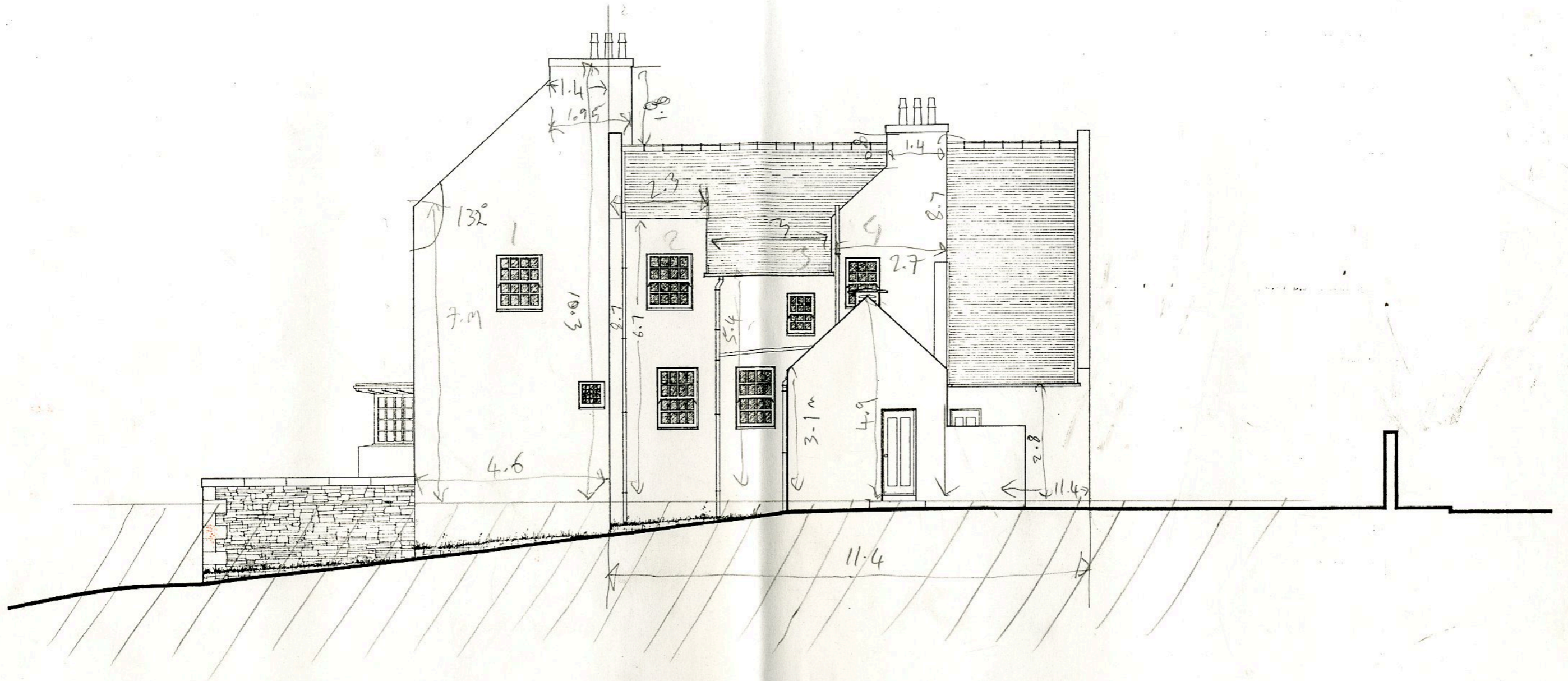
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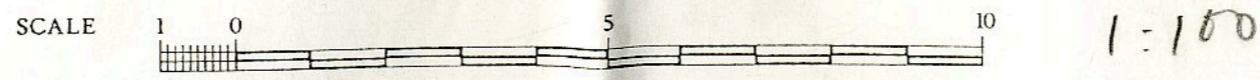
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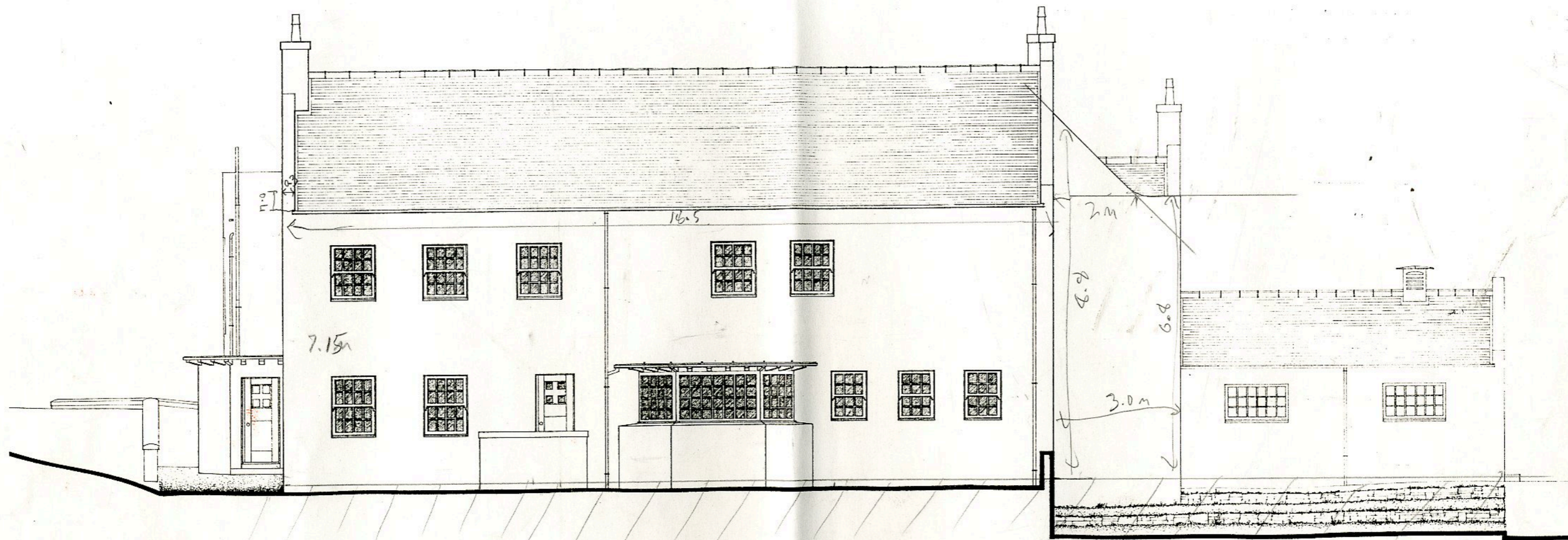


North Elevation



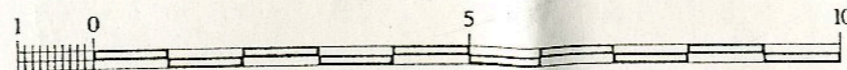
East Elevation





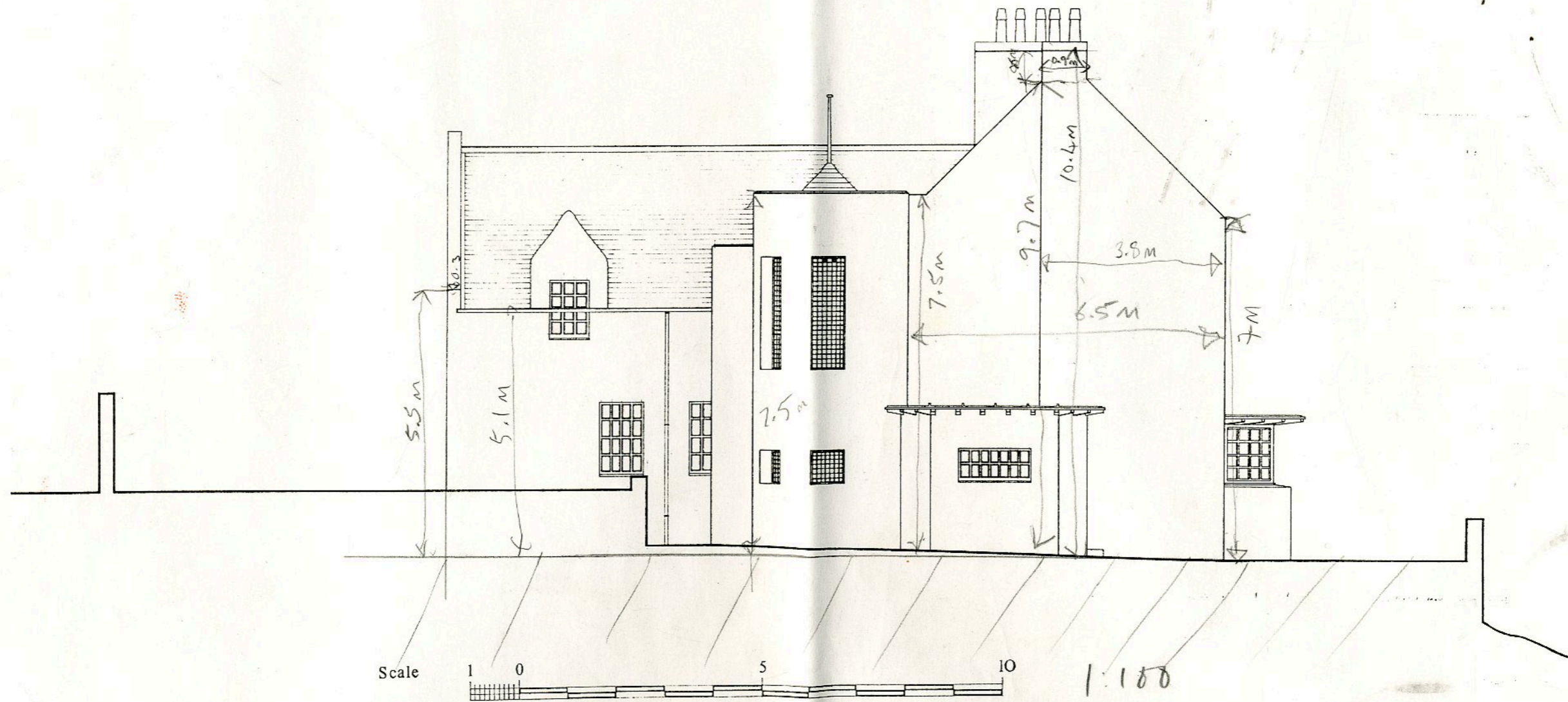
South Elevation

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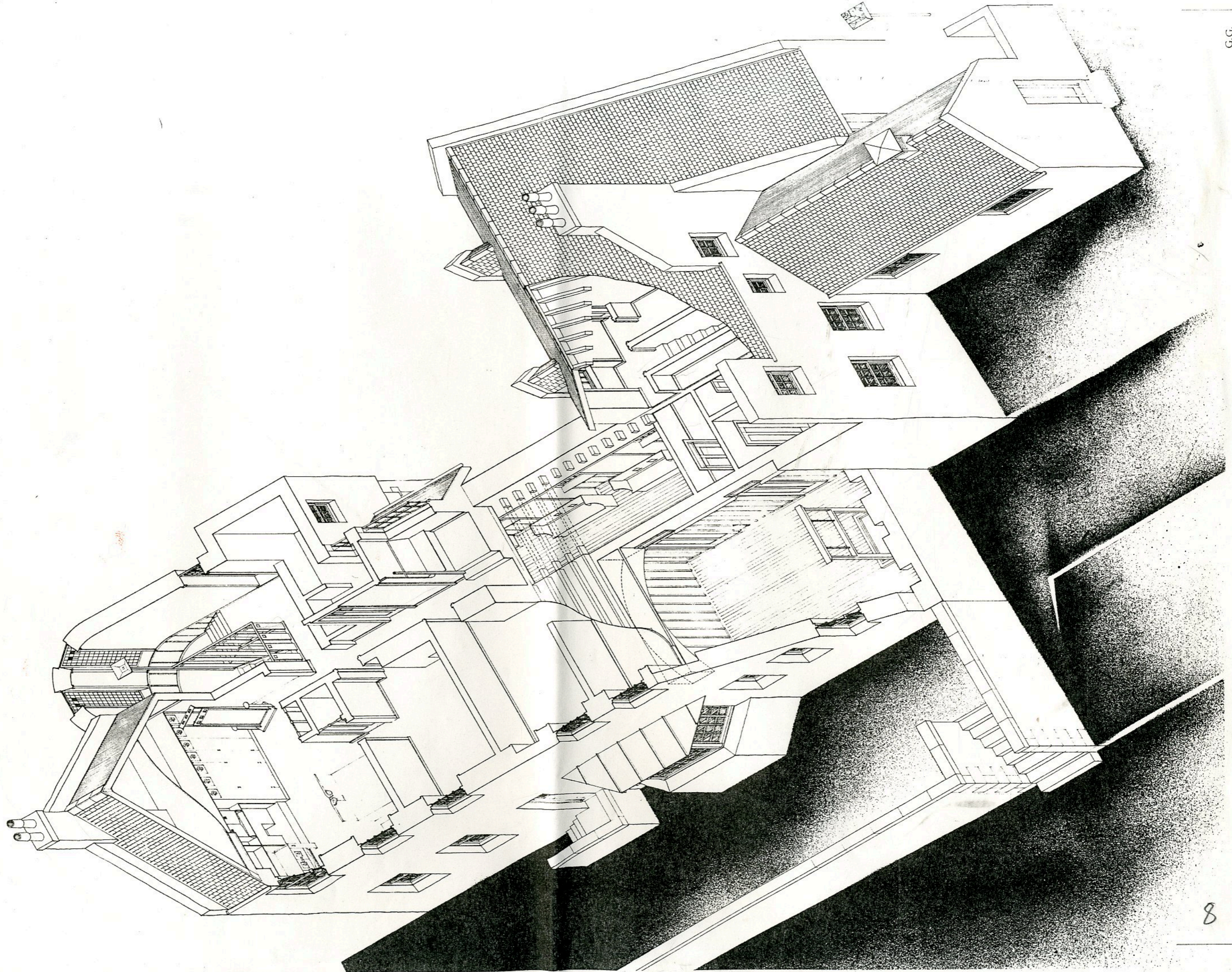
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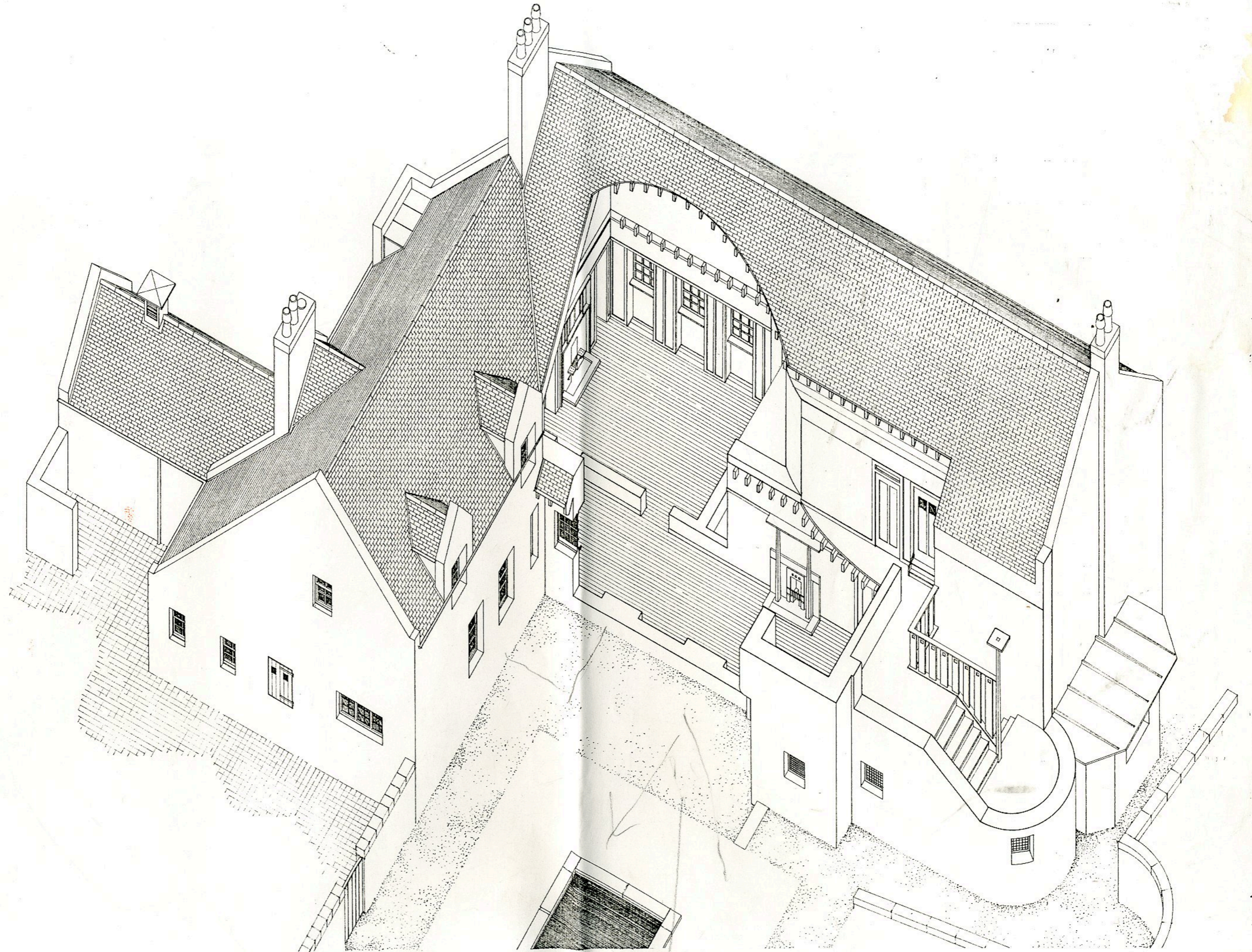


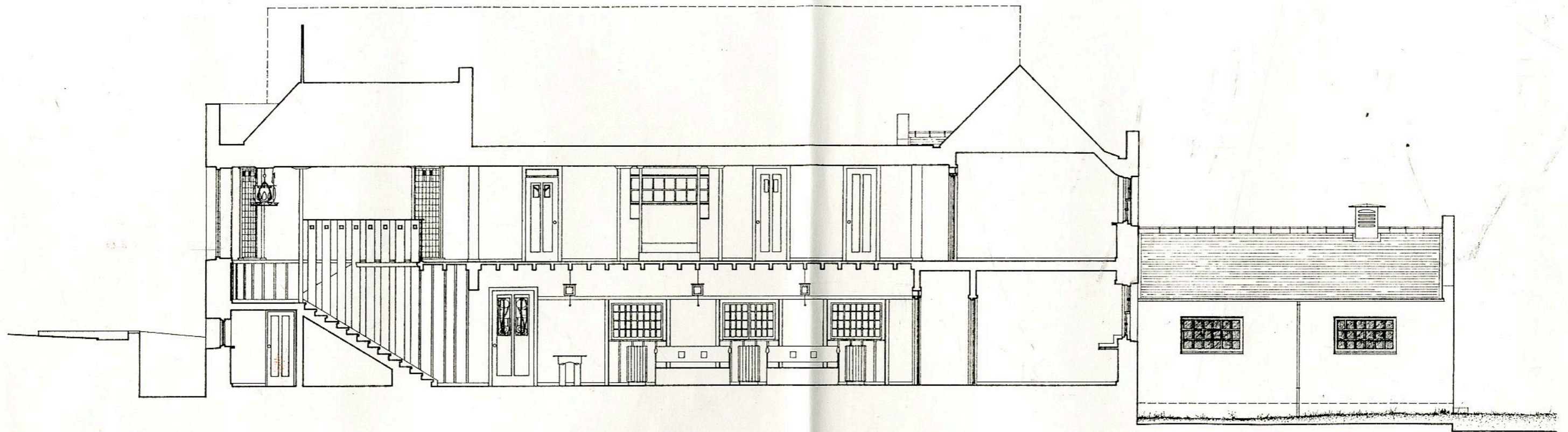
West Elevation

7
S.D.

Axonometric From South - east





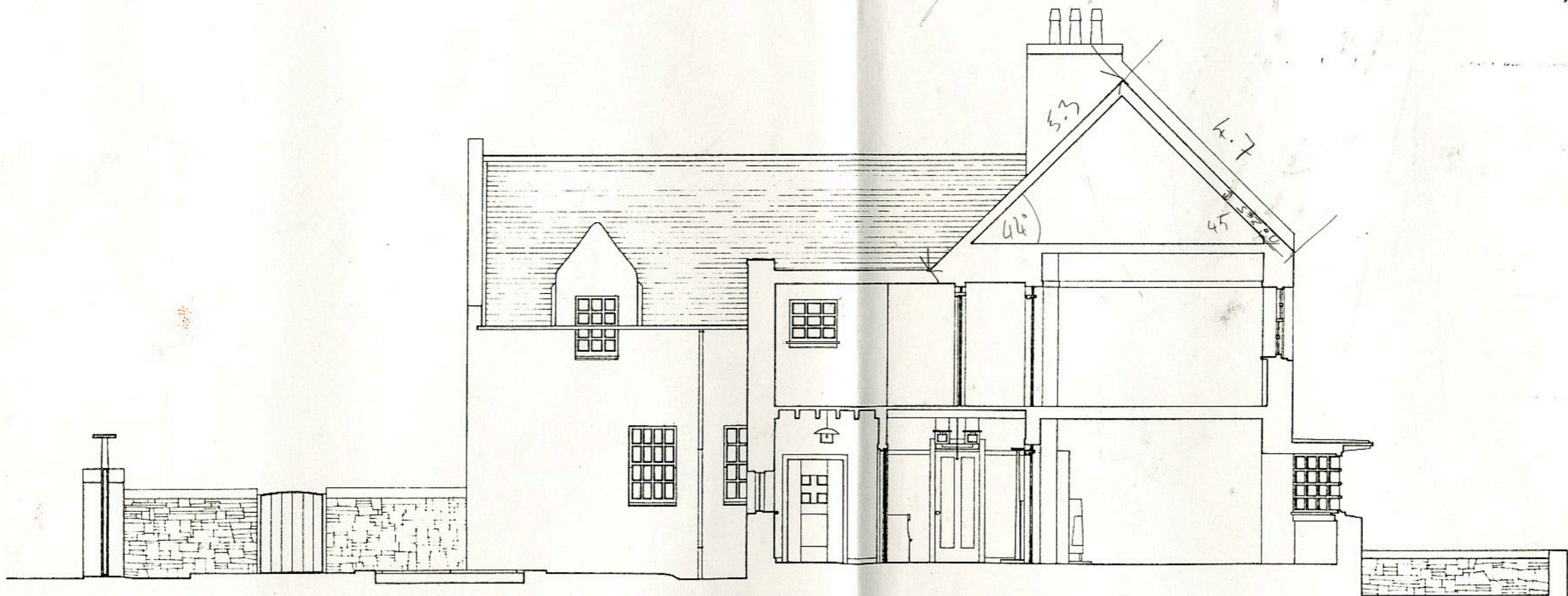


Section Through Hall

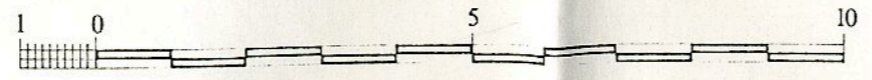
SCALE



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Scale

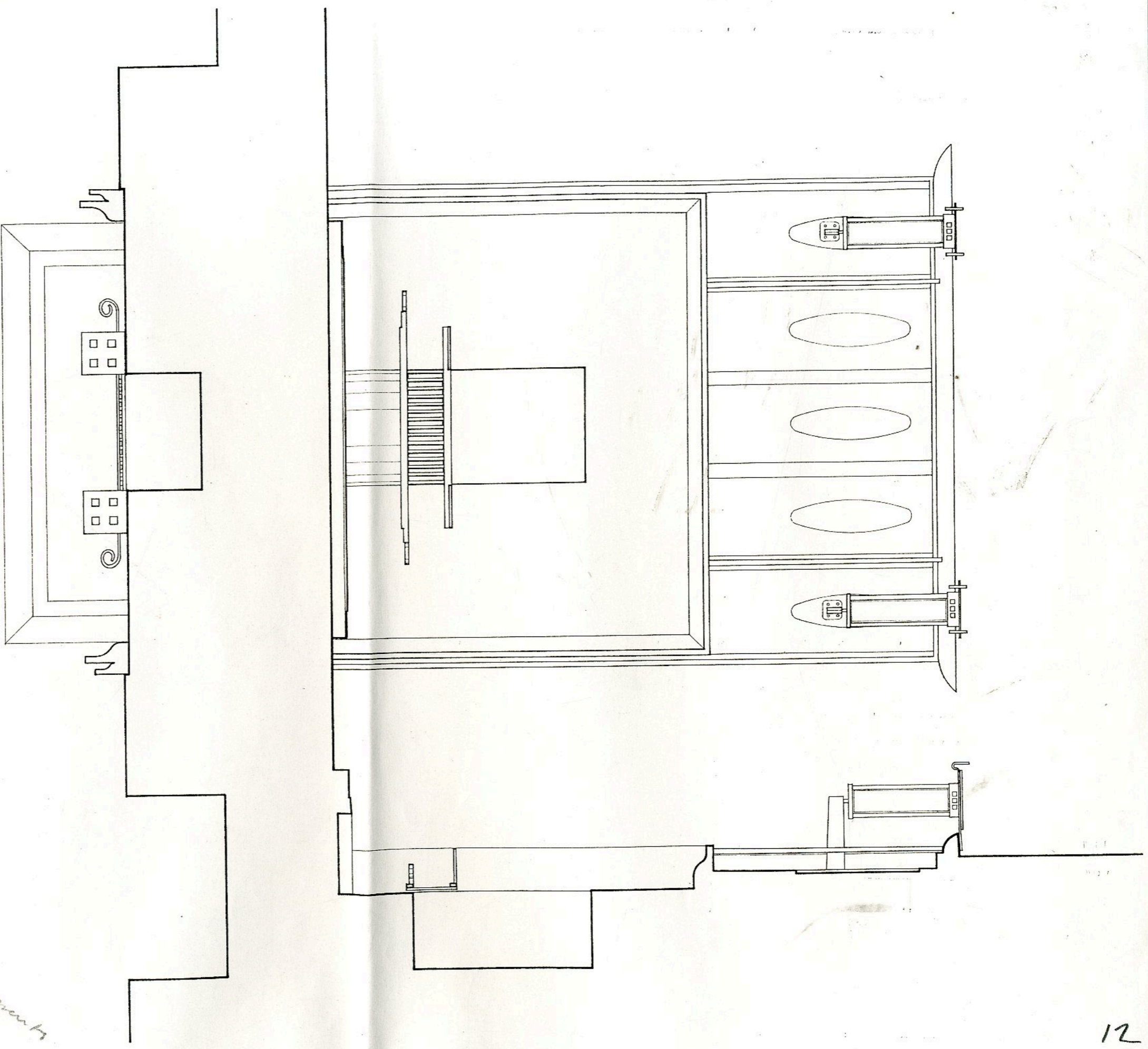


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Section

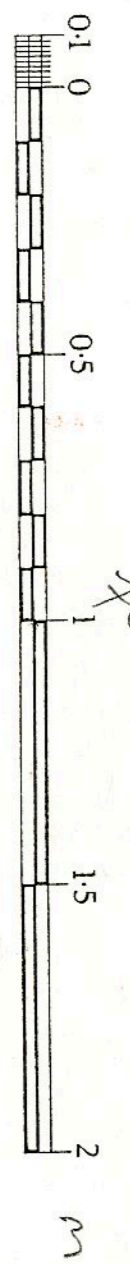
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S.D.



Dining Room Fireplace Detail

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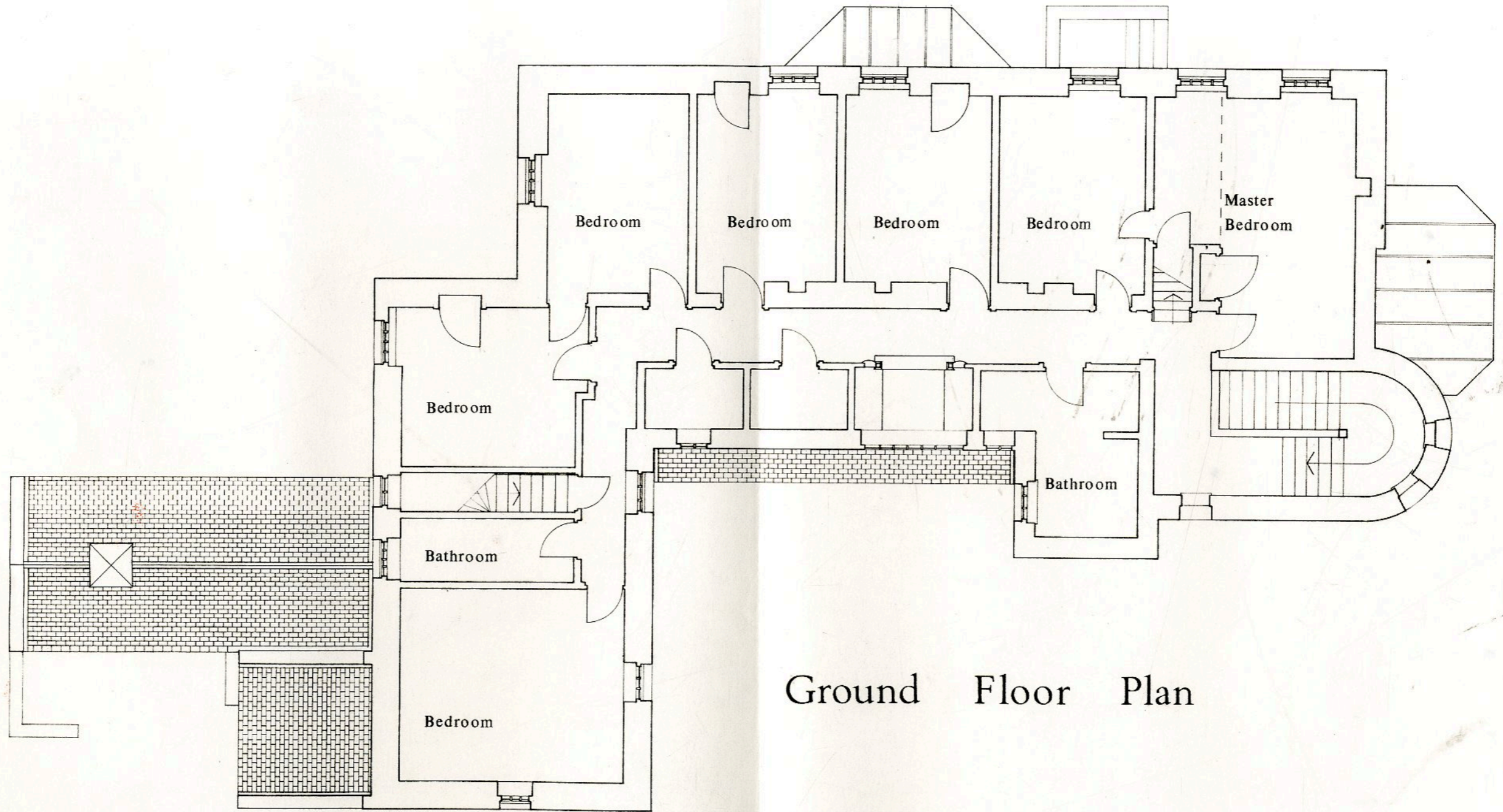
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*70mm represents
1/2000 m*

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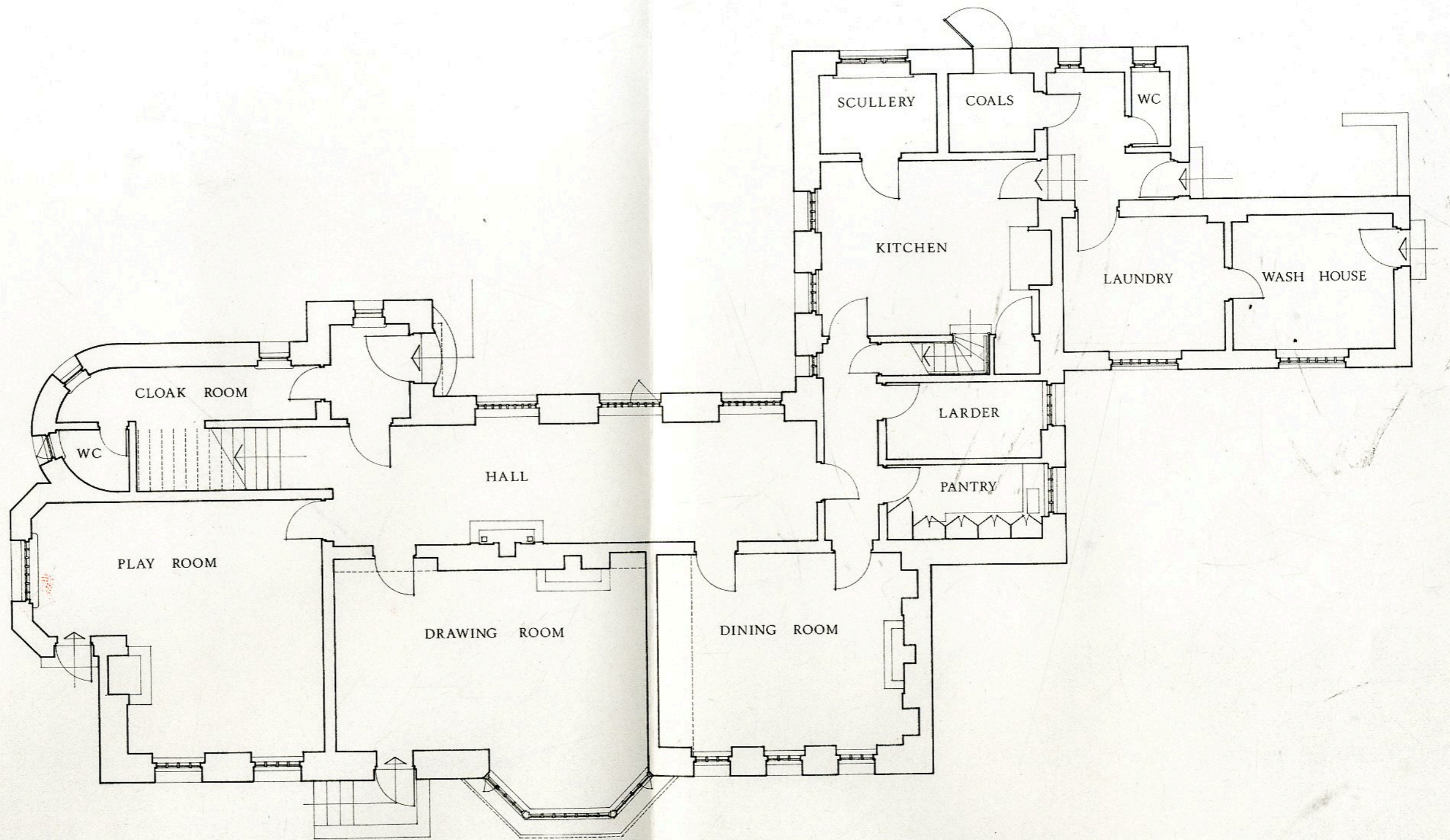
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G.G.

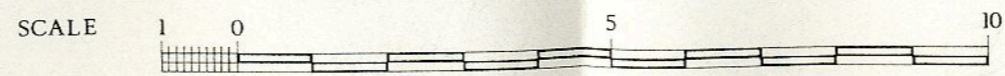


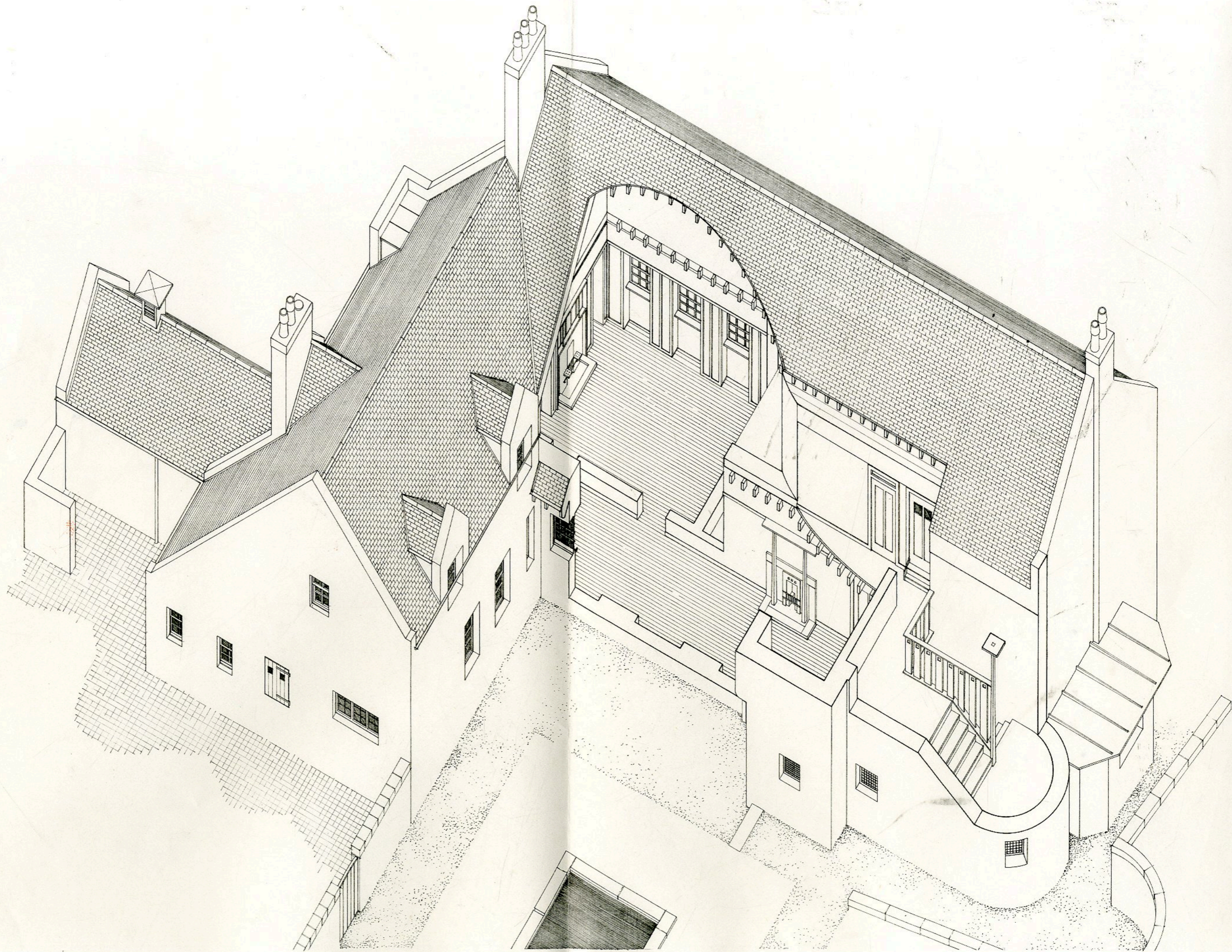
Ground Floor Plan

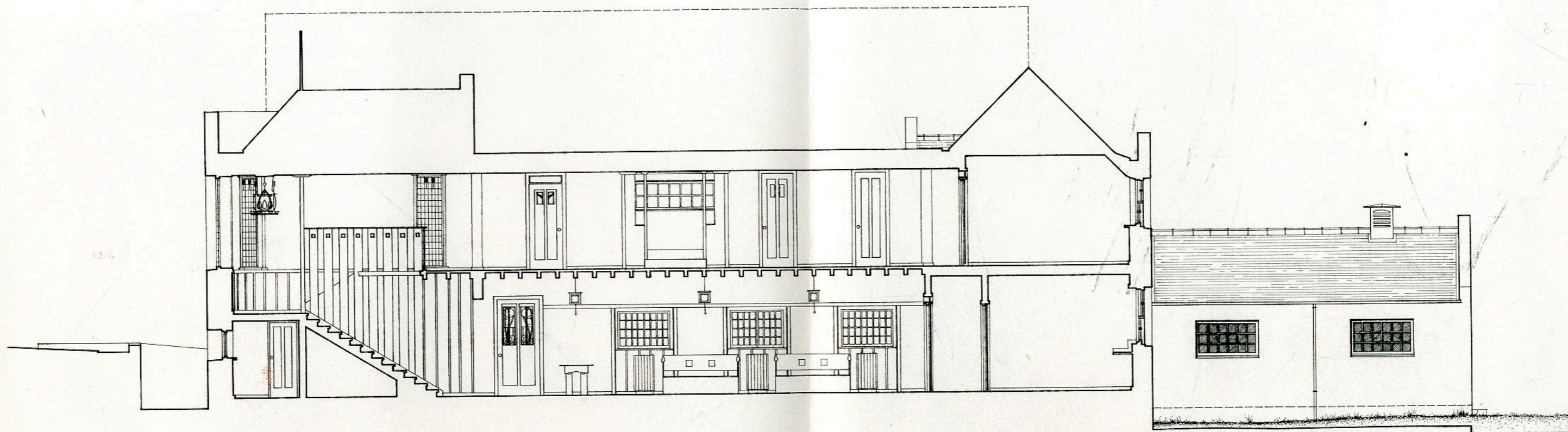




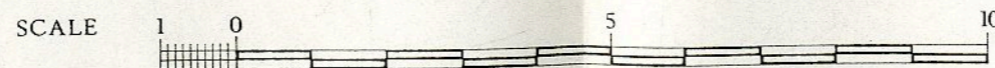
Ground Floor Plan

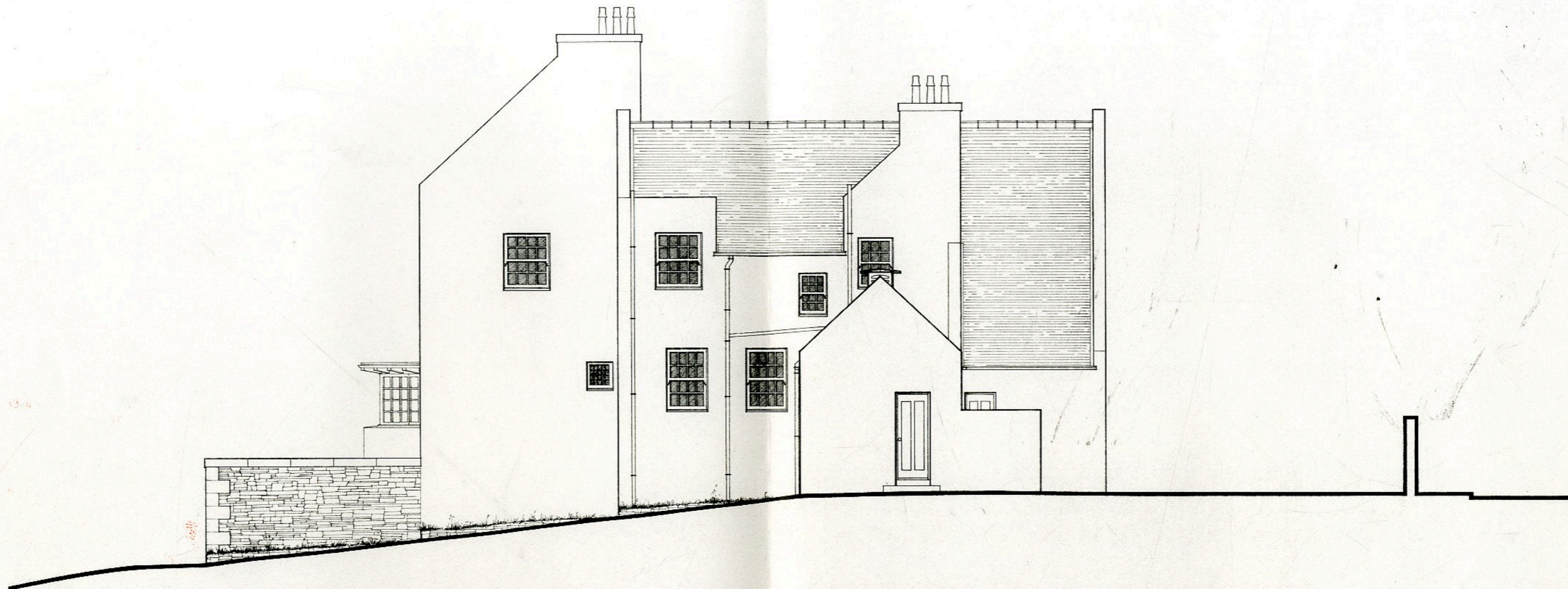






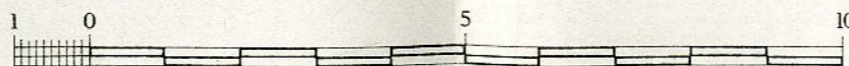
Section Through Hall

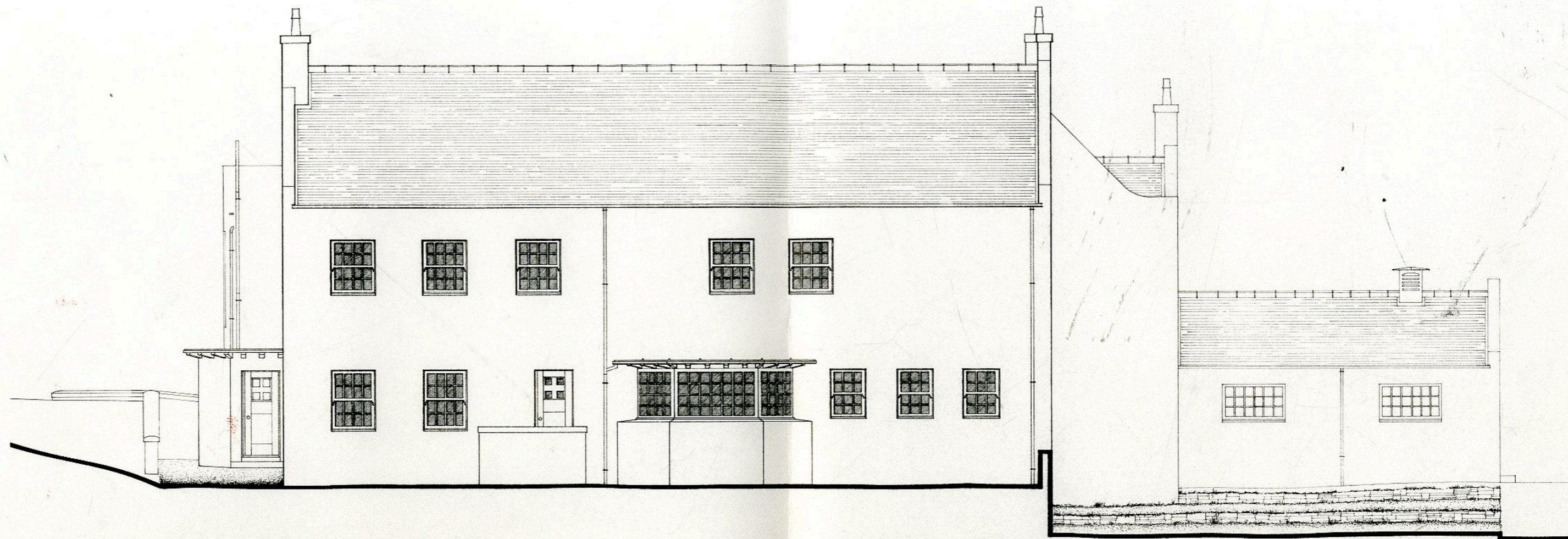




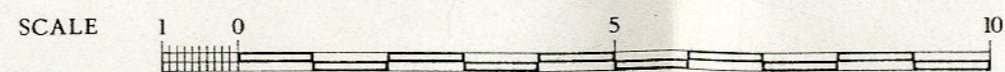
East Elevation

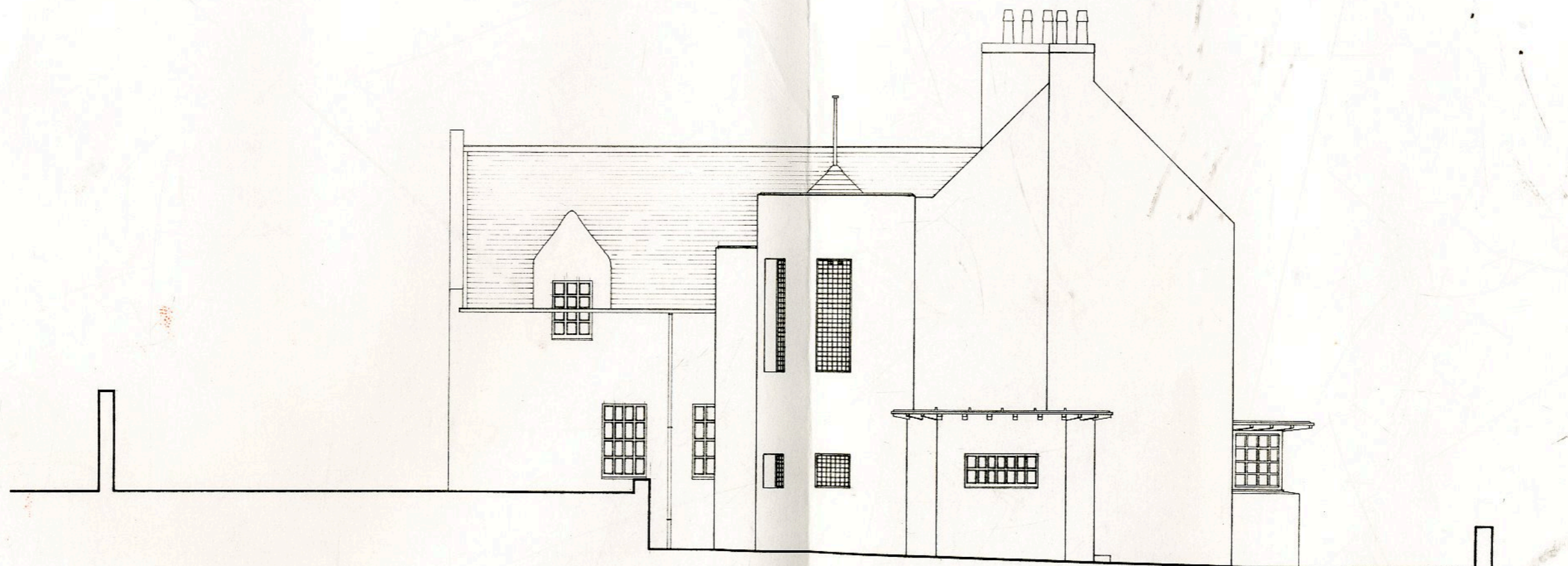
SCALE



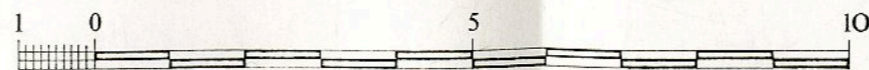


South Elevation

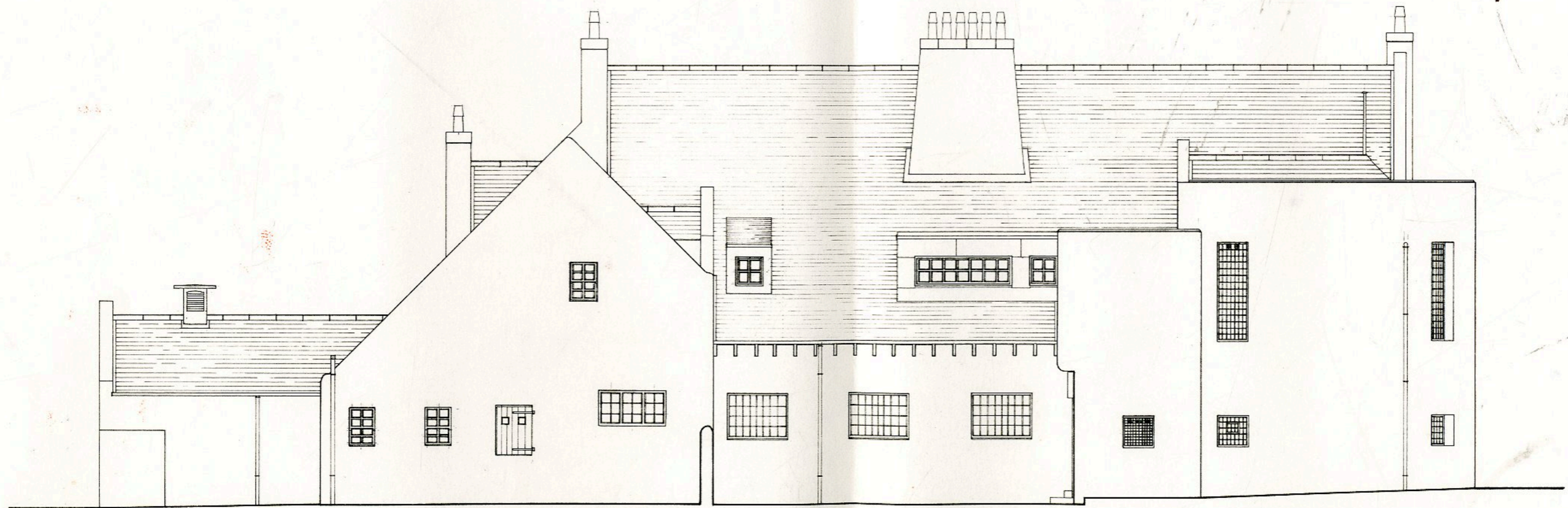




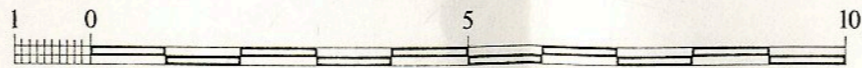
Scale



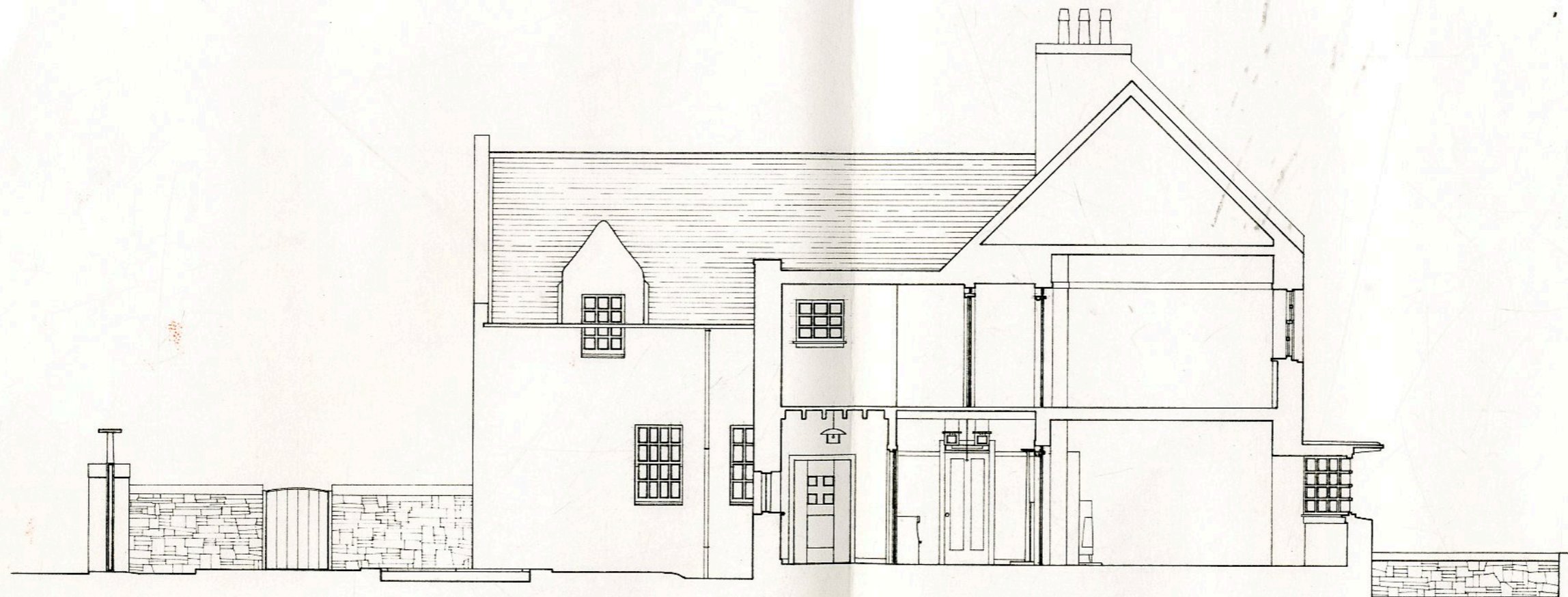
West Elevation



Scale



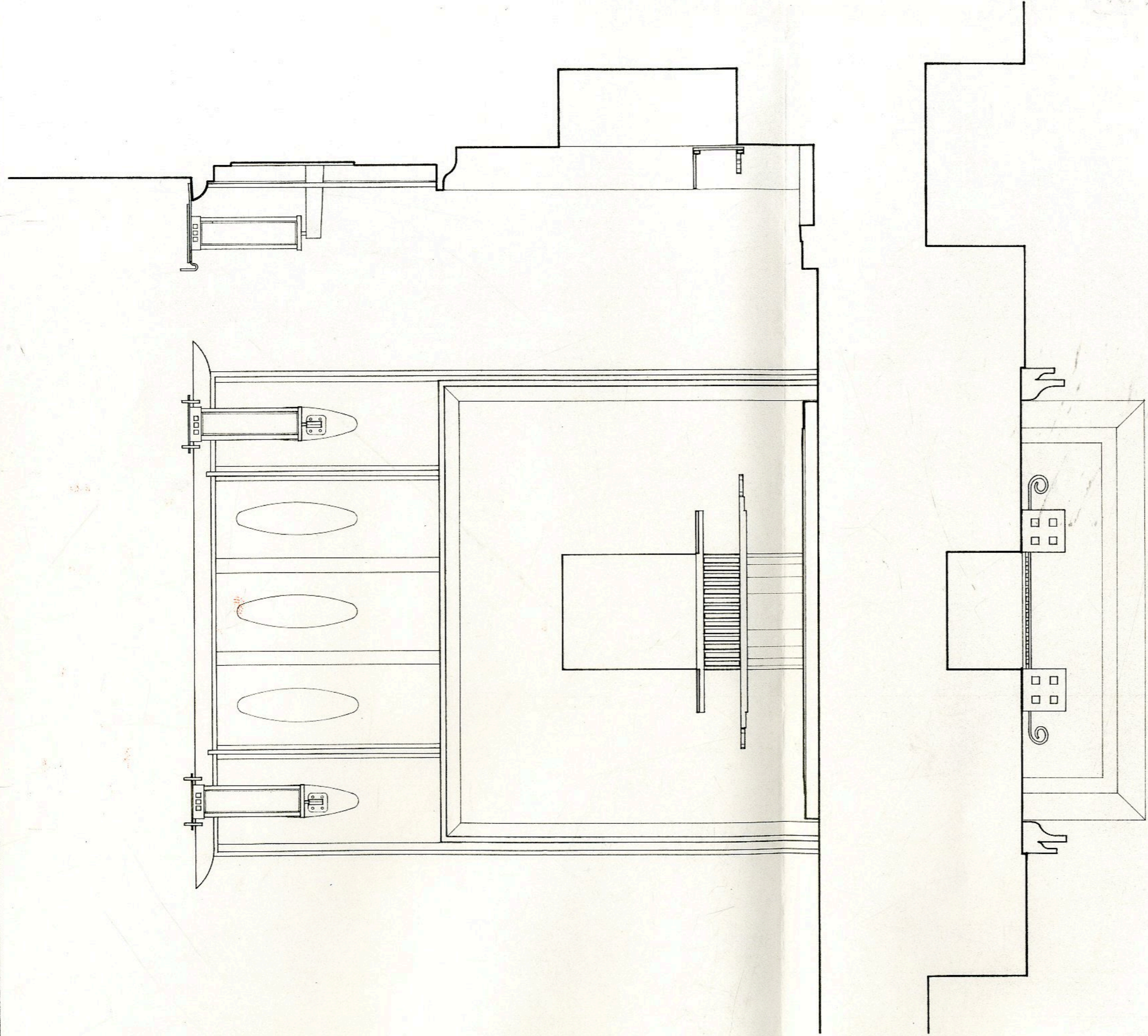
North Elevation



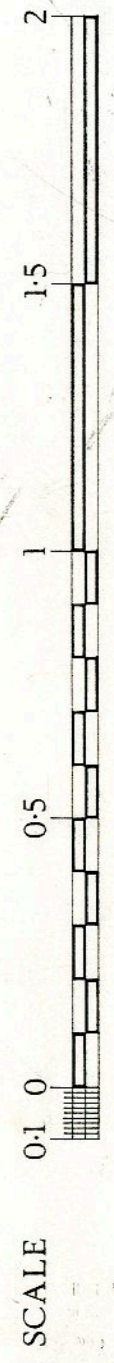
Scale

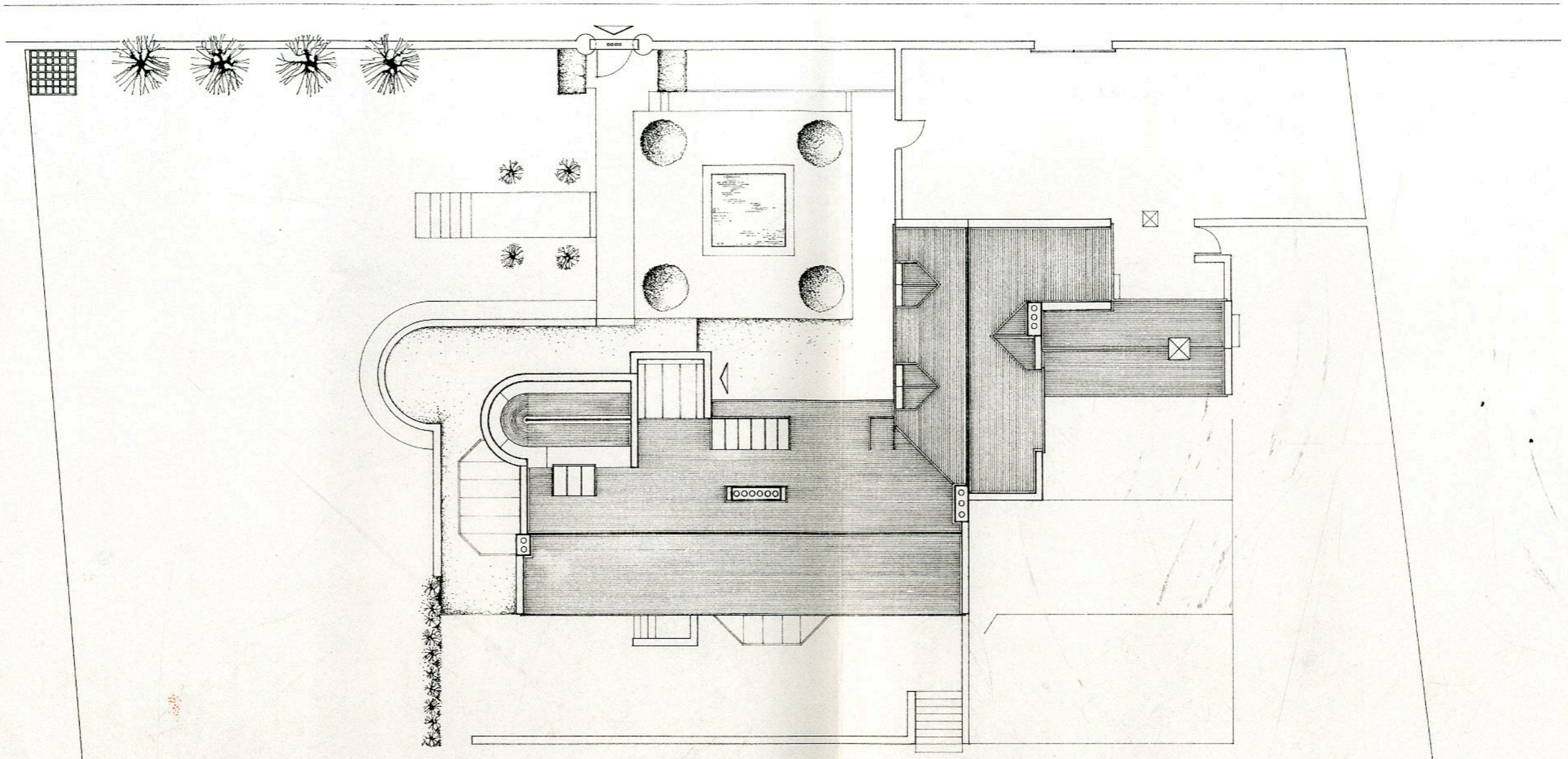


Section



Dining Room Fireplace Detail

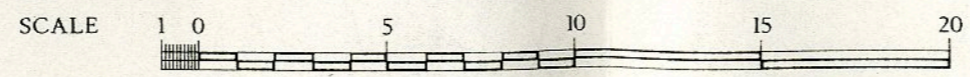
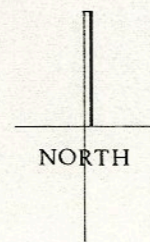




WINDYHILL 1899 · 1901

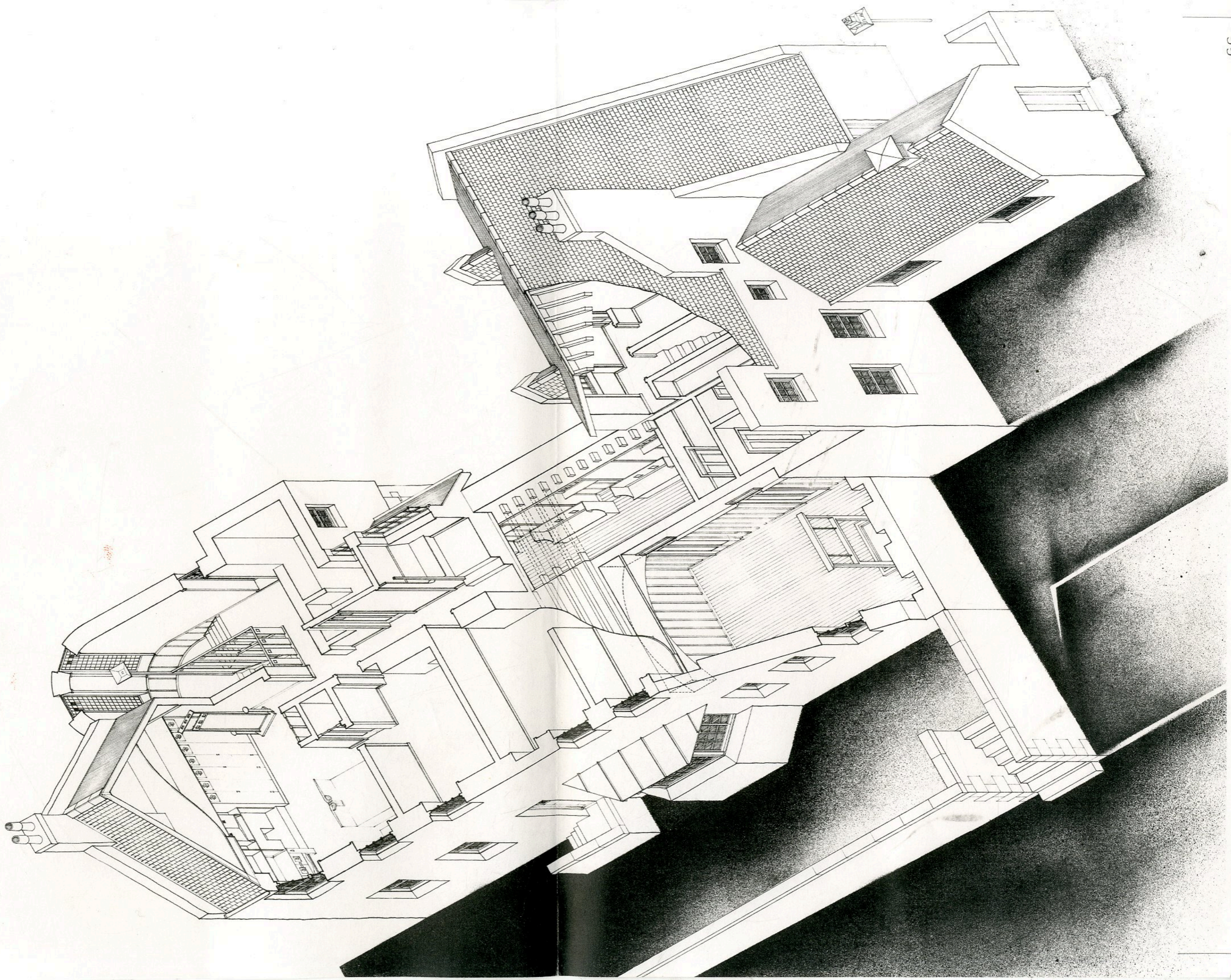
Charles Rennie Mackintosh

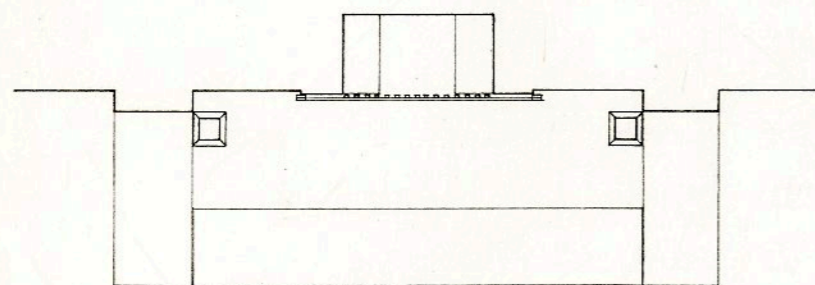
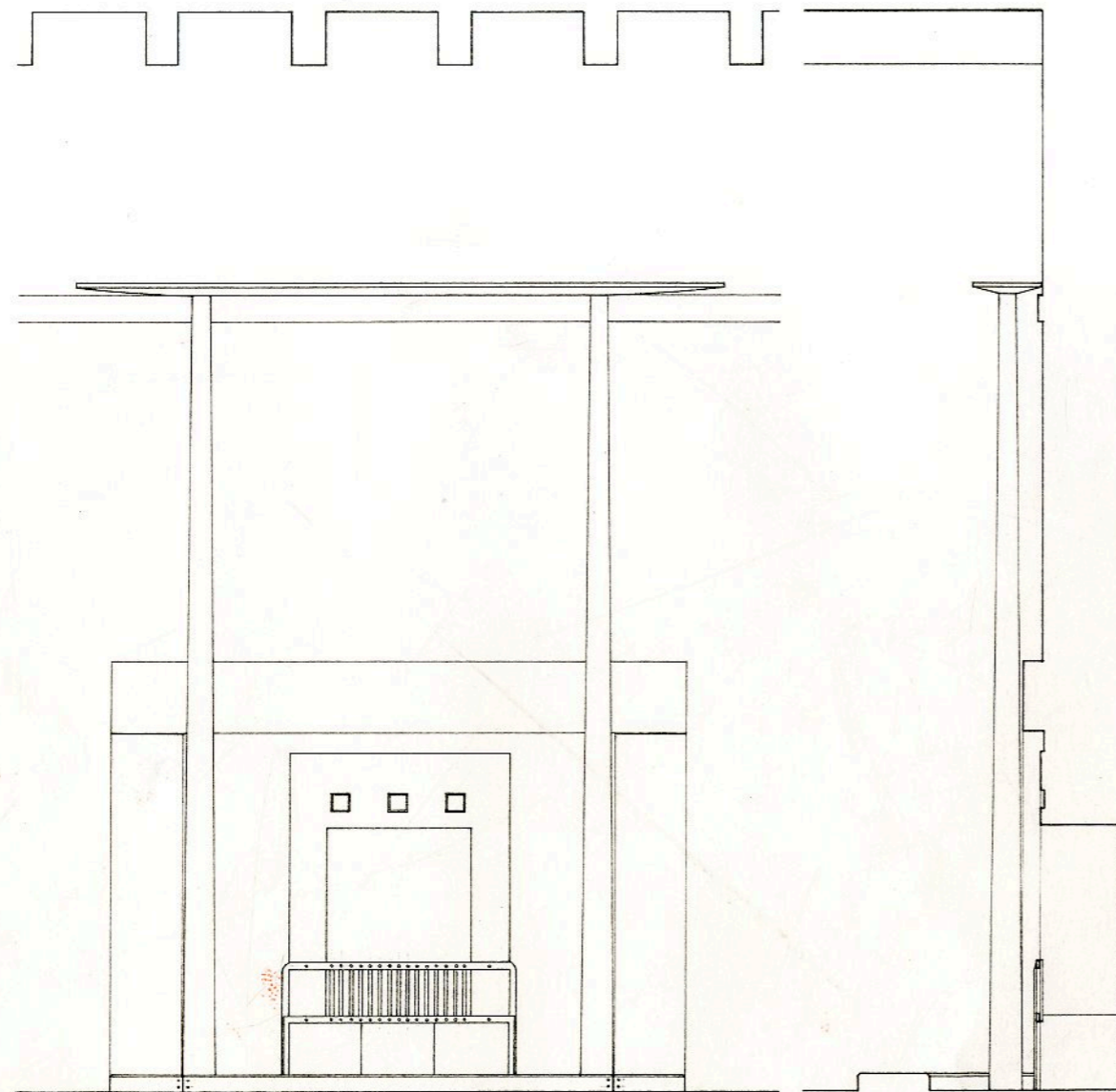
Site Plan



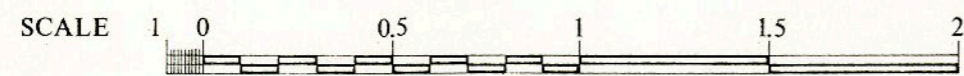
G S Greenock
and
S S P Doyle

Axonometric From South - east

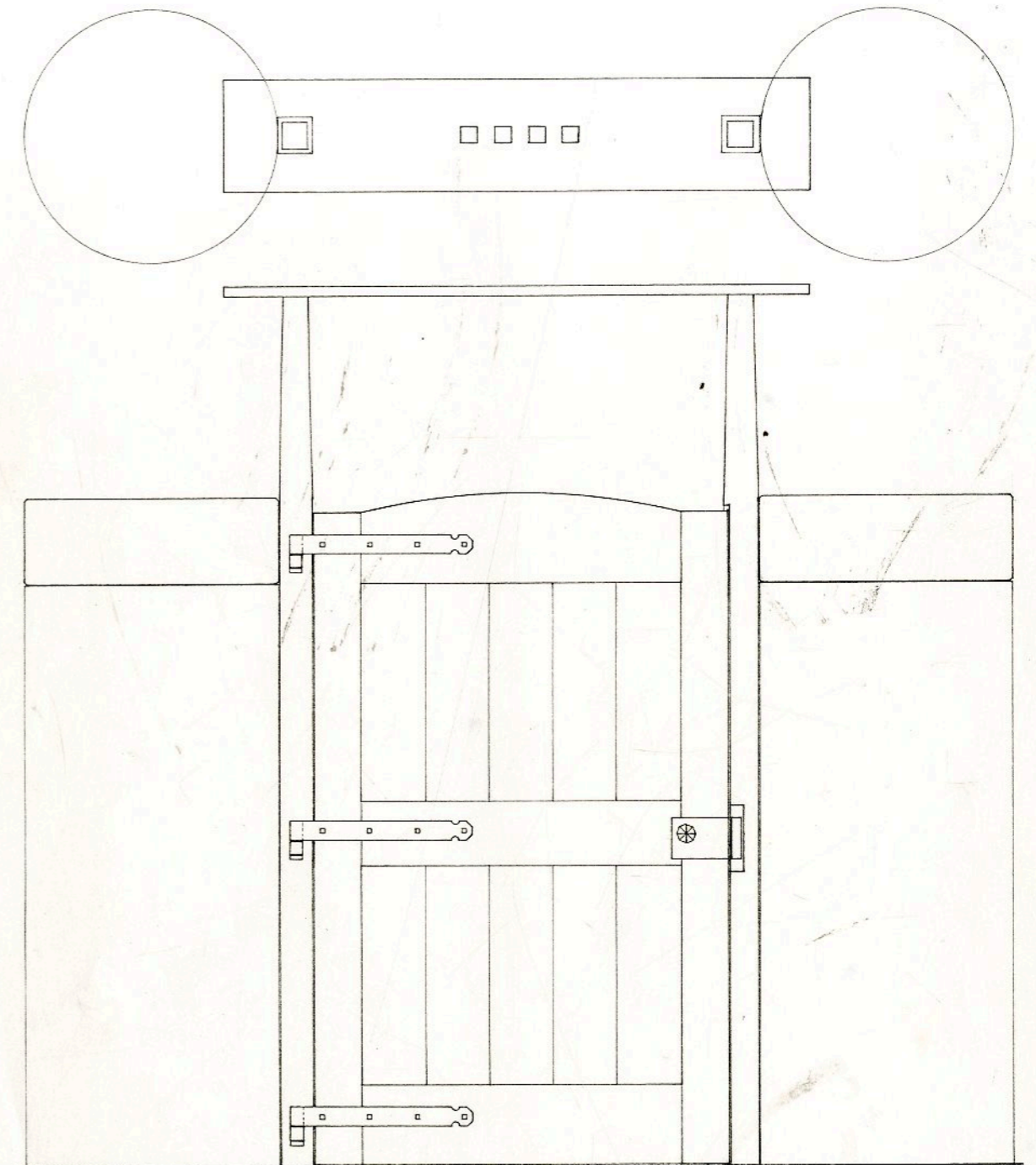




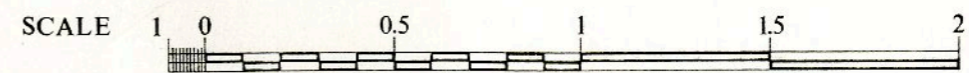
Hall Fireplace Detail



S.D.



Garden Gate Detail



S.D.